Prepared for

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2022 ANNUAL GROUNDWATER MONITORING & CORRECTIVE ACTION REPORT

GEORGIA POWER COMPANY
PLANT BRANCH ASH PONDS B, C, & D

Prepared by

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Project Number: GW8862

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CERTIFICATION STATEMENT

This *2022 Annual Groundwater Monitoring & Corrective Action Report, Georgia Power Company - Plant Branch – Ash Ponds B, C, and D (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 or engineer with Geosyntec Consultants. I hereby certify that I am a qualified groundwater scientist, in accordance with the Georgia Rules of Solid Waste Management, and 40 CFR Part 258.50(g).

_____ July 29, 2022

Whitney B. Law Date

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EXECUTIVE SUMMARY

This summary of the *2022 Annual Groundwater Monitoring and Corrective Action Report* provides the status of the groundwater monitoring and corrective action program from July 2021 through June 2022 at Georgia Power Company's (Georgia Power's) Plant Branch Ash Ponds B, C, and D (AP-BCD) (the Site). This summary was prepared by Geosyntec Consultants, Inc. (Geosyntec) on behalf of Georgia Power to meet the requirements listed in Part A, Section 6[1] of the U.S. Environmental Protection Agency (USEPA) coal combustion residual (CCR) rule (40 Code of Federal Regulations [CFR] 257 Subpart D) (herein referred to as the CCR Rule).

Plant Branch and the Site

Plant Branch is located at 1100 Milledgeville Road, approximately 8 miles north of Milledgeville in Putnam County, Georgia. Plant Branch formerly operated as a coal-fired electric generating facility, until its decommissioning in July 2015, at which point it ceased producing electricity. CCR materials resulting from power generation were historically transferred and stored at the five ash ponds (i.e., A, B, C, D, and E). Ash Pond A was taken out of service in the late 1960s and was closed in April 2016. Ash Ponds B, C, D, and E are inactive, and will be closed by removal and relocation of its stored CCR to a proposed fully lined landfill located on the plant property. As required in the CCR Rule, this Annual Report describes the status of the groundwater monitoring program, summarizes key actions completed, describes any problems encountered, discusses actions to resolve the problems, and presents projected key activities for the upcoming year for AP-BCD. The other CCR unit (AP-E) at Plant Branch is reported separately.

Groundwater at the Site is monitored using a comprehensive well network that meets federal and state monitoring requirements. Routine sampling and reporting began after the background groundwater conditions were established between 2016 and 2018. Based

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

on groundwater conditions at the Site, an assessment monitoring program was established on November 13, 2019, and the Site entered into an assessment of corrective measures on July 9, 2020. During the 2022 annual reporting period, the Site remained in assessment monitoring as corrective measures are being evaluated.

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

Groundwater monitoring sampling events for AP-BCD were conducted by Golder Associates in September 2021 and February 2022 for this annual reporting period. In order to meet the requirements of GA EPD Rule 391-3-4-.10(6) and 40 CFR 257.95 (b) and (d)(1), these semi-annual events were combined events and included sampling and analysis of all Appendix III and Appendix IV constituents. Surface water samples were also collected in September 2021 and February 2022 by Arcadis in support of the assessment of corrective measures and for continued evaluation of the nature and extent of impacts in the vicinity of AP-BCD. Samples were collected and submitted to Pace Analytical Services, LLC, for analysis. Per the CCR Rule, groundwater results through February 2022 data were evaluated in accordance with the certified statistical methods. That evaluation showed statistically significant values of Appendix III[2] and Appendix IV[3] parameters in wells listed in the tables below. On February 22, 2022, GA EPD updated the Rules for Solid Waste Management 391-3-4-.10(6) to incorporate updated Federal GWPS where an MCL has not been established. These levels were specified for cobalt (0.006 mg/L), lead (0.015 mg/L), lithium (0.040 mg/L), and molybdenum (0.100 mg/L), except when site specific background concentrations of these constituents are higher. Statistical evaluation for the Spring 2022 event was updated to reflect these changes.

Appendix III Parameter	September 2021
Boron	BRGWC-25I, BRGWC-27I, BRGWC-29I, BRGWC-30I, BRGWC-32S, BRGWC-47, BRGWC-50, and BRGWC-52I
Calcium	BRGWC-25I, BRGWC-27I, BRGWC-29I, BRGWC-30I, BRGWC-32S, BRGWC-45, BRGWC-47, BRGWC-50, and BRGWC-52I
Chloride	BRGWC-45 and BRGWC-50
pH (lower limit)	BRGWC-29I and BRGWC-50

[2] Boron, calcium, chloride, fluoride, pH, sulfate, and total dissolved solids (TDS)
[3] Antimony, arsenic, barium, beryllium, cadmium, chromium, cobalt, fluoride, lead, lithium, mercury, molybdenum, selenium, thallium, and radium 226 + 228

Sulfate	BRGWC-25I, BRGWC-27I, BRGWC-29I, BRGWC-30I, BRGWC-32S, BRGWC-45, BRGWC-47, BRGWC-50, and BRGWC-52I
Total Dissolved Solids (TDS)	BRGWC-29I, BRGWC-30I, BRGWC-32S, BRGWC-47, BRGWC-50, and BRGWC-52I
Appendix IV Parameter	**September 2021**
Cadmium	BRGWC-50
Cobalt	BRGWC-50 and PZ-51I

Appendix III Parameter	**February 2022**
Boron	BRGWC-25I, BRGWC-27I, BRGWC-29I, BRGWC-30I, BRGWC-32S, BRGWC-47, BRGWC-50, and BRGWC-52I
Calcium	BRGWC-25I, BRGWC-27I, BRGWC-29I, BRGWC-30I, BRGWC-32S, BRGWC-45, BRGWC-47, BRGWC-50, and BRGWC-52I
Chloride	BRGWC-29I, BRGWC-45, BRGWC-50, and BRGWC-52I
pH (lower limit)	BRGWC-29I and BRGWC-50
Sulfate	BRGWC-25I, BRGWC-27I, BRGWC-29I, BRGWC-30I, BRGWC-32S, BRGWC-45, BRGWC-47, BRGWC-50, and BRGWC-52I
Total Dissolved Solids (TDS)	BRGWC-27I, BRGWC-29I, BRGWC-30I, BRGWC-32S, BRGWC-47, and BRGWC-50
Appendix IV Parameter	**February 2022**
Cadmium	BRGWC-50
Cobalt	BRGWC-50 and PZ-51I

Based on a review of the Appendix III and Appendix IV statistical results completed for the groundwater monitoring and corrective action program from July 2021 through June 2022, the Site will continue in assessment monitoring. Georgia Power will continue routine groundwater monitoring and reporting at the Site. Reports will be posted to Georgia Power's CCR Rule Compliance website and provided to GA EPD semiannually.

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LIST OF ACRONYMS

ACM	Assessment of Corrective Measures
AP	ash pond
CCR	coal combustion residuals
CFR	Code of Federal Regulations
DO	dissolved oxygen
ft/day	feet per day
ft/ft	feet per foot
GA EPD	Georgia Environmental Protection Division
Georgia Power	Georgia Power Company
Geosyntec	Geosyntec Consultants, Inc.
GSC	Groundwater Stats Consulting
GWPS	Groundwater Protection Standard
HAR	Hydrogeologic Assessment Report
K_h	horizontal hydraulic conductivity
MCL	Maximum Contaminant Level
mg/L	milligram per liter
NELAP	National Environmental Laboratory Accreditation Program
NTU	Nephelometric turbidity units
ORP	oxidation-reduction potential
Pace Analytical	Pace Analytical Services, LLC.
PE	professional engineer
PL	prediction limit
PWR	partially weathered rock
QA/QC	Quality Assurance/Quality Control
RPD	relative percent difference
SSI	statistically significant increase
SSL	statistically significant level
s.u.	standard unit
TWR	transitionally weathered rock
USEPA	United States Environmental Protection Agency

1.0 INTRODUCTION

In accordance with the Georgia Environmental Protection Division (GA EPD) Rules for Solid Waste Management 391-3-4-.10, Geosyntec Consultants, Inc. (Geosyntec) has prepared this *2022 Annual Groundwater Monitoring & Corrective Action Report* to document groundwater monitoring activities conducted at Georgia Power Company's (Georgia Power) Plant Branch (Site) Ash Ponds B, C, and D (AP-BCD) for the reporting period of July 2021 through June 2022 (referred to herein as the reporting period).

To specify groundwater monitoring requirements, GA EPD rule 391-3-4-.10(6)(a) incorporates by reference the Federal Coal Combustion Residuals (CCR) Rule. For ease of reference, the Federal CCR Rule is cited within this report. Plant Branch ceased producing electricity prior to April 2015, and therefore, Ash Ponds B, C, and D are not subject to the USEPA CCR Rule. A CCR Unit Solid Waste Handling Permit application for AP-BCD was submitted to GA EPD in November 2018 and is under review. This report documents the activities completed to establish the groundwater monitoring program in accordance with GA EPD Rule 391-3-4-.10(6)(a).

Due to statistically significant increases (SSIs) of Appendix III parameters identified in the *2019 Annual Groundwater Monitoring and Corrective Action Report* (Golder, 2019), Georgia Power initiated an assessment monitoring program for AP-BCD on November 13, 2019. Statistically significant levels (SSLs) of Appendix IV parameters cadmium (Cd) and cobalt (Co) were identified during the initial assessment monitoring event. Georgia Power then initiated an assessment of corrective measures program on July 9, 2020. SSLs of Cd and Co have been observed in all subsequent assessment monitoring events and documented in the annual groundwater monitoring and corrective action reports (Golder, 2020a and 2021). Pursuant to 40 CFR 257.96(b), Georgia Power continues to monitor groundwater associated with AP-BCD in accordance with the assessment monitoring program established for the unit in 2019, including annual and semiannual monitoring and reporting pursuant to 40 CFR 257.90 through 40 CFR 257.95 of the Federal CCR Rule, and GA EPD Rules for Solid Waste Management 391-3-4-.10(6)(a).

1.1 Site Description and Background

Plant Branch is located in Putnam County, Georgia, approximately 8 miles north of Milledgeville. The property occupies approximately 3,200 acres and is bordered on the south and east by Lake Sinclair and by sparsely populated, forested, rural land on the north and west. Lake Sinclair is an approximately 15,330-acre hydroelectric reservoir that was created in 1953 by the impoundment of the Oconee River. Ash ponds B, C, and D are located on the southeast corner of the Plant surrounded by Lake Sinclair on the south,

rural land on the north and west, and the former coal pile and Ash Pond A on the east (**Figure 1**). The physical address of the Site is 1100 Milledgeville Road, Milledgeville, Georgia, 31024.

The Site formerly operated as a coal-fired power plant that commenced power generation in 1965. Over the course of power generation at the facility, five CCR surface impoundments (ash ponds), identified as Ash Ponds A, B, C, D, and E, were utilized. The location of the ash ponds is shown on **Figure 1**. The former Ash Pond A, the first ash pond constructed at the facility, was taken out of service in the late 1960s and was closed in April 2016 by the removal and relocation of its stored CCR to Ash Pond E. Ash Ponds B, C, D, and E are currently not active and will be closed by removal, specifically, by relocation of the CCR stored in those ash ponds to a new, permitted, on-site CCR landfill.

This report documents the groundwater monitoring program at the multi-unit AP-BCD. As previously noted, groundwater monitoring activities completed at Plant Branch's AP-E are reported separately.

1.2 Regional Geology & Hydrogeologic Setting

The following section summarizes the geologic and hydrogeologic conditions at AP-BCD as described in the *Hydrogeologic Assessment Report Revision 01 – AP-BCD* (HAR Rev 01) submitted to GA EPD in November 2020 to provide information regarding the hydrogeologic conditions and the groundwater monitoring well network at the Site (Geosyntec, 2020).

1.2.1 Regional and Site Geology

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. Generally, 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. 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 mafic 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 bedrock underlying the saprolite is fine- to medium-grained, poorly jointed biotite-quartz-feldspar gneiss.

Based on our review of available data, micaceous, locally saprolitic soils, consisting primarily of clay, silty clay, silt, and sandy clay occur as a variably thick blanket of residuum overlying bedrock across most of the Site. The thickness of the residual soil encountered in AP-BCD borings is variable, ranging from approximately 10 feet to as much as 75 feet. Between the residual soil/saprolite zone and the underlying bedrock there is a zone of 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 soil/saprolite and TWR/PWR, is collectively referred to as overburden.

1.2.2 Hydrogeologic Setting

The uppermost aquifer at the Site is an unconfined regional groundwater aquifer that occurs primarily in the saprolite, PWR, and fractured bedrock. While the aquifer characteristics of each unit may vary, the groundwater is interpreted to be interconnected between these units, and they effectively act as one unconfined aquifer. Generally, the water table surface at the Site is a subdued reflection of topography, with groundwater generally flowing east, west, and south. Downward hydraulic gradients dominate in the topographically high areas, while upward gradients are observed in topographic lows. Recharge to the fractured bedrock aquifer system comes primarily from precipitation that is stored in the overburden and slowly infiltrates to the bedrock through areas of enhanced permeability. Interconnected fractures are the primary conduit for groundwater flow through bedrock since the rock lacks primary porosity.

1.3 Groundwater Monitoring Well Network

In accordance with 40 CFR 257.91 of the CCR rule and 391-3-4-.10(6), a groundwater monitoring system was installed at AP-BCD that consists of a sufficient number of wells installed at appropriate locations and depths to yield groundwater samples from the uppermost aquifer to represent the groundwater quality both upgradient of the units (i.e., background conditions) and passing the waste boundary of the units. The number, spacing, and depths of the groundwater monitoring wells were selected based on the characterization of site-specific hydrogeologic conditions. 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 interconnected aquifer system. Wells suffixed with an “S” are installed in overburden (saprolitic soil), an “I” indicates TWR/PWR and the upper fractured mantle of bedrock (transition zone), and “D” indicates a screened zone in the deeper bedrock. Well construction details for the monitoring network are listed in **Table 1**. The locations of the groundwater monitoring wells and piezometers are shown on **Figure 2.**

Groundwater elevation measurements are collected across the entire Site (including AP-E and the area of the proposed new CCR landfill). These measurements are used to define groundwater flow direction and gradients and to understand potential changes related to seasonal fluctuations or site activities. The potentiometric surface maps for the September 2021 and January 2022 water level gauging events are provided in **Figures 3** and **4.**

2.0 GROUNDWATER MONITORING ACTIVITIES

In accordance with 40 CFR 257.90(e)(3) and 391-3-4-.10(6), the following describes monitoring-related activities performed during this reporting period and discusses any change in status of the monitoring program.

2.1 Monitoring Well Installation and Maintenance

Two additional piezometers (PZ-62I and PZ-63I) were installed downgradient of Ash Pond B in January 2022. Well construction details for these piezometers are tabulated in **Table 1**, and a well installation memorandum was completed by Golder and is included as an appendix to the *2022 Semi-Annual Remedy Selection and Design Progress Report* (**Appendix D**).

The well and piezometer networks are inspected during each groundwater monitoring event to determine if any repairs or corrective actions are necessary to meet the requirements of the Georgia Water Well Standards Act (O.C.G.A § 12-5-134(5)(d)(vii)). Any issues identified with the wells (e.g., faded well identification signage, rusted locks and/or latches) are addressed before the following groundwater sampling event. The well inspection forms for the reporting period are provided in **Appendix A**. The Fall 2021 memorandum serves as the documentation for the five-year review pursuant to the Georgia Water Well Standards Act (Golder, 2022).

2.2 Assessment Monitoring

Pursuant to 40 CFR 257.94(e)(3), an assessment monitoring program was initiated for AP-BCD based on SSIs of Appendix III constituents documented in the *2019 Annual Groundwater Monitoring and Corrective Action Report* (Golder, 2019). A notice of assessment monitoring was placed in the operating record on November 13, 2019.

Two groundwater monitoring events were conducted for this reporting period in September 2021 and February 2022 in accordance with 40 CFR 257.93 and GA EPD rule 391-3-4-.10(6)(a). The wells in the certified monitoring system for AP-BCD are tabulated in **Table 1,** and their locations are shown on **Figure 2**. A summary of groundwater wells sampled at AP-BCD during this reporting period is presented in **Table 2**.

During the September 2021 and February 2022 semi-annual assessment monitoring events, groundwater samples from each monitoring well were collected and analyzed for the complete list of Appendix III and Appendix IV constituents. Field data, field

calibration forms, well inspection logs, laboratory analytical results, and data validation reports associated with these sampling events are provided in **Appendix A.**

2.3 Additional Sampling and Surface Water Sampling

Additional sampling was conducted during the reporting period in support of the assessment of corrective measures and in continuing to evaluate the nature and extent of impacts resulting from AP-BCD. This additional sampling is further discussed in Section 4.3 of this report. Due to the presence of surface water features downgradient of BRGWC-50, Georgia Power proactively collected surface water samples from discrete (surface, middle, and bottom) depths at six locations in Lake Sinclair on September 23, 2021 and February 03, 2022, The sample locations closest to BRGWC-50 are shown on **Figure 2**. The six locations are sampled for Appendix III and targeted Appendix IV constituents (Co), in addition to cations and anions (sodium, magnesium, potassium, and alkalinity). One of these locations, LR-9a, is used to delineate Co concentrations downgradient of well BRGWC-50. Surface water samples are collected in accordance with USEPA Region 4 Science and Ecosystem Support Division Operating Procedures for Surface Water Sampling SESDPROC 201-R4 (USEPA, 2016). The laboratory reports associated with the September 23, 2021 and February 03, 2022 surface water sampling events are provided in **Appendix A**. Georgia Power will continue collecting the surface water samples semi-annually.

3.0 SAMPLING METHODOLOGY & ANALYSES

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

3.1 Groundwater Elevation Measurement

Prior to each sampling event, a synoptic round of depth to groundwater level measurements were recorded from all the wells and piezometers and used to calculate the corresponding groundwater elevations. The calculated groundwater elevations obtained in September 2021 and January 2022 for the two semiannual assessment monitoring events in this reporting period at AP-BCD and AP-E are presented in **Table 3**.

The groundwater elevation data were used to prepare potentiometric surface maps for the September 2021 and February 2022 events, which are presented on **Figures 3** and **4,** respectively. The general direction of groundwater flow across AP-BCD is towards Lake Sinclair (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.

Hydraulic conductivity (K_h) values used in flow calculations range from 2.7 to 5.5 feet per day (ft/day) and were based on slug test data presented in the 2020 *Hydrogeologic Assessment Report Revision 01* (Geosyntec, 2020). The highest observed K_h estimates from each well set were used, resulting in a conservatively high estimate of groundwater flow velocity. An estimated effective porosity of 0.20 is used to represent average conditions at AP-BCD which was derived based on the default values for effective porosity recommended by USEPA for a silty sand-type soil (USEPA, 1996). With these variables determined, and accounting for the averaged hydraulic gradient calculated between well pairs for the September 2021 and February 2022 events, horizontal flow velocities were calculated as below.

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

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

where:

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

K_h = Average hydraulic conductivity $\left(\frac{feet}{day}\right)$

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

n_e = Effective porosity

The supporting calculations for the September 2021 and February 2022 semiannual events are presented in **Table 4A** and **Table 4B**, respectively**.** The tables also present the average hydraulic gradients calculated from the two measurement events. The general trajectory of the flow paths used in the calculations and associated potentiometric contour lines are shown on **Figures 3** and **4**. As presented on **Table 4A** and **Table 4B**, average groundwater flow velocity at the site is approximately 0.39 ft/day across AP-BCD. The observed groundwater flow velocities calculated for this reporting period are also generally consistent with expected velocities is consistent with historical observations and confirm the groundwater monitoring system as properly located to monitor the uppermost aquifer for AP-BCD at Plant Branch.

3.3 Groundwater Sampling Procedures

Groundwater samples were collected from the compliance monitoring well network using low-flow sampling procedures in accordance with 40 CFR 257.93(a), 3913-4-.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. All non-disposable equipment was decontaminated before use and between well locations.

A SmarTROLL® (In-Situ field instrument) was used to monitor and record field water quality parameters [i.e., pH, conductivity, oxidation-reduction potential (ORP), temperature, and dissolved oxygen (DO)] during well purging to verify stabilization prior

to sampling. Turbidity was measured using a LaMotte 2020we portable turbidimeter. Groundwater samples were collected when the following stabilization criteria were met:

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

Following purging, and once stabilization was achieved, unfiltered samples were collected into appropriately preserved laboratory-supplied sample containers. Sample bottles were placed in ice-packed coolers and submitted to Pace Analytical Services, LLC. (Pace Analytical) in Norcross, Georgia following chain-of-custody protocol. The field sampling and equipment calibration forms generated during the September 2021 and February 2022 semiannual assessment monitoring events are provided in **Appendix A**.

3.4 Laboratory Analyses

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

The analytical results from the September 2021 and February 2022 monitoring events are summarized in **Tables 5A, 5B,** and **5C**.

3.5 Quality Assurance & Quality Control Summary

Quality assurance/quality control (QA/QC) samples were collected during each sampling event and included the following: field duplicates, equipment blanks, and field blank samples. QA/QC samples were collected in laboratory-provided bottles and submitted under the same chain of custody as the primary samples for analysis of the same constituents by Pace Analytical.

In addition to collecting QA/QC samples, the data were validated based on the pertinent methods referenced in the laboratory reports, professional and technical judgment and

applicable federal guidance documents (USEPA, 2011; USEPA, 2017). Where necessary, the data were qualified with supporting documentation and justifications. Data validation generally consisted of reviewing sample integrity, holding times, laboratory method blanks, laboratory control samples, matrix spikes/matrix spike duplicate recoveries and relative percent differences, post digestions spikes, laboratory and field duplicate relative percent difference (RPDs), field and equipment blanks, and reporting limits. The data are considered usable for meeting project objectives, and the results are considered valid. The associated data validation reports are provided in **Appendix A** with the laboratory reports.

4.0 STATISTICAL ANALYSIS

Statistical analysis of Appendix III groundwater monitoring data was performed pursuant to 40 CFR 257.93 and 391-3-4-.10(6) and is summarized in the section below. In addition, pursuant to 40 CFR 257.95(d)(2), Georgia Power established GWPS for the Appendix IV constituents and completed statistical analyses of the Appendix IV groundwater monitoring data obtained during the September 2021 and February 2022 assessment monitoring events. The reports generated from the analyses are provided in **Appendix B**. The September 2021 and February 2022 data were statistically analyzed by Groundwater Stats Consulting (GSC).

4.1 Statistical Methods

The selected statistical method for AP-BCD was developed in accordance with 40 CFR 257.93(f) and 391-3-4-.10(6) using methodology presented in Statistical Analysis of Groundwater Data at USEPA document *Statistical Analysis of Groundwater Data at RCRA Facilities Unified Guidance* (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 Unified Guidance.

Appendix III statistical analysis was performed to assess if Appendix III constituents have returned to background levels. Appendix IV constituents were evaluated to assess if concentrations statistically exceeded the established state and federal GWPS. Detailed statistical methods used for Appendix III and Appendix IV constituents are discussed in the statistical analysis package provided in **Appendix B** and summarized in Sections 4.1.1 and 4.1.2. The GWPS were finalized pursuant to 40 CFR 257.95(d)(2) and are presented in **Table 6**.

4.1.1 Appendix III Statistical Methods

Statistical tests used to evaluate the groundwater monitoring data consist of interwell prediction limits (PLs) combined with a 1-of-2 verification resample plan for each of the Appendix III parameters. Upgradient well data were pooled to establish a background limit for an individual constituent, and the most recent sample from each downgradient well was compared to the statistical limit for each parameter to determine if concentrations exceeded background levels. The most recent sample from each downgradient well is compared to the background limit to assess whether there are SSIs and/or questionable results. An "initial exceedance" occurs when an Appendix III

constituent reported in the groundwater of a downgradient detection monitoring well exceeds the constituent's associated PL. The 1-of-2 resample plan allows for collection of an independent resample. A confirmed exceedance is noted only when the resample confirms the initial exceedance by also exceeding the statistical limit. If the resample falls within its respective prediction limit, no exceedance is declared. The Sen's Slope/Mann Kendall trend test was used to statistically evaluate concentration levels over time and determine if concentrations are increasing, decreasing, or stabilizing.

4.1.2 Appendix IV Statistical Methods

For the 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 GWPS under GA EPD Rule 391-3-4-.10(6)(a).

USEPA revised the federal CCR Rule on July 30, 2018, updating GWPS for cobalt (Co), lead (Pb), lithium (Li), and molybdenum (Mo). As described in 40 CFR 257.95(h)(1-3), the GWPS is:

(1) The maximum contaminant level (MCL) established under §141.62 and 141.66.

(2) Where an MCL has not been established:

(i) Co: 0.006 mg/L;

(ii) Pb: 0.015 mg/L;

(iii) Li: 0.040 mg/L; and

(iv) Mo: 0.10 mg/L.

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

GA EPD revised the Rules for Solid Waste Management 391-3-4-.10(6) on February 22, 2022, to incorporate updated Federal GWPSs where an MCL has not been established, except when site-specific background concentrations of these constituents are higher. These levels were specified for cobalt, lead, lithium, and molybdenum as stated above.

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

To statistically compare groundwater data to GWPS, confidence intervals are constructed for each of the detected Appendix IV constituents in each downgradient monitoring well. The confidence intervals are compared to both state and federal GWPS. 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, an SSL exceedance is identified.

4.2 Statistical Analyses Results

Based on review of the Appendix III statistical analyses conducted in September 2021 and February 2022, groundwater conditions have not returned to background and assessment monitoring should continue pursuant to 40 CFR 257.95(f). A detailed list of the noted exceedances is provided in **Appendix B**.

Based on the statistical analysis of Appendix IV constituents, the following constituents exceeded the corresponding GWPSs for the September 2021 assessment monitoring event:

- Cd: BRGWC-50
- Co: BRGWC-50 and PZ51I

Based on the statistical analysis of Appendix IV constituents, the following constituents exceeded the corresponding GWPSs for the February 2022 assessment monitoring event:

- Cd: BRGWC-50
- Co: BRGWC-50 and PZ51I

The semiannual statistical evaluation results are consistent with the 2021 reporting year statistical results.

5.0 NATURE AND EXTENT

5.1 Delineation Status

Specific details regarding the delineation status at AP-BCD is discussed in the Semi-Annual Remedy Selection and Design Progress Report (**Appendix C**). As part of the nature and extent study, the following piezometers were installed and sampled:

- To delineate the horizontal and vertical extent of Cd and Co at BRGWC-50, two horizontal assessment monitoring wells (i.e., PZ-51S and PZ-51I) and two vertical assessment monitoring wells (i.e., PZ-50D and PZ-51D) were installed at locations downgradient of the monitoring well BRGWC-50. The delineation of Cd downgradient was accomplished. Exceedances of the GWPS for Co were observed in all of these piezometers with the exception of PZ-51D.

- Five additional assessment monitoring wells (i.e., PZ-57I, PZ-58I, PZ-59I, PZ-60I and PZ-61I) were installed in March 2021 to further delineate the lateral extent of Co observed in BRGWC-50 and PZ-51I for corrective measures evaluation purposes.

- Due to the proximity of Lake Sinclair in the downgradient direction of the wells exhibiting SSLs of Co (i.e., BRGWC-50 and PZ-51I), installation of additional conventional wells to horizontally characterize this area is infeasible. As such, surface water samples were collected from Lake Sinclair downgradient of AP-BCD to supplement horizontal delineation on September 23, 2021 and February 03, 2022. The results from surface water samples collected indicate that Co is not detected in the samples from Lake Sinclair as represented in **Table 5B** and **Table 5D**.

Results from the delineation activities performed during the current reporting period indicate that vertical delineation of Cd and Co have been completed at AP-BCD. In addition, downgradient horizontal delineation has been completed for Cd and Co at AP-BCD. Evaluation of the upgradient and side-gradient (to the north) extent of Cd and Co is ongoing to support the assessment of corrective measures.

Assessment piezometers have been included as assessment wells and will be monitored in future assessment monitoring events. In accordance with Section 21.1.1 of the Unified Guidance (USEPA, 2009), statistical analysis will be performed to construct confidence

intervals required to assess SSLs for Appendix IV constituents once sufficient data is available.

6.0 MONITORING PROGRAM STATUS

Following the requirements of 40 CFR 257.96, Georgia Power completed an *Assessment of Corrective Measures* (ACM) (Golder, 2020b) for AP-BCD at Plant Branch. Notification of this action was placed in the CCR operating record on July 9, 2020.

In accordance with 40 CFR 257.97(a), a remedy selection report will be prepared and submitted concurrent with semiannual groundwater monitoring reports to document results associated with additional data collection, and present progress toward selection and design of a groundwater remedy. The ACM efforts completed during the reporting period covered by this groundwater monitoring and corrective action report are presented in the *Semiannual Remedy Selection and Design Progress Report* provided in **Appendix C** and summarized as follows:

i) The current conceptual site model (CSM).

ii) Summary of work completed to date to achieve delineation of constituents exceeding GWPS and a summary of data collected to date to support remedy selection.

iii) The status of evaluating applicable corrective measures at the site, planned activities, and anticipated schedule for the following semi-annual reporting period.

Pursuant to 40 CFR 257.96(b), Georgia Power will continue to monitor the groundwater at AP-BCD in accordance with the assessment monitoring program regulations of 40 CFR 257.95 while ACM efforts are implemented to address SSL concentrations of Cd and Co in monitoring well BRGWC-50 and Co in PZ-51I.

7.0 CONCLUSIONS & FUTURE ACTIONS

This *2022 Annual Groundwater Monitoring & Corrective Action Report* for Georgia Power's Plant Branch AP-BCD was prepared to fulfill the requirements of GA EPD Rules of Solid Waste Management 391-3-4-.10(6). The groundwater flow direction and rates interpreted during the September 2021 and February 2022 monitoring events are generally consistent with historical evaluations. Statistical evaluations of the groundwater monitoring data for the AP-BCD well network confirmed the continued presence of SSLs of Cd and Co in well BRGWC-50 and Co in piezometer PZ-51I above corresponding GWPSs. Based on the most current data from this reporting period, as described in Section 4.3, the SSLs are vertically and horizontally delineated to below the GWPS. In accordance with GA EPD Rule 391-3-4-.10(6) and 40 CFR 257.96, the Site is in an assessment of corrective measures program for the identified SSLs.

Georgia Power will continue to monitor AP-BCD groundwater under the assessment monitoring program and proceed with the evaluation of remedies presented in the ACM Report (Golder, 2020b). The second semiannual assessment monitoring event is scheduled to occur in August 2022.

8.0 REFERENCES

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TABLES

Table 1
Monitoring Well Network Summary
Plant Branch AP-BCD, Putnam County, Georgia

Well ID	Alternate Name	Hydraulic Location	Installation Date	Northing [1]	Easting [1]	Ground Surface Elevation (ft)	Top of Casing Elevation [2] (ft)	Top of Screen Elevation [2] (ft)	Bottom of Screen Elevation [2] (ft)	Well Depth (ft BGS)	Screen Interval Length (ft)
AP-BCD Detection Monitoring Well Network											
BRGWA-2S	PZ-2S	Upgradient BCD & E	4/2/2014	2549952.59	1167139.69	440.4	443.20	406.2	396.2	44.6	10
BRGWA-2I	PZ-2I	Upgradient BCD & E	3/14/2014	2549957.26	1167129.90	440.5	443.14	386.6	376.6	64.3	10
BRGWA-5S	PZ-5S	Upgradient BCD & E	4/3/2014	2549415.60	1170177.42	440.8	443.86	411.2	401.2	40.0	10
BRGWA-5I	PZ-5I	Upgradient BCD & E	4/3/2014	2549407.91	1170183.54	441.1	443.79	390.3	380.3	61.2	10
BRGWA-6S	PZ-6S	Upgradient BCD & E	4/1/2014	2551540.90	1170732.82	455.8	458.96	416.5	406.5	49.7	10
BRGWA-12S	PZ-12S	Upgradient BCD	3/4/2014	2557142.89	1164286.80	431.6	434.64	383.7	373.7	58.3	10
BRGWA-12I	PZ-12I	Upgradient BCD	2/20/2014	2557138.79	1164301.32	431.5	434.39	364.3	354.3	77.6	10
BRGWA-23S	PZ-23S	Upgradient BCD	7/26/2016	2557868.25	1162971.84	425.5	428.24	394.7	384.7	40.8	10
BRGWC-25I	PZ-25I	Downgradient B	7/25/2016	2561315.08	1160583.67	355.0	357.37	344.5	334.5	20.5	10
BRGWC-27I	PZ-27S	Downgradient C	7/22/2016	2559712.12	1159695.33	364.0	366.86	350.0	340.0	24.0	10
BRGWC-29I	PZ-29I	Downgradient C	7/23/2016	2561050.03	1160297.65	350.6	353.23	340.6	330.6	20.0	10
BRGWC-30I	PZ-30I	Downgradient D	7/18/2016	2557691.84	1161607.69	350.0	352.61	340.0	330.0	20.3	10
BRGWC-32S	PZ-32S	Downgradient D	7/20/2016	2558497.97	1160677.67	403.6	406.39	368.6	358.6	45.0	10
BRGWC-45	PZ-45	Downgradient B	2/3/2018	2561075.38	1162229.68	381.6	384.58	335.0	325.0	57.0	10
BRGWC-47	PZ-47	Downgradient D	1/25/2018	2559456.75	1162700.66	408.8	411.20	327.2	317.2	92.0	10
BRGWC-50	PZ-50	Downgradient B	1/31/2018	2562372.96	1161593.45	378.8	381.35	324.2	314.2	65.0	10
BRGWC-52I	PZ-52	Downgradient B	8/6/2018	2562145.22	1161274.99	381.2	383.87	317.3	307.3	73.9	10
AP-E Detection Monitoring Well Network											
BRGWA-2S	PZ-2S	Upgradient BCD & E	4/2/2014	2549952.59	1167139.69	440.4	443.20	406.2	396.2	44.6	10
BRGWA-2I	PZ-2I	Upgradient BCD & E	3/14/2014	2549957.26	1167129.90	440.5	443.14	386.6	376.6	64.3	10
BRGWA-5S	PZ-5S	Upgradient BCD & E	4/3/2014	2549415.60	1170177.42	440.8	443.86	411.2	401.2	40.0	10
BRGWA-5I	PZ-5I	Upgradient BCD & E	4/3/2014	2549407.91	1170183.54	441.1	443.79	390.3	380.3	61.2	10
BRGWA-6S	PZ-6S	Upgradient BCD & E	4/1/2014	2551540.90	1170732.82	455.8	458.96	416.5	406.5	49.7	10
BRGWC-17S	PZ-17S	Downgradient E	3/13/2014	2554687.84	1166301.32	362.2	365.32	360.5	355.5	7.1	5
BRGWC-33S	PZ-33S	Downgradient E	7/26/2016	2554064.97	1168057.09	414.2	416.68	398.2	388.2	26.4	10
BRGWC-34S	PZ-34S	Downgradient E	7/25/2016	2554231.28	1167384.17	389.2	391.96	376.2	366.2	23.0	10
BRGWC-35S	PZ-35S	Downgradient E	7/23/2016	2554476.13	1166646.02	363.7	366.31	346.7	336.7	27.4	10
BRGWC-36S	PZ-36S	Downgradient E	7/26/2016	2554693.26	1165742.82	383.1	389.84	364.4	354.4	28.7	10
BRGWC-37S	PZ-37S	Downgradient E	7/24/2016	2554979.63	1165093.07	444.4	447.05	390.8	380.8	63.6	10
BRGWC-38S	PZ-38S	Downgradient E	7/22/2016	2555016.50	1164391.82	429.8	432.24	402.0	392.0	38.2	10

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Plant Branch AP-BCD, Putnam County, Georgia

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AP-BCD Assessment Monitoring Well Network											
PZ-44	--	Downgradient B	2/2/2018	2561587.42	1161724.48	380.5	383.04	333.9	323.9	57.0	10
PZ-50D	--	Downgradient	10/8/2020	2562380.34	1161589.51	378.3	380.86	282.3	272.3	106.0	10
PZ-51S	--	Downgradient B	8/1/2018	2562433.07	1161613.24	377.9	380.27	337.9	332.9	45.4	5
PZ-51I	--	Downgradient	8/1/2018	2562439.35	1161631.12	378.0	380.52	323.1	313.1	65.0	10
PZ-51D	--	Downgradient B	10/9/2020	2562433.15	1161640.16	378.1	380.75	282.1	272.1	106.0	10
PZ-57I	--	Downgradient B	3/24/2021	2562170.21	1161582.31	379.4	382.50	313.8	303.8	75.9	10
PZ-58I	--	Downgradient B	3/27/2021	2562297.82	1161579.00	379.3	382.27	325.7	315.7	63.9	10
PZ-59I	--	Downgradient B	3/31/2021	2562329.80	1161654.90	379.9	383.49	323.5	313.5	66.0	10
PZ-60I	--	Downgradient B	3/29/2021	2562330.79	1161588.01	379.5	382.61	329.0	319.0	60.8	10
PZ-61I	--	Downgradient B	3/30/2021	2562429.63	1161621.94	377.7	380.64	312.0	302.0	76.0	10
PZ-62I	--	Downgradient B	1/6/2022	2562336.00	1161478.90	378.1	380.95	318.1	308.1	70.0	10
PZ-63I	--	Downgradient B	1/5/2022	2562233.10	1161371.20	378.6	381.31	332.1	322.1	56.5	10
Piezometers											
PZ-1D	--	Upgradient	4/4/2014	2551598.09	1171999.19	462.9	463.41	397.4	302.9	160.0	94.5
PZ-1I	--	Upgradient	3/10/2014	2551577.63	1171995.75	461.9	464.71	392.8	382.8	79.5	10
PZ-1S	--	Upgradient	3/20/2014	2551588.02	1171996.20	462.4	465.07	407.8	397.8	65.0	10
PZ-3D	--	Upgradient	3/27/2014	2550275.05	1165474.25	486.7	487.50	438.7	358.6	130.0	82
PZ-3I	--	Upgradient	3/11/2014	2550273.05	1165494.61	486.5	489.49	442.3	432.3	54.6	10
PZ-3S	--	Upgradient	3/11/2014	2550274.66	1165484.43	487.0	490.53	457.5	447.5	39.9	10
PZ-4I	--	Upgradient	3/11/2014	2551282.08	1163246.61	479.9	482.98	443.5	433.5	46.8	10
PZ-4S	--	Upgradient	3/10/2014	2551270.14	1163247.97	479.9	482.87	460.3	450.3	30.0	10
PZ-7S	--	Downgradient	4/1/2014	2553055.64	1169419.33	449.0	451.57	414.9	404.9	44.5	10
PZ-8S	--	Upgradient	4/1/2014	2551188.94	1167801.20	450.5	453.08	411.4	401.4	49.5	10
PZ-9S	--	Upgradient	3/5/2014	2553089.53	1162633.36	466.1	469.28	428.5	418.5	48.0	10
PZ-10S	--	Downgradient	3/5/2014	2554990.43	1164021.55	431.0	433.85	402.4	392.4	39.0	10
PZ-11S	--	Downgradient	2/20/2014	2557002.59	1162467.37	390.9	393.99	376.8	366.8	24.5	10
PZ-12D	PZD-12D	Downgradient	4/14/2014	2557136.26	1164311.85	431.4	434.09	350.1	290.1	141.7	60
PZ-13S	--	Downgradient	3/19/2014	2555276.64	1168011.19	406.5	409.97	382.2	372.2	34.7	10
PZ-14I	--	Downgradient	3/20/2014	2554365.65	1168398.28	419.9	422.71	376.5	366.5	53.8	10
PZ-14S	--	Downgradient	3/20/2014	2554359.23	1168398.59	420.2	423.31	393.0	383.0	37.6	10
PZ-15I	--	Downgradient	3/25/2014	2554399.25	1167721.02	400.2	403.06	321.9	311.9	88.7	10
PZ-15S	--	Downgradient	3/27/2014	2554394.06	1167720.25	400.1	402.90	370.2	360.2	39.9	10
PZ-16I	--	Downgradient	3/14/2014	2554587.53	1166980.59	379.5	382.45	351.3	341.3	38.6	10
PZ-16S	--	Downgradient	3/18/2014	2554581.44	1166977.63	379.3	382.52	370.6	360.6	19.1	10
PZ-17I	--	Downgradient	3/17/2014	2554702.42	1166313.81	362.3	365.33	329.2	319.2	43.5	10
PZ-18I	--	Downgradient	2/26/2014	2557745.51	1160766.13	359.6	362.55	331.3	321.3	38.4	10
PZ-18S	--	Downgradient	3/26/2014	2557747.42	1160757.41	359.7	362.82	345.0	335.0	24.2	10
PZ-19I	--	Downgradient	3/4/2014	2558899.87	1159797.10	368.9	371.74	335.6	325.6	43.7	10
PZ-19S	--	Downgradient	3/4/2014	2558894.60	1159805.43	368.4	371.42	350.8	340.8	28.0	10

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Plant Branch AP-BCD, Putnam County, Georgia

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PZ-20I	--	Downgradient	3/5/2014	2560160.17	1159495.25	362.2	365.34	343.1	333.1	29.5	10
PZ-20S	--	Downgradient	3/5/2014	2560157.16	1159490.13	362.2	365.41	357.3	347.3	15.3	10
PZ-21I	--	Downgradient	3/10/2014	2561328.17	1160591.42	355.8	358.92	341.8	331.8	24.4	10
PZ-21S	--	Downgradient	3/11/2014	2561321.43	1160592.45	355.5	358.52	351.1	346.1	9.8	5
PZ-23I	--	Downgradient	7/29/2016	2557877.71	1162975.56	425.1	427.74	368.6	358.6	66.5	10
BRGWC-24S	PZ-24S	Downgradient A	7/27/2016	2562862.19	1162400.95	351.4	354.10	319.9	309.9	42.0	10
PZ-26I	--	Downgradient	7/26/2016	2561626.45	1160669.20	368.0	370.63	347.5	337.5	30.5	10
PZ-28I	--	Downgradient	7/24/2016	2560151.53	1159505.00	362.5	364.81	348.5	338.5	24.0	10
PZ-31S	--	Downgradient	7/26/2016	2557971.75	1160936.81	374.3	376.77	344.8	334.8	39.5	10
PZ-39	--	Downgradient	7/30/2016	2557460.52	1163675.53	432.0	434.78	397.3	387.3	44.7	10
PZ-40S	--	Downgradient A	2/14/2017	2562807.61	1162415.06	353.2	355.96	324.4	314.4	40.2	10
PZ-41S	--	Downgradient A	2/14/2017	2562759.44	1162431.76	354.3	357.17	320.5	310.5	44.2	10
PZ-42S	--	Downgradient A	2/9/2017	2562734.89	1162845.64	359.0	361.66	337.2	327.2	32.2	10
PZ-43	--	Downgradient A	2/7/2018	2562031.42	1162159.72	381.0	383.71	351.0	341.0	40.4	10
PZ-46	--	Downgradient B	2/5/2018	2560558.89	1162756.31	382.1	384.64	346.5	336.5	45.6	10
PZ-48	--	Downgradient D	1/24/2018	2558444.63	1163046.78	418.3	420.90	361.7	351.7	67.0	10
PZ-49	--	Downgradient B	1/30/2018	2561125.71	1163321.35	382.2	384.99	375.6	365.6	17.0	10
PZ-52D	--	Downgradient E	5/14/2020	2554051.53	1168053.71	414.3	417.03	364.8	354.8	59.5	10
PZ-53D	--	Downgradient E	5/17/2020	2554984.36	1164393.74	431.6	434.68	302.2	292.2	139.4	10
PZ-54	--	Downgradient E	5/15/2020	2555458.38	1164828.76	440.8	443.86	398.8	388.8	52.0	10
PZ-55	--	Downgradient E	5/19/2020	2554783.76	1163208.08	450.2	453.07	410.9	400.9	49.3	10
PZ-56	--	Downgradient B	5/20/2020	2554086.36	1162965.21	416.2	418.84	396.9	386.9	29.3	10
PB-1S	--	Downgradient	1/22/2019	2556355.89	1164910.63	400.4	403.16	372.4	362.4	38.0	10
PB-2D	--	Downgradient	12/4/2018	2556914.34	1164853.67	414.9	416.71	367.9	357.9	57.0	10
PB-4S	--	Downgradient	1/16/2019	2556069.32	1164335.20	409.3	411.15	371.3	361.3	48.0	10
PB-4D	--	Downgradient	1/16/2019	2556060.72	1164339.50	409.0	412.12	304.5	294.5	114.5	10
PB-7S	--	Downgradient	1/14/2019	2556186.30	1163831.09	399.7	402.88	376.7	366.7	33.0	10
PB-8S	--	Downgradient	1/8/2018	2556792.21	1163018.39	398.6	401.82	373.6	363.6	35.0	10
PB-8D	--	Downgradient	1/8/2018	2556786.65	1163024.53	398.2	401.74	304.2	294.2	106.0	10
PB-10S	--	Downgradient	1/16/2019	2558551.25	1163589.10	397.6	400.91	374.6	364.6	33.0	10
PB-10D	--	Downgradient	1/16/2019	2558546.62	1163593.43	397.5	400.31	322.5	312.5	85.0	10
PB-13S	--	Downgradient	12/10/2018	2556626.03	1162084.43	370.8	373.31	330.8	320.8	50.0	10
PB-13D	--	Downgradient	12/10/2018	2556638.88	1162084.53	371.1	373.77	284.1	274.1	97.0	10

Notes:
ft = feet
ft BGS = feet below ground surface
-- = not applicable
(1) Coordinates in North American Datum (NAD) 1983, State Plane, Georgia-West, feet.
(2) Elevations referenced to the North American Vertical Datum of 1988 (NAVD88).

Table 2

Groundwater Sampling Event Summary
Plant Branch AP-BCD, Putnam County, Georgia

Well ID	Hydraulic Location	September 21-28, 2021	February 1-4, 2022	Status of Monitoring Well
Purpose of Sampling Event:		**Assessment**	**Assessment**	
AP-BCD				
BRGWA-2S	Upgradient	X	X	Assessment
BRGWA-2I	Upgradient	X	X	Assessment
BRGWA-5S	Upgradient	X	X	Assessment
BRGWA-5I	Upgradient	X	X	Assessment
BRGWA-6S	Upgradient	X	X	Assessment
BRGWA-12S	Upgradient	X	X	Assessment
BRGWA-12I	Upgradient	X	X	Assessment
BRGWA-23S	Upgradient	X	X	Assessment
BRGWC-25I	Downgradient	X	X	Assessment
BRGWC-27I	Downgradient	X	X	Assessment
BRGWC-29I	Downgradient	X	X	Assessment
BRGWC-30I	Downgradient	X	X	Assessment
BRGWC-32S	Downgradient	X	X	Assessment
BRGWC-45	Downgradient	X	X	Assessment
BRGWC-47	Downgradient	X	X	Assessment
BRGWC-50	Downgradient	X	X	Assessment
BRGWC-52I	Downgradient	X	X	Assessment
PZ-44	Downgradient	X	X	Delineation
PZ-50D	Downgradient	X	X	Delineation
PZ-51S	Downgradient	X	X	Delineation
PZ-51I	Downgradient	X	X	Assessment
PZ-51D	Downgradient	X	X	Delineation
PZ-57I	Downgradient	X	X	Delineation
PZ-58I	Downgradient	X	X	Delineation
PZ-59I	Downgradient	not sampled	X	Delineation
PZ-60I	Downgradient	X	X	Delineation
PZ-61I	Downgradient	X	X	Delineation
PZ-62I	Downgradient	not installed	X	Delineation
PZ-63I	Downgradient	not installed	X	Delineation

Table 3

Summary of Groundwater Elevations
Plant Branch AP-BCD, Putnam County, Georgia

Well ID	Top of Casing Elevation [1] (ft)	September 20, 2021		January 31, 2022	
		Depth to Water (ft BTOC)	Groundwater Elevation [1] (ft)	Depth to Water (ft BTOC)	Groundwater Elevation [1] (ft)
AP-BCD Detection Monitoring Well Network					
BRGWA-2S	443.20	12.44	430.76	11.03	432.17
BRGWA-2I	443.14	12.29	430.85	10.87	432.27
BRGWA-5S	443.86	11.85	432.01	11.00	432.86
BRGWA-5I	443.79	11.76	432.03	11.02	432.77
BRGWA-6S	458.96	26.52	432.44	24.63	434.33
BRGWA-12S	434.64	50.20	384.44	49.88	384.76
BRGWA-12I	434.39	49.91	384.48	49.73	384.66
BRGWA-23S	428.24	37.03	391.21	38.36	389.88
BRGWC-25I	357.37	9.68	347.69	9.27	348.10
BRGWC-27I	366.86	7.63	359.23	8.78	358.08
BRGWC-29I	353.23	10.12	343.11	10.17	343.06
BRGWC-30I	352.61	4.52	348.09	4.63	347.98
BRGWC-32S	406.39	37.30	369.09	39.20	367.19
BRGWC-45	384.58	11.31	373.27	10.86	373.72
BRGWC-47	411.20	25.76	385.44	26.51	384.69
BRGWC-50	381.35	37.87	343.48	38.01	343.34
BRGWC-52I	383.87	39.22	344.65	39.31	344.56
AP-E Detection Monitoring Well Network					
BRGWA-2S	443.20	12.44	430.76	11.03	432.17
BRGWA-2I	443.14	12.29	430.85	10.87	432.27
BRGWA-5S	443.86	11.85	432.01	11.00	432.86
BRGWA-5I	443.79	11.76	432.03	11.02	432.77
BRGWA-6S	458.96	26.52	432.44	24.63	434.33
BRGWC-17S	365.32	5.92	359.40	5.94	359.38
BRGWC-33S	416.68	11.95	404.73	9.02	407.66
BRGWC-34S	391.96	3.00	388.96	2.53	389.43
BRGWC-35S	366.31	1.50	364.81	1.75	364.56
BRGWC-36S	389.84	3.18	386.66	3.73	386.11
BRGWC-37S	447.05	50.85	396.20	52.09	394.96
BRGWC-38S	432.24	22.05	410.19	20.85	411.39
AP-BCD Assessment Monitoring Well Network					
PZ-44	383.04	25.60	357.44	25.59	357.45
PZ-50D	380.86	38.02	342.84	38.09	342.77
PZ-51S	380.27	38.32	341.95	38.39	341.88
PZ-51I	380.52	38.16	342.36	38.21	342.31
PZ-51D	380.75	37.94	342.81	37.87	342.88
PZ-57I	382.50	35.70	346.80	35.89	346.61

Table 3
Summary of Groundwater Elevations
Plant Branch AP-BCD, Putnam County, Georgia

Well ID	Top of Casing Elevation [1] (ft)	September 20, 2021		January 31, 2022	
		Depth to Water (ft BTOC)	Groundwater Elevation [1] (ft)	Depth to Water (ft BTOC)	Groundwater Elevation [1] (ft)
PZ-58I	382.27	36.98	345.29	37.12	345.15
PZ-59I	383.49	38.27	345.22	38.44	345.05
PZ-60I	382.61	37.79	344.82	37.96	344.65
PZ-61I	380.64	40.52	340.12	40.45	340.19
PZ-62I	380.95	not installed	not installed	39.02	341.93
PZ-63I	381.31	not installed	not installed	39.10	342.21
Piezometers					
PZ-1D	463.41	37.70	425.71	38.12	425.29
PZ-1I	464.71	38.38	426.33	39.03	425.68
PZ-1S	465.07	37.40	427.67	38.07	427.00
PZ-3D	487.50	49.00	438.50	49.38	438.12
PZ-3I	489.49	50.76	438.73	51.29	438.20
PZ-3S	490.53	>43.60(DRY)	DRY	>43.60(DRY)	DRY
PZ-4I	482.98	34.40	448.58	34.60	448.38
PZ-4S	482.87	DRY	DRY	DRY	DRY
PZ-7S	451.57	22.39	429.18	24.63	426.94
PZ-8S	453.08	24.46	428.62	24.46	428.62
PZ-9S	469.28	37.44	431.84	38.30	430.98
PZ-10S	433.85	26.95	406.90	26.10	407.75
PZ-11S	393.99	18.43	375.56	18.40	375.59
PZ-12D	434.09	75.40	358.69	79.55	354.54
PZ-13S	409.97	27.70	382.27	26.82	383.15
PZ-14I	422.71	19.70	403.01	19.84	402.87
PZ-14S	423.31	22.92	400.39	20.80	402.51
PZ-15I	403.06	10.70	392.36	9.66	393.40
PZ-15S	402.90	10.95	391.95	9.50	393.40
PZ-16I	382.45	11.90	370.55	11.17	371.28
PZ-16S	382.52	12.00	370.52	11.35	371.17
PZ-17I	365.33	2.93	362.40	2.71	362.62
PZ-18I	362.55	19.90	342.65	19.24	343.31
PZ-18S	362.82	21.08	341.74	20.91	341.91
PZ-19I	371.74	17.51	354.23	17.15	354.59
PZ-19S	371.42	16.95	354.47	16.58	354.84
PZ-20I	365.34	15.85	349.49	15.41	349.93
PZ-20S	365.41	16.02	349.39	15.59	349.82
PZ-21I	358.92	11.20	347.72	10.71	348.21
PZ-21S	358.52	10.71	347.81	10.21	348.31
PZ-23I	427.74	36.51	391.23	37.96	389.78

Table 3

Summary of Groundwater Elevations
Plant Branch AP-BCD, Putnam County, Georgia

Well ID	Top of Casing Elevation [1] (ft)	September 20, 2021		January 31, 2022	
		Depth to Water (ft BTOC)	Groundwater Elevation [1] (ft)	Depth to Water (ft BTOC)	Groundwater Elevation [1] (ft)
BRGWC-24S	354.10	14.42	339.68	14.01	340.09
PZ-26I	370.63	22.63	348.00	20.40	350.23
PZ-28I	364.81	15.34	349.47	14.53	350.28
PZ-31S	376.77	26.24	350.53	27.73	349.04
PZ-39	434.78	48.88	385.90	48.85	385.93
PZ-40S	355.96	16.03	339.93	15.72	340.24
PZ-41S	357.17	17.23	339.94	16.95	340.22
PZ-42S	361.66	20.71	340.95	20.50	341.16
PZ-43	383.71	29.12	354.59	29.54	354.17
PZ-46	384.64	9.00	375.64	9.04	375.60
PZ-48	420.90	30.61	390.29	31.60	389.30
PZ-49	384.99	10.89	374.10	9.00	375.99
PZ-52D	417.03	13.60	403.43	11.94	405.09
PZ-53D	434.68	22.90	411.78	20.90	413.78
PZ-54	443.86	47.65	396.21	49.54	394.32
PZ-55	453.07	46.20	406.87	46.00	407.07
PZ-56	418.84	7.22	411.62	7.80	411.04
PB-1S	403.16	17.06	386.10	16.25	386.91
PB-2D	416.71	38.09	378.62	37.77	378.94
PB-4S	411.15	24.04	387.11	24.10	387.05
PB-4D	412.12	25.11	387.01	24.80	387.32
PB-7S	402.88	22.40	380.48	21.55	381.33
PB-8S	401.82	19.24	382.58	19.05	382.77
PB-8D	401.74	20.19	381.55	19.90	381.84
PB-10S	400.91	13.79	387.12	13.85	387.06
PB-10D	400.31	13.35	386.96	13.45	386.86
PB-13S	373.31	8.47	364.84	8.09	365.22
PB-13D	373.77	9.18	364.59	8.81	364.96

Notes:
ft = feet
ft BTOC = feet below top of casing
(1) Elevations referenced to the North American Vertical Datum of 1988 (NAVD88).

Table 4

Groundwater Gradient and Flow Velocity Calculations

Plant Branch AP-BCD, Putnam County, Georgia

Flow Path Direction [1]	September 20, 2021				January 31, 2022			
	h_1 (ft)	h_2 (ft)	L (ft)	i (ft/ft)	h_1 (ft)	h_2 (ft)	L (ft)	i (ft/ft)
BRGWA-23S/BRGWC-30I	391.21	348.09	1374	0.031	389.88	347.98	1374	0.030
BRGWC-47/BRGWC-50	385.40	343.50	3130	0.013	384.69	343.34	3130	0.013

Flow Path Direction [1]	K_h (ft/day)	n_e	Average i (ft/ft)	Average V (ft/day)[2]	Average V (ft/day)[3]
BRGWA-23S/BRGWC-30I	2.70	0.20	0.031	0.42	0.39
BRGWC-47/BRGWC-50	5.50	0.20	0.013	0.37	

Notes:

ft = feet

ft/day = feet per day

ft/ft = feet per foot

h_1 and h_2 = groundwater elevation at location 1 and 2

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

K_h = horizontal hydraulic conductivity

L = distance between location 1 and 2 along the flow path

n_e = effective porosity

V = groundwater flow velocity

(1) Flow path direction relative to the orientation of AP-BCD and illustrated on Figures 3 and 4 of associated report.

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

(3) Average groundwater flow velocity for unit.

Table 5A
Summary of Groundwater Analytical Results - September 2021
Plant Branch AP-BCD, Putnam County, Georgia

	Well ID:	BGWA-12I	BRGWA-12S	BRGWA-23S	BRGWA-2I	BRGWA-2S	BRGWA-5I	BRGWA-5S	BRGWA-6S	BRGWC-25I	BRGWC-27I	BRGWC-29I	BRGWC-30I	BRGWC-32S	BRGWC-45
	Sample Date:	9/21/2021	9/21/2021	9/22/2021	9/22/2021	9/22/2021	9/21/2021	9/21/2021	9/22/2021	9/28/2021	9/28/2021	9/28/2021	9/28/2021	9/28/2021	9/23/2021
	Parameter [1,2,3]														
APPENDIX III	Boron	<0.0086	<0.0086	0.047	<0.0086	<0.0086	<0.0086	<0.0086	<0.0086	1.1	0.95	0.9	1.7	0.91	0.029 J
	Calcium	16.4	5.4	9.2	15.9	4.3	14.1	19.1	4.1	38.4	50.4	59.5	212	33.9	32 M1
	Chloride	2.1	3.5	2.8	1.7	1.5	3.2	3.2	2.1	4.2	3.7	5.4	3.4	3.6	29.3
	Fluoride	0.071 J	<0.05	0.069 J	<0.05	<0.05	<0.05	0.056 J	<0.05	0.15	0.16	0.081 J	0.11	<0.05	0.06 J
	pH	6.53	5.87	5.72	6.78	6.06	6.32	6.36	6.48	5.97	5.82	4.23	6.33	5.82	5.95
	Sulfate	1.7	0.51 J	34.6	5.2	<0.5	2.3	<0.5	<0.5	112	137	250	612	189	97.5
	TDS	117	56	128	129	66	108	104	62	270	262	457	1050	375	277
APPENDIX IV	Antimony	0.017	<0.00078	<0.00078	<0.00078	<0.00078	<0.00078	<0.00078	<0.00078	<0.00078	<0.00078	<0.00078	<0.00078	<0.00078	<0.00078
	Arsenic	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011
	Barium	0.074	0.06	0.07	0.0075	0.0097	0.025	0.038	0.014	0.023	0.013	0.017	0.035	0.02	0.064
	Beryllium	<0.000054	<0.000054	<0.000054	<0.000054	<0.000054	<0.000054	<0.000054	<0.000054	<0.000054	<0.000054	0.00079	<0.000054	<0.000054	<0.000054
	Cadmium	<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
	Chromium	0.0023 J	0.0024 J	0.0026 J	<0.0011	0.0091	0.0064	0.0044 J	0.014	<0.0011	<0.0011	<0.0011	<0.0011	0.0021 J	<0.0011
	Cobalt	<0.00039	<0.00039	<0.00039	0.0015 J	<0.00039	0.00071 J	<0.00039	0.00078 J	0.0029 J	0.0047 J	0.0069	0.001 J	<0.00039	0.0049 J
	Lead	<0.00089	<0.00089	<0.00089	<0.00089	<0.00089	<0.00089	<0.00089	<0.00089	<0.00089	<0.00089	<0.00089	<0.00089	<0.00089	<0.00089
	Lithium	0.0037 J	<0.00073	0.0074 J	0.021 J	<0.00073	0.0012 J	<0.00073	0.0035 J	<0.00073	0.0011 J	0.0029 J	0.023 J	0.0021 J	0.0023 J
	Mercury	0.0001 J B	0.0001 J B	0.0001 J B	0.0001 J B	0.0001 J B	0.0001 J B	0.0001 J B	0.0001 J B	<0.000078	<0.000078	<0.000078	<0.000078	<0.000078	<0.000078
	Molybdenum	<0.00074	<0.00074	<0.00074	0.0012 J	<0.00074	0.002 J	<0.00074	<0.00074	0.00089 J	<0.00074	<0.00074	0.001 J	<0.00074	<0.00074
	Comb. Radium 226/228	1.33	0.468 U	1.4	0.349 U	1.33 U	0.182 U	0.86 U	0.943 U	4.44	3.58	1.49	0.749 U	0.947 U	0.619 U
	Selenium	<0.0014	<0.0014	0.0016 J	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014	0.0022 J	<0.0014	0.13	<0.0014
	Thallium	<0.00018	<0.00018	<0.00018	<0.00018	<0.00018	<0.00018	<0.00018	<0.00018	<0.00018	<0.00018	<0.00018	<0.00018	<0.00018	<0.00018

Notes:
-- = Parameter was not analyzed
J = Indicates the parameter was estimated and detected between the MDL and the reporting limit (RL).
B = Indicates that analytes was detected in associated method blank.
TDS = total dissolved solids
U = Indicates the parameter was not detected above the analytical minimum detectable concentration (MDC) (Specific to combined radium 226/228)
(1) Appendix III/IV parameter per 40 CFR 257 Subpart D. Parameters are reported in units of milligrams per liter (mg/L), except for pH reported as s.u. (standard units) and combined radium reported as picocuries per liter (pCi/L).
(2) Metals were analyzed by EPA Method 6010D, 6020B, and 7470A, anions were analyzed by EPA Method 300.0, TDS was analyzed by SM2540-2011, and combined radium 226/228 by EPA Methods 9315/9320.
(3) The pH value presented was recorded at the time of sample collection in the field.

Table 5A
Summary of Groundwater Analytical Results - September 2021
Plant Branch AP-BCD, Putnam County, Georgia

	Well ID:	BGRWC-47	BRGWC-50	BRGWC-52I	PZ-44	PZ-50D	PZ-51D	PZ-51I	PZ-51S	PZ-57I	PZ-58I	PZ-60I	PZ-61I
	Sample Date:	9/23/2021	9/27/2021	9/28/2021	9/28/2021	9/28/2021	9/28/2021	9/27/2021	9/27/2021	9/28/2021	9/28/2021	9/28/2021	9/27/2021
	Parameter (1,2,3)												
APPENDIX III	Boron	0.47	0.32	1.4	1.3	0.24	0.023 J	0.39	<0.0086	0.48	0.36	0.23	0.26
	Calcium	336	196	39.5	24.2	225	113	187	7.5	51.1	108	274	230
	Chloride	4.3	16.2	5.5	5	13	12.8	9.4	3.8	5.9	9.6	27.2	20
	Fluoride	<0.05	0.43	0.12	0.08 J	0.11	0.26	<0.05	0.072 J	0.085 J	0.97	1.6	0.067 J
	pH	5.74	5.05	6.81	6.22	6.23	7.18	5.34	6.04	5.37	4	4.77	5.02
	Sulfate	1240	1180	132	47.2	866	294	933	<0.5	259	628	1670 M1	1420
	TDS	1770	1800	336	181	1470	650	1560	88	542	1120	2600	2100
APPENDIX IV	Antimony	<0.00078	<0.00078	<0.00078	<0.00078	<0.00078	<0.00078	0.0012 J	<0.00078	<0.00078	<0.00078	<0.00078	<0.00078
	Arsenic	0.002 J	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011	0.0023 J
	Barium	0.031	0.017	0.013	0.049	0.034	0.057	0.014	0.025	0.022	0.017	0.022	0.029
	Beryllium	<0.000054	0.006	<0.000054	<0.000054	0.000059 J	<0.000054	0.000071 J	<0.000054	0.00031 J	0.025	0.065	0.0017
	Cadmium	<0.00011	0.0095	<0.00011	<0.00011	<0.00011	<0.00011	0.0031	<0.00011	0.00064	0.0042	0.016	0.00081
	Chromium	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011	0.0077
	Cobalt	<0.00039	1.3	<0.00039	<0.00039	0.2	<0.00039	0.02	0.0022 J	0.055	0.39	3.5	0.45
	Lead	<0.00089	<0.00089	<0.00089	<0.00089	<0.00089	<0.00089	<0.00089	<0.00089	<0.00089	<0.00089	<0.00089	0.0019
	Lithium	0.042	0.038	0.0035 J	0.0048 J	0.02 J	0.0096 J	0.02 J	<0.00073	0.018 J	0.041	0.1	0.0095 J
	Mercury	<0.000078	<0.000078	<0.000078	<0.000078	<0.000078	<0.000078	<0.000078	<0.000078	<0.000078	<0.000078	<0.000078	<0.000078
	Molybdenum	<0.00074	<0.00074	<0.00074	<0.00074	0.0021 J	0.0029 J	<0.00074	<0.00074	<0.00074	<0.00074	<0.00074	<0.00074
	Comb. Radium 226/228	0.527 U	2.07	3.28	0.526 U	1.05	1.89	0.771 U	0.00107 U	0.0352 U	1.66	2.79	1.14 U
	Selenium	<0.0014	0.0022 J	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014	0.0034 J	0.0049 J	0.0079
	Thallium	<0.00018	<0.00018	<0.00018	<0.00018	<0.00018	<0.00018	<0.00018	<0.00018	<0.00018	<0.00018	<0.00018	<0.00018

Notes:
-- = Parameter was not analyzed
J = Indicates the parameter was estimated and detected between the MDL and the reporting limit (RL).
B = Indicates that analytes was detected in associated method blank.
TDS = total dissolved solids
U = Indicates the parameter was not detected above the analytical minimum detectable concentration (MDC) (Specific to combined radium 226/228)
(1) Appendix III/IV parameter per 40 CFR 257 Subpart D. Parameters are reported in units of milligrams per liter (mg/L), except for pH reported as s.u. (standard units) and combined radium reported as picocuries per liter (pCi/L).
(2) Metals were analyzed by EPA Method 6010D, 6020B, and 7470A, anions were analyzed by EPA Method 300.0, TDS was analyzed by SM2540-2011, and combined radium 226/228 by EPA Methods 9315/9320.
(3) The pH value presented was recorded at the time of sample collection in the field.

Table 5B
Summary of Surface Water Analytical Results - September 2021
Plant Branch AP-BCD, Putnam County, Georgia

	Loc ID:	LR-1 (bottom)	LR-1 (mid)	LR-1 (surface)	LR+8A	LR+8 (bottom)	LR+8 (mid)	LR+8 (surface)	LR+9A	LR+9 (bottom)	LR+9 (mid)	LR+9 (surface)	LR-10 (bottom)	LR-10 (mid)	LR-10 (surface)
	Sample Date:	9/23/2021	9/23/2021	9/23/2021	9/23/2021	9/23/2021	9/23/2021	9/23/2021	9/23/2021	9/23/2021	9/23/2021	9/23/2021	9/23/2021	9/23/2021	9/23/2021
	Parameter [1,2,3]														
APPENDIX III	**Boron**	<0.0086 U	<0.0086 U	<0.0086 U	<0.0086 U	<0.0086 U	<0.0086 U	<0.0086 U	<0.0086 U	<0.0086 U	<0.0086 U	<0.0086 U	<0.0086 U	<0.0086 U	<0.0086 U
	Calcium	4.7	5	5	5	5	5.2	5.3	5	4.9	5	5.2	4.9	4.8	4.8
	Chloride	3.1	3.1	3.1	3.4	3.4	3.3	3.3	3.4	3.4	3.4	3.4	3.5	3.5	3.5
	Fluoride	<0.05 U	<0.05 U	<0.05 U	<0.05 U	<0.05 U	<0.05 U	<0.05 U	<0.05 U	<0.05 U	<0.05 U	<0.05 U	<0.05 U	<0.05 U	<0.05 U
	pH	7.2	7.22	7.22	7.3	7.29	7.28	7.26	7.35	7.32	7.35	7.35	7.27	7.29	7.34
	Sulfate	1.8	1.8	1.8	2.3	2.2	2.2	2.2	2.3	2.3	2.3	2.3	2.4	2.4	2.4
	TDS	63	61	62	61	54	65	56	56	57	58	50	53	53	60
APPENDIX IV	**Antimony**	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	Arsenic	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	Barium	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	Beryllium	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	Cadmium	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	Chromium	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	Cobalt	<0.00039 U	<0.00039 U	<0.00039 U	<0.00039 U	<0.00039 U	<0.00039 U	<0.00039 U	<0.00039 U	<0.00039 U	<0.00039 U	<0.00039 U	<0.00039 U	<0.00039 U	<0.00039 U
	Lead	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	Lithium	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	Mercury	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	Molybdenum	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	Comb. Radium 226/228	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	Selenium	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	Thallium	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Notes:
-- = Parameter was not analyzed
< = Indicates the parameter was not detected above the analytical method detection limit (MDL).
TDS = total dissolved solids
U = Indicates the parameter was not detected above the analytical minimum detectable concentration (MDC) (Specific to combined radium 226/228)
(1) Appendix III/IV parameter per 40 CFR 257 Subpart D. Parameters are reported in units of milligrams per liter (mg/L), except for pH reported as s.u. (standard units) and combined radium reported as picocuries per liter (pCi/L).
(2) Metals were analyzed by EPA Method 6010D, 6020B, and 7470A, anions were analyzed by EPA Method 300.0, TDS was analyzed by SM2540-2011, and combined radium 226/228 by EPA Methods 9315/9320.
(3) The pH value presented was recorded at the time of sample collection in the field.

Table 5C
Summary of Groundwater Analytical Results - February 2022
Plant Branch AP-BCD, Putnam County, Georgia

	Well ID:	BGWA-12I	BRGWA-12S	BRGWA-23S	BRGWA-2I	BRGWA-2S	BRGWA-5I	BRGWA-5S	BRGWA-6S	BRGWC-25I	BRGWC-27I	BRGWC-29I	BRGWC-30I	BRGWC-32S	BRGWC-45
	Sample Date:	2/1/2022	2/1/2022	2/1/2022	2/1/2022	2/1/2022	2/1/2022	2/1/2022	2/1/2022	2/2/2022	2/4/2022	2/3/2022	2/2/2022	2/2/2022	2/2/2022
	Parameter [1,2,3]														
APPENDIX III	Boron	<0.0086	<0.0086	0.046	<0.0086	<0.0086	<0.0086	<0.0086	<0.0086	1.1	1	0.93	1.9	1	0.034 J
	Calcium	14.2	5.3	10.7	14.4	4.4	14.5	19.1	4.2	44.3	61.7	58.7	232 M1	44.2	33.8
	Chloride	2.2	3.6	3.2	1.8	1.6	3.5	3.4	2.1	4.2	4.6	6.1	4	3.8	23.4
	Fluoride	0.055 J	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.15	0.14	0.11	0.1	<0.05	<0.05
	pH	6.4	5.81 - 5.83	5.65	6.83	5.95	6.38	6.39	6.54	6.23	5.97	4.23	6.34	5.99	5.92
	Sulfate	1.4	<0.5	36.8	5.4	<0.5	2	<0.5	<0.5	117	172	274	580	210	90.1
	TDS	114	63	130	126	72	129	124	61	283	301	419	1110	443	276
APPENDIX IV	Antimony	0.011	<0.00078	<0.00078	<0.00078	<0.00078	<0.00078	<0.00078	<0.00078	<0.00078	<0.00078	<0.00078	0.0013 J	<0.00078	<0.00078
	Arsenic	0.0017 J	<0.0011	0.0018 J	0.0012 J	<0.0011	0.0013 J	0.0012 J	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011
	Barium	0.057	0.064	0.08	0.0066	0.01	0.028	0.04	0.014	0.023	0.015	0.016	0.031	0.023	0.063
	Beryllium	<0.000054	<0.000054	<0.000054	<0.000054	<0.000054	<0.000054	<0.000054	<0.000054	<0.000054	0.000054 J	0.00083	<0.000054	<0.000054	<0.000054
	Cadmium	<0.00011	<0.00011	<0.00011	<0.00011	<0.00011	<0.00011	<0.00011	<0.00011	<0.00011	<0.00011	<0.00011	0.00014 J	<0.00011	<0.00011
	Chromium	0.0027 J	0.0029 J	0.0028 J	0.0013 J	0.0092	0.0066	0.0052	0.015	<0.0011	<0.0011	<0.0011	<0.0011	0.0021 J	<0.0011
	Cobalt	<0.00039	<0.00039	0.00052 J	0.00079 J	0.0011 J	0.0007 J	<0.00039	<0.00039	0.0027 J	0.0076	0.0077	0.0012 J	<0.00039	0.0054
	Lead	<0.00089	<0.00089	<0.00089	<0.00089	<0.00089	<0.00089	<0.00089	<0.00089	<0.00089	<0.00089	<0.00089	<0.00089	<0.00089	<0.00089
	Lithium	0.0037 J	<0.00073	0.008 J	0.023 J	<0.00073	0.0011 J	<0.00073	0.0029 J	<0.00073	0.001 J	0.0026 J	0.021 J	0.0035 J	0.0022 J
	Mercury	<0.00013	<0.00013	<0.00013	<0.00013	<0.00013	<0.00013	<0.00013	<0.00013	<0.00013	<0.00013	<0.00013	<0.00013	<0.00013	<0.00013
	Molybdenum	<0.00074	<0.00074	<0.00074	0.0013 J	<0.00074	0.002 J	<0.00074	<0.00074	0.0011 J	<0.00074	<0.00074	0.0012 J	<0.00074	<0.00074
	Comb. Radium 226/228	0.833 U	0.659 U	1.15	0.233 U	0.251 U	1.23	0.23 U	0.349 U	0.640 U	0.335 U	0.798 U	1.21 U	0.0265 U	0.219 U
	Selenium	<0.0014	<0.0014	0.002 J	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014	0.21	<0.0014
	Thallium	<0.00018	<0.00018	<0.00018	<0.00018	<0.00018	<0.00018	<0.00018	<0.00018	<0.00018	<0.00018	<0.00018	<0.00018	<0.00018	<0.00018

Notes:
-- = Parameter was not analyzed
J = Indicates the parameter was estimated and detected between the MDL and the reporting limit (RL).
TDS = total dissolved solids
U = Indicates the parameter was not detected above the analytical minimum detectable concentration (MDC) (Specific to combined radium 226/228)
(1) Appendix III/IV parameter per 40 CFR 257 Subpart D. Parameters are reported in units of milligrams per liter (mg/L), except for pH reported as s.u. (standard units) and combined radium reported as picocuries per liter (pCi/L).
(2) Metals were analyzed by EPA Method 6010D, 6020B, and 7470A, anions were analyzed by EPA Method 300.0, TDS was analyzed by SM2540-2011, and combined radium 226/228 by EPA Methods 9315/9320.
(3) The pH value presented was recorded at the time of sample collection in the field.

Table 5C
Summary of Groundwater Analytical Results - February 2022
Plant Branch AP-BCD, Putnam County, Georgia

	Well ID:	BGRWC-47	BRGWC-50	BRGWC-52I	PZ-44	PZ-50D	PZ-51D	PZ-51I	PZ-51S	PZ-57I	PZ-58I	PZ-59I	PZ-60I	PZ-61I	PZ-62I	PZ-63I
	Sample Date:	2/2/2022	2/3/2022	2/2/2022	2/2/2022	2/3/2022	2/3/2022	2/2/2022	2/2/2022	2/4/2022	2/3/2022	2/3/2022	2/3/2022	2/2/2022	2/4/2022	2/4/2022
	Parameter [1,2,3]															
APPENDIX III	Boron	0.48	0.31	1.5	1.6	0.22	0.034 J	0.42	<0.0086	0.51	0.38	0.055 J D3	0.25	0.32	0.5	0.67
	Calcium	320	220	40.1	25.1	222	122	187 M1	7.8	67.6	120	213	279	215	102	42.2
	Chloride	4.2	17.4	6.1	5.5	12.5	15.2	9.7	4.2	7.2	11.9	36.5	30.7	19.2	9.8	6.2
	Fluoride	<0.05	0.42	0.098 J	0.065 J	0.15	0.27	<0.05	0.053 J	0.096 J	1.8	2.7	2.3	<0.05	0.071 J	0.14
	pH	5.75	5.2	6.35	6.2	6.24	6.77	5.44	6.19	5.28	3.9	3.71	4.73	5.25	5.79	5.89
	Sulfate	1170 M1	1270	126	45.3	903	339	889	<0.5	336	767	2600	2020	1230	451	195
	TDS	1850	1850	160	181	1380	686	1590	98	630	1170	3610	2480	1970	818	403
APPENDIX IV	Antimony	<0.00078	<0.00078	<0.00078	<0.00078	<0.00078	<0.00078	<0.00078	<0.00078	<0.00078	<0.00078	<0.00078	<0.00078	<0.00078	<0.00078	<0.00078
	Arsenic	0.0056	<0.0011	<0.0011	0.004 J	0.0012 J	0.0015 J	<0.0011	0.002 J	<0.0011	<0.0011	0.017	<0.0011	<0.0011	<0.0011	<0.0011
	Barium	0.028	0.016	0.013	0.052	0.033	0.057	0.015	0.027	0.024	0.016	0.013	0.021	0.015	0.058	0.037
	Beryllium	<0.000054	0.0071	<0.000054	<0.000054	<0.000054	<0.000054	0.000071 J	<0.000054	0.00054	0.027	0.12	0.072	0.0015	<0.000054	<0.000054
	Cadmium	0.00015 J	0.0085	<0.00011	<0.00011	<0.00011	<0.00011	0.0043	<0.00011	0.00072	0.0038	0.006	0.016	0.00014 J	0.0004 J	<0.00011
	Chromium	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011	0.0032 J	<0.0011	<0.0011	<0.0011	<0.0011
	Cobalt	<0.00039	1.5	<0.00039	<0.00039	0.1	<0.00039	0.023	0.0028 J	0.094	0.43	1.6	3.4	0.51 M1	0.27	0.019
	Lead	<0.00089	<0.00089	<0.00089	<0.00089	<0.00089	<0.00089	<0.00089	<0.00089	<0.00089	<0.0044 D3	<0.0044 D3	<0.0044	<0.00089	<0.00089	<0.00089
	Lithium	0.04	0.038	0.0041 J	0.0058 J	0.024 J	0.0096 J	0.021 J	<0.00073	0.026 J	0.041	0.19	0.098	0.011 J	0.01 J	0.007 J
	Mercury	<0.00013	<0.00013	<0.00013	<0.00013	<0.00013	<0.00013	<0.00013	<0.00013	<0.00013	<0.00013	<0.00013	<0.00013	<0.00013	<0.00013	<0.00013
	Molybdenum	<0.00074	<0.00074	<0.00074	<0.00074	0.0012 J	0.0017 J	<0.00074	<0.00074	<0.00074	<0.00074	<0.00074	<0.00074	<0.00074	0.0011 J	0.00092 J
	Comb. Radium 226/228	0.145 U	1.15	2.33	0.244 U	1.0	2.23	0.992 U	0.0266 U	0.229 U	1.33	0.766 U	2.46	1.16	0.874	0.768
	Selenium	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014	0.0016 J	0.09	0.0026 J	0.0031 J	<0.0014	<0.0014
	Thallium	<0.00018	<0.00018	<0.00018	<0.00018	<0.00018	<0.00018	<0.00018	<0.00018	<0.00018	<0.0009 D3	<0.0009 D3	<0.0009	<0.00018	<0.00018	<0.00018

Notes:
-- = Parameter was not analyzed
J = Indicates the parameter was estimated and detected between the MDL and the reporting limit (RL).
D3 = Indicates that sample was diluted due to the presence of high levels of non-target analytes or other matrix interference.
M1 = Indicates that matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.
TDS = total dissolved solids
U = Indicates the parameter was not detected above the analytical minimum detectable concentration (MDC) (Specific to combined radium 226/228)
(1) Appendix III/IV parameter per 40 CFR 257 Subpart D. Parameters are reported in units of milligrams per liter (mg/L), except for pH reported as s.u. (standard units) and combined radium reported as picocuries per liter (pCi/L).
(2) Metals were analyzed by EPA Method 6010D, 6020B, and 7470A, anions were analyzed by EPA Method 300.0, TDS was analyzed by SM2540-2011, and combined radium 226/228 by EPA Methods 9315/9320.
(3) The pH value presented was recorded at the time of sample collection in the field.

Table 5D
Summary of Surface Water Analytical Results - February 2022
Plant Branch AP-BCD, Putnam County, Georgia

	Loc ID:	LR-1 (bottom)	LR-1 (mid)	LR-1 (surface)	LR+8A	LR+8 (bottom)	LR+8 (mid)	LR+8 (surface)	LR+9A	LR+9 (bottom)	LR+9 (mid)	LR+9 (surface)	LR-10 (bottom)	LR-10 (mid)	LR-10 (surface)
	Sample Date:	2/3/2022	2/3/2022	2/3/2022	2/3/2022	2/3/2022	2/3/2022	2/3/2022	2/3/2022	2/3/2022	2/3/2022	2/3/2022	2/3/2022	2/3/2022	2/3/2022
	Parameter [1,2,3]														
APPENDIX III	**Boron**	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040
	Calcium	5.1	5.1	5.3	5.7	5.1	5.3	4.8	5.6	5.1	4.8	5.1	5.1	4.9	4.7
	Chloride	3.2	3.2	3.1	3.5	3.6	3.5	3.6	3.8	3.6	3.9	3.8	3.8	4.1	4.2
	Fluoride	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
	pH	6.86	6.59	6.56	6.59	6.59	6.67	9.59	6.73	6.55	6.60	6.60	6.72	6.69	6.07
	Sulfate	2.4	2.4	2.4	4.2	2.8	2.8	2.8	3.5	3.1	2.9	3.0	2.9	3.0	3.0
	TDS	67.0	68.0	70.0	71.0	65.0	62.0	61.0	62.0	70.0	58.0	63.0	62.0	63.0	54.0
APPENDIX IV	**Antimony**	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	Arsenic	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	Barium	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	Beryllium	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	Cadmium	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	Chromium	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	Cobalt	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
	Lead	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	Lithium	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	Mercury	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	Molybdenum	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	Comb. Radium 226/228	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	Selenium	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	Thallium	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Notes:
-- = Parameter was not analyzed
< = Indicates the parameter was not detected above the analytical method detection limit (MDL).
TDS = total dissolved solids
U = Indicates the parameter was not detected above the analytical minimum detectable concentration (MDC) (Specific to combined radium 226/228)
(1) Appendix III/IV parameter per 40 CFR 257 Subpart D. Parameters are reported in units of milligrams per liter (mg/L), except for pH reported as s.u. (standard units) and combined radium reported as picocuries per liter (pCi/L).
(2) Metals were analyzed by EPA Method 6010D, 6020B, and 7470A, anions were analyzed by EPA Method 300.0, TDS was analyzed by SM2540-2011, and combined radium 226/228 by EPA Methods 9315/9320.
(3) The pH value presented was recorded at the time of sample collection in the field.

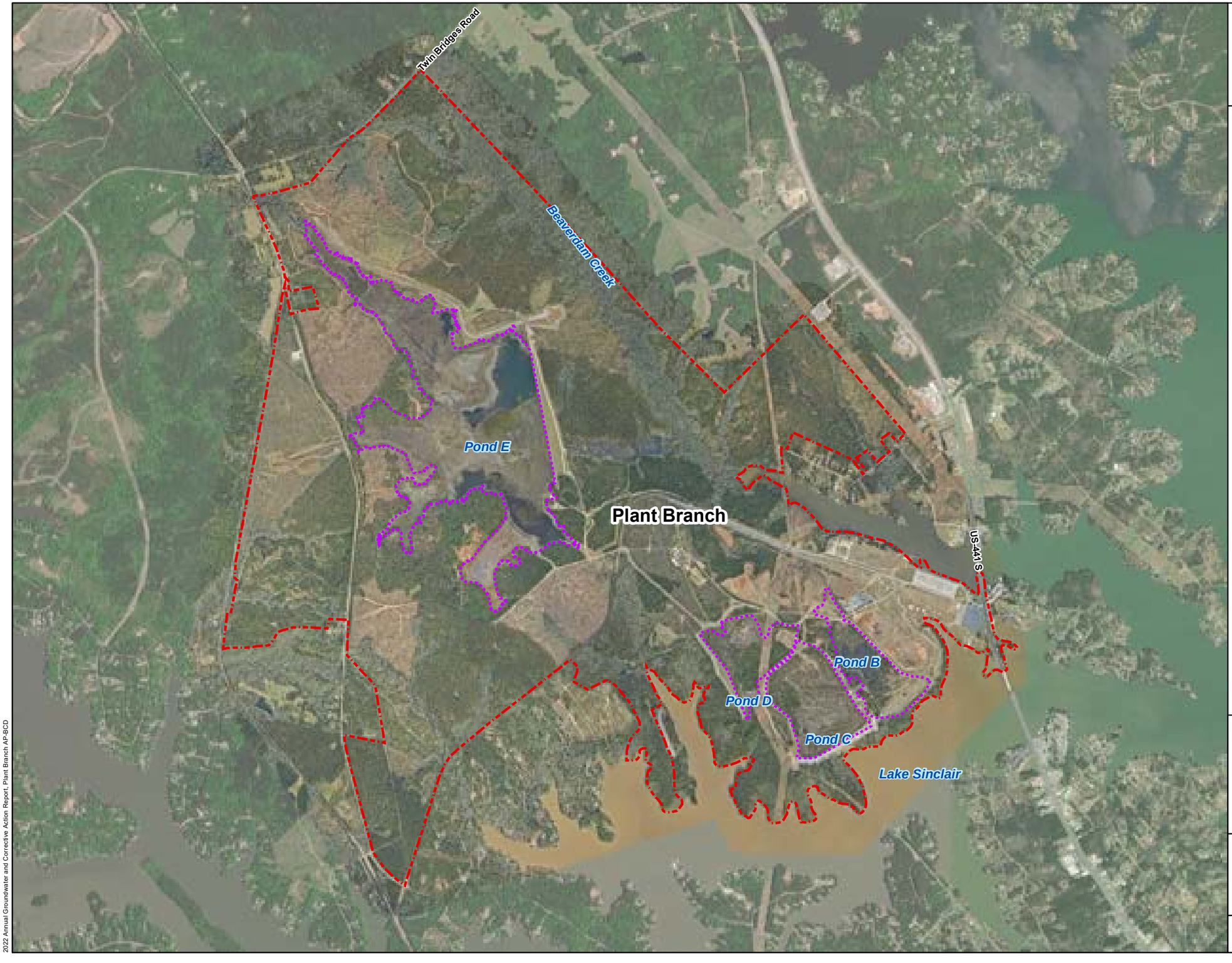
Table 6

Summary of Background Concentrations and Groundwater Protection Standards
Plant Branch AP-BCD, Putnam County, Georgia

Analyte	Units	Background[1]		GWPS[2][3]
		Sept. 2021	Feb. 2022	
Antimony	mg/L	0.017	0.017	0.017
Arsenic	mg/L	0.005	0.005	0.01
Barium	mg/L	0.13	0.13	2
Beryllium	mg/L	0.0005	0.0005	0.004
Cadmium	mg/L	0.0005	0.0005	0.005
Chromium	mg/L	0.016	0.016	0.1
Cobalt	mg/L	0.014	0.014	0.014
Fluoride	mg/L	0.42	0.42	4
Lead	mg/L	0.0013	0.0013	0.015
Lithium	mg/L	0.089	0.089	0.089
Mercury	mg/L	0.00021	0.00021	0.002
Molybdenum	mg/L	0.01	0.01	0.1
Selenium	mg/L	0.006	0.006	0.05
Thallium	mg/L	0.001	0.001	0.002
Combined Radium-226/228	pCi/L	1.65	1.79	5

Notes:
mg/L = milligrams per liter
pCi/L = picocuries per liter
Statistical analyses were performed per semiannual assessment monitoring event conducted during the reporting period.
Background limits and groundwater protection standards (GWPS) are applicable to the September 2021 and February 2022 events.
(1) The background limits were used when determining the GWPS under 40 CFR §257.95(h) and Georgia Environmental Protection Division (GA EPD) Rule 391-3-4-.10(6)(a).
(2) Under 40 CFR §257.95(h)(1-3) the GWPS is: (i) the maximum contaminant level (MCL) established under 141.62 and 141.66 of this title; (ii) where an MCL has not been established a rule-specific GWPS is used; or (iii) background concentrations for constituents were the background level is higher than the MCL or rule-specified GWPS.
(3) On February 22, 2022, GA EPD updated the Rules for Solid Waste Management 391-3-4-.10(6) to incorporate updated Federal GWPSs where an MCL has not been established, except when site-specific background concentrations of constituents is higher.

FIGURES



N

LEGEND

- Plant Branch Property Boundry
- Approximate Ash Pond Boundary

Notes:
1. Coordinate System: NAD 1983 State Plane Georgia West_FIPS (U.S. Feet).
2. Property Boundary Provided by Southern Company Services.
3. Aerial Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community 2019 and Georgia Power Company, February 2022.

0 2,000 4,000
Scale in Feet

SITE LOCATION MAP

GEORGIA POWER COMPANY
PLANT BRANCH AP-BCD
PUTNAM COUNTY, GEORGIA

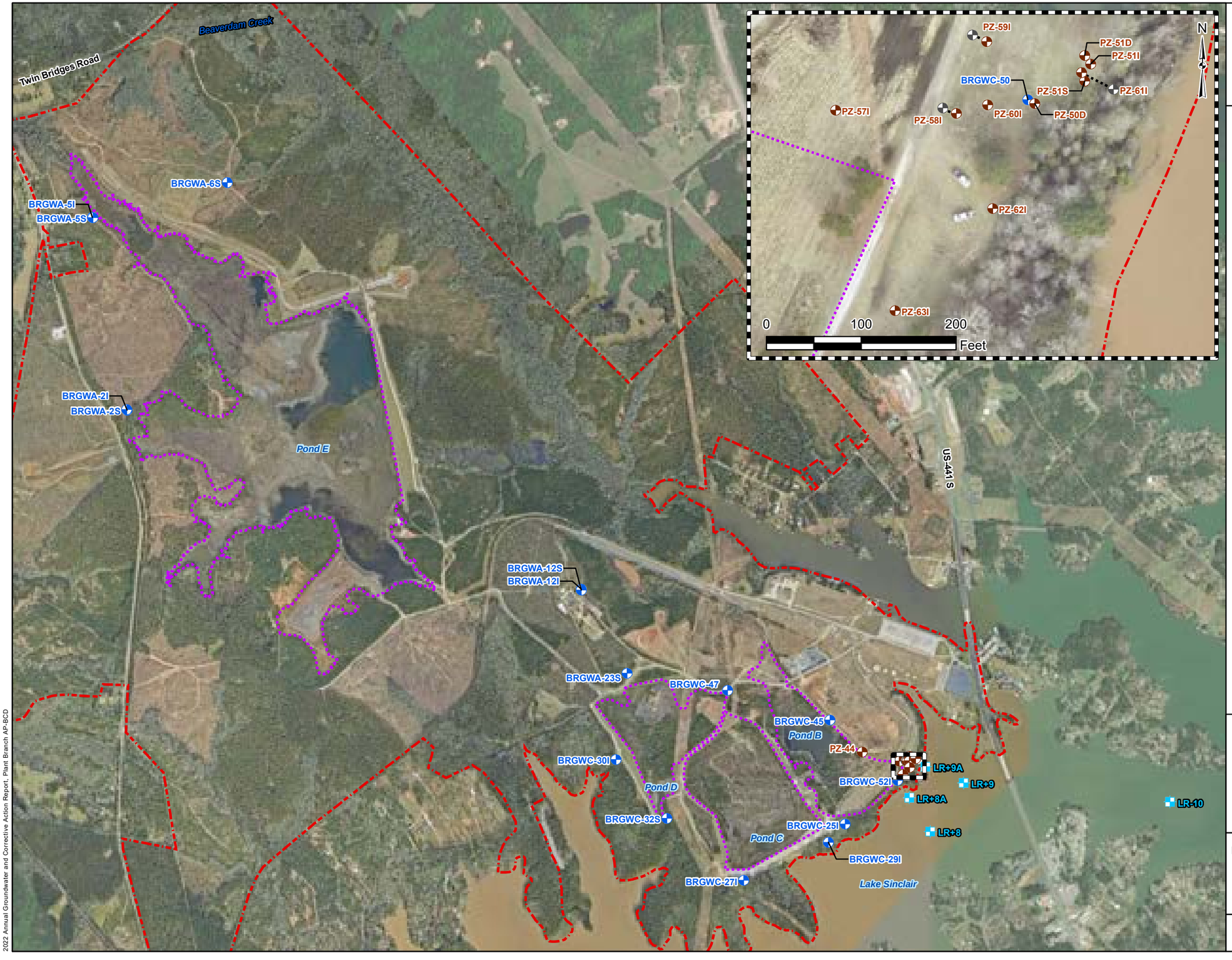
Prepared For: Georgia Power

Prepared By: Geosyntec consultants

KENNESAW, GA | JULY 2022

FIGURE 1

2022 Annual Groundwater and Corrective Action Report, Plant Branch AP-BCD



LEGEND

- Monitoring Well
- Piezometer
- Angled Well Screen
- Surface Water Sample Point
- Plant Branch Property Boundry
- Approximate Ash Pond Boundary

Notes:
1. Coordinate System: NAD 1983 State Plane Georgia West_FIPS (U.S. Feet).
2. Property Boundary Provided by Southern Company Services.
3. Aerial Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community 2019 and Georgia Power Company, February 2022.

0 1,500 3,000
Scale in Feet

AP-BCD SITE PLAN MONITORING WELL AND SURFACE WATER LOCATION MAP

GEORGIA POWER COMPANY
PLANT BRANCH AP-BCD
PUTNAM COUNTY, GEORGIA

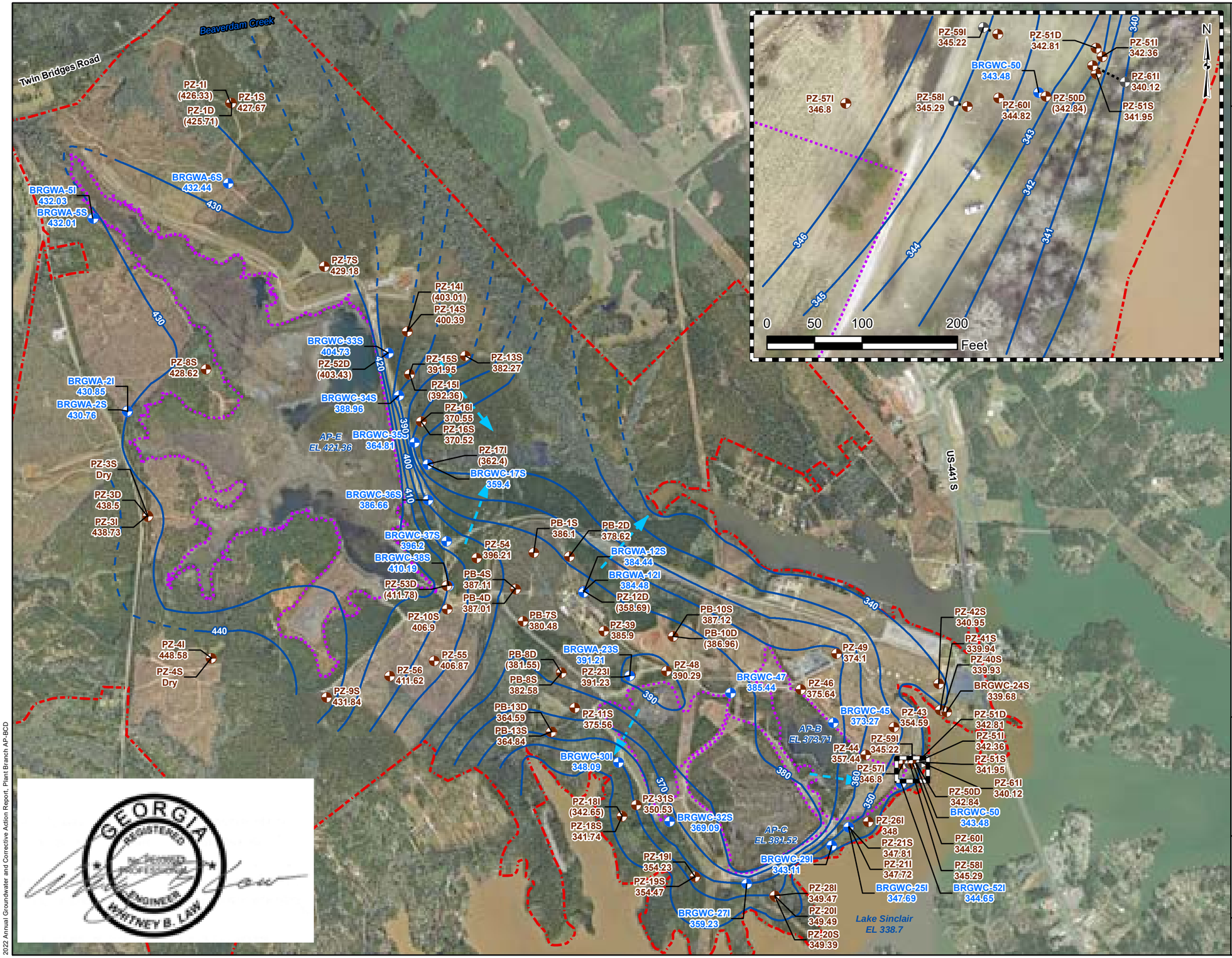
Prepared For: Georgia Power

Prepared By: Geosyntec consultants

KENNESAW, GA | JULY 2022

FIGURE 2

2022 Annual Groundwater and Corrective Action Report, Plant Branch AP-BCD



LEGEND

- Monitoring Well
- Piezometer
- Angled Well Screen
- Groundwater Elevation Iso-Contour
- Groundwater Elevation Iso-Contour (Inferred)
- Approximate Groundwater Flow Direction
- Plant Branch Property Boundry
- Approximate Ash Pond Boundary

Notes:
1. Water level elevation recorded on September 20, 2021.
2. Elevation provided in feet (ft) referenced to the North American Vertical Datum of 1988 (NAVD 88).
3. Groundwater iso-contours based on linear interpolation and extrapolation from known groundwater elevation data, and topographic elevations.
4. Groundwater elevations in parentheses were not used to make the groundwater contours because these wells are screened at a different elevation in the formation/aquifer.
5. NA - not available
6. Coordinate System: NAD 1983 State Plane Georgia West_FIPS (U.S. Feet).
7. Property Boundary Provided by Southern Company Services.
8. Aerial Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community 2019 and Georgia Power Company, February 2022.

0 1,500 3,000
Scale in Feet

POTENTIOMETRIC SURFACE CONTOUR MAP - SEPTEMBER 2021

GEORGIA POWER COMPANY
PLANT BRANCH AP-BCD
PUTNAM COUNTY, GEORGIA

Prepared For: Georgia Power

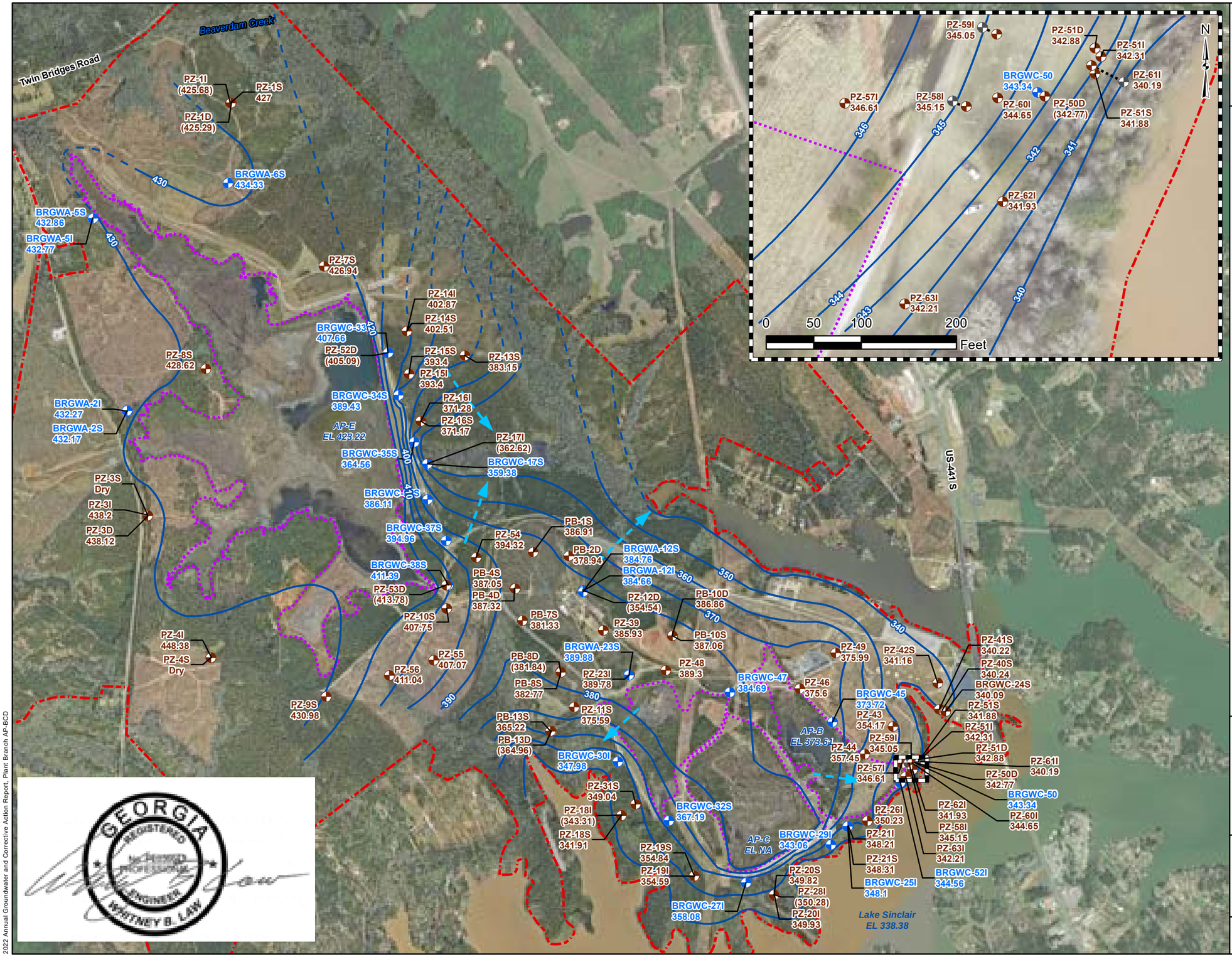
Prepared By: Geosyntec consultants

KENNESAW, GA | JULY 2022

FIGURE 3

GEORGIA REGISTERED PROFESSIONAL ENGINEER COURTNEY B. LAW

2022 Annual Groundwater and Corrective Action Report, Plant Branch AP-BCD



2022 Annual Groundwater and Corrective Action Report, Plant Branch AP-BCD

N

LEGEND

- Monitoring Well
- Piezometer
- Angled Well Screen
- Groundwater Elevation Iso-Contour
- Groundwater Elevation Iso-Contour (Inferred)
- Approximate Groundwater Flow Direction
- Plant Branch Property Boundry
- Approximate Ash Pond Boundary

Notes:
1. Water level elevation recorded on January 31, 2022.
2. Elevation provided in feet (ft) referenced to the North American Vertical Datum of 1988 (NAVD 88).
3. Groundwater iso-contours based on linear interpolation and extrapolation from known groundwater elevation data, and topographic elevations.
4. Groundwater elevations in parentheses were not used to make the groundwater contours because these wells are screened at a different elevation in the formation/aquifer.
5. NA - not available
6. Coordinate System: NAD 1983 State Plane Georgia West_FIPS (U.S. Feet).
7. Property Boundary Provided by Southern Company Services.
8. Aerial Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community 2019 and Georgia Power Company, February 2022.

0 1,500 3,000
Scale in Feet

POTENTIOMETRIC SURFACE CONTOUR MAP - JANUARY 2022

GEORGIA POWER COMPANY
PLANT BRANCH AP-BCD
PUTNAM COUNTY, GEORGIA

Prepared For: Georgia Power

Prepared By: Geosyntec consultants

KENNESAW, GA | JULY 2022

FIGURE 4

APPENDIX A

Laboratory Analytical Results, Field Data Forms, Field Calibration Forms, Well Inspection Logs & Data Validation Reports

APPENDIX A

Laboratory Analytical Results

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

March 03, 2022

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

RE: Project: BRANCH AP-BCD
Pace Project No.: 92585977

Dear Joju Abraham:

Enclosed are the analytical results for sample(s) received by the laboratory between February 03, 2022 and February 04, 2022. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

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

- Pace Analytical Services - Asheville
- Pace Analytical Services - Charlotte
- Pace Analytical Services - Peachtree Corners, GA
- Pace Analytical Services - Minneapolis
- Pace Analytical Services - Ormond Beach

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

Sincerely,

Nicole D'Oleo
nicole.d'oleo@pacelabs.com
(704)875-9092
Project Manager

Enclosures

cc: Anna Bottum, ERM
Andrea Brazell, ERM
Daniela Herrera, Golder
Ben Hodges, Georgia Power
Jimmy Jones, Golder Associates Inc.
Kristen Jurinko
Julie Lehrman, Golder Associates Inc.
Ms. Lauren Petty, Southern Company
Carolyn Powrozek, Golder
Dawn Prell, Golder Associates Inc.
Tim Richards, Golder Associates - Atlanta
Lacy Smith, ERM
Brian Steele, Golder
Caitlin Tillema, ERM
Christine Weaver, ERM

REPORT OF LABORATORY ANALYSIS

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

CERTIFICATIONS

Project: BRANCH AP-BCD
Pace Project No.: 92585977

Pace Analytical Services, LLC - Minneapolis MN

1700 Elm Street SE, Minneapolis, MN 55414
1800 Elm Street SE, Minneapolis, MN 55414--Satellite Air Lab
A2LA Certification #: 2926.01*
Alabama Certification #: 40770
Alaska Contaminated Sites Certification #: 17-009*
Alaska DW Certification #: MN00064
Arizona Certification #: AZ0014*
Arkansas DW Certification #: MN00064
Arkansas WW Certification #: 88-0680
California Certification #: 2929
Colorado Certification #: MN00064
Connecticut Certification #: PH-0256
EPA Region 8 Tribal Water Systems+Wyoming DW Certification #: via MN 027-053-137
Florida Certification #: E87605*
Georgia Certification #: 959
Hawaii Certification #: MN00064
Idaho Certification #: MN00064
Illinois Certification #: 200011
Indiana Certification #: C-MN-01
Iowa Certification #: 368
Kansas Certification #: E-10167
Kentucky DW Certification #: 90062
Kentucky WW Certification #: 90062
Louisiana DEQ Certification #: AI-03086*
Louisiana DW Certification #: MN00064
Maine Certification #: MN00064*
Maryland Certification #: 322
Michigan Certification #: 9909
Minnesota Certification #: 027-053-137*
Minnesota Dept of Ag Approval: via MN 027-053-137
Minnesota Petrofund Registration #: 1240*
Mississippi Certification #: MN00064
Missouri Certification #: 10100
Montana Certification #: CERT0092
Nebraska Certification #: NE-OS-18-06
Nevada Certification #: MN00064
New Hampshire Certification #: 2081*
New Jersey Certification #: MN002
New York Certification #: 11647*
North Carolina DW Certification #: 27700
North Carolina WW Certification #: 530
North Dakota Certification #: R-036
Ohio DW Certification #: 41244
Ohio VAP Certification (1700) #: CL101
Ohio VAP Certification (1800) #: CL110*
Oklahoma Certification #: 9507*
Oregon Primary Certification #: MN300001
Oregon Secondary Certification #: MN200001*
Pennsylvania Certification #: 68-00563*
Puerto Rico Certification #: MN00064
South Carolina Certification #:74003001
Tennessee Certification #: TN02818
Texas Certification #: T104704192*
Utah Certification #: MN00064*
Vermont Certification #: VT-027053137
Virginia Certification #: 460163*
Washington Certification #: C486*
West Virginia DEP Certification #: 382
West Virginia DW Certification #: 9952 C
Wisconsin Certification #: 999407970
Wyoming UST Certification #: via A2LA 2926.01
USDA Permit #: P330-19-00208
*Please Note: Applicable air certifications are denoted with an asterisk (*).

Pace Analytical Services Ormond Beach

8 East Tower Circle, Ormond Beach, FL 32174
Alaska DEC- CS/UST/LUST
Alabama Certification #: 41320
Colorado Certification: FL NELAC Reciprocity
Connecticut Certification #: PH-0216
Delaware Certification: FL NELAC Reciprocity
Florida Certification #: E83079
Georgia Certification #: 955
Guam Certification: FL NELAC Reciprocity
Hawaii Certification: FL NELAC Reciprocity
Illinois Certification #: 200068
Indiana Certification: FL NELAC Reciprocity
Kansas Certification #: E-10383
Kentucky Certification #: 90050
Louisiana Certification #: FL NELAC Reciprocity
Louisiana Environmental Certificate #: 05007
Maine Certification #: FL01264
Maryland Certification: #346
Michigan Certification #: 9911
Mississippi Certification: FL NELAC Reciprocity
Missouri Certification #: 236
Montana Certification #: Cert 0074
Nebraska Certification: NE-OS-28-14
New Hampshire Certification #: 2958
New Jersey Certification #: FL022
New York Certification #: 11608
North Carolina Environmental Certificate #: 667
North Carolina Certification #: 12710
North Dakota Certification #: R-216
Ohio DEP 87780
Oklahoma Certification #: D9947
Pennsylvania Certification #: 68-00547

REPORT OF LABORATORY ANALYSIS

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

CERTIFICATIONS

Project: BRANCH AP-BCD
Pace Project No.: 92585977

Pace Analytical Services Ormond Beach
Puerto Rico Certification #: FL01264
South Carolina Certification: #96042001
Tennessee Certification #: TN02974
Texas Certification: FL NELAC Reciprocity
US Virgin Islands Certification: FL NELAC Reciprocity
Virginia Environmental Certification #: 460165
West Virginia Certification #: 9962C
Wisconsin Certification #: 399079670
Wyoming (EPA Region 8): FL NELAC Reciprocity

Pace Analytical Services Charlotte
South Carolina Laboratory ID: 99006
9800 Kincey Ave. Ste 100, Huntersville, NC 28078
North Carolina Drinking Water Certification #: 37706
North Carolina Field Services Certification #: 5342
North Carolina Wastewater Certification #: 12
South Carolina Laboratory ID: 99006
South Carolina Certification #: 99006001
South Carolina Drinking Water Cert. #: 99006003
Florida/NELAP Certification #: E87627
Kentucky UST Certification #: 84
Louisiana DoH Drinking Water #: LA029
Virginia/VELAP Certification #: 460221

Pace Analytical Services Asheville
2225 Riverside Drive, Asheville, NC 28804
Florida/NELAP Certification #: E87648
North Carolina Drinking Water Certification #: 37712
North Carolina Wastewater Certification #: 40
South Carolina Laboratory ID: 99030
South Carolina Certification #: 99030001
Virginia/VELAP Certification #: 460222

Pace Analytical Services Peachtree Corners
110 Technology Pkwy, Peachtree Corners, GA 30092
Florida DOH Certification #: E87315
Georgia DW Inorganics Certification #: 812
North Carolina Certification #: 381
South Carolina Certification #: 98011001

REPORT OF LABORATORY ANALYSIS

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

SAMPLE SUMMARY

Project: BRANCH AP-BCD
Pace Project No.: 92585977

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92585977001	**BRGWC-25I**	Water	02/02/22 14:44	02/03/22 10:35
92585977002	**BRGWC-30I**	Water	02/02/22 12:30	02/03/22 10:35
92585977003	**BRGWC-32S**	Water	02/02/22 14:55	02/03/22 10:35
92585977004	**BRGWC-45**	Water	02/02/22 10:42	02/03/22 10:35
92585977005	**BRGWC-47**	Water	02/02/22 09:40	02/03/22 10:35
92585977006	**BRGWC-52I**	Water	02/02/22 13:34	02/03/22 10:35
92585977007	**DUP-2**	Water	02/02/22 00:00	02/03/22 10:35
92585977008	**BRGWC-50**	Water	02/03/22 11:48	02/04/22 16:06
92585977009	**BRGWC-27I**	Water	02/04/22 08:50	02/04/22 16:06
92585977010	**BRGWC-29I**	Water	02/03/22 17:00	02/04/22 16:06
92585977011	**DUP-3**	Water	02/03/22 00:00	02/04/22 16:06

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

SAMPLE ANALYTE COUNT

Project: BRANCH AP-BCD
Pace Project No.: 92585977

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92585977001	**BRGWC-25I**	EPA 6010D	KH	6	PASI-GA
		EPA 6020B	CW1	13	PASI-GA
		EPA 7470A	VB	1	PASI-GA
		SM 2540C-2015	ALW	1	PASI-GA
		SM 2320B	AR3	3	PASI-M
		EPA 300.0 Rev 2.1 1993	JCM	3	PASI-A
92585977002	**BRGWC-30I**	EPA 6010D	KH	6	PASI-GA
		EPA 6020B	CW1	13	PASI-GA
		EPA 7470A	VB	1	PASI-GA
		SM 2540C-2015	ALW	1	PASI-GA
		SM 2320B	AR3	3	PASI-M
		EPA 300.0 Rev 2.1 1993	JCM	3	PASI-A
92585977003	**BRGWC-32S**	EPA 6010D	KH	6	PASI-GA
		EPA 6020B	CW1	13	PASI-GA
		EPA 7470A	VB	1	PASI-GA
		SM 2540C-2015	ALW	1	PASI-GA
		SM 2320B	AR3	3	PASI-M
		EPA 300.0 Rev 2.1 1993	JCM	3	PASI-A
92585977004	**BRGWC-45**	EPA 6010D	KH	6	PASI-GA
		EPA 6020B	CW1	13	PASI-GA
		EPA 7470A	VB	1	PASI-GA
		SM 2540C-2015	ALW	1	PASI-GA
		SM 2320B	AR3	3	PASI-M
		EPA 300.0 Rev 2.1 1993	JCM	3	PASI-A
92585977005	**BRGWC-47**	EPA 6010D	KH	6	PASI-GA
		EPA 6020B	CW1	13	PASI-GA
		EPA 7470A	VB	1	PASI-GA
		SM 2540C-2015	ALW	1	PASI-GA
		SM 2320B	AR3	3	PASI-M
		EPA 300.0 Rev 2.1 1993	JCM	3	PASI-A
92585977006	**BRGWC-52I**	EPA 6010D	KH	6	PASI-GA
		EPA 6020B	CW1	13	PASI-GA
		EPA 7470A	VB	1	PASI-GA
		SM 2540C-2015	ALW	1	PASI-GA
		SM 2320B	AR3	3	PASI-M
		EPA 300.0 Rev 2.1 1993	JCM	3	PASI-A
92585977007	**DUP-2**	EPA 6010D	KH	1	PASI-GA

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

SAMPLE ANALYTE COUNT

Project: BRANCH AP-BCD
Pace Project No.: 92585977

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		EPA 6020B	CW1	13	PASI-GA
		EPA 7470A	VB	1	PASI-GA
		SM 2540C-2015	ALW	1	PASI-GA
		EPA 300.0 Rev 2.1 1993	JCM	3	PASI-A
92585977008	**BRGWC-50**	EPA 6010D	KH	7	PASI-GA
		EPA 6020B	CW1	13	PASI-GA
		EPA 7470A	VB	1	PASI-GA
		SM 2540C-2015	ALW	1	PASI-GA
		SM 2320B	AR3	3	PASI-M
		SM 3500-Fe D#4	DMN	1	PASI-A
		SM 3500-Fe B-2011	DMN	1	PASI-A
		SM 4500-S2D-2011	JP1	1	PASI-A
		EPA 300.0 Rev 2.1 1993	CDC	3	PASI-A
		EPA 353.2 Rev 2.0 1993	KDF1	1	PASI-A
		SM 5310B	AGS	1	PASI-O
92585977009	**BRGWC-27I**	EPA 6010D	KH	6	PASI-GA
		EPA 6020B	CW1	13	PASI-GA
		EPA 7470A	VB	1	PASI-GA
		SM 2540C-2015	ALW	1	PASI-GA
		SM 2320B	AR3	3	PASI-M
		EPA 300.0 Rev 2.1 1993	CDC	3	PASI-A
92585977010	**BRGWC-29I**	EPA 6010D	KH	6	PASI-GA
		EPA 6020B	CW1	13	PASI-GA
		EPA 7470A	VB	1	PASI-GA
		SM 2540C-2015	ALW	1	PASI-GA
		SM 2320B	AR3	3	PASI-M
		EPA 300.0 Rev 2.1 1993	CDC	3	PASI-A
92585977011	**DUP-3**	EPA 6010D	KH	6	PASI-GA
		EPA 6020B	CW1	13	PASI-GA
		EPA 7470A	VB	1	PASI-GA
		SM 2540C-2015	ALW	1	PASI-GA
		EPA 300.0 Rev 2.1 1993	CDC	3	PASI-A

PASI-A = Pace Analytical Services - Asheville
PASI-C = Pace Analytical Services - Charlotte
PASI-GA = Pace Analytical Services - Peachtree Corners, GA
PASI-M = Pace Analytical Services - Minneapolis
PASI-O = Pace Analytical Services - Ormond Beach

REPORT OF LABORATORY ANALYSIS

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

SUMMARY OF DETECTION

Project: BRANCH AP-BCD
Pace Project No.: 92585977

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92585977001	**BRGWC-25I**					
	Performed by	CUSTOMER			02/03/22 12:57	
	pH	6.23	Std. Units		02/03/22 12:57	
EPA 6010D	Iron	0.30	mg/L	0.040	02/15/22 18:41	
EPA 6010D	Manganese	1.4	mg/L	0.040	02/15/22 18:41	
EPA 6010D	Potassium	4.0	mg/L	0.20	02/15/22 18:41	
EPA 6010D	Sodium	15.1	mg/L	1.0	02/15/22 18:41	
EPA 6010D	Calcium	44.3	mg/L	1.0	02/15/22 18:41	
EPA 6010D	Magnesium	16.4	mg/L	0.050	02/15/22 18:41	
EPA 6020B	Barium	0.023	mg/L	0.0050	02/15/22 19:11	
EPA 6020B	Boron	1.1	mg/L	0.040	02/15/22 19:11	
EPA 6020B	Cobalt	0.0027J	mg/L	0.0050	02/15/22 19:11	
EPA 6020B	Molybdenum	0.0011J	mg/L	0.010	02/15/22 19:11	
SM 2540C-2015	Total Dissolved Solids	283	mg/L	10.0	02/07/22 17:22	
SM 2320B	Alkalinity, Total as CaCO3	71.7	mg/L	5.0	02/10/22 15:25	
SM 2320B	Alkalinity,Bicarbonate (CaCO3)	71.7	mg/L	5.0	02/10/22 15:25	
EPA 300.0 Rev 2.1 1993	Chloride	4.2	mg/L	1.0	02/08/22 02:24	
EPA 300.0 Rev 2.1 1993	Fluoride	0.15	mg/L	0.10	02/08/22 02:24	
EPA 300.0 Rev 2.1 1993	Sulfate	117	mg/L	3.0	02/08/22 14:32	
92585977002	**BRGWC-30I**					
	Performed by	CUSTOMER			02/03/22 12:57	
	pH	6.34	Std. Units		02/03/22 12:57	
EPA 6010D	Iron	1.1	mg/L	0.040	02/15/22 18:46	
EPA 6010D	Manganese	0.80	mg/L	0.040	02/15/22 18:46	
EPA 6010D	Potassium	5.5	mg/L	0.20	02/15/22 18:46	
EPA 6010D	Sodium	27.5	mg/L	1.0	02/15/22 18:46	M1
EPA 6010D	Calcium	232	mg/L	1.0	02/15/22 18:46	M1
EPA 6010D	Magnesium	46.7	mg/L	0.050	02/15/22 18:46	M1
EPA 6020B	Antimony	0.0013J	mg/L	0.0030	02/15/22 19:34	
EPA 6020B	Barium	0.031	mg/L	0.0050	02/15/22 19:34	
EPA 6020B	Boron	1.9	mg/L	0.040	02/15/22 19:34	
EPA 6020B	Cadmium	0.00014J	mg/L	0.00050	02/15/22 19:34	
EPA 6020B	Cobalt	0.0012J	mg/L	0.0050	02/15/22 19:34	
EPA 6020B	Lithium	0.021J	mg/L	0.030	02/15/22 19:34	
EPA 6020B	Molybdenum	0.0012J	mg/L	0.010	02/15/22 19:34	
SM 2540C-2015	Total Dissolved Solids	1110	mg/L	20.0	02/07/22 17:23	
SM 2320B	Alkalinity, Total as CaCO3	118	mg/L	5.0	02/10/22 15:29	
SM 2320B	Alkalinity,Bicarbonate (CaCO3)	118	mg/L	5.0	02/10/22 15:29	
EPA 300.0 Rev 2.1 1993	Chloride	4.0	mg/L	1.0	02/08/22 02:38	
EPA 300.0 Rev 2.1 1993	Fluoride	0.10	mg/L	0.10	02/08/22 02:38	
EPA 300.0 Rev 2.1 1993	Sulfate	580	mg/L	14.0	02/08/22 14:46	
92585977003	**BRGWC-32S**					
	Performed by	CUSTOMER			02/03/22 12:57	
	pH	5.99	Std. Units		02/03/22 12:57	
EPA 6010D	Iron	0.082	mg/L	0.040	02/15/22 19:05	

REPORT OF LABORATORY ANALYSIS

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

SUMMARY OF DETECTION

Project: BRANCH AP-BCD
Pace Project No.: 92585977

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92585977003	**BRGWC-32S**					
EPA 6010D	Potassium	1.9	mg/L	0.20	02/15/22 19:05	
EPA 6010D	Sodium	24.6	mg/L	1.0	02/15/22 19:05	
EPA 6010D	Calcium	44.2	mg/L	1.0	02/15/22 19:05	
EPA 6010D	Magnesium	28.6	mg/L	0.050	02/15/22 19:05	
EPA 6020B	Barium	0.023	mg/L	0.0050	02/15/22 19:40	
EPA 6020B	Boron	1.0	mg/L	0.040	02/15/22 19:40	
EPA 6020B	Chromium	0.0021J	mg/L	0.0050	02/15/22 19:40	
EPA 6020B	Lithium	0.0035J	mg/L	0.030	02/15/22 19:40	
EPA 6020B	Selenium	0.21	mg/L	0.0050	02/15/22 19:40	
SM 2540C-2015	Total Dissolved Solids	443	mg/L	10.0	02/07/22 17:23	
SM 2320B	Alkalinity, Total as CaCO3	31.5	mg/L	5.0	02/10/22 15:34	
SM 2320B	Alkalinity,Bicarbonate (CaCO3)	31.5	mg/L	5.0	02/10/22 15:34	
EPA 300.0 Rev 2.1 1993	Chloride	3.8	mg/L	1.0	02/08/22 02:52	
EPA 300.0 Rev 2.1 1993	Sulfate	210	mg/L	5.0	02/08/22 15:00	
92585977004	**BRGWC-45**					
	Performed by	CUSTOMER			02/03/22 12:57	
	pH	5.92	Std. Units		02/03/22 12:57	
EPA 6010D	Iron	0.44	mg/L	0.040	02/15/22 19:10	
EPA 6010D	Manganese	0.27	mg/L	0.040	02/15/22 19:10	
EPA 6010D	Potassium	3.4	mg/L	0.20	02/15/22 19:10	
EPA 6010D	Sodium	14.6	mg/L	1.0	02/15/22 19:10	
EPA 6010D	Calcium	33.8	mg/L	1.0	02/15/22 19:10	
EPA 6010D	Magnesium	16.2	mg/L	0.050	02/15/22 19:10	
EPA 6020B	Barium	0.063	mg/L	0.0050	02/15/22 19:46	
EPA 6020B	Boron	0.034J	mg/L	0.040	02/15/22 19:46	
EPA 6020B	Cobalt	0.0054	mg/L	0.0050	02/15/22 19:46	
EPA 6020B	Lithium	0.0022J	mg/L	0.030	02/15/22 19:46	
SM 2540C-2015	Total Dissolved Solids	276	mg/L	10.0	02/07/22 17:23	
SM 2320B	Alkalinity, Total as CaCO3	39.6	mg/L	5.0	02/10/22 15:37	
SM 2320B	Alkalinity,Bicarbonate (CaCO3)	39.6	mg/L	5.0	02/10/22 15:37	
EPA 300.0 Rev 2.1 1993	Chloride	23.4	mg/L	1.0	02/08/22 03:06	
EPA 300.0 Rev 2.1 1993	Sulfate	90.1	mg/L	2.0	02/08/22 15:15	
92585977005	**BRGWC-47**					
	Performed by	CUSTOMER			02/03/22 12:57	
	pH	5.75	Std. Units		02/03/22 12:57	
EPA 6010D	Iron	0.17	mg/L	0.040	02/15/22 19:15	BC
EPA 6010D	Manganese	0.010J	mg/L	0.040	02/15/22 19:15	
EPA 6010D	Potassium	11.5	mg/L	0.20	02/15/22 19:15	
EPA 6010D	Sodium	40.5	mg/L	1.0	02/15/22 19:15	
EPA 6010D	Magnesium	114	mg/L	0.050	02/15/22 19:15	
EPA 6010D	Calcium	320	mg/L	10.0	02/16/22 15:32	
EPA 6020B	Arsenic	0.0056	mg/L	0.0050	02/15/22 19:52	
EPA 6020B	Barium	0.028	mg/L	0.0050	02/15/22 19:52	
EPA 6020B	Boron	0.48	mg/L	0.040	02/15/22 19:52	
EPA 6020B	Cadmium	0.00015J	mg/L	0.00050	02/15/22 19:52	

REPORT OF LABORATORY ANALYSIS

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

SUMMARY OF DETECTION

Project: BRANCH AP-BCD
Pace Project No.: 92585977

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92585977005	**BRGWC-47**					
EPA 6020B	Lithium	0.040	mg/L	0.030	02/15/22 19:52	
SM 2540C-2015	Total Dissolved Solids	1850	mg/L	100	02/07/22 17:23	
SM 2320B	Alkalinity, Total as CaCO3	26.1	mg/L	5.0	02/10/22 15:41	
SM 2320B	Alkalinity,Bicarbonate (CaCO3)	26.1	mg/L	5.0	02/10/22 15:41	
EPA 300.0 Rev 2.1 1993	Chloride	4.2	mg/L	1.0	02/08/22 03:20	
EPA 300.0 Rev 2.1 1993	Sulfate	1170	mg/L	26.0	02/08/22 15:56	M1
92585977006	**BRGWC-52I**					
	Performed by	CUSTOMER			02/03/22 12:57	
	pH	6.35	Std. Units		02/03/22 12:57	
EPA 6010D	Iron	5.8	mg/L	0.040	02/15/22 19:29	
EPA 6010D	Manganese	0.75	mg/L	0.040	02/15/22 19:29	
EPA 6010D	Potassium	4.9	mg/L	0.20	02/15/22 19:29	
EPA 6010D	Sodium	18.4	mg/L	1.0	02/15/22 19:29	
EPA 6010D	Calcium	40.1	mg/L	1.0	02/15/22 19:29	
EPA 6010D	Magnesium	18.1	mg/L	0.050	02/15/22 19:29	
EPA 6020B	Barium	0.013	mg/L	0.0050	02/15/22 20:10	
EPA 6020B	Boron	1.5	mg/L	0.040	02/15/22 20:10	
EPA 6020B	Lithium	0.0041J	mg/L	0.030	02/15/22 20:10	
SM 2540C-2015	Total Dissolved Solids	160	mg/L	10.0	02/07/22 17:23	
SM 2320B	Alkalinity, Total as CaCO3	65.1	mg/L	5.0	02/10/22 15:44	
SM 2320B	Alkalinity,Bicarbonate (CaCO3)	65.1	mg/L	5.0	02/10/22 15:44	
EPA 300.0 Rev 2.1 1993	Chloride	6.1	mg/L	1.0	02/08/22 04:01	
EPA 300.0 Rev 2.1 1993	Fluoride	0.098J	mg/L	0.10	02/08/22 04:01	
EPA 300.0 Rev 2.1 1993	Sulfate	126	mg/L	3.0	02/08/22 16:38	
92585977007	**DUP-2**					
EPA 6010D	Calcium	224	mg/L	1.0	02/15/22 19:34	
EPA 6020B	Barium	0.032	mg/L	0.0050	02/15/22 20:16	
EPA 6020B	Boron	1.9	mg/L	0.040	02/15/22 20:16	
EPA 6020B	Cobalt	0.0013J	mg/L	0.0050	02/15/22 20:16	
EPA 6020B	Lithium	0.020J	mg/L	0.030	02/15/22 20:16	
EPA 6020B	Molybdenum	0.0010J	mg/L	0.010	02/15/22 20:16	
SM 2540C-2015	Total Dissolved Solids	1140	mg/L	20.0	02/07/22 17:39	
EPA 300.0 Rev 2.1 1993	Chloride	4.1	mg/L	1.0	02/08/22 04:43	
EPA 300.0 Rev 2.1 1993	Fluoride	0.11	mg/L	0.10	02/08/22 04:43	
EPA 300.0 Rev 2.1 1993	Sulfate	579	mg/L	14.0	02/08/22 16:51	
92585977008	**BRGWC-50**					
	Performed by	CUSTOMER			02/07/22 09:56	
	pH	5.20	Std. Units		02/07/22 09:56	
EPA 6010D	Manganese	83.5	mg/L	0.40	02/16/22 15:37	
EPA 6010D	Calcium	220	mg/L	10.0	02/16/22 15:37	
EPA 6010D	Magnesium	158	mg/L	0.50	02/16/22 15:37	
EPA 6010D	Hardness, Total(SM 2340B)	1200	mg/L	27.0	02/16/22 15:37	
EPA 6010D	Iron	0.15	mg/L	0.040	02/15/22 19:43	
EPA 6010D	Potassium	9.8	mg/L	0.20	02/15/22 19:43	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
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SUMMARY OF DETECTION

Project: BRANCH AP-BCD
Pace Project No.: 92585977

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92585977008	**BRGWC-50**					
EPA 6010D	Sodium	46.9	mg/L	1.0	02/15/22 19:43	
EPA 6020B	Barium	0.016	mg/L	0.0050	02/15/22 20:58	
EPA 6020B	Beryllium	0.0071	mg/L	0.00050	02/15/22 20:58	
EPA 6020B	Boron	0.31	mg/L	0.040	02/15/22 20:58	
EPA 6020B	Cadmium	0.0085	mg/L	0.00050	02/15/22 20:58	
EPA 6020B	Cobalt	1.5	mg/L	0.025	02/17/22 15:12	
EPA 6020B	Lithium	0.038	mg/L	0.030	02/15/22 20:58	
SM 2540C-2015	Total Dissolved Solids	1850	mg/L	100	02/09/22 10:13	
SM 2320B	Alkalinity, Total as CaCO3	11.6	mg/L	5.0	02/10/22 22:06	
SM 2320B	Alkalinity,Bicarbonate (CaCO3)	11.6	mg/L	5.0	02/10/22 22:06	
SM 3500-Fe B-2011	Iron, Ferrous	0.16J	mg/L	0.50	02/09/22 11:34	H3,N2
EPA 300.0 Rev 2.1 1993	Chloride	17.4	mg/L	1.0	02/10/22 22:50	
EPA 300.0 Rev 2.1 1993	Fluoride	0.42	mg/L	0.10	02/10/22 22:50	
EPA 300.0 Rev 2.1 1993	Sulfate	1270	mg/L	25.0	02/11/22 05:19	
SM 5310B	Dissolved Organic Carbon	0.53 I	mg/L	1.0	02/10/22 20:19	
92585977009	**BRGWC-27I**					
	Performed by	CUSTOMER			02/07/22 09:56	
	pH	5.97	Std. Units		02/07/22 09:56	
EPA 6010D	Iron	0.095	mg/L	0.040	02/15/22 19:48	
EPA 6010D	Manganese	0.88	mg/L	0.040	02/15/22 19:48	
EPA 6010D	Potassium	4.9	mg/L	0.20	02/15/22 19:48	
EPA 6010D	Sodium	14.1	mg/L	1.0	02/15/22 19:48	
EPA 6010D	Calcium	61.7	mg/L	1.0	02/15/22 19:48	
EPA 6010D	Magnesium	5.5	mg/L	0.050	02/15/22 19:48	
EPA 6020B	Barium	0.015	mg/L	0.0050	02/15/22 21:04	
EPA 6020B	Beryllium	0.000054J	mg/L	0.00050	02/15/22 21:04	
EPA 6020B	Boron	1.0	mg/L	0.040	02/15/22 21:04	
EPA 6020B	Cobalt	0.0076	mg/L	0.0050	02/15/22 21:04	
EPA 6020B	Lithium	0.0010J	mg/L	0.030	02/15/22 21:04	
SM 2540C-2015	Total Dissolved Solids	301	mg/L	10.0	02/09/22 18:02	
SM 2320B	Alkalinity, Total as CaCO3	31.3	mg/L	5.0	02/10/22 21:36	
SM 2320B	Alkalinity,Bicarbonate (CaCO3)	31.3	mg/L	5.0	02/10/22 21:36	
EPA 300.0 Rev 2.1 1993	Chloride	4.6	mg/L	1.0	02/10/22 23:05	
EPA 300.0 Rev 2.1 1993	Fluoride	0.14	mg/L	0.10	02/10/22 23:05	
EPA 300.0 Rev 2.1 1993	Sulfate	172	mg/L	4.0	02/11/22 05:34	
92585977010	**BRGWC-29I**					
	Performed by	CUSTOMER			02/07/22 09:57	
	pH	4.23	Std. Units		02/07/22 09:57	
EPA 6010D	Iron	29.2	mg/L	0.040	02/15/22 19:53	
EPA 6010D	Manganese	1.2	mg/L	0.040	02/15/22 19:53	
EPA 6010D	Potassium	9.0	mg/L	0.20	02/15/22 19:53	
EPA 6010D	Sodium	15.0	mg/L	1.0	02/15/22 19:53	
EPA 6010D	Calcium	58.7	mg/L	1.0	02/15/22 19:53	
EPA 6010D	Magnesium	7.3	mg/L	0.050	02/15/22 19:53	
EPA 6020B	Barium	0.016	mg/L	0.0050	02/15/22 21:22	

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SUMMARY OF DETECTION

Project: BRANCH AP-BCD
Pace Project No.: 92585977

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92585977010	**BRGWC-29I**					
EPA 6020B	Beryllium	0.00083	mg/L	0.00050	02/15/22 21:22	
EPA 6020B	Boron	0.93	mg/L	0.040	02/15/22 21:22	
EPA 6020B	Cobalt	0.0077	mg/L	0.0050	02/15/22 21:22	
EPA 6020B	Lithium	0.0026J	mg/L	0.030	02/15/22 21:22	
SM 2540C-2015	Total Dissolved Solids	419	mg/L	10.0	02/09/22 10:13	
EPA 300.0 Rev 2.1 1993	Chloride	6.1	mg/L	1.0	02/10/22 23:20	
EPA 300.0 Rev 2.1 1993	Fluoride	0.11	mg/L	0.10	02/10/22 23:20	
EPA 300.0 Rev 2.1 1993	Sulfate	274	mg/L	6.0	02/11/22 05:48	
92585977011	**DUP-3**					
EPA 6010D	Iron	29.8	mg/L	0.040	02/15/22 19:58	
EPA 6010D	Manganese	1.2	mg/L	0.040	02/15/22 19:58	
EPA 6010D	Potassium	9.2	mg/L	0.20	02/15/22 19:58	
EPA 6010D	Sodium	15.2	mg/L	1.0	02/15/22 19:58	
EPA 6010D	Calcium	59.3	mg/L	1.0	02/15/22 19:58	
EPA 6010D	Magnesium	7.4	mg/L	0.050	02/15/22 19:58	
EPA 6020B	Barium	0.015	mg/L	0.0050	02/15/22 21:28	
EPA 6020B	Beryllium	0.00081	mg/L	0.00050	02/15/22 21:28	
EPA 6020B	Boron	0.96	mg/L	0.040	02/15/22 21:28	
EPA 6020B	Cobalt	0.0072	mg/L	0.0050	02/15/22 21:28	
EPA 6020B	Lithium	0.0028J	mg/L	0.030	02/15/22 21:28	
SM 2540C-2015	Total Dissolved Solids	435	mg/L	10.0	02/09/22 10:13	
EPA 300.0 Rev 2.1 1993	Chloride	6.3	mg/L	1.0	02/10/22 23:35	
EPA 300.0 Rev 2.1 1993	Fluoride	0.12	mg/L	0.10	02/10/22 23:35	
EPA 300.0 Rev 2.1 1993	Sulfate	285	mg/L	6.0	02/11/22 06:03	

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ANALYTICAL RESULTS

Project: BRANCH AP-BCD
Pace Project No.: 92585977

Sample: BRGWC-25I **Lab ID: 92585977001** Collected: 02/02/22 14:44 Received: 02/03/22 10:35 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**CUSTOMER**				1		02/03/22 12:57		
pH	**6.23**	Std. Units			1		02/03/22 12:57		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Iron	**0.30**	mg/L	0.040	0.025	1	02/15/22 11:54	02/15/22 18:41	7439-89-6	
Manganese	**1.4**	mg/L	0.040	0.0043	1	02/15/22 11:54	02/15/22 18:41	7439-96-5	
Potassium	**4.0**	mg/L	0.20	0.15	1	02/15/22 11:54	02/15/22 18:41	7440-09-7	
Sodium	**15.1**	mg/L	1.0	0.58	1	02/15/22 11:54	02/15/22 18:41	7440-23-5	
Calcium	**44.3**	mg/L	1.0	0.12	1	02/15/22 11:54	02/15/22 18:41	7440-70-2	
Magnesium	**16.4**	mg/L	0.050	0.012	1	02/15/22 11:54	02/15/22 18:41	7439-95-4	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00078	1	02/15/22 10:27	02/15/22 19:11	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0011	1	02/15/22 10:27	02/15/22 19:11	7440-38-2	
Barium	**0.023**	mg/L	0.0050	0.00067	1	02/15/22 10:27	02/15/22 19:11	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	02/15/22 10:27	02/15/22 19:11	7440-41-7	
Boron	**1.1**	mg/L	0.040	0.0086	1	02/15/22 10:27	02/15/22 19:11	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	02/15/22 10:27	02/15/22 19:11	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	02/15/22 10:27	02/15/22 19:11	7440-47-3	
Cobalt	**0.0027J**	mg/L	0.0050	0.00039	1	02/15/22 10:27	02/15/22 19:11	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	02/15/22 10:27	02/15/22 19:11	7439-92-1	
Lithium	ND	mg/L	0.030	0.00073	1	02/15/22 10:27	02/15/22 19:11	7439-93-2	
Molybdenum	**0.0011J**	mg/L	0.010	0.00074	1	02/15/22 10:27	02/15/22 19:11	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	02/15/22 10:27	02/15/22 19:11	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	02/15/22 10:27	02/15/22 19:11	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.00013	1	02/10/22 08:00	02/10/22 11:03	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**283**	mg/L	10.0	10.0	1		02/07/22 17:22		
2320B Alkalinity	Analytical Method: SM 2320B Pace Analytical Services - Minneapolis								
Alkalinity, Total as CaCO3	**71.7**	mg/L	5.0	1.8	1		02/10/22 15:25		
Alkalinity,Bicarbonate (CaCO3)	**71.7**	mg/L	5.0	1.8	1		02/10/22 15:25		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	1.8	1		02/10/22 15:25		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
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ANALYTICAL RESULTS

Project: BRANCH AP-BCD
Pace Project No.: 92585977

Sample: BRGWC-25I **Lab ID: 92585977001** Collected: 02/02/22 14:44 Received: 02/03/22 10:35 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**4.2**	mg/L	1.0	0.60	1		02/08/22 02:24	16887-00-6	
Fluoride	**0.15**	mg/L	0.10	0.050	1		02/08/22 02:24	16984-48-8	
Sulfate	**117**	mg/L	3.0	1.5	3		02/08/22 14:32	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: BRANCH AP-BCD
Pace Project No.: 92585977

Sample: BRGWC-30I **Lab ID: 92585977002** Collected: 02/02/22 12:30 Received: 02/03/22 10:35 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**CUSTOMER**				1		02/03/22 12:57		
pH	**6.34**	Std. Units			1		02/03/22 12:57		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Iron	**1.1**	mg/L	0.040	0.025	1	02/15/22 11:54	02/15/22 18:46	7439-89-6	
Manganese	**0.80**	mg/L	0.040	0.0043	1	02/15/22 11:54	02/15/22 18:46	7439-96-5	
Potassium	**5.5**	mg/L	0.20	0.15	1	02/15/22 11:54	02/15/22 18:46	7440-09-7	
Sodium	**27.5**	mg/L	1.0	0.58	1	02/15/22 11:54	02/15/22 18:46	7440-23-5	M1
Calcium	**232**	mg/L	1.0	0.12	1	02/15/22 11:54	02/15/22 18:46	7440-70-2	M1
Magnesium	**46.7**	mg/L	0.050	0.012	1	02/15/22 11:54	02/15/22 18:46	7439-95-4	M1
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	**0.0013J**	mg/L	0.0030	0.00078	1	02/15/22 10:27	02/15/22 19:34	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0011	1	02/15/22 10:27	02/15/22 19:34	7440-38-2	
Barium	**0.031**	mg/L	0.0050	0.00067	1	02/15/22 10:27	02/15/22 19:34	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	02/15/22 10:27	02/15/22 19:34	7440-41-7	
Boron	**1.9**	mg/L	0.040	0.0086	1	02/15/22 10:27	02/15/22 19:34	7440-42-8	
Cadmium	**0.00014J**	mg/L	0.00050	0.00011	1	02/15/22 10:27	02/15/22 19:34	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	02/15/22 10:27	02/15/22 19:34	7440-47-3	
Cobalt	**0.0012J**	mg/L	0.0050	0.00039	1	02/15/22 10:27	02/15/22 19:34	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	02/15/22 10:27	02/15/22 19:34	7439-92-1	
Lithium	**0.021J**	mg/L	0.030	0.00073	1	02/15/22 10:27	02/15/22 19:34	7439-93-2	
Molybdenum	**0.0012J**	mg/L	0.010	0.00074	1	02/15/22 10:27	02/15/22 19:34	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	02/15/22 10:27	02/15/22 19:34	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	02/15/22 10:27	02/15/22 19:34	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.00013	1	02/10/22 08:00	02/10/22 11:13	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**1110**	mg/L	20.0	20.0	1		02/07/22 17:23		
2320B Alkalinity	Analytical Method: SM 2320B Pace Analytical Services - Minneapolis								
Alkalinity, Total as CaCO3	**118**	mg/L	5.0	1.8	1		02/10/22 15:29		
Alkalinity,Bicarbonate (CaCO3)	**118**	mg/L	5.0	1.8	1		02/10/22 15:29		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	1.8	1		02/10/22 15:29		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: BRANCH AP-BCD
Pace Project No.: 92585977

Sample: BRGWC-30I **Lab ID: 92585977002** Collected: 02/02/22 12:30 Received: 02/03/22 10:35 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**4.0**	mg/L	1.0	0.60	1		02/08/22 02:38	16887-00-6	
Fluoride	**0.10**	mg/L	0.10	0.050	1		02/08/22 02:38	16984-48-8	
Sulfate	**580**	mg/L	14.0	7.0	14		02/08/22 14:46	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: BRANCH AP-BCD
Pace Project No.: 92585977

Sample: BRGWC-32S **Lab ID: 92585977003** Collected: 02/02/22 14:55 Received: 02/03/22 10:35 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**CUSTOMER**				1		02/03/22 12:57		
pH	**5.99**	Std. Units			1		02/03/22 12:57		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Iron	**0.082**	mg/L	0.040	0.025	1	02/15/22 11:54	02/15/22 19:05	7439-89-6	
Manganese	ND	mg/L	0.040	0.0043	1	02/15/22 11:54	02/15/22 19:05	7439-96-5	
Potassium	**1.9**	mg/L	0.20	0.15	1	02/15/22 11:54	02/15/22 19:05	7440-09-7	
Sodium	**24.6**	mg/L	1.0	0.58	1	02/15/22 11:54	02/15/22 19:05	7440-23-5	
Calcium	**44.2**	mg/L	1.0	0.12	1	02/15/22 11:54	02/15/22 19:05	7440-70-2	
Magnesium	**28.6**	mg/L	0.050	0.012	1	02/15/22 11:54	02/15/22 19:05	7439-95-4	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00078	1	02/15/22 10:27	02/15/22 19:40	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0011	1	02/15/22 10:27	02/15/22 19:40	7440-38-2	
Barium	**0.023**	mg/L	0.0050	0.00067	1	02/15/22 10:27	02/15/22 19:40	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	02/15/22 10:27	02/15/22 19:40	7440-41-7	
Boron	**1.0**	mg/L	0.040	0.0086	1	02/15/22 10:27	02/15/22 19:40	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	02/15/22 10:27	02/15/22 19:40	7440-43-9	
Chromium	**0.0021J**	mg/L	0.0050	0.0011	1	02/15/22 10:27	02/15/22 19:40	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	02/15/22 10:27	02/15/22 19:40	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	02/15/22 10:27	02/15/22 19:40	7439-92-1	
Lithium	**0.0035J**	mg/L	0.030	0.00073	1	02/15/22 10:27	02/15/22 19:40	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	02/15/22 10:27	02/15/22 19:40	7439-98-7	
Selenium	**0.21**	mg/L	0.0050	0.0014	1	02/15/22 10:27	02/15/22 19:40	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	02/15/22 10:27	02/15/22 19:40	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.00013	1	02/10/22 08:00	02/10/22 11:16	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**443**	mg/L	10.0	10.0	1		02/07/22 17:23		
2320B Alkalinity	Analytical Method: SM 2320B Pace Analytical Services - Minneapolis								
Alkalinity, Total as CaCO3	**31.5**	mg/L	5.0	1.8	1		02/10/22 15:34		
Alkalinity,Bicarbonate (CaCO3)	**31.5**	mg/L	5.0	1.8	1		02/10/22 15:34		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	1.8	1		02/10/22 15:34		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: BRANCH AP-BCD
Pace Project No.: 92585977

Sample: BRGWC-32S **Lab ID: 92585977003** Collected: 02/02/22 14:55 Received: 02/03/22 10:35 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**3.8**	mg/L	1.0	0.60	1		02/08/22 02:52	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		02/08/22 02:52	16984-48-8	
Sulfate	**210**	mg/L	5.0	2.5	5		02/08/22 15:00	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: BRANCH AP-BCD
Pace Project No.: 92585977

Sample: BRGWC-45 **Lab ID: 92585977004** Collected: 02/02/22 10:42 Received: 02/03/22 10:35 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**CUSTOMER**				1		02/03/22 12:57		
pH	**5.92**	Std. Units			1		02/03/22 12:57		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Iron	**0.44**	mg/L	0.040	0.025	1	02/15/22 11:54	02/15/22 19:10	7439-89-6	
Manganese	**0.27**	mg/L	0.040	0.0043	1	02/15/22 11:54	02/15/22 19:10	7439-96-5	
Potassium	**3.4**	mg/L	0.20	0.15	1	02/15/22 11:54	02/15/22 19:10	7440-09-7	
Sodium	**14.6**	mg/L	1.0	0.58	1	02/15/22 11:54	02/15/22 19:10	7440-23-5	
Calcium	**33.8**	mg/L	1.0	0.12	1	02/15/22 11:54	02/15/22 19:10	7440-70-2	
Magnesium	**16.2**	mg/L	0.050	0.012	1	02/15/22 11:54	02/15/22 19:10	7439-95-4	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00078	1	02/15/22 10:27	02/15/22 19:46	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0011	1	02/15/22 10:27	02/15/22 19:46	7440-38-2	
Barium	**0.063**	mg/L	0.0050	0.00067	1	02/15/22 10:27	02/15/22 19:46	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	02/15/22 10:27	02/15/22 19:46	7440-41-7	
Boron	**0.034J**	mg/L	0.040	0.0086	1	02/15/22 10:27	02/15/22 19:46	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	02/15/22 10:27	02/15/22 19:46	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	02/15/22 10:27	02/15/22 19:46	7440-47-3	
Cobalt	**0.0054**	mg/L	0.0050	0.00039	1	02/15/22 10:27	02/15/22 19:46	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	02/15/22 10:27	02/15/22 19:46	7439-92-1	
Lithium	**0.0022J**	mg/L	0.030	0.00073	1	02/15/22 10:27	02/15/22 19:46	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	02/15/22 10:27	02/15/22 19:46	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	02/15/22 10:27	02/15/22 19:46	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	02/15/22 10:27	02/15/22 19:46	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.00013	1	02/10/22 08:00	02/10/22 11:19	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**276**	mg/L	10.0	10.0	1		02/07/22 17:23		
2320B Alkalinity	Analytical Method: SM 2320B Pace Analytical Services - Minneapolis								
Alkalinity, Total as CaCO3	**39.6**	mg/L	5.0	1.8	1		02/10/22 15:37		
Alkalinity,Bicarbonate (CaCO3)	**39.6**	mg/L	5.0	1.8	1		02/10/22 15:37		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	1.8	1		02/10/22 15:37		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: BRANCH AP-BCD
Pace Project No.: 92585977

Sample: BRGWC-45 **Lab ID: 92585977004** Collected: 02/02/22 10:42 Received: 02/03/22 10:35 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**23.4**	mg/L	1.0	0.60	1		02/08/22 03:06	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		02/08/22 03:06	16984-48-8	
Sulfate	**90.1**	mg/L	2.0	1.0	2		02/08/22 15:15	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: BRANCH AP-BCD
Pace Project No.: 92585977

Sample: BRGWC-47 **Lab ID: 92585977005** Collected: 02/02/22 09:40 Received: 02/03/22 10:35 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**CUSTOMER**				1		02/03/22 12:57		
pH	**5.75**	Std. Units			1		02/03/22 12:57		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Iron	**0.17**	mg/L	0.040	0.025	1	02/15/22 11:54	02/15/22 19:15	7439-89-6	BC
Manganese	**0.010J**	mg/L	0.040	0.0043	1	02/15/22 11:54	02/15/22 19:15	7439-96-5	
Potassium	**11.5**	mg/L	0.20	0.15	1	02/15/22 11:54	02/15/22 19:15	7440-09-7	
Sodium	**40.5**	mg/L	1.0	0.58	1	02/15/22 11:54	02/15/22 19:15	7440-23-5	
Magnesium	**114**	mg/L	0.050	0.012	1	02/15/22 11:54	02/15/22 19:15	7439-95-4	
Calcium	**320**	mg/L	10.0	1.2	10	02/15/22 11:54	02/16/22 15:32	7440-70-2	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00078	1	02/15/22 10:27	02/15/22 19:52	7440-36-0	
Arsenic	**0.0056**	mg/L	0.0050	0.0011	1	02/15/22 10:27	02/15/22 19:52	7440-38-2	
Barium	**0.028**	mg/L	0.0050	0.00067	1	02/15/22 10:27	02/15/22 19:52	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	02/15/22 10:27	02/15/22 19:52	7440-41-7	
Boron	**0.48**	mg/L	0.040	0.0086	1	02/15/22 10:27	02/15/22 19:52	7440-42-8	
Cadmium	**0.00015J**	mg/L	0.00050	0.00011	1	02/15/22 10:27	02/15/22 19:52	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	02/15/22 10:27	02/15/22 19:52	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	02/15/22 10:27	02/15/22 19:52	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	02/15/22 10:27	02/15/22 19:52	7439-92-1	
Lithium	**0.040**	mg/L	0.030	0.00073	1	02/15/22 10:27	02/15/22 19:52	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	02/15/22 10:27	02/15/22 19:52	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	02/15/22 10:27	02/15/22 19:52	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	02/15/22 10:27	02/15/22 19:52	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.00013	1	02/10/22 08:00	02/10/22 11:26	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**1850**	mg/L	100	100	1		02/07/22 17:23		
2320B Alkalinity	Analytical Method: SM 2320B Pace Analytical Services - Minneapolis								
Alkalinity, Total as CaCO3	**26.1**	mg/L	5.0	1.8	1		02/10/22 15:41		
Alkalinity,Bicarbonate (CaCO3)	**26.1**	mg/L	5.0	1.8	1		02/10/22 15:41		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	1.8	1		02/10/22 15:41		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: BRANCH AP-BCD
Pace Project No.: 92585977

Sample: BRGWC-47 **Lab ID: 92585977005** Collected: 02/02/22 09:40 Received: 02/03/22 10:35 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**4.2**	mg/L	1.0	0.60	1		02/08/22 03:20	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		02/08/22 03:20	16984-48-8	
Sulfate	**1170**	mg/L	26.0	13.0	26		02/08/22 15:56	14808-79-8	M1

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: BRANCH AP-BCD
Pace Project No.: 92585977

Sample: BRGWC-52I **Lab ID: 92585977006** Collected: 02/02/22 13:34 Received: 02/03/22 10:35 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**CUSTOMER**				1		02/03/22 12:57		
pH	**6.35**	Std. Units			1		02/03/22 12:57		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Iron	**5.8**	mg/L	0.040	0.025	1	02/15/22 11:54	02/15/22 19:29	7439-89-6	
Manganese	**0.75**	mg/L	0.040	0.0043	1	02/15/22 11:54	02/15/22 19:29	7439-96-5	
Potassium	**4.9**	mg/L	0.20	0.15	1	02/15/22 11:54	02/15/22 19:29	7440-09-7	
Sodium	**18.4**	mg/L	1.0	0.58	1	02/15/22 11:54	02/15/22 19:29	7440-23-5	
Calcium	**40.1**	mg/L	1.0	0.12	1	02/15/22 11:54	02/15/22 19:29	7440-70-2	
Magnesium	**18.1**	mg/L	0.050	0.012	1	02/15/22 11:54	02/15/22 19:29	7439-95-4	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00078	1	02/15/22 10:27	02/15/22 20:10	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0011	1	02/15/22 10:27	02/15/22 20:10	7440-38-2	
Barium	**0.013**	mg/L	0.0050	0.00067	1	02/15/22 10:27	02/15/22 20:10	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	02/15/22 10:27	02/15/22 20:10	7440-41-7	
Boron	**1.5**	mg/L	0.040	0.0086	1	02/15/22 10:27	02/15/22 20:10	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	02/15/22 10:27	02/15/22 20:10	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	02/15/22 10:27	02/15/22 20:10	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	02/15/22 10:27	02/15/22 20:10	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	02/15/22 10:27	02/15/22 20:10	7439-92-1	
Lithium	**0.0041J**	mg/L	0.030	0.00073	1	02/15/22 10:27	02/15/22 20:10	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	02/15/22 10:27	02/15/22 20:10	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	02/15/22 10:27	02/15/22 20:10	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	02/15/22 10:27	02/15/22 20:10	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.00013	1	02/14/22 15:15	02/15/22 09:27	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**160**	mg/L	10.0	10.0	1		02/07/22 17:23		
2320B Alkalinity	Analytical Method: SM 2320B Pace Analytical Services - Minneapolis								
Alkalinity, Total as CaCO3	**65.1**	mg/L	5.0	1.8	1		02/10/22 15:44		
Alkalinity,Bicarbonate (CaCO3)	**65.1**	mg/L	5.0	1.8	1		02/10/22 15:44		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	1.8	1		02/10/22 15:44		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: BRANCH AP-BCD
Pace Project No.: 92585977

Sample: BRGWC-52I **Lab ID: 92585977006** Collected: 02/02/22 13:34 Received: 02/03/22 10:35 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**6.1**	mg/L	1.0	0.60	1		02/08/22 04:01	16887-00-6	
Fluoride	**0.098J**	mg/L	0.10	0.050	1		02/08/22 04:01	16984-48-8	
Sulfate	**126**	mg/L	3.0	1.5	3		02/08/22 16:38	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: BRANCH AP-BCD
Pace Project No.: 92585977

Sample: DUP-2 **Lab ID: 92585977007** Collected: 02/02/22 00:00 Received: 02/03/22 10:35 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	**224**	mg/L	1.0	0.12	1	02/15/22 11:54	02/15/22 19:34	7440-70-2	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00078	1	02/15/22 10:27	02/15/22 20:16	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0011	1	02/15/22 10:27	02/15/22 20:16	7440-38-2	
Barium	**0.032**	mg/L	0.0050	0.00067	1	02/15/22 10:27	02/15/22 20:16	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	02/15/22 10:27	02/15/22 20:16	7440-41-7	
Boron	**1.9**	mg/L	0.040	0.0086	1	02/15/22 10:27	02/15/22 20:16	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	02/15/22 10:27	02/15/22 20:16	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	02/15/22 10:27	02/15/22 20:16	7440-47-3	
Cobalt	**0.0013J**	mg/L	0.0050	0.00039	1	02/15/22 10:27	02/15/22 20:16	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	02/15/22 10:27	02/15/22 20:16	7439-92-1	
Lithium	**0.020J**	mg/L	0.030	0.00073	1	02/15/22 10:27	02/15/22 20:16	7439-93-2	
Molybdenum	**0.0010J**	mg/L	0.010	0.00074	1	02/15/22 10:27	02/15/22 20:16	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	02/15/22 10:27	02/15/22 20:16	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	02/15/22 10:27	02/15/22 20:16	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.00013	1	02/14/22 15:15	02/15/22 09:37	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**1140**	mg/L	20.0	20.0	1		02/07/22 17:39		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**4.1**	mg/L	1.0	0.60	1		02/08/22 04:43	16887-00-6	
Fluoride	**0.11**	mg/L	0.10	0.050	1		02/08/22 04:43	16984-48-8	
Sulfate	**579**	mg/L	14.0	7.0	14		02/08/22 16:51	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: BRANCH AP-BCD
Pace Project No.: 92585977

Sample: BRGWC-50 **Lab ID: 92585977008** Collected: 02/03/22 11:48 Received: 02/04/22 16:06 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**CUSTOMER**				1		02/07/22 09:56		
pH	**5.20**	Std. Units			1		02/07/22 09:56		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Manganese	**83.5**	mg/L	0.40	0.043	10	02/15/22 11:54	02/16/22 15:37	7439-96-5	
Calcium	**220**	mg/L	10.0	1.2	10	02/15/22 11:54	02/16/22 15:37	7440-70-2	
Magnesium	**158**	mg/L	0.50	0.12	10	02/15/22 11:54	02/16/22 15:37	7439-95-4	
Hardness, Total(SM 2340B)	**1200**	mg/L	27.0	3.5	10	02/15/22 11:54	02/16/22 15:37		
Iron	**0.15**	mg/L	0.040	0.025	1	02/15/22 11:54	02/15/22 19:43	7439-89-6	
Potassium	**9.8**	mg/L	0.20	0.15	1	02/15/22 11:54	02/15/22 19:43	7440-09-7	
Sodium	**46.9**	mg/L	1.0	0.58	1	02/15/22 11:54	02/15/22 19:43	7440-23-5	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00078	1	02/15/22 10:27	02/15/22 20:58	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0011	1	02/15/22 10:27	02/15/22 20:58	7440-38-2	
Barium	**0.016**	mg/L	0.0050	0.00067	1	02/15/22 10:27	02/15/22 20:58	7440-39-3	
Beryllium	**0.0071**	mg/L	0.00050	0.000054	1	02/15/22 10:27	02/15/22 20:58	7440-41-7	
Boron	**0.31**	mg/L	0.040	0.0086	1	02/15/22 10:27	02/15/22 20:58	7440-42-8	
Cadmium	**0.0085**	mg/L	0.00050	0.00011	1	02/15/22 10:27	02/15/22 20:58	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	02/15/22 10:27	02/15/22 20:58	7440-47-3	
Cobalt	**1.5**	mg/L	0.025	0.0020	5	02/15/22 10:27	02/17/22 15:12	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	02/15/22 10:27	02/16/22 20:27	7439-92-1	
Lithium	**0.038**	mg/L	0.030	0.00073	1	02/15/22 10:27	02/15/22 20:58	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	02/15/22 10:27	02/15/22 20:58	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	02/15/22 10:27	02/15/22 20:58	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	02/15/22 10:27	02/16/22 20:27	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.00013	1	02/14/22 15:15	02/15/22 09:40	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**1850**	mg/L	100	100	1		02/09/22 10:13		
2320B Alkalinity	Analytical Method: SM 2320B Pace Analytical Services - Minneapolis								
Alkalinity, Total as CaCO3	**11.6**	mg/L	5.0	1.8	1		02/10/22 22:06		
Alkalinity,Bicarbonate (CaCO3)	**11.6**	mg/L	5.0	1.8	1		02/10/22 22:06		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	1.8	1		02/10/22 22:06		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: BRANCH AP-BCD
Pace Project No.: 92585977

Sample: BRGWC-50 **Lab ID: 92585977008** Collected: 02/03/22 11:48 Received: 02/04/22 16:06 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Iron, Ferric (Calculation)	Analytical Method: SM 3500-Fe D#4 Pace Analytical Services - Asheville								
Iron, Ferric	ND	mg/L	0.50	0.25	1		02/18/22 12:06	20074-52-6	N2
Iron, Ferrous	Analytical Method: SM 3500-Fe B-2011 Pace Analytical Services - Asheville								
Iron, Ferrous	**0.16J**	mg/L	0.50	0.040	1		02/09/22 11:34	15438-31-0	H3,N2
4500S2D Sulfide Water	Analytical Method: SM 4500-S2D-2011 Pace Analytical Services - Asheville								
Sulfide	ND	mg/L	0.10	0.050	1		02/09/22 03:14	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**17.4**	mg/L	1.0	0.60	1		02/10/22 22:50	16887-00-6	
Fluoride	**0.42**	mg/L	0.10	0.050	1		02/10/22 22:50	16984-48-8	
Sulfate	**1270**	mg/L	25.0	12.5	25		02/11/22 05:19	14808-79-8	
353.2 Nitrogen, NO2/NO3 pres.	Analytical Method: EPA 353.2 Rev 2.0 1993 Pace Analytical Services - Asheville								
Nitrogen, NO2 plus NO3	ND	mg/L	0.040	0.017	1		02/18/22 09:48		
5310B Dissolved Organic Carbon	Analytical Method: SM 5310B Pace Analytical Services - Ormond Beach								
Dissolved Organic Carbon	**0.53 I**	mg/L	1.0	0.50	1		02/10/22 20:19		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: BRANCH AP-BCD
Pace Project No.: 92585977

Sample: BRGWC-27I **Lab ID: 92585977009** Collected: 02/04/22 08:50 Received: 02/04/22 16:06 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**CUSTOMER**				1		02/07/22 09:56		
pH	**5.97**	Std. Units			1		02/07/22 09:56		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Iron	**0.095**	mg/L	0.040	0.025	1	02/15/22 11:54	02/15/22 19:48	7439-89-6	
Manganese	**0.88**	mg/L	0.040	0.0043	1	02/15/22 11:54	02/15/22 19:48	7439-96-5	
Potassium	**4.9**	mg/L	0.20	0.15	1	02/15/22 11:54	02/15/22 19:48	7440-09-7	
Sodium	**14.1**	mg/L	1.0	0.58	1	02/15/22 11:54	02/15/22 19:48	7440-23-5	
Calcium	**61.7**	mg/L	1.0	0.12	1	02/15/22 11:54	02/15/22 19:48	7440-70-2	
Magnesium	**5.5**	mg/L	0.050	0.012	1	02/15/22 11:54	02/15/22 19:48	7439-95-4	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00078	1	02/15/22 10:27	02/15/22 21:04	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0011	1	02/15/22 10:27	02/15/22 21:04	7440-38-2	
Barium	**0.015**	mg/L	0.0050	0.00067	1	02/15/22 10:27	02/15/22 21:04	7440-39-3	
Beryllium	**0.000054J**	mg/L	0.00050	0.000054	1	02/15/22 10:27	02/15/22 21:04	7440-41-7	
Boron	**1.0**	mg/L	0.040	0.0086	1	02/15/22 10:27	02/15/22 21:04	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	02/15/22 10:27	02/15/22 21:04	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	02/15/22 10:27	02/15/22 21:04	7440-47-3	
Cobalt	**0.0076**	mg/L	0.0050	0.00039	1	02/15/22 10:27	02/15/22 21:04	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	02/15/22 10:27	02/15/22 21:04	7439-92-1	
Lithium	**0.0010J**	mg/L	0.030	0.00073	1	02/15/22 10:27	02/15/22 21:04	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	02/15/22 10:27	02/15/22 21:04	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	02/15/22 10:27	02/15/22 21:04	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	02/15/22 10:27	02/15/22 21:04	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.00013	1	02/14/22 15:15	02/15/22 09:43	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**301**	mg/L	10.0	10.0	1		02/09/22 18:02		
2320B Alkalinity	Analytical Method: SM 2320B Pace Analytical Services - Minneapolis								
Alkalinity, Total as CaCO3	**31.3**	mg/L	5.0	1.8	1		02/10/22 21:36		
Alkalinity,Bicarbonate (CaCO3)	**31.3**	mg/L	5.0	1.8	1		02/10/22 21:36		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	1.8	1		02/10/22 21:36		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: BRANCH AP-BCD
Pace Project No.: 92585977

Sample: BRGWC-27I **Lab ID: 92585977009** Collected: 02/04/22 08:50 Received: 02/04/22 16:06 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**4.6**	mg/L	1.0	0.60	1		02/10/22 23:05	16887-00-6	
Fluoride	**0.14**	mg/L	0.10	0.050	1		02/10/22 23:05	16984-48-8	
Sulfate	**172**	mg/L	4.0	2.0	4		02/11/22 05:34	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: BRANCH AP-BCD
Pace Project No.: 92585977

Sample: BRGWC-29I **Lab ID: 92585977010** Collected: 02/03/22 17:00 Received: 02/04/22 16:06 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**CUSTOMER**				1		02/07/22 09:57		
pH	**4.23**	Std. Units			1		02/07/22 09:57		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Iron	**29.2**	mg/L	0.040	0.025	1	02/15/22 11:54	02/15/22 19:53	7439-89-6	
Manganese	**1.2**	mg/L	0.040	0.0043	1	02/15/22 11:54	02/15/22 19:53	7439-96-5	
Potassium	**9.0**	mg/L	0.20	0.15	1	02/15/22 11:54	02/15/22 19:53	7440-09-7	
Sodium	**15.0**	mg/L	1.0	0.58	1	02/15/22 11:54	02/15/22 19:53	7440-23-5	
Calcium	**58.7**	mg/L	1.0	0.12	1	02/15/22 11:54	02/15/22 19:53	7440-70-2	
Magnesium	**7.3**	mg/L	0.050	0.012	1	02/15/22 11:54	02/15/22 19:53	7439-95-4	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00078	1	02/15/22 10:27	02/15/22 21:22	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0011	1	02/15/22 10:27	02/16/22 20:33	7440-38-2	
Barium	**0.016**	mg/L	0.0050	0.00067	1	02/15/22 10:27	02/15/22 21:22	7440-39-3	
Beryllium	**0.00083**	mg/L	0.00050	0.000054	1	02/15/22 10:27	02/15/22 21:22	7440-41-7	
Boron	**0.93**	mg/L	0.040	0.0086	1	02/15/22 10:27	02/15/22 21:22	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	02/15/22 10:27	02/15/22 21:22	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	02/15/22 10:27	02/15/22 21:22	7440-47-3	
Cobalt	**0.0077**	mg/L	0.0050	0.00039	1	02/15/22 10:27	02/15/22 21:22	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	02/15/22 10:27	02/15/22 21:22	7439-92-1	
Lithium	**0.0026J**	mg/L	0.030	0.00073	1	02/15/22 10:27	02/15/22 21:22	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	02/15/22 10:27	02/15/22 21:22	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	02/15/22 10:27	02/15/22 21:22	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	02/15/22 10:27	02/15/22 21:22	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.00013	1	02/14/22 15:15	02/15/22 09:50	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**419**	mg/L	10.0	10.0	1		02/09/22 10:13		
2320B Alkalinity	Analytical Method: SM 2320B Pace Analytical Services - Minneapolis								
Alkalinity, Total as CaCO3	ND	mg/L	5.0	1.8	1		02/10/22 22:11		
Alkalinity,Bicarbonate (CaCO3)	ND	mg/L	5.0	1.8	1		02/10/22 22:11		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	1.8	1		02/10/22 22:11		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: BRANCH AP-BCD
Pace Project No.: 92585977

Sample: BRGWC-29I **Lab ID: 92585977010** Collected: 02/03/22 17:00 Received: 02/04/22 16:06 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**6.1**	mg/L	1.0	0.60	1		02/10/22 23:20	16887-00-6	
Fluoride	**0.11**	mg/L	0.10	0.050	1		02/10/22 23:20	16984-48-8	
Sulfate	**274**	mg/L	6.0	3.0	6		02/11/22 05:48	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: BRANCH AP-BCD
Pace Project No.: 92585977

Sample: DUP-3 **Lab ID: 92585977011** Collected: 02/03/22 00:00 Received: 02/04/22 16:06 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Iron	**29.8**	mg/L	0.040	0.025	1	02/15/22 11:54	02/15/22 19:58	7439-89-6	
Manganese	**1.2**	mg/L	0.040	0.0043	1	02/15/22 11:54	02/15/22 19:58	7439-96-5	
Potassium	**9.2**	mg/L	0.20	0.15	1	02/15/22 11:54	02/15/22 19:58	7440-09-7	
Sodium	**15.2**	mg/L	1.0	0.58	1	02/15/22 11:54	02/15/22 19:58	7440-23-5	
Calcium	**59.3**	mg/L	1.0	0.12	1	02/15/22 11:54	02/15/22 19:58	7440-70-2	
Magnesium	**7.4**	mg/L	0.050	0.012	1	02/15/22 11:54	02/15/22 19:58	7439-95-4	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00078	1	02/15/22 10:27	02/15/22 21:28	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0011	1	02/15/22 10:27	02/16/22 20:39	7440-38-2	
Barium	**0.015**	mg/L	0.0050	0.00067	1	02/15/22 10:27	02/15/22 21:28	7440-39-3	
Beryllium	**0.00081**	mg/L	0.00050	0.000054	1	02/15/22 10:27	02/15/22 21:28	7440-41-7	
Boron	**0.96**	mg/L	0.040	0.0086	1	02/15/22 10:27	02/15/22 21:28	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	02/15/22 10:27	02/15/22 21:28	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	02/15/22 10:27	02/15/22 21:28	7440-47-3	
Cobalt	**0.0072**	mg/L	0.0050	0.00039	1	02/15/22 10:27	02/15/22 21:28	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	02/15/22 10:27	02/15/22 21:28	7439-92-1	
Lithium	**0.0028J**	mg/L	0.030	0.00073	1	02/15/22 10:27	02/15/22 21:28	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	02/15/22 10:27	02/15/22 21:28	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	02/15/22 10:27	02/15/22 21:28	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	02/15/22 10:27	02/15/22 21:28	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.00013	1	02/14/22 15:15	02/15/22 09:53	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**435**	mg/L	10.0	10.0	1		02/09/22 10:13		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**6.3**	mg/L	1.0	0.60	1		02/10/22 23:35	16887-00-6	
Fluoride	**0.12**	mg/L	0.10	0.050	1		02/10/22 23:35	16984-48-8	
Sulfate	**285**	mg/L	6.0	3.0	6		02/11/22 06:03	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: BRANCH AP-BCD
Pace Project No.: 92585977

QC Batch: 678354
QC Batch Method: EPA 3010A
Analysis Method: EPA 6010D
Analysis Description: 6010D ATL
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92585977001, 92585977002, 92585977003, 92585977004, 92585977005, 92585977006, 92585977007, 92585977008, 92585977009, 92585977010, 92585977011

METHOD BLANK: 3549970 Matrix: Water
Associated Lab Samples: 92585977001, 92585977002, 92585977003, 92585977004, 92585977005, 92585977006, 92585977007, 92585977008, 92585977009, 92585977010, 92585977011

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium	mg/L	ND	1.0	0.12	02/15/22 18:32	
Hardness, Total(SM 2340B)	mg/L	ND	2.7	0.35	02/15/22 18:32	
Iron	mg/L	ND	0.040	0.025	02/15/22 18:32	
Magnesium	mg/L	ND	0.050	0.012	02/15/22 18:32	
Manganese	mg/L	ND	0.040	0.0043	02/15/22 18:32	
Potassium	mg/L	ND	0.20	0.15	02/15/22 18:32	
Sodium	mg/L	ND	1.0	0.58	02/15/22 18:32	

LABORATORY CONTROL SAMPLE: 3549971

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium	mg/L	1	1.0	100	80-120	
Hardness, Total(SM 2340B)	mg/L	6.6	6.7	101	80-120	
Iron	mg/L	1	1.1	108	80-120	
Magnesium	mg/L	1	1.0	102	80-120	
Manganese	mg/L	1	1.0	100	80-120	
Potassium	mg/L	1	0.95	95	80-120	
Sodium	mg/L	1	1.0	102	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3549972 3549973

Parameter	Units	92585977002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Calcium	mg/L	232	1	1	237	230	468	-240	75-125	3	20	M1
Hardness, Total(SM 2340B)	mg/L	772	6.6	6.6	793	770	320	-25	75-125	3	20	
Iron	mg/L	1.1	1	1	2.2	2.1	110	103	75-125	4	20	
Magnesium	mg/L	46.7	1	1	49.0	47.8	231	106	75-125	3	20	M1
Manganese	mg/L	0.80	1	1	1.8	1.8	102	98	75-125	2	20	
Potassium	mg/L	5.5	1	1	6.6	6.5	111	97	75-125	2	20	
Sodium	mg/L	27.5	1	1	29.1	28.2	157	72	75-125	3	20	M1

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Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL DATA

Project: BRANCH AP-BCD
Pace Project No.: 92585977

QC Batch: 678313
QC Batch Method: EPA 3005A
Analysis Method: EPA 6020B
Analysis Description: 6020 MET
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92585977001, 92585977002, 92585977003, 92585977004, 92585977005, 92585977006, 92585977007, 92585977008, 92585977009, 92585977010, 92585977011

METHOD BLANK: 3549798 Matrix: Water
Associated Lab Samples: 92585977001, 92585977002, 92585977003, 92585977004, 92585977005, 92585977006, 92585977007, 92585977008, 92585977009, 92585977010, 92585977011

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	ND	0.0030	0.00078	02/15/22 18:59	
Arsenic	mg/L	ND	0.0050	0.0011	02/15/22 18:59	
Barium	mg/L	ND	0.0050	0.00067	02/15/22 18:59	
Beryllium	mg/L	ND	0.00050	0.000054	02/15/22 18:59	
Boron	mg/L	ND	0.040	0.0086	02/15/22 18:59	
Cadmium	mg/L	ND	0.00050	0.00011	02/15/22 18:59	
Chromium	mg/L	ND	0.0050	0.0011	02/15/22 18:59	
Cobalt	mg/L	ND	0.0050	0.00039	02/15/22 18:59	
Lead	mg/L	ND	0.0010	0.00089	02/15/22 18:59	
Lithium	mg/L	ND	0.030	0.00073	02/15/22 18:59	
Molybdenum	mg/L	ND	0.010	0.00074	02/15/22 18:59	
Selenium	mg/L	ND	0.0050	0.0014	02/15/22 18:59	
Thallium	mg/L	ND	0.0010	0.00018	02/15/22 18:59	

LABORATORY CONTROL SAMPLE: 3549799

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	104	80-120	
Barium	mg/L	0.1	0.10	104	80-120	
Beryllium	mg/L	0.1	0.10	103	80-120	
Boron	mg/L	1	1.0	101	80-120	
Cadmium	mg/L	0.1	0.10	103	80-120	
Chromium	mg/L	0.1	0.10	104	80-120	
Cobalt	mg/L	0.1	0.10	100	80-120	
Lead	mg/L	0.1	0.11	109	80-120	
Lithium	mg/L	0.1	0.10	101	80-120	
Molybdenum	mg/L	0.1	0.11	106	80-120	
Selenium	mg/L	0.1	0.10	104	80-120	
Thallium	mg/L	0.1	0.11	109	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3549800 3549801

Parameter	Units	92585977001 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	113	107	75-125	6	20	

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(770)734-4200

QUALITY CONTROL DATA

Project: BRANCH AP-BCD
Pace Project No.: 92585977

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3549800 3549801

Parameter	Units	92585977001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Arsenic	mg/L	ND	0.1	0.1	0.10	0.099	105	99	75-125	6	20	
Barium	mg/L	0.023	0.1	0.1	0.14	0.13	121	103	75-125	14	20	
Beryllium	mg/L	ND	0.1	0.1	0.097	0.092	97	92	75-125	5	20	
Boron	mg/L	1.1	1	1	2.2	2.1	106	98	75-125	4	20	
Cadmium	mg/L	ND	0.1	0.1	0.11	0.098	105	98	75-125	7	20	
Chromium	mg/L	ND	0.1	0.1	0.10	0.10	104	100	75-125	4	20	
Cobalt	mg/L	0.0027J	0.1	0.1	0.10	0.096	102	93	75-125	8	20	
Lead	mg/L	ND	0.1	0.1	0.10	0.096	101	96	75-125	5	20	
Lithium	mg/L	ND	0.1	0.1	0.098	0.093	98	93	75-125	5	20	
Molybdenum	mg/L	0.0011J	0.1	0.1	0.11	0.11	109	104	75-125	4	20	
Selenium	mg/L	ND	0.1	0.1	0.10	0.097	104	96	75-125	7	20	
Thallium	mg/L	ND	0.1	0.1	0.10	0.096	101	96	75-125	5	20	

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(770)734-4200

QUALITY CONTROL DATA

Project: BRANCH AP-BCD
Pace Project No.: 92585977

QC Batch: 677192
QC Batch Method: EPA 7470A
Analysis Method: EPA 7470A
Analysis Description: 7470 Mercury
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92585977001, 92585977002, 92585977003, 92585977004, 92585977005

METHOD BLANK: 3544417 Matrix: Water
Associated Lab Samples: 92585977001, 92585977002, 92585977003, 92585977004, 92585977005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	ND	0.00020	0.00013	02/10/22 10:43	

LABORATORY CONTROL SAMPLE: 3544418

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.0025	0.0022	88	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3544419 3544420

Parameter	Units	92585977001 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	0.0020	0.0020	78	80	75-125	2	20	

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QUALITY CONTROL DATA

Project: BRANCH AP-BCD
Pace Project No.: 92585977

QC Batch: 678089
QC Batch Method: EPA 7470A
Analysis Method: EPA 7470A
Analysis Description: 7470 Mercury
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92585977006, 92585977007, 92585977008, 92585977009, 92585977010, 92585977011

METHOD BLANK: 3548804 Matrix: Water
Associated Lab Samples: 92585977006, 92585977007, 92585977008, 92585977009, 92585977010, 92585977011

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	ND	0.00020	0.00013	02/15/22 09:19	

LABORATORY CONTROL SAMPLE: 3548805

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: 3548806 3548807

Parameter	Units	92585977006 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	0.0025	101	98	75-125	2	20	

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(770)734-4200

QUALITY CONTROL DATA

Project: BRANCH AP-BCD
Pace Project No.: 92585977

QC Batch: 676439 | Analysis Method: SM 2540C-2015
QC Batch Method: SM 2540C-2015 | Analysis Description: 2540C Total Dissolved Solids
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92585977001, 92585977002, 92585977003, 92585977004, 92585977005, 92585977006, 92585977007

METHOD BLANK: 3540519 Matrix: Water
Associated Lab Samples: 92585977001, 92585977002, 92585977003, 92585977004, 92585977005, 92585977006, 92585977007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	10.0	10.0	02/07/22 17:19	

LABORATORY CONTROL SAMPLE: 3540520

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	374	94	80-120	

SAMPLE DUPLICATE: 3540521

Parameter	Units	92585555019 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	180	181	1	25	

SAMPLE DUPLICATE: 3540522

Parameter	Units	92585920011 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	96.0	94.0	2	25	

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QUALITY CONTROL DATA

Project: BRANCH AP-BCD
Pace Project No.: 92585977

QC Batch: 676886 | Analysis Method: SM 2540C-2015
QC Batch Method: SM 2540C-2015 | Analysis Description: 2540C Total Dissolved Solids
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92585977008, 92585977010, 92585977011

METHOD BLANK: 3542886 Matrix: Water
Associated Lab Samples: 92585977008, 92585977010, 92585977011

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	10.0	10.0	02/09/22 10:12	

LABORATORY CONTROL SAMPLE: 3542887

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	374	94	80-120	

SAMPLE DUPLICATE: 3542888

Parameter	Units	92585920029 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	538	574	6	25	

SAMPLE DUPLICATE: 3542889

Parameter	Units	92585979010 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	1380	1350	2	25	

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110 Technology Parkway
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(770)734-4200

QUALITY CONTROL DATA

Project: BRANCH AP-BCD
Pace Project No.: 92585977

QC Batch: 676887
QC Batch Method: SM 2540C-2015
Analysis Method: SM 2540C-2015
Analysis Description: 2540C Total Dissolved Solids
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92585977009

METHOD BLANK: 3542890 Matrix: Water
Associated Lab Samples: 92585977009

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	10.0	10.0	02/09/22 18:00	

LABORATORY CONTROL SAMPLE: 3542891

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	386	96	80-120	

SAMPLE DUPLICATE: 3542892

Parameter	Units	92585561016 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	ND	ND		25	

SAMPLE DUPLICATE: 3542893

Parameter	Units	92586685001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	1990	1860	7	25	

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QUALITY CONTROL DATA

Project: BRANCH AP-BCD
Pace Project No.: 92585977

QC Batch: 798120 Analysis Method: SM 2320B
QC Batch Method: SM 2320B Analysis Description: 2320B Alkalinity
Laboratory: Pace Analytical Services - Minneapolis
Associated Lab Samples: 92585977001, 92585977002, 92585977003, 92585977004, 92585977005, 92585977006

METHOD BLANK: 4240836 Matrix: Water
Associated Lab Samples: 92585977001, 92585977002, 92585977003, 92585977004, 92585977005, 92585977006

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Alkalinity, Total as CaCO3	mg/L	ND	5.0	1.8	02/10/22 14:25	
Alkalinity,Bicarbonate (CaCO3)	mg/L	ND	5.0	1.8	02/10/22 14:25	
Alkalinity,Carbonate (CaCO3)	mg/L	ND	5.0	1.8	02/10/22 14:25	

LABORATORY CONTROL SAMPLE & LCSD: 4240837 4240838

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
Alkalinity, Total as CaCO3	mg/L	40	40.3	40.3	101	101	90-110	0	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4240839 4240840

Parameter	Units	92585979009 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Alkalinity, Total as CaCO3	mg/L	3.2J	40	40	45.9	45.7	107	106	80-120	0	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4240841 4240842

Parameter	Units	10596592002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Alkalinity, Total as CaCO3	mg/L	16.2	40	40	58.1	58.3	105	105	80-120	0	20	

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Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL DATA

Project: BRANCH AP-BCD
Pace Project No.: 92585977

QC Batch: 798366
QC Batch Method: SM 2320B
Analysis Method: SM 2320B
Analysis Description: 2320B Alkalinity
Laboratory: Pace Analytical Services - Minneapolis
Associated Lab Samples: 92585977008, 92585977009, 92585977010

METHOD BLANK: 4241914 Matrix: Water
Associated Lab Samples: 92585977008, 92585977009, 92585977010

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Alkalinity, Total as CaCO3	mg/L	ND	5.0	1.8	02/10/22 19:52	
Alkalinity,Bicarbonate (CaCO3)	mg/L	ND	5.0	1.8	02/10/22 19:52	
Alkalinity,Carbonate (CaCO3)	mg/L	ND	5.0	1.8	02/10/22 19:52	

LABORATORY CONTROL SAMPLE & LCSD: 4241915 4241916

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
Alkalinity, Total as CaCO3	mg/L	40	41.9	42.2	105	105	90-110	1	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4241917 4241918

Parameter	Units	10597082001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Alkalinity, Total as CaCO3	mg/L	23.0	40	40	62.8	63.0	100	100	80-120	0	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4241919 4241920

Parameter	Units	92586436012 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Alkalinity, Total as CaCO3	mg/L	76.7	40	40	116	116	98	99	80-120	0	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: BRANCH AP-BCD
Pace Project No.: 92585977

QC Batch: 676994
QC Batch Method: SM 3500-Fe B-2011
Analysis Method: SM 3500-Fe B-2011
Analysis Description: Iron, Ferrous
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92585977008

METHOD BLANK: 3543126 Matrix: Water
Associated Lab Samples: 92585977008

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Iron, Ferrous	mg/L	ND	0.50	0.040	02/09/22 11:19	N2

LABORATORY CONTROL SAMPLE: 3543127

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Iron, Ferrous	mg/L	1.5	1.5	103	90-110	N2

SAMPLE DUPLICATE: 3543128

Parameter	Units	92584808011 Result	Dup Result	RPD	Max RPD	Qualifiers
Iron, Ferrous	mg/L	ND	0.22J		10	H3,N2

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(770)734-4200

QUALITY CONTROL DATA

Project: BRANCH AP-BCD
Pace Project No.: 92585977

QC Batch: 676918
QC Batch Method: SM 4500-S2D-2011
Analysis Method: SM 4500-S2D-2011
Analysis Description: 4500S2D Sulfide Water
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92585977008

METHOD BLANK: 3542979 Matrix: Water
Associated Lab Samples: 92585977008

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Sulfide	mg/L	ND	0.10	0.050	02/09/22 03:08	

LABORATORY CONTROL SAMPLE: 3542980

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Sulfide	mg/L	0.5	0.50	99	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3542981 3542982

Parameter	Units	92586721004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Sulfide	mg/L	ND	0.5	0.5	0.48	0.48	95	95	80-120	1	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3542983 3542984

Parameter	Units	92586721001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Sulfide	mg/L	ND	0.5	0.5	0.51	0.53	99	103	80-120	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

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

QUALITY CONTROL DATA

Project: BRANCH AP-BCD
Pace Project No.: 92585977

QC Batch: 676560
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
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92585977001, 92585977002, 92585977003, 92585977004, 92585977005, 92585977006, 92585977007

METHOD BLANK: 3541375 Matrix: Water
Associated Lab Samples: 92585977001, 92585977002, 92585977003, 92585977004, 92585977005, 92585977006, 92585977007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.60	02/07/22 23:37	
Fluoride	mg/L	ND	0.10	0.050	02/07/22 23:37	
Sulfate	mg/L	ND	1.0	0.50	02/07/22 23:37	

LABORATORY CONTROL SAMPLE: 3541376

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	51.9	104	90-110	
Fluoride	mg/L	2.5	2.4	97	90-110	
Sulfate	mg/L	50	51.2	102	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3541377 3541378

Parameter	Units	92586448001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	12.0	50	50	64.1	64.0	104	104	90-110	0	10	
Fluoride	mg/L	ND	2.5	2.5	2.5	2.5	97	98	90-110	0	10	
Sulfate	mg/L	7.4	50	50	59.4	59.5	104	104	90-110	0	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3541379 3541380

Parameter	Units	92585977005 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	4.2	50	50	57.0	57.1	106	106	90-110	0	10	
Fluoride	mg/L	ND	2.5	2.5	2.5	2.5	98	100	90-110	2	10	
Sulfate	mg/L	1170	50	50	1160	1150	-14	-27	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

QUALITY CONTROL DATA

Project: BRANCH AP-BCD
Pace Project No.: 92585977

QC Batch: 677218
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
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92585977008, 92585977009, 92585977010, 92585977011

METHOD BLANK: 3544578 Matrix: Water
Associated Lab Samples: 92585977008, 92585977009, 92585977010, 92585977011

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.60	02/10/22 15:27	
Fluoride	mg/L	ND	0.10	0.050	02/10/22 15:27	
Sulfate	mg/L	ND	1.0	0.50	02/10/22 15:27	

LABORATORY CONTROL SAMPLE: 3544579

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	53.6	107	90-110	
Fluoride	mg/L	2.5	2.6	104	90-110	
Sulfate	mg/L	50	52.8	106	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3544580 3544581

Parameter	Units	92586778001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	61.7	50	50	110	110	96	97	90-110	0	10	
Fluoride	mg/L	ND	2.5	2.5	3.1	3.1	120	121	90-110	1	10	M1
Sulfate	mg/L	52.4	50	50	103	103	101	101	90-110	0	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3544582 3544583

Parameter	Units	92585920032 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	7.5	50	50	66.0	66.0	117	117	90-110	0	10	M1
Fluoride	mg/L	ND	2.5	2.5	2.8	2.9	113	114	90-110	1	10	M1
Sulfate	mg/L	65.0	50	50	114	114	98	97	90-110	0	10	

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

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: BRANCH AP-BCD
Pace Project No.: 92585977

QC Batch: 678945
QC Batch Method: EPA 353.2 Rev 2.0 1993
Analysis Method: EPA 353.2 Rev 2.0 1993
Analysis Description: 353.2 Nitrate + Nitrite, preserved
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92585977008

METHOD BLANK: 3552861 Matrix: Water
Associated Lab Samples: 92585977008

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Nitrogen, NO2 plus NO3	mg/L	ND	0.040	0.017	02/18/22 09:25	

LABORATORY CONTROL SAMPLE: 3552862

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, NO2 plus NO3	mg/L	2.5	2.5	100	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3552863 3552864

Parameter	Units	92585013023 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Nitrogen, NO2 plus NO3	mg/L	ND	2.5	2.5	2.3	2.3	91	90	90-110	1	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3552865 3552866

Parameter	Units	92585013024 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Nitrogen, NO2 plus NO3	mg/L	0.16	2.5	2.5	2.6	2.5	96	95	90-110	1	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: BRANCH AP-BCD
Pace Project No.: 92585977

QC Batch: 799039
QC Batch Method: SM 5310B
Analysis Method: SM 5310B
Analysis Description: 5310B Dissolved Organic Carbon
Laboratory: Pace Analytical Services - Ormond Beach
Associated Lab Samples: 92585977008

METHOD BLANK: 4387547 Matrix: Water
Associated Lab Samples: 92585977008

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Dissolved Organic Carbon	mg/L	ND	1.0	0.50	02/10/22 17:39	

LABORATORY CONTROL SAMPLE: 4387548

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Dissolved Organic Carbon	mg/L	20	18.6	93	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4387551 4387552

Parameter	Units	92585979009 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Dissolved Organic Carbon	mg/L	0.57 I	20	20	17.8	18.9	86	92	80-120	6	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4387553 4387554

Parameter	Units	92585464001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Dissolved Organic Carbon	mg/L	1.4	20	20	19.1	19.2	88	89	80-120	0	20	

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

REPORT OF LABORATORY ANALYSIS

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

QUALIFIERS

Project: BRANCH AP-BCD
Pace Project No.: 92585977

DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

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

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

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

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

Acid preservation may not be appropriate for 2 Chloroethylvinyl ether.

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

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

Reported results are not rounded until the final step prior to reporting. Therefore, calculated parameters that are typically reported as "Total" may vary slightly from the sum of the reported component parameters.

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

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

BC	The same analyte was detected in an associated blank at a concentration above 1/2 the reporting limit but below the laboratory reporting limit.
H3	Sample was received or analysis requested beyond the recognized method holding time.
M1	Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.
N2	The lab does not hold NELAC/TNI accreditation for this parameter but other accreditations/certifications may apply. A complete list of accreditations/certifications is available upon request.

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

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: BRANCH AP-BCD
Pace Project No.: 92585977

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92585977001	**BRGWC-25I**				
92585977002	**BRGWC-30I**				
92585977003	**BRGWC-32S**				
92585977004	**BRGWC-45**				
92585977005	**BRGWC-47**				
92585977006	**BRGWC-52I**				
92585977008	**BRGWC-50**				
92585977009	**BRGWC-27I**				
92585977010	**BRGWC-29I**				
92585977001	**BRGWC-25I**	EPA 3010A	678354	EPA 6010D	678446
92585977002	**BRGWC-30I**	EPA 3010A	678354	EPA 6010D	678446
92585977003	**BRGWC-32S**	EPA 3010A	678354	EPA 6010D	678446
92585977004	**BRGWC-45**	EPA 3010A	678354	EPA 6010D	678446
92585977005	**BRGWC-47**	EPA 3010A	678354	EPA 6010D	678446
92585977006	**BRGWC-52I**	EPA 3010A	678354	EPA 6010D	678446
92585977007	**DUP-2**	EPA 3010A	678354	EPA 6010D	678446
92585977008	**BRGWC-50**	EPA 3010A	678354	EPA 6010D	678446
92585977009	**BRGWC-27I**	EPA 3010A	678354	EPA 6010D	678446
92585977010	**BRGWC-29I**	EPA 3010A	678354	EPA 6010D	678446
92585977011	**DUP-3**	EPA 3010A	678354	EPA 6010D	678446
92585977001	**BRGWC-25I**	EPA 3005A	678313	EPA 6020B	678442
92585977002	**BRGWC-30I**	EPA 3005A	678313	EPA 6020B	678442
92585977003	**BRGWC-32S**	EPA 3005A	678313	EPA 6020B	678442
92585977004	**BRGWC-45**	EPA 3005A	678313	EPA 6020B	678442
92585977005	**BRGWC-47**	EPA 3005A	678313	EPA 6020B	678442
92585977006	**BRGWC-52I**	EPA 3005A	678313	EPA 6020B	678442
92585977007	**DUP-2**	EPA 3005A	678313	EPA 6020B	678442
92585977008	**BRGWC-50**	EPA 3005A	678313	EPA 6020B	678442
92585977009	**BRGWC-27I**	EPA 3005A	678313	EPA 6020B	678442
92585977010	**BRGWC-29I**	EPA 3005A	678313	EPA 6020B	678442
92585977011	**DUP-3**	EPA 3005A	678313	EPA 6020B	678442
92585977001	**BRGWC-25I**	EPA 7470A	677192	EPA 7470A	677322
92585977002	**BRGWC-30I**	EPA 7470A	677192	EPA 7470A	677322
92585977003	**BRGWC-32S**	EPA 7470A	677192	EPA 7470A	677322
92585977004	**BRGWC-45**	EPA 7470A	677192	EPA 7470A	677322
92585977005	**BRGWC-47**	EPA 7470A	677192	EPA 7470A	677322
92585977006	**BRGWC-52I**	EPA 7470A	678089	EPA 7470A	678299
92585977007	**DUP-2**	EPA 7470A	678089	EPA 7470A	678299
92585977008	**BRGWC-50**	EPA 7470A	678089	EPA 7470A	678299
92585977009	**BRGWC-27I**	EPA 7470A	678089	EPA 7470A	678299
92585977010	**BRGWC-29I**	EPA 7470A	678089	EPA 7470A	678299
92585977011	**DUP-3**	EPA 7470A	678089	EPA 7470A	678299
92585977001	**BRGWC-25I**	SM 2540C-2015	676439		
92585977002	**BRGWC-30I**	SM 2540C-2015	676439		
92585977003	**BRGWC-32S**	SM 2540C-2015	676439		
92585977004	**BRGWC-45**	SM 2540C-2015	676439		

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: BRANCH AP-BCD
Pace Project No.: 92585977

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92585977005	**BRGWC-47**	SM 2540C-2015	676439		
92585977006	**BRGWC-52I**	SM 2540C-2015	676439		
92585977007	**DUP-2**	SM 2540C-2015	676439		
92585977008	**BRGWC-50**	SM 2540C-2015	676886		
92585977009	**BRGWC-27I**	SM 2540C-2015	676887		
92585977010	**BRGWC-29I**	SM 2540C-2015	676886		
92585977011	**DUP-3**	SM 2540C-2015	676886		
92585977001	**BRGWC-25I**	SM 2320B	798120		
92585977002	**BRGWC-30I**	SM 2320B	798120		
92585977003	**BRGWC-32S**	SM 2320B	798120		
92585977004	**BRGWC-45**	SM 2320B	798120		
92585977005	**BRGWC-47**	SM 2320B	798120		
92585977006	**BRGWC-52I**	SM 2320B	798120		
92585977008	**BRGWC-50**	SM 2320B	798366		
92585977009	**BRGWC-27I**	SM 2320B	798366		
92585977010	**BRGWC-29I**	SM 2320B	798366		
92585977008	**BRGWC-50**	SM 3500-Fe D#4	679361		
92585977008	**BRGWC-50**	SM 3500-Fe B-2011	676994		
92585977008	**BRGWC-50**	SM 4500-S2D-2011	676918		
92585977001	**BRGWC-25I**	EPA 300.0 Rev 2.1 1993	676560		
92585977002	**BRGWC-30I**	EPA 300.0 Rev 2.1 1993	676560		
92585977003	**BRGWC-32S**	EPA 300.0 Rev 2.1 1993	676560		
92585977004	**BRGWC-45**	EPA 300.0 Rev 2.1 1993	676560		
92585977005	**BRGWC-47**	EPA 300.0 Rev 2.1 1993	676560		
92585977006	**BRGWC-52I**	EPA 300.0 Rev 2.1 1993	676560		
92585977007	**DUP-2**	EPA 300.0 Rev 2.1 1993	676560		
92585977008	**BRGWC-50**	EPA 300.0 Rev 2.1 1993	677218		
92585977009	**BRGWC-27I**	EPA 300.0 Rev 2.1 1993	677218		
92585977010	**BRGWC-29I**	EPA 300.0 Rev 2.1 1993	677218		
92585977011	**DUP-3**	EPA 300.0 Rev 2.1 1993	677218		
92585977008	**BRGWC-50**	EPA 353.2 Rev 2.0 1993	678945		
92585977008	**BRGWC-50**	SM 5310B	799039		

REPORT OF LABORATORY ANALYSIS

Pace Analytical®

Document Name: Sample Condition Upon Receipt (SCUR)	Document Revised: [illegible]	Page 1 of 2
Document No.: [illegible]	Issuing Authority: Pace Carolinas Quality Office	

Laboratory receiving samples:

Asheville ☐ Eden ☐ Greenwood ☐ Huntersville ☐ Raleigh ☐ Mechanicsville ☐ Atlanta ☒ Kernersville ☐

WO# : 92585977

Client Name: Georgia Power

Project #:

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

Custody Seal Present? ☐ Yes ☐ No Seals Intact? ☐ Yes ☐ No

Date/Initials Person Examining Contents: 02/26/19

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

Biological Tissue Frozen? ☐ Yes ☐ No ☐ N/A

Thermometer: [illegible] Type of Ice: ☐ Wet ☐ Blue ☐ None

Cooler Temp.: [illegible] Correction Factor: [illegible] Add/Subtract (°C): [illegible]

Temp should be above freezing to 6°C

☐ Samples out of temperature criteria. Samples on ice, cooling process has begun

Cooler Temp Corrected (°C): [illegible]

USDA Regulated Soil (☐ N/A, water sample)

Did samples originate in a quarantine zone within the United States: [illegible]? ☐ Yes ☐ No

Did samples originate from a foreign source (internationally, including Hawaii and Puerto Rico)? ☐ Yes ☐ No

				Comments/Discrepancy
Chain of Custody Present?	☒ Yes	☐ No	☐ N/A	1.
Samples Arrived within Hold Time?	☒ Yes	☐ No	☐ N/A	2.
Short Hold Time Analysis (<72 hr.)?	☐ Yes	☒ No	☐ N/A	3.
Rush Turn Around Time Requested?	☐ Yes	☒ No	☐ N/A	4.
Sufficient Volume?	☒ Yes	☐ No	☐ N/A	5.
Correct Containers Used?	☒ Yes	☐ No	☐ N/A	6.
-Pace Containers Used?	☒ Yes	☐ No	☐ N/A	
Containers Intact?	☒ Yes	☐ No	☐ N/A	7.
Dissolved analyses: Samples field filtered?	☐ Yes	☐ No	☒ N/A	8.
Sample Labels Match COC?	☒ Yes	☐ No	☐ N/A	9.
-Includes Date/Time/ID/Analysis Matrix: WT				
Headspace in VOA Vials (>5-6mm)?	☐ Yes	☐ No	☒ N/A	10.
Trip Blank Present?	☐ Yes	☐ No	☒ N/A	11.
Trip Blank Custody Seals Present?	☐ Yes	☐ No	☒ N/A	

COMMENTS/SAMPLE DISCREPANCY

Field Data Required? ☐ Yes ☐ No

Lot ID of split containers:

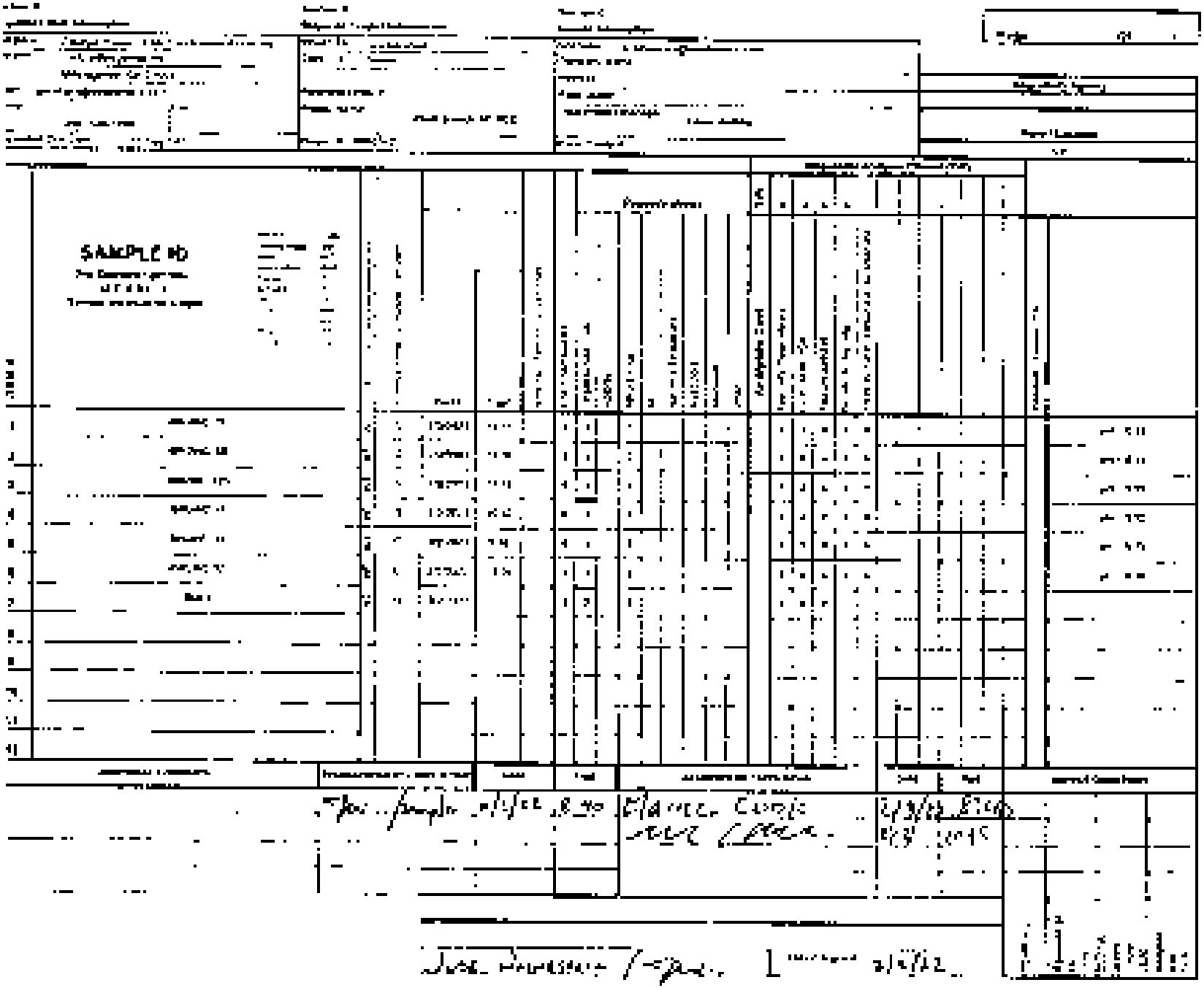
CLIENT NOTIFICATION/RESOLUTION

Person contacted: Date/Time:

Project Manager SCURF Review: Date:

Project Manager SRF Review: Date:

CHAIN-OF-CUSTODY / Analytical Request Document



Pace Analytical	Document Name: Sample Condition Upon Receipt (SCUR)	Document Revised: November 15, 2021
	Document No.: F-CAR-CS-033-Rev.08	Page 1 of 2 Issuing Authority: Pace Carolinas Quality Office

Laboratory receiving samples:
Asheville ☐ Eden ☐ Greenwood ☐ Huntersville ☐ Raleigh ☐ Mechanicsville ☐ Atlanta ☑ Kernersville ☐

Client Name: GA Power

Project #: **WO#: 92585977**

PM: NMG Due Date: 02/17/22
CLIENT: GA-GA Power

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

Custody Seal Present? ☐ Yes ☐ No Seals Intact? ☐ Yes ☑ No

Date/Initials Person Examining Contents: [illegible] 2/7/22

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

Biological Tissue Frozen? ☐ Yes ☐ No ☑ N/A

Thermometer: ☐ IR Gun ID: 2[illegible]

Type of Ice: ☑ Wet ☐ Blue ☐ None

Cooler Temp: 3.3

Correction Factor: Add/Subtract (°C): [illegible]

Cooler Temp Corrected (°C): [illegible]

Temp should be above freezing to 6°C
☐ Samples out of temp criteria. Samples on ice, cooling process has begun

USDA Regulated Soil (☐ N/A, water sample)

Did samples originate in a quarantine zone within the United States: CA, NY, or SC (check maps)? ☐ Yes ☐ No

Did samples originate from a foreign source (internationally, including Hawaii and Puerto Rico)? ☐ Yes ☑ No

	Yes	No	N/A	Comments/Discrepancy
Chain of Custody Present?	☑	☐	☐	1.
Samples Arrived within Hold Time?	☑	☐	☐	2.
Short Hold Time Analysis (<72 hr)?	☐	☑	☐	3.
Rush Turn Around Time Requested?	☐	☑	☐	4.
Sufficient Volume?	☑	☐	☐	5.
Correct Containers Used?	☑	☐	☐	6.
-Pace Containers Used?	☑	☐	☐	
Containers Intact?	☑	☐	☐	7.
Dissolved analysis: Samples Field Filtered?	☐	☐	☑	8.
Sample Labels Match COC?	☑	☐	☐	9.
-Includes Date/Time/ID/Analysis Matrix: WT				
Headspace in VOA Vials (>5-6mm)?	☐	☐	☑	10.
Trip Blank Present?	☐	☐	☑	11.
Trip Blank Custody Seals Present?	☐	☐	☑	

COMMENTS/SAMPLE DISCREPANCY

Field Data Required? ☐ Yes ☐ No

Lot ID of split containers:

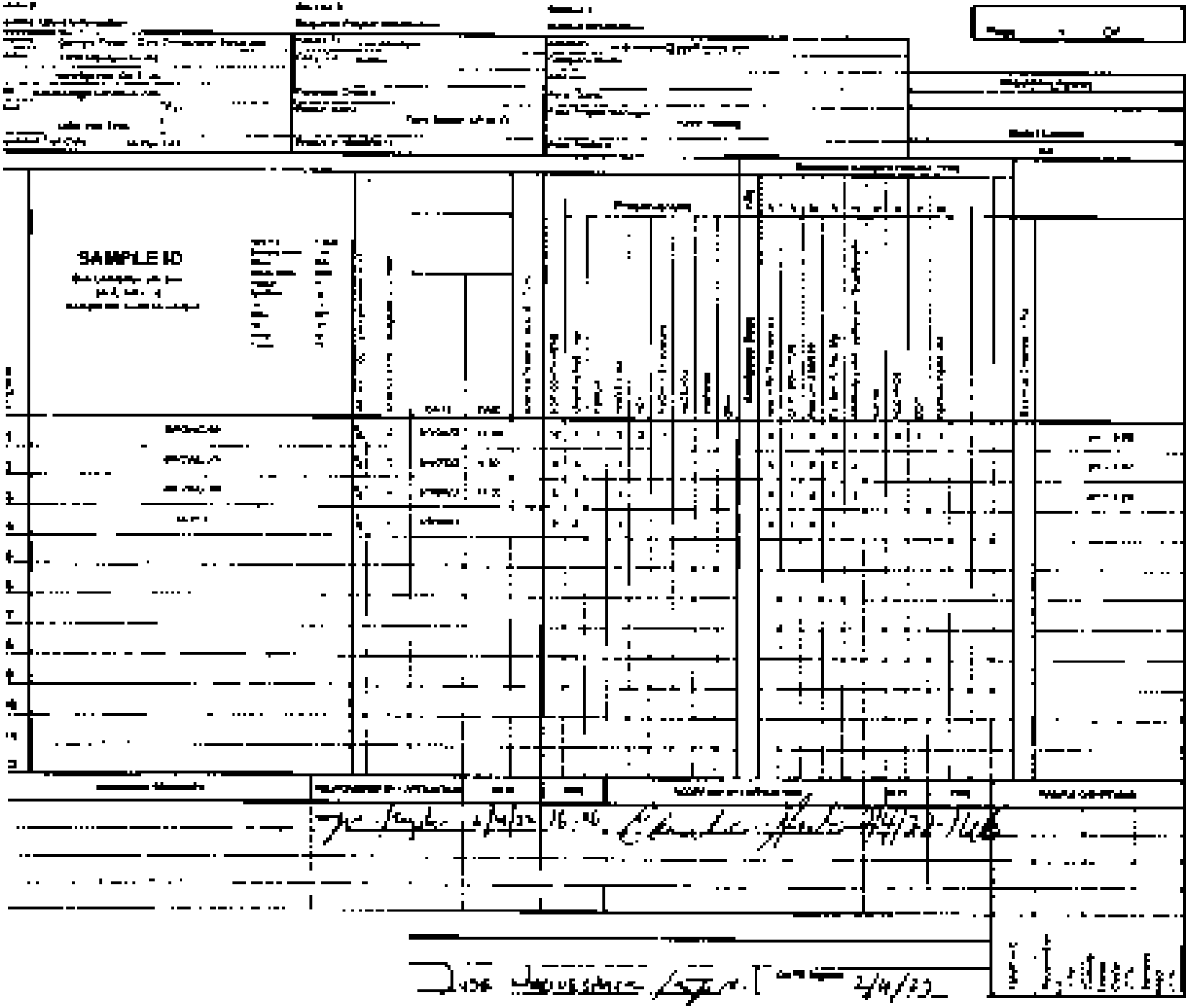
CLIENT NOTIFICATION/RESOLUTION

Person contacted: Date/Time:

Project Manager SCURF Review: Date:

Project Manager SRF Review: Date:

CHAIN-OF-CUSTODY / Analytical Request Document



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

February 15, 2022

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

RE: Project: BRANCH AP-BCD BACKGROUND
Pace Project No.: 92585723

Dear Joju Abraham:

Enclosed are the analytical results for sample(s) received by the laboratory on February 02, 2022. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

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

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

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

Sincerely,

Nicole D'Oleo
nicole.d'oleo@pacelabs.com
(704)875-9092
Project Manager

Enclosures

cc: Anna Bottum, ERM
Andrea Brazell, ERM
Daniela Herrera, Golder
Ben Hodges, Georgia Power
Jimmy Jones, Golder Associates Inc.
Kristen Jurinko
Julie Lehrman, Golder Associates Inc.
Ms. Lauren Petty, Southern Company
Carolyn Powrozek, Golder
Dawn Prell, Golder Associates Inc.
Tim Richards, Golder Associates - Atlanta
Lacy Smith, ERM
Brian Steele, Golder
Caitlin Tillema, ERM
Christine Weaver, ERM

REPORT OF LABORATORY ANALYSIS

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

CERTIFICATIONS

Project: BRANCH AP-BCD BACKGROUND
Pace Project No.: 92585723

Pace Analytical Services, LLC - Minneapolis MN
1700 Elm Street SE, Minneapolis, MN 55414
1800 Elm Street SE, Minneapolis, MN 55414--Satellite Air Lab
A2LA Certification #: 2926.01*
Alabama Certification #: 40770
Alaska Contaminated Sites Certification #: 17-009*
Alaska DW Certification #: MN00064
Arizona Certification #: AZ0014*
Arkansas DW Certification #: MN00064
Arkansas WW Certification #: 88-0680
California Certification #: 2929
Colorado Certification #: MN00064
Connecticut Certification #: PH-0256
EPA Region 8 Tribal Water Systems+Wyoming DW Certification #: via MN 027-053-137
Florida Certification #: E87605*
Georgia Certification #: 959
Hawaii Certification #: MN00064
Idaho Certification #: MN00064
Illinois Certification #: 200011
Indiana Certification #: C-MN-01
Iowa Certification #: 368
Kansas Certification #: E-10167
Kentucky DW Certification #: 90062
Kentucky WW Certification #: 90062
Louisiana DEQ Certification #: AI-03086*
Louisiana DW Certification #: MN00064
Maine Certification #: MN00064*
Maryland Certification #: 322
Michigan Certification #: 9909
Minnesota Certification #: 027-053-137*
Minnesota Dept of Ag Approval: via MN 027-053-137
Minnesota Petrofund Registration #: 1240*
Mississippi Certification #: MN00064
Missouri Certification #: 10100
Montana Certification #: CERT0092
Nebraska Certification #: NE-OS-18-06
Nevada Certification #: MN00064
New Hampshire Certification #: 2081*
New Jersey Certification #: MN002
New York Certification #: 11647*
North Carolina DW Certification #: 27700
North Carolina WW Certification #: 530
North Dakota Certification #: R-036
Ohio DW Certification #: 41244
Ohio VAP Certification (1700) #: CL101
Ohio VAP Certification (1800) #: CL110*
Oklahoma Certification #: 9507*
Oregon Primary Certification #: MN300001
Oregon Secondary Certification #: MN200001*
Pennsylvania Certification #: 68-00563*
Puerto Rico Certification #: MN00064
South Carolina Certification #:74003001
Tennessee Certification #: TN02818
Texas Certification #: T104704192*
Utah Certification #: MN00064*
Vermont Certification #: VT-027053137
Virginia Certification #: 460163*
Washington Certification #: C486*
West Virginia DEP Certification #: 382
West Virginia DW Certification #: 9952 C
Wisconsin Certification #: 999407970
Wyoming UST Certification #: via A2LA 2926.01
USDA Permit #: P330-19-00208
*Please Note: Applicable air certifications are denoted with an asterisk (*).

Pace Analytical Services Charlotte
South Carolina Laboratory ID: 99006
9800 Kincey Ave. Ste 100, Huntersville, NC 28078
North Carolina Drinking Water Certification #: 37706
North Carolina Field Services Certification #: 5342
North Carolina Wastewater Certification #: 12
South Carolina Laboratory ID: 99006
South Carolina Certification #: 99006001
South Carolina Drinking Water Cert. #: 99006003
Florida/NELAP Certification #: E87627
Kentucky UST Certification #: 84
Louisiana DoH Drinking Water #: LA029
Virginia/VELAP Certification #: 460221

Pace Analytical Services Asheville
2225 Riverside Drive, Asheville, NC 28804
Florida/NELAP Certification #: E87648
North Carolina Drinking Water Certification #: 37712
North Carolina Wastewater Certification #: 40
South Carolina Laboratory ID: 99030
South Carolina Certification #: 99030001
Virginia/VELAP Certification #: 460222

Pace Analytical Services Peachtree Corners
110 Technology Pkwy, Peachtree Corners, GA 30092
Florida DOH Certification #: E87315
Georgia DW Inorganics Certification #: 812
North Carolina Certification #: 381

REPORT OF LABORATORY ANALYSIS

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

CERTIFICATIONS

Project: BRANCH AP-BCD BACKGROUND
Pace Project No.: 92585723

Pace Analytical Services Peachtree Corners
South Carolina Certification #: 98011001

REPORT OF LABORATORY ANALYSIS

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

SAMPLE SUMMARY

Project: BRANCH AP-BCD BACKGROUND
Pace Project No.: 92585723

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92585723001	**BRGWA-12S**	Water	02/01/22 13:54	02/02/22 10:25
92585723002	**BRGWA-12I**	Water	02/01/22 12:24	02/02/22 10:25
92585723003	**BRGWA-23S**	Water	02/01/22 10:05	02/02/22 10:25

Pace Analytical Services, LLC
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SAMPLE ANALYTE COUNT

Project: BRANCH AP-BCD BACKGROUND
Pace Project No.: 92585723

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92585723001	**BRGWA-12S**	EPA 6010D	KH	6	PASI-GA
		EPA 6020B	CW1	13	PASI-GA
		EPA 7470A	VB	1	PASI-GA
		SM 2540C-2015	ALW	1	PASI-GA
		SM 2320B	AR3	3	PASI-M
		EPA 300.0 Rev 2.1 1993	CDC	3	PASI-A
92585723002	**BRGWA-12I**	EPA 6010D	KH	6	PASI-GA
		EPA 6020B	CW1	13	PASI-GA
		EPA 7470A	VB	1	PASI-GA
		SM 2540C-2015	ALW	1	PASI-GA
		SM 2320B	AR3	3	PASI-M
		EPA 300.0 Rev 2.1 1993	CDC	3	PASI-A
92585723003	**BRGWA-23S**	EPA 6010D	KH	6	PASI-GA
		EPA 6020B	CW1	13	PASI-GA
		EPA 7470A	VB	1	PASI-GA
		SM 2540C-2015	ALW	1	PASI-GA
		SM 2320B	AR3	3	PASI-M
		EPA 300.0 Rev 2.1 1993	CDC	3	PASI-A

PASI-A = Pace Analytical Services - Asheville
PASI-C = Pace Analytical Services - Charlotte
PASI-GA = Pace Analytical Services - Peachtree Corners, GA
PASI-M = Pace Analytical Services - Minneapolis

REPORT OF LABORATORY ANALYSIS

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

SUMMARY OF DETECTION

Project: BRANCH AP-BCD BACKGROUND
Pace Project No.: 92585723

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92585723001	**BRGWA-12S**					
	Performed by	CUSTOMER			02/02/22 14:27	
	pH	5.81	Std. Units		02/02/22 14:27	
EPA 6010D	Potassium	2.4	mg/L	0.20	02/13/22 18:28	
EPA 6010D	Sodium	5.2	mg/L	1.0	02/13/22 18:28	
EPA 6010D	Calcium	5.3	mg/L	1.0	02/13/22 18:28	
EPA 6010D	Magnesium	2.8	mg/L	0.050	02/13/22 18:28	
EPA 6020B	Barium	0.064	mg/L	0.0050	02/14/22 19:33	
EPA 6020B	Chromium	0.0029J	mg/L	0.0050	02/14/22 19:33	
SM 2540C-2015	Total Dissolved Solids	63.0	mg/L	10.0	02/07/22 15:09	
SM 2320B	Alkalinity, Total as CaCO3	29.6	mg/L	5.0	02/09/22 16:19	
SM 2320B	Alkalinity,Bicarbonate (CaCO3)	29.6	mg/L	5.0	02/09/22 16:19	
EPA 300.0 Rev 2.1 1993	Chloride	3.6	mg/L	1.0	02/07/22 13:11	
92585723002	**BRGWA-12I**					
	Performed by	CUSTOMER			02/02/22 14:27	
	pH	6.40	Std. Units		02/02/22 14:27	
EPA 6010D	Potassium	2.9	mg/L	0.20	02/13/22 18:32	
EPA 6010D	Sodium	10.0	mg/L	1.0	02/13/22 18:32	
EPA 6010D	Calcium	14.2	mg/L	1.0	02/13/22 18:32	
EPA 6010D	Magnesium	3.7	mg/L	0.050	02/13/22 18:32	
EPA 6020B	Antimony	0.011	mg/L	0.0030	02/14/22 19:39	
EPA 6020B	Arsenic	0.0017J	mg/L	0.0050	02/14/22 19:39	
EPA 6020B	Barium	0.057	mg/L	0.0050	02/14/22 19:39	
EPA 6020B	Chromium	0.0027J	mg/L	0.0050	02/14/22 19:39	
EPA 6020B	Lithium	0.0037J	mg/L	0.030	02/14/22 19:39	
SM 2540C-2015	Total Dissolved Solids	114	mg/L	10.0	02/07/22 15:45	
SM 2320B	Alkalinity, Total as CaCO3	71.2	mg/L	5.0	02/09/22 16:23	
SM 2320B	Alkalinity,Bicarbonate (CaCO3)	71.2	mg/L	5.0	02/09/22 16:23	
EPA 300.0 Rev 2.1 1993	Chloride	2.2	mg/L	1.0	02/07/22 13:25	
EPA 300.0 Rev 2.1 1993	Fluoride	0.055J	mg/L	0.10	02/07/22 13:25	
EPA 300.0 Rev 2.1 1993	Sulfate	1.4	mg/L	1.0	02/07/22 13:25	
92585723003	**BRGWA-23S**					
	Performed by	CUSTOMER			02/02/22 14:27	
	pH	5.65	Std. Units		02/02/22 14:27	
EPA 6010D	Iron	0.11	mg/L	0.040	02/13/22 18:37	
EPA 6010D	Manganese	0.081	mg/L	0.040	02/13/22 18:37	
EPA 6010D	Potassium	3.0	mg/L	0.20	02/13/22 18:37	
EPA 6010D	Sodium	11.3	mg/L	1.0	02/13/22 18:37	
EPA 6010D	Calcium	10.7	mg/L	1.0	02/13/22 18:37	
EPA 6010D	Magnesium	5.6	mg/L	0.050	02/13/22 18:37	
EPA 6020B	Arsenic	0.0018J	mg/L	0.0050	02/14/22 19:45	
EPA 6020B	Barium	0.080	mg/L	0.0050	02/14/22 19:45	
EPA 6020B	Boron	0.046	mg/L	0.040	02/14/22 19:45	
EPA 6020B	Chromium	0.0028J	mg/L	0.0050	02/14/22 19:45	
EPA 6020B	Cobalt	0.00052J	mg/L	0.0050	02/14/22 19:45	

REPORT OF LABORATORY ANALYSIS

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

SUMMARY OF DETECTION

Project: BRANCH AP-BCD BACKGROUND
Pace Project No.: 92585723

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92585723003	**BRGWA-23S**					
EPA 6020B	Lithium	0.0080J	mg/L	0.030	02/14/22 19:45	
EPA 6020B	Selenium	0.0020J	mg/L	0.0050	02/14/22 19:45	
SM 2540C-2015	Total Dissolved Solids	130	mg/L	10.0	02/07/22 15:45	
SM 2320B	Alkalinity, Total as CaCO3	31.1	mg/L	5.0	02/09/22 16:28	
SM 2320B	Alkalinity,Bicarbonate (CaCO3)	31.1	mg/L	5.0	02/09/22 16:28	
EPA 300.0 Rev 2.1 1993	Chloride	3.2	mg/L	1.0	02/07/22 13:40	
EPA 300.0 Rev 2.1 1993	Sulfate	36.8	mg/L	1.0	02/07/22 13:40	

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

ANALYTICAL RESULTS

Project: BRANCH AP-BCD BACKGROUND
Pace Project No.: 92585723

Sample: BRGWA-12S **Lab ID: 92585723001** Collected: 02/01/22 13:54 Received: 02/02/22 10:25 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**CUSTOMER**				1		02/02/22 14:27		
pH	**5.81**	Std. Units			1		02/02/22 14:27		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Iron	ND	mg/L	0.040	0.025	1	02/12/22 08:57	02/13/22 18:28	7439-89-6	
Manganese	ND	mg/L	0.040	0.0043	1	02/12/22 08:57	02/13/22 18:28	7439-96-5	
Potassium	**2.4**	mg/L	0.20	0.15	1	02/12/22 08:57	02/13/22 18:28	7440-09-7	
Sodium	**5.2**	mg/L	1.0	0.58	1	02/12/22 08:57	02/13/22 18:28	7440-23-5	
Calcium	**5.3**	mg/L	1.0	0.12	1	02/12/22 08:57	02/13/22 18:28	7440-70-2	
Magnesium	**2.8**	mg/L	0.050	0.012	1	02/12/22 08:57	02/13/22 18:28	7439-95-4	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00078	1	02/11/22 10:29	02/14/22 19:33	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0011	1	02/11/22 10:29	02/14/22 19:33	7440-38-2	
Barium	**0.064**	mg/L	0.0050	0.00067	1	02/11/22 10:29	02/14/22 19:33	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	02/11/22 10:29	02/14/22 19:33	7440-41-7	
Boron	ND	mg/L	0.040	0.0086	1	02/11/22 10:29	02/14/22 19:33	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	02/11/22 10:29	02/14/22 19:33	7440-43-9	
Chromium	**0.0029J**	mg/L	0.0050	0.0011	1	02/11/22 10:29	02/14/22 19:33	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	02/11/22 10:29	02/14/22 19:33	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	02/11/22 10:29	02/14/22 19:33	7439-92-1	
Lithium	ND	mg/L	0.030	0.00073	1	02/11/22 10:29	02/14/22 19:33	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	02/11/22 10:29	02/14/22 19:33	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	02/11/22 10:29	02/14/22 19:33	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	02/11/22 10:29	02/14/22 19:33	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.00013	1	02/09/22 11:00	02/09/22 16:04	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**63.0**	mg/L	10.0	10.0	1		02/07/22 15:09		
2320B Alkalinity	Analytical Method: SM 2320B Pace Analytical Services - Minneapolis								
Alkalinity, Total as CaCO3	**29.6**	mg/L	5.0	1.8	1		02/09/22 16:19		
Alkalinity,Bicarbonate (CaCO3)	**29.6**	mg/L	5.0	1.8	1		02/09/22 16:19		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	1.8	1		02/09/22 16:19		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: BRANCH AP-BCD BACKGROUND
Pace Project No.: 92585723

Sample: BRGWA-12S **Lab ID: 92585723001** Collected: 02/01/22 13:54 Received: 02/02/22 10:25 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**3.6**	mg/L	1.0	0.60	1		02/07/22 13:11	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		02/07/22 13:11	16984-48-8	
Sulfate	ND	mg/L	1.0	0.50	1		02/07/22 13:11	14808-79-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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ANALYTICAL RESULTS

Project: BRANCH AP-BCD BACKGROUND
Pace Project No.: 92585723

Sample: BRGWA-12I **Lab ID: 92585723002** Collected: 02/01/22 12:24 Received: 02/02/22 10:25 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**CUSTOMER**				1		02/02/22 14:27		
pH	**6.40**	Std. Units			1		02/02/22 14:27		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Iron	ND	mg/L	0.040	0.025	1	02/12/22 08:57	02/13/22 18:32	7439-89-6	
Manganese	ND	mg/L	0.040	0.0043	1	02/12/22 08:57	02/13/22 18:32	7439-96-5	
Potassium	**2.9**	mg/L	0.20	0.15	1	02/12/22 08:57	02/13/22 18:32	7440-09-7	
Sodium	**10.0**	mg/L	1.0	0.58	1	02/12/22 08:57	02/13/22 18:32	7440-23-5	
Calcium	**14.2**	mg/L	1.0	0.12	1	02/12/22 08:57	02/13/22 18:32	7440-70-2	
Magnesium	**3.7**	mg/L	0.050	0.012	1	02/12/22 08:57	02/13/22 18:32	7439-95-4	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	**0.011**	mg/L	0.0030	0.00078	1	02/11/22 10:29	02/14/22 19:39	7440-36-0	
Arsenic	**0.0017J**	mg/L	0.0050	0.0011	1	02/11/22 10:29	02/14/22 19:39	7440-38-2	
Barium	**0.057**	mg/L	0.0050	0.00067	1	02/11/22 10:29	02/14/22 19:39	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	02/11/22 10:29	02/14/22 19:39	7440-41-7	
Boron	ND	mg/L	0.040	0.0086	1	02/11/22 10:29	02/14/22 19:39	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	02/11/22 10:29	02/14/22 19:39	7440-43-9	
Chromium	**0.0027J**	mg/L	0.0050	0.0011	1	02/11/22 10:29	02/14/22 19:39	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	02/11/22 10:29	02/14/22 19:39	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	02/11/22 10:29	02/14/22 19:39	7439-92-1	
Lithium	**0.0037J**	mg/L	0.030	0.00073	1	02/11/22 10:29	02/14/22 19:39	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	02/11/22 10:29	02/14/22 19:39	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	02/11/22 10:29	02/14/22 19:39	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	02/11/22 10:29	02/14/22 19:39	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.00013	1	02/09/22 11:00	02/09/22 16:12	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**114**	mg/L	10.0	10.0	1		02/07/22 15:45		
2320B Alkalinity	Analytical Method: SM 2320B Pace Analytical Services - Minneapolis								
Alkalinity, Total as CaCO3	**71.2**	mg/L	5.0	1.8	1		02/09/22 16:23		
Alkalinity,Bicarbonate (CaCO3)	**71.2**	mg/L	5.0	1.8	1		02/09/22 16:23		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	1.8	1		02/09/22 16:23		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: BRANCH AP-BCD BACKGROUND
Pace Project No.: 92585723

Sample: BRGWA-12I **Lab ID: 92585723002** Collected: 02/01/22 12:24 Received: 02/02/22 10:25 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**2.2**	mg/L	1.0	0.60	1		02/07/22 13:25	16887-00-6	
Fluoride	**0.055J**	mg/L	0.10	0.050	1		02/07/22 13:25	16984-48-8	
Sulfate	**1.4**	mg/L	1.0	0.50	1		02/07/22 13:25	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: BRANCH AP-BCD BACKGROUND
Pace Project No.: 92585723

Sample: BRGWA-23S **Lab ID: 92585723003** Collected: 02/01/22 10:05 Received: 02/02/22 10:25 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**CUSTOMER**				1		02/02/22 14:27		
pH	**5.65**	Std. Units			1		02/02/22 14:27		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Iron	**0.11**	mg/L	0.040	0.025	1	02/12/22 08:57	02/13/22 18:37	7439-89-6	
Manganese	**0.081**	mg/L	0.040	0.0043	1	02/12/22 08:57	02/13/22 18:37	7439-96-5	
Potassium	**3.0**	mg/L	0.20	0.15	1	02/12/22 08:57	02/13/22 18:37	7440-09-7	
Sodium	**11.3**	mg/L	1.0	0.58	1	02/12/22 08:57	02/13/22 18:37	7440-23-5	
Calcium	**10.7**	mg/L	1.0	0.12	1	02/12/22 08:57	02/13/22 18:37	7440-70-2	
Magnesium	**5.6**	mg/L	0.050	0.012	1	02/12/22 08:57	02/13/22 18:37	7439-95-4	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00078	1	02/11/22 10:29	02/14/22 19:45	7440-36-0	
Arsenic	**0.0018J**	mg/L	0.0050	0.0011	1	02/11/22 10:29	02/14/22 19:45	7440-38-2	
Barium	**0.080**	mg/L	0.0050	0.00067	1	02/11/22 10:29	02/14/22 19:45	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	02/11/22 10:29	02/14/22 19:45	7440-41-7	
Boron	**0.046**	mg/L	0.040	0.0086	1	02/11/22 10:29	02/14/22 19:45	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	02/11/22 10:29	02/14/22 19:45	7440-43-9	
Chromium	**0.0028J**	mg/L	0.0050	0.0011	1	02/11/22 10:29	02/14/22 19:45	7440-47-3	
Cobalt	**0.00052J**	mg/L	0.0050	0.00039	1	02/11/22 10:29	02/14/22 19:45	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	02/11/22 10:29	02/14/22 19:45	7439-92-1	
Lithium	**0.0080J**	mg/L	0.030	0.00073	1	02/11/22 10:29	02/14/22 19:45	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	02/11/22 10:29	02/14/22 19:45	7439-98-7	
Selenium	**0.0020J**	mg/L	0.0050	0.0014	1	02/11/22 10:29	02/14/22 19:45	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	02/11/22 10:29	02/14/22 19:45	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.00013	1	02/09/22 11:00	02/09/22 16:14	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**130**	mg/L	10.0	10.0	1		02/07/22 15:45		
2320B Alkalinity	Analytical Method: SM 2320B Pace Analytical Services - Minneapolis								
Alkalinity, Total as CaCO3	**31.1**	mg/L	5.0	1.8	1		02/09/22 16:28		
Alkalinity,Bicarbonate (CaCO3)	**31.1**	mg/L	5.0	1.8	1		02/09/22 16:28		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	1.8	1		02/09/22 16:28		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: BRANCH AP-BCD BACKGROUND
Pace Project No.: 92585723

Sample: BRGWA-23S **Lab ID: 92585723003** Collected: 02/01/22 10:05 Received: 02/02/22 10:25 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**3.2**	mg/L	1.0	0.60	1		02/07/22 13:40	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		02/07/22 13:40	16984-48-8	
Sulfate	**36.8**	mg/L	1.0	0.50	1		02/07/22 13:40	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: BRANCH AP-BCD BACKGROUND
Pace Project No.: 92585723

QC Batch: 677807
QC Batch Method: EPA 3010A
Analysis Method: EPA 6010D
Analysis Description: 6010D ATL
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92585723001, 92585723002, 92585723003

METHOD BLANK: 3547708 Matrix: Water
Associated Lab Samples: 92585723001, 92585723002, 92585723003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium	mg/L	ND	1.0	0.12	02/13/22 17:30	
Iron	mg/L	ND	0.040	0.025	02/13/22 17:30	
Magnesium	mg/L	ND	0.050	0.012	02/13/22 17:30	
Manganese	mg/L	ND	0.040	0.0043	02/13/22 17:30	
Potassium	mg/L	ND	0.20	0.15	02/13/22 17:30	
Sodium	mg/L	ND	1.0	0.58	02/13/22 17:30	

LABORATORY CONTROL SAMPLE: 3547709

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium	mg/L	1	1.1	107	80-120	
Iron	mg/L	1	0.99	99	80-120	
Magnesium	mg/L	1	1.0	103	80-120	
Manganese	mg/L	1	1.0	100	80-120	
Potassium	mg/L	1	0.95	95	80-120	
Sodium	mg/L	1	1.1	110	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3547710 3547711

Parameter	Units	92585717001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Calcium	mg/L	4.4	1	1	5.3	5.3	94	88	75-125	1	20	
Iron	mg/L	0.13	1	1	1.1	1.1	102	98	75-125	3	20	
Magnesium	mg/L	4.0	1	1	5.0	4.8	100	87	75-125	3	20	
Manganese	mg/L	0.052	1	1	1.1	1.0	102	99	75-125	3	20	
Potassium	mg/L	0.29	1	1	1.4	1.4	109	110	75-125	1	20	
Sodium	mg/L	3.1	1	1	4.1	4.1	104	99	75-125	1	20	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: BRANCH AP-BCD BACKGROUND
Pace Project No.: 92585723

QC Batch: 677647
QC Batch Method: EPA 3005A
Analysis Method: EPA 6020B
Analysis Description: 6020 MET
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92585723001, 92585723002, 92585723003

METHOD BLANK: 3546468 Matrix: Water
Associated Lab Samples: 92585723001, 92585723002, 92585723003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	0.00078J	0.0030	0.00078	02/14/22 14:43	
Arsenic	mg/L	ND	0.0050	0.0011	02/14/22 14:43	
Barium	mg/L	ND	0.0050	0.00067	02/14/22 14:43	
Beryllium	mg/L	ND	0.00050	0.000054	02/14/22 14:43	
Boron	mg/L	ND	0.040	0.0086	02/14/22 14:43	
Cadmium	mg/L	ND	0.00050	0.00011	02/14/22 14:43	
Chromium	mg/L	ND	0.0050	0.0011	02/14/22 14:43	
Cobalt	mg/L	ND	0.0050	0.00039	02/14/22 14:43	
Lead	mg/L	ND	0.0010	0.00089	02/14/22 14:43	
Lithium	mg/L	ND	0.030	0.00073	02/14/22 14:43	
Molybdenum	mg/L	ND	0.010	0.00074	02/14/22 14:43	
Selenium	mg/L	ND	0.0050	0.0014	02/14/22 14:43	
Thallium	mg/L	ND	0.0010	0.00018	02/14/22 14:43	

LABORATORY CONTROL SAMPLE: 3546469

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.1	0.11	109	80-120	
Arsenic	mg/L	0.1	0.099	99	80-120	
Barium	mg/L	0.1	0.10	103	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	0.11	107	80-120	
Chromium	mg/L	0.1	0.11	107	80-120	
Cobalt	mg/L	0.1	0.11	108	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	0.10	100	80-120	
Thallium	mg/L	0.1	0.10	102	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3546470 3546471

Parameter	Units	92585058023 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Antimony	mg/L	0.027	0.1	0.1	0.13	0.14	107	110	75-125	3	20	
Arsenic	mg/L	ND	0.1	0.1	0.10	0.10	102	104	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: BRANCH AP-BCD BACKGROUND
Pace Project No.: 92585723

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3546470 3546471

Parameter	Units	92585058023 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Barium	mg/L	0.049	0.1	0.1	0.16	0.17	115	119	75-125	3	20	
Beryllium	mg/L	ND	0.1	0.1	0.095	0.097	95	97	75-125	2	20	
Boron	mg/L	0.021J	1	1	0.95	0.96	93	94	75-125	1	20	
Cadmium	mg/L	ND	0.1	0.1	0.10	0.10	105	105	75-125	0	20	
Chromium	mg/L	0.0011J	0.1	0.1	0.10	0.10	104	100	75-125	3	20	
Cobalt	mg/L	ND	0.1	0.1	0.10	0.095	100	95	75-125	6	20	
Lead	mg/L	ND	0.1	0.1	0.094	0.095	94	95	75-125	0	20	
Lithium	mg/L	0.010J	0.1	0.1	0.10	0.10	94	93	75-125	1	20	
Molybdenum	mg/L	0.0041J	0.1	0.1	0.11	0.11	105	106	75-125	1	20	
Selenium	mg/L	ND	0.1	0.1	0.10	0.10	99	102	75-125	3	20	
Thallium	mg/L	ND	0.1	0.1	0.096	0.098	96	98	75-125	2	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: BRANCH AP-BCD BACKGROUND
Pace Project No.: 92585723

QC Batch: 677024
QC Batch Method: EPA 7470A
Analysis Method: EPA 7470A
Analysis Description: 7470 Mercury
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92585723001, 92585723002, 92585723003

METHOD BLANK: 3543214 Matrix: Water
Associated Lab Samples: 92585723001, 92585723002, 92585723003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	ND	0.00020	0.00013	02/09/22 15:30	

LABORATORY CONTROL SAMPLE: 3543215

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.0025	0.0025	101	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3543216 3543217

Parameter	Units	92585717001 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	98	95	75-125	4	20	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: BRANCH AP-BCD BACKGROUND
Pace Project No.: 92585723

QC Batch: 676426
QC Batch Method: SM 2540C-2015
Analysis Method: SM 2540C-2015
Analysis Description: 2540C Total Dissolved Solids
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92585723001

METHOD BLANK: 3540491 Matrix: Water
Associated Lab Samples: 92585723001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	10.0	10.0	02/07/22 15:05	

LABORATORY CONTROL SAMPLE: 3540492

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	372	93	80-120	

SAMPLE DUPLICATE: 3540493

Parameter	Units	92585920001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	1260	1240	1	25	

SAMPLE DUPLICATE: 3540494

Parameter	Units	92585490001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	3160	2680	16	25	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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QUALITY CONTROL DATA

Project: BRANCH AP-BCD BACKGROUND
Pace Project No.: 92585723

QC Batch: 676429
QC Batch Method: SM 2540C-2015
Analysis Method: SM 2540C-2015
Analysis Description: 2540C Total Dissolved Solids
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92585723002, 92585723003

METHOD BLANK: 3540497 Matrix: Water
Associated Lab Samples: 92585723002, 92585723003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	10.0	10.0	02/07/22 15:44	

LABORATORY CONTROL SAMPLE: 3540498

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	380	95	80-120	

SAMPLE DUPLICATE: 3540499

Parameter	Units	92585723002 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	114	114	0	25	

SAMPLE DUPLICATE: 3540500

Parameter	Units	92585727009 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	440	459	4	25	

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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: BRANCH AP-BCD BACKGROUND
Pace Project No.: 92585723

QC Batch: 798025
QC Batch Method: SM 2320B
Analysis Method: SM 2320B
Analysis Description: 2320B Alkalinity
Laboratory: Pace Analytical Services - Minneapolis
Associated Lab Samples: 92585723001, 92585723002, 92585723003

METHOD BLANK: 4240244 Matrix: Water
Associated Lab Samples: 92585723001, 92585723002, 92585723003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Alkalinity, Total as CaCO3	mg/L	ND	5.0	1.8	02/09/22 14:38	
Alkalinity,Bicarbonate (CaCO3)	mg/L	ND	5.0	1.8	02/09/22 14:38	
Alkalinity,Carbonate (CaCO3)	mg/L	ND	5.0	1.8	02/09/22 14:38	

LABORATORY CONTROL SAMPLE & LCSD: 4240245 4240246

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
Alkalinity, Total as CaCO3	mg/L	40	41.9	41.9	105	105	90-110	0	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4240247 4240248

Parameter	Units	92585555010 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Alkalinity, Total as CaCO3	mg/L	8.1	40	40	50.3	51.8	106	109	80-120	3	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4240249 4240250

Parameter	Units	10596970001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Alkalinity, Total as CaCO3	mg/L	21.0	40	40	60.5	60.8	99	99	80-120	0	20	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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(770)734-4200

QUALITY CONTROL DATA

Project: BRANCH AP-BCD BACKGROUND
Pace Project No.: 92585723

QC Batch: 676333
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
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92585723001, 92585723002, 92585723003

METHOD BLANK: 3540067 Matrix: Water
Associated Lab Samples: 92585723001, 92585723002, 92585723003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.60	02/07/22 07:26	
Fluoride	mg/L	ND	0.10	0.050	02/07/22 07:26	
Sulfate	mg/L	ND	1.0	0.50	02/07/22 07:26	

LABORATORY CONTROL SAMPLE: 3540068

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	48.7	97	90-110	
Fluoride	mg/L	2.5	2.4	96	90-110	
Sulfate	mg/L	50	47.0	94	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3540069 3540070

Parameter	Units	92585636004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	20.0	50	50	66.6	69.9	93	100	90-110	5	10	
Fluoride	mg/L	0.086J	2.5	2.5	2.4	2.6	92	100	90-110	7	10	
Sulfate	mg/L	25.3	50	50	71.8	75.0	93	99	90-110	4	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3540071 3540072

Parameter	Units	92585717003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	3.4	50	50	54.7	55.0	103	103	90-110	1	10	
Fluoride	mg/L	ND	2.5	2.5	2.6	2.6	101	102	90-110	1	10	
Sulfate	mg/L	ND	50	50	51.1	51.4	101	102	90-110	1	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: BRANCH AP-BCD BACKGROUND
Pace Project No.: 92585723

DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

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

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

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

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

Acid preservation may not be appropriate for 2 Chloroethylvinyl ether.

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

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

Reported results are not rounded until the final step prior to reporting. Therefore, calculated parameters that are typically reported as "Total" may vary slightly from the sum of the reported component parameters.

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: BRANCH AP-BCD BACKGROUND
Pace Project No.: 92585723

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92585723001	**BRGWA-12S**				
92585723002	**BRGWA-12I**				
92585723003	**BRGWA-23S**				
92585723001	**BRGWA-12S**	EPA 3010A	677807	EPA 6010D	677941
92585723002	**BRGWA-12I**	EPA 3010A	677807	EPA 6010D	677941
92585723003	**BRGWA-23S**	EPA 3010A	677807	EPA 6010D	677941
92585723001	**BRGWA-12S**	EPA 3005A	677647	EPA 6020B	677773
92585723002	**BRGWA-12I**	EPA 3005A	677647	EPA 6020B	677773
92585723003	**BRGWA-23S**	EPA 3005A	677647	EPA 6020B	677773
92585723001	**BRGWA-12S**	EPA 7470A	677024	EPA 7470A	677121
92585723002	**BRGWA-12I**	EPA 7470A	677024	EPA 7470A	677121
92585723003	**BRGWA-23S**	EPA 7470A	677024	EPA 7470A	677121
92585723001	**BRGWA-12S**	SM 2540C-2015	676426		
92585723002	**BRGWA-12I**	SM 2540C-2015	676429		
92585723003	**BRGWA-23S**	SM 2540C-2015	676429		
92585723001	**BRGWA-12S**	SM 2320B	798025		
92585723002	**BRGWA-12I**	SM 2320B	798025		
92585723003	**BRGWA-23S**	SM 2320B	798025		
92585723001	**BRGWA-12S**	EPA 300.0 Rev 2.1 1993	676333		
92585723002	**BRGWA-12I**	EPA 300.0 Rev 2.1 1993	676333		
92585723003	**BRGWA-23S**	EPA 300.0 Rev 2.1 1993	676333		

Pace Analytical	Document Name: Sample Condition Upon Receipt (SCUR)	Document Revised: November 15, 2021 Page 1 of 2
	Document No.: F-CAR-CS-033-Rev.08	Issuing Authority: Pace Carolinas Quality Office

Laboratory receiving samples:
Asheville ☐ Eden ☐ Greenwood ☐ Huntersville ☐ Raleigh ☐ Mechanicsville ☐ Atlanta ☑ Kernersville ☐

Sample Condition Upon Receipt

Client Name: Georgia Power

Project #: **WO# : 92585723**

92585723

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

Custody Seal Present? ☐ Yes ☑ No Seals Intact? ☐ Yes ☐ No

Date/Initials Person Examining Contents: dO 9-2-22

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

Biological Tissue Frozen? ☐ Yes ☐ No ☑ N/A

Thermometer: ☐ IR Gun ID: 230 ☑ Wet ☐ Blue ☐ None Type of Ice:

Cooler Temp: 1.3 Correction Factor: Add/Subtract (°C) +.2

Temp should be above freezing to 6°C
☐ Samples out of temp criteria. Samples on ice, cooling process has begun

Cooler Temp Corrected (°C): 1.5

USDA Regulated Soil (☐ N/A, water sample)
Did samples originate in a quarantine zone within the United States: CA, NY, or SC (check maps)? ☐ Yes ☐ No

Did samples originate from a foreign source (internationally, including Hawaii and Puerto Rico)? ☐ Yes ☐ No

				Comments/Discrepancy:
Chain of Custody Present?	☑ Yes	☐ No	☐ N/A	1.
Samples Arrived within Hold Time?	☑ Yes	☐ No	☐ N/A	2.
Short Hold Time Analysis (<72 hr.)?	☐ Yes	☑ No	☐ N/A	3.
Rush Turn Around Time Requested?	☐ Yes	☑ No	☐ N/A	4.
Sufficient Volume?	☑ Yes	☐ No	☐ N/A	5.
Correct Containers Used?	☑ Yes	☐ No	☐ N/A	6.
-Pace Containers Used?	☑ Yes	☐ No	☐ N/A	
Containers Intact?	☑ Yes	☐ No	☐ N/A	7.
Dissolved analysis: Samples Field Filtered?	☐ Yes	☐ No	☑ N/A	8
Sample Labels Match COC?	☑ Yes	☐ No	☐ N/A	9.
-Includes Date/Time/ID/Analysis Matrix: WT				
Headspace in VOA Vials (>5-6mm)?	☐ Yes	☐ No	☑ N/A	10.
Trip Blank Present?	☐ Yes	☐ No	☑ N/A	11.
Trip Blank Custody Seals Present?	☐ Yes	☐ No	☑ N/A	

COMMENTS/SAMPLE DISCREPANCY

Field Data Required? ☐ Yes ☐ No

Lot ID of split containers:

CLIENT NOTIFICATION/RESOLUTION

Person contacted: Date/Time:

Project Manager SCURF Review: Date:

Project Manager SRF Review: Date:

Pace Analytical	Document Name: **Bottle Identification Form (BIF)**	Document Issued: November 15, 2021 Page 1 of 1
	Document No.: **F-CAR-CS-033-Rev.01**	Issuing Authority: Pace Carolinas Quality Office

***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 bottles**

Project # **WO#: 92585723**

PM: NMG Due Date: 02/18/22

CLIENT: GA-GA Power

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)	BP4B-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 Unpreserved (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)	BP1N	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)	DG9U-40 mL Amber Unpreserved vials (N/A)
	1		2	1			✓ 1																		2				
	2		2	1			✓ 1																		2				
	3		2	1			✓ 1																		2				
	4																												
	5																												
	6																												
	7																												
	8																												
	9																												
	10																												
	11																												
	12																												

pH Adjustment Log for Preserved Samples

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

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

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: [illegible]
Email: [illegible]
Phone: [illegible] Fax:
Requested Due Date: 10 Day TAT

Section B — Required Project Information

Report To: [illegible]
Copy To: Golder
Purchase Order #:
Project Name: Plant Branch AP-BCD Background
Project #: [illegible]

Section C — Invoice Information

Attention: [illegible]
Company Name:
Address:
Pace Quote:
Pace Project Manager: [illegible]
Pace Profile #:

Regulatory Agency:

State / Location: GA

ITEM #	SAMPLE ID	MATRIX CODE	SAMPLE TYPE	DATE	TIME	# OF CONTAINERS	Unpreserved	H_2SO_4	HNO_3	HCl	NaOH + Zn Acetate	$Na_2S_2O_3$	Methanol	Other	App III/IV Total Metals	Cl, F, SO4, TDS	Radium 226/228	Fe, Mn, K, Na, Mg	Alkalinity total, bicarbonate & carbonate	Residual Chlorine (Y/N)	
1	[illegible]	WT	G	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]						X	X	X	X	X		pH = [illegible]
2	[illegible]	WT	G	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]						X	X	X	X	X		pH = [illegible]
3	[illegible]	WT	G	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]						X	X	X	X	X		pH = [illegible]
4																					
5																					
6																					
7																					
8																					
9																					
10																					
11																					
12																					

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
	[illegible signature]	2/3/22	8:22	[illegible signature]	2/3/22	8:22	
					2/9/22	1095	

SAMPLER NAME AND SIGNATURE: [illegible signature]

DATE Signed: 2/8/22

TEMP in C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N)

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

March 04, 2022

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

RE: Project: BRANCH AP-BCD BACKGROUND RAD
Pace Project No.: 92585712

Dear Joju Abraham:

Enclosed are the analytical results for sample(s) received by the laboratory on February 02, 2022. 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,

Nicole D'Oleo
nicole.d'oleo@pacelabs.com
(704)875-9092
Project Manager

Enclosures

cc: Anna Bottum, ERM
Andrea Brazell, ERM
Daniela Herrera, Golder
Ben Hodges, Georgia Power
Jimmy Jones, Golder Associates Inc.
Kristen Jurinko
Julie Lehrman, Golder Associates Inc.
Ms. Lauren Petty, Southern Company
Carolyn Powrozek, Golder
Dawn Prell, Golder Associates Inc.
Tim Richards, Golder Associates - Atlanta
Lacy Smith, ERM
Brian Steele, Golder
Caitlin Tillema, ERM
Christine Weaver, ERM

REPORT OF LABORATORY ANALYSIS

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

CERTIFICATIONS

Project: BRANCH AP-BCD BACKGROUND RAD
Pace Project No.: 92585712

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 #: 460198
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
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SAMPLE SUMMARY

Project: BRANCH AP-BCD BACKGROUND RAD
Pace Project No.: 92585712

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92585712001	**BRGWA-12S**	Water	02/01/22 13:54	02/02/22 10:25
92585712002	**BRGWA-12I**	Water	02/01/22 12:24	02/02/22 10:25
92585712003	**BRGWA-23S**	Water	02/01/22 10:06	02/02/22 10:25

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SAMPLE ANALYTE COUNT

Project: BRANCH AP-BCD BACKGROUND RAD
Pace Project No.: 92585712

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92585712001	**BRGWA-12S**	EPA 9315	JJY	1	PASI-PA
		EPA 9320	JC2	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92585712002	**BRGWA-12I**	EPA 9315	JJY	1	PASI-PA
		EPA 9320	JC2	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92585712003	**BRGWA-23S**	EPA 9315	JJY	1	PASI-PA
		EPA 9320	JC2	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA

PASI-PA = Pace Analytical Services - Greensburg

Pace Analytical Services, LLC
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SUMMARY OF DETECTION

Project: BRANCH AP-BCD BACKGROUND RAD
Pace Project No.: 92585712

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92585712001	**BRGWA-12S**					
EPA 9315	Radium-226	0.143 ± 0.107 (0.170) C:99% T:NA	pCi/L		02/22/22 12:23	
EPA 9320	Radium-228	0.516 ± 0.372 (0.719) C:78% T:85%	pCi/L		02/17/22 16:19	
Total Radium Calculation	Total Radium	0.659 ± 0.479 (0.889)	pCi/L		02/22/22 17:04	
92585712002	**BRGWA-12I**					
EPA 9315	Radium-226	0.185 ± 0.122 (0.185) C:96% T:NA	pCi/L		02/22/22 12:23	
EPA 9320	Radium-228	0.648 ± 0.408 (0.760) C:76% T:84%	pCi/L		02/17/22 16:19	
Total Radium Calculation	Total Radium	0.833 ± 0.530 (0.945)	pCi/L		02/22/22 17:04	
92585712003	**BRGWA-23S**					
EPA 9315	Radium-226	0.456 ± 0.192 (0.238) C:99% T:NA	pCi/L		02/22/22 12:23	
EPA 9320	Radium-228	0.696 ± 0.386 (0.692) C:80% T:86%	pCi/L		02/17/22 16:19	
Total Radium Calculation	Total Radium	1.15 ± 0.578 (0.930)	pCi/L		02/22/22 17:04	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: BRANCH AP-BCD BACKGROUND RAD
Pace Project No.: 92585712

Sample: BRGWA-12S **Lab ID: 92585712001** Collected: 02/01/22 13:54 Received: 02/02/22 10:25 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	**0.143 ± 0.107 (0.170) C:99% T:NA**	pCi/L	02/22/22 12:23	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.516 ± 0.372 (0.719) C:78% T:85%**	pCi/L	02/17/22 16:19	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.659 ± 0.479 (0.889)**	pCi/L	02/22/22 17:04	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: BRANCH AP-BCD BACKGROUND RAD
Pace Project No.: 92585712

Sample: BRGWA-12I **Lab ID: 92585712002** Collected: 02/01/22 12:24 Received: 02/02/22 10:25 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	**0.185 ± 0.122 (0.185) C:96% T:NA**	pCi/L	02/22/22 12:23	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.648 ± 0.408 (0.760) C:76% T:84%**	pCi/L	02/17/22 16:19	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.833 ± 0.530 (0.945)**	pCi/L	02/22/22 17:04	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: BRANCH AP-BCD BACKGROUND RAD
Pace Project No.: 92585712

Sample: BRGWA-23S **Lab ID: 92585712003** Collected: 02/01/22 10:06 Received: 02/02/22 10:25 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	**0.456 ± 0.192 (0.238) C:99% T:NA**	pCi/L	02/22/22 12:23	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.696 ± 0.386 (0.692) C:80% T:86%**	pCi/L	02/17/22 16:19	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.15 ± 0.578 (0.930)**	pCi/L	02/22/22 17:04	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: BRANCH AP-BCD BACKGROUND RAD
Pace Project No.: 92585712

QC Batch: 482652
QC Batch Method: EPA 9320
Analysis Method: EPA 9320
Analysis Description: 9320 Radium 228
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92585712001, 92585712002, 92585712003

METHOD BLANK: 2332806
Matrix: Water
Associated Lab Samples: 92585712001, 92585712002, 92585712003

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.173 ± 0.305 (0.667) C:77% T:85%	pCi/L	02/17/22 12:45	

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

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL - RADIOCHEMISTRY

Project: BRANCH AP-BCD BACKGROUND RAD
Pace Project No.: 92585712

QC Batch: 482985
QC Batch Method: EPA 9315
Analysis Method: EPA 9315
Analysis Description: 9315 Total Radium
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92585712001, 92585712002, 92585712003

METHOD BLANK: 2335102 Matrix: Water
Associated Lab Samples: 92585712001, 92585712002, 92585712003

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.0320 ± 0.0849 (0.207) C:96% T:NA	pCi/L	02/22/22 10:50	

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: BRANCH AP-BCD BACKGROUND RAD
Pace Project No.: 92585712

DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

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

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

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

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

Acid preservation may not be appropriate for 2 Chloroethylvinyl ether.

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

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

Reported results are not rounded until the final step prior to reporting. Therefore, calculated parameters that are typically reported as "Total" may vary slightly from the sum of the reported component parameters.

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.

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: BRANCH AP-BCD BACKGROUND RAD
Pace Project No.: 92585712

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92585712001	**BRGWA-12S**	EPA 9315	482985		
92585712002	**BRGWA-12I**	EPA 9315	482985		
92585712003	**BRGWA-23S**	EPA 9315	482985		
92585712001	**BRGWA-12S**	EPA 9320	482652		
92585712002	**BRGWA-12I**	EPA 9320	482652		
92585712003	**BRGWA-23S**	EPA 9320	482652		
92585712001	**BRGWA-12S**	Total Radium Calculation	485742		
92585712002	**BRGWA-12I**	Total Radium Calculation	485742		
92585712003	**BRGWA-23S**	Total Radium Calculation	485742		

Pace Analytical	Document Name: Sample Condition Upon Receipt (SCUR)	Document Revised: November 15, 2021 Page 1 of 2
	Document No.: F-CAR-CS-033-Rev.08	Issuing Authority: Pace Carolinas Quality Office

Laboratory receiving samples:
Asheville ☐ Eden ☐ Greenwood ☐ Huntersville ☐ Raleigh ☐ Mechanicsville ☐ Atlanta ☑ Kernersville ☐

Sample Condition Upon Receipt

Client Name: Georgia Power

Project #: WO# : 92585712

92585712

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

Custody Seal Present? ☐ Yes ☑ No Seals Intact? ☐ Yes ☐ No

Date/Initials Person Examining Contents: dO 9-2-22

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

Biological Tissue Present? ☐ Yes ☐ No ☑ N/A

Thermometer: ☐ IR Gun ID: 230 ☑ Wet ☐ Blue ☐ None

Type of Ice:

Cooler Temp: 1.3 Correction Factor: Add/Subtract (°C): +.2

Temp should be above freezing to 6°C
☐ Samples out of temp criteria. Samples on ice, cooling process has begun

Cooler Temp Corrected (°C): 1.5

USDA Regulated Soil (☐ N/A, water sample)
Did samples originate in a quarantine zone within the United States: CA, NY, or SC (check maps)? ☐ Yes ☐ No
Did samples originate from a foreign source (internationally, including Hawaii and Puerto Rico)? ☐ Yes ☐ No

				Comments/Discrepancy:
Chain of Custody Present?	☑ Yes	☐ No	☐ N/A	1.
Samples Arrived within Hold Time?	☑ Yes	☐ No	☐ N/A	2.
Short Hold Time Analysis (<72 hr.)?	☐ Yes	☑ No	☐ N/A	3.
Rush Turn Around Time Requested?	☐ Yes	☑ No	☐ N/A	4.
Sufficient Volume?	☑ Yes	☐ No	☐ N/A	5.
Correct Containers Used?	☑ Yes	☐ No	☐ N/A	6.
-Pace Containers Used?	☑ Yes	☐ No	☐ N/A	
Containers Intact?	☑ Yes	☐ No	☐ N/A	7.
Dissolved analysis: Samples Field Filtered?	☐ Yes	☐ No	☑ N/A	8
Sample Labels Match COC?	☐ Yes	☐ No	☐ N/A	9.
-Includes Date/Time/ID/Analysis Matrix: WT				
Headspace in VOA Vials (>5-6mm)?	☐ Yes	☐ No	☑ N/A	10.
Trip Blank Present?	☐ Yes	☐ No	☑ N/A	11.
Trip Blank Custody Seals Present?	☐ Yes	☐ No	☑ N/A	

COMMENTS/SAMPLE DISCREPANCY

Field Data Required? ☐ Yes ☐ No

Lot ID of split containers:

CLIENT NOTIFICATION/RESOLUTION

Person contacted: Date/Time:

Project Manager SCURF Review: Date:

Project Manager SRF Review: Date:

Pace Analytical	Document Name: **Bottle Identification Form (BIF)**	Document Issued: November 15, 2021 Page 1 of 1
	Document No.: F-CAR-CS-043-Rev.03	Issuing Authority: Pace Carolinas Quality Office

***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 bottles**

Project # **WO# : 92585712**

PM: NMG Due Date: 02/23/22

CLIENT: GA-GA Power

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 Unpreserved (N/A)	DG9P-40 mL VOA H3PO4 (N/A)	VOAK (3 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)	BP1N	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)	DG9U-40 mL Amber Unpreserved vials (N/A)
	1		2	1			✓ 1																		✓ 2				
	2		2	1			✓ 1																		✓ 2				
	3		2	1			✓ 1																		✓ 2				
	4																												
	5																												
	6																												
	7																												
	8																												
	9																												
	10																												
	11																												
	12																												

pH Adjustment Log for Preserved Samples

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

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

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: [illegible]
Phone: [illegible]
Requested Due Date: [illegible]

Section B — Required Project Information

Report To: [illegible]
Copy To: Golder
Purchase Order #:
Project Name: Plant Branch AP BCD Background
Project #: [illegible]

Section C — Invoice Information

Company Name:
Address:
Pace Quote:
Pace Project Manager: [illegible]
Pace Profile #:

Regulatory Agency:

State / Location: GA

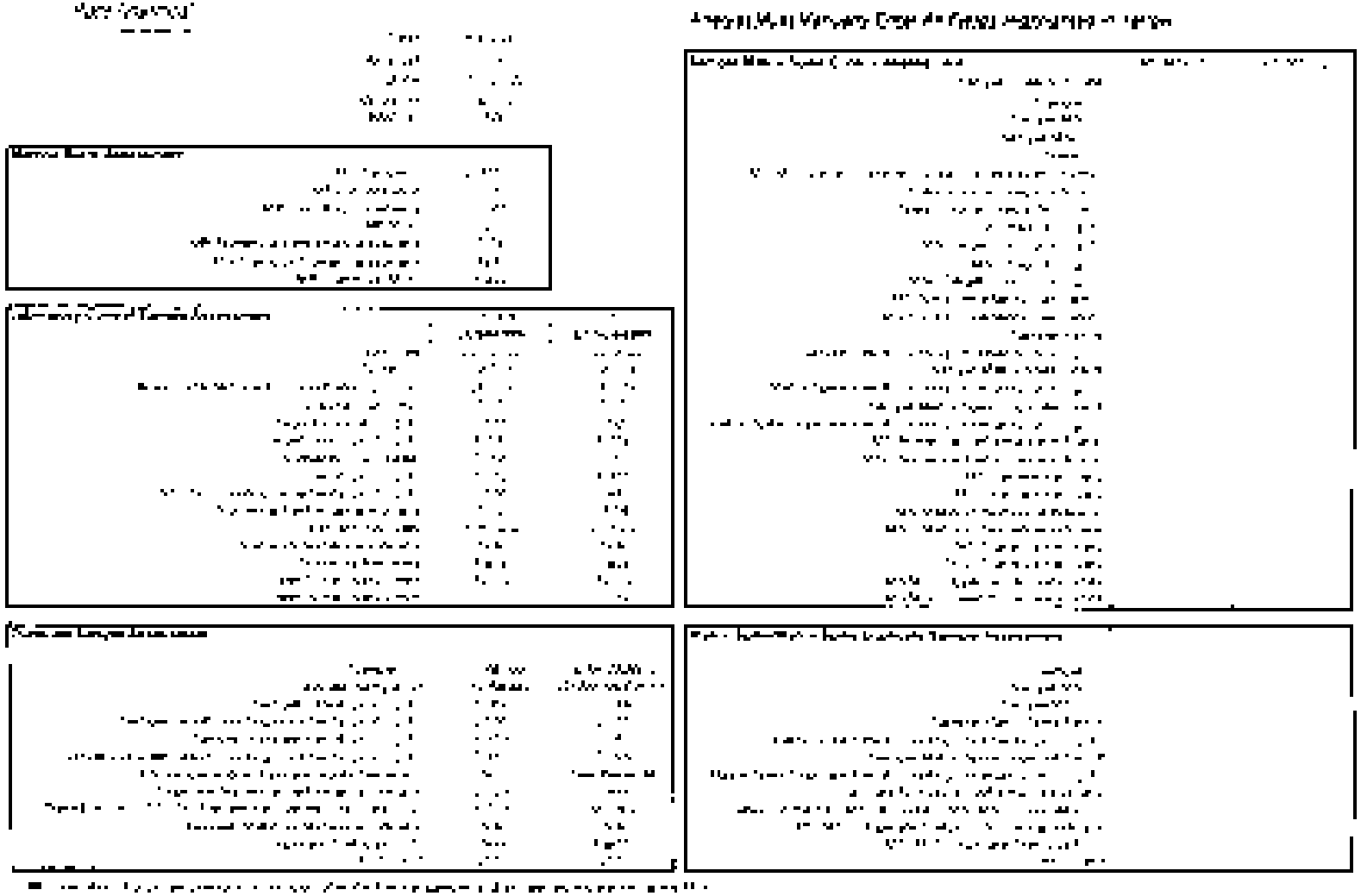
ITEM #	SAMPLE ID	MATRIX CODE	SAMPLE TYPE	DATE	TIME	# OF CONTAINERS	Analyses Test	Residual Chlorine (Y/N)	
1	[illegible]	[illegible]	G	[illegible]	[illegible]	[illegible]	X X X X X		pH = [illegible]
2	[illegible]	[illegible]	G	[illegible]	[illegible]	[illegible]	X X X X X		pH = [illegible]
3	[illegible]	[illegible]	G	[illegible]	[illegible]	[illegible]	X X X X X		pH = [illegible]
4									
5									
6									
7									
8									
9									
10									
11									
12									

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
	[illegible signature]	2/2/22	8:22	[illegible signature]	2/2/22	8:22	
				[illegible signature]	2/3/22	1035	

Signature: [illegible signature] — DATE Signed: 2/2/22

TEMP in C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N)

Quality Control Sample Performance Assessment



Quality Control Sample Performance Assessment

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

March 03, 2022

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

RE: Project: BRANCH AP-BCD DELIN PIEZO
Pace Project No.: 92585979

Dear Joju Abraham:

Enclosed are the analytical results for sample(s) received by the laboratory between February 03, 2022 and February 04, 2022. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

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

- Pace Analytical Services - Asheville
- Pace Analytical Services - Charlotte
- Pace Analytical Services - Peachtree Corners, GA
- Pace Analytical Services - Minneapolis
- Pace Analytical Services - Ormond Beach

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

Sincerely,

Nicole D'Oleo
nicole.d'oleo@pacelabs.com
(704)875-9092
Project Manager

Enclosures

cc: Anna Bottum, ERM
Andrea Brazell, ERM
Daniela Herrera, Golder
Ben Hodges, Georgia Power
Jimmy Jones, Golder Associates Inc.
Kristen Jurinko
Julie Lehrman, Golder Associates Inc.
Ms. Lauren Petty, Southern Company
Carolyn Powrozek, Golder
Dawn Prell, Golder Associates Inc.
Tim Richards, Golder Associates - Atlanta
Lacy Smith, ERM
Brian Steele, Golder
Caitlin Tillema, ERM
Christine Weaver, ERM

REPORT OF LABORATORY ANALYSIS

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

CERTIFICATIONS

Project: BRANCH AP-BCD DELIN PIEZO
Pace Project No.: 92585979

Pace Analytical Services, LLC - Minneapolis MN

1700 Elm Street SE, Minneapolis, MN 55414
1800 Elm Street SE, Minneapolis, MN 55414--Satellite Air Lab
A2LA Certification #: 2926.01*
Alabama Certification #: 40770
Alaska Contaminated Sites Certification #: 17-009*
Alaska DW Certification #: MN00064
Arizona Certification #: AZ0014*
Arkansas DW Certification #: MN00064
Arkansas WW Certification #: 88-0680
California Certification #: 2929
Colorado Certification #: MN00064
Connecticut Certification #: PH-0256
EPA Region 8 Tribal Water Systems+Wyoming DW Certification #: via MN 027-053-137
Florida Certification #: E87605*
Georgia Certification #: 959
Hawaii Certification #: MN00064
Idaho Certification #: MN00064
Illinois Certification #: 200011
Indiana Certification #: C-MN-01
Iowa Certification #: 368
Kansas Certification #: E-10167
Kentucky DW Certification #: 90062
Kentucky WW Certification #: 90062
Louisiana DEQ Certification #: AI-03086*
Louisiana DW Certification #: MN00064
Maine Certification #: MN00064*
Maryland Certification #: 322
Michigan Certification #: 9909
Minnesota Certification #: 027-053-137*
Minnesota Dept of Ag Approval: via MN 027-053-137
Minnesota Petrofund Registration #: 1240*
Mississippi Certification #: MN00064
Missouri Certification #: 10100
Montana Certification #: CERT0092
Nebraska Certification #: NE-OS-18-06
Nevada Certification #: MN00064
New Hampshire Certification #: 2081*
New Jersey Certification #: MN002
New York Certification #: 11647*
North Carolina DW Certification #: 27700
North Carolina WW Certification #: 530
North Dakota Certification #: R-036
Ohio DW Certification #: 41244
Ohio VAP Certification (1700) #: CL101
Ohio VAP Certification (1800) #: CL110*
Oklahoma Certification #: 9507*
Oregon Primary Certification #: MN300001
Oregon Secondary Certification #: MN200001*
Pennsylvania Certification #: 68-00563*
Puerto Rico Certification #: MN00064
South Carolina Certification #:74003001
Tennessee Certification #: TN02818
Texas Certification #: T104704192*
Utah Certification #: MN00064*
Vermont Certification #: VT-027053137
Virginia Certification #: 460163*
Washington Certification #: C486*
West Virginia DEP Certification #: 382
West Virginia DW Certification #: 9952 C
Wisconsin Certification #: 999407970
Wyoming UST Certification #: via A2LA 2926.01
USDA Permit #: P330-19-00208
*Please Note: Applicable air certifications are denoted with an asterisk (*).

Pace Analytical Services Ormond Beach

8 East Tower Circle, Ormond Beach, FL 32174
Alaska DEC- CS/UST/LUST
Alabama Certification #: 41320
Colorado Certification: FL NELAC Reciprocity
Connecticut Certification #: PH-0216
Delaware Certification: FL NELAC Reciprocity
Florida Certification #: E83079
Georgia Certification #: 955
Guam Certification: FL NELAC Reciprocity
Hawaii Certification: FL NELAC Reciprocity
Illinois Certification #: 200068
Indiana Certification: FL NELAC Reciprocity
Kansas Certification #: E-10383
Kentucky Certification #: 90050
Louisiana Certification #: FL NELAC Reciprocity
Louisiana Environmental Certificate #: 05007
Maine Certification #: FL01264
Maryland Certification: #346
Michigan Certification #: 9911
Mississippi Certification: FL NELAC Reciprocity
Missouri Certification #: 236
Montana Certification #: Cert 0074
Nebraska Certification: NE-OS-28-14
New Hampshire Certification #: 2958
New Jersey Certification #: FL022
New York Certification #: 11608
North Carolina Environmental Certificate #: 667
North Carolina Certification #: 12710
North Dakota Certification #: R-216
Ohio DEP 87780
Oklahoma Certification #: D9947
Pennsylvania Certification #: 68-00547

REPORT OF LABORATORY ANALYSIS

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

CERTIFICATIONS

Project: BRANCH AP-BCD DELIN PIEZO
Pace Project No.: 92585979

Pace Analytical Services Ormond Beach
Puerto Rico Certification #: FL01264
South Carolina Certification: #96042001
Tennessee Certification #: TN02974
Texas Certification: FL NELAC Reciprocity
US Virgin Islands Certification: FL NELAC Reciprocity
Virginia Environmental Certification #: 460165
West Virginia Certification #: 9962C
Wisconsin Certification #: 399079670
Wyoming (EPA Region 8): FL NELAC Reciprocity

Pace Analytical Services Charlotte
South Carolina Laboratory ID: 99006
9800 Kincey Ave. Ste 100, Huntersville, NC 28078
North Carolina Drinking Water Certification #: 37706
North Carolina Field Services Certification #: 5342
North Carolina Wastewater Certification #: 12
South Carolina Laboratory ID: 99006
South Carolina Certification #: 99006001
South Carolina Drinking Water Cert. #: 99006003
Florida/NELAP Certification #: E87627
Kentucky UST Certification #: 84
Louisiana DoH Drinking Water #: LA029
Virginia/VELAP Certification #: 460221

Pace Analytical Services Asheville
2225 Riverside Drive, Asheville, NC 28804
Florida/NELAP Certification #: E87648
North Carolina Drinking Water Certification #: 37712
North Carolina Wastewater Certification #: 40
South Carolina Laboratory ID: 99030
South Carolina Certification #: 99030001
Virginia/VELAP Certification #: 460222

Pace Analytical Services Peachtree Corners
110 Technology Pkwy, Peachtree Corners, GA 30092
Florida DOH Certification #: E87315
Georgia DW Inorganics Certification #: 812
North Carolina Certification #: 381
South Carolina Certification #: 98011001

REPORT OF LABORATORY ANALYSIS

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

SAMPLE SUMMARY

Project: BRANCH AP-BCD DELIN PIEZO
Pace Project No.: 92585979

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92585979001	**PZ-51S**	Water	02/02/22 13:56	02/03/22 10:35
92585979002	**PZ-44**	Water	02/02/22 12:23	02/03/22 10:35
92585979003	**PZ-51I**	Water	02/02/22 16:20	02/03/22 10:35
92585979004	**PZ-61I**	Water	02/02/22 15:42	02/03/22 10:35
92585979005	**FB-2**	Water	02/02/22 14:22	02/03/22 10:35
92585979006	**EB-2**	Water	02/02/22 16:18	02/03/22 10:35
92585979007	**PZ-58I**	Water	02/03/22 14:13	02/04/22 16:06
92585979008	**PZ-59I**	Water	02/03/22 12:40	02/04/22 16:06
92585979009	**PZ-60I**	Water	02/03/22 10:45	02/04/22 16:06
92585979010	**PZ-50D**	Water	02/03/22 10:54	02/04/22 16:06
92585979011	**PZ-51D**	Water	02/03/22 16:15	02/04/22 16:06
92585979012	**PZ-57I**	Water	02/04/22 08:54	02/04/22 16:06
92585979013	**PZ-63I**	Water	02/04/22 10:15	02/04/22 16:06
92585979014	**PZ-62I**	Water	02/04/22 10:10	02/04/22 16:06
92585979015	**FB-3**	Water	02/03/22 11:10	02/04/22 16:06

REPORT OF LABORATORY ANALYSIS

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

SAMPLE ANALYTE COUNT

Project: BRANCH AP-BCD DELIN PIEZO
Pace Project No.: 92585979

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92585979001	**PZ-51S**	EPA 6010D	KH	6	PASI-GA
		EPA 6020B	CW1	13	PASI-GA
		EPA 7470A	VB	1	PASI-GA
		SM 2540C-2015	ALW	1	PASI-GA
		SM 2320B	AR3	3	PASI-M
		EPA 300.0 Rev 2.1 1993	JCM	3	PASI-A
92585979002	**PZ-44**	EPA 6010D	KH	6	PASI-GA
		EPA 6020B	CW1	13	PASI-GA
		EPA 7470A	VB	1	PASI-GA
		SM 2540C-2015	ALW	1	PASI-GA
		SM 2320B	AR3	3	PASI-M
		EPA 300.0 Rev 2.1 1993	JCM	3	PASI-A
92585979003	**PZ-51I**	EPA 6010D	KH	6	PASI-GA
		EPA 6020B	CW1	13	PASI-GA
		EPA 7470A	VB	1	PASI-GA
		SM 2540C-2015	ALW	1	PASI-GA
		SM 2320B	AR3	3	PASI-M
		EPA 300.0 Rev 2.1 1993	JCM	3	PASI-A
92585979004	**PZ-61I**	EPA 6010D	KH	6	PASI-GA
		EPA 6020B	CW1	13	PASI-GA
		EPA 7470A	VB	1	PASI-GA
		SM 2540C-2015	ALW	1	PASI-GA
		SM 2320B	AR3	3	PASI-M
		EPA 300.0 Rev 2.1 1993	JCM	3	PASI-A
92585979005	**FB-2**	EPA 6010D	KH	1	PASI-GA
		EPA 6020B	CW1	13	PASI-GA
		EPA 7470A	VB	1	PASI-GA
		SM 2540C-2015	ALW	1	PASI-GA
		EPA 300.0 Rev 2.1 1993	JCM	3	PASI-A
92585979006	**EB-2**	EPA 6010D	KH	1	PASI-GA
		EPA 6020B	CW1	13	PASI-GA
		EPA 7470A	VB	1	PASI-GA
		SM 2540C-2015	ALW	1	PASI-GA
		EPA 300.0 Rev 2.1 1993	JCM	3	PASI-A
92585979007	**PZ-58I**	EPA 6010D	KH	7	PASI-GA
		EPA 6020B	CW1	13	PASI-GA
		EPA 7470A	VB	1	PASI-GA

REPORT OF LABORATORY ANALYSIS

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

SAMPLE ANALYTE COUNT

Project: BRANCH AP-BCD DELIN PIEZO
Pace Project No.: 92585979

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		SM 2540C-2015	ALW	1	PASI-GA
		SM 2320B	AR3	3	PASI-M
		SM 3500-Fe D#4	DMN	1	PASI-A
		SM 3500-Fe B-2011	DMN	1	PASI-A
		SM 4500-S2D-2011	JP1	1	PASI-A
		EPA 300.0 Rev 2.1 1993	CDC	3	PASI-A
		EPA 353.2 Rev 2.0 1993	KDF1	1	PASI-A
		SM 5310B	AGS	1	PASI-O
92585979008	**PZ-59I**	EPA 6010D	KH	7	PASI-GA
		EPA 6020B	CW1	13	PASI-GA
		EPA 7470A	VB	1	PASI-GA
		SM 2540C-2015	ALW	1	PASI-GA
		SM 2320B	AR3	3	PASI-M
		SM 3500-Fe D#4	DMN	1	PASI-A
		SM 3500-Fe B-2011	DMN	1	PASI-A
		SM 4500-S2D-2011	JP1	1	PASI-A
		EPA 300.0 Rev 2.1 1993	CDC	3	PASI-A
		EPA 353.2 Rev 2.0 1993	KDF1	1	PASI-A
		SM 5310B	AGS	1	PASI-O
92585979009	**PZ-60I**	EPA 6010D	KH	7	PASI-GA
		EPA 6020B	CW1	13	PASI-GA
		EPA 7470A	VB	1	PASI-GA
		SM 2540C-2015	ALW	1	PASI-GA
		SM 2320B	AR3	3	PASI-M
		SM 3500-Fe D#4	DMN	1	PASI-A
		SM 3500-Fe B-2011	DMN	1	PASI-A
		SM 4500-S2D-2011	JP1	1	PASI-A
		EPA 300.0 Rev 2.1 1993	CDC	3	PASI-A
		EPA 353.2 Rev 2.0 1993	KDF1	1	PASI-A
		SM 5310B	AGS	1	PASI-O
92585979010	**PZ-50D**	EPA 6010D	KH	6	PASI-GA
		EPA 6020B	CW1	13	PASI-GA
		EPA 7470A	VB	1	PASI-GA
		SM 2540C-2015	ALW	1	PASI-GA
		SM 2320B	AR3	3	PASI-M
		EPA 300.0 Rev 2.1 1993	CDC	3	PASI-A
92585979011	**PZ-51D**	EPA 6010D	KH	6	PASI-GA

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

SAMPLE ANALYTE COUNT

Project: BRANCH AP-BCD DELIN PIEZO
Pace Project No.: 92585979

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		EPA 6020B	CW1	13	PASI-GA
		EPA 7470A	VB	1	PASI-GA
		SM 2540C-2015	ALW	1	PASI-GA
		SM 2320B	AR3	3	PASI-M
		EPA 300.0 Rev 2.1 1993	CDC	3	PASI-A
92585979012	**PZ-57I**	EPA 6010D	KH	6	PASI-GA
		EPA 6020B	CW1	13	PASI-GA
		EPA 7470A	VB	1	PASI-GA
		SM 2540C-2015	ALW	1	PASI-GA
		SM 2320B	AR3	3	PASI-M
		EPA 300.0 Rev 2.1 1993	CDC	3	PASI-A
92585979013	**PZ-63I**	EPA 6010D	KH	6	PASI-GA
		EPA 6020B	CW1	13	PASI-GA
		EPA 7470A	VB	1	PASI-GA
		SM 2540C-2015	ALW	1	PASI-GA
		SM 2320B	AR3	3	PASI-M
		EPA 300.0 Rev 2.1 1993	CDC	3	PASI-A
92585979014	**PZ-62I**	EPA 6010D	KH	6	PASI-GA
		EPA 6020B	CW1	13	PASI-GA
		EPA 7470A	VB	1	PASI-GA
		SM 2540C-2015	ALW	1	PASI-GA
		SM 2320B	AR3	3	PASI-M
		EPA 300.0 Rev 2.1 1993	CDC	3	PASI-A
92585979015	**FB-3**	EPA 6010D	KH	1	PASI-GA
		EPA 6020B	CW1	13	PASI-GA
		EPA 7470A	VB	1	PASI-GA
		SM 2540C-2015	ALW	1	PASI-GA
		EPA 300.0 Rev 2.1 1993	CDC	3	PASI-A

PASI-A = Pace Analytical Services - Asheville
PASI-C = Pace Analytical Services - Charlotte
PASI-GA = Pace Analytical Services - Peachtree Corners, GA
PASI-M = Pace Analytical Services - Minneapolis
PASI-O = Pace Analytical Services - Ormond Beach

REPORT OF LABORATORY ANALYSIS

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

SUMMARY OF DETECTION

Project: BRANCH AP-BCD DELIN PIEZO
Pace Project No.: 92585979

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92585979001	**PZ-51S**					
	Performed by	CUSTOMER			02/03/22 13:02	
	pH	6.19	Std. Units		02/03/22 13:02	
EPA 6010D	Manganese	1.7	mg/L	0.040	02/16/22 16:37	
EPA 6010D	Potassium	2.4	mg/L	0.20	02/16/22 16:37	
EPA 6010D	Sodium	10.7	mg/L	1.0	02/16/22 16:37	
EPA 6010D	Calcium	7.8	mg/L	1.0	02/16/22 16:37	
EPA 6010D	Magnesium	9.1	mg/L	0.050	02/16/22 16:37	
EPA 6020B	Arsenic	0.0020J	mg/L	0.0050	02/16/22 18:25	
EPA 6020B	Barium	0.027	mg/L	0.0050	02/16/22 18:25	
EPA 6020B	Cobalt	0.0028J	mg/L	0.0050	02/16/22 18:25	
SM 2540C-2015	Total Dissolved Solids	98.0	mg/L	10.0	02/08/22 10:49	
SM 2320B	Alkalinity, Total as CaCO3	69.6	mg/L	5.0	02/10/22 15:49	
SM 2320B	Alkalinity,Bicarbonate (CaCO3)	69.6	mg/L	5.0	02/10/22 15:49	
EPA 300.0 Rev 2.1 1993	Chloride	4.2	mg/L	1.0	02/08/22 04:57	
EPA 300.0 Rev 2.1 1993	Fluoride	0.053J	mg/L	0.10	02/08/22 04:57	
92585979002	**PZ-44**					
	Performed by	CUSTOMER			02/03/22 13:03	
	pH	6.20	Std. Units		02/03/22 13:03	
EPA 6010D	Iron	0.29	mg/L	0.040	02/16/22 16:42	
EPA 6010D	Manganese	0.41	mg/L	0.040	02/16/22 16:42	
EPA 6010D	Potassium	2.7	mg/L	0.20	02/16/22 16:42	
EPA 6010D	Sodium	11.6	mg/L	1.0	02/16/22 16:42	
EPA 6010D	Calcium	25.1	mg/L	1.0	02/16/22 16:42	
EPA 6010D	Magnesium	10.9	mg/L	0.050	02/16/22 16:42	
EPA 6020B	Arsenic	0.0040J	mg/L	0.0050	02/16/22 18:31	
EPA 6020B	Barium	0.052	mg/L	0.0050	02/16/22 18:31	
EPA 6020B	Boron	1.6	mg/L	0.040	02/16/22 18:31	
EPA 6020B	Lithium	0.0058J	mg/L	0.030	02/16/22 18:31	
SM 2540C-2015	Total Dissolved Solids	181	mg/L	10.0	02/08/22 10:49	
SM 2320B	Alkalinity, Total as CaCO3	76.6	mg/L	5.0	02/10/22 16:26	
SM 2320B	Alkalinity,Bicarbonate (CaCO3)	76.6	mg/L	5.0	02/10/22 16:26	
EPA 300.0 Rev 2.1 1993	Chloride	5.5	mg/L	1.0	02/08/22 05:11	
EPA 300.0 Rev 2.1 1993	Fluoride	0.065J	mg/L	0.10	02/08/22 05:11	
EPA 300.0 Rev 2.1 1993	Sulfate	45.3	mg/L	1.0	02/08/22 05:11	
92585979003	**PZ-51I**					
	Performed by	CUSTOMER			02/03/22 13:03	
	pH	5.44	Std. Units		02/03/22 13:03	
EPA 6010D	Iron	0.046	mg/L	0.040	02/16/22 16:47	
EPA 6010D	Potassium	10.9	mg/L	0.20	02/16/22 16:47	M1
EPA 6010D	Sodium	43.3	mg/L	1.0	02/16/22 16:47	M1
EPA 6010D	Calcium	187	mg/L	1.0	02/16/22 16:47	M1
EPA 6010D	Magnesium	121	mg/L	0.050	02/16/22 16:47	M1
EPA 6010D	Manganese	41.9	mg/L	0.20	02/17/22 13:20	M1
EPA 6020B	Barium	0.015	mg/L	0.0050	02/16/22 18:37	

REPORT OF LABORATORY ANALYSIS

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

SUMMARY OF DETECTION

Project: BRANCH AP-BCD DELIN PIEZO
Pace Project No.: 92585979

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92585979003	**PZ-51I**					
EPA 6020B	Beryllium	0.000071J	mg/L	0.00050	02/16/22 18:37	
EPA 6020B	Boron	0.42	mg/L	0.040	02/16/22 18:37	
EPA 6020B	Cadmium	0.0043	mg/L	0.00050	02/16/22 18:37	
EPA 6020B	Cobalt	0.023	mg/L	0.0050	02/16/22 18:37	
EPA 6020B	Lithium	0.021J	mg/L	0.030	02/16/22 18:37	
SM 2540C-2015	Total Dissolved Solids	1590	mg/L	50.0	02/08/22 10:49	
SM 2320B	Alkalinity, Total as CaCO3	22.4	mg/L	5.0	02/10/22 16:30	
SM 2320B	Alkalinity,Bicarbonate (CaCO3)	22.4	mg/L	5.0	02/10/22 16:30	
EPA 300.0 Rev 2.1 1993	Chloride	9.7	mg/L	1.0	02/08/22 05:25	
EPA 300.0 Rev 2.1 1993	Sulfate	889	mg/L	21.0	02/08/22 17:05	
92585979004	**PZ-61I**					
	Performed by	CUSTOMER			02/03/22 13:03	
	pH	5.25	Std. Units		02/03/22 13:03	
EPA 6010D	Iron	0.97	mg/L	0.040	02/16/22 17:07	
EPA 6010D	Potassium	7.4	mg/L	0.20	02/16/22 17:07	
EPA 6010D	Sodium	57.2	mg/L	1.0	02/16/22 17:07	
EPA 6010D	Calcium	215	mg/L	1.0	02/16/22 17:07	
EPA 6010D	Manganese	106	mg/L	0.20	02/17/22 13:34	
EPA 6010D	Magnesium	173	mg/L	0.25	02/17/22 13:34	
EPA 6020B	Barium	0.015	mg/L	0.0050	02/16/22 18:43	
EPA 6020B	Beryllium	0.0015	mg/L	0.00050	02/16/22 18:43	
EPA 6020B	Boron	0.32	mg/L	0.040	02/16/22 18:43	
EPA 6020B	Cadmium	0.00014J	mg/L	0.00050	02/16/22 18:43	
EPA 6020B	Cobalt	0.51	mg/L	0.0050	02/16/22 18:43	M1
EPA 6020B	Lithium	0.011J	mg/L	0.030	02/16/22 18:43	
EPA 6020B	Selenium	0.0031J	mg/L	0.0050	02/16/22 18:43	
SM 2540C-2015	Total Dissolved Solids	1970	mg/L	100	02/08/22 10:50	
SM 2320B	Alkalinity, Total as CaCO3	14.4	mg/L	5.0	02/10/22 19:39	
SM 2320B	Alkalinity,Bicarbonate (CaCO3)	14.4	mg/L	5.0	02/10/22 19:39	
EPA 300.0 Rev 2.1 1993	Chloride	19.2	mg/L	1.0	02/08/22 05:39	
EPA 300.0 Rev 2.1 1993	Sulfate	1230	mg/L	29.0	02/08/22 17:19	
92585979005	**FB-2**					
EPA 6020B	Antimony	0.0015J	mg/L	0.0030	02/16/22 19:07	
92585979007	**PZ-58I**					
	Performed by	CUSTOMER			02/07/22 10:11	
	pH	3.90	Std. Units		02/07/22 10:11	
EPA 6010D	Iron	46.6	mg/L	0.040	02/16/22 17:35	
EPA 6010D	Manganese	23.4	mg/L	0.040	02/16/22 17:35	
EPA 6010D	Potassium	7.7	mg/L	0.20	02/16/22 17:35	
EPA 6010D	Sodium	29.8	mg/L	1.0	02/16/22 17:35	
EPA 6010D	Calcium	120	mg/L	1.0	02/16/22 17:35	
EPA 6010D	Magnesium	67.0	mg/L	0.050	02/16/22 17:35	
EPA 6010D	Hardness, Total(SM 2340B)	575	mg/L	2.7	02/16/22 17:35	
EPA 6020B	Barium	0.016	mg/L	0.0050	02/15/22 21:34	

REPORT OF LABORATORY ANALYSIS

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

SUMMARY OF DETECTION

Project: BRANCH AP-BCD DELIN PIEZO
Pace Project No.: 92585979

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92585979007	**PZ-58I**					
EPA 6020B	Beryllium	0.027	mg/L	0.00050	02/15/22 21:34	
EPA 6020B	Boron	0.38	mg/L	0.040	02/15/22 21:34	
EPA 6020B	Cadmium	0.0038	mg/L	0.00050	02/15/22 21:34	
EPA 6020B	Cobalt	0.43	mg/L	0.0050	02/15/22 21:34	
EPA 6020B	Lithium	0.041	mg/L	0.030	02/15/22 21:34	
EPA 6020B	Selenium	0.0016J	mg/L	0.0050	02/15/22 21:34	
SM 2540C-2015	Total Dissolved Solids	1170	mg/L	20.0	02/09/22 10:13	
SM 3500-Fe B-2011	Iron, Ferrous	47.3	mg/L	12.5	02/09/22 12:28	H3,N2
EPA 300.0 Rev 2.1 1993	Chloride	11.9	mg/L	1.0	02/10/22 23:50	
EPA 300.0 Rev 2.1 1993	Fluoride	1.8	mg/L	0.10	02/10/22 23:50	
EPA 300.0 Rev 2.1 1993	Sulfate	767	mg/L	16.0	02/11/22 06:38	
EPA 353.2 Rev 2.0 1993	Nitrogen, NO2 plus NO3	0.071	mg/L	0.040	02/18/22 09:49	
92585979008	**PZ-59I**					
	Performed by	CUSTOMER			02/07/22 10:11	
	pH	3.71	Std. Units		02/07/22 10:11	
EPA 6010D	Iron	345	mg/L	0.20	02/17/22 13:39	
EPA 6010D	Manganese	60.6	mg/L	0.20	02/17/22 13:39	
EPA 6010D	Potassium	15.6	mg/L	1.0	02/17/22 13:39	
EPA 6010D	Sodium	75.5	mg/L	5.0	02/17/22 13:39	
EPA 6010D	Calcium	213	mg/L	5.0	02/17/22 13:39	
EPA 6010D	Magnesium	157	mg/L	0.25	02/17/22 13:39	
EPA 6010D	Hardness, Total(SM 2340B)	1180	mg/L	13.5	02/17/22 13:39	
EPA 6020B	Arsenic	0.017	mg/L	0.0050	02/15/22 21:39	
EPA 6020B	Barium	0.013	mg/L	0.0050	02/15/22 21:39	
EPA 6020B	Beryllium	0.12	mg/L	0.0025	02/16/22 20:51	
EPA 6020B	Boron	0.055J	mg/L	0.20	02/16/22 20:51	D3
EPA 6020B	Cadmium	0.0060	mg/L	0.00050	02/15/22 21:39	
EPA 6020B	Chromium	0.0032J	mg/L	0.0050	02/15/22 21:39	
EPA 6020B	Cobalt	1.6	mg/L	0.025	02/16/22 20:51	
EPA 6020B	Lithium	0.19	mg/L	0.15	02/16/22 20:51	
EPA 6020B	Selenium	0.090	mg/L	0.0050	02/15/22 21:39	
SM 2540C-2015	Total Dissolved Solids	3610	mg/L	100	02/09/22 10:13	
SM 3500-Fe D#4	Iron, Ferric	342	mg/L	0.50	02/18/22 12:06	N2
SM 3500-Fe B-2011	Iron, Ferrous	2.6	mg/L	0.50	02/09/22 11:36	H3,N2
EPA 300.0 Rev 2.1 1993	Chloride	36.5	mg/L	1.0	02/11/22 01:09	
EPA 300.0 Rev 2.1 1993	Fluoride	2.7	mg/L	0.10	02/11/22 01:09	
EPA 300.0 Rev 2.1 1993	Sulfate	2600	mg/L	50.0	02/11/22 08:21	
SM 5310B	Dissolved Organic Carbon	1.3	mg/L	1.0	02/10/22 20:48	
92585979009	**PZ-60I**					
	Performed by	CUSTOMER			02/07/22 10:11	
	pH	4.73	Std. Units		02/07/22 10:11	
EPA 6010D	Iron	0.34	mg/L	0.040	02/16/22 17:44	
EPA 6010D	Potassium	13.8	mg/L	0.20	02/16/22 17:44	
EPA 6010D	Sodium	59.2	mg/L	1.0	02/16/22 17:44	
EPA 6010D	Manganese	166	mg/L	0.40	02/17/22 13:43	

REPORT OF LABORATORY ANALYSIS

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

SUMMARY OF DETECTION

Project: BRANCH AP-BCD DELIN PIEZO
Pace Project No.: 92585979

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92585979009	**PZ-60I**					
EPA 6010D	Calcium	279	mg/L	10.0	02/17/22 13:43	
EPA 6010D	Magnesium	182	mg/L	0.50	02/17/22 13:43	
EPA 6010D	Hardness, Total(SM 2340B)	1450	mg/L	27.0	02/17/22 13:43	
EPA 6020B	Barium	0.021	mg/L	0.0050	02/15/22 21:45	
EPA 6020B	Beryllium	0.072	mg/L	0.00050	02/15/22 21:45	
EPA 6020B	Boron	0.25	mg/L	0.040	02/15/22 21:45	
EPA 6020B	Cadmium	0.016	mg/L	0.00050	02/15/22 21:45	
EPA 6020B	Cobalt	3.4	mg/L	0.025	02/15/22 21:51	
EPA 6020B	Lithium	0.098	mg/L	0.030	02/15/22 21:45	
EPA 6020B	Selenium	0.0026J	mg/L	0.0050	02/15/22 21:45	
SM 2540C-2015	Total Dissolved Solids	2480	mg/L	100	02/09/22 10:13	
SM 2320B	Alkalinity, Total as CaCO3	3.2J	mg/L	5.0	02/10/22 14:34	
SM 2320B	Alkalinity,Bicarbonate (CaCO3)	3.2J	mg/L	5.0	02/10/22 14:34	
SM 3500-Fe B-2011	Iron, Ferrous	0.22J	mg/L	0.50	02/09/22 11:31	H3,N2
EPA 300.0 Rev 2.1 1993	Chloride	30.7	mg/L	1.0	02/11/22 01:24	
EPA 300.0 Rev 2.1 1993	Fluoride	2.3	mg/L	0.10	02/11/22 01:24	
EPA 300.0 Rev 2.1 1993	Sulfate	2020	mg/L	37.0	02/11/22 07:37	
SM 5310B	Dissolved Organic Carbon	0.57 I	mg/L	1.0	02/10/22 21:41	
92585979010	**PZ-50D**					
	Performed by	CUSTOMER			02/07/22 10:12	
	pH	6.24	Std. Units		02/07/22 10:12	
EPA 6010D	Iron	4.8	mg/L	0.040	02/16/22 17:49	
EPA 6010D	Manganese	9.7	mg/L	0.040	02/16/22 17:49	
EPA 6010D	Potassium	13.3	mg/L	0.20	02/16/22 17:49	
EPA 6010D	Sodium	47.5	mg/L	1.0	02/16/22 17:49	
EPA 6010D	Calcium	222	mg/L	1.0	02/16/22 17:49	
EPA 6010D	Magnesium	82.6	mg/L	0.050	02/16/22 17:49	
EPA 6020B	Arsenic	0.0012J	mg/L	0.0050	02/16/22 19:31	
EPA 6020B	Barium	0.033	mg/L	0.0050	02/16/22 19:31	
EPA 6020B	Boron	0.22	mg/L	0.040	02/17/22 10:28	
EPA 6020B	Cobalt	0.10	mg/L	0.0050	02/16/22 19:31	
EPA 6020B	Lithium	0.024J	mg/L	0.030	02/16/22 19:31	
EPA 6020B	Molybdenum	0.0012J	mg/L	0.010	02/16/22 19:31	
SM 2540C-2015	Total Dissolved Solids	1380	mg/L	50.0	02/09/22 10:13	
SM 2320B	Alkalinity, Total as CaCO3	72.9	mg/L	5.0	02/10/22 14:42	
SM 2320B	Alkalinity,Bicarbonate (CaCO3)	72.9	mg/L	5.0	02/10/22 14:42	
EPA 300.0 Rev 2.1 1993	Chloride	12.5	mg/L	1.0	02/11/22 01:39	
EPA 300.0 Rev 2.1 1993	Fluoride	0.15	mg/L	0.10	02/11/22 01:39	
EPA 300.0 Rev 2.1 1993	Sulfate	903	mg/L	18.0	02/11/22 07:51	
92585979011	**PZ-51D**					
	Performed by	CUSTOMER			02/07/22 10:12	
	pH	6.77	Std. Units		02/07/22 10:12	
EPA 6010D	Iron	2.2	mg/L	0.040	02/16/22 17:54	
EPA 6010D	Manganese	1.2	mg/L	0.040	02/16/22 17:54	
EPA 6010D	Potassium	10.7	mg/L	0.20	02/16/22 17:54	

REPORT OF LABORATORY ANALYSIS

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

SUMMARY OF DETECTION

Project: BRANCH AP-BCD DELIN PIEZO
Pace Project No.: 92585979

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92585979011	**PZ-51D**					
EPA 6010D	Sodium	39.8	mg/L	1.0	02/16/22 17:54	
EPA 6010D	Calcium	122	mg/L	1.0	02/16/22 17:54	
EPA 6010D	Magnesium	29.8	mg/L	0.050	02/16/22 17:54	
EPA 6020B	Arsenic	0.0015J	mg/L	0.0050	02/16/22 19:36	
EPA 6020B	Barium	0.057	mg/L	0.0050	02/16/22 19:36	
EPA 6020B	Boron	0.034J	mg/L	0.040	02/16/22 19:36	
EPA 6020B	Lithium	0.0096J	mg/L	0.030	02/16/22 19:36	
EPA 6020B	Molybdenum	0.0017J	mg/L	0.010	02/16/22 19:36	
SM 2540C-2015	Total Dissolved Solids	686	mg/L	20.0	02/09/22 10:13	
SM 2320B	Alkalinity, Total as CaCO3	133	mg/L	5.0	02/10/22 14:46	
SM 2320B	Alkalinity,Bicarbonate (CaCO3)	133	mg/L	5.0	02/10/22 14:46	
EPA 300.0 Rev 2.1 1993	Chloride	15.2	mg/L	1.0	02/11/22 01:54	
EPA 300.0 Rev 2.1 1993	Fluoride	0.27	mg/L	0.10	02/11/22 01:54	
EPA 300.0 Rev 2.1 1993	Sulfate	339	mg/L	7.0	02/11/22 08:06	
92585979012	**PZ-57I**					
	Performed by	CUSTOMER			02/07/22 10:12	
	pH	5.28	Std. Units		02/07/22 10:12	
EPA 6010D	Iron	2.0	mg/L	0.040	02/16/22 17:59	
EPA 6010D	Manganese	17.1	mg/L	0.040	02/16/22 17:59	
EPA 6010D	Potassium	5.0	mg/L	0.20	02/16/22 17:59	
EPA 6010D	Sodium	18.4	mg/L	1.0	02/16/22 17:59	
EPA 6010D	Calcium	67.6	mg/L	1.0	02/16/22 17:59	
EPA 6010D	Magnesium	40.3	mg/L	0.050	02/16/22 17:59	
EPA 6020B	Barium	0.024	mg/L	0.0050	02/16/22 19:42	
EPA 6020B	Beryllium	0.00054	mg/L	0.00050	02/16/22 19:42	
EPA 6020B	Boron	0.51	mg/L	0.20	02/17/22 10:34	
EPA 6020B	Cadmium	0.00072	mg/L	0.00050	02/16/22 19:42	
EPA 6020B	Cobalt	0.094	mg/L	0.0050	02/16/22 19:42	
EPA 6020B	Lithium	0.026J	mg/L	0.030	02/16/22 19:42	
SM 2540C-2015	Total Dissolved Solids	630	mg/L	20.0	02/09/22 18:02	
SM 2320B	Alkalinity, Total as CaCO3	13.3	mg/L	5.0	02/10/22 17:02	
SM 2320B	Alkalinity,Bicarbonate (CaCO3)	13.3	mg/L	5.0	02/10/22 17:02	
EPA 300.0 Rev 2.1 1993	Chloride	7.2	mg/L	1.0	02/11/22 12:18	
EPA 300.0 Rev 2.1 1993	Fluoride	0.096J	mg/L	0.10	02/11/22 12:18	
EPA 300.0 Rev 2.1 1993	Sulfate	336	mg/L	8.0	02/11/22 23:38	
92585979013	**PZ-63I**					
	Performed by	CUSTOMER			02/07/22 10:12	
	pH	5.89	Std. Units		02/07/22 10:12	
EPA 6010D	Iron	2.3	mg/L	0.040	02/16/22 18:04	
EPA 6010D	Manganese	5.5	mg/L	0.040	02/16/22 18:04	
EPA 6010D	Potassium	8.9	mg/L	0.20	02/16/22 18:04	
EPA 6010D	Sodium	16.2	mg/L	1.0	02/16/22 18:04	
EPA 6010D	Calcium	42.2	mg/L	1.0	02/16/22 18:04	
EPA 6010D	Magnesium	29.2	mg/L	0.050	02/16/22 18:04	
EPA 6020B	Barium	0.037	mg/L	0.0050	02/16/22 19:48	

REPORT OF LABORATORY ANALYSIS

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

SUMMARY OF DETECTION

Project: BRANCH AP-BCD DELIN PIEZO
Pace Project No.: 92585979

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92585979013	**PZ-63I**					
EPA 6020B	Boron	0.67	mg/L	0.20	02/17/22 10:40	
EPA 6020B	Cobalt	0.019	mg/L	0.0050	02/16/22 19:48	
EPA 6020B	Lithium	0.0070J	mg/L	0.030	02/16/22 19:48	
EPA 6020B	Molybdenum	0.00092J	mg/L	0.010	02/16/22 19:48	
SM 2540C-2015	Total Dissolved Solids	403	mg/L	10.0	02/09/22 18:02	
SM 2320B	Alkalinity, Total as CaCO3	37.1	mg/L	5.0	02/10/22 14:54	
SM 2320B	Alkalinity,Bicarbonate (CaCO3)	37.1	mg/L	5.0	02/10/22 14:54	
EPA 300.0 Rev 2.1 1993	Chloride	6.2	mg/L	1.0	02/11/22 12:32	
EPA 300.0 Rev 2.1 1993	Fluoride	0.14	mg/L	0.10	02/11/22 12:32	
EPA 300.0 Rev 2.1 1993	Sulfate	195	mg/L	5.0	02/11/22 23:52	
92585979014	**PZ-62I**					
	Performed by	CUSTOMER			02/07/22 10:12	
	pH	5.79	Std. Units		02/07/22 10:12	
EPA 6010D	Iron	3.7	mg/L	0.040	02/16/22 18:09	
EPA 6010D	Manganese	24.8	mg/L	0.040	02/16/22 18:09	
EPA 6010D	Potassium	10.9	mg/L	0.20	02/16/22 18:09	
EPA 6010D	Sodium	28.7	mg/L	1.0	02/16/22 18:09	
EPA 6010D	Calcium	102	mg/L	1.0	02/16/22 18:09	
EPA 6010D	Magnesium	54.1	mg/L	0.050	02/16/22 18:09	
EPA 6020B	Barium	0.058	mg/L	0.0050	02/16/22 19:54	
EPA 6020B	Boron	0.50	mg/L	0.20	02/17/22 10:46	
EPA 6020B	Cadmium	0.00040J	mg/L	0.00050	02/16/22 19:54	
EPA 6020B	Cobalt	0.27	mg/L	0.0050	02/16/22 19:54	
EPA 6020B	Lithium	0.010J	mg/L	0.030	02/16/22 19:54	
EPA 6020B	Molybdenum	0.0011J	mg/L	0.010	02/16/22 19:54	
SM 2540C-2015	Total Dissolved Solids	818	mg/L	20.0	02/09/22 18:03	
SM 2320B	Alkalinity, Total as CaCO3	40.9	mg/L	5.0	02/10/22 15:04	
SM 2320B	Alkalinity,Bicarbonate (CaCO3)	40.9	mg/L	5.0	02/10/22 15:04	
EPA 300.0 Rev 2.1 1993	Chloride	9.8	mg/L	1.0	02/11/22 12:46	
EPA 300.0 Rev 2.1 1993	Fluoride	0.071J	mg/L	0.10	02/11/22 12:46	
EPA 300.0 Rev 2.1 1993	Sulfate	451	mg/L	11.0	02/12/22 00:06	
92585979015	**FB-3**					
SM 2540C-2015	Total Dissolved Solids	14.0	mg/L	10.0	02/09/22 10:14	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: BRANCH AP-BCD DELIN PIEZO
Pace Project No.: 92585979

Sample: PZ-51S **Lab ID: 92585979001** Collected: 02/02/22 13:56 Received: 02/03/22 10:35 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**CUSTOMER**				1		02/03/22 13:02		
pH	**6.19**	Std. Units			1		02/03/22 13:02		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Iron	ND	mg/L	0.040	0.025	1	02/16/22 07:50	02/16/22 16:37	7439-89-6	
Manganese	**1.7**	mg/L	0.040	0.0043	1	02/16/22 07:50	02/16/22 16:37	7439-96-5	
Potassium	**2.4**	mg/L	0.20	0.15	1	02/16/22 07:50	02/16/22 16:37	7440-09-7	
Sodium	**10.7**	mg/L	1.0	0.58	1	02/16/22 07:50	02/16/22 16:37	7440-23-5	
Calcium	**7.8**	mg/L	1.0	0.12	1	02/16/22 07:50	02/16/22 16:37	7440-70-2	
Magnesium	**9.1**	mg/L	0.050	0.012	1	02/16/22 07:50	02/16/22 16:37	7439-95-4	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00078	1	02/16/22 07:51	02/16/22 18:25	7440-36-0	
Arsenic	**0.0020J**	mg/L	0.0050	0.0011	1	02/16/22 07:51	02/16/22 18:25	7440-38-2	
Barium	**0.027**	mg/L	0.0050	0.00067	1	02/16/22 07:51	02/16/22 18:25	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	02/16/22 07:51	02/16/22 18:25	7440-41-7	
Boron	ND	mg/L	0.040	0.0086	1	02/16/22 07:51	02/16/22 18:25	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	02/16/22 07:51	02/16/22 18:25	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	02/16/22 07:51	02/16/22 18:25	7440-47-3	
Cobalt	**0.0028J**	mg/L	0.0050	0.00039	1	02/16/22 07:51	02/16/22 18:25	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	02/16/22 07:51	02/16/22 18:25	7439-92-1	
Lithium	ND	mg/L	0.030	0.00073	1	02/16/22 07:51	02/16/22 18:25	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	02/16/22 07:51	02/16/22 18:25	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	02/16/22 07:51	02/16/22 18:25	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	02/16/22 07:51	02/16/22 18:25	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.00013	1	02/14/22 15:15	02/15/22 10:22	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**98.0**	mg/L	10.0	10.0	1		02/08/22 10:49		
2320B Alkalinity	Analytical Method: SM 2320B Pace Analytical Services - Minneapolis								
Alkalinity, Total as CaCO3	**69.6**	mg/L	5.0	1.8	1		02/10/22 15:49		
Alkalinity,Bicarbonate (CaCO3)	**69.6**	mg/L	5.0	1.8	1		02/10/22 15:49		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	1.8	1		02/10/22 15:49		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: BRANCH AP-BCD DELIN PIEZO
Pace Project No.: 92585979

Sample: PZ-51S **Lab ID: 92585979001** Collected: 02/02/22 13:56 Received: 02/03/22 10:35 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**4.2**	mg/L	1.0	0.60	1		02/08/22 04:57	16887-00-6	
Fluoride	**0.053J**	mg/L	0.10	0.050	1		02/08/22 04:57	16984-48-8	
Sulfate	ND	mg/L	1.0	0.50	1		02/08/22 04:57	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: BRANCH AP-BCD DELIN PIEZO
Pace Project No.: 92585979

Sample: PZ-44 **Lab ID: 92585979002** Collected: 02/02/22 12:23 Received: 02/03/22 10:35 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**CUSTOMER**				1		02/03/22 13:03		
pH	**6.20**	Std. Units			1		02/03/22 13:03		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Iron	**0.29**	mg/L	0.040	0.025	1	02/16/22 07:50	02/16/22 16:42	7439-89-6	
Manganese	**0.41**	mg/L	0.040	0.0043	1	02/16/22 07:50	02/16/22 16:42	7439-96-5	
Potassium	**2.7**	mg/L	0.20	0.15	1	02/16/22 07:50	02/16/22 16:42	7440-09-7	
Sodium	**11.6**	mg/L	1.0	0.58	1	02/16/22 07:50	02/16/22 16:42	7440-23-5	
Calcium	**25.1**	mg/L	1.0	0.12	1	02/16/22 07:50	02/16/22 16:42	7440-70-2	
Magnesium	**10.9**	mg/L	0.050	0.012	1	02/16/22 07:50	02/16/22 16:42	7439-95-4	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00078	1	02/16/22 07:51	02/16/22 18:31	7440-36-0	
Arsenic	**0.0040J**	mg/L	0.0050	0.0011	1	02/16/22 07:51	02/16/22 18:31	7440-38-2	
Barium	**0.052**	mg/L	0.0050	0.00067	1	02/16/22 07:51	02/16/22 18:31	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	02/16/22 07:51	02/16/22 18:31	7440-41-7	
Boron	**1.6**	mg/L	0.040	0.0086	1	02/16/22 07:51	02/16/22 18:31	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	02/16/22 07:51	02/16/22 18:31	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	02/16/22 07:51	02/16/22 18:31	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	02/16/22 07:51	02/16/22 18:31	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	02/16/22 07:51	02/16/22 18:31	7439-92-1	
Lithium	**0.0058J**	mg/L	0.030	0.00073	1	02/16/22 07:51	02/16/22 18:31	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	02/16/22 07:51	02/16/22 18:31	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	02/16/22 07:51	02/16/22 18:31	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	02/16/22 07:51	02/16/22 18:31	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.00013	1	02/14/22 15:15	02/15/22 10:25	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**181**	mg/L	10.0	10.0	1		02/08/22 10:49		
2320B Alkalinity	Analytical Method: SM 2320B Pace Analytical Services - Minneapolis								
Alkalinity, Total as CaCO3	**76.6**	mg/L	5.0	1.8	1		02/10/22 16:26		
Alkalinity,Bicarbonate (CaCO3)	**76.6**	mg/L	5.0	1.8	1		02/10/22 16:26		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	1.8	1		02/10/22 16:26		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: BRANCH AP-BCD DELIN PIEZO
Pace Project No.: 92585979

Sample: PZ-44 **Lab ID: 92585979002** Collected: 02/02/22 12:23 Received: 02/03/22 10:35 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**5.5**	mg/L	1.0	0.60	1		02/08/22 05:11	16887-00-6	
Fluoride	**0.065J**	mg/L	0.10	0.050	1		02/08/22 05:11	16984-48-8	
Sulfate	**45.3**	mg/L	1.0	0.50	1		02/08/22 05:11	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: BRANCH AP-BCD DELIN PIEZO
Pace Project No.: 92585979

Sample: PZ-51I **Lab ID: 92585979003** Collected: 02/02/22 16:20 Received: 02/03/22 10:35 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**CUSTOMER**				1		02/03/22 13:03		
pH	**5.44**	Std. Units			1		02/03/22 13:03		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Iron	**0.046**	mg/L	0.040	0.025	1	02/16/22 07:50	02/16/22 16:47	7439-89-6	
Potassium	**10.9**	mg/L	0.20	0.15	1	02/16/22 07:50	02/16/22 16:47	7440-09-7	M1
Sodium	**43.3**	mg/L	1.0	0.58	1	02/16/22 07:50	02/16/22 16:47	7440-23-5	M1
Calcium	**187**	mg/L	1.0	0.12	1	02/16/22 07:50	02/16/22 16:47	7440-70-2	M1
Magnesium	**121**	mg/L	0.050	0.012	1	02/16/22 07:50	02/16/22 16:47	7439-95-4	M1
Manganese	**41.9**	mg/L	0.20	0.021	5	02/16/22 07:50	02/17/22 13:20	7439-96-5	M1
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00078	1	02/16/22 07:51	02/16/22 18:37	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0011	1	02/16/22 07:51	02/16/22 18:37	7440-38-2	
Barium	**0.015**	mg/L	0.0050	0.00067	1	02/16/22 07:51	02/16/22 18:37	7440-39-3	
Beryllium	**0.000071J**	mg/L	0.00050	0.000054	1	02/16/22 07:51	02/16/22 18:37	7440-41-7	
Boron	**0.42**	mg/L	0.040	0.0086	1	02/16/22 07:51	02/16/22 18:37	7440-42-8	
Cadmium	**0.0043**	mg/L	0.00050	0.00011	1	02/16/22 07:51	02/16/22 18:37	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	02/16/22 07:51	02/16/22 18:37	7440-47-3	
Cobalt	**0.023**	mg/L	0.0050	0.00039	1	02/16/22 07:51	02/16/22 18:37	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	02/16/22 07:51	02/16/22 18:37	7439-92-1	
Lithium	**0.021J**	mg/L	0.030	0.00073	1	02/16/22 07:51	02/16/22 18:37	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	02/16/22 07:51	02/16/22 18:37	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	02/16/22 07:51	02/16/22 18:37	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	02/16/22 07:51	02/16/22 18:37	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.00013	1	02/14/22 15:15	02/15/22 10:27	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**1590**	mg/L	50.0	50.0	1		02/08/22 10:49		
2320B Alkalinity	Analytical Method: SM 2320B Pace Analytical Services - Minneapolis								
Alkalinity, Total as CaCO3	**22.4**	mg/L	5.0	1.8	1		02/10/22 16:30		
Alkalinity,Bicarbonate (CaCO3)	**22.4**	mg/L	5.0	1.8	1		02/10/22 16:30		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	1.8	1		02/10/22 16:30		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: BRANCH AP-BCD DELIN PIEZO
Pace Project No.: 92585979

Sample: PZ-51I **Lab ID: 92585979003** Collected: 02/02/22 16:20 Received: 02/03/22 10:35 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**9.7**	mg/L	1.0	0.60	1		02/08/22 05:25	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		02/08/22 05:25	16984-48-8	
Sulfate	**889**	mg/L	21.0	10.5	21		02/08/22 17:05	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: BRANCH AP-BCD DELIN PIEZO
Pace Project No.: 92585979

Sample: PZ-61I **Lab ID: 92585979004** Collected: 02/02/22 15:42 Received: 02/03/22 10:35 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**CUSTOMER**				1		02/03/22 13:03		
pH	**5.25**	Std. Units			1		02/03/22 13:03		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Iron	**0.97**	mg/L	0.040	0.025	1	02/16/22 07:50	02/16/22 17:07	7439-89-6	
Potassium	**7.4**	mg/L	0.20	0.15	1	02/16/22 07:50	02/16/22 17:07	7440-09-7	
Sodium	**57.2**	mg/L	1.0	0.58	1	02/16/22 07:50	02/16/22 17:07	7440-23-5	
Calcium	**215**	mg/L	1.0	0.12	1	02/16/22 07:50	02/16/22 17:07	7440-70-2	
Manganese	**106**	mg/L	0.20	0.021	5	02/16/22 07:50	02/17/22 13:34	7439-96-5	
Magnesium	**173**	mg/L	0.25	0.059	5	02/16/22 07:50	02/17/22 13:34	7439-95-4	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00078	1	02/16/22 07:51	02/16/22 18:43	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0011	1	02/16/22 07:51	02/16/22 18:43	7440-38-2	
Barium	**0.015**	mg/L	0.0050	0.00067	1	02/16/22 07:51	02/16/22 18:43	7440-39-3	
Beryllium	**0.0015**	mg/L	0.00050	0.000054	1	02/16/22 07:51	02/16/22 18:43	7440-41-7	
Boron	**0.32**	mg/L	0.040	0.0086	1	02/16/22 07:51	02/16/22 18:43	7440-42-8	
Cadmium	**0.00014J**	mg/L	0.00050	0.00011	1	02/16/22 07:51	02/16/22 18:43	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	02/16/22 07:51	02/16/22 18:43	7440-47-3	
Cobalt	**0.51**	mg/L	0.0050	0.00039	1	02/16/22 07:51	02/16/22 18:43	7440-48-4	M1
Lead	ND	mg/L	0.0010	0.00089	1	02/16/22 07:51	02/16/22 18:43	7439-92-1	
Lithium	**0.011J**	mg/L	0.030	0.00073	1	02/16/22 07:51	02/16/22 18:43	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	02/16/22 07:51	02/16/22 18:43	7439-98-7	
Selenium	**0.0031J**	mg/L	0.0050	0.0014	1	02/16/22 07:51	02/16/22 18:43	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	02/16/22 07:51	02/16/22 18:43	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.00013	1	02/14/22 15:15	02/15/22 10:30	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**1970**	mg/L	100	100	1		02/08/22 10:50		
2320B Alkalinity	Analytical Method: SM 2320B Pace Analytical Services - Minneapolis								
Alkalinity, Total as CaCO3	**14.4**	mg/L	5.0	1.8	1		02/10/22 19:39		
Alkalinity,Bicarbonate (CaCO3)	**14.4**	mg/L	5.0	1.8	1		02/10/22 19:39		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	1.8	1		02/10/22 19:39		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: BRANCH AP-BCD DELIN PIEZO
Pace Project No.: 92585979

Sample: PZ-61I **Lab ID: 92585979004** Collected: 02/02/22 15:42 Received: 02/03/22 10:35 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**19.2**	mg/L	1.0	0.60	1		02/08/22 05:39	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		02/08/22 05:39	16984-48-8	
Sulfate	**1230**	mg/L	29.0	14.5	29		02/08/22 17:19	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: BRANCH AP-BCD DELIN PIEZO
Pace Project No.: 92585979

Sample: FB-2 **Lab ID: 92585979005** Collected: 02/02/22 14:22 Received: 02/03/22 10:35 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	ND	mg/L	1.0	0.12	1	02/16/22 07:50	02/16/22 17:11	7440-70-2	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	**0.0015J**	mg/L	0.0030	0.00078	1	02/16/22 07:51	02/16/22 19:07	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0011	1	02/16/22 07:51	02/16/22 19:07	7440-38-2	
Barium	ND	mg/L	0.0050	0.00067	1	02/16/22 07:51	02/16/22 19:07	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	02/16/22 07:51	02/16/22 19:07	7440-41-7	
Boron	ND	mg/L	0.040	0.0086	1	02/16/22 07:51	02/16/22 19:07	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	02/16/22 07:51	02/16/22 19:07	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	02/16/22 07:51	02/16/22 19:07	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	02/16/22 07:51	02/16/22 19:07	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	02/16/22 07:51	02/16/22 19:07	7439-92-1	
Lithium	ND	mg/L	0.030	0.00073	1	02/16/22 07:51	02/16/22 19:07	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	02/16/22 07:51	02/16/22 19:07	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	02/16/22 07:51	02/16/22 19:07	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	02/16/22 07:51	02/16/22 19:07	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.00013	1	02/14/22 15:15	02/15/22 10:32	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	ND	mg/L	10.0	10.0	1		02/08/22 10:50		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	ND	mg/L	1.0	0.60	1		02/08/22 05:53	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		02/08/22 05:53	16984-48-8	
Sulfate	ND	mg/L	1.0	0.50	1		02/08/22 05:53	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: BRANCH AP-BCD DELIN PIEZO
Pace Project No.: 92585979

Sample: EB-2 **Lab ID: 92585979006** Collected: 02/02/22 16:18 Received: 02/03/22 10:35 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	ND	mg/L	1.0	0.12	1	02/16/22 07:50	02/16/22 17:30	7440-70-2	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00078	1	02/16/22 07:51	02/16/22 19:25	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0011	1	02/16/22 07:51	02/16/22 19:25	7440-38-2	
Barium	ND	mg/L	0.0050	0.00067	1	02/16/22 07:51	02/16/22 19:25	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	02/16/22 07:51	02/16/22 19:25	7440-41-7	
Boron	ND	mg/L	0.040	0.0086	1	02/16/22 07:51	02/16/22 19:25	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	02/16/22 07:51	02/16/22 19:25	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	02/16/22 07:51	02/16/22 19:25	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	02/16/22 07:51	02/16/22 19:25	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	02/16/22 07:51	02/16/22 19:25	7439-92-1	
Lithium	ND	mg/L	0.030	0.00073	1	02/16/22 07:51	02/16/22 19:25	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	02/16/22 07:51	02/16/22 19:25	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	02/16/22 07:51	02/16/22 19:25	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	02/16/22 07:51	02/16/22 19:25	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.00013	1	02/14/22 15:15	02/15/22 10:43	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	ND	mg/L	10.0	10.0	1		02/08/22 10:50		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	ND	mg/L	1.0	0.60	1		02/08/22 06:07	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		02/08/22 06:07	16984-48-8	
Sulfate	ND	mg/L	1.0	0.50	1		02/08/22 06:07	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: BRANCH AP-BCD DELIN PIEZO
Pace Project No.: 92585979

Sample: PZ-58I **Lab ID: 92585979007** Collected: 02/03/22 14:13 Received: 02/04/22 16:06 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**CUSTOMER**				1		02/07/22 10:11		
pH	**3.90**	Std. Units			1		02/07/22 10:11		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Iron	**46.6**	mg/L	0.040	0.025	1	02/16/22 07:50	02/16/22 17:35	7439-89-6	
Manganese	**23.4**	mg/L	0.040	0.0043	1	02/16/22 07:50	02/16/22 17:35	7439-96-5	
Potassium	**7.7**	mg/L	0.20	0.15	1	02/16/22 07:50	02/16/22 17:35	7440-09-7	
Sodium	**29.8**	mg/L	1.0	0.58	1	02/16/22 07:50	02/16/22 17:35	7440-23-5	
Calcium	**120**	mg/L	1.0	0.12	1	02/16/22 07:50	02/16/22 17:35	7440-70-2	
Magnesium	**67.0**	mg/L	0.050	0.012	1	02/16/22 07:50	02/16/22 17:35	7439-95-4	
Hardness, Total(SM 2340B)	**575**	mg/L	2.7	0.35	1	02/16/22 07:50	02/16/22 17:35		
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00078	1	02/15/22 10:27	02/15/22 21:34	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0011	1	02/15/22 10:27	02/15/22 21:34	7440-38-2	
Barium	**0.016**	mg/L	0.0050	0.00067	1	02/15/22 10:27	02/15/22 21:34	7440-39-3	
Beryllium	**0.027**	mg/L	0.00050	0.000054	1	02/15/22 10:27	02/15/22 21:34	7440-41-7	
Boron	**0.38**	mg/L	0.040	0.0086	1	02/15/22 10:27	02/15/22 21:34	7440-42-8	
Cadmium	**0.0038**	mg/L	0.00050	0.00011	1	02/15/22 10:27	02/15/22 21:34	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	02/15/22 10:27	02/15/22 21:34	7440-47-3	
Cobalt	**0.43**	mg/L	0.0050	0.00039	1	02/15/22 10:27	02/15/22 21:34	7440-48-4	
Lead	ND	mg/L	0.0050	0.0044	5	02/15/22 10:27	02/16/22 20:45	7439-92-1	D3
Lithium	**0.041**	mg/L	0.030	0.00073	1	02/15/22 10:27	02/15/22 21:34	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	02/15/22 10:27	02/15/22 21:34	7439-98-7	
Selenium	**0.0016J**	mg/L	0.0050	0.0014	1	02/15/22 10:27	02/15/22 21:34	7782-49-2	
Thallium	ND	mg/L	0.0050	0.00090	5	02/15/22 10:27	02/16/22 20:45	7440-28-0	D3
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.00013	1	02/14/22 15:15	02/15/22 11:00	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**1170**	mg/L	20.0	20.0	1		02/09/22 10:13		
2320B Alkalinity	Analytical Method: SM 2320B Pace Analytical Services - Minneapolis								
Alkalinity, Total as CaCO3	ND	mg/L	5.0	1.8	1		02/10/22 19:22		
Alkalinity,Bicarbonate (CaCO3)	ND	mg/L	5.0	1.8	1		02/10/22 19:22		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	1.8	1		02/10/22 19:22		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: BRANCH AP-BCD DELIN PIEZO
Pace Project No.: 92585979

Sample: PZ-58I **Lab ID: 92585979007** Collected: 02/03/22 14:13 Received: 02/04/22 16:06 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Iron, Ferric (Calculation)	Analytical Method: SM 3500-Fe D#4 Pace Analytical Services - Asheville								
Iron, Ferric	ND	mg/L	0.50	0.25	1		02/18/22 12:06	20074-52-6	N2
Iron, Ferrous	Analytical Method: SM 3500-Fe B-2011 Pace Analytical Services - Asheville								
Iron, Ferrous	**47.3**	mg/L	12.5	1.0	25		02/09/22 12:28	15438-31-0	H3,N2
4500S2D Sulfide Water	Analytical Method: SM 4500-S2D-2011 Pace Analytical Services - Asheville								
Sulfide	ND	mg/L	0.10	0.050	1		02/09/22 03:14	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**11.9**	mg/L	1.0	0.60	1		02/10/22 23:50	16887-00-6	
Fluoride	**1.8**	mg/L	0.10	0.050	1		02/10/22 23:50	16984-48-8	
Sulfate	**767**	mg/L	16.0	8.0	16		02/11/22 06:38	14808-79-8	
353.2 Nitrogen, NO2/NO3 pres.	Analytical Method: EPA 353.2 Rev 2.0 1993 Pace Analytical Services - Asheville								
Nitrogen, NO2 plus NO3	**0.071**	mg/L	0.040	0.017	1		02/18/22 09:49		
5310B Dissolved Organic Carbon	Analytical Method: SM 5310B Pace Analytical Services - Ormond Beach								
Dissolved Organic Carbon	ND	mg/L	1.0	0.50	1		02/10/22 20:34		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
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ANALYTICAL RESULTS

Project: BRANCH AP-BCD DELIN PIEZO
Pace Project No.: 92585979

Sample: PZ-59I **Lab ID: 92585979008** Collected: 02/03/22 12:40 Received: 02/04/22 16:06 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**CUSTOMER**				1		02/07/22 10:11		
pH	**3.71**	Std. Units			1		02/07/22 10:11		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Iron	**345**	mg/L	0.20	0.13	5	02/16/22 07:50	02/17/22 13:39	7439-89-6	
Manganese	**60.6**	mg/L	0.20	0.021	5	02/16/22 07:50	02/17/22 13:39	7439-96-5	
Potassium	**15.6**	mg/L	1.0	0.76	5	02/16/22 07:50	02/17/22 13:39	7440-09-7	
Sodium	**75.5**	mg/L	5.0	2.9	5	02/16/22 07:50	02/17/22 13:39	7440-23-5	
Calcium	**213**	mg/L	5.0	0.61	5	02/16/22 07:50	02/17/22 13:39	7440-70-2	
Magnesium	**157**	mg/L	0.25	0.059	5	02/16/22 07:50	02/17/22 13:39	7439-95-4	
Hardness, Total(SM 2340B)	**1180**	mg/L	13.5	1.8	5	02/16/22 07:50	02/17/22 13:39		
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00078	1	02/15/22 10:27	02/15/22 21:39	7440-36-0	
Arsenic	**0.017**	mg/L	0.0050	0.0011	1	02/15/22 10:27	02/15/22 21:39	7440-38-2	
Barium	**0.013**	mg/L	0.0050	0.00067	1	02/15/22 10:27	02/15/22 21:39	7440-39-3	
Beryllium	**0.12**	mg/L	0.0025	0.00027	5	02/15/22 10:27	02/16/22 20:51	7440-41-7	
Boron	**0.055J**	mg/L	0.20	0.043	5	02/15/22 10:27	02/16/22 20:51	7440-42-8	D3
Cadmium	**0.0060**	mg/L	0.00050	0.00011	1	02/15/22 10:27	02/15/22 21:39	7440-43-9	
Chromium	**0.0032J**	mg/L	0.0050	0.0011	1	02/15/22 10:27	02/15/22 21:39	7440-47-3	
Cobalt	**1.6**	mg/L	0.025	0.0020	5	02/15/22 10:27	02/16/22 20:51	7440-48-4	
Lead	ND	mg/L	0.0050	0.0044	5	02/15/22 10:27	02/16/22 20:51	7439-92-1	D3
Lithium	**0.19**	mg/L	0.15	0.0036	5	02/15/22 10:27	02/16/22 20:51	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	02/15/22 10:27	02/15/22 21:39	7439-98-7	
Selenium	**0.090**	mg/L	0.0050	0.0014	1	02/15/22 10:27	02/15/22 21:39	7782-49-2	
Thallium	ND	mg/L	0.0050	0.00090	5	02/15/22 10:27	02/16/22 20:51	7440-28-0	D3
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.00013	1	02/14/22 15:15	02/15/22 11:02	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**3610**	mg/L	100	100	1		02/09/22 10:13		
2320B Alkalinity	Analytical Method: SM 2320B Pace Analytical Services - Minneapolis								
Alkalinity, Total as CaCO3	ND	mg/L	5.0	1.8	1		02/10/22 19:23		
Alkalinity,Bicarbonate (CaCO3)	ND	mg/L	5.0	1.8	1		02/10/22 19:23		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	1.8	1		02/10/22 19:23		

REPORT OF LABORATORY ANALYSIS

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

Project: BRANCH AP-BCD DELIN PIEZO
Pace Project No.: 92585979

Sample: PZ-59I **Lab ID: 92585979008** Collected: 02/03/22 12:40 Received: 02/04/22 16:06 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Iron, Ferric (Calculation)	Analytical Method: SM 3500-Fe D#4 Pace Analytical Services - Asheville								
Iron, Ferric	**342**	mg/L	0.50	0.25	1		02/18/22 12:06	20074-52-6	N2
Iron, Ferrous	Analytical Method: SM 3500-Fe B-2011 Pace Analytical Services - Asheville								
Iron, Ferrous	**2.6**	mg/L	0.50	0.040	1		02/09/22 11:36	15438-31-0	H3,N2
4500S2D Sulfide Water	Analytical Method: SM 4500-S2D-2011 Pace Analytical Services - Asheville								
Sulfide	ND	mg/L	0.10	0.050	1		02/09/22 03:15	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**36.5**	mg/L	1.0	0.60	1		02/11/22 01:09	16887-00-6	
Fluoride	**2.7**	mg/L	0.10	0.050	1		02/11/22 01:09	16984-48-8	
Sulfate	**2600**	mg/L	50.0	25.0	50		02/11/22 08:21	14808-79-8	
353.2 Nitrogen, NO2/NO3 pres.	Analytical Method: EPA 353.2 Rev 2.0 1993 Pace Analytical Services - Asheville								
Nitrogen, NO2 plus NO3	ND	mg/L	0.040	0.017	1		02/18/22 10:02		
5310B Dissolved Organic Carbon	Analytical Method: SM 5310B Pace Analytical Services - Ormond Beach								
Dissolved Organic Carbon	**1.3**	mg/L	1.0	0.50	1		02/10/22 20:48		

REPORT OF LABORATORY ANALYSIS

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

Project: BRANCH AP-BCD DELIN PIEZO
Pace Project No.: 92585979

Sample: PZ-60I **Lab ID: 92585979009** Collected: 02/03/22 10:45 Received: 02/04/22 16:06 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**CUSTOMER**				1		02/07/22 10:11		
pH	**4.73**	Std. Units			1		02/07/22 10:11		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Iron	**0.34**	mg/L	0.040	0.025	1	02/16/22 07:50	02/16/22 17:44	7439-89-6	
Potassium	**13.8**	mg/L	0.20	0.15	1	02/16/22 07:50	02/16/22 17:44	7440-09-7	
Sodium	**59.2**	mg/L	1.0	0.58	1	02/16/22 07:50	02/16/22 17:44	7440-23-5	
Manganese	**166**	mg/L	0.40	0.043	10	02/16/22 07:50	02/17/22 13:43	7439-96-5	
Calcium	**279**	mg/L	10.0	1.2	10	02/16/22 07:50	02/17/22 13:43	7440-70-2	
Magnesium	**182**	mg/L	0.50	0.12	10	02/16/22 07:50	02/17/22 13:43	7439-95-4	
Hardness, Total(SM 2340B)	**1450**	mg/L	27.0	3.5	10	02/16/22 07:50	02/17/22 13:43		
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00078	1	02/15/22 10:27	02/15/22 21:45	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0011	1	02/15/22 10:27	02/15/22 21:45	7440-38-2	
Barium	**0.021**	mg/L	0.0050	0.00067	1	02/15/22 10:27	02/15/22 21:45	7440-39-3	
Beryllium	**0.072**	mg/L	0.00050	0.000054	1	02/15/22 10:27	02/15/22 21:45	7440-41-7	
Boron	**0.25**	mg/L	0.040	0.0086	1	02/15/22 10:27	02/15/22 21:45	7440-42-8	
Cadmium	**0.016**	mg/L	0.00050	0.00011	1	02/15/22 10:27	02/15/22 21:45	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	02/15/22 10:27	02/15/22 21:45	7440-47-3	
Cobalt	**3.4**	mg/L	0.025	0.0020	5	02/15/22 10:27	02/15/22 21:51	7440-48-4	
Lead	ND	mg/L	0.0050	0.0044	5	02/15/22 10:27	02/15/22 21:51	7439-92-1	
Lithium	**0.098**	mg/L	0.030	0.00073	1	02/15/22 10:27	02/15/22 21:45	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	02/15/22 10:27	02/15/22 21:45	7439-98-7	
Selenium	**0.0026J**	mg/L	0.0050	0.0014	1	02/15/22 10:27	02/15/22 21:45	7782-49-2	
Thallium	ND	mg/L	0.0050	0.00090	5	02/15/22 10:27	02/15/22 21:51	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.00013	1	02/14/22 15:15	02/15/22 11:05	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**2480**	mg/L	100	100	1		02/09/22 10:13		
2320B Alkalinity	Analytical Method: SM 2320B Pace Analytical Services - Minneapolis								
Alkalinity, Total as CaCO3	**3.2J**	mg/L	5.0	1.8	1		02/10/22 14:34		
Alkalinity,Bicarbonate (CaCO3)	**3.2J**	mg/L	5.0	1.8	1		02/10/22 14:34		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	1.8	1		02/10/22 14:34		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: BRANCH AP-BCD DELIN PIEZO
Pace Project No.: 92585979

Sample: PZ-60I **Lab ID: 92585979009** Collected: 02/03/22 10:45 Received: 02/04/22 16:06 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Iron, Ferric (Calculation)	Analytical Method: SM 3500-Fe D#4 Pace Analytical Services - Asheville								
Iron, Ferric	ND	mg/L	0.50	0.25	1		02/18/22 12:06	20074-52-6	N2
Iron, Ferrous	Analytical Method: SM 3500-Fe B-2011 Pace Analytical Services - Asheville								
Iron, Ferrous	**0.22J**	mg/L	0.50	0.040	1		02/09/22 11:31	15438-31-0	H3,N2
4500S2D Sulfide Water	Analytical Method: SM 4500-S2D-2011 Pace Analytical Services - Asheville								
Sulfide	ND	mg/L	0.10	0.050	1		02/09/22 03:15	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**30.7**	mg/L	1.0	0.60	1		02/11/22 01:24	16887-00-6	
Fluoride	**2.3**	mg/L	0.10	0.050	1		02/11/22 01:24	16984-48-8	
Sulfate	**2020**	mg/L	37.0	18.5	37		02/11/22 07:37	14808-79-8	
353.2 Nitrogen, NO2/NO3 pres.	Analytical Method: EPA 353.2 Rev 2.0 1993 Pace Analytical Services - Asheville								
Nitrogen, NO2 plus NO3	ND	mg/L	0.040	0.017	1		02/18/22 10:03		
5310B Dissolved Organic Carbon	Analytical Method: SM 5310B Pace Analytical Services - Ormond Beach								
Dissolved Organic Carbon	**0.57 I**	mg/L	1.0	0.50	1		02/10/22 21:41		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: BRANCH AP-BCD DELIN PIEZO
Pace Project No.: 92585979

Sample: PZ-50D **Lab ID: 92585979010** Collected: 02/03/22 10:54 Received: 02/04/22 16:06 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**CUSTOMER**				1		02/07/22 10:12		
pH	**6.24**	Std. Units			1		02/07/22 10:12		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Iron	**4.8**	mg/L	0.040	0.025	1	02/16/22 07:50	02/16/22 17:49	7439-89-6	
Manganese	**9.7**	mg/L	0.040	0.0043	1	02/16/22 07:50	02/16/22 17:49	7439-96-5	
Potassium	**13.3**	mg/L	0.20	0.15	1	02/16/22 07:50	02/16/22 17:49	7440-09-7	
Sodium	**47.5**	mg/L	1.0	0.58	1	02/16/22 07:50	02/16/22 17:49	7440-23-5	
Calcium	**222**	mg/L	1.0	0.12	1	02/16/22 07:50	02/16/22 17:49	7440-70-2	
Magnesium	**82.6**	mg/L	0.050	0.012	1	02/16/22 07:50	02/16/22 17:49	7439-95-4	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00078	1	02/16/22 07:51	02/16/22 19:31	7440-36-0	
Arsenic	**0.0012J**	mg/L	0.0050	0.0011	1	02/16/22 07:51	02/16/22 19:31	7440-38-2	
Barium	**0.033**	mg/L	0.0050	0.00067	1	02/16/22 07:51	02/16/22 19:31	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	02/16/22 07:51	02/16/22 19:31	7440-41-7	
Boron	**0.22**	mg/L	0.040	0.0086	1	02/16/22 07:51	02/17/22 10:28	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	02/16/22 07:51	02/16/22 19:31	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	02/16/22 07:51	02/16/22 19:31	7440-47-3	
Cobalt	**0.10**	mg/L	0.0050	0.00039	1	02/16/22 07:51	02/16/22 19:31	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	02/16/22 07:51	02/16/22 19:31	7439-92-1	
Lithium	**0.024J**	mg/L	0.030	0.00073	1	02/16/22 07:51	02/16/22 19:31	7439-93-2	
Molybdenum	**0.0012J**	mg/L	0.010	0.00074	1	02/16/22 07:51	02/16/22 19:31	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	02/16/22 07:51	02/16/22 19:31	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	02/16/22 07:51	02/16/22 19:31	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.00013	1	02/14/22 15:15	02/15/22 11:08	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**1380**	mg/L	50.0	50.0	1		02/09/22 10:13		
2320B Alkalinity	Analytical Method: SM 2320B Pace Analytical Services - Minneapolis								
Alkalinity, Total as CaCO3	**72.9**	mg/L	5.0	1.8	1		02/10/22 14:42		
Alkalinity,Bicarbonate (CaCO3)	**72.9**	mg/L	5.0	1.8	1		02/10/22 14:42		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	1.8	1		02/10/22 14:42		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: BRANCH AP-BCD DELIN PIEZO
Pace Project No.: 92585979

Sample: PZ-50D **Lab ID: 92585979010** Collected: 02/03/22 10:54 Received: 02/04/22 16:06 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**12.5**	mg/L	1.0	0.60	1		02/11/22 01:39	16887-00-6	
Fluoride	**0.15**	mg/L	0.10	0.050	1		02/11/22 01:39	16984-48-8	
Sulfate	**903**	mg/L	18.0	9.0	18		02/11/22 07:51	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: BRANCH AP-BCD DELIN PIEZO
Pace Project No.: 92585979

Sample: PZ-51D **Lab ID: 92585979011** Collected: 02/03/22 16:15 Received: 02/04/22 16:06 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**CUSTOMER**				1		02/07/22 10:12		
pH	**6.77**	Std. Units			1		02/07/22 10:12		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Iron	**2.2**	mg/L	0.040	0.025	1	02/16/22 07:50	02/16/22 17:54	7439-89-6	
Manganese	**1.2**	mg/L	0.040	0.0043	1	02/16/22 07:50	02/16/22 17:54	7439-96-5	
Potassium	**10.7**	mg/L	0.20	0.15	1	02/16/22 07:50	02/16/22 17:54	7440-09-7	
Sodium	**39.8**	mg/L	1.0	0.58	1	02/16/22 07:50	02/16/22 17:54	7440-23-5	
Calcium	**122**	mg/L	1.0	0.12	1	02/16/22 07:50	02/16/22 17:54	7440-70-2	
Magnesium	**29.8**	mg/L	0.050	0.012	1	02/16/22 07:50	02/16/22 17:54	7439-95-4	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00078	1	02/16/22 07:51	02/16/22 19:36	7440-36-0	
Arsenic	**0.0015J**	mg/L	0.0050	0.0011	1	02/16/22 07:51	02/16/22 19:36	7440-38-2	
Barium	**0.057**	mg/L	0.0050	0.00067	1	02/16/22 07:51	02/16/22 19:36	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	02/16/22 07:51	02/16/22 19:36	7440-41-7	
Boron	**0.034J**	mg/L	0.040	0.0086	1	02/16/22 07:51	02/16/22 19:36	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	02/16/22 07:51	02/16/22 19:36	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	02/16/22 07:51	02/16/22 19:36	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	02/16/22 07:51	02/16/22 19:36	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	02/16/22 07:51	02/16/22 19:36	7439-92-1	
Lithium	**0.0096J**	mg/L	0.030	0.00073	1	02/16/22 07:51	02/16/22 19:36	7439-93-2	
Molybdenum	**0.0017J**	mg/L	0.010	0.00074	1	02/16/22 07:51	02/16/22 19:36	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	02/16/22 07:51	02/16/22 19:36	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	02/16/22 07:51	02/16/22 19:36	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.00013	1	02/14/22 15:15	02/15/22 11:10	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**686**	mg/L	20.0	20.0	1		02/09/22 10:13		
2320B Alkalinity	Analytical Method: SM 2320B Pace Analytical Services - Minneapolis								
Alkalinity, Total as CaCO3	**133**	mg/L	5.0	1.8	1		02/10/22 14:46		
Alkalinity,Bicarbonate (CaCO3)	**133**	mg/L	5.0	1.8	1		02/10/22 14:46		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	1.8	1		02/10/22 14:46		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: BRANCH AP-BCD DELIN PIEZO
Pace Project No.: 92585979

Sample: PZ-51D **Lab ID: 92585979011** Collected: 02/03/22 16:15 Received: 02/04/22 16:06 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**15.2**	mg/L	1.0	0.60	1		02/11/22 01:54	16887-00-6	
Fluoride	**0.27**	mg/L	0.10	0.050	1		02/11/22 01:54	16984-48-8	
Sulfate	**339**	mg/L	7.0	3.5	7		02/11/22 08:06	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: BRANCH AP-BCD DELIN PIEZO
Pace Project No.: 92585979

Sample: PZ-57I **Lab ID: 92585979012** Collected: 02/04/22 08:54 Received: 02/04/22 16:06 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**CUSTOMER**				1		02/07/22 10:12		
pH	**5.28**	Std. Units			1		02/07/22 10:12		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Iron	**2.0**	mg/L	0.040	0.025	1	02/16/22 07:50	02/16/22 17:59	7439-89-6	
Manganese	**17.1**	mg/L	0.040	0.0043	1	02/16/22 07:50	02/16/22 17:59	7439-96-5	
Potassium	**5.0**	mg/L	0.20	0.15	1	02/16/22 07:50	02/16/22 17:59	7440-09-7	
Sodium	**18.4**	mg/L	1.0	0.58	1	02/16/22 07:50	02/16/22 17:59	7440-23-5	
Calcium	**67.6**	mg/L	1.0	0.12	1	02/16/22 07:50	02/16/22 17:59	7440-70-2	
Magnesium	**40.3**	mg/L	0.050	0.012	1	02/16/22 07:50	02/16/22 17:59	7439-95-4	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00078	1	02/16/22 07:51	02/16/22 19:42	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0011	1	02/16/22 07:51	02/16/22 19:42	7440-38-2	
Barium	**0.024**	mg/L	0.0050	0.00067	1	02/16/22 07:51	02/16/22 19:42	7440-39-3	
Beryllium	**0.00054**	mg/L	0.00050	0.000054	1	02/16/22 07:51	02/16/22 19:42	7440-41-7	
Boron	**0.51**	mg/L	0.20	0.043	5	02/16/22 07:51	02/17/22 10:34	7440-42-8	
Cadmium	**0.00072**	mg/L	0.00050	0.00011	1	02/16/22 07:51	02/16/22 19:42	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	02/16/22 07:51	02/16/22 19:42	7440-47-3	
Cobalt	**0.094**	mg/L	0.0050	0.00039	1	02/16/22 07:51	02/16/22 19:42	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	02/16/22 07:51	02/16/22 19:42	7439-92-1	
Lithium	**0.026J**	mg/L	0.030	0.00073	1	02/16/22 07:51	02/16/22 19:42	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	02/16/22 07:51	02/16/22 19:42	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	02/16/22 07:51	02/16/22 19:42	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	02/16/22 07:51	02/16/22 19:42	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.00013	1	02/14/22 15:15	02/15/22 11:13	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**630**	mg/L	20.0	20.0	1		02/09/22 18:02		
2320B Alkalinity	Analytical Method: SM 2320B Pace Analytical Services - Minneapolis								
Alkalinity, Total as CaCO3	**13.3**	mg/L	5.0	1.8	1		02/10/22 17:02		
Alkalinity,Bicarbonate (CaCO3)	**13.3**	mg/L	5.0	1.8	1		02/10/22 17:02		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	1.8	1		02/10/22 17:02		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: BRANCH AP-BCD DELIN PIEZO
Pace Project No.: 92585979

Sample: PZ-57I **Lab ID: 92585979012** Collected: 02/04/22 08:54 Received: 02/04/22 16:06 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**7.2**	mg/L	1.0	0.60	1		02/11/22 12:18	16887-00-6	
Fluoride	**0.096J**	mg/L	0.10	0.050	1		02/11/22 12:18	16984-48-8	
Sulfate	**336**	mg/L	8.0	4.0	8		02/11/22 23:38	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: BRANCH AP-BCD DELIN PIEZO
Pace Project No.: 92585979

Sample: PZ-63I **Lab ID: 92585979013** Collected: 02/04/22 10:15 Received: 02/04/22 16:06 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**CUSTOMER**				1		02/07/22 10:12		
pH	**5.89**	Std. Units			1		02/07/22 10:12		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Iron	**2.3**	mg/L	0.040	0.025	1	02/16/22 07:50	02/16/22 18:04	7439-89-6	
Manganese	**5.5**	mg/L	0.040	0.0043	1	02/16/22 07:50	02/16/22 18:04	7439-96-5	
Potassium	**8.9**	mg/L	0.20	0.15	1	02/16/22 07:50	02/16/22 18:04	7440-09-7	
Sodium	**16.2**	mg/L	1.0	0.58	1	02/16/22 07:50	02/16/22 18:04	7440-23-5	
Calcium	**42.2**	mg/L	1.0	0.12	1	02/16/22 07:50	02/16/22 18:04	7440-70-2	
Magnesium	**29.2**	mg/L	0.050	0.012	1	02/16/22 07:50	02/16/22 18:04	7439-95-4	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00078	1	02/16/22 07:51	02/16/22 19:48	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0011	1	02/16/22 07:51	02/16/22 19:48	7440-38-2	
Barium	**0.037**	mg/L	0.0050	0.00067	1	02/16/22 07:51	02/16/22 19:48	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	02/16/22 07:51	02/16/22 19:48	7440-41-7	
Boron	**0.67**	mg/L	0.20	0.043	5	02/16/22 07:51	02/17/22 10:40	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	02/16/22 07:51	02/16/22 19:48	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	02/16/22 07:51	02/16/22 19:48	7440-47-3	
Cobalt	**0.019**	mg/L	0.0050	0.00039	1	02/16/22 07:51	02/16/22 19:48	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	02/16/22 07:51	02/16/22 19:48	7439-92-1	
Lithium	**0.0070J**	mg/L	0.030	0.00073	1	02/16/22 07:51	02/16/22 19:48	7439-93-2	
Molybdenum	**0.00092J**	mg/L	0.010	0.00074	1	02/16/22 07:51	02/16/22 19:48	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	02/16/22 07:51	02/16/22 19:48	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	02/16/22 07:51	02/16/22 19:48	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.00013	1	02/14/22 15:15	02/15/22 11:16	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**403**	mg/L	10.0	10.0	1		02/09/22 18:02		
2320B Alkalinity	Analytical Method: SM 2320B Pace Analytical Services - Minneapolis								
Alkalinity, Total as CaCO3	**37.1**	mg/L	5.0	1.8	1		02/10/22 14:54		
Alkalinity,Bicarbonate (CaCO3)	**37.1**	mg/L	5.0	1.8	1		02/10/22 14:54		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	1.8	1		02/10/22 14:54		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: BRANCH AP-BCD DELIN PIEZO
Pace Project No.: 92585979

Sample: PZ-63I **Lab ID: 92585979013** Collected: 02/04/22 10:15 Received: 02/04/22 16:06 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**6.2**	mg/L	1.0	0.60	1		02/11/22 12:32	16887-00-6	
Fluoride	**0.14**	mg/L	0.10	0.050	1		02/11/22 12:32	16984-48-8	
Sulfate	**195**	mg/L	5.0	2.5	5		02/11/22 23:52	14808-79-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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ANALYTICAL RESULTS

Project: BRANCH AP-BCD DELIN PIEZO
Pace Project No.: 92585979

Sample: PZ-62I **Lab ID: 92585979014** Collected: 02/04/22 10:10 Received: 02/04/22 16:06 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**CUSTOMER**				1		02/07/22 10:12		
pH	**5.79**	Std. Units			1		02/07/22 10:12		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Iron	**3.7**	mg/L	0.040	0.025	1	02/16/22 07:50	02/16/22 18:09	7439-89-6	
Manganese	**24.8**	mg/L	0.040	0.0043	1	02/16/22 07:50	02/16/22 18:09	7439-96-5	
Potassium	**10.9**	mg/L	0.20	0.15	1	02/16/22 07:50	02/16/22 18:09	7440-09-7	
Sodium	**28.7**	mg/L	1.0	0.58	1	02/16/22 07:50	02/16/22 18:09	7440-23-5	
Calcium	**102**	mg/L	1.0	0.12	1	02/16/22 07:50	02/16/22 18:09	7440-70-2	
Magnesium	**54.1**	mg/L	0.050	0.012	1	02/16/22 07:50	02/16/22 18:09	7439-95-4	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00078	1	02/16/22 07:51	02/16/22 19:54	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0011	1	02/16/22 07:51	02/16/22 19:54	7440-38-2	
Barium	**0.058**	mg/L	0.0050	0.00067	1	02/16/22 07:51	02/16/22 19:54	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	02/16/22 07:51	02/16/22 19:54	7440-41-7	
Boron	**0.50**	mg/L	0.20	0.043	5	02/16/22 07:51	02/17/22 10:46	7440-42-8	
Cadmium	**0.00040J**	mg/L	0.00050	0.00011	1	02/16/22 07:51	02/16/22 19:54	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	02/16/22 07:51	02/16/22 19:54	7440-47-3	
Cobalt	**0.27**	mg/L	0.0050	0.00039	1	02/16/22 07:51	02/16/22 19:54	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	02/16/22 07:51	02/16/22 19:54	7439-92-1	
Lithium	**0.010J**	mg/L	0.030	0.00073	1	02/16/22 07:51	02/16/22 19:54	7439-93-2	
Molybdenum	**0.0011J**	mg/L	0.010	0.00074	1	02/16/22 07:51	02/16/22 19:54	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	02/16/22 07:51	02/16/22 19:54	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	02/16/22 07:51	02/16/22 19:54	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.00013	1	02/14/22 15:15	02/15/22 11:18	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**818**	mg/L	20.0	20.0	1		02/09/22 18:03		
2320B Alkalinity	Analytical Method: SM 2320B Pace Analytical Services - Minneapolis								
Alkalinity, Total as CaCO3	**40.9**	mg/L	5.0	1.8	1		02/10/22 15:04		
Alkalinity,Bicarbonate (CaCO3)	**40.9**	mg/L	5.0	1.8	1		02/10/22 15:04		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	1.8	1		02/10/22 15:04		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: BRANCH AP-BCD DELIN PIEZO
Pace Project No.: 92585979

Sample: PZ-62I **Lab ID: 92585979014** Collected: 02/04/22 10:10 Received: 02/04/22 16:06 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**9.8**	mg/L	1.0	0.60	1		02/11/22 12:46	16887-00-6	
Fluoride	**0.071J**	mg/L	0.10	0.050	1		02/11/22 12:46	16984-48-8	
Sulfate	**451**	mg/L	11.0	5.5	11		02/12/22 00:06	14808-79-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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ANALYTICAL RESULTS

Project: BRANCH AP-BCD DELIN PIEZO
Pace Project No.: 92585979

Sample: FB-3 **Lab ID: 92585979015** Collected: 02/03/22 11:10 Received: 02/04/22 16:06 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	ND	mg/L	1.0	0.12	1	02/16/22 07:50	02/16/22 18:13	7440-70-2	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00078	1	02/16/22 07:51	02/16/22 20:00	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0011	1	02/16/22 07:51	02/16/22 20:00	7440-38-2	
Barium	ND	mg/L	0.0050	0.00067	1	02/16/22 07:51	02/16/22 20:00	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	02/16/22 07:51	02/16/22 20:00	7440-41-7	
Boron	ND	mg/L	0.040	0.0086	1	02/16/22 07:51	02/16/22 20:00	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	02/16/22 07:51	02/16/22 20:00	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	02/16/22 07:51	02/16/22 20:00	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	02/16/22 07:51	02/16/22 20:00	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	02/16/22 07:51	02/16/22 20:00	7439-92-1	
Lithium	ND	mg/L	0.030	0.00073	1	02/16/22 07:51	02/16/22 20:00	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	02/16/22 07:51	02/16/22 20:00	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	02/16/22 07:51	02/16/22 20:00	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	02/16/22 07:51	02/16/22 20:00	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.00013	1	02/14/22 15:15	02/15/22 11:21	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**14.0**	mg/L	10.0	10.0	1		02/09/22 10:14		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	ND	mg/L	1.0	0.60	1		02/11/22 13:00	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		02/11/22 13:00	16984-48-8	
Sulfate	ND	mg/L	1.0	0.50	1		02/11/22 13:00	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: BRANCH AP-BCD DELIN PIEZO
Pace Project No.: 92585979

QC Batch: 678472
QC Batch Method: EPA 3010A
Analysis Method: EPA 6010D
Analysis Description: 6010D ATL
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92585979001, 92585979002, 92585979003, 92585979004, 92585979005, 92585979006, 92585979007, 92585979008, 92585979009, 92585979010, 92585979011, 92585979012, 92585979013, 92585979014, 92585979015

METHOD BLANK: 3550626 Matrix: Water
Associated Lab Samples: 92585979001, 92585979002, 92585979003, 92585979004, 92585979005, 92585979006, 92585979007, 92585979008, 92585979009, 92585979010, 92585979011, 92585979012, 92585979013, 92585979014, 92585979015

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium	mg/L	ND	1.0	0.12	02/16/22 16:27	
Hardness, Total(SM 2340B)	mg/L	ND	2.7	0.35	02/16/22 16:27	
Iron	mg/L	ND	0.040	0.025	02/16/22 16:27	
Magnesium	mg/L	ND	0.050	0.012	02/16/22 16:27	
Manganese	mg/L	ND	0.040	0.0043	02/16/22 16:27	
Potassium	mg/L	ND	0.20	0.15	02/16/22 16:27	
Sodium	mg/L	ND	1.0	0.58	02/16/22 16:27	

LABORATORY CONTROL SAMPLE: 3550627

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium	mg/L	1	1.0	101	80-120	
Hardness, Total(SM 2340B)	mg/L	6.6	7.1	107	80-120	
Iron	mg/L	1	1.1	111	80-120	
Magnesium	mg/L	1	1.1	111	80-120	
Manganese	mg/L	1	1.1	106	80-120	
Potassium	mg/L	1	1.0	105	80-120	
Sodium	mg/L	1	1.0	102	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3550995 3550996

Parameter	Units	92585979003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Calcium	mg/L	187	1	1	192	180	509	-680	75-125	6	20	M1
Hardness, Total(SM 2340B)	mg/L	963	6.6	6.6	987	936	369	-412	75-125	5	20	
Iron	mg/L	0.046	1	1	1.1	1.1	105	106	75-125	1	20	
Magnesium	mg/L	121	1	1	123	118	283	-250	75-125	4	20	M1
Manganese	mg/L	41.9	1	1	44.3	42.2	231	22	75-125	5	20	M1
Potassium	mg/L	10.9	1	1	12.2	11.5	128	56	75-125	6	20	M1
Sodium	mg/L	43.3	1	1	45.4	42.6	206	-73	75-125	6	20	M1

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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QUALITY CONTROL DATA

Project: BRANCH AP-BCD DELIN PIEZO
Pace Project No.: 92585979

QC Batch: 678313
QC Batch Method: EPA 3005A
Analysis Method: EPA 6020B
Analysis Description: 6020 MET
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92585979007, 92585979008, 92585979009

METHOD BLANK: 3549798 Matrix: Water
Associated Lab Samples: 92585979007, 92585979008, 92585979009

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	ND	0.0030	0.00078	02/15/22 18:59	
Arsenic	mg/L	ND	0.0050	0.0011	02/15/22 18:59	
Barium	mg/L	ND	0.0050	0.00067	02/15/22 18:59	
Beryllium	mg/L	ND	0.00050	0.000054	02/15/22 18:59	
Boron	mg/L	ND	0.040	0.0086	02/15/22 18:59	
Cadmium	mg/L	ND	0.00050	0.00011	02/15/22 18:59	
Chromium	mg/L	ND	0.0050	0.0011	02/15/22 18:59	
Cobalt	mg/L	ND	0.0050	0.00039	02/15/22 18:59	
Lead	mg/L	ND	0.0010	0.00089	02/15/22 18:59	
Lithium	mg/L	ND	0.030	0.00073	02/15/22 18:59	
Molybdenum	mg/L	ND	0.010	0.00074	02/15/22 18:59	
Selenium	mg/L	ND	0.0050	0.0014	02/15/22 18:59	
Thallium	mg/L	ND	0.0010	0.00018	02/15/22 18:59	

LABORATORY CONTROL SAMPLE: 3549799

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	104	80-120	
Barium	mg/L	0.1	0.10	104	80-120	
Beryllium	mg/L	0.1	0.10	103	80-120	
Boron	mg/L	1	1.0	101	80-120	
Cadmium	mg/L	0.1	0.10	103	80-120	
Chromium	mg/L	0.1	0.10	104	80-120	
Cobalt	mg/L	0.1	0.10	100	80-120	
Lead	mg/L	0.1	0.11	109	80-120	
Lithium	mg/L	0.1	0.10	101	80-120	
Molybdenum	mg/L	0.1	0.11	106	80-120	
Selenium	mg/L	0.1	0.10	104	80-120	
Thallium	mg/L	0.1	0.11	109	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3549800 3549801

Parameter	Units	92585977001 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	113	107	75-125	6	20	
Arsenic	mg/L	ND	0.1	0.1	0.10	0.099	105	99	75-125	6	20	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: BRANCH AP-BCD DELIN PIEZO
Pace Project No.: 92585979

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3549800 3549801

Parameter	Units	92585977001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Barium	mg/L	0.023	0.1	0.1	0.14	0.13	121	103	75-125	14	20	
Beryllium	mg/L	ND	0.1	0.1	0.097	0.092	97	92	75-125	5	20	
Boron	mg/L	1.1	1	1	2.2	2.1	106	98	75-125	4	20	
Cadmium	mg/L	ND	0.1	0.1	0.11	0.098	105	98	75-125	7	20	
Chromium	mg/L	ND	0.1	0.1	0.10	0.10	104	100	75-125	4	20	
Cobalt	mg/L	0.0027J	0.1	0.1	0.10	0.096	102	93	75-125	8	20	
Lead	mg/L	ND	0.1	0.1	0.10	0.096	101	96	75-125	5	20	
Lithium	mg/L	ND	0.1	0.1	0.098	0.093	98	93	75-125	5	20	
Molybdenum	mg/L	0.0011J	0.1	0.1	0.11	0.11	109	104	75-125	4	20	
Selenium	mg/L	ND	0.1	0.1	0.10	0.097	104	96	75-125	7	20	
Thallium	mg/L	ND	0.1	0.1	0.10	0.096	101	96	75-125	5	20	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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QUALITY CONTROL DATA

Project: BRANCH AP-BCD DELIN PIEZO
Pace Project No.: 92585979

QC Batch: 678476
QC Batch Method: EPA 3005A
Analysis Method: EPA 6020B
Analysis Description: 6020 MET
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92585979001, 92585979002, 92585979003, 92585979004, 92585979005, 92585979006, 92585979010, 92585979011, 92585979012, 92585979013, 92585979014, 92585979015

METHOD BLANK: 3550650 Matrix: Water
Associated Lab Samples: 92585979001, 92585979002, 92585979003, 92585979004, 92585979005, 92585979006, 92585979010, 92585979011, 92585979012, 92585979013, 92585979014, 92585979015

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	ND	0.0030	0.00078	02/16/22 18:13	
Arsenic	mg/L	ND	0.0050	0.0011	02/16/22 18:13	
Barium	mg/L	ND	0.0050	0.00067	02/16/22 18:13	
Beryllium	mg/L	ND	0.00050	0.000054	02/16/22 18:13	
Boron	mg/L	ND	0.040	0.0086	02/16/22 18:13	
Cadmium	mg/L	ND	0.00050	0.00011	02/16/22 18:13	
Chromium	mg/L	ND	0.0050	0.0011	02/16/22 18:13	
Cobalt	mg/L	ND	0.0050	0.00039	02/16/22 18:13	
Lead	mg/L	ND	0.0010	0.00089	02/16/22 18:13	
Lithium	mg/L	ND	0.030	0.00073	02/16/22 18:13	
Molybdenum	mg/L	ND	0.010	0.00074	02/16/22 18:13	
Selenium	mg/L	ND	0.0050	0.0014	02/16/22 18:13	
Thallium	mg/L	ND	0.0010	0.00018	02/16/22 18:13	

LABORATORY CONTROL SAMPLE: 3550651

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.1	0.12	117	80-120	
Arsenic	mg/L	0.1	0.10	101	80-120	
Barium	mg/L	0.1	0.11	106	80-120	
Beryllium	mg/L	0.1	0.11	106	80-120	
Boron	mg/L	1	1.1	106	80-120	
Cadmium	mg/L	0.1	0.10	101	80-120	
Chromium	mg/L	0.1	0.11	106	80-120	
Cobalt	mg/L	0.1	0.10	103	80-120	
Lead	mg/L	0.1	0.10	103	80-120	
Lithium	mg/L	0.1	0.11	111	80-120	
Molybdenum	mg/L	0.1	0.11	109	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: 3550652 3550653

Parameter	Units	92585979004 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	0.12	0.11	115	110	75-125	4	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: BRANCH AP-BCD DELIN PIEZO
Pace Project No.: 92585979

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3550652 3550653

Parameter	Units	92585979004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Arsenic	mg/L	ND	0.1	0.1	0.11	0.10	106	102	75-125	4	20	
Barium	mg/L	0.015	0.1	0.1	0.13	0.12	119	109	75-125	8	20	
Beryllium	mg/L	0.0015	0.1	0.1	0.098	0.095	97	94	75-125	3	20	
Boron	mg/L	0.32	1	1	1.3	1.3	98	96	75-125	1	20	
Cadmium	mg/L	0.00014J	0.1	0.1	0.096	0.098	96	98	75-125	1	20	
Chromium	mg/L	ND	0.1	0.1	0.10	0.10	103	101	75-125	2	20	
Cobalt	mg/L	0.51	0.1	0.1	0.63	0.64	116	132	75-125	2	20	M1
Lead	mg/L	ND	0.1	0.1	0.092	0.088	92	88	75-125	4	20	
Lithium	mg/L	0.011J	0.1	0.1	0.12	0.11	107	98	75-125	8	20	
Molybdenum	mg/L	ND	0.1	0.1	0.11	0.10	108	102	75-125	6	20	
Selenium	mg/L	0.0031J	0.1	0.1	0.12	0.11	112	105	75-125	7	20	
Thallium	mg/L	ND	0.1	0.1	0.095	0.092	95	92	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: BRANCH AP-BCD DELIN PIEZO
Pace Project No.: 92585979

QC Batch: 678089
QC Batch Method: EPA 7470A
Analysis Method: EPA 7470A
Analysis Description: 7470 Mercury
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92585979001, 92585979002, 92585979003, 92585979004, 92585979005

METHOD BLANK: 3548804 Matrix: Water
Associated Lab Samples: 92585979001, 92585979002, 92585979003, 92585979004, 92585979005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	ND	0.00020	0.00013	02/15/22 09:19	

LABORATORY CONTROL SAMPLE: 3548805

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: 3548806 3548807

Parameter	Units	92585977006 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	0.0025	101	98	75-125	2	20	

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

QUALITY CONTROL DATA

Project: BRANCH AP-BCD DELIN PIEZO
Pace Project No.: 92585979

QC Batch: 678090
QC Batch Method: EPA 7470A
Analysis Method: EPA 7470A
Analysis Description: 7470 Mercury
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92585979006, 92585979007, 92585979008, 92585979009, 92585979010, 92585979011, 92585979012, 92585979013, 92585979014, 92585979015

METHOD BLANK: 3548832 Matrix: Water
Associated Lab Samples: 92585979006, 92585979007, 92585979008, 92585979009, 92585979010, 92585979011, 92585979012, 92585979013, 92585979014, 92585979015

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	ND	0.00020	0.00013	02/15/22 10:35	

LABORATORY CONTROL SAMPLE: 3548833

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.0025	0.0029	115	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3548834 3548835

Parameter	Units	92585979006 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	101	98	75-125	4	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: BRANCH AP-BCD DELIN PIEZO
Pace Project No.: 92585979

QC Batch: 676565 Analysis Method: SM 2540C-2015
QC Batch Method: SM 2540C-2015 Analysis Description: 2540C Total Dissolved Solids
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92585979001, 92585979002, 92585979003, 92585979004, 92585979005, 92585979006

METHOD BLANK: 3541415 Matrix: Water
Associated Lab Samples: 92585979001, 92585979002, 92585979003, 92585979004, 92585979005, 92585979006

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	10.0	10.0	02/08/22 10:47	

LABORATORY CONTROL SAMPLE: 3541416

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	389	97	80-120	

SAMPLE DUPLICATE: 3541417

Parameter	Units	92585979001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	98.0	91.0	7	25	

SAMPLE DUPLICATE: 3541418

Parameter	Units	92586342006 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	608	616	1	25	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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(770)734-4200

QUALITY CONTROL DATA

Project: BRANCH AP-BCD DELIN PIEZO
Pace Project No.: 92585979

QC Batch: 676886 | Analysis Method: SM 2540C-2015
QC Batch Method: SM 2540C-2015 | Analysis Description: 2540C Total Dissolved Solids
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92585979007, 92585979008, 92585979009, 92585979010, 92585979011, 92585979015

METHOD BLANK: 3542886 Matrix: Water
Associated Lab Samples: 92585979007, 92585979008, 92585979009, 92585979010, 92585979011, 92585979015

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	10.0	10.0	02/09/22 10:12	

LABORATORY CONTROL SAMPLE: 3542887

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	374	94	80-120	

SAMPLE DUPLICATE: 3542888

Parameter	Units	92585920029 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	538	574	6	25	

SAMPLE DUPLICATE: 3542889

Parameter	Units	92585979010 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	1380	1350	2	25	

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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: BRANCH AP-BCD DELIN PIEZO
Pace Project No.: 92585979

QC Batch: 676887
QC Batch Method: SM 2540C-2015
Analysis Method: SM 2540C-2015
Analysis Description: 2540C Total Dissolved Solids
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92585979012, 92585979013, 92585979014

METHOD BLANK: 3542890 Matrix: Water
Associated Lab Samples: 92585979012, 92585979013, 92585979014

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	10.0	10.0	02/09/22 18:00	

LABORATORY CONTROL SAMPLE: 3542891

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	386	96	80-120	

SAMPLE DUPLICATE: 3542892

Parameter	Units	92585561016 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	ND	ND		25	

SAMPLE DUPLICATE: 3542893

Parameter	Units	92586685001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	1990	1860	7	25	

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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: BRANCH AP-BCD DELIN PIEZO
Pace Project No.: 92585979

QC Batch: 798119
QC Batch Method: SM 2320B
Analysis Method: SM 2320B
Analysis Description: 2320B Alkalinity
Laboratory: Pace Analytical Services - Minneapolis
Associated Lab Samples: 92585979007, 92585979008

METHOD BLANK: 4240829 Matrix: Water
Associated Lab Samples: 92585979007, 92585979008

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Alkalinity, Total as CaCO3	mg/L	ND	5.0	1.8	02/10/22 14:33	
Alkalinity,Bicarbonate (CaCO3)	mg/L	ND	5.0	1.8	02/10/22 14:33	
Alkalinity,Carbonate (CaCO3)	mg/L	ND	5.0	1.8	02/10/22 14:33	

LABORATORY CONTROL SAMPLE & LCSD: 4240830 4240831

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
Alkalinity, Total as CaCO3	mg/L	40	40.3	39.9	101	100	90-110	1	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4240832 4240833

Parameter	Units	92585727002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Alkalinity, Total as CaCO3	mg/L	2.8J	40	40	43.8	43.8	102	103	80-120	0	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4240834 4240835

Parameter	Units	10596422001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Alkalinity, Total as CaCO3	mg/L	29.9	40	40	69.2	69.5	98	99	80-120	0	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: BRANCH AP-BCD DELIN PIEZO
Pace Project No.: 92585979

QC Batch: 798120 | Analysis Method: SM 2320B
QC Batch Method: SM 2320B | Analysis Description: 2320B Alkalinity
Laboratory: Pace Analytical Services - Minneapolis
Associated Lab Samples: 92585979001, 92585979002, 92585979003, 92585979004, 92585979009, 92585979010, 92585979011, 92585979012, 92585979013, 92585979014

METHOD BLANK: 4240836 Matrix: Water
Associated Lab Samples: 92585979001, 92585979002, 92585979003, 92585979004, 92585979009, 92585979010, 92585979011, 92585979012, 92585979013, 92585979014

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Alkalinity, Total as CaCO3	mg/L	ND	5.0	1.8	02/10/22 14:25	
Alkalinity,Bicarbonate (CaCO3)	mg/L	ND	5.0	1.8	02/10/22 14:25	
Alkalinity,Carbonate (CaCO3)	mg/L	ND	5.0	1.8	02/10/22 14:25	

LABORATORY CONTROL SAMPLE & LCSD: 4240837 4240838

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
Alkalinity, Total as CaCO3	mg/L	40	40.3	40.3	101	101	90-110	0	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4240839 4240840

Parameter	Units	92585979009 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Alkalinity, Total as CaCO3	mg/L	3.2J	40	40	45.9	45.7	107	106	80-120	0	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4240841 4240842

Parameter	Units	10596592002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Alkalinity, Total as CaCO3	mg/L	16.2	40	40	58.1	58.3	105	105	80-120	0	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: BRANCH AP-BCD DELIN PIEZO
Pace Project No.: 92585979

QC Batch: 676994
QC Batch Method: SM 3500-Fe B-2011
Analysis Method: SM 3500-Fe B-2011
Analysis Description: Iron, Ferrous
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92585979007, 92585979008, 92585979009

METHOD BLANK: 3543126 Matrix: Water
Associated Lab Samples: 92585979007, 92585979008, 92585979009

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Iron, Ferrous	mg/L	ND	0.50	0.040	02/09/22 11:19	N2

LABORATORY CONTROL SAMPLE: 3543127

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Iron, Ferrous	mg/L	1.5	1.5	103	90-110	N2

SAMPLE DUPLICATE: 3543128

Parameter	Units	92584808011 Result	Dup Result	RPD	Max RPD	Qualifiers
Iron, Ferrous	mg/L	ND	0.22J		10	H3,N2

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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: BRANCH AP-BCD DELIN PIEZO
Pace Project No.: 92585979

QC Batch: 676918
QC Batch Method: SM 4500-S2D-2011
Analysis Method: SM 4500-S2D-2011
Analysis Description: 4500S2D Sulfide Water
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92585979007, 92585979008, 92585979009

METHOD BLANK: 3542979 Matrix: Water
Associated Lab Samples: 92585979007, 92585979008, 92585979009

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Sulfide	mg/L	ND	0.10	0.050	02/09/22 03:08	

LABORATORY CONTROL SAMPLE: 3542980

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Sulfide	mg/L	0.5	0.50	99	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3542981 3542982

Parameter	Units	92586721004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Sulfide	mg/L	ND	0.5	0.5	0.48	0.48	95	95	80-120	1	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3542983 3542984

Parameter	Units	92586721001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Sulfide	mg/L	ND	0.5	0.5	0.51	0.53	99	103	80-120	3	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: BRANCH AP-BCD DELIN PIEZO
Pace Project No.: 92585979

QC Batch: 676560
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
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92585979001, 92585979002, 92585979003, 92585979004, 92585979005, 92585979006

METHOD BLANK: 3541375 Matrix: Water
Associated Lab Samples: 92585979001, 92585979002, 92585979003, 92585979004, 92585979005, 92585979006

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.60	02/07/22 23:37	
Fluoride	mg/L	ND	0.10	0.050	02/07/22 23:37	
Sulfate	mg/L	ND	1.0	0.50	02/07/22 23:37	

LABORATORY CONTROL SAMPLE: 3541376

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	51.9	104	90-110	
Fluoride	mg/L	2.5	2.4	97	90-110	
Sulfate	mg/L	50	51.2	102	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3541377 3541378

Parameter	Units	92586448001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	12.0	50	50	64.1	64.0	104	104	90-110	0	10	
Fluoride	mg/L	ND	2.5	2.5	2.5	2.5	97	98	90-110	0	10	
Sulfate	mg/L	7.4	50	50	59.4	59.5	104	104	90-110	0	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3541379 3541380

Parameter	Units	92585977005 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	4.2	50	50	57.0	57.1	106	106	90-110	0	10	
Fluoride	mg/L	ND	2.5	2.5	2.5	2.5	98	100	90-110	2	10	
Sulfate	mg/L	1170	50	50	1160	1150	-14	-27	90-110	1	10	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: BRANCH AP-BCD DELIN PIEZO
Pace Project No.: 92585979

QC Batch: 677218
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
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92585979007, 92585979008, 92585979009, 92585979010, 92585979011

METHOD BLANK: 3544578 Matrix: Water
Associated Lab Samples: 92585979007, 92585979008, 92585979009, 92585979010, 92585979011

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.60	02/10/22 15:27	
Fluoride	mg/L	ND	0.10	0.050	02/10/22 15:27	
Sulfate	mg/L	ND	1.0	0.50	02/10/22 15:27	

LABORATORY CONTROL SAMPLE: 3544579

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	53.6	107	90-110	
Fluoride	mg/L	2.5	2.6	104	90-110	
Sulfate	mg/L	50	52.8	106	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3544580 3544581

Parameter	Units	92586778001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	61.7	50	50	110	110	96	97	90-110	0	10	
Fluoride	mg/L	ND	2.5	2.5	3.1	3.1	120	121	90-110	1	10	M1
Sulfate	mg/L	52.4	50	50	103	103	101	101	90-110	0	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3544582 3544583

Parameter	Units	92585920032 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	7.5	50	50	66.0	66.0	117	117	90-110	0	10	M1
Fluoride	mg/L	ND	2.5	2.5	2.8	2.9	113	114	90-110	1	10	M1
Sulfate	mg/L	65.0	50	50	114	114	98	97	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

QUALITY CONTROL DATA

Project: BRANCH AP-BCD DELIN PIEZO
Pace Project No.: 92585979

QC Batch: 677497
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
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92585979012, 92585979013, 92585979014, 92585979015

METHOD BLANK: 3545965 Matrix: Water
Associated Lab Samples: 92585979012, 92585979013, 92585979014, 92585979015

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.60	02/11/22 07:04	
Fluoride	mg/L	ND	0.10	0.050	02/11/22 07:04	
Sulfate	mg/L	ND	1.0	0.50	02/11/22 07:04	

LABORATORY CONTROL SAMPLE: 3545966

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	52.1	104	90-110	
Fluoride	mg/L	2.5	2.5	100	90-110	
Sulfate	mg/L	50	50.2	100	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3545967 3545968

Parameter	Units	92587247021 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	53.3	50	50	90.2	88.9	74	71	90-110	1	10	M1
Fluoride	mg/L	0.41	2.5	2.5	3.1	3.1	106	106	90-110	0	10	
Sulfate	mg/L	95.9	50	50	140	139	89	86	90-110	1	10	M1

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3545969 3545970

Parameter	Units	92587247031 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	73.8	50	50	106	107	65	67	90-110	1	10	M1
Fluoride	mg/L	1.1	2.5	2.5	3.7	3.8	106	108	90-110	2	10	
Sulfate	mg/L	141	50	50	179	180	77	79	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

QUALITY CONTROL DATA

Project: BRANCH AP-BCD DELIN PIEZO
Pace Project No.: 92585979

QC Batch: 678945
QC Batch Method: EPA 353.2 Rev 2.0 1993
Analysis Method: EPA 353.2 Rev 2.0 1993
Analysis Description: 353.2 Nitrate + Nitrite, preserved
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92585979007, 92585979008, 92585979009

METHOD BLANK: 3552861 Matrix: Water
Associated Lab Samples: 92585979007, 92585979008, 92585979009

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Nitrogen, NO2 plus NO3	mg/L	ND	0.040	0.017	02/18/22 09:25	

LABORATORY CONTROL SAMPLE: 3552862

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, NO2 plus NO3	mg/L	2.5	2.5	100	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3552863 3552864

Parameter	Units	92585013023 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Nitrogen, NO2 plus NO3	mg/L	ND	2.5	2.5	2.3	2.3	91	90	90-110	1	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3552865 3552866

Parameter	Units	92585013024 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Nitrogen, NO2 plus NO3	mg/L	0.16	2.5	2.5	2.6	2.5	96	95	90-110	1	10	

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

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: BRANCH AP-BCD DELIN PIEZO
Pace Project No.: 92585979

QC Batch: 799039
QC Batch Method: SM 5310B
Analysis Method: SM 5310B
Analysis Description: 5310B Dissolved Organic Carbon
Laboratory: Pace Analytical Services - Ormond Beach
Associated Lab Samples: 92585979007, 92585979008, 92585979009

METHOD BLANK: 4387547 Matrix: Water
Associated Lab Samples: 92585979007, 92585979008, 92585979009

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Dissolved Organic Carbon	mg/L	ND	1.0	0.50	02/10/22 17:39	

LABORATORY CONTROL SAMPLE: 4387548

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Dissolved Organic Carbon	mg/L	20	18.6	93	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4387551 4387552

Parameter	Units	92585979009 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Dissolved Organic Carbon	mg/L	0.57 I	20	20	17.8	18.9	86	92	80-120	6	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4387553 4387554

Parameter	Units	92585464001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Dissolved Organic Carbon	mg/L	1.4	20	20	19.1	19.2	88	89	80-120	0	20	

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

REPORT OF LABORATORY ANALYSIS

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

QUALIFIERS

Project: BRANCH AP-BCD DELIN PIEZO
Pace Project No.: 92585979

DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

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

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

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

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

Acid preservation may not be appropriate for 2 Chloroethylvinyl ether.

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

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

Reported results are not rounded until the final step prior to reporting. Therefore, calculated parameters that are typically reported as "Total" may vary slightly from the sum of the reported component parameters.

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

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

D3	Sample was diluted due to the presence of high levels of non-target analytes or other matrix interference.
H3	Sample was received or analysis requested beyond the recognized method holding time.
M1	Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.
N2	The lab does not hold NELAC/TNI accreditation for this parameter but other accreditations/certifications may apply. A complete list of accreditations/certifications is available upon request.

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

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: BRANCH AP-BCD DELIN PIEZO
Pace Project No.: 92585979

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92585979001	**PZ-51S**				
92585979002	**PZ-44**				
92585979003	**PZ-51I**				
92585979004	**PZ-61I**				
92585979007	**PZ-58I**				
92585979008	**PZ-59I**				
92585979009	**PZ-60I**				
92585979010	**PZ-50D**				
92585979011	**PZ-51D**				
92585979012	**PZ-57I**				
92585979013	**PZ-63I**				
92585979014	**PZ-62I**				
92585979001	**PZ-51S**	EPA 3010A	678472	EPA 6010D	678669
92585979002	**PZ-44**	EPA 3010A	678472	EPA 6010D	678669
92585979003	**PZ-51I**	EPA 3010A	678472	EPA 6010D	678669
92585979004	**PZ-61I**	EPA 3010A	678472	EPA 6010D	678669
92585979005	**FB-2**	EPA 3010A	678472	EPA 6010D	678669
92585979006	**EB-2**	EPA 3010A	678472	EPA 6010D	678669
92585979007	**PZ-58I**	EPA 3010A	678472	EPA 6010D	678669
92585979008	**PZ-59I**	EPA 3010A	678472	EPA 6010D	678669
92585979009	**PZ-60I**	EPA 3010A	678472	EPA 6010D	678669
92585979010	**PZ-50D**	EPA 3010A	678472	EPA 6010D	678669
92585979011	**PZ-51D**	EPA 3010A	678472	EPA 6010D	678669
92585979012	**PZ-57I**	EPA 3010A	678472	EPA 6010D	678669
92585979013	**PZ-63I**	EPA 3010A	678472	EPA 6010D	678669
92585979014	**PZ-62I**	EPA 3010A	678472	EPA 6010D	678669
92585979015	**FB-3**	EPA 3010A	678472	EPA 6010D	678669
92585979001	**PZ-51S**	EPA 3005A	678476	EPA 6020B	678683
92585979002	**PZ-44**	EPA 3005A	678476	EPA 6020B	678683
92585979003	**PZ-51I**	EPA 3005A	678476	EPA 6020B	678683
92585979004	**PZ-61I**	EPA 3005A	678476	EPA 6020B	678683
92585979005	**FB-2**	EPA 3005A	678476	EPA 6020B	678683
92585979006	**EB-2**	EPA 3005A	678476	EPA 6020B	678683
92585979007	**PZ-58I**	EPA 3005A	678313	EPA 6020B	678442
92585979008	**PZ-59I**	EPA 3005A	678313	EPA 6020B	678442
92585979009	**PZ-60I**	EPA 3005A	678313	EPA 6020B	678442
92585979010	**PZ-50D**	EPA 3005A	678476	EPA 6020B	678683
92585979011	**PZ-51D**	EPA 3005A	678476	EPA 6020B	678683
92585979012	**PZ-57I**	EPA 3005A	678476	EPA 6020B	678683
92585979013	**PZ-63I**	EPA 3005A	678476	EPA 6020B	678683
92585979014	**PZ-62I**	EPA 3005A	678476	EPA 6020B	678683
92585979015	**FB-3**	EPA 3005A	678476	EPA 6020B	678683
92585979001	**PZ-51S**	EPA 7470A	678089	EPA 7470A	678299
92585979002	**PZ-44**	EPA 7470A	678089	EPA 7470A	678299
92585979003	**PZ-51I**	EPA 7470A	678089	EPA 7470A	678299
92585979004	**PZ-61I**	EPA 7470A	678089	EPA 7470A	678299

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

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: BRANCH AP-BCD DELIN PIEZO
Pace Project No.: 92585979

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92585979005	**FB-2**	EPA 7470A	678089	EPA 7470A	678299
92585979006	**EB-2**	EPA 7470A	678090	EPA 7470A	678300
92585979007	**PZ-58I**	EPA 7470A	678090	EPA 7470A	678300
92585979008	**PZ-59I**	EPA 7470A	678090	EPA 7470A	678300
92585979009	**PZ-60I**	EPA 7470A	678090	EPA 7470A	678300
92585979010	**PZ-50D**	EPA 7470A	678090	EPA 7470A	678300
92585979011	**PZ-51D**	EPA 7470A	678090	EPA 7470A	678300
92585979012	**PZ-57I**	EPA 7470A	678090	EPA 7470A	678300
92585979013	**PZ-63I**	EPA 7470A	678090	EPA 7470A	678300
92585979014	**PZ-62I**	EPA 7470A	678090	EPA 7470A	678300
92585979015	**FB-3**	EPA 7470A	678090	EPA 7470A	678300
92585979001	**PZ-51S**	SM 2540C-2015	676565		
92585979002	**PZ-44**	SM 2540C-2015	676565		
92585979003	**PZ-51I**	SM 2540C-2015	676565		
92585979004	**PZ-61I**	SM 2540C-2015	676565		
92585979005	**FB-2**	SM 2540C-2015	676565		
92585979006	**EB-2**	SM 2540C-2015	676565		
92585979007	**PZ-58I**	SM 2540C-2015	676886		
92585979008	**PZ-59I**	SM 2540C-2015	676886		
92585979009	**PZ-60I**	SM 2540C-2015	676886		
92585979010	**PZ-50D**	SM 2540C-2015	676886		
92585979011	**PZ-51D**	SM 2540C-2015	676886		
92585979012	**PZ-57I**	SM 2540C-2015	676887		
92585979013	**PZ-63I**	SM 2540C-2015	676887		
92585979014	**PZ-62I**	SM 2540C-2015	676887		
92585979015	**FB-3**	SM 2540C-2015	676886		
92585979001	**PZ-51S**	SM 2320B	798120		
92585979002	**PZ-44**	SM 2320B	798120		
92585979003	**PZ-51I**	SM 2320B	798120		
92585979004	**PZ-61I**	SM 2320B	798120		
92585979007	**PZ-58I**	SM 2320B	798119		
92585979008	**PZ-59I**	SM 2320B	798119		
92585979009	**PZ-60I**	SM 2320B	798120		
92585979010	**PZ-50D**	SM 2320B	798120		
92585979011	**PZ-51D**	SM 2320B	798120		
92585979012	**PZ-57I**	SM 2320B	798120		
92585979013	**PZ-63I**	SM 2320B	798120		
92585979014	**PZ-62I**	SM 2320B	798120		
92585979007	**PZ-58I**	SM 3500-Fe D#4	679361		
92585979008	**PZ-59I**	SM 3500-Fe D#4	679361		
92585979009	**PZ-60I**	SM 3500-Fe D#4	679361		
92585979007	**PZ-58I**	SM 3500-Fe B-2011	676994		
92585979008	**PZ-59I**	SM 3500-Fe B-2011	676994		
92585979009	**PZ-60I**	SM 3500-Fe B-2011	676994		

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: BRANCH AP-BCD DELIN PIEZO
Pace Project No.: 92585979

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92585979007	**PZ-58I**	SM 4500-S2D-2011	676918		
92585979008	**PZ-59I**	SM 4500-S2D-2011	676918		
92585979009	**PZ-60I**	SM 4500-S2D-2011	676918		
92585979001	**PZ-51S**	EPA 300.0 Rev 2.1 1993	676560		
92585979002	**PZ-44**	EPA 300.0 Rev 2.1 1993	676560		
92585979003	**PZ-51I**	EPA 300.0 Rev 2.1 1993	676560		
92585979004	**PZ-61I**	EPA 300.0 Rev 2.1 1993	676560		
92585979005	**FB-2**	EPA 300.0 Rev 2.1 1993	676560		
92585979006	**EB-2**	EPA 300.0 Rev 2.1 1993	676560		
92585979007	**PZ-58I**	EPA 300.0 Rev 2.1 1993	677218		
92585979008	**PZ-59I**	EPA 300.0 Rev 2.1 1993	677218		
92585979009	**PZ-60I**	EPA 300.0 Rev 2.1 1993	677218		
92585979010	**PZ-50D**	EPA 300.0 Rev 2.1 1993	677218		
92585979011	**PZ-51D**	EPA 300.0 Rev 2.1 1993	677218		
92585979012	**PZ-57I**	EPA 300.0 Rev 2.1 1993	677497		
92585979013	**PZ-63I**	EPA 300.0 Rev 2.1 1993	677497		
92585979014	**PZ-62I**	EPA 300.0 Rev 2.1 1993	677497		
92585979015	**FB-3**	EPA 300.0 Rev 2.1 1993	677497		
92585979007	**PZ-58I**	EPA 353.2 Rev 2.0 1993	678945		
92585979008	**PZ-59I**	EPA 353.2 Rev 2.0 1993	678945		
92585979009	**PZ-60I**	EPA 353.2 Rev 2.0 1993	678945		
92585979007	**PZ-58I**	SM 5310B	799039		
92585979008	**PZ-59I**	SM 5310B	799039		
92585979009	**PZ-60I**	SM 5310B	799039		

Pace Analytical

Document Name: Sample Condition Upon Receipt (SCUR)
Document No.: F-CAR-CS-033-Rev.08
Document Revised: November 15, 2021
Page 1 of 2
Issuing Authority: Pace Carolinas Quality Office

Laboratory receiving samples:
Asheville ☐ Eden ☐ Greenwood ☐ Huntersville ☐ Raleigh ☐ Mechanicsville ☐ Atlanta ☒ Kernersville ☐

Sample Condition Upon Receipt | Client Name:
Project #: **WO# : 92585979**

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

Custody Seal Present? ☐ Yes ☐ No Seals Intact? ☐ Yes ☐ No

Date/Initials Person Examining Contents:

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

Biological Tissue Frozen? ☐ Yes ☐ No ☒ N/A

Thermometer: ☐ IR Gun ID:

Type of Ice: ☒ Wet ☐ Blue ☐ None

Correction Factor:
Cooler Temp: Add/Subtract (°C):

Temp should be above freezing to 6°C
☐ Samples out of temp criteria. Samples on ice, cooling process has begun

Cooler Temp Corrected (°C):
USDA Regulated Soil (☐ N/A, water sample)

Did samples originate in a quarantine zone within the United States: CA, NY, or SC (check maps)? ☐ Yes ☐ No

Did samples originate from a foreign source (internationally, including Hawaii and Puerto Rico)? ☐ Yes ☐ No

				Comments/Discrepancy
Chain of Custody Present?	☒ Yes	☐ No	☐ N/A	1.
Samples Arrived within Hold Time?	☒ Yes	☐ No	☐ N/A	2.
Short Hold Time Analysis (<72 hr)?	☐ Yes	☒ No	☐ N/A	3.
Rush Turn Around Time Requested?	☐ Yes	☒ No	☐ N/A	4.
Sufficient Volume?	☒ Yes	☐ No	☐ N/A	5.
Correct Containers Used?	☒ Yes	☐ No	☐ N/A	6.
-Pace Containers Used?	☒ Yes	☐ No	☐ N/A	
Containers Intact?	☒ Yes	☐ No	☐ N/A	7.
Dissolved analysis: Samples Field Filtered?	☐ Yes	☐ No	☒ N/A	8.
Sample Labels Match COC?	☒ Yes	☐ No	☐ N/A	9.
-Includes Date/Time/ID/Analysis Matrix:				
Headspace in VOA Vials (>5-6mm)?	☐ Yes	☐ No	☒ N/A	10.
Trip Blank Present?	☐ Yes	☐ No	☒ N/A	11.
Trip Blank Custody Seals Present?	☐ Yes	☐ No	☒ N/A	

COMMENTS/SAMPLE DISCREPANCY

Field Data Required? ☐ Yes ☐ No

Lot ID of split containers:

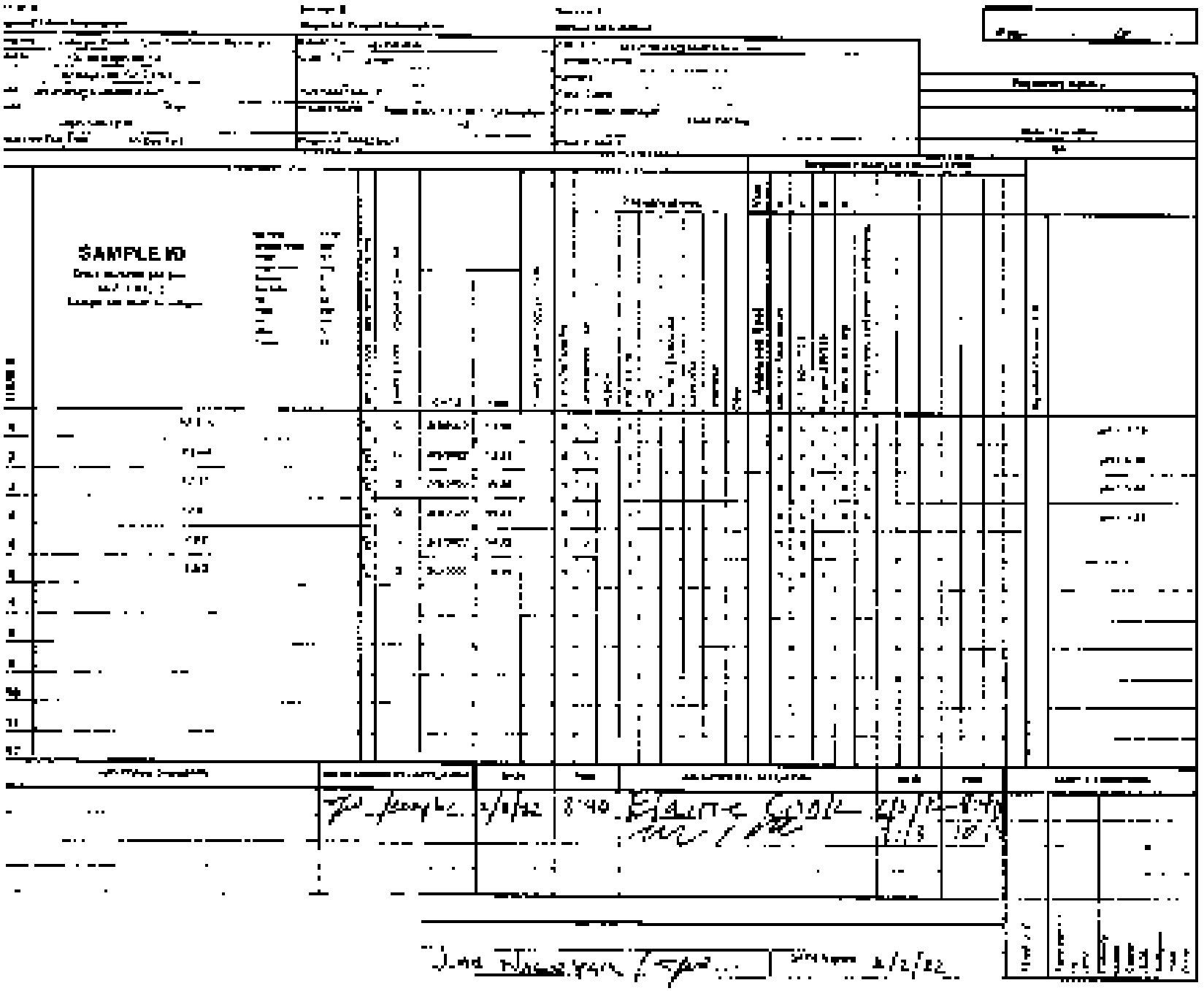
CLIENT NOTIFICATION/RESOLUTION

Person contacted: Date/Time:

Project Manager SCURF Review: Date:

Project Manager SRF Review: Date:

CHAIN-OF-CUSTODY / Analytical Request Document



Pace Analytical

Document Name: Sample Condition Upon Receipt (SCUR)

Document No.:

Document Revised: November 15, 2021

Page 1 of 2

Issuing Authority: Pace Carolinas Quality Office

Laboratory receiving samples:

Asheville ☐ Eden ☐ Greenwood ☐ Huntersville ☐ Raleigh ☐ Mechanicsville ☐ Atlanta ☑ Kernersville ☐

Client Name:

Project #:

WO# : 92585979

PM: Due Date: 02/17/22

CLIENT: GA-GA Power

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

Custody Seal Present? ☐ Yes ☑ No Seals Intact? ☐ Yes ☐ No

Date/Initials Person Examining Contents:

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

Biological Tissue Frozen? ☐ Yes ☐ No ☑ N/A

Thermometer: ☐ IR Gun ID:

Type of Ice: ☑ Wet ☐ Blue ☐ None

Correction Factor:

Cooler Temp: Add/Subtract (°C):

Temp should be above freezing to 6°C

☐ Samples out of temp criteria. Samples on ice, cooling process has begun

Cooler Temp Corrected (°C):

USDA Regulated Soil (☐ N/A, water sample)

Did samples originate in a quarantine zone within the United States: CA, NY, or SC (check maps)? ☐ Yes ☐ No

Did samples originate from a foreign source (internationally, including Hawaii and Puerto Rico)? ☐ Yes ☐ No

					Comments/Discrepancy
Chain of Custody Present?	☑ Yes	☐ No	☐ N/A	1.	
Samples Arrived within Hold Time?	☑ Yes	☐ No	☐ N/A	2.	
Short Hold Time Analysis (<72 hr)?	☐ Yes	☑ No	☐ N/A	3.	
Rush Turn Around Time Requested?	☐ Yes	☑ No	☐ N/A	4.	
Sufficient Volume?	☑ Yes	☐ No	☐ N/A	5.	
Correct Containers Used?	☑ Yes	☐ No	☐ N/A	6.	
Pace Containers Used?	☑ Yes	☐ No	☐ N/A		
Containers Intact?	☑ Yes	☐ No	☐ N/A	7.	
Dissolved Analysis: Samples Field Filtered?	☐ Yes	☐ No	☑ N/A	8.	
Sample Labels Match COC?	☑ Yes	☐ No	☐ N/A	9.	
Includes Date/Time/ID/Analysis Matrix:					
Headspace in VOA Vials (>5-6mm)?	☐ Yes	☐ No	☑ N/A	10.	
Trip Blank Present?	☐ Yes	☐ No	☑ N/A	11.	
Trip Blank Custody Seals Present?	☐ Yes	☐ No	☑ N/A		

COMMENTS/SAMPLE DISCREPANCY

Field Data Required? ☐ Yes ☐ No

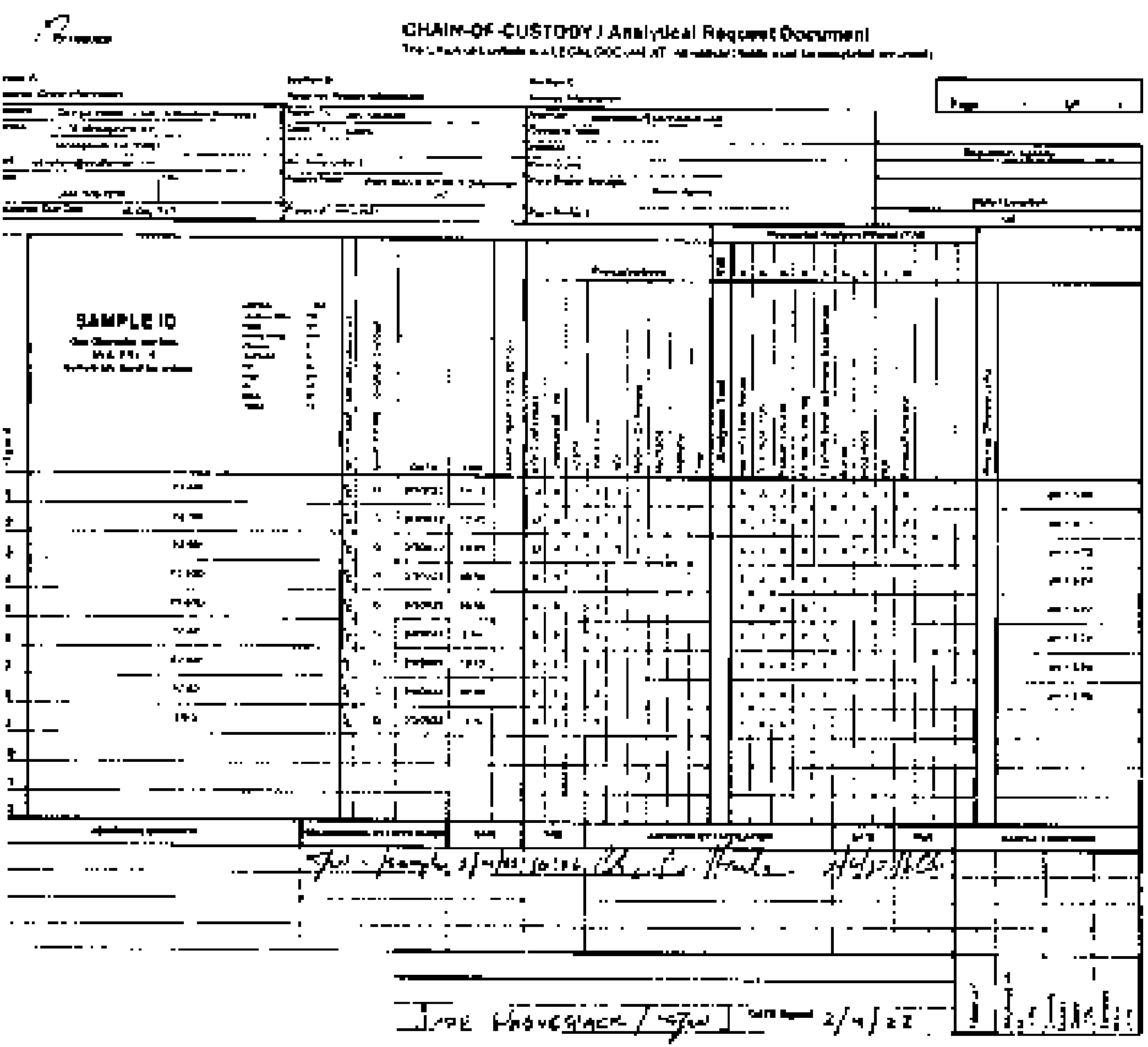
Lot ID of split containers:

CLIENT NOTIFICATION/RESOLUTION

Person contacted: Date/Time:

Project Manager SCURF Review: Date:

Project Manager SRF Review: Date:


CHAIN-OF-CUSTODY / Analytical Request Document
SAMPLE ID

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

March 04, 2022

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

RE: Project: BRANCH AP-BCD RAD
Pace Project No.: 92585970

Dear Joju Abraham:

Enclosed are the analytical results for sample(s) received by the laboratory between February 03, 2022 and February 04, 2022. 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,

Nicole D'Oleo
nicole.d'oleo@pacelabs.com
(704)875-9092
Project Manager

Enclosures

cc: Anna Bottum, ERM
Andrea Brazell, ERM
Daniela Herrera, Golder
Ben Hodges, Georgia Power
Jimmy Jones, Golder Associates Inc.
Kristen Jurinko
Julie Lehrman, Golder Associates Inc.
Ms. Lauren Petty, Southern Company
Carolyn Powrozek, Golder
Dawn Prell, Golder Associates Inc.
Tim Richards, Golder Associates - Atlanta
Lacy Smith, ERM
Brian Steele, Golder
Caitlin Tillema, ERM
Christine Weaver, ERM

REPORT OF LABORATORY ANALYSIS

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

CERTIFICATIONS

Project: BRANCH AP-BCD RAD
Pace Project No.: 92585970

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 #: 460198
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: BRANCH AP-BCD RAD
Pace Project No.: 92585970

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92585970001	**BRGWC-25I**	Water	02/02/22 14:44	02/03/22 10:35
92585970002	**BRGWC-30I**	Water	02/02/22 12:30	02/03/22 10:35
92585970003	**BRGWC-32S**	Water	02/02/22 14:55	02/03/22 10:35
92585970004	**BRGWC-45**	Water	02/02/22 10:42	02/03/22 10:35
92585970005	**BRGWC-47**	Water	02/02/22 09:40	02/03/22 10:35
92585970006	**BRGWC-52I**	Water	02/02/22 13:34	02/03/22 10:35
92585970007	**DUP-2**	Water	02/02/22 00:00	02/03/22 10:35
92585970008	**BRGWC-50**	Water	02/03/22 11:48	02/04/22 16:06
92585970009	**BRGWC-27I**	Water	02/04/22 08:50	02/04/22 16:06
92585970010	**BRGWC-29I**	Water	02/03/22 17:00	02/04/22 16:06
92585970011	**DUP-3**	Water	02/03/22 00:00	02/04/22 16:06

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SAMPLE ANALYTE COUNT

Project: BRANCH AP-BCD RAD
Pace Project No.: 92585970

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92585970001	**BRGWC-25I**	EPA 9315	JC2	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
92585970002	**BRGWC-30I**	EPA 9315	JC2	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
92585970003	**BRGWC-32S**	EPA 9315	JC2	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
92585970004	**BRGWC-45**	EPA 9315	JC2	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
92585970005	**BRGWC-47**	EPA 9315	JC2	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
92585970006	**BRGWC-52I**	EPA 9315	JC2	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
92585970007	**DUP-2**	EPA 9315	JC2	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
92585970008	**BRGWC-50**	EPA 9315	JC2	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
92585970009	**BRGWC-27I**	EPA 9315	JC2	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
92585970010	**BRGWC-29I**	EPA 9315	JC2	1	PASI-PA
		EPA 9320	JSM	1	PASI-PA
92585970011	**DUP-3**	EPA 9315	JC2	1	PASI-PA
		EPA 9320	JSM	1	PASI-PA

PASI-PA = Pace Analytical Services - Greensburg

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SUMMARY OF DETECTION

Project: BRANCH AP-BCD RAD
Pace Project No.: 92585970

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92585970001	**BRGWC-25I**					
EPA 9315	Radium-226	0.213 ± 0.163 (0.284) C:87% T:NA	pCi/L		02/23/22 09:00	
EPA 9320	Radium-228	0.427 ± 0.394 (0.804) C:75% T:83%	pCi/L		02/21/22 12:17	
92585970002	**BRGWC-30I**					
EPA 9315	Radium-226	0.237 ± 0.156 (0.238) C:95% T:NA	pCi/L		02/23/22 09:00	
EPA 9320	Radium-228	0.974 ± 0.564 (1.05) C:77% T:95%	pCi/L		02/21/22 15:39	
92585970003	**BRGWC-32S**					
EPA 9315	Radium-226	0.0831 ± 0.107 (0.220) C:95% T:NA	pCi/L		02/23/22 09:00	
EPA 9320	Radium-228	-0.0566 ± 0.633 (1.49) C:53% T:89%	pCi/L		02/21/22 15:39	
92585970004	**BRGWC-45**					
EPA 9315	Radium-226	0.0922 ± 0.115 (0.231) C:85% T:NA	pCi/L		02/23/22 09:00	
EPA 9320	Radium-228	0.127 ± 0.474 (1.07) C:76% T:87%	pCi/L		02/21/22 15:39	
92585970005	**BRGWC-47**					
EPA 9315	Radium-226	0.227 ± 0.165 (0.264) C:77% T:NA	pCi/L		02/23/22 09:00	
EPA 9320	Radium-228	-0.0821 ± 0.506 (1.19) C:76% T:81%	pCi/L		02/21/22 15:39	

REPORT OF LABORATORY ANALYSIS

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SUMMARY OF DETECTION

Project: BRANCH AP-BCD RAD
Pace Project No.: 92585970

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92585970006	**BRGWC-52I**					
EPA 9315	Radium-226	0.440 ± 0.223 (0.318) C:85% T:NA	pCi/L		02/23/22 09:00	
EPA 9320	Radium-228	1.89 ± 0.793 (1.29) C:77% T:75%	pCi/L		02/21/22 15:40	
92585970007	**DUP-2**					
EPA 9315	Radium-226	0.252 ± 0.164 (0.252) C:94% T:NA	pCi/L		02/23/22 09:00	
EPA 9320	Radium-228	-0.118 ± 0.474 (1.12) C:76% T:91%	pCi/L		02/21/22 15:40	
92585970008	**BRGWC-50**					
EPA 9315	Radium-226	0.262 ± 0.161 (0.243) C:92% T:NA	pCi/L		02/23/22 09:00	
EPA 9320	Radium-228	0.883 ± 0.422 (0.722) C:76% T:90%	pCi/L		02/21/22 15:40	
92585970009	**BRGWC-27I**					
EPA 9315	Radium-226	0.209 ± 0.164 (0.282) C:79% T:NA	pCi/L		02/23/22 09:00	
EPA 9320	Radium-228	0.126 ± 0.377 (0.845) C:79% T:83%	pCi/L		02/21/22 15:40	
92585970010	**BRGWC-29I**					
EPA 9315	Radium-226	0.244 ± 0.144 (0.202) C:94% T:NA	pCi/L		02/23/22 11:02	
EPA 9320	Radium-228	0.554 ± 0.398 (0.776) C:78% T:88%	pCi/L		02/21/22 15:42	

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SUMMARY OF DETECTION

Project: BRANCH AP-BCD RAD
Pace Project No.: 92585970

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92585970011	**DUP-3**					
EPA 9315	Radium-226	0.204 ± 0.155 (0.275) C:88% T:NA	pCi/L		02/23/22 11:02	
EPA 9320	Radium-228	0.661 ± 0.401 (0.747) C:75% T:90%	pCi/L		02/21/22 15:42	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: BRANCH AP-BCD RAD
Pace Project No.: 92585970

Sample: BRGWC-25I **Lab ID: 92585970001** Collected: 02/02/22 14:44 Received: 02/03/22 10:35 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	**0.213 ± 0.163 (0.284) C:87% T:NA**	pCi/L	02/23/22 09:00	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.427 ± 0.394 (0.804) C:75% T:83%**	pCi/L	02/21/22 12:17	15262-20-1	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: BRANCH AP-BCD RAD
Pace Project No.: 92585970

Sample: BRGWC-30I **Lab ID: 92585970002** Collected: 02/02/22 12:30 Received: 02/03/22 10:35 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	**0.237 ± 0.156 (0.238) C:95% T:NA**	pCi/L	02/23/22 09:00	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.974 ± 0.564 (1.05) C:77% T:95%**	pCi/L	02/21/22 15:39	15262-20-1	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: BRANCH AP-BCD RAD
Pace Project No.: 92585970

Sample: BRGWC-32S **Lab ID: 92585970003** Collected: 02/02/22 14:55 Received: 02/03/22 10:35 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	**0.0831 ± 0.107 (0.220) C:95% T:NA**	pCi/L	02/23/22 09:00	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**-0.0566 ± 0.633 (1.49) C:53% T:89%**	pCi/L	02/21/22 15:39	15262-20-1	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: BRANCH AP-BCD RAD
Pace Project No.: 92585970

Sample: BRGWC-45 **Lab ID: 92585970004** Collected: 02/02/22 10:42 Received: 02/03/22 10:35 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	**0.0922 ± 0.115 (0.231) C:85% T:NA**	pCi/L	02/23/22 09:00	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.127 ± 0.474 (1.07) C:76% T:87%**	pCi/L	02/21/22 15:39	15262-20-1	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: BRANCH AP-BCD RAD
Pace Project No.: 92585970

Sample: BRGWC-47 **Lab ID: 92585970005** Collected: 02/02/22 09:40 Received: 02/03/22 10:35 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	**0.227 ± 0.165 (0.264) C:77% T:NA**	pCi/L	02/23/22 09:00	13982-63-3	
		Pace Analytical Services - Greensburg				
Radium-228	EPA 9320	**-0.0821 ± 0.506 (1.19) C:76% T:81%**	pCi/L	02/21/22 15:39	15262-20-1	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: BRANCH AP-BCD RAD
Pace Project No.: 92585970

Sample: BRGWC-52I **Lab ID: 92585970006** Collected: 02/02/22 13:34 Received: 02/03/22 10:35 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	**0.440 ± 0.223 (0.318) C:85% T:NA**	pCi/L	02/23/22 09:00	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**1.89 ± 0.793 (1.29) C:77% T:75%**	pCi/L	02/21/22 15:40	15262-20-1	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: BRANCH AP-BCD RAD
Pace Project No.: 92585970

Sample: DUP-2 **Lab ID: 92585970007** Collected: 02/02/22 00:00 Received: 02/03/22 10:35 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	**0.252 ± 0.164 (0.252) C:94% T:NA**	pCi/L	02/23/22 09:00	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**-0.118 ± 0.474 (1.12) C:76% T:91%**	pCi/L	02/21/22 15:40	15262-20-1	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: BRANCH AP-BCD RAD
Pace Project No.: 92585970

Sample: BRGWC-50 **Lab ID: 92585970008** Collected: 02/03/22 11:48 Received: 02/04/22 16:06 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	**0.262 ± 0.161 (0.243) C:92% T:NA**	pCi/L	02/23/22 09:00	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.883 ± 0.422 (0.722) C:76% T:90%**	pCi/L	02/21/22 15:40	15262-20-1	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: BRANCH AP-BCD RAD
Pace Project No.: 92585970

Sample: BRGWC-27I **Lab ID: 92585970009** Collected: 02/04/22 08:50 Received: 02/04/22 16:06 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	**0.209 ± 0.164 (0.282) C:79% T:NA**	pCi/L	02/23/22 09:00	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.126 ± 0.377 (0.845) C:79% T:83%**	pCi/L	02/21/22 15:40	15262-20-1	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: BRANCH AP-BCD RAD
Pace Project No.: 92585970

Sample: BRGWC-29I **Lab ID: 92585970010** Collected: 02/03/22 17:00 Received: 02/04/22 16:06 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	**0.244 ± 0.144 (0.202) C:94% T:NA**	pCi/L	02/23/22 11:02	13982-63-3	
		Pace Analytical Services - Greensburg				
Radium-228	EPA 9320	**0.554 ± 0.398 (0.776) C:78% T:88%**	pCi/L	02/21/22 15:42	15262-20-1	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: BRANCH AP-BCD RAD
Pace Project No.: 92585970

Sample: DUP-3 **Lab ID: 92585970011** Collected: 02/03/22 00:00 Received: 02/04/22 16:06 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	**0.204 ± 0.155 (0.275) C:88% T:NA**	pCi/L	02/23/22 11:02	13982-63-3	
		Pace Analytical Services - Greensburg				
Radium-228	EPA 9320	**0.661 ± 0.401 (0.747) C:75% T:90%**	pCi/L	02/21/22 15:42	15262-20-1	

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL - RADIOCHEMISTRY

Project: BRANCH AP-BCD RAD
Pace Project No.: 92585970

QC Batch: 484157 Analysis Method: EPA 9320
QC Batch Method: EPA 9320 Analysis Description: 9320 Radium 228
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92585970001, 92585970002, 92585970003, 92585970004, 92585970005, 92585970006, 92585970007, 92585970008, 92585970009

METHOD BLANK: 2341231 Matrix: Water
Associated Lab Samples: 92585970001, 92585970002, 92585970003, 92585970004, 92585970005, 92585970006, 92585970007, 92585970008, 92585970009

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.145 ± 0.280 (0.615) C:77% T:93%	pCi/L	02/21/22 12:17	

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.

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QUALITY CONTROL - RADIOCHEMISTRY

Project: BRANCH AP-BCD RAD
Pace Project No.: 92585970

QC Batch: 484277
QC Batch Method: EPA 9315
Analysis Method: EPA 9315
Analysis Description: 9315 Total Radium
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92585970010, 92585970011

METHOD BLANK: 2341866
Matrix: Water
Associated Lab Samples: 92585970010, 92585970011

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.156 ± 0.117 (0.185) C:98% T:NA	pCi/L	02/23/22 11:02	

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.

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QUALITY CONTROL - RADIOCHEMISTRY

Project: BRANCH AP-BCD RAD
Pace Project No.: 92585970

QC Batch: 484158
QC Batch Method: EPA 9320
Analysis Method: EPA 9320
Analysis Description: 9320 Radium 228
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92585970010, 92585970011

METHOD BLANK: 2341232 Matrix: Water
Associated Lab Samples: 92585970010, 92585970011

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.144 ± 0.303 (0.671) C:74% T:90%	pCi/L	02/21/22 15:42	

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

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QUALITY CONTROL - RADIOCHEMISTRY

Project: BRANCH AP-BCD RAD
Pace Project No.: 92585970

QC Batch: 484274 Analysis Method: EPA 9315
QC Batch Method: EPA 9315 Analysis Description: 9315 Total Radium
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92585970001, 92585970002, 92585970003, 92585970004, 92585970005, 92585970006, 92585970007, 92585970008, 92585970009

METHOD BLANK: 2341862 Matrix: Water
Associated Lab Samples: 92585970001, 92585970002, 92585970003, 92585970004, 92585970005, 92585970006, 92585970007, 92585970008, 92585970009

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.00607 ± 0.0684 (0.194) C:102% T:NA	pCi/L	02/23/22 09:00	

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QUALIFIERS

Project: BRANCH AP-BCD RAD
Pace Project No.: 92585970

DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

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

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

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

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

Acid preservation may not be appropriate for 2 Chloroethylvinyl ether.

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

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

Reported results are not rounded until the final step prior to reporting. Therefore, calculated parameters that are typically reported as "Total" may vary slightly from the sum of the reported component parameters.

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.

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

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: BRANCH AP-BCD RAD
Pace Project No.: 92585970

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92585970001	**BRGWC-25I**	EPA 9315	484274		
92585970002	**BRGWC-30I**	EPA 9315	484274		
92585970003	**BRGWC-32S**	EPA 9315	484274		
92585970004	**BRGWC-45**	EPA 9315	484274		
92585970005	**BRGWC-47**	EPA 9315	484274		
92585970006	**BRGWC-52I**	EPA 9315	484274		
92585970007	**DUP-2**	EPA 9315	484274		
92585970008	**BRGWC-50**	EPA 9315	484274		
92585970009	**BRGWC-27I**	EPA 9315	484274		
92585970010	**BRGWC-29I**	EPA 9315	484277		
92585970011	**DUP-3**	EPA 9315	484277		
92585970001	**BRGWC-25I**	EPA 9320	484157		
92585970002	**BRGWC-30I**	EPA 9320	484157		
92585970003	**BRGWC-32S**	EPA 9320	484157		
92585970004	**BRGWC-45**	EPA 9320	484157		
92585970005	**BRGWC-47**	EPA 9320	484157		
92585970006	**BRGWC-52I**	EPA 9320	484157		
92585970007	**DUP-2**	EPA 9320	484157		
92585970008	**BRGWC-50**	EPA 9320	484157		
92585970009	**BRGWC-27I**	EPA 9320	484157		
92585970010	**BRGWC-29I**	EPA 9320	484158		
92585970011	**DUP-3**	EPA 9320	484158		

Pace Analytical	Document Name: Sample Condition Upon Receipt (SCUR)	Document Revised: November 15, 2021 Page 1 of 2
	Document No.: F-CAR-CS-033-Rev.08	Issuing Authority: Pace Carolinas Quality Office

Laboratory receiving samples:

Asheville ☐ Eden ☐ Greenwood ☐ Huntersville ☐ Raleigh ☐ Mechanicsville ☐ Atlanta ☒ Kernersville ☐

Sample Condition Upon Receipt

Client Name: Georgia Power

Project #: **WO# : 92585970**

92585970

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

Custody Seal Present? ☐ Yes ☒ No Seals Intact? ☐ Yes ☐ No

Date/Initials Person Examining Contents: CMP 1/31/2

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

Biological Tissue Frozen? ☐ Yes ☐ No ☒ N/A

Thermometer: ☐ IR Gun ID: 214

Type of Ice: ☒ Wet ☐ Blue ☐ None

Cooler Temp: 2.6 Correction Factor: Add/Subtract (°C) +0.1

Cooler Temp Corrected (°C): 2.7

Temp should be above freezing to 6°C

☐ Samples out of temp criteria. Samples on ice, cooling process has begun

USDA Regulated Soil (☐ N/A, water sample)

Did samples originate in a quarantine zone within the United States: CA, NY, or SC (check maps)? ☐ Yes ☐ No

Did samples originate from a foreign source (internationally, including Hawaii and Puerto Rico)? ☐ Yes ☐ No

				Comments/Discrepancy:
Chain of Custody Present?	☒ Yes	☐ No	☐ N/A	1.
Samples Arrived within Hold Time?	☒ Yes	☐ No	☐ N/A	2.
Short Hold Time Analysis (<72 hr.)?	☐ Yes	☒ No	☐ N/A	3.
Rush Turn Around Time Requested?	☐ Yes	☒ No	☐ N/A	4.
Sufficient Volume?	☒ Yes	☐ No	☐ N/A	5.
Correct Containers Used?	☒ Yes	☐ No	☐ N/A	6.
-Pace Containers Used?	☒ Yes	☐ No	☐ N/A	
Containers Intact?	☒ Yes	☐ No	☐ N/A	7.
Dissolved analysis: Samples Field Filtered?	☐ Yes	☐ No	☒ N/A	8.
Sample Labels Match COC?	☒ Yes	☐ No	☐ N/A	9.
-Includes Date/Time/ID/Analysis Matrix: WT				
Headspace in VOA Vials (>5-6mm)?	☐ Yes	☐ No	☒ N/A	10.
Trip Blank Present?	☐ Yes	☐ No	☒ N/A	11.
Trip Blank Custody Seals Present?	☐ Yes	☐ No	☒ N/A	

COMMENTS/SAMPLE DISCREPANCY

Field Data Required? ☐ Yes ☐ No

Lot ID of split containers:

CLIENT NOTIFICATION/RESOLUTION

Person contacted: Date/Time:

Project Manager SCURF Review: Date:

Project Manager SRF Review: Date:

	Document Name: Bottle Identification Form (BIF)	Document Issued: November 15, 2021 Page 1 of 1
Pace Analytical	Document No.: F-CAR-CS-043-Rev.01	Issuing Authority: Pace Carolinas Quality Office

*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 bottles

Project # **WO#:92585970**

PM: NMG Due Date: 02/24/22

CLIENT: GA-GA Power

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 H_2SO_4 (pH < 2) (Cl-)	BP3N-250 mL plastic HNO_3 (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 H_2SO_4 (pH < 2)	AG3S-250 mL Amber H_2SO_4 (pH < 2)	AG3A(DG3A)-250 mL Amber NH_4Cl (N/A)(Cl-)
	1		2	1			✓ 1									
	2		2	1			✓ 1									
	3		2	1			✓ 1									
	4		2	1			✓ 1									
	5		2	1			✓ 1									
	6		2	1			✓ 1									
	7		1	1			✓ 1									
	8															
	9															
	10															
	11															
	12															

Item	DG9H-40 mL VOA HCl (N/A)	VG9T-40 mL VOA $Na_2S_2O_3$ (N/A)	VG9U-40 mL VOA Unpreserved (N/A)	DG9P-40 mL VOA H_3PO_4 (N/A)	VOAK (3 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)	[illegible]	BP3A-250 mL Plastic $(NH_2)_2SO_4$ (9.3-9.7)	AG0U-100 mL Amber Unpreserved vials (N/A)	VSGU-20 mL Scintillation vials (N/A)	DG9U-40 mL Amber Unpreserved vials (N/A)
1									✓ 1				
2									✓ 1				
3									✓ 1				
4									✓ 1				
5									✓ 1				
6									✓ 1				
7									✓ 1				
8													
9													
10													
11													
12													

pH Adjustment Log for Preserved Samples

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

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

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: 1100 Milledgeville Rd, Milledgeville, GA 31061
Email: [illegible]@southernco.com
Phone: (404) 506-7239 Fax:
Requested Due Date: 10 Day TAT

Section B – Required Project Information:
Report To: Joju Abraham
Copy To: Cooler
Purchase Order #:
Project Name: Plant Branch AP-BCD
Project #: 160025421

Section C – Invoice Information:
Attention: [illegible]@southernco.com
Company Name:
Address:
Pace Quote:
Pace Project Manager: Kevin Herring
Pace Profile #:

Regulatory Agency:
State / Location: GA

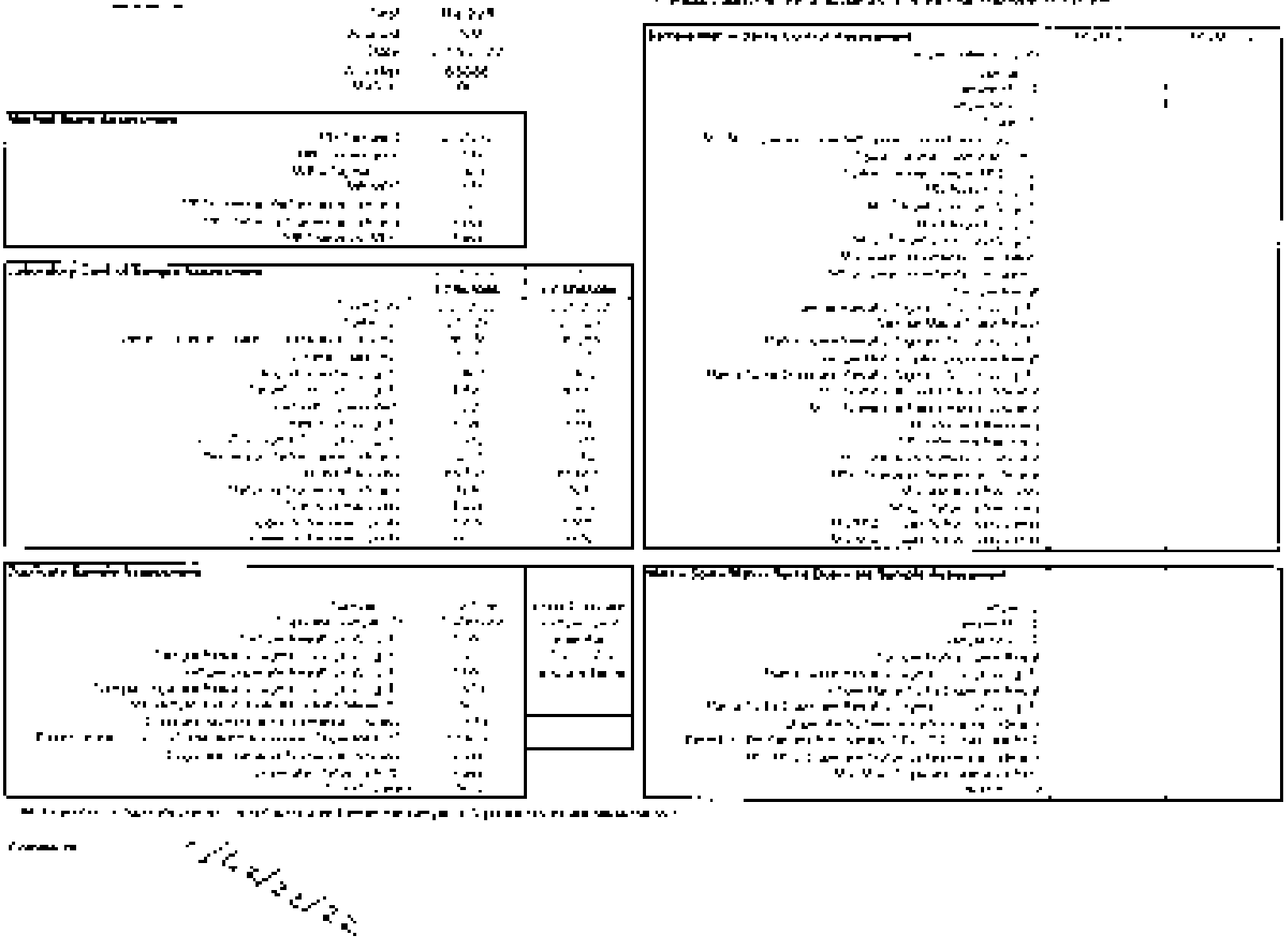
ITEM #	SAMPLE ID	MATRIX CODE	SAMPLE TYPE (G=GRAB C=COMP)	DATE	TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Unpreserved / Ice	H2SO4	HNO3 + Ice	HCl	NaOH + Zn Acetate	Na2S2O3	Methanol	Other	App III/IV Total Metals	Cl, F, SO4, TDS	Radium 226/228	Fe, Mn, K, Na, Mg	Alkalinity (total, carbonate, bicarbonate)	Residual Chlorine (Y/N)	Sample Conditions
1	BRGWC-33	WT	G	2/3/2022	14:44		6	3		3						X	X	X	X	X		pH = 6.03
2	BRGWC-32	WT	G	2/3/2022	12:50		6	3		3						X	X	X	X	X		pH = 6.34
3	BRGWC-32S	WT	G	2/3/2022	14:55		6	3		3						X	X	X	X	X		pH = 5.69
4	BRGWC-45	WT	G	2/3/2022	10:42		6	3		3						X	X	X	X	X		pH = 5.92
5	BRGWC-47	WT	G	2/3/2022	9:48		6	3		3						X	X	X	X	X		pH = 5.75
6	BRGWC-52	WT	G	2/3/2022	13:24		6	3		3						X	X	X	X	X		pH = 6.55
7	Dup-1	WT	G	2/3/2022	-		5	2		3						X	X	X				
8																						
9																						
10																						
11																						
12																						

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
	[signature]	2/3/22	8:40	Elaine Cook	2/3/22	8:40	
				[signature]	2/3	10:35	

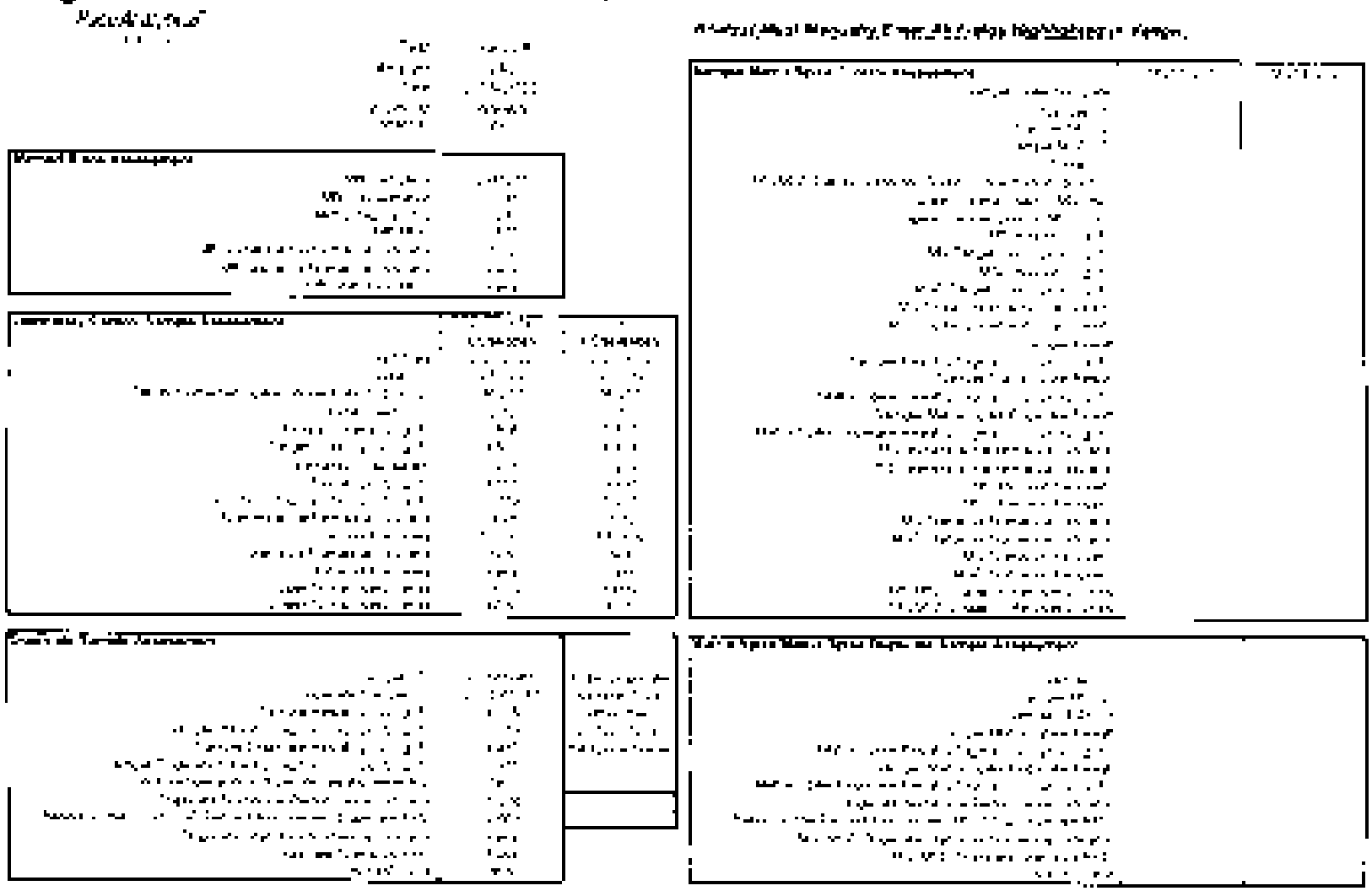
SAMPLER NAME AND SIGNATURE: Jude Wnukesaka / [signature] DATE Signed: 2/3/22

TEMP in C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N)

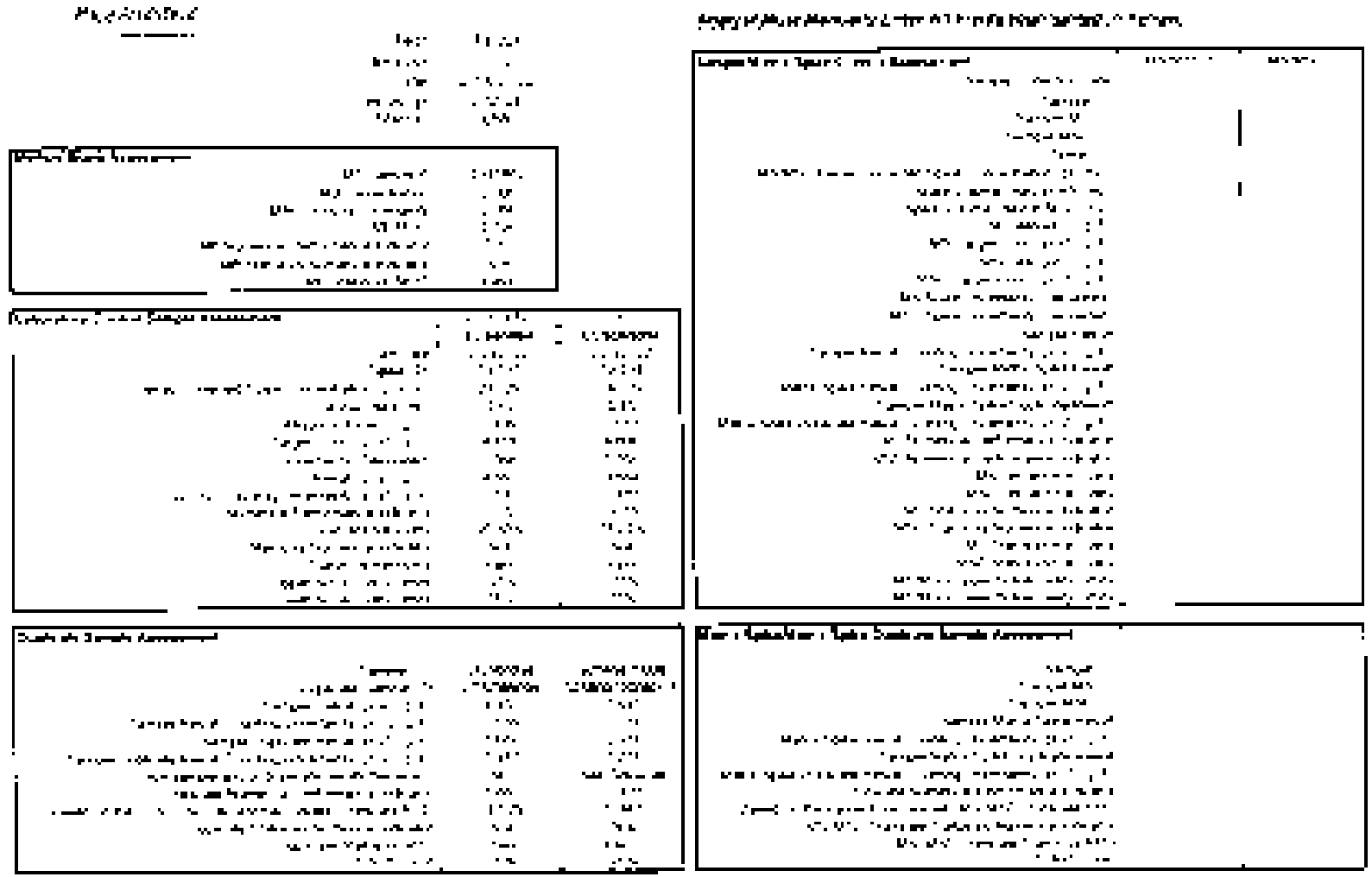
Quality Control Sample Performance Assessment



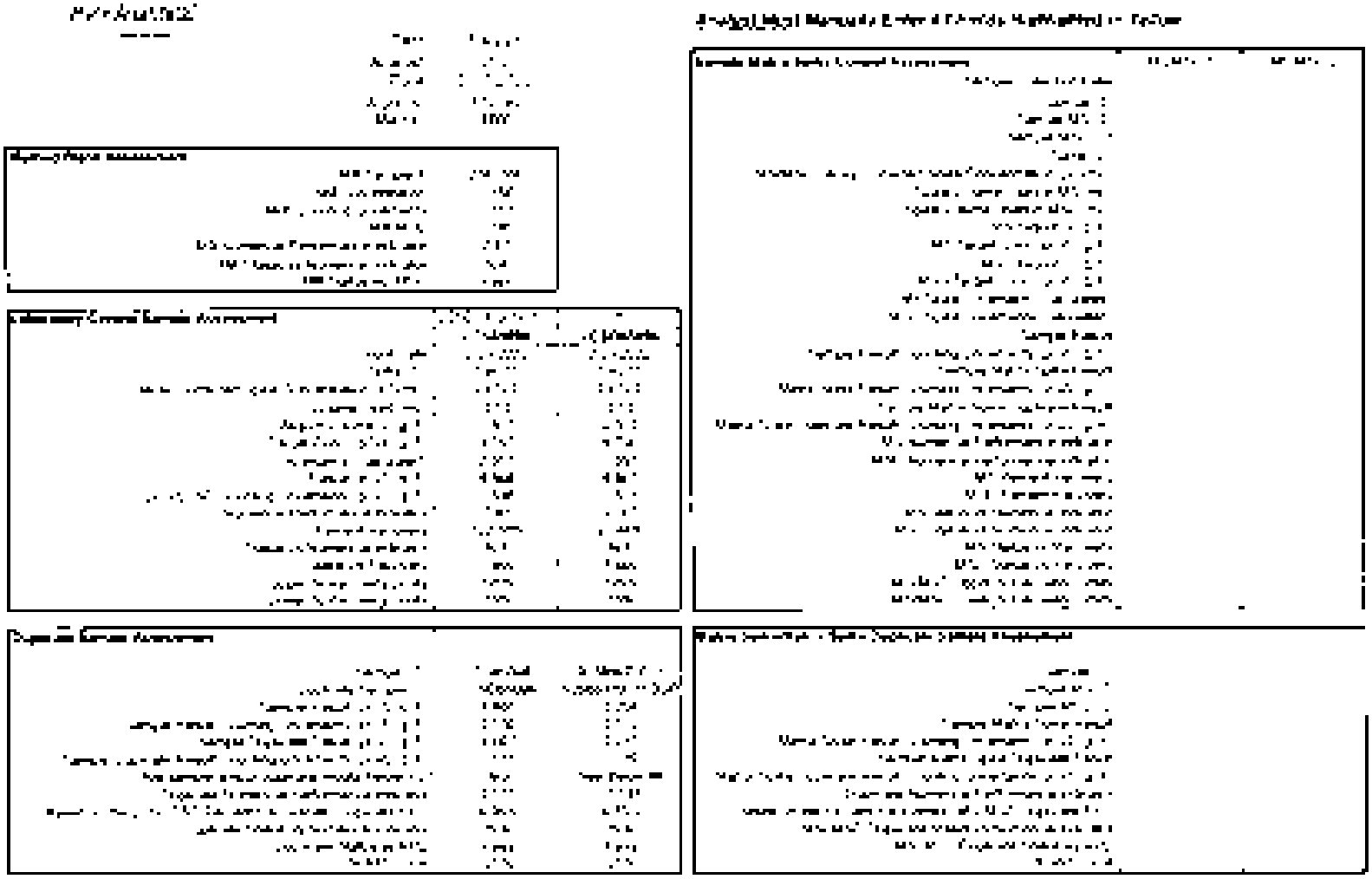
Quality Control Sample Performance Assessment



Quality Control Sample Performance Assessment



Quality Control Sample Performance Assessment



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

March 04, 2022

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

RE: Project: BRANCH AP-BCD/E BACKGROUND RAD
Pace Project No.: 92585708

Dear Joju Abraham:

Enclosed are the analytical results for sample(s) received by the laboratory on February 02, 2022. 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,

Nicole D'Oleo
nicole.d'oleo@pacelabs.com
(704)875-9092
Project Manager

Enclosures

cc: Anna Bottum, ERM
Andrea Brazell, ERM
Daniela Herrera, Golder
Ben Hodges, Georgia Power
Jimmy Jones, Golder Associates Inc.
Kristen Jurinko
Julie Lehrman, Golder Associates Inc.
Ms. Lauren Petty, Southern Company
Carolyn Powrozek, Golder
Dawn Prell, Golder Associates Inc.
Tim Richards, Golder Associates - Atlanta
Lacy Smith, ERM
Brian Steele, Golder
Caitlin Tillema, ERM
Christine Weaver, ERM

REPORT OF LABORATORY ANALYSIS

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

CERTIFICATIONS

Project: BRANCH AP-BCD/E BACKGROUND RAD
Pace Project No.: 92585708

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 #: 460198
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: BRANCH AP-BCD/E BACKGROUND RAD
Pace Project No.: 92585708

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92585708001	**BRGWA-2S**	Water	02/01/22 14:55	02/02/22 10:25
92585708002	**BRGWA-2I**	Water	02/01/22 13:15	02/02/22 10:25
92585708003	**BRGWA-5S**	Water	02/01/22 09:40	02/02/22 10:25
92585708004	**BRGWA-5I**	Water	02/01/22 11:15	02/02/22 10:25
92585708005	**BRGWA-6S**	Water	02/01/22 09:45	02/02/22 10:25

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SAMPLE ANALYTE COUNT

Project: BRANCH AP-BCD/E BACKGROUND RAD
Pace Project No.: 92585708

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92585708001	**BRGWA-2S**	EPA 9315	JJY	1	PASI-PA
		EPA 9320	JC2	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92585708002	**BRGWA-2I**	EPA 9315	JJY	1	PASI-PA
		EPA 9320	JC2	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92585708003	**BRGWA-5S**	EPA 9315	JJY	1	PASI-PA
		EPA 9320	JC2	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92585708004	**BRGWA-5I**	EPA 9315	JJY	1	PASI-PA
		EPA 9320	JC2	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92585708005	**BRGWA-6S**	EPA 9315	JJY	1	PASI-PA
		EPA 9320	JC2	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA

PASI-PA = Pace Analytical Services - Greensburg

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

SUMMARY OF DETECTION

Project: BRANCH AP-BCD/E BACKGROUND RAD
Pace Project No.: 92585708

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92585708001	**BRGWA-2S**					
EPA 9315	Radium-226	0.0397 ± 0.0836 (0.196) C:100% T:NA	pCi/L		02/22/22 10:55	
EPA 9320	Radium-228	0.211 ± 0.309 (0.664) C:76% T:94%	pCi/L		02/17/22 16:18	
Total Radium Calculation	Total Radium	0.251 ± 0.393 (0.860)	pCi/L		02/22/22 17:04	
92585708002	**BRGWA-2I**					
EPA 9315	Radium-226	0.0812 ± 0.0907 (0.173) C:92% T:NA	pCi/L		02/22/22 12:23	
EPA 9320	Radium-228	0.152 ± 0.392 (0.873) C:73% T:86%	pCi/L		02/17/22 16:19	
Total Radium Calculation	Total Radium	0.233 ± 0.483 (1.05)	pCi/L		02/22/22 17:04	
92585708003	**BRGWA-5S**					
EPA 9315	Radium-226	0.0708 ± 0.179 (0.431) C:99% T:NA	pCi/L		02/22/22 12:23	
EPA 9320	Radium-228	0.159 ± 0.371 (0.823) C:77% T:93%	pCi/L		02/17/22 16:19	
Total Radium Calculation	Total Radium	0.230 ± 0.550 (1.25)	pCi/L		02/22/22 17:04	
92585708004	**BRGWA-5I**					
EPA 9315	Radium-226	1.03 ± 0.289 (0.194) C:97% T:NA	pCi/L		02/22/22 12:23	
EPA 9320	Radium-228	0.198 ± 0.319 (0.692) C:77% T:87%	pCi/L		02/17/22 16:19	
Total Radium Calculation	Total Radium	1.23 ± 0.608 (0.886)	pCi/L		02/22/22 17:04	

REPORT OF LABORATORY ANALYSIS

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

SUMMARY OF DETECTION

Project: BRANCH AP-BCD/E BACKGROUND RAD
Pace Project No.: 92585708

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92585708005	**BRGWA-6S**					
EPA 9315	Radium-226	0.0249 ± 0.0724 (0.180) C:97% T:NA	pCi/L		02/22/22 12:23	
EPA 9320	Radium-228	0.324 ± 0.336 (0.691) C:76% T:83%	pCi/L		02/17/22 16:19	
Total Radium Calculation	Total Radium	0.349 ± 0.408 (0.871)	pCi/L		02/22/22 17:04	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: BRANCH AP-BCD/E BACKGROUND RAD
Pace Project No.: 92585708

Sample: BRGWA-2S **Lab ID: 92585708001** Collected: 02/01/22 14:55 Received: 02/02/22 10:25 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	**0.0397 ± 0.0836 (0.196) C:100% T:NA**	pCi/L	02/22/22 10:55	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.211 ± 0.309 (0.664) C:76% T:94%**	pCi/L	02/17/22 16:18	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.251 ± 0.393 (0.860)**	pCi/L	02/22/22 17:04	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: BRANCH AP-BCD/E BACKGROUND RAD
Pace Project No.: 92585708

Sample: BRGWA-2I **Lab ID: 92585708002** Collected: 02/01/22 13:15 Received: 02/02/22 10:25 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	**0.0812 ± 0.0907 (0.173) C:92% T:NA**	pCi/L	02/22/22 12:23	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.152 ± 0.392 (0.873) C:73% T:86%**	pCi/L	02/17/22 16:19	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.233 ± 0.483 (1.05)**	pCi/L	02/22/22 17:04	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: BRANCH AP-BCD/E BACKGROUND RAD
Pace Project No.: 92585708

Sample: BRGWA-5S **Lab ID: 92585708003** Collected: 02/01/22 09:40 Received: 02/02/22 10:25 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	**0.0708 ± 0.179 (0.431) C:99% T:NA**	pCi/L	02/22/22 12:23	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.159 ± 0.371 (0.823) C:77% T:93%**	pCi/L	02/17/22 16:19	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.230 ± 0.550 (1.25)**	pCi/L	02/22/22 17:04	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: BRANCH AP-BCD/E BACKGROUND RAD
Pace Project No.: 92585708

Sample: BRGWA-5I **Lab ID: 92585708004** Collected: 02/01/22 11:15 Received: 02/02/22 10:25 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	**1.03 ± 0.289 (0.194) C:97% T:NA**	pCi/L	02/22/22 12:23	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.198 ± 0.319 (0.692) C:77% T:87%**	pCi/L	02/17/22 16:19	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.23 ± 0.608 (0.886)**	pCi/L	02/22/22 17:04	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: BRANCH AP-BCD/E BACKGROUND RAD
Pace Project No.: 92585708

Sample: BRGWA-6S **Lab ID: 92585708005** Collected: 02/01/22 09:45 Received: 02/02/22 10:25 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	**0.0249 ± 0.0724 (0.180) C:97% T:NA**	pCi/L	02/22/22 12:23	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.324 ± 0.336 (0.691) C:76% T:83%**	pCi/L	02/17/22 16:19	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.349 ± 0.408 (0.871)**	pCi/L	02/22/22 17:04	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL - RADIOCHEMISTRY

Project: BRANCH AP-BCD/E BACKGROUND RAD
Pace Project No.: 92585708

QC Batch: 482652 Analysis Method: EPA 9320
QC Batch Method: EPA 9320 Analysis Description: 9320 Radium 228
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92585708001, 92585708002, 92585708003, 92585708004, 92585708005

METHOD BLANK: 2332806 Matrix: Water
Associated Lab Samples: 92585708001, 92585708002, 92585708003, 92585708004, 92585708005

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.173 ± 0.305 (0.667) C:77% T:85%	pCi/L	02/17/22 12:45	

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

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL - RADIOCHEMISTRY

Project: BRANCH AP-BCD/E BACKGROUND RAD
Pace Project No.: 92585708

QC Batch: 482985 Analysis Method: EPA 9315
QC Batch Method: EPA 9315 Analysis Description: 9315 Total Radium
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92585708001, 92585708002, 92585708003, 92585708004, 92585708005

METHOD BLANK: 2335102 Matrix: Water
Associated Lab Samples: 92585708001, 92585708002, 92585708003, 92585708004, 92585708005

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.0320 ± 0.0849 (0.207) C:96% T:NA	pCi/L	02/22/22 10:50	

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: BRANCH AP-BCD/E BACKGROUND RAD
Pace Project No.: 92585708

DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

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

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

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

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

Acid preservation may not be appropriate for 2 Chloroethylvinyl ether.

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

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

Reported results are not rounded until the final step prior to reporting. Therefore, calculated parameters that are typically reported as "Total" may vary slightly from the sum of the reported component parameters.

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.

Pace Analytical Services, LLC
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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: BRANCH AP-BCD/E BACKGROUND RAD
Pace Project No.: 92585708

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92585708001	**BRGWA-2S**	EPA 9315	482985		
92585708002	**BRGWA-2I**	EPA 9315	482985		
92585708003	**BRGWA-5S**	EPA 9315	482985		
92585708004	**BRGWA-5I**	EPA 9315	482985		
92585708005	**BRGWA-6S**	EPA 9315	482985		
92585708001	**BRGWA-2S**	EPA 9320	482652		
92585708002	**BRGWA-2I**	EPA 9320	482652		
92585708003	**BRGWA-5S**	EPA 9320	482652		
92585708004	**BRGWA-5I**	EPA 9320	482652		
92585708005	**BRGWA-6S**	EPA 9320	482652		
92585708001	**BRGWA-2S**	Total Radium Calculation	485742		
92585708002	**BRGWA-2I**	Total Radium Calculation	485742		
92585708003	**BRGWA-5S**	Total Radium Calculation	485742		
92585708004	**BRGWA-5I**	Total Radium Calculation	485742		
92585708005	**BRGWA-6S**	Total Radium Calculation	485742		

Pace Analytical	Document Name: Sample Condition Upon Receipt (SCUR)	Document Revised: November 15, 2021 Page 1 of 2
	Document No.: F-CAR-CS-033-Rev.08	Issuing Authority: Pace Carolinas Quality Office

Laboratory receiving samples:
Asheville ☐ Eden ☐ Greenwood ☐ Huntersville ☐ Raleigh ☐ Mechanicsville ☐ Atlanta ☑ Kernersville ☐

Sample Condition Upon Receipt

Client Name: Georgia Power

Project #: WO# : 92585708

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

Custody Seal Present? ☐ Yes ☑ No Seals Intact? ☐ Yes ☐ No

Date/Initials Person Examining Contents: dlj 9-2-22

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

Biological Tissue Frozen? ☐ Yes ☐ No ☑ N/A

Thermometer: ☐ IR Gun ID: 230 ☑ Wet ☐ Blue ☐ None Type of Ice:

Cooler Temp: 1.6 Correction Factor: Add/Subtract (°C) +0.2

Temp should be above freezing to 6°C
☐ Samples out of temp criteria. Samples on ice, cooling process has begun

Cooler Temp Corrected (°C): 1.8

USDA Regulated Soil (☐ N/A, water sample)
Did samples originate in a quarantine zone within the United States: CA, NY, or SC (check maps)? ☐ Yes ☐ No

Did samples originate from a foreign source (internationally, including Hawaii and Puerto Rico)? ☐ Yes ☐ No

				Comments/Discrepancy:
Chain of Custody Present?	☑ Yes	☐ No	☐ N/A	1.
Samples Arrived within Hold Time?	☑ Yes	☐ No	☐ N/A	2.
Short Hold Time Analysis (<72 hr.)?	☐ Yes	☑ No	☐ N/A	3.
Rush Turn Around Time Requested?	☐ Yes	☑ No	☐ N/A	4.
Sufficient Volume?	☑ Yes	☐ No	☐ N/A	5.
Correct Containers Used?	☑ Yes	☐ No	☐ N/A	6.
Pace Containers Used?	☑ Yes	☐ No	☐ N/A	
Containers Intact?	☑ Yes	☐ No	☐ N/A	7.
Dissolved analysis: Samples Field Filtered?	☐ Yes	☐ No	☑ N/A	8
Sample Labels Match COC?	☑ Yes	☐ No	☐ N/A	9
-Includes Date/Time/ID/Analysis Matrix: WT				
Headspace in VOA Vials (>6mm)?	☐ Yes	☐ No	☑ N/A	10
Trip Blank Present?	☐ Yes	☐ No	☑ N/A	11
Trip Blank Custody Seals Present?	☐ Yes	☐ No	☑ N/A	

COMMENTS/SAMPLE DISCREPANCY

Field Data Required? ☐ Yes ☐ No

Lot ID of split containers:

CLIENT NOTIFICATION/RESOLUTION

Person contacted: Date/Time:

Project Manager SCURF Review: Date:

Project Manager SRF Review: Date:

Pace Analytical	Document Name: Bottle Identification Form (BIF)	Document Issued: November 15, 2021 Page 1 of 1
	Document No.: F-CAR-CS-033-Rev.01	Issuing Authority: Pace Carolinas Quality Office

***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 bottles**

Project # WO#: 92585708

PM: NMG Due Date: 02/23/22

CLIENT: GA-GA Power

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 Unpreserved (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)	BP1N	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)	DG9U-40 mL Amber Unpreserved vials (N/A)
	1		2	1			✓ 1																		2				
	2		2	1			✓ 1																		2				
	3		2	1			✓ 1																		2				
	4		2	1			✓ 1																		2				
	5		2	1			✓ 1																		2				
	6																												
	7																												
	8																												
	9																												
	10																												
	11																												
	12																												

pH Adjustment Log for Preserved Samples

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

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

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: 1100 Milledgeville Rd, Milledgeville, GA 31061
Email: [illegible]@southernco.com
Phone: (404) 506-7[illegible] Fax:
Requested Due Date: 10 Day TAT

Section B – Required Project Information:
Report To: Jeri Abraham
Copy To: Golder
Purchase Order #:
Project Name: Plant Branch AP-BCD/E Background
Project #: [illegible]

Section C – Invoice Information:
Attention: [illegible]@southernco.com
Company Name:
Address:
Pace Quote:
Pace Project Manager: Kevin Herring
Pace Profile #:

Page: 1 Of 1

Regulatory Agency:

State / Location: GA

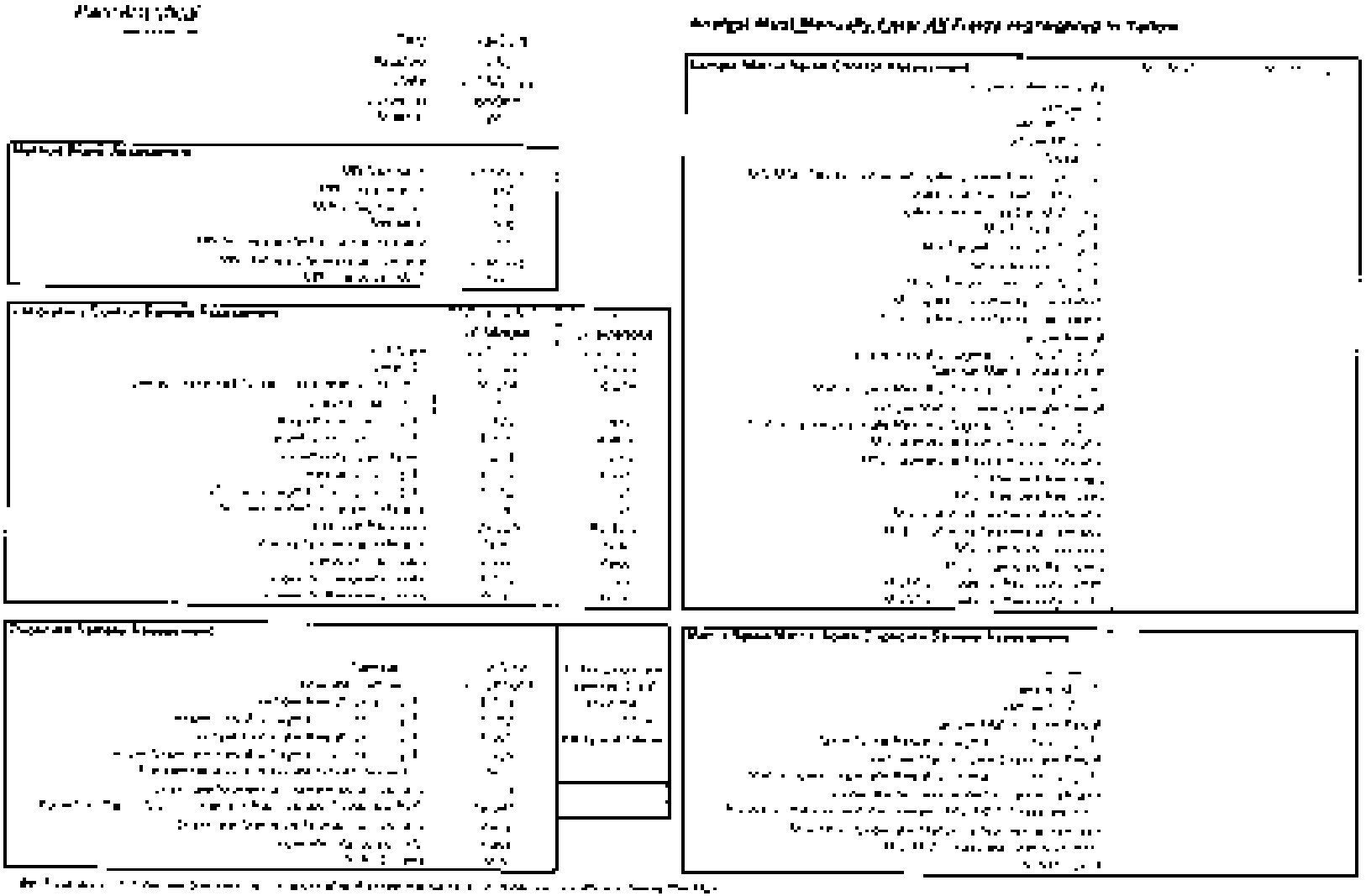
ITEM #	SAMPLE ID	MATRIX CODE	SAMPLE TYPE	DATE	TIME	# OF CONTAINERS	Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	App III/IV Total Metals	Cl, F, SO_4, TDS	Radium 226/228	Fe, Mn, K, Na, Mg	Alkalinity (total, carbonate, bicarbonate)	Residual Chlorine (Y/N)	
1	BRGWA-25	WT	G	[illegible]	14:50	6	3		3						X	X	X	X	X		pH = 5.90
2	BRGWA-2	WT	G	[illegible]	13:15	6	3		3						X	X	X	X	X		pH = 6.83
3	BRGWA-35	WT	G	[illegible]	9:40	6	3		3						X	X	X	X	X		pH = 6.39
4	BRGWA-3	WT	G	[illegible]	11:15	6	3		3						X	X	X	X	X		pH = [illegible]
5	BRGWA-60	WT	G	[illegible]	9:45	6	3		3						X	X	X	X	X		pH = [illegible]
6																					
7																					
8																					
9																					
10																					
11																					
12																					

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
	[illegible]	2/2/22	8:22	Elaine Cook	2/2/22	8:22	
				WCD	2/2/22	1031	

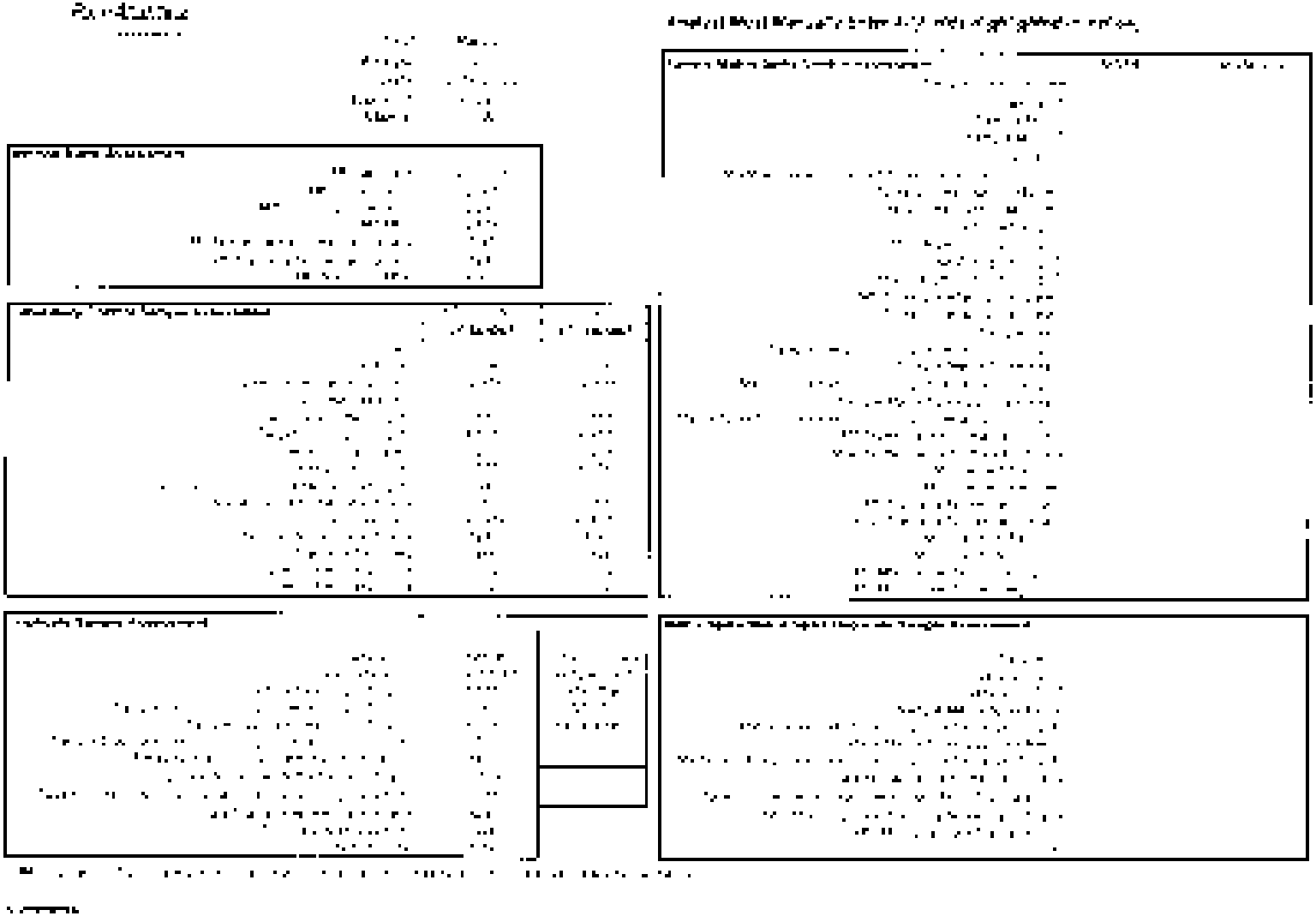
SAMPLER NAME AND SIGNATURE: [illegible] / SW DATE Signed: 2/2/22

TEMP in C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N)

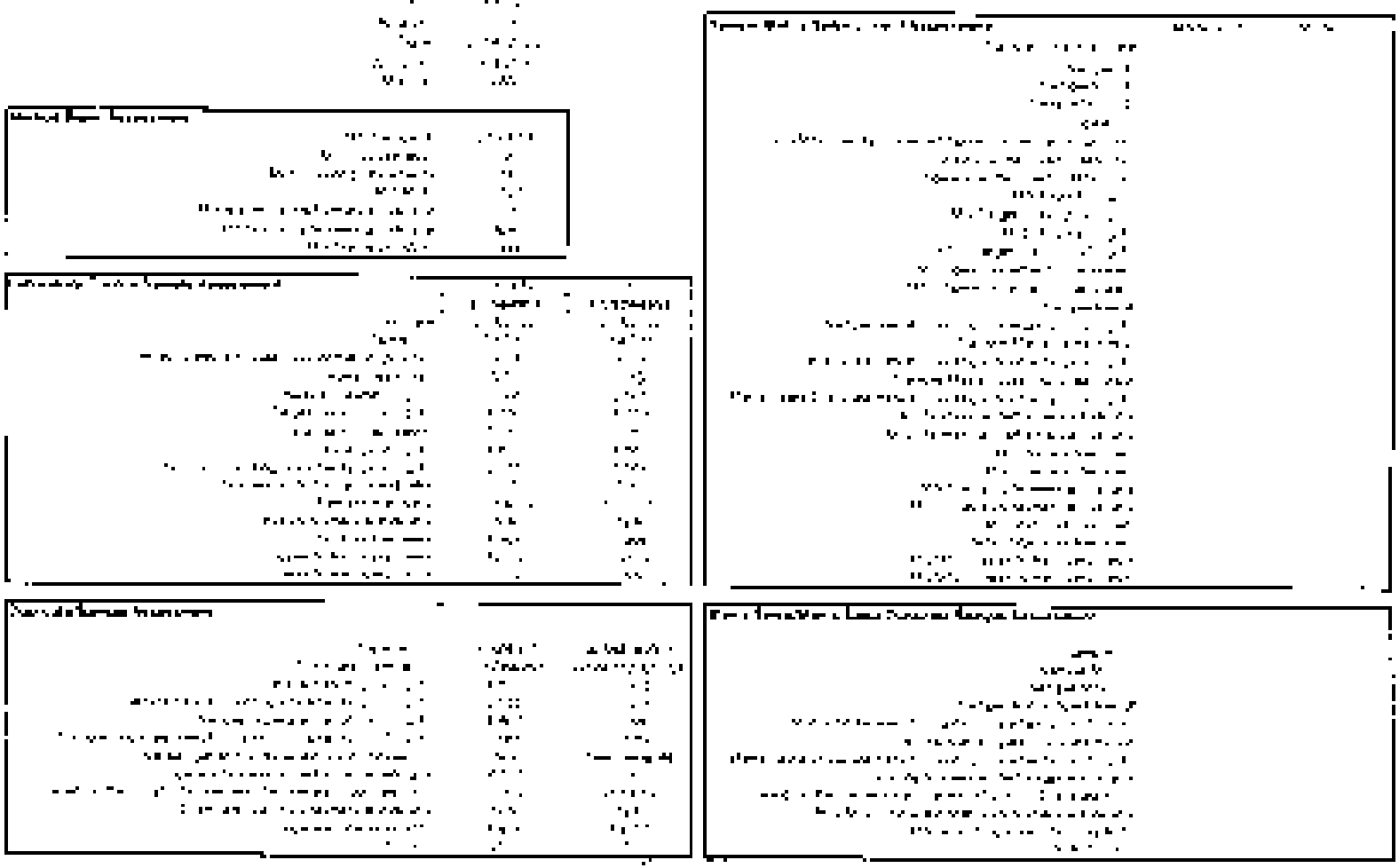
Quality Control Sample Performance Assessment



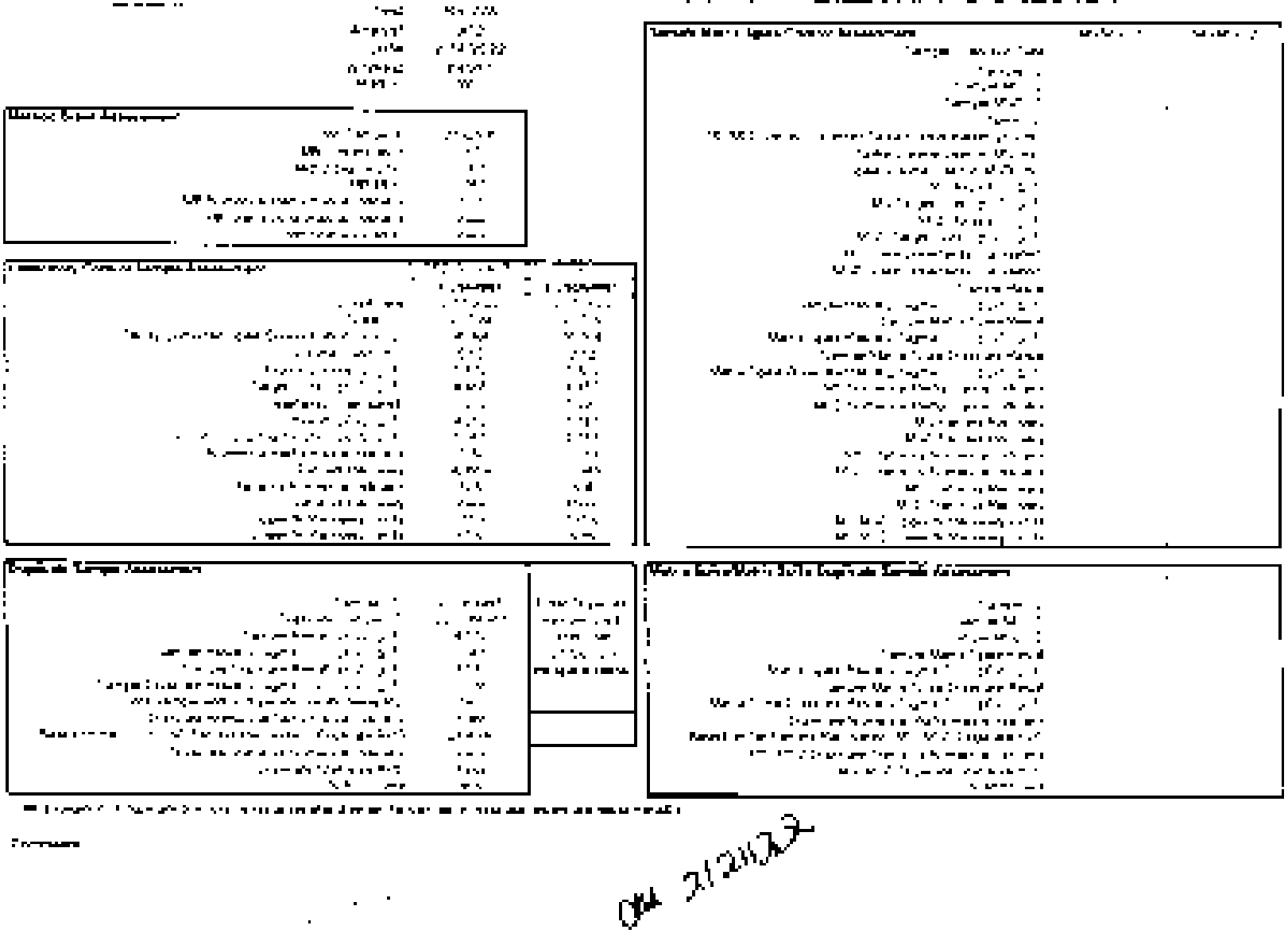
Quality Control Sample Performance Assessment



Quality Control Sample Performance Assessment



Quality Control Sample Performance Assessment



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

February 15, 2022

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

RE: Project: BRANCH AP-BCD/E BACKGROUND
Pace Project No.: 92585717

Dear Joju Abraham:

Enclosed are the analytical results for sample(s) received by the laboratory on February 02, 2022. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

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

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

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

Sincerely,

Nicole D'Oleo
nicole.d'oleo@pacelabs.com
(704)875-9092
Project Manager

Enclosures

cc: Anna Bottum, ERM
Andrea Brazell, ERM
Daniela Herrera, Golder
Ben Hodges, Georgia Power
Jimmy Jones, Golder Associates Inc.
Kristen Jurinko
Julie Lehrman, Golder Associates Inc.
Ms. Lauren Petty, Southern Company
Carolyn Powrozek, Golder
Dawn Prell, Golder Associates Inc.
Tim Richards, Golder Associates - Atlanta
Lacy Smith, ERM
Brian Steele, Golder
Caitlin Tillema, ERM
Christine Weaver, ERM

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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Peachtree Corners, GA 30092
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CERTIFICATIONS

Project: BRANCH AP-BCD/E BACKGROUND
Pace Project No.: 92585717

Pace Analytical Services, LLC - Minneapolis MN

1700 Elm Street SE, Minneapolis, MN 55414
1800 Elm Street SE, Minneapolis, MN 55414--Satellite Air Lab
A2LA Certification #: 2926.01*
Alabama Certification #: 40770
Alaska Contaminated Sites Certification #: 17-009*
Alaska DW Certification #: MN00064
Arizona Certification #: AZ0014*
Arkansas DW Certification #: MN00064
Arkansas WW Certification #: 88-0680
California Certification #: 2929
Colorado Certification #: MN00064
Connecticut Certification #: PH-0256
EPA Region 8 Tribal Water Systems+Wyoming DW Certification #: via MN 027-053-137
Florida Certification #: E87605*
Georgia Certification #: 959
Hawaii Certification #: MN00064
Idaho Certification #: MN00064
Illinois Certification #: 200011
Indiana Certification #: C-MN-01
Iowa Certification #: 368
Kansas Certification #: E-10167
Kentucky DW Certification #: 90062
Kentucky WW Certification #: 90062
Louisiana DEQ Certification #: AI-03086*
Louisiana DW Certification #: MN00064
Maine Certification #: MN00064*
Maryland Certification #: 322
Michigan Certification #: 9909
Minnesota Certification #: 027-053-137*
Minnesota Dept of Ag Approval: via MN 027-053-137
Minnesota Petrofund Registration #: 1240*
Mississippi Certification #: MN00064
Missouri Certification #: 10100
Montana Certification #: CERT0092
Nebraska Certification #: NE-OS-18-06
Nevada Certification #: MN00064
New Hampshire Certification #: 2081*
New Jersey Certification #: MN002
New York Certification #: 11647*
North Carolina DW Certification #: 27700
North Carolina WW Certification #: 530
North Dakota Certification #: R-036
Ohio DW Certification #: 41244
Ohio VAP Certification (1700) #: CL101
Ohio VAP Certification (1800) #: CL110*
Oklahoma Certification #: 9507*
Oregon Primary Certification #: MN300001
Oregon Secondary Certification #: MN200001*
Pennsylvania Certification #: 68-00563*
Puerto Rico Certification #: MN00064
South Carolina Certification #:74003001
Tennessee Certification #: TN02818
Texas Certification #: T104704192*
Utah Certification #: MN00064*
Vermont Certification #: VT-027053137
Virginia Certification #: 460163*
Washington Certification #: C486*
West Virginia DEP Certification #: 382
West Virginia DW Certification #: 9952 C
Wisconsin Certification #: 999407970
Wyoming UST Certification #: via A2LA 2926.01
USDA Permit #: P330-19-00208
*Please Note: Applicable air certifications are denoted with an asterisk (*).

Pace Analytical Services Charlotte

South Carolina Laboratory ID: 99006
9800 Kincey Ave. Ste 100, Huntersville, NC 28078
North Carolina Drinking Water Certification #: 37706
North Carolina Field Services Certification #: 5342
North Carolina Wastewater Certification #: 12
South Carolina Laboratory ID: 99006
South Carolina Certification #: 99006001
South Carolina Drinking Water Cert. #: 99006003
Florida/NELAP Certification #: E87627
Kentucky UST Certification #: 84
Louisiana DoH Drinking Water #: LA029
Virginia/VELAP Certification #: 460221

Pace Analytical Services Asheville

2225 Riverside Drive, Asheville, NC 28804
Florida/NELAP Certification #: E87648
North Carolina Drinking Water Certification #: 37712
North Carolina Wastewater Certification #: 40
South Carolina Laboratory ID: 99030
South Carolina Certification #: 99030001
Virginia/VELAP Certification #: 460222

Pace Analytical Services Peachtree Corners

110 Technology Pkwy, Peachtree Corners, GA 30092
Florida DOH Certification #: E87315
Georgia DW Inorganics Certification #: 812
North Carolina Certification #: 381

REPORT OF LABORATORY ANALYSIS

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

CERTIFICATIONS

Project: BRANCH AP-BCD/E BACKGROUND
Pace Project No.: 92585717

Pace Analytical Services Peachtree Corners
South Carolina Certification #: 98011001

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

SAMPLE SUMMARY

Project: BRANCH AP-BCD/E BACKGROUND
Pace Project No.: 92585717

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92585717001	**BRGWA-2S**	Water	02/01/22 14:55	02/02/22 10:25
92585717002	**BRGWA-2I**	Water	02/01/22 13:15	02/02/22 10:25
92585717003	**BRGWA-5S**	Water	02/01/22 09:40	02/02/22 10:25
92585717004	**BRGWA-5I**	Water	02/01/22 11:15	02/02/22 10:25
92585717005	**BRGWA-6S**	Water	02/01/22 09:45	02/02/22 10:25

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

SAMPLE ANALYTE COUNT

Project: BRANCH AP-BCD/E BACKGROUND
Pace Project No.: 92585717

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92585717001	**BRGWA-2S**	EPA 6010D	KH	6	PASI-GA
		EPA 6020B	CW1	13	PASI-GA
		EPA 7470A	VB	1	PASI-GA
		SM 2540C-2015	ALW	1	PASI-GA
		SM 2320B	AR3	3	PASI-M
		EPA 300.0 Rev 2.1 1993	CDC	3	PASI-A
92585717002	**BRGWA-2I**	EPA 6010D	KH	6	PASI-GA
		EPA 6020B	CW1	13	PASI-GA
		EPA 7470A	VB	1	PASI-GA
		SM 2540C-2015	ALW	1	PASI-GA
		SM 2320B	AR3	3	PASI-M
		EPA 300.0 Rev 2.1 1993	CDC	3	PASI-A
92585717003	**BRGWA-5S**	EPA 6010D	KH	6	PASI-GA
		EPA 6020B	CW1	13	PASI-GA
		EPA 7470A	VB	1	PASI-GA
		SM 2540C-2015	ALW	1	PASI-GA
		SM 2320B	AR3	3	PASI-M
		EPA 300.0 Rev 2.1 1993	CDC	3	PASI-A
92585717004	**BRGWA-5I**	EPA 6010D	KH	6	PASI-GA
		EPA 6020B	CW1	13	PASI-GA
		EPA 7470A	VB	1	PASI-GA
		SM 2540C-2015	ALW	1	PASI-GA
		SM 2320B	AR3	3	PASI-M
		EPA 300.0 Rev 2.1 1993	CDC	3	PASI-A
92585717005	**BRGWA-6S**	EPA 6010D	KH	6	PASI-GA
		EPA 6020B	CW1	13	PASI-GA
		EPA 7470A	VB	1	PASI-GA
		SM 2540C-2015	ALW	1	PASI-GA
		SM 2320B	AR3	3	PASI-M
		EPA 300.0 Rev 2.1 1993	CDC	3	PASI-A

PASI-A = Pace Analytical Services - Asheville
PASI-C = Pace Analytical Services - Charlotte
PASI-GA = Pace Analytical Services - Peachtree Corners, GA
PASI-M = Pace Analytical Services - Minneapolis

REPORT OF LABORATORY ANALYSIS

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

SUMMARY OF DETECTION

Project: BRANCH AP-BCD/E BACKGROUND
Pace Project No.: 92585717

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92585717001	**BRGWA-2S**					
	Performed by	CUSTOMER			02/02/22 14:24	
	pH	5.95	Std. Units		02/02/22 14:24	
EPA 6010D	Iron	0.13	mg/L	0.040	02/13/22 17:39	
EPA 6010D	Manganese	0.052	mg/L	0.040	02/13/22 17:39	
EPA 6010D	Potassium	0.29	mg/L	0.20	02/13/22 17:39	
EPA 6010D	Sodium	3.1	mg/L	1.0	02/13/22 17:39	
EPA 6010D	Calcium	4.4	mg/L	1.0	02/13/22 17:39	
EPA 6010D	Magnesium	4.0	mg/L	0.050	02/13/22 17:39	
EPA 6020B	Barium	0.010	mg/L	0.0050	02/14/22 18:51	
EPA 6020B	Chromium	0.0092	mg/L	0.0050	02/14/22 18:51	
EPA 6020B	Cobalt	0.0011J	mg/L	0.0050	02/14/22 18:51	
SM 2540C-2015	Total Dissolved Solids	72.0	mg/L	10.0	02/07/22 15:08	
SM 2320B	Alkalinity, Total as CaCO3	30.1	mg/L	5.0	02/03/22 23:10	
SM 2320B	Alkalinity,Bicarbonate (CaCO3)	30.1	mg/L	5.0	02/03/22 23:10	
EPA 300.0 Rev 2.1 1993	Chloride	1.6	mg/L	1.0	02/07/22 10:41	
92585717002	**BRGWA-2I**					
	Performed by	CUSTOMER			02/02/22 14:24	
	pH	6.83	Std. Units		02/02/22 14:24	
EPA 6010D	Iron	0.21	mg/L	0.040	02/13/22 17:59	
EPA 6010D	Manganese	0.021J	mg/L	0.040	02/13/22 17:59	
EPA 6010D	Potassium	5.9	mg/L	0.20	02/13/22 17:59	
EPA 6010D	Sodium	5.5	mg/L	1.0	02/13/22 17:59	
EPA 6010D	Calcium	14.4	mg/L	1.0	02/13/22 17:59	
EPA 6010D	Magnesium	7.4	mg/L	0.050	02/13/22 17:59	
EPA 6020B	Arsenic	0.0012J	mg/L	0.0050	02/14/22 18:57	
EPA 6020B	Barium	0.0066	mg/L	0.0050	02/14/22 18:57	
EPA 6020B	Chromium	0.0013J	mg/L	0.0050	02/14/22 18:57	
EPA 6020B	Cobalt	0.00079J	mg/L	0.0050	02/14/22 18:57	
EPA 6020B	Lithium	0.023J	mg/L	0.030	02/14/22 18:57	
EPA 6020B	Molybdenum	0.0013J	mg/L	0.010	02/14/22 18:57	
SM 2540C-2015	Total Dissolved Solids	126	mg/L	10.0	02/07/22 15:08	
SM 2320B	Alkalinity, Total as CaCO3	72.3	mg/L	5.0	02/09/22 15:55	
SM 2320B	Alkalinity,Bicarbonate (CaCO3)	72.3	mg/L	5.0	02/09/22 15:55	
EPA 300.0 Rev 2.1 1993	Chloride	1.8	mg/L	1.0	02/07/22 10:56	
EPA 300.0 Rev 2.1 1993	Sulfate	5.4	mg/L	1.0	02/07/22 10:56	
92585717003	**BRGWA-5S**					
	Performed by	CUSTOMER			02/02/22 14:24	
	pH	6.39	Std. Units		02/02/22 14:24	
EPA 6010D	Iron	0.30	mg/L	0.040	02/13/22 18:03	
EPA 6010D	Manganese	0.021J	mg/L	0.040	02/13/22 18:03	
EPA 6010D	Potassium	0.40	mg/L	0.20	02/13/22 18:03	
EPA 6010D	Sodium	4.1	mg/L	1.0	02/13/22 18:03	
EPA 6010D	Calcium	19.1	mg/L	1.0	02/13/22 18:03	
EPA 6010D	Magnesium	7.4	mg/L	0.050	02/13/22 18:03	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
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SUMMARY OF DETECTION

Project: BRANCH AP-BCD/E BACKGROUND
Pace Project No.: 92585717

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92585717003	**BRGWA-5S**					
EPA 6020B	Arsenic	0.0012J	mg/L	0.0050	02/14/22 19:03	
EPA 6020B	Barium	0.040	mg/L	0.0050	02/14/22 19:03	
EPA 6020B	Chromium	0.0052	mg/L	0.0050	02/14/22 19:03	
SM 2540C-2015	Total Dissolved Solids	124	mg/L	10.0	02/07/22 15:08	
SM 2320B	Alkalinity, Total as CaCO3	77.5	mg/L	5.0	02/09/22 15:59	
SM 2320B	Alkalinity,Bicarbonate (CaCO3)	77.5	mg/L	5.0	02/09/22 15:59	
EPA 300.0 Rev 2.1 1993	Chloride	3.4	mg/L	1.0	02/07/22 11:26	
92585717004	**BRGWA-5I**					
	Performed by	CUSTOMER			02/02/22 14:24	
	pH	6.38	Std. Units		02/02/22 14:24	
EPA 6010D	Potassium	0.89	mg/L	0.20	02/13/22 18:18	
EPA 6010D	Sodium	4.7	mg/L	1.0	02/13/22 18:18	
EPA 6010D	Calcium	14.5	mg/L	1.0	02/13/22 18:18	
EPA 6010D	Magnesium	9.2	mg/L	0.050	02/13/22 18:18	
EPA 6020B	Arsenic	0.0013J	mg/L	0.0050	02/14/22 19:09	
EPA 6020B	Barium	0.028	mg/L	0.0050	02/14/22 19:09	
EPA 6020B	Chromium	0.0066	mg/L	0.0050	02/14/22 19:09	
EPA 6020B	Cobalt	0.00070J	mg/L	0.0050	02/14/22 19:09	
EPA 6020B	Lithium	0.0011J	mg/L	0.030	02/14/22 19:09	
EPA 6020B	Molybdenum	0.0020J	mg/L	0.010	02/14/22 19:09	
SM 2540C-2015	Total Dissolved Solids	129	mg/L	10.0	02/07/22 15:09	
SM 2320B	Alkalinity, Total as CaCO3	75.0	mg/L	5.0	02/09/22 16:04	
SM 2320B	Alkalinity,Bicarbonate (CaCO3)	75.0	mg/L	5.0	02/09/22 16:04	
EPA 300.0 Rev 2.1 1993	Chloride	3.5	mg/L	1.0	02/07/22 12:41	
EPA 300.0 Rev 2.1 1993	Sulfate	2.0	mg/L	1.0	02/07/22 12:41	
92585717005	**BRGWA-6S**					
	Performed by	CUSTOMER			02/02/22 14:24	
	pH	6.54	Std. Units		02/02/22 14:24	
EPA 6010D	Iron	0.23	mg/L	0.040	02/13/22 18:23	
EPA 6010D	Manganese	0.0082J	mg/L	0.040	02/13/22 18:23	
EPA 6010D	Potassium	0.75	mg/L	0.20	02/13/22 18:23	
EPA 6010D	Sodium	2.5	mg/L	1.0	02/13/22 18:23	
EPA 6010D	Calcium	4.2	mg/L	1.0	02/13/22 18:23	
EPA 6010D	Magnesium	3.7	mg/L	0.050	02/13/22 18:23	
EPA 6020B	Barium	0.014	mg/L	0.0050	02/14/22 19:15	
EPA 6020B	Chromium	0.015	mg/L	0.0050	02/14/22 19:15	
EPA 6020B	Lithium	0.0029J	mg/L	0.030	02/14/22 19:15	
SM 2540C-2015	Total Dissolved Solids	61.0	mg/L	10.0	02/07/22 15:09	
SM 2320B	Alkalinity, Total as CaCO3	27.6	mg/L	5.0	02/09/22 16:08	
SM 2320B	Alkalinity,Bicarbonate (CaCO3)	27.6	mg/L	5.0	02/09/22 16:08	
EPA 300.0 Rev 2.1 1993	Chloride	2.1	mg/L	1.0	02/07/22 12:56	

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ANALYTICAL RESULTS

Project: BRANCH AP-BCD/E BACKGROUND
Pace Project No.: 92585717

Sample: BRGWA-2S **Lab ID: 92585717001** Collected: 02/01/22 14:55 Received: 02/02/22 10:25 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**CUSTOMER**				1		02/02/22 14:24		
pH	**5.95**	Std. Units			1		02/02/22 14:24		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Iron	**0.13**	mg/L	0.040	0.025	1	02/12/22 08:57	02/13/22 17:39	7439-89-6	
Manganese	**0.052**	mg/L	0.040	0.0043	1	02/12/22 08:57	02/13/22 17:39	7439-96-5	
Potassium	**0.29**	mg/L	0.20	0.15	1	02/12/22 08:57	02/13/22 17:39	7440-09-7	
Sodium	**3.1**	mg/L	1.0	0.58	1	02/12/22 08:57	02/13/22 17:39	7440-23-5	
Calcium	**4.4**	mg/L	1.0	0.12	1	02/12/22 08:57	02/13/22 17:39	7440-70-2	
Magnesium	**4.0**	mg/L	0.050	0.012	1	02/12/22 08:57	02/13/22 17:39	7439-95-4	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00078	1	02/11/22 10:29	02/14/22 18:51	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0011	1	02/11/22 10:29	02/14/22 18:51	7440-38-2	
Barium	**0.010**	mg/L	0.0050	0.00067	1	02/11/22 10:29	02/14/22 18:51	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	02/11/22 10:29	02/14/22 18:51	7440-41-7	
Boron	ND	mg/L	0.040	0.0086	1	02/11/22 10:29	02/14/22 18:51	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	02/11/22 10:29	02/14/22 18:51	7440-43-9	
Chromium	**0.0092**	mg/L	0.0050	0.0011	1	02/11/22 10:29	02/14/22 18:51	7440-47-3	
Cobalt	**0.0011J**	mg/L	0.0050	0.00039	1	02/11/22 10:29	02/14/22 18:51	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	02/11/22 10:29	02/14/22 18:51	7439-92-1	
Lithium	ND	mg/L	0.030	0.00073	1	02/11/22 10:29	02/14/22 18:51	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	02/11/22 10:29	02/14/22 18:51	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	02/11/22 10:29	02/14/22 18:51	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	02/11/22 10:29	02/14/22 18:51	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.00013	1	02/09/22 11:00	02/09/22 15:43	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**72.0**	mg/L	10.0	10.0	1		02/07/22 15:08		
2320B Alkalinity	Analytical Method: SM 2320B Pace Analytical Services - Minneapolis								
Alkalinity, Total as CaCO3	**30.1**	mg/L	5.0	1.8	1		02/03/22 23:10		
Alkalinity,Bicarbonate (CaCO3)	**30.1**	mg/L	5.0	1.8	1		02/03/22 23:10		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	1.8	1		02/03/22 23:10		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
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ANALYTICAL RESULTS

Project: BRANCH AP-BCD/E BACKGROUND
Pace Project No.: 92585717

Sample: BRGWA-2S **Lab ID: 92585717001** Collected: 02/01/22 14:55 Received: 02/02/22 10:25 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**1.6**	mg/L	1.0	0.60	1		02/07/22 10:41	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		02/07/22 10:41	16984-48-8	
Sulfate	ND	mg/L	1.0	0.50	1		02/07/22 10:41	14808-79-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
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ANALYTICAL RESULTS

Project: BRANCH AP-BCD/E BACKGROUND
Pace Project No.: 92585717

Sample: BRGWA-2I **Lab ID: 92585717002** Collected: 02/01/22 13:15 Received: 02/02/22 10:25 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**CUSTOMER**				1		02/02/22 14:24		
pH	**6.83**	Std. Units			1		02/02/22 14:24		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Iron	**0.21**	mg/L	0.040	0.025	1	02/12/22 08:57	02/13/22 17:59	7439-89-6	
Manganese	**0.021J**	mg/L	0.040	0.0043	1	02/12/22 08:57	02/13/22 17:59	7439-96-5	
Potassium	**5.9**	mg/L	0.20	0.15	1	02/12/22 08:57	02/13/22 17:59	7440-09-7	
Sodium	**5.5**	mg/L	1.0	0.58	1	02/12/22 08:57	02/13/22 17:59	7440-23-5	
Calcium	**14.4**	mg/L	1.0	0.12	1	02/12/22 08:57	02/13/22 17:59	7440-70-2	
Magnesium	**7.4**	mg/L	0.050	0.012	1	02/12/22 08:57	02/13/22 17:59	7439-95-4	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00078	1	02/11/22 10:29	02/14/22 18:57	7440-36-0	
Arsenic	**0.0012J**	mg/L	0.0050	0.0011	1	02/11/22 10:29	02/14/22 18:57	7440-38-2	
Barium	**0.0066**	mg/L	0.0050	0.00067	1	02/11/22 10:29	02/14/22 18:57	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	02/11/22 10:29	02/14/22 18:57	7440-41-7	
Boron	ND	mg/L	0.040	0.0086	1	02/11/22 10:29	02/14/22 18:57	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	02/11/22 10:29	02/14/22 18:57	7440-43-9	
Chromium	**0.0013J**	mg/L	0.0050	0.0011	1	02/11/22 10:29	02/14/22 18:57	7440-47-3	
Cobalt	**0.00079J**	mg/L	0.0050	0.00039	1	02/11/22 10:29	02/14/22 18:57	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	02/11/22 10:29	02/14/22 18:57	7439-92-1	
Lithium	**0.023J**	mg/L	0.030	0.00073	1	02/11/22 10:29	02/14/22 18:57	7439-93-2	
Molybdenum	**0.0013J**	mg/L	0.010	0.00074	1	02/11/22 10:29	02/14/22 18:57	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	02/11/22 10:29	02/14/22 18:57	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	02/11/22 10:29	02/14/22 18:57	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.00013	1	02/09/22 11:00	02/09/22 15:54	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**126**	mg/L	10.0	10.0	1		02/07/22 15:08		
2320B Alkalinity	Analytical Method: SM 2320B Pace Analytical Services - Minneapolis								
Alkalinity, Total as CaCO3	**72.3**	mg/L	5.0	1.8	1		02/09/22 15:55		
Alkalinity,Bicarbonate (CaCO3)	**72.3**	mg/L	5.0	1.8	1		02/09/22 15:55		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	1.8	1		02/09/22 15:55		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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ANALYTICAL RESULTS

Project: BRANCH AP-BCD/E BACKGROUND
Pace Project No.: 92585717

Sample: BRGWA-2I **Lab ID: 92585717002** Collected: 02/01/22 13:15 Received: 02/02/22 10:25 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**1.8**	mg/L	1.0	0.60	1		02/07/22 10:56	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		02/07/22 10:56	16984-48-8	
Sulfate	**5.4**	mg/L	1.0	0.50	1		02/07/22 10:56	14808-79-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
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ANALYTICAL RESULTS

Project: BRANCH AP-BCD/E BACKGROUND
Pace Project No.: 92585717

Sample: BRGWA-5S **Lab ID: 92585717003** Collected: 02/01/22 09:40 Received: 02/02/22 10:25 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**CUSTOMER**				1		02/02/22 14:24		
pH	**6.39**	Std. Units			1		02/02/22 14:24		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Iron	**0.30**	mg/L	0.040	0.025	1	02/12/22 08:57	02/13/22 18:03	7439-89-6	
Manganese	**0.021J**	mg/L	0.040	0.0043	1	02/12/22 08:57	02/13/22 18:03	7439-96-5	
Potassium	**0.40**	mg/L	0.20	0.15	1	02/12/22 08:57	02/13/22 18:03	7440-09-7	
Sodium	**4.1**	mg/L	1.0	0.58	1	02/12/22 08:57	02/13/22 18:03	7440-23-5	
Calcium	**19.1**	mg/L	1.0	0.12	1	02/12/22 08:57	02/13/22 18:03	7440-70-2	
Magnesium	**7.4**	mg/L	0.050	0.012	1	02/12/22 08:57	02/13/22 18:03	7439-95-4	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00078	1	02/11/22 10:29	02/14/22 19:03	7440-36-0	
Arsenic	**0.0012J**	mg/L	0.0050	0.0011	1	02/11/22 10:29	02/14/22 19:03	7440-38-2	
Barium	**0.040**	mg/L	0.0050	0.00067	1	02/11/22 10:29	02/14/22 19:03	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	02/11/22 10:29	02/14/22 19:03	7440-41-7	
Boron	ND	mg/L	0.040	0.0086	1	02/11/22 10:29	02/14/22 19:03	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	02/11/22 10:29	02/14/22 19:03	7440-43-9	
Chromium	**0.0052**	mg/L	0.0050	0.0011	1	02/11/22 10:29	02/14/22 19:03	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	02/11/22 10:29	02/14/22 19:03	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	02/11/22 10:29	02/14/22 19:03	7439-92-1	
Lithium	ND	mg/L	0.030	0.00073	1	02/11/22 10:29	02/14/22 19:03	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	02/11/22 10:29	02/14/22 19:03	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	02/11/22 10:29	02/14/22 19:03	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	02/11/22 10:29	02/14/22 19:03	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.00013	1	02/09/22 11:00	02/09/22 15:56	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**124**	mg/L	10.0	10.0	1		02/07/22 15:08		
2320B Alkalinity	Analytical Method: SM 2320B Pace Analytical Services - Minneapolis								
Alkalinity, Total as CaCO3	**77.5**	mg/L	5.0	1.8	1		02/09/22 15:59		
Alkalinity,Bicarbonate (CaCO3)	**77.5**	mg/L	5.0	1.8	1		02/09/22 15:59		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	1.8	1		02/09/22 15:59		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: BRANCH AP-BCD/E BACKGROUND
Pace Project No.: 92585717

Sample: BRGWA-5S **Lab ID: 92585717003** Collected: 02/01/22 09:40 Received: 02/02/22 10:25 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**3.4**	mg/L	1.0	0.60	1		02/07/22 11:26	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		02/07/22 11:26	16984-48-8	
Sulfate	ND	mg/L	1.0	0.50	1		02/07/22 11:26	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: BRANCH AP-BCD/E BACKGROUND
Pace Project No.: 92585717

Sample: BRGWA-5I **Lab ID: 92585717004** Collected: 02/01/22 11:15 Received: 02/02/22 10:25 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**CUSTOMER**				1		02/02/22 14:24		
pH	**6.38**	Std. Units			1		02/02/22 14:24		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Iron	ND	mg/L	0.040	0.025	1	02/12/22 08:57	02/13/22 18:18	7439-89-6	
Manganese	ND	mg/L	0.040	0.0043	1	02/12/22 08:57	02/13/22 18:18	7439-96-5	
Potassium	**0.89**	mg/L	0.20	0.15	1	02/12/22 08:57	02/13/22 18:18	7440-09-7	
Sodium	**4.7**	mg/L	1.0	0.58	1	02/12/22 08:57	02/13/22 18:18	7440-23-5	
Calcium	**14.5**	mg/L	1.0	0.12	1	02/12/22 08:57	02/13/22 18:18	7440-70-2	
Magnesium	**9.2**	mg/L	0.050	0.012	1	02/12/22 08:57	02/13/22 18:18	7439-95-4	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00078	1	02/11/22 10:29	02/14/22 19:09	7440-36-0	
Arsenic	**0.0013J**	mg/L	0.0050	0.0011	1	02/11/22 10:29	02/14/22 19:09	7440-38-2	
Barium	**0.028**	mg/L	0.0050	0.00067	1	02/11/22 10:29	02/14/22 19:09	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	02/11/22 10:29	02/14/22 19:09	7440-41-7	
Boron	ND	mg/L	0.040	0.0086	1	02/11/22 10:29	02/14/22 19:09	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	02/11/22 10:29	02/14/22 19:09	7440-43-9	
Chromium	**0.0066**	mg/L	0.0050	0.0011	1	02/11/22 10:29	02/14/22 19:09	7440-47-3	
Cobalt	**0.00070J**	mg/L	0.0050	0.00039	1	02/11/22 10:29	02/14/22 19:09	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	02/11/22 10:29	02/14/22 19:09	7439-92-1	
Lithium	**0.0011J**	mg/L	0.030	0.00073	1	02/11/22 10:29	02/14/22 19:09	7439-93-2	
Molybdenum	**0.0020J**	mg/L	0.010	0.00074	1	02/11/22 10:29	02/14/22 19:09	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	02/11/22 10:29	02/14/22 19:09	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	02/11/22 10:29	02/14/22 19:09	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.00013	1	02/09/22 11:00	02/09/22 15:59	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**129**	mg/L	10.0	10.0	1		02/07/22 15:09		
2320B Alkalinity	Analytical Method: SM 2320B Pace Analytical Services - Minneapolis								
Alkalinity, Total as CaCO3	**75.0**	mg/L	5.0	1.8	1		02/09/22 16:04		
Alkalinity,Bicarbonate (CaCO3)	**75.0**	mg/L	5.0	1.8	1		02/09/22 16:04		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	1.8	1		02/09/22 16:04		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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(770)734-4200

ANALYTICAL RESULTS

Project: BRANCH AP-BCD/E BACKGROUND
Pace Project No.: 92585717

Sample: BRGWA-5I **Lab ID: 92585717004** Collected: 02/01/22 11:15 Received: 02/02/22 10:25 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**3.5**	mg/L	1.0	0.60	1		02/07/22 12:41	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		02/07/22 12:41	16984-48-8	
Sulfate	**2.0**	mg/L	1.0	0.50	1		02/07/22 12:41	14808-79-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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ANALYTICAL RESULTS

Project: BRANCH AP-BCD/E BACKGROUND
Pace Project No.: 92585717

Sample: BRGWA-6S **Lab ID: 92585717005** Collected: 02/01/22 09:45 Received: 02/02/22 10:25 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**CUSTOMER**				1		02/02/22 14:24		
pH	**6.54**	Std. Units			1		02/02/22 14:24		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Iron	**0.23**	mg/L	0.040	0.025	1	02/12/22 08:57	02/13/22 18:23	7439-89-6	
Manganese	**0.0082J**	mg/L	0.040	0.0043	1	02/12/22 08:57	02/13/22 18:23	7439-96-5	
Potassium	**0.75**	mg/L	0.20	0.15	1	02/12/22 08:57	02/13/22 18:23	7440-09-7	
Sodium	**2.5**	mg/L	1.0	0.58	1	02/12/22 08:57	02/13/22 18:23	7440-23-5	
Calcium	**4.2**	mg/L	1.0	0.12	1	02/12/22 08:57	02/13/22 18:23	7440-70-2	
Magnesium	**3.7**	mg/L	0.050	0.012	1	02/12/22 08:57	02/13/22 18:23	7439-95-4	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00078	1	02/11/22 10:29	02/14/22 19:15	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0011	1	02/11/22 10:29	02/14/22 19:15	7440-38-2	
Barium	**0.014**	mg/L	0.0050	0.00067	1	02/11/22 10:29	02/14/22 19:15	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	02/11/22 10:29	02/14/22 19:15	7440-41-7	
Boron	ND	mg/L	0.040	0.0086	1	02/11/22 10:29	02/14/22 19:15	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	02/11/22 10:29	02/14/22 19:15	7440-43-9	
Chromium	**0.015**	mg/L	0.0050	0.0011	1	02/11/22 10:29	02/14/22 19:15	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	02/11/22 10:29	02/14/22 19:15	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	02/11/22 10:29	02/14/22 19:15	7439-92-1	
Lithium	**0.0029J**	mg/L	0.030	0.00073	1	02/11/22 10:29	02/14/22 19:15	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	02/11/22 10:29	02/14/22 19:15	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	02/11/22 10:29	02/14/22 19:15	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	02/11/22 10:29	02/14/22 19:15	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.00013	1	02/09/22 11:00	02/09/22 16:01	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**61.0**	mg/L	10.0	10.0	1		02/07/22 15:09		
2320B Alkalinity	Analytical Method: SM 2320B Pace Analytical Services - Minneapolis								
Alkalinity, Total as CaCO3	**27.6**	mg/L	5.0	1.8	1		02/09/22 16:08		
Alkalinity,Bicarbonate (CaCO3)	**27.6**	mg/L	5.0	1.8	1		02/09/22 16:08		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	1.8	1		02/09/22 16:08		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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(770)734-4200

ANALYTICAL RESULTS

Project: BRANCH AP-BCD/E BACKGROUND
Pace Project No.: 92585717

Sample: BRGWA-6S **Lab ID: 92585717005** Collected: 02/01/22 09:45 Received: 02/02/22 10:25 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**2.1**	mg/L	1.0	0.60	1		02/07/22 12:56	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		02/07/22 12:56	16984-48-8	
Sulfate	ND	mg/L	1.0	0.50	1		02/07/22 12:56	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: BRANCH AP-BCD/E BACKGROUND
Pace Project No.: 92585717

QC Batch: 677807
QC Batch Method: EPA 3010A
Analysis Method: EPA 6010D
Analysis Description: 6010D ATL
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92585717001, 92585717002, 92585717003, 92585717004, 92585717005

METHOD BLANK: 3547708 Matrix: Water
Associated Lab Samples: 92585717001, 92585717002, 92585717003, 92585717004, 92585717005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium	mg/L	ND	1.0	0.12	02/13/22 17:30	
Iron	mg/L	ND	0.040	0.025	02/13/22 17:30	
Magnesium	mg/L	ND	0.050	0.012	02/13/22 17:30	
Manganese	mg/L	ND	0.040	0.0043	02/13/22 17:30	
Potassium	mg/L	ND	0.20	0.15	02/13/22 17:30	
Sodium	mg/L	ND	1.0	0.58	02/13/22 17:30	

LABORATORY CONTROL SAMPLE: 3547709

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium	mg/L	1	1.1	107	80-120	
Iron	mg/L	1	0.99	99	80-120	
Magnesium	mg/L	1	1.0	103	80-120	
Manganese	mg/L	1	1.0	100	80-120	
Potassium	mg/L	1	0.95	95	80-120	
Sodium	mg/L	1	1.1	110	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3547710 3547711

Parameter	Units	92585717001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Calcium	mg/L	4.4	1	1	5.3	5.3	94	88	75-125	1	20	
Iron	mg/L	0.13	1	1	1.1	1.1	102	98	75-125	3	20	
Magnesium	mg/L	4.0	1	1	5.0	4.8	100	87	75-125	3	20	
Manganese	mg/L	0.052	1	1	1.1	1.0	102	99	75-125	3	20	
Potassium	mg/L	0.29	1	1	1.4	1.4	109	110	75-125	1	20	
Sodium	mg/L	3.1	1	1	4.1	4.1	104	99	75-125	1	20	

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

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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(770)734-4200

QUALITY CONTROL DATA

Project: BRANCH AP-BCD/E BACKGROUND
Pace Project No.: 92585717

QC Batch: 677647
QC Batch Method: EPA 3005A
Analysis Method: EPA 6020B
Analysis Description: 6020 MET
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92585717001, 92585717002, 92585717003, 92585717004, 92585717005

METHOD BLANK: 3546468 Matrix: Water
Associated Lab Samples: 92585717001, 92585717002, 92585717003, 92585717004, 92585717005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	0.00078J	0.0030	0.00078	02/14/22 14:43	
Arsenic	mg/L	ND	0.0050	0.0011	02/14/22 14:43	
Barium	mg/L	ND	0.0050	0.00067	02/14/22 14:43	
Beryllium	mg/L	ND	0.00050	0.000054	02/14/22 14:43	
Boron	mg/L	ND	0.040	0.0086	02/14/22 14:43	
Cadmium	mg/L	ND	0.00050	0.00011	02/14/22 14:43	
Chromium	mg/L	ND	0.0050	0.0011	02/14/22 14:43	
Cobalt	mg/L	ND	0.0050	0.00039	02/14/22 14:43	
Lead	mg/L	ND	0.0010	0.00089	02/14/22 14:43	
Lithium	mg/L	ND	0.030	0.00073	02/14/22 14:43	
Molybdenum	mg/L	ND	0.010	0.00074	02/14/22 14:43	
Selenium	mg/L	ND	0.0050	0.0014	02/14/22 14:43	
Thallium	mg/L	ND	0.0010	0.00018	02/14/22 14:43	

LABORATORY CONTROL SAMPLE: 3546469

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.1	0.11	109	80-120	
Arsenic	mg/L	0.1	0.099	99	80-120	
Barium	mg/L	0.1	0.10	103	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	0.11	107	80-120	
Chromium	mg/L	0.1	0.11	107	80-120	
Cobalt	mg/L	0.1	0.11	108	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	0.10	100	80-120	
Thallium	mg/L	0.1	0.10	102	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3546470 3546471

Parameter	Units	92585058023 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Antimony	mg/L	0.027	0.1	0.1	0.13	0.14	107	110	75-125	3	20	
Arsenic	mg/L	ND	0.1	0.1	0.10	0.10	102	104	75-125	1	20	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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QUALITY CONTROL DATA

Project: BRANCH AP-BCD/E BACKGROUND
Pace Project No.: 92585717

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3546470 3546471

Parameter	Units	92585058023 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Barium	mg/L	0.049	0.1	0.1	0.16	0.17	115	119	75-125	3	20	
Beryllium	mg/L	ND	0.1	0.1	0.095	0.097	95	97	75-125	2	20	
Boron	mg/L	0.021J	1	1	0.95	0.96	93	94	75-125	1	20	
Cadmium	mg/L	ND	0.1	0.1	0.10	0.10	105	105	75-125	0	20	
Chromium	mg/L	0.0011J	0.1	0.1	0.10	0.10	104	100	75-125	3	20	
Cobalt	mg/L	ND	0.1	0.1	0.10	0.095	100	95	75-125	6	20	
Lead	mg/L	ND	0.1	0.1	0.094	0.095	94	95	75-125	0	20	
Lithium	mg/L	0.010J	0.1	0.1	0.10	0.10	94	93	75-125	1	20	
Molybdenum	mg/L	0.0041J	0.1	0.1	0.11	0.11	105	106	75-125	1	20	
Selenium	mg/L	ND	0.1	0.1	0.10	0.10	99	102	75-125	3	20	
Thallium	mg/L	ND	0.1	0.1	0.096	0.098	96	98	75-125	2	20	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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QUALITY CONTROL DATA

Project: BRANCH AP-BCD/E BACKGROUND
Pace Project No.: 92585717

QC Batch: 677024
QC Batch Method: EPA 7470A
Analysis Method: EPA 7470A
Analysis Description: 7470 Mercury
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92585717001, 92585717002, 92585717003, 92585717004, 92585717005

METHOD BLANK: 3543214 Matrix: Water
Associated Lab Samples: 92585717001, 92585717002, 92585717003, 92585717004, 92585717005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	ND	0.00020	0.00013	02/09/22 15:30	

LABORATORY CONTROL SAMPLE: 3543215

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.0025	0.0025	101	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3543216 3543217

Parameter	Units	92585717001 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	98	95	75-125	4	20	

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

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: BRANCH AP-BCD/E BACKGROUND
Pace Project No.: 92585717

QC Batch: 676426
QC Batch Method: SM 2540C-2015
Analysis Method: SM 2540C-2015
Analysis Description: 2540C Total Dissolved Solids
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92585717001, 92585717002, 92585717003, 92585717004, 92585717005

METHOD BLANK: 3540491 Matrix: Water
Associated Lab Samples: 92585717001, 92585717002, 92585717003, 92585717004, 92585717005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	10.0	10.0	02/07/22 15:05	

LABORATORY CONTROL SAMPLE: 3540492

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	372	93	80-120	

SAMPLE DUPLICATE: 3540493

Parameter	Units	92585920001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	1260	1240	1	25	

SAMPLE DUPLICATE: 3540494

Parameter	Units	92585490001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	3160	2680	16	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
(770)734-4200

QUALITY CONTROL DATA

Project: BRANCH AP-BCD/E BACKGROUND
Pace Project No.: 92585717

QC Batch: 797156
QC Batch Method: SM 2320B
Analysis Method: SM 2320B
Analysis Description: 2320B Alkalinity
Laboratory: Pace Analytical Services - Minneapolis
Associated Lab Samples: 92585717001

METHOD BLANK: 4236642 Matrix: Water
Associated Lab Samples: 92585717001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Alkalinity, Total as CaCO3	mg/L	ND	5.0	1.8	02/03/22 20:09	
Alkalinity,Bicarbonate (CaCO3)	mg/L	ND	5.0	1.8	02/03/22 20:09	
Alkalinity,Carbonate (CaCO3)	mg/L	ND	5.0	1.8	02/03/22 20:09	

LABORATORY CONTROL SAMPLE & LCSD: 4236643 4236644

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
Alkalinity, Total as CaCO3	mg/L	40	42.2	42.2	106	106	90-110	0	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4236645 4236646

Parameter	Units	10595801002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Alkalinity, Total as CaCO3	mg/L	73.8	40	40	114	114	101	102	80-120	0	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4236647 4236648

Parameter	Units	10595871007 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Alkalinity, Total as CaCO3	mg/L	884	40	40	923	924	98	100	80-120	0	20	

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

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: BRANCH AP-BCD/E BACKGROUND
Pace Project No.: 92585717

QC Batch: 798025
QC Batch Method: SM 2320B
Analysis Method: SM 2320B
Analysis Description: 2320B Alkalinity
Laboratory: Pace Analytical Services - Minneapolis
Associated Lab Samples: 92585717002, 92585717003, 92585717004, 92585717005

METHOD BLANK: 4240244 Matrix: Water
Associated Lab Samples: 92585717002, 92585717003, 92585717004, 92585717005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Alkalinity, Total as CaCO3	mg/L	ND	5.0	1.8	02/09/22 14:38	
Alkalinity,Bicarbonate (CaCO3)	mg/L	ND	5.0	1.8	02/09/22 14:38	
Alkalinity,Carbonate (CaCO3)	mg/L	ND	5.0	1.8	02/09/22 14:38	

LABORATORY CONTROL SAMPLE & LCSD: 4240245 4240246

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
Alkalinity, Total as CaCO3	mg/L	40	41.9	41.9	105	105	90-110	0	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4240247 4240248

Parameter	Units	92585555010 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Alkalinity, Total as CaCO3	mg/L	8.1	40	40	50.3	51.8	106	109	80-120	3	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4240249 4240250

Parameter	Units	10596970001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Alkalinity, Total as CaCO3	mg/L	21.0	40	40	60.5	60.8	99	99	80-120	0	20	

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

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: BRANCH AP-BCD/E BACKGROUND
Pace Project No.: 92585717

QC Batch: 676333
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
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92585717001, 92585717002, 92585717003, 92585717004, 92585717005

METHOD BLANK: 3540067 Matrix: Water
Associated Lab Samples: 92585717001, 92585717002, 92585717003, 92585717004, 92585717005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.60	02/07/22 07:26	
Fluoride	mg/L	ND	0.10	0.050	02/07/22 07:26	
Sulfate	mg/L	ND	1.0	0.50	02/07/22 07:26	

LABORATORY CONTROL SAMPLE: 3540068

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	48.7	97	90-110	
Fluoride	mg/L	2.5	2.4	96	90-110	
Sulfate	mg/L	50	47.0	94	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3540069 3540070

Parameter	Units	92585636004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	20.0	50	50	66.6	69.9	93	100	90-110	5	10	
Fluoride	mg/L	0.086J	2.5	2.5	2.4	2.6	92	100	90-110	7	10	
Sulfate	mg/L	25.3	50	50	71.8	75.0	93	99	90-110	4	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3540071 3540072

Parameter	Units	92585717003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	3.4	50	50	54.7	55.0	103	103	90-110	1	10	
Fluoride	mg/L	ND	2.5	2.5	2.6	2.6	101	102	90-110	1	10	
Sulfate	mg/L	ND	50	50	51.1	51.4	101	102	90-110	1	10	

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

REPORT OF LABORATORY ANALYSIS

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

QUALIFIERS

Project: BRANCH AP-BCD/E BACKGROUND
Pace Project No.: 92585717

DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

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

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

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

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

Acid preservation may not be appropriate for 2 Chloroethylvinyl ether.

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

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

Reported results are not rounded until the final step prior to reporting. Therefore, calculated parameters that are typically reported as "Total" may vary slightly from the sum of the reported component parameters.

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: BRANCH AP-BCD/E BACKGROUND
Pace Project No.: 92585717

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92585717001	**BRGWA-2S**				
92585717002	**BRGWA-2I**				
92585717003	**BRGWA-5S**				
92585717004	**BRGWA-5I**				
92585717005	**BRGWA-6S**				
92585717001	**BRGWA-2S**	EPA 3010A	677807	EPA 6010D	677941
92585717002	**BRGWA-2I**	EPA 3010A	677807	EPA 6010D	677941
92585717003	**BRGWA-5S**	EPA 3010A	677807	EPA 6010D	677941
92585717004	**BRGWA-5I**	EPA 3010A	677807	EPA 6010D	677941
92585717005	**BRGWA-6S**	EPA 3010A	677807	EPA 6010D	677941
92585717001	**BRGWA-2S**	EPA 3005A	677647	EPA 6020B	677773
92585717002	**BRGWA-2I**	EPA 3005A	677647	EPA 6020B	677773
92585717003	**BRGWA-5S**	EPA 3005A	677647	EPA 6020B	677773
92585717004	**BRGWA-5I**	EPA 3005A	677647	EPA 6020B	677773
92585717005	**BRGWA-6S**	EPA 3005A	677647	EPA 6020B	677773
92585717001	**BRGWA-2S**	EPA 7470A	677024	EPA 7470A	677121
92585717002	**BRGWA-2I**	EPA 7470A	677024	EPA 7470A	677121
92585717003	**BRGWA-5S**	EPA 7470A	677024	EPA 7470A	677121
92585717004	**BRGWA-5I**	EPA 7470A	677024	EPA 7470A	677121
92585717005	**BRGWA-6S**	EPA 7470A	677024	EPA 7470A	677121
92585717001	**BRGWA-2S**	SM 2540C-2015	676426		
92585717002	**BRGWA-2I**	SM 2540C-2015	676426		
92585717003	**BRGWA-5S**	SM 2540C-2015	676426		
92585717004	**BRGWA-5I**	SM 2540C-2015	676426		
92585717005	**BRGWA-6S**	SM 2540C-2015	676426		
92585717001	**BRGWA-2S**	SM 2320B	797156		
92585717002	**BRGWA-2I**	SM 2320B	798025		
92585717003	**BRGWA-5S**	SM 2320B	798025		
92585717004	**BRGWA-5I**	SM 2320B	798025		
92585717005	**BRGWA-6S**	SM 2320B	798025		
92585717001	**BRGWA-2S**	EPA 300.0 Rev 2.1 1993	676333		
92585717002	**BRGWA-2I**	EPA 300.0 Rev 2.1 1993	676333		
92585717003	**BRGWA-5S**	EPA 300.0 Rev 2.1 1993	676333		
92585717004	**BRGWA-5I**	EPA 300.0 Rev 2.1 1993	676333		
92585717005	**BRGWA-6S**	EPA 300.0 Rev 2.1 1993	676333		

Laboratory receiving samples:
Asheville ☐ Eden ☐ Greenwood ☐ Huntersville ☐ Raleigh ☐ Mechanicsville ☐ Atlanta ☑ Kernersville ☐

Sample Condition Upon Receipt

Client Name: Georgia Power

Project #: WO# : 92585717

92585717

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

Custody Seal Present? ☐ Yes ☑ No **Seals Intact?** ☐ Yes ☐ No

Date/Initials Person Examining Contents: dD 9-2-22

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

Biological Tissue Frozen? ☐ Yes ☐ No ☑ N/A

Thermometer: ☐ IR Gun ID: 230 ☑ Wet ☐ Blue ☐ None

Type of Ice:

Cooler Temp: 1.6 **Correction Factor:** Add/Subtract (°C) +0.2

Temp should be above freezing to 6°C
☐ Samples out of temp criteria. Samples on ice, cooling process has begun

Cooler Temp Corrected (°C): 1.8

USDA Regulated Soil (☐ N/A, water sample)
Did samples originate in a quarantine zone within the United States: CA, NY, or SC (check maps)? ☐ Yes ☐ No
Did samples originate from a foreign source (internationally, including Hawaii and Puerto Rico)? ☐ Yes ☐ No

				Comments/Discrepancy:
Chain of Custody Present?	☑ Yes	☐ No	☐ N/A	1.
Samples Arrived within Hold Time?	☑ Yes	☐ No	☐ N/A	2.
Short Hold Time Analysis (<72 hr.)?	☐ Yes	☑ No	☐ N/A	3.
Rush Turn Around Time Requested?	☐ Yes	☑ No	☐ N/A	4.
Sufficient Volume?	☑ Yes	☐ No	☐ N/A	5.
Correct Containers Used?	☑ Yes	☐ No	☐ N/A	6.
Pace Containers Used?	☑ Yes	☐ No	☐ N/A	
Containers Intact?	☑ Yes	☐ No	☐ N/A	7.
Dissolved analysis: Samples Field Filtered?	☐ Yes	☐ No	☑ N/A	8
Sample Labels Match COC?	☑ Yes	☐ No	☐ N/A	9
Includes Date/Time/ID/Analysis Matrix: WT				
Headspace in VOA Vials (>5-6mm)?	☐ Yes	☐ No	☑ N/A	10
Trip Blank Present?	☐ Yes	☐ No	☑ N/A	11.
Trip Blank Custody Seals Present?	☐ Yes	☐ No	☑ N/A	

COMMENTS/SAMPLE DISCREPANCY

Field Data Required? ☐ Yes ☐ No

Lot ID of split containers:

CLIENT NOTIFICATION/RESOLUTION

Person contacted: _____ Date/Time: _____

Project Manager SCURF Review: _____ **Date:** _____

Project Manager SRF Review: _____ **Date:** _____

Pace Analytical	Document Name: Bottle Identification Form (BIF)	Document Issued: November 15, 2021 Page 1 of 1
	Document No.: F-CAR-CS-043-Rev.01	Issuing Authority: Pace Carolinas Quality Office

***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 bottles**

Project # **WO# : 92585717**

PM: NMC Due Date: 02/18/22

CLIENT: GA-GA Power

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 Unpreserved (N/A)	DG9P-40 mL VOA H3PO4 (N/A)	VOAK (3 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)	BPIN	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)	DG9U-40 mL Amber Unpreserved vials (N/A)
	1		2	1			✓ 1																		2				
	2		2	1			✓ 1																		2				
	3		2	1			✓ 1																		2				
	4		2	1			✓ 1																		2				
	5		2	1			✓ 1																		2				
	6																												
	7																												
	8																												
	9																												
	10																												
	11																												
	12																												

pH Adjustment Log for Preserved Samples

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

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

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 - Coal Combustion Residuals	Report To: [illegible]	Attention: [illegible]
Address: [illegible]	Copy To: [illegible]	Company Name:
[illegible], GA [illegible]		Address:
Email: [illegible]	Purchase Order #:	Pace Quote:
Phone: [illegible] Fax:	Project Name: [illegible]	Pace Project Manager: [illegible]
Requested Due Date: [illegible]	Project #: [illegible]	Pace Profile #:

Regulatory Agency:

State / Location: GA

ITEM #	SAMPLE ID	MATRIX CODE	SAMPLE TYPE	DATE	TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Unpreserved	H_2SO_4	HNO_3	HCl	NaOH + Zn Acetate	$Na_2S_2O_3$	Methanol	Other	Analyses Test	[illegible] Total Metals	Cl, F, SO_4, TDS	Radium 226/228	Fe, Mn, K, Na, Mg	Alkalinity [illegible]	Residual Chlorine (Y/N)	
1	BRGWA-[illegible]	WT	G	[illegible]	14:55		[illegible]	[illegible]		[illegible]							X	X	X	X	X		pH = [illegible]
2	BRGWA-[illegible]	WT	G	[illegible]	10:10		[illegible]	[illegible]		[illegible]							X	X	X	X	X		pH = [illegible]
3	BRGWA-[illegible]	WT	G	[illegible]	9:40		[illegible]	[illegible]		[illegible]							X	X	X	X	X		pH = [illegible]
4	BRGWA-[illegible]	WT	G	[illegible]	11:15		[illegible]	[illegible]		[illegible]							X	X	X	X	X		pH = [illegible]
5	BRGWA-[illegible]	WT	G	[illegible]	9:45		[illegible]	[illegible]		[illegible]							X	X	X	X	X		pH = [illegible]
6																							
7																							
8																							
9																							
10																							
11																							
12																							

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
	[signature]	2/3/22	8:22	Elaine Cook / [illegible]	[illegible]	8:22	
					[illegible]	1023	

Signature: [signature] / [illegible] DATE Signed: 2/8/22

TEMP in C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N)

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

March 03, 2022

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

RE: Project: BRANCH AP-E
Pace Project No.: 92585727

Dear Joju Abraham:

Enclosed are the analytical results for sample(s) received by the laboratory between February 02, 2022 and February 03, 2022. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

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

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

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

Sincerely,

Nicole D'Oleo
nicole.d'oleo@pacelabs.com
(704)875-9092
Project Manager

Enclosures

cc: Anna Bottum, ERM
Andrea Brazell, ERM
Daniela Herrera, Golder
Ben Hodges, Georgia Power
Jimmy Jones, Golder Associates Inc.
Kristen Jurinko
Julie Lehrman, Golder Associates Inc.
Ms. Lauren Petty, Southern Company
Carolyn Powrozek, Golder
Dawn Prell, Golder Associates Inc.
Tim Richards, Golder Associates - Atlanta
Lacy Smith, ERM
Brian Steele, Golder
Caitlin Tillema, ERM
Christine Weaver, ERM

REPORT OF LABORATORY ANALYSIS

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

CERTIFICATIONS

Project: BRANCH AP-E
Pace Project No.: 92585727

Pace Analytical Services, LLC - Minneapolis MN

1700 Elm Street SE, Minneapolis, MN 55414
1800 Elm Street SE, Minneapolis, MN 55414--Satellite Air Lab
A2LA Certification #: 2926.01*
Alabama Certification #: 40770
Alaska Contaminated Sites Certification #: 17-009*
Alaska DW Certification #: MN00064
Arizona Certification #: AZ0014*
Arkansas DW Certification #: MN00064
Arkansas WW Certification #: 88-0680
California Certification #: 2929
Colorado Certification #: MN00064
Connecticut Certification #: PH-0256
EPA Region 8 Tribal Water Systems+Wyoming DW Certification #: via MN 027-053-137
Florida Certification #: E87605*
Georgia Certification #: 959
Hawaii Certification #: MN00064
Idaho Certification #: MN00064
Illinois Certification #: 200011
Indiana Certification #: C-MN-01
Iowa Certification #: 368
Kansas Certification #: E-10167
Kentucky DW Certification #: 90062
Kentucky WW Certification #: 90062
Louisiana DEQ Certification #: AI-03086*
Louisiana DW Certification #: MN00064
Maine Certification #: MN00064*
Maryland Certification #: 322
Michigan Certification #: 9909
Minnesota Certification #: 027-053-137*
Minnesota Dept of Ag Approval: via MN 027-053-137
Minnesota Petrofund Registration #: 1240*
Mississippi Certification #: MN00064
Missouri Certification #: 10100
Montana Certification #: CERT0092
Nebraska Certification #: NE-OS-18-06
Nevada Certification #: MN00064
New Hampshire Certification #: 2081*
New Jersey Certification #: MN002
New York Certification #: 11647*
North Carolina DW Certification #: 27700
North Carolina WW Certification #: 530
North Dakota Certification #: R-036
Ohio DW Certification #: 41244
Ohio VAP Certification (1700) #: CL101
Ohio VAP Certification (1800) #: CL110*
Oklahoma Certification #: 9507*
Oregon Primary Certification #: MN300001
Oregon Secondary Certification #: MN200001*
Pennsylvania Certification #: 68-00563*
Puerto Rico Certification #: MN00064
South Carolina Certification #:74003001
Tennessee Certification #: TN02818
Texas Certification #: T104704192*
Utah Certification #: MN00064*
Vermont Certification #: VT-027053137
Virginia Certification #: 460163*
Washington Certification #: C486*
West Virginia DEP Certification #: 382
West Virginia DW Certification #: 9952 C
Wisconsin Certification #: 999407970
Wyoming UST Certification #: via A2LA 2926.01
USDA Permit #: P330-19-00208
*Please Note: Applicable air certifications are denoted with an asterisk (*).

Pace Analytical Services Charlotte

South Carolina Laboratory ID: 99006
9800 Kincey Ave. Ste 100, Huntersville, NC 28078
North Carolina Drinking Water Certification #: 37706
North Carolina Field Services Certification #: 5342
North Carolina Wastewater Certification #: 12
South Carolina Laboratory ID: 99006
South Carolina Certification #: 99006001
South Carolina Drinking Water Cert. #: 99006003
Florida/NELAP Certification #: E87627
Kentucky UST Certification #: 84
Louisiana DoH Drinking Water #: LA029
Virginia/VELAP Certification #: 460221

Pace Analytical Services Asheville

2225 Riverside Drive, Asheville, NC 28804
Florida/NELAP Certification #: E87648
North Carolina Drinking Water Certification #: 37712
North Carolina Wastewater Certification #: 40
South Carolina Laboratory ID: 99030
South Carolina Certification #: 99030001
Virginia/VELAP Certification #: 460222

Pace Analytical Services Peachtree Corners

110 Technology Pkwy, Peachtree Corners, GA 30092
Florida DOH Certification #: E87315
Georgia DW Inorganics Certification #: 812
North Carolina Certification #: 381

REPORT OF LABORATORY ANALYSIS

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

CERTIFICATIONS

Project: BRANCH AP-E
Pace Project No.: 92585727

Pace Analytical Services Peachtree Corners
South Carolina Certification #: 98011001

REPORT OF LABORATORY ANALYSIS

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

SAMPLE SUMMARY

Project: BRANCH AP-E
Pace Project No.: 92585727

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92585727001	**BRGWC-17S**	Water	02/01/22 15:28	02/02/22 10:25
92585727002	**BRGWC-33S**	Water	02/01/22 11:02	02/02/22 10:25
92585727003	**BRGWC-34S**	Water	02/01/22 13:00	02/02/22 10:25
92585727004	**BRGWC-35S**	Water	02/01/22 14:20	02/02/22 10:25
92585727005	**BRGWC-36S**	Water	02/01/22 13:23	02/02/22 10:25
92585727006	**BRGWC-38S**	Water	02/01/22 15:15	02/02/22 10:25
92585727007	**EB-1**	Water	02/01/22 16:15	02/02/22 10:25
92585727008	**FB-1**	Water	02/01/22 11:30	02/02/22 10:25
92585727009	**DUP-1**	Water	02/01/22 00:00	02/02/22 10:25
92585727010	**BRGWC-37S**	Water	02/02/22 09:20	02/03/22 10:35

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

SAMPLE ANALYTE COUNT

Project: BRANCH AP-E
Pace Project No.: 92585727

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92585727001	**BRGWC-17S**	EPA 6010D	KH	6	PASI-GA
		EPA 6020B	CW1	13	PASI-GA
		EPA 7470A	VB	1	PASI-GA
		SM 2540C-2015	ALW	1	PASI-GA
		SM 2320B	AR3	3	PASI-M
		EPA 300.0 Rev 2.1 1993	CDC	3	PASI-A
92585727002	**BRGWC-33S**	EPA 6010D	KH	6	PASI-GA
		EPA 6020B	CW1	13	PASI-GA
		EPA 7470A	VB	1	PASI-GA
		SM 2540C-2015	ALW	1	PASI-GA
		SM 2320B	AR3	3	PASI-M
		EPA 300.0 Rev 2.1 1993	CDC	3	PASI-A
92585727003	**BRGWC-34S**	EPA 6010D	KH	6	PASI-GA
		EPA 6020B	CW1	13	PASI-GA
		EPA 7470A	VB	1	PASI-GA
		SM 2540C-2015	ALW	1	PASI-GA
		SM 2320B	AR3	3	PASI-M
		EPA 300.0 Rev 2.1 1993	CDC	3	PASI-A
92585727004	**BRGWC-35S**	EPA 6010D	KH	6	PASI-GA
		EPA 6020B	CW1	13	PASI-GA
		EPA 7470A	VB	1	PASI-GA
		SM 2540C-2015	ALW	1	PASI-GA
		SM 2320B	AR3	3	PASI-M
		EPA 300.0 Rev 2.1 1993	CDC	3	PASI-A
92585727005	**BRGWC-36S**	EPA 6010D	KH	6	PASI-GA
		EPA 6020B	CW1	13	PASI-GA
		EPA 7470A	VB	1	PASI-GA
		SM 2540C-2015	ALW	1	PASI-GA
		SM 2320B	AR3	3	PASI-M
		EPA 300.0 Rev 2.1 1993	JCM	3	PASI-A
92585727006	**BRGWC-38S**	EPA 6010D	KH	6	PASI-GA
		EPA 6020B	CW1	13	PASI-GA
		EPA 7470A	VB	1	PASI-GA
		SM 2540C-2015	ALW	1	PASI-GA
		SM 2320B	AR3	3	PASI-M
		EPA 300.0 Rev 2.1 1993	JCM	3	PASI-A
92585727007	**EB-1**	EPA 6010D	KH	1	PASI-GA

Pace Analytical Services, LLC
110 Technology Parkway
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SAMPLE ANALYTE COUNT

Project: BRANCH AP-E
Pace Project No.: 92585727

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		EPA 6020B	CW1	13	PASI-GA
		EPA 7470A	VB	1	PASI-GA
		SM 2540C-2015	ALW	1	PASI-GA
		EPA 300.0 Rev 2.1 1993	JCM	3	PASI-A
92585727008	**FB-1**	EPA 6010D	KH	1	PASI-GA
		EPA 6020B	CW1	13	PASI-GA
		EPA 7470A	VB	1	PASI-GA
		SM 2540C-2015	ALW	1	PASI-GA
		EPA 300.0 Rev 2.1 1993	JCM	3	PASI-A
92585727009	**DUP-1**	EPA 6010D	KH	1	PASI-GA
		EPA 6020B	CW1	13	PASI-GA
		EPA 7470A	VB	1	PASI-GA
		SM 2540C-2015	ALW	1	PASI-GA
		EPA 300.0 Rev 2.1 1993	JCM	3	PASI-A
92585727010	**BRGWC-37S**	EPA 6010D	KH	6	PASI-GA
		EPA 6020B	CW1	13	PASI-GA
		EPA 7470A	VB	1	PASI-GA
		SM 2540C-2015	ALW	1	PASI-GA
		SM 2320B	AR3	3	PASI-M
		EPA 300.0 Rev 2.1 1993	JCM	3	PASI-A

PASI-A = Pace Analytical Services - Asheville
PASI-C = Pace Analytical Services - Charlotte
PASI-GA = Pace Analytical Services - Peachtree Corners, GA
PASI-M = Pace Analytical Services - Minneapolis

REPORT OF LABORATORY ANALYSIS

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

SUMMARY OF DETECTION

Project: BRANCH AP-E
Pace Project No.: 92585727

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92585727001	**BRGWC-17S**					
	Performed by	CUSTOMER			02/02/22 14:31	
	pH	6.39	Std. Units		02/02/22 14:31	
EPA 6010D	Potassium	0.99	mg/L	0.20	02/13/22 18:42	
EPA 6010D	Sodium	22.3	mg/L	1.0	02/13/22 18:42	
EPA 6010D	Calcium	41.5	mg/L	1.0	02/13/22 18:42	
EPA 6010D	Magnesium	22.3	mg/L	0.050	02/13/22 18:42	
EPA 6020B	Barium	0.045	mg/L	0.0050	02/12/22 17:25	
EPA 6020B	Boron	0.013J	mg/L	0.040	02/12/22 17:25	
EPA 6020B	Chromium	0.013	mg/L	0.0050	02/12/22 17:25	
EPA 6020B	Lithium	0.00096J	mg/L	0.030	02/12/22 17:25	
EPA 6020B	Selenium	0.0021J	mg/L	0.0050	02/12/22 17:25	
SM 2540C-2015	Total Dissolved Solids	354	mg/L	10.0	02/07/22 15:47	
SM 2320B	Alkalinity, Total as CaCO3	78.0	mg/L	5.0	02/09/22 22:10	
SM 2320B	Alkalinity,Bicarbonate (CaCO3)	78.0	mg/L	5.0	02/09/22 22:10	
EPA 300.0 Rev 2.1 1993	Chloride	4.9	mg/L	1.0	02/07/22 13:55	
EPA 300.0 Rev 2.1 1993	Fluoride	0.079J	mg/L	0.10	02/07/22 13:55	
EPA 300.0 Rev 2.1 1993	Sulfate	139	mg/L	3.0	02/08/22 11:53	
92585727002	**BRGWC-33S**					
	Performed by	CUSTOMER			02/02/22 14:31	
	pH	4.82	Std. Units		02/02/22 14:31	
EPA 6010D	Manganese	0.97	mg/L	0.040	02/13/22 18:47	
EPA 6010D	Potassium	9.5	mg/L	0.20	02/13/22 18:47	
EPA 6010D	Sodium	12.1	mg/L	1.0	02/13/22 18:47	
EPA 6010D	Calcium	34.3	mg/L	1.0	02/13/22 18:47	
EPA 6010D	Magnesium	3.7	mg/L	0.050	02/13/22 18:47	
EPA 6020B	Barium	0.023	mg/L	0.0050	02/12/22 17:31	
EPA 6020B	Beryllium	0.0013	mg/L	0.00050	02/12/22 17:31	
EPA 6020B	Boron	1.1	mg/L	0.040	02/12/22 17:31	
EPA 6020B	Cadmium	0.00023J	mg/L	0.00050	02/12/22 17:31	
EPA 6020B	Cobalt	0.027	mg/L	0.0050	02/12/22 17:31	
EPA 6020B	Lithium	0.0083J	mg/L	0.030	02/12/22 17:31	
SM 2540C-2015	Total Dissolved Solids	209	mg/L	10.0	02/07/22 15:47	
SM 2320B	Alkalinity, Total as CaCO3	2.8J	mg/L	5.0	02/10/22 14:43	
SM 2320B	Alkalinity,Bicarbonate (CaCO3)	2.8J	mg/L	5.0	02/10/22 14:43	
EPA 300.0 Rev 2.1 1993	Chloride	13.1	mg/L	1.0	02/07/22 14:10	
EPA 300.0 Rev 2.1 1993	Fluoride	0.053J	mg/L	0.10	02/07/22 14:10	
EPA 300.0 Rev 2.1 1993	Sulfate	99.7	mg/L	2.0	02/08/22 12:09	
92585727003	**BRGWC-34S**					
	Performed by	CUSTOMER			02/02/22 14:32	
	pH	5.87	Std. Units		02/02/22 14:32	
EPA 6010D	Manganese	3.3	mg/L	0.040	02/13/22 18:52	
EPA 6010D	Potassium	3.5	mg/L	0.20	02/13/22 18:52	
EPA 6010D	Sodium	21.3	mg/L	1.0	02/13/22 18:52	
EPA 6010D	Calcium	81.7	mg/L	1.0	02/13/22 18:52	

REPORT OF LABORATORY ANALYSIS

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

SUMMARY OF DETECTION

Project: BRANCH AP-E
Pace Project No.: 92585727

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92585727003	**BRGWC-34S**					
EPA 6010D	Magnesium	16.1	mg/L	0.050	02/13/22 18:52	
EPA 6020B	Barium	0.024	mg/L	0.0050	02/12/22 17:37	
EPA 6020B	Beryllium	0.00015J	mg/L	0.00050	02/12/22 17:37	
EPA 6020B	Boron	2.2	mg/L	0.040	02/12/22 17:37	
EPA 6020B	Cadmium	0.00012J	mg/L	0.00050	02/12/22 17:37	
EPA 6020B	Cobalt	0.0044J	mg/L	0.0050	02/12/22 17:37	
EPA 6020B	Lithium	0.00085J	mg/L	0.030	02/12/22 17:37	
SM 2540C-2015	Total Dissolved Solids	449	mg/L	10.0	02/07/22 15:48	
SM 2320B	Alkalinity, Total as CaCO3	29.0	mg/L	5.0	02/10/22 14:50	
SM 2320B	Alkalinity,Bicarbonate (CaCO3)	29.0	mg/L	5.0	02/10/22 14:50	
EPA 300.0 Rev 2.1 1993	Chloride	5.9	mg/L	1.0	02/07/22 14:25	
EPA 300.0 Rev 2.1 1993	Fluoride	0.060J	mg/L	0.10	02/07/22 14:25	
EPA 300.0 Rev 2.1 1993	Sulfate	243	mg/L	5.0	02/08/22 12:24	
92585727004	**BRGWC-35S**					
	Performed by	CUSTOMER			02/02/22 14:32	
	pH	6.09	Std. Units		02/02/22 14:32	
EPA 6010D	Iron	0.036J	mg/L	0.040	02/13/22 18:56	
EPA 6010D	Manganese	0.011J	mg/L	0.040	02/13/22 18:56	
EPA 6010D	Potassium	4.3	mg/L	0.20	02/13/22 18:56	
EPA 6010D	Sodium	20.1	mg/L	1.0	02/13/22 18:56	
EPA 6010D	Calcium	73.8	mg/L	1.0	02/13/22 18:56	
EPA 6010D	Magnesium	36.0	mg/L	0.050	02/13/22 18:56	
EPA 6020B	Barium	0.033	mg/L	0.0050	02/12/22 17:42	
EPA 6020B	Beryllium	0.00015J	mg/L	0.00050	02/12/22 17:42	
EPA 6020B	Boron	2.1	mg/L	0.040	02/12/22 17:42	
EPA 6020B	Chromium	0.0056	mg/L	0.0050	02/12/22 17:42	
EPA 6020B	Lithium	0.0021J	mg/L	0.030	02/12/22 17:42	
SM 2540C-2015	Total Dissolved Solids	521	mg/L	10.0	02/07/22 15:48	
SM 2320B	Alkalinity, Total as CaCO3	52.4	mg/L	5.0	02/10/22 14:54	
SM 2320B	Alkalinity,Bicarbonate (CaCO3)	52.4	mg/L	5.0	02/10/22 14:54	
EPA 300.0 Rev 2.1 1993	Chloride	6.0	mg/L	1.0	02/07/22 14:40	
EPA 300.0 Rev 2.1 1993	Fluoride	0.055J	mg/L	0.10	02/07/22 14:40	
EPA 300.0 Rev 2.1 1993	Sulfate	256	mg/L	6.0	02/08/22 12:39	
92585727005	**BRGWC-36S**					
	Performed by	CUSTOMER			02/02/22 14:32	
	pH	5.65	Std. Units		02/02/22 14:32	
EPA 6010D	Potassium	3.7	mg/L	0.20	02/13/22 19:01	
EPA 6010D	Sodium	39.2	mg/L	1.0	02/13/22 19:01	
EPA 6010D	Calcium	49.7	mg/L	1.0	02/13/22 19:01	
EPA 6010D	Magnesium	19.8	mg/L	0.050	02/13/22 19:01	
EPA 6020B	Barium	0.029	mg/L	0.0050	02/14/22 16:25	
EPA 6020B	Beryllium	0.000087J	mg/L	0.00050	02/12/22 18:00	
EPA 6020B	Boron	1.0	mg/L	0.040	02/12/22 18:00	
EPA 6020B	Chromium	0.0068	mg/L	0.0050	02/12/22 18:00	
EPA 6020B	Lithium	0.0023J	mg/L	0.030	02/12/22 18:00	

REPORT OF LABORATORY ANALYSIS

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

SUMMARY OF DETECTION

Project: BRANCH AP-E
Pace Project No.: 92585727

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92585727005	**BRGWC-36S**					
EPA 6020B	Selenium	0.0025J	mg/L	0.0050	02/12/22 18:00	
SM 2540C-2015	Total Dissolved Solids	441	mg/L	10.0	02/07/22 15:49	
SM 2320B	Alkalinity, Total as CaCO3	20.8	mg/L	5.0	02/10/22 14:59	
SM 2320B	Alkalinity,Bicarbonate (CaCO3)	20.8	mg/L	5.0	02/10/22 14:59	
EPA 300.0 Rev 2.1 1993	Chloride	7.6	mg/L	1.0	02/06/22 23:30	
EPA 300.0 Rev 2.1 1993	Sulfate	195	mg/L	5.0	02/07/22 13:39	M1
92585727006	**BRGWC-38S**					
	Performed by	CUSTOMER			02/02/22 14:32	
	pH	4.06	Std. Units		02/02/22 14:32	
EPA 6010D	Iron	0.064	mg/L	0.040	02/13/22 19:15	
EPA 6010D	Manganese	1.9	mg/L	0.040	02/13/22 19:15	
EPA 6010D	Potassium	6.5	mg/L	0.20	02/13/22 19:15	
EPA 6010D	Sodium	46.8	mg/L	1.0	02/13/22 19:15	
EPA 6010D	Calcium	37.8	mg/L	1.0	02/13/22 19:15	
EPA 6010D	Magnesium	40.3	mg/L	0.050	02/13/22 19:15	
EPA 6020B	Barium	0.015	mg/L	0.0050	02/14/22 16:31	
EPA 6020B	Beryllium	0.0072	mg/L	0.00050	02/12/22 18:06	
EPA 6020B	Boron	1.6	mg/L	0.040	02/12/22 18:06	
EPA 6020B	Cadmium	0.00058	mg/L	0.00050	02/14/22 16:31	
EPA 6020B	Chromium	0.0035J	mg/L	0.0050	02/12/22 18:06	
EPA 6020B	Cobalt	0.18	mg/L	0.0050	02/12/22 18:06	
EPA 6020B	Lithium	0.020J	mg/L	0.030	02/12/22 18:06	
EPA 6020B	Selenium	0.029	mg/L	0.0050	02/12/22 18:06	
SM 2540C-2015	Total Dissolved Solids	560	mg/L	10.0	02/07/22 15:49	
EPA 300.0 Rev 2.1 1993	Chloride	5.8	mg/L	1.0	02/07/22 00:11	
EPA 300.0 Rev 2.1 1993	Fluoride	0.95	mg/L	0.10	02/07/22 00:11	
EPA 300.0 Rev 2.1 1993	Sulfate	287	mg/L	7.0	02/07/22 14:21	
92585727007	**EB-1**					
SM 2540C-2015	Total Dissolved Solids	15.0	mg/L	10.0	02/07/22 15:50	
92585727009	**DUP-1**					
EPA 6010D	Calcium	84.3	mg/L	1.0	02/13/22 19:29	
EPA 6020B	Barium	0.023	mg/L	0.0050	02/14/22 17:02	
EPA 6020B	Beryllium	0.00014J	mg/L	0.00050	02/12/22 18:24	
EPA 6020B	Boron	2.2	mg/L	0.040	02/12/22 18:24	
EPA 6020B	Cadmium	0.00016J	mg/L	0.00050	02/14/22 17:02	
EPA 6020B	Cobalt	0.0039J	mg/L	0.0050	02/12/22 18:24	
EPA 6020B	Lithium	0.00080J	mg/L	0.030	02/12/22 18:24	
SM 2540C-2015	Total Dissolved Solids	440	mg/L	10.0	02/07/22 15:51	
EPA 300.0 Rev 2.1 1993	Chloride	5.9	mg/L	1.0	02/07/22 00:53	
EPA 300.0 Rev 2.1 1993	Fluoride	0.065J	mg/L	0.10	02/07/22 00:53	
EPA 300.0 Rev 2.1 1993	Sulfate	228	mg/L	5.0	02/07/22 14:34	
92585727010	**BRGWC-37S**					
	Performed by	CUSTOMER			02/03/22 12:53	

REPORT OF LABORATORY ANALYSIS

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

SUMMARY OF DETECTION

Project: BRANCH AP-E
Pace Project No.: 92585727

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92585727010	**BRGWC-37S**					
	pH	5.80	Std. Units		02/03/22 12:53	
EPA 6010D	Potassium	2.3	mg/L	0.20	02/13/22 19:39	
EPA 6010D	Sodium	5.0	mg/L	1.0	02/13/22 19:39	
EPA 6010D	Calcium	3.7	mg/L	1.0	02/13/22 19:39	
EPA 6010D	Magnesium	1.2	mg/L	0.050	02/13/22 19:39	
EPA 6020B	Barium	0.025	mg/L	0.0050	02/14/22 21:44	
EPA 6020B	Boron	0.032J	mg/L	0.040	02/14/22 21:44	
EPA 6020B	Chromium	0.0015J	mg/L	0.0050	02/14/22 21:44	
SM 2540C-2015	Total Dissolved Solids	46.0	mg/L	10.0	02/07/22 17:22	
SM 2320B	Alkalinity, Total as CaCO3	23.2	mg/L	5.0	02/10/22 15:55	
SM 2320B	Alkalinity,Bicarbonate (CaCO3)	23.2	mg/L	5.0	02/10/22 15:55	
EPA 300.0 Rev 2.1 1993	Chloride	1.8	mg/L	1.0	02/07/22 13:25	

Pace Analytical Services, LLC
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ANALYTICAL RESULTS

Project: BRANCH AP-E
Pace Project No.: 92585727

Sample: BRGWC-17S **Lab ID: 92585727001** Collected: 02/01/22 15:28 Received: 02/02/22 10:25 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**CUSTOMER**				1		02/02/22 14:31		
pH	**6.39**	Std. Units			1		02/02/22 14:31		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Iron	ND	mg/L	0.040	0.025	1	02/12/22 08:57	02/13/22 18:42	7439-89-6	
Manganese	ND	mg/L	0.040	0.0043	1	02/12/22 08:57	02/13/22 18:42	7439-96-5	
Potassium	**0.99**	mg/L	0.20	0.15	1	02/12/22 08:57	02/13/22 18:42	7440-09-7	
Sodium	**22.3**	mg/L	1.0	0.58	1	02/12/22 08:57	02/13/22 18:42	7440-23-5	
Calcium	**41.5**	mg/L	1.0	0.12	1	02/12/22 08:57	02/13/22 18:42	7440-70-2	
Magnesium	**22.3**	mg/L	0.050	0.012	1	02/12/22 08:57	02/13/22 18:42	7439-95-4	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00078	1	02/12/22 08:26	02/12/22 17:25	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0011	1	02/12/22 08:26	02/12/22 17:25	7440-38-2	
Barium	**0.045**	mg/L	0.0050	0.00067	1	02/12/22 08:26	02/12/22 17:25	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	02/12/22 08:26	02/12/22 17:25	7440-41-7	
Boron	**0.013J**	mg/L	0.040	0.0086	1	02/12/22 08:26	02/12/22 17:25	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	02/12/22 08:26	02/12/22 17:25	7440-43-9	
Chromium	**0.013**	mg/L	0.0050	0.0011	1	02/12/22 08:26	02/12/22 17:25	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	02/12/22 08:26	02/12/22 17:25	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	02/12/22 08:26	02/12/22 17:25	7439-92-1	
Lithium	**0.00096J**	mg/L	0.030	0.00073	1	02/12/22 08:26	02/12/22 17:25	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	02/12/22 08:26	02/12/22 17:25	7439-98-7	
Selenium	**0.0021J**	mg/L	0.0050	0.0014	1	02/12/22 08:26	02/12/22 17:25	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	02/12/22 08:26	02/14/22 16:02	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.00013	1	02/09/22 11:00	02/09/22 16:17	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**354**	mg/L	10.0	10.0	1		02/07/22 15:47		
2320B Alkalinity	Analytical Method: SM 2320B Pace Analytical Services - Minneapolis								
Alkalinity, Total as CaCO3	**78.0**	mg/L	5.0	1.8	1		02/09/22 22:10		
Alkalinity,Bicarbonate (CaCO3)	**78.0**	mg/L	5.0	1.8	1		02/09/22 22:10		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	1.8	1		02/09/22 22:10		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: BRANCH AP-E
Pace Project No.: 92585727

Sample: BRGWC-17S **Lab ID: 92585727001** Collected: 02/01/22 15:28 Received: 02/02/22 10:25 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**4.9**	mg/L	1.0	0.60	1		02/07/22 13:55	16887-00-6	
Fluoride	**0.079J**	mg/L	0.10	0.050	1		02/07/22 13:55	16984-48-8	
Sulfate	**139**	mg/L	3.0	1.5	3		02/08/22 11:53	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: BRANCH AP-E
Pace Project No.: 92585727

Sample: BRGWC-33S **Lab ID: 92585727002** Collected: 02/01/22 11:02 Received: 02/02/22 10:25 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**CUSTOMER**				1		02/02/22 14:31		
pH	**4.82**	Std. Units			1		02/02/22 14:31		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Iron	ND	mg/L	0.040	0.025	1	02/12/22 08:57	02/13/22 18:47	7439-89-6	
Manganese	**0.97**	mg/L	0.040	0.0043	1	02/12/22 08:57	02/13/22 18:47	7439-96-5	
Potassium	**9.5**	mg/L	0.20	0.15	1	02/12/22 08:57	02/13/22 18:47	7440-09-7	
Sodium	**12.1**	mg/L	1.0	0.58	1	02/12/22 08:57	02/13/22 18:47	7440-23-5	
Calcium	**34.3**	mg/L	1.0	0.12	1	02/12/22 08:57	02/13/22 18:47	7440-70-2	
Magnesium	**3.7**	mg/L	0.050	0.012	1	02/12/22 08:57	02/13/22 18:47	7439-95-4	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00078	1	02/12/22 08:26	02/12/22 17:31	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0011	1	02/12/22 08:26	02/12/22 17:31	7440-38-2	
Barium	**0.023**	mg/L	0.0050	0.00067	1	02/12/22 08:26	02/12/22 17:31	7440-39-3	
Beryllium	**0.0013**	mg/L	0.00050	0.000054	1	02/12/22 08:26	02/12/22 17:31	7440-41-7	
Boron	**1.1**	mg/L	0.040	0.0086	1	02/12/22 08:26	02/12/22 17:31	7440-42-8	
Cadmium	**0.00023J**	mg/L	0.00050	0.00011	1	02/12/22 08:26	02/12/22 17:31	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	02/12/22 08:26	02/12/22 17:31	7440-47-3	
Cobalt	**0.027**	mg/L	0.0050	0.00039	1	02/12/22 08:26	02/12/22 17:31	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	02/12/22 08:26	02/12/22 17:31	7439-92-1	
Lithium	**0.0083J**	mg/L	0.030	0.00073	1	02/12/22 08:26	02/12/22 17:31	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	02/12/22 08:26	02/12/22 17:31	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	02/12/22 08:26	02/12/22 17:31	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	02/12/22 08:26	02/14/22 16:07	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.00013	1	02/09/22 11:00	02/09/22 16:20	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**209**	mg/L	10.0	10.0	1		02/07/22 15:47		
2320B Alkalinity	Analytical Method: SM 2320B Pace Analytical Services - Minneapolis								
Alkalinity, Total as CaCO3	**2.8J**	mg/L	5.0	1.8	1		02/10/22 14:43		
Alkalinity,Bicarbonate (CaCO3)	**2.8J**	mg/L	5.0	1.8	1		02/10/22 14:43		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	1.8	1		02/10/22 14:43		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: BRANCH AP-E
Pace Project No.: 92585727

Sample: BRGWC-33S **Lab ID: 92585727002** Collected: 02/01/22 11:02 Received: 02/02/22 10:25 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**13.1**	mg/L	1.0	0.60	1		02/07/22 14:10	16887-00-6	
Fluoride	**0.053J**	mg/L	0.10	0.050	1		02/07/22 14:10	16984-48-8	
Sulfate	**99.7**	mg/L	2.0	1.0	2		02/08/22 12:09	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: BRANCH AP-E
Pace Project No.: 92585727

Sample: BRGWC-34S **Lab ID: 92585727003** Collected: 02/01/22 13:00 Received: 02/02/22 10:25 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**CUSTOMER**				1		02/02/22 14:32		
pH	**5.87**	Std. Units			1		02/02/22 14:32		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Iron	ND	mg/L	0.040	0.025	1	02/12/22 08:57	02/13/22 18:52	7439-89-6	
Manganese	**3.3**	mg/L	0.040	0.0043	1	02/12/22 08:57	02/13/22 18:52	7439-96-5	
Potassium	**3.5**	mg/L	0.20	0.15	1	02/12/22 08:57	02/13/22 18:52	7440-09-7	
Sodium	**21.3**	mg/L	1.0	0.58	1	02/12/22 08:57	02/13/22 18:52	7440-23-5	
Calcium	**81.7**	mg/L	1.0	0.12	1	02/12/22 08:57	02/13/22 18:52	7440-70-2	
Magnesium	**16.1**	mg/L	0.050	0.012	1	02/12/22 08:57	02/13/22 18:52	7439-95-4	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00078	1	02/12/22 08:26	02/12/22 17:37	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0011	1	02/12/22 08:26	02/12/22 17:37	7440-38-2	
Barium	**0.024**	mg/L	0.0050	0.00067	1	02/12/22 08:26	02/12/22 17:37	7440-39-3	
Beryllium	**0.00015J**	mg/L	0.00050	0.000054	1	02/12/22 08:26	02/12/22 17:37	7440-41-7	
Boron	**2.2**	mg/L	0.040	0.0086	1	02/12/22 08:26	02/12/22 17:37	7440-42-8	
Cadmium	**0.00012J**	mg/L	0.00050	0.00011	1	02/12/22 08:26	02/12/22 17:37	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	02/12/22 08:26	02/12/22 17:37	7440-47-3	
Cobalt	**0.0044J**	mg/L	0.0050	0.00039	1	02/12/22 08:26	02/12/22 17:37	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	02/12/22 08:26	02/12/22 17:37	7439-92-1	
Lithium	**0.00085J**	mg/L	0.030	0.00073	1	02/12/22 08:26	02/12/22 17:37	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	02/12/22 08:26	02/12/22 17:37	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	02/12/22 08:26	02/12/22 17:37	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	02/12/22 08:26	02/14/22 16:13	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.00013	1	02/09/22 11:00	02/09/22 16:22	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**449**	mg/L	10.0	10.0	1		02/07/22 15:48		
2320B Alkalinity	Analytical Method: SM 2320B Pace Analytical Services - Minneapolis								
Alkalinity, Total as CaCO3	**29.0**	mg/L	5.0	1.8	1		02/10/22 14:50		
Alkalinity,Bicarbonate (CaCO3)	**29.0**	mg/L	5.0	1.8	1		02/10/22 14:50		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	1.8	1		02/10/22 14:50		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: BRANCH AP-E
Pace Project No.: 92585727

Sample: BRGWC-34S **Lab ID: 92585727003** Collected: 02/01/22 13:00 Received: 02/02/22 10:25 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**5.9**	mg/L	1.0	0.60	1		02/07/22 14:25	16887-00-6	
Fluoride	**0.060J**	mg/L	0.10	0.050	1		02/07/22 14:25	16984-48-8	
Sulfate	**243**	mg/L	5.0	2.5	5		02/08/22 12:24	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: BRANCH AP-E
Pace Project No.: 92585727

Sample: BRGWC-35S **Lab ID: 92585727004** Collected: 02/01/22 14:20 Received: 02/02/22 10:25 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**CUSTOMER**				1		02/02/22 14:32		
pH	**6.09**	Std. Units			1		02/02/22 14:32		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Iron	**0.036J**	mg/L	0.040	0.025	1	02/12/22 08:57	02/13/22 18:56	7439-89-6	
Manganese	**0.011J**	mg/L	0.040	0.0043	1	02/12/22 08:57	02/13/22 18:56	7439-96-5	
Potassium	**4.3**	mg/L	0.20	0.15	1	02/12/22 08:57	02/13/22 18:56	7440-09-7	
Sodium	**20.1**	mg/L	1.0	0.58	1	02/12/22 08:57	02/13/22 18:56	7440-23-5	
Calcium	**73.8**	mg/L	1.0	0.12	1	02/12/22 08:57	02/13/22 18:56	7440-70-2	
Magnesium	**36.0**	mg/L	0.050	0.012	1	02/12/22 08:57	02/13/22 18:56	7439-95-4	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00078	1	02/12/22 08:26	02/12/22 17:42	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0011	1	02/12/22 08:26	02/12/22 17:42	7440-38-2	
Barium	**0.033**	mg/L	0.0050	0.00067	1	02/12/22 08:26	02/12/22 17:42	7440-39-3	
Beryllium	**0.00015J**	mg/L	0.00050	0.000054	1	02/12/22 08:26	02/12/22 17:42	7440-41-7	
Boron	**2.1**	mg/L	0.040	0.0086	1	02/12/22 08:26	02/12/22 17:42	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	02/12/22 08:26	02/12/22 17:42	7440-43-9	
Chromium	**0.0056**	mg/L	0.0050	0.0011	1	02/12/22 08:26	02/12/22 17:42	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	02/12/22 08:26	02/12/22 17:42	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	02/12/22 08:26	02/14/22 16:19	7439-92-1	
Lithium	**0.0021J**	mg/L	0.030	0.00073	1	02/12/22 08:26	02/12/22 17:42	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	02/12/22 08:26	02/12/22 17:42	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	02/12/22 08:26	02/12/22 17:42	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	02/12/22 08:26	02/14/22 16:19	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.00013	1	02/09/22 11:00	02/09/22 16:25	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**521**	mg/L	10.0	10.0	1		02/07/22 15:48		
2320B Alkalinity	Analytical Method: SM 2320B Pace Analytical Services - Minneapolis								
Alkalinity, Total as CaCO3	**52.4**	mg/L	5.0	1.8	1		02/10/22 14:54		
Alkalinity,Bicarbonate (CaCO3)	**52.4**	mg/L	5.0	1.8	1		02/10/22 14:54		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	1.8	1		02/10/22 14:54		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: BRANCH AP-E
Pace Project No.: 92585727

Sample: BRGWC-35S **Lab ID: 92585727004** Collected: 02/01/22 14:20 Received: 02/02/22 10:25 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**6.0**	mg/L	1.0	0.60	1		02/07/22 14:40	16887-00-6	
Fluoride	**0.055J**	mg/L	0.10	0.050	1		02/07/22 14:40	16984-48-8	
Sulfate	**256**	mg/L	6.0	3.0	6		02/08/22 12:39	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: BRANCH AP-E
Pace Project No.: 92585727

Sample: BRGWC-36S **Lab ID: 92585727005** Collected: 02/01/22 13:23 Received: 02/02/22 10:25 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**CUSTOMER**				1		02/02/22 14:32		
pH	**5.65**	Std. Units			1		02/02/22 14:32		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Iron	ND	mg/L	0.040	0.025	1	02/12/22 08:57	02/13/22 19:01	7439-89-6	
Manganese	ND	mg/L	0.040	0.0043	1	02/12/22 08:57	02/13/22 19:01	7439-96-5	
Potassium	**3.7**	mg/L	0.20	0.15	1	02/12/22 08:57	02/13/22 19:01	7440-09-7	
Sodium	**39.2**	mg/L	1.0	0.58	1	02/12/22 08:57	02/13/22 19:01	7440-23-5	
Calcium	**49.7**	mg/L	1.0	0.12	1	02/12/22 08:57	02/13/22 19:01	7440-70-2	
Magnesium	**19.8**	mg/L	0.050	0.012	1	02/12/22 08:57	02/13/22 19:01	7439-95-4	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00078	1	02/12/22 08:26	02/14/22 16:25	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0011	1	02/12/22 08:26	02/12/22 18:00	7440-38-2	
Barium	**0.029**	mg/L	0.0050	0.00067	1	02/12/22 08:26	02/14/22 16:25	7440-39-3	
Beryllium	**0.000087J**	mg/L	0.00050	0.000054	1	02/12/22 08:26	02/12/22 18:00	7440-41-7	
Boron	**1.0**	mg/L	0.040	0.0086	1	02/12/22 08:26	02/12/22 18:00	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	02/12/22 08:26	02/14/22 16:25	7440-43-9	
Chromium	**0.0068**	mg/L	0.0050	0.0011	1	02/12/22 08:26	02/12/22 18:00	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	02/12/22 08:26	02/12/22 18:00	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	02/12/22 08:26	02/14/22 16:25	7439-92-1	
Lithium	**0.0023J**	mg/L	0.030	0.00073	1	02/12/22 08:26	02/12/22 18:00	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	02/12/22 08:26	02/14/22 16:25	7439-98-7	
Selenium	**0.0025J**	mg/L	0.0050	0.0014	1	02/12/22 08:26	02/12/22 18:00	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	02/12/22 08:26	02/14/22 16:25	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.00013	1	02/09/22 11:00	02/09/22 16:28	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**441**	mg/L	10.0	10.0	1		02/07/22 15:49		
2320B Alkalinity	Analytical Method: SM 2320B Pace Analytical Services - Minneapolis								
Alkalinity, Total as CaCO3	**20.8**	mg/L	5.0	1.8	1		02/10/22 14:59		
Alkalinity,Bicarbonate (CaCO3)	**20.8**	mg/L	5.0	1.8	1		02/10/22 14:59		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	1.8	1		02/10/22 14:59		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: BRANCH AP-E
Pace Project No.: 92585727

Sample: BRGWC-36S **Lab ID: 92585727005** Collected: 02/01/22 13:23 Received: 02/02/22 10:25 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**7.6**	mg/L	1.0	0.60	1		02/06/22 23:30	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		02/06/22 23:30	16984-48-8	M1
Sulfate	**195**	mg/L	5.0	2.5	5		02/07/22 13:39	14808-79-8	M1

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: BRANCH AP-E
Pace Project No.: 92585727

Sample: BRGWC-38S **Lab ID: 92585727006** Collected: 02/01/22 15:15 Received: 02/02/22 10:25 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**CUSTOMER**				1		02/02/22 14:32		
pH	**4.06**	Std. Units			1		02/02/22 14:32		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Iron	**0.064**	mg/L	0.040	0.025	1	02/12/22 08:57	02/13/22 19:15	7439-89-6	
Manganese	**1.9**	mg/L	0.040	0.0043	1	02/12/22 08:57	02/13/22 19:15	7439-96-5	
Potassium	**6.5**	mg/L	0.20	0.15	1	02/12/22 08:57	02/13/22 19:15	7440-09-7	
Sodium	**46.8**	mg/L	1.0	0.58	1	02/12/22 08:57	02/13/22 19:15	7440-23-5	
Calcium	**37.8**	mg/L	1.0	0.12	1	02/12/22 08:57	02/13/22 19:15	7440-70-2	
Magnesium	**40.3**	mg/L	0.050	0.012	1	02/12/22 08:57	02/13/22 19:15	7439-95-4	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00078	1	02/12/22 08:26	02/14/22 16:31	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0011	1	02/12/22 08:26	02/12/22 18:06	7440-38-2	
Barium	**0.015**	mg/L	0.0050	0.00067	1	02/12/22 08:26	02/14/22 16:31	7440-39-3	
Beryllium	**0.0072**	mg/L	0.00050	0.000054	1	02/12/22 08:26	02/12/22 18:06	7440-41-7	
Boron	**1.6**	mg/L	0.040	0.0086	1	02/12/22 08:26	02/12/22 18:06	7440-42-8	
Cadmium	**0.00058**	mg/L	0.00050	0.00011	1	02/12/22 08:26	02/14/22 16:31	7440-43-9	
Chromium	**0.0035J**	mg/L	0.0050	0.0011	1	02/12/22 08:26	02/12/22 18:06	7440-47-3	
Cobalt	**0.18**	mg/L	0.0050	0.00039	1	02/12/22 08:26	02/12/22 18:06	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	02/12/22 08:26	02/14/22 16:31	7439-92-1	
Lithium	**0.020J**	mg/L	0.030	0.00073	1	02/12/22 08:26	02/12/22 18:06	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	02/12/22 08:26	02/14/22 16:31	7439-98-7	
Selenium	**0.029**	mg/L	0.0050	0.0014	1	02/12/22 08:26	02/12/22 18:06	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	02/12/22 08:26	02/14/22 16:31	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.00013	1	02/09/22 11:00	02/09/22 16:30	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**560**	mg/L	10.0	10.0	1		02/07/22 15:49		
2320B Alkalinity	Analytical Method: SM 2320B Pace Analytical Services - Minneapolis								
Alkalinity, Total as CaCO3	ND	mg/L	5.0	1.8	1		02/10/22 15:02		
Alkalinity,Bicarbonate (CaCO3)	ND	mg/L	5.0	1.8	1		02/10/22 15:02		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	1.8	1		02/10/22 15:02		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: BRANCH AP-E
Pace Project No.: 92585727

Sample: BRGWC-38S **Lab ID: 92585727006** Collected: 02/01/22 15:15 Received: 02/02/22 10:25 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**5.8**	mg/L	1.0	0.60	1		02/07/22 00:11	16887-00-6	
Fluoride	**0.95**	mg/L	0.10	0.050	1		02/07/22 00:11	16984-48-8	
Sulfate	**287**	mg/L	7.0	3.5	7		02/07/22 14:21	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: BRANCH AP-E
Pace Project No.: 92585727

Sample: EB-1 **Lab ID: 92585727007** Collected: 02/01/22 16:15 Received: 02/02/22 10:25 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	ND	mg/L	1.0	0.12	1	02/12/22 08:57	02/13/22 19:20	7440-70-2	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00078	1	02/12/22 08:26	02/14/22 16:50	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0011	1	02/12/22 08:26	02/12/22 18:12	7440-38-2	
Barium	ND	mg/L	0.0050	0.00067	1	02/12/22 08:26	02/14/22 16:50	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	02/12/22 08:26	02/12/22 18:12	7440-41-7	
Boron	ND	mg/L	0.040	0.0086	1	02/12/22 08:26	02/12/22 18:12	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	02/12/22 08:26	02/14/22 16:50	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	02/12/22 08:26	02/12/22 18:12	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	02/12/22 08:26	02/12/22 18:12	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	02/12/22 08:26	02/14/22 16:50	7439-92-1	
Lithium	ND	mg/L	0.030	0.00073	1	02/12/22 08:26	02/12/22 18:12	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	02/12/22 08:26	02/14/22 16:50	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	02/12/22 08:26	02/12/22 18:12	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	02/12/22 08:26	02/14/22 16:50	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.00013	1	02/09/22 11:00	02/09/22 16:33	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**15.0**	mg/L	10.0	10.0	1		02/07/22 15:50		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	ND	mg/L	1.0	0.60	1		02/07/22 00:25	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		02/07/22 00:25	16984-48-8	
Sulfate	ND	mg/L	1.0	0.50	1		02/07/22 00:25	14808-79-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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ANALYTICAL RESULTS

Project: BRANCH AP-E
Pace Project No.: 92585727

Sample: FB-1 **Lab ID: 92585727008** Collected: 02/01/22 11:30 Received: 02/02/22 10:25 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	ND	mg/L	1.0	0.12	1	02/12/22 08:57	02/13/22 19:25	7440-70-2	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00078	1	02/12/22 08:26	02/14/22 16:56	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0011	1	02/12/22 08:26	02/12/22 18:18	7440-38-2	
Barium	ND	mg/L	0.0050	0.00067	1	02/12/22 08:26	02/14/22 16:56	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	02/12/22 08:26	02/12/22 18:18	7440-41-7	
Boron	ND	mg/L	0.040	0.0086	1	02/12/22 08:26	02/12/22 18:18	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	02/12/22 08:26	02/14/22 16:56	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	02/12/22 08:26	02/12/22 18:18	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	02/12/22 08:26	02/12/22 18:18	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	02/12/22 08:26	02/14/22 16:56	7439-92-1	
Lithium	ND	mg/L	0.030	0.00073	1	02/12/22 08:26	02/12/22 18:18	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	02/12/22 08:26	02/14/22 16:56	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	02/12/22 08:26	02/12/22 18:18	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	02/12/22 08:26	02/14/22 16:56	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.00013	1	02/09/22 11:00	02/09/22 16:36	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	ND	mg/L	10.0	10.0	1		02/07/22 15:50		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	ND	mg/L	1.0	0.60	1		02/07/22 00:39	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		02/07/22 00:39	16984-48-8	
Sulfate	ND	mg/L	1.0	0.50	1		02/07/22 00:39	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: BRANCH AP-E
Pace Project No.: 92585727

Sample: DUP-1 **Lab ID: 92585727009** Collected: 02/01/22 00:00 Received: 02/02/22 10:25 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	**84.3**	mg/L	1.0	0.12	1	02/12/22 08:57	02/13/22 19:29	7440-70-2	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00078	1	02/12/22 08:26	02/14/22 17:02	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0011	1	02/12/22 08:26	02/12/22 18:24	7440-38-2	
Barium	**0.023**	mg/L	0.0050	0.00067	1	02/12/22 08:26	02/14/22 17:02	7440-39-3	
Beryllium	**0.00014J**	mg/L	0.00050	0.000054	1	02/12/22 08:26	02/12/22 18:24	7440-41-7	
Boron	**2.2**	mg/L	0.040	0.0086	1	02/12/22 08:26	02/12/22 18:24	7440-42-8	
Cadmium	**0.00016J**	mg/L	0.00050	0.00011	1	02/12/22 08:26	02/14/22 17:02	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	02/12/22 08:26	02/12/22 18:24	7440-47-3	
Cobalt	**0.0039J**	mg/L	0.0050	0.00039	1	02/12/22 08:26	02/12/22 18:24	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	02/12/22 08:26	02/14/22 17:02	7439-92-1	
Lithium	**0.00080J**	mg/L	0.030	0.00073	1	02/12/22 08:26	02/12/22 18:24	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	02/12/22 08:26	02/14/22 17:02	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	02/12/22 08:26	02/12/22 18:24	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	02/12/22 08:26	02/14/22 17:02	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.00013	1	02/09/22 11:00	02/09/22 16:43	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**440**	mg/L	10.0	10.0	1		02/07/22 15:51		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**5.9**	mg/L	1.0	0.60	1		02/07/22 00:53	16887-00-6	
Fluoride	**0.065J**	mg/L	0.10	0.050	1		02/07/22 00:53	16984-48-8	
Sulfate	**228**	mg/L	5.0	2.5	5		02/07/22 14:34	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: BRANCH AP-E
Pace Project No.: 92585727

Sample: BRGWC-37S **Lab ID: 92585727010** Collected: 02/02/22 09:20 Received: 02/03/22 10:35 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**CUSTOMER**				1		02/03/22 12:53		
pH	**5.80**	Std. Units			1		02/03/22 12:53		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Iron	ND	mg/L	0.040	0.025	1	02/12/22 08:57	02/13/22 19:39	7439-89-6	
Manganese	ND	mg/L	0.040	0.0043	1	02/12/22 08:57	02/13/22 19:39	7439-96-5	
Potassium	**2.3**	mg/L	0.20	0.15	1	02/12/22 08:57	02/13/22 19:39	7440-09-7	
Sodium	**5.0**	mg/L	1.0	0.58	1	02/12/22 08:57	02/13/22 19:39	7440-23-5	
Calcium	**3.7**	mg/L	1.0	0.12	1	02/12/22 08:57	02/13/22 19:39	7440-70-2	
Magnesium	**1.2**	mg/L	0.050	0.012	1	02/12/22 08:57	02/13/22 19:39	7439-95-4	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00078	1	02/14/22 08:52	02/14/22 21:44	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0011	1	02/14/22 08:52	02/14/22 21:44	7440-38-2	
Barium	**0.025**	mg/L	0.0050	0.00067	1	02/14/22 08:52	02/14/22 21:44	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	02/14/22 08:52	02/14/22 21:44	7440-41-7	
Boron	**0.032J**	mg/L	0.040	0.0086	1	02/14/22 08:52	02/14/22 21:44	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	02/14/22 08:52	02/14/22 21:44	7440-43-9	
Chromium	**0.0015J**	mg/L	0.0050	0.0011	1	02/14/22 08:52	02/14/22 21:44	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	02/14/22 08:52	02/14/22 21:44	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	02/14/22 08:52	02/14/22 21:44	7439-92-1	
Lithium	ND	mg/L	0.030	0.00073	1	02/14/22 08:52	02/14/22 21:44	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	02/14/22 08:52	02/14/22 21:44	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	02/14/22 08:52	02/14/22 21:44	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	02/14/22 08:52	02/14/22 21:44	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.00013	1	02/09/22 11:00	02/09/22 16:46	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**46.0**	mg/L	10.0	10.0	1		02/07/22 17:22		
2320B Alkalinity	Analytical Method: SM 2320B Pace Analytical Services - Minneapolis								
Alkalinity, Total as CaCO3	**23.2**	mg/L	5.0	1.8	1		02/10/22 15:55		
Alkalinity,Bicarbonate (CaCO3)	**23.2**	mg/L	5.0	1.8	1		02/10/22 15:55		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	1.8	1		02/10/22 15:55		

REPORT OF LABORATORY ANALYSIS

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

Project: BRANCH AP-E
Pace Project No.: 92585727

Sample: BRGWC-37S **Lab ID: 92585727010** Collected: 02/02/22 09:20 Received: 02/03/22 10:35 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**1.8**	mg/L	1.0	0.60	1		02/07/22 13:25	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		02/07/22 13:25	16984-48-8	
Sulfate	ND	mg/L	1.0	0.50	1		02/07/22 13:25	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: BRANCH AP-E
Pace Project No.: 92585727

QC Batch: 677807
QC Batch Method: EPA 3010A
Analysis Method: EPA 6010D
Analysis Description: 6010D ATL
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92585727001, 92585727002, 92585727003, 92585727004, 92585727005, 92585727006, 92585727007, 92585727008, 92585727009, 92585727010

METHOD BLANK: 3547708 Matrix: Water
Associated Lab Samples: 92585727001, 92585727002, 92585727003, 92585727004, 92585727005, 92585727006, 92585727007, 92585727008, 92585727009, 92585727010

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium	mg/L	ND	1.0	0.12	02/13/22 17:30	
Iron	mg/L	ND	0.040	0.025	02/13/22 17:30	
Magnesium	mg/L	ND	0.050	0.012	02/13/22 17:30	
Manganese	mg/L	ND	0.040	0.0043	02/13/22 17:30	
Potassium	mg/L	ND	0.20	0.15	02/13/22 17:30	
Sodium	mg/L	ND	1.0	0.58	02/13/22 17:30	

LABORATORY CONTROL SAMPLE: 3547709

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium	mg/L	1	1.1	107	80-120	
Iron	mg/L	1	0.99	99	80-120	
Magnesium	mg/L	1	1.0	103	80-120	
Manganese	mg/L	1	1.0	100	80-120	
Potassium	mg/L	1	0.95	95	80-120	
Sodium	mg/L	1	1.1	110	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3547710 3547711

Parameter	Units	92585717001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Calcium	mg/L	4.4	1	1	5.3	5.3	94	88	75-125	1	20	
Iron	mg/L	0.13	1	1	1.1	1.1	102	98	75-125	3	20	
Magnesium	mg/L	4.0	1	1	5.0	4.8	100	87	75-125	3	20	
Manganese	mg/L	0.052	1	1	1.1	1.0	102	99	75-125	3	20	
Potassium	mg/L	0.29	1	1	1.4	1.4	109	110	75-125	1	20	
Sodium	mg/L	3.1	1	1	4.1	4.1	104	99	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: BRANCH AP-E
Pace Project No.: 92585727

QC Batch: 677804
QC Batch Method: EPA 3005A
Analysis Method: EPA 6020B
Analysis Description: 6020 MET
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92585727001, 92585727002, 92585727003, 92585727004, 92585727005, 92585727006, 92585727007, 92585727008, 92585727009

METHOD BLANK: 3547662 Matrix: Water
Associated Lab Samples: 92585727001, 92585727002, 92585727003, 92585727004, 92585727005, 92585727006, 92585727007, 92585727008, 92585727009

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	ND	0.0030	0.00078	02/12/22 15:37	
Arsenic	mg/L	ND	0.0050	0.0011	02/12/22 15:37	
Barium	mg/L	ND	0.0050	0.00067	02/12/22 15:37	
Beryllium	mg/L	ND	0.00050	0.000054	02/12/22 15:37	
Boron	mg/L	ND	0.040	0.0086	02/12/22 15:37	
Cadmium	mg/L	ND	0.00050	0.00011	02/12/22 15:37	
Chromium	mg/L	ND	0.0050	0.0011	02/12/22 15:37	
Cobalt	mg/L	ND	0.0050	0.00039	02/12/22 15:37	
Lead	mg/L	ND	0.0010	0.00089	02/12/22 15:37	
Lithium	mg/L	ND	0.030	0.00073	02/12/22 15:37	
Molybdenum	mg/L	ND	0.010	0.00074	02/12/22 15:37	
Selenium	mg/L	ND	0.0050	0.0014	02/12/22 15:37	
Thallium	mg/L	ND	0.0010	0.00018	02/14/22 13:53	

LABORATORY CONTROL SAMPLE: 3547663

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	0.11	106	80-120	
Barium	mg/L	0.1	0.10	105	80-120	
Beryllium	mg/L	0.1	0.11	109	80-120	
Boron	mg/L	1	1.1	113	80-120	
Cadmium	mg/L	0.1	0.10	103	80-120	
Chromium	mg/L	0.1	0.10	103	80-120	
Cobalt	mg/L	0.1	0.10	100	80-120	
Lead	mg/L	0.1	0.099	99	80-120	
Lithium	mg/L	0.1	0.11	110	80-120	
Molybdenum	mg/L	0.1	0.11	108	80-120	
Selenium	mg/L	0.1	0.10	103	80-120	
Thallium	mg/L	0.1	0.10	105	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3547664 3547665

Parameter	Units	92585555001 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	112	106	75-125	6	20	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: BRANCH AP-E
Pace Project No.: 92585727

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3547664 3547665

Parameter	Units	92585555001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Arsenic	mg/L	0.0021J	0.1	0.1	0.11	0.10	104	100	75-125	3	20	
Barium	mg/L	0.013	0.1	0.1	0.12	0.12	109	102	75-125	6	20	
Beryllium	mg/L	ND	0.1	0.1	0.11	0.11	111	109	75-125	2	20	
Boron	mg/L	ND	1	1	1.1	1.1	109	111	75-125	2	20	
Cadmium	mg/L	ND	0.1	0.1	0.10	0.094	101	94	75-125	7	20	
Chromium	mg/L	ND	0.1	0.1	0.10	0.10	104	101	75-125	3	20	
Cobalt	mg/L	ND	0.1	0.1	0.099	0.097	99	97	75-125	2	20	
Lead	mg/L	ND	0.1	0.1	0.11	0.10	107	100	75-125	6	20	
Lithium	mg/L	0.0017J	0.1	0.1	0.11	0.10	106	102	75-125	4	20	
Molybdenum	mg/L	ND	0.1	0.1	0.11	0.11	109	107	75-125	2	20	
Selenium	mg/L	ND	0.1	0.1	0.099	0.098	99	98	75-125	2	20	
Thallium	mg/L	ND	0.1	0.1	0.10	0.10	103	104	75-125	2	20	

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REPORT OF LABORATORY ANALYSIS

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(770)734-4200

QUALITY CONTROL DATA

Project: BRANCH AP-E
Pace Project No.: 92585727

QC Batch: 678016
QC Batch Method: EPA 3005A
Analysis Method: EPA 6020B
Analysis Description: 6020 MET
Laboratory: Pace Analytical Services - Peachtree Corners, GA

Associated Lab Samples: 92585727010

METHOD BLANK: 3548415 Matrix: Water
Associated Lab Samples: 92585727010

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	ND	0.0030	0.00078	02/14/22 20:15	
Arsenic	mg/L	0.0018J	0.0050	0.0011	02/14/22 20:15	
Barium	mg/L	ND	0.0050	0.00067	02/14/22 20:15	
Beryllium	mg/L	ND	0.00050	0.000054	02/14/22 20:15	
Boron	mg/L	ND	0.040	0.0086	02/14/22 20:15	
Cadmium	mg/L	ND	0.00050	0.00011	02/14/22 20:15	
Chromium	mg/L	ND	0.0050	0.0011	02/14/22 20:15	
Cobalt	mg/L	ND	0.0050	0.00039	02/14/22 20:15	
Lead	mg/L	ND	0.0010	0.00089	02/14/22 20:15	
Lithium	mg/L	ND	0.030	0.00073	02/14/22 20:15	
Molybdenum	mg/L	ND	0.010	0.00074	02/14/22 20:15	
Selenium	mg/L	ND	0.0050	0.0014	02/14/22 20:15	
Thallium	mg/L	ND	0.0010	0.00018	02/14/22 20:15	

LABORATORY CONTROL SAMPLE: 3548416

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.1	0.11	110	80-120	
Arsenic	mg/L	0.1	0.10	102	80-120	
Barium	mg/L	0.1	0.10	104	80-120	
Beryllium	mg/L	0.1	0.10	102	80-120	
Boron	mg/L	1	1.0	100	80-120	
Cadmium	mg/L	0.1	0.11	105	80-120	
Chromium	mg/L	0.1	0.10	101	80-120	
Cobalt	mg/L	0.1	0.095	95	80-120	
Lead	mg/L	0.1	0.10	101	80-120	
Lithium	mg/L	0.1	0.10	101	80-120	
Molybdenum	mg/L	0.1	0.11	106	80-120	
Selenium	mg/L	0.1	0.098	98	80-120	
Thallium	mg/L	0.1	0.10	100	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3548417 3548418

Parameter	Units	92585555011 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	111	75-125	3	20	
Arsenic	mg/L	0.0012J	0.1	0.1	0.10	0.10	99	99	75-125	0	20	

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REPORT OF LABORATORY ANALYSIS

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(770)734-4200

QUALITY CONTROL DATA

Project: BRANCH AP-E
Pace Project No.: 92585727

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3548417 3548418

Parameter	Units	92585555011 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Barium	mg/L	0.029	0.1	0.1	0.14	0.15	112	117	75-125	4	20	
Beryllium	mg/L	ND	0.1	0.1	0.096	0.10	96	100	75-125	4	20	
Boron	mg/L	0.020J	1	1	0.97	1.0	95	98	75-125	4	20	
Cadmium	mg/L	ND	0.1	0.1	0.10	0.11	102	105	75-125	3	20	
Chromium	mg/L	ND	0.1	0.1	0.099	0.10	98	99	75-125	1	20	
Cobalt	mg/L	ND	0.1	0.1	0.096	0.098	95	97	75-125	2	20	
Lead	mg/L	ND	0.1	0.1	0.097	0.10	97	100	75-125	3	20	
Lithium	mg/L	ND	0.1	0.1	0.097	0.099	96	99	75-125	2	20	
Molybdenum	mg/L	0.0021J	0.1	0.1	0.11	0.11	105	108	75-125	3	20	
Selenium	mg/L	ND	0.1	0.1	0.098	0.097	98	97	75-125	0	20	
Thallium	mg/L	ND	0.1	0.1	0.097	0.10	97	100	75-125	3	20	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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QUALITY CONTROL DATA

Project: BRANCH AP-E
Pace Project No.: 92585727

QC Batch: 677024 — Analysis Method: EPA 7470A
QC Batch Method: EPA 7470A — Analysis Description: 7470 Mercury
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92585727001, 92585727002, 92585727003, 92585727004, 92585727005, 92585727006, 92585727007, 92585727008, 92585727009, 92585727010

METHOD BLANK: 3543214 — Matrix: Water
Associated Lab Samples: 92585727001, 92585727002, 92585727003, 92585727004, 92585727005, 92585727006, 92585727007, 92585727008, 92585727009, 92585727010

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	ND	0.00020	0.00013	02/09/22 15:30	

LABORATORY CONTROL SAMPLE: 3543215

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.0025	0.0025	101	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3543216 3543217

Parameter	Units	92585717001 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	98	95	75-125	4	20	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: BRANCH AP-E
Pace Project No.: 92585727

QC Batch: 676429 — Analysis Method: SM 2540C-2015
QC Batch Method: SM 2540C-2015 — Analysis Description: 2540C Total Dissolved Solids
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92585727001, 92585727002, 92585727003, 92585727004, 92585727005, 92585727006, 92585727007, 92585727008, 92585727009

METHOD BLANK: 3540497 — Matrix: Water
Associated Lab Samples: 92585727001, 92585727002, 92585727003, 92585727004, 92585727005, 92585727006, 92585727007, 92585727008, 92585727009

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	10.0	10.0	02/07/22 15:44	

LABORATORY CONTROL SAMPLE: 3540498

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	380	95	80-120	

SAMPLE DUPLICATE: 3540499

Parameter	Units	92585723002 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	114	114	0	25	

SAMPLE DUPLICATE: 3540500

Parameter	Units	92585727009 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	440	459	4	25	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: BRANCH AP-E
Pace Project No.: 92585727

QC Batch: 676439
QC Batch Method: SM 2540C-2015
Analysis Method: SM 2540C-2015
Analysis Description: 2540C Total Dissolved Solids
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92585727010

METHOD BLANK: 3540519 Matrix: Water
Associated Lab Samples: 92585727010

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	10.0	10.0	02/07/22 17:19	

LABORATORY CONTROL SAMPLE: 3540520

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	374	94	80-120	

SAMPLE DUPLICATE: 3540521

Parameter	Units	92585555019 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	180	181	1	25	

SAMPLE DUPLICATE: 3540522

Parameter	Units	92585920011 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	96.0	94.0	2	25	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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(770)734-4200

QUALITY CONTROL DATA

Project: BRANCH AP-E
Pace Project No.: 92585727

QC Batch: 798068
QC Batch Method: SM 2320B
Analysis Method: SM 2320B
Analysis Description: 2320B Alkalinity
Laboratory: Pace Analytical Services - Minneapolis
Associated Lab Samples: 92585727001

METHOD BLANK: 4240572 Matrix: Water
Associated Lab Samples: 92585727001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Alkalinity, Total as CaCO3	mg/L	ND	5.0	1.8	02/09/22 16:51	
Alkalinity,Bicarbonate (CaCO3)	mg/L	ND	5.0	1.8	02/09/22 16:51	
Alkalinity,Carbonate (CaCO3)	mg/L	ND	5.0	1.8	02/09/22 16:51	

LABORATORY CONTROL SAMPLE & LCSD: 4240573 4240574

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
Alkalinity, Total as CaCO3	mg/L	40	42.2	42.1	105	105	90-110	0	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4240575 4240576

Parameter	Units	10596353002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Alkalinity, Total as CaCO3	mg/L	127	40	40	167	167	100	100	80-120	0	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4240827 4240828

Parameter	Units	92585555016 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Alkalinity, Total as CaCO3	mg/L	132	40	40	172	171	100	97	80-120	1	20	

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REPORT OF LABORATORY ANALYSIS

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(770)734-4200

QUALITY CONTROL DATA

Project: BRANCH AP-E
Pace Project No.: 92585727

QC Batch: 798119
QC Batch Method: SM 2320B
Analysis Method: SM 2320B
Analysis Description: 2320B Alkalinity
Laboratory: Pace Analytical Services - Minneapolis
Associated Lab Samples: 92585727002, 92585727003, 92585727004, 92585727005, 92585727006, 92585727010

METHOD BLANK: 4240829 Matrix: Water
Associated Lab Samples: 92585727002, 92585727003, 92585727004, 92585727005, 92585727006, 92585727010

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Alkalinity, Total as CaCO3	mg/L	ND	5.0	1.8	02/10/22 14:33	
Alkalinity,Bicarbonate (CaCO3)	mg/L	ND	5.0	1.8	02/10/22 14:33	
Alkalinity,Carbonate (CaCO3)	mg/L	ND	5.0	1.8	02/10/22 14:33	

LABORATORY CONTROL SAMPLE & LCSD: 4240830 4240831

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
Alkalinity, Total as CaCO3	mg/L	40	40.3	39.9	101	100	90-110	1	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4240832 4240833

Parameter	Units	92585727002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Alkalinity, Total as CaCO3	mg/L	2.8J	40	40	43.8	43.8	102	103	80-120	0	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4240834 4240835

Parameter	Units	10596422001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Alkalinity, Total as CaCO3	mg/L	29.9	40	40	69.2	69.5	98	99	80-120	0	20	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: BRANCH AP-E
Pace Project No.: 92585727

QC Batch: 676333
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
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92585727001, 92585727002, 92585727003, 92585727004

METHOD BLANK: 3540067 Matrix: Water
Associated Lab Samples: 92585727001, 92585727002, 92585727003, 92585727004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.60	02/07/22 07:26	
Fluoride	mg/L	ND	0.10	0.050	02/07/22 07:26	
Sulfate	mg/L	ND	1.0	0.50	02/07/22 07:26	

LABORATORY CONTROL SAMPLE: 3540068

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	48.7	97	90-110	
Fluoride	mg/L	2.5	2.4	96	90-110	
Sulfate	mg/L	50	47.0	94	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3540069 3540070

Parameter	Units	92585636004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	20.0	50	50	66.6	69.9	93	100	90-110	5	10	
Fluoride	mg/L	0.086J	2.5	2.5	2.4	2.6	92	100	90-110	7	10	
Sulfate	mg/L	25.3	50	50	71.8	75.0	93	99	90-110	4	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3540071 3540072

Parameter	Units	92585717003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	3.4	50	50	54.7	55.0	103	103	90-110	1	10	
Fluoride	mg/L	ND	2.5	2.5	2.6	2.6	101	102	90-110	1	10	
Sulfate	mg/L	ND	50	50	51.1	51.4	101	102	90-110	1	10	

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

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: BRANCH AP-E
Pace Project No.: 92585727

QC Batch: 676341
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
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92585727005, 92585727006, 92585727007, 92585727008, 92585727009

METHOD BLANK: 3540085 Matrix: Water
Associated Lab Samples: 92585727005, 92585727006, 92585727007, 92585727008, 92585727009

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.60	02/06/22 23:02	
Fluoride	mg/L	ND	0.10	0.050	02/06/22 23:02	
Sulfate	mg/L	ND	1.0	0.50	02/06/22 23:02	

LABORATORY CONTROL SAMPLE: 3540086

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	51.3	103	90-110	
Fluoride	mg/L	2.5	2.5	99	90-110	
Sulfate	mg/L	50	50.2	100	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3540087 3540088

Parameter	Units	92585727005 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	7.6	50	50	60.1	60.3	105	105	90-110	0	10	
Fluoride	mg/L	ND	2.5	2.5	2.8	2.8	110	111	90-110	1	10	M1
Sulfate	mg/L	195	50	50	243	239	96	89	90-110	2	10	M1

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3540089 3540090

Parameter	Units	92585920001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	83.4	50	50	116	115	65	63	90-110	1	10	M1
Fluoride	mg/L	ND	2.5	2.5	2.8	2.9	113	114	90-110	1	10	M1
Sulfate	mg/L	15.0	50	50	67.5	67.4	105	105	90-110	0	10	

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

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: BRANCH AP-E
Pace Project No.: 92585727

QC Batch: 676342
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
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92585727010

METHOD BLANK: 3540091 Matrix: Water
Associated Lab Samples: 92585727010

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.60	02/07/22 06:14	
Fluoride	mg/L	ND	0.10	0.050	02/07/22 06:14	
Sulfate	mg/L	ND	1.0	0.50	02/07/22 06:14	

LABORATORY CONTROL SAMPLE: 3540092

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	52.6	105	90-110	
Fluoride	mg/L	2.5	2.5	99	90-110	
Sulfate	mg/L	50	51.8	104	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3540093 3540094

Parameter	Units	92585920011 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	17.5	50	50	71.5	71.2	108	107	90-110	0	10	
Fluoride	mg/L	ND	2.5	2.5	3.3	3.3	131	128	90-110	2	10	M1
Sulfate	mg/L	31.5	50	50	84.1	83.2	105	103	90-110	1	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3540095 3540096

Parameter	Units	92585929010 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	1.1	50	50	64.6	55.4	127	109	90-110	15	10	M1,R1
Fluoride	mg/L	ND	2.5	2.5	2.9	2.5	116	99	90-110	15	10	M1,R1
Sulfate	mg/L	256	50	50	327	288	141	63	90-110	13	10	M1,R1

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: BRANCH AP-E
Pace Project No.: 92585727

DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

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

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

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

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

Acid preservation may not be appropriate for 2 Chloroethylvinyl ether.

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

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

Reported results are not rounded until the final step prior to reporting. Therefore, calculated parameters that are typically reported as "Total" may vary slightly from the sum of the reported component parameters.

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

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

M1	Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.
R1	RPD value was outside control limits.

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

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: BRANCH AP-E
Pace Project No.: 92585727

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92585727001	**BRGWC-17S**				
92585727002	**BRGWC-33S**				
92585727003	**BRGWC-34S**				
92585727004	**BRGWC-35S**				
92585727005	**BRGWC-36S**				
92585727006	**BRGWC-38S**				
92585727010	**BRGWC-37S**				
92585727001	**BRGWC-17S**	EPA 3010A	677807	EPA 6010D	677941
92585727002	**BRGWC-33S**	EPA 3010A	677807	EPA 6010D	677941
92585727003	**BRGWC-34S**	EPA 3010A	677807	EPA 6010D	677941
92585727004	**BRGWC-35S**	EPA 3010A	677807	EPA 6010D	677941
92585727005	**BRGWC-36S**	EPA 3010A	677807	EPA 6010D	677941
92585727006	**BRGWC-38S**	EPA 3010A	677807	EPA 6010D	677941
92585727007	**EB-1**	EPA 3010A	677807	EPA 6010D	677941
92585727008	**FB-1**	EPA 3010A	677807	EPA 6010D	677941
92585727009	**DUP-1**	EPA 3010A	677807	EPA 6010D	677941
92585727010	**BRGWC-37S**	EPA 3010A	677807	EPA 6010D	677941
92585727001	**BRGWC-17S**	EPA 3005A	677804	EPA 6020B	677940
92585727002	**BRGWC-33S**	EPA 3005A	677804	EPA 6020B	677940
92585727003	**BRGWC-34S**	EPA 3005A	677804	EPA 6020B	677940
92585727004	**BRGWC-35S**	EPA 3005A	677804	EPA 6020B	677940
92585727005	**BRGWC-36S**	EPA 3005A	677804	EPA 6020B	677940
92585727006	**BRGWC-38S**	EPA 3005A	677804	EPA 6020B	677940
92585727007	**EB-1**	EPA 3005A	677804	EPA 6020B	677940
92585727008	**FB-1**	EPA 3005A	677804	EPA 6020B	677940
92585727009	**DUP-1**	EPA 3005A	677804	EPA 6020B	677940
92585727010	**BRGWC-37S**	EPA 3005A	678016	EPA 6020B	678130
92585727001	**BRGWC-17S**	EPA 7470A	677024	EPA 7470A	677121
92585727002	**BRGWC-33S**	EPA 7470A	677024	EPA 7470A	677121
92585727003	**BRGWC-34S**	EPA 7470A	677024	EPA 7470A	677121
92585727004	**BRGWC-35S**	EPA 7470A	677024	EPA 7470A	677121
92585727005	**BRGWC-36S**	EPA 7470A	677024	EPA 7470A	677121
92585727006	**BRGWC-38S**	EPA 7470A	677024	EPA 7470A	677121
92585727007	**EB-1**	EPA 7470A	677024	EPA 7470A	677121
92585727008	**FB-1**	EPA 7470A	677024	EPA 7470A	677121
92585727009	**DUP-1**	EPA 7470A	677024	EPA 7470A	677121
92585727010	**BRGWC-37S**	EPA 7470A	677024	EPA 7470A	677121
92585727001	**BRGWC-17S**	SM 2540C-2015	676429		
92585727002	**BRGWC-33S**	SM 2540C-2015	676429		
92585727003	**BRGWC-34S**	SM 2540C-2015	676429		
92585727004	**BRGWC-35S**	SM 2540C-2015	676429		
92585727005	**BRGWC-36S**	SM 2540C-2015	676429		
92585727006	**BRGWC-38S**	SM 2540C-2015	676429		
92585727007	**EB-1**	SM 2540C-2015	676429		
92585727008	**FB-1**	SM 2540C-2015	676429		
92585727009	**DUP-1**	SM 2540C-2015	676429		

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

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: BRANCH AP-E
Pace Project No.: 92585727

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92585727010	**BRGWC-37S**	SM 2540C-2015	676439		
92585727001	**BRGWC-17S**	SM 2320B	798068		
92585727002	**BRGWC-33S**	SM 2320B	798119		
92585727003	**BRGWC-34S**	SM 2320B	798119		
92585727004	**BRGWC-35S**	SM 2320B	798119		
92585727005	**BRGWC-36S**	SM 2320B	798119		
92585727006	**BRGWC-38S**	SM 2320B	798119		
92585727010	**BRGWC-37S**	SM 2320B	798119		
92585727001	**BRGWC-17S**	EPA 300.0 Rev 2.1 1993	676333		
92585727002	**BRGWC-33S**	EPA 300.0 Rev 2.1 1993	676333		
92585727003	**BRGWC-34S**	EPA 300.0 Rev 2.1 1993	676333		
92585727004	**BRGWC-35S**	EPA 300.0 Rev 2.1 1993	676333		
92585727005	**BRGWC-36S**	EPA 300.0 Rev 2.1 1993	676341		
92585727006	**BRGWC-38S**	EPA 300.0 Rev 2.1 1993	676341		
92585727007	**EB-1**	EPA 300.0 Rev 2.1 1993	676341		
92585727008	**FB-1**	EPA 300.0 Rev 2.1 1993	676341		
92585727009	**DUP-1**	EPA 300.0 Rev 2.1 1993	676341		
92585727010	**BRGWC-37S**	EPA 300.0 Rev 2.1 1993	676342		

Pace Analytical	Document Name: Sample Condition Upon Receipt (SCUR) Document No.: F-CAR-CS-033 Rev [illegible]	Document Revised: [illegible] Page 1 of 2 Issuing Authority: Pace Carolinas Quality Office

Laboratory receiving samples:
Asheville ☐ Eden ☐ Greenwood ☐ Huntersville ☐ Raleigh ☐ Mechanicsville ☐ Atlanta ☑ Kernersville ☐

[illegible]

Client Name: Georgia Power

Project #: **WO# : 92585727**

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

Custody Seal Present? ☐ Yes ☑ No Seals Intact? ☐ Yes ☐ No

Date/Initials Person Examining Contents: [illegible] 9-3-22

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

Biological Tissue Frozen? ☐ Yes ☐ No ☑ N/A

Thermometer: ☐ [illegible] 250

Type of Ice: ☑ Wet ☐ Blue ☐ None

Cooler Temp: 0.6

Correction Factor: Add/Subtract (°C) + 0

Temp should be above freezing to 6°C

☐ Samples out of temp criteria. Samples on ice, cooling process has begun

Cooler Temp Corrected (°C): 0.6

USDA Regulated Soil: ☐ N/A, water sample

Did samples originate in a quarantine zone within the United States: [illegible] (check maps)? ☐ Yes ☐ No

Did samples originate from a foreign source (internationally, including Hawaii and Puerto Rico)? ☐ Yes ☐ No

					Comments/Discrepancy:
Chain of Custody Present?	☑ Yes	☐ No	☐ N/A	1.	
Samples Arrived within Hold Time?	☑ Yes	☐ No	☐ N/A	2.	
Short Hold Time Analysis (<72 hr)?	☐ Yes	☑ No	☐ N/A	3.	
Rush Turn Around Time Requested?	☐ Yes	☑ No	☐ N/A	4.	
Sufficient Volume?	☑ Yes	☐ No	☐ N/A	5.	
Correct Containers Used?	☑ Yes	☐ No	☐ N/A	6.	
-Pace Containers Used?	☑ Yes	☐ No	☐ N/A		
Containers Intact?	☑ Yes	☐ No	☐ N/A	7.	
[illegible]	☐ Yes	☐ No	☑ N/A	8.	
[illegible]	☐ Yes	☐ No	☐ N/A	9.	
Includes Date/Time/ID/Analysis Matrix: WT					
Headspace in VOA Vials (>5-6mm)?	☐ Yes	☐ No	☑ N/A	10.	
Trip Blank Present?	☐ Yes	☐ No	☑ N/A	11.	
Trip Blank Custody Seals Present?	☐ Yes	☐ No	☑ N/A		

COMMENTS/SAMPLE DISCREPANCY

Field Data Required? ☐ Yes ☐ No

Lot ID of split containers:

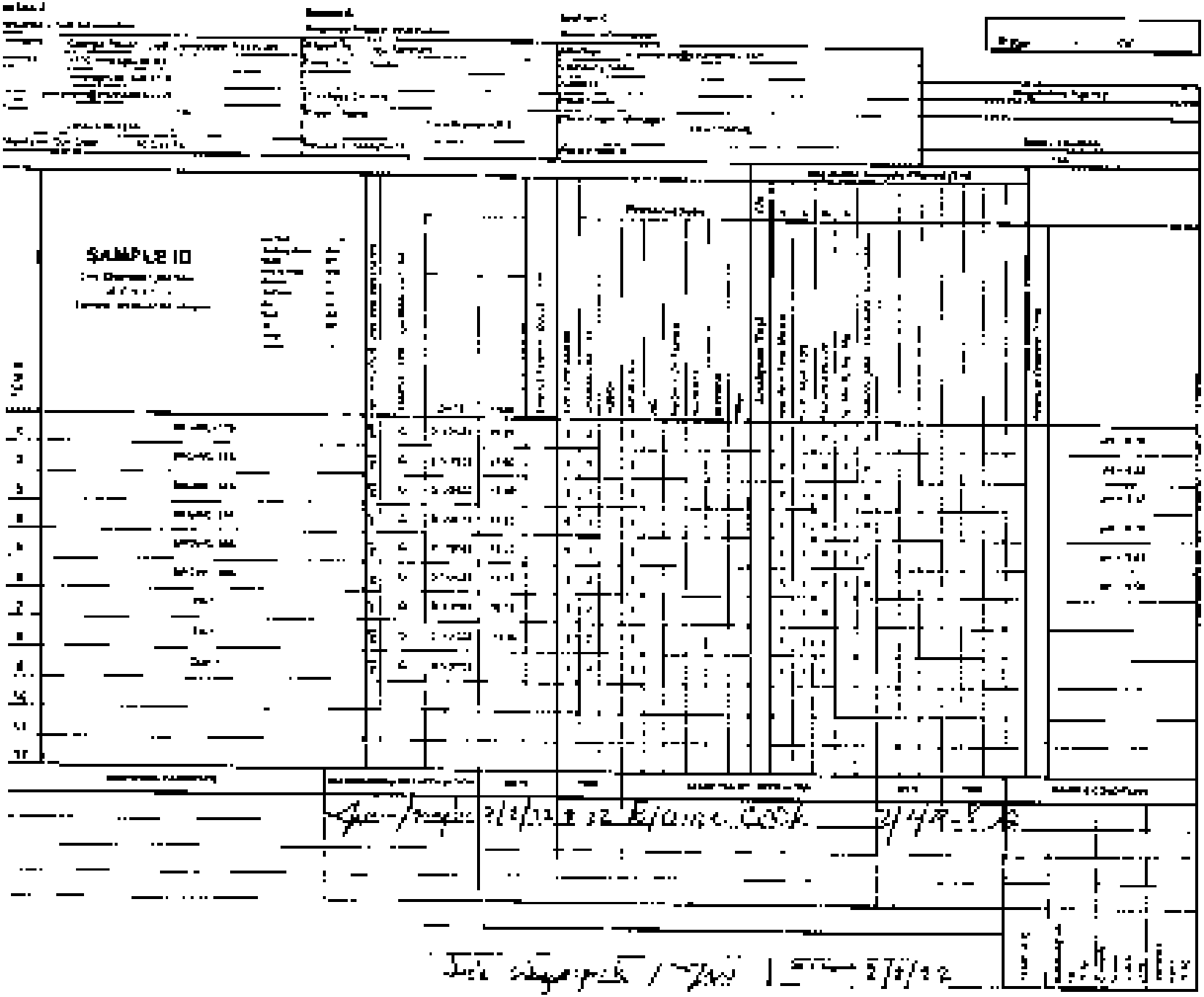
CLIENT NOTIFICATION/RESOLUTION

Person contacted: Date/Time:

Project Manager SCURF Review: Date:

Project Manager SRF Review: Date:

CHAIN-OF-CUSTODY / Analytical Request Document



Pace Analytical

Document Name: Sample Condition Upon Receipt (SCUR)

Document No.: F-CAR-CS-033-Rev.06

Document Revised: [illegible]

Page 1 of 1

Issuing Authority: Pace Carolinas Quality Office

Laboratory receiving samples:

Asheville ☐ Eden ☐ Greenwood ☐ Huntersville ☐ Raleigh ☐ Mechanicsville ☐ Atlanta ☒ Kernersville ☐

Sample Condition Upon Receipt

Client Name: Georgia Power

Project #: **WO#: 92585727**

PM: NMG Due Date: 02/18/22

CLIENT: GA-GA Power

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

Custody Seal Present? ☐ Yes ☒ No Seals Intact? ☐ Yes ☐ No

Date/Initials Person Examining Contents: [illegible]

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

Biological Tissue Frozen? ☐ Yes ☐ No ☒ N/A

Thermometer: ☐ IR Gun ID: [illegible]

Type of Ice: ☒ Wet ☐ Blue ☐ None

Cooler Temp: [illegible]

Correction Factor: Add/Subtract (°C): [illegible]

Cooler Temp Corrected (°C): [illegible]

USDA Regulated Soil (☐ N/A, water sample)

Temp should be above freezing to 6°C

☐ Samples out of temp criteria. Samples on ice, cooling process has begun

Did samples originate in a quarantine zone within the United States: CA, NY, or SC (check maps)? ☐ Yes ☐ No

Did samples originate from a foreign source (internationally, including Hawaii and Puerto Rico)? ☐ Yes ☐ No

				Comments/Discrepancy
Chain of Custody Present?	☒ Yes	☐ No	☐ N/A	1.
Samples Arrived within Hold Time?	☒ Yes	☐ No	☐ N/A	2.
Short Hold Time Analysis (<72 hr)?	☐ Yes	☒ No	☐ N/A	3.
Rush Turn Around Time Requested?	☐ Yes	☒ No	☐ N/A	4.
Sufficient Volume?	☒ Yes	☐ No	☐ N/A	5.
Correct Containers Used?	☒ Yes	☐ No	☐ N/A	6.
-Pace Containers Used?	☒ Yes	☐ No	☐ N/A	
Containers Intact?	☒ Yes	☐ No	☐ N/A	7.
Dissolved Analysis: Samples Field Filtered?	☐ Yes	☐ No	☒ N/A	8.
Sample Labels Match COC?	☒ Yes	☐ No	☐ N/A	9.
-Includes Date/Time/ID/Analysis Matrix: [illegible]				
Headspace in VOA Vials (>5-6mm)?	☐ Yes	☐ No	☒ N/A	10.
Trip Blank Present?	☐ Yes	☐ No	☒ N/A	11.
Trip Blank Custody Seals Present?	☐ Yes	☐ No	☒ N/A	

COMMENTS/SAMPLE DISCREPANCY

Field Data Required? ☐ Yes ☐ No

Lot ID of split containers:

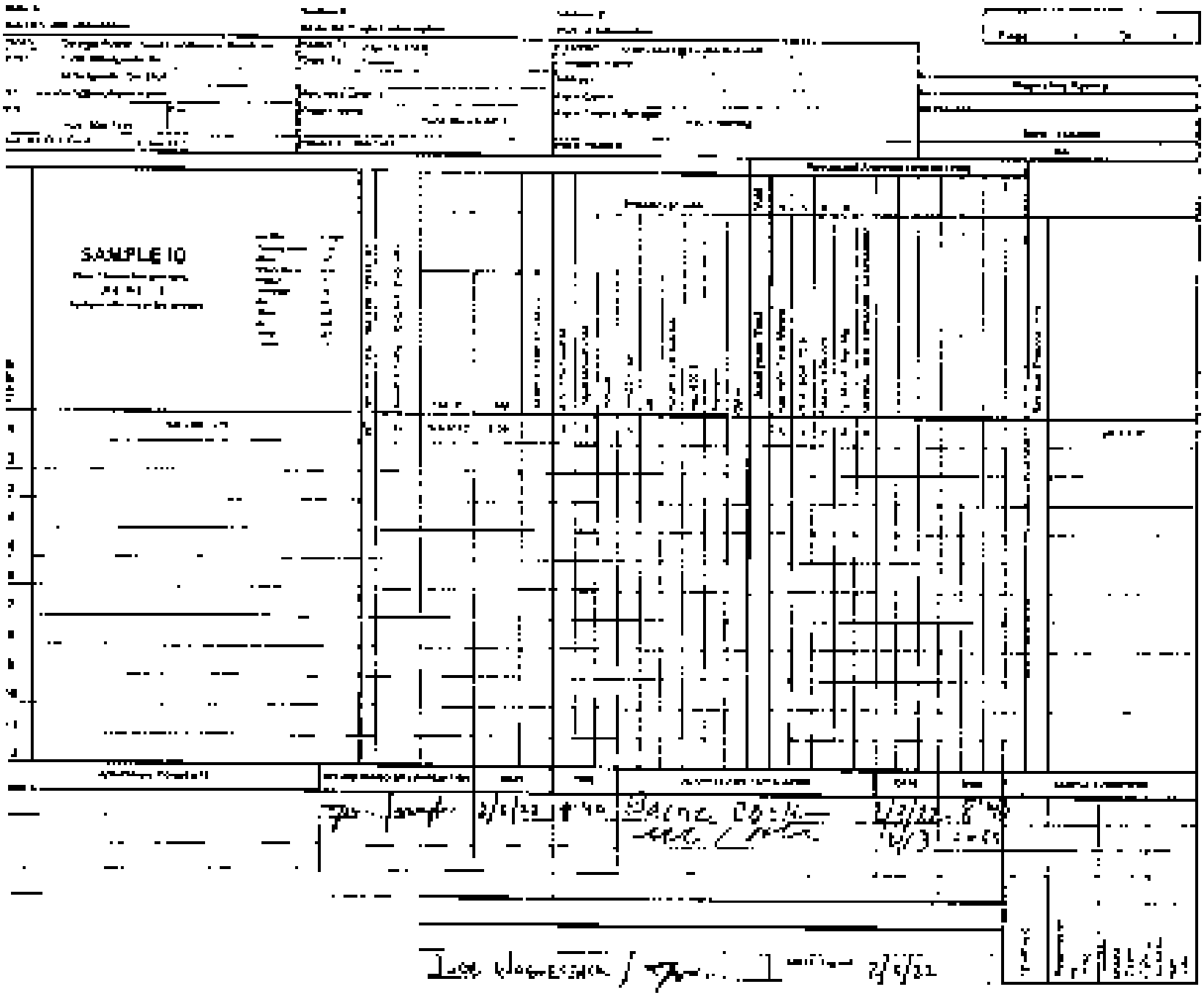
CLIENT NOTIFICATION/RESOLUTION

Person contacted: Date/Time:

Project Manager SCURF Review: Date:

Project Manager SRF Review: Date:

CHAIN-OF-CUSTODY / Analytical Request Document



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

March 11, 2022

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

RE: Project: BRANCH AP-E RAD
Pace Project No.: 92585714

Dear Joju Abraham:

Enclosed are the analytical results for sample(s) received by the laboratory between February 02, 2022 and February 03, 2022. 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,

Nicole D'Oleo
nicole.d'oleo@pacelabs.com
(704)875-9092
Project Manager

Enclosures

cc: Anna Bottum, ERM
Andrea Brazell, ERM
Daniela Herrera, Golder
Ben Hodges, Georgia Power
Jimmy Jones, Golder Associates Inc.
Kristen Jurinko
Julie Lehrman, Golder Associates Inc.
Karim Minkara, Golder Associates - Atlanta
Ms. Lauren Petty, Southern Company
Carolyn Powrozek, Golder
Dawn Prell, Golder Associates Inc.
Lacy Smith, ERM
Brian Steele, Golder
Caitlin Tillema, ERM
Christine Weaver, ERM

REPORT OF LABORATORY ANALYSIS

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

CERTIFICATIONS

Project: BRANCH AP-E RAD
Pace Project No.: 92585714

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 #: 460198
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
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(770)734-4200

SAMPLE SUMMARY

Project: BRANCH AP-E RAD
Pace Project No.: 92585714

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92585714001	**BRGWC-17S**	Water	02/01/22 15:28	02/02/22 10:25
92585714002	**BRGWC-33S**	Water	02/01/22 11:02	02/02/22 10:25
92585714003	**BRGWC-34S**	Water	02/01/22 13:00	02/02/22 10:25
92585714004	**BRGWC-35S**	Water	02/01/22 14:20	02/02/22 10:25
92585714005	**BRGWC-36S**	Water	02/01/22 13:23	02/02/22 10:25
92585714006	**BRGWC-38S**	Water	02/01/22 15:15	02/02/22 10:25
92585714007	**EB-1**	Water	02/01/22 16:15	02/02/22 10:25
92585714008	**FB-1**	Water	02/01/22 11:30	02/02/22 10:25
92585714009	**DUP-1**	Water	02/01/22 00:00	02/02/22 10:25
92585714010	**BRGWC-37S**	Water	02/02/22 09:20	02/03/22 10:35

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SAMPLE ANALYTE COUNT

Project: BRANCH AP-E RAD
Pace Project No.: 92585714

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92585714001	**BRGWC-17S**	EPA 9315	JJY	1	PASI-PA
		EPA 9320	JC2	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92585714002	**BRGWC-33S**	EPA 9315	JJY	1	PASI-PA
		EPA 9320	JC2	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92585714003	**BRGWC-34S**	EPA 9315	JJY	1	PASI-PA
		EPA 9320	JC2	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92585714004	**BRGWC-35S**	EPA 9315	JJY	1	PASI-PA
		EPA 9320	JC2	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92585714005	**BRGWC-36S**	EPA 9315	JJY	1	PASI-PA
		EPA 9320	JC2	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92585714006	**BRGWC-38S**	EPA 9315	JJY	1	PASI-PA
		EPA 9320	JC2	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92585714007	**EB-1**	EPA 9315	JJY	1	PASI-PA
		EPA 9320	JC2	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92585714008	**FB-1**	EPA 9315	JJY	1	PASI-PA
		EPA 9320	JC2	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92585714009	**DUP-1**	EPA 9315	JJY	1	PASI-PA
		EPA 9320	JC2	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92585714010	**BRGWC-37S**	EPA 9315	JC2	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA

PASI-PA = Pace Analytical Services - Greensburg

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SUMMARY OF DETECTION

Project: BRANCH AP-E RAD
Pace Project No.: 92585714

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92585714001	**BRGWC-17S**					
EPA 9315	Radium-226	0.187 ± 0.188 (0.378) C:95% T:NA	pCi/L		02/17/22 13:56	
EPA 9320	Radium-228	0.316 ± 0.308 (0.628) C:80% T:82%	pCi/L		02/17/22 12:46	
Total Radium Calculation	Total Radium	0.503 ± 0.496 (1.01)	pCi/L		02/21/22 10:10	
92585714002	**BRGWC-33S**					
EPA 9315	Radium-226	0.112 ± 0.146 (0.307) C:95% T:NA	pCi/L		02/17/22 13:56	
EPA 9320	Radium-228	0.471 ± 0.338 (0.648) C:76% T:87%	pCi/L		02/17/22 12:46	
Total Radium Calculation	Total Radium	0.583 ± 0.484 (0.955)	pCi/L		02/21/22 10:10	
92585714003	**BRGWC-34S**					
EPA 9315	Radium-226	0.146 ± 0.179 (0.380) C:93% T:NA	pCi/L		02/17/22 13:56	
EPA 9320	Radium-228	0.389 ± 0.356 (0.723) C:74% T:89%	pCi/L		02/17/22 12:46	
Total Radium Calculation	Total Radium	0.535 ± 0.535 (1.10)	pCi/L		02/21/22 10:10	
92585714004	**BRGWC-35S**					
EPA 9315	Radium-226	0.0960 ± 0.168 (0.382) C:96% T:NA	pCi/L		02/17/22 13:56	
EPA 9320	Radium-228	0.576 ± 0.422 (0.823) C:71% T:87%	pCi/L		02/17/22 13:00	
Total Radium Calculation	Total Radium	0.672 ± 0.590 (1.21)	pCi/L		02/21/22 10:10	

REPORT OF LABORATORY ANALYSIS

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SUMMARY OF DETECTION

Project: BRANCH AP-E RAD
Pace Project No.: 92585714

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92585714005	**BRGWC-36S**					
EPA 9315	Radium-226	0.337 ± 0.207 (0.337) C:96% T:NA	pCi/L		02/17/22 13:56	
EPA 9320	Radium-228	1.27 ± 0.796 (1.53) C:69% T:61%	pCi/L		02/17/22 13:04	
Total Radium Calculation	Total Radium	1.61 ± 1.00 (1.87)	pCi/L		02/21/22 10:10	
92585714006	**BRGWC-38S**					
EPA 9315	Radium-226	0.312 ± 0.168 (0.221) C:98% T:NA	pCi/L		02/18/22 09:19	
EPA 9320	Radium-228	7.33 ± 1.61 (1.23) C:70% T:79%	pCi/L		02/17/22 13:04	
Total Radium Calculation	Total Radium	7.64 ± 1.78 (1.45)	pCi/L		02/21/22 10:10	
92585714007	**EB-1**					
EPA 9315	Radium-226	0.0593 ± 0.105 (0.237) C:99% T:NA	pCi/L		02/18/22 09:19	
EPA 9320	Radium-228	0.122 ± 0.527 (1.18) C:70% T:88%	pCi/L		02/17/22 13:04	
Total Radium Calculation	Total Radium	0.181 ± 0.632 (1.42)	pCi/L		02/21/22 10:10	
92585714008	**FB-1**					
EPA 9315	Radium-226	0.0212 ± 0.0971 (0.249) C:95% T:NA	pCi/L		02/18/22 09:19	
EPA 9320	Radium-228	-0.0882 ± 0.327 (0.784) C:78% T:91%	pCi/L		02/17/22 16:18	
Total Radium Calculation	Total Radium	0.0212 ± 0.424 (1.03)	pCi/L		02/21/22 10:10	

REPORT OF LABORATORY ANALYSIS

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SUMMARY OF DETECTION

Project: BRANCH AP-E RAD
Pace Project No.: 92585714

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92585714009	**DUP-1**					
EPA 9315	Radium-226	0.110 ± 0.117 (0.226) C:98% T:NA	pCi/L		02/18/22 09:19	
EPA 9320	Radium-228	0.828 ± 0.523 (0.982) C:80% T:65%	pCi/L		02/17/22 16:18	
Total Radium Calculation	Total Radium	0.938 ± 0.640 (1.21)	pCi/L		02/21/22 10:10	
92585714010	**BRGWC-37S**					
EPA 9315	Radium-226	0.301 ± 0.163 (0.237) C:90% T:NA	pCi/L		03/08/22 08:22	
EPA 9320	Radium-228	0.353 ± 0.304 (0.605) C:77% T:89%	pCi/L		03/04/22 14:04	
Total Radium Calculation	Total Radium	0.654 ± 0.467 (0.842)	pCi/L		03/10/22 17:16	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: BRANCH AP-E RAD
Pace Project No.: 92585714

Sample: BRGWC-17S **Lab ID: 92585714001** Collected: 02/01/22 15:28 Received: 02/02/22 10:25 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	**0.187 ± 0.188 (0.378) C:95% T:NA**	pCi/L	02/17/22 13:56	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.316 ± 0.308 (0.628) C:80% T:82%**	pCi/L	02/17/22 12:46	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.503 ± 0.496 (1.01)**	pCi/L	02/21/22 10:10	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: BRANCH AP-E RAD
Pace Project No.: 92585714

Sample: BRGWC-33S **Lab ID: 92585714002** Collected: 02/01/22 11:02 Received: 02/02/22 10:25 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	**0.112 ± 0.146 (0.307) C:95% T:NA**	pCi/L	02/17/22 13:56	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.471 ± 0.338 (0.648) C:76% T:87%**	pCi/L	02/17/22 12:46	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.583 ± 0.484 (0.955)**	pCi/L	02/21/22 10:10	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: BRANCH AP-E RAD
Pace Project No.: 92585714

Sample: BRGWC-34S **Lab ID: 92585714003** Collected: 02/01/22 13:00 Received: 02/02/22 10:25 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	**0.146 ± 0.179 (0.380) C:93% T:NA**	pCi/L	02/17/22 13:56	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.389 ± 0.356 (0.723) C:74% T:89%**	pCi/L	02/17/22 12:46	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.535 ± 0.535 (1.10)**	pCi/L	02/21/22 10:10	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: BRANCH AP-E RAD
Pace Project No.: 92585714

Sample: BRGWC-35S **Lab ID: 92585714004** Collected: 02/01/22 14:20 Received: 02/02/22 10:25 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	**0.0960 ± 0.168 (0.382) C:96% T:NA**	pCi/L	02/17/22 13:56	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.576 ± 0.422 (0.823) C:71% T:87%**	pCi/L	02/17/22 13:00	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.672 ± 0.590 (1.21)**	pCi/L	02/21/22 10:10	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: BRANCH AP-E RAD
Pace Project No.: 92585714

Sample: BRGWC-36S **Lab ID: 92585714005** Collected: 02/01/22 13:23 Received: 02/02/22 10:25 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	**0.337 ± 0.207 (0.337) C:96% T:NA**	pCi/L	02/17/22 13:56	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**1.27 ± 0.796 (1.53) C:69% T:61%**	pCi/L	02/17/22 13:04	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.61 ± 1.00 (1.87)**	pCi/L	02/21/22 10:10	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: BRANCH AP-E RAD
Pace Project No.: 92585714

Sample: BRGWC-38S **Lab ID: 92585714006** Collected: 02/01/22 15:15 Received: 02/02/22 10:25 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	**0.312 ± 0.168 (0.221) C:98% T:NA**	pCi/L	02/18/22 09:19	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**7.33 ± 1.61 (1.23) C:70% T:79%**	pCi/L	02/17/22 13:04	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**7.64 ± 1.78 (1.45)**	pCi/L	02/21/22 10:10	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: BRANCH AP-E RAD
Pace Project No.: 92585714

Sample: EB-1 **Lab ID: 92585714007** Collected: 02/01/22 16:15 Received: 02/02/22 10:25 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	**0.0593 ± 0.105 (0.237) C:99% T:NA**	pCi/L	02/18/22 09:19	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.122 ± 0.527 (1.18) C:70% T:88%**	pCi/L	02/17/22 13:04	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.181 ± 0.632 (1.42)**	pCi/L	02/21/22 10:10	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: BRANCH AP-E RAD
Pace Project No.: 92585714

Sample: FB-1 **Lab ID: 92585714008** Collected: 02/01/22 11:30 Received: 02/02/22 10:25 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	**0.0212 ± 0.0971 (0.249) C:95% T:NA**	pCi/L	02/18/22 09:19	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**-0.0882 ± 0.327 (0.784) C:78% T:91%**	pCi/L	02/17/22 16:18	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.0212 ± 0.424 (1.03)**	pCi/L	02/21/22 10:10	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: BRANCH AP-E RAD
Pace Project No.: 92585714

Sample: DUP-1 **Lab ID: 92585714009** Collected: 02/01/22 00:00 Received: 02/02/22 10:25 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	**0.110 ± 0.117 (0.226) C:98% T:NA**	pCi/L	02/18/22 09:19	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.828 ± 0.523 (0.982) C:80% T:65%**	pCi/L	02/17/22 16:18	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.938 ± 0.640 (1.21)**	pCi/L	02/21/22 10:10	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: BRANCH AP-E RAD
Pace Project No.: 92585714

Sample: BRGWC-37S **Lab ID: 92585714010** Collected: 02/02/22 09:20 Received: 02/03/22 10:35 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	**0.301 ± 0.163 (0.237) C:90% T:NA**	pCi/L	03/08/22 08:22	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.353 ± 0.304 (0.605) C:77% T:89%**	pCi/L	03/04/22 14:04	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.654 ± 0.467 (0.842)**	pCi/L	03/10/22 17:16	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL - RADIOCHEMISTRY

Project: BRANCH AP-E RAD
Pace Project No.: 92585714

QC Batch: 482652 Analysis Method: EPA 9320
QC Batch Method: EPA 9320 Analysis Description: 9320 Radium 228
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92585714001, 92585714002, 92585714003, 92585714004, 92585714005, 92585714006, 92585714007, 92585714008, 92585714009

METHOD BLANK: 2332806 Matrix: Water
Associated Lab Samples: 92585714001, 92585714002, 92585714003, 92585714004, 92585714005, 92585714006, 92585714007, 92585714008, 92585714009

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.173 ± 0.305 (0.667) C:77% T:85%	pCi/L	02/17/22 12:45	

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

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL - RADIOCHEMISTRY

Project: BRANCH AP-E RAD
Pace Project No.: 92585714

QC Batch: 486611
QC Batch Method: EPA 9315
Analysis Method: EPA 9315
Analysis Description: 9315 Total Radium
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92585714010

METHOD BLANK: 2353259 Matrix: Water
Associated Lab Samples: 92585714010

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	-0.0325 ± 0.0552 (0.191) C:101% T:NA	pCi/L	03/08/22 08:21	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL - RADIOCHEMISTRY

Project: BRANCH AP-E RAD
Pace Project No.: 92585714

QC Batch: 482098 Analysis Method: EPA 9315
QC Batch Method: EPA 9315 Analysis Description: 9315 Total Radium
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92585714001, 92585714002, 92585714003, 92585714004, 92585714005, 92585714006, 92585714007, 92585714008, 92585714009

METHOD BLANK: 2330653 Matrix: Water
Associated Lab Samples: 92585714001, 92585714002, 92585714003, 92585714004, 92585714005, 92585714006, 92585714007, 92585714008, 92585714009

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.0854 ± 0.145 (0.327) C:100% T:NA	pCi/L	02/17/22 13:31	

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

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL - RADIOCHEMISTRY

Project: BRANCH AP-E RAD
Pace Project No.: 92585714

QC Batch: 486654
QC Batch Method: EPA 9320
Analysis Method: EPA 9320
Analysis Description: 9320 Radium 228
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92585714010

METHOD BLANK: 2353485 Matrix: Water
Associated Lab Samples: 92585714010

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.0646 ± 0.235 (0.535) C:84% T:93%	pCi/L	03/04/22 10:45	

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

REPORT OF LABORATORY ANALYSIS

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QUALIFIERS

Project: BRANCH AP-E RAD
Pace Project No.: 92585714

DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

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

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

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

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

Acid preservation may not be appropriate for 2 Chloroethylvinyl ether.

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

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

Reported results are not rounded until the final step prior to reporting. Therefore, calculated parameters that are typically reported as "Total" may vary slightly from the sum of the reported component parameters.

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.

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

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: BRANCH AP-E RAD
Pace Project No.: 92585714

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92585714001	**BRGWC-17S**	EPA 9315	482098		
92585714002	**BRGWC-33S**	EPA 9315	482098		
92585714003	**BRGWC-34S**	EPA 9315	482098		
92585714004	**BRGWC-35S**	EPA 9315	482098		
92585714005	**BRGWC-36S**	EPA 9315	482098		
92585714006	**BRGWC-38S**	EPA 9315	482098		
92585714007	**EB-1**	EPA 9315	482098		
92585714008	**FB-1**	EPA 9315	482098		
92585714009	**DUP-1**	EPA 9315	482098		
92585714010	**BRGWC-37S**	EPA 9315	486611		
92585714001	**BRGWC-17S**	EPA 9320	482652		
92585714002	**BRGWC-33S**	EPA 9320	482652		
92585714003	**BRGWC-34S**	EPA 9320	482652		
92585714004	**BRGWC-35S**	EPA 9320	482652		
92585714005	**BRGWC-36S**	EPA 9320	482652		
92585714006	**BRGWC-38S**	EPA 9320	482652		
92585714007	**EB-1**	EPA 9320	482652		
92585714008	**FB-1**	EPA 9320	482652		
92585714009	**DUP-1**	EPA 9320	482652		
92585714010	**BRGWC-37S**	EPA 9320	486654		
92585714001	**BRGWC-17S**	Total Radium Calculation	485223		
92585714002	**BRGWC-33S**	Total Radium Calculation	485223		
92585714003	**BRGWC-34S**	Total Radium Calculation	485223		
92585714004	**BRGWC-35S**	Total Radium Calculation	485223		
92585714005	**BRGWC-36S**	Total Radium Calculation	485223		
92585714006	**BRGWC-38S**	Total Radium Calculation	485223		
92585714007	**EB-1**	Total Radium Calculation	485223		
92585714008	**FB-1**	Total Radium Calculation	485223		
92585714009	**DUP-1**	Total Radium Calculation	485223		
92585714010	**BRGWC-37S**	Total Radium Calculation	489606		

Pace Analytical	Document Name: Sample Condition Upon Receipt (SCUR)	Document Revised:
	Document No.: F-CAR-CS-033 Rev 08	Page 1 of 2
		Issuing Authority: Pace Carolinas Quality Office

Laboratory receiving samples:
Asheville ☐ Eden ☐ Greenwood ☐ Huntersville ☐ Raleigh ☐ Mechanicsville ☐ Atlanta ☑ Kernersville ☐

Sample Condition Upon Receipt

Client Name: Georgia Power

Project #: **WO#: 92585727**

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

Custody Seal Present? ☐ Yes ☑ No   Seals Intact? ☐ Yes ☐ No

Date/Initials Person Examining Contents: 9-2-22

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

Biological Tissue Frozen? ☐ Yes ☐ No ☑ N/A

Thermometer: ☐ IR Gun ID: 230

Type of Ice: ☑ Wet ☐ Blue ☐ None

Cooler Temp: 2.6   Correction Factor: Add/Subtract (°C): 0

Temp should be above freezing to 6°C
☐ Samples out of temp criteria. Samples on ice, cooling process has begun

Cooler Temp Corrected (°C): 2.6

USDA Regulated Soil: ☐ N/A, water sample

Did samples originate in a quarantine zone within the United States: CA, NY, or SC (check maps)? ☐ Yes ☐ No

Did samples originate from a foreign source (internationally, including Hawaii and Puerto Rico)? ☐ Yes ☐ No

				Comments/Discrepancy
Chain of Custody Present?	☑ Yes	☐ No	☐ N/A	1.
Samples Arrived within Hold Time?	☑ Yes	☐ No	☐ N/A	2.
Short Hold Time Analysis (<72 hr)?	☐ Yes	☑ No	☐ N/A	3.
Rush Turn Around Time Requested?	☐ Yes	☑ No	☐ N/A	4.
Sufficient Volume?	☑ Yes	☐ No	☐ N/A	5.
Correct Containers Used?	☑ Yes	☐ No	☐ N/A	6.
-Pace Containers Used?	☑ Yes	☐ No	☐ N/A	
Containers Intact?	☑ Yes	☐ No	☐ N/A	7.
Dissolved analysis: Samples Field Filtered?	☐ Yes	☐ No	☑ N/A	8.
Sample Labels Match COC?	☐ Yes	☐ No	☐ N/A	9.
-Includes Date/Time/ID/Analysis Matrix: WT				
Headspace in VOA Vials (>5-6mm)?	☐ Yes	☐ No	☑ N/A	10.
Trip Blank Present?	☐ Yes	☐ No	☑ N/A	11.
Trip Blank Custody Seals Present?	☐ Yes	☐ No	☑ N/A	

COMMENTS/SAMPLE DISCREPANCY

Field Data Required? ☐ Yes ☐ No

Lot ID of split containers:

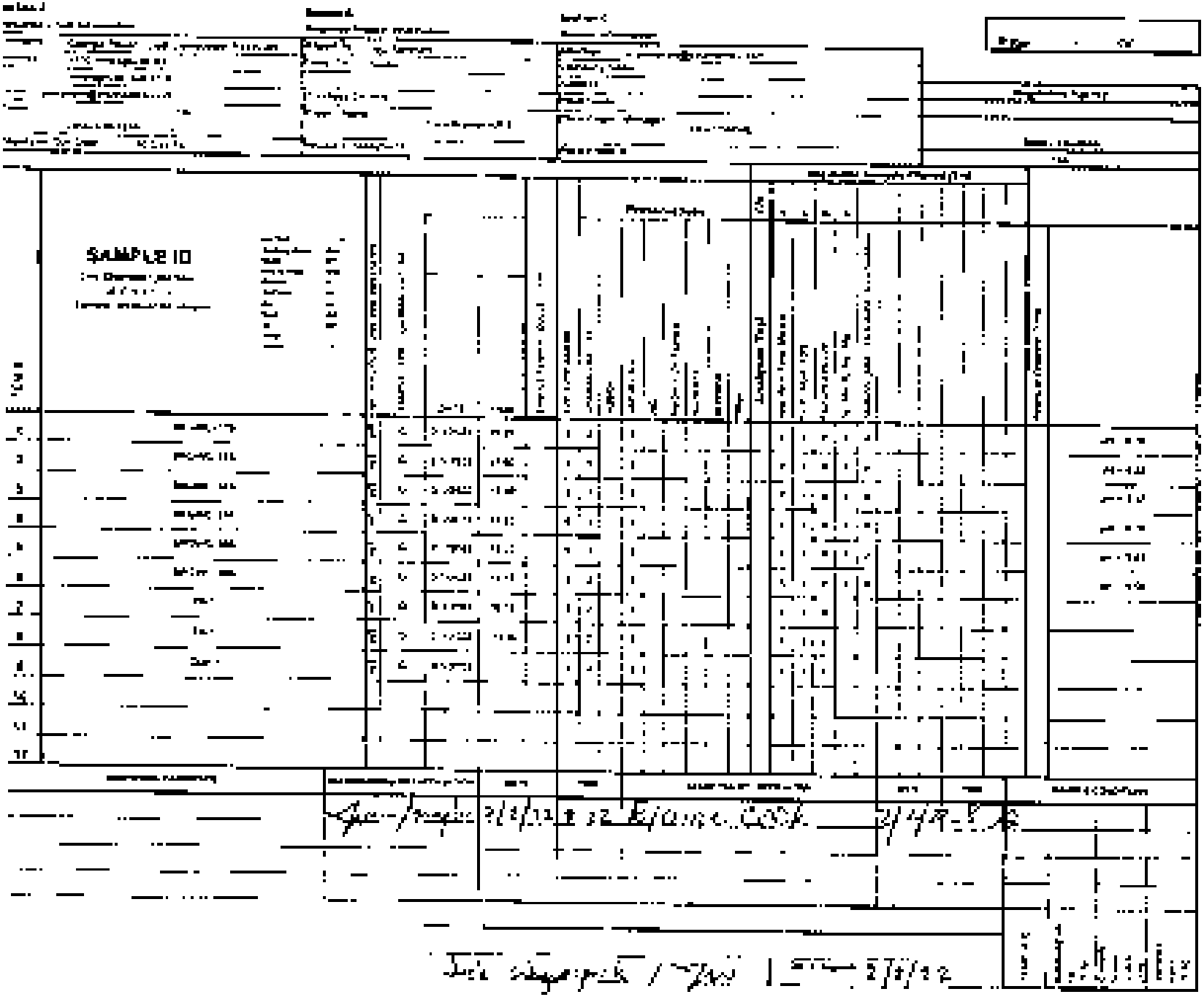
CLIENT NOTIFICATION/RESOLUTION

Person contacted: Date/Time:

Project Manager SCURF Review: Date:

Project Manager SRF Review: Date:

CHAIN-OF-CUSTODY / Analytical Request Document



Pace Analytical	Document Name: Sample Condition Upon Receipt (SCUR)	Document Revised: [illegible]
	Document No.: F-CAR-CS-033-Rev.06	Page 1 of 2
		Issuing Authority: Pace Carolinas Quality Office

Laboratory receiving samples:
Asheville ☐ Eden ☐ Greenwood ☐ Huntersville ☐ Raleigh ☐ Mechanicsville ☐ Atlanta ☒ Kernersville ☐

[illegible]

Client Name:

Project #: **WO# : 92585727**

PM: NMG Due Date: 02/18/22

CLIENT: GA-GA Power

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

Custody Seal Present? ☐ Yes ☐ No Seals Intact? ☐ Yes ☐ No

Date/Initials Person Examining Contents:

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

Thermometer:

Type of Ice: ☐ Wet ☐ Blue ☐ None

Biological Tissue Frozen? ☐ Yes ☐ No ☐ N/A

Cooler Temp: Correction Factor: Add/Subtract (°C)

Cooler Temp Corrected (°C):

USDA Regulated Soil (☐ N/A, water sample)

Temp should be above freezing to 6°C

Comments/Discrepancy:

Chain of Custody Present?	☐ Yes	☐ No	☐ N/A	1.
Samples Arrived within Hold Time?	☐ Yes	☐ No	☐ N/A	2.
Short Hold Time Analysis (<72 hr)?	☐ Yes	☐ No	☐ N/A	3.
Rush Turn Around Time Requested?	☐ Yes	☐ No	☐ N/A	4.
Sufficient Volume?	☐ Yes	☐ No	☐ N/A	5.
Correct Containers Used?	☐ Yes	☐ No	☐ N/A	6.
-Pace Containers Used?	☐ Yes	☐ No	☐ N/A	
Containers Intact?	☐ Yes	☐ No	☐ N/A	7.
Dissolved analysis: Samples Field Filtered?	☐ Yes	☐ No	☐ N/A	8.
Sample Labels Match COC?	☐ Yes	☐ No	☐ N/A	9.
-Includes Date/Time/ID/Analysis Matrix:				
Headspace in VOA Vials (>5-6mm)?	☐ Yes	☐ No	☐ N/A	10.
Trip Blank Present?	☐ Yes	☐ No	☐ N/A	11.
Trip Blank Custody Seals Present?	☐ Yes	☐ No	☐ N/A	

COMMENTS/SAMPLE DISCREPANCY

Field Data Required? ☐ Yes ☐ No

Lot ID of split containers

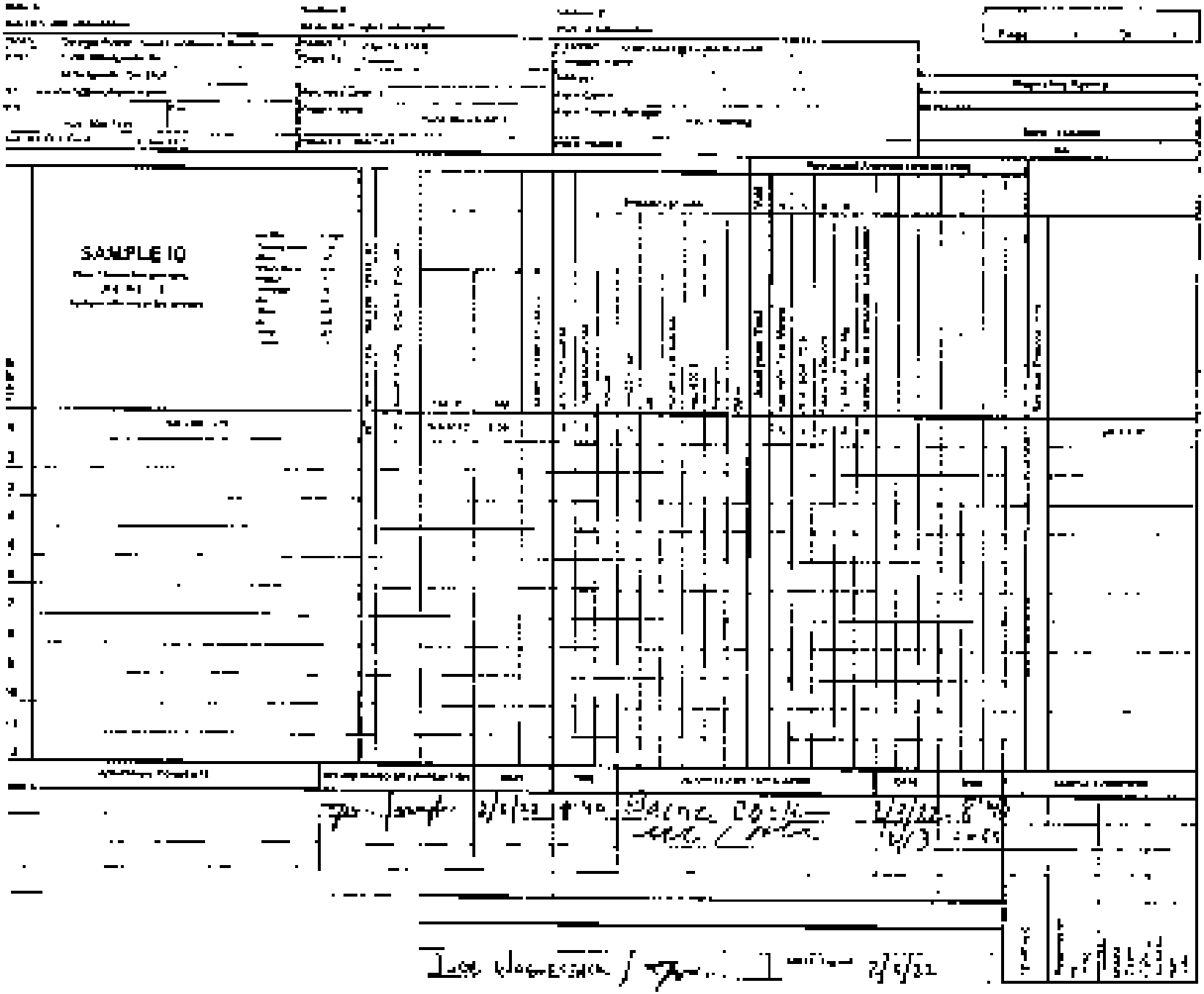
CLIENT NOTIFICATION/RESOLUTION

Person contacted: Date/Time:

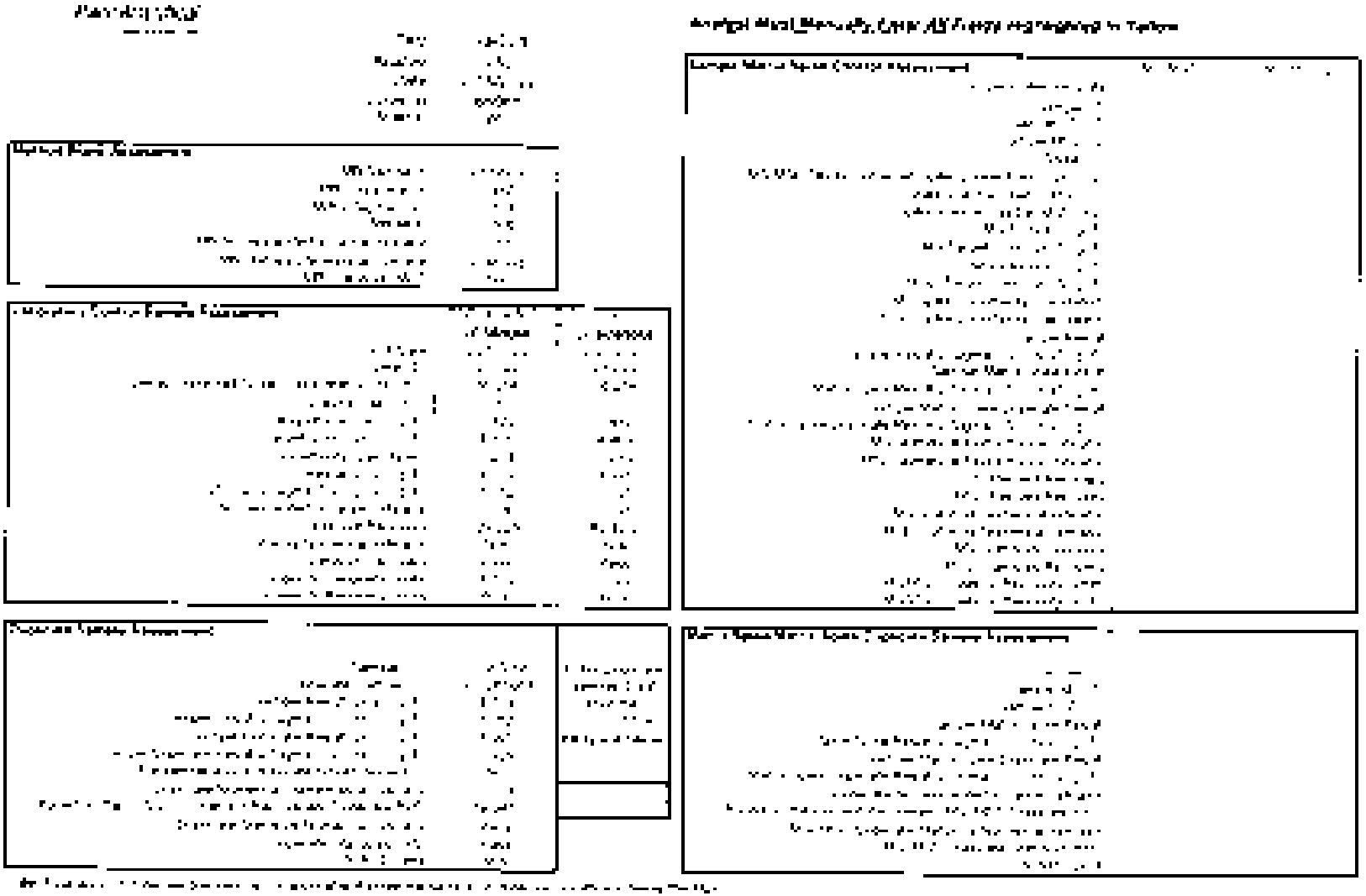
Project Manager SCURF Review: Date:

Project Manager SRF Review: Date:

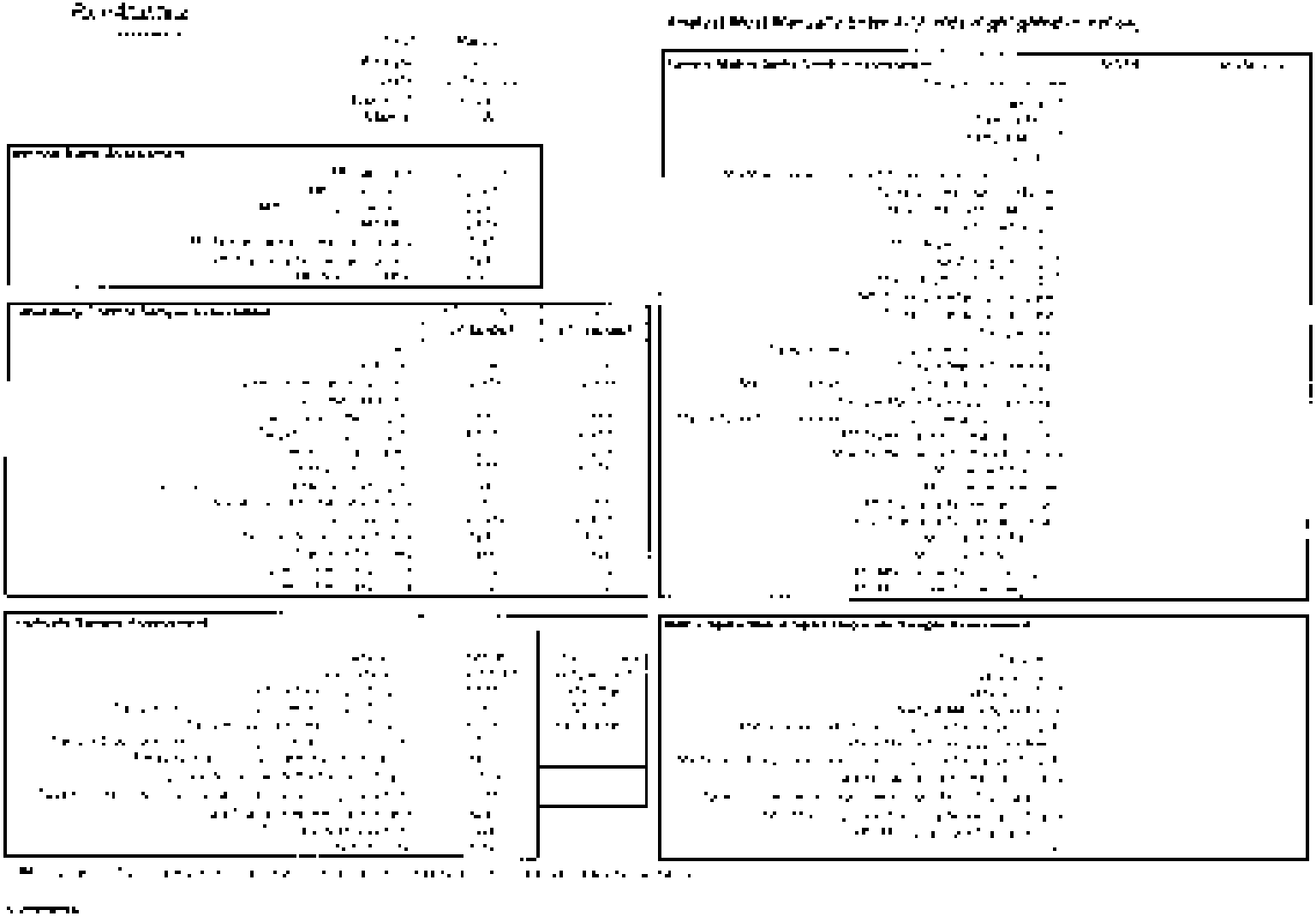
CHAIN-OF-CUSTODY / Analytical Request Document



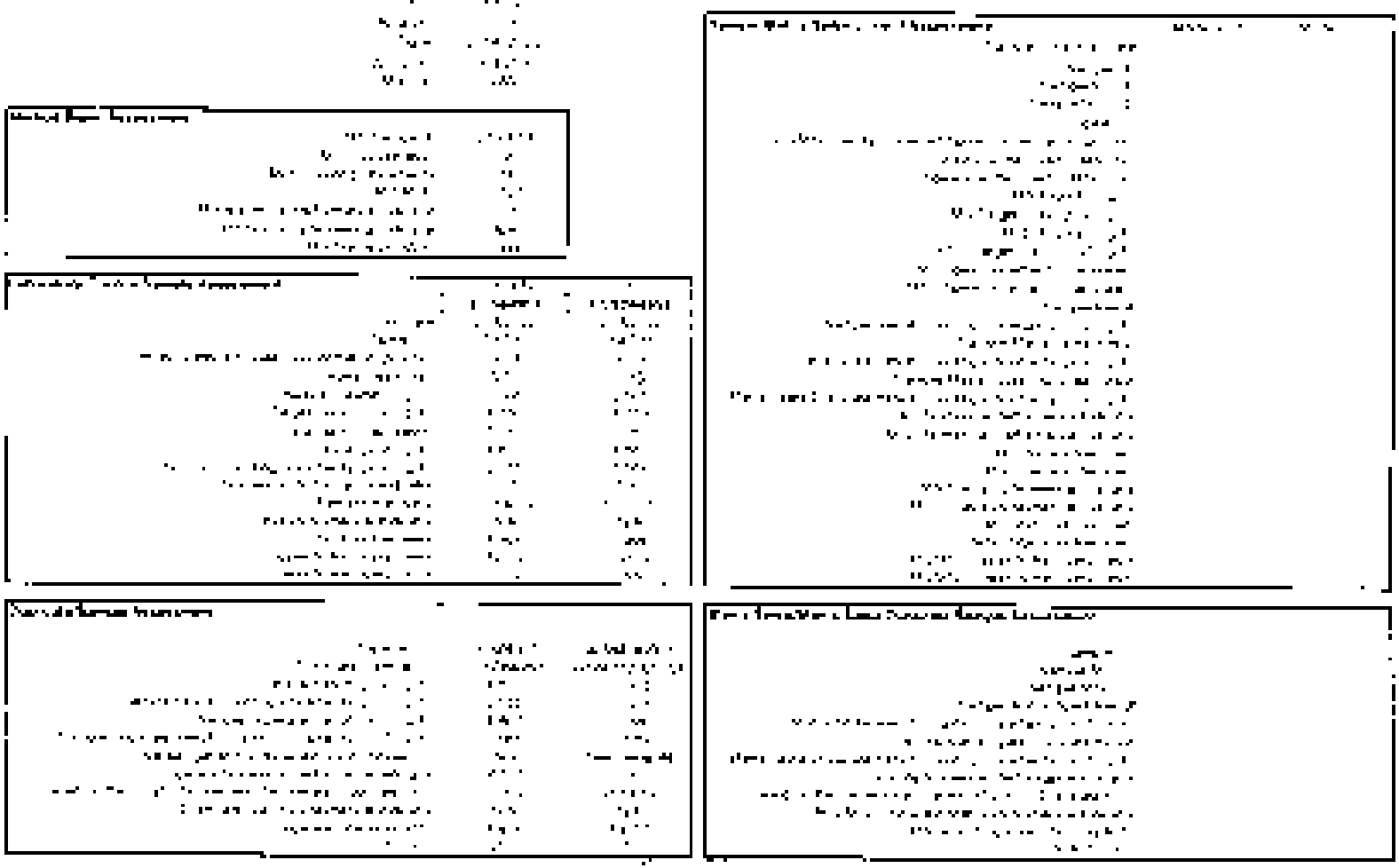
Quality Control Sample Performance Assessment



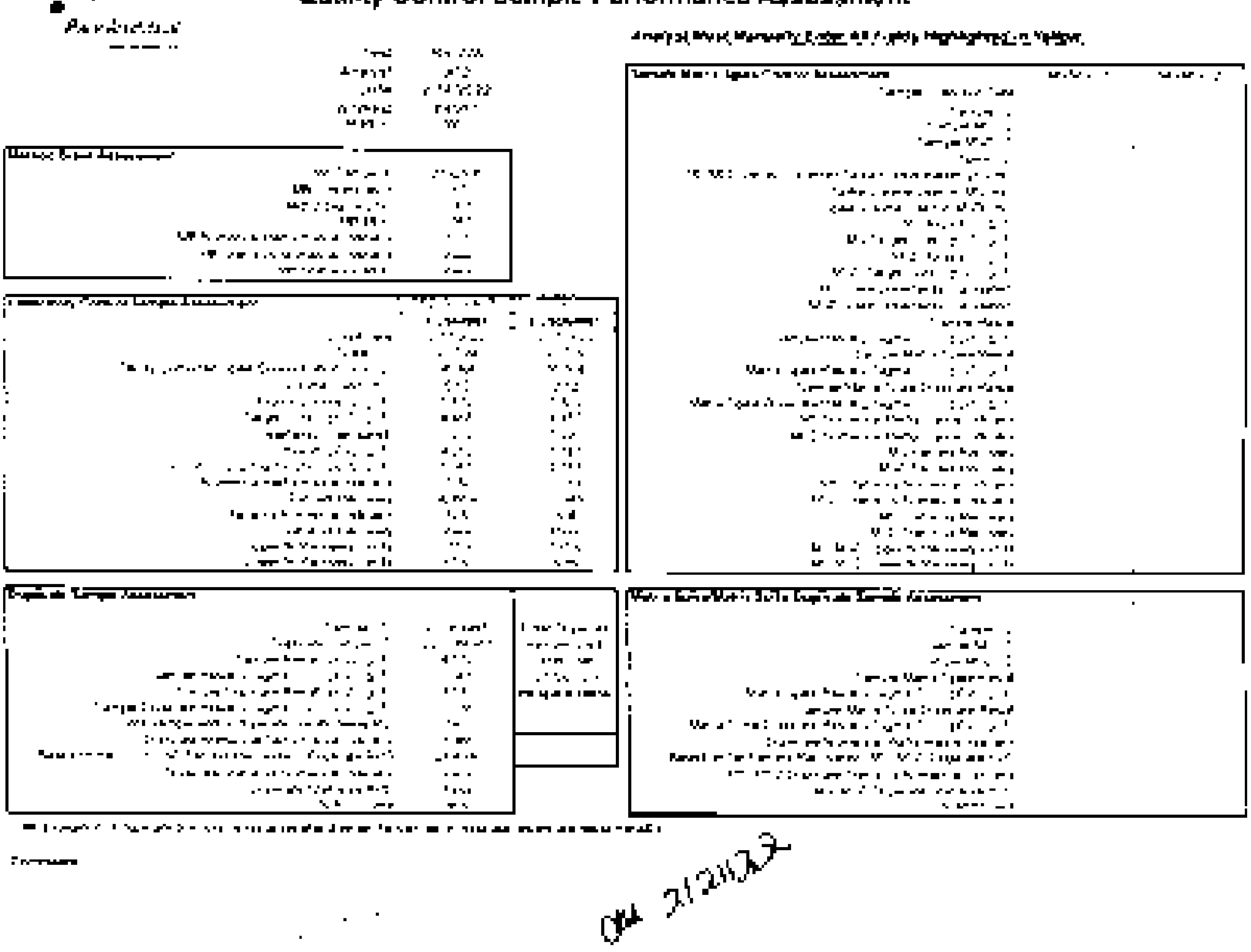
Quality Control Sample Performance Assessment



Quality Control Sample Performance Assessment



Quality Control Sample Performance Assessment



Quality Control Sample Performance Assessment

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Test:	Ra-228
Analyst:	VAL
Date:	3/2/2022
Worklist:	65307
Matrix:	WT

Method Blank Assessment	
MB Sample ID	2353485
MB concentration:	0.065
M/B 2 Sigma CSU:	0.235
MB MDC:	0.535
MB Numerical Performance Indicator:	0.54
MB Status vs Numerical Indicator:	Pass
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	LCSD (Y or N)?	Y
	LCS65307	**LCSD65307**
Count Date:	3/4/2022	3/4/2022
Spike I.D.:	21-029	21-029
Decay Corrected Spike Concentration (pCi/mL):	36.128	36.128
Volume Used (mL):	0.10	0.10
Aliquot Volume (L, g, F):	0.809	0.805
Target Conc. (pCi/L, g, F):	4.467	4.488
Uncertainty (Calculated):	0.219	0.220
Result (pCi/L, g, F):	3.614	3.728
LCS/LCSD 2 Sigma CSU (pCi/L, g, F):	0.822	0.844
Numerical Performance Indicator:	-1.96	-1.71
Percent Recovery:	80.92%	83.07%
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.:	LCS65307	Enter Duplicate
Duplicate Sample I.D.	LCSD65307	sample IDs if
Sample Result (pCi/L, g, F):	3.614	other than
Sample Result 2 Sigma CSU (pCi/L, g, F):	0.822	LCS/LCSD in the
Sample Duplicate Result (pCi/L, g, F):	3.728	space below.
Sample Duplicate Result 2 Sigma CSU (pCi/L, g, F):	0.844	
Are sample and/or duplicate results below RL?	NO	
Duplicate Numerical Performance Indicator:	-0.189	
(Based on the LCS/LCSD Percent Recoveries) Duplicate RPD:	2.62%	
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:

Quality Control Sample Performance Assessment

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Test:	Ra-226
Analyst:	JC2
Date:	3/1/2022
Worklist:	65294
Matrix:	DW

Method Blank Assessment	
MB Sample ID	2353259
MB concentration:	-0.033
M/B Counting Uncertainty:	0.055
MB MDC:	0.191
MB Numerical Performance Indicator:	-1.16
MB Status vs Numerical Indicator:	N/A
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	LCSD (Y or N)?	Y
	LCS65294	**LCSD65294**
Count Date:	3/8/2022	3/8/2022
Spike I.D.:	19-033	19-033
Decay Corrected Spike Concentration (pCi/mL):	24.029	24.029
Volume Used (mL):	0.10	0.10
Aliquot Volume (L, g, F):	0.503	0.506
Target Conc. (pCi/L, g, F):	4.777	4.752
Uncertainty (Calculated):	0.057	0.057
Result (pCi/L, g, F):	4.910	4.441
LCS/LCSD Counting Uncertainty (pCi/L, g, F):	0.508	0.466
Numerical Performance Indicator:	0.51	-1.30
Percent Recovery:	102.79%	93.46%
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.:	LCS65294	92587080025
Duplicate Sample I.D.	LCSD65294	92587080025DUP
Sample Result (pCi/L, g, F):	4.910	0.708
Sample Result Counting Uncertainty (pCi/L, g, F):	0.508	0.212
Sample Duplicate Result (pCi/L, g, F):	4.441	0.789
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):	0.466	0.203
Are sample and/or duplicate results below RL?	NO	See Below ##
Duplicate Numerical Performance Indicator:	1.334	-0.540
(Based on the LCS/LCSD Percent Recoveries) Duplicate RPD:	9.51%	10.80%
Duplicate Status vs Numerical Indicator:	N/A	N/A
Duplicate Status vs RPD:	Pass	Pass
% RPD Limit:	25%	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:

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

May 02, 2022

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

RE: Project: BRANCH AP-BCD DELIN PIEZO RAD
Pace Project No.: 92585972

Dear Joju Abraham:

Enclosed are the analytical results for sample(s) received by the laboratory between February 03, 2022 and February 04, 2022. 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,

Nicole D'Oleo
nicole.d'oleo@pacelabs.com
(704)875-9092
Project Manager

Enclosures

cc: Daniela Herrera, Golder
Ben Hodges, Georgia Power
Jimmy Jones, Golder Associates Inc.
Kristen Jurinko
Julie Lehrman, Golder Associates Inc.
Karim Minkara, Golder Associates - Atlanta
Ms. Lauren Petty, Southern Company
Carolyn Powrozek, Golder
Dawn Prell, Golder Associates Inc.
Brian Steele, Golder Associates Inc_Atlanta

REPORT OF LABORATORY ANALYSIS

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

CERTIFICATIONS

Project: BRANCH AP-BCD DELIN PIEZO RAD
Pace Project No.: 92585972

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 #: 460198
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: BRANCH AP-BCD DELIN PIEZO RAD
Pace Project No.: 92585972

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92585972001	**PZ-51S**	Water	02/02/22 13:56	02/03/22 10:35
92585972002	**PZ-44**	Water	02/02/22 12:23	02/03/22 10:35
92585972003	**PZ-51I**	Water	02/02/22 16:20	02/03/22 10:35
92585972004	**PZ-61I**	Water	02/02/22 15:42	02/03/22 10:35
92585972005	**FB-2**	Water	02/02/22 14:22	02/03/22 10:35
92585972006	**EB-2**	Water	02/02/22 16:18	02/03/22 10:35
92585972007	**PZ-58I**	Water	02/03/22 14:13	02/04/22 16:06
92585972008	**PZ-59I**	Water	02/03/22 12:40	02/04/22 16:06
92585972009	**PZ-60I**	Water	02/03/22 10:45	02/04/22 16:06
92585972010	**PZ-50D**	Water	02/03/22 10:54	02/04/22 16:06
92585972011	**PZ-51D**	Water	02/03/22 16:16	02/04/22 16:06
92585972012	**PZ-57I**	Water	02/04/22 08:54	02/04/22 16:06
92585972013	**PZ-63I**	Water	02/04/22 10:15	02/04/22 16:06
92585972014	**PZ-62I**	Water	02/04/22 10:10	02/04/22 16:06
92585972015	**FB-3**	Water	02/03/22 11:10	02/04/22 16:06

REPORT OF LABORATORY ANALYSIS

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

SAMPLE ANALYTE COUNT

Project: BRANCH AP-BCD DELIN PIEZO RAD
Pace Project No.: 92585972

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92585972001	**PZ-51S**	EPA 9315	JC2	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92585972002	**PZ-44**	EPA 9315	JC2	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92585972003	**PZ-51I**	EPA 9315	JC2	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92585972004	**PZ-61I**	EPA 9315	JC2	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92585972005	**FB-2**	EPA 9315	JC2	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92585972006	**EB-2**	EPA 9315	JC2	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92585972007	**PZ-58I**	EPA 9315	JC2	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92585972008	**PZ-59I**	EPA 9315	JC2	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92585972009	**PZ-60I**	EPA 9315	JC2	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92585972010	**PZ-50D**	EPA 9315	JC2	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92585972011	**PZ-51D**	EPA 9315	JC2	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92585972012	**PZ-57I**	EPA 9315	JC2	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92585972013	**PZ-63I**	EPA 9315	JC2	1	PASI-PA

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SAMPLE ANALYTE COUNT

Project: BRANCH AP-BCD DELIN PIEZO RAD
Pace Project No.: 92585972

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92585972014	**PZ-62I**	EPA 9315	JC2	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92585972015	**FB-3**	EPA 9315	JC2	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA

PASI-PA = Pace Analytical Services - Greensburg

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SUMMARY OF DETECTION

Project: BRANCH AP-BCD DELIN PIEZO RAD
Pace Project No.: 92585972

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92585972001	**PZ-51S**					
EPA 9315	Radium-226	0.0266 ± 0.0664 (0.160) C:97% T:NA	pCi/L		03/22/22 08:24	
EPA 9320	Radium-228	-0.0997 ± 0.411 (0.975) C:88% T:89%	pCi/L		03/04/22 15:33	
Total Radium Calculation	Total Radium	0.0266 ± 0.477 (1.14)	pCi/L		03/22/22 15:19	
92585972002	**PZ-44**					
EPA 9315	Radium-226	0.103 ± 0.0908 (0.165) C:92% T:NA	pCi/L		03/22/22 08:24	
EPA 9320	Radium-228	0.141 ± 0.392 (0.879) C:88% T:85%	pCi/L		03/04/22 15:33	
Total Radium Calculation	Total Radium	0.244 ± 0.483 (1.04)	pCi/L		03/22/22 15:19	
92585972003	**PZ-51I**					
EPA 9315	Radium-226	0.186 ± 0.110 (0.165) C:99% T:NA	pCi/L		03/22/22 08:24	
EPA 9320	Radium-228	0.806 ± 0.485 (0.902) C:89% T:89%	pCi/L		03/04/22 15:33	
Total Radium Calculation	Total Radium	0.992 ± 0.595 (1.07)	pCi/L		03/22/22 15:19	
92585972004	**PZ-61I**					
EPA 9315	Radium-226	0.237 ± 0.117 (0.147) C:102% T:NA	pCi/L		03/22/22 08:24	
EPA 9320	Radium-228	0.920 ± 0.540 (1.00) C:86% T:90%	pCi/L		03/04/22 15:33	
Total Radium Calculation	Total Radium	1.16 ± 0.657 (1.15)	pCi/L		03/22/22 15:19	

REPORT OF LABORATORY ANALYSIS

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SUMMARY OF DETECTION

Project: BRANCH AP-BCD DELIN PIEZO RAD
Pace Project No.: 92585972

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92585972005	**FB-2**					
EPA 9315	Radium-226	0.00672 ± 0.0577 (0.154) C:100% T:NA	pCi/L		03/22/22 08:24	
EPA 9320	Radium-228	0.123 ± 0.480 (1.08) C:87% T:90%	pCi/L		03/04/22 15:34	
Total Radium Calculation	Total Radium	0.130 ± 0.538 (1.23)	pCi/L		03/22/22 15:19	
92585972006	**EB-2**					
EPA 9315	Radium-226	-0.0388 ± 0.0458 (0.167) C:99% T:NA	pCi/L		03/22/22 08:24	
EPA 9320	Radium-228	0.575 ± 0.414 (0.798) C:88% T:95%	pCi/L		03/04/22 15:34	
Total Radium Calculation	Total Radium	0.575 ± 0.460 (0.965)	pCi/L		03/22/22 15:19	
92585972007	**PZ-58I**					
EPA 9315	Radium-226	0.552 ± 0.182 (0.155) C:101% T:NA	pCi/L		03/22/22 08:24	
EPA 9320	Radium-228	0.781 ± 0.357 (0.589) C:90% T:87%	pCi/L		03/04/22 15:34	
Total Radium Calculation	Total Radium	1.33 ± 0.539 (0.744)	pCi/L		03/22/22 15:19	
92585972008	**PZ-59I**					
EPA 9315	Radium-226	0.393 ± 0.147 (0.135) C:102% T:NA	pCi/L		03/22/22 08:24	
EPA 9320	Radium-228	0.373 ± 0.327 (0.665) C:92% T:92%	pCi/L		03/04/22 15:34	

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SUMMARY OF DETECTION

Project: BRANCH AP-BCD DELIN PIEZO RAD
Pace Project No.: 92585972

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92585972008	**PZ-59I**					
Total Radium Calculation	Total Radium	0.766 ± 0.474 (0.800)	pCi/L		03/22/22 15:19	
92585972009	**PZ-60I**					
EPA 9315	Radium-226	0.542 ± 0.180 (0.159) C:96% T:NA	pCi/L		03/22/22 08:24	
EPA 9320	Radium-228	1.92 ± 0.565 (0.693) C:88% T:87%	pCi/L		03/04/22 15:34	
Total Radium Calculation	Total Radium	2.46 ± 0.745 (0.852)	pCi/L		03/22/22 15:19	
92585972010	**PZ-50D**					
EPA 9315	Radium-226	0.413 ± 0.167 (0.209) C:101% T:NA	pCi/L		03/22/22 08:30	
EPA 9320	Radium-228	0.588 ± 0.364 (0.684) C:88% T:84%	pCi/L		03/04/22 15:34	
Total Radium Calculation	Total Radium	1.00 ± 0.531 (0.893)	pCi/L		03/22/22 15:19	
92585972011	**PZ-51D**					
EPA 9315	Radium-226	0.896 ± 0.241 (0.156) C:104% T:NA	pCi/L		03/22/22 08:30	
EPA 9320	Radium-228	1.33 ± 0.450 (0.603) C:88% T:85%	pCi/L		03/04/22 15:34	
Total Radium Calculation	Total Radium	2.23 ± 0.691 (0.759)	pCi/L		03/22/22 15:19	
92585972012	**PZ-57I**					
EPA 9315	Radium-226	0.117 ± 0.0855 (0.134) C:99% T:NA	pCi/L		03/22/22 08:30	

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SUMMARY OF DETECTION

Project: BRANCH AP-BCD DELIN PIEZO RAD
Pace Project No.: 92585972

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92585972012	**PZ-57I**					
EPA 9320	Radium-228	0.112 ± 0.226 (0.501) C:85% T:93%	pCi/L		03/04/22 15:35	
Total Radium Calculation	Total Radium	0.229 ± 0.312 (0.635)	pCi/L		03/22/22 15:19	
92585972013	**PZ-63I**					
EPA 9315	Radium-226	0.285 ± 0.120 (0.110) C:96% T:NA	pCi/L		03/22/22 08:30	
EPA 9320	Radium-228	0.483 ± 0.285 (0.510) C:86% T:90%	pCi/L		03/04/22 15:35	
Total Radium Calculation	Total Radium	0.768 ± 0.405 (0.620)	pCi/L		03/22/22 15:19	
92585972014	**PZ-62I**					
EPA 9315	Radium-226	0.312 ± 0.130 (0.133) C:102% T:NA	pCi/L		03/22/22 08:30	
EPA 9320	Radium-228	0.562 ± 0.320 (0.583) C:90% T:92%	pCi/L		03/04/22 15:36	
Total Radium Calculation	Total Radium	0.874 ± 0.450 (0.716)	pCi/L		03/22/22 15:19	
92585972015	**FB-3**					
EPA 9315	Radium-226	-0.0310 ± 0.0345 (0.144) C:95% T:NA	pCi/L		03/22/22 08:30	
EPA 9320	Radium-228	0.147 ± 0.326 (0.726) C:95% T:90%	pCi/L		03/04/22 18:26	
Total Radium Calculation	Total Radium	0.147 ± 0.361 (0.870)	pCi/L		03/22/22 15:19	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: BRANCH AP-BCD DELIN PIEZO RAD
Pace Project No.: 92585972

Sample: PZ-51S **Lab ID: 92585972001** Collected: 02/02/22 13:56 Received: 02/03/22 10:35 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	**0.0266 ± 0.0664 (0.160) C:97% T:NA**	pCi/L	03/22/22 08:24	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**-0.0997 ± 0.411 (0.975) C:88% T:89%**	pCi/L	03/04/22 15:33	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.0266 ± 0.477 (1.14)**	pCi/L	03/22/22 15:19	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: BRANCH AP-BCD DELIN PIEZO RAD
Pace Project No.: 92585972

Sample: PZ-44 **Lab ID: 92585972002** Collected: 02/02/22 12:23 Received: 02/03/22 10:35 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	**0.103 ± 0.0908 (0.165) C:92% T:NA**	pCi/L	03/22/22 08:24	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.141 ± 0.392 (0.879) C:88% T:85%**	pCi/L	03/04/22 15:33	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.244 ± 0.483 (1.04)**	pCi/L	03/22/22 15:19	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: BRANCH AP-BCD DELIN PIEZO RAD
Pace Project No.: 92585972

Sample: PZ-51I **Lab ID: 92585972003** Collected: 02/02/22 16:20 Received: 02/03/22 10:35 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	**0.186 ± 0.110 (0.165) C:99% T:NA**	pCi/L	03/22/22 08:24	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.806 ± 0.485 (0.902) C:89% T:89%**	pCi/L	03/04/22 15:33	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.992 ± 0.595 (1.07)**	pCi/L	03/22/22 15:19	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: BRANCH AP-BCD DELIN PIEZO RAD
Pace Project No.: 92585972

Sample: PZ-61I **Lab ID: 92585972004** Collected: 02/02/22 15:42 Received: 02/03/22 10:35 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	**0.237 ± 0.117 (0.147) C:102% T:NA**	pCi/L	03/22/22 08:24	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.920 ± 0.540 (1.00) C:86% T:90%**	pCi/L	03/04/22 15:33	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.16 ± 0.657 (1.15)**	pCi/L	03/22/22 15:19	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: BRANCH AP-BCD DELIN PIEZO RAD
Pace Project No.: 92585972

Sample: FB-2 **Lab ID: 92585972005** Collected: 02/02/22 14:22 Received: 02/03/22 10:35 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	**0.00672 ± 0.0577 (0.154) C:100% T:NA**	pCi/L	03/22/22 08:24	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.123 ± 0.480 (1.08) C:87% T:90%**	pCi/L	03/04/22 15:34	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.130 ± 0.538 (1.23)**	pCi/L	03/22/22 15:19	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: BRANCH AP-BCD DELIN PIEZO RAD
Pace Project No.: 92585972

Sample: EB-2 **Lab ID: 92585972006** Collected: 02/02/22 16:18 Received: 02/03/22 10:35 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	**-0.0388 ± 0.0458 (0.167) C:99% T:NA**	pCi/L	03/22/22 08:24	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.575 ± 0.414 (0.798) C:88% T:95%**	pCi/L	03/04/22 15:34	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.575 ± 0.460 (0.965)**	pCi/L	03/22/22 15:19	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: BRANCH AP-BCD DELIN PIEZO RAD
Pace Project No.: 92585972

Sample: PZ-58I **Lab ID: 92585972007** Collected: 02/03/22 14:13 Received: 02/04/22 16:06 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	**0.552 ± 0.182 (0.155) C:101% T:NA**	pCi/L	03/22/22 08:24	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.781 ± 0.357 (0.589) C:90% T:87%**	pCi/L	03/04/22 15:34	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.33 ± 0.539 (0.744)**	pCi/L	03/22/22 15:19	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: BRANCH AP-BCD DELIN PIEZO RAD
Pace Project No.: 92585972

Sample: PZ-59I **Lab ID: 92585972008** Collected: 02/03/22 12:40 Received: 02/04/22 16:06 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	**0.393 ± 0.147 (0.135) C:102% T:NA**	pCi/L	03/22/22 08:24	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.373 ± 0.327 (0.665) C:92% T:92%**	pCi/L	03/04/22 15:34	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.766 ± 0.474 (0.800)**	pCi/L	03/22/22 15:19	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: BRANCH AP-BCD DELIN PIEZO RAD
Pace Project No.: 92585972

Sample: PZ-60I **Lab ID: 92585972009** Collected: 02/03/22 10:45 Received: 02/04/22 16:06 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	**0.542 ± 0.180 (0.159) C:96% T:NA**	pCi/L	03/22/22 08:24	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**1.92 ± 0.565 (0.693) C:88% T:87%**	pCi/L	03/04/22 15:34	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**2.46 ± 0.745 (0.852)**	pCi/L	03/22/22 15:19	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: BRANCH AP-BCD DELIN PIEZO RAD
Pace Project No.: 92585972

Sample: PZ-50D **Lab ID: 92585972010** Collected: 02/03/22 10:54 Received: 02/04/22 16:06 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	**0.413 ± 0.167 (0.209) C:101% T:NA**	pCi/L	03/22/22 08:30	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.588 ± 0.364 (0.684) C:88% T:84%**	pCi/L	03/04/22 15:34	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.00 ± 0.531 (0.893)**	pCi/L	03/22/22 15:19	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: BRANCH AP-BCD DELIN PIEZO RAD
Pace Project No.: 92585972

Sample: PZ-51D **Lab ID: 92585972011** Collected: 02/03/22 16:16 Received: 02/04/22 16:06 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	**0.896 ± 0.241 (0.156) C:104% T:NA**	pCi/L	03/22/22 08:30	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**1.33 ± 0.450 (0.603) C:88% T:85%**	pCi/L	03/04/22 15:34	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**2.23 ± 0.691 (0.759)**	pCi/L	03/22/22 15:19	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: BRANCH AP-BCD DELIN PIEZO RAD
Pace Project No.: 92585972

Sample: PZ-57I **Lab ID: 92585972012** Collected: 02/04/22 08:54 Received: 02/04/22 16:06 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	**0.117 ± 0.0855 (0.134) C:99% T:NA**	pCi/L	03/22/22 08:30	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.112 ± 0.226 (0.501) C:85% T:93%**	pCi/L	03/04/22 15:35	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.229 ± 0.312 (0.635)**	pCi/L	03/22/22 15:19	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: BRANCH AP-BCD DELIN PIEZO RAD
Pace Project No.: 92585972

Sample: PZ-63I **Lab ID: 92585972013** Collected: 02/04/22 10:15 Received: 02/04/22 16:06 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	**0.285 ± 0.120 (0.110) C:96% T:NA**	pCi/L	03/22/22 08:30	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.483 ± 0.285 (0.510) C:86% T:90%**	pCi/L	03/04/22 15:35	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.768 ± 0.405 (0.620)**	pCi/L	03/22/22 15:19	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: BRANCH AP-BCD DELIN PIEZO RAD
Pace Project No.: 92585972

Sample: PZ-62I **Lab ID: 92585972014** Collected: 02/04/22 10:10 Received: 02/04/22 16:06 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	**0.312 ± 0.130 (0.133) C:102% T:NA**	pCi/L	03/22/22 08:30	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.562 ± 0.320 (0.583) C:90% T:92%**	pCi/L	03/04/22 15:36	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.874 ± 0.450 (0.716)**	pCi/L	03/22/22 15:19	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: BRANCH AP-BCD DELIN PIEZO RAD
Pace Project No.: 92585972

Sample: FB-3 **Lab ID: 92585972015** Collected: 02/03/22 11:10 Received: 02/04/22 16:06 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	**-0.0310 ± 0.0345 (0.144) C:95% T:NA**	pCi/L	03/22/22 08:30	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.147 ± 0.326 (0.726) C:95% T:90%**	pCi/L	03/04/22 18:26	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.147 ± 0.361 (0.870)**	pCi/L	03/22/22 15:19	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: BRANCH AP-BCD DELIN PIEZO RAD
Pace Project No.: 92585972

QC Batch: 486659 Analysis Method: EPA 9320
QC Batch Method: EPA 9320 Analysis Description: 9320 Radium 228
Laboratory: Pace Analytical Services - Greensburg

Associated Lab Samples: 92585972001, 92585972002, 92585972003, 92585972004, 92585972005, 92585972006, 92585972007, 92585972008, 92585972009, 92585972010, 92585972011, 92585972012, 92585972013, 92585972014, 92585972015

METHOD BLANK: 2353495 Matrix: Water

Associated Lab Samples: 92585972001, 92585972002, 92585972003, 92585972004, 92585972005, 92585972006, 92585972007, 92585972008, 92585972009, 92585972010, 92585972011, 92585972012, 92585972013, 92585972014, 92585972015

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.115 ± 0.191 (0.414) C:101% T:93%	pCi/L	03/04/22 12:08	

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: BRANCH AP-BCD DELIN PIEZO RAD
Pace Project No.: 92585972

QC Batch: 486605 Analysis Method: EPA 9315
QC Batch Method: EPA 9315 Analysis Description: 9315 Total Radium
Laboratory: Pace Analytical Services - Greensburg

Associated Lab Samples: 92585972001, 92585972002, 92585972003, 92585972004, 92585972005, 92585972006, 92585972007, 92585972008, 92585972009, 92585972010, 92585972011, 92585972012, 92585972013, 92585972014, 92585972015

METHOD BLANK: 2353237 Matrix: Water

Associated Lab Samples: 92585972001, 92585972002, 92585972003, 92585972004, 92585972005, 92585972006, 92585972007, 92585972008, 92585972009, 92585972010, 92585972011, 92585972012, 92585972013, 92585972014, 92585972015

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.00383 ± 0.0488 (0.136) C:99% T:NA	pCi/L	03/22/22 08:24	

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: BRANCH AP-BCD DELIN PIEZO RAD
Pace Project No.: 92585972

DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

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

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

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

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

Acid preservation may not be appropriate for 2 Chloroethylvinyl ether.

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

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

Reported results are not rounded until the final step prior to reporting. Therefore, calculated parameters that are typically reported as "Total" may vary slightly from the sum of the reported component parameters.

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.

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

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: BRANCH AP-BCD DELIN PIEZO RAD
Pace Project No.: 92585972

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92585972001	**PZ-51S**	EPA 9315	486605		
92585972002	**PZ-44**	EPA 9315	486605		
92585972003	**PZ-51I**	EPA 9315	486605		
92585972004	**PZ-61I**	EPA 9315	486605		
92585972005	**FB-2**	EPA 9315	486605		
92585972006	**EB-2**	EPA 9315	486605		
92585972007	**PZ-58I**	EPA 9315	486605		
92585972008	**PZ-59I**	EPA 9315	486605		
92585972009	**PZ-60I**	EPA 9315	486605		
92585972010	**PZ-50D**	EPA 9315	486605		
92585972011	**PZ-51D**	EPA 9315	486605		
92585972012	**PZ-57I**	EPA 9315	486605		
92585972013	**PZ-63I**	EPA 9315	486605		
92585972014	**PZ-62I**	EPA 9315	486605		
92585972015	**FB-3**	EPA 9315	486605		
92585972001	**PZ-51S**	EPA 9320	486659		
92585972002	**PZ-44**	EPA 9320	486659		
92585972003	**PZ-51I**	EPA 9320	486659		
92585972004	**PZ-61I**	EPA 9320	486659		
92585972005	**FB-2**	EPA 9320	486659		
92585972006	**EB-2**	EPA 9320	486659		
92585972007	**PZ-58I**	EPA 9320	486659		
92585972008	**PZ-59I**	EPA 9320	486659		
92585972009	**PZ-60I**	EPA 9320	486659		
92585972010	**PZ-50D**	EPA 9320	486659		
92585972011	**PZ-51D**	EPA 9320	486659		
92585972012	**PZ-57I**	EPA 9320	486659		
92585972013	**PZ-63I**	EPA 9320	486659		
92585972014	**PZ-62I**	EPA 9320	486659		
92585972015	**FB-3**	EPA 9320	486659		
92585972001	**PZ-51S**	Total Radium Calculation	492102		
92585972002	**PZ-44**	Total Radium Calculation	492102		
92585972003	**PZ-51I**	Total Radium Calculation	492102		
92585972004	**PZ-61I**	Total Radium Calculation	492102		
92585972005	**FB-2**	Total Radium Calculation	492102		
92585972006	**EB-2**	Total Radium Calculation	492102		
92585972007	**PZ-58I**	Total Radium Calculation	492102		
92585972008	**PZ-59I**	Total Radium Calculation	492102		
92585972009	**PZ-60I**	Total Radium Calculation	492102		
92585972010	**PZ-50D**	Total Radium Calculation	492102		
92585972011	**PZ-51D**	Total Radium Calculation	492102		
92585972012	**PZ-57I**	Total Radium Calculation	492102		
92585972013	**PZ-63I**	Total Radium Calculation	492102		
92585972014	**PZ-62I**	Total Radium Calculation	492102		
92585972015	**FB-3**	Total Radium Calculation	492102		

Pace Analytical

Document Name: Sample Condition Upon Receipt (SCUR)
Document No.: F-CAR-CS-033-Rev.08
Document Revised: November 15, 2021
Page 1 of 2
Issuing Authority: Pace Carolinas Quality Office

Laboratory receiving samples:

Asheville ☐ Eden ☐ Greenwood ☐ Huntersville ☐ Raleigh ☐ Mechanicsville ☐ Atlanta ☒ Kernersville ☐

Sample Condition Upon Receipt

Client Name:

Project #: WO#: 92585979

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

Custody Seal Present? ☐ Yes ☐ No Seals Intact? ☐ Yes ☐ No

Date/Initials Person Examining Contents:

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

Biological Tissue Frozen? ☐ Yes ☐ No ☐ N/A

Thermometer: ☐ IR Gun ID:

Type of Ice: ☐ Wet ☐ Blue ☐ None

Cooler Temp: Correction Factor: Add/Subtract (°C):

Temp should be above freezing to 6°C

☐ Samples out of temp criteria. Samples on ice, cooling process has begun

Cooler Temp Corrected (°C):

USDA Regulated Soil (☐ N/A, water sample)

Did samples originate in a quarantine zone within the United States: CA, NY, or SC (check maps)? ☐ Yes ☐ No

Did samples originate from a foreign source (internationally, including Hawaii and Puerto Rico)? ☐ Yes ☐ No

Comments/Discrepancy:

Chain of Custody Present?	☒ Yes	☐ No	☐ N/A	1.
Samples Arrived within Hold Time?	☐ Yes	☐ No	☐ N/A	2.
Short Hold Time Analysis (<72 hr)?	☐ Yes	☒ No	☐ N/A	3.
Rush Turn Around Time Requested?	☐ Yes	☒ No	☐ N/A	4.
Sufficient Volume?	☐ Yes	☐ No	☐ N/A	5.
Correct Containers Used?	☐ Yes	☐ No	☐ N/A	6.
-Pace Containers Used?	☐ Yes	☐ No	☐ N/A	
Containers Intact?	☒ Yes	☐ No	☐ N/A	7.
Dissolved analysis: Samples Field Filtered?	☐ Yes	☐ No	☒ N/A	8.
Sample Labels Match COC?	☒ Yes	☐ No	☐ N/A	9.
-Includes Date/Time/ID/Analysis Matrix:				
Headspace in VOA Vials (>5-6mm)?	☐ Yes	☐ No	☒ N/A	10.
Trip Blank Present?	☐ Yes	☐ No	☒ N/A	11.
Trip Blank Custody Seals Present?	☐ Yes	☐ No	☒ N/A	

COMMENTS/SAMPLE DISCREPANCY

Field Data Required? ☐ Yes ☐ No

Lot ID of split containers:

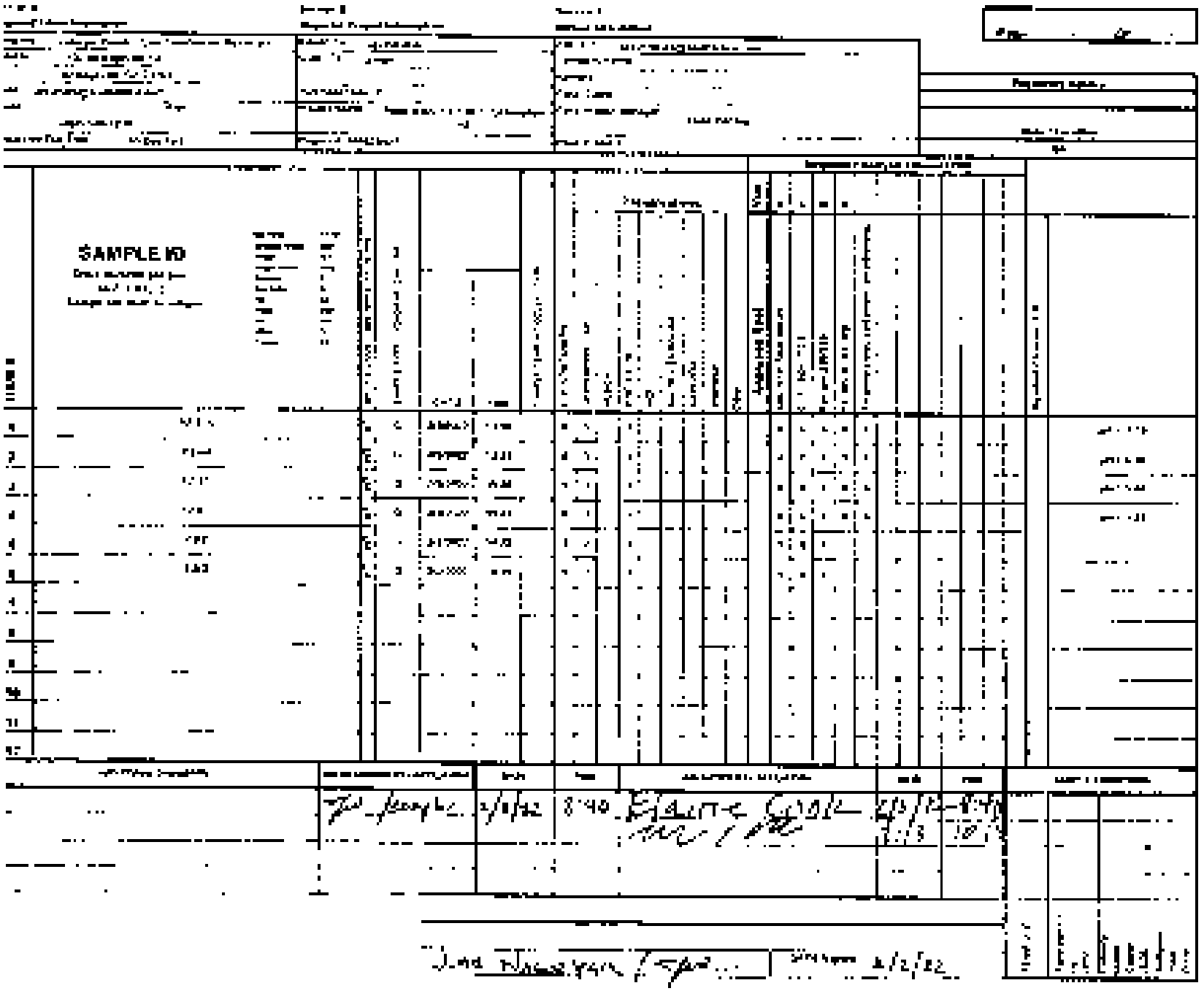
CLIENT NOTIFICATION/RESOLUTION

Person contacted: Date/Time:

Project Manager SCURF Review: Date:

Project Manager SRF Review: Date:

CHAIN-OF-CUSTODY / Analytical Request Document



Pace Analytical

Document Name: Sample Condition Upon Receipt (SCUR)
Document No.:
Document Revised: November 15, 2021
Page 1 of 2
Issuing Authority: Pace Carolinas Quality Office

Laboratory receiving samples:
Asheville ☐ Eden ☐ Greenwood ☐ Huntersville ☐ Raleigh ☐ Mechanicsville ☐ Atlanta ☑ Kernersville ☐

Sample Condition Upon Receipt | Client Name: | Project #:

WO# : 92585979

PM: AMO Due Date: 02/17/22
CLIENT: GA-GA Power

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

Custody Seal Present? ☐ Yes ☑ No Seals Intact? ☐ Yes ☑ No

Date/Initials Person Examining Contents:

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

Biological Tissue Frozen? ☐ Yes ☐ No ☑ N/A

Thermometer:
☐ IR Gun ID:
Type of Ice: ☑ Wet ☐ Blue ☐ None

Cooler Temp:
Correction Factor: Add/Subtract (°C)

Temp should be above freezing to 6°C
☐ Samples out of temp criteria. Samples on ice, cooling process has begun

Cooler Temp Corrected (°C):
USDA Regulated Soil (☐ N/A, water sample)
Did samples originate in a quarantine zone within the United States: CA, NY, or SC (check maps)? ☐ Yes ☐ No
Did samples originate from a foreign source (internationally, including Hawaii and Puerto Rico)? ☐ Yes ☐ No

				Comments/Discrepancy:
Chain of Custody Present?	☑ Yes	☐ No	☐ N/A	1.
Samples Arrived within Hold Time?	☑ Yes	☐ No	☐ N/A	2.
Short Hold Time Analysis (<72 hr)?	☐ Yes	☑ No	☐ N/A	3.
Rush Turn Around Time Requested?	☐ Yes	☑ No	☐ N/A	4.
Sufficient Volume?	☑ Yes	☐ No	☐ N/A	5.
Correct Containers Used?	☑ Yes	☐ No	☐ N/A	6.
-Pace Containers Used?	☑ Yes	☐ No	☐ N/A	
Containers Intact?	☑ Yes	☐ No	☐ N/A	7.
Dissolved Analysis: Samples Field Filtered?	☐ Yes	☐ No	☑ N/A	8.
Sample Labels Match COC?	☑ Yes	☐ No	☐ N/A	9.
-Includes Date/Time/ID/Analysis Matrix:				
Headspace in VOA Vials (>5-6mm)?	☐ Yes	☐ No	☑ N/A	10.
Trip Blank Present?	☐ Yes	☐ No	☑ N/A	
Trip Blank Custody Seals Present?	☐ Yes	☐ No	☑ N/A	

Comments/Sample Discrepancy:

Lot ID of split containers:

Field Data Required? ☐ Yes ☐ No

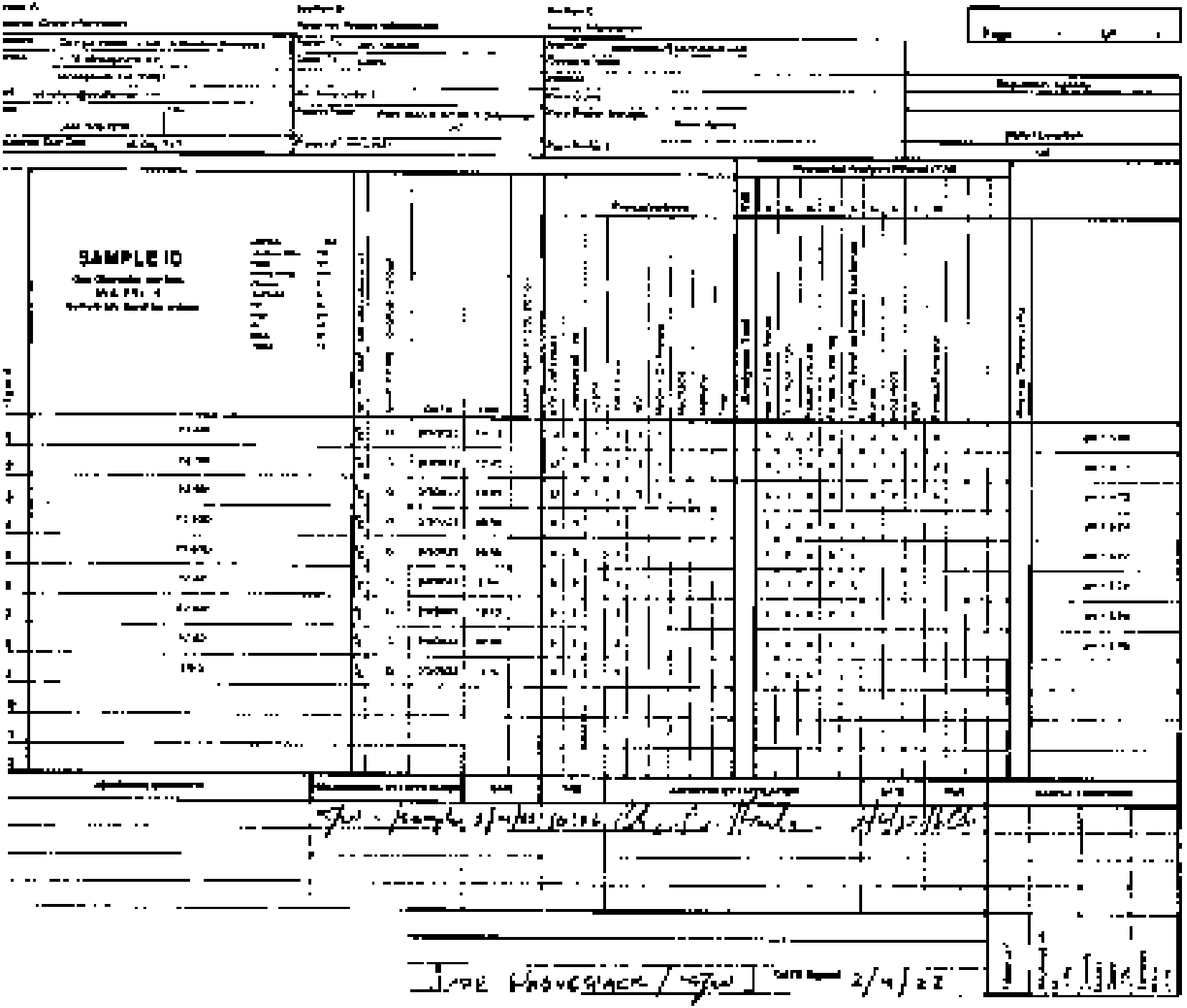
Client Notification/Resolution:

Person contacted: Date/Time:

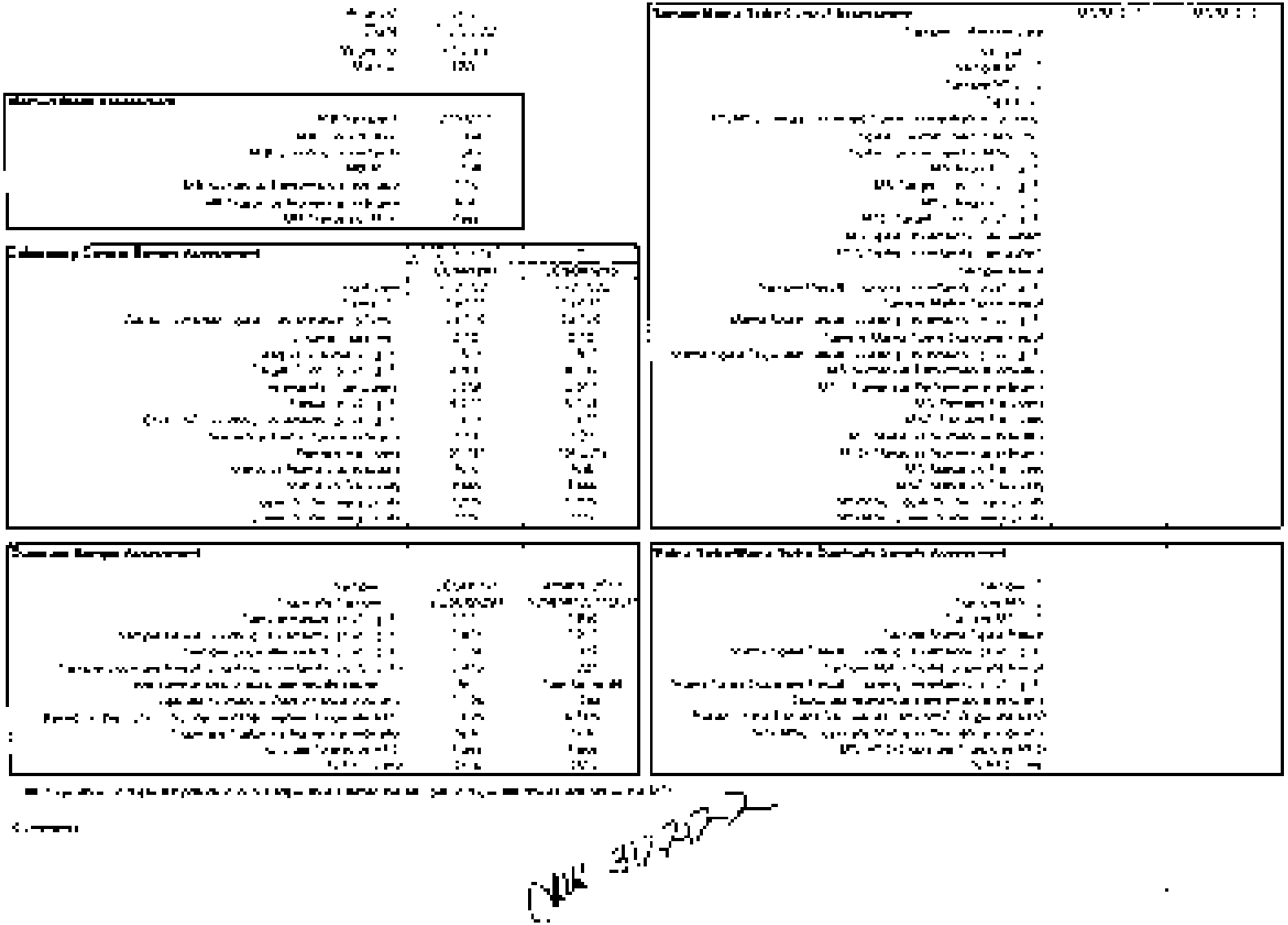
Project Manager SCURF Review: Date:

Project Manager SRF Review: Date:

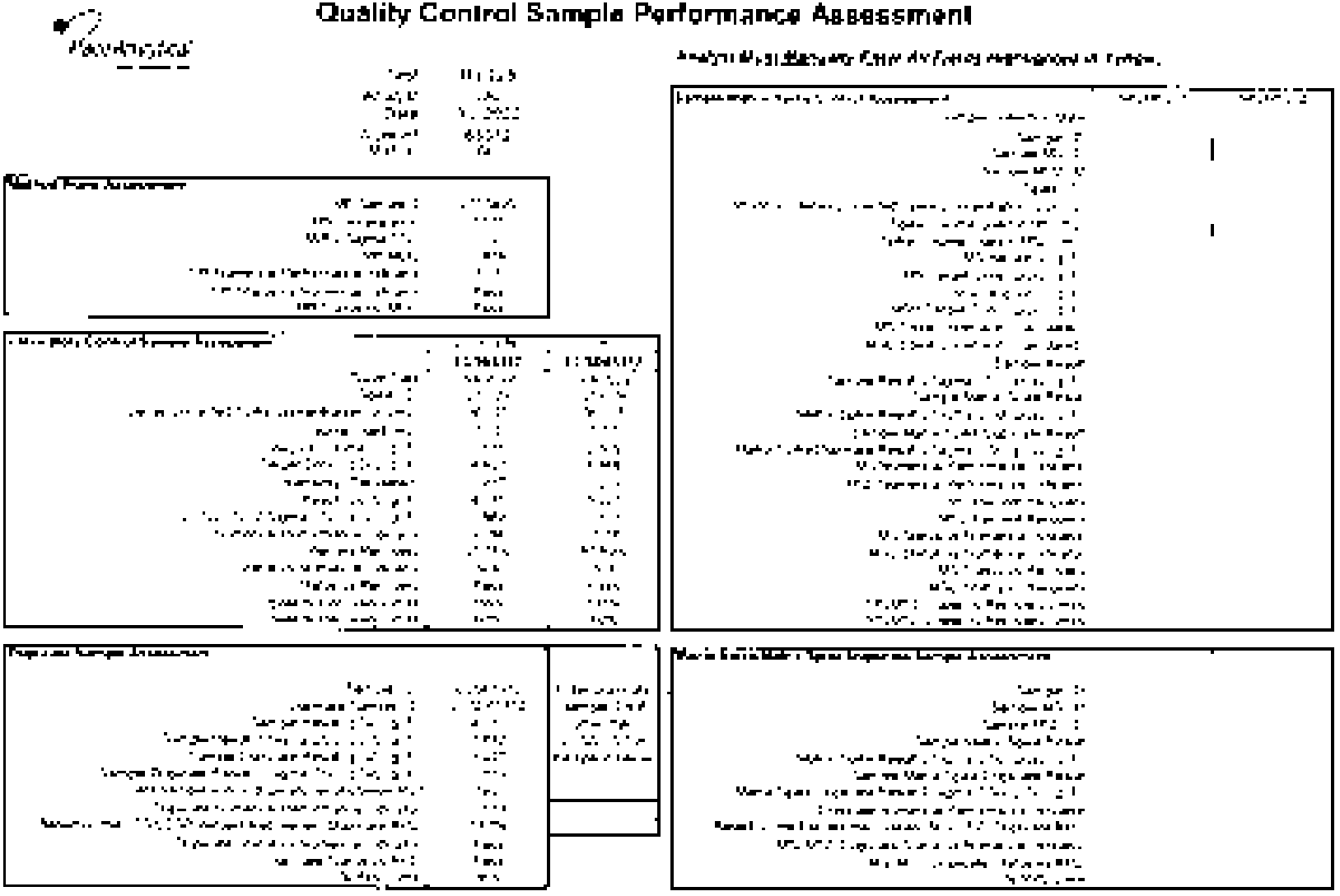
CHAIN-OF-CUSTODY / Analytical Request Document



Quality Control Sample Performance Assessment



Quality Control Sample Performance Assessment



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

February 11, 2022

Kelley Sharpe
ARCADIS - Atlanta
2839 Paces Ferry Rd
STE 900
Atlanta, GA 30339

RE: Project: Plant Branch CCR-Ash Pond
Pace Project No.: 92586144

Dear Kelley Sharpe:

Enclosed are the analytical results for sample(s) received by the laboratory on February 03, 2022. 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.

Some analyses were subcontracted outside of the Pace Network. The test report from the external subcontractor is attached to this report in its entirety.

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

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

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

Sincerely,

Maiya Parks
maiya.parks@pacelabs.com
(770)734-4200
Project Manager

Enclosures

cc: Joju Abraham, Georgia Power-CCR
Ben Hodges, Georgia Power
Warren Johnson, ARCADIS - Atlanta

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

CERTIFICATIONS

Project: Plant Branch CCR-Ash Pond
Pace Project No.: 92586144

Pace Analytical Services Asheville
2225 Riverside Drive, Asheville, NC 28804
Florida/NELAP Certification #: E87648
North Carolina Drinking Water Certification #: 37712
North Carolina Wastewater Certification #: 40
South Carolina Laboratory ID: 99030
South Carolina Certification #: 99030001
Virginia/VELAP Certification #: 460222

Pace Analytical Services Peachtree Corners
110 Technology Pkwy, Peachtree Corners, GA 30092
Florida DOH Certification #: E87315
Georgia DW Inorganics Certification #: 812
North Carolina Certification #: 381
South Carolina Certification #: 98011001

REPORT OF LABORATORY ANALYSIS

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

SAMPLE SUMMARY

Project: Plant Branch CCR-Ash Pond
Pace Project No.: 92586144

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92586144001	**LR-1 (Surface)**	Water	02/03/22 10:47	02/03/22 15:32
92586144002	**LR-1 (Mid)**	Water	02/03/22 10:52	02/03/22 15:32
92586144003	**LR-1 (Bottom)**	Water	02/03/22 10:58	02/03/22 15:32
92586144004	**LR+8A (Surface)**	Water	02/03/22 11:29	02/03/22 15:32
92586144005	**LR+9A (Surface)**	Water	02/03/22 11:38	02/03/22 15:32
92586144006	**LR+8 (Surface)**	Water	02/03/22 11:18	02/03/22 15:32
92586144007	**LR+8 (Mid)**	Water	02/03/22 11:21	02/03/22 15:32
92586144008	**LR+8 (Bottom)**	Water	02/03/22 11:24	02/03/22 15:32
92586144009	**LR+9 (Surface)**	Water	02/03/22 11:08	02/03/22 15:32
92586144010	**LR+9 (Mid)**	Water	02/03/22 11:10	02/03/22 15:32
92586144011	**LR+9 (Bottom)**	Water	02/03/22 11:12	02/03/22 15:32
92586144012	**LR-10 (Surface)**	Water	02/03/22 10:48	02/03/22 15:32
92586144013	**LR-10 (Mid)**	Water	02/03/22 10:52	02/03/22 15:32
92586144014	**LR-10 (Bottom)**	Water	02/03/22 10:55	02/03/22 15:32

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

SAMPLE ANALYTE COUNT

Project: Plant Branch CCR-Ash Pond
Pace Project No.: 92586144

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92586144001	**LR-1 (Surface)**	EPA 6010D	KH	4	PASI-GA
		EPA 6020B	CW1	2	PASI-GA
		SM 2540C-2015	ALW	1	PASI-GA
		EPA 300.0 Rev 2.1 1993	JCM	3	PASI-A
92586144002	**LR-1 (Mid)**	EPA 6010D	KH	4	PASI-GA
		EPA 6020B	CW1	2	PASI-GA
		SM 2540C-2015	ALW	1	PASI-GA
		EPA 300.0 Rev 2.1 1993	JCM	3	PASI-A
92586144003	**LR-1 (Bottom)**	EPA 6010D	KH	4	PASI-GA
		EPA 6020B	CW1	2	PASI-GA
		SM 2540C-2015	ALW	1	PASI-GA
		EPA 300.0 Rev 2.1 1993	JCM	3	PASI-A
92586144004	**LR+8A (Surface)**	EPA 6010D	KH	4	PASI-GA
		EPA 6020B	CW1	2	PASI-GA
		SM 2540C-2015	ALW	1	PASI-GA
		EPA 300.0 Rev 2.1 1993	JCM	3	PASI-A
92586144005	**LR+9A (Surface)**	EPA 6010D	KH	4	PASI-GA
		EPA 6020B	CW1	2	PASI-GA
		SM 2540C-2015	ALW	1	PASI-GA
		EPA 300.0 Rev 2.1 1993	JCM	3	PASI-A
92586144006	**LR+8 (Surface)**	EPA 6010D	KH	4	PASI-GA
		EPA 6020B	CW1	2	PASI-GA
		SM 2540C-2015	ALW	1	PASI-GA
		EPA 300.0 Rev 2.1 1993	JCM	3	PASI-A
92586144007	**LR+8 (Mid)**	EPA 6010D	KH	4	PASI-GA
		EPA 6020B	CW1	2	PASI-GA
		SM 2540C-2015	ALW	1	PASI-GA
		EPA 300.0 Rev 2.1 1993	JCM	3	PASI-A
92586144008	**LR+8 (Bottom)**	EPA 6010D	KH	4	PASI-GA
		EPA 6020B	CW1	2	PASI-GA
		SM 2540C-2015	ALW	1	PASI-GA
		EPA 300.0 Rev 2.1 1993	JCM	3	PASI-A
92586144009	**LR+9 (Surface)**	EPA 6010D	KH	4	PASI-GA
		EPA 6020B	CW1	2	PASI-GA
		SM 2540C-2015	ALW	1	PASI-GA
		EPA 300.0 Rev 2.1 1993	JCM	3	PASI-A
92586144010	**LR+9 (Mid)**	EPA 6010D	KH	4	PASI-GA

REPORT OF LABORATORY ANALYSIS

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SAMPLE ANALYTE COUNT

Project: Plant Branch CCR-Ash Pond
Pace Project No.: 92586144

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		EPA 6020B	CW1	2	PASI-GA
		SM 2540C-2015	ALW	1	PASI-GA
		EPA 300.0 Rev 2.1 1993	JCM	3	PASI-A
92586144011	**LR+9 (Bottom)**	EPA 6010D	KH	4	PASI-GA
		EPA 6020B	CW1	2	PASI-GA
		SM 2540C-2015	ALW	1	PASI-GA
		EPA 300.0 Rev 2.1 1993	JCM	3	PASI-A
92586144012	**LR-10 (Surface)**	EPA 6010D	KH	4	PASI-GA
		EPA 6020B	CW1	2	PASI-GA
		SM 2540C-2015	ALW	1	PASI-GA
		EPA 300.0 Rev 2.1 1993	JCM	3	PASI-A
92586144013	**LR-10 (Mid)**	EPA 6010D	KH	4	PASI-GA
		EPA 6020B	CW1	2	PASI-GA
		SM 2540C-2015	ALW	1	PASI-GA
		EPA 300.0 Rev 2.1 1993	JCM	3	PASI-A
92586144014	**LR-10 (Bottom)**	EPA 6010D	KH	4	PASI-GA
		EPA 6020B	CW1	2	PASI-GA
		SM 2540C-2015	ALW	1	PASI-GA
		EPA 300.0 Rev 2.1 1993	JCM	3	PASI-A

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

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ANALYTICAL RESULTS

Project: Plant Branch CCR-Ash Pond
Pace Project No.: 92586144

Sample: LR-1 (Surface) **Lab ID: 92586144001** Collected: 02/03/22 10:47 Received: 02/03/22 15:32 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA							
Potassium	**2.3**	mg/L	0.20	1	02/07/22 10:42	02/08/22 00:06	7440-09-7	
Sodium	**4.3**	mg/L	1.0	1	02/07/22 10:42	02/08/22 00:06	7440-23-5	
Calcium	**5.3**	mg/L	1.0	1	02/07/22 10:42	02/08/22 00:06	7440-70-2	
Magnesium	**2.4**	mg/L	0.050	1	02/07/22 10:42	02/08/22 00:06	7439-95-4	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA							
Boron	ND	mg/L	0.040	1	02/07/22 10:39	02/08/22 15:57	7440-42-8	
Cobalt	ND	mg/L	0.0050	1	02/07/22 10:39	02/08/22 15:57	7440-48-4	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA							
Total Dissolved Solids	**70.0**	mg/L	10.0	1		02/08/22 11:15		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville							
Chloride	**3.1**	mg/L	1.0	1		02/05/22 19:14	16887-00-6	
Fluoride	ND	mg/L	0.10	1		02/05/22 19:14	16984-48-8	
Sulfate	**2.4**	mg/L	1.0	1		02/05/22 19:14	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Plant Branch CCR-Ash Pond
Pace Project No.: 92586144

Sample: LR-1 (Mid) **Lab ID: 92586144002** Collected: 02/03/22 10:52 Received: 02/03/22 15:32 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA							
Potassium	**2.2**	mg/L	0.20	1	02/07/22 10:42	02/08/22 00:10	7440-09-7	
Sodium	**4.4**	mg/L	1.0	1	02/07/22 10:42	02/08/22 00:10	7440-23-5	
Calcium	**5.1**	mg/L	1.0	1	02/07/22 10:42	02/08/22 00:10	7440-70-2	
Magnesium	**2.4**	mg/L	0.050	1	02/07/22 10:42	02/08/22 00:10	7439-95-4	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA							
Boron	ND	mg/L	0.040	1	02/07/22 10:39	02/08/22 16:21	7440-42-8	
Cobalt	ND	mg/L	0.0050	1	02/07/22 10:39	02/08/22 16:21	7440-48-4	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA							
Total Dissolved Solids	**68.0**	mg/L	10.0	1		02/08/22 11:16		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville							
Chloride	**3.2**	mg/L	1.0	1		02/05/22 19:28	16887-00-6	M1
Fluoride	ND	mg/L	0.10	1		02/05/22 19:28	16984-48-8	M1
Sulfate	**2.4**	mg/L	1.0	1		02/05/22 19:28	14808-79-8	M1

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ANALYTICAL RESULTS

Project: Plant Branch CCR-Ash Pond
Pace Project No.: 92586144

Sample: LR-1 (Bottom) **Lab ID: 92586144003** Collected: 02/03/22 10:58 Received: 02/03/22 15:32 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA							
Potassium	**2.2**	mg/L	0.20	1	02/07/22 10:42	02/08/22 00:30	7440-09-7	
Sodium	**4.3**	mg/L	1.0	1	02/07/22 10:42	02/08/22 00:30	7440-23-5	
Calcium	**5.1**	mg/L	1.0	1	02/07/22 10:42	02/08/22 00:30	7440-70-2	
Magnesium	**2.4**	mg/L	0.050	1	02/07/22 10:42	02/08/22 00:30	7439-95-4	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA							
Boron	ND	mg/L	0.040	1	02/07/22 10:39	02/08/22 16:27	7440-42-8	
Cobalt	ND	mg/L	0.0050	1	02/07/22 10:39	02/08/22 16:27	7440-48-4	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA							
Total Dissolved Solids	**67.0**	mg/L	10.0	1		02/08/22 13:46		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville							
Chloride	**3.2**	mg/L	1.0	1		02/05/22 20:10	16887-00-6	
Fluoride	ND	mg/L	0.10	1		02/05/22 20:10	16984-48-8	
Sulfate	**2.4**	mg/L	1.0	1		02/05/22 20:10	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Plant Branch CCR-Ash Pond
Pace Project No.: 92586144

Sample: LR+8A (Surface) **Lab ID: 92586144004** Collected: 02/03/22 11:29 Received: 02/03/22 15:32 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA							
Potassium	**2.5**	mg/L	0.20	1	02/07/22 10:42	02/08/22 00:34	7440-09-7	
Sodium	**4.6**	mg/L	1.0	1	02/07/22 10:42	02/08/22 00:34	7440-23-5	
Calcium	**5.7**	mg/L	1.0	1	02/07/22 10:42	02/08/22 00:34	7440-70-2	
Magnesium	**2.4**	mg/L	0.050	1	02/07/22 10:42	02/08/22 00:34	7439-95-4	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA							
Boron	ND	mg/L	0.040	1	02/07/22 10:39	02/08/22 16:33	7440-42-8	
Cobalt	ND	mg/L	0.0050	1	02/07/22 10:39	02/08/22 16:33	7440-48-4	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA							
Total Dissolved Solids	**71.0**	mg/L	10.0	1		02/08/22 13:46		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville							
Chloride	**3.5**	mg/L	1.0	1		02/05/22 20:23	16887-00-6	
Fluoride	ND	mg/L	0.10	1		02/05/22 20:23	16984-48-8	
Sulfate	**4.2**	mg/L	1.0	1		02/05/22 20:23	14808-79-8	

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ANALYTICAL RESULTS

Project: Plant Branch CCR-Ash Pond
Pace Project No.: 92586144

Sample: LR+9A (Surface) **Lab ID: 92586144005** Collected: 02/03/22 11:38 Received: 02/03/22 15:32 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA							
Potassium	**2.7**	mg/L	0.20	1	02/07/22 10:42	02/08/22 00:39	7440-09-7	
Sodium	**5.0**	mg/L	1.0	1	02/07/22 10:42	02/08/22 00:39	7440-23-5	
Calcium	**5.6**	mg/L	1.0	1	02/07/22 10:42	02/08/22 00:39	7440-70-2	
Magnesium	**2.4**	mg/L	0.050	1	02/07/22 10:42	02/08/22 00:39	7439-95-4	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA							
Boron	ND	mg/L	0.040	1	02/07/22 10:39	02/08/22 16:39	7440-42-8	
Cobalt	ND	mg/L	0.0050	1	02/07/22 10:39	02/08/22 16:39	7440-48-4	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA							
Total Dissolved Solids	**62.0**	mg/L	10.0	1		02/08/22 13:46		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville							
Chloride	**3.8**	mg/L	1.0	1		02/05/22 20:37	16887-00-6	
Fluoride	ND	mg/L	0.10	1		02/05/22 20:37	16984-48-8	
Sulfate	**3.5**	mg/L	1.0	1		02/05/22 20:37	14808-79-8	

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ANALYTICAL RESULTS

Project: Plant Branch CCR-Ash Pond
Pace Project No.: 92586144

Sample: LR+8 (Surface) **Lab ID: 92586144006** Collected: 02/03/22 11:18 Received: 02/03/22 15:32 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA							
Potassium	**2.4**	mg/L	0.20	1	02/07/22 10:42	02/08/22 00:53	7440-09-7	
Sodium	**4.4**	mg/L	1.0	1	02/07/22 10:42	02/08/22 00:53	7440-23-5	
Calcium	**4.8**	mg/L	1.0	1	02/07/22 10:42	02/08/22 00:53	7440-70-2	
Magnesium	**2.2**	mg/L	0.050	1	02/07/22 10:42	02/08/22 00:53	7439-95-4	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA							
Boron	ND	mg/L	0.040	1	02/07/22 10:39	02/08/22 18:08	7440-42-8	
Cobalt	ND	mg/L	0.0050	1	02/07/22 10:39	02/08/22 18:08	7440-48-4	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA							
Total Dissolved Solids	**61.0**	mg/L	10.0	1		02/08/22 13:47		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville							
Chloride	**3.6**	mg/L	1.0	1		02/05/22 21:19	16887-00-6	
Fluoride	ND	mg/L	0.10	1		02/05/22 21:19	16984-48-8	
Sulfate	**2.8**	mg/L	1.0	1		02/05/22 21:19	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Plant Branch CCR-Ash Pond
Pace Project No.: 92586144

Sample: LR+8 (Mid) **Lab ID: 92586144007** Collected: 02/03/22 11:21 Received: 02/03/22 15:32 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA							
Potassium	**2.5**	mg/L	0.20	1	02/07/22 10:42	02/08/22 00:58	7440-09-7	
Sodium	**4.8**	mg/L	1.0	1	02/07/22 10:42	02/08/22 00:58	7440-23-5	
Calcium	**5.3**	mg/L	1.0	1	02/07/22 10:42	02/08/22 00:58	7440-70-2	
Magnesium	**2.4**	mg/L	0.050	1	02/07/22 10:42	02/08/22 00:58	7439-95-4	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA							
Boron	ND	mg/L	0.040	1	02/07/22 10:39	02/08/22 18:14	7440-42-8	
Cobalt	ND	mg/L	0.0050	1	02/07/22 10:39	02/08/22 18:14	7440-48-4	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA							
Total Dissolved Solids	**62.0**	mg/L	10.0	1		02/08/22 13:47		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville							
Chloride	**3.5**	mg/L	1.0	1		02/05/22 21:33	16887-00-6	
Fluoride	ND	mg/L	0.10	1		02/05/22 21:33	16984-48-8	
Sulfate	**2.8**	mg/L	1.0	1		02/05/22 21:33	14808-79-8	

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ANALYTICAL RESULTS

Project: Plant Branch CCR-Ash Pond
Pace Project No.: 92586144

Sample: LR+8 (Bottom) **Lab ID: 92586144008** Collected: 02/03/22 11:24 Received: 02/03/22 15:32 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA							
Potassium	**2.5**	mg/L	0.20	1	02/07/22 10:42	02/08/22 01:03	7440-09-7	
Sodium	**4.6**	mg/L	1.0	1	02/07/22 10:42	02/08/22 01:03	7440-23-5	
Calcium	**5.1**	mg/L	1.0	1	02/07/22 10:42	02/08/22 01:03	7440-70-2	
Magnesium	**2.3**	mg/L	0.050	1	02/07/22 10:42	02/08/22 01:03	7439-95-4	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA							
Boron	ND	mg/L	0.040	1	02/07/22 10:39	02/08/22 18:20	7440-42-8	
Cobalt	ND	mg/L	0.0050	1	02/07/22 10:39	02/08/22 18:20	7440-48-4	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA							
Total Dissolved Solids	**65.0**	mg/L	10.0	1		02/08/22 13:47		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville							
Chloride	**3.6**	mg/L	1.0	1		02/05/22 21:47	16887-00-6	
Fluoride	ND	mg/L	0.10	1		02/05/22 21:47	16984-48-8	
Sulfate	**2.8**	mg/L	1.0	1		02/05/22 21:47	14808-79-8	

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ANALYTICAL RESULTS

Project: Plant Branch CCR-Ash Pond
Pace Project No.: 92586144

Sample: LR+9 (Surface) **Lab ID: 92586144009** Collected: 02/03/22 11:08 Received: 02/03/22 15:32 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA							
Potassium	**2.6**	mg/L	0.20	1	02/07/22 10:42	02/08/22 01:08	7440-09-7	
Sodium	**4.8**	mg/L	1.0	1	02/07/22 10:42	02/08/22 01:08	7440-23-5	
Calcium	**5.1**	mg/L	1.0	1	02/07/22 10:42	02/08/22 01:08	7440-70-2	
Magnesium	**2.2**	mg/L	0.050	1	02/07/22 10:42	02/08/22 01:08	7439-95-4	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA							
Boron	ND	mg/L	0.040	1	02/07/22 10:39	02/08/22 18:26	7440-42-8	
Cobalt	ND	mg/L	0.0050	1	02/07/22 10:39	02/08/22 18:26	7440-48-4	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA							
Total Dissolved Solids	**63.0**	mg/L	10.0	1		02/08/22 13:47		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville							
Chloride	**3.8**	mg/L	1.0	1		02/05/22 22:01	16887-00-6	
Fluoride	ND	mg/L	0.10	1		02/05/22 22:01	16984-48-8	
Sulfate	**3.0**	mg/L	1.0	1		02/05/22 22:01	14808-79-8	

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ANALYTICAL RESULTS

Project: Plant Branch CCR-Ash Pond
Pace Project No.: 92586144

Sample: LR+9 (Mid) **Lab ID: 92586144010** Collected: 02/03/22 11:10 Received: 02/03/22 15:32 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA							
Potassium	**2.5**	mg/L	0.20	1	02/07/22 10:42	02/08/22 01:13	7440-09-7	
Sodium	**4.6**	mg/L	1.0	1	02/07/22 10:42	02/08/22 01:13	7440-23-5	
Calcium	**4.8**	mg/L	1.0	1	02/07/22 10:42	02/08/22 01:13	7440-70-2	
Magnesium	**2.1**	mg/L	0.050	1	02/07/22 10:42	02/08/22 01:13	7439-95-4	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA							
Boron	ND	mg/L	0.040	1	02/07/22 10:39	02/08/22 18:32	7440-42-8	
Cobalt	ND	mg/L	0.0050	1	02/07/22 10:39	02/08/22 18:32	7440-48-4	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA							
Total Dissolved Solids	**58.0**	mg/L	10.0	1		02/08/22 13:47		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville							
Chloride	**3.9**	mg/L	1.0	1		02/05/22 22:15	16887-00-6	
Fluoride	ND	mg/L	0.10	1		02/05/22 22:15	16984-48-8	
Sulfate	**2.9**	mg/L	1.0	1		02/05/22 22:15	14808-79-8	

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ANALYTICAL RESULTS

Project: Plant Branch CCR-Ash Pond
Pace Project No.: 92586144

Sample: LR+9 (Bottom) **Lab ID: 92586144011** Collected: 02/03/22 11:12 Received: 02/03/22 15:32 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA							
Potassium	**2.5**	mg/L	0.20	1	02/07/22 10:42	02/08/22 01:17	7440-09-7	
Sodium	**4.7**	mg/L	1.0	1	02/07/22 10:42	02/08/22 01:17	7440-23-5	
Calcium	**5.1**	mg/L	1.0	1	02/07/22 10:42	02/08/22 01:17	7440-70-2	
Magnesium	**2.3**	mg/L	0.050	1	02/07/22 10:42	02/08/22 01:17	7439-95-4	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA							
Boron	ND	mg/L	0.040	1	02/07/22 10:39	02/08/22 18:38	7440-42-8	
Cobalt	ND	mg/L	0.0050	1	02/07/22 10:39	02/08/22 18:38	7440-48-4	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA							
Total Dissolved Solids	**70.0**	mg/L	10.0	1		02/08/22 13:47		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville							
Chloride	**3.6**	mg/L	1.0	1		02/05/22 22:29	16887-00-6	
Fluoride	ND	mg/L	0.10	1		02/05/22 22:29	16984-48-8	
Sulfate	**3.1**	mg/L	1.0	1		02/05/22 22:29	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 CCR-Ash Pond
Pace Project No.: 92586144

Sample: LR-10 (Surface) **Lab ID: 92586144012** Collected: 02/03/22 10:48 Received: 02/03/22 15:32 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA							
Potassium	**2.6**	mg/L	0.20	1	02/07/22 10:42	02/08/22 01:22	7440-09-7	
Sodium	**4.9**	mg/L	1.0	1	02/07/22 10:42	02/08/22 01:22	7440-23-5	
Calcium	**4.7**	mg/L	1.0	1	02/07/22 10:42	02/08/22 01:22	7440-70-2	
Magnesium	**2.0**	mg/L	0.050	1	02/07/22 10:42	02/08/22 01:22	7439-95-4	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA							
Boron	ND	mg/L	0.040	1	02/07/22 10:39	02/08/22 18:44	7440-42-8	
Cobalt	ND	mg/L	0.0050	1	02/07/22 10:39	02/08/22 18:44	7440-48-4	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA							
Total Dissolved Solids	**54.0**	mg/L	10.0	1		02/08/22 13:47		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville							
Chloride	**4.2**	mg/L	1.0	1		02/05/22 23:11	16887-00-6	M1
Fluoride	ND	mg/L	0.10	1		02/05/22 23:11	16984-48-8	M1
Sulfate	**3.0**	mg/L	1.0	1		02/05/22 23:11	14808-79-8	M1

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Plant Branch CCR-Ash Pond
Pace Project No.: 92586144

Sample: LR-10 (Mid) **Lab ID: 92586144013** Collected: 02/03/22 10:52 Received: 02/03/22 15:32 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA							
Potassium	**2.7**	mg/L	0.20	1	02/07/22 10:42	02/08/22 01:27	7440-09-7	
Sodium	**5.0**	mg/L	1.0	1	02/07/22 10:42	02/08/22 01:27	7440-23-5	
Calcium	**4.9**	mg/L	1.0	1	02/07/22 10:42	02/08/22 01:27	7440-70-2	
Magnesium	**2.1**	mg/L	0.050	1	02/07/22 10:42	02/08/22 01:27	7439-95-4	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA							
Boron	ND	mg/L	0.040	1	02/07/22 10:39	02/08/22 18:50	7440-42-8	
Cobalt	ND	mg/L	0.0050	1	02/07/22 10:39	02/08/22 18:50	7440-48-4	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA							
Total Dissolved Solids	**63.0**	mg/L	10.0	1		02/08/22 13:47		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville							
Chloride	**4.1**	mg/L	1.0	1		02/06/22 00:20	16887-00-6	
Fluoride	ND	mg/L	0.10	1		02/06/22 00:20	16984-48-8	
Sulfate	**3.0**	mg/L	1.0	1		02/06/22 00:20	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Plant Branch CCR-Ash Pond
Pace Project No.: 92586144

Sample: LR-10 (Bottom) **Lab ID: 92586144014** Collected: 02/03/22 10:55 Received: 02/03/22 15:32 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA							
Potassium	**2.6**	mg/L	0.20	1	02/07/22 10:42	02/08/22 01:32	7440-09-7	
Sodium	**4.9**	mg/L	1.0	1	02/07/22 10:42	02/08/22 01:32	7440-23-5	
Calcium	**5.1**	mg/L	1.0	1	02/07/22 10:42	02/08/22 01:32	7440-70-2	
Magnesium	**2.3**	mg/L	0.050	1	02/07/22 10:42	02/08/22 01:32	7439-95-4	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA							
Boron	ND	mg/L	0.040	1	02/07/22 10:39	02/08/22 18:56	7440-42-8	
Cobalt	ND	mg/L	0.0050	1	02/07/22 10:39	02/08/22 18:56	7440-48-4	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA							
Total Dissolved Solids	**62.0**	mg/L	10.0	1		02/08/22 13:48		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville							
Chloride	**3.8**	mg/L	1.0	1		02/06/22 00:34	16887-00-6	
Fluoride	ND	mg/L	0.10	1		02/06/22 00:34	16984-48-8	
Sulfate	**2.9**	mg/L	1.0	1		02/06/22 00:34	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 CCR-Ash Pond
Pace Project No.: 92586144

QC Batch: 676394
QC Batch Method: EPA 3010A
Analysis Method: EPA 6010D
Analysis Description: 6010D ATL
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92586144001, 92586144002, 92586144003, 92586144004, 92586144005, 92586144006, 92586144007, 92586144008, 92586144009, 92586144010, 92586144011, 92586144012, 92586144013, 92586144014

METHOD BLANK: 3540275 Matrix: Water
Associated Lab Samples: 92586144001, 92586144002, 92586144003, 92586144004, 92586144005, 92586144006, 92586144007, 92586144008, 92586144009, 92586144010, 92586144011, 92586144012, 92586144013, 92586144014

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Calcium	mg/L	ND	1.0	02/07/22 23:56	
Magnesium	mg/L	ND	0.050	02/07/22 23:56	
Potassium	mg/L	ND	0.20	02/07/22 23:56	
Sodium	mg/L	ND	1.0	02/07/22 23:56	

LABORATORY CONTROL SAMPLE: 3540276

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium	mg/L	1	.99J	99	80-120	
Magnesium	mg/L	1	1.1	105	80-120	
Potassium	mg/L	1	1.1	106	80-120	
Sodium	mg/L	1	1.1	106	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3540277 3540278

Parameter	Units	92586144002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Calcium	mg/L	5.1	1	1	6.2	6.2	107	112	75-125	1	20	
Magnesium	mg/L	2.4	1	1	3.5	3.5	111	114	75-125	1	20	
Potassium	mg/L	2.2	1	1	3.3	3.4	109	113	75-125	1	20	
Sodium	mg/L	4.4	1	1	5.4	5.5	104	112	75-125	1	20	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Plant Branch CCR-Ash Pond
Pace Project No.: 92586144

QC Batch: 676363
QC Batch Method: EPA 3005A
Analysis Method: EPA 6020B
Analysis Description: 6020 MET
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92586144001, 92586144002, 92586144003, 92586144004, 92586144005, 92586144006, 92586144007, 92586144008, 92586144009, 92586144010, 92586144011, 92586144012, 92586144013, 92586144014

METHOD BLANK: 3540160 Matrix: Water
Associated Lab Samples: 92586144001, 92586144002, 92586144003, 92586144004, 92586144005, 92586144006, 92586144007, 92586144008, 92586144009, 92586144010, 92586144011, 92586144012, 92586144013, 92586144014

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Boron	mg/L	ND	0.040	02/08/22 15:45	
Cobalt	mg/L	ND	0.0050	02/08/22 15:45	

LABORATORY CONTROL SAMPLE: 3540161

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Boron	mg/L	1	0.95	95	80-120	
Cobalt	mg/L	0.1	0.098	98	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3540162 3540163

Parameter	Units	92586144001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Boron	mg/L	ND	1	1	1.0	1.0	99	99	75-125	0	20	
Cobalt	mg/L	ND	0.1	0.1	0.098	0.10	98	101	75-125	4	20	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Plant Branch CCR-Ash Pond
Pace Project No.: 92586144

QC Batch: 676566
QC Batch Method: SM 2540C-2015
Analysis Method: SM 2540C-2015
Analysis Description: 2540C Total Dissolved Solids
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92586144001, 92586144002

METHOD BLANK: 3541419 Matrix: Water
Associated Lab Samples: 92586144001, 92586144002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	10.0	02/08/22 11:11	

LABORATORY CONTROL SAMPLE: 3541420

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	390	98	80-120	

SAMPLE DUPLICATE: 3541421

Parameter	Units	92585920025 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	65.0	46.0	34	25	D6

SAMPLE DUPLICATE: 3541422

Parameter	Units	92586436013 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	102	103	1	25	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Plant Branch CCR-Ash Pond
Pace Project No.: 92586144

QC Batch: 676746
QC Batch Method: SM 2540C-2015
Analysis Method: SM 2540C-2015
Analysis Description: 2540C Total Dissolved Solids
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92586144003, 92586144004, 92586144005, 92586144006, 92586144007, 92586144008, 92586144009, 92586144010, 92586144011, 92586144012, 92586144013, 92586144014

METHOD BLANK: 3541991 Matrix: Water
Associated Lab Samples: 92586144003, 92586144004, 92586144005, 92586144006, 92586144007, 92586144008, 92586144009, 92586144010, 92586144011, 92586144012, 92586144013, 92586144014

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	10.0	02/08/22 13:45	

LABORATORY CONTROL SAMPLE: 3541992

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	378	94	80-120	

SAMPLE DUPLICATE: 3541993

Parameter	Units	92586144003 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	67.0	70.0	4	25	

SAMPLE DUPLICATE: 3541994

Parameter	Units	92586144013 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	63.0	66.0	5	25	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Plant Branch CCR-Ash Pond
Pace Project No.: 92586144

QC Batch: 676287
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
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92586144001, 92586144002, 92586144003, 92586144004, 92586144005, 92586144006, 92586144007, 92586144008, 92586144009, 92586144010, 92586144011

METHOD BLANK: 3539895 Matrix: Water
Associated Lab Samples: 92586144001, 92586144002, 92586144003, 92586144004, 92586144005, 92586144006, 92586144007, 92586144008, 92586144009, 92586144010, 92586144011

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	02/05/22 15:45	
Fluoride	mg/L	ND	0.10	02/05/22 15:45	
Sulfate	mg/L	ND	1.0	02/05/22 15:45	

LABORATORY CONTROL SAMPLE: 3539896

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	51.0	102	90-110	
Fluoride	mg/L	2.5	2.5	98	90-110	
Sulfate	mg/L	50	49.6	99	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3539897 3539898

Parameter	Units	92585635001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	45.2	50	50	88.4	94.5	86	99	90-110	7	10	M1
Fluoride	mg/L	ND	2.5	2.5	3.0	3.1	119	121	90-110	2	10	M1
Sulfate	mg/L	5.8	50	50	63.6	64.8	116	118	90-110	2	10	M1

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3539899 3539900

Parameter	Units	92586144002 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	63.6	63.2	121	120	90-110	1	10	M1
Fluoride	mg/L	ND	2.5	2.5	2.9	2.9	115	115	90-110	0	10	M1
Sulfate	mg/L	2.4	50	50	62.6	62.0	120	119	90-110	1	10	M1

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Plant Branch CCR-Ash Pond
Pace Project No.: 92586144

QC Batch: 676288
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
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92586144012, 92586144013, 92586144014

METHOD BLANK: 3539901 Matrix: Water
Associated Lab Samples: 92586144012, 92586144013, 92586144014

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	02/06/22 17:16	
Fluoride	mg/L	ND	0.10	02/06/22 17:16	
Sulfate	mg/L	ND	1.0	02/06/22 17:16	

LABORATORY CONTROL SAMPLE: 3539902

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	52.2	104	90-110	
Fluoride	mg/L	2.5	2.5	99	90-110	
Sulfate	mg/L	50	50.9	102	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3539903 3539904

Parameter	Units	92586144012 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	4.2	50	50	63.7	64.4	119	120	90-110	1	10	M1
Fluoride	mg/L	ND	2.5	2.5	2.9	2.9	113	116	90-110	2	10	M1
Sulfate	mg/L	3.0	50	50	62.0	62.7	118	119	90-110	1	10	M1

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3539905 3539906

Parameter	Units	92586259001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	46.0	50	50	84.0	85.4	76	79	90-110	2	10	M1
Fluoride	mg/L	9.9	2.5	2.5	11.5	10.9	64	38	90-110	6	10	M1
Sulfate	mg/L	750	50	50	782	783	64	65	90-110	0	10	M1

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REPORT OF LABORATORY ANALYSIS

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QUALIFIERS

Project: Plant Branch CCR-Ash Pond
Pace Project No.: 92586144

DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

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

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

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

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

Acid preservation may not be appropriate for 2 Chloroethylvinyl ether.

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

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

Reported results are not rounded until the final step prior to reporting. Therefore, calculated parameters that are typically reported as "Total" may vary slightly from the sum of the reported component parameters.

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

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

D6	The precision between the sample and sample duplicate exceeded laboratory control limits.
M1	Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

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

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Plant Branch CCR-Ash Pond
Pace Project No.: 92586144

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92586144001	**LR-1 (Surface)**	EPA 3010A	676394	EPA 6010D	676474
92586144002	**LR-1 (Mid)**	EPA 3010A	676394	EPA 6010D	676474
92586144003	**LR-1 (Bottom)**	EPA 3010A	676394	EPA 6010D	676474
92586144004	**LR+8A (Surface)**	EPA 3010A	676394	EPA 6010D	676474
92586144005	**LR+9A (Surface)**	EPA 3010A	676394	EPA 6010D	676474
92586144006	**LR+8 (Surface)**	EPA 3010A	676394	EPA 6010D	676474
92586144007	**LR+8 (Mid)**	EPA 3010A	676394	EPA 6010D	676474
92586144008	**LR+8 (Bottom)**	EPA 3010A	676394	EPA 6010D	676474
92586144009	**LR+9 (Surface)**	EPA 3010A	676394	EPA 6010D	676474
92586144010	**LR+9 (Mid)**	EPA 3010A	676394	EPA 6010D	676474
92586144011	**LR+9 (Bottom)**	EPA 3010A	676394	EPA 6010D	676474
92586144012	**LR-10 (Surface)**	EPA 3010A	676394	EPA 6010D	676474
92586144013	**LR-10 (Mid)**	EPA 3010A	676394	EPA 6010D	676474
92586144014	**LR-10 (Bottom)**	EPA 3010A	676394	EPA 6010D	676474
92586144001	**LR-1 (Surface)**	EPA 3005A	676363	EPA 6020B	676471
92586144002	**LR-1 (Mid)**	EPA 3005A	676363	EPA 6020B	676471
92586144003	**LR-1 (Bottom)**	EPA 3005A	676363	EPA 6020B	676471
92586144004	**LR+8A (Surface)**	EPA 3005A	676363	EPA 6020B	676471
92586144005	**LR+9A (Surface)**	EPA 3005A	676363	EPA 6020B	676471
92586144006	**LR+8 (Surface)**	EPA 3005A	676363	EPA 6020B	676471
92586144007	**LR+8 (Mid)**	EPA 3005A	676363	EPA 6020B	676471
92586144008	**LR+8 (Bottom)**	EPA 3005A	676363	EPA 6020B	676471
92586144009	**LR+9 (Surface)**	EPA 3005A	676363	EPA 6020B	676471
92586144010	**LR+9 (Mid)**	EPA 3005A	676363	EPA 6020B	676471
92586144011	**LR+9 (Bottom)**	EPA 3005A	676363	EPA 6020B	676471
92586144012	**LR-10 (Surface)**	EPA 3005A	676363	EPA 6020B	676471
92586144013	**LR-10 (Mid)**	EPA 3005A	676363	EPA 6020B	676471
92586144014	**LR-10 (Bottom)**	EPA 3005A	676363	EPA 6020B	676471
92586144001	**LR-1 (Surface)**	SM 2540C-2015	676566		
92586144002	**LR-1 (Mid)**	SM 2540C-2015	676566		
92586144003	**LR-1 (Bottom)**	SM 2540C-2015	676746		
92586144004	**LR+8A (Surface)**	SM 2540C-2015	676746		
92586144005	**LR+9A (Surface)**	SM 2540C-2015	676746		
92586144006	**LR+8 (Surface)**	SM 2540C-2015	676746		
92586144007	**LR+8 (Mid)**	SM 2540C-2015	676746		
92586144008	**LR+8 (Bottom)**	SM 2540C-2015	676746		
92586144009	**LR+9 (Surface)**	SM 2540C-2015	676746		
92586144010	**LR+9 (Mid)**	SM 2540C-2015	676746		
92586144011	**LR+9 (Bottom)**	SM 2540C-2015	676746		
92586144012	**LR-10 (Surface)**	SM 2540C-2015	676746		
92586144013	**LR-10 (Mid)**	SM 2540C-2015	676746		
92586144014	**LR-10 (Bottom)**	SM 2540C-2015	676746		
92586144001	**LR-1 (Surface)**	EPA 300.0 Rev 2.1 1993	676287		
92586144002	**LR-1 (Mid)**	EPA 300.0 Rev 2.1 1993	676287		
92586144003	**LR-1 (Bottom)**	EPA 300.0 Rev 2.1 1993	676287		
92586144004	**LR+8A (Surface)**	EPA 300.0 Rev 2.1 1993	676287		
92586144005	**LR+9A (Surface)**	EPA 300.0 Rev 2.1 1993	676287		

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 CCR-Ash Pond
Pace Project No.: 92586144

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92586144006	**LR+8 (Surface)**	EPA 300.0 Rev 2.1 1993	676287		
92586144007	**LR+8 (Mid)**	EPA 300.0 Rev 2.1 1993	676287		
92586144008	**LR+8 (Bottom)**	EPA 300.0 Rev 2.1 1993	676287		
92586144009	**LR+9 (Surface)**	EPA 300.0 Rev 2.1 1993	676287		
92586144010	**LR+9 (Mid)**	EPA 300.0 Rev 2.1 1993	676287		
92586144011	**LR+9 (Bottom)**	EPA 300.0 Rev 2.1 1993	676287		
92586144012	**LR-10 (Surface)**	EPA 300.0 Rev 2.1 1993	676288		
92586144013	**LR-10 (Mid)**	EPA 300.0 Rev 2.1 1993	676288		
92586144014	**LR-10 (Bottom)**	EPA 300.0 Rev 2.1 1993	676288		

CHAIN-OF-CUSTODY / Analytical Request Document

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

Page : 1 Of [illegible]

Section A — Required Client Information: [illegible]

Section B — Required Project Information: [illegible]

Section C — Invoice Information: [illegible]

WO# : 92586144

92586144

ITEM #	SAMPLE ID	MATRIX CODE	SAMPLE TYPE	COLLECTED START DATE	COLLECTED START TIME	END DATE	END TIME
1	[illegible]	WT	G	[illegible]	1047		
2	[illegible]	[illegible]	G	[illegible]	1052		
3	[illegible]	WT	G	[illegible]	1058		
4	[illegible]	WT	G	[illegible]	1129		
5	[illegible]	WT	G	[illegible]	1158		
6	[illegible]	WT	G	[illegible]	1115		
7	[illegible]	WT	G	[illegible]	1121		
8	[illegible]	WT	G	[illegible]	1124		
9	[illegible]	WT	G	[illegible]	1109		
10	[illegible]	WT	G	[illegible]	1108		
11	[illegible]	WT	G	[illegible]	1112		
12	[illegible]	WT	G	[illegible]	1045		

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
[illegible]	[illegible]	[illegible]	1532	[illegible]	[illegible]	1532	

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: [illegible] / [illegible] / 02-[illegible]-22

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		Section B Required Project Information		Section C Invoice Information	
Company:	[illegible]	Report To:	[illegible]	Attention:	[illegible]
Address:	[illegible]	Copy To:	[illegible]	Company Name:	[illegible]
	[illegible], CA [illegible]			Address:	
Email:	[illegible]	Purchase Order #:	[illegible]	Pace Quote:	
Phone:	[illegible]	Project Name:	[illegible]	Pace Project Manager:	[illegible]
Requested Due Date:	[illegible] TAT	Project #:		Pace Profile #:	[illegible]

Page: [illegible] of [illegible]

Regulatory Agency

State / Location

CA

SAMPLE ID

ITEM #	SAMPLE ID	MATRIX CODE	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analyses Test	[illegible]	[illegible]	[illegible]	Residual Chlorine (Y/N)	
1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]														[illegible]	[illegible]	[illegible]		
2	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]														[illegible]	[illegible]	[illegible]		
3																							
4																							
5																							
6																							
7																							
8																							
9																							
10																							
11																							
12																							

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
[illegible]	[signature]	3/5/[illegible]	[illegible]	[signature]	[illegible]	1532	
[illegible]							

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER:

	Document Name:	Document Revised: November 15, 2021
Pace Analytical	Sample Condition Upon Receipt (SCUR)	Page 1 of 2
	Document No.:	Issuing Authority:
	F-CAR-CS-033-Rev.08	Pace Carolinas Quality Office

Laboratory receiving samples:

Asheville ☐ Eden ☐ Greenwood ☐ Huntersville ☐ Raleigh ☐ Mechanicsville ☐ Atlanta ☑ Kernersville ☐

Client Name: Arcadis

Project #

WO# : 92586144

PM: MF Due Date: 02/18/22

CLIENT: GA-Arcadis

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

Custody Seal Present? ☐ Yes ☑ No Seals Intact? ☐ Yes ☐ No

Date/Initials Person Examining Contents: 2/11/22 [illegible]

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

Biological Tissue Frozen? ☐ Yes ☐ No ☐ N/A

Thermometer: ☐ IR Gun 92T083 Type of Ice: ☑ Wet ☐ Blue ☐ None

Cooler Temp: 1.8 Correction Factor: Add/Subtract (°C) +0.2

Temp should be above freezing to 6°C

☐ Samples out of temp criteria. Samples on ice, cooling process has begun

Cooler Temp Corrected (°C): 2.0

USDA Regulated Soil (☐ N/A, water sample)

Did samples originate in a quarantine zone within the United States: CA, NY, or SC (check maps)? ☐ Yes ☐ No

Did samples originate from a foreign source (internationally, including Hawaii and Puerto Rico)? ☐ Yes ☐ No

				Comments/Discrepancy:
Chain of Custody Present?	☑ Yes	☐ No	☐ N/A	1.
Samples Arrived within Hold Time?	☑ Yes	☐ No	☐ N/A	2. Filter out
Short Hold Time Analysis (<72 hr)?	☐ Yes	☐ No	☐ N/A	3.
Rush Turn Around Time Requested?	☐ Yes	☑ No	☐ N/A	4.
Sufficient Volume?	☑ Yes	☐ No	☐ N/A	5.
Correct Containers Used?	☑ Yes	☐ No	☐ N/A	6.
-Pace Containers Used?	☑ Yes	☐ No	☐ N/A	
Containers Intact?	☑ Yes	☐ No	☐ N/A	7.
Dissolved analysis: Samples Field Filtered?	☐ Yes	☐ No	☑ N/A	8.
Sample Labels Match COC?	☑ Yes	☐ No	☐ N/A	9.
-Includes Date/Time/ID/Analysis Matrix:	W			
Headspace in VOA Vials (>5-6mm)?	☐ Yes	☐ No	☑ N/A	10.
Trip Blank Present?	☐ Yes	☐ No	☑ N/A	11.
Trip Blank Custody Seals Present?	☐ Yes	☐ No	☑ N/A	

COMMENTS/SAMPLE DISCREPANCY

Field Data Required? ☐ Yes ☐ No

Lot ID of split containers:

CLIENT NOTIFICATION/RESOLUTION

Person contacted: ____________ Date/Time: ____________

Project Manager SCURF Review: ____________ Date: ____________

Project Manager SRF Review: ____________ Date: ____________

Pace Analytical	Document Name: Sample Condition Upon Receipt (SCUR)	Document Revised: November 15, 2021 Page 2 of 2
	Document No.: F-CAR-CS-033-Rev.08	Issuing Authority: Pace Carolinas Quality Office

*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 bottles

Project #

WO#: 92586144

PM: HP Due Date: 02/18/22

CLIENT: [illegible]

Well	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
1		2	1			✓
2		2	1			✓
3		2				✓
4		2	1			✓
5		2				✓
6		2	1			✓
7		2	1			✓
8		2	1			✓
9		2	1			✓
10		2	1			✓
11		2				✓
12		2	1			✓

pH Adjustment Log for Preserved Samples

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

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

AES
ANALYTICAL ENVIRONMENTAL SERVICES, INC.

February 11, 2022

Maiya Parks
Pace Analytical Atlanta

110 Technology Pkwy
Peachtree Corners GA 30092

RE: 92586144

Dear Maiya Parks: Order No: 2202644

Analytical Environmental Services, Inc. received 14 samples on 2/4/2022 7:35:00 AM for the analyses presented in following report.

"No problems were encountered during the analyses except as noted in the Case Narrative or by qualifiers in the report or QC Summary. Additionally, all results for the associated Quality Control samples were within EPA and/or AES established limits.
AES's accreditations are as follows:
-NELAP/State of Florida Laboratory ID E87582 for analysis of Non-Potable Water, Solid & Chemical Materials, Air & Emissions Volatile Organics, and Drinking Water Microbiology & Metals, effective 07/01/21-06/30/22.
State of Georgia, Department of Natural Resources ID #800 for analysis of Drinking Water Metals, effective through 06/30/22 and Total Coliforms/ E. coli, effective 04/20/20-04/24/23.
-AIHA-LAP, LLC Laboratory ID: 100671 for Industrial Hygiene samples (Metals and PCM Asbestos), Environmental Lead (Paint, Soil, Dust Wipes, Air), and Environmental Microbiology (Fungal) Direct Examination, effective until 11/01/23.
These results relate only to the items tested as received. This report may only be reproduced in full.

If you have any questions regarding these test results, please feel free to call.

Sincerely,

Paris Masoudi

Project Manager

Chain of Custody

PASI Charlotte Laboratory

Workorder: 92586144 Workorder Name: Plant Branch CCR-Ash Pond Results Requested By: 2/10/2022 2202644

Report / Invoice To	Subcontract To	
Maiya Parks Pace Analytical Atlanta 110 Technology Parkway Peachtree Corners, GA 30092 Phone (770)734-4200 Email: maiya.parks@pacelabs.com	AES 3080 Presidential Dr. Atlanta GA 30340	P.O. 92586144 MP

State of Sample Origin: GA

Item	Sample ID	Collect Date/Time	Lab ID	Matrix	Preserved Containers	Requested Analysis	LAB USE ONLY
1	LR-1 (Surface)	2/3/2022 10:47	92586144001	Water		X	
2	LR-1 (Mid)	2/3/2022 10:52	92586144002	Water		X	
3	LR-1 (Bottom)	2/3/2022 10:58	92586144003	Water		X	
4	LR-5A (Surface)	2/3/2022 11:29	92586144004	Water		X	
5	LR-6A (Surface)	2/3/2022 11:38	92586144005	Water		X	
6	LR-8 (Surface)	2/3/2022 11:18	92586144006	Water		X	
7	LR-8 (Mid)	2/3/2022 11:21	92586144007	Water		X	
8	LR-8 (Bottom)	2/3/2022 11:24	92586144008	Water		X	
9	LR-9 (Surface)	2/3/2022 11:08	92586144009	Water		X	
10	LR-9 (Mid)	2/3/2022 11:10	92586144010	Water		X	
11	LR-9 (Bottom)	2/3/2022 11:12	92586144011	Water		X	
12	LR-10 (Surface)	2/3/2022 10:48	92586144012	Water		X	
13	LR-10 (Mid)	2/3/2022 10:52	92586144013	Water		X	
14	LR-10 (Bottom)	2/3/2022 10:55	92586144014	Water		X	
15							
16							
17							

Transfers	Released By	Date/Time	Received By	Date/Time	Comments
1	Ryan Williams /Pace	2/4/22 0735	U. Karris	2/4 7:35	Needs trail and bicarb CP 2202645 2202644
2					
3					

Cooler Temperature on Receipt ______ °C | Custody Seal Y or N | Received on Ice Y or N | Samples Intact Y or N

Client:	Pace Analytical Atlanta	**Client Sample ID:**	92586144001
Project Name:	92586144	**Collection Date:**	2/3/2022 10:47:00 AM
Lab ID:	2202644-001	**Matrix:**	Aqueous

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
CARBON DIOXIDE SM4500-CO2-D								
Bicarbonate Alkalinity	28.8	10.0		mg/L	R477225	1	02/10/2022 15:15	GY
Alkalinity by SM2320B								
Alkalinity, Total (As CaCO3)	28.8	3.00		mg/L	R477225	1	02/10/2022 15:15	GY

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	F	Analyzed in the lab which is a deviation from the method
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Client:	Pace Analytical Atlanta	**Client Sample ID:**	92586144002
Project Name:	92586144	**Collection Date:**	2/3/2022 10:52:00 AM
Lab ID:	2202644-002	**Matrix:**	Aqueous

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
CARBON DIOXIDE SM4500-CO2-D								
Bicarbonate Alkalinity	32.5	10.0		mg/L	R477225	1	02/10/2022 15:15	GY
Alkalinity by SM2320B								
Alkalinity, Total (As CaCO3)	32.5	3.00		mg/L	R477225	1	02/10/2022 15:15	GY

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	F	Analyzed in the lab which is a deviation from the method
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Client:	Pace Analytical Atlanta	**Client Sample ID:**	92586144003
Project Name:	92586144	**Collection Date:**	2/3/2022 10:58:00 AM
Lab ID:	2202644-003	**Matrix:**	Aqueous

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
CARBON DIOXIDE SM4500-CO2-D								
Bicarbonate Alkalinity	28.5	10.0		mg/L	R477225	1	02/10/2022 15:15	GY
Alkalinity by SM2320B								
Alkalinity, Total (As CaCO3)	28.5	3.00		mg/L	R477225	1	02/10/2022 15:15	GY

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	F	Analyzed in the lab which is a deviation from the method
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Client:	Pace Analytical Atlanta	**Client Sample ID:**	92586144004
Project Name:	92586144	**Collection Date:**	2/3/2022 11:29:00 AM
Lab ID:	2202644-004	**Matrix:**	Aqueous

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
CARBON DIOXIDE SM4500-CO2-D								
Bicarbonate Alkalinity	29.0	10.0		mg/L	R477225	1	02/10/2022 15:15	GY
Alkalinity by SM2320B								
Alkalinity, Total (As CaCO3)	29.0	3.00		mg/L	R477225	1	02/10/2022 15:15	GY

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	F	Analyzed in the lab which is a deviation from the method
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Client:	Pace Analytical Atlanta	**Client Sample ID:**	92586144005
Project Name:	92586144	**Collection Date:**	2/3/2022 11:38:00 AM
Lab ID:	2202644-005	**Matrix:**	Aqueous

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
CARBON DIOXIDE SM4500-CO2-D								
Bicarbonate Alkalinity	27.0	10.0		mg/L	R477225	1	02/10/2022 15:15	GY
Alkalinity by SM2320B								
Alkalinity, Total (As CaCO3)	27.0	3.00		mg/L	R477225	1	02/10/2022 15:15	GY

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	F	Analyzed in the lab which is a deviation from the method
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Client:	Pace Analytical Atlanta	**Client Sample ID:**	92586144006
Project Name:	92586144	**Collection Date:**	2/3/2022 11:18:00 AM
Lab ID:	2202644-006	**Matrix:**	Aqueous

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
CARBON DIOXIDE SM4500-CO2-D								
Bicarbonate Alkalinity	27.6	10.0		mg/L	R477225	1	02/10/2022 15:15	GY
Alkalinity by SM2320B								
Alkalinity, Total (As CaCO3)	27.6	3.00		mg/L	R477225	1	02/10/2022 15:15	GY

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	F	Analyzed in the lab which is a deviation from the method
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 11-Feb-22

Client:	Pace Analytical Atlanta	**Client Sample ID:**	92586144007
Project Name:	92586144	**Collection Date:**	2/3/2022 11:21:00 AM
Lab ID:	2202644-007	**Matrix:**	Aqueous

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
CARBON DIOXIDE SM4500-CO2-D								
Bicarbonate Alkalinity	29.4	10.0		mg/L	R477225	1	02/10/2022 15:15	GY
Alkalinity by SM2320B								
Alkalinity, Total (As CaCO3)	29.4	3.00		mg/L	R477225	1	02/10/2022 15:15	GY

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	F	Analyzed in the lab which is a deviation from the method
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Client:	Pace Analytical Atlanta	**Client Sample ID:**	92586144008
Project Name:	92586144	**Collection Date:**	2/3/2022 11:24:00 AM
Lab ID:	2202644-008	**Matrix:**	Aqueous

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
CARBON DIOXIDE SM4500-CO2-D								
Bicarbonate Alkalinity	28.4	10.0		mg/L	R477225	1	02/10/2022 15:15	GY
Alkalinity by SM2320B								
Alkalinity, Total (As CaCO3)	28.4	3.00		mg/L	R477225	1	02/10/2022 15:15	GY

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	F	Analyzed in the lab which is a deviation from the method
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Client:	Pace Analytical Atlanta	**Client Sample ID:**	92586144009
Project Name:	92586144	**Collection Date:**	2/3/2022 11:08:00 AM
Lab ID:	2202644-009	**Matrix:**	Aqueous

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
CARBON DIOXIDE SM4500-CO2-D								
Bicarbonate Alkalinity	31.8	10.0		mg/L	R477225	1	02/10/2022 15:15	GY
Alkalinity by SM2320B								
Alkalinity, Total (As CaCO3)	31.9	3.00		mg/L	R477225	1	02/10/2022 15:15	GY

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	F	Analyzed in the lab which is a deviation from the method
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Client:	Pace Analytical Atlanta	**Client Sample ID:**	92586144010
Project Name:	92586144	**Collection Date:**	2/3/2022 11:10:00 AM
Lab ID:	2202644-010	**Matrix:**	Aqueous

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
CARBON DIOXIDE SM4500-CO2-D								
Bicarbonate Alkalinity	30.0	10.0		mg/L	R477225	1	02/10/2022 15:15	GY
Alkalinity by SM2320B								
Alkalinity, Total (As CaCO3)	30.0	3.00		mg/L	R477225	1	02/10/2022 15:15	GY

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	F	Analyzed in the lab which is a deviation from the method
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Client:	Pace Analytical Atlanta	**Client Sample ID:**	92586144011
Project Name:	92586144	**Collection Date:**	2/3/2022 11:12:00 AM
Lab ID:	2202644-011	**Matrix:**	Aqueous

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
CARBON DIOXIDE SM4500-CO2-D								
Bicarbonate Alkalinity	28.8	10.0		mg/L	R477225	1	02/10/2022 15:15	GY
Alkalinity by SM2320B								
Alkalinity, Total (As CaCO3)	28.8	3.00		mg/L	R477225	1	02/10/2022 15:15	GY

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	F	Analyzed in the lab which is a deviation from the method
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Client:	Pace Analytical Atlanta	**Client Sample ID:**	92586144012
Project Name:	92586144	**Collection Date:**	2/3/2022 10:48:00 AM
Lab ID:	2202644-012	**Matrix:**	Aqueous

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
CARBON DIOXIDE SM4500-CO2-D								
Bicarbonate Alkalinity	28.6	10.0		mg/L	R476848	1	02/07/2022 10:47	GY
Alkalinity by SM2320B								
Alkalinity, Total (As CaCO3)	28.6	3.00		mg/L	R476848	1	02/07/2022 10:47	GY

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- F Analyzed in the lab which is a deviation from the method
- < Less than Result value
- J Estimated value detected below Reporting Limit

Client:	Pace Analytical Atlanta	**Client Sample ID:**	92586144013
Project Name:	92586144	**Collection Date:**	2/3/2022 10:52:00 AM
Lab ID:	2202644-013	**Matrix:**	Aqueous

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
CARBON DIOXIDE SM4500-CO2-D								
Bicarbonate Alkalinity	27.1	10.0		mg/L	R476848	1	02/07/2022 10:47	GY
Alkalinity by SM2320B								
Alkalinity, Total (As CaCO3)	27.1	3.00		mg/L	R476848	1	02/07/2022 10:47	GY

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- F Analyzed in the lab which is a deviation from the method
- < Less than Result value
- J Estimated value detected below Reporting Limit

Client:	Pace Analytical Atlanta	**Client Sample ID:**	92586144014
Project Name:	92586144	**Collection Date:**	2/3/2022 10:55:00 AM
Lab ID:	2202644-014	**Matrix:**	Aqueous

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
CARBON DIOXIDE SM4500-CO2-D								
Bicarbonate Alkalinity	28.6	10.0		mg/L	R476848	1	02/07/2022 10:47	GY
Alkalinity by SM2320B								
Alkalinity, Total (As CaCO3)	28.6	3.00		mg/L	R476848	1	02/07/2022 10:47	GY

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- F Analyzed in the lab which is a deviation from the method
- < Less than Result value
- J Estimated value detected below Reporting Limit

Clear Save as

ANALYTICAL ENVIRONMENTAL SERVICES, INC. AES

SAMPLE/COOLER RECEIPT CHECKLIST

1. Client Name: **Pace Analytical Atlanta** AES Work Order Number: **2202644**

2. Carrier: FedEx ☐ UPS ☐ USPS ☐ Client ■ Courier ☐ Other _____

		Yes	No	N/A	Details	Comments
3.	Shipping container/cooler received in good condition?	◉	○	○	damaged ☐ leaking ☐ other ☐	
4.	Custody seals present on shipping container?	○	◉	○		
5.	Custody seals intact on shipping container?	○	○	◉		
6.	Temperature blanks present?	○	○	○		
7.	Cooler temperature(s) within limits of 0-6°C? [See item 13 and 14 for temperature recordings.]	◉	○	○	Cooling initiated for recently collected samples / ice present ☐	
8.	Chain of Custody (COC) present?	◉	○	○		
9.	Chain of Custody signed, dated, and timed when relinquished and received?	◉	○	○		
10.	Sampler name and/or signature on COC?	◉	○	○		
11.	Were all samples received within holding time?	◉	○	○		
12.	TAT marked on the COC?	◉	○	○	If no TAT indicated, proceeded with standard TAT per Terms & Conditions. ☐	

13. Cooler 1 Temperature 1.9 °C Cooler 2 Temperature _____ °C Cooler 3 Temperature _____ °C Cooler 4 Temperature _____ °C

14. Cooler 5 Temperature _____ °C Cooler 6 Temperature _____ °C Cooler 7 Temperature _____ °C Cooler 8 Temperature _____ °C

15. Comments:

I certify that I have completed sections 1-15 (dated initials). CP 2/04/2022

		Yes	No	N/A	Details	Comments
16.	Were sample containers intact upon receipt?	◉	○	○		
17.	Custody seals present on sample containers?	○	◉	○		
18.	Custody seals intact on sample containers?	○	○	◉		
19.	Do sample container labels match the COC?	◉	○	○	incomplete info ☐ illegible ☐ no label ☐ other ☐	
20.	Are analyses requested indicated on the COC?	◉	○	○		
21.	Were all of the samples listed on the COC received?	◉	○	○	samples received but not listed on COC ☐ samples listed on COC not received ☐	
22.	Was the sample collection date/time noted?	◉	○	○		
23.	Did we receive sufficient sample volume for indicated analyses?	◉	○	○		
24.	Were samples received in appropriate containers?	◉	○	○		
25.	Were VOA samples received without headspace (< 1/4" bubble)?	○	○	◉		
26.	Were trip blanks submitted?	○	○	◉	listed on COC ☐ not listed on COC ☐	

27. Comments:

This section only applies to samples where pH can be checked at Sample Receipt.

I certify that I have completed sections 16-27 (dated initials). TL 2-5-22

		Yes	No	N/A	Details	Comments
28.	Have containers needing chemical preservation been checked? *	○	○	◉		
29.	Containers meet preservation guidelines?	○	○	◉		
30.	Was pH adjusted at Sample Receipt?	○	○	◉		

* Note: Certain analyses require chemical preservation but must be checked in the laboratory and not upon Sample Receipt such as Coliforms, VOCs and Oil & Grease/TPH.
This also excludes metals by EPA 200.7, 200.8 and 245.1 which will be verified between 16 and 24 hours after preservation.

I certify that I have completed sections 28-30 (dated initials). TL 2-5-22

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Page 50 of 53

Client: Pace Analytical Atlanta
Project Name: 92586144
Workorder: 2202644

ANALYTICAL QC SUMMARY REPORT

BatchID: R476848

Sample ID: **LCS-R476848**	Client ID:			Units: **mg/L**	Prep Date:		Run No: **476848**
SampleType: **LCS**	TestCode: **Alkalinity by SM2320B**			BatchID: **R476848**	Analysis Date: **02/07/2022**		Seq No: **11008131**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Alkalinity, Total (As CaCO3)	126.5	3.00	125.0		101	90	110				

Sample ID: **2202295-001ADUP**	Client ID:			Units: **mg/L**	Prep Date:		Run No: **476848**
SampleType: **DUP**	TestCode: **Alkalinity by SM2320B**			BatchID: **R476848**	Analysis Date: **02/07/2022**		Seq No: **11008134**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Alkalinity, Total (As CaCO3)	33.99	3.00						35.04	3.05	30	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Pace Analytical Atlanta
Project Name: 92586144
Workorder: 2202644

ANALYTICAL QC SUMMARY REPORT

BatchID: R477225

Sample ID: **LCS-R477225**	Client ID:				Units: **mg/L**		Prep Date:		Run No: **477225**	
SampleType: **LCS**	TestCode: **Alkalinity by SM2320B**				BatchID: **R477225**		Analysis Date: **02/10/2022**		Seq No: **11020756**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Alkalinity, Total (As CaCO3)	125.2	3.00	125.0		100	90	110				

Sample ID: **2202A24-006EDUP**	Client ID:				Units: **mg/L**		Prep Date:		Run No: **477225**	
SampleType: **DUP**	TestCode: **Alkalinity by SM2320B**				BatchID: **R477225**		Analysis Date: **02/10/2022**		Seq No: **11020764**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Alkalinity, Total (As CaCO3)	105.2	3.00						112.7	6.86	30	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

End of Report

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

October 22, 2021

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

RE: Project: BRANCH AP-BCD
Pace Project No.: 92563226

Dear Joju Abraham:

Enclosed are the analytical results for sample(s) received by the laboratory between September 23, 2021 and September 29, 2021. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

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

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

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

Sincerely,

Nicole D'Oleo
nicole.d'oleo@pacelabs.com
(704)875-9092
Project Manager

Enclosures

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

REPORT OF LABORATORY ANALYSIS

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

CERTIFICATIONS

Project: BRANCH AP-BCD
Pace Project No.: 92563226

Pace Analytical Services Charlotte
9800 Kincey Ave. Ste 100, Huntersville, NC 28078
Louisiana/NELAP Certification # LA170028
North Carolina Drinking Water Certification #: 37706
North Carolina Field Services Certification #: 5342
North Carolina Wastewater Certification #: 12
South Carolina Certification #: 99006001
Florida/NELAP Certification #: E87627
Kentucky UST Certification #: 84
Virginia/VELAP Certification #: 460221

Pace Analytical Services Asheville
2225 Riverside Drive, Asheville, NC 28804
Florida/NELAP Certification #: E87648
North Carolina Drinking Water Certification #: 37712
North Carolina Wastewater Certification #: 40
South Carolina Certification #: 99030001
Virginia/VELAP Certification #: 460222

Pace Analytical Services Peachtree Corners
110 Technology Pkwy, Peachtree Corners, GA 30092
Florida DOH Certification #: E87315
Georgia DW Inorganics Certification #: 812
North Carolina Certification #: 381
South Carolina Certification #: 98011001

REPORT OF LABORATORY ANALYSIS

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

SAMPLE SUMMARY

Project: BRANCH AP-BCD
Pace Project No.: 92563226

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92563226001	**BRGWC-45**	Water	09/23/21 12:15	09/23/21 17:10
92563226002	**BRGWC-47**	Water	09/23/21 13:35	09/23/21 17:10
92563226003	**BRGWC-50**	Water	09/27/21 13:05	09/28/21 10:18
92563226004	**DUP-2**	Water	09/27/21 00:00	09/28/21 10:18
92563226005	**BRGWC-25I**	Water	09/28/21 11:26	09/29/21 11:57
92563226006	**BRGWC-27I**	Water	09/28/21 14:30	09/29/21 11:57
92563226007	**BRGWC-29I**	Water	09/28/21 12:51	09/29/21 11:57
92563226008	**BRGWC-30I**	Water	09/28/21 16:30	09/29/21 11:57
92563226009	**BRGWC-32S**	Water	09/28/21 16:40	09/29/21 11:57
92563226010	**EB-2**	Water	09/28/21 14:50	09/29/21 11:57
92563226011	**FB-2**	Water	09/28/21 13:15	09/29/21 11:57
92563226012	**DUP-3**	Water	09/28/21 00:00	09/29/21 11:57
92563226013	**BRGWC-52I**	Water	09/28/21 16:16	09/29/21 11:57
92563226014	**FB-3**	Water	09/28/21 16:15	09/29/21 11:57
92563226015	**EB-3**	Water	09/28/21 16:40	09/29/21 11:57

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

SAMPLE ANALYTE COUNT

Project: BRANCH AP-BCD
Pace Project No.: 92563226

Lab ID	Sample ID	Method	Analysts	Analytes Reported
92563226001	**BRGWC-45**	EPA 6010D	DRB	1
		EPA 6020B	KH	13
		EPA 7470A	VB	1
		SM 2540C-2011	ALW	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92563226002	**BRGWC-47**	EPA 6010D	DRB	1
		EPA 6020B	KH	13
		EPA 7470A	VB	1
		SM 2540C-2011	ALW	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92563226003	**BRGWC-50**	EPA 6010D	DRB	7
		EPA 6020B	CW1, KH	13
		EPA 7470A	VB	1
		SM 2540C-2011	ALW	1
		SM 2320B-2011	SMK	3
		EPA 300.0 Rev 2.1 1993	CDC	3
		EPA 353.2 Rev 2.0 1993	KDF1	1
92563226004	**DUP-2**	EPA 6010D	DRB	7
		EPA 6020B	CW1, KH	13
		EPA 7470A	VB	1
		SM 2540C-2011	ALW	1
		SM 2320B-2011	SMK	3
		EPA 300.0 Rev 2.1 1993	CDC	3
92563226005	**BRGWC-25I**	EPA 6010D	DRB	1
		EPA 6020B	KH	13
		EPA 7470A	VB	1
		SM 2540C-2011	ALW	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92563226006	**BRGWC-27I**	EPA 6010D	DRB	1
		EPA 6020B	KH	13
		EPA 7470A	VB	1
		SM 2540C-2011	ALW	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92563226007	**BRGWC-29I**	EPA 6010D	DRB	1
		EPA 6020B	KH	13
		EPA 7470A	VB	1
		SM 2540C-2011	ALW	1

REPORT OF LABORATORY ANALYSIS

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

SAMPLE ANALYTE COUNT

Project: BRANCH AP-BCD
Pace Project No.: 92563226

Lab ID	Sample ID	Method	Analysts	Analytes Reported
		EPA 300.0 Rev 2.1 1993	CDC	3
92563226008	**BRGWC-30I**	EPA 6010D	DRB	1
		EPA 6020B	KH	13
		EPA 7470A	VB	1
		SM 2540C-2011	ALW	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92563226009	**BRGWC-32S**	EPA 6010D	DRB	1
		EPA 6020B	KH	13
		EPA 7470A	VB	1
		SM 2540C-2011	ALW	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92563226010	**EB-2**	EPA 6010D	DRB	1
		EPA 6020B	KH	13
		EPA 7470A	VB	1
		SM 2540C-2011	ALW	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92563226011	**FB-2**	EPA 6010D	DRB	1
		EPA 6020B	KH	13
		EPA 7470A	VB	1
		SM 2540C-2011	ALW	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92563226012	**DUP-3**	EPA 6010D	DRB	1
		EPA 6020B	KH	13
		EPA 7470A	VB	1
		SM 2540C-2011	ALW	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92563226013	**BRGWC-52I**	EPA 6010D	DRB	7
		EPA 6020B	KH	13
		EPA 7470A	VB	1
		SM 2540C-2011	ALW	1
		SM 2320B-2011	SMK	3
		EPA 300.0 Rev 2.1 1993	CDC	3
		EPA 353.2 Rev 2.0 1993	KDF1	1
92563226014	**FB-3**	EPA 6010D	DRB	7
		EPA 6020B	KH	13
		EPA 7470A	VB	1
		SM 2540C-2011	ALW	1

REPORT OF LABORATORY ANALYSIS

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

SAMPLE ANALYTE COUNT

Project: BRANCH AP-BCD
Pace Project No.: 92563226

Lab ID	Sample ID	Method	Analysts	Analytes Reported
		SM 2320B-2011	SMK	3
		EPA 300.0 Rev 2.1 1993	CDC	3
92563226015	**EB-3**	EPA 6010D	DRB	7
		EPA 6020B	KH	13
		EPA 7470A	VB	1
		SM 2540C-2011	ALW	1
		SM 2320B-2011	SMK	3
		EPA 300.0 Rev 2.1 1993	CDC	3

PASI-A = Pace Analytical Services - Asheville
PASI-C = Pace Analytical Services - Charlotte
PASI-GA = Pace Analytical Services - Peachtree Corners, GA

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

SUMMARY OF DETECTION

Project: BRANCH AP-BCD
Pace Project No.: 92563226

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92563226001	**BRGWC-45**					
	Performed by	CUSTOMER			09/24/21 10:45	
	pH	5.95	Std. Units		09/24/21 10:45	
EPA 6010D	Calcium	32.0	mg/L	1.0	10/06/21 18:27	M1
EPA 6020B	Barium	0.064	mg/L	0.0050	10/08/21 17:17	
EPA 6020B	Boron	0.029J	mg/L	0.040	10/08/21 17:17	
EPA 6020B	Cobalt	0.0049J	mg/L	0.0050	10/08/21 17:17	
EPA 6020B	Lithium	0.0023J	mg/L	0.030	10/08/21 17:17	
SM 2540C-2011	Total Dissolved Solids	277	mg/L	10.0	09/30/21 18:57	
EPA 300.0 Rev 2.1 1993	Chloride	29.3	mg/L	1.0	09/27/21 08:04	
EPA 300.0 Rev 2.1 1993	Fluoride	0.060J	mg/L	0.10	09/27/21 08:04	
EPA 300.0 Rev 2.1 1993	Sulfate	97.5	mg/L	2.0	09/27/21 15:33	
92563226002	**BRGWC-47**					
	Performed by	CUSTOMER			09/24/21 10:46	
	pH	5.74	Std. Units		09/24/21 10:46	
EPA 6010D	Calcium	336	mg/L	10.0	10/07/21 16:32	
EPA 6020B	Arsenic	0.0020J	mg/L	0.0050	10/08/21 17:22	
EPA 6020B	Barium	0.031	mg/L	0.0050	10/08/21 17:22	
EPA 6020B	Boron	0.47	mg/L	0.040	10/08/21 17:22	
EPA 6020B	Lithium	0.042	mg/L	0.030	10/08/21 17:22	
SM 2540C-2011	Total Dissolved Solids	1770	mg/L	100	09/30/21 18:58	
EPA 300.0 Rev 2.1 1993	Chloride	4.3	mg/L	1.0	09/27/21 08:19	
EPA 300.0 Rev 2.1 1993	Sulfate	1240	mg/L	27.0	09/27/21 15:48	
92563226003	**BRGWC-50**					
	Performed by	CUSTOMER			09/28/21 17:32	
	pH	5.05	Std. Units		09/28/21 17:32	
EPA 6010D	Manganese	78.0	mg/L	0.40	10/07/21 16:37	
EPA 6010D	Iron	0.15	mg/L	0.040	10/06/21 18:51	
EPA 6010D	Potassium	9.7	mg/L	0.20	10/06/21 18:51	
EPA 6010D	Sodium	46.3	mg/L	1.0	10/06/21 18:51	
EPA 6010D	Calcium	196	mg/L	1.0	10/06/21 18:51	
EPA 6010D	Magnesium	136	mg/L	0.050	10/06/21 18:51	
EPA 6010D	Hardness, Total(SM 2340B)	1050	mg/L	2.7	10/06/21 18:51	
EPA 6020B	Barium	0.017	mg/L	0.0050	10/08/21 17:45	
EPA 6020B	Beryllium	0.0060	mg/L	0.00050	10/08/21 17:45	
EPA 6020B	Boron	0.32	mg/L	0.040	10/08/21 17:45	
EPA 6020B	Cadmium	0.0095	mg/L	0.00050	10/08/21 17:45	
EPA 6020B	Cobalt	1.3	mg/L	0.050	10/11/21 14:39	
EPA 6020B	Lithium	0.038	mg/L	0.030	10/08/21 17:45	
EPA 6020B	Selenium	0.0022J	mg/L	0.0050	10/08/21 17:45	
SM 2540C-2011	Total Dissolved Solids	1800	mg/L	100	09/30/21 19:01	
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	11.2	mg/L	5.0	10/07/21 19:14	
SM 2320B-2011	Alkalinity, Total as CaCO3	11.2	mg/L	5.0	10/07/21 19:14	
EPA 300.0 Rev 2.1 1993	Chloride	16.2	mg/L	1.0	09/30/21 16:20	
EPA 300.0 Rev 2.1 1993	Fluoride	0.43	mg/L	0.10	09/30/21 16:20	

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SUMMARY OF DETECTION

Project: BRANCH AP-BCD
Pace Project No.: 92563226

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92563226003	**BRGWC-50**					
EPA 300.0 Rev 2.1 1993	Sulfate	1180	mg/L	26.0	10/01/21 04:31	
92563226004	**DUP-2**					
EPA 6010D	Manganese	76.2	mg/L	0.40	10/07/21 16:41	
EPA 6010D	Iron	0.14	mg/L	0.040	10/06/21 18:56	
EPA 6010D	Potassium	9.4	mg/L	0.20	10/06/21 18:56	
EPA 6010D	Sodium	45.2	mg/L	1.0	10/06/21 18:56	
EPA 6010D	Calcium	191	mg/L	1.0	10/06/21 18:56	
EPA 6010D	Magnesium	133	mg/L	0.050	10/06/21 18:56	
EPA 6010D	Hardness, Total(SM 2340B)	1020	mg/L	2.7	10/06/21 18:56	
EPA 6020B	Barium	0.018	mg/L	0.0050	10/08/21 17:51	
EPA 6020B	Beryllium	0.0058	mg/L	0.00050	10/08/21 17:51	
EPA 6020B	Boron	0.32	mg/L	0.040	10/08/21 17:51	
EPA 6020B	Cadmium	0.0099	mg/L	0.00050	10/08/21 17:51	
EPA 6020B	Cobalt	1.3	mg/L	0.050	10/11/21 14:45	
EPA 6020B	Lithium	0.039	mg/L	0.030	10/08/21 17:51	
EPA 6020B	Selenium	0.0022J	mg/L	0.0050	10/08/21 17:51	
SM 2540C-2011	Total Dissolved Solids	1840	mg/L	100	09/30/21 19:01	
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	10.3	mg/L	5.0	10/07/21 19:20	
SM 2320B-2011	Alkalinity, Total as CaCO3	10.3	mg/L	5.0	10/07/21 19:20	
EPA 300.0 Rev 2.1 1993	Chloride	16.2	mg/L	1.0	09/30/21 16:36	
EPA 300.0 Rev 2.1 1993	Fluoride	0.46	mg/L	0.10	09/30/21 16:36	
EPA 300.0 Rev 2.1 1993	Sulfate	1170	mg/L	26.0	10/01/21 04:47	M1
92563226005	**BRGWC-25I**					
	Performed by	CUSTOMER			09/29/21 13:17	
	pH	5.97	Std. Units		09/29/21 13:17	
EPA 6010D	Calcium	38.4	mg/L	1.0	10/06/21 19:10	
EPA 6020B	Barium	0.023	mg/L	0.0050	10/08/21 17:57	
EPA 6020B	Boron	1.1	mg/L	0.040	10/08/21 17:57	
EPA 6020B	Cobalt	0.0029J	mg/L	0.0050	10/08/21 17:57	
EPA 6020B	Molybdenum	0.00089J	mg/L	0.010	10/08/21 17:57	
SM 2540C-2011	Total Dissolved Solids	270	mg/L	10.0	10/03/21 11:39	
EPA 300.0 Rev 2.1 1993	Chloride	4.2	mg/L	1.0	09/30/21 22:10	
EPA 300.0 Rev 2.1 1993	Fluoride	0.15	mg/L	0.10	09/30/21 22:10	
EPA 300.0 Rev 2.1 1993	Sulfate	112	mg/L	3.0	10/01/21 08:27	
92563226006	**BRGWC-27I**					
	Performed by	CUSTOMER			09/29/21 13:17	
	pH	5.82	Std. Units		09/29/21 13:17	
EPA 6010D	Calcium	50.4	mg/L	1.0	10/06/21 19:15	
EPA 6020B	Barium	0.013	mg/L	0.0050	10/08/21 18:18	
EPA 6020B	Boron	0.95	mg/L	0.040	10/08/21 18:18	
EPA 6020B	Cobalt	0.0047J	mg/L	0.0050	10/08/21 18:18	
EPA 6020B	Lithium	0.0011J	mg/L	0.030	10/08/21 18:18	
SM 2540C-2011	Total Dissolved Solids	262	mg/L	10.0	10/03/21 11:40	
EPA 300.0 Rev 2.1 1993	Chloride	3.7	mg/L	1.0	09/30/21 22:26	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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SUMMARY OF DETECTION

Project: BRANCH AP-BCD
Pace Project No.: 92563226

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92563226006	**BRGWC-27I**					
EPA 300.0 Rev 2.1 1993	Fluoride	0.16	mg/L	0.10	09/30/21 22:26	
EPA 300.0 Rev 2.1 1993	Sulfate	137	mg/L	3.0	10/01/21 08:42	
92563226007	**BRGWC-29I**					
	Performed by	CUSTOMER			09/29/21 13:17	
	pH	4.23	Std. Units		09/29/21 13:17	
EPA 6010D	Calcium	59.5	mg/L	1.0	10/06/21 19:20	
EPA 6020B	Barium	0.017	mg/L	0.0050	10/08/21 18:24	
EPA 6020B	Beryllium	0.00079	mg/L	0.00050	10/08/21 18:24	
EPA 6020B	Boron	0.90	mg/L	0.040	10/08/21 18:24	
EPA 6020B	Cobalt	0.0069	mg/L	0.0050	10/08/21 18:24	
EPA 6020B	Lithium	0.0029J	mg/L	0.030	10/08/21 18:24	
EPA 6020B	Selenium	0.0022J	mg/L	0.0050	10/08/21 18:24	
SM 2540C-2011	Total Dissolved Solids	457	mg/L	10.0	10/03/21 11:40	
EPA 300.0 Rev 2.1 1993	Chloride	5.4	mg/L	1.0	09/30/21 22:42	
EPA 300.0 Rev 2.1 1993	Fluoride	0.081J	mg/L	0.10	09/30/21 22:42	
EPA 300.0 Rev 2.1 1993	Sulfate	250	mg/L	6.0	10/01/21 08:58	
92563226008	**BRGWC-30I**					
	Performed by	CUSTOMER			09/29/21 13:17	
	pH	6.33	Std. Units		09/29/21 13:17	
EPA 6010D	Calcium	212	mg/L	1.0	10/06/21 19:25	
EPA 6020B	Barium	0.035	mg/L	0.0050	10/08/21 18:30	
EPA 6020B	Boron	1.7	mg/L	0.040	10/08/21 18:30	
EPA 6020B	Cobalt	0.0010J	mg/L	0.0050	10/08/21 18:30	
EPA 6020B	Lithium	0.023J	mg/L	0.030	10/08/21 18:30	
EPA 6020B	Molybdenum	0.0010J	mg/L	0.010	10/08/21 18:30	
SM 2540C-2011	Total Dissolved Solids	1050	mg/L	20.0	10/03/21 11:40	
EPA 300.0 Rev 2.1 1993	Chloride	3.4	mg/L	1.0	09/30/21 22:58	
EPA 300.0 Rev 2.1 1993	Fluoride	0.11	mg/L	0.10	09/30/21 22:58	
EPA 300.0 Rev 2.1 1993	Sulfate	612	mg/L	14.0	10/01/21 09:14	
92563226009	**BRGWC-32S**					
	Performed by	CUSTOMER			09/29/21 13:17	
	pH	5.82	Std. Units		09/29/21 13:17	
EPA 6010D	Calcium	33.9	mg/L	1.0	10/06/21 19:30	
EPA 6020B	Barium	0.020	mg/L	0.0050	10/08/21 18:35	
EPA 6020B	Boron	0.91	mg/L	0.040	10/08/21 18:35	
EPA 6020B	Chromium	0.0021J	mg/L	0.0050	10/08/21 18:35	
EPA 6020B	Lithium	0.0021J	mg/L	0.030	10/08/21 18:35	
EPA 6020B	Selenium	0.13	mg/L	0.0050	10/08/21 18:35	
SM 2540C-2011	Total Dissolved Solids	375	mg/L	10.0	10/03/21 11:40	
EPA 300.0 Rev 2.1 1993	Chloride	3.6	mg/L	1.0	09/30/21 23:14	
EPA 300.0 Rev 2.1 1993	Sulfate	189	mg/L	4.0	10/01/21 09:29	
92563226012	**DUP-3**					
EPA 6010D	Calcium	209	mg/L	1.0	10/06/21 19:44	

REPORT OF LABORATORY ANALYSIS

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SUMMARY OF DETECTION

Project: BRANCH AP-BCD
Pace Project No.: 92563226

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92563226012	**DUP-3**					
EPA 6020B	Barium	0.034	mg/L	0.0050	10/08/21 18:53	
EPA 6020B	Boron	1.6	mg/L	0.040	10/08/21 18:53	
EPA 6020B	Cobalt	0.0010J	mg/L	0.0050	10/08/21 18:53	
EPA 6020B	Lithium	0.023J	mg/L	0.030	10/08/21 18:53	
EPA 6020B	Molybdenum	0.00096J	mg/L	0.010	10/08/21 18:53	
SM 2540C-2011	Total Dissolved Solids	1140	mg/L	20.0	10/04/21 15:36	
EPA 300.0 Rev 2.1 1993	Chloride	3.5	mg/L	1.0	10/01/21 00:02	
EPA 300.0 Rev 2.1 1993	Fluoride	0.11	mg/L	0.10	10/01/21 00:02	
EPA 300.0 Rev 2.1 1993	Sulfate	609	mg/L	14.0	10/01/21 09:45	
92563226013	**BRGWC-52I**					
	Performed by	CUSTOMER			09/29/21 13:18	
	pH	6.81	Std. Units		09/29/21 13:18	
EPA 6010D	Iron	5.7	mg/L	0.040	10/06/21 19:49	
EPA 6010D	Manganese	0.76	mg/L	0.040	10/06/21 19:49	
EPA 6010D	Potassium	4.8	mg/L	0.20	10/06/21 19:49	
EPA 6010D	Sodium	18.2	mg/L	1.0	10/06/21 19:49	
EPA 6010D	Calcium	39.5	mg/L	1.0	10/06/21 19:49	
EPA 6010D	Magnesium	17.6	mg/L	0.050	10/06/21 19:49	
EPA 6010D	Hardness, Total(SM 2340B)	171	mg/L	2.7	10/06/21 19:49	
EPA 6020B	Barium	0.013	mg/L	0.0050	10/08/21 18:58	
EPA 6020B	Boron	1.4	mg/L	0.040	10/08/21 18:58	
EPA 6020B	Lithium	0.0035J	mg/L	0.030	10/08/21 18:58	
SM 2540C-2011	Total Dissolved Solids	336	mg/L	10.0	10/04/21 15:36	
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	75.4	mg/L	5.0	10/11/21 23:30	
SM 2320B-2011	Alkalinity, Total as CaCO3	75.4	mg/L	5.0	10/11/21 23:30	
EPA 300.0 Rev 2.1 1993	Chloride	5.5	mg/L	1.0	10/01/21 00:18	
EPA 300.0 Rev 2.1 1993	Fluoride	0.12	mg/L	0.10	10/01/21 00:18	
EPA 300.0 Rev 2.1 1993	Sulfate	132	mg/L	3.0	10/01/21 10:01	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: BRANCH AP-BCD
Pace Project No.: 92563226

Sample: BRGWC-45 **Lab ID: 92563226001** Collected: 09/23/21 12:15 Received: 09/23/21 17:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**CUSTOMER**				1		09/24/21 10:45		
pH	**5.95**	Std. Units			1		09/24/21 10:45		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	**32.0**	mg/L	1.0	0.12	1	10/06/21 14:05	10/06/21 18:27	7440-70-2	M1
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00078	1	10/07/21 09:38	10/08/21 17:17	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0011	1	10/07/21 09:38	10/08/21 17:17	7440-38-2	
Barium	**0.064**	mg/L	0.0050	0.00067	1	10/07/21 09:38	10/08/21 17:17	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	10/07/21 09:38	10/08/21 17:17	7440-41-7	
Boron	**0.029J**	mg/L	0.040	0.0086	1	10/07/21 09:38	10/08/21 17:17	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	10/07/21 09:38	10/08/21 17:17	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	10/07/21 09:38	10/08/21 17:17	7440-47-3	
Cobalt	**0.0049J**	mg/L	0.0050	0.00039	1	10/07/21 09:38	10/08/21 17:17	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	10/07/21 09:38	10/08/21 17:17	7439-92-1	
Lithium	**0.0023J**	mg/L	0.030	0.00073	1	10/07/21 09:38	10/08/21 17:17	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	10/07/21 09:38	10/08/21 17:17	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	10/07/21 09:38	10/08/21 17:17	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	10/07/21 09:38	10/08/21 17:17	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.000078	1	10/11/21 15:05	10/12/21 09:45	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**277**	mg/L	10.0	10.0	1		09/30/21 18:57		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**29.3**	mg/L	1.0	0.60	1		09/27/21 08:04	16887-00-6	
Fluoride	**0.060J**	mg/L	0.10	0.050	1		09/27/21 08:04	16984-48-8	
Sulfate	**97.5**	mg/L	2.0	1.0	2		09/27/21 15:33	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: BRANCH AP-BCD
Pace Project No.: 92563226

Sample: BRGWC-47 **Lab ID: 92563226002** Collected: 09/23/21 13:35 Received: 09/23/21 17:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**CUSTOMER**				1		09/24/21 10:46		
pH	**5.74**	Std. Units			1		09/24/21 10:46		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	**336**	mg/L	10.0	1.2	10	10/06/21 14:05	10/07/21 16:32	7440-70-2	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00078	1	10/07/21 09:38	10/08/21 17:22	7440-36-0	
Arsenic	**0.0020J**	mg/L	0.0050	0.0011	1	10/07/21 09:38	10/08/21 17:22	7440-38-2	
Barium	**0.031**	mg/L	0.0050	0.00067	1	10/07/21 09:38	10/08/21 17:22	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	10/07/21 09:38	10/08/21 17:22	7440-41-7	
Boron	**0.47**	mg/L	0.040	0.0086	1	10/07/21 09:38	10/08/21 17:22	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	10/07/21 09:38	10/08/21 17:22	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	10/07/21 09:38	10/08/21 17:22	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	10/07/21 09:38	10/08/21 17:22	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	10/07/21 09:38	10/08/21 17:22	7439-92-1	
Lithium	**0.042**	mg/L	0.030	0.00073	1	10/07/21 09:38	10/08/21 17:22	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	10/07/21 09:38	10/08/21 17:22	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	10/07/21 09:38	10/08/21 17:22	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	10/07/21 09:38	10/08/21 17:22	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.000078	1	10/11/21 15:05	10/12/21 09:47	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**1770**	mg/L	100	100	1		09/30/21 18:58		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**4.3**	mg/L	1.0	0.60	1		09/27/21 08:19	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		09/27/21 08:19	16984-48-8	
Sulfate	**1240**	mg/L	27.0	13.5	27		09/27/21 15:48	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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110 Technology Parkway
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ANALYTICAL RESULTS

Project: BRANCH AP-BCD
Pace Project No.: 92563226

Sample: BRGWC-50 **Lab ID: 92563226003** Collected: 09/27/21 13:05 Received: 09/28/21 10:18 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**CUSTOMER**				1		09/28/21 17:32		
pH	**5.05**	Std. Units			1		09/28/21 17:32		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Manganese	**78.0**	mg/L	0.40	0.043	10	10/06/21 14:05	10/07/21 16:37	7439-96-5	
Iron	**0.15**	mg/L	0.040	0.025	1	10/06/21 14:05	10/06/21 18:51	7439-89-6	
Potassium	**9.7**	mg/L	0.20	0.15	1	10/06/21 14:05	10/06/21 18:51	7440-09-7	
Sodium	**46.3**	mg/L	1.0	0.58	1	10/06/21 14:05	10/06/21 18:51	7440-23-5	
Calcium	**196**	mg/L	1.0	0.12	1	10/06/21 14:05	10/06/21 18:51	7440-70-2	
Magnesium	**136**	mg/L	0.050	0.012	1	10/06/21 14:05	10/06/21 18:51	7439-95-4	
Hardness, Total(SM 2340B)	**1050**	mg/L	2.7	0.35	1	10/06/21 14:05	10/06/21 18:51		
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00078	1	10/07/21 09:38	10/08/21 17:45	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0011	1	10/07/21 09:38	10/08/21 17:45	7440-38-2	
Barium	**0.017**	mg/L	0.0050	0.00067	1	10/07/21 09:38	10/08/21 17:45	7440-39-3	
Beryllium	**0.0060**	mg/L	0.00050	0.000054	1	10/07/21 09:38	10/08/21 17:45	7440-41-7	
Boron	**0.32**	mg/L	0.040	0.0086	1	10/07/21 09:38	10/08/21 17:45	7440-42-8	
Cadmium	**0.0095**	mg/L	0.00050	0.00011	1	10/07/21 09:38	10/08/21 17:45	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	10/07/21 09:38	10/08/21 17:45	7440-47-3	
Cobalt	**1.3**	mg/L	0.050	0.0039	10	10/07/21 09:38	10/11/21 14:39	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	10/07/21 09:38	10/08/21 17:45	7439-92-1	
Lithium	**0.038**	mg/L	0.030	0.00073	1	10/07/21 09:38	10/08/21 17:45	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	10/07/21 09:38	10/08/21 17:45	7439-98-7	
Selenium	**0.0022J**	mg/L	0.0050	0.0014	1	10/07/21 09:38	10/08/21 17:45	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	10/07/21 09:38	10/08/21 17:45	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.000078	1	10/11/21 15:05	10/12/21 09:50	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**1800**	mg/L	100	100	1		09/30/21 19:01		
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville								
Alkalinity,Bicarbonate (CaCO3)	**11.2**	mg/L	5.0	5.0	1		10/07/21 19:14		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		10/07/21 19:14		
Alkalinity, Total as CaCO3	**11.2**	mg/L	5.0	5.0	1		10/07/21 19:14		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: BRANCH AP-BCD
Pace Project No.: 92563226

Sample: BRGWC-50 **Lab ID: 92563226003** Collected: 09/27/21 13:05 Received: 09/28/21 10:18 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**16.2**	mg/L	1.0	0.60	1		09/30/21 16:20	16887-00-6	
Fluoride	**0.43**	mg/L	0.10	0.050	1		09/30/21 16:20	16984-48-8	
Sulfate	**1180**	mg/L	26.0	13.0	26		10/01/21 04:31	14808-79-8	
353.2 Nitrogen, NO2/NO3 pres.	Analytical Method: EPA 353.2 Rev 2.0 1993 Pace Analytical Services - Asheville								
Nitrogen, NO2 plus NO3	ND	mg/L	0.040	0.017	1		10/11/21 11:31		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: BRANCH AP-BCD
Pace Project No.: 92563226

Sample: DUP-2 **Lab ID: 92563226004** Collected: 09/27/21 00:00 Received: 09/28/21 10:18 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Manganese	**76.2**	mg/L	0.40	0.043	10	10/06/21 14:05	10/07/21 16:41	7439-96-5	
Iron	**0.14**	mg/L	0.040	0.025	1	10/06/21 14:05	10/06/21 18:56	7439-89-6	
Potassium	**9.4**	mg/L	0.20	0.15	1	10/06/21 14:05	10/06/21 18:56	7440-09-7	
Sodium	**45.2**	mg/L	1.0	0.58	1	10/06/21 14:05	10/06/21 18:56	7440-23-5	
Calcium	**191**	mg/L	1.0	0.12	1	10/06/21 14:05	10/06/21 18:56	7440-70-2	
Magnesium	**133**	mg/L	0.050	0.012	1	10/06/21 14:05	10/06/21 18:56	7439-95-4	
Hardness, Total(SM 2340B)	**1020**	mg/L	2.7	0.35	1	10/06/21 14:05	10/06/21 18:56		
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00078	1	10/07/21 09:38	10/08/21 17:51	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0011	1	10/07/21 09:38	10/08/21 17:51	7440-38-2	
Barium	**0.018**	mg/L	0.0050	0.00067	1	10/07/21 09:38	10/08/21 17:51	7440-39-3	
Beryllium	**0.0058**	mg/L	0.00050	0.000054	1	10/07/21 09:38	10/08/21 17:51	7440-41-7	
Boron	**0.32**	mg/L	0.040	0.0086	1	10/07/21 09:38	10/08/21 17:51	7440-42-8	
Cadmium	**0.0099**	mg/L	0.00050	0.00011	1	10/07/21 09:38	10/08/21 17:51	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	10/07/21 09:38	10/08/21 17:51	7440-47-3	
Cobalt	**1.3**	mg/L	0.050	0.0039	10	10/07/21 09:38	10/11/21 14:45	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	10/07/21 09:38	10/08/21 17:51	7439-92-1	
Lithium	**0.039**	mg/L	0.030	0.00073	1	10/07/21 09:38	10/08/21 17:51	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	10/07/21 09:38	10/08/21 17:51	7439-98-7	
Selenium	**0.0022J**	mg/L	0.0050	0.0014	1	10/07/21 09:38	10/08/21 17:51	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	10/07/21 09:38	10/08/21 17:51	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.000078	1	10/11/21 15:05	10/12/21 10:02	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**1840**	mg/L	100	100	1		09/30/21 19:01		
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville								
Alkalinity,Bicarbonate (CaCO3)	**10.3**	mg/L	5.0	5.0	1		10/07/21 19:20		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		10/07/21 19:20		
Alkalinity, Total as CaCO3	**10.3**	mg/L	5.0	5.0	1		10/07/21 19:20		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**16.2**	mg/L	1.0	0.60	1		09/30/21 16:36	16887-00-6	
Fluoride	**0.46**	mg/L	0.10	0.050	1		09/30/21 16:36	16984-48-8	
Sulfate	**1170**	mg/L	26.0	13.0	26		10/01/21 04:47	14808-79-8	M1

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: BRANCH AP-BCD
Pace Project No.: 92563226

Sample: BRGWC-25I **Lab ID: 92563226005** Collected: 09/28/21 11:26 Received: 09/29/21 11:57 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**CUSTOMER**				1		09/29/21 13:17		
pH	**5.97**	Std. Units			1		09/29/21 13:17		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	**38.4**	mg/L	1.0	0.12	1	10/06/21 14:05	10/06/21 19:10	7440-70-2	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00078	1	10/07/21 09:38	10/08/21 17:57	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0011	1	10/07/21 09:38	10/08/21 17:57	7440-38-2	
Barium	**0.023**	mg/L	0.0050	0.00067	1	10/07/21 09:38	10/08/21 17:57	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	10/07/21 09:38	10/08/21 17:57	7440-41-7	
Boron	**1.1**	mg/L	0.040	0.0086	1	10/07/21 09:38	10/08/21 17:57	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	10/07/21 09:38	10/08/21 17:57	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	10/07/21 09:38	10/08/21 17:57	7440-47-3	
Cobalt	**0.0029J**	mg/L	0.0050	0.00039	1	10/07/21 09:38	10/08/21 17:57	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	10/07/21 09:38	10/08/21 17:57	7439-92-1	
Lithium	ND	mg/L	0.030	0.00073	1	10/07/21 09:38	10/08/21 17:57	7439-93-2	
Molybdenum	**0.00089J**	mg/L	0.010	0.00074	1	10/07/21 09:38	10/08/21 17:57	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	10/07/21 09:38	10/08/21 17:57	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	10/07/21 09:38	10/08/21 17:57	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.000078	1	10/11/21 15:05	10/12/21 10:04	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**270**	mg/L	10.0	10.0	1		10/03/21 11:39		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**4.2**	mg/L	1.0	0.60	1		09/30/21 22:10	16887-00-6	
Fluoride	**0.15**	mg/L	0.10	0.050	1		09/30/21 22:10	16984-48-8	
Sulfate	**112**	mg/L	3.0	1.5	3		10/01/21 08:27	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: BRANCH AP-BCD
Pace Project No.: 92563226

Sample: BRGWC-27I **Lab ID: 92563226006** Collected: 09/28/21 14:30 Received: 09/29/21 11:57 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**CUSTOMER**				1		09/29/21 13:17		
pH	**5.82**	Std. Units			1		09/29/21 13:17		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	**50.4**	mg/L	1.0	0.12	1	10/06/21 14:05	10/06/21 19:15	7440-70-2	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00078	1	10/07/21 09:38	10/08/21 18:18	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0011	1	10/07/21 09:38	10/08/21 18:18	7440-38-2	
Barium	**0.013**	mg/L	0.0050	0.00067	1	10/07/21 09:38	10/08/21 18:18	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	10/07/21 09:38	10/08/21 18:18	7440-41-7	
Boron	**0.95**	mg/L	0.040	0.0086	1	10/07/21 09:38	10/08/21 18:18	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	10/07/21 09:38	10/08/21 18:18	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	10/07/21 09:38	10/08/21 18:18	7440-47-3	
Cobalt	**0.0047J**	mg/L	0.0050	0.00039	1	10/07/21 09:38	10/08/21 18:18	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	10/07/21 09:38	10/08/21 18:18	7439-92-1	
Lithium	**0.0011J**	mg/L	0.030	0.00073	1	10/07/21 09:38	10/08/21 18:18	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	10/07/21 09:38	10/08/21 18:18	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	10/07/21 09:38	10/08/21 18:18	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	10/07/21 09:38	10/08/21 18:18	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.000078	1	10/11/21 15:05	10/12/21 10:12	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**262**	mg/L	10.0	10.0	1		10/03/21 11:40		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**3.7**	mg/L	1.0	0.60	1		09/30/21 22:26	16887-00-6	
Fluoride	**0.16**	mg/L	0.10	0.050	1		09/30/21 22:26	16984-48-8	
Sulfate	**137**	mg/L	3.0	1.5	3		10/01/21 08:42	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: BRANCH AP-BCD
Pace Project No.: 92563226

Sample: BRGWC-29I **Lab ID: 92563226007** Collected: 09/28/21 12:51 Received: 09/29/21 11:57 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**CUSTOMER**				1		09/29/21 13:17		
pH	**4.23**	Std. Units			1		09/29/21 13:17		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	**59.5**	mg/L	1.0	0.12	1	10/06/21 14:05	10/06/21 19:20	7440-70-2	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00078	1	10/07/21 09:38	10/08/21 18:24	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0011	1	10/07/21 09:38	10/08/21 18:24	7440-38-2	
Barium	**0.017**	mg/L	0.0050	0.00067	1	10/07/21 09:38	10/08/21 18:24	7440-39-3	
Beryllium	**0.00079**	mg/L	0.00050	0.000054	1	10/07/21 09:38	10/08/21 18:24	7440-41-7	
Boron	**0.90**	mg/L	0.040	0.0086	1	10/07/21 09:38	10/08/21 18:24	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	10/07/21 09:38	10/08/21 18:24	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	10/07/21 09:38	10/08/21 18:24	7440-47-3	
Cobalt	**0.0069**	mg/L	0.0050	0.00039	1	10/07/21 09:38	10/08/21 18:24	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	10/07/21 09:38	10/08/21 18:24	7439-92-1	
Lithium	**0.0029J**	mg/L	0.030	0.00073	1	10/07/21 09:38	10/08/21 18:24	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	10/07/21 09:38	10/08/21 18:24	7439-98-7	
Selenium	**0.0022J**	mg/L	0.0050	0.0014	1	10/07/21 09:38	10/08/21 18:24	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	10/07/21 09:38	10/08/21 18:24	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.000078	1	10/11/21 15:05	10/12/21 10:15	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**457**	mg/L	10.0	10.0	1		10/03/21 11:40		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**5.4**	mg/L	1.0	0.60	1		09/30/21 22:42	16887-00-6	
Fluoride	**0.081J**	mg/L	0.10	0.050	1		09/30/21 22:42	16984-48-8	
Sulfate	**250**	mg/L	6.0	3.0	6		10/01/21 08:58	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: BRANCH AP-BCD
Pace Project No.: 92563226

Sample: BRGWC-30I **Lab ID: 92563226008** Collected: 09/28/21 16:30 Received: 09/29/21 11:57 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**CUSTOMER**				1		09/29/21 13:17		
pH	**6.33**	Std. Units			1		09/29/21 13:17		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	**212**	mg/L	1.0	0.12	1	10/06/21 14:05	10/06/21 19:25	7440-70-2	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00078	1	10/07/21 09:38	10/08/21 18:30	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0011	1	10/07/21 09:38	10/08/21 18:30	7440-38-2	
Barium	**0.035**	mg/L	0.0050	0.00067	1	10/07/21 09:38	10/08/21 18:30	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	10/07/21 09:38	10/08/21 18:30	7440-41-7	
Boron	**1.7**	mg/L	0.040	0.0086	1	10/07/21 09:38	10/08/21 18:30	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	10/07/21 09:38	10/08/21 18:30	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	10/07/21 09:38	10/08/21 18:30	7440-47-3	
Cobalt	**0.0010J**	mg/L	0.0050	0.00039	1	10/07/21 09:38	10/08/21 18:30	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	10/07/21 09:38	10/08/21 18:30	7439-92-1	
Lithium	**0.023J**	mg/L	0.030	0.00073	1	10/07/21 09:38	10/08/21 18:30	7439-93-2	
Molybdenum	**0.0010J**	mg/L	0.010	0.00074	1	10/07/21 09:38	10/08/21 18:30	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	10/07/21 09:38	10/08/21 18:30	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	10/07/21 09:38	10/08/21 18:30	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.000078	1	10/11/21 15:05	10/12/21 10:18	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**1050**	mg/L	20.0	20.0	1		10/03/21 11:40		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**3.4**	mg/L	1.0	0.60	1		09/30/21 22:58	16887-00-6	
Fluoride	**0.11**	mg/L	0.10	0.050	1		09/30/21 22:58	16984-48-8	
Sulfate	**612**	mg/L	14.0	7.0	14		10/01/21 09:14	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: BRANCH AP-BCD
Pace Project No.: 92563226

Sample: BRGWC-32S **Lab ID: 92563226009** Collected: 09/28/21 16:40 Received: 09/29/21 11:57 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**CUSTOMER**				1		09/29/21 13:17		
pH	**5.82**	Std. Units			1		09/29/21 13:17		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	**33.9**	mg/L	1.0	0.12	1	10/06/21 14:05	10/06/21 19:30	7440-70-2	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00078	1	10/07/21 09:38	10/08/21 18:35	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0011	1	10/07/21 09:38	10/08/21 18:35	7440-38-2	
Barium	**0.020**	mg/L	0.0050	0.00067	1	10/07/21 09:38	10/08/21 18:35	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	10/07/21 09:38	10/08/21 18:35	7440-41-7	
Boron	**0.91**	mg/L	0.040	0.0086	1	10/07/21 09:38	10/08/21 18:35	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	10/07/21 09:38	10/08/21 18:35	7440-43-9	
Chromium	**0.0021J**	mg/L	0.0050	0.0011	1	10/07/21 09:38	10/08/21 18:35	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	10/07/21 09:38	10/08/21 18:35	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	10/07/21 09:38	10/08/21 18:35	7439-92-1	
Lithium	**0.0021J**	mg/L	0.030	0.00073	1	10/07/21 09:38	10/08/21 18:35	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	10/07/21 09:38	10/08/21 18:35	7439-98-7	
Selenium	**0.13**	mg/L	0.0050	0.0014	1	10/07/21 09:38	10/08/21 18:35	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	10/07/21 09:38	10/08/21 18:35	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.000078	1	10/11/21 15:05	10/12/21 10:20	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**375**	mg/L	10.0	10.0	1		10/03/21 11:40		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**3.6**	mg/L	1.0	0.60	1		09/30/21 23:14	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		09/30/21 23:14	16984-48-8	
Sulfate	**189**	mg/L	4.0	2.0	4		10/01/21 09:29	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: BRANCH AP-BCD
Pace Project No.: 92563226

Sample: EB-2 **Lab ID: 92563226010** Collected: 09/28/21 14:50 Received: 09/29/21 11:57 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	ND	mg/L	1.0	0.12	1	10/06/21 14:05	10/06/21 19:34	7440-70-2	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00078	1	10/07/21 09:38	10/08/21 18:41	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0011	1	10/07/21 09:38	10/08/21 18:41	7440-38-2	
Barium	ND	mg/L	0.0050	0.00067	1	10/07/21 09:38	10/08/21 18:41	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	10/07/21 09:38	10/08/21 18:41	7440-41-7	
Boron	ND	mg/L	0.040	0.0086	1	10/07/21 09:38	10/08/21 18:41	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	10/07/21 09:38	10/08/21 18:41	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	10/07/21 09:38	10/08/21 18:41	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	10/07/21 09:38	10/08/21 18:41	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	10/07/21 09:38	10/08/21 18:41	7439-92-1	
Lithium	ND	mg/L	0.030	0.00073	1	10/07/21 09:38	10/08/21 18:41	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	10/07/21 09:38	10/08/21 18:41	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	10/07/21 09:38	10/08/21 18:41	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	10/07/21 09:38	10/08/21 18:41	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.000078	1	10/11/21 15:05	10/12/21 10:23	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	ND	mg/L	10.0	10.0	1		10/03/21 11:40		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	ND	mg/L	1.0	0.60	1		09/30/21 23:30	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		09/30/21 23:30	16984-48-8	
Sulfate	ND	mg/L	1.0	0.50	1		09/30/21 23:30	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: BRANCH AP-BCD
Pace Project No.: 92563226

Sample: FB-2 **Lab ID: 92563226011** Collected: 09/28/21 13:15 Received: 09/29/21 11:57 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	ND	mg/L	1.0	0.12	1	10/06/21 14:05	10/06/21 19:39	7440-70-2	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00078	1	10/07/21 09:38	10/08/21 18:47	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0011	1	10/07/21 09:38	10/08/21 18:47	7440-38-2	
Barium	ND	mg/L	0.0050	0.00067	1	10/07/21 09:38	10/08/21 18:47	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	10/07/21 09:38	10/08/21 18:47	7440-41-7	
Boron	ND	mg/L	0.040	0.0086	1	10/07/21 09:38	10/08/21 18:47	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	10/07/21 09:38	10/08/21 18:47	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	10/07/21 09:38	10/08/21 18:47	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	10/07/21 09:38	10/08/21 18:47	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	10/07/21 09:38	10/08/21 18:47	7439-92-1	
Lithium	ND	mg/L	0.030	0.00073	1	10/07/21 09:38	10/08/21 18:47	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	10/07/21 09:38	10/08/21 18:47	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	10/07/21 09:38	10/08/21 18:47	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	10/07/21 09:38	10/08/21 18:47	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.000078	1	10/11/21 15:05	10/12/21 10:25	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	ND	mg/L	10.0	10.0	1		10/03/21 11:40		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	ND	mg/L	1.0	0.60	1		09/30/21 23:46	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		09/30/21 23:46	16984-48-8	
Sulfate	ND	mg/L	1.0	0.50	1		09/30/21 23:46	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: BRANCH AP-BCD
Pace Project No.: 92563226

Sample: DUP-3 **Lab ID: 92563226012** Collected: 09/28/21 00:00 Received: 09/29/21 11:57 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	**209**	mg/L	1.0	0.12	1	10/06/21 14:05	10/06/21 19:44	7440-70-2	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00078	1	10/07/21 09:38	10/08/21 18:53	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0011	1	10/07/21 09:38	10/08/21 18:53	7440-38-2	
Barium	**0.034**	mg/L	0.0050	0.00067	1	10/07/21 09:38	10/08/21 18:53	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	10/07/21 09:38	10/08/21 18:53	7440-41-7	
Boron	**1.6**	mg/L	0.040	0.0086	1	10/07/21 09:38	10/08/21 18:53	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	10/07/21 09:38	10/08/21 18:53	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	10/07/21 09:38	10/08/21 18:53	7440-47-3	
Cobalt	**0.0010J**	mg/L	0.0050	0.00039	1	10/07/21 09:38	10/08/21 18:53	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	10/07/21 09:38	10/08/21 18:53	7439-92-1	
Lithium	**0.023J**	mg/L	0.030	0.00073	1	10/07/21 09:38	10/08/21 18:53	7439-93-2	
Molybdenum	**0.00096J**	mg/L	0.010	0.00074	1	10/07/21 09:38	10/08/21 18:53	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	10/07/21 09:38	10/08/21 18:53	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	10/07/21 09:38	10/08/21 18:53	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.000078	1	10/11/21 15:05	10/12/21 10:28	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**1140**	mg/L	20.0	20.0	1		10/04/21 15:36		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**3.5**	mg/L	1.0	0.60	1		10/01/21 00:02	16887-00-6	
Fluoride	**0.11**	mg/L	0.10	0.050	1		10/01/21 00:02	16984-48-8	
Sulfate	**609**	mg/L	14.0	7.0	14		10/01/21 09:45	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: BRANCH AP-BCD
Pace Project No.: 92563226

Sample: BRGWC-52I **Lab ID: 92563226013** Collected: 09/28/21 16:16 Received: 09/29/21 11:57 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**CUSTOMER**				1		09/29/21 13:18		
pH	**6.81**	Std. Units			1		09/29/21 13:18		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Iron	**5.7**	mg/L	0.040	0.025	1	10/06/21 14:05	10/06/21 19:49	7439-89-6	
Manganese	**0.76**	mg/L	0.040	0.0043	1	10/06/21 14:05	10/06/21 19:49	7439-96-5	
Potassium	**4.8**	mg/L	0.20	0.15	1	10/06/21 14:05	10/06/21 19:49	7440-09-7	
Sodium	**18.2**	mg/L	1.0	0.58	1	10/06/21 14:05	10/06/21 19:49	7440-23-5	
Calcium	**39.5**	mg/L	1.0	0.12	1	10/06/21 14:05	10/06/21 19:49	7440-70-2	
Magnesium	**17.6**	mg/L	0.050	0.012	1	10/06/21 14:05	10/06/21 19:49	7439-95-4	
Hardness, Total(SM 2340B)	**171**	mg/L	2.7	0.35	1	10/06/21 14:05	10/06/21 19:49		
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00078	1	10/07/21 09:38	10/08/21 18:58	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0011	1	10/07/21 09:38	10/08/21 18:58	7440-38-2	
Barium	**0.013**	mg/L	0.0050	0.00067	1	10/07/21 09:38	10/08/21 18:58	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	10/07/21 09:38	10/08/21 18:58	7440-41-7	
Boron	**1.4**	mg/L	0.040	0.0086	1	10/07/21 09:38	10/08/21 18:58	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	10/07/21 09:38	10/08/21 18:58	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	10/07/21 09:38	10/08/21 18:58	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	10/07/21 09:38	10/08/21 18:58	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	10/07/21 09:38	10/08/21 18:58	7439-92-1	
Lithium	**0.0035J**	mg/L	0.030	0.00073	1	10/07/21 09:38	10/08/21 18:58	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	10/07/21 09:38	10/08/21 18:58	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	10/07/21 09:38	10/08/21 18:58	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	10/07/21 09:38	10/08/21 18:58	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.000078	1	10/11/21 15:05	10/12/21 10:31	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**336**	mg/L	10.0	10.0	1		10/04/21 15:36		
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville								
Alkalinity,Bicarbonate (CaCO3)	**75.4**	mg/L	5.0	5.0	1		10/11/21 23:30		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		10/11/21 23:30		
Alkalinity, Total as CaCO3	**75.4**	mg/L	5.0	5.0	1		10/11/21 23:30		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: BRANCH AP-BCD
Pace Project No.: 92563226

Sample: BRGWC-52I **Lab ID: 92563226013** Collected: 09/28/21 16:16 Received: 09/29/21 11:57 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**5.5**	mg/L	1.0	0.60	1		10/01/21 00:18	16887-00-6	
Fluoride	**0.12**	mg/L	0.10	0.050	1		10/01/21 00:18	16984-48-8	
Sulfate	**132**	mg/L	3.0	1.5	3		10/01/21 10:01	14808-79-8	
353.2 Nitrogen, NO2/NO3 pres.	Analytical Method: EPA 353.2 Rev 2.0 1993 Pace Analytical Services - Asheville								
Nitrogen, NO2 plus NO3	ND	mg/L	0.040	0.017	1		10/11/21 12:36		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: BRANCH AP-BCD
Pace Project No.: 92563226

Sample: FB-3 **Lab ID: 92563226014** Collected: 09/28/21 16:15 Received: 09/29/21 11:57 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Iron	ND	mg/L	0.040	0.025	1	10/06/21 14:05	10/06/21 20:08	7439-89-6	
Manganese	ND	mg/L	0.040	0.0043	1	10/06/21 14:05	10/06/21 20:08	7439-96-5	
Potassium	ND	mg/L	0.20	0.15	1	10/06/21 14:05	10/06/21 20:08	7440-09-7	
Sodium	ND	mg/L	1.0	0.58	1	10/06/21 14:05	10/06/21 20:08	7440-23-5	
Calcium	ND	mg/L	1.0	0.12	1	10/06/21 14:05	10/06/21 20:08	7440-70-2	
Magnesium	ND	mg/L	0.050	0.012	1	10/06/21 14:05	10/06/21 20:08	7439-95-4	
Hardness, Total(SM 2340B)	ND	mg/L	2.7	0.35	1	10/06/21 14:05	10/06/21 20:08		
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00078	1	10/07/21 09:38	10/08/21 19:10	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0011	1	10/07/21 09:38	10/08/21 19:10	7440-38-2	
Barium	ND	mg/L	0.0050	0.00067	1	10/07/21 09:38	10/08/21 19:10	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	10/07/21 09:38	10/08/21 19:10	7440-41-7	
Boron	ND	mg/L	0.040	0.0086	1	10/07/21 09:38	10/08/21 19:10	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	10/07/21 09:38	10/08/21 19:10	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	10/07/21 09:38	10/08/21 19:10	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	10/07/21 09:38	10/08/21 19:10	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	10/07/21 09:38	10/08/21 19:10	7439-92-1	
Lithium	ND	mg/L	0.030	0.00073	1	10/07/21 09:38	10/08/21 19:10	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	10/07/21 09:38	10/08/21 19:10	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	10/07/21 09:38	10/08/21 19:10	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	10/07/21 09:38	10/08/21 19:10	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.000078	1	10/11/21 15:05	10/12/21 10:33	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	ND	mg/L	10.0	10.0	1		10/04/21 15:36		
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville								
Alkalinity,Bicarbonate (CaCO3)	ND	mg/L	5.0	5.0	1		10/11/21 23:38		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		10/11/21 23:38		
Alkalinity, Total as CaCO3	ND	mg/L	5.0	5.0	1		10/11/21 23:38		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	ND	mg/L	1.0	0.60	1		10/01/21 00:34	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		10/01/21 00:34	16984-48-8	
Sulfate	ND	mg/L	1.0	0.50	1		10/01/21 00:34	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: BRANCH AP-BCD
Pace Project No.: 92563226

Sample: EB-3 **Lab ID: 92563226015** Collected: 09/28/21 16:40 Received: 09/29/21 11:57 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Iron	ND	mg/L	0.040	0.025	1	10/06/21 14:05	10/06/21 20:13	7439-89-6	
Manganese	ND	mg/L	0.040	0.0043	1	10/06/21 14:05	10/06/21 20:13	7439-96-5	
Potassium	ND	mg/L	0.20	0.15	1	10/06/21 14:05	10/06/21 20:13	7440-09-7	
Sodium	ND	mg/L	1.0	0.58	1	10/06/21 14:05	10/06/21 20:13	7440-23-5	
Calcium	ND	mg/L	1.0	0.12	1	10/06/21 14:05	10/06/21 20:13	7440-70-2	
Magnesium	ND	mg/L	0.050	0.012	1	10/06/21 14:05	10/06/21 20:13	7439-95-4	
Hardness, Total(SM 2340B)	ND	mg/L	2.7	0.35	1	10/06/21 14:05	10/06/21 20:13		
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00078	1	10/07/21 09:38	10/08/21 19:27	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0011	1	10/07/21 09:38	10/08/21 19:27	7440-38-2	
Barium	ND	mg/L	0.0050	0.00067	1	10/07/21 09:38	10/08/21 19:27	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	10/07/21 09:38	10/08/21 19:27	7440-41-7	
Boron	ND	mg/L	0.040	0.0086	1	10/07/21 09:38	10/08/21 19:27	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	10/07/21 09:38	10/08/21 19:27	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	10/07/21 09:38	10/08/21 19:27	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	10/07/21 09:38	10/08/21 19:27	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	10/07/21 09:38	10/08/21 19:27	7439-92-1	
Lithium	ND	mg/L	0.030	0.00073	1	10/07/21 09:38	10/08/21 19:27	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	10/07/21 09:38	10/08/21 19:27	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	10/07/21 09:38	10/08/21 19:27	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	10/07/21 09:38	10/08/21 19:27	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.000078	1	10/11/21 15:05	10/12/21 10:36	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	ND	mg/L	10.0	10.0	1		10/04/21 15:36		
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville								
Alkalinity,Bicarbonate (CaCO3)	ND	mg/L	5.0	5.0	1		10/11/21 23:41		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		10/11/21 23:41		
Alkalinity, Total as CaCO3	ND	mg/L	5.0	5.0	1		10/11/21 23:41		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	ND	mg/L	1.0	0.60	1		10/01/21 01:53	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		10/01/21 01:53	16984-48-8	
Sulfate	ND	mg/L	1.0	0.50	1		10/01/21 01:53	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: BRANCH AP-BCD
Pace Project No.: 92563226

QC Batch: 651173
QC Batch Method: EPA 3010A
Analysis Method: EPA 6010D
Analysis Description: 6010D ATL
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92563226001, 92563226002, 92563226003, 92563226004, 92563226005, 92563226006, 92563226007, 92563226008, 92563226009, 92563226010, 92563226011, 92563226012, 92563226013, 92563226014, 92563226015

METHOD BLANK: 3415002 Matrix: Water
Associated Lab Samples: 92563226001, 92563226002, 92563226003, 92563226004, 92563226005, 92563226006, 92563226007, 92563226008, 92563226009, 92563226010, 92563226011, 92563226012, 92563226013, 92563226014, 92563226015

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium	mg/L	ND	1.0	0.12	10/06/21 18:17	
Hardness, Total(SM 2340B)	mg/L	ND	2.7	0.35	10/06/21 18:17	
Iron	mg/L	ND	0.040	0.025	10/06/21 18:17	
Magnesium	mg/L	ND	0.050	0.012	10/06/21 18:17	
Manganese	mg/L	ND	0.040	0.0043	10/06/21 18:17	
Potassium	mg/L	ND	0.20	0.15	10/06/21 18:17	
Sodium	mg/L	ND	1.0	0.58	10/06/21 18:17	

LABORATORY CONTROL SAMPLE: 3415003

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium	mg/L	1	0.99J	99	80-120	
Hardness, Total(SM 2340B)	mg/L	6.6	6.7	102	80-120	
Iron	mg/L	1	1.0	104	80-120	
Magnesium	mg/L	1	1.0	103	80-120	
Manganese	mg/L	1	1.0	102	80-120	
Potassium	mg/L	1	0.92	92	80-120	
Sodium	mg/L	1	0.99J	99	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3415004 3415005

Parameter	Units	92563226001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Calcium	mg/L	32.0	1	1	34.1	34.7	206	267	75-125	2	20	M1
Hardness, Total(SM 2340B)	mg/L	144	6.6	6.6	154	157	165	211	75-125	2	20	
Iron	mg/L	0.66	1	1	1.7	1.7	107	108	75-125	1	20	
Magnesium	mg/L	15.4	1	1	16.8	17.2	141	177	75-125	2	20	M1
Manganese	mg/L	0.30	1	1	1.3	1.3	100	102	75-125	1	20	
Potassium	mg/L	3.4	1	1	4.4	4.5	106	117	75-125	2	20	
Sodium	mg/L	13.9	1	1	15.3	15.7	142	176	75-125	2	20	M1

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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QUALITY CONTROL DATA

Project: BRANCH AP-BCD
Pace Project No.: 92563226

QC Batch: 651350
QC Batch Method: EPA 3005A
Analysis Method: EPA 6020B
Analysis Description: 6020 MET
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92563226001, 92563226002, 92563226003, 92563226004, 92563226005, 92563226006, 92563226007, 92563226008, 92563226009, 92563226010, 92563226011, 92563226012, 92563226013, 92563226014, 92563226015

METHOD BLANK: 3415849 Matrix: Water
Associated Lab Samples: 92563226001, 92563226002, 92563226003, 92563226004, 92563226005, 92563226006, 92563226007, 92563226008, 92563226009, 92563226010, 92563226011, 92563226012, 92563226013, 92563226014, 92563226015

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	ND	0.0030	0.00078	10/08/21 17:05	
Arsenic	mg/L	ND	0.0050	0.0011	10/08/21 17:05	
Barium	mg/L	ND	0.0050	0.00067	10/08/21 17:05	
Beryllium	mg/L	ND	0.00050	0.000054	10/08/21 17:05	
Boron	mg/L	ND	0.040	0.0086	10/08/21 17:05	
Cadmium	mg/L	ND	0.00050	0.00011	10/08/21 17:05	
Chromium	mg/L	ND	0.0050	0.0011	10/08/21 17:05	
Cobalt	mg/L	ND	0.0050	0.00039	10/08/21 17:05	
Lead	mg/L	ND	0.0010	0.00089	10/08/21 17:05	
Lithium	mg/L	ND	0.030	0.00073	10/08/21 17:05	
Molybdenum	mg/L	ND	0.010	0.00074	10/08/21 17:05	
Selenium	mg/L	ND	0.0050	0.0014	10/08/21 17:05	
Thallium	mg/L	ND	0.0010	0.00018	10/08/21 17:05	

LABORATORY CONTROL SAMPLE: 3415850

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.1	0.10	103	80-120	
Arsenic	mg/L	0.1	0.096	96	80-120	
Barium	mg/L	0.1	0.097	97	80-120	
Beryllium	mg/L	0.1	0.093	93	80-120	
Boron	mg/L	1	0.97	97	80-120	
Cadmium	mg/L	0.1	0.10	102	80-120	
Chromium	mg/L	0.1	0.092	92	80-120	
Cobalt	mg/L	0.1	0.090	90	80-120	
Lead	mg/L	0.1	0.093	93	80-120	
Lithium	mg/L	0.1	0.096	96	80-120	
Molybdenum	mg/L	0.1	0.098	98	80-120	
Selenium	mg/L	0.1	0.096	96	80-120	
Thallium	mg/L	0.1	0.093	93	80-120	

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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: BRANCH AP-BCD
Pace Project No.: 92563226

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3415851 3415852

Parameter	Units	92563226002 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	110	75-125	2	20	
Arsenic	mg/L	0.0020J	0.1	0.1	0.10	0.10	103	102	75-125	0	20	
Barium	mg/L	0.031	0.1	0.1	0.13	0.13	97	101	75-125	3	20	
Beryllium	mg/L	ND	0.1	0.1	0.093	0.094	93	94	75-125	1	20	
Boron	mg/L	0.47	1	1	1.4	1.4	89	92	75-125	2	20	
Cadmium	mg/L	ND	0.1	0.1	0.098	0.10	98	101	75-125	3	20	
Chromium	mg/L	ND	0.1	0.1	0.099	0.099	98	99	75-125	0	20	
Cobalt	mg/L	ND	0.1	0.1	0.093	0.094	93	94	75-125	1	20	
Lead	mg/L	ND	0.1	0.1	0.093	0.094	93	94	75-125	1	20	
Lithium	mg/L	0.042	0.1	0.1	0.13	0.14	92	95	75-125	2	20	
Molybdenum	mg/L	ND	0.1	0.1	0.10	0.10	100	104	75-125	4	20	
Selenium	mg/L	ND	0.1	0.1	0.11	0.11	107	105	75-125	2	20	
Thallium	mg/L	ND	0.1	0.1	0.094	0.095	94	94	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: BRANCH AP-BCD
Pace Project No.: 92563226

QC Batch: 652043
QC Batch Method: EPA 7470A
Analysis Method: EPA 7470A
Analysis Description: 7470 Mercury
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92563226001, 92563226002, 92563226003, 92563226004, 92563226005, 92563226006, 92563226007, 92563226008, 92563226009, 92563226010, 92563226011, 92563226012, 92563226013, 92563226014, 92563226015

METHOD BLANK: 3419327 Matrix: Water
Associated Lab Samples: 92563226001, 92563226002, 92563226003, 92563226004, 92563226005, 92563226006, 92563226007, 92563226008, 92563226009, 92563226010, 92563226011, 92563226012, 92563226013, 92563226014, 92563226015

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	ND	0.00020	0.000078	10/12/21 09:39	

LABORATORY CONTROL SAMPLE: 3419328

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.0025	0.0024	97	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3419329 3419330

Parameter	Units	92563226003 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	0.0022	0.0021	85	80	75-125	5	20	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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QUALITY CONTROL DATA

Project: BRANCH AP-BCD
Pace Project No.: 92563226

QC Batch: 650109
QC Batch Method: SM 2540C-2011
Analysis Method: SM 2540C-2011
Analysis Description: 2540C Total Dissolved Solids
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92563226001, 92563226002, 92563226003, 92563226004

METHOD BLANK: 3409662 Matrix: Water
Associated Lab Samples: 92563226001, 92563226002, 92563226003, 92563226004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	10.0	10.0	09/30/21 18:57	

LABORATORY CONTROL SAMPLE: 3409663

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	396	99	90-111	

SAMPLE DUPLICATE: 3409664

Parameter	Units	92563226001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	277	284	2	10	

SAMPLE DUPLICATE: 3409665

Parameter	Units	92563599002 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	78.0	85.0	9	10	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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(770)734-4200

QUALITY CONTROL DATA

Project: BRANCH AP-BCD
Pace Project No.: 92563226

QC Batch: 650392
QC Batch Method: SM 2540C-2011
Analysis Method: SM 2540C-2011
Analysis Description: 2540C Total Dissolved Solids
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92563226005, 92563226006, 92563226007, 92563226008, 92563226009, 92563226010, 92563226011

METHOD BLANK: 3411236 Matrix: Water
Associated Lab Samples: 92563226005, 92563226006, 92563226007, 92563226008, 92563226009, 92563226010, 92563226011

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	10.0	10.0	10/03/21 11:38	

LABORATORY CONTROL SAMPLE: 3411237

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	387	97	90-111	

SAMPLE DUPLICATE: 3411239

Parameter	Units	92563761007 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	181	181	0	10	

SAMPLE DUPLICATE: 3412138

Parameter	Units	92563761002 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	1560	1580	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: BRANCH AP-BCD
Pace Project No.: 92563226

QC Batch: 650655
QC Batch Method: SM 2540C-2011
Analysis Method: SM 2540C-2011
Analysis Description: 2540C Total Dissolved Solids
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92563226012, 92563226013, 92563226014, 92563226015

METHOD BLANK: 3412467 Matrix: Water
Associated Lab Samples: 92563226012, 92563226013, 92563226014, 92563226015

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	10.0	10.0	10/04/21 15:35	

LABORATORY CONTROL SAMPLE: 3412468

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	406	102	90-111	

SAMPLE DUPLICATE: 3412470

Parameter	Units	92564073001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	6620	5680	15	10	D6

SAMPLE DUPLICATE: 3412668

Parameter	Units	92563226012 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	1140	1130	1	10	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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(770)734-4200

QUALITY CONTROL DATA

Project: BRANCH AP-BCD
Pace Project No.: 92563226

QC Batch: 651424
QC Batch Method: SM 2320B-2011
Analysis Method: SM 2320B-2011
Analysis Description: 2320B Alkalinity
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92563226003, 92563226004

METHOD BLANK: 3416272 Matrix: Water
Associated Lab Samples: 92563226003, 92563226004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Alkalinity, Total as CaCO3	mg/L	ND	5.0	5.0	10/07/21 17:20	
Alkalinity,Bicarbonate (CaCO3)	mg/L	ND	5.0	5.0	10/07/21 17:20	
Alkalinity,Carbonate (CaCO3)	mg/L	ND	5.0	5.0	10/07/21 17:20	

LABORATORY CONTROL SAMPLE: 3416273

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	50	51.9	104	80-120	

LABORATORY CONTROL SAMPLE: 3416274

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	50	51.2	102	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3416275 3416276

Parameter	Units	92563915005 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Alkalinity, Total as CaCO3	mg/L	ND	50	50	51.0	59.9	93	110	80-120	16	25	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3416277 3416278

Parameter	Units	92563915006 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Alkalinity, Total as CaCO3	mg/L	25.0	50	50	72.9	73.7	96	97	80-120	1	25	

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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: BRANCH AP-BCD
Pace Project No.: 92563226

QC Batch: 651992
QC Batch Method: SM 2320B-2011
Analysis Method: SM 2320B-2011
Analysis Description: 2320B Alkalinity
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92563226013, 92563226014, 92563226015

METHOD BLANK: 3419013 Matrix: Water
Associated Lab Samples: 92563226013, 92563226014, 92563226015

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Alkalinity, Total as CaCO3	mg/L	ND	5.0	5.0	10/11/21 20:50	
Alkalinity,Bicarbonate (CaCO3)	mg/L	ND	5.0	5.0	10/11/21 20:50	
Alkalinity,Carbonate (CaCO3)	mg/L	ND	5.0	5.0	10/11/21 20:50	

LABORATORY CONTROL SAMPLE: 3419014

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	50	52.5	105	80-120	

LABORATORY CONTROL SAMPLE: 3419015

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	50	54.6	109	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3419016 3419017

Parameter	Units	92564448001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Alkalinity, Total as CaCO3	mg/L	82.1	50	50	114	113	65	61	80-120	2	25	M1

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3419018 3419019

Parameter	Units	92564448007 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Alkalinity, Total as CaCO3	mg/L	66.5	50	50	119	121	104	108	80-120	2	25	

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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: BRANCH AP-BCD
Pace Project No.: 92563226

QC Batch: 649415
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
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92563226001, 92563226002

METHOD BLANK: 3406128 Matrix: Water
Associated Lab Samples: 92563226001, 92563226002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.60	09/27/21 06:19	
Fluoride	mg/L	ND	0.10	0.050	09/27/21 06:19	
Sulfate	mg/L	ND	1.0	0.50	09/27/21 06:19	

LABORATORY CONTROL SAMPLE: 3406129

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	50.0	100	90-110	
Fluoride	mg/L	2.5	2.5	102	90-110	
Sulfate	mg/L	50	51.5	103	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3406130 3406131

Parameter	Units	92562974010 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	6.1	50	50	59.7	60.7	107	109	90-110	2	10	
Fluoride	mg/L	0.071J	2.5	2.5	2.9	2.9	114	115	90-110	1	10	M1
Sulfate	mg/L	258	50	50	303	305	91	94	90-110	0	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3406132 3406133

Parameter	Units	92563313008 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	103	50	50	150	150	94	94	90-110	0	10	
Fluoride	mg/L	ND	2.5	2.5	3.9	3.7	156	146	90-110	6	10	M1
Sulfate	mg/L	433	50	50	482	481	98	96	90-110	0	10	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: BRANCH AP-BCD
Pace Project No.: 92563226

QC Batch: 650118
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
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92563226003, 92563226004

METHOD BLANK: 3409685 Matrix: Water
Associated Lab Samples: 92563226003, 92563226004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.60	09/30/21 12:38	
Fluoride	mg/L	ND	0.10	0.050	09/30/21 12:38	
Sulfate	mg/L	ND	1.0	0.50	09/30/21 12:38	

LABORATORY CONTROL SAMPLE: 3409686

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	46.5	93	90-110	
Fluoride	mg/L	2.5	2.4	96	90-110	
Sulfate	mg/L	50	49.6	99	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3409687 3409688

Parameter	Units	92563859001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	1030	50	50	1080	1090	110	129	90-110	1	10	M1
Fluoride	mg/L	ND	2.5	2.5	1.5	1.6	62	63	90-110	2	10	M1
Sulfate	mg/L	1290	50	50	1350	1370	124	150	90-110	1	10	M1

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3409689 3409690

Parameter	Units	92563226004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	16.2	50	50	63.6	64.7	95	97	90-110	2	10	
Fluoride	mg/L	0.46	2.5	2.5	3.1	3.1	104	106	90-110	2	10	
Sulfate	mg/L	1170	50	50	1200	1200	65	48	90-110	1	10	M1

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: BRANCH AP-BCD
Pace Project No.: 92563226

QC Batch: 650124
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
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92563226005, 92563226006, 92563226007, 92563226008, 92563226009, 92563226010, 92563226011, 92563226012, 92563226013, 92563226014, 92563226015

METHOD BLANK: 3409716 Matrix: Water
Associated Lab Samples: 92563226005, 92563226006, 92563226007, 92563226008, 92563226009, 92563226010, 92563226011, 92563226012, 92563226013, 92563226014, 92563226015

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.60	09/30/21 20:19	
Fluoride	mg/L	ND	0.10	0.050	09/30/21 20:19	
Sulfate	mg/L	ND	1.0	0.50	09/30/21 20:19	

LABORATORY CONTROL SAMPLE: 3409717

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	46.9	94	90-110	
Fluoride	mg/L	2.5	2.4	97	90-110	
Sulfate	mg/L	50	51.9	104	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3409718 3409719

Parameter	Units	92563761009 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	27.2	50	50	74.3	75.0	94	95	90-110	1	10	
Fluoride	mg/L	1.6	2.5	2.5	4.3	4.4	107	110	90-110	2	10	
Sulfate	mg/L	1670	50	50	1680	1680	26	13	90-110	0	10	M1

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3409720 3409721

Parameter	Units	92563226014 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	ND	50	50	47.4	47.9	95	96	90-110	1	10	
Fluoride	mg/L	ND	2.5	2.5	2.5	2.5	98	100	90-110	1	10	
Sulfate	mg/L	ND	50	50	50.4	51.0	101	102	90-110	1	10	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: BRANCH AP-BCD
Pace Project No.: 92563226

QC Batch: 651968
QC Batch Method: EPA 353.2 Rev 2.0 1993
Analysis Method: EPA 353.2 Rev 2.0 1993
Analysis Description: 353.2 Nitrate + Nitrite, preserved
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92563226003

METHOD BLANK: 3418960 Matrix: Water
Associated Lab Samples: 92563226003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Nitrogen, NO2 plus NO3	mg/L	ND	0.040	0.017	10/11/21 11:02	

LABORATORY CONTROL SAMPLE: 3418961

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, NO2 plus NO3	mg/L	2.5	2.5	101	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3418962 3418963

Parameter	Units	92564311001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Nitrogen, NO2 plus NO3	mg/L	0.058	2.5	2.5	2.4	2.4	95	95	90-110	0	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3418964 3418965

Parameter	Units	92564312001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Nitrogen, NO2 plus NO3	mg/L	0.052	2.5	2.5	1.8	1.8	69	68	90-110	0	10	M1

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: BRANCH AP-BCD
Pace Project No.: 92563226

QC Batch: 651970
QC Batch Method: EPA 353.2 Rev 2.0 1993
Analysis Method: EPA 353.2 Rev 2.0 1993
Analysis Description: 353.2 Nitrate + Nitrite, preserved
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92563226013

METHOD BLANK: 3418972 Matrix: Water
Associated Lab Samples: 92563226013

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Nitrogen, NO2 plus NO3	mg/L	ND	0.040	0.017	10/11/21 12:11	

LABORATORY CONTROL SAMPLE: 3418973

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, NO2 plus NO3	mg/L	2.5	2.5	102	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3418974 3418975

Parameter	Units	92562907001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Nitrogen, NO2 plus NO3	mg/L	43.3	2.5	2.5	46.1	46.0	112	106	90-110	0	10	M1

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3418976 3418977

Parameter	Units	92562911001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Nitrogen, NO2 plus NO3	mg/L	ND	2.5	2.5	2.3	2.3	92	93	90-110	1	10	

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REPORT OF LABORATORY ANALYSIS

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(770)734-4200

QUALIFIERS

Project: BRANCH AP-BCD
Pace Project No.: 92563226

DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

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

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

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

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

Acid preservation may not be appropriate for 2 Chloroethylvinyl ether.

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

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

Reported results are not rounded until the final step prior to reporting. Therefore, calculated parameters that are typically reported as "Total" may vary slightly from the sum of the reported component parameters.

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

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

D6	The precision between the sample and sample duplicate exceeded laboratory control limits.
M1	Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

Pace Analytical Services, LLC
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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: BRANCH AP-BCD
Pace Project No.: 92563226

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92563226001	**BRGWC-45**				
92563226002	**BRGWC-47**				
92563226003	**BRGWC-50**				
92563226005	**BRGWC-25I**				
92563226006	**BRGWC-27I**				
92563226007	**BRGWC-29I**				
92563226008	**BRGWC-30I**				
92563226009	**BRGWC-32S**				
92563226013	**BRGWC-52I**				
92563226001	**BRGWC-45**	EPA 3010A	651173	EPA 6010D	651248
92563226002	**BRGWC-47**	EPA 3010A	651173	EPA 6010D	651248
92563226003	**BRGWC-50**	EPA 3010A	651173	EPA 6010D	651248
92563226004	**DUP-2**	EPA 3010A	651173	EPA 6010D	651248
92563226005	**BRGWC-25I**	EPA 3010A	651173	EPA 6010D	651248
92563226006	**BRGWC-27I**	EPA 3010A	651173	EPA 6010D	651248
92563226007	**BRGWC-29I**	EPA 3010A	651173	EPA 6010D	651248
92563226008	**BRGWC-30I**	EPA 3010A	651173	EPA 6010D	651248
92563226009	**BRGWC-32S**	EPA 3010A	651173	EPA 6010D	651248
92563226010	**EB-2**	EPA 3010A	651173	EPA 6010D	651248
92563226011	**FB-2**	EPA 3010A	651173	EPA 6010D	651248
92563226012	**DUP-3**	EPA 3010A	651173	EPA 6010D	651248
92563226013	**BRGWC-52I**	EPA 3010A	651173	EPA 6010D	651248
92563226014	**FB-3**	EPA 3010A	651173	EPA 6010D	651248
92563226015	**EB-3**	EPA 3010A	651173	EPA 6010D	651248
92563226001	**BRGWC-45**	EPA 3005A	651350	EPA 6020B	651455
92563226002	**BRGWC-47**	EPA 3005A	651350	EPA 6020B	651455
92563226003	**BRGWC-50**	EPA 3005A	651350	EPA 6020B	651455
92563226004	**DUP-2**	EPA 3005A	651350	EPA 6020B	651455
92563226005	**BRGWC-25I**	EPA 3005A	651350	EPA 6020B	651455
92563226006	**BRGWC-27I**	EPA 3005A	651350	EPA 6020B	651455
92563226007	**BRGWC-29I**	EPA 3005A	651350	EPA 6020B	651455
92563226008	**BRGWC-30I**	EPA 3005A	651350	EPA 6020B	651455
92563226009	**BRGWC-32S**	EPA 3005A	651350	EPA 6020B	651455
92563226010	**EB-2**	EPA 3005A	651350	EPA 6020B	651455
92563226011	**FB-2**	EPA 3005A	651350	EPA 6020B	651455
92563226012	**DUP-3**	EPA 3005A	651350	EPA 6020B	651455
92563226013	**BRGWC-52I**	EPA 3005A	651350	EPA 6020B	651455
92563226014	**FB-3**	EPA 3005A	651350	EPA 6020B	651455
92563226015	**EB-3**	EPA 3005A	651350	EPA 6020B	651455
92563226001	**BRGWC-45**	EPA 7470A	652043	EPA 7470A	652216
92563226002	**BRGWC-47**	EPA 7470A	652043	EPA 7470A	652216
92563226003	**BRGWC-50**	EPA 7470A	652043	EPA 7470A	652216
92563226004	**DUP-2**	EPA 7470A	652043	EPA 7470A	652216
92563226005	**BRGWC-25I**	EPA 7470A	652043	EPA 7470A	652216
92563226006	**BRGWC-27I**	EPA 7470A	652043	EPA 7470A	652216
92563226007	**BRGWC-29I**	EPA 7470A	652043	EPA 7470A	652216
92563226008	**BRGWC-30I**	EPA 7470A	652043	EPA 7470A	652216

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: BRANCH AP-BCD
Pace Project No.: 92563226

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92563226009	**BRGWC-32S**	EPA 7470A	652043	EPA 7470A	652216
92563226010	**EB-2**	EPA 7470A	652043	EPA 7470A	652216
92563226011	**FB-2**	EPA 7470A	652043	EPA 7470A	652216
92563226012	**DUP-3**	EPA 7470A	652043	EPA 7470A	652216
92563226013	**BRGWC-52I**	EPA 7470A	652043	EPA 7470A	652216
92563226014	**FB-3**	EPA 7470A	652043	EPA 7470A	652216
92563226015	**EB-3**	EPA 7470A	652043	EPA 7470A	652216
92563226001	**BRGWC-45**	SM 2540C-2011	650109		
92563226002	**BRGWC-47**	SM 2540C-2011	650109		
92563226003	**BRGWC-50**	SM 2540C-2011	650109		
92563226004	**DUP-2**	SM 2540C-2011	650109		
92563226005	**BRGWC-25I**	SM 2540C-2011	650392		
92563226006	**BRGWC-27I**	SM 2540C-2011	650392		
92563226007	**BRGWC-29I**	SM 2540C-2011	650392		
92563226008	**BRGWC-30I**	SM 2540C-2011	650392		
92563226009	**BRGWC-32S**	SM 2540C-2011	650392		
92563226010	**EB-2**	SM 2540C-2011	650392		
92563226011	**FB-2**	SM 2540C-2011	650392		
92563226012	**DUP-3**	SM 2540C-2011	650655		
92563226013	**BRGWC-52I**	SM 2540C-2011	650655		
92563226014	**FB-3**	SM 2540C-2011	650655		
92563226015	**EB-3**	SM 2540C-2011	650655		
92563226003	**BRGWC-50**	SM 2320B-2011	651424		
92563226004	**DUP-2**	SM 2320B-2011	651424		
92563226013	**BRGWC-52I**	SM 2320B-2011	651992		
92563226014	**FB-3**	SM 2320B-2011	651992		
92563226015	**EB-3**	SM 2320B-2011	651992		
92563226001	**BRGWC-45**	EPA 300.0 Rev 2.1 1993	649415		
92563226002	**BRGWC-47**	EPA 300.0 Rev 2.1 1993	649415		
92563226003	**BRGWC-50**	EPA 300.0 Rev 2.1 1993	650118		
92563226004	**DUP-2**	EPA 300.0 Rev 2.1 1993	650118		
92563226005	**BRGWC-25I**	EPA 300.0 Rev 2.1 1993	650124		
92563226006	**BRGWC-27I**	EPA 300.0 Rev 2.1 1993	650124		
92563226007	**BRGWC-29I**	EPA 300.0 Rev 2.1 1993	650124		
92563226008	**BRGWC-30I**	EPA 300.0 Rev 2.1 1993	650124		
92563226009	**BRGWC-32S**	EPA 300.0 Rev 2.1 1993	650124		
92563226010	**EB-2**	EPA 300.0 Rev 2.1 1993	650124		
92563226011	**FB-2**	EPA 300.0 Rev 2.1 1993	650124		
92563226012	**DUP-3**	EPA 300.0 Rev 2.1 1993	650124		
92563226013	**BRGWC-52I**	EPA 300.0 Rev 2.1 1993	650124		
92563226014	**FB-3**	EPA 300.0 Rev 2.1 1993	650124		
92563226015	**EB-3**	EPA 300.0 Rev 2.1 1993	650124		
92563226003	**BRGWC-50**	EPA 353.2 Rev 2.0 1993	651968		
92563226013	**BRGWC-52I**	EPA 353.2 Rev 2.0 1993	651970		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: BRANCH AP-BCD
Pace Project No.: 92563226

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch

Pace Analytical	Document Name: Sample Condition Upon Receipt(SCUR)	Document Revised: October 28, 2020 Page 1 of 2
	Document No.: F-CAR-CS-033-Rev.07	Issuing Authority: Pace Carolinas Quality Office

Laboratory receiving samples:

Asheville ☐ Eden ☐ Greenwood ☐ Huntersville ☐ Raleigh ☐ Mechanicsville ☐ Atlanta ☑ Kernersville ☐

Sample Condition Upon Receipt

Client Name: GA Power

Project #:

WO# : 92563226

92563226

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

Custody Seal Present? ☐ Yes ☑ No Seals Intact? ☐ Yes ☐ No

Date/Initials Person Examining Contents: 9/23/21 [illegible]

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

Biological Tissue Frozen? ☐ Yes ☑ No ☐ N/A

Thermometer: ☑ IR Gun ID: IHR230 Type of Ice: ☑ Wet ☐ Blue ☐ None

Cooler Temp: 1.2 Correction Factor: Add/Subtract (°C) +0.1

Temp should be above freezing to 6°C

☐ Samples out of temp criteria. Samples on ice, cooling process has begun

Cooler Temp Corrected (°C): 1.3

USDA Regulated Soil (☑ N/A, water sample)

Did samples originate in a quarantine zone within the United States: CA, NY, or SC (check maps)? ☐ Yes ☑ No

Did samples originate from a foreign source (internationally, including Hawaii and Puerto Rico)? ☐ Yes ☑ No

				Comments/Discrepancy:
Chain of Custody Present?	☑ Yes	☐ No	☐ N/A	1.
Samples Arrived within Hold Time?	☑ Yes	☐ No	☐ N/A	2.
Short Hold Time Analysis (<72 hr.)?	☐ Yes	☑ No	☐ N/A	3.
Rush Turn Around Time Requested?	☐ Yes	☑ No	☐ N/A	4. 10 Day
Sufficient Volume?	☑ Yes	☐ No	☐ N/A	5.
Correct Containers Used?	☑ Yes	☐ No	☐ N/A	6.
-Pace Containers Used?	☑ Yes	☐ No	☐ N/A	
Containers Intact?	☑ Yes	☐ No	☐ N/A	7.
Dissolved analysis: Samples Field Filtered?	☐ Yes	☐ No	☑ N/A	8.
Sample Labels Match COC?	☑ Yes	☐ No	☐ N/A	9.
-Includes Date/Time/ID/Analysis Matrix: W				
Headspace in VOA Vials (>5-6mm)?	☐ Yes	☐ No	☑ N/A	10.
Trip Blank Present?	☐ Yes	☐ No	☑ N/A	11.
Trip Blank Custody Seals Present?	☐ Yes	☐ No	☑ N/A	

COMMENTS/SAMPLE DISCREPANCY

Field Data Required? ☐ Yes ☐ No

Lot ID of split containers:

CLIENT NOTIFICATION/RESOLUTION

Person contacted: ____ Date/Time: ____

Project Manager SCURF Review: ____ Date: ____

Project Manager SRF Review: ____ Date: ____

Pace Analytical	Document Name: Sample Condition Upon Receipt(SCUR)	Document Revised: October 28, 2020 Page 2 of 2
	Document No.: F-CAR-CS-033-Rev.07	Issuing Authority: Pace Carolinas Quality Office

***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 bottles**

Project # **WO# : 92563226**

PM: NMG Due Date: 10/07/21

CLIENT: GA-GA Power

Rack	BP1U-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)	BP1N	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)	DG9U-40 mL Amber Unpreserved vials (N/A)
1		1	1			✓ 1																		[illegible]				
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pH Adjustment Log for Preserved Samples

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

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

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: 1130 Milledgeville Rd, Milledgeville, GA [illegible]
- Email: [illegible]@southernco.com
- Phone: (404) 506-7239 Fax:
- Requested Due Date: 10 Day TAT

Section B — Required Project Information:
- Report To: Joju Abraham
- Copy To: Golder
- Purchase Order #:
- Project Name: Plant Branch AP-BCD
- Project #: [illegible]

Section C — Invoice Information:
- Attention: [illegible]@southernco.com
- Company Name:
- Address:
- Pace Quote:
- Pace Project Manager: Kevin Herring
- Pace Profile #:

Regulatory Agency:

State / Location: GA

ITEM #	SAMPLE ID	MATRIX CODE	SAMPLE TYPE (G=GRAB C=COMP)	DATE	TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Unpreserved - Ice	H2SO4	HNO3 + Ice	HCl	NaOH + Zn Acetate	Na2S2O3	Methanol	Other	App III/IV Total Metals	Cl, F, SO4, TDS	Radium 226/228	Residual Chlorine (Y/N)	
1	BRGWC-45	WT	G	9/23/2021	12:11		5	2		3						X	X	X		pH = 5.90
2	BRGWC-47	WT	G	9/23/2021	12:20		5	2		3						X	X	X		pH = 5.74
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ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
	[signature]	9-25	1710	Charles [signature]	9/27/21	1710	

SAMPLER NAME AND SIGNATURE: Jude Wagner[illegible]

DATE Signed: 9-23

TEMP in C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N)

Pace Analytical	Document Name: Sample Condition Upon Receipt(SCUR)	Document Revised: October 28, 2020 Page 1 of 2
	Document No.: F-CAR-CS-033-Rev.07	Issuing Authority: Pace Carolinas Quality Office

Laboratory receiving samples:

Asheville ☐ Eden ☐ Greenwood ☐ Huntersville ☐ Raleigh ☐ Mechanicsville ☐ Atlanta ☑ Kernersville ☐

Sample Condition Upon Receipt

Client Name: Georgia Power

Project #:

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

Custody Seal Present? ☐ Yes ☑ No **Seals Intact?** ☐ Yes ☐ No

Date/Initials Person Examining Contents: RT 9/15/21

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

Biological Tissue Frozen? ☐ Yes ☑ No ☐ N/A

Thermometer: ☐ IR Gun ID: 230

Type of Ice: ☐ Wet ☐ Blue ☐ None

Cooler Temp: 3.4 **Correction Factor:** Add/Subtract (°C) ±0.1

Cooler Temp Corrected (°C): 3.5

Temp should be above freezing to 6°C

☐ Samples out of temp criteria. Samples on ice, cooling process has begun

USDA Regulated Soil (☐ N/A, water sample)

Did samples originate in a quarantine zone within the United States: CA, NY, or SC (check maps)? ☐ Yes ☑ No

Did samples originate from a foreign source (internationally, including Hawaii and Puerto Rico)? ☐ Yes ☐ No

				Comments/Discrepancy:
Chain of Custody Present?	☑ Yes	☐ No	☐ N/A	1.
Samples Arrived within Hold Time?	☑ Yes	☐ No	☐ N/A	2.
Short Hold Time Analysis (<72 hr.)?	☐ Yes	☑ No	☐ N/A	3.
Rush Turn Around Time Requested?	☐ Yes	☑ No	☐ N/A	4.
Sufficient Volume?	☑ Yes	☐ No	☐ N/A	5.
Correct Containers Used?	☑ Yes	☐ No	☐ N/A	6.
-Pace Containers Used?	☑ Yes	☐ No	☐ N/A	
Containers Intact?	☑ Yes	☐ No	☐ N/A	7.
Dissolved analysis: Samples Field Filtered?	☐ Yes	☑ No	☐ N/A	8.
Sample Labels Match COC?	☑ Yes	☐ No	☐ N/A	9.
-Includes Date/Time/ID/Analysis Matrix: WT				
Headspace in VOA Vials (>5-6mm)?	☐ Yes	☐ No	☑ N/A	10.
Trip Blank Present?	☐ Yes	☐ No	☑ N/A	11.
Trip Blank Custody Seals Present?	☐ Yes	☐ No	☑ N/A	

COMMENTS/SAMPLE DISCREPANCY

Field Data Required? ☐ Yes ☐ No

Lot ID of split containers:

CLIENT NOTIFICATION/RESOLUTION

Person contacted: Date/Time:

Project Manager SCURF Review: Date:

Project Manager SRF Review: Date:

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

Project #

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

****Bottom half of box is to list number of bottles**

Bottle	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)	Bag	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)	DG9U-40 mL Amber Unpreserved vials (N/A)
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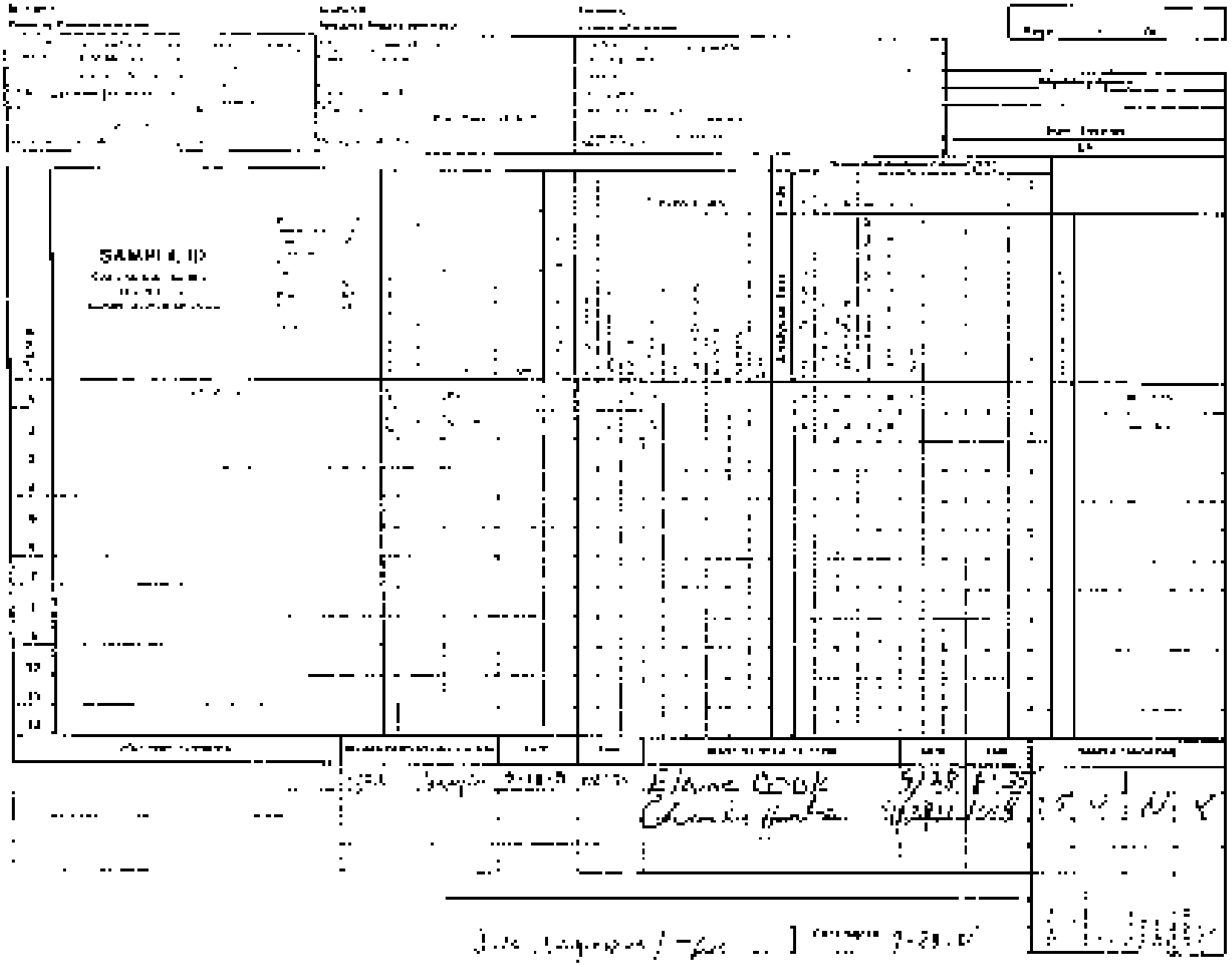
pH Adjustment Log for Preserved Samples

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

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

CHAIN-OF-CUSTODY / Analytical Request Document



Pace Analytical

Document Name: Sample Condition Upon Receipt (SCUR)
Document No.: F-CAR-CS-033-Rev.07

Document Revised: October 28, 2020
Page 1 of 2
Issuing Authority: Pace Carolinas Quality Office

Laboratory receiving samples:
Asheville [ ] Eden [ ] Greenwood [ ] Huntersville [ ] Raleigh [ ] Mechanicsville [ ] Atlanta [X] Kernersville [ ]

Sample Condition Upon Receipt

Client Name: G A Power

Project #:

Courier: [ ] Fed Ex [ ] UPS [ ] USPS [X] Client [ ] Commercial [ ] Pace [ ] Other:

Custody Seal Present? [ ] Yes [X] No Seals Intact? [ ] Yes [ ] No

Date/Initials Person Examining Contents: 4/29/21 CJ-W

Packing Material: [ ] Bubble Wrap [ ] Bubble Bags [X] None [ ] Other

Biological Tissue Frozen? [ ] Yes [ ] No [X] N/A

Thermometer: [X] IR Gun ID: 083

Type of Ice: [X] Wet [ ] Blue [ ] None

Cooler Temp: 4.3 Correction Factor: Add/Subtract (°C) 0.0

Temp should be above freezing to 6°C
[ ] Samples out of temp criteria. Samples on ice, cooling process has begun

Cooler Temp Corrected (°C): 4.3

USDA Regulated Soil: [ ] N/A, water sample)
Did samples originate in a quarantine zone within the United States: AL, AR, CA, FL, GA, ID, LA, MS, NC, NM, NY, OK, OR, SC, TN, or TX (check maps)? [ ] Yes [ ] No

Did samples originate from a foreign source (internationally, including Hawaii and Puerto Rico)? [ ] Yes [ ] No

				Comments/Discrepancy:
Chain of Custody Present?	[X] Yes	[ ] No	[ ] N/A	1.
Samples Arrived within Hold Time?	[X] Yes	[ ] No	[ ] N/A	2.
Short Hold Time Analysis (<72 hr.)?	[ ] Yes	[X] No	[ ] N/A	3.
Rush Turn Around Time Requested?	[ ] Yes	[X] No	[ ] N/A	4.
Sufficient Volume?	[X] Yes	[ ] No	[ ] N/A	5.
Correct Containers Used?	[X] Yes	[ ] No	[ ] N/A	6.
-Pace Containers Used?	[X] Yes	[ ] No	[ ] N/A	
Containers Intact?	[X] Yes	[ ] No	[ ] N/A	7.
Dissolved analysis: Samples Field Filtered?	[ ] Yes	[ ] No	[X] N/A	8.
Sample Labels Match COC?	[X] Yes	[ ] No	[ ] N/A	9.
-Includes Date/Time/ID/Analysis Matrix: W				
Headspace in VOA Vials (>5-6mm)?	[ ] Yes	[ ] No	[X] N/A	10.
Trip Blank Present?	[ ] Yes	[ ] No	[X] N/A	11.
Trip Blank Custody Seals Present?	[ ] Yes	[ ] No	[X] N/A	

COMMENTS/SAMPLE DISCREPANCY

Field Data Required? [ ] Yes [ ] No

CLIENT NOTIFICATION/RESOLUTION

Lot ID of split containers:

Person Contacted: Date/Time:

Project Manager SCURF Review: Date:

Project Manager SRF Review: Date:

	Document Name: Sample Condition Upon Receipt (SCUR) Document No.: F-CAR-CS-033-Rev.07	Document Revised: October 28, 2020 Page 2 of 2 Issuing Authority: Pace Carolinas Quality Office

*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 bottles

Project #

Item	BP1U-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)	BP3S-250 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)	DG9U-40 mL Amber Unpreserved vials (N/A)
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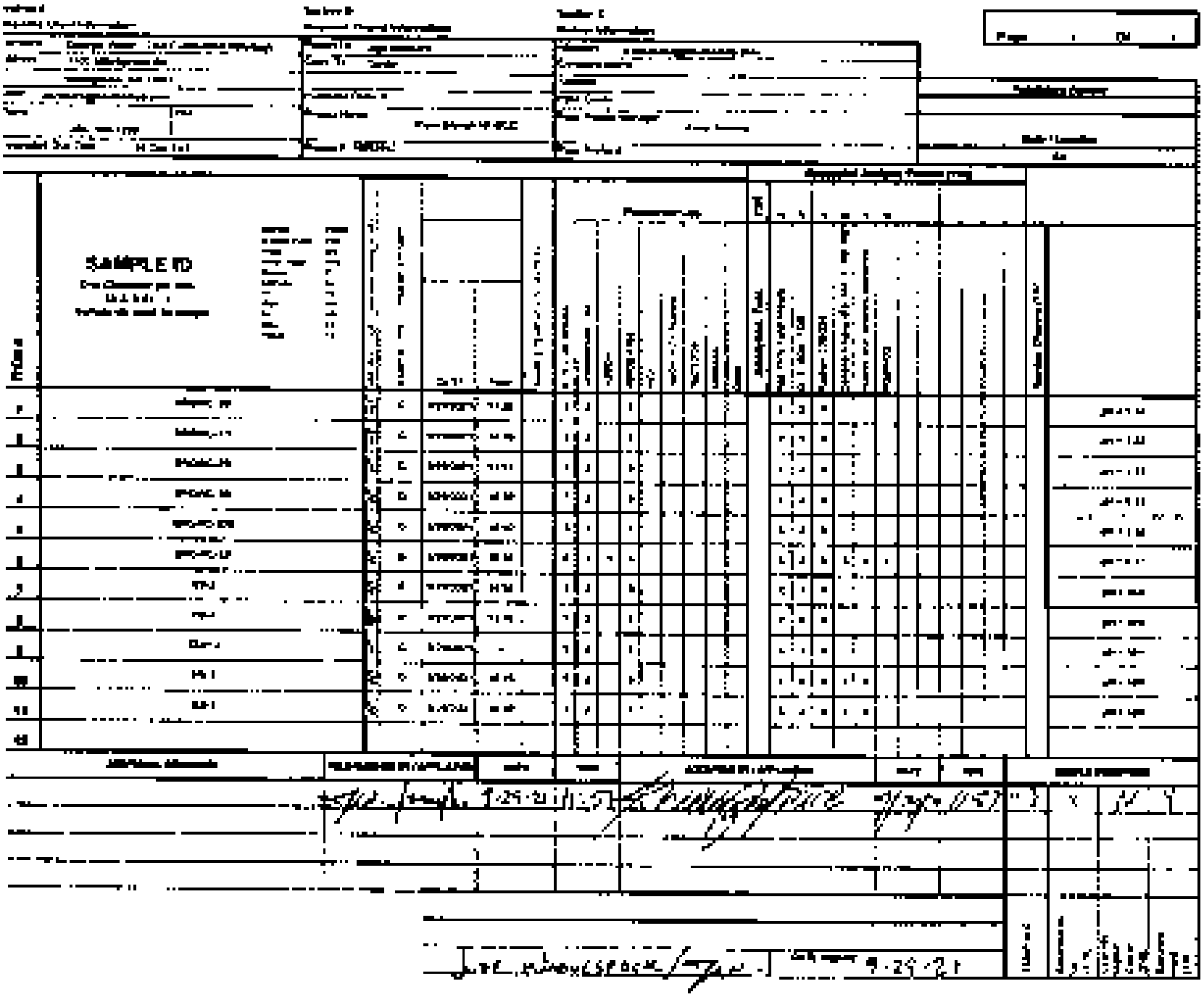
pH Adjustment Log for Preserved Samples

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

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

CHAIN-OF-CUSTODY / Analytical Request Document



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

October 29, 2021

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

RE: Project: BRANCH AP-BCD BACKGROUND RADS
Pace Project No.: 92562847

Dear Joju Abraham:

Enclosed are the analytical results for sample(s) received by the laboratory between September 22, 2021 and September 23, 2021. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

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

- Pace Analytical Services - Greensburg

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

Sincerely,

Nicole D'Oleo
nicole.d'oleo@pacelabs.com
(704)875-9092
Project Manager

Enclosures

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

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

CERTIFICATIONS

Project: BRANCH AP-BCD BACKGROUND RADS
Pace Project No.: 92562847

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: BRANCH AP-BCD BACKGROUND RADS
Pace Project No.: 92562847

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92562847001	**BRGWA-12S**	Water	09/21/21 10:45	09/22/21 17:08
92562847002	**BRGWA-12I**	Water	09/21/21 13:50	09/22/21 17:08
92562847003	**BRGWA-23S**	Water	09/22/21 10:10	09/23/21 10:47

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

SAMPLE ANALYTE COUNT

Project: BRANCH AP-BCD BACKGROUND RADS
Pace Project No.: 92562847

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92562847001	**BRGWA-12S**	EPA 9315	JJY	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92562847002	**BRGWA-12I**	EPA 9315	JJY	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92562847003	**BRGWA-23S**	EPA 9315	JJY	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA

PASI-PA = Pace Analytical Services - Greensburg

REPORT OF LABORATORY ANALYSIS

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

SUMMARY OF DETECTION

Project: BRANCH AP-BCD BACKGROUND RADS
Pace Project No.: 92562847

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92562847001	**BRGWA-12S**					
EPA 9315	Radium-226	0.409 ± 0.241 (0.367) C:96% T:NA	pCi/L		10/08/21 08:02	
EPA 9320	Radium-228	0.0585 ± 0.397 (0.915) C:61% T:84%	pCi/L		10/07/21 14:38	
Total Radium Calculation	Total Radium	0.468 ± 0.638 (1.28)	pCi/L		10/20/21 17:19	
92562847002	**BRGWA-12I**					
EPA 9315	Radium-226	0.698 ± 0.296 (0.344) C:98% T:NA	pCi/L		10/08/21 08:02	
EPA 9320	Radium-228	0.631 ± 0.444 (0.850) C:59% T:91%	pCi/L		10/07/21 14:38	
Total Radium Calculation	Total Radium	1.33 ± 0.740 (1.19)	pCi/L		10/20/21 17:19	
92562847003	**BRGWA-23S**					
EPA 9315	Radium-226	0.813 ± 0.319 (0.347) C:100% T:NA	pCi/L		10/08/21 08:02	
EPA 9320	Radium-228	0.583 ± 0.475 (0.944) C:61% T:85%	pCi/L		10/07/21 14:38	
Total Radium Calculation	Total Radium	1.40 ± 0.794 (1.29)	pCi/L		10/20/21 17:19	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: BRANCH AP-BCD BACKGROUND RADS
Pace Project No.: 92562847

Sample: BRGWA-12S **Lab ID: 92562847001** Collected: 09/21/21 10:45 Received: 09/22/21 17:08 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	**0.409 ± 0.241 (0.367) C:96% T:NA**	pCi/L	10/08/21 08:02	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.0585 ± 0.397 (0.915) C:61% T:84%**	pCi/L	10/07/21 14:38	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.468 ± 0.638 (1.28)**	pCi/L	10/20/21 17:19	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: BRANCH AP-BCD BACKGROUND RADS
Pace Project No.: 92562847

Sample: BRGWA-12I **Lab ID: 92562847002** Collected: 09/21/21 13:50 Received: 09/22/21 17:08 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	**0.698 ± 0.296 (0.344) C:98% T:NA**	pCi/L	10/08/21 08:02	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.631 ± 0.444 (0.850) C:59% T:91%**	pCi/L	10/07/21 14:38	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.33 ± 0.740 (1.19)**	pCi/L	10/20/21 17:19	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: BRANCH AP-BCD BACKGROUND RADS
Pace Project No.: 92562847

Sample: BRGWA-23S **Lab ID: 92562847003** Collected: 09/22/21 10:10 Received: 09/23/21 10:47 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	**0.813 ± 0.319 (0.347) C:100% T:NA**	pCi/L	10/08/21 08:02	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.583 ± 0.475 (0.944) C:61% T:85%**	pCi/L	10/07/21 14:38	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.40 ± 0.794 (1.29)**	pCi/L	10/20/21 17:19	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: BRANCH AP-BCD BACKGROUND RADS
Pace Project No.: 92562847

QC Batch: 466410
QC Batch Method: EPA 9320
Analysis Method: EPA 9320
Analysis Description: 9320 Radium 228
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92562847001, 92562847002, 92562847003

METHOD BLANK: 2252279 Matrix: Water
Associated Lab Samples: 92562847001, 92562847002, 92562847003

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.420 ± 0.367 (0.738) C:65% T:90%	pCi/L	10/07/21 11:22	

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: BRANCH AP-BCD BACKGROUND RADS
Pace Project No.: 92562847

QC Batch: 466264
QC Batch Method: EPA 9315
Analysis Method: EPA 9315
Analysis Description: 9315 Total Radium
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92562847001, 92562847002, 92562847003

METHOD BLANK: 2251638
Matrix: Water
Associated Lab Samples: 92562847001, 92562847002, 92562847003

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.284 ± 0.229 (0.421) C:95% T:NA	pCi/L	10/08/21 08:00	

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: BRANCH AP-BCD BACKGROUND RADS
Pace Project No.: 92562847

DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

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

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

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

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

Acid preservation may not be appropriate for 2 Chloroethylvinyl ether.

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

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

Reported results are not rounded until the final step prior to reporting. Therefore, calculated parameters that are typically reported as "Total" may vary slightly from the sum of the reported component parameters.

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.

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

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: BRANCH AP-BCD BACKGROUND RADS
Pace Project No.: 92562847

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92562847001	**BRGWA-12S**	EPA 9315	466264		
92562847002	**BRGWA-12I**	EPA 9315	466264		
92562847003	**BRGWA-23S**	EPA 9315	466264		
92562847001	**BRGWA-12S**	EPA 9320	466410		
92562847002	**BRGWA-12I**	EPA 9320	466410		
92562847003	**BRGWA-23S**	EPA 9320	466410		
92562847001	**BRGWA-12S**	Total Radium Calculation	469110		
92562847002	**BRGWA-12I**	Total Radium Calculation	469110		
92562847003	**BRGWA-23S**	Total Radium Calculation	469110		

Pace Analytical	Document Name: Sample Condition Upon Receipt[SCUR]	Document Revised: October 28, 2020 Page 1 of 2
	Document No.: F-CAR-CS-033-Rev.07	Issuing Authority: Pace Carolinas Quality Office

Laboratory receiving samples:
Asheville ☐ Eden ☐ Greenwood ☐ Huntersville ☐ Raleigh ☐ Mechanicsville ☐ Atlanta ☑ Kernersville ☐

Sample Condition Upon Receipt

Client Name: GP POWER

Project #:

WO# : 92562847

92562847

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

Custody Seal Present? ☐ Yes ☑ No Seals Intact? ☐ Yes ☐ No

Date/Initials Person Examining Contents: 9/22/21 LH

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

Biological Tissue Frozen? ☐ Yes ☐ No ☐ N/A

Thermometer: ☐ IR Gun ID: 083 ☐ Wet ☐ Blue ☐ None

Type of Ice:

Cooler Temp: 1.8 Correction Factor: Add/Subtract (°C) 0.0

Temp should be above freezing to 6°C
☐ Samples out of temp criteria. Samples on ice, cooling process has begun

Cooler Temp Corrected (°C): 1.8

USDA Regulated Soil (☐ N/A, water sample)
Did samples originate in a quarantine zone within the United States: CA, NY, or SC (check maps)? ☐ Yes ☐ No

Did samples originate from a foreign source (internationally, including Hawaii and Puerto Rico)? ☐ Yes ☐ No

				Comments/Discrepancy:
Chain of Custody Present?	☐ Yes	☐ No	☐ N/A	1.
Samples Arrived within Hold Time?	☑ Yes	☐ No	☐ N/A	2.
Short Hold Time Analysis (<72 hr.)?	☐ Yes	☑ No	☐ N/A	3.
Rush Turn Around Time Requested?	☐ Yes	☑ No	☐ N/A	4.
Sufficient Volume?	☑ Yes	☐ No	☐ N/A	5.
Correct Containers Used?	☑ Yes	☐ No	☐ N/A	6.
-Pace Containers Used?	☑ Yes	☐ No	☐ N/A	
Containers Intact?	☑ Yes	☐ No	☐ N/A	7.
Dissolved analysis: Samples Field Filtered?	☐ Yes	☐ No	☑ N/A	8.
Sample Labels Match COC?	☑ Yes	☐ No	☐ N/A	9.
-Includes Date/Time/ID/Analysis Matrix:	W			
Headspace in VOA Vials (>5-6mm)?	☐ Yes	☐ No	☑ N/A	10.
Trip Blank Present?	☐ Yes	☐ No	☑ N/A	11.
Trip Blank Custody Seals Present?	☐ Yes	☐ No	☑ N/A	

Field Data Required? ☐ Yes ☐ No

COMMENTS/SAMPLE DISCREPANCY

Lot ID of split containers:

CLIENT NOTIFICATION/RESOLUTION

Person contacted: Date/Time:

Project Manager SCURF Review: Date:

Project Manager SRF Review: Date:

Pace Analytical	Document Name: Sample Condition Upon Receipt(SCUR)	Document Revised: October 28, 2020 Page 2 of 2
	Document No.: F-CAR-CS-033-Rev.07	Issuing Authority: Pace Carolinas Quality Office

***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 bottles**

Project # **WO# : 92562847**

PM: NMG Due Date: 10/13/21

CLIENT: GA-GA Power

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)	BPIN	BP3A-250 mL Plastic (NH2)2SO4 (9.3-9.7)	AGOU-100 mL Amber Unpreserved vials (N/A)	VSGU-20 mL Scintillation vials (N/A)	DG9U-40 mL Amber Unpreserved vials (N/A)
1		1	1			✓ 1																		✓ 2				
2		1	1			✓ 1																		✓ 2				
3																												
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12																												

pH Adjustment Log for Preserved Samples

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

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

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:	1100 Milledgeville Rd, Milledgeville, GA [illegible]
Email:	[illegible]@southernco.com
Phone:	[illegible] 506-7239
Fax:	
Requested Due Date:	[illegible]

Section B — Required Project Information:

Report To:	[illegible]
Copy To:	Golder
Purchase Order #:	
Project Name:	Plant Branch AP-BCD Background
Project #:	[illegible]

Section C — Invoice Information:

Attention:	[illegible]@southernco.com
Company Name:	
Address:	
Pace Quote:	
Pace Project Manager:	Kevin Herring
Pace Profile #:	

Regulatory Agency	
State / Location	GA

ITEM #	SAMPLE ID	MATRIX CODE	SAMPLE TYPE (G=GRAB C=COMP)	DATE	TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Unpreserved - Ice	H2SO4	HNO3 + Ice	HCl	NaOH + Zn Acetate	Na2S2O3	Methanol	Other	App III/IV Total Metals	Cl, F, SO4, TDS	Radium 226/228	Residual Chlorine (Y/N)	SAMPLE CONDITIONS
1	BRGWA-12S	WT	G	9/21/2021	10:45		5	2		3						X	X	X		pH = 5.87
2	BRGWA-12I	WT	G	9/21/2021	13:50		5	2		3						X	X	X		pH = 6.53
3																				
4																				
5																				
6																				
7																				
8																				
9																				
10																				
11																				
12																				

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
	[signature]	9.22.21	5:04	[signature]	9/22/21	17:08	

DATE Signed:

TEMP in C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N)

PaceAnalytical	Document Name: Sample Condition Upon Receipt (SCUR)	Document Revised: October 28, 2020
	Document No.: F-CAR-CS-033-Rev.07	Page 1 of 2
		Issuing Authority: Pace Carolinas Quality Office

Laboratory receiving samples:

Asheville ☐ Eden ☐ Greenwood ☐ Huntersville ☐ Raleigh ☐ Mechanicsville ☐ Atlanta ☑ Kernersville ☐

Sample Condition Upon Receipt

Client Name: GA Power

Project #

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

Custody Seal Present? ☐ Yes ☑ No Seals Intact? ☐ Yes ☑ No

Date/Initials Person Examining Contents:

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

Biological Tissue Frozen? ☐ Yes ☑ No ☐ N/A

Thermometer: ☐ IR Gun ID: 3 7 5

Type of Ice: ☑ Wet ☐ Blue ☐ None

Cooler Temp: 1.8 Correction Factor: Add/Subtract (°C): 0.0

Cooler Temp Corrected (°C): 1.8

Temp should be above freezing to 6°C

☐ Samples out of temp criteria. Samples on ice, cooling process has begun

USDA Regulated Soil (☐ N/A, water sample)

Did samples originate in a quarantine zone within the United States: CA, NY, or SC (check maps)? ☐ Yes ☑ No

Did samples originate from a foreign source (internationally, including Hawaii and Puerto Rico)? ☐ Yes ☑ No

					Comments/Discrepancy:
Chain of Custody Present?	☑ Yes	☐ No	☐ N/A	1.	
Samples Arrived within Hold Time?	☑ Yes	☐ No	☐ N/A	2.	
Short Hold Time Analysis (<72 hr)?	☐ Yes	☑ No	☐ N/A	3.	
Rush Turn Around Time Requested?	☐ Yes	☑ No	☐ N/A	4.	
Sufficient Volume?	☑ Yes	☐ No	☐ N/A	5.	
Correct Containers Used?	☑ Yes	☐ No	☐ N/A	6.	
-Pace Containers Used?	☑ Yes	☐ No	☐ N/A		
Containers Intact?	☑ Yes	☐ No	☐ N/A	7.	
Dissolved Analysis: Samples Field Filtered?	☐ Yes	☑ No	☐ N/A	8.	
Sample Labels Match COC?	☑ Yes	☐ No	☐ N/A	9.	
-Includes Date/Time/ID/Analysis Matrix: WT					
Headspace in VOA Vials (>5-6mm)?	☐ Yes	☐ No	☑ N/A	10.	
Trip Blank Present?	☐ Yes	☐ No	☑ N/A	11.	
Trip Blank Custody Seals Present?	☐ Yes	☐ No	☑ N/A		

COMMENTS/SAMPLE DISCREPANCY

Field Data Required? ☐ Yes ☐ No

Lot ID of split containers:

CLIENT NOTIFICATION/RESOLUTION

Person contacted: Date/Time:

Project Manager SCURF Review: Date:

Project Manager SRF Review: Date:

*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 bottles

Project #

Sample	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
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pH Adjustment Log for Preserved Samples

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

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

CHAIN-OF-CUSTODY / Analytical Request Document

Page: 1 Of 1

Regulatory Agency

SAMPLE ID

Preservatives

Other

Analyses Test

Y/N

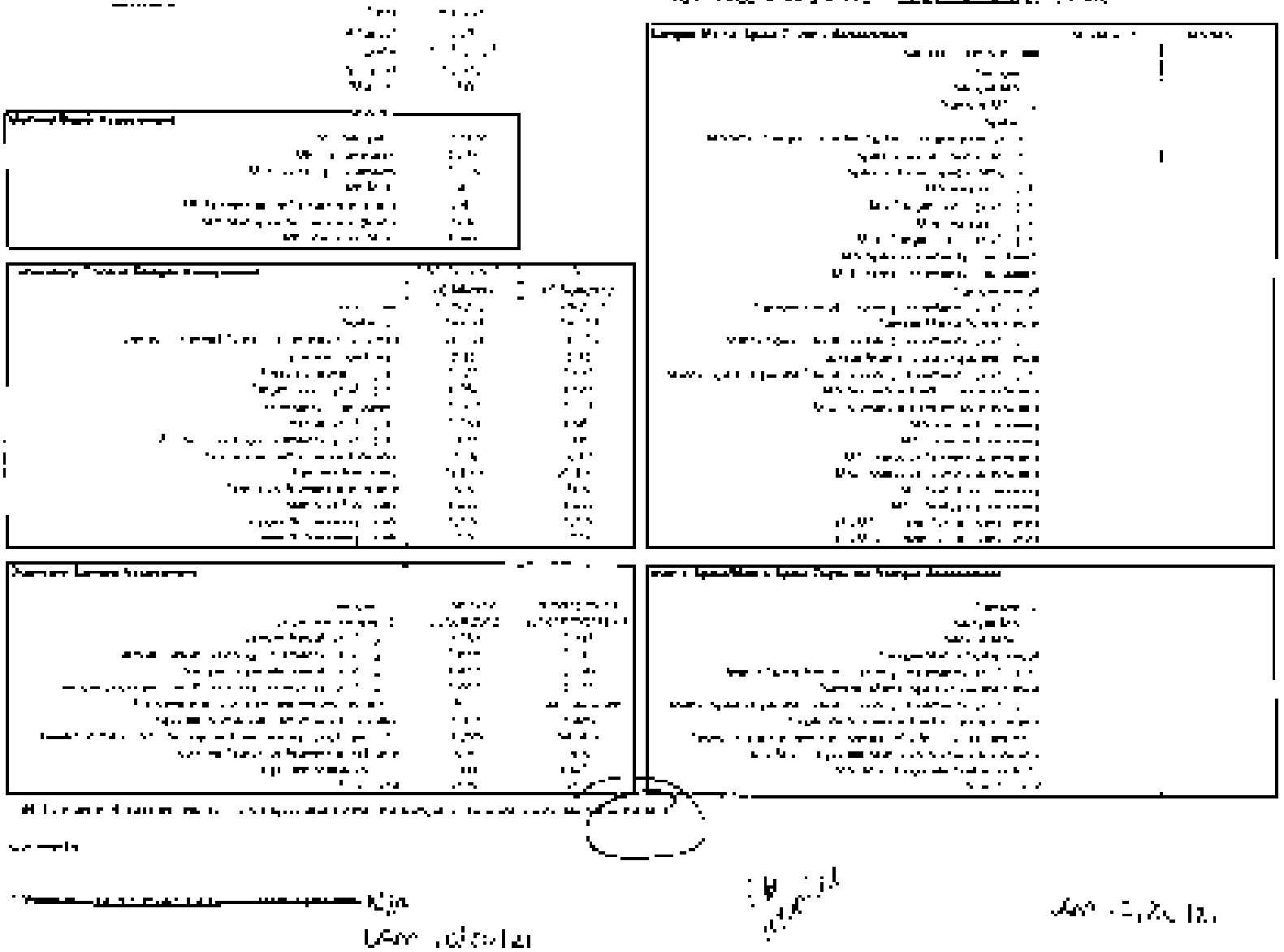
Requested Analysis Filtered (Y/N)

Residual Chlorine (Y/N)

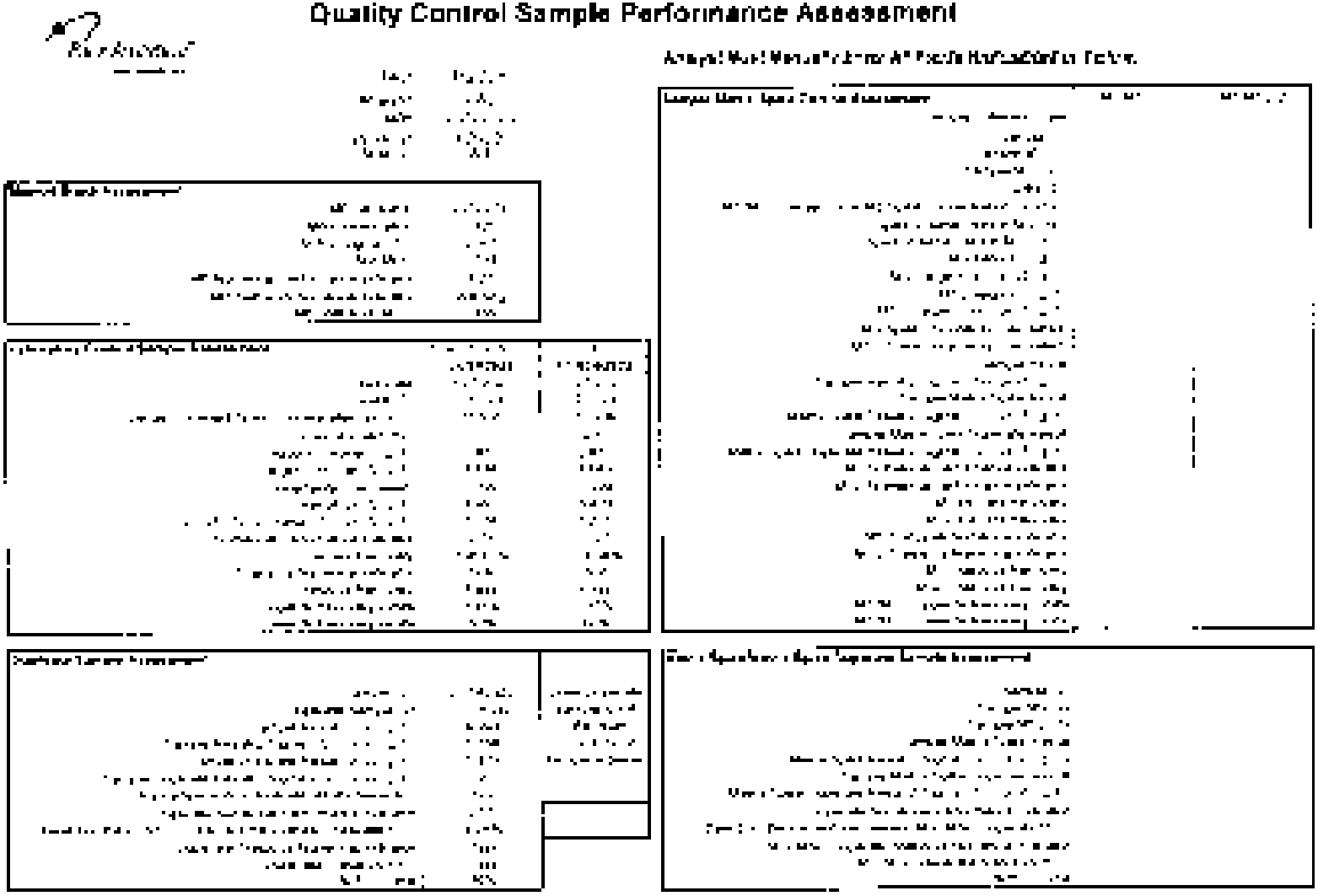
ADDITIONAL COMMENTS

DATE Signed: 9-28-21

Quality Control Sample Performance Assessment



Quality Control Sample Performance Assessment



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

October 22, 2021

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

RE: Project: BRANCH AP-BCD BACKGROUND
Pace Project No.: 92562855

Dear Joju Abraham:

Enclosed are the analytical results for sample(s) received by the laboratory between September 22, 2021 and September 23, 2021. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

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

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

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

Sincerely,

Nicole D'Oleo
nicole.d'oleo@pacelabs.com
(704)875-9092
Project Manager

Enclosures

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

REPORT OF LABORATORY ANALYSIS

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

CERTIFICATIONS

Project: BRANCH AP-BCD BACKGROUND
Pace Project No.: 92562855

Pace Analytical Services Charlotte
9800 Kincey Ave. Ste 100, Huntersville, NC 28078
Louisiana/NELAP Certification # LA170028
North Carolina Drinking Water Certification #: 37706
North Carolina Field Services Certification #: 5342
North Carolina Wastewater Certification #: 12
South Carolina Certification #: 99006001
Florida/NELAP Certification #: E87627
Kentucky UST Certification #: 84
Virginia/VELAP Certification #: 460221

Pace Analytical Services Asheville
2225 Riverside Drive, Asheville, NC 28804
Florida/NELAP Certification #: E87648
North Carolina Drinking Water Certification #: 37712
North Carolina Wastewater Certification #: 40
South Carolina Certification #: 99030001
Virginia/VELAP Certification #: 460222

Pace Analytical Services Peachtree Corners
110 Technology Pkwy, Peachtree Corners, GA 30092
Florida DOH Certification #: E87315
Georgia DW Inorganics Certification #: 812
North Carolina Certification #: 381
South Carolina Certification #: 98011001

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

SAMPLE SUMMARY

Project: BRANCH AP-BCD BACKGROUND
Pace Project No.: 92562855

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92562855001	**BRGWA-12S**	Water	09/21/21 10:45	09/22/21 17:08
92562855002	**BRGWA-12I**	Water	09/21/21 13:50	09/22/21 17:08
92562855003	**BRGWA-23S**	Water	09/22/21 10:10	09/23/21 10:47

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

SAMPLE ANALYTE COUNT

Project: BRANCH AP-BCD BACKGROUND
Pace Project No.: 92562855

Lab ID	Sample ID	Method	Analysts	Analytes Reported
92562855001	**BRGWA-12S**	EPA 6010D	KH	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2011	ALW	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92562855002	**BRGWA-12I**	EPA 6010D	KH	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2011	ALW	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92562855003	**BRGWA-23S**	EPA 6010D	KH	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2011	ALW	1
		EPA 300.0 Rev 2.1 1993	CDC	3

PASI-A = Pace Analytical Services - Asheville
PASI-C = Pace Analytical Services - Charlotte
PASI-GA = Pace Analytical Services - Peachtree Corners, GA

REPORT OF LABORATORY ANALYSIS

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

SUMMARY OF DETECTION

Project: BRANCH AP-BCD BACKGROUND
Pace Project No.: 92562855

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92562855001	**BRGWA-12S**					
	Performed by	CUSTOMER			09/23/21 09:40	
	pH	5.87	Std. Units		09/23/21 09:40	
EPA 6010D	Calcium	5.4	mg/L	1.0	09/30/21 20:24	
EPA 6020B	Barium	0.060	mg/L	0.0050	10/01/21 14:14	
EPA 6020B	Chromium	0.0024J	mg/L	0.0050	09/30/21 19:18	
EPA 7470A	Mercury	0.00010J	mg/L	0.00020	10/06/21 12:25	B
SM 2540C-2011	Total Dissolved Solids	56.0	mg/L	10.0	09/27/21 10:20	
EPA 300.0 Rev 2.1 1993	Chloride	3.5	mg/L	1.0	09/24/21 18:31	
EPA 300.0 Rev 2.1 1993	Sulfate	0.51J	mg/L	1.0	09/24/21 18:31	
92562855002	**BRGWA-12I**					
	Performed by	CUSTOMER			09/23/21 09:40	
	pH	6.53	Std. Units		09/23/21 09:40	
EPA 6010D	Calcium	16.4	mg/L	1.0	09/30/21 20:29	
EPA 6020B	Antimony	0.017	mg/L	0.0030	10/01/21 14:20	
EPA 6020B	Barium	0.074	mg/L	0.0050	10/01/21 14:20	
EPA 6020B	Chromium	0.0023J	mg/L	0.0050	09/30/21 19:35	
EPA 6020B	Lithium	0.0037J	mg/L	0.030	09/30/21 19:35	
EPA 7470A	Mercury	0.00010J	mg/L	0.00020	10/06/21 12:36	B
SM 2540C-2011	Total Dissolved Solids	117	mg/L	10.0	09/27/21 10:20	
EPA 300.0 Rev 2.1 1993	Chloride	2.1	mg/L	1.0	09/24/21 19:19	
EPA 300.0 Rev 2.1 1993	Fluoride	0.071J	mg/L	0.10	09/24/21 19:19	
EPA 300.0 Rev 2.1 1993	Sulfate	1.7	mg/L	1.0	09/24/21 19:19	
92562855003	**BRGWA-23S**					
	Performed by	CUSTOMER			09/23/21 13:00	
	pH	5.72	Std. Units		09/23/21 13:00	
EPA 6010D	Calcium	9.2	mg/L	1.0	09/30/21 20:33	
EPA 6020B	Barium	0.070	mg/L	0.0050	10/01/21 14:37	
EPA 6020B	Boron	0.047	mg/L	0.040	10/01/21 14:37	
EPA 6020B	Chromium	0.0026J	mg/L	0.0050	10/01/21 14:37	
EPA 6020B	Lithium	0.0074J	mg/L	0.030	10/01/21 14:37	
EPA 6020B	Selenium	0.0016J	mg/L	0.0050	10/01/21 14:37	
EPA 7470A	Mercury	0.00010J	mg/L	0.00020	10/06/21 12:54	B
SM 2540C-2011	Total Dissolved Solids	128	mg/L	10.0	09/28/21 10:57	
EPA 300.0 Rev 2.1 1993	Chloride	2.8	mg/L	1.0	09/24/21 20:38	
EPA 300.0 Rev 2.1 1993	Fluoride	0.069J	mg/L	0.10	09/24/21 20:38	
EPA 300.0 Rev 2.1 1993	Sulfate	34.6	mg/L	1.0	09/24/21 20:38	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: BRANCH AP-BCD BACKGROUND
Pace Project No.: 92562855

Sample: BRGWA-12S **Lab ID: 92562855001** Collected: 09/21/21 10:45 Received: 09/22/21 17:08 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**CUSTOMER**				1		09/23/21 09:40		
pH	**5.87**	Std. Units			1		09/23/21 09:40		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	**5.4**	mg/L	1.0	0.12	1	09/30/21 10:15	09/30/21 20:24	7440-70-2	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00078	1	09/30/21 10:25	09/30/21 19:18	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0011	1	09/30/21 10:25	09/30/21 19:18	7440-38-2	
Barium	**0.060**	mg/L	0.0050	0.00067	1	09/30/21 10:25	10/01/21 14:14	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	09/30/21 10:25	09/30/21 19:18	7440-41-7	
Boron	ND	mg/L	0.040	0.0086	1	09/30/21 10:25	09/30/21 19:18	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	09/30/21 10:25	09/30/21 19:18	7440-43-9	
Chromium	**0.0024J**	mg/L	0.0050	0.0011	1	09/30/21 10:25	09/30/21 19:18	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	09/30/21 10:25	09/30/21 19:18	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	09/30/21 10:25	09/30/21 19:18	7439-92-1	
Lithium	ND	mg/L	0.030	0.00073	1	09/30/21 10:25	09/30/21 19:18	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	09/30/21 10:25	09/30/21 19:18	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	09/30/21 10:25	09/30/21 19:18	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	09/30/21 10:25	09/30/21 19:18	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	**0.00010J**	mg/L	0.00020	0.000078	1	10/06/21 09:30	10/06/21 12:25	7439-97-6	B
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**56.0**	mg/L	10.0	10.0	1		09/27/21 10:20		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**3.5**	mg/L	1.0	0.60	1		09/24/21 18:31	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		09/24/21 18:31	16984-48-8	
Sulfate	**0.51J**	mg/L	1.0	0.50	1		09/24/21 18:31	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: BRANCH AP-BCD BACKGROUND
Pace Project No.: 92562855

Sample: BRGWA-12I **Lab ID: 92562855002** Collected: 09/21/21 13:50 Received: 09/22/21 17:08 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**CUSTOMER**				1		09/23/21 09:40		
pH	**6.53**	Std. Units			1		09/23/21 09:40		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	**16.4**	mg/L	1.0	0.12	1	09/30/21 10:15	09/30/21 20:29	7440-70-2	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	**0.017**	mg/L	0.0030	0.00078	1	09/30/21 10:25	10/01/21 14:20	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0011	1	09/30/21 10:25	09/30/21 19:35	7440-38-2	
Barium	**0.074**	mg/L	0.0050	0.00067	1	09/30/21 10:25	10/01/21 14:20	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	09/30/21 10:25	09/30/21 19:35	7440-41-7	
Boron	ND	mg/L	0.040	0.0086	1	09/30/21 10:25	09/30/21 19:35	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	09/30/21 10:25	09/30/21 19:35	7440-43-9	
Chromium	**0.0023J**	mg/L	0.0050	0.0011	1	09/30/21 10:25	09/30/21 19:35	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	09/30/21 10:25	09/30/21 19:35	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	09/30/21 10:25	09/30/21 19:35	7439-92-1	
Lithium	**0.0037J**	mg/L	0.030	0.00073	1	09/30/21 10:25	09/30/21 19:35	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	09/30/21 10:25	09/30/21 19:35	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	09/30/21 10:25	09/30/21 19:35	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	09/30/21 10:25	09/30/21 19:35	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	**0.00010J**	mg/L	0.00020	0.000078	1	10/06/21 09:30	10/06/21 12:36	7439-97-6	B
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**117**	mg/L	10.0	10.0	1		09/27/21 10:20		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**2.1**	mg/L	1.0	0.60	1		09/24/21 19:19	16887-00-6	
Fluoride	**0.071J**	mg/L	0.10	0.050	1		09/24/21 19:19	16984-48-8	
Sulfate	**1.7**	mg/L	1.0	0.50	1		09/24/21 19:19	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: BRANCH AP-BCD BACKGROUND
Pace Project No.: 92562855

Sample: BRGWA-23S **Lab ID: 92562855003** Collected: 09/22/21 10:10 Received: 09/23/21 10:47 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**CUSTOMER**				1		09/23/21 13:00		
pH	**5.72**	Std. Units			1		09/23/21 13:00		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	**9.2**	mg/L	1.0	0.12	1	09/30/21 10:15	09/30/21 20:33	7440-70-2	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00078	1	09/30/21 10:25	10/01/21 14:37	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0011	1	09/30/21 10:25	10/01/21 14:37	7440-38-2	
Barium	**0.070**	mg/L	0.0050	0.00067	1	09/30/21 10:25	10/01/21 14:37	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	09/30/21 10:25	10/01/21 14:37	7440-41-7	
Boron	**0.047**	mg/L	0.040	0.0086	1	09/30/21 10:25	10/01/21 14:37	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	09/30/21 10:25	10/01/21 14:37	7440-43-9	
Chromium	**0.0026J**	mg/L	0.0050	0.0011	1	09/30/21 10:25	10/01/21 14:37	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	09/30/21 10:25	10/01/21 14:37	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	09/30/21 10:25	10/01/21 14:37	7439-92-1	
Lithium	**0.0074J**	mg/L	0.030	0.00073	1	09/30/21 10:25	10/01/21 14:37	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	09/30/21 10:25	10/01/21 14:37	7439-98-7	
Selenium	**0.0016J**	mg/L	0.0050	0.0014	1	09/30/21 10:25	10/01/21 14:37	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	09/30/21 10:25	10/01/21 14:37	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	**0.00010J**	mg/L	0.00020	0.000078	1	10/06/21 09:30	10/06/21 12:54	7439-97-6	B
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**128**	mg/L	10.0	10.0	1		09/28/21 10:57		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**2.8**	mg/L	1.0	0.60	1		09/24/21 20:38	16887-00-6	
Fluoride	**0.069J**	mg/L	0.10	0.050	1		09/24/21 20:38	16984-48-8	
Sulfate	**34.6**	mg/L	1.0	0.50	1		09/24/21 20:38	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: BRANCH AP-BCD BACKGROUND
Pace Project No.: 92562855

QC Batch: 650016
QC Batch Method: EPA 3010A
Analysis Method: EPA 6010D
Analysis Description: 6010D ATL
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92562855001, 92562855002, 92562855003

METHOD BLANK: 3409429 Matrix: Water
Associated Lab Samples: 92562855001, 92562855002, 92562855003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium	mg/L	ND	1.0	0.12	09/30/21 18:01	

LABORATORY CONTROL SAMPLE: 3409430

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium	mg/L	1	1.1	109	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3409431 3409432

Parameter	Units	92561637001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Calcium	mg/L	72.7	1	1	72.0	73.0	-71	25	75-125	1	20	M1

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

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: BRANCH AP-BCD BACKGROUND
Pace Project No.: 92562855

QC Batch: 650022
QC Batch Method: EPA 3005A
Analysis Method: EPA 6020B
Analysis Description: 6020 MET
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92562855001, 92562855002, 92562855003

METHOD BLANK: 3409457 Matrix: Water
Associated Lab Samples: 92562855001, 92562855002, 92562855003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	ND	0.0030	0.00078	09/30/21 18:26	
Arsenic	mg/L	ND	0.0050	0.0011	09/30/21 18:26	
Barium	mg/L	ND	0.0050	0.00067	09/30/21 18:26	
Beryllium	mg/L	ND	0.00050	0.000054	09/30/21 18:26	
Boron	mg/L	ND	0.040	0.0086	09/30/21 18:26	
Cadmium	mg/L	ND	0.00050	0.00011	09/30/21 18:26	
Chromium	mg/L	ND	0.0050	0.0011	09/30/21 18:26	
Cobalt	mg/L	ND	0.0050	0.00039	09/30/21 18:26	
Lead	mg/L	ND	0.0010	0.00089	09/30/21 18:26	
Lithium	mg/L	ND	0.030	0.00073	09/30/21 18:26	
Molybdenum	mg/L	ND	0.010	0.00074	09/30/21 18:26	
Selenium	mg/L	ND	0.0050	0.0014	09/30/21 18:26	
Thallium	mg/L	ND	0.0010	0.00018	09/30/21 18:26	

LABORATORY CONTROL SAMPLE: 3409458

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.1	0.12	116	80-120	
Arsenic	mg/L	0.1	0.097	97	80-120	
Barium	mg/L	0.1	0.11	111	80-120	
Beryllium	mg/L	0.1	0.11	106	80-120	
Boron	mg/L	1	1.1	106	80-120	
Cadmium	mg/L	0.1	0.10	102	80-120	
Chromium	mg/L	0.1	0.11	106	80-120	
Cobalt	mg/L	0.1	0.10	103	80-120	
Lead	mg/L	0.1	0.096	96	80-120	
Lithium	mg/L	0.1	0.11	107	80-120	
Molybdenum	mg/L	0.1	0.11	111	80-120	
Selenium	mg/L	0.1	0.097	97	80-120	
Thallium	mg/L	0.1	0.095	95	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3409459 3409460

Parameter	Units	92562820017 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	108	114	75-125	5	20	
Arsenic	mg/L	ND	0.1	0.1	0.097	0.099	97	99	75-125	2	20	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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QUALITY CONTROL DATA

Project: BRANCH AP-BCD BACKGROUND
Pace Project No.: 92562855

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3409459 3409460

Parameter	Units	92562820017 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Barium	mg/L	0.092	0.1	0.1	0.23	0.24	138	152	75-125	6	20	M1
Beryllium	mg/L	ND	0.1	0.1	0.11	0.11	110	108	75-125	2	20	
Boron	mg/L	ND	1	1	1.1	1.0	108	104	75-125	4	20	
Cadmium	mg/L	ND	0.1	0.1	0.10	0.10	102	101	75-125	0	20	
Chromium	mg/L	ND	0.1	0.1	0.10	0.10	103	102	75-125	1	20	
Cobalt	mg/L	ND	0.1	0.1	0.10	0.11	99	103	75-125	4	20	
Lead	mg/L	ND	0.1	0.1	0.096	0.095	96	95	75-125	1	20	
Lithium	mg/L	ND	0.1	0.1	0.11	0.11	109	108	75-125	0	20	
Molybdenum	mg/L	ND	0.1	0.1	0.11	0.11	108	114	75-125	5	20	
Selenium	mg/L	ND	0.1	0.1	0.096	0.095	96	95	75-125	1	20	
Thallium	mg/L	ND	0.1	0.1	0.095	0.095	95	95	75-125	0	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: BRANCH AP-BCD BACKGROUND
Pace Project No.: 92562855

QC Batch: 650957
QC Batch Method: EPA 7470A
Analysis Method: EPA 7470A
Analysis Description: 7470 Mercury
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92562855001, 92562855002, 92562855003

METHOD BLANK: 3413779 Matrix: Water
Associated Lab Samples: 92562855001, 92562855002, 92562855003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	0.00011J	0.00020	0.000078	10/06/21 12:20	

LABORATORY CONTROL SAMPLE: 3413780

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.0025	0.0025	98	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3413781 3413782

Parameter	Units	92562855001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	mg/L	0.00010J	0.0025	0.0025	0.0024	0.0023	92	89	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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QUALITY CONTROL DATA

Project: BRANCH AP-BCD BACKGROUND
Pace Project No.: 92562855

QC Batch: 649295
QC Batch Method: SM 2540C-2011
Analysis Method: SM 2540C-2011
Analysis Description: 2540C Total Dissolved Solids
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92562855001, 92562855002

METHOD BLANK: 3405734 Matrix: Water
Associated Lab Samples: 92562855001, 92562855002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	10.0	10.0	09/27/21 10:19	

LABORATORY CONTROL SAMPLE: 3405735

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	394	98	90-111	

SAMPLE DUPLICATE: 3405736

Parameter	Units	92562283002 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	174	168	4	10	

SAMPLE DUPLICATE: 3405737

Parameter	Units	92563313004 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	985	1080	9	10	

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

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: BRANCH AP-BCD BACKGROUND
Pace Project No.: 92562855

QC Batch: 649491
QC Batch Method: SM 2540C-2011
Analysis Method: SM 2540C-2011
Analysis Description: 2540C Total Dissolved Solids
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92562855003

METHOD BLANK: 3406451 Matrix: Water
Associated Lab Samples: 92562855003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	10.0	10.0	09/28/21 10:55	

LABORATORY CONTROL SAMPLE: 3406452

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	394	98	90-111	

SAMPLE DUPLICATE: 3406453

Parameter	Units	92563313026 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	527	536	2	10	

SAMPLE DUPLICATE: 3406454

Parameter	Units	92562857001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	86.0	80.0	7	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

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

QUALITY CONTROL DATA

Project: BRANCH AP-BCD BACKGROUND
Pace Project No.: 92562855

QC Batch: 649204
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
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92562855001, 92562855002, 92562855003

METHOD BLANK: 3405091 Matrix: Water
Associated Lab Samples: 92562855001, 92562855002, 92562855003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.60	09/24/21 17:59	
Fluoride	mg/L	ND	0.10	0.050	09/24/21 17:59	
Sulfate	mg/L	ND	1.0	0.50	09/24/21 17:59	

LABORATORY CONTROL SAMPLE: 3405092

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	45.5	91	90-110	
Fluoride	mg/L	2.5	2.4	96	90-110	
Sulfate	mg/L	50	49.1	98	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3405095 3405096

Parameter	Units	92562974002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	2.7	50	50	49.7	49.4	94	93	90-110	1	10	
Fluoride	mg/L	0.068J	2.5	2.5	2.7	2.6	103	102	90-110	1	10	
Sulfate	mg/L	94.6	50	50	140	141	90	94	90-110	1	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3405233 3405234

Parameter	Units	92562855001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	3.5	50	50	48.5	50.6	90	94	90-110	4	10	
Fluoride	mg/L	ND	2.5	2.5	2.4	2.5	95	99	90-110	5	10	
Sulfate	mg/L	0.51J	50	50	48.8	51.3	97	102	90-110	5	10	

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

REPORT OF LABORATORY ANALYSIS

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

QUALIFIERS

Project: BRANCH AP-BCD BACKGROUND
Pace Project No.: 92562855

DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

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

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

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

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

Acid preservation may not be appropriate for 2 Chloroethylvinyl ether.

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

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

Reported results are not rounded until the final step prior to reporting. Therefore, calculated parameters that are typically reported as "Total" may vary slightly from the sum of the reported component parameters.

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.
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: BRANCH AP-BCD BACKGROUND
Pace Project No.: 92562855

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92562855001	**BRGWA-12S**				
92562855002	**BRGWA-12I**				
92562855003	**BRGWA-23S**				
92562855001	**BRGWA-12S**	EPA 3010A	650016	EPA 6010D	650179
92562855002	**BRGWA-12I**	EPA 3010A	650016	EPA 6010D	650179
92562855003	**BRGWA-23S**	EPA 3010A	650016	EPA 6010D	650179
92562855001	**BRGWA-12S**	EPA 3005A	650022	EPA 6020B	650181
92562855002	**BRGWA-12I**	EPA 3005A	650022	EPA 6020B	650181
92562855003	**BRGWA-23S**	EPA 3005A	650022	EPA 6020B	650181
92562855001	**BRGWA-12S**	EPA 7470A	650957	EPA 7470A	651107
92562855002	**BRGWA-12I**	EPA 7470A	650957	EPA 7470A	651107
92562855003	**BRGWA-23S**	EPA 7470A	650957	EPA 7470A	651107
92562855001	**BRGWA-12S**	SM 2540C-2011	649295		
92562855002	**BRGWA-12I**	SM 2540C-2011	649295		
92562855003	**BRGWA-23S**	SM 2540C-2011	649491		
92562855001	**BRGWA-12S**	EPA 300.0 Rev 2.1 1993	649204		
92562855002	**BRGWA-12I**	EPA 300.0 Rev 2.1 1993	649204		
92562855003	**BRGWA-23S**	EPA 300.0 Rev 2.1 1993	649204		

Pace Analytical	Document Name: Sample Condition Upon Receipt(SCUR)	Document Revised: October 28, 2020 Page 1 of 2
	Document No.: F-CAR-CS-033-Rev.07	Issuing Authority: Pace Carolinas Quality Office

Laboratory receiving samples:
Asheville ☐ Eden ☐ Greenwood ☐ Huntersville ☐ Raleigh ☐ Mechanicsville ☐ Atlanta ☑ Kernersville ☐

Sample Condition Upon Receipt

Client Name: GP Power

Project #: WO# : 92562855

92562855

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

Custody Seal Present? ☐ Yes ☑ No Seals Intact? ☐ Yes ☐ No

Date/Initials Person Examining Contents: 9/22/24 184

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

Biological Tissue Frozen? ☐ Yes ☐ No ☑ N/A

Thermometer: ☐ IR Gun ID: 083 ☑ Wet ☐ Blue ☐ None

Type of Ice:

Cooler Temp: 1.8 Correction Factor: Add/Subtract (°C) 0.0

Cooler Temp Corrected (°C): 1.8

Temp should be above freezing to 6°C
☐ Samples out of temp criteria. Samples on ice, cooling process has begun

USDA Regulated Soil (☐ N/A, water sample)
Did samples originate in a quarantine zone within the United States: CA, NY, or SC (check maps)? ☐ Yes ☐ No

Did samples originate from a foreign source (internationally, including Hawaii and Puerto Rico)? ☐ Yes ☐ No

				Comments/Discrepancy:
Chain of Custody Present?	☑ Yes	☐ No	☐ N/A	1.
Samples Arrived within Hold Time?	☑ Yes	☐ No	☐ N/A	2.
Short Hold Time Analysis (<72 hr.)?	☐ Yes	☑ No	☐ N/A	3.
Rush Turn Around Time Requested?	☐ Yes	☑ No	☐ N/A	4.
Sufficient Volume?	☑ Yes	☐ No	☐ N/A	5.
Correct Containers Used?	☑ Yes	☐ No	☐ N/A	6.
-Pace Containers Used?	☑ Yes	☐ No	☐ N/A	
Containers Intact?	☑ Yes	☐ No	☐ N/A	7.
Dissolved analysis: Samples Field Filtered?	☐ Yes	☐ No	☑ N/A	8.
Sample Labels Match COC?	☑ Yes	☐ No	☐ N/A	9.
-Includes Date/Time/ID/Analysis Matrix:	W			
Headspace in VOA Vials (>5-6mm)?	☐ Yes	☐ No	☑ N/A	10.
Trip Blank Present?	☐ Yes	☐ No	☑ N/A	11.
Trip Blank Custody Seals Present?	☐ Yes	☐ No	☑ N/A	

COMMENTS/SAMPLE DISCREPANCY

Field Data Required? ☐ Yes ☐ No

Lot ID of split containers:

CLIENT NOTIFICATION/RESOLUTION

Person contacted: Date/Time:

Project Manager SCURF Review: Date:

Project Manager SRF Review: Date:

Pace Analytical	Document Name: Sample Condition Upon Receipt(SCUR)	Document Revised: October 28, 2020 Page 2 of 2
	Document No.: F-CAR-CS-033-Rev.07	Issuing Authority: Pace Carolinas Quality Office

***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 bottles**

Project #

WO# : 92562855

PM: NMG Due Date: 10/06/21

CLIENT: GA-GA Power

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

Item#	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)	BP1N	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)	DG9U-40 mL Amber Unpreserved vials (N/A)
1										✓				
2										✓				
3														
4														
5														
6														
7														
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9														
10														
11														
12														

pH Adjustment Log for Preserved Samples

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

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

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 - Coal Combustion Residuals	Report To:	Joju Abraham	Attention:	[illegible]@southernco.com
Address:	1100 Milledgeville Rd, Milledgeville, GA 31061	Copy To:	Golder	Company Name:	
Email:	jabraham@southernco.com	Purchase Order #:		Address:	
Phone:	(404) 506-7239	Project Name:	Plant Branch AP-BCC Background	Pace Quote:	
Fax:				Pace Project Manager:	Kevin Herring
Requested Due Date:	10 day TAT	Project #:	[illegible]	Pace Profile #:	

Regulatory Agency

State / Location: GA

ITEM #	SAMPLE ID	MATRIX CODE	SAMPLE TYPE (G=GRAB C=COMP)	DATE	TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Unpreserved / Ice	H2SO4	HNO3 / Ice	HCl	NaOH + Zn Acetate	Na2S2O3	Methanol	Other	Analyses Test	App. III/IV Total Metals	Cl, F, SO4, TDS	Radium 226/228	Residual Chlorine (Y/N)	
1	BRGWA-12S	WT	G	9/21/2021	10:45		1	2		3							X	X	X		pH = 5.87
2	BRGWA-12I	WT	G	9/21/2021	11:50		1	2		3							X	X	X		pH = 6.33
3																					
4																					
5																					
6																					
7																					
8																					
9																					
10																					
11																					
12																					

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
	[signature]	9-22-21	5:[illegible]	[signature]	9/[illegible]	17[illegible]	

DATE Signed

TEMP in C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N)

PaceAnalytical

Document Name: Sample Condition Upon Receipt (SCUR)	Document Revised: October [illegible], 2020 Page 1 of 2
Document No.: F-CAR-CS-[illegible] Rev 07	Issuing Authority: Pace Carolinas Quality Office

Laboratory receiving samples:

Asheville ☐ Eden ☐ Greenwood ☐ Huntersville ☐ Raleigh ☐ Mechanicsville ☐ Atlanta ☑ Kernersville ☐

Sample Condition Upon Receipt

Client Name: [illegible handwriting]

Project #

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

Custody Seal Present? ☐ Yes ☑ No Seals Intact? ☐ Yes ☑ No

Date/Initials Person Examining Contents: [illegible]

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

Biological Tissue Frozen? ☐ Yes ☑ No ☐ N/A

Thermometer: ☐ [illegible] 3[illegible]5

Type of Ice: ☑ Wet ☐ Blue ☐ None

Cooler Temp: 1.8

Correction Factor: Add/Subtract (°C): 0.0

Cooler Temp Corrected (°C): 1.8

Temp should be above freezing to 6°C

☐ Samples out of temp criteria. Samples on ice, cooling process has begun

USDA Regulated Soil (☐ N/A, water sample)

Did samples originate in a quarantine zone within the United States: CA, NY, or SC (check maps)? ☐ Yes ☑ No

Did samples originate from a foreign source (internationally, including Hawaii and Puerto Rico)? ☐ Yes ☑ No

				Comments/Discrepancy
Chain of Custody Present?	☑ Yes	☐ No	☐ N/A	1.
Samples Arrived within Hold Time?	☑ Yes	☐ No	☐ N/A	2.
Short Hold Time Analysis (<72 hr)?	☐ Yes	☑ No	☐ N/A	3.
Rush Turn Around Time Requested?	☐ Yes	☑ No	☐ N/A	4.
Sufficient Volume?	☑ Yes	☐ No	☐ N/A	5.
Correct Containers Used?	☑ Yes	☐ No	☐ N/A	6.
-Pace Containers Used?	☑ Yes	☐ No	☐ N/A	
Containers Intact?	☑ Yes	☐ No	☐ N/A	7.
Dissolved Analysis: Samples Field Filtered?	☐ Yes	☑ No	☐ N/A	8.
Sample Labels Match COC?	☑ Yes	☐ No	☐ N/A	9.
-Includes Date/Time/ID/Analysis Matrix:	WT			
Headspace in VOA Vials (>5-6mm)?	☐ Yes	☐ No	☑ N/A	10.
Trip Blank Present?	☐ Yes	☐ No	☑ N/A	11.
Trip Blank Custody Seals Present?	☐ Yes	☐ No	☑ N/A	

COMMENTS/SAMPLE DISCREPANCY

Field Data Required? ☐ Yes ☐ No

Lot ID of split containers:

CLIENT NOTIFICATION/RESOLUTION

Person contacted: Date/Time:

Project Manager SCURF Review: Date:

Project Manager SRF Review: Date:

*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 bottles

Project #

Sample	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
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12																												

pH Adjustment Log for Preserved Samples

Sample ID	Type of Preservative	pH upon receipt	Date preserved/or adjusted	Time preservation adjusted	Amount of Preservative added	Lot #

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

CHAIN-OF-CUSTODY / Analytical Request Document

SAMPLE ID

Analyses Test

Requested Analysis Filtered (Y/N)

Residual Chlorine (Y/N)

Regulatory Agency

	[illegible]	9-27-21	[illegible]	[illegible]	8:50
			[illegible]	9/27	[illegible]

9-27-21

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

October 22, 2021

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

RE: Project: BRANCH AP-BCD DELIN PIEZO
Pace Project No.: 92563761

Dear Joju Abraham:

Enclosed are the analytical results for sample(s) received by the laboratory between September 28, 2021 and September 29, 2021. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

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

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

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

Sincerely,

Nicole D'Oleo
nicole.d'oleo@pacelabs.com
(704)875-9092
Project Manager

Enclosures

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

REPORT OF LABORATORY ANALYSIS

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

CERTIFICATIONS

Project: BRANCH AP-BCD DELIN PIEZO
Pace Project No.: 92563761

Pace Analytical Services Charlotte
9800 Kincey Ave. Ste 100, Huntersville, NC 28078
Louisiana/NELAP Certification # LA170028
North Carolina Drinking Water Certification #: 37706
North Carolina Field Services Certification #: 5342
North Carolina Wastewater Certification #: 12
South Carolina Certification #: 99006001
Florida/NELAP Certification #: E87627
Kentucky UST Certification #: 84
Virginia/VELAP Certification #: 460221

Pace Analytical Services Asheville
2225 Riverside Drive, Asheville, NC 28804
Florida/NELAP Certification #: E87648
North Carolina Drinking Water Certification #: 37712
North Carolina Wastewater Certification #: 40
South Carolina Certification #: 99030001
Virginia/VELAP Certification #: 460222

Pace Analytical Services Peachtree Corners
110 Technology Pkwy, Peachtree Corners, GA 30092
Florida DOH Certification #: E87315
Georgia DW Inorganics Certification #: 812
North Carolina Certification #: 381
South Carolina Certification #: 98011001

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

SAMPLE SUMMARY

Project: BRANCH AP-BCD DELIN PIEZO
Pace Project No.: 92563761

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92563761001	**PZ-51S**	Water	09/27/21 15:38	09/28/21 10:18
92563761002	**PZ-51I**	Water	09/27/21 17:33	09/28/21 10:18
92563761003	**PZ-61I**	Water	09/27/21 16:43	09/28/21 10:18
92563761004	**PZ-51D**	Water	09/28/21 11:10	09/29/21 11:57
92563761005	**PZ-57I**	Water	09/28/21 14:29	09/29/21 11:57
92563761006	**PZ-58I**	Water	09/28/21 13:15	09/29/21 11:57
92563761007	**PZ-44**	Water	09/28/21 14:50	09/29/21 11:57
92563761008	**PZ-50D**	Water	09/28/21 09:24	09/29/21 11:57
92563761009	**PZ-60I**	Water	09/28/21 12:02	09/29/21 11:57

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

SAMPLE ANALYTE COUNT

Project: BRANCH AP-BCD DELIN PIEZO
Pace Project No.: 92563761

Lab ID	Sample ID	Method	Analysts	Analytes Reported
92563761001	**PZ-51S**	EPA 6010D	DRB	7
		EPA 6020B	KH	13
		EPA 7470A	VB	1
		SM 2540C-2011	ALW	1
		SM 2320B-2011	SMK	3
		EPA 300.0 Rev 2.1 1993	CDC	3
		EPA 353.2 Rev 2.0 1993	KDF1	1
92563761002	**PZ-51I**	EPA 6010D	DRB	7
		EPA 6020B	KH	13
		EPA 7470A	VB	1
		SM 2540C-2011	ALW	1
		SM 2320B-2011	SMK	3
		EPA 300.0 Rev 2.1 1993	CDC	3
		EPA 353.2 Rev 2.0 1993	KDF1	1
92563761003	**PZ-61I**	EPA 6010D	DRB	7
		EPA 6020B	KH	13
		EPA 7470A	VB	1
		SM 2540C-2011	ALW	1
		SM 2320B-2011	SMK	3
		EPA 300.0 Rev 2.1 1993	CDC	3
		EPA 353.2 Rev 2.0 1993	KDF1	1
92563761004	**PZ-51D**	EPA 6010D	DRB	7
		EPA 6020B	KH	13
		EPA 7470A	VB	1
		SM 2540C-2011	ALW	1
		SM 2320B-2011	SMK	3
		EPA 300.0 Rev 2.1 1993	CDC	3
		EPA 353.2 Rev 2.0 1993	KDF1	1
92563761005	**PZ-57I**	EPA 6010D	DRB	7
		EPA 6020B	KH	13
		EPA 7470A	VB	1
		SM 2540C-2011	ALW	1
		SM 2320B-2011	SMK	3
		EPA 300.0 Rev 2.1 1993	CDC	3
		EPA 353.2 Rev 2.0 1993	KDF1	1
92563761006	**PZ-58I**	EPA 6010D	DRB	7
		EPA 6020B	KH	13

REPORT OF LABORATORY ANALYSIS

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

SAMPLE ANALYTE COUNT

Project: BRANCH AP-BCD DELIN PIEZO
Pace Project No.: 92563761

Lab ID	Sample ID	Method	Analysts	Analytes Reported
		EPA 7470A	VB	1
		SM 2540C-2011	ALW	1
		SM 2320B-2011	SMK	3
		EPA 300.0 Rev 2.1 1993	CDC	3
		EPA 353.2 Rev 2.0 1993	KDF1	1
92563761007	**PZ-44**	EPA 6010D	DRB	7
		EPA 6020B	KH	13
		EPA 7470A	VB	1
		SM 2540C-2011	ALW	1
		SM 2320B-2011	SMK	3
		EPA 300.0 Rev 2.1 1993	CDC	3
		EPA 353.2 Rev 2.0 1993	KDF1	1
92563761008	**PZ-50D**	EPA 6010D	DRB	7
		EPA 6020B	KH	13
		EPA 7470A	VB	1
		SM 2540C-2011	ALW	1
		SM 2320B-2011	SMK	3
		EPA 300.0 Rev 2.1 1993	CDC	3
		EPA 353.2 Rev 2.0 1993	KDF1	1
92563761009	**PZ-60I**	EPA 6010D	DRB	7
		EPA 6020B	CW1, KH	13
		EPA 7470A	VB	1
		SM 2540C-2011	ALW	1
		SM 2320B-2011	SMK	3
		EPA 300.0 Rev 2.1 1993	CDC	3
		EPA 353.2 Rev 2.0 1993	KDF1	1

PASI-A = Pace Analytical Services - Asheville
PASI-C = Pace Analytical Services - Charlotte
PASI-GA = Pace Analytical Services - Peachtree Corners, GA

REPORT OF LABORATORY ANALYSIS

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

SUMMARY OF DETECTION

Project: BRANCH AP-BCD DELIN PIEZO
Pace Project No.: 92563761

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92563761001	**PZ-51S**					
	Performed by	CUSTOMER			09/28/21 17:34	
	pH	6.04	Std. Units		09/28/21 17:34	
EPA 6010D	Manganese	1.3	mg/L	0.040	10/07/21 18:46	
EPA 6010D	Potassium	2.2	mg/L	0.20	10/07/21 18:46	
EPA 6010D	Sodium	11.4	mg/L	1.0	10/07/21 18:46	M1
EPA 6010D	Calcium	7.5	mg/L	1.0	10/07/21 18:46	
EPA 6010D	Magnesium	8.4	mg/L	0.050	10/07/21 18:46	
EPA 6010D	Hardness, Total(SM 2340B)	53.2	mg/L	2.7	10/07/21 18:46	
EPA 6020B	Barium	0.025	mg/L	0.0050	10/08/21 20:07	
EPA 6020B	Cobalt	0.0022J	mg/L	0.0050	10/08/21 20:07	
SM 2540C-2011	Total Dissolved Solids	88.0	mg/L	10.0	09/30/21 19:01	
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	68.7	mg/L	5.0	10/07/21 19:25	
SM 2320B-2011	Alkalinity, Total as CaCO3	68.7	mg/L	5.0	10/07/21 19:25	
EPA 300.0 Rev 2.1 1993	Chloride	3.8	mg/L	1.0	09/30/21 17:24	
EPA 300.0 Rev 2.1 1993	Fluoride	0.072J	mg/L	0.10	09/30/21 17:24	
EPA 353.2 Rev 2.0 1993	Nitrogen, NO2 plus NO3	1.8	mg/L	0.040	10/11/21 11:32	
92563761002	**PZ-51I**					
	Performed by	CUSTOMER			09/28/21 17:34	
	pH	5.34	Std. Units		09/28/21 17:34	
EPA 6010D	Iron	0.031J	mg/L	0.040	10/07/21 19:15	
EPA 6010D	Manganese	37.5	mg/L	0.040	10/07/21 19:15	
EPA 6010D	Potassium	10.6	mg/L	0.20	10/07/21 19:15	
EPA 6010D	Sodium	45.8	mg/L	1.0	10/07/21 19:15	
EPA 6010D	Calcium	187	mg/L	1.0	10/07/21 19:15	
EPA 6010D	Magnesium	121	mg/L	0.050	10/07/21 19:15	
EPA 6010D	Hardness, Total(SM 2340B)	963	mg/L	2.7	10/07/21 19:15	
EPA 6020B	Antimony	0.0012J	mg/L	0.0030	10/08/21 20:30	
EPA 6020B	Barium	0.014	mg/L	0.0050	10/08/21 20:30	
EPA 6020B	Beryllium	0.000071J	mg/L	0.00050	10/08/21 20:30	
EPA 6020B	Boron	0.39	mg/L	0.040	10/08/21 20:30	
EPA 6020B	Cadmium	0.0031	mg/L	0.00050	10/08/21 20:30	
EPA 6020B	Cobalt	0.020	mg/L	0.0050	10/08/21 20:30	
EPA 6020B	Lithium	0.020J	mg/L	0.030	10/08/21 20:30	
SM 2540C-2011	Total Dissolved Solids	1560	mg/L	50.0	10/03/21 11:38	
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	22.2	mg/L	5.0	10/07/21 19:42	
SM 2320B-2011	Alkalinity, Total as CaCO3	22.2	mg/L	5.0	10/07/21 19:42	
EPA 300.0 Rev 2.1 1993	Chloride	9.4	mg/L	1.0	09/30/21 17:40	
EPA 300.0 Rev 2.1 1993	Sulfate	933	mg/L	21.0	10/01/21 05:34	
92563761003	**PZ-61I**					
	Performed by	CUSTOMER			09/28/21 17:34	
	pH	5.02	Std. Units		09/28/21 17:34	
EPA 6010D	Manganese	118	mg/L	0.40	10/08/21 12:31	
EPA 6010D	Iron	4.5	mg/L	0.040	10/07/21 19:20	
EPA 6010D	Potassium	7.0	mg/L	0.20	10/07/21 19:20	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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SUMMARY OF DETECTION

Project: BRANCH AP-BCD DELIN PIEZO
Pace Project No.: 92563761

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92563761003	**PZ-61I**					
EPA 6010D	Sodium	66.1	mg/L	1.0	10/07/21 19:20	
EPA 6010D	Calcium	230	mg/L	1.0	10/07/21 19:20	
EPA 6010D	Magnesium	180	mg/L	0.050	10/07/21 19:20	
EPA 6010D	Hardness, Total(SM 2340B)	1310	mg/L	2.7	10/07/21 19:20	
EPA 6020B	Arsenic	0.0023J	mg/L	0.0050	10/08/21 20:36	
EPA 6020B	Barium	0.029	mg/L	0.0050	10/08/21 20:36	
EPA 6020B	Beryllium	0.0017	mg/L	0.00050	10/08/21 20:36	
EPA 6020B	Boron	0.26	mg/L	0.040	10/08/21 20:36	
EPA 6020B	Cadmium	0.00081	mg/L	0.00050	10/08/21 20:36	
EPA 6020B	Chromium	0.0077	mg/L	0.0050	10/08/21 20:36	
EPA 6020B	Cobalt	0.45	mg/L	0.0050	10/08/21 20:36	
EPA 6020B	Lead	0.0019	mg/L	0.0010	10/08/21 20:36	
EPA 6020B	Lithium	0.0095J	mg/L	0.030	10/08/21 20:36	
EPA 6020B	Selenium	0.0079	mg/L	0.0050	10/08/21 20:36	
SM 2540C-2011	Total Dissolved Solids	2100	mg/L	100	10/03/21 11:38	
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	11.3	mg/L	5.0	10/07/21 19:48	
SM 2320B-2011	Alkalinity, Total as CaCO3	11.3	mg/L	5.0	10/07/21 19:48	
EPA 300.0 Rev 2.1 1993	Chloride	20.0	mg/L	1.0	09/30/21 17:55	
EPA 300.0 Rev 2.1 1993	Fluoride	0.067J	mg/L	0.10	09/30/21 17:55	
EPA 300.0 Rev 2.1 1993	Sulfate	1420	mg/L	32.0	10/01/21 05:50	
92563761004	**PZ-51D**					
	Performed by	CUSTOMER			09/29/21 13:10	
	pH	7.18	Std. Units		09/29/21 13:10	
EPA 6010D	Iron	1.7	mg/L	0.040	10/07/21 19:25	
EPA 6010D	Manganese	1.1	mg/L	0.040	10/07/21 19:25	
EPA 6010D	Potassium	10	mg/L	0.20	10/07/21 19:25	
EPA 6010D	Sodium	39.0	mg/L	1.0	10/07/21 19:25	
EPA 6010D	Calcium	113	mg/L	1.0	10/07/21 19:25	
EPA 6010D	Magnesium	28.2	mg/L	0.050	10/07/21 19:25	
EPA 6010D	Hardness, Total(SM 2340B)	399	mg/L	2.7	10/07/21 19:25	
EPA 6020B	Barium	0.057	mg/L	0.0050	10/08/21 20:53	
EPA 6020B	Boron	0.023J	mg/L	0.040	10/08/21 20:53	
EPA 6020B	Lithium	0.0096J	mg/L	0.030	10/08/21 20:53	
EPA 6020B	Molybdenum	0.0029J	mg/L	0.010	10/08/21 20:53	
SM 2540C-2011	Total Dissolved Solids	650	mg/L	20.0	10/03/21 11:39	
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	144	mg/L	5.0	10/11/21 22:43	
SM 2320B-2011	Alkalinity, Total as CaCO3	144	mg/L	5.0	10/11/21 22:43	
EPA 300.0 Rev 2.1 1993	Chloride	12.8	mg/L	1.0	09/30/21 18:59	
EPA 300.0 Rev 2.1 1993	Fluoride	0.26	mg/L	0.10	09/30/21 18:59	
EPA 300.0 Rev 2.1 1993	Sulfate	294	mg/L	7.0	10/01/21 06:05	
92563761005	**PZ-57I**					
	Performed by	CUSTOMER			09/29/21 13:10	
	pH	5.37	Std. Units		09/29/21 13:10	
EPA 6010D	Iron	2.6	mg/L	0.040	10/07/21 19:29	
EPA 6010D	Manganese	12.2	mg/L	0.040	10/07/21 19:29	

REPORT OF LABORATORY ANALYSIS

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

SUMMARY OF DETECTION

Project: BRANCH AP-BCD DELIN PIEZO
Pace Project No.: 92563761

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92563761005	**PZ-57I**					
EPA 6010D	Potassium	4.3	mg/L	0.20	10/07/21 19:29	
EPA 6010D	Sodium	18.2	mg/L	1.0	10/07/21 19:29	
EPA 6010D	Calcium	51.1	mg/L	1.0	10/07/21 19:29	
EPA 6010D	Magnesium	31.3	mg/L	0.050	10/07/21 19:29	
EPA 6010D	Hardness, Total(SM 2340B)	257	mg/L	2.7	10/07/21 19:29	
EPA 6020B	Barium	0.022	mg/L	0.0050	10/08/21 20:59	
EPA 6020B	Beryllium	0.00031J	mg/L	0.00050	10/08/21 20:59	
EPA 6020B	Boron	0.48	mg/L	0.040	10/08/21 20:59	
EPA 6020B	Cadmium	0.00064	mg/L	0.00050	10/08/21 20:59	
EPA 6020B	Cobalt	0.055	mg/L	0.0050	10/08/21 20:59	
EPA 6020B	Lithium	0.018J	mg/L	0.030	10/08/21 20:59	
SM 2540C-2011	Total Dissolved Solids	542	mg/L	10.0	10/03/21 11:39	
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	10.1	mg/L	5.0	10/11/21 22:53	
SM 2320B-2011	Alkalinity, Total as CaCO3	10.1	mg/L	5.0	10/11/21 22:53	
EPA 300.0 Rev 2.1 1993	Chloride	5.9	mg/L	1.0	09/30/21 19:15	
EPA 300.0 Rev 2.1 1993	Fluoride	0.085J	mg/L	0.10	09/30/21 19:15	
EPA 300.0 Rev 2.1 1993	Sulfate	259	mg/L	6.0	10/01/21 06:21	
92563761006	**PZ-58I**					
	Performed by	CUSTOMER			09/29/21 13:10	
	pH	4.00	Std. Units		09/29/21 13:10	
EPA 6010D	Iron	39.8	mg/L	0.040	10/07/21 19:34	
EPA 6010D	Manganese	20.2	mg/L	0.040	10/07/21 19:34	
EPA 6010D	Potassium	7.0	mg/L	0.20	10/07/21 19:34	
EPA 6010D	Sodium	30.3	mg/L	1.0	10/07/21 19:34	
EPA 6010D	Calcium	108	mg/L	1.0	10/07/21 19:34	
EPA 6010D	Magnesium	58.9	mg/L	0.050	10/07/21 19:34	
EPA 6010D	Hardness, Total(SM 2340B)	513	mg/L	2.7	10/07/21 19:34	
EPA 6020B	Barium	0.017	mg/L	0.0050	10/08/21 21:04	
EPA 6020B	Beryllium	0.025	mg/L	0.00050	10/08/21 21:04	
EPA 6020B	Boron	0.36	mg/L	0.040	10/08/21 21:04	
EPA 6020B	Cadmium	0.0042	mg/L	0.00050	10/08/21 21:04	
EPA 6020B	Cobalt	0.39	mg/L	0.0050	10/08/21 21:04	
EPA 6020B	Lithium	0.041	mg/L	0.030	10/08/21 21:04	
EPA 6020B	Selenium	0.0034J	mg/L	0.0050	10/08/21 21:04	
SM 2540C-2011	Total Dissolved Solids	1120	mg/L	20.0	10/03/21 11:39	
EPA 300.0 Rev 2.1 1993	Chloride	9.6	mg/L	1.0	09/30/21 19:31	
EPA 300.0 Rev 2.1 1993	Fluoride	0.97	mg/L	0.10	09/30/21 19:31	
EPA 300.0 Rev 2.1 1993	Sulfate	628	mg/L	14.0	10/01/21 06:37	
92563761007	**PZ-44**					
	Performed by	CUSTOMER			09/29/21 13:10	
	pH	6.22	Std. Units		09/29/21 13:10	
EPA 6010D	Iron	0.11	mg/L	0.040	10/07/21 19:39	
EPA 6010D	Manganese	0.44	mg/L	0.040	10/07/21 19:39	
EPA 6010D	Potassium	2.5	mg/L	0.20	10/07/21 19:39	
EPA 6010D	Sodium	12.3	mg/L	1.0	10/07/21 19:39	

Pace Analytical Services, LLC
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SUMMARY OF DETECTION

Project: BRANCH AP-BCD DELIN PIEZO
Pace Project No.: 92563761

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92563761007	**PZ-44**					
EPA 6010D	Calcium	24.2	mg/L	1.0	10/07/21 19:39	
EPA 6010D	Magnesium	10.3	mg/L	0.050	10/07/21 19:39	
EPA 6010D	Hardness, Total(SM 2340B)	103	mg/L	2.7	10/07/21 19:39	
EPA 6020B	Barium	0.049	mg/L	0.0050	10/08/21 21:10	
EPA 6020B	Boron	1.3	mg/L	0.040	10/08/21 21:10	
EPA 6020B	Lithium	0.0048J	mg/L	0.030	10/08/21 21:10	
SM 2540C-2011	Total Dissolved Solids	181	mg/L	10.0	10/03/21 11:39	
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	81.8	mg/L	5.0	10/11/21 23:00	
SM 2320B-2011	Alkalinity, Total as CaCO3	81.8	mg/L	5.0	10/11/21 23:00	
EPA 300.0 Rev 2.1 1993	Chloride	5.0	mg/L	1.0	09/30/21 19:47	
EPA 300.0 Rev 2.1 1993	Fluoride	0.080J	mg/L	0.10	09/30/21 19:47	
EPA 300.0 Rev 2.1 1993	Sulfate	47.2	mg/L	1.0	09/30/21 19:47	
92563761008	**PZ-50D**					
	Performed by	CUSTOMER			09/29/21 13:11	
	pH	6.23	Std. Units		09/29/21 13:11	
EPA 6010D	Iron	4.5	mg/L	0.040	10/07/21 19:44	
EPA 6010D	Manganese	14.7	mg/L	0.040	10/07/21 19:44	
EPA 6010D	Potassium	13.3	mg/L	0.20	10/07/21 19:44	
EPA 6010D	Sodium	62.1	mg/L	1.0	10/07/21 19:44	
EPA 6010D	Calcium	225	mg/L	1.0	10/07/21 19:44	
EPA 6010D	Magnesium	87.4	mg/L	0.050	10/07/21 19:44	
EPA 6010D	Hardness, Total(SM 2340B)	923	mg/L	2.7	10/07/21 19:44	
EPA 6020B	Barium	0.034	mg/L	0.0050	10/08/21 21:16	
EPA 6020B	Beryllium	0.000059J	mg/L	0.00050	10/08/21 21:16	
EPA 6020B	Boron	0.24	mg/L	0.040	10/08/21 21:16	
EPA 6020B	Cobalt	0.20	mg/L	0.0050	10/08/21 21:16	
EPA 6020B	Lithium	0.020J	mg/L	0.030	10/08/21 21:16	
EPA 6020B	Molybdenum	0.0021J	mg/L	0.010	10/08/21 21:16	
SM 2540C-2011	Total Dissolved Solids	1470	mg/L	50.0	10/03/21 11:39	
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	77.7	mg/L	5.0	10/11/21 23:08	
SM 2320B-2011	Alkalinity, Total as CaCO3	77.7	mg/L	5.0	10/11/21 23:08	
EPA 300.0 Rev 2.1 1993	Chloride	13.0	mg/L	1.0	09/30/21 20:03	
EPA 300.0 Rev 2.1 1993	Fluoride	0.11	mg/L	0.10	09/30/21 20:03	
EPA 300.0 Rev 2.1 1993	Sulfate	866	mg/L	20.0	10/01/21 06:52	
92563761009	**PZ-60I**					
	Performed by	CUSTOMER			09/29/21 13:11	
	pH	4.77	Std. Units		09/29/21 13:11	
EPA 6010D	Manganese	167	mg/L	0.40	10/08/21 12:36	
EPA 6010D	Iron	0.25	mg/L	0.040	10/07/21 19:49	
EPA 6010D	Potassium	13.0	mg/L	0.20	10/07/21 19:49	
EPA 6010D	Sodium	64.0	mg/L	1.0	10/07/21 19:49	
EPA 6010D	Calcium	274	mg/L	1.0	10/07/21 19:49	
EPA 6010D	Magnesium	173	mg/L	0.050	10/07/21 19:49	
EPA 6010D	Hardness, Total(SM 2340B)	1400	mg/L	2.7	10/07/21 19:49	
EPA 6020B	Barium	0.022	mg/L	0.0050	10/08/21 21:21	

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SUMMARY OF DETECTION

Project: BRANCH AP-BCD DELIN PIEZO
Pace Project No.: 92563761

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92563761009	**PZ-60I**					
EPA 6020B	Beryllium	0.065	mg/L	0.00050	10/08/21 21:21	
EPA 6020B	Boron	0.23	mg/L	0.040	10/08/21 21:21	
EPA 6020B	Cadmium	0.016	mg/L	0.00050	10/08/21 21:21	
EPA 6020B	Cobalt	3.5	mg/L	0.050	10/11/21 14:21	
EPA 6020B	Lithium	0.10	mg/L	0.030	10/08/21 21:21	
EPA 6020B	Selenium	0.0049J	mg/L	0.0050	10/08/21 21:21	
SM 2540C-2011	Total Dissolved Solids	2600	mg/L	100	10/03/21 11:39	
EPA 300.0 Rev 2.1 1993	Chloride	27.2	mg/L	1.0	09/30/21 20:51	
EPA 300.0 Rev 2.1 1993	Fluoride	1.6	mg/L	0.10	09/30/21 20:51	
EPA 300.0 Rev 2.1 1993	Sulfate	1670	mg/L	37.0	10/01/21 07:40	M1

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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ANALYTICAL RESULTS

Project: BRANCH AP-BCD DELIN PIEZO
Pace Project No.: 92563761

Sample: PZ-51S **Lab ID: 92563761001** Collected: 09/27/21 15:38 Received: 09/28/21 10:18 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**CUSTOMER**				1		09/28/21 17:34		
pH	**6.04**	Std. Units			1		09/28/21 17:34		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Iron	ND	mg/L	0.040	0.025	1	10/07/21 11:53	10/07/21 18:46	7439-89-6	
Manganese	**1.3**	mg/L	0.040	0.0043	1	10/07/21 11:53	10/07/21 18:46	7439-96-5	
Potassium	**2.2**	mg/L	0.20	0.15	1	10/07/21 11:53	10/07/21 18:46	7440-09-7	
Sodium	**11.4**	mg/L	1.0	0.58	1	10/07/21 11:53	10/07/21 18:46	7440-23-5	M1
Calcium	**7.5**	mg/L	1.0	0.12	1	10/07/21 11:53	10/07/21 18:46	7440-70-2	
Magnesium	**8.4**	mg/L	0.050	0.012	1	10/07/21 11:53	10/07/21 18:46	7439-95-4	
Hardness, Total(SM 2340B)	**53.2**	mg/L	2.7	0.35	1	10/07/21 11:53	10/07/21 18:46		
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00078	1	10/08/21 10:25	10/08/21 20:07	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0011	1	10/08/21 10:25	10/08/21 20:07	7440-38-2	
Barium	**0.025**	mg/L	0.0050	0.00067	1	10/08/21 10:25	10/08/21 20:07	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	10/08/21 10:25	10/08/21 20:07	7440-41-7	
Boron	ND	mg/L	0.040	0.0086	1	10/08/21 10:25	10/08/21 20:07	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	10/08/21 10:25	10/08/21 20:07	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	10/08/21 10:25	10/08/21 20:07	7440-47-3	
Cobalt	**0.0022J**	mg/L	0.0050	0.00039	1	10/08/21 10:25	10/08/21 20:07	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	10/08/21 10:25	10/08/21 20:07	7439-92-1	
Lithium	ND	mg/L	0.030	0.00073	1	10/08/21 10:25	10/08/21 20:07	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	10/08/21 10:25	10/08/21 20:07	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	10/08/21 10:25	10/08/21 20:07	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	10/08/21 10:25	10/08/21 20:07	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.000078	1	10/13/21 07:00	10/13/21 10:44	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**88.0**	mg/L	10.0	10.0	1		09/30/21 19:01		
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville								
Alkalinity,Bicarbonate (CaCO3)	**68.7**	mg/L	5.0	5.0	1		10/07/21 19:25		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		10/07/21 19:25		
Alkalinity, Total as CaCO3	**68.7**	mg/L	5.0	5.0	1		10/07/21 19:25		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: BRANCH AP-BCD DELIN PIEZO
Pace Project No.: 92563761

Sample: PZ-51S **Lab ID: 92563761001** Collected: 09/27/21 15:38 Received: 09/28/21 10:18 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**3.8**	mg/L	1.0	0.60	1		09/30/21 17:24	16887-00-6	
Fluoride	**0.072J**	mg/L	0.10	0.050	1		09/30/21 17:24	16984-48-8	
Sulfate	ND	mg/L	1.0	0.50	1		09/30/21 17:24	14808-79-8	
353.2 Nitrogen, NO2/NO3 pres.	Analytical Method: EPA 353.2 Rev 2.0 1993 Pace Analytical Services - Asheville								
Nitrogen, NO2 plus NO3	**1.8**	mg/L	0.040	0.017	1		10/11/21 11:32		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: BRANCH AP-BCD DELIN PIEZO
Pace Project No.: 92563761

Sample: PZ-51I **Lab ID: 92563761002** Collected: 09/27/21 17:33 Received: 09/28/21 10:18 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**CUSTOMER**				1		09/28/21 17:34		
pH	**5.34**	Std. Units			1		09/28/21 17:34		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Iron	**0.031J**	mg/L	0.040	0.025	1	10/07/21 11:53	10/07/21 19:15	7439-89-6	
Manganese	**37.5**	mg/L	0.040	0.0043	1	10/07/21 11:53	10/07/21 19:15	7439-96-5	
Potassium	**10.6**	mg/L	0.20	0.15	1	10/07/21 11:53	10/07/21 19:15	7440-09-7	
Sodium	**45.8**	mg/L	1.0	0.58	1	10/07/21 11:53	10/07/21 19:15	7440-23-5	
Calcium	**187**	mg/L	1.0	0.12	1	10/07/21 11:53	10/07/21 19:15	7440-70-2	
Magnesium	**121**	mg/L	0.050	0.012	1	10/07/21 11:53	10/07/21 19:15	7439-95-4	
Hardness, Total(SM 2340B)	**963**	mg/L	2.7	0.35	1	10/07/21 11:53	10/07/21 19:15		
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	**0.0012J**	mg/L	0.0030	0.00078	1	10/08/21 10:25	10/08/21 20:30	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0011	1	10/08/21 10:25	10/08/21 20:30	7440-38-2	
Barium	**0.014**	mg/L	0.0050	0.00067	1	10/08/21 10:25	10/08/21 20:30	7440-39-3	
Beryllium	**0.000071J**	mg/L	0.00050	0.000054	1	10/08/21 10:25	10/08/21 20:30	7440-41-7	
Boron	**0.39**	mg/L	0.040	0.0086	1	10/08/21 10:25	10/08/21 20:30	7440-42-8	
Cadmium	**0.0031**	mg/L	0.00050	0.00011	1	10/08/21 10:25	10/08/21 20:30	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	10/08/21 10:25	10/08/21 20:30	7440-47-3	
Cobalt	**0.020**	mg/L	0.0050	0.00039	1	10/08/21 10:25	10/08/21 20:30	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	10/08/21 10:25	10/08/21 20:30	7439-92-1	
Lithium	**0.020J**	mg/L	0.030	0.00073	1	10/08/21 10:25	10/08/21 20:30	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	10/08/21 10:25	10/08/21 20:30	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	10/08/21 10:25	10/08/21 20:30	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	10/08/21 10:25	10/08/21 20:30	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.000078	1	10/13/21 07:00	10/13/21 10:47	7439-97-6	M1,R1
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**1560**	mg/L	50.0	50.0	1		10/03/21 11:38		
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville								
Alkalinity,Bicarbonate (CaCO3)	**22.2**	mg/L	5.0	5.0	1		10/07/21 19:42		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		10/07/21 19:42		
Alkalinity, Total as CaCO3	**22.2**	mg/L	5.0	5.0	1		10/07/21 19:42		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: BRANCH AP-BCD DELIN PIEZO
Pace Project No.: 92563761

Sample: PZ-51I **Lab ID: 92563761002** Collected: 09/27/21 17:33 Received: 09/28/21 10:18 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**9.4**	mg/L	1.0	0.60	1		09/30/21 17:40	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		09/30/21 17:40	16984-48-8	
Sulfate	**933**	mg/L	21.0	10.5	21		10/01/21 05:34	14808-79-8	
353.2 Nitrogen, NO2/NO3 pres.	Analytical Method: EPA 353.2 Rev 2.0 1993 Pace Analytical Services - Asheville								
Nitrogen, NO2 plus NO3	ND	mg/L	0.040	0.017	1		10/11/21 11:33		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: BRANCH AP-BCD DELIN PIEZO
Pace Project No.: 92563761

Sample: PZ-61I **Lab ID: 92563761003** Collected: 09/27/21 16:43 Received: 09/28/21 10:18 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**CUSTOMER**				1		09/28/21 17:34		
pH	**5.02**	Std. Units			1		09/28/21 17:34		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Manganese	**118**	mg/L	0.40	0.043	10	10/07/21 11:53	10/08/21 12:31	7439-96-5	
Iron	**4.5**	mg/L	0.040	0.025	1	10/07/21 11:53	10/07/21 19:20	7439-89-6	
Potassium	**7.0**	mg/L	0.20	0.15	1	10/07/21 11:53	10/07/21 19:20	7440-09-7	
Sodium	**66.1**	mg/L	1.0	0.58	1	10/07/21 11:53	10/07/21 19:20	7440-23-5	
Calcium	**230**	mg/L	1.0	0.12	1	10/07/21 11:53	10/07/21 19:20	7440-70-2	
Magnesium	**180**	mg/L	0.050	0.012	1	10/07/21 11:53	10/07/21 19:20	7439-95-4	
Hardness, Total(SM 2340B)	**1310**	mg/L	2.7	0.35	1	10/07/21 11:53	10/07/21 19:20		
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00078	1	10/08/21 10:25	10/08/21 20:36	7440-36-0	
Arsenic	**0.0023J**	mg/L	0.0050	0.0011	1	10/08/21 10:25	10/08/21 20:36	7440-38-2	
Barium	**0.029**	mg/L	0.0050	0.00067	1	10/08/21 10:25	10/08/21 20:36	7440-39-3	
Beryllium	**0.0017**	mg/L	0.00050	0.000054	1	10/08/21 10:25	10/08/21 20:36	7440-41-7	
Boron	**0.26**	mg/L	0.040	0.0086	1	10/08/21 10:25	10/08/21 20:36	7440-42-8	
Cadmium	**0.00081**	mg/L	0.00050	0.00011	1	10/08/21 10:25	10/08/21 20:36	7440-43-9	
Chromium	**0.0077**	mg/L	0.0050	0.0011	1	10/08/21 10:25	10/08/21 20:36	7440-47-3	
Cobalt	**0.45**	mg/L	0.0050	0.00039	1	10/08/21 10:25	10/08/21 20:36	7440-48-4	
Lead	**0.0019**	mg/L	0.0010	0.00089	1	10/08/21 10:25	10/08/21 20:36	7439-92-1	
Lithium	**0.0095J**	mg/L	0.030	0.00073	1	10/08/21 10:25	10/08/21 20:36	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	10/08/21 10:25	10/08/21 20:36	7439-98-7	
Selenium	**0.0079**	mg/L	0.0050	0.0014	1	10/08/21 10:25	10/08/21 20:36	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	10/08/21 10:25	10/08/21 20:36	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.000078	1	10/13/21 07:00	10/13/21 11:04	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**2100**	mg/L	100	100	1		10/03/21 11:38		
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville								
Alkalinity,Bicarbonate (CaCO3)	**11.3**	mg/L	5.0	5.0	1		10/07/21 19:48		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		10/07/21 19:48		
Alkalinity, Total as CaCO3	**11.3**	mg/L	5.0	5.0	1		10/07/21 19:48		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: BRANCH AP-BCD DELIN PIEZO
Pace Project No.: 92563761

Sample: PZ-61I **Lab ID: 92563761003** Collected: 09/27/21 16:43 Received: 09/28/21 10:18 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**20.0**	mg/L	1.0	0.60	1		09/30/21 17:55	16887-00-6	
Fluoride	**0.067J**	mg/L	0.10	0.050	1		09/30/21 17:55	16984-48-8	
Sulfate	**1420**	mg/L	32.0	16.0	32		10/01/21 05:50	14808-79-8	
353.2 Nitrogen, NO2/NO3 pres.	Analytical Method: EPA 353.2 Rev 2.0 1993 Pace Analytical Services - Asheville								
Nitrogen, NO2 plus NO3	ND	mg/L	0.040	0.017	1		10/11/21 11:34		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: BRANCH AP-BCD DELIN PIEZO
Pace Project No.: 92563761

Sample: PZ-51D **Lab ID: 92563761004** Collected: 09/28/21 11:10 Received: 09/29/21 11:57 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**CUSTOMER**				1		09/29/21 13:10		
pH	**7.18**	Std. Units			1		09/29/21 13:10		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Iron	**1.7**	mg/L	0.040	0.025	1	10/07/21 11:53	10/07/21 19:25	7439-89-6	
Manganese	**1.1**	mg/L	0.040	0.0043	1	10/07/21 11:53	10/07/21 19:25	7439-96-5	
Potassium	**10**	mg/L	0.20	0.15	1	10/07/21 11:53	10/07/21 19:25	7440-09-7	
Sodium	**39.0**	mg/L	1.0	0.58	1	10/07/21 11:53	10/07/21 19:25	7440-23-5	
Calcium	**113**	mg/L	1.0	0.12	1	10/07/21 11:53	10/07/21 19:25	7440-70-2	
Magnesium	**28.2**	mg/L	0.050	0.012	1	10/07/21 11:53	10/07/21 19:25	7439-95-4	
Hardness, Total(SM 2340B)	**399**	mg/L	2.7	0.35	1	10/07/21 11:53	10/07/21 19:25		
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00078	1	10/08/21 10:25	10/08/21 20:53	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0011	1	10/08/21 10:25	10/08/21 20:53	7440-38-2	
Barium	**0.057**	mg/L	0.0050	0.00067	1	10/08/21 10:25	10/08/21 20:53	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	10/08/21 10:25	10/08/21 20:53	7440-41-7	
Boron	**0.023J**	mg/L	0.040	0.0086	1	10/08/21 10:25	10/08/21 20:53	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	10/08/21 10:25	10/08/21 20:53	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	10/08/21 10:25	10/08/21 20:53	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	10/08/21 10:25	10/08/21 20:53	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	10/08/21 10:25	10/08/21 20:53	7439-92-1	
Lithium	**0.0096J**	mg/L	0.030	0.00073	1	10/08/21 10:25	10/08/21 20:53	7439-93-2	
Molybdenum	**0.0029J**	mg/L	0.010	0.00074	1	10/08/21 10:25	10/08/21 20:53	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	10/08/21 10:25	10/08/21 20:53	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	10/08/21 10:25	10/08/21 20:53	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.000078	1	10/13/21 07:00	10/13/21 11:07	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**650**	mg/L	20.0	20.0	1		10/03/21 11:39		
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville								
Alkalinity,Bicarbonate (CaCO3)	**144**	mg/L	5.0	5.0	1		10/11/21 22:43		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		10/11/21 22:43		
Alkalinity, Total as CaCO3	**144**	mg/L	5.0	5.0	1		10/11/21 22:43		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: BRANCH AP-BCD DELIN PIEZO
Pace Project No.: 92563761

Sample: PZ-51D **Lab ID: 92563761004** Collected: 09/28/21 11:10 Received: 09/29/21 11:57 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**12.8**	mg/L	1.0	0.60	1		09/30/21 18:59	16887-00-6	
Fluoride	**0.26**	mg/L	0.10	0.050	1		09/30/21 18:59	16984-48-8	
Sulfate	**294**	mg/L	7.0	3.5	7		10/01/21 06:05	14808-79-8	
353.2 Nitrogen, NO2/NO3 pres.	Analytical Method: EPA 353.2 Rev 2.0 1993 Pace Analytical Services - Asheville								
Nitrogen, NO2 plus NO3	ND	mg/L	0.040	0.017	1		10/11/21 12:27		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: BRANCH AP-BCD DELIN PIEZO
Pace Project No.: 92563761

Sample: PZ-57I **Lab ID: 92563761005** Collected: 09/28/21 14:29 Received: 09/29/21 11:57 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**CUSTOMER**				1		09/29/21 13:10		
pH	**5.37**	Std. Units			1		09/29/21 13:10		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Iron	**2.6**	mg/L	0.040	0.025	1	10/07/21 11:53	10/07/21 19:29	7439-89-6	
Manganese	**12.2**	mg/L	0.040	0.0043	1	10/07/21 11:53	10/07/21 19:29	7439-96-5	
Potassium	**4.3**	mg/L	0.20	0.15	1	10/07/21 11:53	10/07/21 19:29	7440-09-7	
Sodium	**18.2**	mg/L	1.0	0.58	1	10/07/21 11:53	10/07/21 19:29	7440-23-5	
Calcium	**51.1**	mg/L	1.0	0.12	1	10/07/21 11:53	10/07/21 19:29	7440-70-2	
Magnesium	**31.3**	mg/L	0.050	0.012	1	10/07/21 11:53	10/07/21 19:29	7439-95-4	
Hardness, Total(SM 2340B)	**257**	mg/L	2.7	0.35	1	10/07/21 11:53	10/07/21 19:29		
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00078	1	10/08/21 10:25	10/08/21 20:59	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0011	1	10/08/21 10:25	10/08/21 20:59	7440-38-2	
Barium	**0.022**	mg/L	0.0050	0.00067	1	10/08/21 10:25	10/08/21 20:59	7440-39-3	
Beryllium	**0.00031J**	mg/L	0.00050	0.000054	1	10/08/21 10:25	10/08/21 20:59	7440-41-7	
Boron	**0.48**	mg/L	0.040	0.0086	1	10/08/21 10:25	10/08/21 20:59	7440-42-8	
Cadmium	**0.00064**	mg/L	0.00050	0.00011	1	10/08/21 10:25	10/08/21 20:59	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	10/08/21 10:25	10/08/21 20:59	7440-47-3	
Cobalt	**0.055**	mg/L	0.0050	0.00039	1	10/08/21 10:25	10/08/21 20:59	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	10/08/21 10:25	10/08/21 20:59	7439-92-1	
Lithium	**0.018J**	mg/L	0.030	0.00073	1	10/08/21 10:25	10/08/21 20:59	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	10/08/21 10:25	10/08/21 20:59	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	10/08/21 10:25	10/08/21 20:59	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	10/08/21 10:25	10/08/21 20:59	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.000078	1	10/13/21 07:00	10/13/21 11:10	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**542**	mg/L	10.0	10.0	1		10/03/21 11:39		
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville								
Alkalinity,Bicarbonate (CaCO3)	**10.1**	mg/L	5.0	5.0	1		10/11/21 22:53		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		10/11/21 22:53		
Alkalinity, Total as CaCO3	**10.1**	mg/L	5.0	5.0	1		10/11/21 22:53		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: BRANCH AP-BCD DELIN PIEZO
Pace Project No.: 92563761

Sample: PZ-57I **Lab ID: 92563761005** Collected: 09/28/21 14:29 Received: 09/29/21 11:57 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**5.9**	mg/L	1.0	0.60	1		09/30/21 19:15	16887-00-6	
Fluoride	**0.085J**	mg/L	0.10	0.050	1		09/30/21 19:15	16984-48-8	
Sulfate	**259**	mg/L	6.0	3.0	6		10/01/21 06:21	14808-79-8	
353.2 Nitrogen, NO2/NO3 pres.	Analytical Method: EPA 353.2 Rev 2.0 1993 Pace Analytical Services - Asheville								
Nitrogen, NO2 plus NO3	ND	mg/L	0.040	0.017	1		10/11/21 12:28		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: BRANCH AP-BCD DELIN PIEZO
Pace Project No.: 92563761

Sample: PZ-58I **Lab ID: 92563761006** Collected: 09/28/21 13:15 Received: 09/29/21 11:57 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**CUSTOMER**				1		09/29/21 13:10		
pH	**4.00**	Std. Units			1		09/29/21 13:10		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Iron	**39.8**	mg/L	0.040	0.025	1	10/07/21 11:53	10/07/21 19:34	7439-89-6	
Manganese	**20.2**	mg/L	0.040	0.0043	1	10/07/21 11:53	10/07/21 19:34	7439-96-5	
Potassium	**7.0**	mg/L	0.20	0.15	1	10/07/21 11:53	10/07/21 19:34	7440-09-7	
Sodium	**30.3**	mg/L	1.0	0.58	1	10/07/21 11:53	10/07/21 19:34	7440-23-5	
Calcium	**108**	mg/L	1.0	0.12	1	10/07/21 11:53	10/07/21 19:34	7440-70-2	
Magnesium	**58.9**	mg/L	0.050	0.012	1	10/07/21 11:53	10/07/21 19:34	7439-95-4	
Hardness, Total(SM 2340B)	**513**	mg/L	2.7	0.35	1	10/07/21 11:53	10/07/21 19:34		
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00078	1	10/08/21 10:25	10/08/21 21:04	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0011	1	10/08/21 10:25	10/08/21 21:04	7440-38-2	
Barium	**0.017**	mg/L	0.0050	0.00067	1	10/08/21 10:25	10/08/21 21:04	7440-39-3	
Beryllium	**0.025**	mg/L	0.00050	0.000054	1	10/08/21 10:25	10/08/21 21:04	7440-41-7	
Boron	**0.36**	mg/L	0.040	0.0086	1	10/08/21 10:25	10/08/21 21:04	7440-42-8	
Cadmium	**0.0042**	mg/L	0.00050	0.00011	1	10/08/21 10:25	10/08/21 21:04	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	10/08/21 10:25	10/08/21 21:04	7440-47-3	
Cobalt	**0.39**	mg/L	0.0050	0.00039	1	10/08/21 10:25	10/08/21 21:04	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	10/08/21 10:25	10/08/21 21:04	7439-92-1	
Lithium	**0.041**	mg/L	0.030	0.00073	1	10/08/21 10:25	10/08/21 21:04	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	10/08/21 10:25	10/08/21 21:04	7439-98-7	
Selenium	**0.0034J**	mg/L	0.0050	0.0014	1	10/08/21 10:25	10/08/21 21:04	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	10/08/21 10:25	10/08/21 21:04	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.000078	1	10/13/21 07:00	10/13/21 11:12	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**1120**	mg/L	20.0	20.0	1		10/03/21 11:39		
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville								
Alkalinity,Bicarbonate (CaCO3)	ND	mg/L	5.0	5.0	1		10/11/21 22:58		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		10/11/21 22:58		
Alkalinity, Total as CaCO3	ND	mg/L	5.0	5.0	1		10/11/21 22:58		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: BRANCH AP-BCD DELIN PIEZO
Pace Project No.: 92563761

Sample: PZ-58I **Lab ID: 92563761006** Collected: 09/28/21 13:15 Received: 09/29/21 11:57 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**9.6**	mg/L	1.0	0.60	1		09/30/21 19:31	16887-00-6	
Fluoride	**0.97**	mg/L	0.10	0.050	1		09/30/21 19:31	16984-48-8	
Sulfate	**628**	mg/L	14.0	7.0	14		10/01/21 06:37	14808-79-8	
353.2 Nitrogen, NO2/NO3 pres.	Analytical Method: EPA 353.2 Rev 2.0 1993 Pace Analytical Services - Asheville								
Nitrogen, NO2 plus NO3	ND	mg/L	0.040	0.017	1		10/11/21 12:29		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: BRANCH AP-BCD DELIN PIEZO
Pace Project No.: 92563761

Sample: PZ-44 **Lab ID: 92563761007** Collected: 09/28/21 14:50 Received: 09/29/21 11:57 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**CUSTOMER**				1		09/29/21 13:10		
pH	**6.22**	Std. Units			1		09/29/21 13:10		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Iron	**0.11**	mg/L	0.040	0.025	1	10/07/21 11:53	10/07/21 19:39	7439-89-6	
Manganese	**0.44**	mg/L	0.040	0.0043	1	10/07/21 11:53	10/07/21 19:39	7439-96-5	
Potassium	**2.5**	mg/L	0.20	0.15	1	10/07/21 11:53	10/07/21 19:39	7440-09-7	
Sodium	**12.3**	mg/L	1.0	0.58	1	10/07/21 11:53	10/07/21 19:39	7440-23-5	
Calcium	**24.2**	mg/L	1.0	0.12	1	10/07/21 11:53	10/07/21 19:39	7440-70-2	
Magnesium	**10.3**	mg/L	0.050	0.012	1	10/07/21 11:53	10/07/21 19:39	7439-95-4	
Hardness, Total(SM 2340B)	**103**	mg/L	2.7	0.35	1	10/07/21 11:53	10/07/21 19:39		
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00078	1	10/08/21 10:25	10/08/21 21:10	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0011	1	10/08/21 10:25	10/08/21 21:10	7440-38-2	
Barium	**0.049**	mg/L	0.0050	0.00067	1	10/08/21 10:25	10/08/21 21:10	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	10/08/21 10:25	10/08/21 21:10	7440-41-7	
Boron	**1.3**	mg/L	0.040	0.0086	1	10/08/21 10:25	10/08/21 21:10	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	10/08/21 10:25	10/08/21 21:10	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	10/08/21 10:25	10/08/21 21:10	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	10/08/21 10:25	10/08/21 21:10	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	10/08/21 10:25	10/08/21 21:10	7439-92-1	
Lithium	**0.0048J**	mg/L	0.030	0.00073	1	10/08/21 10:25	10/08/21 21:10	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	10/08/21 10:25	10/08/21 21:10	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	10/08/21 10:25	10/08/21 21:10	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	10/08/21 10:25	10/08/21 21:10	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.000078	1	10/13/21 07:00	10/13/21 11:15	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**181**	mg/L	10.0	10.0	1		10/03/21 11:39		
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville								
Alkalinity,Bicarbonate (CaCO3)	**81.8**	mg/L	5.0	5.0	1		10/11/21 23:00		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		10/11/21 23:00		
Alkalinity, Total as CaCO3	**81.8**	mg/L	5.0	5.0	1		10/11/21 23:00		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: BRANCH AP-BCD DELIN PIEZO
Pace Project No.: 92563761

Sample: PZ-44 **Lab ID: 92563761007** Collected: 09/28/21 14:50 Received: 09/29/21 11:57 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**5.0**	mg/L	1.0	0.60	1		09/30/21 19:47	16887-00-6	
Fluoride	**0.080J**	mg/L	0.10	0.050	1		09/30/21 19:47	16984-48-8	
Sulfate	**47.2**	mg/L	1.0	0.50	1		09/30/21 19:47	14808-79-8	
353.2 Nitrogen, NO2/NO3 pres.	Analytical Method: EPA 353.2 Rev 2.0 1993 Pace Analytical Services - Asheville								
Nitrogen, NO2 plus NO3	ND	mg/L	0.040	0.017	1		10/11/21 12:30		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: BRANCH AP-BCD DELIN PIEZO
Pace Project No.: 92563761

Sample: PZ-50D **Lab ID: 92563761008** Collected: 09/28/21 09:24 Received: 09/29/21 11:57 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**CUSTOMER**				1		09/29/21 13:11		
pH	**6.23**	Std. Units			1		09/29/21 13:11		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Iron	**4.5**	mg/L	0.040	0.025	1	10/07/21 11:53	10/07/21 19:44	7439-89-6	
Manganese	**14.7**	mg/L	0.040	0.0043	1	10/07/21 11:53	10/07/21 19:44	7439-96-5	
Potassium	**13.3**	mg/L	0.20	0.15	1	10/07/21 11:53	10/07/21 19:44	7440-09-7	
Sodium	**62.1**	mg/L	1.0	0.58	1	10/07/21 11:53	10/07/21 19:44	7440-23-5	
Calcium	**225**	mg/L	1.0	0.12	1	10/07/21 11:53	10/07/21 19:44	7440-70-2	
Magnesium	**87.4**	mg/L	0.050	0.012	1	10/07/21 11:53	10/07/21 19:44	7439-95-4	
Hardness, Total(SM 2340B)	**923**	mg/L	2.7	0.35	1	10/07/21 11:53	10/07/21 19:44		
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00078	1	10/08/21 10:25	10/08/21 21:16	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0011	1	10/08/21 10:25	10/08/21 21:16	7440-38-2	
Barium	**0.034**	mg/L	0.0050	0.00067	1	10/08/21 10:25	10/08/21 21:16	7440-39-3	
Beryllium	**0.000059J**	mg/L	0.00050	0.000054	1	10/08/21 10:25	10/08/21 21:16	7440-41-7	
Boron	**0.24**	mg/L	0.040	0.0086	1	10/08/21 10:25	10/08/21 21:16	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	10/08/21 10:25	10/08/21 21:16	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	10/08/21 10:25	10/08/21 21:16	7440-47-3	
Cobalt	**0.20**	mg/L	0.0050	0.00039	1	10/08/21 10:25	10/08/21 21:16	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	10/08/21 10:25	10/08/21 21:16	7439-92-1	
Lithium	**0.020J**	mg/L	0.030	0.00073	1	10/08/21 10:25	10/08/21 21:16	7439-93-2	
Molybdenum	**0.0021J**	mg/L	0.010	0.00074	1	10/08/21 10:25	10/08/21 21:16	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	10/08/21 10:25	10/08/21 21:16	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	10/08/21 10:25	10/08/21 21:16	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.000078	1	10/13/21 07:00	10/13/21 11:17	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**1470**	mg/L	50.0	50.0	1		10/03/21 11:39		
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville								
Alkalinity,Bicarbonate (CaCO3)	**77.7**	mg/L	5.0	5.0	1		10/11/21 23:08		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		10/11/21 23:08		
Alkalinity, Total as CaCO3	**77.7**	mg/L	5.0	5.0	1		10/11/21 23:08		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: BRANCH AP-BCD DELIN PIEZO
Pace Project No.: 92563761

Sample: PZ-50D **Lab ID: 92563761008** Collected: 09/28/21 09:24 Received: 09/29/21 11:57 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**13.0**	mg/L	1.0	0.60	1		09/30/21 20:03	16887-00-6	
Fluoride	**0.11**	mg/L	0.10	0.050	1		09/30/21 20:03	16984-48-8	
Sulfate	**866**	mg/L	20.0	10.0	20		10/01/21 06:52	14808-79-8	
353.2 Nitrogen, NO2/NO3 pres.	Analytical Method: EPA 353.2 Rev 2.0 1993 Pace Analytical Services - Asheville								
Nitrogen, NO2 plus NO3	ND	mg/L	0.040	0.017	1		10/11/21 12:31		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: BRANCH AP-BCD DELIN PIEZO
Pace Project No.: 92563761

Sample: PZ-60I **Lab ID: 92563761009** Collected: 09/28/21 12:02 Received: 09/29/21 11:57 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**CUSTOMER**				1		09/29/21 13:11		
pH	**4.77**	Std. Units			1		09/29/21 13:11		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Manganese	**167**	mg/L	0.40	0.043	10	10/07/21 11:53	10/08/21 12:36	7439-96-5	
Iron	**0.25**	mg/L	0.040	0.025	1	10/07/21 11:53	10/07/21 19:49	7439-89-6	
Potassium	**13.0**	mg/L	0.20	0.15	1	10/07/21 11:53	10/07/21 19:49	7440-09-7	
Sodium	**64.0**	mg/L	1.0	0.58	1	10/07/21 11:53	10/07/21 19:49	7440-23-5	
Calcium	**274**	mg/L	1.0	0.12	1	10/07/21 11:53	10/07/21 19:49	7440-70-2	
Magnesium	**173**	mg/L	0.050	0.012	1	10/07/21 11:53	10/07/21 19:49	7439-95-4	
Hardness, Total(SM 2340B)	**1400**	mg/L	2.7	0.35	1	10/07/21 11:53	10/07/21 19:49		
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00078	1	10/08/21 10:25	10/08/21 21:21	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0011	1	10/08/21 10:25	10/08/21 21:21	7440-38-2	
Barium	**0.022**	mg/L	0.0050	0.00067	1	10/08/21 10:25	10/08/21 21:21	7440-39-3	
Beryllium	**0.065**	mg/L	0.00050	0.000054	1	10/08/21 10:25	10/08/21 21:21	7440-41-7	
Boron	**0.23**	mg/L	0.040	0.0086	1	10/08/21 10:25	10/08/21 21:21	7440-42-8	
Cadmium	**0.016**	mg/L	0.00050	0.00011	1	10/08/21 10:25	10/08/21 21:21	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	10/08/21 10:25	10/08/21 21:21	7440-47-3	
Cobalt	**3.5**	mg/L	0.050	0.0039	10	10/08/21 10:25	10/11/21 14:21	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	10/08/21 10:25	10/08/21 21:21	7439-92-1	
Lithium	**0.10**	mg/L	0.030	0.00073	1	10/08/21 10:25	10/08/21 21:21	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	10/08/21 10:25	10/08/21 21:21	7439-98-7	
Selenium	**0.0049J**	mg/L	0.0050	0.0014	1	10/08/21 10:25	10/08/21 21:21	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	10/08/21 10:25	10/08/21 21:21	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.000078	1	10/13/21 07:00	10/13/21 11:20	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**2600**	mg/L	100	100	1		10/03/21 11:39		
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville								
Alkalinity,Bicarbonate (CaCO3)	ND	mg/L	5.0	5.0	1		10/11/21 23:16		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		10/11/21 23:16		
Alkalinity, Total as CaCO3	ND	mg/L	5.0	5.0	1		10/11/21 23:16		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: BRANCH AP-BCD DELIN PIEZO
Pace Project No.: 92563761

Sample: PZ-60I **Lab ID: 92563761009** Collected: 09/28/21 12:02 Received: 09/29/21 11:57 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**27.2**	mg/L	1.0	0.60	1		09/30/21 20:51	16887-00-6	
Fluoride	**1.6**	mg/L	0.10	0.050	1		09/30/21 20:51	16984-48-8	
Sulfate	**1670**	mg/L	37.0	18.5	37		10/01/21 07:40	14808-79-8	M1
353.2 Nitrogen, NO2/NO3 pres.	Analytical Method: EPA 353.2 Rev 2.0 1993 Pace Analytical Services - Asheville								
Nitrogen, NO2 plus NO3	ND	mg/L	0.040	0.017	1		10/11/21 12:32		

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: BRANCH AP-BCD DELIN PIEZO
Pace Project No.: 92563761

QC Batch: 651397
QC Batch Method: EPA 3010A
Analysis Method: EPA 6010D
Analysis Description: 6010D ATL
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92563761001, 92563761002, 92563761003, 92563761004, 92563761005, 92563761006, 92563761007, 92563761008, 92563761009

METHOD BLANK: 3416096 Matrix: Water
Associated Lab Samples: 92563761001, 92563761002, 92563761003, 92563761004, 92563761005, 92563761006, 92563761007, 92563761008, 92563761009

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium	mg/L	ND	1.0	0.12	10/07/21 18:37	
Hardness, Total(SM 2340B)	mg/L	ND	2.7	0.35	10/07/21 18:37	
Iron	mg/L	ND	0.040	0.025	10/07/21 18:37	
Magnesium	mg/L	ND	0.050	0.012	10/07/21 18:37	
Manganese	mg/L	ND	0.040	0.0043	10/07/21 18:37	
Potassium	mg/L	ND	0.20	0.15	10/07/21 18:37	
Sodium	mg/L	ND	1.0	0.58	10/07/21 18:37	

LABORATORY CONTROL SAMPLE: 3416097

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium	mg/L	1	0.99J	99	80-120	
Hardness, Total(SM 2340B)	mg/L	6.6	6.8	103	80-120	
Iron	mg/L	1	1.0	103	80-120	
Magnesium	mg/L	1	1.1	105	80-120	
Manganese	mg/L	1	1.0	100	80-120	
Potassium	mg/L	1	0.84	84	80-120	
Sodium	mg/L	1	1.1	114	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3416098 3416099

Parameter	Units	92563761001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Calcium	mg/L	7.5	1	1	8.4	8.4	94	91	75-125	0	20	
Hardness, Total(SM 2340B)	mg/L	53.2	6.6	6.6	58.9	59.2	86	91	75-125	1	20	
Iron	mg/L	ND	1	1	1.1	1.0	105	103	75-125	2	20	
Magnesium	mg/L	8.4	1	1	9.2	9.3	80	90	75-125	1	20	
Manganese	mg/L	1.3	1	1	2.3	2.3	97	96	75-125	0	20	
Potassium	mg/L	2.2	1	1	3.2	3.2	102	98	75-125	1	20	
Sodium	mg/L	11.4	1	1	11.9	12.3	46	90	75-125	4	20	M1

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: BRANCH AP-BCD DELIN PIEZO
Pace Project No.: 92563761

QC Batch: 651684
QC Batch Method: EPA 3005A
Analysis Method: EPA 6020B
Analysis Description: 6020 MET
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92563761001, 92563761002, 92563761003, 92563761004, 92563761005, 92563761006, 92563761007, 92563761008, 92563761009

METHOD BLANK: 3417564 Matrix: Water
Associated Lab Samples: 92563761001, 92563761002, 92563761003, 92563761004, 92563761005, 92563761006, 92563761007, 92563761008, 92563761009

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	ND	0.0030	0.00078	10/08/21 19:44	
Arsenic	mg/L	ND	0.0050	0.0011	10/08/21 19:44	
Barium	mg/L	ND	0.0050	0.00067	10/08/21 19:44	
Beryllium	mg/L	ND	0.00050	0.000054	10/08/21 19:44	
Boron	mg/L	ND	0.040	0.0086	10/08/21 19:44	
Cadmium	mg/L	ND	0.00050	0.00011	10/08/21 19:44	
Chromium	mg/L	ND	0.0050	0.0011	10/08/21 19:44	
Cobalt	mg/L	ND	0.0050	0.00039	10/08/21 19:44	
Lead	mg/L	ND	0.0010	0.00089	10/08/21 19:44	
Lithium	mg/L	ND	0.030	0.00073	10/08/21 19:44	
Molybdenum	mg/L	ND	0.010	0.00074	10/08/21 19:44	
Selenium	mg/L	ND	0.0050	0.0014	10/08/21 19:44	
Thallium	mg/L	ND	0.0010	0.00018	10/08/21 19:44	

LABORATORY CONTROL SAMPLE: 3417565

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	0.099	99	80-120	
Barium	mg/L	0.1	0.096	96	80-120	
Beryllium	mg/L	0.1	0.092	92	80-120	
Boron	mg/L	1	0.91	91	80-120	
Cadmium	mg/L	0.1	0.10	102	80-120	
Chromium	mg/L	0.1	0.094	94	80-120	
Cobalt	mg/L	0.1	0.090	90	80-120	
Lead	mg/L	0.1	0.093	93	80-120	
Lithium	mg/L	0.1	0.094	94	80-120	
Molybdenum	mg/L	0.1	0.097	97	80-120	
Selenium	mg/L	0.1	0.097	97	80-120	
Thallium	mg/L	0.1	0.092	92	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3417566 3417567

Parameter	Units	92563761001 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	108	75-125	1	20	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: BRANCH AP-BCD DELIN PIEZO
Pace Project No.: 92563761

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3417566 3417567

Parameter	Units	92563761001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Arsenic	mg/L	ND	0.1	0.1	0.098	0.099	98	99	75-125	1	20	
Barium	mg/L	0.025	0.1	0.1	0.12	0.12	96	98	75-125	2	20	
Beryllium	mg/L	ND	0.1	0.1	0.089	0.090	89	90	75-125	2	20	
Boron	mg/L	ND	1	1	0.87	0.91	86	91	75-125	5	20	
Cadmium	mg/L	ND	0.1	0.1	0.10	0.10	103	103	75-125	0	20	
Chromium	mg/L	ND	0.1	0.1	0.091	0.092	91	92	75-125	1	20	
Cobalt	mg/L	0.0022J	0.1	0.1	0.091	0.092	88	90	75-125	2	20	
Lead	mg/L	ND	0.1	0.1	0.094	0.096	94	96	75-125	2	20	
Lithium	mg/L	ND	0.1	0.1	0.093	0.093	92	93	75-125	1	20	
Molybdenum	mg/L	ND	0.1	0.1	0.10	0.10	100	102	75-125	2	20	
Selenium	mg/L	ND	0.1	0.1	0.096	0.099	96	98	75-125	3	20	
Thallium	mg/L	ND	0.1	0.1	0.092	0.093	92	93	75-125	1	20	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: BRANCH AP-BCD DELIN PIEZO
Pace Project No.: 92563761

QC Batch: 652379
QC Batch Method: EPA 7470A
Analysis Method: EPA 7470A
Analysis Description: 7470 Mercury
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92563761001, 92563761002, 92563761003, 92563761004, 92563761005, 92563761006, 92563761007, 92563761008, 92563761009

METHOD BLANK: 3420817 Matrix: Water
Associated Lab Samples: 92563761001, 92563761002, 92563761003, 92563761004, 92563761005, 92563761006, 92563761007, 92563761008, 92563761009

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	ND	0.00020	0.000078	10/13/21 10:39	

LABORATORY CONTROL SAMPLE: 3420818

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.0025	0.0023	93	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3420819 3420820

Parameter	Units	92563761002 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	0.0022	0.0015	86	59	75-125	37	20	M1,R1

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: BRANCH AP-BCD DELIN PIEZO
Pace Project No.: 92563761

QC Batch: 650109
QC Batch Method: SM 2540C-2011
Analysis Method: SM 2540C-2011
Analysis Description: 2540C Total Dissolved Solids
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92563761001

METHOD BLANK: 3409662 Matrix: Water
Associated Lab Samples: 92563761001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	10.0	10.0	09/30/21 18:57	

LABORATORY CONTROL SAMPLE: 3409663

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	396	99	90-111	

SAMPLE DUPLICATE: 3409664

Parameter	Units	92563226001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	277	284	2	10	

SAMPLE DUPLICATE: 3409665

Parameter	Units	92563599002 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	78.0	85.0	9	10	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: BRANCH AP-BCD DELIN PIEZO
Pace Project No.: 92563761

QC Batch: 650392 — Analysis Method: SM 2540C-2011
QC Batch Method: SM 2540C-2011 — Analysis Description: 2540C Total Dissolved Solids
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92563761002, 92563761003, 92563761004, 92563761005, 92563761006, 92563761007, 92563761008, 92563761009

METHOD BLANK: 3411236 — Matrix: Water
Associated Lab Samples: 92563761002, 92563761003, 92563761004, 92563761005, 92563761006, 92563761007, 92563761008, 92563761009

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	10.0	10.0	10/03/21 11:38	

LABORATORY CONTROL SAMPLE: 3411237

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	387	97	90-111	

SAMPLE DUPLICATE: 3411239

Parameter	Units	92563761007 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	181	181	0	10	

SAMPLE DUPLICATE: 3412138

Parameter	Units	92563761002 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	1560	1580	2	10	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: BRANCH AP-BCD DELIN PIEZO
Pace Project No.: 92563761

QC Batch: 651424
QC Batch Method: SM 2320B-2011
Analysis Method: SM 2320B-2011
Analysis Description: 2320B Alkalinity
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92563761001, 92563761002, 92563761003

METHOD BLANK: 3416272 Matrix: Water
Associated Lab Samples: 92563761001, 92563761002, 92563761003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Alkalinity, Total as CaCO3	mg/L	ND	5.0	5.0	10/07/21 17:20	
Alkalinity,Bicarbonate (CaCO3)	mg/L	ND	5.0	5.0	10/07/21 17:20	
Alkalinity,Carbonate (CaCO3)	mg/L	ND	5.0	5.0	10/07/21 17:20	

LABORATORY CONTROL SAMPLE: 3416273

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	50	51.9	104	80-120	

LABORATORY CONTROL SAMPLE: 3416274

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	50	51.2	102	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3416275 3416276

Parameter	Units	92563915005 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Alkalinity, Total as CaCO3	mg/L	ND	50	50	51.0	59.9	93	110	80-120	16	25	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3416277 3416278

Parameter	Units	92563915006 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Alkalinity, Total as CaCO3	mg/L	25.0	50	50	72.9	73.7	96	97	80-120	1	25	

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REPORT OF LABORATORY ANALYSIS

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(770)734-4200

QUALITY CONTROL DATA

Project: BRANCH AP-BCD DELIN PIEZO
Pace Project No.: 92563761

QC Batch: 651992
QC Batch Method: SM 2320B-2011
Analysis Method: SM 2320B-2011
Analysis Description: 2320B Alkalinity
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92563761004, 92563761005, 92563761006, 92563761007, 92563761008, 92563761009

METHOD BLANK: 3419013 Matrix: Water
Associated Lab Samples: 92563761004, 92563761005, 92563761006, 92563761007, 92563761008, 92563761009

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Alkalinity, Total as CaCO3	mg/L	ND	5.0	5.0	10/11/21 20:50	
Alkalinity,Bicarbonate (CaCO3)	mg/L	ND	5.0	5.0	10/11/21 20:50	
Alkalinity,Carbonate (CaCO3)	mg/L	ND	5.0	5.0	10/11/21 20:50	

LABORATORY CONTROL SAMPLE: 3419014

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	50	52.5	105	80-120	

LABORATORY CONTROL SAMPLE: 3419015

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	50	54.6	109	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3419016 3419017

Parameter	Units	92564448001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Alkalinity, Total as CaCO3	mg/L	82.1	50	50	114	113	65	61	80-120	2	25	M1

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3419018 3419019

Parameter	Units	92564448007 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Alkalinity, Total as CaCO3	mg/L	66.5	50	50	119	121	104	108	80-120	2	25	

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REPORT OF LABORATORY ANALYSIS

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Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL DATA

Project: BRANCH AP-BCD DELIN PIEZO
Pace Project No.: 92563761

QC Batch: 650118
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
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92563761001, 92563761002, 92563761003, 92563761004, 92563761005, 92563761006, 92563761007, 92563761008

METHOD BLANK: 3409685 Matrix: Water
Associated Lab Samples: 92563761001, 92563761002, 92563761003, 92563761004, 92563761005, 92563761006, 92563761007, 92563761008

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.60	09/30/21 12:38	
Fluoride	mg/L	ND	0.10	0.050	09/30/21 12:38	
Sulfate	mg/L	ND	1.0	0.50	09/30/21 12:38	

LABORATORY CONTROL SAMPLE: 3409686

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	46.5	93	90-110	
Fluoride	mg/L	2.5	2.4	96	90-110	
Sulfate	mg/L	50	49.6	99	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3409687 3409688

Parameter	Units	92563859001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	1030	50	50	1080	1090	110	129	90-110	1	10	M1
Fluoride	mg/L	ND	2.5	2.5	1.5	1.6	62	63	90-110	2	10	M1
Sulfate	mg/L	1290	50	50	1350	1370	124	150	90-110	1	10	M1

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3409689 3409690

Parameter	Units	92563226004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	16.2	50	50	63.6	64.7	95	97	90-110	2	10	
Fluoride	mg/L	0.46	2.5	2.5	3.1	3.1	104	106	90-110	2	10	
Sulfate	mg/L	1170	50	50	1200	1200	65	48	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

QUALITY CONTROL DATA

Project: BRANCH AP-BCD DELIN PIEZO
Pace Project No.: 92563761

QC Batch: 650124
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
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92563761009

METHOD BLANK: 3409716 Matrix: Water
Associated Lab Samples: 92563761009

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.60	09/30/21 20:19	
Fluoride	mg/L	ND	0.10	0.050	09/30/21 20:19	
Sulfate	mg/L	ND	1.0	0.50	09/30/21 20:19	

LABORATORY CONTROL SAMPLE: 3409717

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	46.9	94	90-110	
Fluoride	mg/L	2.5	2.4	97	90-110	
Sulfate	mg/L	50	51.9	104	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3409718 3409719

Parameter	Units	92563761009 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	27.2	50	50	74.3	75.0	94	95	90-110	1	10	
Fluoride	mg/L	1.6	2.5	2.5	4.3	4.4	107	110	90-110	2	10	
Sulfate	mg/L	1670	50	50	1680	1680	26	13	90-110	0	10	M1

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3409720 3409721

Parameter	Units	92563226014 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	ND	50	50	47.4	47.9	95	96	90-110	1	10	
Fluoride	mg/L	ND	2.5	2.5	2.5	2.5	98	100	90-110	1	10	
Sulfate	mg/L	ND	50	50	50.4	51.0	101	102	90-110	1	10	

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

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: BRANCH AP-BCD DELIN PIEZO
Pace Project No.: 92563761

QC Batch: 651968
QC Batch Method: EPA 353.2 Rev 2.0 1993
Analysis Method: EPA 353.2 Rev 2.0 1993
Analysis Description: 353.2 Nitrate + Nitrite, preserved
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92563761001, 92563761002, 92563761003

METHOD BLANK: 3418960 Matrix: Water
Associated Lab Samples: 92563761001, 92563761002, 92563761003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Nitrogen, NO2 plus NO3	mg/L	ND	0.040	0.017	10/11/21 11:02	

LABORATORY CONTROL SAMPLE: 3418961

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, NO2 plus NO3	mg/L	2.5	2.5	101	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3418962 3418963

Parameter	Units	92564311001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Nitrogen, NO2 plus NO3	mg/L	0.058	2.5	2.5	2.4	2.4	95	95	90-110	0	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3418964 3418965

Parameter	Units	92564312001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Nitrogen, NO2 plus NO3	mg/L	0.052	2.5	2.5	1.8	1.8	69	68	90-110	0	10	M1

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

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: BRANCH AP-BCD DELIN PIEZO
Pace Project No.: 92563761

QC Batch: 651970
QC Batch Method: EPA 353.2 Rev 2.0 1993
Analysis Method: EPA 353.2 Rev 2.0 1993
Analysis Description: 353.2 Nitrate + Nitrite, preserved
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92563761004, 92563761005, 92563761006, 92563761007, 92563761008, 92563761009

METHOD BLANK: 3418972 Matrix: Water
Associated Lab Samples: 92563761004, 92563761005, 92563761006, 92563761007, 92563761008, 92563761009

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Nitrogen, NO2 plus NO3	mg/L	ND	0.040	0.017	10/11/21 12:11	

LABORATORY CONTROL SAMPLE: 3418973

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, NO2 plus NO3	mg/L	2.5	2.5	102	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3418974 3418975

Parameter	Units	92562907001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Nitrogen, NO2 plus NO3	mg/L	43.3	2.5	2.5	46.1	46.0	112	106	90-110	0	10	M1

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3418976 3418977

Parameter	Units	92562911001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Nitrogen, NO2 plus NO3	mg/L	ND	2.5	2.5	2.3	2.3	92	93	90-110	1	10	

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

REPORT OF LABORATORY ANALYSIS

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

QUALIFIERS

Project: BRANCH AP-BCD DELIN PIEZO
Pace Project No.: 92563761

DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

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

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

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

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

Acid preservation may not be appropriate for 2 Chloroethylvinyl ether.

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

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

Reported results are not rounded until the final step prior to reporting. Therefore, calculated parameters that are typically reported as "Total" may vary slightly from the sum of the reported component parameters.

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

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

M1	Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.
R1	RPD value was outside control limits.

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

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: BRANCH AP-BCD DELIN PIEZO
Pace Project No.: 92563761

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92563761001	**PZ-51S**				
92563761002	**PZ-51I**				
92563761003	**PZ-61I**				
92563761004	**PZ-51D**				
92563761005	**PZ-57I**				
92563761006	**PZ-58I**				
92563761007	**PZ-44**				
92563761008	**PZ-50D**				
92563761009	**PZ-60I**				
92563761001	**PZ-51S**	EPA 3010A	651397	EPA 6010D	651486
92563761002	**PZ-51I**	EPA 3010A	651397	EPA 6010D	651486
92563761003	**PZ-61I**	EPA 3010A	651397	EPA 6010D	651486
92563761004	**PZ-51D**	EPA 3010A	651397	EPA 6010D	651486
92563761005	**PZ-57I**	EPA 3010A	651397	EPA 6010D	651486
92563761006	**PZ-58I**	EPA 3010A	651397	EPA 6010D	651486
92563761007	**PZ-44**	EPA 3010A	651397	EPA 6010D	651486
92563761008	**PZ-50D**	EPA 3010A	651397	EPA 6010D	651486
92563761009	**PZ-60I**	EPA 3010A	651397	EPA 6010D	651486
92563761001	**PZ-51S**	EPA 3005A	651684	EPA 6020B	651759
92563761002	**PZ-51I**	EPA 3005A	651684	EPA 6020B	651759
92563761003	**PZ-61I**	EPA 3005A	651684	EPA 6020B	651759
92563761004	**PZ-51D**	EPA 3005A	651684	EPA 6020B	651759
92563761005	**PZ-57I**	EPA 3005A	651684	EPA 6020B	651759
92563761006	**PZ-58I**	EPA 3005A	651684	EPA 6020B	651759
92563761007	**PZ-44**	EPA 3005A	651684	EPA 6020B	651759
92563761008	**PZ-50D**	EPA 3005A	651684	EPA 6020B	651759
92563761009	**PZ-60I**	EPA 3005A	651684	EPA 6020B	651759
92563761001	**PZ-51S**	EPA 7470A	652379	EPA 7470A	652560
92563761002	**PZ-51I**	EPA 7470A	652379	EPA 7470A	652560
92563761003	**PZ-61I**	EPA 7470A	652379	EPA 7470A	652560
92563761004	**PZ-51D**	EPA 7470A	652379	EPA 7470A	652560
92563761005	**PZ-57I**	EPA 7470A	652379	EPA 7470A	652560
92563761006	**PZ-58I**	EPA 7470A	652379	EPA 7470A	652560
92563761007	**PZ-44**	EPA 7470A	652379	EPA 7470A	652560
92563761008	**PZ-50D**	EPA 7470A	652379	EPA 7470A	652560
92563761009	**PZ-60I**	EPA 7470A	652379	EPA 7470A	652560
92563761001	**PZ-51S**	SM 2540C-2011	650109		
92563761002	**PZ-51I**	SM 2540C-2011	650392		
92563761003	**PZ-61I**	SM 2540C-2011	650392		
92563761004	**PZ-51D**	SM 2540C-2011	650392		
92563761005	**PZ-57I**	SM 2540C-2011	650392		
92563761006	**PZ-58I**	SM 2540C-2011	650392		
92563761007	**PZ-44**	SM 2540C-2011	650392		
92563761008	**PZ-50D**	SM 2540C-2011	650392		
92563761009	**PZ-60I**	SM 2540C-2011	650392		
92563761001	**PZ-51S**	SM 2320B-2011	651424		

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

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: BRANCH AP-BCD DELIN PIEZO
Pace Project No.: 92563761

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92563761002	**PZ-51I**	SM 2320B-2011	651424		
92563761003	**PZ-61I**	SM 2320B-2011	651424		
92563761004	**PZ-51D**	SM 2320B-2011	651992		
92563761005	**PZ-57I**	SM 2320B-2011	651992		
92563761006	**PZ-58I**	SM 2320B-2011	651992		
92563761007	**PZ-44**	SM 2320B-2011	651992		
92563761008	**PZ-50D**	SM 2320B-2011	651992		
92563761009	**PZ-60I**	SM 2320B-2011	651992		
92563761001	**PZ-51S**	EPA 300.0 Rev 2.1 1993	650118		
92563761002	**PZ-51I**	EPA 300.0 Rev 2.1 1993	650118		
92563761003	**PZ-61I**	EPA 300.0 Rev 2.1 1993	650118		
92563761004	**PZ-51D**	EPA 300.0 Rev 2.1 1993	650118		
92563761005	**PZ-57I**	EPA 300.0 Rev 2.1 1993	650118		
92563761006	**PZ-58I**	EPA 300.0 Rev 2.1 1993	650118		
92563761007	**PZ-44**	EPA 300.0 Rev 2.1 1993	650118		
92563761008	**PZ-50D**	EPA 300.0 Rev 2.1 1993	650118		
92563761009	**PZ-60I**	EPA 300.0 Rev 2.1 1993	650124		
92563761001	**PZ-51S**	EPA 353.2 Rev 2.0 1993	651968		
92563761002	**PZ-51I**	EPA 353.2 Rev 2.0 1993	651968		
92563761003	**PZ-61I**	EPA 353.2 Rev 2.0 1993	651968		
92563761004	**PZ-51D**	EPA 353.2 Rev 2.0 1993	651970		
92563761005	**PZ-57I**	EPA 353.2 Rev 2.0 1993	651970		
92563761006	**PZ-58I**	EPA 353.2 Rev 2.0 1993	651970		
92563761007	**PZ-44**	EPA 353.2 Rev 2.0 1993	651970		
92563761008	**PZ-50D**	EPA 353.2 Rev 2.0 1993	651970		
92563761009	**PZ-60I**	EPA 353.2 Rev 2.0 1993	651970		

Pace Analytical	Document Name: Sample Condition Upon Receipt(SCUR)	Document Revised: October 28, 2020 Page 1 of 2
	Document No.: F-CAR-CS-033-Rev.07	Issuing Authority: Pace Carolinas Quality Office

Laboratory receiving samples:
Asheville ☐ Eden ☐ Greenwood ☐ Huntersville ☐ Raleigh ☐ Mechanicsville ☐ Atlanta ☑ Kernersville ☐

Sample Condition Upon Receipt

Client Name: Georgia Power

Project #: **WO# : 92563761**

92563761

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

Custody Seal Present? ☐ Yes ☑ No Seals Intact? ☐ Yes ☐ No

Date/Initials Person Examining Contents:

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

Biological Tissue Frozen? ☐ Yes ☑ No ☐ N/A

Thermometer: ☐ IR Gun ID: 130 Type of Ice:

Cooler Temp: 3.4 Correction Factor: Add/Subtract (°C) +0.1

Cooler Temp Corrected (°C): 3.5

Temp should be above freezing to 6°C
☐ Samples out of temp criteria. Samples on ice, cooling process has begun

USDA Regulated Soil (☐ N/A, water sample)
Did samples originate in a quarantine zone within the United States: CA, NY, or SC (check maps)? ☐ Yes ☐ No

Did samples originate from a foreign source (internationally, including Hawaii and Puerto Rico)? ☐ Yes ☐ No

				Comments/Discrepancy:
Chain of Custody Present?	☑ Yes	☐ No	☐ N/A	1
Samples Arrived within Hold Time?	☑ Yes	☐ No	☐ N/A	2
Short Hold Time Analysis (<72 hr.)?	☐ Yes	☑ No	☐ N/A	3
Rush Turn Around Time Requested?	☐ Yes	☑ No	☐ N/A	4
Sufficient Volume?	☑ Yes	☐ No	☐ N/A	5
Correct Containers Used?	☑ Yes	☐ No	☐ N/A	6
-Pace Containers Used?	☑ Yes	☐ No	☐ N/A	
Containers Intact?	☑ Yes	☐ No	☐ N/A	7
Dissolved analysis: Samples Field Filtered?	☐ Yes	☑ No	☐ N/A	8
Sample Labels Match COC?	☑ Yes	☐ No	☐ N/A	9
-Includes Date/Time/ID/Analysis Matrix:	WT			
Headspace in VOA Vials (>6mm)?	☐ Yes	☐ No	☑ N/A	10
Trip Blank Present?	☐ Yes	☐ No	☑ N/A	11
Trip Blank Custody Seals Present?	☐ Yes	☐ No	☑ N/A	

COMMENTS/SAMPLE DISCREPANCY

Field Data Required? ☐ Yes ☐ No

CLIENT NOTIFICATION/RESOLUTION

Lot ID of split containers:

Person contacted: Date/Time:

Project Manager SCURF Review: Date:

Project Manager SRF Review: Date:

Project # **WO#: 92563761**

PM: NMG Due Date: 10/12/21

CLIENT: GA-GA Power

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

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

****Bottom half of box is to list number of bottles**

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-)	DG3H-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)	BP3R	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)	DG9U-40 mL Amber Unpreserved vials (N/A)
1		1	1		✓	✓																		✓ 2				
2		1	1		✓	✓																		✓ 2				
3		1	1		✓	✓																		✓ 2				
4																												
5																												
6																												
7																												
8																												
9																												
10																												
11																												
12																												

pH Adjustment Log for Preserved Samples

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

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

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

Section B — Required Project Information

Section C — Invoice Information

Page: 1 Of 1

Regulatory Agency

State / Location

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID	DATE	TIME	Preservatives	Analyses Test	Residual Chlorine (Y/N)	
1	[illegible]	[illegible]	[illegible]				[illegible]
2	[illegible]	[illegible]	[illegible]				[illegible]
3	[illegible]	[illegible]	[illegible]				[illegible]
4							
5							
6							
7							
8							
9							
10							
11							
12							

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
	[illegible]	9-28-21	8:56	[illegible]	9/28	8:55	
				[illegible]	9/28/21	1018	

DATE Signed: 9-28-21

Pace Analytical

	Document Name: Sample Condition Upon Receipt (SCUR)	Document Revised: October 28, 2020
	Document No.: F-CAR-CS-033 Rev 07	Page 1 of 2
		Issuing Authority: Pace Carolinas Quality Office

Laboratory receiving samples:

Asheville [ ] Eden [ ] Greenwood [ ] Huntersville [ ] Raleigh [ ] Mechanicsville [ ] Atlanta [✓] Kernersville [ ]

Sample Condition Upon Receipt

Client Name: GA Power

Project #

Courier: [ ] Fed Ex [ ] UPS [✓] Client

[ ] Commercial [ ] Pace [ ] Other: ____

Custody Seal Present? [ ] Yes [✓] No Seals Intact? [ ] Yes [ ] No

Date/Initials Person Examining Contents: 9/29/21

Packing Material: [ ] Bubble Wrap [ ] Bubble Bags [✓] None [ ] Other

Biological Tissue Frozen? [ ] Yes [ ] No [✓] N/A

Thermometer: IR Gun ID: 9.2 Type of Ice: [✓] Wet [ ] Blue [ ] None

Cooler Temp: 9.2 Correction Factor: Add/Subtract (°C): 0.0

Cooler Temp Corrected (°C): 9.2

Temp should be above freezing to 6°C

[ ] Samples out of temp criteria. Samples on ice, cooling process has begun

USDA Regulated Soil ([ ] N/A, water sample)

Did samples originate in a quarantine zone within the United States: CA, NY, or SC (check maps)? [ ] Yes [ ] No

Did samples originate from a foreign source (internationally, including Hawaii and Puerto Rico)? [ ] Yes [ ] No

					Comments/Discrepancy
Chain of Custody Present?	[✓] Yes	[ ] No	[ ] N/A	1.	
Samples Arrived within Hold Time?	[✓] Yes	[ ] No	[ ] N/A	2.	
Short Hold Time Analysis (<72 hr)?	[ ] Yes	[✓] No	[ ] N/A	3.	
Rush Turn Around Time Requested?	[ ] Yes	[✓] No	[ ] N/A	4.	
Sufficient Volume?	[✓] Yes	[ ] No	[ ] N/A	5.	
Correct Containers Used?	[✓] Yes	[ ] No	[ ] N/A	6.	
-Pace Containers Used?	[✓] Yes	[ ] No	[ ] N/A		
Containers Intact?	[✓] Yes	[ ] No	[ ] N/A	7.	
Dissolved analysis: Samples Field Filtered?	[ ] Yes	[ ] No	[✓] N/A	8.	
Samples Labels Match COC?	[✓] Yes	[ ] No	[ ] N/A	9.	
-Includes Date/Time/ID/Analysis Matrix:	W				
Headspace in VOA Vials (>5-6mm)?	[ ] Yes	[ ] No	[✓] N/A	10.	
Trip Blank Present?	[ ] Yes	[ ] No	[✓] N/A	11.	
Trip Blank Custody Seals Present?	[ ] Yes	[ ] No	[✓] N/A		

COMMENTS/SAMPLE DISCREPANCY

Field Data Required? [ ] Yes [ ] No

CLIENT NOTIFICATION/RESOLUTION

Lot ID of split containers:

Person Contacted: Date/Time:

Project Manager SCURF Review: Date: ____________

Project Manager SRF Review: Date: ____________

Pace Analytical®

Document Name: Sample Condition Upon Receipt (SCUR) Document No.: [illegible]

Document Revised: October [illegible] 2020 Page 2 of 2 Issuing Authority: [illegible] Quality Office

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

[illegible]

**Bottom half of box is to list number of bottles

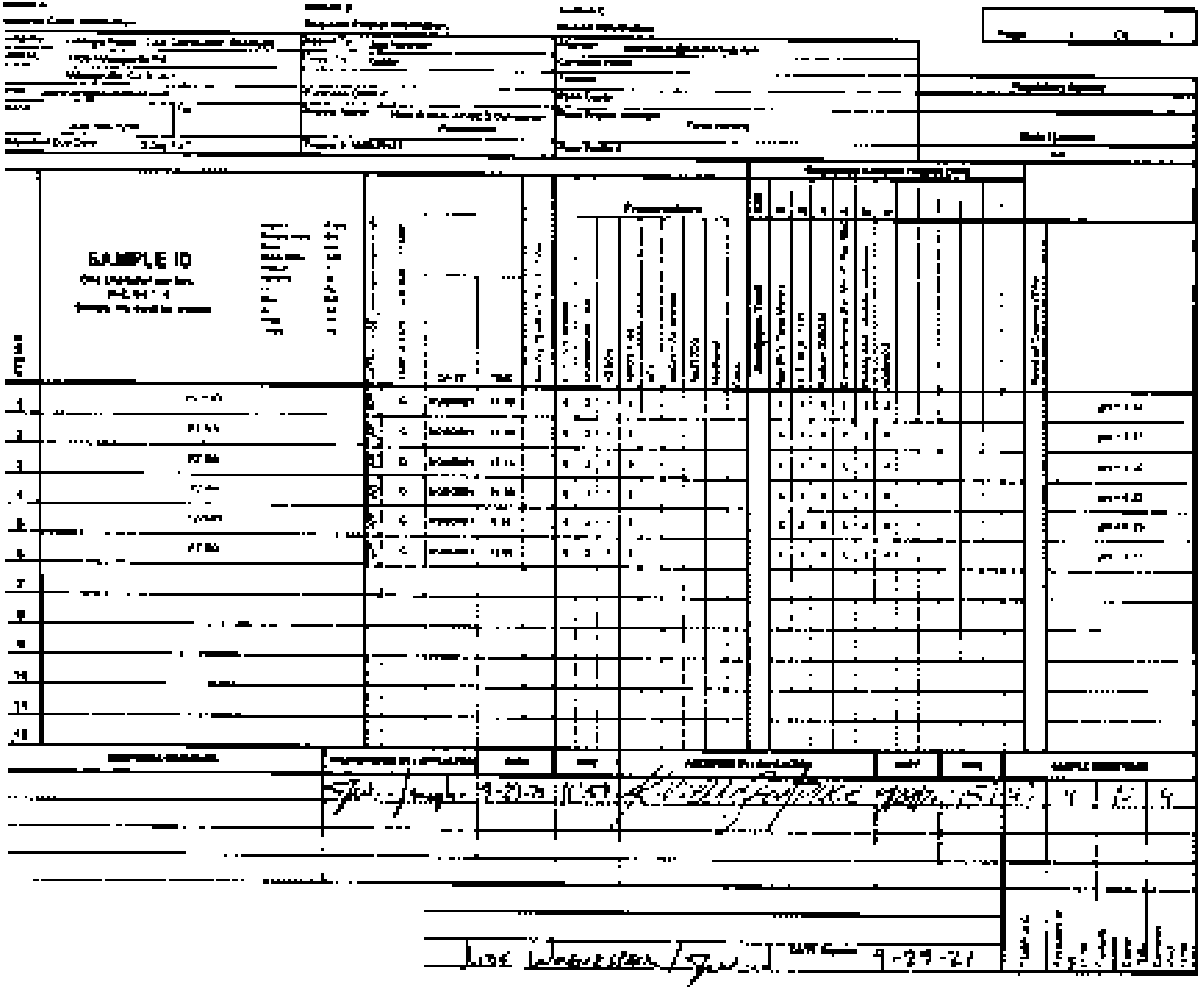
Project #

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 [illegible] samples, a copy of this form will be sent to the [illegible] Certification Office (i.e. Out of hold, incorrect preservative, out of temp, incorrect containers).

CHAIN-OF-CUSTODY / Analytical Request Document



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

October 29, 2021

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

RE: Project: BRANCH AP-BCDE BACKGROUND RADS
Pace Project No.: 92562849

Dear Joju Abraham:

Enclosed are the analytical results for sample(s) received by the laboratory between September 22, 2021 and September 23, 2021. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

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

- Pace Analytical Services - Greensburg

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

Sincerely,

Nicole D'Oleo
nicole.d'oleo@pacelabs.com
(704)875-9092
Project Manager

Enclosures

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

REPORT OF LABORATORY ANALYSIS

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

CERTIFICATIONS

Project: BRANCH AP-BCDE BACKGROUND RADS
Pace Project No.: 92562849

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: BRANCH AP-BCDE BACKGROUND RADS
Pace Project No.: 92562849

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92562849001	**BRGWA-5S**	Water	09/21/21 16:28	09/22/21 17:08
92562849002	**BRGWA-5I**	Water	09/21/21 12:30	09/22/21 17:08
92562849003	**BRGWA-2S**	Water	09/22/21 11:25	09/23/21 10:47
92562849004	**BRGWA-2I**	Water	09/22/21 10:21	09/23/21 10:47
92562849005	**BRGWA-6S**	Water	09/22/21 11:55	09/23/21 10:47

REPORT OF LABORATORY ANALYSIS

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

SAMPLE ANALYTE COUNT

Project: BRANCH AP-BCDE BACKGROUND RADS
Pace Project No.: 92562849

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92562849001	**BRGWA-5S**	EPA 9315	JJY	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92562849002	**BRGWA-5I**	EPA 9315	JJY	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92562849003	**BRGWA-2S**	EPA 9315	JJY	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92562849004	**BRGWA-2I**	EPA 9315	JJY	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92562849005	**BRGWA-6S**	EPA 9315	JJY	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA

PASI-PA = Pace Analytical Services - Greensburg

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

SUMMARY OF DETECTION

Project: BRANCH AP-BCDE BACKGROUND RADS
Pace Project No.: 92562849

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92562849001	**BRGWA-5S**					
EPA 9315	Radium-226	0.298 ± 0.226 (0.394) C:94% T:NA	pCi/L		10/08/21 08:02	
EPA 9320	Radium-228	0.562 ± 0.557 (1.16) C:61% T:84%	pCi/L		10/07/21 14:38	
Total Radium Calculation	Total Radium	0.860 ± 0.783 (1.55)	pCi/L		10/20/21 17:19	
92562849002	**BRGWA-5I**					
EPA 9315	Radium-226	0.123 ± 0.179 (0.391) C:98% T:NA	pCi/L		10/08/21 07:36	
EPA 9320	Radium-228	0.0589 ± 0.389 (0.891) C:62% T:91%	pCi/L		10/07/21 14:38	
Total Radium Calculation	Total Radium	0.182 ± 0.568 (1.28)	pCi/L		10/20/21 17:19	
92562849003	**BRGWA-2S**					
EPA 9315	Radium-226	0.172 ± 0.153 (0.262) C:99% T:NA	pCi/L		10/08/21 07:37	
EPA 9320	Radium-228	1.16 ± 0.614 (1.11) C:59% T:83%	pCi/L		10/07/21 14:38	
Total Radium Calculation	Total Radium	1.33 ± 0.767 (1.37)	pCi/L		10/20/21 17:19	
92562849004	**BRGWA-2I**					
EPA 9315	Radium-226	0.115 ± 0.155 (0.326) C:100% T:NA	pCi/L		10/08/21 07:35	
EPA 9320	Radium-228	0.234 ± 0.419 (0.917) C:62% T:83%	pCi/L		10/07/21 14:38	
Total Radium Calculation	Total Radium	0.349 ± 0.574 (1.24)	pCi/L		10/20/21 17:19	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
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SUMMARY OF DETECTION

Project: BRANCH AP-BCDE BACKGROUND RADS
Pace Project No.: 92562849

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92562849005	**BRGWA-6S**					
EPA 9315	Radium-226	0.943 ± 0.340 (0.300) C:104% T:NA	pCi/L		10/08/21 07:36	
EPA 9320	Radium-228	-0.0295 ± 0.364 (0.860) C:65% T:82%	pCi/L		10/07/21 14:39	
Total Radium Calculation	Total Radium	0.943 ± 0.704 (1.16)	pCi/L		10/20/21 17:19	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: BRANCH AP-BCDE BACKGROUND RADS
Pace Project No.: 92562849

Sample: BRGWA-5S **Lab ID: 92562849001** Collected: 09/21/21 16:28 Received: 09/22/21 17:08 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	**0.298 ± 0.226 (0.394) C:94% T:NA**	pCi/L	10/08/21 08:02	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.562 ± 0.557 (1.16) C:61% T:84%**	pCi/L	10/07/21 14:38	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.860 ± 0.783 (1.55)**	pCi/L	10/20/21 17:19	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: BRANCH AP-BCDE BACKGROUND RADS
Pace Project No.: 92562849

Sample: BRGWA-5I **Lab ID: 92562849002** Collected: 09/21/21 12:30 Received: 09/22/21 17:08 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	**0.123 ± 0.179 (0.391) C:98% T:NA**	pCi/L	10/08/21 07:36	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.0589 ± 0.389 (0.891) C:62% T:91%**	pCi/L	10/07/21 14:38	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.182 ± 0.568 (1.28)**	pCi/L	10/20/21 17:19	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: BRANCH AP-BCDE BACKGROUND RADS
Pace Project No.: 92562849

Sample: BRGWA-2S **Lab ID: 92562849003** Collected: 09/22/21 11:25 Received: 09/23/21 10:47 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	**0.172 ± 0.153 (0.262) C:99% T:NA**	pCi/L	10/08/21 07:37	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**1.16 ± 0.614 (1.11) C:59% T:83%**	pCi/L	10/07/21 14:38	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.33 ± 0.767 (1.37)**	pCi/L	10/20/21 17:19	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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(770)734-4200

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: BRANCH AP-BCDE BACKGROUND RADS
Pace Project No.: 92562849

Sample: BRGWA-2I **Lab ID: 92562849004** Collected: 09/22/21 10:21 Received: 09/23/21 10:47 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	**0.115 ± 0.155 (0.326) C:100% T:NA**	pCi/L	10/08/21 07:35	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.234 ± 0.419 (0.917) C:62% T:83%**	pCi/L	10/07/21 14:38	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.349 ± 0.574 (1.24)**	pCi/L	10/20/21 17:19	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: BRANCH AP-BCDE BACKGROUND RADS
Pace Project No.: 92562849

Sample: BRGWA-6S **Lab ID: 92562849005** Collected: 09/22/21 11:55 Received: 09/23/21 10:47 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	**0.943 ± 0.340 (0.300) C:104% T:NA**	pCi/L	10/08/21 07:36	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**-0.0295 ± 0.364 (0.860) C:65% T:82%**	pCi/L	10/07/21 14:39	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.943 ± 0.704 (1.16)**	pCi/L	10/20/21 17:19	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: BRANCH AP-BCDE BACKGROUND RADS
Pace Project No.: 92562849

QC Batch: 466410 Analysis Method: EPA 9320
QC Batch Method: EPA 9320 Analysis Description: 9320 Radium 228
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92562849001, 92562849002, 92562849003, 92562849004, 92562849005

METHOD BLANK: 2252279 Matrix: Water
Associated Lab Samples: 92562849001, 92562849002, 92562849003, 92562849004, 92562849005

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.420 ± 0.367 (0.738) C:65% T:90%	pCi/L	10/07/21 11:22	

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: BRANCH AP-BCDE BACKGROUND RADS
Pace Project No.: 92562849

QC Batch: 466264
QC Batch Method: EPA 9315
Analysis Method: EPA 9315
Analysis Description: 9315 Total Radium
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92562849001, 92562849002, 92562849003, 92562849004, 92562849005

METHOD BLANK: 2251638 Matrix: Water
Associated Lab Samples: 92562849001, 92562849002, 92562849003, 92562849004, 92562849005

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.284 ± 0.229 (0.421) C:95% T:NA	pCi/L	10/08/21 08:00	

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: BRANCH AP-BCDE BACKGROUND RADS
Pace Project No.: 92562849

DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

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

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

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

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

Acid preservation may not be appropriate for 2 Chloroethylvinyl ether.

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

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

Reported results are not rounded until the final step prior to reporting. Therefore, calculated parameters that are typically reported as "Total" may vary slightly from the sum of the reported component parameters.

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.

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

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: BRANCH AP-BCDE BACKGROUND RADS
Pace Project No.: 92562849

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92562849001	**BRGWA-5S**	EPA 9315	466264		
92562849002	**BRGWA-5I**	EPA 9315	466264		
92562849003	**BRGWA-2S**	EPA 9315	466264		
92562849004	**BRGWA-2I**	EPA 9315	466264		
92562849005	**BRGWA-6S**	EPA 9315	466264		
92562849001	**BRGWA-5S**	EPA 9320	466410		
92562849002	**BRGWA-5I**	EPA 9320	466410		
92562849003	**BRGWA-2S**	EPA 9320	466410		
92562849004	**BRGWA-2I**	EPA 9320	466410		
92562849005	**BRGWA-6S**	EPA 9320	466410		
92562849001	**BRGWA-5S**	Total Radium Calculation	469110		
92562849002	**BRGWA-5I**	Total Radium Calculation	469110		
92562849003	**BRGWA-2S**	Total Radium Calculation	469110		
92562849004	**BRGWA-2I**	Total Radium Calculation	469110		
92562849005	**BRGWA-6S**	Total Radium Calculation	469110		

Pace Analytical	Document Name: Sample Condition Upon Receipt(SCUR)	Document Revised: October 28, 2020 Page 1 of 2
	Document No.: F-CAR-CS-033-Rev.07	Issuing Authority: Pace Carolinas Quality Office

Laboratory receiving samples:
Asheville ☐ Eden ☐ Greenwood ☐ Huntersville ☐ Raleigh ☐ Mechanicsville ☐ Atlanta ☑ Kernersville ☐

Sample Condition Upon Receipt

Client Name: GA Power

Project #:

WO# : 92562849

92562849

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

Custody Seal Present? ☐ Yes ☑ No Seals Intact? ☐ Yes ☐ No

Date/Initials Person Examining Contents: 9/24/21 CH

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

Biological Tissue Frozen? ☐ Yes ☐ No ☑ N/A

Thermometer: ☑ IR Gun ID: 083 ☐ Wet ☐ Blue ☐ None

Type of Ice:

Cooler Temp: 1.8 Correction Factor: Add/Subtract (°C): 0.0

Cooler Temp Corrected (°C): 1.8

Temp should be above freezing to 6°C
☐ Samples out of temp criteria. Samples on ice, cooling process has begun

USDA Regulated Soil (☐ N/A, water sample)
Did samples originate in a quarantine zone within the United States: CA, NY, or SC (check maps)? ☐ Yes ☐ No

Did samples originate from a foreign source (internationally, including Hawaii and Puerto Rico)? ☐ Yes ☐ No

				Comments/Discrepancy:
Chain of Custody Present?	☑ Yes	☐ No	☐ N/A	1.
Samples Arrived within Hold Time?	☑ Yes	☐ No	☐ N/A	2.
Short Hold Time Analysis (<72 hr)?	☐ Yes	☑ No	☐ N/A	3.
Rush Turn Around Time Requested?	☐ Yes	☑ No	☐ N/A	4.
Sufficient Volume?	☑ Yes	☐ No	☐ N/A	5.
Correct Containers Used?	☑ Yes	☐ No	☐ N/A	6.
Pace Containers Used?	☑ Yes	☐ No	☐ N/A	
Containers Intact?	☑ Yes	☐ No	☐ N/A	7.
Dissolved analysis: Samples Field Filtered?	☐ Yes	☐ No	☑ N/A	8.
Sample Labels Match COC?	☑ Yes	☐ No	☐ N/A	9.
-Includes Date/Time/ID/Analysis Matrix:	W			
Headspace in VOA Vials (>5-6mm)?	☐ Yes	☐ No	☑ N/A	10.
Trip Blank Present?	☐ Yes	☐ No	☑ N/A	11.
Trip Blank Custody Seals Present?	☐ Yes	☐ No	☑ N/A	

COMMENTS/SAMPLE DISCREPANCY

Field Data Required? ☐ Yes ☐ No

Lot ID of split containers:

CLIENT NOTIFICATION/RESOLUTION

Person contacted: Date/Time:

Project Manager SCURF Review: Date:

Project Manager SRF Review: Date:

***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 bottles**

Project #

WO#: 92562849

PM: NMG Due Date: 10/13/21

CLIENT: GA-GA Power

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)	BP1N	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)	DG9U-40 mL Amber Unpreserved vials (N/A)
1		1	1			✓ 1																						
2		1	1			✓ 1																						
3																												
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12																												

pH Adjustment Log for Preserved Samples

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

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

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 - Coal Combustion Residuals	Report To:	Joju Abraham	Attention:	[illegible]@southernco.com
Address:	1100 Milledgeville Rd	Copy To:	Golder	Company Name:	
	Milledgeville, GA 31061			Address:	
Email:	jabraham@southernco.com	Purchase Order #:		Pace Quote:	
Phone: (404) 506-7239	Fax:	Project Name:	Plant Branch AP (BCD) Background	Pace Project Manager:	Kevin Herring
Requested Due Date:	10 Day TAT	Project #:	[illegible]	Pace Profile #:	

Regulatory Agency	
State / Location	GA

ITEM #	SAMPLE ID	MATRIX CODE	SAMPLE TYPE (G=GRAB C=COMP)	DATE	TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Unpreserved - Ice	H2SO4	HNO3 + Ice	HCl	NaOH + Zn Acetate	Na2S2O3	Methanol	Other	App III/IV Total Metals	Cl, F, SO4, TDS	Radium 226/228	Residual Chlorine (Y/N)	
1	BRGWA-5S	WT	G	9/21/2021	10:20		5	2		3						X	X	X		pH = 6.38
2	BRGWA-6	WT	G	9/21/2021	12:00		5	2		3						X	X	X		pH = 5.32
3																				
4																				
5																				
6																				
7																				
8																				
9																				
10																				
11																				
12																				

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
	[illegible]	9-22-21	5:05	[illegible]	[illegible]	[illegible]	

DATE Signed:

TEMP in C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N)

Pace Analytical

Document Name: Sample Condition Upon Receipt (SCUR)	Document Revised: October [illegible], 20[illegible] Page 1 of 1
Document No.: [illegible]	Issuing Authority: Pace [illegible] Quality Office

Laboratory receiving samples:
Asheville ☐ Eden ☐ Greenwood ☐ Huntersville ☐ Raleigh ☐ Mechanicsville ☐ Atlanta ☑ Kernersville ☐

Sample Condition Upon Receipt

Client Name: GA [illegible]

Project #:

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

Custody Seal Present? ☐ Yes ☑ No Seals Intact? ☐ Yes ☑ No

Date/Initials Person Examining Contents: [illegible]

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

Biological Tissue Frozen? ☐ Yes ☑ No ☐ N/A

Thermometer: ☐ IR Gun ID: [illegible] Type of Ice: ☑ Wet ☐ Blue ☐ None

Cooler Temp: [illegible] Correction Factor: Add/Subtract (°C): [illegible]

Temp should be above freezing to 6°C ☐ Samples out of temp criteria. Samples on ice, cooling process has begun

Cooler Temp Corrected (°C): [illegible]

USDA Regulated Soil? ☐ N/A, water sample

Did samples originate in a quarantine zone within the United States: [illegible] ☐ Yes ☑ No

Did samples originate from a foreign source (internationally, including Hawaii and Puerto Rico)? ☐ Yes ☑ No

					Comments/Discrepancy
Chain of Custody Present?	☑ Yes	☐ No	☐ N/A	1.	
Samples Arrived within Hold Time?	☑ Yes	☐ No	☐ N/A	2.	
Short Hold Time Analysis (<72 hr)?	☐ Yes	☑ No	☐ N/A	3.	
Rush Turn Around Time Requested?	☐ Yes	☑ No	☐ N/A	4.	
Sufficient Volume?	☑ Yes	☐ No	☐ N/A	5.	
Correct Containers Used?	☑ Yes	☐ No	☐ N/A	6.	
-Pace Containers Used?	☑ Yes	☐ No	☐ N/A		
Containers Intact?	☑ Yes	☐ No	☐ N/A	7.	
Dissolved analysis: Samples Field Filtered?	☐ Yes	☑ No	☐ N/A	8.	
Sample Labels Match COC?	☑ Yes	☐ No	☐ N/A	9.	
-Includes Date/Time/ID/Analysis Matrix:	[illegible]				
Headspace in VOA Vials (>5-6mm)?	☐ Yes	☐ No	☑ N/A	10.	
Trip Blank Present?	☐ Yes	☐ No	☑ N/A	11.	
Trip Blank Custody Seals Present?	☐ Yes	☐ No	☑ N/A		

COMMENTS/SAMPLE DISCREPANCY

Field Data Required? ☐ Yes ☐ No

Lot ID of split containers:

CLIENT NOTIFICATION/RESOLUTION

Person contacted: Date/Time:

Project Manager SCURF Review: Date:

Project Manager SRF Review: Date:

*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 bottles

Project #

Well	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	AG0U-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 Unpreserved (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)	[illegible]	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)	DG9U-40 mL Amber Unpreserved vials (N/A)
1																												
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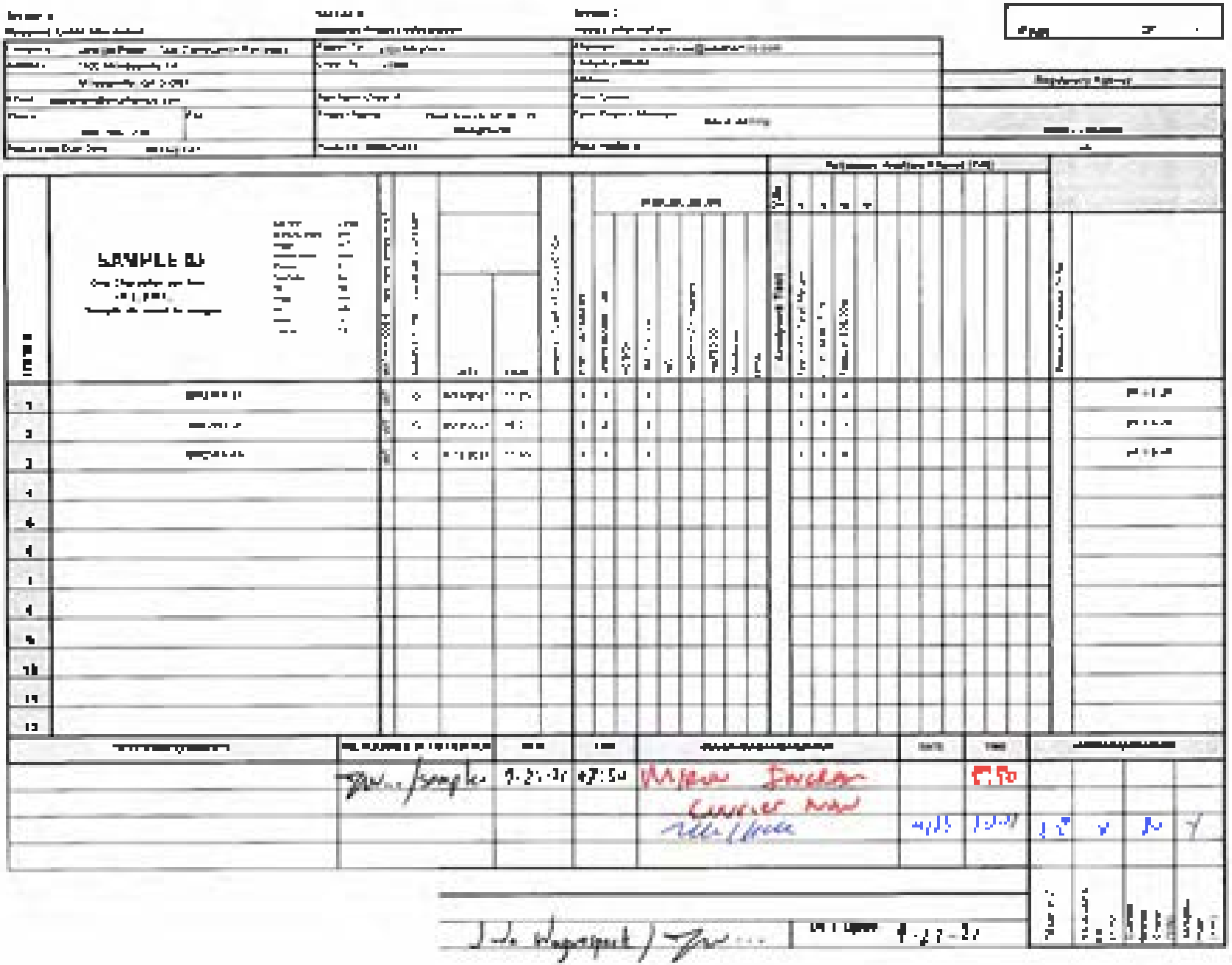
pH Adjustment Log for Preserved Samples

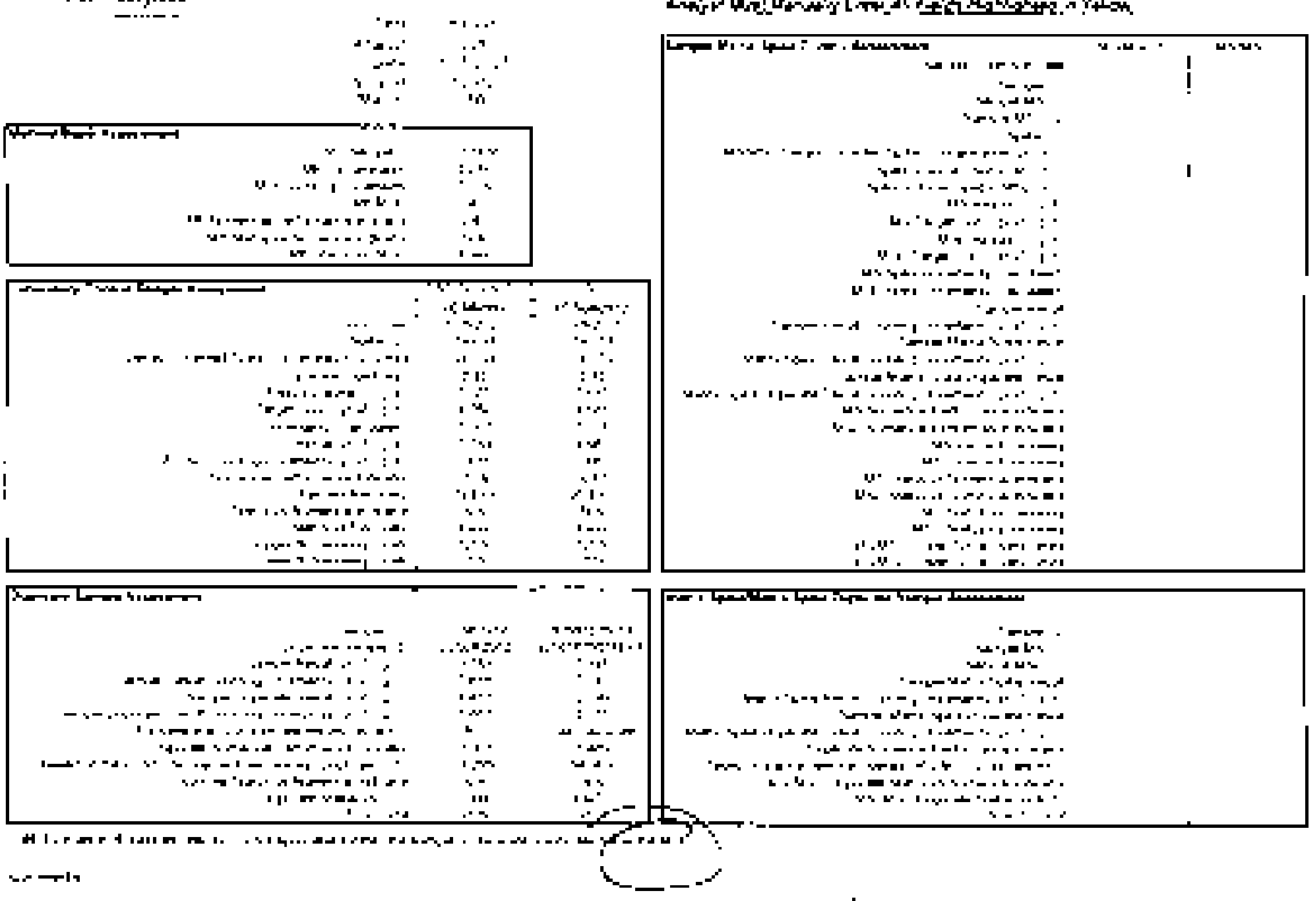
Sample ID	Type of Preservative	pH upon receipt	Date preservation adjusted	Time preservation adjusted	Amount of Preservative added	Lot #

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

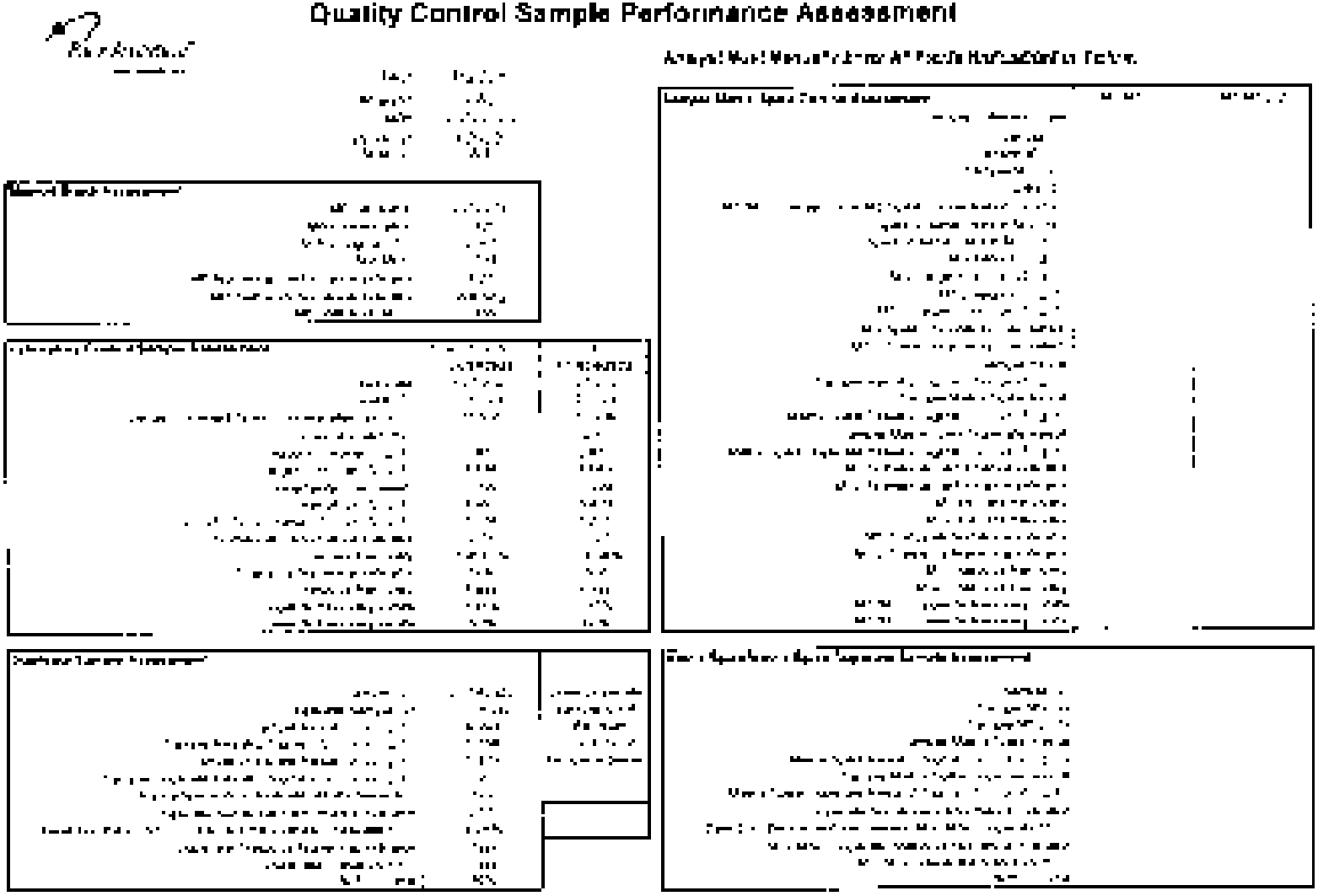
CHAIN-OF-CUSTODY / Analytical Request Document



Quality Control Sample Performance Assessment



Quality Control Sample Performance Assessment



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

October 22, 2021

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

RE: Project: BRANCH AP-BCDE BACKGROUND
Pace Project No.: 92562860

Dear Joju Abraham:

Enclosed are the analytical results for sample(s) received by the laboratory between September 22, 2021 and September 23, 2021. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

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

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

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

Sincerely,

Nicole D'Oleo
nicole.d'oleo@pacelabs.com
(704)875-9092
Project Manager

Enclosures

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

REPORT OF LABORATORY ANALYSIS

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

CERTIFICATIONS

Project: BRANCH AP-BCDE BACKGROUND
Pace Project No.: 92562860

Pace Analytical Services Charlotte
9800 Kincey Ave. Ste 100, Huntersville, NC 28078
Louisiana/NELAP Certification # LA170028
North Carolina Drinking Water Certification #: 37706
North Carolina Field Services Certification #: 5342
North Carolina Wastewater Certification #: 12
South Carolina Certification #: 99006001
Florida/NELAP Certification #: E87627
Kentucky UST Certification #: 84
Virginia/VELAP Certification #: 460221

Pace Analytical Services Asheville
2225 Riverside Drive, Asheville, NC 28804
Florida/NELAP Certification #: E87648
North Carolina Drinking Water Certification #: 37712
North Carolina Wastewater Certification #: 40
South Carolina Certification #: 99030001
Virginia/VELAP Certification #: 460222

Pace Analytical Services Peachtree Corners
110 Technology Pkwy, Peachtree Corners, GA 30092
Florida DOH Certification #: E87315
Georgia DW Inorganics Certification #: 812
North Carolina Certification #: 381
South Carolina Certification #: 98011001

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

SAMPLE SUMMARY

Project: BRANCH AP-BCDE BACKGROUND
Pace Project No.: 92562860

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92562860001	**BRGWA-5S**	Water	09/21/21 16:28	09/22/21 17:08
92562860002	**BRGWA-5I**	Water	09/21/21 12:30	09/22/21 17:08
92562860003	**BRGWA-2S**	Water	09/22/21 11:25	09/23/21 10:47
92562860004	**BRGWA-2I**	Water	09/22/21 10:21	09/23/21 10:47
92562860005	**BRGWA-6S**	Water	09/22/21 11:55	09/23/21 10:47

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

SAMPLE ANALYTE COUNT

Project: BRANCH AP-BCDE BACKGROUND
Pace Project No.: 92562860

Lab ID	Sample ID	Method	Analysts	Analytes Reported
92562860001	**BRGWA-5S**	EPA 6010D	KH	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2011	ALW	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92562860002	**BRGWA-5I**	EPA 6010D	KH	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2011	ALW	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92562860003	**BRGWA-2S**	EPA 6010D	KH	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2011	ALW	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92562860004	**BRGWA-2I**	EPA 6010D	KH	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2011	ALW	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92562860005	**BRGWA-6S**	EPA 6010D	KH	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2011	ALW	1
		EPA 300.0 Rev 2.1 1993	CDC	3

PASI-A = Pace Analytical Services - Asheville
PASI-C = Pace Analytical Services - Charlotte
PASI-GA = Pace Analytical Services - Peachtree Corners, GA

REPORT OF LABORATORY ANALYSIS

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

SUMMARY OF DETECTION

Project: BRANCH AP-BCDE BACKGROUND
Pace Project No.: 92562860

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92562860001	**BRGWA-5S**					
	Performed by	CUSTOMER			09/23/21 09:42	
	pH	6.36	Std. Units		09/23/21 09:42	
EPA 6010D	Calcium	19.1	mg/L	1.0	10/01/21 17:58	
EPA 6020B	Barium	0.038	mg/L	0.0050	10/01/21 14:26	
EPA 6020B	Chromium	0.0044J	mg/L	0.0050	09/30/21 19:41	
EPA 7470A	Mercury	0.00010J	mg/L	0.00020	10/06/21 12:38	B
SM 2540C-2011	Total Dissolved Solids	104	mg/L	10.0	09/27/21 10:20	
EPA 300.0 Rev 2.1 1993	Chloride	3.2	mg/L	1.0	09/24/21 19:35	
EPA 300.0 Rev 2.1 1993	Fluoride	0.056J	mg/L	0.10	09/24/21 19:35	
92562860002	**BRGWA-5I**					
	Performed by	CUSTOMER			09/23/21 09:43	
	pH	6.32	Std. Units		09/23/21 09:43	
EPA 6010D	Calcium	14.1	mg/L	1.0	10/01/21 18:32	
EPA 6020B	Barium	0.025	mg/L	0.0050	10/01/21 14:31	
EPA 6020B	Chromium	0.0064	mg/L	0.0050	09/30/21 19:46	
EPA 6020B	Cobalt	0.00071J	mg/L	0.0050	09/30/21 19:46	
EPA 6020B	Lithium	0.0012J	mg/L	0.030	09/30/21 19:46	
EPA 6020B	Molybdenum	0.0020J	mg/L	0.010	09/30/21 19:46	
EPA 7470A	Mercury	0.00010J	mg/L	0.00020	10/06/21 12:41	B
SM 2540C-2011	Total Dissolved Solids	108	mg/L	10.0	09/27/21 10:20	
EPA 300.0 Rev 2.1 1993	Chloride	3.2	mg/L	1.0	09/24/21 19:51	
EPA 300.0 Rev 2.1 1993	Sulfate	2.3	mg/L	1.0	09/24/21 19:51	
92562860003	**BRGWA-2S**					
	Performed by	CUSTOMER			09/23/21 13:03	
	pH	6.06	Std. Units		09/23/21 13:03	
EPA 6010D	Calcium	4.3	mg/L	1.0	10/01/21 18:51	
EPA 6020B	Barium	0.0097	mg/L	0.0050	10/01/21 14:43	
EPA 6020B	Chromium	0.0091	mg/L	0.0050	09/30/21 19:58	
EPA 7470A	Mercury	0.00010J	mg/L	0.00020	10/06/21 12:56	B
SM 2540C-2011	Total Dissolved Solids	66.0	mg/L	10.0	09/28/21 10:57	
EPA 300.0 Rev 2.1 1993	Chloride	1.5	mg/L	1.0	09/24/21 20:54	
92562860004	**BRGWA-2I**					
	Performed by	CUSTOMER			09/23/21 13:03	
	pH	6.78	Std. Units		09/23/21 13:03	
EPA 6010D	Calcium	15.9	mg/L	1.0	10/01/21 18:56	
EPA 6020B	Barium	0.0075	mg/L	0.0050	10/01/21 14:48	
EPA 6020B	Cobalt	0.0015J	mg/L	0.0050	09/30/21 20:04	
EPA 6020B	Lithium	0.021J	mg/L	0.030	09/30/21 20:04	
EPA 6020B	Molybdenum	0.0012J	mg/L	0.010	09/30/21 20:04	
EPA 7470A	Mercury	0.00010J	mg/L	0.00020	10/06/21 12:59	B
SM 2540C-2011	Total Dissolved Solids	129	mg/L	10.0	09/28/21 10:57	
EPA 300.0 Rev 2.1 1993	Chloride	1.7	mg/L	1.0	09/24/21 21:10	
EPA 300.0 Rev 2.1 1993	Sulfate	5.2	mg/L	1.0	09/24/21 21:10	

REPORT OF LABORATORY ANALYSIS

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

SUMMARY OF DETECTION

Project: BRANCH AP-BCDE BACKGROUND
Pace Project No.: 92562860

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92562860005	**BRGWA-6S**					
	Performed by	CUSTOMER			09/23/21 13:03	
	pH	6.48	Std. Units		09/23/21 13:03	
EPA 6010D	Calcium	4.1	mg/L	1.0	10/01/21 19:01	
EPA 6020B	Barium	0.014	mg/L	0.0050	10/01/21 14:54	
EPA 6020B	Chromium	0.014	mg/L	0.0050	09/30/21 20:09	
EPA 6020B	Cobalt	0.00078J	mg/L	0.0050	09/30/21 20:09	
EPA 6020B	Lithium	0.0035J	mg/L	0.030	09/30/21 20:09	
EPA 7470A	Mercury	0.00010J	mg/L	0.00020	10/06/21 13:01	B
SM 2540C-2011	Total Dissolved Solids	62.0	mg/L	10.0	09/28/21 10:57	
EPA 300.0 Rev 2.1 1993	Chloride	2.1	mg/L	1.0	09/24/21 21:26	

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

ANALYTICAL RESULTS

Project: BRANCH AP-BCDE BACKGROUND
Pace Project No.: 92562860

Sample: BRGWA-5S **Lab ID: 92562860001** Collected: 09/21/21 16:28 Received: 09/22/21 17:08 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**CUSTOMER**				1		09/23/21 09:42		
pH	**6.36**	Std. Units			1		09/23/21 09:42		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	**19.1**	mg/L	1.0	0.12	1	10/01/21 13:30	10/01/21 17:58	7440-70-2	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00078	1	09/30/21 10:25	09/30/21 19:41	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0011	1	09/30/21 10:25	09/30/21 19:41	7440-38-2	
Barium	**0.038**	mg/L	0.0050	0.00067	1	09/30/21 10:25	10/01/21 14:26	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	09/30/21 10:25	09/30/21 19:41	7440-41-7	
Boron	ND	mg/L	0.040	0.0086	1	09/30/21 10:25	09/30/21 19:41	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	09/30/21 10:25	09/30/21 19:41	7440-43-9	
Chromium	**0.0044J**	mg/L	0.0050	0.0011	1	09/30/21 10:25	09/30/21 19:41	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	09/30/21 10:25	09/30/21 19:41	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	09/30/21 10:25	09/30/21 19:41	7439-92-1	
Lithium	ND	mg/L	0.030	0.00073	1	09/30/21 10:25	09/30/21 19:41	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	09/30/21 10:25	09/30/21 19:41	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	09/30/21 10:25	09/30/21 19:41	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	09/30/21 10:25	09/30/21 19:41	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	**0.00010J**	mg/L	0.00020	0.000078	1	10/06/21 09:30	10/06/21 12:38	7439-97-6	B
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**104**	mg/L	10.0	10.0	1		09/27/21 10:20		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**3.2**	mg/L	1.0	0.60	1		09/24/21 19:35	16887-00-6	
Fluoride	**0.056J**	mg/L	0.10	0.050	1		09/24/21 19:35	16984-48-8	
Sulfate	ND	mg/L	1.0	0.50	1		09/24/21 19:35	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: BRANCH AP-BCDE BACKGROUND
Pace Project No.: 92562860

Sample: BRGWA-5I **Lab ID: 92562860002** Collected: 09/21/21 12:30 Received: 09/22/21 17:08 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**CUSTOMER**				1		09/23/21 09:43		
pH	**6.32**	Std. Units			1		09/23/21 09:43		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	**14.1**	mg/L	1.0	0.12	1	10/01/21 13:30	10/01/21 18:32	7440-70-2	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00078	1	09/30/21 10:25	09/30/21 19:46	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0011	1	09/30/21 10:25	09/30/21 19:46	7440-38-2	
Barium	**0.025**	mg/L	0.0050	0.00067	1	09/30/21 10:25	10/01/21 14:31	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	09/30/21 10:25	09/30/21 19:46	7440-41-7	
Boron	ND	mg/L	0.040	0.0086	1	09/30/21 10:25	09/30/21 19:46	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	09/30/21 10:25	09/30/21 19:46	7440-43-9	
Chromium	**0.0064**	mg/L	0.0050	0.0011	1	09/30/21 10:25	09/30/21 19:46	7440-47-3	
Cobalt	**0.00071J**	mg/L	0.0050	0.00039	1	09/30/21 10:25	09/30/21 19:46	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	09/30/21 10:25	09/30/21 19:46	7439-92-1	
Lithium	**0.0012J**	mg/L	0.030	0.00073	1	09/30/21 10:25	09/30/21 19:46	7439-93-2	
Molybdenum	**0.0020J**	mg/L	0.010	0.00074	1	09/30/21 10:25	09/30/21 19:46	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	09/30/21 10:25	09/30/21 19:46	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	09/30/21 10:25	09/30/21 19:46	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	**0.00010J**	mg/L	0.00020	0.000078	1	10/06/21 09:30	10/06/21 12:41	7439-97-6	B
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**108**	mg/L	10.0	10.0	1		09/27/21 10:20		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**3.2**	mg/L	1.0	0.60	1		09/24/21 19:51	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		09/24/21 19:51	16984-48-8	
Sulfate	**2.3**	mg/L	1.0	0.50	1		09/24/21 19:51	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: BRANCH AP-BCDE BACKGROUND
Pace Project No.: 92562860

Sample: BRGWA-2S **Lab ID: 92562860003** Collected: 09/22/21 11:25 Received: 09/23/21 10:47 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**CUSTOMER**				1		09/23/21 13:03		
pH	**6.06**	Std. Units			1		09/23/21 13:03		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	**4.3**	mg/L	1.0	0.12	1	10/01/21 13:30	10/01/21 18:51	7440-70-2	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00078	1	09/30/21 10:25	09/30/21 19:58	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0011	1	09/30/21 10:25	09/30/21 19:58	7440-38-2	
Barium	**0.0097**	mg/L	0.0050	0.00067	1	09/30/21 10:25	10/01/21 14:43	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	09/30/21 10:25	09/30/21 19:58	7440-41-7	
Boron	ND	mg/L	0.040	0.0086	1	09/30/21 10:25	09/30/21 19:58	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	09/30/21 10:25	09/30/21 19:58	7440-43-9	
Chromium	**0.0091**	mg/L	0.0050	0.0011	1	09/30/21 10:25	09/30/21 19:58	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	09/30/21 10:25	09/30/21 19:58	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	09/30/21 10:25	09/30/21 19:58	7439-92-1	
Lithium	ND	mg/L	0.030	0.00073	1	09/30/21 10:25	09/30/21 19:58	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	09/30/21 10:25	09/30/21 19:58	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	09/30/21 10:25	09/30/21 19:58	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	09/30/21 10:25	09/30/21 19:58	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	**0.00010J**	mg/L	0.00020	0.000078	1	10/06/21 09:30	10/06/21 12:56	7439-97-6	B
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**66.0**	mg/L	10.0	10.0	1		09/28/21 10:57		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**1.5**	mg/L	1.0	0.60	1		09/24/21 20:54	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		09/24/21 20:54	16984-48-8	
Sulfate	ND	mg/L	1.0	0.50	1		09/24/21 20:54	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: BRANCH AP-BCDE BACKGROUND
Pace Project No.: 92562860

Sample: BRGWA-2I **Lab ID: 92562860004** Collected: 09/22/21 10:21 Received: 09/23/21 10:47 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**CUSTOMER**				1		09/23/21 13:03		
pH	**6.78**	Std. Units			1		09/23/21 13:03		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	**15.9**	mg/L	1.0	0.12	1	10/01/21 13:30	10/01/21 18:56	7440-70-2	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00078	1	09/30/21 10:25	09/30/21 20:04	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0011	1	09/30/21 10:25	09/30/21 20:04	7440-38-2	
Barium	**0.0075**	mg/L	0.0050	0.00067	1	09/30/21 10:25	10/01/21 14:48	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	09/30/21 10:25	09/30/21 20:04	7440-41-7	
Boron	ND	mg/L	0.040	0.0086	1	09/30/21 10:25	09/30/21 20:04	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	09/30/21 10:25	09/30/21 20:04	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	09/30/21 10:25	09/30/21 20:04	7440-47-3	
Cobalt	**0.0015J**	mg/L	0.0050	0.00039	1	09/30/21 10:25	09/30/21 20:04	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	09/30/21 10:25	09/30/21 20:04	7439-92-1	
Lithium	**0.021J**	mg/L	0.030	0.00073	1	09/30/21 10:25	09/30/21 20:04	7439-93-2	
Molybdenum	**0.0012J**	mg/L	0.010	0.00074	1	09/30/21 10:25	09/30/21 20:04	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	09/30/21 10:25	09/30/21 20:04	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	09/30/21 10:25	09/30/21 20:04	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	**0.00010J**	mg/L	0.00020	0.000078	1	10/06/21 09:30	10/06/21 12:59	7439-97-6	B
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**129**	mg/L	10.0	10.0	1		09/28/21 10:57		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**1.7**	mg/L	1.0	0.60	1		09/24/21 21:10	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		09/24/21 21:10	16984-48-8	
Sulfate	**5.2**	mg/L	1.0	0.50	1		09/24/21 21:10	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: BRANCH AP-BCDE BACKGROUND
Pace Project No.: 92562860

Sample: BRGWA-6S **Lab ID: 92562860005** Collected: 09/22/21 11:55 Received: 09/23/21 10:47 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**CUSTOMER**				1		09/23/21 13:03		
pH	**6.48**	Std. Units			1		09/23/21 13:03		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	**4.1**	mg/L	1.0	0.12	1	10/01/21 13:30	10/01/21 19:01	7440-70-2	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00078	1	09/30/21 10:25	09/30/21 20:09	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0011	1	09/30/21 10:25	09/30/21 20:09	7440-38-2	
Barium	**0.014**	mg/L	0.0050	0.00067	1	09/30/21 10:25	10/01/21 14:54	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	09/30/21 10:25	09/30/21 20:09	7440-41-7	
Boron	ND	mg/L	0.040	0.0086	1	09/30/21 10:25	09/30/21 20:09	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	09/30/21 10:25	09/30/21 20:09	7440-43-9	
Chromium	**0.014**	mg/L	0.0050	0.0011	1	09/30/21 10:25	09/30/21 20:09	7440-47-3	
Cobalt	**0.00078J**	mg/L	0.0050	0.00039	1	09/30/21 10:25	09/30/21 20:09	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	09/30/21 10:25	09/30/21 20:09	7439-92-1	
Lithium	**0.0035J**	mg/L	0.030	0.00073	1	09/30/21 10:25	09/30/21 20:09	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	09/30/21 10:25	09/30/21 20:09	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	09/30/21 10:25	09/30/21 20:09	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	09/30/21 10:25	09/30/21 20:09	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	**0.00010J**	mg/L	0.00020	0.000078	1	10/06/21 09:30	10/06/21 13:01	7439-97-6	B
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**62.0**	mg/L	10.0	10.0	1		09/28/21 10:57		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**2.1**	mg/L	1.0	0.60	1		09/24/21 21:26	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		09/24/21 21:26	16984-48-8	
Sulfate	ND	mg/L	1.0	0.50	1		09/24/21 21:26	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: BRANCH AP-BCDE BACKGROUND
Pace Project No.: 92562860

QC Batch: 650399
QC Batch Method: EPA 3010A
Analysis Method: EPA 6010D
Analysis Description: 6010D ATL
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92562860001, 92562860002, 92562860003, 92562860004, 92562860005

METHOD BLANK: 3411275 Matrix: Water
Associated Lab Samples: 92562860001, 92562860002, 92562860003, 92562860004, 92562860005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium	mg/L	ND	1.0	0.12	10/01/21 17:49	

LABORATORY CONTROL SAMPLE: 3411276

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium	mg/L	1	1.1	112	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3411277 3411278

Parameter	Units	92562860002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Calcium	mg/L	14.1	1	1	15.1	15.0	105	93	75-125	1	20	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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QUALITY CONTROL DATA

Project: BRANCH AP-BCDE BACKGROUND
Pace Project No.: 92562860

QC Batch: 650022
QC Batch Method: EPA 3005A
Analysis Method: EPA 6020B
Analysis Description: 6020 MET
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92562860001, 92562860002, 92562860003, 92562860004, 92562860005

METHOD BLANK: 3409457 Matrix: Water
Associated Lab Samples: 92562860001, 92562860002, 92562860003, 92562860004, 92562860005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	ND	0.0030	0.00078	09/30/21 18:26	
Arsenic	mg/L	ND	0.0050	0.0011	09/30/21 18:26	
Barium	mg/L	ND	0.0050	0.00067	09/30/21 18:26	
Beryllium	mg/L	ND	0.00050	0.000054	09/30/21 18:26	
Boron	mg/L	ND	0.040	0.0086	09/30/21 18:26	
Cadmium	mg/L	ND	0.00050	0.00011	09/30/21 18:26	
Chromium	mg/L	ND	0.0050	0.0011	09/30/21 18:26	
Cobalt	mg/L	ND	0.0050	0.00039	09/30/21 18:26	
Lead	mg/L	ND	0.0010	0.00089	09/30/21 18:26	
Lithium	mg/L	ND	0.030	0.00073	09/30/21 18:26	
Molybdenum	mg/L	ND	0.010	0.00074	09/30/21 18:26	
Selenium	mg/L	ND	0.0050	0.0014	09/30/21 18:26	
Thallium	mg/L	ND	0.0010	0.00018	09/30/21 18:26	

LABORATORY CONTROL SAMPLE: 3409458

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.1	0.12	116	80-120	
Arsenic	mg/L	0.1	0.097	97	80-120	
Barium	mg/L	0.1	0.11	111	80-120	
Beryllium	mg/L	0.1	0.11	106	80-120	
Boron	mg/L	1	1.1	106	80-120	
Cadmium	mg/L	0.1	0.10	102	80-120	
Chromium	mg/L	0.1	0.11	106	80-120	
Cobalt	mg/L	0.1	0.10	103	80-120	
Lead	mg/L	0.1	0.096	96	80-120	
Lithium	mg/L	0.1	0.11	107	80-120	
Molybdenum	mg/L	0.1	0.11	111	80-120	
Selenium	mg/L	0.1	0.097	97	80-120	
Thallium	mg/L	0.1	0.095	95	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3409459 3409460

Parameter	Units	92562820017 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	108	114	75-125	5	20	
Arsenic	mg/L	ND	0.1	0.1	0.097	0.099	97	99	75-125	2	20	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: BRANCH AP-BCDE BACKGROUND
Pace Project No.: 92562860

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3409459 3409460

Parameter	Units	92562820017 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Barium	mg/L	0.092	0.1	0.1	0.23	0.24	138	152	75-125	6	20	M1
Beryllium	mg/L	ND	0.1	0.1	0.11	0.11	110	108	75-125	2	20	
Boron	mg/L	ND	1	1	1.1	1.0	108	104	75-125	4	20	
Cadmium	mg/L	ND	0.1	0.1	0.10	0.10	102	101	75-125	0	20	
Chromium	mg/L	ND	0.1	0.1	0.10	0.10	103	102	75-125	1	20	
Cobalt	mg/L	ND	0.1	0.1	0.10	0.11	99	103	75-125	4	20	
Lead	mg/L	ND	0.1	0.1	0.096	0.095	96	95	75-125	1	20	
Lithium	mg/L	ND	0.1	0.1	0.11	0.11	109	108	75-125	0	20	
Molybdenum	mg/L	ND	0.1	0.1	0.11	0.11	108	114	75-125	5	20	
Selenium	mg/L	ND	0.1	0.1	0.096	0.095	96	95	75-125	1	20	
Thallium	mg/L	ND	0.1	0.1	0.095	0.095	95	95	75-125	0	20	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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QUALITY CONTROL DATA

Project: BRANCH AP-BCDE BACKGROUND
Pace Project No.: 92562860

QC Batch: 650957
QC Batch Method: EPA 7470A
Analysis Method: EPA 7470A
Analysis Description: 7470 Mercury
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92562860001, 92562860002, 92562860003, 92562860004, 92562860005

METHOD BLANK: 3413779 Matrix: Water
Associated Lab Samples: 92562860001, 92562860002, 92562860003, 92562860004, 92562860005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	0.00011J	0.00020	0.000078	10/06/21 12:20	

LABORATORY CONTROL SAMPLE: 3413780

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.0025	0.0025	98	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3413781 3413782

Parameter	Units	92562855001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	mg/L	0.00010J	0.0025	0.0025	0.0024	0.0023	92	89	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: BRANCH AP-BCDE BACKGROUND
Pace Project No.: 92562860

QC Batch: 649295
QC Batch Method: SM 2540C-2011
Analysis Method: SM 2540C-2011
Analysis Description: 2540C Total Dissolved Solids
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92562860001, 92562860002

METHOD BLANK: 3405734 Matrix: Water
Associated Lab Samples: 92562860001, 92562860002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	10.0	10.0	09/27/21 10:19	

LABORATORY CONTROL SAMPLE: 3405735

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	394	98	90-111	

SAMPLE DUPLICATE: 3405736

Parameter	Units	92562283002 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	174	168	4	10	

SAMPLE DUPLICATE: 3405737

Parameter	Units	92563313004 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	985	1080	9	10	

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

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: BRANCH AP-BCDE BACKGROUND
Pace Project No.: 92562860

QC Batch: 649491
QC Batch Method: SM 2540C-2011
Analysis Method: SM 2540C-2011
Analysis Description: 2540C Total Dissolved Solids
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92562860003, 92562860004, 92562860005

METHOD BLANK: 3406451 Matrix: Water
Associated Lab Samples: 92562860003, 92562860004, 92562860005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	10.0	10.0	09/28/21 10:55	

LABORATORY CONTROL SAMPLE: 3406452

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	394	98	90-111	

SAMPLE DUPLICATE: 3406453

Parameter	Units	92563313026 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	527	536	2	10	

SAMPLE DUPLICATE: 3406454

Parameter	Units	92562857001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	86.0	80.0	7	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

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

QUALITY CONTROL DATA

Project: BRANCH AP-BCDE BACKGROUND
Pace Project No.: 92562860

QC Batch: 649204
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
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92562860001, 92562860002, 92562860003, 92562860004, 92562860005

METHOD BLANK: 3405091 Matrix: Water
Associated Lab Samples: 92562860001, 92562860002, 92562860003, 92562860004, 92562860005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.60	09/24/21 17:59	
Fluoride	mg/L	ND	0.10	0.050	09/24/21 17:59	
Sulfate	mg/L	ND	1.0	0.50	09/24/21 17:59	

LABORATORY CONTROL SAMPLE: 3405092

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	45.5	91	90-110	
Fluoride	mg/L	2.5	2.4	96	90-110	
Sulfate	mg/L	50	49.1	98	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3405095 3405096

Parameter	Units	92562974002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	2.7	50	50	49.7	49.4	94	93	90-110	1	10	
Fluoride	mg/L	0.068J	2.5	2.5	2.7	2.6	103	102	90-110	1	10	
Sulfate	mg/L	94.6	50	50	140	141	90	94	90-110	1	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3405233 3405234

Parameter	Units	92562855001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	3.5	50	50	48.5	50.6	90	94	90-110	4	10	
Fluoride	mg/L	ND	2.5	2.5	2.4	2.5	95	99	90-110	5	10	
Sulfate	mg/L	0.51J	50	50	48.8	51.3	97	102	90-110	5	10	

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

REPORT OF LABORATORY ANALYSIS

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

QUALIFIERS

Project: BRANCH AP-BCDE BACKGROUND
Pace Project No.: 92562860

DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

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

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

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

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

Acid preservation may not be appropriate for 2 Chloroethylvinyl ether.

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

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

Reported results are not rounded until the final step prior to reporting. Therefore, calculated parameters that are typically reported as "Total" may vary slightly from the sum of the reported component parameters.

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.
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: BRANCH AP-BCDE BACKGROUND
Pace Project No.: 92562860

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92562860001	**BRGWA-5S**				
92562860002	**BRGWA-5I**				
92562860003	**BRGWA-2S**				
92562860004	**BRGWA-2I**				
92562860005	**BRGWA-6S**				
92562860001	**BRGWA-5S**	EPA 3010A	650399	EPA 6010D	650462
92562860002	**BRGWA-5I**	EPA 3010A	650399	EPA 6010D	650462
92562860003	**BRGWA-2S**	EPA 3010A	650399	EPA 6010D	650462
92562860004	**BRGWA-2I**	EPA 3010A	650399	EPA 6010D	650462
92562860005	**BRGWA-6S**	EPA 3010A	650399	EPA 6010D	650462
92562860001	**BRGWA-5S**	EPA 3005A	650022	EPA 6020B	650181
92562860002	**BRGWA-5I**	EPA 3005A	650022	EPA 6020B	650181
92562860003	**BRGWA-2S**	EPA 3005A	650022	EPA 6020B	650181
92562860004	**BRGWA-2I**	EPA 3005A	650022	EPA 6020B	650181
92562860005	**BRGWA-6S**	EPA 3005A	650022	EPA 6020B	650181
92562860001	**BRGWA-5S**	EPA 7470A	650957	EPA 7470A	651107
92562860002	**BRGWA-5I**	EPA 7470A	650957	EPA 7470A	651107
92562860003	**BRGWA-2S**	EPA 7470A	650957	EPA 7470A	651107
92562860004	**BRGWA-2I**	EPA 7470A	650957	EPA 7470A	651107
92562860005	**BRGWA-6S**	EPA 7470A	650957	EPA 7470A	651107
92562860001	**BRGWA-5S**	SM 2540C-2011	649295		
92562860002	**BRGWA-5I**	SM 2540C-2011	649295		
92562860003	**BRGWA-2S**	SM 2540C-2011	649491		
92562860004	**BRGWA-2I**	SM 2540C-2011	649491		
92562860005	**BRGWA-6S**	SM 2540C-2011	649491		
92562860001	**BRGWA-5S**	EPA 300.0 Rev 2.1 1993	649204		
92562860002	**BRGWA-5I**	EPA 300.0 Rev 2.1 1993	649204		
92562860003	**BRGWA-2S**	EPA 300.0 Rev 2.1 1993	649204		
92562860004	**BRGWA-2I**	EPA 300.0 Rev 2.1 1993	649204		
92562860005	**BRGWA-6S**	EPA 300.0 Rev 2.1 1993	649204		

REPORT OF LABORATORY ANALYSIS

Pace Analytical	Document Name: Sample Condition Upon Receipt(SCUR)	Document Revised: October 28, 2020 Page 1 of 2
	Document No.: F-CAR-CS-033-Rev.07	Issuing Authority: Pace Carolinas Quality Office

Laboratory receiving samples:
Asheville ☐ Eden ☐ Greenwood ☐ Huntersville ☐ Raleigh ☐ Mechanicsville ☐ Atlanta ☑ Kernersville ☐

Sample Condition Upon Receipt

Client Name: GP Power

Project #: WO# : 92562860

92562860

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

Custody Seal Present? ☐ Yes ☑ No Seals Intact? ☐ Yes ☐ No

Date/Initials Person Examining Contents: 9/22/21 CH

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

Biological Tissue Frozen? ☐ Yes ☐ No ☑ N/A

Thermometer: ☑ IR Gun ID: 083 ☐ Wet ☐ Blue ☐ None

Type of Ice:

Cooler Temp: 1.8 Correction Factor: Add/Subtract (°C): 0.0

Temp should be above freezing to 6°C
☐ Samples out of temp criteria. Samples on ice, cooling process has begun

Cooler Temp Corrected (°C): 1.8

USDA Regulated Soil (☐ N/A, water sample)
Did samples originate in a quarantine zone within the United States: CA, NY, or SC (check maps)? ☐ Yes ☐ No

Did samples originate from a foreign source (internationally, including Hawaii and Puerto Rico)? ☐ Yes ☐ No

				Comments/Discrepancy:
Chain of Custody Present?	☑ Yes	☐ No	☐ N/A	1.
Samples Arrived within Hold Time?	☑ Yes	☐ No	☐ N/A	2.
Short Hold Time Analysis (<72 hr.)?	☐ Yes	☑ No	☐ N/A	3.
Rush Turn Around Time Requested?	☐ Yes	☑ No	☐ N/A	4.
Sufficient Volume?	☑ Yes	☐ No	☐ N/A	5.
Correct Containers Used?	☑ Yes	☐ No	☐ N/A	6.
-Pace Containers Used?	☑ Yes	☐ No	☐ N/A	
Containers Intact?	☑ Yes	☐ No	☐ N/A	7.
Dissolved analysis: Samples Field Filtered?	☐ Yes	☐ No	☑ N/A	8.
Sample Labels Match COC?	☑ Yes	☐ No	☐ N/A	9.
-Includes Date/Time/ID/Analysis Matrix: W				
Headspace in VOA Vials (>5-6mm)?	☐ Yes	☐ No	☑ N/A	10.
Trip Blank Present?	☐ Yes	☐ No	☑ N/A	11.
Trip Blank Custody Seals Present?	☐ Yes	☐ No	☑ N/A	

COMMENTS/SAMPLE DISCREPANCY

Field Data Required? ☐ Yes ☐ No

Lot ID of split containers:

CLIENT NOTIFICATION/RESOLUTION

Person contacted: Date/Time:

Project Manager SCURF Review: Date:

Project Manager SRF Review: Date:

Pace Analytical	Document Name: Sample Condition Upon Receipt(SCUR)	Document Revised: October 28, 2020 Page 2 of 2
	Document No.: F-CAR-CS-033-Rev.07	Issuing Authority: Pace Carolinas Quality Office

*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 bottles

Project #

WO#: 92562860

PM: NMG Due Date: 10/06/21

CLIENT: GA-GA Power

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)	BPIN	BP3A-250 mL Plastic (NH2)2SO4 (9.3-9.7)	AG0U-100 mL Amber Unpreserved vials (N/A)	VG0U-20 mL Scintillation vials (N/A)	DG9U-40 mL Amber Unpreserved vials (N/A)
1		1	1			✓ 1																		✓ 2				
2		1	1			✓ 1																		✓ 2				
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pH Adjustment Log for Preserved Samples

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

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

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		Section B Required Project Information		Section C Invoice Information	
Company	Georgia Power - Coal Combustion Residuals	Report To	[illegible]	Attention	[illegible]
Address	[illegible]	Copy To	[illegible]	Company Name	
	[illegible]			Address	
Email	[illegible]	Purchase Order #		Pace Quote	
Phone	(404) [illegible]	Project Name	Plant [illegible] Background	Pace Project Manager	[illegible]
Requested Due Date	10 Day TAT	Project #	[illegible]	Pace Profile #	

Page : 1 Of 1

Regulatory Agency

State / Location: GA

ITEM #	SAMPLE ID	MATRIX CODE	SAMPLE TYPE (G=GRAB C=COMP)	DATE	TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Unpreserved - Ice	H_2SO_4	HNO_3 + Ice	HCl	NaOH + Zn Acetate	$Na_2S_2O_3$	Methanol	Other	Analyses Test	App III/IV Total Metals	Cl, F, SO_4, TDS	Radium 226/228	Residual Chlorine (Y/N)	
1	[illegible]	[illegible]	G	9/21/2021	[illegible]		5	2		3							X	X	X		pH = [illegible]
2	[illegible]	[illegible]	G	9/21/2021	[illegible]		5	2		3							X	X	X		pH = [illegible]
3																					
4																					
5																					
6																					
7																					
8																					
9																					
10																					
11																					
12																					

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	

DATE Signed:

TEMP in C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N)

Pace Analytical

Document Name:	Document Revised: October 28, 2020
Sample Condition Upon Receipt(SCUR)	Page 1 of 1
Document No.:	Issuing Authority:
F-CAR-CS-033-Rev.07	Pace Carolinas Quality Office

Laboratory receiving samples:

Asheville ☐ Eden ☐ Greenwood ☐ Huntersville ☐ Raleigh ☐ Mechanicsville ☐ Atlanta ☑ Kernersville ☐

Sample Condition Upon Receipt

Client Name: GA Power

Project #:

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

Custody Seal Present? ☐ Yes ☑ No Seals Intact? ☐ Yes ☑ No

Date/Initials Person Examining Contents: [illegible]

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

Biological Tissue Frozen? ☐ Yes ☑ No ☐ N/A

Thermometer: ☐ IR Gun ID: [illegible]

Type of Ice: ☑ Wet ☐ Blue ☐ None

Cooler Temp: [illegible] Correction Factor: Add/Subtract (°C): [illegible]

Temp should be above freezing to 6°C

☐ Samples out of temp criteria. Samples on ice, cooling process has begun

Cooler Temp Corrected (°C): [illegible]

USDA Regulated Soil (☐ N/A, water sample)

Did samples originate in a quarantine zone within the United States: CA, NY, or SC (check maps)? ☐ Yes ☑ No

Did samples originate from a foreign source (internationally, including Hawaii and Puerto Rico)? ☐ Yes ☑ No

					Comments/Discrepancy:
Chain of Custody Present?	☑ Yes	☐ No	☐ N/A	1.	
Samples Arrived within Hold Time?	☑ Yes	☐ No	☐ N/A	2.	
Short Hold Time Analysis (<72 hr.)?	☐ Yes	☑ No	☐ N/A	3.	
Rush Turn Around Time Requested?	☐ Yes	☑ No	☐ N/A	4.	
Sufficient Volume?	☑ Yes	☐ No	☐ N/A	5.	
Correct Containers Used?	☑ Yes	☐ No	☐ N/A	6.	
-Pace Containers Used?	☑ Yes	☐ No	☐ N/A		
Containers Intact?	☑ Yes	☐ No	☐ N/A	7.	
Dissolved analysis: Samples Field Filtered?	☐ Yes	☑ No	☐ N/A	8.	
Sample Labels Match COC?	☑ Yes	☐ No	☐ N/A	9.	
-Includes Date/Time/ID/Analysis Matrix:	[illegible]				
Headspace in VOA Vials (>5-6mm)?	☐ Yes	☐ No	☑ N/A	10.	
Trip Blank Present?	☐ Yes	☐ No	☑ N/A	11.	
Trip Blank Custody Seals Present?	☐ Yes	☐ No	☑ N/A		

COMMENTS/SAMPLE DISCREPANCY

Field Data Required? ☐ Yes ☐ No

Lot ID of split containers:

CLIENT NOTIFICATION/RESOLUTION

Person contacted: Date/Time:

Project Manager SCURF Review: Date:

Project Manager SRF Review: Date:

*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 bottles

Project #

Well	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
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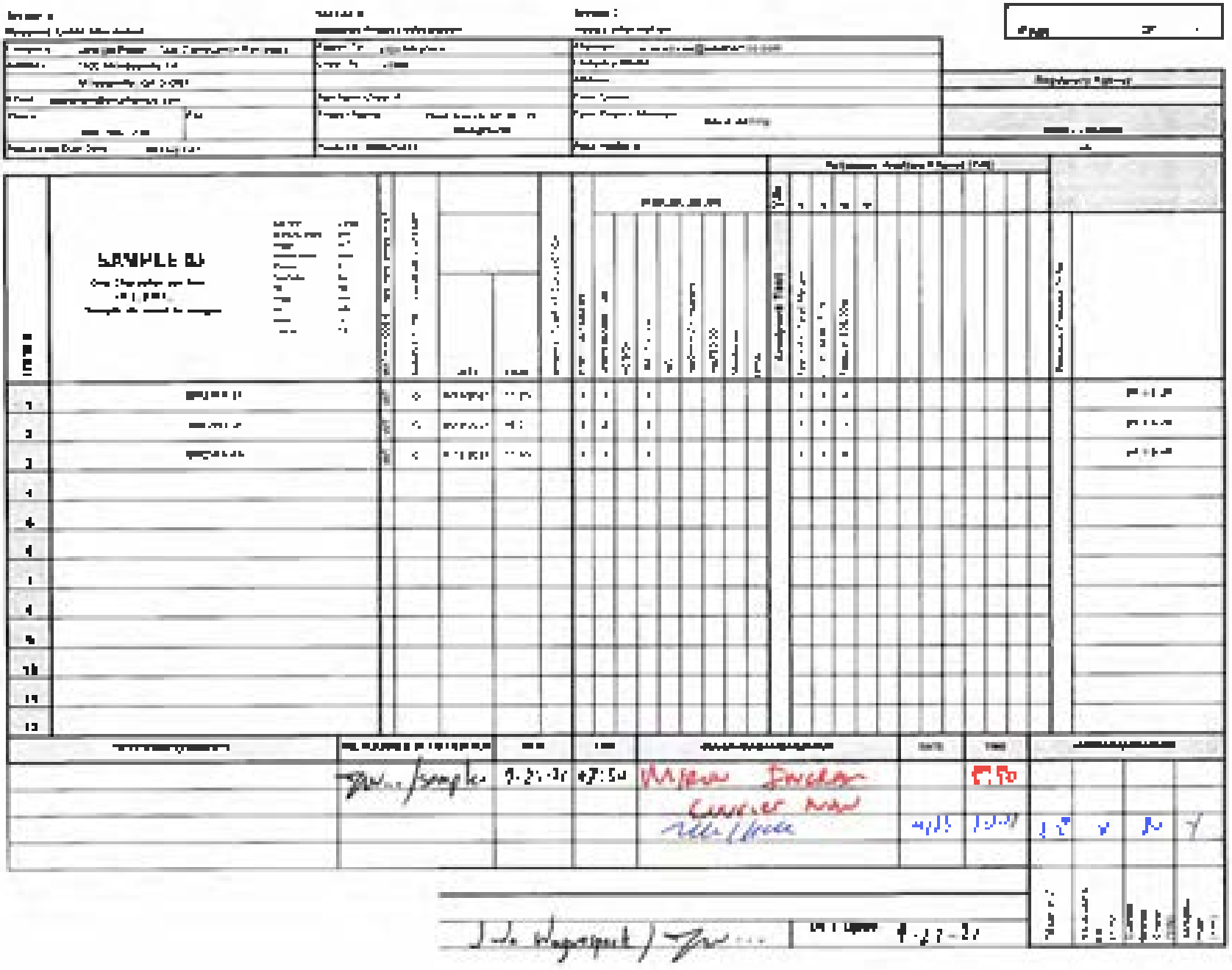
pH Adjustment Log for Preserved Samples

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

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

CHAIN-OF-CUSTODY / Analytical Request Document



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

October 22, 2021

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

RE: Project: BRANCH AP-E
Pace Project No.: 92562974

Dear Joju Abraham:

Enclosed are the analytical results for sample(s) received by the laboratory on September 23, 2021. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

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

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

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

Sincerely,

Nicole D'Oleo
nicole.d'oleo@pacelabs.com
(704)875-9092
Project Manager

Enclosures

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

REPORT OF LABORATORY ANALYSIS

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

CERTIFICATIONS

Project: BRANCH AP-E
Pace Project No.: 92562974

Pace Analytical Services Charlotte
9800 Kincey Ave. Ste 100, Huntersville, NC 28078
Louisiana/NELAP Certification # LA170028
North Carolina Drinking Water Certification #: 37706
North Carolina Field Services Certification #: 5342
North Carolina Wastewater Certification #: 12
South Carolina Certification #: 99006001
Florida/NELAP Certification #: E87627
Kentucky UST Certification #: 84
Virginia/VELAP Certification #: 460221

Pace Analytical Services Asheville
2225 Riverside Drive, Asheville, NC 28804
Florida/NELAP Certification #: E87648
North Carolina Drinking Water Certification #: 37712
North Carolina Wastewater Certification #: 40
South Carolina Certification #: 99030001
Virginia/VELAP Certification #: 460222

Pace Analytical Services Peachtree Corners
110 Technology Pkwy, Peachtree Corners, GA 30092
Florida DOH Certification #: E87315
Georgia DW Inorganics Certification #: 812
North Carolina Certification #: 381
South Carolina Certification #: 98011001

REPORT OF LABORATORY ANALYSIS

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

SAMPLE SUMMARY

Project: BRANCH AP-E
Pace Project No.: 92562974

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92562974001	**BRGWC-17S**	Water	09/22/21 12:09	09/23/21 10:47
92562974002	**BRGWC-33S**	Water	09/22/21 15:10	09/23/21 10:47
92562974003	**BRGWC-34S**	Water	09/22/21 17:20	09/23/21 10:47
92562974004	**BRGWC-36S**	Water	09/22/21 10:09	09/23/21 10:47
92562974005	**EB-1**	Water	09/22/21 17:00	09/23/21 10:47
92562974006	**FB-1**	Water	09/22/21 15:30	09/23/21 10:47
92562974007	**BRGWC-35S**	Water	09/23/21 10:05	09/23/21 17:10
92562974008	**BRGWC-37S**	Water	09/23/21 12:40	09/23/21 17:10
92562974009	**BRGWC-38S**	Water	09/23/21 11:20	09/23/21 17:10
92562974010	**DUP-1**	Water	09/23/21 00:00	09/23/21 17:10

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SAMPLE ANALYTE COUNT

Project: BRANCH AP-E
Pace Project No.: 92562974

Lab ID	Sample ID	Method	Analysts	Analytes Reported
92562974001	**BRGWC-17S**	EPA 6010D	KH	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2011	ALW	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92562974002	**BRGWC-33S**	EPA 6010D	KH	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2011	ALW	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92562974003	**BRGWC-34S**	EPA 6010D	KH	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2011	ALW	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92562974004	**BRGWC-36S**	EPA 6010D	KH	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2011	ALW	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92562974005	**EB-1**	EPA 6010D	KH	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2011	ALW	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92562974006	**FB-1**	EPA 6010D	KH	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2011	ALW	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92562974007	**BRGWC-35S**	EPA 6010D	KH	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2011	ALW	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92562974008	**BRGWC-37S**	EPA 6010D	KH	1
		EPA 6020B	CW1	13

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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SAMPLE ANALYTE COUNT

Project: BRANCH AP-E
Pace Project No.: 92562974

Lab ID	Sample ID	Method	Analysts	Analytes Reported
		EPA 7470A	VB	1
		SM 2540C-2011	ALW	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92562974009	**BRGWC-38S**	EPA 6010D	KH	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2011	ALW	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92562974010	**DUP-1**	EPA 6010D	KH	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2011	ALW	1
		EPA 300.0 Rev 2.1 1993	CDC	3

PASI-A = Pace Analytical Services - Asheville
PASI-C = Pace Analytical Services - Charlotte
PASI-GA = Pace Analytical Services - Peachtree Corners, GA

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
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SUMMARY OF DETECTION

Project: BRANCH AP-E
Pace Project No.: 92562974

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92562974001	**BRGWC-17S**					
	Performed by	CUSTOMER			09/23/21 13:09	
	pH	6.22	Std. Units		09/23/21 13:09	
EPA 6010D	Calcium	36.4	mg/L	1.0	10/01/21 19:05	
EPA 6020B	Barium	0.043	mg/L	0.0050	10/01/21 15:00	
EPA 6020B	Boron	0.020J	mg/L	0.040	09/30/21 20:15	
EPA 6020B	Chromium	0.0091	mg/L	0.0050	09/30/21 20:15	
EPA 6020B	Lithium	0.0011J	mg/L	0.030	09/30/21 20:15	
EPA 6020B	Selenium	0.0015J	mg/L	0.0050	09/30/21 20:15	
EPA 7470A	Mercury	0.00010J	mg/L	0.00020	10/06/21 13:04	B
SM 2540C-2011	Total Dissolved Solids	323	mg/L	10.0	09/28/21 10:57	
EPA 300.0 Rev 2.1 1993	Chloride	4.6	mg/L	1.0	09/24/21 21:42	
EPA 300.0 Rev 2.1 1993	Fluoride	0.10	mg/L	0.10	09/24/21 21:42	
EPA 300.0 Rev 2.1 1993	Sulfate	123	mg/L	3.0	09/25/21 04:53	
92562974002	**BRGWC-33S**					
	Performed by	CUSTOMER			09/23/21 13:09	
	pH	4.81	Std. Units		09/23/21 13:09	
EPA 6010D	Calcium	28.9	mg/L	1.0	10/01/21 19:10	
EPA 6020B	Barium	0.019	mg/L	0.0050	10/01/21 15:06	
EPA 6020B	Beryllium	0.0012	mg/L	0.00050	09/30/21 20:21	
EPA 6020B	Boron	1.1	mg/L	0.040	09/30/21 20:21	
EPA 6020B	Cadmium	0.00019J	mg/L	0.00050	09/30/21 20:21	
EPA 6020B	Cobalt	0.024	mg/L	0.0050	09/30/21 20:21	
EPA 6020B	Lithium	0.0080J	mg/L	0.030	09/30/21 20:21	
EPA 7470A	Mercury	0.00012J	mg/L	0.00020	10/06/21 13:07	B
SM 2540C-2011	Total Dissolved Solids	190	mg/L	10.0	09/28/21 10:57	
EPA 300.0 Rev 2.1 1993	Chloride	2.7	mg/L	1.0	09/24/21 21:58	
EPA 300.0 Rev 2.1 1993	Fluoride	0.068J	mg/L	0.10	09/24/21 21:58	
EPA 300.0 Rev 2.1 1993	Sulfate	94.6	mg/L	2.0	09/25/21 05:08	
92562974003	**BRGWC-34S**					
	Performed by	CUSTOMER			09/23/21 13:09	
	pH	5.93	Std. Units		09/23/21 13:09	
EPA 6010D	Calcium	76.9	mg/L	1.0	10/01/21 19:24	
EPA 6020B	Barium	0.021	mg/L	0.0050	10/01/21 15:44	
EPA 6020B	Beryllium	0.00015J	mg/L	0.00050	09/30/21 20:26	
EPA 6020B	Boron	2.2	mg/L	0.040	09/30/21 20:26	
EPA 6020B	Cadmium	0.00033J	mg/L	0.00050	09/30/21 20:26	
EPA 6020B	Cobalt	0.0075	mg/L	0.0050	09/30/21 20:26	
EPA 7470A	Mercury	0.00015J	mg/L	0.00020	10/06/21 13:09	B
SM 2540C-2011	Total Dissolved Solids	406	mg/L	10.0	09/29/21 18:44	
EPA 300.0 Rev 2.1 1993	Chloride	5.6	mg/L	1.0	09/24/21 22:46	
EPA 300.0 Rev 2.1 1993	Fluoride	0.10	mg/L	0.10	09/24/21 22:46	
EPA 300.0 Rev 2.1 1993	Sulfate	232	mg/L	5.0	09/25/21 06:27	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
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SUMMARY OF DETECTION

Project: BRANCH AP-E
Pace Project No.: 92562974

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92562974004	**BRGWC-36S**					
	Performed by	CUSTOMER			09/23/21 13:09	
	pH	5.53	Std. Units		09/23/21 13:09	
EPA 6010D	Calcium	53.7	mg/L	1.0	10/01/21 19:29	
EPA 6020B	Barium	0.028	mg/L	0.0050	09/30/21 20:44	
EPA 6020B	Beryllium	0.000084J	mg/L	0.00050	09/30/21 20:44	
EPA 6020B	Boron	1.1	mg/L	0.040	09/30/21 20:44	
EPA 6020B	Chromium	0.0065	mg/L	0.0050	09/30/21 20:44	
EPA 6020B	Lithium	0.0026J	mg/L	0.030	09/30/21 20:44	
EPA 6020B	Selenium	0.0032J	mg/L	0.0050	09/30/21 20:44	
EPA 7470A	Mercury	0.00010J	mg/L	0.00020	10/06/21 13:12	B
SM 2540C-2011	Total Dissolved Solids	457	mg/L	10.0	09/29/21 18:44	
EPA 300.0 Rev 2.1 1993	Chloride	7.1	mg/L	1.0	09/24/21 23:02	
EPA 300.0 Rev 2.1 1993	Fluoride	0.054J	mg/L	0.10	09/24/21 23:02	
EPA 300.0 Rev 2.1 1993	Sulfate	234	mg/L	5.0	09/25/21 06:43	
92562974005	**EB-1**					
EPA 7470A	Mercury	0.00010J	mg/L	0.00020	10/06/21 13:15	B
92562974006	**FB-1**					
EPA 7470A	Mercury	0.00010J	mg/L	0.00020	10/06/21 13:22	B
92562974007	**BRGWC-35S**					
	Performed by	CUSTOMER			09/24/21 09:54	
	pH	6.08	Std. Units		09/24/21 09:54	
EPA 6010D	Calcium	70.5	mg/L	1.0	10/01/21 19:44	
EPA 6020B	Barium	0.036	mg/L	0.0050	09/30/21 21:01	
EPA 6020B	Beryllium	0.00016J	mg/L	0.00050	09/30/21 21:01	
EPA 6020B	Boron	2.0	mg/L	0.040	09/30/21 21:01	
EPA 6020B	Chromium	0.0065	mg/L	0.0050	09/30/21 21:01	
EPA 6020B	Lithium	0.0022J	mg/L	0.030	09/30/21 21:01	
EPA 7470A	Mercury	0.00011J	mg/L	0.00020	10/06/21 13:25	B
SM 2540C-2011	Total Dissolved Solids	511	mg/L	10.0	09/29/21 19:08	
EPA 300.0 Rev 2.1 1993	Chloride	6.1	mg/L	1.0	09/27/21 05:34	
EPA 300.0 Rev 2.1 1993	Fluoride	0.073J	mg/L	0.10	09/27/21 05:34	
EPA 300.0 Rev 2.1 1993	Sulfate	258	mg/L	6.0	09/27/21 14:18	
92562974008	**BRGWC-37S**					
	Performed by	CUSTOMER			09/24/21 09:54	
	pH	5.85	Std. Units		09/24/21 09:54	
EPA 6010D	Calcium	3.7	mg/L	1.0	10/01/21 19:48	
EPA 6020B	Barium	0.027	mg/L	0.0050	09/30/21 21:07	
EPA 6020B	Chromium	0.0016J	mg/L	0.0050	09/30/21 21:07	
EPA 7470A	Mercury	0.00011J	mg/L	0.00020	10/06/21 13:28	B
SM 2540C-2011	Total Dissolved Solids	49.0	mg/L	10.0	09/29/21 19:08	
EPA 300.0 Rev 2.1 1993	Chloride	1.9	mg/L	1.0	09/27/21 05:49	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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SUMMARY OF DETECTION

Project: BRANCH AP-E
Pace Project No.: 92562974

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92562974009	**BRGWC-38S**					
	Performed by	CUSTOMER			09/24/21 09:55	
	pH	4.05	Std. Units		09/24/21 09:55	
EPA 6010D	Calcium	36.8	mg/L	1.0	10/01/21 19:53	
EPA 6020B	Arsenic	0.0020J	mg/L	0.0050	10/01/21 17:16	
EPA 6020B	Barium	0.014	mg/L	0.0050	10/01/21 17:16	
EPA 6020B	Beryllium	0.0071	mg/L	0.00050	10/01/21 17:16	
EPA 6020B	Boron	1.4	mg/L	0.040	10/01/21 17:16	
EPA 6020B	Cadmium	0.00048J	mg/L	0.00050	10/01/21 17:16	
EPA 6020B	Chromium	0.0040J	mg/L	0.0050	10/01/21 17:16	
EPA 6020B	Cobalt	0.17	mg/L	0.0050	10/01/21 17:16	
EPA 6020B	Lithium	0.019J	mg/L	0.030	10/01/21 17:16	
EPA 6020B	Selenium	0.031	mg/L	0.0050	10/01/21 17:16	
EPA 6020B	Thallium	0.00022J	mg/L	0.0010	10/01/21 17:16	
EPA 7470A	Mercury	0.00022	mg/L	0.00020	10/06/21 13:30	B
SM 2540C-2011	Total Dissolved Solids	528	mg/L	20.0	09/29/21 19:08	
EPA 300.0 Rev 2.1 1993	Chloride	6.0	mg/L	1.0	09/27/21 06:04	
EPA 300.0 Rev 2.1 1993	Fluoride	0.85	mg/L	0.10	09/27/21 06:04	
EPA 300.0 Rev 2.1 1993	Sulfate	318	mg/L	7.0	09/27/21 14:32	
92562974010	**DUP-1**					
EPA 6010D	Calcium	67.9	mg/L	1.0	10/01/21 19:58	
EPA 6020B	Antimony	0.0013J	mg/L	0.0030	10/01/21 17:39	
EPA 6020B	Barium	0.036	mg/L	0.0050	10/01/21 17:39	
EPA 6020B	Beryllium	0.00013J	mg/L	0.00050	10/01/21 17:39	
EPA 6020B	Boron	1.9	mg/L	0.040	10/01/21 17:39	
EPA 6020B	Chromium	0.0057	mg/L	0.0050	10/01/21 17:39	
EPA 6020B	Lithium	0.0020J	mg/L	0.030	10/01/21 17:39	
EPA 7470A	Mercury	0.00011J	mg/L	0.00020	10/06/21 13:33	B
SM 2540C-2011	Total Dissolved Solids	514	mg/L	10.0	09/29/21 19:08	
EPA 300.0 Rev 2.1 1993	Chloride	6.1	mg/L	1.0	09/27/21 06:49	
EPA 300.0 Rev 2.1 1993	Fluoride	0.071J	mg/L	0.10	09/27/21 06:49	M1
EPA 300.0 Rev 2.1 1993	Sulfate	258	mg/L	6.0	09/27/21 14:47	

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ANALYTICAL RESULTS

Project: BRANCH AP-E
Pace Project No.: 92562974

Sample: BRGWC-17S **Lab ID: 92562974001** Collected: 09/22/21 12:09 Received: 09/23/21 10:47 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**CUSTOMER**				1		09/23/21 13:09		
pH	**6.22**	Std. Units			1		09/23/21 13:09		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	**36.4**	mg/L	1.0	0.12	1	10/01/21 13:30	10/01/21 19:05	7440-70-2	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00078	1	09/30/21 10:25	09/30/21 20:15	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0011	1	09/30/21 10:25	09/30/21 20:15	7440-38-2	
Barium	**0.043**	mg/L	0.0050	0.00067	1	09/30/21 10:25	10/01/21 15:00	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	09/30/21 10:25	09/30/21 20:15	7440-41-7	
Boron	**0.020J**	mg/L	0.040	0.0086	1	09/30/21 10:25	09/30/21 20:15	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	09/30/21 10:25	09/30/21 20:15	7440-43-9	
Chromium	**0.0091**	mg/L	0.0050	0.0011	1	09/30/21 10:25	09/30/21 20:15	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	09/30/21 10:25	09/30/21 20:15	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	09/30/21 10:25	09/30/21 20:15	7439-92-1	
Lithium	**0.0011J**	mg/L	0.030	0.00073	1	09/30/21 10:25	09/30/21 20:15	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	09/30/21 10:25	09/30/21 20:15	7439-98-7	
Selenium	**0.0015J**	mg/L	0.0050	0.0014	1	09/30/21 10:25	09/30/21 20:15	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	09/30/21 10:25	09/30/21 20:15	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	**0.00010J**	mg/L	0.00020	0.000078	1	10/06/21 09:30	10/06/21 13:04	7439-97-6	B
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**323**	mg/L	10.0	10.0	1		09/28/21 10:57		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**4.6**	mg/L	1.0	0.60	1		09/24/21 21:42	16887-00-6	
Fluoride	**0.10**	mg/L	0.10	0.050	1		09/24/21 21:42	16984-48-8	
Sulfate	**123**	mg/L	3.0	1.5	3		09/25/21 04:53	14808-79-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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ANALYTICAL RESULTS

Project: BRANCH AP-E
Pace Project No.: 92562974

Sample: BRGWC-33S **Lab ID: 92562974002** Collected: 09/22/21 15:10 Received: 09/23/21 10:47 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**CUSTOMER**				1		09/23/21 13:09		
pH	**4.81**	Std. Units			1		09/23/21 13:09		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	**28.9**	mg/L	1.0	0.12	1	10/01/21 13:30	10/01/21 19:10	7440-70-2	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00078	1	09/30/21 10:25	09/30/21 20:21	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0011	1	09/30/21 10:25	09/30/21 20:21	7440-38-2	
Barium	**0.019**	mg/L	0.0050	0.00067	1	09/30/21 10:25	10/01/21 15:06	7440-39-3	
Beryllium	**0.0012**	mg/L	0.00050	0.000054	1	09/30/21 10:25	09/30/21 20:21	7440-41-7	
Boron	**1.1**	mg/L	0.040	0.0086	1	09/30/21 10:25	09/30/21 20:21	7440-42-8	
Cadmium	**0.00019J**	mg/L	0.00050	0.00011	1	09/30/21 10:25	09/30/21 20:21	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	09/30/21 10:25	09/30/21 20:21	7440-47-3	
Cobalt	**0.024**	mg/L	0.0050	0.00039	1	09/30/21 10:25	09/30/21 20:21	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	09/30/21 10:25	09/30/21 20:21	7439-92-1	
Lithium	**0.0080J**	mg/L	0.030	0.00073	1	09/30/21 10:25	09/30/21 20:21	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	09/30/21 10:25	09/30/21 20:21	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	09/30/21 10:25	09/30/21 20:21	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	09/30/21 10:25	09/30/21 20:21	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	**0.00012J**	mg/L	0.00020	0.000078	1	10/06/21 09:30	10/06/21 13:07	7439-97-6	B
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**190**	mg/L	10.0	10.0	1		09/28/21 10:57		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**2.7**	mg/L	1.0	0.60	1		09/24/21 21:58	16887-00-6	
Fluoride	**0.068J**	mg/L	0.10	0.050	1		09/24/21 21:58	16984-48-8	
Sulfate	**94.6**	mg/L	2.0	1.0	2		09/25/21 05:08	14808-79-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
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ANALYTICAL RESULTS

Project: BRANCH AP-E
Pace Project No.: 92562974

Sample: BRGWC-34S **Lab ID: 92562974003** Collected: 09/22/21 17:20 Received: 09/23/21 10:47 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**CUSTOMER**				1		09/23/21 13:09		
pH	**5.93**	Std. Units			1		09/23/21 13:09		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	**76.9**	mg/L	1.0	0.12	1	10/01/21 13:30	10/01/21 19:24	7440-70-2	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00078	1	09/30/21 10:25	09/30/21 20:26	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0011	1	09/30/21 10:25	09/30/21 20:26	7440-38-2	
Barium	**0.021**	mg/L	0.0050	0.00067	1	09/30/21 10:25	10/01/21 15:44	7440-39-3	
Beryllium	**0.00015J**	mg/L	0.00050	0.000054	1	09/30/21 10:25	09/30/21 20:26	7440-41-7	
Boron	**2.2**	mg/L	0.040	0.0086	1	09/30/21 10:25	09/30/21 20:26	7440-42-8	
Cadmium	**0.00033J**	mg/L	0.00050	0.00011	1	09/30/21 10:25	09/30/21 20:26	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	09/30/21 10:25	09/30/21 20:26	7440-47-3	
Cobalt	**0.0075**	mg/L	0.0050	0.00039	1	09/30/21 10:25	09/30/21 20:26	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	09/30/21 10:25	10/01/21 15:44	7439-92-1	
Lithium	ND	mg/L	0.030	0.00073	1	09/30/21 10:25	10/01/21 15:44	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	09/30/21 10:25	09/30/21 20:26	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	09/30/21 10:25	09/30/21 20:26	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	09/30/21 10:25	09/30/21 20:26	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	**0.00015J**	mg/L	0.00020	0.000078	1	10/06/21 09:30	10/06/21 13:09	7439-97-6	B
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**406**	mg/L	10.0	10.0	1		09/29/21 18:44		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**5.6**	mg/L	1.0	0.60	1		09/24/21 22:46	16887-00-6	
Fluoride	**0.10**	mg/L	0.10	0.050	1		09/24/21 22:46	16984-48-8	
Sulfate	**232**	mg/L	5.0	2.5	5		09/25/21 06:27	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: BRANCH AP-E
Pace Project No.: 92562974

Sample: BRGWC-36S **Lab ID: 92562974004** Collected: 09/22/21 10:09 Received: 09/23/21 10:47 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**CUSTOMER**				1		09/23/21 13:09		
pH	**5.53**	Std. Units			1		09/23/21 13:09		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	**53.7**	mg/L	1.0	0.12	1	10/01/21 13:30	10/01/21 19:29	7440-70-2	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00078	1	09/30/21 10:25	09/30/21 20:44	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0011	1	09/30/21 10:25	09/30/21 20:44	7440-38-2	
Barium	**0.028**	mg/L	0.0050	0.00067	1	09/30/21 10:25	09/30/21 20:44	7440-39-3	
Beryllium	**0.000084J**	mg/L	0.00050	0.000054	1	09/30/21 10:25	09/30/21 20:44	7440-41-7	
Boron	**1.1**	mg/L	0.040	0.0086	1	09/30/21 10:25	09/30/21 20:44	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	09/30/21 10:25	09/30/21 20:44	7440-43-9	
Chromium	**0.0065**	mg/L	0.0050	0.0011	1	09/30/21 10:25	09/30/21 20:44	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	09/30/21 10:25	09/30/21 20:44	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	09/30/21 10:25	09/30/21 20:44	7439-92-1	
Lithium	**0.0026J**	mg/L	0.030	0.00073	1	09/30/21 10:25	09/30/21 20:44	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	09/30/21 10:25	09/30/21 20:44	7439-98-7	
Selenium	**0.0032J**	mg/L	0.0050	0.0014	1	09/30/21 10:25	09/30/21 20:44	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	09/30/21 10:25	09/30/21 20:44	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	**0.00010J**	mg/L	0.00020	0.000078	1	10/06/21 09:30	10/06/21 13:12	7439-97-6	B
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**457**	mg/L	10.0	10.0	1		09/29/21 18:44		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**7.1**	mg/L	1.0	0.60	1		09/24/21 23:02	16887-00-6	
Fluoride	**0.054J**	mg/L	0.10	0.050	1		09/24/21 23:02	16984-48-8	
Sulfate	**234**	mg/L	5.0	2.5	5		09/25/21 06:43	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: BRANCH AP-E
Pace Project No.: 92562974

Sample: EB-1 **Lab ID: 92562974005** Collected: 09/22/21 17:00 Received: 09/23/21 10:47 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	ND	mg/L	1.0	0.12	1	10/01/21 13:30	10/01/21 19:34	7440-70-2	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00078	1	09/30/21 10:25	09/30/21 20:49	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0011	1	09/30/21 10:25	09/30/21 20:49	7440-38-2	
Barium	ND	mg/L	0.0050	0.00067	1	09/30/21 10:25	09/30/21 20:49	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	09/30/21 10:25	09/30/21 20:49	7440-41-7	
Boron	ND	mg/L	0.040	0.0086	1	09/30/21 10:25	09/30/21 20:49	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	09/30/21 10:25	09/30/21 20:49	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	09/30/21 10:25	09/30/21 20:49	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	09/30/21 10:25	09/30/21 20:49	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	09/30/21 10:25	09/30/21 20:49	7439-92-1	
Lithium	ND	mg/L	0.030	0.00073	1	09/30/21 10:25	09/30/21 20:49	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	09/30/21 10:25	09/30/21 20:49	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	09/30/21 10:25	09/30/21 20:49	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	09/30/21 10:25	09/30/21 20:49	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	**0.00010J**	mg/L	0.00020	0.000078	1	10/06/21 09:30	10/06/21 13:15	7439-97-6	B
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	ND	mg/L	10.0	10.0	1		09/29/21 18:44		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	ND	mg/L	1.0	0.60	1		09/24/21 23:50	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		09/24/21 23:50	16984-48-8	
Sulfate	ND	mg/L	1.0	0.50	1		09/24/21 23:50	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: BRANCH AP-E
Pace Project No.: 92562974

Sample: FB-1 **Lab ID: 92562974006** Collected: 09/22/21 15:30 Received: 09/23/21 10:47 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	ND	mg/L	1.0	0.12	1	10/01/21 13:30	10/01/21 19:39	7440-70-2	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00078	1	09/30/21 10:25	09/30/21 20:55	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0011	1	09/30/21 10:25	09/30/21 20:55	7440-38-2	
Barium	ND	mg/L	0.0050	0.00067	1	09/30/21 10:25	09/30/21 20:55	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	09/30/21 10:25	09/30/21 20:55	7440-41-7	
Boron	ND	mg/L	0.040	0.0086	1	09/30/21 10:25	09/30/21 20:55	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	09/30/21 10:25	09/30/21 20:55	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	09/30/21 10:25	09/30/21 20:55	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	09/30/21 10:25	09/30/21 20:55	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	09/30/21 10:25	09/30/21 20:55	7439-92-1	
Lithium	ND	mg/L	0.030	0.00073	1	09/30/21 10:25	09/30/21 20:55	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	09/30/21 10:25	09/30/21 20:55	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	09/30/21 10:25	09/30/21 20:55	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	09/30/21 10:25	09/30/21 20:55	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	**0.00010J**	mg/L	0.00020	0.000078	1	10/06/21 09:30	10/06/21 13:22	7439-97-6	B
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	ND	mg/L	10.0	10.0	1		09/29/21 18:44		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	ND	mg/L	1.0	0.60	1		09/25/21 00:06	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		09/25/21 00:06	16984-48-8	
Sulfate	ND	mg/L	1.0	0.50	1		09/25/21 00:06	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: BRANCH AP-E
Pace Project No.: 92562974

Sample: BRGWC-35S **Lab ID: 92562974007** Collected: 09/23/21 10:05 Received: 09/23/21 17:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**CUSTOMER**				1		09/24/21 09:54		
pH	**6.08**	Std. Units			1		09/24/21 09:54		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	**70.5**	mg/L	1.0	0.12	1	10/01/21 13:30	10/01/21 19:44	7440-70-2	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00078	1	09/30/21 10:25	09/30/21 21:01	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0011	1	09/30/21 10:25	09/30/21 21:01	7440-38-2	
Barium	**0.036**	mg/L	0.0050	0.00067	1	09/30/21 10:25	09/30/21 21:01	7440-39-3	
Beryllium	**0.00016J**	mg/L	0.00050	0.000054	1	09/30/21 10:25	09/30/21 21:01	7440-41-7	
Boron	**2.0**	mg/L	0.040	0.0086	1	09/30/21 10:25	09/30/21 21:01	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	09/30/21 10:25	09/30/21 21:01	7440-43-9	
Chromium	**0.0065**	mg/L	0.0050	0.0011	1	09/30/21 10:25	09/30/21 21:01	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	09/30/21 10:25	09/30/21 21:01	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	09/30/21 10:25	09/30/21 21:01	7439-92-1	
Lithium	**0.0022J**	mg/L	0.030	0.00073	1	09/30/21 10:25	09/30/21 21:01	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	09/30/21 10:25	09/30/21 21:01	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	09/30/21 10:25	09/30/21 21:01	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	09/30/21 10:25	09/30/21 21:01	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	**0.00011J**	mg/L	0.00020	0.000078	1	10/06/21 09:30	10/06/21 13:25	7439-97-6	B
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**511**	mg/L	10.0	10.0	1		09/29/21 19:08		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**6.1**	mg/L	1.0	0.60	1		09/27/21 05:34	16887-00-6	
Fluoride	**0.073J**	mg/L	0.10	0.050	1		09/27/21 05:34	16984-48-8	
Sulfate	**258**	mg/L	6.0	3.0	6		09/27/21 14:18	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: BRANCH AP-E
Pace Project No.: 92562974

Sample: BRGWC-37S **Lab ID: 92562974008** Collected: 09/23/21 12:40 Received: 09/23/21 17:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**CUSTOMER**				1		09/24/21 09:54		
pH	**5.85**	Std. Units			1		09/24/21 09:54		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	**3.7**	mg/L	1.0	0.12	1	10/01/21 13:30	10/01/21 19:48	7440-70-2	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00078	1	09/30/21 10:25	09/30/21 21:07	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0011	1	09/30/21 10:25	09/30/21 21:07	7440-38-2	
Barium	**0.027**	mg/L	0.0050	0.00067	1	09/30/21 10:25	09/30/21 21:07	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	09/30/21 10:25	09/30/21 21:07	7440-41-7	
Boron	ND	mg/L	0.040	0.0086	1	09/30/21 10:25	09/30/21 21:07	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	09/30/21 10:25	09/30/21 21:07	7440-43-9	
Chromium	**0.0016J**	mg/L	0.0050	0.0011	1	09/30/21 10:25	09/30/21 21:07	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	09/30/21 10:25	09/30/21 21:07	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	09/30/21 10:25	09/30/21 21:07	7439-92-1	
Lithium	ND	mg/L	0.030	0.00073	1	09/30/21 10:25	09/30/21 21:07	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	09/30/21 10:25	09/30/21 21:07	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	09/30/21 10:25	09/30/21 21:07	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	09/30/21 10:25	09/30/21 21:07	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	**0.00011J**	mg/L	0.00020	0.000078	1	10/06/21 09:30	10/06/21 13:28	7439-97-6	B
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**49.0**	mg/L	10.0	10.0	1		09/29/21 19:08		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**1.9**	mg/L	1.0	0.60	1		09/27/21 05:49	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		09/27/21 05:49	16984-48-8	
Sulfate	ND	mg/L	1.0	0.50	1		09/27/21 05:49	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: BRANCH AP-E
Pace Project No.: 92562974

Sample: BRGWC-38S **Lab ID: 92562974009** Collected: 09/23/21 11:20 Received: 09/23/21 17:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**CUSTOMER**				1		09/24/21 09:55		
pH	**4.05**	Std. Units			1		09/24/21 09:55		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	**36.8**	mg/L	1.0	0.12	1	10/01/21 13:30	10/01/21 19:53	7440-70-2	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00078	1	10/01/21 10:25	10/01/21 17:16	7440-36-0	
Arsenic	**0.0020J**	mg/L	0.0050	0.0011	1	10/01/21 10:25	10/01/21 17:16	7440-38-2	
Barium	**0.014**	mg/L	0.0050	0.00067	1	10/01/21 10:25	10/01/21 17:16	7440-39-3	
Beryllium	**0.0071**	mg/L	0.00050	0.000054	1	10/01/21 10:25	10/01/21 17:16	7440-41-7	
Boron	**1.4**	mg/L	0.040	0.0086	1	10/01/21 10:25	10/01/21 17:16	7440-42-8	
Cadmium	**0.00048J**	mg/L	0.00050	0.00011	1	10/01/21 10:25	10/01/21 17:16	7440-43-9	
Chromium	**0.0040J**	mg/L	0.0050	0.0011	1	10/01/21 10:25	10/01/21 17:16	7440-47-3	
Cobalt	**0.17**	mg/L	0.0050	0.00039	1	10/01/21 10:25	10/01/21 17:16	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	10/01/21 10:25	10/01/21 17:16	7439-92-1	
Lithium	**0.019J**	mg/L	0.030	0.00073	1	10/01/21 10:25	10/01/21 17:16	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	10/01/21 10:25	10/01/21 17:16	7439-98-7	
Selenium	**0.031**	mg/L	0.0050	0.0014	1	10/01/21 10:25	10/01/21 17:16	7782-49-2	
Thallium	**0.00022J**	mg/L	0.0010	0.00018	1	10/01/21 10:25	10/01/21 17:16	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	**0.00022**	mg/L	0.00020	0.000078	1	10/06/21 09:30	10/06/21 13:30	7439-97-6	B
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**528**	mg/L	20.0	20.0	1		09/29/21 19:08		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**6.0**	mg/L	1.0	0.60	1		09/27/21 06:04	16887-00-6	
Fluoride	**0.85**	mg/L	0.10	0.050	1		09/27/21 06:04	16984-48-8	
Sulfate	**318**	mg/L	7.0	3.5	7		09/27/21 14:32	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: BRANCH AP-E
Pace Project No.: 92562974

Sample: DUP-1 **Lab ID: 92562974010** Collected: 09/23/21 00:00 Received: 09/23/21 17:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	**67.9**	mg/L	1.0	0.12	1	10/01/21 13:30	10/01/21 19:58	7440-70-2	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	**0.0013J**	mg/L	0.0030	0.00078	1	10/01/21 10:25	10/01/21 17:39	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0011	1	10/01/21 10:25	10/01/21 17:39	7440-38-2	
Barium	**0.036**	mg/L	0.0050	0.00067	1	10/01/21 10:25	10/01/21 17:39	7440-39-3	
Beryllium	**0.00013J**	mg/L	0.00050	0.000054	1	10/01/21 10:25	10/01/21 17:39	7440-41-7	
Boron	**1.9**	mg/L	0.040	0.0086	1	10/01/21 10:25	10/01/21 17:39	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	10/01/21 10:25	10/01/21 17:39	7440-43-9	
Chromium	**0.0057**	mg/L	0.0050	0.0011	1	10/01/21 10:25	10/01/21 17:39	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	10/01/21 10:25	10/01/21 17:39	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	10/01/21 10:25	10/01/21 17:39	7439-92-1	
Lithium	**0.0020J**	mg/L	0.030	0.00073	1	10/01/21 10:25	10/01/21 17:39	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	10/01/21 10:25	10/01/21 17:39	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	10/01/21 10:25	10/01/21 17:39	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	10/01/21 10:25	10/01/21 17:39	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	**0.00011J**	mg/L	0.00020	0.000078	1	10/06/21 09:30	10/06/21 13:33	7439-97-6	B
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**514**	mg/L	10.0	10.0	1		09/29/21 19:08		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**6.1**	mg/L	1.0	0.60	1		09/27/21 06:49	16887-00-6	
Fluoride	**0.071J**	mg/L	0.10	0.050	1		09/27/21 06:49	16984-48-8	M1
Sulfate	**258**	mg/L	6.0	3.0	6		09/27/21 14:47	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: BRANCH AP-E
Pace Project No.: 92562974

QC Batch: 650399
QC Batch Method: EPA 3010A
Analysis Method: EPA 6010D
Analysis Description: 6010D ATL
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92562974001, 92562974002, 92562974003, 92562974004, 92562974005, 92562974006, 92562974007, 92562974008, 92562974009, 92562974010

METHOD BLANK: 3411275 Matrix: Water
Associated Lab Samples: 92562974001, 92562974002, 92562974003, 92562974004, 92562974005, 92562974006, 92562974007, 92562974008, 92562974009, 92562974010

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium	mg/L	ND	1.0	0.12	10/01/21 17:49	

LABORATORY CONTROL SAMPLE: 3411276

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium	mg/L	1	1.1	112	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3411277 3411278

Parameter	Units	92562860002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Calcium	mg/L	14.1	1	1	15.1	15.0	105	93	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: BRANCH AP-E
Pace Project No.: 92562974

QC Batch: 650022
QC Batch Method: EPA 3005A
Analysis Method: EPA 6020B
Analysis Description: 6020 MET
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92562974001, 92562974002, 92562974003, 92562974004, 92562974005, 92562974006, 92562974007, 92562974008

METHOD BLANK: 3409457 Matrix: Water
Associated Lab Samples: 92562974001, 92562974002, 92562974003, 92562974004, 92562974005, 92562974006, 92562974007, 92562974008

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	ND	0.0030	0.00078	09/30/21 18:26	
Arsenic	mg/L	ND	0.0050	0.0011	09/30/21 18:26	
Barium	mg/L	ND	0.0050	0.00067	09/30/21 18:26	
Beryllium	mg/L	ND	0.00050	0.000054	09/30/21 18:26	
Boron	mg/L	ND	0.040	0.0086	09/30/21 18:26	
Cadmium	mg/L	ND	0.00050	0.00011	09/30/21 18:26	
Chromium	mg/L	ND	0.0050	0.0011	09/30/21 18:26	
Cobalt	mg/L	ND	0.0050	0.00039	09/30/21 18:26	
Lead	mg/L	ND	0.0010	0.00089	09/30/21 18:26	
Lithium	mg/L	ND	0.030	0.00073	09/30/21 18:26	
Molybdenum	mg/L	ND	0.010	0.00074	09/30/21 18:26	
Selenium	mg/L	ND	0.0050	0.0014	09/30/21 18:26	
Thallium	mg/L	ND	0.0010	0.00018	09/30/21 18:26	

LABORATORY CONTROL SAMPLE: 3409458

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.1	0.12	116	80-120	
Arsenic	mg/L	0.1	0.097	97	80-120	
Barium	mg/L	0.1	0.11	111	80-120	
Beryllium	mg/L	0.1	0.11	106	80-120	
Boron	mg/L	1	1.1	106	80-120	
Cadmium	mg/L	0.1	0.10	102	80-120	
Chromium	mg/L	0.1	0.11	106	80-120	
Cobalt	mg/L	0.1	0.10	103	80-120	
Lead	mg/L	0.1	0.096	96	80-120	
Lithium	mg/L	0.1	0.11	107	80-120	
Molybdenum	mg/L	0.1	0.11	111	80-120	
Selenium	mg/L	0.1	0.097	97	80-120	
Thallium	mg/L	0.1	0.095	95	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3409459 3409460

Parameter	Units	92562820017 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	108	114	75-125	5	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: BRANCH AP-E
Pace Project No.: 92562974

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3409459 3409460

Parameter	Units	92562820017 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Arsenic	mg/L	ND	0.1	0.1	0.097	0.099	97	99	75-125	2	20	
Barium	mg/L	0.092	0.1	0.1	0.23	0.24	138	152	75-125	6	20	M1
Beryllium	mg/L	ND	0.1	0.1	0.11	0.11	110	108	75-125	2	20	
Boron	mg/L	ND	1	1	1.1	1.0	108	104	75-125	4	20	
Cadmium	mg/L	ND	0.1	0.1	0.10	0.10	102	101	75-125	0	20	
Chromium	mg/L	ND	0.1	0.1	0.10	0.10	103	102	75-125	1	20	
Cobalt	mg/L	ND	0.1	0.1	0.10	0.11	99	103	75-125	4	20	
Lead	mg/L	ND	0.1	0.1	0.096	0.095	96	95	75-125	1	20	
Lithium	mg/L	ND	0.1	0.1	0.11	0.11	109	108	75-125	0	20	
Molybdenum	mg/L	ND	0.1	0.1	0.11	0.11	108	114	75-125	5	20	
Selenium	mg/L	ND	0.1	0.1	0.096	0.095	96	95	75-125	1	20	
Thallium	mg/L	ND	0.1	0.1	0.095	0.095	95	95	75-125	0	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: BRANCH AP-E
Pace Project No.: 92562974

QC Batch: 650361
QC Batch Method: EPA 3005A
Analysis Method: EPA 6020B
Analysis Description: 6020 MET
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92562974009, 92562974010

METHOD BLANK: 3411035 Matrix: Water
Associated Lab Samples: 92562974009, 92562974010

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	ND	0.0030	0.00078	10/01/21 17:04	
Arsenic	mg/L	ND	0.0050	0.0011	10/01/21 17:04	
Barium	mg/L	ND	0.0050	0.00067	10/01/21 17:04	
Beryllium	mg/L	ND	0.00050	0.000054	10/01/21 17:04	
Boron	mg/L	ND	0.040	0.0086	10/01/21 17:04	
Cadmium	mg/L	ND	0.00050	0.00011	10/01/21 17:04	
Chromium	mg/L	ND	0.0050	0.0011	10/01/21 17:04	
Cobalt	mg/L	ND	0.0050	0.00039	10/01/21 17:04	
Lead	mg/L	ND	0.0010	0.00089	10/01/21 17:04	
Lithium	mg/L	ND	0.030	0.00073	10/01/21 17:04	
Molybdenum	mg/L	ND	0.010	0.00074	10/01/21 17:04	
Selenium	mg/L	ND	0.0050	0.0014	10/01/21 17:04	
Thallium	mg/L	ND	0.0010	0.00018	10/01/21 17:04	

LABORATORY CONTROL SAMPLE: 3411036

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.1	0.097	97	80-120	
Arsenic	mg/L	0.1	0.098	98	80-120	
Barium	mg/L	0.1	0.092	92	80-120	
Beryllium	mg/L	0.1	0.10	100	80-120	
Boron	mg/L	1	1.0	102	80-120	
Cadmium	mg/L	0.1	0.10	100	80-120	
Chromium	mg/L	0.1	0.098	98	80-120	
Cobalt	mg/L	0.1	0.095	95	80-120	
Lead	mg/L	0.1	0.094	94	80-120	
Lithium	mg/L	0.1	0.10	102	80-120	
Molybdenum	mg/L	0.1	0.097	97	80-120	
Selenium	mg/L	0.1	0.099	99	80-120	
Thallium	mg/L	0.1	0.092	92	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3411037 3411038

Parameter	Units	92562974009 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	112	113	75-125	1	20	
Arsenic	mg/L	0.0020J	0.1	0.1	0.10	0.10	102	103	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: BRANCH AP-E
Pace Project No.: 92562974

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3411037 3411038

Parameter	Units	92562974009 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Barium	mg/L	0.014	0.1	0.1	0.12	0.12	105	106	75-125	0	20	
Beryllium	mg/L	0.0071	0.1	0.1	0.099	0.098	92	91	75-125	1	20	
Boron	mg/L	1.4	1	1	2.3	2.4	84	95	75-125	5	20	
Cadmium	mg/L	0.00048J	0.1	0.1	0.10	0.10	103	101	75-125	2	20	
Chromium	mg/L	0.0040J	0.1	0.1	0.11	0.11	101	101	75-125	0	20	
Cobalt	mg/L	0.17	0.1	0.1	0.28	0.27	106	100	75-125	2	20	
Lead	mg/L	ND	0.1	0.1	0.090	0.090	90	90	75-125	0	20	
Lithium	mg/L	0.019J	0.1	0.1	0.11	0.11	95	90	75-125	4	20	
Molybdenum	mg/L	ND	0.1	0.1	0.11	0.11	109	112	75-125	3	20	
Selenium	mg/L	0.031	0.1	0.1	0.13	0.13	103	101	75-125	2	20	
Thallium	mg/L	0.00022J	0.1	0.1	0.089	0.090	89	90	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: BRANCH AP-E
Pace Project No.: 92562974

QC Batch: 650957 Analysis Method: EPA 7470A
QC Batch Method: EPA 7470A Analysis Description: 7470 Mercury
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92562974001, 92562974002, 92562974003, 92562974004, 92562974005, 92562974006, 92562974007, 92562974008, 92562974009, 92562974010

METHOD BLANK: 3413779 Matrix: Water
Associated Lab Samples: 92562974001, 92562974002, 92562974003, 92562974004, 92562974005, 92562974006, 92562974007, 92562974008, 92562974009, 92562974010

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	0.00011J	0.00020	0.000078	10/06/21 12:20	

LABORATORY CONTROL SAMPLE: 3413780

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.0025	0.0025	98	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3413781 3413782

Parameter	Units	92562855001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	mg/L	0.00010J	0.0025	0.0025	0.0024	0.0023	92	89	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: BRANCH AP-E
Pace Project No.: 92562974

QC Batch: 649491
QC Batch Method: SM 2540C-2011
Analysis Method: SM 2540C-2011
Analysis Description: 2540C Total Dissolved Solids
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92562974001, 92562974002

METHOD BLANK: 3406451 Matrix: Water
Associated Lab Samples: 92562974001, 92562974002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	10.0	10.0	09/28/21 10:55	

LABORATORY CONTROL SAMPLE: 3406452

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	394	98	90-111	

SAMPLE DUPLICATE: 3406453

Parameter	Units	92563313026 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	527	536	2	10	

SAMPLE DUPLICATE: 3406454

Parameter	Units	92562857001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	86.0	80.0	7	10	

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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: BRANCH AP-E
Pace Project No.: 92562974

QC Batch: 649722 | Analysis Method: SM 2540C-2011
QC Batch Method: SM 2540C-2011 | Analysis Description: 2540C Total Dissolved Solids
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92562974003, 92562974004, 92562974005, 92562974006

METHOD BLANK: 3407437 Matrix: Water
Associated Lab Samples: 92562974003, 92562974004, 92562974005, 92562974006

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	10.0	10.0	09/29/21 18:44	

LABORATORY CONTROL SAMPLE: 3407438

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	403	101	90-111	

SAMPLE DUPLICATE: 3407439

Parameter	Units	92562974003 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	406	412	1	10	

SAMPLE DUPLICATE: 3407440

Parameter	Units	92563313019 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	51.0	47.0	8	10	

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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: BRANCH AP-E
Pace Project No.: 92562974

QC Batch: 649984 — Analysis Method: SM 2540C-2011
QC Batch Method: SM 2540C-2011 — Analysis Description: 2540C Total Dissolved Solids
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92562974007, 92562974008, 92562974009, 92562974010

METHOD BLANK: 3409087 — Matrix: Water
Associated Lab Samples: 92562974007, 92562974008, 92562974009, 92562974010

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	10.0	10.0	09/29/21 19:07	

LABORATORY CONTROL SAMPLE: 3409088

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	406	102	90-111	

SAMPLE DUPLICATE: 3409089

Parameter	Units	92563085003 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	65.0	88.0	30	10	D6

SAMPLE DUPLICATE: 3409090

Parameter	Units	92563212005 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	56.0	53.0	6	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

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

QUALITY CONTROL DATA

Project: BRANCH AP-E
Pace Project No.: 92562974

QC Batch: 649204
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
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92562974001, 92562974002, 92562974003, 92562974004, 92562974005, 92562974006

METHOD BLANK: 3405091 Matrix: Water
Associated Lab Samples: 92562974001, 92562974002, 92562974003, 92562974004, 92562974005, 92562974006

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.60	09/24/21 17:59	
Fluoride	mg/L	ND	0.10	0.050	09/24/21 17:59	
Sulfate	mg/L	ND	1.0	0.50	09/24/21 17:59	

LABORATORY CONTROL SAMPLE: 3405092

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	45.5	91	90-110	
Fluoride	mg/L	2.5	2.4	96	90-110	
Sulfate	mg/L	50	49.1	98	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3405095 3405096

Parameter	Units	92562974002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	2.7	50	50	49.7	49.4	94	93	90-110	1	10	
Fluoride	mg/L	0.068J	2.5	2.5	2.7	2.6	103	102	90-110	1	10	
Sulfate	mg/L	94.6	50	50	140	141	90	94	90-110	1	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3405233 3405234

Parameter	Units	92562855001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	3.5	50	50	48.5	50.6	90	94	90-110	4	10	
Fluoride	mg/L	ND	2.5	2.5	2.4	2.5	95	99	90-110	5	10	
Sulfate	mg/L	0.51J	50	50	48.8	51.3	97	102	90-110	5	10	

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

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: BRANCH AP-E
Pace Project No.: 92562974

QC Batch: 649414
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
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92562974007, 92562974008, 92562974009

METHOD BLANK: 3406122 Matrix: Water
Associated Lab Samples: 92562974007, 92562974008, 92562974009

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.60	09/26/21 23:06	
Fluoride	mg/L	ND	0.10	0.050	09/26/21 23:06	
Sulfate	mg/L	ND	1.0	0.50	09/26/21 23:06	

LABORATORY CONTROL SAMPLE: 3406123

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	48.2	96	90-110	
Fluoride	mg/L	2.5	2.3	93	90-110	
Sulfate	mg/L	50	49.8	100	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3406124 3406125

Parameter	Units	92563212001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	3.1	50	50	56.2	57.0	106	108	90-110	1	10	
Fluoride	mg/L	ND	2.5	2.5	2.7	2.7	104	105	90-110	1	10	
Sulfate	mg/L	1.8	50	50	56.4	57.2	109	111	90-110	1	10	M1

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3406126 3406127

Parameter	Units	92563212011 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	3.4	50	50	56.8	57.8	107	109	90-110	2	10	
Fluoride	mg/L	ND	2.5	2.5	2.7	2.7	104	106	90-110	2	10	
Sulfate	mg/L	2.3	50	50	57.2	58.2	110	112	90-110	2	10	M1

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

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: BRANCH AP-E
Pace Project No.: 92562974

QC Batch: 649415
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
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92562974010

METHOD BLANK: 3406128 Matrix: Water
Associated Lab Samples: 92562974010

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.60	09/27/21 06:19	
Fluoride	mg/L	ND	0.10	0.050	09/27/21 06:19	
Sulfate	mg/L	ND	1.0	0.50	09/27/21 06:19	

LABORATORY CONTROL SAMPLE: 3406129

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	50.0	100	90-110	
Fluoride	mg/L	2.5	2.5	102	90-110	
Sulfate	mg/L	50	51.5	103	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3406130 3406131

Parameter	Units	92562974010 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	6.1	50	50	59.7	60.7	107	109	90-110	2	10	
Fluoride	mg/L	0.071J	2.5	2.5	2.9	2.9	114	115	90-110	1	10	M1
Sulfate	mg/L	258	50	50	303	305	91	94	90-110	0	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3406132 3406133

Parameter	Units	92563313008 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	103	50	50	150	150	94	94	90-110	0	10	
Fluoride	mg/L	ND	2.5	2.5	3.9	3.7	156	146	90-110	6	10	M1
Sulfate	mg/L	433	50	50	482	481	98	96	90-110	0	10	

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

REPORT OF LABORATORY ANALYSIS

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

QUALIFIERS

Project: BRANCH AP-E
Pace Project No.: 92562974

DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

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

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

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

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

Acid preservation may not be appropriate for 2 Chloroethylvinyl ether.

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

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

Reported results are not rounded until the final step prior to reporting. Therefore, calculated parameters that are typically reported as "Total" may vary slightly from the sum of the reported component parameters.

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.
D6	The precision between the sample and sample duplicate exceeded laboratory control limits.
M1	Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

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

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: BRANCH AP-E
Pace Project No.: 92562974

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92562974001	**BRGWC-17S**				
92562974002	**BRGWC-33S**				
92562974003	**BRGWC-34S**				
92562974004	**BRGWC-36S**				
92562974007	**BRGWC-35S**				
92562974008	**BRGWC-37S**				
92562974009	**BRGWC-38S**				
92562974001	**BRGWC-17S**	EPA 3010A	650399	EPA 6010D	650462
92562974002	**BRGWC-33S**	EPA 3010A	650399	EPA 6010D	650462
92562974003	**BRGWC-34S**	EPA 3010A	650399	EPA 6010D	650462
92562974004	**BRGWC-36S**	EPA 3010A	650399	EPA 6010D	650462
92562974005	**EB-1**	EPA 3010A	650399	EPA 6010D	650462
92562974006	**FB-1**	EPA 3010A	650399	EPA 6010D	650462
92562974007	**BRGWC-35S**	EPA 3010A	650399	EPA 6010D	650462
92562974008	**BRGWC-37S**	EPA 3010A	650399	EPA 6010D	650462
92562974009	**BRGWC-38S**	EPA 3010A	650399	EPA 6010D	650462
92562974010	**DUP-1**	EPA 3010A	650399	EPA 6010D	650462
92562974001	**BRGWC-17S**	EPA 3005A	650022	EPA 6020B	650181
92562974002	**BRGWC-33S**	EPA 3005A	650022	EPA 6020B	650181
92562974003	**BRGWC-34S**	EPA 3005A	650022	EPA 6020B	650181
92562974004	**BRGWC-36S**	EPA 3005A	650022	EPA 6020B	650181
92562974005	**EB-1**	EPA 3005A	650022	EPA 6020B	650181
92562974006	**FB-1**	EPA 3005A	650022	EPA 6020B	650181
92562974007	**BRGWC-35S**	EPA 3005A	650022	EPA 6020B	650181
92562974008	**BRGWC-37S**	EPA 3005A	650022	EPA 6020B	650181
92562974009	**BRGWC-38S**	EPA 3005A	650361	EPA 6020B	650438
92562974010	**DUP-1**	EPA 3005A	650361	EPA 6020B	650438
92562974001	**BRGWC-17S**	EPA 7470A	650957	EPA 7470A	651107
92562974002	**BRGWC-33S**	EPA 7470A	650957	EPA 7470A	651107
92562974003	**BRGWC-34S**	EPA 7470A	650957	EPA 7470A	651107
92562974004	**BRGWC-36S**	EPA 7470A	650957	EPA 7470A	651107
92562974005	**EB-1**	EPA 7470A	650957	EPA 7470A	651107
92562974006	**FB-1**	EPA 7470A	650957	EPA 7470A	651107
92562974007	**BRGWC-35S**	EPA 7470A	650957	EPA 7470A	651107
92562974008	**BRGWC-37S**	EPA 7470A	650957	EPA 7470A	651107
92562974009	**BRGWC-38S**	EPA 7470A	650957	EPA 7470A	651107
92562974010	**DUP-1**	EPA 7470A	650957	EPA 7470A	651107
92562974001	**BRGWC-17S**	SM 2540C-2011	649491		
92562974002	**BRGWC-33S**	SM 2540C-2011	649491		
92562974003	**BRGWC-34S**	SM 2540C-2011	649722		
92562974004	**BRGWC-36S**	SM 2540C-2011	649722		
92562974005	**EB-1**	SM 2540C-2011	649722		
92562974006	**FB-1**	SM 2540C-2011	649722		
92562974007	**BRGWC-35S**	SM 2540C-2011	649984		
92562974008	**BRGWC-37S**	SM 2540C-2011	649984		

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: BRANCH AP-E
Pace Project No.: 92562974

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92562974009	**BRGWC-38S**	SM 2540C-2011	649984		
92562974010	**DUP-1**	SM 2540C-2011	649984		
92562974001	**BRGWC-17S**	EPA 300.0 Rev 2.1 1993	649204		
92562974002	**BRGWC-33S**	EPA 300.0 Rev 2.1 1993	649204		
92562974003	**BRGWC-34S**	EPA 300.0 Rev 2.1 1993	649204		
92562974004	**BRGWC-36S**	EPA 300.0 Rev 2.1 1993	649204		
92562974005	**EB-1**	EPA 300.0 Rev 2.1 1993	649204		
92562974006	**FB-1**	EPA 300.0 Rev 2.1 1993	649204		
92562974007	**BRGWC-35S**	EPA 300.0 Rev 2.1 1993	649414		
92562974008	**BRGWC-37S**	EPA 300.0 Rev 2.1 1993	649414		
92562974009	**BRGWC-38S**	EPA 300.0 Rev 2.1 1993	649414		
92562974010	**DUP-1**	EPA 300.0 Rev 2.1 1993	649415		

Pace Analytical	Document Name: Sample Condition Upon Receipt(SCUR)	Document Revised: October 28, 2020 Page 1 of 2
	Document No.: F-CAR-CS-033-Rev.07	Issuing Authority: Pace Carolinas Quality Office

Laboratory receiving samples:
Asheville ☐ Eden ☐ Greenwood ☐ Huntersville ☐ Raleigh ☐ Mechanicsville ☐ Atlanta ☑ Kernersville ☐

Sample Condition Upon Receipt

Client Name: GA Power

Project #:

WO# : 92562974

92562974

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

Custody Seal Present? ☐ Yes ☑ No Seals Intact? ☐ Yes ☑ No

Date/Initials Person Examining Contents: [illegible] 9/23/2[illegible]

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

Biological Tissue Frozen? ☐ Yes ☑ No ☐ N/A

Thermometer: ☐ IR Gun ID: 093

Type of Ice: ☑ Wet ☐ Blue ☐ None

Cooler Temp: 2.8 Correction Factor: Add/Subtract (°C): +0

Temp should be above freezing to 6°C
☐ Samples out of temp criteria. Samples on ice, cooling process has begun

Cooler Temp Corrected (°C): 2.8

USDA Regulated Soil (☐ N/A, water sample)
Did samples originate in a quarantine zone within the United States: CA, NY, or SC (check maps)? ☐ Yes ☑ No

Did samples originate from a foreign source (internationally, including Hawaii and Puerto Rico)? ☐ Yes ☑ No

				Comments/Discrepancy:
Chain of Custody Present?	☑ Yes	☐ No	☐ N/A	1.
Samples Arrived within Hold Time?	☑ Yes	☐ No	☐ N/A	2.
Short Hold Time Analysis (<72 hr.)?	☐ Yes	☑ No	☐ N/A	3.
Rush Turn Around Time Requested?	☐ Yes	☑ No	☐ N/A	4.
Sufficient Volume?	☑ Yes	☐ No	☐ N/A	5.
Correct Containers Used?	☑ Yes	☐ No	☐ N/A	6.
-Pace Containers Used?	☑ Yes	☐ No	☐ N/A	
Containers Intact?	☑ Yes	☐ No	☐ N/A	7.
Dissolved analysis: Samples Field Filtered?	☐ Yes	☑ No	☐ N/A	8.
Sample Labels Match COC?	☑ Yes	☐ No	☐ N/A	9.
-Includes Date/Time/ID/Analysis Matrix: WT				
Headspace in VOA Vials (>5-6mm)?	☐ Yes	☐ No	☑ N/A	10.
Trip Blank Present?	☐ Yes	☐ No	☑ N/A	11.
Trip Blank Custody Seals Present?	☐ Yes	☐ No	☑ N/A	

COMMENTS/SAMPLE DISCREPANCY

Field Data Required? ☐ Yes ☐ No

Lot ID of split containers:

CLIENT NOTIFICATION/RESOLUTION

Person contacted: ____ Date/Time: ____

Project Manager SCURF Review: ____ Date: ____

Project Manager SRF Review: ____ Date: ____

Pace Analytical	Document Name: Sample Condition Upon Receipt(SCUR)	Document Revised: October 28, 2020 Page 2 of 2
	Document No.: F-CAR-CS-033-Rev.07	Issuing Authority: Pace Carolinas Quality Office

***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 bottles**

Project # WO# : 92562974

PM: NMG Due Date: 10/07/21

CLIENT: GA-GA Power

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-)	DG3H-40 mL VOA HCl (N/A)	VG9T-40 mL VOA Na2S2O3 (N/A)	VG9U-40 mL VOA Unp (N/A)	DG3P-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)	BP1N	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)	DG9U-40 mL Amber Unpreserved vials (N/A)
1		1	1			✓ 1																		✓ 1				
2		1	1			✓ 1																		✓ 1				
3		1	1			✓ 1																		✓ 1				
4		1	1			✓ 1																		✓ 1				
5		1	1			✓ 1																		✓ 1				
6		1	1			✓ 1																		✓ 1				
7																												
8																												
9																												
10																												
11																												
12																												

pH Adjustment Log for Preserved Samples

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

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

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 - Coal Combustion Residuals	Report To: Joju Abraham	Attention: [illegible]@southernco.com
Address: [illegible] Milledgeville Rd	Copy To: Golder	Company Name:
Milledgeville, GA [illegible]		Address:
Email: [illegible]@southernco.com	Purchase Order #:	Pace Quote:
Phone: (404) 506-[illegible] Fax:	Project Name: Plant Branch AP-3	Pace Project Manager: Kevin Herring
Requested Due Date: 10 Day TAT	Project #: [illegible]	Pace Profile #:

Regulatory Agency:

State / Location: GA

ITEM #	SAMPLE ID	MATRIX CODE	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED DATE	COLLECTED TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Unpreserved / Ice	H2SO4	HNO3 + Ice	HCl	NaOH + Zn Acetate	Na2S2O3	Methanol	Other	App III/IV Total Metals	Cl, F, SO4, TDS	Radium 226/228	Residual Chlorine (Y/N)
1	BRGWC-17S	WT	G	9/22/2021	12:55		5	2		3						X	X	X	pH = 6.22
2	BRGWC-22S	WT	G	9/22/2021	15:15		5	2		3						X	X	X	pH = 4.81
3	BRGWC-34S	WT	G	9/22/2021	17:20		5	2		3						X	X	X	pH = 5.53
4	BRGWC-36S	WT	G	9/22/2021	10:00		5	2		3						X	X	X	pH = 5.33
5	EB-1	WT	G	9/22/2021	17:00		5	2		3						X	X	X	pH = NA
6	FB-1	WT	G	9/22/2021	15:00		5	2		3						X	X	X	pH = NA
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)
	[illegible signature]	9-23-21	08:50	[illegible signature]		[illegible]				
				[illegible signature] / [illegible]	9/23	[illegible]	2.6	Y	N	Y

SAMPLER NAME AND SIGNATURE: [illegible signature] / [illegible]

DATE Signed: 9-23-21

Pace Analytical	Document Name: Sample Condition Upon Receipt (SCUR) Document No.: [illegible]	Document Revised: October [illegible] Page 1 of 2 Issuing Authority: Pace Carolinas Quality Office

Laboratory receiving samples:

Asheville ☐ Eden ☐ Greenwood ☐ Huntersville ☐ Raleigh ☐ Mechanicsville ☐ Atlanta ☑ Kernersville ☐

Sample Condition Upon Receipt Client Name: GE Power Project #:

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

Custody Seal Present? ☐ Yes ☑ No Seals Intact? ☐ Yes ☐ No

Date/Initials Person Examining Contents: 9/23/21 KMW

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

Biological Tissue Frozen? ☐ Yes ☑ No ☐ N/A

Thermometer: ☐ IR Gun ID: THR230 Type of Ice: ☑ Wet ☐ Blue ☐ None

Cooler Temp: 2.4 Correction Factor: Add/Subtract (°C) -.1

Temp should be above freezing to 6°C

☐ Samples out of temp criteria. Samples on ice, cooling process has begun

Cooler Temp Corrected (°C): 2.3

USDA Regulated Soil (☑ N/A, water sample)

Did samples originate in a quarantine zone within the United States: CA, NY, or SC (check maps)? ☐ Yes ☑ No

Did samples originate from a foreign source (internationally, including Hawaii and Puerto Rico)? ☐ Yes ☑ No

				Comments/Discrepancy
Chain of Custody Present?	☑ Yes	☐ No	☐ N/A	1.
Samples Arrived within Hold Time?	☑ Yes	☐ No	☐ N/A	2.
Short Hold Time Analysis (<72 hr)?	☐ Yes	☑ No	☐ N/A	3.
Rush Turn Around Time Requested?	☐ Yes	☑ No	☐ N/A	4. 10 Day TAT
Sufficient Volume?	☑ Yes	☐ No	☐ N/A	5.
Correct Containers Used?	☑ Yes	☐ No	☐ N/A	6.
-Pace Containers Used?	☑ Yes	☐ No	☐ N/A	
Containers Intact?	☑ Yes	☐ No	☐ N/A	7.
Dissolved Analysis: Samples Field Filtered?	☐ Yes	☐ No	☑ N/A	8.
Sample Labels Match COC?	☑ Yes	☐ No	☐ N/A	9.
-Includes Date/Time/ID/Analysis Matrix: WT				
Headspace in VOA Vials (>5-6mm)?	☐ Yes	☐ No	☑ N/A	10.
Trip Blank Present?	☐ Yes	☐ No	☑ N/A	11.
Trip Blank Custody Seals Present?	☐ Yes	☐ No	☑ N/A	

COMMENTS/SAMPLE DISCREPANCY

Field Data Required? ☐ Yes ☐ No

Lot ID of split containers:

CLIENT NOTIFICATION/RESOLUTION

Person contacted: ____________ Date/Time: ____________

Project Manager SCURF Review: ____________ Date ____________

Project Manager SRF Review: ____________ Date ____________

Pace Analytical	Document Name: Sample Condition Upon Receipt (SCUR) Document No.: F-CAR-CS-033-Rev.07	Document Revised: October 28, 2020 Page 2 of 2 Issuing Authority: Pace Carolinas Quality Office

*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 bottles

Project #

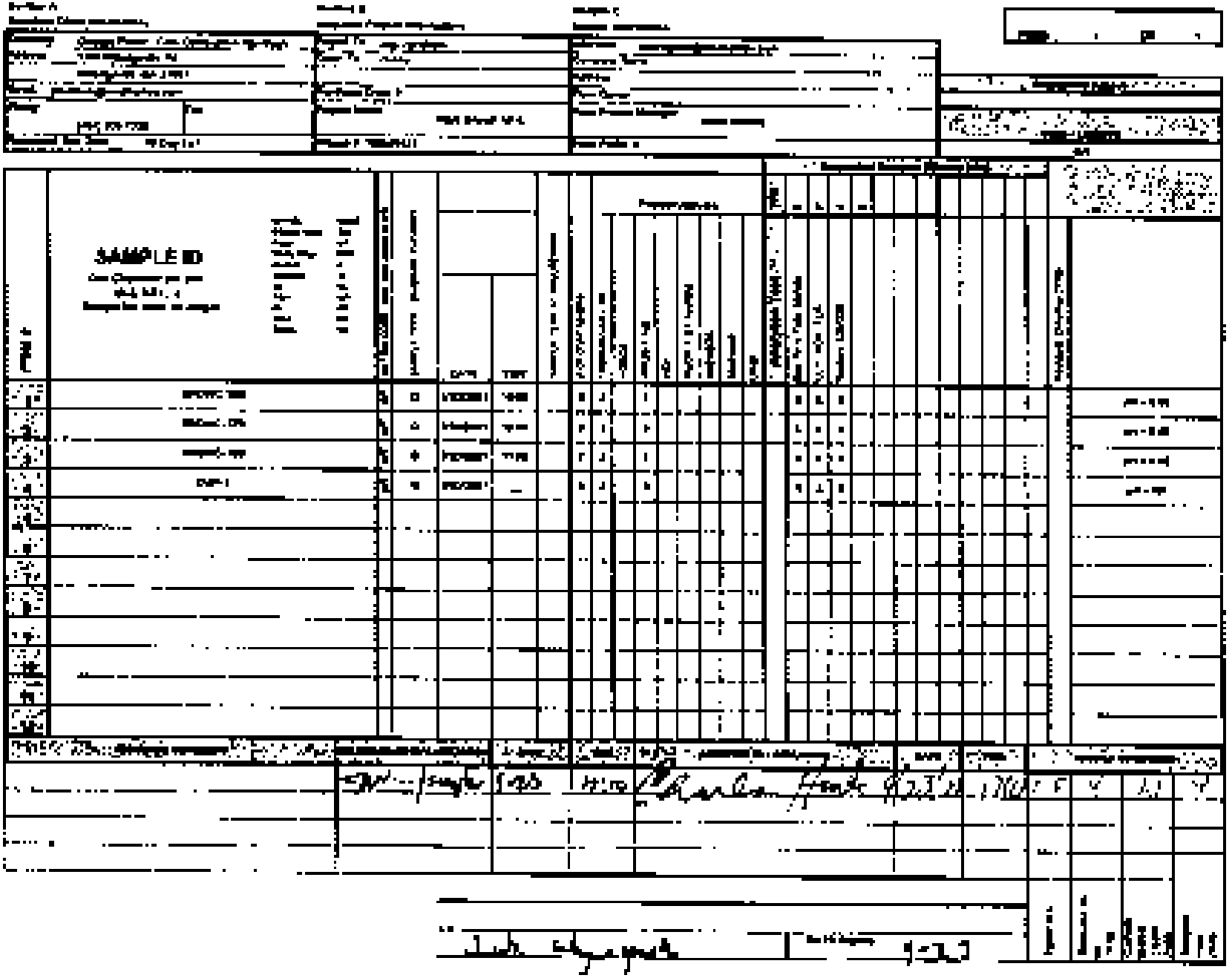
Item	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
1																												
2																												
3																												
4																												
5																												
6																												
7																												
8																												
9																												
10																												
11																												
12																												

pH Adjustment Log for Preserved Samples

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

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

CHAIN-OF-CUSTODY / Analytical Request Document



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

November 02, 2021

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

RE: Project: BRANCH AP-E RADS
Pace Project No.: 92562947

Dear Joju Abraham:

Enclosed are the analytical results for sample(s) received by the laboratory on September 23, 2021. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

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

- Pace Analytical Services - Greensburg

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

Sincerely,

Nicole D'Oleo
nicole.d'oleo@pacelabs.com
(704)875-9092
Project Manager

Enclosures

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

REPORT OF LABORATORY ANALYSIS

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

CERTIFICATIONS

Project: BRANCH AP-E RADS
Pace Project No.: 92562947

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
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SAMPLE SUMMARY

Project: BRANCH AP-E RADS
Pace Project No.: 92562947

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92562947001	**BRGWC-17S**	Water	09/22/21 12:09	09/23/21 10:47
92562947002	**BRGWC-33S**	Water	09/22/21 15:10	09/23/21 10:47
92562947003	**BRGWC-34S**	Water	09/22/21 17:20	09/23/21 10:47
92562947004	**BRGWC-36S**	Water	09/22/21 10:09	09/23/21 10:47
92562947005	**EB-1**	Water	09/22/21 17:00	09/23/21 10:47
92562947006	**FB-1**	Water	09/22/21 15:30	09/23/21 10:47
92562947007	**BRGWC-35S**	Water	09/23/21 10:05	09/23/21 17:10
92562947008	**BRGWC-37S**	Water	09/23/21 12:40	09/23/21 17:10
92562947009	**BRGWC-38S**	Water	09/23/21 11:20	09/23/21 17:10
92562947010	**DUP-1**	Water	09/23/21 00:00	09/23/21 17:10

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

SAMPLE ANALYTE COUNT

Project: BRANCH AP-E RADS
Pace Project No.: 92562947

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92562947001	**BRGWC-17S**	EPA 9315	JJY	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92562947002	**BRGWC-33S**	EPA 9315	JJY	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92562947003	**BRGWC-34S**	EPA 9315	JJY	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92562947004	**BRGWC-36S**	EPA 9315	JJY	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92562947005	**EB-1**	EPA 9315	JJY	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92562947006	**FB-1**	EPA 9315	JJY	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92562947007	**BRGWC-35S**	EPA 9315	JJY	1	PASI-PA
		EPA 9320	JC2	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92562947008	**BRGWC-37S**	EPA 9315	JJY	1	PASI-PA
		EPA 9320	JC2	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92562947009	**BRGWC-38S**	EPA 9315	JJY	1	PASI-PA
		EPA 9320	JC2	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92562947010	**DUP-1**	EPA 9315	JJY	1	PASI-PA
		EPA 9320	JC2	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA

PASI-PA = Pace Analytical Services - Greensburg

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
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SUMMARY OF DETECTION

Project: BRANCH AP-E RADS
Pace Project No.: 92562947

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92562947001	**BRGWC-17S**					
EPA 9315	Radium-226	0.0152 ± 0.172 (0.456) C:97% T:NA	pCi/L		10/27/21 08:50	
EPA 9320	Radium-228	0.719 ± 0.584 (1.18) C:66% T:78%	pCi/L		10/13/21 14:12	
Total Radium Calculation	Total Radium	0.734 ± 0.756 (1.64)	pCi/L		10/28/21 17:14	
92562947002	**BRGWC-33S**					
EPA 9315	Radium-226	-0.00291 ± 0.168 (0.463) C:98% T:NA	pCi/L		10/27/21 08:50	
EPA 9320	Radium-228	0.382 ± 0.423 (0.884) C:65% T:77%	pCi/L		10/18/21 11:42	
Total Radium Calculation	Total Radium	0.382 ± 0.591 (1.35)	pCi/L		10/28/21 17:14	
92562947003	**BRGWC-34S**					
EPA 9315	Radium-226	0.0669 ± 0.191 (0.464) C:97% T:NA	pCi/L		10/27/21 08:50	
EPA 9320	Radium-228	0.843 ± 0.474 (0.867) C:68% T:85%	pCi/L		10/13/21 14:12	
Total Radium Calculation	Total Radium	0.910 ± 0.665 (1.33)	pCi/L		10/28/21 17:14	
92562947004	**BRGWC-36S**					
EPA 9315	Radium-226	0.481 ± 0.333 (0.614) C:97% T:NA	pCi/L		10/27/21 08:55	
EPA 9320	Radium-228	0.327 ± 0.403 (0.852) C:69% T:76%	pCi/L		10/13/21 14:12	
Total Radium Calculation	Total Radium	0.808 ± 0.736 (1.47)	pCi/L		10/28/21 17:14	

REPORT OF LABORATORY ANALYSIS

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

SUMMARY OF DETECTION

Project: BRANCH AP-E RADS
Pace Project No.: 92562947

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92562947005	**EB-1**					
EPA 9315	Radium-226	-0.0902 ± 0.174 (0.522) C:98% T:NA	pCi/L		10/27/21 08:55	
EPA 9320	Radium-228	1.24 ± 0.525 (0.853) C:69% T:84%	pCi/L		10/13/21 14:12	
Total Radium Calculation	Total Radium	1.24 ± 0.699 (1.38)	pCi/L		10/28/21 17:14	
92562947006	**FB-1**					
EPA 9315	Radium-226	0.0729 ± 0.155 (0.363) C:98% T:NA	pCi/L		10/27/21 08:59	
EPA 9320	Radium-228	0.108 ± 0.416 (0.938) C:69% T:90%	pCi/L		10/13/21 14:12	
Total Radium Calculation	Total Radium	0.181 ± 0.571 (1.30)	pCi/L		10/28/21 17:14	
92562947007	**BRGWC-35S**					
EPA 9315	Radium-226	0.233 ± 0.209 (0.381) C:95% T:NA	pCi/L		10/27/21 08:59	
EPA 9320	Radium-228	0.161 ± 0.327 (0.722) C:75% T:87%	pCi/L		10/13/21 11:10	
Total Radium Calculation	Total Radium	0.394 ± 0.536 (1.10)	pCi/L		10/28/21 17:14	
92562947008	**BRGWC-37S**					
EPA 9315	Radium-226	0.0780 ± 0.170 (0.400) C:96% T:NA	pCi/L		10/27/21 08:59	
EPA 9320	Radium-228	-0.907 ± 0.249 (0.721) C:77% T:86%	pCi/L		10/13/21 11:10	
Total Radium Calculation	Total Radium	0.0780 ± 0.419 (1.12)	pCi/L		10/28/21 17:14	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
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SUMMARY OF DETECTION

Project: BRANCH AP-E RADS
Pace Project No.: 92562947

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92562947009	**BRGWC-38S**					
EPA 9315	Radium-226	0.143 ± 0.190 (0.399) C:98% T:NA	pCi/L		10/27/21 08:59	
EPA 9320	Radium-228	1.26 ± 0.471 (0.701) C:78% T:85%	pCi/L		10/13/21 11:10	
Total Radium Calculation	Total Radium	1.40 ± 0.661 (1.10)	pCi/L		10/28/21 17:14	
92562947010	**DUP-1**					
EPA 9315	Radium-226	0.0943 ± 0.167 (0.378) C:97% T:NA	pCi/L		10/27/21 08:59	
EPA 9320	Radium-228	0.540 ± 0.370 (0.705) C:76% T:82%	pCi/L		10/13/21 11:10	
Total Radium Calculation	Total Radium	0.634 ± 0.537 (1.08)	pCi/L		10/28/21 17:14	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: BRANCH AP-E RADS
Pace Project No.: 92562947

Sample: BRGWC-17S **Lab ID: 92562947001** Collected: 09/22/21 12:09 Received: 09/23/21 10:47 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	**0.0152 ± 0.172 (0.456) C:97% T:NA**	pCi/L	10/27/21 08:50	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.719 ± 0.584 (1.18) C:66% T:78%**	pCi/L	10/13/21 14:12	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.734 ± 0.756 (1.64)**	pCi/L	10/28/21 17:14	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: BRANCH AP-E RADS
Pace Project No.: 92562947

Sample: BRGWC-33S **Lab ID: 92562947002** Collected: 09/22/21 15:10 Received: 09/23/21 10:47 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	**-0.00291 ± 0.168 (0.463) C:98% T:NA**	pCi/L	10/27/21 08:50	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.382 ± 0.423 (0.884) C:65% T:77%**	pCi/L	10/18/21 11:42	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.382 ± 0.591 (1.35)**	pCi/L	10/28/21 17:14	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: BRANCH AP-E RADS
Pace Project No.: 92562947

Sample: BRGWC-34S **Lab ID: 92562947003** Collected: 09/22/21 17:20 Received: 09/23/21 10:47 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	**0.0669 ± 0.191 (0.464) C:97% T:NA**	pCi/L	10/27/21 08:50	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.843 ± 0.474 (0.867) C:68% T:85%**	pCi/L	10/13/21 14:12	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.910 ± 0.665 (1.33)**	pCi/L	10/28/21 17:14	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: BRANCH AP-E RADS
Pace Project No.: 92562947

Sample: BRGWC-36S **Lab ID: 92562947004** Collected: 09/22/21 10:09 Received: 09/23/21 10:47 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	**0.481 ± 0.333 (0.614) C:97% T:NA**	pCi/L	10/27/21 08:55	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.327 ± 0.403 (0.852) C:69% T:76%**	pCi/L	10/13/21 14:12	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.808 ± 0.736 (1.47)**	pCi/L	10/28/21 17:14	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: BRANCH AP-E RADS
Pace Project No.: 92562947

Sample: EB-1 **Lab ID: 92562947005** Collected: 09/22/21 17:00 Received: 09/23/21 10:47 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	**-0.0902 ± 0.174 (0.522) C:98% T:NA**	pCi/L	10/27/21 08:55	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**1.24 ± 0.525 (0.853) C:69% T:84%**	pCi/L	10/13/21 14:12	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.24 ± 0.699 (1.38)**	pCi/L	10/28/21 17:14	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: BRANCH AP-E RADS
Pace Project No.: 92562947

Sample: FB-1 **Lab ID: 92562947006** Collected: 09/22/21 15:30 Received: 09/23/21 10:47 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	**0.0729 ± 0.155 (0.363) C:98% T:NA**	pCi/L	10/27/21 08:59	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.108 ± 0.416 (0.938) C:69% T:90%**	pCi/L	10/13/21 14:12	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.181 ± 0.571 (1.30)**	pCi/L	10/28/21 17:14	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: BRANCH AP-E RADS
Pace Project No.: 92562947

Sample: BRGWC-35S **Lab ID: 92562947007** Collected: 09/23/21 10:05 Received: 09/23/21 17:10 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.233 ± 0.209 (0.381) C:95% T:NA**	pCi/L	10/27/21 08:59	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.161 ± 0.327 (0.722) C:75% T:87%**	pCi/L	10/13/21 11:10	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.394 ± 0.536 (1.10)**	pCi/L	10/28/21 17:14	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: BRANCH AP-E RADS
Pace Project No.: 92562947

Sample: BRGWC-37S **Lab ID: 92562947008** Collected: 09/23/21 12:40 Received: 09/23/21 17:10 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.0780 ± 0.170 (0.400) C:96% T:NA**	pCi/L	10/27/21 08:59	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**-0.907 ± 0.249 (0.721) C:77% T:86%**	pCi/L	10/13/21 11:10	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.0780 ± 0.419 (1.12)**	pCi/L	10/28/21 17:14	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: BRANCH AP-E RADS
Pace Project No.: 92562947

Sample: BRGWC-38S **Lab ID: 92562947009** Collected: 09/23/21 11:20 Received: 09/23/21 17:10 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.143 ± 0.190 (0.399) C:98% T:NA**	pCi/L	10/27/21 08:59	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**1.26 ± 0.471 (0.701) C:78% T:85%**	pCi/L	10/13/21 11:10	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.40 ± 0.661 (1.10)**	pCi/L	10/28/21 17:14	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: BRANCH AP-E RADS
Pace Project No.: 92562947

Sample: DUP-1 **Lab ID: 92562947010** Collected: 09/23/21 00:00 Received: 09/23/21 17:10 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.0943 ± 0.167 (0.378) C:97% T:NA**	pCi/L	10/27/21 08:59	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.540 ± 0.370 (0.705) C:76% T:82%**	pCi/L	10/13/21 11:10	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.634 ± 0.537 (1.08)**	pCi/L	10/28/21 17:14	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: BRANCH AP-E RADS
Pace Project No.: 92562947

QC Batch: 466416 Analysis Method: EPA 9320
QC Batch Method: EPA 9320 Analysis Description: 9320 Radium 228
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92562947001, 92562947002, 92562947003, 92562947004, 92562947005, 92562947006

METHOD BLANK: 2252287 Matrix: Water
Associated Lab Samples: 92562947001, 92562947002, 92562947003, 92562947004, 92562947005, 92562947006

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.590 ± 0.393 (0.739) C:68% T:79%	pCi/L	10/13/21 14:18	

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: BRANCH AP-E RADS
Pace Project No.: 92562947

QC Batch: 466417
QC Batch Method: EPA 9320
Analysis Method: EPA 9320
Analysis Description: 9320 Radium 228
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92562947007, 92562947008, 92562947009, 92562947010

METHOD BLANK: 2252288 Matrix: Water
Associated Lab Samples: 92562947007, 92562947008, 92562947009, 92562947010

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	-0.0448 ± 0.328 (0.776) C:75% T:81%	pCi/L	10/13/21 11:10	

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

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

QUALITY CONTROL - RADIOCHEMISTRY

Project: BRANCH AP-E RADS
Pace Project No.: 92562947

QC Batch: 466466 Analysis Method: EPA 9315
QC Batch Method: EPA 9315 Analysis Description: 9315 Total Radium
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92562947001, 92562947002, 92562947003, 92562947004, 92562947005, 92562947006, 92562947007, 92562947008, 92562947009, 92562947010

METHOD BLANK: 2252388 Matrix: Water
Associated Lab Samples: 92562947001, 92562947002, 92562947003, 92562947004, 92562947005, 92562947006, 92562947007, 92562947008, 92562947009, 92562947010

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.396 ± 0.389 (0.814) C:96% T:NA	pCi/L	10/27/21 08:49	

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: BRANCH AP-E RADS
Pace Project No.: 92562947

DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

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

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

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

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

Acid preservation may not be appropriate for 2 Chloroethylvinyl ether.

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

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

Reported results are not rounded until the final step prior to reporting. Therefore, calculated parameters that are typically reported as "Total" may vary slightly from the sum of the reported component parameters.

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.

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

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: BRANCH AP-E RADS
Pace Project No.: 92562947

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92562947001	**BRGWC-17S**	EPA 9315	466466		
92562947002	**BRGWC-33S**	EPA 9315	466466		
92562947003	**BRGWC-34S**	EPA 9315	466466		
92562947004	**BRGWC-36S**	EPA 9315	466466		
92562947005	**EB-1**	EPA 9315	466466		
92562947006	**FB-1**	EPA 9315	466466		
92562947007	**BRGWC-35S**	EPA 9315	466466		
92562947008	**BRGWC-37S**	EPA 9315	466466		
92562947009	**BRGWC-38S**	EPA 9315	466466		
92562947010	**DUP-1**	EPA 9315	466466		
92562947001	**BRGWC-17S**	EPA 9320	466416		
92562947002	**BRGWC-33S**	EPA 9320	466416		
92562947003	**BRGWC-34S**	EPA 9320	466416		
92562947004	**BRGWC-36S**	EPA 9320	466416		
92562947005	**EB-1**	EPA 9320	466416		
92562947006	**FB-1**	EPA 9320	466416		
92562947007	**BRGWC-35S**	EPA 9320	466417		
92562947008	**BRGWC-37S**	EPA 9320	466417		
92562947009	**BRGWC-38S**	EPA 9320	466417		
92562947010	**DUP-1**	EPA 9320	466417		
92562947001	**BRGWC-17S**	Total Radium Calculation	470302		
92562947002	**BRGWC-33S**	Total Radium Calculation	470302		
92562947003	**BRGWC-34S**	Total Radium Calculation	470302		
92562947004	**BRGWC-36S**	Total Radium Calculation	470302		
92562947005	**EB-1**	Total Radium Calculation	470302		
92562947006	**FB-1**	Total Radium Calculation	470302		
92562947007	**BRGWC-35S**	Total Radium Calculation	470302		
92562947008	**BRGWC-37S**	Total Radium Calculation	470302		
92562947009	**BRGWC-38S**	Total Radium Calculation	470302		
92562947010	**DUP-1**	Total Radium Calculation	470302		

Pace Analytical	Document Name: Sample Condition Upon Receipt(SCUR)	Document Revised: October 28, 2020 Page 1 of 2
	Document No.: F-CAR-CS-033-Rev.07	Issuing Authority: Pace Carolinas Quality Office

Laboratory receiving samples:
Asheville ☐ Eden ☐ Greenwood ☐ Huntersville ☐ Raleigh ☐ Mechanicsville ☐ Atlanta ☑ Kernersville ☐

Sample Condition Upon Receipt

Client Name: CA Powell

Project #: WO# : 92562947

92562947

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

Custody Seal Present? ☐ Yes ☑ No Seals Intact? ☐ Yes ☑ No

Date/Initials Person Examining Contents: MT 9/15/21

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

Biological Tissue Frozen? ☐ Yes ☑ No ☐ N/A

Thermometer: ☐ IR Gun ID: 093 Type of Ice: ☑ Wet ☐ Blue ☐ None

Cooler Temp: 2.8 Correction Factor: Add/Subtract (°C): -0.5

Cooler Temp Corrected (°C): 2.3

Temp should be above freezing to 6°C
☐ Samples out of temp criteria. Samples on ice, cooling process has begun

USDA Regulated Soil (☐ N/A, water sample)
Did samples originate in a quarantine zone within the United States: CA, NY, or SC (check maps)? ☐ Yes ☑ No

Did samples originate from a foreign source (internationally, including Hawaii and Puerto Rico)? ☐ Yes ☑ No

				Comments/Discrepancy:
Chain of Custody Present?	☑ Yes	☐ No	☐ N/A	1.
Samples Arrived within Hold Time?	☑ Yes	☐ No	☐ N/A	2.
Short Hold Time Analysis (<72 hr.)?	☐ Yes	☑ No	☐ N/A	3.
Rush Turn Around Time Requested?	☐ Yes	☑ No	☐ N/A	4.
Sufficient Volume?	☑ Yes	☐ No	☐ N/A	5.
Correct Containers Used?	☑ Yes	☐ No	☐ N/A	6.
-Pace Containers Used?	☑ Yes	☐ No	☐ N/A	
Containers Intact?	☑ Yes	☐ No	☐ N/A	7.
Dissolved analysis: Samples Field Filtered?	☐ Yes	☑ No	☐ N/A	8.
Sample Labels Match COC?	☑ Yes	☐ No	☐ N/A	9
-Includes Date/Time/ID/Analysis Matrix:	WT			
Headspace in VOA Vials (>6mm)?	☐ Yes	☐ No	☑ N/A	10.
Trip Blank Present?	☐ Yes	☐ No	☑ N/A	11.
Trip Blank Custody Seals Present?	☐ Yes	☐ No	☑ N/A	

COMMENTS/SAMPLE DISCREPANCY

Field Data Required? ☐ Yes ☐ No

Lot ID of split containers:

CLIENT NOTIFICATION/RESOLUTION

Person contacted: Date/Time:

Project Manager SCURF Review: Date:

Project Manager SRF Review: Date:

PaceAnalytical	Document Name: Sample Condition Upon Receipt(SCUR)	Document Revised: October 28, 2020 Page 2 of 2
	Document No.: F-CAR-CS-033-Rev.07	Issuing Authority: Pace Carolinas Quality Office

***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 bottles**

Project #

WO# : 92562947

PM: NMG Due Date: 10/14/21

CLIENT: GA-GA Power

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-)	DG3H-40 mL VOA HCl (N/A)	VG9T-40 mL VOA Na2S2O3 (N/A)	VG9U-40 mL VOA Unp (N/A)	DG3P-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)	BP4N	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)	DG9U-40 mL Amber Unpreserved vials (N/A)
1		1	1			1 ✓																		1 ✓				
2		1	1			1 ✓																		1 ✓				
3		1	1			1 ✓																		1 ✓				
4		1	1			1 ✓																		1 ✓				
5		1	1			1 ✓																		1 ✓				
6		1	1			1 ✓																		1 ✓				
7																												
8																												
9																												
10																												
11																												
12																												

pH Adjustment Log for Preserved Samples

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

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

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 - Coal Combustion Residuals	Report To: [illegible] Abraham	Attention: [illegible]@southernco.com
Address: [illegible] Rd	Copy To: Geosyntec	Company Name:
[illegible], GA [illegible]		Address:
Email: [illegible]@southernco.com	Purchase Order #:	Pace Quote:
Phone: (404) 506-7239 / Fax:	Project Name: Plant Branch AP-3?	Pace Project Manager: [illegible]
Requested Due Date: 10 Day TAT	Project #: [illegible]	Pace Profile #:

Regulatory Agency:

State / Location: GA

ITEM #	SAMPLE ID	MATRIX CODE	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED DATE	COLLECTED TIME	# OF CONTAINERS	Unpreserved - Ice	H2SO4	HNO3 + Ice	HCl	NaOH + Zn Acetate	Na2S2O3	Methanol	Other	App III/IV Total Metals	Cl, F, SO4, TDS	Radium 226/228	Residual Chlorine (Y/N)
1	BRGWC-17S	WT	G	9/22/2021	13:00?	5	2		3						X	X	X	pH = 6.22?
2	BRGWC-23S	WT	G	9/22/2021	15:10	5	2		3						X	X	X	pH = 4.81
3	BRGWC-34S	WT	G	9/22/2021	17:20	5	2		3						X	X	X	pH = 5.83?
4	BRGWC-30S	WT	G	9/22/2021	10:00	5	2		3						X	X	X	pH = 5.53?
5	EB-1	WT	G	9/22/2021	17:00	5	2		3						X	X	X	pH = NA
6	FB-1	WT	G	9/22/2021	15:30?	5	2		3						X	X	X	pH = NA
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)
	[signature]	9-23-21	08:50	[signature] Geosyntec		0:50?				
				[signature] / Pace?	9/23	1047?	3.5	Y	N	Y

SAMPLER NAME AND SIGNATURE: Jake Wagenspeck? / [signature] DATE Signed: 9-23-21

Pace Analytical

Document Name: Sample Condition Upon Receipt (SCUR)

Document Revised: October 28, 2021

Page 1 of 1

Laboratory receiving samples:

Asheville ☐ Eden ☐ Greensboro ☐ Huntersville ☐ Raleigh ☐ Mechanicsville ☐ Atlanta ☐ Kernersville ☐

Sample Condition Upon Receipt

Client Name: GE 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: THR230

Type of Ice: ☐ Wet ☐ Blue ☐ Dry ☐ None

Biological Tissue Frozen? ☐ Yes ☐ No ☐ N/A

Cooler Temp: 2.4 Correction Factor: -0.1

Temp should be above freezing to 6°C

Temp Blank Present: ☐ Yes ☐ No

Comments/Discrepancy:

Chain of Custody Present: ☐ Yes ☐ No ☐ N/A 1.

Samples Arrived within Hold Time: ☐ Yes ☐ No ☐ N/A 2.

Short Hold Time Analysis (<72 hr): ☐ Yes ☐ No ☐ N/A 3.

Rush Turn Around Time Requested: ☐ Yes ☐ No ☐ N/A 4. 10 Day TAT

Sufficient Volume: ☐ Yes ☐ No ☐ N/A 5.

Correct Containers Used: ☐ Yes ☐ No ☐ N/A 6.

Pace Containers Used: ☐ Yes ☐ No ☐ N/A

Containers Intact: ☐ Yes ☐ No ☐ N/A 7.

Unpreserved 5035A Soils frozen within 48hrs: ☐ Yes ☐ No ☐ N/A 8.

Samples Listed on COC: ☐ Yes ☐ No ☐ N/A 9.

If Applicable VOA Vials Headspace ≥ 6mm: ☐ Yes ☐ No ☐ N/A 10.

Trip Blank Present: ☐ Yes ☐ No ☐ N/A 11.

Trip Blank Custody Seals Present: ☐ Yes ☐ No ☐ N/A

Pace Trip Blank Lot # (if purchased):

Client Notification/Resolution:

Field Data Required? ☐ Yes ☐ No

Lot ID of split containers:

CLIENT NOTIFICATION/RESOLUTION

Person contacted: Date/Time:

Project Manager SCURF Review: Date:

Project Manager SRF Review: Date:

*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 bottles

Project #

Item#	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]
1		1	1			1																		[illegible]				
2		1				1																		[illegible]				
3						1																		[illegible]				
4						1																		[illegible]				
5																												
6																												
7																												
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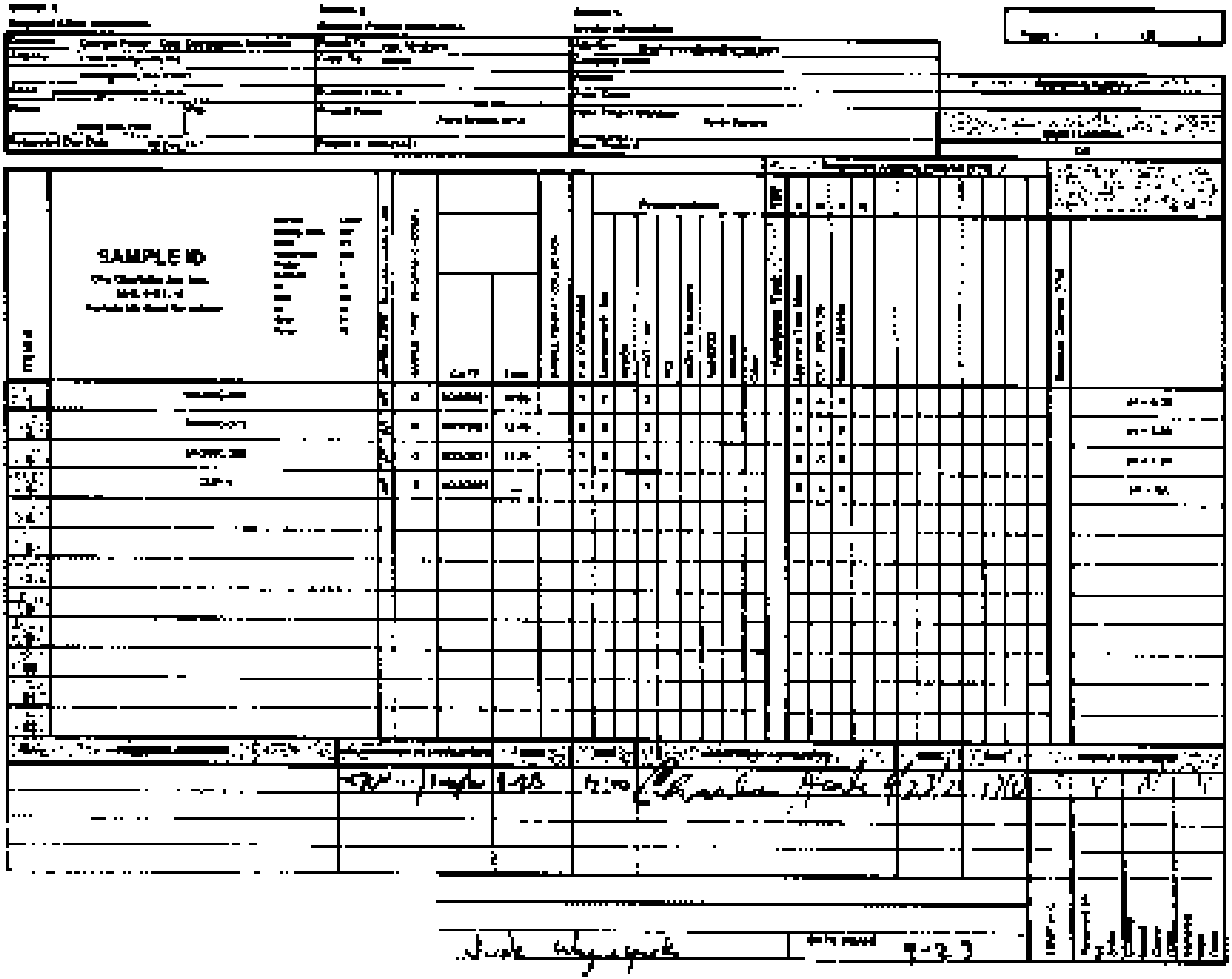
9																												
10																												
11																												
12																												

pH Adjustment Log for Preserved Samples

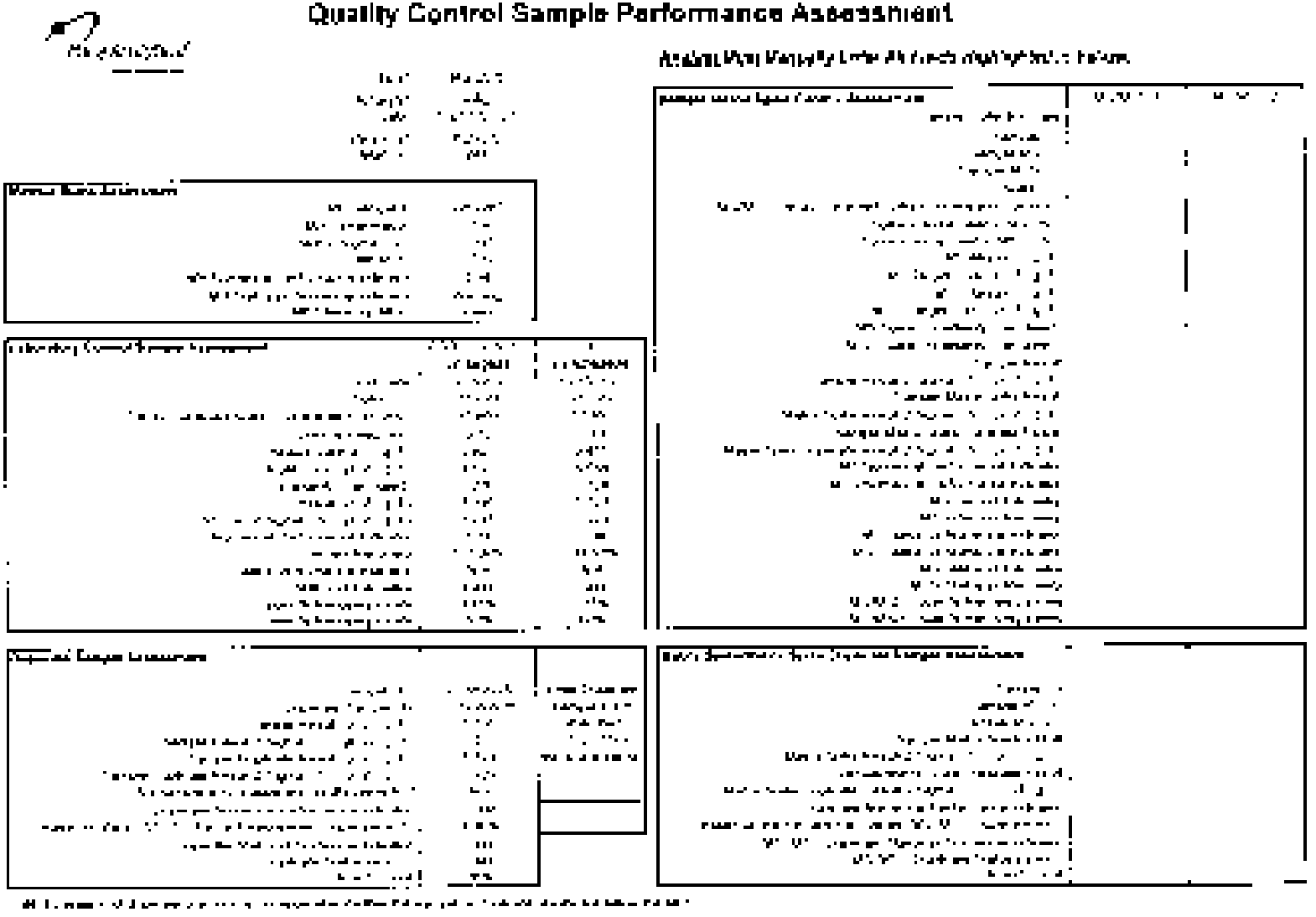
Sample ID	Type of Preservative	pH upon receipt	Date preservation adjusted	Time preservation adjusted	Amount of Preservative added	Lot #

[illegible]

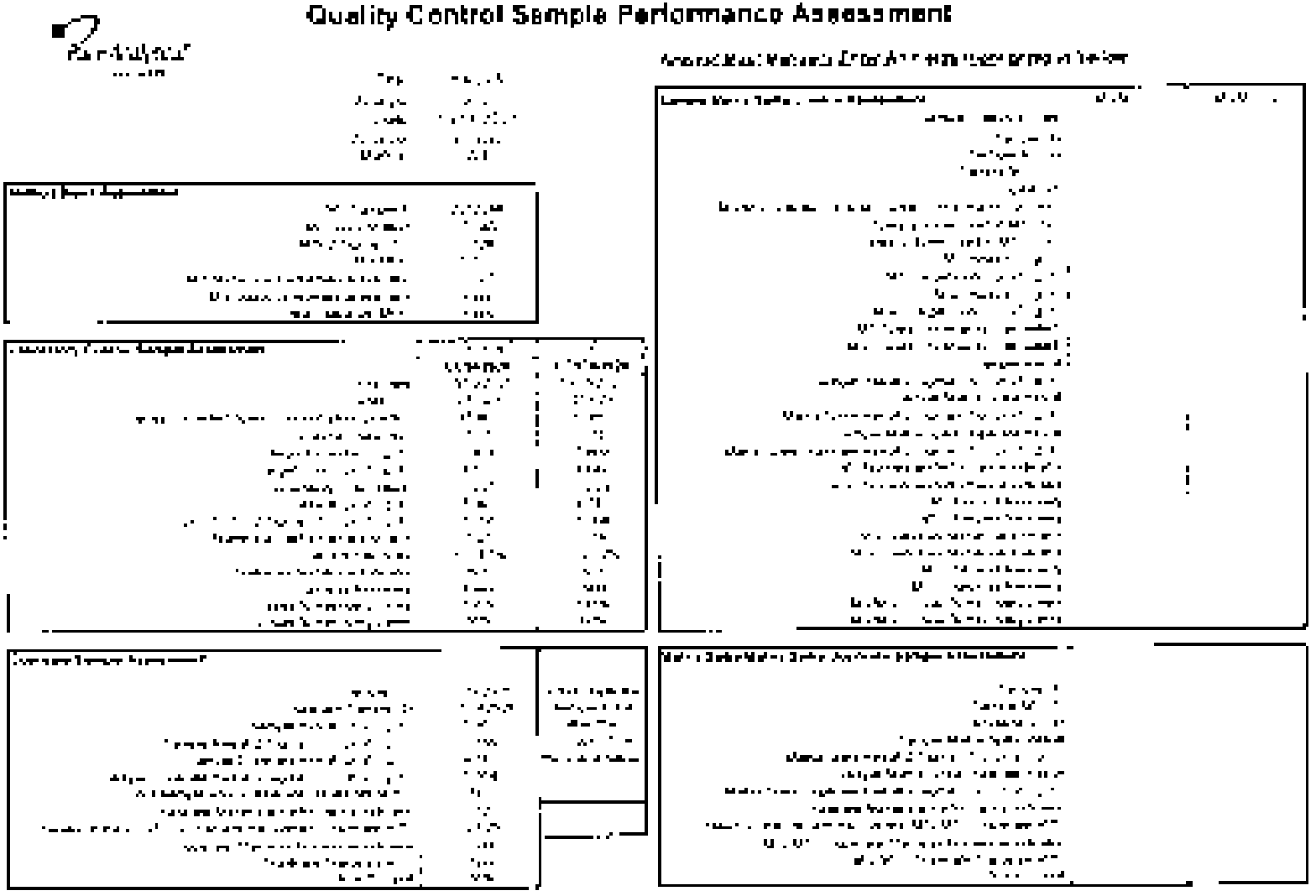
CHAIN-OF-CUSTODY / Analytical Request Document



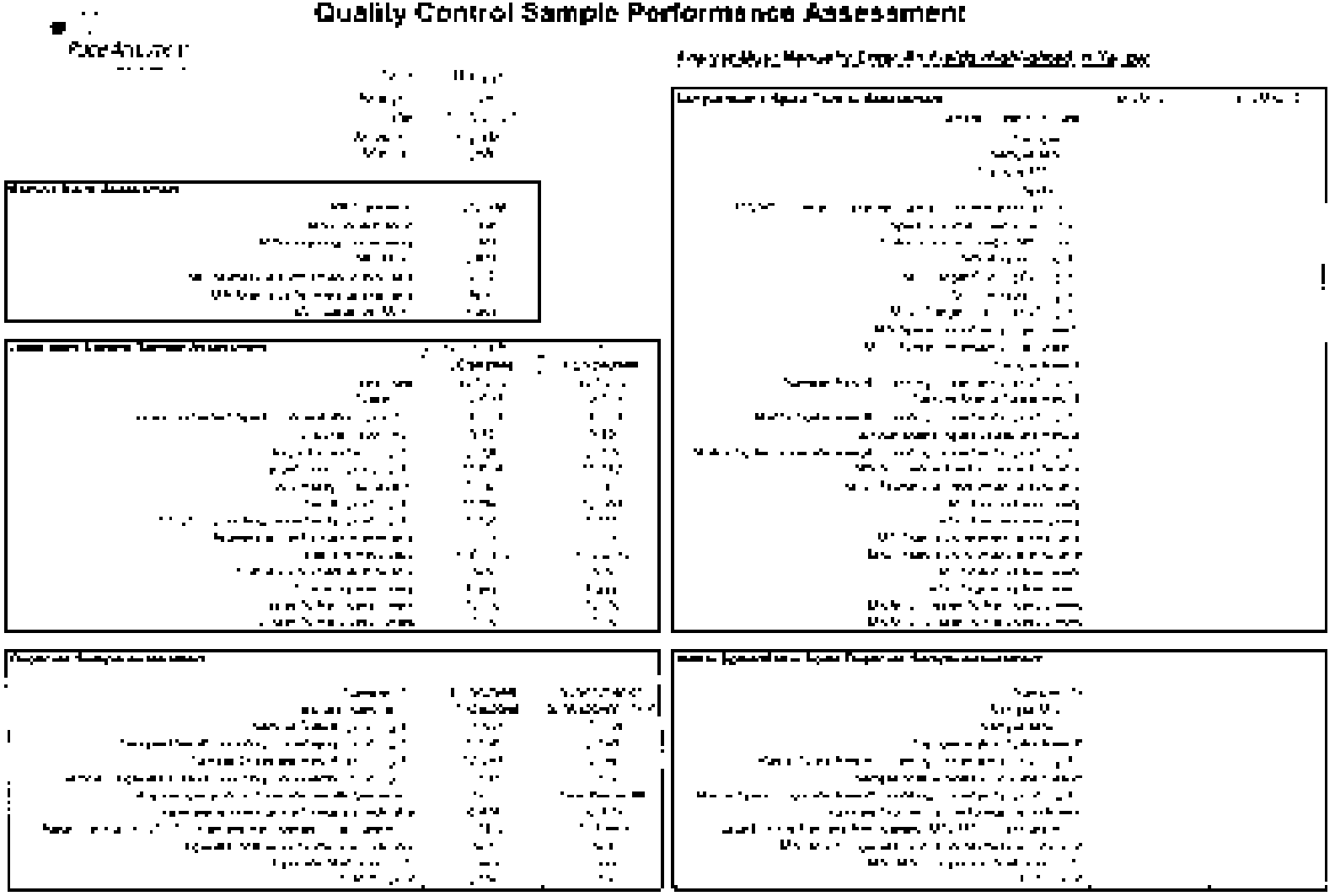
Quality Control Sample Performance Assessment



Quality Control Sample Performance Assessment



Quality Control Sample Performance Assessment



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

October 01, 2021

Kelley Sharpe
ARCADIS - Atlanta
2839 Paces Ferry Rd
STE 900
Atlanta, GA 30339

RE: Project: Plant Branch CCR-Ash Pond
Pace Project No.: 92563212

Dear Kelley Sharpe:

Enclosed are the analytical results for sample(s) received by the laboratory on September 24, 2021. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

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

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

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

Sincerely,

Maiya Parks

Maiya Parks
maiya.parks@pacelabs.com
(770)734-4200
Project Manager

Enclosures

cc: Joju Abraham, Georgia Power-CCR
Ben Hodges, Georgia Power
Warren Johnson, ARCADIS - Atlanta

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

CERTIFICATIONS

Project: Plant Branch CCR-Ash Pond
Pace Project No.: 92563212

Pace Analytical Services Asheville
2225 Riverside Drive, Asheville, NC 28804
Florida/NELAP Certification #: E87648
North Carolina Drinking Water Certification #: 37712
North Carolina Wastewater Certification #: 40
South Carolina Certification #: 99030001
Virginia/VELAP Certification #: 460222

Pace Analytical Services Peachtree Corners
110 Technology Pkwy, Peachtree Corners, GA 30092
Florida DOH Certification #: E87315
Georgia DW Inorganics Certification #: 812
North Carolina Certification #: 381
South Carolina Certification #: 98011001

REPORT OF LABORATORY ANALYSIS

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

SAMPLE SUMMARY

Project: Plant Branch CCR-Ash Pond
Pace Project No.: 92563212

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92563212001	**LR-1 (Surface)**	Water	09/23/21 10:55	09/24/21 08:24
92563212002	**LR-1 (Mid)**	Water	09/23/21 10:55	09/24/21 08:24
92563212003	**LR-1 (Bottom)**	Water	09/23/21 10:55	09/24/21 08:24
92563212004	**LR+8A (Surface)**	Water	09/23/21 10:35	09/24/21 08:24
92563212005	**LR+9A (Surface)**	Water	09/23/21 10:42	09/24/21 08:24
92563212006	**LR+8 (Surface)**	Water	09/23/21 10:22	09/24/21 08:24
92563212007	**LR+8 (Mid)**	Water	09/23/21 10:22	09/24/21 08:24
92563212008	**LR+8 (Bottom)**	Water	09/23/21 10:22	09/24/21 08:24
92563212009	**LR+9 (Surface)**	Water	09/23/21 10:10	09/24/21 08:24
92563212010	**LR+9 (Mid)**	Water	09/23/21 10:10	09/24/21 08:24
92563212011	**LR+9 (Bottom)**	Water	09/23/21 10:10	09/24/21 08:24
92563212012	**LR-10 (Surface)**	Water	09/23/21 09:51	09/24/21 08:24
92563212013	**LR-10 (Mid)**	Water	09/23/21 09:51	09/24/21 08:24
92563212014	**LR-10 (Bottom)**	Water	09/23/21 09:51	09/24/21 08:24

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SAMPLE ANALYTE COUNT

Project: Plant Branch CCR-Ash Pond
Pace Project No.: 92563212

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92563212001	**LR-1 (Surface)**	EPA 6010D	KH	4	PASI-GA
		EPA 6020B	CW1	2	PASI-GA
		SM 2540C-2011	ALW	1	PASI-GA
		SM 2320B-2011	ECH	2	PASI-A
		EPA 300.0 Rev 2.1 1993	CDC	3	PASI-A
92563212002	**LR-1 (Mid)**	EPA 6010D	KH	4	PASI-GA
		EPA 6020B	CW1	2	PASI-GA
		SM 2540C-2011	ALW	1	PASI-GA
		SM 2320B-2011	ECH	2	PASI-A
		EPA 300.0 Rev 2.1 1993	CDC	3	PASI-A
92563212003	**LR-1 (Bottom)**	EPA 6010D	KH	4	PASI-GA
		EPA 6020B	CW1	2	PASI-GA
		SM 2540C-2011	ALW	1	PASI-GA
		SM 2320B-2011	ECH	2	PASI-A
		EPA 300.0 Rev 2.1 1993	CDC	3	PASI-A
92563212004	**LR+8A (Surface)**	EPA 6010D	KH	4	PASI-GA
		EPA 6020B	CW1	2	PASI-GA
		SM 2540C-2011	ALW	1	PASI-GA
		SM 2320B-2011	ECH	2	PASI-A
		EPA 300.0 Rev 2.1 1993	CDC	3	PASI-A
92563212005	**LR+9A (Surface)**	EPA 6010D	KH	4	PASI-GA
		EPA 6020B	CW1	2	PASI-GA
		SM 2540C-2011	ALW	1	PASI-GA
		SM 2320B-2011	ECH	2	PASI-A
		EPA 300.0 Rev 2.1 1993	CDC	3	PASI-A
92563212006	**LR+8 (Surface)**	EPA 6010D	KH	4	PASI-GA
		EPA 6020B	CW1	2	PASI-GA
		SM 2540C-2011	ALW	1	PASI-GA
		SM 2320B-2011	ECH	2	PASI-A
		EPA 300.0 Rev 2.1 1993	CDC	3	PASI-A
92563212007	**LR+8 (Mid)**	EPA 6010D	KH	4	PASI-GA
		EPA 6020B	CW1	2	PASI-GA
		SM 2540C-2011	ALW	1	PASI-GA
		SM 2320B-2011	ECH	2	PASI-A
		EPA 300.0 Rev 2.1 1993	CDC	3	PASI-A
92563212008	**LR+8 (Bottom)**	EPA 6010D	KH	4	PASI-GA
		EPA 6020B	CW1	2	PASI-GA

REPORT OF LABORATORY ANALYSIS

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SAMPLE ANALYTE COUNT

Project: Plant Branch CCR-Ash Pond
Pace Project No.: 92563212

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		SM 2540C-2011	ALW	1	PASI-GA
		SM 2320B-2011	ECH	2	PASI-A
		EPA 300.0 Rev 2.1 1993	CDC	3	PASI-A
92563212009	**LR+9 (Surface)**	EPA 6010D	KH	4	PASI-GA
		EPA 6020B	CW1	2	PASI-GA
		SM 2540C-2011	ALW	1	PASI-GA
		SM 2320B-2011	ECH	2	PASI-A
		EPA 300.0 Rev 2.1 1993	CDC	3	PASI-A
92563212010	**LR+9 (Mid)**	EPA 6010D	KH	4	PASI-GA
		EPA 6020B	CW1	2	PASI-GA
		SM 2540C-2011	ALW	1	PASI-GA
		SM 2320B-2011	ECH	2	PASI-A
		EPA 300.0 Rev 2.1 1993	CDC	3	PASI-A
92563212011	**LR+9 (Bottom)**	EPA 6010D	KH	4	PASI-GA
		EPA 6020B	CW1	2	PASI-GA
		SM 2540C-2011	ALW	1	PASI-GA
		SM 2320B-2011	ECH	2	PASI-A
		EPA 300.0 Rev 2.1 1993	CDC	3	PASI-A
92563212012	**LR-10 (Surface)**	EPA 6010D	KH	4	PASI-GA
		EPA 6020B	CW1	2	PASI-GA
		SM 2540C-2011	ALW	1	PASI-GA
		SM 2320B-2011	ECH	2	PASI-A
		EPA 300.0 Rev 2.1 1993	CDC	3	PASI-A
92563212013	**LR-10 (Mid)**	EPA 6010D	KH	4	PASI-GA
		EPA 6020B	CW1	2	PASI-GA
		SM 2540C-2011	ALW	1	PASI-GA
		SM 2320B-2011	ECH	2	PASI-A
		EPA 300.0 Rev 2.1 1993	CDC	3	PASI-A
92563212014	**LR-10 (Bottom)**	EPA 6010D	KH	4	PASI-GA
		EPA 6020B	CW1	2	PASI-GA
		SM 2540C-2011	ALW	1	PASI-GA
		SM 2320B-2011	ECH	2	PASI-A
		EPA 300.0 Rev 2.1 1993	CDC	3	PASI-A

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

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ANALYTICAL RESULTS

Project: Plant Branch CCR-Ash Pond
Pace Project No.: 92563212

Sample: LR-1 (Surface) **Lab ID: 92563212001** Collected: 09/23/21 10:55 Received: 09/24/21 08:24 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA							
Potassium	**2.5**	mg/L	0.20	1	09/28/21 10:00	09/28/21 14:56	7440-09-7	
Sodium	**4.7**	mg/L	1.0	1	09/28/21 10:00	09/28/21 14:56	7440-23-5	M1
Calcium	**5.0**	mg/L	1.0	1	09/28/21 10:00	09/28/21 14:56	7440-70-2	M1
Magnesium	**2.5**	mg/L	0.050	1	09/28/21 10:00	09/28/21 14:56	7439-95-4	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA							
Boron	ND	mg/L	0.040	1	09/28/21 09:20	09/28/21 18:29	7440-42-8	
Cobalt	ND	mg/L	0.0050	1	09/28/21 09:20	09/28/21 18:29	7440-48-4	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Peachtree Corners, GA							
Total Dissolved Solids	**62.0**	mg/L	10.0	1		09/29/21 19:08		
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville							
Alkalinity,Bicarbonate (CaCO3)	**34.2**	mg/L	5.0	1		09/27/21 18:06		
Alkalinity, Total as CaCO3	**34.2**	mg/L	5.0	1		09/27/21 18:06		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville							
Chloride	**3.1**	mg/L	1.0	1		09/26/21 23:36	16887-00-6	
Fluoride	ND	mg/L	0.10	1		09/26/21 23:36	16984-48-8	
Sulfate	**1.8**	mg/L	1.0	1		09/26/21 23:36	14808-79-8	M1

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Plant Branch CCR-Ash Pond
Pace Project No.: 92563212

Sample: LR-1 (Mid) **Lab ID: 92563212002** Collected: 09/23/21 10:55 Received: 09/24/21 08:24 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA							
Potassium	**2.5**	mg/L	0.20	1	09/28/21 10:00	09/28/21 17:56	7440-09-7	
Sodium	**4.7**	mg/L	1.0	1	09/28/21 10:00	09/28/21 17:56	7440-23-5	
Calcium	**5.0**	mg/L	1.0	1	09/28/21 10:00	09/28/21 17:56	7440-70-2	
Magnesium	**2.6**	mg/L	0.050	1	09/28/21 10:00	09/28/21 17:56	7439-95-4	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA							
Boron	ND	mg/L	0.040	1	09/28/21 09:20	09/28/21 18:35	7440-42-8	
Cobalt	ND	mg/L	0.0050	1	09/28/21 09:20	09/28/21 18:35	7440-48-4	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Peachtree Corners, GA							
Total Dissolved Solids	**61.0**	mg/L	10.0	1		09/29/21 19:08		
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville							
Alkalinity,Bicarbonate (CaCO3)	**33.2**	mg/L	5.0	1		09/27/21 18:12		
Alkalinity, Total as CaCO3	**33.2**	mg/L	5.0	1		09/27/21 18:12		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville							
Chloride	**3.1**	mg/L	1.0	1		09/27/21 00:20	16887-00-6	
Fluoride	ND	mg/L	0.10	1		09/27/21 00:20	16984-48-8	
Sulfate	**1.8**	mg/L	1.0	1		09/27/21 00:20	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Plant Branch CCR-Ash Pond
Pace Project No.: 92563212

Sample: LR-1 (Bottom) **Lab ID: 92563212003** Collected: 09/23/21 10:55 Received: 09/24/21 08:24 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA							
Potassium	**2.4**	mg/L	0.20	1	09/28/21 10:00	09/28/21 18:01	7440-09-7	
Sodium	**4.5**	mg/L	1.0	1	09/28/21 10:00	09/28/21 18:01	7440-23-5	
Calcium	**4.7**	mg/L	1.0	1	09/28/21 10:00	09/28/21 18:01	7440-70-2	
Magnesium	**2.6**	mg/L	0.050	1	09/28/21 10:00	09/28/21 18:01	7439-95-4	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA							
Boron	ND	mg/L	0.040	1	09/28/21 09:20	09/28/21 18:57	7440-42-8	
Cobalt	ND	mg/L	0.0050	1	09/28/21 09:20	09/28/21 18:57	7440-48-4	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Peachtree Corners, GA							
Total Dissolved Solids	**63.0**	mg/L	10.0	1		09/29/21 19:08		
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville							
Alkalinity,Bicarbonate (CaCO3)	**32.0**	mg/L	5.0	1		09/27/21 18:18		
Alkalinity, Total as CaCO3	**32.0**	mg/L	5.0	1		09/27/21 18:18		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville							
Chloride	**3.1**	mg/L	1.0	1		09/27/21 00:35	16887-00-6	
Fluoride	ND	mg/L	0.10	1		09/27/21 00:35	16984-48-8	
Sulfate	**1.8**	mg/L	1.0	1		09/27/21 00:35	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Plant Branch CCR-Ash Pond
Pace Project No.: 92563212

Sample: LR+8A (Surface) **Lab ID: 92563212004** Collected: 09/23/21 10:35 Received: 09/24/21 08:24 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA							
Potassium	**2.6**	mg/L	0.20	1	09/28/21 10:00	09/28/21 18:06	7440-09-7	
Sodium	**4.9**	mg/L	1.0	1	09/28/21 10:00	09/28/21 18:06	7440-23-5	
Calcium	**5.0**	mg/L	1.0	1	09/28/21 10:00	09/28/21 18:06	7440-70-2	
Magnesium	**2.6**	mg/L	0.050	1	09/28/21 10:00	09/28/21 18:06	7439-95-4	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA							
Boron	ND	mg/L	0.040	1	09/28/21 09:20	09/28/21 19:03	7440-42-8	
Cobalt	ND	mg/L	0.0050	1	09/28/21 09:20	09/28/21 19:03	7440-48-4	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Peachtree Corners, GA							
Total Dissolved Solids	**61.0**	mg/L	10.0	1		09/29/21 19:08		
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville							
Alkalinity,Bicarbonate (CaCO3)	**31.9**	mg/L	5.0	1		09/27/21 18:32		
Alkalinity, Total as CaCO3	**31.9**	mg/L	5.0	1		09/27/21 18:32		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville							
Chloride	**3.4**	mg/L	1.0	1		09/27/21 00:50	16887-00-6	
Fluoride	ND	mg/L	0.10	1		09/27/21 00:50	16984-48-8	
Sulfate	**2.3**	mg/L	1.0	1		09/27/21 00:50	14808-79-8	

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ANALYTICAL RESULTS

Project: Plant Branch CCR-Ash Pond
Pace Project No.: 92563212

Sample: LR+9A (Surface) **Lab ID: 92563212005** Collected: 09/23/21 10:42 Received: 09/24/21 08:24 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA							
Potassium	**2.6**	mg/L	0.20	1	09/28/21 10:00	09/28/21 18:11	7440-09-7	
Sodium	**5.0**	mg/L	1.0	1	09/28/21 10:00	09/28/21 18:11	7440-23-5	
Calcium	**5.0**	mg/L	1.0	1	09/28/21 10:00	09/28/21 18:11	7440-70-2	
Magnesium	**2.6**	mg/L	0.050	1	09/28/21 10:00	09/28/21 18:11	7439-95-4	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA							
Boron	ND	mg/L	0.040	1	09/28/21 09:20	09/28/21 19:09	7440-42-8	
Cobalt	ND	mg/L	0.0050	1	09/28/21 09:20	09/28/21 19:09	7440-48-4	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Peachtree Corners, GA							
Total Dissolved Solids	**56.0**	mg/L	10.0	1		09/29/21 19:09		
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville							
Alkalinity,Bicarbonate (CaCO3)	**31.8**	mg/L	5.0	1		09/27/21 18:38		
Alkalinity, Total as CaCO3	**31.8**	mg/L	5.0	1		09/27/21 18:38		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville							
Chloride	**3.4**	mg/L	1.0	1		09/27/21 01:05	16887-00-6	
Fluoride	ND	mg/L	0.10	1		09/27/21 01:05	16984-48-8	
Sulfate	**2.3**	mg/L	1.0	1		09/27/21 01:05	14808-79-8	

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ANALYTICAL RESULTS

Project: Plant Branch CCR-Ash Pond
Pace Project No.: 92563212

Sample: LR+8 (Surface) **Lab ID: 92563212006** Collected: 09/23/21 10:22 Received: 09/24/21 08:24 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA							
Potassium	**2.7**	mg/L	0.20	1	09/28/21 10:00	09/28/21 18:15	7440-09-7	
Sodium	**5.2**	mg/L	1.0	1	09/28/21 10:00	09/28/21 18:15	7440-23-5	
Calcium	**5.3**	mg/L	1.0	1	09/28/21 10:00	09/28/21 18:15	7440-70-2	
Magnesium	**2.6**	mg/L	0.050	1	09/28/21 10:00	09/28/21 18:15	7439-95-4	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA							
Boron	ND	mg/L	0.040	1	09/28/21 09:20	09/28/21 19:26	7440-42-8	
Cobalt	ND	mg/L	0.0050	1	09/28/21 09:20	09/28/21 19:26	7440-48-4	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Peachtree Corners, GA							
Total Dissolved Solids	**56.0**	mg/L	10.0	1		09/29/21 19:09		
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville							
Alkalinity,Bicarbonate (CaCO3)	**31.5**	mg/L	5.0	1		09/27/21 18:44		
Alkalinity, Total as CaCO3	**31.5**	mg/L	5.0	1		09/27/21 18:44		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville							
Chloride	**3.3**	mg/L	1.0	1		09/27/21 01:20	16887-00-6	
Fluoride	ND	mg/L	0.10	1		09/27/21 01:20	16984-48-8	
Sulfate	**2.2**	mg/L	1.0	1		09/27/21 01:20	14808-79-8	

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ANALYTICAL RESULTS

Project: Plant Branch CCR-Ash Pond
Pace Project No.: 92563212

Sample: LR+8 (Mid) **Lab ID: 92563212007** Collected: 09/23/21 10:22 Received: 09/24/21 08:24 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA							
Potassium	**2.6**	mg/L	0.20	1	09/28/21 10:00	09/28/21 18:20	7440-09-7	
Sodium	**5.1**	mg/L	1.0	1	09/28/21 10:00	09/28/21 18:20	7440-23-5	
Calcium	**5.2**	mg/L	1.0	1	09/28/21 10:00	09/28/21 18:20	7440-70-2	
Magnesium	**2.6**	mg/L	0.050	1	09/28/21 10:00	09/28/21 18:20	7439-95-4	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA							
Boron	ND	mg/L	0.040	1	09/28/21 09:20	09/28/21 19:32	7440-42-8	
Cobalt	ND	mg/L	0.0050	1	09/28/21 09:20	09/28/21 19:32	7440-48-4	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Peachtree Corners, GA							
Total Dissolved Solids	**65.0**	mg/L	10.0	1		09/29/21 19:09		
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville							
Alkalinity,Bicarbonate (CaCO3)	**31.9**	mg/L	5.0	1		09/27/21 18:50		
Alkalinity, Total as CaCO3	**31.9**	mg/L	5.0	1		09/27/21 18:50		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville							
Chloride	**3.3**	mg/L	1.0	1		09/27/21 02:05	16887-00-6	
Fluoride	ND	mg/L	0.10	1		09/27/21 02:05	16984-48-8	
Sulfate	**2.2**	mg/L	1.0	1		09/27/21 02:05	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 CCR-Ash Pond
Pace Project No.: 92563212

Sample: LR+8 (Bottom) **Lab ID: 92563212008** Collected: 09/23/21 10:22 Received: 09/24/21 08:24 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA							
Potassium	**2.5**	mg/L	0.20	1	09/28/21 10:00	09/28/21 18:25	7440-09-7	
Sodium	**5.0**	mg/L	1.0	1	09/28/21 10:00	09/28/21 18:25	7440-23-5	
Calcium	**5.0**	mg/L	1.0	1	09/28/21 10:00	09/28/21 18:25	7440-70-2	
Magnesium	**2.6**	mg/L	0.050	1	09/28/21 10:00	09/28/21 18:25	7439-95-4	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA							
Boron	ND	mg/L	0.040	1	09/28/21 09:20	09/28/21 19:37	7440-42-8	
Cobalt	ND	mg/L	0.0050	1	09/28/21 09:20	09/28/21 19:37	7440-48-4	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Peachtree Corners, GA							
Total Dissolved Solids	**54.0**	mg/L	10.0	1		09/29/21 19:09		
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville							
Alkalinity,Bicarbonate (CaCO3)	**32.7**	mg/L	5.0	1		09/27/21 18:55		
Alkalinity, Total as CaCO3	**32.7**	mg/L	5.0	1		09/27/21 18:55		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville							
Chloride	**3.4**	mg/L	1.0	1		09/27/21 02:20	16887-00-6	
Fluoride	ND	mg/L	0.10	1		09/27/21 02:20	16984-48-8	
Sulfate	**2.2**	mg/L	1.0	1		09/27/21 02:20	14808-79-8	

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ANALYTICAL RESULTS

Project: Plant Branch CCR-Ash Pond
Pace Project No.: 92563212

Sample: LR+9 (Surface) **Lab ID: 92563212009** Collected: 09/23/21 10:10 Received: 09/24/21 08:24 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA							
Potassium	**2.6**	mg/L	0.20	1	09/28/21 10:00	09/28/21 18:42	7440-09-7	
Sodium	**5.1**	mg/L	1.0	1	09/28/21 10:00	09/28/21 18:42	7440-23-5	
Calcium	**5.2**	mg/L	1.0	1	09/28/21 10:00	09/28/21 18:42	7440-70-2	
Magnesium	**2.6**	mg/L	0.050	1	09/28/21 10:00	09/28/21 18:42	7439-95-4	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA							
Boron	ND	mg/L	0.040	1	09/28/21 09:20	09/28/21 19:43	7440-42-8	
Cobalt	ND	mg/L	0.0050	1	09/28/21 09:20	09/28/21 19:43	7440-48-4	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Peachtree Corners, GA							
Total Dissolved Solids	**50.0**	mg/L	10.0	1		09/29/21 19:09		
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville							
Alkalinity,Bicarbonate (CaCO3)	**32.8**	mg/L	5.0	1		09/27/21 19:01		
Alkalinity, Total as CaCO3	**32.8**	mg/L	5.0	1		09/27/21 19:01		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville							
Chloride	**3.4**	mg/L	1.0	1		09/27/21 02:35	16887-00-6	
Fluoride	ND	mg/L	0.10	1		09/27/21 02:35	16984-48-8	
Sulfate	**2.3**	mg/L	1.0	1		09/27/21 02:35	14808-79-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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ANALYTICAL RESULTS

Project: Plant Branch CCR-Ash Pond
Pace Project No.: 92563212

Sample: LR+9 (Mid) **Lab ID: 92563212010** Collected: 09/23/21 10:10 Received: 09/24/21 08:24 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA							
Potassium	**2.5**	mg/L	0.20	1	09/28/21 10:00	09/28/21 18:47	7440-09-7	
Sodium	**5.0**	mg/L	1.0	1	09/28/21 10:00	09/28/21 18:47	7440-23-5	
Calcium	**5.0**	mg/L	1.0	1	09/28/21 10:00	09/28/21 18:47	7440-70-2	
Magnesium	**2.5**	mg/L	0.050	1	09/28/21 10:00	09/28/21 18:47	7439-95-4	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA							
Boron	ND	mg/L	0.040	1	09/28/21 09:20	09/28/21 19:49	7440-42-8	
Cobalt	ND	mg/L	0.0050	1	09/28/21 09:20	09/28/21 19:49	7440-48-4	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Peachtree Corners, GA							
Total Dissolved Solids	**58.0**	mg/L	10.0	1		09/29/21 19:09		
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville							
Alkalinity,Bicarbonate (CaCO3)	**33.0**	mg/L	5.0	1		09/27/21 19:19		
Alkalinity, Total as CaCO3	**33.0**	mg/L	5.0	1		09/27/21 19:19		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville							
Chloride	**3.4**	mg/L	1.0	1		09/27/21 02:50	16887-00-6	
Fluoride	ND	mg/L	0.10	1		09/27/21 02:50	16984-48-8	
Sulfate	**2.3**	mg/L	1.0	1		09/27/21 02:50	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Plant Branch CCR-Ash Pond
Pace Project No.: 92563212

Sample: LR+9 (Bottom) **Lab ID: 92563212011** Collected: 09/23/21 10:10 Received: 09/24/21 08:24 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA							
Potassium	**2.5**	mg/L	0.20	1	09/28/21 10:00	09/28/21 18:52	7440-09-7	
Sodium	**4.9**	mg/L	1.0	1	09/28/21 10:00	09/28/21 18:52	7440-23-5	
Calcium	**4.9**	mg/L	1.0	1	09/28/21 10:00	09/28/21 18:52	7440-70-2	
Magnesium	**2.5**	mg/L	0.050	1	09/28/21 10:00	09/28/21 18:52	7439-95-4	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA							
Boron	ND	mg/L	0.040	1	09/28/21 09:20	09/28/21 19:55	7440-42-8	
Cobalt	ND	mg/L	0.0050	1	09/28/21 09:20	09/28/21 19:55	7440-48-4	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Peachtree Corners, GA							
Total Dissolved Solids	**57.0**	mg/L	10.0	1		09/29/21 19:09		
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville							
Alkalinity,Bicarbonate (CaCO3)	**33.5**	mg/L	5.0	1		09/27/21 19:24		
Alkalinity, Total as CaCO3	**33.5**	mg/L	5.0	1		09/27/21 19:24		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville							
Chloride	**3.4**	mg/L	1.0	1		09/27/21 03:05	16887-00-6	
Fluoride	ND	mg/L	0.10	1		09/27/21 03:05	16984-48-8	
Sulfate	**2.3**	mg/L	1.0	1		09/27/21 03:05	14808-79-8	M1

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Plant Branch CCR-Ash Pond
Pace Project No.: 92563212

Sample: LR-10 (Surface) **Lab ID: 92563212012** Collected: 09/23/21 09:51 Received: 09/24/21 08:24 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA							
Potassium	**2.5**	mg/L	0.20	1	09/28/21 10:00	09/28/21 18:56	7440-09-7	
Sodium	**4.8**	mg/L	1.0	1	09/28/21 10:00	09/28/21 18:56	7440-23-5	
Calcium	**4.8**	mg/L	1.0	1	09/28/21 10:00	09/28/21 18:56	7440-70-2	
Magnesium	**2.5**	mg/L	0.050	1	09/28/21 10:00	09/28/21 18:56	7439-95-4	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA							
Boron	ND	mg/L	0.040	1	09/28/21 09:20	09/28/21 20:00	7440-42-8	
Cobalt	ND	mg/L	0.0050	1	09/28/21 09:20	09/28/21 20:00	7440-48-4	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Peachtree Corners, GA							
Total Dissolved Solids	**60.0**	mg/L	10.0	1		09/29/21 19:09		
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville							
Alkalinity,Bicarbonate (CaCO3)	**32.9**	mg/L	5.0	1		09/27/21 19:39		
Alkalinity, Total as CaCO3	**32.9**	mg/L	5.0	1		09/27/21 19:39		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville							
Chloride	**3.5**	mg/L	1.0	1		09/27/21 03:50	16887-00-6	
Fluoride	ND	mg/L	0.10	1		09/27/21 03:50	16984-48-8	
Sulfate	**2.4**	mg/L	1.0	1		09/27/21 03:50	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Plant Branch CCR-Ash Pond
Pace Project No.: 92563212

Sample: LR-10 (Mid) **Lab ID: 92563212013** Collected: 09/23/21 09:51 Received: 09/24/21 08:24 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA							
Potassium	**2.4**	mg/L	0.20	1	09/28/21 10:00	09/28/21 19:01	7440-09-7	
Sodium	**4.8**	mg/L	1.0	1	09/28/21 10:00	09/28/21 19:01	7440-23-5	
Calcium	**4.8**	mg/L	1.0	1	09/28/21 10:00	09/28/21 19:01	7440-70-2	
Magnesium	**2.5**	mg/L	0.050	1	09/28/21 10:00	09/28/21 19:01	7439-95-4	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA							
Boron	ND	mg/L	0.040	1	09/28/21 09:20	09/28/21 20:06	7440-42-8	
Cobalt	ND	mg/L	0.0050	1	09/28/21 09:20	09/28/21 20:06	7440-48-4	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Peachtree Corners, GA							
Total Dissolved Solids	**53.0**	mg/L	10.0	1		09/29/21 19:09		
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville							
Alkalinity,Bicarbonate (CaCO3)	**33.0**	mg/L	5.0	1		09/27/21 19:44		
Alkalinity, Total as CaCO3	**33.0**	mg/L	5.0	1		09/27/21 19:44		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville							
Chloride	**3.5**	mg/L	1.0	1		09/27/21 04:05	16887-00-6	
Fluoride	ND	mg/L	0.10	1		09/27/21 04:05	16984-48-8	
Sulfate	**2.4**	mg/L	1.0	1		09/27/21 04:05	14808-79-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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ANALYTICAL RESULTS

Project: Plant Branch CCR-Ash Pond
Pace Project No.: 92563212

Sample: LR-10 (Bottom) **Lab ID: 92563212014** Collected: 09/23/21 09:51 Received: 09/24/21 08:24 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA							
Potassium	**2.6**	mg/L	0.20	1	09/28/21 10:00	09/28/21 19:06	7440-09-7	
Sodium	**4.8**	mg/L	1.0	1	09/28/21 10:00	09/28/21 19:06	7440-23-5	
Calcium	**4.9**	mg/L	1.0	1	09/28/21 10:00	09/28/21 19:06	7440-70-2	
Magnesium	**2.5**	mg/L	0.050	1	09/28/21 10:00	09/28/21 19:06	7439-95-4	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA							
Boron	ND	mg/L	0.040	1	09/28/21 09:20	09/28/21 20:12	7440-42-8	
Cobalt	ND	mg/L	0.0050	1	09/28/21 09:20	09/28/21 20:12	7440-48-4	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Peachtree Corners, GA							
Total Dissolved Solids	**53.0**	mg/L	10.0	1		09/29/21 19:09		
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville							
Alkalinity,Bicarbonate (CaCO3)	**32.6**	mg/L	5.0	1		09/27/21 19:50		
Alkalinity, Total as CaCO3	**32.6**	mg/L	5.0	1		09/27/21 19:50		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville							
Chloride	**3.5**	mg/L	1.0	1		09/27/21 04:20	16887-00-6	
Fluoride	ND	mg/L	0.10	1		09/27/21 04:20	16984-48-8	
Sulfate	**2.4**	mg/L	1.0	1		09/27/21 04:20	14808-79-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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QUALITY CONTROL DATA

Project: Plant Branch CCR-Ash Pond
Pace Project No.: 92563212

QC Batch: 649634
QC Batch Method: EPA 3010A
Analysis Method: EPA 6010D
Analysis Description: 6010D ATL
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92563212001, 92563212002, 92563212003, 92563212004, 92563212005, 92563212006, 92563212007, 92563212008, 92563212009, 92563212010, 92563212011, 92563212012, 92563212013, 92563212014

METHOD BLANK: 3406953 Matrix: Water
Associated Lab Samples: 92563212001, 92563212002, 92563212003, 92563212004, 92563212005, 92563212006, 92563212007, 92563212008, 92563212009, 92563212010, 92563212011, 92563212012, 92563212013, 92563212014

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Calcium	mg/L	ND	1.0	09/28/21 14:47	
Magnesium	mg/L	ND	0.050	09/28/21 14:47	
Potassium	mg/L	ND	0.20	09/28/21 14:47	
Sodium	mg/L	ND	1.0	09/28/21 14:47	

LABORATORY CONTROL SAMPLE: 3406954

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium	mg/L	1	1.1	110	80-120	
Magnesium	mg/L	1	1.1	106	80-120	
Potassium	mg/L	1	1.1	113	80-120	
Sodium	mg/L	1	1.1	109	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3406955 3406956

Parameter	Units	92563212001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Calcium	mg/L	5.0	1	1	6.0	6.3	95	126	75-125	5	20	M1
Magnesium	mg/L	2.5	1	1	3.6	3.7	109	113	75-125	1	20	
Potassium	mg/L	2.5	1	1	3.5	3.6	99	116	75-125	5	20	
Sodium	mg/L	4.7	1	1	5.7	6.0	107	134	75-125	5	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
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QUALITY CONTROL DATA

Project: Plant Branch CCR-Ash Pond
Pace Project No.: 92563212

QC Batch: 649637
QC Batch Method: EPA 3005A
Analysis Method: EPA 6020B
Analysis Description: 6020 MET
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92563212001, 92563212002, 92563212003, 92563212004, 92563212005, 92563212006, 92563212007, 92563212008, 92563212009, 92563212010, 92563212011, 92563212012, 92563212013, 92563212014

METHOD BLANK: 3406966 Matrix: Water
Associated Lab Samples: 92563212001, 92563212002, 92563212003, 92563212004, 92563212005, 92563212006, 92563212007, 92563212008, 92563212009, 92563212010, 92563212011, 92563212012, 92563212013, 92563212014

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Boron	mg/L	ND	0.040	09/28/21 18:17	
Cobalt	mg/L	ND	0.0050	09/28/21 18:17	

LABORATORY CONTROL SAMPLE: 3406967

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Boron	mg/L	1	0.95	95	80-120	
Cobalt	mg/L	0.1	0.10	102	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3406968 3406969

Parameter	Units	92563212002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Boron	mg/L	ND	1	1	1.0	0.99	101	98	75-125	3	20	
Cobalt	mg/L	ND	0.1	0.1	0.10	0.10	103	103	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 CCR-Ash Pond
Pace Project No.: 92563212

QC Batch: 649984
QC Batch Method: SM 2540C-2011
Analysis Method: SM 2540C-2011
Analysis Description: 2540C Total Dissolved Solids
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92563212001, 92563212002, 92563212003, 92563212004, 92563212005, 92563212006, 92563212007, 92563212008, 92563212009, 92563212010, 92563212011, 92563212012, 92563212013, 92563212014

METHOD BLANK: 3409087 Matrix: Water
Associated Lab Samples: 92563212001, 92563212002, 92563212003, 92563212004, 92563212005, 92563212006, 92563212007, 92563212008, 92563212009, 92563212010, 92563212011, 92563212012, 92563212013, 92563212014

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	10.0	09/29/21 19:07	

LABORATORY CONTROL SAMPLE: 3409088

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	406	102	90-111	

SAMPLE DUPLICATE: 3409089

Parameter	Units	92563085003 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	65.0	88.0	30	10	D6

SAMPLE DUPLICATE: 3409090

Parameter	Units	92563212005 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	56.0	53.0	6	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

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

QUALITY CONTROL DATA

Project: Plant Branch CCR-Ash Pond
Pace Project No.: 92563212

QC Batch: 649465
QC Batch Method: SM 2320B-2011
Analysis Method: SM 2320B-2011
Analysis Description: 2320B Alkalinity
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92563212001, 92563212002, 92563212003, 92563212004, 92563212005, 92563212006, 92563212007, 92563212008, 92563212009, 92563212010, 92563212011, 92563212012, 92563212013, 92563212014

METHOD BLANK: 3406338 Matrix: Water
Associated Lab Samples: 92563212001, 92563212002, 92563212003, 92563212004, 92563212005, 92563212006, 92563212007, 92563212008, 92563212009, 92563212010, 92563212011, 92563212012, 92563212013, 92563212014

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Alkalinity, Total as CaCO3	mg/L	ND	5.0	09/27/21 17:30	
Alkalinity,Bicarbonate (CaCO3)	mg/L	ND	5.0	09/27/21 17:30	

LABORATORY CONTROL SAMPLE: 3406339

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	50	50.8	102	80-120	

LABORATORY CONTROL SAMPLE: 3406340

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	50	52.3	105	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3406341 3406342

Parameter	Units	92562667004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Alkalinity, Total as CaCO3	mg/L	ND	50	50	21.9	20.8	44	42	80-120	5	25	M1

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3406343 3406344

Parameter	Units	92563212009 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Alkalinity, Total as CaCO3	mg/L	32.8	50	50	83.8	83.8	102	102	80-120	0	25	

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

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: Plant Branch CCR-Ash Pond
Pace Project No.: 92563212

QC Batch: 649414
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
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92563212001, 92563212002, 92563212003, 92563212004, 92563212005, 92563212006, 92563212007, 92563212008, 92563212009, 92563212010, 92563212011, 92563212012, 92563212013, 92563212014

METHOD BLANK: 3406122 Matrix: Water
Associated Lab Samples: 92563212001, 92563212002, 92563212003, 92563212004, 92563212005, 92563212006, 92563212007, 92563212008, 92563212009, 92563212010, 92563212011, 92563212012, 92563212013, 92563212014

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	09/26/21 23:06	
Fluoride	mg/L	ND	0.10	09/26/21 23:06	
Sulfate	mg/L	ND	1.0	09/26/21 23:06	

LABORATORY CONTROL SAMPLE: 3406123

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	48.2	96	90-110	
Fluoride	mg/L	2.5	2.3	93	90-110	
Sulfate	mg/L	50	49.8	100	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3406124 3406125

Parameter	Units	92563212001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	3.1	50	50	56.2	57.0	106	108	90-110	1	10	
Fluoride	mg/L	ND	2.5	2.5	2.7	2.7	104	105	90-110	1	10	
Sulfate	mg/L	1.8	50	50	56.4	57.2	109	111	90-110	1	10	M1

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3406126 3406127

Parameter	Units	92563212011 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	3.4	50	50	56.8	57.8	107	109	90-110	2	10	
Fluoride	mg/L	ND	2.5	2.5	2.7	2.7	104	106	90-110	2	10	
Sulfate	mg/L	2.3	50	50	57.2	58.2	110	112	90-110	2	10	M1

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

REPORT OF LABORATORY ANALYSIS

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

QUALIFIERS

Project: Plant Branch CCR-Ash Pond
Pace Project No.: 92563212

DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

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

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

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

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

Acid preservation may not be appropriate for 2 Chloroethylvinyl ether.

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

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

Reported results are not rounded until the final step prior to reporting. Therefore, calculated parameters that are typically reported as "Total" may vary slightly from the sum of the reported component parameters.

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

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

D6	The precision between the sample and sample duplicate exceeded laboratory control limits.
M1	Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

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

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Plant Branch CCR-Ash Pond
Pace Project No.: 92563212

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92563212001	**LR-1 (Surface)**	EPA 3010A	649634	EPA 6010D	649673
92563212002	**LR-1 (Mid)**	EPA 3010A	649634	EPA 6010D	649673
92563212003	**LR-1 (Bottom)**	EPA 3010A	649634	EPA 6010D	649673
92563212004	**LR+8A (Surface)**	EPA 3010A	649634	EPA 6010D	649673
92563212005	**LR+9A (Surface)**	EPA 3010A	649634	EPA 6010D	649673
92563212006	**LR+8 (Surface)**	EPA 3010A	649634	EPA 6010D	649673
92563212007	**LR+8 (Mid)**	EPA 3010A	649634	EPA 6010D	649673
92563212008	**LR+8 (Bottom)**	EPA 3010A	649634	EPA 6010D	649673
92563212009	**LR+9 (Surface)**	EPA 3010A	649634	EPA 6010D	649673
92563212010	**LR+9 (Mid)**	EPA 3010A	649634	EPA 6010D	649673
92563212011	**LR+9 (Bottom)**	EPA 3010A	649634	EPA 6010D	649673
92563212012	**LR-10 (Surface)**	EPA 3010A	649634	EPA 6010D	649673
92563212013	**LR-10 (Mid)**	EPA 3010A	649634	EPA 6010D	649673
92563212014	**LR-10 (Bottom)**	EPA 3010A	649634	EPA 6010D	649673
92563212001	**LR-1 (Surface)**	EPA 3005A	649637	EPA 6020B	649678
92563212002	**LR-1 (Mid)**	EPA 3005A	649637	EPA 6020B	649678
92563212003	**LR-1 (Bottom)**	EPA 3005A	649637	EPA 6020B	649678
92563212004	**LR+8A (Surface)**	EPA 3005A	649637	EPA 6020B	649678
92563212005	**LR+9A (Surface)**	EPA 3005A	649637	EPA 6020B	649678
92563212006	**LR+8 (Surface)**	EPA 3005A	649637	EPA 6020B	649678
92563212007	**LR+8 (Mid)**	EPA 3005A	649637	EPA 6020B	649678
92563212008	**LR+8 (Bottom)**	EPA 3005A	649637	EPA 6020B	649678
92563212009	**LR+9 (Surface)**	EPA 3005A	649637	EPA 6020B	649678
92563212010	**LR+9 (Mid)**	EPA 3005A	649637	EPA 6020B	649678
92563212011	**LR+9 (Bottom)**	EPA 3005A	649637	EPA 6020B	649678
92563212012	**LR-10 (Surface)**	EPA 3005A	649637	EPA 6020B	649678
92563212013	**LR-10 (Mid)**	EPA 3005A	649637	EPA 6020B	649678
92563212014	**LR-10 (Bottom)**	EPA 3005A	649637	EPA 6020B	649678
92563212001	**LR-1 (Surface)**	SM 2540C-2011	649984		
92563212002	**LR-1 (Mid)**	SM 2540C-2011	649984		
92563212003	**LR-1 (Bottom)**	SM 2540C-2011	649984		
92563212004	**LR+8A (Surface)**	SM 2540C-2011	649984		
92563212005	**LR+9A (Surface)**	SM 2540C-2011	649984		
92563212006	**LR+8 (Surface)**	SM 2540C-2011	649984		
92563212007	**LR+8 (Mid)**	SM 2540C-2011	649984		
92563212008	**LR+8 (Bottom)**	SM 2540C-2011	649984		
92563212009	**LR+9 (Surface)**	SM 2540C-2011	649984		
92563212010	**LR+9 (Mid)**	SM 2540C-2011	649984		
92563212011	**LR+9 (Bottom)**	SM 2540C-2011	649984		
92563212012	**LR-10 (Surface)**	SM 2540C-2011	649984		
92563212013	**LR-10 (Mid)**	SM 2540C-2011	649984		
92563212014	**LR-10 (Bottom)**	SM 2540C-2011	649984		
92563212001	**LR-1 (Surface)**	SM 2320B-2011	649465		
92563212002	**LR-1 (Mid)**	SM 2320B-2011	649465		
92563212003	**LR-1 (Bottom)**	SM 2320B-2011	649465		
92563212004	**LR+8A (Surface)**	SM 2320B-2011	649465		
92563212005	**LR+9A (Surface)**	SM 2320B-2011	649465		

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

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Plant Branch CCR-Ash Pond
Pace Project No.: 92563212

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92563212006	**LR+8 (Surface)**	SM 2320B-2011	649465		
92563212007	**LR+8 (Mid)**	SM 2320B-2011	649465		
92563212008	**LR+8 (Bottom)**	SM 2320B-2011	649465		
92563212009	**LR+9 (Surface)**	SM 2320B-2011	649465		
92563212010	**LR+9 (Mid)**	SM 2320B-2011	649465		
92563212011	**LR+9 (Bottom)**	SM 2320B-2011	649465		
92563212012	**LR-10 (Surface)**	SM 2320B-2011	649465		
92563212013	**LR-10 (Mid)**	SM 2320B-2011	649465		
92563212014	**LR-10 (Bottom)**	SM 2320B-2011	649465		
92563212001	**LR-1 (Surface)**	EPA 300.0 Rev 2.1 1993	649414		
92563212002	**LR-1 (Mid)**	EPA 300.0 Rev 2.1 1993	649414		
92563212003	**LR-1 (Bottom)**	EPA 300.0 Rev 2.1 1993	649414		
92563212004	**LR+8A (Surface)**	EPA 300.0 Rev 2.1 1993	649414		
92563212005	**LR+9A (Surface)**	EPA 300.0 Rev 2.1 1993	649414		
92563212006	**LR+8 (Surface)**	EPA 300.0 Rev 2.1 1993	649414		
92563212007	**LR+8 (Mid)**	EPA 300.0 Rev 2.1 1993	649414		
92563212008	**LR+8 (Bottom)**	EPA 300.0 Rev 2.1 1993	649414		
92563212009	**LR+9 (Surface)**	EPA 300.0 Rev 2.1 1993	649414		
92563212010	**LR+9 (Mid)**	EPA 300.0 Rev 2.1 1993	649414		
92563212011	**LR+9 (Bottom)**	EPA 300.0 Rev 2.1 1993	649414		
92563212012	**LR-10 (Surface)**	EPA 300.0 Rev 2.1 1993	649414		
92563212013	**LR-10 (Mid)**	EPA 300.0 Rev 2.1 1993	649414		
92563212014	**LR-10 (Bottom)**	EPA 300.0 Rev 2.1 1993	649414		

CHAIN-OF-CUSTODY / Analytical Request Document

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

Page : 1 Of 2

WO# : 92563212

Item #	Sample ID	Matrix Code	Sample Type	Collected Start Date	Collected Start Time	Collected End Date	Collected End Time	COC Analysis	Analysis	Analysis
1	[illegible]	WT	G	[illegible]	0945			•	•	•
2	[illegible]	WT	G	[illegible]	0955			•	•	•
3	[illegible]	WT	G	[illegible]	1155			•	•	•
4	[illegible]	WT	G	[illegible]	1005			•	•	•
5	[illegible]	WT	G	[illegible]	[illegible]			•	•	•
6	[illegible]	WT	G	[illegible]	[illegible]			•	•	•
7	[illegible]	WT	G	[illegible]	1015			•	•	•
8	[illegible]	WT	G	[illegible]	[illegible]			•	•	•
9	[illegible]	WT	G	[illegible]	[illegible]			•	•	•
10	[illegible]	WT	G	[illegible]	[illegible]			•	•	•
11	[illegible]	WT	G	[illegible]	1410			•	•	•
12	[illegible]	WT	G	[illegible]	[illegible]			•	•	•

Additional Comments	Relinquished by / Affiliation	Date	Time	Accepted by / Affiliation	Date	Time
[illegible]	[signature]	7/[illegible]	0844	[signature]	[illegible]	0834

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: [signature] Date: 7-23-21

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

Regulatory Agency

WO# : 92563212

PM: [illegible] Due Date: 10/01/21

CLIENT: [illegible]

SAMPLE ID

ITEM #	SAMPLE ID	COLLECTED START DATE	TIME	END DATE	TIME	Analyses Test	Y/N
1	[illegible]	[illegible]	0854				
2	[illegible]	[illegible]	0851				
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							

Preservatives: Unpreserved, H_2SO_4, HNO_3, HCl, NaOH, $Na_2S_2O_3$, Methanol, Other

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
[illegible]	[signature]	9/[illegible]	0834	[signature]	9/[illegible]	0824	

SAMPLER NAME AND SIGNATURE

[signature] 9-22-21

Pace Analytical	Document Name: Sample Condition Upon Receipt(SCUR)	Document Revised: October 28, 2020 Page 1 of 2
	Document No.: F-CAR-CS-033-Rev.07	Issuing Authority: Pace Carolinas Quality Office

Laboratory receiving samples:
Asheville ☐ Eden ☐ Greenwood ☐ Huntersville ☐ Raleigh ☐ Mechanicsville ☐ Atlanta ☑ Kernersville ☐

Sample Condition Upon Receipt

Client Name: Arcadis Atlanta

Project #

WO# : 92563212

PM: ## Due Date: 10/01/21

CLIENT: GA-ArcadisATL

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

Custody Seal Present? ☐ Yes ☑ No Seals Intact? ☐ Yes ☐ No

Date/Initials Person Examining Contents: 9/24/21 CJW

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

Biological Tissue Frozen? ☐ Yes ☐ No ☑ N/A

Thermometer: ☑ Gun ID: 083

Type of Ice: ☑ Wet ☐ Blue ☐ None

Cooler Temp: 5.2

Correction Factor: Add/Subtract (°C) 0.0

Temp should be above freezing to 6°C
☐ Samples out of temp criteria. Samples on ice, cooling process has begun

Cooler Temp Corrected (°C): 5.2

USDA Regulated Soil: (☐ N/A, water sample)

Did samples originate in a quarantine zone within the United States: CA, NY, or SC (check maps)? ☐ Yes ☐ No

Did samples originate from a foreign source (internationally, including Hawaii and Puerto Rico)? ☐ Yes ☐ No

				Comments/Discrepancy:
Chain of Custody Present?	☑ Yes	☐ No	☐ N/A	1.
Samples Arrived within Hold Time?	☑ Yes	☐ No	☐ N/A	2.
Short Hold Time Analysis (<72 hr.)?	☐ Yes	☑ No	☐ N/A	3.
Rush Turn Around Time Requested?	☐ Yes	☑ No	☐ N/A	4.
Sufficient Volume?	☑ Yes	☐ No	☐ N/A	5.
Correct Containers Used?	☑ Yes	☐ No	☐ N/A	6.
-Pace Containers Used?	☑ Yes	☐ No	☐ N/A	
Containers Intact?	☑ Yes	☐ No	☐ N/A	7.
Dissolved analysis: Samples Field Filtered?	☐ Yes	☐ No	☑ N/A	8.
Sample Labels Match COC?	☑ Yes	☐ No	☐ N/A	9.
-Includes Date/Time/ID/Analysis Matrix: W				
Headspace in VOA Vials (>5-6mm)?	☐ Yes	☐ No	☑ N/A	10.
Trip Blank Present?	☐ Yes	☐ No	☑ N/A	11.
Trip Blank Custody Seals Present?	☐ Yes	☐ No	☑ N/A	

COMMENTS/SAMPLE DISCREPANCY

Field Data Required? ☐ Yes ☐ No

Lot ID of split containers:

CLIENT NOTIFICATION/RESOLUTION

Person contacted: ____________ Date/Time: ____________

Project Manager SCURF Review: ____________ Date: ____________

Project Manager SRF Review: ____________ Date: ____________

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

Exceptions: [illegible]

**Bottom half of box is to list number of bottles

Project #

WO#: 92563212

PM: NF Due Date: 10/01/23

CLIENT: GA-Arcadis

Sample	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
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: [illegible]
Out of hold, incorrect preservative, out of temp, incorrect containers.

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

July 22, 2022

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

RE: Project: BRANCH AP-BCD RAD-Revised Report
Pace Project No.: 92585970

Dear Joju Abraham:

Enclosed are the analytical results for sample(s) received by the laboratory between February 03, 2022 and February 04, 2022. 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,

Nicole D'Oleo
nicole.d'oleo@pacelabs.com
(704)875-9092
Project Manager

Enclosures

cc: Daniela Herrera, Golder
Ben Hodges, Georgia Power
Jimmy Jones, Golder Associates Inc.
Kristen Jurinko
Julie Lehrman, Golder Associates Inc.
Laura Midkiff, Georgia Power
Karim Minkara, Golder Associates - Atlanta
Ms. Lauren Petty, Southern Company
Carolyn Powrozek, Golder
Dawn Prell, Golder Associates Inc.
Brian Steele, Golder Associates Inc_Atlanta

REPORT OF LABORATORY ANALYSIS

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

CERTIFICATIONS

Project: BRANCH AP-BCD RAD-Revised Report
Pace Project No.: 92585970

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 #: 460198
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
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SAMPLE SUMMARY

Project: BRANCH AP-BCD RAD-Revised Report
Pace Project No.: 92585970

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92585970001	**BRGWC-25I**	Water	02/02/22 14:44	02/03/22 10:35
92585970002	**BRGWC-30I**	Water	02/02/22 12:30	02/03/22 10:35
92585970003	**BRGWC-32S**	Water	02/02/22 14:55	02/03/22 10:35
92585970004	**BRGWC-45**	Water	02/02/22 10:42	02/03/22 10:35
92585970005	**BRGWC-47**	Water	02/02/22 09:40	02/03/22 10:35
92585970006	**BRGWC-52I**	Water	02/02/22 13:34	02/03/22 10:35
92585970007	**DUP-2**	Water	02/02/22 00:00	02/03/22 10:35
92585970008	**BRGWC-50**	Water	02/03/22 11:48	02/04/22 16:06
92585970009	**BRGWC-27I**	Water	02/04/22 08:50	02/04/22 16:06
92585970010	**BRGWC-29I**	Water	02/03/22 17:00	02/04/22 16:06
92585970011	**DUP-3**	Water	02/03/22 00:00	02/04/22 16:06

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SAMPLE ANALYTE COUNT

Project: BRANCH AP-BCD RAD-Revised Report
Pace Project No.: 92585970

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92585970001	**BRGWC-25I**	EPA 9315	JC2	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
92585970002	**BRGWC-30I**	EPA 9315	JC2	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
92585970003	**BRGWC-32S**	EPA 9315	JC2	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
92585970004	**BRGWC-45**	EPA 9315	JC2	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
92585970005	**BRGWC-47**	EPA 9315	JC2	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
92585970006	**BRGWC-52I**	EPA 9315	JC2	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
92585970007	**DUP-2**	EPA 9315	JC2	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
92585970008	**BRGWC-50**	EPA 9315	JC2	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
92585970009	**BRGWC-27I**	EPA 9315	JC2	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
92585970010	**BRGWC-29I**	EPA 9315	JC2	1	PASI-PA
		EPA 9320	JSM	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
92585970011	**DUP-3**	EPA 9315	JC2	1	PASI-PA
		EPA 9320	JSM	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA

PASI-PA = Pace Analytical Services - Greensburg

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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SUMMARY OF DETECTION

Project: BRANCH AP-BCD RAD-Revised Report
Pace Project No.: 92585970

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92585970001	**BRGWC-25I**					
EPA 9315	Radium-226	0.213 ± 0.163 (0.284) C:87% T:NA	pCi/L		02/23/22 09:00	
EPA 9320	Radium-228	0.427 ± 0.394 (0.804) C:75% T:83%	pCi/L		02/21/22 12:17	
Total Radium Calculation	Total Radium	0.640 ± 0.557 (1.09)	pCi/L		07/21/22 09:22	
92585970002	**BRGWC-30I**					
EPA 9315	Radium-226	0.237 ± 0.156 (0.238) C:95% T:NA	pCi/L		02/23/22 09:00	
EPA 9320	Radium-228	0.974 ± 0.564 (1.05) C:77% T:95%	pCi/L		02/21/22 15:39	
Total Radium Calculation	Total Radium	1.21 ± 0.720 (1.29)	pCi/L		07/21/22 09:22	
92585970003	**BRGWC-32S**					
EPA 9315	Radium-226	0.0831 ± 0.107 (0.220) C:95% T:NA	pCi/L		02/23/22 09:00	
EPA 9320	Radium-228	-0.0566 ± 0.633 (1.49) C:53% T:89%	pCi/L		02/21/22 15:39	
Total Radium Calculation	Total Radium	0.0265 ± 0.740 (1.71)	pCi/L		07/21/22 09:22	
92585970004	**BRGWC-45**					
EPA 9315	Radium-226	0.0922 ± 0.115 (0.231) C:85% T:NA	pCi/L		02/23/22 09:00	
EPA 9320	Radium-228	0.127 ± 0.474 (1.07) C:76% T:87%	pCi/L		02/21/22 15:39	
Total Radium Calculation	Total Radium	0.219 ± 0.589 (1.30)	pCi/L		07/21/22 09:22	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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SUMMARY OF DETECTION

Project: BRANCH AP-BCD RAD-Revised Report
Pace Project No.: 92585970

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92585970005	**BRGWC-47**					
EPA 9315	Radium-226	0.227 ± 0.165 (0.264) C:77% T:NA	pCi/L		02/23/22 09:00	
EPA 9320	Radium-228	-0.0821 ± 0.506 (1.19) C:76% T:81%	pCi/L		02/21/22 15:39	
Total Radium Calculation	Total Radium	0.145 ± 0.671 (1.45)	pCi/L		07/21/22 09:22	
92585970006	**BRGWC-52I**					
EPA 9315	Radium-226	0.440 ± 0.223 (0.318) C:85% T:NA	pCi/L		02/23/22 09:00	
EPA 9320	Radium-228	1.89 ± 0.793 (1.29) C:77% T:75%	pCi/L		02/21/22 15:40	
Total Radium Calculation	Total Radium	2.33 ± 1.02 (1.61)	pCi/L		07/21/22 09:22	
92585970007	**DUP-2**					
EPA 9315	Radium-226	0.252 ± 0.164 (0.252) C:94% T:NA	pCi/L		02/23/22 09:00	
EPA 9320	Radium-228	-0.118 ± 0.474 (1.12) C:76% T:91%	pCi/L		02/21/22 15:40	
Total Radium Calculation	Total Radium	0.134 ± 0.638 (1.37)	pCi/L		07/21/22 09:22	
92585970008	**BRGWC-50**					
EPA 9315	Radium-226	0.262 ± 0.161 (0.243) C:92% T:NA	pCi/L		02/23/22 09:00	
EPA 9320	Radium-228	0.883 ± 0.422 (0.722) C:76% T:90%	pCi/L		02/21/22 15:40	
Total Radium Calculation	Total Radium	1.15 ± 0.583 (0.965)	pCi/L		07/21/22 09:53	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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SUMMARY OF DETECTION

Project: BRANCH AP-BCD RAD-Revised Report
Pace Project No.: 92585970

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92585970009	**BRGWC-27I**					
EPA 9315	Radium-226	0.209 ± 0.164 (0.282) C:79% T:NA	pCi/L		02/23/22 09:00	
EPA 9320	Radium-228	0.126 ± 0.377 (0.845) C:79% T:83%	pCi/L		02/21/22 15:40	
Total Radium Calculation	Total Radium	0.335 ± 0.541 (1.13)	pCi/L		07/21/22 09:22	
92585970010	**BRGWC-29I**					
EPA 9315	Radium-226	0.244 ± 0.144 (0.202) C:94% T:NA	pCi/L		02/23/22 11:02	
EPA 9320	Radium-228	0.554 ± 0.398 (0.776) C:78% T:88%	pCi/L		02/21/22 15:42	
Total Radium Calculation	Total Radium	0.798 ± 0.533 (0.978)	pCi/L		07/21/22 09:22	
92585970011	**DUP-3**					
EPA 9315	Radium-226	0.204 ± 0.155 (0.275) C:88% T:NA	pCi/L		02/23/22 11:02	
EPA 9320	Radium-228	0.661 ± 0.401 (0.747) C:75% T:90%	pCi/L		02/21/22 15:42	
Total Radium Calculation	Total Radium	0.865 ± 0.556 (1.02)	pCi/L		07/21/22 09:22	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: BRANCH AP-BCD RAD-Revised Report
Pace Project No.: 92585970

Sample: BRGWC-25I **Lab ID: 92585970001** Collected: 02/02/22 14:44 Received: 02/03/22 10:35 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	**0.213 ± 0.163 (0.284) C:87% T:NA**	pCi/L	02/23/22 09:00	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.427 ± 0.394 (0.804) C:75% T:83%**	pCi/L	02/21/22 12:17	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.640 ± 0.557 (1.09)**	pCi/L	07/21/22 09:22	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: BRANCH AP-BCD RAD-Revised Report
Pace Project No.: 92585970

Sample: BRGWC-30I **Lab ID: 92585970002** Collected: 02/02/22 12:30 Received: 02/03/22 10:35 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	**0.237 ± 0.156 (0.238) C:95% T:NA**	pCi/L	02/23/22 09:00	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.974 ± 0.564 (1.05) C:77% T:95%**	pCi/L	02/21/22 15:39	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.21 ± 0.720 (1.29)**	pCi/L	07/21/22 09:22	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: BRANCH AP-BCD RAD-Revised Report
Pace Project No.: 92585970

Sample: BRGWC-32S **Lab ID: 92585970003** Collected: 02/02/22 14:55 Received: 02/03/22 10:35 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	**0.0831 ± 0.107 (0.220) C:95% T:NA**	pCi/L	02/23/22 09:00	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**-0.0566 ± 0.633 (1.49) C:53% T:89%**	pCi/L	02/21/22 15:39	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.0265 ± 0.740 (1.71)**	pCi/L	07/21/22 09:22	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: BRANCH AP-BCD RAD-Revised Report
Pace Project No.: 92585970

Sample: BRGWC-45 **Lab ID: 92585970004** Collected: 02/02/22 10:42 Received: 02/03/22 10:35 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	**0.0922 ± 0.115 (0.231) C:85% T:NA**	pCi/L	02/23/22 09:00	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.127 ± 0.474 (1.07) C:76% T:87%**	pCi/L	02/21/22 15:39	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.219 ± 0.589 (1.30)**	pCi/L	07/21/22 09:22	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: BRANCH AP-BCD RAD-Revised Report
Pace Project No.: 92585970

Sample: BRGWC-47 **Lab ID: 92585970005** Collected: 02/02/22 09:40 Received: 02/03/22 10:35 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	**0.227 ± 0.165 (0.264) C:77% T:NA**	pCi/L	02/23/22 09:00	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**-0.0821 ± 0.506 (1.19) C:76% T:81%**	pCi/L	02/21/22 15:39	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.145 ± 0.671 (1.45)**	pCi/L	07/21/22 09:22	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: BRANCH AP-BCD RAD-Revised Report
Pace Project No.: 92585970

Sample: BRGWC-52I **Lab ID: 92585970006** Collected: 02/02/22 13:34 Received: 02/03/22 10:35 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	**0.440 ± 0.223 (0.318) C:85% T:NA**	pCi/L	02/23/22 09:00	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**1.89 ± 0.793 (1.29) C:77% T:75%**	pCi/L	02/21/22 15:40	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**2.33 ± 1.02 (1.61)**	pCi/L	07/21/22 09:22	7440-14-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: BRANCH AP-BCD RAD-Revised Report
Pace Project No.: 92585970

Sample: DUP-2 **Lab ID: 92585970007** Collected: 02/02/22 00:00 Received: 02/03/22 10:35 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	**0.252 ± 0.164 (0.252) C:94% T:NA**	pCi/L	02/23/22 09:00	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**-0.118 ± 0.474 (1.12) C:76% T:91%**	pCi/L	02/21/22 15:40	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.134 ± 0.638 (1.37)**	pCi/L	07/21/22 09:22	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: BRANCH AP-BCD RAD-Revised Report
Pace Project No.: 92585970

Sample: BRGWC-50 **Lab ID: 92585970008** Collected: 02/03/22 11:48 Received: 02/04/22 16:06 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	**0.262 ± 0.161 (0.243) C:92% T:NA**	pCi/L	02/23/22 09:00	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.883 ± 0.422 (0.722) C:76% T:90%**	pCi/L	02/21/22 15:40	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.15 ± 0.583 (0.965)**	pCi/L	07/21/22 09:53	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: BRANCH AP-BCD RAD-Revised Report
Pace Project No.: 92585970

Sample: BRGWC-27I **Lab ID: 92585970009** Collected: 02/04/22 08:50 Received: 02/04/22 16:06 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	**0.209 ± 0.164 (0.282) C:79% T:NA**	pCi/L	02/23/22 09:00	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.126 ± 0.377 (0.845) C:79% T:83%**	pCi/L	02/21/22 15:40	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.335 ± 0.541 (1.13)**	pCi/L	07/21/22 09:22	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: BRANCH AP-BCD RAD-Revised Report
Pace Project No.: 92585970

Sample: BRGWC-29I **Lab ID: 92585970010** Collected: 02/03/22 17:00 Received: 02/04/22 16:06 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	**0.244 ± 0.144 (0.202) C:94% T:NA**	pCi/L	02/23/22 11:02	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.554 ± 0.398 (0.776) C:78% T:88%**	pCi/L	02/21/22 15:42	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.798 ± 0.533 (0.978)**	pCi/L	07/21/22 09:22	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: BRANCH AP-BCD RAD-Revised Report
Pace Project No.: 92585970

Sample: DUP-3 **Lab ID: 92585970011** Collected: 02/03/22 00:00 Received: 02/04/22 16:06 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	**0.204 ± 0.155 (0.275) C:88% T:NA**	pCi/L	02/23/22 11:02	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.661 ± 0.401 (0.747) C:75% T:90%**	pCi/L	02/21/22 15:42	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.865 ± 0.556 (1.02)**	pCi/L	07/21/22 09:22	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL - RADIOCHEMISTRY

Project: BRANCH AP-BCD RAD-Revised Report
Pace Project No.: 92585970

QC Batch: 484157 Analysis Method: EPA 9320
QC Batch Method: EPA 9320 Analysis Description: 9320 Radium 228
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92585970001, 92585970002, 92585970003, 92585970004, 92585970005, 92585970006, 92585970007, 92585970008, 92585970009

METHOD BLANK: 2341231 Matrix: Water
Associated Lab Samples: 92585970001, 92585970002, 92585970003, 92585970004, 92585970005, 92585970006, 92585970007, 92585970008, 92585970009

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.145 ± 0.280 (0.615) C:77% T:93%	pCi/L	02/21/22 12:17	

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: BRANCH AP-BCD RAD-Revised Report
Pace Project No.: 92585970

QC Batch: 484277
QC Batch Method: EPA 9315
Analysis Method: EPA 9315
Analysis Description: 9315 Total Radium
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92585970010, 92585970011

METHOD BLANK: 2341866
Matrix: Water
Associated Lab Samples: 92585970010, 92585970011

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.156 ± 0.117 (0.185) C:98% T:NA	pCi/L	02/23/22 11:02	

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: BRANCH AP-BCD RAD-Revised Report
Pace Project No.: 92585970

QC Batch: 484158
QC Batch Method: EPA 9320
Analysis Method: EPA 9320
Analysis Description: 9320 Radium 228
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92585970010, 92585970011

METHOD BLANK: 2341232
Matrix: Water
Associated Lab Samples: 92585970010, 92585970011

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.144 ± 0.303 (0.671) C:74% T:90%	pCi/L	02/21/22 15:42	

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

QUALITY CONTROL - RADIOCHEMISTRY

Project: BRANCH AP-BCD RAD-Revised Report
Pace Project No.: 92585970

QC Batch: 484274 Analysis Method: EPA 9315
QC Batch Method: EPA 9315 Analysis Description: 9315 Total Radium
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92585970001, 92585970002, 92585970003, 92585970004, 92585970005, 92585970006, 92585970007, 92585970008, 92585970009

METHOD BLANK: 2341862 Matrix: Water
Associated Lab Samples: 92585970001, 92585970002, 92585970003, 92585970004, 92585970005, 92585970006, 92585970007, 92585970008, 92585970009

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.00607 ± 0.0684 (0.194) C:102% T:NA	pCi/L	02/23/22 09:00	

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: BRANCH AP-BCD RAD-Revised Report
Pace Project No.: 92585970

DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

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

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

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

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

Acid preservation may not be appropriate for 2 Chloroethylvinyl ether.

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

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

Reported results are not rounded until the final step prior to reporting. Therefore, calculated parameters that are typically reported as "Total" may vary slightly from the sum of the reported component parameters.

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.

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

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: BRANCH AP-BCD RAD-Revised Report
Pace Project No.: 92585970

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92585970001	**BRGWC-25I**	EPA 9315	484274		
92585970002	**BRGWC-30I**	EPA 9315	484274		
92585970003	**BRGWC-32S**	EPA 9315	484274		
92585970004	**BRGWC-45**	EPA 9315	484274		
92585970005	**BRGWC-47**	EPA 9315	484274		
92585970006	**BRGWC-52I**	EPA 9315	484274		
92585970007	**DUP-2**	EPA 9315	484274		
92585970008	**BRGWC-50**	EPA 9315	484274		
92585970009	**BRGWC-27I**	EPA 9315	484274		
92585970010	**BRGWC-29I**	EPA 9315	484277		
92585970011	**DUP-3**	EPA 9315	484277		
92585970001	**BRGWC-25I**	EPA 9320	484157		
92585970002	**BRGWC-30I**	EPA 9320	484157		
92585970003	**BRGWC-32S**	EPA 9320	484157		
92585970004	**BRGWC-45**	EPA 9320	484157		
92585970005	**BRGWC-47**	EPA 9320	484157		
92585970006	**BRGWC-52I**	EPA 9320	484157		
92585970007	**DUP-2**	EPA 9320	484157		
92585970008	**BRGWC-50**	EPA 9320	484157		
92585970009	**BRGWC-27I**	EPA 9320	484157		
92585970010	**BRGWC-29I**	EPA 9320	484158		
92585970011	**DUP-3**	EPA 9320	484158		
92585970001	**BRGWC-25I**	Total Radium Calculation	520289		
92585970002	**BRGWC-30I**	Total Radium Calculation	520289		
92585970003	**BRGWC-32S**	Total Radium Calculation	520289		
92585970004	**BRGWC-45**	Total Radium Calculation	520289		
92585970005	**BRGWC-47**	Total Radium Calculation	520289		
92585970006	**BRGWC-52I**	Total Radium Calculation	520289		
92585970007	**DUP-2**	Total Radium Calculation	520289		
92585970008	**BRGWC-50**	Total Radium Calculation	520289		
92585970009	**BRGWC-27I**	Total Radium Calculation	520289		
92585970010	**BRGWC-29I**	Total Radium Calculation	520289		
92585970011	**DUP-3**	Total Radium Calculation	520289		

REPORT OF LABORATORY ANALYSIS

Pace Analytical

Document Name: Sample Condition Upon Receipt (SCUR)
Document No: F-CAR-CS-033-Rev.08
Effective Date: November 03, 2020
Page 1 of 2
Issuing Authority: Pace Carolinas Quality Office

Laboratory receiving sample:
Asheville ☐ Eden ☐ Greensboro ☐ Huntersville ☐ Raleigh ☐ Mechanicsville ☐ Atlanta ☑ Kernersville ☐

Client Name:

Project #: WO# : 92585977

Courier: ☑ Commercial ☐ Pace

Custody Seal Present? ☐ Yes ☐ No Seals Intact? ☐ Yes ☐ No

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

Thermometer: ☐ IR Gun ☐ Type of Ice: ☐ Wet ☐ Blue ☐ None

Biological Tissue Frozen? ☐ Yes ☐ No ☑ N/A

Cooler Temp: Corrected Cooler Temp (°C):

Temp should be above freezing to 6°C
☐ Samples frozen upon receipt ☐ Samples received on ice, cooling process has begun

USDA Regulated Soils ☐ (N/A, water sample):

Did samples originate in a quarantine zone within the United States: CA, NY, or SC (check maps)? ☐ Yes ☐ No

Do samples originate from a foreign source (internationally, including Hawaii and Puerto Rico)? ☐ Yes ☐ No

Comments/Discrepancy:

Chain of Custody Present?	☑ Yes	☐ No	☐ N/A	
Samples Arrived within Hold Time?	☑ Yes	☐ No	☐ N/A	
Short Hold Time Analysis (<72 hr)?	☐ Yes	☑ No	☐ N/A	
Rush Turn Around Time Requested?	☐ Yes	☑ No	☐ N/A	
Sufficient Volume?	☑ Yes	☐ No	☐ N/A	
Correct Containers Used?	☑ Yes	☐ No	☐ N/A	
-Pace Containers Used?	☑ Yes	☐ No	☐ N/A	
Containers Intact?	☑ Yes	☐ No	☐ N/A	
Dissolved analyses Samples Field Filtered?	☐ Yes	☐ No	☑ N/A	
Sample Labels Match COC?	☑ Yes	☐ No	☐ N/A	
Includes Date/Time/ID/Analysis Matrix:				
Headspace in VOA Vials (>6mm)?	☐ Yes	☐ No	☑ N/A	
Trip Blank Present?	☐ Yes	☐ No	☑ N/A	
Trip Blank Custody Seals Present?	☐ Yes	☐ No	☑ N/A	

Client Notification/Resolution:

Field Data Required? ☐ Yes ☐ No

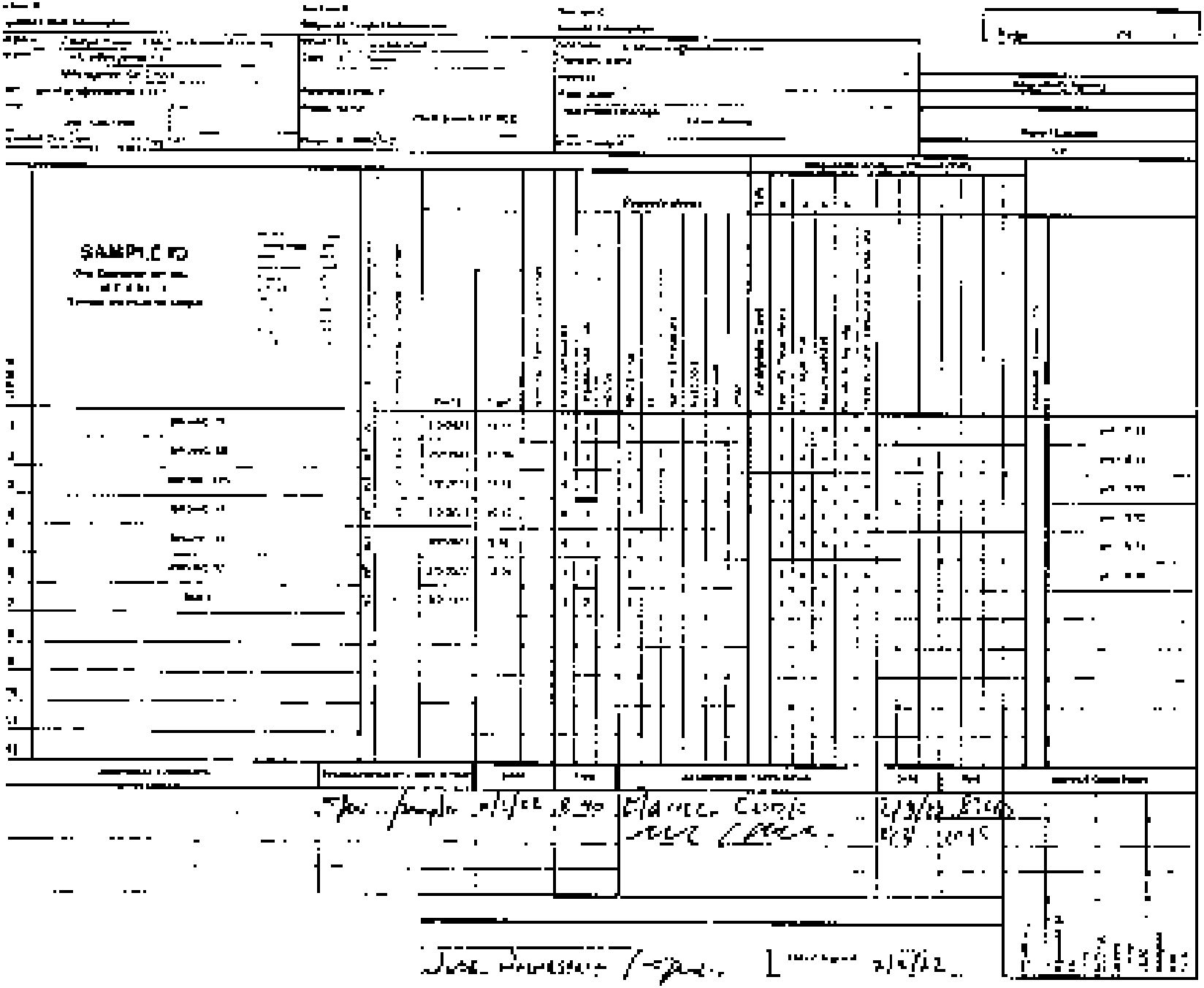
Person Contacted: Date/Time:

Comments/Resolution:

Project Manager SCURF Review: Date:

Project Manager SRF Review: Date:

CHAIN-OF-CUSTODY / Analytical Request Document



Pace Analytical	Document Name: Sample Condition Upon Receipt (SCUR)	Document Revised: December 15, 2021
	Document No.: F-CAR-CS-033-Rev.08	Page 1 of 2
		Issuing Authority: Pace Carolinas Quality Office

Laboratory receiving samples:

Asheville ☐ Eden ☐ Greenwood ☐ Huntersville ☐ Raleigh ☐ Mechanicsville ☐ Atlanta ☑ Kernersville ☐

Sample Condition Upon Receipt

Client Name: GA Power

Project #: **WO#: 92585977**

PM: NMG Due Date: 02/17/22

CLIENT: GA-GA Power

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

Custody Seal Present? ☐ Yes ☑ No Seals Intact? ☐ Yes ☑ No

Date/Initials Person Examining Contents: [illegible] 2/7/22

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

Biological Tissue Frozen? ☐ Yes ☐ No ☑ N/A

Thermometer: ☐ IR Gun ID: 2 [illegible]

Type of Ice: ☑ Wet ☐ Blue ☐ None

Cooler Temp: 3.3 Correction Factor: Add/Subtract (°C): [illegible]

Cooler Temp Corrected (°C): 3.4

Temp should be above freezing to 6°C

☐ Samples out of temp criteria. Samples on ice, cooling process has begun

USDA Regulated Soil (☐ N/A, water sample)

Did samples originate in a quarantine zone within the United States: CA, NY, or SC (check maps)? ☐ Yes ☑ No

Did samples originate from a foreign source (internationally, including Hawaii and Puerto Rico)? ☐ Yes ☑ No

					Comments/Discrepancy:
Chain of Custody Present?	☑ Yes	☐ No	☐ N/A	1.	
Samples Arrived within Hold Time?	☑ Yes	☐ No	☐ N/A	2.	
Short Hold Time Analysis (<72 hr.)?	☐ Yes	☑ No	☐ N/A	3.	
Rush Turn Around Time Requested?	☐ Yes	☑ No	☐ N/A	4.	
Sufficient Volume?	☑ Yes	☐ No	☐ N/A	5.	
Correct Containers Used?	☑ Yes	☐ No	☐ N/A	6.	
-Pace Containers Used?	☑ Yes	☐ No	☐ N/A		
Containers Intact?	☑ Yes	☐ No	☐ N/A	7.	
Dissolved analysis: Samples Field Filtered?	☐ Yes	☐ No	☑ N/A	8.	
Sample Labels Match COC?	☑ Yes	☐ No	☐ N/A	9.	
-Includes Date/Time/ID/Analysis Matrix:	WT				
Headspace in VOA Vials (>5-6mm)?	☐ Yes	☐ No	☑ N/A	10.	
Trip Blank Present?	☐ Yes	☐ No	☑ N/A	11.	
Trip Blank Custody Seals Present?	☐ Yes	☐ No	☑ N/A		

COMMENTS/SAMPLE DISCREPANCY

Field Data Required? ☐ Yes ☐ No

Lot ID of split containers:

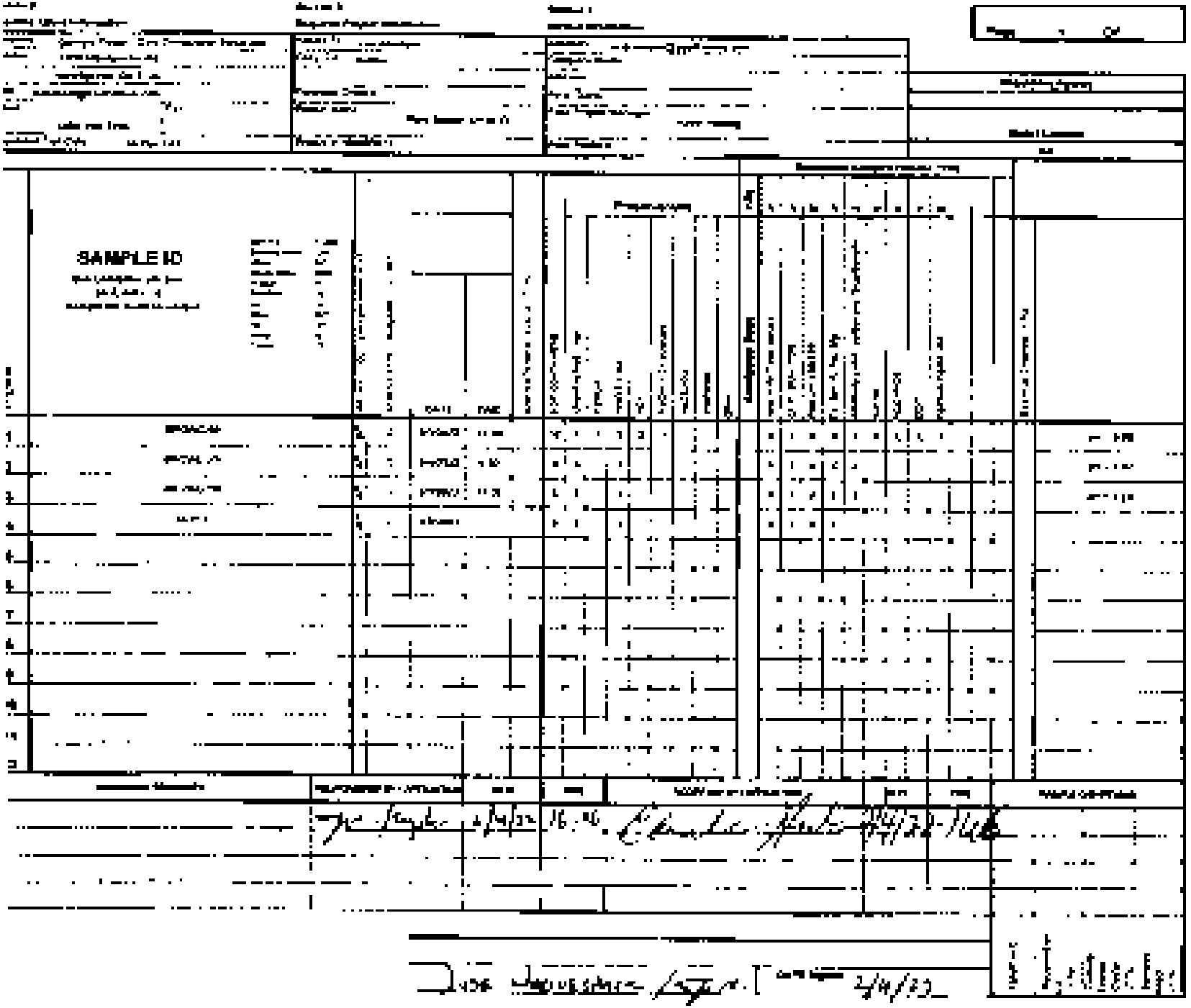
CLIENT NOTIFICATION/RESOLUTION

Person contacted: Date/Time:

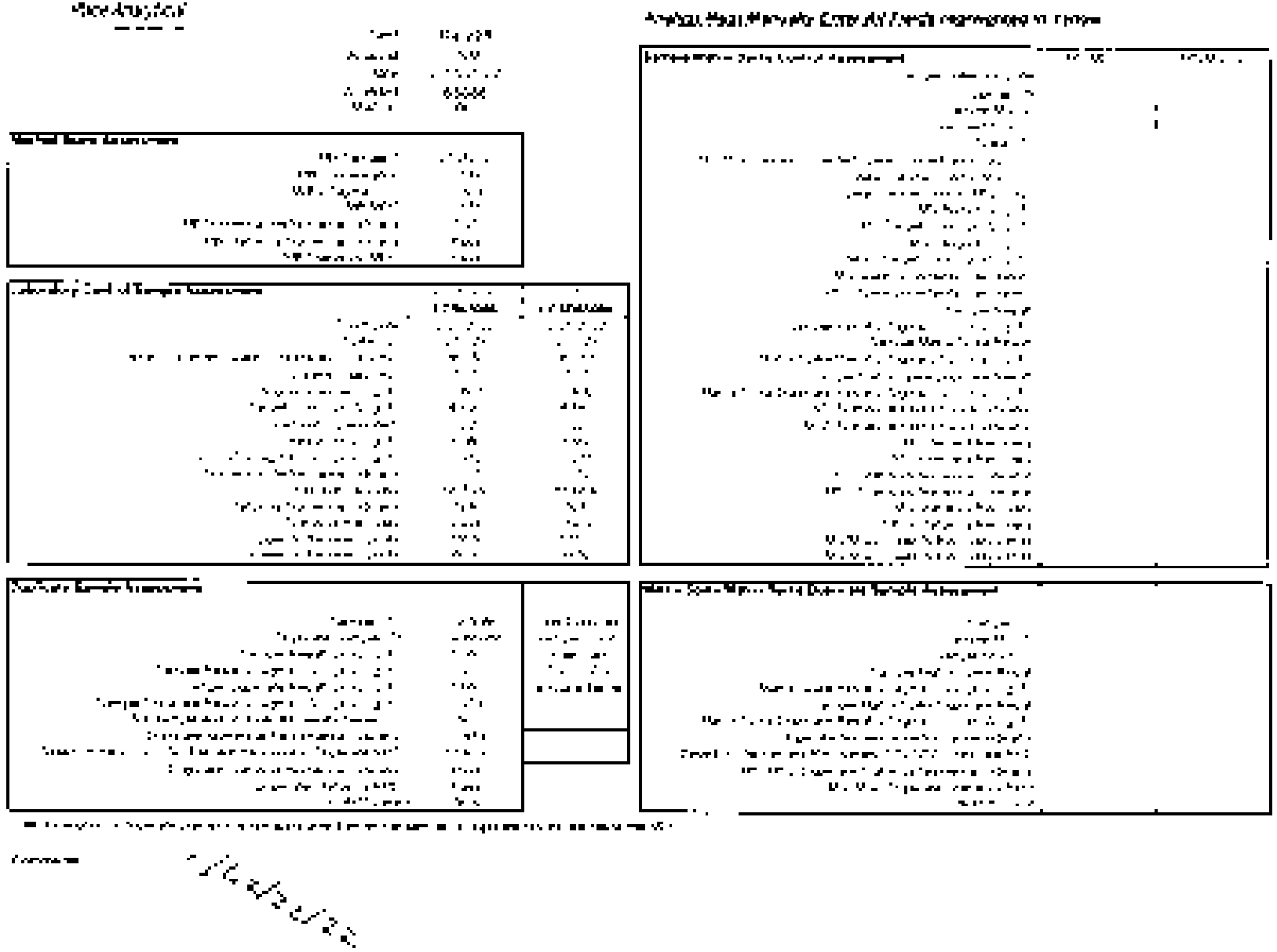
Project Manager SCURF Review: Date:

Project Manager SRF Review: Date:

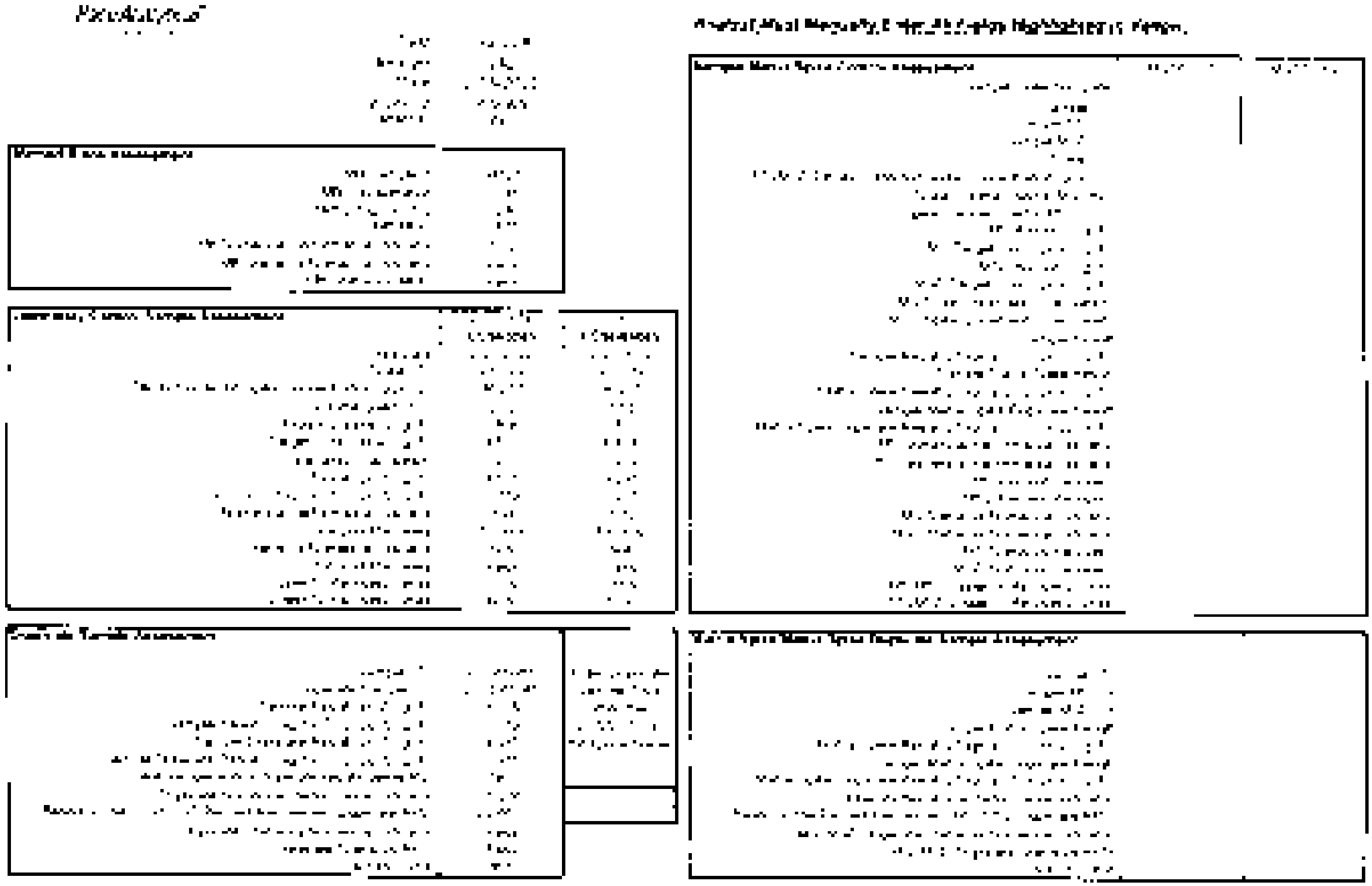
CHAIN-OF-CUSTODY / Analytical Request Document



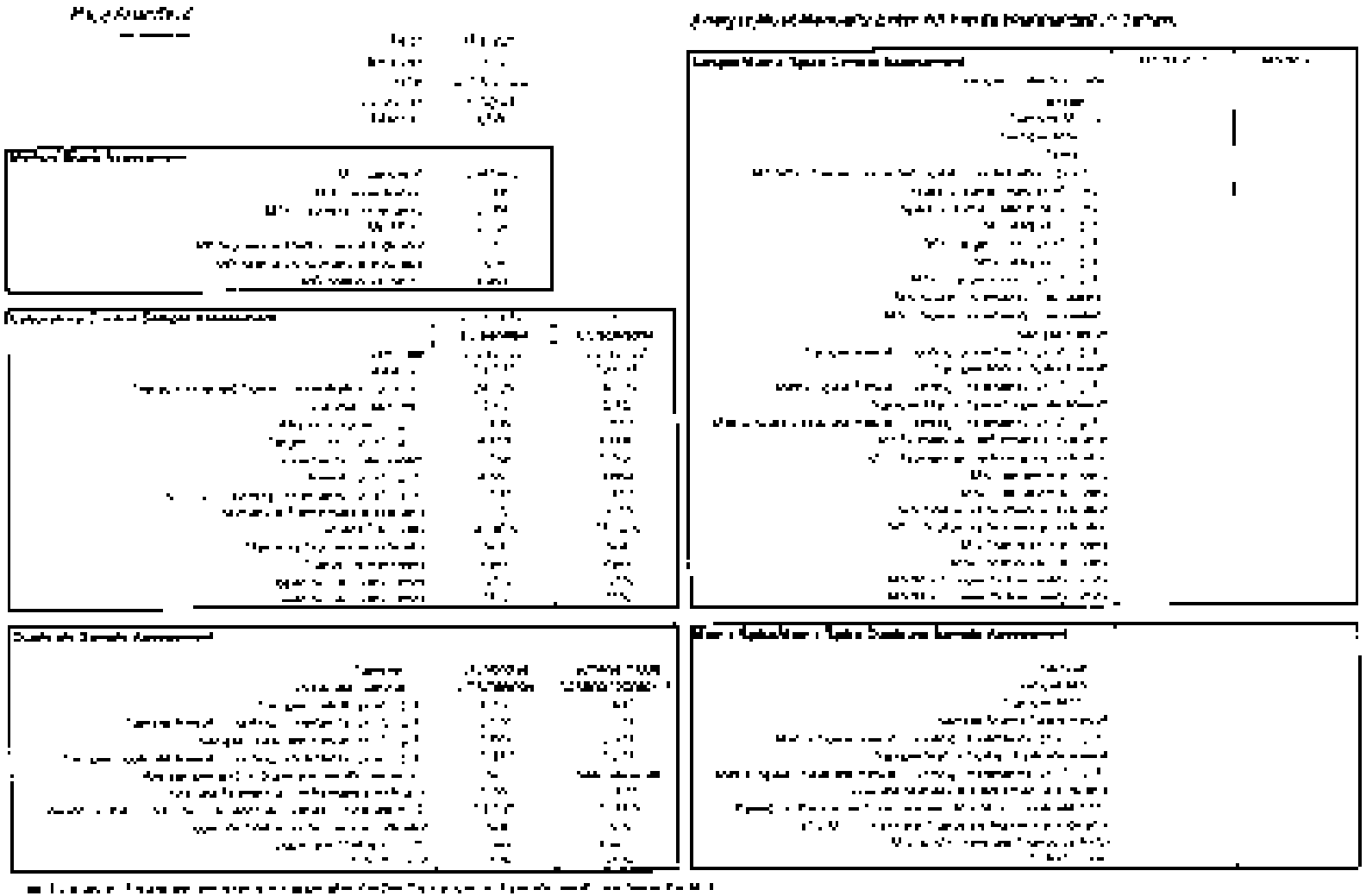
Quality Control Sample Performance Assessment



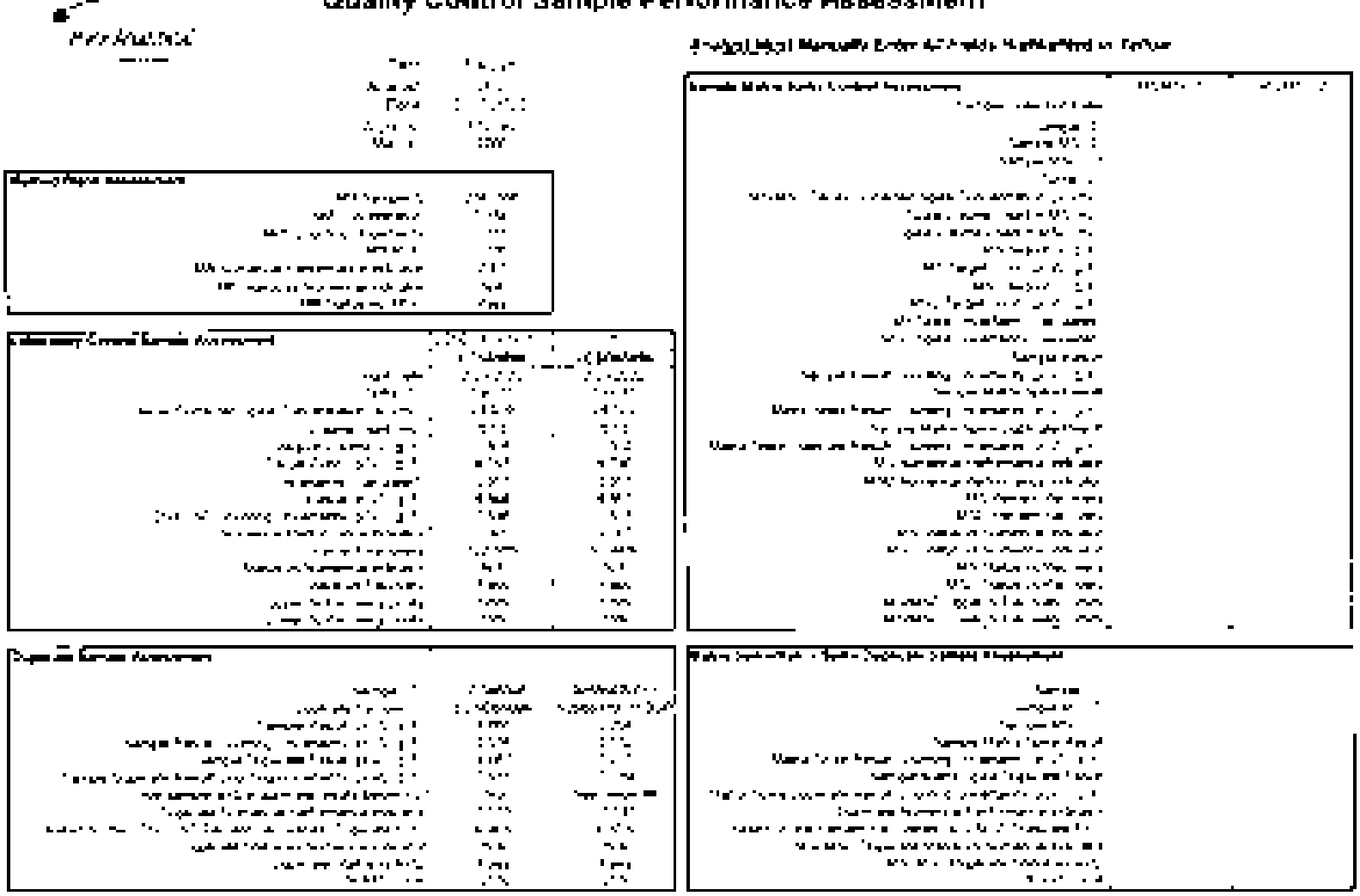
Quality Control Sample Performance Assessment



Quality Control Sample Performance Assessment



Quality Control Sample Performance Assessment



APPENDIX A

Field Data Forms

APPENDIX A

Field Calibration Forms

Daily Calibration Log

Project Plant Branch
Field Staff J Waguespack / E. Rheams / E. D'Hondt

"Incude daily mid-day pH check"

Instrument Calibration

Date: 9.21.21 Time: 06:40 | 9.22.21 08:25 | 9.23.21

Parameter	Units	Standard	SmarTROLL SN 891593 iPad # 109	SmarTROLL SN 891093 iPad # 109	SmarTROLL SN ___ iPad # ___	SmarTROLL SN 890767 iPad # 109
DO	% saturation	100	98.21	111.71		98.26
Conductivity	us/cm	4490	4868.7	4449.7		4650.4
pH	S.U.	4.00	4.07	4.03		4.13
pH	S.U.	7.00	6.99	7.03		7.06
pH	S.U.	10.00	9.99	10.02		10.07
ORP	mV	228.00	194.0	212.7		212.8

	Units	Standard	LaMotte SN 4392-4519	LaMotte SN 4582-1519	LaMotte SN	LaMotte SN 4592-1519
Turbidity	NTU	0.0	0.6	0.0		0.0
	NTU	1.0	1.07	1.0		1.0
	NTU	10.0	9.16	9.04		7.89

Date: 9.21.21 Time: 12:35 | 9.22.21 12:42 | 9.23.21 12:09

Parameter	Units	Standard	SmarTROLL SN 891553 iPad # 105	SmarTROLL SN 891553 iPad # 105	SmarTROLL SN 891553 iPad # 105	SmarTROLL SN ___ iPad # ___
DO	% saturation	100				
Conductivity	us/cm	4490				
pH	S.U.	4.00	4.04		4.06	
pH	S.U.	7.00		7.03		
pH	S.U.	10.00				
ORP	mV	228.00				

	Units	Standard	LaMotte SN ___	LaMotte SN ___	LaMotte SN ___	LaMotte SN ___
Turbidity	NTU	0.0				
	NTU	1.0				
	NTU	10.0				

Notes: DO - Dissolved Oxygen; us/cm - microsiemens/centimeter; ORP - oxidation-reduction potential; mV - millivolts; NTU - Nphelometric Turbidity Units; NC - Not calibrated

Daily Calibration Log

Incude daily mid-day pH check

Project: Plant Branch
Field Staff: J.Waguespack / E. Rheams / E. D'Hondt

Instrument Calibration

Date: 9-23-21 | 9-28-21
Time: 7:57 | 9:52

Parameter	Units	Standard	SmarTROLL SN 850787 iPad # 109	SmarTROLL SN 871573 iPad # 81	SmarTROLL SN _____ iPad # ____	SmarTROLL SN _____ iPad # ____
DO	% saturation	100	96.62	95.57		
Conductivity	us/cm	4490	4313.7	4857		
pH	S.U.	4.00	3.94	4.05		
pH	S.U.	7.00	7.08	7.05		
pH	S.U.	10.00	10.15	9.99		
ORP	mV	228.00	230.3	171.8		

Turbidity	Units	Standard	LaMotte SN 6970-3515	LaMotte SN 9392-1814	LaMotte SN _____	LaMotte SN _____
	NTU	0.0	0.0	0.0		
	NTU	1.0	1.02	0.94		
	NTU	10.0	9.18	11.26		

Date: 9-28-21
Time: 12:45

Parameter	Units	Standard	SmarTROLL SN _____ iPad # ____	SmarTROLL SN 871573 iPad # 81	SmarTROLL SN _____ iPad # ____	SmarTROLL SN _____ iPad # ____
DO	% saturation	100				
Conductivity	us/cm	4490				
pH	S.U.	4.00		4.02		
pH	S.U.	7.00				
pH	S.U.	10.00				
ORP	mV	228.00				

Turbidity	Units	Standard	LaMotte SN _____	LaMotte SN _____	LaMotte SN _____	LaMotte SN _____
	NTU	0.0				
	NTU	1.0				
	NTU	10.0				

Notes: DO - Dissolved Oxygen; us/cm - microsiemens/centimeter; ORP - oxidation-reduction potential; mV - millivolts; NTU - Nphelometric Turbidity Units; NC - Not calibrated

September 2021

Daily Calibration Log

186625421

Project: Plant Branch
Field Staff: J.Waguespack / E. Rheams / E. D'Hondt

Include daily mid-day pH check

Instrument Calibration

Date: 9/21/2021 9/22/2021 9/23/21
Time: 9:00 8:30 8:00

Parameter	Units	Standard	SmarTROLL SN 650751 iPad # 7	SmarTROLL SN 95075 iPad # 7	SmarTROLL SN 650751 iPad # 7	SmarTROLL SN _____ iPad # _____
DO	% saturation	100	106.74	97.62	103.07	
Conductivity	us/cm	4490	4478.1	4427.8	4498	
pH	S.U.	4.00	4.05	4.089	3.98	
pH	S.U.	7.00	6.96	7.00	7.01	
pH	S.U.	10.00	10.06	10.08	10.03	
ORP	mV	228.00	229	228.8	241.7	

	Units	Standard	LaMotte SN 1510-911	LaMotte SN 1510-911	LaMotte SN 1510-911	LaMotte SN _____
Turbidity	NTU	0.0	0.04	0.04	0.01	
	NTU	1.0	1.0	1.08	1.17	
	NTU	10.0	10.0	10.70	10.00	

Date:
Time:

Parameter	Units	Standard	SmarTROLL SN _____ iPad # _____	SmarTROLL SN _____ iPad # _____	SmarTROLL SN _____ iPad # _____	SmarTROLL SN _____ iPad # _____
DO	% saturation	100				
Conductivity	us/cm	4490				
pH	S.U.	4.00				
pH	S.U.	7.00				
pH	S.U.	10.00				
ORP	mV	228.00				

	Units	Standard	LaMotte SN _____	LaMotte SN _____	LaMotte SN _____	LaMotte SN _____
Turbidity	NTU	0.0				
	NTU	1.0				
	NTU	10.0				

Notes: DO - Dissolved Oxygen; us/cm - microsiemens/centimeter; ORP - oxidation-reduction potential; mV - millivolts; NTU - Nphelometric Turbidity Units; NC - Not calibrated

GOLDER
MEMBER OF WSP

Daily Calibration Log

"Incude daily mid-day pH check"

Project Plant Branch
Field Staff J.Waguespack / E. Rheams / E. D'Hondt / D. Herrera

Instrument Calibration

Date:
Time: 9/27/2021 / 1056

Parameter	Units	Standard	SmarTROLL SN 250735 iPad # 78	SmarTROLL SN iPad #	SmarTROLL SN iPad #	SmarTROLL SN iPad #
DO	% saturation	100	90.83			
Conductivity	us/cm	4490	4929.6			
pH	S.U.	4.00	4.16			
pH	S.U.	7.00	7.11			
pH	S.U.	10.00	10.03			
ORP	mV	228.00	201.7			

Turbidity	Units	Standard	LaMotte SN 26842	LaMotte SN	LaMotte SN	LaMotte SN
	NTU	0.0	-0.02			
	NTU	1.0	1.0			
	NTU	10.0	10.0			

Date: 9/28/2021
Time: 7:26

Parameter	Units	Standard	SmarTROLL SN 250735 iPad # 78	SmarTROLL SN iPad #	SmarTROLL SN iPad #	SmarTROLL SN iPad #
DO	% saturation	100	92.01			
Conductivity	us/cm	4490	3925.0			
pH	S.U.	4.00	3.70			
pH	S.U.	7.00	7.02			
pH	S.U.	10.00	10.05			
ORP	mV	228.00	234.6			

Turbidity	Units	Standard	LaMotte SN 26842	LaMotte SN	LaMotte SN	LaMotte SN
	NTU	0.0	0.01			
	NTU	1.0	1.00			
	NTU	10.0	~~[illegible]~~ 10.02			

Notes: DO - Dissolved Oxygen; us/cm - microsiemens/centimeter; ORP - oxidation-reduction potential; mV - millivolts; NTU - Nephelometric Turbidity Units; NC - Not calibrated

GOLDER MEMBER OF WSP

Daily Calibration Log

Project Plant Branch *include daily mid-day pH check*

Field Staff J. Waguespack, D. Fulton, J. Booth, ~~J. Bankhead~~ B. Steele

Instrument Calibration

		Date:	2/1/22			
		Time:	09:11			
Parameter	**Units**	**Standard**	**SmarTROLL SN 854767 iPad # 71**	**Mid-Day pH**	**SmarTROLL SN ____ iPad # ____**	**Mid-Day pH**
DO	% saturation	100	96.75	------		------
Conductivity	us/cm	4400	4285.0	------		------
pH	S.U.	4.00	4.00			
pH	S.U.	7.00	7.07			
pH	S.U.	10.00	10.16			
ORP	mV	228.00	241.1	------		------

Turbidity	**Units**	**Standard**	HACH ~~**LaMotte SN**~~ 12050C011779	**LaMotte SN**	**LaMotte SN**	**LaMotte SN**
	NTU	~~0.0~~ 20	19.9			
	NTU	~~1.0~~ 100	106			
	NTU	~~10.0~~ 800	817			
		10.0	10.4			

		Date:				
		Time:				
Parameter	**Units**	**Standard**	**SmarTROLL SN ____ iPad # ____**	**Mid-Day pH**	**SmarTROLL SN ____ iPad # ____**	**Mid-Day pH**
DO	% saturation	100		------		------
Conductivity	us/cm	4400		------		------
pH	S.U.	4.00				
pH	S.U.	7.00				
pH	S.U.	10.00				
ORP	mV	228.00		------		------

Turbidity	**Units**	**Standard**	**LaMotte SN**	**LaMotte SN**	**LaMotte SN**	**LaMotte SN**
	NTU	0.0				
	NTU	1.0				
	NTU	10.0				

Notes: DO - Dissolved Oxygen; us/cm - microsiemens/centimeter; ORP - oxidation reduction potential; mV - millivolts; NTU - Nphelometric Turbidity Units; NC - Not calibrated

GOLDER
MEMBER OF WSP

Daily Calibration Log

Include daily mid-day pH check

Project Plant Branch
Field Staff J. Wagenpack, D. Fulton, J. Booth, J. Barkhead

Instrument Calibration

		Date: Time:				
Parameter	Units	Standard	SmarTROLL SN _____ iPad # _____	Mid-Day pH	SmarTROLL SN _____ iPad # _____	Mid-Day pH
DO	% saturation	100		-------		-------
Conductivity	us/cm	4490		-------		-------
pH	S.U.	4.00				
pH	S.U.	7.00				
pH	S.U.	10.00				
ORP	mV	228.00		-------		-------

	Units	Standard	LaMotte SN _____	LaMotte SN _____	LaMotte SN _____	LaMotte SN _____
Turbidity	NTU	0.0				
	NTU	1.0				
	NTU	10.0				

		Date: Time:				
Parameter	Units	Standard	SmarTROLL SN _____ iPad # _____	Mid-Day pH	SmarTROLL SN _____ iPad # _____	Mid-Day pH
DO	% saturation	100		-------		-------
Conductivity	us/cm	4490		-------		-------
pH	S.U.	4.00				
pH	S.U.	7.00				
pH	S.U.	10.00				
ORP	mV	228.00		-------		-------

	Units	Standard	LaMotte SN _____	LaMotte SN _____	LaMotte SN _____	LaMotte SN _____
Turbidity	NTU	0.0				
	NTU	1.0				
	NTU	10.0				

Notes: DO - Dissolved Oxygen; us/cm - microsiemens/centimeter; ORP - oxidation reduction potential; mV - millivolts; NTU - Nphelometric Turbidity Units; NC - Not calibrated

Daily Calibration Log

Project Plant Branch *Incude daily mid-day pH check*
Field Staff J. Waguespack, D. Fulton, J. Booth, J. Bankhead

Instrument Calibration

Parameter	Units	Standard	SmarTROLL SN 902285 iPad # 76	Mid-Day pH	SmarTROLL SN 943388 iPad # 74	Mid-Day pH
		Date: Time:	2/1/22		2/2/22	
DO	% saturation	100	100.94	------	100.43	------
Conductivity	us/cm	4400	4537.4	------	4397.4	------
pH	S.U.	4.00	4.00	4.00	4.00	4.03
pH	S.U.	7.00	7.02	7.02	7.07	7.09
pH	S.U.	10.00	10.06	10.07	10.01	10.10
ORP	mV	228.00	230.4	------	229.5	------

Turbidity	Units	Standard	LaMotte SN	LaMotte SN	LaMotte SN	LaMotte SN
	NTU	10.0	10.2	10.3	10.09	10.02
	NTU	20.0	20.0	20.2	20.21	20.09
	NTU	100.0	100.6	100.9	100.00	100.00

Parameter	Units	Standard	SmarTROLL SN 873865 iPad # 76	Mid-Day pH	SmarTROLL SN 943388 iPad # 72	Mid-Day pH
		Date: Time:	2/3/22		2/4/22	
DO	% saturation	100	101.3%	------	95.67	------
Conductivity	us/cm	4400	4386.2	------	4540.7	------
pH	S.U.	4.00	4.00	4.02	4.09	
pH	S.U.	7.00	7.02	7.10	7.01	
pH	S.U.	10.00	10.09	10.09	10.02	
ORP	mV	228.00	229.15	------	229.2	------

Turbidity	Units	Standard	LaMotte SN	LaMotte SN	LaMotte SN	LaMotte SN
	NTU	10.0	10.1	10.03	10.0	
	NTU	20.0	20.1	20.0	20.0	
	NTU	100.0	100	100	100	

Notes: DO - Dissolved Oxygen; us/cm - microsiemens/centimeter; ORP - oxidation-reduction potential; mV - millivolts; NTU - Nphelometric Turbidity Units; NC - Not calibrated

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Daily Calibration Log

Include daily mid-day pH check

Project: Plant Branch
Field Staff: J. Waguespack, D. Fulton, J. Booth, J. Bankhead

Instrument Calibration

		Date: Time:				
Parameter	**Units**	**Standard**	**SmarTROLL SN _____ iPad # _____**	**Mid-Day pH**	**SmarTROLL SN _____ iPad # _____**	**Mid-Day pH**
DO	% saturation	100		------		------
Conductivity	us/cm	4490		------		------
pH	S.U.	4.00				
pH	S.U.	7.00				
pH	S.U.	10.00				
ORP	mV	228.00		------		------

	Units	**Standard**	**LaMotte SN _____**	**LaMotte SN _____**	**LaMotte SN _____**	**LaMotte SN _____**
Turbidity	NTU	0.0				
	NTU	1.0				
	NTU	10.0				

		Date: Time:				
Parameter	**Units**	**Standard**	**SmarTROLL SN _____ iPad # _____**	**Mid-Day pH**	**SmarTROLL SN _____ iPad # _____**	**Mid-Day pH**
DO	% saturation	100		------		------
Conductivity	us/cm	4490		------		------
pH	S.U.	4.00				
pH	S.U.	7.00				
pH	S.U.	10.00				
ORP	mV	220.00		------		------

	Units	**Standard**	**LaMotte SN _____**	**LaMotte SN _____**	**LaMotte SN _____**	**LaMotte SN _____**
Turbidity	NTU	0.0				
	NTU	1.0				
	NTU	10.0				

Notes: DO - Dissolved Oxygen; us/cm - microsiemens/centimeter; ORP - oxidation reduction potential; mV - millivolts; NTU - Nphelometric Turbidity Units; NC - Not calibrated

Daily Calibration Log

Project Plant Branch *Incude daily mid-day pH check*
Field Staff J. Waguespack, D. Fulton, J. Booth, J. Bankhead

Instrument Calibration

Parameter	Units	Standard	SmarTROLL SN 850351 iPad # ____	Mid-Day pH	SmarTROLL SN 850351 iPad # ____	Mid-Day pH
		Date: / Time:	02/01/22 / 05:54	11:02	02/02/22 / 05:45	
DO	% saturation	100	100.4	------	99.5	------
Conductivity	us/cm	4490	4577.1	------	4457.0	------
pH	S.U.	4.00	4.04	4.07	3.95	
pH	S.U.	7.00	7.02	7.03	6.95	
pH	S.U.	10.00	10.04	10.05	10.13	
ORP	mV	228.00	221.5	------	225.7	------

Turbidity	Units	Standard	~~LaMotte SN~~ HACH	~~LaMotte SN~~ HACH	~~LaMotte SN~~ HACH	LaMotte SN
Turbidity	NTU	10 9.8	9.7	10.1	9.7	
	NTU	20 20	18.2	19.7	22.1	
	NTU	100 100	107.1	101.3	107.9	

Parameter	Units	Standard	SmarTROLL SN 950271 iPad # ____	Mid-Day pH	SmarTROLL SN 850271 iPad # ____	Mid-Day pH
		Date: / Time:	02/03/22 / 5:10	10:02	02/04/22 / 06:02	
DO	% saturation	100	99.5	------	96.5	------
Conductivity	us/cm	4490	4408.6	------	4,597.7	------
pH	S.U.	4.00	4.01	4.09	3.96	
pH	S.U.	7.00	7.02	7.04	6.96	
pH	S.U.	10.00	10.04	9.95	10.04	
ORP	mV	228.00	229.1	------	221.4	------

Turbidity	Units	Standard	~~LaMotte SN~~ HACH	LaMotte SN ____	~~LaMotte SN~~ HACH	LaMotte SN ____
Turbidity	NTU	20 20	22.1	/	20.2	
	NTU	100 100	111.0	/	101	
	NTU	800 800	859	/	841	

Notes: DO - Dissolved Oxygen; us/cm - microsiemens/centimeter; ORP - oxidation-reduction potential; mV - millivolts; NTU - Nephelometric Turbidity Units; NC - Not calibrated

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Daily Calibration Log

Include daily mid-day pH check

Project: Plant Branch
Field Staff: J. Waguespack, D. Fulton, J. Booth, J. Bankhead

Instrument Calibration

		Date: Time:				
Parameter	**Units**	**Standard**	**SmarTROLL SN _____ iPad # _____**	**Mid-Day pH**	**SmarTROLL SN _____ iPad # _____**	**Mid-Day pH**
DO	% saturation	100		------		------
Conductivity	us/cm	4490		------		------
pH	S.U.	4.00				
pH	S.U.	7.00				
pH	S.U.	10.00				
ORP*	mV	228.00		------		------

	Units	**Standard**	**LaMotte SN _____**	**LaMotte SN _____**	**LaMotte SN _____**	**LaMotte SN _____**
Turbidity	NTU	0.0				
	NTU	1.0				
	NTU	10.0				

		Date: Time:				
Parameter	**Units**	**Standard**	**SmarTROLL SN _____ iPad # _____**	**Mid-Day pH**	**SmarTROLL SN _____ iPad # _____**	**Mid-Day pH**
DO	% saturation	100		------		------
Conductivity	us/cm	4490		------		------
pH	S.U.	4.00				
pH	S.U.	7.00				
pH	S.U.	10.00				
ORP*	mV	228.00		------		------

	Units	**Standard**	**LaMotte SN _____**	**LaMotte SN _____**	**LaMotte SN _____**	**LaMotte SN _____**
Turbidity	NTU	0.0				
	NTU	1.0				
	NTU	10.0				

Notes: DO - Dissolved Oxygen; us/cm - microsiemens/centimeter; ORP - oxidation-reduction potential; mV - millivolts; NTU - Nphelometric Turbidity Units; ND - Not calibrated

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Daily Calibration Log

Project Plant Branch **incude daily mid-day pH check**
Field Staff J. Waguespack, D. Fulton, J. Booth, J. Bankhead

Instrument Calibration

		Date: Time:	2/1/22 06:37		2/2/22 06:26	
Parameter	Units	Standard	SmarTROLL SN 851413 iPad # ___	Mid-Day pH	SmarTROLL SN 87948 iPad # ___	Mid-Day pH
DO	% saturation	100	73.03	------	100.09	------
Conductivity	us/cm	4490	4149.8	------	4496.8	------
pH	S.U.	4.00	3.96		4.04	
pH	S.U.	7.00	6.90		7.00	7.02
pH	S.U.	10.00	10.00	10.04	9.98	
ORP	mV	228.00	207.0	------	224.9	------
			Hach		Hach	

Turbidity	Units	Standard	LaMotte SN 1131102071	LaMotte SN	LaMotte SN 1110102145	LaMotte SN
	NTU	20/20	18.4		19.7	
	NTU	100/100	102		99.4	
	NTU	800/800	820		794	
		10	10.3		10.1	

		Date: Time:	2/3/22 6:34		2/4/22 6:31	
Parameter	Units	Standard	SmarTROLL SN 851413 iPad # ___	Mid-Day pH	SmarTROLL SN 851413 iPad # ___	Mid-Day pH
DO	% saturation	100	100.97	------	102.58	------
Conductivity	us/cm	4490	4456.1	------	4501.9	------
pH	S.U.	4.00	4.02		4.01	
pH	S.U.	7.00	7.02		7.01	
pH	S.U.	10.00	10.02		10.01	
ORP	mV	228.00	216.3	------	225.2	------
			Hach		Hach	

Turbidity	Units	Standard	LaMotte SN 1110102145	LaMotte SN	LaMotte SN 1110102145	LaMotte SN
	NTU	20/20	20.1		20.1	
	NTU	100/100	100		101	
	NTU	800/800	789		805	
		10	10.1		10.0	

Notes: DO - Dissolved Oxygen; us/cm - microsiemens/centimeter; ORP - oxidation-reduction potential; mV - millivolts; NTU - Nphelometric Turbidity Units; NC - Not calibrated

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[1]include daily mid-day pH check[1]

Project Plant Branch
Field Staff J. Waguespack, D. Fulton, J. Booth, J. Bankhead

Instrument Calibration

		Date: Time:				
Parameter	**Units**	**Standard**	**SmarTROLL SN _____ iPad # _____**	**Mid-Day pH**	**SmarTROLL SN _____ iPad # _____**	**Mid-Day pH**
DO	% saturation	100		------		------
Conductivity	us/cm	4490		------		------
pH	S.U.	4.00				
pH	S.U.	7.00				
pH	S.U.	10.00				
ORP[2]	mV	228.00		------		------

	Units	**Standard**	**LaMotte SN _____**	**LaMotte SN _____**	**LaMotte SN _____**	**LaMotte SN _____**
Turbidity	NTU	0.0				
	NTU	1.0				
	NTU	10.0				

		Date: Time:				
Parameter	**Units**	**Standard**	**SmarTROLL SN _____ iPad # _____**	**Mid-Day pH**	**SmarTROLL SN _____ iPad # _____**	**Mid-Day pH**
DO	% saturation	100		------		------
Conductivity	us/cm	4490		------		------
pH	S.U.	4.00				
pH	S.U.	7.00				
pH	S.U.	10.00				
ORP[2]	mV	228.00		------		------

	Units	**Standard**	**LaMotte SN _____**	**LaMotte SN _____**	**LaMotte SN _____**	**LaMotte SN _____**
Turbidity	NTU	0.0				
	NTU	1.0				
	NTU	10.0				

Notes: DO - Dissolved Oxygen; us/cm - microsiemens/centimeter; ORP - oxidation-reduction potential; mV - millivolts; NTU - Nphelometric Turbidity Units; ND - Not calibrated

APPENDIX A

Water Level Measurements

TABLE 1
PLANT BRANCH GROUNDWATER SAMPLING
WATER LEVEL MONITORING ON 09-20-2021

Jose Wadsspack 1/3

Well ID	Old Well ID	Northing (feet)	Easting (feet)	Total Depth (feet BTOC)	Top of Casing Elevation (ft MSL)	Pond	Depth to Water (ft BTOC)	Time	Comments
BRGWA-2S	PZ-2S	1167140	2549803	44.80	440.20	1BOTH	12.49	14:19	
BRGWA-2I	PZ-2I	1167130	2549857	64.30	440.14	1BOTH	12.27	14:25	
BRGWA-5S	PZ-5S	1170178	2549419	40.00	440.86	1BOTH	11.85	14:12	overgrown
BRGWA-5I	PZ-5I	1170184	2549408	61.25	440.75	1BOTH	11.76	14:41	overgrown
BRGWA-6S	PZ-6S	1170730	2551041	49.70	458.96	1BOTH	26.52	13:39	
BRGWA-12S	PZ-12S	1164297	2557143	58.30	434.84	1BCD	EA		
BRGWA-12I	PZ-12I	1164301	2557139	77.80	434.39	1BCD			
BRGWA-23S	PZ-23S	1162972	2557868	40.80	428.24	1BCD			
BRGWC-29I	PZ-29I	1160584	2561315	20.50	387.37	1BCD	ED		
BRGWC-27I	PZ-27I	1159695	2558712	24.00	388.46	1BCD			
BRGWC-28I	PZ-28I	1160298	2561050	20.00	393.29	1BCD			
BRGWC-30I	PZ-30I	1161628	2557692	20.25	392.81	1BCD			
BRGWC-32S	PZ-32S	1160679	2558408	45.00	408.39	1BCD	37.70	14:37	
BRGWC-33S	PZ-33S	1166257	2554085	28.45	416.68	1E	11.46	13:05	
BRGWC-34S	PZ-34S	1167384	2554231	25.00	397.98	1E	3.00	12:45	
BRGWC-35S	PZ-35S	1166646	2554479	27.40	398.31	1E	1.50	12:39	
BRGWC-17S	PZ-17S	1165302	2554688	7.15	385.32	1E	5.92	12:29	peristaltic pump ✓
BRGWC-36S	PZ-36S	1163743	2554593	28.70	389.84	1E	5.18	12:21	peristaltic pump ✓
BRGWC-37S	PZ-37S	1165083	2554960	60.58	447.00	1E	50.95	12:17	
BRGWC-38S	PZ-38S	1164382	2555017	38.20	432.24	1E	27.85	11:40	
BRGWC-45	PZ-45	1160236	2561076	57.00	384.58	1BCD	ED		sample pro ; pump to install
BRGWC-47	PZ-47	1162701	2559457	60.00	411.20	1BCD	EA		samplepro ; pump to install
BRGWC-50	PZ-50	1161063	2562373	65.00	381.30	1BCD	ED		sample pro ; pump to install
BRGWC-52I	PZ-52	1161275	2562145	73.90	383.87	1BCD			sample pro ; pump to install
PZ-50D		1161589	2562381	106.00	385.86	1BCD			Assessment Well - samplepro
PZ-51S		1161613	2562433	45.40	380.27	1BCD			Delineation Well - samplepro
PZ-51I		1161601	2562439	85.00	380.52	1BCD			Assessment Well - samplepro
PZ-51D		1161640	2562434	105.30	380.75	1BCD			Delineation Well - samplepro
PZ-53I		1161382	2562170	75.85	382.50	1BCD			Delineation Well - samplepro
PZ-58I		1161579	2562298	83.93	382.27	1BCD			Delineation Well - samplepro
PZ-59I		1161655	2562330	65.53	385.49	1BCD			Water level only
PZ-60I		1161388	2562311	60.83	382.61	1BCD			Delineation Well - samplepro
PZ-61I		1161622	2562430	76.02	380.84	1BCD			Assessment Well - samplepro

TABLE 1
PLANT BRANCH GROUNDWATER SAMPLING
WATER LEVEL MONITORING ON 09-20-2021

JW 2/3

Well ID	Old Well ID	Northing (Feet)	Easting (Feet)	Total Depth (feet BTOC)	Top of Casing Elevation (ft MSL)	Pond (ft)	Depth to Water (ft BTOC)	Time	Comments
PZ-1S	NA	1171996	2551589	65.00	465.37		37.40	13:45	
PZ-1I	NA	1171998	2551579	79.50	464.71		38.38	13:44	
PZ-1D	NA	1171986	2551598	160.20	463.41		37.70	13:47	
PZ-2S	NA	1165480	2550275	39.80	490.53		DRY	14:25	
PZ-2I	NA	1165490	2550273	54.60	489.46		50.76	14:37	
PZ-3D	NA	1165474	2550275	130.20	487.50		49.04	14:32	
PZ-4S	NA	1163248	2551270	30.90	482.87		DRY	14:58	
PZ-4I	NA	1163247	2551262	46.80	482.98		34.40	14:55	
PZ-7S	NA	1169419	2553056	44.50	451.57		22.39	15:37	DTB = 37.18
PZ-8S	NA	1167601	2551189	49.50	453.59		24.46	14:19	
PZ-9S	NA	1162633	2563090	46.00	469.28		37.39	15:49	
PZ-10S	NA	1164022	2554901	39.00	435.85		26.55	11:33	
PZ-11S	NA	1162487	2557003	24.50	360.08		ER		
PZ-12D	NA	1164512	2557136	141.70	434.09		ER		
PZ-13S	NA	1158011	2555217	34.70	409.97		27.70	13:23	
PZ-14S	NA	1158599	2554359	37.60	423.31		22.92	13:05	
PZ-14I	NA	1158598	2554368	53.40	422.71		19.70	13:16	
PZ-15S	NA	1167720	2554294	39.80	402.90		10.46	12:57	
PZ-15I	NA	1167721	2554299	68.70	403.08		10.78	12:59	
PZ-16S	NA	1166978	2554581	19.10	382.52		12.00	12:43	
PZ-16I	NA	1166981	2554588	38.60	382.45		11.90	12:45	
PZ-17I	NA	1168314	2554703	43.50	385.39		2.93	12:26	
PZ-18S	NA	1160757	2557747	24.20	362.42		ED		
PZ-18I	NA	1160768	2557748	38.40	362.55				
PZ-19S	NA	1159605	2558995	28.00	371.42				
PZ-19I	NA	1159797	2558900	40.70	371.74				
PZ-20S	NA	1159490	2560157	15.30	365.41				
PZ-20I	NA	1159495	2560160	29.50	365.34				
PZ-21S	NA	1160592	2561321	9.80	358.52				
PZ-21I	NA	1160592	2561328	24.40	358.92				
PZ-24S	BPGWC-24S	1162401	2562982	42.00	354.10				
PZ-28I	NA	1160069	2561528	30.50	370.63				
PZ-29I	NA	1159505	2560152	24.00	364.81				
PZ-31S	NA	1160027	2557972	39.50	376.77				
PZ-22I	NA	1162975	2557878	88.50	427.74		ER		
PZ-2I	PZ-20S	1163675	2557461	44.70	434.79		ER		

BRGW-2 (GWA-42)

TOC 14:50 OVERGROWN, NO LOCK
NO ACCESS RD.

GOLDER

PLANT BRANCH GROUNDWATER SAMPLING
WATER LEVEL MONITORING ON 09-20-2021

JW 3/3

Well-ID	Old Well-ID	Northing (feet)	Easting (feet)	Total Depth (feet BTOC)	Top of Casing Elevation (ft MSL)	Pond	Depth to Water (ft BTOC)	Time	Comments
PZ-40S	NA	1162415	2562808	40.20	355.96		ED		
PZ-41S	NA	1162432	2562759	44.20	337.17				
PZ-42S	NA	1162846	2562755	32.20	381.66				
PZ-43	NA	1162160	2562031	40.40	383.71				
PZ-44	NA	1161725	2561380	57.90	380.04				
PZ-46	NA	1162756	2560559	45.60	384.84				
PZ-48	NA	1163047	2558445	67.00	426.96		ER		
PZ-49	NA	1163321	2561125	17.00	384.99		ED		
PZ-52D		1166064	2554052	59.50	417.03	[illegible]	13.60	13:08	
PZ-53D		1164394	2554884	139.40	434.68	[illegible]	22.40	11:39	
PZ-54		1164829	2555498	52.00	443.86	[illegible]	ER		
PZ-55		1163208	2554784	49.30	453.07	[illegible]	46.70	15:07	
PZ-56		1162965	2554086	29.30	418.84	[illegible]	9.22	15:28	
W-C-1				29.60			ED		
W-B-1				42.40			ED		[illegible]
W-D-1				19.60			19.80	16:15	DRY
W-E-1				33.80			9.90	17:04	
W-B-2				15.10			ED		[illegible]
W-C-2				29.60			ED		
W-D-2				30.60			20.44	16:26	
PB-13		1164211	2556008	39.00	403.16		ER		
PB-2D		1164654	2556914	57.00	416.71				
PB-4S		1164335	2558069	49.00	411.15				
PB-4D		1164540	2558061	114.50	412.12				
PB-7S		1163631	2559186	33.00	402.69		22.40	15:52	OVERGROWN, NO ACCESS [illegible]
PB-8S		1163018	2558792	35.00	401.82		ER		
PB-8D		1163034	2558787	106.00	401.74				
PB-10S		1163686	2558001	33.00	400.91				
PB-10D		1163033	2558347	85.00	400.21				
PB-13S		1162084	2558626	55.00	373.31				
PB-13D		1162085	2558639	97.00	373.77				

TABLE 1
PLANT BRANCH GROUNDWATER SAMPLING
WATER LEVEL MONITORING ON 09-20-2021

Erik R[illegible] 1/3

Well-ID	Old Well-ID	Northing (feet)	Easting (feet)	Total Depth (feet BTOC)	Top of Casing Elevation (ft MSL)	Pond	Depth to Water (ft BTOC)	Time	Comments
BRGWA-2S	PZ-2S	1167140	2549853	44.80	443.20	BOTH			
BRGWA-2I	PZ-2I	1167150	2549857	84.35	443.14	BOTH			
BRGWA-5S	PZ-5S	1170178	2549418	40.00	443.98	BOTH			
BRGWA-5I	PZ-5I	1170184	2549409	81.22	443.79	BOTH			
BRGWA-6S	PZ-6S	1170733	2551041	45.70	458.98	BOTH			
BRGWA-12S	PZ-12S	1164287	2557143	58.30	434.84	BCD	50.26	1425	
BRGWA-12I	PZ-12I	1164301	2557138	77.60	434.39	BCD	49.91	1428	
BRGWA-23S	PZ-23S	1162972	2557868	40.80	428.24	BCD	37.03	1254	
BRGWC-25I	PZ-25I	1160584	2561319	20.50	357.37	BCD			
BRGWC-27I	PZ-27S	1159600	2559712	24.50	366.80	BCD			
BRGWC-29I	PZ-29I	1160298	2561050	20.00	353.23	BCD			
BRGWC-30I	PZ-30	1161608	2557892	20.25	352.61	BCD			
BRGWC-32S	PZ-32S	1160876	2558498	45.00	408.39	BCD			
BRGWC-33S	PZ-33S	1168057	2554085	25.40	416.68	E			
BRGWC-34S	PZ-34S	1167384	2554231	23.90	391.98	E			
BRGWC-35S	PZ-35S	1166646	2554478	27.40	366.31	E			
BRGWC-17S	PZ-17S	1166302	2554688	7.10	368.32	E			peristaltic pump
BRGWC-36S	PZ-36S	1165743	2554691	28.70	385.84	E			peristaltic pump
BRGWC-37S	PZ-37S	1165093	2554980	63.39	447.05	E			
BRGWC-38S	PZ-38S	1164592	2555017	38.20	432.24	E			
BRGWC-45	PZ-45	1162230	2561076	57.00	384.58	BCD			sample pit
BRGWC-47	PZ-47	1162701	2559457	52.00	411.20	BCD	25.76	1219	sample pit
BRGWC-50	PZ-50	1161593	2562375	80.00	381.35	BCD			sample pit
BRGWC-52	PZ-52	1161276	2562145	73.90	383.87	BCD			sample pit
PZ-60D		1161589	2562381	108.00	380.96	BCD			Assessment Well - sample pit
PZ-61S		1161613	2562403	45.40	380.27	BCD			Delineation Well - sample pit
PZ-61I		1161631	2562439	65.00	380.52	BCD			Assessment Well - sample pit
PZ-61D		1161640	2562434	106.00	380.75	BCD			Delineation Well - sample pit
PZ-57I		1161082	2562170	75.50	382.50	BCD			Delineation Well - sample pit
PZ-58I		1161079	2562298	63.55	382.27	BCD			Delineation Well - sample pit
PZ-59I		1161605	2562300	85.93	383.49	BCD			Water level only
PZ-60I		1161566	2562351	60.83	382.61	BCD			Delineation Well - sample pit
PZ-63I		1161622	2562430	78.03	380.84	BCD			Assessment Well - sample pit

TABLE 1
PLANT BRANCH GROUNDWATER SAMPLING
WATER LEVEL MONITORING ON 09-20-2021

ER 7/3

Well ID	Old Well ID	Northing (feet)	Easting (feet)	Total Depth (feet BTOC)	Top of Casing Elevation (ft MSL)	Flood	Depth to Water (ft BTOC)	Time	Comments
PZ-18	NA	1171996	2551588	60.00	465.97				
PZ-9	NA	1171996	2561578	79.50	464.71				
PZ-10	NA	1171999	2551588	160.00	463.41				
PZ-35	NA	1165485	2550275	39.50	490.53				
PZ-36	NA	1165490	2550273	54.50	489.49				
PZ-30	NA	1165474	2550275	130.00	487.50				
PZ-45	NA	1163248	2561278	30.00	462.87				
PZ-46	NA	1163247	2561282	60.80	462.98				
PZ-75	NA	1159419	2563098	44.50	451.57				
PZ-85	NA	1157821	2551189	45.50	453.08				
PZ-95	NA	1162833	2563080	48.00	459.29				
PZ-105	NA	1164022	2564991	39.00	433.85				
PZ-115	NA	1162467	2567969	24.50	390.99		16.93	1308	
PZ-120	NA	1164312	2557136	141.70	434.09		15.90	1428	
PZ-135	NA	1168011	2555277	54.70	409.97				
PZ-145	NA	1168399	2554359	57.50	423.31				
PZ-54	NA	1168508	2554366	53.80	422.71				
PZ-155	NA	1167130	2554364	59.90	402.90				
PZ-159	NA	1167721	2564369	68.70	403.06				
PZ-165	NA	1166019	2554581	79.10	382.52				
PZ-190	NA	1166861	2554588	39.80	382.45				
PZ-170	NA	1166314	2554703	43.50	365.33				
PZ-185	NA	1166757	2557147	34.20	362.82				
PZ-180	NA	1166756	2557146	58.40	362.55				
PZ-195	NA	1159508	2558890	28.00	371.42				
PZ-199	NA	1159757	2558900	43.75	371.74				
PZ-205	NA	1159499	2560157	15.30	369.41				
PZ-200	NA	1159495	2560160	29.50	369.34				
PZ-210	NA	1160592	2561321	9.80	358.52				
PZ-211	NA	1160592	2561328	24.40	358.52				
PZ-245	BRDWC-240	1162401	2562982	40.20	364.10				
PZ-250	NA	1162869	2561636	30.50	370.63				
PZ-260	NA	1159505	2560152	24.90	364.81				
PZ-215	NA	1160837	2557972	29.50	375.77				
PZ-230	NA	1162975	2557978	60.50	427.74		36.51	1254	
PZ-29	PZ-225	1163875	2557481	44.70	434.78		43.85	1415	

PB-19 9.18 45.52
PB-17 25.52 45.55
PB-16 25.74 45.84
PB-15 16.72 30.09
PB-18 17.86 41.77

TABLE 1
PLANT BRANCH GROUNDWATER SAMPLING
WATER LEVEL MONITORING ON 09-20-2021

ER 3/3

Well ID	Old Well ID	Northing (feet)	Easting (feet)	Total Depth (feet BTOC)	Top of Casing Elevation (ft MSL)	Pond (ft)	Depth to Water (ft BTOC)	Time	Comments
PZ-40S	NA	1162415	2562908	40.20	355.96				
PZ-41S	NA	1162402	2562759	44.20	357.17				
PZ-42S	NA	1162686	2562735	32.20	361.06				
PZ-43	NA	1162160	2562331	40.40	383.71				
PZ-44	NA	1161725	2561589	57.00	383.04				
PZ-46	NA	1162756	2560559	45.60	384.64				
PZ-48	NA	1163047	2558445	67.00	420.80		30.61	1213	
PZ-49	NA	1163321	2561126	57.00	384.89				
PZ-50D		1158054	2554052	99.50	417.03	pE			
PZ-53D		1164394	2554984	139.40	434.68	pE			
PZ-54		1166829	2555458	62.00	443.86	pE	~~3.14~~	~~1135~~	~~No stickup or pad~~ 47.65 @ 1533
PZ-55		1163358	2554794	49.50	453.07	pE			
PZ-56		1162985	2554086	29.50	418.84	pE			
IW-C-1				20.60					
IW-B-1				42.40					
IW-D-1				19.60					
IW-E-1				33.80					
IW-B-2				18.10					
IW-C-2				28.60					
IW-D-2				32.60					

PB-1S		1164911	2556308	38.00	403.16		17.06	1643	# Same
PB-2D		1164854	2555914	57.00	416.71		28.04	1439	No stickup, Pad, or ID
PB-4S		1164335	2556069	48.00	411.10		24.09	1334	
PB-4D		1164340	2556061	114.00	412.12		25.11	1334	
PB-7S		1163831	2556186	33.00	402.88				
PB-8S		1163918	2556750	36.00	401.82		19.24	1349	# Same
PB-8D		1163934	2556787	106.00	401.74		20.19	1347	# Same
PB-10S		1163569	2556551	33.00	400.01		13.79	1245	No stickup, Pad, or I.D.
PB-10D		1163593	2556547	85.00	400.31		13.35	1253	Same
PB-12S		1163084	2556626	50.00	373.31		8.47	1315	Same
PB-13D		1163080	2556639	97.00	373.77		9.15	1315	Same

TABLE 1
PLANT BRANCH GROUNDWATER SAMPLING
WATER LEVEL MONITORING ON 09-20-2021

Erin D'Arnot 1/3

Well-ID	Old Well-ID	Northing	Easting	Total Depth	Top of Casing Elevation	Pond	Depth to Water	Time	Comments
BRGWA-2S	PZ-2S	1167140	2549553	44.50	443.20	BOTH			
BRGWA-2I	PZ-2I	1167130	2549557	64.35	443.14	BOTH			
BRGWA-5S	PZ-5S	1170178	2549416	40.00	443.86	BOTH			
BRGWA-5I	PZ-5I	1170184	2549408	61.25	443.75	BOTH			
BRGWA-6S	PZ-6S	1170739	2551541	49.70	458.96	BOTH			
BRGWA-12S	PZ-12S	1164287	2557143	58.30	434.64	BCD			
BRGWA-12I	PZ-12I	1164301	2557139	77.60	434.39	BCD			
BRGWA-23S	PZ-23S	1162972	2557869	40.60	428.24	BCD			
BRGWC-25I	PZ-25I	1160364	2561316	20.50	357.37	BCD	9.63	1400	
BRGWC-27I	PZ-27I	1159695	2559712	24.00	366.66	BCD	7.62	1425	
BRGWC-29I	PZ-29I	1160298	2561060	20.00	353.23	BCD	10.34	1450	
BRGWC-30I	PZ-30I	1161608	2557650	20.25	352.61	BCD	4.52	1430	
BRGWC-32S	PZ-32S	1160679	2556456	45.00	406.39	BCD			
BRGWC-33S	PZ-33S	1168087	2554085	26.40	419.68	E			
BRGWC-34S	PZ-34S	1167384	2554231	25.90	391.86	E			
BRGWC-35S	PZ-35S	1166640	2554476	27.40	388.31	E			
BRGWC-17S	PZ-17S	1166302	2554088	7.15	365.32	E			peristaltic pump
BRGWC-36S	PZ-36S	1165743	2554660	28.70	369.64	E			peristaltic pump
BRGWC-37S	PZ-37S	1165060	2554960	63.50	447.05	E			
BRGWC-38S	PZ-38S	1164350	2555017	38.20	432.24	E			
BRGWC-45	PZ-45	1162230	2561076	57.00	394.58	BCD	11.54	1110	sample pro
BRGWC-47	PZ-47	1162701	2559457	92.00	411.20	BCD			samplepro
BRGWC-50	PZ-50	1161583	2562373	65.00	391.35	BCD	33.97	1225	sample pro
BRGWC-52	PZ-52	1161275	2562145	73.00	383.47	BCD	31.33	1335	sample pro
PZ-60D		1161589	2562581	106.00	386.86	BCD	59.02	1250	Assessment Well - samplepro
PZ-61S		1161613	2562433	45.40	380.27	BCD	43.53	1255	Delineation Well - samplepro
PZ-61I		1161631	2562439	65.00	380.52	BCD	[illegible]	1300	Assessment Well - samplepro
PZ-61D		1161640	2562434	106.00	380.75	BCD	[illegible]	1305	Delineation Well - samplepro
PZ-67I		1161582	2562170	73.50	382.55	BCD	[illegible]	1310	Delineation Well - samplepro
PZ-68I		1161578	2562204	63.93	382.27	BCD	[illegible]	1310	Delineation Well - samplepro
PZ-69I		1161605	2562335	65.50	383.40	BCD	[illegible]	1320	Water level only
PZ-40I		1161588	2562331	60.63	382.61	BCD	[illegible]	1330	Delineation Well - samplepro
PZ-41I		1161622	2562430	75.03	380.84	BCD	47.75	1335	Assessment Well - samplepro

34.16
37.94
35.70

GOLDER

ED 2/3

TABLE 1
PLANT BRANCH GROUNDWATER SAMPLING
WATER LEVEL MONITORING ON 09-20-2021

Well-ID	Old Well-ID	Northing (feet)	Easting (feet)	Total Depth (feet BTOC)	Top of Casing Elevation (ft MSL)	Pond (m)	Depth to Water (ft BTOC)	Time	Comments
PZ-1S	NA	1171896	2551598	65.00	465.07				
PZ-1I	NA	1171896	2551578	79.00	464.71				
PZ-1D	NA	1171909	2551598	160.00	463.41				
PZ-3S	NA	1165465	2550275	39.90	490.53				
PZ-3I	NA	1165495	2550273	54.60	489.49				
PZ-3D	NA	1165474	2550275	130.00	487.50				
PZ-4S	NA	1163248	2551270	30.00	462.87				
PZ-4I	NA	1163247	2551262	46.60	462.98				
PZ-7S	NA	1169419	2553098	44.50	451.57				
PZ-8S	NA	1167801	2551169	49.50	453.08				
PZ-9S	NA	1162633	2553090	46.00	469.28				
PZ-10S	NA	1164022	2554981	30.00	433.85				
PZ-11S	NA	1162487	2557000	24.00	395.88				
PZ-12D	NA	1164312	2557138	141.70	434.08				
PZ-13S	NA	1168011	2555277	34.70	408.87				
PZ-14S	NA	1158399	2554359	37.60	423.31				
PZ-14I	NA	1158398	2554366	53.80	423.71				
PZ-15S	NA	1167720	2554354	39.90	402.90				
PZ-15I	NA	1167721	2554359	88.70	403.06				
PZ-16S	NA	1166978	2554581	19.10	392.52				
PZ-16I	NA	1166981	2554588	58.60	392.46				
PZ-17I	NA	1166314	2554703	43.50	369.33				
PZ-18S	NA	1160757	2557747	34.20	382.82		21.05	1403	
PZ-18I	NA	1160766	2557746	39.40	382.55		19.9	1405	
PZ-19S	NA	1159805	2558895	28.80	371.42		16.5	1453	
PZ-19I	NA	1158797	2558800	43.70	371.74		17.51	1455	
PZ-20S	NA	1159495	2560157	16.30	365.41		16.02	1450	
PZ-20I	NA	1159495	2560160	29.50	365.24		15.55	1455	
PZ-21S	NA	1160592	2561321	9.80	358.52		10.71	1350	
PZ-21I	NA	1160592	2561328	24.40	358.62		11.2	1355	
PZ-24S	BRGWC-24S	1162401	2562862	42.00	394.10		14.42	1330	
PZ-26I	NA	1160869	2561626	30.50	378.63		22.63	1405	
PZ-28I	NA	1159509	2560152	24.00	364.81		15.34	1440	
PZ-31S	NA	1160937	2557972	39.50	378.77		26.24	1512	
PZ-22I	NA	1162675	2567879	88.50	427.74				
PZ-28	PZ-22S	1163675	2567461	44.70	434.78				

~~PZ42S~~
~~BRGWC 24S~~
~~PZ 41S~~
~~PZ 46S~~
~~PZ 43~~
~~PZ 44~~
~~BRGWC-52I~~
~~MW-8~~
~~PZ-26I~~
~~BRGWC-25I~~
~~PZ 41~~
~~PZ 21S~~
~~BRGWC 29I~~

~~BRGWC-27I~~
~~PZ 20I~~
~~PZ 28I~~
~~PZ 20S~~
~~PZ 19I~~
~~PZ 19S~~
~~BRGWC-32S~~
~~PZ 31S~~
PZ 18S
PZ 18I

~~IWC-1~~
~~IWC-2~~
~~BRGWC 47~~
~~PZ 46~~
~~EWB 26~~ could be cut back
~~PZ 49~~
~~BRGC 45~~
~~BRGWC-50~~
~~PZ-57I~~
~~PZ-59I~~
~~PZ-58I~~
~~PZ-61~~
PZ 50D

~~PZ 50D~~
~~PZ 57I~~
PZ 61I
~~PZ 51S~~
~~PZ 60I~~

GOLDER

TABLE 1
PLANT BRANCH GROUNDWATER SAMPLING
WATER LEVEL MONITORING ON 09-20-2021

ED 7/3

Well ID	Old Well ID	Northing (feet)	Easting (feet)	Total Depth (feet BTOC)	Top of Casing Elevation (ft MSL)	Pond [illegible]	Depth to Water (ft BTOC)	Time	Comments
PZ-40S	NA	1162415	2562808	40.20	355.98		16.03	1135	
PZ-41S	NA	1162432	2562759	44.20	357.17		17.23	1140	
PZ-42S	NA	1162848	2562735	32.20	361.88		30.71	1120	well good condition
PZ-43	NA	1162160	2562031	45.40	383.71		38.12	1240	
PZ-44	NA	1161725	2561588	57.00	383.34		23.4	1215	15 ?
PZ-46	NA	1160758	2560559	45.60	384.54		9.4	1530	
PZ-48	NA	1163047	2558445	67.00	420.90				
PZ-49	NA	1161321	2561125	17.00	384.99		10.89	1230	
PZ-52D		1166054	2554052	59.90	417.00	JE			
PZ-53D		1164284	2554054	120.40	434.88	JE			
PZ-54		1164829	2553458	52.00	443.86	JE			
PZ-55		1163228	2554784	49.30	403.07	JE			
PZ-56		1162968	2554086	29.30	418.84	JE			
SW-C-1				20.60			14.1	1515	
SW-B-1				42.40			20.77	1545	peristaltic
SW-D-1				19.60					
SW-E-1				33.80					
SW-B-2				19.10			5.5	1530	peristaltic OVERGROWN
SW-C-2				28.60			16.27	1510	
SW-D-2				32.60					
PB-1S		1164911	2556358	38.00	403.16				
PB-2D		1164854	2556914	67.00	416.71				
PB-4S		1164335	2556089	48.00	411.15				
PB-4D		1164340	2556081	114.50	412.12				
PB-7S		1163831	2556188	33.00	402.88				
PB-8S		1163018	2556792	35.05	401.82				
PB-8D		1163024	2556787	106.00	401.74				
PB-10S		1163588	2556551	33.00	400.91				
PB-10D		1163593	2556547	85.00	400.31				
PB-13S		1162084	2556626	50.00	373.31				
PB-13D		1162085	2556639	67.00	373.77				

TABLE 1
PLANT BRANCH GROUNDWATER SAMPLING
WATER LEVEL MONITORING ON 01/31/2022

JB

Well ID	Old Well ID	Northing (feet)	Easting (feet)	Total Depth (feet BTOC)	Top of Casing Elevation (ft MSL)	Pond (or)	Depth to Water (ft BTOC)	Time	Comments
PZ-40S	NA	1153413	2502809	40.00	393.80		15.72 15.02	1200	
PZ-41S	NA	1153432	2502750	44.00	397.17		10.95 17.23	1242	
PZ-42S	NA	1153840	2502735	50.00	391.86		20.80 20.71	1181	
PZ-43	NA	1162160	2562011	40.40	383.71		24.54 23.12	1534	
PZ-44	NA	1161725	2561586	57.00	383.04		25.09 23.80	1530	peristaltic
PZ-46	NA	1162750	2560559	45.50	384.64		9.01 3.80	1524	
PZ-48	NA	1163047	2558440	67.00	420.90		30.81		
PZ-49	NA	1163321	2561128	17.00	384.00		9.0 13.80	1144	
PZ-52D		1168054	2554052	59.50	417.03	LB	13.60		
PZ-53D		1164269	2556084	129.40	434.69	LB	22.40		
PZ-54		1164629	2555499	92.00	443.80	LB	47.60		
PZ-55		1163208	2554784	49.50	453.07	LB	46.27		
PZ-56		1162063	2554095	29.50	418.84	LB	7.22		
IW-C-1				25.00			14.49 11.10	1513	
IW-B-1				40.40			20.96 20.77	1310	peristaltic
IW-D-1				19.60			19.44 13.80	1458	
IW-E-1				55.00			9.62		
IW-B-2				19.10			5.18 5.80	1522	peristaltic
IW-C-2				29.60			17.64 15.27	1526	
IW-D-2				32.00			22.81 21.44	1447	
PB-15		1165511	2555350	38.00	403.15		17.06		
PB-20		1165658	2555815	57.00	410.71		26.09		
PB-30		1165320	2555305	45.00	411.15		24.04		
PB-40		1164340	2555051	114.50	412.12		26.11		
PB-75		1165831	2556155	53.00	402.88		22.40		peristaltic
PB-80		1164618	2556752	30.00	401.82		19.21		
PB-85		1165024	2556787	105.00	401.74		20.15		
PB-100		1165568	2556551	55.00	400.91		13.79		
PB-10D		1165565	2556547	85.00	400.31		13.03		
PB-13S		1163084	2556635	50.00	373.51		8.47		
PB-13D		1163085	2556636	87.00	373.77		8.16		
PB-15				30.06			19.72		
PB-16				45.81			23.74		
PB-17				45.05			23.52		
PB-18				61.77			17.80		
PB-19				45.62			8.14		

GOLDER

TABLE 1
PLANT BRANCH GROUNDWATER SAMPLING
WATER LEVEL MONITORING ON 01/31/2022

Joe Booth

Well ID	Old Well ID	Northing (feet)	Easting (feet)	Total Depth (feet BTOC)	Top of Casing Elevation (ft MSL)	Fund	Depth to Water (ft BTOC)	Time	Comments
BRGWA-2S	PZ-2S	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	12.91		
BRGWA-2I	PZ-2I	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	12.09		
BRGWA-5S	PZ-5S	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	11.85		
BRGWA-5I	PZ-5I	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	11.75		
BRGWA-6S	PZ-6S	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	26.52		
BRGWA-12S	PZ-12S	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	32.27		
BRGWA-12I	PZ-12I	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	49.41		
BRGWA-23S	PZ-23S	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	37.03		
BRGWC-26S	PZ-26S	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	9.27 9.00	1336	
BRGWC-27I	PZ-27S	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	8.78 7.83	1340	
BRGWC-29I	PZ-29	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	10.19 10.12	1341	
BRGWC-30I	PZ-30	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	4.63 4.37	1453	
BRGWC-32S	PZ-32S	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	39.70 37.93	1416	
BRGWC-33S	PZ-33S	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	11.85		
BRGWC-34S	PZ-34S	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	5.00		
BRGWC-35S	PZ-35S	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1.93		
BRGWC-17S	PZ-17S	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	5.52		peristaltic pump
BRGWC-36S	PZ-36S	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	3.18		peristaltic pump
BRGWC-37S	PZ-37S	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	30.44		
BRGWC-38S	PZ-38S	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	22.05		
BRGWC-45	PZ-45	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	10.86 11.13	1527	
BRGWC-47	PZ-47	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	26.51 25.75	1442	
BRGWC-50	PZ-50	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	38.03 33.67	1343	
BRGWC-52	PZ-52	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	39.31 39.22	1301	
PZ-50D		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	36.04 36.02	1246	Assessment Well - samples
PZ-51D		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	38.39 35.32	1230	Delineation Well - samples
PZ-53		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible] 38.19	[illegible]	Assessment Well - samples
PZ-53D		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	37.37 37.44	1222	Delineation Well - samples
PZ-55		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	35.89 35.73	1236	Delineation Well - samples
PZ-56		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	39.10 37.85	1234	Delineation Well - samples
PZ-58		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	38.45 38.25	1235	[illegible]
PZ-59		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	37.46 37.74	1239	Delineation Well - samples
PZ-61		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	47.70 47.78	1229	Assessment Well - samples
PZ-60				75.00			39.02	1252	
PZ-61				55.00			39.10	1258	

TABLE 1
PLANT BRANCH GROUNDWATER SAMPLING
WATER LEVEL MONITORING ON 01/31/2022

JB

Well ID	Old Well ID	Northing (feet)	Easting (feet)	Total Depth (feet BTOC)	Top of Casing Elevation (ft MSL)	Pond (st)	Depth to Water (ft BTOC)	Time	Comments
PZ-1S	NA	1171998	2551598	69.00	465.07		27.45		
PZ-1I	NA	1171990	2551579	79.00	464.71		38.38		
PZ-1D	NA	1171999	2551598	160.00	463.41		37.75		
PZ-3S	NA	1165493	2550275	39.90	460.53		Dry		
PZ-3I	NA	1165485	2550273	84.60	460.49		33.75		
PZ-3D	NA	1165474	2550275	130.00	461.50		43.05		
PZ-4S	NA	1163249	2551270	30.00	460.87		Dry		
PZ-4I	NA	1163247	2551282	60.80	462.09		24.41		
PZ-7S	NA	1169419	2555098	44.50	461.57		23.36		
PZ-8S	NA	1167801	2551185	60.50	453.08		24.46		
PZ-9S	NA	1162633	2553000	49.00	455.28		27.44		
PZ-10S	NA	1164022	2556091	30.00	433.85		20.57		
PZ-11S	NA	1162407	2557003	24.50	392.99		19.41		
PZ-12D	NA	1163312	2557120	181.70	439.09		73.45		
PZ-13S	NA	1168011	2555277	34.70	409.97		27.71		
PZ-14S	NA	1168300	2554359	37.60	433.31		22.92		
PZ-14I	NA	1168298	2554355	53.60	432.71		19.71		
PZ-15S	NA	1167720	2554334	39.60	433.95		10.95		
PZ-15I	NA	1167721	2554289	66.70	433.05		10.77		
PZ-16S	NA	1166578	2554581	19.10	382.52		12.05		
PZ-16I	NA	1166581	2554585	39.60	382.45		11.90		
PZ-17I	NA	1166514	2554703	43.50	385.53		3.95		
PZ-18S	NA	1160757	2557747	24.00	382.82		20.41 21.09	1332	
PZ-18I	NA	1160760	2557736	39.60	382.55		20.71 19.60	1325	
PZ-19S	NA	1158803	2558805	28.00	371.42		16.34 15.80	1409	
PZ-19I	NA	1158797	2558800	43.70	371.74		17.15 17.51	1405	
PZ-20S	NA	1159400	2560137	15.00	360.41		15.09 15.02	1351	
PZ-22I	NA	1159455	2560180	29.00	360.34		13.41 13.60	1353	
PZ-41S	NA	1160500	2561521	9.80	358.52		10.71 10.71	1342	
PZ-41I	NA	1160502	2561528	24.40	358.52		14.71 11.20	1334	
PZ-24S	BRGWC-24S	1162401	2562002	43.00	354.10		14.09 13.92	1157	
PZ-30	NA	1160002	2561620	50.50	375.63		20.40 22.03	1315	
PZ-36	NA	1159505	2560152	24.00	364.81		14.58 15.51	1507	
PZ-41S	NA	1160037	2557572	59.50	515.77		27.23 25.21	1428	
PZ-23S	NA	1162075	2557078	60.50	427.74		20.31		
PZ-38	PZ-33S	1163075	2557461	44.70	434.75		20.85		

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TABLE 1
PLANT BRANCH GROUNDWATER SAMPLING
WATER LEVEL MONITORING ON 01/31/2022

DP

Well ID	Old Well ID	Northing ([illegible])	Easting ([illegible])	Total Depth ([illegible])	Top of Casing Elevation ([illegible])	Fluid ([illegible])	Depth to Water ([illegible])	Time	Comments
PZ-40S	NA	1162418	2362908	40.30	355.98		15.03		
PZ-41S	NA	1162432	2362759	44.30	357.17		17.23		
PZ-42S	NA	1162846	2362739	32.30	361.06		20.71		
PZ-43	NA	1162160	2362031	40.40	360.71		20.12		
PZ-33	NA	1161725	2361588	37.00	383.04		25.60		periodic
PZ-35	NA	1162750	2360155	45.60	384.64		5.00		
PZ-38	NA	1163047	2358645	57.00	420.90		30.61		
PZ-39	NA	1163321	2361120	17.00	380.09		15.69		
PZ-50D		1159054	2353052	58.50	417.03	[illegible]	11.94 13.60	13:38	[illegible]
PZ-53D		1155303	2355883	155.20	434.08	[illegible]	22.49		
PZ-54		1164828	2355408	52.00	443.95	[illegible]	47.60		
PZ-55		1163328	2354794	48.30	453.07	[illegible]	46.22		
PZ-56		1162983	2354080	28.30	419.64	[illegible]	7.03		
W-C-1				20.00			14.10		
W-B-1				42.40			20.71		periodic
W-D-1				19.60			19.60		
W-E-1				33.80			5.40		
W-B-2				18.15			3.50		periodic
W-C-2				25.50			16.27		
W-D-2				32.80			20.44		
FB-16		1164911	2355356	58.50	423.16		17.00		
FB-03		1164654	2355514	57.00	438.71		38.05		
FB-45		1164535	2356009	48.00	411.15		27.03		
FB-4D		1164540	2356061	114.55	412.12		25.11		
FB-75		1163651	2356180	33.00	402.88		22.45		periodic
FB-65		1163016	2356782	35.00	401.82		13.23		
FB-6D		1163024	2356787	100.00	401.74		23.13		
FB-10S		1162089	2359551	33.00	400.61		13.79		
FB-10D		1163003	2359537	85.00	400.51		13.35		
FB-12S		1162089	2359626	60.00	375.51		8.47		
FB-12D		1162095	2359518	97.00	375.77		8.18		
FB-15				35.09			16.72		
FB-16				35.61			23.74		
FB-17				35.55			23.53		
FB-18				41.77			17.66		
FB-19				43.52			8.18		

TABLE 1

PLANT BRANCH GROUNDWATER SAMPLING

WATER LEVEL MONITORING ON 01/31/2022

DF

Well ID	Old Well ID	Northing (feet)	Easting (feet)	Total Depth (feet BTOC)	Top of Casing Elevation (ft MSL)	Pond	Depth to Water (ft BTOC)	Time	Comments
PZ-1S	NA	[illegible]	[illegible]	[illegible]	[illegible]		38.07	12:53	JDDO
PZ-1I	NA	[illegible]	[illegible]	[illegible]	[illegible]		39.03	12:52	JDDO
PZ-1D	NA	[illegible]	[illegible]	[illegible]	[illegible]		38.12	12:51	JDDO
PZ-2S	NA	[illegible]	[illegible]	[illegible]	[illegible]		DRY	14:10	JDDO
PZ-2I	NA	[illegible]	[illegible]	[illegible]	[illegible]		51.29	14:13	JDDO
PZ-2D	NA	[illegible]	[illegible]	[illegible]	[illegible]		49.35	14:11	JDDO
PZ-4S	NA	[illegible]	[illegible]	[illegible]	[illegible]		DRY	14:01	JDDO
PZ-4I	NA	[illegible]	[illegible]	[illegible]	[illegible]		54.60	14:20	JDDO
PZ-7S	NA	[illegible]	[illegible]	[illegible]	[illegible]		24.63	12:41	JDDO
PZ-8S	NA	[illegible]	[illegible]	[illegible]	[illegible]		24.96	14:27	JDDO
PZ-9S	NA	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]		
PZ-10S	NA	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]		
PZ-11S	NA	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]		
PZ-12D	NA	[illegible]	[illegible]	141.70	[illegible]		[illegible]		
PZ-13S	NA	[illegible]	[illegible]	[illegible]	[illegible]		26.82	14:10	JDDO
PZ-14S	NA	[illegible]	[illegible]	[illegible]	[illegible]		20.90	12:40	JDDO
PZ-14I	NA	[illegible]	[illegible]	[illegible]	[illegible]		19.34	12:33	JDDO
PZ-15S	NA	[illegible]	[illegible]	[illegible]	[illegible]		9.50	14:03	JDDO
PZ-15I	NA	[illegible]	[illegible]	[illegible]	[illegible]		9.66	14:05	JDDO
PZ-16S	NA	[illegible]	[illegible]	[illegible]	[illegible]		11.35	15:30	~~[illegible]~~ JDDO
PZ-16I	NA	[illegible]	[illegible]	[illegible]	[illegible]		11.17	12:04	JDDO
PZ-17I	NA	[illegible]	[illegible]	[illegible]	[illegible]		3.74	11:50	JDDO
PZ-18S	NA	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]		
PZ-18I	NA	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]		
PZ-19S	NA	[illegible]	[illegible]	[illegible]	371.42		[illegible]		
PZ-19I	NA	[illegible]	[illegible]	[illegible]	371.74		[illegible]		
PZ-20S	NA	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]		
PZ-20I	NA	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]		
PZ-21S	NA	[illegible]	[illegible]	9.80	[illegible]		[illegible]		
PZ-21I	NA	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]		
PZ-24S	[illegible]	[illegible]	[illegible]	42.00	[illegible]		[illegible]		
PZ-26I	NA	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]		
PZ-28I	NA	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]		
PZ-31S	NA	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]		
PZ-33I	NA	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]		
PZ-35	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]		

GOLDER

TABLE 1
PLANT BRANCH GROUNDWATER SAMPLING
WATER LEVEL MONITORING ON 01/31/2022

Duane Fulton

Well ID	Old Well ID	Northing (feet)	Easting (feet)	Total Depth (feet BTOC)	Top of Casing Elevation (ft MSL)	Pond	Depth to Water (ft BTOC)	Time	Comments
BRGWA-2S	PZ-2S	[illegible]	[illegible]	[illegible]	[illegible]	NORTH	11.03	14:23	[illegible]
BRGWA-2I	PZ-2I	[illegible]	[illegible]	[illegible]	[illegible]	NORTH	10.97	14:22	[illegible]
BRGWA-5S	PZ-5S	[illegible]	[illegible]	[illegible]	[illegible]	NORTH	11.00	14:38	[illegible]
BRGWA-5I	PZ-5I	[illegible]	[illegible]	[illegible]	[illegible]	NORTH	11.08	14:39	[illegible]
BRGWA-6S	PZ-6S	[illegible]	[illegible]	[illegible]	[illegible]	NORTH	24.63	12:45	[illegible]
BRGWA-12S	PZ-12S	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		
BRGWA-12I	PZ-12I	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		
BRGWA-23S	PZ-23S	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		
BRGWC-25I	PZ-25I	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		
BRGWC-27I	PZ-27I	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		
BRGWC-29I	PZ-29I	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		
BRGWC-30I	PZ-30I	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		
BRGWC-32S	PZ-32S	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		
BRGWC-33S	PZ-33S	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	9.06	12:02	[illegible]
BRGWC-34S	PZ-34S	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	2.53	12:17	[illegible]
BRGWC-35S	PZ-35S	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1.75	12:00	[illegible]
BRGWC-17S	PZ-17S	[illegible]	[illegible]	7.10	[illegible]	[illegible]	5.94	11:49	peristaltic pump [illegible]
BRGWC-36S	PZ-36S	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0.00	11:44	peristaltic pump [illegible]
BRGWC-37S	PZ-37S	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	58.09	11:41	[illegible]
BRGWC-38S	PZ-38S	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		
BRGWC-45	PZ-45	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		
BRGWC-47	PZ-47	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		
BRGWC-50	PZ-50	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		
BRGWC-52I	PZ-52	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		
PZ-50D		[illegible]	[illegible]	108.00	[illegible]	[illegible]	[illegible]		Assessment Well - samples
PZ-51S		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		Delineation Well - samples
PZ-51I		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		Assessment Well - samples
PZ-51D		[illegible]	[illegible]	108.00	[illegible]	[illegible]	[illegible]		Delineation Well - samples
PZ-57I		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		Delineation Well - samples
PZ-58I		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		Delineation Well - samples
PZ-59I		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]
PZ-60I		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		Delineation Well - samples
PZ-61I		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		Assessment Well - samples
PZ-63				73.00					
PZ-64				56.50					

GOLDER

TABLE 1
PLANT BRANCH GROUNDWATER SAMPLING
WATER LEVEL MONITORING ON 01/31/2022

JW

Well ID	TXX Well ID	Northing (feet)	Easting (feet)	Total Depth (feet BTOC)	Top of Casing Elevation (ft MSL)	Point	Depth to Water (ft BTOC)	Time	Comments
PZ-40S	NA	1162415	2362808	40.22	355.86		JB 18.07		
PZ-41S	NA	1162452	2362799	64.22	357.17		17.22		
PZ-42S	NA	1162846	2362739	32.20	351.06		20.71		
PZ-43	NA	1162160	2362031	40.40	365.71		23.12		
PZ-44	NA	1161725	2361988	37.00	383.04		25.60		[illegible]
PZ-45	NA	1162755	2360939	45.53	394.64		5.00		
PZ-48	NA	1163047	2358445	67.00	420.00		21.60 30.61	15:20	
PZ-49	NA	1163321	2361120	17.00	399.09		JB 10.60		
PZ-52D		1160054	2354052	59.03	417.03	[illegible]	DF 13.60		
PZ-53D		1164393	2353083	130.03	433.08	[illegible]	20.90 22.40	13:07	
PZ-54		1163825	2355408	32.00	433.00	[illegible]	*46.62 41.00	12:56	TOP OF PUMP @ 46.62
PZ-55		1163309	2354793	49.30	453.07	[illegible]	46.00 48.20	14:07	
PZ-56		1163050	2354080	25.30	419.64	[illegible]	7.80 5.20	14:14	
IW-C-1				29.60			JB 14.10		
IW-B-1				62.40			20.77		[illegible]
IW-D-1				19.80			13.80		
IW-E-1				33.80			8.72 8.60	13:44	
IW-B-2				19.10			JB 3.50		[illegible]
IW-C-2				29.00			10.27		
IW-D-2				32.00			23.44		
PB-10		1164011	2358530	38.00	403.10		16.25 11.00	12:20	LABELED CASING
PB-20		1164054	2358614	37.00	410.71		37.77 30.00	12:07	MARKED CASING
PB-45		1164435	2356000	48.00	411.15		24.10 20.00	14:21	LABELED CASING
PB-40		1164340	2356081	114.50	412.12		24.80 20.11	14:29	LABELED CASING
PB-75		1163631	2356186	33.00	402.86		21.55 22.40	14:35	[illegible]
PB-85		1163018	2356792	35.00	401.92		19.05 15.20		LABELED CASING & PINK FLAG
PB-90		1163024	2356787	108.00	401.74		19.90 22.10	15:02	LABELED CASING & PINK FLAG
PB-105		1163008	2358551	33.00	400.61		NOT 26.40 12.00	15:25	13.85' OTW
PB-100		1163353	2358547	85.00	400.31		13.45 11.00	15:20	
PB-130		1162084	2358828	30.00	375.31		8.09 3.47	14:49	
PB-135		1162085	2358839	87.00	375.77		8.81 3.10	14:50	
PB-15				30.05			16.72		ABANDONED
PB-16				35.81			23.74		NOT USED FOR PT MAP
PB-17				35.55			23.53		NOT USED FOR PT MAP
PB-18				31.77			17.90		NOT USED FOR PT MAP
PB-19				45.52			8.10		NOT USED FOR PT MAP

44.55' on pulled pump

GOLDER

TABLE 1

PLANT BRANCH GROUNDWATER SAMPLING

WATER LEVEL MONITORING ON 01/31/2022

Well ID	Old Well ID	Northing (feet)	Easting (feet)	Total Depth (feet BTOC)	Top of Casing Elevation (ft MSL)	Pond (in)	Depth to Water (ft BTOC)	Time	Comments
PZ-1S	NA	1171998	2351589	65.00	485.07		DF 37.40		
PZ-1I	NA	1171998	2351579	79.50	484.71		38.38		
PZ-1D	NA	1171999	2351568	100.00	485.41		37.77		
PZ-2S	NA	1165485	2350275	34.50	490.55		.81		
PZ-8	NA	1165485	2350273	54.80	489.46		30.75		
PZ-9D	NA	1165474	2350275	130.00	487.50		33.03		
PZ-4S	NA	1163249	2351270	30.00	482.87		.81		
PZ-4I	NA	1163247	2351282	46.80	482.88		34.57		
PZ-7S	NA	1169416	2353098	44.50	451.57		23.38		
PZ-8S	NA	1167951	2351188	49.50	453.08		24.45		
PZ-9S	NA	1162633	2353000	49.00	469.29		38.70 37.44	14:20	
PZ-10S	NA	1164022	2355901	39.00	433.85		26.10 26.61	13:36	
PZ-11S	NA	1162497	2357003	24.80	355.95		18.40 18.61	14:43	
PZ-12D	NA	1164312	2357138	141.70	438.09		79.55 79.40	12:00	
PZ-13S	NA	1168011	2355277	34.70	409.97		DF 27.79		
PZ-14S	NA	1158500	2354355	37.80	423.37		DF 22.92		
PZ-14I	NA	1158500	2354366	53.80	423.71		DF 18.89		
PZ-15S	NA	1157720	2354354	39.40	402.90		10.95		
PZ-15I	NA	1157721	2354369	65.70	403.08		10.79		
PZ-16S	NA	1155979	2354581	19.10	392.52		DF 12.05		
PZ-16I	NA	1155981	2354588	38.65	392.45		11.95		
PZ-17I	NA	1160514	2354703	45.50	385.35		3.92		
PZ-18S	NA	1160737	2357747	24.20	362.82		JB 21.06		
PZ-18I	NA	1160750	2357740	58.40	362.55		19.90		
PZ-19S	NA	1159605	2359993	28.00	371.42		16.83		
PZ-19I	NA	1159747	2359603	45.70	371.74		17.51		
PZ-20S	NA	1159606	2360157	16.30	366.41		16.02		
PZ-20I	NA	1159595	2360160	29.50	365.34		15.85		
PZ-21S	NA	1160502	2361321	9.80	338.52		10.71		
PZ-21I	NA	1160502	2361329	24.40	338.82		11.20		
PZ-22S	BRGWC-24S	1162601	2352052	42.00	355.10		14.42		
PZ-23I	NA	1153800	2361609	35.50	375.63		22.63		
PZ-23S	NA	1155505	2360152	24.00	364.81		15.34		
PZ-31S	NA	1160957	2357972	39.00	376.77		26.21		
PZ-33	NA	1162975	2357978	66.00	427.74		37.96 38.51	15:16	
PZ-36	PZ-33S	1163075	2357461	44.15	434.78		48.86 48.80	15:39	

GOLDER

January/Febraury 2022 | 166625421

TABLE 1
PLANT BRANCH GROUNDWATER SAMPLING
WATER LEVEL MONITORING ON 01/31/2022

Well ID	Old Well ID	Northing (feet)	Easting (feet)	Total Depth (feet BTOC)	Top of Casing Elevation (ft MSL)	Pond	Depth to Water (ft BTOC)	Time	Comments
BRGWA-25	PZ-25	1167140	2568893	44.00	443.20	(BOTH)	DF 12.44		
BRGWA-31	PZ-31	1167132	2568957	64.30	443.14	(BOTH)	12.29		
BRGWA-55	PZ-55	1170178	2549416	40.00	443.86	(BOTH)	11.85		
BRGWA-51	PZ-51	1170184	2549408	61.00	443.79	(BOTH)	11.75		
BRGWA-65	PZ-65	1170755	2551561	49.70	458.95	(BOTH)	26.92		
BRGWA-12S	PZ-12S	1164287	2557183	59.30	433.64	(BCO)	49.88	11:54	
BRGWA-12I	PZ-12I	1164301	2557156	77.60	434.06	(BCO)	49.77	11:57	
BRGWA-23S	PZ-23S	1162972	2557569	40.00	428.24	(BCO)	38.36	15:16	
BRGWC-25	PZ-25	1160063	2561215	25.50	337.07	(BCO)	JB 9.66		
BRGWC-27I	PZ-27I	1159899	2559712	24.00	368.46	(BCO)	7.83		
BRGWC-29I	PZ-29I	1160298	2561050	30.00	343.23	(BCO)	10.12		
BRGWC-30I	PZ-30	1161508	2557502	20.25	353.61	(BCO)	4.52		
BRGWC-32S	PZ-32S	1160579	2558866	45.00	406.06	(BCO)	37.94		
BRGWC-33S	PZ-33S	1166097	2554063	26.40	416.09	(B)	DF 11.93		
BRGWC-34S	PZ-34S	1167384	2554311	23.00	391.96	(B)	3.05		
BRGWC-35S	PZ-35S	1166648	2554475	27.40	398.51	(B)	1.95		
BRGWC-17S	PZ-17S	1166302	2559886	7.10	355.32	(B)	5.92		peristaltic pump
BRGWC-36S	PZ-36S	1165743	2554693	26.70	399.84	(B)	3.12		peristaltic pump
BRGWC-37S	PZ-37S	1165983	2554980	63.58	447.05	(B)	53.85		
BRGWC-38S	PZ-38S	1163382	2558317	38.20	430.34	(B)	20.85	13:11	
BRGWC-45	PZ-45	1162230	2561076	57.00	388.66	(BCO)	JB 11.31		
BRGWC-47	PZ-47	1162751	2559457	92.00	411.20	(BCO)	23.75		
BRGWC-50	PZ-50	1161565	2562373	65.00	381.35	(BCO)	33.87		
BRGWC-52I	PZ-52	1161275	2562165	73.00	383.87	(BCO)	39.22		
PZ-60D		1161586	2562361	106.00	380.86	(BCO)	38.02		Assessment Well - [illegible]
PZ-61S		1161613	2562453	45.40	380.27	(BCO)	38.32		Delineation Well - [illegible]
PZ-61I		1161631	2562439	65.00	380.52	(BCO)	38.16		Assessment Well - [illegible]
PZ-61D		1161640	2562433	100.00	380.75	(BCO)	37.64		Delineation Well - [illegible]
PZ-67I		1161582	2562170	75.93	382.50	(BCO)	35.70		Delineation Well - [illegible]
PZ-58		1161579	2562358	65.93	382.27	(BCO)	37.05		Delineation Well - [illegible]
PZ-60		1161655	2562330	65.93	383.45	(BCO)	38.26		Inactive
PZ-62		1161588	2562331	65.93	382.61	(BCO)	37.76		Delineation Well - [illegible]
PZ-61		1161622	2562430	76.03	380.64	(BCO)	37.75		Assessment Well - [illegible]
PZ-63				75.00					
PZ-64				56.50					

APPENDIX A

Purge Logs

Low-Flow Test Report:

Test Date / Time: 9/21/2021 10:18:44 AM
Project: Plant Branch
Operator Name: Erin D Hondt

Location Name: BRGWA-12S **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 51.01 ft** **Total Depth: 61.01 ft** **Initial Depth to Water: 50.4 ft**	**Pump Type: Dedicated** **Tubing Type: Polyethylene Pump** **Intake From TOC: 56.01 ft** **Estimated Total Volume Pumped: 5600 ml** **Flow Cell Volume: 90 ml** **Final Flow Rate: 280 ml/min** **Final Draw Down: 0.62 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 850751**

Test Notes:

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 10 %	+/- 5	+/- 10	+/- 0.3	
9/21/2021 10:18 AM	00:00	5.68 pH	21.02 °C	65.47 µS/cm	6.33 mg/L	1.62 NTU	98.1 mV	50.40 ft	280.00 ml/min
9/21/2021 10:23 AM	05:00	5.80 pH	20.84 °C	72.06 µS/cm	6.50 mg/L	6.54 NTU	95.9 mV	51.02 ft	280.00 ml/min
9/21/2021 10:28 AM	10:00	5.84 pH	20.96 °C	74.32 µS/cm	6.54 mg/L	4.32 NTU	94.6 mV	51.02 ft	280.00 ml/min
9/21/2021 10:33 AM	15:00	5.87 pH	21.11 °C	75.99 µS/cm	6.60 mg/L	1.34 NTU	90.7 mV	51.02 ft	280.00 ml/min
9/21/2021 10:38 AM	20:00	5.87 pH	21.22 °C	75.88 µS/cm	6.60 mg/L	0.15 NTU	92.1 mV	51.02 ft	280.00 ml/min

Samples

Sample ID:	Description:

Low-Flow Test Report:

Test Date / Time: 9/21/2021 10:58:33 AM
Project: Plant Branch (2)
Operator Name: Erin D Hondt

Location Name: BRGWA-12I **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 70.54 ft** **Total Depth: 80.54 ft** **Initial Depth to Water: 50.13 ft**	**Pump Type: Dedicated** **Tubing Type: Polyethylene Pump** **Intake From TOC: 75.54 ft** **Estimated Total Volume Pumped: 28526 ml** **Flow Cell Volume: 90 ml** **Final Flow Rate: 240 ml/min** **Final Draw Down: 13.82 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 850751**

Test Notes:

Turbidity meter issues prevented data collection from 12:00 - 1:00. Replaced meter to resume readings.

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 10 %	+/- 5	+/- 10	+/- 0.3	
9/21/2021 10:58 AM	00:00	6.17 pH	21.55 °C	158.37 µS/cm	0.86 mg/L	8.55 NTU	91.2 mV	50.13 ft	280.00 ml/min
9/21/2021 11:00 AM	02:07	6.19 pH	21.51 °C	150.07 µS/cm	0.57 mg/L	8.14 NTU	91.2 mV	52.79 ft	280.00 ml/min
9/21/2021 11:05 AM	07:07	6.18 pH	21.21 °C	143.12 µS/cm	0.53 mg/L	7.49 NTU	90.8 mV	55.15 ft	280.00 ml/min
9/21/2021 11:10 AM	12:07	6.18 pH	22.06 °C	140.70 µS/cm	1.93 mg/L	7.22 NTU	89.0 mV	56.00 ft	280.00 ml/min
9/21/2021 11:15 AM	17:07	6.21 pH	21.69 °C	140.42 µS/cm	1.84 mg/L	8.71 NTU	88.6 mV	57.50 ft	280.00 ml/min
9/21/2021 11:20 AM	22:07	6.21 pH	21.95 °C	137.05 µS/cm	1.71 mg/L	8.44 NTU	88.0 mV	58.58 ft	280.00 ml/min
9/21/2021 11:25 AM	27:07	6.21 pH	21.82 °C	132.21 µS/cm	2.48 mg/L	8.91 NTU	86.4 mV	59.70 ft	280.00 ml/min
9/21/2021 11:30 AM	32:07	6.21 pH	23.00 °C	132.60 µS/cm	2.57 mg/L	8.44 NTU	84.0 mV	59.85 ft	200.00 ml/min
9/21/2021 11:35 AM	37:07	6.21 pH	22.44 °C	130.03 µS/cm	2.84 mg/L	6.34 NTU	84.3 mV	60.04 ft	200.00 ml/min
9/21/2021 11:40 AM	42:07	6.22 pH	22.72 °C	127.12 µS/cm	3.44 mg/L	5.90 NTU	83.2 mV	60.40 ft	200.00 ml/min
9/21/2021 11:45 AM	47:07	6.23 pH	23.91 °C	125.70 µS/cm	3.98 mg/L	6.58 NTU	81.6 mV	60.70 ft	200.00 ml/min
9/21/2021 11:50 AM	52:07	6.26 pH	24.25 °C	128.86 µS/cm	4.16 mg/L	6.75 NTU	80.2 mV	60.92 ft	200.00 ml/min
9/21/2021 11:55 AM	57:07	6.30 pH	24.24 °C	130.80 µS/cm	4.11 mg/L	7.51 NTU	80.4 mV	60.95 ft	200.00 ml/min
9/21/2021 12:00 PM	01:02:07	6.36 pH	22.89 °C	136.80 µS/cm	4.39 mg/L	6.88 NTU	81.0 mV	61.03 ft	200.00 ml/min
9/21/2021 12:05 PM	01:07:07	6.41 pH	22.82 °C	141.59 µS/cm	4.61 mg/L	6.38 NTU	81.0 mV	61.20 ft	200.00 ml/min

9/21/2021 12:10 PM	01:12:07	6.44 pH	23.61 °C	144.60 µS/cm	4.76 mg/L	6.89 NTU	79.4 mV	61.20 ft	100.00 ml/min
9/21/2021 12:15 PM	01:17:07	6.45 pH	24.11 °C	144.04 µS/cm	4.72 mg/L	7.46 NTU	79.5 mV	61.20 ft	100.00 ml/min
9/21/2021 12:20 PM	01:22:07	6.45 pH	25.38 °C	144.45 µS/cm	4.64 mg/L		77.8 mV	61.20 ft	100.00 ml/min
9/21/2021 12:25 PM	01:27:07	6.45 pH	26.29 °C	142.89 µS/cm	4.51 mg/L		77.5 mV	61.20 ft	100.00 ml/min
9/21/2021 12:30 PM	01:32:07	6.47 pH	24.84 °C	142.98 µS/cm	4.55 mg/L		78.9 mV	61.20 ft	100.00 ml/min
9/21/2021 12:35 PM	01:37:07	6.49 pH	23.84 °C	145.87 µS/cm	4.78 mg/L		79.9 mV	61.20 ft	100.00 ml/min
9/21/2021 12:40 PM	01:42:07	6.52 pH	22.96 °C	146.28 µS/cm	5.02 mg/L		80.9 mV	61.20 ft	100.00 ml/min
9/21/2021 12:45 PM	01:46:54	6.53 pH	21.82 °C	146.27 µS/cm	5.20 mg/L		81.4 mV	61.20 ft	100.00 ml/min
9/21/2021 12:50 PM	01:51:54	6.53 pH	22.05 °C	148.05 µS/cm	5.38 mg/L		82.2 mV	61.20 ft	100.00 ml/min
9/21/2021 12:55 PM	01:56:54	6.52 pH	22.73 °C	144.67 µS/cm	5.26 mg/L		82.5 mV	61.20 ft	100.00 ml/min
9/21/2021 1:00 PM	02:01:54	6.50 pH	23.52 °C	143.83 µS/cm	4.94 mg/L		83.4 mV	61.20 ft	100.00 ml/min
9/21/2021 1:02 PM	02:04:18	6.50 pH	22.20 °C	139.88 µS/cm	4.65 mg/L	0.81 NTU	84.5 mV	61.65 ft	100.00 ml/min
9/21/2021 1:05 PM	02:06:33	6.51 pH	22.70 °C	141.52 µS/cm	4.87 mg/L	0.07 NTU	83.2 mV	61.65 ft	100.00 ml/min
9/21/2021 1:10 PM	02:11:33	6.52 pH	22.28 °C	142.90 µS/cm	4.74 mg/L	0.97 NTU	83.9 mV	61.65 ft	100.00 ml/min
9/21/2021 1:30 PM	02:31:27	6.51 pH	22.46 °C	146.45 µS/cm	4.86 mg/L	3.63 NTU	84.2 mV	63.25 ft	240.00 ml/min
9/21/2021 1:35 PM	02:36:27	6.51 pH	22.10 °C	148.36 µS/cm	4.72 mg/L	2.75 NTU	84.5 mV	63.70 ft	240.00 ml/min
9/21/2021 1:40 PM	02:41:27	6.54 pH	22.58 °C	149.57 µS/cm	4.93 mg/L	2.66 NTU	83.8 mV	63.89 ft	240.00 ml/min
9/21/2021 1:45 PM	02:46:27	6.53 pH	22.77 °C	151.59 µS/cm	4.79 mg/L	3.52 NTU	84.2 mV	63.95 ft	240.00 ml/min

Samples

Sample ID:	Description:

Low-Flow Test Report:

Test Date / Time: 9/21/2021 12:14:37 PM
Project: Plant Branch
Operator Name: E. Rheams

Location Name: BRGWA-5I **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 51.20 ft** **Total Depth: 61.20 ft** **Initial Depth to Water: 11.86 ft**	**Pump Type: Dedicted** **Tubing Type: Polyethylene** **Pump Intake from TOC: 56 ft** **Estimated Total Volume Pumped: 4200 ml** **Flow Cell Volume: 90 ml** **Final Flow Rate: 280 ml/min** **Final Draw Down: 0.25 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 850767**

Test Notes:

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 10 %	+/- 5	+/- 10	+/- 0.3	
9/21/2021 12:14 PM	00:00	6.13 pH	22.28 °C	185.52 µS/cm	3.86 mg/L	2.19 NTU	100.6 mV	11.86 ft	280.00 ml/min
9/21/2021 12:19 PM	05:00	6.27 pH	19.65 °C	186.42 µS/cm	4.81 mg/L	2.84 NTU	107.7 mV	12.09 ft	280.00 ml/min
9/21/2021 12:24 PM	10:00	6.31 pH	19.32 °C	186.67 µS/cm	4.94 mg/L	3.46 NTU	82.1 mV	12.11 ft	280.00 ml/min
9/21/2021 12:29 PM	15:00	6.32 pH	19.23 °C	186.32 µS/cm	5.01 mg/L	4.36 NTU	100.5 mV	12.11 ft	280.00 ml/min

Samples

Sample ID:	Description:

Low-Flow Test Report:

Test Date / Time: 9/21/2021 1:07:37 PM
Project: Plant Branch
Operator Name: E. Rheams

Location Name: BRGWA-5S **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 30.0 ft** **Total Depth: 40.0 ft** **Initial Depth to Water: 11.95 ft**	**Pump Type: Dedicted** **Tubing Type: Polyethylene** **Pump Intake from TOC: 35 ft** **Estimated Total Volume Pumped: 20000 ml** **Flow Cell Volume: 90 ml** **Final Flow Rate: 100 ml/min** **Final Draw Down: 0.15 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 850767**

Test Notes:

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 10 %	+/- 5	+/- 10	+/- 0.3	
9/21/2021 1:07 PM	00:00	6.17 pH	21.56 °C	174.24 µS/cm	2.56 mg/L	11.43 NTU	89.4 mV	11.95 ft	100.00 ml/min
9/21/2021 1:12 PM	05:00	6.30 pH	19.59 °C	188.63 µS/cm	1.79 mg/L	9.42 NTU	76.6 mV	12.10 ft	100.00 ml/min
9/21/2021 1:17 PM	10:00	6.35 pH	19.33 °C	195.86 µS/cm	1.62 mg/L	10.60 NTU	87.2 mV	12.10 ft	100.00 ml/min
9/21/2021 1:22 PM	15:00	6.36 pH	19.96 °C	197.66 µS/cm	1.59 mg/L	10.09 NTU	68.7 mV	12.10 ft	100.00 ml/min
9/21/2021 1:27 PM	20:00	6.37 pH	20.08 °C	200.31 µS/cm	1.57 mg/L	11.00 NTU	65.8 mV	12.10 ft	100.00 ml/min
9/21/2021 1:32 PM	25:00	6.37 pH	20.47 °C	198.97 µS/cm	1.57 mg/L	11.50 NTU	64.2 mV	12.10 ft	100.00 ml/min
9/21/2021 1:37 PM	30:00	6.36 pH	22.36 °C	204.08 µS/cm	1.63 mg/L	11.67 NTU	74.4 mV	12.10 ft	100.00 ml/min
9/21/2021 1:42 PM	35:00	6.36 pH	23.88 °C	200.67 µS/cm	1.68 mg/L	12.70 NTU	64.3 mV	12.10 ft	100.00 ml/min
9/21/2021 1:47 PM	40:00	6.36 pH	21.95 °C	195.97 µS/cm	1.72 mg/L	11.90 NTU	64.6 mV	12.10 ft	100.00 ml/min
9/21/2021 1:50 PM	43:09	6.36 pH	21.55 °C	195.35 µS/cm	1.67 mg/L	12.00 NTU	65.2 mV	12.10 ft	100.00 ml/min
9/21/2021 1:55 PM	48:09	6.37 pH	21.28 °C	198.27 µS/cm	1.66 mg/L	12.50 NTU	75.0 mV	12.10 ft	100.00 ml/min
9/21/2021 2:00 PM	53:09	6.37 pH	20.87 °C	197.97 µS/cm	1.68 mg/L	11.80 NTU	63.1 mV	12.10 ft	100.00 ml/min
9/21/2021 2:05 PM	58:09	6.36 pH	21.46 °C	196.16 µS/cm	1.69 mg/L	11.87 NTU	74.0 mV	12.10 ft	100.00 ml/min
9/21/2021 2:10 PM	01:03:09	6.37 pH	21.48 °C	197.22 µS/cm	1.73 mg/L	11.00 NTU	74.9 mV	12.10 ft	100.00 ml/min
9/21/2021 2:15 PM	01:08:09	6.36 pH	21.20 °C	195.81 µS/cm	1.74 mg/L	11.69 NTU	75.7 mV	12.10 ft	100.00 ml/min
9/21/2021 2:20 PM	01:13:09	6.36 pH	20.76 °C	195.20 µS/cm	1.75 mg/L	11.97 NTU	63.4 mV	12.10 ft	100.00 ml/min

9/21/2021 2:25 PM	01:18:09	6.36 pH	20.44 °C	195.60 µS/cm	1.74 mg/L	11.23 NTU	74.6 mV	12.10 ft	100.00 ml/min
9/21/2021 2:30 PM	01:23:09	6.36 pH	20.57 °C	195.44 µS/cm	1.74 mg/L	12.42 NTU	75.0 mV	12.10 ft	100.00 ml/min
9/21/2021 2:35 PM	01:28:09	6.36 pH	20.48 °C	193.84 µS/cm	1.76 mg/L	11.04 NTU	62.9 mV	12.10 ft	100.00 ml/min
9/21/2021 2:40 PM	01:33:09	6.36 pH	20.57 °C	194.27 µS/cm	1.77 mg/L	11.17 NTU	62.0 mV	12.10 ft	100.00 ml/min
9/21/2021 2:45 PM	01:38:09	6.35 pH	20.61 °C	194.42 µS/cm	1.79 mg/L	11.75 NTU	73.1 mV	12.10 ft	100.00 ml/min
9/21/2021 2:50 PM	01:43:09	6.36 pH	20.66 °C	193.98 µS/cm	1.82 mg/L	12.32 NTU	74.4 mV	12.10 ft	100.00 ml/min
9/21/2021 2:55 PM	01:48:09	6.36 pH	20.35 °C	193.44 µS/cm	1.80 mg/L	11.98 NTU	75.0 mV	12.10 ft	100.00 ml/min
9/21/2021 3:00 PM	01:53:09	6.35 pH	20.17 °C	193.58 µS/cm	1.81 mg/L	12.09 NTU	75.3 mV	12.10 ft	100.00 ml/min
9/21/2021 3:05 PM	01:58:09	6.35 pH	20.17 °C	192.92 µS/cm	1.81 mg/L	10.53 NTU	63.0 mV	12.10 ft	100.00 ml/min
9/21/2021 3:10 PM	02:03:09	6.35 pH	20.29 °C	192.62 µS/cm	1.82 mg/L	11.01 NTU	62.1 mV	12.10 ft	100.00 ml/min
9/21/2021 3:15 PM	02:08:09	6.35 pH	20.26 °C	191.80 µS/cm	1.82 mg/L	10.01 NTU	73.3 mV	12.10 ft	100.00 ml/min
9/21/2021 3:20 PM	02:13:09	6.36 pH	20.79 °C	193.12 µS/cm	2.28 mg/L	10.93 NTU	75.0 mV	12.10 ft	100.00 ml/min
9/21/2021 3:25 PM	02:18:09	6.36 pH	20.84 °C	191.53 µS/cm	2.14 mg/L	11.12 NTU	75.8 mV	12.10 ft	100.00 ml/min
9/21/2021 3:30 PM	02:23:09	6.35 pH	20.76 °C	191.81 µS/cm	2.03 mg/L	10.42 NTU	76.6 mV	12.10 ft	100.00 ml/min
9/21/2021 3:35 PM	02:28:09	6.36 pH	20.76 °C	190.81 µS/cm	1.97 mg/L	10.56 NTU	76.9 mV	12.10 ft	100.00 ml/min
9/21/2021 3:40 PM	02:33:09	6.36 pH	20.58 °C	190.07 µS/cm	1.97 mg/L	11.77 NTU	77.0 mV	12.10 ft	100.00 ml/min
9/21/2021 3:45 PM	02:38:09	6.36 pH	20.67 °C	190.01 µS/cm	1.96 mg/L	11.04 NTU	76.9 mV	12.10 ft	100.00 ml/min
9/21/2021 3:50 PM	02:43:09	6.35 pH	20.53 °C	194.96 µS/cm	1.98 mg/L	10.49 NTU	76.2 mV	12.10 ft	100.00 ml/min
9/21/2021 3:55 PM	02:48:09	6.36 pH	20.56 °C	190.31 µS/cm	1.94 mg/L	11.02 NTU	63.6 mV	12.10 ft	100.00 ml/min
9/21/2021 4:00 PM	02:53:09	6.36 pH	20.53 °C	190.54 µS/cm	1.95 mg/L	9.87 NTU	75.1 mV	12.10 ft	100.00 ml/min
9/21/2021 4:05 PM	02:58:09	6.36 pH	20.35 °C	190.04 µS/cm	1.94 mg/L	9.65 NTU	75.7 mV	12.10 ft	100.00 ml/min
9/21/2021 4:10 PM	03:03:09	6.36 pH	20.22 °C	190.37 µS/cm	1.91 mg/L	8.43 NTU	76.1 mV	12.10 ft	100.00 ml/min
9/21/2021 4:15 PM	03:08:09	6.36 pH	19.95 °C	193.24 µS/cm	1.99 mg/L	8.28 NTU	75.9 mV	12.10 ft	100.00 ml/min
9/21/2021 4:20 PM	03:13:09	6.36 pH	19.63 °C	190.18 µS/cm	1.94 mg/L	6.78 NTU	63.2 mV	12.10 ft	100.00 ml/min
9/21/2021 4:25 PM	03:18:09	6.36 pH	19.18 °C	189.75 µS/cm	1.95 mg/L	2.29 NTU	74.4 mV	12.10 ft	100.00 ml/min

Samples

Sample ID:	Description:

Low-Flow Test Report:

Test Date / Time: 9/22/2021 9:31:18 AM
Project: Plant Branch
Operator Name: E. Rheams

Location Name: BRGWA-2I **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 54.30 ft** **Total Depth: 64.30 ft** **Initial Depth to Water: 11.02 ft**	**Pump Type: Dedicted** **Tubing Type: Polyethylene** **Pump Intake from TOC: 59 ft** **Estimated Total Volume Pumped: 7200 ml** **Flow Cell Volume: 90 ml** **Final Flow Rate: 120 ml/min** **Final Draw Down: 1.53 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 850767**

Test Notes:

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 10 %	+/- 5	+/- 10	+/- 0.3	
9/22/2021 9:31 AM	00:00	6.92 pH	22.47 °C	182.45 µS/cm	3.58 mg/L	5.66 NTU	137.4 mV	11.02 ft	240.00 ml/min
9/22/2021 9:36 AM	05:00	6.82 pH	19.46 °C	173.63 µS/cm	3.08 mg/L	13.60 NTU	105.4 mV	12.84 ft	240.00 ml/min
9/22/2021 9:41 AM	10:00	6.82 pH	19.28 °C	175.49 µS/cm	3.20 mg/L	7.08 NTU	119.9 mV	13.48 ft	120.00 ml/min
9/22/2021 9:46 AM	15:00	6.80 pH	20.30 °C	175.32 µS/cm	2.56 mg/L	5.61 NTU	105.8 mV	13.09 ft	120.00 ml/min
9/22/2021 9:51 AM	20:00	6.78 pH	20.40 °C	173.51 µS/cm	1.95 mg/L	3.15 NTU	95.6 mV	12.85 ft	120.00 ml/min
9/22/2021 9:56 AM	25:00	6.78 pH	20.48 °C	176.63 µS/cm	1.52 mg/L	3.29 NTU	77.2 mV	12.70 ft	120.00 ml/min
9/22/2021 10:01 AM	30:00	6.79 pH	20.40 °C	182.04 µS/cm	1.09 mg/L	2.92 NTU	61.5 mV	12.65 ft	120.00 ml/min
9/22/2021 10:06 AM	35:00	6.81 pH	20.53 °C	189.30 µS/cm	0.77 mg/L	2.98 NTU	45.8 mV	12.60 ft	120.00 ml/min
9/22/2021 10:11 AM	40:00	6.82 pH	20.57 °C	189.51 µS/cm	0.61 mg/L	2.95 NTU	42.3 mV	12.55 ft	120.00 ml/min
9/22/2021 10:16 AM	45:00	6.80 pH	20.57 °C	187.15 µS/cm	0.55 mg/L	2.39 NTU	37.8 mV	12.55 ft	120.00 ml/min
9/22/2021 10:21 AM	50:00	6.78 pH	20.71 °C	183.23 µS/cm	0.57 mg/L	2.94 NTU	37.1 mV	12.55 ft	120.00 ml/min

Samples

Sample ID:	Description:

Low-Flow Test Report:

Test Date / Time: 9/22/2021 9:54:20 AM
Project: Plant Branch
Operator Name: Jude Waguespack

Location Name: BRGWC-36S **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 24.02 ft** **Total Depth: 34.02 ft** **Initial Depth to Water: 2.9 ft**	**Pump Type: Peristaltic** **Tubing Type: Polyethylene** **Pump Intake From TOC: 29 ft** **Estimated Total Volume Pumped: 3750 ml** **Flow Cell Volume: 90 ml** **Final Flow Rate: 250 ml/min** **Final Draw Down: 0.75 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 843593**

Test Notes:

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 10 %	+/- 5	+/- 10	+/- 0.3	
9/22/2021 9:54 AM	00:00	5.54 pH	22.31 °C	557.28 µS/cm	1.95 mg/L		120.6 mV	2.90 ft	250.00 ml/min
9/22/2021 9:59 AM	05:00	5.52 pH	20.74 °C	571.01 µS/cm	1.83 mg/L	3.66 NTU	132.2 mV	3.70 ft	250.00 ml/min
9/22/2021 10:04 AM	10:00	5.53 pH	20.67 °C	568.75 µS/cm	1.78 mg/L	3.29 NTU	122.2 mV	3.65 ft	250.00 ml/min
9/22/2021 10:09 AM	15:00	5.53 pH	20.56 °C	570.33 µS/cm	1.77 mg/L	2.55 NTU	135.8 mV	3.65 ft	250.00 ml/min

Samples

Sample ID:	Description:
BRGWC-36S	

Low-Flow Test Report:

Test Date / Time: 9/22/2021 10:07:04 AM
Project: Plant Branch (4)
Operator Name: Erin D Hondt

Location Name: BRGWA-23S **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 33.8 ft** **Total Depth: 43.8 ft** **Initial Depth to Water: 37.1 ft**	**Pump Type: Dedicated** **Tubing Type: Polyethylene** **Pump Intake From TOC: 33.8 ft** **Estimated Total Volume Pumped: 12.4 L** **Flow Cell Volume: 90 ml** **Final Flow Rate: 120 ml/min** **Final Draw Down: 1.19 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 850751**

Test Notes:

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 10 %	+/- 5	+/- 10	+/- 0.3	
9/22/2021 10:07 AM	00:00	5.72 pH	22.18 °C	147.92 µS/cm	4.82 mg/L	3.80 NTU	97.3 mV	38.29 ft	120.00 ml/min

Samples

Sample ID:	Description:

Low-Flow Test Report:

Test Date / Time: 9/22/2021 10:54:04 AM
Project: Plant Branch (25)
Operator Name: E. Rheams

Location Name: BRGWA-2S **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 34.60 ft** **Total Depth: 44.60 ft** **Initial Depth to Water: 11.01 ft**	**Pump Type: Dedicted** **Tubing Type: Polyethylene** **Pump Intake from TOC: 39 ft** **Estimated Total Volume Pumped: 6600 ml** **Flow Cell Volume: 90 ml** **Final Flow Rate: 220 ml/min** **Final Draw Down: 0.09 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 850767**

Test Notes:

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 10 %	+/- 5	+/- 10	+/- 0.3	
9/22/2021 10:54 AM	00:00	6.00 pH	20.52 °C	71.17 µS/cm	3.43 mg/L	0.89 NTU	54.8 mV	11.01 ft	220.00 ml/min
9/22/2021 10:59 AM	05:00	6.09 pH	20.04 °C	69.90 µS/cm	1.86 mg/L	1.17 NTU	50.7 mV	11.04 ft	220.00 ml/min
9/22/2021 11:04 AM	10:00	6.09 pH	19.90 °C	69.75 µS/cm	1.37 mg/L	0.91 NTU	49.4 mV	11.08 ft	220.00 ml/min
9/22/2021 11:09 AM	15:00	6.09 pH	20.03 °C	69.25 µS/cm	1.11 mg/L	0.73 NTU	49.0 mV	11.10 ft	220.00 ml/min
9/22/2021 11:14 AM	20:00	6.08 pH	19.80 °C	69.20 µS/cm	1.00 mg/L	0.67 NTU	48.9 mV	11.10 ft	220.00 ml/min
9/22/2021 11:19 AM	25:00	6.07 pH	19.90 °C	69.11 µS/cm	0.88 mg/L	0.70 NTU	49.9 mV	11.10 ft	220.00 ml/min
9/22/2021 11:24 AM	30:00	6.06 pH	19.95 °C	69.21 µS/cm	0.87 mg/L	0.71 NTU	49.7 mV	11.10 ft	220.00 ml/min

Samples

Sample ID:	Description:

Low-Flow Test Report:

Test Date / Time: 9/22/2021 11:32:05 AM
Project: Plant Branch (5)
Operator Name: Erin D Hondt

Location Name: BRGWA-6S **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 42.9 ft** **Total Depth: 52.9 ft** **Initial Depth to Water: 26.2 ft**	**Pump Type: Dedicated** **Tubing Type: Polyethylene Pump** **Intake From TOC: 47.9 ft** **Estimated Total Volume Pumped: 3400 ml** **Flow Cell Volume: 90 ml** **Final Flow Rate: 200 ml/min** **Final Draw Down: 0.85 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 850751**

Test Notes:

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 10 %	+/- 5	+/- 10	+/- 0.3	
9/22/2021 11:32 AM	00:00	6.25 pH	20.93 °C	56.02 µS/cm	6.41 mg/L	8.84 NTU	84.7 mV	26.20 ft	200.00 ml/min
9/22/2021 11:37 AM	05:00	6.42 pH	20.57 °C	55.95 µS/cm	6.38 mg/L	4.38 NTU	86.5 mV	26.98 ft	200.00 ml/min
9/22/2021 11:42 AM	10:00	6.47 pH	20.67 °C	56.06 µS/cm	6.40 mg/L	1.42 NTU	84.7 mV	27.05 ft	200.00 ml/min
9/22/2021 11:47 AM	15:00	6.48 pH	21.11 °C	56.07 µS/cm	6.39 mg/L	0.99 NTU	84.8 mV	27.05 ft	200.00 ml/min
9/22/2021 11:49 AM	17:00	6.48 pH	21.33 °C	55.25 µS/cm	6.42 mg/L	0.99 NTU	84.6 mV	27.05 ft	200.00 ml/min

Samples

Sample ID:	Description:

Low-Flow Test Report:

Test Date / Time: 9/22/2021 11:39:26 AM
Project: Plant Branch
Operator Name: Jude Waguespack

Location Name: BRGWC-17S **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 5.0 ft** **Top of Screen: 1.15 ft** **Total Depth: 6.15 ft** **Initial Depth to Water: 5.21 ft**	**Pump Type: Peristaltic** **Tubing Type: Polyethylene** **Pump Intake From TOC: 6 ft** **Estimated Total Volume Pumped: 7500 ml** **Flow Cell Volume: 90 ml** **Final Flow Rate: 250 ml/min** **Final Draw Down: 0.29 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 843593**

Test Notes:

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 10 %	+/- 5	+/- 10	+/- 0.3	
9/22/2021 11:39 AM	00:00	6.28 pH	24.71 °C	440.96 µS/cm	3.24 mg/L	6.87 NTU	93.6 mV	5.21 ft	250.00 ml/min
9/22/2021 11:44 AM	05:00	6.24 pH	22.10 °C	438.94 µS/cm	1.27 mg/L	4.29 NTU	90.0 mV	5.50 ft	250.00 ml/min
9/22/2021 11:49 AM	10:00	6.21 pH	22.11 °C	418.48 µS/cm	1.36 mg/L	8.85 NTU	94.7 mV	5.50 ft	250.00 ml/min
9/22/2021 11:54 AM	15:00	6.21 pH	22.12 °C	411.76 µS/cm	1.41 mg/L	9.90 NTU	94.8 mV	5.50 ft	250.00 ml/min
9/22/2021 11:59 AM	20:00	6.22 pH	22.13 °C	406.53 µS/cm	1.42 mg/L	11.04 NTU	95.4 mV	5.50 ft	250.00 ml/min
9/22/2021 12:04 PM	25:00	6.22 pH	22.22 °C	405.41 µS/cm	1.41 mg/L	7.50 NTU	101.4 mV	5.50 ft	250.00 ml/min
9/22/2021 12:09 PM	30:00	6.22 pH	22.31 °C	407.12 µS/cm	1.47 mg/L	4.57 NTU	98.5 mV	5.50 ft	250.00 ml/min

Samples

Sample ID:	Description:
BRGWC-17S	EB-1

Low-Flow Test Report:

Test Date / Time: 9/22/2021 2:37:46 PM
Project: Plant Branch (6)
Operator Name: Erin D Hondt

Location Name: BRGWC-33S **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 21.66 ft** **Total Depth: 31.66 ft** **Initial Depth to Water: 11.75 ft**	**Pump Type: Dedicated** **Tubing Type: Polyethylene** **Pump Intake From TOC: 26.66 ft** **Estimated Total Volume Pumped: 5400 ml** **Flow Cell Volume: 90 ml** **Final Flow Rate: 280 ml/min** **Final Draw Down: 0.05 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 850751**

Test Notes:

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 10 %	+/- 5	+/- 10	+/- 0.3	
9/22/2021 2:37 PM	00:00	4.74 pH	24.54 °C	265.94 µS/cm	0.67 mg/L	2.85 NTU	117.0 mV	11.75 ft	120.00 ml/min
9/22/2021 2:42 PM	05:00	4.79 pH	23.72 °C	257.28 µS/cm	0.59 mg/L	3.14 NTU	117.6 mV	11.75 ft	120.00 ml/min
9/22/2021 2:47 PM	10:00	4.80 pH	22.40 °C	256.33 µS/cm	0.55 mg/L	3.45 NTU	119.1 mV	11.80 ft	280.00 ml/min
9/22/2021 2:52 PM	15:00	4.81 pH	21.20 °C	258.73 µS/cm	0.23 mg/L	4.65 NTU	120.5 mV	11.80 ft	280.00 ml/min
9/22/2021 2:57 PM	20:00	4.81 pH	20.86 °C	259.38 µS/cm	0.19 mg/L	3.76 NTU	121.2 mV	11.80 ft	280.00 ml/min
9/22/2021 3:02 PM	25:00	4.81 pH	20.75 °C	257.69 µS/cm	0.17 mg/L	3.55 NTU	120.7 mV	11.80 ft	280.00 ml/min

Samples

Sample ID:	Description:
BRGWC-33S	FB-1

Low-Flow Test Report:

Test Date / Time: 9/22/2021 4:01:41 PM
Project: Plant Branch (7)
Operator Name: Erin D Hondt

Location Name: BRGWC-34S **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 42.64 ft** **Total Depth: 52.64 ft** **Initial Depth to Water: 2.97 ft**	**Pump Type: Dedicated** **Tubing Type: Polyethylene** **Pump Intake From TOC: 47.64 ft** **Estimated Total Volume Pumped: 20192.666 ml** **Flow Cell Volume: 90 ml** **Final Flow Rate: 280 ml/min** **Final Draw Down: 0.04 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 850751**

Test Notes:

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 10 %	+/- 5	+/- 10	+/- 0.3	
9/22/2021 4:01 PM	00:00	5.88 pH	22.31 °C	664.16 µS/cm	2.16 mg/L	2.00 NTU	108.6 mV	2.97 ft	280.00 ml/min
9/22/2021 4:02 PM	01:04	5.88 pH	22.36 °C	596.08 µS/cm	2.07 mg/L	2.00 NTU	108.5 mV	2.97 ft	280.00 ml/min
9/22/2021 4:07 PM	06:04	5.93 pH	22.18 °C	627.56 µS/cm	2.33 mg/L	2.68 NTU	107.8 mV	3.01 ft	280.00 ml/min
9/22/2021 4:12 PM	11:04	5.91 pH	22.14 °C	610.31 µS/cm	1.82 mg/L	2.38 NTU	108.0 mV	3.01 ft	280.00 ml/min
9/22/2021 4:17 PM	16:04	5.92 pH	22.29 °C	604.87 µS/cm	2.06 mg/L	2.01 NTU	107.3 mV	3.01 ft	280.00 ml/min
9/22/2021 4:21 PM	20:11	5.92 pH	22.30 °C	688.47 µS/cm	1.91 mg/L	1.93 NTU	107.1 mV	3.01 ft	280.00 ml/min
9/22/2021 4:23 PM	22:07	5.92 pH	22.27 °C	658.11 µS/cm	1.94 mg/L	1.91 NTU	107.2 mV	3.01 ft	280.00 ml/min
9/22/2021 4:28 PM	27:07	5.92 pH	22.21 °C	609.32 µS/cm	1.93 mg/L	1.88 NTU	107.0 mV	3.01 ft	280.00 ml/min
9/22/2021 4:33 PM	32:07	5.93 pH	22.19 °C	589.21 µS/cm	2.11 mg/L	1.83 NTU	107.2 mV	3.01 ft	280.00 ml/min
9/22/2021 4:38 PM	37:07	5.92 pH	22.03 °C	545.51 µS/cm	2.09 mg/L	1.81 NTU	107.3 mV	3.01 ft	280.00 ml/min
9/22/2021 4:43 PM	42:07	5.92 pH	21.85 °C	579.00 µS/cm	2.27 mg/L	1.78 NTU	108.6 mV	3.01 ft	280.00 ml/min
9/22/2021 4:48 PM	47:07	5.93 pH	21.91 °C	542.90 µS/cm	2.17 mg/L	1.72 NTU	108.7 mV	3.01 ft	280.00 ml/min
9/22/2021 4:53 PM	52:07	5.93 pH	21.93 °C	583.49 µS/cm	2.18 mg/L	1.69 NTU	109.3 mV	3.01 ft	280.00 ml/min
9/22/2021 4:58 PM	57:07	5.92 pH	21.86 °C	477.50 µS/cm	2.08 mg/L	1.78 NTU	110.5 mV	3.01 ft	280.00 ml/min
9/22/2021 5:03 PM	01:02:07	5.93 pH	21.87 °C	587.51 µS/cm	2.26 mg/L	1.88 NTU	111.2 mV	3.01 ft	280.00 ml/min

9/22/2021 5:08 PM	01:07:07	5.93 pH	21.76 °C	584.53 µS/cm	2.14 mg/L	1.90 NTU	112.1 mV	3.01 ft	280.00 ml/min
9/22/2021 5:13 PM	01:12:07	5.93 pH	21.82 °C	603.28 µS/cm	2.15 mg/L	1.48 NTU	113.0 mV	3.01 ft	280.00 ml/min

Samples

Sample ID:	Description:

Low-Flow Test Report:

Test Date / Time: 9/23/2021 9:42:31 AM
Project: Plant Branch (8)
Operator Name: Erin D Hondt

Location Name: BRGWC-35S **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 25.34 ft** **Total Depth: 35.34 ft** **Initial Depth to Water: 1.59 ft**	**Pump Type: Dedicated** **Tubing Type: Polyethylene** **Pump Intake From TOC: 30.34 ft** **Estimated Total Volume Pumped: 5400 ml** **Flow Cell Volume: 90 ml** **Final Flow Rate: 360 ml/min** **Final Draw Down: 0.09 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 850751**

Test Notes:

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 10 %	+/- 5	+/- 10	+/- 0.3	
9/23/2021 9:42 AM	00:00	6.08 pH	18.84 °C	653.15 µS/cm	0.29 mg/L	4.98 NTU	78.5 mV	1.59 ft	360.00 ml/min
9/23/2021 9:47 AM	05:00	6.06 pH	18.93 °C	635.31 µS/cm	0.13 mg/L	2.55 NTU	71.5 mV	1.68 ft	360.00 ml/min
9/23/2021 9:52 AM	10:00	6.07 pH	18.95 °C	633.41 µS/cm	0.11 mg/L	2.85 NTU	71.3 mV	1.68 ft	360.00 ml/min
9/23/2021 9:57 AM	15:00	6.08 pH	18.96 °C	638.51 µS/cm	0.11 mg/L	1.80 NTU	68.9 mV	1.68 ft	360.00 ml/min

Samples

Sample ID:	Description:
BRGWC-35S	DUP-1

Low-Flow Test Report:

Test Date / Time: 9/23/2021 10:42:43 AM
Project: Plant Branch (9)
Operator Name: Erin D Hondt

Location Name: BRGWC-38S **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 33.66 ft** **Total Depth: 43.66 ft** **Initial Depth to Water: 22.2 ft**	**Pump Type: Dedicated** **Tubing Type: Polyethylene** **Pump Intake From TOC: 38.66 ft** **Estimated Total Volume Pumped: 4800 ml** **Flow Cell Volume: 90 ml** **Final Flow Rate: 160 ml/min** **Final Draw Down: 0.85 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 850751**

Test Notes:

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 10 %	+/- 5	+/- 10	+/- 0.3	
9/23/2021 10:42 AM	00:00	4.04 pH	19.51 °C	756.91 µS/cm	2.18 mg/L	2.88 NTU	79.9 mV	22.20 ft	160.00 ml/min
9/23/2021 10:47 AM	05:00	4.03 pH	19.64 °C	754.14 µS/cm	1.67 mg/L	3.83 NTU	80.5 mV	22.80 ft	160.00 ml/min
9/23/2021 10:52 AM	10:00	4.03 pH	19.80 °C	732.39 µS/cm	1.50 mg/L	3.24 NTU	82.0 mV	23.05 ft	160.00 ml/min
9/23/2021 10:57 AM	15:00	4.04 pH	19.95 °C	720.31 µS/cm	1.34 mg/L	3.67 NTU	83.0 mV	23.05 ft	160.00 ml/min
9/23/2021 11:02 AM	20:00	4.04 pH	20.06 °C	712.36 µS/cm	1.32 mg/L	2.67 NTU	84.2 mV	23.05 ft	160.00 ml/min
9/23/2021 11:07 AM	25:00	4.04 pH	20.16 °C	712.25 µS/cm	1.31 mg/L	1.24 NTU	85.4 mV	23.05 ft	160.00 ml/min
9/23/2021 11:12 AM	30:00	4.05 pH	20.22 °C	720.11 µS/cm	1.30 mg/L	0.58 NTU	87.0 mV	23.05 ft	160.00 ml/min

Samples

Sample ID:	Description:

Low-Flow Test Report:

Test Date / Time: 9/23/2021 11:54:45 AM
Project: Plant Branch
Operator Name: E. Rheams

Location Name: BRGWC-45 **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 50.45 ft** **Total Depth: 60.45 ft** **Initial Depth to Water: 10.99 ft**	**Pump Type: Dedicted** **Tubing Type: Polyethylene** **Pump Intake From TOC: 52.21 ft** **Estimated Total Volume Pumped: 4400 ml** **Flow Cell Volume: 90 ml** **Final Flow Rate: 220 ml/min** **Final Draw Down: 0.37 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 850767**

Test Notes:

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 10 %	+/- 5	+/- 10	+/- 0.3	
9/23/2021 11:54 AM	00:00	6.32 pH	23.11 °C	434.15 µS/cm	4.49 mg/L	1.93 NTU	68.5 mV	10.99 ft	220.00 ml/min
9/23/2021 11:59 AM	05:00	6.01 pH	22.30 °C	474.89 µS/cm	0.90 mg/L	10.48 NTU	58.0 mV	11.38 ft	220.00 ml/min
9/23/2021 12:04 PM	10:00	6.00 pH	22.44 °C	467.11 µS/cm	0.70 mg/L	2.50 NTU	55.4 mV	11.40 ft	220.00 ml/min
9/23/2021 12:09 PM	15:00	5.98 pH	22.47 °C	457.15 µS/cm	0.52 mg/L	2.58 NTU	47.3 mV	11.36 ft	220.00 ml/min
9/23/2021 12:14 PM	20:00	5.95 pH	22.31 °C	448.79 µS/cm	0.41 mg/L	2.40 NTU	44.5 mV	11.36 ft	220.00 ml/min

Samples

Sample ID:	Description:

Low-Flow Test Report:

Test Date / Time: 9/23/2021 12:08:54 PM
Project: Plant Branch (10)
Operator Name: Erin D Hondt

Location Name: BRGWC-37S **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 58.73 ft** **Total Depth: 68.73 ft** **Initial Depth to Water: 51.14 ft**	**Pump Type: Dedicated** **Tubing Type: Polyethylene** **Pump Intake From TOC: 63.73 ft** **Estimated Total Volume Pumped: 3000 ml** **Flow Cell Volume: 90 ml** **Final Flow Rate: 120 ml/min** **Final Draw Down: 0.54 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 850751**

Test Notes:

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 10 %	+/- 5	+/- 10	+/- 0.3	
9/23/2021 12:08 PM	00:00	5.79 pH	22.40 °C	47.96 µS/cm	7.11 mg/L	2.79 NTU	92.6 mV	51.14 ft	120.00 ml/min
9/23/2021 12:13 PM	05:00	5.81 pH	21.74 °C	49.37 µS/cm	7.29 mg/L	0.17 NTU	88.5 mV	51.68 ft	120.00 ml/min
9/23/2021 12:18 PM	10:00	5.84 pH	21.77 °C	49.26 µS/cm	7.32 mg/L	0.77 NTU	91.7 mV	51.68 ft	120.00 ml/min
9/23/2021 12:23 PM	15:00	5.84 pH	21.82 °C	49.57 µS/cm	7.36 mg/L	0.07 NTU	93.8 mV	51.68 ft	120.00 ml/min
9/23/2021 12:28 PM	20:00	5.84 pH	22.28 °C	49.22 µS/cm	7.37 mg/L	0.06 NTU	94.9 mV	51.68 ft	120.00 ml/min
9/23/2021 12:33 PM	25:00	5.85 pH	22.43 °C	49.37 µS/cm	7.38 mg/L	0.01 NTU	95.9 mV	51.68 ft	120.00 ml/min

Samples

Sample ID:	Description:

Low-Flow Test Report:

Test Date / Time: 9/23/2021 1:08:09 PM
Project: Plant McDonough (29)
Operator Name: E. Rheams

Location Name: BRGWC-47 **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 82.00 ft** **Total Depth: 92.00 ft** **Initial Depth to Water: 25.84 ft**	**Pump Type: Dedicted** **Tubing Type: Polyethylene** **Pump Intake From TOC: 87.55 ft** **Estimated Total Volume Pumped: 4500 ml** **Flow Cell Volume: 90 ml** **Final Flow Rate: 140 ml/min** **Final Draw Down: 0.61 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 850767**

Test Notes:

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 10 %	+/- 5	+/- 10	+/- 0.3	
9/23/2021 1:08 PM	00:00	6.67 pH	22.80 °C	1,700.0 µS/cm	4.42 mg/L	6.13 NTU	-35.1 mV	25.84 ft	240.00 ml/min
9/23/2021 1:13 PM	05:00	5.87 pH	20.84 °C	2,358.7 µS/cm	1.29 mg/L	11.30 NTU	-30.3 mV	26.90 ft	240.00 ml/min
9/23/2021 1:18 PM	10:00	5.78 pH	21.37 °C	2,389.5 µS/cm	0.98 mg/L	7.47 NTU	-37.9 mV	26.60 ft	140.00 ml/min
9/23/2021 1:23 PM	15:00	5.75 pH	21.64 °C	2,379.3 µS/cm	0.83 mg/L	4.21 NTU	-20.6 mV	26.45 ft	140.00 ml/min
9/23/2021 1:28 PM	20:00	5.74 pH	21.93 °C	2,380.8 µS/cm	0.76 mg/L	3.22 NTU	-6.2 mV	26.45 ft	140.00 ml/min
9/23/2021 1:33 PM	25:00	5.74 pH	21.77 °C	2,383.8 µS/cm	0.68 mg/L	2.36 NTU	-25.2 mV	26.45 ft	140.00 ml/min

Samples

Sample ID:	Description:

Low-Flow Test Report:

Test Date / Time: 9/27/2021 12:32:38 PM
Project: Plant Branch (12)
Operator Name: D. Herrera

Location Name: BRGWC-50 **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 55 ft** **Total Depth: 65 ft** **Initial Depth to Water: 37.89 ft**	**Pump Type: Bladder** **Tubing Type: Polyethylene** **Pump Intake From TOC: 60 ft** **Estimated Total Volume Pumped: 7500 ml** **Flow Cell Volume: 90 ml** **Final Flow Rate: 250 ml/min** **Final Draw Down: 0.16 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 850751**

Test Notes:

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 10 %	+/- 5	+/- 10	+/- 0.3	
9/27/2021 12:32 PM	00:00	5.19 pH	22.94 °C	1,830.3 µS/cm	1.35 mg/L	2.40 NTU	81.5 mV	37.89 ft	250.00 ml/min
9/27/2021 12:37 PM	05:00	5.24 pH	22.27 °C	1,830.3 µS/cm	1.52 mg/L	3.04 NTU	76.9 mV	38.05 ft	250.00 ml/min
9/27/2021 12:42 PM	10:00	5.09 pH	22.08 °C	1,838.8 µS/cm	0.63 mg/L	3.80 NTU	73.6 mV	38.05 ft	250.00 ml/min
9/27/2021 12:47 PM	15:00	5.07 pH	22.09 °C	1,835.2 µS/cm	0.39 mg/L	3.72 NTU	71.0 mV	38.05 ft	250.00 ml/min
9/27/2021 12:52 PM	20:00	5.06 pH	22.22 °C	1,845.9 µS/cm	0.35 mg/L	3.84 NTU	69.0 mV	38.05 ft	250.00 ml/min
9/27/2021 12:57 PM	25:00	5.05 pH	22.09 °C	1,854.1 µS/cm	0.34 mg/L	4.55 NTU	67.3 mV	38.05 ft	250.00 ml/min
9/27/2021 1:02 PM	30:00	5.05 pH	22.35 °C	1,850.6 µS/cm	0.35 mg/L	4.40 NTU	65.9 mV	38.05 ft	250.00 ml/min

Samples

Sample ID:	Description:
BRGWC-50	DUP-2

Low-Flow Test Report:

Test Date / Time: 9/27/2021 2:36:00 PM
Project: Plant Branch (15)
Operator Name: D. Herrera

Location Name: PZ-51S **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 35.4 ft** **Total Depth: 45.4 ft** **Initial Depth to Water: 38.17 ft**	**Pump Type: Bladder** **Tubing Type: Polyethylene** **Pump Intake From TOC: 42 ft** **Estimated Total Volume Pumped: 15000 ml** **Flow Cell Volume: 90 ml** **Final Flow Rate: 250 ml/min** **Final Draw Down: 3.48 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 850751**

Test Notes:

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 10 %	+/- 5	+/- 10	+/- 0.3	
9/27/2021 2:36 PM	00:00	6.06 pH	21.14 °C	137.89 µS/cm	0.88 mg/L	5.90 NTU	51.7 mV	38.17 ft	250.00 ml/min
9/27/2021 2:41 PM	05:00	6.05 pH	21.43 °C	138.90 µS/cm	0.63 mg/L	5.82 NTU	51.4 mV	40.65 ft	250.00 ml/min
9/27/2021 2:46 PM	10:00	6.04 pH	21.29 °C	140.15 µS/cm	0.59 mg/L	6.18 NTU	52.4 mV	40.97 ft	250.00 ml/min
9/27/2021 2:51 PM	15:00	6.05 pH	21.24 °C	140.22 µS/cm	0.50 mg/L	6.01 NTU	52.7 mV	41.15 ft	250.00 ml/min
9/27/2021 2:56 PM	20:00	6.05 pH	21.33 °C	140.45 µS/cm	0.61 mg/L	5.83 NTU	52.6 mV	41.25 ft	250.00 ml/min
9/27/2021 3:01 PM	25:00	6.04 pH	21.31 °C	139.58 µS/cm	0.44 mg/L	6.20 NTU	53.5 mV	41.35 ft	250.00 ml/min
9/27/2021 3:06 PM	30:00	6.04 pH	21.39 °C	135.89 µS/cm	0.38 mg/L	6.77 NTU	53.5 mV	41.45 ft	250.00 ml/min
9/27/2021 3:11 PM	35:00	6.04 pH	21.38 °C	139.42 µS/cm	0.35 mg/L	6.97 NTU	54.0 mV	41.45 ft	250.00 ml/min
9/27/2021 3:16 PM	40:00	6.04 pH	21.46 °C	139.48 µS/cm	0.31 mg/L	5.43 NTU	54.1 mV	41.55 ft	250.00 ml/min
9/27/2021 3:21 PM	45:00	6.03 pH	21.58 °C	138.88 µS/cm	0.29 mg/L	4.20 NTU	54.5 mV	41.58 ft	250.00 ml/min
9/27/2021 3:26 PM	50:00	6.04 pH	21.58 °C	139.43 µS/cm	0.29 mg/L	3.12 NTU	54.3 mV	41.60 ft	250.00 ml/min
9/27/2021 3:31 PM	55:00	6.03 pH	21.56 °C	138.39 µS/cm	0.40 mg/L	1.56 NTU	54.7 mV	41.65 ft	250.00 ml/min
9/27/2021 3:36 PM	01:00:00	6.04 pH	21.58 °C	137.25 µS/cm	0.44 mg/L	0.70 NTU	55.0 mV	41.65 ft	250.00 ml/min

Samples

Sample ID:	Description:
PZ-51S	

Low-Flow Test Report:

Test Date / Time: 9/27/2021 4:16:25 PM
Project: Plant Branch (16)
Operator Name: D. Herrera

Location Name: PZ-61I **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 66.03 ft** **Total Depth: 76.03 ft** **Initial Depth to Water: 47.8 ft**	**Pump Type: Bladder** **Tubing Type: Polyethylene** **Pump Intake From TOC: 71 ft** **Estimated Total Volume Pumped: 6250 ml** **Flow Cell Volume: 90 ml** **Final Flow Rate: 250 ml/min** **Final Draw Down: 0.4 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 850751**

Test Notes:

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 10 %	+/- 5	+/- 10	+/- 0.3	
9/27/2021 4:16 PM	00:00	5.01 pH	21.69 °C	2,177.0 µS/cm	0.47 mg/L	13.40 NTU	56.7 mV	47.80 ft	250.00 ml/min
9/27/2021 4:21 PM	05:00	5.00 pH	21.33 °C	2,183.8 µS/cm	0.31 mg/L	3.46 NTU	54.6 mV	48.10 ft	250.00 ml/min
9/27/2021 4:26 PM	10:00	5.01 pH	21.29 °C	2,164.6 µS/cm	0.27 mg/L	4.03 NTU	52.5 mV	48.20 ft	250.00 ml/min
9/27/2021 4:31 PM	15:00	5.03 pH	21.43 °C	2,151.2 µS/cm	0.26 mg/L	2.73 NTU	50.4 mV	48.25 ft	250.00 ml/min
9/27/2021 4:36 PM	20:00	5.01 pH	21.38 °C	2,184.2 µS/cm	0.23 mg/L	3.80 NTU	48.2 mV	48.20 ft	250.00 ml/min
9/27/2021 4:41 PM	25:00	5.02 pH	21.31 °C	2,165.8 µS/cm	0.21 mg/L	3.98 NTU	47.4 mV	48.20 ft	250.00 ml/min

Samples

Sample ID:	Description:
PZ-61I	

Low-Flow Test Report:

Test Date / Time: 9/27/2021 5:13:20 PM
Project: Plant Branch (17)
Operator Name: J.Waguespack

Location Name: PZ-51I **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 58 ft** **Total Depth: 68 ft** **Initial Depth to Water: 38 ft**	**Pump Type: Bladder** **Tubing Type: Polyethylene** **Pump Intake From TOC: 63 ft** **Estimated Total Volume Pumped: 5500 ml** **Flow Cell Volume: 90 ml** **Final Flow Rate: 300 ml/min** **Final Draw Down: 1.15 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 850751**

Test Notes:

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 10 %	+/- 5	+/- 10	+/- 0.3	
9/27/2021 5:13 PM	00:00	5.68 pH	29.39 °C	1,381.1 µS/cm	5.64 mg/L	6.89 NTU	60.0 mV	38.00 ft	250.00 ml/min
9/27/2021 5:18 PM	05:00	5.62 pH	21.99 °C	1,489.3 µS/cm	4.86 mg/L	6.41 NTU	71.6 mV	38.80 ft	250.00 ml/min
9/27/2021 5:23 PM	10:00	5.40 pH	21.20 °C	1,529.2 µS/cm	1.81 mg/L	5.96 NTU	75.8 mV	39.05 ft	300.00 ml/min
9/27/2021 5:28 PM	15:00	5.36 pH	21.11 °C	1,520.6 µS/cm	0.87 mg/L	6.54 NTU	75.9 mV	39.05 ft	300.00 ml/min
9/27/2021 5:33 PM	20:00	5.34 pH	21.14 °C	1,540.3 µS/cm	0.48 mg/L	4.37 NTU	76.2 mV	39.15 ft	300.00 ml/min

Samples

Sample ID:	Description:
PZ-51I	

Low-Flow Test Report:

Test Date / Time: 9/28/2021 9:13:11 AM
Project: Plant Branch (18)
Operator Name: D. Herrera

Location Name: PZ-51D **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 96 ft** **Total Depth: 106 ft** **Initial Depth to Water: 39.9 ft**	**Pump Type: Dedicated** **Tubing Type: Poly** **Pump Intake From TOC: 101 ft** **Estimated Total Volume Pumped: 28750 ml** **Flow Cell Volume: 90 ml** **Final Flow Rate: 100 ml/min** **Final Draw Down: -34.4 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 850751**

Test Notes:

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 10 %	+/- 5	+/- 10	+/- 0.3	
9/28/2021 9:13 AM	00:00	7.27 pH	20.23 °C	1,006.6 µS/cm	8.27 mg/L	4.11 NTU	120.8 mV	39.90 ft	250.00 ml/min
9/28/2021 9:18 AM	05:00	6.94 pH	20.31 °C	1,025.9 µS/cm	1.95 mg/L	5.12 NTU	79.8 mV	41.75 ft	250.00 ml/min
9/28/2021 9:23 AM	10:00	7.01 pH	20.22 °C	1,027.3 µS/cm	0.95 mg/L	3.39 NTU	59.1 mV	42.89 ft	250.00 ml/min
9/28/2021 9:28 AM	15:00	7.06 pH	20.31 °C	1,026.6 µS/cm	1.19 mg/L	3.21 NTU	40.7 mV	42.89 ft	250.00 ml/min
9/28/2021 9:33 AM	20:00	7.10 pH	20.35 °C	1,026.0 µS/cm	1.75 mg/L	2.77 NTU	17.8 mV	45.50 ft	250.00 ml/min
9/28/2021 9:38 AM	25:00	7.14 pH	20.44 °C	1,026.6 µS/cm	2.40 mg/L	2.78 NTU	-0.2 mV	46.41 ft	250.00 ml/min
9/28/2021 9:43 AM	30:00	7.17 pH	20.61 °C	1,027.3 µS/cm	2.88 mg/L	2.80 NTU	-14.8 mV	46.70 ft	250.00 ml/min
9/28/2021 9:48 AM	35:00	7.18 pH	20.89 °C	1,020.9 µS/cm	2.89 mg/L	2.90 NTU	-32.4 mV	47.05 ft	250.00 ml/min
9/28/2021 9:53 AM	40:00	7.18 pH	21.22 °C	1,015.3 µS/cm	3.38 mg/L	2.96 NTU	-42.0 mV	47.70 ft	250.00 ml/min
9/28/2021 9:58 AM	45:00	7.18 pH	21.42 °C	1,006.6 µS/cm	3.64 mg/L	3.15 NTU	-46.7 mV	48.55 ft	250.00 ml/min
9/28/2021 10:03 AM	50:00	7.18 pH	21.65 °C	1,004.8 µS/cm	4.01 mg/L	3.09 NTU	-48.4 mV	49.30 ft	250.00 ml/min
9/28/2021 10:08 AM	55:00	7.18 pH	21.90 °C	1,000.9 µS/cm	4.12 mg/L	4.82 NTU	-49.4 mV	49.50 ft	250.00 ml/min
9/28/2021 10:13 AM	01:00:00	7.19 pH	22.00 °C	997.07 µS/cm	4.48 mg/L	4.10 NTU	-50.5 mV	49.91 ft	250.00 ml/min
9/28/2021 10:18 AM	01:05:00	7.18 pH	22.14 °C	993.87 µS/cm	4.50 mg/L	4.53 NTU	-48.1 mV	50.06 ft	250.00 ml/min
9/28/2021 10:23 AM	01:10:00	7.18 pH	22.36 °C	988.99 µS/cm	4.81 mg/L	4.47 NTU	-50.7 mV	51.70 ft	250.00 ml/min

9/28/2021 10:28 AM	01:15:00	7.18 pH	22.45 °C	986.62 µS/cm	4.91 mg/L	4.56 NTU	-50.4 mV	52.21 ft	250.00 ml/min
9/28/2021 10:33 AM	01:20:00	7.18 pH	22.54 °C	984.17 µS/cm	5.26 mg/L	4.32 NTU	-50.5 mV	52.98 ft	250.00 ml/min
9/28/2021 10:38 AM	01:25:00	7.18 pH	22.67 °C	984.73 µS/cm	5.30 mg/L	3.98 NTU	-50.9 mV	53.30 ft	250.00 ml/min
9/28/2021 10:43 AM	01:30:00	7.18 pH	22.88 °C	983.81 µS/cm	5.96 mg/L	3.79 NTU	-50.4 mV	53.65 ft	250.00 ml/min
9/28/2021 10:48 AM	01:35:00	7.18 pH	23.01 °C	984.00 µS/cm	6.08 mg/L	4.75 NTU	-49.9 mV	54.38 ft	250.00 ml/min
9/28/2021 10:53 AM	01:40:00	7.17 pH	23.23 °C	980.95 µS/cm	6.62 mg/L	4.68 NTU	-48.8 mV	54.73 ft	250.00 ml/min
9/28/2021 10:58 AM	01:45:00	7.17 pH	23.47 °C	971.90 µS/cm	6.71 mg/L	2.99 NTU	-48.8 mV	55.21 ft	250.00 ml/min
9/28/2021 11:03 AM	01:50:00	7.18 pH	23.30 °C	983.99 µS/cm	6.37 mg/L	3.31 NTU	-49.7 mV	55.42 ft	250.00 ml/min
9/28/2021 11:08 AM	01:55:00	7.18 pH	23.35 °C	983.63 µS/cm	5.88 mg/L	2.97 NTU	-50.3 mV	55.50 ft	100.00 ml/min

Samples

Sample ID:	Description:
PZ-51D	

Low-Flow Test Report:

Test Date / Time: 9/28/2021 9:22:24 AM
Project: Plant Branch (2)
Operator Name: Jude Waguespack

Location Name: PZ-50D **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 96 ft** **Total Depth: 106 ft** **Initial Depth to Water: 65.3 ft**	**Pump Type: Bladder** **Tubing Type: Polyethylene** **Pump Intake From TOC: 101 ft** **Estimated Total Volume Pumped: 300 ml** **Flow Cell Volume: 90 ml** **Final Flow Rate: 150 ml/min** **Final Draw Down: 0.9 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 850767**

Test Notes:
Well evacuated 09.27.21 -
44.25 L removed

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 10 %	+/- 5	+/- 10	+/- 0.3	
9/28/2021 9:22 AM	00:00	6.65 pH	20.75 °C	1,864.5 µS/cm	9.18 mg/L	9.35 NTU	90.6 mV	65.30 ft	150.00 ml/min
9/28/2021 9:23 AM	01:00	6.49 pH	20.66 °C	1,927.4 µS/cm	7.41 mg/L	8.10 NTU	84.7 mV	66.20 ft	150.00 ml/min
9/28/2021 9:24 AM	02:00	6.23 pH	20.58 °C	1,870.3 µS/cm	4.36 mg/L	4.82 NTU	81.4 mV	66.20 ft	150.00 ml/min

Samples

Sample ID:	Description:
PZ-50D	

Low-Flow Test Report:

Test Date / Time: 9/28/2021 10:51:43 AM
Project: Plant Branch
Operator Name: Brian Steele

Location Name: BRGWC-25I **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 14.41 ft** **Total Depth: 24.41 ft** **Initial Depth to Water: 9.55 ft**	**Pump Type: Dedicted** **Tubing Type: Polyethylene** **Pump Intake From TOC: 20.41 ft** **Estimated Total Volume Pumped: 9352 ml** **Flow Cell Volume: 90 ml** **Final Flow Rate: 320 ml/min** **Final Draw Down: 0.15 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 850767**

Test Notes:

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 10 %	+/- 5	+/- 10	+/- 0.3	
9/28/2021 10:51 AM	00:00	7.42 pH	24.33 °C	1.49 µS/cm	8.40 mg/L	20.10 NTU	189.9 mV	9.55 ft	240.00 ml/min
9/28/2021 10:52 AM	00:44	7.41 pH	24.31 °C	1.47 µS/cm	8.40 mg/L	17.60 NTU	204.7 mV	9.55 ft	240.00 ml/min
9/28/2021 10:57 AM	05:38	5.92 pH	19.94 °C	363.92 µS/cm	1.03 mg/L	14.40 NTU	54.7 mV	9.70 ft	320.00 ml/min
9/28/2021 11:02 AM	10:38	5.95 pH	19.81 °C	365.67 µS/cm	0.29 mg/L	5.73 NTU	93.5 mV	9.70 ft	320.00 ml/min
9/28/2021 11:07 AM	15:38	5.95 pH	19.81 °C	370.37 µS/cm	0.27 mg/L	2.27 NTU	104.8 mV	9.70 ft	320.00 ml/min
9/28/2021 11:12 AM	20:38	5.95 pH	19.80 °C	370.12 µS/cm	0.22 mg/L	1.37 NTU	110.7 mV	9.70 ft	320.00 ml/min
9/28/2021 11:17 AM	25:38	5.96 pH	19.80 °C	372.78 µS/cm	0.28 mg/L	1.23 NTU	114.9 mV	9.70 ft	320.00 ml/min
9/28/2021 11:22 AM	30:38	5.97 pH	19.81 °C	372.46 µS/cm	0.29 mg/L	0.85 NTU	131.1 mV	9.70 ft	320.00 ml/min

Samples

Sample ID:	Description:
BRWGC-25I	App 3 App 4
BRGWC-25I	Radium

Low-Flow Test Report:

Test Date / Time: 9/28/2021 11:41:53 AM
Project: Plant Branch
Operator Name: Jude Waguespack

Location Name: PZ-60I **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 50.83 ft** **Total Depth: 60.83 ft** **Initial Depth to Water: 37.6 ft**	**Pump Type: Bladder** **Tubing Type: Polyethylene** **Pump Intake From TOC: 55 ft** **Estimated Total Volume Pumped: 5000 ml** **Flow Cell Volume: 90 ml** **Final Flow Rate: 250 ml/min** **Final Draw Down: 0.15 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 850767**

Test Notes:

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 10 %	+/- 5	+/- 10	+/- 0.3	
9/28/2021 11:41 AM	00:00	5.86 pH	26.60 °C	2,854.7 µS/cm	5.89 mg/L	6.99 NTU	127.3 mV	37.60 ft	250.00 ml/min
9/28/2021 11:46 AM	05:00	5.58 pH	22.35 °C	2,948.8 µS/cm	0.78 mg/L	6.54 NTU	113.2 mV	37.70 ft	250.00 ml/min
9/28/2021 11:51 AM	10:00	4.84 pH	21.86 °C	3,064.1 µS/cm	0.34 mg/L	3.80 NTU	189.1 mV	37.75 ft	250.00 ml/min
9/28/2021 11:56 AM	15:00	4.79 pH	21.78 °C	3,072.9 µS/cm	0.26 mg/L	3.22 NTU	233.3 mV	37.75 ft	250.00 ml/min
9/28/2021 12:01 PM	20:00	4.77 pH	21.82 °C	3,072.5 µS/cm	0.22 mg/L	3.30 NTU	360.0 mV	37.75 ft	250.00 ml/min

Samples

Sample ID:	Description:
PZ-60I	

Low-Flow Test Report:

Test Date / Time: 9/28/2021 12:06:15 PM
Project: Plant Branch (2)
Operator Name: Brian Steele

Location Name: BRGWC-29I **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 13.63 ft** **Total Depth: 23.63 ft** **Initial Depth to Water: 10.5 ft**	**Pump Type: Dedicted** **Tubing Type: Polyethylene** **Pump Intake From TOC: 18.6 ft** **Estimated Total Volume Pumped: 9800 ml** **Flow Cell Volume: 90 ml** **Final Flow Rate: 280 ml/min** **Final Draw Down: 0 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 850767**

Test Notes:

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 10 %	+/- 5	+/- 10	+/- 0.3	
9/28/2021 12:06 PM	00:00	3.17 pH	22.58 °C	632.77 µS/cm	3.81 mg/L	1.76 NTU	264.3 mV	10.50 ft	280.00 ml/min
9/28/2021 12:11 PM	05:00	3.97 pH	21.77 °C	556.61 µS/cm	1.27 mg/L	1.31 NTU	254.0 mV	10.50 ft	280.00 ml/min
9/28/2021 12:16 PM	10:00	4.17 pH	21.68 °C	555.90 µS/cm	1.30 mg/L	1.19 NTU	206.2 mV	10.50 ft	280.00 ml/min
9/28/2021 12:21 PM	15:00	4.21 pH	21.69 °C	555.24 µS/cm	1.15 mg/L	0.76 NTU	200.2 mV	10.50 ft	280.00 ml/min
9/28/2021 12:26 PM	20:00	4.22 pH	21.73 °C	545.02 µS/cm	1.18 mg/L	0.50 NTU	196.3 mV	10.50 ft	280.00 ml/min
9/28/2021 12:31 PM	25:00	4.23 pH	21.73 °C	550.88 µS/cm	1.07 mg/L	0.63 NTU	193.9 mV	10.50 ft	280.00 ml/min
9/28/2021 12:36 PM	30:00	4.23 pH	21.73 °C	554.52 µS/cm	1.20 mg/L	0.59 NTU	192.7 mV	10.50 ft	280.00 ml/min
9/28/2021 12:41 PM	35:00	4.23 pH	21.65 °C	548.93 µS/cm	1.06 mg/L	0.42 NTU	191.9 mV	10.50 ft	280.00 ml/min
9/28/2021 12:46 PM	40:00	4.23 pH	21.56 °C	550.20 µS/cm	1.03 mg/L	0.42 NTU	191.4 mV	10.50 ft	280.00 ml/min

Samples

Sample ID:	Description:
BRGWC-29I	App III/IV Rad Extra RAD

Low-Flow Test Report:

Test Date / Time: 9/28/2021 12:25:37 PM
Project: Plant Branch (19)
Operator Name: D. Herrera

Location Name: PZ-58I **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 53.93 ft** **Total Depth: 63.93 ft** **Initial Depth to Water: 37.78 ft**	**Pump Type: Bladder** **Tubing Type: Polyethylene** **Pump Intake From TOC: 58 ft** **Estimated Total Volume Pumped: 12500 ml** **Flow Cell Volume: 90 ml** **Final Flow Rate: 250 ml/min** **Final Draw Down: 0.04 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 850751**

Test Notes:

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 10 %	+/- 5	+/- 10	+/- 0.3	
9/28/2021 12:25 PM	00:00	3.63 pH	32.20 °C	1,197.3 µS/cm	6.35 mg/L	25.70 NTU	169.9 mV	37.78 ft	250.00 ml/min
9/28/2021 12:30 PM	05:00	4.02 pH	22.91 °C	1,355.6 µS/cm	0.77 mg/L	23.20 NTU	108.4 mV	37.82 ft	250.00 ml/min
9/28/2021 12:35 PM	10:00	4.02 pH	22.58 °C	1,396.0 µS/cm	0.60 mg/L	29.10 NTU	107.4 mV	37.82 ft	250.00 ml/min
9/28/2021 12:40 PM	15:00	4.02 pH	22.32 °C	1,403.9 µS/cm	0.51 mg/L	26.30 NTU	111.8 mV	37.82 ft	250.00 ml/min
9/28/2021 12:45 PM	20:00	4.01 pH	22.00 °C	1,399.7 µS/cm	0.45 mg/L	15.98 NTU	119.3 mV	37.82 ft	250.00 ml/min
9/28/2021 12:50 PM	25:00	4.01 pH	22.30 °C	1,405.1 µS/cm	0.41 mg/L	17.90 NTU	129.1 mV	37.82 ft	250.00 ml/min
9/28/2021 12:55 PM	30:00	4.01 pH	22.49 °C	1,404.6 µS/cm	0.36 mg/L	13.40 NTU	142.7 mV	37.82 ft	250.00 ml/min
9/28/2021 1:00 PM	35:00	4.01 pH	22.39 °C	1,402.5 µS/cm	0.31 mg/L	9.45 NTU	161.0 mV	37.82 ft	250.00 ml/min
9/28/2021 1:05 PM	40:00	4.01 pH	22.57 °C	1,408.9 µS/cm	0.27 mg/L	7.06 NTU	181.3 mV	37.82 ft	250.00 ml/min
9/28/2021 1:10 PM	45:00	4.01 pH	22.45 °C	1,403.5 µS/cm	0.24 mg/L	5.77 NTU	205.6 mV	37.82 ft	250.00 ml/min
9/28/2021 1:15 PM	50:00	4.00 pH	22.45 °C	1,402.8 µS/cm	0.21 mg/L	4.85 NTU	221.2 mV	37.82 ft	250.00 ml/min

Samples

Sample ID:	Description:
PZ-58I	

Low-Flow Test Report:

Test Date / Time: 9/28/2021 1:41:51 PM
Project: Plant Branch
Operator Name: Brian Steele

Location Name: BRGWC-27I **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 14.41 ft** **Total Depth: 24.41 ft** **Initial Depth to Water: 7.84 ft**	**Pump Type: Dedicted** **Tubing Type: Polyethylene** **Pump Intake From TOC: 20.41 ft** **Estimated Total Volume Pumped: 8153 ml** **Flow Cell Volume: 90 ml** **Final Flow Rate: 200 ml/min** **Final Draw Down: 0.03 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 850767**

Test Notes:

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 10 %	+/- 5	+/- 10	+/- 0.3	
9/28/2021 1:41 PM	00:00	5.56 pH	24.08 °C	368.52 µS/cm	3.42 mg/L	1.87 NTU	103.3 mV	7.87 ft	200.00 ml/min
9/28/2021 1:42 PM	00:35	5.59 pH	23.40 °C	364.85 µS/cm	2.52 mg/L	1.60 NTU	118.9 mV	7.87 ft	200.00 ml/min
9/28/2021 1:42 PM	00:46	5.61 pH	23.15 °C	365.64 µS/cm	2.30 mg/L	1.50 NTU	122.2 mV	7.87 ft	200.00 ml/min
9/28/2021 1:47 PM	05:46	5.71 pH	21.45 °C	367.05 µS/cm	0.77 mg/L	1.91 NTU	132.0 mV	7.87 ft	200.00 ml/min
9/28/2021 1:52 PM	10:46	5.76 pH	21.73 °C	365.84 µS/cm	0.25 mg/L	1.19 NTU	139.0 mV	7.87 ft	200.00 ml/min
9/28/2021 1:57 PM	15:46	5.77 pH	21.50 °C	363.80 µS/cm	0.17 mg/L	1.20 NTU	167.0 mV	7.87 ft	200.00 ml/min
9/28/2021 2:02 PM	20:46	5.80 pH	21.59 °C	361.84 µS/cm	0.32 mg/L	0.86 NTU	143.2 mV	7.87 ft	200.00 ml/min
9/28/2021 2:07 PM	25:46	5.81 pH	21.33 °C	361.93 µS/cm	0.20 mg/L	0.93 NTU	161.8 mV	7.87 ft	200.00 ml/min
9/28/2021 2:12 PM	30:46	5.81 pH	21.39 °C	362.00 µS/cm	0.19 mg/L	0.85 NTU	162.3 mV	7.87 ft	200.00 ml/min
9/28/2021 2:17 PM	35:46	5.80 pH	21.20 °C	363.30 µS/cm	0.13 mg/L	0.77 NTU	138.5 mV	7.87 ft	200.00 ml/min
9/28/2021 2:22 PM	40:46	5.82 pH	21.15 °C	361.51 µS/cm	0.28 mg/L	0.58 NTU	161.7 mV	7.87 ft	200.00 ml/min

Samples

Sample ID:	Description:
BRGWC-27I	EB-2 App III/IV

BRGWC-27I	Rad

Low-Flow Test Report:

Test Date / Time: 9/28/2021 2:14:21 PM
Project: Plant Branch
Operator Name: Jude Waguespack

Location Name: PZ-57I **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 65.93 ft** **Total Depth: 75.93 ft** **Initial Depth to Water: 35.55 ft**	**Pump Type: Bladder** **Tubing Type: Polyethylene** **Pump Intake From TOC: 70 ft** **Estimated Total Volume Pumped: 3750 ml** **Flow Cell Volume: 90 ml** **Final Flow Rate: 250 ml/min** **Final Draw Down: 0.47 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 850767**

Test Notes:

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 10 %	+/- 5	+/- 10	+/- 0.3	
9/28/2021 2:14 PM	00:00	5.46 pH	29.20 °C	657.98 µS/cm	3.65 mg/L	10.57 NTU	172.5 mV	35.55 ft	250.00 ml/min
9/28/2021 2:19 PM	05:00	5.40 pH	22.22 °C	673.77 µS/cm	0.87 mg/L	6.91 NTU	134.9 mV	36.00 ft	250.00 ml/min
9/28/2021 2:24 PM	10:00	5.39 pH	21.88 °C	675.08 µS/cm	0.43 mg/L	5.01 NTU	167.0 mV	36.02 ft	250.00 ml/min
9/28/2021 2:29 PM	15:00	5.37 pH	22.05 °C	694.37 µS/cm	0.31 mg/L	3.97 NTU	114.4 mV	36.02 ft	250.00 ml/min

Samples

Sample ID:	Description:
PZ-57I	

Low-Flow Test Report:

Test Date / Time: 9/28/2021 2:18:16 PM
Project: Plant Branch (20)
Operator Name: D. Herrera

Location Name: PZ-44 **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 47 ft** **Total Depth: 57 ft** **Initial Depth to Water: 25.51 ft**	**Pump Type: Bladder** **Tubing Type: Polyethylene** **Pump Intake From TOC: 52 ft** **Estimated Total Volume Pumped: 7500 ml** **Flow Cell Volume: 90 ml** **Final Flow Rate: 250 ml/min** **Final Draw Down: 0.34 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 850751**

Test Notes:

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 10 %	+/- 5	+/- 10	+/- 0.3	
9/28/2021 2:18 PM	00:00	6.22 pH	30.72 °C	262.83 µS/cm	2.59 mg/L	5.89 NTU	142.9 mV	25.51 ft	250.00 ml/min
9/28/2021 2:23 PM	05:00	6.21 pH	24.15 °C	284.68 µS/cm	0.40 mg/L	3.18 NTU	140.8 mV	25.85 ft	250.00 ml/min
9/28/2021 2:28 PM	10:00	6.21 pH	23.97 °C	289.07 µS/cm	0.27 mg/L	3.60 NTU	139.1 mV	25.85 ft	250.00 ml/min
9/28/2021 2:33 PM	15:00	6.21 pH	23.93 °C	289.78 µS/cm	0.21 mg/L	4.27 NTU	134.4 mV	25.85 ft	250.00 ml/min
9/28/2021 2:38 PM	20:00	6.21 pH	23.66 °C	291.77 µS/cm	0.18 mg/L	4.90 NTU	132.1 mV	25.85 ft	250.00 ml/min
9/28/2021 2:43 PM	25:00	6.21 pH	23.46 °C	290.79 µS/cm	0.16 mg/L	1.96 NTU	128.2 mV	25.85 ft	250.00 ml/min
9/28/2021 2:48 PM	30:00	6.22 pH	23.39 °C	291.58 µS/cm	0.15 mg/L	2.13 NTU	126.6 mV	25.85 ft	250.00 ml/min

Samples

Sample ID:	Description:
PZ-44	

Low-Flow Test Report:

Test Date / Time: 9/28/2021 3:29:17 PM
Project: Plant Branch
Operator Name: Brian Steele

Location Name: BRGWC-32S **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 38 ft** **Total Depth: 48 ft** **Initial Depth to Water: 37.6 ft**	**Pump Type: Dedicted** **Tubing Type: Polyethylene** **Pump Intake From TOC: 44 ft** **Estimated Total Volume Pumped: 7800 ml** **Flow Cell Volume: 90 ml** **Final Flow Rate: 120 ml/min** **Final Draw Down: 0.7 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 850767**

Test Notes:

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 10 %	+/- 5	+/- 10	+/- 0.3	
9/28/2021 3:29 PM	00:00	5.77 pH	21.48 °C	421.29 µS/cm	6.21 mg/L	1.30 NTU	173.0 mV	37.60 ft	120.00 ml/min
9/28/2021 3:34 PM	05:00	5.77 pH	21.32 °C	417.91 µS/cm	5.56 mg/L	2.44 NTU	158.0 mV	38.30 ft	120.00 ml/min
9/28/2021 3:39 PM	10:00	5.78 pH	21.42 °C	424.38 µS/cm	5.10 mg/L	2.15 NTU	153.9 mV	38.30 ft	120.00 ml/min
9/28/2021 3:44 PM	15:00	5.80 pH	21.41 °C	434.87 µS/cm	4.84 mg/L	1.28 NTU	181.5 mV	38.30 ft	120.00 ml/min
9/28/2021 3:49 PM	20:00	5.80 pH	21.19 °C	439.10 µS/cm	4.72 mg/L	2.96 NTU	182.6 mV	38.30 ft	120.00 ml/min
9/28/2021 3:54 PM	25:00	5.81 pH	21.11 °C	443.61 µS/cm	4.49 mg/L	3.04 NTU	181.8 mV	38.30 ft	120.00 ml/min
9/28/2021 3:59 PM	30:00	5.81 pH	21.06 °C	444.36 µS/cm	4.42 mg/L	2.58 NTU	180.7 mV	38.30 ft	120.00 ml/min
9/28/2021 4:04 PM	35:00	5.81 pH	20.97 °C	445.07 µS/cm	4.40 mg/L	1.89 NTU	179.6 mV	38.30 ft	120.00 ml/min
9/28/2021 4:09 PM	40:00	5.81 pH	21.08 °C	445.00 µS/cm	4.39 mg/L	1.50 NTU	179.1 mV	38.30 ft	120.00 ml/min
9/28/2021 4:14 PM	45:00	5.81 pH	20.53 °C	447.56 µS/cm	4.44 mg/L	1.38 NTU	178.1 mV	38.30 ft	120.00 ml/min
9/28/2021 4:19 PM	50:00	5.81 pH	20.47 °C	448.82 µS/cm	4.53 mg/L	1.19 NTU	177.1 mV	38.30 ft	120.00 ml/min
9/28/2021 4:24 PM	55:00	5.81 pH	20.39 °C	447.91 µS/cm	4.52 mg/L	0.82 NTU	176.5 mV	38.30 ft	120.00 ml/min
9/28/2021 4:29 PM	01:00:00	5.82 pH	20.30 °C	448.82 µS/cm	4.50 mg/L	0.63 NTU	175.6 mV	38.30 ft	120.00 ml/min
9/28/2021 4:34 PM	01:05:00	5.82 pH	20.39 °C	448.60 µS/cm	4.47 mg/L	1.02 NTU	175.2 mV	38.30 ft	120.00 ml/min

Samples

Sample ID:	Description:
BRGWC-32S	App III/IV rad

Low-Flow Test Report:

Test Date / Time: 9/28/2021 3:59:48 PM
Project: Plant Branch (21)
Operator Name: D. Herrera

Location Name: BRGWC-30I **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 12.35 ft** **Total Depth: 22.35 ft** **Initial Depth to Water: 4.14 ft**	**Pump Type: Dedicated** **Tubing Type: Polyethylene** **Pump Intake From TOC: 18 ft** **Estimated Total Volume Pumped: 6000 ml** **Flow Cell Volume: 90 ml** **Final Flow Rate: 200 ml/min** **Final Draw Down: 0.41 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 850751**

Test Notes:

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 10 %	+/- 5	+/- 10	+/- 0.3	
9/28/2021 3:59 PM	00:00	6.27 pH	25.69 °C	1,015.4 µS/cm	5.92 mg/L	6.39 NTU	123.0 mV	4.14 ft	200.00 ml/min
9/28/2021 4:04 PM	05:00	6.24 pH	25.40 °C	1,167.9 µS/cm	3.41 mg/L	26.60 NTU	115.4 mV	4.50 ft	200.00 ml/min
9/28/2021 4:09 PM	10:00	6.31 pH	21.33 °C	1,436.3 µS/cm	0.57 mg/L	13.23 NTU	114.8 mV	4.50 ft	200.00 ml/min
9/28/2021 4:14 PM	15:00	6.33 pH	20.90 °C	1,440.1 µS/cm	0.21 mg/L	8.72 NTU	114.4 mV	4.50 ft	200.00 ml/min
9/28/2021 4:19 PM	20:00	6.33 pH	20.75 °C	1,456.4 µS/cm	0.32 mg/L	5.86 NTU	113.7 mV	4.55 ft	200.00 ml/min
9/28/2021 4:24 PM	25:00	6.33 pH	20.69 °C	1,457.9 µS/cm	0.36 mg/L	3.70 NTU	112.6 mV	4.55 ft	200.00 ml/min
9/28/2021 4:29 PM	30:00	6.33 pH	20.65 °C	1,468.9 µS/cm	0.15 mg/L	3.29 NTU	112.3 mV	4.55 ft	200.00 ml/min

Samples

Sample ID:	Description:
BRGWC-30I	DUP-3 and extra Rad

Low-Flow Test Report:

Test Date / Time: 9/28/2021 4:00:58 PM
Project: Plant Branch
Operator Name: Jude Waguespack

Location Name: BRGWC-52I **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 66.6 ft** **Total Depth: 76.6 ft** **Initial Depth to Water: 39 ft**	**Pump Type: Bladder** **Tubing Type: Polyethylene** **Pump Intake From TOC: 71 ft** **Estimated Total Volume Pumped: 3750 ml** **Flow Cell Volume: 90 ml** **Final Flow Rate: 250 ml/min** **Final Draw Down: 0.65 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 850767**

Test Notes:

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 10 %	+/- 5	+/- 10	+/- 0.3	
9/28/2021 4:00 PM	00:00	7.22 pH	27.29 °C	403.27 µS/cm	2.96 mg/L	6.66 NTU	76.5 mV	39.00 ft	250.00 ml/min
9/28/2021 4:05 PM	05:00	6.84 pH	21.06 °C	539.96 µS/cm	1.58 mg/L	3.58 NTU	-52.7 mV	39.55 ft	250.00 ml/min
9/28/2021 4:10 PM	10:00	6.84 pH	20.61 °C	547.46 µS/cm	0.58 mg/L	2.80 NTU	-62.6 mV	39.60 ft	250.00 ml/min
9/28/2021 4:15 PM	15:00	6.81 pH	20.57 °C	544.08 µS/cm	0.42 mg/L	2.53 NTU	-61.0 mV	39.65 ft	250.00 ml/min

Samples

Sample ID:	Description:
PZ-52I	FB-3; EB-3

PURGING AND SAMPLING FORM

Project #: 166625421	Project Name/Site Name: SCS Plant Branch		Page: 1 of 1
Well ID #: BRGWA-2I	Date: 09/22/21	Water Level (ft): 11.02	Time (WL): 0925
Physical Condition of Well: Good		Weather: Cloudy	
Well Diameter (in): 2	Well Depth (ft): 64.30	Water Column (ft): 53.28	Well Volume (gal): 8.68
Start Purge: 0951	End Purge: 1021	Top of Pump (ft): ~59	
Evacuation Method: Low-Flow		Volume Removed (L): 7.2L	
Evacuation Equipment: QED		Purging Personnel: E, Rheams	
SmarTroll serial #: 850767		LaMotte serial #: 4392-1914	

Purge Data/Field Parameters

Time	Color & Appearance	Odor	pH (S.U.)	Cond. (uS/cm)	DO (mg/L)	Temp (C)	ORP (mV)	Turbidity (NTU)	DTW (ft BTOC)	Pumping Rate
1021			6.78	183.23	0.57	20.71	37.1	2.94	12.35	120 mL/min
		Sampled @ 1021								

Stabilization Criteria: pH ± 0.1 S.U, Conductivity ± 5%, Dissolved Oxygen ± 10% or 0.2Mg/L (whichever is greater; for DO < 0.5mg/L, record only, no stabilization criteria), Turbidity ≤5 NTU; Purge volume ≥3L purge water, water level ≤ 0.3 ft; Temp and ORP record only

Sample Description

Sample ID: BRGWA-2I
Sample Date/Time: 09/22/21 1021
Metals Date/Time: 09/29/21 1021
Duplicate: —
Dup Date/Time: —
Final Turbidity NTU: 2.94
Field Blank: —
Blank Date/Time: —
Turbidity Date/Time: 09/22/21 1021

# Sample Bottles	Container	Preservative	Analyte(s)
1	250 mL plastic	HNO3	Metals App III/ IV (As, B, Ba, Be, Ca, Cd, Cr, Co, Hg, Li, Mo, Pb, Sb, Se, Tl)
1	250 mL plastic	–	Chloride, Fluoride, Sulfate
1	500 mL plastic	–	TDS
2	1 L plastic	HNO3	Radium 226/228

Signature: Eric Rheams

GOLDER
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PURGING AND SAMPLING FORM

Project #: 166625421	Project Name/Site Name: SCS Plant Branch		Page: 1 of 1
Well ID #: BRGWA-25	Date: 09/22/21	Water Level (ft): 11.01	Time (WL): 1050
Physical Condition of Well: Good		Weather: Cloudy	
Well Diameter (in): 2	Well Depth (ft): 44.60	Water Column (ft): 33.59	Well Volume (gal): 5.48
Start Purge: 1055	End Purge: 1125	Top of Pump (ft): 39	
Evacuation Method: Low-Flow		Volume Removed (L): 6.6 L	
Evacuation Equipment: QED		Purging Personnel: E. Rheams	
SmarTroll serial #: 850767		LaMotte serial #: 4392-1914	

Purge Data/Field Parameters

Time	Color & Appearance	Odor	pH (S.U.)	Cond. (uS/cm)	DO (mg/L)	Temp (C)	ORP (mV)	Turbidity (NTU)	DTW (ft BTOC)	Pumping Rate
1125	Clear	None	6.06	69.21	0.87	19.95	49.7	0.71	11.10	220 mL/min
		Sampled @ 1125								

Stabilization Criteria: pH ± 0.1 S.U, Conductivity ± 5%, Dissolved Oxygen ± 10% or 0.2Mg/L (whichever is greater; for DO < 0.5mg/L, record only, no stabilization criteria), Turbidity ≤5 NTU; Purge volume ≥3L purge water, water level ≤ 0.3 ft; Temp and ORP record only

Sample Description

Sample ID: BRGWA-25
Sample Date/Time: 09/22/21 1125
Metals Date/Time: 09/22/21 1125
Duplicate: —
Dup Date/Time: —
Final Turbidity NTU: 0.71
Field Blank: —
Blank Date/Time: —
Turbidity Date/Time: 09/22/21 1125

# Sample Bottles	Container	Preservative	Analyte(s)
1	250 mL plastic	HNO3	Metals App III/ IV (As, B, Ba, Be, Ca, Cd, Cr, Co, Hg, Li, Mo, Pb, Sb, Se, Tl)
1	250 mL plastic	--	Chloride, Fluoride, Sulfate
1	500 mL plastic	--	TDS
2	1 L plastic	HNO3	Radium 226/228

Signature: _____

GOLDER
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PURGING AND SAMPLING FORM

Project #: 166625421	Project Name/Site Name: SCS Plant Branch		Page: 1 of 1
Well ID #: BRGWA-5I	Date: 09/21/21	Water Level (ft): 11.86	Time (WL): 1202
Physical Condition of Well: Good		Weather: Cloudy	
Well Diameter (in): 2	Well Depth (ft): 61.20	Water Column (ft): 49.34	Well Volume (gal): 8.09
Start Purge: 1215	End Purge: 1230	Top of Pump (ft): 56	
Evacuation Method: Low-Flow		Volume Removed (L): 4.2	
Evacuation Equipment: QED		Purging Personnel: E. Rhoads	
SmarTroll serial #: 850767		LaMotte serial #: 9392-1914	

Purge Data/Field Parameters

Time	Color & Appearance	Odor	pH (S.U.)	Cond. (uS/cm)	DO (mg/L)	Temp (C)	ORP (mV)	Turbidity (NTU)	DTW (ft BTOC)	Pumping Rate
1230	Clear	None	6.32	186.32	5.01	19.23	160.5	4.36	12.11	280 mL/min
			Sample	d @	1230					

Stabilization Criteria: pH ± 0.1 S.U. Conductivity ± 5%, Dissolved Oxygen ± 10% or 0.2Mg/L (whichever is greater; for DO < 0.5mg/L, record only, no stabilization criteria), Turbidity ≤5 NTU; Purge volume ≥3L purge water, water level ≤ 0.3 ft; Temp and ORP record only

Sample Description

Sample ID: BRGWA-5I
Sample Date/Time: 09/21/21 1230
Metals Date/Time: 09/21/21 1230
Duplicate: —
Dup Date/Time: —
Final Turbidity NTU: 4.36
Field Blank: —
Blank Date/Time: —
Turbidity Date/Time: 09/21/21 1230

# Sample Bottles	Container	Preservative	Analyte(s)
1	250 mL plastic	HNO3	Metals App III/ IV (As, B, Ba, Be, Ca, Cd, Cr, Co, Hg, Li, Mo, Pb, Sb, Se, Tl)
1	250 mL plastic	–	Chloride, Fluoride, Sulfate
1	500 mL plastic	–	TDS
2	1 L plastic	HNO3	Radium 226/228

Signature: Eli Rhoads

GOLDER
MEMBER OF WSP

57.4

PURGING AND SAMPLING FORM

Project #: 166625421	Project Name/Site Name: SCS Plant Branch		Page: 1 of 1
Well ID #: BRGWA-55	Date: 09/21/21	Water Level (ft): 11.95	Time (WL): 1300
Physical Condition of Well:	Good	Weather: Clear	
Well Diameter (in): 2	Well Depth (ft): 40.0	Water Column (ft): 28.05	Well Volume (gal): 4.57
Start Purge: 1307	End Purge: 1628	Top of Pump (ft): 35	
Evacuation Method: Low-Flow		Volume Removed (L): 20.1 L	
Evacuation Equipment: QED		Purging Personnel: E. Rheams	
SmarTroll serial #: 850767		LaMotte serial #: 9392-1914	

Purge Data/Field Parameters

Time	Color & Appearance	Odor	pH (S.U.)	Cond. (uS/cm)	DO (mg/L)	Temp (C)	ORP (mV)	Turbidity (NTU)	DTW (ft BTOC)	Pumping Rate
1628	Clear	None	6.36	189.75	1.95	19.18	79.9	2.27	12.16	100 mL/min
			Sampled @ 1628							

Stabilization Criteria: pH ± 0.1 S.U, Conductivity ± 5%, Dissolved Oxygen ± 10% or 0.2Mg/L (whichever is greater; for DO < 0.5mg/L, record only, no stabilization criteria), Turbidity ≤5 NTU; Purge volume ≥3L purge water, water level ≤ 0.3 ft; Temp and ORP record only

Sample Description

Sample ID: BRGWA-55 Sample Date/Time: 09/21/21 1628 Metals Date/Time: 09/21/21 1628

Duplicate: — Dup Date/Time: — Final Turbidity NTU: 2.27

Field Blank: — Blank Date/Time: — Turbidity Date/Time: 09/21/21 1625

# Sample Bottles	Container	Preservative	Analyte(s)
1	250 mL plastic	HNO3	Metals App III/IV (As, B, Ba, Be, Ca, Cd, Cr, Co, Hg, Li, Mo, Pb, Sb, Se, Tl)
1	250 mL plastic	--	Chloride, Fluoride, Sulfate
1	500 mL plastic	--	TDS
2	1 L plastic	HNO3	Radium 226/228

Signature: Eli Rheams

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PURGING AND SAMPLING FORM

Project #: 166625421	Project Name/Site Name: SCS Plant Branch		Page: 1 of 1
Well ID #: BRGWA-65	Date: 9/22/21	Water Level (ft): 26.2	Time (WL): 1115
Physical Condition of Well:	good	Weather:	sunny & overcast
Well Diameter (in): 2	Well Depth (ft): 52.90	Water Column (ft): 26.7	Well Volume (gal):
Start Purge: 11:32	End Purge: 11:55	Top of Pump (ft): 42.90	
Evacuation Method: Low-Flow		Volume Removed (L): 3.4	
Evacuation Equipment: dedicated		Purging Personnel: [illegible]	
SmarTroll serial #: 450251		LaMotte serial #: 156-4111	

Purge Data/Field Parameters

Time	Color & Appearance	Odor	pH (S.U.)	Cond. (uS/cm)	DO (mg/L)	Temp (C)	ORP (mV)	Turbidity (NTU)	DTW (ft BTOC)	Pumping Rate
1150	clear	none	6.48	55.25	6.42	21.33	84.6	0.99	27.05	200
					IN					

Stabilization Criteria: pH ± 0.1 S.U, Conductivity ± 5%, Dissolved Oxygen ± 10% or 0.2Mg/L (whichever is greater; for DO < 0.5mg/L, record only, no stabilization criteria), Turbidity ≤5 NTU; Purge volume ≥3L purge water, water level ≤ 0.3 ft; Temp and ORP record only

Sample Description

Sample ID: BRGWA-65
Sample Date/Time: 9/22/21 1155
Metals Date/Time: /
Duplicate: /
Dup Date/Time: /
Final Turbidity NTU: 0.99
Field Blank: /
Blank Date/Time: /
Turbidity Date/Time: 9/22/21

# Sample Bottles	Container	Preservative	Analyte(s)
1	250 mL plastic	HNO3	Metals App III/ IV (As, B, Ba, Be, Ca, Cd, Cr, Co, Hg, Li, Mo, Pb, Sb, Se, Tl)
1	250 mL plastic	--	Chloride, Fluoride, Sulfate
1	500 mL plastic	--	TDS
2	1 L plastic	HNO3	Radium 226/228

Signature: [signature]

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PURGING AND SAMPLING FORM

Project #: 166625421	Project Name/Site Name: SCS Plant Branch		Page: 1 of 1
Well ID #: BRGWA-121	Date: 9/21/21	Water Level (ft): 50.13	Time (WL): 1055
Physical Condition of Well: Good		Weather: 73° mostly cloudy	
Well Diameter (in): 2	Well Depth (ft): 80.54	Water Column (ft): 30.41	Well Volume (gal): 4.96
Start Purge: 11:00	End Purge: 1350	Top of Pump (ft): 70.54	
Evacuation Method: Low-Flow		Volume Removed (L): 29.5	
Evacuation Equipment: dedicated		Purging Personnel: Erin Dhondt	
SmarTroll serial #: 850751		LaMotte serial #: 1510-4111	

Purge Data/Field Parameters

Time	Color & Appearance	Odor	pH (S.U.)	Cond. (uS/cm)	DO (mg/L)	Temp (C)	ORP (mV)	Turbidity (NTU)	DTW (ft BTOC)	Pumping Rate
1217	Turbidity meter check - kept pumping									
1303	Started measurements again									
1333	Turbidity meter not reading properly still pumping -									
	stopped taking measurements									
1331	Start measurements again									
1346	Clear	none	6.53	151.59	4.79	22.77	84.2	3.52	63.95	240 mL/min

Stabilization Criteria: pH ± 0.1 S.U. Conductivity ± 5%, Dissolved Oxygen ± 10% or 0.2Mg/L (whichever is greater; for DO < 0.5mg/L, record only, no stabilization criteria), Turbidity ≤5 NTU; Purge volume ≥3L purge water, water level ≤ 0.3 ft; Temp and ORP record only

Sample Description

Sample ID: BRGWA-121 Sample Date/Time: 9/21/21 1350 Metals Date/Time: /

Duplicate: / Dup Date/Time: / Final Turbidity NTU: 3.52

Field Blank: / Blank Date/Time: / Turbidity Date/Time: 9/21/21 1346

# Sample Bottles	Container	Preservative	Analyte(s)
1	250 mL plastic	HNO3	Metals App III/ IV (As, B, Ba, Be, Ca, Cd, Cr, Co, Hg, Li, Mo, Pb, Sb, Se, Tl)
1	250 mL plastic	--	Chloride, Fluoride, Sulfate
1	500 mL plastic	--	TDS
2	1 L plastic	HNO3	Radium 226/228

Signature:

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PURGING AND SAMPLING FORM

Project #: 166625421	Project Name/Site Name: SCS Plant Branch		Page: 1 of 1
Well ID #: BRGWA-12	Date: 9/21/21	Water Level (ft): 50.4	Time (WL): 1010
Physical Condition of Well: good		Weather: 73° mostly cloudy	
Well Diameter (in): 2	Well Depth (ft): 61.01	Water Column (ft): 10.61	Well Volume (gal):
Start Purge: 1018	End Purge: 1038	Top of Pump (ft): 51.01	
Evacuation Method: Low-Flow		Volume Removed (L): 5.6	
Evacuation Equipment: DEDICATED		Purging Personnel: Erin D'Hondt	
SmarTroll serial #: 850151		LaMotte serial #: 1510 - 9111	

Purge Data/Field Parameters

Time	Color & Appearance	Odor	pH (S.U.)	Cond. (uS/cm)	DO (mg/L)	Temp (C)	ORP (mV)	Turbidity (NTU)	DTW (ft BTOC)	Pumping Rate
1038	clear	none	5.87	75.58	6.6	21.22	92.1	0.15	51.02	250 mL/min

Stabilization Criteria: pH ± 0.1 S.U, Conductivity ± 5%, Dissolved Oxygen ± 10% or 0.2Mg/L (whichever is greater; for DO < 0.5mg/L, record only, no stabilization criteria), Turbidity ≤5 NTU; Purge volume ≥3L purge water, water level ≤ 0.3 ft; Temp and ORP record only

Sample Description

Sample ID: BRGWA-12 | Sample Date/Time: 1045 9/21/21 | Metals Date/Time:

Duplicate: / | Dup Date/Time: / | Final Turbidity NTU: 0.15

Field Blank: / | Blank Date/Time: / | Turbidity Date/Time: 9/21/21 1038

# Sample Bottles	Container	Preservative	Analyte(s)
1	250 mL plastic	HNO3	Metals App III/ IV (As, B, Ba, Be, Ca, Cd, Cr, Co, Hg, Li, Mo, Pb, Sb, Se, Tl)
1	250 mL plastic	--	Chloride, Fluoride, Sulfate
1	500 mL plastic	--	TDS
2	1 L plastic	HNO3	Radium 226/228

Signature: [signature]

GOLDER
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PURGING AND SAMPLING FORM

Project #: 166625421	Project Name/Site Name: SCS Plant Branch		Page: 1 of 1
Well ID #: BRGWA-23S	Date: 9/21/21	Water Level (ft): 37.1	Time (WL): 1680
Physical Condition of Well: good		Weather: 75° overcast	
Well Diameter (in): 2	Well Depth (ft): 43.80	Water Column (ft): 6.7	Well Volume (gal): 1.09
Start Purge: 9/21/2021 1615	End Purge: 9/22/21 1007	Top of Pump (ft): 33.80	
Evacuation Method: Low-Flow		Volume Removed (L): 12.9	
Evacuation Equipment: dedicated		Purging Personnel: Cam D'Amato	
SmarTroll serial #: 850751		LaMotte serial #: 5IO-4111	

Purge Data/Field Parameters

Time	Color & Appearance	Odor	pH (S.U.)	Cond. (uS/cm)	DO (mg/L)	Temp (C)	ORP (mV)	Turbidity (NTU)	DTW (ft BTOC)	Pumping Rate
Pumped 3 well volumes before sampling										
10:07	clear	none	5.72	14792	4.82	22.18	97.3	3.80	38.29	120

Stabilization Criteria: pH ± 0.1 S.U, Conductivity ± 5%, Dissolved Oxygen ± 10% or 0.2Mg/L (whichever is greater; for DO < 0.5mg/L, record only, no stabilization criteria), Turbidity ≤5 NTU; Purge volume ≥3L purge water, water level ≤ 0.3 ft; Temp and ORP record only

Sample Description

Sample ID: BRGWA-23S
Sample Date/Time: 9/22/21 1010
Metals Date/Time: —
Duplicate: —
Dup Date/Time: —
Final Turbidity NTU: 3.80
Field Blank: —
Blank Date/Time: —
Turbidity Date/Time: 1007 9/22/21

# Sample Bottles	Container	Preservative	Analyte(s)
1	250 mL plastic	HNO3	Metals App III/ IV (As, B, Ba, Be, Ca, Cd, Cr, Co, Hg, Li, Mo, Pb, Sb, Se, Tl)
1	250 mL plastic	--	Chloride, Fluoride, Sulfate
1	500 mL plastic	--	TDS
2	1 L plastic	HNO3	Radium 226/228

Signature:

GOLDER
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PURGING AND SAMPLING FORM

Project #: 166625421	Project Name/Site Name: SCS Plant Branch		Page: 1 of 1
Well ID #: BAGWC-17S	Date: 9/22/21	Water Level (ft): 5.21	Time (WL): 11:24
Physical Condition of Well: Good		Weather: cloudy, 75°F	
Well Diameter (in): 2	Well Depth (ft): 8.15	Water Column (ft): 0.94	Well Volume (gal): 0.15
Start Purge: 11:39	End Purge: 12:09	Top of Pump (ft): 6.0	
Evacuation Method: Low-Flow		Volume Removed (L): 7.5 L	
Evacuation Equipment: Peristaltic		Purging Personnel: Jake Wagenschein	
SmarTroll serial #: 893593		LaMotte serial #: 4392-1914	

Purge Data/Field Parameters

Time	Color & Appearance	Odor	pH (S.U.)	Cond. (uS/cm)	DO (mg/L)	Temp (C)	ORP (mV)	Turbidity (NTU)	DTW (ft BTOC)	Pumping Rate
12:09	clear	none	6.22	407.12	1.47	22.31	98.5	4.57	5.50	250 mL/min
			SAMPLED @		12:09					

Stabilization Criteria: pH ± 0.1 S.U, Conductivity ± 5%, Dissolved Oxygen ± 10% or 0.2Mg/L (whichever is greater; for DO < 0.5mg/L record only, no stabilization criteria), Turbidity ≤5 NTU; Purge volume ≥3L purge water, water level ≤ 0.3 ft; Temp and ORP record only

Sample Description

Sample ID: BAGWC-17S
Duplicate: —
Field Blank: EB-1

Sample Date/Time: 9.22.21 / 12:09
Dup Date/Time: —
Blank Date/Time: 9.22.21 / 13:00

Metals Date/Time: 9.22.21 / 12:09
Final Turbidity NTU: 4.57
Turbidity Date/Time: 9.22.21 / 12:09

# Sample Bottles	Container	Preservative	Analyte(s)
2	250 mL plastic	HNO3	Metals App III IV (As, B, Ba, Be, Ca, Cd, Cr, Co, Hg, Li, Mo, Pb, Sb, Se, Tl)
2	250 mL plastic	–	Chloride, Fluoride, Sulfate
2	500 mL plastic	–	TDS
4	1 L plastic	HNO3	Radium 226/228

Signature: JW...

EB-1 w/ Peri tubing

0.15 gal x 3 = 0.46 gal = 1.74 L = 3 well volume

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PURGING AND SAMPLING FORM

Project #: 166625421	Project Name/Site Name: SCS Plant Branch		Page: 1 of 1
Well ID #: BEGWC-25I	Date: 9-28-2021	Water Level (ft): 9.55	Time (WL): 1045
Physical Condition of Well: Good		Weather: Sunny 80°F	
Well Diameter (in): 2	Well Depth (ft): 24.41	Water Column (ft): 14.86	Well Volume (gal) 5.47
Start Purge: 1055	End Purge: 1125	Top of Pump (ft): 20.41	
Evacuation Method: Low-Flow		Volume Removed (L): 2.47 gal	
Evacuation Equipment: Peristaltic Variable pump, MP-50		Purging Personnel: Brian Steele	
SmarTroll serial #: 850767		LaMotte serial #: 5990-3915	

Began purge at

Purge Data/Field Parameters

Time	Color & Appearance	Odor	pH (S.U.)	Cond (uS/cm)	DO (mg/L)	Temp (C)	ORP (mV)	Turbidity (NTU)	DTW (ft BTOC)	Pumping Rate
1125	Clear	none	5.93	372.46	0.29	19.81	131.1	0.85	9.70	32=mL/min

Stabilization Criteria: pH ± 0.1 S.U, Conductivity ± 5%, Dissolved Oxygen ± 10% or 0.2Mg/L (whichever is greater, for DO < 0.5mg/L record only, no stabilization criteria), Turbidity ≤5 NTU; Purge volume ≥3L purge water, water level ≤ 0.3 ft; Temp and ORP record only

Sample Description

Sample ID: BEGWC-25I
Sample Date/Time: 9-28-21 / 1126
Metals Date/Time: same
Duplicate: —
Dup Date/Time: —
Final Turbidity NTU: 0.85
Field Blank: —
Blank Date/Time: —
Turbidity Date/Time: 9-28-21 / 1125

# Sample Bottles	Container	Preservative	Analyte(s)
1	250 mL plastic	HNO3	Metals App III/ IV (As, B, Ba, Be, Ca, Cd, Cr, Co, Hg, Li, Mo, Pb, Sb, Se, Tl)
1	250 mL plastic	–	Chloride, Fluoride, Sulfate
1	500 mL plastic	–	TDS
2	1 L plastic	HNO3	Radium 226/228

Signature:

GOLDER
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PURGING AND SAMPLING FORM

Project #: 166625421	Project Name/Site Name: SCS Plant Branch		Page: 1 of 1
Well ID #: BRGWL-27S	Date: 9.28.21	Water Level (ft): 7.84	Time (WL): 1337
Physical Condition of Well: Good		Weather: Sunny	
Well Diameter (in): 2	Well Depth (ft): 33.41	Water Column (ft): 25.57	Well Volume (gal): 4.16
Start Purge: 1343	End Purge: 1425	Top of Pump (ft): 28	
Evacuation Method: Low-Flow		Volume Removed (L): 2.25 gal	
Evacuation Equipment: P.V. pump, MP-50		Purging Personnel: Brian Stark	
SmarTroll serial #: F50767		LaMotte serial #: 5990-3915	

Purge Data/Field Parameters

Time	Color & Appearance	Odor	pH (S.U.)	Cond. (uS/cm)	DO (mg/L)	Temp (C)	ORP (mV)	Turbidity (NTU)	DTW (ft BTOC)	Pumping Rate
1425	clear	none	5.82	341.51	0.28	21.15	161.7	0.58	7.87	200 mL/min

Stabilization Criteria: pH ± 0.1 S.U, Conductivity ± 5%, Dissolved Oxygen ± 10% or 0.2Mg/L (whichever is greater; for DO < 0.5mg/L, record only, no stabilization criteria), Turbidity ≤5 NTU; Purge volume ≥3L purge water, water level ≤ 0.3 ft; Temp and ORP record only

Sample Description

Sample ID: BRGWL-27S
Sample Date/Time: 9.28.21 / 1437
Metals Date/Time: 9/28/21 / 1430

Duplicate: —
Dup Date/Time: —
Final Turbidity NTU: 0.58

Field Blank: —
Blank Date/Time: EB-26 1450
Turbidity Date/Time: ~~0.58~~ 9.28.21 / 1425

# Sample Bottles	Container	Preservative	Analyte(s)
2	250 mL plastic	HNO3	Metals App III/ IV (As, B, Ba, Be, Ca, Cd, Cr, Co, Hg, Li, Mo, Pb, Sb, Se, Tl)
2	250 mL plastic	--	Chloride, Fluoride, Sulfate
2	500 mL plastic	--	TDS
4	1 L plastic	HNO3	Radium 226/228

Signature:

PURGING AND SAMPLING FORM All the says 25I

Project #: 166025421	Project Name/Site Name: SCS Plant Branch		Page: 1 of 1
Well ID #: BRGWL-29I	Date: 9-28-21	Water Level (ft): 10.50	Time (WL): 1159
Physical Condition of Well: Good		Weather: Sunny 85°F	
Well Diameter (in): 2	Well Depth (ft): 23.63	Water Column (ft): 13.13	Well Volume (gal): 2.14
Start Purge: 1205	End Purge: 1250	Top of Pump (ft): 18.6	
Evacuation Method: Low-Flow		Volume Removed (L): 12.6 L	
Evacuation Equipment: Ded. Pump, MP-50		Purging Personnel: Brian Finch	
SmarTroll serial #: 850767		LaMotte serial #: 5990 - 3905	

Purge Data/Field Parameters

Time	Color & Appearance	Odor	pH (S.U.)	Cond. (uS/cm)	DO (mg/L)	Temp (C)	ORP (mV)	Turbidity (NTU)	DTW (ft BTOC)	Pumping Rate
1250	Clear	none	4.23	548.93	1.04	21.65	191.9	0.42	10.50	280 mL/min

Stabilization Criteria: pH ± 0.1 S.U, Conductivity ± 5%, Dissolved Oxygen ± 10% or 0.2Mg/L (whichever is greater; for DO < 0.5mg/L, record only, no stabilization criteria), Turbidity ≤5 NTU; Purge volume ≥3L purge water, water level ≤ 0.3 ft, Temp and ORP record only

Sample Description

Sample ID: BRGWL-29I Sample Date/Time: 9-28-21 / 1251 Metals Date/Time: 9-28-21 / ~~1250~~ BS 1251

Duplicate: — Dup Date/Time: — Final Turbidity NTU: 0.42

Field Blank: FB-2 @ 1315 Blank Date/Time: — Turbidity Date/Time: 9-28-21 / 1250

# Sample Bottles	Container	Preservative	Analyte(s)
1	250 mL plastic	HNO3	Metals App III/IV (As, B, Ba, Be, Ca, Cd, Cr, Co, Hg, Li, Mo, Pb, Sb, Se, Tl)
1	250 mL plastic	--	Chloride, Fluoride, Sulfate
1	500 mL plastic	--	TDS
4	1 L plastic	HNO3	Radium 226/228

extra rads

Signature:

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PURGING AND SAMPLING FORM

Project #: 166625421	Project Name/Site Name: SCS Plant Branch		Page: 1 of 1
Well ID #: BRGWC-30I	Date: 9.28.2021	Water Level (ft): 4.14	Time (WL): 1550
Physical Condition of Well: Good		Weather: Sunny 85°F	
Well Diameter (in): 2	Well Depth (ft): 22.35	Water Column (ft): 18.21	Well Volume (gal): 2.97
Start Purge: 15:58	End Purge: 1630	Top of Pump (ft): ~18	
Evacuation Method: Low-Flow		Volume Removed (L): ~6L	
Evacuation Equipment: Dedicated Bladder		Purging Personnel: D. Herrera	
SmarTroll serial #850751		LaMotte serial #: 26862	

Purge Data/Field Parameters

Time	Color & Appearance	Odor	pH (S.U.)	Cond. (µS/cm)	DO (mg/L)	Temp (C)	ORP (mV)	Turbidity (NTU)	DTW (ft BTOC)	Pumping Rate
1630	Clear	none	6.33	1,468.9	0.15	20.65	112.3	3.29	4.55	200mL/L
* Extra rad's										

Stabilization Criteria: pH ± 0.1 S.U, Conductivity ± 5%, Dissolved Oxygen ± 10% or 0.2Mg/L (whichever is greater; for DO < 0.5mg/L, record only, no stabilization criteria), Turbidity ≤5 NTU; Purge volume ≥3L purge water, water level ≤ 0.3 ft; Temp and ORP record only

Sample Description

Sample ID: BRGWC-30I
Duplicate: FD-3
Field Blank: —

Sample Date/Time: 9.28.21 / 1630
Dup Date/Time: 9.28.2021 / —
Blank Date/Time: —

Metals Date/Time: 9.28.21 / 1630
Final Turbidity NTU: 3.29
Turbidity Date/Time: 9.28.21 / 1630

# Sample Bottles	Container	Preservative	Analyte(s)
1+1	250 mL plastic	HNO3	Metals App III/ IV (As, B, Ba, Be, Ca, Cd, Cr, Co, Hg, Li, Mo, Pb, Sb, Se, Tl)
1+1	250 mL plastic	--	Chloride, Fluoride, Sulfate
1+1	500 mL plastic	--	TDS
2+2+2	1 L plastic	HNO3	Radium 226/228

Signature: D. Herrera

PURGING AND SAMPLING FORM

Project #: 166625421	Project Name/Site Name: SCS Plant Branch		Page: 1 of 1
Well ID #: BRANCH-325	Date: 9-28-21	Water Level (ft): 37.60	Time (WL): 1522
Physical Condition of Well: Good		Weather: Sunny 80°F	
Well Diameter (in): 2	Well Depth (ft): 48.00	Water Column (ft): 10.4	Well Volume (gal): 1.69
Start Purge: 1530	End Purge:	Top of Pump (ft): 44	
Evacuation Method: Low-Flow		Volume Removed (L):	
Evacuation Equipment: Geotech MP-50		Purging Personnel: Brian Steele	
SmarTroll serial #: 850767		LaMotte serial #: 5990-3915	

Purge Data/Field Parameters

Time	Color & Appearance	Odor	pH (S.U.)	Cond. (uS/cm)	DO (mg/L)	Temp (C)	ORP (mV)	Turbidity (NTU)	DTW (ft BTOC)	Pumping Rate
1636	Clear	none	5.82	448.60	4.47	20.39	175.1	1.02	38.30	120 mL/min

Stabilization Criteria: pH ± 0.1 S.U, Conductivity ± 5%, Dissolved Oxygen ± 10% or 0.2Mg/L (whichever is greater; for DO < 0.5mg/L, record only, no stabilization criteria), Turbidity ≤5 NTU; Purge volume ≥3L purge water, water level ≤ 0.3 ft; Temp and ORP record only

Sample Description

Sample ID: BRGWC-325 Sample Date/Time: 9-28-21 / 1640 Metals Date/Time: 9-28-21 / 1640

Duplicate: — Dup Date/Time: — Final Turbidity NTU: 1.02

Field Blank: — Blank Date/Time: — Turbidity Date/Time: 9-28-21 / 1640

# Sample Bottles	Container	Preservative	Analyte(s)
1	250 mL plastic	HNO3	Metals App III/ IV (As, B, Ba, Be, Ca, Cd, Cr, Co, Hg, Li, Mo, Pb, Sb, Se, Tl)
1	250 mL plastic	--	Chloride, Fluoride, Sulfate
1	500 mL plastic	--	TDS
2	1 L plastic	HNO3	Radium 226/228

Signature:

GOLDER
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PURGING AND SAMPLING FORM

Project #: 166625421	Project Name/Site Name: SCS Plant Branch		Page: 1 of 1
Well ID #: BRGWC-335	Date: 9/22/21	Water Level (ft): 11.75	Time (WL): 1430
Physical Condition of Well: Good		Weather: 75° raining	
Well Diameter (in): 2	Well Depth (ft): 31.66	Water Column (ft): 19.91	Well Volume (gal): 5.25
Start Purge: 1438	End Purge: 1503	Top of Pump (ft): 26.66	
Evacuation Method: Low-Flow		Volume Removed (L): 5.4	
Evacuation Equipment: Dedicated		Purging Personnel: [illegible]	
SmarTroll serial #: 650751		LaMotte serial #: 1510-4111	

Purge Data/Field Parameters

Time	Color & Appearance	Odor	pH (S.U.)	Cond. (uS/cm)	DO (mg/L)	Temp (C)	ORP (mV)	Turbidity (NTU)	DTW (ft BTOC)	Pumping Rate
1503	Clear	none	4.81	257.6 0.17	0.17	20.75	120.7	3.55	11.80	280

Stabilization Criteria: pH ± 0.1 S.U, Conductivity ± 5%, Dissolved Oxygen ± 10% or 0.2Mg/L (whichever is greater; for DO < 0.5mg/L, record only, no stabilization criteria), Turbidity ≤5 NTU; Purge volume ≥3L purge water, water level ≤ 0.3 ft; Temp and ORP record only

Sample Description

Sample ID: BRGWC-335 Sample Date/Time: 9/22/21 1510 Metals Date/Time: /

Duplicate: / Dup Date/Time: / Final Turbidity NTU: 3.55

Field Blank: FB-1 Blank Date/Time: 9/22/21 1530 Turbidity Date/Time: 9/22/21 15

# Sample Bottles	Container	Preservative	Analyte(s)
2	250 mL plastic	HNO3	Metals App III/ IV (As, B, Ba, Be, Ca, Cd, Cr, Co, Hg, Li, Mo, Pb, Sb, Se, Tl)
2	250 mL plastic	--	Chloride, Fluoride, Sulfate
2	500 mL plastic	--	TDS
4	1 L plastic	HNO3	Radium 226/228

Signature: [signature]

GOLDER
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PURGING AND SAMPLING FORM

Project #: 166625421	Project Name/Site Name: SCS Plant Branch		Page: 1 of 1
Well ID #: BRGWC-34S	Date: 9/22/21	Water Level (ft): 297	Time (WL): 1550
Physical Condition of Well: Good		Weather: 75° + mostly cloudy	
Well Diameter (in): 2	Well Depth (ft): 52.64	Water Column (ft): 49.67	Well Volume (gal): 8.1
Start Purge: 1600	End Purge: 1715	Top of Pump (ft): ~~42.64~~ 47.64	
Evacuation Method: Low-Flow Dedicated		Volume Removed (L): 2019	
Evacuation Equipment: Dedicated		Purging Personnel: CM DHart	
SmarTroll serial #: 850751		LaMotte serial #: 1510-4111	

Purge Data/Field Parameters

Time	Color & Appearance	Odor	pH (S.U.)	Cond. (uS/cm)	DO (mg/L)	Temp (C)	ORP (mV)	Turbidity (NTU)	DTW (ft BTOC)	Pumping Rate
1715	clear	none	~~5.93~~ 5.93	603.28	2.15	21.82	113	1.48	3.01	280

Stabilization Criteria: pH ± 0.1 S.U, Conductivity ± 5%, Dissolved Oxygen ± 10% or 0.2Mg/L (whichever is greater; for DO < 0.5mg/L, record only, no stabilization criteria), Turbidity ≤5 NTU; Purge volume ≥3L purge water, water level ≤ 0.3 ft; Temp and ORP record only

Sample Description

Sample ID: BRGWC-34S
Sample Date/Time: 9/22/21 1720
Metals Date/Time: /
Duplicate: /
Dup Date/Time: /
Final Turbidity NTU: 1.48
Field Blank: /
Blank Date/Time: /
Turbidity Date/Time: 9/22/21 1715

# Sample Bottles	Container	Preservative	Analyte(s)
1	250 mL plastic	HNO3	Metals App III/ IV (As, B, Ba, Be, Ca, Cd, Cr, Co, Hg, Li, Mo, Pb, Sb, Se, Tl)
1	250 mL plastic	--	Chloride, Fluoride, Sulfate
1	500 mL plastic	--	TDS
2	1 L plastic	HNO3	Radium 226/228

Signature: CM DHart

PURGING AND SAMPLING FORM

Project #: 166625421	Project Name/Site Name: SCS Plant Branch		Page: 1 of 1
Well ID #: DRGWC355	Date: 9/23/21	Water Level (ft): 1.59'	Time (WL): 939
Physical Condition of Well: Good		Weather: 57° & Sunny	
Well Diameter (in): 2	Well Depth (ft): 35.34	Water Column (ft): 33.75	Well Volume (gal): 5.5
Start Purge: 943	End Purge: 959	Top of Pump (ft): ~~2034~~ 3034	
Evacuation Method: Low-Flow		Volume Removed (L): 5.4	
Evacuation Equipment: Dedicated		Purging Personnel: [illegible]	
SmarTroll serial #: 850251		LaMotte serial #: 1510-4111	

Purge Data/Field Parameters

Time	Color & Appearance	Odor	pH (S.U.)	Cond. (uS/cm)	DO (mg/L)	Temp (C)	ORP (mV)	Turbidity (NTU)	DTW (ft BTOC)	Pumping Rate
959	Clear	none	6.09	6385	0.11	18.96	689	1.8	1.68	360

Stabilization Criteria: pH ± 0.1 S.U, Conductivity ± 5%, Dissolved Oxygen ± 10% or 0.2Mg/L (whichever is greater; for DO < 0.5mg/L, record only, no stabilization criteria), Turbidity ≤5 NTU; Purge volume ≥3L purge water, water level ≤ 0.3 ft; Temp and ORP record only

Sample Description

Sample ID: DRGWC-355
Sample Date/Time: 9/23/21 1005
Metals Date/Time: ✓

Duplicate: FD1
Dup Date/Time: 9/23/21 1005
Final Turbidity NTU: 1.80

Field Blank: ✓
Blank Date/Time: ✓
Turbidity Date/Time: 9/23/21 959

# Sample Bottles	Container	Preservative	Analyte(s)
2	250 mL plastic	HNO3	Metals App III IV (As, B, Ba, Be, Ca, Cd, Cr, Co, Hg, Li, Mo, Pb, Sb, Se, Tl)
2	250 mL plastic	--	Chloride, Fluoride, Sulfate
2	500 mL plastic	--	TDS
4	1 L plastic	HNO3	Radium 226/228

Signature: [signature]

GOLDER
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PURGING AND SAMPLING FORM

Project #: 166625421	Project Name/Site Name: SCS Plant Branch		Page: 1 of 1
Well ID #: BRGWC-365	Date: 9/22/21	Water Level (ft): 2.90	Time (WL): 09:40
Physical Condition of Well: GOOD		Weather: CLOUDY, 73°F	
Well Diameter (in): 2	Well Depth (ft): 34.02	Water Column (ft): 31.12	Well Volume (gal): 5.07
Start Purge: 9:54	End Purge: 10:09	Top of Pump (ft): ~29	
Evacuation Method: Low-Flow		Volume Removed (L): 3.75	
Evacuation Equipment: PERISTALTIC		Purging Personnel: JUDE WAGUESPACK	
SmarTroll serial #: 843593		LaMotte serial #: 4392 - 1914	

Purge Data/Field Parameters

Time	Color & Appearance	Odor	pH (S.U.)	Cond. (uS/cm)	DO (mg/L)	Temp (C)	ORP (mV)	Turbidity (NTU)	DTW (ft BTOC)	Pumping Rate
10:09	CLEAR	NONE	5.53	570.33	1.77	20.56	135.8	2.55	3.65	250 mL/min
			SAMPLED @ 10:09							

Stabilization Criteria: pH ± 0.1 S.U, Conductivity ± 5%, Dissolved Oxygen ± 10% or 0.2Mg/L (whichever is greater; for DO < 0.5mg/L, record only, no stabilization criteria), Turbidity ≤5 NTU; Purge volume ≥3L purge water, water level ≤ 0.3 ft; Temp and ORP record only

Sample Description

Sample ID: BRGWC-365
Duplicate: —
Field Blank: —

Sample Date/Time: 9.22.21/10:09
Dup Date/Time: —
Blank Date/Time: —

Metals Date/Time: 9.22.21/10:09
Final Turbidity NTU: 2.55
Turbidity Date/Time: 9.22.21/10:09

# Sample Bottles	Container	Preservative	Analyte(s)
1	250 mL plastic	HNO3	Metals App III/ IV (As, B, Ba, Be, Ca, Cd, Cr, Co, Hg, Li, Mo, Pb, Sb, Se, Tl)
1	250 mL plastic	--	Chloride, Fluoride, Sulfate
1	500 mL plastic	--	TDS
2	1 L plastic	HNO3	Radium 226/228

Signature: JW...

GOLDER
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PURGING AND SAMPLING FORM

Project #: 166625421	Project Name/Site Name: SCS Plant Branch		Page: 1 of 1
Well ID #: BRGWC-37S	Date: 9/23/21	Water Level (ft): 51.14	Time (WL): 1145
Physical Condition of Well: Good		Weather: 68° Sunny	
Well Diameter (in): 2	Well Depth (ft): 68.73	Water Column (ft): 17.59	Well Volume (gal): 2.87
Start Purge: 12:00	End Purge: 12:37	Top of Pump (ft): 63.73	
Evacuation Method: Low-Flow		Volume Removed (L): 3000	
Evacuation Equipment: dedicated		Purging Personnel: Erin Dhondt	
SmarTroll serial #: 750851		LaMotte serial #: 1510-4111	

Purge Data/Field Parameters

Time	Color & Appearance	Odor	pH (S.U.)	Cond. (uS/cm)	DO (mg/L)	Temp (C)	ORP (mV)	Turbidity (NTU)	DTW (ft BTOC)	Pumping Rate
1233	clear	none	5.85	49.37	7.36	22.43	95.9	0.01	51.68	120

Stabilization Criteria: pH ± 0.1 S.U, Conductivity ± 5%, Dissolved Oxygen ± 10% or 0.2Mg/L (whichever is greater; for DO < 0.5mg/L, record only, no stabilization criteria), Turbidity ≤5 NTU; Purge volume ≥3L purge water, water level ≤ 0.3 ft; Temp and ORP record only

Sample Description

Sample ID: BRGWC-37S
Sample Date/Time: 9/23/21 1240
Metals Date/Time: /

Duplicate: /
Dup Date/Time: /
Final Turbidity NTU: 0.01

Field Blank: /
Blank Date/Time: /
Turbidity Date/Time: 9/23/21 1233

# Sample Bottles	Container	Preservative	Analyte(s)
1	250 mL plastic	HNO3	Metals App III/ IV (As, B, Ba, Be, Ca, Cd, Cr, Co, Hg, Li, Mo, Pb, Sb, Se, Tl)
1	250 mL plastic	--	Chloride, Fluoride, Sulfate
1	500 mL plastic	--	TDS
2	1 L plastic	HNO3	Radium 226/228

Signature:

GOLDER
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PURGING AND SAMPLING FORM

Project #: 166625421	Project Name/Site Name: SCS Plant Branch		Page: 1 of 1
Well ID # BRGWX-38S	Date: 9/23/21	Water Level (ft): 22.80	Time (WL): 10:30
Physical Condition of Well: Good		Weather: 57° & Sunny	
Well Diameter (in): 2	Well Depth (ft): 43.66	Water Column (ft): 21.46	Well Volume (gal): 3.5
Start Purge: 1043	End Purge: 1113	Top of Pump (ft): 38.66	
Evacuation Method: Low-Flow		Volume Removed (L): 4.8	
Evacuation Equipment: dedicated		Purging Personnel: EmD Hondt	
SmarTroll serial #: 850757		LaMotte serial #: 1510-4111	

Purge Data/Field Parameters

Time	Color & Appearance	Odor	pH (S.U.)	Cond. (uS/cm)	DO (mg/L)	Temp (C)	ORP (mV)	Turbidity (NTU)	DTW (ft BTOC)	Pumping Rate
1113	clear	none	4.05	720.11	1.30	20.22	87.0	0.52	23.05	160

Stabilization Criteria: pH ± 0.1 S.U, Conductivity ± 5%, Dissolved Oxygen ± 10% or 0.2Mg/L (whichever is greater; for DO < 0.5mg/L, record only, no stabilization criteria), Turbidity ≤5 NTU; Purge volume ≥3L purge water, water level ≤ 0.3 ft; Temp and ORP record only

Sample Description

Sample ID: BRGWX-38S
Duplicate: —
Field Blank: —

Sample Date/Time: 9/23/21 1120
Dup Date/Time: —
Blank Date/Time: —

Metals Date/Time: —
Final Turbidity NTU: 0.58
Turbidity Date/Time: 9/23/21 1113

# Sample Bottles	Container	Preservative	Analyte(s)
1	250 mL plastic	HNO3	Metals App III/ IV (As, B, Ba, Be, Ca, Cd, Cr, Co, Hg, Li, Mo, Pb, Sb, Se, Tl)
1	250 mL plastic	--	Chloride, Fluoride, Sulfate
1	500 mL plastic	--	TDS
4	1 L plastic	HNO3	Radium 226/228

Signature: [signature]

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PURGING AND SAMPLING FORM

Project #: 166625421	Project Name/Site Name: SCS Plant Branch		Page: 1 of 1
Well ID #: BRGWC-4S	Date: 09/23/21	Water Level (ft): 10.99	Time (WL): 1140
Physical Condition of Well: Good		Weather: Clear	
Well Diameter (in): 2	Well Depth (ft): 60.95	Water Column (ft): 49.96	Well Volume (gal): 8.06
Start Purge: 1155	End Purge: 1215	Top of Pump (ft): 52.31	
Evacuation Method: Low-Flow		Volume Removed (L): 4.4L	
Evacuation Equipment: 856767		Purging Personnel: E. Rhoms	
SmarTroll serial #: QED		LaMotte serial #: 4392-1814	

Purge Data/Field Parameters

Time	Color & Appearance	Odor	pH (S.U.)	Cond. (uS/cm)	DO (mg/L)	Temp (C)	ORP (mV)	Turbidity (NTU)	DTW (ft BTOC)	Pumping Rate
1215	Clear	None	5.95	488.79	0.41	22.31	44.5	2.40	11.36	220mL
		Sampled @ 1215								

Stabilization Criteria: pH ± 0.1 S.U, Conductivity ± 5%, Dissolved Oxygen ± 10% or 0.2Mg/L (whichever is greater; for DO < 0.5mg/L, record only, no stabilization criteria), Turbidity ≤5 NTU; Purge volume ≥3L purge water, water level ≤ 0.3 ft; Temp and ORP record only

Sample Description

Sample ID: BRGWC-4S
Duplicate: —
Field Blank: —

Sample Date/Time: 09/23/21 1215
Dup Date/Time: —
Blank Date/Time: —

Metals Date/Time: 09/23/21 1215
Final Turbidity NTU: 2.40
Turbidity Date/Time: 09/23/21 1215

# Sample Bottles	Container	Preservative	Analyte(s)
1	250 mL plastic	HNO3	Metals App III/ IV (As, B, Ba, Be, Ca, Cd, Cr, Co, Hg, Li, Mo, Pb, Sb, Se, Tl)
1	250 mL plastic	--	Chloride, Fluoride, Sulfate
1	500 mL plastic	--	TDS
2	1 L plastic	HNO3	Radium 226/228

Signature: _____

GOLDER
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PURGING AND SAMPLING FORM

Project #: 166625421	Project Name/Site Name: SCS Plant Branch		Page: 1 of 1
Well ID #: BRGWC-47	Date: 09/23/21	Water Level (ft): 25.89	Time (WL): 1258
Physical Condition of Well: Good		Weather: Clear	
Well Diameter (in): 2	Well Depth (ft): 92.0	Water Column (ft): 66.16	Well Volume (gal): 10.78
Start Purge: 1310	End Purge: 1335	Top of Pump (ft): 89.55	
Evacuation Method: Low-Flow		Volume Removed (L): 4.5 L	
Evacuation Equipment: QED		Purging Personnel: E. Rhoms	
SmarTroll serial #: 850767		LaMotte serial #: 4392-1914	

Purge Data/Field Parameters

Time	Color & Appearance	Odor	pH (S.U.)	Cond. (uS/cm)	DO (mg/L)	Temp (C)	ORP (mV)	Turbidity (NTU)	DTW (ft BTOC)	Pumping Rate
1335	Clear	None	5.74	2383.8	0.68	21.77	-25.2	2.36	26.15	180mL
		Sampled @ 1335								

Stabilization Criteria: pH ± 0.1 S.U, Conductivity ± 5%, Dissolved Oxygen ± 10% or 0.2Mg/L (whichever is greater; for DO < 0.5mg/L, record only, no stabilization criteria), Turbidity ≤5 NTU; Purge volume ≥3L purge water, water level ≤ 0.3 ft; Temp and ORP record only

Sample Description

Sample ID: BRGWC-47
Duplicate: —
Field Blank: —

Sample Date/Time: 09/23/21 1335
Dup Date/Time: —
Blank Date/Time: —

Metals Date/Time: 09/23/21 1335
Final Turbidity NTU: 2.36
Turbidity Date/Time: 09/23/21 1335

# Sample Bottles	Container	Preservative	Analyte(s)
1	250 mL plastic	HNO3	Metals App III/IV (As, B, Ba, Be, Ca, Cd, Cr, Co, Hg, Li, Mo, Pb, Sb, Se, Tl)
1	250 mL plastic	--	Chloride, Fluoride, Sulfate
1	500 mL plastic	--	TDS
2	1 L plastic	HNO3	Radium 226/228

Signature: _____

PURGING AND SAMPLING FORM

Project #: 166625421	Project Name/Site Name: SCS Plant Branch		Page: 1 of 1
Well ID #: BRGWC-50	Date: 9/27/2021	Water Level (ft): 37.89	Time (WL): 1215
Physical Condition of Well: Good		Weather: 85°F 27.17	
Well Diameter (in): 2	Well Depth (ft): 65.00	Water Column (ft): ~~27.11~~	Well Volume (gal): ~~3.60~~ 4.4
Start Purge: 1232	End Purge: 1305	Top of Pump (ft): 60	
Evacuation Method: Low-Flow		Volume Removed (L): 7.5L	
Evacuation Equipment: dedicated bladder		Purging Personnel: D. Herrera	
SmarTroll serial #: 85075		LaMotte serial #: 26862	

Purge Data/Field Parameters

Time	Color & Appearance	Odor	pH (S.U.)	Cond. (uS/cm)	DO (mg/L)	Temp (C)	ORP (mV)	Turbidity (NTU)	DTW (ft BTOC)	Pumping Rate
1305	clear	none	5.05	1850.6	0.35	22.35	65.9	4.40	38.05	250mL/min

Stabilization Criteria: pH ± 0.1 S.U. Conductivity ± 5%, Dissolved Oxygen ± 10% or 0.2Mg/L (whichever is greater; for DO < 0.5mg/L, record only, no stabilization criteria), Turbidity ≤5 NTU; Purge volume ≥3L purge water, water level ≤ 0.3 ft; Temp and ORP record only

Sample Description

Sample ID: BRGWC-50 Sample Date/Time: 9/27/21 1305 Metals Date/Time: 9.27.2021/1305

Duplicate: DUP-2 Dup Date/Time: 9/27/21 — Final Turbidity NTU: 4.40

Field Blank: FBMBR Blank Date/Time: — Turbidity Date/Time: 9.27.21/1305

# Sample Bottles	Container	Preservative	Analyte(s)
1+1	250 mL plastic	HNO3	Metals App III/ IV (As, B, Ba, Be, Ca, Cd, Cr, Co, Hg, Li, Mo, Pb, Sb, Se, Tl)
1+1	250 mL plastic	--	Chloride, Fluoride, Sulfate
1+1	500 mL plastic	--	TDS
2+2	1 L plastic	HNO3	Radium 226/228
1	250 mL Plastic	H2SO4	353 NO2/NO3

Signature:

PURGING AND SAMPLING FORM

Project #: 166625421	Project Name/Site Name: SCS Plant Branch		Page: 1 of 1
Well ID #: BRGWC-52I	Date: 9-28-21	Water Level (ft): 39.0	Time (WL): 15:48
Physical Condition of Well: Good		Weather: sunny 85°F	
Well Diameter (in): 2	Well Depth (ft): 76.60	Water Column (ft): 37.6	Well Volume (gal): 6.13
Start Purge: 16:01	End Purge: 16:16	Top of Pump (ft): ~71	
Evacuation Method: Low-Flow		Volume Removed (L): 3.75 L	
Evacuation Equipment: DEDICATED BLADDER		Purging Personnel: J. WAGNESPACK	
SmarTroll serial #: 850767		LaMotte serial #: 5990-3715	

Purge Data/Field Parameters

Time	Color & Appearance	Odor	pH (S.U.)	Cond. (uS/cm)	DO (mg/L)	Temp (C)	ORP (mV)	Turbidity (NTU)	DTW (ft BTOC)	Pumping Rate
16:16	CLEAR	NONE	6.81	544.08	0.42	20.57	-61.0	2.53	39.66	250 mL/min
			SAMPLED @		16:16					

Stabilization Criteria: pH ± 0.1 S.U, Conductivity ± 5%, Dissolved Oxygen ± 10% or 0.2Mg/L (whichever is greater; for DO < 0.5mg/L, record only, no stabilization criteria), Turbidity ≤5 NTU; Purge volume ≥3L purge water, water level ≤ 0.3 ft, Temp and ORP record only

Sample Description

Sample ID: BRGWC-52I
Duplicate: EB-3
Field Blank: FB-3

Sample Date/Time: 9.28.21 / 16:16
Dup Date/Time: 9.28.21 / 16:40
Blank Date/Time: 9.28.21 / 16:15

Metals Date/Time: 9.28.21 / 16:16
Final Turbidity NTU: 2.53
Turbidity Date/Time: 9.28.21 / 16:16

# Sample Bottles	Container	Preservative	Analyte(s)
3	250 mL plastic	HNO3	Metals App III/ IV (As, B, Ba, Be, Ca, Cd, Cr, Co, Hg, Li, Mo, Pb, Sb, Se, Tl)
3	250 mL plastic	–	Chloride, Fluoride, Sulfate
3	500 mL plastic	–	TDS
6	1 L plastic	HNO3	Radium 226/228
1	250 mL plastic	culture	NO_2, NO_3

Signature:

EB-3 w/ BLADDER

GOLDER
MEMBER OF WSP

PURGING AND SAMPLING FORM

Project #: 166625421	Project Name/Site Name: SCS Plant Branch		Page: 1 of 1
Well ID # PZ-44	Date: 9.28.21	Water Level (ft): 25.51	Time (WL): ~~25.51~~ 14:12
Physical Condition of Well: Good		Weather: Sunny 85°F	
Well Diameter (in): 2	Well Depth (ft): 57.0	Water Column (ft): 31.49	Well Volume (gal): 5.13
Start Purge: 14:18	End Purge: 1450	Top of Pump (ft): 52	
Evacuation Method: Low-Flow		Volume Removed (L): 7.5	
Evacuation Equipment: Bladder Pump		Purging Personnel: D. Herrera	
SmarTroll serial #: 850751		LaMotte serial #: 26362	

Purge Data/Field Parameters

Time	Color & Appearance	Odor	pH (S.U.)	Cond. (uS/cm)	DO (mg/L)	Temp (C)	ORP (mV)	Turbidity (NTU)	DTW (ft BTOC)	Pumping Rate
1450	clear	none	6.22	291.58	0.15	23.71	126.6	2.13	25.85	250mL/min

Stabilization Criteria: pH ± 0.1 S.U, Conductivity ± 5%, Dissolved Oxygen ± 10% or 0.2Mg/L (whichever is greater; for DO < 0.5mg/L, record only, no stabilization criteria), Turbidity ≤5 NTU; Purge volume ≥3L purge water, water level ≤ 0.3 ft; Temp and ORP record only

Sample Description

Sample ID: PZ-44 — Sample Date/Time: 9.28.21 / 1450 — Metals Date/Time: 9.28.21 / 1450

Duplicate: — — Dup Date/Time: — — Final Turbidity NTU: 2.13

Field Blank: — — Blank Date/Time: — — Turbidity Date/Time: 9.28.21 /

# Sample Bottles	Container	Preservative	Analyte(s)
1	250 mL plastic	HNO3	Metals App III/ IV (As, B, Ba, Be, Ca, Cd, Cr, Co, Hg, Li, Mo, Pb, Sb, Se, Tl)
1	250 mL plastic	--	Chloride, Fluoride, Sulfate
1	500 mL plastic	--	TDS
2	1 L plastic	HNO3	Radium 226/228
1	250 mL plastic		NO_2 / NO_3

Signature: D. Herrera

PURGING AND SAMPLING FORM

Project #: 166625421	Project Name/Site Name: SCS Plant Branch		Page: 1 of 2
Well ID #: PZ-50D	Date: 9-27-21	Water Level (ft): 36.70	Time (WL): 13:12
Physical Condition of Well: GOOD		Weather: SUNNY, 85°F	
Well Diameter (in): 2	Well Depth (ft): 106.0	Water Column (ft): 69.3	Well Volume (gal): 11.3
Start Purge: 13:18	End Purge: 16:26	Top of Pump (ft): ~ 101	
Evacuation Method: Low-Flow		Volume Removed (L): 94.25 L	
Evacuation Equipment: BLADDER SAMPLEPRO		Purging Personnel: J. VANDESPACK	
SmarTroll serial #: 850767		LaMotte serial #: 5990-3915	

Purge Data/Field Parameters

Time	Color & Appearance	Odor	pH (S.U.)	Cond. (uS/cm)	DO (mg/L)	Temp (C)	ORP (mV)	Turbidity (NTU)	DTW (ft BTOC)	Pumping Rate
15:16	CLEAR	NONE	6.39	1515.2	0.27	22.18	-76.0	2.90	63.30	100 mL/min
	INCREASE FLOW RATE FOR FULL EVACUATION PRIOR									350 mL/min
	TO SAMPLING									
	350 mL/min IS MAX PURGE RATE ALLOWED W/ CURRENT EQUIP									
16:26	CLEAR	NONE	6.60	1644.5	3.76	22.02	-57.0	25.0	TOP OF PUMP	350 mL/min
			NO SAMPLE - WELL EVACUATED							

Stabilization Criteria: pH ± 0.1 S.U, Conductivity ± 5%, Dissolved Oxygen ± 10% or 0.2Mg/L (whichever is greater; for DO < 0.5mg/L, record only, no stabilization criteria), Turbidity ≤5 NTU; Purge volume ≥3L purge water, water level ≤ 0.3 ft; Temp and ORP record only

Sample Description

Sample ID: — Sample Date/Time: — Metals Date/Time: —

Duplicate: — Dup Date/Time: — Final Turbidity NTU: —

Field Blank: — Blank Date/Time: — Turbidity Date/Time: —

# Sample Bottles	Container	Preservative	Analyte(s)
—	250 mL plastic	HNO3	Metals App III/ IV (As, B, Ba, Be, Ca, Cd, Cr, Co, Hg, Li, Mo, Pb, Sb, Se, Tl)
—	250 mL plastic	--	Chloride, Fluoride, Sulfate
—	500 mL plastic	--	TDS
—	1 L plastic	HNO3	Radium 226/228

Signature: _____

GOLDER
MEMBER OF WSP

PURGING AND SAMPLING FORM

Project #: 166625421	Project Name/Site Name: SCS Plant Branch		Page: 2 of 2
Well ID #: PZ-50D	Date: 9-28-21	Water Level (ft): 65.30	Time (WL): 09:17
Physical Condition of Well: GOOD		Weather: SUNNY, 68°F	
Well Diameter (in): 2	Well Depth (ft): 106.0	Water Column (ft): 40.7	Well Volume (gal): 6.63
Start Purge: 09:22	End Purge: 09:24	Top of Pump (ft): ~101	
Evacuation Method: Low-Flow		Volume Removed (L): 300 mL	
Evacuation Equipment: SAMPLE PRO BLADDER		Purging Personnel: J. WAGUESPACK	
SmarTroll serial #: 850767		LaMotte serial #: 5990-3915	

Purge Data/Field Parameters

Time	Color & Appearance	Odor	pH (S.U.)	Cond. (uS/cm)	DO (mg/L)	Temp (C)	ORP (mV)	Turbidity (NTU)	DTW (ft BTOC)	Pumping Rate
9:24	CLEAR	NONE	6.23	1870.3	4.36	20.58	81.4	4.82	66.20	150 mL/min
			SAMPLED @ 09:24							

Stabilization Criteria: pH ± 0.1 S.U, Conductivity ± 5%, Dissolved Oxygen ± 10% or 0.2Mg/L (whichever is greater; for DO < 0.5mg/L, record only, no stabilization criteria), Turbidity ≤5 NTU; Purge volume ≥3L purge water, water level ≤ 0.3 ft; Temp and ORP record only

Sample Description

Sample ID: PZ-50D
Sample Date/Time: 9.28.21 / 9:24
Metals Date/Time: 9.28.21 / 9:24
Duplicate: –
Dup Date/Time: –
Final Turbidity NTU: 4.82
Field Blank: –
Blank Date/Time: –
Turbidity Date/Time: 9.28.21 / 9:24

# Sample Bottles	Container	Preservative	Analyte(s)
1	250 mL plastic	HNO3	Metals App III/ IV (As, B, Ba, Be, Ca, Cd, Cr, Co, Hg, Li, Mo, Pb, Sb, Se, Tl)
1	250 mL plastic	--	Chloride, Fluoride, Sulfate
1	500 mL plastic	--	TDS
2	1 L plastic	HNO3	Radium 226/228
1	250 mL	H_2SO_4	NO_2, NO_3

Signature: _____

GOLDER
MEMBER OF WSP

PURGING AND SAMPLING FORM

Project #: 160625421	Project Name/Site Name: SCS Plant Branch		Page: 1 of 1
Well ID #: B7-SID	Date: 9.28.21	Water Level (ft): 39.90	Time (WL): 9:03
Physical Condition of Well: Good		Weather: Sunny 75°F	
Well Diameter (in): 2	Well Depth (ft): 106	Water Column (ft): 66.1	Well Volume (gal): 10.77
Start Purge: 913	End Purge: ~~11:10~~ 11:10	Top of Pump (ft): ~101	
Evacuation Method: Low-Flow		Volume Removed (L): ~2.750	
Evacuation Equipment: Dedicated SS bladder pump		Purging Personnel: D. Herrera	
SmarTroll serial #: 550751		LaMotte serial #: 26862	

Purge Data/Field Parameters

Time	Color & Appearance	Odor	pH (S.U.)	Cond. (uS/cm)	DO (mg/L)	Temp (C)	ORP (mV)	Turbidity (NTU)	DTW (ft BTOC)	Pumping Rate
913	clear	none						DRY		250mL/min
11:10 None	clear	none	7.18	9,83,685.39		23.35	523	2.97	5.50	250mL/min
* decreased	flow	to	100mL	L				2.97	5.50	

Stabilization Criteria: pH ± 0.1 S.U, Conductivity ± 5%, Dissolved Oxygen ± 10% or 0.2Mg/L (whichever is greater; for DO < 0.5mg/L, record only, no stabilization criteria), Turbidity ≤5 NTU; Purge volume ≥3L purge water, water level ≤ 0.3 ft; Temp and ORP record only

Sample Description

Sample ID: B7-SID
Sample Date/Time: 9.28.21/1110
Metals Date/Time: 9.28.21/1110
Duplicate: —
Dup Date/Time: —
Final Turbidity NTU: 2.97
Field Blank: —
Blank Date/Time: —
Turbidity Date/Time: 9.28.21/1110

# Sample Bottles	Container	Preservative	Analyte(s)
3 x 1	250 mL plastic	HNO3	Metals App III/ IV (As, B, Ba, Be, Ca, Cd, Cr, Co, Hg, Li, Mo, Pb, Sb, Se, Tl)
1	250 mL plastic	--	Chloride, Fluoride, Sulfate
1	500 mL plastic	--	TDS
2	1 L plastic	HNO3	Radium 226/228

1 250 mL Plastic NO2/NO3

Signature: D. Herrera

GOLDER
MEMBER OF WSP

PURGING AND SAMPLING FORM

Project #: 166625421	Project Name/Site Name: SCS Plant Branch		Page: 1 of 1
Well ID #: PZ-51I	Date: 9-27-21	Water Level (ft): 38.0	Time (WL): 17:10
Physical Condition of Well: Good		Weather: Sunny, 85°F	
Well Diameter (in): 2	Well Depth (ft): 68.0	Water Column (ft): 30.0	Well Volume (gal): 4.89
Start Purge: 17:13	End Purge: 17:33	Top of Pump (ft): ~63	
Evacuation Method: Low-Flow		Volume Removed (L): 5.5 L	
Evacuation Equipment: Sample Pro Bladder		Purging Personnel: J. Wakefield	
SmarTroll serial #: 85075		LaMotte serial #: 26762	

Purge Data/Field Parameters

Time	Color & Appearance	Odor	pH (S.U.)	Cond. (uS/cm)	DO (mg/L)	Temp (C)	ORP (mV)	Turbidity (NTU)	DTW (ft BTOC)	Pumping Rate
17:33	Clear	None	5.39	1590.3	0.48	21.19	76.2	4.37	39.15	300 mL/min
			Sampled @		17:33					

Stabilization Criteria: pH ± 0.1 S.U, Conductivity ± 5%, Dissolved Oxygen ± 10% or 0.2Mg/L (whichever is greater; for DO < 0.5mg/L, record only, no stabilization criteria), Turbidity ≤5 NTU; Purge volume ≥3L purge water, water level ≤ 0.3 ft; Temp and ORP record only

Sample Description

Sample ID: PZ-51I
Duplicate: –
Field Blank: –

Sample Date/Time: 9.27.21/17:33
Dup Date/Time: –
Blank Date/Time: –

Metals Date/Time: 9.27.21/17:33
Final Turbidity NTU: 4.37
Turbidity Date/Time: 9.27.21/17:33

# Sample Bottles	Container	Preservative	Analyte(s)
1	250 mL plastic	HNO3	Metals App III/ IV (As, B, Ba, Be, Ca, Cd, Cr, Co, Hg, Li, Mo, Pb, Sb, Se, Tl)
1	250 mL plastic	--	Chloride, Fluoride, Sulfate
1	500 mL plastic	--	TDS
2	1 L plastic	HNO3	Radium 226/228
1	250 mL	H2SO4 Sulfuric	NO2, NO3

Signature: [signature]

GOLDER
MEMBER OF WSP

PURGING AND SAMPLING FORM

Project #: 166625421	Project Name/Site Name: SCS Plant Branch		Page: 1 of 1
Well ID #: 02-515	Date: 9.27.2021	Water Level (ft): 38.17	Time (WL): 1425
Physical Condition of Well: good		Weather: 85°F	
Well Diameter (in): 2	Well Depth (ft): ~~95.00~~ 47.7	Water Column (ft): 7.23	Well Volume (gal): 1.18
Start Purge: 1436	End Purge: 1538 45.40	Top of Pump (ft): 40 42	
Evacuation Method: Low-Flow		Volume Removed (L): 15 L	
Evacuation Equipment: Dedicated Bladder		Purging Personnel: D. Herrera	
SmarTroll serial #: 85075		LaMotte serial #: 26862	

Purge Data/Field Parameters

Time	Color & Appearance	Odor	pH (S.U.)	Cond. (uS/cm)	DO (mg/L)	Temp (C)	ORP (mV)	Turbidity (NTU)	DTW (ft BTOC)	Pumping Rate
1538	clear	none	6.04	137.25	0.44	21.58	55.0	0.70	41.65	250 mL

Stabilization Criteria: pH ± 0.1 S.U, Conductivity ± 5%, Dissolved Oxygen ± 10% or 0.2Mg/L (whichever is greater; for DO < 0.5mg/L, record only, no stabilization criteria), Turbidity ≤5 NTU; Purge volume ≥3L purge water, water level ≤ 0.3 ft; Temp and ORP record only

Sample Description

Sample ID: 02-515 Sample Date/Time: 9.27.21 / 1538 Metals Date/Time: 9.27.21 / 1538

Duplicate: — Dup Date/Time: — Final Turbidity NTU: 0.70

Field Blank: — Blank Date/Time: — Turbidity Date/Time: 9.27.21 / 1538

# Sample Bottles	Container	Preservative	Analyte(s)
1	250 mL plastic	HNO3	Metals App III/ IV (As, B, Ba, Be, Ca, Cd, Cr, Co, Hg, Li, Mo, Pb, Sb, Se, Tl)
1	250 mL plastic	--	Chloride, Fluoride, Sulfate
1	500 mL plastic	--	TDS
2	1 L plastic	HNO3	Radium 226/228

1 250 mL plastic H2SO4 353 NO2/NO3

Signature: D. Herrera

GOLDER
MEMBER OF WSP

PURGING AND SAMPLING FORM

Project #: 160625421	Project Name/Site Name: SCS Plant Branch		Page: 1 of 1
Well ID #: PZ-57I	Date: 9-28-21	Water Level (ft): 35.55	Time (WL): 14:11
Physical Condition of Well:	Good	Weather: sunny, 84°F	
Well Diameter (in): 2	Well Depth (ft): 75.93	Water Column (ft): 40.38	Well Volume (gal): 6.58
Start Purge: 14:14	End Purge: 14:29	Top of Pump (ft): ~70	
Evacuation Method: Low-Flow		Volume Removed (L): 3.75	
Evacuation Equipment: Sample Pro Bladder		Purging Personnel: J. Wagnesmack	
SmarTroll serial #: 960767		LaMotte serial #: 5990-3915	

Purge Data/Field Parameters

Time	Color & Appearance	Odor	pH (S.U.)	Cond. (uS/cm)	DO (mg/L)	Temp (C)	ORP (mV)	Turbidity (NTU)	DTW (ft BTOC)	Pumping Rate
14:29	clear	none	5.37	699.31	0.31	22.05	114.4	3.97	36.02	250 mL/min
			Sampled @ 14:29							

Stabilization Criteria: pH ± 0.1 S.U, Conductivity ± 5%, Dissolved Oxygen ± 10% or 0.2Mg/L (whichever is greater; for DO < 0.5mg/L, record only, no stabilization criteria), Turbidity ≤5 NTU; Purge volume ≥3L purge water, water level ≤ 0.3 ft; Temp and ORP record only

Sample Description

Sample ID: PZ-57I
Sample Date/Time: 9.28.21 / 14:29
Metals Date/Time: 9.28.21 / 14:29
Duplicate: —
Dup Date/Time: —
Final Turbidity NTU: 3.97
Field Blank: —
Blank Date/Time: —
Turbidity Date/Time: 9.28.21 / 14:29

# Sample Bottles	Container	Preservative	Analyte(s)
1	250 mL plastic	HNO3	Metals App III/ IV (As, B, Ba, Be, Ca, Cd, Cr, Co, Hg, Li, Mo, Pb, Sb, Se, Tl)
1	250 mL plastic	--	Chloride, Fluoride, Sulfate
1	500 mL plastic	--	TDS
2	1 L plastic	HNO3	Radium 226/228
1	250 mL	H_2SO_4	NO_2, NO_3

Signature:

GOLDER
MEMBER OF WSP

PURGING AND SAMPLING FORM

Project #: 160625421	Project Name/Site Name: SCS Plant Branch		Page: 1 of 1
Well ID #: PZ-58I	Date: 9.28.2021	Water Level (ft): 37.73	Time (WL): 1208
Physical Condition of Well:	Good	Weather: Sunny 85°F	
Well Diameter (in): 2	Well Depth (ft): 63.93	Water Column (ft): 26.15	Well Volume (gal): 4.26
Start Purge: 1225	End Purge: 1315	Top of Pump (ft): 58	
Evacuation Method: Low-Flow		Volume Removed (L): 12.5	
Evacuation Equipment: Bladder Pump		Purging Personnel: D. Hesta	
SmarTroll serial #: 290751		LaMotte serial #: 26862	

Purge Data/Field Parameters

Time	Color & Appearance	Odor	pH (S.U.)	Cond. (uS/cm)	DO (mg/L)	Temp (C)	ORP (mV)	Turbidity (NTU)	DTW (ft BTOC)	Pumping Rate
1315	clear	none	4.00	1402.8	0.21	22.45	221.2	4.85	37.82	250mL/R

Stabilization Criteria: pH ± 0.1 S.U, Conductivity ± 5%, Dissolved Oxygen ± 10% or 0.2Mg/L (whichever is greater, for DO < 0.5mg/L, record only, no stabilization criteria), Turbidity ≤5 NTU, Purge volume ≥3L purge water, water level ≤ 0.3 ft, Temp and ORP record only

Sample Description

Sample ID: PZ-58I
Sample Date/Time: 9.28.21/1315
Metals Date/Time: 9.28.21/1315
Duplicate: —
Dup Date/Time: —
Final Turbidity NTU: 4.85
Field Blank: —
Blank Date/Time: —
Turbidity Date/Time: 9.28.21/1315

# Sample Bottles	Container	Preservative	Analyte(s)
1	250 mL plastic	HNO3	Metals App III/ IV (As, B, Ba, Be, Ca, Cd, Cr, Co, Hg, Li, Mo, Pb, Sb, Se, Tl)
1	250 mL plastic	--	Chloride, Fluoride, Sulfate
1	500 mL plastic	--	TDS
2	1 L plastic	HNO3	Radium 226/228

1 250 mL plastic NO2/NO3

Signature: D. HESTA

GOLDER
MEMBER OF WSP

PURGING AND SAMPLING FORM

Project #: 166625421	Project Name/Site Name: SCS Plant Branch		Page: 1 of 1
Well ID #: PZ-60I	Date: 9-28-21	Water Level (ft): 37.60	Time (WL): 11:34
Physical Condition of Well:	Good	Weather: Sunny 81°F	
Well Diameter (in): 2	Well Depth (ft): 60.83	Water Column (ft): 23.23	Well Volume (gal): 3.79
Start Purge: 11:42	End Purge: 12:02	Top of Pump (ft): ~55	
Evacuation Method: Low-Flow		Volume Removed (L): 5 L	
Evacuation Equipment: Sampler Bladder		Purging Personnel: J. Wagnespack	
SmarTroll serial #: 850767		LaMotte serial #: 5990-3915	

Purge Data/Field Parameters

Time	Color & Appearance	Odor	pH (S.U.)	Cond. (uS/cm)	DO (mg/L)	Temp (C)	ORP (mV)	Turbidity (NTU)	DTW (ft BTOC)	Pumping Rate
12:02	clear	none	4.77	80725	0.22	21.82	360.	3.30	37.75	250 mL/min
		Samples @ 12:02								

Stabilization Criteria: pH ± 0.1 S.U, Conductivity ± 5%, Dissolved Oxygen ± 10% or 0.2Mg/L (whichever is greater; for DO < 0.5mg/L record only, no stabilization criteria), Turbidity ≤5 NTU; Purge volume ≥3L purge water, water level ≤ 0.3 ft; Temp and ORP record only

Sample Description

Sample ID: PZ-60I
Duplicate: —
Field Blank: —

Sample Date/Time: 9.28.21/12:02
Dup Date/Time: —
Blank Date/Time: —

Metals Date/Time: 9.28.21/12:02
Final Turbidity NTU: 3.30
Turbidity Date/Time: 9.28.21/12:02

# Sample Bottles	Container	Preservative	Analyte(s)
1	250 mL plastic	HNO3	Metals App III/ IV (As, B, Ba, Be, Ca, Cd, Cr, Co, Hg, Li, Mo, Pb, Sb, Se, Tl)
1	250 mL plastic	--	Chloride, Fluoride, Sulfate
1	500 mL plastic	--	TDS
2	1 L plastic	HNO3	Radium 226/228
1	250 mL	H_2SO_4	NO_2, NO_3

Signature: [signature]

GOLDER
MEMBER OF WSP

PURGING AND SAMPLING FORM

Project #: 186625421	Project Name/Site Name: SCS Plant Branch		Page: 1 of 1
Well ID #: PZ-61I	Date: 9-27-21	Water Level (ft): 47.80	Time (WL): 1606
Physical Condition of Well: Good		Weather: 85°F	
Well Diameter (in): 2	Well Depth (ft): 76.03	Water Column (ft): 28.23	Well Volume (gal): 4.60
Start Purge: 1616	End Purge: 1643	Top of Pump (ft): 71	
Evacuation Method: Low-Flow		Volume Removed (L): 6.25	
Evacuation Equipment: Disposable dedicated tubing		Purging Personnel: D. Hess	
SmarTroll serial #: 85075		LaMotte serial #: 26862	

Purge Data/Field Parameters

Time	Color & Appearance	Odor	pH (S.U.)	Cond. (uS/cm)	DO (mg/L)	Temp (C)	ORP (mV)	Turbidity (NTU)	DTW (ft BTOC)	Pumping Rate
1616 1640	Clear	none	5.02	2,165.3	0.21	21.31	47.4	3.98	98.20	250 mL

Stabilization Criteria: pH ± 0.1 S.U. Conductivity ± 5%, Dissolved Oxygen ± 10% or 0.2Mg/L (whichever is greater; for DO < 0.5mg/L record only, no stabilization criteria), Turbidity ≤5 NTU; Purge volume ≥3L purge water, water level ≤ 0.3 ft; Temp and ORP record only

Sample Description

Sample ID: PZ-61I
Sample Date/Time: 9-27-21 / 1643
Metals Date/Time: 9-27-21 / 1643
Duplicate: —
Dup Date/Time: —
Final Turbidity NTU: 3.98
Field Blank: —
Blank Date/Time: —
Turbidity Date/Time: 9-27-21 / 1643

# Sample Bottles	Container	Preservative	Analyte(s)
1	250 mL plastic	HNO3	Metals App III/ IV (As, B, Ba, Be, Ca, Cd, Cr, Co, Hg, Li, Mo, Pb, Sb, Se, Tl)
1	250 mL plastic	--	Chloride, Fluoride, Sulfate
1	500 mL plastic	--	TDS
2	1 L plastic	HNO3	Radium 226/228
1	250 mL plastic	H2SO4	353.2 NO2/NO3

Signature: D. Hess

GOLDER
MEMBER OF WSP

Low-Flow Test Report:

Test Date / Time: 2/1/2022 12:21:39 PM
Project: Plant Banch
Operator Name: Duane Fulton

Location Name: BRGWA-2I **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 56.96 ft** **Total Depth: 66.96 ft** **Initial Depth to Water: 10.9 ft**	**Pump Type: Dedicated Pump** **Tubing Type: Polyethylene** **Tubing Inner Diameter: 0.170 in** **Tubing Length: 61.96 ft** **Pump Intake From TOC: 61.96 ft** **Estimated Total Volume Pumped: 3975 ml** **Flow Cell Volume: 90 ml** **Final Flow Rate: 70 ml/min** **Final Draw Down: 0.95 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 850751**

Test Notes:

Weather Conditions:
Clear, 55

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 0.2	+/- 2	+/- 10	+/- 0.3	
2/1/2022 12:21 PM	00:00	7.13 pH	23.63 °C	144.62 µS/cm	3.79 mg/L	2.48 NTU	115.9 mV	11.40 ft	150.00 ml/min
2/1/2022 12:26 PM	05:00	6.81 pH	17.82 °C	162.10 µS/cm	0.76 mg/L	1.19 NTU	103.2 mV	11.44 ft	70.00 ml/min
2/1/2022 12:31 PM	10:00	6.67 pH	16.80 °C	162.86 µS/cm	1.03 mg/L	1.25 NTU	74.4 mV	11.60 ft	60.00 ml/min
2/1/2022 12:36 PM	15:00	6.72 pH	17.46 °C	163.21 µS/cm	0.89 mg/L	2.70 NTU	75.6 mV	11.35 ft	60.00 ml/min
2/1/2022 12:41 PM	20:00	6.80 pH	16.48 °C	162.48 µS/cm	0.63 mg/L	3.00 NTU	75.5 mV	11.55 ft	75.00 ml/min
2/1/2022 12:46 PM	25:00	6.82 pH	17.37 °C	163.45 µS/cm	0.81 mg/L	3.95 NTU	74.4 mV	11.95 ft	100.00 ml/min
2/1/2022 12:51 PM	30:00	6.84 pH	17.70 °C	162.95 µS/cm	0.88 mg/L	4.24 NTU	73.6 mV	11.85 ft	70.00 ml/min
2/1/2022 12:56 PM	35:00	6.85 pH	17.18 °C	164.30 µS/cm	0.85 mg/L	4.30 NTU	72.7 mV	11.85 ft	70.00 ml/min
2/1/2022 1:01 PM	40:00	6.84 pH	17.28 °C	164.37 µS/cm	0.80 mg/L	3.00 NTU	71.5 mV	11.85 ft	70.00 ml/min
2/1/2022 1:06 PM	45:00	6.83 pH	17.32 °C	164.66 µS/cm	0.75 mg/L	2.71 NTU	70.5 mV	11.85 ft	70.00 ml/min
2/1/2022 1:11 PM	50:00	6.83 pH	17.33 °C	164.41 µS/cm	0.64 mg/L	2.25 NTU	69.0 mV	11.85 ft	70.00 ml/min

Samples

Sample ID:	Description:
BRGWA-2I	

Low-Flow Test Report:

Test Date / Time: 2/1/2022 2:26:55 PM
Project: Plant Banch
Operator Name: Duane Fulton

Location Name: BRGWA-2S **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 37.39 ft** **Total Depth: 47.39 ft** **Initial Depth to Water: 11.05 ft**	**Pump Type: Dedicated Pump** **Tubing Type: Polyethylene** **Tubing Inner Diameter: 0.170 in** **Tubing Length: 42.39 ft** **Pump Intake From TOC: 42.39 ft** **Estimated Total Volume Pumped: 7500 ml** **Flow Cell Volume: 90 ml** **Final Flow Rate: 300 ml/min** **Final Draw Down: 0.14 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 850751**

Test Notes:

Weather Conditions:
Clear

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 0.2	+/- 2	+/- 10	+/- 0.3	
2/1/2022 2:26 PM	00:00	7.89 pH	22.67 °C	70.47 µS/cm	6.70 mg/L	2.82 NTU	59.7 mV	11.19 ft	300.00 ml/min
2/1/2022 2:31 PM	05:00	5.94 pH	18.39 °C	70.13 µS/cm	1.97 mg/L	0.95 NTU	88.1 mV	11.19 ft	300.00 ml/min
2/1/2022 2:36 PM	10:00	5.94 pH	18.17 °C	69.96 µS/cm	1.54 mg/L	1.10 NTU	90.3 mV	11.19 ft	300.00 ml/min
2/1/2022 2:41 PM	15:00	5.93 pH	18.08 °C	69.12 µS/cm	1.42 mg/L	1.12 NTU	91.8 mV	11.19 ft	300.00 ml/min
2/1/2022 2:46 PM	20:00	5.93 pH	18.02 °C	69.11 µS/cm	1.34 mg/L	0.87 NTU	91.7 mV	11.19 ft	300.00 ml/min
2/1/2022 2:51 PM	25:00	5.95 pH	17.99 °C	69.07 µS/cm	1.30 mg/L	0.81 NTU	90.6 mV	11.19 ft	300.00 ml/min

Samples

Sample ID:	Description:
BRGWA-2S	

Low-Flow Test Report:

Test Date / Time: 2/1/2022 10:25:58 AM
Project: Plant Banch
Operator Name: Duane Fulton

Location Name: BRGWA-5I **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 53.82 ft** **Total Depth: 63.82 ft** **Initial Depth to Water: 11.07 ft**	**Pump Type: Dedicated Pump** **Tubing Type: Polyethylene** **Tubing Inner Diameter: 0.170 in** **Tubing Length: 58 ft** **Pump Intake From TOC: 58 ft** **Estimated Total Volume Pumped: 5950 ml** **Flow Cell Volume: 90 ml** **Final Flow Rate: 130 ml/min** **Final Draw Down: 0.11 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 850751**

Test Notes:

Weather Conditions:
Clear, 38

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 0.2	+/- 2	+/- 10	+/- 0.3	
2/1/2022 10:25 AM	00:00	7.10 pH	17.56 °C	156.11 µS/cm	7.57 mg/L	3.97 NTU	126.6 mV	11.22 ft	150.00 ml/min
2/1/2022 10:30 AM	05:00	6.36 pH	17.34 °C	165.38 µS/cm	4.96 mg/L	1.84 NTU	125.2 mV	11.18 ft	130.00 ml/min
2/1/2022 10:35 AM	10:00	6.35 pH	17.28 °C	157.11 µS/cm	5.59 mg/L	2.22 NTU	128.6 mV	11.20 ft	130.00 ml/min
2/1/2022 10:40 AM	15:00	6.37 pH	17.35 °C	161.84 µS/cm	5.72 mg/L	1.02 NTU	128.4 mV	11.20 ft	130.00 ml/min
2/1/2022 10:45 AM	20:00	6.40 pH	17.47 °C	144.61 µS/cm	5.96 mg/L	1.91 NTU	127.1 mV	11.18 ft	130.00 ml/min
2/1/2022 10:50 AM	25:00	6.38 pH	17.50 °C	165.67 µS/cm	5.37 mg/L	1.33 NTU	124.3 mV	11.18 ft	130.00 ml/min
2/1/2022 10:55 AM	30:00	6.37 pH	17.81 °C	165.13 µS/cm	5.29 mg/L	0.96 NTU	122.8 mV	11.18 ft	130.00 ml/min
2/1/2022 11:00 AM	35:00	6.37 pH	17.81 °C	166.01 µS/cm	5.48 mg/L	0.97 NTU	137.1 mV	11.19 ft	130.00 ml/min
2/1/2022 11:05 AM	40:00	6.38 pH	17.54 °C	165.50 µS/cm	5.50 mg/L	0.96 NTU	121.1 mV	11.18 ft	130.00 ml/min
2/1/2022 11:10 AM	45:00	6.38 pH	17.73 °C	166.38 µS/cm	5.51 mg/L	0.95 NTU	119.1 mV	11.18 ft	130.00 ml/min

Samples

Sample ID:	Description:

BRGWA-5I	

Low-Flow Test Report:

Test Date / Time: 2/1/2022 9:07:59 AM
Project: Plant Banch
Operator Name: Duane Fulton

Location Name: BRGWA-5S **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 33.01 ft** **Total Depth: 43.01 ft** **Initial Depth to Water: 11.19 ft**	**Pump Type: Dedicated Pump** **Tubing Type: Polyethylene** **Tubing Inner Diameter: 0.170 in** **Tubing Length: 38 ft** **Pump Intake From TOC: 38 ft** **Estimated Total Volume Pumped: 4750 ml** **Flow Cell Volume: 90 ml** **Final Flow Rate: 150 ml/min** **Final Draw Down: 0.02 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 850751**

Test Notes:

Weather Conditions:
Clear

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 0.2	+/- 2	+/- 10	+/- 0.3	
2/1/2022 9:07 AM	00:00	7.52 pH	13.84 °C	169.43 µS/cm	8.08 mg/L	0.67 NTU	169.4 mV	11.25 ft	200.00 ml/min
2/1/2022 9:12 AM	05:00	6.36 pH	16.20 °C	152.26 µS/cm	2.36 mg/L	1.90 NTU	152.3 mV	11.20 ft	150.00 ml/min
2/1/2022 9:17 AM	10:00	6.35 pH	16.75 °C	156.85 µS/cm	2.20 mg/L	1.87 NTU	146.8 mV	11.20 ft	150.00 ml/min
2/1/2022 9:22 AM	15:00	6.31 pH	16.80 °C	160.26 µS/cm	2.10 mg/L	4.08 NTU	144.4 mV	11.20 ft	150.00 ml/min
2/1/2022 9:27 AM	20:00	6.40 pH	16.95 °C	164.31 µS/cm	2.13 mg/L	2.43 NTU	136.5 mV	11.20 ft	150.00 ml/min
2/1/2022 9:32 AM	25:00	6.40 pH	16.47 °C	164.91 µS/cm	2.07 mg/L	3.17 NTU	133.1 mV	11.21 ft	150.00 ml/min
2/1/2022 9:37 AM	30:00	6.39 pH	16.51 °C	165.58 µS/cm	2.16 mg/L	3.15 NTU	129.3 mV	11.21 ft	150.00 ml/min

Samples

Sample ID:	Description:
BRGWA-5S	

Low-Flow Test Report:

Test Date / Time: 2/1/2022 9:25:04 AM
Project: Plant Branch
Operator Name: Jude Waguespack

Location Name: BRGWA-6S **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 42.9 ft** **Total Depth: 52.9 ft** **Initial Depth to Water: 24.3 ft**	**Pump Type: dedicated bladder** **Tubing Type: Polyethylene** **Tubing Inner Diameter: 0.170 in** **Tubing Length: 47 ft** **Pump Intake From TOC: 47 ft** **Estimated Total Volume Pumped: 5000 ml** **Flow Cell Volume: 90 ml** **Final Flow Rate: 250 ml/min** **Final Draw Down: 0.87 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 851413**

Test Notes:

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 10 %	+/- 2	+/- 10	+/- 0.3	
2/1/2022 9:25 AM	00:00	6.77 pH	13.71 °C	60.49 µS/cm	7.50 mg/L	3.77 NTU	117.4 mV	24.30 ft	250.00 ml/min
2/1/2022 9:30 AM	05:00	6.45 pH	17.00 °C	62.18 µS/cm	7.05 mg/L	2.82 NTU	98.1 mV	25.05 ft	250.00 ml/min
2/1/2022 9:35 AM	10:00	6.50 pH	17.21 °C	61.86 µS/cm	6.97 mg/L	1.87 NTU	94.8 mV	25.10 ft	250.00 ml/min
2/1/2022 9:40 AM	15:00	6.53 pH	17.40 °C	62.08 µS/cm	6.96 mg/L	2.65 NTU	91.9 mV	25.15 ft	250.00 ml/min
2/1/2022 9:45 AM	20:00	6.54 pH	17.68 °C	62.36 µS/cm	6.89 mg/L	2.74 NTU	90.3 mV	25.17 ft	250.00 ml/min

Samples

Sample ID:	Description:
BRGWA-6S	

Low-Flow Test Report:

Test Date / Time: 2/1/2022 10:59:11 AM
Project: Plant Branch
Operator Name: Joe Booth

Location Name: BRGWA-12I **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 70.54 ft** **Total Depth: 80.54 ft** **Initial Depth to Water: 49.89 ft**	**Pump Type: QED Dedicated** **Tubing Type: Polyethylene** **Tubing Inner Diameter: 0.170 in** **Tubing Length: 75.54 ft** **Pump Intake From TOC: 75.54 ft** **Estimated Total Volume Pumped: 12840 ml** **Flow Cell Volume: 90 ml** **Final Flow Rate: 110 ml/min** **Final Draw Down: 8.3 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 843285**

Test Notes:
Prepurge 1.5 liters

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 1000 %	+/- 5 %	+/- 10 %	+/- 10	+/- 1000 %	+/- 0.3	
2/1/2022 10:59 AM	00:00	6.33 pH	18.33 °C	168.61 µS/cm	3.48 mg/L	1.89 NTU	105.1 mV	49.89 ft	160.00 ml/min
2/1/2022 11:03 AM	04:00	6.30 pH	18.17 °C	170.45 µS/cm	1.75 mg/L	1.93 NTU	104.5 mV	51.73 ft	160.00 ml/min
2/1/2022 11:07 AM	08:00	6.33 pH	18.13 °C	162.93 µS/cm	1.79 mg/L	2.24 NTU	102.9 mV	52.18 ft	160.00 ml/min
2/1/2022 11:11 AM	12:00	6.35 pH	18.37 °C	158.68 µS/cm	1.73 mg/L	2.57 NTU	102.5 mV	52.66 ft	160.00 ml/min
2/1/2022 11:15 AM	16:00	6.36 pH	18.42 °C	156.24 µS/cm	1.95 mg/L	2.25 NTU	101.5 mV	53.16 ft	160.00 ml/min
2/1/2022 11:19 AM	20:00	6.36 pH	18.58 °C	155.43 µS/cm	1.95 mg/L	2.30 NTU	101.1 mV	53.72 ft	160.00 ml/min
2/1/2022 11:23 AM	24:00	6.37 pH	18.51 °C	153.85 µS/cm	2.03 mg/L	2.33 NTU	101.0 mV	54.13 ft	160.00 ml/min
2/1/2022 11:27 AM	28:00	6.39 pH	18.60 °C	152.67 µS/cm	2.16 mg/L	2.01 NTU	100.3 mV	54.57 ft	160.00 ml/min
2/1/2022 11:31 AM	32:00	6.38 pH	18.69 °C	151.10 µS/cm	2.54 mg/L	3.04 NTU	100.7 mV	54.90 ft	160.00 ml/min
2/1/2022 11:35 AM	36:00	6.38 pH	18.78 °C	149.35 µS/cm	2.85 mg/L	2.77 NTU	100.5 mV	55.21 ft	160.00 ml/min
2/1/2022 11:39 AM	40:00	6.39 pH	18.91 °C	147.51 µS/cm	3.06 mg/L	1.56 NTU	99.7 mV	55.80 ft	160.00 ml/min
2/1/2022 11:43 AM	44:00	6.38 pH	18.83 °C	145.86 µS/cm	3.22 mg/L	2.20 NTU	100.0 mV	56.20 ft	160.00 ml/min
2/1/2022 11:47 AM	48:00	6.37 pH	18.93 °C	143.97 µS/cm	3.50 mg/L	1.56 NTU	99.9 mV	56.51 ft	160.00 ml/min
2/1/2022 11:51 AM	52:00	6.36 pH	18.86 °C	141.16 µS/cm	3.84 mg/L	1.83 NTU	100.6 mV	56.81 ft	160.00 ml/min

2/1/2022 11:55 AM	56:00	6.36 pH	18.95 °C	89.05 µS/cm	4.08 mg/L	1.85 NTU	99.8 mV	57.09 ft	160.00 ml/min
2/1/2022 11:59 AM	01:00:00	6.36 pH	18.98 °C	137.94 µS/cm	4.38 mg/L	1.52 NTU	99.4 mV	57.33 ft	160.00 ml/min
2/1/2022 12:03 PM	01:04:00	6.38 pH	19.06 °C	136.61 µS/cm	4.64 mg/L	2.52 NTU	99.6 mV	57.55 ft	160.00 ml/min
2/1/2022 12:07 PM	01:08:00	6.39 pH	19.13 °C	136.63 µS/cm	5.00 mg/L	2.05 NTU	99.3 mV	57.81 ft	160.00 ml/min
2/1/2022 12:11 PM	01:12:00	6.36 pH	19.31 °C	138.92 µS/cm	5.07 mg/L	2.45 NTU	100.1 mV	58.02 ft	110.00 ml/min
2/1/2022 12:15 PM	01:16:00	6.40 pH	19.62 °C	136.59 µS/cm	5.19 mg/L	1.89 NTU	99.9 mV	58.15 ft	110.00 ml/min
2/1/2022 12:19 PM	01:20:00	6.40 pH	19.10 °C	138.65 µS/cm	5.18 mg/L	2.43 NTU	100.4 mV	58.19 ft	110.00 ml/min

Samples

Sample ID:	Description:
BRGWA-12I	Metals, TDS, Inorganics, Alkalinity, Radium

Low-Flow Test Report:

Test Date / Time: 2/1/2022 1:09:57 PM
Project: Plant Branch
Operator Name: Joe Booth

Location Name: BRGWA-12S **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 51.01 ft** **Total Depth: 61.01 ft** **Initial Depth to Water: 50.06 ft**	**Pump Type: QED Dedicated** **Tubing Type: Polyethylene** **Tubing Inner Diameter: 0.170 in** **Tubing Length: 55.01 ft** **Pump Intake From TOC: 55.01 ft** **Estimated Total Volume Pumped: 6000 ml** **Flow Cell Volume: 90 ml** **Final Flow Rate: 150 ml/min** **Final Draw Down: 0.31 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 843285**

Test Notes:
Prepurge 1.5 liters

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 1000 %	+/- 5 %	+/- 10 %	+/- 10	+/- 1000 %	+/- 0.3	
2/1/2022 1:09 PM	00:00	5.53 pH	19.53 °C	65.22 µS/cm	7.10 mg/L	1.91 NTU	100.9 mV	50.06 ft	150.00 ml/min
2/1/2022 1:13 PM	04:00	5.67 pH	19.62 °C	70.58 µS/cm	7.38 mg/L	2.15 NTU	100.6 mV	50.37 ft	150.00 ml/min
2/1/2022 1:17 PM	08:00	5.79 pH	19.54 °C	79.28 µS/cm	7.45 mg/L	1.97 NTU	101.9 mV	50.37 ft	150.00 ml/min
2/1/2022 1:21 PM	12:00	5.86 pH	19.66 °C	82.17 µS/cm	7.64 mg/L	2.17 NTU	102.6 mV	50.37 ft	150.00 ml/min
2/1/2022 1:25 PM	16:00	5.86 pH	19.73 °C	82.71 µS/cm	7.68 mg/L	2.10 NTU	103.7 mV	50.37 ft	150.00 ml/min
2/1/2022 1:29 PM	20:00	5.89 pH	19.66 °C	86.02 µS/cm	7.68 mg/L	2.42 NTU	102.7 mV	50.37 ft	150.00 ml/min
2/1/2022 1:33 PM	24:00	5.88 pH	19.72 °C	81.82 µS/cm	7.70 mg/L	2.19 NTU	102.8 mV	50.37 ft	150.00 ml/min
2/1/2022 1:37 PM	28:00	5.86 pH	19.75 °C	80.28 µS/cm	7.69 mg/L	2.02 NTU	102.9 mV	50.37 ft	150.00 ml/min
2/1/2022 1:41 PM	32:00	5.86 pH	19.83 °C	79.17 µS/cm	7.72 mg/L	1.57 NTU	103.4 mV	50.37 ft	150.00 ml/min
2/1/2022 1:45 PM	36:00	5.83 pH	19.67 °C	78.49 µS/cm	7.72 mg/L	1.85 NTU	104.2 mV	50.37 ft	150.00 ml/min
2/1/2022 1:49 PM	40:00	5.83 pH	19.84 °C	77.60 µS/cm	7.69 mg/L	1.81 NTU	104.6 mV	50.37 ft	150.00 ml/min

Samples

Sample ID:	Description:

BRGWA-12S	Metals, TDS, Inorganics, Alkalinity, Radium

Low-Flow Test Report:

Test Date / Time: 2/1/2022 9:23:01 AM
Project: Plant Branch
Operator Name: Joe Booth

Location Name: BRGWA-23S **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 33.80 ft** **Total Depth: 43.80 ft** **Initial Depth to Water: 38.64 ft**	**Pump Type: QED Dedicated** **Tubing Type: Polyethylene** **Tubing Inner Diameter: 0.170 in** **Tubing Length: 33.86 ft** **Pump Intake From TOC: 33.86 ft** **Estimated Total Volume Pumped: 6480 ml** **Flow Cell Volume: 90 ml** **Final Flow Rate: 180 ml/min** **Final Draw Down: 0.24 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 843285**

Test Notes:
Prepurge 5 liters

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 1000 %	+/- 5 %	+/- 10 %	+/- 10	+/- 1000 %	+/- 0.3	
2/1/2022 9:23 AM	00:00	5.65 pH	16.03 °C	166.45 µS/cm	3.20 mg/L	4.79 NTU	109.9 mV	38.64 ft	180.00 ml/min
2/1/2022 9:27 AM	04:00	5.64 pH	15.78 °C	162.77 µS/cm	3.55 mg/L	4.33 NTU	108.9 mV	38.88 ft	180.00 ml/min
2/1/2022 9:31 AM	08:00	5.64 pH	15.66 °C	162.37 µS/cm	3.75 mg/L	4.57 NTU	108.2 mV	38.88 ft	180.00 ml/min
2/1/2022 9:35 AM	12:00	5.64 pH	15.71 °C	162.19 µS/cm	3.83 mg/L	2.17 NTU	108.0 mV	38.88 ft	180.00 ml/min
2/1/2022 9:39 AM	16:00	5.63 pH	15.60 °C	162.15 µS/cm	3.95 mg/L	2.42 NTU	108.3 mV	38.88 ft	180.00 ml/min
2/1/2022 9:43 AM	20:00	5.63 pH	15.68 °C	162.41 µS/cm	4.08 mg/L	4.23 NTU	108.2 mV	38.88 ft	180.00 ml/min
2/1/2022 9:47 AM	24:00	5.64 pH	15.52 °C	161.72 µS/cm	4.17 mg/L	4.00 NTU	108.4 mV	38.88 ft	180.00 ml/min
2/1/2022 9:51 AM	28:00	5.65 pH	15.65 °C	161.87 µS/cm	4.17 mg/L	3.88 NTU	108.6 mV	38.88 ft	180.00 ml/min
2/1/2022 9:55 AM	32:00	5.65 pH	15.60 °C	162.01 µS/cm	4.24 mg/L	2.30 NTU	109.5 mV	38.88 ft	180.00 ml/min
2/1/2022 9:59 AM	36:00	5.65 pH	15.75 °C	162.76 µS/cm	4.32 mg/L	2.38 NTU	109.6 mV	38.88 ft	180.00 ml/min

Samples

Sample ID:	Description:
BRGWA-23S	Metals, TDS, Inorganics, Alkalinity, Radium

Low-Flow Test Report:

Test Date / Time: 2/1/2022 2:43:54 PM
Project: Plant Branch
Operator Name: Jude Waguespack

Location Name: BRGWC-17S **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 5 ft** **Top of Screen: 4.04 ft** **Total Depth: 9.04 ft** **Initial Depth to Water: 5.94 ft**	**Pump Type: Peristaltic** **Tubing Type: Polyethylene** **Tubing Inner Diameter: 0.170 in** **Tubing Length: 6.2 ft** **Pump Intake From TOC: 6.2 ft** **Estimated Total Volume Pumped: 7700 ml** **Flow Cell Volume: 90 ml** **Final Flow Rate: 200 ml/min** **Final Draw Down: 0.25 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 851413**

Test Notes:

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 10 %	+/- 2	+/- 10	+/- 0.3	
2/1/2022 2:43 PM	00:00	6.43 pH	16.50 °C	488.16 µS/cm	7.45 mg/L	14.60 NTU	111.6 mV	5.94 ft	70.00 ml/min
2/1/2022 2:48 PM	05:00	6.43 pH	16.29 °C	319.92 µS/cm	7.72 mg/L	4.17 NTU	121.4 mV	6.09 ft	70.00 ml/min
2/1/2022 2:53 PM	10:00	6.44 pH	16.11 °C	504.72 µS/cm	7.84 mg/L	102.00 NTU	102.6 mV	6.15 ft	200.00 ml/min
2/1/2022 2:58 PM	15:00	6.35 pH	16.06 °C	499.23 µS/cm	2.35 mg/L	125.00 NTU	114.9 mV	6.15 ft	200.00 ml/min
2/1/2022 3:03 PM	20:00	6.40 pH	15.93 °C	499.95 µS/cm	1.99 mg/L	35.10 NTU	99.1 mV	6.15 ft	200.00 ml/min
2/1/2022 3:08 PM	25:00	6.39 pH	15.79 °C	494.18 µS/cm	1.88 mg/L	25.70 NTU	109.4 mV	6.15 ft	200.00 ml/min
2/1/2022 3:13 PM	30:00	6.39 pH	15.66 °C	498.99 µS/cm	1.83 mg/L	12.20 NTU	94.9 mV	6.19 ft	200.00 ml/min
2/1/2022 3:18 PM	35:00	6.39 pH	15.61 °C	499.70 µS/cm	1.81 mg/L	8.10 NTU	92.6 mV	6.19 ft	200.00 ml/min
2/1/2022 3:23 PM	40:00	6.39 pH	15.61 °C	498.26 µS/cm	1.81 mg/L	4.06 NTU	102.8 mV	6.19 ft	200.00 ml/min
2/1/2022 3:28 PM	45:00	6.39 pH	15.53 °C	498.24 µS/cm	1.79 mg/L	3.20 NTU	90.6 mV	6.19 ft	200.00 ml/min

Samples

Sample ID:	Description:
BRGWC-17S	

Low-Flow Test Report:

Test Date / Time: 2/2/2022 2:19:14 PM
Project: Plant Branch
Operator Name: Joe Booth

Location Name: BRGWC-25I **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 14.41 ft** **Total Depth: 24.41 ft** **Initial Depth to Water: 9.27 ft**	**Pump Type: QED Dedicated** **Tubing Type: Polyethylene** **Tubing Inner Diameter: 0.170 in** **Tubing Length: 20.41 ft** **Pump Intake From TOC: 20.41 ft** **Estimated Total Volume Pumped: 3840 ml** **Flow Cell Volume: 90 ml** **Final Flow Rate: 160 ml/min** **Final Draw Down: 0.09 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 843285**

Test Notes:
Prepurge 2 liters

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 1000 %	+/- 5 %	+/- 10 %	+/- 10	+/- 1000 %	+/- 0.3	
2/2/2022 2:19 PM	00:00	6.27 pH	17.53 °C	489.16 µS/cm	0.28 mg/L	14.10 NTU	34.1 mV	9.27 ft	160.00 ml/min
2/2/2022 2:23 PM	04:00	6.26 pH	17.38 °C	491.94 µS/cm	0.26 mg/L	7.60 NTU	38.4 mV	9.36 ft	160.00 ml/min
2/2/2022 2:27 PM	08:00	6.24 pH	17.37 °C	490.19 µS/cm	0.26 mg/L	7.06 NTU	42.0 mV	9.36 ft	160.00 ml/min
2/2/2022 2:31 PM	12:00	6.24 pH	17.40 °C	492.73 µS/cm	0.27 mg/L	7.57 NTU	45.3 mV	9.36 ft	160.00 ml/min
2/2/2022 2:35 PM	16:00	6.24 pH	17.44 °C	493.78 µS/cm	0.27 mg/L	6.59 NTU	48.0 mV	9.36 ft	160.00 ml/min
2/2/2022 2:39 PM	20:00	6.23 pH	17.50 °C	493.83 µS/cm	0.27 mg/L	3.97 NTU	50.4 mV	9.36 ft	160.00 ml/min
2/2/2022 2:43 PM	24:00	6.23 pH	17.51 °C	490.66 µS/cm	0.26 mg/L	2.74 NTU	52.6 mV	9.36 ft	160.00 ml/min

Samples

Sample ID:	Description:
BRGWC-25I	Metals, TDS, Inorganics, Alkalinity, Radium

Low-Flow Test Report:

Test Date / Time: 2/4/2022 8:23:12 AM
Project: Plant Banch
Operator Name: Duane Fulton

Location Name: BRGWC-27I **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 23.41 ft** **Total Depth: 33.41 ft** **Initial Depth to Water: 8.28 ft**	**Pump Type: Dedicated Pump** **Tubing Type: Polyethylene** **Tubing Inner Diameter: 0.170 in** **Tubing Length: 28.41 ft** **Pump Intake From TOC: 28.41 ft** **Estimated Total Volume Pumped: 5000 ml** **Flow Cell Volume: 90 ml** **Final Flow Rate: 200 ml/min** **Final Draw Down: 0.07 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 850751**

Test Notes:

Weather Conditions:
Rain

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 0.2	+/- 2	+/- 10	+/- 0.3	
2/4/2022 8:23 AM	00:00	6.77 pH	18.11 °C	422.82 µS/cm	6.06 mg/L	1.53 NTU	86.4 mV	8.35 ft	200.00 ml/min
2/4/2022 8:28 AM	05:00	5.92 pH	18.26 °C	481.76 µS/cm	1.65 mg/L	0.92 NTU	136.3 mV	8.32 ft	200.00 ml/min
2/4/2022 8:33 AM	10:00	5.90 pH	18.36 °C	488.38 µS/cm	1.08 mg/L	0.73 NTU	169.1 mV	8.36 ft	200.00 ml/min
2/4/2022 8:38 AM	15:00	5.92 pH	18.43 °C	487.85 µS/cm	0.86 mg/L	0.50 NTU	143.9 mV	8.32 ft	200.00 ml/min
2/4/2022 8:43 AM	20:00	5.96 pH	18.48 °C	491.17 µS/cm	0.79 mg/L	0.52 NTU	171.1 mV	8.33 ft	200.00 ml/min
2/4/2022 8:48 AM	25:00	5.97 pH	18.50 °C	490.87 µS/cm	0.75 mg/L	0.44 NTU	171.9 mV	8.35 ft	200.00 ml/min

Samples

Sample ID:	Description:
BRGWC-27I	

Low-Flow Test Report:

Test Date / Time: 2/3/2022 4:30:55 PM
Project: Plant Banch
Operator Name: Duane Fulton

Location Name: BRGWC-29I **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 13.63 ft** **Total Depth: 23.63 ft** **Initial Depth to Water: 10.1 ft**	**Pump Type: Bladder MP-50 Pump** **Tubing Type: Polyethylene** **Tubing Inner Diameter: 0.170 in** **Tubing Length: 18.63 ft** **Pump Intake From TOC: 18.63 ft** **Estimated Total Volume Pumped: 7500 ml** **Flow Cell Volume: 90 ml** **Final Flow Rate: 300 ml/min** **Final Draw Down: 0.1 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 850751**

Test Notes:

Weather Conditions:
Cloudy

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 0.2	+/- 2	+/- 10	+/- 0.3	
2/3/2022 4:30 PM	00:00	2.98 pH	19.59 °C	811.09 µS/cm	6.13 mg/L	0.89 NTU	324.3 mV	10.22 ft	300.00 ml/min
2/3/2022 4:35 PM	05:00	3.84 pH	19.33 °C	661.65 µS/cm	0.85 mg/L	0.66 NTU	267.5 mV	10.20 ft	300.00 ml/min
2/3/2022 4:40 PM	10:00	4.14 pH	19.33 °C	650.39 µS/cm	0.47 mg/L	0.69 NTU	236.9 mV	10.20 ft	300.00 ml/min
2/3/2022 4:45 PM	15:00	4.20 pH	19.36 °C	650.44 µS/cm	0.55 mg/L	0.84 NTU	230.8 mV	10.20 ft	300.00 ml/min
2/3/2022 4:50 PM	20:00	4.22 pH	19.35 °C	651.09 µS/cm	0.38 mg/L	0.62 NTU	228.6 mV	10.20 ft	300.00 ml/min
2/3/2022 4:55 PM	25:00	4.23 pH	19.37 °C	650.78 µS/cm	0.46 mg/L	0.51 NTU	228.4 mV	10.20 ft	300.00 ml/min

Samples

Sample ID:	Description:
BRGWC-29I	

Low-Flow Test Report:

Test Date / Time: 2/2/2022 10:16:39 AM
Project: Plant Banch
Operator Name: Duane Fulton

Location Name: BRGWC-30I **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 12.35 ft** **Total Depth: 22.35 ft** **Initial Depth to Water: 4.55 ft**	**Pump Type: Dedicated Pump** **Tubing Type: Polyethylene** **Tubing Inner Diameter: 0.170 in** **Tubing Length: 18 ft** **Pump Intake From TOC: 18 ft** **Estimated Total Volume Pumped: 39000 ml** **Flow Cell Volume: 90 ml** **Final Flow Rate: 300 ml/min** **Final Draw Down: 0.27 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 850751**

Test Notes:

Weather Conditions:
Cloudy

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 0.2	+/- 2	+/- 10	+/- 0.3	
2/2/2022 10:16 AM	00:00	6.23 pH	12.81 °C	1,493.5 µS/cm	8.30 mg/L	824.00 NTU	156.2 mV	4.82 ft	300.00 ml/min
2/2/2022 10:21 AM	05:00	6.32 pH	16.31 °C	1,471.8 µS/cm	1.01 mg/L	977.00 NTU	101.8 mV	4.85 ft	300.00 ml/min
2/2/2022 10:26 AM	10:00	6.35 pH	16.92 °C	1,490.2 µS/cm	1.13 mg/L	817.00 NTU	98.3 mV	4.85 ft	300.00 ml/min
2/2/2022 10:31 AM	15:00	6.35 pH	17.08 °C	1,496.4 µS/cm	0.94 mg/L	544.00 NTU	96.7 mV	4.82 ft	300.00 ml/min
2/2/2022 10:36 AM	20:00	6.34 pH	17.23 °C	1,504.6 µS/cm	0.68 mg/L	223.00 NTU	94.2 mV	4.82 ft	300.00 ml/min
2/2/2022 10:41 AM	25:00	6.35 pH	17.32 °C	1,499.2 µS/cm	0.77 mg/L	78.50 NTU	92.4 mV	4.82 ft	300.00 ml/min
2/2/2022 10:46 AM	30:00	6.35 pH	17.37 °C	1,504.5 µS/cm	0.72 mg/L	36.10 NTU	79.8 mV	4.84 ft	300.00 ml/min
2/2/2022 10:51 AM	35:00	6.35 pH	17.40 °C	1,498.6 µS/cm	0.76 mg/L	22.40 NTU	91.2 mV	4.82 ft	300.00 ml/min
2/2/2022 10:56 AM	40:00	6.35 pH	17.46 °C	1,501.9 µS/cm	0.58 mg/L	19.20 NTU	92.2 mV	4.85 ft	300.00 ml/min
2/2/2022 11:01 AM	45:00	6.35 pH	17.46 °C	1,498.2 µS/cm	0.57 mg/L	30.20 NTU	90.0 mV	4.85 ft	300.00 ml/min
2/2/2022 11:06 AM	50:00	6.35 pH	17.46 °C	1,498.4 µS/cm	0.64 mg/L	16.50 NTU	87.5 mV	4.85 ft	300.00 ml/min
2/2/2022 11:11 AM	55:00	6.35 pH	17.53 °C	1,506.4 µS/cm	0.61 mg/L	25.00 NTU	76.9 mV	4.81 ft	300.00 ml/min
2/2/2022 11:16 AM	01:00:00	6.35 pH	17.54 °C	1,499.8 µS/cm	0.58 mg/L	18.00 NTU	86.2 mV	4.81 ft	300.00 ml/min

2/2/2022 11:21 AM	01:05:00	6.34 pH	17.54 °C	1,497.8 µS/cm	0.56 mg/L	15.10 NTU	84.5 mV	4.85 ft	300.00 ml/min
2/2/2022 11:26 AM	01:10:00	6.35 pH	17.54 °C	1,510.6 µS/cm	0.64 mg/L	10.20 NTU	74.0 mV	4.82 ft	300.00 ml/min
2/2/2022 11:31 AM	01:15:00	6.35 pH	17.59 °C	1,498.0 µS/cm	0.59 mg/L	10.50 NTU	82.2 mV	4.82 ft	300.00 ml/min
2/2/2022 11:36 AM	01:20:00	6.35 pH	17.60 °C	1,498.5 µS/cm	0.57 mg/L	10.80 NTU	83.5 mV	4.80 ft	300.00 ml/min
2/2/2022 11:41 AM	01:25:00	6.35 pH	17.65 °C	1,508.9 µS/cm	0.53 mg/L	10.00 NTU	72.9 mV	4.80 ft	300.00 ml/min
2/2/2022 11:46 AM	01:30:00	6.34 pH	17.68 °C	1,497.1 µS/cm	0.46 mg/L	8.20 NTU	80.1 mV	4.80 ft	300.00 ml/min
2/2/2022 11:51 AM	01:35:00	6.34 pH	17.68 °C	1,498.8 µS/cm	0.39 mg/L	6.88 NTU	80.8 mV	4.80 ft	300.00 ml/min
2/2/2022 11:56 AM	01:40:00	6.34 pH	17.63 °C	1,496.8 µS/cm	0.46 mg/L	5.23 NTU	81.9 mV	4.83 ft	300.00 ml/min
2/2/2022 12:01 PM	01:45:00	6.34 pH	17.68 °C	1,505.3 µS/cm	0.46 mg/L	8.76 NTU	70.7 mV	4.83 ft	300.00 ml/min
2/2/2022 12:06 PM	01:50:00	6.34 pH	17.68 °C	1,500.1 µS/cm	0.86 mg/L	9.55 NTU	79.6 mV	4.80 ft	300.00 ml/min
2/2/2022 12:11 PM	01:55:00	6.34 pH	17.65 °C	1,497.8 µS/cm	0.45 mg/L	10.40 NTU	79.2 mV	4.83 ft	300.00 ml/min
2/2/2022 12:16 PM	02:00:00	6.34 pH	17.66 °C	1,515.3 µS/cm	0.44 mg/L	6.99 NTU	70.6 mV	4.83 ft	300.00 ml/min
2/2/2022 12:21 PM	02:05:00	6.34 pH	17.66 °C	1,507.7 µS/cm	0.41 mg/L	6.23 NTU	69.5 mV	4.82 ft	300.00 ml/min
2/2/2022 12:26 PM	02:10:00	6.34 pH	17.64 °C	1,498.8 µS/cm	0.39 mg/L	4.87 NTU	78.3 mV	4.82 ft	300.00 ml/min

Samples

Sample ID:	Description:
BRGWC-30I	

Low-Flow Test Report:

Test Date / Time: 2/2/2022 1:21:53 PM
Project: Plant Banch
Operator Name: Duane Fulton

Location Name: BRGWC-32S **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 38 ft** **Total Depth: 48 ft** **Initial Depth to Water: 39.11 ft**	**Pump Type: Dedicated Pump** **Tubing Type: Polyethylene** **Tubing Inner Diameter: 0.170 in** **Tubing Length: 43 ft** **Pump Intake From TOC: 43 ft** **Estimated Total Volume Pumped: 21500 ml** **Flow Cell Volume: 90 ml** **Final Flow Rate: 350 ml/min** **Final Draw Down: 0.44 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 850751**

Test Notes:

Weather Conditions:
Cloudy

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 0.2	+/- 2	+/- 10	+/- 0.3	
2/2/2022 1:21 PM	00:00	6.31 pH	15.98 °C	532.08 µS/cm	8.04 mg/L	5.26 NTU	104.5 mV	39.35 ft	150.00 ml/min
2/2/2022 1:26 PM	05:00	5.91 pH	17.81 °C	576.41 µS/cm	5.94 mg/L	3.33 NTU	133.2 mV	39.55 ft	200.00 ml/min
2/2/2022 1:31 PM	10:00	5.93 pH	18.10 °C	596.11 µS/cm	5.34 mg/L	17.90 NTU	134.5 mV	39.55 ft	200.00 ml/min
2/2/2022 1:36 PM	15:00	5.96 pH	18.08 °C	602.92 µS/cm	5.30 mg/L	20.20 NTU	132.9 mV	39.55 ft	200.00 ml/min
2/2/2022 1:41 PM	20:00	5.96 pH	18.00 °C	604.02 µS/cm	4.69 mg/L	15.50 NTU	111.3 mV	39.55 ft	200.00 ml/min
2/2/2022 1:46 PM	25:00	5.97 pH	18.04 °C	614.18 µS/cm	4.40 mg/L	7.93 NTU	130.2 mV	39.55 ft	200.00 ml/min
2/2/2022 1:51 PM	30:00	5.98 pH	17.99 °C	613.95 µS/cm	4.20 mg/L	4.39 NTU	109.6 mV	39.55 ft	200.00 ml/min
2/2/2022 1:56 PM	35:00	5.98 pH	17.91 °C	620.89 µS/cm	4.09 mg/L	3.01 NTU	128.7 mV	39.55 ft	200.00 ml/min
2/2/2022 2:01 PM	40:00	5.98 pH	17.88 °C	620.30 µS/cm	4.00 mg/L	1.76 NTU	108.7 mV	39.55 ft	200.00 ml/min
2/2/2022 2:06 PM	45:00	5.99 pH	17.95 °C	618.79 µS/cm	3.94 mg/L	1.87 NTU	107.3 mV	39.55 ft	200.00 ml/min
2/2/2022 2:11 PM	50:00	5.99 pH	18.01 °C	622.05 µS/cm	3.89 mg/L	1.18 NTU	126.8 mV	39.55 ft	200.00 ml/min
2/2/2022 2:16 PM	55:00	5.99 pH	17.99 °C	619.73 µS/cm	3.87 mg/L	0.65 NTU	107.6 mV	39.55 ft	200.00 ml/min
2/2/2022 2:21 PM	01:00:00	5.97 pH	18.05 °C	625.46 µS/cm	3.74 mg/L	2.11 NTU	126.9 mV	39.55 ft	200.00 ml/min

2/2/2022 2:26 PM	01:05:00	5.98 pH	18.26 °C	618.01 µS/cm	3.74 mg/L	7.48 NTU	108.2 mV	39.55 ft	350.00 ml/min
2/2/2022 2:31 PM	01:10:00	5.99 pH	18.26 °C	627.33 µS/cm	3.45 mg/L	5.87 NTU	126.6 mV	39.55 ft	350.00 ml/min
2/2/2022 2:36 PM	01:15:00	5.99 pH	18.30 °C	625.82 µS/cm	3.38 mg/L	3.74 NTU	106.8 mV	39.55 ft	350.00 ml/min
2/2/2022 2:41 PM	01:20:00	5.99 pH	18.30 °C	625.88 µS/cm	3.34 mg/L	2.13 NTU	105.8 mV	39.55 ft	350.00 ml/min
2/2/2022 2:46 PM	01:25:00	6.00 pH	18.28 °C	628.19 µS/cm	3.44 mg/L	2.25 NTU	124.8 mV	39.55 ft	350.00 ml/min
2/2/2022 2:51 PM	01:30:00	5.99 pH	18.30 °C	624.75 µS/cm	3.45 mg/L	2.30 NTU	106.1 mV	39.55 ft	350.00 ml/min

Samples

Sample ID:	Description:
BRGWC-32S	

Low-Flow Test Report:

Test Date / Time: 2/1/2022 10:42:05 AM
Project: Plant Branch
Operator Name: Jude Waguespack

Location Name: BRGWC-33S **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 21.66 ft** **Total Depth: 31.66 ft** **Initial Depth to Water: 8.94 ft**	**Pump Type: Dedicated Bladder** **Tubing Type: Polyethylene** **Tubing Inner Diameter: 0.170 in** **Tubing Length: 26 ft** **Pump Intake From TOC: 26 ft** **Estimated Total Volume Pumped: 5000 ml** **Flow Cell Volume: 90 ml** **Final Flow Rate: 250 ml/min** **Final Draw Down: 0.06 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 851413**

Test Notes:

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 10 %	+/- 2	+/- 10	+/- 0.3	
2/1/2022 10:42 AM	00:00	4.72 pH	17.18 °C	328.24 µS/cm	1.27 mg/L	6.09 NTU	112.6 mV	8.94 ft	250.00 ml/min
2/1/2022 10:47 AM	05:00	4.82 pH	19.01 °C	333.97 µS/cm	0.19 mg/L	4.96 NTU	150.1 mV	8.97 ft	250.00 ml/min
2/1/2022 10:52 AM	10:00	4.82 pH	18.97 °C	332.43 µS/cm	0.08 mg/L	2.17 NTU	213.4 mV	9.00 ft	250.00 ml/min
2/1/2022 10:57 AM	15:00	4.82 pH	19.05 °C	334.10 µS/cm	0.08 mg/L	2.24 NTU	182.1 mV	9.00 ft	250.00 ml/min
2/1/2022 11:02 AM	20:00	4.82 pH	19.09 °C	333.94 µS/cm	0.07 mg/L	0.96 NTU	190.6 mV	9.00 ft	250.00 ml/min

Samples

Sample ID:	Description:
BRGWC-33S	

Low-Flow Test Report:

Test Date / Time: 2/1/2022 12:24:17 PM
Project: Plant Branch
Operator Name: Brian Steele

Location Name: BRGWC-34S **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 42.64 ft** **Total Depth: 52.64 ft** **Initial Depth to Water: 2.63 ft**	**Pump Type: Dedicated** **Tubing Type: Polyethylene** **Tubing Inner Diameter: 0.170 in** **Tubing Length: 48 ft** **Pump Intake From TOC: 48 ft** **Estimated Total Volume Pumped: 10500 ml** **Flow Cell Volume: 90 ml** **Final Flow Rate: 350 ml/min** **Final Draw Down: 0.0 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 850767**

Test Notes:

Weather Conditions:
Sunny 60F

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 0.2	+/- 5	+/- 10	+/- 0.3	
2/1/2022 12:24 PM	00:00	5.83 pH	18.75 °C	605.80 µS/cm	1.50 mg/L	1.40 NTU	72.3 mV	2.63 ft	350.00 ml/min
2/1/2022 12:29 PM	05:00	5.86 pH	18.86 °C	625.18 µS/cm	0.31 mg/L	1.32 NTU	70.6 mV	2.63 ft	350.00 ml/min
2/1/2022 12:34 PM	10:00	5.87 pH	18.88 °C	620.36 µS/cm	0.21 mg/L	1.34 NTU	68.6 mV	2.63 ft	350.00 ml/min
2/1/2022 12:39 PM	15:00	5.87 pH	19.00 °C	617.89 µS/cm	0.18 mg/L	1.08 NTU	67.5 mV	2.63 ft	350.00 ml/min
2/1/2022 12:44 PM	20:00	5.87 pH	19.03 °C	618.04 µS/cm	0.17 mg/L	0.93 NTU	75.5 mV	2.63 ft	350.00 ml/min
2/1/2022 12:49 PM	25:00	5.87 pH	19.05 °C	616.02 µS/cm	0.16 mg/L	1.27 NTU	66.5 mV	2.63 ft	350.00 ml/min
2/1/2022 12:54 PM	30:00	5.87 pH	19.05 °C	614.12 µS/cm	0.15 mg/L	0.67 NTU	74.5 mV	2.63 ft	350.00 ml/min

Samples

Sample ID:	Description:
BRGWC-34S	Dup-1

Low-Flow Test Report:

Test Date / Time: 2/1/2022 1:38:43 PM
Project: Plant Branch
Operator Name: Brian Steele

Location Name: BRGWC-35S **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 25.34 ft** **Total Depth: 35.34 ft** **Initial Depth to Water: 1.88 ft**	**Pump Type: Dedicated** **Tubing Type: Polyethylene** **Tubing Inner Diameter: 0.170 in** **Tubing Length: 30.34 ft** **Pump Intake From TOC: 30.34 ft** **Estimated Total Volume Pumped: 7500 ml** **Flow Cell Volume: 90 ml** **Final Flow Rate: 250 ml/min** **Final Draw Down: 0.01 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 850767**

Test Notes:

Weather Conditions:
Sunny 65F

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 0.2	+/- 5	+/- 10	+/- 0.3	
2/1/2022 1:38 PM	00:00	6.09 pH	19.77 °C	607.96 µS/cm	3.31 mg/L	2.05 NTU	70.8 mV	1.89 ft	250.00 ml/min
2/1/2022 1:43 PM	05:00	6.03 pH	18.03 °C	655.03 µS/cm	0.65 mg/L	1.75 NTU	72.8 mV	1.89 ft	250.00 ml/min
2/1/2022 1:48 PM	10:00	6.03 pH	18.03 °C	657.52 µS/cm	0.28 mg/L	1.26 NTU	80.5 mV	1.89 ft	250.00 ml/min
2/1/2022 1:53 PM	15:00	6.03 pH	18.12 °C	659.27 µS/cm	0.23 mg/L	0.82 NTU	71.5 mV	1.89 ft	250.00 ml/min
2/1/2022 1:58 PM	20:00	6.04 pH	18.08 °C	662.89 µS/cm	0.22 mg/L	0.66 NTU	79.1 mV	1.89 ft	250.00 ml/min
2/1/2022 2:03 PM	25:00	6.04 pH	18.01 °C	664.18 µS/cm	0.21 mg/L	1.18 NTU	70.3 mV	1.89 ft	250.00 ml/min
2/1/2022 2:08 PM	30:00	6.04 pH	18.11 °C	661.81 µS/cm	0.21 mg/L	0.87 NTU	69.6 mV	1.89 ft	250.00 ml/min

Samples

Sample ID:	Description:
BRGWC-35S	

Low-Flow Test Report:

Test Date / Time: 2/1/2022 1:03:19 PM
Project: Plant Branch
Operator Name: Jude Waguespack

Location Name: BRGWC-36S **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 24.02 ft** **Total Depth: 34.02 ft** **Initial Depth to Water: 3.73 ft**	**Pump Type: Peristaltic** **Tubing Type: Polyethylene** **Tubing Inner Diameter: 0.170 in** **Tubing Length: 29 ft** **Pump Intake From TOC: 29 ft** **Estimated Total Volume Pumped: 5000 ml** **Flow Cell Volume: 90 ml** **Final Flow Rate: 250 ml/min** **Final Draw Down: 0.07 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 851413**

Test Notes:

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 10 %	+/- 2	+/- 10	+/- 0.3	
2/1/2022 1:03 PM	00:00	5.64 pH	13.99 °C	600.63 µS/cm	2.72 mg/L	2.62 NTU	142.2 mV	3.73 ft	250.00 ml/min
2/1/2022 1:08 PM	05:00	5.65 pH	14.57 °C	601.00 µS/cm	2.55 mg/L	2.81 NTU	129.2 mV	3.80 ft	250.00 ml/min
2/1/2022 1:13 PM	10:00	5.65 pH	14.77 °C	597.08 µS/cm	2.51 mg/L	1.44 NTU	143.2 mV	3.80 ft	250.00 ml/min
2/1/2022 1:18 PM	15:00	5.66 pH	14.94 °C	596.37 µS/cm	2.48 mg/L	0.92 NTU	119.2 mV	3.80 ft	250.00 ml/min
2/1/2022 1:23 PM	20:00	5.65 pH	14.94 °C	596.52 µS/cm	2.47 mg/L	1.42 NTU	131.8 mV	3.80 ft	250.00 ml/min

Samples

Sample ID:	Description:
BRGWC-36S	

Low-Flow Test Report:

Test Date / Time: 2/2/2022 8:42:14 AM
Project: Plant Banch
Operator Name: Duane Fulton

Location Name: BRGWC-37S **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 58.73 ft** **Total Depth: 68.73 ft** **Initial Depth to Water: 52.1 ft**	**Pump Type: Dedicated Pump** **Tubing Type: Polyethylene** **Tubing Inner Diameter: 0.170 in** **Tubing Length: 63.73 ft** **Pump Intake From TOC: 63.73 ft** **Estimated Total Volume Pumped: 4125 ml** **Flow Cell Volume: 90 ml** **Final Flow Rate: 125 ml/min** **Final Draw Down: 0.48 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 850751**

Test Notes:

Weather Conditions:
Cloudy

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 0.2	+/- 2	+/- 10	+/- 0.3	
2/2/2022 8:42 AM	00:00	7.55 pH	11.48 °C	60.47 µS/cm	10.13 mg/L	2.07 NTU	155.1 mV	52.34 ft	100.00 ml/min
2/2/2022 8:47 AM	05:00	6.01 pH	15.39 °C	57.75 µS/cm	8.37 mg/L	0.48 NTU	151.3 mV	52.52 ft	100.00 ml/min
2/2/2022 8:52 AM	10:00	5.82 pH	16.39 °C	56.51 µS/cm	8.08 mg/L	0.46 NTU	150.4 mV	52.55 ft	125.00 ml/min
2/2/2022 8:57 AM	15:00	5.80 pH	16.74 °C	56.07 µS/cm	7.99 mg/L	0.72 NTU	147.7 mV	52.55 ft	125.00 ml/min
2/2/2022 9:02 AM	20:00	5.80 pH	16.34 °C	55.78 µS/cm	7.98 mg/L	0.77 NTU	146.4 mV	52.55 ft	125.00 ml/min
2/2/2022 9:07 AM	25:00	5.80 pH	16.56 °C	55.65 µS/cm	7.98 mg/L	0.27 NTU	144.0 mV	52.54 ft	125.00 ml/min
2/2/2022 9:12 AM	30:00	5.80 pH	16.88 °C	55.37 µS/cm	7.97 mg/L	0.35 NTU	143.2 mV	52.57 ft	125.00 ml/min
2/2/2022 9:17 AM	35:00	5.80 pH	16.87 °C	55.39 µS/cm	7.99 mg/L	0.32 NTU	142.0 mV	52.58 ft	125.00 ml/min

Samples

Sample ID:	Description:
BRGWC-37S	

Low-Flow Test Report:

Test Date / Time: 2/1/2022 2:43:41 PM
Project: Plant Branch
Operator Name: Joe Booth

Location Name: BRGWC-38S **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 33.66 ft** **Total Depth: 43.66 ft** **Initial Depth to Water: 21.05 ft**	**Pump Type: QED Dedicated** **Tubing Type: Polyethylene** **Tubing Inner Diameter: 0.170 in** **Tubing Length: 38.66 ft** **Pump Intake From TOC: 38.66 ft** **Estimated Total Volume Pumped: 4320 ml** **Flow Cell Volume: 90 ml** **Final Flow Rate: 180 ml/min** **Final Draw Down: 0.69 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 843285**

Test Notes:
Prepurge 2 liters

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 1000 %	+/- 5 %	+/- 10 %	+/- 10	+/- 1000 %	+/- 0.3	
2/1/2022 2:43 PM	00:00	4.05 pH	18.96 °C	860.06 µS/cm	1.19 mg/L	21.10 NTU	136.0 mV	21.05 ft	180.00 ml/min
2/1/2022 2:47 PM	04:00	4.06 pH	18.73 °C	761.24 µS/cm	1.22 mg/L	12.00 NTU	136.2 mV	21.74 ft	180.00 ml/min
2/1/2022 2:51 PM	08:00	4.06 pH	18.65 °C	783.83 µS/cm	1.15 mg/L	10.50 NTU	137.7 mV	21.74 ft	180.00 ml/min
2/1/2022 2:55 PM	12:00	4.06 pH	18.53 °C	797.38 µS/cm	1.11 mg/L	4.69 NTU	138.4 mV	21.74 ft	180.00 ml/min
2/1/2022 2:59 PM	16:00	4.06 pH	18.37 °C	805.06 µS/cm	1.13 mg/L	4.01 NTU	139.1 mV	21.74 ft	180.00 ml/min
2/1/2022 3:03 PM	20:00	4.06 pH	18.42 °C	803.92 µS/cm	1.16 mg/L	2.81 NTU	140.0 mV	21.74 ft	180.00 ml/min
2/1/2022 3:07 PM	24:00	4.06 pH	18.37 °C	804.80 µS/cm	1.17 mg/L	1.72 NTU	141.5 mV	21.74 ft	180.00 ml/min

Samples

Sample ID:	Description:
BRGWC-38S	Metals, TDS, Inorganics, Alkalinity, Radium

Low-Flow Test Report:

Test Date / Time: 2/2/2022 10:22:45 AM
Project: Plant Branch
Operator Name: Joe Booth

Location Name: BRGWC-45 **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 50.45 ft** **Total Depth: 60.45 ft** **Initial Depth to Water: 10.86 ft**	**Pump Type: QED Dedicated** **Tubing Type: Polyethylene** **Tubing Inner Diameter: 0.170 in** **Tubing Length: 55 ft** **Pump Intake From TOC: 55 ft** **Estimated Total Volume Pumped: 2880 ml** **Flow Cell Volume: 90 ml** **Final Flow Rate: 180 ml/min** **Final Draw Down: 0.35 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 843285**

Test Notes:
Prepurge 2 liters

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 1000 %	+/- 5 %	+/- 10 %	+/- 10	+/- 1000 %	+/- 0.3	
2/2/2022 10:22 AM	00:00	5.99 pH	18.95 °C	432.92 µS/cm	0.53 mg/L	15.80 NTU	103.0 mV	10.86 ft	180.00 ml/min
2/2/2022 10:26 AM	04:00	5.93 pH	19.62 °C	429.41 µS/cm	0.29 mg/L	11.45 NTU	100.8 mV	11.21 ft	180.00 ml/min
2/2/2022 10:30 AM	08:00	5.93 pH	19.58 °C	430.72 µS/cm	0.22 mg/L	7.46 NTU	99.4 mV	11.21 ft	180.00 ml/min
2/2/2022 10:34 AM	12:00	5.92 pH	19.62 °C	428.09 µS/cm	0.20 mg/L	2.61 NTU	98.3 mV	11.21 ft	180.00 ml/min
2/2/2022 10:38 AM	16:00	5.92 pH	19.83 °C	428.48 µS/cm	0.20 mg/L	2.23 NTU	97.3 mV	11.21 ft	180.00 ml/min

Samples

Sample ID:	Description:
BRGWC-45	Metals, TDS, Inorganics, Alkalinity, Radium

Low-Flow Test Report:

Test Date / Time: 2/2/2022 9:05:37 AM
Project: Plant Branch
Operator Name: Joe Booth

Location Name: BRGWC-47 **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 82 ft** **Total Depth: 92 ft** **Initial Depth to Water: 26.51 ft**	**Pump Type: QED Dedicated** **Tubing Type: Polyethylene** **Tubing Inner Diameter: 0.170 in** **Tubing Length: 87 ft** **Pump Intake From TOC: 87 ft** **Estimated Total Volume Pumped: 3200 ml** **Flow Cell Volume: 90 ml** **Final Flow Rate: 160 ml/min** **Final Draw Down: 0.61 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 843285**

Test Notes:
Prepurge 1.5 liters

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 1000 %	+/- 5 %	+/- 10 %	+/- 10	+/- 1000 %	+/- 0.3	
2/2/2022 9:05 AM	00:00	6.03 pH	17.03 °C	2,376.9 µS/cm	0.65 mg/L	9.33 NTU	111.8 mV	26.51 ft	160.00 ml/min
2/2/2022 9:09 AM	04:00	5.80 pH	17.35 °C	2,179.4 µS/cm	0.42 mg/L	11.30 NTU	117.1 mV	27.03 ft	160.00 ml/min
2/2/2022 9:13 AM	08:00	5.76 pH	17.35 °C	2,141.1 µS/cm	0.36 mg/L	9.67 NTU	119.2 mV	27.07 ft	160.00 ml/min
2/2/2022 9:17 AM	12:00	5.75 pH	17.44 °C	2,172.4 µS/cm	0.33 mg/L	7.30 NTU	120.2 mV	27.10 ft	160.00 ml/min
2/2/2022 9:21 AM	16:00	5.75 pH	17.48 °C	2,160.7 µS/cm	0.31 mg/L	5.87 NTU	120.9 mV	27.12 ft	160.00 ml/min
2/2/2022 9:25 AM	20:00	5.75 pH	17.48 °C	2,150.8 µS/cm	0.29 mg/L	3.22 NTU	121.2 mV	27.12 ft	160.00 ml/min

Samples

Sample ID:	Description:
BRGWC-47	Metals, TDS, Inorganics, Alkalinity, Radium

Low-Flow Test Report:

Test Date / Time: 2/3/2022 11:28:30 AM
Project: Plant Branch
Operator Name: Jude Waguespack

Location Name: BRGWC-50 **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 55 ft** **Total Depth: 65 ft** **Initial Depth to Water: 37.85 ft**	**Pump Type: Dedicated bladder** **Tubing Type: Polyethylene** **Tubing Inner Diameter: 0.170 in** **Tubing Length: 60 ft** **Pump Intake From TOC: 60 ft** **Estimated Total Volume Pumped: 6000 ml** **Flow Cell Volume: 90 ml** **Final Flow Rate: 300 ml/min** **Final Draw Down: 0.15 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 851413**

Test Notes:

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 10 %	+/- 2	+/- 10	+/- 0.3	
2/3/2022 11:28 AM	00:00	5.34 pH	19.68 °C	2,271.3 µS/cm	3.78 mg/L	0.86 NTU	105.6 mV	37.85 ft	300.00 ml/min
2/3/2022 11:33 AM	05:00	5.23 pH	20.12 °C	2,278.5 µS/cm	0.71 mg/L	0.91 NTU	115.5 mV	38.00 ft	300.00 ml/min
2/3/2022 11:38 AM	10:00	5.21 pH	20.20 °C	2,250.0 µS/cm	0.38 mg/L	0.67 NTU	124.4 mV	38.00 ft	300.00 ml/min
2/3/2022 11:43 AM	15:00	5.20 pH	20.30 °C	2,254.9 µS/cm	0.24 mg/L	0.81 NTU	115.1 mV	38.00 ft	300.00 ml/min
2/3/2022 11:48 AM	20:00	5.20 pH	20.48 °C	2,257.5 µS/cm	0.22 mg/L	1.01 NTU	116.3 mV	38.00 ft	300.00 ml/min

Samples

Sample ID:	Description:
BRGWC-50	

Low-Flow Test Report:

Test Date / Time: 2/2/2022 1:12:34 PM
Project: Plant Branch
Operator Name: Joe Booth

Location Name: BRGWC-52I **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 66.6 ft** **Total Depth: 76.6 ft** **Initial Depth to Water: 39.29 ft**	**Pump Type: QED Dedicated** **Tubing Type: Polyethylene** **Tubing Inner Diameter: 0.170 in** **Tubing Length: 71 ft** **Pump Intake From TOC: 71 ft** **Estimated Total Volume Pumped: 3200 ml** **Flow Cell Volume: 90 ml** **Final Flow Rate: 200 ml/min** **Final Draw Down: 0.66 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 843285**

Test Notes:
Prepurge 2 liters

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 1000 %	+/- 5 %	+/- 10 %	+/- 10	+/- 1000 %	+/- 0.3	
2/2/2022 1:12 PM	00:00	6.31 pH	18.77 °C	556.98 µS/cm	0.91 mg/L	5.45 NTU	71.1 mV	39.29 ft	200.00 ml/min
2/2/2022 1:16 PM	04:00	6.34 pH	18.94 °C	561.52 µS/cm	0.56 mg/L	4.81 NTU	49.2 mV	39.85 ft	200.00 ml/min
2/2/2022 1:20 PM	08:00	6.35 pH	18.95 °C	549.77 µS/cm	0.38 mg/L	2.74 NTU	34.5 mV	39.92 ft	200.00 ml/min
2/2/2022 1:24 PM	12:00	6.36 pH	19.00 °C	547.69 µS/cm	0.33 mg/L	2.67 NTU	26.2 mV	39.95 ft	200.00 ml/min
2/2/2022 1:28 PM	16:00	6.35 pH	19.24 °C	545.07 µS/cm	0.32 mg/L	2.51 NTU	20.1 mV	39.95 ft	200.00 ml/min

Samples

Sample ID:	Description:
BRGAC-52I	Metals, TDS, Inorganics, Alkalinity, Radium

Low-Flow Test Report:

Test Date / Time: 2/4/2022 9:56:03 AM
Project: Plant Branch
Operator Name: Jude Waguespack

Location Name: PB-7S **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 23 ft** **Total Depth: 33 ft** **Initial Depth to Water: 21.6 ft**	**Pump Type: Peristaltic** **Tubing Type: Polyethylene** **Tubing Inner Diameter: 0.170 in** **Tubing Length: 28 ft** **Pump Intake From TOC: 28 ft** **Estimated Total Volume Pumped: 4000 ml** **Flow Cell Volume: 90 ml** **Final Flow Rate: 200 ml/min** **Final Draw Down: 0.1 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 851413**

Test Notes:
EB-3

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 10 %	+/- 2	+/- 10	+/- 0.3	
2/4/2022 9:56 AM	00:00	5.74 pH	18.43 °C	68.92 µS/cm	4.28 mg/L	12.50 NTU	120.3 mV	21.60 ft	200.00 ml/min
2/4/2022 10:01 AM	05:00	5.60 pH	18.00 °C	82.39 µS/cm	3.66 mg/L	2.71 NTU	121.7 mV	21.70 ft	200.00 ml/min
2/4/2022 10:06 AM	10:00	5.65 pH	18.00 °C	87.63 µS/cm	4.06 mg/L	3.58 NTU	121.9 mV	21.70 ft	200.00 ml/min
2/4/2022 10:11 AM	15:00	5.61 pH	18.00 °C	84.04 µS/cm	4.27 mg/L	4.64 NTU	122.0 mV	21.70 ft	200.00 ml/min
2/4/2022 10:16 AM	20:00	5.62 pH	18.01 °C	83.99 µS/cm	4.09 mg/L	3.69 NTU	122.2 mV	21.70 ft	200.00 ml/min

Samples

Sample ID:	Description:
PB-7S	

Low-Flow Test Report:

Test Date / Time: 2/2/2022 11:45:59 AM
Project: Plant Branch
Operator Name: Joe Booth

Location Name: PZ-44 **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 47 ft** **Total Depth: 57 ft** **Initial Depth to Water: 25.65 ft**	**Pump Type: Bladder** **Tubing Type: Polyethylene** **Tubing Inner Diameter: 0.170 in** **Tubing Length: 52 ft** **Pump Intake From TOC: 52 ft** **Estimated Total Volume Pumped: 5440 ml** **Flow Cell Volume: 90 ml** **Final Flow Rate: 170 ml/min** **Final Draw Down: 0.25 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 843285**

Test Notes:
Prepurge 1.5 liters

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 1000 %	+/- 5 %	+/- 10 %	+/- 10	+/- 1000 %	+/- 0.3	
2/2/2022 11:45 AM	00:00	6.67 pH	26.26 °C	0.13 µS/cm	8.23 mg/L	2.40 NTU	100.0 mV	25.65 ft	170.00 ml/min
2/2/2022 11:49 AM	04:00	6.25 pH	20.00 °C	288.74 µS/cm	1.01 mg/L	23.50 NTU	101.2 mV	25.90 ft	170.00 ml/min
2/2/2022 11:53 AM	08:00	6.20 pH	19.63 °C	291.09 µS/cm	0.51 mg/L	27.00 NTU	99.6 mV	25.90 ft	170.00 ml/min
2/2/2022 11:57 AM	12:00	6.20 pH	19.58 °C	290.64 µS/cm	0.40 mg/L	17.80 NTU	99.1 mV	25.90 ft	170.00 ml/min
2/2/2022 12:01 PM	16:00	6.20 pH	19.75 °C	291.46 µS/cm	0.35 mg/L	11.70 NTU	98.8 mV	25.90 ft	170.00 ml/min
2/2/2022 12:05 PM	20:00	6.20 pH	19.84 °C	290.49 µS/cm	0.31 mg/L	8.85 NTU	99.0 mV	25.90 ft	170.00 ml/min
2/2/2022 12:09 PM	24:00	6.20 pH	19.89 °C	289.58 µS/cm	0.27 mg/L	5.86 NTU	98.9 mV	25.90 ft	170.00 ml/min
2/2/2022 12:13 PM	28:00	6.20 pH	19.75 °C	290.39 µS/cm	0.25 mg/L	4.73 NTU	98.9 mV	25.90 ft	170.00 ml/min
2/2/2022 12:17 PM	32:00	6.20 pH	19.49 °C	290.03 µS/cm	0.24 mg/L	3.76 NTU	99.3 mV	25.90 ft	170.00 ml/min

Samples

Sample ID:	Description:
PZ-44	Metals, TDS, Inorganics, Alkalinity, Radium

Low-Flow Test Report:

Test Date / Time: 2/3/2022 10:51:57 AM
Project: Plant Branch
Operator Name: Jude Waguespack

Location Name: PZ-50D **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 96 ft** **Total Depth: 106 ft** **Initial Depth to Water: 63 ft**	**Pump Type: bladder** **Tubing Type: Polyethylene** **Tubing Inner Diameter: 0.170 in** **Tubing Length: 101 ft** **Pump Intake From TOC: 101 ft** **Estimated Total Volume Pumped: 400 ml** **Flow Cell Volume: 90 ml** **Final Flow Rate: 200 ml/min** **Final Draw Down: 0.95 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 851413**

Test Notes:

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 10 %	+/- 2	+/- 10	+/- 0.3	
2/3/2022 10:51 AM	00:00	6.33 pH	17.63 °C	1,964.6 µS/cm	8.75 mg/L	3.51 NTU	91.5 mV	63.00 ft	200.00 ml/min
2/3/2022 10:53 AM	02:00	6.24 pH	19.03 °C	1,875.9 µS/cm	5.64 mg/L	1.90 NTU	83.5 mV	63.95 ft	200.00 ml/min

Samples

Sample ID:	Description:
PZ-50D	

Low-Flow Test Report:

Test Date / Time: 2/3/2022 3:40:31 PM
Project: Plant Branch
Operator Name: Joe Booth

Location Name: PZ-51D **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 96 ft** **Total Depth: 106 ft** **Initial Depth to Water: 39.78 ft**	**Pump Type: Bladder** **Tubing Type: Polyethylene** **Tubing Inner Diameter: 0.170 in** **Tubing Length: 100 ft** **Pump Intake From TOC: 100 ft** **Estimated Total Volume Pumped: 7000 ml** **Flow Cell Volume: 90 ml** **Final Flow Rate: 250 ml/min** **Final Draw Down: 4.66 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 843285**

Test Notes:
Prepurge 1.5 liters

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 1000 %	+/- 5 %	+/- 10 %	+/- 10	+/- 1000 %	+/- 0.3	
2/3/2022 3:40 PM	00:00	6.46 pH	20.46 °C	972.18 µS/cm	1.12 mg/L	14.40 NTU	72.2 mV	39.78 ft	250.00 ml/min
2/3/2022 3:44 PM	04:00	6.56 pH	20.24 °C	996.84 µS/cm	0.36 mg/L	3.84 NTU	53.0 mV	41.46 ft	250.00 ml/min
2/3/2022 3:48 PM	08:00	6.62 pH	20.20 °C	1,002.4 µS/cm	0.27 mg/L	2.33 NTU	39.5 mV	42.55 ft	250.00 ml/min
2/3/2022 3:52 PM	12:00	6.66 pH	20.20 °C	1,005.3 µS/cm	0.22 mg/L	2.43 NTU	25.2 mV	43.45 ft	250.00 ml/min
2/3/2022 3:56 PM	16:00	6.69 pH	20.20 °C	1,002.0 µS/cm	0.20 mg/L	3.18 NTU	9.5 mV	44.25 ft	250.00 ml/min
2/3/2022 4:00 PM	20:00	6.72 pH	20.20 °C	996.90 µS/cm	0.19 mg/L	2.70 NTU	-4.2 mV	44.35 ft	250.00 ml/min
2/3/2022 4:04 PM	24:00	6.75 pH	20.21 °C	997.47 µS/cm	0.17 mg/L	3.58 NTU	-13.2 mV	44.44 ft	250.00 ml/min
2/3/2022 4:08 PM	28:00	6.77 pH	20.13 °C	998.98 µS/cm	0.16 mg/L	2.43 NTU	-17.4 mV	44.44 ft	250.00 ml/min

Samples

Sample ID:	Description:
PZ-51D	Metals, TDS, Inorganics, Alkalinity, Radium

Low-Flow Test Report:

Test Date / Time: 2/2/2022 4:01:12 PM
Project: Plant Branch
Operator Name: Joe Booth

Location Name: PZ-51I **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 58 ft** **Total Depth: 68 ft** **Initial Depth to Water: 38.17 ft**	**Pump Type: Bladder** **Tubing Type: Polyethylene** **Tubing Inner Diameter: 0.170 in** **Tubing Length: 63 ft** **Pump Intake From TOC: 63 ft** **Estimated Total Volume Pumped: 2880 ml** **Flow Cell Volume: 90 ml** **Final Flow Rate: 180 ml/min** **Final Draw Down: 1.01 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 843285**

Test Notes:
Prepurge 1 liter

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 1000 %	+/- 5 %	+/- 10 %	+/- 10	+/- 1000 %	+/- 0.3	
2/2/2022 4:01 PM	00:00	5.54 pH	19.66 °C	1,872.2 µS/cm	1.54 mg/L	4.42 NTU	118.5 mV	38.17 ft	180.00 ml/min
2/2/2022 4:05 PM	04:00	5.45 pH	19.70 °C	1,951.0 µS/cm	0.51 mg/L	1.48 NTU	117.7 mV	39.13 ft	180.00 ml/min
2/2/2022 4:09 PM	08:00	5.44 pH	19.69 °C	1,951.7 µS/cm	0.32 mg/L	1.61 NTU	117.8 mV	39.18 ft	180.00 ml/min
2/2/2022 4:13 PM	12:00	5.44 pH	19.66 °C	1,923.1 µS/cm	0.24 mg/L	0.61 NTU	118.0 mV	39.18 ft	180.00 ml/min
2/2/2022 4:17 PM	16:00	5.44 pH	19.66 °C	1,920.1 µS/cm	0.18 mg/L	0.57 NTU	118.3 mV	39.18 ft	180.00 ml/min

Samples

Sample ID:	Description:
PZ-51I	Metals, TDS, Inorganics, Alkalinity

Low-Flow Test Report:

Test Date / Time: 2/2/2022 12:18:04 PM
Project: Plant Branch
Operator Name: Jude Waguespack

Location Name: PZ-51S **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 35.4 ft** **Total Depth: 45.4 ft** **Initial Depth to Water: 38.3 ft**	**Pump Type: Bladder** **Tubing Type: Polyethylene** **Tubing Inner Diameter: 0.170 in** **Tubing Length: 42 ft** **Pump Intake From TOC: 42 ft** **Estimated Total Volume Pumped: 14620 ml** **Flow Cell Volume: 90 ml** **Final Flow Rate: 150 ml/min** **Final Draw Down: 2.2 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 851413**

Test Notes:

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 10 %	+/- 2	+/- 10	+/- 0.3	
2/2/2022 12:18 PM	00:00	6.50 pH	16.96 °C	214.43 µS/cm	5.33 mg/L	6.95 NTU	27.3 mV	38.30 ft	150.00 ml/min
2/2/2022 12:23 PM	05:00	6.24 pH	18.34 °C	177.64 µS/cm	1.98 mg/L	8.10 NTU	40.6 mV	39.10 ft	150.00 ml/min
2/2/2022 12:28 PM	10:00	6.19 pH	18.83 °C	175.21 µS/cm	0.52 mg/L	13.90 NTU	46.6 mV	39.52 ft	150.00 ml/min
2/2/2022 12:33 PM	15:00	6.18 pH	18.88 °C	174.77 µS/cm	0.37 mg/L	8.40 NTU	54.4 mV	39.76 ft	150.00 ml/min
2/2/2022 12:38 PM	20:00	6.17 pH	18.92 °C	174.81 µS/cm	0.37 mg/L	4.83 NTU	59.4 mV	40.50 ft	150.00 ml/min
2/2/2022 12:43 PM	25:00	6.19 pH	18.92 °C	177.46 µS/cm	1.92 mg/L	2.90 NTU	55.5 mV	40.50 ft	150.00 ml/min
2/2/2022 12:48 PM	30:00	6.21 pH	18.88 °C	172.23 µS/cm	2.99 mg/L	1.49 NTU	56.9 mV	40.50 ft	150.00 ml/min
2/2/2022 12:53 PM	35:00	6.18 pH	18.79 °C	172.57 µS/cm	2.99 mg/L	1.32 NTU	59.5 mV	40.50 ft	150.00 ml/min
2/2/2022 12:58 PM	40:00	6.19 pH	18.79 °C	172.15 µS/cm	3.24 mg/L	1.16 NTU	60.4 mV	40.50 ft	150.00 ml/min
2/2/2022 1:00 PM	42:28	6.19 pH	18.83 °C	172.98 µS/cm	3.53 mg/L	1.16 NTU	61.2 mV	40.50 ft	150.00 ml/min
2/2/2022 1:05 PM	47:28	6.19 pH	18.82 °C	172.16 µS/cm	3.68 mg/L	0.80 NTU	62.0 mV	40.50 ft	150.00 ml/min
2/2/2022 1:10 PM	52:28	6.15 pH	18.83 °C	171.90 µS/cm	3.53 mg/L	0.68 NTU	64.2 mV	40.50 ft	150.00 ml/min
2/2/2022 1:15 PM	57:28	6.18 pH	18.88 °C	170.53 µS/cm	3.68 mg/L	0.78 NTU	71.9 mV	40.50 ft	150.00 ml/min
2/2/2022 1:20 PM	01:02:28	6.19 pH	18.96 °C	170.50 µS/cm	3.77 mg/L	1.41 NTU	72.4 mV	40.50 ft	150.00 ml/min
2/2/2022 1:25 PM	01:07:28	6.19 pH	18.97 °C	170.54 µS/cm	3.70 mg/L	0.68 NTU	73.3 mV	40.50 ft	150.00 ml/min

2/2/2022 1:30 PM	01:12:28	6.16 pH	19.10 °C	170.40 µS/cm	4.15 mg/L	0.72 NTU	76.2 mV	40.50 ft	150.00 ml/min
2/2/2022 1:35 PM	01:17:28	6.19 pH	19.14 °C	170.33 µS/cm	4.11 mg/L	0.74 NTU	75.4 mV	40.50 ft	150.00 ml/min
2/2/2022 1:40 PM	01:22:28	6.19 pH	19.06 °C	170.07 µS/cm	4.10 mg/L	0.79 NTU	76.4 mV	40.50 ft	150.00 ml/min
2/2/2022 1:45 PM	01:27:28	6.15 pH	19.10 °C	169.83 µS/cm	3.49 mg/L	0.55 NTU	78.9 mV	40.50 ft	150.00 ml/min
2/2/2022 1:50 PM	01:32:28	6.18 pH	19.16 °C	169.66 µS/cm	3.53 mg/L	1.07 NTU	78.4 mV	40.50 ft	150.00 ml/min
2/2/2022 1:55 PM	01:37:28	6.19 pH	19.06 °C	171.38 µS/cm	3.64 mg/L	0.55 NTU	70.1 mV	40.50 ft	150.00 ml/min

Samples

Sample ID:	Description:
PZ-51S	

Low-Flow Test Report:

Test Date / Time: 2/4/2022 8:40:02 AM
Project: Plant Branch
Operator Name: Jude Waguespack

Location Name: PZ-54 **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 42 ft** **Total Depth: 52 ft** **Initial Depth to Water: 46.8 ft**	**Pump Type: Dedicated Bladder** **Tubing Type: Polyethylene** **Tubing Inner Diameter: 0.170 ft** **Tubing Length: 46 ft** **Pump Intake From TOC: 46 ft** **Estimated Total Volume Pumped: 1000 ml** **Flow Cell Volume: 90 ml** **Final Flow Rate: 100 ml/min** **Final Draw Down: 0 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 851413**

Test Notes:
Well dry- no sample

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 10 %	+/- 2	+/- 10	+/- 0.3	
2/4/2022 8:40 AM	00:00	7.05 pH	17.72 °C	328.05 µS/cm	9.32 mg/L	1,000.00 NTU	136.2 mV	46.80 ft	100.00 ml/min
2/4/2022 8:45 AM	05:00	7.04 pH	17.71 °C	513.26 µS/cm	7.00 mg/L	1,000.00 NTU	139.5 mV	46.80 ft	100.00 ml/min
2/4/2022 8:50 AM	10:00	6.98 pH	17.60 °C	635.80 µS/cm	8.53 mg/L	1,000.00 NTU	139.8 mV	BTOP	100.00 ml/min

NO SAMPLE TAKEN; REFLECTED ON SMP

Samples

Sample ID:	Description:

Low-Flow Test Report:

Test Date / Time: 2/4/2022 8:23:07 AM
Project: Plant Branch
Operator Name: Joe Booth

Location Name: PZ-57I **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 65.93 ft** **Total Depth: 75.93 ft** **Initial Depth to Water: 35.72 ft**	**Pump Type: Bladder** **Tubing Type: Polyethylene** **Tubing Inner Diameter: 0.170 in** **Tubing Length: 70 ft** **Pump Intake From TOC: 70 ft** **Estimated Total Volume Pumped: 4320 ml** **Flow Cell Volume: 90 ml** **Final Flow Rate: 180 ml/min** **Final Draw Down: 0.36 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 843285**

Test Notes:
Prepurge 1.5 liters

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 1000 %	+/- 5 %	+/- 10 %	+/- 10	+/- 1000 %	+/- 0.3	
2/4/2022 8:23 AM	00:00	6.48 pH	18.67 °C	798.11 µS/cm	2.79 mg/L	68.40 NTU	79.6 mV	35.72 ft	180.00 ml/min
2/4/2022 8:27 AM	04:00	5.52 pH	18.95 °C	843.30 µS/cm	0.45 mg/L	13.30 NTU	64.6 mV	36.08 ft	180.00 ml/min
2/4/2022 8:31 AM	08:00	5.36 pH	19.02 °C	854.67 µS/cm	0.26 mg/L	6.47 NTU	61.4 mV	36.08 ft	180.00 ml/min
2/4/2022 8:35 AM	12:00	5.31 pH	19.04 °C	861.11 µS/cm	0.20 mg/L	3.70 NTU	60.8 mV	36.08 ft	180.00 ml/min
2/4/2022 8:39 AM	16:00	5.29 pH	19.08 °C	858.50 µS/cm	0.16 mg/L	3.59 NTU	60.9 mV	36.08 ft	180.00 ml/min
2/4/2022 8:43 AM	20:00	5.28 pH	19.13 °C	852.87 µS/cm	0.14 mg/L	3.79 NTU	60.9 mV	36.08 ft	180.00 ml/min
2/4/2022 8:47 AM	24:00	5.28 pH	19.12 °C	846.99 µS/cm	0.12 mg/L	3.28 NTU	60.6 mV	36.08 ft	180.00 ml/min

Samples

Sample ID:	Description:
PZ-57I	Metals, TDS, Inorganics, Alkalinity, Radium

Low-Flow Test Report:

Test Date / Time: 2/3/2022 1:21:58 PM
Project: Plant Banch
Operator Name: Duane Fulton

Location Name: PZ-58I **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 53.93 ft** **Total Depth: 63.93 ft** **Initial Depth to Water: 37.96 ft**	**Pump Type: Bladder MP-50 Pump** **Tubing Type: Polyethylene** **Tubing Inner Diameter: 0.170 in** **Tubing Length: 58 ft** **Pump Intake From TOC: 58 ft** **Estimated Total Volume Pumped: 9875 ml** **Flow Cell Volume: 90 ml** **Final Flow Rate: 200 ml/min** **Final Draw Down: -0.01 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 850751**

Test Notes:

Weather Conditions:
Cloudy, slight rain

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 0.2	+/- 2	+/- 10	+/- 0.3	
2/3/2022 1:21 PM	00:00	3.28 pH	22.25 °C	1,357.7 µS/cm	5.65 mg/L	35.00 NTU	355.7 mV	37.95 ft	175.00 ml/min
2/3/2022 1:26 PM	05:00	3.91 pH	20.49 °C	1,480.8 µS/cm	0.41 mg/L	35.60 NTU	243.8 mV	37.95 ft	200.00 ml/min
2/3/2022 1:31 PM	10:00	3.93 pH	20.44 °C	1,460.6 µS/cm	0.25 mg/L	25.20 NTU	236.9 mV	37.95 ft	200.00 ml/min
2/3/2022 1:36 PM	15:00	3.93 pH	20.44 °C	1,479.1 µS/cm	0.20 mg/L	20.20 NTU	218.5 mV	37.98 ft	200.00 ml/min
2/3/2022 1:41 PM	20:00	3.93 pH	20.50 °C	1,477.5 µS/cm	0.21 mg/L	22.10 NTU	226.6 mV	37.98 ft	200.00 ml/min
2/3/2022 1:46 PM	25:00	3.92 pH	20.49 °C	1,483.9 µS/cm	0.20 mg/L	18.10 NTU	224.2 mV	37.98 ft	200.00 ml/min
2/3/2022 1:51 PM	30:00	3.91 pH	20.43 °C	1,493.8 µS/cm	0.18 mg/L	14.00 NTU	209.6 mV	37.95 ft	200.00 ml/min
2/3/2022 1:56 PM	35:00	3.91 pH	20.35 °C	1,488.6 µS/cm	0.17 mg/L	12.10 NTU	220.2 mV	37.95 ft	200.00 ml/min
2/3/2022 2:01 PM	40:00	3.91 pH	20.28 °C	1,499.8 µS/cm	0.17 mg/L	8.18 NTU	206.2 mV	37.95 ft	200.00 ml/min
2/3/2022 2:06 PM	45:00	3.91 pH	20.31 °C	1,490.7 µS/cm	0.15 mg/L	5.65 NTU	217.0 mV	37.95 ft	200.00 ml/min
2/3/2022 2:11 PM	50:00	3.90 pH	20.29 °C	1,499.7 µS/cm	0.16 mg/L	3.55 NTU	203.5 mV	37.95 ft	200.00 ml/min

Samples

Sample ID:	Description:
PZ-58I	

Low-Flow Test Report:

Test Date / Time: 2/3/2022 10:00:33 AM
Project: Plant Branch
Operator Name: Joe Booth

Location Name: PZ-59I **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 60 ft** **Total Depth: 70 ft** **Initial Depth to Water: 39.33 ft**	**Pump Type: Bladder** **Tubing Type: Polyethylene** **Tubing Inner Diameter: 0.170 in** **Tubing Length: 65 ft** **Pump Intake From TOC: 65 ft** **Estimated Total Volume Pumped: 25728 ml** **Flow Cell Volume: 90 ml** **Final Flow Rate: 220 ml/min** **Final Draw Down: 0.61 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 843285**

Test Notes:
Prepurge 2 liters

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 1000 %	+/- 5 %	+/- 10 %	+/- 10	+/- 1000 %	+/- 0.3	
2/3/2022 10:00 AM	00:00	3.64 pH	19.49 °C	3,523.0 µS/cm	0.41 mg/L	52.50 NTU	157.7 mV	39.33 ft	180.00 ml/min
2/3/2022 10:02 AM	01:36	3.67 pH	19.81 °C	3,522.0 µS/cm	0.28 mg/L	52.50 NTU	154.5 mV	39.33 ft	180.00 ml/min
2/3/2022 10:06 AM	05:36	3.68 pH	20.03 °C	3,569.6 µS/cm	0.20 mg/L	54.40 NTU	152.5 mV	40.24 ft	180.00 ml/min
2/3/2022 10:10 AM	09:36	3.69 pH	20.08 °C	3,545.0 µS/cm	0.16 mg/L	69.60 NTU	152.3 mV	40.11 ft	170.00 ml/min
2/3/2022 10:14 AM	13:36	3.69 pH	19.89 °C	3,548.8 µS/cm	0.19 mg/L	53.30 NTU	152.4 mV	40.07 ft	170.00 ml/min
2/3/2022 10:18 AM	17:36	3.68 pH	19.94 °C	3,554.9 µS/cm	0.17 mg/L	46.50 NTU	152.6 mV	39.99 ft	150.00 ml/min
2/3/2022 10:22 AM	21:36	3.68 pH	19.84 °C	3,534.9 µS/cm	0.18 mg/L	38.60 NTU	152.9 mV	39.89 ft	150.00 ml/min
2/3/2022 10:26 AM	25:36	3.68 pH	19.84 °C	3,539.1 µS/cm	0.17 mg/L	36.10 NTU	153.1 mV	39.83 ft	150.00 ml/min
2/3/2022 10:30 AM	29:36	3.69 pH	19.99 °C	3,560.2 µS/cm	0.16 mg/L	32.40 NTU	153.2 mV	39.83 ft	150.00 ml/min
2/3/2022 10:34 AM	33:36	3.69 pH	20.10 °C	3,524.9 µS/cm	0.14 mg/L	30.00 NTU	153.4 mV	39.83 ft	150.00 ml/min
2/3/2022 10:38 AM	37:36	3.70 pH	20.13 °C	3,546.1 µS/cm	0.14 mg/L	27.50 NTU	153.5 mV	39.83 ft	150.00 ml/min
2/3/2022 10:42 AM	41:36	3.70 pH	20.19 °C	3,528.8 µS/cm	0.12 mg/L	29.50 NTU	153.6 mV	39.83 ft	150.00 ml/min
2/3/2022 10:46 AM	45:36	3.70 pH	19.96 °C	3,517.7 µS/cm	0.15 mg/L	27.40 NTU	154.0 mV	39.83 ft	150.00 ml/min
2/3/2022 10:50 AM	49:36	3.70 pH	19.91 °C	3,539.9 µS/cm	0.15 mg/L	27.40 NTU	154.2 mV	39.83 ft	150.00 ml/min

2/3/2022 10:54 AM	53:36	3.70 pH	19.95 °C	3,538.4 µS/cm	0.15 mg/L	24.40 NTU	154.3 mV	39.78 ft	150.00 ml/min
2/3/2022 10:58 AM	57:36	3.70 pH	19.88 °C	3,526.6 µS/cm	0.14 mg/L	22.30 NTU	154.5 mV	39.78 ft	150.00 ml/min
2/3/2022 11:02 AM	01:01:36	3.71 pH	19.76 °C	3,548.5 µS/cm	0.13 mg/L	21.60 NTU	154.6 mV	39.78 ft	150.00 ml/min
2/3/2022 11:06 AM	01:05:36	3.71 pH	19.71 °C	3,548.2 µS/cm	0.13 mg/L	22.40 NTU	154.7 mV	39.78 ft	150.00 ml/min
2/3/2022 11:10 AM	01:09:36	3.71 pH	19.66 °C	3,560.3 µS/cm	0.13 mg/L	24.00 NTU	154.9 mV	39.78 ft	150.00 ml/min
2/3/2022 11:14 AM	01:13:36	3.71 pH	19.75 °C	3,565.8 µS/cm	0.12 mg/L	18.10 NTU	154.9 mV	39.78 ft	150.00 ml/min
2/3/2022 11:18 AM	01:17:36	3.71 pH	19.90 °C	3,546.0 µS/cm	0.11 mg/L	18.40 NTU	155.0 mV	39.78 ft	150.00 ml/min
2/3/2022 11:22 AM	01:21:36	3.71 pH	20.04 °C	3,579.9 µS/cm	0.12 mg/L	15.90 NTU	155.1 mV	39.78 ft	150.00 ml/min
2/3/2022 11:26 AM	01:25:36	3.70 pH	20.19 °C	3,558.9 µS/cm	0.11 mg/L	18.50 NTU	155.2 mV	39.78 ft	150.00 ml/min
2/3/2022 11:30 AM	01:29:36	3.71 pH	20.11 °C	3,550.4 µS/cm	0.11 mg/L	20.90 NTU	155.4 mV	39.78 ft	150.00 ml/min
2/3/2022 11:34 AM	01:33:36	3.71 pH	20.29 °C	3,571.7 µS/cm	0.11 mg/L	19.80 NTU	155.4 mV	39.78 ft	150.00 ml/min
2/3/2022 11:38 AM	01:37:36	3.71 pH	20.35 °C	3,558.1 µS/cm	0.10 mg/L	16.50 NTU	155.5 mV	39.78 ft	150.00 ml/min
2/3/2022 11:42 AM	01:41:36	3.71 pH	20.42 °C	3,586.2 µS/cm	0.10 mg/L	16.90 NTU	155.6 mV	39.78 ft	150.00 ml/min
2/3/2022 11:46 AM	01:45:36	3.71 pH	20.74 °C	3,573.8 µS/cm	0.10 mg/L	16.10 NTU	155.6 mV	39.78 ft	150.00 ml/min
2/3/2022 11:50 AM	01:49:36	3.71 pH	21.09 °C	3,562.0 µS/cm	0.10 mg/L	13.90 NTU	155.6 mV	39.78 ft	150.00 ml/min
2/3/2022 11:54 AM	01:53:36	3.71 pH	20.86 °C	3,576.7 µS/cm	0.09 mg/L	15.10 NTU	155.9 mV	39.78 ft	150.00 ml/min
2/3/2022 11:58 AM	01:57:36	3.71 pH	20.87 °C	3,594.6 µS/cm	0.36 mg/L	13.50 NTU	156.0 mV	39.78 ft	150.00 ml/min
2/3/2022 12:02 PM	02:01:36	3.71 pH	20.78 °C	3,611.2 µS/cm	0.44 mg/L	14.40 NTU	156.3 mV	39.78 ft	220.00 ml/min
2/3/2022 12:06 PM	02:05:36	3.71 pH	20.73 °C	3,627.5 µS/cm	0.68 mg/L	14.00 NTU	156.6 mV	39.94 ft	220.00 ml/min
2/3/2022 12:10 PM	02:09:36	3.70 pH	20.64 °C	3,627.7 µS/cm	0.85 mg/L	10.60 NTU	157.2 mV	39.94 ft	220.00 ml/min
2/3/2022 12:14 PM	02:13:36	3.70 pH	20.60 °C	3,646.2 µS/cm	0.84 mg/L	7.98 NTU	157.9 mV	39.94 ft	220.00 ml/min
2/3/2022 12:18 PM	02:17:36	3.70 pH	20.68 °C	3,531.0 µS/cm	0.96 mg/L	8.76 NTU	158.7 mV	39.94 ft	220.00 ml/min
2/3/2022 12:22 PM	02:21:36	3.70 pH	20.69 °C	3,631.1 µS/cm	0.92 mg/L	7.51 NTU	159.3 mV	39.94 ft	220.00 ml/min
2/3/2022 12:26 PM	02:25:36	3.70 pH	20.79 °C	3,641.6 µS/cm	1.11 mg/L	6.56 NTU	159.9 mV	39.94 ft	220.00 ml/min
2/3/2022 12:30 PM	02:29:36	3.70 pH	20.82 °C	3,639.1 µS/cm	1.27 mg/L	5.61 NTU	160.7 mV	39.94 ft	220.00 ml/min
2/3/2022 12:34 PM	02:33:36	3.71 pH	20.93 °C	3,647.9 µS/cm	1.35 mg/L	4.30 NTU	161.5 mV	39.94 ft	220.00 ml/min

Samples

Sample ID:	Description:

PZ-59I	Metals, TDS, Inorganics, Alkalinity, Radium,sulfide, Hardness, DOC, FE,

Low-Flow Test Report:

Test Date / Time: 2/3/2022 10:09:38 AM
Project: Plant Banch
Operator Name: Duane Fulton

Location Name: PZ-60I **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 50.83 ft** **Total Depth: 60.83 ft** **Initial Depth to Water: 37.83 ft**	**Pump Type: Bladder MP-50 Pump** **Tubing Type: Polyethylene** **Tubing Inner Diameter: 0.170 in** **Tubing Length: 55ft** **Pump Intake From TOC: 55 ft** **Estimated Total Volume Pumped: 6500 ml** **Flow Cell Volume: 90 ml** **Final Flow Rate: 225 ml/min** **Final Draw Down: 0.12 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 850751**

Test Notes:

Weather Conditions:
Cloudy

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 0.2	+/- 2	+/- 10	+/- 0.3	
2/3/2022 10:09 AM	00:00	5.32 pH	17.95 °C	3,099.9 µS/cm	3.80 mg/L	44.70 NTU	279.2 mV	37.95 ft	175.00 ml/min
2/3/2022 10:14 AM	05:00	4.74 pH	19.51 °C	3,102.2 µS/cm	0.46 mg/L	19.70 NTU	291.8 mV	37.92 ft	225.00 ml/min
2/3/2022 10:19 AM	10:00	4.74 pH	19.81 °C	3,104.0 µS/cm	0.23 mg/L	9.65 NTU	316.7 mV	37.92 ft	225.00 ml/min
2/3/2022 10:24 AM	15:00	4.74 pH	19.86 °C	3,085.7 µS/cm	0.19 mg/L	6.82 NTU	309.8 mV	38.00 ft	225.00 ml/min
2/3/2022 10:29 AM	20:00	4.74 pH	19.94 °C	3,097.0 µS/cm	0.16 mg/L	4.82 NTU	343.5 mV	37.95 ft	225.00 ml/min
2/3/2022 10:34 AM	25:00	4.74 pH	19.98 °C	3,072.8 µS/cm	0.14 mg/L	3.39 NTU	324.7 mV	37.92 ft	225.00 ml/min
2/3/2022 10:39 AM	30:00	4.73 pH	19.98 °C	3,068.0 µS/cm	0.13 mg/L	2.76 NTU	328.3 mV	37.95 ft	225.00 ml/min

Samples

Sample ID:	Description:
PZ-60I	

Low-Flow Test Report:

Test Date / Time: 2/2/2022 3:07:38 PM
Project: Plant Branch
Operator Name: Jude Waguespack

Location Name: PZ-61I **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 66.03 ft** **Total Depth: 76.03 ft** **Initial Depth to Water: 47.69 ft**	**Pump Type: Bladder** **Tubing Type: Polyethylene** **Tubing Inner Diameter: 0.170 in** **Tubing Length: 71 ft** **Pump Intake From TOC: 71 ft** **Estimated Total Volume Pumped: 7000 ml** **Flow Cell Volume: 90 ml** **Final Flow Rate: 200 ml/min** **Final Draw Down: 0.61 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 851413**

Test Notes:

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 10 %	+/- 2	+/- 10	+/- 0.3	
2/2/2022 3:07 PM	00:00	5.88 pH	19.88 °C	1,858.6 µS/cm	3.01 mg/L	20.70 NTU	0.5 mV	47.69 ft	200.00 ml/min
2/2/2022 3:12 PM	05:00	5.84 pH	19.07 °C	2,053.8 µS/cm	0.39 mg/L	3.56 NTU	-30.2 mV	48.20 ft	200.00 ml/min
2/2/2022 3:17 PM	10:00	5.78 pH	18.95 °C	2,166.8 µS/cm	0.25 mg/L	1.87 NTU	-53.4 mV	48.25 ft	200.00 ml/min
2/2/2022 3:22 PM	15:00	5.75 pH	18.97 °C	2,276.7 µS/cm	0.20 mg/L	1.18 NTU	-51.5 mV	48.25 ft	200.00 ml/min
2/2/2022 3:27 PM	20:00	5.46 pH	19.02 °C	2,348.6 µS/cm	0.16 mg/L	0.99 NTU	-34.5 mV	48.25 ft	200.00 ml/min
2/2/2022 3:32 PM	25:00	5.34 pH	19.06 °C	2,371.4 µS/cm	0.14 mg/L	1.35 NTU	-18.6 mV	48.25 ft	200.00 ml/min
2/2/2022 3:37 PM	30:00	5.28 pH	19.06 °C	2,408.3 µS/cm	0.12 mg/L	1.53 NTU	-5.3 mV	48.30 ft	200.00 ml/min
2/2/2022 3:42 PM	35:00	5.25 pH	19.06 °C	2,439.9 µS/cm	0.11 mg/L	1.93 NTU	4.5 mV	48.30 ft	200.00 ml/min

Samples

Sample ID:	Description:
PZ-61I	

Low-Flow Test Report:

Test Date / Time: 2/4/2022 9:43:46 AM
Project: Plant Branch
Operator Name: Joe Booth

Location Name: PZ-62I **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 60 ft** **Total Depth: 70 ft** **Initial Depth to Water: 38.75 ft**	**Pump Type: Bladder** **Tubing Type: Polyethylene** **Tubing Inner Diameter: 0.170 in** **Tubing Length: 65 ft** **Pump Intake From TOC: 65 ft** **Estimated Total Volume Pumped: 3400 ml** **Flow Cell Volume: 90 ml** **Final Flow Rate: 170 ml/min** **Final Draw Down: 0.85 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 843285**

Test Notes:
Prepurge 2 liters

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 1000 %	+/- 5 %	+/- 10 %	+/- 10	+/- 1000 %	+/- 0.3	
2/4/2022 9:43 AM	00:00	5.81 pH	19.35 °C	1,062.9 µS/cm	0.40 mg/L	20.90 NTU	70.4 mV	38.75 ft	170.00 ml/min
2/4/2022 9:47 AM	04:00	5.79 pH	19.38 °C	1,082.0 µS/cm	0.28 mg/L	9.03 NTU	68.3 mV	39.60 ft	170.00 ml/min
2/4/2022 9:51 AM	08:00	5.79 pH	19.40 °C	1,090.8 µS/cm	0.22 mg/L	8.74 NTU	66.1 mV	39.60 ft	170.00 ml/min
2/4/2022 9:55 AM	12:00	5.79 pH	19.40 °C	1,089.8 µS/cm	0.20 mg/L	7.45 NTU	63.9 mV	39.60 ft	170.00 ml/min
2/4/2022 9:59 AM	16:00	5.79 pH	19.41 °C	1,091.0 µS/cm	0.16 mg/L	5.96 NTU	61.8 mV	39.60 ft	170.00 ml/min
2/4/2022 10:03 AM	20:00	5.79 pH	19.44 °C	1,091.1 µS/cm	0.16 mg/L	4.16 NTU	60.0 mV	39.60 ft	170.00 ml/min

Samples

Sample ID:	Description:
PZ-62I	Metals, TDS, Inorganics, Alkalinity, Radium

Low-Flow Test Report:

Test Date / Time: 2/4/2022 9:44:53 AM
Project: Plant Banch
Operator Name: Duane Fulton

Location Name: PZ-63I **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 60 ft** **Total Depth: 70 ft** **Initial Depth to Water: 38.92 ft**	**Pump Type: Dedicated Pump** **Tubing Type: Polyethylene** **Tubing Inner Diameter: 0.170 in** **Tubing Length: 65 ft** **Pump Intake From TOC: 65 ft** **Estimated Total Volume Pumped: 7500 ml** **Flow Cell Volume: 90 ml** **Final Flow Rate: 250 ml/min** **Final Draw Down: 0.76 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 850751**

Test Notes:

Weather Conditions:
Rain

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 0.2	+/- 2	+/- 10	+/- 0.3	
2/4/2022 9:44 AM	00:00	6.20 pH	18.17 °C	611.39 µS/cm	7.15 mg/L	62.00 NTU	83.2 mV	39.30 ft	250.00 ml/min
2/4/2022 9:49 AM	05:00	6.06 pH	19.07 °C	605.65 µS/cm	0.37 mg/L	30.30 NTU	65.0 mV	39.65 ft	250.00 ml/min
2/4/2022 9:54 AM	10:00	6.05 pH	19.15 °C	604.76 µS/cm	0.27 mg/L	18.50 NTU	34.7 mV	39.68 ft	250.00 ml/min
2/4/2022 9:59 AM	15:00	5.99 pH	19.15 °C	602.58 µS/cm	0.19 mg/L	6.38 NTU	26.4 mV	39.68 ft	250.00 ml/min
2/4/2022 10:04 AM	20:00	5.96 pH	19.17 °C	601.57 µS/cm	0.17 mg/L	2.60 NTU	24.0 mV	39.69 ft	250.00 ml/min
2/4/2022 10:09 AM	25:00	5.91 pH	19.19 °C	600.19 µS/cm	0.16 mg/L	1.53 NTU	21.4 mV	39.68 ft	250.00 ml/min
2/4/2022 10:14 AM	30:00	5.89 pH	19.21 °C	596.87 µS/cm	0.14 mg/L	0.93 NTU	22.0 mV	39.68 ft	250.00 ml/min

Samples

Sample ID:	Description:
PZ-63I	

PURGING AND SAMPLING FORM

Project #: 106025421	Project Name/Site Name: SCS Plant Branch		Page: 1 of 1
Well ID #: BRGW-125	Date: 2/1/22	Water Level (ft): 50.04	Time (WL): 1303
Physical Condition of Well:		Weather: 55° Clear	
Well Diameter (in): 2	Well Depth (ft): 61.01	Water Column (ft): 10.97	Well Volume (gal): 1.78
Start Purge: 1303	End Purge: 1350	Top of Pump (ft): 60.01	
Evacuation Method: Low-Flow		Volume Removed (L): 7.5	
Evacuation Equipment: QED Decicated		Purging Personnel: Joe Beck	
SmarTroll serial #: 843285		LaMotte serial #: 18110C071494	

Purge Data/Field Parameters

Time	Color & Appearance	Odor	pH (S.U.)	Cond. (uS/cm)	DO (mg/L)	Temp (C)	ORP (mV)	Turbidity (NTU)	DTW (ft BTOC)	Pumping Rate
1349	Clear	NO	5.81	77.60	7.69	19.84	104.6	1.81	50.37	150 mL/min
			Sampled @ 1354							

Stabilization Criteria: pH ± 0.1 S.U. Conductivity ± 5%, Dissolved Oxygen ± 10% or 0.2Mg/L (whichever is greater, for DO < 0.5mg/L, record only, no stabilization criteria), Turbidity ≤5 NTU, Purge volume ≥3L purge water, water level ≤ 0.3 ft, Temp and ORP record only

Sample Description

Sample ID: BRGW-125 Sample Date/Time: 2/1/22 1354 Metals Date/Time: 2/1/22 1854

Duplicate: — Dup Date/Time: — Final Turbidity NTU: 1.81

Field Blank: — Blank Date/Time: — Turbidity Date/Time: 2/1/22 1354

# Sample Bottles	Container	Preservative	Analyte(s)
1	250 mL plastic	HNO3	Metals App III/ IV Total + K, Na, Mg
1 + 1	250 mL plastic	--	TDS, Cl, F, SO4
1	500 mL plastic	--	Alkalinity (Bicarbonate + Carbonate)
2	1 L plastic	HNO3	Radium 226/228

Signature: [signature]

GOLDER
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PURGING AND SAMPLING FORM

Project #: 166625421	Project Name/Site Name: SCS Plant Branch		Page: 1 of 1
Well ID #: BRGWA-12I	Date: 2/1/22	Water Level (ft): 49.89	Time (WL): 1048
Physical Condition of Well:		Weather:	
Well Diameter (in): 2	Well Depth (ft): 80.54	Water Column (ft): 30.65	Well Volume (gal): 4.99
Start Purge: 1050	End Purge: 1219	Top of Pump (ft): 75.54	
Evacuation Method: Low-Flow		Volume Removed (L): 13.9 L	
Evacuation Equipment: dedicated		Purging Personnel: Joe Booth	
SmarTroll serial #: 843285		LaMotte serial #: 18 110C 071494	

Purge Data/Field Parameters

Time	Color & Appearance	Odor	pH (S.U.)	Cond (uS/cm)	DO (mg/L)	Temp (C)	ORP (mV)	Turbidity (NTU)	DTW (ft BTOC)	Pumping Rate
1219	clear	NO	6.40	139.65	5.18	19.10	10.4	2.43	55.19	10
			sampled	@		1224				

Stabilization Criteria: pH ± 0.1 S.U, Conductivity ± 5%, Dissolved Oxygen ± 10% or 0.2Mg/L (whichever is greater; for DO < 0.5mg/L, record only, no stabilization criteria), Turbidity ≤5 NTU; Purge volume ≥3L purge water, water level ≤ 0.3 ft. Temp and ORP record only

Sample Description

Sample ID: BRGWA-12I   Sample Date/Time: 2/1/22 1224   Metals Date/Time: 2/1/22 1224

Duplicate: ______   Dup Date/Time: ______   Final Turbidity NTU: 2.43

Field Blank: ______   Blank Date/Time: ______   Turbidity Date/Time: 2/1/22 1224

# Sample Bottles	Container	Preservative	Analyte(s)
1	250 mL plastic	HNO3	Metals App III/ IV Total + K, Na, Mg
1+1	250 mL plastic	--	TDS, Cl, F, SO4
1	500 mL plastic	--	Alkalinity (Bicarbonate + Carbonate)
2	1 L plastic	HNO3	Radium 226/228

Signature: Joe Booth

GOLDER
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PURGING AND SAMPLING FORM

Project #: 166625421	Project Name/Site Name: SCS Plant Branch		Page: 1 of 1
Well ID #: BR GWA-23S	Date: 2/1/22	Water Level (ft): 38.64	Time (WL): 0800
Physical Condition of Well: good		Weather: 30° Clear	
Well Diameter (in): 2	Well Depth (ft): 43.80	Water Column (ft): 5.16	Well Volume (gal): 0.84
Start Purge: 9:08	End Purge: 958	Top of Pump (ft): 38.96	
Evacuation Method: Low-Flow		Volume Removed (L): 11.4 L	
Evacuation Equipment: dedicated		Purging Personnel: [illegible]	
SmarTroll serial #: 843295		LaMotte serial #: 1810C071494	

Purge Data/Field Parameters

Time	Color & Appearance	Odor	pH (S.U.)	Cond. (uS/cm)	DO (mg/L)	Temp (C)	ORP (mV)	Turbidity (NTU)	DTW (ft BTOC)	Pumping Rate
Purged 3 Well Volumes before sampling										
954	Clear	None	5.65	162.76	4.32	15.78	191.6	2.84	38.88	190 ml/min
		Sampled @		1006						

Stabilization Criteria: pH ≤ 0.1 S.U. Conductivity ≤ 5%, Dissolved Oxygen ≤ 10% or 0.2Mg/L (whichever is greater; for DO < 0.5mg/L record only, no stabilization criteria), Turbidity ≤5 NTU; Purge volume ≤3L purge water, water level ≤ 0.3 ft; Temp and ORP record only

Sample Description

Sample ID: BR GWA-23S — Sample Date/Time: 2/1/22 1006 — Metals Date/Time: 2/1/22 1006

Duplicate: — — Dup Date/Time: — — Final Turbidity NTU: 2.84

Field Blank: — — Blank Date/Time: — — Turbidity Date/Time: 2/1/22 1006

# Sample Bottles	Container	Preservative	Analyte(s)
1	250 mL plastic	HNO3	Metals App III/ IV Total + K, Na, Mg
1+1	250 mL plastic	--	TDS, Cl, F, SO4
1	500 mL plastic	--	TDS Alkalinity (Bicarbonate + Carbonate)
2	1 L plastic	HNO3	Radium 226/228

Signature: [signature]

GOLDER
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PURGING AND SAMPLING FORM

Project #: 166625421	Project Name/Site Name: SCS Plant Branch		Page: 1 of 1
Well ID #: PZ-51S	Date: 2/2/22	Water Level (ft): 38.30	Time (WL): 10:41
Physical Condition of Well: Good		Weather: 52°F, Sunny	
Well Diameter (in): 2	Well Depth (ft): 45.40	Water Column (ft): 7.1	Well Volume (gal): 1.16 [illegible]
Start Purge: 12:18	End Purge: 13:56	Top of Pump (ft): 42	
Evacuation Method: Low-Flow		Volume Removed (L): 14.6 L	
Evacuation Equipment: Bladder pump		Purging Personnel: [illegible]	
SmarTroll serial #: 861413		~~LaMotte~~ serial #: Hach 131106029655	

Purge Data/Field Parameters

Time	Color & Appearance	Odor	pH (S.U.)	Cond (uS/cm)	DO (mg/L)	Temp (C)	ORP (mV)	Turbidity (NTU)	DTW (ft BTOC)	Pumping Rate
12:38	clear	none	6.17	174.86	0.57 ~~1.48~~	19.92	59.4 ~~[illegible]~~	4.83	[illegible]	150 mL/min
		Purging	3	well	vol	4.44 x 3 =		13.2	L	
13:56	clear	none	6.19	171.38	3.64	19.06	70.1	0.55	BTOP	150
		Sampled	@ 13:56							

Stabilization Criteria: pH ≤ 0.1 S.U, Conductivity ≤ 5%, Dissolved Oxygen ≤ 10% or 0.2Mg/L (whichever is greater; for DO < 0.5mg/L record only, no stabilization criteria), Turbidity ≤5 NTU; Purge volume ≤3L purge water, water level ≤ 0.3 ft; Temp and ORP record only

Sample Description

Sample ID:	PZ-51S	Sample Date/Time:	2.2.22/13:56	Metals Date/Time:	2.2.22/13:56
Duplicate:	—	Dup Date/Time:	—	Final Turbidity NTU:	0.55
Field Blank:	FB-2	Blank Date/Time:	2.2.22/13:23	Turbidity Date/Time:	2.2.22/13:56

# Sample Bottles	Container	Preservative	Analyte(s)
2	250 mL plastic	HNO3	Metals App III/ IV Total + K, Na, Mg
2	250 mL plastic	--	~~TDS~~, Cl, F, SO4
2	500 mL plastic	--	Alkalinity (Bicarbonate + Carbonate)
4	1 L plastic	HNO3	Radium 226/228
1	500 mL	-	TDS

Signature: [signature]

GOLDER
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PURGING AND SAMPLING FORM

Project #: 166825421	Project Name/Site Name: SCS Plant Branch		Page: 1 of 1
Well ID #: P2-510	Date: 2/3/22	Water Level (ft): 39.72	Time (WL): 1532
Physical Condition of Well: good		Weather: 60 overcast	
Well Diameter (in): 2	Well Depth (ft): 100.2	Water Column (ft): 60.22	Well Volume (gal): 15.73
Start Purge: 1532	End Purge: 1611	Top of Pump (ft): 100	
Evacuation Method: Low-Flow		Volume Removed (L): 7.00	
Evacuation Equipment: Bladder		Purging Personnel: Joe Bass	
SmarTroll serial #: 443265		LaMotte serial #: 1811 dco 71454	

Purge Data/Field Parameters

Time	Color & Appearance	Odor	pH (S.U.)	Cond. (uS/cm)	DO (mg/L)	Temp (C)	ORP (mV)	Turbidity (NTU)	DTW (ft BTOC)	Pumping Rate
1611	Clear	None	6.37	472.18	0.18	20.13	-17.4	2.47	44.44	225 ml/min
			Sampled	60	1612					

Stabilization Criteria: pH ± 0.1 S.U, Conductivity ± 5%, Dissolved Oxygen ± 10% or 0.2Mg/L (whichever is greater, for DO < 0.5mg/L, record only, no stabilization criteria), Turbidity ≤5 NTU, Purge volume ≥3L purge water, water level ≤ 0.3 ft, Temp and ORP record only

Sample Description

Sample ID: P2-510 Sample Date/Time: 2/3/22 1612 Metals Date/Time: 2/3/22 1616

Duplicate: X-Mas Dup Dup Date/Time: 2/3/22 Final Turbidity NTU: 2.43

Field Blank: — Blank Date/Time: — Turbidity Date/Time: 2/3/22 1616

# Sample Bottles	Container	Preservative	Analyte(s)
1	250 mL plastic	HNO3	Metals App III/ IV Total + K, Na, Mg
1 + 1	250 mL plastic	--	TDS, Cl, F, SO4
1	500 mL plastic	--	Alkalinity (Bicarbonate + Carbonate)
4	1 L plastic	HNO3	Radium 226/228

Signature: [signature]

GOLDER
MEMBER OF WSP

PURGING AND SAMPLING FORM

Project #: 166625421	Project Name/Site Name: SCS Plant Branch		Page: 1 of 1
Well ID #: P2-57I	Date: 2/4/21	Water Level (ft): 35.72	Time (WL): 8:16
Physical Condition of Well: good		Weather: hot rainy	
Well Diameter (in): 2	Well Depth (ft): 75.93	Water Column (ft): 40.21	Well Volume (gal): 6.55
Start Purge: 8:14	End Purge: 08 49	Top of Pump (ft): 70	
Evacuation Method: Low-Flow		Volume Removed (L): 5.9 L	
Evacuation Equipment: Bladder		Purging Personnel: Joe Beck	
SmarTroll serial #: 643265		LaMotte serial #: 1811ec671494	

Purge Data/Field Parameters

Time	Color & Appearance	Odor	pH (S.U.)	Cond (uS/cm)	DO (mg/L)	Temp (C)	ORP (mV)	Turbidity (NTU)	DTW (ft BTOC)	Pumping Rate
847	clear	no	5.28	946.99	0.12	19.12	60.4	3.48	36.06	150 mL/min
			Sampled @ 0854							

Stabilization Criteria: pH ± 0.1 S.U. Conductivity ± 5%. Dissolved Oxygen ± 10% or 0.2Mg/L (whichever is greater; for DO < 0.5mg/L, record only; no stabilization criteria). Turbidity ≤5 NTU; Purge volume ≥3L purge water, water level ± 0.3 ft; Temp and ORP record only

Sample Description

Sample ID: P2-57I
Sample Date/Time: 2/4/21 0854
Metals Date/Time: 2/4/21 0854
Duplicate: —
Dup Date/Time: —
Final Turbidity NTU: 3.28
Field Blank: —
Blank Date/Time: —
Turbidity Date/Time: 2/4/21 0854

# Sample Bottles	Container	Preservative	Analyte(s)
1	250 mL plastic	HNO3	Metals App III/ IV Total + K, Na, Mg
1 x 2	250 mL plastic	--	TDS, Cl, F, SO4
1	500 mL plastic	--	Alkalinity (Bicarbonate + Carbonate)
2	1 L plastic	HNO3	Radium 226/228

Signature: [signature]

GOLDER
MEMBER OF WSP

PURGING AND SAMPLING FORM

Project #: 1666226421	Project Name/Site Name: SCS Plant Branch		Page: 1 of 1
Well ID #: PZ-55I	Date: 02/03/22	Water Level (ft): 37.95	Time (Wl.): 12:25
Physical Condition of Well: GOOD		Weather: CLOUDY, SLIGHT RAIN 40's	
Well Diameter (in): 2	Well Depth (ft): 63.93	Water Column (ft): 25.98	Well Volume (gal): 4.23
Start Purge: 13:21	End Purge: 14:11	Top of Pump (ft): 58.00	
Evacuation Method: Low-Flow		Volume Removed (L): 9.875	
Evacuation Equipment: BLADDER MP-60 PUMP		Purging Personnel: DVANI FARTON	
SmarTroll serial #: 850751		LaMotte serial #: 11085000116970 HACH	

Purge Data/Field Parameters

Time	Color & Appearance	Odor	pH (S.U.)	Cond. (uS/cm)	DO (mg/L)	Temp (C)	ORP (mV)	Turbidity (NTU)	DTW (ft BTOC)	Pumping Rate
14:11	CLEAR	NONE	7.90	1,499.7	0.14	20.25	203.5	3.55	37.95	200 mL/min
						SAMPLE 14:13				

Stabilization Criteria: pH ± 0.1 S.U, Conductivity ± 5%, Dissolved Oxygen ± 10% or 0.2Mg/L (whichever is greater, for DO < 0.5mg/L, record only, no stabilization criteria), Turbidity ≤5 NTU, Purge volume ≥3L purge water, water level ≤ 0.3 ft, Temp and ORP record only

Sample Description

Sample ID: PZ-55I
Duplicate: —
Field Blank: —

Sample Date/Time: 02/03/22 - 14:13
Dup Date/Time: —
Blank Date/Time: —

Metals Date/Time: 02/03/22 - 14:17
Final Turbidity NTU: 3.89
Turbidity Date/Time: 02/03/22 - 14:30

# Sample Bottles	Container	Preservative	Analyte(s)
1	250 mL plastic	HNO3	Metals App III/ IV Total + K, Na, Mg
1	250 mL plastic	--	TDS, Cl, F, SO4
1	500 mL plastic	--	Alkalinity (Bicarbonate + Carbonate)
2	1 L plastic	HNO3	Radium 226/228
1	250 mL PLASTIC	HNO_3	HALONES
1	250 mL PLASTIC	—	FERROUS IRON
3	40 mL VIAL	HCL	DOC / TURBIDITY 0.50 NT

Signature: Dvani Farton

1	125 mL PLASTIC	HNO_3	SULFIDE
1	125 mL PLASTIC	H_2SO_4	$NO_2 + NO_3$

GOLDER
MEMBER OF WSP

PURGING AND SAMPLING FORM

Project #: 166625421	Project Name/Site Name: SCS Plant Branch		Page: 1 of 1
Well ID #: 72-59 [illegible]	Date: 7/3/22	Water Level (ft): 39.33	Time (WL): 9 30
Physical Condition of Well: good		Weather: 50° overcast	
Well Diameter (in): 2	Well Depth (ft): 70	Water Column (ft): 30.67	Well Volume (gal): 5.0
Start Purge: 0935	End Purge: 12 35	Top of Pump (ft): 65	
Evacuation Method: Low-Flow		Volume Removed (L): 27.4 L	
Evacuation Equipment: Bladder		Purging Personnel: [illegible]	
SmarTroll serial #: 443285		LaMotte serial #: 1311 060 71454	

Purge Data/Field Parameters

Time	Color & Appearance	Odor	pH (S.U.)	Cond (uS/cm)	DO (mg/L)	Temp (C)	ORP (mV)	Turbidity (NTU)	DTW (ft BTOC)	Pumping Rate
1235	clear	none	3.71	3647.9	1.35	20.93	161.5	4.30	39.64	210 ml/min
			Sampled		@	1240				

Stabilization Criteria: pH ± 0.1 S.U, Conductivity ± 5%, Dissolved Oxygen ± 10% or 0.2Mg/L (whichever is greater; for DO < 0.5mg/L, record only, no stabilization criteria), Turbidity ≤5 NTU; Purge volume ≥3L purge water, water level ≤ 0.3 ft. Temp and ORP record only

Sample Description

Sample ID: 72-59 [illegible]
Sample Date/Time: 3/3/22 1240
Metals Date/Time: 3/3/22 1240
Duplicate: —
Dup Date/Time: —
Final Turbidity NTU: 4.30
Field Blank: —
Blank Date/Time:
Turbidity Date/Time: 3/3/22 1240

# Sample Bottles	Container	Preservative	Analyte(s)
2	250 mL plastic	HNO3	Metals App III/ IV Total + K, Na, Mg / Hardness
3	250 mL plastic	--	TDS, Cl, F, SO4 / Fe ++, Fe+++
1	500 mL plastic	--	Alkalinity (Bicarbonate + Carbonate)
2	1 L plastic	HNO3	Radium 226/228
2	125 ml plastic	NaOH / [illegible]	NO2 / NO3 + sulfide
3	40 mL amber		

Signature: [signature]

GOLDER
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PURGING AND SAMPLING FORM

Project #: 166825421	Project Name/Site Name: SCS Plant Branch		Page: 1 of 1
Well ID #: PZ-44	Date: 2/2/22	Water Level (ft): 25.65	Time (WL): 11:33
Physical Condition of Well: good		Weather: 50° overcast	
Well Diameter (in): 2	Well Depth (ft): 57.0	Water Column (ft): 31.35	Well Volume (gal): 5.11
Start Purge: 1140	End Purge: 1214	Top of Pump (ft): 52.0	
Evacuation Method: Low-Flow		Volume Removed (L): 7.4 L	
Evacuation Equipment: QED Bladder		Purging Personnel: Joe Bonilla	
SmarTroll serial #: 443245		LaMotte serial #: 1811 pco 71494	

Purge Data/Field Parameters

Time	Color & Appearance	Odor	pH (S.U.)	Cond. (uS/cm)	DO (mg/L)	Temp (C)	ORP (mV)	Turbidity (NTU)	DTW (ft BTOC)	Pumping Rate
1217	clear	NO	6.20	290.03	0.28	19.49	99.3	3.76	25.90	170 mL/min
			Sampled @			1223				

Stabilization Criteria: pH ± 0.1 S.U. Conductivity ± 5%, Dissolved Oxygen ± 10% or 0.2MgL (whichever is greater; for DO < 0.5mg/L, record only, no stabilization criteria), Turbidity ≤5 NTU; Purge volume ≥3L purge water, water level ≤ 0.3 ft; Temp and ORP record only

Sample Description

Sample ID: PZ-44 Sample Date/Time: 2/2/22 1223 Metals Date/Time: 2/2/22 1223

Duplicate: Dup Date/Time: Final Turbidity NTU: 3.76

Field Blank: Blank Date/Time: Turbidity Date/Time: 2/2/22 1223

# Sample Bottles	Container	Preservative	Analyte(s)
1	250 mL plastic	HNO3	Metals App III/ IV Total + K, Na, Mg
1+1	250 mL plastic	–	TDS, Cl, F, SO4
1	500 mL plastic	–	Alkalinity (Bicarbonate + Carbonate)
2	1 L plastic	HNO3	Radium 226/228

Signature: R Bon

GOLDER
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PURGING AND SAMPLING FORM

Project #: 166625421	Project Name/Site Name: SCS Plant Branch		Page: 1 of 1
Well ID #: PZ-50D	Date: 2/2/22	Water Level (ft): 38.0	Time (WL): 9:36
Physical Condition of Well: GOOD		Weather: cloudy, 46°F	
Well Diameter (in): 2	Well Depth (ft): 106.0	Water Column (ft): 68.0	Well Volume (gal): 11.08
Start Purge: 10:08	End Purge:	Top of Pump (ft): 101	
Evacuation Method: Low-Flow		Volume Removed (L): 39.4 L	
Evacuation Equipment: BLADDER PUMP		Purging Personnel: Jose Wangerman	
SmarTroll serial #: 851413		~~LaMotte~~ HACH serial #: HACH 1811ec029655	

Purge Data/Field Parameters

Time	Color & Appearance	Odor	pH (S.U.)	Cond. (uS/cm)	DO (mg/L)	Temp (C)	ORP (mV)	Turbidity (NTU)	DTW (ft BTOC)	Pumping Rate
10:13	CLEAR	NONE	6.59	1962.3	12.75	18.26	13.9	3.89	39.03	200 mL/min
11:03	CLEAR	NONE	6.50	1947.6	10.21	19.07	18.5	3.27	54.75	200
11:54	CLEAR	NONE	6.52	1940.3	9.16	18.89	15.0	15.2	69.15	200
13:17	CLEAR	NONE	—	—	—	—	—	20.9	90.46	200
14:12	WELL	EVACUATED –	RETURN TO				SAMPLE	2/3	TOP OF PUMP	
2/3/22 10:47	10:52	BEGIN	PURGE						63.0	
10:54	CLEAR	NONE	6.24	1875.9	8.64	19.03	83.6	1.90	68.96	200 mL/min

Stabilization Criteria: pH ≤ 0.1 S.U, Conductivity ≤ 5%, Dissolved Oxygen ≤ 10% or 0.2Mg/L (whichever is greater; for DO < 0.5mg/L, record only, no stabilization criteria), Turbidity ≤5 NTU; Purge volume ≥3L purge water, water level ≤ 0.3 ft; Temp and ORP record only

Sample Description

Sample ID:	PZ-50D	Sample Date/Time:	2.3.22/10:54	Metals Date/Time:	2.3.22/10:54
Duplicate:	—	Dup Date/Time:	—	Final Turbidity NTU:	1.90
Field Blank:	FB-3	Blank Date/Time:	2.3.22/11:10	Turbidity Date/Time:	2.3.22/10:54

# Sample Bottles	Container	Preservative	Analyte(s)
2	250 mL plastic	HNO3	Metals App III/ IV Total + K, Na, Mg
2	250 mL plastic	--	TDS, Cl, F, SO4
2	500 mL plastic	--	Alkalinity (Bicarbonate + Carbonate)
4	1 L plastic	HNO3	Radium 226/228

Signature: [signature]

GOLDER
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PURGING AND SAMPLING FORM

Project #: 160625421	Project Name/Site Name: SCS Plant Branch		Page: 1 of 1
Well ID #: PZ-51 I	Date: 2/2/22	Water Level (ft): 33.17	Time (WL): 1553
Physical Condition of Well: good		Weather: 60° overcast	
Well Diameter (in): 2	Well Depth (ft): 67.0	Water Column (ft): 29.83	Well Volume (gal): 4.85
Start Purge: 1555	End Purge: 1622	Top of Pump (ft): 63.0	
Evacuation Method: Low-Flow		Volume Removed (L): 4.9	
Evacuation Equipment: Bladder		Purging Personnel: Joe Dobs	
SmarTroll serial #: 443255		LaMotte serial #: 1611 060 9149	

Purge Data/Field Parameters

Time	Color & Appearance	Odor	pH (S.U.)	Cond. (uS/cm)	DO (mg/L)	Temp (C)	ORP (mV)	Turbidity (NTU)	DTW (ft BTOC)	Pumping Rate
1617	clear	NO	5.44	1920.1	0.19	14.66	118.7	0.57	33.19	160 mL/min
			Sample		1620					

Stabilization Criteria: pH ± 0.1 S.U, Conductivity ± 5%, Dissolved Oxygen ± 10% or 0.2Mg/L (whichever is greater, for DO < 0.5mg/L, record only, no stabilization criteria), Turbidity ≤5 NTU, Purge volume ≥3L purge water, water level ≤ 0.3 ft, Temp and ORP record only

Sample Description

Sample ID: PZ-51 I
Sample Date/Time: 2/2/22 1620
Metals Date/Time: 2/4/22 1620
Duplicate: —
Dup Date/Time: —
Final Turbidity NTU: 0.57
Field Blank: —
Blank Date/Time: —
Turbidity Date/Time: 2/2/22 1620

# Sample Bottles	Container	Preservative	Analyte(s)
1	250 mL plastic	HNO3	Metals App III/ IV Total + K, Na, Mg
4	250 mL plastic	--	TDS, Cl, F, SO4
1	500 mL plastic	--	Alkalinity (Bicarbonate + Carbonate)
2	1 L plastic	HNO3	Radium 226/228

Signature: [signature]

GOLDER
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PURGING AND SAMPLING FORM

Project #: 166625421	Project Name/Site Name: SCS Plant Branch		Page: 1 of 1
Well ID #: PZ-61I	Date: 3/2/22	Water Level (ft): 49.69	Time (WL): 14:55
Physical Condition of Well: Good		Weather: cloudy, 63°F	
Well Diameter (in): 2	Well Depth (ft): 76.03	Water Column (ft): 26.34	Well Volume (gal): 4.13
Start Purge: 15:07	End Purge: 15:42	Top of Pump (ft): 71	
Evacuation Method: Low-Flow		Volume Removed (L): 7 L	
Evacuation Equipment: Bladder		Purging Personnel: June Wanamaker	
SmarTroll serial #: 861413		LaMotte serial #: Hach 1311060 29655	

Purge Data/Field Parameters

Time	Color & Appearance	Odor	pH (S.U.)	Cond (uS/cm)	DO (mg/L)	Temp (C)	ORP (mV)	Turbidity (NTU)	DTW (ft BTOC)	Pumping Rate
15:42	clear	none	6.24	2439.9	0.11	19.06	4.5	1.93	49.30	200 mL/min
			Sampled @		15:42					

Stabilization Criteria: pH ≤ 0.1 S.U. Conductivity ≤ 5%, Dissolved Oxygen ≤ 10% or 0.2Mg/L (whichever is greater; for DO < 0.5mg/L record only, no stabilization criteria), Turbidity ≤5 NTU; Purge volume ≤3L purge water, water level ≤ 0.3 ft; Temp and ORP record only

Sample Description

Sample ID: PZ-61I   Sample Date/Time: 3.2.22/15:42   Metals Date/Time: 3.2.22/15:42

Duplicate: —   Dup Date/Time: —   Final Turbidity NTU: 1.93

Field Blank: EB-2   Blank Date/Time: 3.2.22/16:18   Turbidity Date/Time: 3.2.22/15:42

# Sample Bottles	Container	Preservative	Analyte(s)
2	250 mL plastic	HNO3	Metals App III/ IV Total + K, Na, Mg
2	250 mL plastic	--	~~TDS~~, Cl, F, SO4
2	500 mL plastic	--	Alkalinity (Bicarbonate + Carbonate)
4	1 L plastic	HNO3	Radium 226/228
2	500 mL	—	TDS

Signature: [signature]

GOLDER
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PURGING AND SAMPLING FORM

Project #: 166625421	Project Name/Site Name: SCS Plant Branch		Page: 1 of 1
Well ID #: P2-60I	Date: 02/03/21	Water Level (ft): 37.83	Time (WL): 10:03
Physical Condition of Well: GOOD		Weather: CLOUDY	
Well Diameter (in): 2	Well Depth (ft): 60.83	Water Column (ft): 23.10	Well Volume (gal): 3.75
Start Purge: 10:09	End Purge: 10:43	Top of Pump (ft): 55.00	
Evacuation Method: Low-Flow		Volume Removed (L): 6.5	
Evacuation Equipment: BLADDER MP-50 PUMP		Purging Personnel: DUANE FULTON	
SmarTroll serial #: 850751		LaMotte serial #: 1108000116-76	

HACH

Purge Data/Field Parameters

Time	Color & Appearance	Odor	pH (S.U.)	Cond. (uS/cm)	DO (mg/L)	Temp (C)	ORP (mV)	Turbidity (NTU)	DTW (ft BTOC)	Pumping Rate
10:43	CLEAR	NONE	4.73	3,068.0	0.13	19.98	328.3	2.76	37.95	225.1 mL/min
		SAMPLE 10:45								

Stabilization Criteria: pH ≤ 0.1 S.U, Conductivity ≤ 5%, Dissolved Oxygen ≤ 10% or 0.2Mg/L (whichever is greater; for DO < 0.5mg/L, record only, no stabilization criteria), Turbidity ≤5 NTU; Purge volume ≤3L purge water, water level ≤ 0.3 ft; Temp and ORP record only

Sample Description

Sample ID: P2-60I — Sample Date/Time: 02/03/22 - 10:45 — Metals Date/Time: 02/03/22 - 10:45

Duplicate: — — Dup Date/Time: — — Final Turbidity NTU: 0.97

Field Blank: — — Blank Date/Time: — — Turbidity Date/Time: 02/03/22 11:00

# Sample Bottles	Container	Preservative	Analyte(s)
1	250 mL plastic	HNO3	Metals App III/ IV Total + K, Na, Mg
1	250 mL plastic	--	TDS, Cl, F, SO4
1	500 mL plastic	--	Alkalinity (Bicarbonate + Carbonate)
2	1 L plastic	HNO3	Radium 226/228
1	250 mL PLASTIC	HNO3	HARDNESS
1	250 mL PLASTIC	—	FERROUS IRON
3	40mL VIALS	HCL	DOC

FINAL FILTER TURB. 0.83 NTU

Signature: Duane Fulton

1	125 mL PLASTIC	NAOH + ZINC	SULFIDE
1	125 mL PLASTIC	H_2SO_4	$NO_2 + NO_3$

GOLDER
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PURGING AND SAMPLING FORM

Project #: 166825421	Project Name/Site Name: SCS Plant Branch		Page: 1 of 1
Well ID #: PZ-62I	Date: 2/4/21	Water Level (ft): 31.75	Time (WL): 0934
Physical Condition of Well: good		Weather: 60° rainy	
Well Diameter (in): 2	Well Depth (ft): 70	Water Column (ft): 31.35	Well Volume (gal): 5.09
Start Purge: 0939	End Purge: 1005	Top of Pump (ft): 45	
Evacuation Method: Low Flow		Volume Removed (L): 5.4	
Evacuation Equipment: Bladder		Purging Personnel: JM BM	
SmarTroll serial #: 843 285		LaMotte serial #: 191 208 71494	

Purge Data/Field Parameters

Time	Color & Appearance	Odor	pH (S.U.)	Cond. (uS/cm)	DO (mg/L)	Temp (C)	ORP (mV)	Turbidity (NTU)	DTW (ft BTOC)	Pumping Rate
1001	clear	None	5.79	1091.1	0.16	19.44	60.2	4.16	87.60	170 mL/min
				Sample	@	1010				

Stabilization Criteria: pH ± 0.1 S.U, Conductivity ± 5%, Dissolved Oxygen ± 10% or 0.2Mg/L (whichever is greater; for DO < 0.5mg/L, record only, no stabilization criteria), Turbidity ≤5 NTU; Purge volume ≥3L purge water, water level ± 0.3 ft; Temp and ORP record only

Sample Description

Sample ID: PZ-62I
Sample Date/Time: 2/4/21 1010
Metals Date/Time: 2/4/21 1010
Duplicate: —
Dup Date/Time: —
Final Turbidity NTU: 4.16
Field Blank: —
Blank Date/Time: —
Turbidity Date/Time: 2/4/21 1010

# Sample Bottles	Container	Preservative	Analyte(s)
1	250 mL plastic	HNO3	Metals App III/IV Total + K, Na, Mg
1+1	250 mL plastic	--	TDS, Cl, F, SO4
1	500 mL plastic	--	Alkalinity (Bicarbonate + Carbonate)
2	1 L plastic	HNO3	Radium 226/228

Signature: JM BM

GOLDER
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PURGING AND SAMPLING FORM

Project #: 166625421	Project Name/Site Name: SCS Plant Branch		Page: 1 of 1
Well ID #: PZ-63I	Date: 02/04/22	Water Level (ft): 35.92	Time (WL): 09:41
Physical Condition of Well: Good		Weather: RAIN / 65°	
Well Diameter (in): 2	Well Depth (ft): 70.00	Water Column (ft): 66.08	Well Volume (gal): 10.77
Start Purge: 09:45	End Purge: 10:15	Top of Pump (ft): 65.00	
Evacuation Method: Low-Flow		Volume Removed (L): 7.5	
Evacuation Equipment: BLADDER MP-50 PUMP		Purging Personnel: DUANE FULTON	
SmarTroll serial #: 850751		LaMotte serial #: 1105DC.DC9431 HACH	

Purge Data/Field Parameters

Time	Color & Appearance	Odor	pH (S.U.)	Cond. (uS/cm)	DO (mg/L)	Temp (C)	ORP (mV)	Turbidity (NTU)	DTW (ft BTOC)	Pumping Rate
10:15	CLEAR	ODOR	5.89	596.87	0.14	19.21	22	0.93	39.68	250 ML/MIN
				SAMPLE		10:15				

Stabilization Criteria: pH ± 0.1 S.U, Conductivity ± 5%, Dissolved Oxygen ± 10% or 0.2Mg/L (whichever is greater, for DO < 0.5mg/L, record only, no stabilization criteria), Turbidity ≤5 NTU, Purge volume ≥3L purge water, water level ≤ 0.3 ft, Temp and ORP record only

Sample Description

Sample ID: PZ-63I Sample Date/Time: 02/04/22 - 10:15 Metals Date/Time: 02/04/22 - 10:15

Duplicate: — Dup Date/Time: — Final Turbidity NTU: 0.87

Field Blank: — Blank Date/Time: — Turbidity Date/Time: 02/04/22 - 10:30

# Sample Bottles	Container	Preservative	Analyte(s)
1	250 mL plastic	HNO3	Metals App III/ IV Total + K, Na, Mg
1	250 mL plastic	--	TDS, Cl, F, SO4
1	500 mL plastic	--	Alkalinity (Bicarbonate + Carbonate)
2	1 L plastic	HNO3	Radium 226/228

Signature: Duane Fulton

GOLDER
MEMBER OF WSP

PURGING AND SAMPLING FORM

Project #: 166625421	Project Name/Site Name: SCS Plant Branch		Page: 1 of 1
Well ID #: BRGWA-25I	Date: 2/2/22	Water Level (ft): 9.29	Time (WL): 1414
Physical Condition of Well: good		Weather: 55° overcast	
Well Diameter (in): 2	Well Depth (ft): 24.41	Water Column (ft): 14.86	Well Volume (gal): 2.42
Start Purge: 1416	End Purge: 1443	Top of Pump (ft): 20.41	
Evacuation Method: Low-Flow		Volume Removed (L): 5.9 L	
Evacuation Equipment: QED Dedicated		Purging Personnel: Joe Booth	
SmarTroll serial #: 843285		LaMotte serial #: 1811060792 494	

Purge Data/Field Parameters

Time	Color & Appearance	Odor	pH (S.U.)	Cond (uS/cm)	DO (mg/L)	Temp (C)	ORP (mV)	Turbidity (NTU)	DTW (ft BTOC)	Pumping Rate
1442	Clear	None	6.23	490.66	0.26	17.51	52.6	2.74	9.36	160 mL/min
				Sampled	@	1444				

Stabilization Criteria: pH ± 0.1 S.U, Conductivity ± 5%, Dissolved Oxygen ± 10% or 0.2Mg/L (whichever is greater; for DO < 0.5mg/L, record only, no stabilization criteria), Turbidity ≤5 NTU; Purge volume ≥3L purge water, water level ≤ 0.3 ft; Temp and ORP record only

Sample Description

Sample ID: BRGWA-25I
Sample Date/Time: 2/2/22 1444
Metals Date/Time: 2/2/22 1444
Duplicate: —
Dup Date/Time: —
Final Turbidity NTU: 2.74
Field Blank: —
Blank Date/Time: —
Turbidity Date/Time: 2/2/22 1444

# Sample Bottles	Container	Preservative	Analyte(s)
1	250 mL plastic	HNO3	Metals App III/ IV Total + K, Na, Mg
1+1	250 mL plastic	--	TDS, Cl, F, SO4
1	500 mL plastic	--	Alkalinity (Bicarbonate + Carbonate)
2	1 L plastic	HNO3	Radium 226/228

Signature: [signature]

GOLDER
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PURGING AND SAMPLING FORM

Project #: 166625421	Project Name/Site Name: SCS Plant Branch		Page: 1 of 1
Well ID #: BRGWC-27I	Date: 02/04/22	Water Level (ft): 9.28	Time (Wl.): 08:17
Physical Condition of Well: GOOD		Weather: RAIN / 63°	
Well Diameter (in): 2	Well Depth (ft): 33.41	Water Column (ft): 24.13	Well Volume (gal): 393
Start Purge: 08:24	End Purge: 08:45	Top of Pump (ft): 28.41	
Evacuation Method: Low-Flow		Volume Removed (L): 5.0	
Evacuation Equipment: DEDICATED PUMP		Purging Personnel: DUANE SUTTON	
SmarTroll serial #: 85071-51		LaMotte serial #: 11050C00943	
		HACH	

Purge Data/Field Parameters

Time	Color & Appearance	Odor	pH (S.U.)	Cond. (uS/cm)	DO (mg/L)	Temp (C)	ORP (mV)	Turbidity (NTU)	DTW (ft BTOC)	Pumping Rate
08:45	CLEAR,	NONE	5.97	490.87	0.75	18.30	171.9	0.44	8.35	200 mL/min
				2 SAMPLE		08:50				

Stabilization Criteria: pH ± 0.1 S.U, Conductivity ± 5%, Dissolved Oxygen ± 10% or 0.2Mg/L (whichever is greater, for DO < 0.5mg/L, record only, no stabilization criteria), Turbidity ±5 NTU, Purge volume ±3L purge water, water level ± 0.3 ft, Temp and ORP record only

Sample Description

Sample ID: BRGWC-27I
Sample Date/Time: 02/04/22 - 08:50
Metals Date/Time: 02/04/22 - 08:50
Duplicate: —
Dup Date/Time: —
Final Turbidity NTU: 0.41
Field Blank: —
Blank Date/Time: —
Turbidity Date/Time: 02/04/22 - 09:1

# Sample Bottles	Container	Preservative	Analyte(s)
1	250 mL plastic	HNO3	Metals App III/ IV Total + K, Na, Mg
1	250 mL plastic	--	TDS, Cl, F, SO4
1	500 mL plastic	--	Alkalinity (Bicarbonate + Carbonate)
2	1 L plastic	HNO3	Radium 226/228

Signature: Duane Sutton

GOLDER
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PURGING AND SAMPLING FORM

Project #: 166625421	Project Name/Site Name: SCS Plant Branch		Page: 1 of 1
Well ID #: BRGWC-29I	Date: 02/03/22	Water Level (ft): 10.10	Time (WL): 16:21
Physical Condition of Well:		Weather: CLOUDY	
Well Diameter (in): 2	Well Depth (ft): 23.63	Water Column (ft): 13.53	Well Volume (gal): 2.20
Start Purge: 16:30	End Purge: 16:57	Top of Pump (ft): 18.63	
Evacuation Method: Low-Flow		Volume Removed (L): 7.5	
Evacuation Equipment: DEDICATED BLADDER		Purging Personnel: DYLAN FULTON	
SmarTroll serial #: 550751		~~LaMotte~~ HACH serial #: 110300011670	

Purge Data/Field Parameters

Time	Color & Appearance	Odor	pH (S.U.)	Cond. (uS/cm)	DO (mg/L)	Temp (C)	ORP (mV)	Turbidity (NTU)	DTW (ft BTOC)	Pumping Rate
16:57	CLEAR	NONE	4.23	650.75	0.46	19.37	325.4	0.51	10.20	300 mL/min
			SAMPLE 17:00							

Stabilization Criteria: pH ≤ 0.1 S.U, Conductivity ≤ 5%, Dissolved Oxygen ≤ 10% or 0.2Mg/L (whichever is greater; for DO < 0.5mg/L, record only, no stabilization criteria), Turbidity ≤5 NTU; Purge volume ≥3L purge water, water level ≤ 0.3 ft; Temp and ORP record only

Sample Description

Sample ID: BRGWC-29I Sample Date/Time: 02/03/22 - 17:00 Metals Date/Time: 02/03/22 - 17:00

Duplicate: DUP-3 Dup Date/Time: 02/03/22 Final Turbidity NTU: 0.51

Field Blank: — Blank Date/Time: ______ Turbidity Date/Time: 02/03/22 - 17:30

# Sample Bottles	Container	Preservative	Analyte(s)
2	250 mL plastic	HNO3	Metals App III/ IV Total + K, Na, Mg
2	250 mL plastic	--	TDS, Cl, F, SO4
2	500 mL plastic	--	Alkalinity (Bicarbonate + Carbonate)
4	1 L plastic	HNO3	Radium 226/228

Signature: [signature]

GOLDER
MEMBER OF WSP

PURGING AND SAMPLING FORM

Project #: 166025421	Project Name/Site Name: SCS Plant Branch		Page: 1 of 1
Well ID #: BRGWC-30I	Date: 02-02-22	Water Level (ft): 4.55	Time (WL): 10:04
Physical Condition of Well: Good		Weather: Cloudy, 50°	
Well Diameter (in): 2	Well Depth (ft): 22.35	Water Column (ft): 17.80	Well Volume (gal): 2.90
Start Purge: 10:16	End Purge: 12:24	Top of Pump (ft): 18.00	
Evacuation Method: Low-Flow		Volume Removed (L): 39	
Evacuation Equipment: Dedicated Pump MP-50		Purging Personnel: Dubak Faton	
SmarTroll serial #: 850751		LaMotte serial #: 1108000011670	

Purge Data/Field Parameters

Time	Color & Appearance	Odor	pH (S.U.)	Cond. (uS/cm)	DO (mg/L)	Temp (C)	ORP (mV)	Turbidity (NTU)	DTW (ft BTOC)	Pumping Rate
12:24	Clear	None	6.34	1,498.8	0.39	17.64	78.3	4.87	4.82	300 mL/min

Sample 12:30

Stabilization Criteria: pH ± 0.1 S.U, Conductivity ± 5%, Dissolved Oxygen ± 10% or 0.2Mg/L (whichever is greater; for DO < 0.5mg/L record only, no stabilization criteria), Turbidity ≤5 NTU; Purge volume ≥3L purge water, water level ≤ 0.3 ft; Temp and ORP record only

Sample Description

Sample ID: BRGWC-30I — Sample Date/Time: 02/02/22-12:30 — Metals Date/Time: 02/02/22-12:30

Duplicate: DUP-2 — Dup Date/Time: 02/02/22 — Final Turbidity NTU: 4.79

Field Blank: — — Blank Date/Time: — — Turbidity Date/Time: 02/02/22-12:54

# Sample Bottles	Container	Preservative	Analyte(s)
2	250 mL plastic	HNO3	Metals App III/ IV Total + K, Na, Mg
1	250 mL plastic	--	TDS, Cl, F, SO4
2	500 mL plastic	--	Alkalinity (Bicarbonate + Carbonate)
4	1 L plastic	HNO3	Radium 226/228

Signature: [signature]

GOLDER
MEMBER OF WSP

PURGING AND SAMPLING FORM

Project #: 16662421	Project Name/Site Name: SCS Plant Branch		Page: 1 of 1
Well ID #: BRGWC-32S	Date: 02/02/22	Water Level (ft): 39.11	Time (WL): 13:09
Physical Condition of Well: Good		Weather: Cloudy	
Well Diameter (in): 2	Well Depth (ft): 48.00	Water Column (ft): 8.89	Well Volume (gal): 1.45
Start Purge: 13:28	End Purge: 14:52	Top of Pump (ft): 43	
Evacuation Method: Low-Flow		Volume Removed (L): 21.5	
Evacuation Equipment: Geocontrol Pump MP-50		Purging Personnel: Devan Fulton	
SmarTroll serial #: 850751		LaMotte serial #: 11080001670	

Purge Data/Field Parameters

Time	Color & Appearance	Odor	pH (S.U.)	Cond (uS/cm)	DO (mg/L)	Temp (C)	ORP (mV)	Turbidity (NTU)	DTW (ft BTOC)	Pumping Rate
14:52	Clear	None	5.99	624.75	3.45	18.30	106.1	2.30	39.55	350 mL/min
		Sample 14:55								

Stabilization Criteria: pH ± 0.1 S.U, Conductivity ± 5%, Dissolved Oxygen ± 10% or 0.2Mg/L (whichever is greater; for DO < 0.5mg/L, record only, no stabilization criteria), Turbidity ≤5 NTU; Purge volume ≥3L purge water, water level ≤ 0.3 ft; Temp and ORP record only

Sample Description

Sample ID: BRGWC-32S   Sample Date/Time: 02/02/22 - 14:55   Metals Date/Time: 02/02/22 - 14:55

Duplicate: —   Dup Date/Time: —   Final Turbidity NTU: 2.16

Field Blank: —   Blank Date/Time: —   Turbidity Date/Time: 02/02/22 15:10

# Sample Bottles	Container	Preservative	Analyte(s)
1	250 mL plastic	HNO3	Metals App III/ IV Total + K, Na, Mg
1	250 mL plastic	--	TDS, Cl, F, SO4
1	500 mL plastic	--	Alkalinity (Bicarbonate + Carbonate)
2	1 L plastic	HNO3	Radium 226/228

Signature: Devan Fulton

PURGING AND SAMPLING FORM

Project #: 166625421	Project Name/Site Name: SCS Plant Branch		Page: 1 of 1
Well ID #: BRGWA-45	Date: 2/2/22	Water Level (ft): 10.86	Time (WL): 1015
Physical Condition of Well:		Weather: 45° Overcast	
Well Diameter (in): 2	Well Depth (ft): 60.45	Water Column (ft): 49.59	Well Volume (gal): 8.08
Start Purge: 1017	End Purge: 1040	Top of Pump (ft): 55	
Evacuation Method: Low-Flow		Volume Removed (L): 4.9	
Evacuation Equipment: QED Dedicated		Purging Personnel: Joe Bo[illegible]	
SmarTroll serial #: 843285		LaMotte serial #: 1911 060 714[illegible]	

Purge Data/Field Parameters

Time	Color & Appearance	Odor	pH (S.U.)	Cond (uS/cm)	DO (mg/L)	Temp (C)	ORP (mV)	Turbidity (NTU)	DTW (ft BTOC)	Pumping Rate
1034	Clear	No	5.92	428.48	0.22	19.43	97.3	2.23	11.21	150 ml/min
			Sampled		@	1042				

Stabilization Criteria: pH ± 0.1 S.U, Conductivity ± 5%, Dissolved Oxygen ± 10% or 0.2Mg/L (whichever is greater; for DO < 0.5mg/L, record only, no stabilization criteria), Turbidity ≤5 NTU; Purge volume ≥3L purge water, water level ≤ 0.3 ft; Temp and ORP record only

Sample Description

Sample ID: BRGWA-45 | Sample Date/Time: 2/2/22 1042 | Metals Date/Time: 2/2/22 1042

Duplicate: ______ | Dup Date/Time: ______ | Final Turbidity NTU: 2.23

Field Blank: ______ | Blank Date/Time: ______ | Turbidity Date/Time: 2/2/22 1042

# Sample Bottles	Container	Preservative	Analyte(s)
1	250 mL plastic	HNO3	Metals App III/ IV Total + K, Na, Mg
1+1	250 mL plastic	--	TDS, Cl, F, SO4
1	500 mL plastic	--	Alkalinity (Bicarbonate + Carbonate)
2	1 L plastic	HNO3	Radium 226/228

Signature: [signature]

GOLDER
MEMBER OF WSP

PURGING AND SAMPLING FORM

Project #: 166625421	Project Name/Site Name: SCS Plant Branch		Page: 1 of 1
Well ID #: BRGWC-47	Date: 2/2/22	Water Level (ft): 26.51	Time (WL): 0855
Physical Condition of Well: good		Weather: 47° overcast	
Well Diameter (in): 2	Well Depth (ft): 92.0	Water Column (ft): 65.49	Well Volume (gal): 10.7
Start Purge: 0900	End Purge: 0924	Top of Pump (ft): 87.0	
Evacuation Method: Low-Flow		Volume Removed (L): 4.7	
Evacuation Equipment: QED Dedicated		Purging Personnel: Joe Bruton	
SmarTroll serial #: 943285		LaMotte serial #: 18110CO71464	

Purge Data/Field Parameters

Time	Color & Appearance	Odor	pH (S.U.)	Cond. (uS/cm)	DO (mg/L)	Temp (C)	ORP (mV)	Turbidity (NTU)	DTW (ft BTOC)	Pumping Rate
926	Clear	No	5.75	2150.8	0.39	17.46	121.2	3.22	27.12	160
			Sampled		@	0940				

Stabilization Criteria: pH ± 0.1 S.U, Conductivity ± 5%, Dissolved Oxygen ± 10% or 0.2Mg/L (whichever is greater; for DO < 0.5mg/L, record only, no stabilization criteria), Turbidity ≤5 NTU; Purge volume ≥3L purge water, water level ≤ 0.3 ft; Temp and ORP record only

Sample Description

Sample ID: BRGWC-47   Sample Date/Time: 2/2/22   Metals Date/Time: 2/2/22

Duplicate: —   Dup Date/Time: —   Final Turbidity NTU:

Field Blank: —   Blank Date/Time: Turbidity Date/Time: 2/2/22

# Sample Bottles	Container	Preservative	Analyte(s)
1	250 mL plastic	HNO3	Metals App III/ IV Total + K, Na, Mg
1+1	250 mL plastic	--	TDS, Cl, F, SO4
1	500 mL plastic	--	Alkalinity (Bicarbonate + Carbonate)
2	1 L plastic	HNO3	Radium 226/228

Signature: [signature]

PURGING AND SAMPLING FORM

Project #: 166025421	Project Name/Site Name: SCS Plant Branch		Page: 1 of 1
Well ID #: BRowE-50	Date: 2/3/22	Water Level (ft): 37.85	Time (WL): 11:34
Physical Condition of Well: Good		Weather: cloudy, 68°F	
Well Diameter (in): 2	Well Depth (ft): 65.0	Water Column (ft): 27.15	Well Volume (gal): 4.43
Start Purge: 11:38	End Purge: 11:48	Top of Pump (ft): 60	
Evacuation Method: Low-Flow		Volume Removed (L): 6 L	
Evacuation Equipment: DEDICATED BLADDER		Purging Personnel: J. VAN HAGEMEIER	
SmarTroll serial #: 351913		LaMotte® serial #: HACH 1311000296 EE	

Purge Data/Field Parameters

Time	Color & Appearance	Odor	pH (S.U.)	Cond. (uS/cm)	DO (mg/L)	Temp (C)	ORP (mV)	Turbidity (NTU)	DTW (ft BTOC)	Pumping Rate
11:48	CLEAR	NONE	5.20	2257	0.22	20.48	116.3	1.01	38.0	300 mL/min
								1.98 FIELD FILTERED		
		SAMPLED @ 11:48								

Stabilization Criteria: pH ± 0.1 S.U. Conductivity ± 5%, Dissolved Oxygen ± 10% or 0.2Mg/L (whichever is greater; for DO < 0.5mg/L, record only, no stabilization criteria), Turbidity ≤5 NTU; Purge volume ≥3L purge water, water level ± 0.3 ft; Temp and ORP record only

Sample Description

Sample ID: BROWE-50 Sample Date/Time: 2.3.22/11:48 Metals Date/Time: 2.3.22/11:48

Duplicate: — Dup Date/Time: — Final Turbidity NTU: 1.01/1.98

Field Blank: — Blank Date/Time: — Turbidity Date/Time: 2.3.22/11:48

# Sample Bottles	Container	Preservative	Analyte(s)
2	250 mL plastic	HNO3	Metals App III/IV Total + K, Na, Mg + Fe
3	250 mL plastic	--	Alkalinity, ~~Br~~, Cl, F, SO4, Nitrate/Nitrite, Hard
1	500 mL plastic	--	~~Alkalinity (Bicarbonate + Carbonate)~~ TDS
2	1 L plastic	HNO3	Radium 226/228
3	40 mL amber	HCl	DOC (Field Filtered)
1	125 mL plastic	H_2SO_4	$NO_2 + NO_3$
1	125 mL plastic	NaOH + Zn Acetate	Sulfide

Signature: _____

GOLDER
MEMBER OF WSP

PURGING AND SAMPLING FORM

Project #: 166625421	Project Name/Site Name: SCS Plant Branch		Page: 1 of 1
Well ID #: BRGWC-52I	Date: 2/2/22	Water Level (ft): 39.29	Time (WL): 1303
Physical Condition of Well: good		Weather: 51° overcast	
Well Diameter (in): 2	Well Depth (ft): 76.60	Water Column (ft): 37.31	Well Volume (gal): 6.08
Start Purge: 1304	End Purge: 1329	Top of Pump (ft): ~71	
Evacuation Method: Low-Flow		Volume Removed (L): 5.2	
Evacuation Equipment: QED Dedicated		Purging Personnel: Joe Bode	
SmarTroll serial #: 843285		LaMotte serial #: 1810C071494	

Purge Data/Field Parameters

Time	Color & Appearance	Odor	pH (S.U.)	Cond (uS/cm)	DO (mg/L)	Temp (C)	ORP (mV)	Turbidity (NTU)	DTW (ft BTOC)	Pumping Rate
1328	clear	NO	6.35	545.07	0.32	19.24	20.1	2.51	39.95	200 mL/min
				sampled	@	1334				

Stabilization Criteria: pH ± 0.1 S.U. Conductivity ± 5%, Dissolved Oxygen ± 10% or 0.2Mg/L (whichever is greater; for DO < 0.5mg/L record only, no stabilization criteria), Turbidity ≤5 NTU; Purge volume ≥3L purge water, water level ≤ 0.3 ft; Temp and ORP record only

Sample Description

Sample ID: BRGWC-52I
Sample Date/Time: 2/2/22
Metals Date/Time: 2/2/22
Duplicate: Extra Radium
Dup Date/Time: 2/2/22
Final Turbidity NTU:
Field Blank:
Blank Date/Time:
Turbidity Date/Time: 2/2/22

# Sample Bottles	Container	Preservative	Analyte(s)
1	250 mL plastic	HNO3	Metals App III/ IV Total + K, Na, Mg
1+1	250 mL plastic	--	TDS, Cl, F, SO4
1	500 mL plastic	--	Alkalinity (Bicarbonate + Carbonate)
4	1 L plastic	HNO3	Radium 226/228

Signature: [signature]

GOLDER
MEMBER OF WSP

PURGING AND SAMPLING FORM

Project #: 166625421	Project Name/Site Name: SCS Plant Branch		Page: 1 of 1
Well ID #: BRGWA-25	Date: 02/01/22	Water Level (ft): 11.05	Time (WL): 14:15
Physical Condition of Well:		Weather: CLEAR, 61°	
Well Diameter (in): 2	Well Depth (ft): 47.39	Water Column (ft): 36.34	Well Volume (gal): 5.92
Start Purge: 14:26	End Purge: 14:53	Top of Pump (ft): 42.39	
Evacuation Method: Low-Flow		Volume Removed (L): 7.5	
Evacuation Equipment: DEDICATED PUMP		Purging Personnel: SVANS FULTON	
SmarTroll serial #: 850751		~~LaMotte~~ serial #: 1108000470 HACH	

Purge Data/Field Parameters

Time	Color & Appearance	Odor	pH (S.U.)	Cond (uS/cm)	DO (mg/L)	Temp (C)	ORP (mV)	Turbidity (NTU)	DTW (ft BTOC)	Pumping Rate
14:53	CLEAR	NONE	5.95	69.07	1.30	17.99	90.4	0.81	11.19	300 mL/min
		SAMPLE 14:55								

Stabilization Criteria: pH ± 0.1 S.U. Conductivity ± 5%, Dissolved Oxygen ± 10% or 0.2Mg/L (whichever is greater; for DO < 0.5mg/L record only, no stabilization criteria), Turbidity ≤5 NTU; Purge volume ≥3L purge water, water level ≤ 0.3 ft; Temp and ORP record only

Sample Description

Sample ID: BRGWA-25   Sample Date/Time: 02/01/22 - 14:55   Metals Date/Time: 02/01/22 - 14:55

Duplicate: —   Dup Date/Time: —   Final Turbidity NTU: 0.79

Field Blank: —   Blank Date/Time: —   Turbidity Date/Time: 02/01/22 - 15:10

# Sample Bottles	Container	Preservative	Analyte(s)
1	250 mL plastic	HNO3	Metals App III/ IV Total + K, Na, Mg
1	250 mL plastic	--	TDS, Cl, F, SO4
1	500 mL plastic	--	Alkalinity (Bicarbonate + Carbonate)
2	1 L plastic	HNO3	Radium 226/228

Signature: [signature]

GOLDER
MEMBER OF WSP

PURGING AND SAMPLING FORM

Project #: 166825421	Project Name/Site Name: SCS Plant Branch		Page: 1 of 1
Well ID #: BRGWA-2I	Date: 02/01/22	Water Level (ft): 10.90	Time (WL): 12:15
Physical Condition of Well: GOOD		Weather: CLEAR, 58°	
Well Diameter (in): 2	Well Depth (ft): 66.96	Water Column (ft): 56.06	Well Volume (gal): 9.14
Start Purge: 12:22	End Purge: 13:13	Top of Pump (ft): 61.96	
Evacuation Method: Low-Flow		Volume Removed (L): 3.975	
Evacuation Equipment: DEDICATED PUMP		Purging Personnel: DUANE FULTON	
SmarTroll serial #: 650751		~~LaMotte~~ HACH serial #: 1108000011670	

Purge Data/Field Parameters

Time	Color & Appearance	Odor	pH (S.U.)	Cond. (uS/cm)	DO (mg/L)	Temp (C)	ORP (mV)	Turbidity (NTU)	DTW (ft BTOC)	Pumping Rate
13:13	CLEAR	NONE	6.83	164.41	0.64	17.33	69.0	2.25	11.85	70 mL/MIN
				SAMPLE 13:15						

Stabilization Criteria: pH ≤ 0.1 S.U, Conductivity ≤ 5%, Dissolved Oxygen ≤ 10% or 0.2Mg/L (whichever is greater; for DO < 0.5mg/L, record only, no stabilization criteria), Turbidity ≤5 NTU; Purge volume ≥3L purge water, water level ≤ 0.3 ft; Temp and ORP record only

Sample Description

Sample ID: BRGWA-2I
Sample Date/Time: 02/01/22-13:15
Metals Date/Time: 02/01/22-13:15
Duplicate: —
Dup Date/Time: —
Final Turbidity NTU: 2.13
Field Blank: —
Blank Date/Time: —
Turbidity Date/Time: 02/01/22-13:50

# Sample Bottles	Container	Preservative	Analyte(s)
1	250 mL plastic	HNO3	Metals App III/ IV Total + K, Na, Mg
1	250 mL plastic	--	TDS, Cl, F, SO4
1	500 mL plastic	--	Alkalinity (Bicarbonate + Carbonate)
2	1 L plastic	HNO3	Radium 226/228

Signature: Duane Fulton

GOLDER
MEMBER OF WSP

PURGING AND SAMPLING FORM

Project #: 166625421	Project Name/Site Name: SCS Plant Branch		Page: 1 of 1
Well ID #: BRGWA-55	Date: 02/01/22	Water Level (ft): 11.19	Time (WL): 08:56
Physical Condition of Well: GOOD		Weather: CLEAR, 34°	
Well Diameter (in): 2	Well Depth (ft): 43.01	Water Column (ft): 31.82	Well Volume (gal): 5.19
Start Purge: 09:07	End Purge: 09:38	Top of Pump (ft): 38.00	
Evacuation Method: Low-Flow		Volume Removed (L): 4.75	
Evacuation Equipment: DEDICATED PUMP		Purging Personnel: DUANE FULTON	
SmarTroll serial #: 850751		~~LaMotte~~ HACH serial #: 11080C011670	

Purge Data/Field Parameters

Time	Color & Appearance	Odor	pH (S.U.)	Cond (uS/cm)	DO (mg/L)	Temp (C)	ORP (mV)	Turbidity (NTU)	DTW (ft BTOC)	Pumping Rate
09:38	CLEAR	NONE	6.39	145.58	2.16	16.51	129.3	3.15	11.21	150 mL/min
			SAMPLE TIME 09:40							

Stabilization Criteria: pH ± 0.1 S.U, Conductivity ± 5%, Dissolved Oxygen ≤ 10% or 0.2Mg/L (whichever is greater; for DO < 0.5mg/L record only, no stabilization criteria), Turbidity ≤5 NTU; Purge volume ≥3L purge water, water level ≤ 0.3 ft; Temp and ORP record only

Sample Description

Sample ID: BRGWA-55　Sample Date/Time: 02/01/22 - 09:40　Metals Date/Time: 02/01/22 - 09:40

Duplicate: —　Dup Date/Time: 　Final Turbidity NTU: 2.97 - 1045

Field Blank: —　Blank Date/Time: —　Turbidity Date/Time: 02/01/22 10:15

# Sample Bottles	Container	Preservative	Analyte(s)
1	250 mL plastic	HNO3	Metals App III/ IV Total + K, Na, Mg
1	250 mL plastic	--	TDS, Cl, F, SO4
1	500 mL plastic	--	Alkalinity (Bicarbonate + Carbonate)
2	1 L plastic	HNO3	Radium 226/228

Signature: [signature]

PURGING AND SAMPLING FORM

Project #: 166625421	Project Name/Site Name: SCS Plant Branch		Page: 1 of 1
Well ID #: BRBWA-5I	Date: 02/01/22	Water Level (ft): 11.87	Time (WL): 10:21
Physical Condition of Well: GOOD		Weather: CLEAR, 31°	
Well Diameter (in): 2	Well Depth (ft): 63.62	Water Column (ft): 52.75	Well Volume (gal): 8.60
Start Purge: 10:25	End Purge: 11:28/13	Top of Pump (ft): 58.40	
Evacuation Method: Low-Flow		Volume Removed (L): 5.95	
Evacuation Equipment: GROUNDFOS PUMP		Purging Personnel: BRIAN FULTON	
SmarTroll serial #: 850751		LaMotte serial #: 11080011070 HACH	

Purge Data/Field Parameters

Time	Color & Appearance	Odor	pH (S.U.)	Cond (uS/cm)	DO (mg/L)	Temp (C)	ORP (mV)	Turbidity (NTU)	DTW (ft BTOC)	Pumping Rate
11:13	CLEAR	NONE	6.58	166.34	5.51	17.73	118.1	0.95	11.19	150 mL/min

Z SAMPLE 11:16

Stabilization Criteria: pH ± 0.1 S.U. Conductivity ± 5%, Dissolved Oxygen ± 10% or 0.2Mg/L (whichever is greater, for DO < 0.5mg/L, record only, no stabilization criteria), Turbidity ≤5 NTU; Purge volume ≥3L purge water, water level ± 0.3 ft; Temp and ORP record only

Sample Description

Sample ID: BRBWA-5I
Sample Date/Time: 02/01/22 - 11:16
Metals Date/Time: 02/01/22 - 11:16
Duplicate: —
Dup Date/Time: —
Final Turbidity NTU: 0.95
Field Blank: —
Blank Date/Time: —
Turbidity Date/Time: 02/01/22 - 11:52

# Sample Bottles	Container	Preservative	Analyte(s)
1	250 mL plastic	HNO3	Metals App III/ IV Total + K, Na, Mg
1	250 mL plastic	--	TDS, Cl, F, SO4
1	500 mL plastic	--	Alkalinity (Bicarbonate + Carbonate)
2	1 L plastic	HNO3	Radium 226/228

Signature: [signature]

GOLDER
MEMBER OF WSP

PURGING AND SAMPLING FORM

Project #: 166625421	Project Name/Site Name: SCS Plant Branch		Page: 1 of 1
Well ID #: BRGWA-6S	Date: 2/1/22	Water Level (ft): 24.30	Time (WL): 9:19
Physical Condition of Well: GOOD		Weather: SUNNY, 42°F	
Well Diameter (in): 2	Well Depth (ft): 52.90	Water Column (ft): 28.6	Well Volume (gal): 4.66
Start Purge: 9:25	End Purge: 9:45	Top of Pump (ft): 47	
Evacuation Method: Low-Flow		Volume Removed (L): 5 L	
Evacuation Equipment: DEDICATED BLADDER		Purging Personnel: JUDE WAGUESPACK	
SmarTroll serial #: 841413		~~LaMotte~~ serial #: HACH 131106029685	

Purge Data/Field Parameters

Time	Color & Appearance	Odor	pH (S.U.)	Cond (uS/cm)	DO (mg/L)	Temp (C)	ORP (mV)	Turbidity (NTU)	DTW (ft BTOC)	Pumping Rate
9:45	CLEAR	NONE	6.54	62.36	6.89	17.69	90.3	2.74	25.17	200 mL/min
			SAMPLED @ 9:45							

Stabilization Criteria: pH ± 0.1 S.U, Conductivity ± 5%, Dissolved Oxygen ± 10% or 0.2Mg/L (whichever is greater; for DO < 0.5mg/L record only, no stabilization criteria), Turbidity ≤5 NTU; Purge volume ≥3L purge water, water level ≤ 0.3 ft; Temp and ORP record only

Sample Description

Sample ID:	BRGWA-6S	Sample Date/Time:	2.1.22/9:45	Metals Date/Time:	2.1.22/9:45
Duplicate:	–	Dup Date/Time:	–	Final Turbidity NTU:	2.74
Field Blank:	–	Blank Date/Time:	–	Turbidity Date/Time:	2.1.22/9:45

# Sample Bottles	Container	Preservative	Analyte(s)
1	250 mL plastic	HNO3	Metals App III/ IV Total + K, Na, Mg, Fe, Mn
1	250 mL plastic	--	~~TDS~~, Cl, F, SO4
1	500 mL plastic	--	Alkalinity (Bicarbonate + Carbonate)
2	1 L plastic	HNO3	Radium 226/228
1	500 mL plastic	–	TDS

Signature: [signature]

GOLDER
MEMBER OF WSP

PURGING AND SAMPLING FORM

WL = 49.54 1/11 @ 12:55

Project #: 166625421	Project Name/Site Name: SCS Plant Branch		Page: ___ of ___
Well ID #: PZ-54	Date: 3/4/22	Water Level (ft): ≈ 46.80	Time (WL): 08:30
Physical Condition of Well: GOOD		Weather: 63 °F SHOWERS	
Well Diameter (in): 2	Well Depth (ft): 52.0	Water Column (ft): ≈ 5.2	Well Volume (gal): 0.85
Start Purge: 8:40	End Purge: 8:55	Top of Pump (ft): 46 (INTAKE ≈ 49)	
Evacuation Method: Low-Flow		Volume Removed (L): ≈ 1 L	
Evacuation Equipment: DEDICATED BLADDER		Purging Personnel: JOE WAGUESPACK	
SmarTroll serial #: 861913		LaMotte serial #: HACH 131100C029655	

PURGING 3 WELL VOL = 3.2 L × 3 = 9.6 L

Purge Data/Field Parameters

Time	Color & Appearance	Odor	pH (S.U.)	Cond (uS/cm)	DO (mg/L)	Temp (C)	ORP (mV)	Turbidity (NTU)	DTW (ft BTOC)	Pumping Rate
8:55	CLEAR	NONE	6.98	635.90	8.53	17.60	139.8	>1000	BTOP	100 ml/min
			WELL DRY; PULL DEDICATED PUMP; NO SAMPLE							
9:05	—	—	—	—	—	—	—	—	50.10	—
11:10	—	—	—	—	—	—	—	—	49.89	—

Stabilization Criteria: pH ≤ 0.1 S.U, Conductivity ≤ 5%, Dissolved Oxygen ≤ 10% or 0.2Mg/L (whichever is greater; for DO < 0.5mg/L record only, no stabilization criteria), Turbidity ≤5 NTU; Purge volume ≥3L purge water, water level ≤ 0.3 ft; Temp and ORP record only

Sample Description

Sample ID: NONE
Sample Date/Time: —
Metals Date/Time: —
Duplicate: —
Dup Date/Time: —
Final Turbidity NTU: >1000
Field Blank: —
Blank Date/Time: —
Turbidity Date/Time: 3.4.22 / 8:55

# Sample Bottles	Container	Preservative	Analyte(s)
	250 mL plastic	HNO3	~~Metals App III/IV Total+K, Na, Mg~~ B, Ca
	250 mL plastic	--	TDS, Cl, F, SO4
	500 mL plastic	--	~~Alkalinity (Bicarbonate + Carbonate)~~ JW
JW	1 L plastic	HNO3	~~Radium 226/228~~ JW

Signature: ____________________

WELL PURGED DRY, NO SAMPLE

GOLDER
MEMBER OF WSP

PURGING AND SAMPLING FORM

Project #: 166625421	Project Name/Site Name: SCS Plant Branch		Page: 1 of 1
Well ID #: BAGWC-17S	Date: 2/1/22	Water Level (ft): 5.94	Time (WL): 14:15
Physical Condition of Well: GOOD		Weather: SUNNY, 63°F	
Well Diameter (in): 2	Well Depth (ft): 9.04	Water Column (ft): 3.1	Well Volume (gal): 0.50
Start Purge: 14:43	End Purge:	Top of Pump (ft): 6.2	
Evacuation Method: Low-Flow		Volume Removed (L): 7.7 L	
Evacuation Equipment: PERISTALTIC		Purging Personnel: JUDE WADDELL	
SmarTroll serial #: 861413		LaMotte serial #: HACH 1311..0239655	

Purge Data/Field Parameters

Time	Color & Appearance	Odor	pH (S.U.)	Cond (uS/cm)	DO (mg/L)	Temp (C)	ORP (mV)	Turbidity (NTU)	DTW (ft BTOC)	Pumping Rate
1453	REMOVED TRANSDUCER - ROOT BALL IN WELL - FLOW RATE 70 → 200 ml/min									
	5680 ml / 200 = 28.4 minutes to evacuate 3 well vol.									
1528	CLEAR	NONE	6.37	498.24	1.79	15.53	90.6	3.2	6.19	200 ml/min
			SAMPLED @ 1528							

Stabilization Criteria: pH ≤ 0.1 S.U, Conductivity ≤ 5%, Dissolved Oxygen ≤ 10% or 0.2Mg/L (whichever is greater; for DO < 0.5mg/L, record only, no stabilization criteria), Turbidity ≤5 NTU, Purge volume ≥3L purge water, water level ≤ 0.3 ft, Temp and ORP record only

Sample Description

Sample ID: BAGWC-17S Sample Date/Time: 2.1.22/1528 Metals Date/Time: 2.1.22/1528

Duplicate: — Dup Date/Time: — Final Turbidity NTU: 3.2

Field Blank: EB-1 Blank Date/Time: 2.1.22/1615 Turbidity Date/Time: 2.1.22/1528

# Sample Bottles	Container	Preservative	Analyte(s)
2	250 mL plastic	HNO3	Metals App III/ IV Total + K, Na, Mg
2	250 mL plastic	--	TDS, Cl, F, SO4
2	500 mL plastic	--	Alkalinity (Bicarbonate + Carbonate)
4	1 L plastic	HNO3	Radium 226/228

Signature: [signature]

3 well volume = 0.5 × 3 = 1.5 gal = 5.68 L

GOLDER
MEMBER OF WSP

PURGING AND SAMPLING FORM

Project #: 166625421	Project Name/Site Name: SCS Plant Branch		Page: 1 of 1
Well ID #: BRGWC-33S	Date: 2/1/22	Water Level (ft): 8.94	Time (WL): 10:38
Physical Condition of Well: GOOD		Weather: SUNNY, 45°F	
Well Diameter (in): 2	Well Depth (ft): 31.66	Water Column (ft): 22.72	Well Volume (gal): 3.70
Start Purge: 10:42	End Purge: 11:02	Top of Pump (ft): 26	
Evacuation Method: Low-Flow		Volume Removed (L): 5 L	
Evacuation Equipment: DEDICATED BLADDER		Purging Personnel: JUNE WAGNER	
SmarTroll serial #: 851413		LaMotte Serial #: [illegible] 1311OC029655	

Purge Data/Field Parameters

Time	Color & Appearance	Odor	pH (S.U.)	Cond (uS/cm)	DO (mg/L)	Temp (C)	ORP (mV)	Turbidity (NTU)	DTW (ft BTOC)	Pumping Rate
11:02	CLEAR	NONE	4.82	333.94	0.07	19.09	190.6	0.96	9.00	250 mL/min
				SAMPLED	@	11:02				

Stabilization Criteria: pH ≤ 0.1 S.U, Conductivity ≤ 5%, Dissolved Oxygen ≤ 10% or 0.2Mg/L (whichever is greater; for DO < 0.5mg/L, record only, no stabilization criteria), Turbidity ≤5 NTU; Purge volume ≤3L purge water, water level ≤ 0.3 ft; Temp and ORP record only

Sample Description

Sample ID: BRGWC-33S   Sample Date/Time: 2.1.22/11:02   Metals Date/Time: 2.1.22/11:02

Duplicate: —   Dup Date/Time: —   Final Turbidity NTU: 0.96

Field Blank: FB-1   Blank Date/Time: 2.1.22/11:30   Turbidity Date/Time: 2.1.22/11:02

# Sample Bottles	Container	Preservative	Analyte(s)
2	250 mL plastic	HNO3	Metals App III/ IV Total + K, Na, Mg
2	250 mL plastic	--	~~TDS~~, Cl, F, SO4
2	~~500~~ 250 mL plastic	--	Alkalinity (Bicarbonate + Carbonate)
4	1 L plastic	HNO3	Radium 226/228
2	500 mL plastic	–	TDS

Signature: [signature]

GOLDER
MEMBER OF WSP

PURGING AND SAMPLING FORM

Project #: 166625421	Project Name/Site Name: SCS Plant Branch		Page: 1 of 1
Well ID #: BRGWC-34S	Date: ~~[illegible]~~ BS 02/01/22	Water Level (ft): 2.63	Time (WL): 1215
Physical Condition of Well: good		Weather: 60°F sunny	
Well Diameter (in): 2	Well Depth (ft): 52.64	Water Column (ft): 50.01	Well Volume (gal): 8.15
Start Purge: 1225	End Purge: 1250	Top of Pump (ft): 48	
Evacuation Method: Low-Flow Dedicated		Volume Removed (L): 10	
Evacuation Equipment: Dedicated		Purging Personnel: [signature]	
SmarTroll serial #: 850767		~~LaMotte~~ Hach serial #: 172050C 017749	

Purge Data/Field Parameters

Time	Color & Appearance	Odor	pH (S.U.)	Cond (uS/cm)	DO (mg/L)	Temp (C)	ORP (mV)	Turbidity (NTU)	DTW (ft BTOC)	Pumping Rate
1250	clear	none	5.87	614.12	0.15	19.05	74.5	0.67	2.63	350

BS

Stabilization Criteria: pH ≤ 0.1 S.U, Conductivity ≤ 5%, Dissolved Oxygen ≤ 10% or 0.2Mg/L (whichever is greater; for DO < 0.5mg/L, record only, no stabilization criteria), Turbidity ≤5 NTU, Purge volume ≥3L purge water, water level ≤ 0.3 ft, Temp and ORP record only

Sample Description

Sample ID: BRGWC-34S — Sample Date/Time: 2-1-22 / 1300 — Metals Date/Time: ______

Duplicate: Dup-1 — Dup Date/Time: 2-1-22 / — — Final Turbidity NTU: 0.67

Field Blank: — — Blank Date/Time: — — Turbidity Date/Time: 2-1-22 1250

# Sample Bottles	Container	Preservative	Analyte(s)
1	250 mL plastic	HNO3	Metals App III/ IV Total + K, Na, Mg
2	250 mL plastic	--	TDS, Cl, F, SO4
1	500 mL plastic	--	Alkalinity (Bicarbonate + Carbonate)
2	1 L plastic	HNO3	Radium 226/228

Signature: [signature]

PURGING AND SAMPLING FORM

Project #: 166525421	Project Name/Site Name: SCS Plant Branch		Page: 1 of 1
Well ID #: BRGWC-35S	Date: 2-1-22	Water Level (ft): 1.88	Time (WL): 1332
Physical Condition of Well: Good		Weather: Sunny 65°F	
Well Diameter (in): 2	Well Depth (ft): 35.34	Water Column (ft): 33.46	Well Volume (gal): 5.45
Start Purge: 1338	End Purge: 1410	Top of Pump (ft): 30.34	
Evacuation Method: Low-Flow		Volume Removed (L): 7	
Evacuation Equipment: Peristaltic		Purging Personnel:	
SmarTroll serial #: 850767		LaMotte serial #: 1205UC P17749	

Hanna

Purge Data/Field Parameters

Time	Color & Appearance	Odor	pH (S.U.)	Cond (uS/cm)	DO (mg/L)	Temp (C)	ORP (mV)	Turbidity (NTU)	DTW (ft BTOC)	Pumping Rate
1410	Clear	None	6.09	607.96	0.21	18.11	70.8	0.87	1.89	250

BS

Stabilization Criteria: pH ± 0.1 S.U, Conductivity ± 5%, Dissolved Oxygen ± 10% or 0.2Mg/L (whichever is greater, for DO < 0.5mg/L, record only, no stabilization criteria), Turbidity ≤5 NTU; Purge volume ≥3L purge water, water level ≤ 0.3 ft; Temp and ORP record only

Sample Description

Sample ID: BRGWC-35S — Sample Date/Time: 2-1-22/1415 — Metals Date/Time: —

Duplicate: — Dup Date/Time: — Final Turbidity NTU: 0.87

Field Blank: — Blank Date/Time: — Turbidity Date/Time: 2-1-22/1410

# Sample Bottles	Container	Preservative	Analyte(s)
1	250 mL plastic	HNO3	Metals App III/ IV Total + K, Na, Mg
2	250 mL plastic	--	TDS, Cl, F, SO4
1	500 mL plastic	--	Alkalinity (Bicarbonate + Carbonate)
2	1 L plastic	HNO3	Radium 226/228

Signature:

GOLDER
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PURGING AND SAMPLING FORM

Project #: 18825421	Project Name/Site Name: SCS Plant Branch		Page: 1 of 1
Well ID #: BRGWC-36S	Date: 2/1/23	Water Level (ft): 3.73	Time (WL): 12:56
Physical Condition of Well: Good		Weather: Sunny, 57°F	
Well Diameter (in): 2	Well Depth (ft): 34.02	Water Column (ft): 30.29	Well Volume (gal): 4.94
Start Purge: 13:03	End Purge: 13:23	Top of Pump (ft): 29	
Evacuation Method: Low-Flow		Volume Removed (L): 5 L	
Evacuation Equipment: Peristaltic		Purging Personnel: June Wagenstar	
SmarTroll serial #: 851413		LaMotte serial #: Hach 131106023655	

Purge Data/Field Parameters

Time	Color & Appearance	Odor	pH (S.U.)	Cond (uS/cm)	DO (mg/L)	Temp (C)	ORP (mV)	Turbidity (NTU)	DTW (ft BTOC)	Pumping Rate
13:23	clear	none	5.65	696.42	2.47	14.74	131.8	1.42	3.80	250 ml/min
				Sampled	@	13:23				

Stabilization Criteria: pH ± 0.1 S.U, Conductivity ± 5%, Dissolved Oxygen ± 10% or 0.2Mg/L (whichever is greater; for DO < 0.5mg/L, record only, no stabilization criteria), Turbidity ≤5 NTU; Purge volume ≥3L purge water, water level ≤ 0.3 ft; Temp and ORP record only

Sample Description

Sample ID: BRGWC-36S   Sample Date/Time: 2.1.23/13:23   Metals Date/Time: 2.1.23/13:23

Duplicate: —   Dup Date/Time: —   Final Turbidity NTU: 1.42

Field Blank: —   Blank Date/Time: —   Turbidity Date/Time: 2.1.23/13:23

# Sample Bottles	Container	Preservative	Analyte(s)
1	250 mL plastic	HNO3	Metals App III/ IV Total + K, Na, Mg
1	250 mL plastic	--	TDS, Cl, F, SO4
1	250 mL plastic	--	Alkalinity (Bicarbonate + Carbonate)
2	1 L plastic	HNO3	Radium 226/228
1	500 ml plastic	—	TDS

Signature: [signature]

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PURGING AND SAMPLING FORM

Project #: 166625421	Project Name/Site Name: SCS Plant Branch		Page: 1 of 1
Well ID #: BRGWC-37S	Date: 02-02-22	Water Level (ft): 52.10	Time (WL): 08:31
Physical Condition of Well: GOOD		Weather: CLOUDY, 44°	
Well Diameter (in): 2	Well Depth (ft): 68.73	Water Column (ft): 16.63	Well Volume (gal): 2.71
Start Purge: 08:42	End Purge: 09:17	Top of Pump (ft): 63.73	
Evacuation Method: Low-Flow		Volume Removed (L): 4.125	
Evacuation Equipment: BLADDER PUMP		Purging Personnel: DUANE FULTON	
SmarTroll serial #: 850751		~~LaMotte~~ HACH serial #: 1180001630	

Purge Data/Field Parameters

Time	Color & Appearance	Odor	pH (S.U.)	Cond (uS/cm)	DO (mg/L)	Temp (C)	ORP (mV)	Turbidity (NTU)	DTW (ft BTOC)	Pumping Rate
09:17	CLEAR	NONE	5.80	55.39	7.99	16.87	142	0.37	52.58	125 ml/min
	SAMPLE 09:20									

Stabilization Criteria: pH ≤ 0.1 S.U, Conductivity ≤ 5%, Dissolved Oxygen ≤ 10% or 0.2Mg/L (whichever is greater, for DO < 0.5mg/L, record only, no stabilization criteria), Turbidity ≤5 NTU; Purge volume ≥3L purge water, water level ≤ 0.3 ft, Temp and ORP record only

Sample Description

Sample ID: BRGWC-37S Sample Date/Time: 02/02/22-09:20 Metals Date/Time: 02/02/22-09:20

Duplicate: — Dup Date/Time: — Final Turbidity NTU: 0.37

Field Blank: — Blank Date/Time: — Turbidity Date/Time: 02/02/22-09:34

# Sample Bottles	Container	Preservative	Analyte(s)
1	250 mL plastic	HNO3	Metals App III/ IV Total + K, Na, Mg
1	250 mL plastic	--	TDS, Cl, F, SO4
1	500 mL plastic	--	Alkalinity (Bicarbonate + Carbonate)
2	1 L plastic	HNO3	Radium 226/228

Signature: Duane Fulton

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PURGING AND SAMPLING FORM

Project #: 166625421	Project Name/Site Name: SCS Plant Branch		Page: 1 of 1
Well ID #: BRGWC-38S	Date: 2/1/22	Water Level (ft): 21.05	Time (WL): 1430
Physical Condition of Well: good		Weather: 40 clear	
Well Diameter (in): 2	Well Depth (ft): 43.66	Water Column (ft): 22.61	Well Volume (gal): 3.62
Start Purge: 1437	End Purge: 1507	Top of Pump (ft): 38.66	
Evacuation Method: Low-Flow		Volume Removed (L): 6.32 L	
Evacuation Equipment: dedicated		Purging Personnel: Joe Bxxxx	
SmarTroll serial #: 843285		LaMotte serial #: 1811-060-7144	

Purge Data/Field Parameters

Time	Color & Appearance	Odor	pH (S.U.)	Cond (uS/cm)	DO (mg/L)	Temp (C)	ORP (mV)	Turbidity (NTU)	DTW (ft BTOC)	Pumping Rate
1507	clear	No	4.06	804.80	1.17	18.37	141.5	1.72	21.71	160 mL/min
				Sampled	@	1515				

Stabilization Criteria: pH ≤ 0.1 S.U, Conductivity ≤ 5%, Dissolved Oxygen ≤ 10% or 0.2Mg/L (whichever is greater; for DO < 0.5mg/L record only, no stabilization criteria), Turbidity ≤5 NTU; Purge volume ≥3L purge water, water level ≤ 0.3 ft; Temp and ORP record only

Sample Description

Sample ID: BRGWC-38S
Duplicate: Extra Radium
Field Blank: —

Sample Date/Time: 2/1/22 1515
Dup Date/Time: 2/1/22 1515
Blank Date/Time: —

Metals Date/Time: 2/1/22 1515
Final Turbidity NTU: 1.72
Turbidity Date/Time: 2/1/22 1515

# Sample Bottles	Container	Preservative	Analyte(s)
1	250 mL plastic	HNO3	Metals App III/ IV Total + K, Na, Mg
1+1	250 mL plastic	--	TDS, Cl, F, SO4
1	500 mL plastic	--	Alkalinity (Bicarbonate + Carbonate)
2	1 L plastic	HNO3	Radium 226/228

Signature: [signature]

GOLDER
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Plant Branch Surface Water Samples 02/03/2022

Sample ID	Total Depth (ft)	Sample Depth (ft)	Time	Temp(F)	pH	OPR (mV)	DO (mg/L)	Turbidity (NTU)	Conductance – (mS/cm)	Coordinates
LR-1 (surface)	26.3	surface	1047	8.90	6.56	83.4	11.14	24.8	0.05	33.178603, -83.317692
LR-1 (mid)		13.0	1052	8.92	6.59	81.1	11.12	24.5	0.05	
LR-1 (bottom)		25.0	1058	8.93	6.86	76.8	11.54	24.3	0.05	
LR+8A (surface)	2.2	1.0	1129	9.45	6.59	94.1	11.21	19.6	0.053	33.188793, -83.298479
LR+9A (surface)	9.8	4.5	1138	9.60	6.73	85.9	11.89	16.5	0.054	33.190136, -83.297139
LR+8 (surface)	18.9	surface	1118	8.99	9.59	109.7	11.00	17.5	0.051	33.187322, -83.296928
LR+8 (mid)		9.0	1121	9.37	6.67	99.8	11.13	18.8	0.052	
LR+8 (bottom)		17.0	1124	9.21	6.59	99.1	11.19	17.6	0.051	
LR+9 (surface)	34.5	surface	1108	9.30	6.60	91.2	11.57	12.5	0.052	33.189500, -83.295199
LR+9 (mid)		17.0	1110	9.38	6.60	91.7	11.43	12.4	0.051	
LR+9 (bottom)		33.0	1112	9.24	6.55	91.4	11.54	12.3	0.052	
LR-10 (surface)	35.2	surface	1048	9.78	6.72	69.4	12.25	10.4	0.053	33.188519, -83.284506
LR-10 (mid)		18.0	1052	9.38	6.69	75.2	11.80	10.1	0.052	
LR-10 (bottom)		34.0	1055	9.47	6.07	74.3	10.30	10.3	0.051	

APPENDIX A

Well Inspection Logs

MEMORANDUM

Date: January 10, 2022

To: Joju Abraham – Georgia Power

CC: Ben Hodges, Regina Linch

From: Brian Steele/Rachel Kirkman

Subject: Plant Branch Unit AP-BCD and AP-E - Well Maintenance and Repair Documentation
Georgia Power Company

Golder Associates, Inc. (Golder) has prepared this memorandum to provide documentation of groundwater monitoring well maintenance and/or repair performed at Plant Branch during the 2021 semiannual reporting period. All repairs and maintenance were completed in accordance with the Georgia Environmental Protection Division (GAEPD) guidance on routine visual inspections of groundwater monitoring wells.

Georgia Power Site/Unit	Date Performed	Well ID	Maintenance/ Repair Performed
Plant Branch/ AP-E	9/20/2021	BRGWA-5S	Overgrown
Plant Branch/ AP-E	9/20/2021	BRGWA-5I	Overgrown
Plant Branch/AP-B	9/20/2021	IW-B-2	Overgrown

WELL INSPECTION FORM
PLANT Branch

WELL-ID	MONITORING WELL POSITION ↑ or ↓	**LOCATION / IDENTIFICATION** a. Visible and accessible b. Properly identified wth correct ID c. Not in a high traffic area that requires traffic protection d. No standing water nearby, adequate surrounding drainage **(S) for Satisfactory** **Discrepancies identified below**	**PROTECTIVE CASING** a. Free from damage, degradation, or deterioration b. Functioning weep hole c. Annular space free of debris and water, and has enough pea gravel d. Functioning cap and lock and in good condition **(S) for Satisfactory** **Discrepancies identified below**	**SURFACE PAD** a. In good condition b. Sloped away from the well c. In contact with protective casing d. Stable and in contact with ground surface e. Free of debris f. Survey pin clearly identified **(S) for Satisfactory** **Discrepancies identified below**	**INTERNAL CASING** a. Cap prevents entry of foreign material b. Free of kinks or bends or any obstruction from foreign objects c. Weephole present and cap not too tight to allow equilibrium for air presssure d. Survey point clearly marked on the inner casing e. Stable/immobile **(S) for Satisfactory** **Discrepancies identified below**	**SAMPLING (Groundwater Wells Only)** a. Well recharges adequately when purged b. If dedicated sampling equipment installed, it is in good condition and specified in the approved groundater plan for the facility c. Does not require redevelopment d. Other (please specify) **(S) for Satisfactory** **Discrepancies identified below**
BRGWA-2S	↑BOTH	S	S	S	S	S
BRGWA-2I	↑BOTH	S	S	S	S	S
BRGWA-5S	↑BOTH	Overgrown	S	S	S	S
BRGWA-5I	↑BOTH	Overgrown	S	S	S	S
BRGWA-6S	↑BOTH	S	S	S	S	S
BRGWA-12S	↑BCD	S	S	S	S	S
BRGWA-12I	↑BCD	S	S	S	S	S
BRGWA-23S	↑BCD	S	S	S	S	S
BRGWC-25I	↓BCD	S	S	S	S	S
BRGWC-27I	↓BCD	S	S	S	S	S
BRGWC-29I	↓BCD	S	S	S	S	S
BRGWC-30I	↓BCD	S	S	S	S	S
BRGWC-32S	↓BCD	S	S	S	S	S
BRGWC-33S	↓E	S	S	S	S	S
BRGWC-34S	↓E	S	S	S	S	S
BRGWC-35S	↓E	S	S	S	S	S
BRGWC-17S	↓E	S	S	S	S	no pump (9 ft deep)
BRGWC-36S	↓E	S	S	S	S	no pump (perched)
BRGWC-37S	↓E	S	S	S	S	S
BRGWC-38S	↓E	S	S	S	S	S
BRGWC-45	↓BCD	S	S	S	S	pump installed
BRGWC-47	↓BCD	S	S	S	S	pump installed
BRGWC-50	↓BCD	S	S	S	S	pump installed

GOLDER
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Inspected by: J. Waguespack
Date: 9/20/2021

WELL INSPECTION FORM
PLANT Branch

WELL-ID	MONITORING WELL POSITION ↑ or ↓	**LOCATION / IDENTIFICATION** a. Visible and accessible b. Properly identified wth correct ID c. Not in a high traffic area that requires traffic protection d. No standing water nearby, adequate surrounding drainage **(S) for Satisfactory** **Discrepancies identified below**	**PROTECTIVE CASING** a. Free from damage, degradation, or deterioration b. Functioning weep hole c. Annular space free of debris and water, and has enough pea gravel d. Functioning cap and lock and in good condition **(S) for Satisfactory** **Discrepancies identified below**	**SURFACE PAD** a. In good condition b. Sloped away from the well c. In contact with protective casing d. Stable and in contact with ground surface e. Free of debris f. Survey pin clearly identified **(S) for Satisfactory** **Discrepancies identified below**	**INTERNAL CASING** a. Cap prevents entry of foreign material b. Free of kinks or bends or any obstruction from foreign objects c. Weephole present and cap not too tight to allow equilibrium for air presssure d. Survey point clearly marked on the inner casing e. Stable/immobile **(S) for Satisfactory** **Discrepancies identified below**	**SAMPLING (Groundwater Wells Only)** a. Well recharges adequately when purged b. If dedicated sampling equipment installed, it is in good condition and specified in the approved groundater plan for the facility c. Does not require redevelopment d. Other (please specify) **(S) for Satisfactory** **Discrepancies identified below**
BRGWC-52I	↓BCD	S	S	S	S	pump installed
PZ-50D	↓BCD	S	S	S	S	no pump, inadequate recharge to perform low flow
PZ-51S	↓BCD	S	S	S	S	no pump
PZ-51I	↓BCD	S	S	S	S	no pump
PZ-51D	↓BCD	S	S	S	S	no pump
PZ-1S		S	S	S	S	--
PZ -1I		S	S	S	S	--
PZ-1D		S	S	S	S	--
PZ -3S		S	S	S	S	--
PZ - 3I		S	S	S	S	--
PZ- 3D		S	S	S	S	--
PZ- 4S		S	S	S	S	--
PZ - 4I		S	S	S	S	--
PZ-7S		S	S	S	S	--
PZ- 8S		S	S	S	S	--
PZ-9S		S	S	S	S	--
PZ-10S		S	S	S	S	--
PZ-11S		S	S	S	S	--
PZ-12D		S	S	S	S	--
PZ-13S		S	S	S	S	--
PZ-14S		S	S	S	S	--
PZ -14I		S	S	S	S	--

Inspected by: J. Waguespack
Date: 9/20/2021

WELL INSPECTION FORM
PLANT Branch

WELL-ID	MONITORING WELL POSITION ↑ or ↓	**LOCATION / IDENTIFICATION** a. Visible and accessible b. Properly identified wth correct ID c. Not in a high traffic area that requires traffic protection d. No standing water nearby, adequate surrounding drainage **(S) for Satisfactory** **Discrepancies identified below**	**PROTECTIVE CASING** a. Free from damage, degradation, or deterioration b. Functioning weep hole c. Annular space free of debris and water, and has enough pea gravel d. Functioning cap and lock and in good condition **(S) for Satisfactory** **Discrepancies identified below**	**SURFACE PAD** a. In good condition b. Sloped away from the well c. In contact with protective casing d. Stable and in contact with ground surface e. Free of debris f. Survey pin clearly identified **(S) for Satisfactory** **Discrepancies identified below**	**INTERNAL CASING** a. Cap prevents entry of foreign material b. Free of kinks or bends or any obstruction from foreign objects c. Weephole present and cap not too tight to allow equilibrium for air presssure d. Survey point clearly marked on the inner casing e. Stable/immobile **(S) for Satisfactory** **Discrepancies identified below**	**SAMPLING (Groundwater Wells Only)** a. Well recharges adequately when purged b. If dedicated sampling equipment installed, it is in good condition and specified in the approved groundater plan for the facility c. Does not require redevelopment d. Other (please specify) **(S) for Satisfactory** **Discrepancies identified below**
PZ-15S		S	S	S	S	--
PZ -15I		S	S	S	S	--
PZ-16S		S	S	S	S	--
PZ -16I		S	S	S	S	--
PZ -17I		S	S	S	S	--
PZ-18S		S	S	S	S	--
PZ -18I		S	S	S	S	--
PZ-19S		S	S	S	S	--
PZ -19I		S	S	S	S	--
PZ-20S		S	S	S	S	--
PZ -20I		S	S	S	S	--
PZ-21S		S	S	S	S	--
PZ -21I		S	S	S	S	--
PZ-22S		S	S	S	S	--
BRGWC-24S		S	S	S	S	--
PZ-26I		S	S	S	S	--
PZ-28I		S	S	S	S	--
PZ-31S		S	S	S	S	--
PZ-23I		S	S	S	S	--
PZ-40S		S	S	S	S	--
PZ-41S		S	S	S	S	--
PZ-42S		S	S	S	S	--
PZ-43		S	S	S	S	--

Inspected by: J. Waguespack
Date: 9/20/2021

WELL INSPECTION FORM
PLANT Branch

WELL-ID	MONITORING WELL POSITION ↑ or ↓	LOCATION / IDENTIFICATION a. Visible and accessible b. Properly identified wth correct ID c. Not in a high traffic area that requires traffic protection d. No standing water nearby, adequate surrounding drainage **(S) for Satisfactory** **Discrepancies identified below**	PROTECTIVE CASING a. Free from damage, degradation, or deterioration b. Functioning weep hole c. Annular space free of debris and water, and has enough pea gravel d. Functioning cap and lock and in good condition **(S) for Satisfactory** **Discrepancies identified below**	SURFACE PAD a. In good condition b. Sloped away from the well c. In contact with protective casing d. Stable and in contact with ground surface e. Free of debris f. Survey pin clearly identified **(S) for Satisfactory** **Discrepancies identified below**	INTERNAL CASING a. Cap prevents entry of foreign material b. Free of kinks or bends or any obstruction from foreign objects c. Weephole present and cap not too tight to allow equilibrium for air presssure d. Survey point clearly marked on the inner casing e. Stable/immobile **(S) for Satisfactory** **Discrepancies identified below**	SAMPLING (Groundwater Wells Only) a. Well recharges adequately when purged b. If dedicated sampling equipment installed, it is in good condition and specified in the approved groundater plan for the facility c. Does not require redevelopment d. Other (please specify) **(S) for Satisfactory** **Discrepancies identified below**
PZ-44		S	S	S	S	--
PZ-46		S	S	S	S	--
PZ-48		S	S	S	S	--
PZ-49		S	S	S	S	--
PZ-53D		S	S	S	S	--
PZ-54		S	S	S	S	--
IW-C-1		S	S	S	S	--
IW-B-1		S	S	S	S	S
IW-D-1		S	S	S	S	--
IW-E-1		S	S	S	S	--
IW-B-2		Overgrown	S	S	S	S
IW-C-2		S	S	S	S	--
IW-D-2		S	S	S	S	--

Inspected by: J. Waguespack
Date: 9/20/2021

WELL INSPECTION FORM
PLANT Branch

WELL-ID	MONITORING WELL POSITION ↑ or ↓	LOCATION / IDENTIFICATION a. Visible and accessible b. Properly identified wth correct ID c. Not in a high traffic area that requires traffic protection d. No standing water nearby, adequate surrounding drainage **(S) for Satisfactory** **Discrepancies identified below**	PROTECTIVE CASING a. Free from damage, degradation, or deterioration b. Functioning weep hole c. Annular space free of debris and water, and has enough pea gravel d. Functioning cap and lock and in good condition **(S) for Satisfactory** **Discrepancies identified below**	SURFACE PAD a. In good condition b. Sloped away from the well c. In contact with protective casing d. Stable and in contact with ground surface e. Free of debris f. Survey pin clearly identified **(S) for Satisfactory** **Discrepancies identified below**	INTERNAL CASING a. Cap prevents entry of foreign material b. Free of kinks or bends or any obstruction from foreign objects c. Weephole present and cap not too tight to allow equilibrium for air presssure d. Survey point clearly marked on the inner casing e. Stable/immobile **(S) for Satisfactory** **Discrepancies identified below**	SAMPLING (Groundwater Wells Only) a. Well recharges adequately when purged b. If dedicated sampling equipment installed, it is in good condition and specified in the approved groundater plan for the facility c. Does not require redevelopment d. Other (please specify) **(S) for Satisfactory** **Discrepancies identified below**
PB-1S		Labeled with Permanent Marker Only	No Protective Casing	No Pad	S	--
PB-2D		Labeled with Permanent Marker Only	No Protective Casing	No Pad	S	--
PB-4S		Labeled with Permanent Marker Only	No Protective Casing	No Pad	S	--
PB-4D		Labeled with Permanent Marker Only	No Protective Casing	No Pad	S	--
PB-7S		Labeled with Permanent Marker Only / Overgrown	No Protective Casing	No Pad	S	--
PB-8D		Labeled with Permanent Marker Only	No Protective Casing	No Pad	S	--
PB-8S		Labeled with Permanent Marker Only	No Protective Casing	No Pad	S	--
PB-10D		Labeled with Permanent Marker Only	No Protective Casing	No Pad	S	--
PB-10S		Labeled with Permanent Marker Only	No Protective Casing	No Pad	S	--
PB-13D		Labeled with Permanent Marker Only	No Protective Casing	No Pad	S	--
PB-13S		Labeled with Permanent Marker Only	No Protective Casing	No Pad	S	--

NOTES:
1. Provide pictures of any deficiencies.
2. Notify SCS /GPC of any noted deficiencies.
3. Provide additional comments as necessary to address any deficiencies.

Issue resolved
Requires immediate attention

Inspected by: J. Waguespack
Date: 9/20/2021

Geosyntec consultants

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Kennesaw, Georgia 30144
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FAX 678.202.9501
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Memorandum

Date:	05 July 2022
To:	Joju Abraham, Southern Company Services Ben Hodges, Georgia Power Company Regina Linch, Plant Branch
From:	Joe Ivanowski and Lauren Fitzgerald, Geosyntec Consultants
Subject:	Plant Branch Unit AP-BCD and AP-E – Well Inspection Documentation Plant Branch, Putnam County, Georgia

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Geosyntec Consultants, Inc. (Geosyntec) has prepared this memorandum to provide documentation of groundwater monitoring well and piezometer inspections and repair/maintenance, if needed, performed at Plant Branch during the first semiannual reporting period of 2022. Inspections were completed in accordance with the Georgia Environmental Protection Division (GA EPD) guidance on routine visual inspections of groundwater monitoring wells.

The groundwater monitoring well network (including associated piezometers) for Ash Ponds B, C, and D (AP-BCD) and Ash Pond E (AP-E) at Plant Branch were inspected on 1/31/2022. The groundwater monitoring well network was observed to be well maintained and in good condition; no deficiencies requiring maintenance or repair were identified.

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Groundwater Monitoring Well Integrity Form

Site Name: Plant Branch

Permit Number:

Well ID: BRGWA-2S

Date: 1/31/22

		Yes	No	N/A
1) Location/Identification				
A	Is the well visible and accessible?	X		
B	Is the well properly identified with correct well ID?	X		
C	Is the well in a high traffic area and does the well require protection from traffic?		X	
D	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	X		
2) Protective Casing				
A	Is the protective casing free from apparent damage and able to be secured?	X		
B	Is the casing free of degradation or deterioration?	X		
C	Does the casing have a functioning weep hole?	X		
D	Is the annular space between the casings clear of debris and water, or filled with pea gravel/sand?	X		
E	Is the well locked and is the lock in good condition?	X		
3) Surface Pad				
A	Is the well pad in good condition (not cracked/broken)?	X		
B	Is the well pad sloped away from the protective casing?	X		
C	Is the well pad in complete contact with the ground surface and stable?	X		
D	Is the well pad in complete contact with the protective casing?	X		
E	Is the pad surface clean (not covered with sediment or debris)?	X		
4) Internal Casing				
A	Does the cap prevent entry of foreign material inot the well?	X		
B	Is the casing free of kinks/bends, or any obstructions from foreign objects (such as bailers)?	X		
C	Is the well properly vented for equilibration of air pressure?	X		
D	Is the survey point clearly marked on the inner casing?	X		
E	Is the depth of the well consistent with the original well log?	X		
F	Is the casing stable? (Does PVC move easily when touched or can be taken apart by hand due to lack of grout or use of slip couplings in construction)	X		
5) Sampling: Groundwater Wells Only				
A	Does water recharge adequately when purged?	X		
B	If dedicated sampling equipment installed, is it in good condition and specified in the arppove groundwater monitoring plan for the facility?	X		
C	Does the well require redevelopment (low flow/turbidity)?		X	
6) Based on 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?		X		
7) Corrective actions as needed, by date:				
Signature and Seal of PE/PG responsible for inspection				

Groundwater Monitoring Well Integrity Form

Site Name: Plant Branch

Permit Number:

Well ID: BRGWA-2I

Date: 1/31/22

		Yes	No	N/A
1) Location/Identification				
A	Is the well visible and accessible?	X		
B	Is the well properly identified with correct well ID?	X		
C	Is the well in a high traffic area and does the well require protection from traffic?		X	
D	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	X		
2) Protective Casing				
A	Is the protective casing free from apparent damage and able to be secured?	X		
B	Is the casing free of degradation or deterioration?	X		
C	Does the casing have a functioning weep hole?	X		
D	Is the annular space between the casings clear of debris and water, or filled with pea gravel/sand?	X		
E	Is the well locked and is the lock in good condition?	X		
3) Surface Pad				
A	Is the well pad in good condition (not cracked/broken)?	X		
B	Is the well pad sloped away from the protective casing?	X		
C	Is the well pad in complete contact with the ground surface and stable?	X		
D	Is the well pad in complete contact with the protective casing?	X		
E	Is the pad surface clean (not covered with sediment or debris)?	X		
4) Internal Casing				
A	Does the cap prevent entry of foreign material inot the well?	X		
B	Is the casing free of kinks/bends, or any obstructions from foreign objects (such as bailers)?	X		
C	Is the well properly vented for equilibration of air pressure?	X		
D	Is the survey point clearly marked on the inner casing?	X		
E	Is the depth of the well consistent with the original well log?	X		
F	Is the casing stable? (Does PVC move easily when touched or can be taken apart by hand due to lack of grout or use of slip couplings in construction)	X		
5) Sampling: Groundwater Wells Only				
A	Does water recharge adequately when purged?	X		
B	If dedicated sampling equipment installed, is it in good condition and specified in the arppove groundwater monitoring plan for the facility?	X		
C	Does the well require redevelopment (low flow/turbidity)?		X	
6) Based on 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?		X		
7) Corrective actions as needed, by date:				
Signature and Seal of PE/PG responsible for inspection				

Groundwater Monitoring Well Integrity Form

Site Name: Plant Branch

Permit Number:

Well ID: BRGWA-5S

Date: 1/31/22

		Yes	No	N/A
1) Location/Identification				
A	Is the well visible and accessible?	X		
B	Is the well properly identified with correct well ID?	X		
C	Is the well in a high traffic area and does the well require protection from traffic?		X	
D	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	X		
2) Protective Casing				
A	Is the protective casing free from apparent damage and able to be secured?	X		
B	Is the casing free of degradation or deterioration?	X		
C	Does the casing have a functioning weep hole?	X		
D	Is the annular space between the casings clear of debris and water, or filled with pea gravel/sand?	X		
E	Is the well locked and is the lock in good condition?	X		
3) Surface Pad				
A	Is the well pad in good condition (not cracked/broken)?	X		
B	Is the well pad sloped away from the protective casing?	X		
C	Is the well pad in complete contact with the ground surface and stable?	X		
D	Is the well pad in complete contact with the protective casing?	X		
E	Is the pad surface clean (not covered with sediment or debris)?	X		
4) Internal Casing				
A	Does the cap prevent entry of foreign material inot the well?	X		
B	Is the casing free of kinks/bends, or any obstructions from foreign objects (such as bailers)?	X		
C	Is the well properly vented for equilibration of air pressure?	X		
D	Is the survey point clearly marked on the inner casing?	X		
E	Is the depth of the well consistent with the original well log?	X		
F	Is the casing stable? (Does PVC move easily when touched or can be taken apart by hand due to lack of grout or use of slip couplings in construction)	X		
5) Sampling: Groundwater Wells Only				
A	Does water recharge adequately when purged?	X		
B	If dedicated sampling equipment installed, is it in good condition and specified in the arppove groundwater monitoring plan for the facility?	X		
C	Does the well require redevelopment (low flow/turbidity)?		X	
6) Based on 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?		X		
7) Corrective actions as needed, by date:				
Signature and Seal of PE/PG responsible for inspection				

Groundwater Monitoring Well Integrity Form

Site Name: Plant Branch

Permit Number:

Well ID: BRGWA-5I

Date: 1/31/22

		Yes	No	N/A
1) Location/Identification				
A	Is the well visible and accessible?	X		
B	Is the well properly identified with correct well ID?	X		
C	Is the well in a high traffic area and does the well require protection from traffic?		X	
D	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	X		
2) Protective Casing				
A	Is the protective casing free from apparent damage and able to be secured?	X		
B	Is the casing free of degradation or deterioration?	X		
C	Does the casing have a functioning weep hole?	X		
D	Is the annular space between the casings clear of debris and water, or filled with pea gravel/sand?	X		
E	Is the well locked and is the lock in good condition?	X		
3) Surface Pad				
A	Is the well pad in good condition (not cracked/broken)?	X		
B	Is the well pad sloped away from the protective casing?	X		
C	Is the well pad in complete contact with the ground surface and stable?	X		
D	Is the well pad in complete contact with the protective casing?	X		
E	Is the pad surface clean (not covered with sediment or debris)?	X		
4) Internal Casing				
A	Does the cap prevent entry of foreign material inot the well?	X		
B	Is the casing free of kinks/bends, or any obstructions from foreign objects (such as bailers)?	X		
C	Is the well properly vented for equilibration of air pressure?	X		
D	Is the survey point clearly marked on the inner casing?	X		
E	Is the depth of the well consistent with the original well log?	X		
F	Is the casing stable? (Does PVC move easily when touched or can be taken apart by hand due to lack of grout or use of slip couplings in construction)	X		
5) Sampling: Groundwater Wells Only				
A	Does water recharge adequately when purged?	X		
B	If dedicated sampling equipment installed, is it in good condition and specified in the arppove groundwater monitoring plan for the facility?	X		
C	Does the well require redevelopment (low flow/turbidity)?		X	
6) Based on 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?		X		
7) Corrective actions as needed, by date:				
Signature and Seal of PE/PG responsible for inspection				

Groundwater Monitoring Well Integrity Form

Site Name: Plant Branch

Permit Number:

Well ID: BRGWA-6S

Date: 1/31/22

		Yes	No	N/A
1) Location/Identification				
A	Is the well visible and accessible?	X		
B	Is the well properly identified with correct well ID?	X		
C	Is the well in a high traffic area and does the well require protection from traffic?		X	
D	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	X		
2) Protective Casing				
A	Is the protective casing free from apparent damage and able to be secured?	X		
B	Is the casing free of degradation or deterioration?	X		
C	Does the casing have a functioning weep hole?	X		
D	Is the annular space between the casings clear of debris and water, or filled with pea gravel/sand?	X		
E	Is the well locked and is the lock in good condition?	X		
3) Surface Pad				
A	Is the well pad in good condition (not cracked/broken)?	X		
B	Is the well pad sloped away from the protective casing?	X		
C	Is the well pad in complete contact with the ground surface and stable?	X		
D	Is the well pad in complete contact with the protective casing?	X		
E	Is the pad surface clean (not covered with sediment or debris)?	X		
4) Internal Casing				
A	Does the cap prevent entry of foreign material inot the well?	X		
B	Is the casing free of kinks/bends, or any obstructions from foreign objects (such as bailers)?	X		
C	Is the well properly vented for equilibration of air pressure?	X		
D	Is the survey point clearly marked on the inner casing?	X		
E	Is the depth of the well consistent with the original well log?	X		
F	Is the casing stable? (Does PVC move easily when touched or can be taken apart by hand due to lack of grout or use of slip couplings in construction)	X		
5) Sampling: Groundwater Wells Only				
A	Does water recharge adequately when purged?	X		
B	If dedicated sampling equipment installed, is it in good condition and specified in the arppove groundwater monitoring plan for the facility?	X		
C	Does the well require redevelopment (low flow/turbidity)?		X	
6) Based on 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?		X		
7) Corrective actions as needed, by date:				
Signature and Seal of PE/PG responsible for inspection				

Groundwater Monitoring Well Integrity Form

Site Name: Plant Branch

Permit Number:

Well ID: BRGWA-12S

Date: 1/31/22

		Yes	No	N/A
1) Location/Identification				
A	Is the well visible and accessible?	X		
B	Is the well properly identified with correct well ID?	X		
C	Is the well in a high traffic area and does the well require protection from traffic?		X	
D	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	X		
2) Protective Casing				
A	Is the protective casing free from apparent damage and able to be secured?	X		
B	Is the casing free of degradation or deterioration?	X		
C	Does the casing have a functioning weep hole?	X		
D	Is the annular space between the casings clear of debris and water, or filled with pea gravel/sand?	X		
E	Is the well locked and is the lock in good condition?	X		
3) Surface Pad				
A	Is the well pad in good condition (not cracked/broken)?	X		
B	Is the well pad sloped away from the protective casing?	X		
C	Is the well pad in complete contact with the ground surface and stable?	X		
D	Is the well pad in complete contact with the protective casing?	X		
E	Is the pad surface clean (not covered with sediment or debris)?	X		
4) Internal Casing				
A	Does the cap prevent entry of foreign material inot the well?	X		
B	Is the casing free of kinks/bends, or any obstructions from foreign objects (such as bailers)?	X		
C	Is the well properly vented for equilibration of air pressure?	X		
D	Is the survey point clearly marked on the inner casing?	X		
E	Is the depth of the well consistent with the original well log?	X		
F	Is the casing stable? (Does PVC move easily when touched or can be taken apart by hand due to lack of grout or use of slip couplings in construction)	X		
5) Sampling: Groundwater Wells Only				
A	Does water recharge adequately when purged?	X		
B	If dedicated sampling equipment installed, is it in good condition and specified in the arppove groundwater monitoring plan for the facility?	X		
C	Does the well require redevelopment (low flow/turbidity)?		X	
6) Based on 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?		X		
7) Corrective actions as needed, by date:				
Signature and Seal of PE/PG responsible for inspection				

Groundwater Monitoring Well Integrity Form

Site Name: Plant Branch

Permit Number:

Well ID: BRGWA-12I

Date: 1/31/22

		Yes	No	N/A
1) Location/Identification				
A	Is the well visible and accessible?	X		
B	Is the well properly identified with correct well ID?	X		
C	Is the well in a high traffic area and does the well require protection from traffic?		X	
D	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	X		
2) Protective Casing				
A	Is the protective casing free from apparent damage and able to be secured?	X		
B	Is the casing free of degradation or deterioration?	X		
C	Does the casing have a functioning weep hole?	X		
D	Is the annular space between the casings clear of debris and water, or filled with pea gravel/sand?	X		
E	Is the well locked and is the lock in good condition?	X		
3) Surface Pad				
A	Is the well pad in good condition (not cracked/broken)?	X		
B	Is the well pad sloped away from the protective casing?	X		
C	Is the well pad in complete contact with the ground surface and stable?	X		
D	Is the well pad in complete contact with the protective casing?	X		
E	Is the pad surface clean (not covered with sediment or debris)?	X		
4) Internal Casing				
A	Does the cap prevent entry of foreign material inot the well?	X		
B	Is the casing free of kinks/bends, or any obstructions from foreign objects (such as bailers)?	X		
C	Is the well properly vented for equilibration of air pressure?	X		
D	Is the survey point clearly marked on the inner casing?	X		
E	Is the depth of the well consistent with the original well log?	X		
F	Is the casing stable? (Does PVC move easily when touched or can be taken apart by hand due to lack of grout or use of slip couplings in construction)	X		
5) Sampling: Groundwater Wells Only				
A	Does water recharge adequately when purged?	X		
B	If dedicated sampling equipment installed, is it in good condition and specified in the arppove groundwater monitoring plan for the facility?	X		
C	Does the well require redevelopment (low flow/turbidity)?		X	
6) Based on 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?		X		
7) Corrective actions as needed, by date:				
Signature and Seal of PE/PG responsible for inspection				

Groundwater Monitoring Well Integrity Form

Site Name: Plant Branch

Permit Number:

Well ID: BRGWA-23S

Date: 1/31/22

		Yes	No	N/A
1) Location/Identification				
A	Is the well visible and accessible?	X		
B	Is the well properly identified with correct well ID?	X		
C	Is the well in a high traffic area and does the well require protection from traffic?		X	
D	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	X		
2) Protective Casing				
A	Is the protective casing free from apparent damage and able to be secured?	X		
B	Is the casing free of degradation or deterioration?	X		
C	Does the casing have a functioning weep hole?	X		
D	Is the annular space between the casings clear of debris and water, or filled with pea gravel/sand?	X		
E	Is the well locked and is the lock in good condition?	X		
3) Surface Pad				
A	Is the well pad in good condition (not cracked/broken)?	X		
B	Is the well pad sloped away from the protective casing?	X		
C	Is the well pad in complete contact with the ground surface and stable?	X		
D	Is the well pad in complete contact with the protective casing?	X		
E	Is the pad surface clean (not covered with sediment or debris)?	X		
4) Internal Casing				
A	Does the cap prevent entry of foreign material inot the well?	X		
B	Is the casing free of kinks/bends, or any obstructions from foreign objects (such as bailers)?	X		
C	Is the well properly vented for equilibration of air pressure?	X		
D	Is the survey point clearly marked on the inner casing?	X		
E	Is the depth of the well consistent with the original well log?	X		
F	Is the casing stable? (Does PVC move easily when touched or can be taken apart by hand due to lack of grout or use of slip couplings in construction)	X		
5) Sampling: Groundwater Wells Only				
A	Does water recharge adequately when purged?	X		
B	If dedicated sampling equipment installed, is it in good condition and specified in the arppove groundwater monitoring plan for the facility?	X		
C	Does the well require redevelopment (low flow/turbidity)?		X	
6) Based on 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?		X		
7) Corrective actions as needed, by date:				
Signature and Seal of PE/PG responsible for inspection				

Groundwater Monitoring Well Integrity Form

Site Name: Plant Branch

Permit Number:

Well ID: BRGWC-25I

Date: 1/31/22

		Yes	No	N/A
1) Location/Identification				
A	Is the well visible and accessible?	X		
B	Is the well properly identified with correct well ID?	X		
C	Is the well in a high traffic area and does the well require protection from traffic?		X	
D	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	X		
2) Protective Casing				
A	Is the protective casing free from apparent damage and able to be secured?	X		
B	Is the casing free of degradation or deterioration?	X		
C	Does the casing have a functioning weep hole?	X		
D	Is the annular space between the casings clear of debris and water, or filled with pea gravel/sand?	X		
E	Is the well locked and is the lock in good condition?	X		
3) Surface Pad				
A	Is the well pad in good condition (not cracked/broken)?	X		
B	Is the well pad sloped away from the protective casing?	X		
C	Is the well pad in complete contact with the ground surface and stable?	X		
D	Is the well pad in complete contact with the protective casing?	X		
E	Is the pad surface clean (not covered with sediment or debris)?	X		
4) Internal Casing				
A	Does the cap prevent entry of foreign material inot the well?	X		
B	Is the casing free of kinks/bends, or any obstructions from foreign objects (such as bailers)?	X		
C	Is the well properly vented for equilibration of air pressure?	X		
D	Is the survey point clearly marked on the inner casing?	X		
E	Is the depth of the well consistent with the original well log?	X		
F	Is the casing stable? (Does PVC move easily when touched or can be taken apart by hand due to lack of grout or use of slip couplings in construction)	X		
5) Sampling: Groundwater Wells Only				
A	Does water recharge adequately when purged?	X		
B	If dedicated sampling equipment installed, is it in good condition and specified in the arppove groundwater monitoring plan for the facility?	X		
C	Does the well require redevelopment (low flow/turbidity)?		X	
6) Based on 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?		X		
7) Corrective actions as needed, by date:				
Signature and Seal of PE/PG responsible for inspection				

Groundwater Monitoring Well Integrity Form

Site Name: Plant Branch

Permit Number:

Well ID: BRGWC-27I

Date: 1/31/22

		Yes	No	N/A
1) Location/Identification				
A	Is the well visible and accessible?	X		
B	Is the well properly identified with correct well ID?	X		
C	Is the well in a high traffic area and does the well require protection from traffic?		X	
D	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	X		
2) Protective Casing				
A	Is the protective casing free from apparent damage and able to be secured?	X		
B	Is the casing free of degradation or deterioration?	X		
C	Does the casing have a functioning weep hole?	X		
D	Is the annular space between the casings clear of debris and water, or filled with pea gravel/sand?	X		
E	Is the well locked and is the lock in good condition?	X		
3) Surface Pad				
A	Is the well pad in good condition (not cracked/broken)?	X		
B	Is the well pad sloped away from the protective casing?	X		
C	Is the well pad in complete contact with the ground surface and stable?	X		
D	Is the well pad in complete contact with the protective casing?	X		
E	Is the pad surface clean (not covered with sediment or debris)?	X		
4) Internal Casing				
A	Does the cap prevent entry of foreign material inot the well?	X		
B	Is the casing free of kinks/bends, or any obstructions from foreign objects (such as bailers)?	X		
C	Is the well properly vented for equilibration of air pressure?	X		
D	Is the survey point clearly marked on the inner casing?	X		
E	Is the depth of the well consistent with the original well log?	X		
F	Is the casing stable? (Does PVC move easily when touched or can be taken apart by hand due to lack of grout or use of slip couplings in construction)	X		
5) Sampling: Groundwater Wells Only				
A	Does water recharge adequately when purged?	X		
B	If dedicated sampling equipment installed, is it in good condition and specified in the arppove groundwater monitoring plan for the facility?	X		
C	Does the well require redevelopment (low flow/turbidity)?		X	
6) Based on 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?		X		
7) Corrective actions as needed, by date:				
Signature and Seal of PE/PG responsible for inspection				

Groundwater Monitoring Well Integrity Form

Site Name: Plant Branch

Permit Number:

Well ID: BRGWC-29I

Date: 1/31/22

		Yes	No	N/A
1) Location/Identification				
A	Is the well visible and accessible?	X		
B	Is the well properly identified with correct well ID?	X		
C	Is the well in a high traffic area and does the well require protection from traffic?		X	
D	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	X		
2) Protective Casing				
A	Is the protective casing free from apparent damage and able to be secured?	X		
B	Is the casing free of degradation or deterioration?	X		
C	Does the casing have a functioning weep hole?	X		
D	Is the annular space between the casings clear of debris and water, or filled with pea gravel/sand?	X		
E	Is the well locked and is the lock in good condition?	X		
3) Surface Pad				
A	Is the well pad in good condition (not cracked/broken)?	X		
B	Is the well pad sloped away from the protective casing?	X		
C	Is the well pad in complete contact with the ground surface and stable?	X		
D	Is the well pad in complete contact with the protective casing?	X		
E	Is the pad surface clean (not covered with sediment or debris)?	X		
4) Internal Casing				
A	Does the cap prevent entry of foreign material inot the well?	X		
B	Is the casing free of kinks/bends, or any obstructions from foreign objects (such as bailers)?	X		
C	Is the well properly vented for equilibration of air pressure?	X		
D	Is the survey point clearly marked on the inner casing?	X		
E	Is the depth of the well consistent with the original well log?	X		
F	Is the casing stable? (Does PVC move easily when touched or can be taken apart by hand due to lack of grout or use of slip couplings in construction)	X		
5) Sampling: Groundwater Wells Only				
A	Does water recharge adequately when purged?	X		
B	If dedicated sampling equipment installed, is it in good condition and specified in the arppove groundwater monitoring plan for the facility?	X		
C	Does the well require redevelopment (low flow/turbidity)?		X	
6) Based on 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?		X		
7) Corrective actions as needed, by date:				
Signature and Seal of PE/PG responsible for inspection				

Groundwater Monitoring Well Integrity Form

Site Name: Plant Branch

Permit Number:

Well ID: BRGWC-30I

Date: 1/31/22

		Yes	No	N/A
1) Location/Identification				
A	Is the well visible and accessible?	X		
B	Is the well properly identified with correct well ID?	X		
C	Is the well in a high traffic area and does the well require protection from traffic?		X	
D	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	X		
2) Protective Casing				
A	Is the protective casing free from apparent damage and able to be secured?	X		
B	Is the casing free of degradation or deterioration?	X		
C	Does the casing have a functioning weep hole?	X		
D	Is the annular space between the casings clear of debris and water, or filled with pea gravel/sand?	X		
E	Is the well locked and is the lock in good condition?	X		
3) Surface Pad				
A	Is the well pad in good condition (not cracked/broken)?	X		
B	Is the well pad sloped away from the protective casing?	X		
C	Is the well pad in complete contact with the ground surface and stable?	X		
D	Is the well pad in complete contact with the protective casing?	X		
E	Is the pad surface clean (not covered with sediment or debris)?	X		
4) Internal Casing				
A	Does the cap prevent entry of foreign material inot the well?	X		
B	Is the casing free of kinks/bends, or any obstructions from foreign objects (such as bailers)?	X		
C	Is the well properly vented for equilibration of air pressure?	X		
D	Is the survey point clearly marked on the inner casing?	X		
E	Is the depth of the well consistent with the original well log?	X		
F	Is the casing stable? (Does PVC move easily when touched or can be taken apart by hand due to lack of grout or use of slip couplings in construction)	X		
5) Sampling: Groundwater Wells Only				
A	Does water recharge adequately when purged?	X		
B	If dedicated sampling equipment installed, is it in good condition and specified in the arppove groundwater monitoring plan for the facility?	X		
C	Does the well require redevelopment (low flow/turbidity)?		X	
6) Based on 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?		X		
7) Corrective actions as needed, by date:				
Signature and Seal of PE/PG responsible for inspection				

Groundwater Monitoring Well Integrity Form

Site Name: Plant Branch

Permit Number:

Well ID: BRGWC-32S

Date: 1/31/22

		Yes	No	N/A
1) Location/Identification				
A	Is the well visible and accessible?	X		
B	Is the well properly identified with correct well ID?	X		
C	Is the well in a high traffic area and does the well require protection from traffic?		X	
D	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	X		
2) Protective Casing				
A	Is the protective casing free from apparent damage and able to be secured?	X		
B	Is the casing free of degradation or deterioration?	X		
C	Does the casing have a functioning weep hole?	X		
D	Is the annular space between the casings clear of debris and water, or filled with pea gravel/sand?	X		
E	Is the well locked and is the lock in good condition?	X		
3) Surface Pad				
A	Is the well pad in good condition (not cracked/broken)?	X		
B	Is the well pad sloped away from the protective casing?	X		
C	Is the well pad in complete contact with the ground surface and stable?	X		
D	Is the well pad in complete contact with the protective casing?	X		
E	Is the pad surface clean (not covered with sediment or debris)?	X		
4) Internal Casing				
A	Does the cap prevent entry of foreign material inot the well?	X		
B	Is the casing free of kinks/bends, or any obstructions from foreign objects (such as bailers)?	X		
C	Is the well properly vented for equilibration of air pressure?	X		
D	Is the survey point clearly marked on the inner casing?	X		
E	Is the depth of the well consistent with the original well log?	X		
F	Is the casing stable? (Does PVC move easily when touched or can be taken apart by hand due to lack of grout or use of slip couplings in construction)	X		
5) Sampling: Groundwater Wells Only				
A	Does water recharge adequately when purged?	X		
B	If dedicated sampling equipment installed, is it in good condition and specified in the arppove groundwater monitoring plan for the facility?	X		
C	Does the well require redevelopment (low flow/turbidity)?		X	
6) Based on 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?		X		
7) Corrective actions as needed, by date:				
Signature and Seal of PE/PG responsible for inspection				

Groundwater Monitoring Well Integrity Form

Site Name: Plant Branch

Permit Number:

Well ID: BRGWC-33S

Date: 1/31/22

		Yes	No	N/A
1) Location/Identification				
A	Is the well visible and accessible?	X		
B	Is the well properly identified with correct well ID?	X		
C	Is the well in a high traffic area and does the well require protection from traffic?		X	
D	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	X		
2) Protective Casing				
A	Is the protective casing free from apparent damage and able to be secured?	X		
B	Is the casing free of degradation or deterioration?	X		
C	Does the casing have a functioning weep hole?	X		
D	Is the annular space between the casings clear of debris and water, or filled with pea gravel/sand?	X		
E	Is the well locked and is the lock in good condition?	X		
3) Surface Pad				
A	Is the well pad in good condition (not cracked/broken)?	X		
B	Is the well pad sloped away from the protective casing?	X		
C	Is the well pad in complete contact with the ground surface and stable?	X		
D	Is the well pad in complete contact with the protective casing?	X		
E	Is the pad surface clean (not covered with sediment or debris)?	X		
4) Internal Casing				
A	Does the cap prevent entry of foreign material inot the well?	X		
B	Is the casing free of kinks/bends, or any obstructions from foreign objects (such as bailers)?	X		
C	Is the well properly vented for equilibration of air pressure?	X		
D	Is the survey point clearly marked on the inner casing?	X		
E	Is the depth of the well consistent with the original well log?	X		
F	Is the casing stable? (Does PVC move easily when touched or can be taken apart by hand due to lack of grout or use of slip couplings in construction)	X		
5) Sampling: Groundwater Wells Only				
A	Does water recharge adequately when purged?	X		
B	If dedicated sampling equipment installed, is it in good condition and specified in the arppove groundwater monitoring plan for the facility?	X		
C	Does the well require redevelopment (low flow/turbidity)?		X	
6) Based on 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?		X		
7) Corrective actions as needed, by date:				
Signature and Seal of PE/PG responsible for inspection				

Groundwater Monitoring Well Integrity Form

Site Name: Plant Branch

Permit Number:

Well ID: BRGWC-34S

Date: 1/31/22

		Yes	No	N/A
1) Location/Identification				
A	Is the well visible and accessible?	X		
B	Is the well properly identified with correct well ID?	X		
C	Is the well in a high traffic area and does the well require protection from traffic?		X	
D	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	X		
2) Protective Casing				
A	Is the protective casing free from apparent damage and able to be secured?	X		
B	Is the casing free of degradation or deterioration?	X		
C	Does the casing have a functioning weep hole?	X		
D	Is the annular space between the casings clear of debris and water, or filled with pea gravel/sand?	X		
E	Is the well locked and is the lock in good condition?	X		
3) Surface Pad				
A	Is the well pad in good condition (not cracked/broken)?	X		
B	Is the well pad sloped away from the protective casing?	X		
C	Is the well pad in complete contact with the ground surface and stable?	X		
D	Is the well pad in complete contact with the protective casing?	X		
E	Is the pad surface clean (not covered with sediment or debris)?	X		
4) Internal Casing				
A	Does the cap prevent entry of foreign material inot the well?	X		
B	Is the casing free of kinks/bends, or any obstructions from foreign objects (such as bailers)?	X		
C	Is the well properly vented for equilibration of air pressure?	X		
D	Is the survey point clearly marked on the inner casing?	X		
E	Is the depth of the well consistent with the original well log?	X		
F	Is the casing stable? (Does PVC move easily when touched or can be taken apart by hand due to lack of grout or use of slip couplings in construction)	X		
5) Sampling: Groundwater Wells Only				
A	Does water recharge adequately when purged?	X		
B	If dedicated sampling equipment installed, is it in good condition and specified in the arppove groundwater monitoring plan for the facility?	X		
C	Does the well require redevelopment (low flow/turbidity)?		X	
6) Based on 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?		X		
7) Corrective actions as needed, by date:				
Signature and Seal of PE/PG responsible for inspection				

Groundwater Monitoring Well Integrity Form

Site Name: Plant Branch

Permit Number:

Well ID: BRGWC-35S

Date: 1/31/22

		Yes	No	N/A
1) Location/Identification				
A	Is the well visible and accessible?	X		
B	Is the well properly identified with correct well ID?	X		
C	Is the well in a high traffic area and does the well require protection from traffic?		X	
D	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	X		
2) Protective Casing				
A	Is the protective casing free from apparent damage and able to be secured?	X		
B	Is the casing free of degradation or deterioration?	X		
C	Does the casing have a functioning weep hole?	X		
D	Is the annular space between the casings clear of debris and water, or filled with pea gravel/sand?	X		
E	Is the well locked and is the lock in good condition?	X		
3) Surface Pad				
A	Is the well pad in good condition (not cracked/broken)?	X		
B	Is the well pad sloped away from the protective casing?	X		
C	Is the well pad in complete contact with the ground surface and stable?	X		
D	Is the well pad in complete contact with the protective casing?	X		
E	Is the pad surface clean (not covered with sediment or debris)?	X		
4) Internal Casing				
A	Does the cap prevent entry of foreign material inot the well?	X		
B	Is the casing free of kinks/bends, or any obstructions from foreign objects (such as bailers)?	X		
C	Is the well properly vented for equilibration of air pressure?	X		
D	Is the survey point clearly marked on the inner casing?	X		
E	Is the depth of the well consistent with the original well log?	X		
F	Is the casing stable? (Does PVC move easily when touched or can be taken apart by hand due to lack of grout or use of slip couplings in construction)	X		
5) Sampling: Groundwater Wells Only				
A	Does water recharge adequately when purged?	X		
B	If dedicated sampling equipment installed, is it in good condition and specified in the arppove groundwater monitoring plan for the facility?	X		
C	Does the well require redevelopment (low flow/turbidity)?		X	
6) Based on 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?		X		
7) Corrective actions as needed, by date:				
Signature and Seal of PE/PG responsible for inspection				

Groundwater Monitoring Well Integrity Form

Site Name: Plant Branch

Permit Number:

Well ID: BRGWC-17S

Date: 1/31/22

		Yes	No	N/A
1) Location/Identification				
A	Is the well visible and accessible?	X		
B	Is the well properly identified with correct well ID?	X		
C	Is the well in a high traffic area and does the well require protection from traffic?		X	
D	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	X		
2) Protective Casing				
A	Is the protective casing free from apparent damage and able to be secured?	X		
B	Is the casing free of degradation or deterioration?	X		
C	Does the casing have a functioning weep hole?	X		
D	Is the annular space between the casings clear of debris and water, or filled with pea gravel/sand?	X		
E	Is the well locked and is the lock in good condition?	X		
3) Surface Pad				
A	Is the well pad in good condition (not cracked/broken)?	X		
B	Is the well pad sloped away from the protective casing?	X		
C	Is the well pad in complete contact with the ground surface and stable?	X		
D	Is the well pad in complete contact with the protective casing?	X		
E	Is the pad surface clean (not covered with sediment or debris)?	X		
4) Internal Casing				
A	Does the cap prevent entry of foreign material inot the well?	X		
B	Is the casing free of kinks/bends, or any obstructions from foreign objects (such as bailers)?	X		
C	Is the well properly vented for equilibration of air pressure?	X		
D	Is the survey point clearly marked on the inner casing?	X		
E	Is the depth of the well consistent with the original well log?	X		
F	Is the casing stable? (Does PVC move easily when touched or can be taken apart by hand due to lack of grout or use of slip couplings in construction)	X		
5) Sampling: Groundwater Wells Only				
A	Does water recharge adequately when purged?	X		
B	If dedicated sampling equipment installed, is it in good condition and specified in the arppove groundwater monitoring plan for the facility?	X		
C	Does the well require redevelopment (low flow/turbidity)?		X	
6) Based on 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?		X		
7) Corrective actions as needed, by date:				
Signature and Seal of PE/PG responsible for inspection				

Groundwater Monitoring Well Integrity Form

Site Name: Plant Branch

Permit Number:

Well ID: BRGWC-36S

Date: 1/31/22

		Yes	No	N/A
1) Location/Identification				
A	Is the well visible and accessible?	X		
B	Is the well properly identified with correct well ID?	X		
C	Is the well in a high traffic area and does the well require protection from traffic?		X	
D	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	X		
2) Protective Casing				
A	Is the protective casing free from apparent damage and able to be secured?	X		
B	Is the casing free of degradation or deterioration?	X		
C	Does the casing have a functioning weep hole?	X		
D	Is the annular space between the casings clear of debris and water, or filled with pea gravel/sand?	X		
E	Is the well locked and is the lock in good condition?	X		
3) Surface Pad				
A	Is the well pad in good condition (not cracked/broken)?	X		
B	Is the well pad sloped away from the protective casing?	X		
C	Is the well pad in complete contact with the ground surface and stable?	X		
D	Is the well pad in complete contact with the protective casing?	X		
E	Is the pad surface clean (not covered with sediment or debris)?	X		
4) Internal Casing				
A	Does the cap prevent entry of foreign material inot the well?	X		
B	Is the casing free of kinks/bends, or any obstructions from foreign objects (such as bailers)?	X		
C	Is the well properly vented for equilibration of air pressure?	X		
D	Is the survey point clearly marked on the inner casing?	X		
E	Is the depth of the well consistent with the original well log?	X		
F	Is the casing stable? (Does PVC move easily when touched or can be taken apart by hand due to lack of grout or use of slip couplings in construction)	X		
5) Sampling: Groundwater Wells Only				
A	Does water recharge adequately when purged?	X		
B	If dedicated sampling equipment installed, is it in good condition and specified in the arppove groundwater monitoring plan for the facility?	X		
C	Does the well require redevelopment (low flow/turbidity)?		X	
6) Based on 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?		X		
7) Corrective actions as needed, by date:				
Signature and Seal of PE/PG responsible for inspection				

Groundwater Monitoring Well Integrity Form

Site Name: Plant Branch

Permit Number:

Well ID: BRGWC-37S

Date: 1/31/22

		Yes	No	N/A
1) Location/Identification				
A	Is the well visible and accessible?	X		
B	Is the well properly identified with correct well ID?	X		
C	Is the well in a high traffic area and does the well require protection from traffic?		X	
D	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	X		
2) Protective Casing				
A	Is the protective casing free from apparent damage and able to be secured?	X		
B	Is the casing free of degradation or deterioration?	X		
C	Does the casing have a functioning weep hole?	X		
D	Is the annular space between the casings clear of debris and water, or filled with pea gravel/sand?	X		
E	Is the well locked and is the lock in good condition?	X		
3) Surface Pad				
A	Is the well pad in good condition (not cracked/broken)?	X		
B	Is the well pad sloped away from the protective casing?	X		
C	Is the well pad in complete contact with the ground surface and stable?	X		
D	Is the well pad in complete contact with the protective casing?	X		
E	Is the pad surface clean (not covered with sediment or debris)?	X		
4) Internal Casing				
A	Does the cap prevent entry of foreign material inot the well?	X		
B	Is the casing free of kinks/bends, or any obstructions from foreign objects (such as bailers)?	X		
C	Is the well properly vented for equilibration of air pressure?	X		
D	Is the survey point clearly marked on the inner casing?	X		
E	Is the depth of the well consistent with the original well log?	X		
F	Is the casing stable? (Does PVC move easily when touched or can be taken apart by hand due to lack of grout or use of slip couplings in construction)	X		
5) Sampling: Groundwater Wells Only				
A	Does water recharge adequately when purged?	X		
B	If dedicated sampling equipment installed, is it in good condition and specified in the arppove groundwater monitoring plan for the facility?	X		
C	Does the well require redevelopment (low flow/turbidity)?		X	
6) Based on 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?		X		
7) Corrective actions as needed, by date:				
Signature and Seal of PE/PG responsible for inspection				

Groundwater Monitoring Well Integrity Form

Site Name: Plant Branch

Permit Number:

Well ID: BRGWC-38S

Date: 1/31/22

		Yes	No	N/A
1) Location/Identification				
A	Is the well visible and accessible?	X		
B	Is the well properly identified with correct well ID?	X		
C	Is the well in a high traffic area and does the well require protection from traffic?		X	
D	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	X		
2) Protective Casing				
A	Is the protective casing free from apparent damage and able to be secured?	X		
B	Is the casing free of degradation or deterioration?	X		
C	Does the casing have a functioning weep hole?	X		
D	Is the annular space between the casings clear of debris and water, or filled with pea gravel/sand?	X		
E	Is the well locked and is the lock in good condition?	X		
3) Surface Pad				
A	Is the well pad in good condition (not cracked/broken)?	X		
B	Is the well pad sloped away from the protective casing?	X		
C	Is the well pad in complete contact with the ground surface and stable?	X		
D	Is the well pad in complete contact with the protective casing?	X		
E	Is the pad surface clean (not covered with sediment or debris)?	X		
4) Internal Casing				
A	Does the cap prevent entry of foreign material inot the well?	X		
B	Is the casing free of kinks/bends, or any obstructions from foreign objects (such as bailers)?	X		
C	Is the well properly vented for equilibration of air pressure?	X		
D	Is the survey point clearly marked on the inner casing?	X		
E	Is the depth of the well consistent with the original well log?	X		
F	Is the casing stable? (Does PVC move easily when touched or can be taken apart by hand due to lack of grout or use of slip couplings in construction)	X		
5) Sampling: Groundwater Wells Only				
A	Does water recharge adequately when purged?	X		
B	If dedicated sampling equipment installed, is it in good condition and specified in the arppove groundwater monitoring plan for the facility?	X		
C	Does the well require redevelopment (low flow/turbidity)?		X	
6) Based on 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?		X		
7) Corrective actions as needed, by date:				
Signature and Seal of PE/PG responsible for inspection				

Groundwater Monitoring Well Integrity Form

Site Name: Plant Branch

Permit Number:

Well ID: BRGWC-45

Date: 1/31/22

		Yes	No	N/A
1) Location/Identification				
A	Is the well visible and accessible?	X		
B	Is the well properly identified with correct well ID?	X		
C	Is the well in a high traffic area and does the well require protection from traffic?		X	
D	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	X		
2) Protective Casing				
A	Is the protective casing free from apparent damage and able to be secured?	X		
B	Is the casing free of degradation or deterioration?	X		
C	Does the casing have a functioning weep hole?	X		
D	Is the annular space between the casings clear of debris and water, or filled with pea gravel/sand?	X		
E	Is the well locked and is the lock in good condition?	X		
3) Surface Pad				
A	Is the well pad in good condition (not cracked/broken)?	X		
B	Is the well pad sloped away from the protective casing?	X		
C	Is the well pad in complete contact with the ground surface and stable?	X		
D	Is the well pad in complete contact with the protective casing?	X		
E	Is the pad surface clean (not covered with sediment or debris)?	X		
4) Internal Casing				
A	Does the cap prevent entry of foreign material inot the well?	X		
B	Is the casing free of kinks/bends, or any obstructions from foreign objects (such as bailers)?	X		
C	Is the well properly vented for equilibration of air pressure?	X		
D	Is the survey point clearly marked on the inner casing?	X		
E	Is the depth of the well consistent with the original well log?	X		
F	Is the casing stable? (Does PVC move easily when touched or can be taken apart by hand due to lack of grout or use of slip couplings in construction)	X		
5) Sampling: Groundwater Wells Only				
A	Does water recharge adequately when purged?	X		
B	If dedicated sampling equipment installed, is it in good condition and specified in the arppove groundwater monitoring plan for the facility?	X		
C	Does the well require redevelopment (low flow/turbidity)?		X	
6) Based on 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?		X		
7) Corrective actions as needed, by date:				
Signature and Seal of PE/PG responsible for inspection				

Groundwater Monitoring Well Integrity Form

Site Name: Plant Branch

Permit Number:

Well ID: BRGWC-47

Date: 1/31/22

		Yes	No	N/A
1) Location/Identification				
A	Is the well visible and accessible?	X		
B	Is the well properly identified with correct well ID?	X		
C	Is the well in a high traffic area and does the well require protection from traffic?		X	
D	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	X		
2) Protective Casing				
A	Is the protective casing free from apparent damage and able to be secured?	X		
B	Is the casing free of degradation or deterioration?	X		
C	Does the casing have a functioning weep hole?	X		
D	Is the annular space between the casings clear of debris and water, or filled with pea gravel/sand?	X		
E	Is the well locked and is the lock in good condition?	X		
3) Surface Pad				
A	Is the well pad in good condition (not cracked/broken)?	X		
B	Is the well pad sloped away from the protective casing?	X		
C	Is the well pad in complete contact with the ground surface and stable?	X		
D	Is the well pad in complete contact with the protective casing?	X		
E	Is the pad surface clean (not covered with sediment or debris)?	X		
4) Internal Casing				
A	Does the cap prevent entry of foreign material inot the well?	X		
B	Is the casing free of kinks/bends, or any obstructions from foreign objects (such as bailers)?	X		
C	Is the well properly vented for equilibration of air pressure?	X		
D	Is the survey point clearly marked on the inner casing?	X		
E	Is the depth of the well consistent with the original well log?	X		
F	Is the casing stable? (Does PVC move easily when touched or can be taken apart by hand due to lack of grout or use of slip couplings in construction)	X		
5) Sampling: Groundwater Wells Only				
A	Does water recharge adequately when purged?	X		
B	If dedicated sampling equipment installed, is it in good condition and specified in the arppove groundwater monitoring plan for the facility?	X		
C	Does the well require redevelopment (low flow/turbidity)?		X	
6) Based on 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?		X		
7) Corrective actions as needed, by date:				
Signature and Seal of PE/PG responsible for inspection				

Groundwater Monitoring Well Integrity Form

Site Name: Plant Branch

Permit Number:

Well ID: BRGWC-50

Date: 1/31/22

		Yes	No	N/A
1) Location/Identification				
A	Is the well visible and accessible?	X		
B	Is the well properly identified with correct well ID?	X		
C	Is the well in a high traffic area and does the well require protection from traffic?		X	
D	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	X		
2) Protective Casing				
A	Is the protective casing free from apparent damage and able to be secured?	X		
B	Is the casing free of degradation or deterioration?	X		
C	Does the casing have a functioning weep hole?	X		
D	Is the annular space between the casings clear of debris and water, or filled with pea gravel/sand?	X		
E	Is the well locked and is the lock in good condition?	X		
3) Surface Pad				
A	Is the well pad in good condition (not cracked/broken)?	X		
B	Is the well pad sloped away from the protective casing?	X		
C	Is the well pad in complete contact with the ground surface and stable?	X		
D	Is the well pad in complete contact with the protective casing?	X		
E	Is the pad surface clean (not covered with sediment or debris)?	X		
4) Internal Casing				
A	Does the cap prevent entry of foreign material inot the well?	X		
B	Is the casing free of kinks/bends, or any obstructions from foreign objects (such as bailers)?	X		
C	Is the well properly vented for equilibration of air pressure?	X		
D	Is the survey point clearly marked on the inner casing?	X		
E	Is the depth of the well consistent with the original well log?	X		
F	Is the casing stable? (Does PVC move easily when touched or can be taken apart by hand due to lack of grout or use of slip couplings in construction)	X		
5) Sampling: Groundwater Wells Only				
A	Does water recharge adequately when purged?	X		
B	If dedicated sampling equipment installed, is it in good condition and specified in the arppove groundwater monitoring plan for the facility?	X		
C	Does the well require redevelopment (low flow/turbidity)?		X	
6) Based on 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?		X		
7) Corrective actions as needed, by date:				
Signature and Seal of PE/PG responsible for inspection				

Groundwater Monitoring Well Integrity Form

Site Name: Plant Branch

Permit Number:

Well ID: BRGWC-52I

Date: 1/31/22

		Yes	No	N/A
1) Location/Identification				
A	Is the well visible and accessible?	X		
B	Is the well properly identified with correct well ID?	X		
C	Is the well in a high traffic area and does the well require protection from traffic?		X	
D	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	X		
2) Protective Casing				
A	Is the protective casing free from apparent damage and able to be secured?	X		
B	Is the casing free of degradation or deterioration?	X		
C	Does the casing have a functioning weep hole?	X		
D	Is the annular space between the casings clear of debris and water, or filled with pea gravel/sand?	X		
E	Is the well locked and is the lock in good condition?	X		
3) Surface Pad				
A	Is the well pad in good condition (not cracked/broken)?	X		
B	Is the well pad sloped away from the protective casing?	X		
C	Is the well pad in complete contact with the ground surface and stable?	X		
D	Is the well pad in complete contact with the protective casing?	X		
E	Is the pad surface clean (not covered with sediment or debris)?	X		
4) Internal Casing				
A	Does the cap prevent entry of foreign material inot the well?	X		
B	Is the casing free of kinks/bends, or any obstructions from foreign objects (such as bailers)?	X		
C	Is the well properly vented for equilibration of air pressure?	X		
D	Is the survey point clearly marked on the inner casing?	X		
E	Is the depth of the well consistent with the original well log?	X		
F	Is the casing stable? (Does PVC move easily when touched or can be taken apart by hand due to lack of grout or use of slip couplings in construction)	X		
5) Sampling: Groundwater Wells Only				
A	Does water recharge adequately when purged?	X		
B	If dedicated sampling equipment installed, is it in good condition and specified in the arppove groundwater monitoring plan for the facility?	X		
C	Does the well require redevelopment (low flow/turbidity)?		X	
6) Based on 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?		X		
7) Corrective actions as needed, by date:				
Signature and Seal of PE/PG responsible for inspection				

Groundwater Monitoring Well Integrity Form

Site Name: Plant Branch

Permit Number:

Well ID: PZ-50D

Date: 1/31/22

		Yes	No	N/A
1) Location/Identification				
A	Is the well visible and accessible?	X		
B	Is the well properly identified with correct well ID?	X		
C	Is the well in a high traffic area and does the well require protection from traffic?		X	
D	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	X		
2) Protective Casing				
A	Is the protective casing free from apparent damage and able to be secured?	X		
B	Is the casing free of degradation or deterioration?	X		
C	Does the casing have a functioning weep hole?	X		
D	Is the annular space between the casings clear of debris and water, or filled with pea gravel/sand?	X		
E	Is the well locked and is the lock in good condition?	X		
3) Surface Pad				
A	Is the well pad in good condition (not cracked/broken)?	X		
B	Is the well pad sloped away from the protective casing?	X		
C	Is the well pad in complete contact with the ground surface and stable?	X		
D	Is the well pad in complete contact with the protective casing?	X		
E	Is the pad surface clean (not covered with sediment or debris)?	X		
4) Internal Casing				
A	Does the cap prevent entry of foreign material inot the well?	X		
B	Is the casing free of kinks/bends, or any obstructions from foreign objects (such as bailers)?	X		
C	Is the well properly vented for equilibration of air pressure?	X		
D	Is the survey point clearly marked on the inner casing?	X		
E	Is the depth of the well consistent with the original well log?	X		
F	Is the casing stable? (Does PVC move easily when touched or can be taken apart by hand due to lack of grout or use of slip couplings in construction)	X		
5) Sampling: Groundwater Wells Only				
A	Does water recharge adequately when purged?	X		
B	If dedicated sampling equipment installed, is it in good condition and specified in the arppove groundwater monitoring plan for the facility?	X		
C	Does the well require redevelopment (low flow/turbidity)?		X	
6) Based on 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?		X		
7) Corrective actions as needed, by date:				
Signature and Seal of PE/PG responsible for inspection				

Groundwater Monitoring Well Integrity Form

Site Name: Plant Branch

Permit Number:

Well ID: PZ-51S

Date: 1/31/22

		Yes	No	N/A
1) Location/Identification				
A	Is the well visible and accessible?	X		
B	Is the well properly identified with correct well ID?	X		
C	Is the well in a high traffic area and does the well require protection from traffic?		X	
D	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	X		
2) Protective Casing				
A	Is the protective casing free from apparent damage and able to be secured?	X		
B	Is the casing free of degradation or deterioration?	X		
C	Does the casing have a functioning weep hole?	X		
D	Is the annular space between the casings clear of debris and water, or filled with pea gravel/sand?	X		
E	Is the well locked and is the lock in good condition?	X		
3) Surface Pad				
A	Is the well pad in good condition (not cracked/broken)?	X		
B	Is the well pad sloped away from the protective casing?	X		
C	Is the well pad in complete contact with the ground surface and stable?	X		
D	Is the well pad in complete contact with the protective casing?	X		
E	Is the pad surface clean (not covered with sediment or debris)?	X		
4) Internal Casing				
A	Does the cap prevent entry of foreign material inot the well?	X		
B	Is the casing free of kinks/bends, or any obstructions from foreign objects (such as bailers)?	X		
C	Is the well properly vented for equilibration of air pressure?	X		
D	Is the survey point clearly marked on the inner casing?	X		
E	Is the depth of the well consistent with the original well log?	X		
F	Is the casing stable? (Does PVC move easily when touched or can be taken apart by hand due to lack of grout or use of slip couplings in construction)	X		
5) Sampling: Groundwater Wells Only				
A	Does water recharge adequately when purged?	X		
B	If dedicated sampling equipment installed, is it in good condition and specified in the arppove groundwater monitoring plan for the facility?	X		
C	Does the well require redevelopment (low flow/turbidity)?		X	
6) Based on 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?		X		
7) Corrective actions as needed, by date:				
Signature and Seal of PE/PG responsible for inspection				

Groundwater Monitoring Well Integrity Form

Site Name: Plant Branch

Permit Number:

Well ID: PZ-51I

Date: 1/31/22

		Yes	No	N/A
1) Location/Identification				
A	Is the well visible and accessible?	X		
B	Is the well properly identified with correct well ID?	X		
C	Is the well in a high traffic area and does the well require protection from traffic?		X	
D	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	X		
2) Protective Casing				
A	Is the protective casing free from apparent damage and able to be secured?	X		
B	Is the casing free of degradation or deterioration?	X		
C	Does the casing have a functioning weep hole?	X		
D	Is the annular space between the casings clear of debris and water, or filled with pea gravel/sand?	X		
E	Is the well locked and is the lock in good condition?	X		
3) Surface Pad				
A	Is the well pad in good condition (not cracked/broken)?	X		
B	Is the well pad sloped away from the protective casing?	X		
C	Is the well pad in complete contact with the ground surface and stable?	X		
D	Is the well pad in complete contact with the protective casing?	X		
E	Is the pad surface clean (not covered with sediment or debris)?	X		
4) Internal Casing				
A	Does the cap prevent entry of foreign material inot the well?	X		
B	Is the casing free of kinks/bends, or any obstructions from foreign objects (such as bailers)?	X		
C	Is the well properly vented for equilibration of air pressure?	X		
D	Is the survey point clearly marked on the inner casing?	X		
E	Is the depth of the well consistent with the original well log?	X		
F	Is the casing stable? (Does PVC move easily when touched or can be taken apart by hand due to lack of grout or use of slip couplings in construction)	X		
5) Sampling: Groundwater Wells Only				
A	Does water recharge adequately when purged?	X		
B	If dedicated sampling equipment installed, is it in good condition and specified in the arppove groundwater monitoring plan for the facility?	X		
C	Does the well require redevelopment (low flow/turbidity)?		X	
6) Based on 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?		X		
7) Corrective actions as needed, by date:				
Signature and Seal of PE/PG responsible for inspection				

Groundwater Monitoring Well Integrity Form

Site Name: Plant Branch

Permit Number:

Well ID: PZ-51D

Date: 1/31/22

		Yes	No	N/A
1) Location/Identification				
A	Is the well visible and accessible?	X		
B	Is the well properly identified with correct well ID?	X		
C	Is the well in a high traffic area and does the well require protection from traffic?		X	
D	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	X		
2) Protective Casing				
A	Is the protective casing free from apparent damage and able to be secured?	X		
B	Is the casing free of degradation or deterioration?	X		
C	Does the casing have a functioning weep hole?	X		
D	Is the annular space between the casings clear of debris and water, or filled with pea gravel/sand?	X		
E	Is the well locked and is the lock in good condition?	X		
3) Surface Pad				
A	Is the well pad in good condition (not cracked/broken)?	X		
B	Is the well pad sloped away from the protective casing?	X		
C	Is the well pad in complete contact with the ground surface and stable?	X		
D	Is the well pad in complete contact with the protective casing?	X		
E	Is the pad surface clean (not covered with sediment or debris)?	X		
4) Internal Casing				
A	Does the cap prevent entry of foreign material inot the well?	X		
B	Is the casing free of kinks/bends, or any obstructions from foreign objects (such as bailers)?	X		
C	Is the well properly vented for equilibration of air pressure?	X		
D	Is the survey point clearly marked on the inner casing?	X		
E	Is the depth of the well consistent with the original well log?	X		
F	Is the casing stable? (Does PVC move easily when touched or can be taken apart by hand due to lack of grout or use of slip couplings in construction)	X		
5) Sampling: Groundwater Wells Only				
A	Does water recharge adequately when purged?	X		
B	If dedicated sampling equipment installed, is it in good condition and specified in the arppove groundwater monitoring plan for the facility?	X		
C	Does the well require redevelopment (low flow/turbidity)?		X	
6) Based on 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?		X		
7) Corrective actions as needed, by date:				
Signature and Seal of PE/PG responsible for inspection				

Groundwater Monitoring Well Integrity Form

Site Name: Plant Branch

Permit Number:

Well ID: PZ-57I

Date: 1/31/22

		Yes	No	N/A
1) Location/Identification				
A	Is the well visible and accessible?	X		
B	Is the well properly identified with correct well ID?	X		
C	Is the well in a high traffic area and does the well require protection from traffic?		X	
D	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	X		
2) Protective Casing				
A	Is the protective casing free from apparent damage and able to be secured?	X		
B	Is the casing free of degradation or deterioration?	X		
C	Does the casing have a functioning weep hole?	X		
D	Is the annular space between the casings clear of debris and water, or filled with pea gravel/sand?	X		
E	Is the well locked and is the lock in good condition?	X		
3) Surface Pad				
A	Is the well pad in good condition (not cracked/broken)?	X		
B	Is the well pad sloped away from the protective casing?	X		
C	Is the well pad in complete contact with the ground surface and stable?	X		
D	Is the well pad in complete contact with the protective casing?	X		
E	Is the pad surface clean (not covered with sediment or debris)?	X		
4) Internal Casing				
A	Does the cap prevent entry of foreign material inot the well?	X		
B	Is the casing free of kinks/bends, or any obstructions from foreign objects (such as bailers)?	X		
C	Is the well properly vented for equilibration of air pressure?	X		
D	Is the survey point clearly marked on the inner casing?	X		
E	Is the depth of the well consistent with the original well log?	X		
F	Is the casing stable? (Does PVC move easily when touched or can be taken apart by hand due to lack of grout or use of slip couplings in construction)	X		
5) Sampling: Groundwater Wells Only				
A	Does water recharge adequately when purged?	X		
B	If dedicated sampling equipment installed, is it in good condition and specified in the arppove groundwater monitoring plan for the facility?	X		
C	Does the well require redevelopment (low flow/turbidity)?		X	
6) Based on 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?		X		
7) Corrective actions as needed, by date:				
Signature and Seal of PE/PG responsible for inspection				

Groundwater Monitoring Well Integrity Form

Site Name: Plant Branch

Permit Number:

Well ID: PZ-58I

Date: 1/31/22

		Yes	No	N/A
1) Location/Identification				
A	Is the well visible and accessible?	X		
B	Is the well properly identified with correct well ID?	X		
C	Is the well in a high traffic area and does the well require protection from traffic?		X	
D	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	X		
2) Protective Casing				
A	Is the protective casing free from apparent damage and able to be secured?	X		
B	Is the casing free of degradation or deterioration?	X		
C	Does the casing have a functioning weep hole?	X		
D	Is the annular space between the casings clear of debris and water, or filled with pea gravel/sand?	X		
E	Is the well locked and is the lock in good condition?	X		
3) Surface Pad				
A	Is the well pad in good condition (not cracked/broken)?	X		
B	Is the well pad sloped away from the protective casing?	X		
C	Is the well pad in complete contact with the ground surface and stable?	X		
D	Is the well pad in complete contact with the protective casing?	X		
E	Is the pad surface clean (not covered with sediment or debris)?	X		
4) Internal Casing				
A	Does the cap prevent entry of foreign material inot the well?	X		
B	Is the casing free of kinks/bends, or any obstructions from foreign objects (such as bailers)?	X		
C	Is the well properly vented for equilibration of air pressure?	X		
D	Is the survey point clearly marked on the inner casing?	X		
E	Is the depth of the well consistent with the original well log?	X		
F	Is the casing stable? (Does PVC move easily when touched or can be taken apart by hand due to lack of grout or use of slip couplings in construction)	X		
5) Sampling: Groundwater Wells Only				
A	Does water recharge adequately when purged?	X		
B	If dedicated sampling equipment installed, is it in good condition and specified in the arppove groundwater monitoring plan for the facility?	X		
C	Does the well require redevelopment (low flow/turbidity)?		X	
6) Based on 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?		X		
7) Corrective actions as needed, by date:				
Signature and Seal of PE/PG responsible for inspection				

Groundwater Monitoring Well Integrity Form

Site Name: Plant Branch

Permit Number:

Well ID: PZ-59I

Date: 1/31/22

		Yes	No	N/A
1) Location/Identification				
A	Is the well visible and accessible?	X		
B	Is the well properly identified with correct well ID?	X		
C	Is the well in a high traffic area and does the well require protection from traffic?		X	
D	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	X		
2) Protective Casing				
A	Is the protective casing free from apparent damage and able to be secured?	X		
B	Is the casing free of degradation or deterioration?	X		
C	Does the casing have a functioning weep hole?	X		
D	Is the annular space between the casings clear of debris and water, or filled with pea gravel/sand?	X		
E	Is the well locked and is the lock in good condition?	X		
3) Surface Pad				
A	Is the well pad in good condition (not cracked/broken)?	X		
B	Is the well pad sloped away from the protective casing?	X		
C	Is the well pad in complete contact with the ground surface and stable?	X		
D	Is the well pad in complete contact with the protective casing?	X		
E	Is the pad surface clean (not covered with sediment or debris)?	X		
4) Internal Casing				
A	Does the cap prevent entry of foreign material inot the well?	X		
B	Is the casing free of kinks/bends, or any obstructions from foreign objects (such as bailers)?	X		
C	Is the well properly vented for equilibration of air pressure?	X		
D	Is the survey point clearly marked on the inner casing?	X		
E	Is the depth of the well consistent with the original well log?	X		
F	Is the casing stable? (Does PVC move easily when touched or can be taken apart by hand due to lack of grout or use of slip couplings in construction)	X		
5) Sampling: Groundwater Wells Only				
A	Does water recharge adequately when purged?	X		
B	If dedicated sampling equipment installed, is it in good condition and specified in the arppove groundwater monitoring plan for the facility?	X		
C	Does the well require redevelopment (low flow/turbidity)?		X	
6) Based on 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?		X		
7) Corrective actions as needed, by date:				
Signature and Seal of PE/PG responsible for inspection				

Groundwater Monitoring Well Integrity Form

Site Name: Plant Branch

Permit Number:

Well ID: PZ-60I

Date: 1/31/22

		Yes	No	N/A
1) Location/Identification				
A	Is the well visible and accessible?	X		
B	Is the well properly identified with correct well ID?	X		
C	Is the well in a high traffic area and does the well require protection from traffic?		X	
D	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	X		
2) Protective Casing				
A	Is the protective casing free from apparent damage and able to be secured?	X		
B	Is the casing free of degradation or deterioration?	X		
C	Does the casing have a functioning weep hole?	X		
D	Is the annular space between the casings clear of debris and water, or filled with pea gravel/sand?	X		
E	Is the well locked and is the lock in good condition?	X		
3) Surface Pad				
A	Is the well pad in good condition (not cracked/broken)?	X		
B	Is the well pad sloped away from the protective casing?	X		
C	Is the well pad in complete contact with the ground surface and stable?	X		
D	Is the well pad in complete contact with the protective casing?	X		
E	Is the pad surface clean (not covered with sediment or debris)?	X		
4) Internal Casing				
A	Does the cap prevent entry of foreign material inot the well?	X		
B	Is the casing free of kinks/bends, or any obstructions from foreign objects (such as bailers)?	X		
C	Is the well properly vented for equilibration of air pressure?	X		
D	Is the survey point clearly marked on the inner casing?	X		
E	Is the depth of the well consistent with the original well log?	X		
F	Is the casing stable? (Does PVC move easily when touched or can be taken apart by hand due to lack of grout or use of slip couplings in construction)	X		
5) Sampling: Groundwater Wells Only				
A	Does water recharge adequately when purged?	X		
B	If dedicated sampling equipment installed, is it in good condition and specified in the arppove groundwater monitoring plan for the facility?	X		
C	Does the well require redevelopment (low flow/turbidity)?		X	
6) Based on 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?		X		
7) Corrective actions as needed, by date:				
Signature and Seal of PE/PG responsible for inspection				

Groundwater Monitoring Well Integrity Form

Site Name: Plant Branch

Permit Number:

Well ID: PZ-61I

Date: 1/31/22

		Yes	No	N/A
1) Location/Identification				
A	Is the well visible and accessible?	X		
B	Is the well properly identified with correct well ID?	X		
C	Is the well in a high traffic area and does the well require protection from traffic?		X	
D	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	X		
2) Protective Casing				
A	Is the protective casing free from apparent damage and able to be secured?	X		
B	Is the casing free of degradation or deterioration?	X		
C	Does the casing have a functioning weep hole?	X		
D	Is the annular space between the casings clear of debris and water, or filled with pea gravel/sand?	X		
E	Is the well locked and is the lock in good condition?	X		
3) Surface Pad				
A	Is the well pad in good condition (not cracked/broken)?	X		
B	Is the well pad sloped away from the protective casing?	X		
C	Is the well pad in complete contact with the ground surface and stable?	X		
D	Is the well pad in complete contact with the protective casing?	X		
E	Is the pad surface clean (not covered with sediment or debris)?	X		
4) Internal Casing				
A	Does the cap prevent entry of foreign material inot the well?	X		
B	Is the casing free of kinks/bends, or any obstructions from foreign objects (such as bailers)?	X		
C	Is the well properly vented for equilibration of air pressure?	X		
D	Is the survey point clearly marked on the inner casing?	X		
E	Is the depth of the well consistent with the original well log?	X		
F	Is the casing stable? (Does PVC move easily when touched or can be taken apart by hand due to lack of grout or use of slip couplings in construction)	X		
5) Sampling: Groundwater Wells Only				
A	Does water recharge adequately when purged?	X		
B	If dedicated sampling equipment installed, is it in good condition and specified in the arppove groundwater monitoring plan for the facility?	X		
C	Does the well require redevelopment (low flow/turbidity)?		X	
6) Based on 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?		X		
7) Corrective actions as needed, by date:				
Signature and Seal of PE/PG responsible for inspection				

Groundwater Monitoring Well Integrity Form

Site Name: Plant Branch

Permit Number:

Well ID: PZ-62I

Date: 1/31/22

		Yes	No	N/A
1) Location/Identification				
A	Is the well visible and accessible?	X		
B	Is the well properly identified with correct well ID?	X		
C	Is the well in a high traffic area and does the well require protection from traffic?		X	
D	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	X		
2) Protective Casing				
A	Is the protective casing free from apparent damage and able to be secured?	X		
B	Is the casing free of degradation or deterioration?	X		
C	Does the casing have a functioning weep hole?	X		
D	Is the annular space between the casings clear of debris and water, or filled with pea gravel/sand?	X		
E	Is the well locked and is the lock in good condition?	X		
3) Surface Pad				
A	Is the well pad in good condition (not cracked/broken)?	X		
B	Is the well pad sloped away from the protective casing?	X		
C	Is the well pad in complete contact with the ground surface and stable?	X		
D	Is the well pad in complete contact with the protective casing?	X		
E	Is the pad surface clean (not covered with sediment or debris)?	X		
4) Internal Casing				
A	Does the cap prevent entry of foreign material inot the well?	X		
B	Is the casing free of kinks/bends, or any obstructions from foreign objects (such as bailers)?	X		
C	Is the well properly vented for equilibration of air pressure?	X		
D	Is the survey point clearly marked on the inner casing?	X		
E	Is the depth of the well consistent with the original well log?	X		
F	Is the casing stable? (Does PVC move easily when touched or can be taken apart by hand due to lack of grout or use of slip couplings in construction)	X		
5) Sampling: Groundwater Wells Only				
A	Does water recharge adequately when purged?	X		
B	If dedicated sampling equipment installed, is it in good condition and specified in the arppove groundwater monitoring plan for the facility?	X		
C	Does the well require redevelopment (low flow/turbidity)?		X	
6) Based on 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?		X		
7) Corrective actions as needed, by date:				
Signature and Seal of PE/PG responsible for inspection				

Groundwater Monitoring Well Integrity Form

Site Name: Plant Branch

Permit Number:

Well ID: PZ-63I

Date: 1/31/22

		Yes	No	N/A
1) Location/Identification				
A	Is the well visible and accessible?	X		
B	Is the well properly identified with correct well ID?	X		
C	Is the well in a high traffic area and does the well require protection from traffic?		X	
D	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	X		
2) Protective Casing				
A	Is the protective casing free from apparent damage and able to be secured?	X		
B	Is the casing free of degradation or deterioration?	X		
C	Does the casing have a functioning weep hole?	X		
D	Is the annular space between the casings clear of debris and water, or filled with pea gravel/sand?	X		
E	Is the well locked and is the lock in good condition?	X		
3) Surface Pad				
A	Is the well pad in good condition (not cracked/broken)?	X		
B	Is the well pad sloped away from the protective casing?	X		
C	Is the well pad in complete contact with the ground surface and stable?	X		
D	Is the well pad in complete contact with the protective casing?	X		
E	Is the pad surface clean (not covered with sediment or debris)?	X		
4) Internal Casing				
A	Does the cap prevent entry of foreign material inot the well?	X		
B	Is the casing free of kinks/bends, or any obstructions from foreign objects (such as bailers)?	X		
C	Is the well properly vented for equilibration of air pressure?	X		
D	Is the survey point clearly marked on the inner casing?	X		
E	Is the depth of the well consistent with the original well log?	X		
F	Is the casing stable? (Does PVC move easily when touched or can be taken apart by hand due to lack of grout or use of slip couplings in construction)	X		
5) Sampling: Groundwater Wells Only				
A	Does water recharge adequately when purged?	X		
B	If dedicated sampling equipment installed, is it in good condition and specified in the arppove groundwater monitoring plan for the facility?	X		
C	Does the well require redevelopment (low flow/turbidity)?		X	
6) Based on 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?		X		
7) Corrective actions as needed, by date:				
Signature and Seal of PE/PG responsible for inspection				

Groundwater Monitoring Well Integrity Form

Site Name: Plant Branch

Permit Number:

Well ID: PZ-1S

Date: 1/31/22

		Yes	No	N/A
1) Location/Identification				
A	Is the well visible and accessible?	X		
B	Is the well properly identified with correct well ID?	X		
C	Is the well in a high traffic area and does the well require protection from traffic?		X	
D	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	X		
2) Protective Casing				
A	Is the protective casing free from apparent damage and able to be secured?	X		
B	Is the casing free of degradation or deterioration?	X		
C	Does the casing have a functioning weep hole?	X		
D	Is the annular space between the casings clear of debris and water, or filled with pea gravel/sand?	X		
E	Is the well locked and is the lock in good condition?	X		
3) Surface Pad				
A	Is the well pad in good condition (not cracked/broken)?	X		
B	Is the well pad sloped away from the protective casing?	X		
C	Is the well pad in complete contact with the ground surface and stable?	X		
D	Is the well pad in complete contact with the protective casing?	X		
E	Is the pad surface clean (not covered with sediment or debris)?	X		
4) Internal Casing				
A	Does the cap prevent entry of foreign material inot the well?	X		
B	Is the casing free of kinks/bends, or any obstructions from foreign objects (such as bailers)?	X		
C	Is the well properly vented for equilibration of air pressure?	X		
D	Is the survey point clearly marked on the inner casing?	X		
E	Is the depth of the well consistent with the original well log?	X		
F	Is the casing stable? (Does PVC move easily when touched or can be taken apart by hand due to lack of grout or use of slip couplings in construction)	X		
5) Sampling: Groundwater Wells Only				
A	Does water recharge adequately when purged?	X		
B	If dedicated sampling equipment installed, is it in good condition and specified in the arppove groundwater monitoring plan for the facility?	X		
C	Does the well require redevelopment (low flow/turbidity)?		X	
6) Based on 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?		X		
7) Corrective actions as needed, by date:				
Signature and Seal of PE/PG responsible for inspection				

Groundwater Monitoring Well Integrity Form

Site Name: Plant Branch

Permit Number:

Well ID: PZ-1I

Date: 1/31/22

		Yes	No	N/A
1) Location/Identification				
A	Is the well visible and accessible?	X		
B	Is the well properly identified with correct well ID?	X		
C	Is the well in a high traffic area and does the well require protection from traffic?		X	
D	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	X		
2) Protective Casing				
A	Is the protective casing free from apparent damage and able to be secured?	X		
B	Is the casing free of degradation or deterioration?	X		
C	Does the casing have a functioning weep hole?	X		
D	Is the annular space between the casings clear of debris and water, or filled with pea gravel/sand?	X		
E	Is the well locked and is the lock in good condition?	X		
3) Surface Pad				
A	Is the well pad in good condition (not cracked/broken)?	X		
B	Is the well pad sloped away from the protective casing?	X		
C	Is the well pad in complete contact with the ground surface and stable?	X		
D	Is the well pad in complete contact with the protective casing?	X		
E	Is the pad surface clean (not covered with sediment or debris)?	X		
4) Internal Casing				
A	Does the cap prevent entry of foreign material inot the well?	X		
B	Is the casing free of kinks/bends, or any obstructions from foreign objects (such as bailers)?	X		
C	Is the well properly vented for equilibration of air pressure?	X		
D	Is the survey point clearly marked on the inner casing?	X		
E	Is the depth of the well consistent with the original well log?	X		
F	Is the casing stable? (Does PVC move easily when touched or can be taken apart by hand due to lack of grout or use of slip couplings in construction)	X		
5) Sampling: Groundwater Wells Only				
A	Does water recharge adequately when purged?	X		
B	If dedicated sampling equipment installed, is it in good condition and specified in the arppove groundwater monitoring plan for the facility?	X		
C	Does the well require redevelopment (low flow/turbidity)?		X	
6) Based on 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?		X		
7) Corrective actions as needed, by date:				
Signature and Seal of PE/PG responsible for inspection				

Groundwater Monitoring Well Integrity Form

Site Name: Plant Branch

Permit Number:

Well ID: PZ-1D

Date: 1/31/22

		Yes	No	N/A
1) Location/Identification				
A	Is the well visible and accessible?	X		
B	Is the well properly identified with correct well ID?	X		
C	Is the well in a high traffic area and does the well require protection from traffic?		X	
D	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	X		
2) Protective Casing				
A	Is the protective casing free from apparent damage and able to be secured?	X		
B	Is the casing free of degradation or deterioration?	X		
C	Does the casing have a functioning weep hole?	X		
D	Is the annular space between the casings clear of debris and water, or filled with pea gravel/sand?	X		
E	Is the well locked and is the lock in good condition?	X		
3) Surface Pad				
A	Is the well pad in good condition (not cracked/broken)?	X		
B	Is the well pad sloped away from the protective casing?	X		
C	Is the well pad in complete contact with the ground surface and stable?	X		
D	Is the well pad in complete contact with the protective casing?	X		
E	Is the pad surface clean (not covered with sediment or debris)?	X		
4) Internal Casing				
A	Does the cap prevent entry of foreign material inot the well?	X		
B	Is the casing free of kinks/bends, or any obstructions from foreign objects (such as bailers)?	X		
C	Is the well properly vented for equilibration of air pressure?	X		
D	Is the survey point clearly marked on the inner casing?	X		
E	Is the depth of the well consistent with the original well log?	X		
F	Is the casing stable? (Does PVC move easily when touched or can be taken apart by hand due to lack of grout or use of slip couplings in construction)	X		
5) Sampling: Groundwater Wells Only				
A	Does water recharge adequately when purged?	X		
B	If dedicated sampling equipment installed, is it in good condition and specified in the arppove groundwater monitoring plan for the facility?	X		
C	Does the well require redevelopment (low flow/turbidity)?		X	
6) Based on 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?		X		
7) Corrective actions as needed, by date:				
Signature and Seal of PE/PG responsible for inspection				

Groundwater Monitoring Well Integrity Form

Site Name: Plant Branch

Permit Number:

Well ID: PZ-3S

Date: 1/31/22

		Yes	No	N/A
1) Location/Identification				
A	Is the well visible and accessible?	X		
B	Is the well properly identified with correct well ID?	X		
C	Is the well in a high traffic area and does the well require protection from traffic?		X	
D	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	X		
2) Protective Casing				
A	Is the protective casing free from apparent damage and able to be secured?	X		
B	Is the casing free of degradation or deterioration?	X		
C	Does the casing have a functioning weep hole?	X		
D	Is the annular space between the casings clear of debris and water, or filled with pea gravel/sand?	X		
E	Is the well locked and is the lock in good condition?	X		
3) Surface Pad				
A	Is the well pad in good condition (not cracked/broken)?	X		
B	Is the well pad sloped away from the protective casing?	X		
C	Is the well pad in complete contact with the ground surface and stable?	X		
D	Is the well pad in complete contact with the protective casing?	X		
E	Is the pad surface clean (not covered with sediment or debris)?	X		
4) Internal Casing				
A	Does the cap prevent entry of foreign material inot the well?	X		
B	Is the casing free of kinks/bends, or any obstructions from foreign objects (such as bailers)?	X		
C	Is the well properly vented for equilibration of air pressure?	X		
D	Is the survey point clearly marked on the inner casing?	X		
E	Is the depth of the well consistent with the original well log?	X		
F	Is the casing stable? (Does PVC move easily when touched or can be taken apart by hand due to lack of grout or use of slip couplings in construction)	X		
5) Sampling: Groundwater Wells Only				
A	Does water recharge adequately when purged?	X		
B	If dedicated sampling equipment installed, is it in good condition and specified in the arppove groundwater monitoring plan for the facility?	X		
C	Does the well require redevelopment (low flow/turbidity)?		X	
6) Based on 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?		X		
7) Corrective actions as needed, by date:				
Signature and Seal of PE/PG responsible for inspection				

Groundwater Monitoring Well Integrity Form

Site Name: Plant Branch

Permit Number:

Well ID: PZ-3I

Date: 1/31/22

		Yes	No	N/A
1) Location/Identification				
A	Is the well visible and accessible?	X		
B	Is the well properly identified with correct well ID?	X		
C	Is the well in a high traffic area and does the well require protection from traffic?		X	
D	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	X		
2) Protective Casing				
A	Is the protective casing free from apparent damage and able to be secured?	X		
B	Is the casing free of degradation or deterioration?	X		
C	Does the casing have a functioning weep hole?	X		
D	Is the annular space between the casings clear of debris and water, or filled with pea gravel/sand?	X		
E	Is the well locked and is the lock in good condition?	X		
3) Surface Pad				
A	Is the well pad in good condition (not cracked/broken)?	X		
B	Is the well pad sloped away from the protective casing?	X		
C	Is the well pad in complete contact with the ground surface and stable?	X		
D	Is the well pad in complete contact with the protective casing?	X		
E	Is the pad surface clean (not covered with sediment or debris)?	X		
4) Internal Casing				
A	Does the cap prevent entry of foreign material inot the well?	X		
B	Is the casing free of kinks/bends, or any obstructions from foreign objects (such as bailers)?	X		
C	Is the well properly vented for equilibration of air pressure?	X		
D	Is the survey point clearly marked on the inner casing?	X		
E	Is the depth of the well consistent with the original well log?	X		
F	Is the casing stable? (Does PVC move easily when touched or can be taken apart by hand due to lack of grout or use of slip couplings in construction)	X		
5) Sampling: Groundwater Wells Only				
A	Does water recharge adequately when purged?	X		
B	If dedicated sampling equipment installed, is it in good condition and specified in the arppove groundwater monitoring plan for the facility?	X		
C	Does the well require redevelopment (low flow/turbidity)?		X	
6) Based on 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?		X		
7) Corrective actions as needed, by date:				
Signature and Seal of PE/PG responsible for inspection				

Groundwater Monitoring Well Integrity Form

Site Name: Plant Branch

Permit Number:

Well ID: PZ-3D

Date: 1/31/22

		Yes	No	N/A
1) Location/Identification				
A	Is the well visible and accessible?	X		
B	Is the well properly identified with correct well ID?	X		
C	Is the well in a high traffic area and does the well require protection from traffic?		X	
D	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	X		
2) Protective Casing				
A	Is the protective casing free from apparent damage and able to be secured?	X		
B	Is the casing free of degradation or deterioration?	X		
C	Does the casing have a functioning weep hole?	X		
D	Is the annular space between the casings clear of debris and water, or filled with pea gravel/sand?	X		
E	Is the well locked and is the lock in good condition?	X		
3) Surface Pad				
A	Is the well pad in good condition (not cracked/broken)?	X		
B	Is the well pad sloped away from the protective casing?	X		
C	Is the well pad in complete contact with the ground surface and stable?	X		
D	Is the well pad in complete contact with the protective casing?	X		
E	Is the pad surface clean (not covered with sediment or debris)?	X		
4) Internal Casing				
A	Does the cap prevent entry of foreign material inot the well?	X		
B	Is the casing free of kinks/bends, or any obstructions from foreign objects (such as bailers)?	X		
C	Is the well properly vented for equilibration of air pressure?	X		
D	Is the survey point clearly marked on the inner casing?	X		
E	Is the depth of the well consistent with the original well log?	X		
F	Is the casing stable? (Does PVC move easily when touched or can be taken apart by hand due to lack of grout or use of slip couplings in construction)	X		
5) Sampling: Groundwater Wells Only				
A	Does water recharge adequately when purged?	X		
B	If dedicated sampling equipment installed, is it in good condition and specified in the arppove groundwater monitoring plan for the facility?	X		
C	Does the well require redevelopment (low flow/turbidity)?		X	
6) Based on 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?		X		
7) Corrective actions as needed, by date:				
Signature and Seal of PE/PG responsible for inspection				

Groundwater Monitoring Well Integrity Form

Site Name: Plant Branch

Permit Number:

Well ID: PZ-4S

Date: 1/31/22

		Yes	No	N/A
1) Location/Identification				
A	Is the well visible and accessible?	X		
B	Is the well properly identified with correct well ID?	X		
C	Is the well in a high traffic area and does the well require protection from traffic?		X	
D	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	X		
2) Protective Casing				
A	Is the protective casing free from apparent damage and able to be secured?	X		
B	Is the casing free of degradation or deterioration?	X		
C	Does the casing have a functioning weep hole?	X		
D	Is the annular space between the casings clear of debris and water, or filled with pea gravel/sand?	X		
E	Is the well locked and is the lock in good condition?	X		
3) Surface Pad				
A	Is the well pad in good condition (not cracked/broken)?	X		
B	Is the well pad sloped away from the protective casing?	X		
C	Is the well pad in complete contact with the ground surface and stable?	X		
D	Is the well pad in complete contact with the protective casing?	X		
E	Is the pad surface clean (not covered with sediment or debris)?	X		
4) Internal Casing				
A	Does the cap prevent entry of foreign material inot the well?	X		
B	Is the casing free of kinks/bends, or any obstructions from foreign objects (such as bailers)?	X		
C	Is the well properly vented for equilibration of air pressure?	X		
D	Is the survey point clearly marked on the inner casing?	X		
E	Is the depth of the well consistent with the original well log?	X		
F	Is the casing stable? (Does PVC move easily when touched or can be taken apart by hand due to lack of grout or use of slip couplings in construction)	X		
5) Sampling: Groundwater Wells Only				
A	Does water recharge adequately when purged?	X		
B	If dedicated sampling equipment installed, is it in good condition and specified in the arppove groundwater monitoring plan for the facility?	X		
C	Does the well require redevelopment (low flow/turbidity)?		X	
6) Based on 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?		X		
7) Corrective actions as needed, by date:				
Signature and Seal of PE/PG responsible for inspection				

Groundwater Monitoring Well Integrity Form

Site Name: Plant Branch

Permit Number:

Well ID: PZ-4I

Date: 1/31/22

		Yes	No	N/A
1) Location/Identification				
A	Is the well visible and accessible?	X		
B	Is the well properly identified with correct well ID?	X		
C	Is the well in a high traffic area and does the well require protection from traffic?		X	
D	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	X		
2) Protective Casing				
A	Is the protective casing free from apparent damage and able to be secured?	X		
B	Is the casing free of degradation or deterioration?	X		
C	Does the casing have a functioning weep hole?	X		
D	Is the annular space between the casings clear of debris and water, or filled with pea gravel/sand?	X		
E	Is the well locked and is the lock in good condition?	X		
3) Surface Pad				
A	Is the well pad in good condition (not cracked/broken)?	X		
B	Is the well pad sloped away from the protective casing?	X		
C	Is the well pad in complete contact with the ground surface and stable?	X		
D	Is the well pad in complete contact with the protective casing?	X		
E	Is the pad surface clean (not covered with sediment or debris)?	X		
4) Internal Casing				
A	Does the cap prevent entry of foreign material inot the well?	X		
B	Is the casing free of kinks/bends, or any obstructions from foreign objects (such as bailers)?	X		
C	Is the well properly vented for equilibration of air pressure?	X		
D	Is the survey point clearly marked on the inner casing?	X		
E	Is the depth of the well consistent with the original well log?	X		
F	Is the casing stable? (Does PVC move easily when touched or can be taken apart by hand due to lack of grout or use of slip couplings in construction)	X		
5) Sampling: Groundwater Wells Only				
A	Does water recharge adequately when purged?	X		
B	If dedicated sampling equipment installed, is it in good condition and specified in the arppove groundwater monitoring plan for the facility?	X		
C	Does the well require redevelopment (low flow/turbidity)?		X	
6) Based on 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?		X		
7) Corrective actions as needed, by date:				
Signature and Seal of PE/PG responsible for inspection				

Groundwater Monitoring Well Integrity Form

Site Name: Plant Branch

Permit Number:

Well ID: PZ-7S

Date: 1/31/22

		Yes	No	N/A
1) Location/Identification				
A	Is the well visible and accessible?	X		
B	Is the well properly identified with correct well ID?	X		
C	Is the well in a high traffic area and does the well require protection from traffic?		X	
D	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	X		
2) Protective Casing				
A	Is the protective casing free from apparent damage and able to be secured?	X		
B	Is the casing free of degradation or deterioration?	X		
C	Does the casing have a functioning weep hole?	X		
D	Is the annular space between the casings clear of debris and water, or filled with pea gravel/sand?	X		
E	Is the well locked and is the lock in good condition?	X		
3) Surface Pad				
A	Is the well pad in good condition (not cracked/broken)?	X		
B	Is the well pad sloped away from the protective casing?	X		
C	Is the well pad in complete contact with the ground surface and stable?	X		
D	Is the well pad in complete contact with the protective casing?	X		
E	Is the pad surface clean (not covered with sediment or debris)?	X		
4) Internal Casing				
A	Does the cap prevent entry of foreign material inot the well?	X		
B	Is the casing free of kinks/bends, or any obstructions from foreign objects (such as bailers)?	X		
C	Is the well properly vented for equilibration of air pressure?	X		
D	Is the survey point clearly marked on the inner casing?	X		
E	Is the depth of the well consistent with the original well log?	X		
F	Is the casing stable? (Does PVC move easily when touched or can be taken apart by hand due to lack of grout or use of slip couplings in construction)	X		
5) Sampling: Groundwater Wells Only				
A	Does water recharge adequately when purged?	X		
B	If dedicated sampling equipment installed, is it in good condition and specified in the arppove groundwater monitoring plan for the facility?	X		
C	Does the well require redevelopment (low flow/turbidity)?		X	
6) Based on 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?		X		
7) Corrective actions as needed, by date:				
Signature and Seal of PE/PG responsible for inspection				

Groundwater Monitoring Well Integrity Form

Site Name: Plant Branch

Permit Number:

Well ID: PZ-8S

Date: 1/31/22

		Yes	No	N/A
1) Location/Identification				
A	Is the well visible and accessible?	X		
B	Is the well properly identified with correct well ID?	X		
C	Is the well in a high traffic area and does the well require protection from traffic?		X	
D	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	X		
2) Protective Casing				
A	Is the protective casing free from apparent damage and able to be secured?	X		
B	Is the casing free of degradation or deterioration?	X		
C	Does the casing have a functioning weep hole?	X		
D	Is the annular space between the casings clear of debris and water, or filled with pea gravel/sand?	X		
E	Is the well locked and is the lock in good condition?	X		
3) Surface Pad				
A	Is the well pad in good condition (not cracked/broken)?	X		
B	Is the well pad sloped away from the protective casing?	X		
C	Is the well pad in complete contact with the ground surface and stable?	X		
D	Is the well pad in complete contact with the protective casing?	X		
E	Is the pad surface clean (not covered with sediment or debris)?	X		
4) Internal Casing				
A	Does the cap prevent entry of foreign material inot the well?	X		
B	Is the casing free of kinks/bends, or any obstructions from foreign objects (such as bailers)?	X		
C	Is the well properly vented for equilibration of air pressure?	X		
D	Is the survey point clearly marked on the inner casing?	X		
E	Is the depth of the well consistent with the original well log?	X		
F	Is the casing stable? (Does PVC move easily when touched or can be taken apart by hand due to lack of grout or use of slip couplings in construction)	X		
5) Sampling: Groundwater Wells Only				
A	Does water recharge adequately when purged?	X		
B	If dedicated sampling equipment installed, is it in good condition and specified in the arppove groundwater monitoring plan for the facility?	X		
C	Does the well require redevelopment (low flow/turbidity)?		X	
6) Based on 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?		X		
7) Corrective actions as needed, by date:				
Signature and Seal of PE/PG responsible for inspection				

Groundwater Monitoring Well Integrity Form

Site Name: Plant Branch

Permit Number:

Well ID: PZ-9S

Date: 1/31/22

		Yes	No	N/A
1) Location/Identification				
A	Is the well visible and accessible?	X		
B	Is the well properly identified with correct well ID?	X		
C	Is the well in a high traffic area and does the well require protection from traffic?		X	
D	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	X		
2) Protective Casing				
A	Is the protective casing free from apparent damage and able to be secured?	X		
B	Is the casing free of degradation or deterioration?	X		
C	Does the casing have a functioning weep hole?	X		
D	Is the annular space between the casings clear of debris and water, or filled with pea gravel/sand?	X		
E	Is the well locked and is the lock in good condition?	X		
3) Surface Pad				
A	Is the well pad in good condition (not cracked/broken)?	X		
B	Is the well pad sloped away from the protective casing?	X		
C	Is the well pad in complete contact with the ground surface and stable?	X		
D	Is the well pad in complete contact with the protective casing?	X		
E	Is the pad surface clean (not covered with sediment or debris)?	X		
4) Internal Casing				
A	Does the cap prevent entry of foreign material inot the well?	X		
B	Is the casing free of kinks/bends, or any obstructions from foreign objects (such as bailers)?	X		
C	Is the well properly vented for equilibration of air pressure?	X		
D	Is the survey point clearly marked on the inner casing?	X		
E	Is the depth of the well consistent with the original well log?	X		
F	Is the casing stable? (Does PVC move easily when touched or can be taken apart by hand due to lack of grout or use of slip couplings in construction)	X		
5) Sampling: Groundwater Wells Only				
A	Does water recharge adequately when purged?	X		
B	If dedicated sampling equipment installed, is it in good condition and specified in the arppove groundwater monitoring plan for the facility?	X		
C	Does the well require redevelopment (low flow/turbidity)?		X	
6) Based on 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?		X		
7) Corrective actions as needed, by date:				
Signature and Seal of PE/PG responsible for inspection				

Groundwater Monitoring Well Integrity Form

Site Name: Plant Branch

Permit Number:

Well ID: PZ-10S

Date: 1/31/22

		Yes	No	N/A
1) Location/Identification				
A	Is the well visible and accessible?	X		
B	Is the well properly identified with correct well ID?	X		
C	Is the well in a high traffic area and does the well require protection from traffic?		X	
D	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	X		
2) Protective Casing				
A	Is the protective casing free from apparent damage and able to be secured?	X		
B	Is the casing free of degradation or deterioration?	X		
C	Does the casing have a functioning weep hole?	X		
D	Is the annular space between the casings clear of debris and water, or filled with pea gravel/sand?	X		
E	Is the well locked and is the lock in good condition?	X		
3) Surface Pad				
A	Is the well pad in good condition (not cracked/broken)?	X		
B	Is the well pad sloped away from the protective casing?	X		
C	Is the well pad in complete contact with the ground surface and stable?	X		
D	Is the well pad in complete contact with the protective casing?	X		
E	Is the pad surface clean (not covered with sediment or debris)?	X		
4) Internal Casing				
A	Does the cap prevent entry of foreign material inot the well?	X		
B	Is the casing free of kinks/bends, or any obstructions from foreign objects (such as bailers)?	X		
C	Is the well properly vented for equilibration of air pressure?	X		
D	Is the survey point clearly marked on the inner casing?	X		
E	Is the depth of the well consistent with the original well log?	X		
F	Is the casing stable? (Does PVC move easily when touched or can be taken apart by hand due to lack of grout or use of slip couplings in construction)	X		
5) Sampling: Groundwater Wells Only				
A	Does water recharge adequately when purged?	X		
B	If dedicated sampling equipment installed, is it in good condition and specified in the arppove groundwater monitoring plan for the facility?	X		
C	Does the well require redevelopment (low flow/turbidity)?		X	
6) Based on 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?		X		
7) Corrective actions as needed, by date:				
Signature and Seal of PE/PG responsible for inspection				

Groundwater Monitoring Well Integrity Form

Site Name: Plant Branch

Permit Number:

Well ID: PZ-11S

Date: 1/31/22

		Yes	No	N/A
1) Location/Identification				
A	Is the well visible and accessible?	X		
B	Is the well properly identified with correct well ID?	X		
C	Is the well in a high traffic area and does the well require protection from traffic?		X	
D	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	X		
2) Protective Casing				
A	Is the protective casing free from apparent damage and able to be secured?	X		
B	Is the casing free of degradation or deterioration?	X		
C	Does the casing have a functioning weep hole?	X		
D	Is the annular space between the casings clear of debris and water, or filled with pea gravel/sand?	X		
E	Is the well locked and is the lock in good condition?	X		
3) Surface Pad				
A	Is the well pad in good condition (not cracked/broken)?	X		
B	Is the well pad sloped away from the protective casing?	X		
C	Is the well pad in complete contact with the ground surface and stable?	X		
D	Is the well pad in complete contact with the protective casing?	X		
E	Is the pad surface clean (not covered with sediment or debris)?	X		
4) Internal Casing				
A	Does the cap prevent entry of foreign material inot the well?	X		
B	Is the casing free of kinks/bends, or any obstructions from foreign objects (such as bailers)?	X		
C	Is the well properly vented for equilibration of air pressure?	X		
D	Is the survey point clearly marked on the inner casing?	X		
E	Is the depth of the well consistent with the original well log?	X		
F	Is the casing stable? (Does PVC move easily when touched or can be taken apart by hand due to lack of grout or use of slip couplings in construction)	X		
5) Sampling: Groundwater Wells Only				
A	Does water recharge adequately when purged?	X		
B	If dedicated sampling equipment installed, is it in good condition and specified in the arppove groundwater monitoring plan for the facility?	X		
C	Does the well require redevelopment (low flow/turbidity)?		X	
6) Based on 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?		X		
7) Corrective actions as needed, by date:				
Signature and Seal of PE/PG responsible for inspection				

Groundwater Monitoring Well Integrity Form

Site Name: Plant Branch

Permit Number:

Well ID: PZ-12D

Date: 1/31/22

		Yes	No	N/A
1) Location/Identification				
A	Is the well visible and accessible?	X		
B	Is the well properly identified with correct well ID?	X		
C	Is the well in a high traffic area and does the well require protection from traffic?		X	
D	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	X		
2) Protective Casing				
A	Is the protective casing free from apparent damage and able to be secured?	X		
B	Is the casing free of degradation or deterioration?	X		
C	Does the casing have a functioning weep hole?	X		
D	Is the annular space between the casings clear of debris and water, or filled with pea gravel/sand?	X		
E	Is the well locked and is the lock in good condition?	X		
3) Surface Pad				
A	Is the well pad in good condition (not cracked/broken)?	X		
B	Is the well pad sloped away from the protective casing?	X		
C	Is the well pad in complete contact with the ground surface and stable?	X		
D	Is the well pad in complete contact with the protective casing?	X		
E	Is the pad surface clean (not covered with sediment or debris)?	X		
4) Internal Casing				
A	Does the cap prevent entry of foreign material inot the well?	X		
B	Is the casing free of kinks/bends, or any obstructions from foreign objects (such as bailers)?	X		
C	Is the well properly vented for equilibration of air pressure?	X		
D	Is the survey point clearly marked on the inner casing?	X		
E	Is the depth of the well consistent with the original well log?	X		
F	Is the casing stable? (Does PVC move easily when touched or can be taken apart by hand due to lack of grout or use of slip couplings in construction)	X		
5) Sampling: Groundwater Wells Only				
A	Does water recharge adequately when purged?	X		
B	If dedicated sampling equipment installed, is it in good condition and specified in the arppove groundwater monitoring plan for the facility?	X		
C	Does the well require redevelopment (low flow/turbidity)?		X	
6) Based on 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?		X		
7) Corrective actions as needed, by date:				
Signature and Seal of PE/PG responsible for inspection				

Groundwater Monitoring Well Integrity Form

Site Name: Plant Branch

Permit Number:

Well ID: PZ-13S

Date: 1/31/22

		Yes	No	N/A
1) Location/Identification				
A	Is the well visible and accessible?	X		
B	Is the well properly identified with correct well ID?	X		
C	Is the well in a high traffic area and does the well require protection from traffic?		X	
D	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	X		
2) Protective Casing				
A	Is the protective casing free from apparent damage and able to be secured?	X		
B	Is the casing free of degradation or deterioration?	X		
C	Does the casing have a functioning weep hole?	X		
D	Is the annular space between the casings clear of debris and water, or filled with pea gravel/sand?	X		
E	Is the well locked and is the lock in good condition?	X		
3) Surface Pad				
A	Is the well pad in good condition (not cracked/broken)?	X		
B	Is the well pad sloped away from the protective casing?	X		
C	Is the well pad in complete contact with the ground surface and stable?	X		
D	Is the well pad in complete contact with the protective casing?	X		
E	Is the pad surface clean (not covered with sediment or debris)?	X		
4) Internal Casing				
A	Does the cap prevent entry of foreign material inot the well?	X		
B	Is the casing free of kinks/bends, or any obstructions from foreign objects (such as bailers)?	X		
C	Is the well properly vented for equilibration of air pressure?	X		
D	Is the survey point clearly marked on the inner casing?	X		
E	Is the depth of the well consistent with the original well log?	X		
F	Is the casing stable? (Does PVC move easily when touched or can be taken apart by hand due to lack of grout or use of slip couplings in construction)	X		
5) Sampling: Groundwater Wells Only				
A	Does water recharge adequately when purged?	X		
B	If dedicated sampling equipment installed, is it in good condition and specified in the arppove groundwater monitoring plan for the facility?	X		
C	Does the well require redevelopment (low flow/turbidity)?		X	
6) Based on 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?		X		
7) Corrective actions as needed, by date:				
Signature and Seal of PE/PG responsible for inspection				

Groundwater Monitoring Well Integrity Form

Site Name: Plant Branch

Permit Number:

Well ID: PZ-14S

Date: 1/31/22

		Yes	No	N/A
1) Location/Identification				
A	Is the well visible and accessible?	X		
B	Is the well properly identified with correct well ID?	X		
C	Is the well in a high traffic area and does the well require protection from traffic?		X	
D	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	X		
2) Protective Casing				
A	Is the protective casing free from apparent damage and able to be secured?	X		
B	Is the casing free of degradation or deterioration?	X		
C	Does the casing have a functioning weep hole?	X		
D	Is the annular space between the casings clear of debris and water, or filled with pea gravel/sand?	X		
E	Is the well locked and is the lock in good condition?	X		
3) Surface Pad				
A	Is the well pad in good condition (not cracked/broken)?	X		
B	Is the well pad sloped away from the protective casing?	X		
C	Is the well pad in complete contact with the ground surface and stable?	X		
D	Is the well pad in complete contact with the protective casing?	X		
E	Is the pad surface clean (not covered with sediment or debris)?	X		
4) Internal Casing				
A	Does the cap prevent entry of foreign material inot the well?	X		
B	Is the casing free of kinks/bends, or any obstructions from foreign objects (such as bailers)?	X		
C	Is the well properly vented for equilibration of air pressure?	X		
D	Is the survey point clearly marked on the inner casing?	X		
E	Is the depth of the well consistent with the original well log?	X		
F	Is the casing stable? (Does PVC move easily when touched or can be taken apart by hand due to lack of grout or use of slip couplings in construction)	X		
5) Sampling: Groundwater Wells Only				
A	Does water recharge adequately when purged?	X		
B	If dedicated sampling equipment installed, is it in good condition and specified in the arppove groundwater monitoring plan for the facility?	X		
C	Does the well require redevelopment (low flow/turbidity)?		X	
6) Based on 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?		X		
7) Corrective actions as needed, by date:				
Signature and Seal of PE/PG responsible for inspection				

Groundwater Monitoring Well Integrity Form

Site Name: Plant Branch

Permit Number:

Well ID: PZ-14I

Date: 1/31/22

		Yes	No	N/A
1) Location/Identification				
A	Is the well visible and accessible?	X		
B	Is the well properly identified with correct well ID?	X		
C	Is the well in a high traffic area and does the well require protection from traffic?		X	
D	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	X		
2) Protective Casing				
A	Is the protective casing free from apparent damage and able to be secured?	X		
B	Is the casing free of degradation or deterioration?	X		
C	Does the casing have a functioning weep hole?	X		
D	Is the annular space between the casings clear of debris and water, or filled with pea gravel/sand?	X		
E	Is the well locked and is the lock in good condition?	X		
3) Surface Pad				
A	Is the well pad in good condition (not cracked/broken)?	X		
B	Is the well pad sloped away from the protective casing?	X		
C	Is the well pad in complete contact with the ground surface and stable?	X		
D	Is the well pad in complete contact with the protective casing?	X		
E	Is the pad surface clean (not covered with sediment or debris)?	X		
4) Internal Casing				
A	Does the cap prevent entry of foreign material inot the well?	X		
B	Is the casing free of kinks/bends, or any obstructions from foreign objects (such as bailers)?	X		
C	Is the well properly vented for equilibration of air pressure?	X		
D	Is the survey point clearly marked on the inner casing?	X		
E	Is the depth of the well consistent with the original well log?	X		
F	Is the casing stable? (Does PVC move easily when touched or can be taken apart by hand due to lack of grout or use of slip couplings in construction)	X		
5) Sampling: Groundwater Wells Only				
A	Does water recharge adequately when purged?	X		
B	If dedicated sampling equipment installed, is it in good condition and specified in the arppove groundwater monitoring plan for the facility?	X		
C	Does the well require redevelopment (low flow/turbidity)?		X	
6) Based on 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?		X		
7) Corrective actions as needed, by date:				
Signature and Seal of PE/PG responsible for inspection				

Groundwater Monitoring Well Integrity Form

Site Name: Plant Branch

Permit Number:

Well ID: PZ-15S

Date: 1/31/22

		Yes	No	N/A
1) Location/Identification				
A	Is the well visible and accessible?	X		
B	Is the well properly identified with correct well ID?	X		
C	Is the well in a high traffic area and does the well require protection from traffic?		X	
D	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	X		
2) Protective Casing				
A	Is the protective casing free from apparent damage and able to be secured?	X		
B	Is the casing free of degradation or deterioration?	X		
C	Does the casing have a functioning weep hole?	X		
D	Is the annular space between the casings clear of debris and water, or filled with pea gravel/sand?	X		
E	Is the well locked and is the lock in good condition?	X		
3) Surface Pad				
A	Is the well pad in good condition (not cracked/broken)?	X		
B	Is the well pad sloped away from the protective casing?	X		
C	Is the well pad in complete contact with the ground surface and stable?	X		
D	Is the well pad in complete contact with the protective casing?	X		
E	Is the pad surface clean (not covered with sediment or debris)?	X		
4) Internal Casing				
A	Does the cap prevent entry of foreign material inot the well?	X		
B	Is the casing free of kinks/bends, or any obstructions from foreign objects (such as bailers)?	X		
C	Is the well properly vented for equilibration of air pressure?	X		
D	Is the survey point clearly marked on the inner casing?	X		
E	Is the depth of the well consistent with the original well log?	X		
F	Is the casing stable? (Does PVC move easily when touched or can be taken apart by hand due to lack of grout or use of slip couplings in construction)	X		
5) Sampling: Groundwater Wells Only				
A	Does water recharge adequately when purged?	X		
B	If dedicated sampling equipment installed, is it in good condition and specified in the arppove groundwater monitoring plan for the facility?	X		
C	Does the well require redevelopment (low flow/turbidity)?		X	
6) Based on 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?		X		
7) Corrective actions as needed, by date:				
Signature and Seal of PE/PG responsible for inspection				

Groundwater Monitoring Well Integrity Form

Site Name: Plant Branch

Permit Number:

Well ID: PZ-15I

Date: 1/31/22

		Yes	No	N/A
1) Location/Identification				
A	Is the well visible and accessible?	X		
B	Is the well properly identified with correct well ID?	X		
C	Is the well in a high traffic area and does the well require protection from traffic?		X	
D	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	X		
2) Protective Casing				
A	Is the protective casing free from apparent damage and able to be secured?	X		
B	Is the casing free of degradation or deterioration?	X		
C	Does the casing have a functioning weep hole?	X		
D	Is the annular space between the casings clear of debris and water, or filled with pea gravel/sand?	X		
E	Is the well locked and is the lock in good condition?	X		
3) Surface Pad				
A	Is the well pad in good condition (not cracked/broken)?	X		
B	Is the well pad sloped away from the protective casing?	X		
C	Is the well pad in complete contact with the ground surface and stable?	X		
D	Is the well pad in complete contact with the protective casing?	X		
E	Is the pad surface clean (not covered with sediment or debris)?	X		
4) Internal Casing				
A	Does the cap prevent entry of foreign material inot the well?	X		
B	Is the casing free of kinks/bends, or any obstructions from foreign objects (such as bailers)?	X		
C	Is the well properly vented for equilibration of air pressure?	X		
D	Is the survey point clearly marked on the inner casing?	X		
E	Is the depth of the well consistent with the original well log?	X		
F	Is the casing stable? (Does PVC move easily when touched or can be taken apart by hand due to lack of grout or use of slip couplings in construction)	X		
5) Sampling: Groundwater Wells Only				
A	Does water recharge adequately when purged?	X		
B	If dedicated sampling equipment installed, is it in good condition and specified in the arppove groundwater monitoring plan for the facility?	X		
C	Does the well require redevelopment (low flow/turbidity)?		X	
6) Based on 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?		X		
7) Corrective actions as needed, by date:				
Signature and Seal of PE/PG responsible for inspection				

Groundwater Monitoring Well Integrity Form

Site Name: Plant Branch

Permit Number:

Well ID: PZ-16S

Date: 1/31/22

		Yes	No	N/A
1) Location/Identification				
A	Is the well visible and accessible?	X		
B	Is the well properly identified with correct well ID?	X		
C	Is the well in a high traffic area and does the well require protection from traffic?		X	
D	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	X		
2) Protective Casing				
A	Is the protective casing free from apparent damage and able to be secured?	X		
B	Is the casing free of degradation or deterioration?	X		
C	Does the casing have a functioning weep hole?	X		
D	Is the annular space between the casings clear of debris and water, or filled with pea gravel/sand?	X		
E	Is the well locked and is the lock in good condition?	X		
3) Surface Pad				
A	Is the well pad in good condition (not cracked/broken)?	X		
B	Is the well pad sloped away from the protective casing?	X		
C	Is the well pad in complete contact with the ground surface and stable?	X		
D	Is the well pad in complete contact with the protective casing?	X		
E	Is the pad surface clean (not covered with sediment or debris)?	X		
4) Internal Casing				
A	Does the cap prevent entry of foreign material inot the well?	X		
B	Is the casing free of kinks/bends, or any obstructions from foreign objects (such as bailers)?	X		
C	Is the well properly vented for equilibration of air pressure?	X		
D	Is the survey point clearly marked on the inner casing?	X		
E	Is the depth of the well consistent with the original well log?	X		
F	Is the casing stable? (Does PVC move easily when touched or can be taken apart by hand due to lack of grout or use of slip couplings in construction)	X		
5) Sampling: Groundwater Wells Only				
A	Does water recharge adequately when purged?	X		
B	If dedicated sampling equipment installed, is it in good condition and specified in the arppove groundwater monitoring plan for the facility?	X		
C	Does the well require redevelopment (low flow/turbidity)?		X	
6) Based on 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?		X		
7) Corrective actions as needed, by date:				
Signature and Seal of PE/PG responsible for inspection				

Groundwater Monitoring Well Integrity Form

Site Name: Plant Branch

Permit Number:

Well ID: PZ-16I

Date: 1/31/22

		Yes	No	N/A
1) Location/Identification				
A	Is the well visible and accessible?	X		
B	Is the well properly identified with correct well ID?	X		
C	Is the well in a high traffic area and does the well require protection from traffic?		X	
D	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	X		
2) Protective Casing				
A	Is the protective casing free from apparent damage and able to be secured?	X		
B	Is the casing free of degradation or deterioration?	X		
C	Does the casing have a functioning weep hole?	X		
D	Is the annular space between the casings clear of debris and water, or filled with pea gravel/sand?	X		
E	Is the well locked and is the lock in good condition?	X		
3) Surface Pad				
A	Is the well pad in good condition (not cracked/broken)?	X		
B	Is the well pad sloped away from the protective casing?	X		
C	Is the well pad in complete contact with the ground surface and stable?	X		
D	Is the well pad in complete contact with the protective casing?	X		
E	Is the pad surface clean (not covered with sediment or debris)?	X		
4) Internal Casing				
A	Does the cap prevent entry of foreign material inot the well?	X		
B	Is the casing free of kinks/bends, or any obstructions from foreign objects (such as bailers)?	X		
C	Is the well properly vented for equilibration of air pressure?	X		
D	Is the survey point clearly marked on the inner casing?	X		
E	Is the depth of the well consistent with the original well log?	X		
F	Is the casing stable? (Does PVC move easily when touched or can be taken apart by hand due to lack of grout or use of slip couplings in construction)	X		
5) Sampling: Groundwater Wells Only				
A	Does water recharge adequately when purged?	X		
B	If dedicated sampling equipment installed, is it in good condition and specified in the arppove groundwater monitoring plan for the facility?	X		
C	Does the well require redevelopment (low flow/turbidity)?		X	
6) Based on 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?		X		
7) Corrective actions as needed, by date:				
Signature and Seal of PE/PG responsible for inspection				

Groundwater Monitoring Well Integrity Form

Site Name: Plant Branch

Permit Number:

Well ID: PZ-17I

Date: 1/31/22

		Yes	No	N/A
1) Location/Identification				
A	Is the well visible and accessible?	X		
B	Is the well properly identified with correct well ID?	X		
C	Is the well in a high traffic area and does the well require protection from traffic?		X	
D	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	X		
2) Protective Casing				
A	Is the protective casing free from apparent damage and able to be secured?	X		
B	Is the casing free of degradation or deterioration?	X		
C	Does the casing have a functioning weep hole?	X		
D	Is the annular space between the casings clear of debris and water, or filled with pea gravel/sand?	X		
E	Is the well locked and is the lock in good condition?	X		
3) Surface Pad				
A	Is the well pad in good condition (not cracked/broken)?	X		
B	Is the well pad sloped away from the protective casing?	X		
C	Is the well pad in complete contact with the ground surface and stable?	X		
D	Is the well pad in complete contact with the protective casing?	X		
E	Is the pad surface clean (not covered with sediment or debris)?	X		
4) Internal Casing				
A	Does the cap prevent entry of foreign material inot the well?	X		
B	Is the casing free of kinks/bends, or any obstructions from foreign objects (such as bailers)?	X		
C	Is the well properly vented for equilibration of air pressure?	X		
D	Is the survey point clearly marked on the inner casing?	X		
E	Is the depth of the well consistent with the original well log?	X		
F	Is the casing stable? (Does PVC move easily when touched or can be taken apart by hand due to lack of grout or use of slip couplings in construction)	X		
5) Sampling: Groundwater Wells Only				
A	Does water recharge adequately when purged?	X		
B	If dedicated sampling equipment installed, is it in good condition and specified in the arppove groundwater monitoring plan for the facility?	X		
C	Does the well require redevelopment (low flow/turbidity)?		X	
6) Based on 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?		X		
7) Corrective actions as needed, by date:				
Signature and Seal of PE/PG responsible for inspection				

Groundwater Monitoring Well Integrity Form

Site Name: Plant Branch

Permit Number:

Well ID: PZ-18S

Date: 1/31/22

		Yes	No	N/A
1) Location/Identification				
A	Is the well visible and accessible?	X		
B	Is the well properly identified with correct well ID?	X		
C	Is the well in a high traffic area and does the well require protection from traffic?		X	
D	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	X		
2) Protective Casing				
A	Is the protective casing free from apparent damage and able to be secured?	X		
B	Is the casing free of degradation or deterioration?	X		
C	Does the casing have a functioning weep hole?	X		
D	Is the annular space between the casings clear of debris and water, or filled with pea gravel/sand?	X		
E	Is the well locked and is the lock in good condition?	X		
3) Surface Pad				
A	Is the well pad in good condition (not cracked/broken)?	X		
B	Is the well pad sloped away from the protective casing?	X		
C	Is the well pad in complete contact with the ground surface and stable?	X		
D	Is the well pad in complete contact with the protective casing?	X		
E	Is the pad surface clean (not covered with sediment or debris)?	X		
4) Internal Casing				
A	Does the cap prevent entry of foreign material inot the well?	X		
B	Is the casing free of kinks/bends, or any obstructions from foreign objects (such as bailers)?	X		
C	Is the well properly vented for equilibration of air pressure?	X		
D	Is the survey point clearly marked on the inner casing?	X		
E	Is the depth of the well consistent with the original well log?	X		
F	Is the casing stable? (Does PVC move easily when touched or can be taken apart by hand due to lack of grout or use of slip couplings in construction)	X		
5) Sampling: Groundwater Wells Only				
A	Does water recharge adequately when purged?	X		
B	If dedicated sampling equipment installed, is it in good condition and specified in the arppove groundwater monitoring plan for the facility?	X		
C	Does the well require redevelopment (low flow/turbidity)?		X	
6) Based on 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?		X		
7) Corrective actions as needed, by date:				
Signature and Seal of PE/PG responsible for inspection				

Groundwater Monitoring Well Integrity Form

Site Name: Plant Branch

Permit Number:

Well ID: PZ-18I

Date: 1/31/22

		Yes	No	N/A
1) Location/Identification				
A	Is the well visible and accessible?	X		
B	Is the well properly identified with correct well ID?	X		
C	Is the well in a high traffic area and does the well require protection from traffic?		X	
D	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	X		
2) Protective Casing				
A	Is the protective casing free from apparent damage and able to be secured?	X		
B	Is the casing free of degradation or deterioration?	X		
C	Does the casing have a functioning weep hole?	X		
D	Is the annular space between the casings clear of debris and water, or filled with pea gravel/sand?	X		
E	Is the well locked and is the lock in good condition?	X		
3) Surface Pad				
A	Is the well pad in good condition (not cracked/broken)?	X		
B	Is the well pad sloped away from the protective casing?	X		
C	Is the well pad in complete contact with the ground surface and stable?	X		
D	Is the well pad in complete contact with the protective casing?	X		
E	Is the pad surface clean (not covered with sediment or debris)?	X		
4) Internal Casing				
A	Does the cap prevent entry of foreign material inot the well?	X		
B	Is the casing free of kinks/bends, or any obstructions from foreign objects (such as bailers)?	X		
C	Is the well properly vented for equilibration of air pressure?	X		
D	Is the survey point clearly marked on the inner casing?	X		
E	Is the depth of the well consistent with the original well log?	X		
F	Is the casing stable? (Does PVC move easily when touched or can be taken apart by hand due to lack of grout or use of slip couplings in construction)	X		
5) Sampling: Groundwater Wells Only				
A	Does water recharge adequately when purged?	X		
B	If dedicated sampling equipment installed, is it in good condition and specified in the arppove groundwater monitoring plan for the facility?	X		
C	Does the well require redevelopment (low flow/turbidity)?		X	
6) Based on 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?		X		
7) Corrective actions as needed, by date:				
Signature and Seal of PE/PG responsible for inspection				

Groundwater Monitoring Well Integrity Form

Site Name: Plant Branch

Permit Number:

Well ID: PZ-19S

Date: 1/31/22

		Yes	No	N/A
1) Location/Identification				
A	Is the well visible and accessible?	X		
B	Is the well properly identified with correct well ID?	X		
C	Is the well in a high traffic area and does the well require protection from traffic?		X	
D	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	X		
2) Protective Casing				
A	Is the protective casing free from apparent damage and able to be secured?	X		
B	Is the casing free of degradation or deterioration?	X		
C	Does the casing have a functioning weep hole?	X		
D	Is the annular space between the casings clear of debris and water, or filled with pea gravel/sand?	X		
E	Is the well locked and is the lock in good condition?	X		
3) Surface Pad				
A	Is the well pad in good condition (not cracked/broken)?	X		
B	Is the well pad sloped away from the protective casing?	X		
C	Is the well pad in complete contact with the ground surface and stable?	X		
D	Is the well pad in complete contact with the protective casing?	X		
E	Is the pad surface clean (not covered with sediment or debris)?	X		
4) Internal Casing				
A	Does the cap prevent entry of foreign material inot the well?	X		
B	Is the casing free of kinks/bends, or any obstructions from foreign objects (such as bailers)?	X		
C	Is the well properly vented for equilibration of air pressure?	X		
D	Is the survey point clearly marked on the inner casing?	X		
E	Is the depth of the well consistent with the original well log?	X		
F	Is the casing stable? (Does PVC move easily when touched or can be taken apart by hand due to lack of grout or use of slip couplings in construction)	X		
5) Sampling: Groundwater Wells Only				
A	Does water recharge adequately when purged?	X		
B	If dedicated sampling equipment installed, is it in good condition and specified in the arppove groundwater monitoring plan for the facility?	X		
C	Does the well require redevelopment (low flow/turbidity)?		X	
6) Based on 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?		X		
7) Corrective actions as needed, by date:				
Signature and Seal of PE/PG responsible for inspection				

Groundwater Monitoring Well Integrity Form

Site Name: Plant Branch

Permit Number:

Well ID: PZ-19I

Date: 1/31/22

		Yes	No	N/A
1) Location/Identification				
A	Is the well visible and accessible?	X		
B	Is the well properly identified with correct well ID?	X		
C	Is the well in a high traffic area and does the well require protection from traffic?		X	
D	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	X		
2) Protective Casing				
A	Is the protective casing free from apparent damage and able to be secured?	X		
B	Is the casing free of degradation or deterioration?	X		
C	Does the casing have a functioning weep hole?	X		
D	Is the annular space between the casings clear of debris and water, or filled with pea gravel/sand?	X		
E	Is the well locked and is the lock in good condition?	X		
3) Surface Pad				
A	Is the well pad in good condition (not cracked/broken)?	X		
B	Is the well pad sloped away from the protective casing?	X		
C	Is the well pad in complete contact with the ground surface and stable?	X		
D	Is the well pad in complete contact with the protective casing?	X		
E	Is the pad surface clean (not covered with sediment or debris)?	X		
4) Internal Casing				
A	Does the cap prevent entry of foreign material inot the well?	X		
B	Is the casing free of kinks/bends, or any obstructions from foreign objects (such as bailers)?	X		
C	Is the well properly vented for equilibration of air pressure?	X		
D	Is the survey point clearly marked on the inner casing?	X		
E	Is the depth of the well consistent with the original well log?	X		
F	Is the casing stable? (Does PVC move easily when touched or can be taken apart by hand due to lack of grout or use of slip couplings in construction)	X		
5) Sampling: Groundwater Wells Only				
A	Does water recharge adequately when purged?	X		
B	If dedicated sampling equipment installed, is it in good condition and specified in the arppove groundwater monitoring plan for the facility?	X		
C	Does the well require redevelopment (low flow/turbidity)?		X	
6) Based on 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?		X		
7) Corrective actions as needed, by date:				
Signature and Seal of PE/PG responsible for inspection				

Groundwater Monitoring Well Integrity Form

Site Name: Plant Branch

Permit Number:

Well ID: PZ-20S

Date: 1/31/22

		Yes	No	N/A
1) Location/Identification				
A	Is the well visible and accessible?	X		
B	Is the well properly identified with correct well ID?	X		
C	Is the well in a high traffic area and does the well require protection from traffic?		X	
D	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	X		
2) Protective Casing				
A	Is the protective casing free from apparent damage and able to be secured?	X		
B	Is the casing free of degradation or deterioration?	X		
C	Does the casing have a functioning weep hole?	X		
D	Is the annular space between the casings clear of debris and water, or filled with pea gravel/sand?	X		
E	Is the well locked and is the lock in good condition?	X		
3) Surface Pad				
A	Is the well pad in good condition (not cracked/broken)?	X		
B	Is the well pad sloped away from the protective casing?	X		
C	Is the well pad in complete contact with the ground surface and stable?	X		
D	Is the well pad in complete contact with the protective casing?	X		
E	Is the pad surface clean (not covered with sediment or debris)?	X		
4) Internal Casing				
A	Does the cap prevent entry of foreign material inot the well?	X		
B	Is the casing free of kinks/bends, or any obstructions from foreign objects (such as bailers)?	X		
C	Is the well properly vented for equilibration of air pressure?	X		
D	Is the survey point clearly marked on the inner casing?	X		
E	Is the depth of the well consistent with the original well log?	X		
F	Is the casing stable? (Does PVC move easily when touched or can be taken apart by hand due to lack of grout or use of slip couplings in construction)	X		
5) Sampling: Groundwater Wells Only				
A	Does water recharge adequately when purged?	X		
B	If dedicated sampling equipment installed, is it in good condition and specified in the arppove groundwater monitoring plan for the facility?	X		
C	Does the well require redevelopment (low flow/turbidity)?		X	
6) Based on 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?		X		
7) Corrective actions as needed, by date:				
Signature and Seal of PE/PG responsible for inspection				

Groundwater Monitoring Well Integrity Form

Site Name: Plant Branch

Permit Number:

Well ID: PZ-20I

Date: 1/31/22

		Yes	No	N/A
1) Location/Identification				
A	Is the well visible and accessible?	X		
B	Is the well properly identified with correct well ID?	X		
C	Is the well in a high traffic area and does the well require protection from traffic?		X	
D	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	X		
2) Protective Casing				
A	Is the protective casing free from apparent damage and able to be secured?	X		
B	Is the casing free of degradation or deterioration?	X		
C	Does the casing have a functioning weep hole?	X		
D	Is the annular space between the casings clear of debris and water, or filled with pea gravel/sand?	X		
E	Is the well locked and is the lock in good condition?	X		
3) Surface Pad				
A	Is the well pad in good condition (not cracked/broken)?	X		
B	Is the well pad sloped away from the protective casing?	X		
C	Is the well pad in complete contact with the ground surface and stable?	X		
D	Is the well pad in complete contact with the protective casing?	X		
E	Is the pad surface clean (not covered with sediment or debris)?	X		
4) Internal Casing				
A	Does the cap prevent entry of foreign material inot the well?	X		
B	Is the casing free of kinks/bends, or any obstructions from foreign objects (such as bailers)?	X		
C	Is the well properly vented for equilibration of air pressure?	X		
D	Is the survey point clearly marked on the inner casing?	X		
E	Is the depth of the well consistent with the original well log?	X		
F	Is the casing stable? (Does PVC move easily when touched or can be taken apart by hand due to lack of grout or use of slip couplings in construction)	X		
5) Sampling: Groundwater Wells Only				
A	Does water recharge adequately when purged?	X		
B	If dedicated sampling equipment installed, is it in good condition and specified in the arppove groundwater monitoring plan for the facility?	X		
C	Does the well require redevelopment (low flow/turbidity)?		X	
6) Based on 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?		X		
7) Corrective actions as needed, by date:				
Signature and Seal of PE/PG responsible for inspection				

Groundwater Monitoring Well Integrity Form

Site Name: Plant Branch

Permit Number:

Well ID: PZ-21S

Date: 1/31/22

		Yes	No	N/A
1) Location/Identification				
A	Is the well visible and accessible?	X		
B	Is the well properly identified with correct well ID?	X		
C	Is the well in a high traffic area and does the well require protection from traffic?		X	
D	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	X		
2) Protective Casing				
A	Is the protective casing free from apparent damage and able to be secured?	X		
B	Is the casing free of degradation or deterioration?	X		
C	Does the casing have a functioning weep hole?	X		
D	Is the annular space between the casings clear of debris and water, or filled with pea gravel/sand?	X		
E	Is the well locked and is the lock in good condition?	X		
3) Surface Pad				
A	Is the well pad in good condition (not cracked/broken)?	X		
B	Is the well pad sloped away from the protective casing?	X		
C	Is the well pad in complete contact with the ground surface and stable?	X		
D	Is the well pad in complete contact with the protective casing?	X		
E	Is the pad surface clean (not covered with sediment or debris)?	X		
4) Internal Casing				
A	Does the cap prevent entry of foreign material inot the well?	X		
B	Is the casing free of kinks/bends, or any obstructions from foreign objects (such as bailers)?	X		
C	Is the well properly vented for equilibration of air pressure?	X		
D	Is the survey point clearly marked on the inner casing?	X		
E	Is the depth of the well consistent with the original well log?	X		
F	Is the casing stable? (Does PVC move easily when touched or can be taken apart by hand due to lack of grout or use of slip couplings in construction)	X		
5) Sampling: Groundwater Wells Only				
A	Does water recharge adequately when purged?	X		
B	If dedicated sampling equipment installed, is it in good condition and specified in the arppove groundwater monitoring plan for the facility?	X		
C	Does the well require redevelopment (low flow/turbidity)?		X	
6) Based on 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?		X		
7) Corrective actions as needed, by date:				
Signature and Seal of PE/PG responsible for inspection				

Groundwater Monitoring Well Integrity Form

Site Name: Plant Branch

Permit Number:

Well ID: PZ-21I

Date: 1/31/22

		Yes	No	N/A
1) Location/Identification				
A	Is the well visible and accessible?	X		
B	Is the well properly identified with correct well ID?	X		
C	Is the well in a high traffic area and does the well require protection from traffic?		X	
D	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	X		
2) Protective Casing				
A	Is the protective casing free from apparent damage and able to be secured?	X		
B	Is the casing free of degradation or deterioration?	X		
C	Does the casing have a functioning weep hole?	X		
D	Is the annular space between the casings clear of debris and water, or filled with pea gravel/sand?	X		
E	Is the well locked and is the lock in good condition?	X		
3) Surface Pad				
A	Is the well pad in good condition (not cracked/broken)?	X		
B	Is the well pad sloped away from the protective casing?	X		
C	Is the well pad in complete contact with the ground surface and stable?	X		
D	Is the well pad in complete contact with the protective casing?	X		
E	Is the pad surface clean (not covered with sediment or debris)?	X		
4) Internal Casing				
A	Does the cap prevent entry of foreign material inot the well?	X		
B	Is the casing free of kinks/bends, or any obstructions from foreign objects (such as bailers)?	X		
C	Is the well properly vented for equilibration of air pressure?	X		
D	Is the survey point clearly marked on the inner casing?	X		
E	Is the depth of the well consistent with the original well log?	X		
F	Is the casing stable? (Does PVC move easily when touched or can be taken apart by hand due to lack of grout or use of slip couplings in construction)	X		
5) Sampling: Groundwater Wells Only				
A	Does water recharge adequately when purged?	X		
B	If dedicated sampling equipment installed, is it in good condition and specified in the arppove groundwater monitoring plan for the facility?	X		
C	Does the well require redevelopment (low flow/turbidity)?		X	
6) Based on 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?		X		
7) Corrective actions as needed, by date:				
Signature and Seal of PE/PG responsible for inspection				

Groundwater Monitoring Well Integrity Form

Site Name: Plant Branch

Permit Number:

Well ID: PZ-24S

Date: 1/31/22

		Yes	No	N/A
1) Location/Identification				
A	Is the well visible and accessible?	X		
B	Is the well properly identified with correct well ID?	X		
C	Is the well in a high traffic area and does the well require protection from traffic?		X	
D	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	X		
2) Protective Casing				
A	Is the protective casing free from apparent damage and able to be secured?	X		
B	Is the casing free of degradation or deterioration?	X		
C	Does the casing have a functioning weep hole?	X		
D	Is the annular space between the casings clear of debris and water, or filled with pea gravel/sand?	X		
E	Is the well locked and is the lock in good condition?	X		
3) Surface Pad				
A	Is the well pad in good condition (not cracked/broken)?	X		
B	Is the well pad sloped away from the protective casing?	X		
C	Is the well pad in complete contact with the ground surface and stable?	X		
D	Is the well pad in complete contact with the protective casing?	X		
E	Is the pad surface clean (not covered with sediment or debris)?	X		
4) Internal Casing				
A	Does the cap prevent entry of foreign material inot the well?	X		
B	Is the casing free of kinks/bends, or any obstructions from foreign objects (such as bailers)?	X		
C	Is the well properly vented for equilibration of air pressure?	X		
D	Is the survey point clearly marked on the inner casing?	X		
E	Is the depth of the well consistent with the original well log?	X		
F	Is the casing stable? (Does PVC move easily when touched or can be taken apart by hand due to lack of grout or use of slip couplings in construction)	X		
5) Sampling: Groundwater Wells Only				
A	Does water recharge adequately when purged?	X		
B	If dedicated sampling equipment installed, is it in good condition and specified in the arppove groundwater monitoring plan for the facility?	X		
C	Does the well require redevelopment (low flow/turbidity)?		X	
6) Based on 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?		X		
7) Corrective actions as needed, by date:				
Signature and Seal of PE/PG responsible for inspection				

Groundwater Monitoring Well Integrity Form

Site Name: Plant Branch

Permit Number:

Well ID: PZ-26I

Date: 1/31/22

		Yes	No	N/A
1) Location/Identification				
A	Is the well visible and accessible?	X		
B	Is the well properly identified with correct well ID?	X		
C	Is the well in a high traffic area and does the well require protection from traffic?		X	
D	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	X		
2) Protective Casing				
A	Is the protective casing free from apparent damage and able to be secured?	X		
B	Is the casing free of degradation or deterioration?	X		
C	Does the casing have a functioning weep hole?	X		
D	Is the annular space between the casings clear of debris and water, or filled with pea gravel/sand?	X		
E	Is the well locked and is the lock in good condition?	X		
3) Surface Pad				
A	Is the well pad in good condition (not cracked/broken)?	X		
B	Is the well pad sloped away from the protective casing?	X		
C	Is the well pad in complete contact with the ground surface and stable?	X		
D	Is the well pad in complete contact with the protective casing?	X		
E	Is the pad surface clean (not covered with sediment or debris)?	X		
4) Internal Casing				
A	Does the cap prevent entry of foreign material inot the well?	X		
B	Is the casing free of kinks/bends, or any obstructions from foreign objects (such as bailers)?	X		
C	Is the well properly vented for equilibration of air pressure?	X		
D	Is the survey point clearly marked on the inner casing?	X		
E	Is the depth of the well consistent with the original well log?	X		
F	Is the casing stable? (Does PVC move easily when touched or can be taken apart by hand due to lack of grout or use of slip couplings in construction)	X		
5) Sampling: Groundwater Wells Only				
A	Does water recharge adequately when purged?	X		
B	If dedicated sampling equipment installed, is it in good condition and specified in the arppove groundwater monitoring plan for the facility?	X		
C	Does the well require redevelopment (low flow/turbidity)?		X	
6) Based on 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?		X		
7) Corrective actions as needed, by date:				
Signature and Seal of PE/PG responsible for inspection				

Groundwater Monitoring Well Integrity Form

Site Name: Plant Branch

Permit Number:

Well ID: PZ-28I

Date: 1/31/22

		Yes	No	N/A
1) Location/Identification				
A	Is the well visible and accessible?	X		
B	Is the well properly identified with correct well ID?	X		
C	Is the well in a high traffic area and does the well require protection from traffic?		X	
D	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	X		
2) Protective Casing				
A	Is the protective casing free from apparent damage and able to be secured?	X		
B	Is the casing free of degradation or deterioration?	X		
C	Does the casing have a functioning weep hole?	X		
D	Is the annular space between the casings clear of debris and water, or filled with pea gravel/sand?	X		
E	Is the well locked and is the lock in good condition?	X		
3) Surface Pad				
A	Is the well pad in good condition (not cracked/broken)?	X		
B	Is the well pad sloped away from the protective casing?	X		
C	Is the well pad in complete contact with the ground surface and stable?	X		
D	Is the well pad in complete contact with the protective casing?	X		
E	Is the pad surface clean (not covered with sediment or debris)?	X		
4) Internal Casing				
A	Does the cap prevent entry of foreign material inot the well?	X		
B	Is the casing free of kinks/bends, or any obstructions from foreign objects (such as bailers)?	X		
C	Is the well properly vented for equilibration of air pressure?	X		
D	Is the survey point clearly marked on the inner casing?	X		
E	Is the depth of the well consistent with the original well log?	X		
F	Is the casing stable? (Does PVC move easily when touched or can be taken apart by hand due to lack of grout or use of slip couplings in construction)	X		
5) Sampling: Groundwater Wells Only				
A	Does water recharge adequately when purged?	X		
B	If dedicated sampling equipment installed, is it in good condition and specified in the arppove groundwater monitoring plan for the facility?	X		
C	Does the well require redevelopment (low flow/turbidity)?		X	
6) Based on 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?		X		
7) Corrective actions as needed, by date:				
Signature and Seal of PE/PG responsible for inspection				

Groundwater Monitoring Well Integrity Form

Site Name: Plant Branch

Permit Number:

Well ID: PZ-31S

Date: 1/31/22

		Yes	No	N/A
1) Location/Identification				
A	Is the well visible and accessible?	X		
B	Is the well properly identified with correct well ID?	X		
C	Is the well in a high traffic area and does the well require protection from traffic?		X	
D	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	X		
2) Protective Casing				
A	Is the protective casing free from apparent damage and able to be secured?	X		
B	Is the casing free of degradation or deterioration?	X		
C	Does the casing have a functioning weep hole?	X		
D	Is the annular space between the casings clear of debris and water, or filled with pea gravel/sand?	X		
E	Is the well locked and is the lock in good condition?	X		
3) Surface Pad				
A	Is the well pad in good condition (not cracked/broken)?	X		
B	Is the well pad sloped away from the protective casing?	X		
C	Is the well pad in complete contact with the ground surface and stable?	X		
D	Is the well pad in complete contact with the protective casing?	X		
E	Is the pad surface clean (not covered with sediment or debris)?	X		
4) Internal Casing				
A	Does the cap prevent entry of foreign material inot the well?	X		
B	Is the casing free of kinks/bends, or any obstructions from foreign objects (such as bailers)?	X		
C	Is the well properly vented for equilibration of air pressure?	X		
D	Is the survey point clearly marked on the inner casing?	X		
E	Is the depth of the well consistent with the original well log?	X		
F	Is the casing stable? (Does PVC move easily when touched or can be taken apart by hand due to lack of grout or use of slip couplings in construction)	X		
5) Sampling: Groundwater Wells Only				
A	Does water recharge adequately when purged?	X		
B	If dedicated sampling equipment installed, is it in good condition and specified in the arppove groundwater monitoring plan for the facility?	X		
C	Does the well require redevelopment (low flow/turbidity)?		X	
6) Based on 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?		X		
7) Corrective actions as needed, by date:				
Signature and Seal of PE/PG responsible for inspection				

Groundwater Monitoring Well Integrity Form

Site Name: Plant Branch

Permit Number:

Well ID: PZ-23I

Date: 1/31/22

		Yes	No	N/A
1) Location/Identification				
A	Is the well visible and accessible?	X		
B	Is the well properly identified with correct well ID?	X		
C	Is the well in a high traffic area and does the well require protection from traffic?		X	
D	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	X		
2) Protective Casing				
A	Is the protective casing free from apparent damage and able to be secured?	X		
B	Is the casing free of degradation or deterioration?	X		
C	Does the casing have a functioning weep hole?	X		
D	Is the annular space between the casings clear of debris and water, or filled with pea gravel/sand?	X		
E	Is the well locked and is the lock in good condition?	X		
3) Surface Pad				
A	Is the well pad in good condition (not cracked/broken)?	X		
B	Is the well pad sloped away from the protective casing?	X		
C	Is the well pad in complete contact with the ground surface and stable?	X		
D	Is the well pad in complete contact with the protective casing?	X		
E	Is the pad surface clean (not covered with sediment or debris)?	X		
4) Internal Casing				
A	Does the cap prevent entry of foreign material inot the well?	X		
B	Is the casing free of kinks/bends, or any obstructions from foreign objects (such as bailers)?	X		
C	Is the well properly vented for equilibration of air pressure?	X		
D	Is the survey point clearly marked on the inner casing?	X		
E	Is the depth of the well consistent with the original well log?	X		
F	Is the casing stable? (Does PVC move easily when touched or can be taken apart by hand due to lack of grout or use of slip couplings in construction)	X		
5) Sampling: Groundwater Wells Only				
A	Does water recharge adequately when purged?	X		
B	If dedicated sampling equipment installed, is it in good condition and specified in the arppove groundwater monitoring plan for the facility?	X		
C	Does the well require redevelopment (low flow/turbidity)?		X	
6) Based on 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?		X		
7) Corrective actions as needed, by date:				
Signature and Seal of PE/PG responsible for inspection				

Groundwater Monitoring Well Integrity Form

Site Name: Plant Branch

Permit Number:

Well ID: PZ-39

Date: 1/31/22

		Yes	No	N/A
1) Location/Identification				
A	Is the well visible and accessible?	X		
B	Is the well properly identified with correct well ID?	X		
C	Is the well in a high traffic area and does the well require protection from traffic?		X	
D	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	X		
2) Protective Casing				
A	Is the protective casing free from apparent damage and able to be secured?	X		
B	Is the casing free of degradation or deterioration?	X		
C	Does the casing have a functioning weep hole?	X		
D	Is the annular space between the casings clear of debris and water, or filled with pea gravel/sand?	X		
E	Is the well locked and is the lock in good condition?	X		
3) Surface Pad				
A	Is the well pad in good condition (not cracked/broken)?	X		
B	Is the well pad sloped away from the protective casing?	X		
C	Is the well pad in complete contact with the ground surface and stable?	X		
D	Is the well pad in complete contact with the protective casing?	X		
E	Is the pad surface clean (not covered with sediment or debris)?	X		
4) Internal Casing				
A	Does the cap prevent entry of foreign material inot the well?	X		
B	Is the casing free of kinks/bends, or any obstructions from foreign objects (such as bailers)?	X		
C	Is the well properly vented for equilibration of air pressure?	X		
D	Is the survey point clearly marked on the inner casing?	X		
E	Is the depth of the well consistent with the original well log?	X		
F	Is the casing stable? (Does PVC move easily when touched or can be taken apart by hand due to lack of grout or use of slip couplings in construction)	X		
5) Sampling: Groundwater Wells Only				
A	Does water recharge adequately when purged?	X		
B	If dedicated sampling equipment installed, is it in good condition and specified in the arppove groundwater monitoring plan for the facility?	X		
C	Does the well require redevelopment (low flow/turbidity)?		X	
6) Based on 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?		X		
7) Corrective actions as needed, by date:				
Signature and Seal of PE/PG responsible for inspection				

Groundwater Monitoring Well Integrity Form

Site Name: Plant Branch

Permit Number:

Well ID: PZ-40S

Date: 1/31/22

		Yes	No	N/A
1) Location/Identification				
A	Is the well visible and accessible?	X		
B	Is the well properly identified with correct well ID?	X		
C	Is the well in a high traffic area and does the well require protection from traffic?		X	
D	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	X		
2) Protective Casing				
A	Is the protective casing free from apparent damage and able to be secured?	X		
B	Is the casing free of degradation or deterioration?	X		
C	Does the casing have a functioning weep hole?	X		
D	Is the annular space between the casings clear of debris and water, or filled with pea gravel/sand?	X		
E	Is the well locked and is the lock in good condition?	X		
3) Surface Pad				
A	Is the well pad in good condition (not cracked/broken)?	X		
B	Is the well pad sloped away from the protective casing?	X		
C	Is the well pad in complete contact with the ground surface and stable?	X		
D	Is the well pad in complete contact with the protective casing?	X		
E	Is the pad surface clean (not covered with sediment or debris)?	X		
4) Internal Casing				
A	Does the cap prevent entry of foreign material inot the well?	X		
B	Is the casing free of kinks/bends, or any obstructions from foreign objects (such as bailers)?	X		
C	Is the well properly vented for equilibration of air pressure?	X		
D	Is the survey point clearly marked on the inner casing?	X		
E	Is the depth of the well consistent with the original well log?	X		
F	Is the casing stable? (Does PVC move easily when touched or can be taken apart by hand due to lack of grout or use of slip couplings in construction)	X		
5) Sampling: Groundwater Wells Only				
A	Does water recharge adequately when purged?	X		
B	If dedicated sampling equipment installed, is it in good condition and specified in the arppove groundwater monitoring plan for the facility?	X		
C	Does the well require redevelopment (low flow/turbidity)?		X	
6) Based on 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?		X		
7) Corrective actions as needed, by date:				
Signature and Seal of PE/PG responsible for inspection				

Groundwater Monitoring Well Integrity Form

Site Name: Plant Branch

Permit Number:

Well ID: PZ-41S

Date: 1/31/22

		Yes	No	N/A
1) Location/Identification				
A	Is the well visible and accessible?	X		
B	Is the well properly identified with correct well ID?	X		
C	Is the well in a high traffic area and does the well require protection from traffic?		X	
D	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	X		
2) Protective Casing				
A	Is the protective casing free from apparent damage and able to be secured?	X		
B	Is the casing free of degradation or deterioration?	X		
C	Does the casing have a functioning weep hole?	X		
D	Is the annular space between the casings clear of debris and water, or filled with pea gravel/sand?	X		
E	Is the well locked and is the lock in good condition?	X		
3) Surface Pad				
A	Is the well pad in good condition (not cracked/broken)?	X		
B	Is the well pad sloped away from the protective casing?	X		
C	Is the well pad in complete contact with the ground surface and stable?	X		
D	Is the well pad in complete contact with the protective casing?	X		
E	Is the pad surface clean (not covered with sediment or debris)?	X		
4) Internal Casing				
A	Does the cap prevent entry of foreign material inot the well?	X		
B	Is the casing free of kinks/bends, or any obstructions from foreign objects (such as bailers)?	X		
C	Is the well properly vented for equilibration of air pressure?	X		
D	Is the survey point clearly marked on the inner casing?	X		
E	Is the depth of the well consistent with the original well log?	X		
F	Is the casing stable? (Does PVC move easily when touched or can be taken apart by hand due to lack of grout or use of slip couplings in construction)	X		
5) Sampling: Groundwater Wells Only				
A	Does water recharge adequately when purged?	X		
B	If dedicated sampling equipment installed, is it in good condition and specified in the arppove groundwater monitoring plan for the facility?	X		
C	Does the well require redevelopment (low flow/turbidity)?		X	
6) Based on 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?		X		
7) Corrective actions as needed, by date:				
Signature and Seal of PE/PG responsible for inspection				

Groundwater Monitoring Well Integrity Form

Site Name: Plant Branch

Permit Number:

Well ID: PZ-42S

Date: 1/31/22

		Yes	No	N/A
1) Location/Identification				
A	Is the well visible and accessible?	X		
B	Is the well properly identified with correct well ID?	X		
C	Is the well in a high traffic area and does the well require protection from traffic?		X	
D	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	X		
2) Protective Casing				
A	Is the protective casing free from apparent damage and able to be secured?	X		
B	Is the casing free of degradation or deterioration?	X		
C	Does the casing have a functioning weep hole?	X		
D	Is the annular space between the casings clear of debris and water, or filled with pea gravel/sand?	X		
E	Is the well locked and is the lock in good condition?	X		
3) Surface Pad				
A	Is the well pad in good condition (not cracked/broken)?	X		
B	Is the well pad sloped away from the protective casing?	X		
C	Is the well pad in complete contact with the ground surface and stable?	X		
D	Is the well pad in complete contact with the protective casing?	X		
E	Is the pad surface clean (not covered with sediment or debris)?	X		
4) Internal Casing				
A	Does the cap prevent entry of foreign material inot the well?	X		
B	Is the casing free of kinks/bends, or any obstructions from foreign objects (such as bailers)?	X		
C	Is the well properly vented for equilibration of air pressure?	X		
D	Is the survey point clearly marked on the inner casing?	X		
E	Is the depth of the well consistent with the original well log?	X		
F	Is the casing stable? (Does PVC move easily when touched or can be taken apart by hand due to lack of grout or use of slip couplings in construction)	X		
5) Sampling: Groundwater Wells Only				
A	Does water recharge adequately when purged?	X		
B	If dedicated sampling equipment installed, is it in good condition and specified in the arppove groundwater monitoring plan for the facility?	X		
C	Does the well require redevelopment (low flow/turbidity)?		X	
6) Based on 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?		X		
7) Corrective actions as needed, by date:				
Signature and Seal of PE/PG responsible for inspection				

Groundwater Monitoring Well Integrity Form

Site Name: Plant Branch

Permit Number:

Well ID: PZ-43

Date: 1/31/22

		Yes	No	N/A
1) Location/Identification				
A	Is the well visible and accessible?	X		
B	Is the well properly identified with correct well ID?	X		
C	Is the well in a high traffic area and does the well require protection from traffic?		X	
D	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	X		
2) Protective Casing				
A	Is the protective casing free from apparent damage and able to be secured?	X		
B	Is the casing free of degradation or deterioration?	X		
C	Does the casing have a functioning weep hole?	X		
D	Is the annular space between the casings clear of debris and water, or filled with pea gravel/sand?	X		
E	Is the well locked and is the lock in good condition?	X		
3) Surface Pad				
A	Is the well pad in good condition (not cracked/broken)?	X		
B	Is the well pad sloped away from the protective casing?	X		
C	Is the well pad in complete contact with the ground surface and stable?	X		
D	Is the well pad in complete contact with the protective casing?	X		
E	Is the pad surface clean (not covered with sediment or debris)?	X		
4) Internal Casing				
A	Does the cap prevent entry of foreign material inot the well?	X		
B	Is the casing free of kinks/bends, or any obstructions from foreign objects (such as bailers)?	X		
C	Is the well properly vented for equilibration of air pressure?	X		
D	Is the survey point clearly marked on the inner casing?	X		
E	Is the depth of the well consistent with the original well log?	X		
F	Is the casing stable? (Does PVC move easily when touched or can be taken apart by hand due to lack of grout or use of slip couplings in construction)	X		
5) Sampling: Groundwater Wells Only				
A	Does water recharge adequately when purged?	X		
B	If dedicated sampling equipment installed, is it in good condition and specified in the arppove groundwater monitoring plan for the facility?	X		
C	Does the well require redevelopment (low flow/turbidity)?		X	
6) Based on 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?		X		
7) Corrective actions as needed, by date:				
Signature and Seal of PE/PG responsible for inspection				

Groundwater Monitoring Well Integrity Form

Site Name: Plant Branch

Permit Number:

Well ID: PZ-44

Date: 1/31/22

		Yes	No	N/A
1) Location/Identification				
A	Is the well visible and accessible?	X		
B	Is the well properly identified with correct well ID?	X		
C	Is the well in a high traffic area and does the well require protection from traffic?		X	
D	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	X		
2) Protective Casing				
A	Is the protective casing free from apparent damage and able to be secured?	X		
B	Is the casing free of degradation or deterioration?	X		
C	Does the casing have a functioning weep hole?	X		
D	Is the annular space between the casings clear of debris and water, or filled with pea gravel/sand?	X		
E	Is the well locked and is the lock in good condition?	X		
3) Surface Pad				
A	Is the well pad in good condition (not cracked/broken)?	X		
B	Is the well pad sloped away from the protective casing?	X		
C	Is the well pad in complete contact with the ground surface and stable?	X		
D	Is the well pad in complete contact with the protective casing?	X		
E	Is the pad surface clean (not covered with sediment or debris)?	X		
4) Internal Casing				
A	Does the cap prevent entry of foreign material inot the well?	X		
B	Is the casing free of kinks/bends, or any obstructions from foreign objects (such as bailers)?	X		
C	Is the well properly vented for equilibration of air pressure?	X		
D	Is the survey point clearly marked on the inner casing?	X		
E	Is the depth of the well consistent with the original well log?	X		
F	Is the casing stable? (Does PVC move easily when touched or can be taken apart by hand due to lack of grout or use of slip couplings in construction)	X		
5) Sampling: Groundwater Wells Only				
A	Does water recharge adequately when purged?	X		
B	If dedicated sampling equipment installed, is it in good condition and specified in the arppove groundwater monitoring plan for the facility?	X		
C	Does the well require redevelopment (low flow/turbidity)?		X	
6) Based on 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?		X		
7) Corrective actions as needed, by date:				
Signature and Seal of PE/PG responsible for inspection				

Groundwater Monitoring Well Integrity Form

Site Name: Plant Branch

Permit Number:

Well ID: PZ-46

Date: 1/31/22

		Yes	No	N/A
1) Location/Identification				
A	Is the well visible and accessible?	X		
B	Is the well properly identified with correct well ID?	X		
C	Is the well in a high traffic area and does the well require protection from traffic?		X	
D	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	X		
2) Protective Casing				
A	Is the protective casing free from apparent damage and able to be secured?	X		
B	Is the casing free of degradation or deterioration?	X		
C	Does the casing have a functioning weep hole?	X		
D	Is the annular space between the casings clear of debris and water, or filled with pea gravel/sand?	X		
E	Is the well locked and is the lock in good condition?	X		
3) Surface Pad				
A	Is the well pad in good condition (not cracked/broken)?	X		
B	Is the well pad sloped away from the protective casing?	X		
C	Is the well pad in complete contact with the ground surface and stable?	X		
D	Is the well pad in complete contact with the protective casing?	X		
E	Is the pad surface clean (not covered with sediment or debris)?	X		
4) Internal Casing				
A	Does the cap prevent entry of foreign material inot the well?	X		
B	Is the casing free of kinks/bends, or any obstructions from foreign objects (such as bailers)?	X		
C	Is the well properly vented for equilibration of air pressure?	X		
D	Is the survey point clearly marked on the inner casing?	X		
E	Is the depth of the well consistent with the original well log?	X		
F	Is the casing stable? (Does PVC move easily when touched or can be taken apart by hand due to lack of grout or use of slip couplings in construction)	X		
5) Sampling: Groundwater Wells Only				
A	Does water recharge adequately when purged?	X		
B	If dedicated sampling equipment installed, is it in good condition and specified in the arppove groundwater monitoring plan for the facility?	X		
C	Does the well require redevelopment (low flow/turbidity)?		X	
6) Based on 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?		X		
7) Corrective actions as needed, by date:				
Signature and Seal of PE/PG responsible for inspection				

Groundwater Monitoring Well Integrity Form

Site Name: Plant Branch

Permit Number:

Well ID: PZ-48

Date: 1/31/22

		Yes	No	N/A
1) Location/Identification				
A	Is the well visible and accessible?	X		
B	Is the well properly identified with correct well ID?	X		
C	Is the well in a high traffic area and does the well require protection from traffic?		X	
D	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	X		
2) Protective Casing				
A	Is the protective casing free from apparent damage and able to be secured?	X		
B	Is the casing free of degradation or deterioration?	X		
C	Does the casing have a functioning weep hole?	X		
D	Is the annular space between the casings clear of debris and water, or filled with pea gravel/sand?	X		
E	Is the well locked and is the lock in good condition?	X		
3) Surface Pad				
A	Is the well pad in good condition (not cracked/broken)?	X		
B	Is the well pad sloped away from the protective casing?	X		
C	Is the well pad in complete contact with the ground surface and stable?	X		
D	Is the well pad in complete contact with the protective casing?	X		
E	Is the pad surface clean (not covered with sediment or debris)?	X		
4) Internal Casing				
A	Does the cap prevent entry of foreign material inot the well?	X		
B	Is the casing free of kinks/bends, or any obstructions from foreign objects (such as bailers)?	X		
C	Is the well properly vented for equilibration of air pressure?	X		
D	Is the survey point clearly marked on the inner casing?	X		
E	Is the depth of the well consistent with the original well log?	X		
F	Is the casing stable? (Does PVC move easily when touched or can be taken apart by hand due to lack of grout or use of slip couplings in construction)	X		
5) Sampling: Groundwater Wells Only				
A	Does water recharge adequately when purged?	X		
B	If dedicated sampling equipment installed, is it in good condition and specified in the arppove groundwater monitoring plan for the facility?	X		
C	Does the well require redevelopment (low flow/turbidity)?		X	
6) Based on 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?		X		
7) Corrective actions as needed, by date:				
Signature and Seal of PE/PG responsible for inspection				

Groundwater Monitoring Well Integrity Form

Site Name: Plant Branch

Permit Number:

Well ID: PZ-49

Date: 1/31/22

		Yes	No	N/A
1) Location/Identification				
A	Is the well visible and accessible?	X		
B	Is the well properly identified with correct well ID?	X		
C	Is the well in a high traffic area and does the well require protection from traffic?		X	
D	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	X		
2) Protective Casing				
A	Is the protective casing free from apparent damage and able to be secured?	X		
B	Is the casing free of degradation or deterioration?	X		
C	Does the casing have a functioning weep hole?	X		
D	Is the annular space between the casings clear of debris and water, or filled with pea gravel/sand?	X		
E	Is the well locked and is the lock in good condition?	X		
3) Surface Pad				
A	Is the well pad in good condition (not cracked/broken)?	X		
B	Is the well pad sloped away from the protective casing?	X		
C	Is the well pad in complete contact with the ground surface and stable?	X		
D	Is the well pad in complete contact with the protective casing?	X		
E	Is the pad surface clean (not covered with sediment or debris)?	X		
4) Internal Casing				
A	Does the cap prevent entry of foreign material inot the well?	X		
B	Is the casing free of kinks/bends, or any obstructions from foreign objects (such as bailers)?	X		
C	Is the well properly vented for equilibration of air pressure?	X		
D	Is the survey point clearly marked on the inner casing?	X		
E	Is the depth of the well consistent with the original well log?	X		
F	Is the casing stable? (Does PVC move easily when touched or can be taken apart by hand due to lack of grout or use of slip couplings in construction)	X		
5) Sampling: Groundwater Wells Only				
A	Does water recharge adequately when purged?	X		
B	If dedicated sampling equipment installed, is it in good condition and specified in the arppove groundwater monitoring plan for the facility?	X		
C	Does the well require redevelopment (low flow/turbidity)?		X	
6) Based on 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?		X		
7) Corrective actions as needed, by date:				
Signature and Seal of PE/PG responsible for inspection				

Groundwater Monitoring Well Integrity Form

Site Name: Plant Branch

Permit Number:

Well ID: PZ-52D

Date: 1/31/22

		Yes	No	N/A
1) Location/Identification				
A	Is the well visible and accessible?	X		
B	Is the well properly identified with correct well ID?	X		
C	Is the well in a high traffic area and does the well require protection from traffic?		X	
D	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	X		
2) Protective Casing				
A	Is the protective casing free from apparent damage and able to be secured?	X		
B	Is the casing free of degradation or deterioration?	X		
C	Does the casing have a functioning weep hole?	X		
D	Is the annular space between the casings clear of debris and water, or filled with pea gravel/sand?	X		
E	Is the well locked and is the lock in good condition?	X		
3) Surface Pad				
A	Is the well pad in good condition (not cracked/broken)?	X		
B	Is the well pad sloped away from the protective casing?	X		
C	Is the well pad in complete contact with the ground surface and stable?	X		
D	Is the well pad in complete contact with the protective casing?	X		
E	Is the pad surface clean (not covered with sediment or debris)?	X		
4) Internal Casing				
A	Does the cap prevent entry of foreign material inot the well?	X		
B	Is the casing free of kinks/bends, or any obstructions from foreign objects (such as bailers)?	X		
C	Is the well properly vented for equilibration of air pressure?	X		
D	Is the survey point clearly marked on the inner casing?	X		
E	Is the depth of the well consistent with the original well log?	X		
F	Is the casing stable? (Does PVC move easily when touched or can be taken apart by hand due to lack of grout or use of slip couplings in construction)	X		
5) Sampling: Groundwater Wells Only				
A	Does water recharge adequately when purged?	X		
B	If dedicated sampling equipment installed, is it in good condition and specified in the arppove groundwater monitoring plan for the facility?	X		
C	Does the well require redevelopment (low flow/turbidity)?		X	
6) Based on 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?		X		
7) Corrective actions as needed, by date:				
Signature and Seal of PE/PG responsible for inspection				

Groundwater Monitoring Well Integrity Form

Site Name: Plant Branch

Permit Number:

Well ID: PZ-53D

Date: 1/31/22

		Yes	No	N/A
1) Location/Identification				
A	Is the well visible and accessible?	X		
B	Is the well properly identified with correct well ID?	X		
C	Is the well in a high traffic area and does the well require protection from traffic?		X	
D	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	X		
2) Protective Casing				
A	Is the protective casing free from apparent damage and able to be secured?	X		
B	Is the casing free of degradation or deterioration?	X		
C	Does the casing have a functioning weep hole?	X		
D	Is the annular space between the casings clear of debris and water, or filled with pea gravel/sand?	X		
E	Is the well locked and is the lock in good condition?	X		
3) Surface Pad				
A	Is the well pad in good condition (not cracked/broken)?	X		
B	Is the well pad sloped away from the protective casing?	X		
C	Is the well pad in complete contact with the ground surface and stable?	X		
D	Is the well pad in complete contact with the protective casing?	X		
E	Is the pad surface clean (not covered with sediment or debris)?	X		
4) Internal Casing				
A	Does the cap prevent entry of foreign material inot the well?	X		
B	Is the casing free of kinks/bends, or any obstructions from foreign objects (such as bailers)?	X		
C	Is the well properly vented for equilibration of air pressure?	X		
D	Is the survey point clearly marked on the inner casing?	X		
E	Is the depth of the well consistent with the original well log?	X		
F	Is the casing stable? (Does PVC move easily when touched or can be taken apart by hand due to lack of grout or use of slip couplings in construction)	X		
5) Sampling: Groundwater Wells Only				
A	Does water recharge adequately when purged?	X		
B	If dedicated sampling equipment installed, is it in good condition and specified in the arppove groundwater monitoring plan for the facility?	X		
C	Does the well require redevelopment (low flow/turbidity)?		X	
6) Based on 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?		X		
7) Corrective actions as needed, by date:				
Signature and Seal of PE/PG responsible for inspection				

Groundwater Monitoring Well Integrity Form

Site Name: Plant Branch

Permit Number:

Well ID: PZ-54

Date: 1/31/22

		Yes	No	N/A
1) Location/Identification				
A	Is the well visible and accessible?	X		
B	Is the well properly identified with correct well ID?	X		
C	Is the well in a high traffic area and does the well require protection from traffic?		X	
D	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	X		
2) Protective Casing				
A	Is the protective casing free from apparent damage and able to be secured?	X		
B	Is the casing free of degradation or deterioration?	X		
C	Does the casing have a functioning weep hole?	X		
D	Is the annular space between the casings clear of debris and water, or filled with pea gravel/sand?	X		
E	Is the well locked and is the lock in good condition?	X		
3) Surface Pad				
A	Is the well pad in good condition (not cracked/broken)?	X		
B	Is the well pad sloped away from the protective casing?	X		
C	Is the well pad in complete contact with the ground surface and stable?	X		
D	Is the well pad in complete contact with the protective casing?	X		
E	Is the pad surface clean (not covered with sediment or debris)?	X		
4) Internal Casing				
A	Does the cap prevent entry of foreign material inot the well?	X		
B	Is the casing free of kinks/bends, or any obstructions from foreign objects (such as bailers)?	X		
C	Is the well properly vented for equilibration of air pressure?	X		
D	Is the survey point clearly marked on the inner casing?	X		
E	Is the depth of the well consistent with the original well log?	X		
F	Is the casing stable? (Does PVC move easily when touched or can be taken apart by hand due to lack of grout or use of slip couplings in construction)	X		
5) Sampling: Groundwater Wells Only				
A	Does water recharge adequately when purged?	X		
B	If dedicated sampling equipment installed, is it in good condition and specified in the arppove groundwater monitoring plan for the facility?	X		
C	Does the well require redevelopment (low flow/turbidity)?		X	
6) Based on 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?		X		
7) Corrective actions as needed, by date:				
Signature and Seal of PE/PG responsible for inspection				

Groundwater Monitoring Well Integrity Form

Site Name: Plant Branch

Permit Number:

Well ID: PZ-55

Date: 1/31/22

		Yes	No	N/A
1) Location/Identification				
A	Is the well visible and accessible?	X		
B	Is the well properly identified with correct well ID?	X		
C	Is the well in a high traffic area and does the well require protection from traffic?		X	
D	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	X		
2) Protective Casing				
A	Is the protective casing free from apparent damage and able to be secured?	X		
B	Is the casing free of degradation or deterioration?	X		
C	Does the casing have a functioning weep hole?	X		
D	Is the annular space between the casings clear of debris and water, or filled with pea gravel/sand?	X		
E	Is the well locked and is the lock in good condition?	X		
3) Surface Pad				
A	Is the well pad in good condition (not cracked/broken)?	X		
B	Is the well pad sloped away from the protective casing?	X		
C	Is the well pad in complete contact with the ground surface and stable?	X		
D	Is the well pad in complete contact with the protective casing?	X		
E	Is the pad surface clean (not covered with sediment or debris)?	X		
4) Internal Casing				
A	Does the cap prevent entry of foreign material inot the well?	X		
B	Is the casing free of kinks/bends, or any obstructions from foreign objects (such as bailers)?	X		
C	Is the well properly vented for equilibration of air pressure?	X		
D	Is the survey point clearly marked on the inner casing?	X		
E	Is the depth of the well consistent with the original well log?	X		
F	Is the casing stable? (Does PVC move easily when touched or can be taken apart by hand due to lack of grout or use of slip couplings in construction)	X		
5) Sampling: Groundwater Wells Only				
A	Does water recharge adequately when purged?	X		
B	If dedicated sampling equipment installed, is it in good condition and specified in the arppove groundwater monitoring plan for the facility?	X		
C	Does the well require redevelopment (low flow/turbidity)?		X	
6) Based on 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?		X		
7) Corrective actions as needed, by date:				
Signature and Seal of PE/PG responsible for inspection				

Groundwater Monitoring Well Integrity Form

Site Name: Plant Branch

Permit Number:

Well ID: PZ-56

Date: 1/31/22

		Yes	No	N/A
1) Location/Identification				
A	Is the well visible and accessible?	X		
B	Is the well properly identified with correct well ID?	X		
C	Is the well in a high traffic area and does the well require protection from traffic?		X	
D	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	X		
2) Protective Casing				
A	Is the protective casing free from apparent damage and able to be secured?	X		
B	Is the casing free of degradation or deterioration?	X		
C	Does the casing have a functioning weep hole?	X		
D	Is the annular space between the casings clear of debris and water, or filled with pea gravel/sand?	X		
E	Is the well locked and is the lock in good condition?	X		
3) Surface Pad				
A	Is the well pad in good condition (not cracked/broken)?	X		
B	Is the well pad sloped away from the protective casing?	X		
C	Is the well pad in complete contact with the ground surface and stable?	X		
D	Is the well pad in complete contact with the protective casing?	X		
E	Is the pad surface clean (not covered with sediment or debris)?	X		
4) Internal Casing				
A	Does the cap prevent entry of foreign material inot the well?	X		
B	Is the casing free of kinks/bends, or any obstructions from foreign objects (such as bailers)?	X		
C	Is the well properly vented for equilibration of air pressure?	X		
D	Is the survey point clearly marked on the inner casing?	X		
E	Is the depth of the well consistent with the original well log?	X		
F	Is the casing stable? (Does PVC move easily when touched or can be taken apart by hand due to lack of grout or use of slip couplings in construction)	X		
5) Sampling: Groundwater Wells Only				
A	Does water recharge adequately when purged?	X		
B	If dedicated sampling equipment installed, is it in good condition and specified in the arppove groundwater monitoring plan for the facility?	X		
C	Does the well require redevelopment (low flow/turbidity)?		X	
6) Based on 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?		X		
7) Corrective actions as needed, by date:				
Signature and Seal of PE/PG responsible for inspection				

Groundwater Monitoring Well Integrity Form

Site Name: Plant Branch

Permit Number:

Well ID: IW-C-1

Date: 1/31/22

		Yes	No	N/A
1) Location/Identification				
A	Is the well visible and accessible?	X		
B	Is the well properly identified with correct well ID?	X		
C	Is the well in a high traffic area and does the well require protection from traffic?		X	
D	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	X		
2) Protective Casing				
A	Is the protective casing free from apparent damage and able to be secured?	X		
B	Is the casing free of degradation or deterioration?	X		
C	Does the casing have a functioning weep hole?	X		
D	Is the annular space between the casings clear of debris and water, or filled with pea gravel/sand?	X		
E	Is the well locked and is the lock in good condition?	X		
3) Surface Pad				
A	Is the well pad in good condition (not cracked/broken)?	X		
B	Is the well pad sloped away from the protective casing?	X		
C	Is the well pad in complete contact with the ground surface and stable?	X		
D	Is the well pad in complete contact with the protective casing?	X		
E	Is the pad surface clean (not covered with sediment or debris)?	X		
4) Internal Casing				
A	Does the cap prevent entry of foreign material inot the well?	X		
B	Is the casing free of kinks/bends, or any obstructions from foreign objects (such as bailers)?	X		
C	Is the well properly vented for equilibration of air pressure?	X		
D	Is the survey point clearly marked on the inner casing?	X		
E	Is the depth of the well consistent with the original well log?	X		
F	Is the casing stable? (Does PVC move easily when touched or can be taken apart by hand due to lack of grout or use of slip couplings in construction)	X		
5) Sampling: Groundwater Wells Only				
A	Does water recharge adequately when purged?	X		
B	If dedicated sampling equipment installed, is it in good condition and specified in the arppove groundwater monitoring plan for the facility?	X		
C	Does the well require redevelopment (low flow/turbidity)?		X	
6) Based on 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?		X		
7) Corrective actions as needed, by date:				
Signature and Seal of PE/PG responsible for inspection				

Groundwater Monitoring Well Integrity Form

Site Name: Plant Branch

Permit Number:

Well ID: IW-B-1

Date: 1/31/22

		Yes	No	N/A
1) Location/Identification				
A	Is the well visible and accessible?	X		
B	Is the well properly identified with correct well ID?	X		
C	Is the well in a high traffic area and does the well require protection from traffic?		X	
D	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	X		
2) Protective Casing				
A	Is the protective casing free from apparent damage and able to be secured?	X		
B	Is the casing free of degradation or deterioration?	X		
C	Does the casing have a functioning weep hole?	X		
D	Is the annular space between the casings clear of debris and water, or filled with pea gravel/sand?	X		
E	Is the well locked and is the lock in good condition?	X		
3) Surface Pad				
A	Is the well pad in good condition (not cracked/broken)?	X		
B	Is the well pad sloped away from the protective casing?	X		
C	Is the well pad in complete contact with the ground surface and stable?	X		
D	Is the well pad in complete contact with the protective casing?	X		
E	Is the pad surface clean (not covered with sediment or debris)?	X		
4) Internal Casing				
A	Does the cap prevent entry of foreign material inot the well?	X		
B	Is the casing free of kinks/bends, or any obstructions from foreign objects (such as bailers)?	X		
C	Is the well properly vented for equilibration of air pressure?	X		
D	Is the survey point clearly marked on the inner casing?	X		
E	Is the depth of the well consistent with the original well log?	X		
F	Is the casing stable? (Does PVC move easily when touched or can be taken apart by hand due to lack of grout or use of slip couplings in construction)	X		
5) Sampling: Groundwater Wells Only				
A	Does water recharge adequately when purged?	X		
B	If dedicated sampling equipment installed, is it in good condition and specified in the arppove groundwater monitoring plan for the facility?	X		
C	Does the well require redevelopment (low flow/turbidity)?		X	
6) Based on 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?		X		
7) Corrective actions as needed, by date:				
Signature and Seal of PE/PG responsible for inspection				

Groundwater Monitoring Well Integrity Form

Site Name: Plant Branch

Permit Number:

Well ID: IW-D-1

Date: 1/31/22

		Yes	No	N/A
1) Location/Identification				
A	Is the well visible and accessible?	X		
B	Is the well properly identified with correct well ID?	X		
C	Is the well in a high traffic area and does the well require protection from traffic?		X	
D	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	X		
2) Protective Casing				
A	Is the protective casing free from apparent damage and able to be secured?	X		
B	Is the casing free of degradation or deterioration?	X		
C	Does the casing have a functioning weep hole?	X		
D	Is the annular space between the casings clear of debris and water, or filled with pea gravel/sand?	X		
E	Is the well locked and is the lock in good condition?	X		
3) Surface Pad				
A	Is the well pad in good condition (not cracked/broken)?	X		
B	Is the well pad sloped away from the protective casing?	X		
C	Is the well pad in complete contact with the ground surface and stable?	X		
D	Is the well pad in complete contact with the protective casing?	X		
E	Is the pad surface clean (not covered with sediment or debris)?	X		
4) Internal Casing				
A	Does the cap prevent entry of foreign material inot the well?	X		
B	Is the casing free of kinks/bends, or any obstructions from foreign objects (such as bailers)?	X		
C	Is the well properly vented for equilibration of air pressure?	X		
D	Is the survey point clearly marked on the inner casing?	X		
E	Is the depth of the well consistent with the original well log?	X		
F	Is the casing stable? (Does PVC move easily when touched or can be taken apart by hand due to lack of grout or use of slip couplings in construction)	X		
5) Sampling: Groundwater Wells Only				
A	Does water recharge adequately when purged?	X		
B	If dedicated sampling equipment installed, is it in good condition and specified in the arppove groundwater monitoring plan for the facility?	X		
C	Does the well require redevelopment (low flow/turbidity)?		X	
6) Based on 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?		X		
7) Corrective actions as needed, by date:				
Signature and Seal of PE/PG responsible for inspection				

Groundwater Monitoring Well Integrity Form

Site Name: Plant Branch

Permit Number:

Well ID: IW-E-1

Date: 1/31/22

		Yes	No	N/A
1) Location/Identification				
A	Is the well visible and accessible?	X		
B	Is the well properly identified with correct well ID?	X		
C	Is the well in a high traffic area and does the well require protection from traffic?		X	
D	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	X		
2) Protective Casing				
A	Is the protective casing free from apparent damage and able to be secured?	X		
B	Is the casing free of degradation or deterioration?	X		
C	Does the casing have a functioning weep hole?	X		
D	Is the annular space between the casings clear of debris and water, or filled with pea gravel/sand?	X		
E	Is the well locked and is the lock in good condition?	X		
3) Surface Pad				
A	Is the well pad in good condition (not cracked/broken)?	X		
B	Is the well pad sloped away from the protective casing?	X		
C	Is the well pad in complete contact with the ground surface and stable?	X		
D	Is the well pad in complete contact with the protective casing?	X		
E	Is the pad surface clean (not covered with sediment or debris)?	X		
4) Internal Casing				
A	Does the cap prevent entry of foreign material inot the well?	X		
B	Is the casing free of kinks/bends, or any obstructions from foreign objects (such as bailers)?	X		
C	Is the well properly vented for equilibration of air pressure?	X		
D	Is the survey point clearly marked on the inner casing?	X		
E	Is the depth of the well consistent with the original well log?	X		
F	Is the casing stable? (Does PVC move easily when touched or can be taken apart by hand due to lack of grout or use of slip couplings in construction)	X		
5) Sampling: Groundwater Wells Only				
A	Does water recharge adequately when purged?	X		
B	If dedicated sampling equipment installed, is it in good condition and specified in the arppove groundwater monitoring plan for the facility?	X		
C	Does the well require redevelopment (low flow/turbidity)?		X	
6) Based on 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?		X		
7) Corrective actions as needed, by date:				
Signature and Seal of PE/PG responsible for inspection				

Groundwater Monitoring Well Integrity Form

Site Name: Plant Branch

Permit Number:

Well ID: IW-B-2

Date: 1/31/22

		Yes	No	N/A
1) Location/Identification				
A	Is the well visible and accessible?	X		
B	Is the well properly identified with correct well ID?	X		
C	Is the well in a high traffic area and does the well require protection from traffic?		X	
D	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	X		
2) Protective Casing				
A	Is the protective casing free from apparent damage and able to be secured?	X		
B	Is the casing free of degradation or deterioration?	X		
C	Does the casing have a functioning weep hole?	X		
D	Is the annular space between the casings clear of debris and water, or filled with pea gravel/sand?	X		
E	Is the well locked and is the lock in good condition?	X		
3) Surface Pad				
A	Is the well pad in good condition (not cracked/broken)?	X		
B	Is the well pad sloped away from the protective casing?	X		
C	Is the well pad in complete contact with the ground surface and stable?	X		
D	Is the well pad in complete contact with the protective casing?	X		
E	Is the pad surface clean (not covered with sediment or debris)?	X		
4) Internal Casing				
A	Does the cap prevent entry of foreign material inot the well?	X		
B	Is the casing free of kinks/bends, or any obstructions from foreign objects (such as bailers)?	X		
C	Is the well properly vented for equilibration of air pressure?	X		
D	Is the survey point clearly marked on the inner casing?	X		
E	Is the depth of the well consistent with the original well log?	X		
F	Is the casing stable? (Does PVC move easily when touched or can be taken apart by hand due to lack of grout or use of slip couplings in construction)	X		
5) Sampling: Groundwater Wells Only				
A	Does water recharge adequately when purged?	X		
B	If dedicated sampling equipment installed, is it in good condition and specified in the arppove groundwater monitoring plan for the facility?	X		
C	Does the well require redevelopment (low flow/turbidity)?		X	
6) Based on 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?		X		
7) Corrective actions as needed, by date:				
Signature and Seal of PE/PG responsible for inspection				

Groundwater Monitoring Well Integrity Form

Site Name: Plant Branch

Permit Number:

Well ID: IW-C-2

Date: 1/31/22

		Yes	No	N/A
1) Location/Identification				
A	Is the well visible and accessible?	X		
B	Is the well properly identified with correct well ID?	X		
C	Is the well in a high traffic area and does the well require protection from traffic?		X	
D	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	X		
2) Protective Casing				
A	Is the protective casing free from apparent damage and able to be secured?	X		
B	Is the casing free of degradation or deterioration?	X		
C	Does the casing have a functioning weep hole?	X		
D	Is the annular space between the casings clear of debris and water, or filled with pea gravel/sand?	X		
E	Is the well locked and is the lock in good condition?	X		
3) Surface Pad				
A	Is the well pad in good condition (not cracked/broken)?	X		
B	Is the well pad sloped away from the protective casing?	X		
C	Is the well pad in complete contact with the ground surface and stable?	X		
D	Is the well pad in complete contact with the protective casing?	X		
E	Is the pad surface clean (not covered with sediment or debris)?	X		
4) Internal Casing				
A	Does the cap prevent entry of foreign material inot the well?	X		
B	Is the casing free of kinks/bends, or any obstructions from foreign objects (such as bailers)?	X		
C	Is the well properly vented for equilibration of air pressure?	X		
D	Is the survey point clearly marked on the inner casing?	X		
E	Is the depth of the well consistent with the original well log?	X		
F	Is the casing stable? (Does PVC move easily when touched or can be taken apart by hand due to lack of grout or use of slip couplings in construction)	X		
5) Sampling: Groundwater Wells Only				
A	Does water recharge adequately when purged?	X		
B	If dedicated sampling equipment installed, is it in good condition and specified in the arppove groundwater monitoring plan for the facility?	X		
C	Does the well require redevelopment (low flow/turbidity)?		X	
6) Based on 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?		X		
7) Corrective actions as needed, by date:				
Signature and Seal of PE/PG responsible for inspection				

Groundwater Monitoring Well Integrity Form

Site Name: Plant Branch

Permit Number:

Well ID: IW-D-2

Date: 1/31/22

		Yes	No	N/A
1) Location/Identification				
A	Is the well visible and accessible?	X		
B	Is the well properly identified with correct well ID?	X		
C	Is the well in a high traffic area and does the well require protection from traffic?		X	
D	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	X		
2) Protective Casing				
A	Is the protective casing free from apparent damage and able to be secured?	X		
B	Is the casing free of degradation or deterioration?	X		
C	Does the casing have a functioning weep hole?	X		
D	Is the annular space between the casings clear of debris and water, or filled with pea gravel/sand?	X		
E	Is the well locked and is the lock in good condition?	X		
3) Surface Pad				
A	Is the well pad in good condition (not cracked/broken)?	X		
B	Is the well pad sloped away from the protective casing?	X		
C	Is the well pad in complete contact with the ground surface and stable?	X		
D	Is the well pad in complete contact with the protective casing?	X		
E	Is the pad surface clean (not covered with sediment or debris)?	X		
4) Internal Casing				
A	Does the cap prevent entry of foreign material inot the well?	X		
B	Is the casing free of kinks/bends, or any obstructions from foreign objects (such as bailers)?	X		
C	Is the well properly vented for equilibration of air pressure?	X		
D	Is the survey point clearly marked on the inner casing?	X		
E	Is the depth of the well consistent with the original well log?	X		
F	Is the casing stable? (Does PVC move easily when touched or can be taken apart by hand due to lack of grout or use of slip couplings in construction)	X		
5) Sampling: Groundwater Wells Only				
A	Does water recharge adequately when purged?	X		
B	If dedicated sampling equipment installed, is it in good condition and specified in the arppove groundwater monitoring plan for the facility?	X		
C	Does the well require redevelopment (low flow/turbidity)?		X	
6) Based on 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?		X		
7) Corrective actions as needed, by date:				
Signature and Seal of PE/PG responsible for inspection				

Groundwater Monitoring Well Integrity Form

Site Name: Plant Branch

Permit Number:

Well ID: PB-1S

Date: 1/31/22

		Yes	No	N/A
1) Location/Identification				
A	Is the well visible and accessible?	X		
B	Is the well properly identified with correct well ID?	X		
C	Is the well in a high traffic area and does the well require protection from traffic?		X	
D	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	X		
2) Protective Casing				
A	Is the protective casing free from apparent damage and able to be secured?	X		
B	Is the casing free of degradation or deterioration?	X		
C	Does the casing have a functioning weep hole?	X		
D	Is the annular space between the casings clear of debris and water, or filled with pea gravel/sand?	X		
E	Is the well locked and is the lock in good condition?	X		
3) Surface Pad				
A	Is the well pad in good condition (not cracked/broken)?	X		
B	Is the well pad sloped away from the protective casing?	X		
C	Is the well pad in complete contact with the ground surface and stable?	X		
D	Is the well pad in complete contact with the protective casing?	X		
E	Is the pad surface clean (not covered with sediment or debris)?	X		
4) Internal Casing				
A	Does the cap prevent entry of foreign material inot the well?	X		
B	Is the casing free of kinks/bends, or any obstructions from foreign objects (such as bailers)?	X		
C	Is the well properly vented for equilibration of air pressure?	X		
D	Is the survey point clearly marked on the inner casing?	X		
E	Is the depth of the well consistent with the original well log?	X		
F	Is the casing stable? (Does PVC move easily when touched or can be taken apart by hand due to lack of grout or use of slip couplings in construction)	X		
5) Sampling: Groundwater Wells Only				
A	Does water recharge adequately when purged?	X		
B	If dedicated sampling equipment installed, is it in good condition and specified in the arppove groundwater monitoring plan for the facility?	X		
C	Does the well require redevelopment (low flow/turbidity)?		X	
6) Based on 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?		X		
7) Corrective actions as needed, by date:				
Signature and Seal of PE/PG responsible for inspection				

Groundwater Monitoring Well Integrity Form

Site Name: Plant Branch

Permit Number:

Well ID: PB-2D

Date: 1/31/22

		Yes	No	N/A
1) Location/Identification				
A	Is the well visible and accessible?	X		
B	Is the well properly identified with correct well ID?	X		
C	Is the well in a high traffic area and does the well require protection from traffic?		X	
D	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	X		
2) Protective Casing				
A	Is the protective casing free from apparent damage and able to be secured?	X		
B	Is the casing free of degradation or deterioration?	X		
C	Does the casing have a functioning weep hole?	X		
D	Is the annular space between the casings clear of debris and water, or filled with pea gravel/sand?	X		
E	Is the well locked and is the lock in good condition?	X		
3) Surface Pad				
A	Is the well pad in good condition (not cracked/broken)?	X		
B	Is the well pad sloped away from the protective casing?	X		
C	Is the well pad in complete contact with the ground surface and stable?	X		
D	Is the well pad in complete contact with the protective casing?	X		
E	Is the pad surface clean (not covered with sediment or debris)?	X		
4) Internal Casing				
A	Does the cap prevent entry of foreign material inot the well?	X		
B	Is the casing free of kinks/bends, or any obstructions from foreign objects (such as bailers)?	X		
C	Is the well properly vented for equilibration of air pressure?	X		
D	Is the survey point clearly marked on the inner casing?	X		
E	Is the depth of the well consistent with the original well log?	X		
F	Is the casing stable? (Does PVC move easily when touched or can be taken apart by hand due to lack of grout or use of slip couplings in construction)	X		
5) Sampling: Groundwater Wells Only				
A	Does water recharge adequately when purged?	X		
B	If dedicated sampling equipment installed, is it in good condition and specified in the arppove groundwater monitoring plan for the facility?	X		
C	Does the well require redevelopment (low flow/turbidity)?		X	
6) Based on 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?		X		
7) Corrective actions as needed, by date:				
Signature and Seal of PE/PG responsible for inspection				

Groundwater Monitoring Well Integrity Form

Site Name: Plant Branch

Permit Number:

Well ID: PB-4S

Date: 1/31/22

		Yes	No	N/A
1) Location/Identification				
A	Is the well visible and accessible?	X		
B	Is the well properly identified with correct well ID?	X		
C	Is the well in a high traffic area and does the well require protection from traffic?		X	
D	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	X		
2) Protective Casing				
A	Is the protective casing free from apparent damage and able to be secured?	X		
B	Is the casing free of degradation or deterioration?	X		
C	Does the casing have a functioning weep hole?	X		
D	Is the annular space between the casings clear of debris and water, or filled with pea gravel/sand?	X		
E	Is the well locked and is the lock in good condition?	X		
3) Surface Pad				
A	Is the well pad in good condition (not cracked/broken)?	X		
B	Is the well pad sloped away from the protective casing?	X		
C	Is the well pad in complete contact with the ground surface and stable?	X		
D	Is the well pad in complete contact with the protective casing?	X		
E	Is the pad surface clean (not covered with sediment or debris)?	X		
4) Internal Casing				
A	Does the cap prevent entry of foreign material inot the well?	X		
B	Is the casing free of kinks/bends, or any obstructions from foreign objects (such as bailers)?	X		
C	Is the well properly vented for equilibration of air pressure?	X		
D	Is the survey point clearly marked on the inner casing?	X		
E	Is the depth of the well consistent with the original well log?	X		
F	Is the casing stable? (Does PVC move easily when touched or can be taken apart by hand due to lack of grout or use of slip couplings in construction)	X		
5) Sampling: Groundwater Wells Only				
A	Does water recharge adequately when purged?	X		
B	If dedicated sampling equipment installed, is it in good condition and specified in the arppove groundwater monitoring plan for the facility?	X		
C	Does the well require redevelopment (low flow/turbidity)?		X	
6) Based on 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?		X		
7) Corrective actions as needed, by date:				
Signature and Seal of PE/PG responsible for inspection				

Groundwater Monitoring Well Integrity Form

Site Name: Plant Branch

Permit Number:

Well ID: PB-4D

Date: 1/31/22

		Yes	No	N/A
1) Location/Identification				
A	Is the well visible and accessible?	X		
B	Is the well properly identified with correct well ID?	X		
C	Is the well in a high traffic area and does the well require protection from traffic?		X	
D	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	X		
2) Protective Casing				
A	Is the protective casing free from apparent damage and able to be secured?	X		
B	Is the casing free of degradation or deterioration?	X		
C	Does the casing have a functioning weep hole?	X		
D	Is the annular space between the casings clear of debris and water, or filled with pea gravel/sand?	X		
E	Is the well locked and is the lock in good condition?	X		
3) Surface Pad				
A	Is the well pad in good condition (not cracked/broken)?	X		
B	Is the well pad sloped away from the protective casing?	X		
C	Is the well pad in complete contact with the ground surface and stable?	X		
D	Is the well pad in complete contact with the protective casing?	X		
E	Is the pad surface clean (not covered with sediment or debris)?	X		
4) Internal Casing				
A	Does the cap prevent entry of foreign material inot the well?	X		
B	Is the casing free of kinks/bends, or any obstructions from foreign objects (such as bailers)?	X		
C	Is the well properly vented for equilibration of air pressure?	X		
D	Is the survey point clearly marked on the inner casing?	X		
E	Is the depth of the well consistent with the original well log?	X		
F	Is the casing stable? (Does PVC move easily when touched or can be taken apart by hand due to lack of grout or use of slip couplings in construction)	X		
5) Sampling: Groundwater Wells Only				
A	Does water recharge adequately when purged?	X		
B	If dedicated sampling equipment installed, is it in good condition and specified in the arppove groundwater monitoring plan for the facility?	X		
C	Does the well require redevelopment (low flow/turbidity)?		X	
6) Based on 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?		X		
7) Corrective actions as needed, by date:				
Signature and Seal of PE/PG responsible for inspection				

Groundwater Monitoring Well Integrity Form

Site Name: Plant Branch

Permit Number:

Well ID: PB-7S

Date: 1/31/22

		Yes	No	N/A
1) Location/Identification				
A	Is the well visible and accessible?	X		
B	Is the well properly identified with correct well ID?	X		
C	Is the well in a high traffic area and does the well require protection from traffic?		X	
D	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	X		
2) Protective Casing				
A	Is the protective casing free from apparent damage and able to be secured?	X		
B	Is the casing free of degradation or deterioration?	X		
C	Does the casing have a functioning weep hole?	X		
D	Is the annular space between the casings clear of debris and water, or filled with pea gravel/sand?	X		
E	Is the well locked and is the lock in good condition?	X		
3) Surface Pad				
A	Is the well pad in good condition (not cracked/broken)?	X		
B	Is the well pad sloped away from the protective casing?	X		
C	Is the well pad in complete contact with the ground surface and stable?	X		
D	Is the well pad in complete contact with the protective casing?	X		
E	Is the pad surface clean (not covered with sediment or debris)?	X		
4) Internal Casing				
A	Does the cap prevent entry of foreign material inot the well?	X		
B	Is the casing free of kinks/bends, or any obstructions from foreign objects (such as bailers)?	X		
C	Is the well properly vented for equilibration of air pressure?	X		
D	Is the survey point clearly marked on the inner casing?	X		
E	Is the depth of the well consistent with the original well log?	X		
F	Is the casing stable? (Does PVC move easily when touched or can be taken apart by hand due to lack of grout or use of slip couplings in construction)	X		
5) Sampling: Groundwater Wells Only				
A	Does water recharge adequately when purged?	X		
B	If dedicated sampling equipment installed, is it in good condition and specified in the arppove groundwater monitoring plan for the facility?	X		
C	Does the well require redevelopment (low flow/turbidity)?		X	
6) Based on 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?		X		
7) Corrective actions as needed, by date:				
Signature and Seal of PE/PG responsible for inspection				

Groundwater Monitoring Well Integrity Form

Site Name: Plant Branch

Permit Number:

Well ID: PB-8S

Date: 1/31/22

		Yes	No	N/A
1) Location/Identification				
A	Is the well visible and accessible?	X		
B	Is the well properly identified with correct well ID?	X		
C	Is the well in a high traffic area and does the well require protection from traffic?		X	
D	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	X		
2) Protective Casing				
A	Is the protective casing free from apparent damage and able to be secured?	X		
B	Is the casing free of degradation or deterioration?	X		
C	Does the casing have a functioning weep hole?	X		
D	Is the annular space between the casings clear of debris and water, or filled with pea gravel/sand?	X		
E	Is the well locked and is the lock in good condition?	X		
3) Surface Pad				
A	Is the well pad in good condition (not cracked/broken)?	X		
B	Is the well pad sloped away from the protective casing?	X		
C	Is the well pad in complete contact with the ground surface and stable?	X		
D	Is the well pad in complete contact with the protective casing?	X		
E	Is the pad surface clean (not covered with sediment or debris)?	X		
4) Internal Casing				
A	Does the cap prevent entry of foreign material inot the well?	X		
B	Is the casing free of kinks/bends, or any obstructions from foreign objects (such as bailers)?	X		
C	Is the well properly vented for equilibration of air pressure?	X		
D	Is the survey point clearly marked on the inner casing?	X		
E	Is the depth of the well consistent with the original well log?	X		
F	Is the casing stable? (Does PVC move easily when touched or can be taken apart by hand due to lack of grout or use of slip couplings in construction)	X		
5) Sampling: Groundwater Wells Only				
A	Does water recharge adequately when purged?	X		
B	If dedicated sampling equipment installed, is it in good condition and specified in the arppove groundwater monitoring plan for the facility?	X		
C	Does the well require redevelopment (low flow/turbidity)?		X	
6) Based on 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?		X		
7) Corrective actions as needed, by date:				
Signature and Seal of PE/PG responsible for inspection				

Groundwater Monitoring Well Integrity Form

Site Name: Plant Branch

Permit Number:

Well ID: PB-8D

Date: 1/31/22

		Yes	No	N/A
1) Location/Identification				
A	Is the well visible and accessible?	X		
B	Is the well properly identified with correct well ID?	X		
C	Is the well in a high traffic area and does the well require protection from traffic?		X	
D	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	X		
2) Protective Casing				
A	Is the protective casing free from apparent damage and able to be secured?	X		
B	Is the casing free of degradation or deterioration?	X		
C	Does the casing have a functioning weep hole?	X		
D	Is the annular space between the casings clear of debris and water, or filled with pea gravel/sand?	X		
E	Is the well locked and is the lock in good condition?	X		
3) Surface Pad				
A	Is the well pad in good condition (not cracked/broken)?	X		
B	Is the well pad sloped away from the protective casing?	X		
C	Is the well pad in complete contact with the ground surface and stable?	X		
D	Is the well pad in complete contact with the protective casing?	X		
E	Is the pad surface clean (not covered with sediment or debris)?	X		
4) Internal Casing				
A	Does the cap prevent entry of foreign material inot the well?	X		
B	Is the casing free of kinks/bends, or any obstructions from foreign objects (such as bailers)?	X		
C	Is the well properly vented for equilibration of air pressure?	X		
D	Is the survey point clearly marked on the inner casing?	X		
E	Is the depth of the well consistent with the original well log?	X		
F	Is the casing stable? (Does PVC move easily when touched or can be taken apart by hand due to lack of grout or use of slip couplings in construction)	X		
5) Sampling: Groundwater Wells Only				
A	Does water recharge adequately when purged?	X		
B	If dedicated sampling equipment installed, is it in good condition and specified in the arppove groundwater monitoring plan for the facility?	X		
C	Does the well require redevelopment (low flow/turbidity)?		X	
6) Based on 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?		X		
7) Corrective actions as needed, by date:				
Signature and Seal of PE/PG responsible for inspection				

Groundwater Monitoring Well Integrity Form

Site Name: Plant Branch

Permit Number:

Well ID: PB-10S

Date: 1/31/22

		Yes	No	N/A
1) Location/Identification				
A	Is the well visible and accessible?	X		
B	Is the well properly identified with correct well ID?	X		
C	Is the well in a high traffic area and does the well require protection from traffic?		X	
D	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	X		
2) Protective Casing				
A	Is the protective casing free from apparent damage and able to be secured?	X		
B	Is the casing free of degradation or deterioration?	X		
C	Does the casing have a functioning weep hole?	X		
D	Is the annular space between the casings clear of debris and water, or filled with pea gravel/sand?	X		
E	Is the well locked and is the lock in good condition?	X		
3) Surface Pad				
A	Is the well pad in good condition (not cracked/broken)?	X		
B	Is the well pad sloped away from the protective casing?	X		
C	Is the well pad in complete contact with the ground surface and stable?	X		
D	Is the well pad in complete contact with the protective casing?	X		
E	Is the pad surface clean (not covered with sediment or debris)?	X		
4) Internal Casing				
A	Does the cap prevent entry of foreign material inot the well?	X		
B	Is the casing free of kinks/bends, or any obstructions from foreign objects (such as bailers)?	X		
C	Is the well properly vented for equilibration of air pressure?	X		
D	Is the survey point clearly marked on the inner casing?	X		
E	Is the depth of the well consistent with the original well log?	X		
F	Is the casing stable? (Does PVC move easily when touched or can be taken apart by hand due to lack of grout or use of slip couplings in construction)	X		
5) Sampling: Groundwater Wells Only				
A	Does water recharge adequately when purged?	X		
B	If dedicated sampling equipment installed, is it in good condition and specified in the arppove groundwater monitoring plan for the facility?	X		
C	Does the well require redevelopment (low flow/turbidity)?		X	
6) Based on 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?		X		
7) Corrective actions as needed, by date:				
Signature and Seal of PE/PG responsible for inspection				

Groundwater Monitoring Well Integrity Form

Site Name: Plant Branch

Permit Number:

Well ID: PB-10D

Date: 1/31/22

		Yes	No	N/A
1) Location/Identification				
A	Is the well visible and accessible?	X		
B	Is the well properly identified with correct well ID?	X		
C	Is the well in a high traffic area and does the well require protection from traffic?		X	
D	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	X		
2) Protective Casing				
A	Is the protective casing free from apparent damage and able to be secured?	X		
B	Is the casing free of degradation or deterioration?	X		
C	Does the casing have a functioning weep hole?	X		
D	Is the annular space between the casings clear of debris and water, or filled with pea gravel/sand?	X		
E	Is the well locked and is the lock in good condition?	X		
3) Surface Pad				
A	Is the well pad in good condition (not cracked/broken)?	X		
B	Is the well pad sloped away from the protective casing?	X		
C	Is the well pad in complete contact with the ground surface and stable?	X		
D	Is the well pad in complete contact with the protective casing?	X		
E	Is the pad surface clean (not covered with sediment or debris)?	X		
4) Internal Casing				
A	Does the cap prevent entry of foreign material inot the well?	X		
B	Is the casing free of kinks/bends, or any obstructions from foreign objects (such as bailers)?	X		
C	Is the well properly vented for equilibration of air pressure?	X		
D	Is the survey point clearly marked on the inner casing?	X		
E	Is the depth of the well consistent with the original well log?	X		
F	Is the casing stable? (Does PVC move easily when touched or can be taken apart by hand due to lack of grout or use of slip couplings in construction)	X		
5) Sampling: Groundwater Wells Only				
A	Does water recharge adequately when purged?	X		
B	If dedicated sampling equipment installed, is it in good condition and specified in the arppove groundwater monitoring plan for the facility?	X		
C	Does the well require redevelopment (low flow/turbidity)?		X	
6) Based on 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?		X		
7) Corrective actions as needed, by date:				
Signature and Seal of PE/PG responsible for inspection				

Groundwater Monitoring Well Integrity Form

Site Name: Plant Branch

Permit Number:

Well ID: PB-13S

Date: 1/31/22

		Yes	No	N/A
1) Location/Identification				
A	Is the well visible and accessible?	X		
B	Is the well properly identified with correct well ID?	X		
C	Is the well in a high traffic area and does the well require protection from traffic?		X	
D	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	X		
2) Protective Casing				
A	Is the protective casing free from apparent damage and able to be secured?	X		
B	Is the casing free of degradation or deterioration?	X		
C	Does the casing have a functioning weep hole?	X		
D	Is the annular space between the casings clear of debris and water, or filled with pea gravel/sand?	X		
E	Is the well locked and is the lock in good condition?	X		
3) Surface Pad				
A	Is the well pad in good condition (not cracked/broken)?	X		
B	Is the well pad sloped away from the protective casing?	X		
C	Is the well pad in complete contact with the ground surface and stable?	X		
D	Is the well pad in complete contact with the protective casing?	X		
E	Is the pad surface clean (not covered with sediment or debris)?	X		
4) Internal Casing				
A	Does the cap prevent entry of foreign material inot the well?	X		
B	Is the casing free of kinks/bends, or any obstructions from foreign objects (such as bailers)?	X		
C	Is the well properly vented for equilibration of air pressure?	X		
D	Is the survey point clearly marked on the inner casing?	X		
E	Is the depth of the well consistent with the original well log?	X		
F	Is the casing stable? (Does PVC move easily when touched or can be taken apart by hand due to lack of grout or use of slip couplings in construction)	X		
5) Sampling: Groundwater Wells Only				
A	Does water recharge adequately when purged?	X		
B	If dedicated sampling equipment installed, is it in good condition and specified in the arppove groundwater monitoring plan for the facility?	X		
C	Does the well require redevelopment (low flow/turbidity)?		X	
6) Based on 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?		X		
7) Corrective actions as needed, by date:				
Signature and Seal of PE/PG responsible for inspection				

Groundwater Monitoring Well Integrity Form

Site Name: Plant Branch

Permit Number:

Well ID: PB-13D

Date: 1/31/22

		Yes	No	N/A
1) Location/Identification				
A	Is the well visible and accessible?	X		
B	Is the well properly identified with correct well ID?	X		
C	Is the well in a high traffic area and does the well require protection from traffic?		X	
D	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	X		
2) Protective Casing				
A	Is the protective casing free from apparent damage and able to be secured?	X		
B	Is the casing free of degradation or deterioration?	X		
C	Does the casing have a functioning weep hole?	X		
D	Is the annular space between the casings clear of debris and water, or filled with pea gravel/sand?	X		
E	Is the well locked and is the lock in good condition?	X		
3) Surface Pad				
A	Is the well pad in good condition (not cracked/broken)?	X		
B	Is the well pad sloped away from the protective casing?	X		
C	Is the well pad in complete contact with the ground surface and stable?	X		
D	Is the well pad in complete contact with the protective casing?	X		
E	Is the pad surface clean (not covered with sediment or debris)?	X		
4) Internal Casing				
A	Does the cap prevent entry of foreign material inot the well?	X		
B	Is the casing free of kinks/bends, or any obstructions from foreign objects (such as bailers)?	X		
C	Is the well properly vented for equilibration of air pressure?	X		
D	Is the survey point clearly marked on the inner casing?	X		
E	Is the depth of the well consistent with the original well log?	X		
F	Is the casing stable? (Does PVC move easily when touched or can be taken apart by hand due to lack of grout or use of slip couplings in construction)	X		
5) Sampling: Groundwater Wells Only				
A	Does water recharge adequately when purged?	X		
B	If dedicated sampling equipment installed, is it in good condition and specified in the arppove groundwater monitoring plan for the facility?	X		
C	Does the well require redevelopment (low flow/turbidity)?		X	
6) Based on 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?		X		
7) Corrective actions as needed, by date:				
Signature and Seal of PE/PG responsible for inspection				

Groundwater Monitoring Well Integrity Form

Site Name: Plant Branch

Permit Number:

Well ID: PB-15

Date: 1/31/22

		Yes	No	N/A
1) Location/Identification				
A	Is the well visible and accessible?	X		
B	Is the well properly identified with correct well ID?	X		
C	Is the well in a high traffic area and does the well require protection from traffic?		X	
D	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	X		
2) Protective Casing				
A	Is the protective casing free from apparent damage and able to be secured?	X		
B	Is the casing free of degradation or deterioration?	X		
C	Does the casing have a functioning weep hole?	X		
D	Is the annular space between the casings clear of debris and water, or filled with pea gravel/sand?	X		
E	Is the well locked and is the lock in good condition?	X		
3) Surface Pad				
A	Is the well pad in good condition (not cracked/broken)?	X		
B	Is the well pad sloped away from the protective casing?	X		
C	Is the well pad in complete contact with the ground surface and stable?	X		
D	Is the well pad in complete contact with the protective casing?	X		
E	Is the pad surface clean (not covered with sediment or debris)?	X		
4) Internal Casing				
A	Does the cap prevent entry of foreign material inot the well?	X		
B	Is the casing free of kinks/bends, or any obstructions from foreign objects (such as bailers)?	X		
C	Is the well properly vented for equilibration of air pressure?	X		
D	Is the survey point clearly marked on the inner casing?	X		
E	Is the depth of the well consistent with the original well log?	X		
F	Is the casing stable? (Does PVC move easily when touched or can be taken apart by hand due to lack of grout or use of slip couplings in construction)	X		
5) Sampling: Groundwater Wells Only				
A	Does water recharge adequately when purged?	X		
B	If dedicated sampling equipment installed, is it in good condition and specified in the arppove groundwater monitoring plan for the facility?	X		
C	Does the well require redevelopment (low flow/turbidity)?		X	
6) Based on 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?		X		
7) Corrective actions as needed, by date:				
Signature and Seal of PE/PG responsible for inspection				

Groundwater Monitoring Well Integrity Form

Site Name: Plant Branch

Permit Number:

Well ID: PB-16

Date: 1/31/22

		Yes	No	N/A
1) Location/Identification				
A	Is the well visible and accessible?	X		
B	Is the well properly identified with correct well ID?	X		
C	Is the well in a high traffic area and does the well require protection from traffic?		X	
D	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	X		
2) Protective Casing				
A	Is the protective casing free from apparent damage and able to be secured?	X		
B	Is the casing free of degradation or deterioration?	X		
C	Does the casing have a functioning weep hole?	X		
D	Is the annular space between the casings clear of debris and water, or filled with pea gravel/sand?	X		
E	Is the well locked and is the lock in good condition?	X		
3) Surface Pad				
A	Is the well pad in good condition (not cracked/broken)?	X		
B	Is the well pad sloped away from the protective casing?	X		
C	Is the well pad in complete contact with the ground surface and stable?	X		
D	Is the well pad in complete contact with the protective casing?	X		
E	Is the pad surface clean (not covered with sediment or debris)?	X		
4) Internal Casing				
A	Does the cap prevent entry of foreign material inot the well?	X		
B	Is the casing free of kinks/bends, or any obstructions from foreign objects (such as bailers)?	X		
C	Is the well properly vented for equilibration of air pressure?	X		
D	Is the survey point clearly marked on the inner casing?	X		
E	Is the depth of the well consistent with the original well log?	X		
F	Is the casing stable? (Does PVC move easily when touched or can be taken apart by hand due to lack of grout or use of slip couplings in construction)	X		
5) Sampling: Groundwater Wells Only				
A	Does water recharge adequately when purged?	X		
B	If dedicated sampling equipment installed, is it in good condition and specified in the arppove groundwater monitoring plan for the facility?	X		
C	Does the well require redevelopment (low flow/turbidity)?		X	
6) Based on 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?		X		
7) Corrective actions as needed, by date:				
Signature and Seal of PE/PG responsible for inspection				

Groundwater Monitoring Well Integrity Form

Site Name: Plant Branch

Permit Number:

Well ID: PB-17

Date: 1/31/22

		Yes	No	N/A
1) Location/Identification				
A	Is the well visible and accessible?	X		
B	Is the well properly identified with correct well ID?	X		
C	Is the well in a high traffic area and does the well require protection from traffic?		X	
D	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	X		
2) Protective Casing				
A	Is the protective casing free from apparent damage and able to be secured?	X		
B	Is the casing free of degradation or deterioration?	X		
C	Does the casing have a functioning weep hole?	X		
D	Is the annular space between the casings clear of debris and water, or filled with pea gravel/sand?	X		
E	Is the well locked and is the lock in good condition?	X		
3) Surface Pad				
A	Is the well pad in good condition (not cracked/broken)?	X		
B	Is the well pad sloped away from the protective casing?	X		
C	Is the well pad in complete contact with the ground surface and stable?	X		
D	Is the well pad in complete contact with the protective casing?	X		
E	Is the pad surface clean (not covered with sediment or debris)?	X		
4) Internal Casing				
A	Does the cap prevent entry of foreign material inot the well?	X		
B	Is the casing free of kinks/bends, or any obstructions from foreign objects (such as bailers)?	X		
C	Is the well properly vented for equilibration of air pressure?	X		
D	Is the survey point clearly marked on the inner casing?	X		
E	Is the depth of the well consistent with the original well log?	X		
F	Is the casing stable? (Does PVC move easily when touched or can be taken apart by hand due to lack of grout or use of slip couplings in construction)	X		
5) Sampling: Groundwater Wells Only				
A	Does water recharge adequately when purged?	X		
B	If dedicated sampling equipment installed, is it in good condition and specified in the arppove groundwater monitoring plan for the facility?	X		
C	Does the well require redevelopment (low flow/turbidity)?		X	
6) Based on 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?		X		
7) Corrective actions as needed, by date:				
Signature and Seal of PE/PG responsible for inspection				

Groundwater Monitoring Well Integrity Form

Site Name: Plant Branch

Permit Number:

Well ID: PB-18

Date: 1/31/22

		Yes	No	N/A
1) Location/Identification				
A	Is the well visible and accessible?	X		
B	Is the well properly identified with correct well ID?	X		
C	Is the well in a high traffic area and does the well require protection from traffic?		X	
D	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	X		
2) Protective Casing				
A	Is the protective casing free from apparent damage and able to be secured?	X		
B	Is the casing free of degradation or deterioration?	X		
C	Does the casing have a functioning weep hole?	X		
D	Is the annular space between the casings clear of debris and water, or filled with pea gravel/sand?	X		
E	Is the well locked and is the lock in good condition?	X		
3) Surface Pad				
A	Is the well pad in good condition (not cracked/broken)?	X		
B	Is the well pad sloped away from the protective casing?	X		
C	Is the well pad in complete contact with the ground surface and stable?	X		
D	Is the well pad in complete contact with the protective casing?	X		
E	Is the pad surface clean (not covered with sediment or debris)?	X		
4) Internal Casing				
A	Does the cap prevent entry of foreign material inot the well?	X		
B	Is the casing free of kinks/bends, or any obstructions from foreign objects (such as bailers)?	X		
C	Is the well properly vented for equilibration of air pressure?	X		
D	Is the survey point clearly marked on the inner casing?	X		
E	Is the depth of the well consistent with the original well log?	X		
F	Is the casing stable? (Does PVC move easily when touched or can be taken apart by hand due to lack of grout or use of slip couplings in construction)	X		
5) Sampling: Groundwater Wells Only				
A	Does water recharge adequately when purged?	X		
B	If dedicated sampling equipment installed, is it in good condition and specified in the arppove groundwater monitoring plan for the facility?	X		
C	Does the well require redevelopment (low flow/turbidity)?		X	
6) Based on 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?		X		
7) Corrective actions as needed, by date:				
Signature and Seal of PE/PG responsible for inspection				

Groundwater Monitoring Well Integrity Form

Site Name: Plant Branch

Permit Number:

Well ID: PB-19

Date: 1/31/22

		Yes	No	N/A
1) Location/Identification				
A	Is the well visible and accessible?	X		
B	Is the well properly identified with correct well ID?	X		
C	Is the well in a high traffic area and does the well require protection from traffic?		X	
D	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	X		
2) Protective Casing				
A	Is the protective casing free from apparent damage and able to be secured?	X		
B	Is the casing free of degradation or deterioration?	X		
C	Does the casing have a functioning weep hole?	X		
D	Is the annular space between the casings clear of debris and water, or filled with pea gravel/sand?	X		
E	Is the well locked and is the lock in good condition?	X		
3) Surface Pad				
A	Is the well pad in good condition (not cracked/broken)?	X		
B	Is the well pad sloped away from the protective casing?	X		
C	Is the well pad in complete contact with the ground surface and stable?	X		
D	Is the well pad in complete contact with the protective casing?	X		
E	Is the pad surface clean (not covered with sediment or debris)?	X		
4) Internal Casing				
A	Does the cap prevent entry of foreign material inot the well?	X		
B	Is the casing free of kinks/bends, or any obstructions from foreign objects (such as bailers)?	X		
C	Is the well properly vented for equilibration of air pressure?	X		
D	Is the survey point clearly marked on the inner casing?	X		
E	Is the depth of the well consistent with the original well log?	X		
F	Is the casing stable? (Does PVC move easily when touched or can be taken apart by hand due to lack of grout or use of slip couplings in construction)	X		
5) Sampling: Groundwater Wells Only				
A	Does water recharge adequately when purged?	X		
B	If dedicated sampling equipment installed, is it in good condition and specified in the arppove groundwater monitoring plan for the facility?	X		
C	Does the well require redevelopment (low flow/turbidity)?		X	
6) Based on 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?		X		
7) Corrective actions as needed, by date:				
Signature and Seal of PE/PG responsible for inspection				

APPENDIX A

Data Validation Reports

Appendix 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 September 21, 2021 and September 28, 2021. The chemical data were reviewed to identify quality issues which could affect the use of the data for decision making purposes.

Information regarding the primary sample locations, analytical parameters, QC samples, sampling dates, and laboratory sample delivery group (SDG) designations is summarized in Table 1. In accordance with groundwater monitoring and corrective action procedures discussed in Title 40 CFR, Subpart D - Standards for the Disposal of Coal Combustion Residuals in Landfills and Surface Impoundments, the samples were analyzed for detection monitoring constituents listed in 40 CFR, Part 257, Appendix III and IV. Test methods included Inductively Coupled Plasma - Mass Spectrometry (ICP-MS) (USEPA Method 6020B), Mercury in Liquid Wastes (USEPA Method 7470A), Inductively Coupled Plasma (ICP) (6010D), Determination of Inorganic Anions By Ion Chromatography (USEPA Method 300.0), Total Dissolved Solids (TDS) (Standard Methods 2540C), Radium-226 (USEPA Method 9315) and Radium-228 (USEPA Method 9320). Additional analysis were conducted in select samples, including Alkalinity (Standard Methods SM2320B), and Total Nitrogen as Nitrate and Nitrite (Method 353.2).

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 and field duplicates, matrix spike/matrix spike duplicates), accuracy (laboratory control samples and matrix spike samples), and blank contamination (including field and laboratory blanks). Additionally, sample procedures, holding times and chains-of-custody were reviewed. Where there was a discrepancy between the QC criteria in the guidelines and the QC criterion established in the analytic methodology, method-specific criteria or professional judgment was used.

DATA QUALITY OBJECTIVES

Laboratory Precision: Laboratory goals for precision were met.

Field Precision: Field goals for precision were met.

Accuracy: Laboratory goals for accuracy were met except for mercury results in SDG 92563761 as described in the qualifications sections below.

Sensitivity: 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.

Holding Times: All holding time requirements were met in accordance with specific analytical methods.

Additional Comments: Detections were found in certain blank results, as described in the qualification sections below.

Completeness: There were no rejected analytical results for this event, resulting in a completion of 100%.

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.

J The analyte was positively identified above the method detection limit; however, the associated numerical value is the approximate concentration of the analyte in the sample.

U The analyte was not detected above the method detection limit.

The data generated as part of this sampling event met the QC criteria established in the respective analytical methods and data validation guidelines except as specified below. Although these qualifications were applied to some data from samples collected at the site and reported in SDGs 92562855, 92562860, 92563208, and 92563761 qualifications may not have been required or applied to all samples collected. A summary of sample qualifications can be found in Table 2.

- The mercury result in sample PZ-51I was qualified as estimated non-detect value (UJ) since the associated matrix spike and/or matrix spike duplicate (MS/MSD) recovery was below the QC criteria and the analyte was not detected in the associated parent sample.
- Certain mercury results were qualified as non-detect (U) as the analyte was detected at a similar level in an associated blank sample. As shown in Table 2, when the original sample result was below the reporting limit (RL), the results were qualified as non-detect (U) and the results were raised to the RL.
- The radium-228 result in sample BRGWC-52I was qualified as non-detect (U) as the analyte was detected at a similar level in an associated blank sample. As shown in Table 2, the results were qualified as non-detect (U).
- The total Radium result in sample BRGWC-52I was qualified as estimated biased high (J+) as one of the corresponding radium isotopes was qualified U.

Golder reviewed the data from samples collected at the Plant Branch CCR Ash Ponds between September 21, 2021 and September 28, 2021 in accordance with the analytical methods, the laboratory specific QC criteria, and the guidelines. As described above, 100% of the results were acceptable for project use. The data are considered usable for meeting project objectives and the results are considered valid.

REFERENCE

Paar J.G. and Porterfield D.R., April 1997, US Department of Energy, *Evaluation of Radiochemical Data Usability*.

USEPA, September 2011, Region 4, Science and Ecosystem Support Division, Quality Assurance Section, MTSB, *Data Validation Standard Operating Procedures for Contract Laboratory Program Inorganic Data By Inductively Coupled Plasma – Atomic Emission Spectroscopy and Inductively Coupled Plasma – Mass Spectroscopy,* Revision 2.0.

USEPA, January 2017, National, Office of Superfund Remediation and Technology Innovation, *National Functional Guidelines for Inorganic Superfund Methods Data Review,* Revision 0.0.

TABLE 1
Sample Summary Table - Pond BCD
SCS Plant Branch

						Analyses										
SDGs	***Field Identification***	***Collection Date***	***Lab Identification***	***Matrix***	***QC Samples***	**Field pH**	**Total Metals (EPA 6020B)**	**Calcium (EPA 6010D)**	**Mercury (SW7470A)**	**Anions (EPA 300.0)**	**TDS (SM2540C-2011)**	**Alkalinity (2320B)**	**Nitrogen, NO2 + NO3 (353.2)**	**Nitrogen 353.2)**	**Radium-226 (EPA 9315)**	**Radium-228 (EPA 9320)**
92562855	BRGWA-12S	9/21/2021	92562855001	GW	-	X	X	X	X	X	X					
92562855	BRGWA-12I	9/21/2021	92562855002	GW	-	X	X	X	X	X	X					
92562855	BRGWA-23S	9/22/2021	92562855003	GW	-	X	X	X	X	X	X					
92563226	BRGWC-45	9/23/2021	92563226001	GW	-	X	X	X	X	X	X					
92563226	BRGWC-47	9/23/2021	92563226002	GW	-	X	X	X	X	X	X					
92563226	BRGWC-50	9/27/2021	92563226003	GW	-	X	X	X	X	X	X	X	X			
92563226	DUP-2	9/27/2021	92563226004	GW	FD (BRGWC-50)	X	X	X	X	X	X	X				
92563226	BRGWC-25I	9/28/2021	92563226005	GW	-	X	X	X	X	X	X					
92563226	BRGWC-27I	9/28/2021	92563226006	GW	-	X	X	X	X	X	X					
92563226	BRGWC-29I	9/28/2021	92563226007	GW	-	X	X	X	X	X	X					
92563226	BRGWC-30I	9/28/2021	92563226008	GW	-	X	X	X	X	X	X					
92563226	BRGWC-32S	9/28/2021	92563226009	GW	-	X	X	X	X	X	X					
92563226	EB-2	9/28/2021	92563226010	WQ	EB (BRGWC-27I)	X	X	X	X	X	X					
92563226	FB-2	9/28/2021	92563226011	WQ	FB (BRGWC-29I)	X	X	X	X	X	X					
92563226	DUP-3	9/28/2021	92563226012	GW	FD (BRGWC-30I)	X	X	X	X	X	X					
92563226	BRGWC-52I	9/28/2021	92563226013	GW	-	X	X	X	X	X	X	X	X			
92563226	FB-3	9/28/2021	92563226014	WQ	FB (BRGWC-52I)	X	X	X	X	X	X	X				
92563226	EB-3	9/28/2021	92563226015	WQ	EB (BRGWC-52I)	X	X	X	X	X	X	X				
92563761	PZ-51S	9/27/2021	92563761001	GW	-	X	X	X	X	X	X			X		
92563761	PZ-51I	9/27/2021	92563761002	GW	-	X	X	X	X	X	X			X		
92563761	PZ-61I	9/27/2021	92563761003	GW	-	X	X	X	X	X	X			X		
92563761	PZ-51D	9/28/2021	92563761004	GW	-	X	X	X	X	X	X			X		
92563761	PZ-57I	9/28/2021	92563761005	GW	-	X	X	X	X	X	X			X		
92563761	PZ-58I	9/28/2021	92563761006	GW	-	X	X	X	X	X	X			X		
92563761	PZ-44	9/28/2021	92563761007	GW	-	X	X	X	X	X	X			X		
92563761	PZ-50D	9/28/2021	92563761008	GW	-	X	X	X	X	X	X			X		
92563761	PZ-60I	9/28/2021	92563761009	GW	-	X	X	X	X	X	X			X		
92562860	BRGWA-5S	9/21/2021	92562860001	GW	-	X	X	X	X	X	X					
92562860	BRGWA-5I	9/21/2021	92562860002	GW	-	X	X	X	X	X	X					
92562860	BRGWA-2S	9/22/2021	92562860003	GW	-	X	X	X	X	X	X					
92562860	BRGWA-2I	9/22/2021	92562860004	GW	-	X	X	X	X	X	X					
92562860	BRGWA-6S	9/22/2021	92562860005	GW	-	X	X	X	X	X	X					
92562847	BRGWA-12S	9/21/2021	92562847001	GW	-										X	X
92562847	BRGWA-12I	9/21/2021	92562847002	GW	-										X	X
92562847	BRGWA-23S	9/22/2021	92562847003	GW	-										X	X
92563208	BRGWC-45	9/23/2021	92563208001	GW	-										X	X
92563208	BRGWC-47	9/23/2021	92563208002	GW	-										X	X
92563208	BRGWC-50	9/27/2021	92563208003	GW	-										X	X
92563208	DUP-2	9/27/2021	92563208004	GW	FD (BRGWC-50)										X	X
92563208	BRGWC-25I	9/28/2021	92563208005	GW	-										X	X
92563208	BRGWC-27I	9/28/2021	92563208006	GW	-										X	X
92563208	BRGWC-29I	9/28/2021	92563208007	GW	-										X	X
92563208	BRGWC-30I	9/28/2021	92563208008	GW	-										X	X
92563208	BRGWC-32S	9/28/2021	92563208009	GW	-										X	X
92563208	EB-2	9/28/2021	92563208010	WQ	EB (BRGWC-27I)										X	X
92563208	FB-2	9/28/2021	92563208011	WQ	FB (BRGWC-29I)										X	X
92563208	DUP-3	9/28/2021	92563208012	GW	FD (BRGWC-30I)										X	X
92563208	BRGWC-52I	9/28/2021	92563208013	GW	-										X	X
92563208	FB-3	9/28/2021	92563208014	WQ	FB (BRGWC-52I)										X	X
92563208	EB-3	9/28/2021	92563208015	WQ	EB (BRGWC-52I)										X	X
92563753	PZ-51S	9/27/2021	92563753001	GW	-										X	X
92563753	PZ-51I	9/27/2021	92563753002	GW	-										X	X
92563753	PZ-61I	9/27/2021	92563753003	GW	-										X	X
92563753	PZ-51D	9/28/2021	92563753004	GW	-										X	X
92563753	PZ-57I	9/28/2021	92563753005	GW	-										X	X
92563753	PZ-58I	9/28/2021	92563753006	GW	-										X	X
92563753	PZ-44	9/28/2021	92563753007	GW	-										X	X
92563753	PZ-50D	9/28/2021	92563753008	GW	-										X	X
92563753	PZ-60I	9/28/2021	92563753009	GW	-										X	X
92562849	BRGWA-5S	9/21/2021	92562849001	GW	-										X	X
92562849	BRGWA-5I	9/21/2021	92562849002	GW	-										X	X
92562849	BRGWA-2S	9/22/2021	92562849003	GW	-										X	X
92562849	BRGWA-2I	9/22/2021	92562849004	GW	-										X	X
92562849	BRGWA-6S	9/22/2021	92562849005	GW	-										X	X

Abbreviations:

SDG- Sample Delivery Group
QC - Quality Control
GW - Groundwater
WQ - Water Quality
TDS - Total dissolved solids
SW - Solid Waste
EPA - Environmental Protection Agency
FB - Field blank
EB - Equipment Blank
FD - Field duplicate
SM - Standard Method

TABLE 2
Qualifier Summary Table
SCS Plant Branch

SDG	*Sample Name*	*Constituent*	*New Result*	*New RL or MDC*	*Qualifier*	*Reason*
92562855	BRGWA-12S	Mercury	0.0002	-	U	Method blank detection
92562855	BRGWA-12I	Mercury	0.0002	-	U	Method blank detection
92562855	BRGWA-23S	Mercury	0.0002	-	U	Method blank detection
92563761	PZ-51I	Mercury	--	--	UJ	MS/MSD recovered below acceptance criteria and parent sample is ND
92563208	BRGWC-52I	Radium-228	-	2.75	U	Method, Equipment, and Field blank detection
92563208	BRGWC-52I	Total Radium	-	-	J+	Method, Equipment, and Field blank detection
92562860	BRGWA-5S	Mercury	0.0002	--	U	Method blank detection
92562860	BRGWA-5I	Mercury	0.0002	--	U	Method blank detection
92562860	BRGWA-2S	Mercury	0.0002	--	U	Method blank detection
92562860	BRGWA-2I	Mercury	0.0002	--	U	Method blank detection
92562860	BRGWA-6S	Mercury	0.0002	--	U	Method blank detection

Abbreviations:
SDG : Sample delivery group
RL : Reporting limit
MDC : Minimum detectable concentration
MS/MSD: Matrix spike/Matrix spike duplicate

Qualifiers:
U : Non-detect result
UJ : Non-detect estimated result
J+: Estimated value, bias high

Quality Control Review of Analytical Data submitted by Pace Analytical Services, LLC Plant Branch CCR Ash Pond E February 2022

This narrative presents results of the quality control (QC) data review performed on analytical data submitted by Pace Analytical Services, LLC for groundwater samples collected at the Plant Branch CCR Ash Pond AP-E between February 1, 2022 and February 2, 2022. The chemical data were reviewed to identify quality issues which could affect the use of the data for decision making purposes.

Information regarding the primary sample locations, analytical parameters, QC samples, sampling dates, and laboratory sample delivery group (SDG) designations is summarized in Table 1. In accordance with groundwater monitoring and corrective action procedures discussed in Title 40 CFR, Subpart D - Standards for the Disposal of Coal Combustion Residuals in Landfills and Surface Impoundments, the samples were analyzed for detection monitoring constituents listed in 40 CFR, Part 257, Appendix III and IV. Additional analysis included cations and anions (iron, manganese, potassium, magnesium), and alkalinity (total, carbonate and bicarbonate). Test methods included Inductively Coupled Plasma- Mass Spectrometry (ICP-MS) (USEPA Method 6020B), Mercury in Liquid Wastes (USEPA Method 7470A), Inductively Coupled Plasma (ICP) (6010D), Determination of Inorganic Anions By Ion Chromatography (USEPA Method 300.0), Total Dissolved Solids (TDS) (Standard Methods 2540C), Radium-226 (USEPA Method 9315), Radium-228 (USEPA Method 9320), and Alkalinity by Titration through Standard Method 2320B (SM2320B).

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 (November 2020), and US Department of Energy, Evaluation of Radiochemical Data Usability (April 1997). The review included an assessment of the results for completeness, precision (laboratory duplicates, matrix spike/matrix spike duplicates), accuracy (laboratory control samples and matrix spike samples), and blank contamination (including field and laboratory blanks). Additionally, sample procedures, holding times and chains-of-custody were reviewed. Where there was a discrepancy between the QC criteria in the guidelines and the QC criterion established in the analytic methodology, method-specific criteria or professional judgment was used.

DATA QUALITY OBJECTIVES

Laboratory Precision:	Laboratory goals for precision were met
Field Precision:	Field goals for precision were met.
Accuracy:	Laboratory goals for accuracy were met.
Sensitivity:	Project goals for detection limits were met. Certain samples were diluted due to the concentration of target analytes. Dilutions do not require qualifications based on USEPA guidelines. Detection and reporting limits of non-detect compounds are elevated proportional to the dilution when undiluted sample results are not provided by the laboratory. The data usability of diluted results was evaluated by the data user in the context of site-wide characterization.

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.

J The analyte was positively identified above the method detection limit; however, the concentration reported is an estimated.

U The analyte was not detected above the method detection limit.

The data generated as part of this sampling event met the QC criteria established in the respective analytical methods and data validation guidelines except as specified below. Although these qualifications were applied to some data from samples collected at the site and reported in SDGs 92585717, 92585727, 92585708, and 92585714 qualifications may not have been required or applied to all samples collected. No qualifications were required based on the data validation for Pond E.

Golder reviewed the data from samples collected at the Plant Branch CCR Ash Ponds between February 1, 2022 and February 2, 2022 in accordance with the analytical methods, the laboratory specific QC criteria, and the guidelines. As described above, 100% of the results were acceptable for project use. The data are considered usable for meeting project objectives and the results are considered valid.

REFERENCE

Paar J.G. and Porterfield D.R., April 1997, US Department of Energy, *Evaluation of Radiochemical Data Usability*.

US EPA, November 2020, National Functional Guidelines for Inorganic Superfund Methods Data Review, Office of Superfund Remediation and Technology Innovation. OLEM 9240.0-51 [EPA 540-R-20-005]. Washington. DC, November 2020.

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 - Pond E
SCS Plant Branch

						Analysis							
SDGs	***Field Identification***	***Collection Date***	***Lab Identification***	***Matrix***	***QC Samples***	***Field pH***	***Total Metals (EPA 6020B)***	***Metals (EPA 6010D)***	***Mercury (SW 7470A)***	***Anions (EPA 300.0)***	***TDS (SM2540C-2011)***	***Alkalinity (2320B)***	***Radium-226/228 (EPA 9315/9320)***
92585717	BRGWA-2S	2/1/2022	92585717001	GW	-	X	X	X	X	X	X	X	-
92585717	BRGWA-2I	2/1/2022	92585717002	GW	-	X	X	X	X	X	X	X	-
92585717	BRGWA-5S	2/1/2022	92585717003	GW	-	X	X	X	X	X	X	X	-
92585717	BRGWA-5I	2/1/2022	92585717004	GW	-	X	X	X	X	X	X	X	-
92585717	BRGWA-6S	2/1/2022	92585717005	GW	-	X	X	X	X	X	X	X	-
92585727	BRGWC-17S	2/1/2022	92585727001	GW	-	X	X	X	X	X	X	X	-
92585727	BRGWC-33S	2/1/2022	92585727002	GW	-	X	X	X	X	X	X	X	-
92585727	BRGWC-34S	2/1/2022	92585727003	GW	-	X	X	X	X	X	X	X	-
92585727	BRGWC-35S	2/1/2022	92585727004	GW	-	X	X	X	X	X	X	X	-
92585727	BRGWC-36S	2/1/2022	92585727005	GW	-	X	X	X	X	X	X	X	-
92585727	BRGWC-38S	2/1/2022	92585727006	GW	-	X	X	X	X	X	X	X	-
92585727	EB-1	2/1/2022	92585727007	WQ	EB (BRGWC-17S)	X	X	X	X	X	X	-	-
92585727	FB-1	2/1/2022	92585727008	WQ	FB (BRGWC-33S)	X	X	X	X	X	X	-	-
92585727	DUP-1	2/1/2022	92585727009	GW	FD (BRGWC-34S)	X	X	X	X	X	X	-	-
92585727	BRGWC-37S	2/2/2022	92585727010	GW	-	X	X	X	X	X	X	X	-
92585708	BRGWA-2S	2/1/2022	92585708001	GW	-	-	-	-	-	-	-	-	X
92585708	BRGWA-2I	2/1/2022	92585708002	GW	-	-	-	-	-	-	-	-	X
92585708	BRGWA-5S	2/1/2022	92585708003	GW	-	-	-	-	-	-	-	-	X
92585708	BRGWA-5I	2/1/2022	92585708004	GW	-	-	-	-	-	-	-	-	X
92585708	BRGWA-6S	2/1/2022	92585708005	GW	-	-	-	-	-	-	-	-	X
92585714	BRGWC-17S	2/1/2022	92585714001	GW	-	-	-	-	-	-	-	-	X
92585714	BRGWC-33S	2/1/2022	92585714002	GW	-	-	-	-	-	-	-	-	X
92585714	BRGWC-34S	2/1/2022	92585714003	GW	-	-	-	-	-	-	-	-	X
92585714	BRGWC-35S	2/1/2022	92585714004	GW	-	-	-	-	-	-	-	-	X
92585714	BRGWC-36S	2/1/2022	92585714005	GW	-	-	-	-	-	-	-	-	X
92585714	BRGWC-38S	2/1/2022	92585714006	GW	-	-	-	-	-	-	-	-	X
92585714	EB-1	2/1/2022	92585714007	GW	EB (BRGWC-17S)	-	-	-	-	-	-	-	X
92585714	FB-1	2/1/2022	92585714008	GW	FB (BRGWC-33S)	-	-	-	-	-	-	-	X
92585714	DUP-1	2/1/2022	92585714009	GW	FD (BRGWC-34S)	-	-	-	-	-	-	-	X
92585714	BRGWC-37S	2/1/2022	92585714010	GW	-	-	-	-	-	-	-	-	X

Abbreviations:

SDG - Sample Delivery Group
QC - Quality Control
TDS - Total Dissolved Solids
EPA - Environmental Protection Agency
SW - Solid Waste
SM - Standard Method
GW - Groundwater
WQ - Water Quality
FB - Field blank
EB - Equipment blank
FD - Field duplicate

TABLE 2
Qualifier Summary Table - Pond E
Plant Branch

SDG	*Sample Name*	*Constituent*	*New Result*	*New RL or MDC*	*Qualifier*	*Reason*
						No qualifcations required.

Abbreviations:
SDG : Sample delivery group
MDC : Minimum detectable concentration
RL : Reporting limit

Quality Control Review of Analytical Data submitted by Pace Analytical Services, LLC Plant Branch CCR Ash Pond BCD February 2022

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 February 1, 2022 and February 4, 2022. The chemical data were reviewed to identify quality issues which could affect the use of the data for decision making purposes.

Information regarding the primary sample locations, analytical parameters, QC samples, sampling dates, and laboratory sample delivery group (SDG) designations is summarized in Table 1. In accordance with groundwater monitoring and corrective action procedures discussed in Title 40 CFR, Subpart D - Standards for the Disposal of Coal Combustion Residuals in Landfills and Surface Impoundments, the samples were analyzed for detection monitoring constituents listed in 40 CFR, Part 257, Appendix III and IV. Additional analysis included cations and anions (iron, manganese, potassium, magnesium), alkalinity (total, carbonate and bicarbonate), nitrate-nitrite, sulfide, ferrous and ferric iron and Dissolved Organic Carbon (DOC). Test methods included Inductively Coupled Plasma- Mass Spectrometry (ICP-MS) (USEPA Method 6020B), Mercury in Liquid Wastes (USEPA Method 7470A), Inductively Coupled Plasma (ICP) (6010D), Determination of Inorganic Anions By Ion Chromatography (USEPA Method 300.0), Total Dissolved Solids (TDS) (Standard Methods 2540C), Radium-226 (USEPA Method 9315), Radium-228 (USEPA Method 9320), Alkalinity by Titration through Standard Method 2320B (SM2320B), Determination of Nitrate-Nitrite Nitrogen by Automated Colorimetry (EPA 353.2), Sulfide (Standard Methods 4500), Ferrous and Ferric iron (Standard Methods 3500) and DOC (Standard Methods 5310B).

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 (November 2020), and US Department of Energy, Evaluation of Radiochemical Data Usability (April 1997). The review included an assessment of the results for completeness, precision (laboratory and field duplicates, matrix spike/matrix spike duplicates), accuracy (laboratory control samples and matrix spike samples), and blank contamination (including field and laboratory blanks). Additionally, sample procedures, holding times and chains-of-custody were reviewed. Where there was a discrepancy between the QC criteria in the guidelines and the QC criterion established in the analytic methodology, method-specific criteria or professional judgment was used.

DATA QUALITY OBJECTIVES

Laboratory Precision: Laboratory goals for precision were met.

Field Precision: Field goals for precision were met.

Accuracy: Laboratory goals for accuracy were met.

Sensitivity: 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. Detections were found in certain blank results, as described in the qualification sections below.
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 except for ferrous and ferric iron results in SDGs 92585977 and 92585979 as described in the qualifications sections below.

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.

J	The analyte was positively identified above the method detection limit; however, the associated numerical value is the approximate concentration of the analyte in the sample.
U	The analyte was not detected above the method detection limit.

The data generated as part of this sampling event met the QC criteria established in the respective analytical methods and data validation guidelines except as specified below. Although these qualifications were applied to some data from samples collected at the site and reported in SDGs 92585708, 92585712, 92585717, 92585723, 92585970, 92585972, 92585977, and 92585979 qualifications may not have been required or applied to all samples collected. A summary of sample qualifications can be found in Table 2.

- Certain ferrous and ferric iron results in SDGs 92585977 and 92585979 were qualified as estimated values (J) due to holding time requirement exceedances specific to the analytical method.

Golder reviewed the data from samples collected at the Plant Branch CCR Ash Pond BCD between February 1, 2022 and February 4, 2022 in accordance with the analytical methods, the laboratory specific QC criteria, and the guidelines. As described above, 100% of the results were acceptable for project use. The data are considered usable for meeting project objectives and the results are considered valid.

REFERENCE

Paar J.G. and Porterfield D.R., April 1997, US Department of Energy, Evaluation of Radiochemical Data Usability.

US EPA, November 2020, National Functional Guidelines for Inorganic Superfund Methods Data Review, Office of Superfund Remediation and Technology Innovation. OLEM 9240.0-51 [EPA 540-R-20-005]. Washington. DC, November 2020.

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 - Pond BCD
SCS Plant Branch

						Analysis											
SDGs	*Field Identification*	*Collection Date*	*Lab Identification*	*Matrix*	*QC Samples*	Field pH	Total Metals (EPA 6020B)	Metals (EPA 6010D)	Mercury (SW7470A)	Anions (EPA 300.0)	TDS (SM2540C-2011)	Alkalinity (SM 2320B)	Nitrate-Nitrite (EPA 353.2)	Sulfide (SM 4500)	Ferrous and Ferric iron (SM 3500)	DOC (SM 5310B)	Radium-226/228 (EPA 9315/9320)
92585717	BRGWA-2S	2/1/2022	92585717001	GW	-	X	X	X	X	X	X	X	-	-	-	-	-
92585717	BRGWA-2I	2/1/2022	92585717002	GW	-	X	X	X	X	X	X	X	-	-	-	-	-
92585717	BRGWA-5S	2/1/2022	92585717003	GW	-	X	X	X	X	X	X	X	-	-	-	-	-
92585717	BRGWA-5I	2/1/2022	92585717004	GW	-	X	X	X	X	X	X	X	-	-	-	-	-
92585717	BRGWA-6S	2/1/2022	92585717005	GW	-	X	X	X	X	X	X	X	-	-	-	-	-
92585723	BRGWA-12S	2/1/2022	92585723001	GW	-	X	X	X	X	X	X	X	-	-	-	-	-
92585723	BRGWA-12I	2/1/2022	92585723002	GW	-	X	X	X	X	X	X	X	-	-	-	-	-
92585723	BRGWA-23S	2/1/2022	92585723003	GW	-	X	X	X	X	X	X	X	-	-	-	-	-
92585977	BRGWC-25I	2/2/2022	92585977001	GW	-	X	X	X	X	X	X	X	-	-	-	-	-
92585977	BRGWC-30I	2/2/2022	92585977002	GW	-	X	X	X	X	X	X	X	-	-	-	-	-
92585977	BRGWC-32S	2/2/2022	92585977003	GW	-	X	X	X	X	X	X	X	-	-	-	-	-
92585977	BRGWC-45	2/2/2022	92585977004	GW	-	X	X	X	X	X	X	X	-	-	-	-	-
92585977	BRGWC-47	2/2/2022	92585977005	GW	-	X	X	X	X	X	X	X	-	-	-	-	-
92585977	BRGWC-52I	2/2/2022	92585977006	GW	-	X	X	X	X	X	X	X	-	-	-	-	-
92585977	DUP-2	2/2/2022	92585977007	GW	FD (BRGWC-30I)	X	X	X	X	X	X	-	-	-	-	-	-
92585977	BRGWC-50	2/3/2022	92585977008	GW	-	X	X	X	X	X	X	X	X	X	X	X	-
92585977	BRGWC-27I	2/4/2022	92585977009	GW	-	X	X	X	X	X	X	X	-	-	-	-	-
92585977	BRGWC-29I	2/3/2022	92585977010	GW	-	X	X	X	X	X	X	X	-	-	-	-	-
92585977	DUP-3	2/3/2022	92585977011	GW	FD (BRGWC-29I)	X	X	X	X	X	X	-	-	-	-	-	-
92585979	PZ-51S	2/2/2022	92585979001	GW	-	X	X	X	X	X	X	X	-	-	-	-	-
92585979	PZ-44	2/2/2022	92585979002	GW	-	X	X	X	X	X	X	X	-	-	-	-	-
92585979	PZ-51I	2/2/2022	92585979003	GW	-	X	X	X	X	X	X	X	-	-	-	-	-
92585979	PZ-61I	2/2/2022	92585979004	GW	-	X	X	X	X	X	X	X	-	-	-	-	-
92585979	FB-2	2/2/2022	92585979005	WQ	FB (PZ-51S)	X	X	X	X	X	X	-	-	-	-	-	-
92585979	EB-2	2/2/2022	92585979006	WQ	EB (PZ-61I)	X	X	X	X	X	X	-	-	-	-	-	-
92585979	PZ-58I	2/3/2022	92585979007	GW	-	X	X	X	X	X	X	X	X	X	X	X	-
92585979	PZ-59I	2/3/2022	92585979008	GW	-	X	X	X	X	X	X	X	X	X	X	X	-
92585979	PZ-60I	2/3/2022	92585979009	GW	-	X	X	X	X	X	X	X	X	X	X	X	-
92585979	PZ-50D	2/3/2022	92585979010	GW	-	X	X	X	X	X	X	X	-	-	-	-	-
92585979	PZ-51D	2/3/2022	92585979011	GW	-	X	X	X	X	X	X	X	-	-	-	-	-
92585979	PZ-57I	2/4/2022	92585979012	GW	-	X	X	X	X	X	X	X	-	-	-	-	-
92585979	PZ-63I	2/4/2022	92585979013	GW	-	X	X	X	X	X	X	X	-	-	-	-	-
92585979	PZ-62I	2/4/2022	92585979014	GW	-	X	X	X	X	X	X	X	-	-	-	-	-
92585979	FB-3	2/3/2022	92585979015	WQ	FB (PZ-50D)	X	X	X	X	X	X	-	-	-	-	-	-
92585708	BRGWA-2S	2/1/2022	92585708001	GW	-	-	-	-	-	-	-	-	-	-	-	-	X
92585708	BRGWA-2I	2/1/2022	92585708002	GW	-	-	-	-	-	-	-	-	-	-	-	-	X
92585708	BRGWA-5S	2/1/2022	92585708003	GW	-	-	-	-	-	-	-	-	-	-	-	-	X
92585708	BRGWA-5I	2/1/2022	92585708004	GW	-	-	-	-	-	-	-	-	-	-	-	-	X
92585708	BRGWA-6S	2/1/2022	92585708005	GW	-	-	-	-	-	-	-	-	-	-	-	-	X
92585712	BRGWA-12S	2/1/2022	92585712001	GW	-	-	-	-	-	-	-	-	-	-	-	-	X
92585712	BRGWA-12I	2/1/2022	92585712002	GW	-	-	-	-	-	-	-	-	-	-	-	-	X
92585712	BRGWA-23S	2/1/2022	92585712003	GW	-	-	-	-	-	-	-	-	-	-	-	-	X
92585970	BRGWC-25I	2/2/2022	92585970001	GW	-	-	-	-	-	-	-	-	-	-	-	-	X
92585970	BRGWC-30I	2/2/2022	92585970002	GW	-	-	-	-	-	-	-	-	-	-	-	-	X
92585970	BRGWC-32S	2/2/2022	92585970003	GW	-	-	-	-	-	-	-	-	-	-	-	-	X
92585970	BRGWC-45	2/2/2022	92585970004	GW	-	-	-	-	-	-	-	-	-	-	-	-	X
92585970	BRGWC-47	2/2/2022	92585970005	GW	-	-	-	-	-	-	-	-	-	-	-	-	X
92585970	BRGWC-52I	2/2/2022	92585970006	GW	-	-	-	-	-	-	-	-	-	-	-	-	X
92585970	DUP-2	2/2/2022	92585970007	GW	FD (BRGWC-30I)	-	-	-	-	-	-	-	-	-	-	-	X
92585970	BRGWC-50	2/3/2022	92585970008	GW	-	-	-	-	-	-	-	-	-	-	-	-	X
92585970	BRGWC-27I	2/4/2022	92585970009	GW	-	-	-	-	-	-	-	-	-	-	-	-	X
92585970	BRGWC-29I	2/3/2022	92585970010	GW	-	-	-	-	-	-	-	-	-	-	-	-	X
92585970	DUP-3	2/3/2022	92585970011	GW	FD (BRGWC-29I)	-	-	-	-	-	-	-	-	-	-	-	X
92585972	PZ-51S	2/2/2022	92585972001	GW	-	-	-	-	-	-	-	-	-	-	-	-	X
92585972	PZ-44	2/2/2022	92585972002	GW	-	-	-	-	-	-	-	-	-	-	-	-	X
92585972	PZ-51I	2/2/2022	92585972003	GW	-	-	-	-	-	-	-	-	-	-	-	-	X
92585972	PZ-61I	2/2/2022	92585972004	GW	-	-	-	-	-	-	-	-	-	-	-	-	X
92585972	FB-2	2/2/2022	92585972005	WQ	FB (PZ-51S)	-	-	-	-	-	-	-	-	-	-	-	X
92585972	EB-2	2/2/2022	92585972006	WQ	EB (PZ-61I)	-	-	-	-	-	-	-	-	-	-	-	X
92585972	PZ-58I	2/3/2022	92585972007	GW	-	-	-	-	-	-	-	-	-	-	-	-	X
92585972	PZ-59I	2/3/2022	92585972008	GW	-	-	-	-	-	-	-	-	-	-	-	-	X
92585972	PZ-60I	2/3/2022	92585972009	GW	-	-	-	-	-	-	-	-	-	-	-	-	X
92585972	PZ-50D	2/3/2022	92585972010	GW	-	-	-	-	-	-	-	-	-	-	-	-	X
92585972	PZ-51D	2/3/2022	92585972011	GW	-	-	-	-	-	-	-	-	-	-	-	-	X
92585972	PZ-57I	2/4/2022	92585972012	GW	-	-	-	-	-	-	-	-	-	-	-	-	X
92585972	PZ-63I	2/4/2022	92585972013	GW	-	-	-	-	-	-	-	-	-	-	-	-	X
92585972	PZ-62I	2/4/2022	92585972014	GW	-	-	-	-	-	-	-	-	-	-	-	-	X
92585972	FB-3	2/3/2022	92585972015	WQ	FB (PZ-50D)	-	-	-	-	-	-	-	-	-	-	-	X

Abbreviations:

SDG - Sample Delivery Group
QC - Quality Control
GW - Groundwater
WQ - Water Quality
SW - Solid Waste
SM - Standard Method
EPA - Environmental Protection Agency
TDS - Total Dissolved Solids
FB - Field blank
EB - Equipment Blank
FD - Field duplicate
DOC- Dissolved Organic Carbon

TABLE 2
Qualifier Summary Table
Plant Branch AP-BCD

SDG	*Sample Name*	*Constituent*	*New Result*	*New RL or MDC*	*Qualifier*	*Reason*
92585977	BRGWC-50	Iron (Ferrous)	-	-	J	Analysis run out of holding time
92585977	BRGWC-50	Iron (Ferric)	-	-	J	Analysis run out of holding time
92585979	PZ-58I	Iron (Ferrous)	-	-	J	Analysis run out of holding time
92585979	PZ-59I	Iron (Ferrous)	-	-	J	Analysis run out of holding time
92585979	PZ-60I	Iron (Ferrous)	-	-	J	Analysis run out of holding time
92585979	PZ-58I	Iron (Ferric)	-	-	J	Analysis run out of holding time
92585979	PZ-59I	Iron (Ferric)	-	-	J	Analysis run out of holding time
92585979	PZ-60I	Iron (Ferric)	-	-	J	Analysis run out of holding time

Abbreviations:
SDG : Sample delivery group
RL : Reporting limit
MDC : Minimum Detectable Concentration

Qualifiers:
J: Estimated value

APPENDIX B

Statistical Analyses – September 2021 and February 2022

GROUNDWATER STATS CONSULTING

February 28, 2022

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 – September 2021 Statistical Analysis

Dear Mr. Abraham,

Groundwater Stats Consulting, formerly the statistical consulting division of Sanitas Technologies, is pleased to provide the September 2021 Semi-Annual Groundwater Detection and Assessment Monitoring Statistical Analysis 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
- **Delineation wells:** PZ-51D, PZ-51S, PZ-57I, PZ-58I, and PZ-60I
- **Assessment wells:** PZ-50D, PZ-51I, and PZ-61I

Data from delineation and assessment wells are evaluated using confidence intervals when a minimum of 4 samples are available.

The Coal Combustion Residuals (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

Note that when there are no detections present in downgradient wells for a given constituent, statistical analyses are not required. A summary of Appendix IV well/constituent pairs with 100% non-detects follows this letter. A substitution of the most recent reporting limit is used for non-detect data.

Time series plots for Appendix III and IV parameters at all wells are provided for the purpose of screening data at these wells (Figure A). Delineation and Assessment well data are included on the time series graphs, and with the confidence intervals when a minimum of 4 samples are available as discussed above. 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 most reporting limit is utilized in the statistical analysis. The reporting limit utilized for nondetects is the most recent practical quantification limit (PQL) as reported by the laboratory.
- When data contain between 15-50% nondetects, the Kaplan-Meier nondetect adjustment is applied to the background data. This technique adjusts the mean and standard deviation of the historical concentrations to account for concentrations below the reporting limit.
- Nonparametric prediction limits are used on data containing greater than 50% nondetects.

Natural systems continuously evolve due to physical changes made to the environment. Examples include capping a landfill, paving areas near a well, or lining a drainage channel to prevent erosion. Periodic updating of background statistical limits is necessary to accommodate these types of changes. In the interwell case, prediction limits are updated with upgradient well data during each event after careful screening for any new outliers. In some cases, the earlier portion of data are deselected prior to construction of limits to provide sensitive limits that will rapidly detect changes in groundwater quality. Even

though the data are excluded from the calculation, the values will continue to be reported and shown in tables and graphs.

Summary of Background Screening – Conducted in March 2019

Outlier Analysis

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. Note that the reporting limit for boron during the March 2019 event was 0.1 mg/L; however, the historical reporting limit of 0.04 mg/L was substituted for all non-detects which provides more conservative (lower) statistical limits.

Seasonality

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.

Trend Tests

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 – September 2021

Interwell Prediction Limits

Interwell prediction limits, combined with a 1-of-2 resample plan, were constructed using all historical upgradient well data through September 2021 (Figure D). Background (upgradient) well data were re-assessed for potential outliers during this analysis and no new values were flagged. Interwell prediction limits pool upgradient well data to establish a background limit for an individual constituent. The September 2021 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 several Appendix III parameters. Exceedances were identified for the following well/constituent pairs:

- Boron: BRGWC-25I, BRGWC-27I, BRGWC-29I, BRGWC-30I, BRGWC-32S, BRGWC-47, BRGWC-50, and BRGWC-52I
- Calcium: BRGWC-25I, BRGWC-27I, BRGWC-29I, BRGWC-30I, BRGWC-32S, BRGWC-45, BRGWC-47, BRGWC-50, and BRGWC-52I
- Chloride: BRGWC-45 and BRGWC-50
- Fluoride: BRGWC-50
- pH (lower limit): BRGWC-29I and BRGWC-50
- Sulfate: BRGWC-25I, BRGWC-27I, BRGWC-29I, BRGWC-30I, BRGWC-32S, BRGWC-45, BRGWC-47, BRGWC-50, and BRGWC-52I
- TDS: BRGWC-29I, BRGWC-30I, BRGWC-32S, BRGWC-47, BRGWC-50, and BRGWC-52I

Trend Test Evaluation – Appendix III

When prediction limit exceedances are identified in downgradient wells, data are further evaluated using the Sen's Slope/Mann Kendall trend test to determine whether concentrations are statistically increasing, decreasing, or stable (Figure E). Upgradient wells are included in the trend analyses to identify whether similar patterns exist upgradient of the site which is an indication of natural variability in groundwater unrelated to practices at the site. While several statistically significant decreasing trends were noted in both upgradient and downgradient wells, a statistically significant increasing trend was identified for calcium in well BRGWC-30I. A summary of the trend test results follows this letter.

Evaluation of Appendix IV Parameters – September 2021

For Appendix IV parameters, confidence intervals for each downgradient well/constituent were compared against corresponding Groundwater Protection Standards (GWPS). GWPS were developed as described below. Well/constituent pairs that have 100% non-detects do not require analysis. Data from upgradient wells for Appendix IV parameters are reassessed for outliers during each analysis. No new values were flagged and a summary of previously flagged outliers follows this report (Figure C).

Interwell Upper Tolerance Limits

First, interwell tolerance limits were used to calculate site-specific background limits from all available pooled upgradient well data through September 2021 for Appendix IV constituents (Figure F). Parametric tolerance limits are used when data follow a normal or transformed-normal distribution. When data contained greater than 50% non-detects or did not follow a normal or transformed-normal distribution, non-parametric tolerance limits were used.

Groundwater Protection Standards

The background limits were then used when determining the groundwater protection standard (GWPS) under Georgia EPD Rule 391-3-4-.10(6)(a). Georgia EPD has not incorporated the updated GWPS into the current Georgia EPD Rules for Solid Waste Management 391-3-4-.10(6)(a); therefore, for sites regulated under Georgia EPD Rules, the GWPS is:

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

Following the above Georgia EPD Rule requirements, GWPS were established for statistical comparison of Appendix IV constituents for the September 2021 sample event according to the state rules (Figure G).

Confidence Intervals

To complete the statistical comparison to GWPS, confidence intervals were constructed for each of the Appendix IV constituents in each downgradient well with detections (Figure H). The Sanitas software was used to calculate the tolerance limits and the confidence intervals. Those confidence intervals were compared to the GWPS established using the Georgia EPD Rules 391-3-4-.10(6)(a). Only when the entire confidence interval is above a GWPS is the downgradient well/constituent pair considered to exceed its respective standard. If there is an exceedance of the GWPS, a statistically significant level (SSL) exceedance is identified.

Statistical exceedances were identified for the following State and Federal well/constituent pairs:

- Cadmium: BRGWC-50
- Cobalt: BRGWC-50 and PZ-51I

Trend Test Evaluation – Appendix IV

Data at wells with confidence interval exceedances are further evaluated using the Sen's Slope/Mann Kendall trend test to determine whether concentrations are statistically increasing, decreasing, or stable (Figure I). Upgradient wells are included in the trend analyses to identify whether similar patterns exist upgradient of the site for the same constituents. When trends are present in upgradient trends, it is an indication of natural variability in groundwater quality unrelated to practices at the site. A summary of the Appendix IV trend test results follows this letter. No statistically significant increasing or decreasing trends were identified.

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,

Kristina L. Rayner
Groundwater Statistician

Andrew Collins
Project Manager

100% Non-Detects

Analysis Run 12/2/2021 10:25 AM View: Confidence Intervals Pond B,C,D
Plant Branch Client: Southern Company Data: Plant Branch AP

Antimony (mg/L)
BRGWC-25I, BRGWC-27I, BRGWC-30I, PZ-57I, PZ-58I, PZ-60I, PZ-61I

Arsenic (mg/L)
PZ-51I, PZ-51S, PZ-57I, PZ-58I, PZ-60I

Beryllium (mg/L)
BRGWC-25I, BRGWC-30I, BRGWC-32S, BRGWC-52I, PZ-51D, PZ-51S

Cadmium (mg/L)
BRGWC-25I, BRGWC-29I, BRGWC-52I, PZ-50D, PZ-51D, PZ-51S

Chromium (mg/L)
PZ-50D, PZ-51D, PZ-57I, PZ-58I, PZ-60I

Lead (mg/L)
BRGWC-32S, PZ-51S, PZ-57I, PZ-58I, PZ-60I

Lithium (mg/L)
BRGWC-25I

Mercury (mg/L)
BRGWC-45, BRGWC-47, BRGWC-50, BRGWC-52I, PZ-50D, PZ-51D, PZ-51S, PZ-57I, PZ-58I, PZ-60I, PZ-61I

Molybdenum (mg/L)
BRGWC-27I, BRGWC-29I, BRGWC-32S, BRGWC-47, PZ-51I, PZ-51S, PZ-57I, PZ-58I, PZ-60I, PZ-61I

Selenium (mg/L)
BRGWC-52I, PZ-50D, PZ-51D, PZ-51I, PZ-51S, PZ-57I

Thallium (mg/L)
BRGWC-25I, BRGWC-27I, BRGWC-30I, BRGWC-32S, BRGWC-45, BRGWC-47, BRGWC-50, BRGWC-52I, PZ-50D, PZ-51D, PZ-51I, PZ-51S, PZ-57I, PZ-58I, PZ-60I, PZ-61I

Interwell Prediction Limits - Significant Results

Plant Branch Client: Southern Company Data: Plant Branch AP Printed 11/5/2021, 6:40 AM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Boron (mg/L)	BRGWC-25I	0.068	n/a	9/28/2021	1.1	Yes	112	n/a	n/a	52.68	n/a	n/a	0.0001579	NP Inter (NDs) 1 of 2
Boron (mg/L)	BRGWC-27I	0.068	n/a	9/28/2021	0.95	Yes	112	n/a	n/a	52.68	n/a	n/a	0.0001579	NP Inter (NDs) 1 of 2
Boron (mg/L)	BRGWC-29I	0.068	n/a	9/28/2021	0.9	Yes	112	n/a	n/a	52.68	n/a	n/a	0.0001579	NP Inter (NDs) 1 of 2
Boron (mg/L)	BRGWC-30I	0.068	n/a	9/28/2021	1.7	Yes	112	n/a	n/a	52.68	n/a	n/a	0.0001579	NP Inter (NDs) 1 of 2
Boron (mg/L)	BRGWC-32S	0.068	n/a	9/28/2021	0.91	Yes	112	n/a	n/a	52.68	n/a	n/a	0.0001579	NP Inter (NDs) 1 of 2
Boron (mg/L)	BRGWC-47	0.068	n/a	9/23/2021	0.47	Yes	112	n/a	n/a	52.68	n/a	n/a	0.0001579	NP Inter (NDs) 1 of 2
Boron (mg/L)	BRGWC-50	0.068	n/a	9/27/2021	0.32	Yes	112	n/a	n/a	52.68	n/a	n/a	0.0001579	NP Inter (NDs) 1 of 2
Boron (mg/L)	BRGWC-52I	0.068	n/a	9/28/2021	1.4	Yes	112	n/a	n/a	52.68	n/a	n/a	0.0001579	NP Inter (NDs) 1 of 2
Calcium (mg/L)	BRGWC-25I	24	n/a	9/28/2021	38.4	Yes	114	n/a	n/a	5.263	n/a	n/a	0.0001521	NP Inter (normality) 1 of 2
Calcium (mg/L)	BRGWC-27I	24	n/a	9/28/2021	50.4	Yes	114	n/a	n/a	5.263	n/a	n/a	0.0001521	NP Inter (normality) 1 of 2
Calcium (mg/L)	BRGWC-29I	24	n/a	9/28/2021	59.5	Yes	114	n/a	n/a	5.263	n/a	n/a	0.0001521	NP Inter (normality) 1 of 2
Calcium (mg/L)	BRGWC-30I	24	n/a	9/28/2021	212	Yes	114	n/a	n/a	5.263	n/a	n/a	0.0001521	NP Inter (normality) 1 of 2
Calcium (mg/L)	BRGWC-32S	24	n/a	9/28/2021	33.9	Yes	114	n/a	n/a	5.263	n/a	n/a	0.0001521	NP Inter (normality) 1 of 2
Calcium (mg/L)	BRGWC-45	24	n/a	9/23/2021	32	Yes	114	n/a	n/a	5.263	n/a	n/a	0.0001521	NP Inter (normality) 1 of 2
Calcium (mg/L)	BRGWC-47	24	n/a	9/23/2021	336	Yes	114	n/a	n/a	5.263	n/a	n/a	0.0001521	NP Inter (normality) 1 of 2
Calcium (mg/L)	BRGWC-50	24	n/a	9/27/2021	196	Yes	114	n/a	n/a	5.263	n/a	n/a	0.0001521	NP Inter (normality) 1 of 2
Calcium (mg/L)	BRGWC-52I	24	n/a	9/28/2021	39.5	Yes	114	n/a	n/a	5.263	n/a	n/a	0.0001521	NP Inter (normality) 1 of 2
Chloride (mg/L)	BRGWC-45	5.8	n/a	9/23/2021	29.3	Yes	114	n/a	n/a	0	n/a	n/a	0.0001521	NP Inter (normality) 1 of 2
Chloride (mg/L)	BRGWC-50	5.8	n/a	9/27/2021	16.2	Yes	114	n/a	n/a	0	n/a	n/a	0.0001521	NP Inter (normality) 1 of 2
Fluoride (mg/L)	BRGWC-50	0.42	n/a	9/27/2021	0.43	Yes	128	n/a	n/a	50.78	n/a	n/a	0.0001206	NP Inter (NDs) 1 of 2
pH, Field (S.U.)	BRGWC-29I	7.057	5.592	9/28/2021	4.23	Yes	130	6.325	0.3803	0	None	No	0.0004179	Param Inter 1 of 2
pH, Field (S.U.)	BRGWC-50	7.057	5.592	9/27/2021	5.05	Yes	130	6.325	0.3803	0	None	No	0.0004179	Param Inter 1 of 2
Sulfate (mg/L)	BRGWC-25I	89	n/a	9/28/2021	112	Yes	114	n/a	n/a	13.16	n/a	n/a	0.0001521	NP Inter (normality) 1 of 2
Sulfate (mg/L)	BRGWC-27I	89	n/a	9/28/2021	137	Yes	114	n/a	n/a	13.16	n/a	n/a	0.0001521	NP Inter (normality) 1 of 2
Sulfate (mg/L)	BRGWC-29I	89	n/a	9/28/2021	250	Yes	114	n/a	n/a	13.16	n/a	n/a	0.0001521	NP Inter (normality) 1 of 2
Sulfate (mg/L)	BRGWC-30I	89	n/a	9/28/2021	612	Yes	114	n/a	n/a	13.16	n/a	n/a	0.0001521	NP Inter (normality) 1 of 2
Sulfate (mg/L)	BRGWC-32S	89	n/a	9/28/2021	189	Yes	114	n/a	n/a	13.16	n/a	n/a	0.0001521	NP Inter (normality) 1 of 2
Sulfate (mg/L)	BRGWC-45	89	n/a	9/23/2021	97.5	Yes	114	n/a	n/a	13.16	n/a	n/a	0.0001521	NP Inter (normality) 1 of 2
Sulfate (mg/L)	BRGWC-47	89	n/a	9/23/2021	1240	Yes	114	n/a	n/a	13.16	n/a	n/a	0.0001521	NP Inter (normality) 1 of 2
Sulfate (mg/L)	BRGWC-50	89	n/a	9/27/2021	1180	Yes	114	n/a	n/a	13.16	n/a	n/a	0.0001521	NP Inter (normality) 1 of 2
Sulfate (mg/L)	BRGWC-52I	89	n/a	9/28/2021	132	Yes	114	n/a	n/a	13.16	n/a	n/a	0.0001521	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	BRGWC-29I	299	n/a	9/28/2021	457	Yes	114	n/a	n/a	1.754	n/a	n/a	0.0001521	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	BRGWC-30I	299	n/a	9/28/2021	1050	Yes	114	n/a	n/a	1.754	n/a	n/a	0.0001521	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	BRGWC-32S	299	n/a	9/28/2021	375	Yes	114	n/a	n/a	1.754	n/a	n/a	0.0001521	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	BRGWC-47	299	n/a	9/23/2021	1770	Yes	114	n/a	n/a	1.754	n/a	n/a	0.0001521	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	BRGWC-50	299	n/a	9/27/2021	1800	Yes	114	n/a	n/a	1.754	n/a	n/a	0.0001521	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	BRGWC-52I	299	n/a	9/28/2021	336	Yes	114	n/a	n/a	1.754	n/a	n/a	0.0001521	NP Inter (normality) 1 of 2

Interwell Prediction Limits - All Results

Plant Branch Client: Southern Company Data: Plant Branch AP Printed 11/5/2021, 6:40 AM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Boron (mg/L)	**BRGWC-25I**	**0.068**	**n/a**	**9/28/2021**	**1.1**	**Yes**	**112**	**n/a**	**n/a**	**52.68**	**n/a**	**n/a**	**0.0001579**	**NP Inter (NDs) 1 of 2**
Boron (mg/L)	**BRGWC-27I**	**0.068**	**n/a**	**9/28/2021**	**0.95**	**Yes**	**112**	**n/a**	**n/a**	**52.68**	**n/a**	**n/a**	**0.0001579**	**NP Inter (NDs) 1 of 2**
Boron (mg/L)	**BRGWC-29I**	**0.068**	**n/a**	**9/28/2021**	**0.9**	**Yes**	**112**	**n/a**	**n/a**	**52.68**	**n/a**	**n/a**	**0.0001579**	**NP Inter (NDs) 1 of 2**
Boron (mg/L)	**BRGWC-30I**	**0.068**	**n/a**	**9/28/2021**	**1.7**	**Yes**	**112**	**n/a**	**n/a**	**52.68**	**n/a**	**n/a**	**0.0001579**	**NP Inter (NDs) 1 of 2**
Boron (mg/L)	**BRGWC-32S**	**0.068**	**n/a**	**9/28/2021**	**0.91**	**Yes**	**112**	**n/a**	**n/a**	**52.68**	**n/a**	**n/a**	**0.0001579**	**NP Inter (NDs) 1 of 2**
Boron (mg/L)	BRGWC-45	0.068	n/a	9/23/2021	0.029J	No	112	n/a	n/a	52.68	n/a	n/a	0.0001579	NP Inter (NDs) 1 of 2
Boron (mg/L)	**BRGWC-47**	**0.068**	**n/a**	**9/23/2021**	**0.47**	**Yes**	**112**	**n/a**	**n/a**	**52.68**	**n/a**	**n/a**	**0.0001579**	**NP Inter (NDs) 1 of 2**
Boron (mg/L)	**BRGWC-50**	**0.068**	**n/a**	**9/27/2021**	**0.32**	**Yes**	**112**	**n/a**	**n/a**	**52.68**	**n/a**	**n/a**	**0.0001579**	**NP Inter (NDs) 1 of 2**
Boron (mg/L)	**BRGWC-52I**	**0.068**	**n/a**	**9/28/2021**	**1.4**	**Yes**	**112**	**n/a**	**n/a**	**52.68**	**n/a**	**n/a**	**0.0001579**	**NP Inter (NDs) 1 of 2**
Calcium (mg/L)	**BRGWC-25I**	**24**	**n/a**	**9/28/2021**	**38.4**	**Yes**	**114**	**n/a**	**n/a**	**5.263**	**n/a**	**n/a**	**0.0001521**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	**BRGWC-27I**	**24**	**n/a**	**9/28/2021**	**50.4**	**Yes**	**114**	**n/a**	**n/a**	**5.263**	**n/a**	**n/a**	**0.0001521**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	**BRGWC-29I**	**24**	**n/a**	**9/28/2021**	**59.5**	**Yes**	**114**	**n/a**	**n/a**	**5.263**	**n/a**	**n/a**	**0.0001521**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	**BRGWC-30I**	**24**	**n/a**	**9/28/2021**	**212**	**Yes**	**114**	**n/a**	**n/a**	**5.263**	**n/a**	**n/a**	**0.0001521**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	**BRGWC-32S**	**24**	**n/a**	**9/28/2021**	**33.9**	**Yes**	**114**	**n/a**	**n/a**	**5.263**	**n/a**	**n/a**	**0.0001521**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	**BRGWC-45**	**24**	**n/a**	**9/23/2021**	**32**	**Yes**	**114**	**n/a**	**n/a**	**5.263**	**n/a**	**n/a**	**0.0001521**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	**BRGWC-47**	**24**	**n/a**	**9/23/2021**	**336**	**Yes**	**114**	**n/a**	**n/a**	**5.263**	**n/a**	**n/a**	**0.0001521**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	**BRGWC-50**	**24**	**n/a**	**9/27/2021**	**196**	**Yes**	**114**	**n/a**	**n/a**	**5.263**	**n/a**	**n/a**	**0.0001521**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	**BRGWC-52I**	**24**	**n/a**	**9/28/2021**	**39.5**	**Yes**	**114**	**n/a**	**n/a**	**5.263**	**n/a**	**n/a**	**0.0001521**	**NP Inter (normality) 1 of 2**
Chloride (mg/L)	BRGWC-25I	5.8	n/a	9/28/2021	4.2	No	114	n/a	n/a	0	n/a	n/a	0.0001521	NP Inter (normality) 1 of 2
Chloride (mg/L)	BRGWC-27I	5.8	n/a	9/28/2021	3.7	No	114	n/a	n/a	0	n/a	n/a	0.0001521	NP Inter (normality) 1 of 2
Chloride (mg/L)	BRGWC-29I	5.8	n/a	9/28/2021	5.4	No	114	n/a	n/a	0	n/a	n/a	0.0001521	NP Inter (normality) 1 of 2
Chloride (mg/L)	BRGWC-30I	5.8	n/a	9/28/2021	3.4	No	114	n/a	n/a	0	n/a	n/a	0.0001521	NP Inter (normality) 1 of 2
Chloride (mg/L)	BRGWC-32S	5.8	n/a	9/28/2021	3.6	No	114	n/a	n/a	0	n/a	n/a	0.0001521	NP Inter (normality) 1 of 2
Chloride (mg/L)	**BRGWC-45**	**5.8**	**n/a**	**9/23/2021**	**29.3**	**Yes**	**114**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0001521**	**NP Inter (normality) 1 of 2**
Chloride (mg/L)	BRGWC-47	5.8	n/a	9/23/2021	4.3	No	114	n/a	n/a	0	n/a	n/a	0.0001521	NP Inter (normality) 1 of 2
Chloride (mg/L)	**BRGWC-50**	**5.8**	**n/a**	**9/27/2021**	**16.2**	**Yes**	**114**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0001521**	**NP Inter (normality) 1 of 2**
Chloride (mg/L)	BRGWC-52I	5.8	n/a	9/28/2021	5.5	No	114	n/a	n/a	0	n/a	n/a	0.0001521	NP Inter (normality) 1 of 2
Fluoride (mg/L)	BRGWC-25I	0.42	n/a	9/28/2021	0.15	No	128	n/a	n/a	50.78	n/a	n/a	0.0001206	NP Inter (NDs) 1 of 2
Fluoride (mg/L)	BRGWC-27I	0.42	n/a	9/28/2021	0.16	No	128	n/a	n/a	50.78	n/a	n/a	0.0001206	NP Inter (NDs) 1 of 2
Fluoride (mg/L)	BRGWC-29I	0.42	n/a	9/28/2021	0.081J	No	128	n/a	n/a	50.78	n/a	n/a	0.0001206	NP Inter (NDs) 1 of 2
Fluoride (mg/L)	BRGWC-30I	0.42	n/a	9/28/2021	0.11	No	128	n/a	n/a	50.78	n/a	n/a	0.0001206	NP Inter (NDs) 1 of 2
Fluoride (mg/L)	BRGWC-32S	0.42	n/a	9/28/2021	0.1ND	No	128	n/a	n/a	50.78	n/a	n/a	0.0001206	NP Inter (NDs) 1 of 2
Fluoride (mg/L)	BRGWC-45	0.42	n/a	9/23/2021	0.06J	No	128	n/a	n/a	50.78	n/a	n/a	0.0001206	NP Inter (NDs) 1 of 2
Fluoride (mg/L)	BRGWC-47	0.42	n/a	9/23/2021	0.1ND	No	128	n/a	n/a	50.78	n/a	n/a	0.0001206	NP Inter (NDs) 1 of 2
Fluoride (mg/L)	**BRGWC-50**	**0.42**	**n/a**	**9/27/2021**	**0.43**	**Yes**	**128**	**n/a**	**n/a**	**50.78**	**n/a**	**n/a**	**0.0001206**	**NP Inter (NDs) 1 of 2**
Fluoride (mg/L)	BRGWC-52I	0.42	n/a	9/28/2021	0.12	No	128	n/a	n/a	50.78	n/a	n/a	0.0001206	NP Inter (NDs) 1 of 2
pH, Field (S.U.)	BRGWC-25I	7.057	5.592	9/28/2021	5.97	No	130	6.325	0.3803	0	None	No	0.0004179	Param Inter 1 of 2
pH, Field (S.U.)	BRGWC-27I	7.057	5.592	9/28/2021	5.82	No	130	6.325	0.3803	0	None	No	0.0004179	Param Inter 1 of 2
pH, Field (S.U.)	**BRGWC-29I**	**7.057**	**5.592**	**9/28/2021**	**4.23**	**Yes**	**130**	**6.325**	**0.3803**	**0**	**None**	**No**	**0.0004179**	**Param Inter 1 of 2**
pH, Field (S.U.)	BRGWC-30I	7.057	5.592	9/28/2021	6.33	No	130	6.325	0.3803	0	None	No	0.0004179	Param Inter 1 of 2
pH, Field (S.U.)	BRGWC-32S	7.057	5.592	9/28/2021	5.82	No	130	6.325	0.3803	0	None	No	0.0004179	Param Inter 1 of 2
pH, Field (S.U.)	BRGWC-45	7.057	5.592	9/23/2021	5.95	No	130	6.325	0.3803	0	None	No	0.0004179	Param Inter 1 of 2
pH, Field (S.U.)	BRGWC-47	7.057	5.592	9/23/2021	5.74	No	130	6.325	0.3803	0	None	No	0.0004179	Param Inter 1 of 2
pH, Field (S.U.)	**BRGWC-50**	**7.057**	**5.592**	**9/27/2021**	**5.05**	**Yes**	**130**	**6.325**	**0.3803**	**0**	**None**	**No**	**0.0004179**	**Param Inter 1 of 2**
pH, Field (S.U.)	BRGWC-52I	7.057	5.592	9/28/2021	6.81	No	130	6.325	0.3803	0	None	No	0.0004179	Param Inter 1 of 2
Sulfate (mg/L)	**BRGWC-25I**	**89**	**n/a**	**9/28/2021**	**112**	**Yes**	**114**	**n/a**	**n/a**	**13.16**	**n/a**	**n/a**	**0.0001521**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	**BRGWC-27I**	**89**	**n/a**	**9/28/2021**	**137**	**Yes**	**114**	**n/a**	**n/a**	**13.16**	**n/a**	**n/a**	**0.0001521**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	**BRGWC-29I**	**89**	**n/a**	**9/28/2021**	**250**	**Yes**	**114**	**n/a**	**n/a**	**13.16**	**n/a**	**n/a**	**0.0001521**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	**BRGWC-30I**	**89**	**n/a**	**9/28/2021**	**612**	**Yes**	**114**	**n/a**	**n/a**	**13.16**	**n/a**	**n/a**	**0.0001521**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	**BRGWC-32S**	**89**	**n/a**	**9/28/2021**	**189**	**Yes**	**114**	**n/a**	**n/a**	**13.16**	**n/a**	**n/a**	**0.0001521**	**NP Inter (normality) 1 of 2**

Interwell Prediction Limits - All Results

Plant Branch Client: Southern Company Data: Plant Branch AP Printed 11/5/2021, 6:40 AM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Sulfate (mg/L)	**BRGWC-45**	**89**	**n/a**	**9/23/2021**	**97.5**	**Yes**	**114**	**n/a**	**n/a**	**13.16**	**n/a**	**n/a**	**0.0001521**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	**BRGWC-47**	**89**	**n/a**	**9/23/2021**	**1240**	**Yes**	**114**	**n/a**	**n/a**	**13.16**	**n/a**	**n/a**	**0.0001521**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	**BRGWC-50**	**89**	**n/a**	**9/27/2021**	**1180**	**Yes**	**114**	**n/a**	**n/a**	**13.16**	**n/a**	**n/a**	**0.0001521**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	**BRGWC-52I**	**89**	**n/a**	**9/28/2021**	**132**	**Yes**	**114**	**n/a**	**n/a**	**13.16**	**n/a**	**n/a**	**0.0001521**	**NP Inter (normality) 1 of 2**
Total Dissolved Solids (mg/L)	BRGWC-25I	299	n/a	9/28/2021	270	No	114	n/a	n/a	1.754	n/a	n/a	0.0001521	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	BRGWC-27I	299	n/a	9/28/2021	262	No	114	n/a	n/a	1.754	n/a	n/a	0.0001521	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	**BRGWC-29I**	**299**	**n/a**	**9/28/2021**	**457**	**Yes**	**114**	**n/a**	**n/a**	**1.754**	**n/a**	**n/a**	**0.0001521**	**NP Inter (normality) 1 of 2**
Total Dissolved Solids (mg/L)	**BRGWC-30I**	**299**	**n/a**	**9/28/2021**	**1050**	**Yes**	**114**	**n/a**	**n/a**	**1.754**	**n/a**	**n/a**	**0.0001521**	**NP Inter (normality) 1 of 2**
Total Dissolved Solids (mg/L)	**BRGWC-32S**	**299**	**n/a**	**9/28/2021**	**375**	**Yes**	**114**	**n/a**	**n/a**	**1.754**	**n/a**	**n/a**	**0.0001521**	**NP Inter (normality) 1 of 2**
Total Dissolved Solids (mg/L)	BRGWC-45	299	n/a	9/23/2021	277	No	114	n/a	n/a	1.754	n/a	n/a	0.0001521	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	**BRGWC-47**	**299**	**n/a**	**9/23/2021**	**1770**	**Yes**	**114**	**n/a**	**n/a**	**1.754**	**n/a**	**n/a**	**0.0001521**	**NP Inter (normality) 1 of 2**
Total Dissolved Solids (mg/L)	**BRGWC-50**	**299**	**n/a**	**9/27/2021**	**1800**	**Yes**	**114**	**n/a**	**n/a**	**1.754**	**n/a**	**n/a**	**0.0001521**	**NP Inter (normality) 1 of 2**
Total Dissolved Solids (mg/L)	**BRGWC-52I**	**299**	**n/a**	**9/28/2021**	**336**	**Yes**	**114**	**n/a**	**n/a**	**1.754**	**n/a**	**n/a**	**0.0001521**	**NP Inter (normality) 1 of 2**

Appendix III Trend Test Summary - Significant Results

Plant Branch Client: Southern Company Data: Plant Branch AP Printed 11/9/2021, 6:42 AM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Boron (mg/L)	**BRGWC-27I**	**-0.1605**	**-64**	**-53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	**BRGWC-29I**	**-0.1613**	**-50**	**-48**	**Yes**	**14**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**BRGWA-6S (bg)**	**0.177**	**51**	**48**	**Yes**	**14**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**BRGWC-25I**	**-6.149**	**-75**	**-48**	**Yes**	**14**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**BRGWC-27I**	**-5.366**	**-55**	**-48**	**Yes**	**14**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**BRGWC-30I**	**15.72**	**68**	**48**	**Yes**	**14**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	**BRGWA-12I (bg)**	**-0.2227**	**-65**	**-53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	**BRGWC-50**	**-2.006**	**-51**	**-48**	**Yes**	**14**	**0**	**n/a**	**n/a**	**0.01**	**NP**
pH, Field (S.U.)	**BRGWA-23S (bg)**	**-0.05938**	**-60**	**-58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
pH, Field (S.U.)	**BRGWA-2I (bg)**	**-0.1251**	**-70**	**-58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**BRGWA-12I (bg)**	**-0.2564**	**-84**	**-53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**BRGWA-12S (bg)**	**-0.1826**	**-68**	**-53**	**Yes**	**15**	**13.33**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**BRGWC-25I**	**-41.43**	**-62**	**-48**	**Yes**	**14**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**BRGWC-27I**	**-27.24**	**-70**	**-48**	**Yes**	**14**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**BRGWC-29I**	**-51.5**	**-59**	**-48**	**Yes**	**14**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**BRGWC-32S**	**-41.84**	**-55**	**-48**	**Yes**	**14**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Total Dissolved Solids (mg/L)	**BRGWC-32S**	**-57.27**	**-64**	**-48**	**Yes**	**14**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Total Dissolved Solids (mg/L)	**BRGWC-50**	**-157.8**	**-51**	**-48**	**Yes**	**14**	**0**	**n/a**	**n/a**	**0.01**	**NP**

Appendix III Trend Test Summary - All Results

Plant Branch Client: Southern Company Data: Plant Branch AP Printed 11/9/2021, 6:42 AM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Boron (mg/L)	BRGWA-12I (bg)	-0.0003611	-12	-48	No	14	14.29	n/a	n/a	0.01	NP
Boron (mg/L)	BRGWA-12S (bg)	0	2	48	No	14	78.57	n/a	n/a	0.01	NP
Boron (mg/L)	BRGWA-23S (bg)	0.001292	10	48	No	14	14.29	n/a	n/a	0.01	NP
Boron (mg/L)	BRGWA-2I (bg)	0.002384	20	48	No	14	21.43	n/a	n/a	0.01	NP
Boron (mg/L)	BRGWA-2S (bg)	0	11	48	No	14	92.86	n/a	n/a	0.01	NP
Boron (mg/L)	BRGWA-5I (bg)	0	6	48	No	14	71.43	n/a	n/a	0.01	NP
Boron (mg/L)	BRGWA-5S (bg)	0	1	48	No	14	57.14	n/a	n/a	0.01	NP
Boron (mg/L)	BRGWA-6S (bg)	0	14	48	No	14	71.43	n/a	n/a	0.01	NP
Boron (mg/L)	BRGWC-25I	-0.1154	-38	-48	No	14	0	n/a	n/a	0.01	NP
Boron (mg/L)	**BRGWC-27I**	**-0.1605**	**-64**	**-53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	**BRGWC-29I**	**-0.1613**	**-50**	**-48**	**Yes**	**14**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	BRGWC-30I	-0.004574	-15	-53	No	15	0	n/a	n/a	0.01	NP
Boron (mg/L)	BRGWC-32S	-0.01337	-14	-53	No	15	0	n/a	n/a	0.01	NP
Boron (mg/L)	BRGWC-47	0.02383	21	53	No	15	0	n/a	n/a	0.01	NP
Boron (mg/L)	BRGWC-50	0	8	48	No	14	0	n/a	n/a	0.01	NP
Boron (mg/L)	BRGWC-52I	0	9	48	No	14	0	n/a	n/a	0.01	NP
Calcium (mg/L)	BRGWA-12I (bg)	0.199	10	53	No	15	6.667	n/a	n/a	0.01	NP
Calcium (mg/L)	BRGWA-12S (bg)	0.2536	26	53	No	15	6.667	n/a	n/a	0.01	NP
Calcium (mg/L)	BRGWA-23S (bg)	-1.151	-37	-48	No	14	7.143	n/a	n/a	0.01	NP
Calcium (mg/L)	BRGWA-2I (bg)	0.8266	46	48	No	14	7.143	n/a	n/a	0.01	NP
Calcium (mg/L)	BRGWA-2S (bg)	0	1	48	No	14	0	n/a	n/a	0.01	NP
Calcium (mg/L)	BRGWA-5I (bg)	-0.07521	-6	-48	No	14	7.143	n/a	n/a	0.01	NP
Calcium (mg/L)	BRGWA-5S (bg)	-0.4646	-20	-48	No	14	7.143	n/a	n/a	0.01	NP
Calcium (mg/L)	**BRGWA-6S (bg)**	**0.177**	**51**	**48**	**Yes**	**14**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**BRGWC-25I**	**-6.149**	**-75**	**-48**	**Yes**	**14**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**BRGWC-27I**	**-5.366**	**-55**	**-48**	**Yes**	**14**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	BRGWC-29I	-9.731	-47	-48	No	14	0	n/a	n/a	0.01	NP
Calcium (mg/L)	**BRGWC-30I**	**15.72**	**68**	**48**	**Yes**	**14**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	BRGWC-32S	-6.126	-43	-48	No	14	0	n/a	n/a	0.01	NP
Calcium (mg/L)	BRGWC-45	-2.868	-44	-53	No	15	0	n/a	n/a	0.01	NP
Calcium (mg/L)	BRGWC-47	5.19	21	53	No	15	0	n/a	n/a	0.01	NP
Calcium (mg/L)	BRGWC-50	-9.359	-25	-48	No	14	0	n/a	n/a	0.01	NP
Calcium (mg/L)	BRGWC-52I	2.783	16	43	No	13	0	n/a	n/a	0.01	NP
Chloride (mg/L)	**BRGWA-12I (bg)**	**-0.2227**	**-65**	**-53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	BRGWA-12S (bg)	0	11	53	No	15	0	n/a	n/a	0.01	NP
Chloride (mg/L)	BRGWA-23S (bg)	-0.23	-42	-48	No	14	0	n/a	n/a	0.01	NP
Chloride (mg/L)	BRGWA-2I (bg)	-0.06183	-31	-48	No	14	0	n/a	n/a	0.01	NP
Chloride (mg/L)	BRGWA-2S (bg)	-0.02852	-22	-48	No	14	0	n/a	n/a	0.01	NP
Chloride (mg/L)	BRGWA-5I (bg)	-0.2053	-44	-48	No	14	0	n/a	n/a	0.01	NP
Chloride (mg/L)	BRGWA-5S (bg)	-0.06983	-25	-48	No	14	0	n/a	n/a	0.01	NP
Chloride (mg/L)	BRGWA-6S (bg)	0	-12	-48	No	14	0	n/a	n/a	0.01	NP
Chloride (mg/L)	BRGWC-45	-7.683	-47	-53	No	15	0	n/a	n/a	0.01	NP
Chloride (mg/L)	**BRGWC-50**	**-2.006**	**-51**	**-48**	**Yes**	**14**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Fluoride (mg/L)	BRGWA-12I (bg)	-0.01393	-38	-58	No	16	25	n/a	n/a	0.01	NP
Fluoride (mg/L)	BRGWA-12S (bg)	0	49	58	No	16	68.75	n/a	n/a	0.01	NP
Fluoride (mg/L)	BRGWA-23S (bg)	0	-27	-58	No	16	56.25	n/a	n/a	0.01	NP
Fluoride (mg/L)	BRGWA-2I (bg)	0	-19	-58	No	16	43.75	n/a	n/a	0.01	NP
Fluoride (mg/L)	BRGWA-2S (bg)	0	35	58	No	16	56.25	n/a	n/a	0.01	NP
Fluoride (mg/L)	BRGWA-5I (bg)	0	44	58	No	16	68.75	n/a	n/a	0.01	NP
Fluoride (mg/L)	BRGWA-5S (bg)	-0.007283	-34	-58	No	16	31.25	n/a	n/a	0.01	NP
Fluoride (mg/L)	BRGWA-6S (bg)	0.003585	41	58	No	16	56.25	n/a	n/a	0.01	NP
Fluoride (mg/L)	BRGWC-50	-0.1283	-29	-58	No	16	0	n/a	n/a	0.01	NP
pH, Field (S.U.)	BRGWA-12I (bg)	-0.0587	-42	-68	No	18	0	n/a	n/a	0.01	NP
pH, Field (S.U.)	BRGWA-12S (bg)	-0.01934	-29	-63	No	17	0	n/a	n/a	0.01	NP
pH, Field (S.U.)	**BRGWA-23S (bg)**	**-0.05938**	**-60**	**-58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**

Appendix III Trend Test Summary - All Results

Plant Branch Client: Southern Company Data: Plant Branch AP Printed 11/9/2021, 6:42 AM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
pH, Field (S.U.)	**BRGWA-2I (bg)**	**-0.1251**	**-70**	**-58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
pH, Field (S.U.)	BRGWA-2S (bg)	-0.02883	-43	-58	No	16	0	n/a	n/a	0.01	NP
pH, Field (S.U.)	BRGWA-5I (bg)	-0.02729	-28	-58	No	16	0	n/a	n/a	0.01	NP
pH, Field (S.U.)	BRGWA-5S (bg)	-0.0589	-55	-58	No	16	0	n/a	n/a	0.01	NP
pH, Field (S.U.)	BRGWA-6S (bg)	-0.006594	-6	-53	No	15	0	n/a	n/a	0.01	NP
pH, Field (S.U.)	BRGWC-29I	0.003679	3	58	No	16	0	n/a	n/a	0.01	NP
pH, Field (S.U.)	BRGWC-50	-0.06992	-32	-63	No	17	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	**BRGWA-12I (bg)**	**-0.2564**	**-84**	**-53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**BRGWA-12S (bg)**	**-0.1826**	**-68**	**-53**	**Yes**	**15**	**13.33**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	BRGWA-23S (bg)	-2.575	-19	-48	No	14	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	BRGWA-2I (bg)	-0.2487	-28	-48	No	14	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	BRGWA-2S (bg)	0	3	48	No	14	35.71	n/a	n/a	0.01	NP
Sulfate (mg/L)	BRGWA-5I (bg)	-0.3219	-27	-48	No	14	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	BRGWA-5S (bg)	-0.08437	-40	-48	No	14	35.71	n/a	n/a	0.01	NP
Sulfate (mg/L)	BRGWA-6S (bg)	-0.01226	-14	-48	No	14	21.43	n/a	n/a	0.01	NP
Sulfate (mg/L)	**BRGWC-25I**	**-41.43**	**-62**	**-48**	**Yes**	**14**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**BRGWC-27I**	**-27.24**	**-70**	**-48**	**Yes**	**14**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**BRGWC-29I**	**-51.5**	**-59**	**-48**	**Yes**	**14**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	BRGWC-30I	24.89	35	48	No	14	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	**BRGWC-32S**	**-41.84**	**-55**	**-48**	**Yes**	**14**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	BRGWC-45	-3.548	-38	-53	No	15	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	BRGWC-47	-66.18	-33	-53	No	15	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	BRGWC-50	-115.1	-31	-43	No	13	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	BRGWC-52I	-14.1	-30	-48	No	14	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	BRGWA-12I (bg)	-5.087	-40	-53	No	15	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	BRGWA-12S (bg)	-6.547	-29	-53	No	15	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	BRGWA-23S (bg)	-11.77	-35	-48	No	14	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	BRGWA-2I (bg)	-4.927	-15	-48	No	14	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	BRGWA-2S (bg)	0.8314	7	48	No	14	7.143	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	BRGWA-5I (bg)	-7.713	-21	-48	No	14	7.143	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	BRGWA-5S (bg)	-7.968	-46	-48	No	14	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	BRGWA-6S (bg)	-2.774	-10	-48	No	14	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	BRGWC-29I	-74.57	-44	-48	No	14	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	BRGWC-30I	62.57	45	48	No	14	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	**BRGWC-32S**	**-57.27**	**-64**	**-48**	**Yes**	**14**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Total Dissolved Solids (mg/L)	BRGWC-47	-107.8	-38	-48	No	14	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	**BRGWC-50**	**-157.8**	**-51**	**-48**	**Yes**	**14**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Total Dissolved Solids (mg/L)	BRGWC-52I	0.9481	3	48	No	14	0	n/a	n/a	0.01	NP

Upper Tolerance Limits Summary Table

Plant Branch Client: Southern Company Data: Plant Branch AP Printed 11/23/2021, 11:50 AM

Constituent	Upper Lim.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Antimony (mg/L)	0.017	120	n/a	n/a	81.67	n/a	n/a	0.002122	NP Inter(NDs)
Arsenic (mg/L)	0.005	120	n/a	n/a	75.83	n/a	n/a	0.002122	NP Inter(NDs)
Barium (mg/L)	0.13	120	n/a	n/a	0	n/a	n/a	0.002122	NP Inter(normality)
Beryllium (mg/L)	0.0005	120	n/a	n/a	100	n/a	n/a	0.002122	NP Inter(NDs)
Cadmium (mg/L)	0.0005	122	n/a	n/a	98.36	n/a	n/a	0.001915	NP Inter(NDs)
Chromium (mg/L)	0.016	120	n/a	n/a	19.17	n/a	n/a	0.002122	NP Inter(normality)
Cobalt (mg/L)	0.0135	120	n/a	n/a	56.67	n/a	n/a	0.002122	NP Inter(normality)
Combined Radium 226 + 228 (pCi/L)	1.646	120	0.796	0.448	0	None	No	0.05	Inter
Fluoride (mg/L)	0.42	128	n/a	n/a	50.78	n/a	n/a	0.001408	NP Inter(normality)
Lead (mg/L)	0.0013	120	n/a	n/a	85	n/a	n/a	0.002122	NP Inter(NDs)
Lithium (mg/L)	0.089	120	n/a	n/a	39.17	n/a	n/a	0.002122	NP Inter(normality)
Mercury (mg/L)	0.00021	104	n/a	n/a	85.58	n/a	n/a	0.004822	NP Inter(NDs)
Molybdenum (mg/L)	0.01	117	n/a	n/a	78.63	n/a	n/a	0.002475	NP Inter(NDs)
Selenium (mg/L)	0.006	120	n/a	n/a	90.83	n/a	n/a	0.002122	NP Inter(NDs)
Thallium (mg/L)	0.001	120	n/a	n/a	100	n/a	n/a	0.002122	NP Inter(NDs)

PLANT BRANCH PONDS B,C,D GWPS			
Constituent Name	**MCL**	**Background Limit**	**GWPS**
Antimony, Total (mg/L)	0.006	0.017	0.017
Arsenic, Total (mg/L)	0.01	0.005	0.01
Barium, Total (mg/L)	2	0.13	2
Beryllium, Total (mg/L)	0.004	0.0005	0.004
Cadmium, Total (mg/L)	0.005	0.0005	0.005
Chromium, Total (mg/L)	0.1	0.016	0.1
Cobalt, Total (mg/L)	n/a	0.014	0.014
Combined Radium, Total (pCi/L)	5	1.65	5
Fluoride, Total (mg/L)	4	0.42	4
Lead, Total (mg/L)	n/a	0.0013	0.0013
Lithium, Total (mg/L)	n/a	0.089	0.089
Mercury, Total (mg/L)	0.002	0.00021	0.002
Molybdenum, Total (mg/L)	n/a	0.01	0.01
Selenium, Total (mg/L)	0.05	0.006	0.05
Thallium, Total (mg/L)	0.002	0.001	0.002

**Highlighted cells indicate 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 AP Printed 12/2/2021, 10:32 AM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Cadmium (mg/L)	**BRGWC-50**	**0.04274**	**0.0135**	**0.005**	**Yes**	**15**	**0.03023**	**0.02529**	**0**	**None**	**sqrt(x)**	**0.01**	**Param.**
Cobalt (mg/L)	**BRGWC-50**	**1.5**	**1.3**	**0.014**	**Yes**	**15**	**1.387**	**0.06399**	**0**	**None**	**No**	**0.01**	**NP (normality)**
Cobalt (mg/L)	**PZ-51I**	**0.041**	**0.017**	**0.014**	**Yes**	**8**	**0.02213**	**0.007772**	**0**	**None**	**No**	**0.004**	**NP (normality)**

Confidence Intervals - All Results

Plant Branch Client: Southern Company Data: Plant Branch AP Printed 12/2/2021, 10:32 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	0.0007	0.017	No	15	0.002847	0.0005939	93.33	None	No	0.01	NP (NDs)
Antimony (mg/L)	BRGWC-32S	0.003	0.0014	0.017	No	15	0.002893	0.0004131	93.33	None	No	0.01	NP (NDs)
Antimony (mg/L)	BRGWC-45	0.0031	0.0012	0.017	No	16	0.002378	0.0009265	56.25	None	No	0.01	NP (normality)
Antimony (mg/L)	BRGWC-47	0.003	0.00035	0.017	No	16	0.002834	0.0006625	93.75	None	No	0.01	NP (NDs)
Antimony (mg/L)	BRGWC-50	0.003	0.00092	0.017	No	15	0.002523	0.000992	80	None	No	0.01	NP (NDs)
Antimony (mg/L)	BRGWC-52I	0.003	0.00091	0.017	No	15	0.002546	0.0009451	80	None	No	0.01	NP (NDs)
Antimony (mg/L)	PZ-51I	0.001766	0.0007453	0.017	No	6	0.002115	0.001011	50	Kaplan-Meier	sqrt(x)	0.01	Param.
Antimony (mg/L)	PZ-51S	0.003	0.00043	0.017	No	6	0.002372	0.001065	66.67	None	No	0.0155	NP (normality)
Arsenic (mg/L)	BRGWC-25I	0.005	0.00072	0.01	No	15	0.00385	0.001976	73.33	None	No	0.01	NP (normality)
Arsenic (mg/L)	BRGWC-27I	0.005	0.0011	0.01	No	15	0.00394	0.001825	73.33	None	No	0.01	NP (normality)
Arsenic (mg/L)	BRGWC-29I	0.005	0.00065	0.01	No	15	0.00324	0.001997	53.33	None	No	0.01	NP (normality)
Arsenic (mg/L)	BRGWC-30I	0.005	0.00056	0.01	No	15	0.004704	0.001146	93.33	None	No	0.01	NP (NDs)
Arsenic (mg/L)	BRGWC-32S	0.005	0.00053	0.01	No	15	0.004702	0.001154	93.33	None	No	0.01	NP (NDs)
Arsenic (mg/L)	BRGWC-45	0.005	0.00075	0.01	No	16	0.003756	0.001933	68.75	None	No	0.01	NP (normality)
Arsenic (mg/L)	BRGWC-47	0.005	0.00089	0.01	No	16	0.002827	0.00182	37.5	None	No	0.01	NP (normality)
Arsenic (mg/L)	BRGWC-50	0.005	0.0014	0.01	No	15	0.004173	0.001721	80	None	No	0.01	NP (NDs)
Arsenic (mg/L)	BRGWC-52I	0.005	0.0016	0.01	No	15	0.003478	0.001479	33.33	None	No	0.01	NP (normality)
Barium (mg/L)	BRGWC-25I	0.03643	0.02682	2	No	15	0.03163	0.007089	0	None	No	0.01	Param.
Barium (mg/L)	BRGWC-27I	0.01702	0.01492	2	No	15	0.01597	0.001551	0	None	No	0.01	Param.
Barium (mg/L)	BRGWC-29I	0.0195	0.01696	2	No	15	0.01823	0.001873	0	None	No	0.01	Param.
Barium (mg/L)	BRGWC-30I	0.02719	0.02171	2	No	15	0.02445	0.004044	0	None	No	0.01	Param.
Barium (mg/L)	BRGWC-32S	0.04406	0.02797	2	No	15	0.03601	0.01187	0	None	No	0.01	Param.
Barium (mg/L)	BRGWC-45	0.09639	0.07723	2	No	16	0.08681	0.01473	0	None	No	0.01	Param.
Barium (mg/L)	BRGWC-47	0.04407	0.0343	2	No	16	0.03918	0.007509	0	None	No	0.01	Param.
Barium (mg/L)	BRGWC-50	0.02149	0.01851	2	No	15	0.02	0.002204	0	None	No	0.01	Param.
Barium (mg/L)	BRGWC-52I	0.02605	0.01635	2	No	15	0.0212	0.007153	0	None	No	0.01	Param.
Barium (mg/L)	PZ-51I	0.01686	0.01281	2	No	6	0.01483	0.001472	0	None	No	0.01	Param.
Barium (mg/L)	PZ-51S	0.03674	0.02593	2	No	6	0.03133	0.003933	0	None	No	0.01	Param.
Beryllium (mg/L)	BRGWC-27I	0.0005	0.0001	0.004	No	16	0.00023	0.000166	25	None	No	0.01	NP (normality)
Beryllium (mg/L)	BRGWC-29I	0.001054	0.0007242	0.004	No	15	0.0008893	0.0002436	6.667	None	No	0.01	Param.
Beryllium (mg/L)	BRGWC-45	0.0005	0.000079	0.004	No	17	0.0004485	0.0001454	88.24	None	No	0.01	NP (NDs)
Beryllium (mg/L)	BRGWC-47	0.0005	0.000056	0.004	No	16	0.0004161	0.0001803	81.25	None	No	0.01	NP (NDs)
Beryllium (mg/L)	BRGWC-50	0.004915	0.002458	0.004	No	15	0.003687	0.001813	13.33	None	No	0.01	Param.
Beryllium (mg/L)	PZ-51I	0.0005	0.000064	0.004	No	6	0.0001508	0.0001716	16.67	None	No	0.0155	NP (normality)
Cadmium (mg/L)	BRGWC-27I	0.0005	0.00009	0.005	No	16	0.0004475	0.0001435	87.5	None	No	0.01	NP (NDs)
Cadmium (mg/L)	BRGWC-30I	0.0005	0.00008	0.005	No	16	0.0004738	0.000105	93.75	None	No	0.01	NP (NDs)
Cadmium (mg/L)	BRGWC-32S	0.0005	0.00011	0.005	No	16	0.0004244	0.0001627	81.25	None	No	0.01	NP (NDs)
Cadmium (mg/L)	BRGWC-45	0.0005	0.0002	0.005	No	17	0.0004146	0.0001599	76.47	None	No	0.01	NP (NDs)
Cadmium (mg/L)	BRGWC-47	0.0005	0.00015	0.005	No	16	0.0003175	0.0001687	43.75	None	No	0.01	NP (normality)
Cadmium (mg/L)	**BRGWC-50**	**0.04274**	**0.0135**	**0.005**	**Yes**	**15**	**0.03023**	**0.02529**	**0**	**None**	**sqrt(x)**	**0.01**	**Param.**
Cadmium (mg/L)	PZ-51I	0.01427	0.0009488	0.005	No	8	0.008004	0.0114	0	None	ln(x)	0.01	Param.
Chromium (mg/L)	BRGWC-25I	0.005	0.0016	0.1	No	15	0.004505	0.001311	86.67	None	No	0.01	NP (NDs)
Chromium (mg/L)	BRGWC-27I	0.005	0.003	0.1	No	15	0.0046	0.001121	86.67	None	No	0.01	NP (NDs)
Chromium (mg/L)	BRGWC-29I	0.02	0.005	0.1	No	15	0.006	0.003873	93.33	None	No	0.01	NP (NDs)
Chromium (mg/L)	BRGWC-30I	0.0051	0.005	0.1	No	15	0.005607	0.002322	86.67	None	No	0.01	NP (NDs)
Chromium (mg/L)	BRGWC-32S	0.005	0.0012	0.1	No	15	0.002773	0.001684	33.33	None	No	0.01	NP (normality)
Chromium (mg/L)	BRGWC-45	0.005	0.0014	0.1	No	16	0.004246	0.00163	81.25	None	No	0.01	NP (NDs)
Chromium (mg/L)	BRGWC-47	0.005	0.00092	0.1	No	16	0.004009	0.001789	75	None	No	0.01	NP (normality)
Chromium (mg/L)	BRGWC-50	0.005	0.00071	0.1	No	15	0.003383	0.002035	53.33	None	No	0.01	NP (normality)
Chromium (mg/L)	BRGWC-52I	0.005	0.0017	0.1	No	15	0.00478	0.0008521	93.33	None	No	0.01	NP (NDs)
Chromium (mg/L)	PZ-51I	0.005	0.0008	0.1	No	6	0.00363	0.002123	66.67	None	No	0.0155	NP (normality)
Chromium (mg/L)	PZ-51S	0.005	0.00042	0.1	No	6	0.003508	0.002312	66.67	None	No	0.0155	NP (normality)
Cobalt (mg/L)	BRGWC-25I	0.006964	0.004102	0.014	No	15	0.005533	0.002112	6.667	None	No	0.01	Param.
Cobalt (mg/L)	BRGWC-27I	0.01096	0.00775	0.014	No	16	0.009356	0.00247	0	None	No	0.01	Param.
Cobalt (mg/L)	BRGWC-29I	0.01006	0.006469	0.014	No	15	0.008367	0.002766	6.667	None	sqrt(x)	0.01	Param.

Confidence Intervals - All Results

Plant Branch Client: Southern Company Data: Plant Branch AP Printed 12/2/2021, 10:32 AM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Cobalt (mg/L)	BRGWC-30I	0.0016	0.00078	0.014	No	16	0.001817	0.001608	18.75	None	No	0.01	NP (normality)
Cobalt (mg/L)	BRGWC-32S	0.005	0.0025	0.014	No	16	0.004594	0.001143	87.5	None	No	0.01	NP (NDs)
Cobalt (mg/L)	BRGWC-45	0.015	0.0064	0.014	No	17	0.01331	0.01501	0	None	No	0.01	NP (normality)
Cobalt (mg/L)	BRGWC-47	0.003786	0.0007947	0.014	No	16	0.002822	0.003337	12.5	None	x^(1/3)	0.01	Param.
Cobalt (mg/L)	**BRGWC-50**	**1.5**	**1.3**	**0.014**	**Yes**	**15**	**1.387**	**0.06399**	**0**	**None**	**No**	**0.01**	**NP (normality)**
Cobalt (mg/L)	BRGWC-52I	0.005	0.0012	0.014	No	15	0.003566	0.001825	53.33	None	No	0.01	NP (normality)
Cobalt (mg/L)	**PZ-51I**	**0.041**	**0.017**	**0.014**	**Yes**	**8**	**0.02213**	**0.007772**	**0**	**None**	**No**	**0.004**	**NP (normality)**
Cobalt (mg/L)	PZ-51S	0.008222	0.00312	0.014	No	7	0.005671	0.002148	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	BRGWC-25I	1.518	0.5183	5	No	15	1.119	0.9983	0	None	x^(1/3)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	BRGWC-27I	1.453	0.5539	5	No	15	1.058	0.8075	0	None	sqrt(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	BRGWC-29I	1.643	1.194	5	No	15	1.418	0.3315	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	BRGWC-30I	1.133	0.6188	5	No	15	0.8757	0.3791	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	BRGWC-32S	1.098	0.4761	5	No	15	0.7871	0.4588	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	BRGWC-45	0.8176	0.3742	5	No	16	0.5959	0.3407	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	BRGWC-47	1.444	0.8221	5	No	16	1.133	0.478	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	BRGWC-50	2.012	1.236	5	No	15	1.624	0.5732	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	BRGWC-52I	2.299	1.396	5	No	15	1.847	0.6669	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	PZ-51I	11.7	0.771	5	No	6	2.999	4.287	0	None	No	0.0155	NP (normality)
Combined Radium 226 + 228 (pCi/L)	PZ-51S	10.86	-3.1e-8	5	No	6	3.51	6.673	0	None	x^(1/3)	0.01	Param.
Fluoride (mg/L)	BRGWC-25I	0.29	0.14	4	No	16	0.2131	0.143	6.25	None	No	0.01	NP (normality)
Fluoride (mg/L)	BRGWC-27I	0.2684	0.1508	4	No	16	0.2096	0.0904	12.5	None	No	0.01	Param.
Fluoride (mg/L)	BRGWC-29I	0.227	0.09209	4	No	16	0.1818	0.1287	12.5	None	ln(x)	0.01	Param.
Fluoride (mg/L)	BRGWC-30I	0.3663	0.1278	4	No	16	0.2657	0.2246	6.25	None	sqrt(x)	0.01	Param.
Fluoride (mg/L)	BRGWC-32S	0.11	0.09	4	No	16	0.1063	0.03914	62.5	None	No	0.01	NP (normality)
Fluoride (mg/L)	BRGWC-45	0.12	0.067	4	No	17	0.1815	0.2444	52.94	None	No	0.01	NP (normality)
Fluoride (mg/L)	BRGWC-47	0.34	0.076	4	No	17	0.2491	0.268	47.06	None	No	0.01	NP (normality)
Fluoride (mg/L)	BRGWC-50	0.8598	0.3393	4	No	16	0.6356	0.469	0	None	sqrt(x)	0.01	Param.
Fluoride (mg/L)	BRGWC-52I	0.2422	0.1306	4	No	15	0.1864	0.08242	6.667	None	No	0.01	Param.
Fluoride (mg/L)	PZ-51I	0.1	0.061	4	No	7	0.09443	0.01474	85.71	None	No	0.008	NP (NDs)
Fluoride (mg/L)	PZ-51S	0.1187	0.04559	4	No	6	0.08217	0.02663	0	None	No	0.01	Param.
Lead (mg/L)	BRGWC-25I	0.001	0.00011	0.0013	No	15	0.0009407	0.0002298	93.33	None	No	0.01	NP (NDs)
Lead (mg/L)	BRGWC-27I	0.001	0.000063	0.0013	No	15	0.0009375	0.0002419	93.33	None	No	0.01	NP (NDs)
Lead (mg/L)	BRGWC-29I	0.0005144	0.0002945	0.0013	No	14	0.0004221	0.0002025	7.143	None	ln(x)	0.01	Param.
Lead (mg/L)	BRGWC-30I	0.001	0.00011	0.0013	No	15	0.0009407	0.0002298	93.33	None	No	0.01	NP (NDs)
Lead (mg/L)	BRGWC-45	0.001	0.00026	0.0013	No	16	0.0008452	0.0003352	81.25	None	No	0.01	NP (NDs)
Lead (mg/L)	BRGWC-47	0.001	0.00012	0.0013	No	16	0.0008271	0.0003719	81.25	None	No	0.01	NP (NDs)
Lead (mg/L)	BRGWC-50	0.001	0.000085	0.0013	No	15	0.0005634	0.0004385	46.67	None	No	0.01	NP (normality)
Lead (mg/L)	BRGWC-52I	0.001	0.000042	0.0013	No	15	0.0009361	0.0002474	93.33	None	No	0.01	NP (NDs)
Lead (mg/L)	PZ-51I	0.001	0.00017	0.0013	No	6	0.000755	0.0003843	66.67	None	No	0.0155	NP (normality)
Lithium (mg/L)	BRGWC-27I	0.0021	0.0012	0.089	No	15	0.00332	0.004748	13.33	None	No	0.01	NP (normality)
Lithium (mg/L)	BRGWC-29I	0.003686	0.003074	0.089	No	15	0.00338	0.0004523	0	None	No	0.01	Param.
Lithium (mg/L)	BRGWC-30I	0.01628	0.01159	0.089	No	15	0.01393	0.003458	0	None	No	0.01	Param.
Lithium (mg/L)	BRGWC-32S	0.0023	0.002	0.089	No	15	0.00386	0.004525	13.33	None	No	0.01	NP (normality)
Lithium (mg/L)	BRGWC-45	0.003584	0.002962	0.089	No	15	0.003273	0.000459	0	None	No	0.01	Param.
Lithium (mg/L)	BRGWC-47	0.04398	0.04057	0.089	No	16	0.04228	0.002613	0	None	No	0.01	Param.
Lithium (mg/L)	BRGWC-50	0.04437	0.03803	0.089	No	15	0.0412	0.004678	0	None	No	0.01	Param.
Lithium (mg/L)	BRGWC-52I	0.00708	0.003138	0.089	No	15	0.005313	0.003385	6.667	None	sqrt(x)	0.01	Param.
Lithium (mg/L)	PZ-51I	0.026	0.019	0.089	No	6	0.02067	0.002733	0	None	No	0.0155	NP (normality)
Lithium (mg/L)	PZ-51S	0.015	0.0012	0.089	No	6	0.0127	0.005634	83.33	None	No	0.0155	NP (NDs)
Mercury (mg/L)	BRGWC-25I	0.0002	0.000083	0.002	No	13	0.0001787	0.00005275	84.62	None	No	0.01	NP (NDs)
Mercury (mg/L)	BRGWC-27I	0.0002	0.00005	0.002	No	13	0.0001767	0.0000569	84.62	None	No	0.01	NP (NDs)
Mercury (mg/L)	BRGWC-29I	0.0002	0.00007	0.002	No	13	0.0001698	0.00005851	76.92	None	No	0.01	NP (NDs)
Mercury (mg/L)	BRGWC-30I	0.0002	0.00007	0.002	No	13	0.0001686	0.00006029	76.92	None	No	0.01	NP (NDs)
Mercury (mg/L)	BRGWC-32S	0.0002	0.00009	0.002	No	13	0.0001748	0.00004809	76.92	None	No	0.01	NP (NDs)
Mercury (mg/L)	PZ-51I	0.0002	0.000099	0.002	No	6	0.0001832	0.00004123	83.33	None	No	0.0155	NP (NDs)

Trend Tests - Confidence Interval Exceedances - All Results (No Significant)

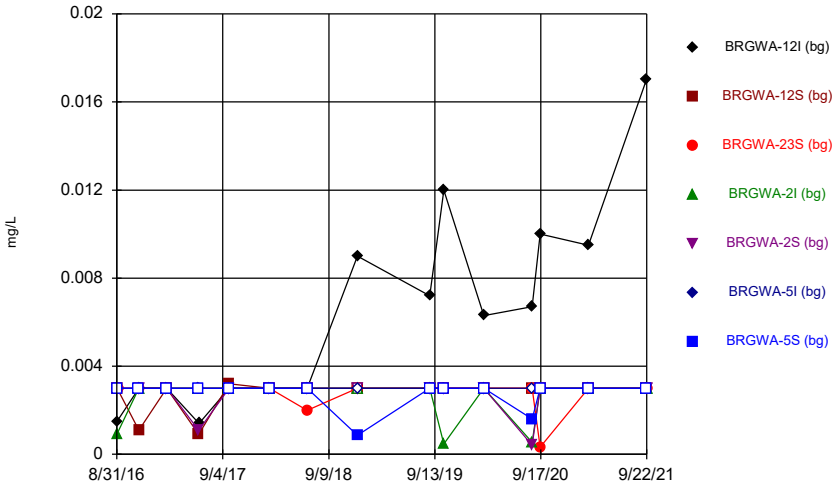
Plant Branch Client: Southern Company Data: Plant Branch AP Printed 12/2/2021, 10:20 AM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Cadmium (mg/L)	BRGWA-12I (bg)	0	0	58	No	16	100	n/a	n/a	0.01	NP
Cadmium (mg/L)	BRGWA-12S (bg)	0	0	58	No	16	100	n/a	n/a	0.01	NP
Cadmium (mg/L)	BRGWA-23S (bg)	0	1	53	No	15	86.67	n/a	n/a	0.01	NP
Cadmium (mg/L)	BRGWA-2I (bg)	0	0	53	No	15	100	n/a	n/a	0.01	NP
Cadmium (mg/L)	BRGWA-2S (bg)	0	0	53	No	15	100	n/a	n/a	0.01	NP
Cadmium (mg/L)	BRGWA-5I (bg)	0	0	53	No	15	100	n/a	n/a	0.01	NP
Cadmium (mg/L)	BRGWA-5S (bg)	0	0	53	No	15	100	n/a	n/a	0.01	NP
Cadmium (mg/L)	BRGWA-6S (bg)	0	0	53	No	15	100	n/a	n/a	0.01	NP
Cadmium (mg/L)	BRGWC-50	-0.01101	-46	-53	No	15	0	n/a	n/a	0.01	NP
Cobalt (mg/L)	BRGWA-12I (bg)	0	0	58	No	16	100	n/a	n/a	0.01	NP
Cobalt (mg/L)	BRGWA-12S (bg)	0	0	58	No	16	100	n/a	n/a	0.01	NP
Cobalt (mg/L)	BRGWA-23S (bg)	-0.0007052	-26	-53	No	15	13.33	n/a	n/a	0.01	NP
Cobalt (mg/L)	BRGWA-2I (bg)	0	11	53	No	15	80	n/a	n/a	0.01	NP
Cobalt (mg/L)	BRGWA-2S (bg)	-0.0004551	-45	-53	No	15	13.33	n/a	n/a	0.01	NP
Cobalt (mg/L)	BRGWA-5I (bg)	-0.000186	-42	-43	No	13	0	n/a	n/a	0.01	NP
Cobalt (mg/L)	BRGWA-5S (bg)	0	16	53	No	15	66.67	n/a	n/a	0.01	NP
Cobalt (mg/L)	BRGWA-6S (bg)	0	-9	-53	No	15	66.67	n/a	n/a	0.01	NP
Cobalt (mg/L)	BRGWC-50	0	10	53	No	15	0	n/a	n/a	0.01	NP
Cobalt (mg/L)	PZ-51I	0	-1	-21	No	8	0	n/a	n/a	0.01	NP

FIGURE A.

Sanitas™ v.9.6.30f Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Time Series



Constituent: Antimony Analysis Run 11/5/2021 6:55 AM View: Descriptive
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.30f Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

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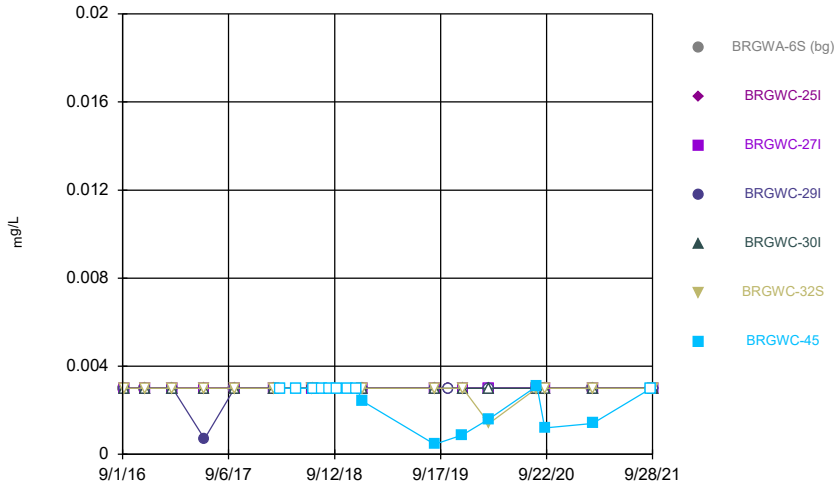
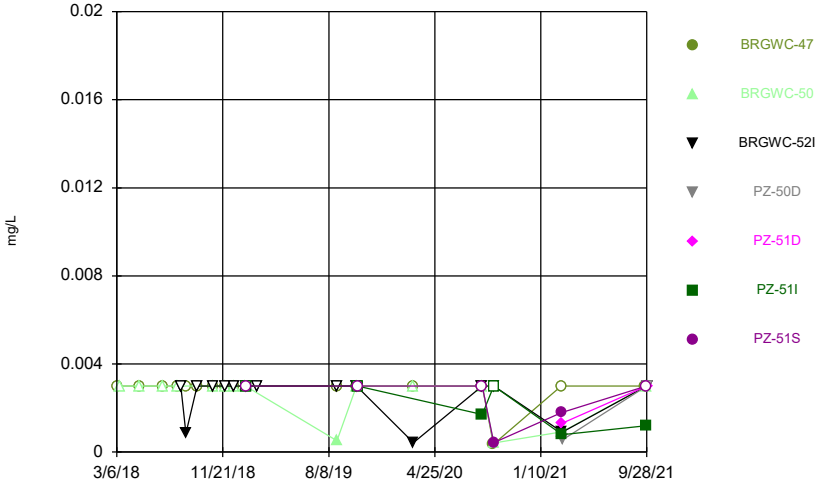


Constituent: Antimony Analysis Run 11/5/2021 6:56 AM View: Descriptive
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.30f Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Time Series



Constituent: Antimony Analysis Run 11/5/2021 6:56 AM View: Descriptive
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.30f Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

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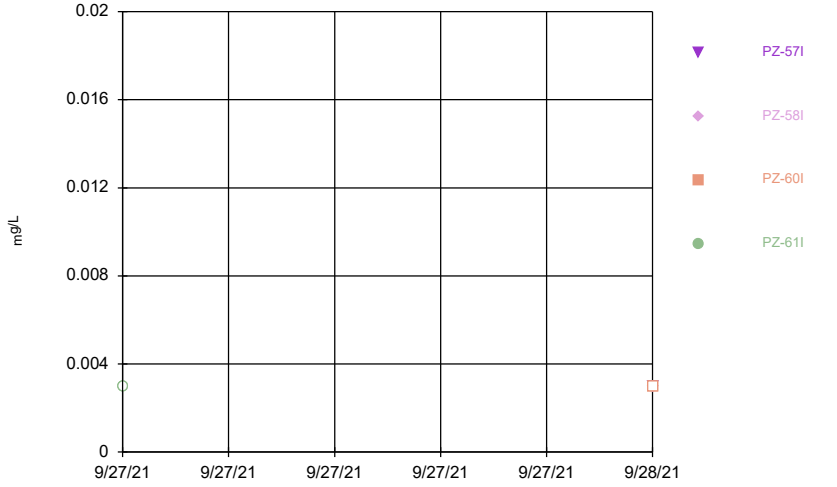

Constituent: Antimony Analysis Run 11/5/2021 6:56 AM View: Descriptive
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.30f Sanitas software utilized by Groundwater Stats Consulting. UG
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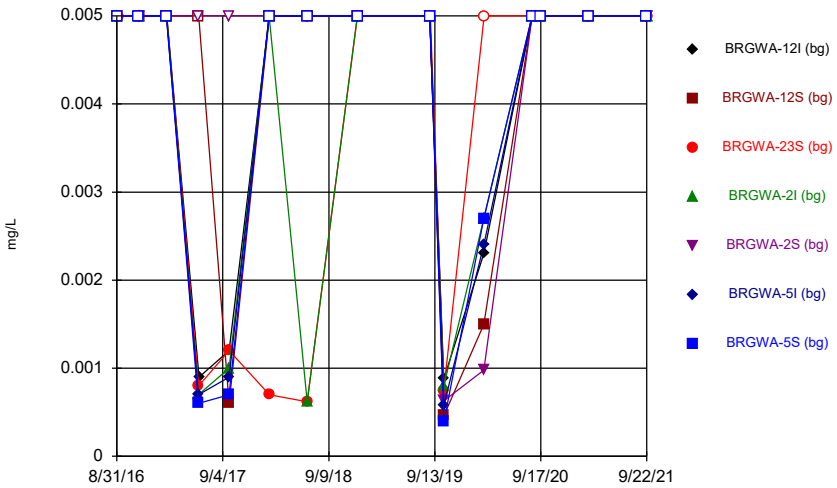
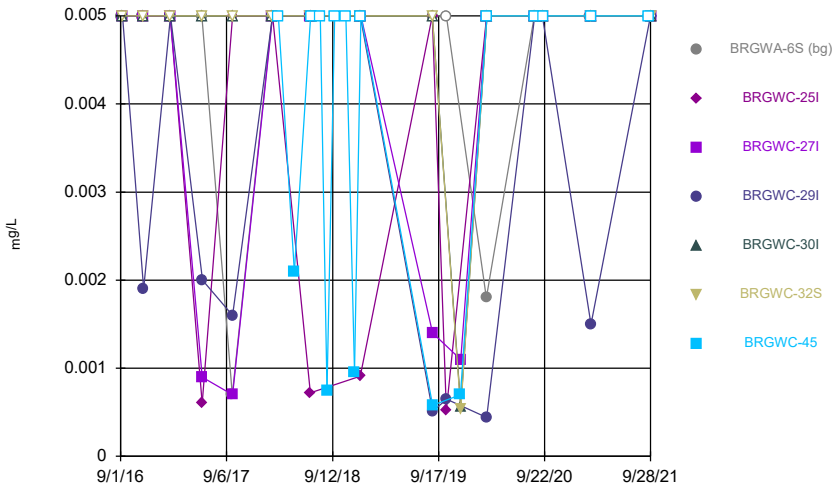
Time Series



Constituent: Arsenic Analysis Run 11/5/2021 6:56 AM View: Descriptive
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.30f Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

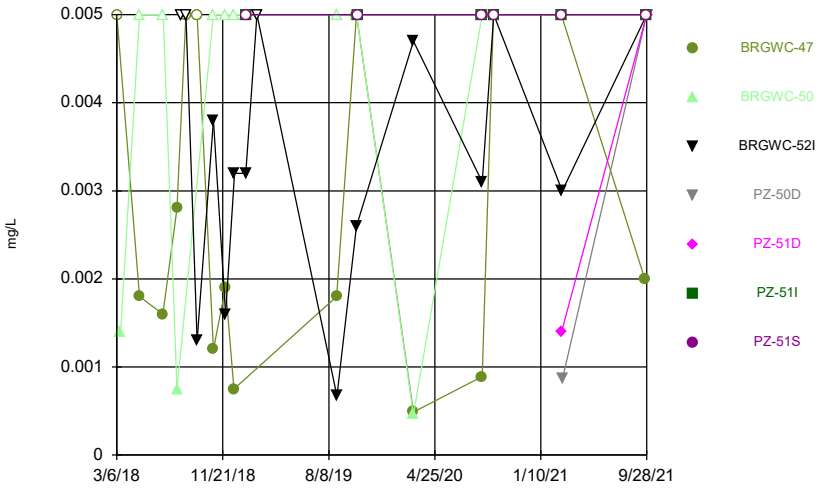
Time Series



Constituent: Arsenic Analysis Run 11/5/2021 6:56 AM View: Descriptive
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.30f Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Time Series



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Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.30f Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

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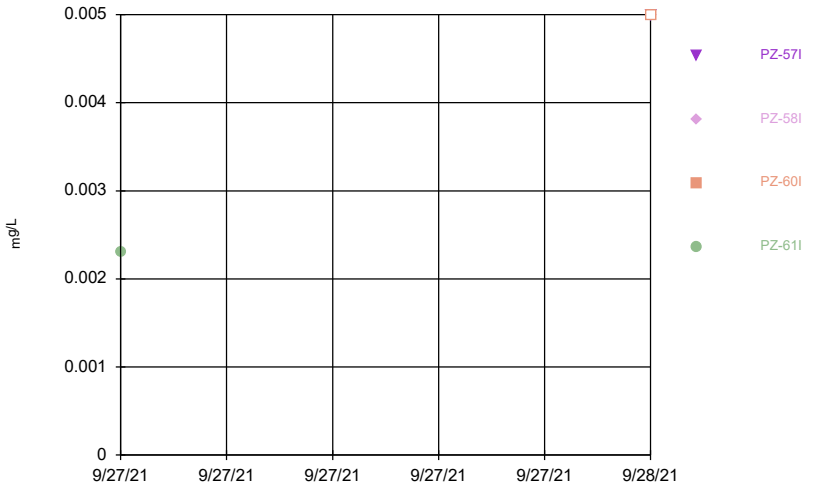
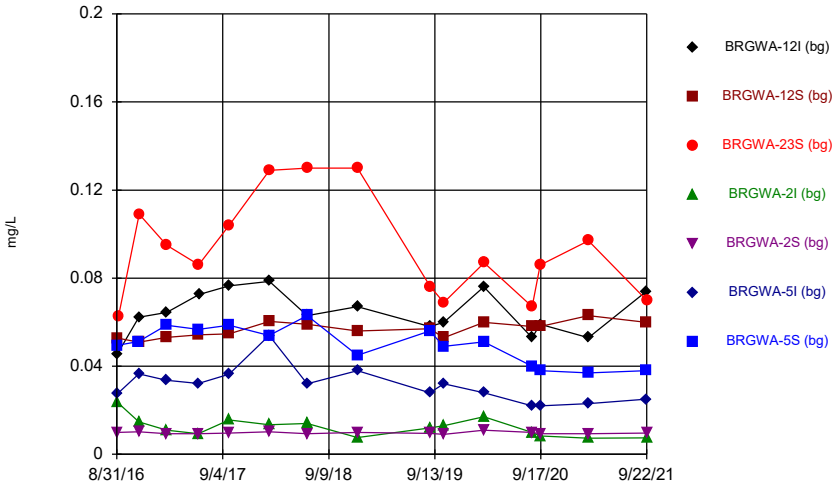


Constituent: Arsenic Analysis Run 11/5/2021 6:56 AM View: Descriptive
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.30f Sanitas software utilized by Groundwater Stats Consulting. UG

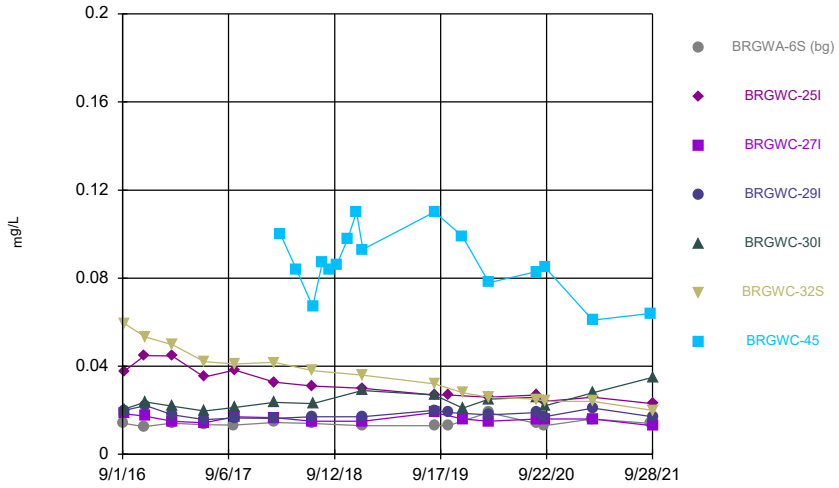
Time Series



Constituent: Barium Analysis Run 11/5/2021 6:56 AM View: Descriptive
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.30f Sanitas software utilized by Groundwater Stats Consulting. UG

Time Series



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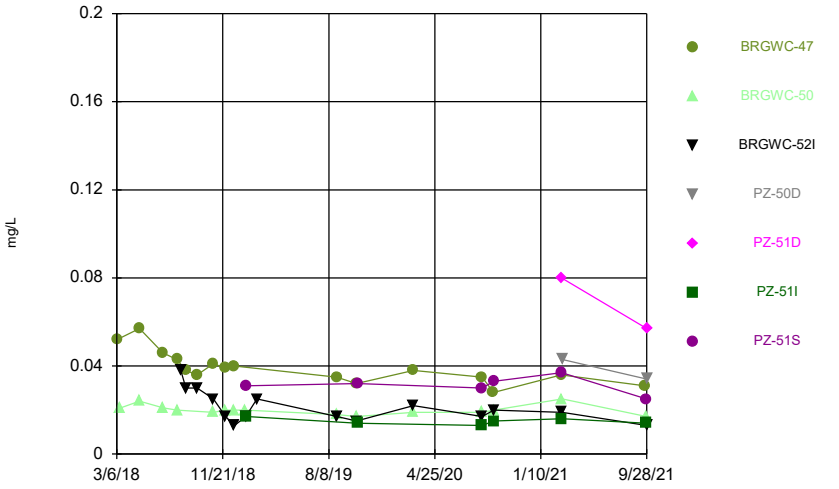
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.30f Sanitas software utilized by Groundwater Stats Consulting. UG

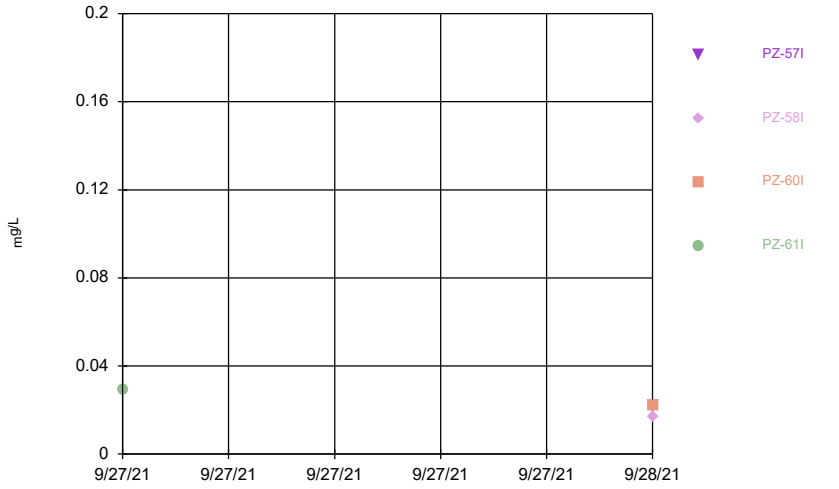
Time Series



Constituent: Barium Analysis Run 11/5/2021 6:56 AM View: Descriptive
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.30f Sanitas software utilized by Groundwater Stats Consulting. UG

Time Series



Constituent: Barium Analysis Run 11/5/2021 6:56 AM View: Descriptive
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.30f Sanitas software utilized by Groundwater Stats Consulting. UG
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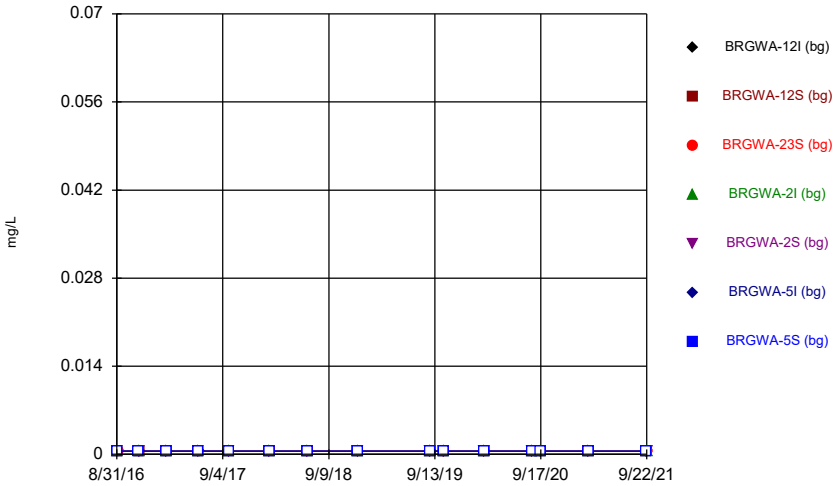
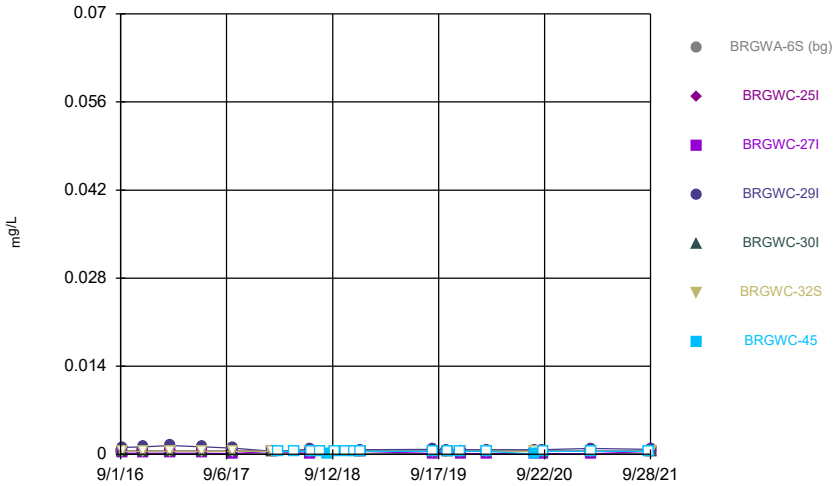


Constituent: Beryllium Analysis Run 11/5/2021 6:56 AM View: Descriptive
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.30f Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Time Series



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Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.30f Sanitas software utilized by Groundwater Stats Consulting. UG
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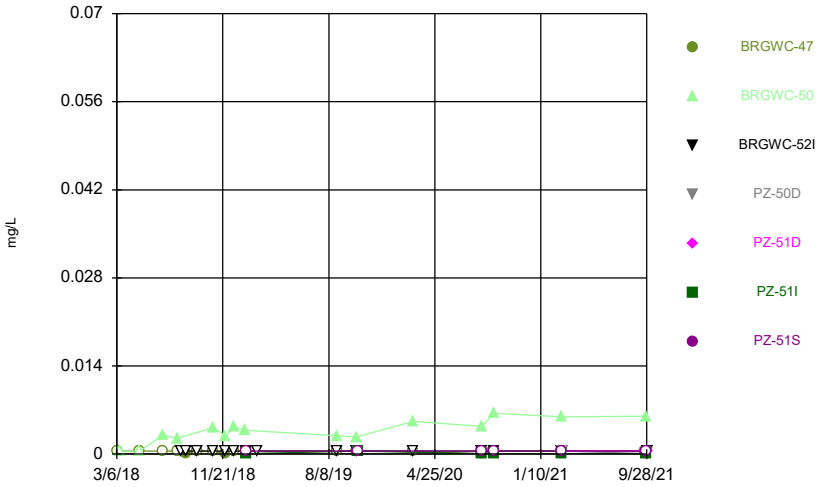
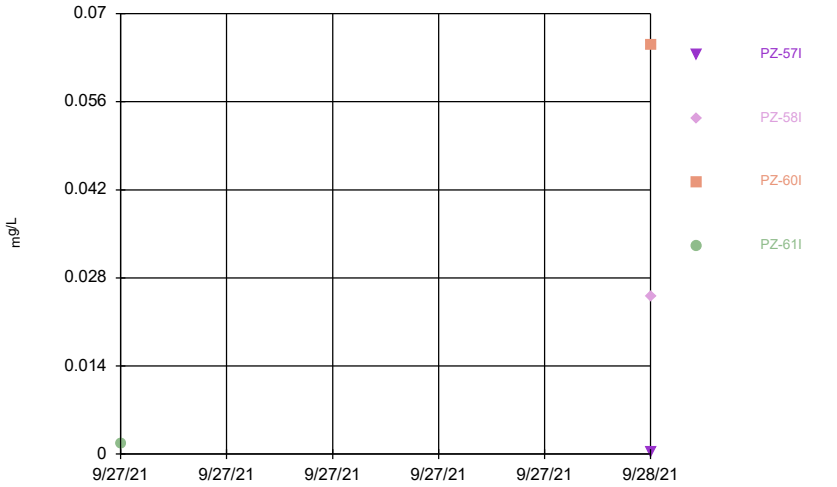


Constituent: Beryllium Analysis Run 11/5/2021 6:56 AM View: Descriptive
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.30f Sanitas software utilized by Groundwater Stats Consulting. UG

Time Series



Constituent: Beryllium Analysis Run 11/5/2021 6:56 AM View: Descriptive
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.30f Sanitas software utilized by Groundwater Stats Consulting. UG
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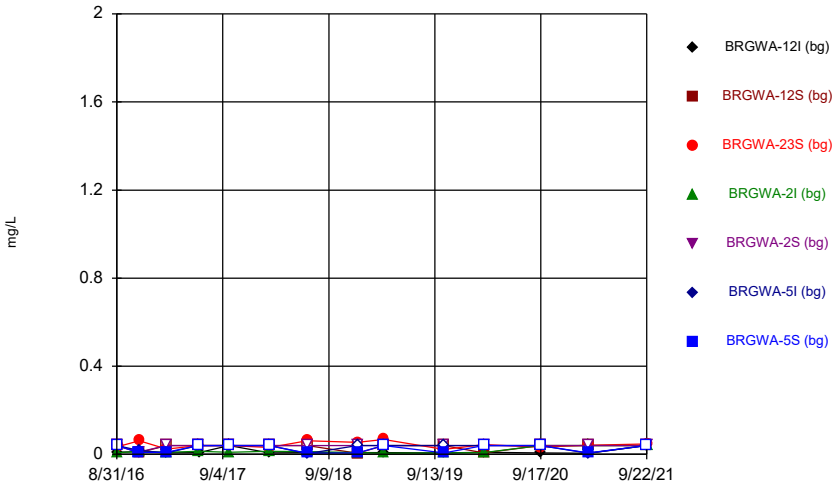

Constituent: Boron Analysis Run 11/5/2021 6:56 AM View: Descriptive
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.30f Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

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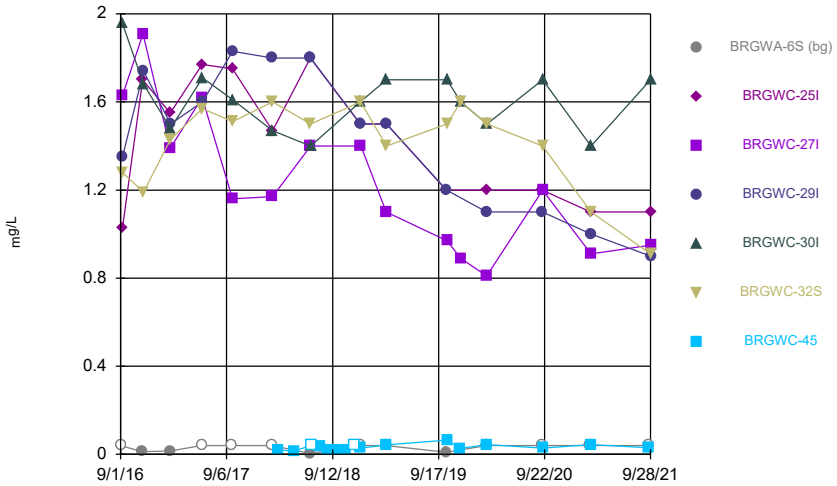

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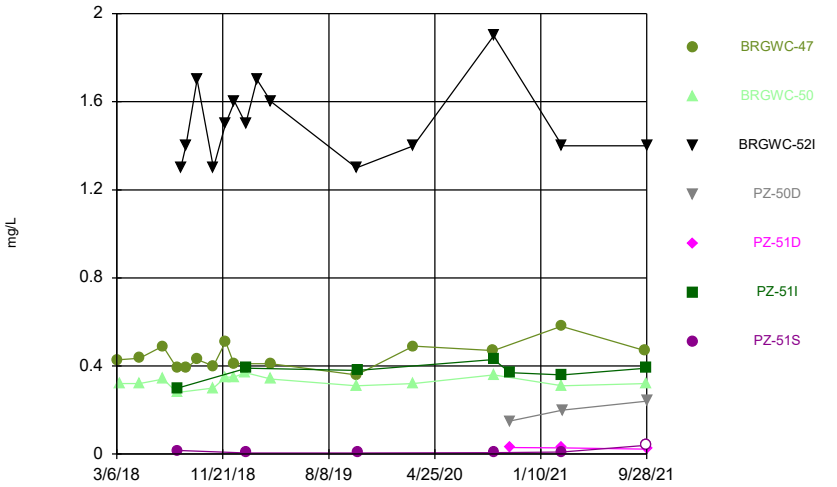

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Sanitas™ v.9.6.30f Sanitas software utilized by Groundwater Stats Consulting. UG

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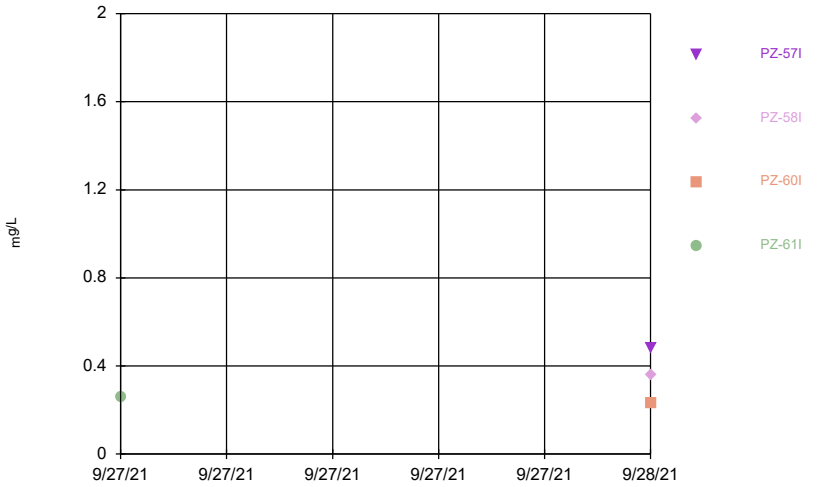

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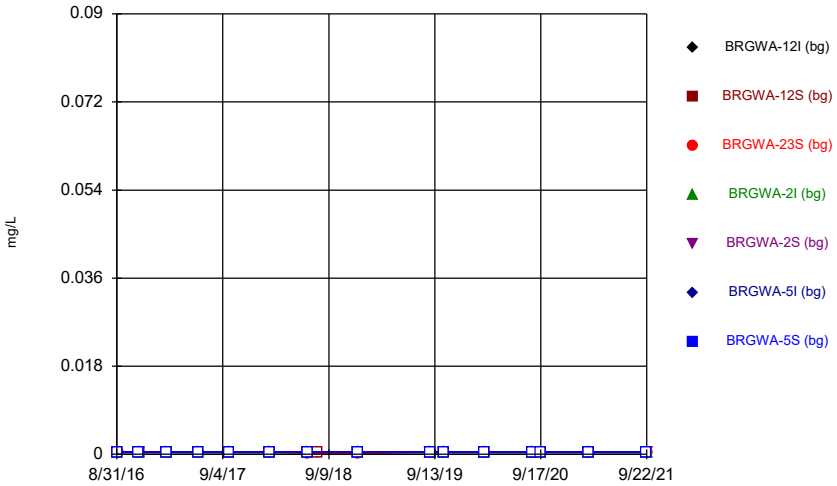
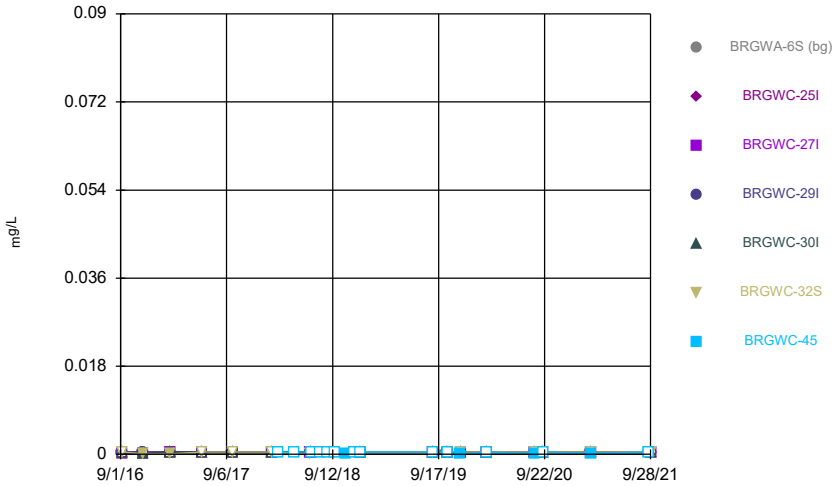
Time Series



Constituent: Cadmium Analysis Run 11/5/2021 6:56 AM View: Descriptive
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.30f Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

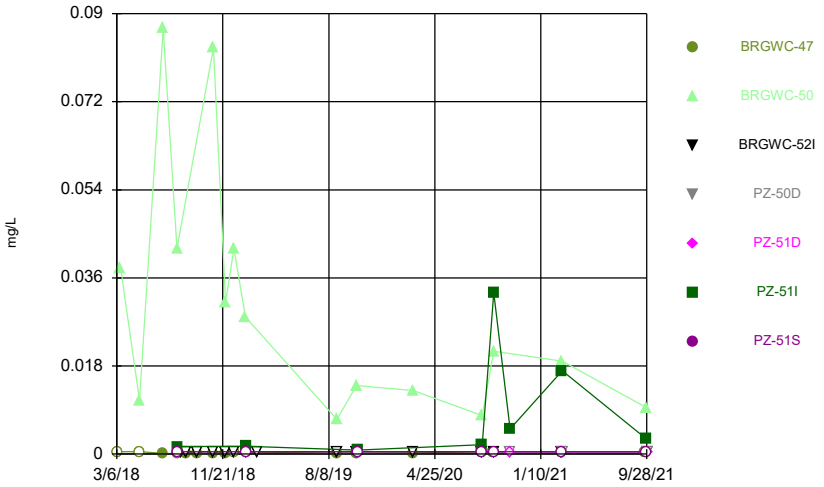
Time Series



Constituent: Cadmium Analysis Run 11/5/2021 6:56 AM View: Descriptive
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.30f Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

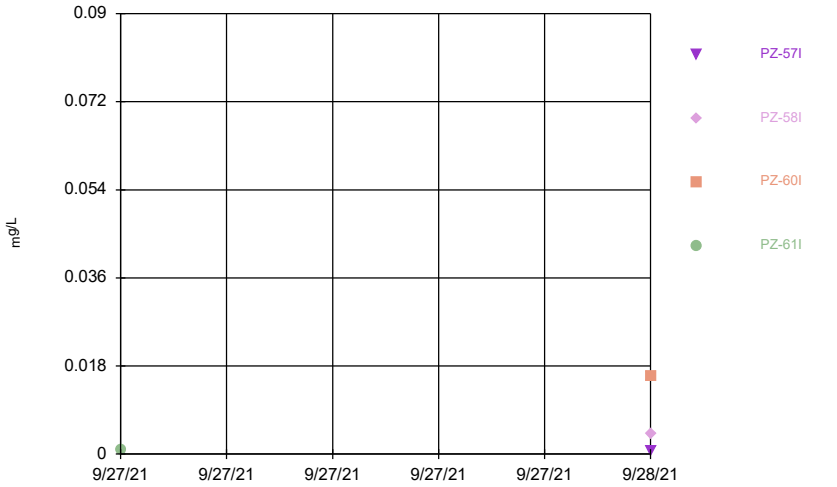
Time Series



Constituent: Cadmium Analysis Run 11/5/2021 6:56 AM View: Descriptive
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.30f Sanitas software utilized by Groundwater Stats Consulting. UG

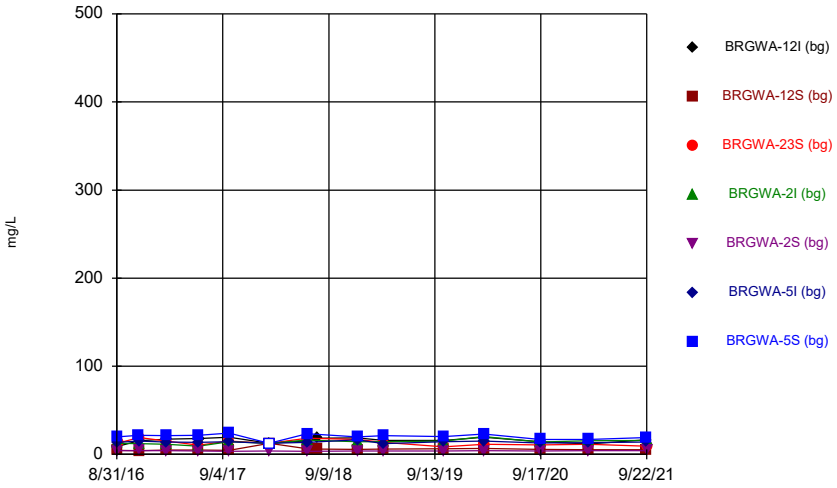
Time Series



Constituent: Cadmium Analysis Run 11/5/2021 6:56 AM View: Descriptive
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.30f Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

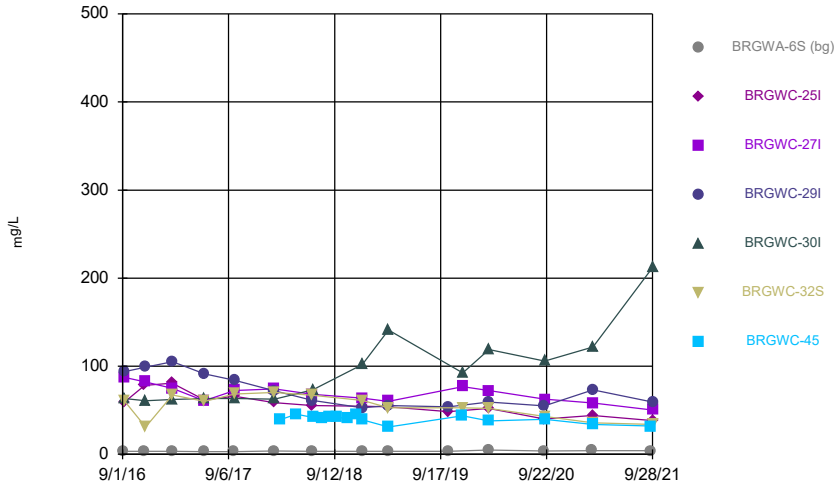
Time Series



Constituent: Calcium Analysis Run 11/5/2021 6:56 AM View: Descriptive
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.30f Sanitas software utilized by Groundwater Stats Consulting. UG

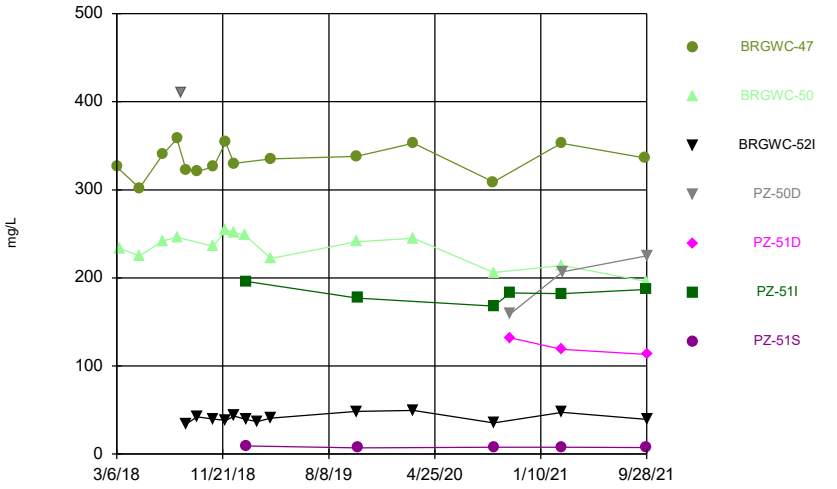
Time Series



Constituent: Calcium Analysis Run 11/5/2021 6:56 AM View: Descriptive
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.30f Sanitas software utilized by Groundwater Stats Consulting. UG

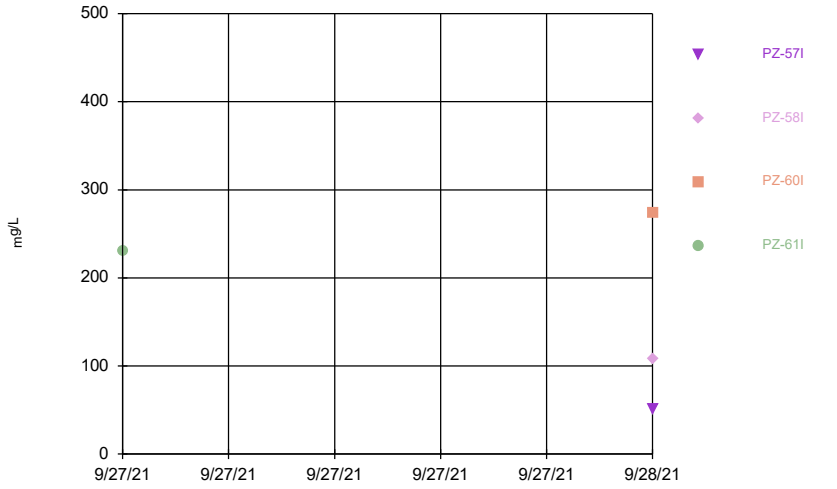
Time Series



Constituent: Calcium Analysis Run 11/5/2021 6:56 AM View: Descriptive
Plant Branch Client: Southern Company Data: Plant Branch AP

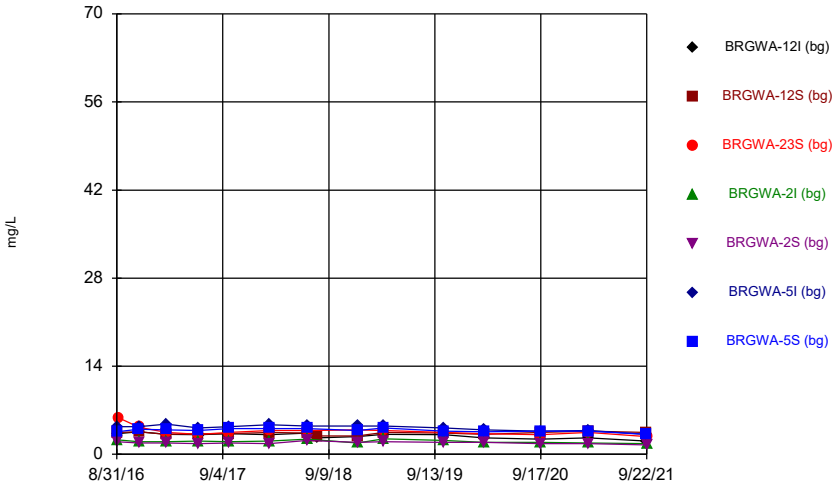
Sanitas™ v.9.6.30f Sanitas software utilized by Groundwater Stats Consulting. UG

Time Series



Constituent: Calcium Analysis Run 11/5/2021 6:56 AM View: Descriptive
Plant Branch Client: Southern Company Data: Plant Branch AP

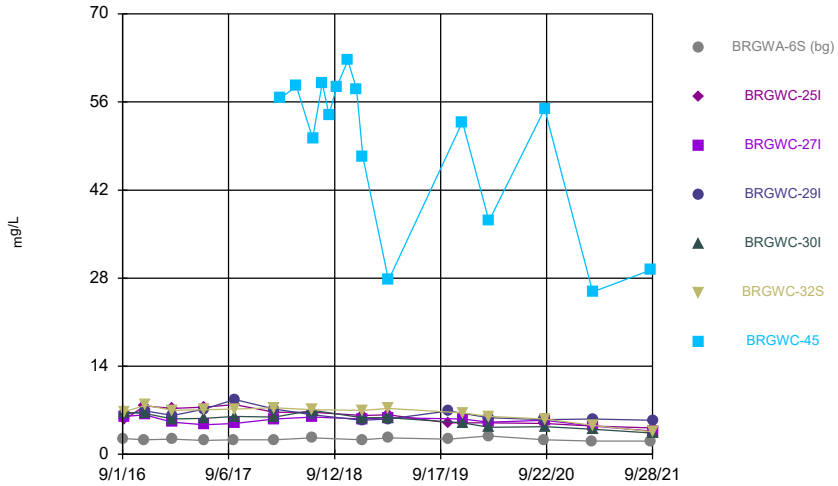
Time Series



Constituent: Chloride Analysis Run 11/5/2021 6:56 AM View: Descriptive
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.30f Sanitas software utilized by Groundwater Stats Consulting. UG

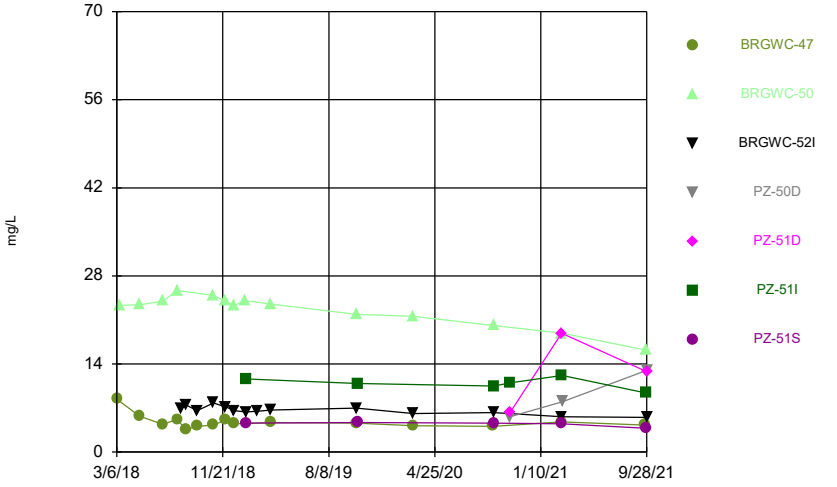
Time Series



Constituent: Chloride Analysis Run 11/5/2021 6:56 AM View: Descriptive
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.30f Sanitas software utilized by Groundwater Stats Consulting. UG

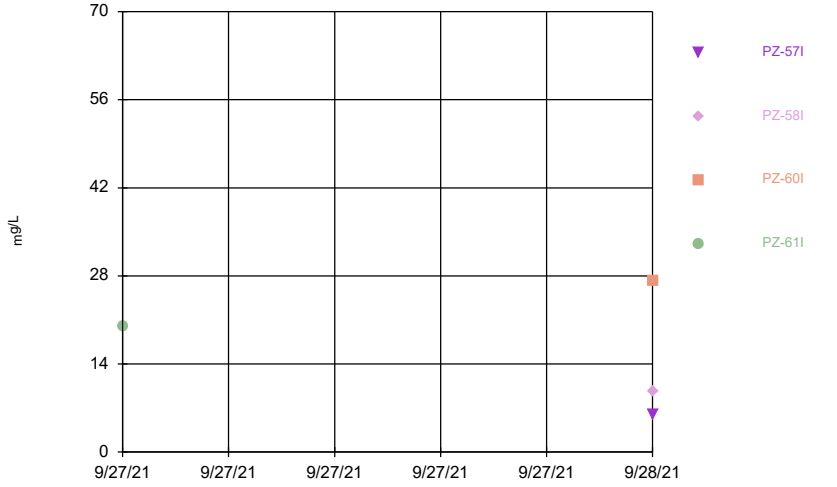
Time Series



Constituent: Chloride Analysis Run 11/5/2021 6:56 AM View: Descriptive
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.30f Sanitas software utilized by Groundwater Stats Consulting. UG

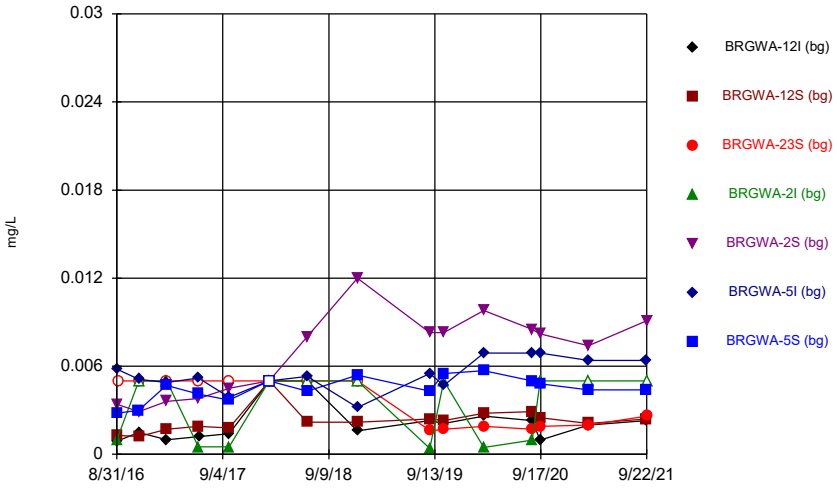
Time Series



Constituent: Chloride Analysis Run 11/5/2021 6:56 AM View: Descriptive
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.30f Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

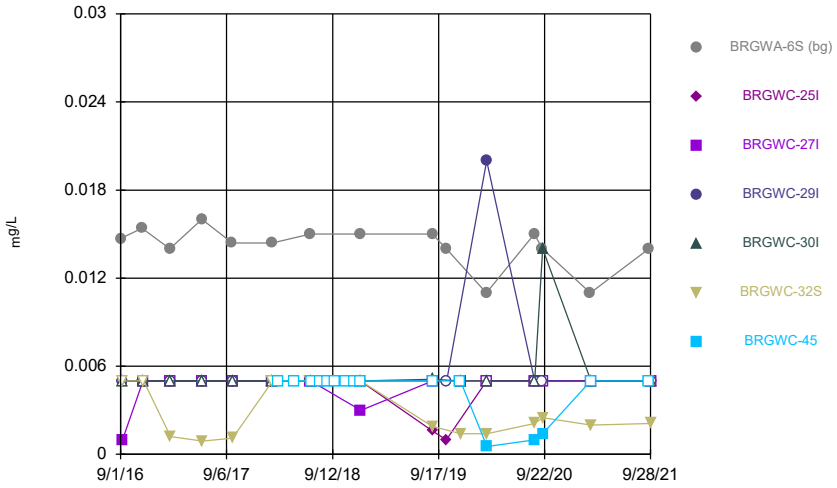
Time Series



Constituent: Chromium Analysis Run 11/5/2021 6:56 AM View: Descriptive
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.30f Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

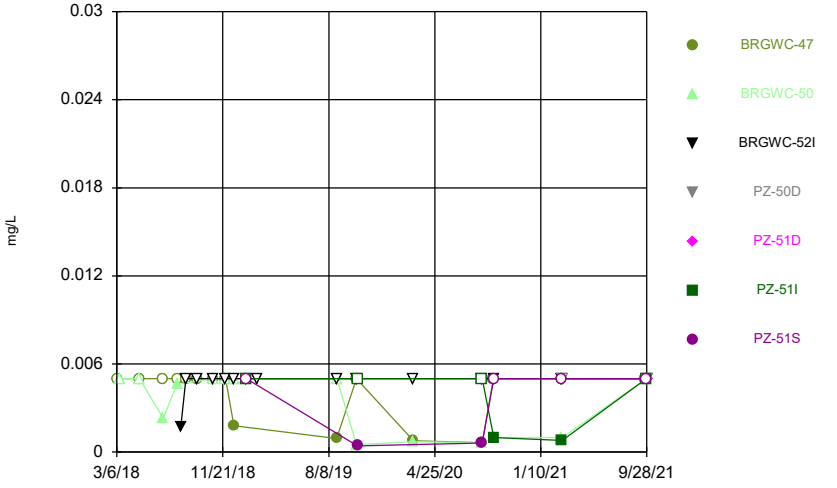
Time Series



Constituent: Chromium Analysis Run 11/5/2021 6:56 AM View: Descriptive
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.30f Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

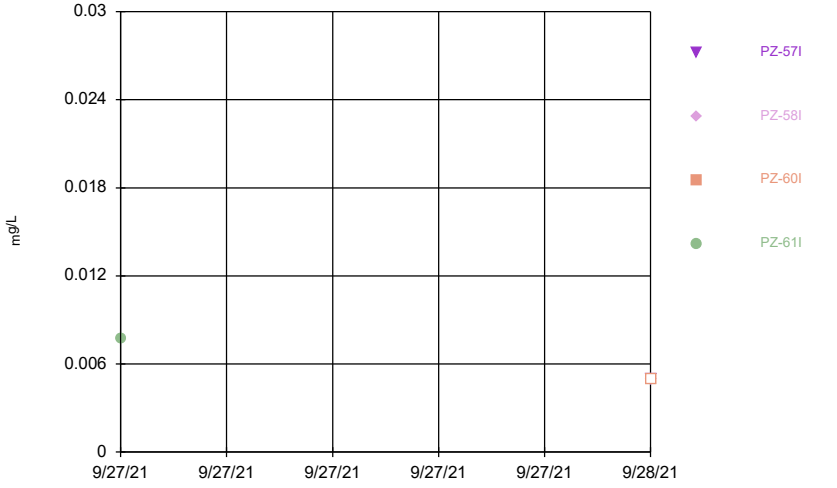
Time Series



Constituent: Chromium Analysis Run 11/5/2021 6:56 AM View: Descriptive
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.30f Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

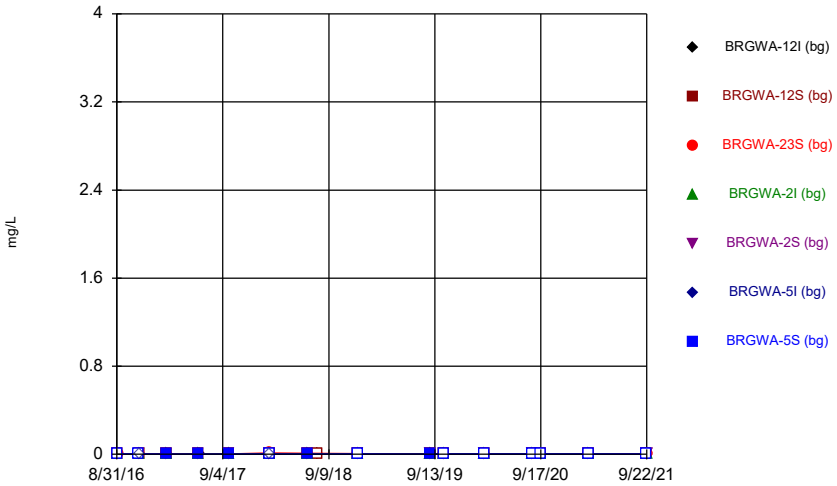
Time Series



Constituent: Chromium Analysis Run 11/5/2021 6:56 AM View: Descriptive
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.30f Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

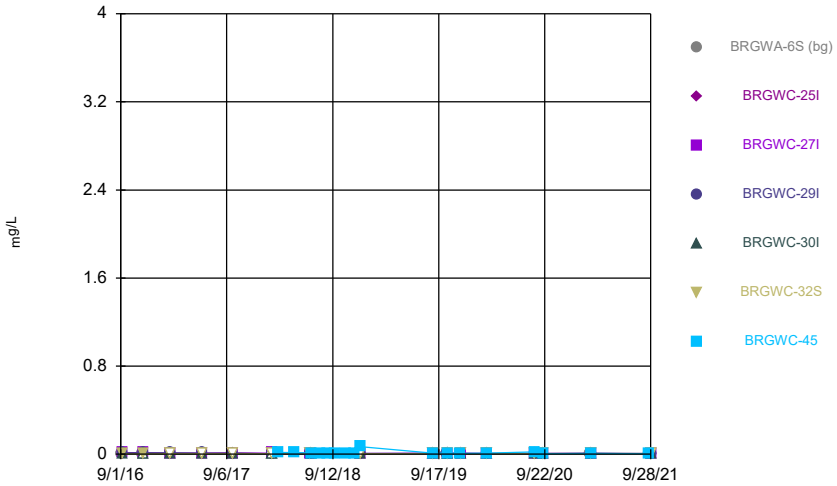
Time Series



Constituent: Cobalt Analysis Run 11/5/2021 6:56 AM View: Descriptive
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.30f Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

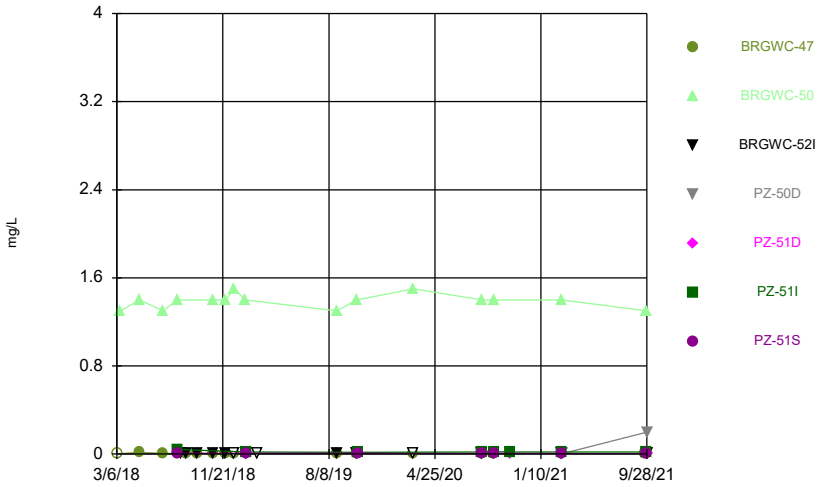
Time Series



Constituent: Cobalt Analysis Run 11/5/2021 6:56 AM View: Descriptive
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.30f Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

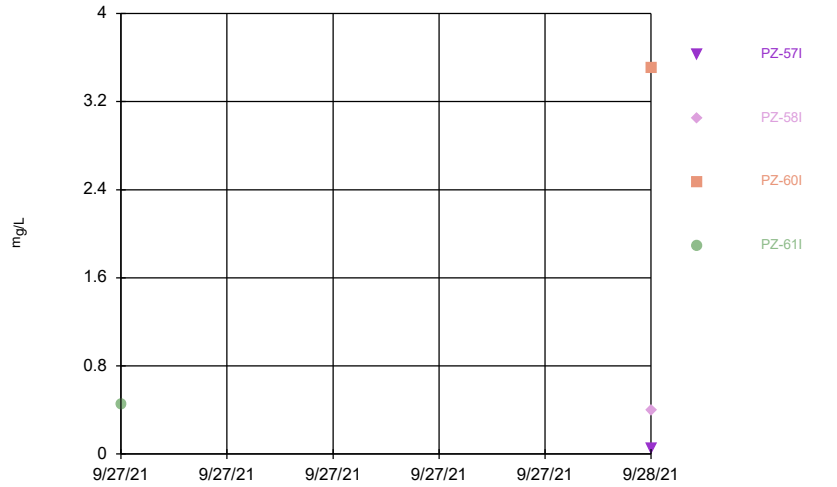
Time Series



Constituent: Cobalt Analysis Run 11/5/2021 6:56 AM View: Descriptive
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.30f Sanitas software utilized by Groundwater Stats Consulting. UG

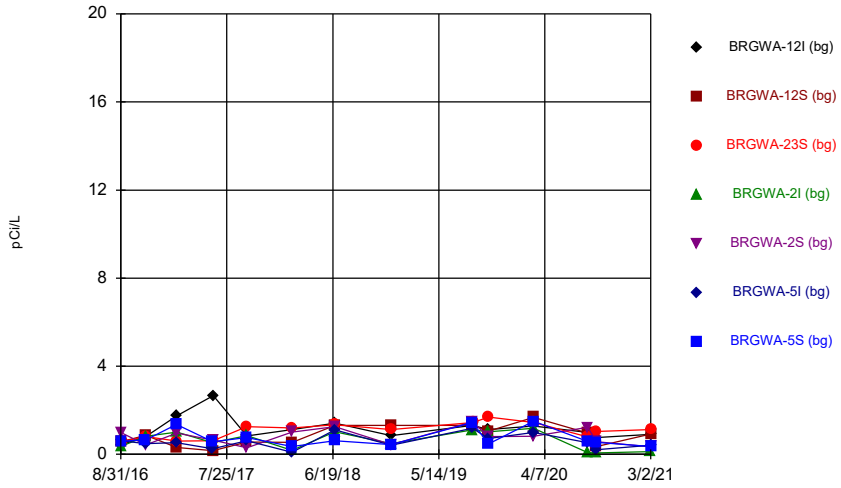
Time Series



Constituent: Cobalt Analysis Run 11/5/2021 6:56 AM View: Descriptive
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.30f Sanitas software utilized by Groundwater Stats Consulting. UG

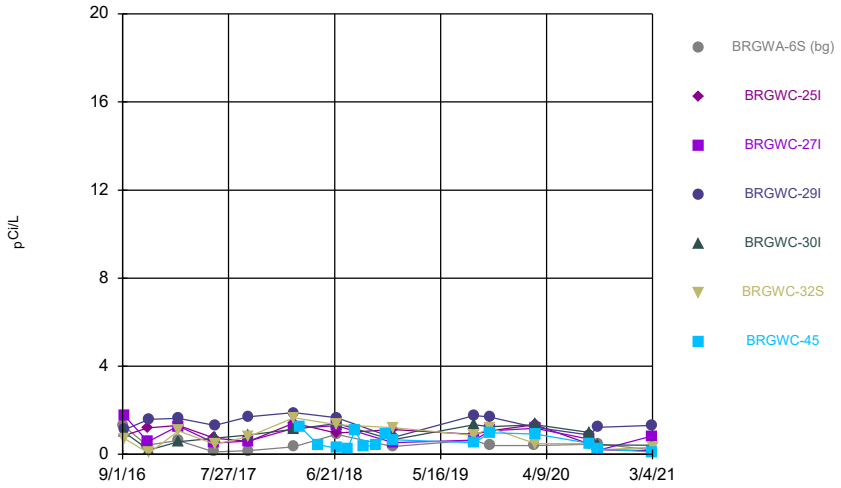
Time Series



Constituent: Combined Radium 226 + 228 Analysis Run 11/5/2021 6:56 AM View: Descriptive
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.30f Sanitas software utilized by Groundwater Stats Consulting. UG

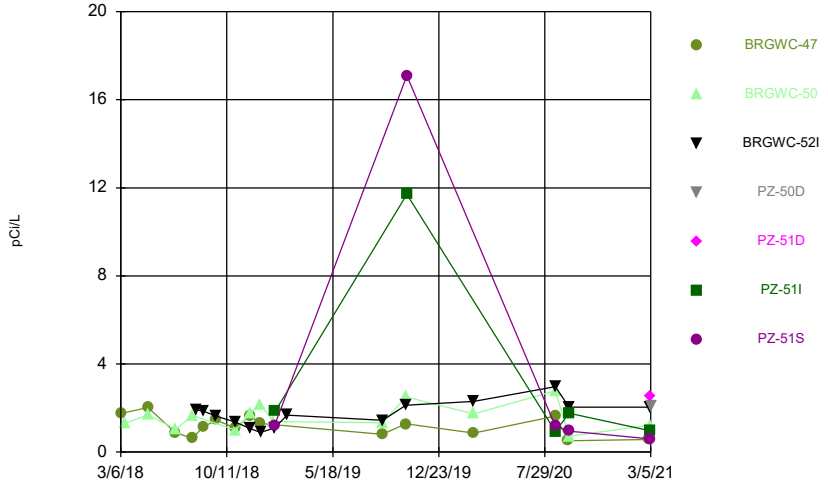
Time Series



Constituent: Combined Radium 226 + 228 Analysis Run 11/5/2021 6:56 AM View: Descriptive
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.30f Sanitas software utilized by Groundwater Stats Consulting. UG

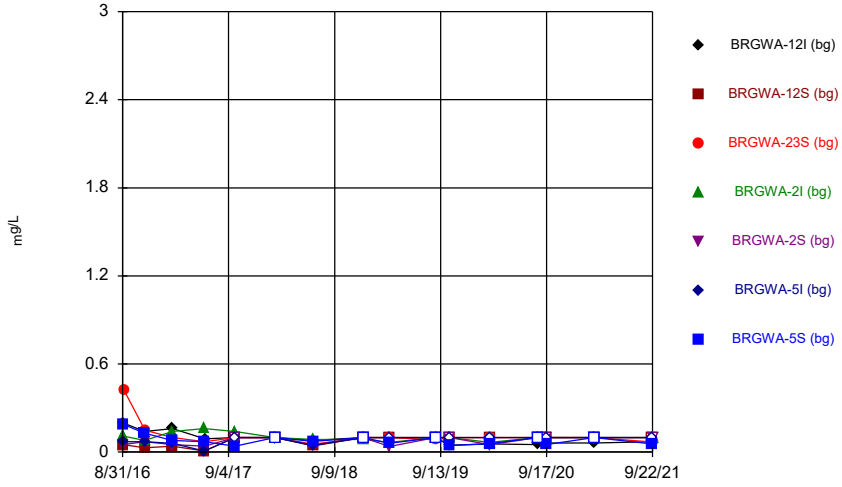
Time Series



Constituent: Combined Radium 226 + 228 Analysis Run 11/5/2021 6:56 AM View: Descriptive
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.30f Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

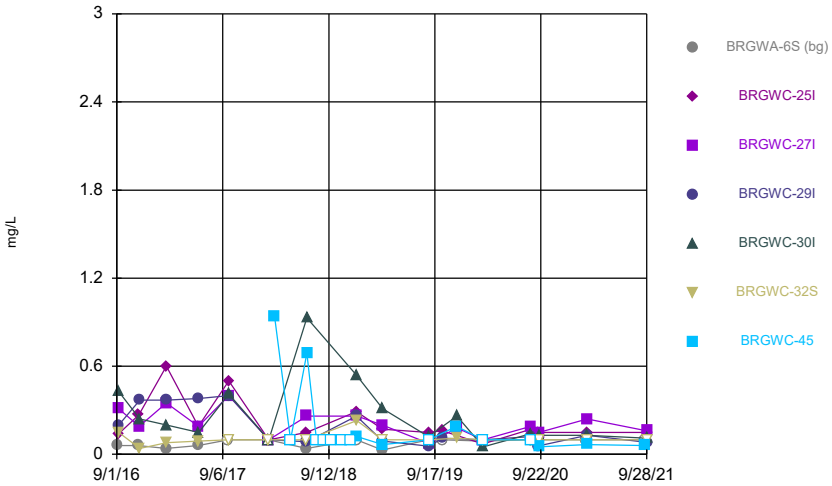
Time Series



Constituent: Fluoride Analysis Run 11/5/2021 6:56 AM View: Descriptive
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.30f Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

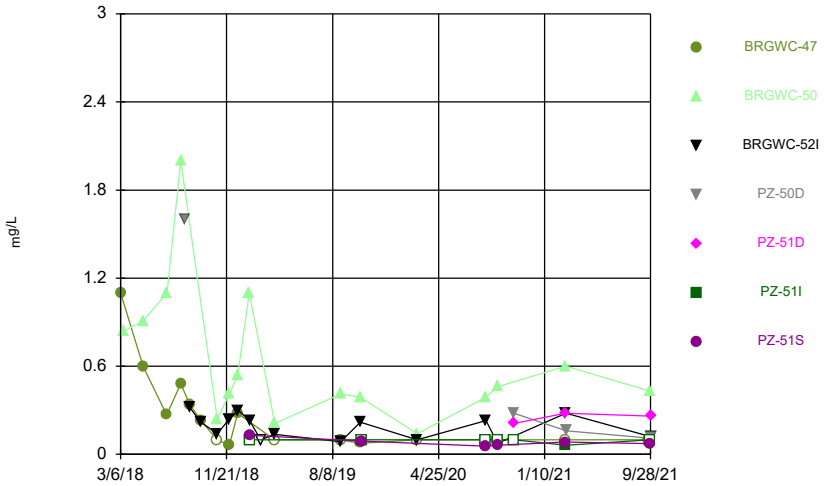
Time Series



Constituent: Fluoride Analysis Run 11/5/2021 6:56 AM View: Descriptive
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.30f Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

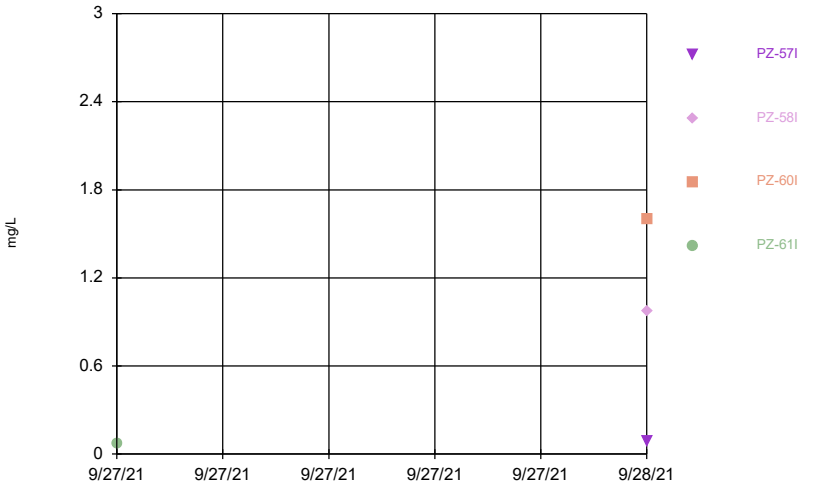
Time Series



Constituent: Fluoride Analysis Run 11/5/2021 6:56 AM View: Descriptive
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.30f Sanitas software utilized by Groundwater Stats Consulting. UG

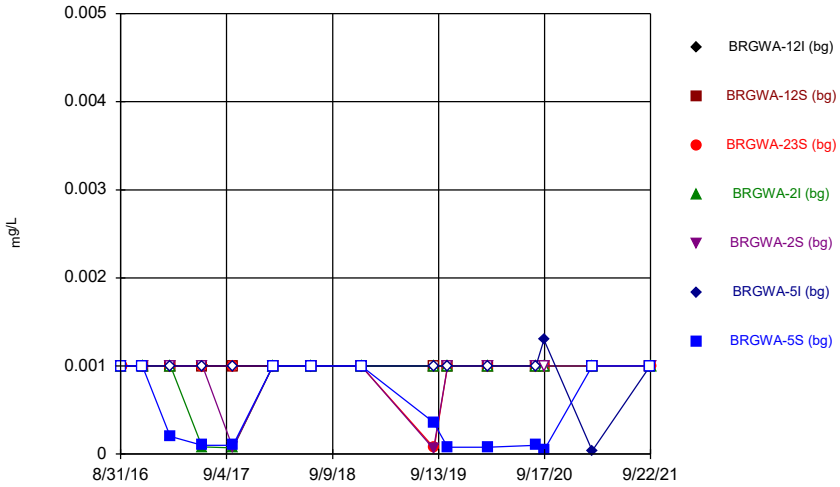
Time Series



Constituent: Fluoride Analysis Run 11/5/2021 6:56 AM View: Descriptive
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.30f Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

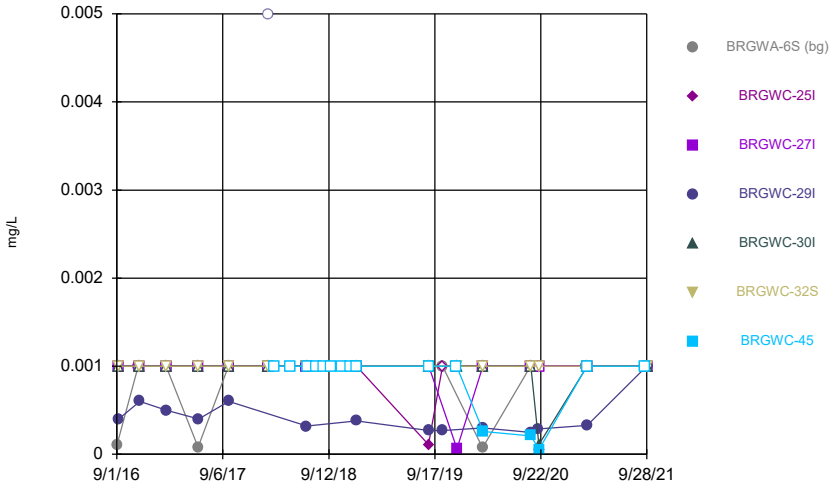
Time Series



Constituent: Lead Analysis Run 11/5/2021 6:56 AM View: Descriptive
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.30f Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

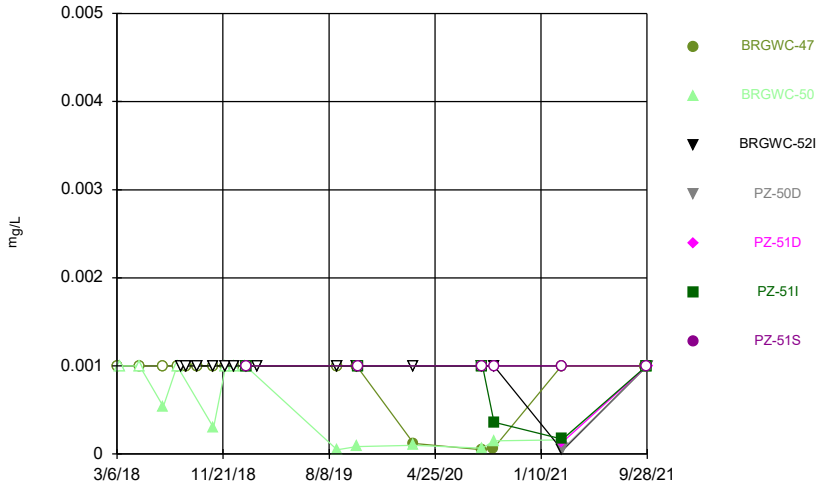
Time Series



Constituent: Lead Analysis Run 11/5/2021 6:56 AM View: Descriptive
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.30f Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

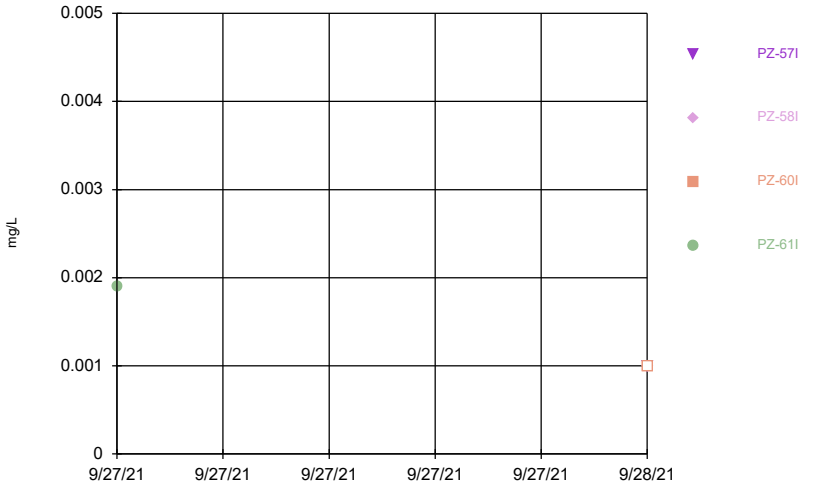
Time Series



Constituent: Lead Analysis Run 11/5/2021 6:56 AM View: Descriptive
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.30f Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

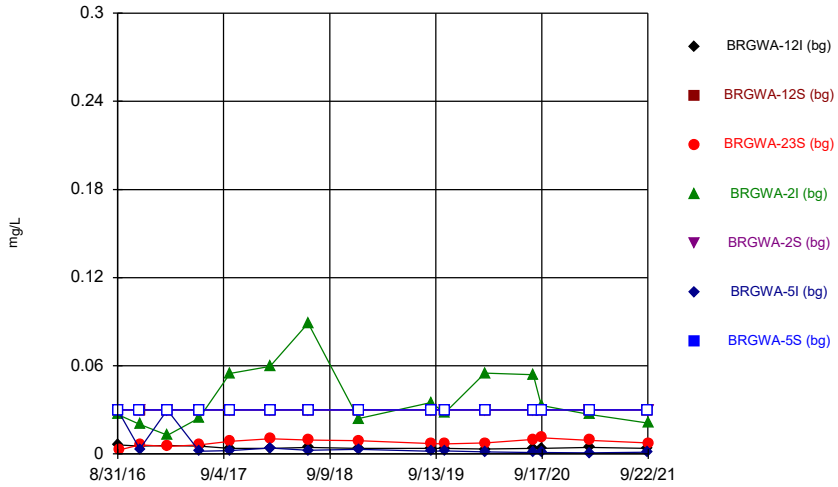
Time Series



Constituent: Lead Analysis Run 11/5/2021 6:56 AM View: Descriptive
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.30f Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

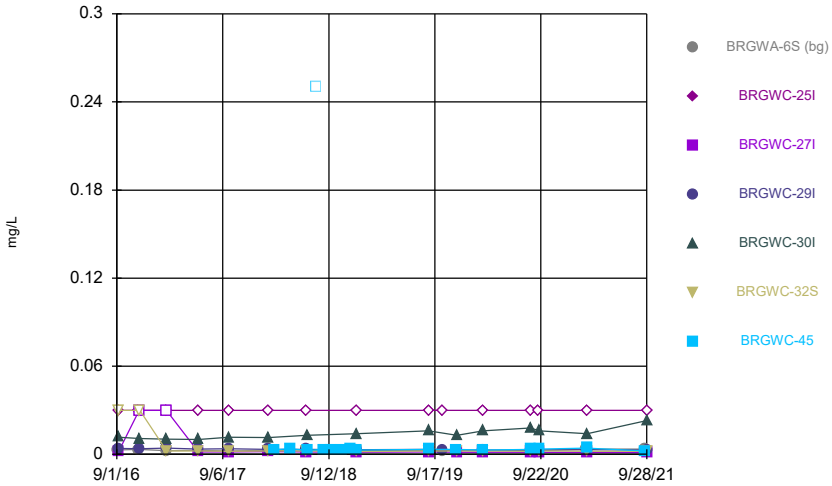
Time Series



Constituent: Lithium Analysis Run 11/5/2021 6:56 AM View: Descriptive
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.30f Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

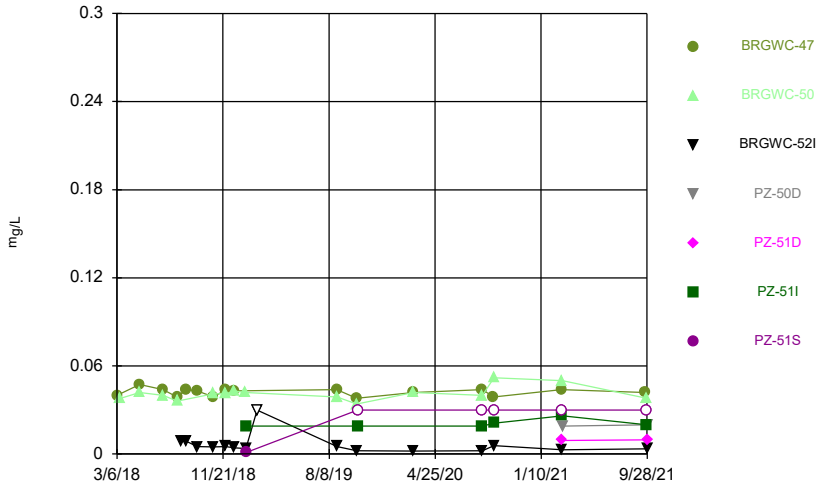
Time Series



Constituent: Lithium Analysis Run 11/5/2021 6:56 AM View: Descriptive
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.30f Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

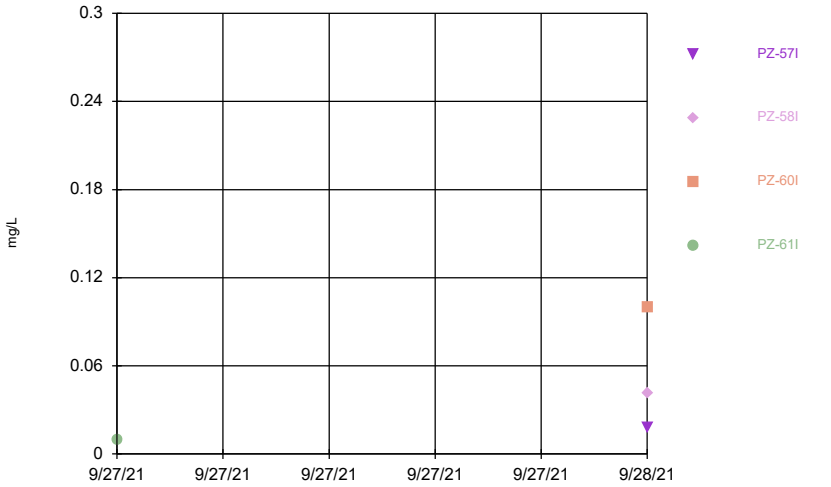
Time Series



Constituent: Lithium Analysis Run 11/5/2021 6:57 AM View: Descriptive
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.30f Sanitas software utilized by Groundwater Stats Consulting. UG

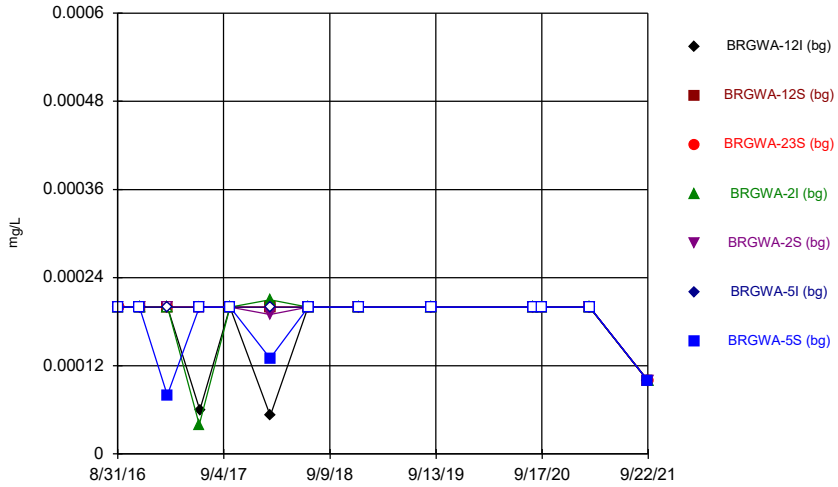
Time Series



Constituent: Lithium Analysis Run 11/5/2021 6:57 AM View: Descriptive
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.30f Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

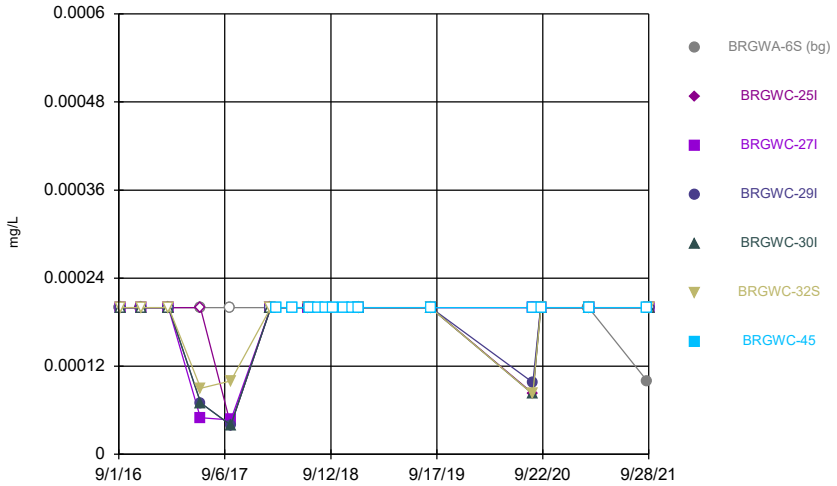
Time Series



Constituent: Mercury Analysis Run 11/5/2021 6:57 AM View: Descriptive
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.30f Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

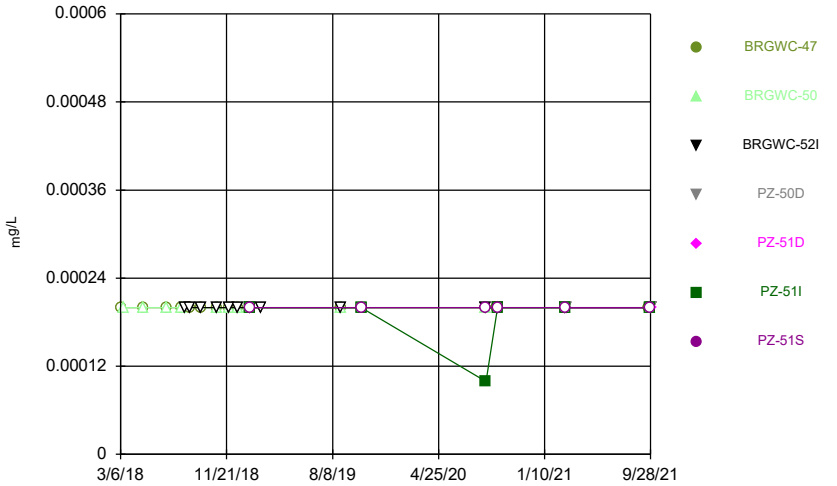
Time Series



Constituent: Mercury Analysis Run 11/5/2021 6:57 AM View: Descriptive
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.30f Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

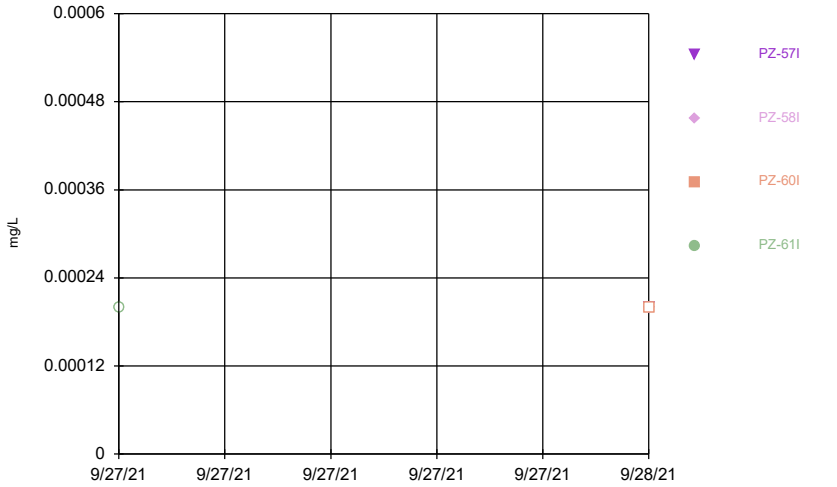
Time Series



Constituent: Mercury Analysis Run 11/5/2021 6:57 AM View: Descriptive
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.30f Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

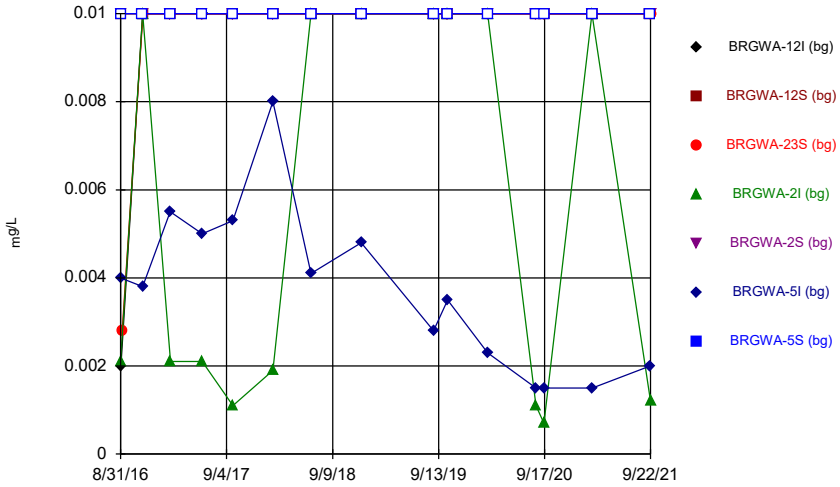
Time Series



Constituent: Mercury Analysis Run 11/5/2021 6:57 AM View: Descriptive
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.30f Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

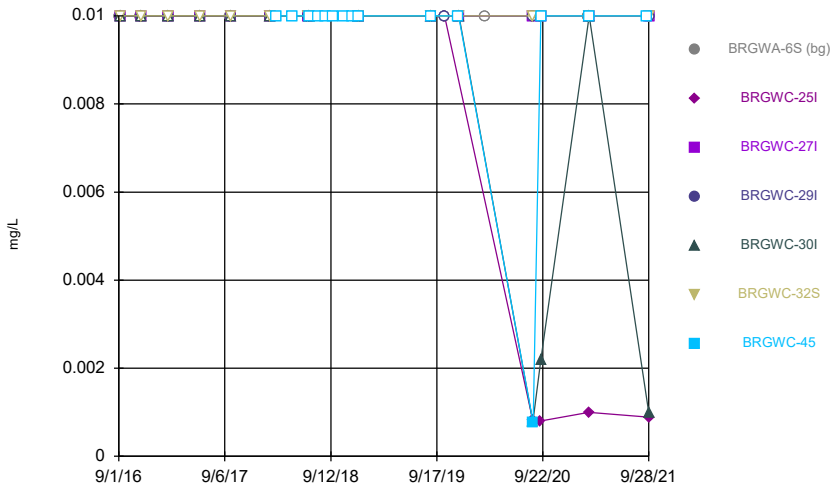
Time Series



Constituent: Molybdenum Analysis Run 11/5/2021 6:57 AM View: Descriptive
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.30f Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

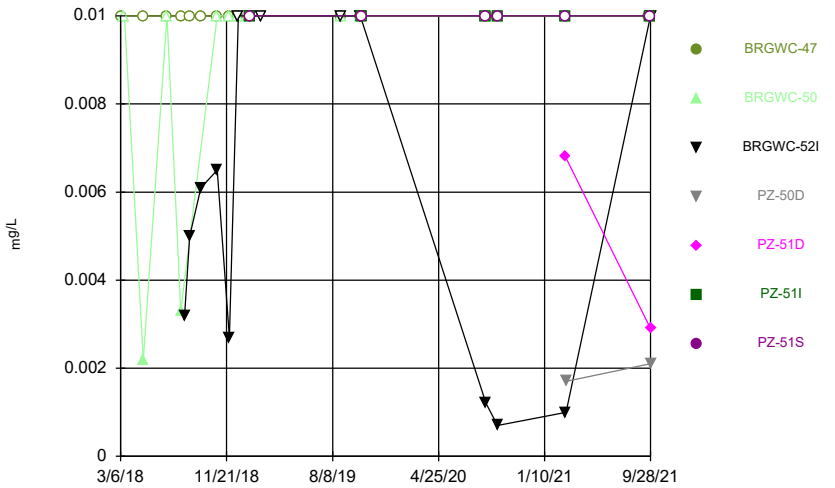
Time Series



Constituent: Molybdenum Analysis Run 11/5/2021 6:57 AM View: Descriptive
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.30f Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

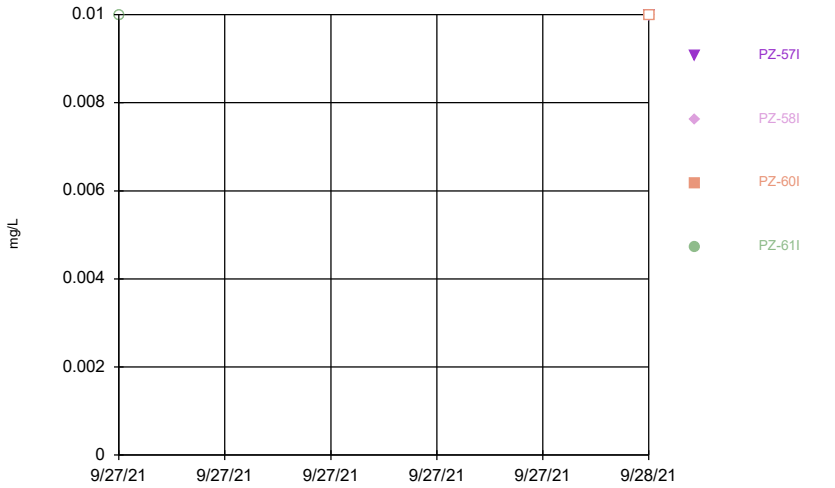
Time Series



Constituent: Molybdenum Analysis Run 11/5/2021 6:57 AM View: Descriptive
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.30f Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

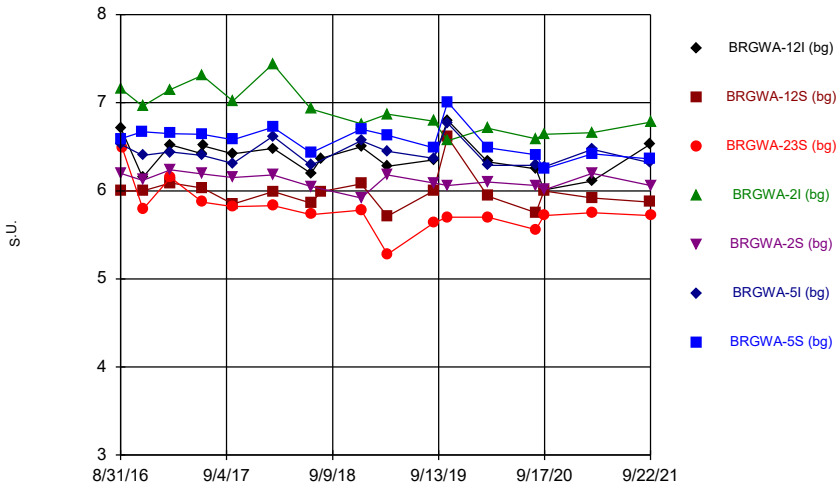
Time Series



Constituent: Molybdenum Analysis Run 11/5/2021 6:57 AM View: Descriptive
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.30f Sanitas software utilized by Groundwater Stats Consulting. UG

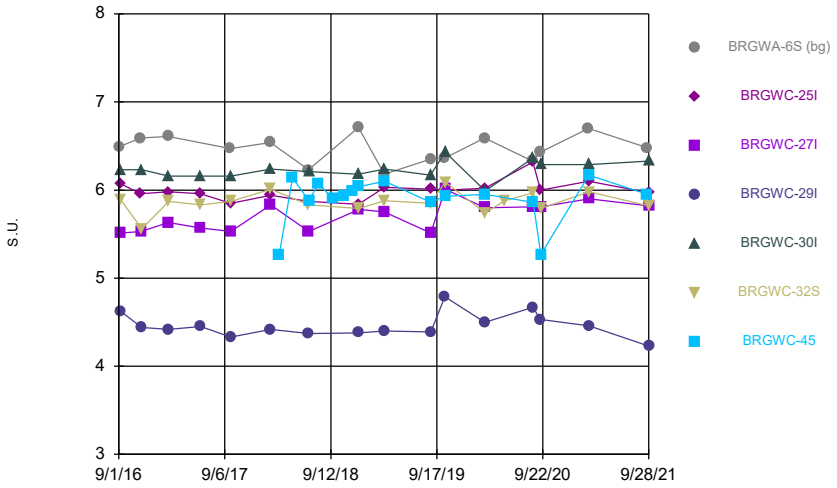
Time Series



Constituent: pH, Field Analysis Run 11/5/2021 6:57 AM View: Descriptive
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.30f Sanitas software utilized by Groundwater Stats Consulting. UG

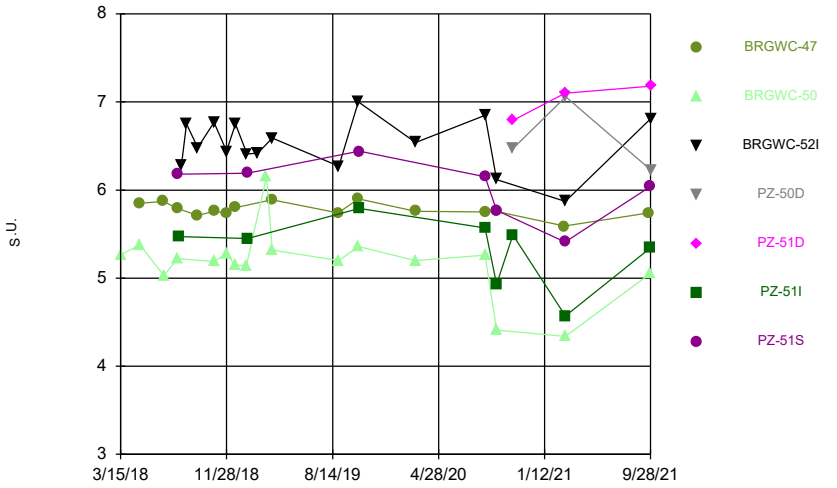
Time Series



Constituent: pH, Field Analysis Run 11/5/2021 6:57 AM View: Descriptive
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.30f Sanitas software utilized by Groundwater Stats Consulting. UG

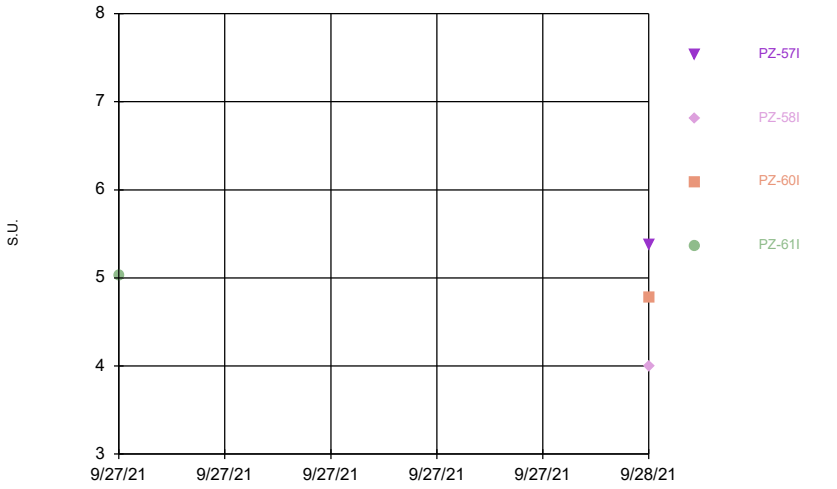
Time Series



Constituent: pH, Field Analysis Run 11/5/2021 6:57 AM View: Descriptive
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.30f Sanitas software utilized by Groundwater Stats Consulting. UG

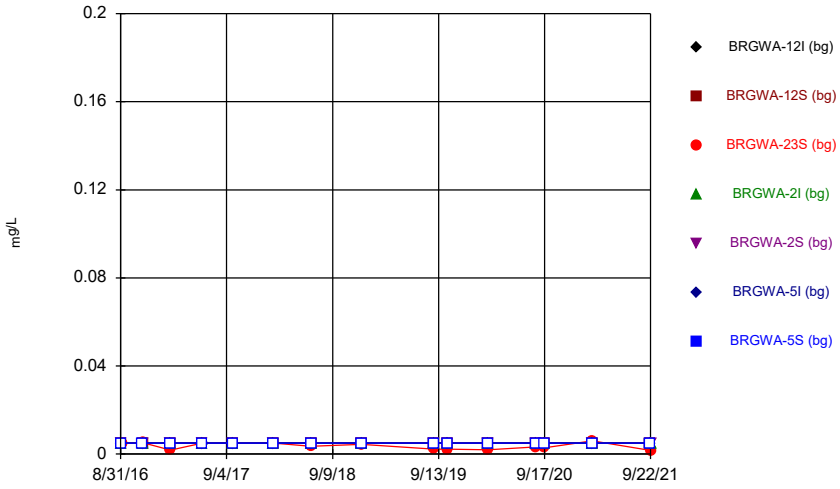
Time Series



Constituent: pH, Field Analysis Run 11/5/2021 6:57 AM View: Descriptive
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.30f Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

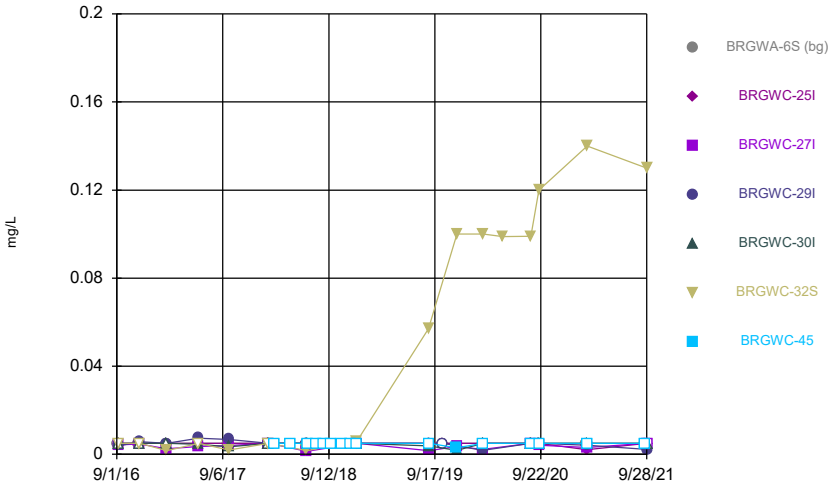
Time Series



Constituent: Selenium Analysis Run 11/5/2021 6:57 AM View: Descriptive
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.30f Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

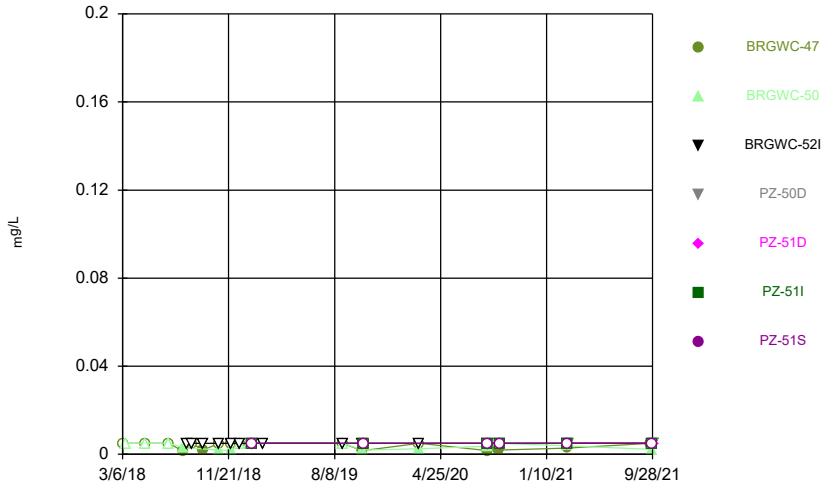
Time Series



Constituent: Selenium Analysis Run 11/5/2021 6:57 AM View: Descriptive
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.30f Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

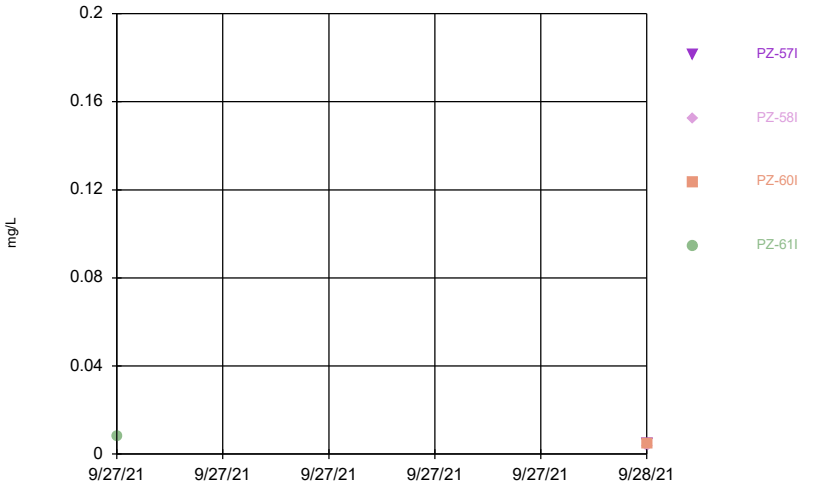
Time Series



Constituent: Selenium Analysis Run 11/5/2021 6:57 AM View: Descriptive
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.30f Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

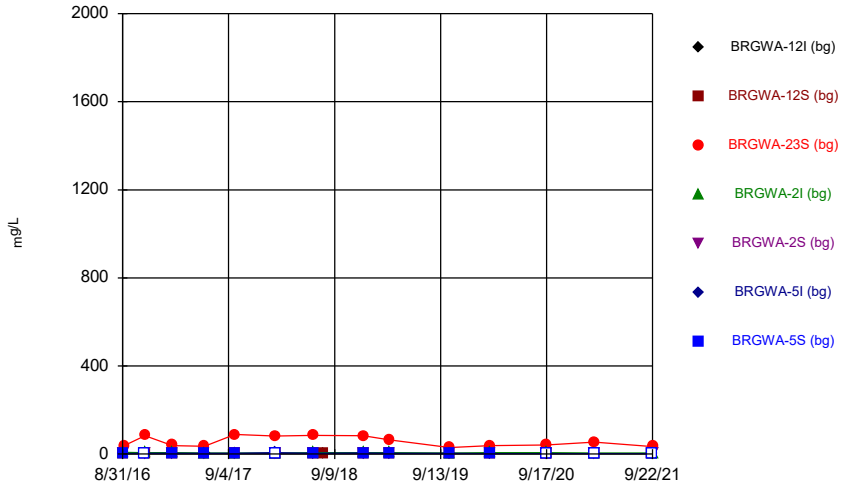
Time Series



Constituent: Selenium Analysis Run 11/5/2021 6:57 AM View: Descriptive
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.30f Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

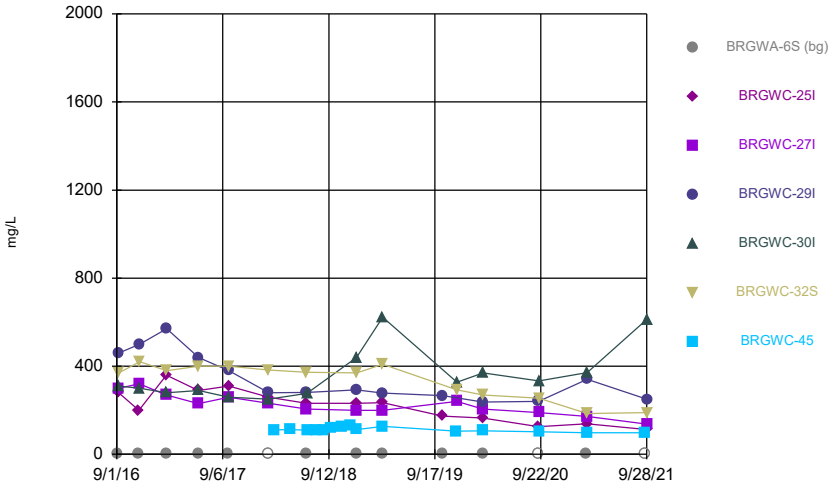
Time Series



Constituent: Sulfate Analysis Run 11/5/2021 6:57 AM View: Descriptive
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.30f Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

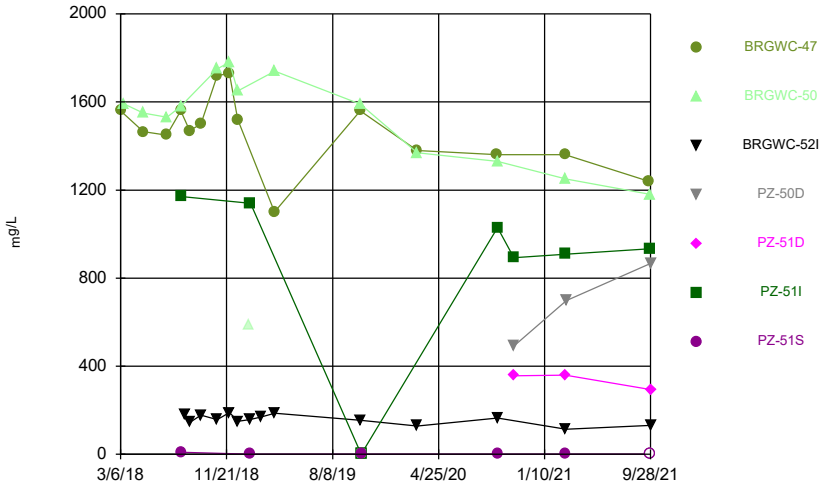
Time Series



Constituent: Sulfate Analysis Run 11/5/2021 6:57 AM View: Descriptive
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.30f Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

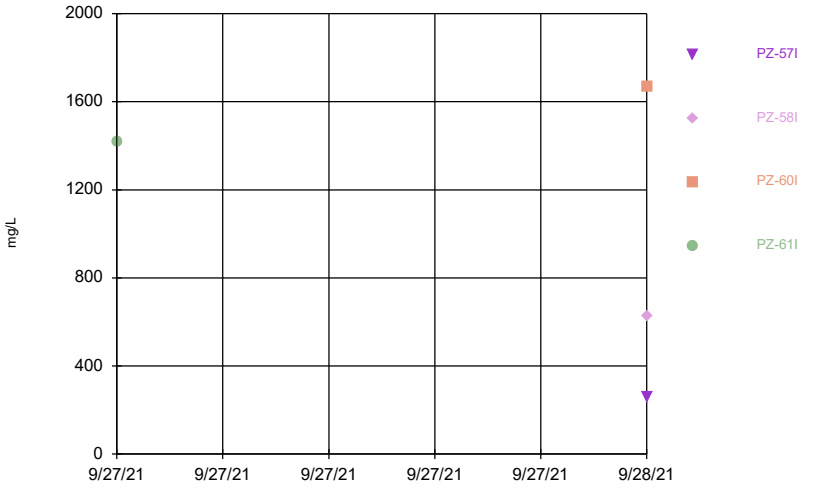
Time Series



Constituent: Sulfate Analysis Run 11/5/2021 6:57 AM View: Descriptive
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.30f Sanitas software utilized by Groundwater Stats Consulting. UG

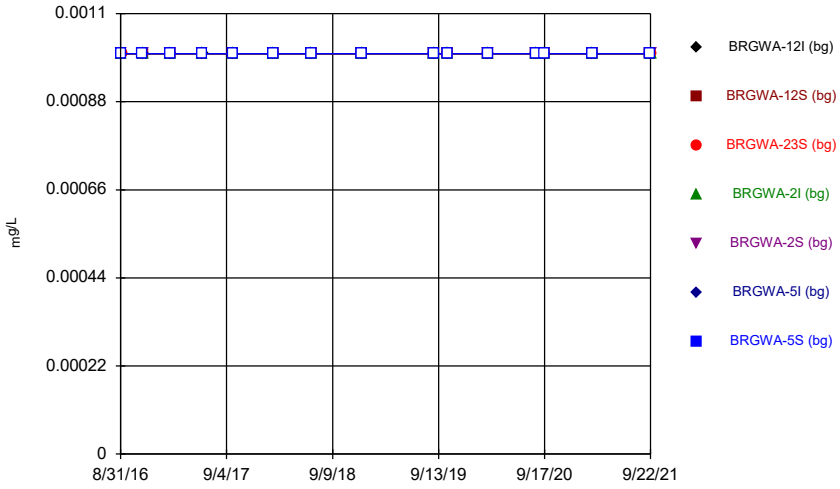
Time Series



Constituent: Sulfate Analysis Run 11/5/2021 6:57 AM View: Descriptive
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.30f Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

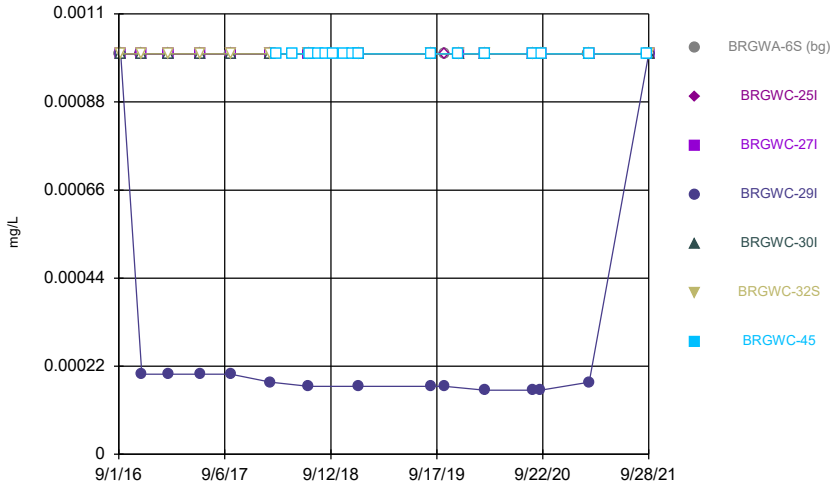
Time Series



Constituent: Thallium Analysis Run 11/5/2021 6:57 AM View: Descriptive
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.30f Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

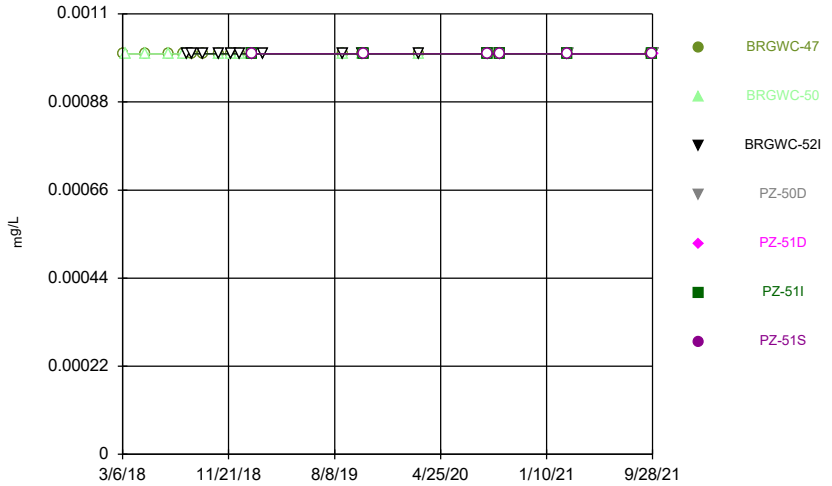
Time Series



Constituent: Thallium Analysis Run 11/5/2021 6:57 AM View: Descriptive
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.30f Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

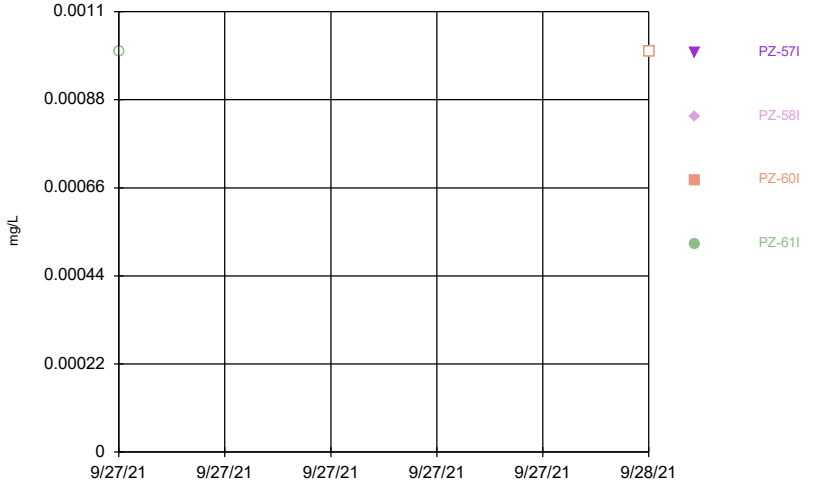
Time Series



Constituent: Thallium Analysis Run 11/5/2021 6:57 AM View: Descriptive
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.30f Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

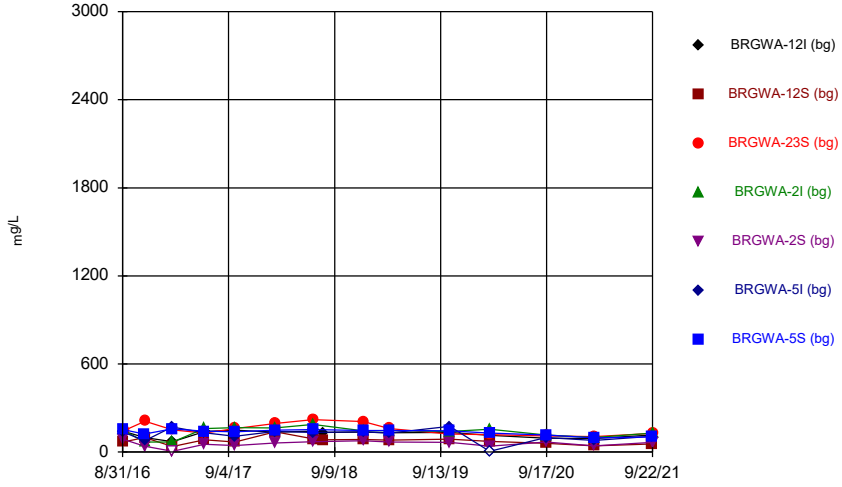
Time Series



Constituent: Thallium Analysis Run 11/5/2021 6:57 AM View: Descriptive
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.30f Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

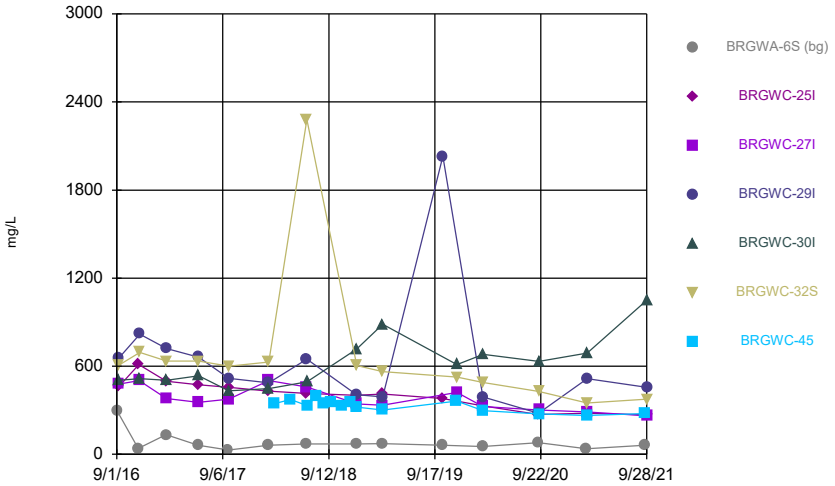
Time Series



Constituent: Total Dissolved Solids Analysis Run 11/5/2021 6:57 AM View: Descriptive
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.30f Sanitas software utilized by Groundwater Stats Consulting. UG

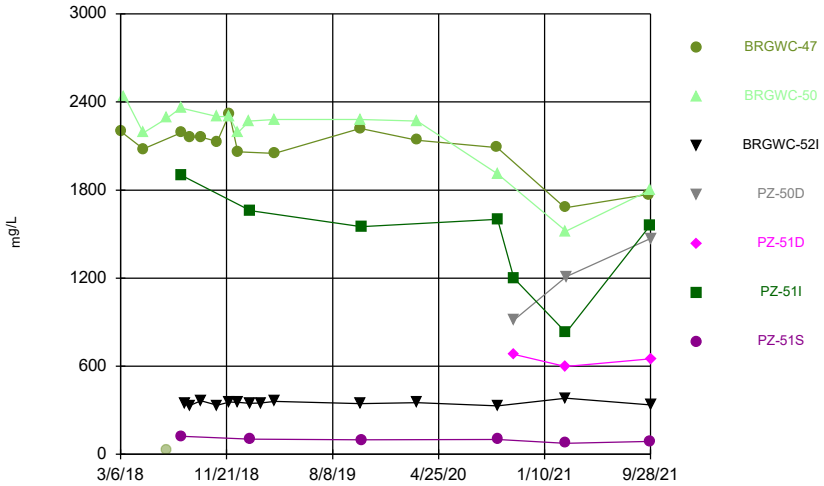
Time Series



Constituent: Total Dissolved Solids Analysis Run 11/5/2021 6:57 AM View: Descriptive
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.30f Sanitas software utilized by Groundwater Stats Consulting. UG

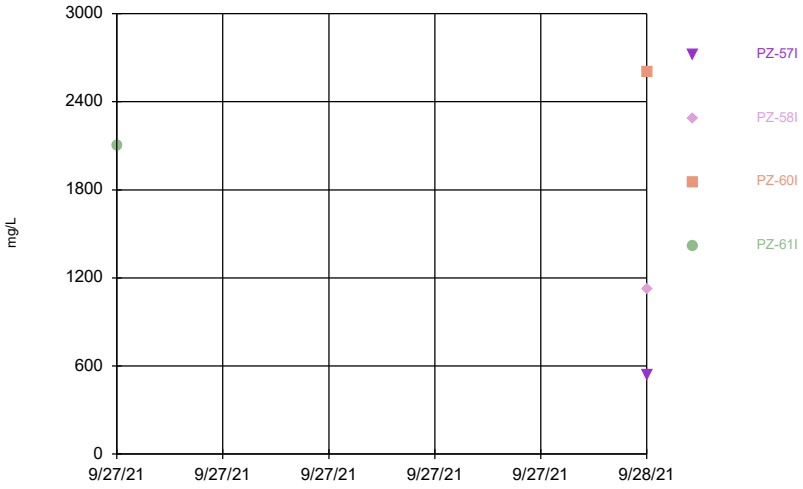
Time Series



Constituent: Total Dissolved Solids Analysis Run 11/5/2021 6:57 AM View: Descriptive
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.30f Sanitas software utilized by Groundwater Stats Consulting. UG

Time Series



Constituent: Total Dissolved Solids Analysis Run 11/5/2021 6:57 AM View: Descriptive
Plant Branch Client: Southern Company Data: Plant Branch AP

Time Series

Constituent: Antimony (mg/L) Analysis Run 11/5/2021 7:02 AM View: Descriptive

Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWA-12I (bg)	BRGWA-12S (bg)	BRGWA-23S (bg)	BRGWA-2I (bg)	BRGWA-2S (bg)	BRGWA-5I (bg)	BRGWA-5S (bg)	BRGWA-6S (bg)	BRGWC-25I
8/31/2016				0.0009 (J)	<0.003	<0.003	<0.003		
9/1/2016	0.0015 (J)	<0.003						<0.003	
9/6/2016			<0.003						
9/8/2016									<0.003
11/15/2016							<0.003	<0.003	
11/16/2016	<0.003	0.0011 (J)		<0.003	<0.003	<0.003			
11/17/2016			<0.003						<0.003
2/20/2017						<0.003	<0.003	<0.003	
2/21/2017	<0.003	<0.003	<0.003	<0.003	<0.003				<0.003
6/12/2017				<0.003		<0.003	<0.003	<0.003	
6/13/2017		0.0009 (J)	<0.003		0.0011 (J)				<0.003
6/14/2017	0.0014 (J)								
9/26/2017	<0.003	0.0032	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	
9/27/2017									<0.003
2/13/2018				<0.003	<0.003	<0.003	<0.003	<0.003	
2/14/2018	<0.003	<0.003	<0.003						<0.003
6/26/2018	<0.003	<0.003	0.002 (J)	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
12/18/2018	0.009	<0.003	<0.003	<0.003	<0.003	<0.003	0.00087 (J)	<0.003	<0.003
8/27/2019	0.0072	<0.003		<0.003	<0.003	<0.003	<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	<0.003	<0.003	<0.003	<0.003
3/3/2020	0.0063	<0.003		<0.003	<0.003	<0.003	<0.003	<0.003	
3/4/2020			<0.003						<0.003
8/18/2020	0.0067	<0.003	<0.003	0.00054 (J)	0.00042 (J)	<0.003	0.0016 (J)	<0.003	
8/19/2020									<0.003
9/15/2020	0.01	<0.003	0.00033 (J)	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
3/1/2021				<0.003				<0.003	
3/2/2021	0.0095	<0.003	<0.003		<0.003	<0.003	<0.003		<0.003
9/21/2021	0.017	<0.003				<0.003	<0.003		
9/22/2021			<0.003	<0.003	<0.003			<0.003	
9/28/2021									<0.003

Time Series

Constituent: Antimony (mg/L) Analysis Run 11/5/2021 7:02 AM View: Descriptive
Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWC-27I	BRGWC-29I	BRGWC-30I	BRGWC-32S	BRGWC-45	BRGWC-47	BRGWC-50	BRGWC-52I	PZ-50D
9/6/2016			<0.003						
9/8/2016	<0.003	<0.003		<0.003					
11/18/2016	<0.003								
11/21/2016		<0.003	<0.003	<0.003					
2/21/2017	<0.003								
2/22/2017		<0.003	<0.003	<0.003					
6/13/2017	<0.003								
6/14/2017		0.0007 (J)	<0.003	<0.003					
9/27/2017	<0.003	<0.003	<0.003	<0.003					
2/14/2018	<0.003	<0.003	<0.003	<0.003					
3/6/2018					<0.003	<0.003			
3/15/2018							<0.003		
5/1/2018					<0.003	<0.003 (D)	<0.003		
6/27/2018	<0.003	<0.003		<0.003		<0.003			
6/28/2018			<0.003		<0.003		<0.003		
7/31/2018					<0.003				
8/1/2018						<0.003	<0.003		
8/10/2018								<0.003	
8/23/2018					<0.003	<0.003		0.00085 (J)	
9/19/2018					<0.003	<0.003		<0.003	
10/29/2018					<0.003	<0.003	<0.003	<0.003	
11/28/2018					<0.003	<0.003	<0.003	<0.003	
12/18/2018		<0.003	<0.003						
12/19/2018				<0.003		<0.003	<0.003		
12/20/2018	<0.003				0.0024 (J)			<0.003	
1/16/2019							<0.003		
1/17/2019								<0.003	
2/13/2019								<0.003	
8/27/2019			<0.003	<0.003					
8/28/2019	<0.003	<0.003			0.00046 (J)	<0.003			
8/29/2019							0.00052 (J)	<0.003	
10/16/2019		<0.003				<0.003	<0.003	<0.003	
12/3/2019					0.00088 (J)				
12/4/2019	<0.003		<0.003	<0.003					
3/4/2020	<0.003	<0.003				<0.003	<0.003	0.00043 (J)	
3/5/2020			<0.003	0.0014 (J)	0.0016 (J)				
8/19/2020	<0.003	<0.003	<0.003	<0.003					
8/20/2020					0.0031	<0.003	<0.003	<0.003	
9/15/2020		<0.003							
9/16/2020	<0.003		<0.003	<0.003	0.0012 (J)	0.00035 (J)			
9/17/2020							0.00041 (J)	<0.003	
3/2/2021					0.0014 (J)	<0.003			
3/3/2021	<0.003	<0.003	<0.003						
3/4/2021				<0.003			0.00092 (J)	0.00091 (J)	
3/5/2021									0.00056 (J)
9/23/2021					<0.003	<0.003			
9/27/2021							<0.003		
9/28/2021	<0.003	<0.003	<0.003	<0.003				<0.003	<0.003

Time Series

Constituent: Antimony (mg/L) Analysis Run 11/5/2021 7:02 AM View: Descriptive

Plant Branch Client: Southern Company Data: Plant Branch AP

	PZ-51D	PZ-51I	PZ-51S	PZ-57I	PZ-58I	PZ-60I	PZ-61I
1/18/2019			<0.003				
1/19/2019		<0.003					
10/18/2019		<0.003	<0.003				
8/20/2020		0.0017 (J)	<0.003				
9/17/2020		<0.003	0.00043 (J)				
3/3/2021	0.0013 (J)		0.0018 (J)				
3/4/2021		0.00079 (J)					
9/27/2021		0.0012 (J)	<0.003				<0.003
9/28/2021	<0.003			<0.003	<0.003	<0.003	

Time Series

Constituent: Arsenic (mg/L) Analysis Run 11/5/2021 7:02 AM View: Descriptive

Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWA-12I (bg)	BRGWA-12S (bg)	BRGWA-23S (bg)	BRGWA-2I (bg)	BRGWA-2S (bg)	BRGWA-5I (bg)	BRGWA-5S (bg)	BRGWA-6S (bg)	BRGWC-25I
8/31/2016				<0.005	<0.005	<0.005	<0.005		
9/1/2016	<0.005	<0.005						<0.005	
9/6/2016			<0.005						
9/8/2016									<0.005
11/15/2016							<0.005	<0.005	
11/16/2016	<0.005	<0.005		<0.005	<0.005	<0.005			
11/17/2016			<0.005						<0.005
2/20/2017						<0.005	<0.005	<0.005	
2/21/2017	<0.005	<0.005	<0.005	<0.005	<0.005				<0.005
6/12/2017				0.0007 (J)		0.0007 (J)	0.0006 (J)	<0.005	
6/13/2017		<0.005	0.0008 (J)		<0.005				0.0006 (J)
6/14/2017	0.0009 (J)								
9/26/2017	0.0012 (J)	0.0006 (J)	0.0012 (J)	0.001 (J)	<0.005	0.0009 (J)	0.0007 (J)	0.0007 (J)	
9/27/2017									<0.005
2/13/2018				<0.005	<0.005	<0.005	<0.005	<0.005	
2/14/2018	<0.005	<0.005	0.0007 (J)						<0.005
6/26/2018	<0.005	<0.005	0.00062 (J)	0.00062 (J)	<0.005	<0.005	<0.005	<0.005	0.00072 (J)
12/18/2018	<0.005	<0.005	<0.005	<0.005	<0.005 (X)	<0.005 (X)	<0.005 (X)	<0.005 (X)	0.00091 (J)
8/27/2019	<0.005	<0.005		<0.005	<0.005	<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)	0.00058 (J)	0.00039 (J)	<0.005	0.00052 (J)
3/3/2020	0.0023 (J)	0.0015 (J)		0.0027 (J)	0.00098 (J)	0.0024 (J)	0.0027 (J)	0.0018 (J)	
3/4/2020			<0.005						<0.005
8/18/2020	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	
8/19/2020									<0.005
9/15/2020	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
3/1/2021				<0.005				<0.005	
3/2/2021	<0.005	<0.005	<0.005		<0.005	<0.005	<0.005		<0.005
9/21/2021	<0.005	<0.005				<0.005	<0.005		
9/22/2021			<0.005	<0.005	<0.005			<0.005	
9/28/2021									<0.005

Time Series

Constituent: Arsenic (mg/L) Analysis Run 11/5/2021 7:02 AM View: Descriptive

Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWC-27I	BRGWC-29I	BRGWC-30I	BRGWC-32S	BRGWC-45	BRGWC-47	BRGWC-50	BRGWC-52I	PZ-50D
9/6/2016			<0.005						
9/8/2016	<0.005	<0.005		<0.005					
11/18/2016	<0.005								
11/21/2016		0.0019 (J)	<0.005	<0.005					
2/21/2017	<0.005								
2/22/2017		<0.005	<0.005	<0.005					
6/13/2017	0.0009 (J)								
6/14/2017		0.002 (J)	<0.005	<0.005					
9/27/2017	0.0007 (J)	0.0016 (J)	<0.005	<0.005					
2/14/2018	<0.005	<0.005	<0.005	<0.005					
3/6/2018					<0.005 (X)	<0.005 (X)			
3/15/2018							0.0014 (J)		
5/1/2018					0.0021 (J)	0.0018 (JD)	<0.005		
6/27/2018	<0.005	<0.005		<0.005		0.0016 (J)			
6/28/2018			<0.005 (X)		<0.005 (X)		<0.005		
7/31/2018					<0.005				
8/1/2018						0.0028 (J)	0.00074 (J)		
8/10/2018								<0.005	
8/23/2018					0.00075 (J)	<0.005		<0.005	
9/19/2018					<0.005	<0.005		0.0013 (J)	
10/29/2018					<0.005	0.0012 (J)	<0.005	0.0038 (J)	
11/28/2018					0.00096 (J)	0.0019 (J)	<0.005	0.0016 (J)	
12/18/2018		<0.005	<0.005						
12/19/2018				<0.005		0.00075 (J)	<0.005		
12/20/2018	<0.005				<0.005			0.0032 (J)	
1/16/2019							<0.005		
1/17/2019								0.0032 (J)	
2/13/2019								<0.005	
8/27/2019			<0.005	<0.005					
8/28/2019	0.0014 (J)	0.00051 (J)			0.00058 (J)	0.0018 (J)			
8/29/2019							<0.005	0.00067 (J)	
10/16/2019		0.00065 (J)				<0.005	<0.005	0.0026 (J)	
12/3/2019					0.0007 (J)				
12/4/2019	0.0011 (J)		0.00056 (J)	0.00053 (J)					
3/4/2020	<0.005	0.00044 (J)				0.00049 (J)	0.00046 (J)	0.0047 (J)	
3/5/2020			<0.005	<0.005	<0.005				
8/19/2020	<0.005	<0.005	<0.005	<0.005					
8/20/2020					<0.005	0.00089 (J)	<0.005	0.0031 (J)	
9/15/2020		<0.005							
9/16/2020	<0.005		<0.005	<0.005	<0.005	<0.005			
9/17/2020							<0.005	<0.005	
3/2/2021					<0.005	<0.005			
3/3/2021	<0.005	0.0015 (J)	<0.005						
3/4/2021				<0.005			<0.005	0.003 (J)	
3/5/2021									0.00087 (J)
9/23/2021					<0.005	0.002 (J)			
9/27/2021							<0.005		
9/28/2021	<0.005	<0.005	<0.005	<0.005				<0.005	<0.005

Time Series

Constituent: Arsenic (mg/L) Analysis Run 11/5/2021 7:02 AM View: Descriptive

Plant Branch Client: Southern Company Data: Plant Branch AP

	PZ-51D	PZ-51I	PZ-51S	PZ-57I	PZ-58I	PZ-60I	PZ-61I
1/18/2019			<0.005				
1/19/2019		<0.005					
10/18/2019		<0.005	<0.005				
8/20/2020		<0.005	<0.005				
9/17/2020		<0.005	<0.005				
3/3/2021	0.0014 (J)		<0.005				
3/4/2021		<0.005					
9/27/2021		<0.005	<0.005				0.0023 (J)
9/28/2021	<0.005			<0.005	<0.005	<0.005	

Time Series

Constituent: Barium (mg/L) Analysis Run 11/5/2021 7:02 AM View: Descriptive

Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWA-12I (bg)	BRGWA-12S (bg)	BRGWA-23S (bg)	BRGWA-2I (bg)	BRGWA-2S (bg)	BRGWA-5I (bg)	BRGWA-5S (bg)	BRGWA-6S (bg)	BRGWC-25I
8/31/2016				0.0239	0.0099 (J)	0.0273	0.0495		
9/1/2016	0.0454	0.0528						0.0142	
9/6/2016			0.0624						
9/8/2016									0.0378
11/15/2016							0.0512	0.0126	
11/16/2016	0.0623	0.0509		0.0147	0.0102	0.0365			
11/17/2016			0.109						0.0448
2/20/2017						0.0336	0.0586	0.0142	
2/21/2017	0.0644	0.0531	0.095	0.0109	0.0094 (J)				0.0447
6/12/2017				0.0094 (J)		0.0322	0.0567	0.0134	
6/13/2017		0.0543	0.0861		0.0094 (J)				0.0351
6/14/2017	0.0726								
9/26/2017	0.0765	0.0547	0.104	0.0156	0.0096 (J)	0.0364	0.0586	0.0133	
9/27/2017									0.0383
2/13/2018				0.0134	0.0102	0.054	0.054	0.0145	
2/14/2018	0.0786	0.0603	0.129						0.0327
6/26/2018	0.063	0.059	0.13	0.014	0.0093 (J)	0.032	0.063	0.014	0.031
12/18/2018	0.067	0.056	0.13	0.0076 (J)	0.01	0.038	0.045	0.013	0.03
8/27/2019	0.058	0.057		0.012	0.0095 (J)	0.028	0.056	0.013	0.027
8/29/2019			0.076						
10/15/2019	0.06	0.053	0.069	0.013	0.0091 (J)	0.032	0.049	0.013	0.027
3/3/2020	0.076	0.06		0.017	0.011	0.028	0.051	0.019	
3/4/2020			0.087						0.026
8/18/2020	0.053	0.058	0.067	0.01 (J)	0.01	0.022	0.04	0.014	
8/19/2020									0.027
9/15/2020	0.059	0.058	0.086	0.0083 (J)	0.0094 (J)	0.022	0.038	0.013	0.024
3/1/2021				0.0074				0.016	
3/2/2021	0.053	0.063	0.097		0.0094	0.023	0.037		0.026
9/21/2021	0.074	0.06				0.025	0.038		
9/22/2021			0.07	0.0075	0.0097			0.014	
9/28/2021									0.023

Time Series

Constituent: Barium (mg/L) Analysis Run 11/5/2021 7:02 AM View: Descriptive

Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWC-27I	BRGWC-29I	BRGWC-30I	BRGWC-32S	BRGWC-45	BRGWC-47	BRGWC-50	BRGWC-52I	PZ-50D
9/6/2016			0.0206						
9/8/2016	0.0184	0.0199		0.0593					
11/18/2016	0.0173								
11/21/2016		0.0221 (J)	0.0237 (J)	0.0532 (BR)					
2/21/2017	0.015								
2/22/2017		0.0179	0.0219	0.0498					
6/13/2017	0.0143								
6/14/2017		0.0157	0.0197	0.0421					
9/27/2017	0.017	0.0165	0.0213	0.0411					
2/14/2018	0.0166	0.0163	0.0236	0.0417					
3/6/2018					0.1	0.0519			
3/15/2018							0.021		
5/1/2018					0.084	0.057 (D)	0.024		
6/27/2018	0.015	0.017		0.038		0.046			
6/28/2018			0.023		0.067		0.021		
7/31/2018					0.087 (J+X)				
8/1/2018						0.043 (J+X)	0.02 (J+X)		
8/10/2018								0.038	
8/23/2018					0.084	0.038		0.03 (JX)	
9/19/2018					0.086	0.036		0.03	
10/29/2018					0.098 (J+X)	0.041 (J+X)	0.019 (J+X)	0.025 (J+X)	
11/28/2018					0.11	0.039	0.02	0.017	
12/18/2018		0.017	0.029						
12/19/2018				0.036		0.04	0.02		
12/20/2018	0.015				0.093			0.013	
1/16/2019							0.02		
1/17/2019								0.017	
2/13/2019								0.025	
8/27/2019			0.027	0.032					
8/28/2019	0.019	0.02			0.11	0.035			
8/29/2019							0.018	0.017	
10/16/2019		0.019				0.032	0.017	0.015	
12/3/2019					0.099				
12/4/2019	0.016		0.021	0.028					
3/4/2020	0.015	0.018				0.038	0.019	0.022	
3/5/2020			0.025	0.026	0.078				
8/19/2020	0.016	0.019	0.026	0.025					
8/20/2020					0.083	0.035	0.019	0.017	
9/15/2020		0.017							
9/16/2020	0.016		0.022	0.024	0.085	0.028			
9/17/2020							0.02	0.02	
3/2/2021					0.061	0.036			
3/3/2021	0.016	0.021	0.028						
3/4/2021				0.024			0.025	0.019	
3/5/2021									0.043
9/23/2021					0.064	0.031			
9/27/2021							0.017		
9/28/2021	0.013	0.017	0.035	0.02				0.013	0.034

Time Series

Constituent: Barium (mg/L) Analysis Run 11/5/2021 7:02 AM View: Descriptive

Plant Branch Client: Southern Company Data: Plant Branch AP

	PZ-51D	PZ-51I	PZ-51S	PZ-57I	PZ-58I	PZ-60I	PZ-61I
1/18/2019			0.031				
1/19/2019		0.017					
10/18/2019		0.014	0.032				
8/20/2020		0.013	0.03				
9/17/2020		0.015	0.033				
3/3/2021	0.08		0.037				
3/4/2021		0.016					
9/27/2021		0.014	0.025				0.029
9/28/2021	0.057			0.022	0.017	0.022	

Time Series

Constituent: Beryllium (mg/L) Analysis Run 11/5/2021 7:02 AM View: Descriptive

Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWA-12I (bg)	BRGWA-12S (bg)	BRGWA-23S (bg)	BRGWA-2I (bg)	BRGWA-2S (bg)	BRGWA-5I (bg)	BRGWA-5S (bg)	BRGWA-6S (bg)	BRGWC-25I
8/31/2016				<0.0005	<0.0005	<0.0005	<0.0005		
9/1/2016	<0.0005	<0.0005						<0.0005	
9/6/2016			<0.0005						
9/8/2016									<0.0005
11/15/2016							<0.0005	<0.0005	
11/16/2016	<0.0005	<0.0005		<0.0005	<0.0005	<0.0005			
11/17/2016			<0.0005						<0.0005
2/20/2017						<0.0005	<0.0005	<0.0005	
2/21/2017	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005				<0.0005
6/12/2017				<0.0005		<0.0005	<0.0005	<0.0005	
6/13/2017		<0.0005	<0.0005		<0.0005				<0.0005
6/14/2017	<0.0005								
9/26/2017	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	
9/27/2017									<0.0005
2/13/2018				<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	
2/14/2018	<0.0005	<0.0005	<0.0005						<0.0005
6/26/2018	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
12/18/2018	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
8/27/2019	<0.0005	<0.0005		<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
8/29/2019			<0.0005						
10/15/2019	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
3/3/2020	<0.0005	<0.0005		<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	
3/4/2020			<0.0005						<0.0005
8/18/2020	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	
8/19/2020									<0.0005
9/15/2020	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
3/1/2021				<0.0005				<0.0005	
3/2/2021	<0.0005	<0.0005	<0.0005		<0.0005	<0.0005	<0.0005		<0.0005
9/21/2021	<0.0005	<0.0005				<0.0005	<0.0005		
9/22/2021			<0.0005	<0.0005	<0.0005			<0.0005	
9/28/2021									<0.0005

Time Series

Constituent: Beryllium (mg/L) Analysis Run 11/5/2021 7:02 AM View: Descriptive

Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWC-27I	BRGWC-29I	BRGWC-30I	BRGWC-32S	BRGWC-45	BRGWC-47	BRGWC-50	BRGWC-52I	PZ-50D
9/6/2016			<0.0005						
9/8/2016	0.0002 (J)	0.0011 (J)		<0.0005					
11/18/2016	0.0002 (J)								
11/21/2016		0.0012 (J)	<0.0005	<0.0005					
2/21/2017	0.0002 (J)								
2/22/2017		0.0014 (J)	<0.0005	<0.0005					
6/13/2017	0.0002 (J)								
6/14/2017		0.0012 (J)	<0.0005	<0.0005					
9/27/2017	0.0001 (J)	0.001 (J)	<0.0005	<0.0005					
2/14/2018	<0.0005	<0.0005	<0.0005	<0.0005					
3/6/2018					<0.0005	<0.0005			
3/15/2018							<0.0005		
5/1/2018					<0.0005	<0.0005 (D)	<0.0005		
6/27/2018	0.00014 (J)	0.0008 (J)		<0.0005		<0.0005			
6/28/2018			<0.0005		<0.0005		0.003 (J)		
7/31/2018					<0.0005				
8/1/2018						<0.0005	0.0025 (J)		
8/10/2018								<0.0005	
8/23/2018					7.9E-05 (J)	5.5E-05 (J)		<0.0005	
9/19/2018					<0.0005	<0.0005		<0.0005	
10/29/2018					<0.0005	<0.0005	0.0042	<0.0005	
11/28/2018					<0.0005	5.6E-05 (J)	0.0029 (J)	<0.0005	
12/18/2018		0.00071 (J)	<0.0005						
12/19/2018				<0.0005		<0.0005 (X)	0.0043		
12/20/2018	<0.0005 (X)				<0.0005			<0.0005	
1/16/2019							0.0038		
1/17/2019								<0.0005	
2/13/2019								<0.0005	
8/27/2019			<0.0005	<0.0005					
8/28/2019	0.00012 (J)	0.0008 (J)			<0.0005	<0.0005			
8/29/2019							0.0029 (J)	<0.0005	
10/16/2019		0.00072 (J)				<0.0005	0.0027 (J)	<0.0005	
10/17/2019	<0.0005		<0.0005	<0.0005	<0.0005				
12/3/2019					<0.0005				
12/4/2019	0.00012 (J)		<0.0005	<0.0005					
3/4/2020	0.00012 (J)	0.00073 (J)				<0.0005	0.0052	<0.0005	
3/5/2020			<0.0005	<0.0005	<0.0005				
8/19/2020	9.9E-05 (J)	0.00074 (J)	<0.0005	<0.0005					
8/20/2020					4.6E-05 (J)	4.7E-05 (J)	0.0044	<0.0005	
9/15/2020		0.00071 (J)							
9/16/2020	0.00011 (J)		<0.0005	<0.0005	<0.0005	<0.0005			
9/17/2020							0.0065	<0.0005	
3/2/2021					<0.0005	<0.0005			
3/3/2021	7.1E-05 (J)	0.00094	<0.0005						
3/4/2021				<0.0005			0.0059	<0.0005	
3/5/2021									<0.0005
9/23/2021					<0.0005	<0.0005			
9/27/2021							0.006		
9/28/2021	<0.0005	0.00079	<0.0005	<0.0005				<0.0005	5.9E-05 (J)

Time Series

Constituent: Beryllium (mg/L) Analysis Run 11/5/2021 7:02 AM View: Descriptive

Plant Branch Client: Southern Company Data: Plant Branch AP

	PZ-51D	PZ-51I	PZ-51S	PZ-57I	PZ-58I	PZ-60I	PZ-61I
1/18/2019			<0.0005				
1/19/2019		6.4E-05 (J)					
10/18/2019		<0.0005	<0.0005				
8/20/2020		7.7E-05 (J)	<0.0005				
9/17/2020		9.6E-05 (J)	<0.0005				
3/3/2021	<0.0005		<0.0005				
3/4/2021		9.7E-05 (J)					
9/27/2021		7.1E-05 (J)	<0.0005				0.0017
9/28/2021	<0.0005			0.00031 (J)	0.025	0.065	

Time Series

Constituent: Boron (mg/L) Analysis Run 11/5/2021 7:02 AM View: Descriptive

Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWA-12I (bg)	BRGWA-12S (bg)	BRGWA-23S (bg)	BRGWA-2I (bg)	BRGWA-2S (bg)	BRGWA-5I (bg)	BRGWA-5S (bg)	BRGWA-6S (bg)	BRGWC-25I
8/31/2016				0.0072 (J)	<0.04	<0.04	<0.04		
9/1/2016	0.0093 (J)	<0.04						<0.04	
9/6/2016			0.0362 (J)						
9/8/2016									1.03
11/15/2016							0.0085 (J)	0.0123 (J)	
11/16/2016	0.0127 (J)	0.0081 (J)		0.0117 (J)	0.0109 (J)	0.0187 (J)			
11/17/2016			0.0617						1.7
2/20/2017						0.0066 (J)	0.0093 (J)	0.0157 (J)	
2/21/2017	0.0071 (J)	<0.04	0.0245 (J)	0.0088 (J)	<0.04				1.55
6/12/2017				0.0133 (J)		<0.04	<0.04	<0.04	
6/13/2017		<0.04	<0.04		<0.04				1.77
6/14/2017	0.0078 (J)								
9/26/2017	<0.04	<0.04	<0.04	0.0093 (J)	<0.04	<0.04	<0.04	<0.04	
9/27/2017									1.75
2/13/2018				0.0141 (J)	<0.04	<0.04	<0.04	<0.04	
2/14/2018	0.0068 (J)	<0.04	0.0314 (J)						1.47
6/26/2018	0.008 (J)	<0.04	0.062	0.012 (J)	<0.04	0.0042 (J)	0.0056 (J)	0.0041 (J)	1.8
12/18/2018	0.0083 (J)	0.0053 (J)	0.055	0.0086 (J)	<0.04	<0.04	0.0062 (J)	<0.04	1.5
3/19/2019	0.008 (J)	<0.04	0.068	0.00565 (JD)	<0.04	<0.04	<0.04	<0.04	
3/20/2019									1.5 (D)
10/15/2019	0.006 (J)	<0.04	0.022 (J)	0.0067 (J)	<0.04	<0.04	0.006 (J)	0.01 (J)	1.2
3/3/2020	0.01 (J)	0.0065 (J)		0.0082 (J)	<0.04	<0.04	<0.04	<0.04	
3/4/2020			0.044 (J)						1.2
9/15/2020	0.0071 (J)	<0.04	0.033 (J)	<0.04	<0.04	<0.04	<0.04	<0.04	1.2
3/1/2021				<0.04				<0.04	
3/2/2021	0.0057 (J)	<0.04	0.042		<0.04	0.0053 (J)	0.0071 (J)		1.1
9/21/2021	<0.04	<0.04				<0.04	<0.04		
9/22/2021			0.047	<0.04	<0.04			<0.04	
9/28/2021									1.1

Time Series

Constituent: Boron (mg/L) Analysis Run 11/5/2021 7:02 AM View: Descriptive

Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWC-27I	BRGWC-29I	BRGWC-30I	BRGWC-32S	BRGWC-45	BRGWC-47	BRGWC-50	BRGWC-52I	PZ-50D
9/6/2016			1.96						
9/8/2016	1.63	1.35		1.28					
11/18/2016	1.91								
11/21/2016		1.74	1.68	1.19					
2/21/2017	1.39								
2/22/2017		1.5	1.48	1.43					
6/13/2017	1.62								
6/14/2017		1.6	1.71	1.57					
9/27/2017	1.16	1.83	1.61	1.51					
2/14/2018	1.17	1.8	1.47	1.6					
3/6/2018					0.0198 (J)	0.428			
3/15/2018							0.32		
5/1/2018					0.015 (J)	0.435 (D)	0.32		
6/27/2018	1.4 (J+X)	1.8 (J+X)		1.5 (J+X)		0.49 (J+X)			
6/28/2018			1.4		<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	1.6						
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	1.7	1.4	0.043		0.34	1.6 (D)	
10/16/2019		1.2				0.36	0.31	1.3	
10/17/2019	0.97		1.7	1.5	0.064				
12/3/2019					0.027 (J)				
12/4/2019	0.89		1.6	1.6					
3/4/2020	0.81	1.1				0.49	0.32	1.4	
3/5/2020			1.5	1.5	0.044 (J)				
9/15/2020		1.1							
9/16/2020	1.2		1.7	1.4	0.028 (J)	0.47			
9/17/2020							0.36	1.9	
10/27/2020									0.15
3/2/2021					0.044	0.58			
3/3/2021	0.91	1	1.4						
3/4/2021				1.1			0.31	1.4	
3/5/2021									0.2
9/23/2021					0.029 (J)	0.47			
9/27/2021							0.32		
9/28/2021	0.95	0.9	1.7	0.91				1.4	0.24

Time Series

Constituent: Boron (mg/L) Analysis Run 11/5/2021 7:02 AM View: Descriptive

Plant Branch Client: Southern Company Data: Plant Branch AP

	PZ-51D	PZ-51I	PZ-51S	PZ-57I	PZ-58I	PZ-60I	PZ-61I
8/2/2018			0.016 (J)				
8/3/2018		0.3					
1/18/2019			0.0057 (J)				
1/19/2019		0.39					
10/18/2019		0.38	0.0057 (J)				
9/17/2020		0.43	0.0063 (J)				
10/27/2020	0.029 (J)	0.37					
3/3/2021	0.028 (J)		0.0096 (J)				
3/4/2021		0.36					
9/27/2021		0.39	<0.04				0.26
9/28/2021	0.023 (J)			0.48	0.36	0.23	

Time Series

Constituent: Cadmium (mg/L) Analysis Run 11/5/2021 7:02 AM View: Descriptive

Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWA-12I (bg)	BRGWA-12S (bg)	BRGWA-23S (bg)	BRGWA-2I (bg)	BRGWA-2S (bg)	BRGWA-5I (bg)	BRGWA-5S (bg)	BRGWA-6S (bg)	BRGWC-25I
8/31/2016				<0.0005	<0.0005	<0.0005	<0.0005		
9/1/2016	<0.0005	<0.0005						<0.0005	
9/6/2016			<0.0005						
9/8/2016									<0.0005
11/15/2016							<0.0005	<0.0005	
11/16/2016	<0.0005	<0.0005		<0.0005	<0.0005	<0.0005			
11/17/2016			<0.0005						<0.0005
2/20/2017						<0.0005	<0.0005	<0.0005	
2/21/2017	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005				<0.0005
6/12/2017				<0.0005		<0.0005	<0.0005	<0.0005	
6/13/2017		<0.0005	<0.0005		<0.0005				<0.0005
6/14/2017	<0.0005								
9/26/2017	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	
9/27/2017									<0.0005
2/13/2018				<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	
2/14/2018	<0.0005	<0.0005	<0.0005						<0.0005
6/26/2018	<0.0005	<0.0005	0.00015 (J)	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
7/31/2018	<0.0005	<0.0005							
12/18/2018	<0.0005	<0.0005	0.0001 (J)	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
8/27/2019	<0.0005	<0.0005		<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
8/29/2019			<0.0005						
10/15/2019	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
3/3/2020	<0.0005	<0.0005		<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	
3/4/2020			<0.0005						<0.0005
8/18/2020	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	
8/19/2020									<0.0005
9/15/2020	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
3/1/2021				<0.0005				<0.0005	
3/2/2021	<0.0005	<0.0005	<0.0005		<0.0005	<0.0005	<0.0005		<0.0005
9/21/2021	<0.0005	<0.0005				<0.0005	<0.0005		
9/22/2021			<0.0005	<0.0005	<0.0005			<0.0005	
9/28/2021									<0.0005

Time Series

Constituent: Cadmium (mg/L) Analysis Run 11/5/2021 7:02 AM View: Descriptive

Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWC-27I	BRGWC-29I	BRGWC-30I	BRGWC-32S	BRGWC-45	BRGWC-47	BRGWC-50	BRGWC-52I	PZ-50D
9/6/2016			<0.0005						
9/8/2016	7E-05 (J)	<0.0005		<0.0005					
11/18/2016	9E-05 (J)								
11/21/2016		<0.0005	8E-05 (J)	8E-05 (J)					
2/21/2017	<0.0005								
2/22/2017		<0.0005	<0.0005	0.0001 (J)					
6/13/2017	<0.0005								
6/14/2017		<0.0005	<0.0005	<0.0005					
9/27/2017	<0.0005	<0.0005	<0.0005	<0.0005					
2/14/2018	<0.0005	<0.0005	<0.0005	<0.0005					
3/6/2018					<0.0005	<0.0005			
3/15/2018							0.038		
5/1/2018					<0.0005	<0.0005 (D)	0.011		
6/27/2018	<0.0005	<0.0005		0.00011 (J)		0.00014 (J)			
6/28/2018			<0.0005		<0.0005		0.087		
7/31/2018					<0.0005				
8/1/2018						0.00011 (J)	0.042		
8/10/2018								<0.0005	
8/23/2018					<0.0005	0.00018 (J)		<0.0005	
9/19/2018					<0.0005	0.00015 (J)		<0.0005	
10/29/2018					9.8E-05 (J)	0.00019 (J)	0.083	<0.0005	
11/28/2018					<0.0005	0.00022 (J)	0.031	<0.0005	
12/18/2018		<0.0005	<0.0005						
12/19/2018				<0.0005 (X)		<0.0005	0.042		
12/20/2018	<0.0005				<0.0005 (X)			<0.0005	
1/16/2019							0.028		
1/17/2019								<0.0005	
2/13/2019								<0.0005	
8/27/2019			<0.0005	<0.0005					
8/28/2019	<0.0005	<0.0005			<0.0005	0.00017 (J)			
8/29/2019							0.0071	<0.0005	
10/16/2019		<0.0005				0.00018 (J)	0.014	<0.0005	
10/17/2019	<0.0005		<0.0005	<0.0005	<0.0005				
12/3/2019					0.00011 (J)				
12/4/2019	<0.0005		<0.0005	<0.0005					
3/4/2020	<0.0005	<0.0005				0.00024 (J)	0.013	<0.0005	
3/5/2020			<0.0005	<0.0005	<0.0005				
8/19/2020	<0.0005	<0.0005	<0.0005	<0.0005					
8/20/2020					0.00014 (J)	<0.0005	0.0079	<0.0005	
9/15/2020		<0.0005							
9/16/2020	<0.0005		<0.0005	<0.0005	<0.0005	<0.0005			
9/17/2020							0.021	<0.0005	
10/27/2020									<0.0005
3/2/2021					0.0002 (J)	<0.0005			
3/3/2021	<0.0005	<0.0005	<0.0005						
3/4/2021				<0.0005			0.019	<0.0005	
3/5/2021									<0.0005
9/23/2021					<0.0005	<0.0005			
9/27/2021							0.0095		
9/28/2021	<0.0005	<0.0005	<0.0005	<0.0005				<0.0005	<0.0005

Time Series

Constituent: Cadmium (mg/L) Analysis Run 11/5/2021 7:02 AM View: Descriptive

Plant Branch Client: Southern Company Data: Plant Branch AP

	PZ-51D	PZ-51I	PZ-51S	PZ-57I	PZ-58I	PZ-60I	PZ-61I
8/2/2018			<0.0005				
8/3/2018		0.0015					
1/18/2019			<0.0005				
1/19/2019		0.0016					
10/18/2019		0.00083 (J)	<0.0005				
8/20/2020		0.0019 (J)	<0.0005				
9/17/2020		0.033	<0.0005				
10/27/2020	<0.0005	0.0051					
3/3/2021	<0.0005		<0.0005				
3/4/2021		0.017					
9/27/2021		0.0031	<0.0005				0.00081
9/28/2021	<0.0005			0.00064	0.0042	0.016	

Time Series

Constituent: Calcium (mg/L) Analysis Run 11/5/2021 7:02 AM View: Descriptive
Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWA-12I (bg)	BRGWA-12S (bg)	BRGWA-23S (bg)	BRGWA-2I (bg)	BRGWA-2S (bg)	BRGWA-5I (bg)	BRGWA-5S (bg)	BRGWA-6S (bg)	BRGWC-25I
8/31/2016				12.6	4.09	13.5	19.6		
9/1/2016	8.98	4.61						3.3	
9/6/2016			12.8						
9/8/2016									59.4
11/15/2016							21.7	3.44	
11/16/2016	15.4	4.17		12.1	4.25	14.9			
11/17/2016			19.2						78.4
2/20/2017						13.9	21.1	3.52	
2/21/2017	17.4	5	15.1	11.4	4.02				80.9
6/12/2017				9.34		13.7	21.5	3.11	
6/13/2017		4.98	10.2		3.84				62
6/14/2017	18.1								
9/26/2017	19.3	4.49	15	14.3	3.31	14.4	24	3.15	
9/27/2017									65.8
2/13/2018				<25	3.94	<25	<25	3.65	
2/14/2018	<25	<25	<25						58.8
6/26/2018	15.5 (J)	6.4	18.5 (J)	16 (J)	3.6	13.5 (J)	23.5 (J)	3.3	55.5
7/31/2018	18.2 (J)	6.1							
12/18/2018	18.7 (J)	5.5	16.8 (J)	14.5 (J)	3.8	16.4 (J)	19.8 (J)	3.5	54.7
3/19/2019	15.9 (J)	5.9	13.5 (J)	14.3 (JD)	3.9	12.3 (J)	21.4 (J)	3.6	
3/20/2019									53.95 (D)
10/15/2019	15.9	6.2	8.6	15.1	3.7	14.4	20	3.5	48.3
3/3/2020	19.4	6.8		20	4	14.9	23.2	5	
3/4/2020			11.5						52
9/15/2020	14.5	5.7	10.7	14.1	3.9	12.7	16.8	3.7	40.1
3/1/2021				15.4				4.2	
3/2/2021	11.7	5.4	11.6		4	13.2	16.8		44.1
9/21/2021	16.4	5.4				14.1	19.1		
9/22/2021			9.2	15.9	4.3			4.1	
9/28/2021									38.4

Time Series

Constituent: Calcium (mg/L) Analysis Run 11/5/2021 7:02 AM View: Descriptive

Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWC-27I	BRGWC-29I	BRGWC-30I	BRGWC-32S	BRGWC-45	BRGWC-47	BRGWC-50	BRGWC-52I	PZ-50D
9/6/2016			63.3						
9/8/2016	87.2	93.9		60.5					
11/18/2016	82.4								
11/21/2016		99.1	60.7	31.1					
2/21/2017	75.1								
2/22/2017		105	62.1	67.3					
6/13/2017	61								
6/14/2017		91.3	63.5	60.2					
9/27/2017	72.6	84	63.5	68.4					
2/14/2018	74.1	72.1	62.8	70.2					
3/6/2018					39.5	326			
3/15/2018							233		
5/1/2018					45.5	302 (D)	225		
6/27/2018	68.2	61.1		67.1		340			
6/28/2018			73.3		41.9		242		
7/31/2018					41.5				
8/1/2018						358	246		
8/10/2018								410 (O)	
8/23/2018					42.3	323		33.9	
9/19/2018					41.9	321		42.3	
10/29/2018					40.8	326	236	39.8	
11/28/2018					45.1	354	254	38.2	
12/18/2018		52.9	102						
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		55.4	141	52.8	31.2		222	40.85 (D)	
10/16/2019		54				338	241	48.4	
12/3/2019					43.7				
12/4/2019	76.8		92.6	52.7					
3/4/2020	72.3	59.3				353	245	49.5	
3/5/2020			119	52.1	37.9				
9/15/2020		55.1							
9/16/2020	62.5		106	43.1	39.7	309			
9/17/2020							206	35.4	
10/27/2020									159
3/2/2021					33.9	353			
3/3/2021	58.2	73.3	122						
3/4/2021				35.7			214	47.5	
3/5/2021									207
9/23/2021					32	336			
9/27/2021							196		
9/28/2021	50.4	59.5	212	33.9				39.5	225

Time Series

Constituent: Calcium (mg/L) Analysis Run 11/5/2021 7:02 AM View: Descriptive

Plant Branch Client: Southern Company Data: Plant Branch AP

	PZ-51D	PZ-51I	PZ-51S	PZ-57I	PZ-58I	PZ-60I	PZ-61I
1/18/2019			9.1				
1/19/2019		196					
10/18/2019		177	7.1				
9/17/2020		168	7.7				
10/27/2020	132	183					
3/3/2021	119		7.9				
3/4/2021		182					
9/27/2021		187	7.5				230
9/28/2021	113			51.1	108	274	

Time Series

Constituent: Chloride (mg/L) Analysis Run 11/5/2021 7:02 AM View: Descriptive
Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWA-12I (bg)	BRGWA-12S (bg)	BRGWA-23S (bg)	BRGWA-2I (bg)	BRGWA-2S (bg)	BRGWA-5I (bg)	BRGWA-5S (bg)	BRGWA-6S (bg)	BRGWC-25I
8/31/2016				2.3	2	4.4	3.6		
9/1/2016	3.3	3.5						2.5	
9/6/2016			5.8						
9/8/2016									5.5
11/15/2016							4	2.3	
11/16/2016	3.6	3.6		2	1.8	4.4			
11/17/2016			4.3						7.7
2/20/2017						4.8	3.9	2.4	
2/21/2017	3.2	3.2	3.5	2	1.8				7.3
6/12/2017				2.1		4.2	3.8	2.2	
6/13/2017		3.3	3.2		1.7				7.5
6/14/2017	3.1								
9/26/2017	3.3	3.3	3.5	2	1.8	4.4	4.1	2.3	
9/27/2017									7.9
2/13/2018				2.1	1.7	4.7	4.1	2.3	
2/14/2018	3.1	3.5	3.8						6.7
6/26/2018	3.4	3.4	3.8	2.4	2.2	4.5	4.1	2.6	6.7
7/31/2018	2.6	2.9							
12/18/2018	2.8	2.9	3.9	1.8	1.9	4.5	3.8	2.3	6.2
3/19/2019	3.2	3.5	3.8	2.45 (D)	2	4.5	4.2	2.6	
3/20/2019									6.3 (D)
10/15/2019	3.1	3.4	3.5	2.2	1.9	4.2	3.7	2.4	5
3/3/2020	2.6	3.2		1.9	1.9	3.9	3.6	2.9	
3/4/2020			3.3						5
9/15/2020	2.4	3.5	3.1	1.9	1.7	3.7	3.7	2.3	4.9
3/1/2021				1.8				2.1	
3/2/2021	2.6	3.7	3.5		1.7	3.8	3.7		4.5
9/21/2021	2.1	3.5				3.2	3.2		
9/22/2021			2.8	1.7	1.5			2.1	
9/28/2021									4.2

Time Series

Constituent: Chloride (mg/L) Analysis Run 11/5/2021 7:02 AM View: Descriptive

Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWC-27I	BRGWC-29I	BRGWC-30I	BRGWC-32S	BRGWC-45	BRGWC-47	BRGWC-50	BRGWC-52I	PZ-50D
9/6/2016			6.7						
9/8/2016	6	6.4		6.8					
11/18/2016	6.3								
11/21/2016		6.9	6.5	7.8					
2/21/2017	5.1								
2/22/2017		6.2	5.6	7					
6/13/2017	4.7								
6/14/2017		7.2	5.7	7.1					
9/27/2017	4.9	8.7	6	7.2					
2/14/2018	5.6	7.2	5.9	7.4					
3/6/2018					56.6	8.4			
3/15/2018							23.3		
5/1/2018					58.5	5.7 (D)	23.4		
6/27/2018	5.9	6.3		7.1		4.4			
6/28/2018			7 (J-X)		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	5.8						
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		5.6	5.8	7.3	27.7		23.5	6.7 (D)	
10/16/2019		6.9				4.6	21.9	7	
12/3/2019					52.8				
12/4/2019	5.6		5	6.6					
3/4/2020	5.1	5.8				4.2	21.6	6.1	
3/5/2020			4.3	6	37.1				
9/15/2020		5.5							
9/16/2020	5.4		4.4	5.6	54.9	4.1			
9/17/2020							20.1	6.3	
10/27/2020									5.6
3/2/2021					25.8	4.8			
3/3/2021	4.5	5.6	4						
3/4/2021				4.6			18.9	5.6	
3/5/2021									8
9/23/2021					29.3	4.3			
9/27/2021							16.2		
9/28/2021	3.7	5.4	3.4	3.6				5.5	13

Time Series

Constituent: Chloride (mg/L) Analysis Run 11/5/2021 7:02 AM View: Descriptive

Plant Branch Client: Southern Company Data: Plant Branch AP

	PZ-51D	PZ-51I	PZ-51S	PZ-57I	PZ-58I	PZ-60I	PZ-61I
1/18/2019			4.6				
1/19/2019		11.6					
10/18/2019		10.9	4.7				
9/17/2020		10.5	4.6				
10/27/2020	6.3	11					
3/3/2021	18.9		4.5				
3/4/2021		12.2					
9/27/2021		9.4	3.8				20
9/28/2021	12.8			5.9	9.6	27.2	

Time Series

Constituent: Chromium (mg/L) Analysis Run 11/5/2021 7:02 AM View: Descriptive

Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWA-12I (bg)	BRGWA-12S (bg)	BRGWA-23S (bg)	BRGWA-2I (bg)	BRGWA-2S (bg)	BRGWA-5I (bg)	BRGWA-5S (bg)	BRGWA-6S (bg)	BRGWC-25I
8/31/2016				0.001 (J)	0.0034 (J)	0.0058 (J)	0.0028 (J)		
9/1/2016	0.0009 (J)	0.0013 (J)						0.0147	
9/6/2016			<0.005						
9/8/2016									<0.005
11/15/2016							0.003 (J)	0.0154 (B)	
11/16/2016	0.0015 (J)	0.0012 (J)		<0.005	0.0029 (J)	0.0051 (J)			
11/17/2016			<0.005						<0.005
2/20/2017						0.0049 (J)	0.0047 (J)	0.014	
2/21/2017	0.001 (J)	0.0017 (J)	<0.005	<0.005	0.0036 (J)				<0.005
6/12/2017				0.0005 (J)		0.0052 (J)	0.0041 (J)	0.016	
6/13/2017		0.0019 (J)	<0.005		0.0038 (J)				<0.005
6/14/2017	0.0012 (J)								
9/26/2017	0.0014 (J)	0.0018 (J)	<0.005	0.0005 (J)	0.0045 (J)	0.0039 (J)	0.0037 (J)	0.0144	
9/27/2017									<0.005
2/13/2018				<0.005	<0.005	<0.005	<0.005	0.0144	
2/14/2018	<0.005	<0.005	<0.005						<0.005
6/26/2018	<0.005	0.0022 (J)	<0.005	<0.005	0.008 (J)	0.0053 (J)	0.0043 (J)	0.015	<0.005
12/18/2018	0.0016 (J)	0.0022 (J)	<0.005	<0.005	0.012	0.0032 (J)	0.0054 (J)	0.015	<0.005
8/27/2019	0.0023 (J)	0.0024 (J)		0.0004 (J)	0.0083 (J)	0.0055 (J)	0.0043 (J)	0.015	0.0016 (J)
8/29/2019			0.0016 (J)						
10/15/2019	0.0021 (J)	0.0023 (J)	0.0017 (J)	<0.005	0.0083 (J)	0.0047 (J)	0.0055 (J)	0.014	0.00098 (J)
3/3/2020	0.0026 (J)	0.0028 (J)		0.00047 (J)	0.0098 (J)	0.0069 (J)	0.0057 (J)	0.011	
3/4/2020			0.0019 (J)						<0.005
8/18/2020	0.0023 (J)	0.0029 (J)	0.0017 (J)	0.00096 (J)	0.0085 (J)	0.0069 (J)	0.005 (J)	0.015	
8/19/2020									<0.005
9/15/2020	0.00096 (J)	0.0025 (J)	0.0019 (J)	<0.005	0.0082 (J)	0.0069 (J)	0.0048 (J)	0.014	<0.005
3/1/2021				<0.005				0.011	
3/2/2021	0.002 (J)	0.0021 (J)	0.002 (J)		0.0074	0.0064	0.0044 (J)		<0.005
9/21/2021	0.0023 (J)	0.0024 (J)				0.0064	0.0044 (J)		
9/22/2021			0.0026 (J)	<0.005	0.0091			0.014	
9/28/2021									<0.005

Time Series

Constituent: Chromium (mg/L) Analysis Run 11/5/2021 7:02 AM View: Descriptive

Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWC-27I	BRGWC-29I	BRGWC-30I	BRGWC-32S	BRGWC-45	BRGWC-47	BRGWC-50	BRGWC-52I	PZ-50D
9/6/2016			<0.005						
9/8/2016	0.001 (J)	<0.005		<0.005					
11/18/2016	<0.005								
11/21/2016		<0.005	<0.005	<0.005					
2/21/2017	<0.005								
2/22/2017		<0.005	<0.005	0.0012 (J)					
6/13/2017	<0.005								
6/14/2017		<0.005	<0.005	0.0009 (J)					
9/27/2017	<0.005	<0.005	<0.005	0.0011 (J)					
2/14/2018	<0.005	<0.005	<0.005	<0.005					
3/6/2018					<0.005	<0.005			
3/15/2018							<0.005		
5/1/2018					<0.005	<0.005 (D)	<0.005		
6/27/2018	<0.005	<0.005		<0.005		<0.005			
6/28/2018			<0.005		<0.005		0.0023 (J)		
7/31/2018					<0.005				
8/1/2018						<0.005	0.0046 (J)		
8/10/2018								0.0017 (J)	
8/23/2018					<0.005	<0.005		<0.005	
9/19/2018					<0.005	<0.005		<0.005	
10/29/2018					<0.005	<0.005	<0.005	<0.005	
11/28/2018					<0.005	<0.005	<0.005	<0.005	
12/18/2018		<0.005	<0.005						
12/19/2018				<0.005		0.0018 (J)	<0.005		
12/20/2018	0.003 (J)				<0.005			<0.005	
1/16/2019							<0.005		
1/17/2019								<0.005	
2/13/2019								<0.005	
8/27/2019			0.0051 (J)	0.0019 (J)					
8/28/2019	<0.005	<0.005			<0.005	0.00092 (J)			
8/29/2019							<0.005	<0.005	
10/16/2019		<0.005				<0.005	0.0005 (J)	<0.005	
12/3/2019					<0.005				
12/4/2019	<0.005		<0.005	0.0014 (J)					
3/4/2020	<0.005	0.02				0.00078 (J)	0.00071 (J)	<0.005	
3/5/2020			<0.005	0.0014 (J)	0.00053 (J)				
8/19/2020	<0.005	<0.005	<0.005	0.0021 (J)					
8/20/2020					0.001 (J)	0.00064 (J)	0.00065 (J)	<0.005	
9/15/2020		<0.005							
9/16/2020	<0.005		0.014	0.0025 (J)	0.0014 (J)	<0.005			
9/17/2020							0.00098 (J)	<0.005	
3/2/2021					<0.005	<0.005			
3/3/2021	<0.005	<0.005	<0.005						
3/4/2021				0.002 (J)			0.001 (J)	<0.005	
3/5/2021									<0.005
9/23/2021					<0.005	<0.005			
9/27/2021							<0.005		
9/28/2021	<0.005	<0.005	<0.005	0.0021 (J)				<0.005	<0.005

Time Series

Constituent: Chromium (mg/L) Analysis Run 11/5/2021 7:02 AM View: Descriptive

Plant Branch Client: Southern Company Data: Plant Branch AP

	PZ-51D	PZ-51I	PZ-51S	PZ-57I	PZ-58I	PZ-60I	PZ-61I
1/18/2019			<0.005				
1/19/2019		<0.005					
10/18/2019		<0.005	0.00042 (J)				
8/20/2020		<0.005	0.00063 (J)				
9/17/2020		0.00098 (J)	<0.005				
3/3/2021	<0.005		<0.005				
3/4/2021		0.0008 (J)					
9/27/2021		<0.005	<0.005				0.0077
9/28/2021	<0.005			<0.005	<0.005	<0.005	

Time Series

Constituent: Cobalt (mg/L) Analysis Run 11/5/2021 7:02 AM View: Descriptive

Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWA-12I (bg)	BRGWA-12S (bg)	BRGWA-23S (bg)	BRGWA-2I (bg)	BRGWA-2S (bg)	BRGWA-5I (bg)	BRGWA-5S (bg)	BRGWA-6S (bg)	BRGWC-25I
8/31/2016				0.0016 (J)	0.0034 (J)	0.0013 (J)	<0.005		
9/1/2016	<0.005	<0.005						<0.005	
9/6/2016			0.0028 (J)						
9/8/2016									0.0073 (J)
11/15/2016							<0.005	<0.005	
11/16/2016	<0.005	<0.005		0.0006 (J)	0.003 (J)	<0.01 (o)			
11/17/2016			0.0072 (J)						0.0086 (J)
2/20/2017						0.0012 (J)	0.0009 (J)	<0.005	
2/21/2017	<0.005	<0.005	0.0045 (J)	<0.005	0.0028 (J)				0.0079 (J)
6/12/2017				<0.005		0.0011 (J)	0.0006 (J)	0.0003 (J)	
6/13/2017		<0.005	0.0036 (J)		0.0025 (J)				0.0083 (J)
6/14/2017	<0.005								
9/26/2017	<0.005	<0.005	0.0037 (J)	<0.005	0.002 (J)	0.0016 (J)	0.0005 (J)	0.0003 (J)	
9/27/2017									0.0087 (J)
2/13/2018				<0.005	<0.005	<0.01 (o)	<0.005	<0.005	
2/14/2018	<0.005	<0.005	0.0135						<0.005
6/26/2018	<0.005	<0.005	0.0098 (J)	<0.005	0.0019 (J)	0.0009 (J)	0.00052 (J)	<0.005	0.006 (J)
7/31/2018	<0.005	<0.005							
12/18/2018	<0.005	<0.005	0.0057 (J)	<0.005	0.0032 (J)	0.00062 (J)	<0.005	<0.005	0.0055 (J)
8/27/2019	<0.005	<0.005		<0.005	0.0012 (J)	0.00068 (J)	0.00042 (J)	<0.005	0.0042 (J)
8/29/2019			0.0015 (J)						
10/15/2019	<0.005	<0.005	0.0011 (J)	<0.005	0.00097 (J)	0.00083 (J)	<0.005	<0.005	0.0043 (J)
3/3/2020	<0.005	<0.005		<0.005	0.0015 (J)	0.00043 (J)	<0.005	0.0011 (J)	
3/4/2020			0.0012 (J)						0.0039 (J)
8/18/2020	<0.005	<0.005	0.00067 (J)	<0.005	0.0014 (J)	0.00048 (J)	<0.005	0.00061 (J)	
8/19/2020									0.0039 (J)
9/15/2020	<0.005	<0.005	0.00076 (J)	<0.005	0.001 (J)	0.0005 (J)	<0.005	<0.005	0.0035 (J)
3/1/2021				<0.005				<0.005	
3/2/2021	<0.005	<0.005	<0.005		0.001 (J)	0.00053 (J)	<0.005		0.003 (J)
9/21/2021	<0.005	<0.005				0.00071 (J)	<0.005		
9/22/2021			<0.005	0.0015 (J)	<0.005			0.00078 (J)	
9/28/2021									0.0029 (J)

Time Series

Constituent: Cobalt (mg/L) Analysis Run 11/5/2021 7:02 AM View: Descriptive

Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWC-27I	BRGWC-29I	BRGWC-30I	BRGWC-32S	BRGWC-45	BRGWC-47	BRGWC-50	BRGWC-52I	PZ-50D
9/6/2016			0.0006 (J)						
9/8/2016	0.0149	0.0122		0.0025 (J)					
11/18/2016	0.0131								
11/21/2016		0.0122	<0.005	0.001 (J)					
2/21/2017	0.0099 (J)								
2/22/2017		0.0136	0.0016 (J)	<0.005					
6/13/2017	0.0094 (J)								
6/14/2017		0.0113	0.0015 (J)	<0.005					
9/27/2017	0.0095 (J)	0.0094 (J)	0.0007 (J)	<0.005					
2/14/2018	0.0112	<0.005	<0.005	<0.005					
3/6/2018					0.0162	<0.005			
3/15/2018							1.3		
5/1/2018					0.015	0.0125 (D)	1.4		
6/27/2018	0.0093 (J)	0.0069 (J)		<0.005		0.0076 (J)			
6/28/2018			0.00078 (J)		0.01		1.3		
7/31/2018					0.0098 (J)				
8/1/2018						0.004 (J)	1.4		
8/10/2018								0.0043 (J)	
8/23/2018					0.0093 (J)	0.0016 (J)		0.0026 (J)	
9/19/2018					0.0084 (J)	0.0018 (J)		0.0028 (J)	
10/29/2018					0.0064 (J)	0.0014 (J)	1.4	0.0015 (J)	
11/28/2018					0.0071 (J)	0.0016 (J)	1.4	0.0012 (J)	
12/18/2018		0.0067 (J)	0.0011 (J)						
12/19/2018				<0.005		0.0014 (J)	1.5		
12/20/2018	0.0081 (J)				0.069			<0.005	
1/16/2019							1.4		
1/17/2019								<0.005	
2/13/2019								<0.005	
8/27/2019			0.0014 (J)	<0.005					
8/28/2019	0.01	0.0061			0.011	0.00037 (J)			
8/29/2019							1.3	0.00063 (J)	
10/16/2019		0.0058				0.00032 (J)	1.4	<0.005	
10/17/2019	0.011 (J)		<0.005	<0.005	0.0098 (J)				
12/3/2019					0.0076				
12/4/2019	0.0086		0.0012 (J)	<0.005					
3/4/2020	0.008	0.007				0.0011 (J)	1.5	<0.005	
3/5/2020			0.0011 (J)	<0.005	0.0091				
8/19/2020	0.0078	0.0065	0.0008 (J)	<0.005					
8/20/2020					0.022	0.00043 (J)	1.4	<0.005	
9/15/2020		0.0064							
9/16/2020	0.008		0.0008 (J)	<0.005	0.0049 (J)	0.00053 (J)			
9/17/2020							1.4	0.00046 (J)	
10/27/2020									0.0037 (J)
3/2/2021					0.0057	0.0005 (J)			
3/3/2021	0.0062	0.0095	0.0015 (J)						
3/4/2021				<0.005			1.4	<0.005	
3/5/2021									0.0038 (J)
9/23/2021					0.0049 (J)	<0.005			
9/27/2021							1.3		
9/28/2021	0.0047 (J)	0.0069	0.001 (J)	<0.005				<0.005	0.2

Time Series

Constituent: Cobalt (mg/L) Analysis Run 11/5/2021 7:02 AM View: Descriptive

Plant Branch Client: Southern Company Data: Plant Branch AP

	PZ-51D	PZ-51I	PZ-51S	PZ-57I	PZ-58I	PZ-60I	PZ-61I
8/2/2018			0.0079 (J)				
8/3/2018		0.041					
1/18/2019			0.0082 (J)				
1/19/2019		0.018					
10/18/2019		0.017	0.0063				
8/20/2020		0.02	0.0039 (J)				
9/17/2020		0.022	0.0062				
10/27/2020	0.00041 (J)	0.02					
3/3/2021	0.0004 (J)		0.005				
3/4/2021		0.019					
9/27/2021		0.02	0.0022 (J)				0.45
9/28/2021	<0.005			0.055	0.39	3.5	

Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 11/5/2021 7:02 AM View: Descriptive

Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWA-12I (bg)	BRGWA-12S (bg)	BRGWA-23S (bg)	BRGWA-2I (bg)	BRGWA-2S (bg)	BRGWA-5I (bg)	BRGWA-5S (bg)	BRGWA-6S (bg)	BRGWC-25I
8/31/2016				0.351 (U)	1 (U)	0.62 (U)	0.603 (U)		
9/1/2016	0.428 (U)	0.566 (U)						1.33	
9/6/2016			0.585 (U)						
9/8/2016									0.862 (U)
11/15/2016							0.645 (U)	0.412 (U)	
11/16/2016	0.799 (U)	0.863 (U)		0.824 (U)	0.43 (U)	0.493 (U)			
11/17/2016			0.804 (U)						1.2 (U)
2/20/2017						0.534 (U)	1.36	0.633 (U)	
2/21/2017	1.75 (U)	0.318 (U)	0.595 (U)	1.01 (U)	0.96 (U)				1.31
6/12/2017				0.532 (U)		0.254 (U)	0.566 (U)	0.112 (U)	
6/13/2017		0.163 (U)	0.618 (U)		0.645 (U)				0.738 (U)
6/14/2017	2.66								
9/26/2017	0.841 (U)	0.56 (U)	1.26 (U)	0.845 (U)	0.299 (U)	0.62 (U)	0.762 (U)	0.167 (U)	
9/27/2017									0.583 (U)
2/13/2018				0.176 (U)	1.01 (U)	0.0914 (U)	0.349 (U)	0.347 (U)	
2/14/2018	1.13 (UX)	0.537 (U)	1.2 (U)						1.41 (J+X)
6/26/2018	1.42 (J+X)	1.31 (UX)	1.34 (U)	1.02 (U)	1.26 (J+X)	1.11 (U)	0.614 (U)	0.903 (U)	0.968 (U)
12/18/2018	0.855 (U)	1.31 (J+X)	1.13 (U)	0.487 (U)	0.44 (U)	0.42 (U)	0.445 (U)	0.353 (U)	1.13 (U)
8/27/2019	1.31	1.32		1.11	1.47	1.19	1.44	0.65 (U)	0.91 (U)
8/29/2019			1.45 (U)						
10/15/2019	1.13 (U)	1.05 (U)	1.69	1.02 (U)	0.807 (U)	0.714 (U)	0.467 (U)	0.402 (U)	1.06 (U)
3/3/2020	1.29 (U)	1.68		1.18 (U)	0.818 (U)	0.996 (U)	1.5	0.397 (U)	
3/4/2020			1.45						1.34
8/18/2020	0.988 (U)	0.969 (U)	0.784 (U)	0.0861 (U)	1.22 (U)	0.53 (U)	0.581 (U)	0.453 (U)	
8/19/2020									0.467 (U)
9/15/2020	0.762 (U)	0.359 (U)	1.04 (U)	0.0583 (U)	0.579 (U)	0.215 (U)	0.55 (U)	0.474 (U)	0.205 (U)
3/1/2021				0.127 (U)				0.215 (U)	
3/2/2021	0.901	0.925	1.12		0.342 (U)	0.409 (U)	0.362 (U)		0.161 (U)

Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 11/5/2021 7:02 AM View: Descriptive

Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWC-27I	BRGWC-29I	BRGWC-30I	BRGWC-32S	BRGWC-45	BRGWC-47	BRGWC-50	BRGWC-52I	PZ-50D
9/6/2016			1.01 (U)						
9/8/2016	1.74	1.13		0.706 (U)					
11/18/2016	0.571 (U)								
11/21/2016		1.59	0.201 (U)	0.0569 (U)					
2/21/2017	1.28 (U)								
2/22/2017		1.64	0.57 (U)	1.07 (U)					
6/13/2017	0.521 (U)								
6/14/2017		1.32	0.726 (U)	0.459 (U)					
9/27/2017	0.595 (U)	1.7	0.884 (U)	0.807 (U)					
2/14/2018	1.18 (U)	1.89 (J+X)	1.14 (U)	1.67 (J+X)					
3/6/2018					1.25 (U)	1.75 (J+X)			
3/15/2018							1.31		
5/1/2018					0.423 (U)	2.02 (D)	1.69 (J+X)		
6/27/2018	1.3 (U)	1.66 (J+X)		1.34 (UX)		0.878 (U)			
6/28/2018			1.4 (UX)		0.283 (U)		1.04 (U)		
7/31/2018					0.243 (U)				
8/1/2018						0.638 (U)	1.67		
8/10/2018								1.91	
8/23/2018					1.1 (U)	1.14 (U)		1.86 (J+X)	
9/19/2018					0.369 (U)	1.45 (UX)		1.64 (UX)	
10/29/2018					0.401 (U)	1.09 (U)	0.992 (U)	1.36 (U)	
11/28/2018					0.901 (U)	1.67 (UX)	1.76 (UX)	1.07 (U)	
12/18/2018		0.759 (U)	0.661 (U)						
12/19/2018				1.21 (U)		1.3	2.15 (J+X)		
12/20/2018	0.527 (U)				0.657 (U)			0.892 (U)	
1/16/2019							1.39		
1/17/2019								1.1 (U)	
2/13/2019								1.68	
8/27/2019			1.35	0.86 (U)					
8/28/2019	0.643 (U)	1.76			0.528 (U)	0.804 (U)			
8/29/2019							1.33	1.44	
10/16/2019		1.69 (U)				1.28 (U)	2.51	2.13	
10/17/2019	1.07 (U)		1.25 (U)	1.2 (U)	0.977 (U)				
3/4/2020	1.18	1.23				0.862 (U)	1.73	2.3	
3/5/2020			1.35	0.483 (U)	0.921 (U)				
8/19/2020	0.684 (U)	0.876 (U)	1 (U)	0.482 (U)					
8/20/2020					0.501 (U)	1.64	2.78	2.97	
9/15/2020		1.23 (U)							
9/16/2020	0.175 (U)		0.43 (U)	0.195 (U)	0.254 (U)	0.51 (U)			
9/17/2020							0.717 (U)	2.04	
3/2/2021					0.107 (U)	0.571 (U)			
3/3/2021	0.829 (U)	1.31 (U)	0.415 (U)						
3/4/2021				0.32 (U)			1.22	2.04	
3/5/2021									2.11

Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 11/5/2021 7:02 AM View: Descriptive

Plant Branch Client: Southern Company Data: Plant Branch AP

	PZ-51D	PZ-51I	PZ-51S
1/18/2019			1.22
1/19/2019		1.86	
10/18/2019		11.7 (U)	17.1 (U)
8/20/2020		0.937 (U)	1.19
9/17/2020		1.76	0.952 (U)
3/3/2021	2.54		0.599 (U)
3/4/2021		0.966 (U)	

Time Series

Constituent: Fluoride (mg/L) Analysis Run 11/5/2021 7:02 AM View: Descriptive

Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWA-12I (bg)	BRGWA-12S (bg)	BRGWA-23S (bg)	BRGWA-2I (bg)	BRGWA-2S (bg)	BRGWA-5I (bg)	BRGWA-5S (bg)	BRGWA-6S (bg)	BRGWC-25I
8/31/2016				0.11 (J)	0.05 (J)	0.07 (J)	0.19 (J)		
9/1/2016	0.2 (J)	0.05 (J)						0.06 (J)	
9/6/2016			0.42						
9/8/2016									0.14 (J)
11/15/2016							0.13 (J)	0.06 (J)	
11/16/2016	0.14 (J)	0.03 (J)		0.08 (J)	0.07 (J)	0.07 (J)			
11/17/2016			0.15 (J)						0.27 (J)
2/20/2017						0.06 (J)	0.08 (J)	0.04 (J)	
2/21/2017	0.16 (J)	0.04 (J)	0.1 (J)	0.14 (J)	0.05 (J)				0.6
6/12/2017				0.16 (J)		0.008 (J)	0.07 (J)	0.06 (J)	
6/13/2017		0.008 (J)	0.07 (J)		0.04 (J)				0.19 (J)
6/14/2017	0.09 (J)								
9/26/2017	0.1 (J)	<0.1	<0.1	0.14 (J)	<0.1	<0.1	0.04 (J)	<0.1	
9/27/2017									0.5
2/13/2018				<0.1	<0.1	<0.1	<0.1	<0.1	
2/14/2018	<0.1	<0.1	<0.1						<0.1
6/26/2018	0.079 (J)	0.042 (J)	0.053 (J)	0.085 (J)	0.048 (J)	0.045 (J)	0.072 (J)	0.041 (J)	0.15 (J)
12/18/2018	<0.1	<0.1	<0.1	0.085 (J)	<0.1	<0.1	<0.1	<0.1	0.29 (J)
3/19/2019	<0.1	<0.1	<0.1	0.0655 (JD)	0.037 (J)	<0.1	0.06 (J)	0.03 (J)	
3/20/2019									0.17 (JD)
8/27/2019	<0.1	<0.1		<0.1	<0.1	<0.1	<0.1	<0.1	0.15 (J)
8/29/2019			0.084 (J)						
10/15/2019	0.047 (J)	<0.1	<0.1	<0.1	<0.1	<0.1	0.045 (J)	<0.1	0.16 (J)
3/3/2020	0.056 (J)	<0.1		0.066 (J)	0.05 (J)	<0.1	0.057 (J)	0.09 (J)	
3/4/2020			<0.1						0.07 (J)
8/18/2020	0.052 (J)	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	
8/19/2020									0.17
9/15/2020	0.062 (J)	<0.1	<0.1	<0.1	<0.1	<0.1	0.051 (J)	<0.1	0.15
3/1/2021				<0.1				<0.1	
3/2/2021	0.061 (J)	<0.1	<0.1		<0.1	<0.1	<0.1		0.15
9/21/2021	0.071 (J)	<0.1				<0.1	0.056 (J)		
9/22/2021			0.069 (J)	<0.1	<0.1			<0.1	
9/28/2021									0.15

Time Series

Constituent: Fluoride (mg/L) Analysis Run 11/5/2021 7:02 AM View: Descriptive

Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWC-27I	BRGWC-29I	BRGWC-30I	BRGWC-32S	BRGWC-45	BRGWC-47	BRGWC-50	BRGWC-52I	PZ-50D
9/6/2016			0.43						
9/8/2016	0.31	0.2 (J)		0.15 (J)					
11/18/2016	0.19 (J)								
11/21/2016		0.37	0.24 (J)	0.04 (J)					
2/21/2017	0.35								
2/22/2017		0.37	0.2 (J)	0.08 (J)					
6/13/2017	0.19 (J)								
6/14/2017		0.38	0.15 (J)	0.09 (J)					
9/27/2017	0.4	0.4	0.41	<0.1					
2/14/2018	<0.1	<0.1	<0.1	<0.1					
3/6/2018					0.94	1.1			
3/15/2018							0.84 (JX)		
5/1/2018					<0.1	0.595 (D)	0.91		
6/27/2018	0.26 (J)	0.085 (J)		<0.1		0.27 (J)			
6/28/2018			0.93 (J+X)		0.69 (J+X)		1.1 (J+X)		
7/31/2018					<0.1				
8/1/2018						0.48	2		
8/10/2018								1.6 (O)	
8/23/2018					<0.1	0.34		0.32	
9/19/2018					<0.1	0.23 (J)		0.22 (J)	
10/29/2018					<0.1	<0.1	0.24 (J)	0.14 (J)	
11/28/2018					<0.1	0.063 (J)	0.41	0.24 (J)	
12/18/2018		0.26 (J)	0.54						
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								<0.1	
3/19/2019	0.2 (J)					<0.1			
3/20/2019		0.091 (J)	0.31	<0.1	0.066 (J)		0.21 (J)	0.135 (JD)	
8/27/2019			0.12 (J)	<0.1					
8/28/2019	0.074 (J)	0.055 (J)			<0.1	<0.1			
8/29/2019							0.41	0.087 (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)		0.26 (J)	0.11 (J)					
3/4/2020	<0.1	<0.1				<0.1	0.14 (J)	0.1 (J)	
3/5/2020			0.051 (J)	<0.1	<0.1				
8/19/2020	0.19	0.12	0.14	<0.1					
8/20/2020					<0.1	<0.1	0.39	0.23	
9/15/2020		0.057 (J)							
9/16/2020	0.15		0.13	<0.1	0.052 (J)	<0.1			
9/17/2020							0.46	0.074 (J)	
10/27/2020									0.28
3/2/2021					0.067 (J)	<0.1			
3/3/2021	0.24	0.13	0.13						
3/4/2021				<0.1			0.6	0.28	
3/5/2021									0.16
9/23/2021					0.06 (J)	<0.1			
9/27/2021							0.43		
9/28/2021	0.16	0.081 (J)	0.11	<0.1				0.12	0.11

Time Series

Constituent: Fluoride (mg/L) Analysis Run 11/5/2021 7:02 AM View: Descriptive

Plant Branch Client: Southern Company Data: Plant Branch AP

	PZ-51D	PZ-51I	PZ-51S	PZ-57I	PZ-58I	PZ-60I	PZ-61I
1/18/2019			0.13 (J)				
1/19/2019		<0.1					
10/18/2019		<0.1	0.09 (J)				
8/20/2020		<0.1	0.056 (J)				
9/17/2020		<0.1	0.062 (J)				
10/27/2020	0.21	<0.1					
3/3/2021	0.28		0.083 (J)				
3/4/2021		0.061 (J)					
9/27/2021		<0.1	0.072 (J)				0.067 (J)
9/28/2021	0.26			0.085 (J)	0.97	1.6	

Time Series

Constituent: Lead (mg/L) Analysis Run 11/5/2021 7:02 AM View: Descriptive

Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWA-12I (bg)	BRGWA-12S (bg)	BRGWA-23S (bg)	BRGWA-2I (bg)	BRGWA-2S (bg)	BRGWA-5I (bg)	BRGWA-5S (bg)	BRGWA-6S (bg)	BRGWC-25I
8/31/2016				<0.001	<0.001	<0.001	<0.001		
9/1/2016	<0.001	<0.001						0.0001 (J)	
9/6/2016			<0.001						
9/8/2016									<0.001
11/15/2016							<0.001	<0.001	
11/16/2016	<0.001	<0.001		<0.001	<0.001	<0.001			
11/17/2016			<0.001						<0.001
2/20/2017						<0.001	0.0002 (J)	<0.001	
2/21/2017	<0.001	<0.001	<0.001	<0.001	<0.001				<0.001
6/12/2017				8E-05 (J)		<0.001	0.0001 (J)	8E-05 (J)	
6/13/2017		<0.001	<0.001		<0.001				<0.001
6/14/2017	<0.001								
9/26/2017	<0.001	<0.001	<0.001	7E-05 (J)	7E-05 (J)	<0.001	0.0001 (J)	<0.001	
9/27/2017									<0.001
2/13/2018				<0.001	<0.001	<0.001	<0.001	<0.001	
2/14/2018	<0.001	<0.001	<0.001						<0.001
6/26/2018	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
12/18/2018	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
8/27/2019	<0.001	<0.001		<0.001	5.8E-05 (J)	<0.001	0.00036 (J)	<0.001	0.00011 (J)
8/29/2019			7E-05 (J)						
10/15/2019	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	7.9E-05 (J)	<0.001	<0.001
3/3/2020	<0.001	<0.001		<0.001	<0.001	<0.001	7.9E-05 (J)	7.3E-05 (J)	
3/4/2020			<0.001						<0.001
8/18/2020	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.0001 (J)	<0.001	
8/19/2020									<0.001
9/15/2020	<0.001	<0.001	<0.001	<0.001	<0.001	0.0013 (J)	4.3E-05 (J)	<0.001	<0.001
3/1/2021				<0.001				<0.001	
3/2/2021	<0.001	<0.001	<0.001		<0.001	3.7E-05 (J)	<0.001		<0.001
9/21/2021	<0.001	<0.001				<0.001	<0.001		
9/22/2021			<0.001	<0.001	<0.001			<0.001	
9/28/2021									<0.001

Time Series

Constituent: Lead (mg/L) Analysis Run 11/5/2021 7:02 AM View: Descriptive

Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWC-27I	BRGWC-29I	BRGWC-30I	BRGWC-32S	BRGWC-45	BRGWC-47	BRGWC-50	BRGWC-52I	PZ-50D
9/6/2016			<0.001						
9/8/2016	<0.001	0.0004 (J)		<0.001					
11/18/2016	<0.001								
11/21/2016		0.0006 (J)	<0.001	<0.001					
2/21/2017	<0.001								
2/22/2017		0.0005 (J)	<0.001	<0.001					
6/13/2017	<0.001								
6/14/2017		0.0004 (J)	<0.001	<0.001					
9/27/2017	<0.001	0.0006 (J)	<0.001	<0.001					
2/14/2018	<0.001	<0.005 (o)	<0.001	<0.001					
3/6/2018					<0.001	<0.001			
3/15/2018							<0.001		
5/1/2018					<0.001	<0.001 (D)	<0.001		
6/27/2018	<0.001	0.00032 (J)		<0.001		<0.001			
6/28/2018			<0.001		<0.001		0.00054 (J)		
7/31/2018					<0.001				
8/1/2018						<0.001	<0.001		
8/10/2018								<0.001	
8/23/2018					<0.001	<0.001		<0.001	
9/19/2018					<0.001	<0.001		<0.001	
10/29/2018					<0.001	<0.001	0.0003 (J)	<0.001	
11/28/2018					<0.001	<0.001	<0.001	<0.001	
12/18/2018		0.00038 (J)	<0.001						
12/19/2018				<0.001		<0.001	<0.001		
12/20/2018	<0.001				<0.001			<0.001	
1/16/2019							<0.001		
1/17/2019								<0.001	
2/13/2019								<0.001	
8/27/2019			<0.001	<0.001					
8/28/2019	<0.001	0.00027 (J)			<0.001	<0.001			
8/29/2019							4.9E-05 (J)	<0.001	
10/16/2019		0.00027 (J)				<0.001	8.5E-05 (J)	<0.001	
12/3/2019					<0.001				
12/4/2019	6.3E-05 (J)		<0.001	<0.001					
3/4/2020	<0.001	0.0003 (J)				0.00012 (J)	0.0001 (J)	<0.001	
3/5/2020			<0.001	<0.001	0.00026 (J)				
8/19/2020	<0.001	0.00025 (J)	<0.001	<0.001					
8/20/2020					0.00021 (J)	4.8E-05 (J)	6.7E-05 (J)	<0.001	
9/15/2020		0.00029 (J)							
9/16/2020	<0.001		0.00011 (J)	<0.001	5.3E-05 (J)	6.6E-05 (J)			
9/17/2020							0.00015 (J)	<0.001	
3/2/2021					<0.001	<0.001			
3/3/2021	<0.001	0.00033 (J)	<0.001						
3/4/2021				<0.001			0.00016 (J)	4.2E-05 (J)	
3/5/2021									5.6E-05 (J)
9/23/2021					<0.001	<0.001			
9/27/2021							<0.001		
9/28/2021	<0.001	<0.001	<0.001	<0.001				<0.001	<0.001

Time Series

Constituent: Lead (mg/L) Analysis Run 11/5/2021 7:02 AM View: Descriptive

Plant Branch Client: Southern Company Data: Plant Branch AP

	PZ-51D	PZ-51I	PZ-51S	PZ-57I	PZ-58I	PZ-60I	PZ-61I
1/18/2019			<0.001				
1/19/2019		<0.001					
10/18/2019		<0.001	<0.001				
8/20/2020		<0.001	<0.001				
9/17/2020		0.00036 (J)	<0.001				
3/3/2021	0.00013 (J)		<0.001				
3/4/2021		0.00017 (J)					
9/27/2021		<0.001	<0.001				0.0019
9/28/2021	<0.001			<0.001	<0.001	<0.001	

Time Series

Constituent: Lithium (mg/L) Analysis Run 11/5/2021 7:02 AM View: Descriptive

Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWA-12I (bg)	BRGWA-12S (bg)	BRGWA-23S (bg)	BRGWA-2I (bg)	BRGWA-2S (bg)	BRGWA-5I (bg)	BRGWA-5S (bg)	BRGWA-6S (bg)	BRGWC-25I
8/31/2016				0.0268 (J)	<0.03	<0.03	<0.03		
9/1/2016	0.0061 (J)	<0.03						0.003 (J)	
9/6/2016			0.0028 (J)						
9/8/2016									<0.03
11/15/2016							<0.03	0.0033 (J)	
11/16/2016	0.0054 (J)	<0.03		0.0201 (J)	<0.03	0.0033 (J)			
11/17/2016			0.0063 (J)						<0.03
2/20/2017						<0.03	<0.03	0.0025 (J)	
2/21/2017	0.0058 (J)	<0.03	0.0052 (J)	0.0128 (J)	<0.03				<0.03
6/12/2017				0.0245 (J)		0.0019 (J)	<0.03	0.0027 (J)	
6/13/2017		<0.03	0.0061 (J)		<0.03				<0.03
6/14/2017	0.0054 (J)								
9/26/2017	0.0037 (J)	<0.03	0.0087 (J)	0.0549	<0.03	0.0022 (J)	<0.03	0.0023 (J)	
9/27/2017									<0.03
2/13/2018				0.0595	<0.03	0.0041 (J)	<0.03	0.0027 (J)	
2/14/2018	0.0038 (J)	<0.03	0.0104 (J)						<0.03
6/26/2018	0.0045 (J)	<0.03	0.0095 (J)	0.089	<0.03	0.0025 (J)	<0.03	0.0029 (J)	<0.03
12/18/2018	0.0038 (J)	<0.03	0.0091 (J)	0.024 (J)	<0.03	0.0032 (J)	<0.03	0.0026 (J)	<0.03
8/27/2019	0.0039 (J)	<0.03		0.035	<0.03	0.0019 (J)	<0.03	0.0028 (J)	<0.03
8/29/2019			0.007 (J)						
10/15/2019	0.0037 (J)	<0.03	0.0069 (J)	0.028 (J)	<0.03	0.002 (J)	<0.03	0.0024 (J)	<0.03
3/3/2020	0.0033 (J)	<0.03		0.055	<0.03	0.0013 (J)	<0.03	0.0026 (J)	
3/4/2020			0.0074 (J)						<0.03
8/18/2020	0.0039 (J)	<0.03	0.0099 (J)	0.054	<0.03	0.00095 (J)	<0.03	0.0026 (J)	
8/19/2020									<0.03
9/15/2020	0.0037 (J)	<0.03	0.011 (J)	0.033	<0.03	0.001 (J)	<0.03	0.0027 (J)	<0.03
3/1/2021				0.027 (J)				0.0036 (J)	
3/2/2021	0.0045 (J)	<0.03	0.0093 (J)		<0.03	0.00081 (J)	<0.03		<0.03
9/21/2021	0.0037 (J)	<0.03				0.0012 (J)	<0.03		
9/22/2021			0.0074 (J)	0.021 (J)	<0.03			0.0035 (J)	
9/28/2021									<0.03

Time Series

Constituent: Lithium (mg/L) Analysis Run 11/5/2021 7:02 AM View: Descriptive

Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWC-27I	BRGWC-29I	BRGWC-30I	BRGWC-32S	BRGWC-45	BRGWC-47	BRGWC-50	BRGWC-52I	PZ-50D
9/6/2016			0.0117 (J)						
9/8/2016	0.0021 (J)	0.004 (J)		<0.03					
11/18/2016	<0.03								
11/21/2016		0.0039 (J)	0.0108 (J)	<0.03					
2/21/2017	<0.03								
2/22/2017		0.0043 (J)	0.0103 (J)	0.0023 (J)					
6/13/2017	0.0017 (J)								
6/14/2017		0.0036 (J)	0.0101 (J)	0.0022 (J)					
9/27/2017	0.0016 (J)	0.0038 (J)	0.0116 (J)	0.0021 (J)					
2/14/2018	0.0018 (J)	0.0034 (J)	0.0115 (J)	0.0023 (J)					
3/6/2018					0.0031 (J)	0.0399 (J)			
3/15/2018							0.038 (J)		
5/1/2018					0.0038 (J)	0.0475 (D)	0.042 (J)		
6/27/2018	0.0016 (J)	0.0034 (J)		0.0023 (J)		0.044 (J)			
6/28/2018			0.013 (J)		0.0028 (J)		0.04 (J)		
7/31/2018					<0.25 (o)				
8/1/2018						0.039 (J)	0.036 (J)		
8/10/2018								0.0087 (J)	
8/23/2018					0.0033 (J)	0.044 (J)		0.0089 (J)	
9/19/2018					0.0033 (J)	0.043 (J)		0.005 (J)	
10/29/2018					0.003 (J)	0.039 (J)	0.041 (J)	0.0048 (J)	
11/28/2018					0.0035 (J)	0.044 (J)	0.041 (J)	0.0052 (J)	
12/18/2018		0.0032 (J)	0.014 (J)						
12/19/2018				0.0018 (J)		0.043 (J)	0.043 (J)		
12/20/2018	0.0015 (J)				0.003 (J)			0.0042 (J)	
1/16/2019							0.042 (J)		
1/17/2019								0.0039 (J)	
2/13/2019								<0.03	
8/27/2019			0.016 (J)	0.0022 (J)					
8/28/2019	0.0016 (J)	0.0033 (J)			0.0034 (J)	0.044			
8/29/2019							0.039	0.0052 (J)	
10/16/2019		0.0029 (J)				0.038	0.034	0.0023 (J)	
12/3/2019					0.0033 (J)				
12/4/2019	0.0014 (J)		0.013 (J)	0.0022 (J)					
3/4/2020	0.0014 (J)	0.0029 (J)				0.042	0.042	0.002 (J)	
3/5/2020			0.016 (J)	0.0022 (J)	0.003 (J)				
8/19/2020	0.0014 (J)	0.0029 (J)	0.018 (J)	0.002 (J)					
8/20/2020					0.0034 (J)	0.044	0.04	0.0022 (J)	
9/15/2020		0.003 (J)							
9/16/2020	0.0014 (J)		0.016 (J)	0.0022 (J)	0.0036 (J)	0.039			
9/17/2020							0.052	0.0058 (J)	
3/2/2021					0.0043 (J)	0.044			
3/3/2021	0.0012 (J)	0.0032 (J)	0.014 (J)						
3/4/2021				0.002 (J)			0.05	0.003 (J)	
3/5/2021									0.019 (J)
9/23/2021					0.0023 (J)	0.042			
9/27/2021							0.038		
9/28/2021	0.0011 (J)	0.0029 (J)	0.023 (J)	0.0021 (J)				0.0035 (J)	0.02 (J)

Time Series

Constituent: Lithium (mg/L) Analysis Run 11/5/2021 7:02 AM View: Descriptive

Plant Branch Client: Southern Company Data: Plant Branch AP

	PZ-51D	PZ-51I	PZ-51S	PZ-57I	PZ-58I	PZ-60I	PZ-61I
1/18/2019			0.0012 (J)				
1/19/2019		0.019 (J)					
10/18/2019		0.019 (J)	<0.03				
8/20/2020		0.019 (J)	<0.03				
9/17/2020		0.021 (J)	<0.03				
3/3/2021	0.0093 (J)		<0.03				
3/4/2021		0.026 (J)					
9/27/2021		0.02 (J)	<0.03				0.0095 (J)
9/28/2021	0.0096 (J)			0.018 (J)	0.041	0.1	

Time Series

Constituent: Mercury (mg/L) Analysis Run 11/5/2021 7:02 AM View: Descriptive

Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWA-12I (bg)	BRGWA-12S (bg)	BRGWA-23S (bg)	BRGWA-2I (bg)	BRGWA-2S (bg)	BRGWA-5I (bg)	BRGWA-5S (bg)	BRGWA-6S (bg)	BRGWC-25I
8/31/2016				<0.0002	<0.0002	<0.0002	<0.0002		
9/1/2016	<0.0002	<0.0002						<0.0002	
9/6/2016			<0.0002						
9/8/2016									<0.0002
11/15/2016							<0.0002	<0.0002	
11/16/2016	<0.0002	<0.0002		<0.0002	<0.0002	<0.0002			
11/17/2016			<0.0002						<0.0002
2/20/2017						<0.0002	8E-05 (J)	<0.0002	
2/21/2017	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002				<0.0002
6/12/2017				4E-05 (J)		<0.0002	<0.0002	<0.0002	
6/13/2017		<0.0002	<0.0002		<0.0002				<0.0002
6/14/2017	6E-05 (J)								
9/26/2017	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	
9/27/2017									4E-05 (J)
2/13/2018				0.00021	0.00019 (J)	<0.0002	0.00013 (J)	<0.0002	
2/14/2018	5.2E-05 (J)	<0.0002	<0.0002						<0.0002
6/26/2018	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
12/18/2018	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
8/27/2019	<0.0002	<0.0002		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
8/29/2019			<0.0002						
8/18/2020	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	
8/19/2020									8.3E-05 (J)
9/15/2020	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
3/1/2021				<0.0002				<0.0002	
3/2/2021	<0.0002	<0.0002	<0.0002		<0.0002	<0.0002	<0.0002		<0.0002
9/21/2021	0.0001 (J)	0.0001 (J)				0.0001 (J)	0.0001 (J)		
9/22/2021			0.0001 (J)	0.0001 (J)	0.0001 (J)			0.0001 (J)	
9/28/2021									<0.0002

Time Series

Constituent: Mercury (mg/L) Analysis Run 11/5/2021 7:02 AM View: Descriptive

Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWC-27I	BRGWC-29I	BRGWC-30I	BRGWC-32S	BRGWC-45	BRGWC-47	BRGWC-50	BRGWC-52I	PZ-50D
9/6/2016			<0.0002						
9/8/2016	<0.0002	<0.0002		<0.0002					
11/18/2016	<0.0002								
11/21/2016		<0.0002	<0.0002	<0.0002					
2/21/2017	<0.0002								
2/22/2017		<0.0002	<0.0002	<0.0002					
6/13/2017	5E-05 (J)								
6/14/2017		7E-05 (J)	7E-05 (J)	9E-05 (J)					
9/27/2017	4.7E-05 (J)	4E-05 (J)	4E-05 (J)	0.0001 (J)					
2/14/2018	<0.0002	<0.0002	<0.0002	<0.0002					
3/6/2018					<0.0002	<0.0002			
3/15/2018							<0.0002		
5/1/2018					<0.0002	<0.0002 (D)	<0.0002		
6/27/2018	<0.0002	<0.0002		<0.0002		<0.0002			
6/28/2018			<0.0002		<0.0002		<0.0002		
7/31/2018					<0.0002				
8/1/2018						<0.0002	<0.0002		
8/10/2018								<0.0002	
8/23/2018					<0.0002	<0.0002		<0.0002	
9/19/2018					<0.0002	<0.0002		<0.0002	
10/29/2018					<0.0002	<0.0002	<0.0002	<0.0002	
11/28/2018					<0.0002	<0.0002	<0.0002	<0.0002	
12/18/2018		<0.0002	<0.0002						
12/19/2018				<0.0002		<0.0002	<0.0002		
12/20/2018	<0.0002				<0.0002			<0.0002	
1/16/2019							<0.0002		
1/17/2019								<0.0002	
2/13/2019								<0.0002	
8/27/2019			<0.0002	<0.0002					
8/28/2019	<0.0002	<0.0002			<0.0002	<0.0002			
8/29/2019							<0.0002	<0.0002	
8/19/2020	<0.0002	9.8E-05 (J)	8.2E-05 (J)	8.2E-05 (J)					
8/20/2020					<0.0002	<0.0002	<0.0002	<0.0002	
9/15/2020		<0.0002							
9/16/2020	<0.0002		<0.0002	<0.0002	<0.0002	<0.0002			
9/17/2020							<0.0002	<0.0002	
3/2/2021					<0.0002	<0.0002			
3/3/2021	<0.0002	<0.0002	<0.0002						
3/4/2021				<0.0002			<0.0002	<0.0002	
3/5/2021									<0.0002
9/23/2021					<0.0002	<0.0002			
9/27/2021							<0.0002		
9/28/2021	<0.0002	<0.0002	<0.0002	<0.0002				<0.0002	<0.0002

Time Series

Constituent: Mercury (mg/L) Analysis Run 11/5/2021 7:02 AM View: Descriptive

Plant Branch Client: Southern Company Data: Plant Branch AP

	PZ-51D	PZ-51I	PZ-51S	PZ-57I	PZ-58I	PZ-60I	PZ-61I
1/18/2019			<0.0002				
1/19/2019		<0.0002					
10/18/2019		<0.0002	<0.0002				
8/20/2020		9.9E-05 (J)	<0.0002				
9/17/2020		<0.0002	<0.0002				
3/3/2021	<0.0002		<0.0002				
3/4/2021		<0.0002					
9/27/2021		<0.0002	<0.0002				<0.0002
9/28/2021	<0.0002			<0.0002	<0.0002	<0.0002	

Time Series

Constituent: Molybdenum (mg/L) Analysis Run 11/5/2021 7:02 AM View: Descriptive

Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWA-12I (bg)	BRGWA-12S (bg)	BRGWA-23S (bg)	BRGWA-2I (bg)	BRGWA-2S (bg)	BRGWA-5I (bg)	BRGWA-5S (bg)	BRGWA-6S (bg)	BRGWC-25I
8/31/2016				0.0021 (J)	<0.01	0.004 (J)	<0.01		
9/1/2016	0.002 (J)	<0.01						<0.01	
9/6/2016			0.0028 (J)						
9/8/2016									<0.01
11/15/2016							<0.01	<0.01	
11/16/2016	<0.01	<0.01		<0.01	<0.01	0.0038 (J)			
11/17/2016			<0.01						<0.01
2/20/2017						0.0055 (J)	<0.01	<0.01	
2/21/2017	<0.01	<0.01	<0.01	0.0021 (J)	<0.01				<0.01
6/12/2017				0.0021 (J)		0.005 (J)	<0.01	<0.01	
6/13/2017		<0.01	<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	0.0053 (J)	<0.01	<0.01	
9/27/2017									<0.01
2/13/2018				0.0019 (J)	<0.01	0.008 (J)	<0.01	<0.01	
2/14/2018	<0.01	<0.01	<0.01						<0.01
6/26/2018	<0.01	<0.01	<0.01	<0.01	<0.01	0.0041 (J)	<0.01	<0.01	<0.01
12/18/2018	<0.01	<0.01	<0.01	<0.01	<0.01	0.0048 (J)	<0.01	<0.01	<0.01
8/27/2019	<0.01	<0.01		<0.01	<0.01	0.0028 (J)	<0.01	<0.01	<0.01
8/29/2019			<0.01						
10/15/2019	<0.01	<0.01	<0.01	<0.01	<0.01	0.0035 (J)	<0.01	<0.01	<0.01
3/3/2020				<0.01	<0.01	0.0023 (J)	<0.01	<0.01	
8/18/2020	<0.01	<0.01	<0.01	0.0011 (J)	<0.01	0.0015 (J)	<0.01	<0.01	
8/19/2020									0.00081 (J)
9/15/2020	<0.01	<0.01	<0.01	0.0007 (J)	<0.01	0.0015 (J)	<0.01	<0.01	0.0008 (J)
3/1/2021				<0.01				<0.01	
3/2/2021	<0.01	<0.01	<0.01		<0.01	0.0015 (J)	<0.01		0.001 (J)
9/21/2021	<0.01	<0.01				0.002 (J)	<0.01		
9/22/2021			<0.01	0.0012 (J)	<0.01			<0.01	
9/28/2021									0.00089 (J)

Time Series

Constituent: Molybdenum (mg/L) Analysis Run 11/5/2021 7:02 AM View: Descriptive

Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWC-27I	BRGWC-29I	BRGWC-30I	BRGWC-32S	BRGWC-45	BRGWC-47	BRGWC-50	BRGWC-52I	PZ-50D
9/6/2016			<0.01						
9/8/2016	<0.01	<0.01		<0.01					
11/18/2016	<0.01								
11/21/2016		<0.01	<0.01	<0.01					
2/21/2017	<0.01								
2/22/2017		<0.01	<0.01	<0.01					
6/13/2017	<0.01								
6/14/2017		<0.01	<0.01	<0.01					
9/27/2017	<0.01	<0.01	<0.01	<0.01					
2/14/2018	<0.01	<0.01	<0.01	<0.01					
3/6/2018					<0.01	<0.01			
3/15/2018							<0.01		
5/1/2018					<0.01	<0.01 (D)	0.0022 (J)		
6/27/2018	<0.01	<0.01		<0.01		<0.01			
6/28/2018			<0.01		<0.01		<0.01		
7/31/2018					<0.01				
8/1/2018						<0.01	0.0033 (J)		
8/10/2018								0.0032 (J)	
8/23/2018					<0.01	<0.01		0.005 (J)	
9/19/2018					<0.01	<0.01		0.0061 (J)	
10/29/2018					<0.01	<0.01	<0.01	0.0065 (J)	
11/28/2018					<0.01	<0.01	<0.01	0.0027 (J)	
12/18/2018		<0.01	<0.01						
12/19/2018				<0.01		<0.01	<0.01		
12/20/2018	<0.01				<0.01			<0.01	
1/16/2019							<0.01		
1/17/2019								<0.01	
2/13/2019								<0.01	
8/27/2019			<0.01	<0.01					
8/28/2019	<0.01	<0.01			<0.01	<0.01			
8/29/2019							<0.01	<0.01	
10/16/2019		<0.01				<0.01	<0.01	<0.01	
12/3/2019					<0.01				
12/4/2019	<0.01		<0.01	<0.01					
8/19/2020	<0.01	<0.01	0.00078 (J)	<0.01					
8/20/2020					0.00076 (J)	<0.01	<0.01	0.0012 (J)	
9/15/2020		<0.01							
9/16/2020	<0.01		0.0022 (J)	<0.01	<0.01	<0.01			
9/17/2020							<0.01	0.0007 (J)	
3/2/2021					<0.01	<0.01			
3/3/2021	<0.01	<0.01	<0.01						
3/4/2021				<0.01			<0.01	0.001 (J)	
3/5/2021									0.0017 (J)
9/23/2021					<0.01	<0.01			
9/27/2021							<0.01		
9/28/2021	<0.01	<0.01	0.001 (J)	<0.01				<0.01	0.0021 (J)

Time Series

Constituent: Molybdenum (mg/L) Analysis Run 11/5/2021 7:02 AM View: Descriptive

Plant Branch Client: Southern Company Data: Plant Branch AP

	PZ-51D	PZ-51I	PZ-51S	PZ-57I	PZ-58I	PZ-60I	PZ-61I
1/18/2019			<0.01				
1/19/2019		<0.01					
10/18/2019		<0.01	<0.01				
8/20/2020		<0.01	<0.01				
9/17/2020		<0.01	<0.01				
3/3/2021	0.0068 (J)		<0.01				
3/4/2021		<0.01					
9/27/2021		<0.01	<0.01				<0.01
9/28/2021	0.0029 (J)			<0.01	<0.01	<0.01	

Time Series

Constituent: pH, Field (S.U.) Analysis Run 11/5/2021 7:02 AM View: Descriptive

Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWA-12I (bg)	BRGWA-12S (bg)	BRGWA-23S (bg)	BRGWA-2I (bg)	BRGWA-2S (bg)	BRGWA-5I (bg)	BRGWA-5S (bg)	BRGWA-6S (bg)	BRGWC-25I
8/31/2016				7.16	6.2	6.53	6.59		
9/1/2016	6.71	6						6.49	
9/6/2016			6.49						
9/8/2016									6.07
11/15/2016							6.67	6.59	
11/16/2016	6.15	6		6.96	6.12	6.4			5.96
11/17/2016			5.79						
2/20/2017						6.44	6.65	6.61	
2/21/2017	6.52	6.09	6.15	7.15	6.24				5.98
6/12/2017				7.31		6.4	6.64		
6/13/2017	6.42	6.03	5.87		6.19				5.96
6/14/2017	6.51								
9/26/2017	6.42	5.85	5.82	7.02	6.15	6.31	6.58	6.47	
9/27/2017									5.85
2/13/2018				7.44	6.18	6.62	6.72	6.54	
2/14/2018	6.48	5.99	5.83						5.94
6/26/2018	6.2	5.86	5.73	6.93	6.05	6.29	6.43	6.23	5.87
7/31/2018	6.37	5.99							
12/18/2018	6.5	6.08	5.78	6.76	5.92	6.57	6.7	6.71	5.84
3/19/2019	6.28	5.71	5.28	6.87	6.18	6.45	6.63	6.18	
3/20/2019									6.03
8/27/2019	6.35	6		6.79	6.09	6.37	6.49	6.35	6.01
8/29/2019			5.64						
10/15/2019	6.8	6.61	5.7	6.57	6.06	6.77	7.01	6.36	6
3/3/2020	6.33	5.94		6.71	6.1	6.29	6.49	6.59	
3/4/2020			5.7						6.02
8/18/2020	6.25	5.75	5.56	6.59	6.06	6.29	6.41	6.33	
8/19/2020									6.32
9/15/2020	6.01	6	5.72	6.64	6.01	6.27	6.25	6.43	6
3/1/2021				6.66				6.7	
3/2/2021	6.11	5.92	5.75		6.2	6.47	6.42		6.1
9/21/2021	6.53	5.87				6.32	6.36		
9/22/2021			5.72	6.78	6.06			6.48	
9/28/2021									5.97

Time Series

Constituent: pH, Field (S.U.) Analysis Run 11/5/2021 7:02 AM View: Descriptive

Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWC-27I	BRGWC-29I	BRGWC-30I	BRGWC-32S	BRGWC-45	BRGWC-47	BRGWC-50	BRGWC-52I	PZ-50D
9/6/2016			6.23						
9/8/2016	5.51	4.62		5.89					
11/18/2016	5.53								
11/21/2016		4.44	6.23	5.56					
2/21/2017	5.63								
2/22/2017		4.42	6.16	5.87					
6/13/2017	5.57								
6/14/2017		4.45	6.16	5.83					
9/27/2017	5.53	4.33	6.16	5.87					
2/14/2018	5.83	4.42	6.24	6.01					
3/15/2018					5.26		5.26		
5/1/2018					6.14	5.85	5.38		
6/27/2018	5.53	4.37		5.83		5.87			
6/28/2018			6.21		5.88		5.03		
7/31/2018					6.07				
8/1/2018						5.79	5.22		
8/10/2018								6.28	
8/23/2018								6.75	
9/19/2018					5.9	5.71		6.48	
10/29/2018					5.93	5.76	5.19	6.77	
11/28/2018					5.99	5.74	5.28	6.44	
12/18/2018		4.38	6.18						
12/19/2018				5.79		5.8	5.15		
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		4.4	6.24	5.88	6.1		5.32	6.59	
8/27/2019			6.17	5.85					
8/28/2019	5.51	4.39			5.86	5.74			
8/29/2019							5.2	6.27	
10/16/2019		4.79				5.9	5.36	7	
10/17/2019	6.01 (D)		6.43	6.09	5.93				
3/4/2020	5.8	4.5				5.76	5.2	6.54	
3/5/2020			5.99	5.74	5.95				
5/12/2020				5.88					
8/19/2020	5.81	4.67	6.36	5.97					
8/20/2020					5.86	5.75	5.26	6.85	
9/15/2020		4.53							
9/16/2020	5.81		6.29	5.79	5.27	5.76			
9/17/2020							4.41	6.12	
10/27/2020									6.47
3/2/2021					6.17	5.59			
3/3/2021	5.9	4.46	6.29						
3/4/2021				5.98			4.34	5.87	
3/5/2021									7.06
9/23/2021					5.95	5.74			
9/27/2021							5.05		
9/28/2021	5.82	4.23	6.33	5.82				6.81	6.23

Time Series

Constituent: pH, Field (S.U.) Analysis Run 11/5/2021 7:02 AM View: Descriptive
Plant Branch Client: Southern Company Data: Plant Branch AP

	PZ-51D	PZ-51I	PZ-51S	PZ-57I	PZ-58I	PZ-60I	PZ-61I
8/2/2018			6.18				
8/3/2018		5.47					
1/18/2019			6.19				
1/19/2019		5.45					
10/18/2019		5.79	6.44				
8/20/2020		5.57	6.15				
9/17/2020		4.93	5.77				
10/27/2020	6.79	5.49					
3/3/2021	7.1		5.41				
3/4/2021		4.57					
9/27/2021		5.34	6.04				5.02
9/28/2021	7.18			5.37	4	4.77	

Time Series

Constituent: Selenium (mg/L) Analysis Run 11/5/2021 7:02 AM View: Descriptive
Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWA-12I (bg)	BRGWA-12S (bg)	BRGWA-23S (bg)	BRGWA-2I (bg)	BRGWA-2S (bg)	BRGWA-5I (bg)	BRGWA-5S (bg)	BRGWA-6S (bg)	BRGWC-25I
8/31/2016				<0.005	<0.005	<0.005	<0.005		
9/1/2016	<0.005	<0.005						<0.005	
9/6/2016			<0.005						
9/8/2016									<0.005
11/15/2016							<0.005	<0.005	
11/16/2016	<0.005	<0.005		<0.005	<0.005	<0.005			
11/17/2016			0.0052 (J)						<0.005
2/20/2017						<0.005	<0.005	<0.005	
2/21/2017	<0.005	<0.005	0.0018 (J)	<0.005	<0.005				<0.005
6/12/2017				<0.005		<0.005	<0.005	<0.005	
6/13/2017		<0.005	<0.005		<0.005				<0.005
6/14/2017	<0.005								
9/26/2017	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	
9/27/2017									<0.005
2/13/2018				<0.005	<0.005	<0.005	<0.005	<0.005	
2/14/2018	<0.005	<0.005	<0.005						<0.005
6/26/2018	<0.005	<0.005	0.0036 (J)	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
12/18/2018	<0.005	<0.005	0.0044 (J)	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
8/27/2019	<0.005	<0.005		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
8/29/2019			0.0023 (J)						
10/15/2019	<0.005	<0.005	0.0022 (J)	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
3/3/2020	<0.005	<0.005		<0.005	<0.005	<0.005	<0.005	<0.005	
3/4/2020			0.0019 (J)						<0.005
8/18/2020	<0.005	<0.005	0.0033 (J)	<0.005	<0.005	<0.005	<0.005	<0.005	
8/19/2020									<0.005
9/15/2020	<0.005	<0.005	0.0028 (J)	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
3/1/2021				<0.005				<0.005	
3/2/2021	<0.005	<0.005	0.006		<0.005	<0.005	<0.005		0.0021 (J)
9/21/2021	<0.005	<0.005				<0.005	<0.005		
9/22/2021			0.0016 (J)	<0.005	<0.005			<0.005	
9/28/2021									<0.005

Time Series

Constituent: Selenium (mg/L) Analysis Run 11/5/2021 7:02 AM View: Descriptive

Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWC-27I	BRGWC-29I	BRGWC-30I	BRGWC-32S	BRGWC-45	BRGWC-47	BRGWC-50	BRGWC-52I	PZ-50D
9/6/2016			<0.005						
9/8/2016	0.0043 (J)	0.0039 (J)		<0.005					
11/18/2016	0.0047 (J)								
11/21/2016		0.0058 (J)	<0.005	<0.005					
2/21/2017	0.0025 (J)								
2/22/2017		0.005 (J)	<0.005	0.0017 (J)					
6/13/2017	0.0036 (J)								
6/14/2017		0.0074 (J)	0.0045 (J)	<0.005					
9/27/2017	0.004 (J)	0.0068 (J)	0.0034 (J)	0.0019 (J)					
2/14/2018	<0.005	<0.005	<0.005	<0.005					
3/6/2018					<0.005	<0.005			
3/15/2018							<0.005		
5/1/2018					<0.005	<0.005 (D)	<0.005		
6/27/2018	0.0014 (J)	<0.005		0.0017 (J)		<0.005			
6/28/2018			<0.005		<0.005		<0.005		
7/31/2018					<0.005				
8/1/2018						0.0015 (J)	0.0031 (J)		
8/10/2018								<0.005	
8/23/2018					<0.005	<0.005 (X)		<0.005	
9/19/2018					<0.005	0.002 (J)		<0.005	
10/29/2018					<0.005	<0.005	0.002 (J)	<0.005	
11/28/2018					<0.005	<0.005	0.0017 (J)	<0.005	
12/18/2018		<0.005	<0.005						
12/19/2018				0.0059 (J)		<0.005	<0.005		
12/20/2018	<0.005				<0.005			<0.005	
1/16/2019							<0.005		
1/17/2019								<0.005	
2/13/2019								<0.005	
8/27/2019			0.0038 (J)	0.057					
8/28/2019	0.0017 (J)	<0.005			<0.005	<0.005			
8/29/2019							<0.005	<0.005	
10/16/2019		<0.005				0.0017 (J)	0.002 (J)	<0.005	
12/3/2019					0.0029 (J)				
12/4/2019	0.0036 (J)		0.0018 (J)	0.1					
3/4/2020	0.0022 (J)	0.0018 (J)				<0.005	0.0026 (J)	<0.005	
3/5/2020			<0.005	0.1	<0.005				
5/12/2020				0.0989					
8/19/2020	<0.005	<0.005	<0.005	0.099					
8/20/2020					<0.005	0.0016 (J)	0.0037 (J)	<0.005	
9/15/2020		<0.005							
9/16/2020	0.0042 (J)		<0.005	0.12	<0.005	0.002 (J)			
9/17/2020							<0.005	<0.005	
3/2/2021					<0.005	0.0028 (J)			
3/3/2021	0.0031 (J)	0.0042 (J)	<0.005						
3/4/2021				0.14			0.0039 (J)	<0.005	
3/5/2021									<0.005
9/23/2021					<0.005	<0.005			
9/27/2021							0.0022 (J)		
9/28/2021	<0.005	0.0022 (J)	<0.005	0.13				<0.005	<0.005

Time Series

Constituent: Selenium (mg/L) Analysis Run 11/5/2021 7:02 AM View: Descriptive

Plant Branch Client: Southern Company Data: Plant Branch AP

	PZ-51D	PZ-51I	PZ-51S	PZ-57I	PZ-58I	PZ-60I	PZ-61I
1/18/2019			<0.005				
1/19/2019		<0.005					
10/18/2019		<0.005	<0.005				
8/20/2020		<0.005	<0.005				
9/17/2020		<0.005	<0.005				
3/3/2021	<0.005		<0.005				
3/4/2021		<0.005					
9/27/2021		<0.005	<0.005				0.0079
9/28/2021	<0.005			<0.005	0.0034 (J)	0.0049 (J)	

Time Series

Constituent: Sulfate (mg/L) Analysis Run 11/5/2021 7:02 AM View: Descriptive

Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWA-12I (bg)	BRGWA-12S (bg)	BRGWA-23S (bg)	BRGWA-2I (bg)	BRGWA-2S (bg)	BRGWA-5I (bg)	BRGWA-5S (bg)	BRGWA-6S (bg)	BRGWC-25I
8/31/2016				7.5	0.38 (J)	2.7	0.81 (J)		
9/1/2016	2.7	1.7						0.6 (J)	
9/6/2016			38						
9/8/2016									280
11/15/2016							<1 (J)	0.68 (J)	
11/16/2016	3.6	1.2		6.6	<1 (J)	3.4			
11/17/2016			84						200
2/20/2017						3.9 (B-01)	1 (B-01)	0.98 (J)	
2/21/2017	3	1.1	39	6.1	1.5				360
6/12/2017				5		3.7	0.94 (J)	0.54 (J)	
6/13/2017		1.1	35		0.67 (J)				290
6/14/2017	2.6								
9/26/2017	2.5	1.3	89	5.4	0.62 (J)	4.1	0.92 (J)	0.53 (J)	
9/27/2017									310
2/13/2018				4.7 (J)	<1	6.6	<1	<1	
2/14/2018	2.1 (J)	<1	82.2						260
6/26/2018	2	0.84 (J)	84.2	6.2	0.69 (J)	3.5	0.91 (J)	0.54 (J)	231
7/31/2018	1.9	0.63 (J)							
12/18/2018	2.1	0.66 (J)	83.4	5.9	0.72 (J)	4.3	0.68 (J)	0.39 (J)	231
3/19/2019	2.2	0.75 (J)	65	6 (D)	0.78 (J)	3	0.74 (J)	0.68 (J)	
3/20/2019									235 (D)
10/15/2019	1.9	0.61 (J)	30	5.2	0.47 (J)	3.8	0.68 (J)	0.48 (J)	174
3/3/2020	1.8	0.51 (J)		7.1	0.93 (J)	2.8	0.71 (J)	2.5	
3/4/2020			38.6						165
9/15/2020	1.7	<1	41.5	5.9	<1	1.7	<1	<1	126
3/1/2021				4.7				0.74 (J)	
3/2/2021	1.7	0.51 (J)	54		<1	2.2	<1		139
9/21/2021	1.7	0.51 (J)				2.3	<1		
9/22/2021			34.6	5.2	<1			<1	
9/28/2021									112

Time Series

Constituent: Sulfate (mg/L) Analysis Run 11/5/2021 7:02 AM View: Descriptive

Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWC-27I	BRGWC-29I	BRGWC-30I	BRGWC-32S	BRGWC-45	BRGWC-47	BRGWC-50	BRGWC-52I	PZ-50D
9/6/2016			310						
9/8/2016	300	460		370					
11/18/2016	320								
11/21/2016		500	300	420					
2/21/2017	270								
2/22/2017		570	280	380					
6/13/2017	230								
6/14/2017		440	290	400					
9/27/2017	260	380	260	400					
2/14/2018	232	280	250	383					
3/6/2018					111	1560			
3/15/2018							1590		
5/1/2018					112	1465 (D)	1550		
6/27/2018	205	281		372		1450			
6/28/2018			276		109		1530		
7/31/2018					107				
8/1/2018						1560	1580		
8/10/2018								183	
8/23/2018					108	1470		145	
9/19/2018					117	1500		178	
10/29/2018					127	1720	1750	157	
11/28/2018					133	1730	1780	189	
12/18/2018		293	440						
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		278	623	409	127		1740	186.5 (D)	
10/16/2019		266				1560	1590	155	
12/3/2019					105				
12/4/2019	241		327	293					
3/4/2020	205	238				1380	1370	129	
3/5/2020			369	269	106				
9/15/2020		241							
9/16/2020	190		334	255	103	1360			
9/17/2020							1330	165	
10/27/2020									492
3/2/2021					98.3	1360			
3/3/2021	172	341	371						
3/4/2021				185			1250	114	
3/5/2021									698
9/23/2021					97.5	1240			
9/27/2021							1180		
9/28/2021	137	250	612	189				132	866

Time Series

Constituent: Sulfate (mg/L) Analysis Run 11/5/2021 7:02 AM View: Descriptive

Plant Branch Client: Southern Company Data: Plant Branch AP

	PZ-51D	PZ-51I	PZ-51S	PZ-57I	PZ-58I	PZ-60I	PZ-61I
8/2/2018			8.9				
8/3/2018		1170					
1/18/2019			0.64 (J)				
1/19/2019		1140					
10/18/2019		<1	0.76 (J)				
9/17/2020		1030	0.53 (J)				
10/27/2020	357	893					
3/3/2021	360		0.66 (J)				
3/4/2021		909					
9/27/2021		933	<1				1420
9/28/2021	294			259	628	1670	

Time Series

Constituent: Thallium (mg/L) Analysis Run 11/5/2021 7:02 AM View: Descriptive

Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWA-12I (bg)	BRGWA-12S (bg)	BRGWA-23S (bg)	BRGWA-2I (bg)	BRGWA-2S (bg)	BRGWA-5I (bg)	BRGWA-5S (bg)	BRGWA-6S (bg)	BRGWC-25I
8/31/2016				<0.001	<0.001	<0.001	<0.001		
9/1/2016	<0.001	<0.001						<0.001	
9/6/2016			<0.001						
9/8/2016									<0.001
11/15/2016							<0.001	<0.001	
11/16/2016	<0.001	<0.001		<0.001	<0.001	<0.001			
11/17/2016			<0.001						<0.001
2/20/2017						<0.001	<0.001	<0.001	
2/21/2017	<0.001	<0.001	<0.001	<0.001	<0.001				<0.001
6/12/2017				<0.001		<0.001	<0.001	<0.001	
6/13/2017		<0.001	<0.001		<0.001				<0.001
6/14/2017	<0.001								
9/26/2017	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	
9/27/2017									<0.001
2/13/2018				<0.001	<0.001	<0.001	<0.001	<0.001	
2/14/2018	<0.001	<0.001	<0.001						<0.001
6/26/2018	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
12/18/2018	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
8/27/2019	<0.001	<0.001		<0.001	<0.001	<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	<0.001	<0.001	<0.001	<0.001
3/3/2020	<0.001	<0.001		<0.001	<0.001	<0.001	<0.001	<0.001	
3/4/2020			<0.001						<0.001
8/18/2020	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	
8/19/2020									<0.001
9/15/2020	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
3/1/2021				<0.001				<0.001	
3/2/2021	<0.001	<0.001	<0.001		<0.001	<0.001	<0.001		<0.001
9/21/2021	<0.001	<0.001				<0.001	<0.001		
9/22/2021			<0.001	<0.001	<0.001			<0.001	
9/28/2021									<0.001

Time Series

Constituent: Thallium (mg/L) Analysis Run 11/5/2021 7:02 AM View: Descriptive

Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWC-27I	BRGWC-29I	BRGWC-30I	BRGWC-32S	BRGWC-45	BRGWC-47	BRGWC-50	BRGWC-52I	PZ-50D
9/6/2016			<0.001						
9/8/2016	<0.001	<0.001		<0.001					
11/18/2016	<0.001								
11/21/2016		0.0002 (J)	<0.001	<0.001					
2/21/2017	<0.001								
2/22/2017		0.0002 (J)	<0.001	<0.001					
6/13/2017	<0.001								
6/14/2017		0.0002 (J)	<0.001	<0.001					
9/27/2017	<0.001	0.0002 (J)	<0.001	<0.001					
2/14/2018	<0.001	0.00018 (J)	<0.001	<0.001					
3/6/2018					<0.001	<0.001			
3/15/2018							<0.001		
5/1/2018					<0.001	<0.001 (D)	<0.001		
6/27/2018	<0.001	0.00017 (J)		<0.001		<0.001			
6/28/2018			<0.001		<0.001		<0.001		
7/31/2018					<0.001				
8/1/2018						<0.001	<0.001		
8/10/2018								<0.001	
8/23/2018					<0.001	<0.001		<0.001	
9/19/2018					<0.001	<0.001		<0.001	
10/29/2018					<0.001	<0.001	<0.001	<0.001	
11/28/2018					<0.001	<0.001	<0.001	<0.001	
12/18/2018		0.00017 (J)	<0.001						
12/19/2018				<0.001		<0.001	<0.001		
12/20/2018	<0.001				<0.001			<0.001	
1/16/2019							<0.001		
1/17/2019								<0.001	
2/13/2019								<0.001	
8/27/2019			<0.001	<0.001					
8/28/2019	<0.001	0.00017 (J)			<0.001	<0.001			
8/29/2019							<0.001	<0.001	
10/16/2019		0.00017 (J)				<0.001	<0.001	<0.001	
12/3/2019					<0.001				
12/4/2019	<0.001		<0.001	<0.001					
3/4/2020	<0.001	0.00016 (J)				<0.001	<0.001	<0.001	
3/5/2020			<0.001	<0.001	<0.001				
8/19/2020	<0.001	0.00016 (J)	<0.001	<0.001					
8/20/2020					<0.001	<0.001	<0.001	<0.001	
9/15/2020		0.00016 (J)							
9/16/2020	<0.001		<0.001	<0.001	<0.001	<0.001			
9/17/2020							<0.001	<0.001	
3/2/2021					<0.001	<0.001			
3/3/2021	<0.001	0.00018 (J)	<0.001						
3/4/2021				<0.001			<0.001	<0.001	
3/5/2021									<0.001
9/23/2021					<0.001	<0.001			
9/27/2021							<0.001		
9/28/2021	<0.001	<0.001	<0.001	<0.001				<0.001	<0.001

Time Series

Constituent: Thallium (mg/L) Analysis Run 11/5/2021 7:02 AM View: Descriptive

Plant Branch Client: Southern Company Data: Plant Branch AP

	PZ-51D	PZ-51I	PZ-51S	PZ-57I	PZ-58I	PZ-60I	PZ-61I
1/18/2019			<0.001				
1/19/2019		<0.001					
10/18/2019		<0.001	<0.001				
8/20/2020		<0.001	<0.001				
9/17/2020		<0.001	<0.001				
3/3/2021	<0.001		<0.001				
3/4/2021		<0.001					
9/27/2021		<0.001	<0.001				<0.001
9/28/2021	<0.001			<0.001	<0.001	<0.001	

Time Series

Constituent: Total Dissolved Solids (mg/L) Analysis Run 11/5/2021 7:02 AM View: Descriptive
Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWA-12I (bg)	BRGWA-12S (bg)	BRGWA-23S (bg)	BRGWA-2I (bg)	BRGWA-2S (bg)	BRGWA-5I (bg)	BRGWA-5S (bg)	BRGWA-6S (bg)	BRGWC-25I
8/31/2016				151	88	138	154		
9/1/2016	142	69						299	
9/6/2016			146						
9/8/2016									460
11/15/2016							123	41	
11/16/2016	100	100		69	41	77			
11/17/2016			211						611
2/20/2017						170	158	133	
2/21/2017	71	37	151	68	<10				497
6/12/2017				161		132	142	61	
6/13/2017		84	130		53				474
6/14/2017	140								
9/26/2017	149	68	160	167	45	108	138	29	
9/27/2017									457
2/13/2018				165	63	141	150	61	
2/14/2018	137	138	194						431
6/26/2018	142	90	221	188	71	133	154	71	414
7/31/2018	133	83							
12/18/2018	135	85	208	145 (X)	78 (X)	138 (X)	147	70 (X)	401
3/19/2019	132 (JX)	82 (JX)	161 (JX)	146.5 (D)	68	130	146	72	
3/20/2019									410.5 (D)
10/15/2019	134	89	124	140	66	175	144	63	380
3/3/2020	115	72		155	41	<10	130	54	
3/4/2020			118						330
9/15/2020	95	60	109	116	69	100	116	79	272
3/1/2021				98				39	
3/2/2021	93	43	105		43	80	96		280
9/21/2021	117	56				108	104		
9/22/2021			128	129	66			62	
9/28/2021									270

Time Series

Constituent: Total Dissolved Solids (mg/L) Analysis Run 11/5/2021 7:02 AM View: Descriptive
Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWC-27I	BRGWC-29I	BRGWC-30I	BRGWC-32S	BRGWC-45	BRGWC-47	BRGWC-50	BRGWC-52I	PZ-50D
9/6/2016			505						
9/8/2016	478	654		607					
11/18/2016	503								
11/21/2016		819	515	695					
2/21/2017	380								
2/22/2017		721	504	635					
6/13/2017	354								
6/14/2017		661	536	635					
9/27/2017	376	518	432	601					
2/14/2018	503 (JX)	487	448	628					
3/6/2018					346	2200			
3/15/2018							2440		
5/1/2018					374	2080 (D)	2190		
6/27/2018	458 (X)	648 (X)		2280		31 (OX)			
6/28/2018			494		333		2290		
7/31/2018					393				
8/1/2018						2190	2360		
8/10/2018								344	
8/23/2018					350	2160		333	
9/19/2018					353	2160		364	
10/29/2018					329	2130	2300	334	
11/28/2018					358	2320	2300	357	
12/18/2018		407	715						
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		391	885	564	302		2280	360 (D)	
10/16/2019		2030				2220	2280	346	
12/3/2019					362				
12/4/2019	422		612	526					
3/4/2020	326	391				2140	2270	351	
3/5/2020			681	489	297				
9/15/2020		281							
9/16/2020	301		634	428	275	2090			
9/17/2020							1910	329	
10/27/2020									914
3/2/2021					264	1680			
3/3/2021	288	515	690						
3/4/2021				350			1520	383	
3/5/2021									1210
9/23/2021					277	1770			
9/27/2021							1800		
9/28/2021	262	457	1050	375				336	1470

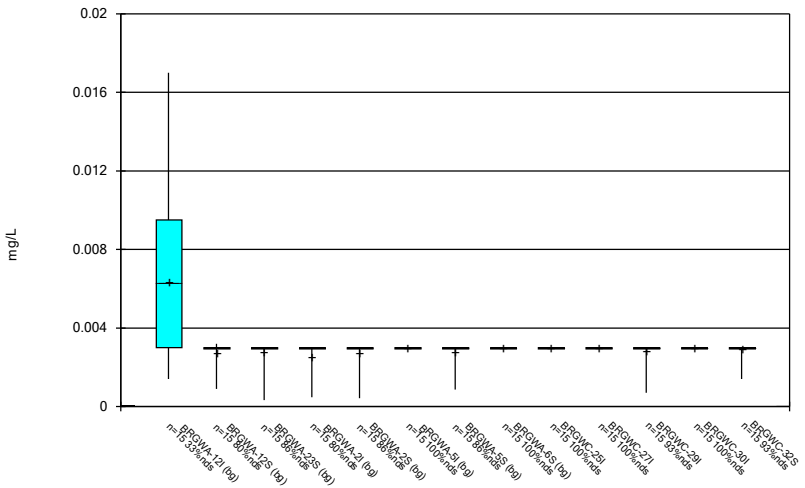
Time Series

Constituent: Total Dissolved Solids (mg/L) Analysis Run 11/5/2021 7:02 AM View: Descriptive
Plant Branch Client: Southern Company Data: Plant Branch AP

	PZ-51D	PZ-51I	PZ-51S	PZ-57I	PZ-58I	PZ-60I	PZ-61I
8/2/2018			123				
8/3/2018		1900					
1/18/2019			103				
1/19/2019		1660					
10/18/2019		1550	99				
9/17/2020		1600	101				
10/27/2020	680	1200					
3/3/2021	598		76				
3/4/2021		830					
9/27/2021		1560	88				2100
9/28/2021	650			542	1120	2600	

FIGURE B.

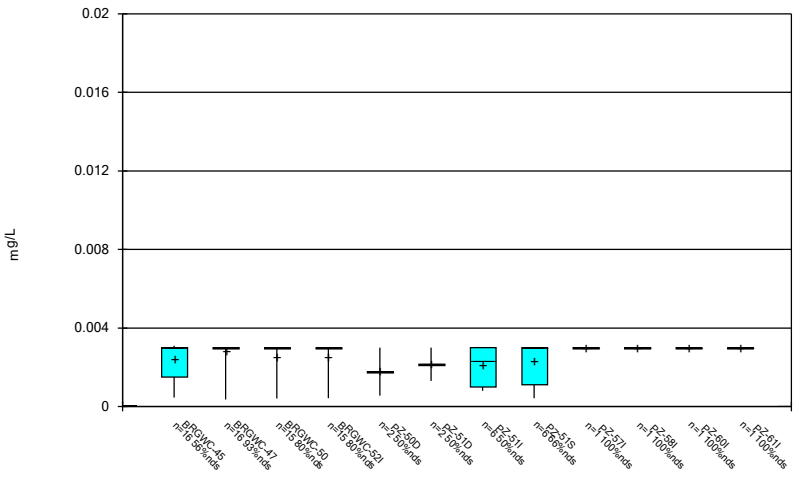
Box & Whiskers Plot



Constituent: Antimony Analysis Run 11/5/2021 7:06 AM View: 100% NDs
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.30f Sanitas software utilized by Groundwater Stats Consulting. UG

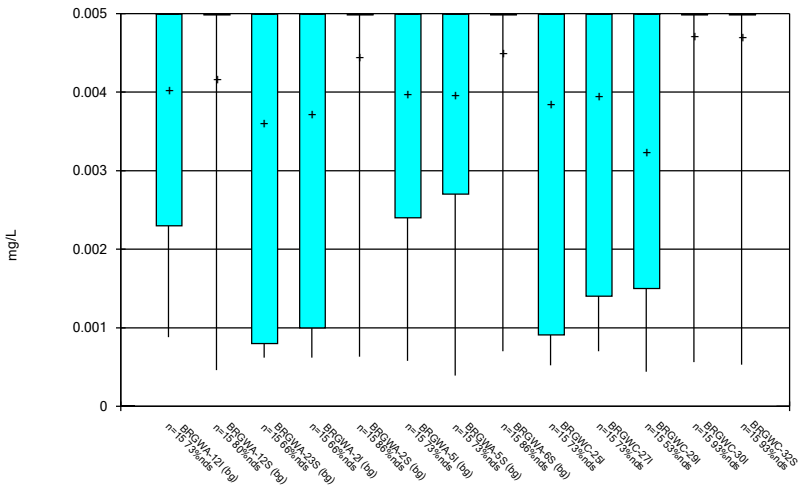
Box & Whiskers Plot



Constituent: Antimony Analysis Run 11/5/2021 7:06 AM View: 100% NDs
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.30f Sanitas software utilized by Groundwater Stats Consulting. UG

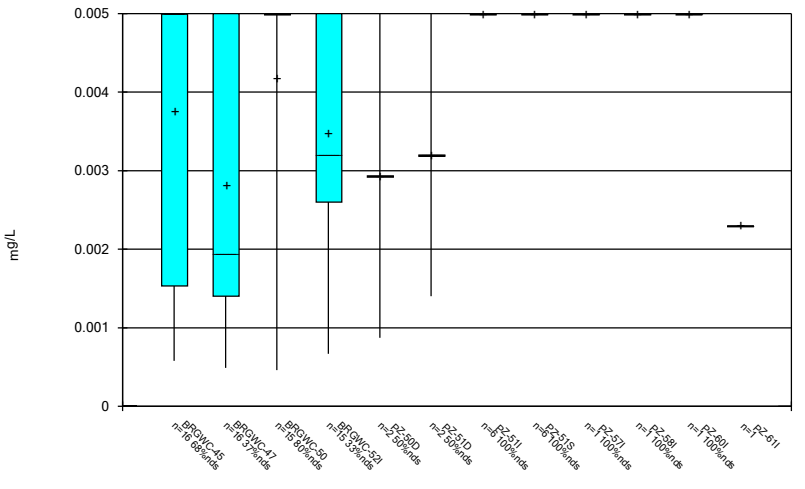
Box & Whiskers Plot



Constituent: Arsenic Analysis Run 11/5/2021 7:06 AM View: 100% NDs
Plant Branch Client: Southern Company Data: Plant Branch AP

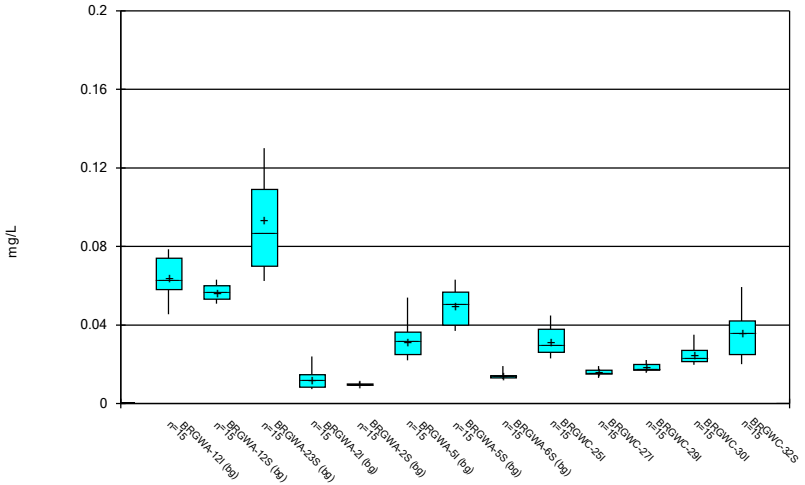
Sanitas™ v.9.6.30f Sanitas software utilized by Groundwater Stats Consulting. UG

Box & Whiskers Plot



Constituent: Arsenic Analysis Run 11/5/2021 7:06 AM View: 100% NDs
Plant Branch Client: Southern Company Data: Plant Branch AP

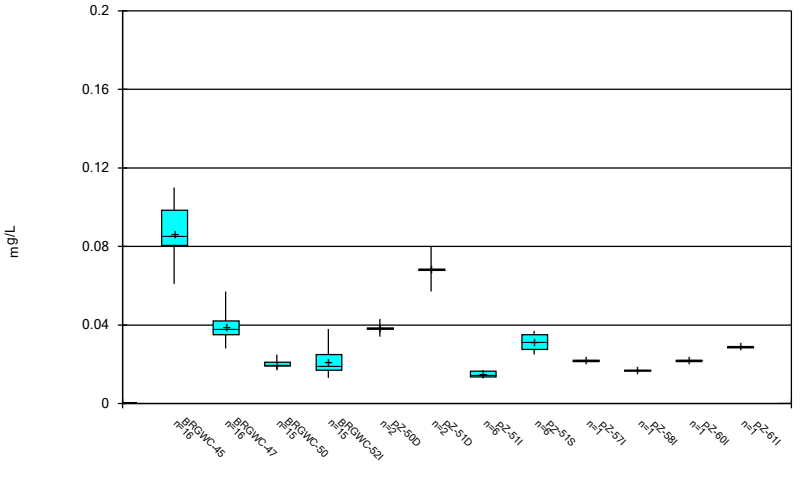
Box & Whiskers Plot



Constituent: Barium Analysis Run 11/5/2021 7:06 AM View: 100% NDs
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.30f Sanitas software utilized by Groundwater Stats Consulting. UG

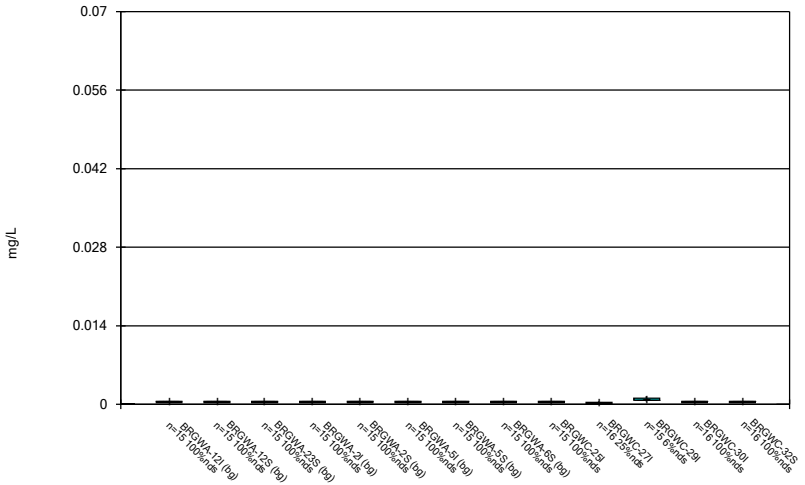
Box & Whiskers Plot



Constituent: Barium Analysis Run 11/5/2021 7:06 AM View: 100% NDs
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.30f Sanitas software utilized by Groundwater Stats Consulting. UG

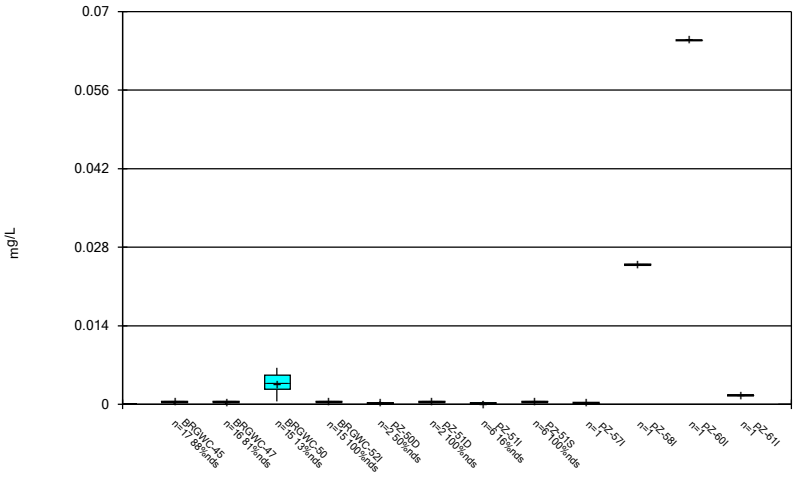
Box & Whiskers Plot



Constituent: Beryllium Analysis Run 11/5/2021 7:06 AM View: 100% NDs
Plant Branch Client: Southern Company Data: Plant Branch AP

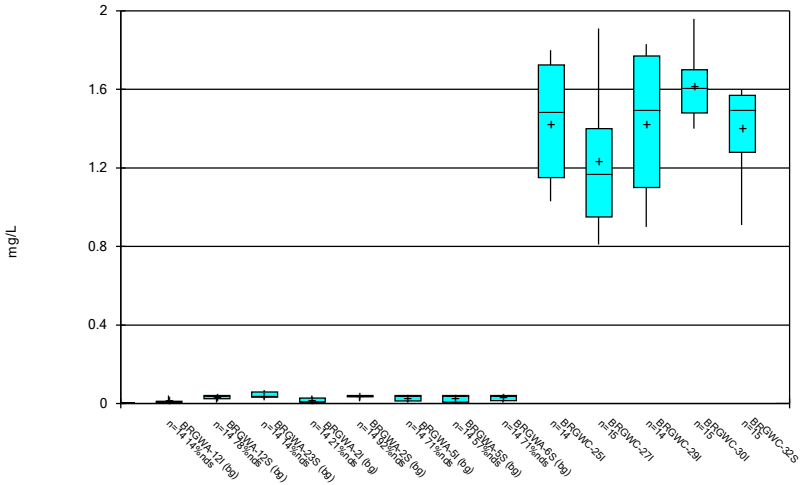
Sanitas™ v.9.6.30f Sanitas software utilized by Groundwater Stats Consulting. UG

Box & Whiskers Plot



Constituent: Beryllium Analysis Run 11/5/2021 7:06 AM View: 100% NDs
Plant Branch Client: Southern Company Data: Plant Branch AP

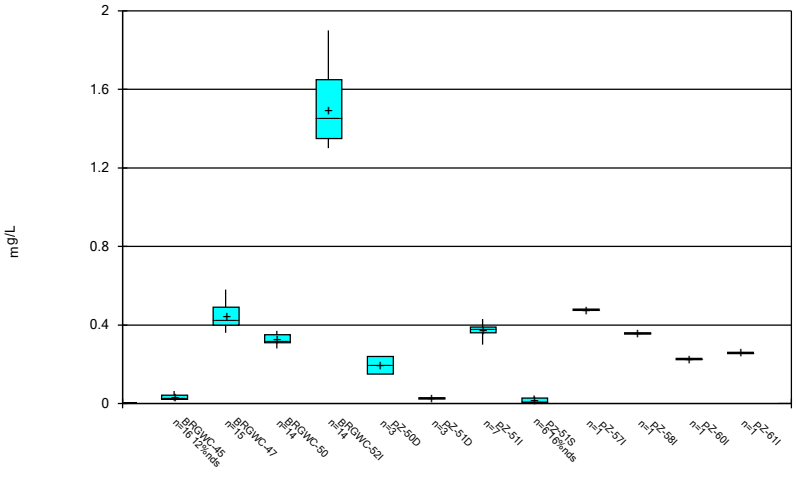
Box & Whiskers Plot



Constituent: Boron Analysis Run 11/5/2021 7:06 AM View: 100% NDs
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.30f Sanitas software utilized by Groundwater Stats Consulting. UG

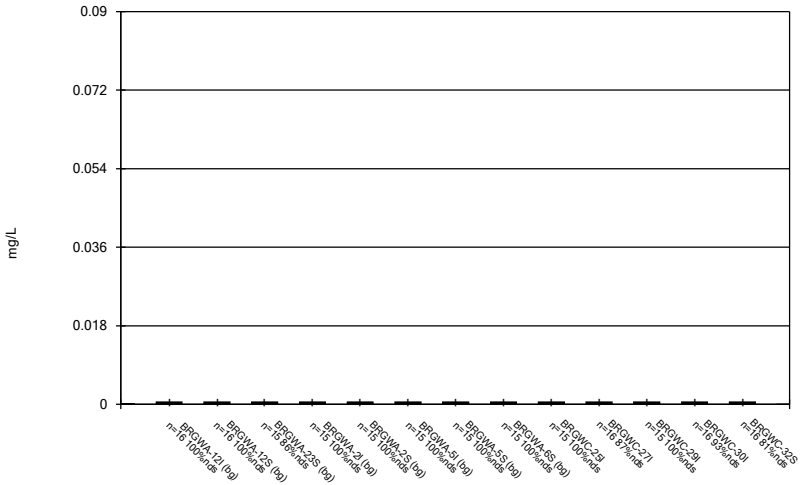
Box & Whiskers Plot



Constituent: Boron Analysis Run 11/5/2021 7:06 AM View: 100% NDs
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.30f Sanitas software utilized by Groundwater Stats Consulting. UG

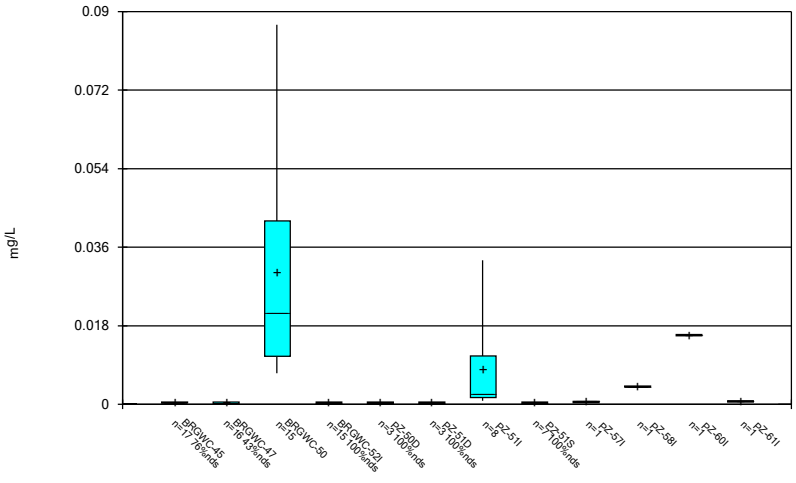
Box & Whiskers Plot



Constituent: Cadmium Analysis Run 11/5/2021 7:06 AM View: 100% NDs
Plant Branch Client: Southern Company Data: Plant Branch AP

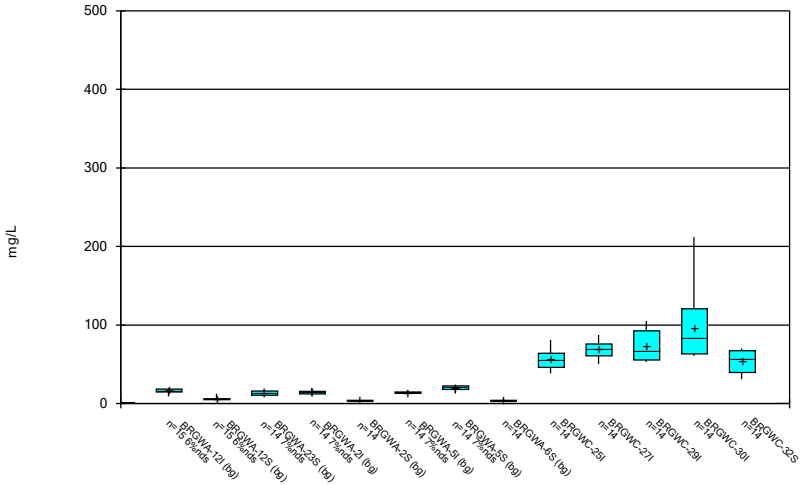
Sanitas™ v.9.6.30f Sanitas software utilized by Groundwater Stats Consulting. UG

Box & Whiskers Plot



Constituent: Cadmium Analysis Run 11/5/2021 7:06 AM View: 100% NDs
Plant Branch Client: Southern Company Data: Plant Branch AP

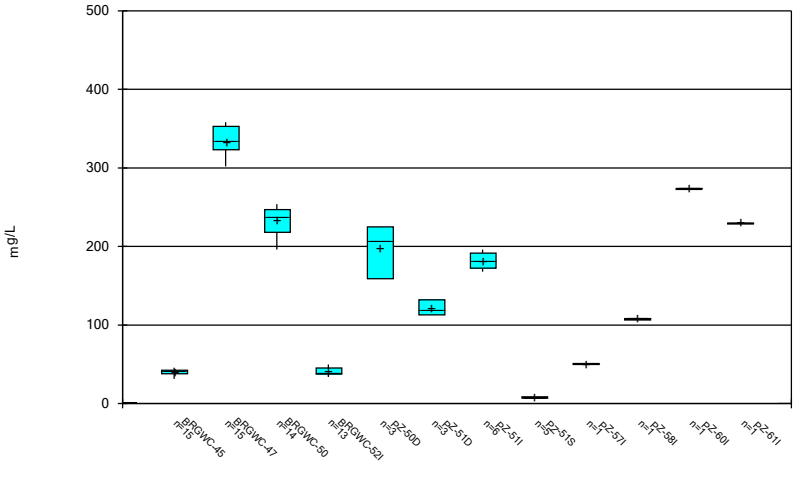
Box & Whiskers Plot



Constituent: Calcium Analysis Run 11/5/2021 7:06 AM View: 100% NDs
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.30f Sanitas software utilized by Groundwater Stats Consulting. UG

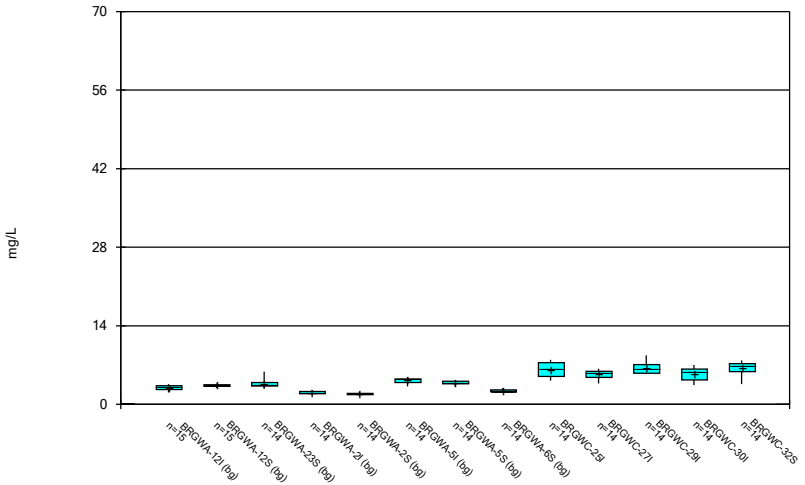
Box & Whiskers Plot



Constituent: Calcium Analysis Run 11/5/2021 7:06 AM View: 100% NDs
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.30f Sanitas software utilized by Groundwater Stats Consulting. UG

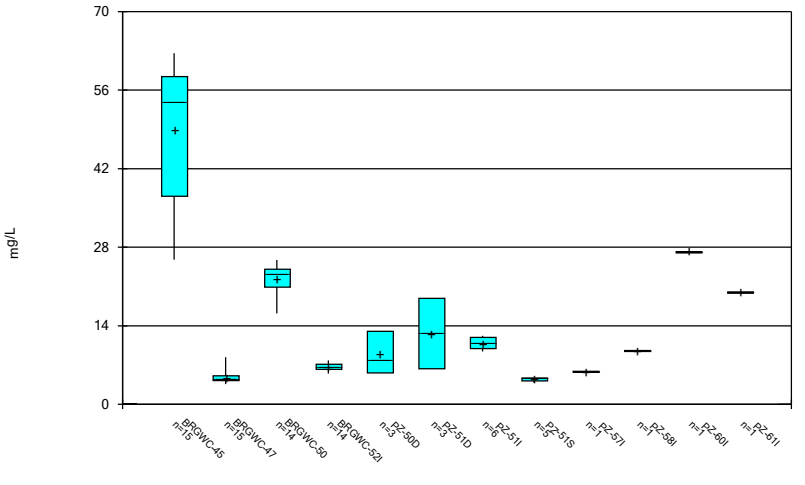
Box & Whiskers Plot



Constituent: Chloride Analysis Run 11/5/2021 7:06 AM View: 100% NDs
Plant Branch Client: Southern Company Data: Plant Branch AP

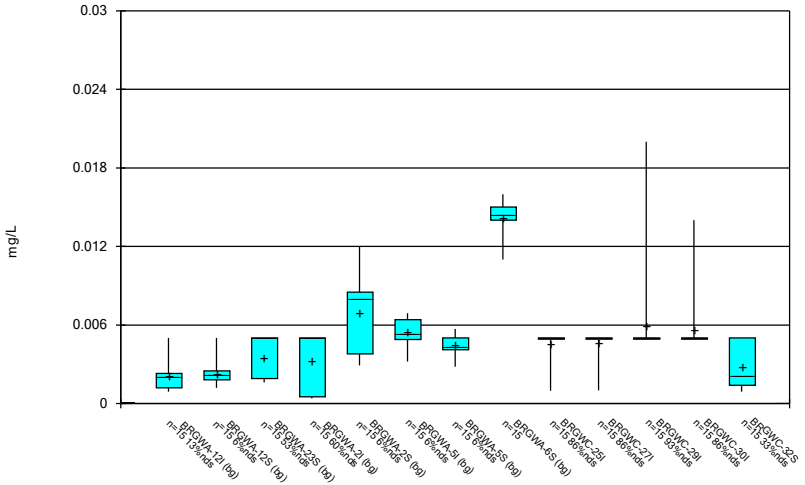
Sanitas™ v.9.6.30f Sanitas software utilized by Groundwater Stats Consulting. UG

Box & Whiskers Plot



Constituent: Chloride Analysis Run 11/5/2021 7:06 AM View: 100% NDs
Plant Branch Client: Southern Company Data: Plant Branch AP

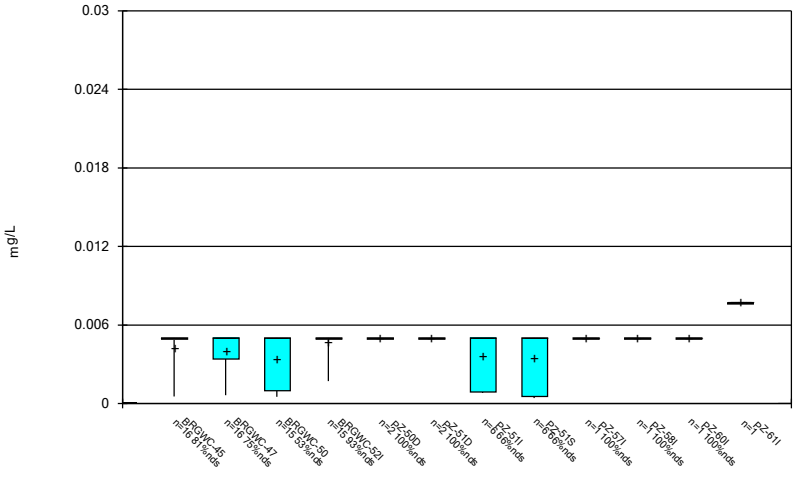
Box & Whiskers Plot



Constituent: Chromium Analysis Run 11/5/2021 7:06 AM View: 100% NDs
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.30f Sanitas software utilized by Groundwater Stats Consulting. UG

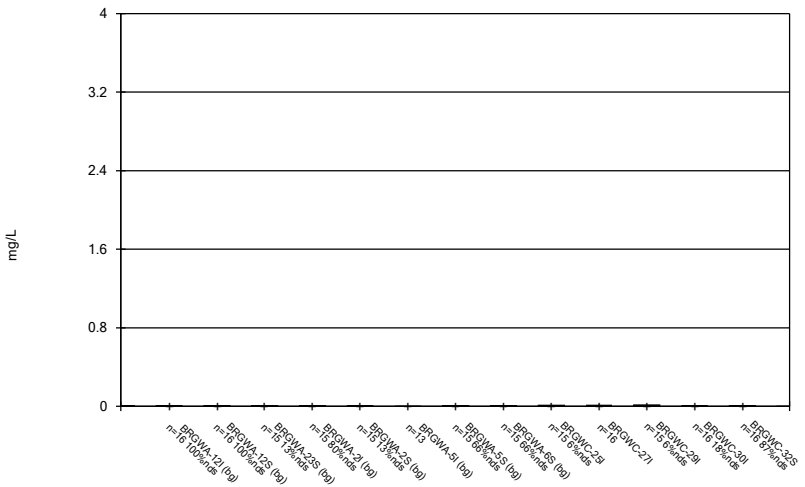
Box & Whiskers Plot



Constituent: Chromium Analysis Run 11/5/2021 7:06 AM View: 100% NDs
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.30f Sanitas software utilized by Groundwater Stats Consulting. UG

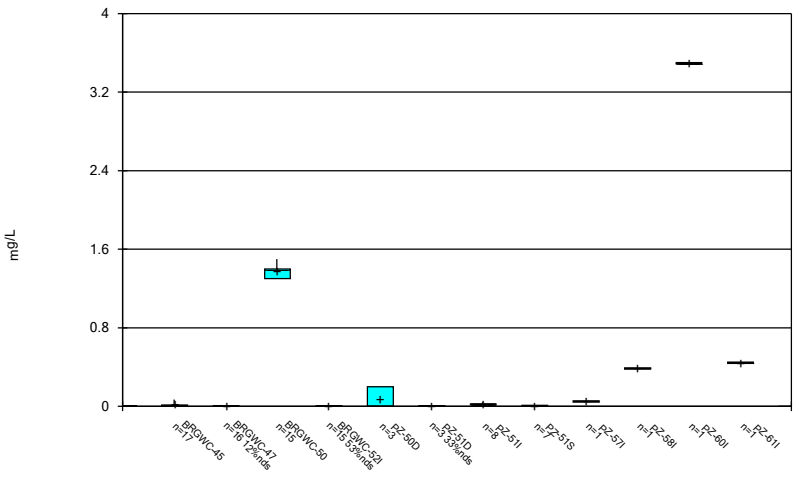
Box & Whiskers Plot



Constituent: Cobalt Analysis Run 11/5/2021 7:06 AM View: 100% NDs
Plant Branch Client: Southern Company Data: Plant Branch AP

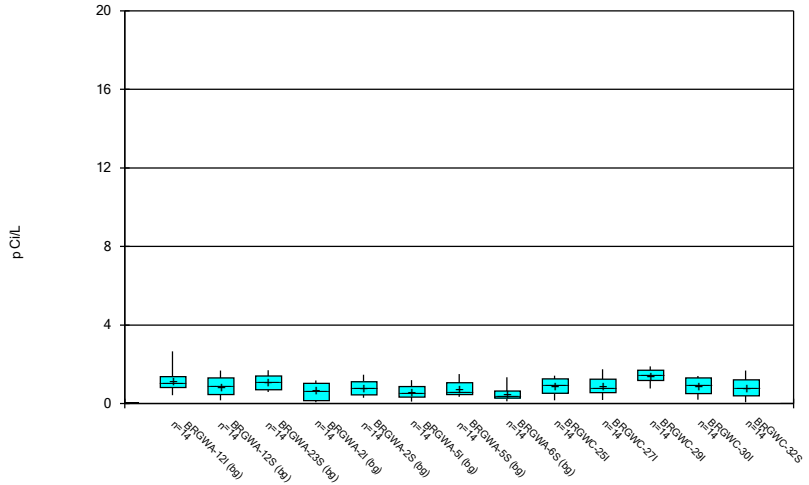
Sanitas™ v.9.6.30f Sanitas software utilized by Groundwater Stats Consulting. UG

Box & Whiskers Plot



Constituent: Cobalt Analysis Run 11/5/2021 7:06 AM View: 100% NDs
Plant Branch Client: Southern Company Data: Plant Branch AP

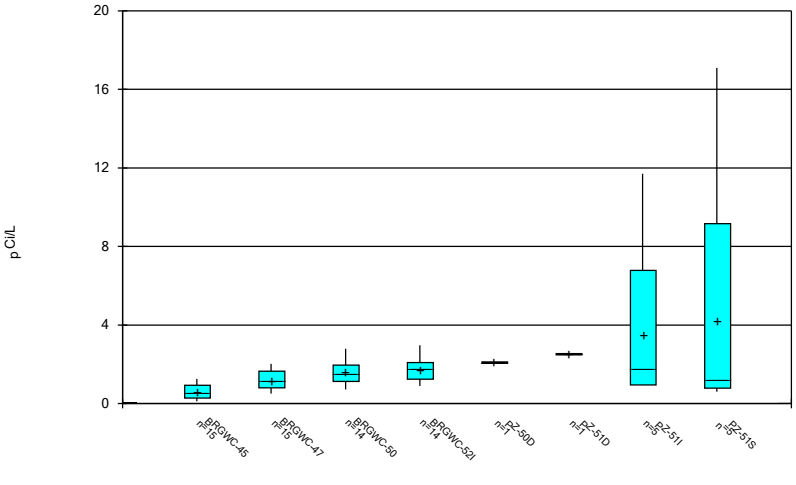
Box & Whiskers Plot



Constituent: Combined Radium 226 + 228 Analysis Run 11/5/2021 7:07 AM View: 100% NDs
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.30f Sanitas software utilized by Groundwater Stats Consulting. UG

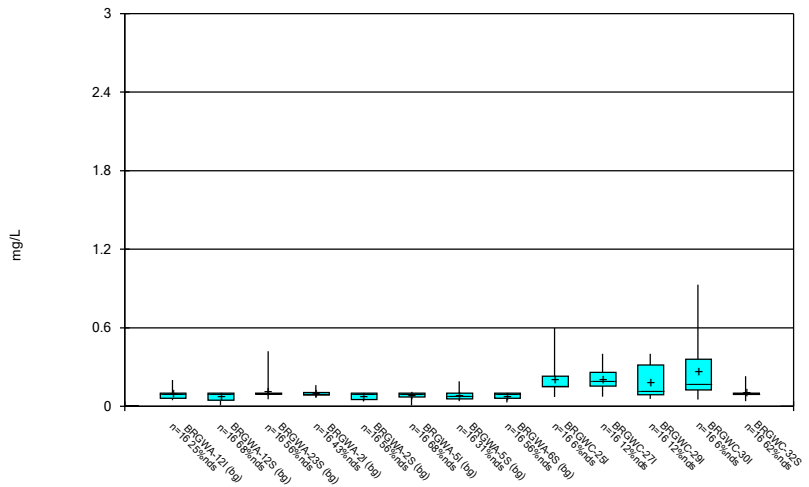
Box & Whiskers Plot



Constituent: Combined Radium 226 + 228 Analysis Run 11/5/2021 7:07 AM View: 100% NDs
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.30f Sanitas software utilized by Groundwater Stats Consulting. UG

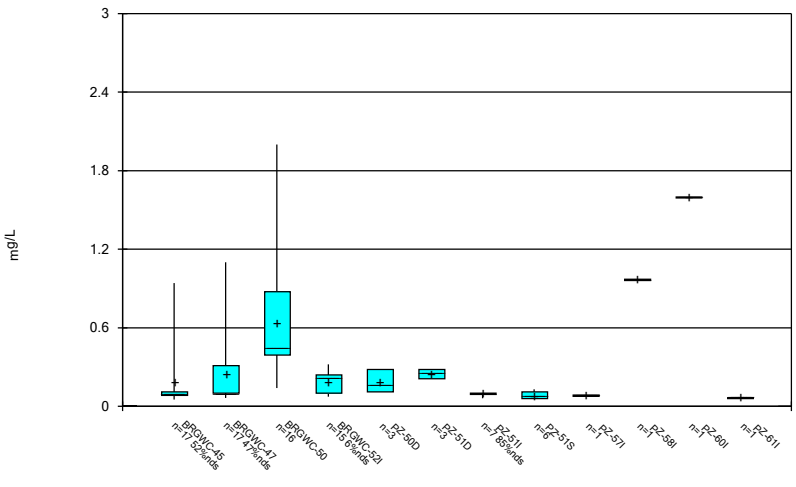
Box & Whiskers Plot



Constituent: Fluoride Analysis Run 11/5/2021 7:07 AM View: 100% NDs
Plant Branch Client: Southern Company Data: Plant Branch AP

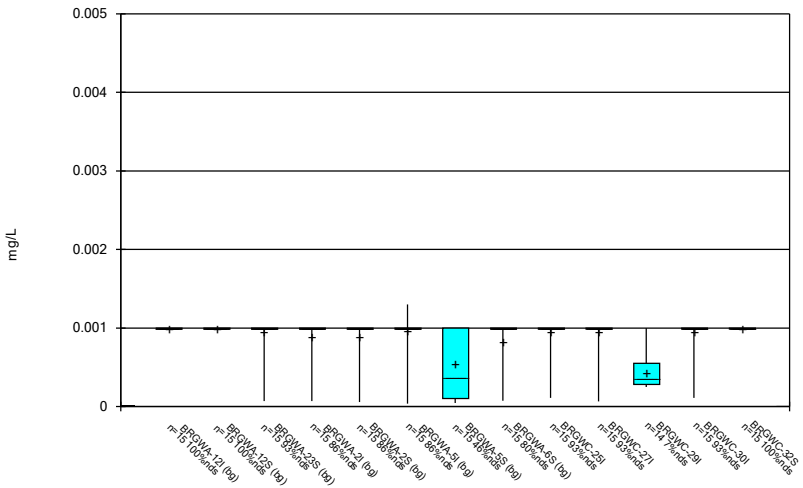
Sanitas™ v.9.6.30f Sanitas software utilized by Groundwater Stats Consulting. UG

Box & Whiskers Plot



Constituent: Fluoride Analysis Run 11/5/2021 7:07 AM View: 100% NDs
Plant Branch Client: Southern Company Data: Plant Branch AP

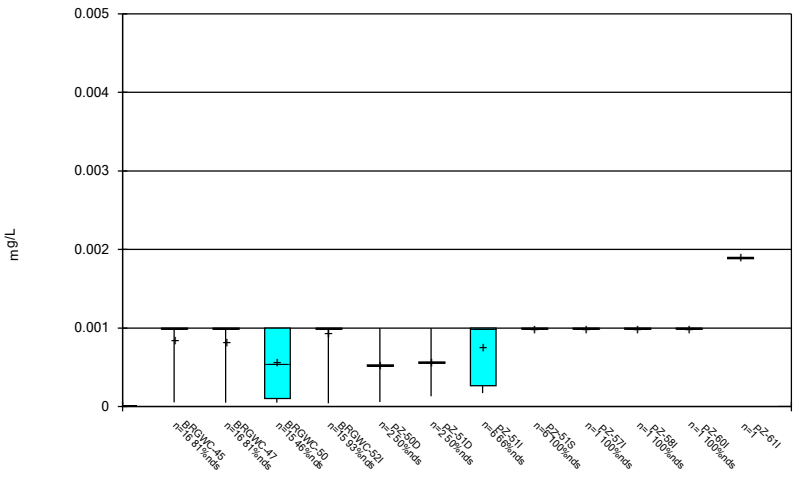
Box & Whiskers Plot



Constituent: Lead Analysis Run 11/5/2021 7:07 AM View: 100% NDs
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.30f Sanitas software utilized by Groundwater Stats Consulting. UG

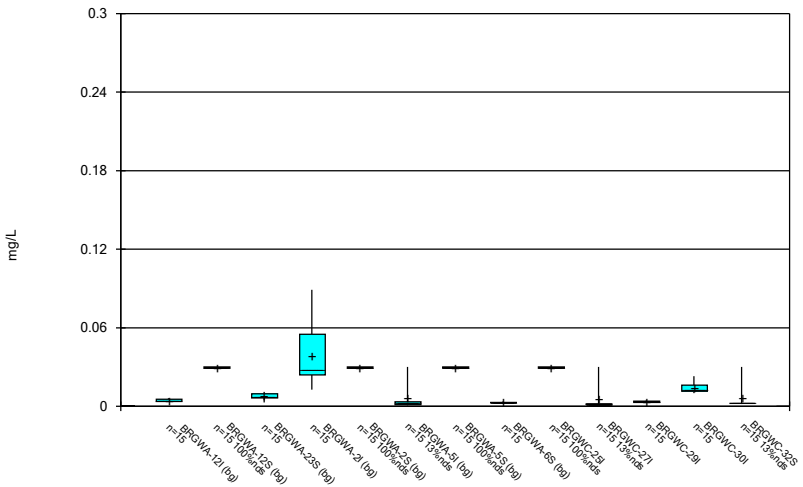
Box & Whiskers Plot



Constituent: Lead Analysis Run 11/5/2021 7:07 AM View: 100% NDs
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.30f Sanitas software utilized by Groundwater Stats Consulting. UG

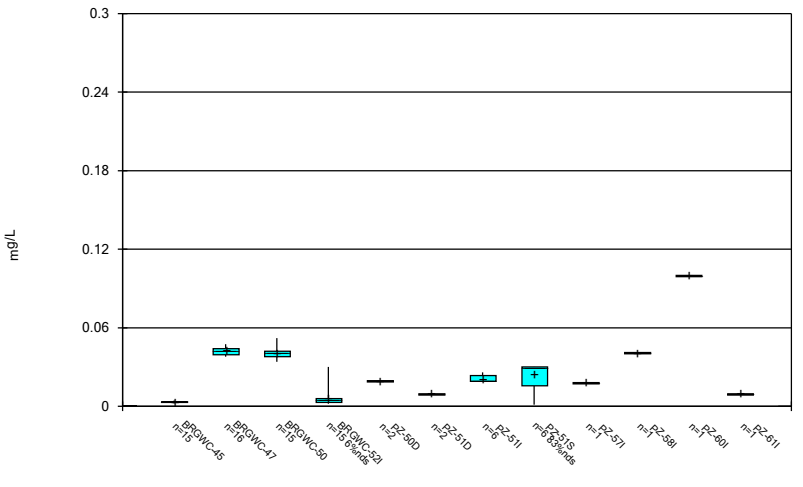
Box & Whiskers Plot



Constituent: Lithium Analysis Run 11/5/2021 7:07 AM View: 100% NDs
Plant Branch Client: Southern Company Data: Plant Branch AP

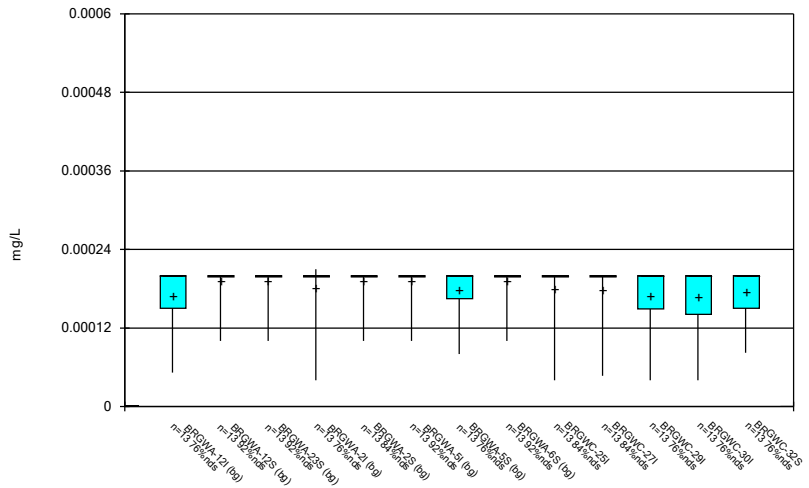
Sanitas™ v.9.6.30f Sanitas software utilized by Groundwater Stats Consulting. UG

Box & Whiskers Plot



Constituent: Lithium Analysis Run 11/5/2021 7:07 AM View: 100% NDs
Plant Branch Client: Southern Company Data: Plant Branch AP

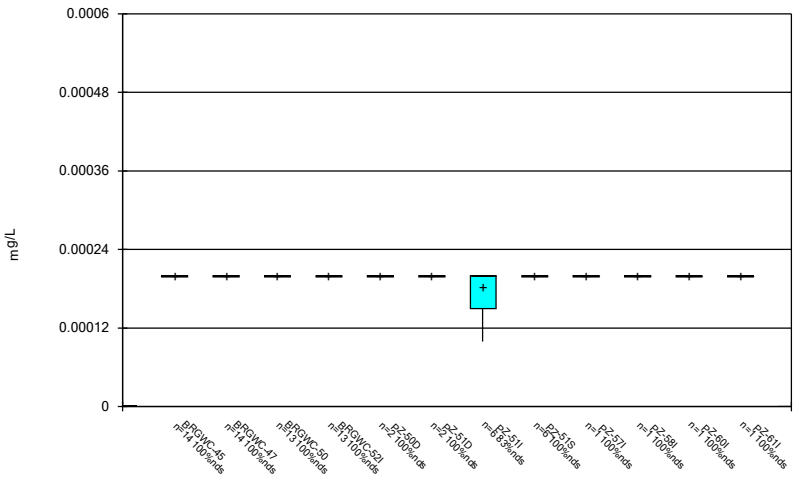
Box & Whiskers Plot



Constituent: Mercury Analysis Run 11/5/2021 7:07 AM View: 100% NDs
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.30f Sanitas software utilized by Groundwater Stats Consulting. UG

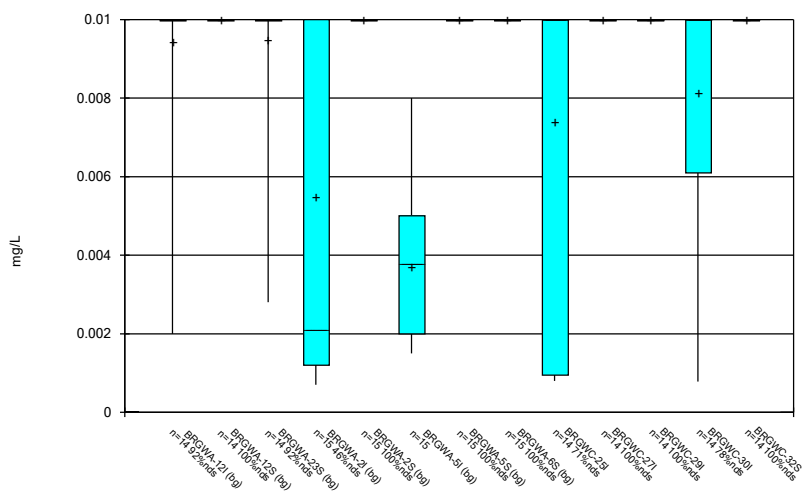
Box & Whiskers Plot



Constituent: Mercury Analysis Run 11/5/2021 7:07 AM View: 100% NDs
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.30f Sanitas software utilized by Groundwater Stats Consulting. UG

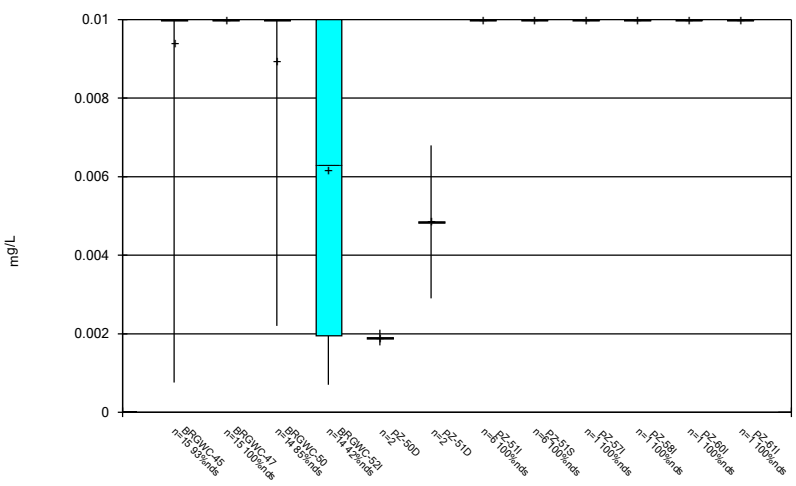
Box & Whiskers Plot



Constituent: Molybdenum Analysis Run 11/5/2021 7:07 AM View: 100% NDs
Plant Branch Client: Southern Company Data: Plant Branch AP

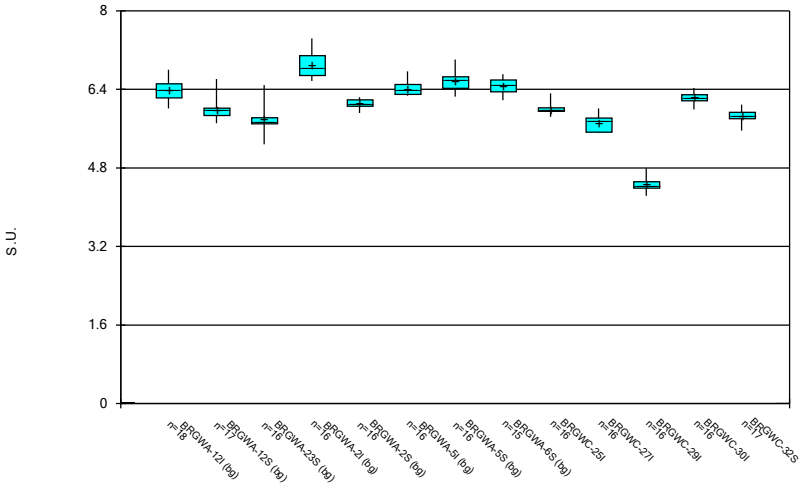
Sanitas™ v.9.6.30f Sanitas software utilized by Groundwater Stats Consulting. UG

Box & Whiskers Plot



Constituent: Molybdenum Analysis Run 11/5/2021 7:07 AM View: 100% NDs
Plant Branch Client: Southern Company Data: Plant Branch AP

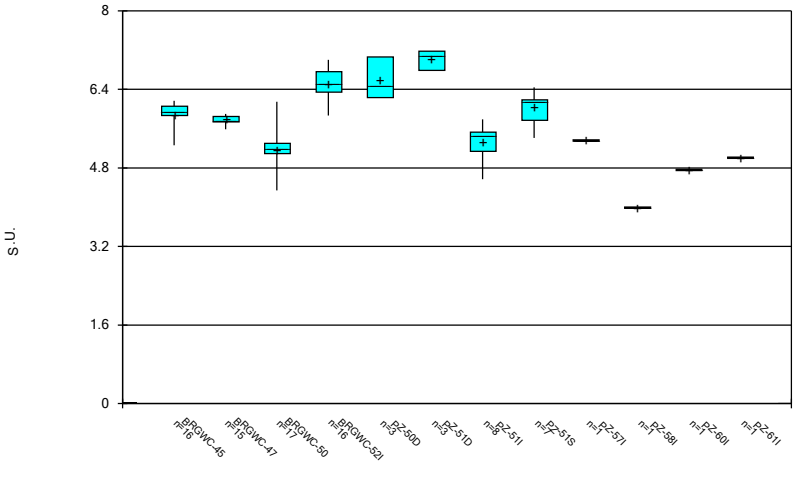
Box & Whiskers Plot



Constituent: pH, Field Analysis Run 11/5/2021 7:07 AM View: 100% NDs
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.30f Sanitas software utilized by Groundwater Stats Consulting. UG

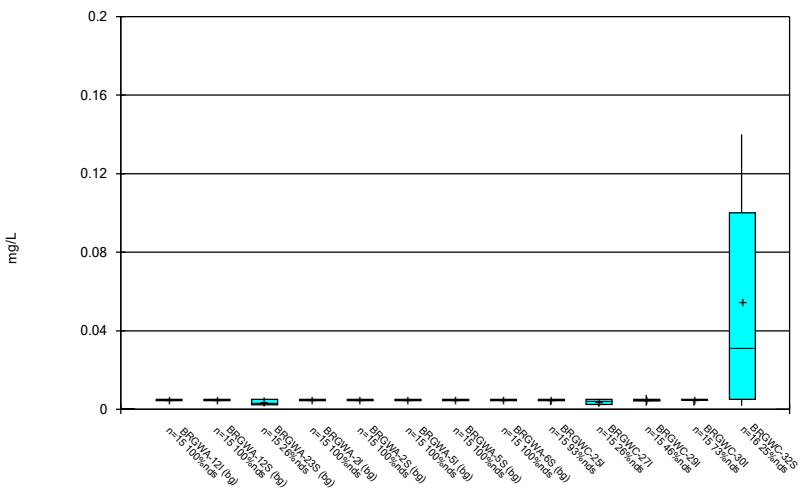
Box & Whiskers Plot



Constituent: pH, Field Analysis Run 11/5/2021 7:07 AM View: 100% NDs
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.30f Sanitas software utilized by Groundwater Stats Consulting. UG

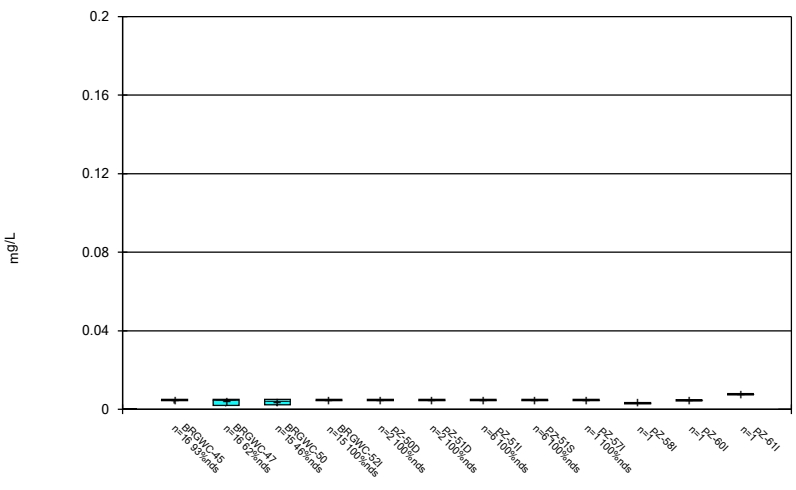
Box & Whiskers Plot



Constituent: Selenium Analysis Run 11/5/2021 7:07 AM View: 100% NDs
Plant Branch Client: Southern Company Data: Plant Branch AP

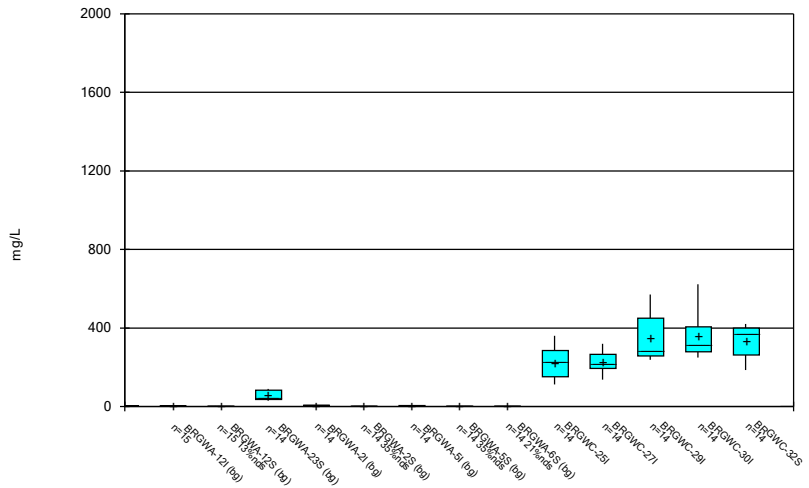
Sanitas™ v.9.6.30f Sanitas software utilized by Groundwater Stats Consulting. UG

Box & Whiskers Plot



Constituent: Selenium Analysis Run 11/5/2021 7:07 AM View: 100% NDs
Plant Branch Client: Southern Company Data: Plant Branch AP

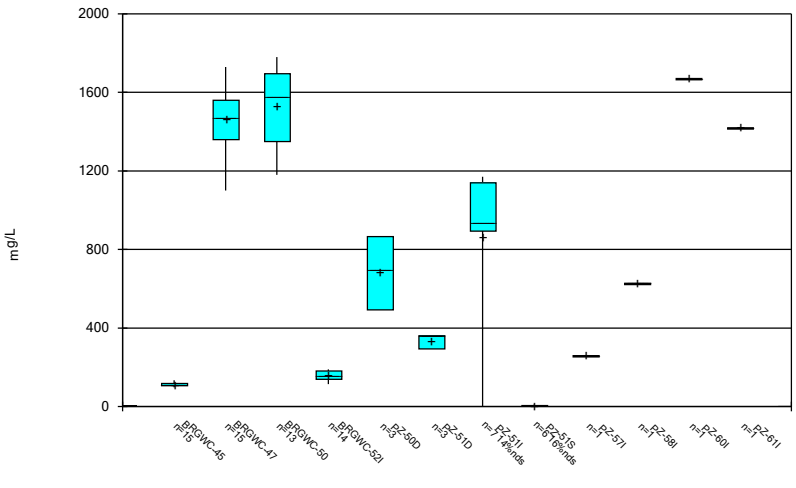
Box & Whiskers Plot



Constituent: Sulfate Analysis Run 11/5/2021 7:07 AM View: 100% NDs
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.30f Sanitas software utilized by Groundwater Stats Consulting. UG

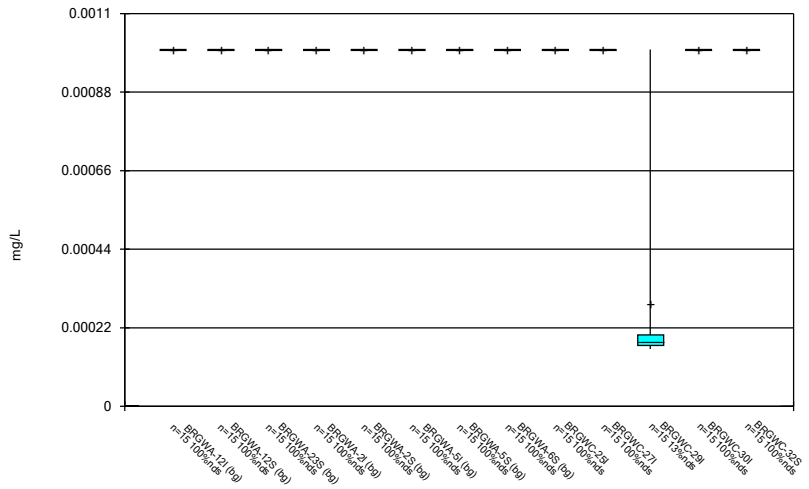
Box & Whiskers Plot



Constituent: Sulfate Analysis Run 11/5/2021 7:07 AM View: 100% NDs
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.30f Sanitas software utilized by Groundwater Stats Consulting. UG

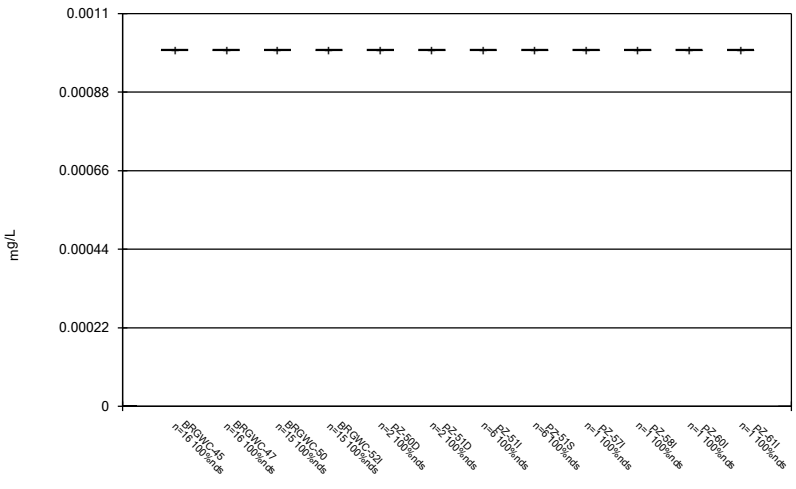
Box & Whiskers Plot



Constituent: Thallium Analysis Run 11/5/2021 7:07 AM View: 100% NDs
Plant Branch Client: Southern Company Data: Plant Branch AP

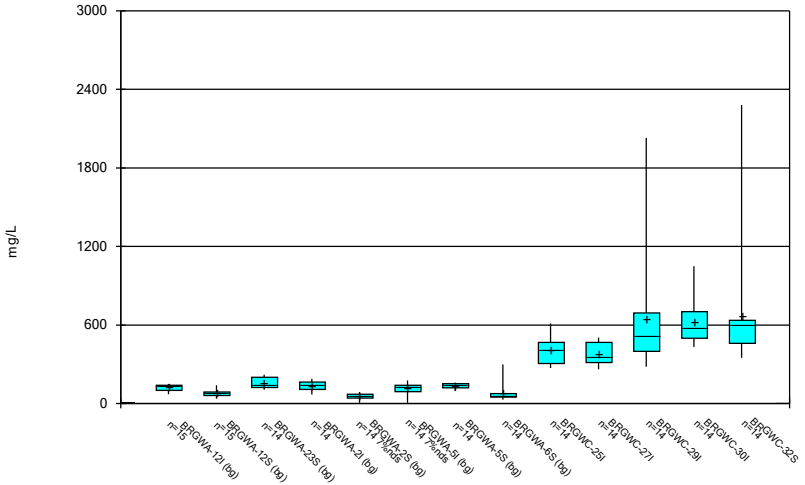
Sanitas™ v.9.6.30f Sanitas software utilized by Groundwater Stats Consulting. UG

Box & Whiskers Plot



Constituent: Thallium Analysis Run 11/5/2021 7:07 AM View: 100% NDs
Plant Branch Client: Southern Company Data: Plant Branch AP

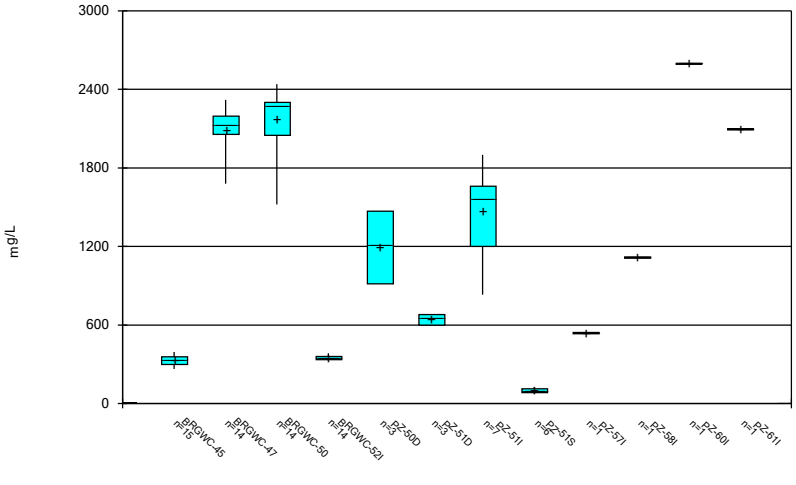
Box & Whiskers Plot



Constituent: Total Dissolved Solids Analysis Run 11/5/2021 7:07 AM View: 100% NDs
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.30f Sanitas software utilized by Groundwater Stats Consulting. UG

Box & Whiskers Plot



Constituent: Total Dissolved Solids Analysis Run 11/5/2021 7:07 AM View: 100% NDs
Plant Branch Client: Southern Company Data: Plant Branch AP

FIGURE C.

Outlier Summary

Plant Branch Client: Southern Company Data: Plant Branch AP Printed 11/5/2021, 7:05 AM

	BRGWC-52I Calcium (mg/L)	BRGWA-5I Cobalt (mg/L)	BRGWC-52I Fluoride (mg/L)	BRGWC-29I Lead (mg/L)	BRGWC-45 Lithium (mg/L)	BRGWC-50 Sulfate (mg/L)	BRGWC-47 Total Dissolved Solids (mg/L)
11/16/2016		<0.01 (o)					
2/13/2018		<0.01 (o)					
2/14/2018				<0.001 (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 - Significant Results

Plant Branch Client: Southern Company Data: Plant Branch AP Printed 11/5/2021, 6:40 AM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Boron (mg/L)	BRGWC-25I	0.068	n/a	9/28/2021	1.1	Yes	112	n/a	n/a	52.68	n/a	n/a	0.0001579	NP Inter (NDs) 1 of 2
Boron (mg/L)	BRGWC-27I	0.068	n/a	9/28/2021	0.95	Yes	112	n/a	n/a	52.68	n/a	n/a	0.0001579	NP Inter (NDs) 1 of 2
Boron (mg/L)	BRGWC-29I	0.068	n/a	9/28/2021	0.9	Yes	112	n/a	n/a	52.68	n/a	n/a	0.0001579	NP Inter (NDs) 1 of 2
Boron (mg/L)	BRGWC-30I	0.068	n/a	9/28/2021	1.7	Yes	112	n/a	n/a	52.68	n/a	n/a	0.0001579	NP Inter (NDs) 1 of 2
Boron (mg/L)	BRGWC-32S	0.068	n/a	9/28/2021	0.91	Yes	112	n/a	n/a	52.68	n/a	n/a	0.0001579	NP Inter (NDs) 1 of 2
Boron (mg/L)	BRGWC-47	0.068	n/a	9/23/2021	0.47	Yes	112	n/a	n/a	52.68	n/a	n/a	0.0001579	NP Inter (NDs) 1 of 2
Boron (mg/L)	BRGWC-50	0.068	n/a	9/27/2021	0.32	Yes	112	n/a	n/a	52.68	n/a	n/a	0.0001579	NP Inter (NDs) 1 of 2
Boron (mg/L)	BRGWC-52I	0.068	n/a	9/28/2021	1.4	Yes	112	n/a	n/a	52.68	n/a	n/a	0.0001579	NP Inter (NDs) 1 of 2
Calcium (mg/L)	BRGWC-25I	24	n/a	9/28/2021	38.4	Yes	114	n/a	n/a	5.263	n/a	n/a	0.0001521	NP Inter (normality) 1 of 2
Calcium (mg/L)	BRGWC-27I	24	n/a	9/28/2021	50.4	Yes	114	n/a	n/a	5.263	n/a	n/a	0.0001521	NP Inter (normality) 1 of 2
Calcium (mg/L)	BRGWC-29I	24	n/a	9/28/2021	59.5	Yes	114	n/a	n/a	5.263	n/a	n/a	0.0001521	NP Inter (normality) 1 of 2
Calcium (mg/L)	BRGWC-30I	24	n/a	9/28/2021	212	Yes	114	n/a	n/a	5.263	n/a	n/a	0.0001521	NP Inter (normality) 1 of 2
Calcium (mg/L)	BRGWC-32S	24	n/a	9/28/2021	33.9	Yes	114	n/a	n/a	5.263	n/a	n/a	0.0001521	NP Inter (normality) 1 of 2
Calcium (mg/L)	BRGWC-45	24	n/a	9/23/2021	32	Yes	114	n/a	n/a	5.263	n/a	n/a	0.0001521	NP Inter (normality) 1 of 2
Calcium (mg/L)	BRGWC-47	24	n/a	9/23/2021	336	Yes	114	n/a	n/a	5.263	n/a	n/a	0.0001521	NP Inter (normality) 1 of 2
Calcium (mg/L)	BRGWC-50	24	n/a	9/27/2021	196	Yes	114	n/a	n/a	5.263	n/a	n/a	0.0001521	NP Inter (normality) 1 of 2
Calcium (mg/L)	BRGWC-52I	24	n/a	9/28/2021	39.5	Yes	114	n/a	n/a	5.263	n/a	n/a	0.0001521	NP Inter (normality) 1 of 2
Chloride (mg/L)	BRGWC-45	5.8	n/a	9/23/2021	29.3	Yes	114	n/a	n/a	0	n/a	n/a	0.0001521	NP Inter (normality) 1 of 2
Chloride (mg/L)	BRGWC-50	5.8	n/a	9/27/2021	16.2	Yes	114	n/a	n/a	0	n/a	n/a	0.0001521	NP Inter (normality) 1 of 2
Fluoride (mg/L)	BRGWC-50	0.42	n/a	9/27/2021	0.43	Yes	128	n/a	n/a	50.78	n/a	n/a	0.0001206	NP Inter (NDs) 1 of 2
pH, Field (S.U.)	BRGWC-29I	7.057	5.592	9/28/2021	4.23	Yes	130	6.325	0.3803	0	None	No	0.0004179	Param Inter 1 of 2
pH, Field (S.U.)	BRGWC-50	7.057	5.592	9/27/2021	5.05	Yes	130	6.325	0.3803	0	None	No	0.0004179	Param Inter 1 of 2
Sulfate (mg/L)	BRGWC-25I	89	n/a	9/28/2021	112	Yes	114	n/a	n/a	13.16	n/a	n/a	0.0001521	NP Inter (normality) 1 of 2
Sulfate (mg/L)	BRGWC-27I	89	n/a	9/28/2021	137	Yes	114	n/a	n/a	13.16	n/a	n/a	0.0001521	NP Inter (normality) 1 of 2
Sulfate (mg/L)	BRGWC-29I	89	n/a	9/28/2021	250	Yes	114	n/a	n/a	13.16	n/a	n/a	0.0001521	NP Inter (normality) 1 of 2
Sulfate (mg/L)	BRGWC-30I	89	n/a	9/28/2021	612	Yes	114	n/a	n/a	13.16	n/a	n/a	0.0001521	NP Inter (normality) 1 of 2
Sulfate (mg/L)	BRGWC-32S	89	n/a	9/28/2021	189	Yes	114	n/a	n/a	13.16	n/a	n/a	0.0001521	NP Inter (normality) 1 of 2
Sulfate (mg/L)	BRGWC-45	89	n/a	9/23/2021	97.5	Yes	114	n/a	n/a	13.16	n/a	n/a	0.0001521	NP Inter (normality) 1 of 2
Sulfate (mg/L)	BRGWC-47	89	n/a	9/23/2021	1240	Yes	114	n/a	n/a	13.16	n/a	n/a	0.0001521	NP Inter (normality) 1 of 2
Sulfate (mg/L)	BRGWC-50	89	n/a	9/27/2021	1180	Yes	114	n/a	n/a	13.16	n/a	n/a	0.0001521	NP Inter (normality) 1 of 2
Sulfate (mg/L)	BRGWC-52I	89	n/a	9/28/2021	132	Yes	114	n/a	n/a	13.16	n/a	n/a	0.0001521	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	BRGWC-29I	299	n/a	9/28/2021	457	Yes	114	n/a	n/a	1.754	n/a	n/a	0.0001521	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	BRGWC-30I	299	n/a	9/28/2021	1050	Yes	114	n/a	n/a	1.754	n/a	n/a	0.0001521	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	BRGWC-32S	299	n/a	9/28/2021	375	Yes	114	n/a	n/a	1.754	n/a	n/a	0.0001521	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	BRGWC-47	299	n/a	9/23/2021	1770	Yes	114	n/a	n/a	1.754	n/a	n/a	0.0001521	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	BRGWC-50	299	n/a	9/27/2021	1800	Yes	114	n/a	n/a	1.754	n/a	n/a	0.0001521	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	BRGWC-52I	299	n/a	9/28/2021	336	Yes	114	n/a	n/a	1.754	n/a	n/a	0.0001521	NP Inter (normality) 1 of 2

Interwell Prediction Limits - All Results

Plant Branch Client: Southern Company Data: Plant Branch AP Printed 11/5/2021, 6:40 AM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Boron (mg/L)	**BRGWC-25I**	**0.068**	**n/a**	**9/28/2021**	**1.1**	**Yes**	**112**	**n/a**	**n/a**	**52.68**	**n/a**	**n/a**	**0.0001579**	**NP Inter (NDs) 1 of 2**
Boron (mg/L)	**BRGWC-27I**	**0.068**	**n/a**	**9/28/2021**	**0.95**	**Yes**	**112**	**n/a**	**n/a**	**52.68**	**n/a**	**n/a**	**0.0001579**	**NP Inter (NDs) 1 of 2**
Boron (mg/L)	**BRGWC-29I**	**0.068**	**n/a**	**9/28/2021**	**0.9**	**Yes**	**112**	**n/a**	**n/a**	**52.68**	**n/a**	**n/a**	**0.0001579**	**NP Inter (NDs) 1 of 2**
Boron (mg/L)	**BRGWC-30I**	**0.068**	**n/a**	**9/28/2021**	**1.7**	**Yes**	**112**	**n/a**	**n/a**	**52.68**	**n/a**	**n/a**	**0.0001579**	**NP Inter (NDs) 1 of 2**
Boron (mg/L)	**BRGWC-32S**	**0.068**	**n/a**	**9/28/2021**	**0.91**	**Yes**	**112**	**n/a**	**n/a**	**52.68**	**n/a**	**n/a**	**0.0001579**	**NP Inter (NDs) 1 of 2**
Boron (mg/L)	BRGWC-45	0.068	n/a	9/23/2021	0.029J	No	112	n/a	n/a	52.68	n/a	n/a	0.0001579	NP Inter (NDs) 1 of 2
Boron (mg/L)	**BRGWC-47**	**0.068**	**n/a**	**9/23/2021**	**0.47**	**Yes**	**112**	**n/a**	**n/a**	**52.68**	**n/a**	**n/a**	**0.0001579**	**NP Inter (NDs) 1 of 2**
Boron (mg/L)	**BRGWC-50**	**0.068**	**n/a**	**9/27/2021**	**0.32**	**Yes**	**112**	**n/a**	**n/a**	**52.68**	**n/a**	**n/a**	**0.0001579**	**NP Inter (NDs) 1 of 2**
Boron (mg/L)	**BRGWC-52I**	**0.068**	**n/a**	**9/28/2021**	**1.4**	**Yes**	**112**	**n/a**	**n/a**	**52.68**	**n/a**	**n/a**	**0.0001579**	**NP Inter (NDs) 1 of 2**
Calcium (mg/L)	**BRGWC-25I**	**24**	**n/a**	**9/28/2021**	**38.4**	**Yes**	**114**	**n/a**	**n/a**	**5.263**	**n/a**	**n/a**	**0.0001521**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	**BRGWC-27I**	**24**	**n/a**	**9/28/2021**	**50.4**	**Yes**	**114**	**n/a**	**n/a**	**5.263**	**n/a**	**n/a**	**0.0001521**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	**BRGWC-29I**	**24**	**n/a**	**9/28/2021**	**59.5**	**Yes**	**114**	**n/a**	**n/a**	**5.263**	**n/a**	**n/a**	**0.0001521**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	**BRGWC-30I**	**24**	**n/a**	**9/28/2021**	**212**	**Yes**	**114**	**n/a**	**n/a**	**5.263**	**n/a**	**n/a**	**0.0001521**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	**BRGWC-32S**	**24**	**n/a**	**9/28/2021**	**33.9**	**Yes**	**114**	**n/a**	**n/a**	**5.263**	**n/a**	**n/a**	**0.0001521**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	**BRGWC-45**	**24**	**n/a**	**9/23/2021**	**32**	**Yes**	**114**	**n/a**	**n/a**	**5.263**	**n/a**	**n/a**	**0.0001521**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	**BRGWC-47**	**24**	**n/a**	**9/23/2021**	**336**	**Yes**	**114**	**n/a**	**n/a**	**5.263**	**n/a**	**n/a**	**0.0001521**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	**BRGWC-50**	**24**	**n/a**	**9/27/2021**	**196**	**Yes**	**114**	**n/a**	**n/a**	**5.263**	**n/a**	**n/a**	**0.0001521**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	**BRGWC-52I**	**24**	**n/a**	**9/28/2021**	**39.5**	**Yes**	**114**	**n/a**	**n/a**	**5.263**	**n/a**	**n/a**	**0.0001521**	**NP Inter (normality) 1 of 2**
Chloride (mg/L)	BRGWC-25I	5.8	n/a	9/28/2021	4.2	No	114	n/a	n/a	0	n/a	n/a	0.0001521	NP Inter (normality) 1 of 2
Chloride (mg/L)	BRGWC-27I	5.8	n/a	9/28/2021	3.7	No	114	n/a	n/a	0	n/a	n/a	0.0001521	NP Inter (normality) 1 of 2
Chloride (mg/L)	BRGWC-29I	5.8	n/a	9/28/2021	5.4	No	114	n/a	n/a	0	n/a	n/a	0.0001521	NP Inter (normality) 1 of 2
Chloride (mg/L)	BRGWC-30I	5.8	n/a	9/28/2021	3.4	No	114	n/a	n/a	0	n/a	n/a	0.0001521	NP Inter (normality) 1 of 2
Chloride (mg/L)	BRGWC-32S	5.8	n/a	9/28/2021	3.6	No	114	n/a	n/a	0	n/a	n/a	0.0001521	NP Inter (normality) 1 of 2
Chloride (mg/L)	**BRGWC-45**	**5.8**	**n/a**	**9/23/2021**	**29.3**	**Yes**	**114**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0001521**	**NP Inter (normality) 1 of 2**
Chloride (mg/L)	BRGWC-47	5.8	n/a	9/23/2021	4.3	No	114	n/a	n/a	0	n/a	n/a	0.0001521	NP Inter (normality) 1 of 2
Chloride (mg/L)	**BRGWC-50**	**5.8**	**n/a**	**9/27/2021**	**16.2**	**Yes**	**114**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0001521**	**NP Inter (normality) 1 of 2**
Chloride (mg/L)	BRGWC-52I	5.8	n/a	9/28/2021	5.5	No	114	n/a	n/a	0	n/a	n/a	0.0001521	NP Inter (normality) 1 of 2
Fluoride (mg/L)	BRGWC-25I	0.42	n/a	9/28/2021	0.15	No	128	n/a	n/a	50.78	n/a	n/a	0.0001206	NP Inter (NDs) 1 of 2
Fluoride (mg/L)	BRGWC-27I	0.42	n/a	9/28/2021	0.16	No	128	n/a	n/a	50.78	n/a	n/a	0.0001206	NP Inter (NDs) 1 of 2
Fluoride (mg/L)	BRGWC-29I	0.42	n/a	9/28/2021	0.081J	No	128	n/a	n/a	50.78	n/a	n/a	0.0001206	NP Inter (NDs) 1 of 2
Fluoride (mg/L)	BRGWC-30I	0.42	n/a	9/28/2021	0.11	No	128	n/a	n/a	50.78	n/a	n/a	0.0001206	NP Inter (NDs) 1 of 2
Fluoride (mg/L)	BRGWC-32S	0.42	n/a	9/28/2021	0.1ND	No	128	n/a	n/a	50.78	n/a	n/a	0.0001206	NP Inter (NDs) 1 of 2
Fluoride (mg/L)	BRGWC-45	0.42	n/a	9/23/2021	0.06J	No	128	n/a	n/a	50.78	n/a	n/a	0.0001206	NP Inter (NDs) 1 of 2
Fluoride (mg/L)	BRGWC-47	0.42	n/a	9/23/2021	0.1ND	No	128	n/a	n/a	50.78	n/a	n/a	0.0001206	NP Inter (NDs) 1 of 2
Fluoride (mg/L)	**BRGWC-50**	**0.42**	**n/a**	**9/27/2021**	**0.43**	**Yes**	**128**	**n/a**	**n/a**	**50.78**	**n/a**	**n/a**	**0.0001206**	**NP Inter (NDs) 1 of 2**
Fluoride (mg/L)	BRGWC-52I	0.42	n/a	9/28/2021	0.12	No	128	n/a	n/a	50.78	n/a	n/a	0.0001206	NP Inter (NDs) 1 of 2
pH, Field (S.U.)	BRGWC-25I	7.057	5.592	9/28/2021	5.97	No	130	6.325	0.3803	0	None	No	0.0004179	Param Inter 1 of 2
pH, Field (S.U.)	BRGWC-27I	7.057	5.592	9/28/2021	5.82	No	130	6.325	0.3803	0	None	No	0.0004179	Param Inter 1 of 2
pH, Field (S.U.)	**BRGWC-29I**	**7.057**	**5.592**	**9/28/2021**	**4.23**	**Yes**	**130**	**6.325**	**0.3803**	**0**	**None**	**No**	**0.0004179**	**Param Inter 1 of 2**
pH, Field (S.U.)	BRGWC-30I	7.057	5.592	9/28/2021	6.33	No	130	6.325	0.3803	0	None	No	0.0004179	Param Inter 1 of 2
pH, Field (S.U.)	BRGWC-32S	7.057	5.592	9/28/2021	5.82	No	130	6.325	0.3803	0	None	No	0.0004179	Param Inter 1 of 2
pH, Field (S.U.)	BRGWC-45	7.057	5.592	9/23/2021	5.95	No	130	6.325	0.3803	0	None	No	0.0004179	Param Inter 1 of 2
pH, Field (S.U.)	BRGWC-47	7.057	5.592	9/23/2021	5.74	No	130	6.325	0.3803	0	None	No	0.0004179	Param Inter 1 of 2
pH, Field (S.U.)	**BRGWC-50**	**7.057**	**5.592**	**9/27/2021**	**5.05**	**Yes**	**130**	**6.325**	**0.3803**	**0**	**None**	**No**	**0.0004179**	**Param Inter 1 of 2**
pH, Field (S.U.)	BRGWC-52I	7.057	5.592	9/28/2021	6.81	No	130	6.325	0.3803	0	None	No	0.0004179	Param Inter 1 of 2
Sulfate (mg/L)	**BRGWC-25I**	**89**	**n/a**	**9/28/2021**	**112**	**Yes**	**114**	**n/a**	**n/a**	**13.16**	**n/a**	**n/a**	**0.0001521**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	**BRGWC-27I**	**89**	**n/a**	**9/28/2021**	**137**	**Yes**	**114**	**n/a**	**n/a**	**13.16**	**n/a**	**n/a**	**0.0001521**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	**BRGWC-29I**	**89**	**n/a**	**9/28/2021**	**250**	**Yes**	**114**	**n/a**	**n/a**	**13.16**	**n/a**	**n/a**	**0.0001521**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	**BRGWC-30I**	**89**	**n/a**	**9/28/2021**	**612**	**Yes**	**114**	**n/a**	**n/a**	**13.16**	**n/a**	**n/a**	**0.0001521**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	**BRGWC-32S**	**89**	**n/a**	**9/28/2021**	**189**	**Yes**	**114**	**n/a**	**n/a**	**13.16**	**n/a**	**n/a**	**0.0001521**	**NP Inter (normality) 1 of 2**

Interwell Prediction Limits - All Results

Plant Branch Client: Southern Company Data: Plant Branch AP Printed 11/5/2021, 6:40 AM

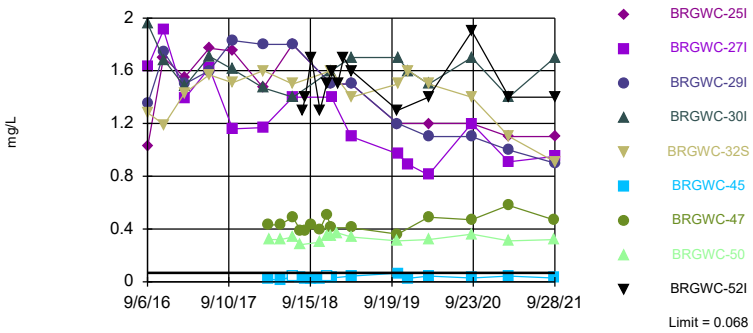
Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Sulfate (mg/L)	**BRGWC-45**	**89**	**n/a**	**9/23/2021**	**97.5**	**Yes**	**114**	**n/a**	**n/a**	**13.16**	**n/a**	**n/a**	**0.0001521**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	**BRGWC-47**	**89**	**n/a**	**9/23/2021**	**1240**	**Yes**	**114**	**n/a**	**n/a**	**13.16**	**n/a**	**n/a**	**0.0001521**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	**BRGWC-50**	**89**	**n/a**	**9/27/2021**	**1180**	**Yes**	**114**	**n/a**	**n/a**	**13.16**	**n/a**	**n/a**	**0.0001521**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	**BRGWC-52I**	**89**	**n/a**	**9/28/2021**	**132**	**Yes**	**114**	**n/a**	**n/a**	**13.16**	**n/a**	**n/a**	**0.0001521**	**NP Inter (normality) 1 of 2**
Total Dissolved Solids (mg/L)	BRGWC-25I	299	n/a	9/28/2021	270	No	114	n/a	n/a	1.754	n/a	n/a	0.0001521	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	BRGWC-27I	299	n/a	9/28/2021	262	No	114	n/a	n/a	1.754	n/a	n/a	0.0001521	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	**BRGWC-29I**	**299**	**n/a**	**9/28/2021**	**457**	**Yes**	**114**	**n/a**	**n/a**	**1.754**	**n/a**	**n/a**	**0.0001521**	**NP Inter (normality) 1 of 2**
Total Dissolved Solids (mg/L)	**BRGWC-30I**	**299**	**n/a**	**9/28/2021**	**1050**	**Yes**	**114**	**n/a**	**n/a**	**1.754**	**n/a**	**n/a**	**0.0001521**	**NP Inter (normality) 1 of 2**
Total Dissolved Solids (mg/L)	**BRGWC-32S**	**299**	**n/a**	**9/28/2021**	**375**	**Yes**	**114**	**n/a**	**n/a**	**1.754**	**n/a**	**n/a**	**0.0001521**	**NP Inter (normality) 1 of 2**
Total Dissolved Solids (mg/L)	BRGWC-45	299	n/a	9/23/2021	277	No	114	n/a	n/a	1.754	n/a	n/a	0.0001521	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	**BRGWC-47**	**299**	**n/a**	**9/23/2021**	**1770**	**Yes**	**114**	**n/a**	**n/a**	**1.754**	**n/a**	**n/a**	**0.0001521**	**NP Inter (normality) 1 of 2**
Total Dissolved Solids (mg/L)	**BRGWC-50**	**299**	**n/a**	**9/27/2021**	**1800**	**Yes**	**114**	**n/a**	**n/a**	**1.754**	**n/a**	**n/a**	**0.0001521**	**NP Inter (normality) 1 of 2**
Total Dissolved Solids (mg/L)	**BRGWC-52I**	**299**	**n/a**	**9/28/2021**	**336**	**Yes**	**114**	**n/a**	**n/a**	**1.754**	**n/a**	**n/a**	**0.0001521**	**NP Inter (normality) 1 of 2**

Sanitas™ v.9.6.30f Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Exceeds Limit: BRGWC-25I, BRGWC-27I, BRGWC-29I, BRGWC-30I, BRGWC-32S, BRGWC-47, BRGWC-50, BRGWC-52I

Prediction Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 112 background values. 52.68% NDs. Annual per-constituent alpha = 0.002838. Individual comparison alpha = 0.0001579 (1 of 2). Comparing 9 points to limit.

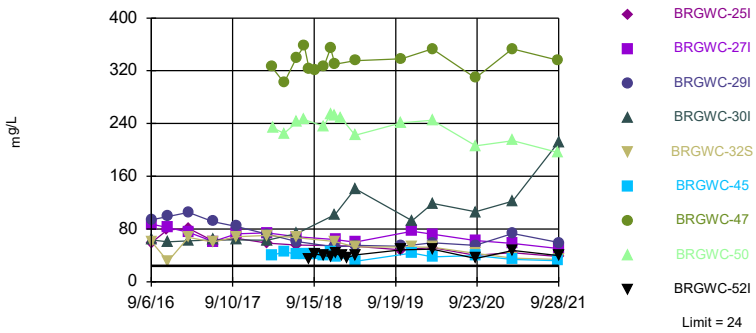
Constituent: Boron Analysis Run 11/5/2021 6:37 AM View: PLs Interwell
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.30f Sanitas software utilized by Groundwater Stats Consulting. UG

Exceeds Limit: BRGWC-25I, BRGWC-27I, BRGWC-29I, BRGWC-30I, BRGWC-32S, BRGWC-45, BRGWC-47, BRGWC-50,..

Prediction Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Chi Squared normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 114 background values. 5.263% NDs. Annual per-constituent alpha = 0.002734. Individual comparison alpha = 0.0001521 (1 of 2). Comparing 9 points to limit.

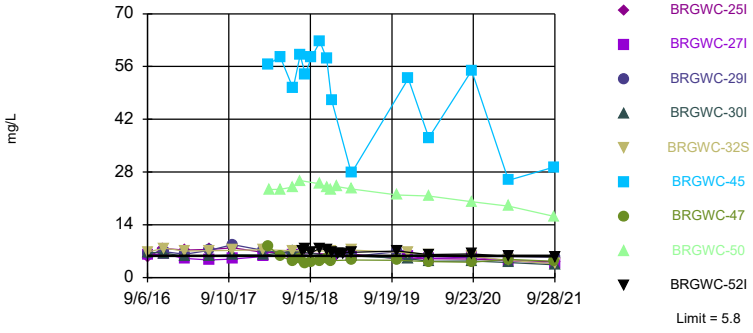
Constituent: Calcium Analysis Run 11/5/2021 6:37 AM View: PLs Interwell
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.30f Sanitas software utilized by Groundwater Stats Consulting. UG

Exceeds Limit: BRGWC-45, BRGWC-50

Prediction Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Chi Squared normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 114 background values. Annual per-constituent alpha = 0.002734. Individual comparison alpha = 0.0001521 (1 of 2). Comparing 9 points to limit.

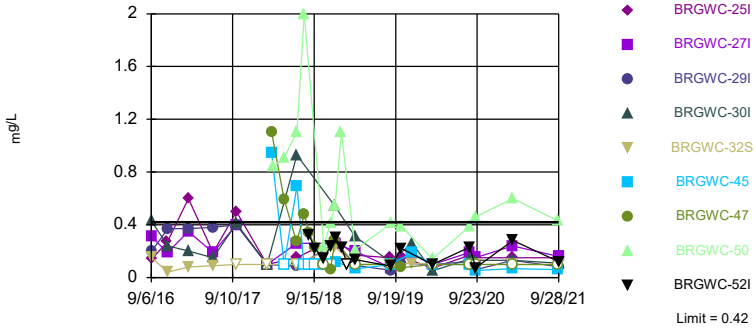
Constituent: Chloride Analysis Run 11/5/2021 6:37 AM View: PLs Interwell
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.30f Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Exceeds Limit: BRGWC-50

Prediction Limit

Interwell Non-parametric



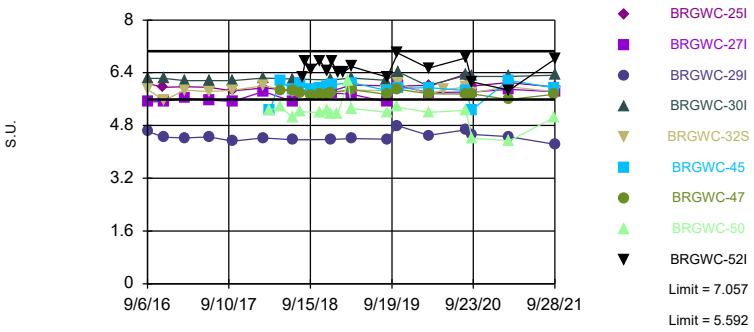
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 128 background values. 50.78% NDs. Annual per-constituent alpha = 0.002169. Individual comparison alpha = 0.0001206 (1 of 2). Comparing 9 points to limit.

Constituent: Fluoride Analysis Run 11/5/2021 6:37 AM View: PLs Interwell
Plant Branch Client: Southern Company Data: Plant Branch AP

Exceeds Limits: BRGWC-29I, BRGWC-50

Prediction Limit

Interwell Parametric



Background Data Summary: Mean=6.325, Std. Dev.=0.3803, n=130. Normality test: Chi Squared @alpha = 0.01, calculated = 5.538, critical = 14.07. Kappa = 1.926 (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.

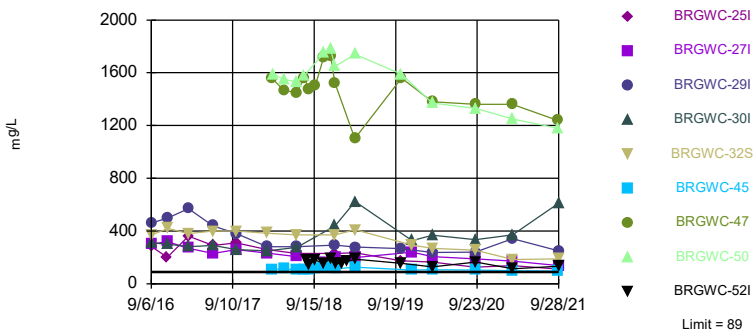
Constituent: pH, Field Analysis Run 11/5/2021 6:37 AM View: PLs Interwell
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.30f Sanitas software utilized by Groundwater Stats Consulting. UG

Exceeds Limit: BRGWC-25I, BRGWC-27I, BRGWC-29I, BRGWC-30I, BRGWC-32S, BRGWC-45, BRGWC-47, BRGWC-50,..

Prediction Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Chi Squared normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 114 background values. 13.16% NDs. Annual per-constituent alpha = 0.002734. Individual comparison alpha = 0.0001521 (1 of 2). Comparing 9 points to limit.

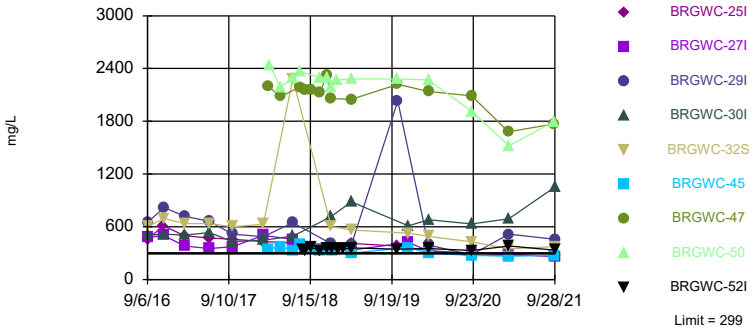
Constituent: Sulfate Analysis Run 11/5/2021 6:37 AM View: PLs Interwell
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.30f Sanitas software utilized by Groundwater Stats Consulting. UG

Exceeds Limit: BRGWC-29I, BRGWC-30I, BRGWC-32S, BRGWC-47, BRGWC-50, BRGWC-52I

Prediction Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Chi Squared normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 114 background values. 1.754% NDs. Annual per-constituent alpha = 0.002734. Individual comparison alpha = 0.0001521 (1 of 2). Comparing 9 points to limit.

Constituent: Total Dissolved Solids Analysis Run 11/5/2021 6:37 AM View: PLs Interwell
Plant Branch Client: Southern Company Data: Plant Branch AP

Prediction Limit

Constituent: Boron (mg/L) Analysis Run 11/5/2021 6:40 AM View: PLs Interwell

Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWA-5S (bg)	BRGWA-5I (bg)	BRGWA-2S (bg)	BRGWA-2I (bg)	BRGWA-12I (bg)	BRGWA-6S (bg)	BRGWA-12S (bg)	BRGWA-23S (bg)	BRGWC-30I
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								0.0362 (J)	1.96
9/8/2016									
11/15/2016	0.0085 (J)					0.0123 (J)			
11/16/2016		0.0187 (J)	0.0109 (J)	0.0117 (J)	0.0127 (J)		0.0081 (J)		
11/17/2016								0.0617	
11/18/2016									
11/21/2016									1.68
2/20/2017	0.0093 (J)	0.0066 (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	0.0314 (J)	1.47
3/6/2018									
3/15/2018									
5/1/2018									
6/26/2018	0.0056 (J)	0.0042 (J)	<0.04	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	0.0062 (J)	<0.04	<0.04	0.0086 (J)	0.0083 (J)	<0.04	0.0053 (J)	0.055	1.6
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	0.006 (J)	<0.04	<0.04	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
9/15/2020	<0.04	<0.04	<0.04	<0.04	0.0071 (J)	<0.04	<0.04	0.033 (J)	
9/16/2020									1.7
9/17/2020									
3/1/2021				<0.04		<0.04			

Prediction Limit

Constituent: Boron (mg/L) Analysis Run 11/5/2021 6:40 AM View: PLs Interwell

Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWA-5S (bg)	BRGWA-5I (bg)	BRGWA-2S (bg)	BRGWA-2I (bg)	BRGWA-12I (bg)	BRGWA-6S (bg)	BRGWA-12S (bg)	BRGWA-23S (bg)	BRGWC-30I
3/2/2021	0.0071 (J)	0.0053 (J)	<0.04		0.0057 (J)		<0.04	0.042	
3/3/2021									1.4
3/4/2021									
9/21/2021	<0.04	<0.04			<0.04		<0.04		
9/22/2021			<0.04	<0.04		<0.04		0.047	
9/23/2021									
9/27/2021									
9/28/2021									1.7

Prediction Limit

Constituent: Boron (mg/L) Analysis Run 11/5/2021 6:40 AM View: PLs Interwell

Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWC-27I	BRGWC-32S	BRGWC-29I	BRGWC-25I	BRGWC-47	BRGWC-45	BRGWC-50	BRGWC-52I
8/31/2016								
9/1/2016								
9/6/2016								
9/8/2016	1.63	1.28	1.35	1.03				
11/15/2016								
11/16/2016								
11/17/2016				1.7				
11/18/2016	1.91							
11/21/2016		1.19	1.74					
2/20/2017								
2/21/2017	1.39			1.55				
2/22/2017		1.43	1.5					
6/12/2017								
6/13/2017	1.62			1.77				
6/14/2017		1.57	1.6					
9/26/2017								
9/27/2017	1.16	1.51	1.83	1.75				
2/13/2018								
2/14/2018	1.17	1.6	1.8	1.47				
3/6/2018					0.428	0.0198 (J)		
3/15/2018							0.32	
5/1/2018					0.435 (D)	0.015 (J)	0.32	
6/26/2018				1.8				
6/27/2018	1.4 (J+X)	1.5 (J+X)	1.8 (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					0.39	0.022 (J)		1.4
9/19/2018					0.43	0.021 (J)		1.7
10/29/2018					0.4	0.021 (J)	0.3	1.3
11/28/2018					0.51	<0.04 (X)	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		1.4	1.5	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)		
9/15/2020			1.1	1.2				
9/16/2020	1.2	1.4			0.47	0.028 (J)		
9/17/2020							0.36	1.9
3/1/2021								

Prediction Limit

Constituent: Boron (mg/L) Analysis Run 11/5/2021 6:40 AM View: PLs Interwell

Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWC-27I	BRGWC-32S	BRGWC-29I	BRGWC-25I	BRGWC-47	BRGWC-45	BRGWC-50	BRGWC-52I
3/2/2021				1.1	0.58	0.044		
3/3/2021	0.91		1					
3/4/2021		1.1					0.31	1.4
9/21/2021								
9/22/2021								
9/23/2021					0.47	0.029 (J)		
9/27/2021							0.32	
9/28/2021	0.95	0.91	0.9	1.1				1.4

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 11/5/2021 6:40 AM View: PLs Interwell

Plant Branch Client: Southern Company Data: Plant Branch AP

	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	
9/15/2020	16.8	12.7	3.9	14.1	3.7	5.7	14.5		10.7
9/16/2020								106	
9/17/2020									
3/1/2021				15.4	4.2				
3/2/2021	16.8	13.2	4			5.4	11.7		11.6

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 11/5/2021 6:40 AM View: PLs Interwell

Plant Branch Client: Southern Company Data: Plant Branch AP

	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)
3/3/2021								122	
3/4/2021									
9/21/2021	19.1	14.1				5.4	16.4		
9/22/2021			4.3	15.9	4.1				9.2
9/23/2021									
9/27/2021									
9/28/2021								212	

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 11/5/2021 6:40 AM View: PLs Interwell

Plant Branch Client: Southern Company Data: Plant Branch AP

	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	87.2	93.9	60.5	59.4				
11/15/2016								
11/16/2016								
11/17/2016				78.4				
11/18/2016	82.4							
11/21/2016		99.1	31.1					
2/20/2017								
2/21/2017	75.1			80.9				
2/22/2017		105	67.3					
6/12/2017								
6/13/2017	61			62				
6/14/2017		91.3	60.2					
9/26/2017								
9/27/2017	72.6	84	68.4	65.8				
2/13/2018								
2/14/2018	74.1	72.1	70.2	58.8				
3/6/2018					39.5	326		
3/15/2018							233	
5/1/2018					45.5	302 (D)	225	
6/26/2018				55.5				
6/27/2018	68.2	61.1	67.1			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					42.3	323		33.9
9/19/2018					41.9	321		42.3
10/29/2018					40.8	326	236	39.8
11/28/2018					45.1	354	254	38.2
12/18/2018		52.9		54.7				
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		55.4	52.8	53.95 (D)	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	76.8		52.7					
3/3/2020								
3/4/2020	72.3	59.3		52		353	245	49.5
3/5/2020			52.1		37.9			
9/15/2020		55.1		40.1				
9/16/2020	62.5		43.1		39.7	309		
9/17/2020							206	35.4
3/1/2021								
3/2/2021				44.1	33.9	353		

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 11/5/2021 6:40 AM View: PLs Interwell

Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWC-27I	BRGWC-29I	BRGWC-32S	BRGWC-25I	BRGWC-45	BRGWC-47	BRGWC-50	BRGWC-52I
3/3/2021	58.2	73.3						
3/4/2021			35.7				214	47.5
9/21/2021								
9/22/2021								
9/23/2021					32	336		
9/27/2021							196	
9/28/2021	50.4	59.5	33.9	38.4				39.5

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 11/5/2021 6:40 AM View: PLs Interwell

Plant Branch Client: Southern Company Data: Plant Branch AP

	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	3.6	4.4	2	2.3					
9/1/2016					2.5	3.5	3.3		
9/6/2016								6.7	5.8
9/8/2016									
11/15/2016	4				2.3				
11/16/2016		4.4	1.8	2		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			1.8	2		3.2	3.2		3.5
2/22/2017								5.6	
6/12/2017	3.8	4.2		2.1	2.2				
6/13/2017			1.7			3.3			3.2
6/14/2017							3.1	5.7	
9/26/2017	4.1	4.4	1.8	2	2.3	3.3	3.3		3.5
9/27/2017								6	
2/13/2018	4.1	4.7	1.7	2.1	2.3				
2/14/2018						3.5	3.1	5.9	3.8
3/6/2018									
3/15/2018									
5/1/2018									
6/26/2018	4.1	4.5	2.2	2.4	2.6	3.4	3.4		3.8
6/27/2018									
6/28/2018								7 (J-X)	
7/31/2018						2.9	2.6		
8/1/2018									
8/10/2018									
8/23/2018									
9/19/2018									
10/29/2018									
11/28/2018									
12/18/2018	3.8	4.5	1.9	1.8	2.3	2.9	2.8	5.8	3.9
12/19/2018									
12/20/2018									
1/16/2019									
1/17/2019									
2/13/2019									
3/19/2019	4.2	4.5	2	2.45 (D)	2.6	3.5	3.2		3.8
3/20/2019								5.8	
10/15/2019	3.7	4.2	1.9	2.2	2.4	3.4	3.1		3.5
10/16/2019									
12/3/2019									
12/4/2019								5	
3/3/2020	3.6	3.9	1.9	1.9	2.9	3.2	2.6		
3/4/2020									3.3
3/5/2020								4.3	
9/15/2020	3.7	3.7	1.7	1.9	2.3	3.5	2.4		3.1
9/16/2020								4.4	
9/17/2020									
3/1/2021				1.8	2.1				
3/2/2021	3.7	3.8	1.7			3.7	2.6		3.5

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 11/5/2021 6:40 AM View: PLs Interwell

Plant Branch Client: Southern Company Data: Plant Branch AP

	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)
3/3/2021								4	
3/4/2021									
9/21/2021	3.2	3.2				3.5	2.1		
9/22/2021			1.5	1.7	2.1				2.8
9/23/2021									
9/27/2021									
9/28/2021								3.4	

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 11/5/2021 6:40 AM View: PLs Interwell

Plant Branch Client: Southern Company Data: Plant Branch AP

	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	6	6.4	6.8	5.5				
11/15/2016								
11/16/2016								
11/17/2016				7.7				
11/18/2016	6.3							
11/21/2016		6.9	7.8					
2/20/2017								
2/21/2017	5.1			7.3				
2/22/2017		6.2	7					
6/12/2017								
6/13/2017	4.7			7.5				
6/14/2017		7.2	7.1					
9/26/2017								
9/27/2017	4.9	8.7	7.2	7.9				
2/13/2018								
2/14/2018	5.6	7.2	7.4	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	5.9	6.3	7.1			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		5.6	7.3	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	5.6		6.6					
3/3/2020								
3/4/2020	5.1	5.8		5		4.2	21.6	6.1
3/5/2020			6		37.1			
9/15/2020		5.5		4.9				
9/16/2020	5.4		5.6		54.9	4.1		
9/17/2020							20.1	6.3
3/1/2021								
3/2/2021				4.5	25.8	4.8		

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 11/5/2021 6:40 AM View: PLs Interwell

Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWC-27I	BRGWC-29I	BRGWC-32S	BRGWC-25I	BRGWC-45	BRGWC-47	BRGWC-50	BRGWC-52I
3/3/2021	4.5	5.6						
3/4/2021			4.6				18.9	5.6
9/21/2021								
9/22/2021								
9/23/2021					29.3	4.3		
9/27/2021							16.2	
9/28/2021	3.7	5.4	3.6	4.2				5.5

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 11/5/2021 6:40 AM View: PLs Interwell

Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWA-2I (bg)	BRGWA-2S (bg)	BRGWA-5I (bg)	BRGWA-5S (bg)	BRGWA-12S (bg)	BRGWA-6S (bg)	BRGWA-12I (bg)	BRGWA-23S (bg)	BRGWC-30I
8/31/2016	0.11 (J)	0.05 (J)	0.07 (J)	0.19 (J)					
9/1/2016					0.05 (J)	0.06 (J)	0.2 (J)		
9/6/2016								0.42	0.43
9/8/2016									
11/15/2016				0.13 (J)		0.06 (J)			
11/16/2016	0.08 (J)	0.07 (J)	0.07 (J)		0.03 (J)		0.14 (J)		
11/17/2016								0.15 (J)	
11/18/2016									
11/21/2016									0.24 (J)
2/20/2017			0.06 (J)	0.08 (J)		0.04 (J)			
2/21/2017	0.14 (J)	0.05 (J)			0.04 (J)		0.16 (J)	0.1 (J)	
2/22/2017									0.2 (J)
6/12/2017	0.16 (J)		0.008 (J)	0.07 (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	0.14 (J)	<0.1	<0.1	0.04 (J)	<0.1	<0.1	0.1 (J)	<0.1	
9/27/2017									0.41
2/13/2018	<0.1	<0.1	<0.1	<0.1		<0.1			
2/14/2018					<0.1		<0.1	<0.1	<0.1
3/6/2018									
3/15/2018									
5/1/2018									
6/26/2018	0.085 (J)	0.048 (J)	0.045 (J)	0.072 (J)	0.042 (J)	0.041 (J)	0.079 (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	0.085 (J)	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.54
12/19/2018									
12/20/2018									
1/16/2019									
1/17/2019									
2/13/2019									
3/19/2019	0.0655 (JD)	0.037 (J)	<0.1	0.06 (J)	<0.1	0.03 (J)	<0.1	<0.1	
3/20/2019									0.31
8/27/2019	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1		0.12 (J)
8/28/2019									
8/29/2019								0.084 (J)	
10/15/2019	<0.1	<0.1	<0.1	0.045 (J)	<0.1	<0.1	0.047 (J)	<0.1	
10/16/2019									
12/3/2019									
12/4/2019									0.26 (J)
3/3/2020	0.066 (J)	0.05 (J)	<0.1	0.057 (J)	<0.1	0.09 (J)	0.056 (J)		
3/4/2020								<0.1	
3/5/2020									0.051 (J)
8/18/2020	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.052 (J)	<0.1	
8/19/2020									0.14

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 11/5/2021 6:40 AM View: PLs Interwell

Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWA-2I (bg)	BRGWA-2S (bg)	BRGWA-5I (bg)	BRGWA-5S (bg)	BRGWA-12S (bg)	BRGWA-6S (bg)	BRGWA-12I (bg)	BRGWA-23S (bg)	BRGWC-30I
8/20/2020									
9/15/2020	<0.1	<0.1	<0.1	0.051 (J)	<0.1	<0.1	0.062 (J)	<0.1	
9/16/2020									0.13
9/17/2020									
3/1/2021	<0.1					<0.1			
3/2/2021		<0.1	<0.1	<0.1	<0.1		0.061 (J)	<0.1	
3/3/2021									0.13
3/4/2021									
9/21/2021			<0.1	0.056 (J)	<0.1		0.071 (J)		
9/22/2021	<0.1	<0.1				<0.1		0.069 (J)	
9/23/2021									
9/27/2021									
9/28/2021									0.11

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 11/5/2021 6:40 AM View: PLs Interwell

Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWC-32S	BRGWC-25I	BRGWC-27I	BRGWC-29I	BRGWC-45	BRGWC-47	BRGWC-50	BRGWC-52I
8/31/2016								
9/1/2016								
9/6/2016								
9/8/2016	0.15 (J)	0.14 (J)	0.31	0.2 (J)				
11/15/2016								
11/16/2016								
11/17/2016		0.27 (J)						
11/18/2016			0.19 (J)					
11/21/2016	0.04 (J)			0.37				
2/20/2017								
2/21/2017		0.6	0.35					
2/22/2017	0.08 (J)			0.37				
6/12/2017								
6/13/2017		0.19 (J)	0.19 (J)					
6/14/2017	0.09 (J)			0.38				
9/26/2017								
9/27/2017	<0.1	0.5	0.4	0.4				
2/13/2018								
2/14/2018	<0.1	<0.1	<0.1	<0.1				
3/6/2018					0.94	1.1		
3/15/2018							0.84 (JX)	
5/1/2018					<0.1	0.595 (D)	0.91	
6/26/2018		0.15 (J)						
6/27/2018	<0.1		0.26 (J)	0.085 (J)		0.27 (J)		
6/28/2018					0.69 (J+X)		1.1 (J+X)	
7/31/2018					<0.1			
8/1/2018						0.48	2	
8/10/2018								1.6 (O)
8/23/2018					<0.1	0.34		0.32
9/19/2018					<0.1	0.23 (J)		0.22 (J)
10/29/2018					<0.1	<0.1	0.24 (J)	0.14 (J)
11/28/2018					<0.1	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								<0.1
3/19/2019			0.2 (J)			<0.1		
3/20/2019	<0.1	0.17 (JD)		0.091 (J)	0.066 (J)		0.21 (J)	0.135 (JD)
8/27/2019	<0.1	0.15 (J)						
8/28/2019			0.074 (J)	0.055 (J)	<0.1	<0.1		
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	0.11 (J)		0.18 (J)					
3/3/2020								
3/4/2020		0.07 (J)	<0.1	<0.1		<0.1	0.14 (J)	0.1 (J)
3/5/2020	<0.1				<0.1			
8/18/2020								
8/19/2020	<0.1	0.17	0.19	0.12				

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 11/5/2021 6:40 AM View: PLs Interwell

Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWC-32S	BRGWC-25I	BRGWC-27I	BRGWC-29I	BRGWC-45	BRGWC-47	BRGWC-50	BRGWC-52I
8/20/2020					<0.1	<0.1	0.39	0.23
9/15/2020		0.15		0.057 (J)				
9/16/2020	<0.1		0.15		0.052 (J)	<0.1		
9/17/2020							0.46	0.074 (J)
3/1/2021								
3/2/2021		0.15			0.067 (J)	<0.1		
3/3/2021			0.24	0.13				
3/4/2021	<0.1						0.6	0.28
9/21/2021								
9/22/2021								
9/23/2021					0.06 (J)	<0.1		
9/27/2021							0.43	
9/28/2021	<0.1	0.15	0.16	0.081 (J)				0.12

Prediction Limit

Constituent: pH, Field (S.U.) Analysis Run 11/5/2021 6:40 AM View: PLs Interwell

Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWA-2I (bg)	BRGWA-2S (bg)	BRGWA-5I (bg)	BRGWA-5S (bg)	BRGWA-12I (bg)	BRGWA-12S (bg)	BRGWA-6S (bg)	BRGWA-23S (bg)	BRGWC-30I
8/31/2016	7.16	6.2	6.53	6.59					
9/1/2016					6.71	6	6.49		
9/6/2016								6.49	6.23
9/8/2016									
11/15/2016				6.67			6.59		
11/16/2016	6.96	6.12	6.4		6.15	6			
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	7.15	6.24			6.52	6.09		6.15	
2/22/2017									6.16
6/12/2017	7.31		6.4	6.64					
6/13/2017		6.19			6.42	6.03		5.87	
6/14/2017					6.51				6.16
9/26/2017	7.02	6.15	6.31	6.58	6.42	5.85	6.47	5.82	
9/27/2017									6.16
2/13/2018	7.44	6.18	6.62	6.72			6.54		
2/14/2018					6.48	5.99		5.83	6.24
3/15/2018									
5/1/2018									
6/26/2018	6.93	6.05	6.29	6.43	6.2	5.86	6.23	5.73	
6/27/2018									
6/28/2018									6.21
7/31/2018					6.37	5.99			
8/1/2018									
8/10/2018									
8/23/2018									
9/19/2018									
10/29/2018									
11/28/2018									
12/18/2018	6.76	5.92	6.57	6.7	6.5	6.08	6.71	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	6.87	6.18	6.45	6.63	6.28	5.71	6.18	5.28	
3/20/2019									6.24
8/27/2019	6.79	6.09	6.37	6.49	6.35	6	6.35		6.17
8/28/2019									
8/29/2019								5.64	
10/15/2019	6.57	6.06	6.77	7.01	6.8	6.61	6.36	5.7	
10/16/2019									
10/17/2019									6.43
3/3/2020	6.71	6.1	6.29	6.49	6.33	5.94	6.59		
3/4/2020								5.7	
3/5/2020									5.99
5/12/2020									
8/18/2020	6.59	6.06	6.29	6.41	6.25	5.75	6.33	5.56	
8/19/2020									6.36

Prediction Limit

Constituent: pH, Field (S.U.) Analysis Run 11/5/2021 6:40 AM View: PLs Interwell

Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWA-2I (bg)	BRGWA-2S (bg)	BRGWA-5I (bg)	BRGWA-5S (bg)	BRGWA-12I (bg)	BRGWA-12S (bg)	BRGWA-6S (bg)	BRGWA-23S (bg)	BRGWC-30I
8/20/2020									
9/15/2020	6.64	6.01	6.27	6.25	6.01	6	6.43	5.72	
9/16/2020									6.29
9/17/2020									
3/1/2021	6.66						6.7		
3/2/2021		6.2	6.47	6.42	6.11	5.92		5.75	
3/3/2021									6.29
3/4/2021									
9/21/2021			6.32	6.36	6.53	5.87			
9/22/2021	6.78	6.06					6.48	5.72	
9/23/2021									
9/27/2021									
9/28/2021									6.33

Prediction Limit

Constituent: pH, Field (S.U.) Analysis Run 11/5/2021 6:40 AM View: PLs Interwell

Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWC-25I	BRGWC-27I	BRGWC-32S	BRGWC-29I	BRGWC-50	BRGWC-45	BRGWC-47	BRGWC-52I
8/31/2016								
9/1/2016								
9/6/2016								
9/8/2016	6.07	5.51	5.89	4.62				
11/15/2016								
11/16/2016	5.96							
11/17/2016								
11/18/2016		5.53						
11/21/2016			5.56	4.44				
2/20/2017								
2/21/2017	5.98	5.63						
2/22/2017			5.87	4.42				
6/12/2017								
6/13/2017	5.96	5.57						
6/14/2017			5.83	4.45				
9/26/2017								
9/27/2017	5.85	5.53	5.87	4.33				
2/13/2018								
2/14/2018	5.94	5.83	6.01	4.42				
3/15/2018					5.26	5.26		
5/1/2018					5.38	6.14	5.85	
6/26/2018	5.87							
6/27/2018		5.53	5.83	4.37			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		5.88	4.4	5.32	6.1		6.59
8/27/2019	6.01		5.85					
8/28/2019		5.51		4.39		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	5.8		4.5	5.2		5.76	6.54
3/5/2020			5.74			5.95		
5/12/2020			5.88					
8/18/2020								
8/19/2020	6.32	5.81	5.97	4.67				

Prediction Limit

Constituent: pH, Field (S.U.) Analysis Run 11/5/2021 6:40 AM View: PLs Interwell

Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWC-25I	BRGWC-27I	BRGWC-32S	BRGWC-29I	BRGWC-50	BRGWC-45	BRGWC-47	BRGWC-52I
8/20/2020					5.26	5.86	5.75	6.85
9/15/2020	6			4.53				
9/16/2020		5.81	5.79			5.27	5.76	
9/17/2020					4.41			6.12
3/1/2021								
3/2/2021	6.1					6.17	5.59	
3/3/2021		5.9		4.46				
3/4/2021			5.98		4.34			5.87
9/21/2021								
9/22/2021								
9/23/2021						5.95	5.74	
9/27/2021					5.05			
9/28/2021	5.97	5.82	5.82	4.23				6.81

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 11/5/2021 6:40 AM View: PLs Interwell

Plant Branch Client: Southern Company Data: Plant Branch AP

	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)				0.68 (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	
9/15/2020	<1	1.7	<1	5.9	<1	<1	1.7		41.5
9/16/2020								334	
9/17/2020									
3/1/2021				4.7	0.74 (J)				
3/2/2021	<1	2.2	<1			0.51 (J)	1.7		54

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 11/5/2021 6:40 AM View: PLs Interwell

Plant Branch Client: Southern Company Data: Plant Branch AP

	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)
3/3/2021								371	
3/4/2021									
9/21/2021	<1	2.3				0.51 (J)	1.7		
9/22/2021			<1	5.2	<1				34.6
9/23/2021									
9/27/2021									
9/28/2021								612	

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 11/5/2021 6:40 AM View: PLs Interwell

Plant Branch Client: Southern Company Data: Plant Branch AP

	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	300	460	370	280				
11/15/2016								
11/16/2016								
11/17/2016				200				
11/18/2016	320							
11/21/2016		500	420					
2/20/2017								
2/21/2017	270			360				
2/22/2017		570	380					
6/12/2017								
6/13/2017	230			290				
6/14/2017		440	400					
9/26/2017								
9/27/2017	260	380	400	310				
2/13/2018								
2/14/2018	232	280	383	260				
3/6/2018					111	1560		
3/15/2018							1590	
5/1/2018					112	1465 (D)	1550	
6/26/2018				231				
6/27/2018	205	281	372			1450		
6/28/2018					109		1530	
7/31/2018					107			
8/1/2018						1560	1580	
8/10/2018								183
8/23/2018					108	1470		145
9/19/2018					117	1500		178
10/29/2018					127	1720	1750	157
11/28/2018					133	1730	1780	189
12/18/2018		293		231				
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		278	409	235 (D)	127		1740	186.5 (D)
10/15/2019				174				
10/16/2019		266				1560	1590	155
12/3/2019					105			
12/4/2019	241		293					
3/3/2020								
3/4/2020	205	238		165		1380	1370	129
3/5/2020			269		106			
9/15/2020		241		126				
9/16/2020	190		255		103	1360		
9/17/2020							1330	165
3/1/2021								
3/2/2021				139	98.3	1360		

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 11/5/2021 6:40 AM View: PLs Interwell

Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWC-27I	BRGWC-29I	BRGWC-32S	BRGWC-25I	BRGWC-45	BRGWC-47	BRGWC-50	BRGWC-52I
3/3/2021	172	341						
3/4/2021			185				1250	114
9/21/2021								
9/22/2021								
9/23/2021					97.5	1240		
9/27/2021							1180	
9/28/2021	137	250	189	112				132

Prediction Limit

Constituent: Total Dissolved Solids (mg/L) Analysis Run 11/5/2021 6:40 AM View: PLs Interwell

Plant Branch Client: Southern Company Data: Plant Branch AP

	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	
9/15/2020	116	100	69	116	79	60	95		109
9/16/2020								634	
9/17/2020									
3/1/2021				98	39				
3/2/2021	96	80	43			43	93		105

Prediction Limit

Constituent: Total Dissolved Solids (mg/L) Analysis Run 11/5/2021 6:40 AM View: PLs Interwell

Plant Branch Client: Southern Company Data: Plant Branch AP

	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)
3/3/2021								690	
3/4/2021									
9/21/2021	104	108				56	117		
9/22/2021			66	129	62				128
9/23/2021									
9/27/2021									
9/28/2021								1050	

Prediction Limit

Constituent: Total Dissolved Solids (mg/L) Analysis Run 11/5/2021 6:40 AM View: PLs Interwell

Plant Branch Client: Southern Company Data: Plant Branch AP

	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	478	654	607	460				
11/15/2016								
11/16/2016								
11/17/2016				611				
11/18/2016	503							
11/21/2016		819	695					
2/20/2017								
2/21/2017	380			497				
2/22/2017		721	635					
6/12/2017								
6/13/2017	354			474				
6/14/2017		661	635					
9/26/2017								
9/27/2017	376	518	601	457				
2/13/2018								
2/14/2018	503 (JX)	487	628	431				
3/6/2018					346	2200		
3/15/2018							2440	
5/1/2018					374	2080 (D)	2190	
6/26/2018				414				
6/27/2018	458 (X)	648 (X)	2280			31 (OX)		
6/28/2018					333		2290	
7/31/2018					393			
8/1/2018						2190	2360	
8/10/2018								344
8/23/2018					350	2160		333
9/19/2018					353	2160		364
10/29/2018					329	2130	2300	334
11/28/2018					358	2320	2300	357
12/18/2018		407		401				
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		391	564	410.5 (D)	302		2280	360 (D)
10/15/2019				380				
10/16/2019		2030				2220	2280	346
12/3/2019					362			
12/4/2019	422		526					
3/3/2020								
3/4/2020	326	391		330		2140	2270	351
3/5/2020			489		297			
9/15/2020		281		272				
9/16/2020	301		428		275	2090		
9/17/2020							1910	329
3/1/2021								
3/2/2021				280	264	1680		

Prediction Limit

Constituent: Total Dissolved Solids (mg/L) Analysis Run 11/5/2021 6:40 AM View: PLs Interwell

Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWC-27I	BRGWC-29I	BRGWC-32S	BRGWC-25I	BRGWC-45	BRGWC-47	BRGWC-50	BRGWC-52I
3/3/2021	288	515						
3/4/2021			350				1520	383
9/21/2021								
9/22/2021								
9/23/2021					277	1770		
9/27/2021							1800	
9/28/2021	262	457	375	270				336

FIGURE E.

Appendix III Trend Test Summary - Significant Results

Plant Branch Client: Southern Company Data: Plant Branch AP Printed 11/9/2021, 6:42 AM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Boron (mg/L)	**BRGWC-27I**	**-0.1605**	**-64**	**-53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	**BRGWC-29I**	**-0.1613**	**-50**	**-48**	**Yes**	**14**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**BRGWA-6S (bg)**	**0.177**	**51**	**48**	**Yes**	**14**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**BRGWC-25I**	**-6.149**	**-75**	**-48**	**Yes**	**14**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**BRGWC-27I**	**-5.366**	**-55**	**-48**	**Yes**	**14**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**BRGWC-30I**	**15.72**	**68**	**48**	**Yes**	**14**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	**BRGWA-12I (bg)**	**-0.2227**	**-65**	**-53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	**BRGWC-50**	**-2.006**	**-51**	**-48**	**Yes**	**14**	**0**	**n/a**	**n/a**	**0.01**	**NP**
pH, Field (S.U.)	**BRGWA-23S (bg)**	**-0.05938**	**-60**	**-58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
pH, Field (S.U.)	**BRGWA-2I (bg)**	**-0.1251**	**-70**	**-58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**BRGWA-12I (bg)**	**-0.2564**	**-84**	**-53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**BRGWA-12S (bg)**	**-0.1826**	**-68**	**-53**	**Yes**	**15**	**13.33**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**BRGWC-25I**	**-41.43**	**-62**	**-48**	**Yes**	**14**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**BRGWC-27I**	**-27.24**	**-70**	**-48**	**Yes**	**14**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**BRGWC-29I**	**-51.5**	**-59**	**-48**	**Yes**	**14**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**BRGWC-32S**	**-41.84**	**-55**	**-48**	**Yes**	**14**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Total Dissolved Solids (mg/L)	**BRGWC-32S**	**-57.27**	**-64**	**-48**	**Yes**	**14**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Total Dissolved Solids (mg/L)	**BRGWC-50**	**-157.8**	**-51**	**-48**	**Yes**	**14**	**0**	**n/a**	**n/a**	**0.01**	**NP**

Appendix III Trend Test Summary - All Results

Plant Branch Client: Southern Company Data: Plant Branch AP Printed 11/9/2021, 6:42 AM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Boron (mg/L)	BRGWA-12I (bg)	-0.0003611	-12	-48	No	14	14.29	n/a	n/a	0.01	NP
Boron (mg/L)	BRGWA-12S (bg)	0	2	48	No	14	78.57	n/a	n/a	0.01	NP
Boron (mg/L)	BRGWA-23S (bg)	0.001292	10	48	No	14	14.29	n/a	n/a	0.01	NP
Boron (mg/L)	BRGWA-2I (bg)	0.002384	20	48	No	14	21.43	n/a	n/a	0.01	NP
Boron (mg/L)	BRGWA-2S (bg)	0	11	48	No	14	92.86	n/a	n/a	0.01	NP
Boron (mg/L)	BRGWA-5I (bg)	0	6	48	No	14	71.43	n/a	n/a	0.01	NP
Boron (mg/L)	BRGWA-5S (bg)	0	1	48	No	14	57.14	n/a	n/a	0.01	NP
Boron (mg/L)	BRGWA-6S (bg)	0	14	48	No	14	71.43	n/a	n/a	0.01	NP
Boron (mg/L)	BRGWC-25I	-0.1154	-38	-48	No	14	0	n/a	n/a	0.01	NP
Boron (mg/L)	**BRGWC-27I**	**-0.1605**	**-64**	**-53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	**BRGWC-29I**	**-0.1613**	**-50**	**-48**	**Yes**	**14**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	BRGWC-30I	-0.004574	-15	-53	No	15	0	n/a	n/a	0.01	NP
Boron (mg/L)	BRGWC-32S	-0.01337	-14	-53	No	15	0	n/a	n/a	0.01	NP
Boron (mg/L)	BRGWC-47	0.02383	21	53	No	15	0	n/a	n/a	0.01	NP
Boron (mg/L)	BRGWC-50	0	8	48	No	14	0	n/a	n/a	0.01	NP
Boron (mg/L)	BRGWC-52I	0	9	48	No	14	0	n/a	n/a	0.01	NP
Calcium (mg/L)	BRGWA-12I (bg)	0.199	10	53	No	15	6.667	n/a	n/a	0.01	NP
Calcium (mg/L)	BRGWA-12S (bg)	0.2536	26	53	No	15	6.667	n/a	n/a	0.01	NP
Calcium (mg/L)	BRGWA-23S (bg)	-1.151	-37	-48	No	14	7.143	n/a	n/a	0.01	NP
Calcium (mg/L)	BRGWA-2I (bg)	0.8266	46	48	No	14	7.143	n/a	n/a	0.01	NP
Calcium (mg/L)	BRGWA-2S (bg)	0	1	48	No	14	0	n/a	n/a	0.01	NP
Calcium (mg/L)	BRGWA-5I (bg)	-0.07521	-6	-48	No	14	7.143	n/a	n/a	0.01	NP
Calcium (mg/L)	BRGWA-5S (bg)	-0.4646	-20	-48	No	14	7.143	n/a	n/a	0.01	NP
Calcium (mg/L)	**BRGWA-6S (bg)**	**0.177**	**51**	**48**	**Yes**	**14**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**BRGWC-25I**	**-6.149**	**-75**	**-48**	**Yes**	**14**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**BRGWC-27I**	**-5.366**	**-55**	**-48**	**Yes**	**14**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	BRGWC-29I	-9.731	-47	-48	No	14	0	n/a	n/a	0.01	NP
Calcium (mg/L)	**BRGWC-30I**	**15.72**	**68**	**48**	**Yes**	**14**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	BRGWC-32S	-6.126	-43	-48	No	14	0	n/a	n/a	0.01	NP
Calcium (mg/L)	BRGWC-45	-2.868	-44	-53	No	15	0	n/a	n/a	0.01	NP
Calcium (mg/L)	BRGWC-47	5.19	21	53	No	15	0	n/a	n/a	0.01	NP
Calcium (mg/L)	BRGWC-50	-9.359	-25	-48	No	14	0	n/a	n/a	0.01	NP
Calcium (mg/L)	BRGWC-52I	2.783	16	43	No	13	0	n/a	n/a	0.01	NP
Chloride (mg/L)	**BRGWA-12I (bg)**	**-0.2227**	**-65**	**-53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	BRGWA-12S (bg)	0	11	53	No	15	0	n/a	n/a	0.01	NP
Chloride (mg/L)	BRGWA-23S (bg)	-0.23	-42	-48	No	14	0	n/a	n/a	0.01	NP
Chloride (mg/L)	BRGWA-2I (bg)	-0.06183	-31	-48	No	14	0	n/a	n/a	0.01	NP
Chloride (mg/L)	BRGWA-2S (bg)	-0.02852	-22	-48	No	14	0	n/a	n/a	0.01	NP
Chloride (mg/L)	BRGWA-5I (bg)	-0.2053	-44	-48	No	14	0	n/a	n/a	0.01	NP
Chloride (mg/L)	BRGWA-5S (bg)	-0.06983	-25	-48	No	14	0	n/a	n/a	0.01	NP
Chloride (mg/L)	BRGWA-6S (bg)	0	-12	-48	No	14	0	n/a	n/a	0.01	NP
Chloride (mg/L)	BRGWC-45	-7.683	-47	-53	No	15	0	n/a	n/a	0.01	NP
Chloride (mg/L)	**BRGWC-50**	**-2.006**	**-51**	**-48**	**Yes**	**14**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Fluoride (mg/L)	BRGWA-12I (bg)	-0.01393	-38	-58	No	16	25	n/a	n/a	0.01	NP
Fluoride (mg/L)	BRGWA-12S (bg)	0	49	58	No	16	68.75	n/a	n/a	0.01	NP
Fluoride (mg/L)	BRGWA-23S (bg)	0	-27	-58	No	16	56.25	n/a	n/a	0.01	NP
Fluoride (mg/L)	BRGWA-2I (bg)	0	-19	-58	No	16	43.75	n/a	n/a	0.01	NP
Fluoride (mg/L)	BRGWA-2S (bg)	0	35	58	No	16	56.25	n/a	n/a	0.01	NP
Fluoride (mg/L)	BRGWA-5I (bg)	0	44	58	No	16	68.75	n/a	n/a	0.01	NP
Fluoride (mg/L)	BRGWA-5S (bg)	-0.007283	-34	-58	No	16	31.25	n/a	n/a	0.01	NP
Fluoride (mg/L)	BRGWA-6S (bg)	0.003585	41	58	No	16	56.25	n/a	n/a	0.01	NP
Fluoride (mg/L)	BRGWC-50	-0.1283	-29	-58	No	16	0	n/a	n/a	0.01	NP
pH, Field (S.U.)	BRGWA-12I (bg)	-0.0587	-42	-68	No	18	0	n/a	n/a	0.01	NP
pH, Field (S.U.)	BRGWA-12S (bg)	-0.01934	-29	-63	No	17	0	n/a	n/a	0.01	NP
pH, Field (S.U.)	**BRGWA-23S (bg)**	**-0.05938**	**-60**	**-58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**

Appendix III Trend Test Summary - All Results

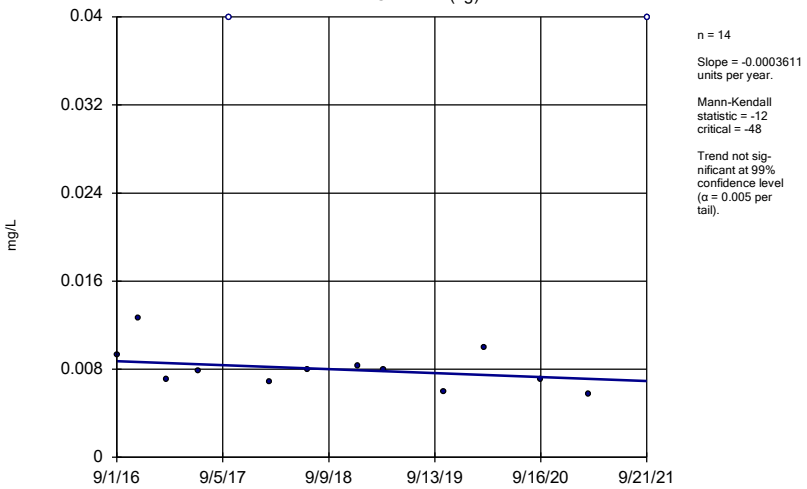
Plant Branch Client: Southern Company Data: Plant Branch AP Printed 11/9/2021, 6:42 AM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
pH, Field (S.U.)	**BRGWA-2I (bg)**	**-0.1251**	**-70**	**-58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
pH, Field (S.U.)	BRGWA-2S (bg)	-0.02883	-43	-58	No	16	0	n/a	n/a	0.01	NP
pH, Field (S.U.)	BRGWA-5I (bg)	-0.02729	-28	-58	No	16	0	n/a	n/a	0.01	NP
pH, Field (S.U.)	BRGWA-5S (bg)	-0.0589	-55	-58	No	16	0	n/a	n/a	0.01	NP
pH, Field (S.U.)	BRGWA-6S (bg)	-0.006594	-6	-53	No	15	0	n/a	n/a	0.01	NP
pH, Field (S.U.)	BRGWC-29I	0.003679	3	58	No	16	0	n/a	n/a	0.01	NP
pH, Field (S.U.)	BRGWC-50	-0.06992	-32	-63	No	17	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	**BRGWA-12I (bg)**	**-0.2564**	**-84**	**-53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**BRGWA-12S (bg)**	**-0.1826**	**-68**	**-53**	**Yes**	**15**	**13.33**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	BRGWA-23S (bg)	-2.575	-19	-48	No	14	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	BRGWA-2I (bg)	-0.2487	-28	-48	No	14	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	BRGWA-2S (bg)	0	3	48	No	14	35.71	n/a	n/a	0.01	NP
Sulfate (mg/L)	BRGWA-5I (bg)	-0.3219	-27	-48	No	14	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	BRGWA-5S (bg)	-0.08437	-40	-48	No	14	35.71	n/a	n/a	0.01	NP
Sulfate (mg/L)	BRGWA-6S (bg)	-0.01226	-14	-48	No	14	21.43	n/a	n/a	0.01	NP
Sulfate (mg/L)	**BRGWC-25I**	**-41.43**	**-62**	**-48**	**Yes**	**14**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**BRGWC-27I**	**-27.24**	**-70**	**-48**	**Yes**	**14**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**BRGWC-29I**	**-51.5**	**-59**	**-48**	**Yes**	**14**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	BRGWC-30I	24.89	35	48	No	14	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	**BRGWC-32S**	**-41.84**	**-55**	**-48**	**Yes**	**14**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	BRGWC-45	-3.548	-38	-53	No	15	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	BRGWC-47	-66.18	-33	-53	No	15	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	BRGWC-50	-115.1	-31	-43	No	13	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	BRGWC-52I	-14.1	-30	-48	No	14	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	BRGWA-12I (bg)	-5.087	-40	-53	No	15	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	BRGWA-12S (bg)	-6.547	-29	-53	No	15	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	BRGWA-23S (bg)	-11.77	-35	-48	No	14	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	BRGWA-2I (bg)	-4.927	-15	-48	No	14	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	BRGWA-2S (bg)	0.8314	7	48	No	14	7.143	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	BRGWA-5I (bg)	-7.713	-21	-48	No	14	7.143	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	BRGWA-5S (bg)	-7.968	-46	-48	No	14	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	BRGWA-6S (bg)	-2.774	-10	-48	No	14	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	BRGWC-29I	-74.57	-44	-48	No	14	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	BRGWC-30I	62.57	45	48	No	14	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	**BRGWC-32S**	**-57.27**	**-64**	**-48**	**Yes**	**14**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Total Dissolved Solids (mg/L)	BRGWC-47	-107.8	-38	-48	No	14	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	**BRGWC-50**	**-157.8**	**-51**	**-48**	**Yes**	**14**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Total Dissolved Solids (mg/L)	BRGWC-52I	0.9481	3	48	No	14	0	n/a	n/a	0.01	NP

Sanitas™ v.9.6.30f Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

BRGWA-12I (bg)



n = 14

Slope = -0.0003611 units per year.

Mann-Kendall statistic = -12
critical = -48

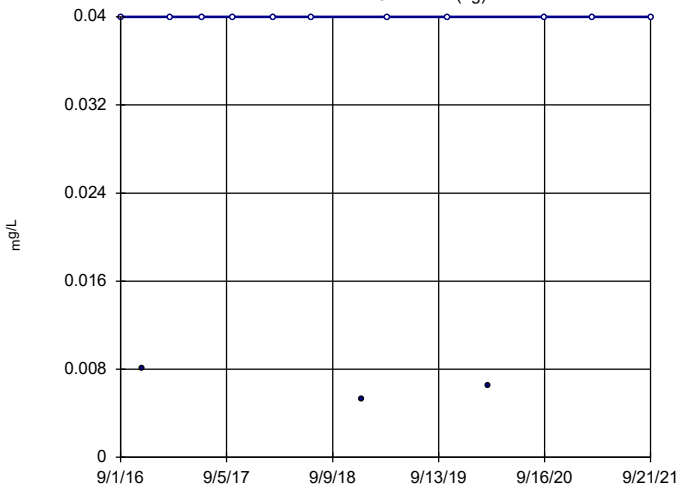
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 11/9/2021 6:34 AM View: Trend Tests - PLs
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.30f Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

BRGWA-12S (bg)



n = 14

Slope = 0 units per year.

Mann-Kendall statistic = 2
critical = 48

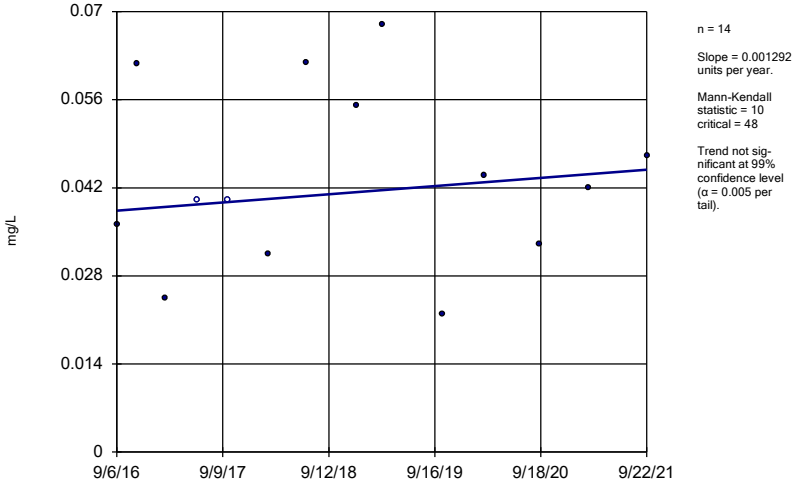
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 11/9/2021 6:34 AM View: Trend Tests - PLs
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.30f Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

BRGWA-23S (bg)



n = 14

Slope = 0.001292 units per year.

Mann-Kendall statistic = 10
critical = 48

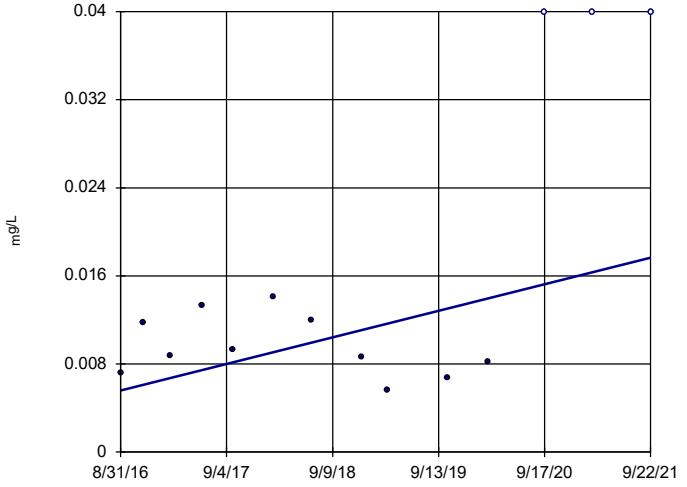
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 11/9/2021 6:34 AM View: Trend Tests - PLs
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.30f Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

BRGWA-2I (bg)



n = 14

Slope = 0.002384 units per year.

Mann-Kendall statistic = 20
critical = 48

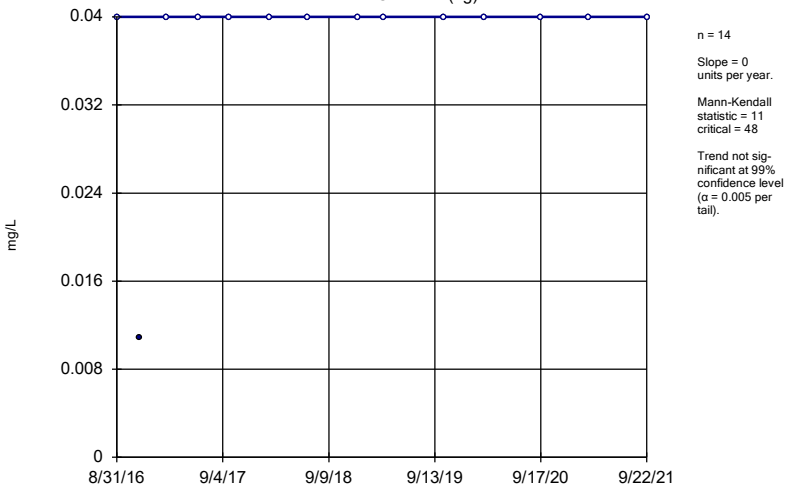
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 11/9/2021 6:34 AM View: Trend Tests - PLs
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.30f Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

BRGWA-2S (bg)



n = 14

Slope = 0 units per year.

Mann-Kendall statistic = 11
critical = 48

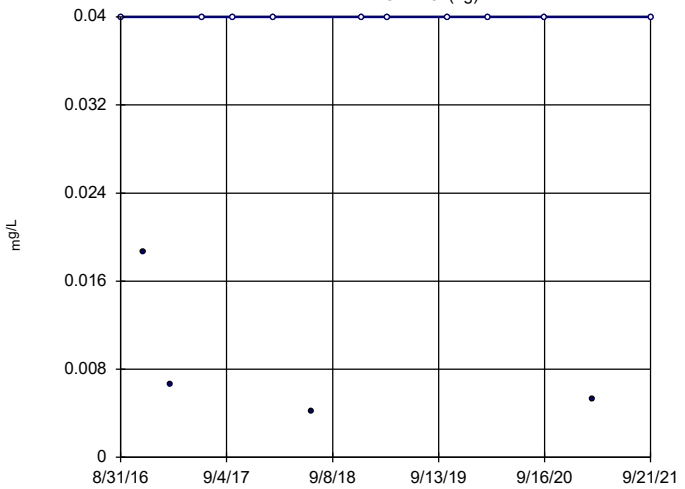
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 11/9/2021 6:35 AM View: Trend Tests - PLs
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.30f Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

BRGWA-5I (bg)



n = 14

Slope = 0 units per year.

Mann-Kendall statistic = 6
critical = 48

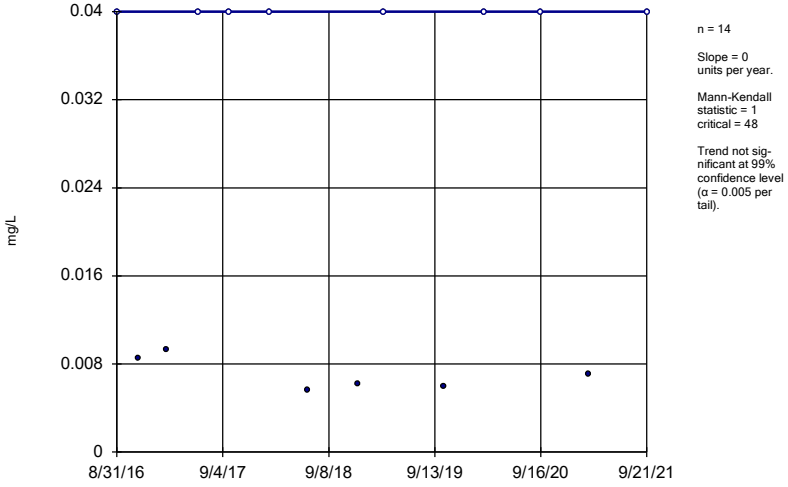
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 11/9/2021 6:35 AM View: Trend Tests - PLs
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.30f Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

BRGWA-5S (bg)



n = 14

Slope = 0 units per year.

Mann-Kendall statistic = 1
critical = 48

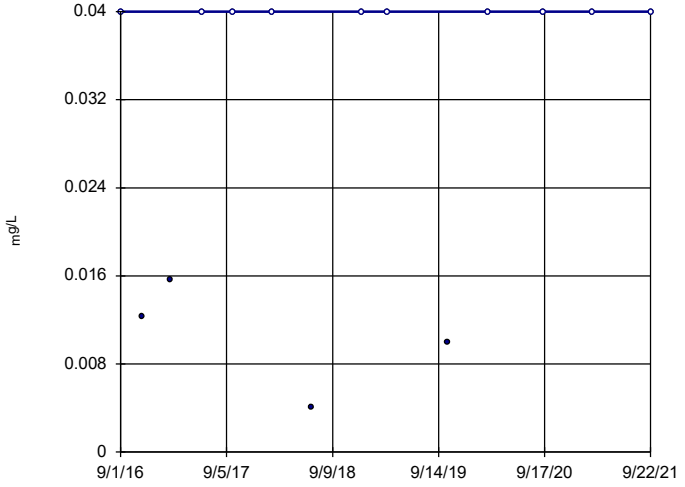
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 11/9/2021 6:35 AM View: Trend Tests - PLs
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.30f Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

BRGWA-6S (bg)



n = 14

Slope = 0 units per year.

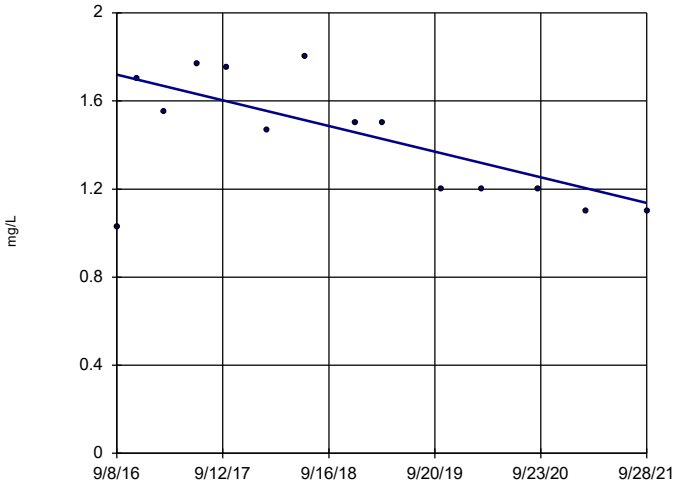
Mann-Kendall statistic = 14
critical = 48

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 11/9/2021 6:35 AM View: Trend Tests - PLs
Plant Branch Client: Southern Company Data: Plant Branch AP

Sen's Slope Estimator

BRGWC-25I



n = 14

Slope = -0.1154 units per year.

Mann-Kendall statistic = -38
critical = -48

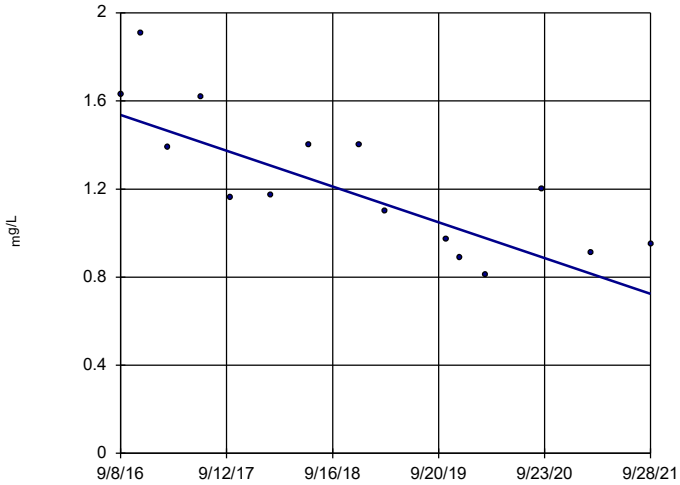
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 11/9/2021 6:35 AM View: Trend Tests - PLs
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.30f Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

BRGWC-27I



n = 15

Slope = -0.1605 units per year.

Mann-Kendall statistic = -64
critical = -53

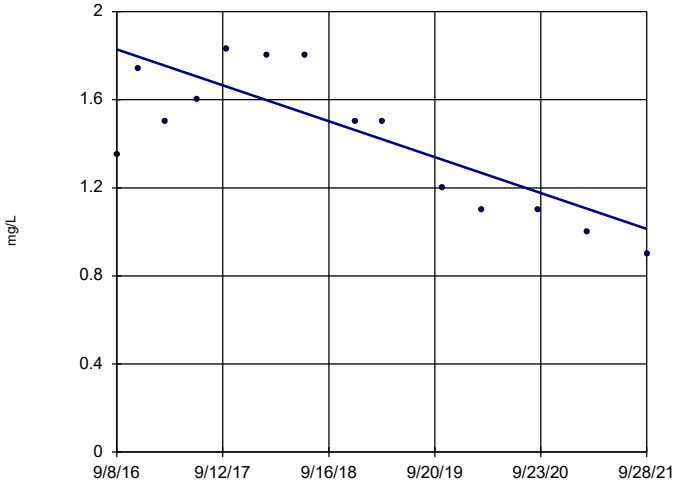
Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 11/9/2021 6:35 AM View: Trend Tests - PLs
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.30f Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

BRGWC-29I



n = 14

Slope = -0.1613 units per year.

Mann-Kendall statistic = -50
critical = -48

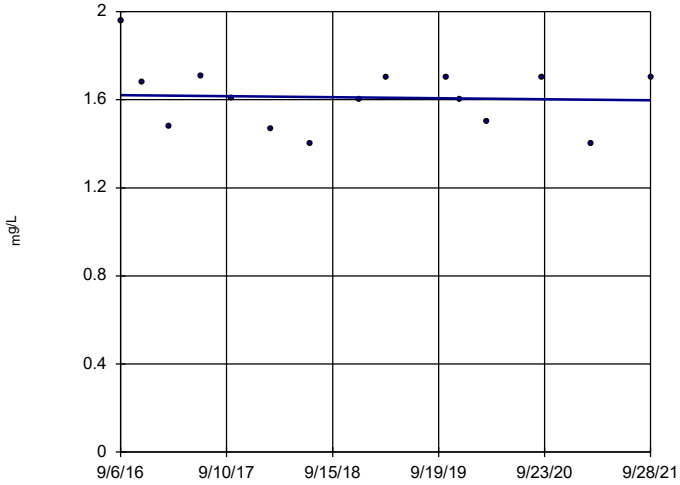
Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 11/9/2021 6:35 AM View: Trend Tests - PLs
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.30f Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

BRGWC-30I



n = 15

Slope = -0.004574 units per year.

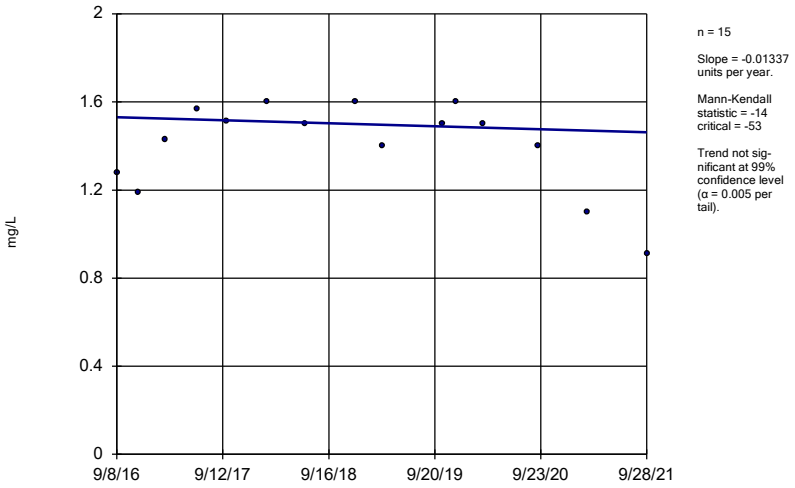
Mann-Kendall statistic = -15
critical = -53

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 11/9/2021 6:35 AM View: Trend Tests - PLs
Plant Branch Client: Southern Company Data: Plant Branch AP

Sen's Slope Estimator

BRGWC-32S



n = 15

Slope = -0.01337 units per year.

Mann-Kendall statistic = -14
critical = -53

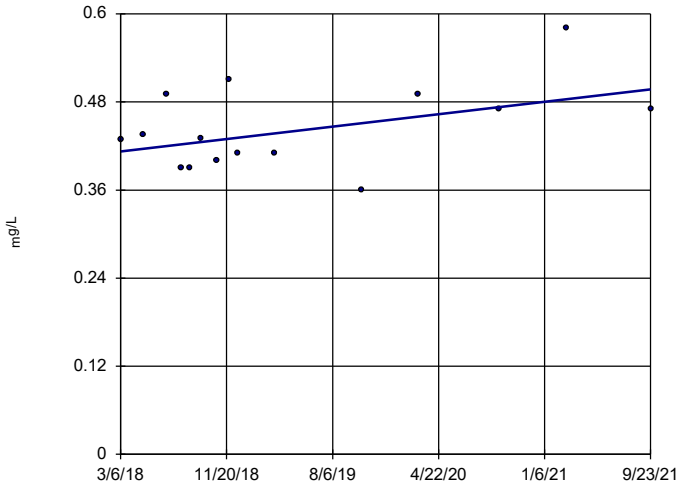
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 11/9/2021 6:35 AM View: Trend Tests - PLs
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.30f Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

BRGWC-47



n = 15

Slope = 0.02383 units per year.

Mann-Kendall statistic = 21
critical = 53

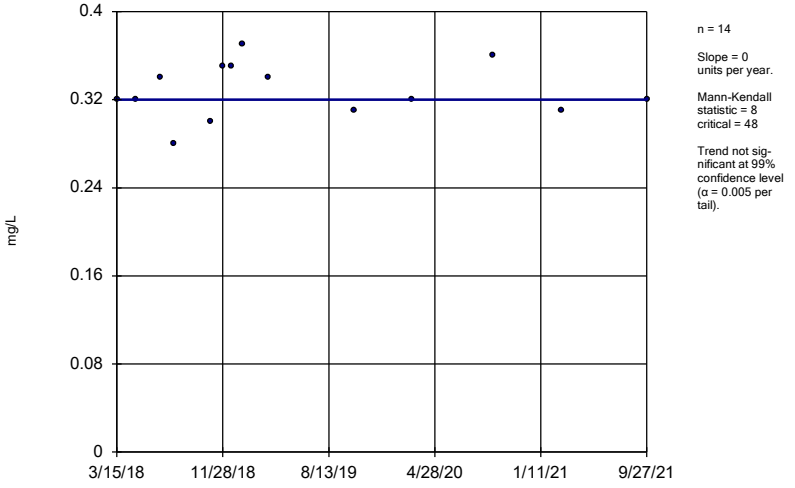
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 11/9/2021 6:35 AM View: Trend Tests - PLs
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.30f Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

BRGWC-50



n = 14

Slope = 0 units per year.

Mann-Kendall statistic = 8
critical = 48

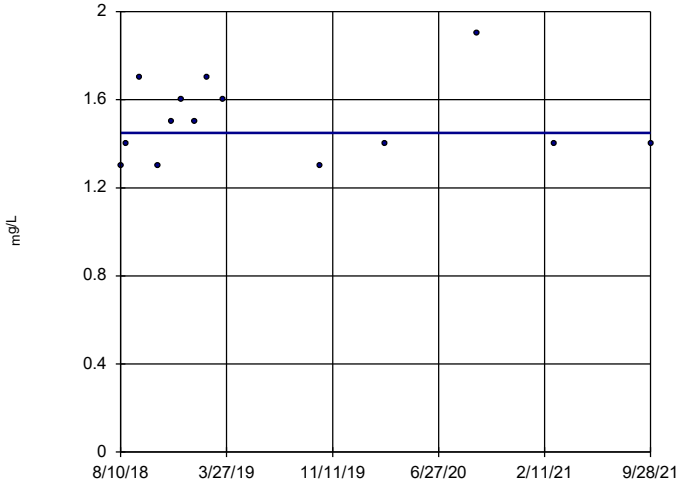
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 11/9/2021 6:35 AM View: Trend Tests - PLs
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.30f Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

BRGWC-52I



n = 14

Slope = 0 units per year.

Mann-Kendall statistic = 9
critical = 48

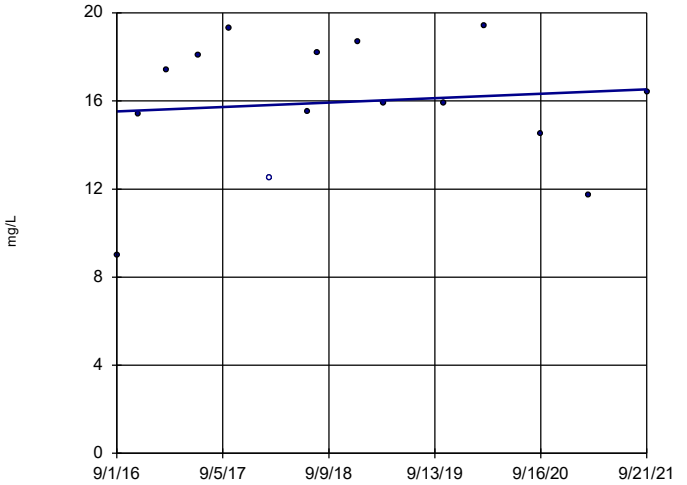
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 11/9/2021 6:35 AM View: Trend Tests - PLs
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.30f Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

BRGWA-12I (bg)



n = 15

Slope = 0.199 units per year.

Mann-Kendall statistic = 10 critical = 53

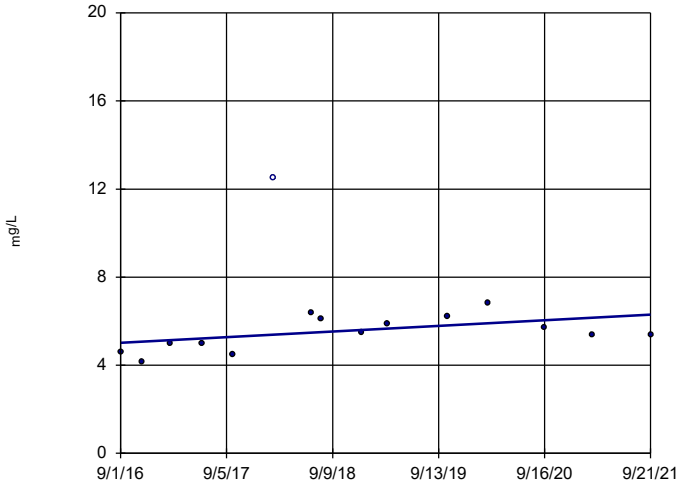
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 11/9/2021 6:35 AM View: Trend Tests - PLs
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.30f Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

BRGWA-12S (bg)



n = 15

Slope = 0.2536 units per year.

Mann-Kendall statistic = 26 critical = 53

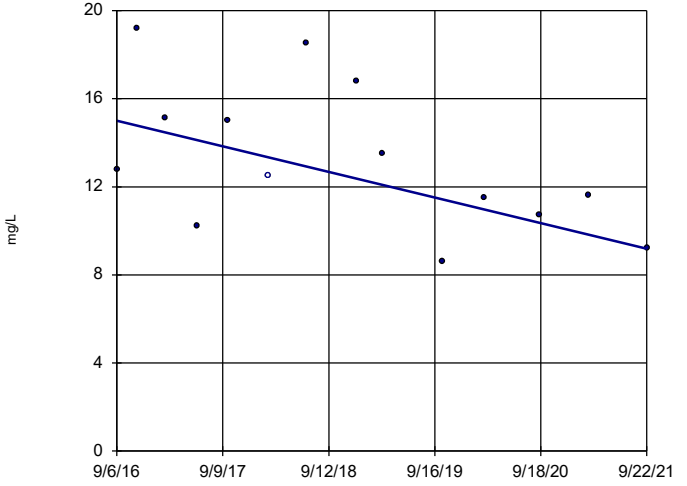
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 11/9/2021 6:35 AM View: Trend Tests - PLs
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.30f Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

BRGWA-23S (bg)



n = 14

Slope = -1.151 units per year.

Mann-Kendall statistic = -37 critical = -48

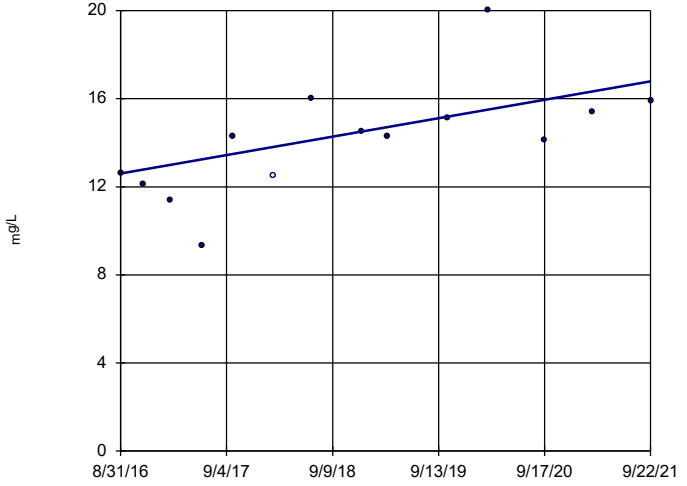
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 11/9/2021 6:35 AM View: Trend Tests - PLs
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.30f Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

BRGWA-2I (bg)



n = 14

Slope = 0.8266 units per year.

Mann-Kendall statistic = 46 critical = 48

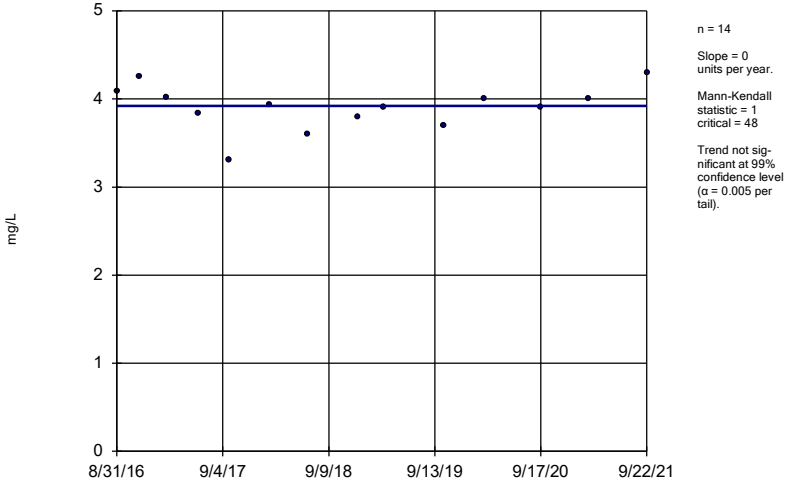
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 11/9/2021 6:35 AM View: Trend Tests - PLs
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.30f Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

BRGWA-2S (bg)



n = 14

Slope = 0 units per year.

Mann-Kendall statistic = 1 critical = 48

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 11/9/2021 6:35 AM View: Trend Tests - PLs

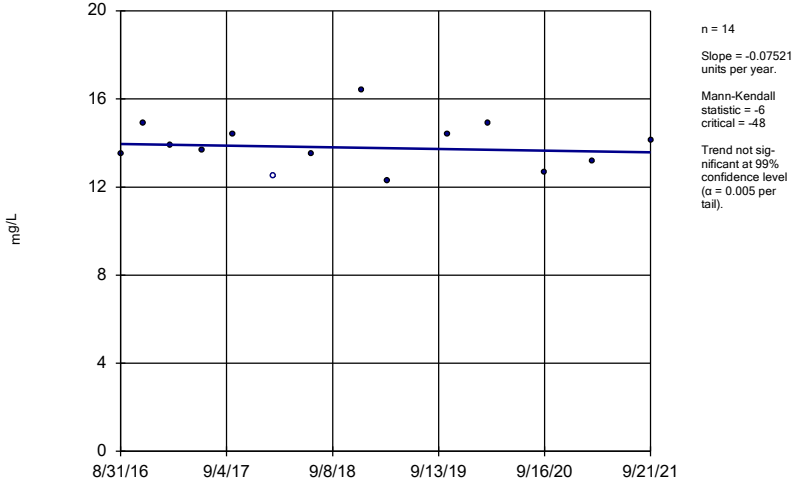
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.30f Sanitas software utilized by Groundwater Stats Consulting. UG

Hollow symbols indicate censored values.

Sen's Slope Estimator

BRGWA-5I (bg)



n = 14

Slope = -0.07521 units per year.

Mann-Kendall statistic = -6 critical = -48

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 11/9/2021 6:35 AM View: Trend Tests - PLs

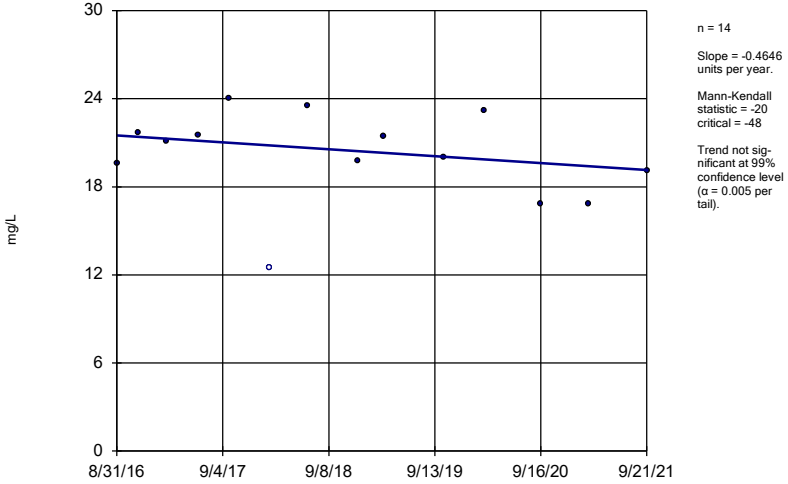
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.30f Sanitas software utilized by Groundwater Stats Consulting. UG

Hollow symbols indicate censored values.

Sen's Slope Estimator

BRGWA-5S (bg)



n = 14

Slope = -0.4646 units per year.

Mann-Kendall statistic = -20 critical = -48

Trend not significant at 99% confidence level (α = 0.005 per tail).

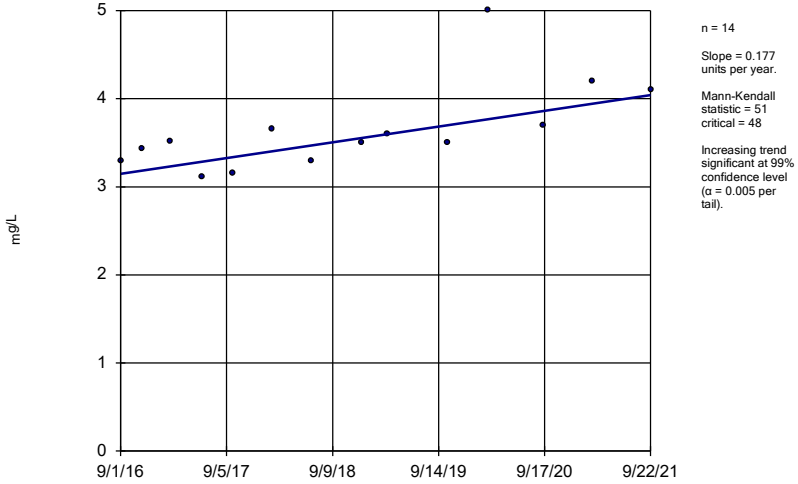
Constituent: Calcium Analysis Run 11/9/2021 6:35 AM View: Trend Tests - PLs

Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.30f Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

BRGWA-6S (bg)



n = 14

Slope = 0.177 units per year.

Mann-Kendall statistic = 51 critical = 48

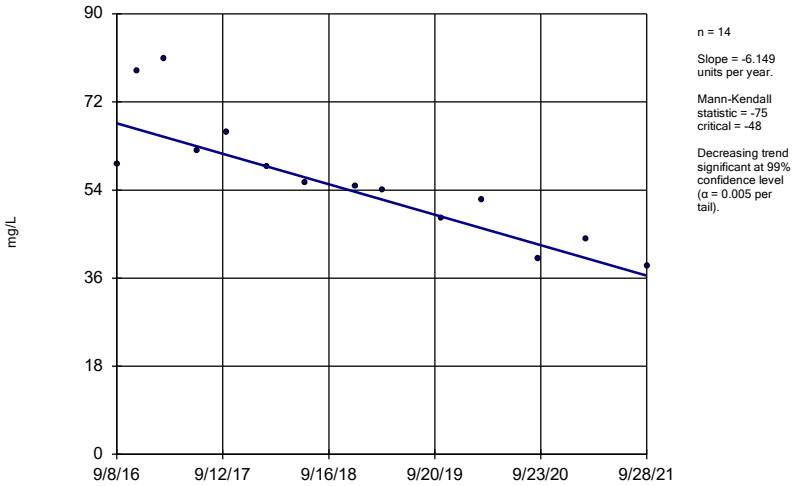
Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 11/9/2021 6:35 AM View: Trend Tests - PLs

Plant Branch Client: Southern Company Data: Plant Branch AP

Sen's Slope Estimator

BRGWC-25I



n = 14

Slope = -6.149 units per year.

Mann-Kendall statistic = -75 critical = -48

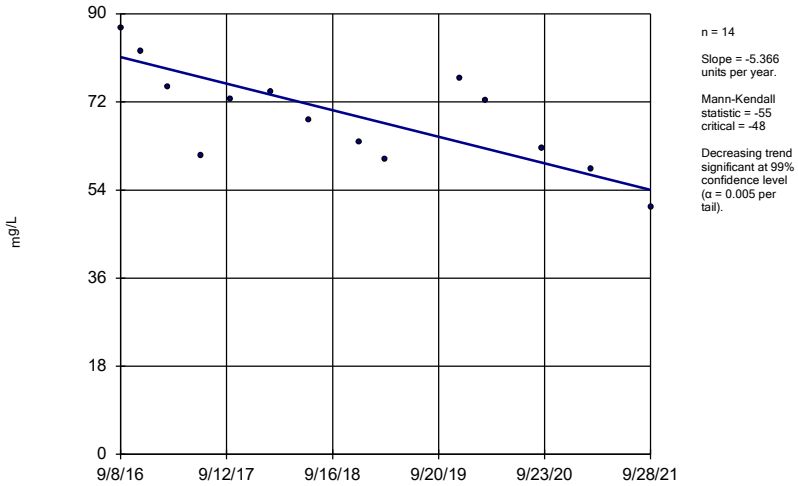
Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 11/9/2021 6:35 AM View: Trend Tests - PLs
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.30f Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

BRGWC-27I



n = 14

Slope = -5.366 units per year.

Mann-Kendall statistic = -55 critical = -48

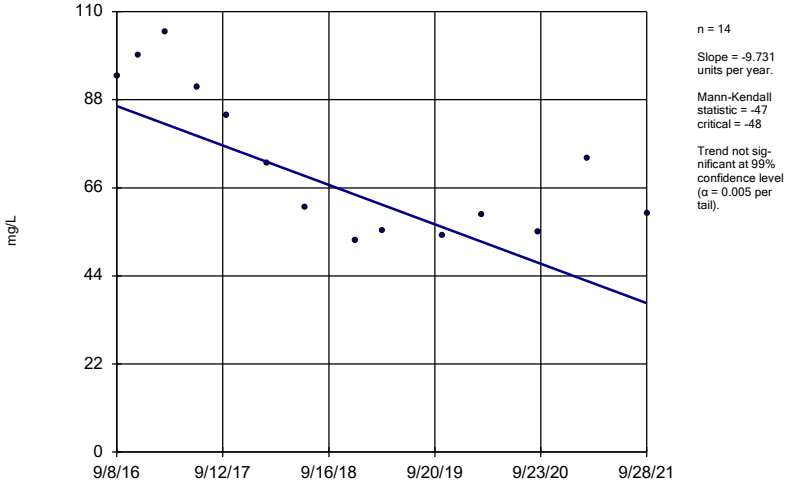
Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 11/9/2021 6:35 AM View: Trend Tests - PLs
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.30f Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

BRGWC-29I



n = 14

Slope = -9.731 units per year.

Mann-Kendall statistic = -47 critical = -48

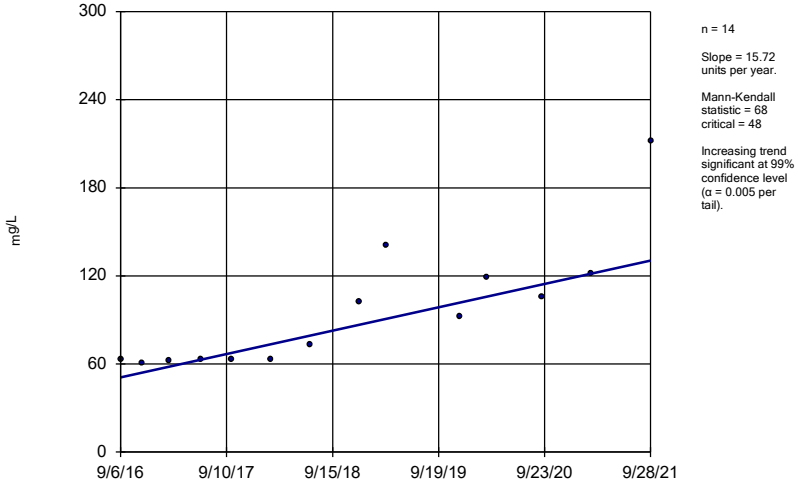
Trend not sig-nificant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 11/9/2021 6:35 AM View: Trend Tests - PLs
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.30f Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

BRGWC-30I



n = 14

Slope = 15.72 units per year.

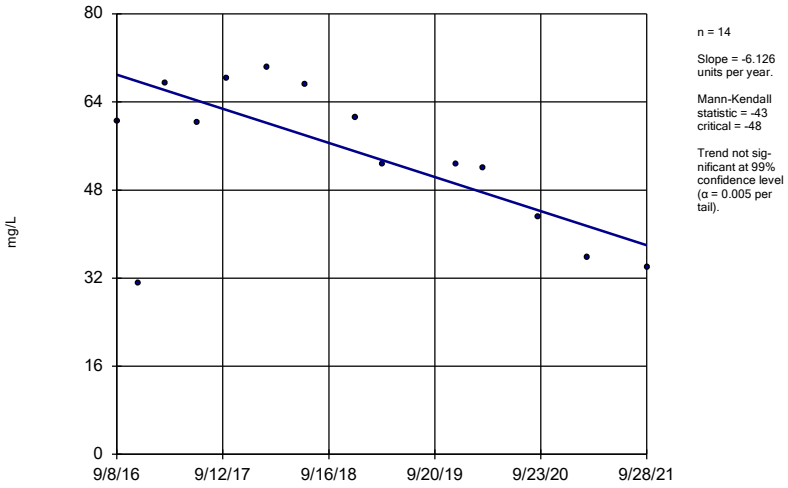
Mann-Kendall statistic = 68 critical = 48

Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 11/9/2021 6:35 AM View: Trend Tests - PLs
Plant Branch Client: Southern Company Data: Plant Branch AP

Sen's Slope Estimator

BRGWC-32S



n = 14

Slope = -6.126 units per year.

Mann-Kendall statistic = -43
critical = -48

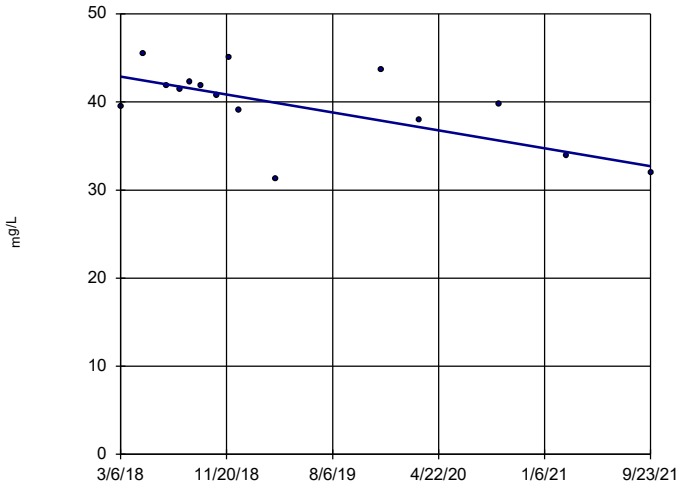
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 11/9/2021 6:35 AM View: Trend Tests - PLs
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.30f Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

BRGWC-45



n = 15

Slope = -2.868 units per year.

Mann-Kendall statistic = -44
critical = -53

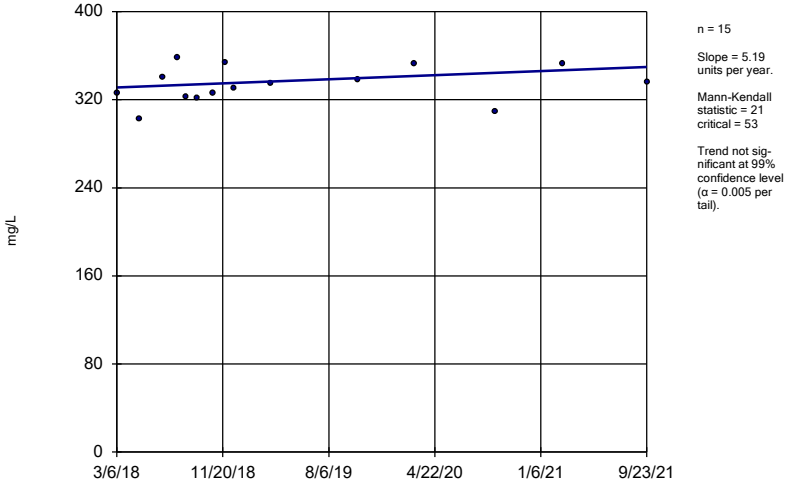
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 11/9/2021 6:35 AM View: Trend Tests - PLs
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.30f Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

BRGWC-47



n = 15

Slope = 5.19 units per year.

Mann-Kendall statistic = 21
critical = 53

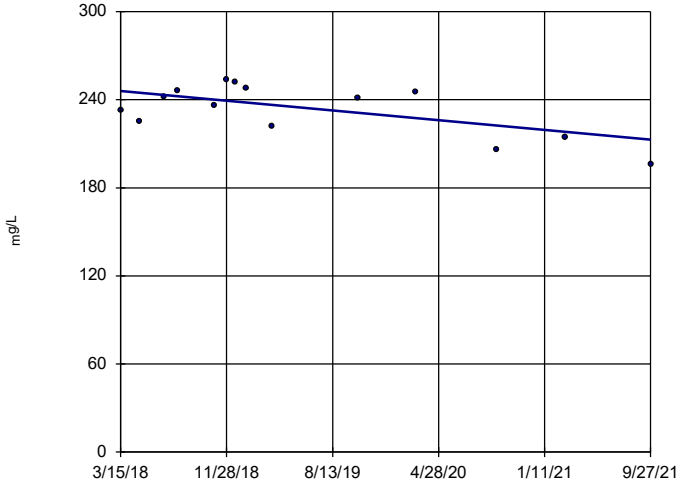
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 11/9/2021 6:35 AM View: Trend Tests - PLs
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.30f Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

BRGWC-50



n = 14

Slope = -9.359 units per year.

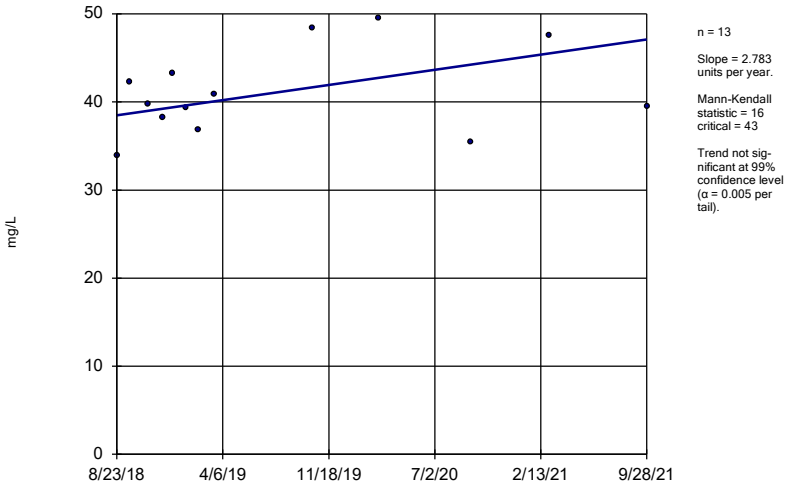
Mann-Kendall statistic = -25
critical = -48

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 11/9/2021 6:35 AM View: Trend Tests - PLs
Plant Branch Client: Southern Company Data: Plant Branch AP

Sen's Slope Estimator

BRGWC-52I



n = 13

Slope = 2.783 units per year.

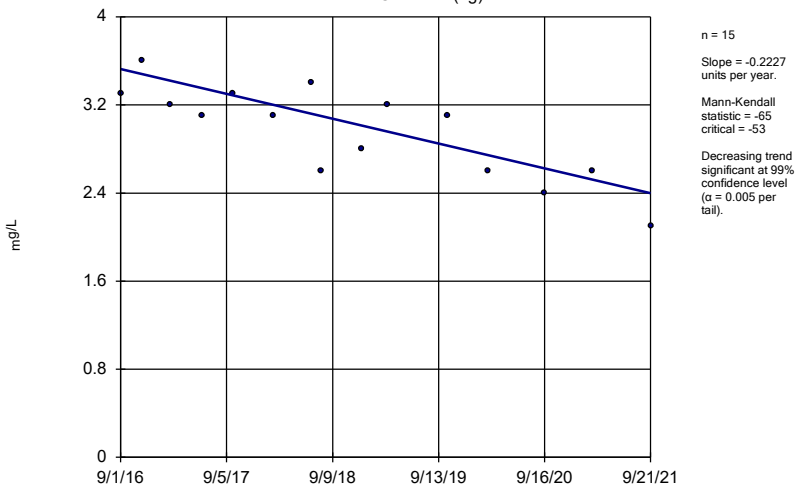
Mann-Kendall statistic = 16 critical = 43

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 11/9/2021 6:35 AM View: Trend Tests - PLs
Plant Branch Client: Southern Company Data: Plant Branch AP

Sen's Slope Estimator

BRGWA-12I (bg)



n = 15

Slope = -0.2227 units per year.

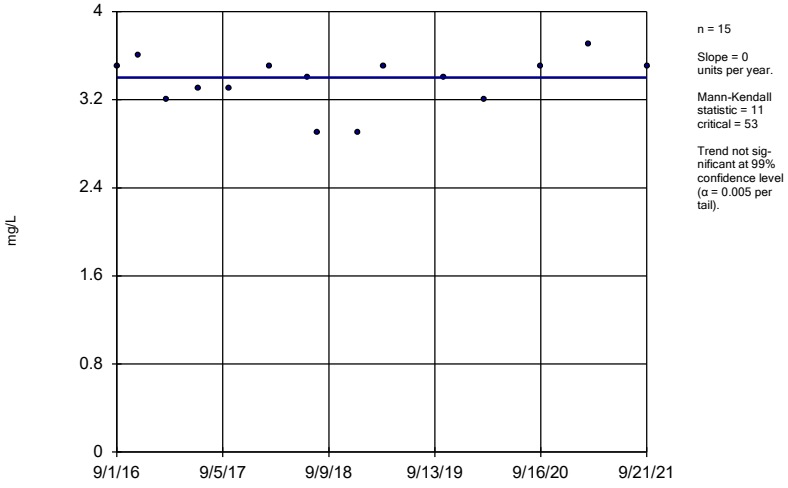
Mann-Kendall statistic = -65 critical = -53

Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride Analysis Run 11/9/2021 6:35 AM View: Trend Tests - PLs
Plant Branch Client: Southern Company Data: Plant Branch AP

Sen's Slope Estimator

BRGWA-12S (bg)



n = 15

Slope = 0 units per year.

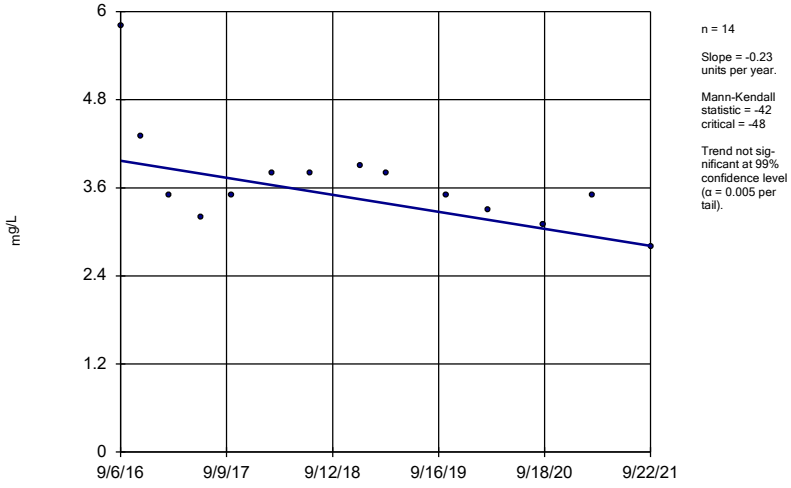
Mann-Kendall statistic = 11 critical = 53

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride Analysis Run 11/9/2021 6:35 AM View: Trend Tests - PLs
Plant Branch Client: Southern Company Data: Plant Branch AP

Sen's Slope Estimator

BRGWA-23S (bg)



n = 14

Slope = -0.23 units per year.

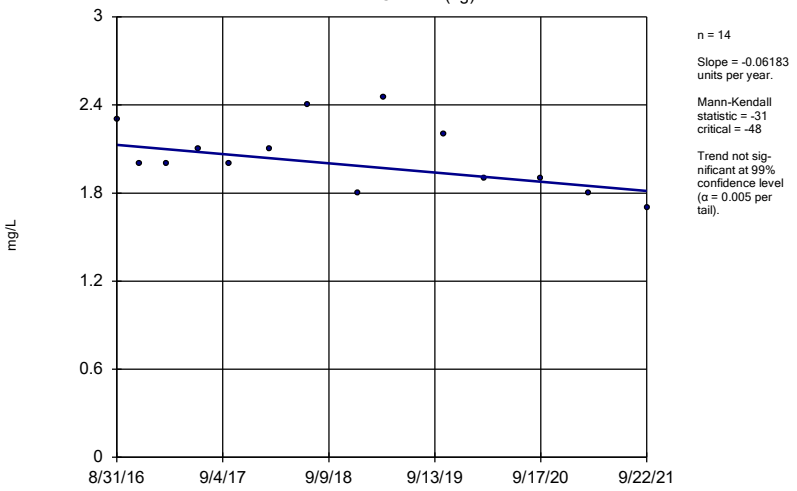
Mann-Kendall statistic = -42 critical = -48

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride Analysis Run 11/9/2021 6:35 AM View: Trend Tests - PLs
Plant Branch Client: Southern Company Data: Plant Branch AP

Sen's Slope Estimator

BRGWA-2I (bg)



n = 14

Slope = -0.06183 units per year.

Mann-Kendall statistic = -31 critical = -48

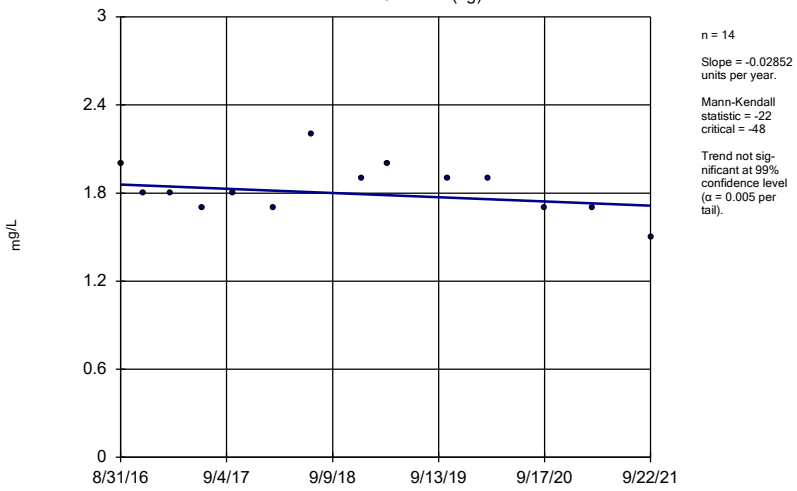
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride Analysis Run 11/9/2021 6:35 AM View: Trend Tests - PLs
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.30f Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

BRGWA-2S (bg)



n = 14

Slope = -0.02852 units per year.

Mann-Kendall statistic = -22 critical = -48

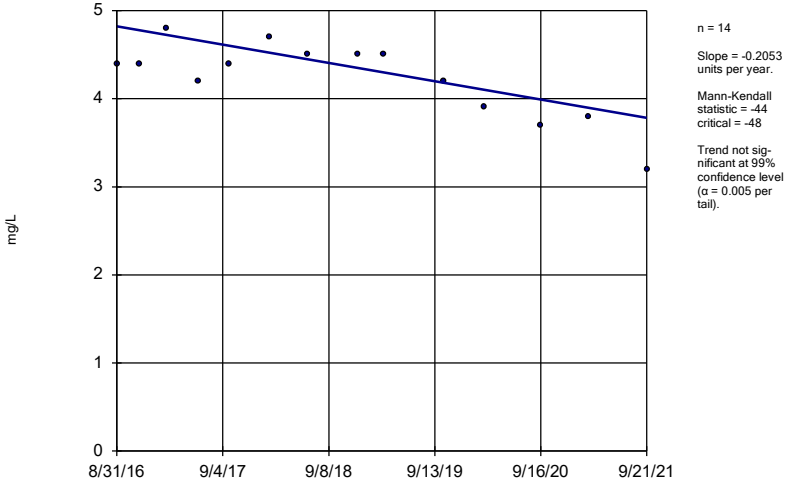
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride Analysis Run 11/9/2021 6:35 AM View: Trend Tests - PLs
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.30f Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

BRGWA-5I (bg)



n = 14

Slope = -0.2053 units per year.

Mann-Kendall statistic = -44 critical = -48

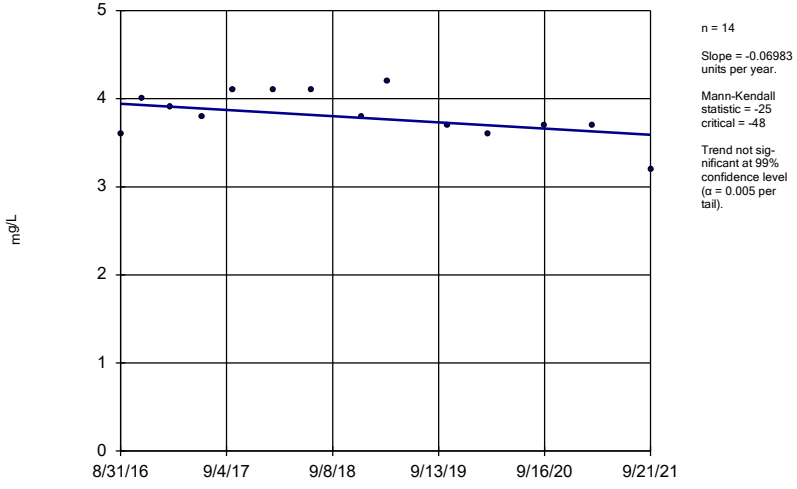
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride Analysis Run 11/9/2021 6:35 AM View: Trend Tests - PLs
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.30f Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

BRGWA-5S (bg)



n = 14

Slope = -0.06983 units per year.

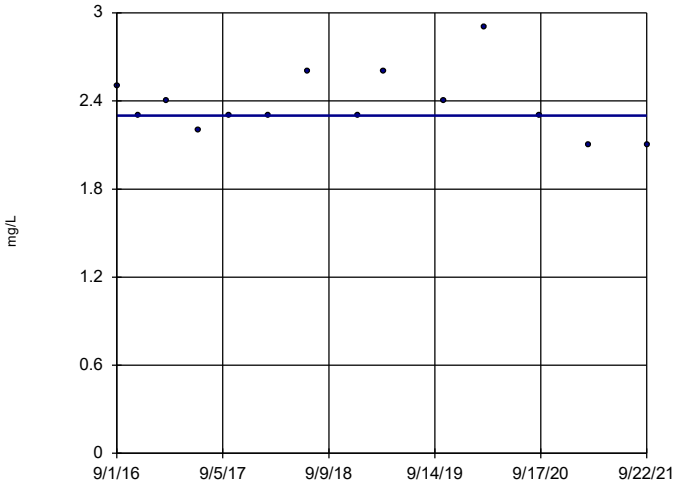
Mann-Kendall statistic = -25 critical = -48

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride Analysis Run 11/9/2021 6:35 AM View: Trend Tests - PLs
Plant Branch Client: Southern Company Data: Plant Branch AP

Sen's Slope Estimator

BRGWA-6S (bg)



n = 14

Slope = 0 units per year.

Mann-Kendall statistic = -12
critical = -48

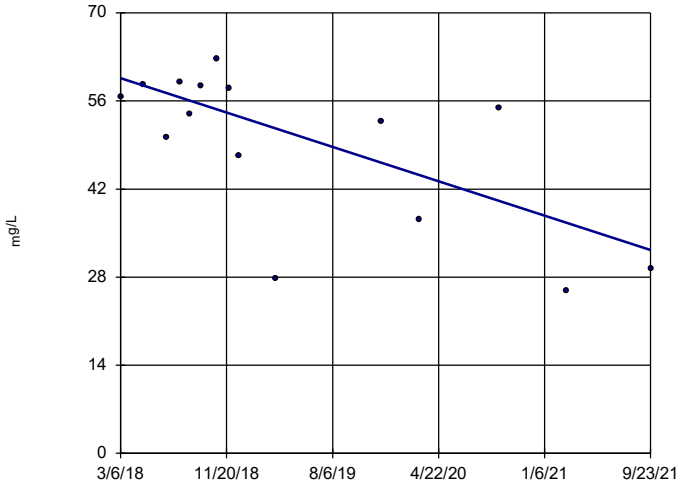
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride Analysis Run 11/9/2021 6:35 AM View: Trend Tests - PLs
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.30f Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

BRGWC-45



n = 15

Slope = -7.683 units per year.

Mann-Kendall statistic = -47
critical = -53

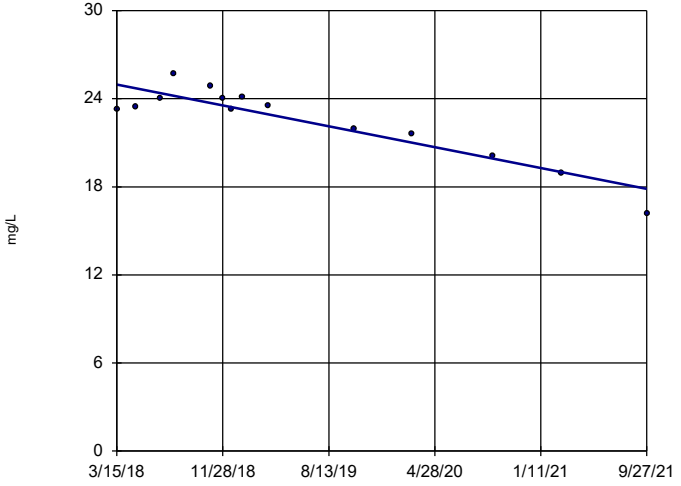
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride Analysis Run 11/9/2021 6:35 AM View: Trend Tests - PLs
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.30f Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

BRGWC-50



n = 14

Slope = -2.006 units per year.

Mann-Kendall statistic = -51
critical = -48

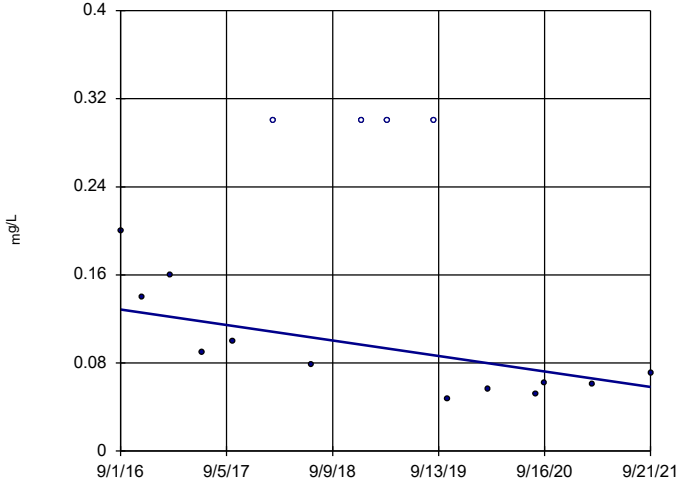
Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride Analysis Run 11/9/2021 6:35 AM View: Trend Tests - PLs
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.30f Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

BRGWA-12I (bg)



n = 16

Slope = -0.01393 units per year.

Mann-Kendall statistic = -38
critical = -58

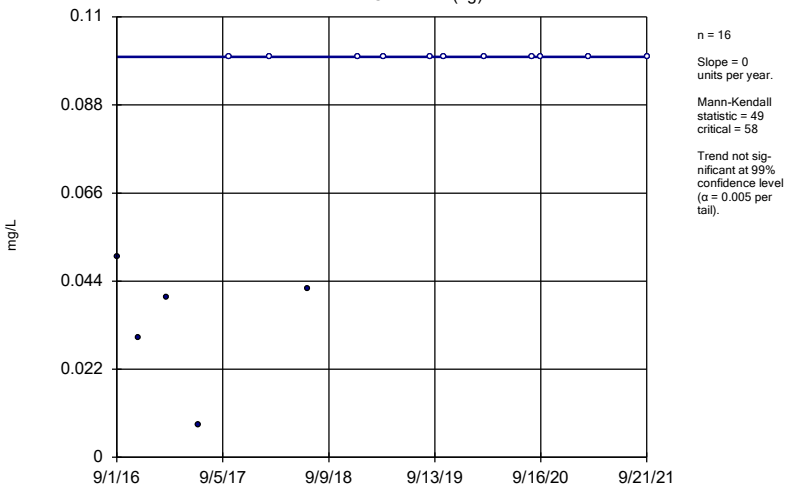
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Fluoride Analysis Run 11/9/2021 6:35 AM View: Trend Tests - PLs
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.30f Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

BRGWA-12S (bg)



n = 16

Slope = 0 units per year.

Mann-Kendall statistic = 49
critical = 58

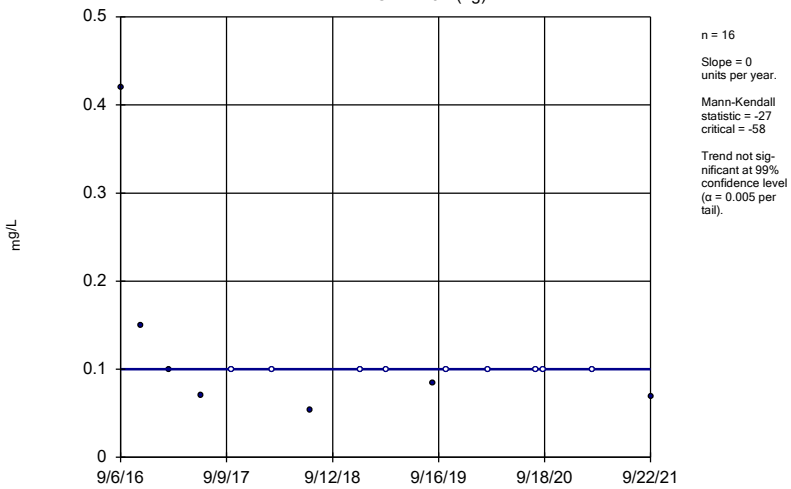
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Fluoride Analysis Run 11/9/2021 6:35 AM View: Trend Tests - PLs
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.30f Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

BRGWA-23S (bg)



n = 16

Slope = 0 units per year.

Mann-Kendall statistic = -27
critical = -58

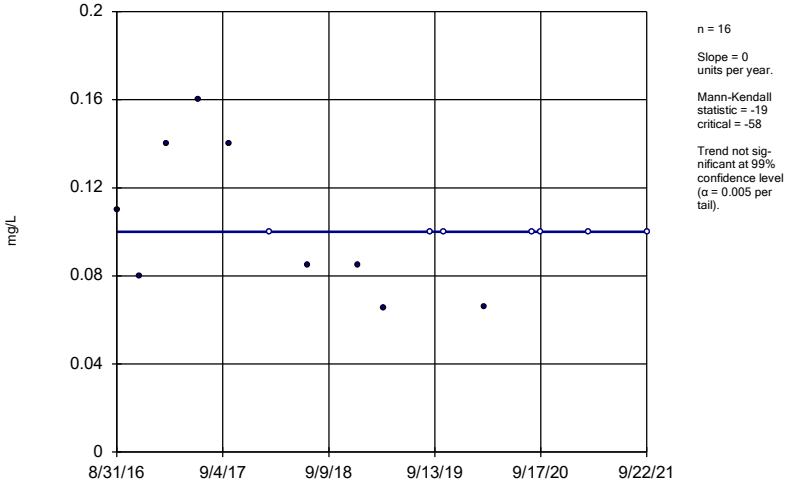
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Fluoride Analysis Run 11/9/2021 6:35 AM View: Trend Tests - PLs
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.30f Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

BRGWA-2I (bg)



n = 16

Slope = 0 units per year.

Mann-Kendall statistic = -19
critical = -58

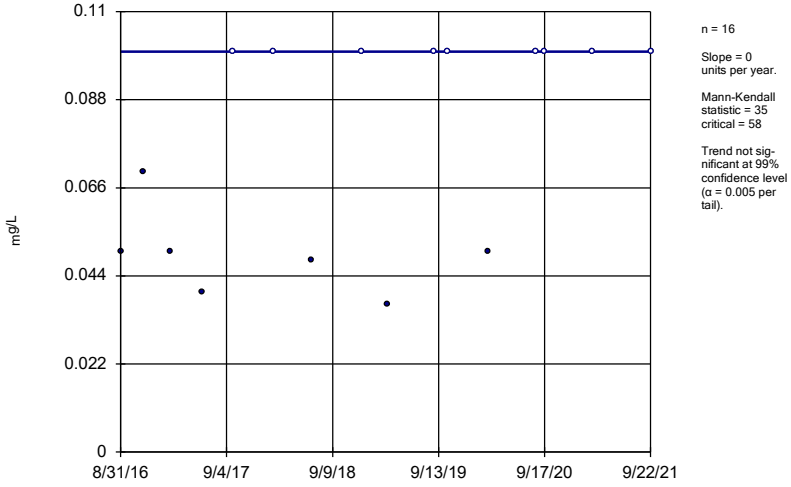
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Fluoride Analysis Run 11/9/2021 6:35 AM View: Trend Tests - PLs
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.30f Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

BRGWA-2S (bg)



n = 16

Slope = 0 units per year.

Mann-Kendall statistic = 35
critical = 58

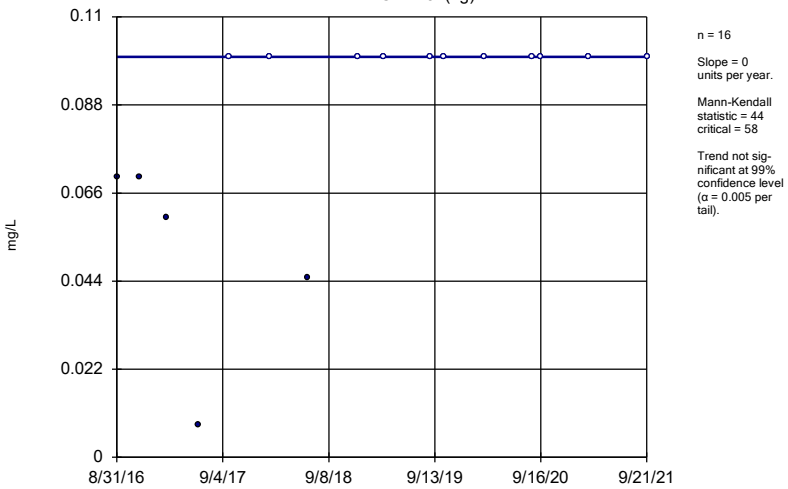
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Fluoride Analysis Run 11/9/2021 6:35 AM View: Trend Tests - PLs
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.30f Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

BRGWA-5I (bg)



n = 16

Slope = 0 units per year.

Mann-Kendall statistic = 44
critical = 58

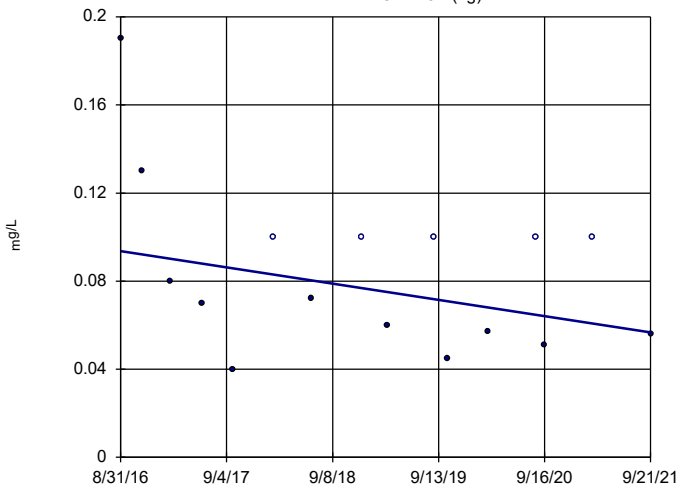
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Fluoride Analysis Run 11/9/2021 6:35 AM View: Trend Tests - PLs
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.30f Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

BRGWA-5S (bg)



n = 16

Slope = -0.007283 units per year.

Mann-Kendall statistic = -34
critical = -58

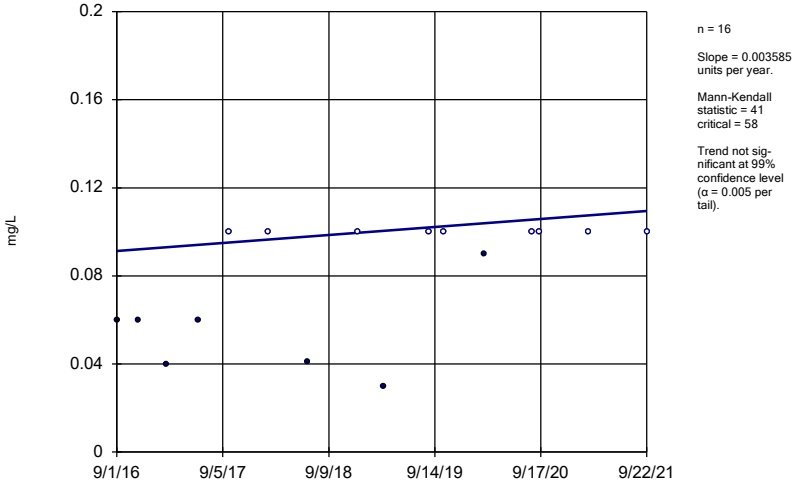
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Fluoride Analysis Run 11/9/2021 6:35 AM View: Trend Tests - PLs
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.30f Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

BRGWA-6S (bg)



n = 16

Slope = 0.003585 units per year.

Mann-Kendall statistic = 41
critical = 58

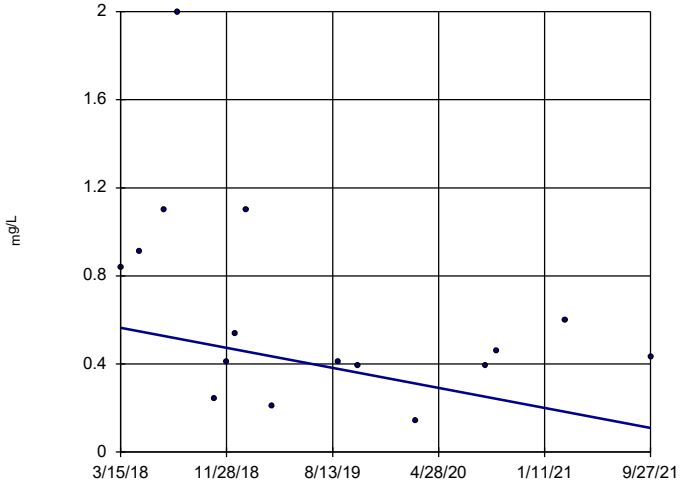
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Fluoride Analysis Run 11/9/2021 6:35 AM View: Trend Tests - PLs
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.30f Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

BRGWC-50



n = 16

Slope = -0.1283 units per year.

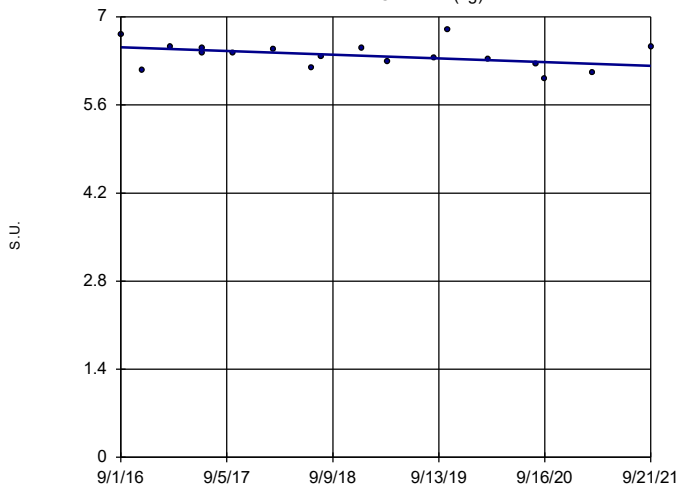
Mann-Kendall statistic = -29
critical = -58

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Fluoride Analysis Run 11/9/2021 6:35 AM View: Trend Tests - PLs
Plant Branch Client: Southern Company Data: Plant Branch AP

Sen's Slope Estimator

BRGWA-12I (bg)



n = 18

Slope = -0.0587 units per year.

Mann-Kendall statistic = -42
critical = -68

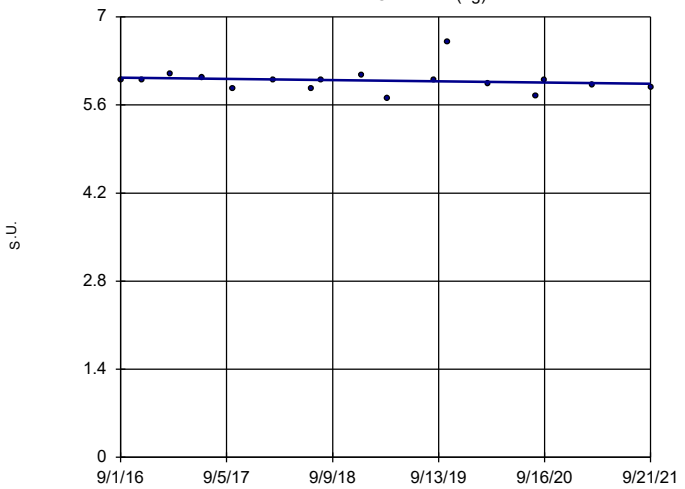
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: pH, Field Analysis Run 11/9/2021 6:35 AM View: Trend Tests - PLs
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.30f Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

BRGWA-12S (bg)



n = 17

Slope = -0.01934 units per year.

Mann-Kendall statistic = -29
critical = -63

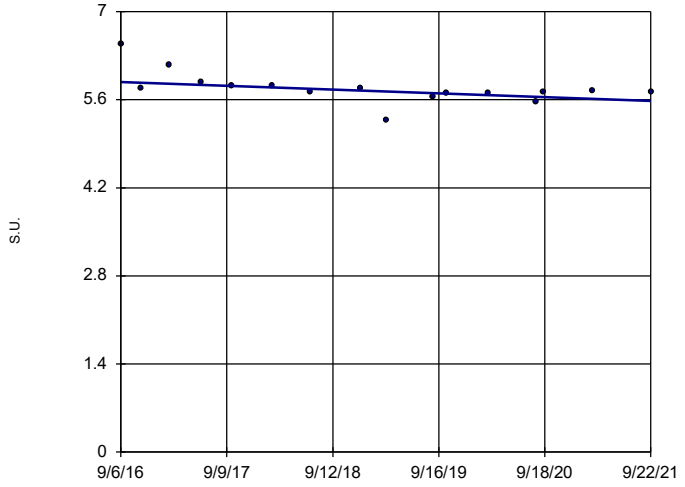
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: pH, Field Analysis Run 11/9/2021 6:35 AM View: Trend Tests - PLs
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.30f Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

BRGWA-23S (bg)



n = 16

Slope = -0.05938 units per year.

Mann-Kendall statistic = -60
critical = -58

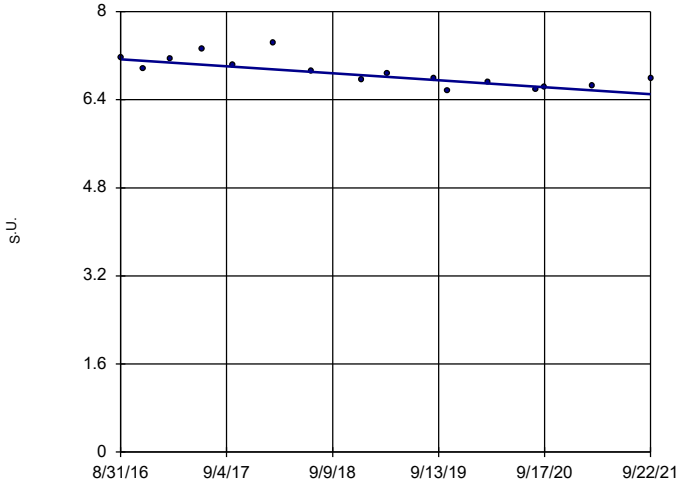
Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: pH, Field Analysis Run 11/9/2021 6:35 AM View: Trend Tests - PLs
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.30f Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

BRGWA-2I (bg)



n = 16

Slope = -0.1251 units per year.

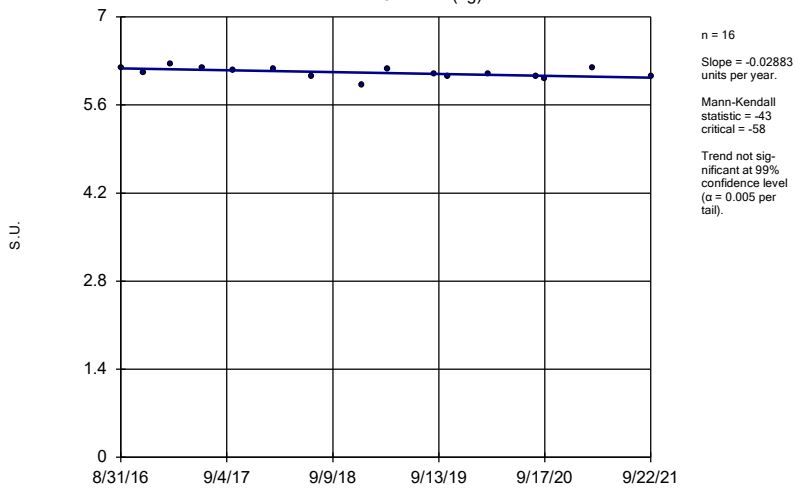
Mann-Kendall statistic = -70
critical = -58

Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: pH, Field Analysis Run 11/9/2021 6:35 AM View: Trend Tests - PLs
Plant Branch Client: Southern Company Data: Plant Branch AP

Sen's Slope Estimator

BRGWA-2S (bg)



n = 16

Slope = -0.02883 units per year.

Mann-Kendall statistic = -43
critical = -58

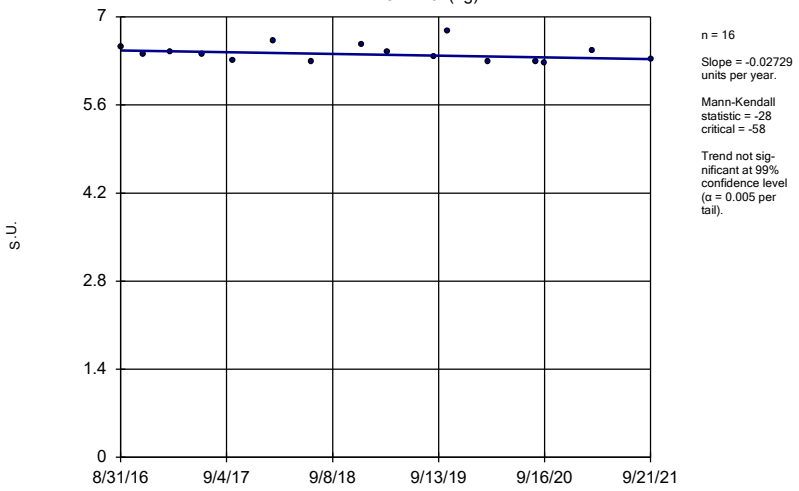
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: pH, Field Analysis Run 11/9/2021 6:36 AM View: Trend Tests - PLs
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.30f Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

BRGWA-5I (bg)



n = 16

Slope = -0.02729 units per year.

Mann-Kendall statistic = -28
critical = -58

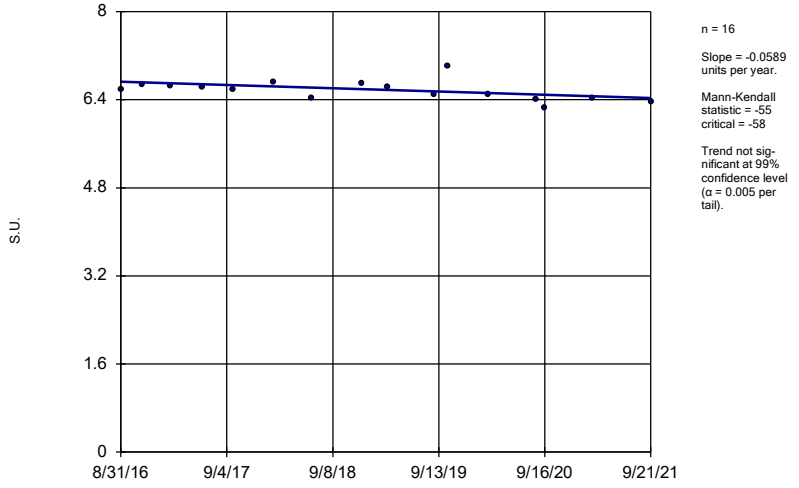
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: pH, Field Analysis Run 11/9/2021 6:36 AM View: Trend Tests - PLs
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.30f Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

BRGWA-5S (bg)



n = 16

Slope = -0.0589 units per year.

Mann-Kendall statistic = -55
critical = -58

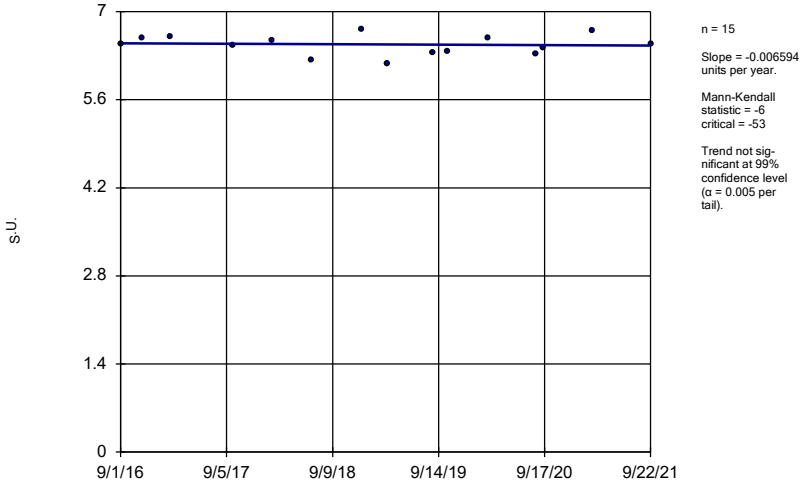
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: pH, Field Analysis Run 11/9/2021 6:36 AM View: Trend Tests - PLs
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.30f Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

BRGWA-6S (bg)



n = 15

Slope = -0.006594 units per year.

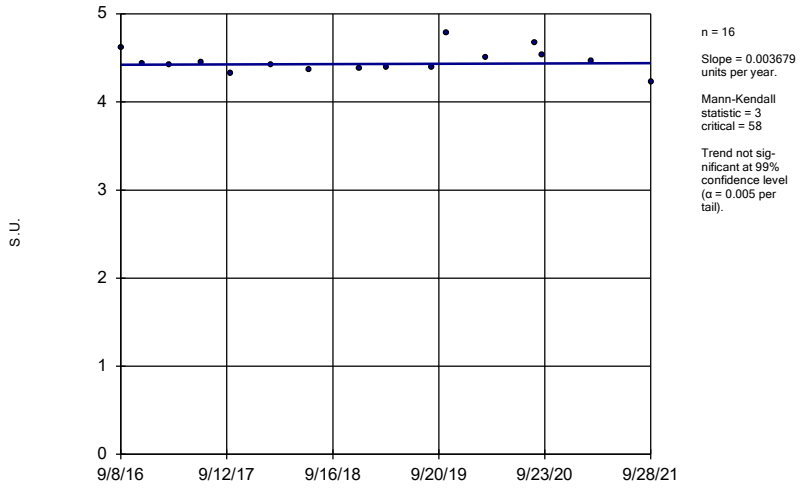
Mann-Kendall statistic = -6
critical = -53

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: pH, Field Analysis Run 11/9/2021 6:36 AM View: Trend Tests - PLs
Plant Branch Client: Southern Company Data: Plant Branch AP

Sen's Slope Estimator

BRGWC-29I



n = 16

Slope = 0.003679 units per year.

Mann-Kendall statistic = 3
critical = 58

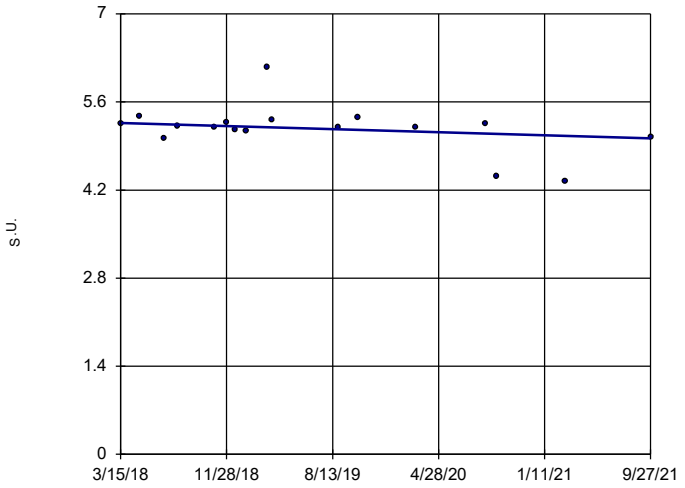
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: pH, Field Analysis Run 11/9/2021 6:36 AM View: Trend Tests - PLs
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.30f Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

BRGWC-50



n = 17

Slope = -0.06992 units per year.

Mann-Kendall statistic = -32
critical = -63

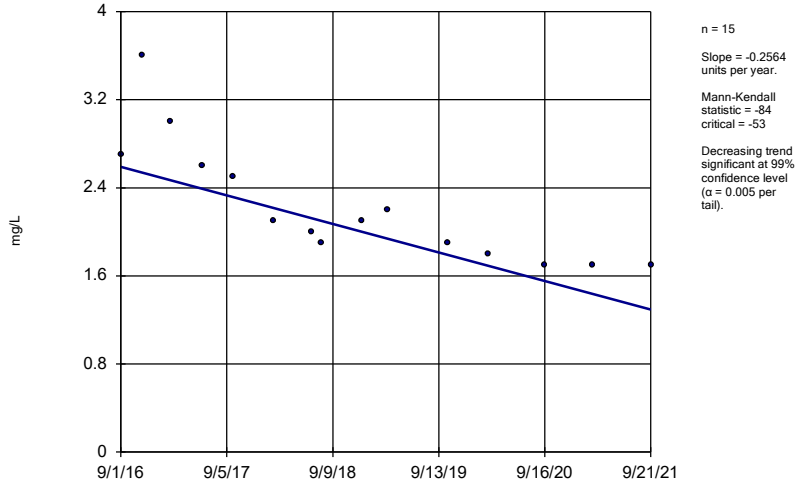
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: pH, Field Analysis Run 11/9/2021 6:36 AM View: Trend Tests - PLs
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.30f Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

BRGWA-12I (bg)



n = 15

Slope = -0.2564 units per year.

Mann-Kendall statistic = -84
critical = -53

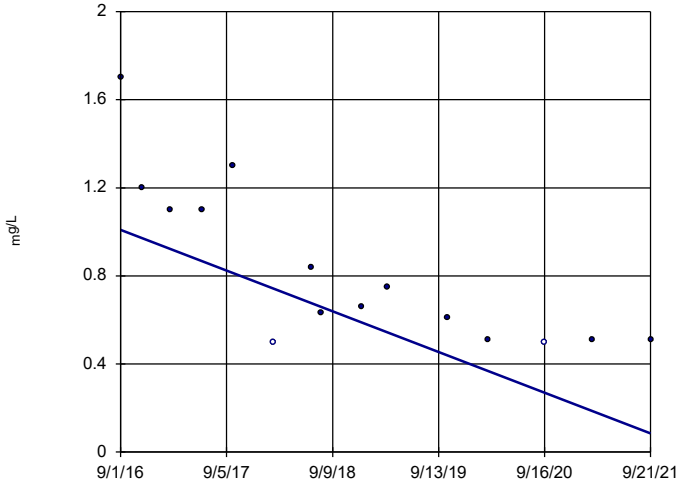
Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 11/9/2021 6:36 AM View: Trend Tests - PLs
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.30f Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

BRGWA-12S (bg)



n = 15

Slope = -0.1826 units per year.

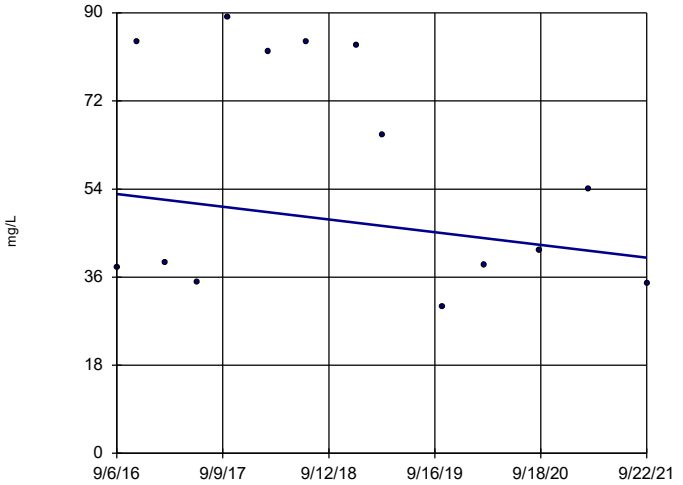
Mann-Kendall statistic = -68
critical = -53

Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 11/9/2021 6:36 AM View: Trend Tests - PLs
Plant Branch Client: Southern Company Data: Plant Branch AP

Sen's Slope Estimator

BRGWA-23S (bg)



n = 14

Slope = -2.575 units per year.

Mann-Kendall statistic = -19 critical = -48

Trend not significant at 99% confidence level (α = 0.005 per tail).

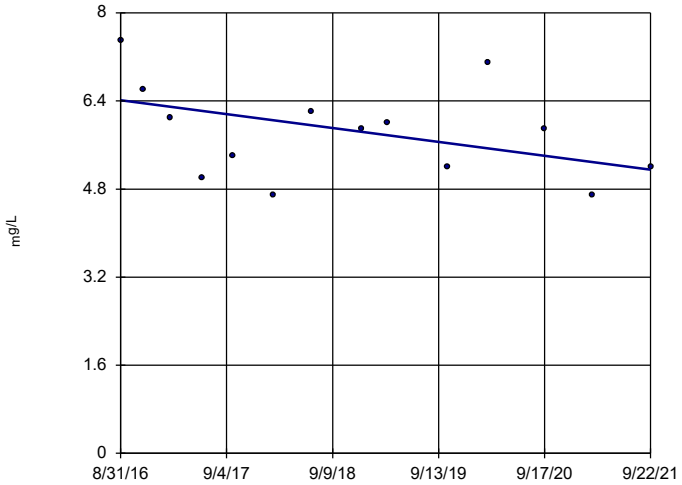
Constituent: Sulfate Analysis Run 11/9/2021 6:36 AM View: Trend Tests - PLs

Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.30f Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

BRGWA-2I (bg)



n = 14

Slope = -0.2487 units per year.

Mann-Kendall statistic = -28 critical = -48

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 11/9/2021 6:36 AM View: Trend Tests - PLs

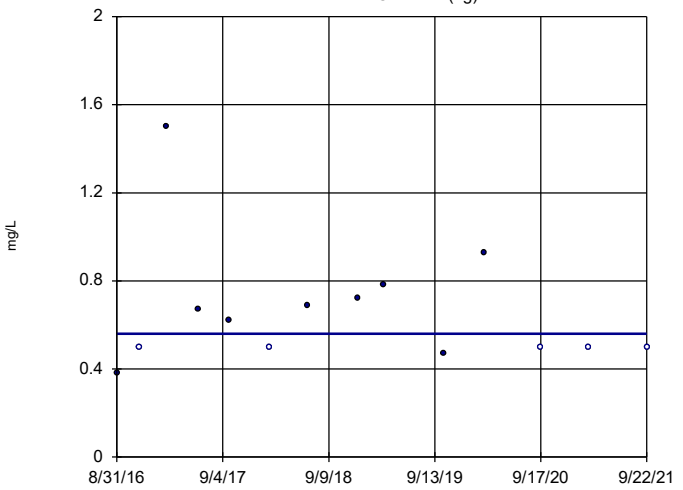
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.30f Sanitas software utilized by Groundwater Stats Consulting. UG

Hollow symbols indicate censored values.

Sen's Slope Estimator

BRGWA-2S (bg)



n = 14

Slope = 0 units per year.

Mann-Kendall statistic = 3 critical = 48

Trend not significant at 99% confidence level (α = 0.005 per tail).

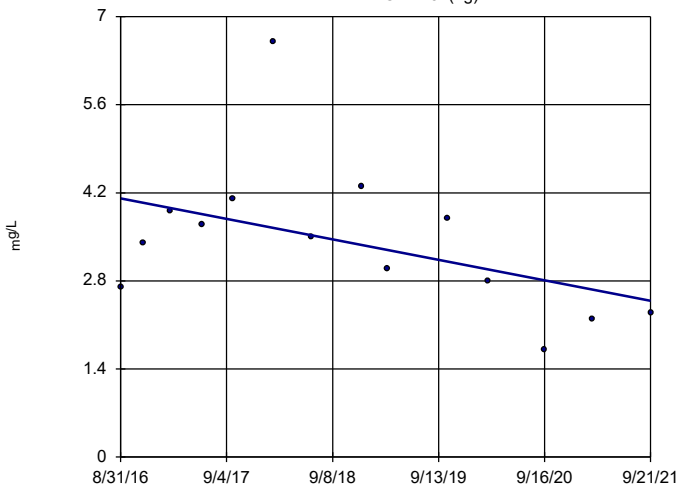
Constituent: Sulfate Analysis Run 11/9/2021 6:36 AM View: Trend Tests - PLs

Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.30f Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

BRGWA-5I (bg)



n = 14

Slope = -0.3219 units per year.

Mann-Kendall statistic = -27 critical = -48

Trend not significant at 99% confidence level (α = 0.005 per tail).

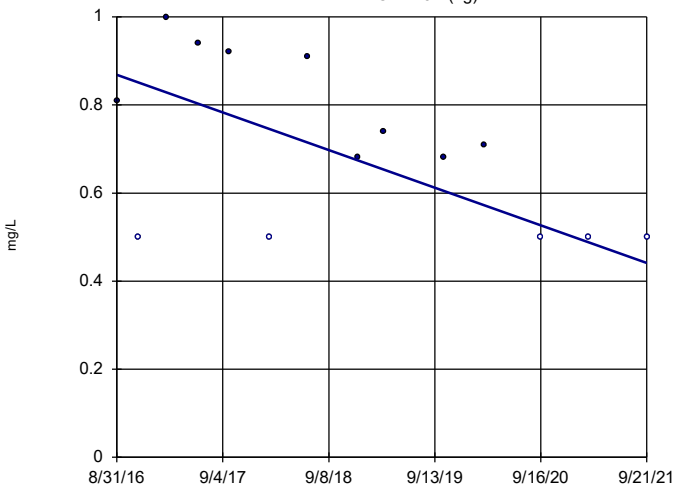
Constituent: Sulfate Analysis Run 11/9/2021 6:36 AM View: Trend Tests - PLs

Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.30f Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

BRGWA-5S (bg)



n = 14

Slope = -0.08437 units per year.

Mann-Kendall statistic = -40
critical = -48

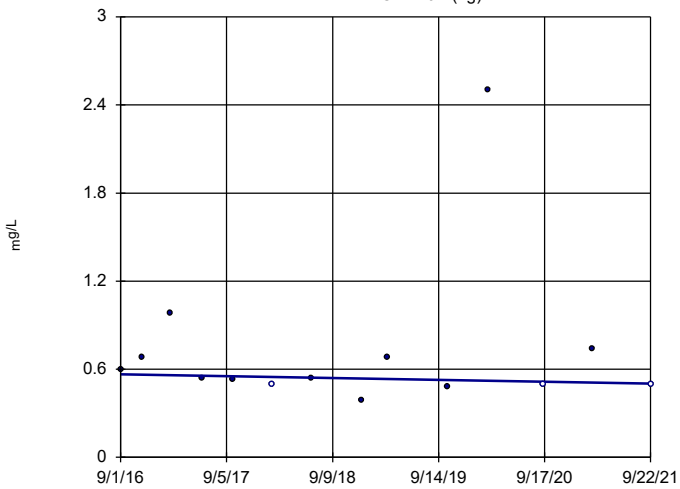
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 11/9/2021 6:36 AM View: Trend Tests - PLs
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.30f Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

BRGWA-6S (bg)



n = 14

Slope = -0.01226 units per year.

Mann-Kendall statistic = -14
critical = -48

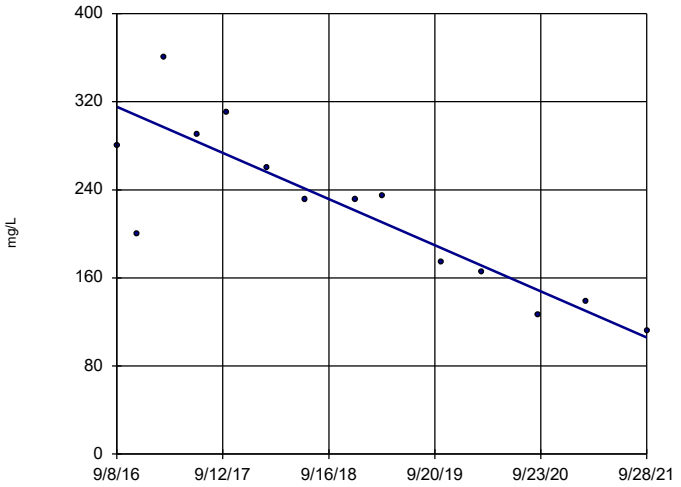
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 11/9/2021 6:36 AM View: Trend Tests - PLs
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.30f Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

BRGWC-25I



n = 14

Slope = -41.43 units per year.

Mann-Kendall statistic = -62
critical = -48

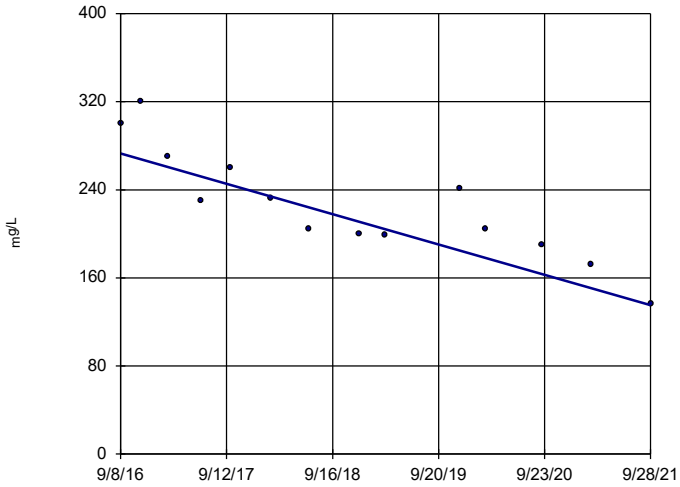
Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 11/9/2021 6:36 AM View: Trend Tests - PLs
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.30f Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

BRGWC-27I



n = 14

Slope = -27.24 units per year.

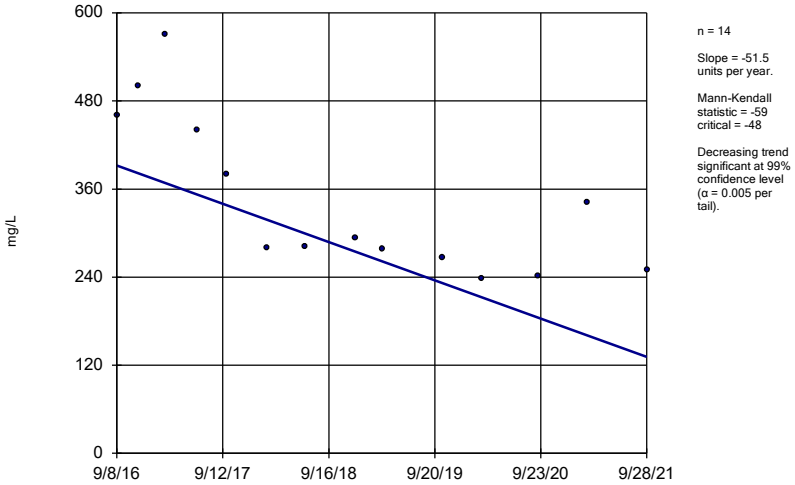
Mann-Kendall statistic = -70
critical = -48

Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 11/9/2021 6:36 AM View: Trend Tests - PLs
Plant Branch Client: Southern Company Data: Plant Branch AP

Sen's Slope Estimator

BRGWC-29I



n = 14

Slope = -51.5 units per year.

Mann-Kendall statistic = -59 critical = -48

Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

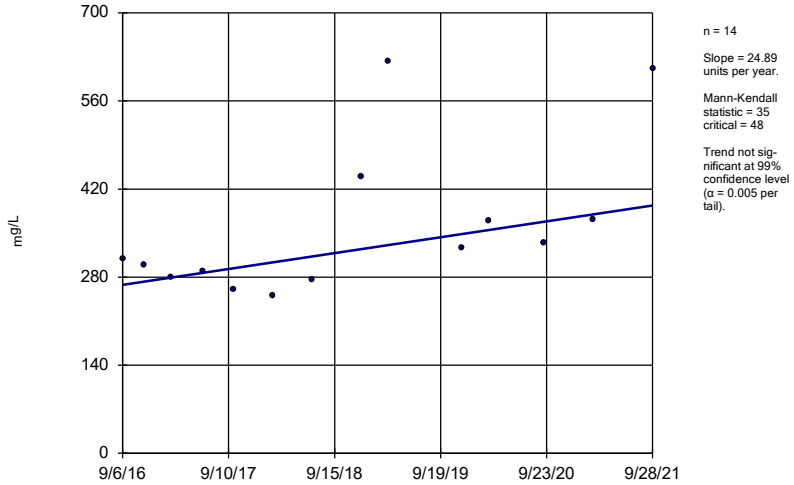
Constituent: Sulfate Analysis Run 11/9/2021 6:36 AM View: Trend Tests - PLs

Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.30f Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

BRGWC-30I



n = 14

Slope = 24.89 units per year.

Mann-Kendall statistic = 35 critical = 48

Trend not significant at 99% confidence level (α = 0.005 per tail).

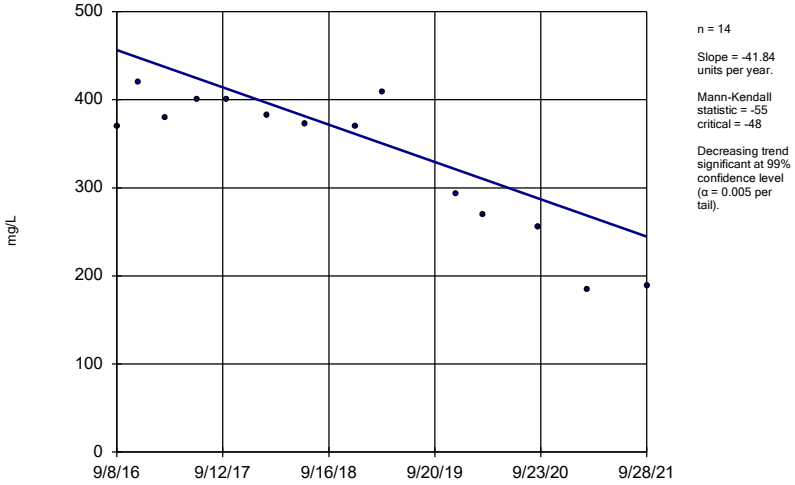
Constituent: Sulfate Analysis Run 11/9/2021 6:36 AM View: Trend Tests - PLs

Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.30f Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

BRGWC-32S



n = 14

Slope = -41.84 units per year.

Mann-Kendall statistic = -55 critical = -48

Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

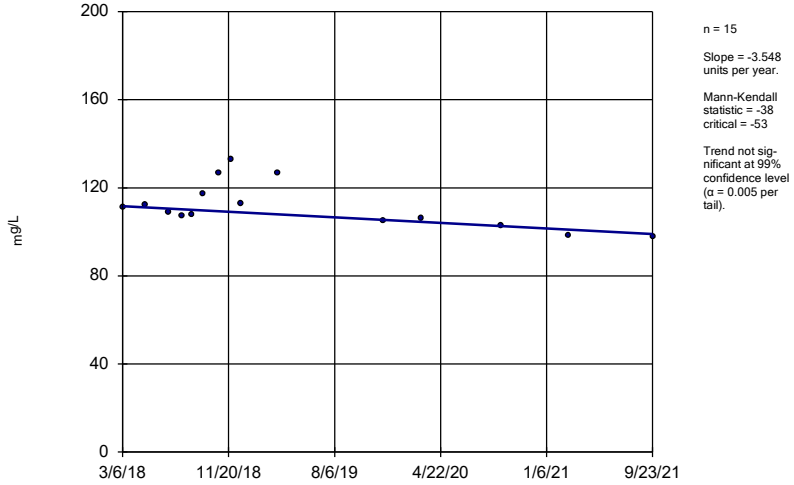
Constituent: Sulfate Analysis Run 11/9/2021 6:36 AM View: Trend Tests - PLs

Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.30f Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

BRGWC-45



n = 15

Slope = -3.548 units per year.

Mann-Kendall statistic = -38 critical = -53

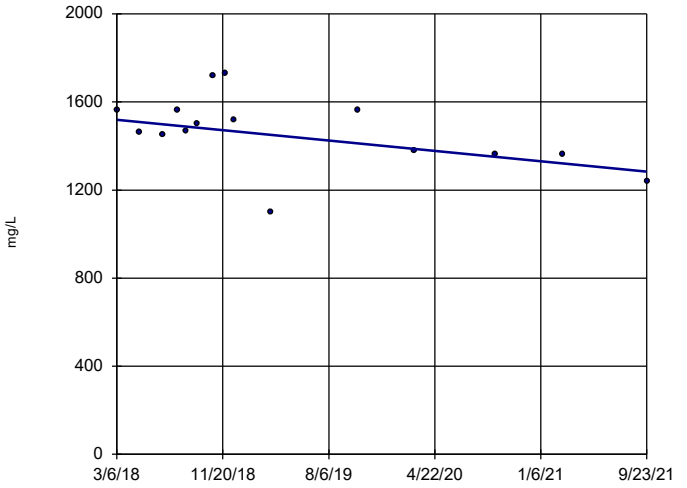
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 11/9/2021 6:36 AM View: Trend Tests - PLs

Plant Branch Client: Southern Company Data: Plant Branch AP

Sen's Slope Estimator

BRGWC-47



n = 15

Slope = -66.18 units per year.

Mann-Kendall statistic = -33 critical = -53

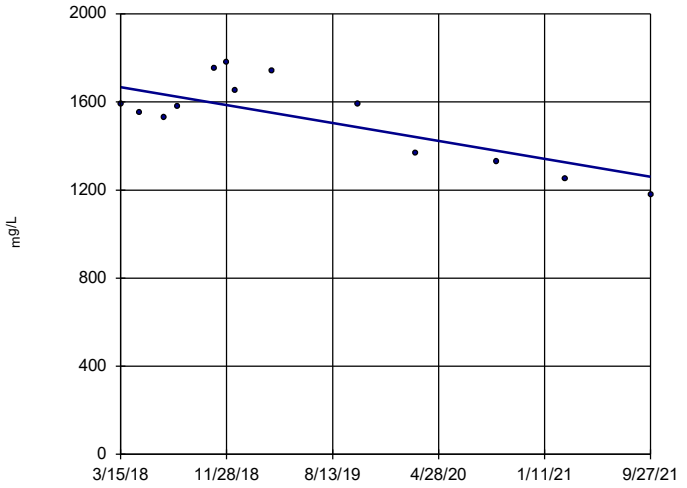
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 11/9/2021 6:36 AM View: Trend Tests - PLs
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.30f Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

BRGWC-50



n = 13

Slope = -115.1 units per year.

Mann-Kendall statistic = -31 critical = -43

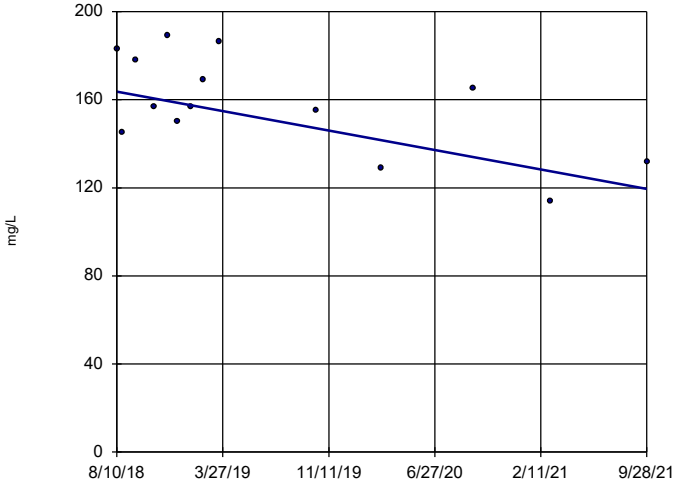
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 11/9/2021 6:36 AM View: Trend Tests - PLs
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.30f Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

BRGWC-52I



n = 14

Slope = -14.1 units per year.

Mann-Kendall statistic = -30 critical = -48

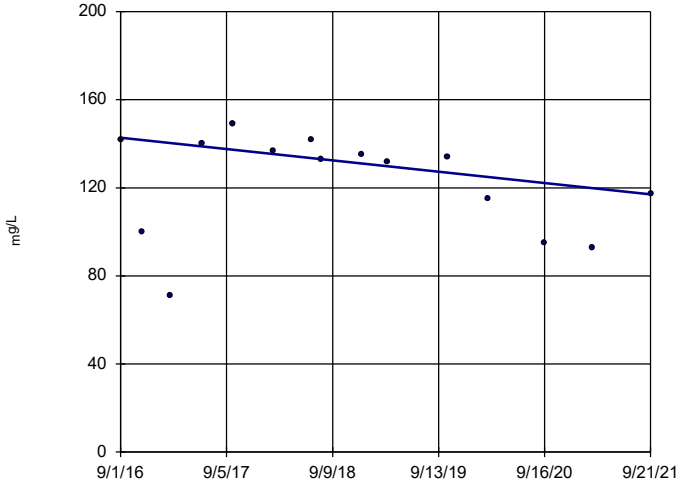
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 11/9/2021 6:36 AM View: Trend Tests - PLs
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.30f Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

BRGWA-12I (bg)



n = 15

Slope = -5.087 units per year.

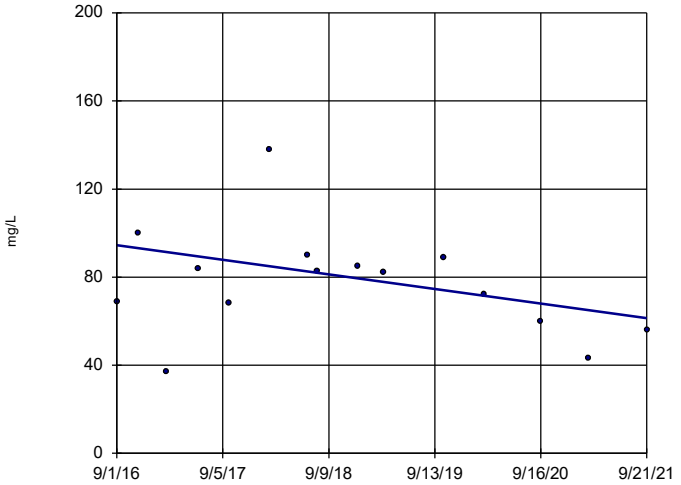
Mann-Kendall statistic = -40 critical = -53

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Total Dissolved Solids Analysis Run 11/9/2021 6:36 AM View: Trend Tests - PLs
Plant Branch Client: Southern Company Data: Plant Branch AP

Sen's Slope Estimator

BRGWA-12S (bg)



n = 15

Slope = -6.547 units per year.

Mann-Kendall statistic = -29 critical = -53

Trend not significant at 99% confidence level (α = 0.005 per tail).

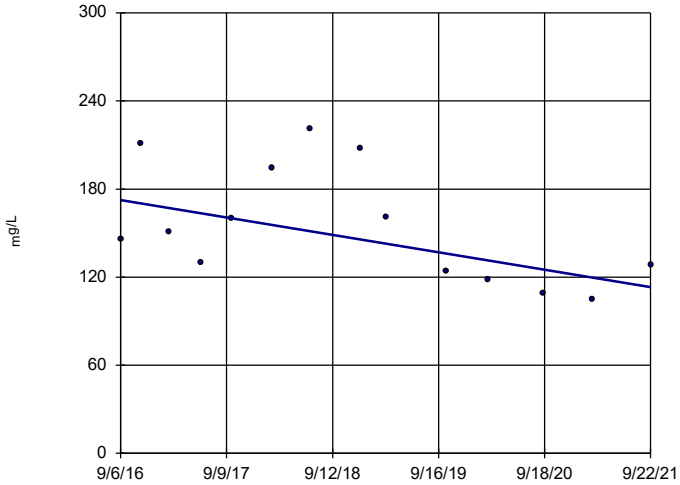
Constituent: Total Dissolved Solids Analysis Run 11/9/2021 6:36 AM View: Trend Tests - PLs

Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.30f Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

BRGWA-23S (bg)



n = 14

Slope = -11.77 units per year.

Mann-Kendall statistic = -35 critical = -48

Trend not significant at 99% confidence level (α = 0.005 per tail).

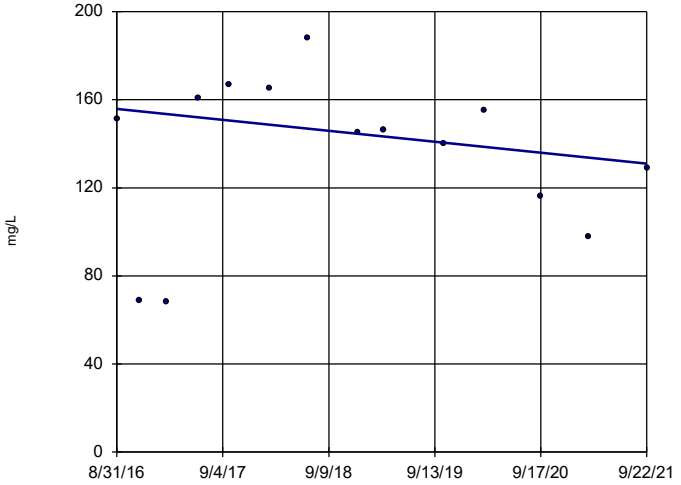
Constituent: Total Dissolved Solids Analysis Run 11/9/2021 6:36 AM View: Trend Tests - PLs

Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.30f Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

BRGWA-2I (bg)



n = 14

Slope = -4.927 units per year.

Mann-Kendall statistic = -15 critical = -48

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Total Dissolved Solids Analysis Run 11/9/2021 6:36 AM View: Trend Tests - PLs

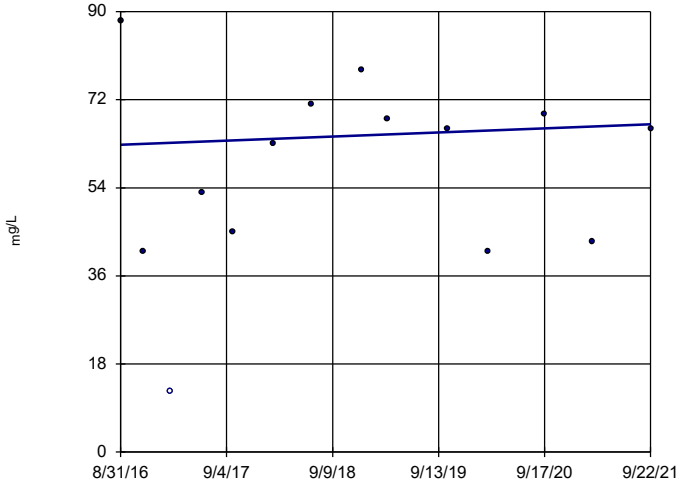
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.30f Sanitas software utilized by Groundwater Stats Consulting. UG

Hollow symbols indicate censored values.

Sen's Slope Estimator

BRGWA-2S (bg)



n = 14

Slope = 0.8314 units per year.

Mann-Kendall statistic = 7 critical = 48

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Total Dissolved Solids Analysis Run 11/9/2021 6:36 AM View: Trend Tests - PLs

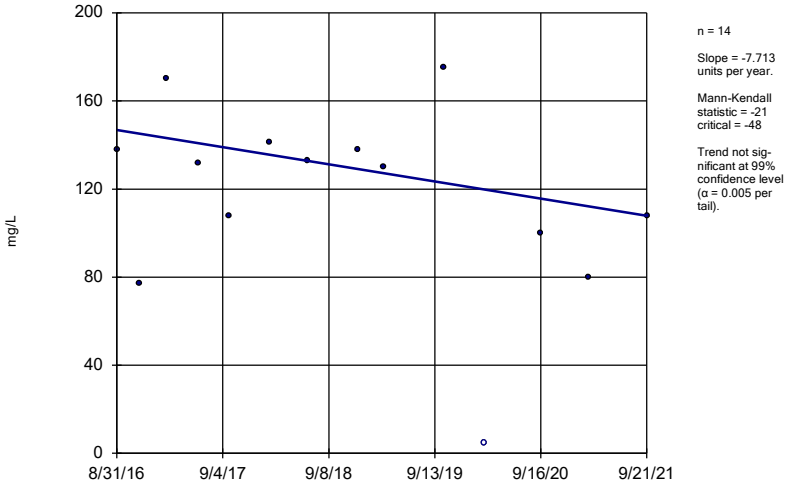
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.30f Sanitas software utilized by Groundwater Stats Consulting. UG

Hollow symbols indicate censored values.

Sen's Slope Estimator

BRGWA-5I (bg)



n = 14

Slope = -7.713 units per year.

Mann-Kendall statistic = -21 critical = -48

Trend not significant at 99% confidence level (α = 0.005 per tail).

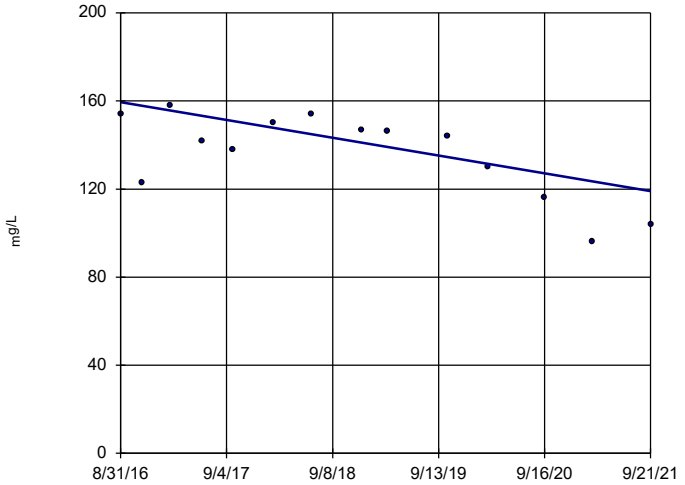
Constituent: Total Dissolved Solids Analysis Run 11/9/2021 6:36 AM View: Trend Tests - PLs

Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.30f Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

BRGWA-5S (bg)



n = 14

Slope = -7.968 units per year.

Mann-Kendall statistic = -46 critical = -48

Trend not significant at 99% confidence level (α = 0.005 per tail).

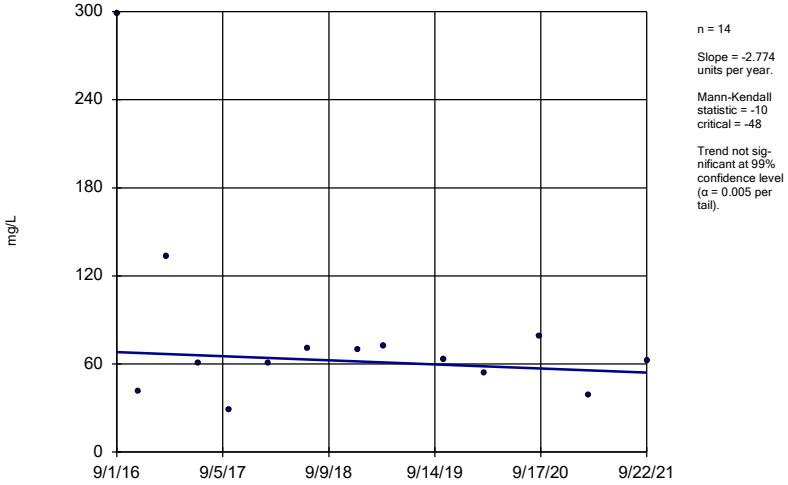
Constituent: Total Dissolved Solids Analysis Run 11/9/2021 6:36 AM View: Trend Tests - PLs

Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.30f Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

BRGWA-6S (bg)



n = 14

Slope = -2.774 units per year.

Mann-Kendall statistic = -10 critical = -48

Trend not significant at 99% confidence level (α = 0.005 per tail).

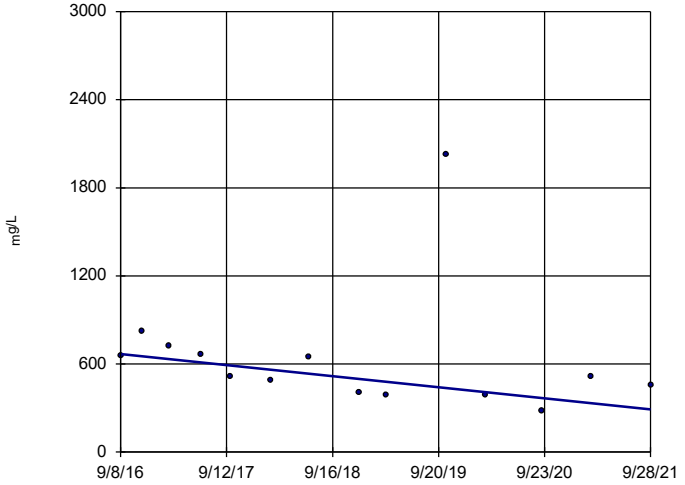
Constituent: Total Dissolved Solids Analysis Run 11/9/2021 6:36 AM View: Trend Tests - PLs

Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.30f Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

BRGWC-29I



n = 14

Slope = -74.57 units per year.

Mann-Kendall statistic = -44 critical = -48

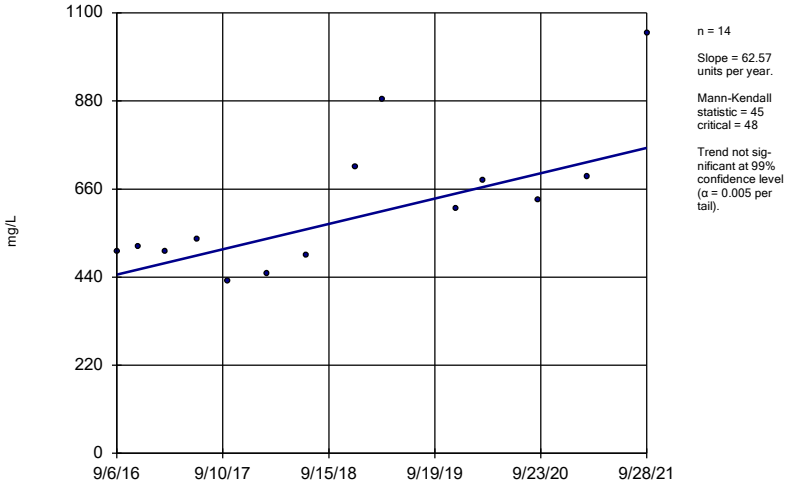
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Total Dissolved Solids Analysis Run 11/9/2021 6:36 AM View: Trend Tests - PLs

Plant Branch Client: Southern Company Data: Plant Branch AP

Sen's Slope Estimator

BRGWC-30I



n = 14

Slope = 62.57 units per year.

Mann-Kendall statistic = 45 critical = 48

Trend not significant at 99% confidence level (α = 0.005 per tail).

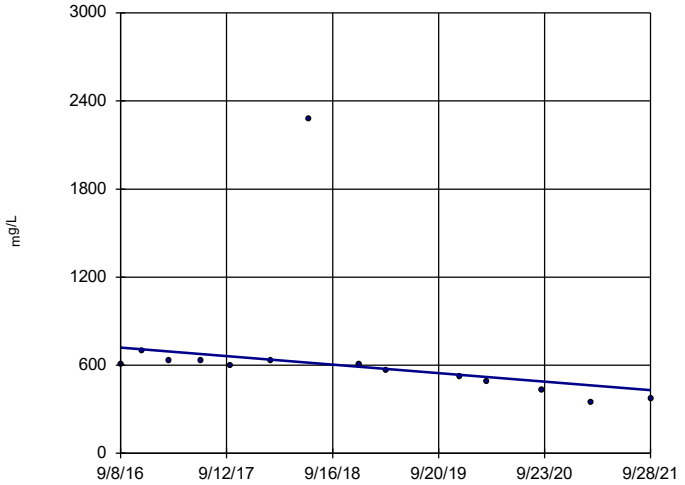
Constituent: Total Dissolved Solids Analysis Run 11/9/2021 6:36 AM View: Trend Tests - PLs

Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.30f Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

BRGWC-32S



n = 14

Slope = -57.27 units per year.

Mann-Kendall statistic = -64 critical = -48

Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

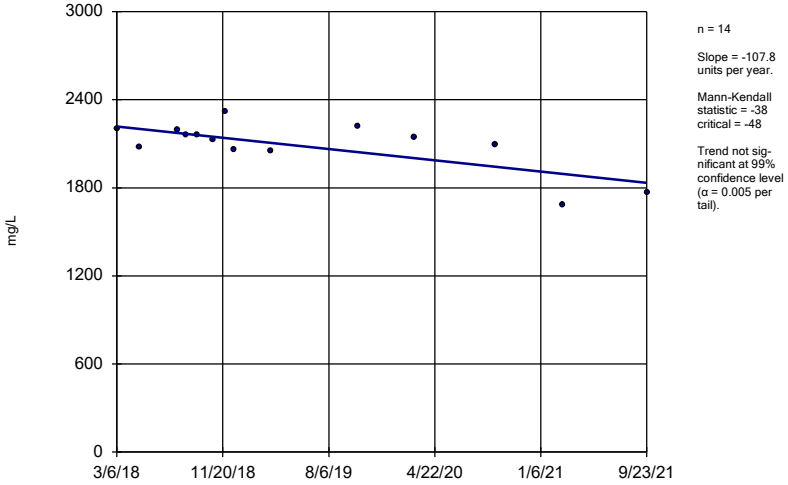
Constituent: Total Dissolved Solids Analysis Run 11/9/2021 6:36 AM View: Trend Tests - PLs

Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.30f Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

BRGWC-47



n = 14

Slope = -107.8 units per year.

Mann-Kendall statistic = -38 critical = -48

Trend not significant at 99% confidence level (α = 0.005 per tail).

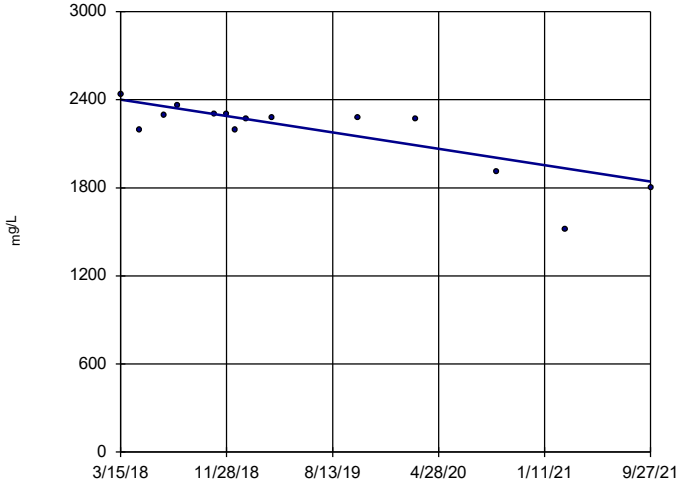
Constituent: Total Dissolved Solids Analysis Run 11/9/2021 6:36 AM View: Trend Tests - PLs

Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.30f Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

BRGWC-50



n = 14

Slope = -157.8 units per year.

Mann-Kendall statistic = -51 critical = -48

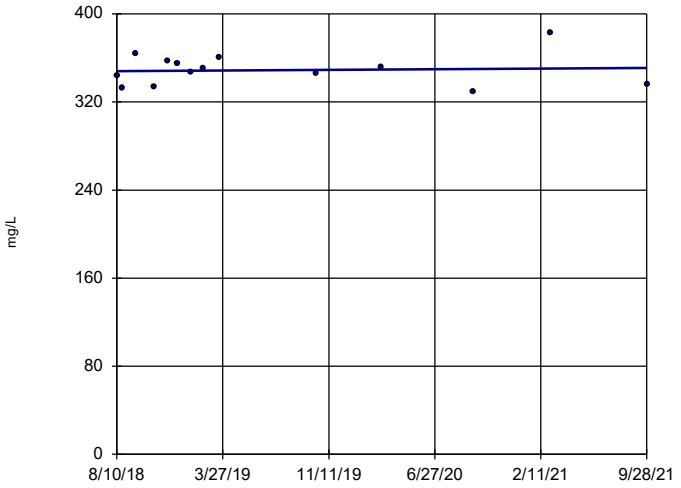
Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Total Dissolved Solids Analysis Run 11/9/2021 6:36 AM View: Trend Tests - PLs

Plant Branch Client: Southern Company Data: Plant Branch AP

Sen's Slope Estimator

BRGWC-52I



n = 14

Slope = 0.9481 units per year.

Mann-Kendall statistic = 3
critical = 48

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Total Dissolved Solids Analysis Run 11/9/2021 6:36 AM View: Trend Tests - PLs

Plant Branch Client: Southern Company Data: Plant Branch AP

FIGURE F.

Upper Tolerance Limits Summary Table

Plant Branch Client: Southern Company Data: Plant Branch AP Printed 11/23/2021, 11:50 AM

Constituent	Upper Lim.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Antimony (mg/L)	0.017	120	n/a	n/a	81.67	n/a	n/a	0.002122	NP Inter(NDs)
Arsenic (mg/L)	0.005	120	n/a	n/a	75.83	n/a	n/a	0.002122	NP Inter(NDs)
Barium (mg/L)	0.13	120	n/a	n/a	0	n/a	n/a	0.002122	NP Inter(normality)
Beryllium (mg/L)	0.0005	120	n/a	n/a	100	n/a	n/a	0.002122	NP Inter(NDs)
Cadmium (mg/L)	0.0005	122	n/a	n/a	98.36	n/a	n/a	0.001915	NP Inter(NDs)
Chromium (mg/L)	0.016	120	n/a	n/a	19.17	n/a	n/a	0.002122	NP Inter(normality)
Cobalt (mg/L)	0.0135	120	n/a	n/a	56.67	n/a	n/a	0.002122	NP Inter(normality)
Combined Radium 226 + 228 (pCi/L)	1.646	120	0.796	0.448	0	None	No	0.05	Inter
Fluoride (mg/L)	0.42	128	n/a	n/a	50.78	n/a	n/a	0.001408	NP Inter(normality)
Lead (mg/L)	0.0013	120	n/a	n/a	85	n/a	n/a	0.002122	NP Inter(NDs)
Lithium (mg/L)	0.089	120	n/a	n/a	39.17	n/a	n/a	0.002122	NP Inter(normality)
Mercury (mg/L)	0.00021	104	n/a	n/a	85.58	n/a	n/a	0.004822	NP Inter(NDs)
Molybdenum (mg/L)	0.01	117	n/a	n/a	78.63	n/a	n/a	0.002475	NP Inter(NDs)
Selenium (mg/L)	0.006	120	n/a	n/a	90.83	n/a	n/a	0.002122	NP Inter(NDs)
Thallium (mg/L)	0.001	120	n/a	n/a	100	n/a	n/a	0.002122	NP Inter(NDs)

FIGURE G.

PLANT BRANCH PONDS B,C,D GWPS			
Constituent Name	**MCL**	**Background Limit**	**GWPS**
Antimony, Total (mg/L)	0.006	0.017	0.017
Arsenic, Total (mg/L)	0.01	0.005	0.01
Barium, Total (mg/L)	2	0.13	2
Beryllium, Total (mg/L)	0.004	0.0005	0.004
Cadmium, Total (mg/L)	0.005	0.0005	0.005
Chromium, Total (mg/L)	0.1	0.016	0.1
Cobalt, Total (mg/L)	n/a	0.014	0.014
Combined Radium, Total (pCi/L)	5	1.65	5
Fluoride, Total (mg/L)	4	0.42	4
Lead, Total (mg/L)	n/a	0.0013	0.0013
Lithium, Total (mg/L)	n/a	0.089	0.089
Mercury, Total (mg/L)	0.002	0.00021	0.002
Molybdenum, Total (mg/L)	n/a	0.01	0.01
Selenium, Total (mg/L)	0.05	0.006	0.05
Thallium, Total (mg/L)	0.002	0.001	0.002

**Highlighted cells indicate 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 AP Printed 12/2/2021, 10:32 AM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Cadmium (mg/L)	**BRGWC-50**	**0.04274**	**0.0135**	**0.005**	**Yes**	**15**	**0.03023**	**0.02529**	**0**	**None**	**sqrt(x)**	**0.01**	**Param.**
Cobalt (mg/L)	**BRGWC-50**	**1.5**	**1.3**	**0.014**	**Yes**	**15**	**1.387**	**0.06399**	**0**	**None**	**No**	**0.01**	**NP (normality)**
Cobalt (mg/L)	**PZ-51I**	**0.041**	**0.017**	**0.014**	**Yes**	**8**	**0.02213**	**0.007772**	**0**	**None**	**No**	**0.004**	**NP (normality)**

Confidence Intervals - All Results

Plant Branch Client: Southern Company Data: Plant Branch AP Printed 12/2/2021, 10:32 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	0.0007	0.017	No	15	0.002847	0.0005939	93.33	None	No	0.01	NP (NDs)
Antimony (mg/L)	BRGWC-32S	0.003	0.0014	0.017	No	15	0.002893	0.0004131	93.33	None	No	0.01	NP (NDs)
Antimony (mg/L)	BRGWC-45	0.0031	0.0012	0.017	No	16	0.002378	0.0009265	56.25	None	No	0.01	NP (normality)
Antimony (mg/L)	BRGWC-47	0.003	0.00035	0.017	No	16	0.002834	0.0006625	93.75	None	No	0.01	NP (NDs)
Antimony (mg/L)	BRGWC-50	0.003	0.00092	0.017	No	15	0.002523	0.000992	80	None	No	0.01	NP (NDs)
Antimony (mg/L)	BRGWC-52I	0.003	0.00091	0.017	No	15	0.002546	0.0009451	80	None	No	0.01	NP (NDs)
Antimony (mg/L)	PZ-51I	0.001766	0.0007453	0.017	No	6	0.002115	0.001011	50	Kaplan-Meier	sqrt(x)	0.01	Param.
Antimony (mg/L)	PZ-51S	0.003	0.00043	0.017	No	6	0.002372	0.001065	66.67	None	No	0.0155	NP (normality)
Arsenic (mg/L)	BRGWC-25I	0.005	0.00072	0.01	No	15	0.00385	0.001976	73.33	None	No	0.01	NP (normality)
Arsenic (mg/L)	BRGWC-27I	0.005	0.0011	0.01	No	15	0.00394	0.001825	73.33	None	No	0.01	NP (normality)
Arsenic (mg/L)	BRGWC-29I	0.005	0.00065	0.01	No	15	0.00324	0.001997	53.33	None	No	0.01	NP (normality)
Arsenic (mg/L)	BRGWC-30I	0.005	0.00056	0.01	No	15	0.004704	0.001146	93.33	None	No	0.01	NP (NDs)
Arsenic (mg/L)	BRGWC-32S	0.005	0.00053	0.01	No	15	0.004702	0.001154	93.33	None	No	0.01	NP (NDs)
Arsenic (mg/L)	BRGWC-45	0.005	0.00075	0.01	No	16	0.003756	0.001933	68.75	None	No	0.01	NP (normality)
Arsenic (mg/L)	BRGWC-47	0.005	0.00089	0.01	No	16	0.002827	0.00182	37.5	None	No	0.01	NP (normality)
Arsenic (mg/L)	BRGWC-50	0.005	0.0014	0.01	No	15	0.004173	0.001721	80	None	No	0.01	NP (NDs)
Arsenic (mg/L)	BRGWC-52I	0.005	0.0016	0.01	No	15	0.003478	0.001479	33.33	None	No	0.01	NP (normality)
Barium (mg/L)	BRGWC-25I	0.03643	0.02682	2	No	15	0.03163	0.007089	0	None	No	0.01	Param.
Barium (mg/L)	BRGWC-27I	0.01702	0.01492	2	No	15	0.01597	0.001551	0	None	No	0.01	Param.
Barium (mg/L)	BRGWC-29I	0.0195	0.01696	2	No	15	0.01823	0.001873	0	None	No	0.01	Param.
Barium (mg/L)	BRGWC-30I	0.02719	0.02171	2	No	15	0.02445	0.004044	0	None	No	0.01	Param.
Barium (mg/L)	BRGWC-32S	0.04406	0.02797	2	No	15	0.03601	0.01187	0	None	No	0.01	Param.
Barium (mg/L)	BRGWC-45	0.09639	0.07723	2	No	16	0.08681	0.01473	0	None	No	0.01	Param.
Barium (mg/L)	BRGWC-47	0.04407	0.0343	2	No	16	0.03918	0.007509	0	None	No	0.01	Param.
Barium (mg/L)	BRGWC-50	0.02149	0.01851	2	No	15	0.02	0.002204	0	None	No	0.01	Param.
Barium (mg/L)	BRGWC-52I	0.02605	0.01635	2	No	15	0.0212	0.007153	0	None	No	0.01	Param.
Barium (mg/L)	PZ-51I	0.01686	0.01281	2	No	6	0.01483	0.001472	0	None	No	0.01	Param.
Barium (mg/L)	PZ-51S	0.03674	0.02593	2	No	6	0.03133	0.003933	0	None	No	0.01	Param.
Beryllium (mg/L)	BRGWC-27I	0.0005	0.0001	0.004	No	16	0.00023	0.000166	25	None	No	0.01	NP (normality)
Beryllium (mg/L)	BRGWC-29I	0.001054	0.0007242	0.004	No	15	0.0008893	0.0002436	6.667	None	No	0.01	Param.
Beryllium (mg/L)	BRGWC-45	0.0005	0.000079	0.004	No	17	0.0004485	0.0001454	88.24	None	No	0.01	NP (NDs)
Beryllium (mg/L)	BRGWC-47	0.0005	0.000056	0.004	No	16	0.0004161	0.0001803	81.25	None	No	0.01	NP (NDs)
Beryllium (mg/L)	BRGWC-50	0.004915	0.002458	0.004	No	15	0.003687	0.001813	13.33	None	No	0.01	Param.
Beryllium (mg/L)	PZ-51I	0.0005	0.000064	0.004	No	6	0.0001508	0.0001716	16.67	None	No	0.0155	NP (normality)
Cadmium (mg/L)	BRGWC-27I	0.0005	0.00009	0.005	No	16	0.0004475	0.0001435	87.5	None	No	0.01	NP (NDs)
Cadmium (mg/L)	BRGWC-30I	0.0005	0.00008	0.005	No	16	0.0004738	0.000105	93.75	None	No	0.01	NP (NDs)
Cadmium (mg/L)	BRGWC-32S	0.0005	0.00011	0.005	No	16	0.0004244	0.0001627	81.25	None	No	0.01	NP (NDs)
Cadmium (mg/L)	BRGWC-45	0.0005	0.0002	0.005	No	17	0.0004146	0.0001599	76.47	None	No	0.01	NP (NDs)
Cadmium (mg/L)	BRGWC-47	0.0005	0.00015	0.005	No	16	0.0003175	0.0001687	43.75	None	No	0.01	NP (normality)
Cadmium (mg/L)	**BRGWC-50**	**0.04274**	**0.0135**	**0.005**	**Yes**	**15**	**0.03023**	**0.02529**	**0**	**None**	**sqrt(x)**	**0.01**	**Param.**
Cadmium (mg/L)	PZ-51I	0.01427	0.0009488	0.005	No	8	0.008004	0.0114	0	None	ln(x)	0.01	Param.
Chromium (mg/L)	BRGWC-25I	0.005	0.0016	0.1	No	15	0.004505	0.001311	86.67	None	No	0.01	NP (NDs)
Chromium (mg/L)	BRGWC-27I	0.005	0.003	0.1	No	15	0.0046	0.001121	86.67	None	No	0.01	NP (NDs)
Chromium (mg/L)	BRGWC-29I	0.02	0.005	0.1	No	15	0.006	0.003873	93.33	None	No	0.01	NP (NDs)
Chromium (mg/L)	BRGWC-30I	0.0051	0.005	0.1	No	15	0.005607	0.002322	86.67	None	No	0.01	NP (NDs)
Chromium (mg/L)	BRGWC-32S	0.005	0.0012	0.1	No	15	0.002773	0.001684	33.33	None	No	0.01	NP (normality)
Chromium (mg/L)	BRGWC-45	0.005	0.0014	0.1	No	16	0.004246	0.00163	81.25	None	No	0.01	NP (NDs)
Chromium (mg/L)	BRGWC-47	0.005	0.00092	0.1	No	16	0.004009	0.001789	75	None	No	0.01	NP (normality)
Chromium (mg/L)	BRGWC-50	0.005	0.00071	0.1	No	15	0.003383	0.002035	53.33	None	No	0.01	NP (normality)
Chromium (mg/L)	BRGWC-52I	0.005	0.0017	0.1	No	15	0.00478	0.0008521	93.33	None	No	0.01	NP (NDs)
Chromium (mg/L)	PZ-51I	0.005	0.0008	0.1	No	6	0.00363	0.002123	66.67	None	No	0.0155	NP (normality)
Chromium (mg/L)	PZ-51S	0.005	0.00042	0.1	No	6	0.003508	0.002312	66.67	None	No	0.0155	NP (normality)
Cobalt (mg/L)	BRGWC-25I	0.006964	0.004102	0.014	No	15	0.005533	0.002112	6.667	None	No	0.01	Param.
Cobalt (mg/L)	BRGWC-27I	0.01096	0.00775	0.014	No	16	0.009356	0.00247	0	None	No	0.01	Param.
Cobalt (mg/L)	BRGWC-29I	0.01006	0.006469	0.014	No	15	0.008367	0.002766	6.667	None	sqrt(x)	0.01	Param.

Confidence Intervals - All Results

Plant Branch Client: Southern Company Data: Plant Branch AP Printed 12/2/2021, 10:32 AM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Cobalt (mg/L)	BRGWC-30I	0.0016	0.00078	0.014	No	16	0.001817	0.001608	18.75	None	No	0.01	NP (normality)
Cobalt (mg/L)	BRGWC-32S	0.005	0.0025	0.014	No	16	0.004594	0.001143	87.5	None	No	0.01	NP (NDs)
Cobalt (mg/L)	BRGWC-45	0.015	0.0064	0.014	No	17	0.01331	0.01501	0	None	No	0.01	NP (normality)
Cobalt (mg/L)	BRGWC-47	0.003786	0.0007947	0.014	No	16	0.002822	0.003337	12.5	None	x^(1/3)	0.01	Param.
Cobalt (mg/L)	**BRGWC-50**	**1.5**	**1.3**	**0.014**	**Yes**	**15**	**1.387**	**0.06399**	**0**	**None**	**No**	**0.01**	**NP (normality)**
Cobalt (mg/L)	BRGWC-52I	0.005	0.0012	0.014	No	15	0.003566	0.001825	53.33	None	No	0.01	NP (normality)
Cobalt (mg/L)	**PZ-51I**	**0.041**	**0.017**	**0.014**	**Yes**	**8**	**0.02213**	**0.007772**	**0**	**None**	**No**	**0.004**	**NP (normality)**
Cobalt (mg/L)	PZ-51S	0.008222	0.00312	0.014	No	7	0.005671	0.002148	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	BRGWC-25I	1.518	0.5183	5	No	15	1.119	0.9983	0	None	x^(1/3)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	BRGWC-27I	1.453	0.5539	5	No	15	1.058	0.8075	0	None	sqrt(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	BRGWC-29I	1.643	1.194	5	No	15	1.418	0.3315	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	BRGWC-30I	1.133	0.6188	5	No	15	0.8757	0.3791	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	BRGWC-32S	1.098	0.4761	5	No	15	0.7871	0.4588	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	BRGWC-45	0.8176	0.3742	5	No	16	0.5959	0.3407	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	BRGWC-47	1.444	0.8221	5	No	16	1.133	0.478	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	BRGWC-50	2.012	1.236	5	No	15	1.624	0.5732	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	BRGWC-52I	2.299	1.396	5	No	15	1.847	0.6669	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	PZ-51I	11.7	0.771	5	No	6	2.999	4.287	0	None	No	0.0155	NP (normality)
Combined Radium 226 + 228 (pCi/L)	PZ-51S	10.86	-3.1e-8	5	No	6	3.51	6.673	0	None	x^(1/3)	0.01	Param.
Fluoride (mg/L)	BRGWC-25I	0.29	0.14	4	No	16	0.2131	0.143	6.25	None	No	0.01	NP (normality)
Fluoride (mg/L)	BRGWC-27I	0.2684	0.1508	4	No	16	0.2096	0.0904	12.5	None	No	0.01	Param.
Fluoride (mg/L)	BRGWC-29I	0.227	0.09209	4	No	16	0.1818	0.1287	12.5	None	ln(x)	0.01	Param.
Fluoride (mg/L)	BRGWC-30I	0.3663	0.1278	4	No	16	0.2657	0.2246	6.25	None	sqrt(x)	0.01	Param.
Fluoride (mg/L)	BRGWC-32S	0.11	0.09	4	No	16	0.1063	0.03914	62.5	None	No	0.01	NP (normality)
Fluoride (mg/L)	BRGWC-45	0.12	0.067	4	No	17	0.1815	0.2444	52.94	None	No	0.01	NP (normality)
Fluoride (mg/L)	BRGWC-47	0.34	0.076	4	No	17	0.2491	0.268	47.06	None	No	0.01	NP (normality)
Fluoride (mg/L)	BRGWC-50	0.8598	0.3393	4	No	16	0.6356	0.469	0	None	sqrt(x)	0.01	Param.
Fluoride (mg/L)	BRGWC-52I	0.2422	0.1306	4	No	15	0.1864	0.08242	6.667	None	No	0.01	Param.
Fluoride (mg/L)	PZ-51I	0.1	0.061	4	No	7	0.09443	0.01474	85.71	None	No	0.008	NP (NDs)
Fluoride (mg/L)	PZ-51S	0.1187	0.04559	4	No	6	0.08217	0.02663	0	None	No	0.01	Param.
Lead (mg/L)	BRGWC-25I	0.001	0.00011	0.0013	No	15	0.0009407	0.0002298	93.33	None	No	0.01	NP (NDs)
Lead (mg/L)	BRGWC-27I	0.001	0.000063	0.0013	No	15	0.0009375	0.0002419	93.33	None	No	0.01	NP (NDs)
Lead (mg/L)	BRGWC-29I	0.0005144	0.0002945	0.0013	No	14	0.0004221	0.0002025	7.143	None	ln(x)	0.01	Param.
Lead (mg/L)	BRGWC-30I	0.001	0.00011	0.0013	No	15	0.0009407	0.0002298	93.33	None	No	0.01	NP (NDs)
Lead (mg/L)	BRGWC-45	0.001	0.00026	0.0013	No	16	0.0008452	0.0003352	81.25	None	No	0.01	NP (NDs)
Lead (mg/L)	BRGWC-47	0.001	0.00012	0.0013	No	16	0.0008271	0.0003719	81.25	None	No	0.01	NP (NDs)
Lead (mg/L)	BRGWC-50	0.001	0.000085	0.0013	No	15	0.0005634	0.0004385	46.67	None	No	0.01	NP (normality)
Lead (mg/L)	BRGWC-52I	0.001	0.000042	0.0013	No	15	0.0009361	0.0002474	93.33	None	No	0.01	NP (NDs)
Lead (mg/L)	PZ-51I	0.001	0.00017	0.0013	No	6	0.000755	0.0003843	66.67	None	No	0.0155	NP (normality)
Lithium (mg/L)	BRGWC-27I	0.0021	0.0012	0.089	No	15	0.00332	0.004748	13.33	None	No	0.01	NP (normality)
Lithium (mg/L)	BRGWC-29I	0.003686	0.003074	0.089	No	15	0.00338	0.0004523	0	None	No	0.01	Param.
Lithium (mg/L)	BRGWC-30I	0.01628	0.01159	0.089	No	15	0.01393	0.003458	0	None	No	0.01	Param.
Lithium (mg/L)	BRGWC-32S	0.0023	0.002	0.089	No	15	0.00386	0.004525	13.33	None	No	0.01	NP (normality)
Lithium (mg/L)	BRGWC-45	0.003584	0.002962	0.089	No	15	0.003273	0.000459	0	None	No	0.01	Param.
Lithium (mg/L)	BRGWC-47	0.04398	0.04057	0.089	No	16	0.04228	0.002613	0	None	No	0.01	Param.
Lithium (mg/L)	BRGWC-50	0.04437	0.03803	0.089	No	15	0.0412	0.004678	0	None	No	0.01	Param.
Lithium (mg/L)	BRGWC-52I	0.00708	0.003138	0.089	No	15	0.005313	0.003385	6.667	None	sqrt(x)	0.01	Param.
Lithium (mg/L)	PZ-51I	0.026	0.019	0.089	No	6	0.02067	0.002733	0	None	No	0.0155	NP (normality)
Lithium (mg/L)	PZ-51S	0.015	0.0012	0.089	No	6	0.0127	0.005634	83.33	None	No	0.0155	NP (NDs)
Mercury (mg/L)	BRGWC-25I	0.0002	0.000083	0.002	No	13	0.0001787	0.00005275	84.62	None	No	0.01	NP (NDs)
Mercury (mg/L)	BRGWC-27I	0.0002	0.00005	0.002	No	13	0.0001767	0.0000569	84.62	None	No	0.01	NP (NDs)
Mercury (mg/L)	BRGWC-29I	0.0002	0.00007	0.002	No	13	0.0001698	0.00005851	76.92	None	No	0.01	NP (NDs)
Mercury (mg/L)	BRGWC-30I	0.0002	0.00007	0.002	No	13	0.0001686	0.00006029	76.92	None	No	0.01	NP (NDs)
Mercury (mg/L)	BRGWC-32S	0.0002	0.00009	0.002	No	13	0.0001748	0.00004809	76.92	None	No	0.01	NP (NDs)
Mercury (mg/L)	PZ-51I	0.0002	0.000099	0.002	No	6	0.0001832	0.00004123	83.33	None	No	0.0155	NP (NDs)

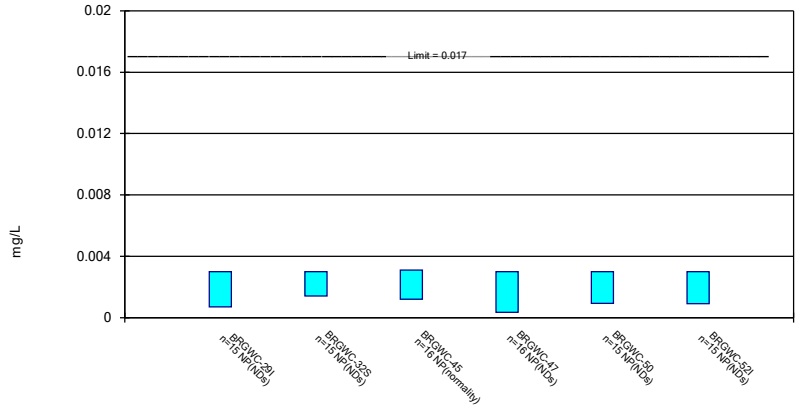
Confidence Intervals - All Results

Plant Branch Client: Southern Company Data: Plant Branch AP Printed 12/2/2021, 10:32 AM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Molybdenum (mg/L)	BRGWC-25I	0.01	0.00089	0.01	No	14	0.007393	0.004278	71.43	None	No	0.01	NP (normality)
Molybdenum (mg/L)	BRGWC-30I	0.01	0.0022	0.01	No	14	0.008141	0.003705	78.57	None	No	0.01	NP (NDs)
Molybdenum (mg/L)	BRGWC-45	0.01	0.00076	0.01	No	15	0.009384	0.002386	93.33	None	No	0.01	NP (NDs)
Molybdenum (mg/L)	BRGWC-50	0.01	0.0033	0.01	No	14	0.008964	0.002642	85.71	None	No	0.01	NP (NDs)
Molybdenum (mg/L)	BRGWC-52I	0.01	0.0012	0.01	No	14	0.006171	0.00384	42.86	None	No	0.01	NP (normality)
Selenium (mg/L)	BRGWC-25I	0.005	0.0021	0.05	No	15	0.004807	0.0007488	93.33	None	No	0.01	NP (NDs)
Selenium (mg/L)	BRGWC-27I	0.00383	0.00233	0.05	No	15	0.003687	0.001248	26.67	Kaplan-Meier	No	0.01	Param.
Selenium (mg/L)	BRGWC-29I	0.0058	0.0039	0.05	No	15	0.004807	0.001439	46.67	None	No	0.01	NP (normality)
Selenium (mg/L)	BRGWC-30I	0.005	0.0038	0.05	No	15	0.004567	0.0009131	73.33	None	No	0.01	NP (normality)
Selenium (mg/L)	BRGWC-32S	0.12	0.0019	0.05	No	16	0.05476	0.05532	25	None	No	0.01	NP (normality)
Selenium (mg/L)	BRGWC-45	0.005	0.0029	0.05	No	16	0.004869	0.000525	93.75	None	No	0.01	NP (NDs)
Selenium (mg/L)	BRGWC-47	0.005	0.0017	0.05	No	16	0.00385	0.001557	62.5	None	No	0.01	NP (normality)
Selenium (mg/L)	BRGWC-50	0.005	0.002	0.05	No	15	0.003747	0.001348	46.67	None	No	0.01	NP (normality)
Thallium (mg/L)	BRGWC-29I	0.0005	0.00016	0.002	No	15	0.0002213	0.0001141	13.33	None	No	0.01	NP (normality)

Non-Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01.

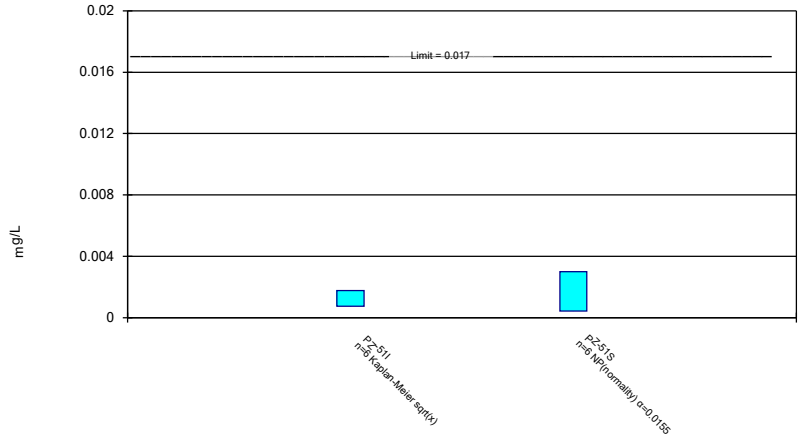


Constituent: Antimony Analysis Run 12/2/2021 10:29 AM View: Confidence Intervals Pond B,C,D
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.31g Sanitas software utilized by 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.

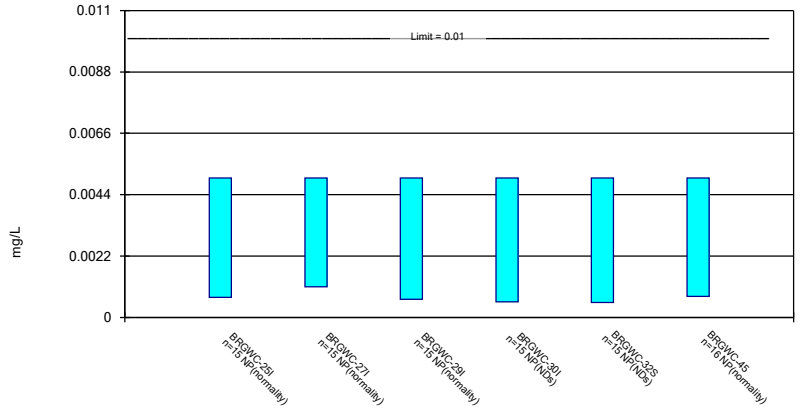


Constituent: Antimony Analysis Run 12/2/2021 10:29 AM View: Confidence Intervals Pond B,C,D
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.31g Sanitas software utilized by Groundwater Stats Consulting. UG

Non-Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01.

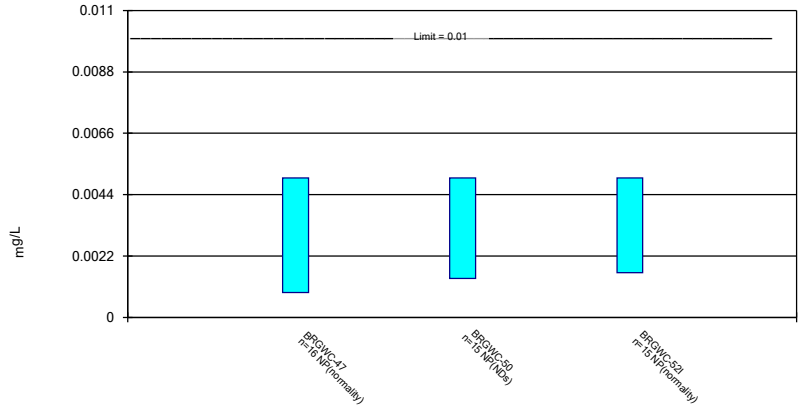


Constituent: Arsenic Analysis Run 12/2/2021 10:29 AM View: Confidence Intervals Pond B,C,D
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.31g Sanitas software utilized by Groundwater Stats Consulting. UG

Non-Parametric Confidence Interval

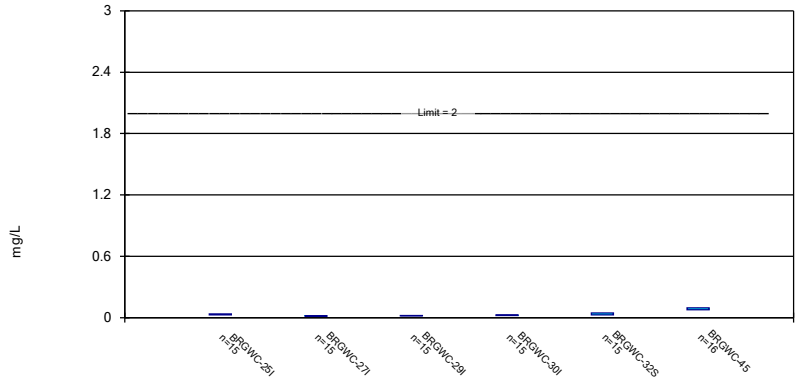
Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Arsenic Analysis Run 12/2/2021 10:29 AM View: Confidence Intervals Pond B,C,D
Plant Branch Client: Southern Company Data: Plant Branch AP

Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.

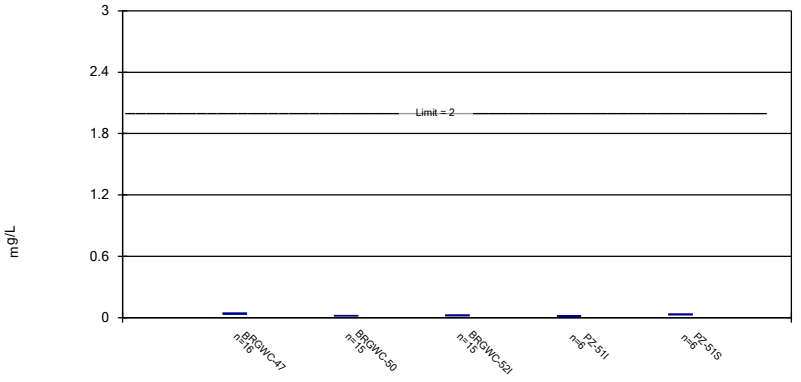


Constituent: Barium Analysis Run 12/2/2021 10:29 AM View: Confidence Intervals Pond B,C,D
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.31g Sanitas software utilized by 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.

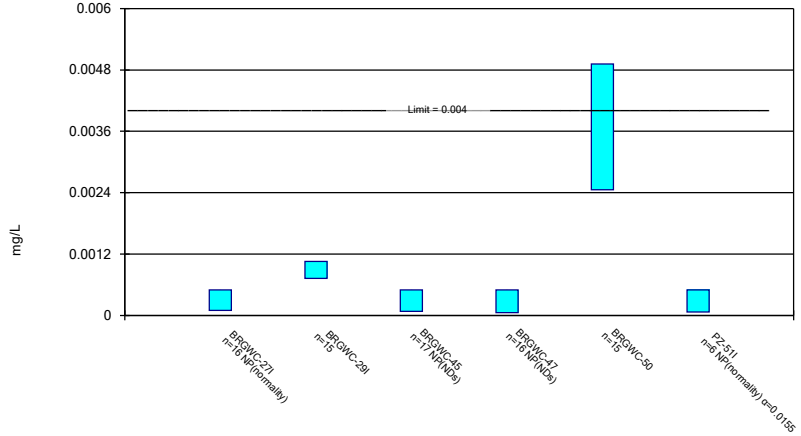


Constituent: Barium Analysis Run 12/2/2021 10:29 AM View: Confidence Intervals Pond B,C,D
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.31g Sanitas software utilized by 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.

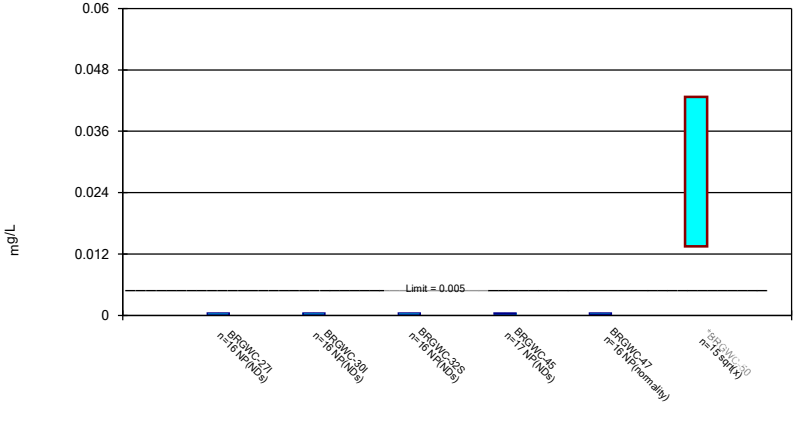


Constituent: Beryllium Analysis Run 12/2/2021 10:29 AM View: Confidence Intervals Pond B,C,D
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.31g Sanitas software utilized by Groundwater Stats Consulting. UG

Parametric and Non-Parametric (NP) Confidence Interval

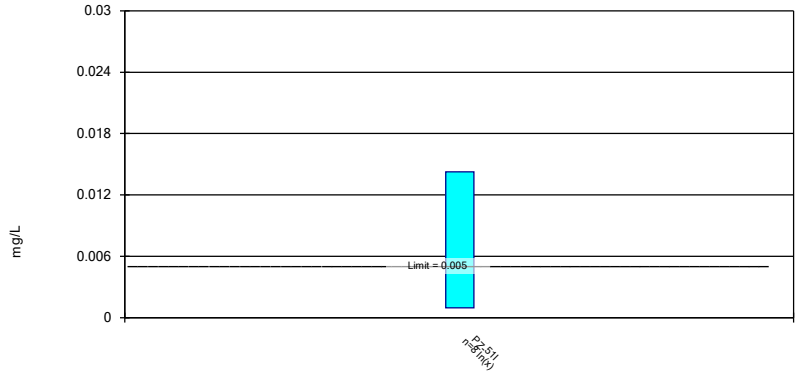
Compliance limit is exceeded.* Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Cadmium Analysis Run 12/2/2021 10:29 AM View: Confidence Intervals Pond B,C,D
Plant Branch Client: Southern Company Data: Plant Branch AP

Parametric Confidence Interval

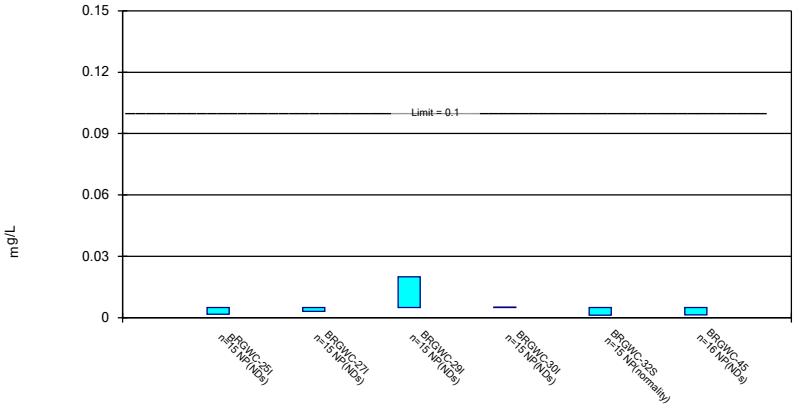
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Cadmium Analysis Run 12/2/2021 10:29 AM View: Confidence Intervals Pond B,C,D
Plant Branch Client: Southern Company Data: Plant Branch AP

Non-Parametric Confidence Interval

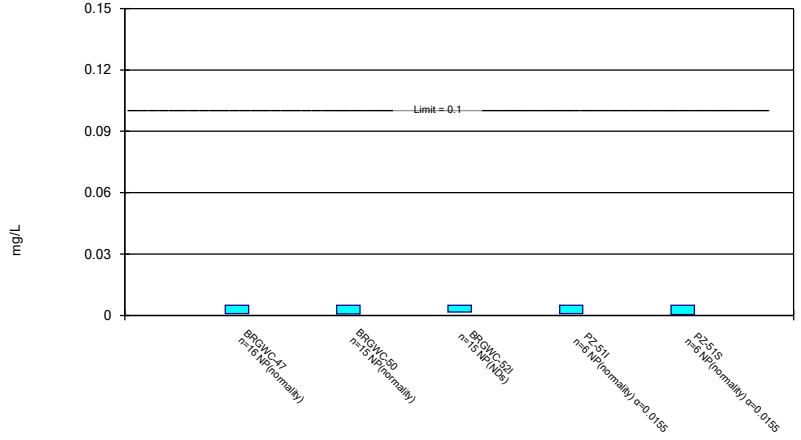
Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Chromium Analysis Run 12/2/2021 10:29 AM View: Confidence Intervals Pond B,C,D
Plant Branch Client: Southern Company Data: Plant Branch AP

Non-Parametric Confidence Interval

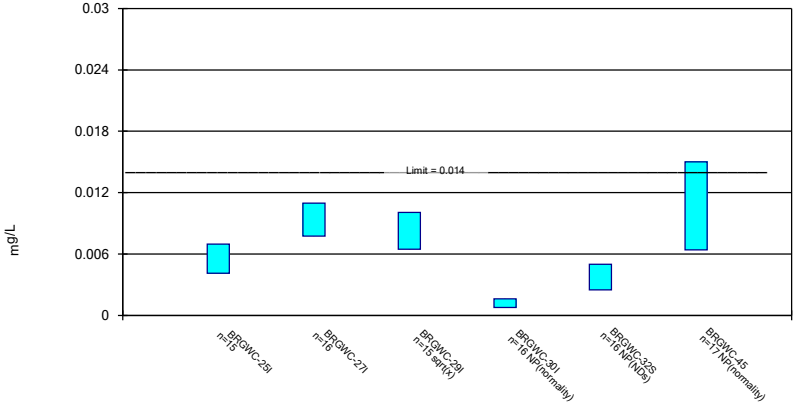
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted.



Constituent: Chromium Analysis Run 12/2/2021 10:29 AM View: Confidence Intervals Pond B,C,D
Plant Branch Client: Southern Company Data: Plant Branch AP

Parametric and Non-Parametric (NP) Confidence Interval

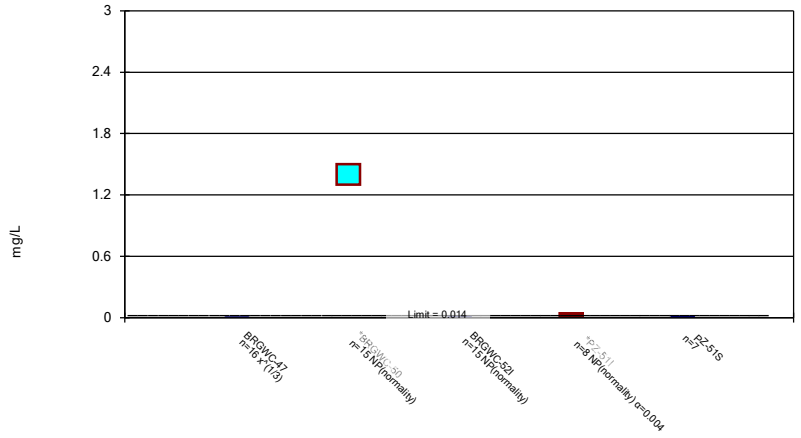
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Cobalt Analysis Run 12/2/2021 10:29 AM View: Confidence Intervals Pond B,C,D
Plant Branch Client: Southern Company Data: Plant Branch AP

Parametric and Non-Parametric (NP) Confidence Interval

Compliance limit is exceeded.* Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.

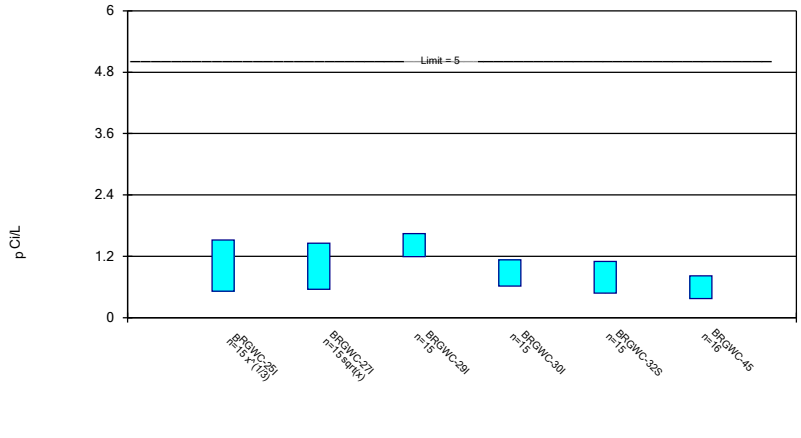


Constituent: Cobalt Analysis Run 12/2/2021 10:29 AM View: Confidence Intervals Pond B,C,D
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.31g Sanitas software utilized by 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.

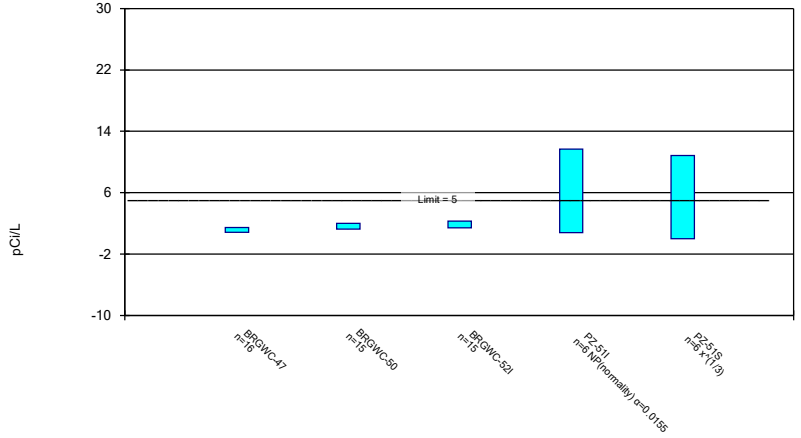


Constituent: Combined Radium 226 + 228 Analysis Run 12/2/2021 10:29 AM View: Confidence Intervals
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.31g Sanitas software utilized by 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.

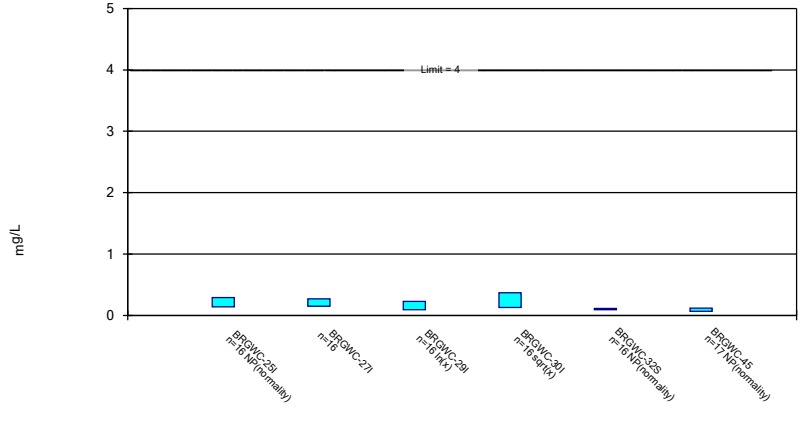


Constituent: Combined Radium 226 + 228 Analysis Run 12/2/2021 10:29 AM View: Confidence Intervals
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.31g Sanitas software utilized by Groundwater Stats Consulting. UG

Parametric and Non-Parametric (NP) Confidence Interval

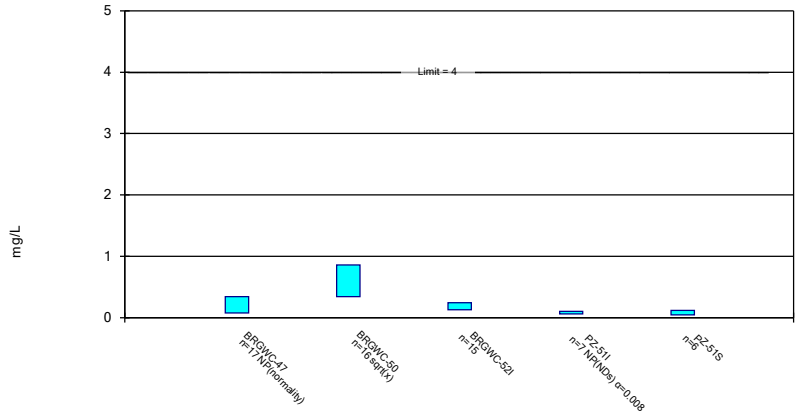
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Fluoride Analysis Run 12/2/2021 10:29 AM View: Confidence Intervals Pond B,C,D
Plant Branch Client: Southern Company Data: Plant Branch AP

Parametric and Non-Parametric (NP) Confidence Interval

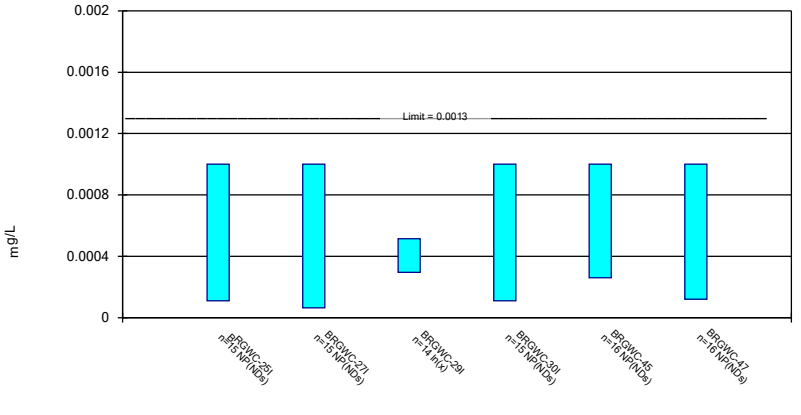
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Fluoride Analysis Run 12/2/2021 10:29 AM View: Confidence Intervals Pond B,C,D
Plant Branch Client: Southern Company Data: Plant Branch AP

Parametric and Non-Parametric (NP) Confidence Interval

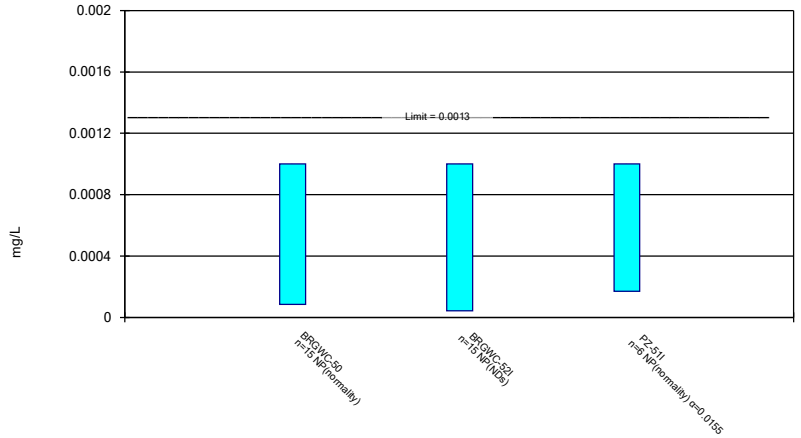
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Lead Analysis Run 12/2/2021 10:29 AM View: Confidence Intervals Pond B,C,D
Plant Branch Client: Southern Company Data: Plant Branch AP

Non-Parametric Confidence Interval

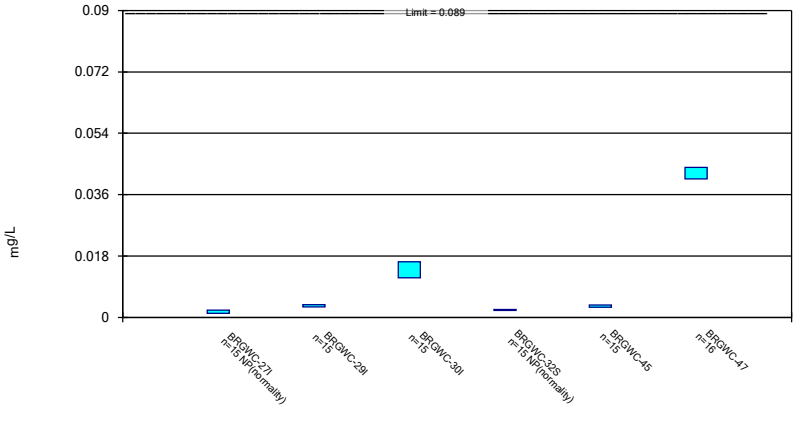
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted.



Constituent: Lead Analysis Run 12/2/2021 10:30 AM View: Confidence Intervals Pond B,C,D
Plant Branch Client: Southern Company Data: Plant Branch AP

Parametric and Non-Parametric (NP) Confidence Interval

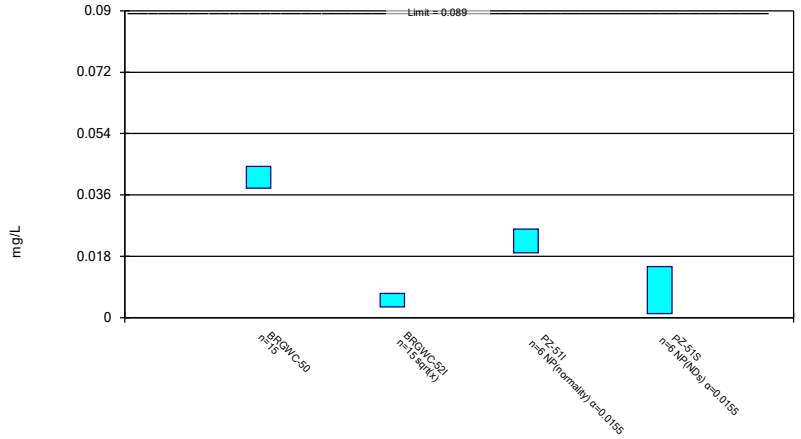
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Lithium Analysis Run 12/2/2021 10:30 AM View: Confidence Intervals Pond B,C,D
Plant Branch Client: Southern Company Data: Plant Branch AP

Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.

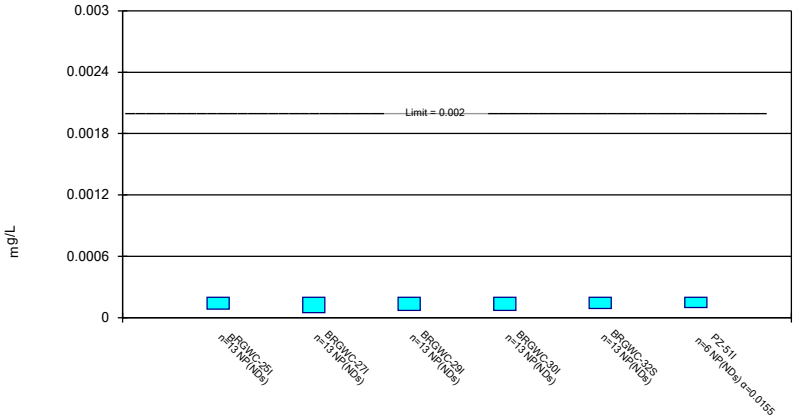


Constituent: Lithium Analysis Run 12/2/2021 10:30 AM View: Confidence Intervals Pond B,C,D
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.31g Sanitas software utilized by Groundwater Stats Consulting. UG

Non-Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted.

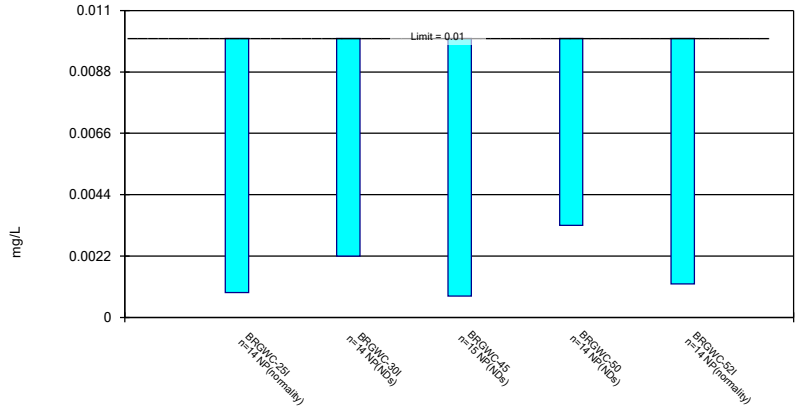


Constituent: Mercury Analysis Run 12/2/2021 10:30 AM View: Confidence Intervals Pond B,C,D
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.31g Sanitas software utilized by Groundwater Stats Consulting. UG

Non-Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01.

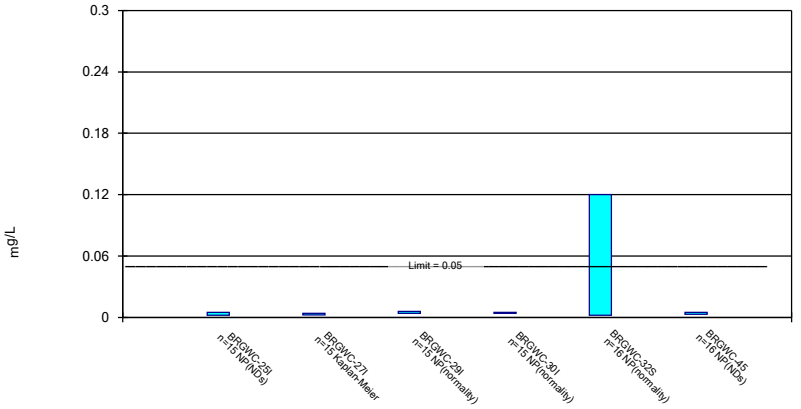


Constituent: Molybdenum Analysis Run 12/2/2021 10:30 AM View: Confidence Intervals Pond B,C,D
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.31g Sanitas software utilized by Groundwater Stats Consulting. UG

Parametric and Non-Parametric (NP) Confidence Interval

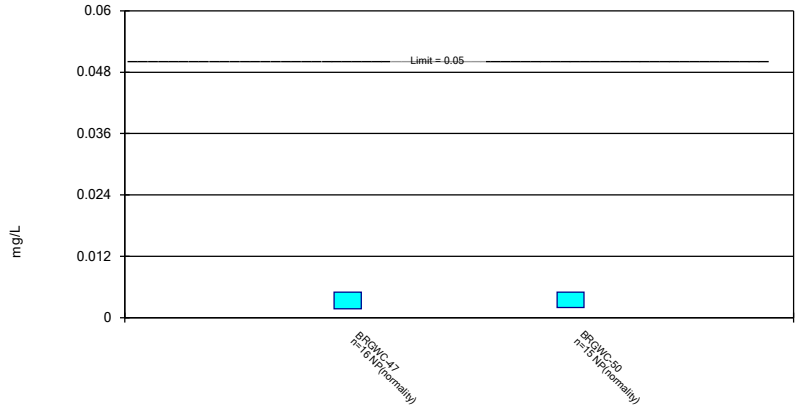
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Selenium Analysis Run 12/2/2021 10:30 AM View: Confidence Intervals Pond B,C,D
Plant Branch Client: Southern Company Data: Plant Branch AP

Non-Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01.

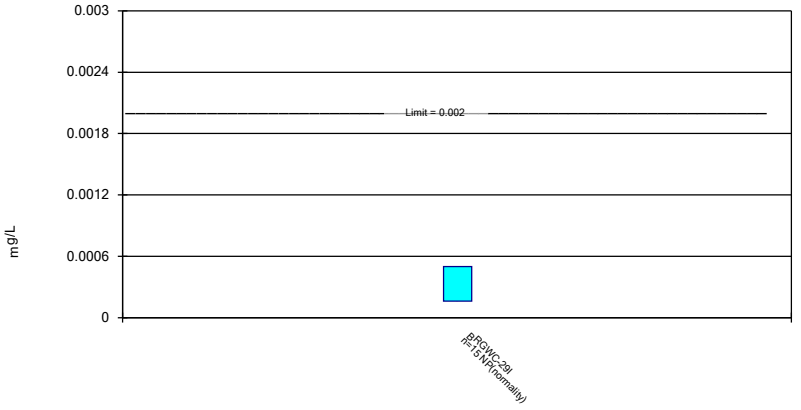


Constituent: Selenium Analysis Run 12/2/2021 10:30 AM View: Confidence Intervals Pond B,C,D
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.31g Sanitas software utilized by Groundwater Stats Consulting. UG

Non-Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Thallium Analysis Run 12/2/2021 10:30 AM View: Confidence Intervals Pond B,C,D
Plant Branch Client: Southern Company Data: Plant Branch AP

FIGURE I.

Trend Tests - Confidence Interval Exceedances - All Results (No Significant)

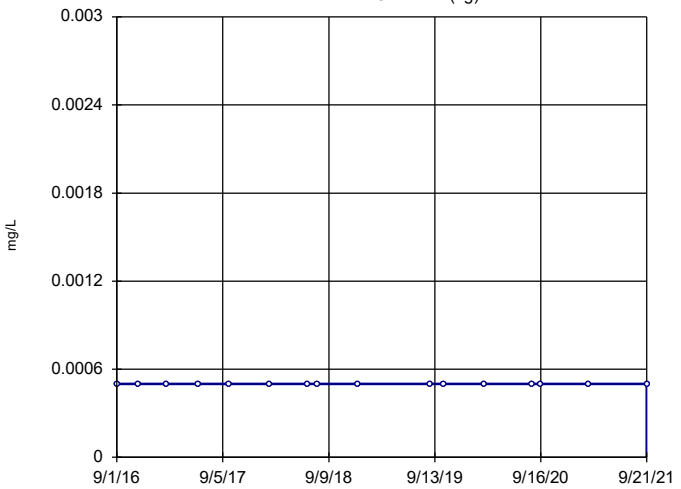
Plant Branch Client: Southern Company Data: Plant Branch AP Printed 12/2/2021, 10:20 AM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Cadmium (mg/L)	BRGWA-12I (bg)	0	0	58	No	16	100	n/a	n/a	0.01	NP
Cadmium (mg/L)	BRGWA-12S (bg)	0	0	58	No	16	100	n/a	n/a	0.01	NP
Cadmium (mg/L)	BRGWA-23S (bg)	0	1	53	No	15	86.67	n/a	n/a	0.01	NP
Cadmium (mg/L)	BRGWA-2I (bg)	0	0	53	No	15	100	n/a	n/a	0.01	NP
Cadmium (mg/L)	BRGWA-2S (bg)	0	0	53	No	15	100	n/a	n/a	0.01	NP
Cadmium (mg/L)	BRGWA-5I (bg)	0	0	53	No	15	100	n/a	n/a	0.01	NP
Cadmium (mg/L)	BRGWA-5S (bg)	0	0	53	No	15	100	n/a	n/a	0.01	NP
Cadmium (mg/L)	BRGWA-6S (bg)	0	0	53	No	15	100	n/a	n/a	0.01	NP
Cadmium (mg/L)	BRGWC-50	-0.01101	-46	-53	No	15	0	n/a	n/a	0.01	NP
Cobalt (mg/L)	BRGWA-12I (bg)	0	0	58	No	16	100	n/a	n/a	0.01	NP
Cobalt (mg/L)	BRGWA-12S (bg)	0	0	58	No	16	100	n/a	n/a	0.01	NP
Cobalt (mg/L)	BRGWA-23S (bg)	-0.0007052	-26	-53	No	15	13.33	n/a	n/a	0.01	NP
Cobalt (mg/L)	BRGWA-2I (bg)	0	11	53	No	15	80	n/a	n/a	0.01	NP
Cobalt (mg/L)	BRGWA-2S (bg)	-0.0004551	-45	-53	No	15	13.33	n/a	n/a	0.01	NP
Cobalt (mg/L)	BRGWA-5I (bg)	-0.000186	-42	-43	No	13	0	n/a	n/a	0.01	NP
Cobalt (mg/L)	BRGWA-5S (bg)	0	16	53	No	15	66.67	n/a	n/a	0.01	NP
Cobalt (mg/L)	BRGWA-6S (bg)	0	-9	-53	No	15	66.67	n/a	n/a	0.01	NP
Cobalt (mg/L)	BRGWC-50	0	10	53	No	15	0	n/a	n/a	0.01	NP
Cobalt (mg/L)	PZ-51I	0	-1	-21	No	8	0	n/a	n/a	0.01	NP

Sanitas™ v.9.6.31g Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

BRGWA-12I (bg)



n = 16

Slope = 0
units per year.

Mann-Kendall
statistic = 0
critical = 58

Trend not sig-
nificant at 99%
confidence level
(α = 0.005 per
tail).

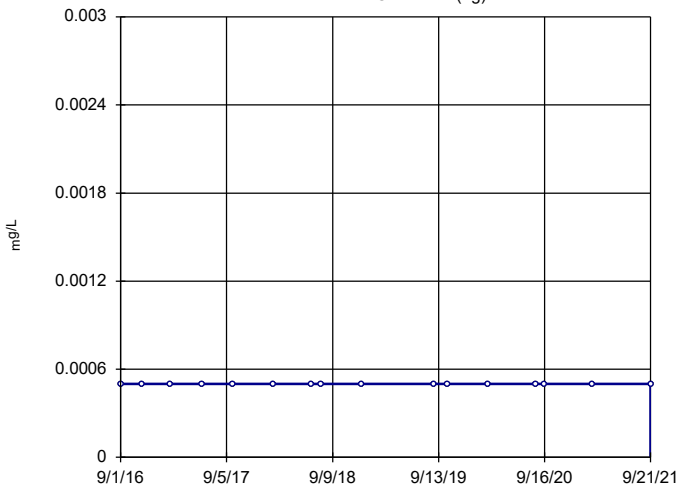
Constituent: Cadmium Analysis Run 12/2/2021 10:18 AM

Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.31g Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

BRGWA-12S (bg)



n = 16

Slope = 0
units per year.

Mann-Kendall
statistic = 0
critical = 58

Trend not sig-
nificant at 99%
confidence level
(α = 0.005 per
tail).

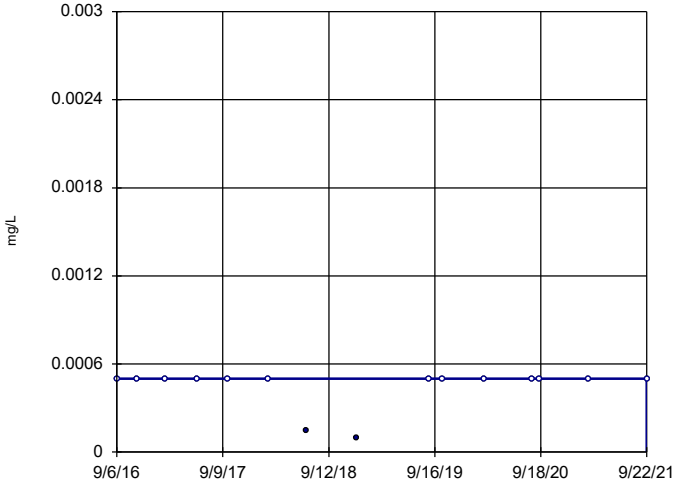
Constituent: Cadmium Analysis Run 12/2/2021 10:18 AM

Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.31g Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

BRGWA-23S (bg)



n = 15

Slope = 0
units per year.

Mann-Kendall
statistic = 1
critical = 53

Trend not sig-
nificant at 99%
confidence level
(α = 0.005 per
tail).

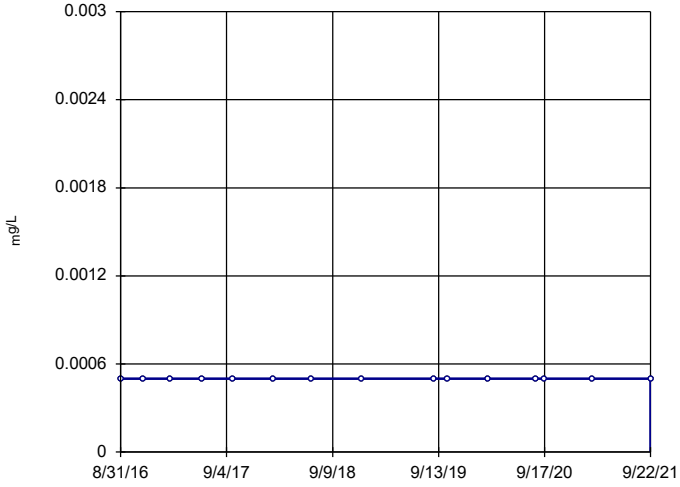
Constituent: Cadmium Analysis Run 12/2/2021 10:18 AM

Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.31g Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

BRGWA-2I (bg)



n = 15

Slope = 0
units per year.

Mann-Kendall
statistic = 0
critical = 53

Trend not sig-
nificant at 99%
confidence level
(α = 0.005 per
tail).

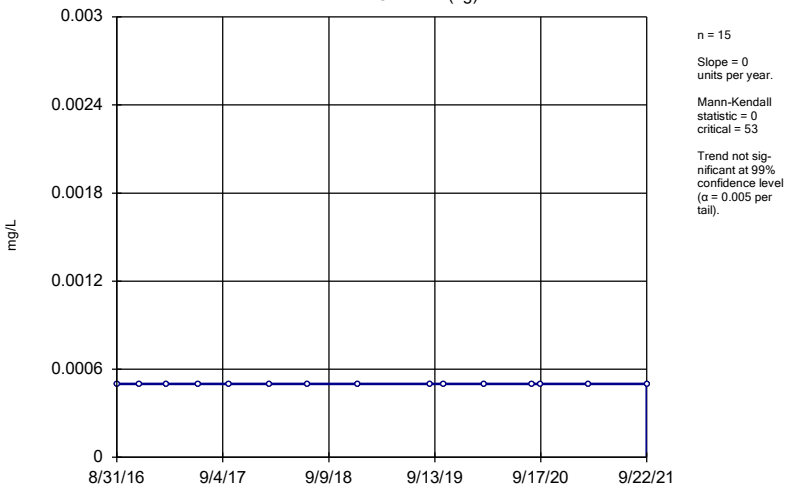
Constituent: Cadmium Analysis Run 12/2/2021 10:18 AM

Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.31g Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

BRGWA-2S (bg)



n = 15

Slope = 0 units per year.

Mann-Kendall statistic = 0 critical = 53

Trend not significant at 99% confidence level (α = 0.005 per tail).

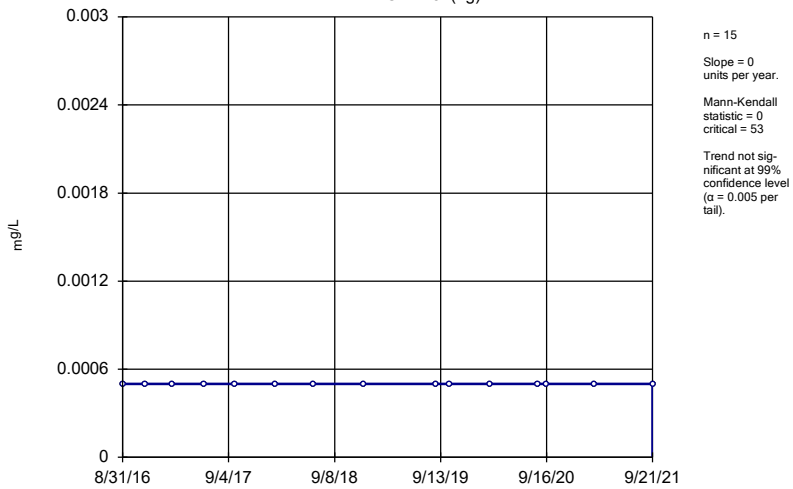
Constituent: Cadmium Analysis Run 12/2/2021 10:18 AM

Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.31g Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

BRGWA-5I (bg)



n = 15

Slope = 0 units per year.

Mann-Kendall statistic = 0 critical = 53

Trend not significant at 99% confidence level (α = 0.005 per tail).

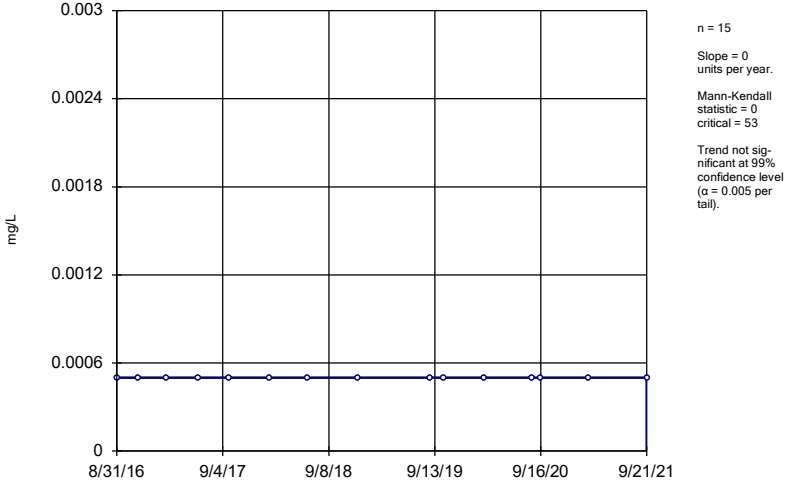
Constituent: Cadmium Analysis Run 12/2/2021 10:18 AM

Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.31g Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

BRGWA-5S (bg)



n = 15

Slope = 0 units per year.

Mann-Kendall statistic = 0 critical = 53

Trend not significant at 99% confidence level (α = 0.005 per tail).

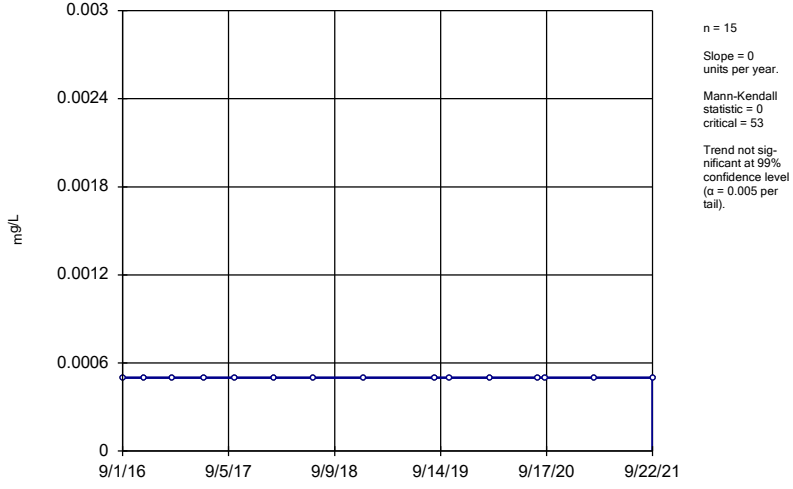
Constituent: Cadmium Analysis Run 12/2/2021 10:18 AM

Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.31g Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

BRGWA-6S (bg)



n = 15

Slope = 0 units per year.

Mann-Kendall statistic = 0 critical = 53

Trend not significant at 99% confidence level (α = 0.005 per tail).

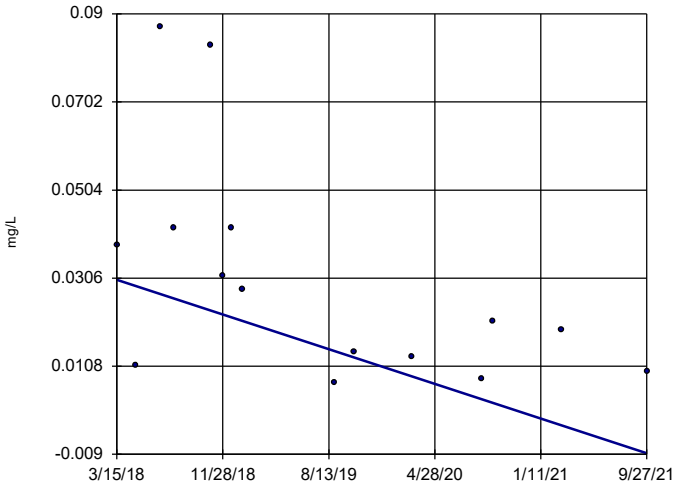
Constituent: Cadmium Analysis Run 12/2/2021 10:18 AM

Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.31g Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

BRGWC-50



n = 15

Slope = -0.01101 units per year.

Mann-Kendall statistic = -46
critical = -53

Trend not significant at 99% confidence level (α = 0.005 per tail).

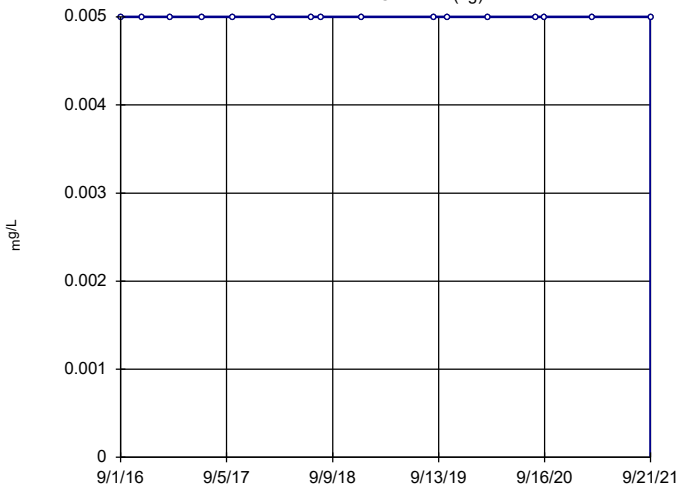
Constituent: Cadmium Analysis Run 12/2/2021 10:18 AM

Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.31g Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

BRGWA-12I (bg)



n = 16

Slope = 0 units per year.

Mann-Kendall statistic = 0
critical = 58

Trend not significant at 99% confidence level (α = 0.005 per tail).

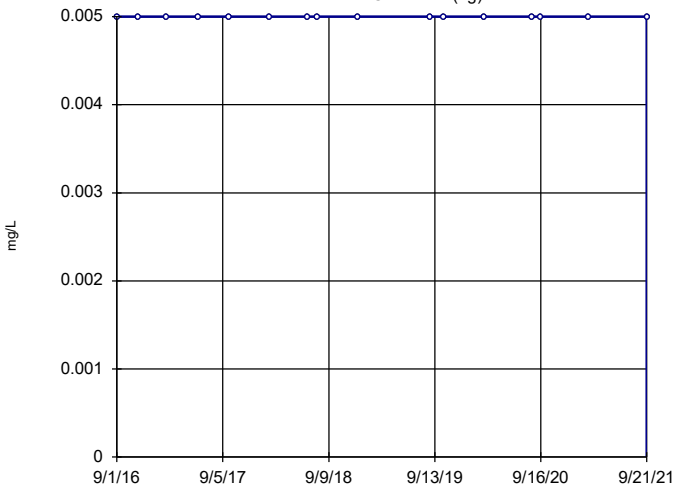
Constituent: Cobalt Analysis Run 12/2/2021 10:18 AM

Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.31g Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

BRGWA-12S (bg)



n = 16

Slope = 0 units per year.

Mann-Kendall statistic = 0
critical = 58

Trend not significant at 99% confidence level (α = 0.005 per tail).

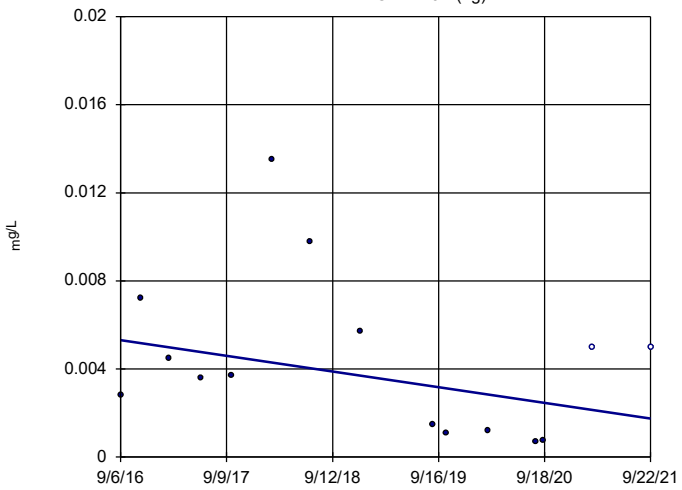
Constituent: Cobalt Analysis Run 12/2/2021 10:18 AM

Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.31g Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

BRGWA-23S (bg)



n = 15

Slope = -0.0007052 units per year.

Mann-Kendall statistic = -26
critical = -53

Trend not significant at 99% confidence level (α = 0.005 per tail).

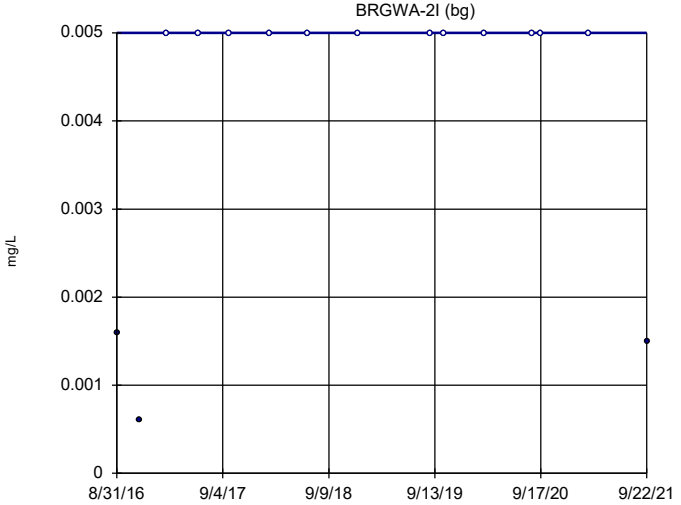
Constituent: Cobalt Analysis Run 12/2/2021 10:18 AM

Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.31g Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

BRGWA-2I (bg)



n = 15

Slope = 0
units per year.

Mann-Kendall
statistic = 11
critical = 53

Trend not sig-
nificant at 99%
confidence level
(α = 0.005 per
tail).

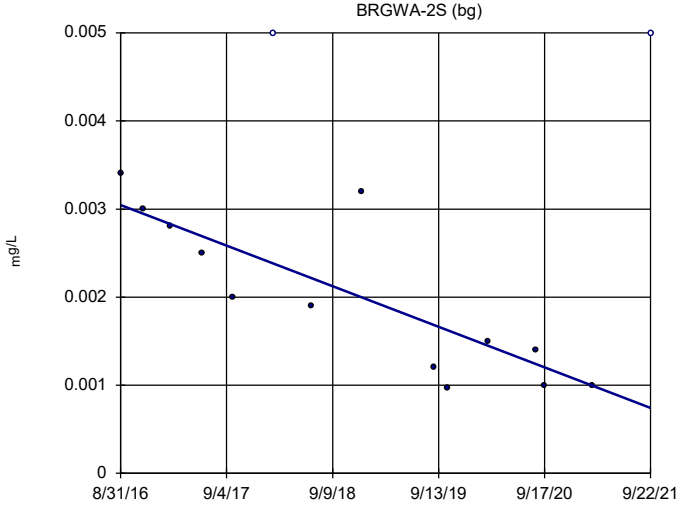
Constituent: Cobalt Analysis Run 12/2/2021 10:18 AM

Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.31g Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

BRGWA-2S (bg)



n = 15

Slope = -0.0004551
units per year.

Mann-Kendall
statistic = -45
critical = -53

Trend not sig-
nificant at 99%
confidence level
(α = 0.005 per
tail).

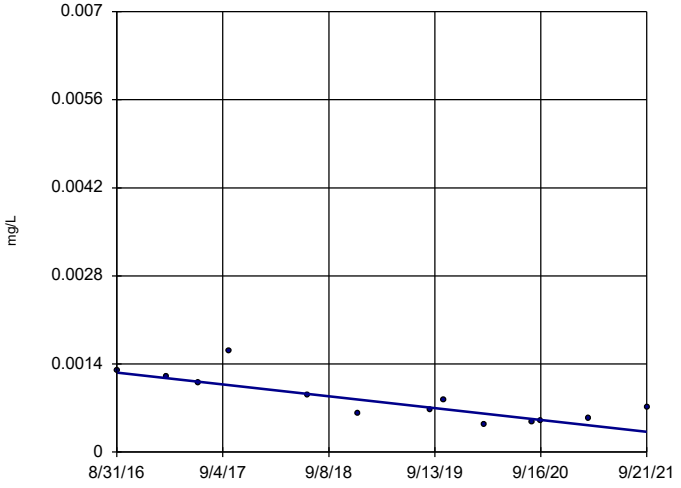
Constituent: Cobalt Analysis Run 12/2/2021 10:18 AM

Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.31g Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

BRGWA-5I (bg)



n = 13

Slope = -0.000186
units per year.

Mann-Kendall
statistic = -42
critical = -43

Trend not sig-
nificant at 99%
confidence level
(α = 0.005 per
tail).

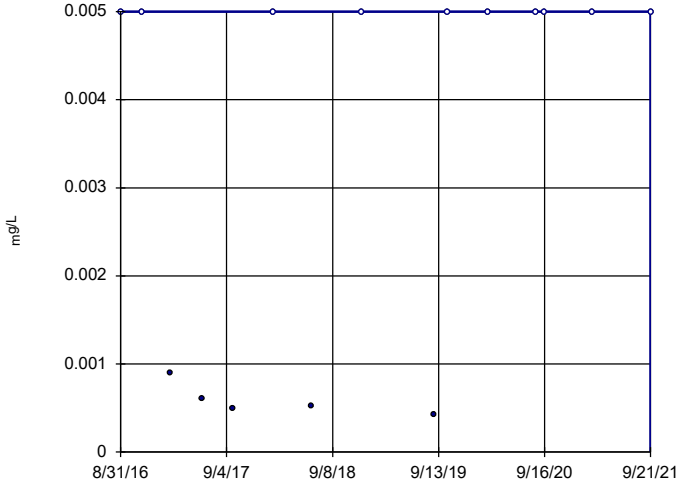
Constituent: Cobalt Analysis Run 12/2/2021 10:18 AM

Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.31g Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

BRGWA-5S (bg)



n = 15

Slope = 0
units per year.

Mann-Kendall
statistic = 16
critical = 53

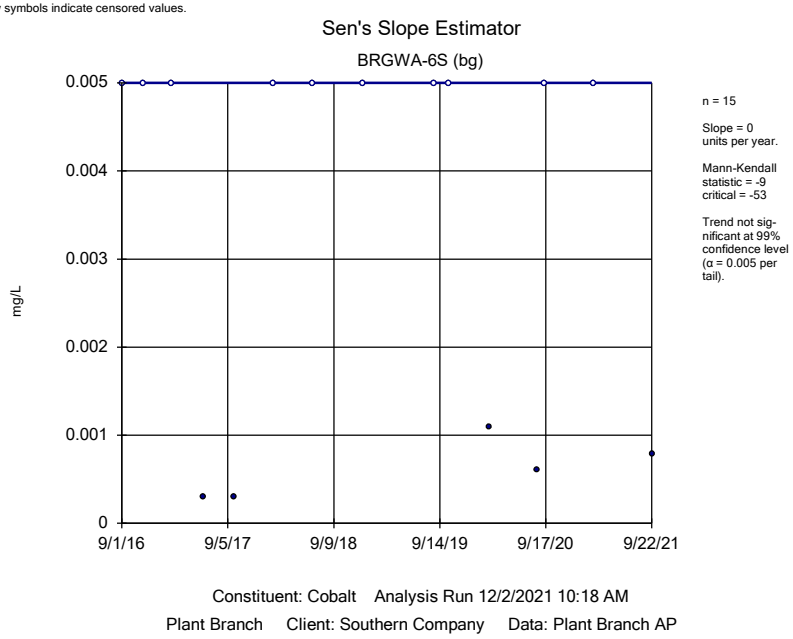
Trend not sig-
nificant at 99%
confidence level
(α = 0.005 per
tail).

Constituent: Cobalt Analysis Run 12/2/2021 10:18 AM

Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.31g Sanitas software utilized by Groundwater Stats Consulting. UG

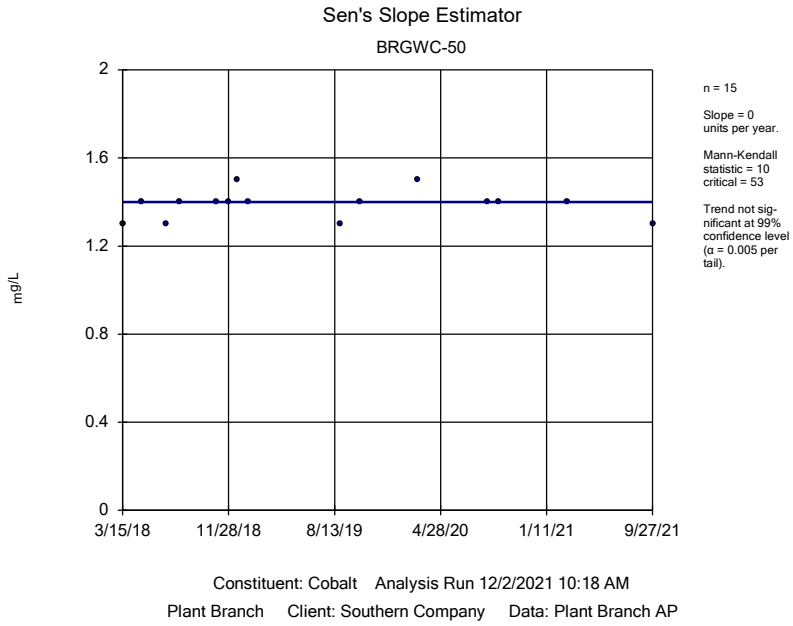
Hollow symbols indicate censored values.



Constituent: Cobalt Analysis Run 12/2/2021 10:18 AM

Plant Branch Client: Southern Company Data: Plant Branch AP

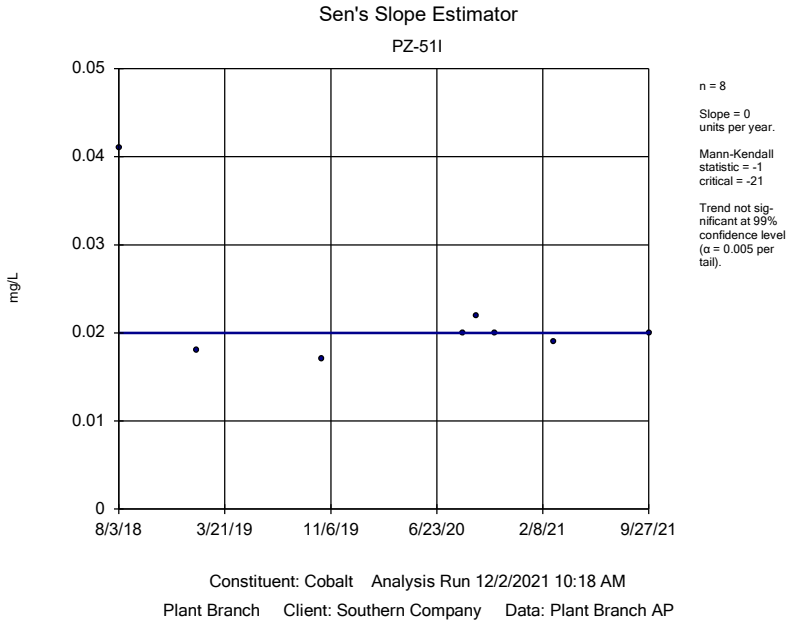
Sanitas™ v.9.6.31g Sanitas software utilized by Groundwater Stats Consulting. UG



Constituent: Cobalt Analysis Run 12/2/2021 10:18 AM

Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.31g Sanitas software utilized by Groundwater Stats Consulting. UG



Constituent: Cobalt Analysis Run 12/2/2021 10:18 AM

Plant Branch Client: Southern Company Data: Plant Branch AP

GROUNDWATER STATS CONSULTING

July 29, 2022

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 – February 2022 Statistical Analysis

Dear Mr. Abraham,

Groundwater Stats Consulting (GSC), formerly the statistical consulting division of Sanitas Technologies, is pleased to provide the February 2022 Semi-Annual Groundwater Detection and Assessment Monitoring Statistical Analysis 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
- **Assessment wells:** PZ-50D, PZ-51D, PZ-51I, PZ-51S, PZ-57I, PZ-58I, PZ-59I, PZ-60I, PZ-61I, PZ-62I, and PZ-63I

Data from assessment wells are evaluated using confidence intervals when a minimum of 4 samples are available.

Data were sent electronically to GSC, and the statistical analysis was reviewed by Kristina Rayner, Founder and Senior Statistician to GSC.

The Coal Combustion Residuals (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

An addendum is included at the end of this report for combined radium as the February 2022 samples were received at a later date than all other samples.

Note that when there are no detections present in downgradient wells for a given constituent, statistical analyses are not required. A summary of Appendix IV well/constituent pairs with 100% non-detects follows this letter. A substitution of the most recent reporting limit is used for non-detect data.

Time series plots for Appendix III and IV parameters at all wells are provided for the purpose of screening data at these wells (Figure A). Assessment well data are included on the time series graphs, and with the confidence intervals when a minimum of 4 samples are available as discussed above. 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 non-detects, a nonparametric test is utilized. While the false positive rate associated with the parametric limits is based on an annual 10% (5% per semi-annual event) as recommended by the EPA Unified Guidance (2009), the false positive rate associated with the nonparametric limits is dependent upon the available background sample size, number of future comparisons, and verification resample plan. The distribution of data is tested using the Shapiro-Wilk/Shapiro-Francia test for normality. After testing for normality and performing any adjustments as discussed below (US EPA, 2009), data are analyzed using either parametric or non-parametric prediction limits.

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% non-detects (USEPA Unified Guidance, 2009, Chapter 6).
- When data contain <15% non-detects in background, simple substitution of one-half the most reporting limit is utilized in the statistical analysis. The reporting limit utilized for non-detects is the most recent practical quantification limit (PQL) as reported by the laboratory.
- When data contain between 15-50% non-detects, the Kaplan-Meier non-detect adjustment is applied to the background data. This technique adjusts the mean and standard deviation of the historical concentrations to account for concentrations below the reporting limit.
- Nonparametric prediction limits are used on data containing greater than 50% non-detects.

Natural systems continuously evolve due to physical changes made to the environment. Examples include capping a landfill, paving areas near a well, or lining a drainage channel to prevent erosion. Periodic updating of background statistical limits is necessary to accommodate these types of changes. In the interwell case, prediction limits are updated with upgradient well data during each event after careful screening for any new outliers. In some cases, the earlier portion of data are deselected prior to construction of limits to provide sensitive limits that will rapidly detect changes in groundwater quality. Even

though the data are excluded from the calculation, the values will continue to be reported and shown in tables and graphs.

Summary of Background Screening – Conducted in March 2019

Outlier Analysis

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. Note that the reporting limit for boron during the March 2019 event was 0.1 mg/L; however, the historical reporting limit of 0.04 mg/L was substituted for all non-detects which provides more conservative (lower) statistical limits.

Seasonality

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.

Trend Tests

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 number 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 – February 2022

Interwell Prediction Limits

Interwell prediction limits, combined with a 1-of-2 resample plan, were constructed using all historical upgradient well data through February 2022 (Figure D). Background (upgradient) well data were re-assessed for potential outliers during this analysis and no new values were flagged. Interwell prediction limits pool upgradient well data to establish a background limit for an individual constituent. The February 2022 sample from each downgradient well is compared to the background limit to determine whether initial exceedances are present.

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 several Appendix III parameters. Exceedances were identified for the following well/constituent pairs:

- Boron: BRGWC-25I, BRGWC-27I, BRGWC-29I, BRGWC-30I, BRGWC-32S, BRGWC-47, BRGWC-50, and BRGWC-52I
- Calcium: BRGWC-25I, BRGWC-27I, BRGWC-29I, BRGWC-30I, BRGWC-32S, BRGWC-45, BRGWC-47, BRGWC-50, and BRGWC-52I
- Chloride: BRGWC-29I, BRGWC-45, BRGWC-50, and BRGWC-52I
- pH (lower limit): BRGWC-29I and BRGWC-50
- Sulfate: BRGWC-25I, BRGWC-27I, BRGWC-29I, BRGWC-30I, BRGWC-32S, BRGWC-45, BRGWC-47, BRGWC-50, and BRGWC-52I
- TDS: BRGWC-27I, BRGWC-29I, BRGWC-30I, BRGWC-32S, BRGWC-47, and BRGWC-50

Trend Test Evaluation – Appendix III

When prediction limit exceedances are identified in downgradient wells, data are further evaluated using the Sen's Slope/Mann Kendall trend test to determine whether

concentrations are statistically increasing, decreasing, or stable (Figure E). Upgradient wells are included in the trend analyses to identify whether similar patterns exist upgradient of the site which is an indication of natural variability in groundwater unrelated to practices at the site. While several statistically significant decreasing trends were noted in both upgradient and downgradient wells, statistically significant increasing trends were identified for calcium in upgradient well BRGWA-6S and downgradient well BRGWC-30I, and for TDS in downgradient well BRGWC-30I. A summary of the trend test results follows this letter.

Evaluation of Appendix IV Parameters – February 2022

For Appendix IV parameters, confidence intervals for each downgradient well/constituent pair were compared against corresponding Groundwater Protection Standards (GWPS). GWPS were developed as described below. Well/constituent pairs containing 100% non-detects do not require analysis. Data from upgradient wells for Appendix IV parameters are reassessed for outliers during each analysis. No new values were flagged and a summary of previously flagged outliers follows this report (Figure C).

Interwell Upper Tolerance Limits

First, interwell tolerance limits were used to calculate site-specific background limits from all available pooled upgradient well data through February 2022 for Appendix IV constituents (Figure F). Parametric tolerance limits are used when data follow a normal or transformed-normal distribution. When data contained greater than 50% non-detects or did not follow a normal or transformed-normal distribution, non-parametric tolerance limits were used.

Groundwater Protection Standards

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). On July 30, 2018, US EPA revised the Federal CCR rule updating GWPS for cobalt, lead, lithium, and molybdenum as described above in 40 CFR §257.95(h)(2). Effective on February 22, 2022, Georgia EPD incorporated the updated GWPS into the current Georgia EPD Rules for Solid Waste Management 391-3-4-.10(6)(a). In accordance with the updated Rules, 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, Federal and State CCR Rules specify levels 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

Following Georgia EPD Rule requirements and the Federal CCR requirements, GWPS were established for statistical comparison of Appendix IV constituents for this sample event (Figure G).

Confidence Intervals

To complete the statistical comparison to GWPS, confidence intervals were constructed for each of the Appendix IV constituents in each downgradient well with detections (Figure H). The Sanitas software was used to calculate the tolerance limits and the confidence intervals. Those confidence intervals were compared to the GWPS established using the Georgia EPD Rules 391-3-4-.10(6)(a). Only when the entire confidence interval is above a GWPS is the downgradient well/constituent pair considered to exceed its respective standard. If there is an exceedance of the GWPS, a statistically significant level (SSL) exceedance is identified.

Statistical exceedances were identified for the following State and Federal well/constituent pairs:

- Cadmium: BRGWC-50
- Cobalt: BRGWC-50 and PZ-51I

Trend Test Evaluation – Appendix IV

Data at wells with confidence interval exceedances are further evaluated using the Sen's Slope/Mann Kendall trend test to determine whether concentrations are statistically increasing, decreasing, or stable (Figure I). Upgradient wells are included in the trend analyses to identify whether similar patterns exist upgradient of the site for the same constituents. When trends are present in upgradient trends, it is an indication of natural variability in groundwater quality unrelated to practices at the site. A summary of the Appendix IV trend test results follows this letter. No statistically significant increasing or decreasing trends were identified.

Addendum Report – Combined Radium 226 + 228 – May 2022

For combined radium 226 + 228, time series and box plots were constructed to evaluate concentrations at the facility (Figures J and K, respectively). Upgradient wells were screened for spurious values that would result in elevated statistical limits; however, no values were flagged during this analysis (Figure C).

Following the methods detailed above for Appendix IV parameters, upper tolerance limits using pooled upgradient well data through February 2022 were constructed (Figure L). The resulting background limits were compared against the respective MCLs in order to establish the GWPS (Figure M).

Confidence intervals using data through February 2022 for each downgradient and assessment well/constituent pair with at least 4 samples were compared against corresponding Groundwater Protection Standards (GWPS) and no exceedances were identified (Figure N).

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
Project Manager

Kristina L. Rayner
Senior Statistician

100% Non-Detects: Appendix IV Downgradient & Assessment

Analysis Run 4/12/2022 9:11 AM View: Pond BCD Appendix IV - Confidence Intervals
Plant Branch Client: Southern Company Data: Plant Branch AP

Antimony (mg/L)
BRGWC-25I, BRGWC-27I, PZ-57I, PZ-58I, PZ-60I, PZ-61I, PZ-59I, PZ-63I, PZ-62I

Arsenic (mg/L)
PZ-51I, PZ-57I, PZ-58I, PZ-60I, PZ-63I, PZ-62I

Beryllium (mg/L)
BRGWC-25I, BRGWC-30I, BRGWC-32S, BRGWC-52I, PZ-51D, PZ-51S, PZ-63I, PZ-62I

Cadmium (mg/L)
BRGWC-25I, BRGWC-29I, BRGWC-52I, PZ-50D, PZ-51D, PZ-51S, PZ-63I

Chromium (mg/L)
PZ-50D, PZ-51D, PZ-57I, PZ-58I, PZ-60I, PZ-63I, PZ-62I

Lead (mg/L)
BRGWC-32S, PZ-51S, PZ-57I, PZ-58I, PZ-60I, PZ-59I, PZ-63I, PZ-62I

Lithium (mg/L)
BRGWC-25I

Mercury (mg/L)
BRGWC-45, BRGWC-47, BRGWC-50, BRGWC-52I, PZ-50D, PZ-51D, PZ-51S, PZ-57I, PZ-58I, PZ-60I, PZ-61I, PZ-59I, PZ-63I, PZ-62I

Molybdenum (mg/L)
BRGWC-27I, BRGWC-29I, BRGWC-32S, BRGWC-47, PZ-51I, PZ-51S, PZ-57I, PZ-58I, PZ-60I, PZ-61I, PZ-59I

Selenium (mg/L)
BRGWC-52I, PZ-50D, PZ-51D, PZ-51I, PZ-51S, PZ-57I, PZ-63I, PZ-62I

Thallium (mg/L)
BRGWC-25I, BRGWC-27I, BRGWC-30I, BRGWC-32S, BRGWC-45, BRGWC-47, BRGWC-50, BRGWC-52I, PZ-50D, PZ-51D, PZ-51I, PZ-51S, PZ-57I, PZ-58I, PZ-60I, PZ-61I, PZ-59I, PZ-63I, PZ-62I

Interwell Prediction Limits - Significant Results

Plant Branch Client: Southern Company Data: Plant Branch AP Printed 3/11/2022, 2:40 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Boron (mg/L)	BRGWC-25I	0.068	n/a	2/2/2022	1.1	Yes	120	n/a	n/a	55	n/a	n/a	0.0001347	NP Inter (NDs) 1 of 2
Boron (mg/L)	BRGWC-27I	0.068	n/a	2/4/2022	1	Yes	120	n/a	n/a	55	n/a	n/a	0.0001347	NP Inter (NDs) 1 of 2
Boron (mg/L)	BRGWC-29I	0.068	n/a	2/3/2022	0.93	Yes	120	n/a	n/a	55	n/a	n/a	0.0001347	NP Inter (NDs) 1 of 2
Boron (mg/L)	BRGWC-30I	0.068	n/a	2/2/2022	1.9	Yes	120	n/a	n/a	55	n/a	n/a	0.0001347	NP Inter (NDs) 1 of 2
Boron (mg/L)	BRGWC-32S	0.068	n/a	2/2/2022	1	Yes	120	n/a	n/a	55	n/a	n/a	0.0001347	NP Inter (NDs) 1 of 2
Boron (mg/L)	BRGWC-47	0.068	n/a	2/2/2022	0.48	Yes	120	n/a	n/a	55	n/a	n/a	0.0001347	NP Inter (NDs) 1 of 2
Boron (mg/L)	BRGWC-50	0.068	n/a	2/3/2022	0.31	Yes	120	n/a	n/a	55	n/a	n/a	0.0001347	NP Inter (NDs) 1 of 2
Boron (mg/L)	BRGWC-52I	0.068	n/a	2/2/2022	1.5	Yes	120	n/a	n/a	55	n/a	n/a	0.0001347	NP Inter (NDs) 1 of 2
Calcium (mg/L)	BRGWC-25I	24	n/a	2/2/2022	44.3	Yes	122	n/a	n/a	4.918	n/a	n/a	0.0001312	NP Inter (normality) 1 of 2
Calcium (mg/L)	BRGWC-27I	24	n/a	2/4/2022	61.7	Yes	122	n/a	n/a	4.918	n/a	n/a	0.0001312	NP Inter (normality) 1 of 2
Calcium (mg/L)	BRGWC-29I	24	n/a	2/3/2022	58.7	Yes	122	n/a	n/a	4.918	n/a	n/a	0.0001312	NP Inter (normality) 1 of 2
Calcium (mg/L)	BRGWC-30I	24	n/a	2/2/2022	232	Yes	122	n/a	n/a	4.918	n/a	n/a	0.0001312	NP Inter (normality) 1 of 2
Calcium (mg/L)	BRGWC-32S	24	n/a	2/2/2022	44.2	Yes	122	n/a	n/a	4.918	n/a	n/a	0.0001312	NP Inter (normality) 1 of 2
Calcium (mg/L)	BRGWC-45	24	n/a	2/2/2022	33.8	Yes	122	n/a	n/a	4.918	n/a	n/a	0.0001312	NP Inter (normality) 1 of 2
Calcium (mg/L)	BRGWC-47	24	n/a	2/2/2022	320	Yes	122	n/a	n/a	4.918	n/a	n/a	0.0001312	NP Inter (normality) 1 of 2
Calcium (mg/L)	BRGWC-50	24	n/a	2/3/2022	220	Yes	122	n/a	n/a	4.918	n/a	n/a	0.0001312	NP Inter (normality) 1 of 2
Calcium (mg/L)	BRGWC-52I	24	n/a	2/2/2022	40.1	Yes	122	n/a	n/a	4.918	n/a	n/a	0.0001312	NP Inter (normality) 1 of 2
Chloride (mg/L)	BRGWC-29I	5.8	n/a	2/3/2022	6.1	Yes	122	n/a	n/a	0	n/a	n/a	0.0001312	NP Inter (normality) 1 of 2
Chloride (mg/L)	BRGWC-45	5.8	n/a	2/2/2022	23.4	Yes	122	n/a	n/a	0	n/a	n/a	0.0001312	NP Inter (normality) 1 of 2
Chloride (mg/L)	BRGWC-50	5.8	n/a	2/3/2022	17.4	Yes	122	n/a	n/a	0	n/a	n/a	0.0001312	NP Inter (normality) 1 of 2
Chloride (mg/L)	BRGWC-52I	5.8	n/a	2/2/2022	6.1	Yes	122	n/a	n/a	0	n/a	n/a	0.0001312	NP Inter (normality) 1 of 2
pH, Field (S.U.)	BRGWC-29I	7.052	5.588	2/3/2022	4.23	Yes	138	6.32	0.3805	0	None	No	0.0004179	Param Inter 1 of 2
pH, Field (S.U.)	BRGWC-50	7.052	5.588	2/3/2022	5.2	Yes	138	6.32	0.3805	0	None	No	0.0004179	Param Inter 1 of 2
Sulfate (mg/L)	BRGWC-25I	89	n/a	2/2/2022	117	Yes	122	n/a	n/a	15.57	n/a	n/a	0.0001312	NP Inter (normality) 1 of 2
Sulfate (mg/L)	BRGWC-27I	89	n/a	2/4/2022	172	Yes	122	n/a	n/a	15.57	n/a	n/a	0.0001312	NP Inter (normality) 1 of 2
Sulfate (mg/L)	BRGWC-29I	89	n/a	2/3/2022	274	Yes	122	n/a	n/a	15.57	n/a	n/a	0.0001312	NP Inter (normality) 1 of 2
Sulfate (mg/L)	BRGWC-30I	89	n/a	2/2/2022	580	Yes	122	n/a	n/a	15.57	n/a	n/a	0.0001312	NP Inter (normality) 1 of 2
Sulfate (mg/L)	BRGWC-32S	89	n/a	2/2/2022	210	Yes	122	n/a	n/a	15.57	n/a	n/a	0.0001312	NP Inter (normality) 1 of 2
Sulfate (mg/L)	BRGWC-45	89	n/a	2/2/2022	90.1	Yes	122	n/a	n/a	15.57	n/a	n/a	0.0001312	NP Inter (normality) 1 of 2
Sulfate (mg/L)	BRGWC-47	89	n/a	2/2/2022	1170	Yes	122	n/a	n/a	15.57	n/a	n/a	0.0001312	NP Inter (normality) 1 of 2
Sulfate (mg/L)	BRGWC-50	89	n/a	2/3/2022	1270	Yes	122	n/a	n/a	15.57	n/a	n/a	0.0001312	NP Inter (normality) 1 of 2
Sulfate (mg/L)	BRGWC-52I	89	n/a	2/2/2022	126	Yes	122	n/a	n/a	15.57	n/a	n/a	0.0001312	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	BRGWC-27I	299	n/a	2/4/2022	301	Yes	122	n/a	n/a	1.639	n/a	n/a	0.0001312	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	BRGWC-29I	299	n/a	2/3/2022	419	Yes	122	n/a	n/a	1.639	n/a	n/a	0.0001312	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	BRGWC-30I	299	n/a	2/2/2022	1110	Yes	122	n/a	n/a	1.639	n/a	n/a	0.0001312	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	BRGWC-32S	299	n/a	2/2/2022	443	Yes	122	n/a	n/a	1.639	n/a	n/a	0.0001312	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	BRGWC-47	299	n/a	2/2/2022	1850	Yes	122	n/a	n/a	1.639	n/a	n/a	0.0001312	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	BRGWC-50	299	n/a	2/3/2022	1850	Yes	122	n/a	n/a	1.639	n/a	n/a	0.0001312	NP Inter (normality) 1 of 2

Interwell Prediction Limits - All Results

Plant Branch Client: Southern Company Data: Plant Branch AP Printed 3/11/2022, 2:40 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Boron (mg/L)	**BRGWC-25I**	**0.068**	**n/a**	**2/2/2022**	**1.1**	**Yes**	**120**	**n/a**	**n/a**	**55**	**n/a**	**n/a**	**0.0001347**	**NP Inter (NDs) 1 of 2**
Boron (mg/L)	**BRGWC-27I**	**0.068**	**n/a**	**2/4/2022**	**1**	**Yes**	**120**	**n/a**	**n/a**	**55**	**n/a**	**n/a**	**0.0001347**	**NP Inter (NDs) 1 of 2**
Boron (mg/L)	**BRGWC-29I**	**0.068**	**n/a**	**2/3/2022**	**0.93**	**Yes**	**120**	**n/a**	**n/a**	**55**	**n/a**	**n/a**	**0.0001347**	**NP Inter (NDs) 1 of 2**
Boron (mg/L)	**BRGWC-30I**	**0.068**	**n/a**	**2/2/2022**	**1.9**	**Yes**	**120**	**n/a**	**n/a**	**55**	**n/a**	**n/a**	**0.0001347**	**NP Inter (NDs) 1 of 2**
Boron (mg/L)	**BRGWC-32S**	**0.068**	**n/a**	**2/2/2022**	**1**	**Yes**	**120**	**n/a**	**n/a**	**55**	**n/a**	**n/a**	**0.0001347**	**NP Inter (NDs) 1 of 2**
Boron (mg/L)	BRGWC-45	0.068	n/a	2/2/2022	0.034J	No	120	n/a	n/a	55	n/a	n/a	0.0001347	NP Inter (NDs) 1 of 2
Boron (mg/L)	**BRGWC-47**	**0.068**	**n/a**	**2/2/2022**	**0.48**	**Yes**	**120**	**n/a**	**n/a**	**55**	**n/a**	**n/a**	**0.0001347**	**NP Inter (NDs) 1 of 2**
Boron (mg/L)	**BRGWC-50**	**0.068**	**n/a**	**2/3/2022**	**0.31**	**Yes**	**120**	**n/a**	**n/a**	**55**	**n/a**	**n/a**	**0.0001347**	**NP Inter (NDs) 1 of 2**
Boron (mg/L)	**BRGWC-52I**	**0.068**	**n/a**	**2/2/2022**	**1.5**	**Yes**	**120**	**n/a**	**n/a**	**55**	**n/a**	**n/a**	**0.0001347**	**NP Inter (NDs) 1 of 2**
Calcium (mg/L)	**BRGWC-25I**	**24**	**n/a**	**2/2/2022**	**44.3**	**Yes**	**122**	**n/a**	**n/a**	**4.918**	**n/a**	**n/a**	**0.0001312**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	**BRGWC-27I**	**24**	**n/a**	**2/4/2022**	**61.7**	**Yes**	**122**	**n/a**	**n/a**	**4.918**	**n/a**	**n/a**	**0.0001312**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	**BRGWC-29I**	**24**	**n/a**	**2/3/2022**	**58.7**	**Yes**	**122**	**n/a**	**n/a**	**4.918**	**n/a**	**n/a**	**0.0001312**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	**BRGWC-30I**	**24**	**n/a**	**2/2/2022**	**232**	**Yes**	**122**	**n/a**	**n/a**	**4.918**	**n/a**	**n/a**	**0.0001312**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	**BRGWC-32S**	**24**	**n/a**	**2/2/2022**	**44.2**	**Yes**	**122**	**n/a**	**n/a**	**4.918**	**n/a**	**n/a**	**0.0001312**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	**BRGWC-45**	**24**	**n/a**	**2/2/2022**	**33.8**	**Yes**	**122**	**n/a**	**n/a**	**4.918**	**n/a**	**n/a**	**0.0001312**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	**BRGWC-47**	**24**	**n/a**	**2/2/2022**	**320**	**Yes**	**122**	**n/a**	**n/a**	**4.918**	**n/a**	**n/a**	**0.0001312**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	**BRGWC-50**	**24**	**n/a**	**2/3/2022**	**220**	**Yes**	**122**	**n/a**	**n/a**	**4.918**	**n/a**	**n/a**	**0.0001312**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	**BRGWC-52I**	**24**	**n/a**	**2/2/2022**	**40.1**	**Yes**	**122**	**n/a**	**n/a**	**4.918**	**n/a**	**n/a**	**0.0001312**	**NP Inter (normality) 1 of 2**
Chloride (mg/L)	BRGWC-25I	5.8	n/a	2/2/2022	4.2	No	122	n/a	n/a	0	n/a	n/a	0.0001312	NP Inter (normality) 1 of 2
Chloride (mg/L)	BRGWC-27I	5.8	n/a	2/4/2022	4.6	No	122	n/a	n/a	0	n/a	n/a	0.0001312	NP Inter (normality) 1 of 2
Chloride (mg/L)	**BRGWC-29I**	**5.8**	**n/a**	**2/3/2022**	**6.1**	**Yes**	**122**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0001312**	**NP Inter (normality) 1 of 2**
Chloride (mg/L)	BRGWC-30I	5.8	n/a	2/2/2022	4	No	122	n/a	n/a	0	n/a	n/a	0.0001312	NP Inter (normality) 1 of 2
Chloride (mg/L)	BRGWC-32S	5.8	n/a	2/2/2022	3.8	No	122	n/a	n/a	0	n/a	n/a	0.0001312	NP Inter (normality) 1 of 2
Chloride (mg/L)	**BRGWC-45**	**5.8**	**n/a**	**2/2/2022**	**23.4**	**Yes**	**122**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0001312**	**NP Inter (normality) 1 of 2**
Chloride (mg/L)	BRGWC-47	5.8	n/a	2/2/2022	4.2	No	122	n/a	n/a	0	n/a	n/a	0.0001312	NP Inter (normality) 1 of 2
Chloride (mg/L)	**BRGWC-50**	**5.8**	**n/a**	**2/3/2022**	**17.4**	**Yes**	**122**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0001312**	**NP Inter (normality) 1 of 2**
Chloride (mg/L)	**BRGWC-52I**	**5.8**	**n/a**	**2/2/2022**	**6.1**	**Yes**	**122**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0001312**	**NP Inter (normality) 1 of 2**
Fluoride (mg/L)	BRGWC-25I	0.42	n/a	2/2/2022	0.15	No	136	n/a	n/a	52.94	n/a	n/a	0.0001065	NP Inter (NDs) 1 of 2
Fluoride (mg/L)	BRGWC-27I	0.42	n/a	2/4/2022	0.14	No	136	n/a	n/a	52.94	n/a	n/a	0.0001065	NP Inter (NDs) 1 of 2
Fluoride (mg/L)	BRGWC-29I	0.42	n/a	2/3/2022	0.11	No	136	n/a	n/a	52.94	n/a	n/a	0.0001065	NP Inter (NDs) 1 of 2
Fluoride (mg/L)	BRGWC-30I	0.42	n/a	2/2/2022	0.1	No	136	n/a	n/a	52.94	n/a	n/a	0.0001065	NP Inter (NDs) 1 of 2
Fluoride (mg/L)	BRGWC-32S	0.42	n/a	2/2/2022	0.1ND	No	136	n/a	n/a	52.94	n/a	n/a	0.0001065	NP Inter (NDs) 1 of 2
Fluoride (mg/L)	BRGWC-45	0.42	n/a	2/2/2022	0.1ND	No	136	n/a	n/a	52.94	n/a	n/a	0.0001065	NP Inter (NDs) 1 of 2
Fluoride (mg/L)	BRGWC-47	0.42	n/a	2/2/2022	0.1ND	No	136	n/a	n/a	52.94	n/a	n/a	0.0001065	NP Inter (NDs) 1 of 2
Fluoride (mg/L)	BRGWC-50	0.42	n/a	2/3/2022	0.42	No	136	n/a	n/a	52.94	n/a	n/a	0.0001065	NP Inter (NDs) 1 of 2
Fluoride (mg/L)	BRGWC-52I	0.42	n/a	2/2/2022	0.098J	No	136	n/a	n/a	52.94	n/a	n/a	0.0001065	NP Inter (NDs) 1 of 2
pH, Field (S.U.)	BRGWC-25I	7.052	5.588	2/2/2022	6.23	No	138	6.32	0.3805	0	None	No	0.0004179	Param Inter 1 of 2
pH, Field (S.U.)	BRGWC-27I	7.052	5.588	2/4/2022	5.97	No	138	6.32	0.3805	0	None	No	0.0004179	Param Inter 1 of 2
pH, Field (S.U.)	**BRGWC-29I**	**7.052**	**5.588**	**2/3/2022**	**4.23**	**Yes**	**138**	**6.32**	**0.3805**	**0**	**None**	**No**	**0.0004179**	**Param Inter 1 of 2**
pH, Field (S.U.)	BRGWC-30I	7.052	5.588	2/2/2022	6.34	No	138	6.32	0.3805	0	None	No	0.0004179	Param Inter 1 of 2
pH, Field (S.U.)	BRGWC-32S	7.052	5.588	2/2/2022	5.99	No	138	6.32	0.3805	0	None	No	0.0004179	Param Inter 1 of 2
pH, Field (S.U.)	BRGWC-45	7.052	5.588	2/2/2022	5.92	No	138	6.32	0.3805	0	None	No	0.0004179	Param Inter 1 of 2
pH, Field (S.U.)	BRGWC-47	7.052	5.588	2/2/2022	5.75	No	138	6.32	0.3805	0	None	No	0.0004179	Param Inter 1 of 2
pH, Field (S.U.)	**BRGWC-50**	**7.052**	**5.588**	**2/3/2022**	**5.2**	**Yes**	**138**	**6.32**	**0.3805**	**0**	**None**	**No**	**0.0004179**	**Param Inter 1 of 2**
pH, Field (S.U.)	BRGWC-52I	7.052	5.588	2/2/2022	6.35	No	138	6.32	0.3805	0	None	No	0.0004179	Param Inter 1 of 2
Sulfate (mg/L)	**BRGWC-25I**	**89**	**n/a**	**2/2/2022**	**117**	**Yes**	**122**	**n/a**	**n/a**	**15.57**	**n/a**	**n/a**	**0.0001312**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	**BRGWC-27I**	**89**	**n/a**	**2/4/2022**	**172**	**Yes**	**122**	**n/a**	**n/a**	**15.57**	**n/a**	**n/a**	**0.0001312**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	**BRGWC-29I**	**89**	**n/a**	**2/3/2022**	**274**	**Yes**	**122**	**n/a**	**n/a**	**15.57**	**n/a**	**n/a**	**0.0001312**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	**BRGWC-30I**	**89**	**n/a**	**2/2/2022**	**580**	**Yes**	**122**	**n/a**	**n/a**	**15.57**	**n/a**	**n/a**	**0.0001312**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	**BRGWC-32S**	**89**	**n/a**	**2/2/2022**	**210**	**Yes**	**122**	**n/a**	**n/a**	**15.57**	**n/a**	**n/a**	**0.0001312**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	**BRGWC-45**	**89**	**n/a**	**2/2/2022**	**90.1**	**Yes**	**122**	**n/a**	**n/a**	**15.57**	**n/a**	**n/a**	**0.0001312**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	**BRGWC-47**	**89**	**n/a**	**2/2/2022**	**1170**	**Yes**	**122**	**n/a**	**n/a**	**15.57**	**n/a**	**n/a**	**0.0001312**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	**BRGWC-50**	**89**	**n/a**	**2/3/2022**	**1270**	**Yes**	**122**	**n/a**	**n/a**	**15.57**	**n/a**	**n/a**	**0.0001312**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	**BRGWC-52I**	**89**	**n/a**	**2/2/2022**	**126**	**Yes**	**122**	**n/a**	**n/a**	**15.57**	**n/a**	**n/a**	**0.0001312**	**NP Inter (normality) 1 of 2**
Total Dissolved Solids (mg/L)	BRGWC-25I	299	n/a	2/2/2022	283	No	122	n/a	n/a	1.639	n/a	n/a	0.0001312	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	**BRGWC-27I**	**299**	**n/a**	**2/4/2022**	**301**	**Yes**	**122**	**n/a**	**n/a**	**1.639**	**n/a**	**n/a**	**0.0001312**	**NP Inter (normality) 1 of 2**
Total Dissolved Solids (mg/L)	**BRGWC-29I**	**299**	**n/a**	**2/3/2022**	**419**	**Yes**	**122**	**n/a**	**n/a**	**1.639**	**n/a**	**n/a**	**0.0001312**	**NP Inter (normality) 1 of 2**
Total Dissolved Solids (mg/L)	**BRGWC-30I**	**299**	**n/a**	**2/2/2022**	**1110**	**Yes**	**122**	**n/a**	**n/a**	**1.639**	**n/a**	**n/a**	**0.0001312**	**NP Inter (normality) 1 of 2**
Total Dissolved Solids (mg/L)	**BRGWC-32S**	**299**	**n/a**	**2/2/2022**	**443**	**Yes**	**122**	**n/a**	**n/a**	**1.639**	**n/a**	**n/a**	**0.0001312**	**NP Inter (normality) 1 of 2**
Total Dissolved Solids (mg/L)	BRGWC-45	299	n/a	2/2/2022	276	No	122	n/a	n/a	1.639	n/a	n/a	0.0001312	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	**BRGWC-47**	**299**	**n/a**	**2/2/2022**	**1850**	**Yes**	**122**	**n/a**	**n/a**	**1.639**	**n/a**	**n/a**	**0.0001312**	**NP Inter (normality) 1 of 2**
Total Dissolved Solids (mg/L)	**BRGWC-50**	**299**	**n/a**	**2/3/2022**	**1850**	**Yes**	**122**	**n/a**	**n/a**	**1.639**	**n/a**	**n/a**	**0.0001312**	**NP Inter (normality) 1 of 2**
Total Dissolved Solids (mg/L)	BRGWC-52I	299	n/a	2/2/2022	160	No	122	n/a	n/a	1.639	n/a	n/a	0.0001312	NP Inter (normality) 1 of 2

Appendix III Trend Tests - Prediction Limit Exceedances - Significant Results

Plant Branch Client: Southern Company Data: Plant Branch AP Printed 3/11/2022, 2:38 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Boron (mg/L)	**BRGWC-27I**	**-0.1419**	**-69**	**-58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	**BRGWC-29I**	**-0.1536**	**-62**	**-53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**BRGWA-6S (bg)**	**0.1798**	**62**	**53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**BRGWC-25I**	**-5.521**	**-83**	**-53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**BRGWC-27I**	**-4.713**	**-61**	**-53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**BRGWC-30I**	**17.73**	**82**	**53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	**BRGWA-12I (bg)**	**-0.2211**	**-78**	**-58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	**BRGWA-5I (bg)**	**-0.2086**	**-56**	**-53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	**BRGWC-45**	**-8.179**	**-62**	**-58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	**BRGWC-50**	**-1.993**	**-63**	**-53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	**BRGWC-52I**	**-0.4148**	**-63**	**-53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
pH, Field (S.U.)	**BRGWA-23S (bg)**	**-0.05219**	**-70**	**-63**	**Yes**	**17**	**0**	**n/a**	**n/a**	**0.01**	**NP**
pH, Field (S.U.)	**BRGWA-2I (bg)**	**-0.1124**	**-70**	**-63**	**Yes**	**17**	**0**	**n/a**	**n/a**	**0.01**	**NP**
pH, Field (S.U.)	**BRGWA-5S (bg)**	**-0.05509**	**-67**	**-63**	**Yes**	**17**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**BRGWA-12I (bg)**	**-0.2541**	**-99**	**-58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**BRGWA-12S (bg)**	**-0.1639**	**-81**	**-58**	**Yes**	**16**	**18.75**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**BRGWC-25I**	**-39.04**	**-74**	**-53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**BRGWC-27I**	**-24.32**	**-81**	**-53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**BRGWC-29I**	**-41.71**	**-65**	**-53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**BRGWC-32S**	**-41.22**	**-65**	**-53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Total Dissolved Solids (mg/L)	**BRGWC-27I**	**-28.24**	**-71**	**-53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Total Dissolved Solids (mg/L)	**BRGWC-30I**	**78.21**	**59**	**53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Total Dissolved Solids (mg/L)	**BRGWC-32S**	**-55.67**	**-72**	**-53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Total Dissolved Solids (mg/L)	**BRGWC-50**	**-141.2**	**-61**	**-53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**

Appendix III Trend Tests - Prediction Limit Exceedances - All Results

Plant Branch Client: Southern Company Data: Plant Branch AP Printed 3/11/2022, 2:38 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Boron (mg/L)	BRGWA-12I (bg)	0	0	53	No	15	20	n/a	n/a	0.01	NP
Boron (mg/L)	BRGWA-12S (bg)	0	5	53	No	15	80	n/a	n/a	0.01	NP
Boron (mg/L)	BRGWA-23S (bg)	0.001293	14	53	No	15	13.33	n/a	n/a	0.01	NP
Boron (mg/L)	BRGWA-2I (bg)	0.003356	31	53	No	15	26.67	n/a	n/a	0.01	NP
Boron (mg/L)	BRGWA-2S (bg)	0	12	53	No	15	93.33	n/a	n/a	0.01	NP
Boron (mg/L)	BRGWA-5I (bg)	0	10	53	No	15	73.33	n/a	n/a	0.01	NP
Boron (mg/L)	BRGWA-5S (bg)	0	7	53	No	15	60	n/a	n/a	0.01	NP
Boron (mg/L)	BRGWA-6S (bg)	0	18	53	No	15	73.33	n/a	n/a	0.01	NP
Boron (mg/L)	BRGWC-25I	-0.1117	-48	-53	No	15	0	n/a	n/a	0.01	NP
Boron (mg/L)	**BRGWC-27I**	**-0.1419**	**-69**	**-58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	**BRGWC-29I**	**-0.1536**	**-62**	**-53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	BRGWC-30I	0	-2	-58	No	16	0	n/a	n/a	0.01	NP
Boron (mg/L)	BRGWC-32S	-0.03856	-27	-58	No	16	0	n/a	n/a	0.01	NP
Boron (mg/L)	BRGWC-47	0.02205	28	58	No	16	0	n/a	n/a	0.01	NP
Boron (mg/L)	BRGWC-50	0	0	53	No	15	0	n/a	n/a	0.01	NP
Boron (mg/L)	BRGWC-52I	0	11	53	No	15	0	n/a	n/a	0.01	NP
Calcium (mg/L)	BRGWA-12I (bg)	0.02053	1	58	No	16	6.25	n/a	n/a	0.01	NP
Calcium (mg/L)	BRGWA-12S (bg)	0.1659	21	58	No	16	6.25	n/a	n/a	0.01	NP
Calcium (mg/L)	BRGWA-23S (bg)	-0.9777	-44	-53	No	15	6.667	n/a	n/a	0.01	NP
Calcium (mg/L)	BRGWA-2I (bg)	0.6672	48	53	No	15	6.667	n/a	n/a	0.01	NP
Calcium (mg/L)	BRGWA-2S (bg)	0.04148	15	53	No	15	0	n/a	n/a	0.01	NP
Calcium (mg/L)	BRGWA-5I (bg)	0	2	53	No	15	6.667	n/a	n/a	0.01	NP
Calcium (mg/L)	BRGWA-5S (bg)	-0.4361	-27	-53	No	15	6.667	n/a	n/a	0.01	NP
Calcium (mg/L)	**BRGWA-6S (bg)**	**0.1798**	**62**	**53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**BRGWC-25I**	**-5.521**	**-83**	**-53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**BRGWC-27I**	**-4.713**	**-61**	**-53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	BRGWC-29I	-7.862	-53	-53	No	15	0	n/a	n/a	0.01	NP
Calcium (mg/L)	**BRGWC-30I**	**17.73**	**82**	**53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	BRGWC-32S	-5.259	-49	-53	No	15	0	n/a	n/a	0.01	NP
Calcium (mg/L)	BRGWC-45	-2.499	-55	-58	No	16	0	n/a	n/a	0.01	NP
Calcium (mg/L)	BRGWC-47	3.192	10	58	No	16	0	n/a	n/a	0.01	NP
Calcium (mg/L)	BRGWC-50	-7.971	-33	-53	No	15	0	n/a	n/a	0.01	NP
Calcium (mg/L)	BRGWC-52I	1.724	17	48	No	14	0	n/a	n/a	0.01	NP
Chloride (mg/L)	**BRGWA-12I (bg)**	**-0.2211**	**-78**	**-58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	BRGWA-12S (bg)	0.03281	23	58	No	16	0	n/a	n/a	0.01	NP
Chloride (mg/L)	BRGWA-23S (bg)	-0.1919	-51	-53	No	15	0	n/a	n/a	0.01	NP
Chloride (mg/L)	BRGWA-2I (bg)	-0.06183	-41	-53	No	15	0	n/a	n/a	0.01	NP
Chloride (mg/L)	BRGWA-2S (bg)	-0.03836	-34	-53	No	15	0	n/a	n/a	0.01	NP
Chloride (mg/L)	**BRGWA-5I (bg)**	**-0.2086**	**-56**	**-53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	BRGWA-5S (bg)	-0.08614	-37	-53	No	15	0	n/a	n/a	0.01	NP
Chloride (mg/L)	BRGWA-6S (bg)	-0.03205	-24	-53	No	15	0	n/a	n/a	0.01	NP
Chloride (mg/L)	BRGWC-29I	-0.2369	-43	-53	No	15	0	n/a	n/a	0.01	NP
Chloride (mg/L)	**BRGWC-45**	**-8.179**	**-62**	**-58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	**BRGWC-50**	**-1.993**	**-63**	**-53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	**BRGWC-52I**	**-0.4148**	**-63**	**-53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
pH, Field (S.U.)	BRGWA-12I (bg)	-0.03862	-42	-74	No	19	0	n/a	n/a	0.01	NP
pH, Field (S.U.)	BRGWA-12S (bg)	-0.0257	-42	-68	No	18	0	n/a	n/a	0.01	NP
pH, Field (S.U.)	**BRGWA-23S (bg)**	**-0.05219**	**-70**	**-63**	**Yes**	**17**	**0**	**n/a**	**n/a**	**0.01**	**NP**
pH, Field (S.U.)	**BRGWA-2I (bg)**	**-0.1124**	**-70**	**-63**	**Yes**	**17**	**0**	**n/a**	**n/a**	**0.01**	**NP**
pH, Field (S.U.)	BRGWA-2S (bg)	-0.03283	-57	-63	No	17	0	n/a	n/a	0.01	NP
pH, Field (S.U.)	BRGWA-5I (bg)	-0.02424	-30	-63	No	17	0	n/a	n/a	0.01	NP
pH, Field (S.U.)	**BRGWA-5S (bg)**	**-0.05509**	**-67**	**-63**	**Yes**	**17**	**0**	**n/a**	**n/a**	**0.01**	**NP**
pH, Field (S.U.)	BRGWA-6S (bg)	-0.0009881	-2	-58	No	16	0	n/a	n/a	0.01	NP
pH, Field (S.U.)	BRGWC-29I	-0.01818	-12	-63	No	17	0	n/a	n/a	0.01	NP
pH, Field (S.U.)	BRGWC-50	-0.04782	-33	-68	No	18	0	n/a	n/a	0.01	NP

Appendix III Trend Tests - Prediction Limit Exceedances - All Results

Plant Branch Client: Southern Company Data: Plant Branch AP Printed 3/11/2022, 2:38 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Sulfate (mg/L)	**BRGWA-12I (bg)**	**-0.2541**	**-99**	**-58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**BRGWA-12S (bg)**	**-0.1639**	**-81**	**-58**	**Yes**	**16**	**18.75**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	BRGWA-23S (bg)	-3.401	-27	-53	No	15	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	BRGWA-2I (bg)	-0.2041	-31	-53	No	15	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	BRGWA-2S (bg)	0	-2	-53	No	15	40	n/a	n/a	0.01	NP
Sulfate (mg/L)	BRGWA-5I (bg)	-0.3476	-39	-53	No	15	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	BRGWA-5S (bg)	-0.08161	-49	-53	No	15	40	n/a	n/a	0.01	NP
Sulfate (mg/L)	BRGWA-6S (bg)	-0.01199	-21	-53	No	15	26.67	n/a	n/a	0.01	NP
Sulfate (mg/L)	**BRGWC-25I**	**-39.04**	**-74**	**-53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**BRGWC-27I**	**-24.32**	**-81**	**-53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**BRGWC-29I**	**-41.71**	**-65**	**-53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	BRGWC-30I	32.33	45	53	No	15	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	**BRGWC-32S**	**-41.22**	**-65**	**-53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	BRGWC-45	-4.331	-53	-58	No	16	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	BRGWC-47	-78.04	-46	-58	No	16	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	BRGWC-50	-111.5	-40	-48	No	14	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	BRGWC-52I	-14.1	-42	-53	No	15	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	BRGWA-12I (bg)	-5.398	-47	-58	No	16	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	BRGWA-12S (bg)	-5.997	-36	-58	No	16	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	BRGWA-23S (bg)	-10.78	-38	-53	No	15	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	BRGWA-2I (bg)	-5.671	-21	-53	No	15	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	BRGWA-2S (bg)	2.173	17	53	No	15	6.667	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	BRGWA-5I (bg)	-3.555	-23	-53	No	15	6.667	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	BRGWA-5S (bg)	-6.868	-52	-53	No	15	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	BRGWA-6S (bg)	-2.765	-14	-53	No	15	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	**BRGWC-27I**	**-28.24**	**-71**	**-53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Total Dissolved Solids (mg/L)	BRGWC-29I	-70.99	-50	-53	No	15	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	**BRGWC-30I**	**78.21**	**59**	**53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Total Dissolved Solids (mg/L)	**BRGWC-32S**	**-55.67**	**-72**	**-53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Total Dissolved Solids (mg/L)	BRGWC-47	-93.11	-48	-53	No	15	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	**BRGWC-50**	**-141.2**	**-61**	**-53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**

Upper Tolerance Limit Summary Table

Plant Branch Client: Southern Company Data: Plant Branch AP Printed 5/3/2022, 10:16 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	0.017	n/a	n/a	n/a	n/a	128	n/a	n/a	82.03	n/a	n/a	0.001408	NP Inter(NDs)
Arsenic (mg/L)	n/a	0.005	n/a	n/a	n/a	n/a	128	n/a	n/a	73.44	n/a	n/a	0.001408	NP Inter(NDs)
Barium (mg/L)	n/a	0.13	n/a	n/a	n/a	n/a	128	n/a	n/a	0	n/a	n/a	0.001408	NP Inter(normality)
Beryllium (mg/L)	n/a	0.0005	n/a	n/a	n/a	n/a	128	n/a	n/a	100	n/a	n/a	0.001408	NP Inter(NDs)
Cadmium (mg/L)	n/a	0.0005	n/a	n/a	n/a	n/a	130	n/a	n/a	98.46	n/a	n/a	0.001271	NP Inter(NDs)
Chromium (mg/L)	n/a	0.016	n/a	n/a	n/a	n/a	128	n/a	n/a	17.97	n/a	n/a	0.001408	NP Inter(normality)
Cobalt (mg/L)	n/a	0.0135	n/a	n/a	n/a	n/a	128	n/a	n/a	56.25	n/a	n/a	0.001408	NP Inter(NDs)
Fluoride (mg/L)	n/a	0.42	n/a	n/a	n/a	n/a	136	n/a	n/a	52.94	n/a	n/a	0.0009341	NP Inter(NDs)
Lead (mg/L)	n/a	0.0013	n/a	n/a	n/a	n/a	128	n/a	n/a	85.94	n/a	n/a	0.001408	NP Inter(NDs)
Lithium (mg/L)	n/a	0.089	n/a	n/a	n/a	n/a	128	n/a	n/a	39.06	n/a	n/a	0.001408	NP Inter(normality)
Mercury (mg/L)	n/a	0.00021	n/a	n/a	n/a	n/a	112	n/a	n/a	86.61	n/a	n/a	0.003199	NP Inter(NDs)
Molybdenum (mg/L)	n/a	0.01	n/a	n/a	n/a	n/a	125	n/a	n/a	78.4	n/a	n/a	0.001642	NP Inter(NDs)
Selenium (mg/L)	n/a	0.006	n/a	n/a	n/a	n/a	128	n/a	n/a	90.63	n/a	n/a	0.001408	NP Inter(NDs)
Thallium (mg/L)	n/a	0.001	n/a	n/a	n/a	n/a	128	n/a	n/a	100	n/a	n/a	0.001408	NP Inter(NDs)

PLANT BRANCH PONDS B,C,D GWPS				
Constituent Name	**MCL**	**CCR-Rule Specified**	**Background Limit**	**GWPS**
Antimony, Total (mg/L)	0.006		0.017	0.017
Arsenic, Total (mg/L)	0.01		0.005	0.01
Barium, Total (mg/L)	2		0.13	2
Beryllium, Total (mg/L)	0.004		0.0005	0.004
Cadmium, Total (mg/L)	0.005		0.0005	0.005
Chromium, Total (mg/L)	0.1		0.016	0.1
Cobalt, Total (mg/L)	n/a	0.006	0.014	0.014
Fluoride, Total (mg/L)	4		0.42	4
Lead, Total (mg/L)	n/a	0.015	0.0013	0.015
Lithium, Total (mg/L)	n/a	0.04	0.089	0.089
Mercury, Total (mg/L)	0.002		0.00021	0.002
Molybdenum, Total (mg/L)	n/a	0.1	0.01	0.1
Selenium, Total (mg/L)	0.05		0.006	0.05
Thallium, Total (mg/L)	0.002		0.001	0.002

**Highlighted cells indicate Background is higher than MCLs*

**MCL = Maximum Contaminant Level*

**CCR = Coal Combustion Residuals*

**GWPS = Groundwater Protection Standard*

Confidence Intervals - Significant Results

Plant Branch Client: Southern Company Data: Plant Branch AP Printed 5/3/2022, 10:21 AM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Cadmium (mg/L)	**BRGWC-50**	**0.03867**	**0.01281**	**0.005**	**Yes**	**16**	**0.02888**	**0.02503**	**0**	**None**	**x^(1/3)**	**0.01**	**Param.**
Cobalt (mg/L)	**BRGWC-50**	**1.5**	**1.3**	**0.014**	**Yes**	**16**	**1.394**	**0.06801**	**0**	**None**	**No**	**0.01**	**NP (normality)**
Cobalt (mg/L)	**PZ-51I**	**0.041**	**0.017**	**0.014**	**Yes**	**9**	**0.02222**	**0.007276**	**0**	**None**	**No**	**0.002**	**NP (normality)**

Confidence Intervals - All Results

Plant Branch Client: Southern Company Data: Plant Branch AP Printed 5/3/2022, 10:21 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	0.0007	0.017	No	16	0.002856	0.000575	93.75	None	No	0.01	NP (NDs)
Antimony (mg/L)	BRGWC-30I	0.003	0.0013	0.017	No	16	0.002894	0.000425	93.75	None	No	0.01	NP (NDs)
Antimony (mg/L)	BRGWC-32S	0.003	0.0014	0.017	No	16	0.0029	0.0004	93.75	None	No	0.01	NP (NDs)
Antimony (mg/L)	BRGWC-45	0.0031	0.0014	0.017	No	17	0.002414	0.0009097	58.82	None	No	0.01	NP (NDs)
Antimony (mg/L)	BRGWC-47	0.003	0.00035	0.017	No	17	0.002844	0.0006427	94.12	None	No	0.01	NP (NDs)
Antimony (mg/L)	BRGWC-50	0.003	0.00092	0.017	No	16	0.002553	0.0009657	81.25	None	No	0.01	NP (NDs)
Antimony (mg/L)	BRGWC-52I	0.003	0.00091	0.017	No	16	0.002574	0.00092	81.25	None	No	0.01	NP (NDs)
Antimony (mg/L)	PZ-51I	0.003	0.00079	0.017	No	7	0.002241	0.000982	57.14	None	No	0.008	NP (NDs)
Antimony (mg/L)	PZ-51S	0.003	0.00043	0.017	No	7	0.002461	0.001001	71.43	None	No	0.008	NP (NDs)
Arsenic (mg/L)	BRGWC-25I	0.005	0.00072	0.01	No	16	0.003922	0.00193	75	None	No	0.01	NP (NDs)
Arsenic (mg/L)	BRGWC-27I	0.005	0.0011	0.01	No	16	0.004006	0.001783	75	None	No	0.01	NP (NDs)
Arsenic (mg/L)	BRGWC-29I	0.005	0.00065	0.01	No	16	0.00335	0.001979	56.25	None	No	0.01	NP (NDs)
Arsenic (mg/L)	BRGWC-30I	0.005	0.00056	0.01	No	16	0.004722	0.00111	93.75	None	No	0.01	NP (NDs)
Arsenic (mg/L)	BRGWC-32S	0.005	0.00053	0.01	No	16	0.004721	0.001117	93.75	None	No	0.01	NP (NDs)
Arsenic (mg/L)	BRGWC-45	0.005	0.00096	0.01	No	17	0.003829	0.001896	70.59	None	No	0.01	NP (NDs)
Arsenic (mg/L)	BRGWC-47	0.005	0.0012	0.01	No	17	0.00299	0.001886	35.29	None	No	0.01	NP (normality)
Arsenic (mg/L)	BRGWC-50	0.005	0.0014	0.01	No	16	0.004225	0.001675	81.25	None	No	0.01	NP (NDs)
Arsenic (mg/L)	BRGWC-52I	0.005	0.0016	0.01	No	16	0.003573	0.001479	37.5	None	No	0.01	NP (normality)
Arsenic (mg/L)	PZ-51S	0.005	0.002	0.01	No	7	0.004571	0.001134	85.71	None	No	0.008	NP (NDs)
Barium (mg/L)	BRGWC-25I	0.03576	0.02642	2	No	16	0.03109	0.00718	0	None	No	0.01	Param.
Barium (mg/L)	BRGWC-27I	0.0169	0.01492	2	No	16	0.01591	0.001518	0	None	No	0.01	Param.
Barium (mg/L)	BRGWC-29I	0.01932	0.01686	2	No	16	0.01809	0.001893	0	None	No	0.01	Param.
Barium (mg/L)	BRGWC-30I	0.02762	0.02211	2	No	16	0.02486	0.004236	0	None	No	0.01	Param.
Barium (mg/L)	BRGWC-32S	0.04296	0.02744	2	No	16	0.0352	0.01192	0	None	No	0.01	Param.
Barium (mg/L)	BRGWC-45	0.09505	0.07577	2	No	17	0.08541	0.01538	0	None	No	0.01	Param.
Barium (mg/L)	BRGWC-47	0.04339	0.03366	2	No	17	0.03852	0.00776	0	None	No	0.01	Param.
Barium (mg/L)	BRGWC-50	0.02128	0.01822	2	No	16	0.01975	0.002352	0	None	No	0.01	Param.
Barium (mg/L)	BRGWC-52I	0.02538	0.016	2	No	16	0.02069	0.007209	0	None	No	0.01	Param.
Barium (mg/L)	PZ-51I	0.01645	0.01326	2	No	7	0.01486	0.001345	0	None	No	0.01	Param.
Barium (mg/L)	PZ-51S	0.0354	0.02603	2	No	7	0.03071	0.003946	0	None	No	0.01	Param.
Beryllium (mg/L)	BRGWC-27I	0.0001224	0.00007868	0.004	No	17	0.0002196	0.0001663	23.53	Kaplan-Meier	ln(x)	0.01	Param.
Beryllium (mg/L)	BRGWC-29I	0.001039	0.0007322	0.004	No	16	0.0008856	0.0002359	6.25	None	No	0.01	Param.
Beryllium (mg/L)	BRGWC-45	0.0005	0.000079	0.004	No	18	0.0004514	0.0001416	88.89	None	No	0.01	NP (NDs)
Beryllium (mg/L)	BRGWC-47	0.0005	0.000056	0.004	No	17	0.0004211	0.0001758	82.35	None	No	0.01	NP (NDs)
Beryllium (mg/L)	BRGWC-50	0.005168	0.002632	0.004	No	16	0.0039	0.001948	12.5	None	No	0.01	Param.
Beryllium (mg/L)	PZ-51I	0.0005	0.000064	0.004	No	7	0.0001394	0.0001595	14.29	None	No	0.008	NP (normality)
Cadmium (mg/L)	BRGWC-27I	0.0005	0.00009	0.005	No	17	0.0004506	0.0001395	88.24	None	No	0.01	NP (NDs)
Cadmium (mg/L)	BRGWC-30I	0.0005	0.00014	0.005	No	17	0.0004541	0.00013	88.24	None	No	0.01	NP (NDs)
Cadmium (mg/L)	BRGWC-32S	0.0005	0.00011	0.005	No	17	0.0004288	0.0001586	82.35	None	No	0.01	NP (NDs)
Cadmium (mg/L)	BRGWC-45	0.0005	0.0002	0.005	No	18	0.0004193	0.0001565	77.78	None	No	0.01	NP (NDs)
Cadmium (mg/L)	BRGWC-47	0.0005	0.00015	0.005	No	17	0.0003076	0.0001684	41.18	None	No	0.01	NP (normality)
Cadmium (mg/L)	**BRGWC-50**	**0.03867**	**0.01281**	**0.005**	**Yes**	**16**	**0.02888**	**0.02503**	**0**	**None**	**x^(1/3)**	**0.01**	**Param.**
Cadmium (mg/L)	PZ-51I	0.01189	0.001178	0.005	No	9	0.007592	0.01074	0	None	ln(x)	0.01	Param.
Chromium (mg/L)	BRGWC-25I	0.005	0.0016	0.1	No	16	0.004536	0.001272	87.5	None	No	0.01	NP (NDs)
Chromium (mg/L)	BRGWC-27I	0.005	0.003	0.1	No	16	0.004625	0.001088	87.5	None	No	0.01	NP (NDs)
Chromium (mg/L)	BRGWC-29I	0.02	0.005	0.1	No	16	0.005937	0.00375	93.75	None	No	0.01	NP (NDs)
Chromium (mg/L)	BRGWC-30I	0.0051	0.005	0.1	No	16	0.005569	0.002248	87.5	None	No	0.01	NP (NDs)
Chromium (mg/L)	BRGWC-32S	0.005	0.0012	0.1	No	16	0.002731	0.001635	31.25	None	No	0.01	NP (normality)
Chromium (mg/L)	BRGWC-45	0.005	0.0014	0.1	No	17	0.00429	0.001588	82.35	None	No	0.01	NP (NDs)
Chromium (mg/L)	BRGWC-47	0.005	0.0018	0.1	No	17	0.004067	0.001748	76.47	None	No	0.01	NP (NDs)
Chromium (mg/L)	BRGWC-50	0.005	0.00071	0.1	No	16	0.003484	0.002007	56.25	None	No	0.01	NP (NDs)
Chromium (mg/L)	BRGWC-52I	0.005	0.0017	0.1	No	16	0.004794	0.000825	93.75	None	No	0.01	NP (NDs)
Chromium (mg/L)	PZ-51I	0.005	0.0008	0.1	No	7	0.003826	0.002006	71.43	None	No	0.008	NP (NDs)
Chromium (mg/L)	PZ-51S	0.005	0.00042	0.1	No	7	0.003721	0.002184	71.43	None	No	0.008	NP (NDs)
Cobalt (mg/L)	BRGWC-25I	0.006761	0.003951	0.014	No	16	0.005356	0.00216	6.25	None	No	0.01	Param.
Cobalt (mg/L)	BRGWC-27I	0.01077	0.007731	0.014	No	17	0.009253	0.002429	0	None	No	0.01	Param.
Cobalt (mg/L)	BRGWC-29I	0.009886	0.006557	0.014	No	16	0.008325	0.002677	6.25	None	sqrt(x)	0.01	Param.
Cobalt (mg/L)	BRGWC-30I	0.0016	0.00078	0.014	No	17	0.001781	0.001564	17.65	None	No	0.01	NP (normality)
Cobalt (mg/L)	BRGWC-32S	0.005	0.0025	0.014	No	17	0.004618	0.001111	88.24	None	No	0.01	NP (NDs)
Cobalt (mg/L)	BRGWC-45	0.015	0.0057	0.014	No	18	0.01287	0.01468	0	None	No	0.01	NP (normality)

Confidence Intervals - All Results

Plant Branch Client: Southern Company Data: Plant Branch AP Printed 5/3/2022, 10:21 AM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Cobalt (mg/L)	BRGWC-47	0.002668	0.000535	0.014	No	17	0.00295	0.003274	17.65	Kaplan-Meier	x^(1/3)	0.01	Param.
Cobalt (mg/L)	**BRGWC-50**	**1.5**	**1.3**	**0.014**	**Yes**	**16**	**1.394**	**0.06801**	**0**	**None**	**No**	**0.01**	**NP (normality)**
Cobalt (mg/L)	BRGWC-52I	0.005	0.0012	0.014	No	16	0.003656	0.001799	56.25	None	No	0.01	NP (NDs)
Cobalt (mg/L)	PZ-50D	0.2898	-0.1361	0.014	No	4	0.07688	0.09379	0	None	No	0.01	Param.
Cobalt (mg/L)	PZ-51D	0.005	0.0004	0.014	No	4	0.002702	0.002653	50	None	No	0.0625	NP (normality)
Cobalt (mg/L)	**PZ-51I**	**0.041**	**0.017**	**0.014**	**Yes**	**9**	**0.02222**	**0.007276**	**0**	**None**	**No**	**0.002**	**NP (normality)**
Cobalt (mg/L)	PZ-51S	0.007679	0.002946	0.014	No	8	0.005313	0.002233	0	None	No	0.01	Param.
Fluoride (mg/L)	BRGWC-25I	0.27	0.14	4	No	17	0.2094	0.1393	5.882	None	No	0.01	NP (normality)
Fluoride (mg/L)	BRGWC-27I	0.2614	0.1497	4	No	17	0.2055	0.08915	11.76	None	No	0.01	Param.
Fluoride (mg/L)	BRGWC-29I	0.37	0.085	4	No	17	0.1776	0.1259	11.76	None	No	0.01	NP (normality)
Fluoride (mg/L)	BRGWC-30I	0.3339	0.1248	4	No	17	0.2559	0.2211	5.882	None	x^(1/3)	0.01	Param.
Fluoride (mg/L)	BRGWC-32S	0.11	0.09	4	No	17	0.1059	0.03792	64.71	None	No	0.01	NP (NDs)
Fluoride (mg/L)	BRGWC-45	0.12	0.067	4	No	18	0.1769	0.2379	55.56	None	No	0.01	NP (NDs)
Fluoride (mg/L)	BRGWC-47	0.34	0.076	4	No	18	0.2408	0.2624	50	None	No	0.01	NP (normality)
Fluoride (mg/L)	BRGWC-50	0.8284	0.3446	4	No	17	0.6229	0.4571	0	None	sqrt(x)	0.01	Param.
Fluoride (mg/L)	BRGWC-52I	0.2346	0.1271	4	No	16	0.1809	0.08263	6.25	None	No	0.01	Param.
Fluoride (mg/L)	PZ-50D	0.3413	0.00868	4	No	4	0.175	0.07326	0	None	No	0.01	Param.
Fluoride (mg/L)	PZ-51D	0.3256	0.1844	4	No	4	0.255	0.03109	0	None	No	0.01	Param.
Fluoride (mg/L)	PZ-51I	0.1	0.061	4	No	8	0.09513	0.01379	87.5	None	No	0.004	NP (NDs)
Fluoride (mg/L)	PZ-51S	0.1097	0.0463	4	No	7	0.078	0.02669	0	None	No	0.01	Param.
Lead (mg/L)	BRGWC-25I	0.001	0.00011	0.015	No	16	0.0009444	0.0002225	93.75	None	No	0.01	NP (NDs)
Lead (mg/L)	BRGWC-27I	0.001	0.000063	0.015	No	16	0.0009414	0.0002343	93.75	None	No	0.01	NP (NDs)
Lead (mg/L)	BRGWC-29I	0.0006	0.00027	0.015	No	15	0.0004607	0.0002457	13.33	None	No	0.01	NP (normality)
Lead (mg/L)	BRGWC-30I	0.001	0.00011	0.015	No	16	0.0009444	0.0002225	93.75	None	No	0.01	NP (NDs)
Lead (mg/L)	BRGWC-45	0.001	0.00026	0.015	No	17	0.0008543	0.0003267	82.35	None	No	0.01	NP (NDs)
Lead (mg/L)	BRGWC-47	0.001	0.00012	0.015	No	17	0.0008373	0.0003625	82.35	None	No	0.01	NP (NDs)
Lead (mg/L)	BRGWC-50	0.001	0.000085	0.015	No	16	0.0005907	0.0004375	50	None	No	0.01	NP (normality)
Lead (mg/L)	BRGWC-52I	0.001	0.000042	0.015	No	16	0.0009401	0.0002395	93.75	None	No	0.01	NP (NDs)
Lead (mg/L)	PZ-51I	0.001	0.00017	0.015	No	7	0.00079	0.0003628	71.43	None	No	0.008	NP (NDs)
Lithium (mg/L)	BRGWC-27I	0.0021	0.0012	0.089	No	16	0.003175	0.004624	12.5	None	No	0.01	NP (normality)
Lithium (mg/L)	BRGWC-29I	0.003643	0.00302	0.089	No	16	0.003331	0.0004785	0	None	No	0.01	Param.
Lithium (mg/L)	BRGWC-30I	0.01683	0.01192	0.089	No	16	0.01438	0.003779	0	None	No	0.01	Param.
Lithium (mg/L)	BRGWC-32S	0.0035	0.002	0.089	No	16	0.003837	0.004372	12.5	None	No	0.01	NP (normality)
Lithium (mg/L)	BRGWC-45	0.003543	0.002869	0.089	No	16	0.003206	0.0005183	0	None	No	0.01	Param.
Lithium (mg/L)	BRGWC-47	0.04376	0.04052	0.089	No	17	0.04214	0.00259	0	None	No	0.01	Param.
Lithium (mg/L)	BRGWC-50	0.04385	0.03802	0.089	No	16	0.041	0.00459	0	None	sqrt(x)	0.01	Param.
Lithium (mg/L)	BRGWC-52I	0.006853	0.003206	0.089	No	16	0.005237	0.003284	6.25	None	sqrt(x)	0.01	Param.
Lithium (mg/L)	PZ-51I	0.026	0.019	0.089	No	7	0.02071	0.002498	0	None	No	0.008	NP (normality)
Lithium (mg/L)	PZ-51S	0.015	0.0012	0.089	No	7	0.01303	0.005216	85.71	None	No	0.008	NP (NDs)
Mercury (mg/L)	BRGWC-25I	0.0002	0.000083	0.002	No	14	0.0001802	0.000051	85.71	None	No	0.01	NP (NDs)
Mercury (mg/L)	BRGWC-27I	0.0002	0.00005	0.002	No	14	0.0001784	0.00005502	85.71	None	No	0.01	NP (NDs)
Mercury (mg/L)	BRGWC-29I	0.0002	0.000098	0.002	No	14	0.000172	0.00005679	78.57	None	No	0.01	NP (NDs)
Mercury (mg/L)	BRGWC-30I	0.0002	0.000082	0.002	No	14	0.0001709	0.00005853	78.57	None	No	0.01	NP (NDs)
Mercury (mg/L)	BRGWC-32S	0.0002	0.0001	0.002	No	14	0.0001766	0.00004669	78.57	None	No	0.01	NP (NDs)
Mercury (mg/L)	PZ-51I	0.0002	0.000099	0.002	No	7	0.0001856	0.00003817	85.71	None	No	0.008	NP (NDs)
Molybdenum (mg/L)	BRGWC-25I	0.01	0.00089	0.1	No	15	0.006973	0.004431	66.67	None	No	0.01	NP (NDs)
Molybdenum (mg/L)	BRGWC-30I	0.01	0.0012	0.1	No	15	0.007679	0.003995	73.33	None	No	0.01	NP (NDs)
Molybdenum (mg/L)	BRGWC-45	0.01	0.00076	0.1	No	16	0.009422	0.00231	93.75	None	No	0.01	NP (NDs)
Molybdenum (mg/L)	BRGWC-50	0.01	0.0033	0.1	No	15	0.009033	0.002559	86.67	None	No	0.01	NP (NDs)
Molybdenum (mg/L)	BRGWC-52I	0.01	0.0012	0.1	No	15	0.006427	0.00383	46.67	None	No	0.01	NP (normality)
Selenium (mg/L)	BRGWC-25I	0.005	0.0021	0.05	No	16	0.004819	0.000725	93.75	None	No	0.01	NP (NDs)
Selenium (mg/L)	BRGWC-27I	0.005	0.0022	0.05	No	16	0.003769	0.00125	31.25	None	No	0.01	NP (normality)
Selenium (mg/L)	BRGWC-29I	0.0058	0.0039	0.05	No	16	0.004819	0.001392	50	None	No	0.01	NP (normality)
Selenium (mg/L)	BRGWC-30I	0.005	0.0038	0.05	No	16	0.004594	0.0008888	75	None	No	0.01	NP (NDs)
Selenium (mg/L)	BRGWC-32S	0.12	0.0019	0.05	No	17	0.06389	0.06547	23.53	None	No	0.01	NP (normality)
Selenium (mg/L)	BRGWC-45	0.005	0.0029	0.05	No	17	0.004876	0.0005093	94.12	None	No	0.01	NP (NDs)
Selenium (mg/L)	BRGWC-47	0.005	0.0017	0.05	No	17	0.003918	0.001533	64.71	None	No	0.01	NP (NDs)
Selenium (mg/L)	BRGWC-50	0.005	0.0022	0.05	No	16	0.003825	0.001339	50	None	No	0.01	NP (normality)
Thallium (mg/L)	BRGWC-29I	0.001	0.00016	0.002	No	16	0.0003325	0.0003315	18.75	None	No	0.01	NP (normality)

Appendix IV Trend Tests - All Results (No Significant)

Plant Branch Client: Southern Company Data: Plant Branch AP Printed 4/12/2022, 11:29 AM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Cadmium (mg/L)	BRGWA-12I (bg)	0	0	63	No	17	100	n/a	n/a	0.01	NP
Cadmium (mg/L)	BRGWA-12S (bg)	0	0	63	No	17	100	n/a	n/a	0.01	NP
Cadmium (mg/L)	BRGWA-23S (bg)	0	3	58	No	16	87.5	n/a	n/a	0.01	NP
Cadmium (mg/L)	BRGWA-2I (bg)	0	0	58	No	16	100	n/a	n/a	0.01	NP
Cadmium (mg/L)	BRGWA-2S (bg)	0	0	58	No	16	100	n/a	n/a	0.01	NP
Cadmium (mg/L)	BRGWA-5I (bg)	0	0	58	No	16	100	n/a	n/a	0.01	NP
Cadmium (mg/L)	BRGWA-5S (bg)	0	0	58	No	16	100	n/a	n/a	0.01	NP
Cadmium (mg/L)	BRGWA-6S (bg)	0	0	58	No	16	100	n/a	n/a	0.01	NP
Cadmium (mg/L)	BRGWC-50	-0.009878	-57	-58	No	16	0	n/a	n/a	0.01	NP
Cobalt (mg/L)	BRGWA-12I (bg)	0	0	63	No	17	100	n/a	n/a	0.01	NP
Cobalt (mg/L)	BRGWA-12S (bg)	0	0	63	No	17	100	n/a	n/a	0.01	NP
Cobalt (mg/L)	BRGWA-23S (bg)	-0.0007123	-41	-58	No	16	12.5	n/a	n/a	0.01	NP
Cobalt (mg/L)	BRGWA-2I (bg)	0	-2	-58	No	16	75	n/a	n/a	0.01	NP
Cobalt (mg/L)	BRGWA-2S (bg)	-0.0004206	-54	-58	No	16	12.5	n/a	n/a	0.01	NP
Cobalt (mg/L)	BRGWA-5I (bg)	-0.0001573	-43	-48	No	14	0	n/a	n/a	0.01	NP
Cobalt (mg/L)	BRGWA-5S (bg)	0	21	58	No	16	68.75	n/a	n/a	0.01	NP
Cobalt (mg/L)	BRGWA-6S (bg)	0	-4	-58	No	16	68.75	n/a	n/a	0.01	NP
Cobalt (mg/L)	BRGWC-50	0	23	58	No	16	0	n/a	n/a	0.01	NP
Cobalt (mg/L)	PZ-51I	0.0005983	5	25	No	9	0	n/a	n/a	0.01	NP

Upper Tolerance Limit Summary Table - Combined Radium 226 + 228

Plant Branch Client: Southern Company Data: Plant Branch AP Printed 5/4/2022, 1:54 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Combined Radium 226 + 228 (pCi/L)	n/a	1.794	n/a	n/a	n/a	n/a	128	0.8469	0.2609	0	None	sqrt(x)	0.05	Inter

PLANT BRANCH PONDS B,C,D GWPS				
Constituent Name	**MCL**	**CCR-Rule Specified**	**Background Limit**	**GWPS**
Combined Radium, Total (pCi/L)	5		1.79	5

**MCL = Maximum Contaminant Level*

**CCR = Coal Combustion Residuals*

**GWPS = Groundwater Protection Standard*

Confidence Intervals - Combined Radium 226 + 228 (No Significant Results)

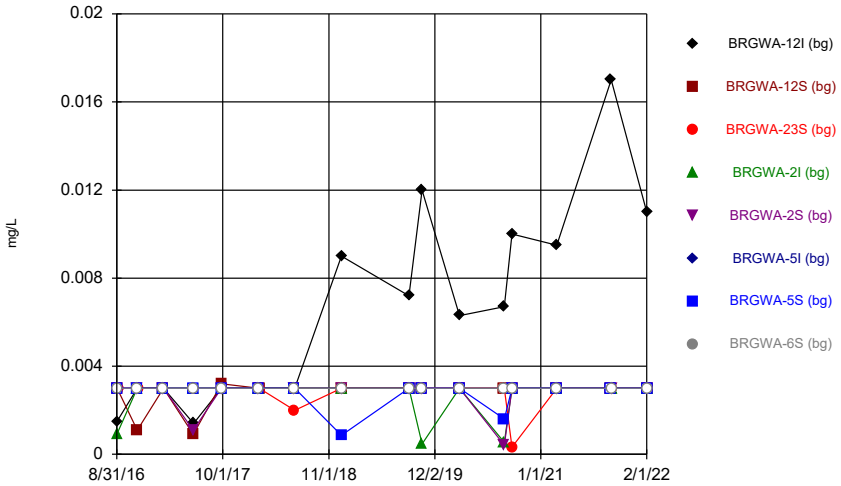
Plant Branch Client: Southern Company Data: Plant Branch AP Printed 7/26/2022, 9:36 AM

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-25I	1.445	0.5267	5	No	16	1.089	0.9719	0	None	x^(1/3)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	BRGWC-27I	1.377	0.5281	5	No	16	1.013	0.8008	0	None	sqrt(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	BRGWC-29I	1.611	1.148	5	No	16	1.38	0.3559	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	BRGWC-30I	1.141	0.6522	5	No	16	0.8966	0.3757	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	BRGWC-32S	1.053	0.4257	5	No	16	0.7395	0.4823	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	BRGWC-45	0.7882	0.3592	5	No	17	0.5737	0.3424	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	BRGWC-47	1.402	0.7484	5	No	17	1.075	0.5212	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	BRGWC-50	1.963	1.226	5	No	16	1.594	0.5663	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	BRGWC-52I	2.304	1.451	5	No	16	1.878	0.6554	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	PZ-51I	11.7	0.771	5	No	7	2.712	3.986	0	None	No	0.008	NP (normality)
Combined Radium 226 + 228 (pCi/L)	PZ-51S	7.273	0.00008008	5	No	7	3.013	6.232	0	None	x^(1/3)	0.01	Param.

FIGURE A.

Sanitas™ v.9.6.32j Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Time Series



Constituent: Antimony Analysis Run 5/3/2022 10:09 AM View: Pond BCD.1
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.32j Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

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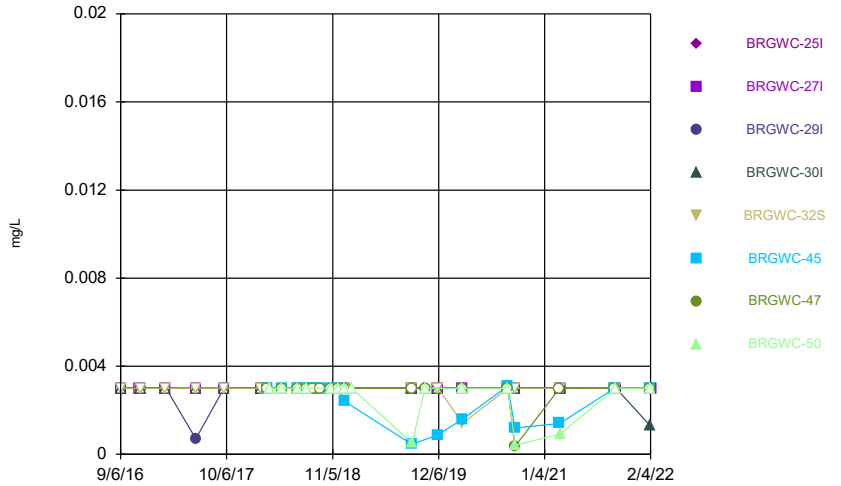

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Plant Branch Client: Southern Company Data: Plant Branch AP

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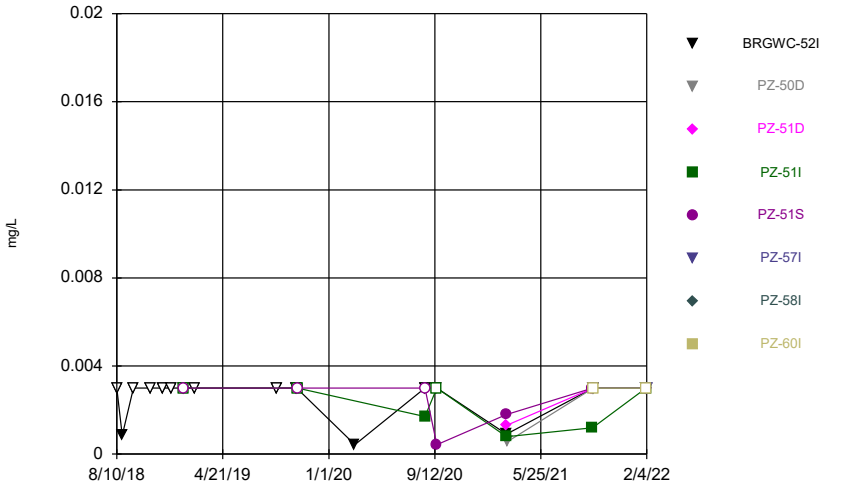

Constituent: Antimony Analysis Run 5/3/2022 10:09 AM View: Pond BCD.1
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.32j Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

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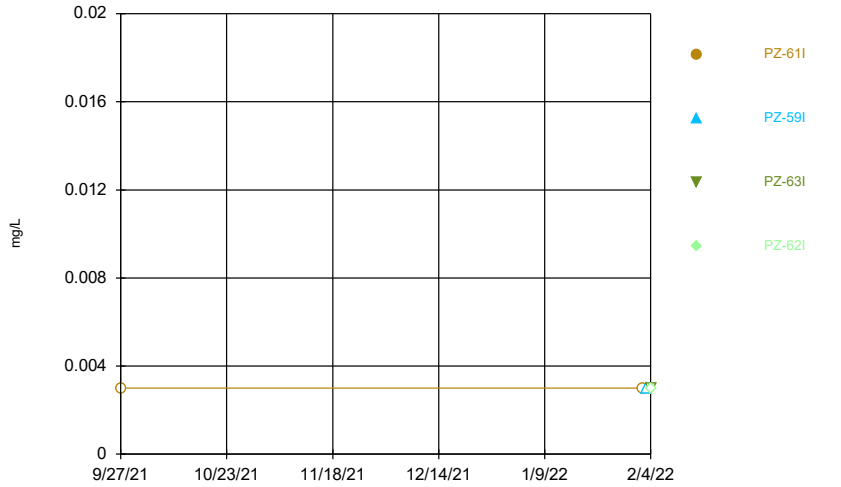

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Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.32j Groundwater Stats Consulting. UG
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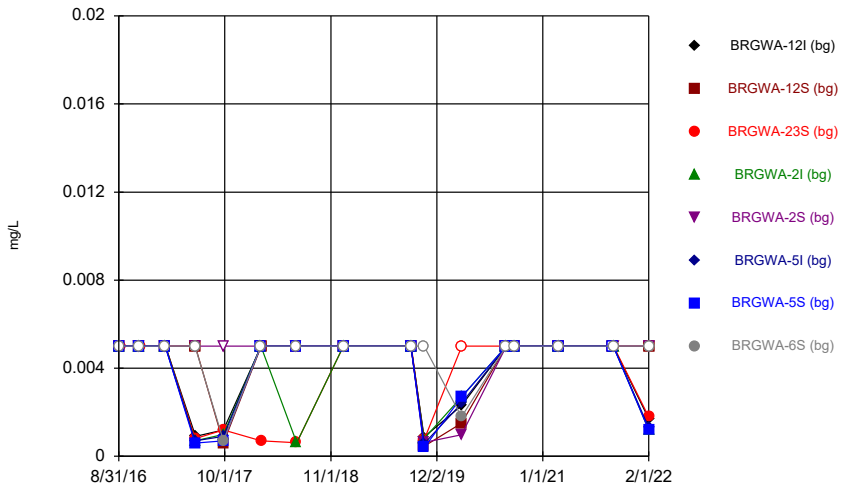
Time Series



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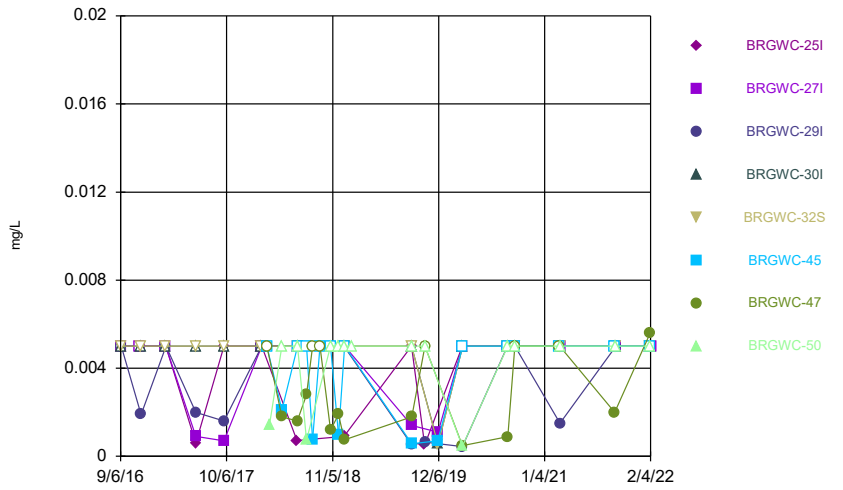
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.32j Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Time Series



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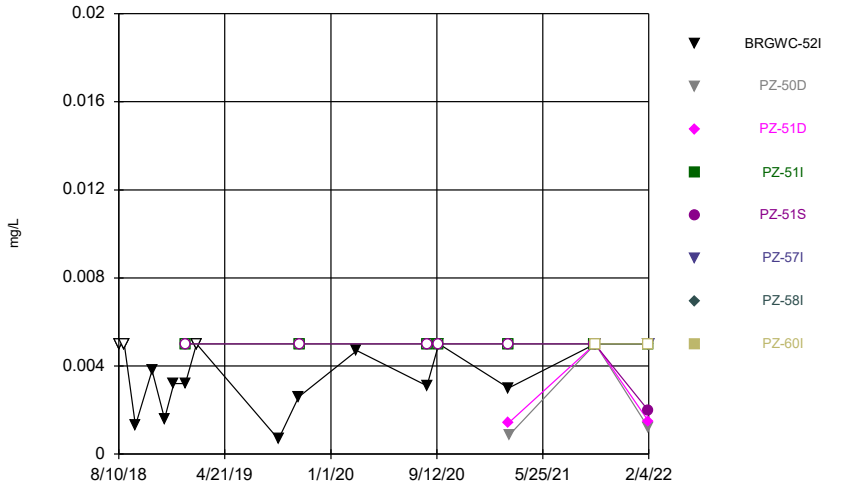
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.32j Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Time Series



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Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.32j Groundwater Stats Consulting. UG
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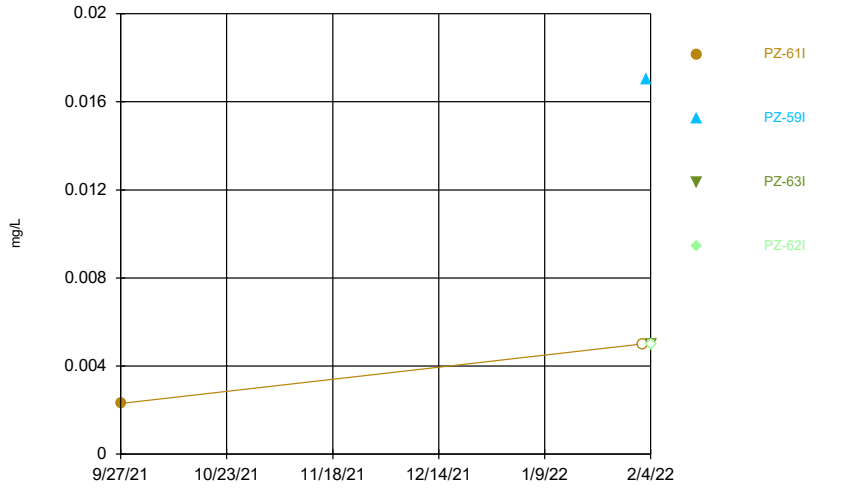

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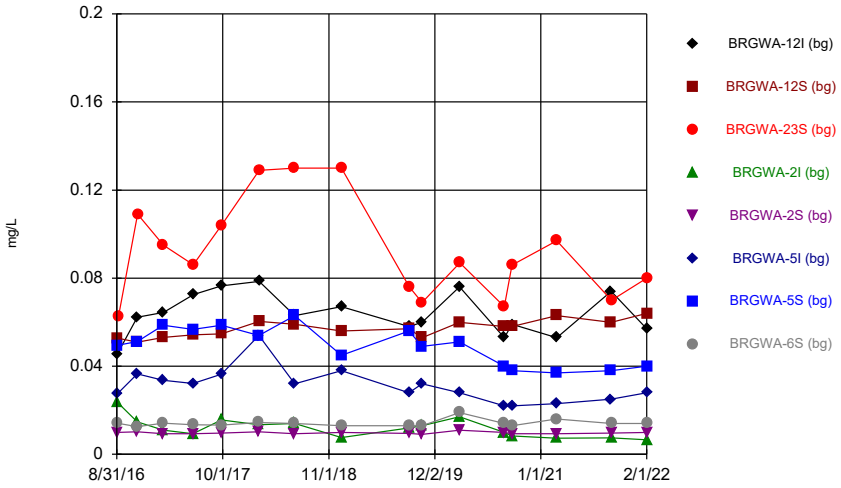
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.32j Groundwater Stats Consulting. UG

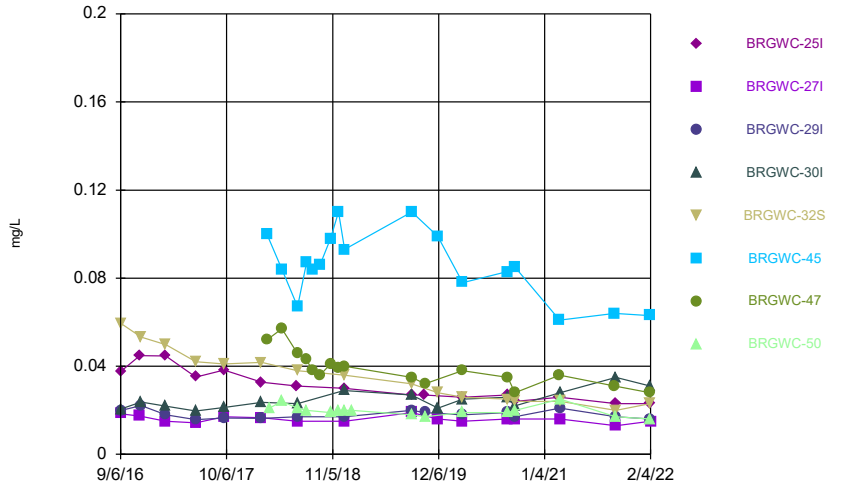
Time Series



Constituent: Barium Analysis Run 5/3/2022 10:10 AM View: Pond BCD.1
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.32j Groundwater Stats Consulting. UG

Time Series



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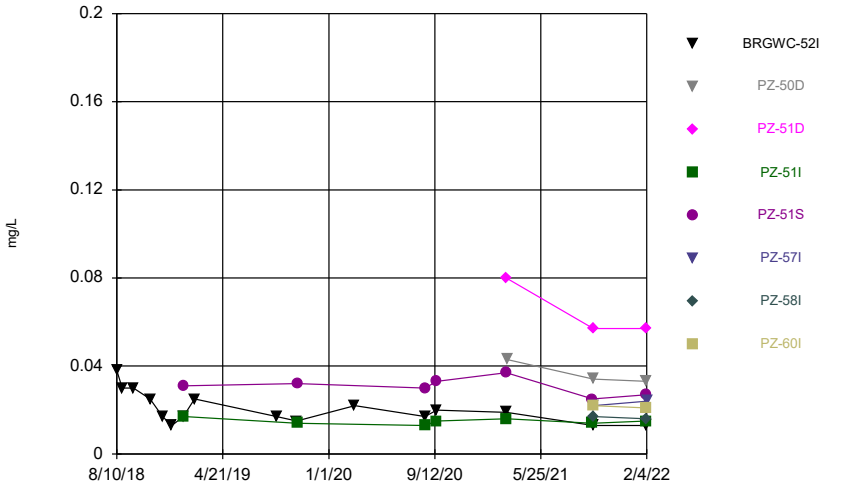
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.32j Groundwater Stats Consulting. UG

Time Series



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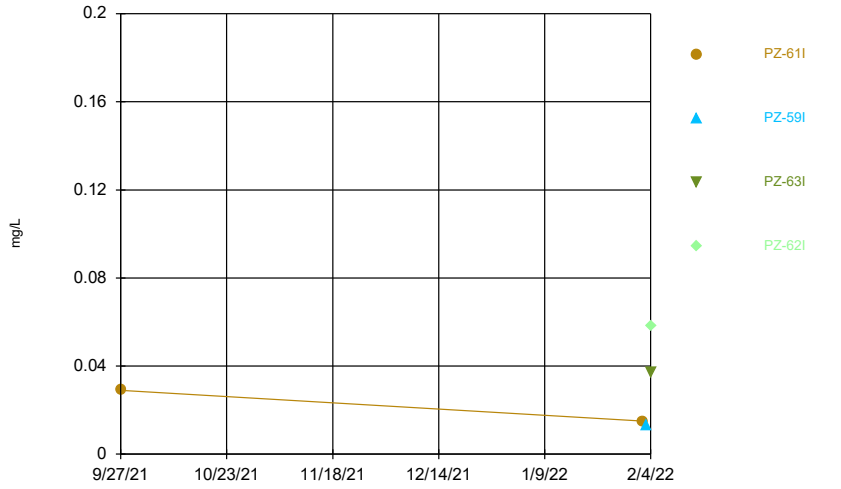
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.32j Groundwater Stats Consulting. UG

Time Series



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Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.32j Groundwater Stats Consulting. UG
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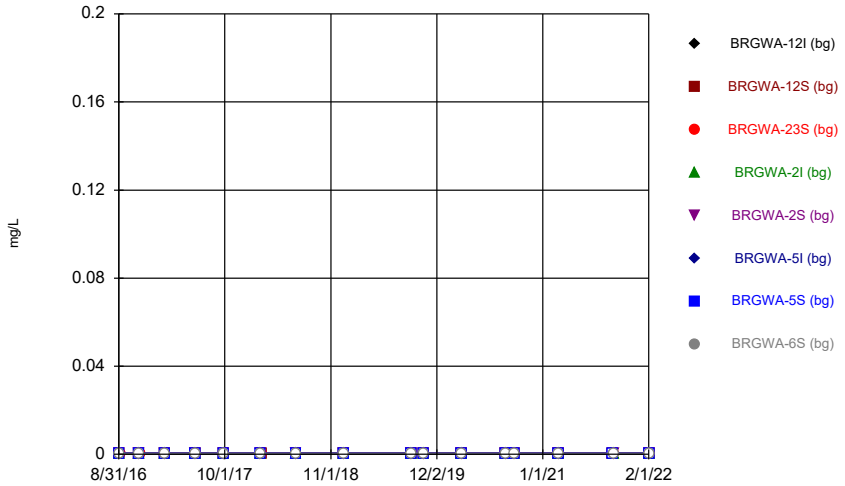

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Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.32j Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

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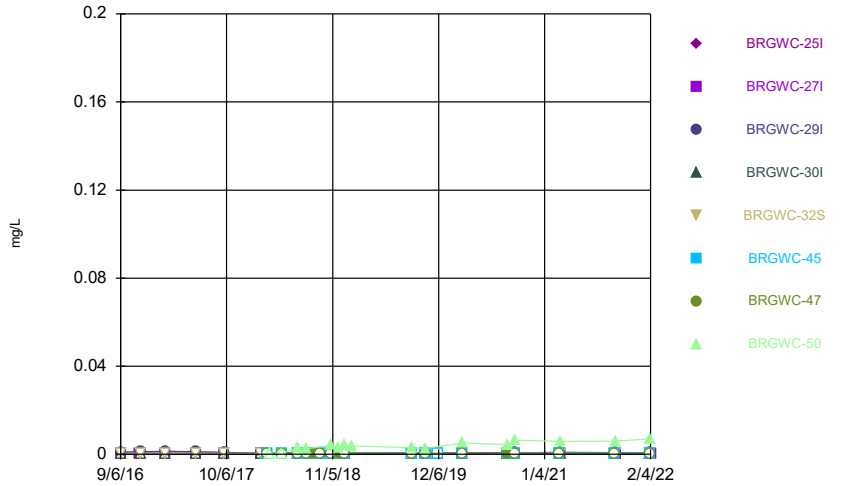

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Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.32j Groundwater Stats Consulting. UG
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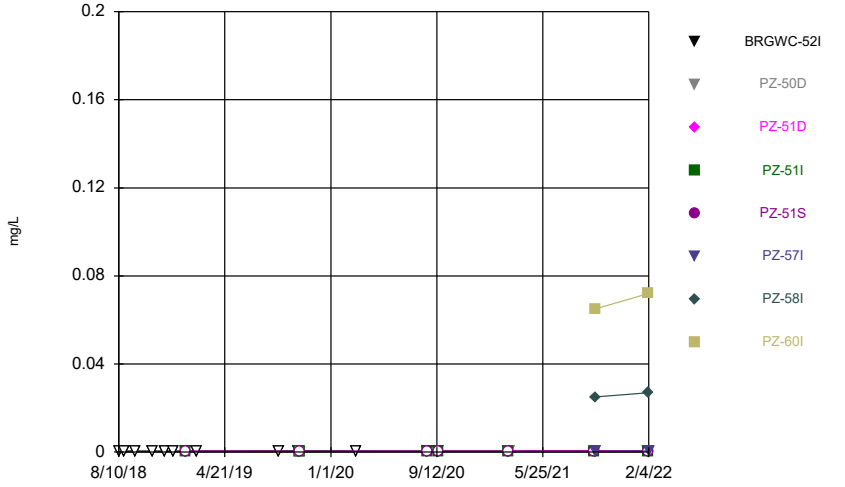

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Plant Branch Client: Southern Company Data: Plant Branch AP

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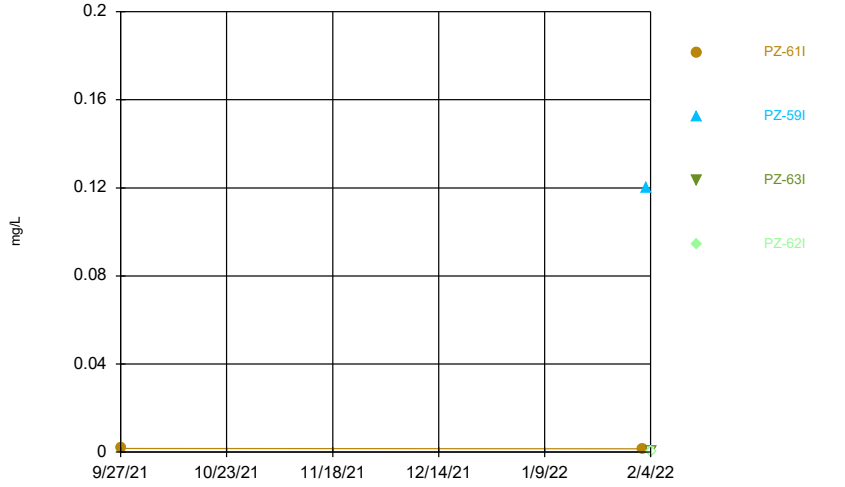

Constituent: Beryllium Analysis Run 5/3/2022 10:10 AM View: Pond BCD.1
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.32j Groundwater Stats Consulting. UG
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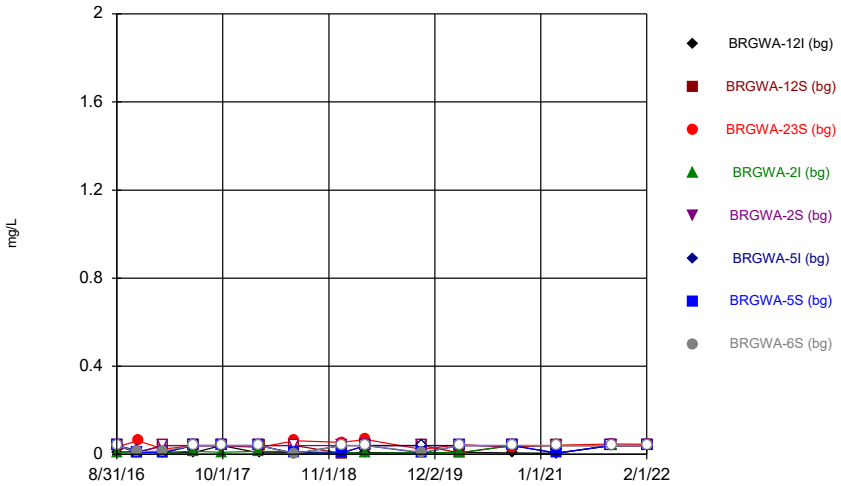

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Plant Branch Client: Southern Company Data: Plant Branch AP

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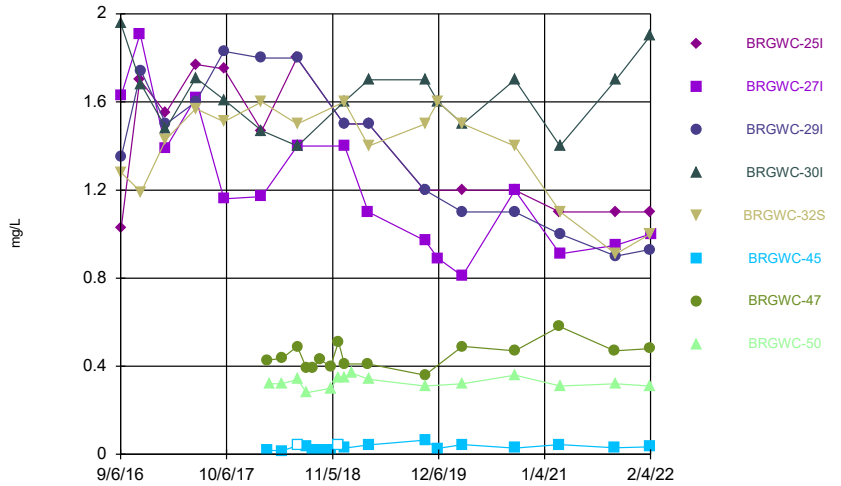

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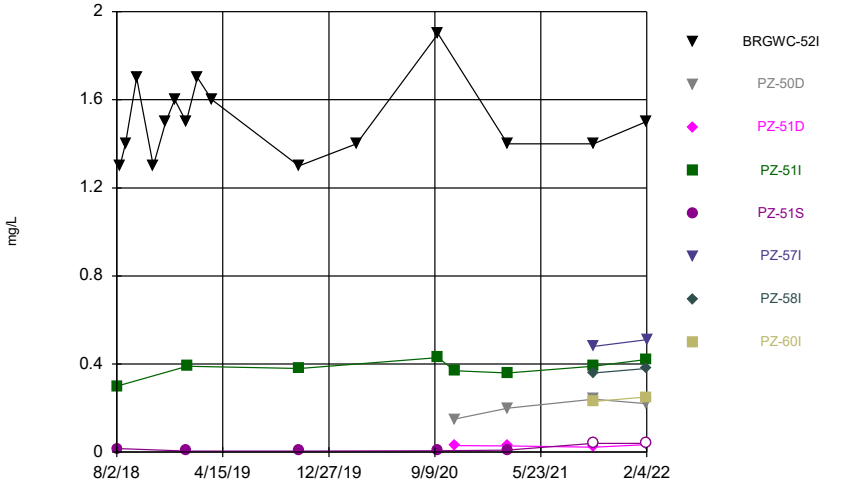

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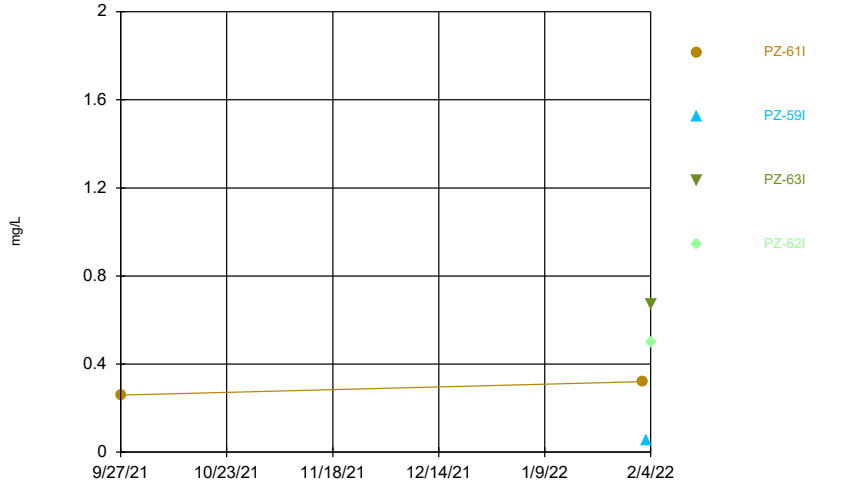
Time Series



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Plant Branch Client: Southern Company Data: Plant Branch AP

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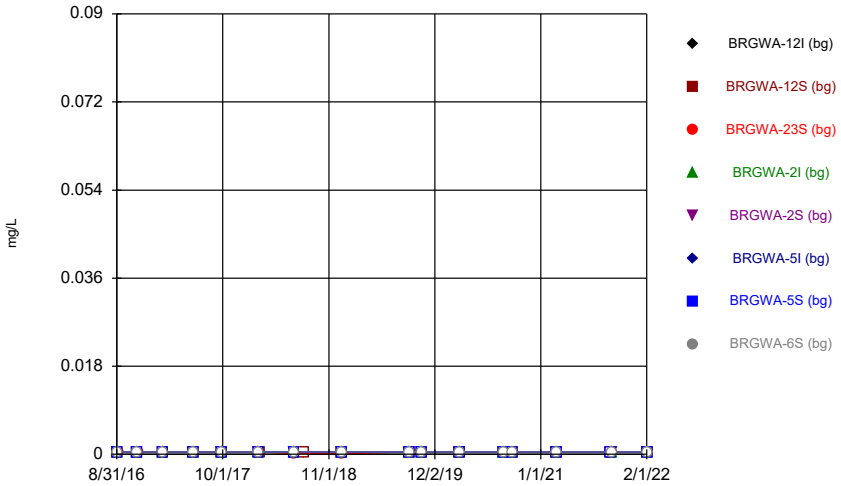
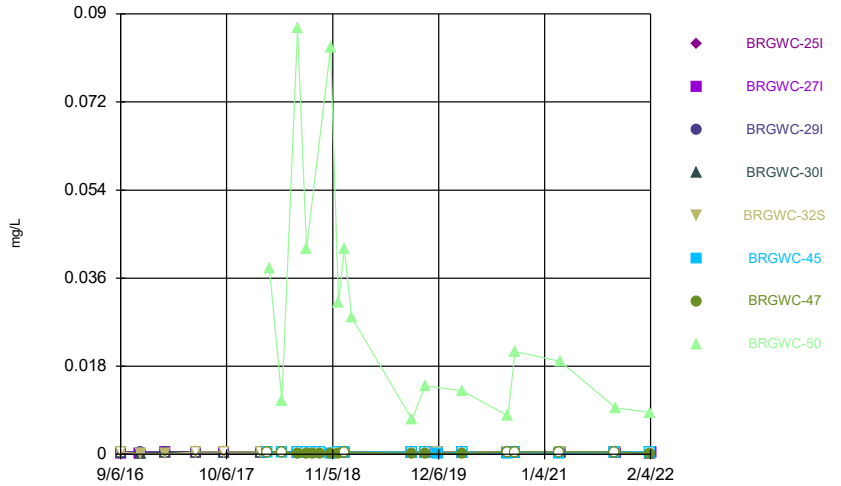


Constituent: Cadmium Analysis Run 5/3/2022 10:10 AM View: Pond BCD.1
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.32j Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Time Series



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Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.32j Groundwater Stats Consulting. UG
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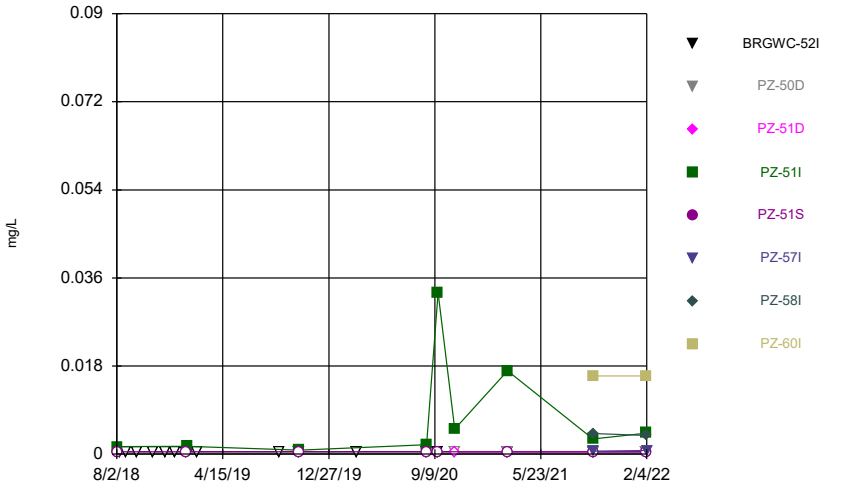
Time Series



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Plant Branch Client: Southern Company Data: Plant Branch AP

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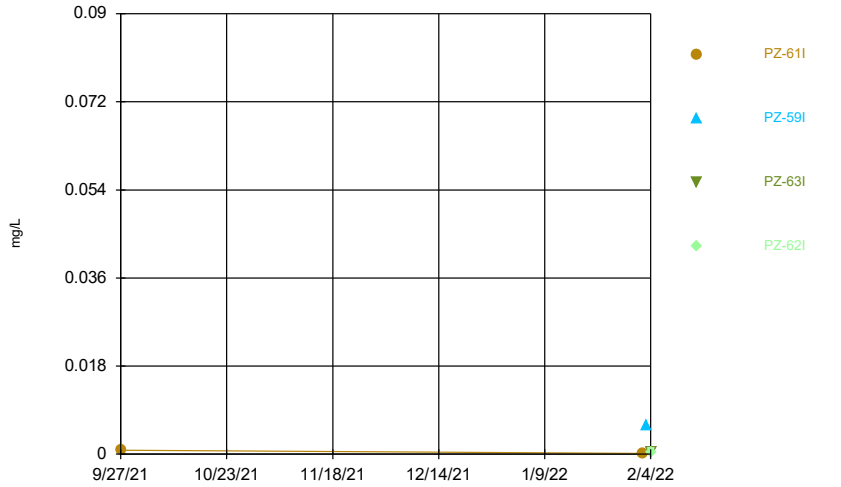

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Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.32j Groundwater Stats Consulting. UG
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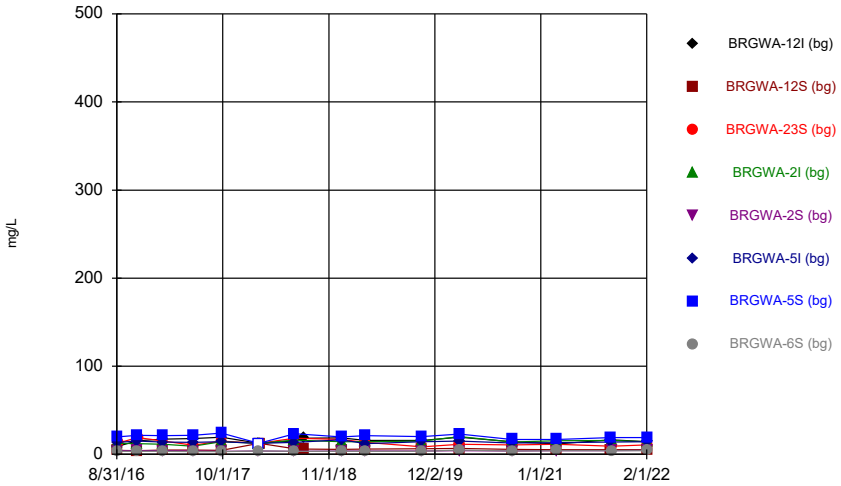
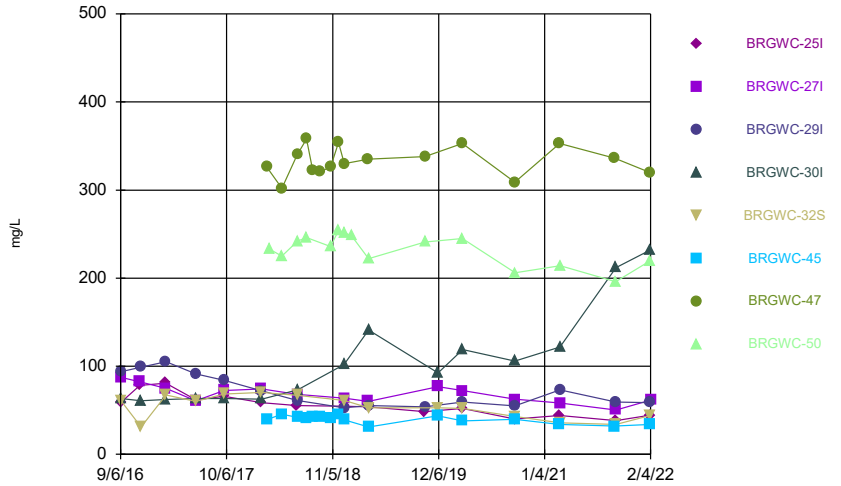


Constituent: Calcium Analysis Run 5/3/2022 10:10 AM View: Pond BCD.1
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.32j Groundwater Stats Consulting. UG

Time Series



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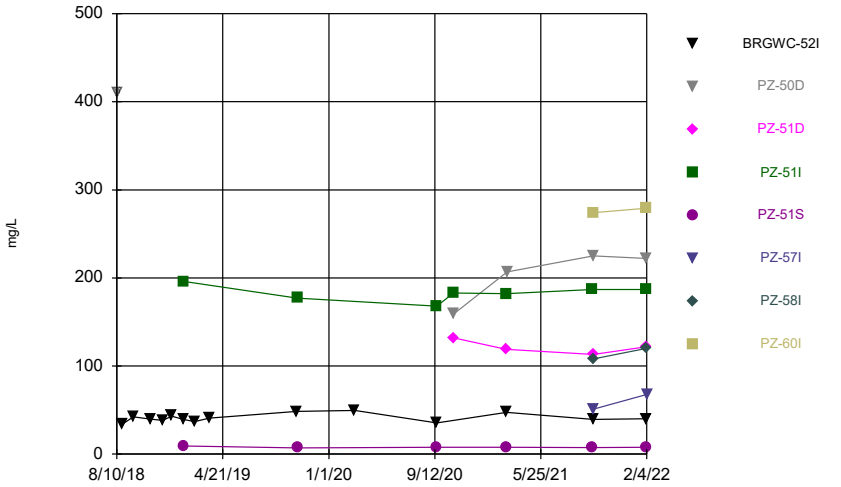
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.32j Groundwater Stats Consulting. UG

Time Series



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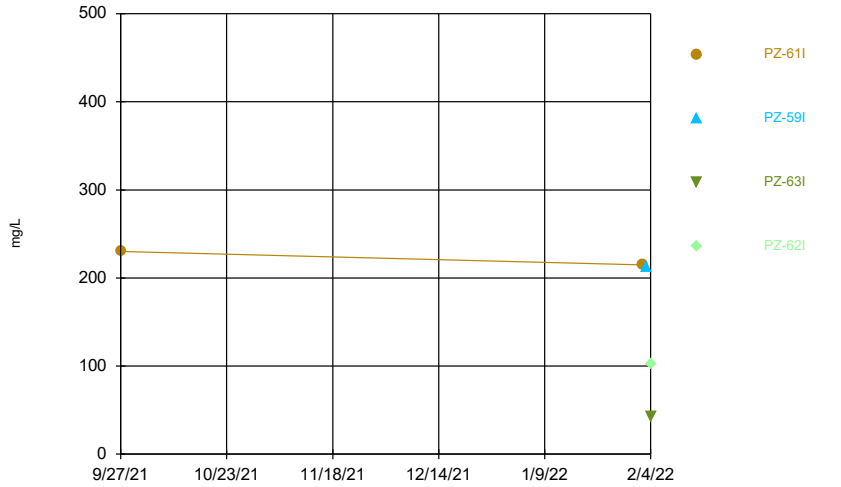
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.32j Groundwater Stats Consulting. UG

Time Series



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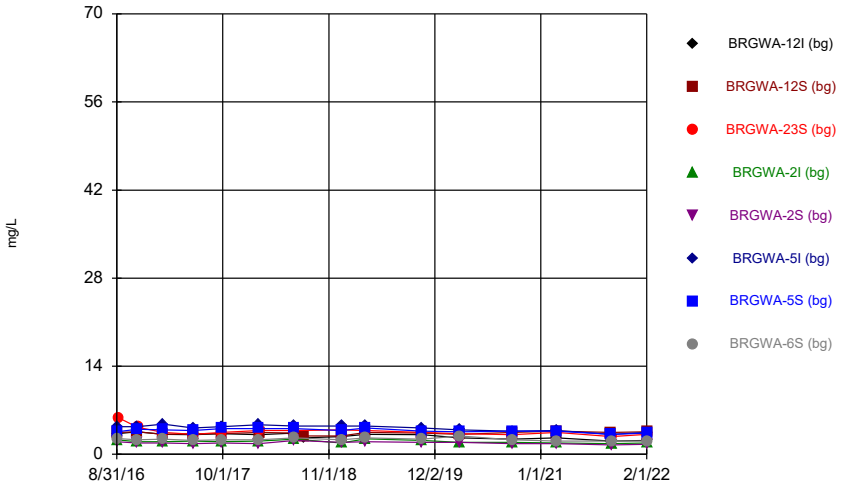
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.32j Groundwater Stats Consulting. UG

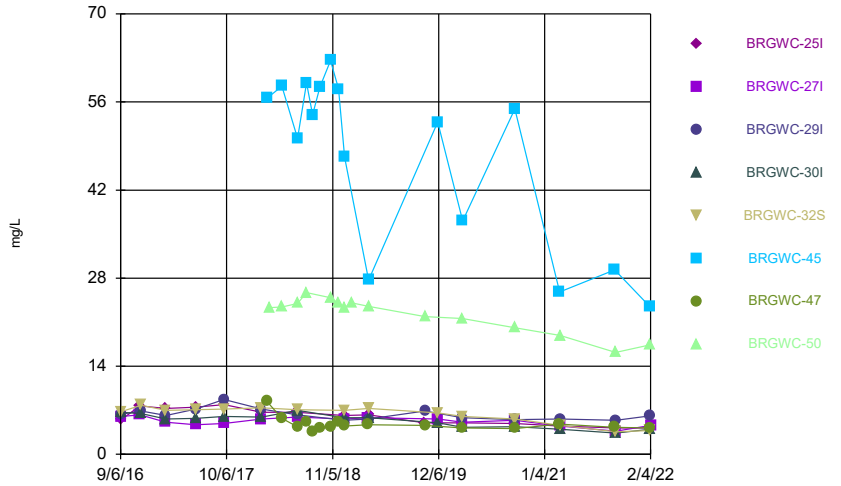
Time Series



Constituent: Chloride Analysis Run 5/3/2022 10:10 AM View: Pond BCD.1
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.32j Groundwater Stats Consulting. UG

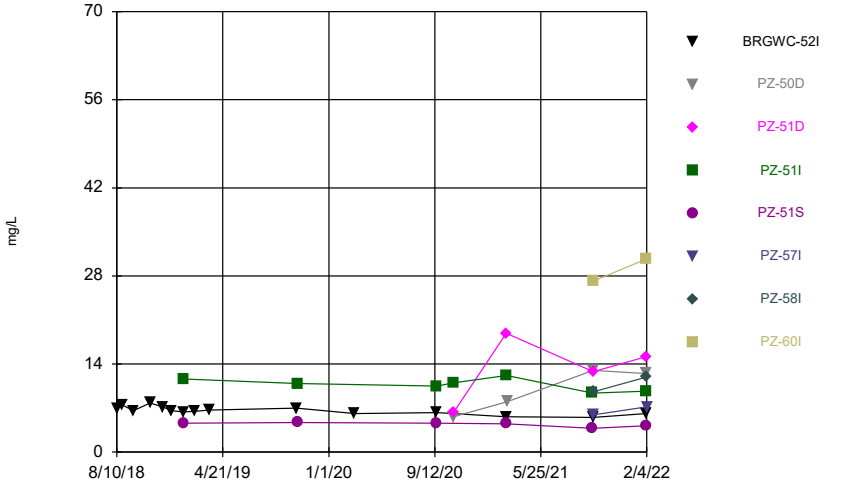
Time Series



Constituent: Chloride Analysis Run 5/3/2022 10:10 AM View: Pond BCD.1
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.32j Groundwater Stats Consulting. UG

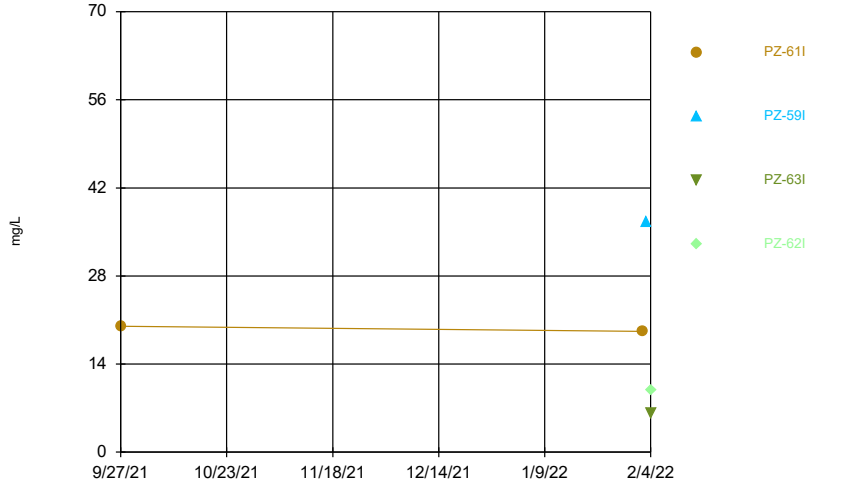
Time Series



Constituent: Chloride Analysis Run 5/3/2022 10:10 AM View: Pond BCD.1
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.32j Groundwater Stats Consulting. UG

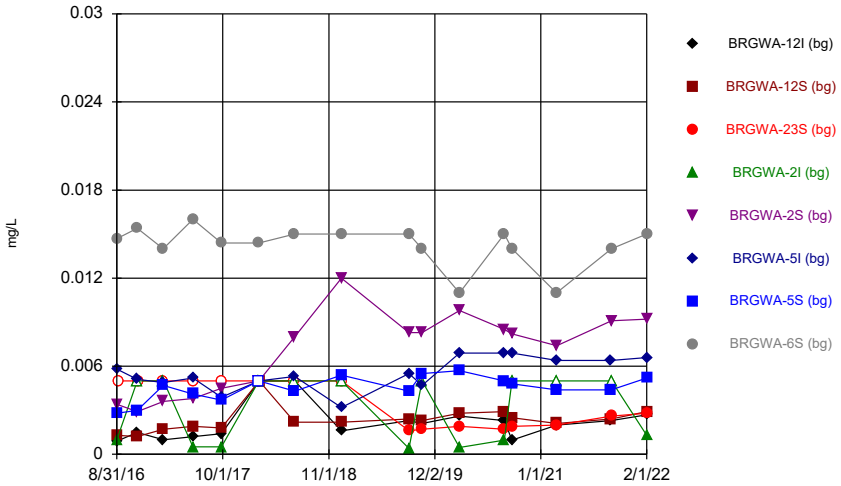
Time Series



Constituent: Chloride Analysis Run 5/3/2022 10:10 AM View: Pond BCD.1
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.32j Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

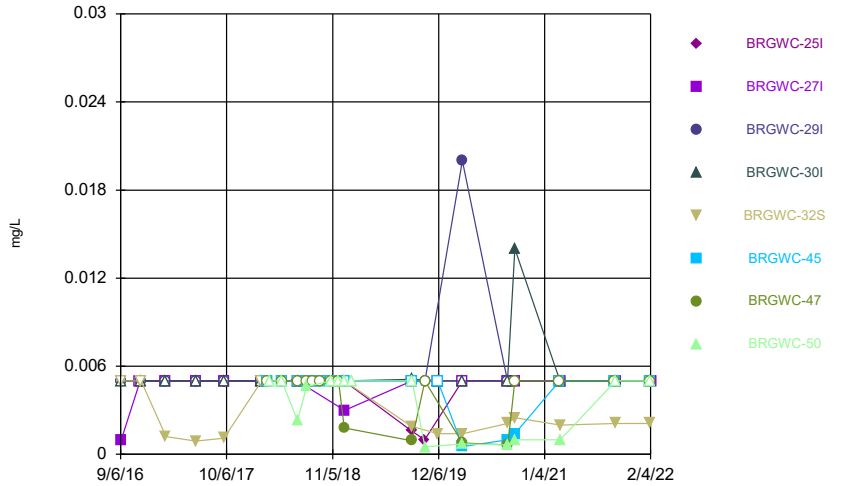
Time Series



Constituent: Chromium Analysis Run 5/3/2022 10:10 AM View: Pond BCD.1
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.32j Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

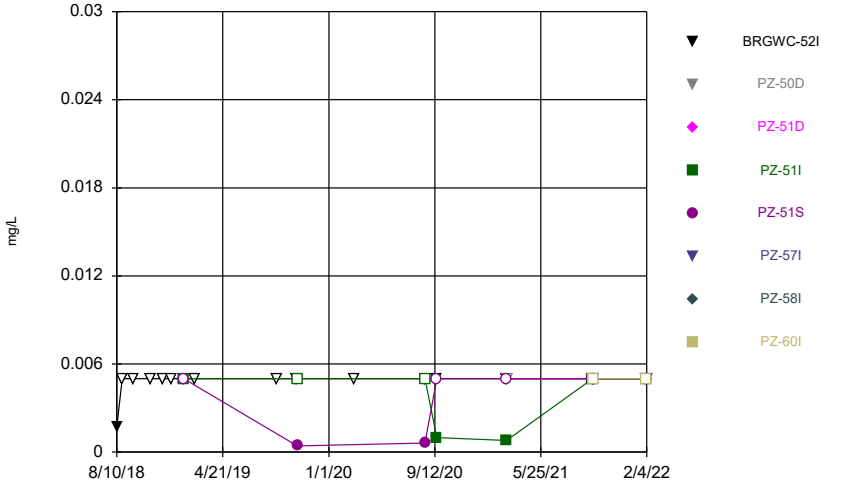
Time Series



Constituent: Chromium Analysis Run 5/3/2022 10:10 AM View: Pond BCD.1
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.32j Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

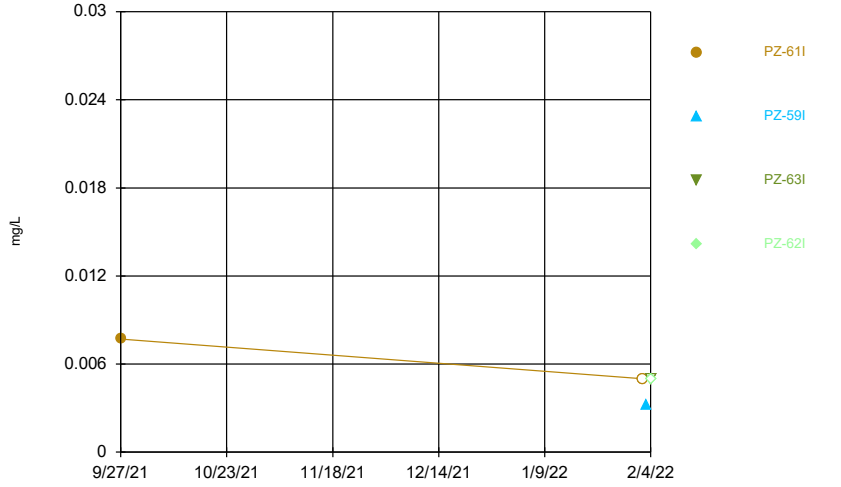
Time Series



Constituent: Chromium Analysis Run 5/3/2022 10:10 AM View: Pond BCD.1
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.32j Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

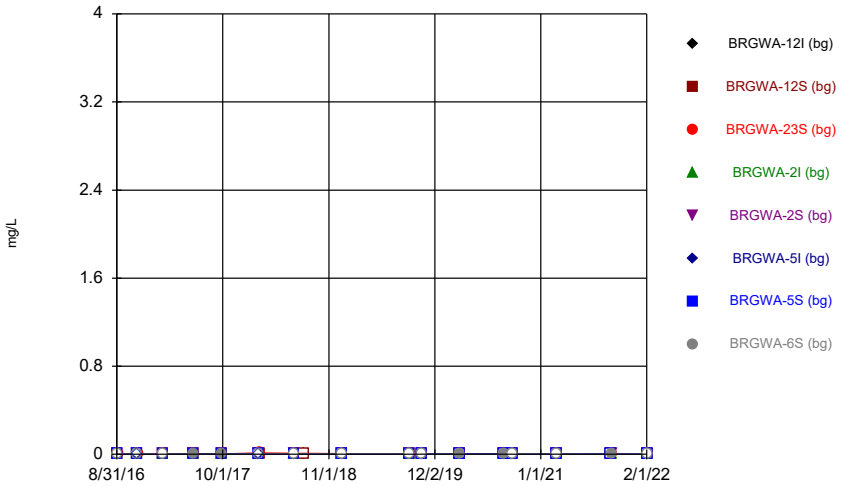
Time Series



Constituent: Chromium Analysis Run 5/3/2022 10:10 AM View: Pond BCD.1
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.32j Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

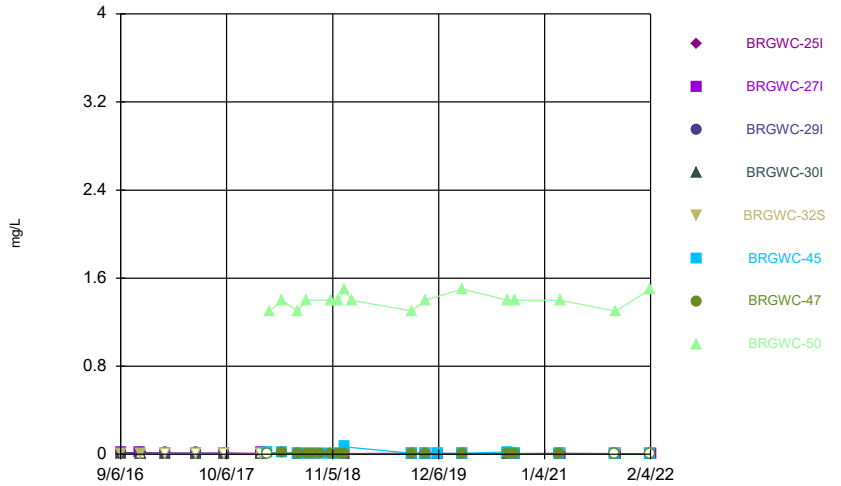
Time Series



Constituent: Cobalt Analysis Run 5/3/2022 10:10 AM View: Pond BCD.1
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.32j Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

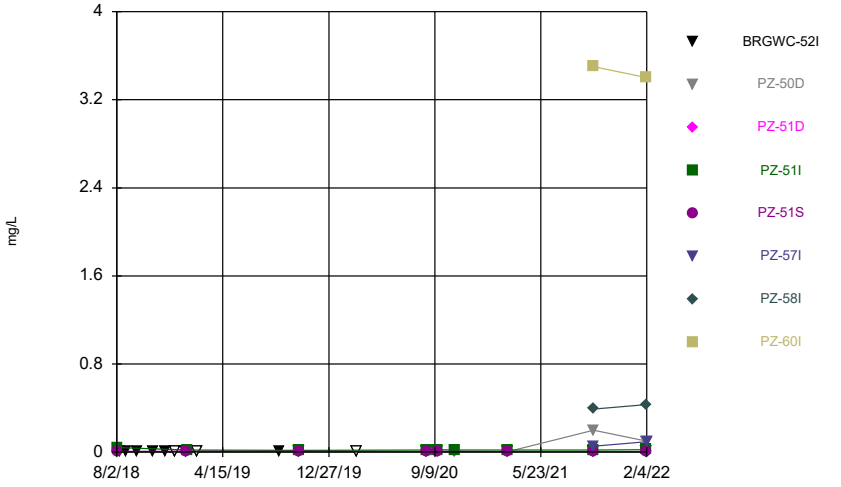
Time Series



Constituent: Cobalt Analysis Run 5/3/2022 10:10 AM View: Pond BCD.1
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.32j Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

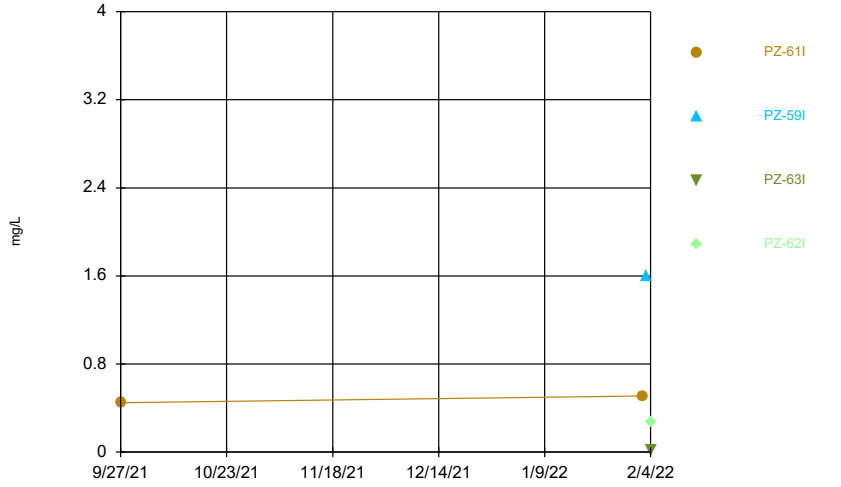
Time Series



Constituent: Cobalt Analysis Run 5/3/2022 10:10 AM View: Pond BCD.1
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.32j Groundwater Stats Consulting. UG

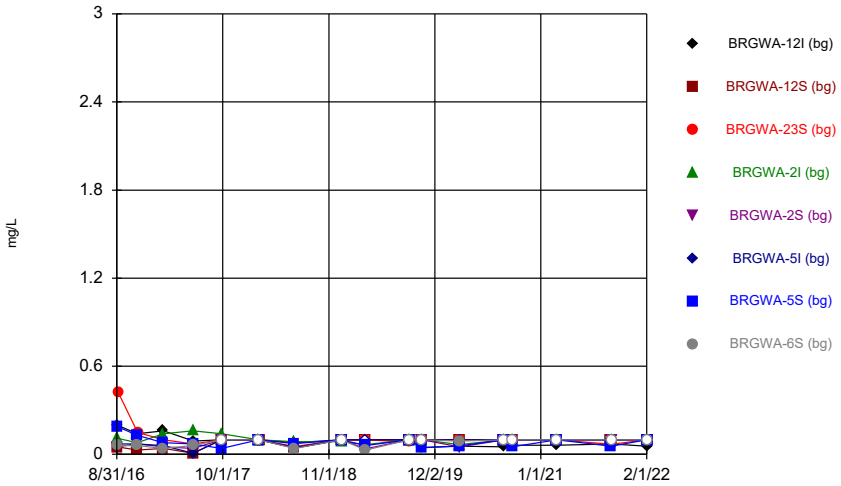
Time Series



Constituent: Cobalt Analysis Run 5/3/2022 10:10 AM View: Pond BCD.1
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.32j Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

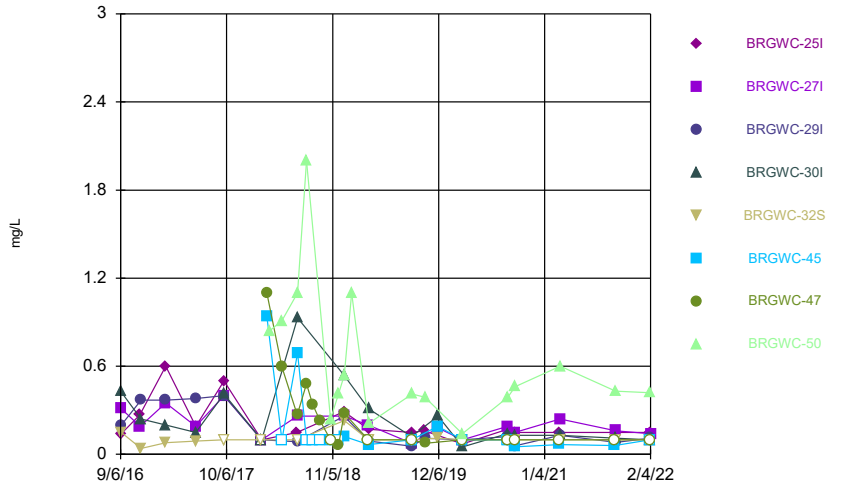
Time Series



Constituent: Fluoride Analysis Run 5/3/2022 10:10 AM View: Pond BCD.1
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.32j Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

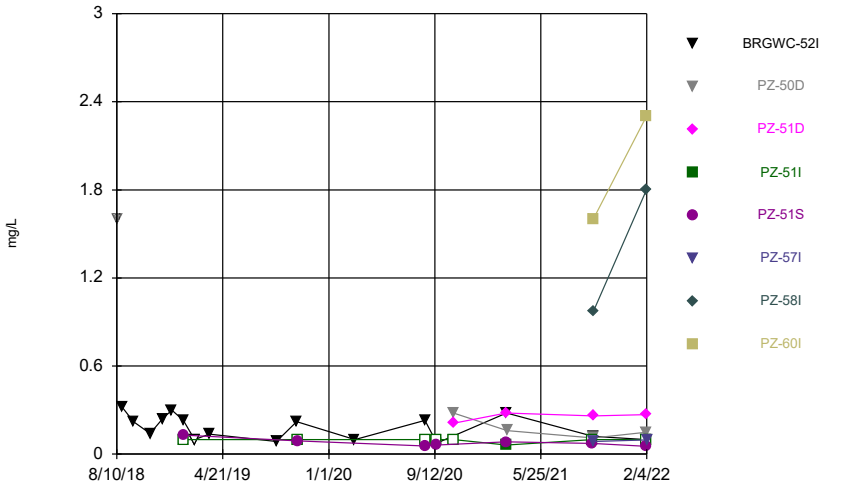
Time Series



Constituent: Fluoride Analysis Run 5/3/2022 10:10 AM View: Pond BCD.1
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.32j Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

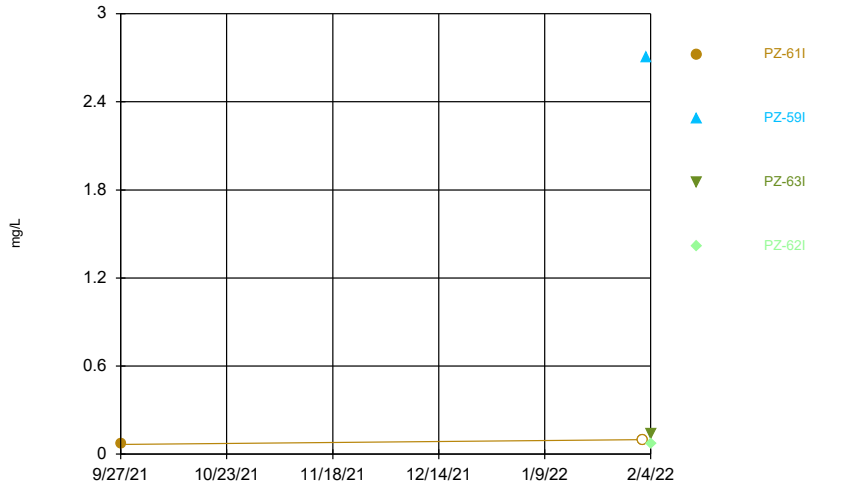
Time Series



Constituent: Fluoride Analysis Run 5/3/2022 10:10 AM View: Pond BCD.1
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.32j Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

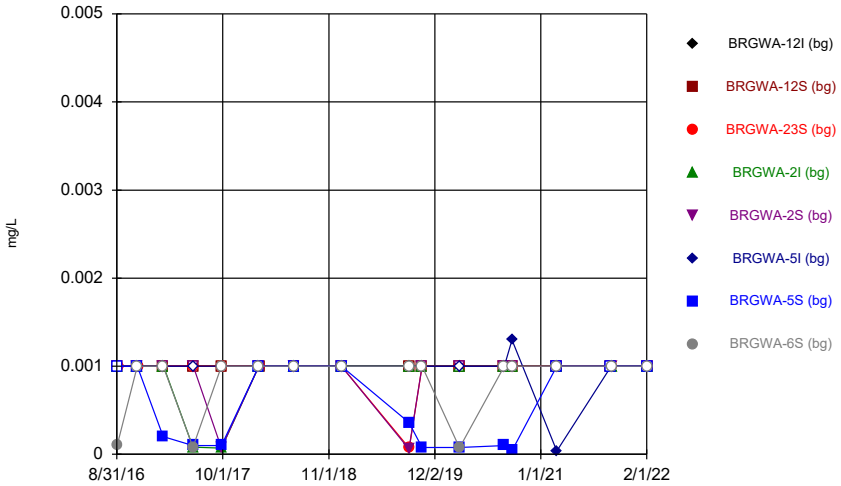
Time Series



Constituent: Fluoride Analysis Run 5/3/2022 10:10 AM View: Pond BCD.1
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.32j Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

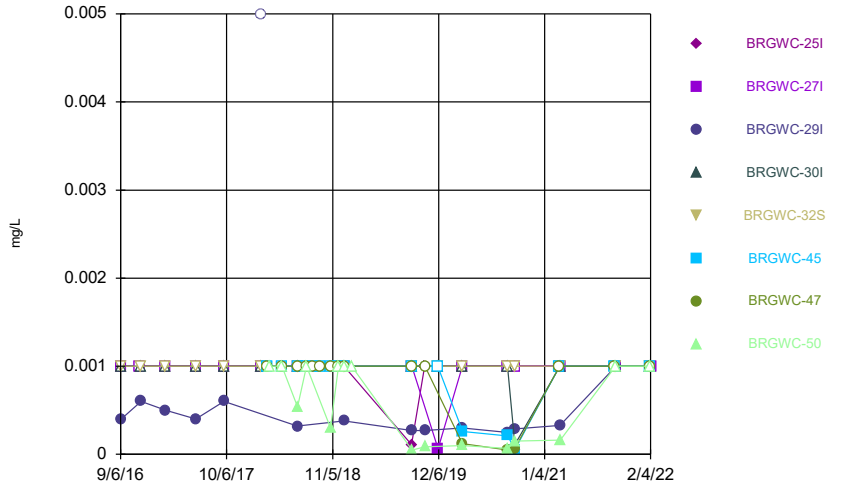
Time Series



Constituent: Lead Analysis Run 5/3/2022 10:10 AM View: Pond BCD.1
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.32j Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

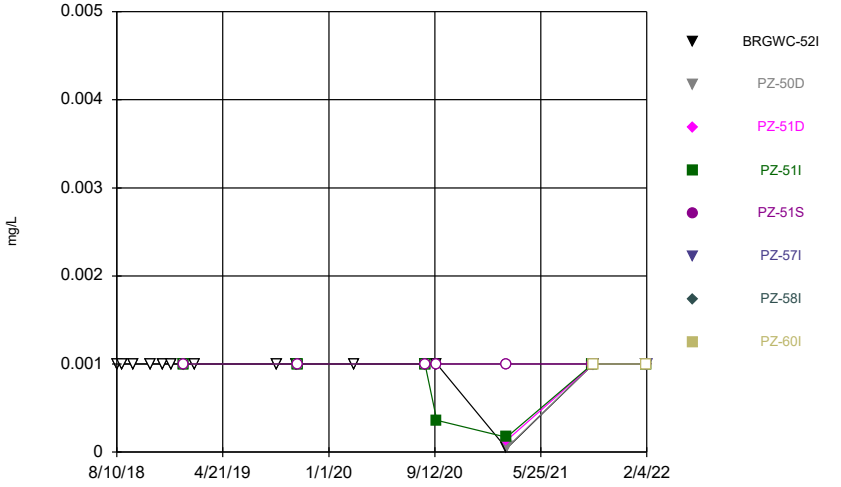
Time Series



Constituent: Lead Analysis Run 5/3/2022 10:10 AM View: Pond BCD.1
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.32j Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

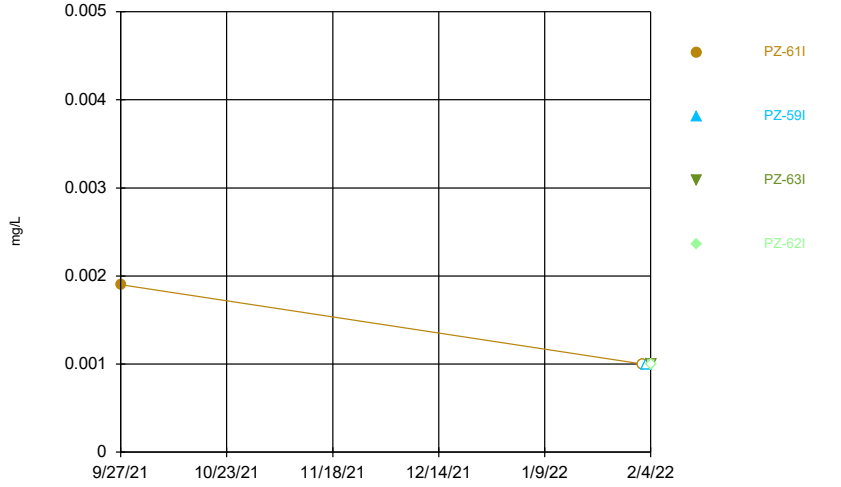
Time Series



Constituent: Lead Analysis Run 5/3/2022 10:10 AM View: Pond BCD.1
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.32j Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

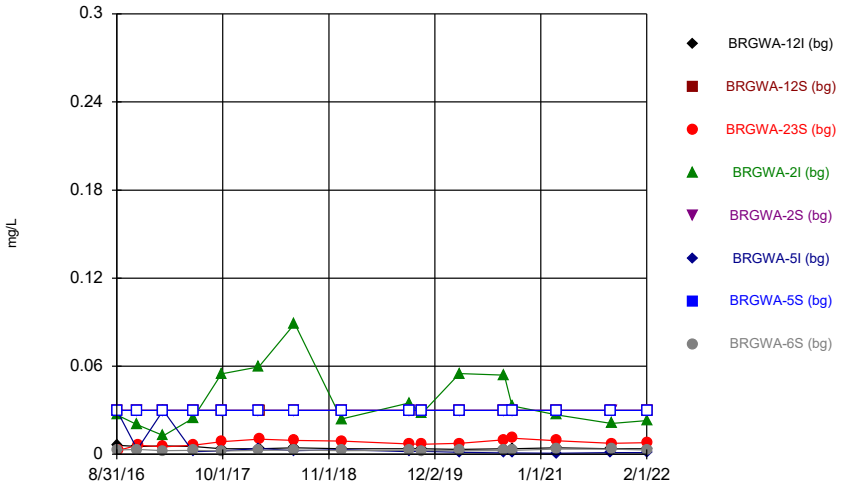
Time Series



Constituent: Lead Analysis Run 5/3/2022 10:10 AM View: Pond BCD.1
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.32j Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

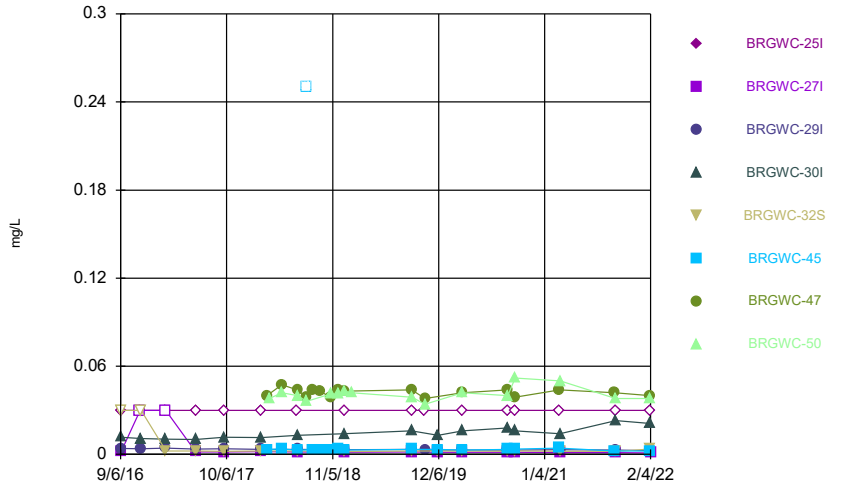
Time Series



Constituent: Lithium Analysis Run 5/3/2022 10:10 AM View: Pond BCD.1
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.32j Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

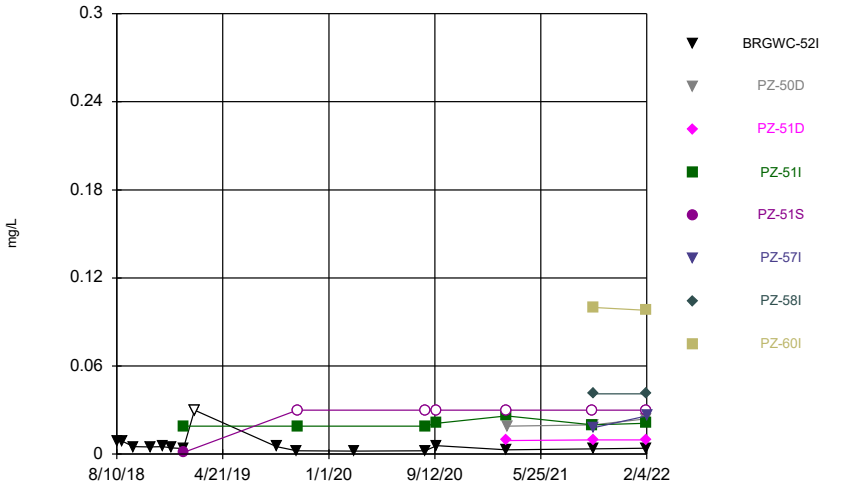
Time Series



Constituent: Lithium Analysis Run 5/3/2022 10:10 AM View: Pond BCD.1
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.32j Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

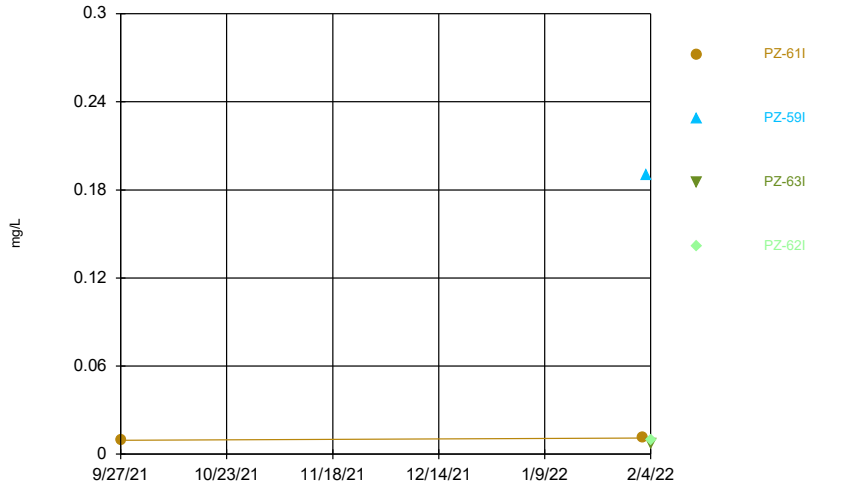
Time Series



Constituent: Lithium Analysis Run 5/3/2022 10:10 AM View: Pond BCD.1
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.32j Groundwater Stats Consulting. UG

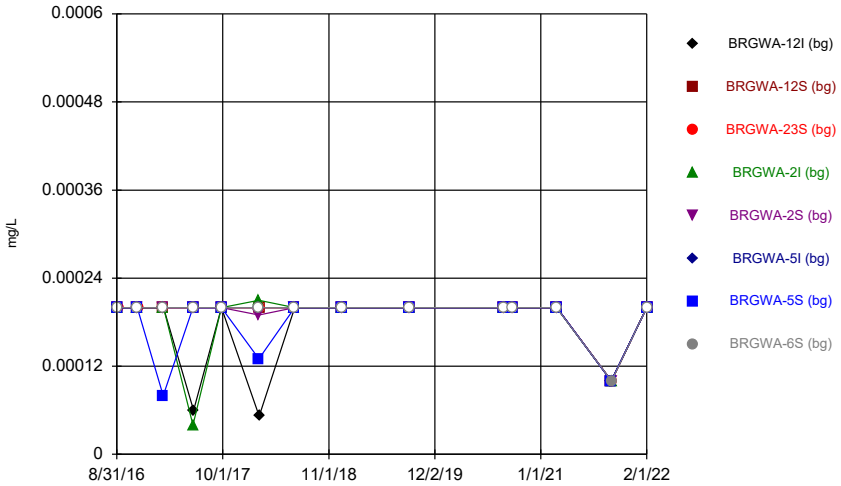
Time Series



Constituent: Lithium Analysis Run 5/3/2022 10:10 AM View: Pond BCD.1
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.32j Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

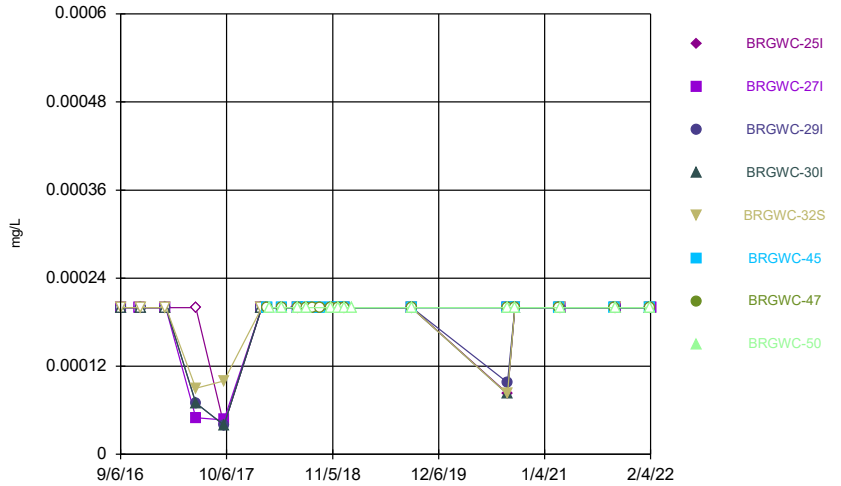
Time Series



Constituent: Mercury Analysis Run 5/3/2022 10:10 AM View: Pond BCD.1
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.32j Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

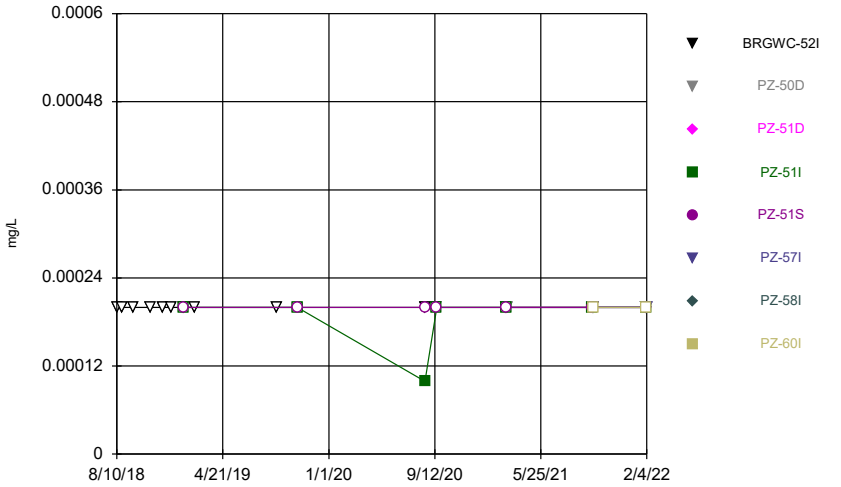
Time Series



Constituent: Mercury Analysis Run 5/3/2022 10:10 AM View: Pond BCD.1
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.32j Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

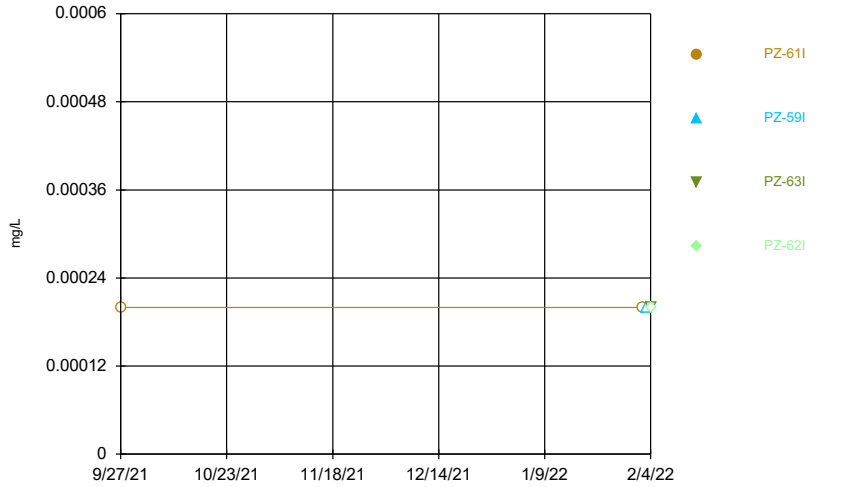
Time Series



Constituent: Mercury Analysis Run 5/3/2022 10:10 AM View: Pond BCD.1
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.32j Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

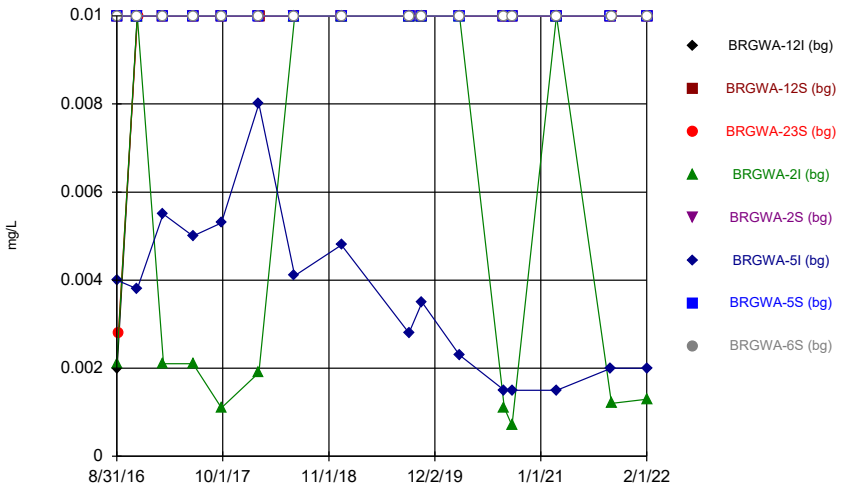
Time Series



Constituent: Mercury Analysis Run 5/3/2022 10:10 AM View: Pond BCD.1
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.32j Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

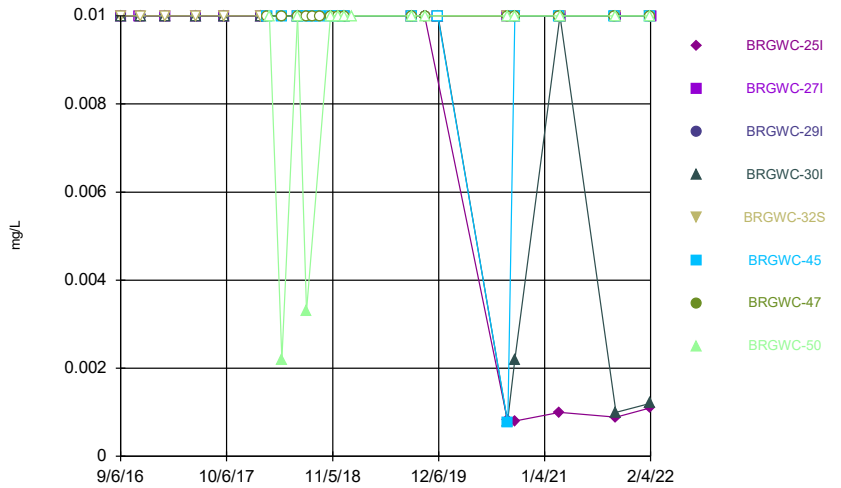
Time Series



Constituent: Molybdenum Analysis Run 5/3/2022 10:10 AM View: Pond BCD.1
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.32j Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

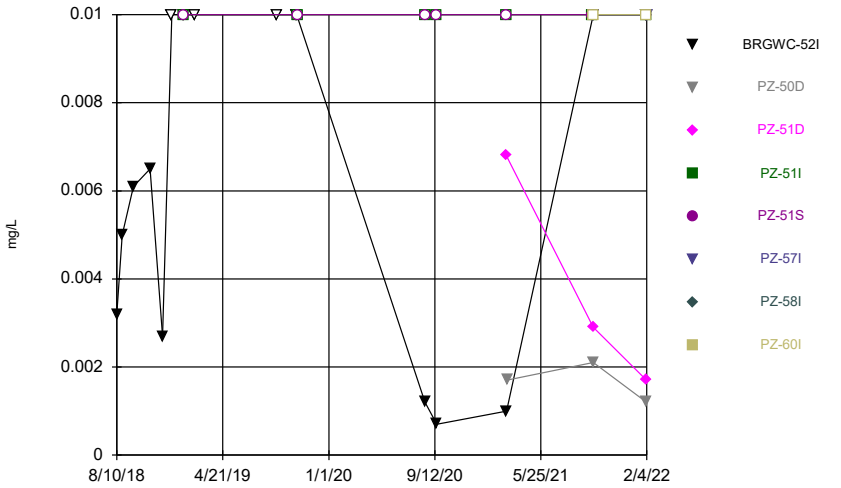
Time Series



Constituent: Molybdenum Analysis Run 5/3/2022 10:10 AM View: Pond BCD.1
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.32j Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

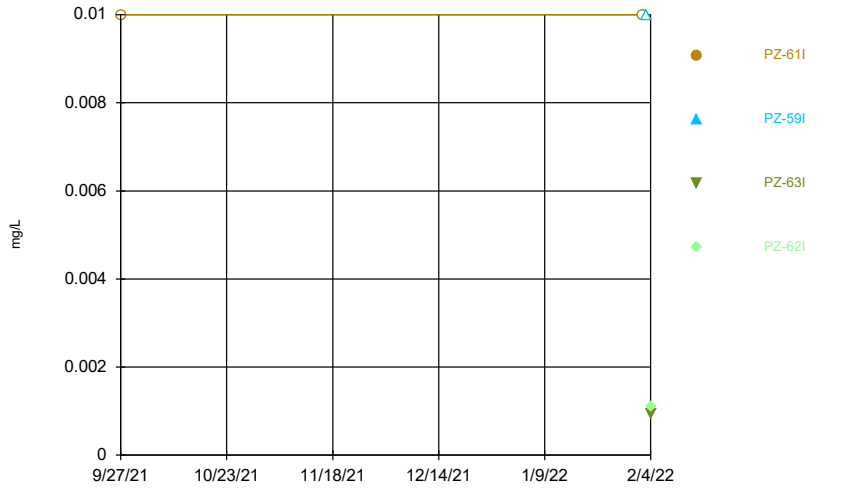
Time Series



Constituent: Molybdenum Analysis Run 5/3/2022 10:10 AM View: Pond BCD.1
Plant Branch Client: Southern Company Data: Plant Branch AP

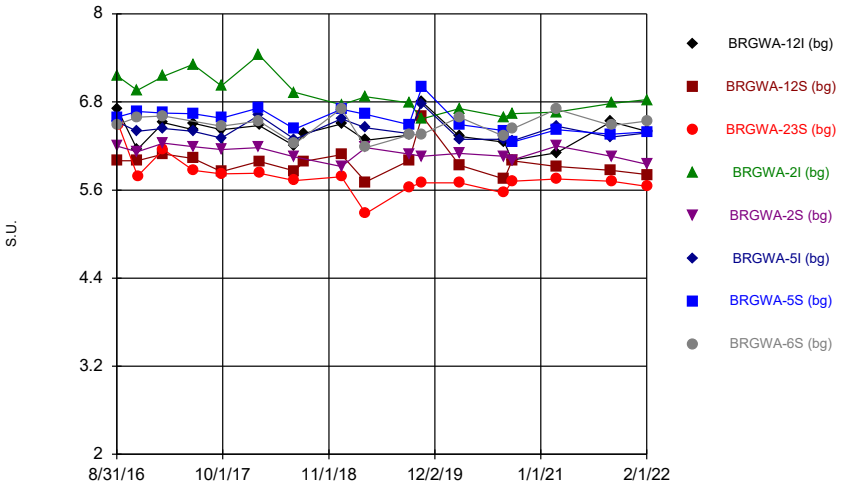
Sanitas™ v.9.6.32j Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Time Series



Constituent: Molybdenum Analysis Run 5/3/2022 10:10 AM View: Pond BCD.1
Plant Branch Client: Southern Company Data: Plant Branch AP

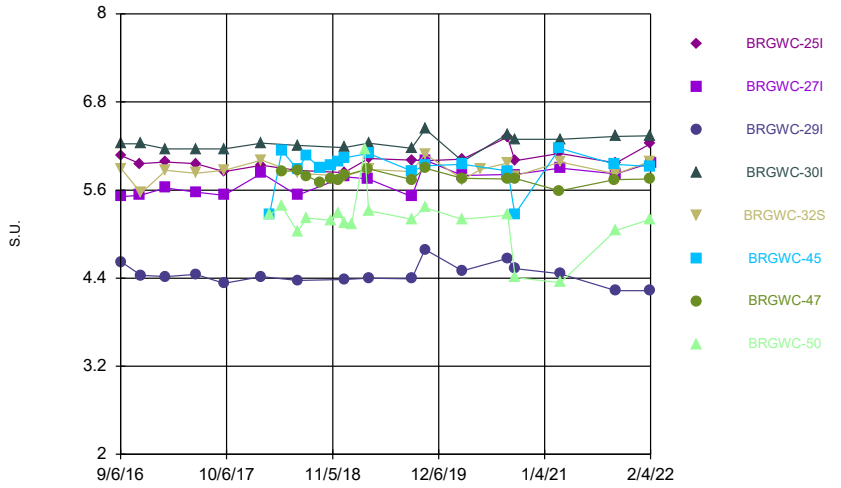
Time Series



Constituent: pH, Field Analysis Run 5/3/2022 10:10 AM View: Pond BCD.1
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.32j Groundwater Stats Consulting. UG

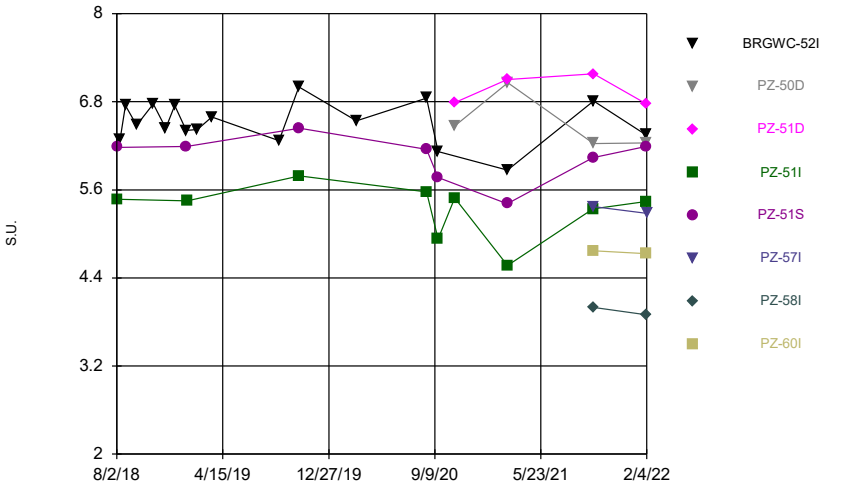
Time Series



Constituent: pH, Field Analysis Run 5/3/2022 10:10 AM View: Pond BCD.1
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.32j Groundwater Stats Consulting. UG

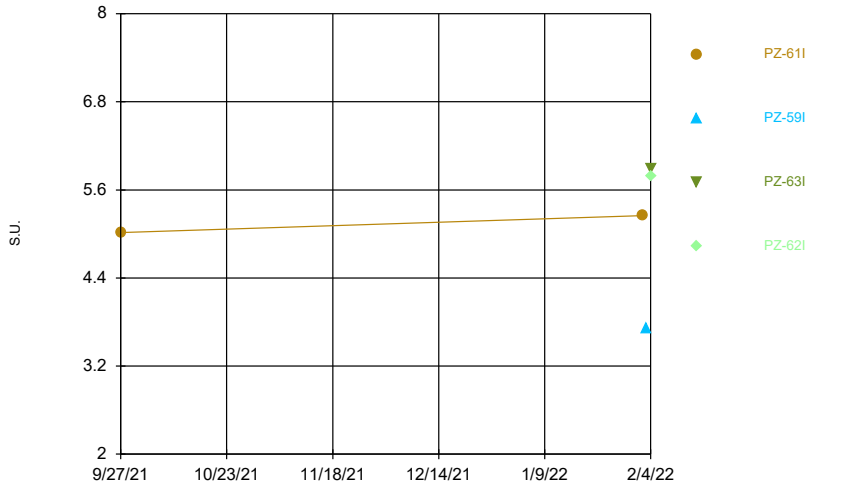
Time Series



Constituent: pH, Field Analysis Run 5/3/2022 10:10 AM View: Pond BCD.1
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.32j Groundwater Stats Consulting. UG

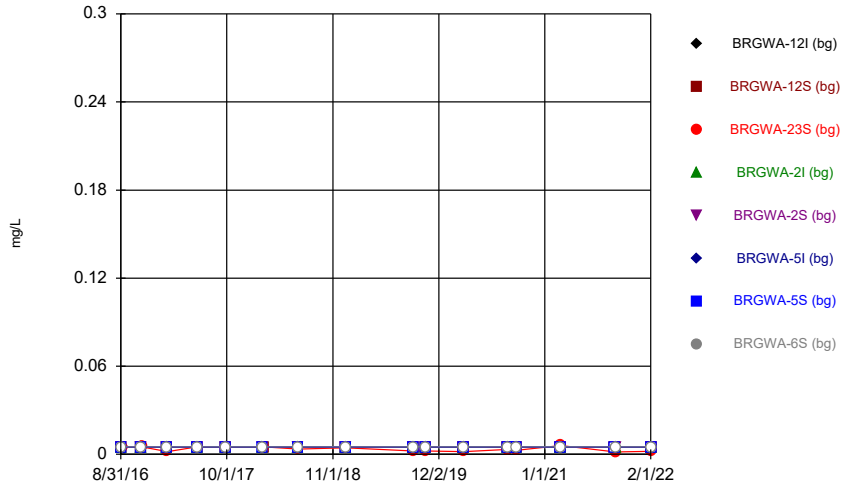
Time Series



Constituent: pH, Field Analysis Run 5/3/2022 10:10 AM View: Pond BCD.1
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.32j Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

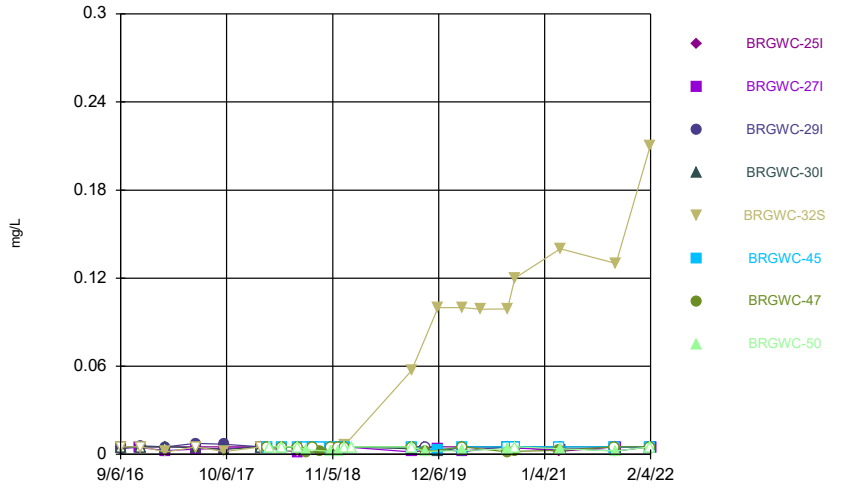
Time Series



Constituent: Selenium Analysis Run 5/3/2022 10:10 AM View: Pond BCD.1
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.32j Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

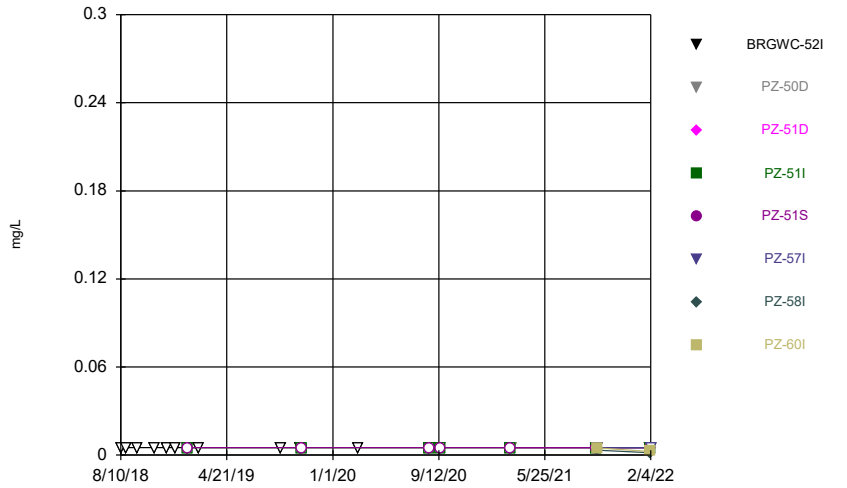
Time Series



Constituent: Selenium Analysis Run 5/3/2022 10:10 AM View: Pond BCD.1
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.32j Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

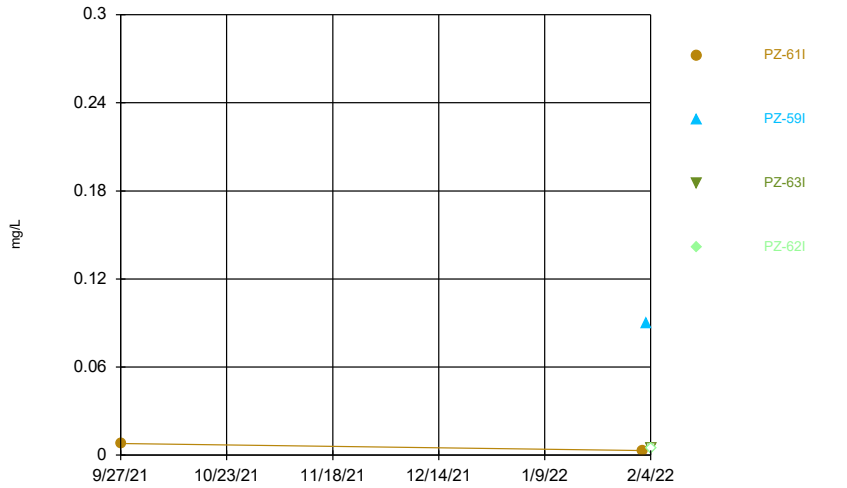
Time Series



Constituent: Selenium Analysis Run 5/3/2022 10:10 AM View: Pond BCD.1
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.32j Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

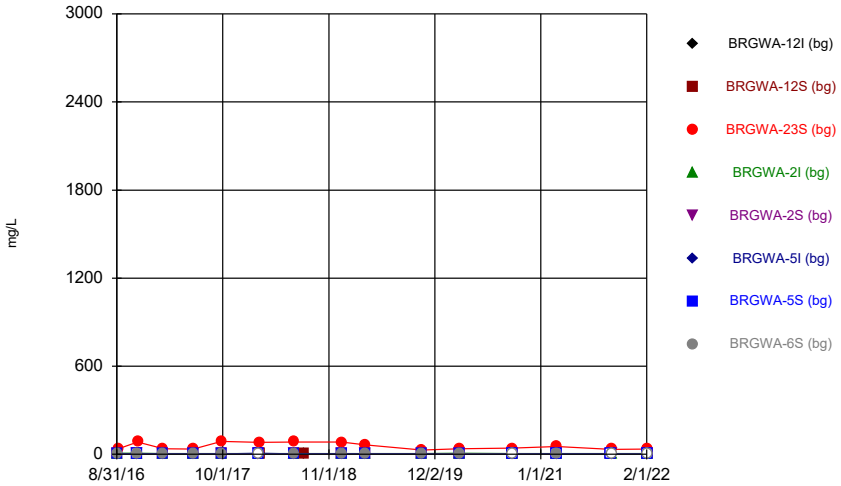
Time Series



Constituent: Selenium Analysis Run 5/3/2022 10:10 AM View: Pond BCD.1
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.32j Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

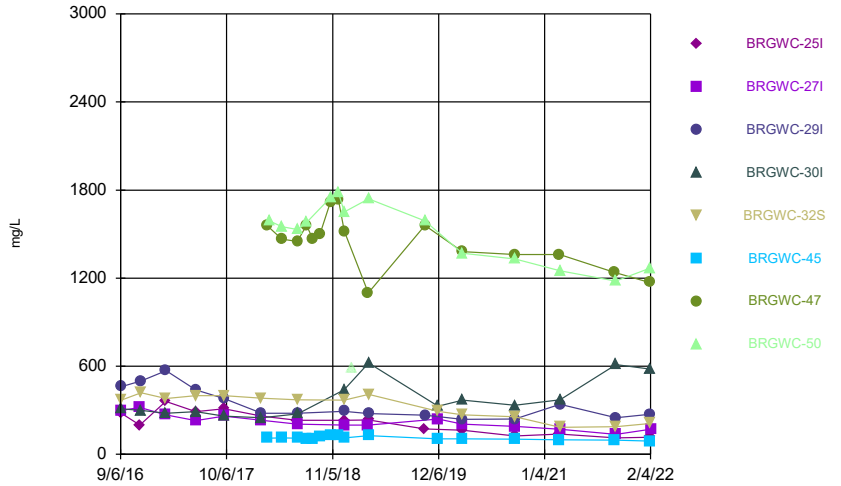
Time Series



Constituent: Sulfate Analysis Run 5/3/2022 10:10 AM View: Pond BCD.1
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.32j Groundwater Stats Consulting. UG

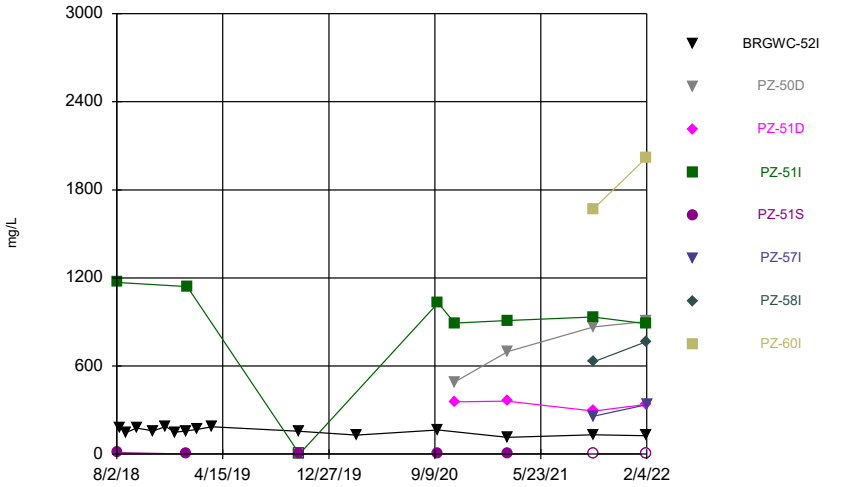
Time Series



Constituent: Sulfate Analysis Run 5/3/2022 10:10 AM View: Pond BCD.1
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.32j Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

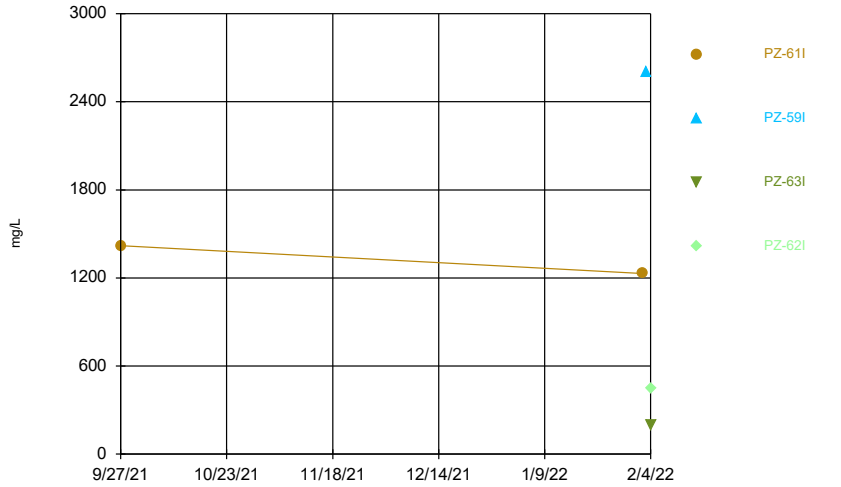
Time Series



Constituent: Sulfate Analysis Run 5/3/2022 10:10 AM View: Pond BCD.1
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.32j Groundwater Stats Consulting. UG

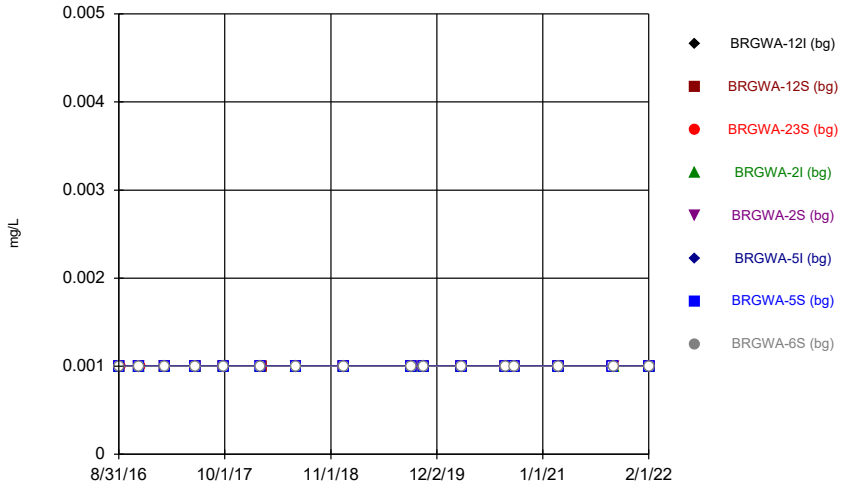
Time Series



Constituent: Sulfate Analysis Run 5/3/2022 10:10 AM View: Pond BCD.1
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.32j Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

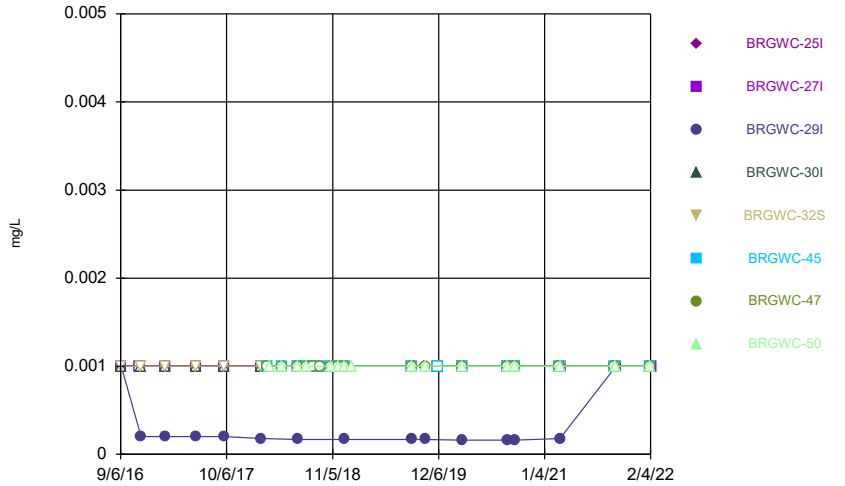
Time Series



Constituent: Thallium Analysis Run 5/3/2022 10:10 AM View: Pond BCD.1
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.32j Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

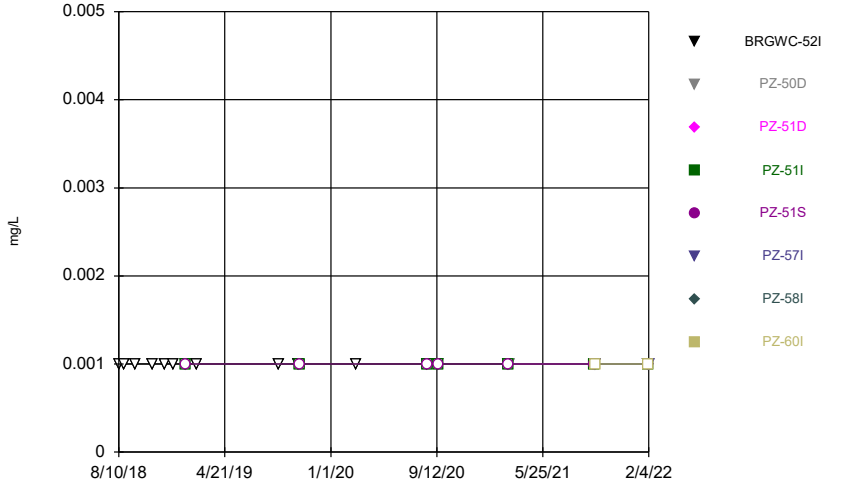
Time Series



Constituent: Thallium Analysis Run 5/3/2022 10:10 AM View: Pond BCD.1
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.32j Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

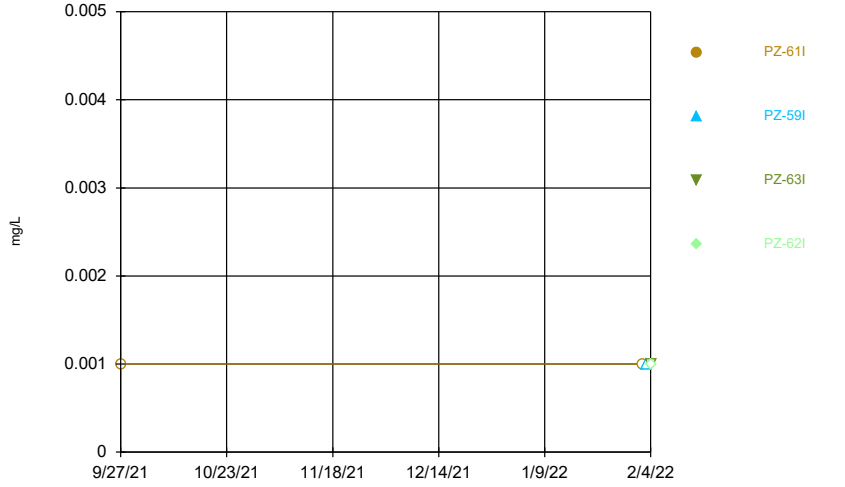
Time Series



Constituent: Thallium Analysis Run 5/3/2022 10:10 AM View: Pond BCD.1
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.32j Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

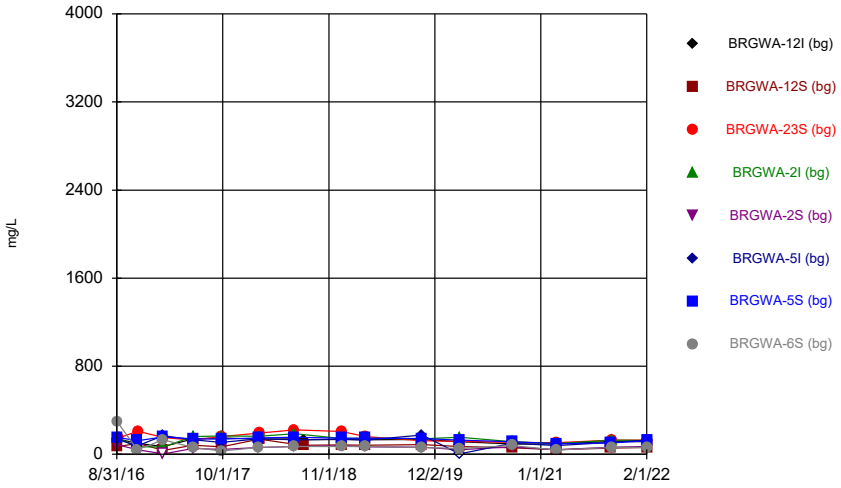
Time Series



Constituent: Thallium Analysis Run 5/3/2022 10:10 AM View: Pond BCD.1
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.32j Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

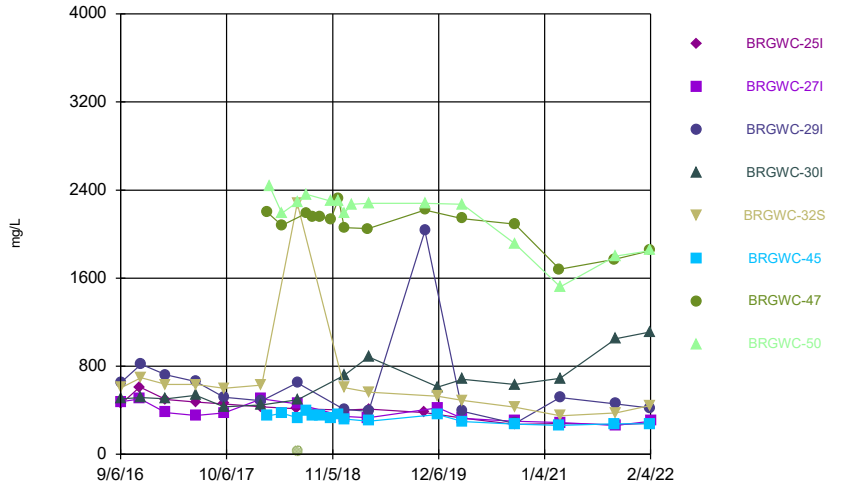
Time Series



Constituent: Total Dissolved Solids Analysis Run 5/3/2022 10:11 AM View: Pond BCD.1
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.32j Groundwater Stats Consulting. UG

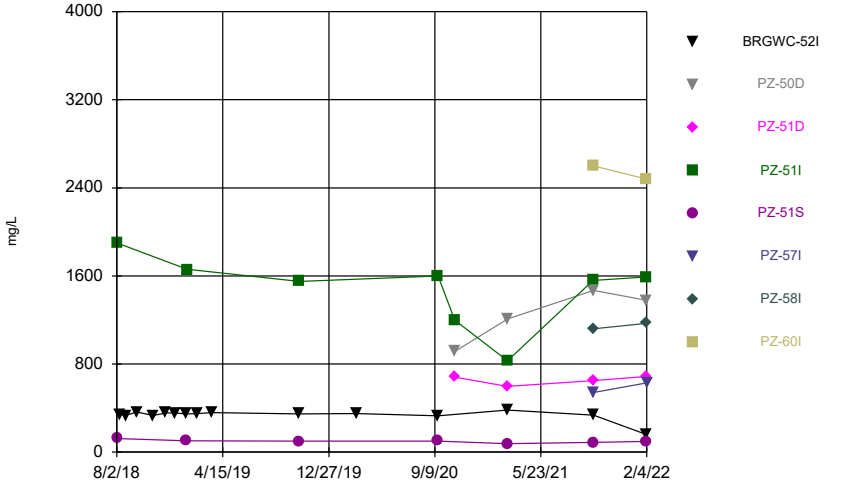
Time Series



Constituent: Total Dissolved Solids Analysis Run 5/3/2022 10:11 AM View: Pond BCD.1
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.32j Groundwater Stats Consulting. UG

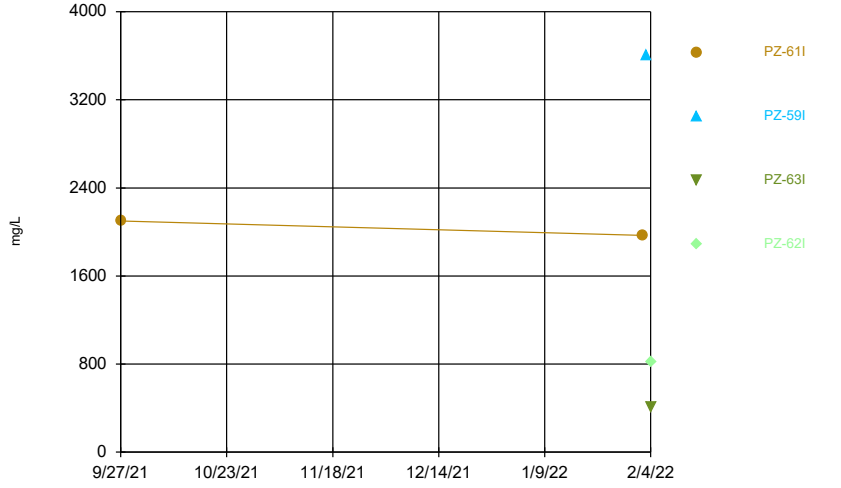
Time Series



Constituent: Total Dissolved Solids Analysis Run 5/3/2022 10:11 AM View: Pond BCD.1
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.32j Groundwater Stats Consulting. UG

Time Series



Constituent: Total Dissolved Solids Analysis Run 5/3/2022 10:11 AM View: Pond BCD.1
Plant Branch Client: Southern Company Data: Plant Branch AP

Time Series

Constituent: Antimony (mg/L) Analysis Run 5/3/2022 10:11 AM View: Pond BCD.1

Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWA-12I (bg)	BRGWA-12S (bg)	BRGWA-23S (bg)	BRGWA-2I (bg)	BRGWA-2S (bg)	BRGWA-5I (bg)	BRGWA-5S (bg)	BRGWA-6S (bg)
8/31/2016				0.0009 (J)	<0.003	<0.003	<0.003	
9/1/2016	0.0015 (J)	<0.003						<0.003
9/6/2016			<0.003					
11/15/2016							<0.003	<0.003
11/16/2016	<0.003	0.0011 (J)		<0.003	<0.003	<0.003		
11/17/2016			<0.003					
2/20/2017						<0.003	<0.003	<0.003
2/21/2017	<0.003	<0.003	<0.003	<0.003	<0.003			
6/12/2017				<0.003		<0.003	<0.003	<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	<0.003	<0.003	<0.003
2/13/2018				<0.003	<0.003	<0.003	<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	<0.003	<0.003	<0.003
12/18/2018	0.009	<0.003	<0.003	<0.003	<0.003	<0.003	0.00087 (J)	<0.003
8/27/2019	0.0072	<0.003		<0.003	<0.003	<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	<0.003	<0.003	<0.003
3/3/2020	0.0063	<0.003		<0.003	<0.003	<0.003	<0.003	<0.003
3/4/2020			<0.003					
8/18/2020	0.0067	<0.003	<0.003	0.00054 (J)	0.00042 (J)	<0.003	0.0016 (J)	<0.003
9/15/2020	0.01	<0.003	0.00033 (J)	<0.003	<0.003	<0.003	<0.003	<0.003
3/1/2021				<0.003				<0.003
3/2/2021	0.0095	<0.003	<0.003		<0.003	<0.003	<0.003	
9/21/2021	0.017	<0.003				<0.003	<0.003	
9/22/2021			<0.003	<0.003	<0.003			<0.003
2/1/2022	0.011	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003

Time Series

Constituent: Antimony (mg/L) Analysis Run 5/3/2022 10:11 AM View: Pond BCD.1

Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWC-25I	BRGWC-27I	BRGWC-29I	BRGWC-30I	BRGWC-32S	BRGWC-45	BRGWC-47	BRGWC-50
9/6/2016				<0.003				
9/8/2016	<0.003	<0.003	<0.003		<0.003			
11/17/2016	<0.003							
11/18/2016		<0.003						
11/21/2016			<0.003	<0.003	<0.003			
2/21/2017	<0.003	<0.003						
2/22/2017			<0.003	<0.003	<0.003			
6/13/2017	<0.003	<0.003						
6/14/2017			0.0007 (J)	<0.003	<0.003			
9/27/2017	<0.003	<0.003	<0.003	<0.003	<0.003			
2/14/2018	<0.003	<0.003	<0.003	<0.003	<0.003			
3/6/2018						<0.003	<0.003	
3/15/2018								<0.003
5/1/2018						<0.003	<0.003 (D)	<0.003
6/26/2018	<0.003							
6/27/2018		<0.003	<0.003		<0.003		<0.003	
6/28/2018				<0.003		<0.003		<0.003
7/31/2018						<0.003		
8/1/2018							<0.003	<0.003
8/23/2018						<0.003	<0.003	
9/19/2018						<0.003	<0.003	
10/29/2018						<0.003	<0.003	<0.003
11/28/2018						<0.003	<0.003	<0.003
12/18/2018	<0.003		<0.003	<0.003				
12/19/2018					<0.003		<0.003	<0.003
12/20/2018		<0.003				0.0024 (J)		
1/16/2019								<0.003
8/27/2019	<0.003			<0.003	<0.003			
8/28/2019		<0.003	<0.003			0.00046 (J)	<0.003	
8/29/2019								0.00052 (J)
10/15/2019	<0.003							
10/16/2019			<0.003				<0.003	<0.003
12/3/2019						0.00088 (J)		
12/4/2019		<0.003		<0.003	<0.003			
3/4/2020	<0.003	<0.003	<0.003				<0.003	<0.003
3/5/2020				<0.003	0.0014 (J)	0.0016 (J)		
8/19/2020	<0.003	<0.003	<0.003	<0.003	<0.003			
8/20/2020						0.0031	<0.003	<0.003
9/15/2020	<0.003		<0.003					
9/16/2020		<0.003		<0.003	<0.003	0.0012 (J)	0.00035 (J)	
9/17/2020								0.00041 (J)
3/2/2021	<0.003					0.0014 (J)	<0.003	
3/3/2021		<0.003	<0.003	<0.003				
3/4/2021					<0.003			0.00092 (J)
9/23/2021						<0.003	<0.003	
9/27/2021								<0.003
9/28/2021	<0.003	<0.003	<0.003	<0.003	<0.003			
2/2/2022	<0.003			0.0013 (J)	<0.003	<0.003	<0.003	
2/3/2022			<0.003					<0.003
2/4/2022		<0.003						

Time Series

Constituent: Antimony (mg/L) Analysis Run 5/3/2022 10:11 AM View: Pond BCD.1

Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWC-52I	PZ-50D	PZ-51D	PZ-51I	PZ-51S	PZ-57I	PZ-58I	PZ-60I
8/10/2018	<0.003							
8/23/2018	0.00085 (J)							
9/19/2018	<0.003							
10/29/2018	<0.003							
11/28/2018	<0.003							
12/20/2018	<0.003							
1/17/2019	<0.003							
1/18/2019					<0.003			
1/19/2019				<0.003				
2/13/2019	<0.003							
8/29/2019	<0.003							
10/16/2019	<0.003							
10/18/2019				<0.003	<0.003			
3/4/2020	0.00043 (J)							
8/20/2020	<0.003			0.0017 (J)	<0.003			
9/17/2020	<0.003			<0.003	0.00043 (J)			
3/3/2021			0.0013 (J)		0.0018 (J)			
3/4/2021	0.00091 (J)			0.00079 (J)				
3/5/2021		0.00056 (J)						
9/27/2021				0.0012 (J)	<0.003			
9/28/2021	<0.003	<0.003	<0.003			<0.003	<0.003	<0.003
2/2/2022	<0.003			<0.003	<0.003			
2/3/2022		<0.003	<0.003				<0.003	<0.003
2/4/2022						<0.003		

Time Series

Constituent: Antimony (mg/L) Analysis Run 5/3/2022 10:11 AM View: Pond BCD.1

Plant Branch Client: Southern Company Data: Plant Branch AP

	PZ-61I	PZ-59I	PZ-63I	PZ-62I
9/27/2021	<0.003			
2/2/2022	<0.003			
2/3/2022		<0.003		
2/4/2022			<0.003	<0.003

Time Series

Constituent: Arsenic (mg/L) Analysis Run 5/3/2022 10:11 AM View: Pond BCD.1

Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWA-12I (bg)	BRGWA-12S (bg)	BRGWA-23S (bg)	BRGWA-2I (bg)	BRGWA-2S (bg)	BRGWA-5I (bg)	BRGWA-5S (bg)	BRGWA-6S (bg)
8/31/2016				<0.005	<0.005	<0.005	<0.005	
9/1/2016	<0.005	<0.005						<0.005
9/6/2016			<0.005					
11/15/2016							<0.005	<0.005
11/16/2016	<0.005	<0.005		<0.005	<0.005	<0.005		
11/17/2016			<0.005					
2/20/2017						<0.005	<0.005	<0.005
2/21/2017	<0.005	<0.005	<0.005	<0.005	<0.005			
6/12/2017				0.0007 (J)		0.0007 (J)	0.0006 (J)	<0.005
6/13/2017		<0.005	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	0.0009 (J)	0.0007 (J)	0.0007 (J)
2/13/2018				<0.005	<0.005	<0.005	<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	<0.005	<0.005	<0.005
12/18/2018	<0.005	<0.005	<0.005	<0.005	<0.005 (X)	<0.005 (X)	<0.005 (X)	<0.005 (X)
8/27/2019	<0.005	<0.005		<0.005	<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)	0.00058 (J)	0.00039 (J)	<0.005
3/3/2020	0.0023 (J)	0.0015 (J)		0.0027 (J)	0.00098 (J)	0.0024 (J)	0.0027 (J)	0.0018 (J)
3/4/2020			<0.005					
8/18/2020	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
9/15/2020	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
3/1/2021				<0.005				<0.005
3/2/2021	<0.005	<0.005	<0.005		<0.005	<0.005	<0.005	
9/21/2021	<0.005	<0.005				<0.005	<0.005	
9/22/2021			<0.005	<0.005	<0.005			<0.005
2/1/2022	0.0017 (J)	<0.005	0.0018 (J)	0.0012 (J)	<0.005	0.0013 (J)	0.0012 (J)	<0.005

Time Series

Constituent: Arsenic (mg/L) Analysis Run 5/3/2022 10:11 AM View: Pond BCD.1

Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWC-25I	BRGWC-27I	BRGWC-29I	BRGWC-30I	BRGWC-32S	BRGWC-45	BRGWC-47	BRGWC-50
9/6/2016				<0.005				
9/8/2016	<0.005	<0.005	<0.005		<0.005			
11/17/2016	<0.005							
11/18/2016		<0.005						
11/21/2016			0.0019 (J)	<0.005	<0.005			
2/21/2017	<0.005	<0.005						
2/22/2017			<0.005	<0.005	<0.005			
6/13/2017	0.0006 (J)	0.0009 (J)						
6/14/2017			0.002 (J)	<0.005	<0.005			
9/27/2017	<0.005	0.0007 (J)	0.0016 (J)	<0.005	<0.005			
2/14/2018	<0.005	<0.005	<0.005	<0.005	<0.005			
3/6/2018						<0.005 (X)	<0.005 (X)	
3/15/2018								0.0014 (J)
5/1/2018						0.0021 (J)	0.0018 (JD)	<0.005
6/26/2018	0.00072 (J)							
6/27/2018		<0.005	<0.005		<0.005		0.0016 (J)	
6/28/2018				<0.005 (X)		<0.005 (X)		<0.005
7/31/2018						<0.005		
8/1/2018							0.0028 (J)	0.00074 (J)
8/23/2018						0.00075 (J)	<0.005	
9/19/2018						<0.005	<0.005	
10/29/2018						<0.005	0.0012 (J)	<0.005
11/28/2018						0.00096 (J)	0.0019 (J)	<0.005
12/18/2018	0.00091 (J)		<0.005	<0.005				
12/19/2018					<0.005		0.00075 (J)	<0.005
12/20/2018		<0.005				<0.005		
1/16/2019								<0.005
8/27/2019	<0.005			<0.005	<0.005			
8/28/2019		0.0014 (J)	0.00051 (J)			0.00058 (J)	0.0018 (J)	
8/29/2019								<0.005
10/15/2019	0.00052 (J)							
10/16/2019			0.00065 (J)				<0.005	<0.005
12/3/2019						0.0007 (J)		
12/4/2019		0.0011 (J)		0.00056 (J)	0.00053 (J)			
3/4/2020	<0.005	<0.005	0.00044 (J)				0.00049 (J)	0.00046 (J)
3/5/2020				<0.005	<0.005	<0.005		
8/19/2020	<0.005	<0.005	<0.005	<0.005	<0.005			
8/20/2020						<0.005	0.00089 (J)	<0.005
9/15/2020	<0.005		<0.005					
9/16/2020		<0.005		<0.005	<0.005	<0.005	<0.005	
9/17/2020								<0.005
3/2/2021	<0.005					<0.005	<0.005	
3/3/2021		<0.005	0.0015 (J)	<0.005				
3/4/2021					<0.005			<0.005
9/23/2021						<0.005	0.002 (J)	
9/27/2021								<0.005
9/28/2021	<0.005	<0.005	<0.005	<0.005	<0.005			
2/2/2022	<0.005			<0.005	<0.005	<0.005	0.0056	
2/3/2022			<0.005					<0.005
2/4/2022		<0.005						

Time Series

Constituent: Arsenic (mg/L) Analysis Run 5/3/2022 10:11 AM View: Pond BCD.1

Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWC-52I	PZ-50D	PZ-51D	PZ-51I	PZ-51S	PZ-57I	PZ-58I	PZ-60I
8/10/2018	<0.005							
8/23/2018	<0.005							
9/19/2018	0.0013 (J)							
10/29/2018	0.0038 (J)							
11/28/2018	0.0016 (J)							
12/20/2018	0.0032 (J)							
1/17/2019	0.0032 (J)							
1/18/2019					<0.005			
1/19/2019				<0.005				
2/13/2019	<0.005							
8/29/2019	0.00067 (J)							
10/16/2019	0.0026 (J)							
10/18/2019				<0.005	<0.005			
3/4/2020	0.0047 (J)							
8/20/2020	0.0031 (J)			<0.005	<0.005			
9/17/2020	<0.005			<0.005	<0.005			
3/3/2021			0.0014 (J)		<0.005			
3/4/2021	0.003 (J)			<0.005				
3/5/2021		0.00087 (J)						
9/27/2021				<0.005	<0.005			
9/28/2021	<0.005	<0.005	<0.005			<0.005	<0.005	<0.005
2/2/2022	<0.005			<0.005	0.002 (J)			
2/3/2022		0.0012 (J)	0.0015 (J)				<0.005	<0.005
2/4/2022						<0.005		

Time Series

Constituent: Arsenic (mg/L) Analysis Run 5/3/2022 10:11 AM View: Pond BCD.1

Plant Branch Client: Southern Company Data: Plant Branch AP

	PZ-61I	PZ-59I	PZ-63I	PZ-62I
9/27/2021	0.0023 (J)			
2/2/2022	<0.005			
2/3/2022		0.017		
2/4/2022			<0.005	<0.005

Time Series

Constituent: Barium (mg/L) Analysis Run 5/3/2022 10:11 AM View: Pond BCD.1

Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWA-12I (bg)	BRGWA-12S (bg)	BRGWA-23S (bg)	BRGWA-2I (bg)	BRGWA-2S (bg)	BRGWA-5I (bg)	BRGWA-5S (bg)	BRGWA-6S (bg)
8/31/2016				0.0239	0.0099 (J)	0.0273	0.0495	
9/1/2016	0.0454	0.0528						0.0142
9/6/2016			0.0624					
11/15/2016							0.0512	0.0126
11/16/2016	0.0623	0.0509		0.0147	0.0102	0.0365		
11/17/2016			0.109					
2/20/2017						0.0336	0.0586	0.0142
2/21/2017	0.0644	0.0531	0.095	0.0109	0.0094 (J)			
6/12/2017				0.0094 (J)		0.0322	0.0567	0.0134
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)	0.0364	0.0586	0.0133
2/13/2018				0.0134	0.0102	0.054	0.054	0.0145
2/14/2018	0.0786	0.0603	0.129					
6/26/2018	0.063	0.059	0.13	0.014	0.0093 (J)	0.032	0.063	0.014
12/18/2018	0.067	0.056	0.13	0.0076 (J)	0.01	0.038	0.045	0.013
8/27/2019	0.058	0.057		0.012	0.0095 (J)	0.028	0.056	0.013
8/29/2019			0.076					
10/15/2019	0.06	0.053	0.069	0.013	0.0091 (J)	0.032	0.049	0.013
3/3/2020	0.076	0.06		0.017	0.011	0.028	0.051	0.019
3/4/2020			0.087					
8/18/2020	0.053	0.058	0.067	0.01 (J)	0.01	0.022	0.04	0.014
9/15/2020	0.059	0.058	0.086	0.0083 (J)	0.0094 (J)	0.022	0.038	0.013
3/1/2021				0.0074				0.016
3/2/2021	0.053	0.063	0.097		0.0094	0.023	0.037	
9/21/2021	0.074	0.06				0.025	0.038	
9/22/2021			0.07	0.0075	0.0097			0.014
2/1/2022	0.057	0.064	0.08	0.0066	0.01	0.028	0.04	0.014

Time Series

Constituent: Barium (mg/L) Analysis Run 5/3/2022 10:11 AM View: Pond BCD.1

Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWC-25I	BRGWC-27I	BRGWC-29I	BRGWC-30I	BRGWC-32S	BRGWC-45	BRGWC-47	BRGWC-50
9/6/2016				0.0206				
9/8/2016	0.0378	0.0184	0.0199		0.0593			
11/17/2016	0.0448							
11/18/2016		0.0173						
11/21/2016			0.0221 (J)	0.0237 (J)	0.0532 (BR)			
2/21/2017	0.0447	0.015						
2/22/2017			0.0179	0.0219	0.0498			
6/13/2017	0.0351	0.0143						
6/14/2017			0.0157	0.0197	0.0421			
9/27/2017	0.0383	0.017	0.0165	0.0213	0.0411			
2/14/2018	0.0327	0.0166	0.0163	0.0236	0.0417			
3/6/2018						0.1	0.0519	
3/15/2018								0.021
5/1/2018						0.084	0.057 (D)	0.024
6/26/2018	0.031							
6/27/2018		0.015	0.017		0.038		0.046	
6/28/2018				0.023		0.067		0.021
7/31/2018						0.087 (J+X)		
8/1/2018							0.043 (J+X)	0.02 (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)	0.019 (J+X)
11/28/2018						0.11	0.039	0.02
12/18/2018	0.03		0.017	0.029				
12/19/2018					0.036		0.04	0.02
12/20/2018		0.015				0.093		
1/16/2019								0.02
8/27/2019	0.027			0.027	0.032			
8/28/2019		0.019	0.02			0.11	0.035	
8/29/2019								0.018
10/15/2019	0.027							
10/16/2019			0.019				0.032	0.017
12/3/2019						0.099		
12/4/2019		0.016		0.021	0.028			
3/4/2020	0.026	0.015	0.018				0.038	0.019
3/5/2020				0.025	0.026	0.078		
8/19/2020	0.027	0.016	0.019	0.026	0.025			
8/20/2020						0.083	0.035	0.019
9/15/2020	0.024		0.017					
9/16/2020		0.016		0.022	0.024	0.085	0.028	
9/17/2020								0.02
3/2/2021	0.026					0.061	0.036	
3/3/2021		0.016	0.021	0.028				
3/4/2021					0.024			0.025
9/23/2021						0.064	0.031	
9/27/2021								0.017
9/28/2021	0.023	0.013	0.017	0.035	0.02			
2/2/2022	0.023			0.031	0.023	0.063	0.028	
2/3/2022			0.016					0.016
2/4/2022		0.015						

Time Series

Constituent: Barium (mg/L) Analysis Run 5/3/2022 10:11 AM View: Pond BCD.1

Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWC-52I	PZ-50D	PZ-51D	PZ-51I	PZ-51S	PZ-57I	PZ-58I	PZ-60I
8/10/2018	0.038							
8/23/2018	0.03 (JX)							
9/19/2018	0.03							
10/29/2018	0.025 (J+X)							
11/28/2018	0.017							
12/20/2018	0.013							
1/17/2019	0.017							
1/18/2019					0.031			
1/19/2019				0.017				
2/13/2019	0.025							
8/29/2019	0.017							
10/16/2019	0.015							
10/18/2019				0.014	0.032			
3/4/2020	0.022							
8/20/2020	0.017			0.013	0.03			
9/17/2020	0.02			0.015	0.033			
3/3/2021			0.08		0.037			
3/4/2021	0.019			0.016				
3/5/2021		0.043						
9/27/2021				0.014	0.025			
9/28/2021	0.013	0.034	0.057			0.022	0.017	0.022
2/2/2022	0.013			0.015	0.027			
2/3/2022		0.033	0.057				0.016	0.021
2/4/2022						0.024		

Time Series

Constituent: Barium (mg/L) Analysis Run 5/3/2022 10:11 AM View: Pond BCD.1

Plant Branch Client: Southern Company Data: Plant Branch AP

	PZ-61I	PZ-59I	PZ-63I	PZ-62I
9/27/2021	0.029			
2/2/2022	0.015			
2/3/2022		0.013		
2/4/2022			0.037	0.058

Time Series

Constituent: Beryllium (mg/L) Analysis Run 5/3/2022 10:11 AM View: Pond BCD.1

Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWA-12I (bg)	BRGWA-12S (bg)	BRGWA-23S (bg)	BRGWA-2I (bg)	BRGWA-2S (bg)	BRGWA-5I (bg)	BRGWA-5S (bg)	BRGWA-6S (bg)
8/31/2016				<0.0005	<0.0005	<0.0005	<0.0005	
9/1/2016	<0.0005	<0.0005						<0.0005
9/6/2016			<0.0005					
11/15/2016							<0.0005	<0.0005
11/16/2016	<0.0005	<0.0005		<0.0005	<0.0005	<0.0005		
11/17/2016			<0.0005					
2/20/2017						<0.0005	<0.0005	<0.0005
2/21/2017	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005			
6/12/2017				<0.0005		<0.0005	<0.0005	<0.0005
6/13/2017		<0.0005	<0.0005		<0.0005			
6/14/2017	<0.0005							
9/26/2017	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
2/13/2018				<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
2/14/2018	<0.0005	<0.0005	<0.0005					
6/26/2018	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
12/18/2018	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
8/27/2019	<0.0005	<0.0005		<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
8/29/2019			<0.0005					
10/15/2019	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
3/3/2020	<0.0005	<0.0005		<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
3/4/2020			<0.0005					
8/18/2020	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
9/15/2020	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
3/1/2021				<0.0005				<0.0005
3/2/2021	<0.0005	<0.0005	<0.0005		<0.0005	<0.0005	<0.0005	
9/21/2021	<0.0005	<0.0005				<0.0005	<0.0005	
9/22/2021			<0.0005	<0.0005	<0.0005			<0.0005
2/1/2022	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005

Time Series

Constituent: Beryllium (mg/L) Analysis Run 5/3/2022 10:11 AM View: Pond BCD.1

Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWC-25I	BRGWC-27I	BRGWC-29I	BRGWC-30I	BRGWC-32S	BRGWC-45	BRGWC-47	BRGWC-50
9/6/2016				<0.0005				
9/8/2016	<0.0005	0.0002 (J)	0.0011 (J)		<0.0005			
11/17/2016	<0.0005							
11/18/2016		0.0002 (J)						
11/21/2016			0.0012 (J)	<0.0005	<0.0005			
2/21/2017	<0.0005	0.0002 (J)						
2/22/2017			0.0014 (J)	<0.0005	<0.0005			
6/13/2017	<0.0005	0.0002 (J)						
6/14/2017			0.0012 (J)	<0.0005	<0.0005			
9/27/2017	<0.0005	0.0001 (J)	0.001 (J)	<0.0005	<0.0005			
2/14/2018	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005			
3/6/2018						<0.0005	<0.0005	
3/15/2018								<0.0005
5/1/2018						<0.0005	<0.0005 (D)	<0.0005
6/26/2018	<0.0005							
6/27/2018		0.00014 (J)	0.0008 (J)		<0.0005		<0.0005	
6/28/2018				<0.0005		<0.0005		0.003 (J)
7/31/2018						<0.0005		
8/1/2018							<0.0005	0.0025 (J)
8/23/2018						7.9E-05 (J)	5.5E-05 (J)	
9/19/2018						<0.0005	<0.0005	
10/29/2018						<0.0005	<0.0005	0.0042
11/28/2018						<0.0005	5.6E-05 (J)	0.0029 (J)
12/18/2018	<0.0005		0.00071 (J)	<0.0005				
12/19/2018					<0.0005		<0.0005 (X)	0.0043
12/20/2018		<0.0005 (X)				<0.0005		
1/16/2019								0.0038
8/27/2019	<0.0005			<0.0005	<0.0005			
8/28/2019		0.00012 (J)	0.0008 (J)			<0.0005	<0.0005	
8/29/2019								0.0029 (J)
10/15/2019	<0.0005							
10/16/2019			0.00072 (J)				<0.0005	0.0027 (J)
10/17/2019		<0.0005		<0.0005	<0.0005	<0.0005		
12/3/2019						<0.0005		
12/4/2019		0.00012 (J)		<0.0005	<0.0005			
3/4/2020	<0.0005	0.00012 (J)	0.00073 (J)				<0.0005	0.0052
3/5/2020				<0.0005	<0.0005	<0.0005		
8/19/2020	<0.0005	9.9E-05 (J)	0.00074 (J)	<0.0005	<0.0005			
8/20/2020						4.6E-05 (J)	4.7E-05 (J)	0.0044
9/15/2020	<0.0005		0.00071 (J)					
9/16/2020		0.00011 (J)		<0.0005	<0.0005	<0.0005	<0.0005	
9/17/2020								0.0065
3/2/2021	<0.0005					<0.0005	<0.0005	
3/3/2021		7.1E-05 (J)	0.00094	<0.0005				
3/4/2021					<0.0005			0.0059
9/23/2021						<0.0005	<0.0005	
9/27/2021								0.006
9/28/2021	<0.0005	<0.0005	0.00079	<0.0005	<0.0005			
2/2/2022	<0.0005			<0.0005	<0.0005	<0.0005	<0.0005	
2/3/2022			0.00083					0.0071
2/4/2022		5.4E-05 (J)						

Time Series

Constituent: Beryllium (mg/L) Analysis Run 5/3/2022 10:11 AM View: Pond BCD.1

Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWC-52I	PZ-50D	PZ-51D	PZ-51I	PZ-51S	PZ-57I	PZ-58I	PZ-60I
8/10/2018	<0.0005							
8/23/2018	<0.0005							
9/19/2018	<0.0005							
10/29/2018	<0.0005							
11/28/2018	<0.0005							
12/20/2018	<0.0005							
1/17/2019	<0.0005							
1/18/2019					<0.0005			
1/19/2019				6.4E-05 (J)				
2/13/2019	<0.0005							
8/29/2019	<0.0005							
10/16/2019	<0.0005							
10/18/2019				<0.0005	<0.0005			
3/4/2020	<0.0005							
8/20/2020	<0.0005			7.7E-05 (J)	<0.0005			
9/17/2020	<0.0005			9.6E-05 (J)	<0.0005			
3/3/2021			<0.0005		<0.0005			
3/4/2021	<0.0005			9.7E-05 (J)				
3/5/2021		<0.0005						
9/27/2021				7.1E-05 (J)	<0.0005			
9/28/2021	<0.0005	5.9E-05 (J)	<0.0005			0.00031 (J)	0.025	0.065
2/2/2022	<0.0005			7.1E-05 (J)	<0.0005			
2/3/2022		<0.0005	<0.0005				0.027	0.072
2/4/2022						0.00054		

Time Series

Constituent: Beryllium (mg/L) Analysis Run 5/3/2022 10:11 AM View: Pond BCD.1

Plant Branch Client: Southern Company Data: Plant Branch AP

	PZ-61I	PZ-59I	PZ-63I	PZ-62I
9/27/2021	0.0017			
2/2/2022	0.0015			
2/3/2022		0.12		
2/4/2022			<0.0005	<0.0005

Time Series

Constituent: Boron (mg/L) Analysis Run 5/3/2022 10:11 AM View: Pond BCD.1

Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWA-12I (bg)	BRGWA-12S (bg)	BRGWA-23S (bg)	BRGWA-2I (bg)	BRGWA-2S (bg)	BRGWA-5I (bg)	BRGWA-5S (bg)	BRGWA-6S (bg)
8/31/2016				0.0072 (J)	<0.04	<0.04	<0.04	
9/1/2016	0.0093 (J)	<0.04						<0.04
9/6/2016			0.0362 (J)					
11/15/2016							0.0085 (J)	0.0123 (J)
11/16/2016	0.0127 (J)	0.0081 (J)		0.0117 (J)	0.0109 (J)	0.0187 (J)		
11/17/2016			0.0617					
2/20/2017						0.0066 (J)	0.0093 (J)	0.0157 (J)
2/21/2017	0.0071 (J)	<0.04	0.0245 (J)	0.0088 (J)	<0.04			
6/12/2017				0.0133 (J)		<0.04	<0.04	<0.04
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	<0.04	<0.04	<0.04
2/13/2018				0.0141 (J)	<0.04	<0.04	<0.04	<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	0.0042 (J)	0.0056 (J)	0.0041 (J)
12/18/2018	0.0083 (J)	0.0053 (J)	0.055	0.0086 (J)	<0.04	<0.04	0.0062 (J)	<0.04
3/19/2019	0.008 (J)	<0.04	0.068	0.00565 (JD)	<0.04	<0.04	<0.04	<0.04
10/15/2019	0.006 (J)	<0.04	0.022 (J)	0.0067 (J)	<0.04	<0.04	0.006 (J)	0.01 (J)
3/3/2020	0.01 (J)	0.0065 (J)		0.0082 (J)	<0.04	<0.04	<0.04	<0.04
3/4/2020			0.044 (J)					
9/15/2020	0.0071 (J)	<0.04	0.033 (J)	<0.04	<0.04	<0.04	<0.04	<0.04
3/1/2021				<0.04				<0.04
3/2/2021	0.0057 (J)	<0.04	0.042		<0.04	0.0053 (J)	0.0071 (J)	
9/21/2021	<0.04	<0.04				<0.04	<0.04	
9/22/2021			0.047	<0.04	<0.04			<0.04
2/1/2022	<0.04	<0.04	0.046	<0.04	<0.04	<0.04	<0.04	<0.04

Time Series

Constituent: Boron (mg/L) Analysis Run 5/3/2022 10:11 AM View: Pond BCD.1

Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWC-25I	BRGWC-27I	BRGWC-29I	BRGWC-30I	BRGWC-32S	BRGWC-45	BRGWC-47	BRGWC-50
9/6/2016				1.96				
9/8/2016	1.03	1.63	1.35		1.28			
11/17/2016	1.7							
11/18/2016		1.91						
11/21/2016			1.74	1.68	1.19			
2/21/2017	1.55	1.39						
2/22/2017			1.5	1.48	1.43			
6/13/2017	1.77	1.62						
6/14/2017			1.6	1.71	1.57			
9/27/2017	1.75	1.16	1.83	1.61	1.51			
2/14/2018	1.47	1.17	1.8	1.47	1.6			
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				1.4		<0.04 (X)		0.34
7/31/2018						0.035 (J)		
8/1/2018							0.39	0.28
8/23/2018						0.022 (J)	0.39	
9/19/2018						0.021 (J)	0.43	
10/29/2018						0.021 (J)	0.4	0.3
11/28/2018						<0.04 (X)	0.51	0.35
12/18/2018	1.5		1.5	1.6				
12/19/2018					1.6		0.41	0.35
12/20/2018		1.4				0.028 (J)		
1/16/2019								0.37
3/19/2019		1.1					0.41	
3/20/2019	1.5 (D)		1.5	1.7	1.4	0.043		0.34
10/15/2019	1.2							
10/16/2019			1.2				0.36	0.31
10/17/2019		0.97		1.7	1.5	0.064		
12/3/2019						0.027 (J)		
12/4/2019		0.89		1.6	1.6			
3/4/2020	1.2	0.81	1.1				0.49	0.32
3/5/2020				1.5	1.5	0.044 (J)		
9/15/2020	1.2		1.1					
9/16/2020		1.2		1.7	1.4	0.028 (J)	0.47	
9/17/2020								0.36
3/2/2021	1.1					0.044	0.58	
3/3/2021		0.91	1	1.4				
3/4/2021					1.1			0.31
9/23/2021						0.029 (J)	0.47	
9/27/2021								0.32
9/28/2021	1.1	0.95	0.9	1.7	0.91			
2/2/2022	1.1			1.9	1	0.034 (J)	0.48	
2/3/2022			0.93					0.31
2/4/2022		1						

Time Series

Constituent: Boron (mg/L) Analysis Run 5/3/2022 10:11 AM View: Pond BCD.1

Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWC-52I	PZ-50D	PZ-51D	PZ-51I	PZ-51S	PZ-57I	PZ-58I	PZ-60I
8/2/2018					0.016 (J)			
8/3/2018				0.3				
8/10/2018	1.3							
8/23/2018	1.4							
9/19/2018	1.7							
10/29/2018	1.3							
11/28/2018	1.5							
12/20/2018	1.6							
1/17/2019	1.5							
1/18/2019					0.0057 (J)			
1/19/2019				0.39				
2/13/2019	1.7							
3/20/2019	1.6 (D)							
10/16/2019	1.3							
10/18/2019				0.38	0.0057 (J)			
3/4/2020	1.4							
9/17/2020	1.9			0.43	0.0063 (J)			
10/27/2020		0.15	0.029 (J)	0.37				
3/3/2021			0.028 (J)		0.0096 (J)			
3/4/2021	1.4			0.36				
3/5/2021		0.2						
9/27/2021				0.39	<0.04			
9/28/2021	1.4	0.24	0.023 (J)			0.48	0.36	0.23
2/2/2022	1.5			0.42	<0.04			
2/3/2022		0.22	0.034 (J)				0.38	0.25
2/4/2022						0.51		

Time Series

Constituent: Boron (mg/L) Analysis Run 5/3/2022 10:11 AM View: Pond BCD.1

Plant Branch Client: Southern Company Data: Plant Branch AP

	PZ-61I	PZ-59I	PZ-63I	PZ-62I
9/27/2021	0.26			
2/2/2022	0.32			
2/3/2022		0.055 (J)		
2/4/2022			0.67	0.5

Time Series

Constituent: Cadmium (mg/L) Analysis Run 5/3/2022 10:11 AM View: Pond BCD.1

Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWA-12I (bg)	BRGWA-12S (bg)	BRGWA-23S (bg)	BRGWA-2I (bg)	BRGWA-2S (bg)	BRGWA-5I (bg)	BRGWA-5S (bg)	BRGWA-6S (bg)
8/31/2016				<0.0005	<0.0005	<0.0005	<0.0005	
9/1/2016	<0.0005	<0.0005						<0.0005
9/6/2016			<0.0005					
11/15/2016							<0.0005	<0.0005
11/16/2016	<0.0005	<0.0005		<0.0005	<0.0005	<0.0005		
11/17/2016			<0.0005					
2/20/2017						<0.0005	<0.0005	<0.0005
2/21/2017	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005			
6/12/2017				<0.0005		<0.0005	<0.0005	<0.0005
6/13/2017		<0.0005	<0.0005		<0.0005			
6/14/2017	<0.0005							
9/26/2017	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
2/13/2018				<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
2/14/2018	<0.0005	<0.0005	<0.0005					
6/26/2018	<0.0005	<0.0005	0.00015 (J)	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
7/31/2018	<0.0005	<0.0005						
12/18/2018	<0.0005	<0.0005	0.0001 (J)	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
8/27/2019	<0.0005	<0.0005		<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
8/29/2019			<0.0005					
10/15/2019	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
3/3/2020	<0.0005	<0.0005		<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
3/4/2020			<0.0005					
8/18/2020	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
9/15/2020	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
3/1/2021				<0.0005				<0.0005
3/2/2021	<0.0005	<0.0005	<0.0005		<0.0005	<0.0005	<0.0005	
9/21/2021	<0.0005	<0.0005				<0.0005	<0.0005	
9/22/2021			<0.0005	<0.0005	<0.0005			<0.0005
2/1/2022	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005

Time Series

Constituent: Cadmium (mg/L) Analysis Run 5/3/2022 10:11 AM View: Pond BCD.1

Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWC-25I	BRGWC-27I	BRGWC-29I	BRGWC-30I	BRGWC-32S	BRGWC-45	BRGWC-47	BRGWC-50
9/6/2016				<0.0005				
9/8/2016	<0.0005	7E-05 (J)	<0.0005		<0.0005			
11/17/2016	<0.0005							
11/18/2016		9E-05 (J)						
11/21/2016			<0.0005	8E-05 (J)	8E-05 (J)			
2/21/2017	<0.0005	<0.0005						
2/22/2017			<0.0005	<0.0005	0.0001 (J)			
6/13/2017	<0.0005	<0.0005						
6/14/2017			<0.0005	<0.0005	<0.0005			
9/27/2017	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005			
2/14/2018	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005			
3/6/2018						<0.0005	<0.0005	
3/15/2018								0.038
5/1/2018						<0.0005	<0.0005 (D)	0.011
6/26/2018	<0.0005							
6/27/2018		<0.0005	<0.0005		0.00011 (J)		0.00014 (J)	
6/28/2018				<0.0005		<0.0005		0.087
7/31/2018						<0.0005		
8/1/2018							0.00011 (J)	0.042
8/23/2018						<0.0005	0.00018 (J)	
9/19/2018						<0.0005	0.00015 (J)	
10/29/2018						9.8E-05 (J)	0.00019 (J)	0.083
11/28/2018						<0.0005	0.00022 (J)	0.031
12/18/2018	<0.0005		<0.0005	<0.0005				
12/19/2018					<0.0005 (X)		<0.0005	0.042
12/20/2018		<0.0005				<0.0005 (X)		
1/16/2019								0.028
8/27/2019	<0.0005			<0.0005	<0.0005			
8/28/2019		<0.0005	<0.0005			<0.0005	0.00017 (J)	
8/29/2019								0.0071
10/15/2019	<0.0005							
10/16/2019			<0.0005				0.00018 (J)	0.014
10/17/2019		<0.0005		<0.0005	<0.0005	<0.0005		
12/3/2019						0.00011 (J)		
12/4/2019		<0.0005		<0.0005	<0.0005			
3/4/2020	<0.0005	<0.0005	<0.0005				0.00024 (J)	0.013
3/5/2020				<0.0005	<0.0005	<0.0005		
8/19/2020	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005			
8/20/2020						0.00014 (J)	<0.0005	0.0079
9/15/2020	<0.0005		<0.0005					
9/16/2020		<0.0005		<0.0005	<0.0005	<0.0005	<0.0005	
9/17/2020								0.021
3/2/2021	<0.0005					0.0002 (J)	<0.0005	
3/3/2021		<0.0005	<0.0005	<0.0005				
3/4/2021					<0.0005			0.019
9/23/2021						<0.0005	<0.0005	
9/27/2021								0.0095
9/28/2021	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005			
2/2/2022	<0.0005			0.00014 (J)	<0.0005	<0.0005	0.00015 (J)	
2/3/2022			<0.0005					0.0085
2/4/2022		<0.0005						

Time Series

Constituent: Cadmium (mg/L) Analysis Run 5/3/2022 10:11 AM View: Pond BCD.1

Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWC-52I	PZ-50D	PZ-51D	PZ-51I	PZ-51S	PZ-57I	PZ-58I	PZ-60I
8/2/2018					<0.0005			
8/3/2018				0.0015				
8/10/2018	<0.0005							
8/23/2018	<0.0005							
9/19/2018	<0.0005							
10/29/2018	<0.0005							
11/28/2018	<0.0005							
12/20/2018	<0.0005							
1/17/2019	<0.0005							
1/18/2019					<0.0005			
1/19/2019				0.0016				
2/13/2019	<0.0005							
8/29/2019	<0.0005							
10/16/2019	<0.0005							
10/18/2019				0.00083 (J)	<0.0005			
3/4/2020	<0.0005							
8/20/2020	<0.0005			0.0019 (J)	<0.0005			
9/17/2020	<0.0005			0.033	<0.0005			
10/27/2020		<0.0005	<0.0005	0.0051				
3/3/2021			<0.0005		<0.0005			
3/4/2021	<0.0005			0.017				
3/5/2021		<0.0005						
9/27/2021				0.0031	<0.0005			
9/28/2021	<0.0005	<0.0005	<0.0005			0.00064	0.0042	0.016
2/2/2022	<0.0005			0.0043	<0.0005			
2/3/2022		<0.0005	<0.0005				0.0038	0.016
2/4/2022						0.00072		

Time Series

Constituent: Cadmium (mg/L) Analysis Run 5/3/2022 10:11 AM View: Pond BCD.1

Plant Branch Client: Southern Company Data: Plant Branch AP

	PZ-61I	PZ-59I	PZ-63I	PZ-62I
9/27/2021	0.00081			
2/2/2022	0.00014 (J)			
2/3/2022		0.006		
2/4/2022			<0.0005	0.0004 (J)

Time Series

Constituent: Calcium (mg/L) Analysis Run 5/3/2022 10:11 AM View: Pond BCD.1

Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWA-12I (bg)	BRGWA-12S (bg)	BRGWA-23S (bg)	BRGWA-2I (bg)	BRGWA-2S (bg)	BRGWA-5I (bg)	BRGWA-5S (bg)	BRGWA-6S (bg)
8/31/2016				12.6	4.09	13.5	19.6	
9/1/2016	8.98	4.61						3.3
9/6/2016			12.8					
11/15/2016							21.7	3.44
11/16/2016	15.4	4.17		12.1	4.25	14.9		
11/17/2016			19.2					
2/20/2017						13.9	21.1	3.52
2/21/2017	17.4	5	15.1	11.4	4.02			
6/12/2017				9.34		13.7	21.5	3.11
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	14.4	24	3.15
2/13/2018				<25	3.94	<25	<25	3.65
2/14/2018	<25	<25	<25					
6/26/2018	15.5 (J)	6.4	18.5 (J)	16 (J)	3.6	13.5 (J)	23.5 (J)	3.3
7/31/2018	18.2 (J)	6.1						
12/18/2018	18.7 (J)	5.5	16.8 (J)	14.5 (J)	3.8	16.4 (J)	19.8 (J)	3.5
3/19/2019	15.9 (J)	5.9	13.5 (J)	14.3 (JD)	3.9	12.3 (J)	21.4 (J)	3.6
10/15/2019	15.9	6.2	8.6	15.1	3.7	14.4	20	3.5
3/3/2020	19.4	6.8		20	4	14.9	23.2	5
3/4/2020			11.5					
9/15/2020	14.5	5.7	10.7	14.1	3.9	12.7	16.8	3.7
3/1/2021				15.4				4.2
3/2/2021	11.7	5.4	11.6		4	13.2	16.8	
9/21/2021	16.4	5.4				14.1	19.1	
9/22/2021			9.2	15.9	4.3			4.1
2/1/2022	14.2	5.3	10.7	14.4	4.4	14.5	19.1	4.2

Time Series

Constituent: Calcium (mg/L) Analysis Run 5/3/2022 10:11 AM View: Pond BCD.1

Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWC-25I	BRGWC-27I	BRGWC-29I	BRGWC-30I	BRGWC-32S	BRGWC-45	BRGWC-47	BRGWC-50
9/6/2016				63.3				
9/8/2016	59.4	87.2	93.9		60.5			
11/17/2016	78.4							
11/18/2016		82.4						
11/21/2016			99.1	60.7	31.1			
2/21/2017	80.9	75.1						
2/22/2017			105	62.1	67.3			
6/13/2017	62	61						
6/14/2017			91.3	63.5	60.2			
9/27/2017	65.8	72.6	84	63.5	68.4			
2/14/2018	58.8	74.1	72.1	62.8	70.2			
3/6/2018						39.5	326	
3/15/2018								233
5/1/2018						45.5	302 (D)	225
6/26/2018	55.5							
6/27/2018		68.2	61.1		67.1		340	
6/28/2018				73.3		41.9		242
7/31/2018						41.5		
8/1/2018							358	246
8/23/2018						42.3	323	
9/19/2018						41.9	321	
10/29/2018						40.8	326	236
11/28/2018						45.1	354	254
12/18/2018	54.7		52.9	102				
12/19/2018					61.2		330	252
12/20/2018		63.9				39		
1/16/2019								248
3/19/2019		60.2					335	
3/20/2019	53.95 (D)		55.4	141	52.8	31.2		222
10/15/2019	48.3							
10/16/2019			54				338	241
12/3/2019						43.7		
12/4/2019		76.8		92.6	52.7			
3/4/2020	52	72.3	59.3				353	245
3/5/2020				119	52.1	37.9		
9/15/2020	40.1		55.1					
9/16/2020		62.5		106	43.1	39.7	309	
9/17/2020								206
3/2/2021	44.1					33.9	353	
3/3/2021		58.2	73.3	122				
3/4/2021					35.7			214
9/23/2021						32	336	
9/27/2021								196
9/28/2021	38.4	50.4	59.5	212	33.9			
2/2/2022	44.3			232	44.2	33.8	320	
2/3/2022			58.7					220
2/4/2022		61.7						

Time Series

Constituent: Calcium (mg/L) Analysis Run 5/3/2022 10:11 AM View: Pond BCD.1

Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWC-52I	PZ-50D	PZ-51D	PZ-51I	PZ-51S	PZ-57I	PZ-58I	PZ-60I
8/10/2018	410 (O)							
8/23/2018	33.9							
9/19/2018	42.3							
10/29/2018	39.8							
11/28/2018	38.2							
12/20/2018	43.2							
1/17/2019	39.4							
1/18/2019					9.1			
1/19/2019				196				
2/13/2019	36.9							
3/20/2019	40.85 (D)							
10/16/2019	48.4							
10/18/2019				177	7.1			
3/4/2020	49.5							
9/17/2020	35.4			168	7.7			
10/27/2020		159	132	183				
3/3/2021			119		7.9			
3/4/2021	47.5			182				
3/5/2021		207						
9/27/2021				187	7.5			
9/28/2021	39.5	225	113			51.1	108	274
2/2/2022	40.1			187	7.8			
2/3/2022		222	122				120	279
2/4/2022						67.6		

Time Series

Constituent: Calcium (mg/L) Analysis Run 5/3/2022 10:11 AM View: Pond BCD.1

Plant Branch Client: Southern Company Data: Plant Branch AP

	PZ-61I	PZ-59I	PZ-63I	PZ-62I
9/27/2021	230			
2/2/2022	215			
2/3/2022		213		
2/4/2022			42.2	102

Time Series

Constituent: Chloride (mg/L) Analysis Run 5/3/2022 10:11 AM View: Pond BCD.1

Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWA-12I (bg)	BRGWA-12S (bg)	BRGWA-23S (bg)	BRGWA-2I (bg)	BRGWA-2S (bg)	BRGWA-5I (bg)	BRGWA-5S (bg)	BRGWA-6S (bg)
8/31/2016				2.3	2	4.4	3.6	
9/1/2016	3.3	3.5						2.5
9/6/2016			5.8					
11/15/2016							4	2.3
11/16/2016	3.6	3.6		2	1.8	4.4		
11/17/2016			4.3					
2/20/2017						4.8	3.9	2.4
2/21/2017	3.2	3.2	3.5	2	1.8			
6/12/2017				2.1		4.2	3.8	2.2
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	4.4	4.1	2.3
2/13/2018				2.1	1.7	4.7	4.1	2.3
2/14/2018	3.1	3.5	3.8					
6/26/2018	3.4	3.4	3.8	2.4	2.2	4.5	4.1	2.6
7/31/2018	2.6	2.9						
12/18/2018	2.8	2.9	3.9	1.8	1.9	4.5	3.8	2.3
3/19/2019	3.2	3.5	3.8	2.45 (D)	2	4.5	4.2	2.6
10/15/2019	3.1	3.4	3.5	2.2	1.9	4.2	3.7	2.4
3/3/2020	2.6	3.2		1.9	1.9	3.9	3.6	2.9
3/4/2020			3.3					
9/15/2020	2.4	3.5	3.1	1.9	1.7	3.7	3.7	2.3
3/1/2021				1.8				2.1
3/2/2021	2.6	3.7	3.5		1.7	3.8	3.7	
9/21/2021	2.1	3.5				3.2	3.2	
9/22/2021			2.8	1.7	1.5			2.1
2/1/2022	2.2	3.6	3.2	1.8	1.6	3.5	3.4	2.1

Time Series

Constituent: Chloride (mg/L) Analysis Run 5/3/2022 10:11 AM View: Pond BCD.1

Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWC-25I	BRGWC-27I	BRGWC-29I	BRGWC-30I	BRGWC-32S	BRGWC-45	BRGWC-47	BRGWC-50
9/6/2016				6.7				
9/8/2016	5.5	6	6.4		6.8			
11/17/2016	7.7							
11/18/2016		6.3						
11/21/2016			6.9	6.5	7.8			
2/21/2017	7.3	5.1						
2/22/2017			6.2	5.6	7			
6/13/2017	7.5	4.7						
6/14/2017			7.2	5.7	7.1			
9/27/2017	7.9	4.9	8.7	6	7.2			
2/14/2018	6.7	5.6	7.2	5.9	7.4			
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		5.9	6.3		7.1		4.4	
6/28/2018				7 (J-X)		50.2 (J-X)		24 (J-X)
7/31/2018						59		
8/1/2018							5.2	25.7
8/23/2018						54	3.6	
9/19/2018						58.4	4.1	
10/29/2018						62.6	4.3	24.9
11/28/2018						58.1	5.1	24
12/18/2018	6.2		5.4	5.8				
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)		
1/16/2019								24.1
3/19/2019		5.8					4.7	
3/20/2019	6.3 (D)		5.6	5.8	7.3	27.7		23.5
10/15/2019	5							
10/16/2019			6.9				4.6	21.9
12/3/2019						52.8		
12/4/2019		5.6		5	6.6			
3/4/2020	5	5.1	5.8				4.2	21.6
3/5/2020				4.3	6	37.1		
9/15/2020	4.9		5.5					
9/16/2020		5.4		4.4	5.6	54.9	4.1	
9/17/2020								20.1
3/2/2021	4.5					25.8	4.8	
3/3/2021		4.5	5.6	4				
3/4/2021					4.6			18.9
9/23/2021						29.3	4.3	
9/27/2021								16.2
9/28/2021	4.2	3.7	5.4	3.4	3.6			
2/2/2022	4.2			4	3.8	23.4	4.2	
2/3/2022			6.1					17.4
2/4/2022		4.6						

Time Series

Constituent: Chloride (mg/L) Analysis Run 5/3/2022 10:11 AM View: Pond BCD.1

Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWC-52I	PZ-50D	PZ-51D	PZ-51I	PZ-51S	PZ-57I	PZ-58I	PZ-60I
8/10/2018	6.9							
8/23/2018	7.5							
9/19/2018	6.6							
10/29/2018	7.8							
11/28/2018	7.2							
12/20/2018	6.6 (J-X)							
1/17/2019	6.4							
1/18/2019					4.6			
1/19/2019				11.6				
2/13/2019	6.5							
3/20/2019	6.7 (D)							
10/16/2019	7							
10/18/2019				10.9	4.7			
3/4/2020	6.1							
9/17/2020	6.3			10.5	4.6			
10/27/2020		5.6	6.3	11				
3/3/2021			18.9		4.5			
3/4/2021	5.6			12.2				
3/5/2021		8						
9/27/2021				9.4	3.8			
9/28/2021	5.5	13	12.8			5.9	9.6	27.2
2/2/2022	6.1			9.7	4.2			
2/3/2022		12.5	15.2				11.9	30.7
2/4/2022						7.2		

Time Series

Constituent: Chloride (mg/L) Analysis Run 5/3/2022 10:11 AM View: Pond BCD.1

Plant Branch Client: Southern Company Data: Plant Branch AP

	PZ-61I	PZ-59I	PZ-63I	PZ-62I
9/27/2021	20			
2/2/2022	19.2			
2/3/2022		36.5		
2/4/2022			6.2	9.8

Time Series

Constituent: Chromium (mg/L) Analysis Run 5/3/2022 10:11 AM View: Pond BCD.1

Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWA-12I (bg)	BRGWA-12S (bg)	BRGWA-23S (bg)	BRGWA-2I (bg)	BRGWA-2S (bg)	BRGWA-5I (bg)	BRGWA-5S (bg)	BRGWA-6S (bg)
8/31/2016				0.001 (J)	0.0034 (J)	0.0058 (J)	0.0028 (J)	
9/1/2016	0.0009 (J)	0.0013 (J)						0.0147
9/6/2016			<0.005					
11/15/2016							0.003 (J)	0.0154 (B)
11/16/2016	0.0015 (J)	0.0012 (J)		<0.005	0.0029 (J)	0.0051 (J)		
11/17/2016			<0.005					
2/20/2017						0.0049 (J)	0.0047 (J)	0.014
2/21/2017	0.001 (J)	0.0017 (J)	<0.005	<0.005	0.0036 (J)			
6/12/2017				0.0005 (J)		0.0052 (J)	0.0041 (J)	0.016
6/13/2017		0.0019 (J)	<0.005		0.0038 (J)			
6/14/2017	0.0012 (J)							
9/26/2017	0.0014 (J)	0.0018 (J)	<0.005	0.0005 (J)	0.0045 (J)	0.0039 (J)	0.0037 (J)	0.0144
2/13/2018				<0.005	<0.005	<0.005	<0.005	0.0144
2/14/2018	<0.005	<0.005	<0.005					
6/26/2018	<0.005	0.0022 (J)	<0.005	<0.005	0.008 (J)	0.0053 (J)	0.0043 (J)	0.015
12/18/2018	0.0016 (J)	0.0022 (J)	<0.005	<0.005	0.012	0.0032 (J)	0.0054 (J)	0.015
8/27/2019	0.0023 (J)	0.0024 (J)		0.0004 (J)	0.0083 (J)	0.0055 (J)	0.0043 (J)	0.015
8/29/2019			0.0016 (J)					
10/15/2019	0.0021 (J)	0.0023 (J)	0.0017 (J)	<0.005	0.0083 (J)	0.0047 (J)	0.0055 (J)	0.014
3/3/2020	0.0026 (J)	0.0028 (J)		0.00047 (J)	0.0098 (J)	0.0069 (J)	0.0057 (J)	0.011
3/4/2020			0.0019 (J)					
8/18/2020	0.0023 (J)	0.0029 (J)	0.0017 (J)	0.00096 (J)	0.0085 (J)	0.0069 (J)	0.005 (J)	0.015
9/15/2020	0.00096 (J)	0.0025 (J)	0.0019 (J)	<0.005	0.0082 (J)	0.0069 (J)	0.0048 (J)	0.014
3/1/2021				<0.005				0.011
3/2/2021	0.002 (J)	0.0021 (J)	0.002 (J)		0.0074	0.0064	0.0044 (J)	
9/21/2021	0.0023 (J)	0.0024 (J)				0.0064	0.0044 (J)	
9/22/2021			0.0026 (J)	<0.005	0.0091			0.014
2/1/2022	0.0027 (J)	0.0029 (J)	0.0028 (J)	0.0013 (J)	0.0092	0.0066	0.0052	0.015

Time Series

Constituent: Chromium (mg/L) Analysis Run 5/3/2022 10:11 AM View: Pond BCD.1

Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWC-25I	BRGWC-27I	BRGWC-29I	BRGWC-30I	BRGWC-32S	BRGWC-45	BRGWC-47	BRGWC-50
9/6/2016				<0.005				
9/8/2016	<0.005	0.001 (J)	<0.005		<0.005			
11/17/2016	<0.005							
11/18/2016		<0.005						
11/21/2016			<0.005	<0.005	<0.005			
2/21/2017	<0.005	<0.005						
2/22/2017			<0.005	<0.005	0.0012 (J)			
6/13/2017	<0.005	<0.005						
6/14/2017			<0.005	<0.005	0.0009 (J)			
9/27/2017	<0.005	<0.005	<0.005	<0.005	0.0011 (J)			
2/14/2018	<0.005	<0.005	<0.005	<0.005	<0.005			
3/6/2018						<0.005	<0.005	
3/15/2018								<0.005
5/1/2018						<0.005	<0.005 (D)	<0.005
6/26/2018	<0.005							
6/27/2018		<0.005	<0.005		<0.005		<0.005	
6/28/2018				<0.005		<0.005		0.0023 (J)
7/31/2018						<0.005		
8/1/2018							<0.005	0.0046 (J)
8/23/2018						<0.005	<0.005	
9/19/2018						<0.005	<0.005	
10/29/2018						<0.005	<0.005	<0.005
11/28/2018						<0.005	<0.005	<0.005
12/18/2018	<0.005		<0.005	<0.005				
12/19/2018					<0.005		0.0018 (J)	<0.005
12/20/2018		0.003 (J)				<0.005		
1/16/2019								<0.005
8/27/2019	0.0016 (J)			0.0051 (J)	0.0019 (J)			
8/28/2019		<0.005	<0.005			<0.005	0.00092 (J)	
8/29/2019								<0.005
10/15/2019	0.00098 (J)							
10/16/2019			<0.005				<0.005	0.0005 (J)
12/3/2019						<0.005		
12/4/2019		<0.005		<0.005	0.0014 (J)			
3/4/2020	<0.005	<0.005	0.02				0.00078 (J)	0.00071 (J)
3/5/2020				<0.005	0.0014 (J)	0.00053 (J)		
8/19/2020	<0.005	<0.005	<0.005	<0.005	0.0021 (J)			
8/20/2020						0.001 (J)	0.00064 (J)	0.00065 (J)
9/15/2020	<0.005		<0.005					
9/16/2020		<0.005		0.014	0.0025 (J)	0.0014 (J)	<0.005	
9/17/2020								0.00098 (J)
3/2/2021	<0.005					<0.005	<0.005	
3/3/2021		<0.005	<0.005	<0.005				
3/4/2021					0.002 (J)			0.001 (J)
9/23/2021						<0.005	<0.005	
9/27/2021								<0.005
9/28/2021	<0.005	<0.005	<0.005	<0.005	0.0021 (J)			
2/2/2022	<0.005			<0.005	0.0021 (J)	<0.005	<0.005	
2/3/2022			<0.005					<0.005
2/4/2022		<0.005						

Time Series

Constituent: Chromium (mg/L) Analysis Run 5/3/2022 10:11 AM View: Pond BCD.1

Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWC-52I	PZ-50D	PZ-51D	PZ-51I	PZ-51S	PZ-57I	PZ-58I	PZ-60I
8/10/2018	0.0017 (J)							
8/23/2018	<0.005							
9/19/2018	<0.005							
10/29/2018	<0.005							
11/28/2018	<0.005							
12/20/2018	<0.005							
1/17/2019	<0.005							
1/18/2019					<0.005			
1/19/2019				<0.005				
2/13/2019	<0.005							
8/29/2019	<0.005							
10/16/2019	<0.005							
10/18/2019				<0.005	0.00042 (J)			
3/4/2020	<0.005							
8/20/2020	<0.005			<0.005	0.00063 (J)			
9/17/2020	<0.005			0.00098 (J)	<0.005			
3/3/2021			<0.005		<0.005			
3/4/2021	<0.005			0.0008 (J)				
3/5/2021		<0.005						
9/27/2021				<0.005	<0.005			
9/28/2021	<0.005	<0.005	<0.005			<0.005	<0.005	<0.005
2/2/2022	<0.005			<0.005	<0.005			
2/3/2022		<0.005	<0.005				<0.005	<0.005
2/4/2022						<0.005		

Time Series

Constituent: Chromium (mg/L) Analysis Run 5/3/2022 10:11 AM View: Pond BCD.1

Plant Branch Client: Southern Company Data: Plant Branch AP

	PZ-61I	PZ-59I	PZ-63I	PZ-62I
9/27/2021	0.0077			
2/2/2022	<0.005			
2/3/2022		0.0032 (J)		
2/4/2022			<0.005	<0.005

Time Series

Constituent: Cobalt (mg/L) Analysis Run 5/3/2022 10:11 AM View: Pond BCD.1

Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWA-12I (bg)	BRGWA-12S (bg)	BRGWA-23S (bg)	BRGWA-2I (bg)	BRGWA-2S (bg)	BRGWA-5I (bg)	BRGWA-5S (bg)	BRGWA-6S (bg)
8/31/2016				0.0016 (J)	0.0034 (J)	0.0013 (J)	<0.005	
9/1/2016	<0.005	<0.005						<0.005
9/6/2016			0.0028 (J)					
11/15/2016							<0.005	<0.005
11/16/2016	<0.005	<0.005		0.0006 (J)	0.003 (J)	<0.01 (o)		
11/17/2016			0.0072 (J)					
2/20/2017						0.0012 (J)	0.0009 (J)	<0.005
2/21/2017	<0.005	<0.005	0.0045 (J)	<0.005	0.0028 (J)			
6/12/2017				<0.005		0.0011 (J)	0.0006 (J)	0.0003 (J)
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)	0.0016 (J)	0.0005 (J)	0.0003 (J)
2/13/2018				<0.005	<0.005	<0.01 (o)	<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)	0.0009 (J)	0.00052 (J)	<0.005
7/31/2018	<0.005	<0.005						
12/18/2018	<0.005	<0.005	0.0057 (J)	<0.005	0.0032 (J)	0.00062 (J)	<0.005	<0.005
8/27/2019	<0.005	<0.005		<0.005	0.0012 (J)	0.00068 (J)	0.00042 (J)	<0.005
8/29/2019			0.0015 (J)					
10/15/2019	<0.005	<0.005	0.0011 (J)	<0.005	0.00097 (J)	0.00083 (J)	<0.005	<0.005
3/3/2020	<0.005	<0.005		<0.005	0.0015 (J)	0.00043 (J)	<0.005	0.0011 (J)
3/4/2020			0.0012 (J)					
8/18/2020	<0.005	<0.005	0.00067 (J)	<0.005	0.0014 (J)	0.00048 (J)	<0.005	0.00061 (J)
9/15/2020	<0.005	<0.005	0.00076 (J)	<0.005	0.001 (J)	0.0005 (J)	<0.005	<0.005
3/1/2021				<0.005				<0.005
3/2/2021	<0.005	<0.005	<0.005		0.001 (J)	0.00053 (J)	<0.005	
9/21/2021	<0.005	<0.005				0.00071 (J)	<0.005	
9/22/2021			<0.005	0.0015 (J)	<0.005			0.00078 (J)
2/1/2022	<0.005	<0.005	0.00052 (J)	0.00079 (J)	0.0011 (J)	0.0007 (J)	<0.005	<0.005

Time Series

Constituent: Cobalt (mg/L) Analysis Run 5/3/2022 10:11 AM View: Pond BCD.1

Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWC-25I	BRGWC-27I	BRGWC-29I	BRGWC-30I	BRGWC-32S	BRGWC-45	BRGWC-47	BRGWC-50
9/6/2016				0.0006 (J)				
9/8/2016	0.0073 (J)	0.0149	0.0122		0.0025 (J)			
11/17/2016	0.0086 (J)							
11/18/2016		0.0131						
11/21/2016			0.0122	<0.005	0.001 (J)			
2/21/2017	0.0079 (J)	0.0099 (J)						
2/22/2017			0.0136	0.0016 (J)	<0.005			
6/13/2017	0.0083 (J)	0.0094 (J)						
6/14/2017			0.0113	0.0015 (J)	<0.005			
9/27/2017	0.0087 (J)	0.0095 (J)	0.0094 (J)	0.0007 (J)	<0.005			
2/14/2018	<0.005	0.0112	<0.005	<0.005	<0.005			
3/6/2018						0.0162	<0.005	
3/15/2018								1.3
5/1/2018						0.015	0.0125 (D)	1.4
6/26/2018	0.006 (J)							
6/27/2018		0.0093 (J)	0.0069 (J)		<0.005		0.0076 (J)	
6/28/2018				0.00078 (J)		0.01		1.3
7/31/2018						0.0098 (J)		
8/1/2018							0.004 (J)	1.4
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)	1.4
11/28/2018						0.0071 (J)	0.0016 (J)	1.4
12/18/2018	0.0055 (J)		0.0067 (J)	0.0011 (J)				
12/19/2018					<0.005		0.0014 (J)	1.5
12/20/2018		0.0081 (J)				0.069		
1/16/2019								1.4
8/27/2019	0.0042 (J)			0.0014 (J)	<0.005			
8/28/2019		0.01	0.0061			0.011	0.00037 (J)	
8/29/2019								1.3
10/15/2019	0.0043 (J)							
10/16/2019			0.0058				0.00032 (J)	1.4
10/17/2019		0.011 (J)		<0.005	<0.005	0.0098 (J)		
12/3/2019						0.0076		
12/4/2019		0.0086		0.0012 (J)	<0.005			
3/4/2020	0.0039 (J)	0.008	0.007				0.0011 (J)	1.5
3/5/2020				0.0011 (J)	<0.005	0.0091		
8/19/2020	0.0039 (J)	0.0078	0.0065	0.0008 (J)	<0.005			
8/20/2020						0.022	0.00043 (J)	1.4
9/15/2020	0.0035 (J)		0.0064					
9/16/2020		0.008		0.0008 (J)	<0.005	0.0049 (J)	0.00053 (J)	
9/17/2020								1.4
3/2/2021	0.003 (J)					0.0057	0.0005 (J)	
3/3/2021		0.0062	0.0095	0.0015 (J)				
3/4/2021					<0.005			1.4
9/23/2021						0.0049 (J)	<0.005	
9/27/2021								1.3
9/28/2021	0.0029 (J)	0.0047 (J)	0.0069	0.001 (J)	<0.005			
2/2/2022	0.0027 (J)			0.0012 (J)	<0.005	0.0054	<0.005	
2/3/2022			0.0077					1.5
2/4/2022		0.0076						

Time Series

Constituent: Cobalt (mg/L) Analysis Run 5/3/2022 10:11 AM View: Pond BCD.1

Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWC-52I	PZ-50D	PZ-51D	PZ-51I	PZ-51S	PZ-57I	PZ-58I	PZ-60I
8/2/2018					0.0079 (J)			
8/3/2018				0.041				
8/10/2018	0.0043 (J)							
8/23/2018	0.0026 (J)							
9/19/2018	0.0028 (J)							
10/29/2018	0.0015 (J)							
11/28/2018	0.0012 (J)							
12/20/2018	<0.005							
1/17/2019	<0.005							
1/18/2019					0.0082 (J)			
1/19/2019				0.018				
2/13/2019	<0.005							
8/29/2019	0.00063 (J)							
10/16/2019	<0.005							
10/18/2019				0.017	0.0063			
3/4/2020	<0.005							
8/20/2020	<0.005			0.02	0.0039 (J)			
9/17/2020	0.00046 (J)			0.022	0.0062			
10/27/2020		0.0037 (J)	0.00041 (J)	0.02				
3/3/2021			0.0004 (J)		0.005			
3/4/2021	<0.005			0.019				
3/5/2021		0.0038 (J)						
9/27/2021				0.02	0.0022 (J)			
9/28/2021	<0.005	0.2	<0.005			0.055	0.39	3.5
2/2/2022	<0.005			0.023	0.0028 (J)			
2/3/2022		0.1	<0.005				0.43	3.4
2/4/2022						0.094		

Time Series

Constituent: Cobalt (mg/L) Analysis Run 5/3/2022 10:11 AM View: Pond BCD.1

Plant Branch Client: Southern Company Data: Plant Branch AP

	PZ-61I	PZ-59I	PZ-63I	PZ-62I
9/27/2021	0.45			
2/2/2022	0.51			
2/3/2022		1.6		
2/4/2022			0.019	0.27

Time Series

Constituent: Fluoride (mg/L) Analysis Run 5/3/2022 10:11 AM View: Pond BCD.1

Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWA-12I (bg)	BRGWA-12S (bg)	BRGWA-23S (bg)	BRGWA-2I (bg)	BRGWA-2S (bg)	BRGWA-5I (bg)	BRGWA-5S (bg)	BRGWA-6S (bg)
8/31/2016				0.11 (J)	0.05 (J)	0.07 (J)	0.19 (J)	
9/1/2016	0.2 (J)	0.05 (J)						0.06 (J)
9/6/2016			0.42					
11/15/2016							0.13 (J)	0.06 (J)
11/16/2016	0.14 (J)	0.03 (J)		0.08 (J)	0.07 (J)	0.07 (J)		
11/17/2016			0.15 (J)					
2/20/2017						0.06 (J)	0.08 (J)	0.04 (J)
2/21/2017	0.16 (J)	0.04 (J)	0.1 (J)	0.14 (J)	0.05 (J)			
6/12/2017				0.16 (J)		0.008 (J)	0.07 (J)	0.06 (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)	<0.1	<0.1	0.14 (J)	<0.1	<0.1	0.04 (J)	<0.1
2/13/2018				<0.1	<0.1	<0.1	<0.1	<0.1
2/14/2018	<0.1	<0.1	<0.1					
6/26/2018	0.079 (J)	0.042 (J)	0.053 (J)	0.085 (J)	0.048 (J)	0.045 (J)	0.072 (J)	0.041 (J)
12/18/2018	<0.1	<0.1	<0.1	0.085 (J)	<0.1	<0.1	<0.1	<0.1
3/19/2019	<0.1	<0.1	<0.1	0.0655 (JD)	0.037 (J)	<0.1	0.06 (J)	0.03 (J)
8/27/2019	<0.1	<0.1		<0.1	<0.1	<0.1	<0.1	<0.1
8/29/2019			0.084 (J)					
10/15/2019	0.047 (J)	<0.1	<0.1	<0.1	<0.1	<0.1	0.045 (J)	<0.1
3/3/2020	0.056 (J)	<0.1		0.066 (J)	0.05 (J)	<0.1	0.057 (J)	0.09 (J)
3/4/2020			<0.1					
8/18/2020	0.052 (J)	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
9/15/2020	0.062 (J)	<0.1	<0.1	<0.1	<0.1	<0.1	0.051 (J)	<0.1
3/1/2021				<0.1				<0.1
3/2/2021	0.061 (J)	<0.1	<0.1		<0.1	<0.1	<0.1	
9/21/2021	0.071 (J)	<0.1				<0.1	0.056 (J)	
9/22/2021			0.069 (J)	<0.1	<0.1			<0.1
2/1/2022	0.055 (J)	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1

Time Series

Constituent: Fluoride (mg/L) Analysis Run 5/3/2022 10:11 AM View: Pond BCD.1

Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWC-25I	BRGWC-27I	BRGWC-29I	BRGWC-30I	BRGWC-32S	BRGWC-45	BRGWC-47	BRGWC-50
9/6/2016				0.43				
9/8/2016	0.14 (J)	0.31	0.2 (J)		0.15 (J)			
11/17/2016	0.27 (J)							
11/18/2016		0.19 (J)						
11/21/2016			0.37	0.24 (J)	0.04 (J)			
2/21/2017	0.6	0.35						
2/22/2017			0.37	0.2 (J)	0.08 (J)			
6/13/2017	0.19 (J)	0.19 (J)						
6/14/2017			0.38	0.15 (J)	0.09 (J)			
9/27/2017	0.5	0.4	0.4	0.41	<0.1			
2/14/2018	<0.1	<0.1	<0.1	<0.1	<0.1			
3/6/2018						0.94	1.1	
3/15/2018								0.84 (JX)
5/1/2018						<0.1	0.595 (D)	0.91
6/26/2018	0.15 (J)							
6/27/2018		0.26 (J)	0.085 (J)		<0.1		0.27 (J)	
6/28/2018				0.93 (J+X)		0.69 (J+X)		1.1 (J+X)
7/31/2018						<0.1		
8/1/2018							0.48	2
8/23/2018						<0.1	0.34	
9/19/2018						<0.1	0.23 (J)	
10/29/2018						<0.1	<0.1	0.24 (J)
11/28/2018						<0.1	0.063 (J)	0.41
12/18/2018	0.29 (J)		0.26 (J)	0.54				
12/19/2018					0.23 (J)		0.28 (J)	0.54
12/20/2018		0.26 (J)				0.12 (J)		
1/16/2019								1.1
3/19/2019		0.2 (J)					<0.1	
3/20/2019	0.17 (JD)		0.091 (J)	0.31	<0.1	0.066 (J)		0.21 (J)
8/27/2019	0.15 (J)			0.12 (J)	<0.1			
8/28/2019		0.074 (J)	0.055 (J)			<0.1	<0.1	
8/29/2019								0.41
10/15/2019	0.16 (J)							
10/16/2019			0.11 (J)				0.076 (J)	0.39
12/3/2019						0.19 (J)		
12/4/2019		0.18 (J)		0.26 (J)	0.11 (J)			
3/4/2020	0.07 (J)	<0.1	<0.1				<0.1	0.14 (J)
3/5/2020				0.051 (J)	<0.1	<0.1		
8/19/2020	0.17	0.19	0.12	0.14	<0.1			
8/20/2020						<0.1	<0.1	0.39
9/15/2020	0.15		0.057 (J)					
9/16/2020		0.15		0.13	<0.1	0.052 (J)	<0.1	
9/17/2020								0.46
3/2/2021	0.15					0.067 (J)	<0.1	
3/3/2021		0.24	0.13	0.13				
3/4/2021					<0.1			0.6
9/23/2021						0.06 (J)	<0.1	
9/27/2021								0.43
9/28/2021	0.15	0.16	0.081 (J)	0.11	<0.1			
2/2/2022	0.15			0.1	<0.1	<0.1	<0.1	
2/3/2022			0.11					0.42
2/4/2022		0.14						

Time Series

Constituent: Fluoride (mg/L) Analysis Run 5/3/2022 10:11 AM View: Pond BCD.1

Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWC-52I	PZ-50D	PZ-51D	PZ-51I	PZ-51S	PZ-57I	PZ-58I	PZ-60I
8/10/2018	1.6 (O)							
8/23/2018	0.32							
9/19/2018	0.22 (J)							
10/29/2018	0.14 (J)							
11/28/2018	0.24 (J)							
12/20/2018	0.3							
1/17/2019	0.23 (J)							
1/18/2019					0.13 (J)			
1/19/2019				<0.1				
2/13/2019	<0.1							
3/20/2019	0.135 (JD)							
8/29/2019	0.087 (J)							
10/16/2019	0.22 (J)							
10/18/2019				<0.1	0.09 (J)			
3/4/2020	0.1 (J)							
8/20/2020	0.23			<0.1	0.056 (J)			
9/17/2020	0.074 (J)			<0.1	0.062 (J)			
10/27/2020		0.28	0.21	<0.1				
3/3/2021			0.28		0.083 (J)			
3/4/2021	0.28			0.061 (J)				
3/5/2021		0.16						
9/27/2021				<0.1	0.072 (J)			
9/28/2021	0.12	0.11	0.26			0.085 (J)	0.97	1.6
2/2/2022	0.098 (J)			<0.1	0.053 (J)			
2/3/2022		0.15	0.27				1.8	2.3
2/4/2022						0.096 (J)		

Time Series

Constituent: Fluoride (mg/L) Analysis Run 5/3/2022 10:11 AM View: Pond BCD.1

Plant Branch Client: Southern Company Data: Plant Branch AP

	PZ-61I	PZ-59I	PZ-63I	PZ-62I
9/27/2021	0.067 (J)			
2/2/2022	<0.1			
2/3/2022		2.7		
2/4/2022			0.14	0.071 (J)

Time Series

Constituent: Lead (mg/L) Analysis Run 5/3/2022 10:11 AM View: Pond BCD.1

Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWA-12I (bg)	BRGWA-12S (bg)	BRGWA-23S (bg)	BRGWA-2I (bg)	BRGWA-2S (bg)	BRGWA-5I (bg)	BRGWA-5S (bg)	BRGWA-6S (bg)
8/31/2016				<0.001	<0.001	<0.001	<0.001	
9/1/2016	<0.001	<0.001						0.0001 (J)
9/6/2016			<0.001					
11/15/2016							<0.001	<0.001
11/16/2016	<0.001	<0.001		<0.001	<0.001	<0.001		
11/17/2016			<0.001					
2/20/2017						<0.001	0.0002 (J)	<0.001
2/21/2017	<0.001	<0.001	<0.001	<0.001	<0.001			
6/12/2017				8E-05 (J)		<0.001	0.0001 (J)	8E-05 (J)
6/13/2017		<0.001	<0.001		<0.001			
6/14/2017	<0.001							
9/26/2017	<0.001	<0.001	<0.001	7E-05 (J)	7E-05 (J)	<0.001	0.0001 (J)	<0.001
2/13/2018				<0.001	<0.001	<0.001	<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	<0.001	<0.001	<0.001
12/18/2018	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
8/27/2019	<0.001	<0.001		<0.001	5.8E-05 (J)	<0.001	0.00036 (J)	<0.001
8/29/2019			7E-05 (J)					
10/15/2019	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	7.9E-05 (J)	<0.001
3/3/2020	<0.001	<0.001		<0.001	<0.001	<0.001	7.9E-05 (J)	7.3E-05 (J)
3/4/2020			<0.001					
8/18/2020	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.0001 (J)	<0.001
9/15/2020	<0.001	<0.001	<0.001	<0.001	<0.001	0.0013 (J)	4.3E-05 (J)	<0.001
3/1/2021				<0.001				<0.001
3/2/2021	<0.001	<0.001	<0.001		<0.001	3.7E-05 (J)	<0.001	
9/21/2021	<0.001	<0.001				<0.001	<0.001	
9/22/2021			<0.001	<0.001	<0.001			<0.001
2/1/2022	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001

Time Series

Constituent: Lead (mg/L) Analysis Run 5/3/2022 10:11 AM View: Pond BCD.1

Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWC-25I	BRGWC-27I	BRGWC-29I	BRGWC-30I	BRGWC-32S	BRGWC-45	BRGWC-47	BRGWC-50
9/6/2016				<0.001				
9/8/2016	<0.001	<0.001	0.0004 (J)		<0.001			
11/17/2016	<0.001							
11/18/2016		<0.001						
11/21/2016			0.0006 (J)	<0.001	<0.001			
2/21/2017	<0.001	<0.001						
2/22/2017			0.0005 (J)	<0.001	<0.001			
6/13/2017	<0.001	<0.001						
6/14/2017			0.0004 (J)	<0.001	<0.001			
9/27/2017	<0.001	<0.001	0.0006 (J)	<0.001	<0.001			
2/14/2018	<0.001	<0.001	<0.005 (o)	<0.001	<0.001			
3/6/2018						<0.001	<0.001	
3/15/2018								<0.001
5/1/2018						<0.001	<0.001 (D)	<0.001
6/26/2018	<0.001							
6/27/2018		<0.001	0.00032 (J)		<0.001		<0.001	
6/28/2018				<0.001		<0.001		0.00054 (J)
7/31/2018						<0.001		
8/1/2018							<0.001	<0.001
8/23/2018						<0.001	<0.001	
9/19/2018						<0.001	<0.001	
10/29/2018						<0.001	<0.001	0.0003 (J)
11/28/2018						<0.001	<0.001	<0.001
12/18/2018	<0.001		0.00038 (J)	<0.001				
12/19/2018					<0.001		<0.001	<0.001
12/20/2018		<0.001				<0.001		
1/16/2019								<0.001
8/27/2019	0.00011 (J)			<0.001	<0.001			
8/28/2019		<0.001	0.00027 (J)			<0.001	<0.001	
8/29/2019								4.9E-05 (J)
10/15/2019	<0.001							
10/16/2019			0.00027 (J)				<0.001	8.5E-05 (J)
12/3/2019						<0.001		
12/4/2019		6.3E-05 (J)		<0.001	<0.001			
3/4/2020	<0.001	<0.001	0.0003 (J)				0.00012 (J)	0.0001 (J)
3/5/2020				<0.001	<0.001	0.00026 (J)		
8/19/2020	<0.001	<0.001	0.00025 (J)	<0.001	<0.001			
8/20/2020						0.00021 (J)	4.8E-05 (J)	6.7E-05 (J)
9/15/2020	<0.001		0.00029 (J)					
9/16/2020		<0.001		0.00011 (J)	<0.001	5.3E-05 (J)	6.6E-05 (J)	
9/17/2020								0.00015 (J)
3/2/2021	<0.001					<0.001	<0.001	
3/3/2021		<0.001	0.00033 (J)	<0.001				
3/4/2021					<0.001			0.00016 (J)
9/23/2021						<0.001	<0.001	
9/27/2021								<0.001
9/28/2021	<0.001	<0.001	<0.001	<0.001	<0.001			
2/2/2022	<0.001			<0.001	<0.001	<0.001	<0.001	
2/3/2022			<0.001					<0.001
2/4/2022		<0.001						

Time Series

Constituent: Lead (mg/L) Analysis Run 5/3/2022 10:11 AM View: Pond BCD.1

Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWC-52I	PZ-50D	PZ-51D	PZ-51I	PZ-51S	PZ-57I	PZ-58I	PZ-60I
8/10/2018	<0.001							
8/23/2018	<0.001							
9/19/2018	<0.001							
10/29/2018	<0.001							
11/28/2018	<0.001							
12/20/2018	<0.001							
1/17/2019	<0.001							
1/18/2019					<0.001			
1/19/2019				<0.001				
2/13/2019	<0.001							
8/29/2019	<0.001							
10/16/2019	<0.001							
10/18/2019				<0.001	<0.001			
3/4/2020	<0.001							
8/20/2020	<0.001			<0.001	<0.001			
9/17/2020	<0.001			0.00036 (J)	<0.001			
3/3/2021			0.00013 (J)		<0.001			
3/4/2021	4.2E-05 (J)			0.00017 (J)				
3/5/2021		5.6E-05 (J)						
9/27/2021				<0.001	<0.001			
9/28/2021	<0.001	<0.001	<0.001			<0.001	<0.001	<0.001
2/2/2022	<0.001			<0.001	<0.001			
2/3/2022		<0.001	<0.001				<0.001	<0.001
2/4/2022						<0.001		

Time Series

Constituent: Lead (mg/L) Analysis Run 5/3/2022 10:11 AM View: Pond BCD.1

Plant Branch Client: Southern Company Data: Plant Branch AP

	PZ-61I	PZ-59I	PZ-63I	PZ-62I
9/27/2021	0.0019			
2/2/2022	<0.001			
2/3/2022		<0.001		
2/4/2022			<0.001	<0.001

Time Series

Constituent: Lithium (mg/L) Analysis Run 5/3/2022 10:11 AM View: Pond BCD.1

Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWA-12I (bg)	BRGWA-12S (bg)	BRGWA-23S (bg)	BRGWA-2I (bg)	BRGWA-2S (bg)	BRGWA-5I (bg)	BRGWA-5S (bg)	BRGWA-6S (bg)
8/31/2016				0.0268 (J)	<0.03	<0.03	<0.03	
9/1/2016	0.0061 (J)	<0.03						0.003 (J)
9/6/2016			0.0028 (J)					
11/15/2016							<0.03	0.0033 (J)
11/16/2016	0.0054 (J)	<0.03		0.0201 (J)	<0.03	0.0033 (J)		
11/17/2016			0.0063 (J)					
2/20/2017						<0.03	<0.03	0.0025 (J)
2/21/2017	0.0058 (J)	<0.03	0.0052 (J)	0.0128 (J)	<0.03			
6/12/2017				0.0245 (J)		0.0019 (J)	<0.03	0.0027 (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	0.0022 (J)	<0.03	0.0023 (J)
2/13/2018				0.0595	<0.03	0.0041 (J)	<0.03	0.0027 (J)
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	0.0025 (J)	<0.03	0.0029 (J)
12/18/2018	0.0038 (J)	<0.03	0.0091 (J)	0.024 (J)	<0.03	0.0032 (J)	<0.03	0.0026 (J)
8/27/2019	0.0039 (J)	<0.03		0.035	<0.03	0.0019 (J)	<0.03	0.0028 (J)
8/29/2019			0.007 (J)					
10/15/2019	0.0037 (J)	<0.03	0.0069 (J)	0.028 (J)	<0.03	0.002 (J)	<0.03	0.0024 (J)
3/3/2020	0.0033 (J)	<0.03		0.055	<0.03	0.0013 (J)	<0.03	0.0026 (J)
3/4/2020			0.0074 (J)					
8/18/2020	0.0039 (J)	<0.03	0.0099 (J)	0.054	<0.03	0.00095 (J)	<0.03	0.0026 (J)
9/15/2020	0.0037 (J)	<0.03	0.011 (J)	0.033	<0.03	0.001 (J)	<0.03	0.0027 (J)
3/1/2021				0.027 (J)				0.0036 (J)
3/2/2021	0.0045 (J)	<0.03	0.0093 (J)		<0.03	0.00081 (J)	<0.03	
9/21/2021	0.0037 (J)	<0.03				0.0012 (J)	<0.03	
9/22/2021			0.0074 (J)	0.021 (J)	<0.03			0.0035 (J)
2/1/2022	0.0037 (J)	<0.03	0.008 (J)	0.023 (J)	<0.03	0.0011 (J)	<0.03	0.0029 (J)

Time Series

Constituent: Lithium (mg/L) Analysis Run 5/3/2022 10:11 AM View: Pond BCD.1

Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWC-25I	BRGWC-27I	BRGWC-29I	BRGWC-30I	BRGWC-32S	BRGWC-45	BRGWC-47	BRGWC-50
9/6/2016				0.0117 (J)				
9/8/2016	<0.03	0.0021 (J)	0.004 (J)		<0.03			
11/17/2016	<0.03							
11/18/2016		<0.03						
11/21/2016			0.0039 (J)	0.0108 (J)	<0.03			
2/21/2017	<0.03	<0.03						
2/22/2017			0.0043 (J)	0.0103 (J)	0.0023 (J)			
6/13/2017	<0.03	0.0017 (J)						
6/14/2017			0.0036 (J)	0.0101 (J)	0.0022 (J)			
9/27/2017	<0.03	0.0016 (J)	0.0038 (J)	0.0116 (J)	0.0021 (J)			
2/14/2018	<0.03	0.0018 (J)	0.0034 (J)	0.0115 (J)	0.0023 (J)			
3/6/2018						0.0031 (J)	0.0399 (J)	
3/15/2018								0.038 (J)
5/1/2018						0.0038 (J)	0.0475 (D)	0.042 (J)
6/26/2018	<0.03							
6/27/2018		0.0016 (J)	0.0034 (J)		0.0023 (J)		0.044 (J)	
6/28/2018				0.013 (J)		0.0028 (J)		0.04 (J)
7/31/2018						<0.25 (o)		
8/1/2018							0.039 (J)	0.036 (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)	0.041 (J)
11/28/2018						0.0035 (J)	0.044 (J)	0.041 (J)
12/18/2018	<0.03		0.0032 (J)	0.014 (J)				
12/19/2018					0.0018 (J)		0.043 (J)	0.043 (J)
12/20/2018		0.0015 (J)				0.003 (J)		
1/16/2019								0.042 (J)
8/27/2019	<0.03			0.016 (J)	0.0022 (J)			
8/28/2019		0.0016 (J)	0.0033 (J)			0.0034 (J)	0.044	
8/29/2019								0.039
10/15/2019	<0.03							
10/16/2019			0.0029 (J)				0.038	0.034
12/3/2019						0.0033 (J)		
12/4/2019		0.0014 (J)		0.013 (J)	0.0022 (J)			
3/4/2020	<0.03	0.0014 (J)	0.0029 (J)				0.042	0.042
3/5/2020				0.016 (J)	0.0022 (J)	0.003 (J)		
8/19/2020	<0.03	0.0014 (J)	0.0029 (J)	0.018 (J)	0.002 (J)			
8/20/2020						0.0034 (J)	0.044	0.04
9/15/2020	<0.03		0.003 (J)					
9/16/2020		0.0014 (J)		0.016 (J)	0.0022 (J)	0.0036 (J)	0.039	
9/17/2020								0.052
3/2/2021	<0.03					0.0043 (J)	0.044	
3/3/2021		0.0012 (J)	0.0032 (J)	0.014 (J)				
3/4/2021					0.002 (J)			0.05
9/23/2021						0.0023 (J)	0.042	
9/27/2021								0.038
9/28/2021	<0.03	0.0011 (J)	0.0029 (J)	0.023 (J)	0.0021 (J)			
2/2/2022	<0.03			0.021 (J)	0.0035 (J)	0.0022 (J)	0.04	
2/3/2022			0.0026 (J)					0.038
2/4/2022		0.001 (J)						

Time Series

Constituent: Lithium (mg/L) Analysis Run 5/3/2022 10:11 AM View: Pond BCD.1

Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWC-52I	PZ-50D	PZ-51D	PZ-51I	PZ-51S	PZ-57I	PZ-58I	PZ-60I
8/10/2018	0.0087 (J)							
8/23/2018	0.0089 (J)							
9/19/2018	0.005 (J)							
10/29/2018	0.0048 (J)							
11/28/2018	0.0052 (J)							
12/20/2018	0.0042 (J)							
1/17/2019	0.0039 (J)							
1/18/2019					0.0012 (J)			
1/19/2019				0.019 (J)				
2/13/2019	<0.03							
8/29/2019	0.0052 (J)							
10/16/2019	0.0023 (J)							
10/18/2019				0.019 (J)	<0.03			
3/4/2020	0.002 (J)							
8/20/2020	0.0022 (J)			0.019 (J)	<0.03			
9/17/2020	0.0058 (J)			0.021 (J)	<0.03			
3/3/2021			0.0093 (J)		<0.03			
3/4/2021	0.003 (J)			0.026 (J)				
3/5/2021		0.019 (J)						
9/27/2021				0.02 (J)	<0.03			
9/28/2021	0.0035 (J)	0.02 (J)	0.0096 (J)			0.018 (J)	0.041	0.1
2/2/2022	0.0041 (J)			0.021 (J)	<0.03			
2/3/2022		0.024 (J)	0.0096 (J)				0.041	0.098
2/4/2022						0.026 (J)		

Time Series

Constituent: Lithium (mg/L) Analysis Run 5/3/2022 10:11 AM View: Pond BCD.1

Plant Branch Client: Southern Company Data: Plant Branch AP

	PZ-61I	PZ-59I	PZ-63I	PZ-62I
9/27/2021	0.0095 (J)			
2/2/2022	0.011 (J)			
2/3/2022		0.19		
2/4/2022			0.007 (J)	0.01 (J)

Time Series

Constituent: Mercury (mg/L) Analysis Run 5/3/2022 10:11 AM View: Pond BCD.1

Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWA-12I (bg)	BRGWA-12S (bg)	BRGWA-23S (bg)	BRGWA-2I (bg)	BRGWA-2S (bg)	BRGWA-5I (bg)	BRGWA-5S (bg)	BRGWA-6S (bg)
8/31/2016				<0.0002	<0.0002	<0.0002	<0.0002	
9/1/2016	<0.0002	<0.0002						<0.0002
9/6/2016			<0.0002					
11/15/2016							<0.0002	<0.0002
11/16/2016	<0.0002	<0.0002		<0.0002	<0.0002	<0.0002		
11/17/2016			<0.0002					
2/20/2017						<0.0002	8E-05 (J)	<0.0002
2/21/2017	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002			
6/12/2017				4E-05 (J)		<0.0002	<0.0002	<0.0002
6/13/2017		<0.0002	<0.0002		<0.0002			
6/14/2017	6E-05 (J)							
9/26/2017	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
2/13/2018				0.00021	0.00019 (J)	<0.0002	0.00013 (J)	<0.0002
2/14/2018	5.2E-05 (J)	<0.0002	<0.0002					
6/26/2018	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
12/18/2018	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
8/27/2019	<0.0002	<0.0002		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
8/29/2019			<0.0002					
8/18/2020	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
9/15/2020	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
3/1/2021				<0.0002				<0.0002
3/2/2021	<0.0002	<0.0002	<0.0002		<0.0002	<0.0002	<0.0002	
9/21/2021	0.0001 (J)	0.0001 (J)				0.0001 (J)	0.0001 (J)	
9/22/2021			0.0001 (J)	0.0001 (J)	0.0001 (J)			0.0001 (J)
2/1/2022	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002

Time Series

Constituent: Mercury (mg/L) Analysis Run 5/3/2022 10:11 AM View: Pond BCD.1

Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWC-25I	BRGWC-27I	BRGWC-29I	BRGWC-30I	BRGWC-32S	BRGWC-45	BRGWC-47	BRGWC-50
9/6/2016				<0.0002				
9/8/2016	<0.0002	<0.0002	<0.0002		<0.0002			
11/17/2016	<0.0002							
11/18/2016		<0.0002						
11/21/2016			<0.0002	<0.0002	<0.0002			
2/21/2017	<0.0002	<0.0002						
2/22/2017			<0.0002	<0.0002	<0.0002			
6/13/2017	<0.0002	5E-05 (J)						
6/14/2017			7E-05 (J)	7E-05 (J)	9E-05 (J)			
9/27/2017	4E-05 (J)	4.7E-05 (J)	4E-05 (J)	4E-05 (J)	0.0001 (J)			
2/14/2018	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002			
3/6/2018						<0.0002	<0.0002	
3/15/2018								<0.0002
5/1/2018						<0.0002	<0.0002 (D)	<0.0002
6/26/2018	<0.0002							
6/27/2018		<0.0002	<0.0002		<0.0002		<0.0002	
6/28/2018				<0.0002		<0.0002		<0.0002
7/31/2018						<0.0002		
8/1/2018							<0.0002	<0.0002
8/23/2018						<0.0002	<0.0002	
9/19/2018						<0.0002	<0.0002	
10/29/2018						<0.0002	<0.0002	<0.0002
11/28/2018						<0.0002	<0.0002	<0.0002
12/18/2018	<0.0002		<0.0002	<0.0002				
12/19/2018					<0.0002		<0.0002	<0.0002
12/20/2018		<0.0002				<0.0002		
1/16/2019								<0.0002
8/27/2019	<0.0002			<0.0002	<0.0002			
8/28/2019		<0.0002	<0.0002			<0.0002	<0.0002	
8/29/2019								<0.0002
8/19/2020	8.3E-05 (J)	<0.0002	9.8E-05 (J)	8.2E-05 (J)	8.2E-05 (J)			
8/20/2020						<0.0002	<0.0002	<0.0002
9/15/2020	<0.0002		<0.0002					
9/16/2020		<0.0002		<0.0002	<0.0002	<0.0002	<0.0002	
9/17/2020								<0.0002
3/2/2021	<0.0002					<0.0002	<0.0002	
3/3/2021		<0.0002	<0.0002	<0.0002				
3/4/2021					<0.0002			<0.0002
9/23/2021						<0.0002	<0.0002	
9/27/2021								<0.0002
9/28/2021	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002			
2/2/2022	<0.0002			<0.0002	<0.0002	<0.0002	<0.0002	
2/3/2022			<0.0002					<0.0002
2/4/2022		<0.0002						

Time Series

Constituent: Mercury (mg/L) Analysis Run 5/3/2022 10:11 AM View: Pond BCD.1

Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWC-52I	PZ-50D	PZ-51D	PZ-51I	PZ-51S	PZ-57I	PZ-58I	PZ-60I
8/10/2018	<0.0002							
8/23/2018	<0.0002							
9/19/2018	<0.0002							
10/29/2018	<0.0002							
11/28/2018	<0.0002							
12/20/2018	<0.0002							
1/17/2019	<0.0002							
1/18/2019					<0.0002			
1/19/2019				<0.0002				
2/13/2019	<0.0002							
8/29/2019	<0.0002							
10/18/2019				<0.0002	<0.0002			
8/20/2020	<0.0002			9.9E-05 (J)	<0.0002			
9/17/2020	<0.0002			<0.0002	<0.0002			
3/3/2021			<0.0002		<0.0002			
3/4/2021	<0.0002			<0.0002				
3/5/2021		<0.0002						
9/27/2021				<0.0002	<0.0002			
9/28/2021	<0.0002	<0.0002	<0.0002			<0.0002	<0.0002	<0.0002
2/2/2022	<0.0002			<0.0002	<0.0002			
2/3/2022		<0.0002	<0.0002				<0.0002	<0.0002
2/4/2022						<0.0002		

Time Series

Constituent: Mercury (mg/L) Analysis Run 5/3/2022 10:11 AM View: Pond BCD.1

Plant Branch Client: Southern Company Data: Plant Branch AP

	PZ-61I	PZ-59I	PZ-63I	PZ-62I
9/27/2021	<0.0002			
2/2/2022	<0.0002			
2/3/2022		<0.0002		
2/4/2022			<0.0002	<0.0002

Time Series

Constituent: Molybdenum (mg/L) Analysis Run 5/3/2022 10:11 AM View: Pond BCD.1

Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWA-12I (bg)	BRGWA-12S (bg)	BRGWA-23S (bg)	BRGWA-2I (bg)	BRGWA-2S (bg)	BRGWA-5I (bg)	BRGWA-5S (bg)	BRGWA-6S (bg)
8/31/2016				0.0021 (J)	<0.01	0.004 (J)	<0.01	
9/1/2016	0.002 (J)	<0.01						<0.01
9/6/2016			0.0028 (J)					
11/15/2016							<0.01	<0.01
11/16/2016	<0.01	<0.01		<0.01	<0.01	0.0038 (J)		
11/17/2016			<0.01					
2/20/2017						0.0055 (J)	<0.01	<0.01
2/21/2017	<0.01	<0.01	<0.01	0.0021 (J)	<0.01			
6/12/2017				0.0021 (J)		0.005 (J)	<0.01	<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	0.0011 (J)	<0.01	0.0053 (J)	<0.01	<0.01
2/13/2018				0.0019 (J)	<0.01	0.008 (J)	<0.01	<0.01
2/14/2018	<0.01	<0.01	<0.01					
6/26/2018	<0.01	<0.01	<0.01	<0.01	<0.01	0.0041 (J)	<0.01	<0.01
12/18/2018	<0.01	<0.01	<0.01	<0.01	<0.01	0.0048 (J)	<0.01	<0.01
8/27/2019	<0.01	<0.01		<0.01	<0.01	0.0028 (J)	<0.01	<0.01
8/29/2019			<0.01					
10/15/2019	<0.01	<0.01	<0.01	<0.01	<0.01	0.0035 (J)	<0.01	<0.01
3/3/2020				<0.01	<0.01	0.0023 (J)	<0.01	<0.01
8/18/2020	<0.01	<0.01	<0.01	0.0011 (J)	<0.01	0.0015 (J)	<0.01	<0.01
9/15/2020	<0.01	<0.01	<0.01	0.0007 (J)	<0.01	0.0015 (J)	<0.01	<0.01
3/1/2021				<0.01				<0.01
3/2/2021	<0.01	<0.01	<0.01		<0.01	0.0015 (J)	<0.01	
9/21/2021	<0.01	<0.01				0.002 (J)	<0.01	
9/22/2021			<0.01	0.0012 (J)	<0.01			<0.01
2/1/2022	<0.01	<0.01	<0.01	0.0013 (J)	<0.01	0.002 (J)	<0.01	<0.01

Time Series

Constituent: Molybdenum (mg/L) Analysis Run 5/3/2022 10:11 AM View: Pond BCD.1

Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWC-25I	BRGWC-27I	BRGWC-29I	BRGWC-30I	BRGWC-32S	BRGWC-45	BRGWC-47	BRGWC-50
9/6/2016				<0.01				
9/8/2016	<0.01	<0.01	<0.01		<0.01			
11/17/2016	<0.01							
11/18/2016		<0.01						
11/21/2016			<0.01	<0.01	<0.01			
2/21/2017	<0.01	<0.01						
2/22/2017			<0.01	<0.01	<0.01			
6/13/2017	<0.01	<0.01						
6/14/2017			<0.01	<0.01	<0.01			
9/27/2017	<0.01	<0.01	<0.01	<0.01	<0.01			
2/14/2018	<0.01	<0.01	<0.01	<0.01	<0.01			
3/6/2018						<0.01	<0.01	
3/15/2018								<0.01
5/1/2018						<0.01	<0.01 (D)	0.0022 (J)
6/26/2018	<0.01							
6/27/2018		<0.01	<0.01		<0.01		<0.01	
6/28/2018				<0.01		<0.01		<0.01
7/31/2018						<0.01		
8/1/2018							<0.01	0.0033 (J)
8/23/2018						<0.01	<0.01	
9/19/2018						<0.01	<0.01	
10/29/2018						<0.01	<0.01	<0.01
11/28/2018						<0.01	<0.01	<0.01
12/18/2018	<0.01		<0.01	<0.01				
12/19/2018					<0.01		<0.01	<0.01
12/20/2018		<0.01				<0.01		
1/16/2019								<0.01
8/27/2019	<0.01			<0.01	<0.01			
8/28/2019		<0.01	<0.01			<0.01	<0.01	
8/29/2019								<0.01
10/15/2019	<0.01							
10/16/2019			<0.01				<0.01	<0.01
12/3/2019						<0.01		
12/4/2019		<0.01		<0.01	<0.01			
8/19/2020	0.00081 (J)	<0.01	<0.01	0.00078 (J)	<0.01			
8/20/2020						0.00076 (J)	<0.01	<0.01
9/15/2020	0.0008 (J)		<0.01					
9/16/2020		<0.01		0.0022 (J)	<0.01	<0.01	<0.01	
9/17/2020								<0.01
3/2/2021	0.001 (J)					<0.01	<0.01	
3/3/2021		<0.01	<0.01	<0.01				
3/4/2021					<0.01			<0.01
9/23/2021						<0.01	<0.01	
9/27/2021								<0.01
9/28/2021	0.00089 (J)	<0.01	<0.01	0.001 (J)	<0.01			
2/2/2022	0.0011 (J)			0.0012 (J)	<0.01	<0.01	<0.01	
2/3/2022			<0.01					<0.01
2/4/2022		<0.01						

Time Series

Constituent: Molybdenum (mg/L) Analysis Run 5/3/2022 10:11 AM View: Pond BCD.1

Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWC-52I	PZ-50D	PZ-51D	PZ-51I	PZ-51S	PZ-57I	PZ-58I	PZ-60I
8/10/2018	0.0032 (J)							
8/23/2018	0.005 (J)							
9/19/2018	0.0061 (J)							
10/29/2018	0.0065 (J)							
11/28/2018	0.0027 (J)							
12/20/2018	<0.01							
1/17/2019	<0.01							
1/18/2019					<0.01			
1/19/2019				<0.01				
2/13/2019	<0.01							
8/29/2019	<0.01							
10/16/2019	<0.01							
10/18/2019				<0.01	<0.01			
8/20/2020	0.0012 (J)			<0.01	<0.01			
9/17/2020	0.0007 (J)			<0.01	<0.01			
3/3/2021			0.0068 (J)		<0.01			
3/4/2021	0.001 (J)			<0.01				
3/5/2021		0.0017 (J)						
9/27/2021				<0.01	<0.01			
9/28/2021	<0.01	0.0021 (J)	0.0029 (J)			<0.01	<0.01	<0.01
2/2/2022	<0.01			<0.01	<0.01			
2/3/2022		0.0012 (J)	0.0017 (J)				<0.01	<0.01
2/4/2022						<0.01		

Time Series

Constituent: Molybdenum (mg/L) Analysis Run 5/3/2022 10:11 AM View: Pond BCD.1

Plant Branch Client: Southern Company Data: Plant Branch AP

	PZ-61I	PZ-59I	PZ-63I	PZ-62I
9/27/2021	<0.01			
2/2/2022	<0.01			
2/3/2022		<0.01		
2/4/2022			0.00092 (J)	0.0011 (J)

Time Series

Constituent: pH, Field (S.U.) Analysis Run 5/3/2022 10:11 AM View: Pond BCD.1

Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWA-12I (bg)	BRGWA-12S (bg)	BRGWA-23S (bg)	BRGWA-2I (bg)	BRGWA-2S (bg)	BRGWA-5I (bg)	BRGWA-5S (bg)	BRGWA-6S (bg)
8/31/2016				7.16	6.2	6.53	6.59	
9/1/2016	6.71	6						6.49
9/6/2016			6.49					
11/15/2016							6.67	6.59
11/16/2016	6.15	6		6.96	6.12	6.4		
11/17/2016			5.79					
2/20/2017						6.44	6.65	6.61
2/21/2017	6.52	6.09	6.15	7.15	6.24			
6/12/2017				7.31		6.4	6.64	
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	6.31	6.58	6.47
2/13/2018				7.44	6.18	6.62	6.72	6.54
2/14/2018	6.48	5.99	5.83					
6/26/2018	6.2	5.86	5.73	6.93	6.05	6.29	6.43	6.23
7/31/2018	6.37	5.99						
12/18/2018	6.5	6.08	5.78	6.76	5.92	6.57	6.7	6.71
3/19/2019	6.28	5.71	5.28	6.87	6.18	6.45	6.63	6.18
8/27/2019	6.35	6		6.79	6.09	6.37	6.49	6.35
8/29/2019			5.64					
10/15/2019	6.8	6.61	5.7	6.57	6.06	6.77	7.01	6.36
3/3/2020	6.33	5.94		6.71	6.1	6.29	6.49	6.59
3/4/2020			5.7					
8/18/2020	6.25	5.75	5.56	6.59	6.06	6.29	6.41	6.33
9/15/2020	6.01	6	5.72	6.64	6.01	6.27	6.25	6.43
3/1/2021				6.66				6.7
3/2/2021	6.11	5.92	5.75		6.2	6.47	6.42	
9/21/2021	6.53	5.87				6.32	6.36	
9/22/2021			5.72	6.78	6.06			6.48
2/1/2022	6.4	5.81	5.65	6.83	5.95	6.38	6.39	6.54

Time Series

Constituent: pH, Field (S.U.) Analysis Run 5/3/2022 10:11 AM View: Pond BCD.1

Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWC-25I	BRGWC-27I	BRGWC-29I	BRGWC-30I	BRGWC-32S	BRGWC-45	BRGWC-47	BRGWC-50
9/6/2016				6.23				
9/8/2016	6.07	5.51	4.62		5.89			
11/16/2016	5.96							
11/18/2016		5.53						
11/21/2016			4.44	6.23	5.56			
2/21/2017	5.98	5.63						
2/22/2017			4.42	6.16	5.87			
6/13/2017	5.96	5.57						
6/14/2017			4.45	6.16	5.83			
9/27/2017	5.85	5.53	4.33	6.16	5.87			
2/14/2018	5.94	5.83	4.42	6.24	6.01			
3/15/2018						5.26		5.26
5/1/2018						6.14	5.85	5.38
6/26/2018	5.87							
6/27/2018		5.53	4.37		5.83		5.87	
6/28/2018				6.21		5.88		5.03
7/31/2018						6.07		
8/1/2018							5.79	5.22
9/19/2018						5.9	5.71	
10/29/2018						5.93	5.76	5.19
11/28/2018						5.99	5.74	5.28
12/18/2018	5.84		4.38	6.18				
12/19/2018					5.79		5.8	5.15
12/20/2018		5.78				6.04		
1/16/2019								5.14
3/6/2019								6.15
3/19/2019		5.75					5.89	
3/20/2019	6.03		4.4	6.24	5.88	6.1		5.32
8/27/2019	6.01			6.17	5.85			
8/28/2019		5.51	4.39			5.86	5.74	
8/29/2019								5.2
10/15/2019	6							
10/16/2019			4.79				5.9	5.36
10/17/2019		6.01 (D)		6.43	6.09	5.93		
3/4/2020	6.02	5.8	4.5				5.76	5.2
3/5/2020				5.99	5.74	5.95		
5/12/2020					5.88			
8/19/2020	6.32	5.81	4.67	6.36	5.97			
8/20/2020						5.86	5.75	5.26
9/15/2020	6		4.53					
9/16/2020		5.81		6.29	5.79	5.27	5.76	
9/17/2020								4.41
3/2/2021	6.1					6.17	5.59	
3/3/2021		5.9	4.46	6.29				
3/4/2021					5.98			4.34
9/23/2021						5.95	5.74	
9/27/2021								5.05
9/28/2021	5.97	5.82	4.23	6.33	5.82			
2/2/2022	6.23			6.34	5.99	5.92	5.75	
2/3/2022			4.23					5.2
2/4/2022		5.97						

Time Series

Constituent: pH, Field (S.U.) Analysis Run 5/3/2022 10:11 AM View: Pond BCD.1

Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWC-52I	PZ-50D	PZ-51D	PZ-51I	PZ-51S	PZ-57I	PZ-58I	PZ-60I
8/2/2018					6.18			
8/3/2018				5.47				
8/10/2018	6.28							
8/23/2018	6.75							
9/19/2018	6.48							
10/29/2018	6.77							
11/28/2018	6.44							
12/20/2018	6.75							
1/17/2019	6.41							
1/18/2019					6.19			
1/19/2019				5.45				
2/13/2019	6.42							
3/20/2019	6.59							
8/29/2019	6.27							
10/16/2019	7							
10/18/2019				5.79	6.44			
3/4/2020	6.54							
8/20/2020	6.85			5.57	6.15			
9/17/2020	6.12			4.93	5.77			
10/27/2020		6.47	6.79	5.49				
3/3/2021			7.1		5.41			
3/4/2021	5.87			4.57				
3/5/2021		7.06						
9/27/2021				5.34	6.04			
9/28/2021	6.81	6.23	7.18			5.37	4	4.77
2/2/2022	6.35			5.44	6.19			
2/3/2022		6.24	6.77				3.9	4.73
2/4/2022						5.28		

Time Series

Constituent: pH, Field (S.U.) Analysis Run 5/3/2022 10:11 AM View: Pond BCD.1

Plant Branch Client: Southern Company Data: Plant Branch AP

	PZ-61I	PZ-59I	PZ-63I	PZ-62I
9/27/2021	5.02			
2/2/2022	5.25			
2/3/2022		3.71		
2/4/2022			5.89	5.79

Time Series

Constituent: Selenium (mg/L) Analysis Run 5/3/2022 10:11 AM View: Pond BCD.1

Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWA-12I (bg)	BRGWA-12S (bg)	BRGWA-23S (bg)	BRGWA-2I (bg)	BRGWA-2S (bg)	BRGWA-5I (bg)	BRGWA-5S (bg)	BRGWA-6S (bg)
8/31/2016				<0.005	<0.005	<0.005	<0.005	
9/1/2016	<0.005	<0.005						<0.005
9/6/2016			<0.005					
11/15/2016							<0.005	<0.005
11/16/2016	<0.005	<0.005		<0.005	<0.005	<0.005		
11/17/2016			0.0052 (J)					
2/20/2017						<0.005	<0.005	<0.005
2/21/2017	<0.005	<0.005	0.0018 (J)	<0.005	<0.005			
6/12/2017				<0.005		<0.005	<0.005	<0.005
6/13/2017		<0.005	<0.005		<0.005			
6/14/2017	<0.005							
9/26/2017	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
2/13/2018				<0.005	<0.005	<0.005	<0.005	<0.005
2/14/2018	<0.005	<0.005	<0.005					
6/26/2018	<0.005	<0.005	0.0036 (J)	<0.005	<0.005	<0.005	<0.005	<0.005
12/18/2018	<0.005	<0.005	0.0044 (J)	<0.005	<0.005	<0.005	<0.005	<0.005
8/27/2019	<0.005	<0.005		<0.005	<0.005	<0.005	<0.005	<0.005
8/29/2019			0.0023 (J)					
10/15/2019	<0.005	<0.005	0.0022 (J)	<0.005	<0.005	<0.005	<0.005	<0.005
3/3/2020	<0.005	<0.005		<0.005	<0.005	<0.005	<0.005	<0.005
3/4/2020			0.0019 (J)					
8/18/2020	<0.005	<0.005	0.0033 (J)	<0.005	<0.005	<0.005	<0.005	<0.005
9/15/2020	<0.005	<0.005	0.0028 (J)	<0.005	<0.005	<0.005	<0.005	<0.005
3/1/2021				<0.005				<0.005
3/2/2021	<0.005	<0.005	0.006		<0.005	<0.005	<0.005	
9/21/2021	<0.005	<0.005				<0.005	<0.005	
9/22/2021			0.0016 (J)	<0.005	<0.005			<0.005
2/1/2022	<0.005	<0.005	0.002 (J)	<0.005	<0.005	<0.005	<0.005	<0.005

Time Series

Constituent: Selenium (mg/L) Analysis Run 5/3/2022 10:11 AM View: Pond BCD.1

Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWC-25I	BRGWC-27I	BRGWC-29I	BRGWC-30I	BRGWC-32S	BRGWC-45	BRGWC-47	BRGWC-50
9/6/2016				<0.005				
9/8/2016	<0.005	0.0043 (J)	0.0039 (J)		<0.005			
11/17/2016	<0.005							
11/18/2016		0.0047 (J)						
11/21/2016			0.0058 (J)	<0.005	<0.005			
2/21/2017	<0.005	0.0025 (J)						
2/22/2017			0.005 (J)	<0.005	0.0017 (J)			
6/13/2017	<0.005	0.0036 (J)						
6/14/2017			0.0074 (J)	0.0045 (J)	<0.005			
9/27/2017	<0.005	0.004 (J)	0.0068 (J)	0.0034 (J)	0.0019 (J)			
2/14/2018	<0.005	<0.005	<0.005	<0.005	<0.005			
3/6/2018						<0.005	<0.005	
3/15/2018								<0.005
5/1/2018						<0.005	<0.005 (D)	<0.005
6/26/2018	<0.005							
6/27/2018		0.0014 (J)	<0.005		0.0017 (J)		<0.005	
6/28/2018				<0.005		<0.005		<0.005
7/31/2018						<0.005		
8/1/2018							0.0015 (J)	0.0031 (J)
8/23/2018						<0.005	<0.005 (X)	
9/19/2018						<0.005	0.002 (J)	
10/29/2018						<0.005	<0.005	0.002 (J)
11/28/2018						<0.005	<0.005	0.0017 (J)
12/18/2018	<0.005		<0.005	<0.005				
12/19/2018					0.0059 (J)		<0.005	<0.005
12/20/2018		<0.005				<0.005		
1/16/2019								<0.005
8/27/2019	<0.005			0.0038 (J)	0.057			
8/28/2019		0.0017 (J)	<0.005			<0.005	<0.005	
8/29/2019								<0.005
10/15/2019	<0.005							
10/16/2019			<0.005				0.0017 (J)	0.002 (J)
12/3/2019						0.0029 (J)		
12/4/2019		0.0036 (J)		0.0018 (J)	0.1			
3/4/2020	<0.005	0.0022 (J)	0.0018 (J)				<0.005	0.0026 (J)
3/5/2020				<0.005	0.1	<0.005		
5/12/2020					0.0989			
8/19/2020	<0.005	<0.005	<0.005	<0.005	0.099			
8/20/2020						<0.005	0.0016 (J)	0.0037 (J)
9/15/2020	<0.005		<0.005					
9/16/2020		0.0042 (J)		<0.005	0.12	<0.005	0.002 (J)	
9/17/2020								<0.005
3/2/2021	0.0021 (J)					<0.005	0.0028 (J)	
3/3/2021		0.0031 (J)	0.0042 (J)	<0.005				
3/4/2021					0.14			0.0039 (J)
9/23/2021						<0.005	<0.005	
9/27/2021								0.0022 (J)
9/28/2021	<0.005	<0.005	0.0022 (J)	<0.005	0.13			
2/2/2022	<0.005			<0.005	0.21	<0.005	<0.005	
2/3/2022			<0.005					<0.005
2/4/2022		<0.005						

Time Series

Constituent: Selenium (mg/L) Analysis Run 5/3/2022 10:11 AM View: Pond BCD.1

Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWC-52I	PZ-50D	PZ-51D	PZ-51I	PZ-51S	PZ-57I	PZ-58I	PZ-60I
8/10/2018	<0.005							
8/23/2018	<0.005							
9/19/2018	<0.005							
10/29/2018	<0.005							
11/28/2018	<0.005							
12/20/2018	<0.005							
1/17/2019	<0.005							
1/18/2019					<0.005			
1/19/2019				<0.005				
2/13/2019	<0.005							
8/29/2019	<0.005							
10/16/2019	<0.005							
10/18/2019				<0.005	<0.005			
3/4/2020	<0.005							
8/20/2020	<0.005			<0.005	<0.005			
9/17/2020	<0.005			<0.005	<0.005			
3/3/2021			<0.005		<0.005			
3/4/2021	<0.005			<0.005				
3/5/2021		<0.005						
9/27/2021				<0.005	<0.005			
9/28/2021	<0.005	<0.005	<0.005			<0.005	0.0034 (J)	0.0049 (J)
2/2/2022	<0.005			<0.005	<0.005			
2/3/2022		<0.005	<0.005				0.0016 (J)	0.0026 (J)
2/4/2022						<0.005		

Time Series

Constituent: Selenium (mg/L) Analysis Run 5/3/2022 10:11 AM View: Pond BCD.1

Plant Branch Client: Southern Company Data: Plant Branch AP

	PZ-61I	PZ-59I	PZ-63I	PZ-62I
9/27/2021	0.0079			
2/2/2022	0.0031 (J)			
2/3/2022		0.09		
2/4/2022			<0.005	<0.005

Time Series

Constituent: Sulfate (mg/L) Analysis Run 5/3/2022 10:11 AM View: Pond BCD.1

Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWA-12I (bg)	BRGWA-12S (bg)	BRGWA-23S (bg)	BRGWA-2I (bg)	BRGWA-2S (bg)	BRGWA-5I (bg)	BRGWA-5S (bg)	BRGWA-6S (bg)
8/31/2016				7.5	0.38 (J)	2.7	0.81 (J)	
9/1/2016	2.7	1.7						0.6 (J)
9/6/2016			38					
11/15/2016							<1 (J)	0.68 (J)
11/16/2016	3.6	1.2		6.6	<1 (J)	3.4		
11/17/2016			84					
2/20/2017						3.9 (B-01)	1 (B-01)	0.98 (J)
2/21/2017	3	1.1	39	6.1	1.5			
6/12/2017				5		3.7	0.94 (J)	0.54 (J)
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)	4.1	0.92 (J)	0.53 (J)
2/13/2018				4.7 (J)	<1	6.6	<1	<1
2/14/2018	2.1 (J)	<1	82.2					
6/26/2018	2	0.84 (J)	84.2	6.2	0.69 (J)	3.5	0.91 (J)	0.54 (J)
7/31/2018	1.9	0.63 (J)						
12/18/2018	2.1	0.66 (J)	83.4	5.9	0.72 (J)	4.3	0.68 (J)	0.39 (J)
3/19/2019	2.2	0.75 (J)	65	6 (D)	0.78 (J)	3	0.74 (J)	0.68 (J)
10/15/2019	1.9	0.61 (J)	30	5.2	0.47 (J)	3.8	0.68 (J)	0.48 (J)
3/3/2020	1.8	0.51 (J)		7.1	0.93 (J)	2.8	0.71 (J)	2.5
3/4/2020			38.6					
9/15/2020	1.7	<1	41.5	5.9	<1	1.7	<1	<1
3/1/2021				4.7				0.74 (J)
3/2/2021	1.7	0.51 (J)	54		<1	2.2	<1	
9/21/2021	1.7	0.51 (J)				2.3	<1	
9/22/2021			34.6	5.2	<1			<1
2/1/2022	1.4	<1	36.8	5.4	<1	2	<1	<1

Time Series

Constituent: Sulfate (mg/L) Analysis Run 5/3/2022 10:11 AM View: Pond BCD.1

Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWC-25I	BRGWC-27I	BRGWC-29I	BRGWC-30I	BRGWC-32S	BRGWC-45	BRGWC-47	BRGWC-50
9/6/2016				310				
9/8/2016	280	300	460		370			
11/17/2016	200							
11/18/2016		320						
11/21/2016			500	300	420			
2/21/2017	360	270						
2/22/2017			570	280	380			
6/13/2017	290	230						
6/14/2017			440	290	400			
9/27/2017	310	260	380	260	400			
2/14/2018	260	232	280	250	383			
3/6/2018						111	1560	
3/15/2018								1590
5/1/2018						112	1465 (D)	1550
6/26/2018	231							
6/27/2018		205	281		372		1450	
6/28/2018				276		109		1530
7/31/2018						107		
8/1/2018							1560	1580
8/23/2018						108	1470	
9/19/2018						117	1500	
10/29/2018						127	1720	1750
11/28/2018						133	1730	1780
12/18/2018	231		293	440				
12/19/2018					370		1520	1650
12/20/2018		200				113		
1/16/2019								589 (O)
3/19/2019		199					1100	
3/20/2019	235 (D)		278	623	409	127		1740
10/15/2019	174							
10/16/2019			266				1560	1590
12/3/2019						105		
12/4/2019		241		327	293			
3/4/2020	165	205	238				1380	1370
3/5/2020				369	269	106		
9/15/2020	126		241					
9/16/2020		190		334	255	103	1360	
9/17/2020								1330
3/2/2021	139					98.3	1360	
3/3/2021		172	341	371				
3/4/2021					185			1250
9/23/2021						97.5	1240	
9/27/2021								1180
9/28/2021	112	137	250	612	189			
2/2/2022	117			580	210	90.1	1170	
2/3/2022			274					1270
2/4/2022		172						

Time Series

Constituent: Sulfate (mg/L) Analysis Run 5/3/2022 10:11 AM View: Pond BCD.1

Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWC-52I	PZ-50D	PZ-51D	PZ-51I	PZ-51S	PZ-57I	PZ-58I	PZ-60I
8/2/2018					8.9			
8/3/2018				1170				
8/10/2018	183							
8/23/2018	145							
9/19/2018	178							
10/29/2018	157							
11/28/2018	189							
12/20/2018	150							
1/17/2019	157							
1/18/2019					0.64 (J)			
1/19/2019				1140				
2/13/2019	169							
3/20/2019	186.5 (D)							
10/16/2019	155							
10/18/2019				<1	0.76 (J)			
3/4/2020	129							
9/17/2020	165			1030	0.53 (J)			
10/27/2020		492	357	893				
3/3/2021			360		0.66 (J)			
3/4/2021	114			909				
3/5/2021		698						
9/27/2021				933	<1			
9/28/2021	132	866	294			259	628	1670
2/2/2022	126			889	<1			
2/3/2022		903	339				767	2020
2/4/2022						336		

Time Series

Constituent: Sulfate (mg/L) Analysis Run 5/3/2022 10:11 AM View: Pond BCD.1

Plant Branch Client: Southern Company Data: Plant Branch AP

	PZ-61I	PZ-59I	PZ-63I	PZ-62I
9/27/2021	1420			
2/2/2022	1230			
2/3/2022		2600		
2/4/2022			195	451

Time Series

Constituent: Thallium (mg/L) Analysis Run 5/3/2022 10:11 AM View: Pond BCD.1

Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWA-12I (bg)	BRGWA-12S (bg)	BRGWA-23S (bg)	BRGWA-2I (bg)	BRGWA-2S (bg)	BRGWA-5I (bg)	BRGWA-5S (bg)	BRGWA-6S (bg)
8/31/2016				<0.001	<0.001	<0.001	<0.001	
9/1/2016	<0.001	<0.001						<0.001
9/6/2016			<0.001					
11/15/2016							<0.001	<0.001
11/16/2016	<0.001	<0.001		<0.001	<0.001	<0.001		
11/17/2016			<0.001					
2/20/2017						<0.001	<0.001	<0.001
2/21/2017	<0.001	<0.001	<0.001	<0.001	<0.001			
6/12/2017				<0.001		<0.001	<0.001	<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	<0.001	<0.001	<0.001
2/13/2018				<0.001	<0.001	<0.001	<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	<0.001	<0.001	<0.001
12/18/2018	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
8/27/2019	<0.001	<0.001		<0.001	<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	<0.001	<0.001	<0.001
3/3/2020	<0.001	<0.001		<0.001	<0.001	<0.001	<0.001	<0.001
3/4/2020			<0.001					
8/18/2020	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
9/15/2020	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
3/1/2021				<0.001				<0.001
3/2/2021	<0.001	<0.001	<0.001		<0.001	<0.001	<0.001	
9/21/2021	<0.001	<0.001				<0.001	<0.001	
9/22/2021			<0.001	<0.001	<0.001			<0.001
2/1/2022	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001

Time Series

Constituent: Thallium (mg/L) Analysis Run 5/3/2022 10:11 AM View: Pond BCD.1

Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWC-25I	BRGWC-27I	BRGWC-29I	BRGWC-30I	BRGWC-32S	BRGWC-45	BRGWC-47	BRGWC-50
9/6/2016				<0.001				
9/8/2016	<0.001	<0.001	<0.001		<0.001			
11/17/2016	<0.001							
11/18/2016		<0.001						
11/21/2016			0.0002 (J)	<0.001	<0.001			
2/21/2017	<0.001	<0.001						
2/22/2017			0.0002 (J)	<0.001	<0.001			
6/13/2017	<0.001	<0.001						
6/14/2017			0.0002 (J)	<0.001	<0.001			
9/27/2017	<0.001	<0.001	0.0002 (J)	<0.001	<0.001			
2/14/2018	<0.001	<0.001	0.00018 (J)	<0.001	<0.001			
3/6/2018						<0.001	<0.001	
3/15/2018								<0.001
5/1/2018						<0.001	<0.001 (D)	<0.001
6/26/2018	<0.001							
6/27/2018		<0.001	0.00017 (J)		<0.001		<0.001	
6/28/2018				<0.001		<0.001		<0.001
7/31/2018						<0.001		
8/1/2018							<0.001	<0.001
8/23/2018						<0.001	<0.001	
9/19/2018						<0.001	<0.001	
10/29/2018						<0.001	<0.001	<0.001
11/28/2018						<0.001	<0.001	<0.001
12/18/2018	<0.001		0.00017 (J)	<0.001				
12/19/2018					<0.001		<0.001	<0.001
12/20/2018		<0.001				<0.001		
1/16/2019								<0.001
8/27/2019	<0.001			<0.001	<0.001			
8/28/2019		<0.001	0.00017 (J)			<0.001	<0.001	
8/29/2019								<0.001
10/15/2019	<0.001							
10/16/2019			0.00017 (J)				<0.001	<0.001
12/3/2019						<0.001		
12/4/2019		<0.001		<0.001	<0.001			
3/4/2020	<0.001	<0.001	0.00016 (J)				<0.001	<0.001
3/5/2020				<0.001	<0.001	<0.001		
8/19/2020	<0.001	<0.001	0.00016 (J)	<0.001	<0.001			
8/20/2020						<0.001	<0.001	<0.001
9/15/2020	<0.001		0.00016 (J)					
9/16/2020		<0.001		<0.001	<0.001	<0.001	<0.001	
9/17/2020								<0.001
3/2/2021	<0.001					<0.001	<0.001	
3/3/2021		<0.001	0.00018 (J)	<0.001				
3/4/2021					<0.001			<0.001
9/23/2021						<0.001	<0.001	
9/27/2021								<0.001
9/28/2021	<0.001	<0.001	<0.001	<0.001	<0.001			
2/2/2022	<0.001			<0.001	<0.001	<0.001	<0.001	
2/3/2022			<0.001					<0.001
2/4/2022		<0.001						

Time Series

Constituent: Thallium (mg/L) Analysis Run 5/3/2022 10:11 AM View: Pond BCD.1

Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWC-52I	PZ-50D	PZ-51D	PZ-51I	PZ-51S	PZ-57I	PZ-58I	PZ-60I
8/10/2018	<0.001							
8/23/2018	<0.001							
9/19/2018	<0.001							
10/29/2018	<0.001							
11/28/2018	<0.001							
12/20/2018	<0.001							
1/17/2019	<0.001							
1/18/2019					<0.001			
1/19/2019				<0.001				
2/13/2019	<0.001							
8/29/2019	<0.001							
10/16/2019	<0.001							
10/18/2019				<0.001	<0.001			
3/4/2020	<0.001							
8/20/2020	<0.001			<0.001	<0.001			
9/17/2020	<0.001			<0.001	<0.001			
3/3/2021			<0.001		<0.001			
3/4/2021	<0.001			<0.001				
3/5/2021		<0.001						
9/27/2021				<0.001	<0.001			
9/28/2021	<0.001	<0.001	<0.001			<0.001	<0.001	<0.001
2/2/2022	<0.001			<0.001	<0.001			
2/3/2022		<0.001	<0.001				<0.001	<0.001
2/4/2022						<0.001		

Time Series

Constituent: Thallium (mg/L) Analysis Run 5/3/2022 10:11 AM View: Pond BCD.1

Plant Branch Client: Southern Company Data: Plant Branch AP

	PZ-61I	PZ-59I	PZ-63I	PZ-62I
9/27/2021	<0.001			
2/2/2022	<0.001			
2/3/2022		<0.001		
2/4/2022			<0.001	<0.001

Time Series

Constituent: Total Dissolved Solids (mg/L) Analysis Run 5/3/2022 10:11 AM View: Pond BCD.1

Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWA-12I (bg)	BRGWA-12S (bg)	BRGWA-23S (bg)	BRGWA-2I (bg)	BRGWA-2S (bg)	BRGWA-5I (bg)	BRGWA-5S (bg)	BRGWA-6S (bg)
8/31/2016				151	88	138	154	
9/1/2016	142	69						299
9/6/2016			146					
11/15/2016							123	41
11/16/2016	100	100		69	41	77		
11/17/2016			211					
2/20/2017						170	158	133
2/21/2017	71	37	151	68	<10			
6/12/2017				161		132	142	61
6/13/2017		84	130		53			
6/14/2017	140							
9/26/2017	149	68	160	167	45	108	138	29
2/13/2018				165	63	141	150	61
2/14/2018	137	138	194					
6/26/2018	142	90	221	188	71	133	154	71
7/31/2018	133	83						
12/18/2018	135	85	208	145 (X)	78 (X)	138 (X)	147	70 (X)
3/19/2019	132 (JX)	82 (JX)	161 (JX)	146.5 (D)	68	130	146	72
10/15/2019	134	89	124	140	66	175	144	63
3/3/2020	115	72		155	41	<10	130	54
3/4/2020			118					
9/15/2020	95	60	109	116	69	100	116	79
3/1/2021				98				39
3/2/2021	93	43	105		43	80	96	
9/21/2021	117	56				108	104	
9/22/2021			128	129	66			62
2/1/2022	114	63	130	126	72	129	124	61

Time Series

Constituent: Total Dissolved Solids (mg/L) Analysis Run 5/3/2022 10:11 AM View: Pond BCD.1

Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWC-25I	BRGWC-27I	BRGWC-29I	BRGWC-30I	BRGWC-32S	BRGWC-45	BRGWC-47	BRGWC-50
9/6/2016				505				
9/8/2016	460	478	654		607			
11/17/2016	611							
11/18/2016		503						
11/21/2016			819	515	695			
2/21/2017	497	380						
2/22/2017			721	504	635			
6/13/2017	474	354						
6/14/2017			661	536	635			
9/27/2017	457	376	518	432	601			
2/14/2018	431	503 (JX)	487	448	628			
3/6/2018						346	2200	
3/15/2018								2440
5/1/2018						374	2080 (D)	2190
6/26/2018	414							
6/27/2018		458 (X)	648 (X)		2280		31 (OX)	
6/28/2018				494		333		2290
7/31/2018						393		
8/1/2018							2190	2360
8/23/2018						350	2160	
9/19/2018						353	2160	
10/29/2018						329	2130	2300
11/28/2018						358	2320	2300
12/18/2018	401		407	715				
12/19/2018					605		2060	2190
12/20/2018		344				322		
1/16/2019								2270
3/19/2019		334 (JX)					2050 (JX)	
3/20/2019	410.5 (D)		391	885	564	302		2280
10/15/2019	380							
10/16/2019			2030				2220	2280
12/3/2019						362		
12/4/2019		422		612	526			
3/4/2020	330	326	391				2140	2270
3/5/2020				681	489	297		
9/15/2020	272		281					
9/16/2020		301		634	428	275	2090	
9/17/2020								1910
3/2/2021	280					264	1680	
3/3/2021		288	515	690				
3/4/2021					350			1520
9/23/2021						277	1770	
9/27/2021								1800
9/28/2021	270	262	457	1050	375			
2/2/2022	283			1110	443	276	1850	
2/3/2022			419					1850
2/4/2022		301						

Time Series

Constituent: Total Dissolved Solids (mg/L) Analysis Run 5/3/2022 10:11 AM View: Pond BCD.1

Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWC-52I	PZ-50D	PZ-51D	PZ-51I	PZ-51S	PZ-57I	PZ-58I	PZ-60I
8/2/2018					123			
8/3/2018				1900				
8/10/2018	344							
8/23/2018	333							
9/19/2018	364							
10/29/2018	334							
11/28/2018	357							
12/20/2018	355							
1/17/2019	347							
1/18/2019					103			
1/19/2019				1660				
2/13/2019	350							
3/20/2019	360 (D)							
10/16/2019	346							
10/18/2019				1550	99			
3/4/2020	351							
9/17/2020	329			1600	101			
10/27/2020		914	680	1200				
3/3/2021			598		76			
3/4/2021	383			830				
3/5/2021		1210						
9/27/2021				1560	88			
9/28/2021	336	1470	650			542	1120	2600
2/2/2022	160			1590	98			
2/3/2022		1380	686				1170	2480
2/4/2022						630		

Time Series

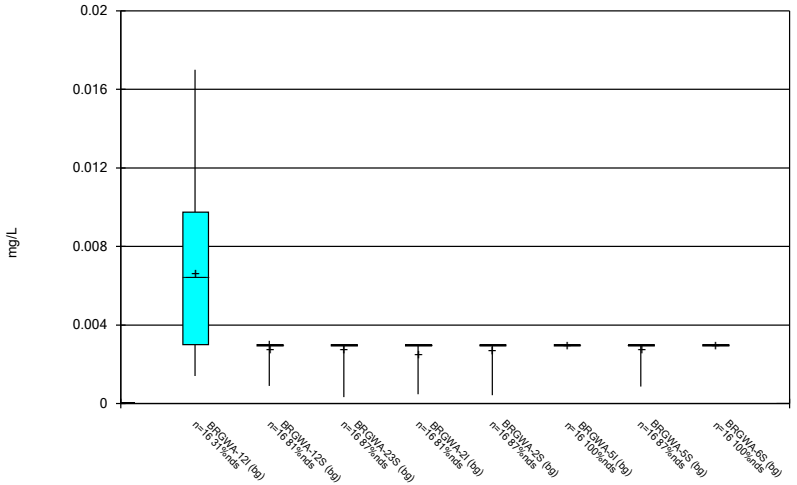
Constituent: Total Dissolved Solids (mg/L) Analysis Run 5/3/2022 10:11 AM View: Pond BCD.1

Plant Branch Client: Southern Company Data: Plant Branch AP

	PZ-61I	PZ-59I	PZ-63I	PZ-62I
9/27/2021	2100			
2/2/2022	1970			
2/3/2022		3610		
2/4/2022			403	818

FIGURE B.

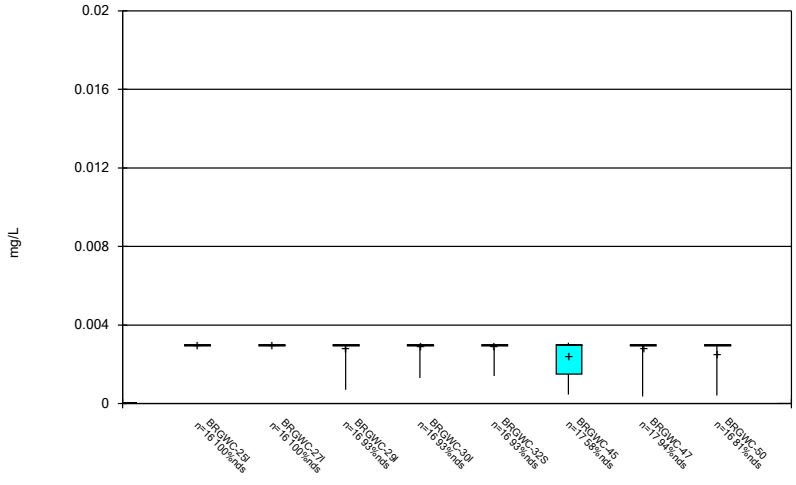
Box & Whiskers Plot



Constituent: Antimony Analysis Run 5/3/2022 10:12 AM View: Pond BCD.1
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.32j Groundwater Stats Consulting. UG

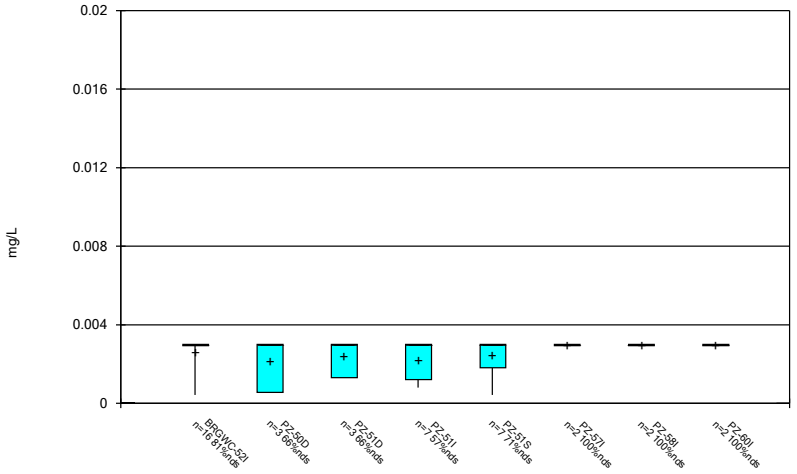
Box & Whiskers Plot



Constituent: Antimony Analysis Run 5/3/2022 10:12 AM View: Pond BCD.1
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.32j Groundwater Stats Consulting. UG

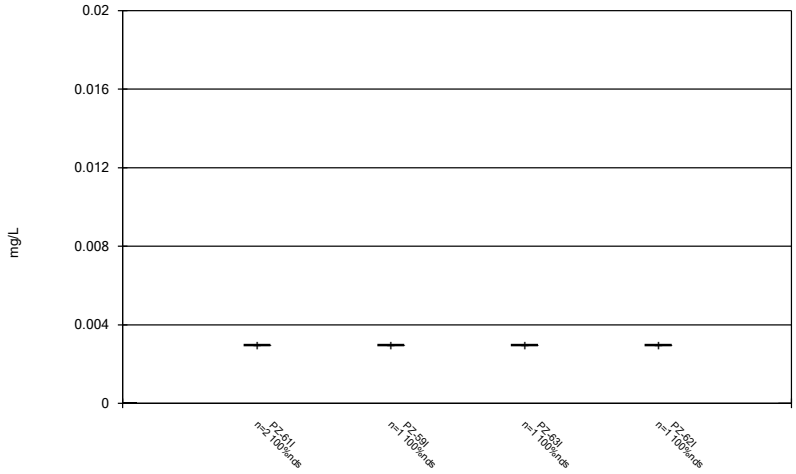
Box & Whiskers Plot



Constituent: Antimony Analysis Run 5/3/2022 10:12 AM View: Pond BCD.1
Plant Branch Client: Southern Company Data: Plant Branch AP

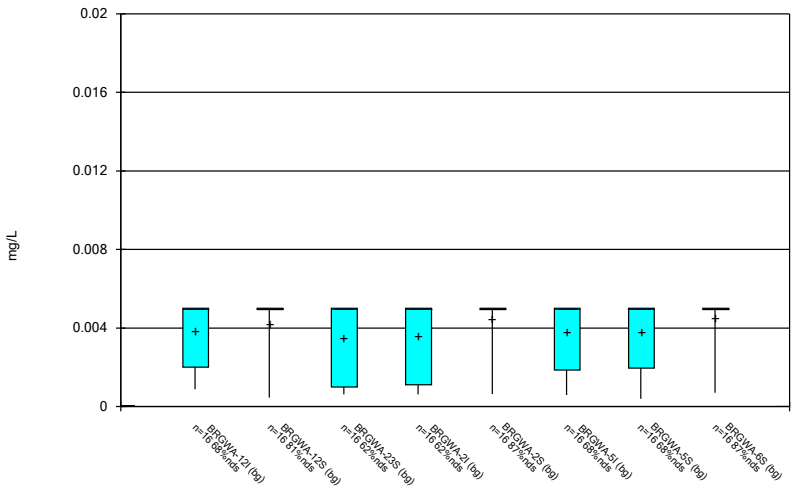
Sanitas™ v.9.6.32j Groundwater Stats Consulting. UG

Box & Whiskers Plot



Constituent: Antimony Analysis Run 5/3/2022 10:12 AM View: Pond BCD.1
Plant Branch Client: Southern Company Data: Plant Branch AP

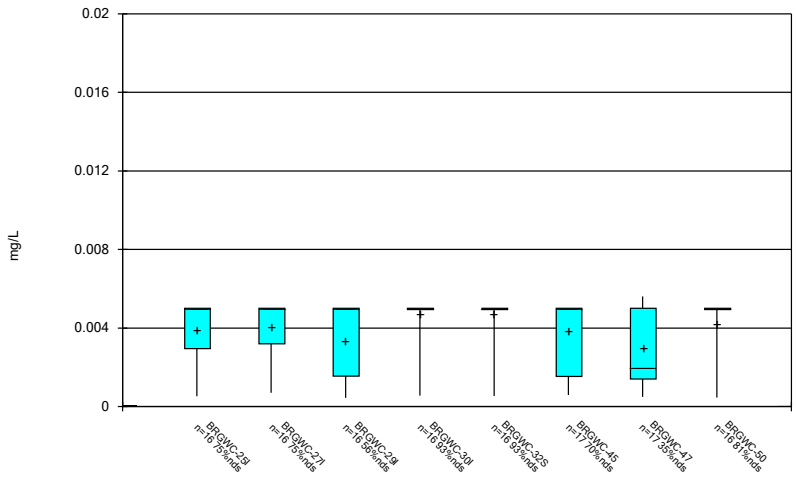
Box & Whiskers Plot



Constituent: Arsenic Analysis Run 5/3/2022 10:12 AM View: Pond BCD.1
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.32j Groundwater Stats Consulting. UG

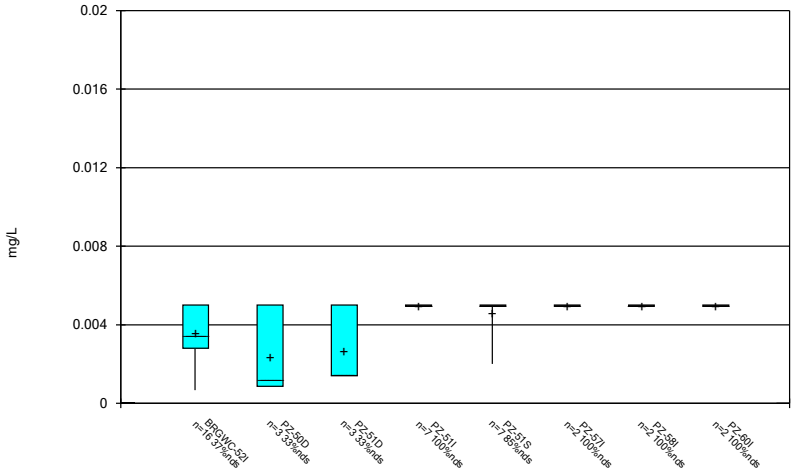
Box & Whiskers Plot



Constituent: Arsenic Analysis Run 5/3/2022 10:12 AM View: Pond BCD.1
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.32j Groundwater Stats Consulting. UG

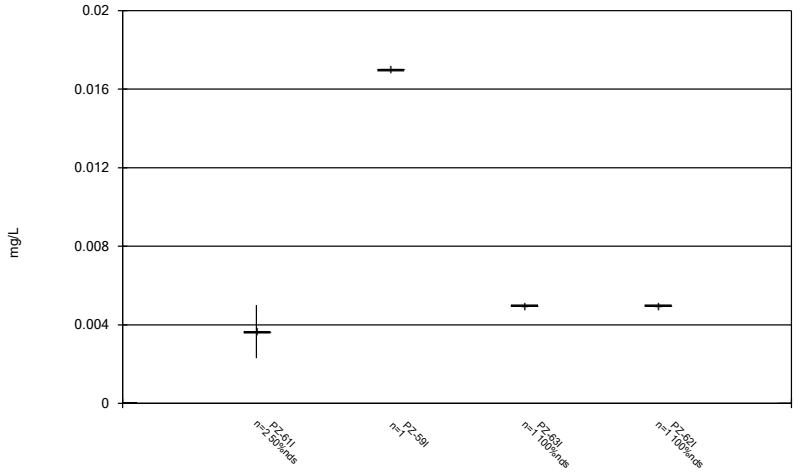
Box & Whiskers Plot



Constituent: Arsenic Analysis Run 5/3/2022 10:12 AM View: Pond BCD.1
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.32j Groundwater Stats Consulting. UG

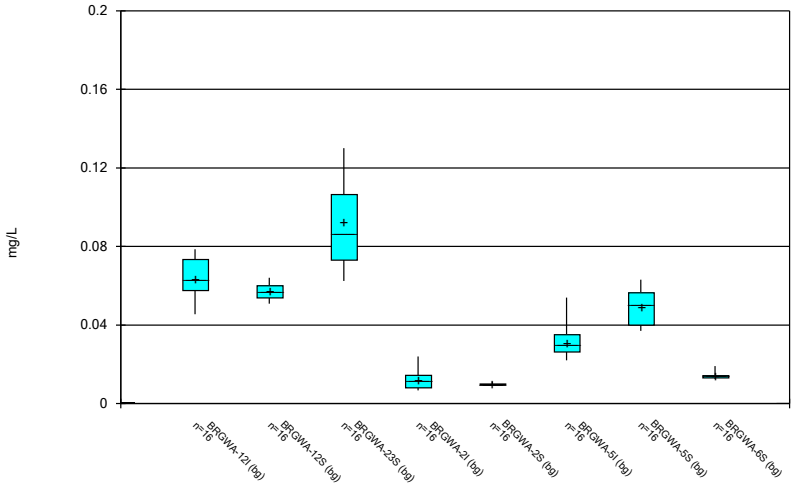
Box & Whiskers Plot



Constituent: Arsenic Analysis Run 5/3/2022 10:12 AM View: Pond BCD.1
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.32j Groundwater Stats Consulting. UG

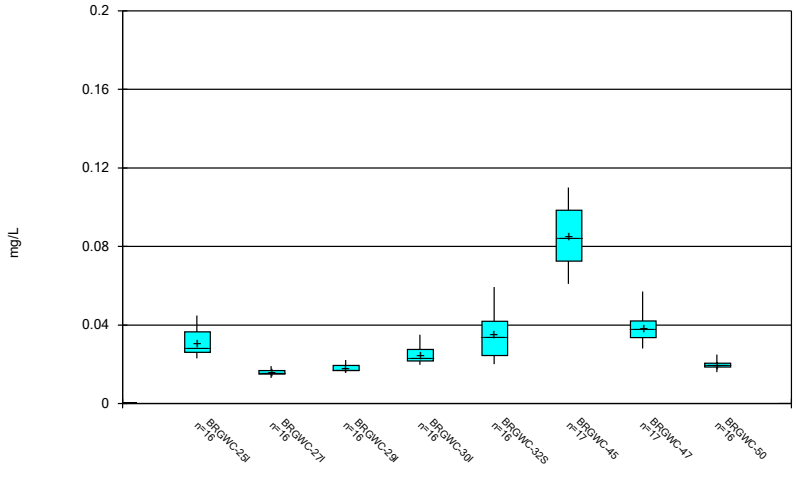
Box & Whiskers Plot



Constituent: Barium Analysis Run 5/3/2022 10:12 AM View: Pond BCD.1
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.32j Groundwater Stats Consulting. UG

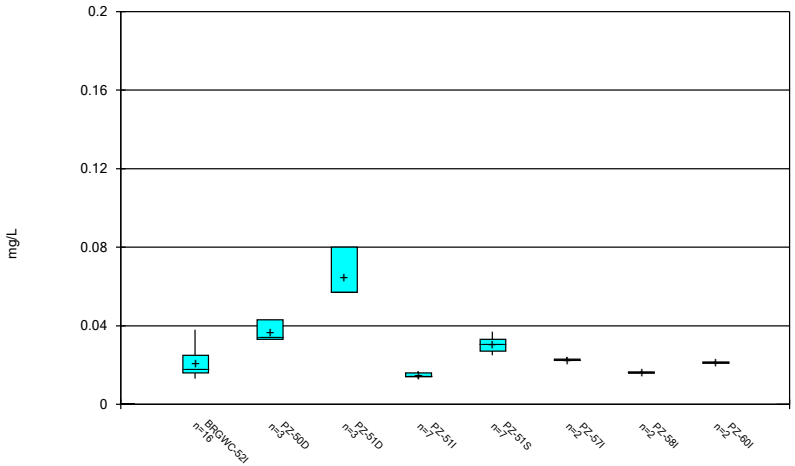
Box & Whiskers Plot



Constituent: Barium Analysis Run 5/3/2022 10:12 AM View: Pond BCD.1
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.32j Groundwater Stats Consulting. UG

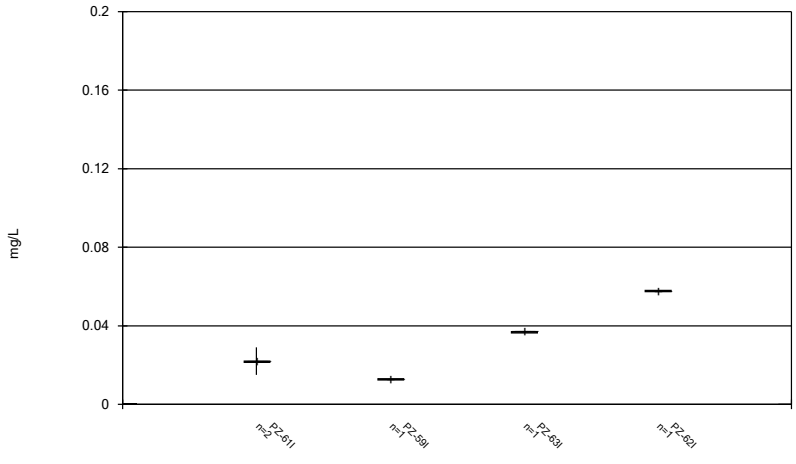
Box & Whiskers Plot



Constituent: Barium Analysis Run 5/3/2022 10:12 AM View: Pond BCD.1
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.32j Groundwater Stats Consulting. UG

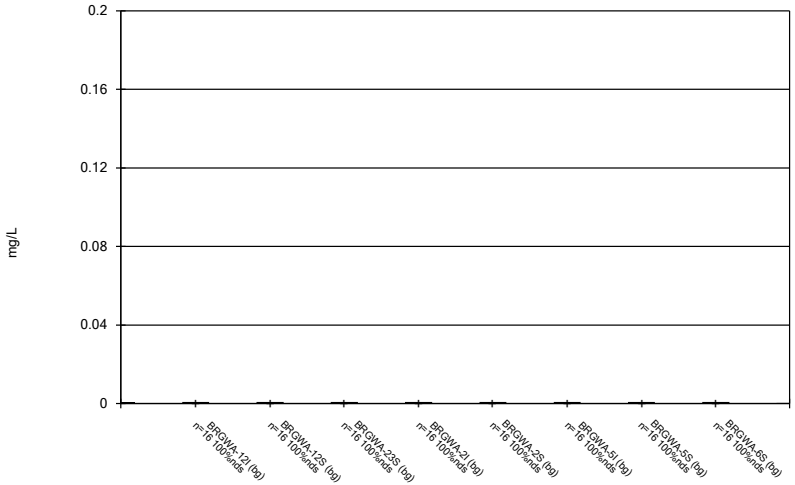
Box & Whiskers Plot



Constituent: Barium Analysis Run 5/3/2022 10:12 AM View: Pond BCD.1
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.32j Groundwater Stats Consulting. UG

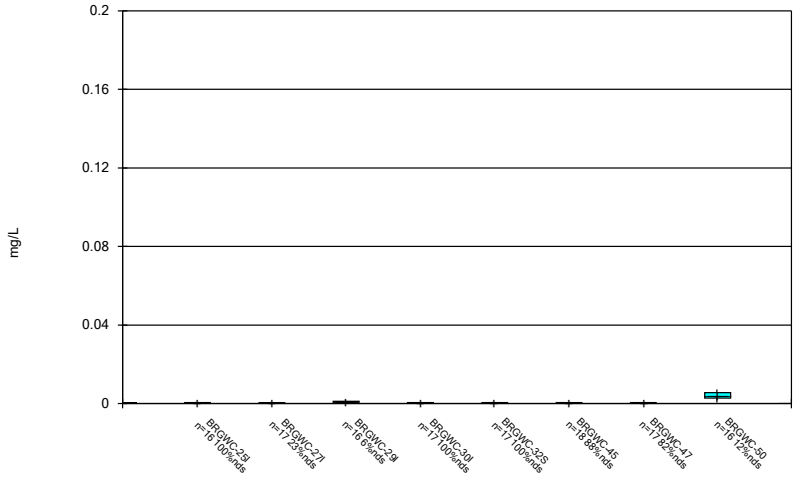
Box & Whiskers Plot



Constituent: Beryllium Analysis Run 5/3/2022 10:12 AM View: Pond BCD.1
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.32j Groundwater Stats Consulting. UG

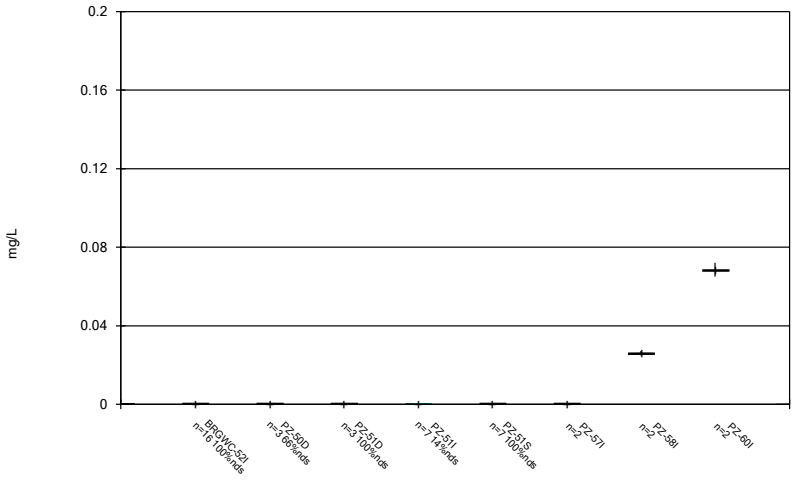
Box & Whiskers Plot



Constituent: Beryllium Analysis Run 5/3/2022 10:12 AM View: Pond BCD.1
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.32j Groundwater Stats Consulting. UG

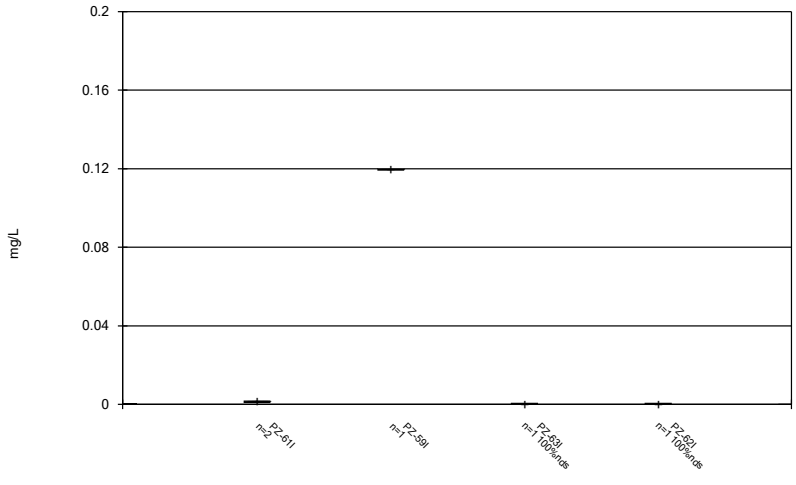
Box & Whiskers Plot



Constituent: Beryllium Analysis Run 5/3/2022 10:12 AM View: Pond BCD.1
Plant Branch Client: Southern Company Data: Plant Branch AP

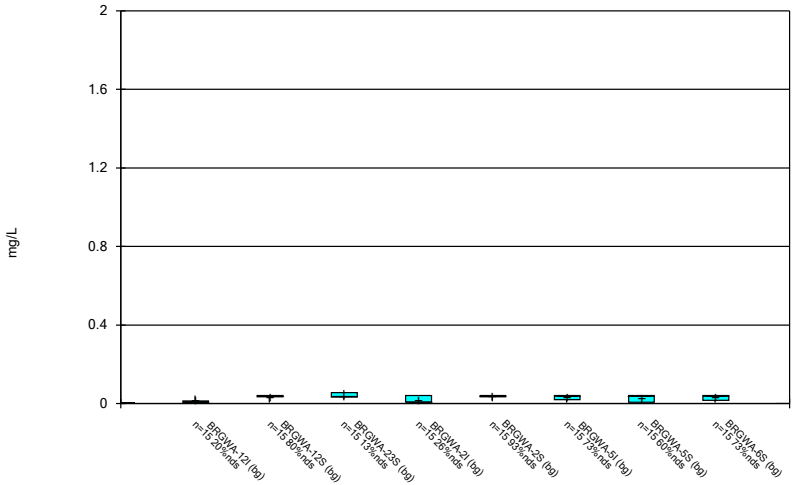
Sanitas™ v.9.6.32j Groundwater Stats Consulting. UG

Box & Whiskers Plot



Constituent: Beryllium Analysis Run 5/3/2022 10:12 AM View: Pond BCD.1
Plant Branch Client: Southern Company Data: Plant Branch AP

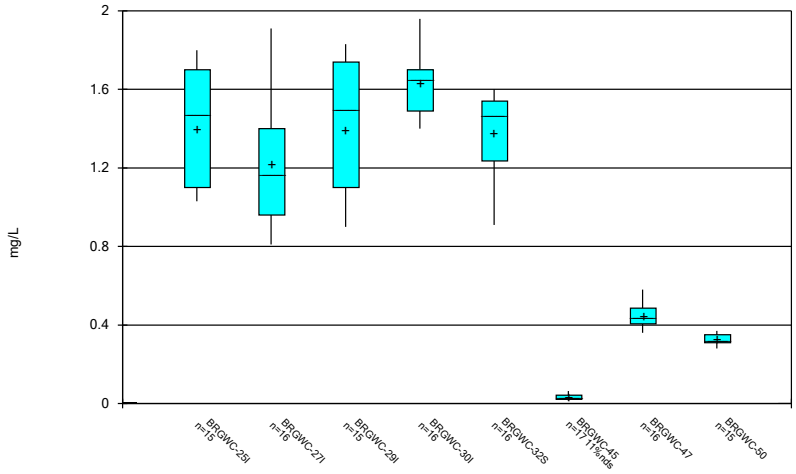
Box & Whiskers Plot



Constituent: Boron Analysis Run 5/3/2022 10:12 AM View: Pond BCD.1
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.32j Groundwater Stats Consulting. UG

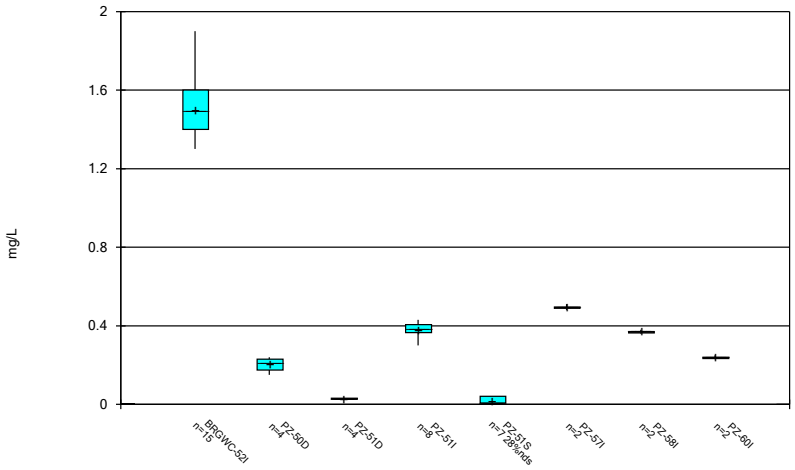
Box & Whiskers Plot



Constituent: Boron Analysis Run 5/3/2022 10:12 AM View: Pond BCD.1
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.32j Groundwater Stats Consulting. UG

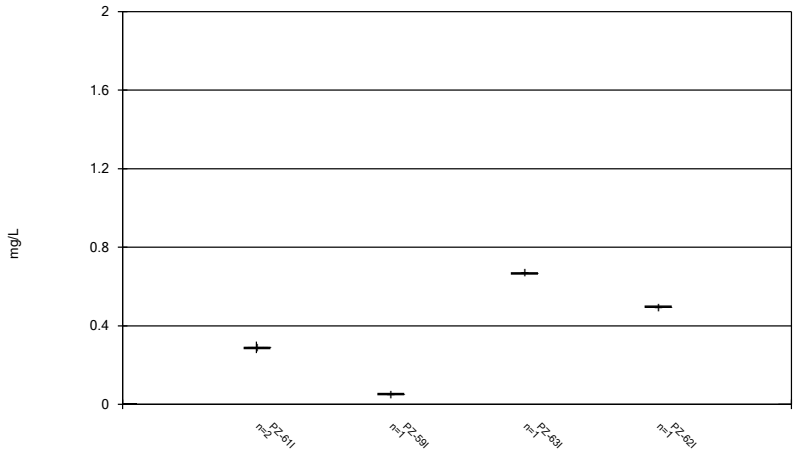
Box & Whiskers Plot



Constituent: Boron Analysis Run 5/3/2022 10:12 AM View: Pond BCD.1
Plant Branch Client: Southern Company Data: Plant Branch AP

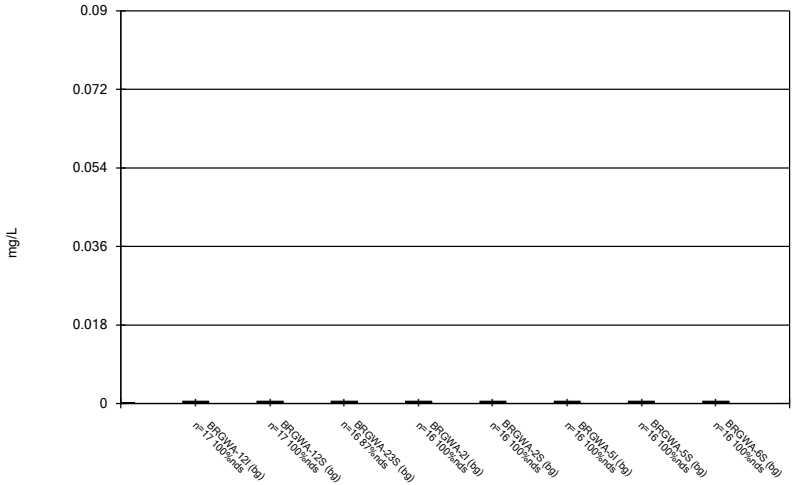
Sanitas™ v.9.6.32j Groundwater Stats Consulting. UG

Box & Whiskers Plot



Constituent: Boron Analysis Run 5/3/2022 10:12 AM View: Pond BCD.1
Plant Branch Client: Southern Company Data: Plant Branch AP

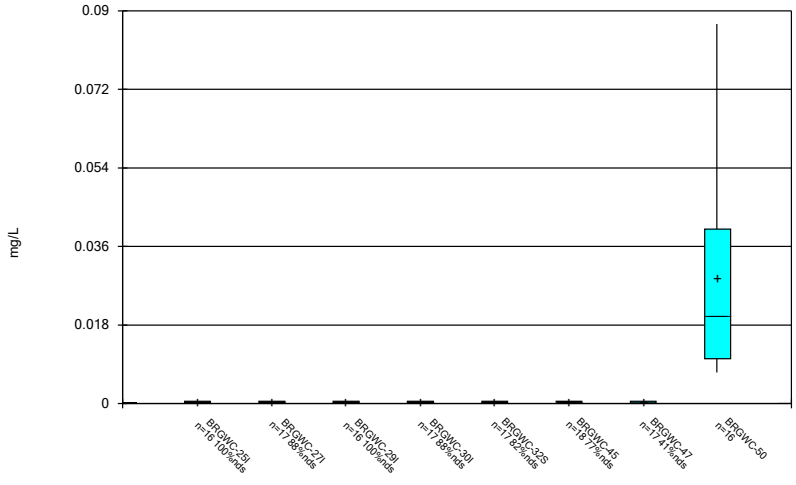
Box & Whiskers Plot



Constituent: Cadmium Analysis Run 5/3/2022 10:12 AM View: Pond BCD.1
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.32j Groundwater Stats Consulting. UG

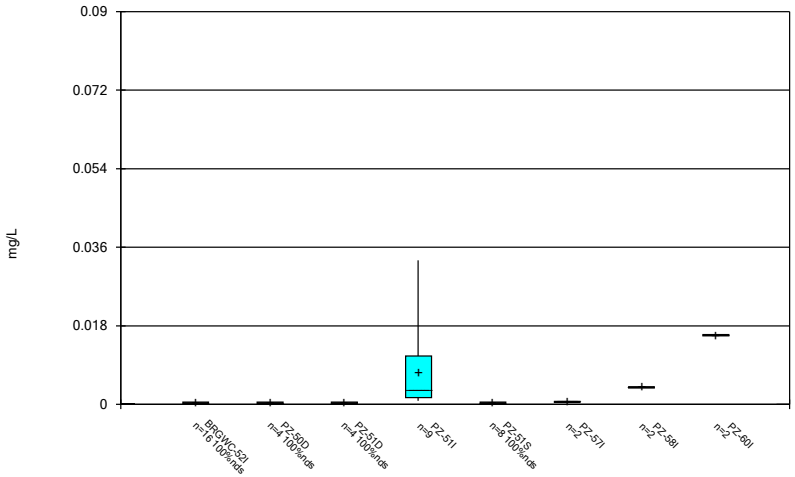
Box & Whiskers Plot



Constituent: Cadmium Analysis Run 5/3/2022 10:12 AM View: Pond BCD.1
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.32j Groundwater Stats Consulting. UG

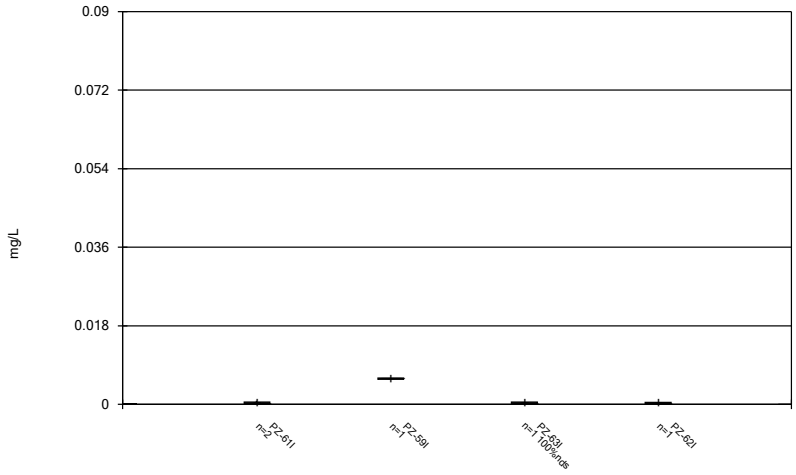
Box & Whiskers Plot



Constituent: Cadmium Analysis Run 5/3/2022 10:12 AM View: Pond BCD.1
Plant Branch Client: Southern Company Data: Plant Branch AP

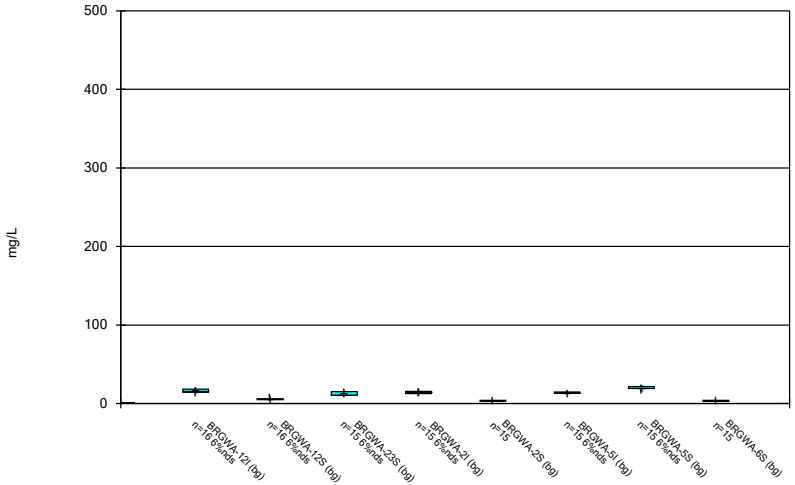
Sanitas™ v.9.6.32j Groundwater Stats Consulting. UG

Box & Whiskers Plot



Constituent: Cadmium Analysis Run 5/3/2022 10:12 AM View: Pond BCD.1
Plant Branch Client: Southern Company Data: Plant Branch AP

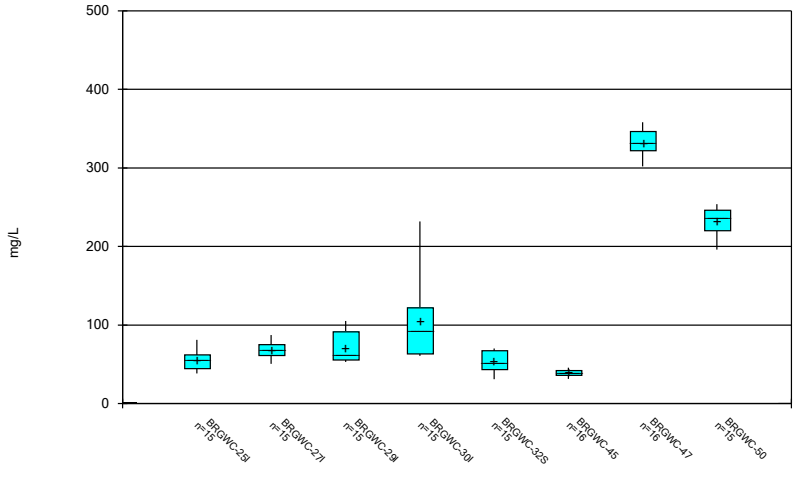
Box & Whiskers Plot



Constituent: Calcium Analysis Run 5/3/2022 10:12 AM View: Pond BCD.1
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.32j Groundwater Stats Consulting. UG

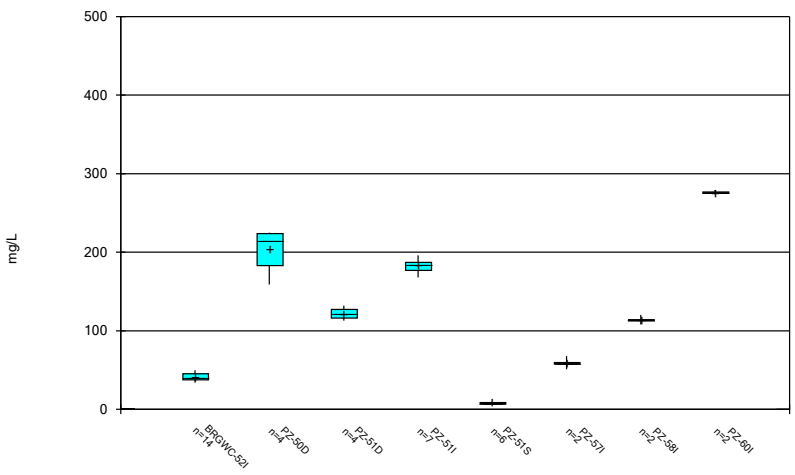
Box & Whiskers Plot



Constituent: Calcium Analysis Run 5/3/2022 10:12 AM View: Pond BCD.1
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.32j Groundwater Stats Consulting. UG

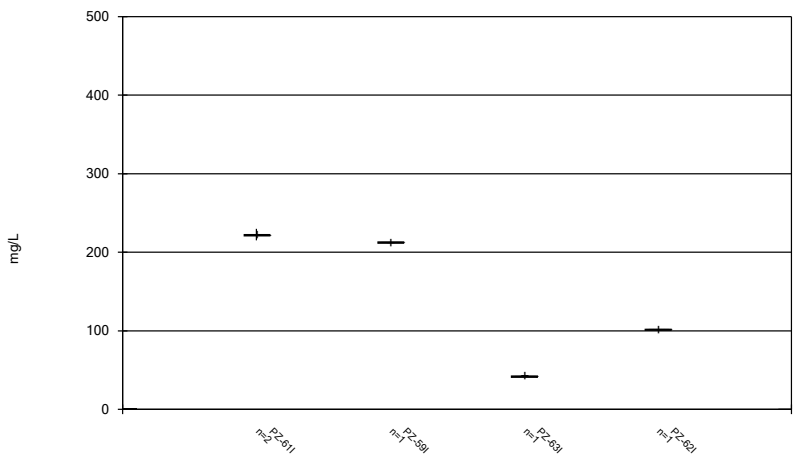
Box & Whiskers Plot



Constituent: Calcium Analysis Run 5/3/2022 10:12 AM View: Pond BCD.1
Plant Branch Client: Southern Company Data: Plant Branch AP

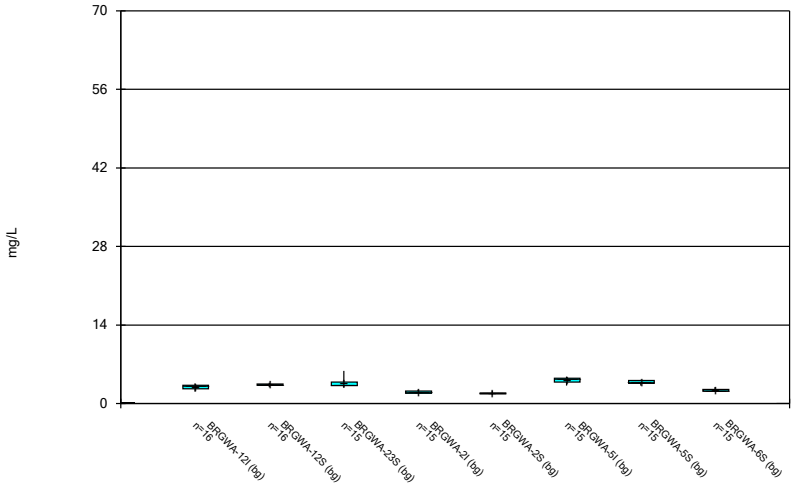
Sanitas™ v.9.6.32j Groundwater Stats Consulting. UG

Box & Whiskers Plot



Constituent: Calcium Analysis Run 5/3/2022 10:12 AM View: Pond BCD.1
Plant Branch Client: Southern Company Data: Plant Branch AP

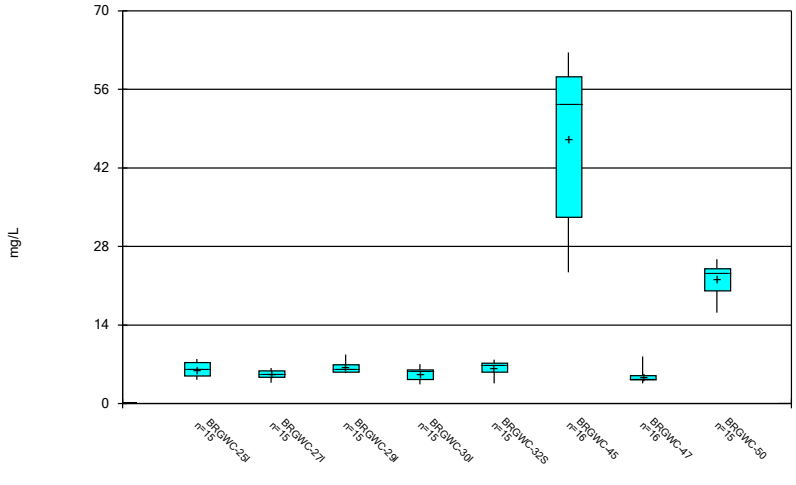
Box & Whiskers Plot



Constituent: Chloride Analysis Run 5/3/2022 10:12 AM View: Pond BCD.1
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.32j Groundwater Stats Consulting. UG

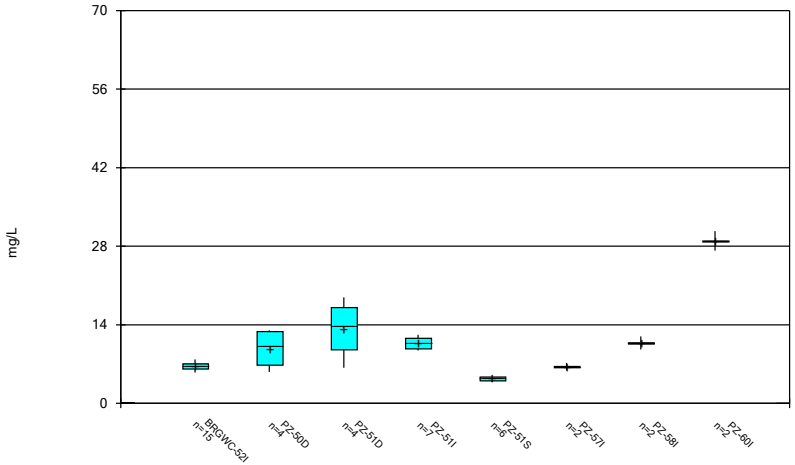
Box & Whiskers Plot



Constituent: Chloride Analysis Run 5/3/2022 10:12 AM View: Pond BCD.1
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.32j Groundwater Stats Consulting. UG

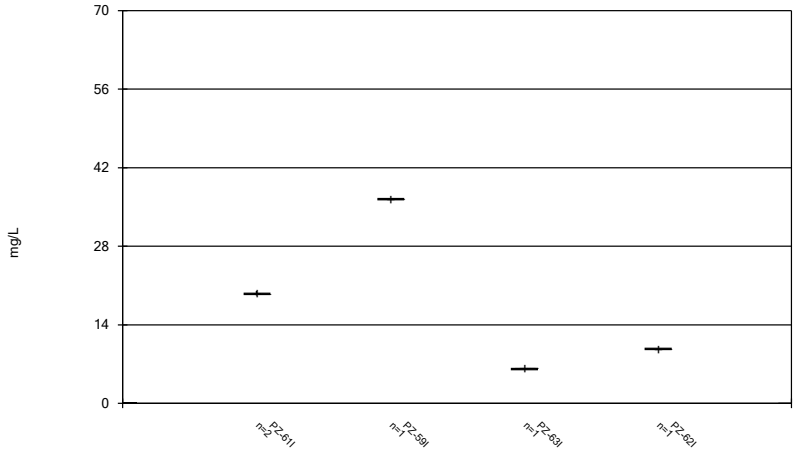
Box & Whiskers Plot



Constituent: Chloride Analysis Run 5/3/2022 10:12 AM View: Pond BCD.1
Plant Branch Client: Southern Company Data: Plant Branch AP

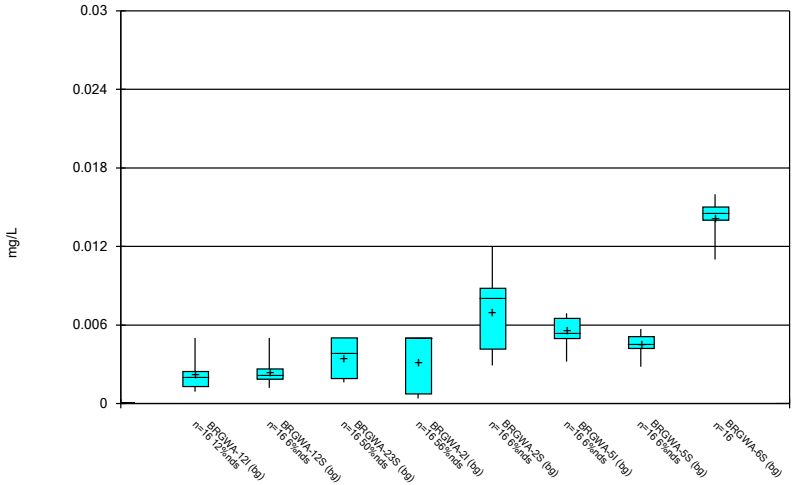
Sanitas™ v.9.6.32j Groundwater Stats Consulting. UG

Box & Whiskers Plot



Constituent: Chloride Analysis Run 5/3/2022 10:12 AM View: Pond BCD.1
Plant Branch Client: Southern Company Data: Plant Branch AP

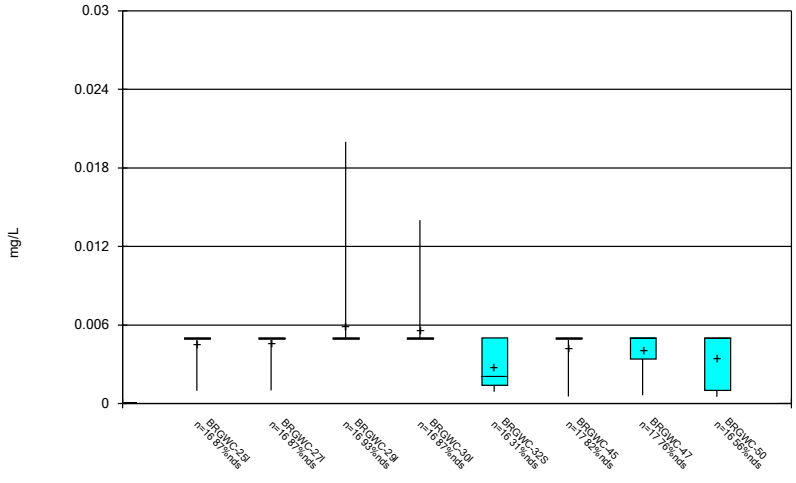
Box & Whiskers Plot



Constituent: Chromium Analysis Run 5/3/2022 10:12 AM View: Pond BCD.1
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.32j Groundwater Stats Consulting. UG

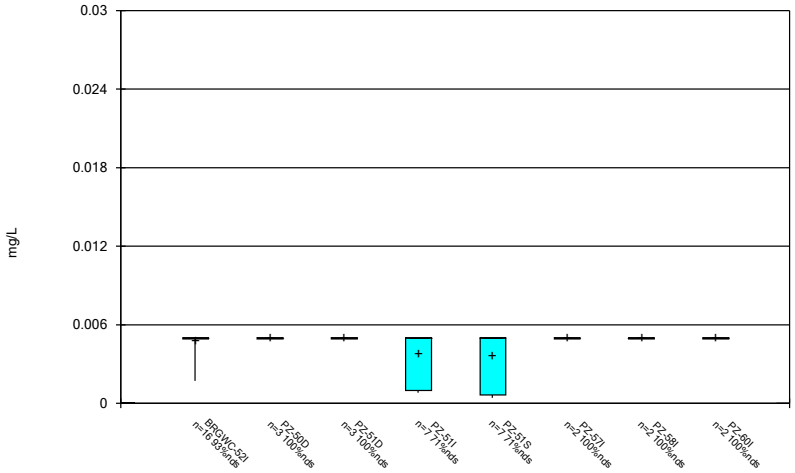
Box & Whiskers Plot



Constituent: Chromium Analysis Run 5/3/2022 10:12 AM View: Pond BCD.1
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.32j Groundwater Stats Consulting. UG

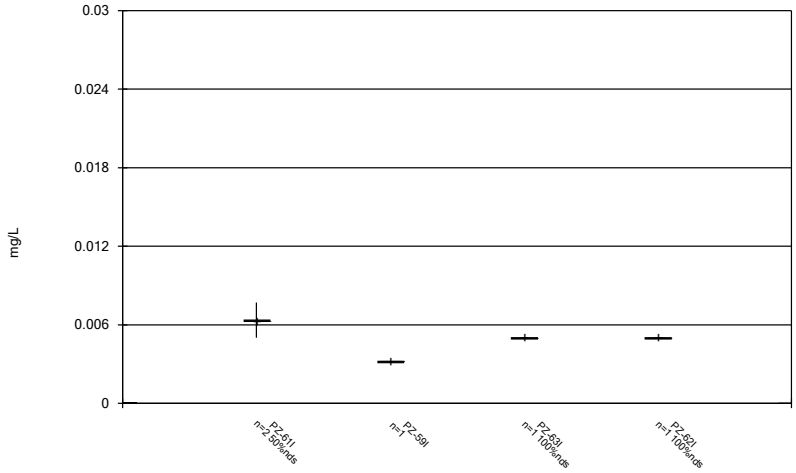
Box & Whiskers Plot



Constituent: Chromium Analysis Run 5/3/2022 10:12 AM View: Pond BCD.1
Plant Branch Client: Southern Company Data: Plant Branch AP

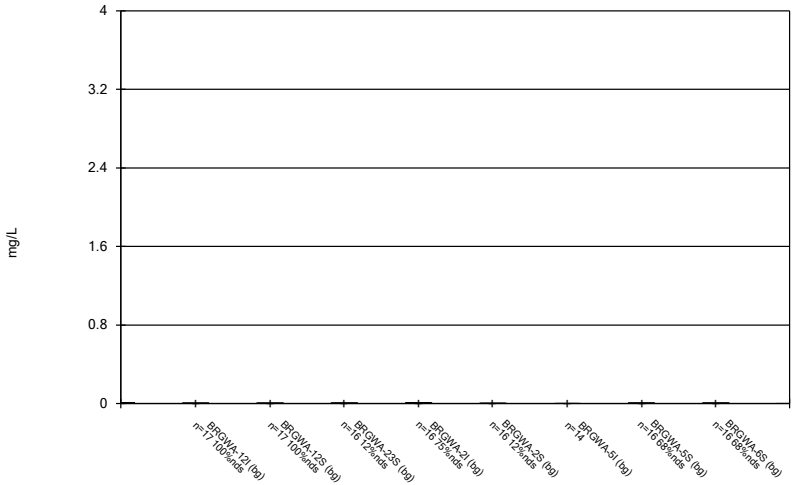
Sanitas™ v.9.6.32j Groundwater Stats Consulting. UG

Box & Whiskers Plot



Constituent: Chromium Analysis Run 5/3/2022 10:12 AM View: Pond BCD.1
Plant Branch Client: Southern Company Data: Plant Branch AP

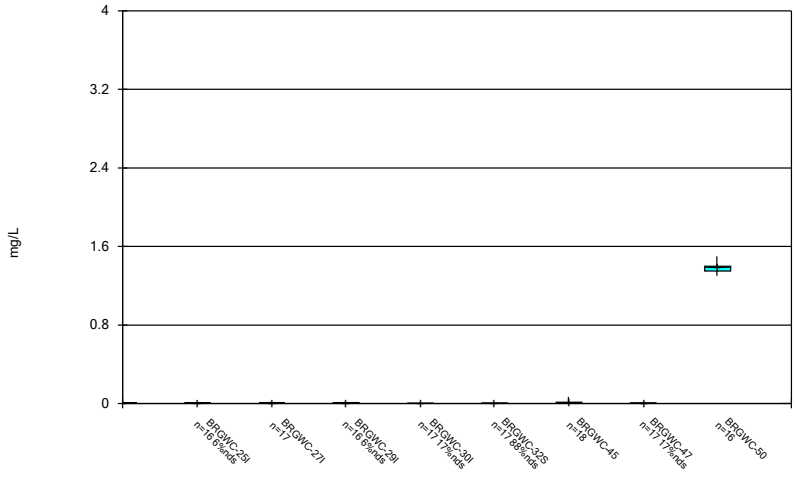
Box & Whiskers Plot



Constituent: Cobalt Analysis Run 5/3/2022 10:12 AM View: Pond BCD.1
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.32j Groundwater Stats Consulting. UG

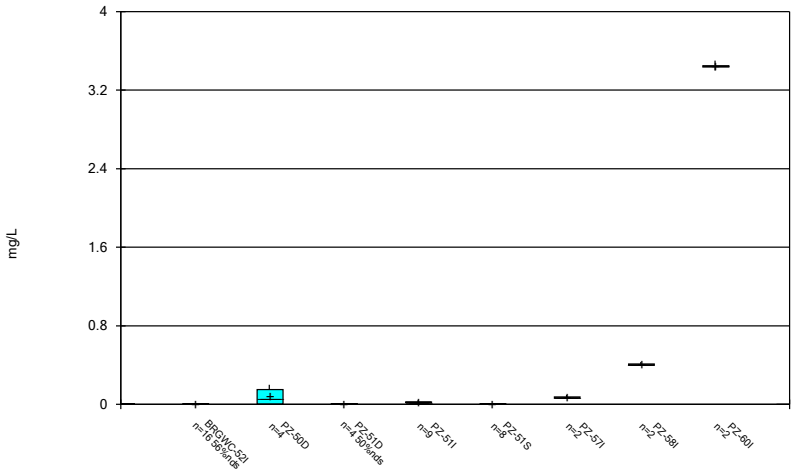
Box & Whiskers Plot



Constituent: Cobalt Analysis Run 5/3/2022 10:12 AM View: Pond BCD.1
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.32j Groundwater Stats Consulting. UG

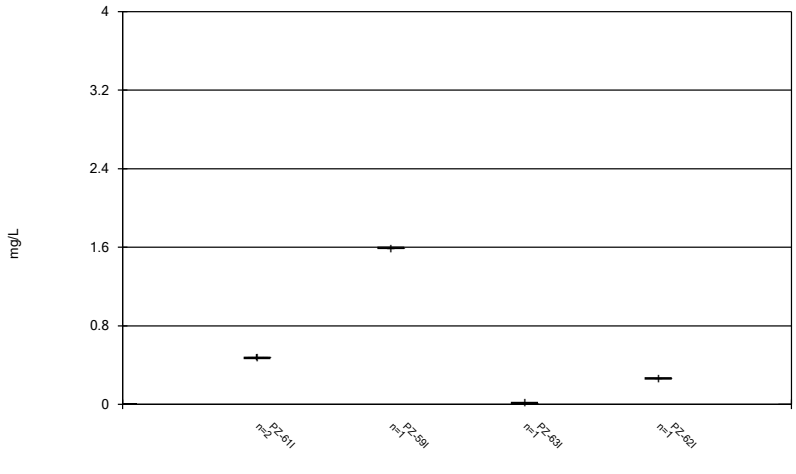
Box & Whiskers Plot



Constituent: Cobalt Analysis Run 5/3/2022 10:12 AM View: Pond BCD.1
Plant Branch Client: Southern Company Data: Plant Branch AP

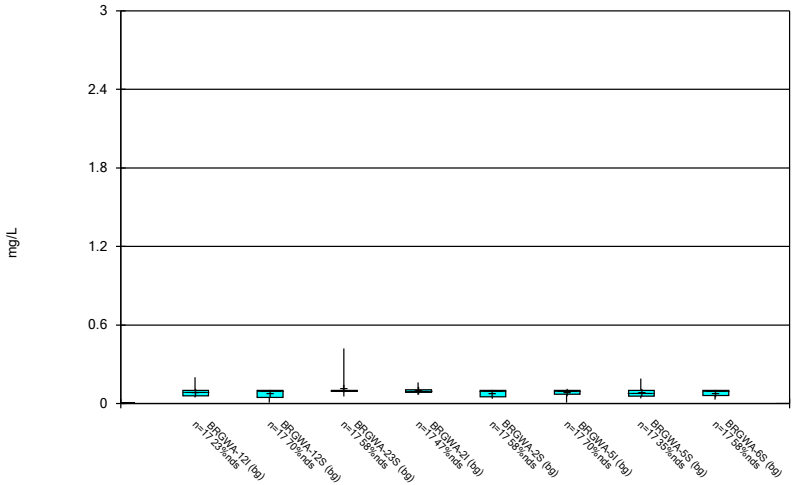
Sanitas™ v.9.6.32j Groundwater Stats Consulting. UG

Box & Whiskers Plot



Constituent: Cobalt Analysis Run 5/3/2022 10:12 AM View: Pond BCD.1
Plant Branch Client: Southern Company Data: Plant Branch AP

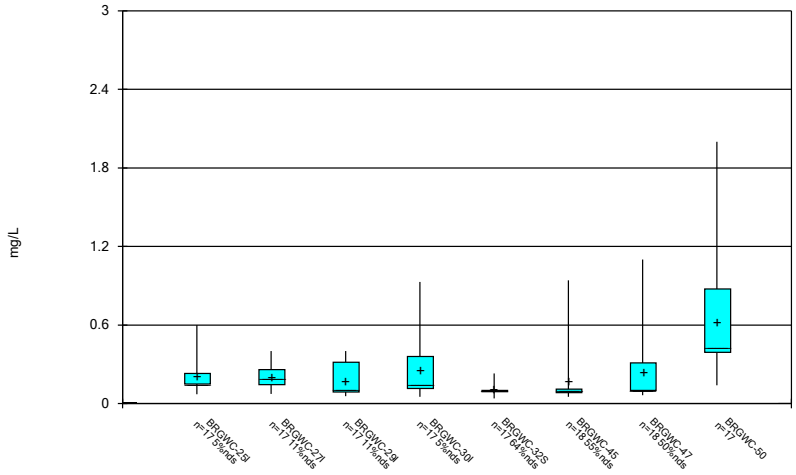
Box & Whiskers Plot



Constituent: Fluoride Analysis Run 5/3/2022 10:12 AM View: Pond BCD.1
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.32j Groundwater Stats Consulting. UG

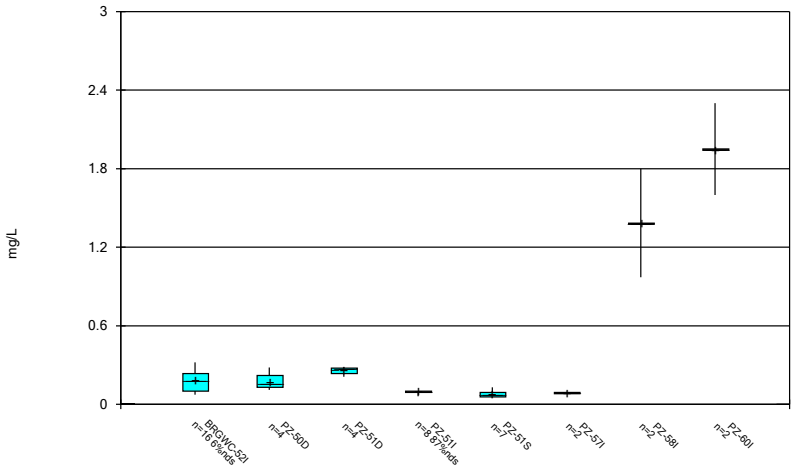
Box & Whiskers Plot



Constituent: Fluoride Analysis Run 5/3/2022 10:12 AM View: Pond BCD.1
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.32j Groundwater Stats Consulting. UG

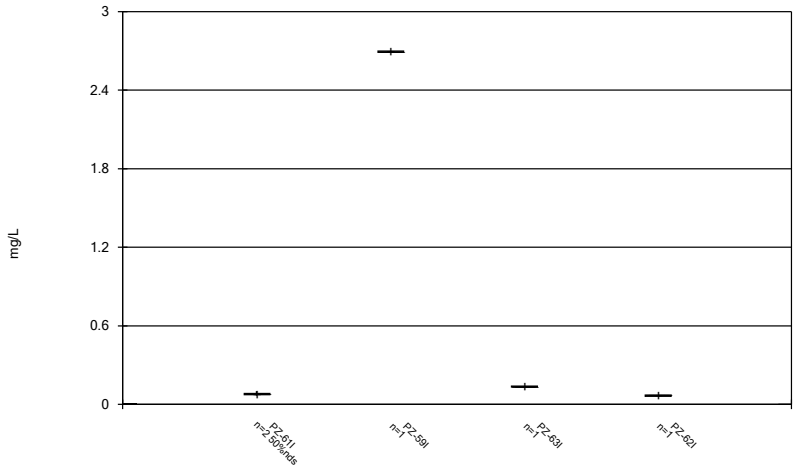
Box & Whiskers Plot



Constituent: Fluoride Analysis Run 5/3/2022 10:12 AM View: Pond BCD.1
Plant Branch Client: Southern Company Data: Plant Branch AP

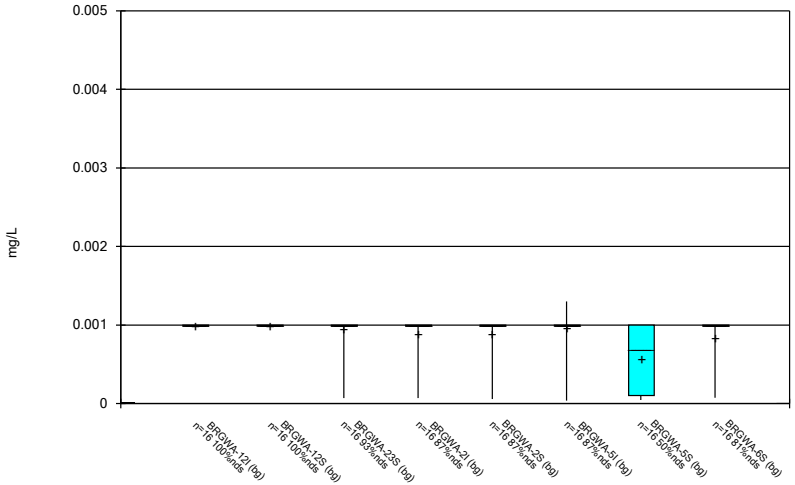
Sanitas™ v.9.6.32j Groundwater Stats Consulting. UG

Box & Whiskers Plot



Constituent: Fluoride Analysis Run 5/3/2022 10:12 AM View: Pond BCD.1
Plant Branch Client: Southern Company Data: Plant Branch AP

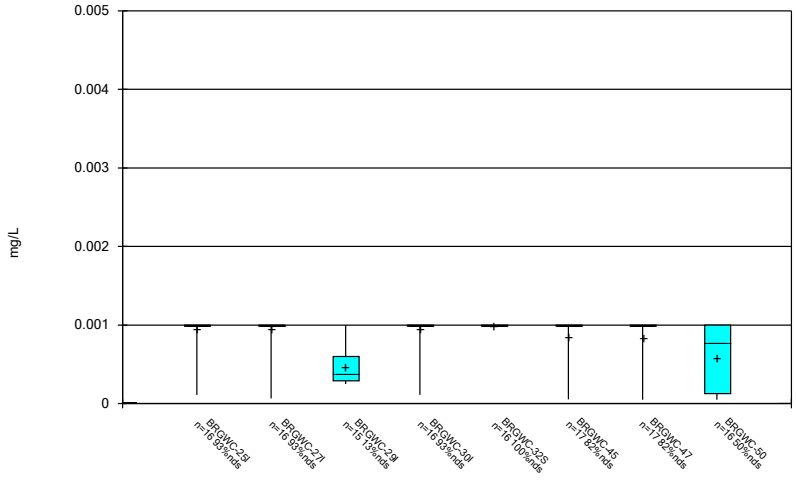
Box & Whiskers Plot



Constituent: Lead Analysis Run 5/3/2022 10:12 AM View: Pond BCD.1
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.32j Groundwater Stats Consulting. UG

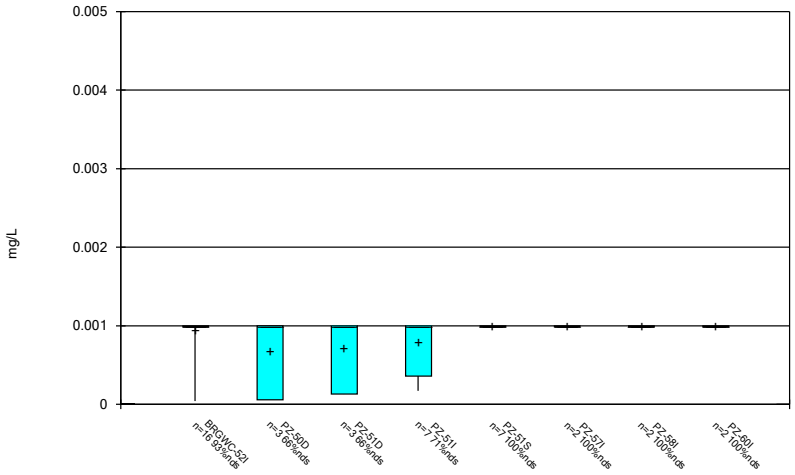
Box & Whiskers Plot



Constituent: Lead Analysis Run 5/3/2022 10:12 AM View: Pond BCD.1
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.32j Groundwater Stats Consulting. UG

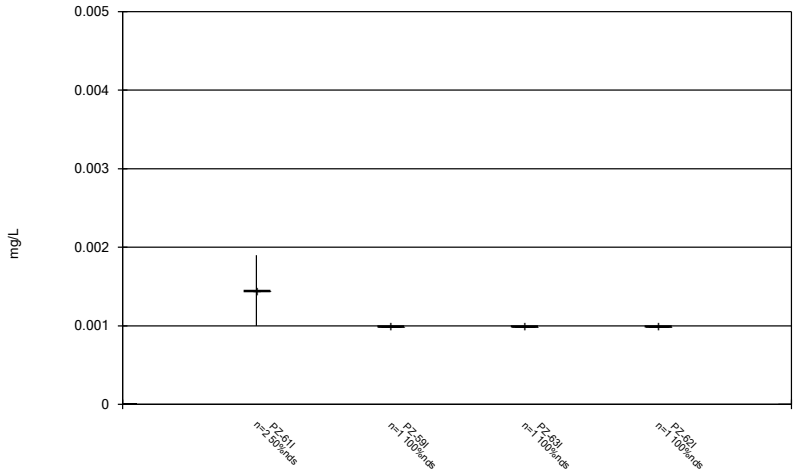
Box & Whiskers Plot



Constituent: Lead Analysis Run 5/3/2022 10:12 AM View: Pond BCD.1
Plant Branch Client: Southern Company Data: Plant Branch AP

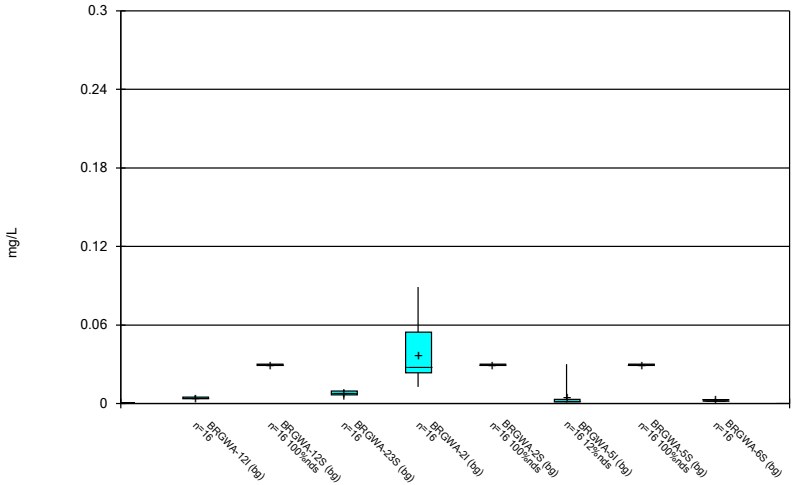
Sanitas™ v.9.6.32j Groundwater Stats Consulting. UG

Box & Whiskers Plot



Constituent: Lead Analysis Run 5/3/2022 10:12 AM View: Pond BCD.1
Plant Branch Client: Southern Company Data: Plant Branch AP

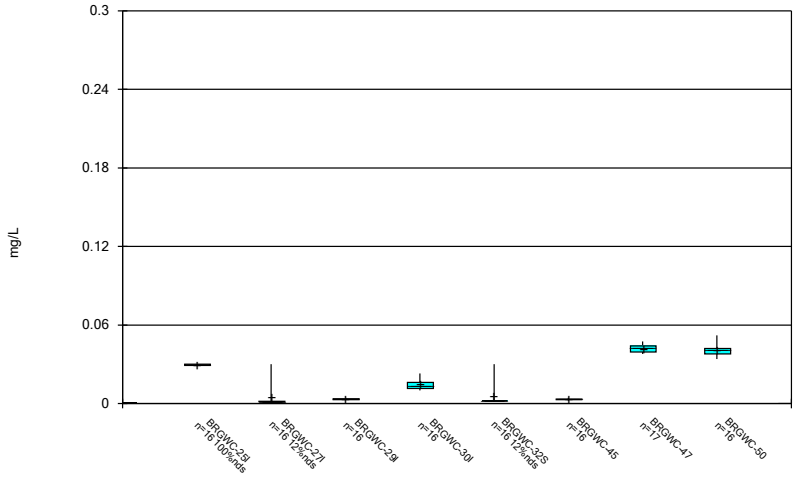
Box & Whiskers Plot



Constituent: Lithium Analysis Run 5/3/2022 10:12 AM View: Pond BCD.1
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.32j Groundwater Stats Consulting. UG

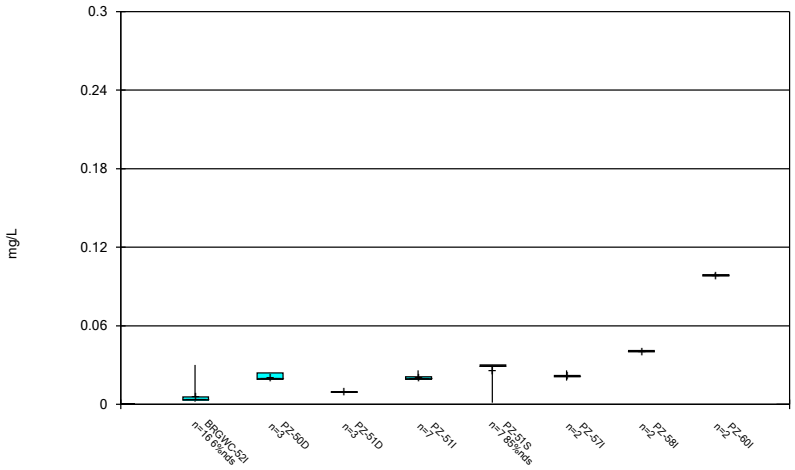
Box & Whiskers Plot



Constituent: Lithium Analysis Run 5/3/2022 10:12 AM View: Pond BCD.1
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.32j Groundwater Stats Consulting. UG

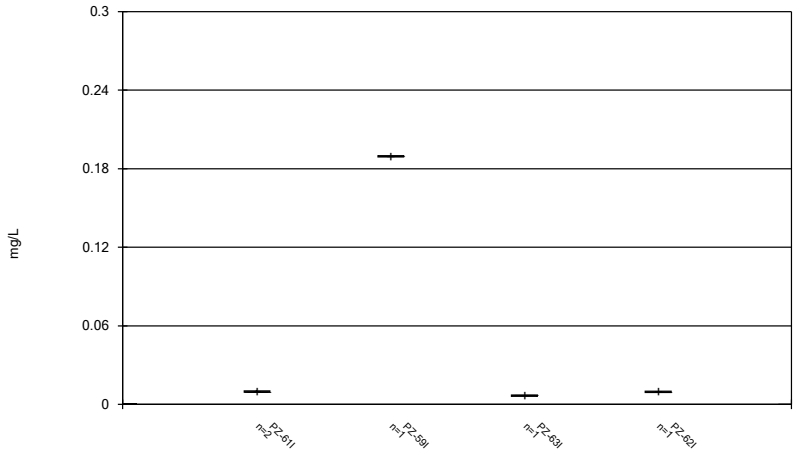
Box & Whiskers Plot



Constituent: Lithium Analysis Run 5/3/2022 10:12 AM View: Pond BCD.1
Plant Branch Client: Southern Company Data: Plant Branch AP

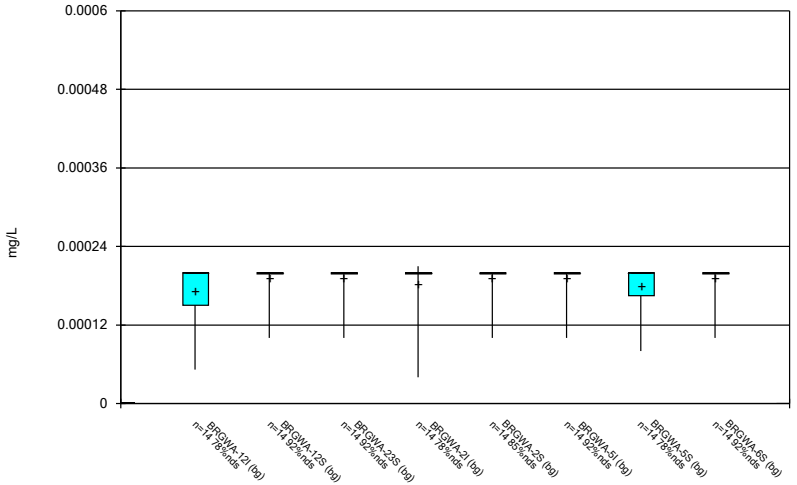
Sanitas™ v.9.6.32j Groundwater Stats Consulting. UG

Box & Whiskers Plot



Constituent: Lithium Analysis Run 5/3/2022 10:12 AM View: Pond BCD.1
Plant Branch Client: Southern Company Data: Plant Branch AP

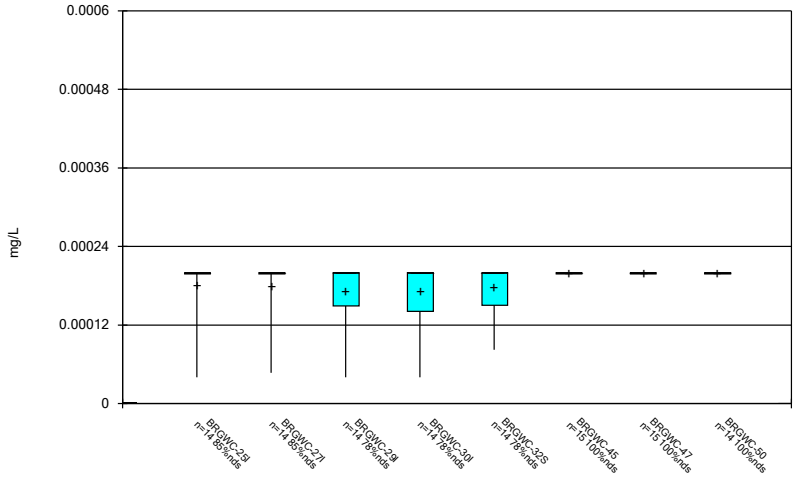
Box & Whiskers Plot



Constituent: Mercury Analysis Run 5/3/2022 10:12 AM View: Pond BCD.1
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.32j Groundwater Stats Consulting. UG

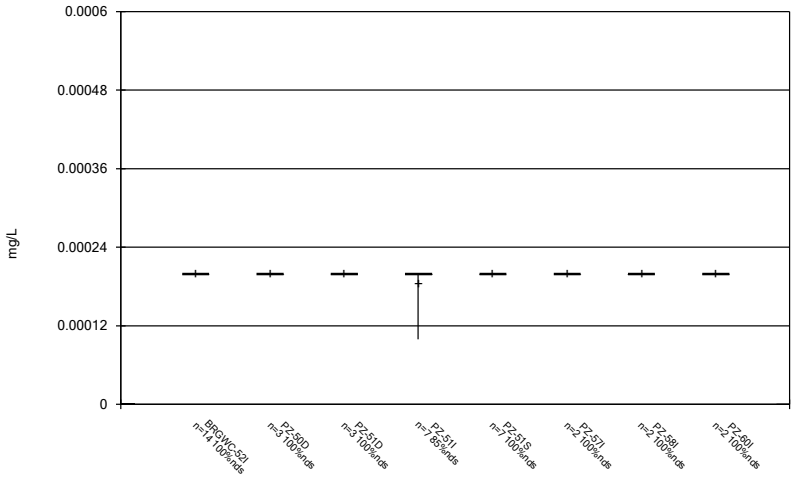
Box & Whiskers Plot



Constituent: Mercury Analysis Run 5/3/2022 10:12 AM View: Pond BCD.1
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.32j Groundwater Stats Consulting. UG

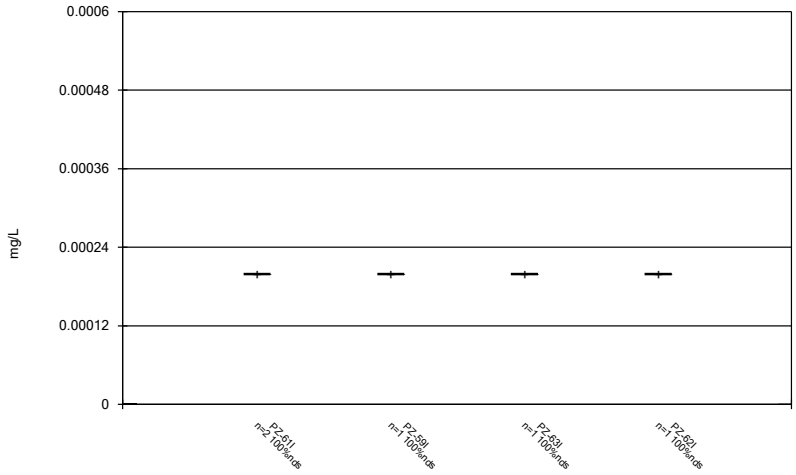
Box & Whiskers Plot



Constituent: Mercury Analysis Run 5/3/2022 10:12 AM View: Pond BCD.1
Plant Branch Client: Southern Company Data: Plant Branch AP

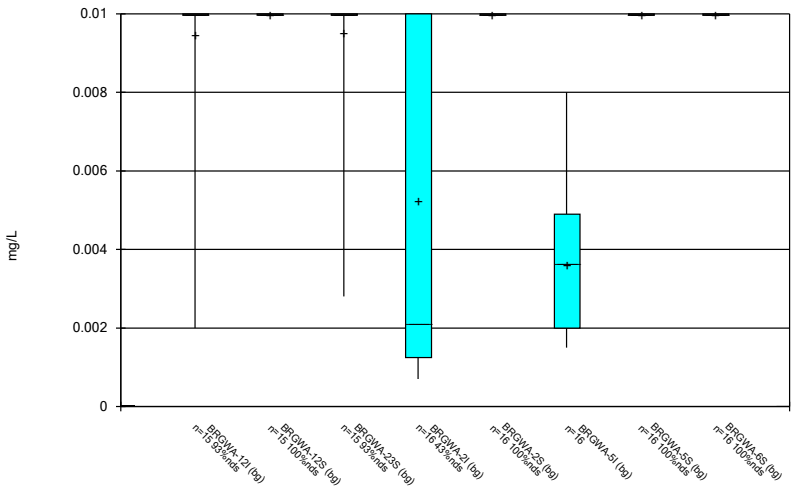
Sanitas™ v.9.6.32j Groundwater Stats Consulting. UG

Box & Whiskers Plot



Constituent: Mercury Analysis Run 5/3/2022 10:12 AM View: Pond BCD.1
Plant Branch Client: Southern Company Data: Plant Branch AP

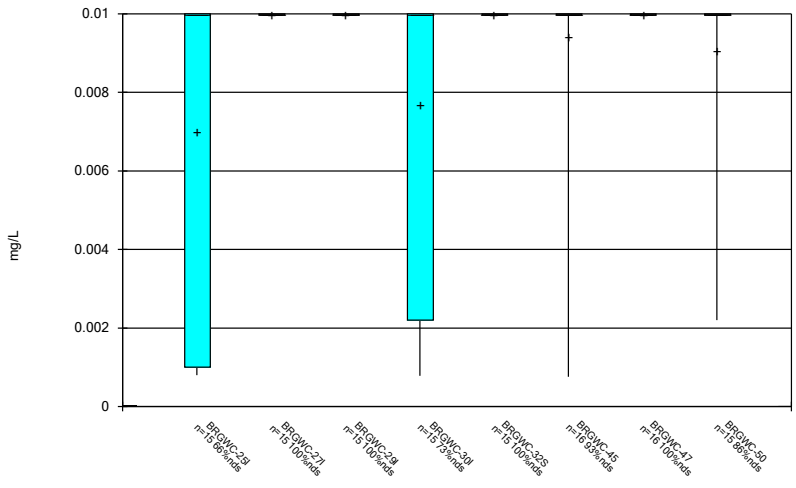
Box & Whiskers Plot



Constituent: Molybdenum Analysis Run 5/3/2022 10:12 AM View: Pond BCD.1
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.32j Groundwater Stats Consulting. UG

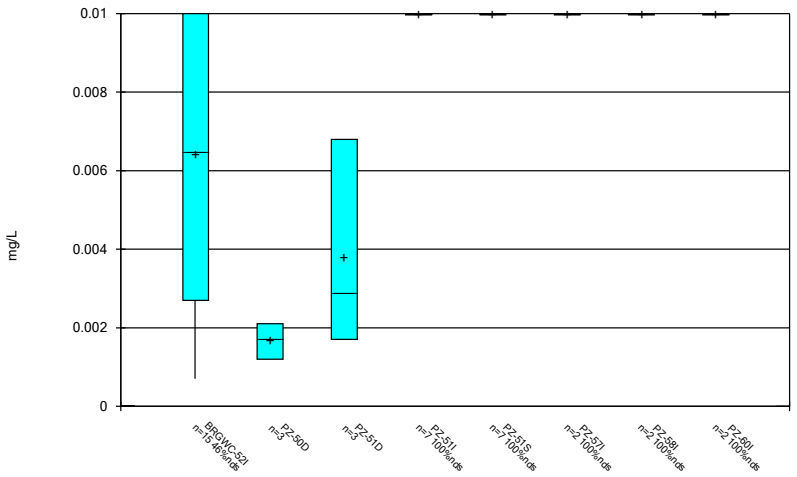
Box & Whiskers Plot



Constituent: Molybdenum Analysis Run 5/3/2022 10:12 AM View: Pond BCD.1
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.32j Groundwater Stats Consulting. UG

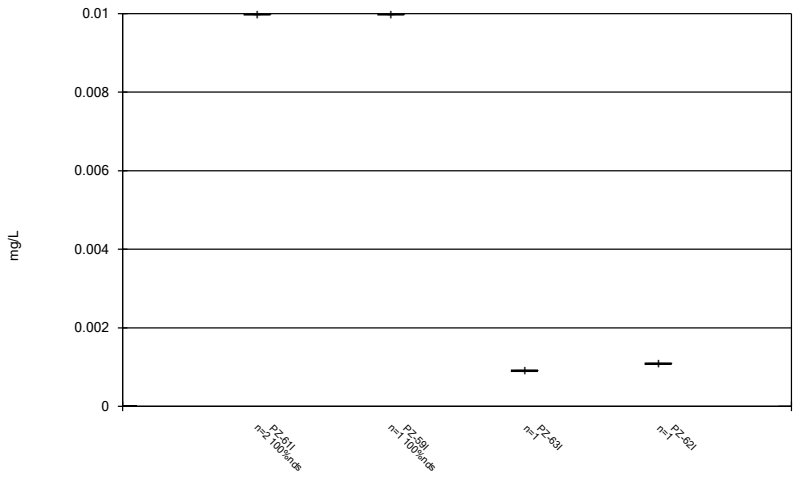
Box & Whiskers Plot



Constituent: Molybdenum Analysis Run 5/3/2022 10:12 AM View: Pond BCD.1
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.32j Groundwater Stats Consulting. UG

Box & Whiskers Plot



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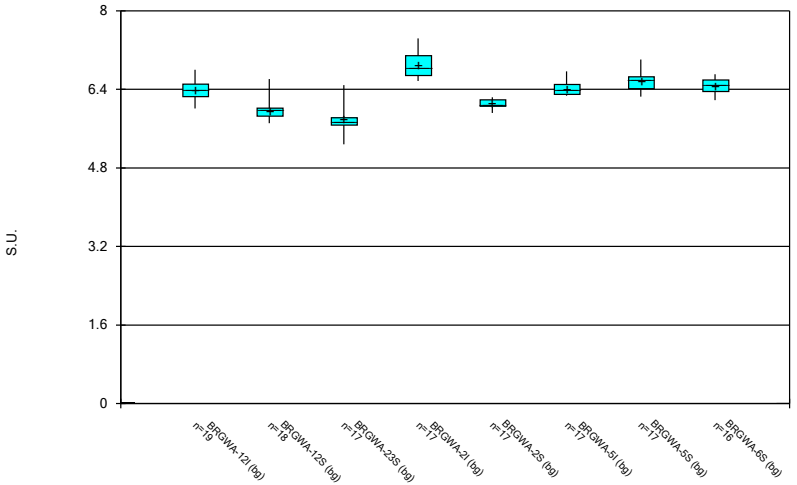
Plant Branch Client: Southern Company Data: Plant Branch AP

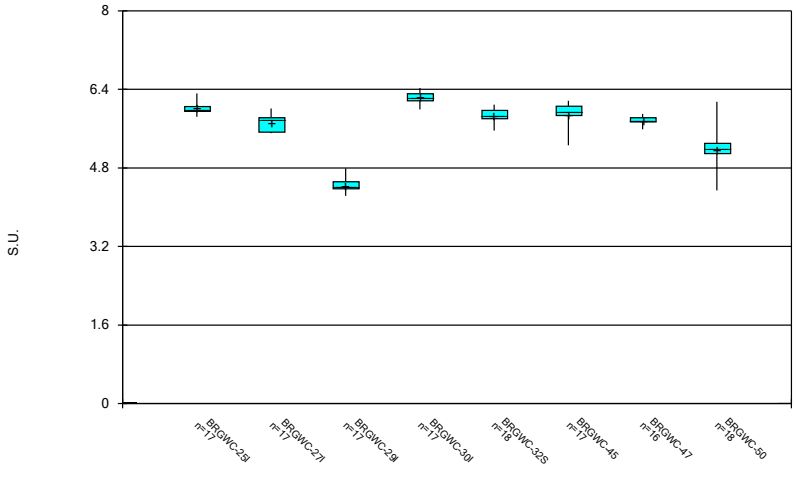
Box & Whiskers Plot



Constituent: pH, Field Analysis Run 5/3/2022 10:12 AM View: Pond BCD.1
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.32j Groundwater Stats Consulting. UG

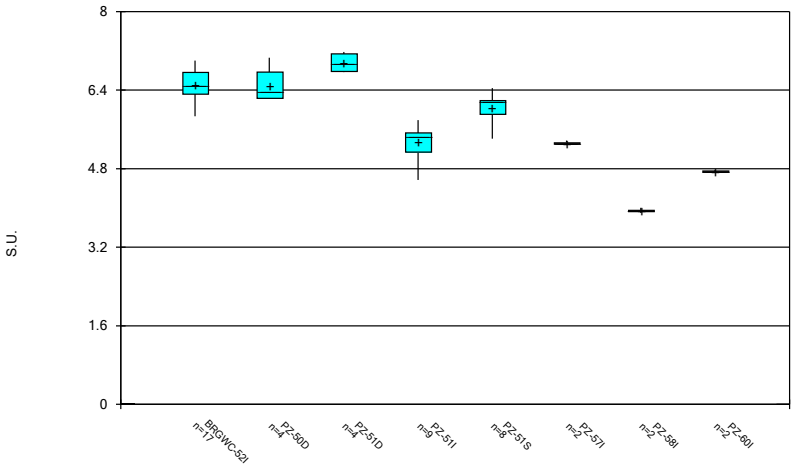
Box & Whiskers Plot



Constituent: pH, Field Analysis Run 5/3/2022 10:12 AM View: Pond BCD.1
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.32j Groundwater Stats Consulting. UG

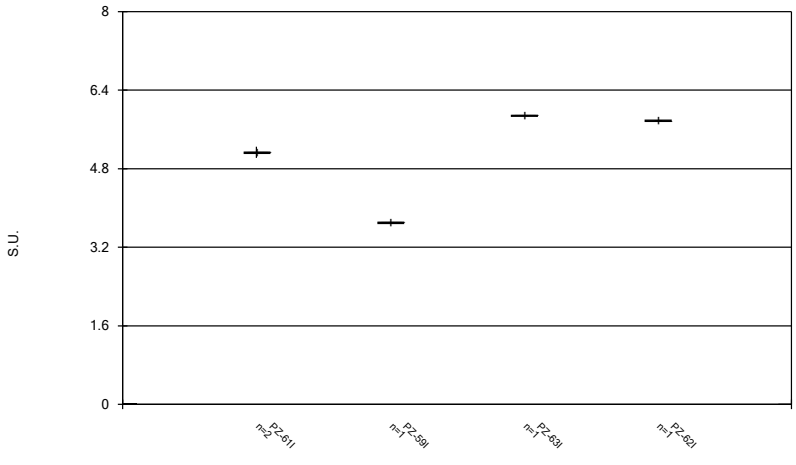
Box & Whiskers Plot



Constituent: pH, Field Analysis Run 5/3/2022 10:12 AM View: Pond BCD.1
Plant Branch Client: Southern Company Data: Plant Branch AP

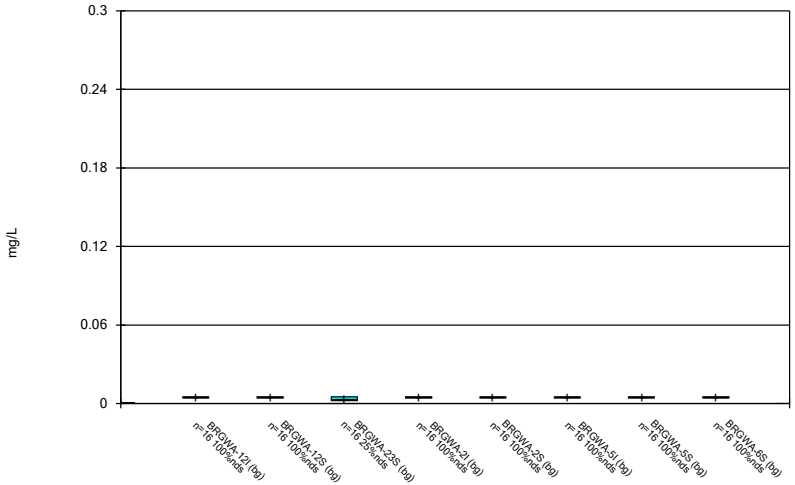
Sanitas™ v.9.6.32j Groundwater Stats Consulting. UG

Box & Whiskers Plot



Constituent: pH, Field Analysis Run 5/3/2022 10:12 AM View: Pond BCD.1
Plant Branch Client: Southern Company Data: Plant Branch AP

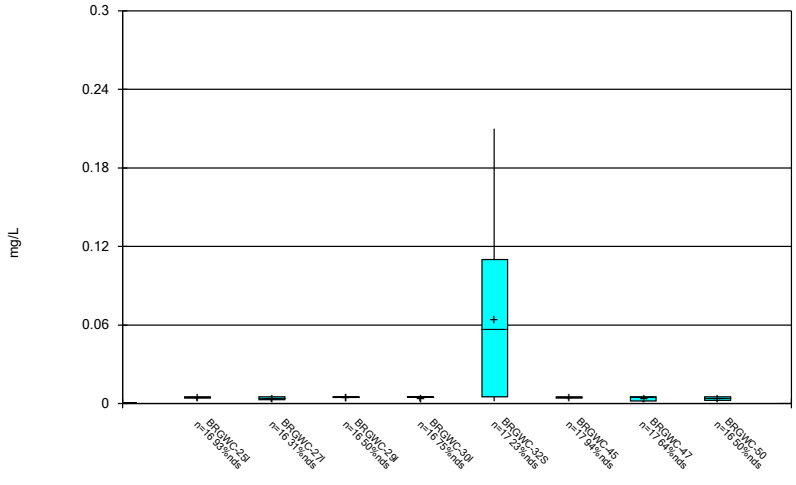
Box & Whiskers Plot



Constituent: Selenium Analysis Run 5/3/2022 10:12 AM View: Pond BCD.1
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.32j Groundwater Stats Consulting. UG

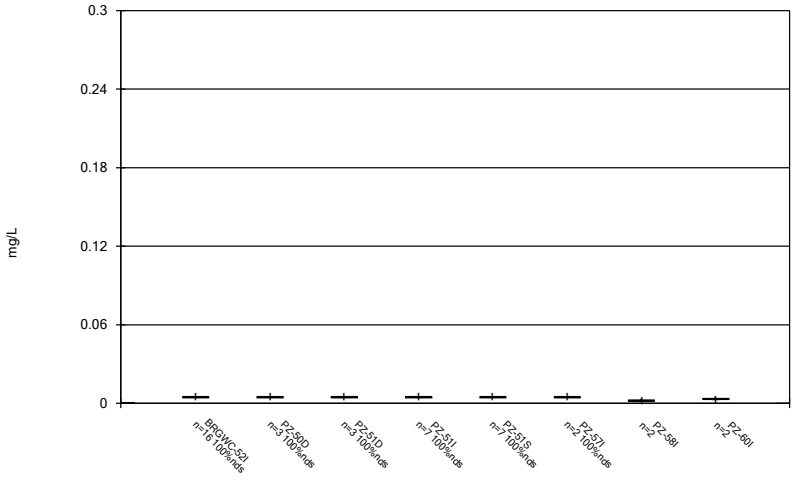
Box & Whiskers Plot



Constituent: Selenium Analysis Run 5/3/2022 10:12 AM View: Pond BCD.1
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.32j Groundwater Stats Consulting. UG

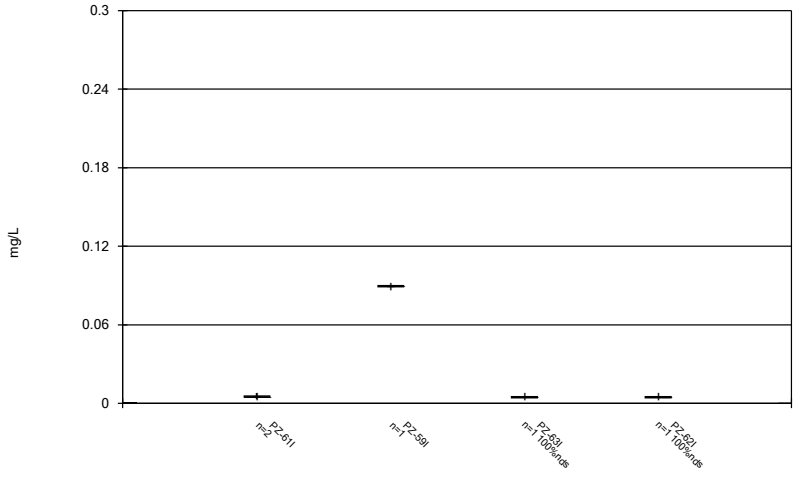
Box & Whiskers Plot



Constituent: Selenium Analysis Run 5/3/2022 10:12 AM View: Pond BCD.1
Plant Branch Client: Southern Company Data: Plant Branch AP

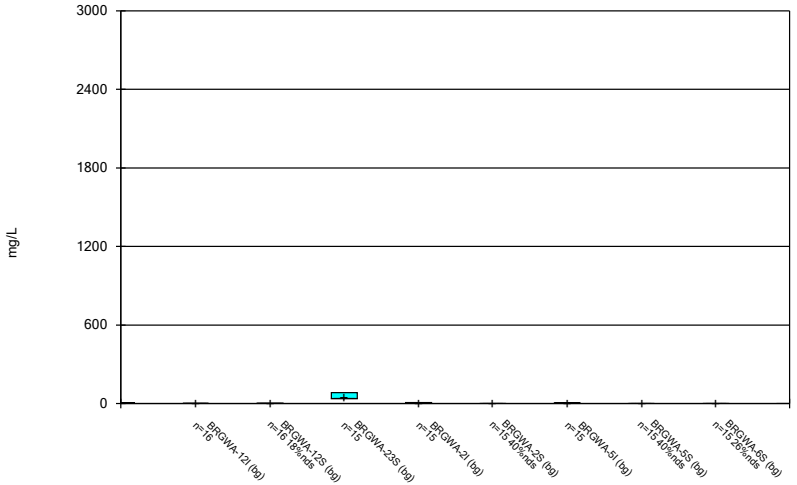
Sanitas™ v.9.6.32j Groundwater Stats Consulting. UG

Box & Whiskers Plot



Constituent: Selenium Analysis Run 5/3/2022 10:12 AM View: Pond BCD.1
Plant Branch Client: Southern Company Data: Plant Branch AP

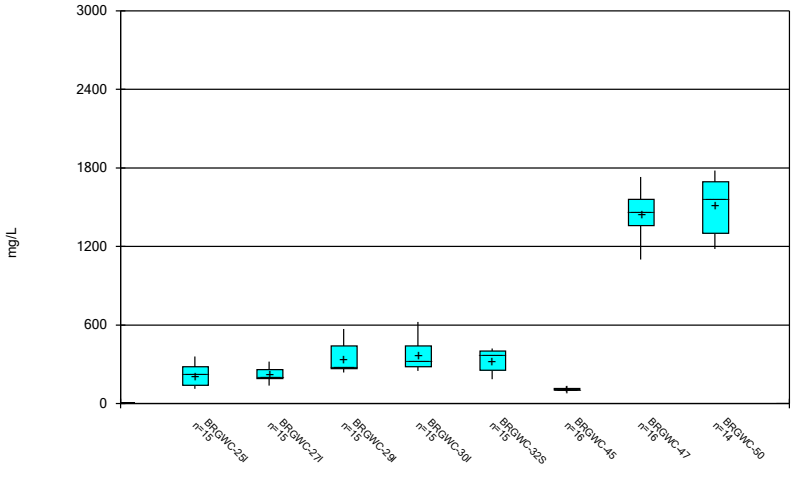
Box & Whiskers Plot



Constituent: Sulfate Analysis Run 5/3/2022 10:12 AM View: Pond BCD.1
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.32j Groundwater Stats Consulting. UG

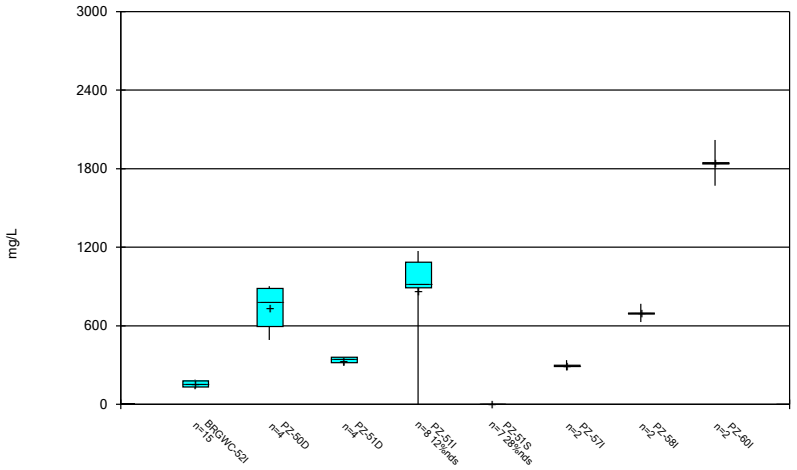
Box & Whiskers Plot



Constituent: Sulfate Analysis Run 5/3/2022 10:12 AM View: Pond BCD.1
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.32j Groundwater Stats Consulting. UG

Box & Whiskers Plot



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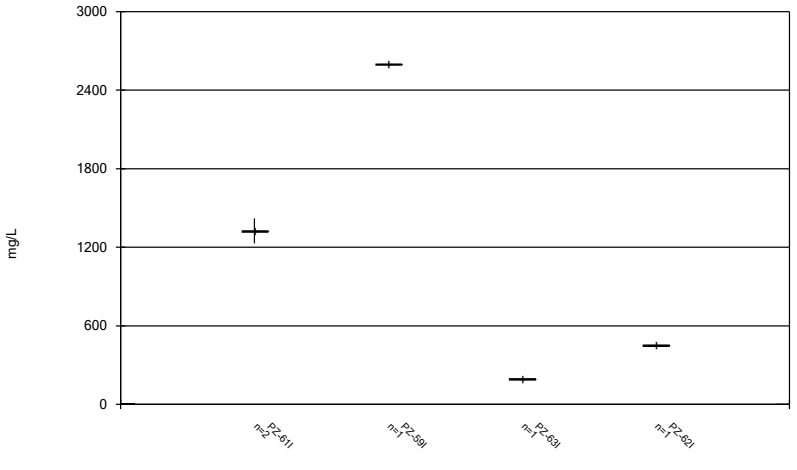
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.32j Groundwater Stats Consulting. UG

Box & Whiskers Plot



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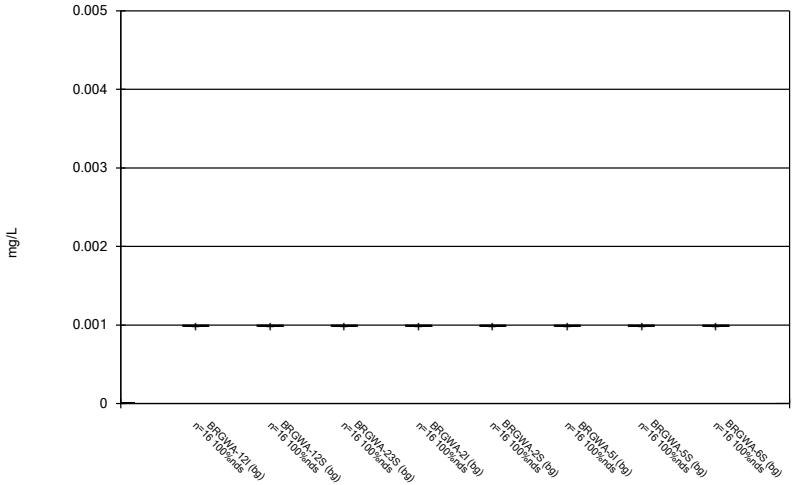
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.32j Groundwater Stats Consulting. UG

Box & Whiskers Plot



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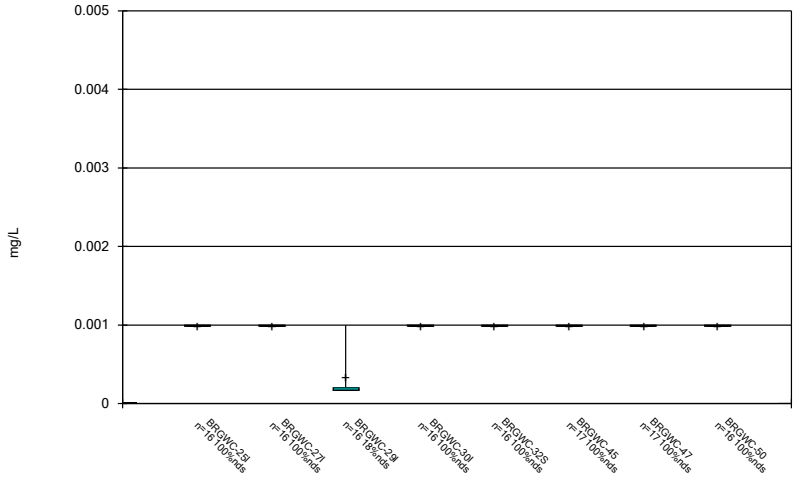
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.32j Groundwater Stats Consulting. UG

Box & Whiskers Plot



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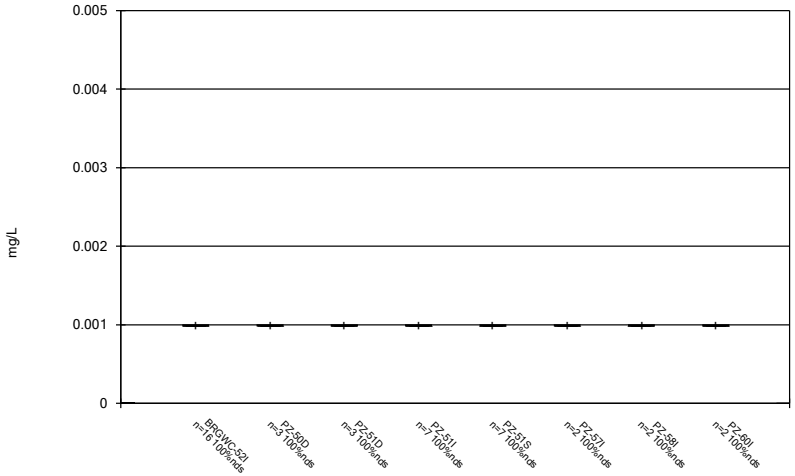
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.32j Groundwater Stats Consulting. UG

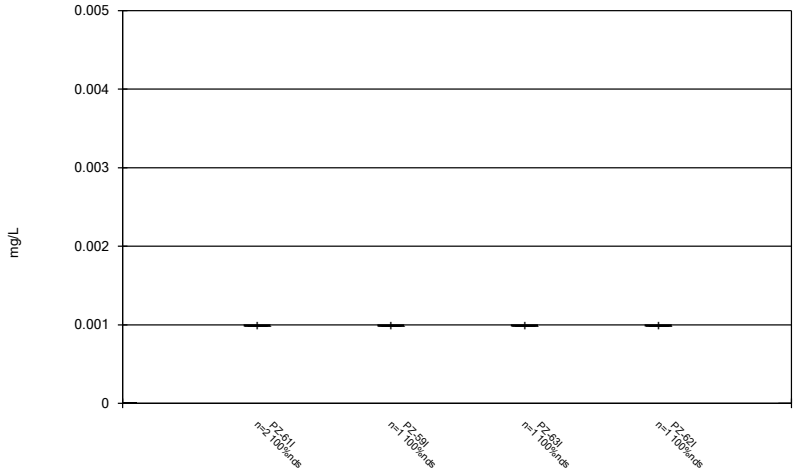
Box & Whiskers Plot



Constituent: Thallium Analysis Run 5/3/2022 10:13 AM View: Pond BCD.1
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.32j Groundwater Stats Consulting. UG

Box & Whiskers Plot



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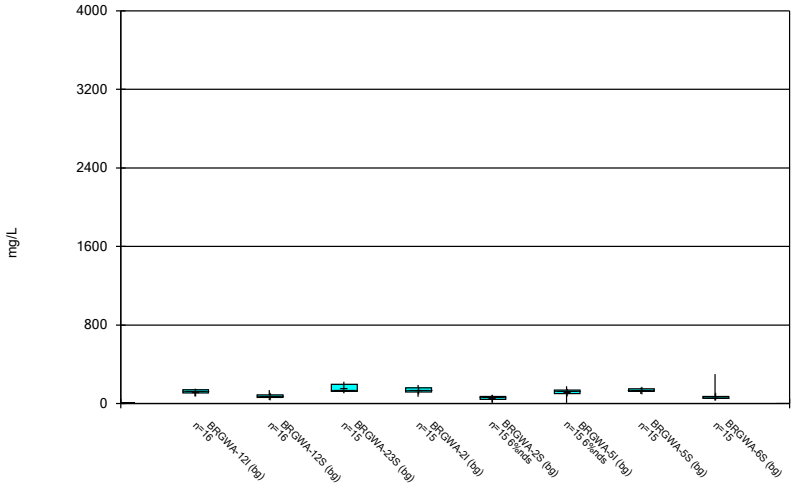
Plant Branch Client: Southern Company Data: Plant Branch AP

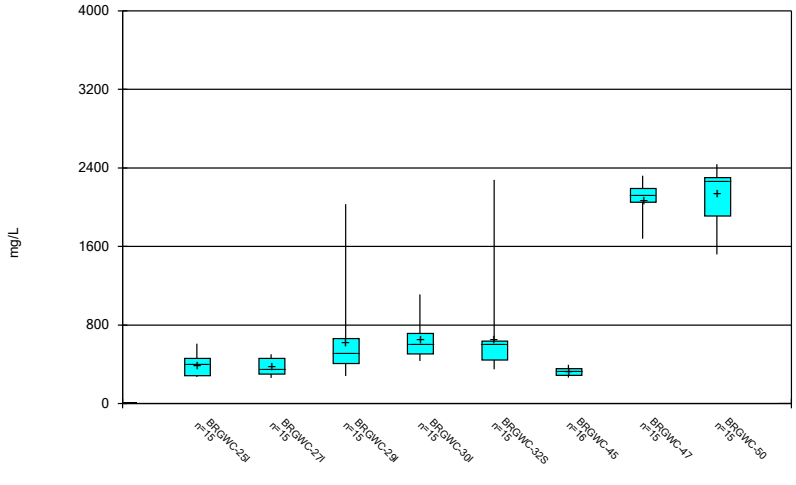
Box & Whiskers Plot



Constituent: Total Dissolved Solids Analysis Run 5/3/2022 10:13 AM View: Pond BCD.1
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.32j Groundwater Stats Consulting. UG

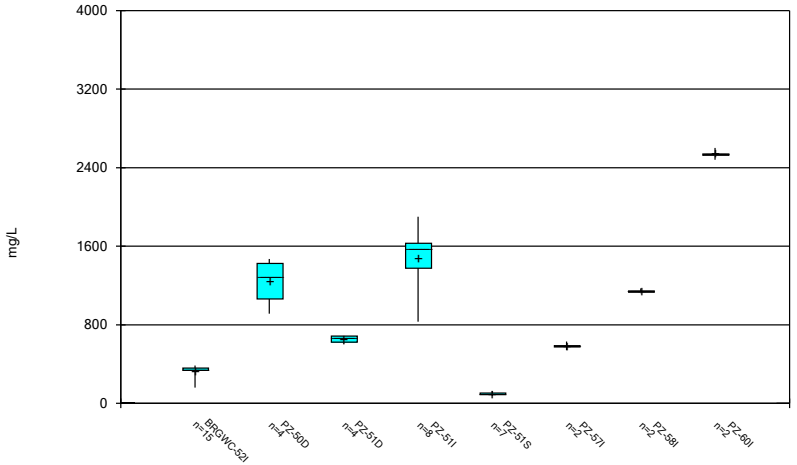
Box & Whiskers Plot



Constituent: Total Dissolved Solids Analysis Run 5/3/2022 10:13 AM View: Pond BCD.1
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.32j Groundwater Stats Consulting. UG

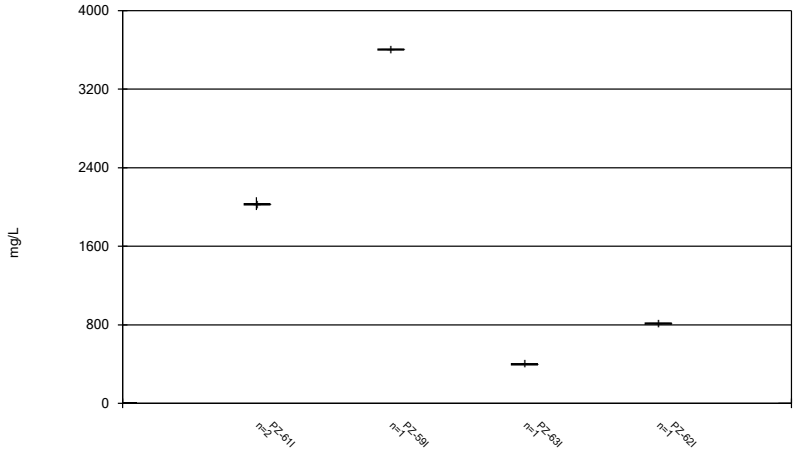
Box & Whiskers Plot



Constituent: Total Dissolved Solids Analysis Run 5/3/2022 10:13 AM View: Pond BCD.1
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.32j Groundwater Stats Consulting. UG

Box & Whiskers Plot



Constituent: Total Dissolved Solids Analysis Run 5/3/2022 10:13 AM View: Pond BCD.1
Plant Branch Client: Southern Company Data: Plant Branch AP

FIGURE C.

Outlier Summary

Plant Branch Client: Southern Company Data: Plant Branch AP Printed 5/2/2022, 10:46 AM

	BRGWC-52I Calcium (mg/L)	BRGWA-5I Cobalt (mg/L)	BRGWC-52I Fluoride (mg/L)	BRGWC-29I Lead (mg/L)	BRGWC-45 Lithium (mg/L)	BRGWC-50 Sulfate (mg/L)	BRGWC-47 Total Dissolved Solids (mg/L)
11/16/2016		<0.01 (o)					
2/13/2018		<0.01 (o)					
2/14/2018			<0.001 (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 - Significant Results

Plant Branch Client: Southern Company Data: Plant Branch AP Printed 3/11/2022, 2:40 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Boron (mg/L)	BRGWC-25I	0.068	n/a	2/2/2022	1.1	Yes	120	n/a	n/a	55	n/a	n/a	0.0001347	NP Inter (NDs) 1 of 2
Boron (mg/L)	BRGWC-27I	0.068	n/a	2/4/2022	1	Yes	120	n/a	n/a	55	n/a	n/a	0.0001347	NP Inter (NDs) 1 of 2
Boron (mg/L)	BRGWC-29I	0.068	n/a	2/3/2022	0.93	Yes	120	n/a	n/a	55	n/a	n/a	0.0001347	NP Inter (NDs) 1 of 2
Boron (mg/L)	BRGWC-30I	0.068	n/a	2/2/2022	1.9	Yes	120	n/a	n/a	55	n/a	n/a	0.0001347	NP Inter (NDs) 1 of 2
Boron (mg/L)	BRGWC-32S	0.068	n/a	2/2/2022	1	Yes	120	n/a	n/a	55	n/a	n/a	0.0001347	NP Inter (NDs) 1 of 2
Boron (mg/L)	BRGWC-47	0.068	n/a	2/2/2022	0.48	Yes	120	n/a	n/a	55	n/a	n/a	0.0001347	NP Inter (NDs) 1 of 2
Boron (mg/L)	BRGWC-50	0.068	n/a	2/3/2022	0.31	Yes	120	n/a	n/a	55	n/a	n/a	0.0001347	NP Inter (NDs) 1 of 2
Boron (mg/L)	BRGWC-52I	0.068	n/a	2/2/2022	1.5	Yes	120	n/a	n/a	55	n/a	n/a	0.0001347	NP Inter (NDs) 1 of 2
Calcium (mg/L)	BRGWC-25I	24	n/a	2/2/2022	44.3	Yes	122	n/a	n/a	4.918	n/a	n/a	0.0001312	NP Inter (normality) 1 of 2
Calcium (mg/L)	BRGWC-27I	24	n/a	2/4/2022	61.7	Yes	122	n/a	n/a	4.918	n/a	n/a	0.0001312	NP Inter (normality) 1 of 2
Calcium (mg/L)	BRGWC-29I	24	n/a	2/3/2022	58.7	Yes	122	n/a	n/a	4.918	n/a	n/a	0.0001312	NP Inter (normality) 1 of 2
Calcium (mg/L)	BRGWC-30I	24	n/a	2/2/2022	232	Yes	122	n/a	n/a	4.918	n/a	n/a	0.0001312	NP Inter (normality) 1 of 2
Calcium (mg/L)	BRGWC-32S	24	n/a	2/2/2022	44.2	Yes	122	n/a	n/a	4.918	n/a	n/a	0.0001312	NP Inter (normality) 1 of 2
Calcium (mg/L)	BRGWC-45	24	n/a	2/2/2022	33.8	Yes	122	n/a	n/a	4.918	n/a	n/a	0.0001312	NP Inter (normality) 1 of 2
Calcium (mg/L)	BRGWC-47	24	n/a	2/2/2022	320	Yes	122	n/a	n/a	4.918	n/a	n/a	0.0001312	NP Inter (normality) 1 of 2
Calcium (mg/L)	BRGWC-50	24	n/a	2/3/2022	220	Yes	122	n/a	n/a	4.918	n/a	n/a	0.0001312	NP Inter (normality) 1 of 2
Calcium (mg/L)	BRGWC-52I	24	n/a	2/2/2022	40.1	Yes	122	n/a	n/a	4.918	n/a	n/a	0.0001312	NP Inter (normality) 1 of 2
Chloride (mg/L)	BRGWC-29I	5.8	n/a	2/3/2022	6.1	Yes	122	n/a	n/a	0	n/a	n/a	0.0001312	NP Inter (normality) 1 of 2
Chloride (mg/L)	BRGWC-45	5.8	n/a	2/2/2022	23.4	Yes	122	n/a	n/a	0	n/a	n/a	0.0001312	NP Inter (normality) 1 of 2
Chloride (mg/L)	BRGWC-50	5.8	n/a	2/3/2022	17.4	Yes	122	n/a	n/a	0	n/a	n/a	0.0001312	NP Inter (normality) 1 of 2
Chloride (mg/L)	BRGWC-52I	5.8	n/a	2/2/2022	6.1	Yes	122	n/a	n/a	0	n/a	n/a	0.0001312	NP Inter (normality) 1 of 2
pH, Field (S.U.)	BRGWC-29I	7.052	5.588	2/3/2022	4.23	Yes	138	6.32	0.3805	0	None	No	0.0004179	Param Inter 1 of 2
pH, Field (S.U.)	BRGWC-50	7.052	5.588	2/3/2022	5.2	Yes	138	6.32	0.3805	0	None	No	0.0004179	Param Inter 1 of 2
Sulfate (mg/L)	BRGWC-25I	89	n/a	2/2/2022	117	Yes	122	n/a	n/a	15.57	n/a	n/a	0.0001312	NP Inter (normality) 1 of 2
Sulfate (mg/L)	BRGWC-27I	89	n/a	2/4/2022	172	Yes	122	n/a	n/a	15.57	n/a	n/a	0.0001312	NP Inter (normality) 1 of 2
Sulfate (mg/L)	BRGWC-29I	89	n/a	2/3/2022	274	Yes	122	n/a	n/a	15.57	n/a	n/a	0.0001312	NP Inter (normality) 1 of 2
Sulfate (mg/L)	BRGWC-30I	89	n/a	2/2/2022	580	Yes	122	n/a	n/a	15.57	n/a	n/a	0.0001312	NP Inter (normality) 1 of 2
Sulfate (mg/L)	BRGWC-32S	89	n/a	2/2/2022	210	Yes	122	n/a	n/a	15.57	n/a	n/a	0.0001312	NP Inter (normality) 1 of 2
Sulfate (mg/L)	BRGWC-45	89	n/a	2/2/2022	90.1	Yes	122	n/a	n/a	15.57	n/a	n/a	0.0001312	NP Inter (normality) 1 of 2
Sulfate (mg/L)	BRGWC-47	89	n/a	2/2/2022	1170	Yes	122	n/a	n/a	15.57	n/a	n/a	0.0001312	NP Inter (normality) 1 of 2
Sulfate (mg/L)	BRGWC-50	89	n/a	2/3/2022	1270	Yes	122	n/a	n/a	15.57	n/a	n/a	0.0001312	NP Inter (normality) 1 of 2
Sulfate (mg/L)	BRGWC-52I	89	n/a	2/2/2022	126	Yes	122	n/a	n/a	15.57	n/a	n/a	0.0001312	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	BRGWC-27I	299	n/a	2/4/2022	301	Yes	122	n/a	n/a	1.639	n/a	n/a	0.0001312	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	BRGWC-29I	299	n/a	2/3/2022	419	Yes	122	n/a	n/a	1.639	n/a	n/a	0.0001312	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	BRGWC-30I	299	n/a	2/2/2022	1110	Yes	122	n/a	n/a	1.639	n/a	n/a	0.0001312	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	BRGWC-32S	299	n/a	2/2/2022	443	Yes	122	n/a	n/a	1.639	n/a	n/a	0.0001312	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	BRGWC-47	299	n/a	2/2/2022	1850	Yes	122	n/a	n/a	1.639	n/a	n/a	0.0001312	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	BRGWC-50	299	n/a	2/3/2022	1850	Yes	122	n/a	n/a	1.639	n/a	n/a	0.0001312	NP Inter (normality) 1 of 2

Interwell Prediction Limits - All Results

Plant Branch Client: Southern Company Data: Plant Branch AP Printed 3/11/2022, 2:40 PM

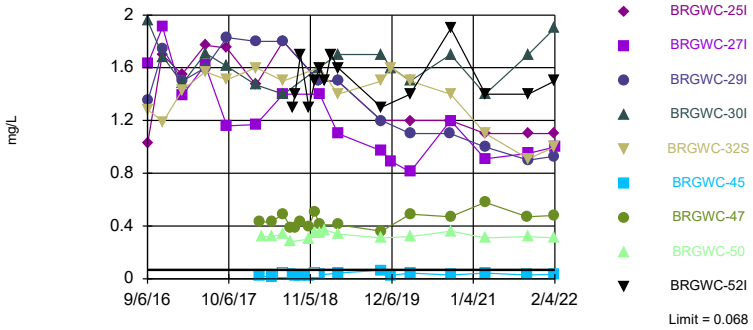
Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Boron (mg/L)	**BRGWC-25I**	**0.068**	**n/a**	**2/2/2022**	**1.1**	**Yes**	**120**	**n/a**	**n/a**	**55**	**n/a**	**n/a**	**0.0001347**	**NP Inter (NDs) 1 of 2**
Boron (mg/L)	**BRGWC-27I**	**0.068**	**n/a**	**2/4/2022**	**1**	**Yes**	**120**	**n/a**	**n/a**	**55**	**n/a**	**n/a**	**0.0001347**	**NP Inter (NDs) 1 of 2**
Boron (mg/L)	**BRGWC-29I**	**0.068**	**n/a**	**2/3/2022**	**0.93**	**Yes**	**120**	**n/a**	**n/a**	**55**	**n/a**	**n/a**	**0.0001347**	**NP Inter (NDs) 1 of 2**
Boron (mg/L)	**BRGWC-30I**	**0.068**	**n/a**	**2/2/2022**	**1.9**	**Yes**	**120**	**n/a**	**n/a**	**55**	**n/a**	**n/a**	**0.0001347**	**NP Inter (NDs) 1 of 2**
Boron (mg/L)	**BRGWC-32S**	**0.068**	**n/a**	**2/2/2022**	**1**	**Yes**	**120**	**n/a**	**n/a**	**55**	**n/a**	**n/a**	**0.0001347**	**NP Inter (NDs) 1 of 2**
Boron (mg/L)	BRGWC-45	0.068	n/a	2/2/2022	0.034J	No	120	n/a	n/a	55	n/a	n/a	0.0001347	NP Inter (NDs) 1 of 2
Boron (mg/L)	**BRGWC-47**	**0.068**	**n/a**	**2/2/2022**	**0.48**	**Yes**	**120**	**n/a**	**n/a**	**55**	**n/a**	**n/a**	**0.0001347**	**NP Inter (NDs) 1 of 2**
Boron (mg/L)	**BRGWC-50**	**0.068**	**n/a**	**2/3/2022**	**0.31**	**Yes**	**120**	**n/a**	**n/a**	**55**	**n/a**	**n/a**	**0.0001347**	**NP Inter (NDs) 1 of 2**
Boron (mg/L)	**BRGWC-52I**	**0.068**	**n/a**	**2/2/2022**	**1.5**	**Yes**	**120**	**n/a**	**n/a**	**55**	**n/a**	**n/a**	**0.0001347**	**NP Inter (NDs) 1 of 2**
Calcium (mg/L)	**BRGWC-25I**	**24**	**n/a**	**2/2/2022**	**44.3**	**Yes**	**122**	**n/a**	**n/a**	**4.918**	**n/a**	**n/a**	**0.0001312**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	**BRGWC-27I**	**24**	**n/a**	**2/4/2022**	**61.7**	**Yes**	**122**	**n/a**	**n/a**	**4.918**	**n/a**	**n/a**	**0.0001312**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	**BRGWC-29I**	**24**	**n/a**	**2/3/2022**	**58.7**	**Yes**	**122**	**n/a**	**n/a**	**4.918**	**n/a**	**n/a**	**0.0001312**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	**BRGWC-30I**	**24**	**n/a**	**2/2/2022**	**232**	**Yes**	**122**	**n/a**	**n/a**	**4.918**	**n/a**	**n/a**	**0.0001312**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	**BRGWC-32S**	**24**	**n/a**	**2/2/2022**	**44.2**	**Yes**	**122**	**n/a**	**n/a**	**4.918**	**n/a**	**n/a**	**0.0001312**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	**BRGWC-45**	**24**	**n/a**	**2/2/2022**	**33.8**	**Yes**	**122**	**n/a**	**n/a**	**4.918**	**n/a**	**n/a**	**0.0001312**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	**BRGWC-47**	**24**	**n/a**	**2/2/2022**	**320**	**Yes**	**122**	**n/a**	**n/a**	**4.918**	**n/a**	**n/a**	**0.0001312**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	**BRGWC-50**	**24**	**n/a**	**2/3/2022**	**220**	**Yes**	**122**	**n/a**	**n/a**	**4.918**	**n/a**	**n/a**	**0.0001312**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	**BRGWC-52I**	**24**	**n/a**	**2/2/2022**	**40.1**	**Yes**	**122**	**n/a**	**n/a**	**4.918**	**n/a**	**n/a**	**0.0001312**	**NP Inter (normality) 1 of 2**
Chloride (mg/L)	BRGWC-25I	5.8	n/a	2/2/2022	4.2	No	122	n/a	n/a	0	n/a	n/a	0.0001312	NP Inter (normality) 1 of 2
Chloride (mg/L)	BRGWC-27I	5.8	n/a	2/4/2022	4.6	No	122	n/a	n/a	0	n/a	n/a	0.0001312	NP Inter (normality) 1 of 2
Chloride (mg/L)	**BRGWC-29I**	**5.8**	**n/a**	**2/3/2022**	**6.1**	**Yes**	**122**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0001312**	**NP Inter (normality) 1 of 2**
Chloride (mg/L)	BRGWC-30I	5.8	n/a	2/2/2022	4	No	122	n/a	n/a	0	n/a	n/a	0.0001312	NP Inter (normality) 1 of 2
Chloride (mg/L)	BRGWC-32S	5.8	n/a	2/2/2022	3.8	No	122	n/a	n/a	0	n/a	n/a	0.0001312	NP Inter (normality) 1 of 2
Chloride (mg/L)	**BRGWC-45**	**5.8**	**n/a**	**2/2/2022**	**23.4**	**Yes**	**122**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0001312**	**NP Inter (normality) 1 of 2**
Chloride (mg/L)	BRGWC-47	5.8	n/a	2/2/2022	4.2	No	122	n/a	n/a	0	n/a	n/a	0.0001312	NP Inter (normality) 1 of 2
Chloride (mg/L)	**BRGWC-50**	**5.8**	**n/a**	**2/3/2022**	**17.4**	**Yes**	**122**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0001312**	**NP Inter (normality) 1 of 2**
Chloride (mg/L)	**BRGWC-52I**	**5.8**	**n/a**	**2/2/2022**	**6.1**	**Yes**	**122**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0001312**	**NP Inter (normality) 1 of 2**
Fluoride (mg/L)	BRGWC-25I	0.42	n/a	2/2/2022	0.15	No	136	n/a	n/a	52.94	n/a	n/a	0.0001065	NP Inter (NDs) 1 of 2
Fluoride (mg/L)	BRGWC-27I	0.42	n/a	2/4/2022	0.14	No	136	n/a	n/a	52.94	n/a	n/a	0.0001065	NP Inter (NDs) 1 of 2
Fluoride (mg/L)	BRGWC-29I	0.42	n/a	2/3/2022	0.11	No	136	n/a	n/a	52.94	n/a	n/a	0.0001065	NP Inter (NDs) 1 of 2
Fluoride (mg/L)	BRGWC-30I	0.42	n/a	2/2/2022	0.1	No	136	n/a	n/a	52.94	n/a	n/a	0.0001065	NP Inter (NDs) 1 of 2
Fluoride (mg/L)	BRGWC-32S	0.42	n/a	2/2/2022	0.1ND	No	136	n/a	n/a	52.94	n/a	n/a	0.0001065	NP Inter (NDs) 1 of 2
Fluoride (mg/L)	BRGWC-45	0.42	n/a	2/2/2022	0.1ND	No	136	n/a	n/a	52.94	n/a	n/a	0.0001065	NP Inter (NDs) 1 of 2
Fluoride (mg/L)	BRGWC-47	0.42	n/a	2/2/2022	0.1ND	No	136	n/a	n/a	52.94	n/a	n/a	0.0001065	NP Inter (NDs) 1 of 2
Fluoride (mg/L)	BRGWC-50	0.42	n/a	2/3/2022	0.42	No	136	n/a	n/a	52.94	n/a	n/a	0.0001065	NP Inter (NDs) 1 of 2
Fluoride (mg/L)	BRGWC-52I	0.42	n/a	2/2/2022	0.098J	No	136	n/a	n/a	52.94	n/a	n/a	0.0001065	NP Inter (NDs) 1 of 2
pH, Field (S.U.)	BRGWC-25I	7.052	5.588	2/2/2022	6.23	No	138	6.32	0.3805	0	None	No	0.0004179	Param Inter 1 of 2
pH, Field (S.U.)	BRGWC-27I	7.052	5.588	2/4/2022	5.97	No	138	6.32	0.3805	0	None	No	0.0004179	Param Inter 1 of 2
pH, Field (S.U.)	**BRGWC-29I**	**7.052**	**5.588**	**2/3/2022**	**4.23**	**Yes**	**138**	**6.32**	**0.3805**	**0**	**None**	**No**	**0.0004179**	**Param Inter 1 of 2**
pH, Field (S.U.)	BRGWC-30I	7.052	5.588	2/2/2022	6.34	No	138	6.32	0.3805	0	None	No	0.0004179	Param Inter 1 of 2
pH, Field (S.U.)	BRGWC-32S	7.052	5.588	2/2/2022	5.99	No	138	6.32	0.3805	0	None	No	0.0004179	Param Inter 1 of 2
pH, Field (S.U.)	BRGWC-45	7.052	5.588	2/2/2022	5.92	No	138	6.32	0.3805	0	None	No	0.0004179	Param Inter 1 of 2
pH, Field (S.U.)	BRGWC-47	7.052	5.588	2/2/2022	5.75	No	138	6.32	0.3805	0	None	No	0.0004179	Param Inter 1 of 2
pH, Field (S.U.)	**BRGWC-50**	**7.052**	**5.588**	**2/3/2022**	**5.2**	**Yes**	**138**	**6.32**	**0.3805**	**0**	**None**	**No**	**0.0004179**	**Param Inter 1 of 2**
pH, Field (S.U.)	BRGWC-52I	7.052	5.588	2/2/2022	6.35	No	138	6.32	0.3805	0	None	No	0.0004179	Param Inter 1 of 2
Sulfate (mg/L)	**BRGWC-25I**	**89**	**n/a**	**2/2/2022**	**117**	**Yes**	**122**	**n/a**	**n/a**	**15.57**	**n/a**	**n/a**	**0.0001312**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	**BRGWC-27I**	**89**	**n/a**	**2/4/2022**	**172**	**Yes**	**122**	**n/a**	**n/a**	**15.57**	**n/a**	**n/a**	**0.0001312**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	**BRGWC-29I**	**89**	**n/a**	**2/3/2022**	**274**	**Yes**	**122**	**n/a**	**n/a**	**15.57**	**n/a**	**n/a**	**0.0001312**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	**BRGWC-30I**	**89**	**n/a**	**2/2/2022**	**580**	**Yes**	**122**	**n/a**	**n/a**	**15.57**	**n/a**	**n/a**	**0.0001312**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	**BRGWC-32S**	**89**	**n/a**	**2/2/2022**	**210**	**Yes**	**122**	**n/a**	**n/a**	**15.57**	**n/a**	**n/a**	**0.0001312**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	**BRGWC-45**	**89**	**n/a**	**2/2/2022**	**90.1**	**Yes**	**122**	**n/a**	**n/a**	**15.57**	**n/a**	**n/a**	**0.0001312**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	**BRGWC-47**	**89**	**n/a**	**2/2/2022**	**1170**	**Yes**	**122**	**n/a**	**n/a**	**15.57**	**n/a**	**n/a**	**0.0001312**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	**BRGWC-50**	**89**	**n/a**	**2/3/2022**	**1270**	**Yes**	**122**	**n/a**	**n/a**	**15.57**	**n/a**	**n/a**	**0.0001312**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	**BRGWC-52I**	**89**	**n/a**	**2/2/2022**	**126**	**Yes**	**122**	**n/a**	**n/a**	**15.57**	**n/a**	**n/a**	**0.0001312**	**NP Inter (normality) 1 of 2**
Total Dissolved Solids (mg/L)	BRGWC-25I	299	n/a	2/2/2022	283	No	122	n/a	n/a	1.639	n/a	n/a	0.0001312	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	**BRGWC-27I**	**299**	**n/a**	**2/4/2022**	**301**	**Yes**	**122**	**n/a**	**n/a**	**1.639**	**n/a**	**n/a**	**0.0001312**	**NP Inter (normality) 1 of 2**
Total Dissolved Solids (mg/L)	**BRGWC-29I**	**299**	**n/a**	**2/3/2022**	**419**	**Yes**	**122**	**n/a**	**n/a**	**1.639**	**n/a**	**n/a**	**0.0001312**	**NP Inter (normality) 1 of 2**
Total Dissolved Solids (mg/L)	**BRGWC-30I**	**299**	**n/a**	**2/2/2022**	**1110**	**Yes**	**122**	**n/a**	**n/a**	**1.639**	**n/a**	**n/a**	**0.0001312**	**NP Inter (normality) 1 of 2**
Total Dissolved Solids (mg/L)	**BRGWC-32S**	**299**	**n/a**	**2/2/2022**	**443**	**Yes**	**122**	**n/a**	**n/a**	**1.639**	**n/a**	**n/a**	**0.0001312**	**NP Inter (normality) 1 of 2**
Total Dissolved Solids (mg/L)	BRGWC-45	299	n/a	2/2/2022	276	No	122	n/a	n/a	1.639	n/a	n/a	0.0001312	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	**BRGWC-47**	**299**	**n/a**	**2/2/2022**	**1850**	**Yes**	**122**	**n/a**	**n/a**	**1.639**	**n/a**	**n/a**	**0.0001312**	**NP Inter (normality) 1 of 2**
Total Dissolved Solids (mg/L)	**BRGWC-50**	**299**	**n/a**	**2/3/2022**	**1850**	**Yes**	**122**	**n/a**	**n/a**	**1.639**	**n/a**	**n/a**	**0.0001312**	**NP Inter (normality) 1 of 2**
Total Dissolved Solids (mg/L)	BRGWC-52I	299	n/a	2/2/2022	160	No	122	n/a	n/a	1.639	n/a	n/a	0.0001312	NP Inter (normality) 1 of 2

Sanitas™ v.9.6.32 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Exceeds Limit: BRGWC-25I, BRGWC-27I, BRGWC-29I, BRGWC-30I, BRGWC-32S, BRGWC-47, BRGWC-50, BRGWC-52I

Prediction Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 120 background values. 55% NDs. Annual per-constituent alpha = 0.002422. Individual comparison alpha = 0.0001347 (1 of 2). Comparing 9 points to limit.

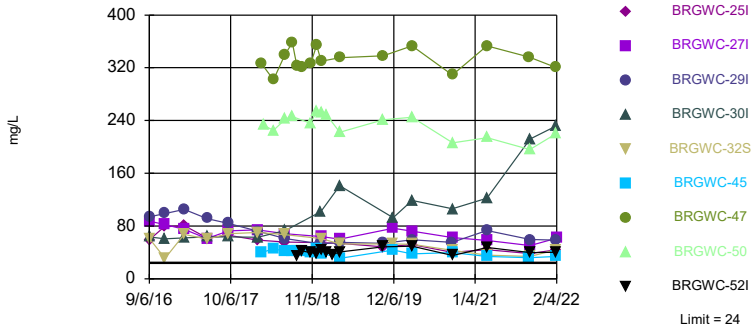
Constituent: Boron Analysis Run 3/11/2022 2:39 PM View: Pond BCD - Appendix III
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.32 Groundwater Stats Consulting. UG

Exceeds Limit: BRGWC-25I, BRGWC-27I, BRGWC-29I, BRGWC-30I, BRGWC-32S, BRGWC-45, BRGWC-47, BRGWC-50,..

Prediction Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Chi Squared normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 122 background values. 4.918% NDs. Annual per-constituent alpha = 0.002359. Individual comparison alpha = 0.0001312 (1 of 2). Comparing 9 points to limit.

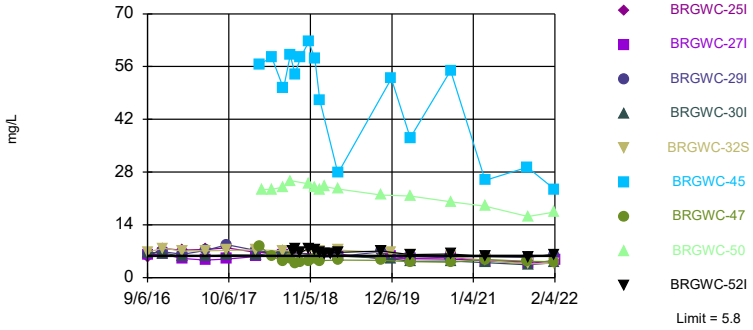
Constituent: Calcium Analysis Run 3/11/2022 2:39 PM View: Pond BCD - Appendix III
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.32 Groundwater Stats Consulting. UG

Exceeds Limit: BRGWC-29I, BRGWC-45, BRGWC-50, BRGWC-52I

Prediction Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Chi Squared normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 122 background values. Annual per-constituent alpha = 0.002359. Individual comparison alpha = 0.0001312 (1 of 2). Comparing 9 points to limit.

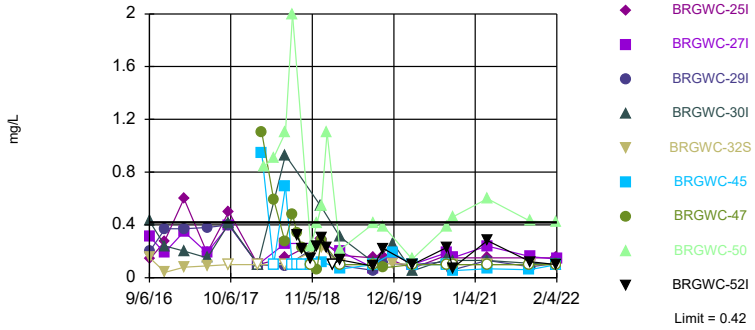
Constituent: Chloride Analysis Run 3/11/2022 2:39 PM View: Pond BCD - Appendix III
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.32 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 censored data exceeded 50%. Limit is highest of 136 background values. 52.94% NDs. Annual per-constituent alpha = 0.001916. Individual comparison alpha = 0.0001065 (1 of 2). Comparing 9 points to limit.

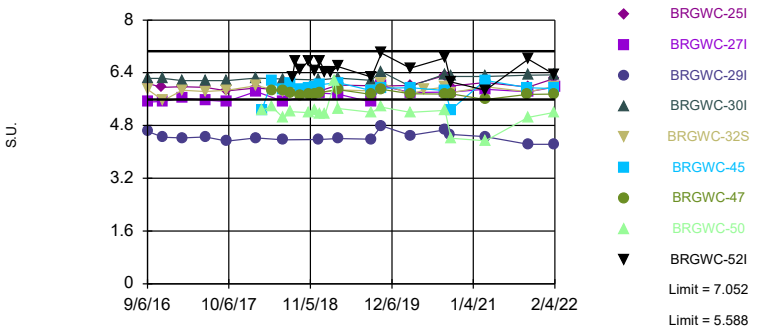
Constituent: Fluoride Analysis Run 3/11/2022 2:39 PM View: Pond BCD - Appendix III
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.32 Groundwater Stats Consulting. UG

Exceeds Limits: BRGWC-29I, BRGWC-50

Prediction Limit

Interwell Parametric



Background Data Summary: Mean=6.32, Std. Dev.=0.3805, n=138. Normality test: Chi Squared @alpha = 0.01, calculated = 5.478, critical = 14.07. Kappa = 1.923 (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 3/11/2022 2:39 PM View: Pond BCD - Appendix III

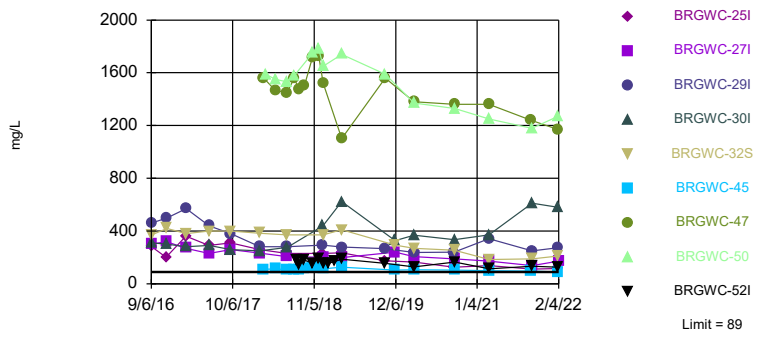
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.32 Groundwater Stats Consulting. UG

Exceeds Limit: BRGWC-25I, BRGWC-27I, BRGWC-29I, BRGWC-30I, BRGWC-32S, BRGWC-45, BRGWC-47, BRGWC-50,..

Prediction Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Chi Squared normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 122 background values. 15.57% NDs. Annual per-constituent alpha = 0.002359. Individual comparison alpha = 0.0001312 (1 of 2). Comparing 9 points to limit.

Constituent: Sulfate Analysis Run 3/11/2022 2:39 PM View: Pond BCD - Appendix III

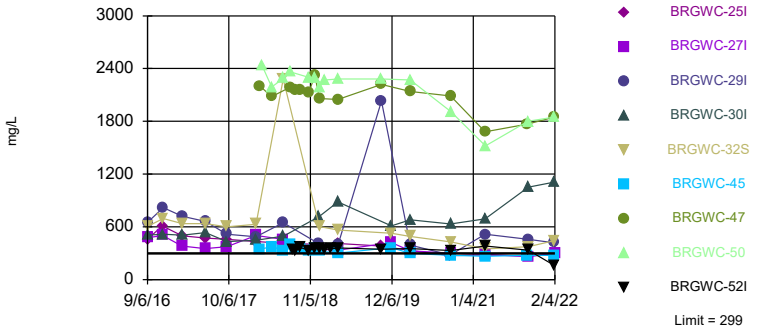
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.32 Groundwater Stats Consulting. UG

Exceeds Limit: BRGWC-27I, BRGWC-29I, BRGWC-30I, BRGWC-32S, BRGWC-47, BRGWC-50

Prediction Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Chi Squared normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 122 background values. 1.639% NDs. Annual per-constituent alpha = 0.002359. Individual comparison alpha = 0.0001312 (1 of 2). Comparing 9 points to limit.

Constituent: Total Dissolved Solids Analysis Run 3/11/2022 2:39 PM View: Pond BCD - Appendix III

Plant Branch Client: Southern Company Data: Plant Branch AP

Prediction Limit

Constituent: Boron (mg/L) Analysis Run 3/11/2022 2:40 PM View: Pond BCD - Appendix III

Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWA-2I (bg)	BRGWA-2S (bg)	BRGWA-5I (bg)	BRGWA-5S (bg)	BRGWA-12I (bg)	BRGWA-12S (bg)	BRGWA-6S (bg)	BRGWA-23S (bg)	BRGWC-30I
8/31/2016	0.0072 (J)	<0.04	<0.04	<0.04					
9/1/2016					0.0093 (J)	<0.04	<0.04		
9/6/2016								0.0362 (J)	1.96
9/8/2016									
11/15/2016				0.0085 (J)			0.0123 (J)		
11/16/2016	0.0117 (J)	0.0109 (J)	0.0187 (J)		0.0127 (J)	0.0081 (J)			
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	0.0088 (J)	<0.04			0.0071 (J)	<0.04		0.0245 (J)	
2/22/2017									1.48
6/12/2017	0.0133 (J)		<0.04	<0.04			<0.04		
6/13/2017		<0.04				<0.04		<0.04	
6/14/2017					0.0078 (J)				1.71
9/26/2017	0.0093 (J)	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	
9/27/2017									1.61
2/13/2018	0.0141 (J)	<0.04	<0.04	<0.04			<0.04		
2/14/2018					0.0068 (J)	<0.04		0.0314 (J)	1.47
3/6/2018									
3/15/2018									
5/1/2018									
6/26/2018	0.012 (J)	<0.04	0.0042 (J)	0.0056 (J)	0.008 (J)	<0.04	0.0041 (J)	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	0.0086 (J)	<0.04	<0.04	0.0062 (J)	0.0083 (J)	0.0053 (J)	<0.04	0.055	1.6
12/19/2018									
12/20/2018									
1/16/2019									
1/17/2019									
2/13/2019									
3/19/2019	0.00565 (JD)	<0.04	<0.04	<0.04	0.008 (J)	<0.04	<0.04	0.068	
3/20/2019									1.7
10/15/2019	0.0067 (J)	<0.04	<0.04	0.006 (J)	0.006 (J)	<0.04	0.01 (J)	0.022 (J)	
10/16/2019									
10/17/2019									1.7
12/3/2019									
12/4/2019									1.6
3/3/2020	0.0082 (J)	<0.04	<0.04	<0.04	0.01 (J)	0.0065 (J)	<0.04		
3/4/2020								0.044 (J)	
3/5/2020									1.5
9/15/2020	<0.04	<0.04	<0.04	<0.04	0.0071 (J)	<0.04	<0.04	0.033 (J)	
9/16/2020									1.7
9/17/2020									
3/1/2021	<0.04						<0.04		

Prediction Limit

Constituent: Boron (mg/L) Analysis Run 3/11/2022 2:40 PM View: Pond BCD - Appendix III

Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWA-2I (bg)	BRGWA-2S (bg)	BRGWA-5I (bg)	BRGWA-5S (bg)	BRGWA-12I (bg)	BRGWA-12S (bg)	BRGWA-6S (bg)	BRGWA-23S (bg)	BRGWC-30I
3/2/2021		<0.04	0.0053 (J)	0.0071 (J)	0.0057 (J)	<0.04		0.042	
3/3/2021									1.4
3/4/2021									
9/21/2021			<0.04	<0.04	<0.04	<0.04			
9/22/2021	<0.04	<0.04					<0.04	0.047	
9/23/2021									
9/27/2021									
9/28/2021									1.7
2/1/2022	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	0.046	
2/2/2022									1.9
2/3/2022									
2/4/2022									

Prediction Limit

Constituent: Boron (mg/L) Analysis Run 3/11/2022 2:40 PM View: Pond BCD - Appendix III

Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWC-27I	BRGWC-32S	BRGWC-25I	BRGWC-29I	BRGWC-45	BRGWC-47	BRGWC-50	BRGWC-52I
8/31/2016								
9/1/2016								
9/6/2016								
9/8/2016	1.63	1.28	1.03	1.35				
11/15/2016								
11/16/2016								
11/17/2016			1.7					
11/18/2016	1.91							
11/21/2016		1.19		1.74				
2/20/2017								
2/21/2017	1.39		1.55					
2/22/2017		1.43		1.5				
6/12/2017								
6/13/2017	1.62		1.77					
6/14/2017		1.57		1.6				
9/26/2017								
9/27/2017	1.16	1.51	1.75	1.83				
2/13/2018								
2/14/2018	1.17	1.6	1.47	1.8				
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)	1.5 (J+X)		1.8 (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		1.4	1.5 (D)	1.5	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		1.2	1.1		0.49	0.32	1.4
3/5/2020		1.5			0.044 (J)			
9/15/2020			1.2	1.1				
9/16/2020	1.2	1.4			0.028 (J)	0.47		
9/17/2020							0.36	1.9
3/1/2021								

Prediction Limit

Constituent: Boron (mg/L) Analysis Run 3/11/2022 2:40 PM View: Pond BCD - Appendix III

Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWC-27I	BRGWC-32S	BRGWC-25I	BRGWC-29I	BRGWC-45	BRGWC-47	BRGWC-50	BRGWC-52I
3/2/2021			1.1		0.044	0.58		
3/3/2021	0.91			1				
3/4/2021		1.1					0.31	1.4
9/21/2021								
9/22/2021								
9/23/2021					0.029 (J)	0.47		
9/27/2021							0.32	
9/28/2021	0.95	0.91	1.1	0.9				1.4
2/1/2022								
2/2/2022		1	1.1		0.034 (J)	0.48		1.5
2/3/2022				0.93			0.31	
2/4/2022	1							

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 3/11/2022 2:40 PM View: Pond BCD - Appendix III

Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWA-5S (bg)	BRGWA-5I (bg)	BRGWA-2S (bg)	BRGWA-2I (bg)	BRGWA-6S (bg)	BRGWA-12S (bg)	BRGWA-12I (bg)	BRGWA-23S (bg)	BRGWC-30I
8/31/2016	19.6	13.5	4.09	12.6					
9/1/2016					3.3	4.61	8.98		
9/6/2016								12.8	63.3
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	<25	62.8
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)	16.8 (J)	102
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
9/15/2020	16.8	12.7	3.9	14.1	3.7	5.7	14.5	10.7	
9/16/2020									106
9/17/2020									
3/1/2021				15.4	4.2				
3/2/2021	16.8	13.2	4			5.4	11.7	11.6	

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 3/11/2022 2:40 PM View: Pond BCD - Appendix III
Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWA-5S (bg)	BRGWA-5I (bg)	BRGWA-2S (bg)	BRGWA-2I (bg)	BRGWA-6S (bg)	BRGWA-12S (bg)	BRGWA-12I (bg)	BRGWA-23S (bg)	BRGWC-30I
3/3/2021									122
3/4/2021									
9/21/2021	19.1	14.1				5.4	16.4		
9/22/2021			4.3	15.9	4.1			9.2	
9/23/2021									
9/27/2021									
9/28/2021									212
2/1/2022	19.1	14.5	4.4	14.4	4.2	5.3	14.2	10.7	
2/2/2022									232
2/3/2022									
2/4/2022									

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 3/11/2022 2:40 PM View: Pond BCD - Appendix III

Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWC-32S	BRGWC-29I	BRGWC-25I	BRGWC-27I	BRGWC-45	BRGWC-47	BRGWC-50	BRGWC-52I
8/31/2016								
9/1/2016								
9/6/2016								
9/8/2016	60.5	93.9	59.4	87.2				
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	68.4	84	65.8	72.6				
2/13/2018								
2/14/2018	70.2	72.1	58.8	74.1				
3/6/2018					39.5	326		
3/15/2018							233	
5/1/2018					45.5	302 (D)	225	
6/26/2018			55.5					
6/27/2018	67.1	61.1		68.2		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					42.3	323		33.9
9/19/2018					41.9	321		42.3
10/29/2018					40.8	326	236	39.8
11/28/2018					45.1	354	254	38.2
12/18/2018		52.9	54.7					
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	52.8	55.4	53.95 (D)		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		59.3	52	72.3		353	245	49.5
3/5/2020	52.1				37.9			
9/15/2020		55.1	40.1					
9/16/2020	43.1			62.5	39.7	309		
9/17/2020							206	35.4
3/1/2021								
3/2/2021			44.1		33.9	353		

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 3/11/2022 2:40 PM View: Pond BCD - Appendix III
Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWC-32S	BRGWC-29I	BRGWC-25I	BRGWC-27I	BRGWC-45	BRGWC-47	BRGWC-50	BRGWC-52I
3/3/2021		73.3		58.2				
3/4/2021	35.7						214	47.5
9/21/2021								
9/22/2021								
9/23/2021					32	336		
9/27/2021							196	
9/28/2021	33.9	59.5	38.4	50.4				39.5
2/1/2022								
2/2/2022	44.2		44.3		33.8	320		40.1
2/3/2022		58.7					220	
2/4/2022				61.7				

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 3/11/2022 2:40 PM View: Pond BCD - Appendix III
Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWA-5S (bg)	BRGWA-5I (bg)	BRGWA-2S (bg)	BRGWA-2I (bg)	BRGWA-12I (bg)	BRGWA-6S (bg)	BRGWA-12S (bg)	BRGWC-30I	BRGWA-23S (bg)
8/31/2016	3.6	4.4	2	2.3					
9/1/2016					3.3	2.5	3.5		
9/6/2016								6.7	5.8
9/8/2016									
11/15/2016	4					2.3			
11/16/2016		4.4	1.8	2	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			1.8	2	3.2		3.2		3.5
2/22/2017								5.6	
6/12/2017	3.8	4.2		2.1		2.2			
6/13/2017			1.7				3.3		3.2
6/14/2017					3.1			5.7	
9/26/2017	4.1	4.4	1.8	2	3.3	2.3	3.3		3.5
9/27/2017								6	
2/13/2018	4.1	4.7	1.7	2.1		2.3			
2/14/2018					3.1		3.5	5.9	3.8
3/6/2018									
3/15/2018									
5/1/2018									
6/26/2018	4.1	4.5	2.2	2.4	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	3.8	4.5	1.9	1.8	2.8	2.3	2.9	5.8	3.9
12/19/2018									
12/20/2018									
1/16/2019									
1/17/2019									
2/13/2019									
3/19/2019	4.2	4.5	2	2.45 (D)	3.2	2.6	3.5		3.8
3/20/2019								5.8	
10/15/2019	3.7	4.2	1.9	2.2	3.1	2.4	3.4		3.5
10/16/2019									
12/3/2019									
12/4/2019								5	
3/3/2020	3.6	3.9	1.9	1.9	2.6	2.9	3.2		
3/4/2020									3.3
3/5/2020								4.3	
9/15/2020	3.7	3.7	1.7	1.9	2.4	2.3	3.5		3.1
9/16/2020								4.4	
9/17/2020									
3/1/2021				1.8		2.1			
3/2/2021	3.7	3.8	1.7		2.6		3.7		3.5

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 3/11/2022 2:40 PM View: Pond BCD - Appendix III

Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWA-5S (bg)	BRGWA-5I (bg)	BRGWA-2S (bg)	BRGWA-2I (bg)	BRGWA-12I (bg)	BRGWA-6S (bg)	BRGWA-12S (bg)	BRGWC-30I	BRGWA-23S (bg)
3/3/2021								4	
3/4/2021									
9/21/2021	3.2	3.2			2.1		3.5		
9/22/2021			1.5	1.7		2.1			2.8
9/23/2021									
9/27/2021									
9/28/2021								3.4	
2/1/2022	3.4	3.5	1.6	1.8	2.2	2.1	3.6		3.2
2/2/2022								4	
2/3/2022									
2/4/2022									

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 3/11/2022 2:40 PM View: Pond BCD - Appendix III
Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWC-27I	BRGWC-29I	BRGWC-32S	BRGWC-25I	BRGWC-47	BRGWC-45	BRGWC-50	BRGWC-52I
8/31/2016								
9/1/2016								
9/6/2016								
9/8/2016	6	6.4	6.8	5.5				
11/15/2016								
11/16/2016								
11/17/2016				7.7				
11/18/2016	6.3							
11/21/2016		6.9	7.8					
2/20/2017								
2/21/2017	5.1			7.3				
2/22/2017		6.2	7					
6/12/2017								
6/13/2017	4.7			7.5				
6/14/2017		7.2	7.1					
9/26/2017								
9/27/2017	4.9	8.7	7.2	7.9				
2/13/2018								
2/14/2018	5.6	7.2	7.4	6.7				
3/6/2018					8.4	56.6		
3/15/2018							23.3	
5/1/2018					5.7 (D)	58.5	23.4	
6/26/2018				6.7				
6/27/2018	5.9	6.3	7.1		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					3.6	54		7.5
9/19/2018					4.1	58.4		6.6
10/29/2018					4.3	62.6	24.9	7.8
11/28/2018					5.1	58.1	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		5.6	7.3	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	5.6		6.6					
3/3/2020								
3/4/2020	5.1	5.8		5	4.2		21.6	6.1
3/5/2020			6			37.1		
9/15/2020		5.5		4.9				
9/16/2020	5.4		5.6		4.1	54.9		
9/17/2020							20.1	6.3
3/1/2021								
3/2/2021				4.5	4.8	25.8		

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 3/11/2022 2:40 PM View: Pond BCD - Appendix III

Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWC-27I	BRGWC-29I	BRGWC-32S	BRGWC-25I	BRGWC-47	BRGWC-45	BRGWC-50	BRGWC-52I
3/3/2021	4.5	5.6						
3/4/2021			4.6				18.9	5.6
9/21/2021								
9/22/2021								
9/23/2021					4.3	29.3		
9/27/2021							16.2	
9/28/2021	3.7	5.4	3.6	4.2				5.5
2/1/2022								
2/2/2022			3.8	4.2	4.2	23.4		6.1
2/3/2022		6.1					17.4	
2/4/2022	4.6							

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 3/11/2022 2:40 PM View: Pond BCD - Appendix III

Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWA-5S (bg)	BRGWA-5I (bg)	BRGWA-2S (bg)	BRGWA-2I (bg)	BRGWA-12I (bg)	BRGWA-6S (bg)	BRGWA-12S (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)	0.06 (J)	0.05 (J)		
9/6/2016								0.43	0.42
9/8/2016									
11/15/2016	0.13 (J)					0.06 (J)			
11/16/2016		0.07 (J)	0.07 (J)	0.08 (J)	0.14 (J)		0.03 (J)		
11/17/2016									0.15 (J)
11/18/2016									
11/21/2016								0.24 (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)	<0.1	<0.1	0.14 (J)	0.1 (J)	<0.1	<0.1		<0.1
9/27/2017								0.41	
2/13/2018	<0.1	<0.1	<0.1	<0.1		<0.1			
2/14/2018					<0.1		<0.1	<0.1	<0.1
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)	0.041 (J)	0.042 (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	<0.1	<0.1	<0.1	0.085 (J)	<0.1	<0.1	<0.1	0.54	<0.1
12/19/2018									
12/20/2018									
1/16/2019									
1/17/2019									
2/13/2019									
3/19/2019	0.06 (J)	<0.1	0.037 (J)	0.0655 (JD)	<0.1	0.03 (J)	<0.1		<0.1
3/20/2019								0.31	
8/27/2019	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.12 (J)	
8/28/2019									
8/29/2019									0.084 (J)
10/15/2019	0.045 (J)	<0.1	<0.1	<0.1	0.047 (J)	<0.1	<0.1		<0.1
10/16/2019									
12/3/2019									
12/4/2019								0.26 (J)	
3/3/2020	0.057 (J)	<0.1	0.05 (J)	0.066 (J)	0.056 (J)	0.09 (J)	<0.1		
3/4/2020									<0.1
3/5/2020								0.051 (J)	
8/18/2020	<0.1	<0.1	<0.1	<0.1	0.052 (J)	<0.1	<0.1		<0.1
8/19/2020								0.14	

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 3/11/2022 2:40 PM View: Pond BCD - Appendix III

Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWA-5S (bg)	BRGWA-5I (bg)	BRGWA-2S (bg)	BRGWA-2I (bg)	BRGWA-12I (bg)	BRGWA-6S (bg)	BRGWA-12S (bg)	BRGWC-30I	BRGWA-23S (bg)
8/20/2020									
9/15/2020	0.051 (J)	<0.1	<0.1	<0.1	0.062 (J)	<0.1	<0.1		<0.1
9/16/2020								0.13	
9/17/2020									
3/1/2021				<0.1		<0.1			
3/2/2021	<0.1	<0.1	<0.1		0.061 (J)		<0.1		<0.1
3/3/2021								0.13	
3/4/2021									
9/21/2021	0.056 (J)	<0.1			0.071 (J)		<0.1		
9/22/2021			<0.1	<0.1		<0.1			0.069 (J)
9/23/2021									
9/27/2021									
9/28/2021								0.11	
2/1/2022	<0.1	<0.1	<0.1	<0.1	0.055 (J)	<0.1	<0.1		<0.1
2/2/2022								0.1	
2/3/2022									
2/4/2022									

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 3/11/2022 2:40 PM View: Pond BCD - Appendix III
Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWC-25I	BRGWC-29I	BRGWC-32S	BRGWC-27I	BRGWC-47	BRGWC-45	BRGWC-50	BRGWC-52I
8/31/2016								
9/1/2016								
9/6/2016								
9/8/2016	0.14 (J)	0.2 (J)	0.15 (J)	0.31				
11/15/2016								
11/16/2016								
11/17/2016	0.27 (J)							
11/18/2016				0.19 (J)				
11/21/2016		0.37	0.04 (J)					
2/20/2017								
2/21/2017	0.6			0.35				
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	0.5	0.4	<0.1	0.4				
2/13/2018								
2/14/2018	<0.1	<0.1	<0.1	<0.1				
3/6/2018					1.1	0.94		
3/15/2018							0.84 (JX)	
5/1/2018					0.595 (D)	<0.1	0.91	
6/26/2018	0.15 (J)							
6/27/2018		0.085 (J)	<0.1	0.26 (J)	0.27 (J)			
6/28/2018						0.69 (J+X)	1.1 (J+X)	
7/31/2018						<0.1		
8/1/2018					0.48		2	
8/10/2018								1.6 (O)
8/23/2018					0.34	<0.1		0.32
9/19/2018					0.23 (J)	<0.1		0.22 (J)
10/29/2018					<0.1	<0.1	0.24 (J)	0.14 (J)
11/28/2018					0.063 (J)	<0.1	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								<0.1
3/19/2019				0.2 (J)	<0.1			
3/20/2019	0.17 (JD)	0.091 (J)	<0.1			0.066 (J)	0.21 (J)	0.135 (JD)
8/27/2019	0.15 (J)		<0.1					
8/28/2019		0.055 (J)		0.074 (J)	<0.1	<0.1		
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			0.11 (J)	0.18 (J)				
3/3/2020								
3/4/2020	0.07 (J)	<0.1		<0.1	<0.1		0.14 (J)	0.1 (J)
3/5/2020			<0.1			<0.1		
8/18/2020								
8/19/2020	0.17	0.12	<0.1	0.19				

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 3/11/2022 2:40 PM View: Pond BCD - Appendix III
Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWC-25I	BRGWC-29I	BRGWC-32S	BRGWC-27I	BRGWC-47	BRGWC-45	BRGWC-50	BRGWC-52I
8/20/2020					<0.1	<0.1	0.39	0.23
9/15/2020	0.15	0.057 (J)						
9/16/2020			<0.1	0.15	<0.1	0.052 (J)		
9/17/2020							0.46	0.074 (J)
3/1/2021								
3/2/2021	0.15				<0.1	0.067 (J)		
3/3/2021		0.13		0.24				
3/4/2021			<0.1				0.6	0.28
9/21/2021								
9/22/2021								
9/23/2021					<0.1	0.06 (J)		
9/27/2021							0.43	
9/28/2021	0.15	0.081 (J)	<0.1	0.16				0.12
2/1/2022								
2/2/2022	0.15		<0.1		<0.1	<0.1		0.098 (J)
2/3/2022		0.11					0.42	
2/4/2022				0.14				

Prediction Limit

Constituent: pH, Field (S.U.) Analysis Run 3/11/2022 2:40 PM View: Pond BCD - Appendix III

Plant Branch Client: Southern Company Data: Plant Branch AP

	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	6.59	6.53	6.2	7.16					
9/1/2016					6.71	6	6.49		
9/6/2016								6.23	6.49
9/8/2016									
11/15/2016	6.67						6.59		
11/16/2016		6.4	6.12	6.96	6.15	6			
11/17/2016									5.79
11/18/2016									
11/21/2016								6.23	
2/20/2017	6.65	6.44					6.61		
2/21/2017			6.24	7.15	6.52	6.09			6.15
2/22/2017								6.16	
6/12/2017	6.64	6.4		7.31					
6/13/2017			6.19		6.42	6.03			5.87
6/14/2017					6.51			6.16	
9/26/2017	6.58	6.31	6.15	7.02	6.42	5.85	6.47		5.82
9/27/2017								6.16	
2/13/2018	6.72	6.62	6.18	7.44			6.54		
2/14/2018					6.48	5.99		6.24	5.83
3/15/2018									
5/1/2018									
6/26/2018	6.43	6.29	6.05	6.93	6.2	5.86	6.23		5.73
6/27/2018									
6/28/2018								6.21	
7/31/2018					6.37	5.99			
8/1/2018									
8/10/2018									
8/23/2018									
9/19/2018									
10/29/2018									
11/28/2018									
12/18/2018	6.7	6.57	5.92	6.76	6.5	6.08	6.71	6.18	5.78
12/19/2018									
12/20/2018									
1/16/2019									
1/17/2019									
2/13/2019									
3/6/2019									
3/19/2019	6.63	6.45	6.18	6.87	6.28	5.71	6.18		5.28
3/20/2019								6.24	
8/27/2019	6.49	6.37	6.09	6.79	6.35	6	6.35	6.17	
8/28/2019									
8/29/2019									5.64
10/15/2019	7.01	6.77	6.06	6.57	6.8	6.61	6.36		5.7
10/16/2019									
10/17/2019								6.43	
3/3/2020	6.49	6.29	6.1	6.71	6.33	5.94	6.59		
3/4/2020									5.7
3/5/2020								5.99	
5/12/2020									
8/18/2020	6.41	6.29	6.06	6.59	6.25	5.75	6.33		5.56
8/19/2020								6.36	

Prediction Limit

Constituent: pH, Field (S.U.) Analysis Run 3/11/2022 2:40 PM View: Pond BCD - Appendix III

Plant Branch Client: Southern Company Data: Plant Branch AP

	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)
8/20/2020									
9/15/2020	6.25	6.27	6.01	6.64	6.01	6	6.43		5.72
9/16/2020								6.29	
9/17/2020									
3/1/2021				6.66			6.7		
3/2/2021	6.42	6.47	6.2		6.11	5.92			5.75
3/3/2021								6.29	
3/4/2021									
9/21/2021	6.36	6.32			6.53	5.87			
9/22/2021			6.06	6.78			6.48		5.72
9/23/2021									
9/27/2021									
9/28/2021								6.33	
2/1/2022	6.39	6.38	5.95	6.83	6.4	5.81	6.54		5.65
2/2/2022								6.34	
2/3/2022									
2/4/2022									

Prediction Limit

Constituent: pH, Field (S.U.) Analysis Run 3/11/2022 2:40 PM View: Pond BCD - Appendix III

Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWC-32S	BRGWC-29I	BRGWC-25I	BRGWC-27I	BRGWC-45	BRGWC-50	BRGWC-47	BRGWC-52I
8/31/2016								
9/1/2016								
9/6/2016								
9/8/2016	5.89	4.62	6.07	5.51				
11/15/2016								
11/16/2016			5.96					
11/17/2016								
11/18/2016				5.53				
11/21/2016	5.56	4.44						
2/20/2017								
2/21/2017			5.98	5.63				
2/22/2017	5.87	4.42						
6/12/2017								
6/13/2017			5.96	5.57				
6/14/2017	5.83	4.45						
9/26/2017								
9/27/2017	5.87	4.33	5.85	5.53				
2/13/2018								
2/14/2018	6.01	4.42	5.94	5.83				
3/15/2018					5.26	5.26		
5/1/2018					6.14	5.38	5.85	
6/26/2018			5.87					
6/27/2018	5.83	4.37		5.53			5.87	
6/28/2018					5.88	5.03		
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					5.93	5.19	5.76	6.77
11/28/2018					5.99	5.28	5.74	6.44
12/18/2018		4.38	5.84					
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	5.88	4.4	6.03		6.1	5.32		6.59
8/27/2019	5.85		6.01					
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	6.09			6.01 (D)	5.93			
3/3/2020								
3/4/2020		4.5	6.02	5.8		5.2	5.76	6.54
3/5/2020	5.74				5.95			
5/12/2020	5.88							
8/18/2020								
8/19/2020	5.97	4.67	6.32	5.81				

Prediction Limit

Constituent: pH, Field (S.U.) Analysis Run 3/11/2022 2:40 PM View: Pond BCD - Appendix III

Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWC-32S	BRGWC-29I	BRGWC-25I	BRGWC-27I	BRGWC-45	BRGWC-50	BRGWC-47	BRGWC-52I
8/20/2020					5.86	5.26	5.75	6.85
9/15/2020		4.53	6					
9/16/2020	5.79			5.81	5.27		5.76	
9/17/2020						4.41		6.12
3/1/2021								
3/2/2021			6.1		6.17		5.59	
3/3/2021		4.46		5.9				
3/4/2021	5.98					4.34		5.87
9/21/2021								
9/22/2021								
9/23/2021					5.95		5.74	
9/27/2021						5.05		
9/28/2021	5.82	4.23	5.97	5.82				6.81
2/1/2022								
2/2/2022	5.99		6.23		5.92		5.75	6.35
2/3/2022		4.23				5.2		
2/4/2022				5.97				

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 3/11/2022 2:40 PM View: Pond BCD - Appendix III
Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWA-5S (bg)	BRGWA-5I (bg)	BRGWA-2S (bg)	BRGWA-2I (bg)	BRGWA-6S (bg)	BRGWA-12S (bg)	BRGWA-12I (bg)	BRGWA-23S (bg)	BRGWC-30I
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								38	310
9/8/2016									
11/15/2016	<1 (J)				0.68 (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)	82.2	250
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	83.4	440
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
9/15/2020	<1	1.7	<1	5.9	<1	<1	1.7	41.5	
9/16/2020									334
9/17/2020									
3/1/2021				4.7	0.74 (J)				
3/2/2021	<1	2.2	<1			0.51 (J)	1.7	54	

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 3/11/2022 2:40 PM View: Pond BCD - Appendix III
Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWA-5S (bg)	BRGWA-5I (bg)	BRGWA-2S (bg)	BRGWA-2I (bg)	BRGWA-6S (bg)	BRGWA-12S (bg)	BRGWA-12I (bg)	BRGWA-23S (bg)	BRGWC-30I
3/3/2021									371
3/4/2021									
9/21/2021	<1	2.3				0.51 (J)	1.7		
9/22/2021			<1	5.2	<1			34.6	
9/23/2021									
9/27/2021									
9/28/2021									612
2/1/2022	<1	2	<1	5.4	<1	<1	1.4	36.8	
2/2/2022									580
2/3/2022									
2/4/2022									

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 3/11/2022 2:40 PM View: Pond BCD - Appendix III
Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWC-32S	BRGWC-29I	BRGWC-25I	BRGWC-27I	BRGWC-45	BRGWC-47	BRGWC-50	BRGWC-52I
8/31/2016								
9/1/2016								
9/6/2016								
9/8/2016	370	460	280	300				
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	400	380	310	260				
2/13/2018								
2/14/2018	383	280	260	232				
3/6/2018					111	1560		
3/15/2018							1590	
5/1/2018					112	1465 (D)	1550	
6/26/2018			231					
6/27/2018	372	281		205		1450		
6/28/2018					109		1530	
7/31/2018					107			
8/1/2018						1560	1580	
8/10/2018								183
8/23/2018					108	1470		145
9/19/2018					117	1500		178
10/29/2018					127	1720	1750	157
11/28/2018					133	1730	1780	189
12/18/2018		293	231					
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	409	278	235 (D)		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		238	165	205		1380	1370	129
3/5/2020	269				106			
9/15/2020		241	126					
9/16/2020	255			190	103	1360		
9/17/2020							1330	165
3/1/2021								
3/2/2021			139		98.3	1360		

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 3/11/2022 2:40 PM View: Pond BCD - Appendix III
Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWC-32S	BRGWC-29I	BRGWC-25I	BRGWC-27I	BRGWC-45	BRGWC-47	BRGWC-50	BRGWC-52I
3/3/2021		341		172				
3/4/2021	185						1250	114
9/21/2021								
9/22/2021								
9/23/2021					97.5	1240		
9/27/2021							1180	
9/28/2021	189	250	112	137				132
2/1/2022								
2/2/2022	210		117		90.1	1170		126
2/3/2022		274					1270	
2/4/2022				172				

Prediction Limit

Constituent: Total Dissolved Solids (mg/L) Analysis Run 3/11/2022 2:40 PM View: Pond BCD - Appendix III

Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWA-5S (bg)	BRGWA-5I (bg)	BRGWA-2S (bg)	BRGWA-2I (bg)	BRGWA-6S (bg)	BRGWA-12S (bg)	BRGWA-12I (bg)	BRGWA-23S (bg)	BRGWC-30I
8/31/2016	154	138	88	151					
9/1/2016					299	69	142		
9/6/2016								146	505
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	194	448
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	208	715
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
9/15/2020	116	100	69	116	79	60	95	109	
9/16/2020									634
9/17/2020									
3/1/2021				98	39				
3/2/2021	96	80	43			43	93	105	

Prediction Limit

Constituent: Total Dissolved Solids (mg/L) Analysis Run 3/11/2022 2:40 PM View: Pond BCD - Appendix III

Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWA-5S (bg)	BRGWA-5I (bg)	BRGWA-2S (bg)	BRGWA-2I (bg)	BRGWA-6S (bg)	BRGWA-12S (bg)	BRGWA-12I (bg)	BRGWA-23S (bg)	BRGWC-30I
3/3/2021									690
3/4/2021									
9/21/2021	104	108				56	117		
9/22/2021			66	129	62			128	
9/23/2021									
9/27/2021									
9/28/2021									1050
2/1/2022	124	129	72	126	61	63	114	130	
2/2/2022									1110
2/3/2022									
2/4/2022									

Prediction Limit

Constituent: Total Dissolved Solids (mg/L) Analysis Run 3/11/2022 2:40 PM View: Pond BCD - Appendix III

Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWC-32S	BRGWC-29I	BRGWC-25I	BRGWC-27I	BRGWC-45	BRGWC-47	BRGWC-50	BRGWC-52I
8/31/2016								
9/1/2016								
9/6/2016								
9/8/2016	607	654	460	478				
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	601	518	457	376				
2/13/2018								
2/14/2018	628	487	431	503 (JX)				
3/6/2018					346	2200		
3/15/2018							2440	
5/1/2018					374	2080 (D)	2190	
6/26/2018			414					
6/27/2018	2280	648 (X)		458 (X)		31 (OX)		
6/28/2018					333		2290	
7/31/2018					393			
8/1/2018						2190	2360	
8/10/2018								344
8/23/2018					350	2160		333
9/19/2018					353	2160		364
10/29/2018					329	2130	2300	334
11/28/2018					358	2320	2300	357
12/18/2018		407	401					
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	564	391	410.5 (D)		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		391	330	326		2140	2270	351
3/5/2020	489				297			
9/15/2020		281	272					
9/16/2020	428			301	275	2090		
9/17/2020							1910	329
3/1/2021								
3/2/2021			280		264	1680		

Prediction Limit

Constituent: Total Dissolved Solids (mg/L) Analysis Run 3/11/2022 2:40 PM View: Pond BCD - Appendix III

Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWC-32S	BRGWC-29I	BRGWC-25I	BRGWC-27I	BRGWC-45	BRGWC-47	BRGWC-50	BRGWC-52I
3/3/2021		515		288				
3/4/2021	350						1520	383
9/21/2021								
9/22/2021								
9/23/2021					277	1770		
9/27/2021							1800	
9/28/2021	375	457	270	262				336
2/1/2022								
2/2/2022	443		283		276	1850		160
2/3/2022		419					1850	
2/4/2022				301				

FIGURE E.

Appendix III Trend Tests - Prediction Limit Exceedances - Significant Results

Plant Branch Client: Southern Company Data: Plant Branch AP Printed 3/11/2022, 2:38 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Boron (mg/L)	**BRGWC-27I**	**-0.1419**	**-69**	**-58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	**BRGWC-29I**	**-0.1536**	**-62**	**-53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**BRGWA-6S (bg)**	**0.1798**	**62**	**53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**BRGWC-25I**	**-5.521**	**-83**	**-53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**BRGWC-27I**	**-4.713**	**-61**	**-53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**BRGWC-30I**	**17.73**	**82**	**53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	**BRGWA-12I (bg)**	**-0.2211**	**-78**	**-58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	**BRGWA-5I (bg)**	**-0.2086**	**-56**	**-53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	**BRGWC-45**	**-8.179**	**-62**	**-58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	**BRGWC-50**	**-1.993**	**-63**	**-53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	**BRGWC-52I**	**-0.4148**	**-63**	**-53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
pH, Field (S.U.)	**BRGWA-23S (bg)**	**-0.05219**	**-70**	**-63**	**Yes**	**17**	**0**	**n/a**	**n/a**	**0.01**	**NP**
pH, Field (S.U.)	**BRGWA-2I (bg)**	**-0.1124**	**-70**	**-63**	**Yes**	**17**	**0**	**n/a**	**n/a**	**0.01**	**NP**
pH, Field (S.U.)	**BRGWA-5S (bg)**	**-0.05509**	**-67**	**-63**	**Yes**	**17**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**BRGWA-12I (bg)**	**-0.2541**	**-99**	**-58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**BRGWA-12S (bg)**	**-0.1639**	**-81**	**-58**	**Yes**	**16**	**18.75**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**BRGWC-25I**	**-39.04**	**-74**	**-53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**BRGWC-27I**	**-24.32**	**-81**	**-53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**BRGWC-29I**	**-41.71**	**-65**	**-53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**BRGWC-32S**	**-41.22**	**-65**	**-53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Total Dissolved Solids (mg/L)	**BRGWC-27I**	**-28.24**	**-71**	**-53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Total Dissolved Solids (mg/L)	**BRGWC-30I**	**78.21**	**59**	**53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Total Dissolved Solids (mg/L)	**BRGWC-32S**	**-55.67**	**-72**	**-53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Total Dissolved Solids (mg/L)	**BRGWC-50**	**-141.2**	**-61**	**-53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**

Appendix III Trend Tests - Prediction Limit Exceedances - All Results

Plant Branch Client: Southern Company Data: Plant Branch AP Printed 3/11/2022, 2:38 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Boron (mg/L)	BRGWA-12I (bg)	0	0	53	No	15	20	n/a	n/a	0.01	NP
Boron (mg/L)	BRGWA-12S (bg)	0	5	53	No	15	80	n/a	n/a	0.01	NP
Boron (mg/L)	BRGWA-23S (bg)	0.001293	14	53	No	15	13.33	n/a	n/a	0.01	NP
Boron (mg/L)	BRGWA-2I (bg)	0.003356	31	53	No	15	26.67	n/a	n/a	0.01	NP
Boron (mg/L)	BRGWA-2S (bg)	0	12	53	No	15	93.33	n/a	n/a	0.01	NP
Boron (mg/L)	BRGWA-5I (bg)	0	10	53	No	15	73.33	n/a	n/a	0.01	NP
Boron (mg/L)	BRGWA-5S (bg)	0	7	53	No	15	60	n/a	n/a	0.01	NP
Boron (mg/L)	BRGWA-6S (bg)	0	18	53	No	15	73.33	n/a	n/a	0.01	NP
Boron (mg/L)	BRGWC-25I	-0.1117	-48	-53	No	15	0	n/a	n/a	0.01	NP
Boron (mg/L)	**BRGWC-27I**	**-0.1419**	**-69**	**-58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	**BRGWC-29I**	**-0.1536**	**-62**	**-53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	BRGWC-30I	0	-2	-58	No	16	0	n/a	n/a	0.01	NP
Boron (mg/L)	BRGWC-32S	-0.03856	-27	-58	No	16	0	n/a	n/a	0.01	NP
Boron (mg/L)	BRGWC-47	0.02205	28	58	No	16	0	n/a	n/a	0.01	NP
Boron (mg/L)	BRGWC-50	0	0	53	No	15	0	n/a	n/a	0.01	NP
Boron (mg/L)	BRGWC-52I	0	11	53	No	15	0	n/a	n/a	0.01	NP
Calcium (mg/L)	BRGWA-12I (bg)	0.02053	1	58	No	16	6.25	n/a	n/a	0.01	NP
Calcium (mg/L)	BRGWA-12S (bg)	0.1659	21	58	No	16	6.25	n/a	n/a	0.01	NP
Calcium (mg/L)	BRGWA-23S (bg)	-0.9777	-44	-53	No	15	6.667	n/a	n/a	0.01	NP
Calcium (mg/L)	BRGWA-2I (bg)	0.6672	48	53	No	15	6.667	n/a	n/a	0.01	NP
Calcium (mg/L)	BRGWA-2S (bg)	0.04148	15	53	No	15	0	n/a	n/a	0.01	NP
Calcium (mg/L)	BRGWA-5I (bg)	0	2	53	No	15	6.667	n/a	n/a	0.01	NP
Calcium (mg/L)	BRGWA-5S (bg)	-0.4361	-27	-53	No	15	6.667	n/a	n/a	0.01	NP
Calcium (mg/L)	**BRGWA-6S (bg)**	**0.1798**	**62**	**53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**BRGWC-25I**	**-5.521**	**-83**	**-53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**BRGWC-27I**	**-4.713**	**-61**	**-53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	BRGWC-29I	-7.862	-53	-53	No	15	0	n/a	n/a	0.01	NP
Calcium (mg/L)	**BRGWC-30I**	**17.73**	**82**	**53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	BRGWC-32S	-5.259	-49	-53	No	15	0	n/a	n/a	0.01	NP
Calcium (mg/L)	BRGWC-45	-2.499	-55	-58	No	16	0	n/a	n/a	0.01	NP
Calcium (mg/L)	BRGWC-47	3.192	10	58	No	16	0	n/a	n/a	0.01	NP
Calcium (mg/L)	BRGWC-50	-7.971	-33	-53	No	15	0	n/a	n/a	0.01	NP
Calcium (mg/L)	BRGWC-52I	1.724	17	48	No	14	0	n/a	n/a	0.01	NP
Chloride (mg/L)	**BRGWA-12I (bg)**	**-0.2211**	**-78**	**-58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	BRGWA-12S (bg)	0.03281	23	58	No	16	0	n/a	n/a	0.01	NP
Chloride (mg/L)	BRGWA-23S (bg)	-0.1919	-51	-53	No	15	0	n/a	n/a	0.01	NP
Chloride (mg/L)	BRGWA-2I (bg)	-0.06183	-41	-53	No	15	0	n/a	n/a	0.01	NP
Chloride (mg/L)	BRGWA-2S (bg)	-0.03836	-34	-53	No	15	0	n/a	n/a	0.01	NP
Chloride (mg/L)	**BRGWA-5I (bg)**	**-0.2086**	**-56**	**-53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	BRGWA-5S (bg)	-0.08614	-37	-53	No	15	0	n/a	n/a	0.01	NP
Chloride (mg/L)	BRGWA-6S (bg)	-0.03205	-24	-53	No	15	0	n/a	n/a	0.01	NP
Chloride (mg/L)	BRGWC-29I	-0.2369	-43	-53	No	15	0	n/a	n/a	0.01	NP
Chloride (mg/L)	**BRGWC-45**	**-8.179**	**-62**	**-58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	**BRGWC-50**	**-1.993**	**-63**	**-53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	**BRGWC-52I**	**-0.4148**	**-63**	**-53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
pH, Field (S.U.)	BRGWA-12I (bg)	-0.03862	-42	-74	No	19	0	n/a	n/a	0.01	NP
pH, Field (S.U.)	BRGWA-12S (bg)	-0.0257	-42	-68	No	18	0	n/a	n/a	0.01	NP
pH, Field (S.U.)	**BRGWA-23S (bg)**	**-0.05219**	**-70**	**-63**	**Yes**	**17**	**0**	**n/a**	**n/a**	**0.01**	**NP**
pH, Field (S.U.)	**BRGWA-2I (bg)**	**-0.1124**	**-70**	**-63**	**Yes**	**17**	**0**	**n/a**	**n/a**	**0.01**	**NP**
pH, Field (S.U.)	BRGWA-2S (bg)	-0.03283	-57	-63	No	17	0	n/a	n/a	0.01	NP
pH, Field (S.U.)	BRGWA-5I (bg)	-0.02424	-30	-63	No	17	0	n/a	n/a	0.01	NP
pH, Field (S.U.)	**BRGWA-5S (bg)**	**-0.05509**	**-67**	**-63**	**Yes**	**17**	**0**	**n/a**	**n/a**	**0.01**	**NP**
pH, Field (S.U.)	BRGWA-6S (bg)	-0.0009881	-2	-58	No	16	0	n/a	n/a	0.01	NP
pH, Field (S.U.)	BRGWC-29I	-0.01818	-12	-63	No	17	0	n/a	n/a	0.01	NP
pH, Field (S.U.)	BRGWC-50	-0.04782	-33	-68	No	18	0	n/a	n/a	0.01	NP

Appendix III Trend Tests - Prediction Limit Exceedances - All Results

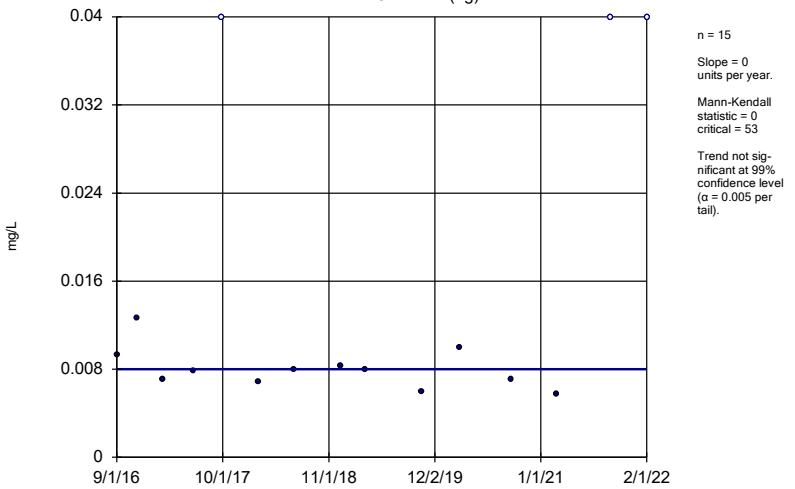
Plant Branch Client: Southern Company Data: Plant Branch AP Printed 3/11/2022, 2:38 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Sulfate (mg/L)	**BRGWA-12I (bg)**	**-0.2541**	**-99**	**-58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**BRGWA-12S (bg)**	**-0.1639**	**-81**	**-58**	**Yes**	**16**	**18.75**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	BRGWA-23S (bg)	-3.401	-27	-53	No	15	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	BRGWA-2I (bg)	-0.2041	-31	-53	No	15	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	BRGWA-2S (bg)	0	-2	-53	No	15	40	n/a	n/a	0.01	NP
Sulfate (mg/L)	BRGWA-5I (bg)	-0.3476	-39	-53	No	15	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	BRGWA-5S (bg)	-0.08161	-49	-53	No	15	40	n/a	n/a	0.01	NP
Sulfate (mg/L)	BRGWA-6S (bg)	-0.01199	-21	-53	No	15	26.67	n/a	n/a	0.01	NP
Sulfate (mg/L)	**BRGWC-25I**	**-39.04**	**-74**	**-53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**BRGWC-27I**	**-24.32**	**-81**	**-53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**BRGWC-29I**	**-41.71**	**-65**	**-53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	BRGWC-30I	32.33	45	53	No	15	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	**BRGWC-32S**	**-41.22**	**-65**	**-53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	BRGWC-45	-4.331	-53	-58	No	16	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	BRGWC-47	-78.04	-46	-58	No	16	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	BRGWC-50	-111.5	-40	-48	No	14	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	BRGWC-52I	-14.1	-42	-53	No	15	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	BRGWA-12I (bg)	-5.398	-47	-58	No	16	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	BRGWA-12S (bg)	-5.997	-36	-58	No	16	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	BRGWA-23S (bg)	-10.78	-38	-53	No	15	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	BRGWA-2I (bg)	-5.671	-21	-53	No	15	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	BRGWA-2S (bg)	2.173	17	53	No	15	6.667	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	BRGWA-5I (bg)	-3.555	-23	-53	No	15	6.667	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	BRGWA-5S (bg)	-6.868	-52	-53	No	15	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	BRGWA-6S (bg)	-2.765	-14	-53	No	15	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	**BRGWC-27I**	**-28.24**	**-71**	**-53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Total Dissolved Solids (mg/L)	BRGWC-29I	-70.99	-50	-53	No	15	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	**BRGWC-30I**	**78.21**	**59**	**53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Total Dissolved Solids (mg/L)	**BRGWC-32S**	**-55.67**	**-72**	**-53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Total Dissolved Solids (mg/L)	BRGWC-47	-93.11	-48	-53	No	15	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	**BRGWC-50**	**-141.2**	**-61**	**-53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**

Sanitas™ v.9.6.32 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

BRGWA-12I (bg)



n = 15

Slope = 0 units per year.

Mann-Kendall statistic = 0 critical = 53

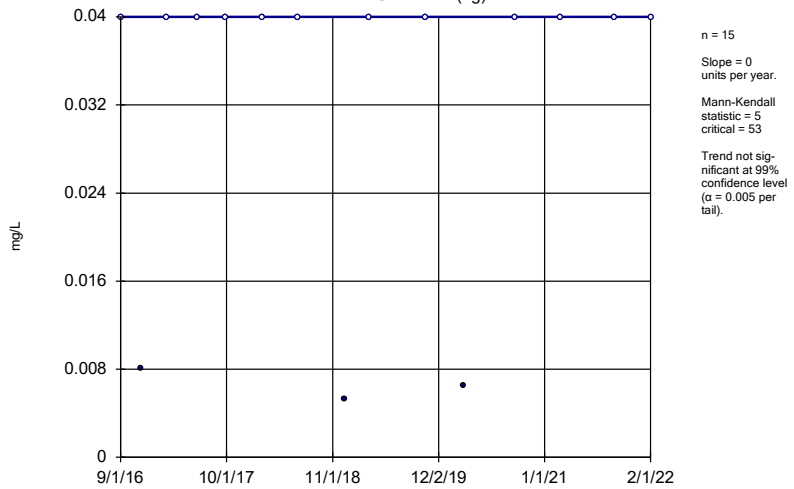
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 3/11/2022 2:35 PM View: Pond BCD - Appendix III Trend Tests
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.32 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

BRGWA-12S (bg)



n = 15

Slope = 0 units per year.

Mann-Kendall statistic = 5 critical = 53

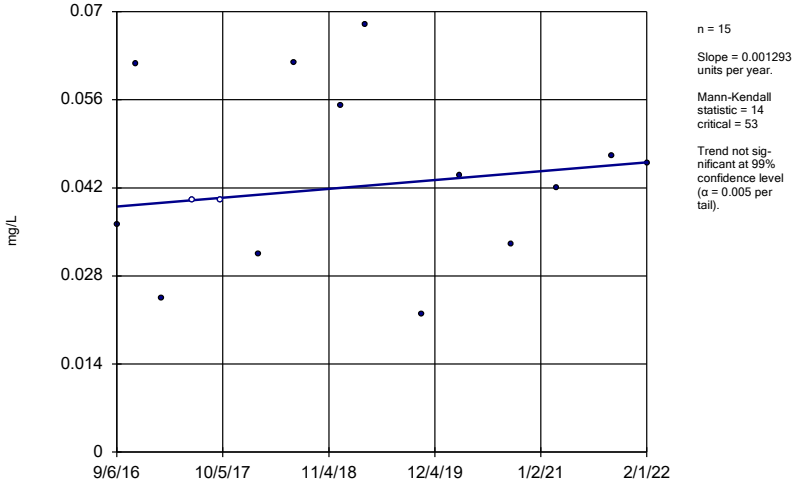
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 3/11/2022 2:35 PM View: Pond BCD - Appendix III Trend Tests
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.32 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

BRGWA-23S (bg)



n = 15

Slope = 0.001293 units per year.

Mann-Kendall statistic = 14 critical = 53

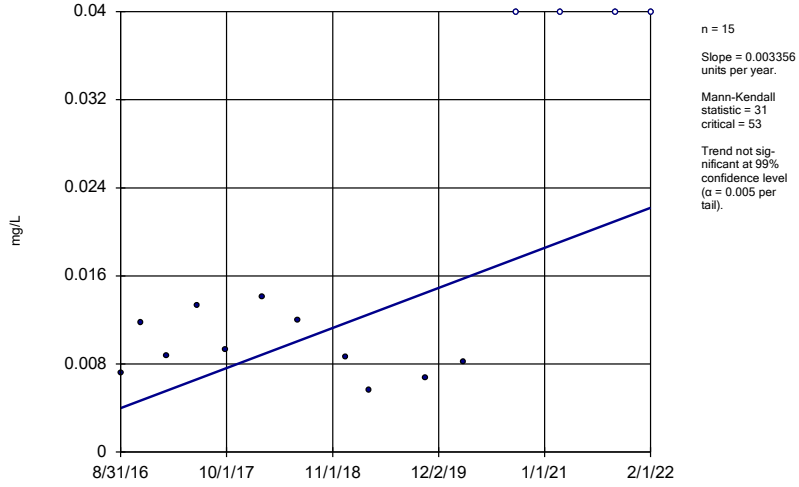
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 3/11/2022 2:35 PM View: Pond BCD - Appendix III Trend Tests
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.32 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

BRGWA-2I (bg)



n = 15

Slope = 0.003356 units per year.

Mann-Kendall statistic = 31 critical = 53

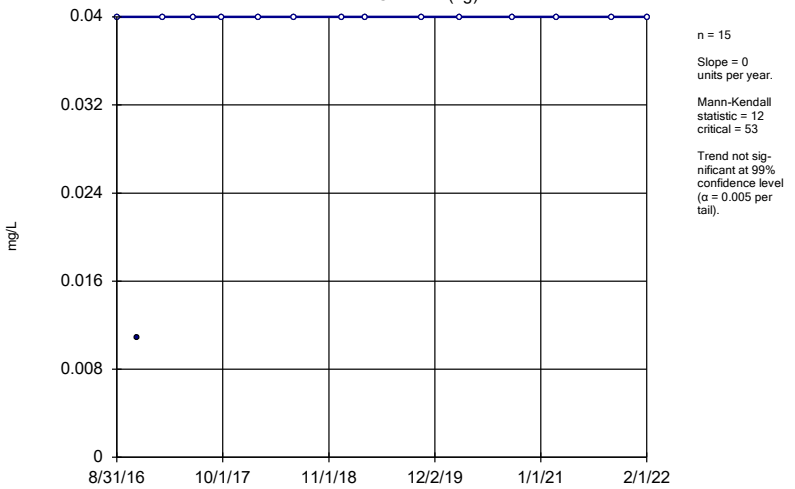
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 3/11/2022 2:35 PM View: Pond BCD - Appendix III Trend Tests
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.32 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

BRGWA-2S (bg)



n = 15

Slope = 0 units per year.

Mann-Kendall statistic = 12
critical = 53

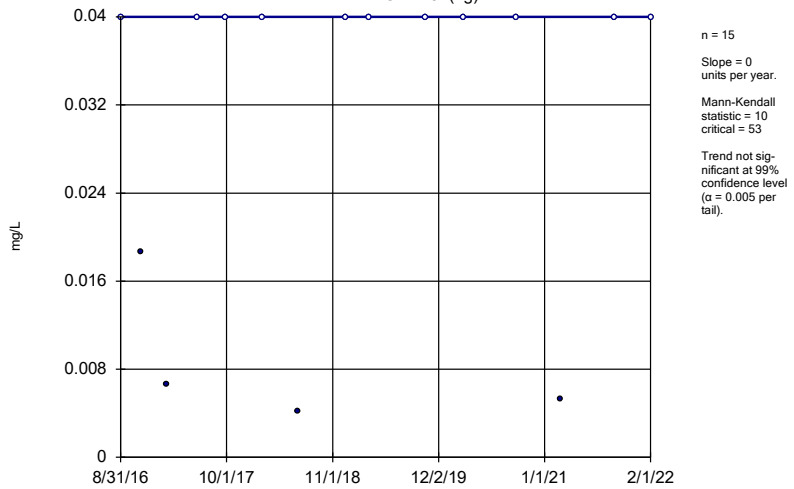
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 3/11/2022 2:35 PM View: Pond BCD - Appendix III Trend Tests
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.32 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

BRGWA-5I (bg)



n = 15

Slope = 0 units per year.

Mann-Kendall statistic = 10
critical = 53

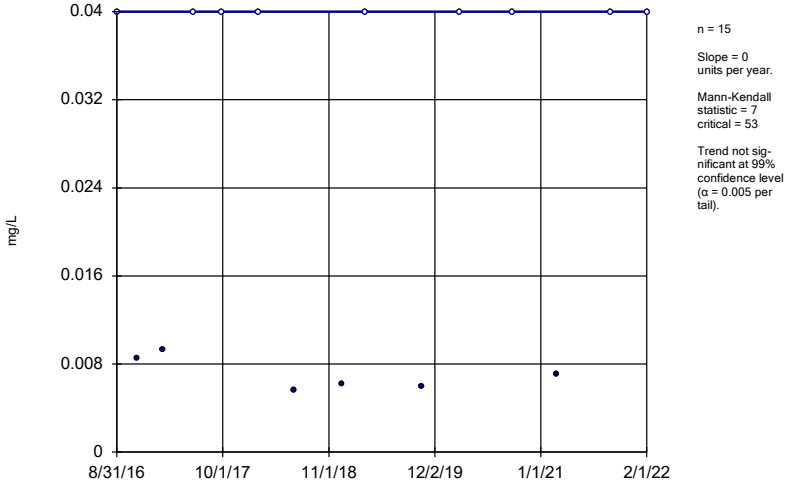
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 3/11/2022 2:35 PM View: Pond BCD - Appendix III Trend Tests
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.32 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

BRGWA-5S (bg)



n = 15

Slope = 0 units per year.

Mann-Kendall statistic = 7
critical = 53

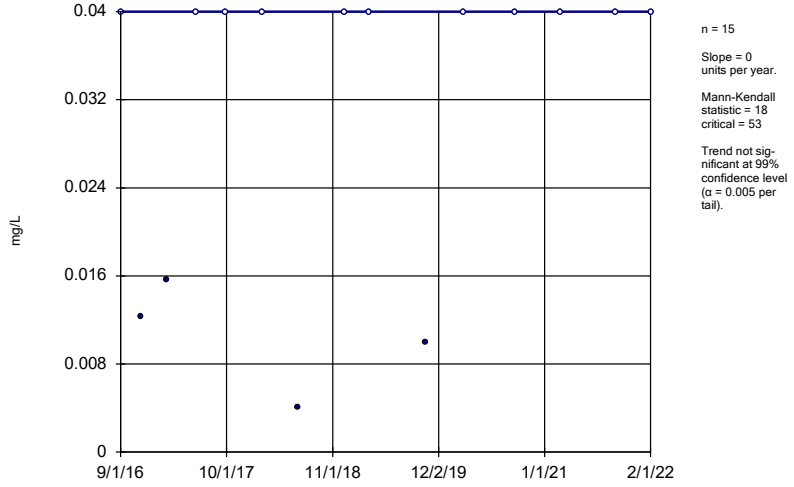
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 3/11/2022 2:35 PM View: Pond BCD - Appendix III Trend Tests
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.32 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

BRGWA-6S (bg)



n = 15

Slope = 0 units per year.

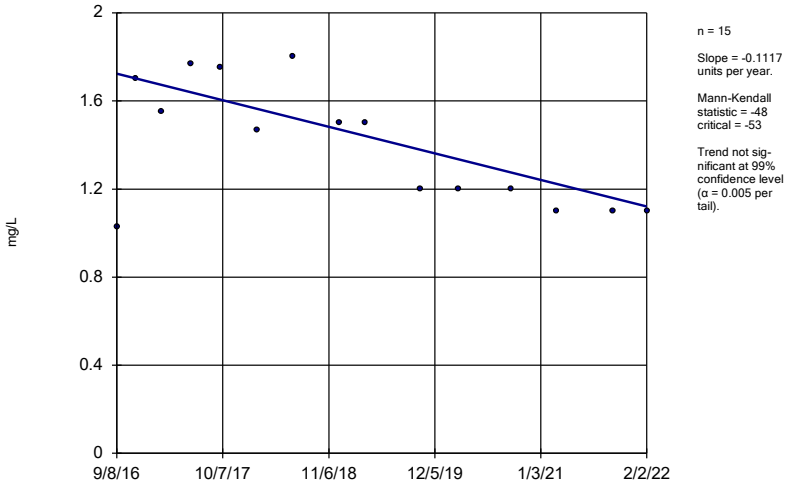
Mann-Kendall statistic = 18
critical = 53

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 3/11/2022 2:35 PM View: Pond BCD - Appendix III Trend Tests
Plant Branch Client: Southern Company Data: Plant Branch AP

Sen's Slope Estimator

BRGWC-25I



n = 15

Slope = -0.1117 units per year.

Mann-Kendall statistic = -48 critical = -53

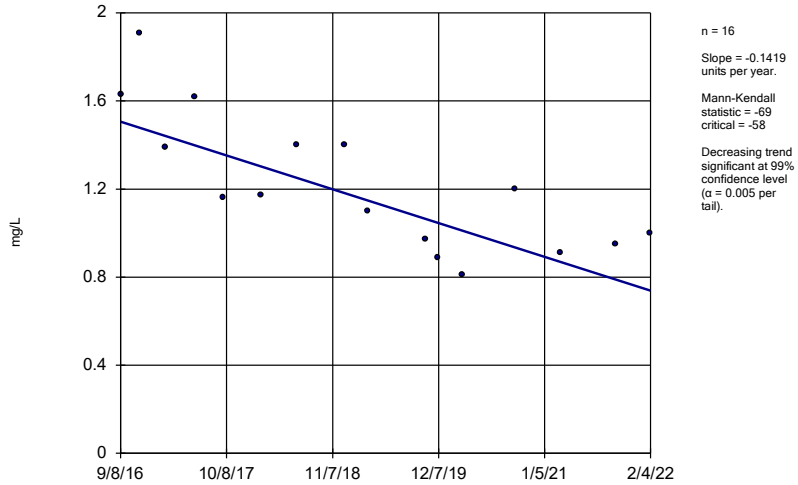
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 3/11/2022 2:35 PM View: Pond BCD - Appendix III Trend Tests
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.32 Groundwater Stats Consulting. UG

Sen's Slope Estimator

BRGWC-27I



n = 16

Slope = -0.1419 units per year.

Mann-Kendall statistic = -69 critical = -58

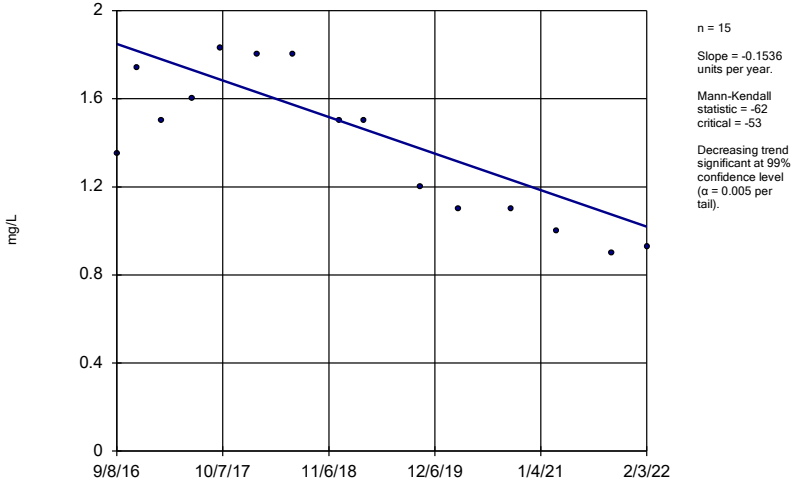
Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 3/11/2022 2:35 PM View: Pond BCD - Appendix III Trend Tests
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.32 Groundwater Stats Consulting. UG

Sen's Slope Estimator

BRGWC-29I



n = 15

Slope = -0.1536 units per year.

Mann-Kendall statistic = -62 critical = -53

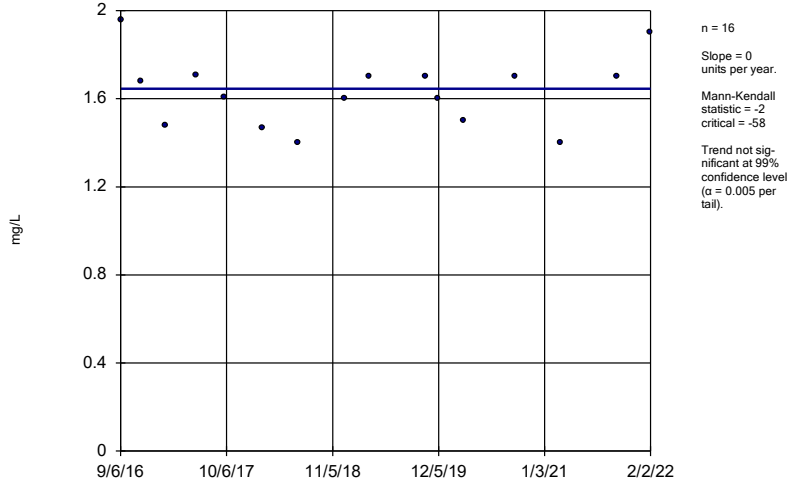
Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 3/11/2022 2:35 PM View: Pond BCD - Appendix III Trend Tests
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.32 Groundwater Stats Consulting. UG

Sen's Slope Estimator

BRGWC-30I



n = 16

Slope = 0 units per year.

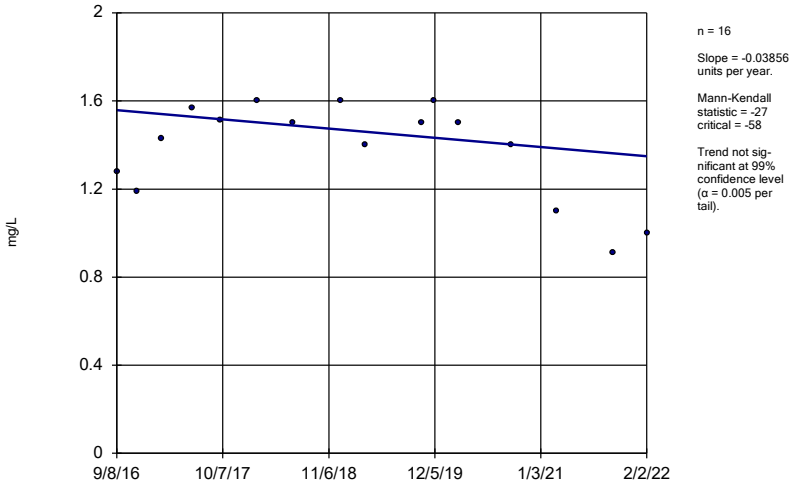
Mann-Kendall statistic = -2 critical = -58

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 3/11/2022 2:35 PM View: Pond BCD - Appendix III Trend Tests
Plant Branch Client: Southern Company Data: Plant Branch AP

Sen's Slope Estimator

BRGWC-32S



n = 16

Slope = -0.03856 units per year.

Mann-Kendall statistic = -27 critical = -58

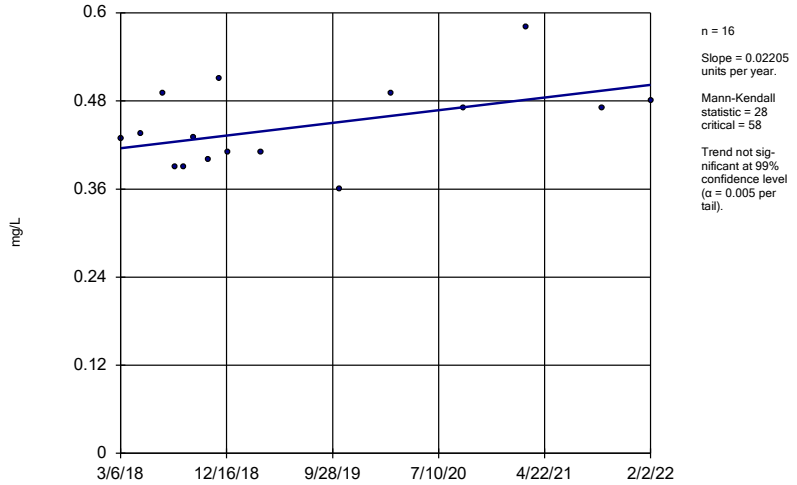
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 3/11/2022 2:35 PM View: Pond BCD - Appendix III Trend Tests
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.32 Groundwater Stats Consulting. UG

Sen's Slope Estimator

BRGWC-47



n = 16

Slope = 0.02205 units per year.

Mann-Kendall statistic = 28 critical = 58

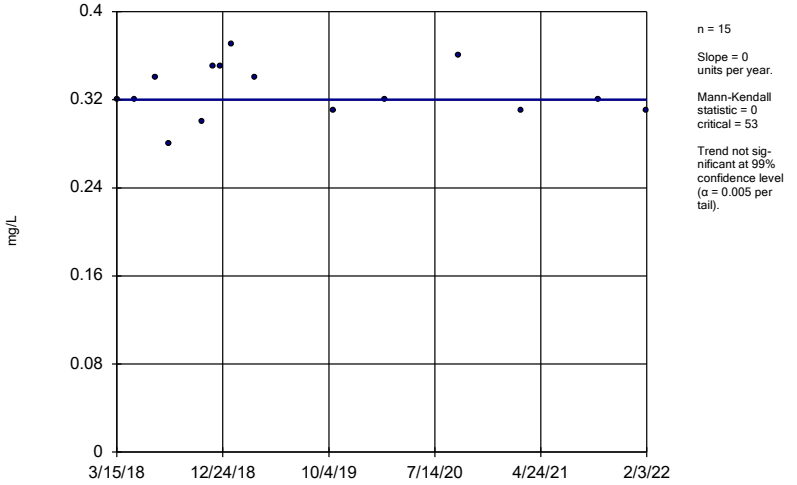
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 3/11/2022 2:35 PM View: Pond BCD - Appendix III Trend Tests
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.32 Groundwater Stats Consulting. UG

Sen's Slope Estimator

BRGWC-50



n = 15

Slope = 0 units per year.

Mann-Kendall statistic = 0 critical = 53

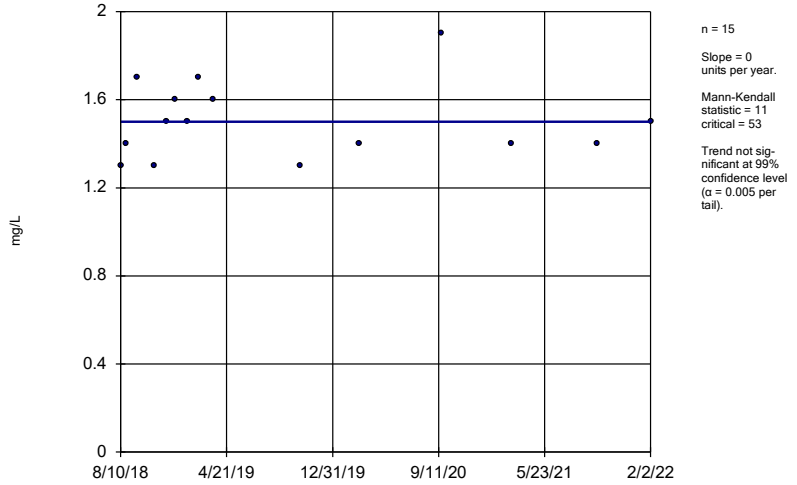
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 3/11/2022 2:35 PM View: Pond BCD - Appendix III Trend Tests
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.32 Groundwater Stats Consulting. UG

Sen's Slope Estimator

BRGWC-52I



n = 15

Slope = 0 units per year.

Mann-Kendall statistic = 11 critical = 53

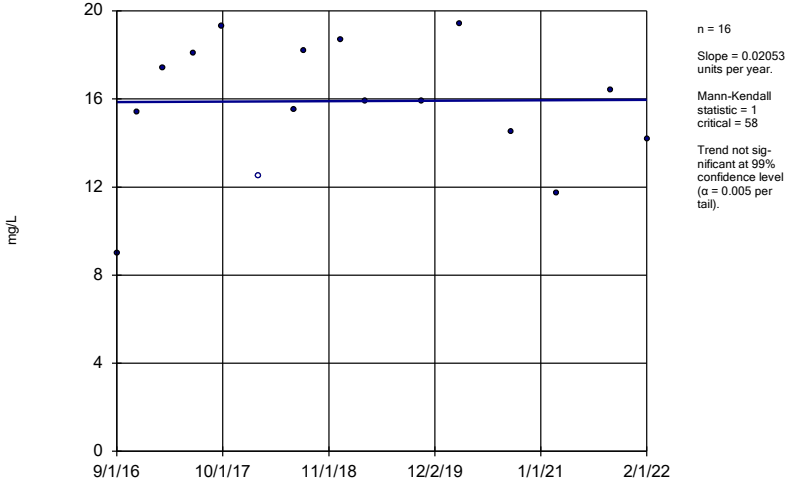
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 3/11/2022 2:35 PM View: Pond BCD - Appendix III Trend Tests
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.32 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

BRGWA-12I (bg)



n = 16

Slope = 0.02053 units per year.

Mann-Kendall statistic = 1
critical = 58

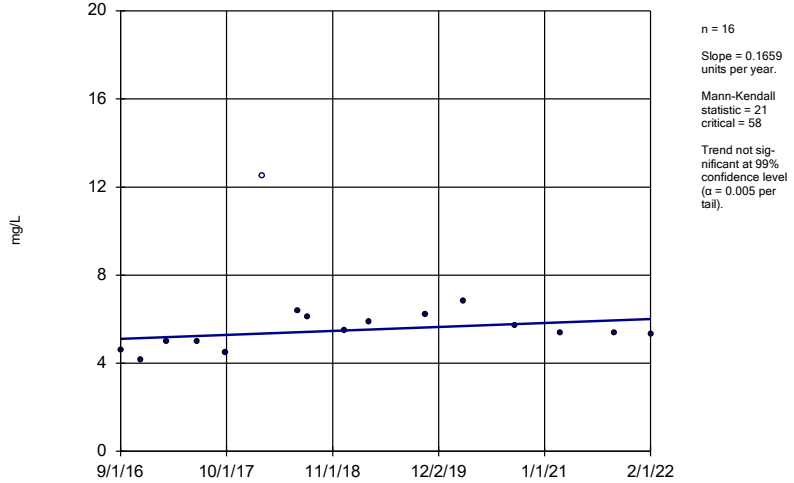
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 3/11/2022 2:35 PM View: Pond BCD - Appendix III Trend Tests
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.32 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

BRGWA-12S (bg)



n = 16

Slope = 0.1659 units per year.

Mann-Kendall statistic = 21
critical = 58

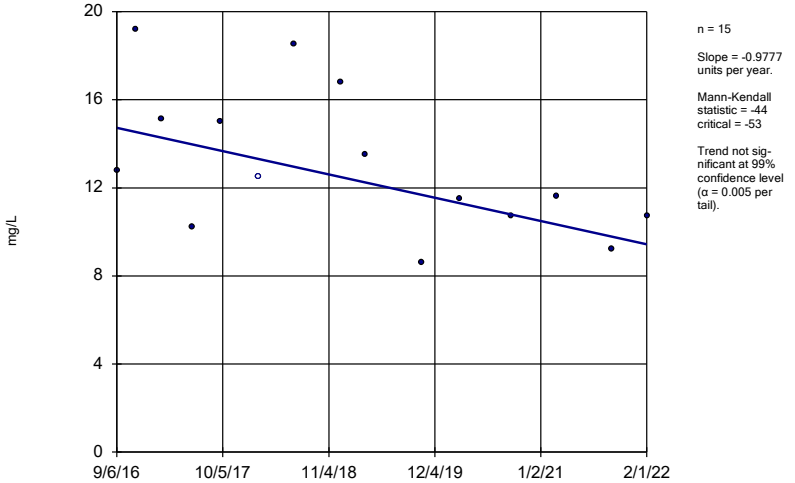
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 3/11/2022 2:35 PM View: Pond BCD - Appendix III Trend Tests
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.32 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

BRGWA-23S (bg)



n = 15

Slope = -0.9777 units per year.

Mann-Kendall statistic = -44
critical = -53

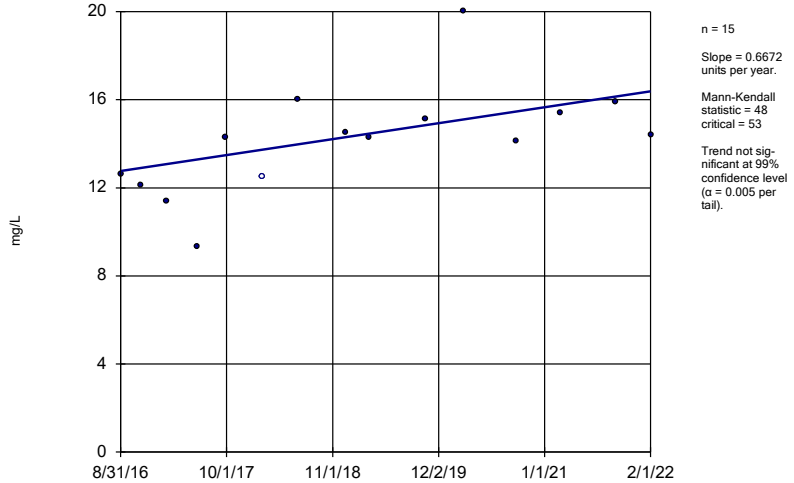
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 3/11/2022 2:35 PM View: Pond BCD - Appendix III Trend Tests
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.32 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

BRGWA-2I (bg)



n = 15

Slope = 0.6672 units per year.

Mann-Kendall statistic = 48
critical = 53

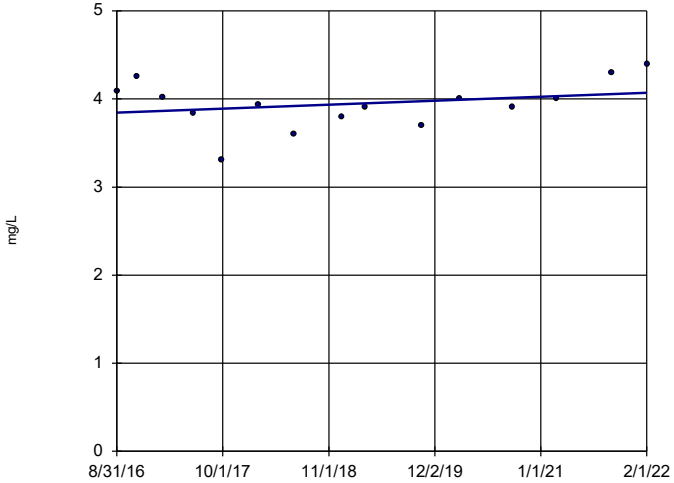
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 3/11/2022 2:35 PM View: Pond BCD - Appendix III Trend Tests
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.32 Groundwater Stats Consulting. UG

Sen's Slope Estimator

BRGWA-2S (bg)



n = 15

Slope = 0.04148 units per year.

Mann-Kendall statistic = 15 critical = 53

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 3/11/2022 2:35 PM View: Pond BCD - Appendix III Trend Tests

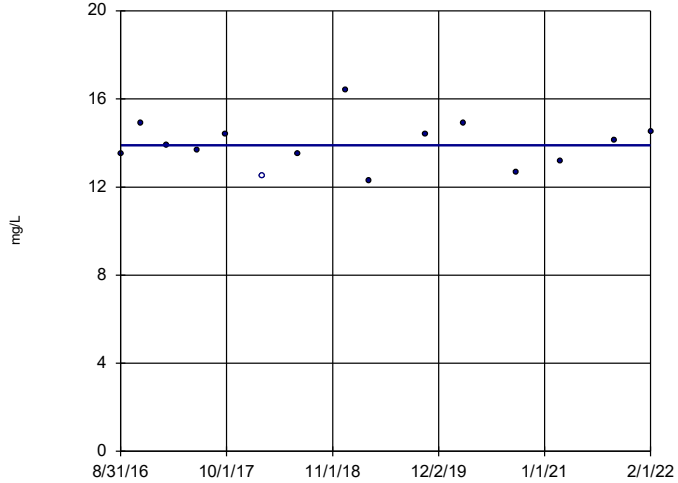
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.32 Groundwater Stats Consulting. UG

Hollow symbols indicate censored values.

Sen's Slope Estimator

BRGWA-5I (bg)



n = 15

Slope = 0 units per year.

Mann-Kendall statistic = 2 critical = 53

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 3/11/2022 2:35 PM View: Pond BCD - Appendix III Trend Tests

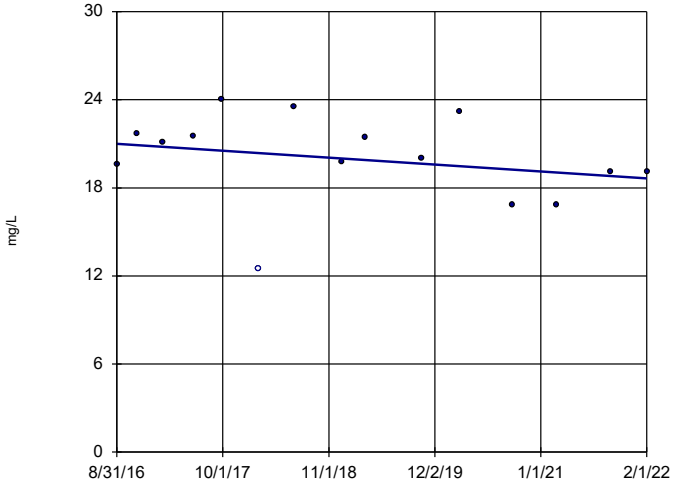
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.32 Groundwater Stats Consulting. UG

Hollow symbols indicate censored values.

Sen's Slope Estimator

BRGWA-5S (bg)



n = 15

Slope = -0.4361 units per year.

Mann-Kendall statistic = -27 critical = -53

Trend not significant at 99% confidence level (α = 0.005 per tail).

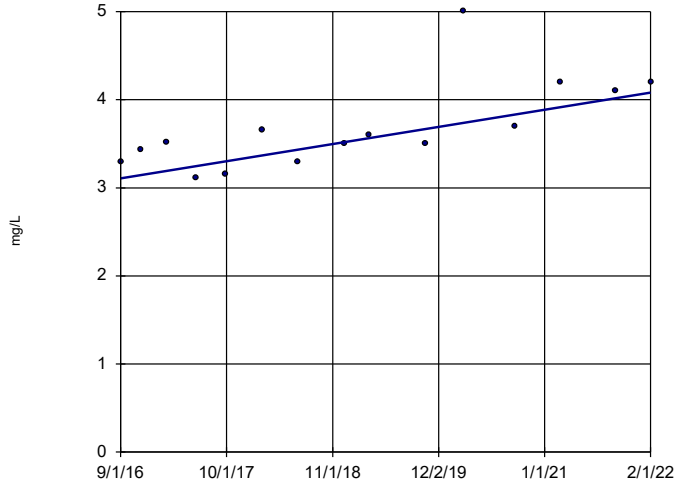
Constituent: Calcium Analysis Run 3/11/2022 2:35 PM View: Pond BCD - Appendix III Trend Tests

Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.32 Groundwater Stats Consulting. UG

Sen's Slope Estimator

BRGWA-6S (bg)



n = 15

Slope = 0.1798 units per year.

Mann-Kendall statistic = 62 critical = 53

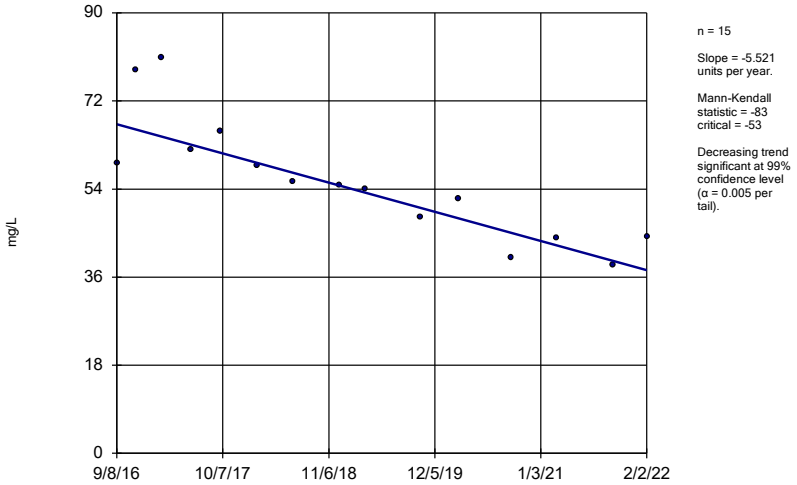
Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 3/11/2022 2:35 PM View: Pond BCD - Appendix III Trend Tests

Plant Branch Client: Southern Company Data: Plant Branch AP

Sen's Slope Estimator

BRGWC-25I



n = 15

Slope = -5.521 units per year.

Mann-Kendall statistic = -83
critical = -53

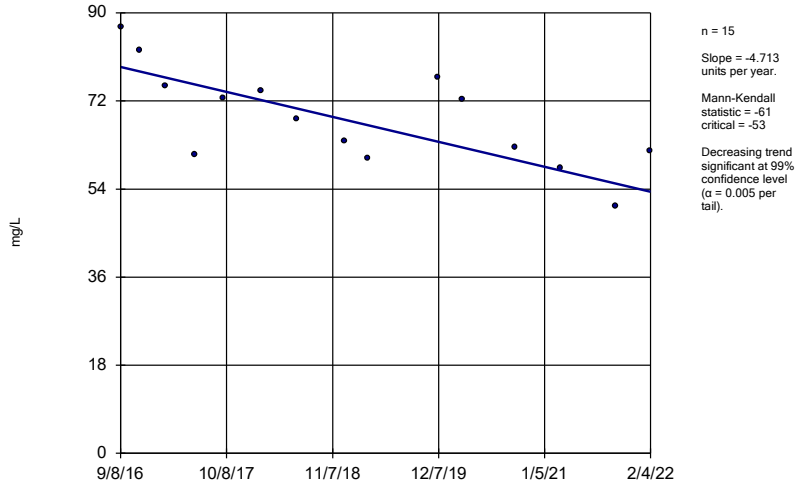
Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 3/11/2022 2:35 PM View: Pond BCD - Appendix III Trend Tests
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.32 Groundwater Stats Consulting. UG

Sen's Slope Estimator

BRGWC-27I



n = 15

Slope = -4.713 units per year.

Mann-Kendall statistic = -61
critical = -53

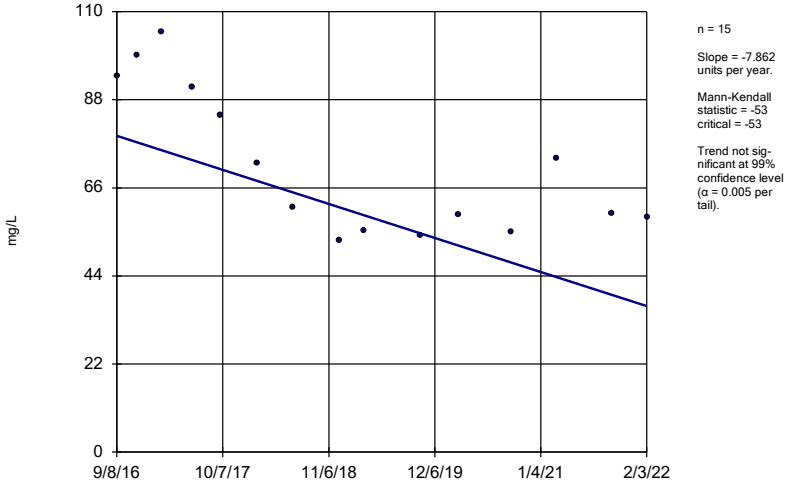
Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 3/11/2022 2:35 PM View: Pond BCD - Appendix III Trend Tests
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.32 Groundwater Stats Consulting. UG

Sen's Slope Estimator

BRGWC-29I



n = 15

Slope = -7.862 units per year.

Mann-Kendall statistic = -53
critical = -53

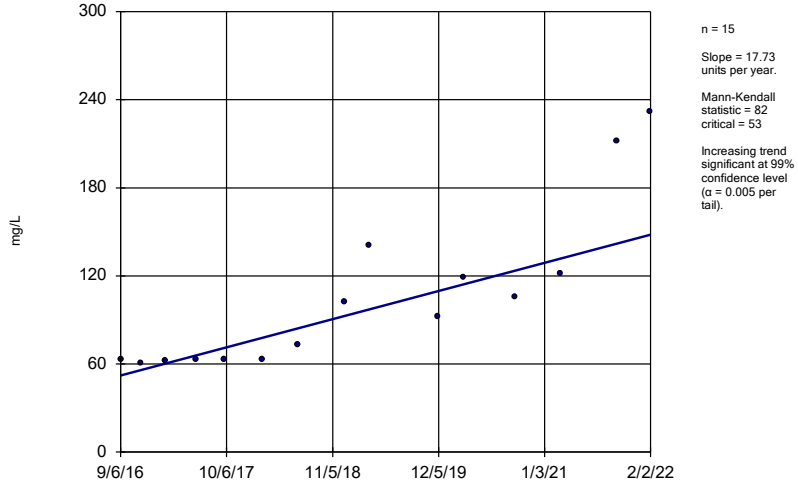
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 3/11/2022 2:35 PM View: Pond BCD - Appendix III Trend Tests
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.32 Groundwater Stats Consulting. UG

Sen's Slope Estimator

BRGWC-30I



n = 15

Slope = 17.73 units per year.

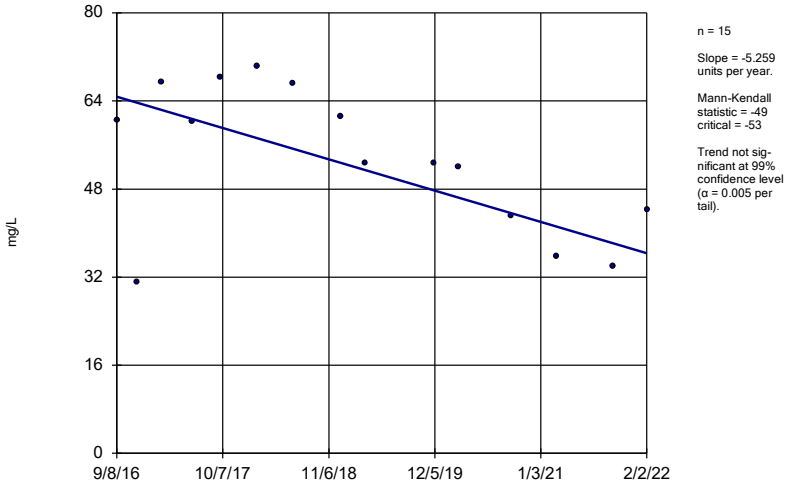
Mann-Kendall statistic = 82
critical = 53

Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 3/11/2022 2:35 PM View: Pond BCD - Appendix III Trend Tests
Plant Branch Client: Southern Company Data: Plant Branch AP

Sen's Slope Estimator

BRGWC-32S



n = 15

Slope = -5.259 units per year.

Mann-Kendall statistic = -49
critical = -53

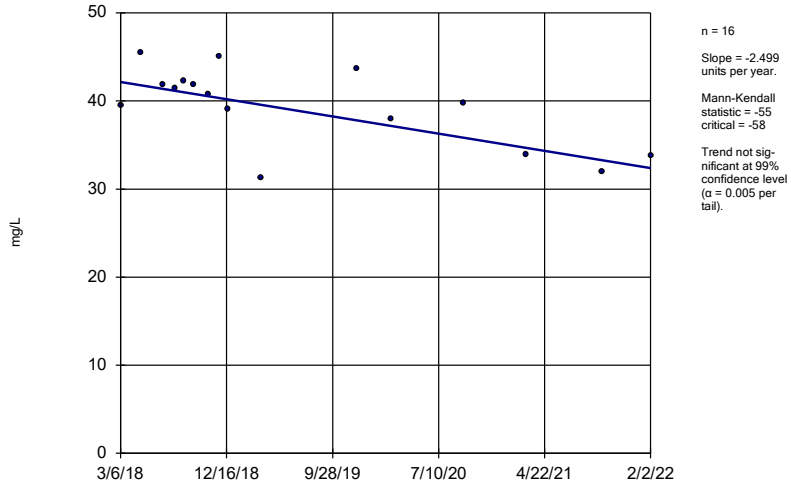
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 3/11/2022 2:35 PM View: Pond BCD - Appendix III Trend Tests
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.32 Groundwater Stats Consulting. UG

Sen's Slope Estimator

BRGWC-45



n = 16

Slope = -2.499 units per year.

Mann-Kendall statistic = -55
critical = -58

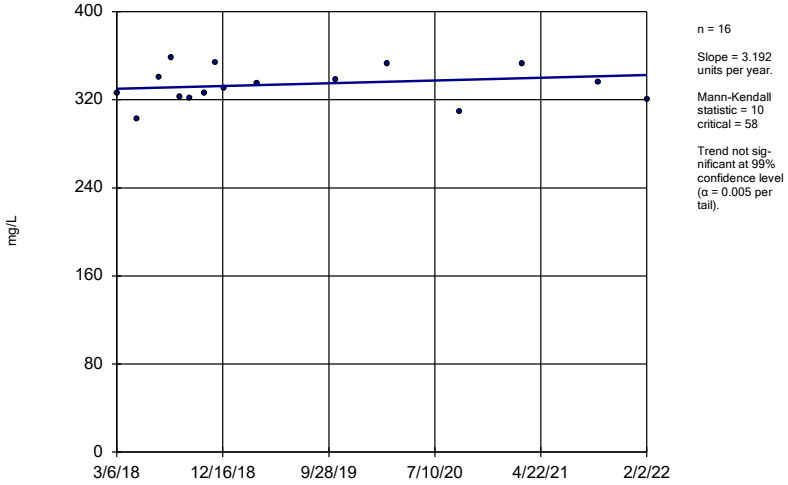
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 3/11/2022 2:35 PM View: Pond BCD - Appendix III Trend Tests
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.32 Groundwater Stats Consulting. UG

Sen's Slope Estimator

BRGWC-47



n = 16

Slope = 3.192 units per year.

Mann-Kendall statistic = 10
critical = 58

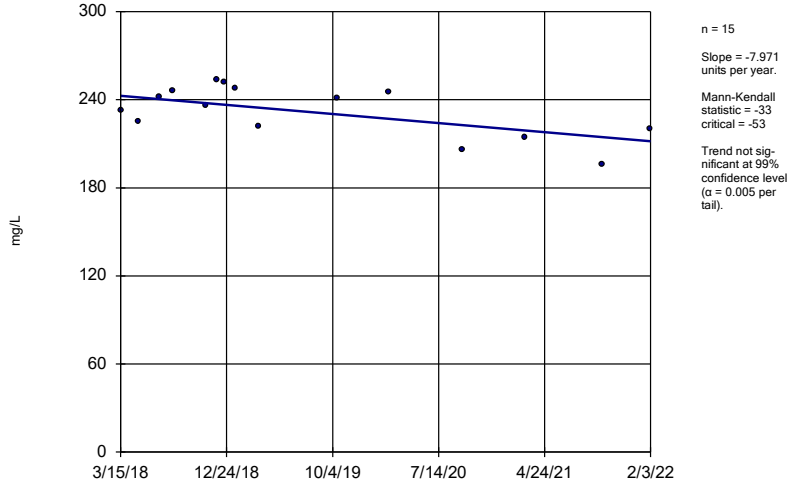
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 3/11/2022 2:35 PM View: Pond BCD - Appendix III Trend Tests
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.32 Groundwater Stats Consulting. UG

Sen's Slope Estimator

BRGWC-50



n = 15

Slope = -7.971 units per year.

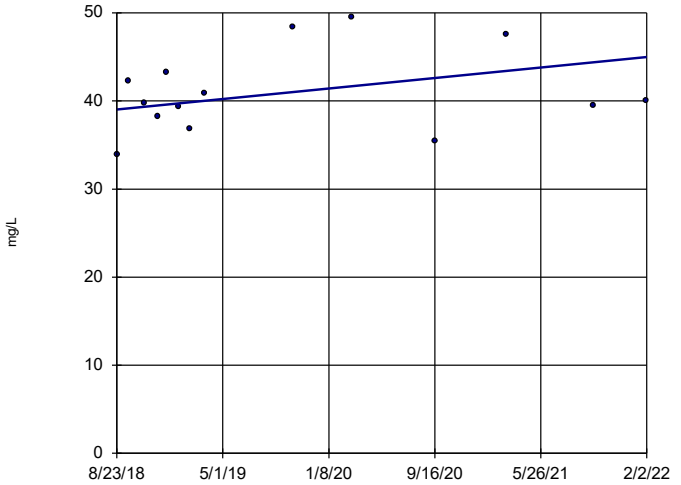
Mann-Kendall statistic = -33
critical = -53

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 3/11/2022 2:35 PM View: Pond BCD - Appendix III Trend Tests
Plant Branch Client: Southern Company Data: Plant Branch AP

Sen's Slope Estimator

BRGWC-52I



n = 14

Slope = 1.724 units per year.

Mann-Kendall statistic = 17 critical = 48

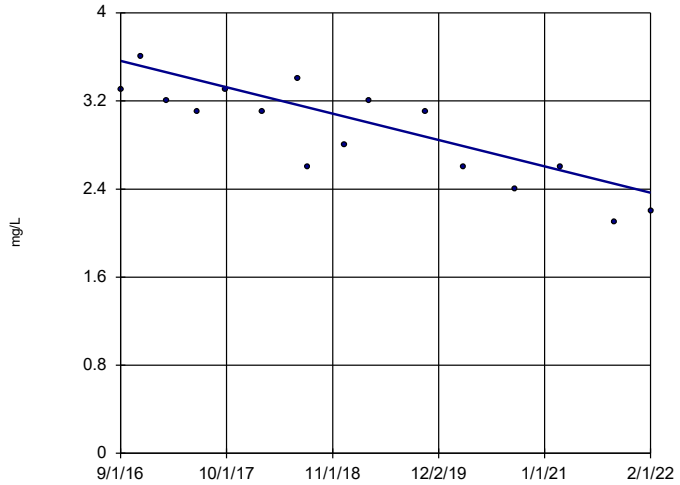
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 3/11/2022 2:35 PM View: Pond BCD - Appendix III Trend Tests
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.32 Groundwater Stats Consulting. UG

Sen's Slope Estimator

BRGWA-12I (bg)



n = 16

Slope = -0.2211 units per year.

Mann-Kendall statistic = -78 critical = -58

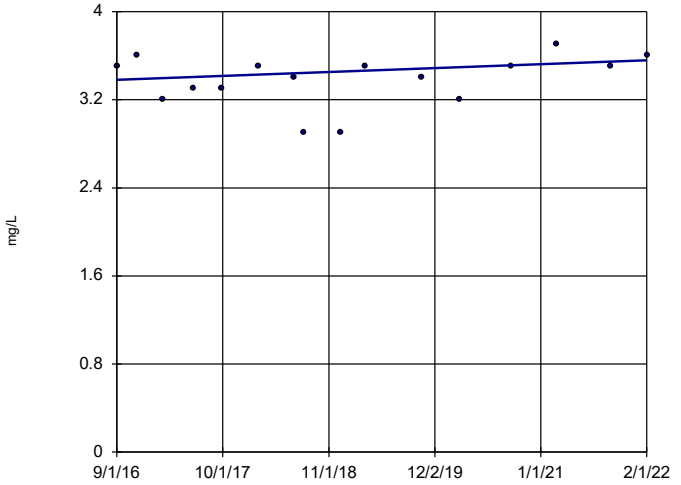
Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride Analysis Run 3/11/2022 2:36 PM View: Pond BCD - Appendix III Trend Tests
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.32 Groundwater Stats Consulting. UG

Sen's Slope Estimator

BRGWA-12S (bg)



n = 16

Slope = 0.03281 units per year.

Mann-Kendall statistic = 23 critical = 58

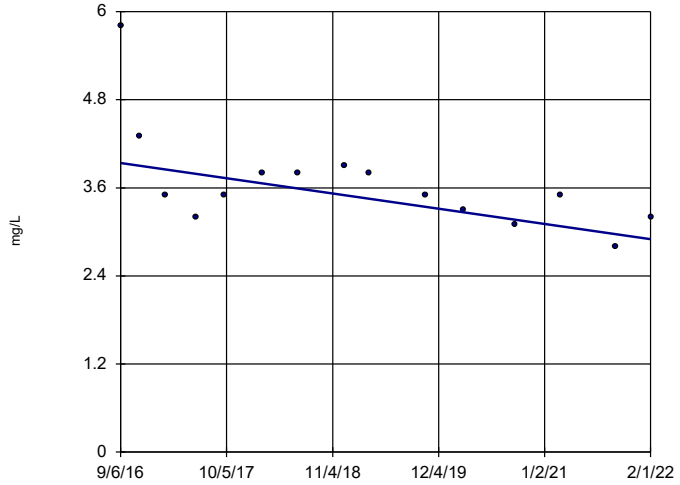
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride Analysis Run 3/11/2022 2:36 PM View: Pond BCD - Appendix III Trend Tests
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.32 Groundwater Stats Consulting. UG

Sen's Slope Estimator

BRGWA-23S (bg)



n = 15

Slope = -0.1919 units per year.

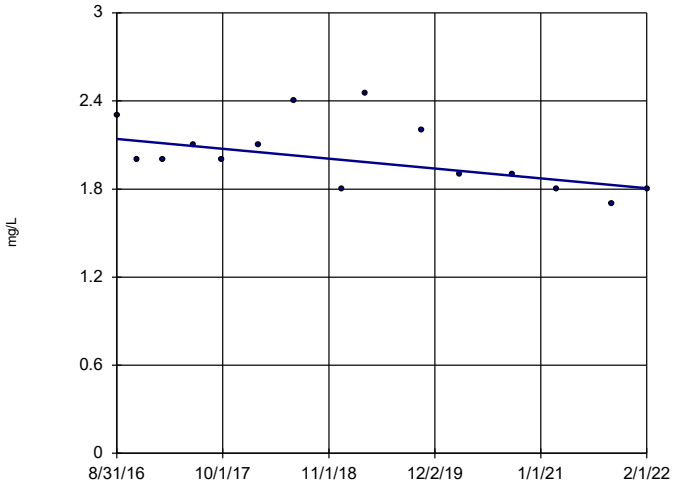
Mann-Kendall statistic = -51 critical = -53

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride Analysis Run 3/11/2022 2:36 PM View: Pond BCD - Appendix III Trend Tests
Plant Branch Client: Southern Company Data: Plant Branch AP

Sen's Slope Estimator

BRGWA-2I (bg)



n = 15

Slope = -0.06183 units per year.

Mann-Kendall statistic = -41
critical = -53

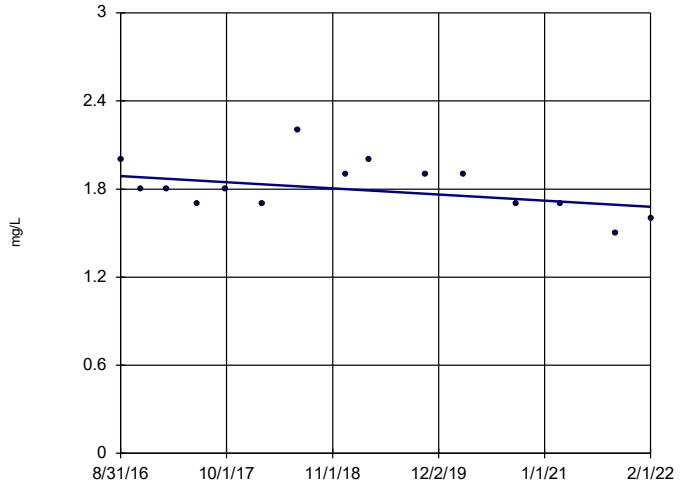
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride Analysis Run 3/11/2022 2:36 PM View: Pond BCD - Appendix III Trend Tests
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.32 Groundwater Stats Consulting. UG

Sen's Slope Estimator

BRGWA-2S (bg)



n = 15

Slope = -0.03836 units per year.

Mann-Kendall statistic = -34
critical = -53

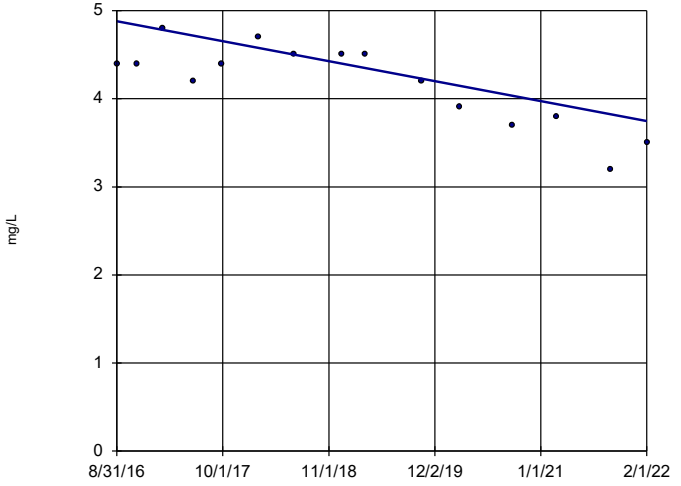
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride Analysis Run 3/11/2022 2:36 PM View: Pond BCD - Appendix III Trend Tests
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.32 Groundwater Stats Consulting. UG

Sen's Slope Estimator

BRGWA-5I (bg)



n = 15

Slope = -0.2086 units per year.

Mann-Kendall statistic = -56
critical = -53

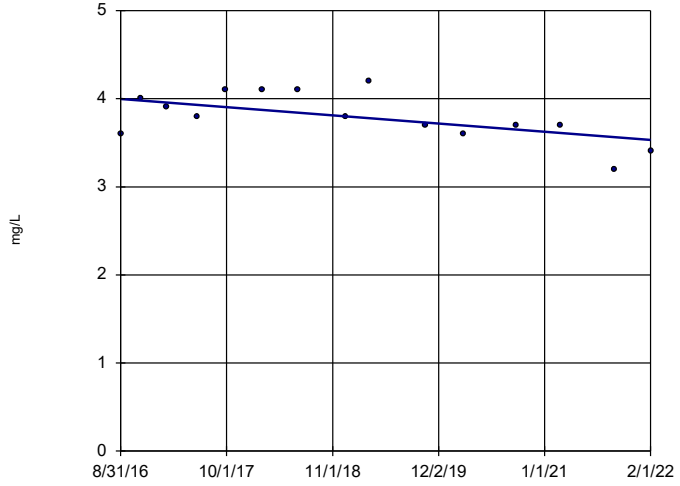
Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride Analysis Run 3/11/2022 2:36 PM View: Pond BCD - Appendix III Trend Tests
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.32 Groundwater Stats Consulting. UG

Sen's Slope Estimator

BRGWA-5S (bg)



n = 15

Slope = -0.08614 units per year.

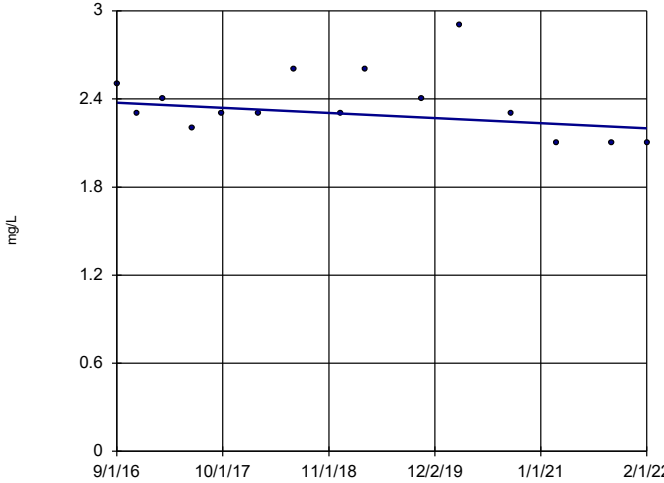
Mann-Kendall statistic = -37
critical = -53

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride Analysis Run 3/11/2022 2:36 PM View: Pond BCD - Appendix III Trend Tests
Plant Branch Client: Southern Company Data: Plant Branch AP

Sen's Slope Estimator

BRGWA-6S (bg)



n = 15

Slope = -0.03205 units per year.

Mann-Kendall statistic = -24
critical = -53

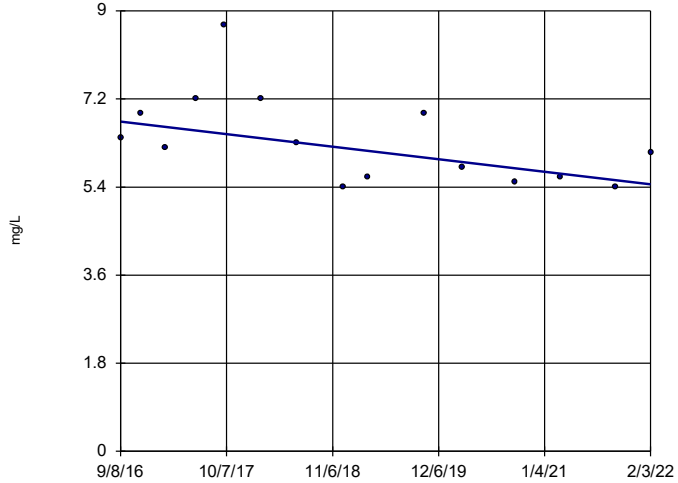
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride Analysis Run 3/11/2022 2:36 PM View: Pond BCD - Appendix III Trend Tests
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.32 Groundwater Stats Consulting. UG

Sen's Slope Estimator

BRGWC-29I



n = 15

Slope = -0.2369 units per year.

Mann-Kendall statistic = -43
critical = -53

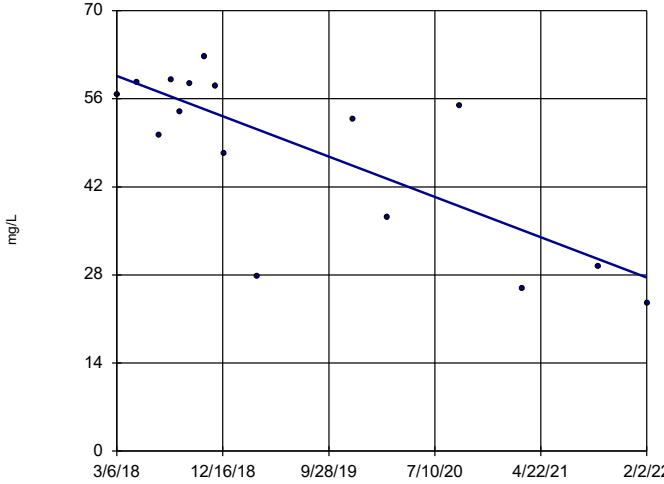
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride Analysis Run 3/11/2022 2:36 PM View: Pond BCD - Appendix III Trend Tests
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.32 Groundwater Stats Consulting. UG

Sen's Slope Estimator

BRGWC-45



n = 16

Slope = -8.179 units per year.

Mann-Kendall statistic = -62
critical = -58

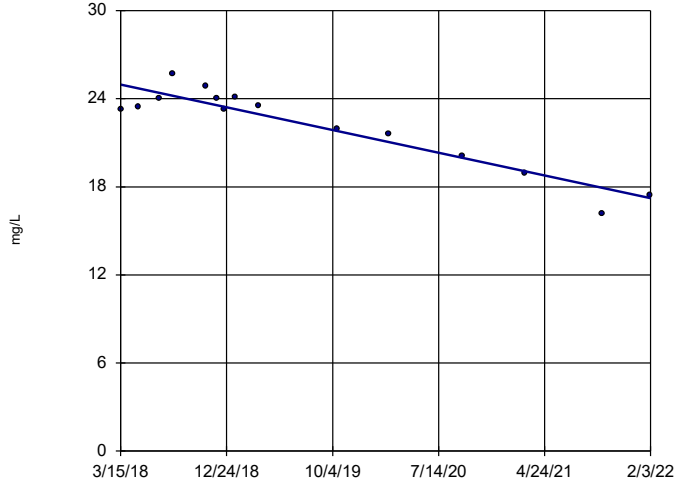
Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride Analysis Run 3/11/2022 2:36 PM View: Pond BCD - Appendix III Trend Tests
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.32 Groundwater Stats Consulting. UG

Sen's Slope Estimator

BRGWC-50



n = 15

Slope = -1.993 units per year.

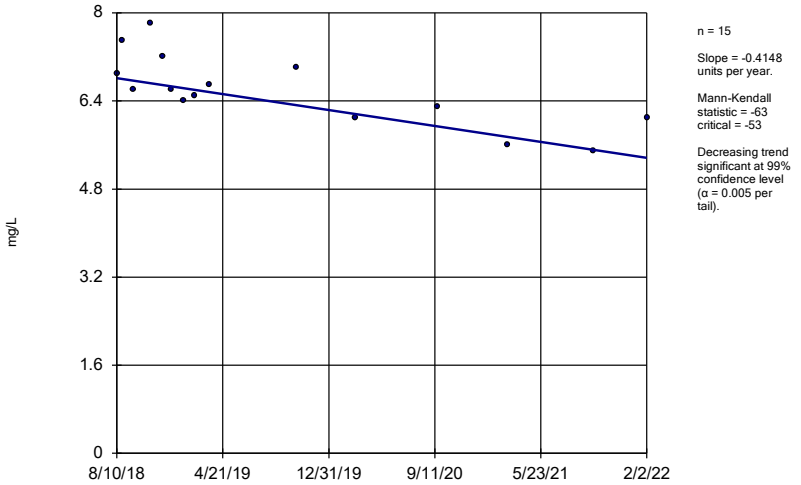
Mann-Kendall statistic = -63
critical = -53

Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride Analysis Run 3/11/2022 2:36 PM View: Pond BCD - Appendix III Trend Tests
Plant Branch Client: Southern Company Data: Plant Branch AP

Sen's Slope Estimator

BRGWC-52I



n = 15

Slope = -0.4148 units per year.

Mann-Kendall statistic = -63 critical = -53

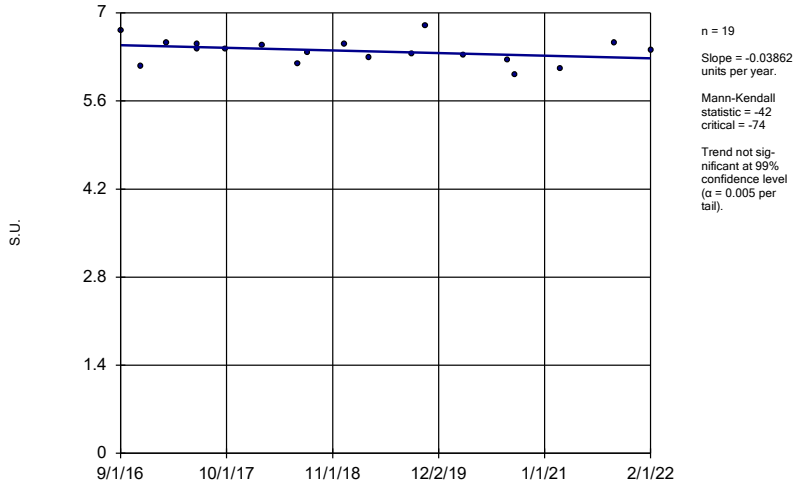
Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride Analysis Run 3/11/2022 2:36 PM View: Pond BCD - Appendix III Trend Tests
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.32 Groundwater Stats Consulting. UG

Sen's Slope Estimator

BRGWA-12I (bg)



n = 19

Slope = -0.03862 units per year.

Mann-Kendall statistic = -42 critical = -74

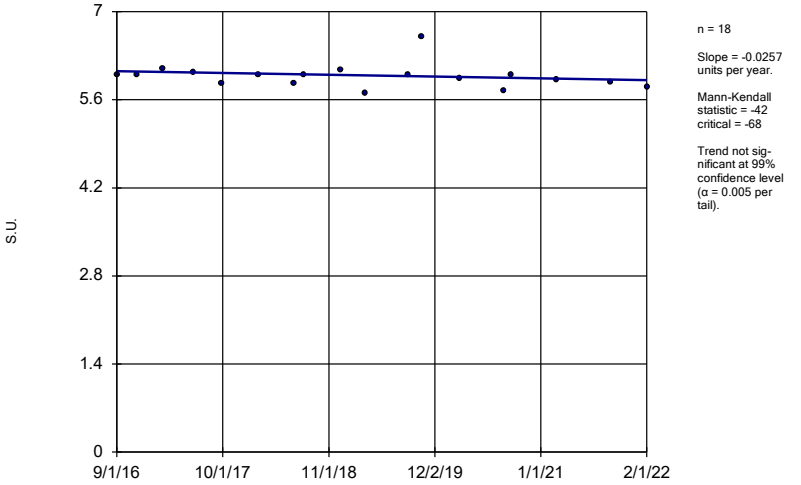
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: pH, Field Analysis Run 3/11/2022 2:36 PM View: Pond BCD - Appendix III Trend Tests
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.32 Groundwater Stats Consulting. UG

Sen's Slope Estimator

BRGWA-12S (bg)



n = 18

Slope = -0.0257 units per year.

Mann-Kendall statistic = -42 critical = -68

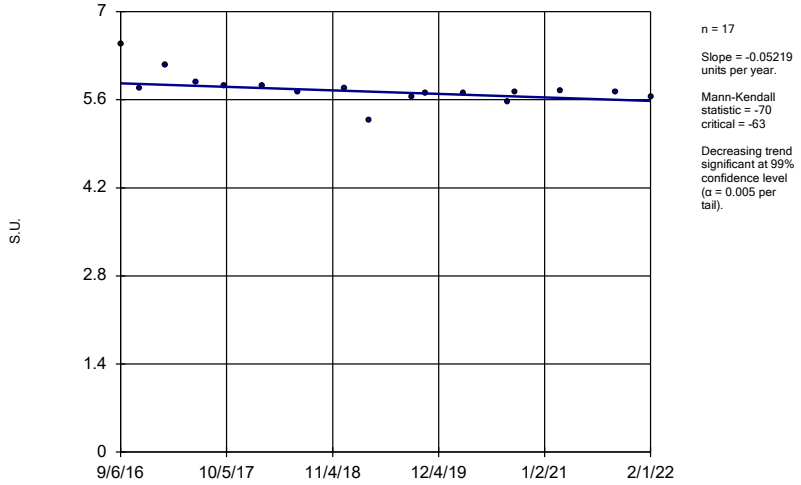
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: pH, Field Analysis Run 3/11/2022 2:36 PM View: Pond BCD - Appendix III Trend Tests
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.32 Groundwater Stats Consulting. UG

Sen's Slope Estimator

BRGWA-23S (bg)



n = 17

Slope = -0.05219 units per year.

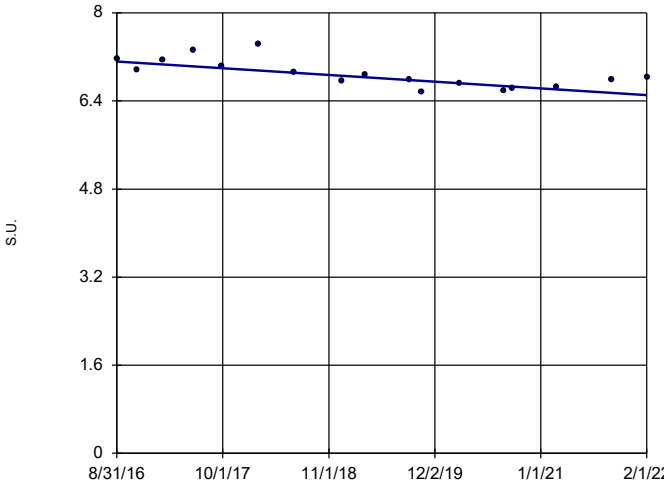
Mann-Kendall statistic = -70 critical = -63

Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: pH, Field Analysis Run 3/11/2022 2:36 PM View: Pond BCD - Appendix III Trend Tests
Plant Branch Client: Southern Company Data: Plant Branch AP

Sen's Slope Estimator

BRGWA-2I (bg)



n = 17

Slope = -0.1124 units per year.

Mann-Kendall statistic = -70
critical = -63

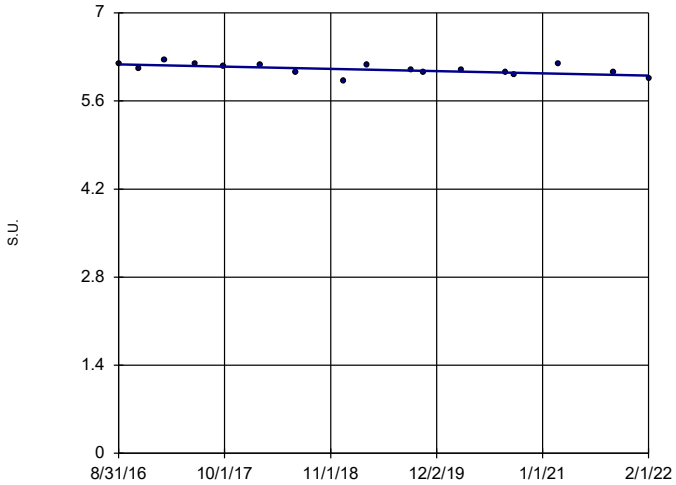
Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: pH, Field Analysis Run 3/11/2022 2:36 PM View: Pond BCD - Appendix III Trend Tests
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.32 Groundwater Stats Consulting. UG

Sen's Slope Estimator

BRGWA-2S (bg)



n = 17

Slope = -0.03283 units per year.

Mann-Kendall statistic = -57
critical = -63

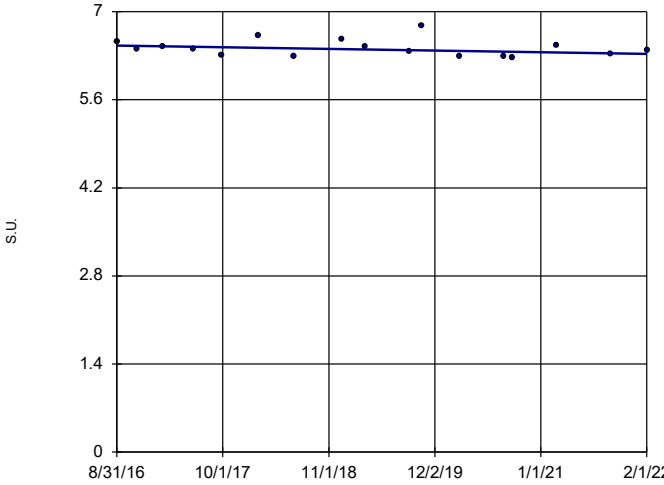
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: pH, Field Analysis Run 3/11/2022 2:36 PM View: Pond BCD - Appendix III Trend Tests
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.32 Groundwater Stats Consulting. UG

Sen's Slope Estimator

BRGWA-5I (bg)



n = 17

Slope = -0.02424 units per year.

Mann-Kendall statistic = -30
critical = -63

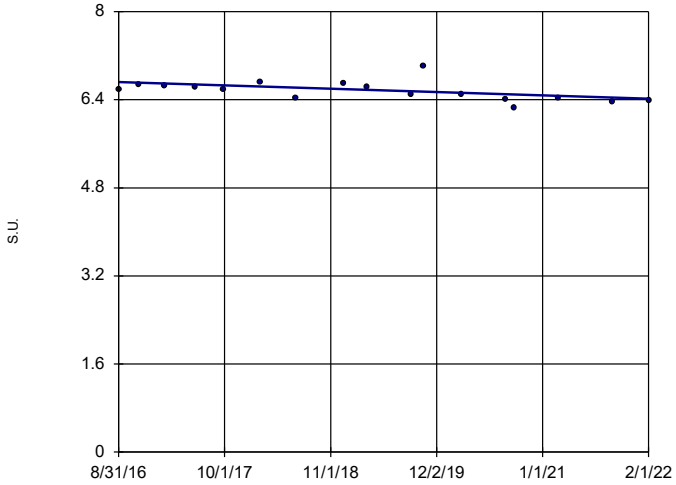
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: pH, Field Analysis Run 3/11/2022 2:36 PM View: Pond BCD - Appendix III Trend Tests
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.32 Groundwater Stats Consulting. UG

Sen's Slope Estimator

BRGWA-5S (bg)



n = 17

Slope = -0.05509 units per year.

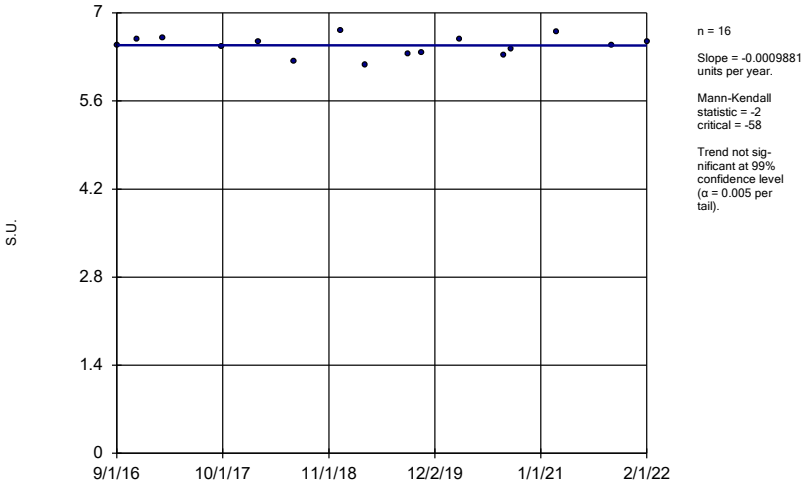
Mann-Kendall statistic = -67
critical = -63

Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: pH, Field Analysis Run 3/11/2022 2:36 PM View: Pond BCD - Appendix III Trend Tests
Plant Branch Client: Southern Company Data: Plant Branch AP

Sen's Slope Estimator

BRGWA-6S (bg)



n = 16

Slope = -0.0009881 units per year.

Mann-Kendall statistic = -2 critical = -58

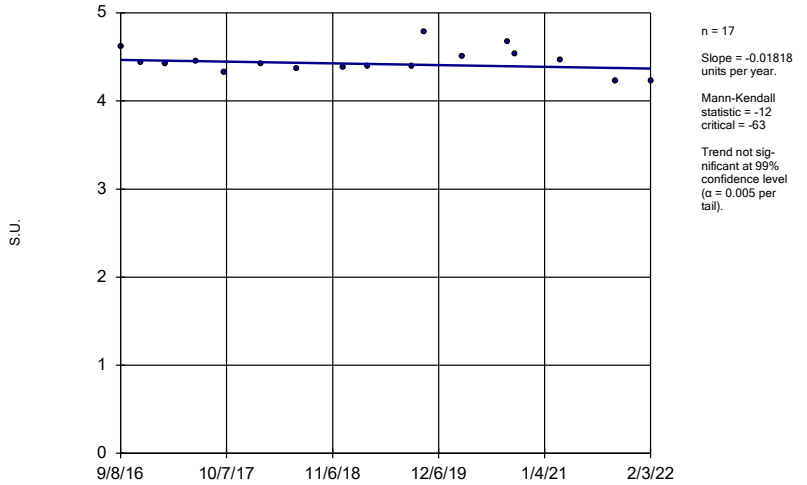
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: pH, Field Analysis Run 3/11/2022 2:36 PM View: Pond BCD - Appendix III Trend Tests
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.32 Groundwater Stats Consulting. UG

Sen's Slope Estimator

BRGWC-29I



n = 17

Slope = -0.01818 units per year.

Mann-Kendall statistic = -12 critical = -63

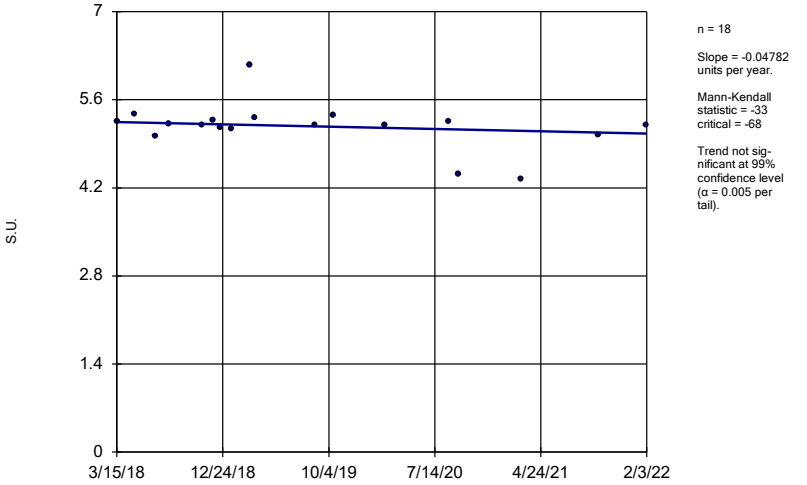
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: pH, Field Analysis Run 3/11/2022 2:36 PM View: Pond BCD - Appendix III Trend Tests
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.32 Groundwater Stats Consulting. UG

Sen's Slope Estimator

BRGWC-50



n = 18

Slope = -0.04782 units per year.

Mann-Kendall statistic = -33 critical = -68

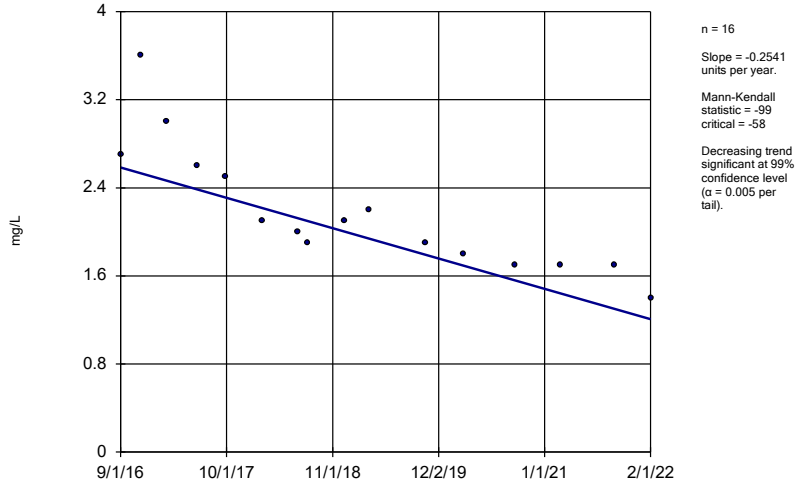
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: pH, Field Analysis Run 3/11/2022 2:36 PM View: Pond BCD - Appendix III Trend Tests
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.32 Groundwater Stats Consulting. UG

Sen's Slope Estimator

BRGWA-12I (bg)



n = 16

Slope = -0.2541 units per year.

Mann-Kendall statistic = -99 critical = -58

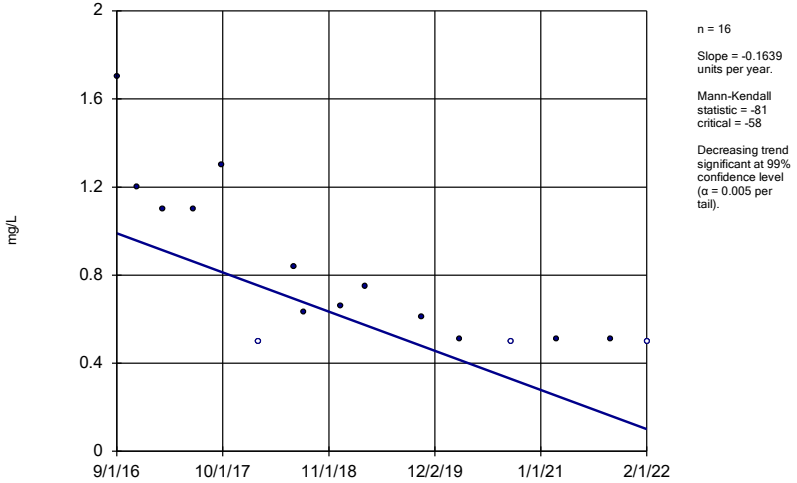
Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 3/11/2022 2:36 PM View: Pond BCD - Appendix III Trend Tests
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.32 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

BRGWA-12S (bg)



n = 16

Slope = -0.1639 units per year.

Mann-Kendall statistic = -81
critical = -58

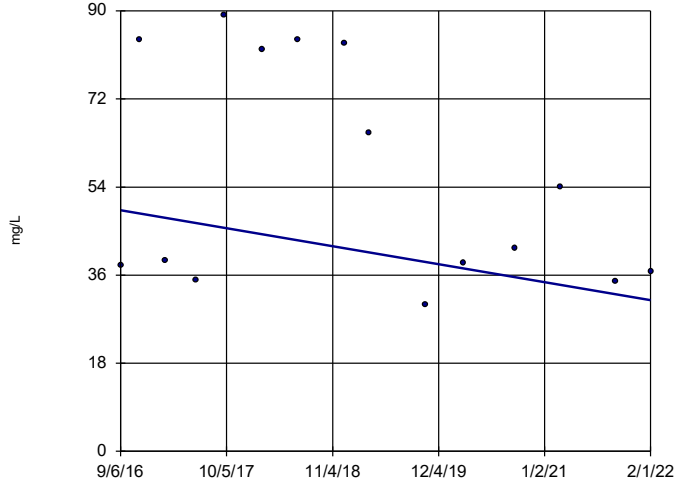
Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 3/11/2022 2:36 PM View: Pond BCD - Appendix III Trend Tests
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.32 Groundwater Stats Consulting. UG

Sen's Slope Estimator

BRGWA-23S (bg)



n = 15

Slope = -3.401 units per year.

Mann-Kendall statistic = -27
critical = -53

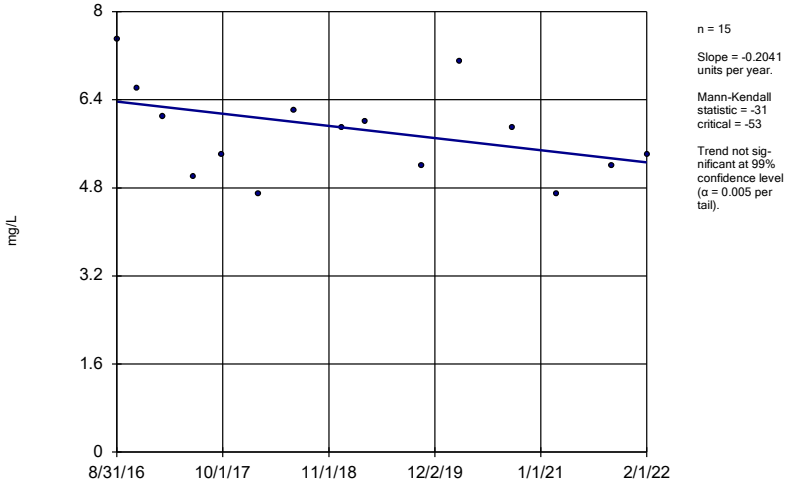
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 3/11/2022 2:36 PM View: Pond BCD - Appendix III Trend Tests
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.32 Groundwater Stats Consulting. UG

Sen's Slope Estimator

BRGWA-2I (bg)



n = 15

Slope = -0.2041 units per year.

Mann-Kendall statistic = -31
critical = -53

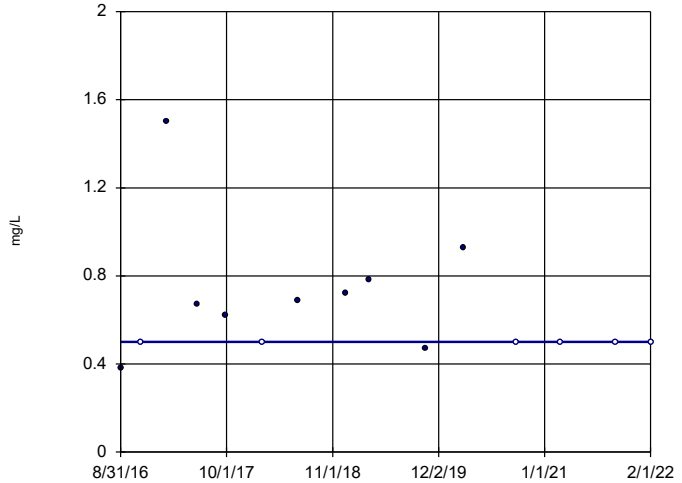
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 3/11/2022 2:36 PM View: Pond BCD - Appendix III Trend Tests
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.32 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

BRGWA-2S (bg)



n = 15

Slope = 0 units per year.

Mann-Kendall statistic = -2
critical = -53

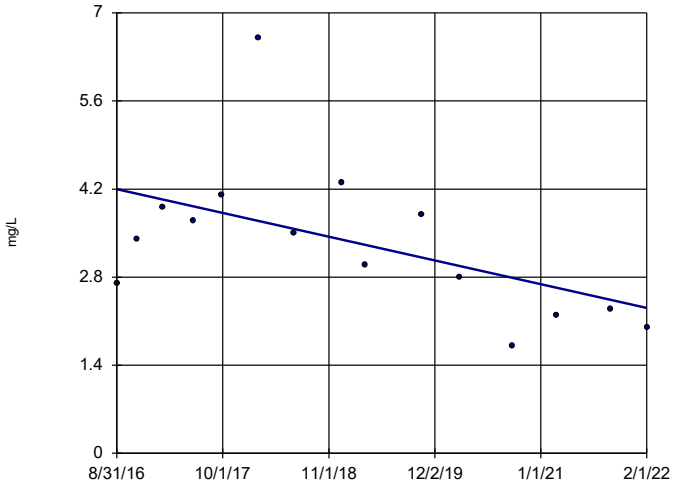
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 3/11/2022 2:36 PM View: Pond BCD - Appendix III Trend Tests
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.32 Groundwater Stats Consulting. UG

Sen's Slope Estimator

BRGWA-5I (bg)



n = 15

Slope = -0.3476 units per year.

Mann-Kendall statistic = -39 critical = -53

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 3/11/2022 2:36 PM View: Pond BCD - Appendix III Trend Tests

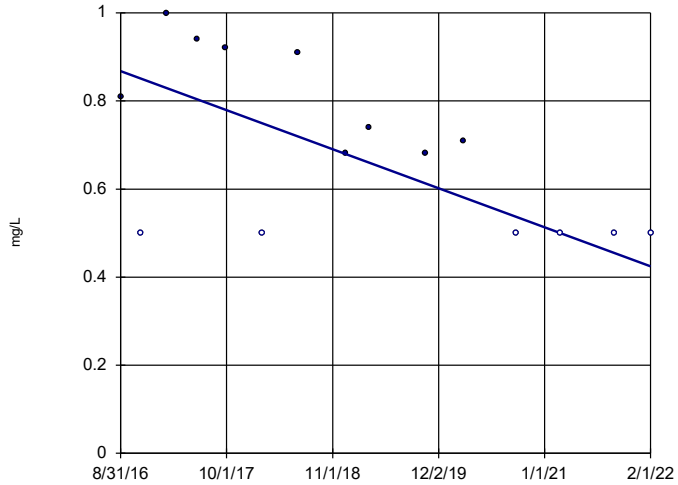
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.32 Groundwater Stats Consulting. UG

Hollow symbols indicate censored values.

Sen's Slope Estimator

BRGWA-5S (bg)



n = 15

Slope = -0.08161 units per year.

Mann-Kendall statistic = -49 critical = -53

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 3/11/2022 2:36 PM View: Pond BCD - Appendix III Trend Tests

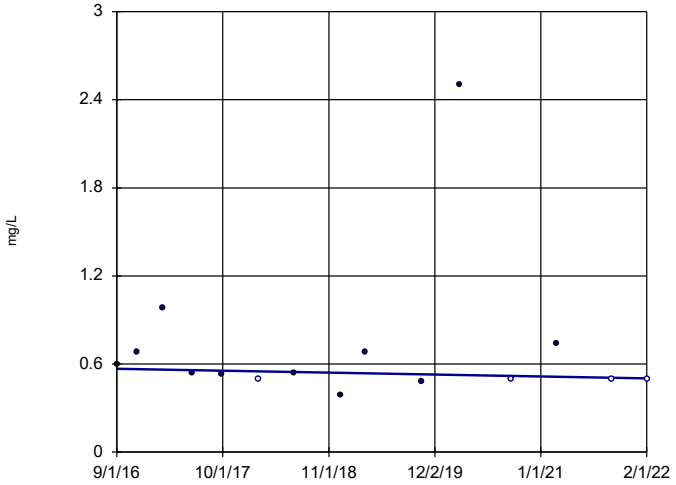
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.32 Groundwater Stats Consulting. UG

Hollow symbols indicate censored values.

Sen's Slope Estimator

BRGWA-6S (bg)



n = 15

Slope = -0.01199 units per year.

Mann-Kendall statistic = -21 critical = -53

Trend not significant at 99% confidence level (α = 0.005 per tail).

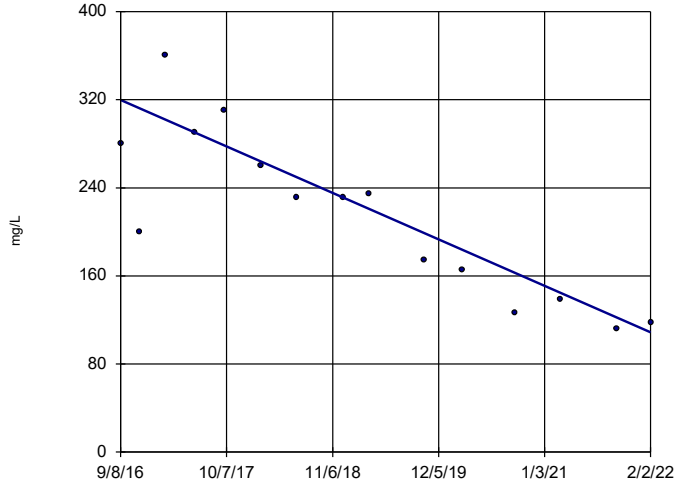
Constituent: Sulfate Analysis Run 3/11/2022 2:36 PM View: Pond BCD - Appendix III Trend Tests

Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.32 Groundwater Stats Consulting. UG

Sen's Slope Estimator

BRGWC-25I



n = 15

Slope = -39.04 units per year.

Mann-Kendall statistic = -74 critical = -53

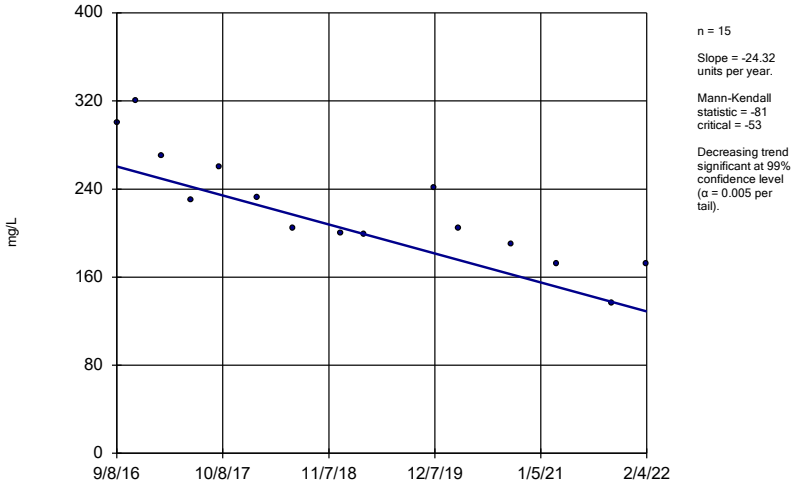
Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 3/11/2022 2:36 PM View: Pond BCD - Appendix III Trend Tests

Plant Branch Client: Southern Company Data: Plant Branch AP

Sen's Slope Estimator

BRGWC-27I



n = 15

Slope = -24.32 units per year.

Mann-Kendall statistic = -81 critical = -53

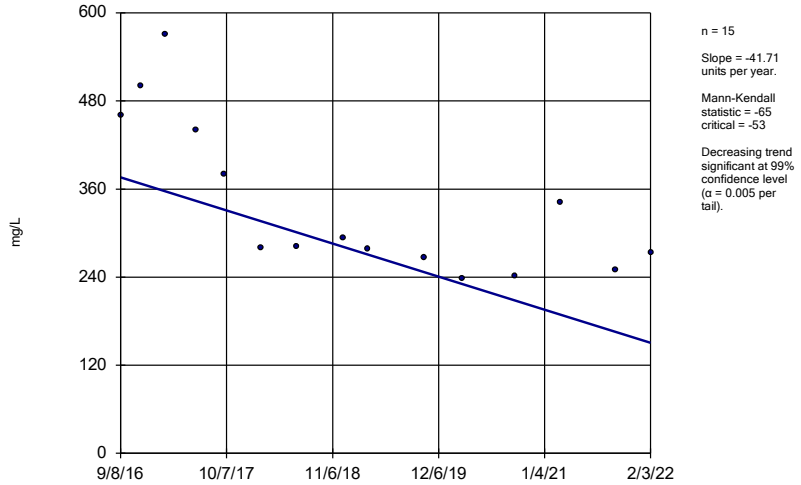
Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 3/11/2022 2:36 PM View: Pond BCD - Appendix III Trend Tests
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.32 Groundwater Stats Consulting. UG

Sen's Slope Estimator

BRGWC-29I



n = 15

Slope = -41.71 units per year.

Mann-Kendall statistic = -65 critical = -53

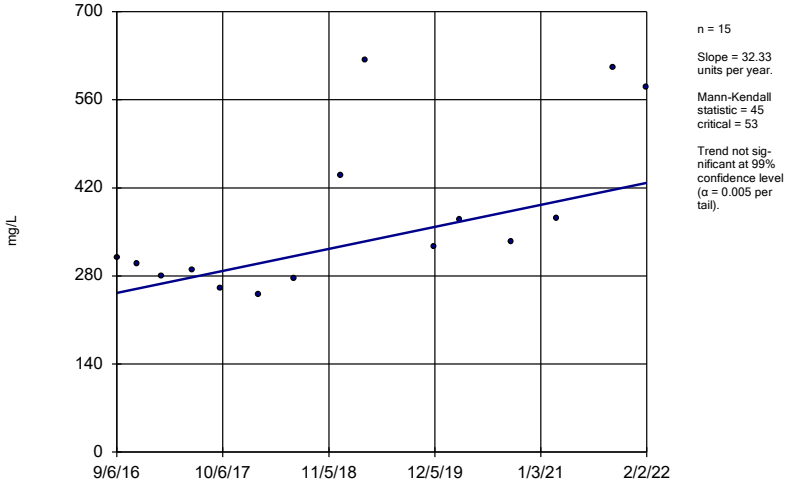
Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 3/11/2022 2:36 PM View: Pond BCD - Appendix III Trend Tests
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.32 Groundwater Stats Consulting. UG

Sen's Slope Estimator

BRGWC-30I



n = 15

Slope = 32.33 units per year.

Mann-Kendall statistic = 45 critical = 53

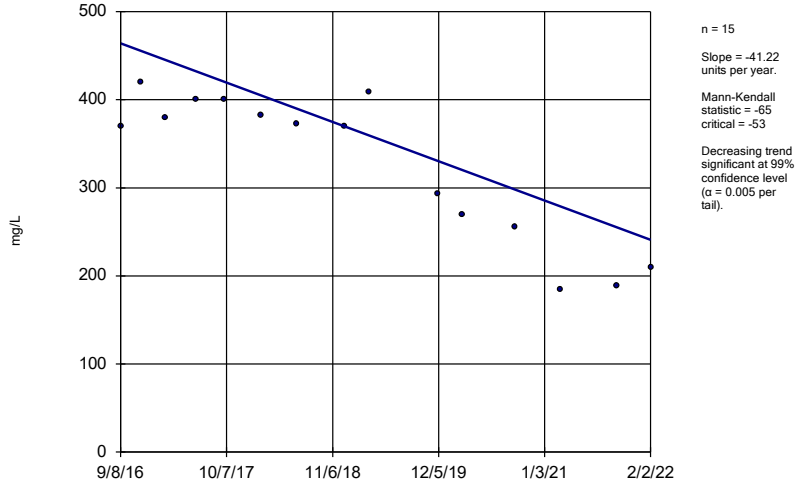
Trend not sig-nificant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 3/11/2022 2:36 PM View: Pond BCD - Appendix III Trend Tests
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.32 Groundwater Stats Consulting. UG

Sen's Slope Estimator

BRGWC-32S



n = 15

Slope = -41.22 units per year.

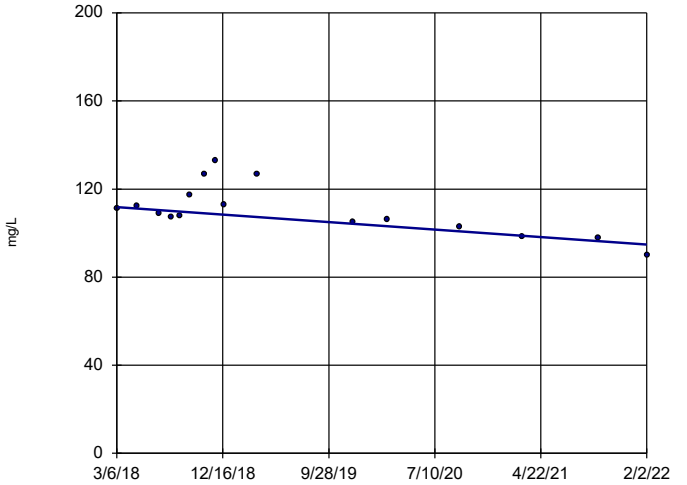
Mann-Kendall statistic = -65 critical = -53

Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 3/11/2022 2:36 PM View: Pond BCD - Appendix III Trend Tests
Plant Branch Client: Southern Company Data: Plant Branch AP

Sen's Slope Estimator

BRGWC-45



n = 16

Slope = -4.331 units per year.

Mann-Kendall statistic = -53
critical = -58

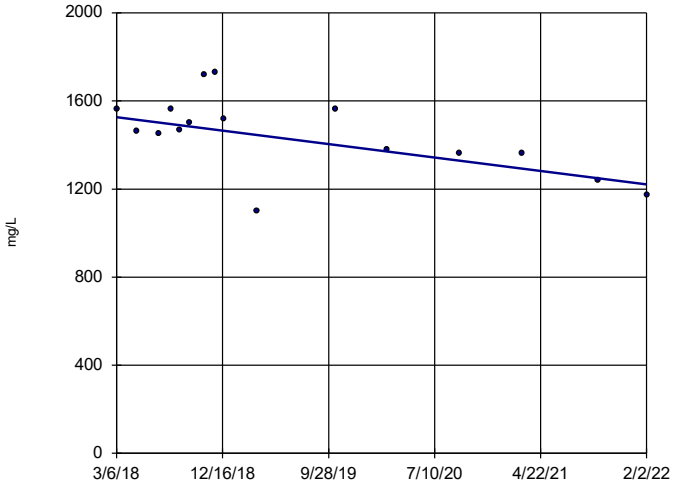
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 3/11/2022 2:36 PM View: Pond BCD - Appendix III Trend Tests
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.32 Groundwater Stats Consulting. UG

Sen's Slope Estimator

BRGWC-47



n = 16

Slope = -78.04 units per year.

Mann-Kendall statistic = -46
critical = -58

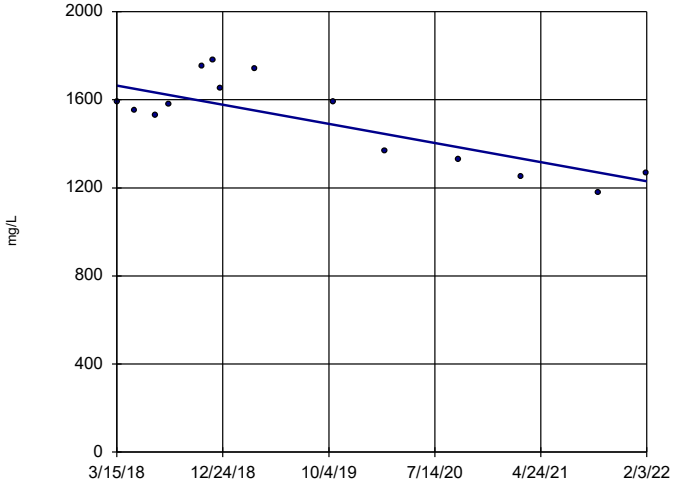
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 3/11/2022 2:36 PM View: Pond BCD - Appendix III Trend Tests
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.32 Groundwater Stats Consulting. UG

Sen's Slope Estimator

BRGWC-50



n = 14

Slope = -111.5 units per year.

Mann-Kendall statistic = -40
critical = -48

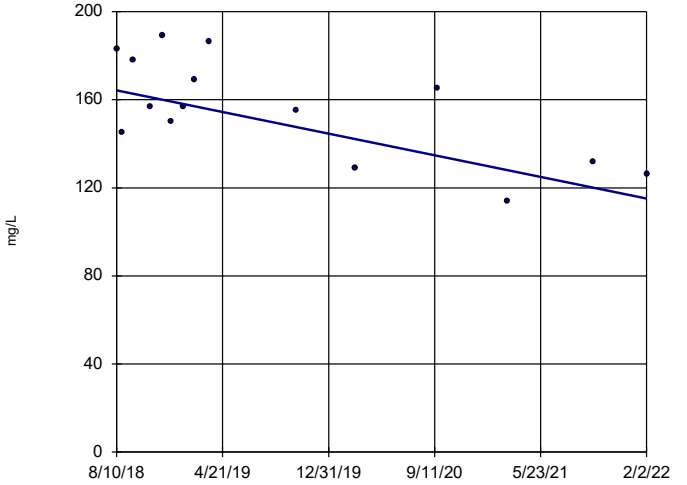
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 3/11/2022 2:36 PM View: Pond BCD - Appendix III Trend Tests
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.32 Groundwater Stats Consulting. UG

Sen's Slope Estimator

BRGWC-52I



n = 15

Slope = -14.1 units per year.

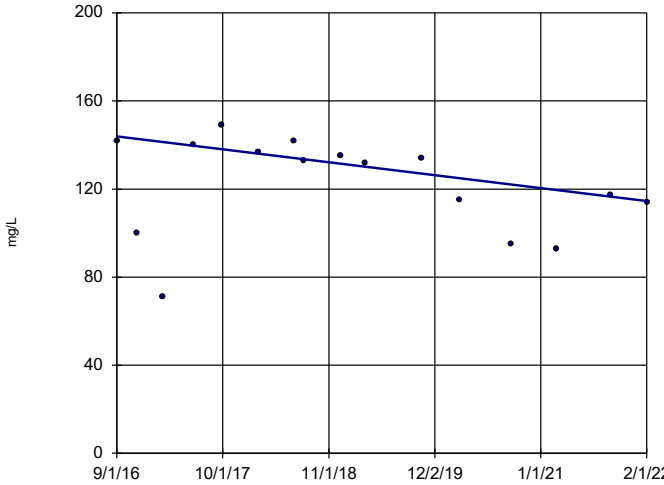
Mann-Kendall statistic = -42
critical = -53

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 3/11/2022 2:36 PM View: Pond BCD - Appendix III Trend Tests
Plant Branch Client: Southern Company Data: Plant Branch AP

Sen's Slope Estimator

BRGWA-12I (bg)



n = 16

Slope = -5.398 units per year.

Mann-Kendall statistic = -47 critical = -58

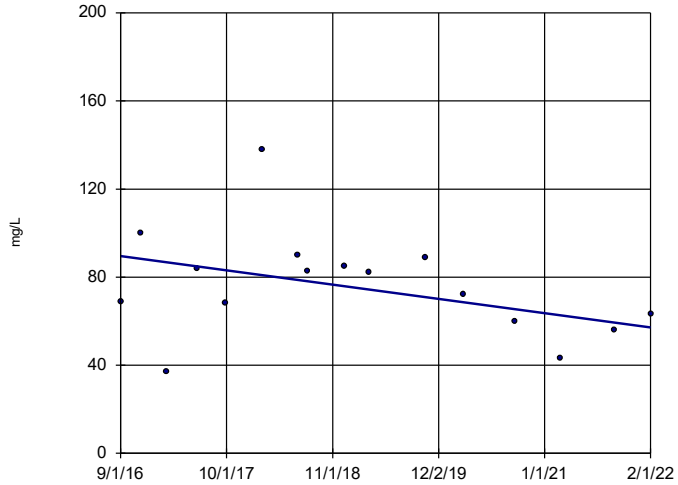
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Total Dissolved Solids Analysis Run 3/11/2022 2:36 PM View: Pond BCD - Appendix III Tren
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.32 Groundwater Stats Consulting. UG

Sen's Slope Estimator

BRGWA-12S (bg)



n = 16

Slope = -5.997 units per year.

Mann-Kendall statistic = -36 critical = -58

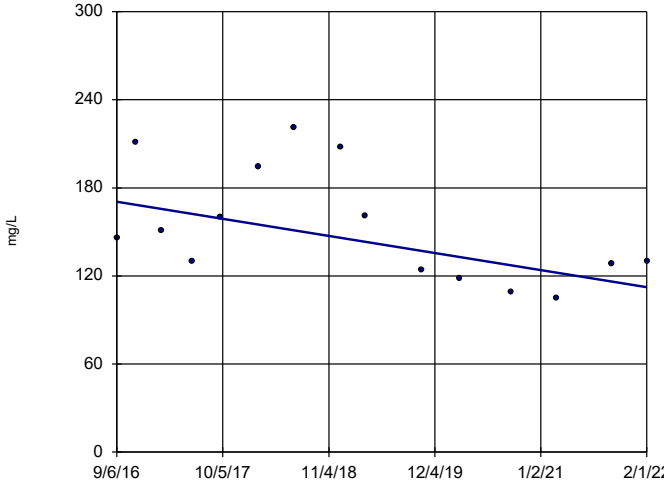
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Total Dissolved Solids Analysis Run 3/11/2022 2:36 PM View: Pond BCD - Appendix III Tren
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.32 Groundwater Stats Consulting. UG

Sen's Slope Estimator

BRGWA-23S (bg)



n = 15

Slope = -10.78 units per year.

Mann-Kendall statistic = -38 critical = -53

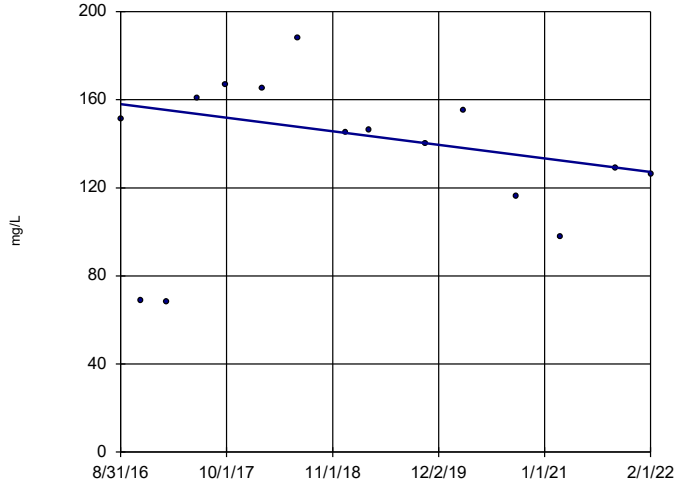
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Total Dissolved Solids Analysis Run 3/11/2022 2:36 PM View: Pond BCD - Appendix III Tren
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.32 Groundwater Stats Consulting. UG

Sen's Slope Estimator

BRGWA-2I (bg)



n = 15

Slope = -5.671 units per year.

Mann-Kendall statistic = -21 critical = -53

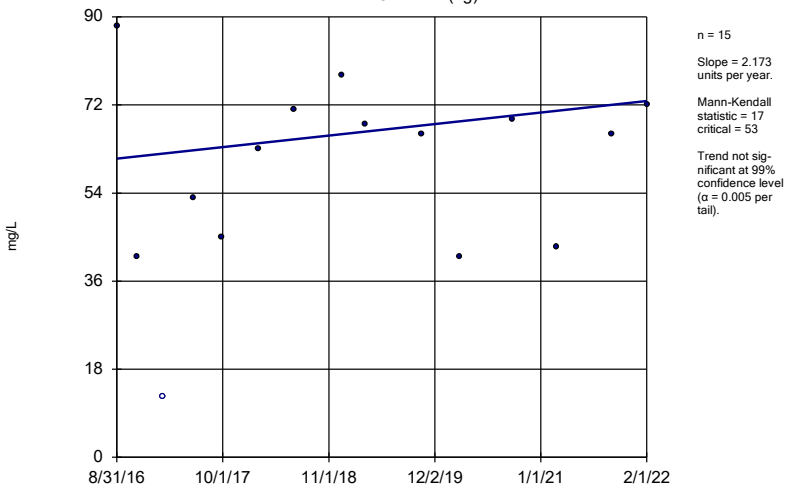
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Total Dissolved Solids Analysis Run 3/11/2022 2:36 PM View: Pond BCD - Appendix III Tren
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.32 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

BRGWA-2S (bg)



n = 15

Slope = 2.173 units per year.

Mann-Kendall statistic = 17 critical = 53

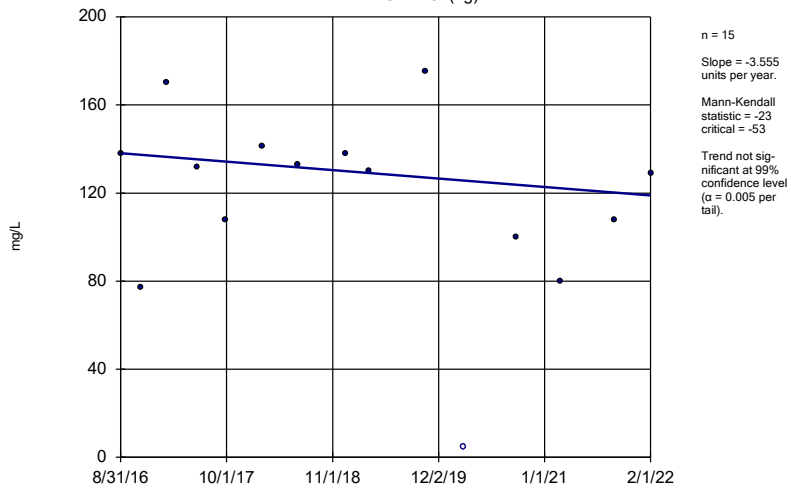
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Total Dissolved Solids Analysis Run 3/11/2022 2:36 PM View: Pond BCD - Appendix III Tren
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.32 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

BRGWA-5I (bg)



n = 15

Slope = -3.555 units per year.

Mann-Kendall statistic = -23 critical = -53

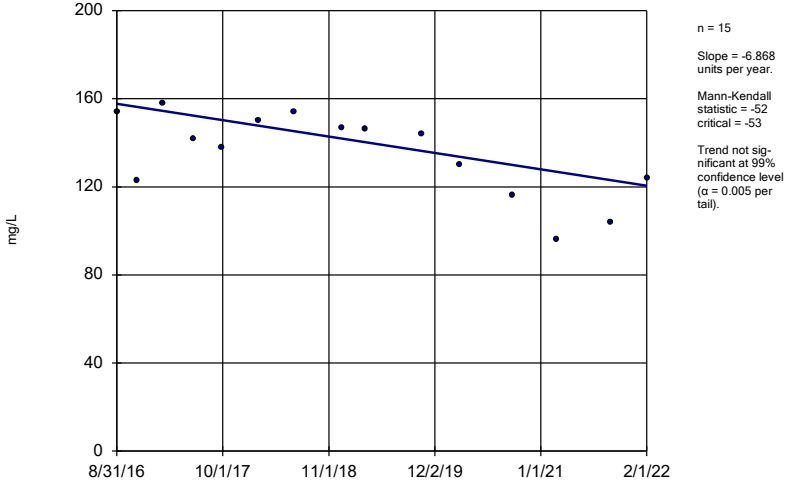
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Total Dissolved Solids Analysis Run 3/11/2022 2:36 PM View: Pond BCD - Appendix III Tren
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.32 Groundwater Stats Consulting. UG

Sen's Slope Estimator

BRGWA-5S (bg)



n = 15

Slope = -6.868 units per year.

Mann-Kendall statistic = -52 critical = -53

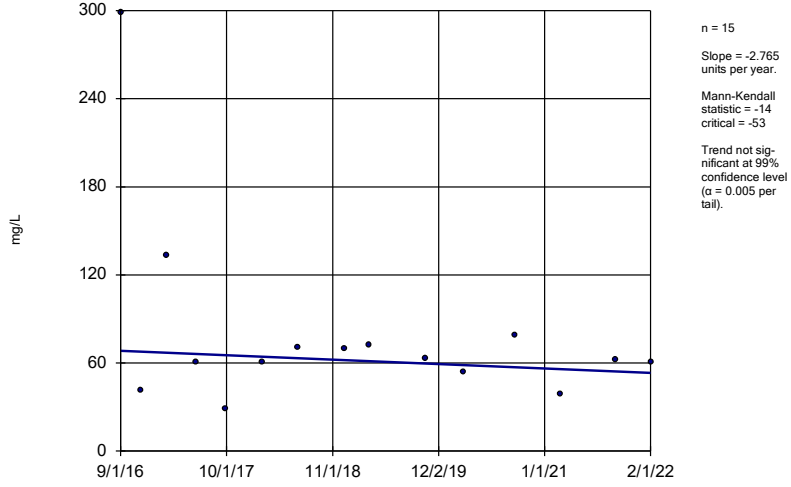
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Total Dissolved Solids Analysis Run 3/11/2022 2:36 PM View: Pond BCD - Appendix III Tren
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.32 Groundwater Stats Consulting. UG

Sen's Slope Estimator

BRGWA-6S (bg)



n = 15

Slope = -2.765 units per year.

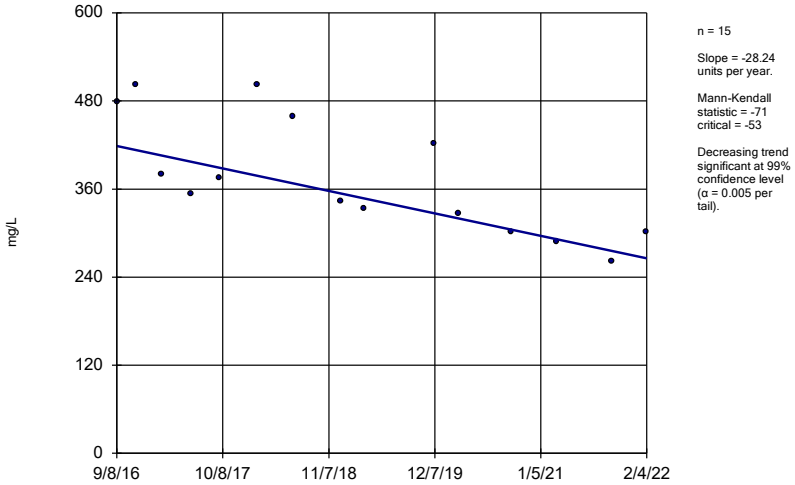
Mann-Kendall statistic = -14 critical = -53

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Total Dissolved Solids Analysis Run 3/11/2022 2:36 PM View: Pond BCD - Appendix III Tren
Plant Branch Client: Southern Company Data: Plant Branch AP

Sen's Slope Estimator

BRGWC-27I



n = 15

Slope = -28.24 units per year.

Mann-Kendall statistic = -71 critical = -53

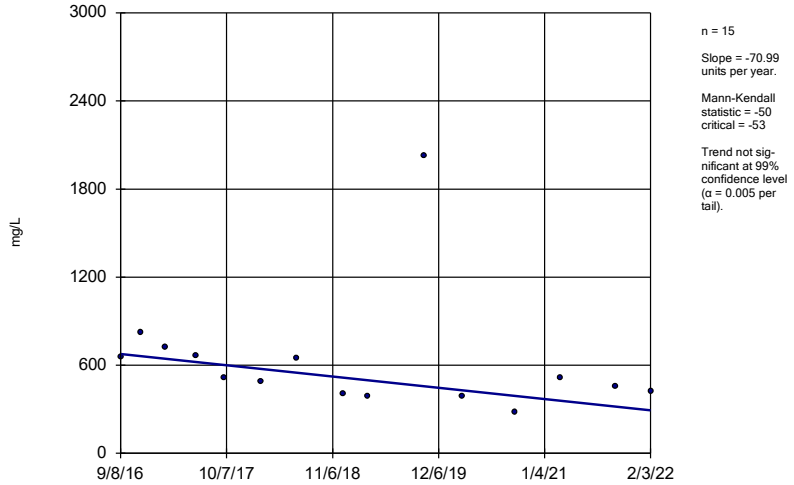
Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Total Dissolved Solids Analysis Run 3/11/2022 2:36 PM View: Pond BCD - Appendix III Tren
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.32 Groundwater Stats Consulting. UG

Sen's Slope Estimator

BRGWC-29I



n = 15

Slope = -70.99 units per year.

Mann-Kendall statistic = -50 critical = -53

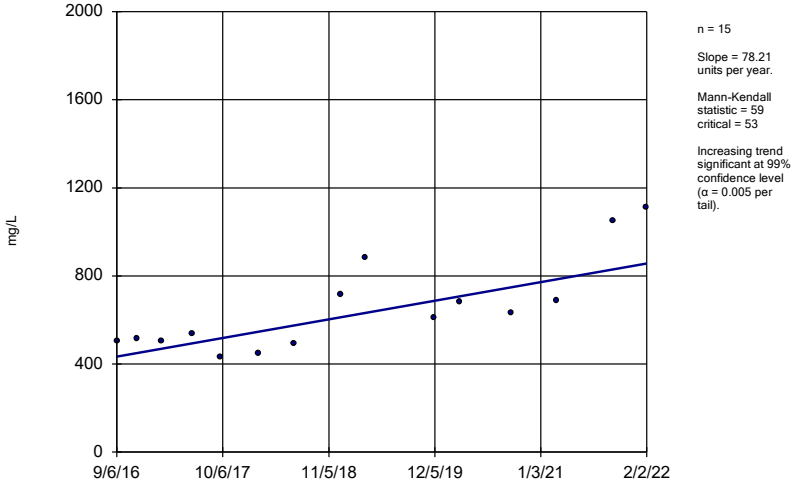
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Total Dissolved Solids Analysis Run 3/11/2022 2:36 PM View: Pond BCD - Appendix III Tren
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.32 Groundwater Stats Consulting. UG

Sen's Slope Estimator

BRGWC-30I



n = 15

Slope = 78.21 units per year.

Mann-Kendall statistic = 59 critical = 53

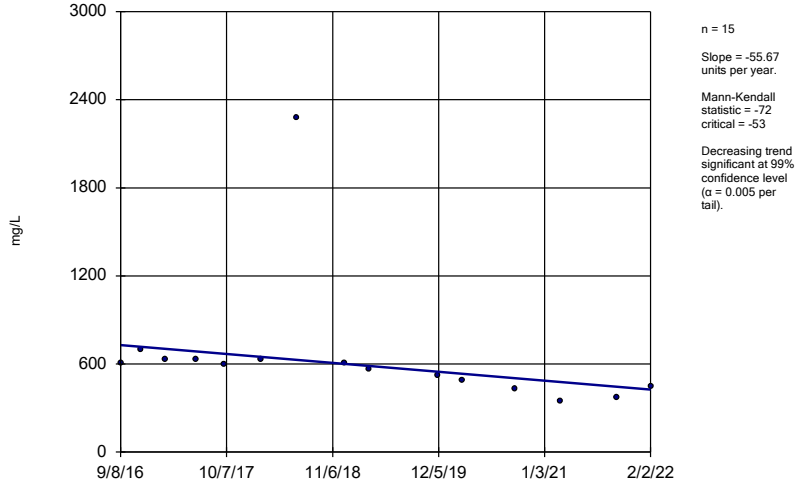
Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Total Dissolved Solids Analysis Run 3/11/2022 2:36 PM View: Pond BCD - Appendix III Tren
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.32 Groundwater Stats Consulting. UG

Sen's Slope Estimator

BRGWC-32S



n = 15

Slope = -55.67 units per year.

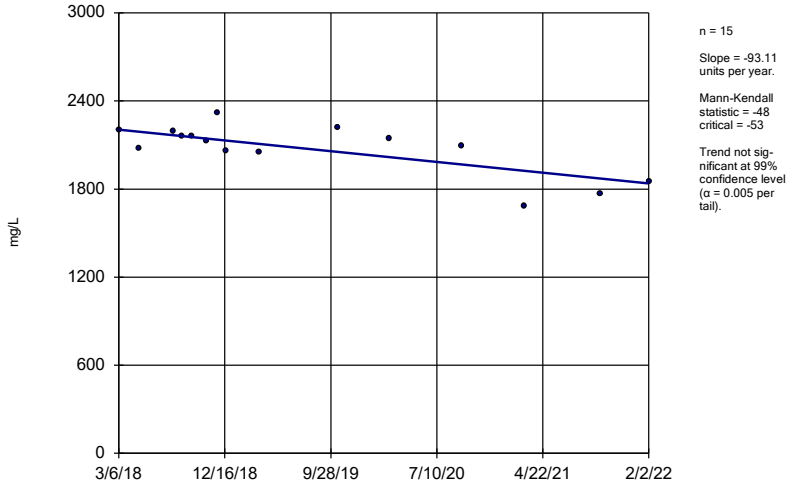
Mann-Kendall statistic = -72 critical = -53

Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Total Dissolved Solids Analysis Run 3/11/2022 2:36 PM View: Pond BCD - Appendix III Tren
Plant Branch Client: Southern Company Data: Plant Branch AP

Sen's Slope Estimator

BRGWC-47



n = 15

Slope = -93.11 units per year.

Mann-Kendall statistic = -48
critical = -53

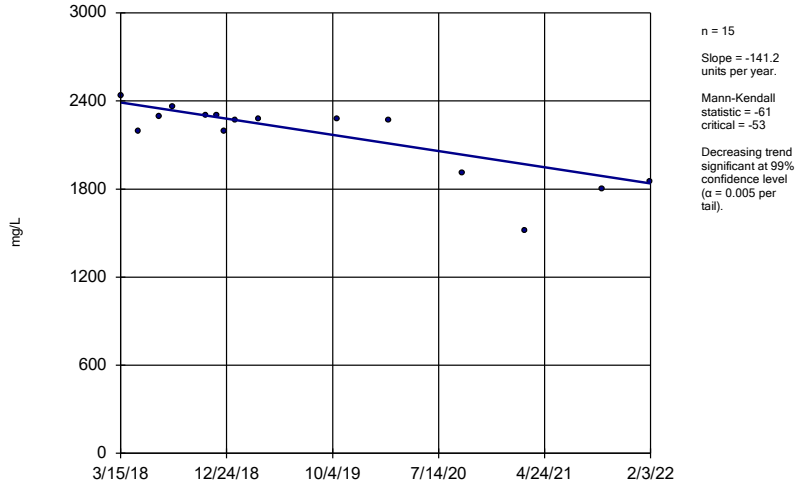
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Total Dissolved Solids Analysis Run 3/11/2022 2:36 PM View: Pond BCD - Appendix III Tren
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.32 Groundwater Stats Consulting. UG

Sen's Slope Estimator

BRGWC-50



n = 15

Slope = -141.2 units per year.

Mann-Kendall statistic = -61
critical = -53

Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Total Dissolved Solids Analysis Run 3/11/2022 2:36 PM View: Pond BCD - Appendix III Tren
Plant Branch Client: Southern Company Data: Plant Branch AP

FIGURE F.

Upper Tolerance Limit Summary Table

Plant Branch Client: Southern Company Data: Plant Branch AP Printed 5/3/2022, 10:16 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	0.017	n/a	n/a	n/a	n/a	128	n/a	n/a	82.03	n/a	n/a	0.001408	NP Inter(NDs)
Arsenic (mg/L)	n/a	0.005	n/a	n/a	n/a	n/a	128	n/a	n/a	73.44	n/a	n/a	0.001408	NP Inter(NDs)
Barium (mg/L)	n/a	0.13	n/a	n/a	n/a	n/a	128	n/a	n/a	0	n/a	n/a	0.001408	NP Inter(normality)
Beryllium (mg/L)	n/a	0.0005	n/a	n/a	n/a	n/a	128	n/a	n/a	100	n/a	n/a	0.001408	NP Inter(NDs)
Cadmium (mg/L)	n/a	0.0005	n/a	n/a	n/a	n/a	130	n/a	n/a	98.46	n/a	n/a	0.001271	NP Inter(NDs)
Chromium (mg/L)	n/a	0.016	n/a	n/a	n/a	n/a	128	n/a	n/a	17.97	n/a	n/a	0.001408	NP Inter(normality)
Cobalt (mg/L)	n/a	0.0135	n/a	n/a	n/a	n/a	128	n/a	n/a	56.25	n/a	n/a	0.001408	NP Inter(NDs)
Fluoride (mg/L)	n/a	0.42	n/a	n/a	n/a	n/a	136	n/a	n/a	52.94	n/a	n/a	0.0009341	NP Inter(NDs)
Lead (mg/L)	n/a	0.0013	n/a	n/a	n/a	n/a	128	n/a	n/a	85.94	n/a	n/a	0.001408	NP Inter(NDs)
Lithium (mg/L)	n/a	0.089	n/a	n/a	n/a	n/a	128	n/a	n/a	39.06	n/a	n/a	0.001408	NP Inter(normality)
Mercury (mg/L)	n/a	0.00021	n/a	n/a	n/a	n/a	112	n/a	n/a	86.61	n/a	n/a	0.003199	NP Inter(NDs)
Molybdenum (mg/L)	n/a	0.01	n/a	n/a	n/a	n/a	125	n/a	n/a	78.4	n/a	n/a	0.001642	NP Inter(NDs)
Selenium (mg/L)	n/a	0.006	n/a	n/a	n/a	n/a	128	n/a	n/a	90.63	n/a	n/a	0.001408	NP Inter(NDs)
Thallium (mg/L)	n/a	0.001	n/a	n/a	n/a	n/a	128	n/a	n/a	100	n/a	n/a	0.001408	NP Inter(NDs)

FIGURE G.

PLANT BRANCH PONDS B,C,D GWPS				
Constituent Name	**MCL**	**CCR-Rule Specified**	**Background Limit**	**GWPS**
Antimony, Total (mg/L)	0.006		0.017	0.017
Arsenic, Total (mg/L)	0.01		0.005	0.01
Barium, Total (mg/L)	2		0.13	2
Beryllium, Total (mg/L)	0.004		0.0005	0.004
Cadmium, Total (mg/L)	0.005		0.0005	0.005
Chromium, Total (mg/L)	0.1		0.016	0.1
Cobalt, Total (mg/L)	n/a	0.006	0.014	0.014
Fluoride, Total (mg/L)	4		0.42	4
Lead, Total (mg/L)	n/a	0.015	0.0013	0.015
Lithium, Total (mg/L)	n/a	0.04	0.089	0.089
Mercury, Total (mg/L)	0.002		0.00021	0.002
Molybdenum, Total (mg/L)	n/a	0.1	0.01	0.1
Selenium, Total (mg/L)	0.05		0.006	0.05
Thallium, Total (mg/L)	0.002		0.001	0.002

**Highlighted cells indicate Background is higher than MCLs*

**MCL = Maximum Contaminant Level*

**CCR = Coal Combustion Residuals*

**GWPS = Groundwater Protection Standard*

FIGURE H.

Confidence Intervals - Significant Results

Plant Branch Client: Southern Company Data: Plant Branch AP Printed 5/3/2022, 10:21 AM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Cadmium (mg/L)	**BRGWC-50**	**0.03867**	**0.01281**	**0.005**	**Yes**	**16**	**0.02888**	**0.02503**	**0**	**None**	**x^(1/3)**	**0.01**	**Param.**
Cobalt (mg/L)	**BRGWC-50**	**1.5**	**1.3**	**0.014**	**Yes**	**16**	**1.394**	**0.06801**	**0**	**None**	**No**	**0.01**	**NP (normality)**
Cobalt (mg/L)	**PZ-51I**	**0.041**	**0.017**	**0.014**	**Yes**	**9**	**0.02222**	**0.007276**	**0**	**None**	**No**	**0.002**	**NP (normality)**

Confidence Intervals - All Results

Plant Branch Client: Southern Company Data: Plant Branch AP Printed 5/3/2022, 10:21 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	0.0007	0.017	No	16	0.002856	0.000575	93.75	None	No	0.01	NP (NDs)
Antimony (mg/L)	BRGWC-30I	0.003	0.0013	0.017	No	16	0.002894	0.000425	93.75	None	No	0.01	NP (NDs)
Antimony (mg/L)	BRGWC-32S	0.003	0.0014	0.017	No	16	0.0029	0.0004	93.75	None	No	0.01	NP (NDs)
Antimony (mg/L)	BRGWC-45	0.0031	0.0014	0.017	No	17	0.002414	0.0009097	58.82	None	No	0.01	NP (NDs)
Antimony (mg/L)	BRGWC-47	0.003	0.00035	0.017	No	17	0.002844	0.0006427	94.12	None	No	0.01	NP (NDs)
Antimony (mg/L)	BRGWC-50	0.003	0.00092	0.017	No	16	0.002553	0.0009657	81.25	None	No	0.01	NP (NDs)
Antimony (mg/L)	BRGWC-52I	0.003	0.00091	0.017	No	16	0.002574	0.00092	81.25	None	No	0.01	NP (NDs)
Antimony (mg/L)	PZ-51I	0.003	0.00079	0.017	No	7	0.002241	0.000982	57.14	None	No	0.008	NP (NDs)
Antimony (mg/L)	PZ-51S	0.003	0.00043	0.017	No	7	0.002461	0.001001	71.43	None	No	0.008	NP (NDs)
Arsenic (mg/L)	BRGWC-25I	0.005	0.00072	0.01	No	16	0.003922	0.00193	75	None	No	0.01	NP (NDs)
Arsenic (mg/L)	BRGWC-27I	0.005	0.0011	0.01	No	16	0.004006	0.001783	75	None	No	0.01	NP (NDs)
Arsenic (mg/L)	BRGWC-29I	0.005	0.00065	0.01	No	16	0.00335	0.001979	56.25	None	No	0.01	NP (NDs)
Arsenic (mg/L)	BRGWC-30I	0.005	0.00056	0.01	No	16	0.004722	0.00111	93.75	None	No	0.01	NP (NDs)
Arsenic (mg/L)	BRGWC-32S	0.005	0.00053	0.01	No	16	0.004721	0.001117	93.75	None	No	0.01	NP (NDs)
Arsenic (mg/L)	BRGWC-45	0.005	0.00096	0.01	No	17	0.003829	0.001896	70.59	None	No	0.01	NP (NDs)
Arsenic (mg/L)	BRGWC-47	0.005	0.0012	0.01	No	17	0.00299	0.001886	35.29	None	No	0.01	NP (normality)
Arsenic (mg/L)	BRGWC-50	0.005	0.0014	0.01	No	16	0.004225	0.001675	81.25	None	No	0.01	NP (NDs)
Arsenic (mg/L)	BRGWC-52I	0.005	0.0016	0.01	No	16	0.003573	0.001479	37.5	None	No	0.01	NP (normality)
Arsenic (mg/L)	PZ-51S	0.005	0.002	0.01	No	7	0.004571	0.001134	85.71	None	No	0.008	NP (NDs)
Barium (mg/L)	BRGWC-25I	0.03576	0.02642	2	No	16	0.03109	0.00718	0	None	No	0.01	Param.
Barium (mg/L)	BRGWC-27I	0.0169	0.01492	2	No	16	0.01591	0.001518	0	None	No	0.01	Param.
Barium (mg/L)	BRGWC-29I	0.01932	0.01686	2	No	16	0.01809	0.001893	0	None	No	0.01	Param.
Barium (mg/L)	BRGWC-30I	0.02762	0.02211	2	No	16	0.02486	0.004236	0	None	No	0.01	Param.
Barium (mg/L)	BRGWC-32S	0.04296	0.02744	2	No	16	0.0352	0.01192	0	None	No	0.01	Param.
Barium (mg/L)	BRGWC-45	0.09505	0.07577	2	No	17	0.08541	0.01538	0	None	No	0.01	Param.
Barium (mg/L)	BRGWC-47	0.04339	0.03366	2	No	17	0.03852	0.00776	0	None	No	0.01	Param.
Barium (mg/L)	BRGWC-50	0.02128	0.01822	2	No	16	0.01975	0.002352	0	None	No	0.01	Param.
Barium (mg/L)	BRGWC-52I	0.02538	0.016	2	No	16	0.02069	0.007209	0	None	No	0.01	Param.
Barium (mg/L)	PZ-51I	0.01645	0.01326	2	No	7	0.01486	0.001345	0	None	No	0.01	Param.
Barium (mg/L)	PZ-51S	0.0354	0.02603	2	No	7	0.03071	0.003946	0	None	No	0.01	Param.
Beryllium (mg/L)	BRGWC-27I	0.0001224	0.00007868	0.004	No	17	0.0002196	0.0001663	23.53	Kaplan-Meier	ln(x)	0.01	Param.
Beryllium (mg/L)	BRGWC-29I	0.001039	0.0007322	0.004	No	16	0.0008856	0.0002359	6.25	None	No	0.01	Param.
Beryllium (mg/L)	BRGWC-45	0.0005	0.000079	0.004	No	18	0.0004514	0.0001416	88.89	None	No	0.01	NP (NDs)
Beryllium (mg/L)	BRGWC-47	0.0005	0.000056	0.004	No	17	0.0004211	0.0001758	82.35	None	No	0.01	NP (NDs)
Beryllium (mg/L)	BRGWC-50	0.005168	0.002632	0.004	No	16	0.0039	0.001948	12.5	None	No	0.01	Param.
Beryllium (mg/L)	PZ-51I	0.0005	0.000064	0.004	No	7	0.0001394	0.0001595	14.29	None	No	0.008	NP (normality)
Cadmium (mg/L)	BRGWC-27I	0.0005	0.00009	0.005	No	17	0.0004506	0.0001395	88.24	None	No	0.01	NP (NDs)
Cadmium (mg/L)	BRGWC-30I	0.0005	0.00014	0.005	No	17	0.0004541	0.00013	88.24	None	No	0.01	NP (NDs)
Cadmium (mg/L)	BRGWC-32S	0.0005	0.00011	0.005	No	17	0.0004288	0.0001586	82.35	None	No	0.01	NP (NDs)
Cadmium (mg/L)	BRGWC-45	0.0005	0.0002	0.005	No	18	0.0004193	0.0001565	77.78	None	No	0.01	NP (NDs)
Cadmium (mg/L)	BRGWC-47	0.0005	0.00015	0.005	No	17	0.0003076	0.0001684	41.18	None	No	0.01	NP (normality)
Cadmium (mg/L)	**BRGWC-50**	**0.03867**	**0.01281**	**0.005**	**Yes**	**16**	**0.02888**	**0.02503**	**0**	**None**	**x^(1/3)**	**0.01**	**Param.**
Cadmium (mg/L)	PZ-51I	0.01189	0.001178	0.005	No	9	0.007592	0.01074	0	None	ln(x)	0.01	Param.
Chromium (mg/L)	BRGWC-25I	0.005	0.0016	0.1	No	16	0.004536	0.001272	87.5	None	No	0.01	NP (NDs)
Chromium (mg/L)	BRGWC-27I	0.005	0.003	0.1	No	16	0.004625	0.001088	87.5	None	No	0.01	NP (NDs)
Chromium (mg/L)	BRGWC-29I	0.02	0.005	0.1	No	16	0.005937	0.00375	93.75	None	No	0.01	NP (NDs)
Chromium (mg/L)	BRGWC-30I	0.0051	0.005	0.1	No	16	0.005569	0.002248	87.5	None	No	0.01	NP (NDs)
Chromium (mg/L)	BRGWC-32S	0.005	0.0012	0.1	No	16	0.002731	0.001635	31.25	None	No	0.01	NP (normality)
Chromium (mg/L)	BRGWC-45	0.005	0.0014	0.1	No	17	0.00429	0.001588	82.35	None	No	0.01	NP (NDs)
Chromium (mg/L)	BRGWC-47	0.005	0.0018	0.1	No	17	0.004067	0.001748	76.47	None	No	0.01	NP (NDs)
Chromium (mg/L)	BRGWC-50	0.005	0.00071	0.1	No	16	0.003484	0.002007	56.25	None	No	0.01	NP (NDs)
Chromium (mg/L)	BRGWC-52I	0.005	0.0017	0.1	No	16	0.004794	0.000825	93.75	None	No	0.01	NP (NDs)
Chromium (mg/L)	PZ-51I	0.005	0.0008	0.1	No	7	0.003826	0.002006	71.43	None	No	0.008	NP (NDs)
Chromium (mg/L)	PZ-51S	0.005	0.00042	0.1	No	7	0.003721	0.002184	71.43	None	No	0.008	NP (NDs)
Cobalt (mg/L)	BRGWC-25I	0.006761	0.003951	0.014	No	16	0.005356	0.00216	6.25	None	No	0.01	Param.
Cobalt (mg/L)	BRGWC-27I	0.01077	0.007731	0.014	No	17	0.009253	0.002429	0	None	No	0.01	Param.
Cobalt (mg/L)	BRGWC-29I	0.009886	0.006557	0.014	No	16	0.008325	0.002677	6.25	None	sqrt(x)	0.01	Param.
Cobalt (mg/L)	BRGWC-30I	0.0016	0.00078	0.014	No	17	0.001781	0.001564	17.65	None	No	0.01	NP (normality)
Cobalt (mg/L)	BRGWC-32S	0.005	0.0025	0.014	No	17	0.004618	0.001111	88.24	None	No	0.01	NP (NDs)
Cobalt (mg/L)	BRGWC-45	0.015	0.0057	0.014	No	18	0.01287	0.01468	0	None	No	0.01	NP (normality)

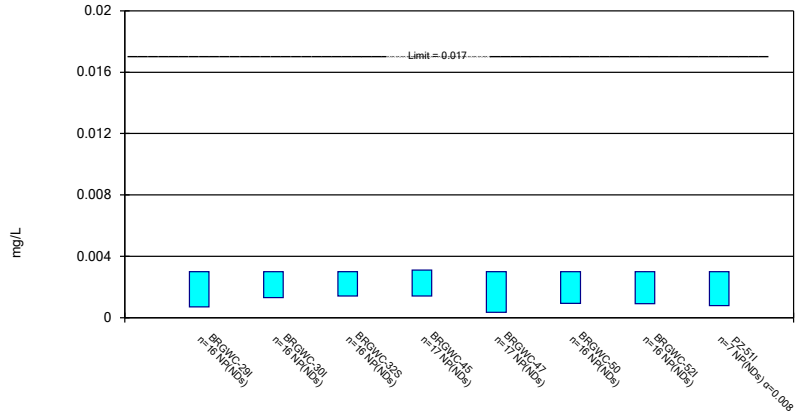
Confidence Intervals - All Results

Plant Branch Client: Southern Company Data: Plant Branch AP Printed 5/3/2022, 10:21 AM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Cobalt (mg/L)	BRGWC-47	0.002668	0.000535	0.014	No	17	0.00295	0.003274	17.65	Kaplan-Meier	x^(1/3)	0.01	Param.
Cobalt (mg/L)	**BRGWC-50**	**1.5**	**1.3**	**0.014**	**Yes**	**16**	**1.394**	**0.06801**	**0**	**None**	**No**	**0.01**	**NP (normality)**
Cobalt (mg/L)	BRGWC-52I	0.005	0.0012	0.014	No	16	0.003656	0.001799	56.25	None	No	0.01	NP (NDs)
Cobalt (mg/L)	PZ-50D	0.2898	-0.1361	0.014	No	4	0.07688	0.09379	0	None	No	0.01	Param.
Cobalt (mg/L)	PZ-51D	0.005	0.0004	0.014	No	4	0.002702	0.002653	50	None	No	0.0625	NP (normality)
Cobalt (mg/L)	**PZ-51I**	**0.041**	**0.017**	**0.014**	**Yes**	**9**	**0.02222**	**0.007276**	**0**	**None**	**No**	**0.002**	**NP (normality)**
Cobalt (mg/L)	PZ-51S	0.007679	0.002946	0.014	No	8	0.005313	0.002233	0	None	No	0.01	Param.
Fluoride (mg/L)	BRGWC-25I	0.27	0.14	4	No	17	0.2094	0.1393	5.882	None	No	0.01	NP (normality)
Fluoride (mg/L)	BRGWC-27I	0.2614	0.1497	4	No	17	0.2055	0.08915	11.76	None	No	0.01	Param.
Fluoride (mg/L)	BRGWC-29I	0.37	0.085	4	No	17	0.1776	0.1259	11.76	None	No	0.01	NP (normality)
Fluoride (mg/L)	BRGWC-30I	0.3339	0.1248	4	No	17	0.2559	0.2211	5.882	None	x^(1/3)	0.01	Param.
Fluoride (mg/L)	BRGWC-32S	0.11	0.09	4	No	17	0.1059	0.03792	64.71	None	No	0.01	NP (NDs)
Fluoride (mg/L)	BRGWC-45	0.12	0.067	4	No	18	0.1769	0.2379	55.56	None	No	0.01	NP (NDs)
Fluoride (mg/L)	BRGWC-47	0.34	0.076	4	No	18	0.2408	0.2624	50	None	No	0.01	NP (normality)
Fluoride (mg/L)	BRGWC-50	0.8284	0.3446	4	No	17	0.6229	0.4571	0	None	sqrt(x)	0.01	Param.
Fluoride (mg/L)	BRGWC-52I	0.2346	0.1271	4	No	16	0.1809	0.08263	6.25	None	No	0.01	Param.
Fluoride (mg/L)	PZ-50D	0.3413	0.00868	4	No	4	0.175	0.07326	0	None	No	0.01	Param.
Fluoride (mg/L)	PZ-51D	0.3256	0.1844	4	No	4	0.255	0.03109	0	None	No	0.01	Param.
Fluoride (mg/L)	PZ-51I	0.1	0.061	4	No	8	0.09513	0.01379	87.5	None	No	0.004	NP (NDs)
Fluoride (mg/L)	PZ-51S	0.1097	0.0463	4	No	7	0.078	0.02669	0	None	No	0.01	Param.
Lead (mg/L)	BRGWC-25I	0.001	0.00011	0.015	No	16	0.0009444	0.0002225	93.75	None	No	0.01	NP (NDs)
Lead (mg/L)	BRGWC-27I	0.001	0.000063	0.015	No	16	0.0009414	0.0002343	93.75	None	No	0.01	NP (NDs)
Lead (mg/L)	BRGWC-29I	0.0006	0.00027	0.015	No	15	0.0004607	0.0002457	13.33	None	No	0.01	NP (normality)
Lead (mg/L)	BRGWC-30I	0.001	0.00011	0.015	No	16	0.0009444	0.0002225	93.75	None	No	0.01	NP (NDs)
Lead (mg/L)	BRGWC-45	0.001	0.00026	0.015	No	17	0.0008543	0.0003267	82.35	None	No	0.01	NP (NDs)
Lead (mg/L)	BRGWC-47	0.001	0.00012	0.015	No	17	0.0008373	0.0003625	82.35	None	No	0.01	NP (NDs)
Lead (mg/L)	BRGWC-50	0.001	0.000085	0.015	No	16	0.0005907	0.0004375	50	None	No	0.01	NP (normality)
Lead (mg/L)	BRGWC-52I	0.001	0.000042	0.015	No	16	0.0009401	0.0002395	93.75	None	No	0.01	NP (NDs)
Lead (mg/L)	PZ-51I	0.001	0.00017	0.015	No	7	0.00079	0.0003628	71.43	None	No	0.008	NP (NDs)
Lithium (mg/L)	BRGWC-27I	0.0021	0.0012	0.089	No	16	0.003175	0.004624	12.5	None	No	0.01	NP (normality)
Lithium (mg/L)	BRGWC-29I	0.003643	0.00302	0.089	No	16	0.003331	0.0004785	0	None	No	0.01	Param.
Lithium (mg/L)	BRGWC-30I	0.01683	0.01192	0.089	No	16	0.01438	0.003779	0	None	No	0.01	Param.
Lithium (mg/L)	BRGWC-32S	0.0035	0.002	0.089	No	16	0.003837	0.004372	12.5	None	No	0.01	NP (normality)
Lithium (mg/L)	BRGWC-45	0.003543	0.002869	0.089	No	16	0.003206	0.0005183	0	None	No	0.01	Param.
Lithium (mg/L)	BRGWC-47	0.04376	0.04052	0.089	No	17	0.04214	0.00259	0	None	No	0.01	Param.
Lithium (mg/L)	BRGWC-50	0.04385	0.03802	0.089	No	16	0.041	0.00459	0	None	sqrt(x)	0.01	Param.
Lithium (mg/L)	BRGWC-52I	0.006853	0.003206	0.089	No	16	0.005237	0.003284	6.25	None	sqrt(x)	0.01	Param.
Lithium (mg/L)	PZ-51I	0.026	0.019	0.089	No	7	0.02071	0.002498	0	None	No	0.008	NP (normality)
Lithium (mg/L)	PZ-51S	0.015	0.0012	0.089	No	7	0.01303	0.005216	85.71	None	No	0.008	NP (NDs)
Mercury (mg/L)	BRGWC-25I	0.0002	0.000083	0.002	No	14	0.0001802	0.000051	85.71	None	No	0.01	NP (NDs)
Mercury (mg/L)	BRGWC-27I	0.0002	0.00005	0.002	No	14	0.0001784	0.00005502	85.71	None	No	0.01	NP (NDs)
Mercury (mg/L)	BRGWC-29I	0.0002	0.000098	0.002	No	14	0.000172	0.00005679	78.57	None	No	0.01	NP (NDs)
Mercury (mg/L)	BRGWC-30I	0.0002	0.000082	0.002	No	14	0.0001709	0.00005853	78.57	None	No	0.01	NP (NDs)
Mercury (mg/L)	BRGWC-32S	0.0002	0.0001	0.002	No	14	0.0001766	0.00004669	78.57	None	No	0.01	NP (NDs)
Mercury (mg/L)	PZ-51I	0.0002	0.000099	0.002	No	7	0.0001856	0.00003817	85.71	None	No	0.008	NP (NDs)
Molybdenum (mg/L)	BRGWC-25I	0.01	0.00089	0.1	No	15	0.006973	0.004431	66.67	None	No	0.01	NP (NDs)
Molybdenum (mg/L)	BRGWC-30I	0.01	0.0012	0.1	No	15	0.007679	0.003995	73.33	None	No	0.01	NP (NDs)
Molybdenum (mg/L)	BRGWC-45	0.01	0.00076	0.1	No	16	0.009422	0.00231	93.75	None	No	0.01	NP (NDs)
Molybdenum (mg/L)	BRGWC-50	0.01	0.0033	0.1	No	15	0.009033	0.002559	86.67	None	No	0.01	NP (NDs)
Molybdenum (mg/L)	BRGWC-52I	0.01	0.0012	0.1	No	15	0.006427	0.00383	46.67	None	No	0.01	NP (normality)
Selenium (mg/L)	BRGWC-25I	0.005	0.0021	0.05	No	16	0.004819	0.000725	93.75	None	No	0.01	NP (NDs)
Selenium (mg/L)	BRGWC-27I	0.005	0.0022	0.05	No	16	0.003769	0.00125	31.25	None	No	0.01	NP (normality)
Selenium (mg/L)	BRGWC-29I	0.0058	0.0039	0.05	No	16	0.004819	0.001392	50	None	No	0.01	NP (normality)
Selenium (mg/L)	BRGWC-30I	0.005	0.0038	0.05	No	16	0.004594	0.0008888	75	None	No	0.01	NP (NDs)
Selenium (mg/L)	BRGWC-32S	0.12	0.0019	0.05	No	17	0.06389	0.06547	23.53	None	No	0.01	NP (normality)
Selenium (mg/L)	BRGWC-45	0.005	0.0029	0.05	No	17	0.004876	0.0005093	94.12	None	No	0.01	NP (NDs)
Selenium (mg/L)	BRGWC-47	0.005	0.0017	0.05	No	17	0.003918	0.001533	64.71	None	No	0.01	NP (NDs)
Selenium (mg/L)	BRGWC-50	0.005	0.0022	0.05	No	16	0.003825	0.001339	50	None	No	0.01	NP (normality)
Thallium (mg/L)	BRGWC-29I	0.001	0.00016	0.002	No	16	0.0003325	0.0003315	18.75	None	No	0.01	NP (normality)

Non-Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted.



Constituent: Antimony Analysis Run 5/3/2022 10:19 AM View: Pond BCD Appendix IV - Confidence Interv
Plant Branch Client: Southern Company Data: Plant Branch AP

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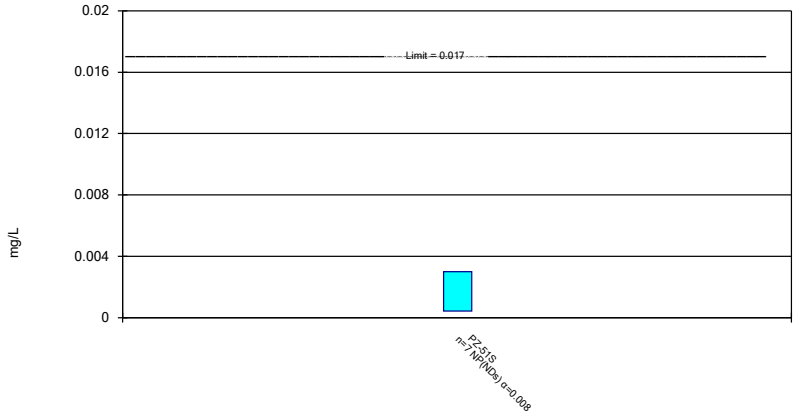
Non-Parametric Confidence Interval

Compliance Limit is not exceeded.



Constituent: Antimony Analysis Run 5/3/2022 10:19 AM View: Pond BCD Appendix IV - Confidence Interv
Plant Branch Client: Southern Company Data: Plant Branch AP

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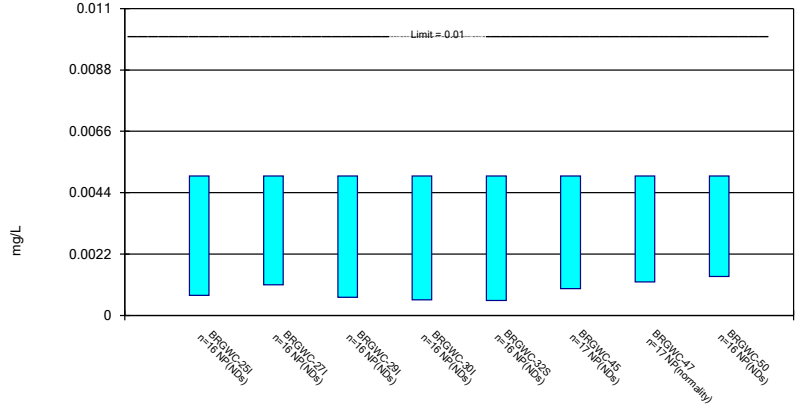
Non-Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Arsenic Analysis Run 5/3/2022 10:19 AM View: Pond BCD Appendix IV - Confidence Interval
Plant Branch Client: Southern Company Data: Plant Branch AP

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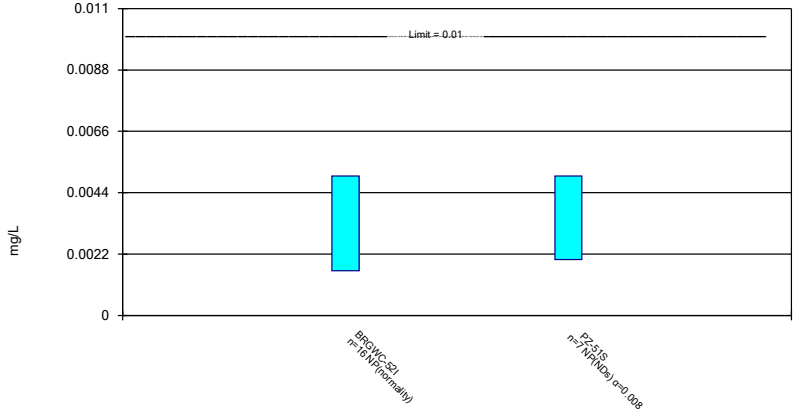
Non-Parametric Confidence Interval

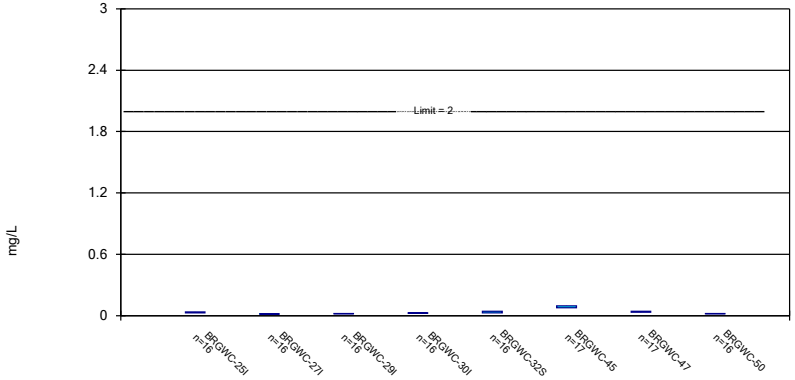
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted.



Constituent: Arsenic Analysis Run 5/3/2022 10:19 AM View: Pond BCD Appendix IV - Confidence Interval
Plant Branch Client: Southern Company Data: Plant Branch AP

Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Barium Analysis Run 5/3/2022 10:19 AM View: Pond BCD Appendix IV - Confidence Intervals
Plant Branch Client: Southern Company Data: Plant Branch AP

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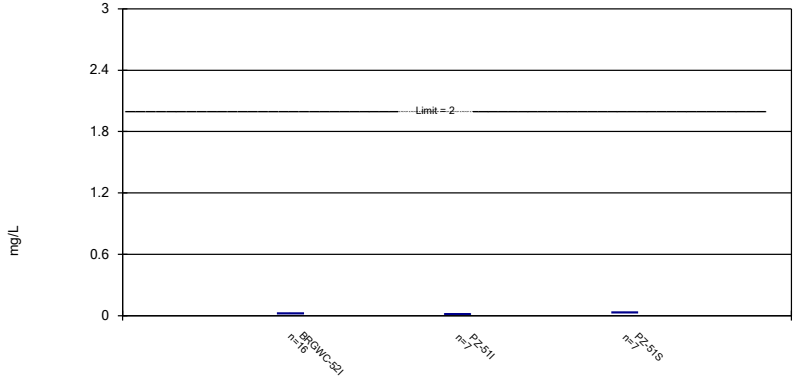
Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.

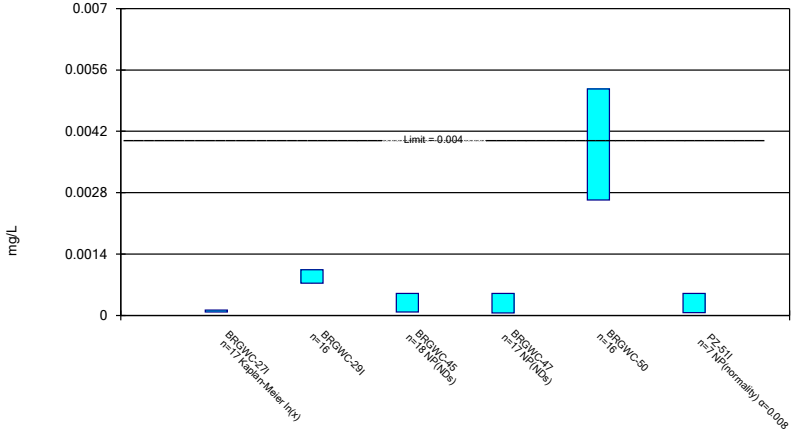


Constituent: Barium Analysis Run 5/3/2022 10:19 AM View: Pond BCD Appendix IV - Confidence Intervals
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.32j 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.

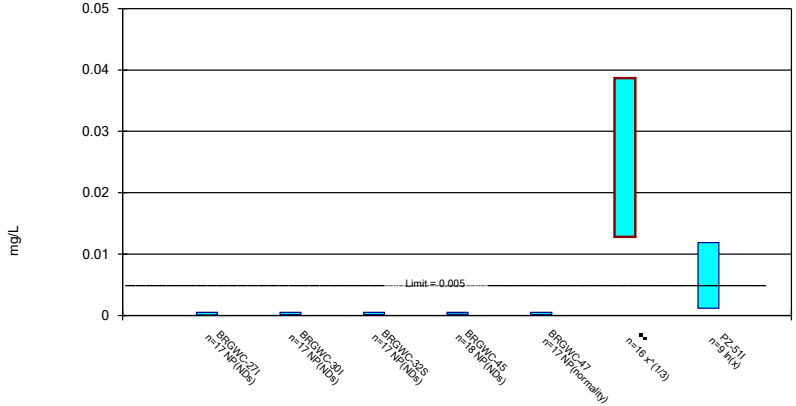


Constituent: Beryllium Analysis Run 5/3/2022 10:19 AM View: Pond BCD Appendix IV - Confidence Interv
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.32j Groundwater Stats Consulting. UG

Parametric and Non-Parametric (NP) Confidence Interval

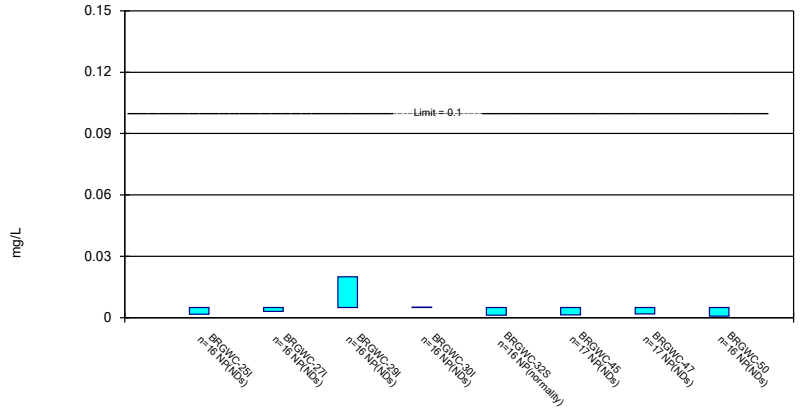
Compliance limit is exceeded.* Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Cadmium Analysis Run 5/3/2022 10:19 AM View: Pond BCD Appendix IV - Confidence Interv
Plant Branch Client: Southern Company Data: Plant Branch AP

Non-Parametric Confidence Interval

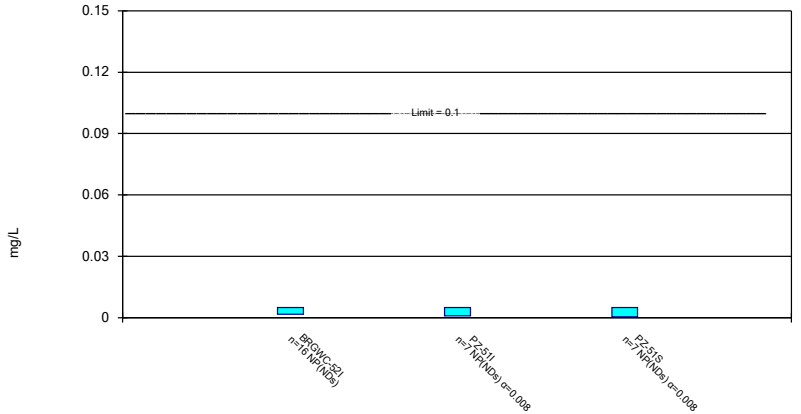
Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Chromium Analysis Run 5/3/2022 10:19 AM View: Pond BCD Appendix IV - Confidence Inter
Plant Branch Client: Southern Company Data: Plant Branch AP

Non-Parametric Confidence Interval

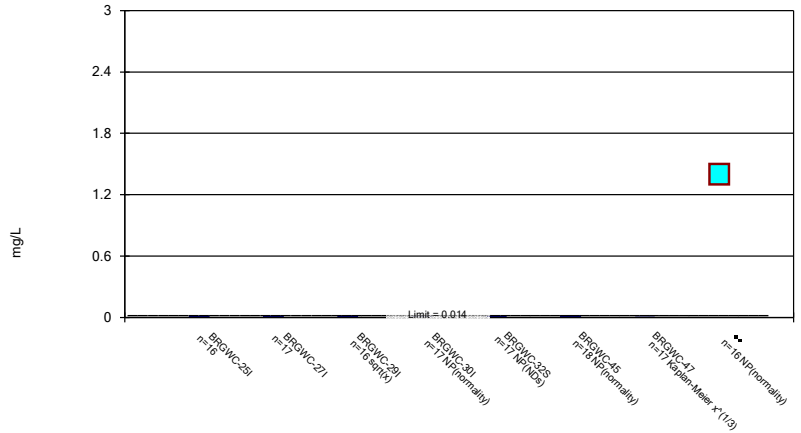
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted.



Constituent: Chromium Analysis Run 5/3/2022 10:19 AM View: Pond BCD Appendix IV - Confidence Inter
Plant Branch Client: Southern Company Data: Plant Branch AP

Parametric and Non-Parametric (NP) Confidence Interval

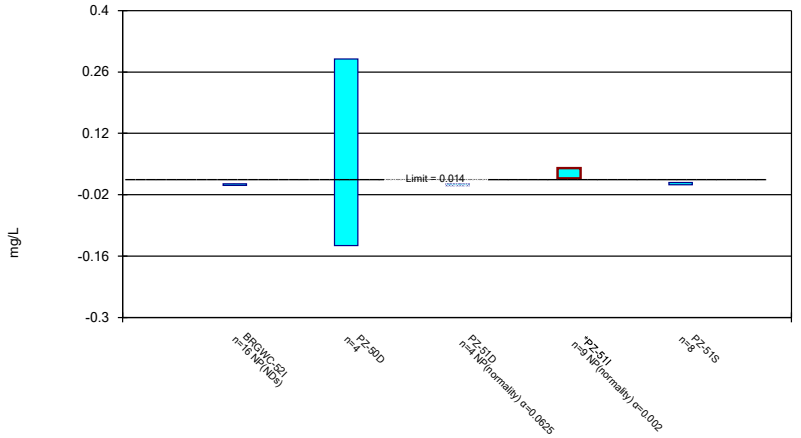
Compliance limit is exceeded.* Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Cobalt Analysis Run 5/3/2022 10:19 AM View: Pond BCD Appendix IV - Confidence Intervals
Plant Branch Client: Southern Company Data: Plant Branch AP

Parametric and Non-Parametric (NP) Confidence Interval

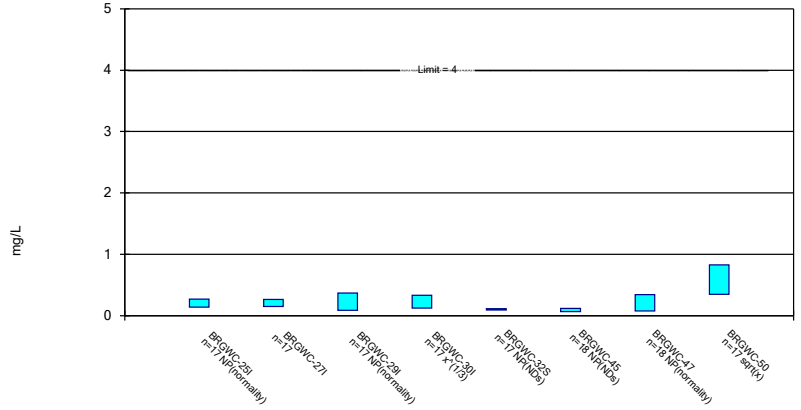
Compliance limit is exceeded.* Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Cobalt Analysis Run 5/3/2022 10:19 AM View: Pond BCD Appendix IV - Confidence Intervals
Plant Branch Client: Southern Company Data: Plant Branch AP

Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.

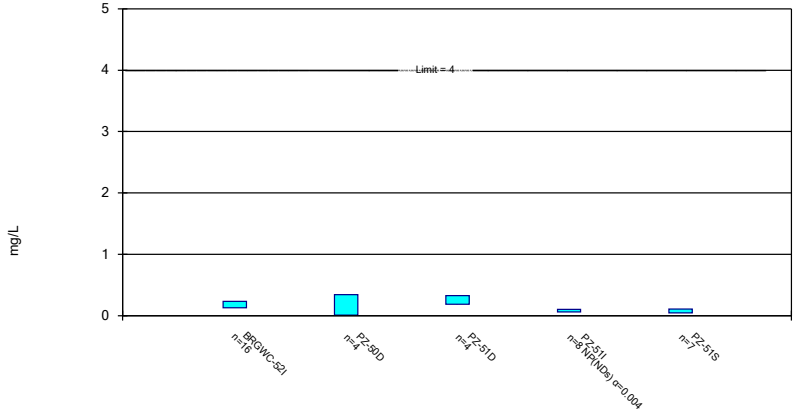


Constituent: Fluoride Analysis Run 5/3/2022 10:19 AM View: Pond BCD Appendix IV - Confidence Interval
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.32j 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.

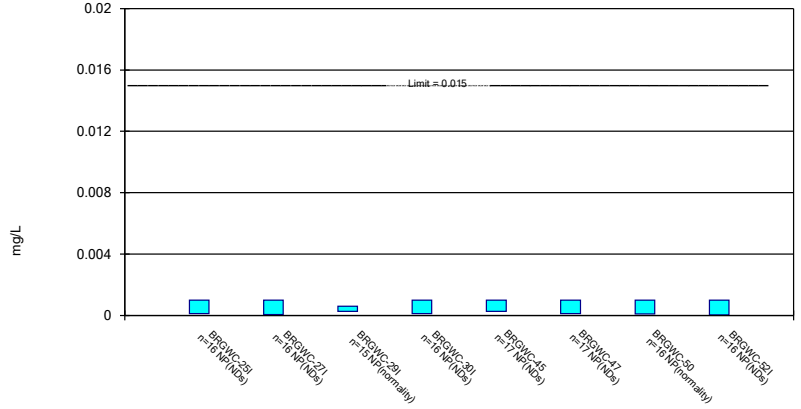


Constituent: Fluoride Analysis Run 5/3/2022 10:19 AM View: Pond BCD Appendix IV - Confidence Interval
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.32j Groundwater Stats Consulting. UG

Non-Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01.

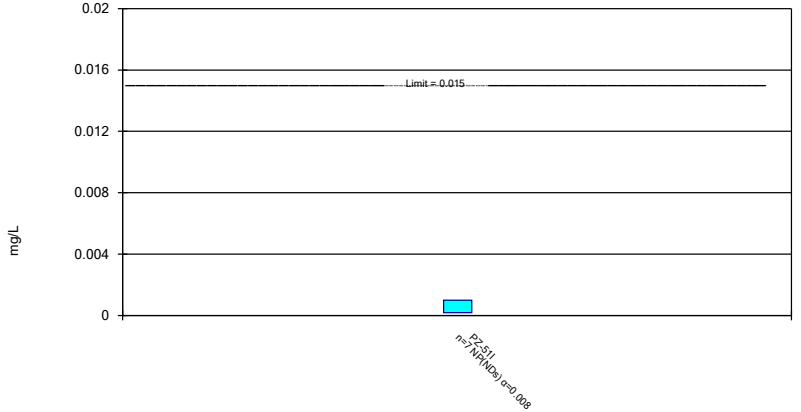


Constituent: Lead Analysis Run 5/3/2022 10:19 AM View: Pond BCD Appendix IV - Confidence Intervals (
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.32j Groundwater Stats Consulting. UG

Non-Parametric Confidence Interval

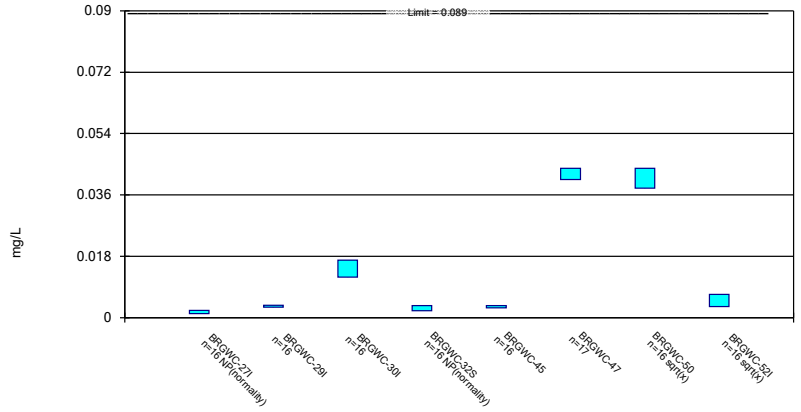
Compliance Limit is not exceeded.



Constituent: Lead Analysis Run 5/3/2022 10:19 AM View: Pond BCD Appendix IV - Confidence Intervals (
Plant Branch Client: Southern Company Data: Plant Branch AP

Parametric and Non-Parametric (NP) Confidence Interval

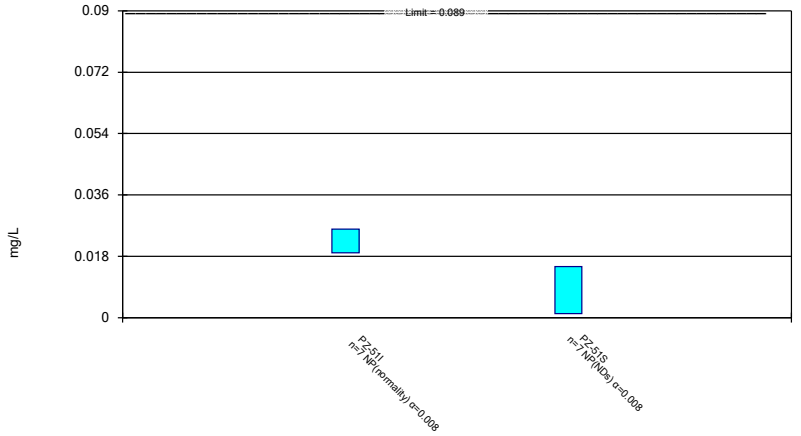
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Lithium Analysis Run 5/3/2022 10:19 AM View: Pond BCD Appendix IV - Confidence Interval
Plant Branch Client: Southern Company Data: Plant Branch AP

Non-Parametric Confidence Interval

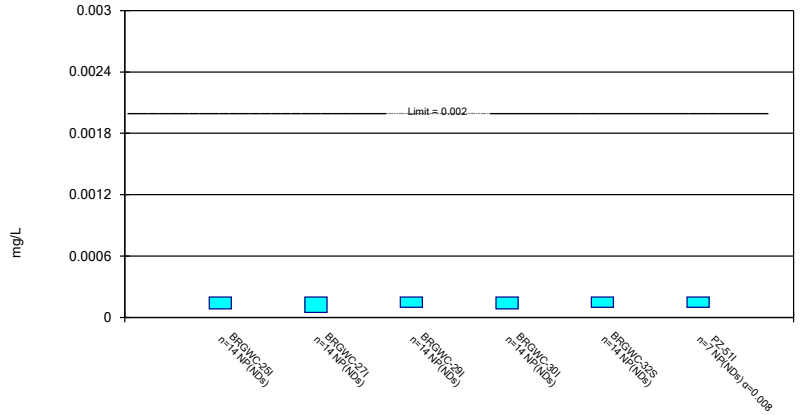
Compliance Limit is not exceeded.



Constituent: Lithium Analysis Run 5/3/2022 10:19 AM View: Pond BCD Appendix IV - Confidence Interval
Plant Branch Client: Southern Company Data: Plant Branch AP

Non-Parametric Confidence Interval

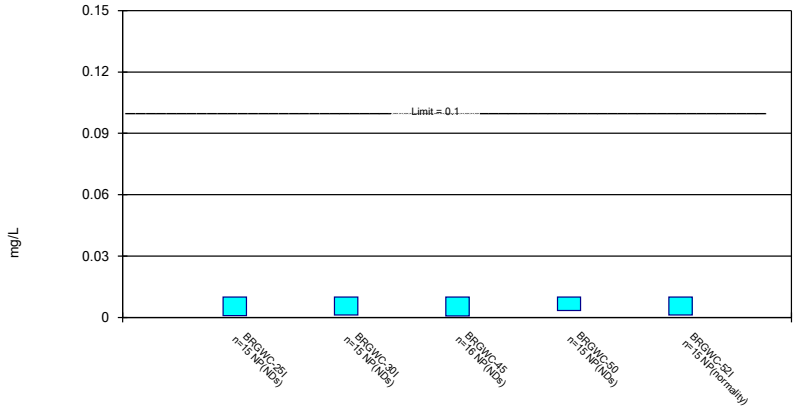
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted.



Constituent: Mercury Analysis Run 5/3/2022 10:19 AM View: Pond BCD Appendix IV - Confidence Interval
Plant Branch Client: Southern Company Data: Plant Branch AP

Non-Parametric Confidence Interval

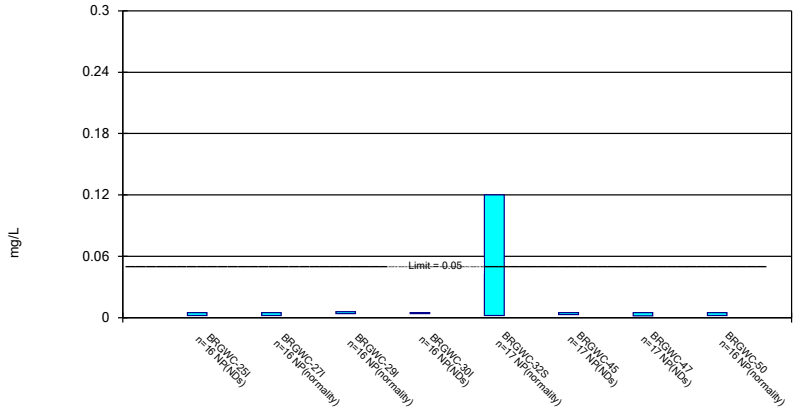
Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Molybdenum Analysis Run 5/3/2022 10:19 AM View: Pond BCD Appendix IV - Confidence Int
Plant Branch Client: Southern Company Data: Plant Branch AP

Non-Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01.

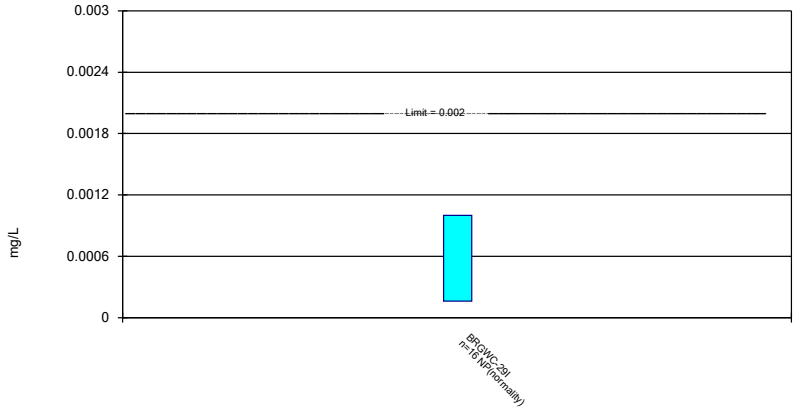


Constituent: Selenium Analysis Run 5/3/2022 10:19 AM View: Pond BCD Appendix IV - Confidence Interv
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.32j Groundwater Stats Consulting. UG

Non-Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Thallium Analysis Run 5/3/2022 10:19 AM View: Pond BCD Appendix IV - Confidence Interva
Plant Branch Client: Southern Company Data: Plant Branch AP

Confidence Interval

Constituent: Antimony (mg/L) Analysis Run 5/3/2022 10:21 AM View: Pond BCD Appendix IV - Confidence Intervals (No Radium)
Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWC-29I	BRGWC-30I	BRGWC-32S	BRGWC-45	BRGWC-47	BRGWC-50	BRGWC-52I	PZ-51I
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			
3/15/2018						<0.003		
5/1/2018				<0.003	<0.003 (D)	<0.003		
6/27/2018	<0.003		<0.003		<0.003			
6/28/2018		<0.003		<0.003		<0.003		
7/31/2018				<0.003				
8/1/2018					<0.003	<0.003		
8/10/2018							<0.003	
8/23/2018				<0.003	<0.003		0.00085 (J)	
9/19/2018				<0.003	<0.003		<0.003	
10/29/2018				<0.003	<0.003	<0.003	<0.003	
11/28/2018				<0.003	<0.003	<0.003	<0.003	
12/18/2018	<0.003	<0.003						
12/19/2018			<0.003		<0.003	<0.003		
12/20/2018				0.0024 (J)			<0.003	
1/16/2019						<0.003		
1/17/2019							<0.003	
1/19/2019								<0.003
2/13/2019							<0.003	
8/27/2019		<0.003	<0.003					
8/28/2019	<0.003			0.00046 (J)	<0.003			
8/29/2019						0.00052 (J)	<0.003	
10/16/2019	<0.003				<0.003	<0.003	<0.003	
10/18/2019								<0.003
12/3/2019				0.00088 (J)				
12/4/2019		<0.003	<0.003					
3/4/2020	<0.003				<0.003	<0.003	0.00043 (J)	
3/5/2020		<0.003	0.0014 (J)	0.0016 (J)				
8/19/2020	<0.003	<0.003	<0.003					
8/20/2020				0.0031	<0.003	<0.003	<0.003	0.0017 (J)
9/15/2020	<0.003							
9/16/2020		<0.003	<0.003	0.0012 (J)	0.00035 (J)			
9/17/2020						0.00041 (J)	<0.003	<0.003
3/2/2021				0.0014 (J)	<0.003			
3/3/2021	<0.003	<0.003						
3/4/2021			<0.003			0.00092 (J)	0.00091 (J)	0.00079 (J)
9/23/2021				<0.003	<0.003			
9/27/2021						<0.003		0.0012 (J)
9/28/2021	<0.003	<0.003	<0.003				<0.003	
2/2/2022		0.0013 (J)	<0.003	<0.003	<0.003		<0.003	<0.003
2/3/2022	<0.003					<0.003		
Mean	0.002856	0.002894	0.0029	0.002414	0.002844	0.002553	0.002574	0.002241
Std. Dev.	0.000575	0.000425	0.0004	0.0009097	0.0006427	0.0009657	0.00092	0.000982
Upper Lim.	0.003	0.003	0.003	0.0031	0.003	0.003	0.003	0.003
Lower Lim.	0.0007	0.0013	0.0014	0.0014	0.00035	0.00092	0.00091	0.00079

Confidence Interval

Constituent: Antimony (mg/L) Analysis Run 5/3/2022 10:21 AM View: Pond BCD Appendix IV - Confidence Intervals (No Radium)
Plant Branch Client: Southern Company Data: Plant Branch AP

	PZ-51S
1/18/2019	<0.003
10/18/2019	<0.003
8/20/2020	<0.003
9/17/2020	0.00043 (J)
3/3/2021	0.0018 (J)
9/27/2021	<0.003
2/2/2022	<0.003
Mean	0.002461
Std. Dev.	0.001001
Upper Lim.	0.003
Lower Lim.	0.00043

Confidence Interval

Constituent: Arsenic (mg/L) Analysis Run 5/3/2022 10:21 AM View: Pond BCD Appendix IV - Confidence Intervals (No Radium)
Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWC-25I	BRGWC-27I	BRGWC-29I	BRGWC-30I	BRGWC-32S	BRGWC-45	BRGWC-47	BRGWC-50
9/6/2016				<0.005				
9/8/2016	<0.005	<0.005	<0.005		<0.005			
11/17/2016	<0.005							
11/18/2016		<0.005						
11/21/2016			0.0019 (J)	<0.005	<0.005			
2/21/2017	<0.005	<0.005						
2/22/2017			<0.005	<0.005	<0.005			
6/13/2017	0.0006 (J)	0.0009 (J)						
6/14/2017			0.002 (J)	<0.005	<0.005			
9/27/2017	<0.005	0.0007 (J)	0.0016 (J)	<0.005	<0.005			
2/14/2018	<0.005	<0.005	<0.005	<0.005	<0.005			
3/6/2018						<0.005 (X)	<0.005 (X)	
3/15/2018								0.0014 (J)
5/1/2018						0.0021 (J)	0.0018 (JD)	<0.005
6/26/2018	0.00072 (J)							
6/27/2018		<0.005	<0.005		<0.005		0.0016 (J)	
6/28/2018				<0.005 (X)		<0.005 (X)		<0.005
7/31/2018						<0.005		
8/1/2018							0.0028 (J)	0.00074 (J)
8/23/2018						0.00075 (J)	<0.005	
9/19/2018						<0.005	<0.005	
10/29/2018						<0.005	0.0012 (J)	<0.005
11/28/2018						0.00096 (J)	0.0019 (J)	<0.005
12/18/2018	0.00091 (J)		<0.005	<0.005				
12/19/2018					<0.005		0.00075 (J)	<0.005
12/20/2018		<0.005				<0.005		
1/16/2019								<0.005
8/27/2019	<0.005			<0.005	<0.005			
8/28/2019		0.0014 (J)	0.00051 (J)			0.00058 (J)	0.0018 (J)	
8/29/2019								<0.005
10/15/2019	0.00052 (J)							
10/16/2019			0.00065 (J)				<0.005	<0.005
12/3/2019						0.0007 (J)		
12/4/2019		0.0011 (J)		0.00056 (J)	0.00053 (J)			
3/4/2020	<0.005	<0.005	0.00044 (J)				0.00049 (J)	0.00046 (J)
3/5/2020				<0.005	<0.005	<0.005		
8/19/2020	<0.005	<0.005	<0.005	<0.005	<0.005			
8/20/2020						<0.005	0.00089 (J)	<0.005
9/15/2020	<0.005		<0.005					
9/16/2020		<0.005		<0.005	<0.005	<0.005	<0.005	
9/17/2020								<0.005
3/2/2021	<0.005					<0.005	<0.005	
3/3/2021		<0.005	0.0015 (J)	<0.005				
3/4/2021					<0.005			<0.005
9/23/2021						<0.005	0.002 (J)	
9/27/2021								<0.005
9/28/2021	<0.005	<0.005	<0.005	<0.005	<0.005			
2/2/2022	<0.005			<0.005	<0.005	<0.005	0.0056	
2/3/2022			<0.005					<0.005
2/4/2022		<0.005						
Mean	0.003922	0.004006	0.00335	0.004722	0.004721	0.003829	0.00299	0.004225
Std. Dev.	0.00193	0.001783	0.001979	0.00111	0.001117	0.001896	0.001886	0.001675

Confidence Interval

Constituent: Arsenic (mg/L) Analysis Run 5/3/2022 10:21 AM View: Pond BCD Appendix IV - Confidence Intervals (No Radium)
Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWC-25I	BRGWC-27I	BRGWC-29I	BRGWC-30I	BRGWC-32S	BRGWC-45	BRGWC-47	BRGWC-50
Upper Lim.	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005
Lower Lim.	0.00072	0.0011	0.00065	0.00056	0.00053	0.00096	0.0012	0.0014

Confidence Interval

Constituent: Arsenic (mg/L) Analysis Run 5/3/2022 10:21 AM View: Pond BCD Appendix IV - Confidence Intervals (No Radium)
Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWC-52I	PZ-51S
8/10/2018	<0.005	
8/23/2018	<0.005	
9/19/2018	0.0013 (J)	
10/29/2018	0.0038 (J)	
11/28/2018	0.0016 (J)	
12/20/2018	0.0032 (J)	
1/17/2019	0.0032 (J)	
1/18/2019		<0.005
2/13/2019	<0.005	
8/29/2019	0.00067 (J)	
10/16/2019	0.0026 (J)	
10/18/2019		<0.005
3/4/2020	0.0047 (J)	
8/20/2020	0.0031 (J)	<0.005
9/17/2020	<0.005	<0.005
3/3/2021		<0.005
3/4/2021	0.003 (J)	
9/27/2021		<0.005
9/28/2021	<0.005	
2/2/2022	<0.005	0.002 (J)
Mean	0.003573	0.004571
Std. Dev.	0.001479	0.001134
Upper Lim.	0.005	0.005
Lower Lim.	0.0016	0.002

Confidence Interval

Constituent: Barium (mg/L) Analysis Run 5/3/2022 10:21 AM View: Pond BCD Appendix IV - Confidence Intervals (No Radium)
Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWC-25I	BRGWC-27I	BRGWC-29I	BRGWC-30I	BRGWC-32S	BRGWC-45	BRGWC-47	BRGWC-50
9/6/2016				0.0206				
9/8/2016	0.0378	0.0184	0.0199		0.0593			
11/17/2016	0.0448							
11/18/2016		0.0173						
11/21/2016			0.0221 (J)	0.0237 (J)	0.0532 (BR)			
2/21/2017	0.0447	0.015						
2/22/2017			0.0179	0.0219	0.0498			
6/13/2017	0.0351	0.0143						
6/14/2017			0.0157	0.0197	0.0421			
9/27/2017	0.0383	0.017	0.0165	0.0213	0.0411			
2/14/2018	0.0327	0.0166	0.0163	0.0236	0.0417			
3/6/2018						0.1	0.0519	
3/15/2018								0.021
5/1/2018						0.084	0.057 (D)	0.024
6/26/2018	0.031							
6/27/2018		0.015	0.017		0.038		0.046	
6/28/2018				0.023		0.067		0.021
7/31/2018						0.087 (J+X)		
8/1/2018							0.043 (J+X)	0.02 (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)	0.019 (J+X)
11/28/2018						0.11	0.039	0.02
12/18/2018	0.03		0.017	0.029				
12/19/2018					0.036		0.04	0.02
12/20/2018		0.015				0.093		
1/16/2019								0.02
8/27/2019	0.027			0.027	0.032			
8/28/2019		0.019	0.02			0.11	0.035	
8/29/2019								0.018
10/15/2019	0.027							
10/16/2019			0.019				0.032	0.017
12/3/2019						0.099		
12/4/2019		0.016		0.021	0.028			
3/4/2020	0.026	0.015	0.018				0.038	0.019
3/5/2020				0.025	0.026	0.078		
8/19/2020	0.027	0.016	0.019	0.026	0.025			
8/20/2020						0.083	0.035	0.019
9/15/2020	0.024		0.017					
9/16/2020		0.016		0.022	0.024	0.085	0.028	
9/17/2020								0.02
3/2/2021	0.026					0.061	0.036	
3/3/2021		0.016	0.021	0.028				
3/4/2021					0.024			0.025
9/23/2021						0.064	0.031	
9/27/2021								0.017
9/28/2021	0.023	0.013	0.017	0.035	0.02			
2/2/2022	0.023			0.031	0.023	0.063	0.028	
2/3/2022			0.016					0.016
2/4/2022		0.015						
Mean	0.03109	0.01591	0.01809	0.02486	0.0352	0.08541	0.03852	0.01975
Std. Dev.	0.00718	0.001518	0.001893	0.004236	0.01192	0.01538	0.00776	0.002352

Confidence Interval

Constituent: Barium (mg/L) Analysis Run 5/3/2022 10:21 AM View: Pond BCD Appendix IV - Confidence Intervals (No Radium)
Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWC-25I	BRGWC-27I	BRGWC-29I	BRGWC-30I	BRGWC-32S	BRGWC-45	BRGWC-47	BRGWC-50
Upper Lim.	0.03576	0.0169	0.01932	0.02762	0.04296	0.09505	0.04339	0.02128
Lower Lim.	0.02642	0.01492	0.01686	0.02211	0.02744	0.07577	0.03366	0.01822

Confidence Interval

Constituent: Barium (mg/L) Analysis Run 5/3/2022 10:21 AM View: Pond BCD Appendix IV - Confidence Intervals (No Radium)
Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWC-52I	PZ-51I	PZ-51S
8/10/2018	0.038		
8/23/2018	0.03 (JX)		
9/19/2018	0.03		
10/29/2018	0.025 (J+X)		
11/28/2018	0.017		
12/20/2018	0.013		
1/17/2019	0.017		
1/18/2019			0.031
1/19/2019		0.017	
2/13/2019	0.025		
8/29/2019	0.017		
10/16/2019	0.015		
10/18/2019		0.014	0.032
3/4/2020	0.022		
8/20/2020	0.017	0.013	0.03
9/17/2020	0.02	0.015	0.033
3/3/2021			0.037
3/4/2021	0.019	0.016	
9/27/2021		0.014	0.025
9/28/2021	0.013		
2/2/2022	0.013	0.015	0.027
Mean	0.02069	0.01486	0.03071
Std. Dev.	0.007209	0.001345	0.003946
Upper Lim.	0.02538	0.01645	0.0354
Lower Lim.	0.016	0.01326	0.02603

Confidence Interval

Constituent: Beryllium (mg/L) Analysis Run 5/3/2022 10:21 AM View: Pond BCD Appendix IV - Confidence Intervals (No Radium)
Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWC-27I	BRGWC-29I	BRGWC-45	BRGWC-47	BRGWC-50	PZ-51I
9/8/2016	0.0002 (J)	0.0011 (J)				
11/18/2016	0.0002 (J)					
11/21/2016		0.0012 (J)				
2/21/2017	0.0002 (J)					
2/22/2017		0.0014 (J)				
6/13/2017	0.0002 (J)					
6/14/2017		0.0012 (J)				
9/27/2017	0.0001 (J)	0.001 (J)				
2/14/2018	<0.0005	<0.0005				
3/6/2018			<0.0005	<0.0005		
3/15/2018					<0.0005	
5/1/2018			<0.0005	<0.0005 (D)	<0.0005	
6/27/2018	0.00014 (J)	0.0008 (J)		<0.0005		
6/28/2018			<0.0005		0.003 (J)	
7/31/2018			<0.0005			
8/1/2018				<0.0005	0.0025 (J)	
8/23/2018			7.9E-05 (J)	5.5E-05 (J)		
9/19/2018			<0.0005	<0.0005		
10/29/2018			<0.0005	<0.0005	0.0042	
11/28/2018			<0.0005	5.6E-05 (J)	0.0029 (J)	
12/18/2018		0.00071 (J)				
12/19/2018				<0.0005 (X)	0.0043	
12/20/2018	<0.0005 (X)		<0.0005			
1/16/2019					0.0038	
1/19/2019						6.4E-05 (J)
8/28/2019	0.00012 (J)	0.0008 (J)	<0.0005	<0.0005		
8/29/2019					0.0029 (J)	
10/16/2019		0.00072 (J)		<0.0005	0.0027 (J)	
10/17/2019	<0.0005		<0.0005			
10/18/2019						<0.0005
12/3/2019			<0.0005			
12/4/2019	0.00012 (J)					
3/4/2020	0.00012 (J)	0.00073 (J)		<0.0005	0.0052	
3/5/2020			<0.0005			
8/19/2020	9.9E-05 (J)	0.00074 (J)				
8/20/2020			4.6E-05 (J)	4.7E-05 (J)	0.0044	7.7E-05 (J)
9/15/2020		0.00071 (J)				
9/16/2020	0.00011 (J)		<0.0005	<0.0005		
9/17/2020					0.0065	9.6E-05 (J)
3/2/2021			<0.0005	<0.0005		
3/3/2021	7.1E-05 (J)	0.00094				
3/4/2021					0.0059	9.7E-05 (J)
9/23/2021			<0.0005	<0.0005		
9/27/2021					0.006	7.1E-05 (J)
9/28/2021	<0.0005	0.00079				
2/2/2022			<0.0005	<0.0005		7.1E-05 (J)
2/3/2022		0.00083			0.0071	
2/4/2022	5.4E-05 (J)					
Mean	0.0002196	0.0008856	0.0004514	0.0004211	0.0039	0.0001394
Std. Dev.	0.0001663	0.0002359	0.0001416	0.0001758	0.001948	0.0001595
Upper Lim.	0.0001224	0.001039	0.0005	0.0005	0.005168	0.0005
Lower Lim.	7.868E-05	0.0007322	7.9E-05	5.6E-05	0.002632	6.4E-05

Confidence Interval

Constituent: Cadmium (mg/L) Analysis Run 5/3/2022 10:21 AM View: Pond BCD Appendix IV - Confidence Intervals (No Radium)
Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWC-27I	BRGWC-30I	BRGWC-32S	BRGWC-45	BRGWC-47	BRGWC-50	PZ-51I
9/6/2016		<0.0005					
9/8/2016	7E-05 (J)		<0.0005				
11/18/2016	9E-05 (J)						
11/21/2016		8E-05 (J)	8E-05 (J)				
2/21/2017	<0.0005						
2/22/2017		<0.0005	0.0001 (J)				
6/13/2017	<0.0005						
6/14/2017		<0.0005	<0.0005				
9/27/2017	<0.0005	<0.0005	<0.0005				
2/14/2018	<0.0005	<0.0005	<0.0005				
3/6/2018				<0.0005	<0.0005		
3/15/2018						0.038	
5/1/2018				<0.0005	<0.0005 (D)	0.011	
6/27/2018	<0.0005		0.00011 (J)		0.00014 (J)		
6/28/2018		<0.0005		<0.0005		0.087	
7/31/2018				<0.0005			
8/1/2018					0.00011 (J)	0.042	
8/3/2018							0.0015
8/23/2018				<0.0005	0.00018 (J)		
9/19/2018				<0.0005	0.00015 (J)		
10/29/2018				9.8E-05 (J)	0.00019 (J)	0.083	
11/28/2018				<0.0005	0.00022 (J)	0.031	
12/18/2018		<0.0005					
12/19/2018			<0.0005 (X)		<0.0005	0.042	
12/20/2018	<0.0005			<0.0005 (X)			
1/16/2019						0.028	
1/19/2019							0.0016
8/27/2019		<0.0005	<0.0005				
8/28/2019	<0.0005			<0.0005	0.00017 (J)		
8/29/2019						0.0071	
10/16/2019					0.00018 (J)	0.014	
10/17/2019	<0.0005	<0.0005	<0.0005	<0.0005			
10/18/2019							0.00083 (J)
12/3/2019				0.00011 (J)			
12/4/2019	<0.0005	<0.0005	<0.0005				
3/4/2020	<0.0005				0.00024 (J)	0.013	
3/5/2020		<0.0005	<0.0005	<0.0005			
8/19/2020	<0.0005	<0.0005	<0.0005				
8/20/2020				0.00014 (J)	<0.0005	0.0079	0.0019 (J)
9/16/2020	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005		
9/17/2020						0.021	0.033
10/27/2020							0.0051
3/2/2021				0.0002 (J)	<0.0005		
3/3/2021	<0.0005	<0.0005					
3/4/2021			<0.0005			0.019	0.017
9/23/2021				<0.0005	<0.0005		
9/27/2021						0.0095	0.0031
9/28/2021	<0.0005	<0.0005	<0.0005				
2/2/2022		0.00014 (J)	<0.0005	<0.0005	0.00015 (J)		0.0043
2/3/2022						0.0085	
2/4/2022	<0.0005						
Mean	0.0004506	0.0004541	0.0004288	0.0004193	0.0003076	0.02888	0.007592

Confidence Interval

Constituent: Cadmium (mg/L) Analysis Run 5/3/2022 10:21 AM View: Pond BCD Appendix IV - Confidence Intervals (No Radium)
Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWC-27I	BRGWC-30I	BRGWC-32S	BRGWC-45	BRGWC-47	BRGWC-50	PZ-51I
Std. Dev.	0.0001395	0.00013	0.0001586	0.0001565	0.0001684	0.02503	0.01074
Upper Lim.	0.0005	0.0005	0.0005	0.0005	0.0005	0.03867	0.01189
Lower Lim.	9E-05	0.00014	0.00011	0.0002	0.00015	0.01281	0.001178

Confidence Interval

Constituent: Chromium (mg/L) Analysis Run 5/3/2022 10:21 AM View: Pond BCD Appendix IV - Confidence Intervals (No Radium)
Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWC-25I	BRGWC-27I	BRGWC-29I	BRGWC-30I	BRGWC-32S	BRGWC-45	BRGWC-47	BRGWC-50
9/6/2016				<0.005				
9/8/2016	<0.005	0.001 (J)	<0.005		<0.005			
11/17/2016	<0.005							
11/18/2016		<0.005						
11/21/2016			<0.005	<0.005	<0.005			
2/21/2017	<0.005	<0.005						
2/22/2017			<0.005	<0.005	0.0012 (J)			
6/13/2017	<0.005	<0.005						
6/14/2017			<0.005	<0.005	0.0009 (J)			
9/27/2017	<0.005	<0.005	<0.005	<0.005	0.0011 (J)			
2/14/2018	<0.005	<0.005	<0.005	<0.005	<0.005			
3/6/2018						<0.005	<0.005	
3/15/2018								<0.005
5/1/2018						<0.005	<0.005 (D)	<0.005
6/26/2018	<0.005							
6/27/2018		<0.005	<0.005		<0.005		<0.005	
6/28/2018				<0.005		<0.005		0.0023 (J)
7/31/2018						<0.005		
8/1/2018							<0.005	0.0046 (J)
8/23/2018						<0.005	<0.005	
9/19/2018						<0.005	<0.005	
10/29/2018						<0.005	<0.005	<0.005
11/28/2018						<0.005	<0.005	<0.005
12/18/2018	<0.005		<0.005	<0.005				
12/19/2018					<0.005		0.0018 (J)	<0.005
12/20/2018		0.003 (J)				<0.005		
1/16/2019								<0.005
8/27/2019	0.0016 (J)			0.0051 (J)	0.0019 (J)			
8/28/2019		<0.005	<0.005			<0.005	0.00092 (J)	
8/29/2019								<0.005
10/15/2019	0.00098 (J)							
10/16/2019			<0.005				<0.005	0.0005 (J)
12/3/2019						<0.005		
12/4/2019		<0.005		<0.005	0.0014 (J)			
3/4/2020	<0.005	<0.005	0.02				0.00078 (J)	0.00071 (J)
3/5/2020				<0.005	0.0014 (J)	0.00053 (J)		
8/19/2020	<0.005	<0.005	<0.005	<0.005	0.0021 (J)			
8/20/2020						0.001 (J)	0.00064 (J)	0.00065 (J)
9/15/2020	<0.005		<0.005					
9/16/2020		<0.005		0.014	0.0025 (J)	0.0014 (J)	<0.005	
9/17/2020								0.00098 (J)
3/2/2021	<0.005					<0.005	<0.005	
3/3/2021		<0.005	<0.005	<0.005				
3/4/2021					0.002 (J)			0.001 (J)
9/23/2021						<0.005	<0.005	
9/27/2021								<0.005
9/28/2021	<0.005	<0.005	<0.005	<0.005	0.0021 (J)			
2/2/2022	<0.005			<0.005	0.0021 (J)	<0.005	<0.005	
2/3/2022			<0.005					<0.005
2/4/2022		<0.005						
Mean	0.004536	0.004625	0.005937	0.005569	0.002731	0.00429	0.004067	0.003484
Std. Dev.	0.001272	0.001088	0.00375	0.002248	0.001635	0.001588	0.001748	0.002007

Confidence Interval

Constituent: Chromium (mg/L) Analysis Run 5/3/2022 10:21 AM View: Pond BCD Appendix IV - Confidence Intervals (No Radium)
Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWC-25I	BRGWC-27I	BRGWC-29I	BRGWC-30I	BRGWC-32S	BRGWC-45	BRGWC-47	BRGWC-50
Upper Lim.	0.005	0.005	0.02	0.0051	0.005	0.005	0.005	0.005
Lower Lim.	0.0016	0.003	0.005	0.005	0.0012	0.0014	0.0018	0.00071

Confidence Interval

Constituent: Chromium (mg/L) Analysis Run 5/3/2022 10:21 AM View: Pond BCD Appendix IV - Confidence Intervals (No Radium)
Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWC-52I	PZ-51I	PZ-51S
8/10/2018	0.0017 (J)		
8/23/2018	<0.005		
9/19/2018	<0.005		
10/29/2018	<0.005		
11/28/2018	<0.005		
12/20/2018	<0.005		
1/17/2019	<0.005		
1/18/2019			<0.005
1/19/2019		<0.005	
2/13/2019	<0.005		
8/29/2019	<0.005		
10/16/2019	<0.005		
10/18/2019		<0.005	0.00042 (J)
3/4/2020	<0.005		
8/20/2020	<0.005	<0.005	0.00063 (J)
9/17/2020	<0.005	0.00098 (J)	<0.005
3/3/2021			<0.005
3/4/2021	<0.005	0.0008 (J)	
9/27/2021		<0.005	<0.005
9/28/2021	<0.005		
2/2/2022	<0.005	<0.005	<0.005
Mean	0.004794	0.003826	0.003721
Std. Dev.	0.000825	0.002006	0.002184
Upper Lim.	0.005	0.005	0.005
Lower Lim.	0.0017	0.0008	0.00042

Confidence Interval

Constituent: Cobalt (mg/L) Analysis Run 5/3/2022 10:21 AM View: Pond BCD Appendix IV - Confidence Intervals (No Radium)
Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWC-25I	BRGWC-27I	BRGWC-29I	BRGWC-30I	BRGWC-32S	BRGWC-45	BRGWC-47	BRGWC-50
9/6/2016				0.0006 (J)				
9/8/2016	0.0073 (J)	0.0149	0.0122		0.0025 (J)			
11/17/2016	0.0086 (J)							
11/18/2016		0.0131						
11/21/2016			0.0122	<0.005	0.001 (J)			
2/21/2017	0.0079 (J)	0.0099 (J)						
2/22/2017			0.0136	0.0016 (J)	<0.005			
6/13/2017	0.0083 (J)	0.0094 (J)						
6/14/2017			0.0113	0.0015 (J)	<0.005			
9/27/2017	0.0087 (J)	0.0095 (J)	0.0094 (J)	0.0007 (J)	<0.005			
2/14/2018	<0.005	0.0112	<0.005	<0.005	<0.005			
3/6/2018						0.0162	<0.005	
3/15/2018								1.3
5/1/2018						0.015	0.0125 (D)	1.4
6/26/2018	0.006 (J)							
6/27/2018		0.0093 (J)	0.0069 (J)		<0.005		0.0076 (J)	
6/28/2018				0.00078 (J)		0.01		1.3
7/31/2018						0.0098 (J)		
8/1/2018							0.004 (J)	1.4
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)	1.4
11/28/2018						0.0071 (J)	0.0016 (J)	1.4
12/18/2018	0.0055 (J)		0.0067 (J)	0.0011 (J)				
12/19/2018					<0.005		0.0014 (J)	1.5
12/20/2018		0.0081 (J)				0.069		
1/16/2019								1.4
8/27/2019	0.0042 (J)			0.0014 (J)	<0.005			
8/28/2019		0.01	0.0061			0.011	0.00037 (J)	
8/29/2019								1.3
10/15/2019	0.0043 (J)							
10/16/2019			0.0058				0.00032 (J)	1.4
10/17/2019		0.011 (J)		<0.005	<0.005	0.0098 (J)		
12/3/2019						0.0076		
12/4/2019		0.0086		0.0012 (J)	<0.005			
3/4/2020	0.0039 (J)	0.008	0.007				0.0011 (J)	1.5
3/5/2020				0.0011 (J)	<0.005	0.0091		
8/19/2020	0.0039 (J)	0.0078	0.0065	0.0008 (J)	<0.005			
8/20/2020						0.022	0.00043 (J)	1.4
9/15/2020	0.0035 (J)		0.0064					
9/16/2020		0.008		0.0008 (J)	<0.005	0.0049 (J)	0.00053 (J)	
9/17/2020								1.4
3/2/2021	0.003 (J)					0.0057	0.0005 (J)	
3/3/2021		0.0062	0.0095	0.0015 (J)				
3/4/2021					<0.005			1.4
9/23/2021						0.0049 (J)	<0.005	
9/27/2021								1.3
9/28/2021	0.0029 (J)	0.0047 (J)	0.0069	0.001 (J)	<0.005			
2/2/2022	0.0027 (J)			0.0012 (J)	<0.005	0.0054	<0.005	
2/3/2022			0.0077					1.5
2/4/2022		0.0076						
Mean	0.005356	0.009253	0.008325	0.001781	0.004618	0.01287	0.00295	1.394

Confidence Interval

Constituent: Cobalt (mg/L) Analysis Run 5/3/2022 10:21 AM View: Pond BCD Appendix IV - Confidence Intervals (No Radium)
Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWC-25I	BRGWC-27I	BRGWC-29I	BRGWC-30I	BRGWC-32S	BRGWC-45	BRGWC-47	BRGWC-50
Std. Dev.	0.00216	0.002429	0.002677	0.001564	0.001111	0.01468	0.003274	0.06801
Upper Lim.	0.006761	0.01077	0.009886	0.0016	0.005	0.015	0.002668	1.5
Lower Lim.	0.003951	0.007731	0.006557	0.00078	0.0025	0.0057	0.000535	1.3

Confidence Interval

Constituent: Cobalt (mg/L) Analysis Run 5/3/2022 10:21 AM View: Pond BCD Appendix IV - Confidence Intervals (No Radium)
Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWC-52I	PZ-50D	PZ-51D	PZ-51I	PZ-51S
8/2/2018					0.0079 (J)
8/3/2018				0.041	
8/10/2018	0.0043 (J)				
8/23/2018	0.0026 (J)				
9/19/2018	0.0028 (J)				
10/29/2018	0.0015 (J)				
11/28/2018	0.0012 (J)				
12/20/2018	<0.005				
1/17/2019	<0.005				
1/18/2019					0.0082 (J)
1/19/2019				0.018	
2/13/2019	<0.005				
8/29/2019	0.00063 (J)				
10/16/2019	<0.005				
10/18/2019				0.017	0.0063
3/4/2020	<0.005				
8/20/2020	<0.005			0.02	0.0039 (J)
9/17/2020	0.00046 (J)			0.022	0.0062
10/27/2020		0.0037 (J)	0.00041 (J)	0.02	
3/3/2021			0.0004 (J)		0.005
3/4/2021	<0.005			0.019	
3/5/2021		0.0038 (J)			
9/27/2021				0.02	0.0022 (J)
9/28/2021	<0.005	0.2	<0.005		
2/2/2022	<0.005			0.023	0.0028 (J)
2/3/2022		0.1	<0.005		
Mean	0.003656	0.07688	0.002702	0.02222	0.005313
Std. Dev.	0.001799	0.09379	0.002653	0.007276	0.002233
Upper Lim.	0.005	0.2898	0.005	0.041	0.007679
Lower Lim.	0.0012	-0.1361	0.0004	0.017	0.002946

Confidence Interval

Constituent: Fluoride (mg/L) Analysis Run 5/3/2022 10:21 AM View: Pond BCD Appendix IV - Confidence Intervals (No Radium)
Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWC-25I	BRGWC-27I	BRGWC-29I	BRGWC-30I	BRGWC-32S	BRGWC-45	BRGWC-47	BRGWC-50
9/6/2016				0.43				
9/8/2016	0.14 (J)	0.31	0.2 (J)		0.15 (J)			
11/17/2016	0.27 (J)							
11/18/2016		0.19 (J)						
11/21/2016			0.37	0.24 (J)	0.04 (J)			
2/21/2017	0.6	0.35						
2/22/2017			0.37	0.2 (J)	0.08 (J)			
6/13/2017	0.19 (J)	0.19 (J)						
6/14/2017			0.38	0.15 (J)	0.09 (J)			
9/27/2017	0.5	0.4	0.4	0.41	<0.1			
2/14/2018	<0.1	<0.1	<0.1	<0.1	<0.1			
3/6/2018						0.94	1.1	
3/15/2018								0.84 (JX)
5/1/2018						<0.1	0.595 (D)	0.91
6/26/2018	0.15 (J)							
6/27/2018		0.26 (J)	0.085 (J)		<0.1		0.27 (J)	
6/28/2018				0.93 (J+X)		0.69 (J+X)		1.1 (J+X)
7/31/2018						<0.1		
8/1/2018							0.48	2
8/23/2018						<0.1	0.34	
9/19/2018						<0.1	0.23 (J)	
10/29/2018						<0.1	<0.1	0.24 (J)
11/28/2018						<0.1	0.063 (J)	0.41
12/18/2018	0.29 (J)		0.26 (J)	0.54				
12/19/2018					0.23 (J)		0.28 (J)	0.54
12/20/2018		0.26 (J)				0.12 (J)		
1/16/2019								1.1
3/19/2019		0.2 (J)					<0.1	
3/20/2019	0.17 (JD)		0.091 (J)	0.31	<0.1	0.066 (J)		0.21 (J)
8/27/2019	0.15 (J)			0.12 (J)	<0.1			
8/28/2019		0.074 (J)	0.055 (J)			<0.1	<0.1	
8/29/2019								0.41
10/15/2019	0.16 (J)							
10/16/2019			0.11 (J)				0.076 (J)	0.39
12/3/2019						0.19 (J)		
12/4/2019		0.18 (J)		0.26 (J)	0.11 (J)			
3/4/2020	0.07 (J)	<0.1	<0.1				<0.1	0.14 (J)
3/5/2020				0.051 (J)	<0.1	<0.1		
8/19/2020	0.17	0.19	0.12	0.14	<0.1			
8/20/2020						<0.1	<0.1	0.39
9/15/2020	0.15		0.057 (J)					
9/16/2020		0.15		0.13	<0.1	0.052 (J)	<0.1	
9/17/2020								0.46
3/2/2021	0.15					0.067 (J)	<0.1	
3/3/2021		0.24	0.13	0.13				
3/4/2021					<0.1			0.6
9/23/2021						0.06 (J)	<0.1	
9/27/2021								0.43
9/28/2021	0.15	0.16	0.081 (J)	0.11	<0.1			
2/2/2022	0.15			0.1	<0.1	<0.1	<0.1	
2/3/2022			0.11					0.42
2/4/2022		0.14						

Confidence Interval

Constituent: Fluoride (mg/L) Analysis Run 5/3/2022 10:21 AM View: Pond BCD Appendix IV - Confidence Intervals (No Radium)
Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWC-25I	BRGWC-27I	BRGWC-29I	BRGWC-30I	BRGWC-32S	BRGWC-45	BRGWC-47	BRGWC-50
Mean	0.2094	0.2055	0.1776	0.2559	0.1059	0.1769	0.2408	0.6229
Std. Dev.	0.1393	0.08915	0.1259	0.2211	0.03792	0.2379	0.2624	0.4571
Upper Lim.	0.27	0.2614	0.37	0.3339	0.11	0.12	0.34	0.8284
Lower Lim.	0.14	0.1497	0.085	0.1248	0.09	0.067	0.076	0.3446

Confidence Interval

Constituent: Fluoride (mg/L) Analysis Run 5/3/2022 10:21 AM View: Pond BCD Appendix IV - Confidence Intervals (No Radium)
Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWC-52I	PZ-50D	PZ-51D	PZ-51I	PZ-51S
8/10/2018	1.6 (O)				
8/23/2018	0.32				
9/19/2018	0.22 (J)				
10/29/2018	0.14 (J)				
11/28/2018	0.24 (J)				
12/20/2018	0.3				
1/17/2019	0.23 (J)				
1/18/2019					0.13 (J)
1/19/2019				<0.1	
2/13/2019	<0.1				
3/20/2019	0.135 (JD)				
8/29/2019	0.087 (J)				
10/16/2019	0.22 (J)				
10/18/2019				<0.1	0.09 (J)
3/4/2020	0.1 (J)				
8/20/2020	0.23			<0.1	0.056 (J)
9/17/2020	0.074 (J)			<0.1	0.062 (J)
10/27/2020		0.28	0.21	<0.1	
3/3/2021			0.28		0.083 (J)
3/4/2021	0.28			0.061 (J)	
3/5/2021		0.16			
9/27/2021				<0.1	0.072 (J)
9/28/2021	0.12	0.11	0.26		
2/2/2022	0.098 (J)			<0.1	0.053 (J)
2/3/2022		0.15	0.27		
Mean	0.1809	0.175	0.255	0.09513	0.078
Std. Dev.	0.08263	0.07326	0.03109	0.01379	0.02669
Upper Lim.	0.2346	0.3413	0.3256	0.1	0.1097
Lower Lim.	0.1271	0.00868	0.1844	0.061	0.0463

Confidence Interval

Constituent: Lead (mg/L) Analysis Run 5/3/2022 10:21 AM View: Pond BCD Appendix IV - Confidence Intervals (No Radium)
Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWC-25I	BRGWC-27I	BRGWC-29I	BRGWC-30I	BRGWC-45	BRGWC-47	BRGWC-50	BRGWC-52I
9/6/2016				<0.001				
9/8/2016	<0.001	<0.001	0.0004 (J)					
11/17/2016	<0.001							
11/18/2016		<0.001						
11/21/2016			0.0006 (J)	<0.001				
2/21/2017	<0.001	<0.001						
2/22/2017			0.0005 (J)	<0.001				
6/13/2017	<0.001	<0.001						
6/14/2017			0.0004 (J)	<0.001				
9/27/2017	<0.001	<0.001	0.0006 (J)	<0.001				
2/14/2018	<0.001	<0.001	<0.005 (o)	<0.001				
3/6/2018					<0.001	<0.001		
3/15/2018							<0.001	
5/1/2018					<0.001	<0.001 (D)	<0.001	
6/26/2018	<0.001							
6/27/2018		<0.001	0.00032 (J)			<0.001		
6/28/2018				<0.001	<0.001		0.00054 (J)	
7/31/2018					<0.001			
8/1/2018						<0.001	<0.001	
8/10/2018								<0.001
8/23/2018					<0.001	<0.001		<0.001
9/19/2018					<0.001	<0.001		<0.001
10/29/2018					<0.001	<0.001	0.0003 (J)	<0.001
11/28/2018					<0.001	<0.001	<0.001	<0.001
12/18/2018	<0.001		0.00038 (J)	<0.001				
12/19/2018						<0.001	<0.001	
12/20/2018		<0.001			<0.001			<0.001
1/16/2019							<0.001	
1/17/2019								<0.001
2/13/2019								<0.001
8/27/2019	0.00011 (J)			<0.001				
8/28/2019		<0.001	0.00027 (J)		<0.001	<0.001		
8/29/2019							4.9E-05 (J)	<0.001
10/15/2019	<0.001							
10/16/2019			0.00027 (J)			<0.001	8.5E-05 (J)	<0.001
12/3/2019					<0.001			
12/4/2019		6.3E-05 (J)		<0.001				
3/4/2020	<0.001	<0.001	0.0003 (J)			0.00012 (J)	0.0001 (J)	<0.001
3/5/2020				<0.001	0.00026 (J)			
8/19/2020	<0.001	<0.001	0.00025 (J)	<0.001				
8/20/2020					0.00021 (J)	4.8E-05 (J)	6.7E-05 (J)	<0.001
9/15/2020	<0.001		0.00029 (J)					
9/16/2020		<0.001		0.00011 (J)	5.3E-05 (J)	6.6E-05 (J)		
9/17/2020							0.00015 (J)	<0.001
3/2/2021	<0.001				<0.001	<0.001		
3/3/2021		<0.001	0.00033 (J)	<0.001				
3/4/2021							0.00016 (J)	4.2E-05 (J)
9/23/2021					<0.001	<0.001		
9/27/2021							<0.001	
9/28/2021	<0.001	<0.001	<0.001	<0.001				<0.001
2/2/2022	<0.001			<0.001	<0.001	<0.001		<0.001
2/3/2022			<0.001				<0.001	

Confidence Interval

Constituent: Lead (mg/L) Analysis Run 5/3/2022 10:21 AM View: Pond BCD Appendix IV - Confidence Intervals (No Radium)
Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWC-25I	BRGWC-27I	BRGWC-29I	BRGWC-30I	BRGWC-45	BRGWC-47	BRGWC-50	BRGWC-52I
2/4/2022		<0.001						
Mean	0.0009444	0.0009414	0.0004607	0.0009444	0.0008543	0.0008373	0.0005907	0.0009401
Std. Dev.	0.0002225	0.0002343	0.0002457	0.0002225	0.0003267	0.0003625	0.0004375	0.0002395
Upper Lim.	0.001	0.001	0.0006	0.001	0.001	0.001	0.001	0.001
Lower Lim.	0.00011	6.3E-05	0.00027	0.00011	0.00026	0.00012	8.5E-05	4.2E-05

Confidence Interval

Constituent: Lead (mg/L) Analysis Run 5/3/2022 10:21 AM View: Pond BCD Appendix IV - Confidence Intervals (No Radium)
Plant Branch Client: Southern Company Data: Plant Branch AP

	PZ-51I
1/19/2019	<0.001
10/18/2019	<0.001
8/20/2020	<0.001
9/17/2020	0.00036 (J)
3/4/2021	0.00017 (J)
9/27/2021	<0.001
2/2/2022	<0.001
Mean	0.00079
Std. Dev.	0.0003628
Upper Lim.	0.001
Lower Lim.	0.00017

Confidence Interval

Constituent: Lithium (mg/L) Analysis Run 5/3/2022 10:21 AM View: Pond BCD Appendix IV - Confidence Intervals (No Radium)
Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWC-27I	BRGWC-29I	BRGWC-30I	BRGWC-32S	BRGWC-45	BRGWC-47	BRGWC-50	BRGWC-52I
9/6/2016			0.0117 (J)					
9/8/2016	0.0021 (J)	0.004 (J)		<0.03				
11/18/2016	<0.03							
11/21/2016		0.0039 (J)	0.0108 (J)	<0.03				
2/21/2017	<0.03							
2/22/2017		0.0043 (J)	0.0103 (J)	0.0023 (J)				
6/13/2017	0.0017 (J)							
6/14/2017		0.0036 (J)	0.0101 (J)	0.0022 (J)				
9/27/2017	0.0016 (J)	0.0038 (J)	0.0116 (J)	0.0021 (J)				
2/14/2018	0.0018 (J)	0.0034 (J)	0.0115 (J)	0.0023 (J)				
3/6/2018					0.0031 (J)	0.0399 (J)		
3/15/2018							0.038 (J)	
5/1/2018					0.0038 (J)	0.0475 (D)	0.042 (J)	
6/27/2018	0.0016 (J)	0.0034 (J)		0.0023 (J)		0.044 (J)		
6/28/2018			0.013 (J)		0.0028 (J)		0.04 (J)	
7/31/2018					<0.25 (o)			
8/1/2018						0.039 (J)	0.036 (J)	
8/10/2018								0.0087 (J)
8/23/2018					0.0033 (J)	0.044 (J)		0.0089 (J)
9/19/2018					0.0033 (J)	0.043 (J)		0.005 (J)
10/29/2018					0.003 (J)	0.039 (J)	0.041 (J)	0.0048 (J)
11/28/2018					0.0035 (J)	0.044 (J)	0.041 (J)	0.0052 (J)
12/18/2018		0.0032 (J)	0.014 (J)					
12/19/2018				0.0018 (J)		0.043 (J)	0.043 (J)	
12/20/2018	0.0015 (J)				0.003 (J)			0.0042 (J)
1/16/2019							0.042 (J)	
1/17/2019								0.0039 (J)
2/13/2019								<0.03
8/27/2019			0.016 (J)	0.0022 (J)				
8/28/2019	0.0016 (J)	0.0033 (J)			0.0034 (J)	0.044		
8/29/2019							0.039	0.0052 (J)
10/16/2019		0.0029 (J)				0.038	0.034	0.0023 (J)
12/3/2019					0.0033 (J)			
12/4/2019	0.0014 (J)		0.013 (J)	0.0022 (J)				
3/4/2020	0.0014 (J)	0.0029 (J)				0.042	0.042	0.002 (J)
3/5/2020			0.016 (J)	0.0022 (J)	0.003 (J)			
8/19/2020	0.0014 (J)	0.0029 (J)	0.018 (J)	0.002 (J)				
8/20/2020					0.0034 (J)	0.044	0.04	0.0022 (J)
9/15/2020		0.003 (J)						
9/16/2020	0.0014 (J)		0.016 (J)	0.0022 (J)	0.0036 (J)	0.039		
9/17/2020							0.052	0.0058 (J)
3/2/2021					0.0043 (J)	0.044		
3/3/2021	0.0012 (J)	0.0032 (J)	0.014 (J)					
3/4/2021				0.002 (J)			0.05	0.003 (J)
9/23/2021					0.0023 (J)	0.042		
9/27/2021							0.038	
9/28/2021	0.0011 (J)	0.0029 (J)	0.023 (J)	0.0021 (J)				0.0035 (J)
2/2/2022			0.021 (J)	0.0035 (J)	0.0022 (J)	0.04		0.0041 (J)
2/3/2022		0.0026 (J)					0.038	
2/4/2022	0.001 (J)							
Mean	0.003175	0.003331	0.01438	0.003837	0.003206	0.04214	0.041	0.005237
Std. Dev.	0.004624	0.0004785	0.003779	0.004372	0.0005183	0.00259	0.00459	0.003284

Confidence Interval

Constituent: Lithium (mg/L) Analysis Run 5/3/2022 10:21 AM View: Pond BCD Appendix IV - Confidence Intervals (No Radium)
Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWC-27I	BRGWC-29I	BRGWC-30I	BRGWC-32S	BRGWC-45	BRGWC-47	BRGWC-50	BRGWC-52I
Upper Lim.	0.0021	0.003643	0.01683	0.0035	0.003543	0.04376	0.04385	0.006853
Lower Lim.	0.0012	0.00302	0.01192	0.002	0.002869	0.04052	0.03802	0.003206

Confidence Interval

Constituent: Lithium (mg/L) Analysis Run 5/3/2022 10:21 AM View: Pond BCD Appendix IV - Confidence Intervals (No Radium)
Plant Branch Client: Southern Company Data: Plant Branch AP

	PZ-51I	PZ-51S
1/18/2019		0.0012 (J)
1/19/2019	0.019 (J)	
10/18/2019	0.019 (J)	<0.03
8/20/2020	0.019 (J)	<0.03
9/17/2020	0.021 (J)	<0.03
3/3/2021		<0.03
3/4/2021	0.026 (J)	
9/27/2021	0.02 (J)	<0.03
2/2/2022	0.021 (J)	<0.03
Mean	0.02071	0.01303
Std. Dev.	0.002498	0.005216
Upper Lim.	0.026	0.015
Lower Lim.	0.019	0.0012

Confidence Interval

Constituent: Mercury (mg/L) Analysis Run 5/3/2022 10:21 AM View: Pond BCD Appendix IV - Confidence Intervals (No Radium)
Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWC-25I	BRGWC-27I	BRGWC-29I	BRGWC-30I	BRGWC-32S	PZ-51I
9/6/2016				<0.0002		
9/8/2016	<0.0002	<0.0002	<0.0002		<0.0002	
11/17/2016	<0.0002					
11/18/2016		<0.0002				
11/21/2016			<0.0002	<0.0002	<0.0002	
2/21/2017	<0.0002	<0.0002				
2/22/2017			<0.0002	<0.0002	<0.0002	
6/13/2017	<0.0002	5E-05 (J)				
6/14/2017			7E-05 (J)	7E-05 (J)	9E-05 (J)	
9/27/2017	4E-05 (J)	4.7E-05 (J)	4E-05 (J)	4E-05 (J)	0.0001 (J)	
2/14/2018	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	
6/26/2018	<0.0002					
6/27/2018		<0.0002	<0.0002		<0.0002	
6/28/2018				<0.0002		
12/18/2018	<0.0002		<0.0002	<0.0002		
12/19/2018					<0.0002	
12/20/2018		<0.0002				
1/19/2019						<0.0002
8/27/2019	<0.0002			<0.0002	<0.0002	
8/28/2019		<0.0002	<0.0002			
10/18/2019						<0.0002
8/19/2020	8.3E-05 (J)	<0.0002	9.8E-05 (J)	8.2E-05 (J)	8.2E-05 (J)	
8/20/2020						9.9E-05 (J)
9/15/2020	<0.0002		<0.0002			
9/16/2020		<0.0002		<0.0002	<0.0002	
9/17/2020						<0.0002
3/2/2021	<0.0002					
3/3/2021		<0.0002	<0.0002	<0.0002		
3/4/2021					<0.0002	<0.0002
9/27/2021						<0.0002
9/28/2021	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	
2/2/2022	<0.0002			<0.0002	<0.0002	<0.0002
2/3/2022			<0.0002			
2/4/2022		<0.0002				
Mean	0.0001802	0.0001784	0.000172	0.0001709	0.0001766	0.0001856
Std. Dev.	5.1E-05	5.502E-05	5.679E-05	5.853E-05	4.669E-05	3.817E-05
Upper Lim.	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002
Lower Lim.	8.3E-05	5E-05	9.8E-05	8.2E-05	0.0001	9.9E-05

Confidence Interval

Constituent: Molybdenum (mg/L) Analysis Run 5/3/2022 10:21 AM View: Pond BCD Appendix IV - Confidence Intervals (No Radium)
Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWC-25I	BRGWC-30I	BRGWC-45	BRGWC-50	BRGWC-52I
9/6/2016		<0.01			
9/8/2016	<0.01				
11/17/2016	<0.01				
11/21/2016		<0.01			
2/21/2017	<0.01				
2/22/2017		<0.01			
6/13/2017	<0.01				
6/14/2017		<0.01			
9/27/2017	<0.01	<0.01			
2/14/2018	<0.01	<0.01			
3/6/2018			<0.01		
3/15/2018				<0.01	
5/1/2018			<0.01	0.0022 (J)	
6/26/2018	<0.01				
6/28/2018		<0.01	<0.01	<0.01	
7/31/2018			<0.01		
8/1/2018				0.0033 (J)	
8/10/2018					0.0032 (J)
8/23/2018			<0.01		0.005 (J)
9/19/2018			<0.01		0.0061 (J)
10/29/2018			<0.01	<0.01	0.0065 (J)
11/28/2018			<0.01	<0.01	0.0027 (J)
12/18/2018	<0.01	<0.01			
12/19/2018				<0.01	
12/20/2018			<0.01		<0.01
1/16/2019				<0.01	
1/17/2019					<0.01
2/13/2019					<0.01
8/27/2019	<0.01	<0.01			
8/28/2019			<0.01		
8/29/2019				<0.01	<0.01
10/15/2019	<0.01				
10/16/2019				<0.01	<0.01
12/3/2019			<0.01		
12/4/2019		<0.01			
8/19/2020	0.00081 (J)	0.00078 (J)			
8/20/2020			0.00076 (J)	<0.01	0.0012 (J)
9/15/2020	0.0008 (J)				
9/16/2020		0.0022 (J)	<0.01		
9/17/2020				<0.01	0.0007 (J)
3/2/2021	0.001 (J)		<0.01		
3/3/2021		<0.01			
3/4/2021				<0.01	0.001 (J)
9/23/2021			<0.01		
9/27/2021				<0.01	
9/28/2021	0.00089 (J)	0.001 (J)			<0.01
2/2/2022	0.0011 (J)	0.0012 (J)	<0.01		<0.01
2/3/2022				<0.01	
Mean	0.006973	0.007679	0.009422	0.009033	0.006427
Std. Dev.	0.004431	0.003995	0.00231	0.002559	0.00383
Upper Lim.	0.01	0.01	0.01	0.01	0.01
Lower Lim.	0.00089	0.0012	0.00076	0.0033	0.0012

Confidence Interval

Constituent: Selenium (mg/L) Analysis Run 5/3/2022 10:21 AM View: Pond BCD Appendix IV - Confidence Intervals (No Radium)
Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWC-25I	BRGWC-27I	BRGWC-29I	BRGWC-30I	BRGWC-32S	BRGWC-45	BRGWC-47	BRGWC-50
9/6/2016				<0.005				
9/8/2016	<0.005	0.0043 (J)	0.0039 (J)		<0.005			
11/17/2016	<0.005							
11/18/2016		0.0047 (J)						
11/21/2016			0.0058 (J)	<0.005	<0.005			
2/21/2017	<0.005	0.0025 (J)						
2/22/2017			0.005 (J)	<0.005	0.0017 (J)			
6/13/2017	<0.005	0.0036 (J)						
6/14/2017			0.0074 (J)	0.0045 (J)	<0.005			
9/27/2017	<0.005	0.004 (J)	0.0068 (J)	0.0034 (J)	0.0019 (J)			
2/14/2018	<0.005	<0.005	<0.005	<0.005	<0.005			
3/6/2018						<0.005	<0.005	
3/15/2018								<0.005
5/1/2018						<0.005	<0.005 (D)	<0.005
6/26/2018	<0.005							
6/27/2018		0.0014 (J)	<0.005		0.0017 (J)		<0.005	
6/28/2018				<0.005		<0.005		<0.005
7/31/2018						<0.005		
8/1/2018							0.0015 (J)	0.0031 (J)
8/23/2018						<0.005	<0.005 (X)	
9/19/2018						<0.005	0.002 (J)	
10/29/2018						<0.005	<0.005	0.002 (J)
11/28/2018						<0.005	<0.005	0.0017 (J)
12/18/2018	<0.005		<0.005	<0.005				
12/19/2018					0.0059 (J)		<0.005	<0.005
12/20/2018		<0.005				<0.005		
1/16/2019								<0.005
8/27/2019	<0.005			0.0038 (J)	0.057			
8/28/2019		0.0017 (J)	<0.005			<0.005	<0.005	
8/29/2019								<0.005
10/15/2019	<0.005							
10/16/2019			<0.005				0.0017 (J)	0.002 (J)
12/3/2019						0.0029 (J)		
12/4/2019		0.0036 (J)		0.0018 (J)	0.1			
3/4/2020	<0.005	0.0022 (J)	0.0018 (J)				<0.005	0.0026 (J)
3/5/2020				<0.005	0.1	<0.005		
5/12/2020					0.0989			
8/19/2020	<0.005	<0.005	<0.005	<0.005	0.099			
8/20/2020						<0.005	0.0016 (J)	0.0037 (J)
9/15/2020	<0.005		<0.005					
9/16/2020		0.0042 (J)		<0.005	0.12	<0.005	0.002 (J)	
9/17/2020								<0.005
3/2/2021	0.0021 (J)					<0.005	0.0028 (J)	
3/3/2021		0.0031 (J)	0.0042 (J)	<0.005				
3/4/2021					0.14			0.0039 (J)
9/23/2021						<0.005	<0.005	
9/27/2021								0.0022 (J)
9/28/2021	<0.005	<0.005	0.0022 (J)	<0.005	0.13			
2/2/2022	<0.005			<0.005	0.21	<0.005	<0.005	
2/3/2022			<0.005					<0.005
2/4/2022		<0.005						
Mean	0.004819	0.003769	0.004819	0.004594	0.06389	0.004876	0.003918	0.003825

Confidence Interval

Constituent: Selenium (mg/L) Analysis Run 5/3/2022 10:21 AM View: Pond BCD Appendix IV - Confidence Intervals (No Radium)
Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWC-25I	BRGWC-27I	BRGWC-29I	BRGWC-30I	BRGWC-32S	BRGWC-45	BRGWC-47	BRGWC-50
Std. Dev.	0.000725	0.00125	0.001392	0.0008888	0.06547	0.0005093	0.001533	0.001339
Upper Lim.	0.005	0.005	0.0058	0.005	0.12	0.005	0.005	0.005
Lower Lim.	0.0021	0.0022	0.0039	0.0038	0.0019	0.0029	0.0017	0.0022

Confidence Interval

Constituent: Thallium (mg/L) Analysis Run 5/3/2022 10:21 AM View: Pond BCD Appendix IV - Confidence Intervals (No Radium)
Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWC-29I
9/8/2016	<0.001
11/21/2016	0.0002 (J)
2/22/2017	0.0002 (J)
6/14/2017	0.0002 (J)
9/27/2017	0.0002 (J)
2/14/2018	0.00018 (J)
6/27/2018	0.00017 (J)
12/18/2018	0.00017 (J)
8/28/2019	0.00017 (J)
10/16/2019	0.00017 (J)
3/4/2020	0.00016 (J)
8/19/2020	0.00016 (J)
9/15/2020	0.00016 (J)
3/3/2021	0.00018 (J)
9/28/2021	<0.001
2/3/2022	<0.001
Mean	0.0003325
Std. Dev.	0.0003315
Upper Lim.	0.001
Lower Lim.	0.00016

FIGURE I.

Appendix IV Trend Tests - All Results (No Significant)

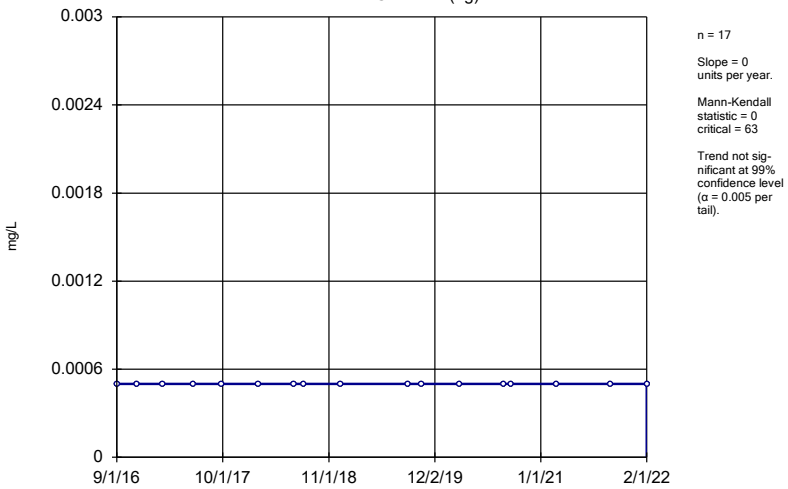
Plant Branch Client: Southern Company Data: Plant Branch AP Printed 4/12/2022, 11:29 AM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Cadmium (mg/L)	BRGWA-12I (bg)	0	0	63	No	17	100	n/a	n/a	0.01	NP
Cadmium (mg/L)	BRGWA-12S (bg)	0	0	63	No	17	100	n/a	n/a	0.01	NP
Cadmium (mg/L)	BRGWA-23S (bg)	0	3	58	No	16	87.5	n/a	n/a	0.01	NP
Cadmium (mg/L)	BRGWA-2I (bg)	0	0	58	No	16	100	n/a	n/a	0.01	NP
Cadmium (mg/L)	BRGWA-2S (bg)	0	0	58	No	16	100	n/a	n/a	0.01	NP
Cadmium (mg/L)	BRGWA-5I (bg)	0	0	58	No	16	100	n/a	n/a	0.01	NP
Cadmium (mg/L)	BRGWA-5S (bg)	0	0	58	No	16	100	n/a	n/a	0.01	NP
Cadmium (mg/L)	BRGWA-6S (bg)	0	0	58	No	16	100	n/a	n/a	0.01	NP
Cadmium (mg/L)	BRGWC-50	-0.009878	-57	-58	No	16	0	n/a	n/a	0.01	NP
Cobalt (mg/L)	BRGWA-12I (bg)	0	0	63	No	17	100	n/a	n/a	0.01	NP
Cobalt (mg/L)	BRGWA-12S (bg)	0	0	63	No	17	100	n/a	n/a	0.01	NP
Cobalt (mg/L)	BRGWA-23S (bg)	-0.0007123	-41	-58	No	16	12.5	n/a	n/a	0.01	NP
Cobalt (mg/L)	BRGWA-2I (bg)	0	-2	-58	No	16	75	n/a	n/a	0.01	NP
Cobalt (mg/L)	BRGWA-2S (bg)	-0.0004206	-54	-58	No	16	12.5	n/a	n/a	0.01	NP
Cobalt (mg/L)	BRGWA-5I (bg)	-0.0001573	-43	-48	No	14	0	n/a	n/a	0.01	NP
Cobalt (mg/L)	BRGWA-5S (bg)	0	21	58	No	16	68.75	n/a	n/a	0.01	NP
Cobalt (mg/L)	BRGWA-6S (bg)	0	-4	-58	No	16	68.75	n/a	n/a	0.01	NP
Cobalt (mg/L)	BRGWC-50	0	23	58	No	16	0	n/a	n/a	0.01	NP
Cobalt (mg/L)	PZ-51I	0.0005983	5	25	No	9	0	n/a	n/a	0.01	NP

Sanitas™ v.9.6.32j Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

BRGWA-12I (bg)



n = 17

Slope = 0 units per year.

Mann-Kendall statistic = 0 critical = 63

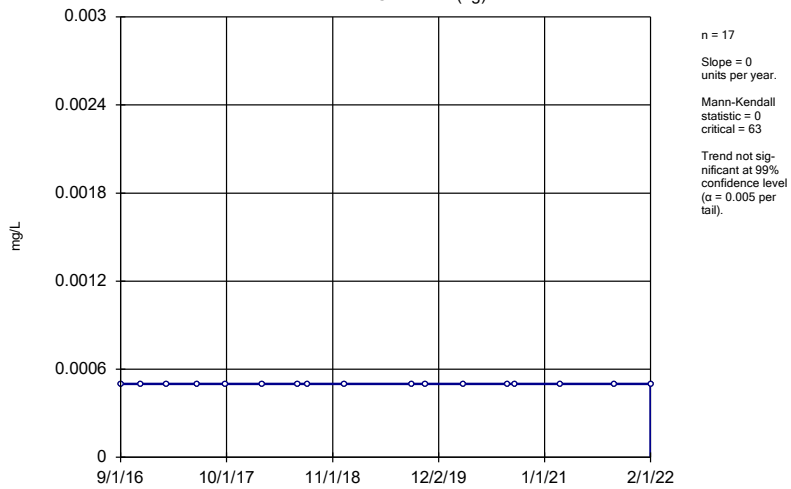
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Cadmium Analysis Run 4/12/2022 11:23 AM View: Pond BCD - Appendix IV Trend Tests
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.32j Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

BRGWA-12S (bg)



n = 17

Slope = 0 units per year.

Mann-Kendall statistic = 0 critical = 63

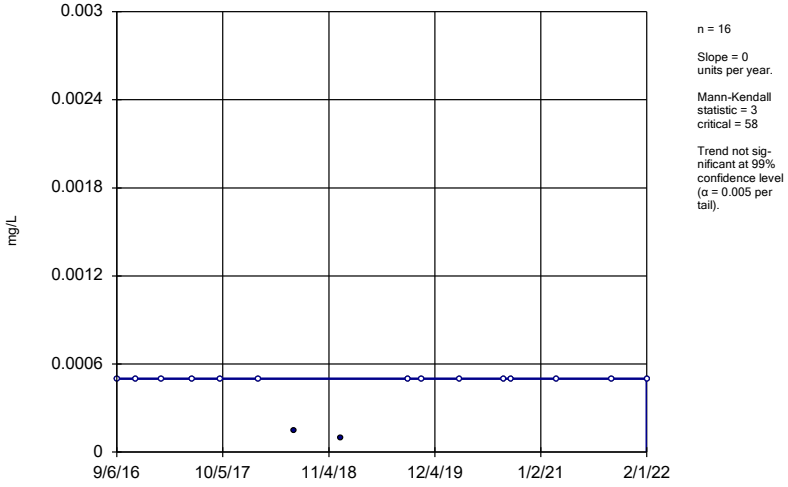
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Cadmium Analysis Run 4/12/2022 11:23 AM View: Pond BCD - Appendix IV Trend Tests
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.32j Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

BRGWA-23S (bg)



n = 16

Slope = 0 units per year.

Mann-Kendall statistic = 3 critical = 58

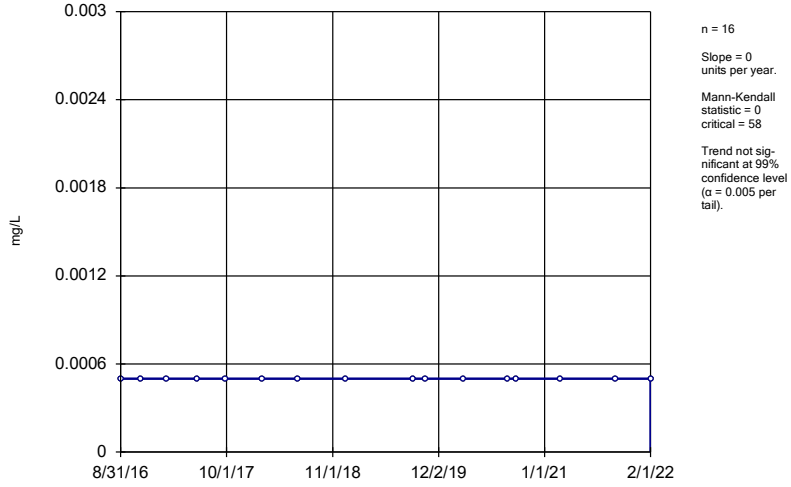
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Cadmium Analysis Run 4/12/2022 11:23 AM View: Pond BCD - Appendix IV Trend Tests
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.32j Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

BRGWA-2I (bg)



n = 16

Slope = 0 units per year.

Mann-Kendall statistic = 0 critical = 58

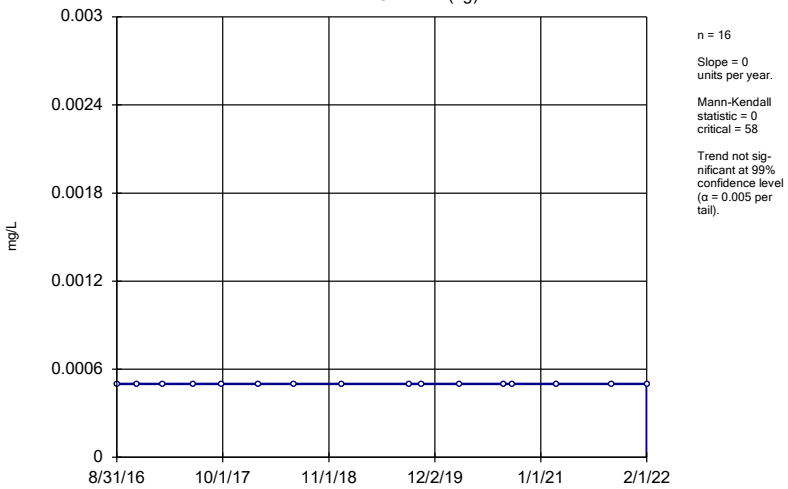
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Cadmium Analysis Run 4/12/2022 11:23 AM View: Pond BCD - Appendix IV Trend Tests
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.32j Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

BRGWA-2S (bg)



n = 16

Slope = 0
units per year.

Mann-Kendall
statistic = 0
critical = 58

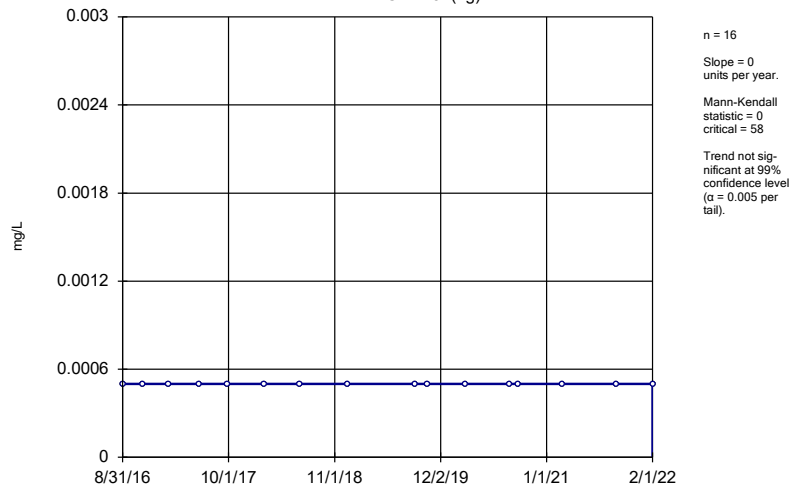
Trend not sig-
nificant at 99%
confidence level
(α = 0.005 per
tail).

Constituent: Cadmium Analysis Run 4/12/2022 11:23 AM View: Pond BCD - Appendix IV Trend Tests
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.32j Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

BRGWA-5I (bg)



n = 16

Slope = 0
units per year.

Mann-Kendall
statistic = 0
critical = 58

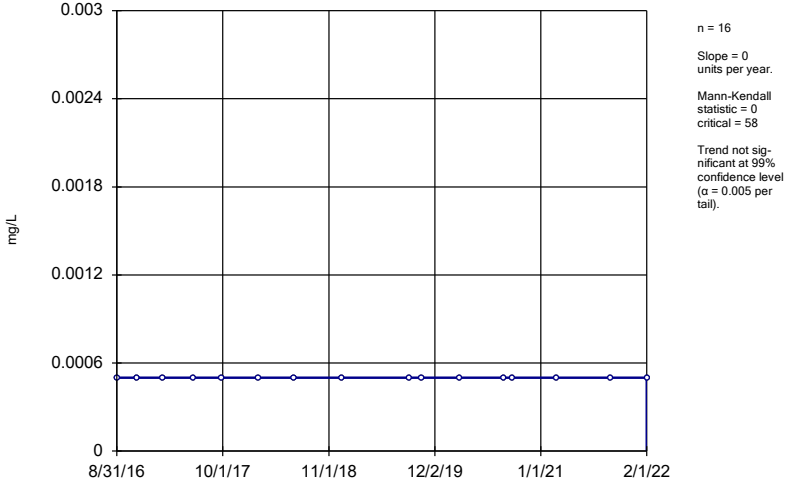
Trend not sig-
nificant at 99%
confidence level
(α = 0.005 per
tail).

Constituent: Cadmium Analysis Run 4/12/2022 11:23 AM View: Pond BCD - Appendix IV Trend Tests
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.32j Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

BRGWA-5S (bg)



n = 16

Slope = 0
units per year.

Mann-Kendall
statistic = 0
critical = 58

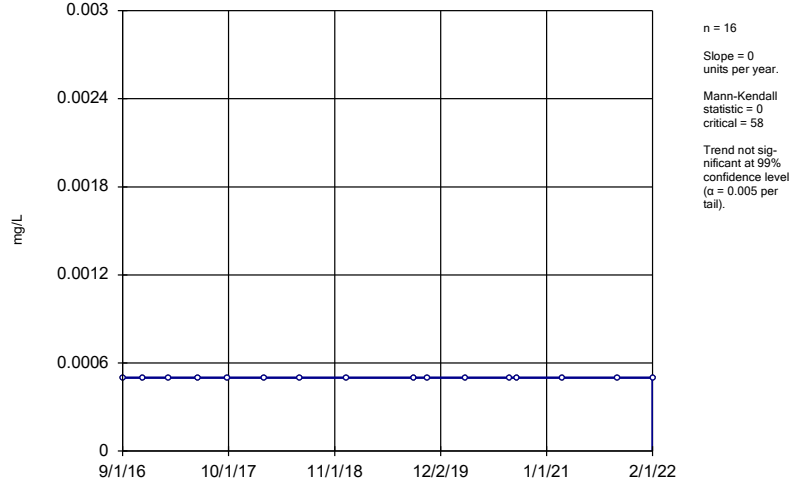
Trend not sig-
nificant at 99%
confidence level
(α = 0.005 per
tail).

Constituent: Cadmium Analysis Run 4/12/2022 11:23 AM View: Pond BCD - Appendix IV Trend Tests
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.32j Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

BRGWA-6S (bg)



n = 16

Slope = 0
units per year.

Mann-Kendall
statistic = 0
critical = 58

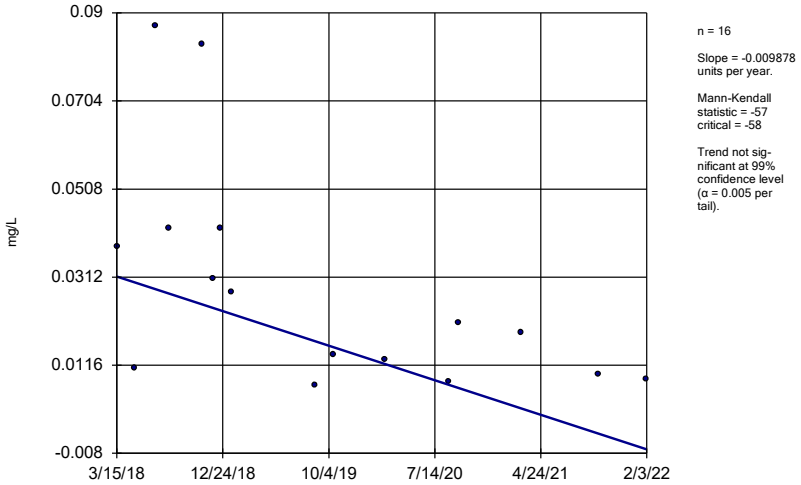
Trend not sig-
nificant at 99%
confidence level
(α = 0.005 per
tail).

Constituent: Cadmium Analysis Run 4/12/2022 11:23 AM View: Pond BCD - Appendix IV Trend Tests
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.32j Groundwater Stats Consulting. UG

Sen's Slope Estimator

BRGWC-50



n = 16

Slope = -0.009878 units per year.

Mann-Kendall statistic = -57 critical = -58

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Cadmium Analysis Run 4/12/2022 11:23 AM View: Pond BCD - Appendix IV Trend Tests

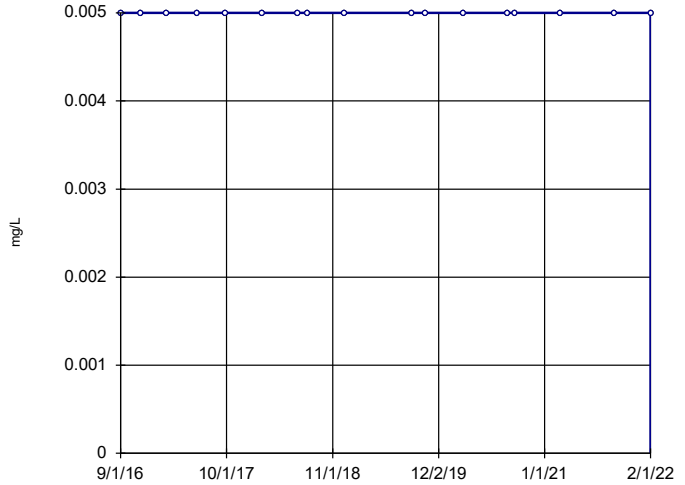
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.32j Groundwater Stats Consulting. UG

Hollow symbols indicate censored values.

Sen's Slope Estimator

BRGWA-12I (bg)



n = 17

Slope = 0 units per year.

Mann-Kendall statistic = 0 critical = 63

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Cobalt Analysis Run 4/12/2022 11:23 AM View: Pond BCD - Appendix IV Trend Tests

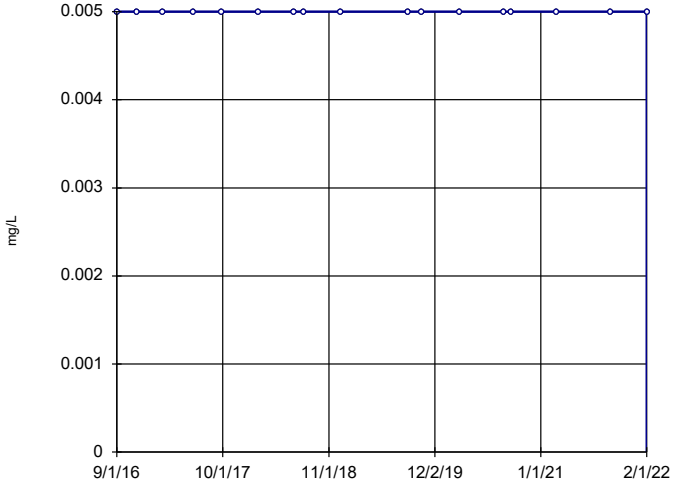
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.32j Groundwater Stats Consulting. UG

Hollow symbols indicate censored values.

Sen's Slope Estimator

BRGWA-12S (bg)



n = 17

Slope = 0 units per year.

Mann-Kendall statistic = 0 critical = 63

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Cobalt Analysis Run 4/12/2022 11:23 AM View: Pond BCD - Appendix IV Trend Tests

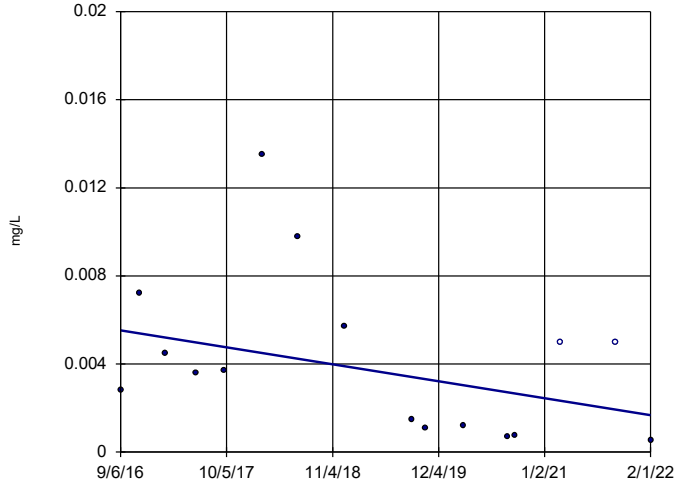
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.32j Groundwater Stats Consulting. UG

Hollow symbols indicate censored values.

Sen's Slope Estimator

BRGWA-23S (bg)



n = 16

Slope = -0.0007123 units per year.

Mann-Kendall statistic = -41 critical = -58

Trend not significant at 99% confidence level (α = 0.005 per tail).

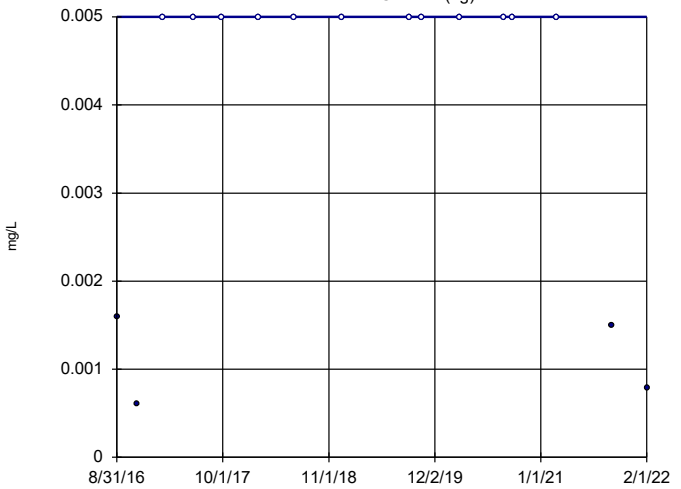
Constituent: Cobalt Analysis Run 4/12/2022 11:23 AM View: Pond BCD - Appendix IV Trend Tests

Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.32j Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

BRGWA-2I (bg)



n = 16

Slope = 0
units per year.

Mann-Kendall
statistic = -2
critical = -58

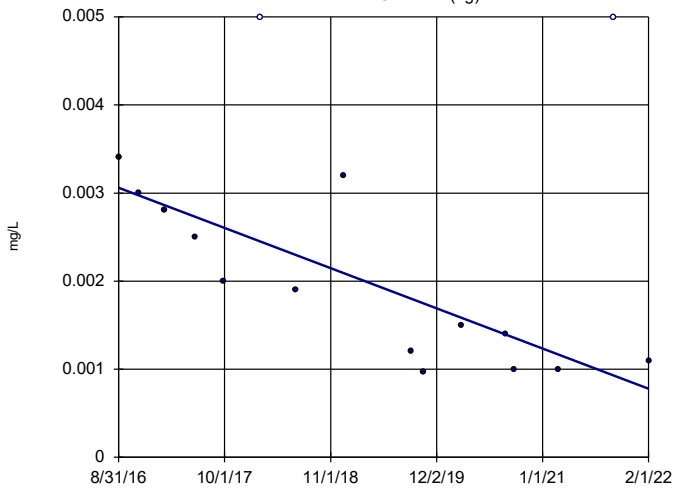
Trend not sig-
nificant at 99%
confidence level
(α = 0.005 per
tail).

Constituent: Cobalt Analysis Run 4/12/2022 11:23 AM View: Pond BCD - Appendix IV Trend Tests
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.32j Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

BRGWA-2S (bg)



n = 16

Slope = -0.0004206
units per year.

Mann-Kendall
statistic = -54
critical = -58

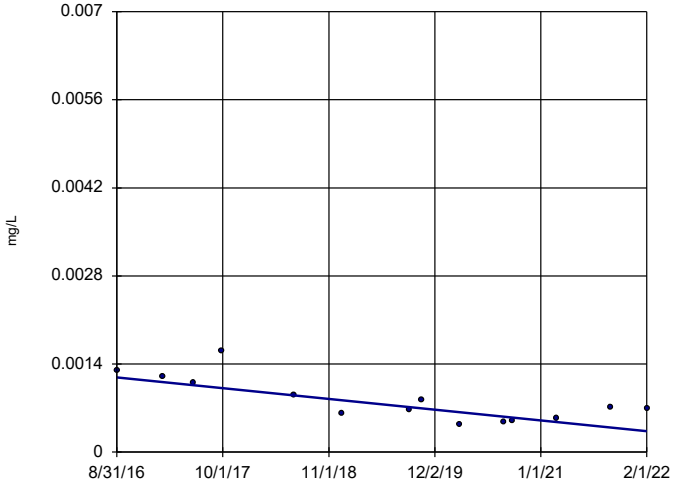
Trend not sig-
nificant at 99%
confidence level
(α = 0.005 per
tail).

Constituent: Cobalt Analysis Run 4/12/2022 11:23 AM View: Pond BCD - Appendix IV Trend Tests
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.32j Groundwater Stats Consulting. UG

Sen's Slope Estimator

BRGWA-5I (bg)



n = 14

Slope = -0.0001573
units per year.

Mann-Kendall
statistic = -43
critical = -48

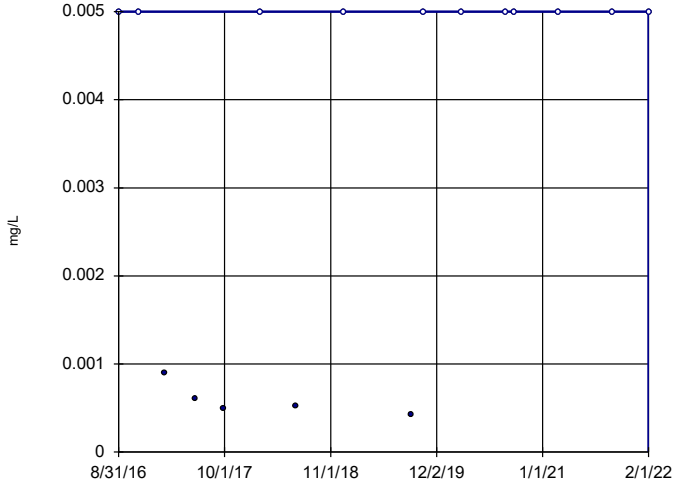
Trend not sig-
nificant at 99%
confidence level
(α = 0.005 per
tail).

Constituent: Cobalt Analysis Run 4/12/2022 11:23 AM View: Pond BCD - Appendix IV Trend Tests
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.32j Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

BRGWA-5S (bg)



n = 16

Slope = 0
units per year.

Mann-Kendall
statistic = 21
critical = 58

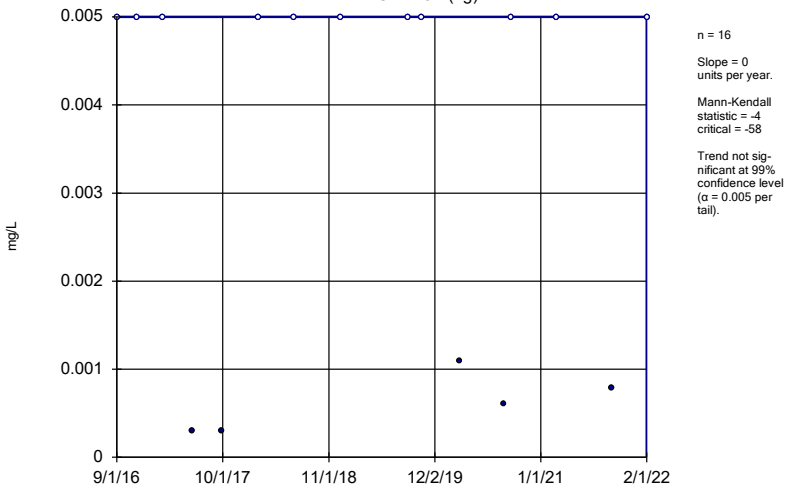
Trend not sig-
nificant at 99%
confidence level
(α = 0.005 per
tail).

Constituent: Cobalt Analysis Run 4/12/2022 11:23 AM View: Pond BCD - Appendix IV Trend Tests
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.32j Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

BRGWA-6S (bg)



n = 16

Slope = 0 units per year.

Mann-Kendall statistic = -4 critical = -58

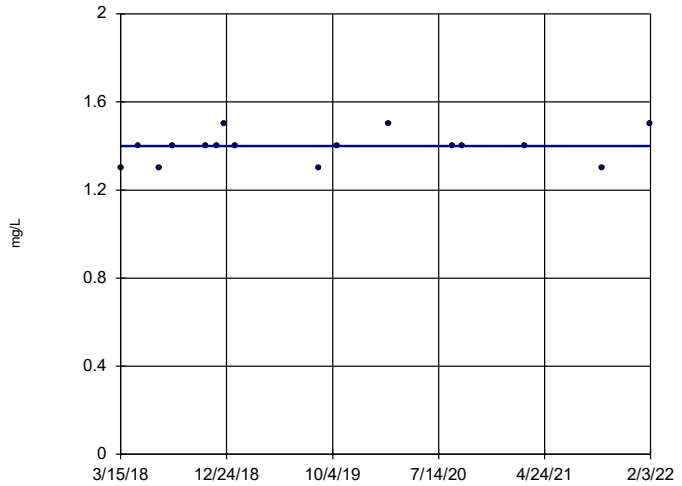
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Cobalt Analysis Run 4/12/2022 11:23 AM View: Pond BCD - Appendix IV Trend Tests
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.32j Groundwater Stats Consulting. UG

Sen's Slope Estimator

BRGWC-50



n = 16

Slope = 0 units per year.

Mann-Kendall statistic = 23 critical = 58

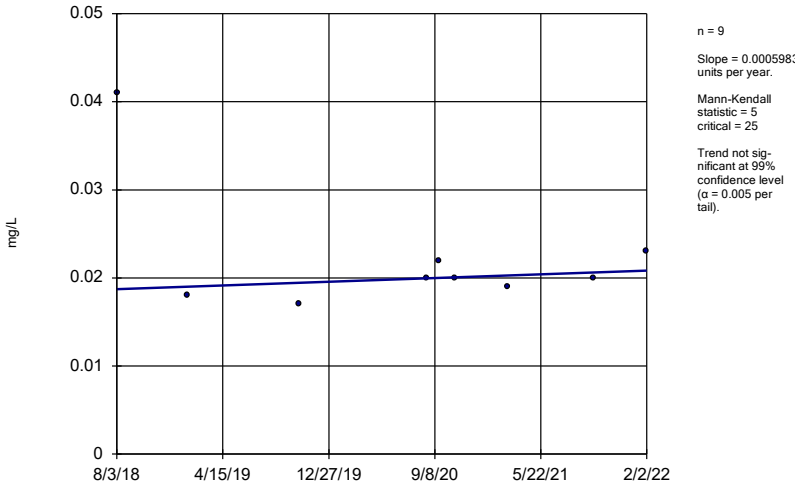
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Cobalt Analysis Run 4/12/2022 11:23 AM View: Pond BCD - Appendix IV Trend Tests
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.32j Groundwater Stats Consulting. UG

Sen's Slope Estimator

PZ-51I



n = 9

Slope = 0.0005983 units per year.

Mann-Kendall statistic = 5 critical = 25

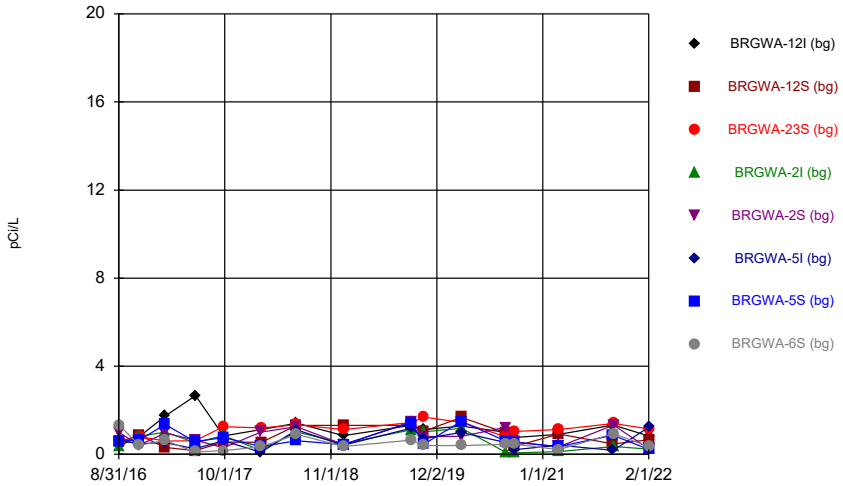
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Cobalt Analysis Run 4/12/2022 11:23 AM View: Pond BCD - Appendix IV Trend Tests
Plant Branch Client: Southern Company Data: Plant Branch AP

FIGURE J.

Sanitas™ v.9.6.35 Groundwater Stats Consulting. UG

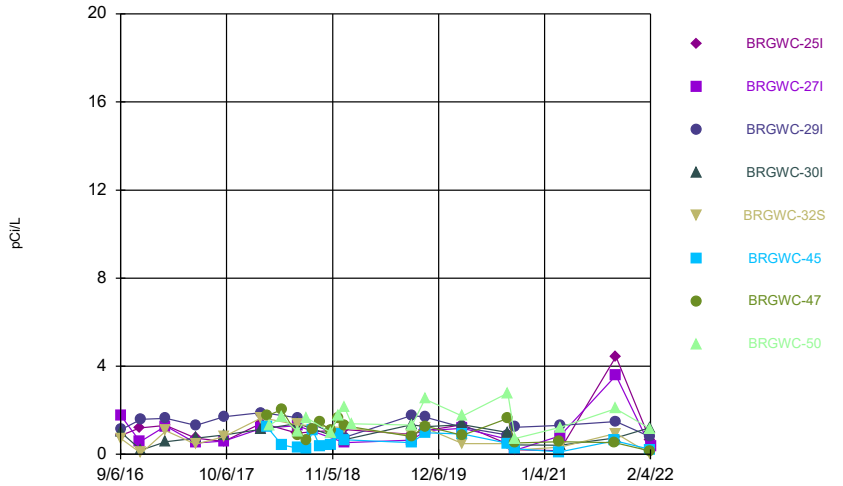
Time Series



Constituent: Combined Radium 226 + 228 Analysis Run 7/26/2022 9:08 AM View: Pond BCD - Combined
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.35 Groundwater Stats Consulting. UG

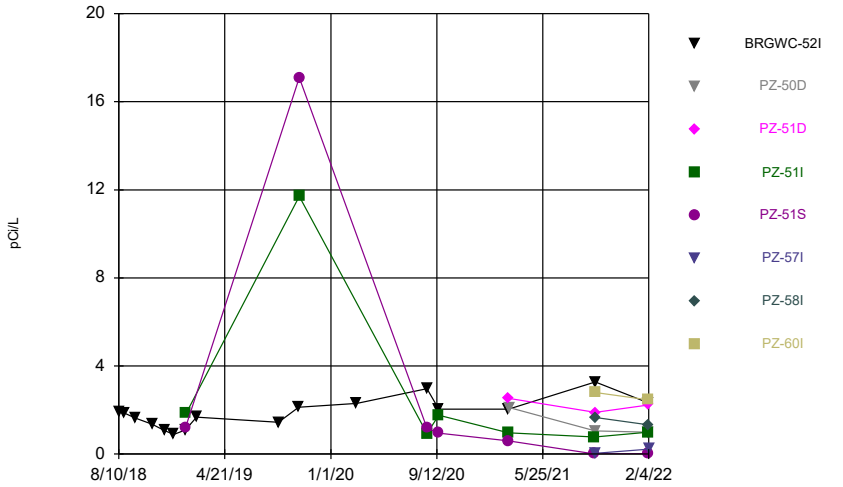
Time Series



Constituent: Combined Radium 226 + 228 Analysis Run 7/26/2022 9:08 AM View: Pond BCD - Combined
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.35 Groundwater Stats Consulting. UG

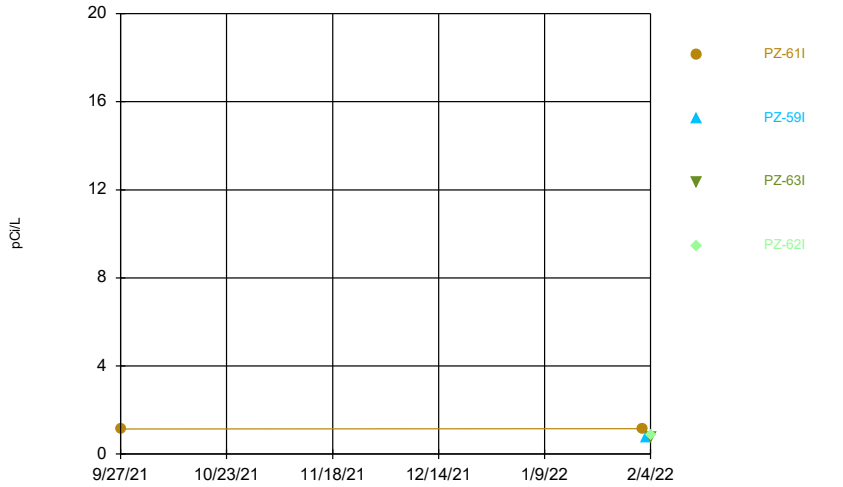
Time Series



Constituent: Combined Radium 226 + 228 Analysis Run 7/26/2022 9:08 AM View: Pond BCD - Combined
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.35 Groundwater Stats Consulting. UG

Time Series



Constituent: Combined Radium 226 + 228 Analysis Run 7/26/2022 9:08 AM View: Pond BCD - Combined
Plant Branch Client: Southern Company Data: Plant Branch AP

Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 7/26/2022 9:09 AM View: Pond BCD - Combined Radium
Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWA-12I (bg)	BRGWA-12S (bg)	BRGWA-23S (bg)	BRGWA-2I (bg)	BRGWA-2S (bg)	BRGWA-5I (bg)	BRGWA-5S (bg)	BRGWA-6S (bg)
8/31/2016				0.351 (U)	1 (U)	0.62 (U)	0.603 (U)	
9/1/2016	0.428 (U)	0.566 (U)						1.33
9/6/2016			0.585 (U)					
11/15/2016							0.645 (U)	0.412 (U)
11/16/2016	0.799 (U)	0.863 (U)		0.824 (U)	0.43 (U)	0.493 (U)		
11/17/2016			0.804 (U)					
2/20/2017						0.534 (U)	1.36	0.633 (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)		0.254 (U)	0.566 (U)	0.112 (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)	0.62 (U)	0.762 (U)	0.167 (U)
2/13/2018				0.176 (U)	1.01 (U)	0.0914 (U)	0.349 (U)	0.347 (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)	1.11 (U)	0.614 (U)	0.903 (U)
12/18/2018	0.855 (U)	1.31 (J+X)	1.13 (U)	0.487 (U)	0.44 (U)	0.42 (U)	0.445 (U)	0.353 (U)
8/27/2019	1.31	1.32		1.11	1.47	1.19	1.44	0.65 (U)
8/29/2019			1.45 (U)					
10/15/2019	1.13 (U)	1.05 (U)	1.69	1.02 (U)	0.807 (U)	0.714 (U)	0.467 (U)	0.402 (U)
3/3/2020	1.29 (U)	1.68		1.18 (U)	0.818 (U)	0.996 (U)	1.5	0.397 (U)
3/4/2020			1.45					
8/18/2020	0.988 (U)	0.969 (U)	0.784 (U)	0.0861 (U)	1.22 (U)	0.53 (U)	0.581 (U)	0.453 (U)
9/15/2020	0.762 (U)	0.359 (U)	1.04 (U)	0.0583 (U)	0.579 (U)	0.215 (U)	0.55 (U)	0.474 (U)
3/1/2021				0.127 (U)				0.215 (U)
3/2/2021	0.901	0.925	1.12		0.342 (U)	0.409 (U)	0.362 (U)	
9/21/2021	1.33	0.468 (U)				0.182 (U)	0.86 (U)	
9/22/2021			1.4	0.349 (U)	1.33 (U)			0.943 (U)
2/1/2022	0.833 (U)	0.659 (U)	1.15	0.233 (U)	0.251 (U)	1.23	0.23 (U)	0.349 (U)

Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 7/26/2022 9:09 AM View: Pond BCD - Combined Radium
Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWC-25I	BRGWC-27I	BRGWC-29I	BRGWC-30I	BRGWC-32S	BRGWC-45	BRGWC-47	BRGWC-50
9/6/2016				1.01 (U)				
9/8/2016	0.862 (U)	1.74	1.13		0.706 (U)			
11/17/2016	1.2 (U)							
11/18/2016		0.571 (U)						
11/21/2016			1.59	0.201 (U)	0.0569 (U)			
2/21/2017	1.31	1.28 (U)						
2/22/2017			1.64	0.57 (U)	1.07 (U)			
6/13/2017	0.738 (U)	0.521 (U)						
6/14/2017			1.32	0.726 (U)	0.459 (U)			
9/27/2017	0.583 (U)	0.595 (U)	1.7	0.884 (U)	0.807 (U)			
2/14/2018	1.41 (J+X)	1.18 (U)	1.89 (J+X)	1.14 (U)	1.67 (J+X)			
3/6/2018						1.25 (U)	1.75 (J+X)	
3/15/2018								1.31
5/1/2018						0.423 (U)	2.02 (J+XD)	1.69 (J+X)
6/26/2018	0.968 (U)							
6/27/2018		1.3 (U)	1.66 (J+X)		1.34 (UX)		0.878 (U)	
6/28/2018				1.4 (UX)		0.283 (U)		1.04 (U)
7/31/2018						0.243 (U)		
8/1/2018							0.638 (U)	1.67
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)	0.992 (U)
11/28/2018						0.901 (U)	1.67 (UX)	1.76 (UX)
12/18/2018	1.13 (U)		0.759 (U)	0.661 (U)				
12/19/2018					1.21 (U)		1.3	2.15 (J+X)
12/20/2018		0.527 (U)				0.657 (U)		
1/16/2019								1.39
8/27/2019	0.91 (U)			1.35	0.86 (U)			
8/28/2019		0.643 (U)	1.76			0.528 (U)	0.804 (U)	
8/29/2019								1.33
10/15/2019	1.06 (U)							
10/16/2019			1.69 (U)				1.28 (U)	2.51
10/17/2019		1.07 (U)		1.25 (U)	1.2 (U)	0.977 (U)		
3/4/2020	1.34	1.18	1.23				0.862 (U)	1.73
3/5/2020				1.35	0.483 (U)	0.921 (U)		
8/19/2020	0.467 (U)	0.684 (U)	0.876 (U)	1 (U)	0.482 (U)			
8/20/2020						0.501 (U)	1.64	2.78
9/15/2020	0.205 (U)		1.23 (U)					
9/16/2020		0.175 (U)		0.43 (U)	0.195 (U)	0.254 (U)	0.51 (U)	
9/17/2020								0.717 (U)
3/2/2021	0.161 (U)					0.107 (U)	0.571 (U)	
3/3/2021		0.829 (U)	1.31 (U)	0.415 (U)				
3/4/2021					0.32 (U)			1.22
9/23/2021						0.619 (U)	0.527 (U)	
9/27/2021								2.07
9/28/2021	4.44	3.58	1.49	0.749 (U)	0.947 (U)			
2/2/2022	0.64 (U)			1.21 (U)	0.0265 (U)	0.219 (U)	0.145 (U)	
2/3/2022			0.798 (U)					1.15
2/4/2022		0.335 (U)						

Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 7/26/2022 9:09 AM View: Pond BCD - Combined Radium
Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWC-52I	PZ-50D	PZ-51D	PZ-51I	PZ-51S	PZ-57I	PZ-58I	PZ-60I
8/10/2018	1.91							
8/23/2018	1.86 (J+X)							
9/19/2018	1.64 (UX)							
10/29/2018	1.36 (U)							
11/28/2018	1.07 (U)							
12/20/2018	0.892 (U)							
1/17/2019	1.1 (U)							
1/18/2019					1.22			
1/19/2019				1.86				
2/13/2019	1.68							
8/29/2019	1.44							
10/16/2019	2.13							
10/18/2019				11.7 (U)	17.1 (U)			
3/4/2020	2.3							
8/20/2020	2.97			0.937 (U)	1.19			
9/17/2020	2.04			1.76	0.952 (U)			
3/3/2021			2.54		0.599 (U)			
3/4/2021	2.04			0.966 (U)				
3/5/2021		2.11						
9/27/2021				0.771 (U)	0.00107 (U)			
9/28/2021	3.28	1.05	1.89			0.0352 (U)	1.66	2.79
2/2/2022	2.33			0.992 (U)	0.0266 (U)			
2/3/2022		1	2.23				1.33	2.46
2/4/2022						0.229 (U)		

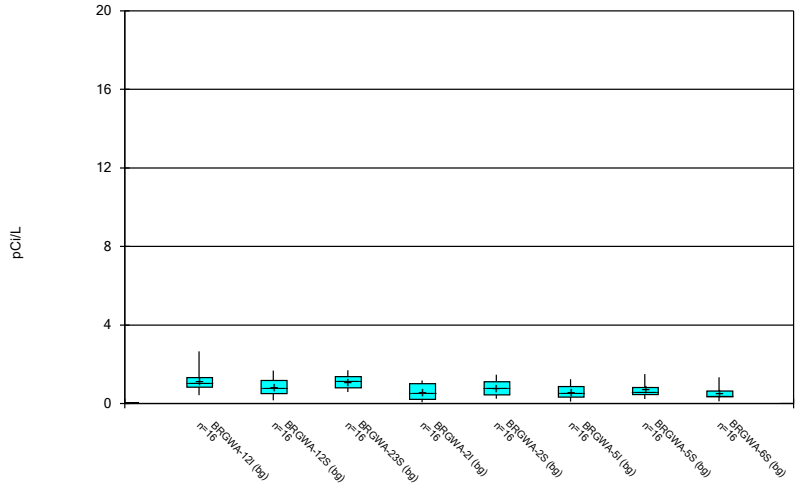
Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 7/26/2022 9:09 AM View: Pond BCD - Combined Radium
Plant Branch Client: Southern Company Data: Plant Branch AP

	PZ-61I	PZ-59I	PZ-63I	PZ-62I
9/27/2021	1.14 (U)			
2/2/2022	1.16			
2/3/2022		0.766 (U)		
2/4/2022			0.768	0.874

FIGURE K.

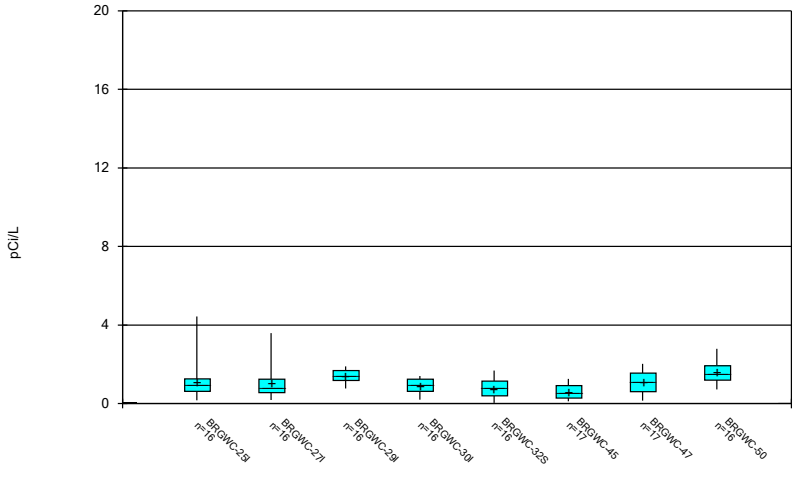
Box & Whiskers Plot



Constituent: Combined Radium 226 + 228 Analysis Run 7/26/2022 9:09 AM View: Pond BCD - Combined
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.35 Groundwater Stats Consulting. UG

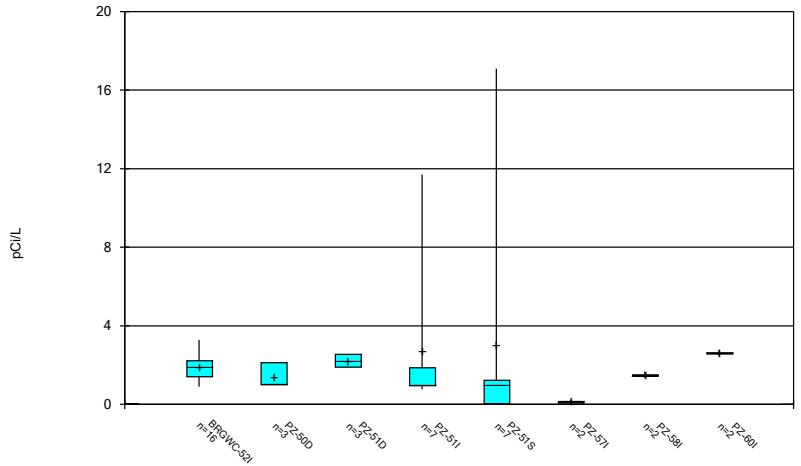
Box & Whiskers Plot



Constituent: Combined Radium 226 + 228 Analysis Run 7/26/2022 9:09 AM View: Pond BCD - Combined
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.35 Groundwater Stats Consulting. UG

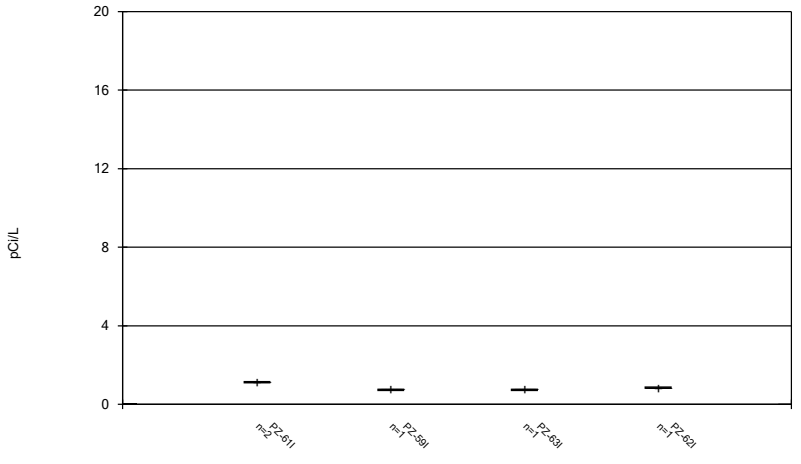
Box & Whiskers Plot



Constituent: Combined Radium 226 + 228 Analysis Run 7/26/2022 9:09 AM View: Pond BCD - Combined
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.35 Groundwater Stats Consulting. UG

Box & Whiskers Plot



Constituent: Combined Radium 226 + 228 Analysis Run 7/26/2022 9:09 AM View: Pond BCD - Combined
Plant Branch Client: Southern Company Data: Plant Branch AP

FIGURE L.

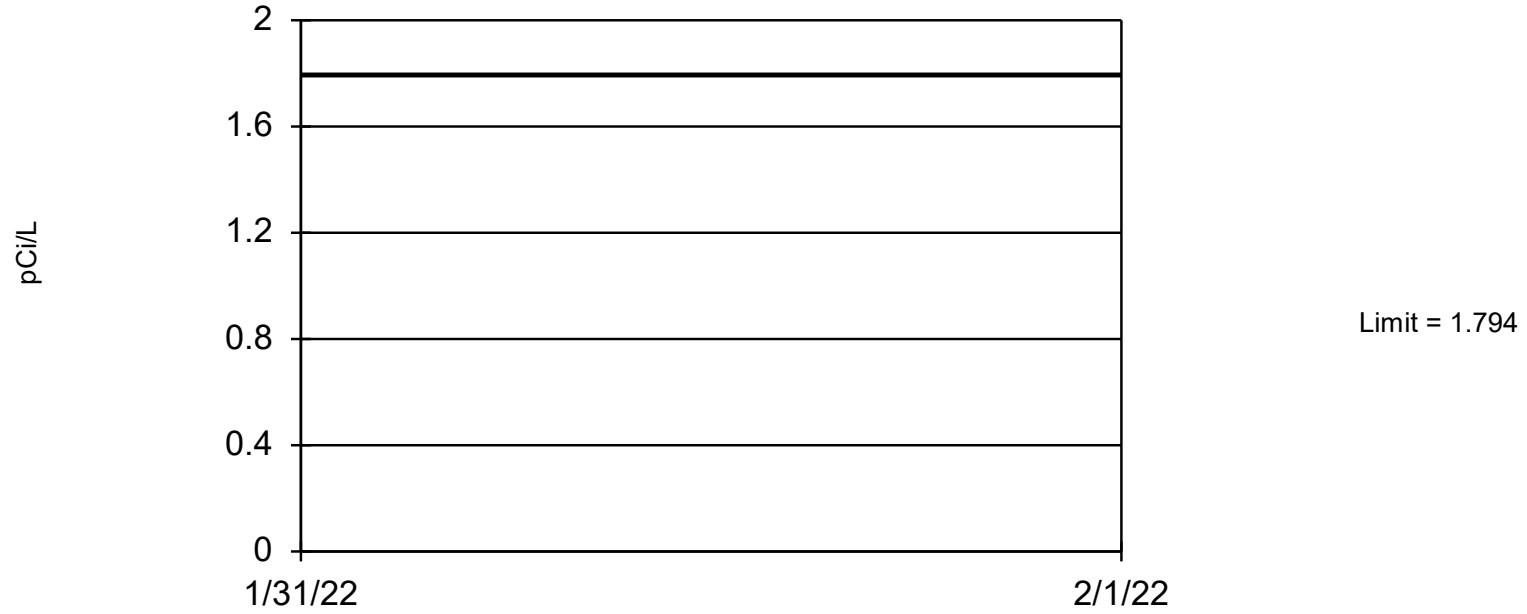
Upper Tolerance Limit Summary Table - Combined Radium 226 + 228

Plant Branch Client: Southern Company Data: Plant Branch AP Printed 5/4/2022, 1:54 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Combined Radium 226 + 228 (pCi/L)	n/a	1.794	n/a	n/a	n/a	n/a	128	0.8469	0.2609	0	None	sqrt(x)	0.05	Inter

Tolerance Limit

Interwell Parametric



95% coverage. Background Data Summary (based on square root transformation): Mean=0.8469, Std. Dev.=0.2609, n=128. Normality test: Chi Squared @alpha = 0.01, calculated = 6.844, critical = 14.07. Report alpha = 0.05.

Constituent: Combined Radium 226 + 228 Analysis Run 5/4/2022 1:54 PM View: Pond BCD Combined Ra

Plant Branch Client: Southern Company Data: Plant Branch AP

FIGURE M.

PLANT BRANCH PONDS B,C,D GWPS				
Constituent Name	**MCL**	**CCR-Rule Specified**	**Background Limit**	**GWPS**
Combined Radium, Total (pCi/L)	5		1.79	5

**MCL = Maximum Contaminant Level*

**CCR = Coal Combustion Residuals*

**GWPS = Groundwater Protection Standard*

FIGURE N.

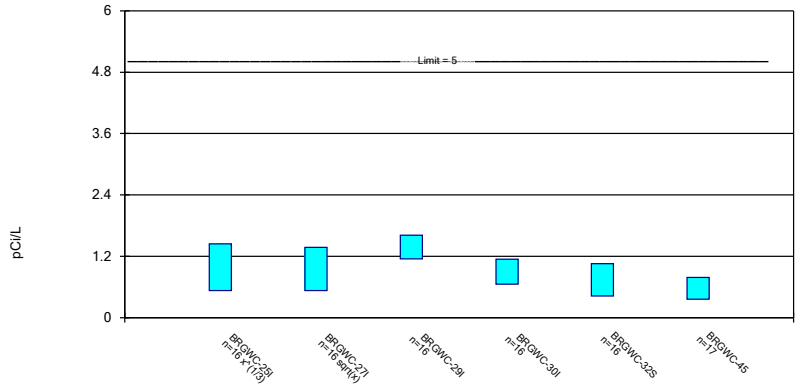
Confidence Intervals - Combined Radium 226 + 228 (No Significant Results)

Plant Branch Client: Southern Company Data: Plant Branch AP Printed 7/26/2022, 9:36 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-25I	1.445	0.5267	5	No	16	1.089	0.9719	0	None	x^(1/3)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	BRGWC-27I	1.377	0.5281	5	No	16	1.013	0.8008	0	None	sqrt(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	BRGWC-29I	1.611	1.148	5	No	16	1.38	0.3559	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	BRGWC-30I	1.141	0.6522	5	No	16	0.8966	0.3757	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	BRGWC-32S	1.053	0.4257	5	No	16	0.7395	0.4823	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	BRGWC-45	0.7882	0.3592	5	No	17	0.5737	0.3424	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	BRGWC-47	1.402	0.7484	5	No	17	1.075	0.5212	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	BRGWC-50	1.963	1.226	5	No	16	1.594	0.5663	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	BRGWC-52I	2.304	1.451	5	No	16	1.878	0.6554	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	PZ-51I	11.7	0.771	5	No	7	2.712	3.986	0	None	No	0.008	NP (normality)
Combined Radium 226 + 228 (pCi/L)	PZ-51S	7.273	0.00008008	5	No	7	3.013	6.232	0	None	x^(1/3)	0.01	Param.

Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.

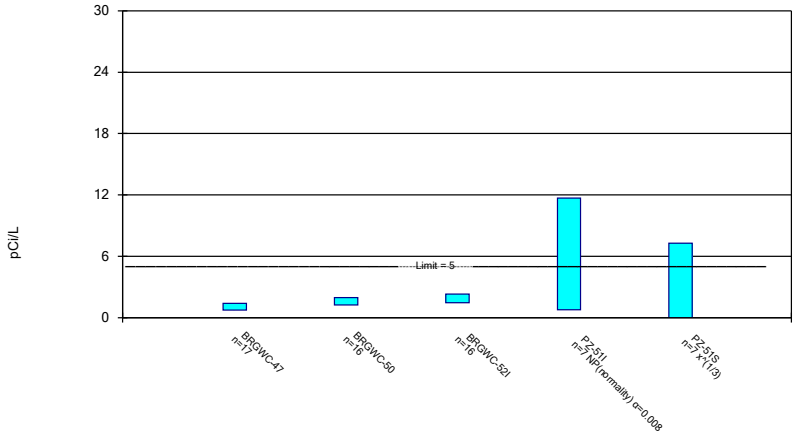


Constituent: Combined Radium 226 + 228 Analysis Run 7/26/2022 9:11 AM View: Pond BCD Combined R
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.35 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: Combined Radium 226 + 228 Analysis Run 7/26/2022 9:11 AM View: Pond BCD Combined R
Plant Branch Client: Southern Company Data: Plant Branch AP

Confidence Interval

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 7/26/2022 9:36 AM View: Pond BCD Combined Radium - Confidence Intervals

Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWC-25I	BRGWC-27I	BRGWC-29I	BRGWC-30I	BRGWC-32S	BRGWC-45
9/6/2016				1.01 (U)		
9/8/2016	0.862 (U)	1.74	1.13		0.706 (U)	
11/17/2016	1.2 (U)					
11/18/2016		0.571 (U)				
11/21/2016			1.59	0.201 (U)	0.0569 (U)	
2/21/2017	1.31	1.28 (U)				
2/22/2017			1.64	0.57 (U)	1.07 (U)	
6/13/2017	0.738 (U)	0.521 (U)				
6/14/2017			1.32	0.726 (U)	0.459 (U)	
9/27/2017	0.583 (U)	0.595 (U)	1.7	0.884 (U)	0.807 (U)	
2/14/2018	1.41 (J+X)	1.18 (U)	1.89 (J+X)	1.14 (U)	1.67 (J+X)	
3/6/2018						1.25 (U)
5/1/2018						0.423 (U)
6/26/2018	0.968 (U)					
6/27/2018		1.3 (U)	1.66 (J+X)		1.34 (UX)	
6/28/2018				1.4 (UX)		0.283 (U)
7/31/2018						0.243 (U)
8/23/2018						1.1 (U)
9/19/2018						0.369 (U)
10/29/2018						0.401 (U)
11/28/2018						0.901 (U)
12/18/2018	1.13 (U)		0.759 (U)	0.661 (U)		
12/19/2018					1.21 (U)	
12/20/2018		0.527 (U)				0.657 (U)
8/27/2019	0.91 (U)			1.35	0.86 (U)	
8/28/2019		0.643 (U)	1.76			0.528 (U)
10/15/2019	1.06 (U)					
10/16/2019			1.69 (U)			
10/17/2019		1.07 (U)		1.25 (U)	1.2 (U)	0.977 (U)
3/4/2020	1.34	1.18	1.23			
3/5/2020				1.35	0.483 (U)	0.921 (U)
8/19/2020	0.467 (U)	0.684 (U)	0.876 (U)	1 (U)	0.482 (U)	
8/20/2020						0.501 (U)
9/15/2020	0.205 (U)		1.23 (U)			
9/16/2020		0.175 (U)		0.43 (U)	0.195 (U)	0.254 (U)
3/2/2021	0.161 (U)					0.107 (U)
3/3/2021		0.829 (U)	1.31 (U)	0.415 (U)		
3/4/2021					0.32 (U)	
9/23/2021						0.619 (U)
9/28/2021	4.44	3.58	1.49	0.749 (U)	0.947 (U)	
2/2/2022	0.64 (U)			1.21 (U)	0.0265 (U)	0.219 (U)
2/3/2022			0.798 (U)			
2/4/2022		0.335 (U)				
Mean	1.089	1.013	1.38	0.8966	0.7395	0.5737
Std. Dev.	0.9719	0.8008	0.3559	0.3757	0.4823	0.3424
Upper Lim.	1.445	1.377	1.611	1.141	1.053	0.7882
Lower Lim.	0.5267	0.5281	1.148	0.6522	0.4257	0.3592

Confidence Interval

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 7/26/2022 9:36 AM View: Pond BCD Combined Radium - Confidence Intervals

Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWC-47	BRGWC-50	BRGWC-52I	PZ-51I	PZ-51S
3/6/2018	1.75 (J+X)				
3/15/2018		1.31			
5/1/2018	2.02 (J+XD)	1.69 (J+X)			
6/27/2018	0.878 (U)				
6/28/2018		1.04 (U)			
8/1/2018	0.638 (U)	1.67			
8/10/2018			1.91		
8/23/2018	1.14 (U)		1.86 (J+X)		
9/19/2018	1.45 (UX)		1.64 (UX)		
10/29/2018	1.09 (U)	0.992 (U)	1.36 (U)		
11/28/2018	1.67 (UX)	1.76 (UX)	1.07 (U)		
12/19/2018	1.3	2.15 (J+X)			
12/20/2018			0.892 (U)		
1/16/2019		1.39			
1/17/2019			1.1 (U)		
1/18/2019					1.22
1/19/2019				1.86	
2/13/2019			1.68		
8/28/2019	0.804 (U)				
8/29/2019		1.33	1.44		
10/16/2019	1.28 (U)	2.51	2.13		
10/18/2019				11.7 (U)	17.1 (U)
3/4/2020	0.862 (U)	1.73	2.3		
8/20/2020	1.64	2.78	2.97	0.937 (U)	1.19
9/16/2020	0.51 (U)				
9/17/2020		0.717 (U)	2.04	1.76	0.952 (U)
3/2/2021	0.571 (U)				
3/3/2021					0.599 (U)
3/4/2021		1.22	2.04	0.966 (U)	
9/23/2021	0.527 (U)				
9/27/2021		2.07		0.771 (U)	0.00107 (U)
9/28/2021			3.28		
2/2/2022	0.145 (U)		2.33	0.992 (U)	0.0266 (U)
2/3/2022		1.15			
Mean	1.075	1.594	1.878	2.712	3.013
Std. Dev.	0.5212	0.5663	0.6554	3.986	6.232
Upper Lim.	1.402	1.963	2.304	11.7	7.273
Lower Lim.	0.7484	1.226	1.451	0.771	8.008E-05

APPENDIX C

Semi-Annual Remedy Selection & Design Progress Report

Prepared for

Georgia Power Company
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SEMIANNUAL REMEDY SELECTION AND DESIGN PROGRESS REPORT

PLANT BRANCH ASH PONDS B, C, AND D

Prepared by

engineers | scientists | innovators

1255 Roberts Boulevard, Suite 200
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Project Number GW8862

July 2022

Geosyntec
consultants

SEMIANNUAL REMEDY SELECTION AND DESIGN PROGRESS REPORT

PLANT BRANCH ASH PONDS B, C, D (AP-BCD)

This *Semiannual Remedy Selection and Design Progress Report, Plant Branch Ash Ponds B, C, and D (AP-BCD)* has been prepared in accordance with the United States Environmental Protection Agency Coal Combustion Residual Rule, specifically 40 Code of Federal (CFR) 257.97(a) and the Georgia Environmental Protection Division Rules for Solid Waste Management 391-3-4-.10(6)(a). This report describes the progress made during the first semiannual period of 2022 in selecting and designing a remedy previously documented in the *Assessment of Corrective Measures Report – Plant Branch Ash Ponds B, C, and D (AP-BCD)*. I hereby certify that I am a qualified groundwater scientist, in accordance with the Georgia Rules of Solid Waste Management, and 40 CFR Part 258.50(g).

Report Prepared by:

_____ July 29, 2022

Whitney B. Law, P.E. Date

Georgia Professional Engineer No. 036641

Geosyntec consultants

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LIST OF ACRONYMS AND ABBREVIATIONS

%	percentage
ACM	Assessment of Corrective Measures
AEC	anion exchange capacity
Al	aluminum
AP	ash pond
CCR	coal combustion residuals
CEC	cation exchange capacity
CFR	Code of Federal Regulations
Co	cobalt
Cd	cadmium
CSM	conceptual site model
Fe	iron
GA EPD	Georgia Environmental Protection Division
Georgia Power	Georgia Power Company
Geosyntec	Geosyntec Consultants, Inc.
GWPS	Groundwater Protection Standard
ISS	in-situ stabilization
K_h	hydraulic conductivity
KGS	Kentucky Geological Survey
M	molar
mL	milliliters
Mn	manganese
MNA	monitored natural attenuation
PRB	permeable reactive barrier
PWR	partially weathered rock
SEP	sequential extraction procedure
SSI	statistically significant increase
SSL	statistically significant level
USEPA	United States Environmental Protection Agency
v/v	volume per volume
wt %	weight percentage
XRD	x-ray diffraction
ZVI	zero valent iron

1.0 INTRODUCTION

1.1 Purpose

This *Semiannual Remedy Selection and Design Progress Report* (the semiannual progress report) was prepared by Geosyntec Consultants, Inc. (Geosyntec) for Georgia Power Company (Georgia Power) Plant Branch Ash Ponds B, C, and D (AP-BCD or Site) in accordance with the United States Environmental Protection Agency (USEPA) Coal Combustion Residual Rule (Federal CCR Rule) (40 Code of Federal Regulations [CFR] 257 Subpart D), specifically 40 CFR § 257.97(a), and the Georgia Environmental Protection Division (GA EPD) Rules for Solid Waste Management 391-3-4-.10(6)(a) (State CCR Rule). Plant Branch ceased producing electricity prior to April 2015, therefore AP-BCD is not subject to the Federal CCR Rule. AP-BCD is managed directly under the State CCR Rule, which incorporates the Federal CCR Rule by reference. This semiannual progress report describes the progress made since the issuance of the prior semiannual progress report in selecting and designing a remedy. Potentially applicable groundwater corrective measures were previously described in the *Assessment of Corrective Measures Report – Plant Branch Ash Ponds B, C, and D (AP-BCD)* (Golder, 2020) (ACM Report).

The purpose of the ACM Report (and subsequent semiannual progress reports) is to document the process of evaluating and selecting corrective measure(s) to improve groundwater quality at the Site. This process is typically iterative and may be composed of multiple steps to analyze the effectiveness of corrective measures. Once potential corrective measures are identified, they are further evaluated using the criteria outlined in § 257.96(c) and Rule 391-3-4-.10(6)(a). The selected corrective measure must meet the additional protection criteria outlined in § 257.97 and corresponding Rule 391-3-4-.10(6)(a). Pursuant to § 257.97(a) and Rule 391-3-4-.10(6)(a), semiannual progress reports have been regularly submitted to document the efforts of evaluating and progressing toward selecting a groundwater corrective measure (Golder, 2021a, 2021b, 2022).

1.2 Site Background and Overview of AP-BCD Pond Closure

Ash Pond B is an approximately 52-acre ash pond that was formed by damming a valley. Placement of CCR in the ash pond began in late 1967. Ash Pond C is an approximately 69-acre ash pond that was also formed by damming a valley. CCR placement in Ash Pond C began in the early 1970s. Ash Pond D is an approximately 46-acre ash pond that began receiving CCR in about 1980. All units ceased receiving waste prior to the effective date

of the CCR rule promulgated in April 2015, thereby designating this site as a Phase II site.

Georgia Power intends to close Ash Ponds B, C, and D (**Figure 1**) via closure by removal in accordance with § 257.102 and corresponding State Rule 391-3-4-.10(7)(b). By removing the CCR from each of the Ash Ponds, the proposed method provides a source control measure which reduces the potential for migration of CCR constituents to groundwater.

1.3 Regulatory Program Status and Nature and Extent

Pursuant to the Federal CCR Rule, CCR compliance groundwater monitoring-related activities have been performed for AP-BCD since 2018. Georgia Power initiated a groundwater assessment monitoring program on November 13, 2019, after identifying statistically significant increases (SSI) of Appendix III constituents.

Statistical analyses of the Appendix IV assessment monitoring groundwater data collected in March 2020 identified statistically significant levels (SSL) for cobalt (Co) and cadmium (Cd) at concentrations exceeding the state and/or federal Groundwater Protection Standards (GWPS)[1]. Pursuant to § 257.96, Georgia Power initiated an ACM program for AP-BCD in July 2020. The ACM Report was submitted to GA EPD in December 2020 and posted to the CCR compliance website (Golder, 2020).

Since the ACM was initiated, delineation wells have been installed and incorporated into the assessment monitoring network to delineate, both horizontally and vertically, the extent of the Co and Cd SSLs downgradient of AP-BCD. The monitoring well network is shown on **Figure 2**; **Table 1** provides well construction details.

Statistical analysis of the February 2022 semiannual assessment monitoring groundwater data identified SSLs of the following Appendix IV constituents at concentrations exceeding the applicable GWPS at AP-BCD:

- Cd: BRGWC-50
- Co: BRGWC-50 and PZ-51I

[1] On February 22, 2022, GA EPD adopted the federal GWPS for cobalt, lithium, lead, and molybdenum. The GWPS for cadmium is derived from the federally promulgated maximum contaminant level (MCL) of 0.005 mg/L.

Details are provided in the *2022 Annual Groundwater Monitoring and Corrective Action Report* (2022 Annual Report) (Geosyntec, 2022).

The groundwater data from the February 2022 semiannual assessment monitoring event were used to generate the Cd and Co iso-concentration maps presented on **Figures 3** and **4**, respectively. Based on the groundwater data reported in the 2022 Annual Report, the horizontal and vertical delineation status of identified SSLs is the following.

- BRGWC-50 – Cd is horizontally delineated by PZ-61I and vertically by PZ-50D.
- BRGWC-50 and PZ-51I – Co is horizontally delineated by surface water location LR+9A and vertically delineated by PZ-51D.

Based on GA EPD guidance, monitoring wells with SSLs were further evaluated by Groundwater Stats Consulting using the Sen's Slope/Mann Kendall trend test (**Appendix A**). The full statistical evaluation is also included as an Appendix to the *2022 Annual Groundwater and Corrective Action Report* (Geosyntec, 2022). No statistically significant trends (at 99% confidence) were identified for Cd or Co in BRGWC-50 or Co in PZ-51I when the February 2022 data were analyzed. Anecdotally, the observed data suggests (i) concentrations of Cd are decreasing in BRGWC-50; and (ii) concentrations appear stable for Co in BRGWC-50 and PZ-51I (Appendix A).

In addition to the assessment monitoring program at the Site, Georgia Power conducted a human health and ecological risk evaluation to evaluate constituents that are present at SSLs in groundwater (i.e., Cd and Co) at AP-BCD. The evaluation provides one of many lines of evidence that will be evaluated and factored into the remedy selection process, which will be completed in accordance with § 257.97. Based on this risk evaluation, concentrations of constituents detected in groundwater at AP-BCD between August 2016 and March 2020 are not expected to pose a risk to human health or the environment (Geosyntec, 2020a). Cobalt and Cd data collected since March 2020 are consistent with data used in the risk evaluation; therefore, the conclusions provided in the 2020 Risk Evaluation Report are supported by current conditions.

Georgia Power will continue to adaptively manage the Site and use ongoing data collection to evaluate the need for additional wells at AP-BCD. Pursuant to § 257.96, groundwater in the vicinity of AP-BCD continues to be monitored during the ACM phase in accordance with the established assessment monitoring program.

1.4 Corrective Measures Evaluated

As discussed in the ACM Report, the following corrective measures were initially considered to be potentially feasible for use at AP-BCD. A comparative screening of the corrective measures is provided in **Table 2**.

1. Geochemical Manipulation (In-Situ Injection)
2. Hydraulic Containment (Pump and Treat)
3. In-Situ Stabilization (ISS)
4. Monitored Natural Attenuation (MNA)
5. Permeable Reactive Barrier (PRB)
6. Phytoremediation
7. Subsurface Vertical Barrier Walls

ISS, PRB, phytoremediation, and subsurface vertical barrier wall corrective measures have since been removed from consideration based on data evaluations presented in previous semiannual progress reports (Golder, 2021a, 2021b, and 2022).

Georgia Power proactively initiated adaptive site management as outlined in the ACM Report (Golder, 2020) to support the groundwater remedy selection process and address potential changes in site conditions (e.g., successful reduction of constituent concentrations or changing trends) as appropriate during ash pond closure. The adaptive site management approach will take existing site conditions, including natural attenuation mechanisms, into account.

Characterization activities to evaluate attenuation mechanisms at the Site include collection of data necessary to progressively evaluate the existing and long-term effectiveness of these processes in the aquifer and reduce uncertainty for decision making at each screening step as listed in the USEPA guidelines for MNA of inorganic constituents (USEPA, 1999, 2007, and 2015). The 1999 MNA guidance originally introduced a "tiered approach" with three tiers of site-specific information, or lines of evidence, to evaluate the appropriate use of MNA at certain sites (USEPA, 1999). In 2007, the USEPA issued MNA technical guidance specific to inorganic contaminants (USEPA, 2007) that contained four "tiers." The 2015 MNA guidance retains these four "tiers," but describes them as "phases" as described below (USEPA, 2015). This 2015 MNA document for inorganic contaminants expands on and is designed to be a companion to the 1999 and 2007 MNA guidance.

- Phase I: Demonstration that the groundwater plume is *not expanding*.

- Phase II: Determination that the *mechanism and rate* of the attenuation process are sufficient.

- Phase III: Determination that the *capacity* of the aquifer is sufficient to attenuate the mass of contaminant within the plume and the *stability* of the immobilized contaminant is sufficient to resist re-mobilization.

- Phase IV: Design of a *performance monitoring program* based on an understanding of the mechanism of the attenuation process, and establishment of contingency remedies tailored to site-specific characteristics.

Georgia Power will address Phase IV, as appropriate, during the development of the future corrective action monitoring plan, after the final remedy selection report.

The data collection approach and the data interpretation presented within this semiannual progress report are informed by this tiered MNA guidance. It is noted, however, that the characterization data collected under this approach are also used to refine the conceptual site model (CSM) and evaluate other retained potential corrective measures.

2.0 SUMMARY OF WORK COMPLETED

The following section summarizes the field investigations and data evaluations completed in support of the ACM program since the issuance of the prior semiannual progress report in February 2022 (Golder, 2022). The routine monitoring events associated with the assessment monitoring program are discussed in the 2022 Annual Report (Geosyntec, 2022).

2.1 Field Activities

Additional field investigation activities since the issuance of the prior semiannual progress report include piezometer installation, additional aquifer testing, and jar and column testing. These activities are detailed below.

2.1.1 Piezometer Installation

In January 2022, two piezometers (PZ-62I and PZ-63I) were installed and developed downgradient of AP-BCD (specifically AP-B) to refine the nature and extent of Co south of BRGWC-50 and closer to AP-B, the primary well exhibiting a SSL for Co. A well installation report was completed and submitted to GA EPD on March 14, 2022 (**Appendix B**).

2.1.2 Aquifer Testing

In June 2022, slug testing was conducted at four of the recently installed piezometers (PZ-57I, PZ-60I, PZ-62I, and PZ-63I) in order to collect additional hydraulic conductivity data in the study area. The pneumatic slug method was used at three of the piezometer locations, while the pump down method was used at PZ-60I due to rapid recovery when the pneumatic method was attempted. For the pneumatic method, the well casing was pressurized using compressed nitrogen gas to displace the water within the piezometer. After the pressure was released using a manual valve, the groundwater recovery was measured using a downhole pressure transducer and data logger (LevelTroll 700) until the water level reached 95% of the static pre-test conditions. For the pump down method at PZ-60I, a submersible pump was used to draw down the water within the piezometer. The same transducer and data logger were used to measure drawdown and recovery during and after the pumping.

Following collection of the displacement and recovery data, the processing and analysis was completed using the AQTESOLV curve-matching software to estimate horizontal hydraulic conductivity (K_h). Both the Bouwer-Rice (1971) and Kentucky Geological

Society (KGS) methods were used to estimate K_h for each piezometer and the results for each method are presented for comparative purposes in **Table 3**.

2.1.3 Jar and Column Testing

A treatability study was completed to support remedy selection activities at AP-BCD. Laboratory testing was conducted on groundwater samples collected from the PZ-60I, PZ-58I, BRGWC-50, and PZ-59I in February 2022 to evaluate the applicability of various in-situ treatment technologies for the remediation of Co and Cd. Bench scale reactors were tested with three amendment materials, potassium bicarbonate and sodium bicarbonate to evaluate the potential for pH neutralization to precipitate Co and Cd, as well as zero valent iron (ZVI) to evaluate the potential for precipitation or adsorption of Co and Cd. Additional details on the laboratory testing are provided in the technical memorandum completed by Golder in April 2022 (**Appendix D**).

2.2 Data Analysis Activities

In addition, this section describes further data analysis including aquifer solids characterization and groundwater geochemical characterization. To note, the field efforts associated with collection of samples for XRD and SEP were discussed in previously submitted semiannual progress reports (Golder, 2021a, 2021b, and 2022).

2.2.1 Soil Characterization

2.2.1.1 X-ray Diffraction

Mineralogical characterization using X-ray diffraction (XRD) was reported for aquifer solids collected from ten borings upgradient and downgradient of AP-BCD. The laboratory results were included in the *SemiAnnual Remedy Selection and Design Progress Report* submitted in February 2021 (Golder, 2021a).

2.2.1.2 Sequential Extraction Procedure

Aquifer solids were collected in May of 2020 and March of 2021 from thirteen borings upgradient and downgradient of AP-BCD and analyzed by sequential extraction procedure (SEP) to assess the geochemical fractionation of trace elements within aquifer solids. The laboratory results were included in the *SemiAnnual Remedy Selection and Design Progress Report* submitted in February 2021 (Golder, 2021a). SEP is chemical extractions used to remove metals from specific solid-associated phases. SEP uses progressively stronger reagents to solubilize metals from increasingly recalcitrant phases.

Although these procedures do not identify the specific metal phases in a soil/aquifer matrix, they do provide a means to evaluate the class of solids and relative stability in relation to oxidation/reduction (redox) potential and pH fluctuations (Tessier et al, 1979; Kuo et al., 1983; Sposito et al., 1984; Hickey and Kittrick, 1984; Gruebel et al., 1988).

SEP data can be used to interpret the mechanism and potential reversibility of attenuation processes, consistent with Phases II and III of the MNA guidance. These data also supplement information collected during the baseline characterization, such as cation exchange capacity (CEC) and anion exchange capacity (AEC), as well as the presence of certain minerals and/or metal oxyhydroxides. Eurofins/TestAmerica uses a 7-step extraction procedure as described below.

- Step 1 (Exchangeable Phase): This extraction includes trace elements that are reversibly sorbed to soil minerals, amorphous solids, and/or organic material by electrostatic forces. These forces may be overcome by exposing the soil to a concentrated electrolyte solution, such as 1 molar (M) magnesium sulfate ($MgSO_4$) that displaces the trace elements from solid surfaces.

- Step 2 (Carbonate Phase): This extraction targets trace elements that are sorbed or otherwise bound to carbonate minerals. This phase is soluble in a mild acid solution (1M sodium acetate [NaOAc] solution in 25% acetic acid [HOAc] at pH 5).

- Step 3 (Non-Crystalline Materials Phase): This extraction targets trace elements that are complexed by, and co-precipitated with, amorphous solids (e.g. iron (Fe)/manganese (Mn)/aluminum (Al) oxyhydroxides). This phase is extracted with 25 milliliter (mL) of 0.2M ammonium oxalate (pH 3) and can provide significant attenuation capacity.

- Step 4 (Metal Hydroxide Phase): Trace elements bound to crystalline hydroxides of Fe, Mn, and/or Al are extracted using a solution of 1M hydroxylamine hydrochloride ($HONH_2$-HCl) in 25% volume per volume (v/v) acetic acid. This phase often provides significant attenuation capacity.

- Step 5 (Organic Phase): This extraction targets trace elements strongly bound via chemisorption to organic material. Oxidation of soil organic matter (using pH 9.5; at 5% sodium hypochlorite [NaOCl]), will bring into solution metals bound to organic functional groups.

- Step 6 (Acid/Sulfide Fraction): The extraction is used to identify trace elements precipitated as sulfide minerals. Metals associated with sulfide minerals will be extracted by leaching the soils with a 3:1:2 v/v solution of hydrochloric acid-nitric acid-water [HCl-HNO_3-H_2O] to dissolve the metal sulfide minerals. Sulfide phases are fairly stable in the groundwater environment.

- Step 7 (Residual Fraction): Trace elements remaining in the soil after the previous extractions will be distributed between silicates, phosphates, and refractory oxides. These residual metals can be removed from the soil through total dissolution with hydrofluoric acid [HF], HNO_3, HCl and boric acid [H_3BO_3]. These are mostly stable, and naturally occurring fraction, which are not easily leached nor provides notable attenuating capacity for trace elements in groundwater.

2.2.2 Groundwater Analytical Analysis

Groundwater was sampled from the compliance and delineation monitoring networks during the semiannual sampling event between February 1 and February 4, 2022. The occurrence of Co and Cd SSLs was evaluated following review of the analytical groundwater data to assess if any correlations existed between the SSLs and other groundwater constituents. Additional detail on the sampling methodology and suite of analytical analyses is included in the *2022 Annual Groundwater Monitoring and Corrective Action Report* (2022 Annual Report) (Geosyntec, 2022).

3.0 SUMMARY OF RESULTS

The following presents the results of the field and data analysis efforts outlined in Section 2.

3.1 Summary of Field Activities

3.1.1 Aquifer Testing

The resulting K_h for the four wells tested ranged from 2.3 x 10^{-4} cm/sec (0.70 ft/day) to 2.1 x 10^{-3} cm/sec (6.02 ft/day), which is consistent with previous estimates of K_h at the Site. The piezometers were all screened within the lower portion of the saprolite and partially weathered rock (PWR), at or near the top of the underlying bedrock. The highest observed K_h during this series of testing was at PZ-60I, which also showed significant water level fluctuations indicate rapid but variable flow in the upper bedrock and reflect variability in aquifer conditions. The curve-matching data plots generated in Aqtesolv are included in **Appendix C**.

3.1.2 Jar and Column Testing

The findings of the jar and column testing support the potential feasibility of injections to buffer the in-situ pH for the attenuation of Co and Cd impacts downgradient of AP-BCD. Additional details on the results are provided in the technical memorandum completed by Golder in April 2022 (**Appendix D**).

3.2 Summary of Data Analysis Activities

3.2.1 Soil Characterization

A summary of the aquifer solids results for is provided below; refer to previous semiannual remedy selection and design progress reports for a detailed discussion of sample collection (Golder, 2021a, 2021b, and 2022).

3.2.1.1 XRD Analysis

XRD analyses were completed to characterize both the crystalline and non-crystalline phases of the unconsolidated aquifer matrix. The quantitative XRD analysis (see **Table 4**) indicated that the largest percentage of the aquifer matrix materials in the locations upgradient of AP-BCD was hornblende (approximately 30 wt%), kaolinite (between 20 and 50 wt%), and lesser amounts of quartz. Overall, the mineralogical composition reflects weathered mafic metamorphic rocks. In contrast, samples from the downgradient

locations from AP-BCD contained different mineralogy and were characterized predominantly by albite (approximately 50 wt%), quartz (approximately wt 25%) and lesser amounts of microcline, biotite and clay minerals, which reflect a felsic to intermediate igneous parent rocks.

Overall, the mineralogy of the aquifer matrix downgradient reflects an abundance of silicates including quartz, albite (a sodium aluminosilicate), biotite (a potassium aluminosilicate that can contain iron or manganese), and microcline (a potassium aluminosilicate). The presence of weathered iron and manganese constituents in the silicates and the minor presence of iron oxides including magnetite suggest the presence of minerals to potentially provide surface sites and ion exchange capacities to attenuate both cationic as well as anionic constituents.

3.2.1.2 Sequential Extraction Procedure

Aquifer solids were evaluated for the fractionation of Co and Cd using the 7-step SEP analysis method. The results are summarized in **Table 5**.

As a first step to evaluate data quality in an SEP analysis, the concentration obtained from the total metals analysis for a constituent of interest should be compared with the sum of metal concentrations reported from the individual SEP steps. While not expected to be exactly the same, these results should be consistent. As can be seen in **Table 5**, the totals analyses for Co and Cd, and the sum of these individual metals from extraction steps 1 through 7 match reasonably well, which indicates good metal recovery in the SEP steps and data quality. Some exceptions were observed where the concentration of Cd and Co in the totals was higher than observed in the sum of steps. Outlier results are possibly related to incomplete sample homogenization conducted by the laboratory, and the low concentrations of total Cd.

Cadmium was generally not recovered in the first two extraction steps, which include the Exchangeable Phase (Step 1) and the Carbonate Phase (Step 2), with the exception of the interval at 59 feet below ground surface in BRGWC-50. The bulk of Cd concentrations was associated with the Metal Hydroxide Phase (Step 4) and the Residual Phase (Step 7) indicating that Cd is mostly associated with crystalline metal oxides and oxyhydroxides as well as a fairly recalcitrant fraction.

The SEP results for Co were similar to what was observed for Cd. The bulk of Co concentrations were recovered in Step 3 (Non-crystalline Materials Phase) and 4 (Metal Hydroxide Phase), suggesting that Co is mostly associated with amorphous and

crystalline metal oxides and oxyhydroxides. In addition, significant Co was recovered in Steps 6 (Acid/Sulfide Phase) and 7 (Residual Phase), indicating a fairly recalcitrant fraction of Co that can only be liberated through weathering of the rock/mineral matrix containing the Co.

3.2.2 Groundwater Geochemical Analysis

Review of the groundwater analytical data (**Table 6**) indicates that downgradient monitoring wells and piezometers generally have a lower pH and higher sulfate concentrations particularly in wells screened in the transition zone where Co and/or Cd impacts are observed (as low as 3.7 in PZ-59I in February 2022). The correlations between aqueous Co concentrations and pH or sulfate are presented in **Figure 5**. Release of Co and Cd could therefore possibly be due to dissolution of Fe or Mn-bearing minerals with which they are associated in the downgradient groundwater geochemical conditions. This is additionally supported by the high concentrations of dissolved Fe and Mn in wells with SSLs relative to wells without SSLs (**Figure 5**) and the SEP data for Co (**Table 4**) suggesting that Co is mostly associated with amorphous and crystalline metal oxides and oxyhydroxides.

4.0 UPDATED CONCEPTUAL SITE MODEL

As noted previously, the closure strategy for AP-BCD will be closure by removal, thereby providing a source control measure that reduces potential for migration of CCR-related constituents to groundwater. The CSM indicates that, under current conditions, the groundwater exceedances are contained onsite. Data collected since the previous progress report are consistent with and generally agree with the CSM described in the February 2022 progress update.

- No significant concentration trends were observed. However, Co concentrations appear stable in BRGWC-50 and PZ-51I, while Cd concentrations appear to be decreasing at well BRGWC-50 (**Figure 6**).

- Downgradient lateral extent of Co and Cd are delineated by sampling of surface water from Lake Sinclair (**Figures 3** and **4**). Additional characterization of the extent of Co and Cd to the north of PZ-59I is under evaluation.

- The characterization of aquifer solids in the vicinity of AP-BCD via XRD indicates the presence of weathered iron and manganese constituents in the silicates and the minor presence of iron oxides including magnetite, which could

potentially provide surface sites and ion exchange capacities to attenuate Co and Cd.

- SEP conducted for select aquifer solid samples suggests that Co and Cd in soils both upgradient and downgradient of AP-BCD appear to be associated with amorphous and crystalline metal oxides and oxyhydroxides and more recalcitrant fractions such as the acid/sulfide fraction and the residual fraction of the SEP. This observation indicates the potential for sorption and/or incorporation of Co and Cd into immobile mineral phases.

- Exceedances of Co and Cd downgradient of AP-BCD appear to be correlated to the relatively lower pH, higher sulfate, and higher dissolved concentrations of Fe and/or Mn geochemistry of the downgradient groundwater (**Figure 5**).

5.0 UPDATED EVALUATION OF CORRECTIVE MEASURES

Based on the data collected to date, the following potential corrective measures will be retained for further evaluation.

- Geochemical Injections:
    - Geochemical injections include the use of an injection well network, or other means of introducing reagents or air into the subsurface, to promote conditions suitable for the attenuation of Co and Cd. The treatability study completed by Golder (**Appendix D**) suggested the potential for in-situ attenuation of Co and Cd utilizing injections of buffer materials to increase the pH. In addition, in-situ remediation via injection of remedial amendments (e.g., potentially sulfate and/or electron donor) to promote sulfate-reducing conditions, could lead to the stable, abiotic precipitation of metal sulfides, including Cd and Co sulfides. Alternatively, reduction of metals including Cd and Co may be achieved through the injection of a bioaugmentation culture and microbially mediated precipitation of sulfides. Therefore, the applicability of injection mechanisms for the treatment of Cd and Co remains a potentially viable option.
- Hydraulic Containment (Pump and Treat):
    - Hydraulic containment refers to the use of groundwater extraction wells or trenches to capture groundwater, which may subsequently require above-ground treatment and permitted discharge to a receiving water feature, reinjection into the groundwater, or reuse. Groundwater extraction and above-ground treatment is potentially a viable option.
- Monitored Natural Attenuation:
    - MNA relies on natural attenuation processes to achieve site-specific remediation objectives within a reasonable time frame relative to more active methods. Under certain conditions (e.g., through sorption, mineral precipitation or oxidation-reduction [redox] reactions), MNA effectively reduces the dissolved concentrations of inorganic constituents in groundwater. The characterization of aquifer solids presented in the previous and the current progress reports suggest that the aquifer matrix has the potential for attenuation of the various constituents of interest at

the Site. Therefore, MNA remains a viable corrective measure. MNA may either be a stand-alone corrective measure or be part of a combination of corrective measures to address groundwater impacts.

Continued groundwater monitoring and updates to the statistical analyses will further refine the CSM and allow for the continued evaluation of an appropriate groundwater corrective measure at the Site.

6.0 PLANNED ACTIVITIES & ANTICIPATED SCHEDULE

The proposed closure by removal approach provides a source control measure that reduces the potential for migration of CCR constituents to groundwater. During the closure construction of AP-BCD, temporary changes in site conditions may occur that must be considered as part of remedy selection. Georgia Power proactively initiated adaptive site management as outlined in the ACM Report (Golder, 2020) to support the remedial strategy and address potential changes in site conditions as appropriate. The adaptive site management approach may be adjusted over the Site's life cycle as new site information and technologies become available. To this end, Georgia Power will continue its data collection efforts as necessary in support of efforts to refine the CSM and to further evaluate the feasibility of the corrective measures retained for further evaluation. Once sufficient data are available to make technically sound decisions regarding the ability to implement one or more specific corrective measures, necessary steps will be taken to design and implement a remedy for AP-BCD in accordance with § 257.98.

Supplementary data collection and evaluation activities proposed to be completed during the next semiannual reporting period include:

- *Continue evaluation of Co and Cd in delineation wells.*
- *Evaluate if additional lateral delineation wells are necessary to characterize the nature and extent of Co and Cd downgradient of AP-BCD and to the north of PZ-59I.*
- *Evaluate the need for additional bench-scale treatability testing to support in-situ geochemical injection remedial alternatives.*

Georgia Power will continue to prepare semiannual progress reports to document AP-BCD groundwater conditions, results associated with additional data collection, and the progress in selecting and designing a groundwater remedy in accordance with § 257.97(a). Georgia Power will include future semiannual progress reports in routine groundwater monitoring and corrective action reports. Record keeping, notifications, and publicly accessible internet site requirements for the semiannual progress reports will be provided in accordance with § 257.105(h)(12), § 257.106(h)(9), and § 257.107(h)(9), respectively.

7.0 REFERENCES

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TABLES

Table 1

Monitoring Well Network Summary

Plant Branch AP-BCD, Putnam County, Georgia

Well ID	Alternate Name	Hydraulic Location	Installation Date	Northing [1]	Easting [1]	Ground Surface Elevation (ft)	Top of Casing Elevation [2] (ft)	Top of Screen Elevation [2] (ft)	Bottom of Screen Elevation [2] (ft)	Well Depth (ft BGS) [3]	Screen Interval Length (ft)
AP-BCD Detection Monitoring Well Network											
BRGWA-2S	PZ-2S	Upgradient BCD & E	4/2/2014	2549952.59	1167139.69	440.4	443.20	406.2	396.2	44.6	10
BRGWA-2I	PZ-2I	Upgradient BCD & E	3/14/2014	2549957.26	1167129.90	440.5	443.14	386.6	376.6	64.3	10
BRGWA-5S	PZ-5S	Upgradient BCD & E	4/3/2014	2549415.60	1170177.42	440.8	443.86	411.2	401.2	40.0	10
BRGWA-5I	PZ-5I	Upgradient BCD & E	4/3/2014	2549407.91	1170183.54	441.1	443.79	390.3	380.3	61.2	10
BRGWA-6S	PZ-6S	Upgradient BCD & E	4/1/2014	2551540.90	1170732.82	455.8	458.96	416.5	406.5	49.7	10
BRGWA-12S	PZ-12S	Upgradient BCD	3/4/2014	2557142.89	1164286.80	431.6	434.64	383.7	373.7	58.3	10
BRGWA-12I	PZ-12I	Upgradient BCD	2/20/2014	2557138.79	1164301.32	431.5	434.39	364.3	354.3	77.6	10
BRGWA-23S	PZ-23S	Upgradient BCD	7/26/2016	2557868.25	1162971.84	425.5	428.24	394.7	384.7	40.8	10
BRGWC-25I	PZ-25I	Downgradient B	7/25/2016	2561315.08	1160583.67	355.0	357.37	344.5	334.5	20.5	10
BRGWC-27I	PZ-27S	Downgradient C	7/22/2016	2559712.12	1159695.33	364.0	366.86	350.0	340.0	24.0	10
BRGWC-29I	PZ-29I	Downgradient C	7/23/2016	2561050.03	1160297.65	350.6	353.23	340.6	330.6	20.0	10
BRGWC-30I	PZ-30I	Downgradient D	7/18/2016	2557691.84	1161607.69	350.0	352.61	340.0	330.0	20.3	10
BRGWC-32S	PZ-32S	Downgradient D	7/20/2016	2558497.97	1160677.67	403.6	406.39	368.6	358.6	45.0	10
BRGWC-45	PZ-45	Downgradient B	2/3/2018	2561075.38	1162229.68	381.6	384.58	335.0	325.0	57.0	10
BRGWC-47	PZ-47	Downgradient D	1/25/2018	2559456.75	1162700.66	408.8	411.20	327.2	317.2	92.0	10
BRGWC-50	PZ-50	Downgradient B	1/31/2018	2562372.96	1161593.45	378.8	381.35	324.2	314.2	65.0	10
BRGWC-52I	PZ-52	Downgradient B	8/6/2018	2562145.22	1161274.99	381.2	383.87	317.3	307.3	73.9	10
AP-E Detection Monitoring Well Network											
BRGWA-2S	PZ-2S	Upgradient BCD & E	4/2/2014	2549952.59	1167139.69	440.4	443.20	406.2	396.2	44.6	10
BRGWA-2I	PZ-2I	Upgradient BCD & E	3/14/2014	2549957.26	1167129.90	440.5	443.14	386.6	376.6	64.3	10
BRGWA-5S	PZ-5S	Upgradient BCD & E	4/3/2014	2549415.60	1170177.42	440.8	443.86	411.2	401.2	40.0	10
BRGWA-5I	PZ-5I	Upgradient BCD & E	4/3/2014	2549407.91	1170183.54	441.1	443.79	390.3	380.3	61.2	10
BRGWA-6S	PZ-6S	Upgradient BCD & E	4/1/2014	2551540.90	1170732.82	455.8	458.96	416.5	406.5	49.7	10
BRGWC-17S	PZ-17S	Downgradient E	3/13/2014	2554687.84	1166301.32	362.2	365.32	360.5	355.5	7.1	5
BRGWC-33S	PZ-33S	Downgradient E	7/26/2016	2554064.97	1168057.09	414.2	416.68	398.2	388.2	26.4	10
BRGWC-34S	PZ-34S	Downgradient E	7/25/2016	2554231.28	1167384.17	389.2	391.96	376.2	366.2	23.0	10
BRGWC-35S	PZ-35S	Downgradient E	7/23/2016	2554476.13	1166646.02	363.7	366.31	346.7	336.7	27.4	10
BRGWC-36S	PZ-36S	Downgradient E	7/26/2016	2554693.26	1165742.82	383.1	389.84	364.4	354.4	28.7	10
BRGWC-37S	PZ-37S	Downgradient E	7/24/2016	2554979.63	1165093.07	444.4	447.05	390.8	380.8	63.6	10
BRGWC-38S	PZ-38S	Downgradient E	7/22/2016	2555016.50	1164391.82	429.8	432.24	402.0	392.0	38.2	10

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Plant Branch AP-BCD, Putnam County, Georgia

Well ID	Alternate Name	Hydraulic Location	Installation Date	Northing [1]	Easting [1]	Ground Surface Elevation (ft)	Top of Casing Elevation [2] (ft)	Top of Screen Elevation [2] (ft)	Bottom of Screen Elevation [2] (ft)	Well Depth (ft BGS) [3]	Screen Interval Length (ft)
AP-BCD Assessment Monitoring Well Network											
PZ-44	--	Downgradient B	2/2/2018	2561587.42	1161724.48	380.5	383.04	333.9	323.9	57.0	10
PZ-50D	--	Downgradient	10/8/2020	2562380.34	1161589.51	378.3	380.86	282.3	272.3	106.0	10
PZ-51S	--	Downgradient B	8/1/2018	2562433.07	1161613.24	377.9	380.27	337.9	332.9	45.4	5
PZ-51I	--	Downgradient	8/1/2018	2562439.35	1161631.12	378.0	380.52	323.1	313.1	65.0	10
PZ-51D	--	Downgradient B	10/9/2020	2562433.15	1161640.16	378.1	380.75	282.1	272.1	106.0	10
PZ-57I	--	Downgradient B	3/24/2021	2562170.21	1161582.31	379.4	382.50	313.8	303.8	75.9	10
PZ-58I	--	Downgradient B	3/27/2021	2562297.82	1161579.00	379.3	382.27	325.7	315.7	63.9	10
PZ-59I	--	Downgradient B	3/31/2021	2562329.80	1161654.90	379.9	383.49	323.5	313.5	66.0	10
PZ-60I	--	Downgradient B	3/29/2021	2562330.79	1161588.01	379.5	382.61	329.0	319.0	60.8	10
PZ-61I	--	Downgradient B	3/30/2021	2562429.63	1161621.94	377.7	380.64	312.0	302.0	76.0	10
PZ-62I	--	Downgradient B	1/6/2022	2562336.00	1161478.90	378.1	380.95	318.1	308.1	70.0	10
PZ-63I	--	Downgradient B	1/5/2022	2562233.10	1161371.20	378.6	381.31	332.1	322.1	56.5	10
Piezometers											
PZ-1D	--	Upgradient	4/4/2014	2551598.09	1171999.19	462.9	463.41	397.4	302.9	160.0	94.5
PZ-1I	--	Upgradient	3/10/2014	2551577.63	1171995.75	461.9	464.71	392.8	382.8	79.5	10
PZ-1S	--	Upgradient	3/20/2014	2551588.02	1171996.20	462.4	465.07	407.8	397.8	65.0	10
PZ-3D	--	Upgradient	3/27/2014	2550275.05	1165474.25	486.7	487.50	438.7	358.6	130.0	82
PZ-3I	--	Upgradient	3/11/2014	2550273.05	1165494.61	486.5	489.49	442.3	432.3	54.6	10
PZ-3S	--	Upgradient	3/11/2014	2550274.66	1165484.43	487.0	490.53	457.5	447.5	39.9	10
PZ-4I	--	Upgradient	3/11/2014	2551282.08	1163246.61	479.9	482.98	443.5	433.5	46.8	10
PZ-4S	--	Upgradient	3/10/2014	2551270.14	1163247.97	479.9	482.87	460.3	450.3	30.0	10
PZ-7S	--	Downgradient	4/1/2014	2553055.64	1169419.33	449.0	451.57	414.9	404.9	44.5	10
PZ-8S	--	Upgradient	4/1/2014	2551188.94	1167801.20	450.5	453.08	411.4	401.4	49.5	10
PZ-9S	--	Upgradient	3/5/2014	2553089.53	1162633.36	466.1	469.28	428.5	418.5	48.0	10
PZ-10S	--	Downgradient	3/5/2014	2554990.43	1164021.55	431.0	433.85	402.4	392.4	39.0	10
PZ-11S	--	Downgradient	2/20/2014	2557002.59	1162467.37	390.9	393.99	376.8	366.8	24.5	10
PZ-12D	PZD-12D	Downgradient	4/14/2014	2557136.26	1164311.85	431.4	434.09	350.1	290.1	141.7	60
PZ-13S	--	Downgradient	3/19/2014	2555276.64	1168011.19	406.5	409.97	382.2	372.2	34.7	10
PZ-14I	--	Downgradient	3/20/2014	2554365.65	1168398.28	419.9	422.71	376.5	366.5	53.8	10
PZ-14S	--	Downgradient	3/20/2014	2554359.23	1168398.59	420.2	423.31	393.0	383.0	37.6	10
PZ-15I	--	Downgradient	3/25/2014	2554399.25	1167721.02	400.2	403.06	321.9	311.9	88.7	10
PZ-15S	--	Downgradient	3/27/2014	2554394.06	1167720.25	400.1	402.90	370.2	360.2	39.9	10
PZ-16I	--	Downgradient	3/14/2014	2554587.53	1166980.59	379.5	382.45	351.3	341.3	38.6	10
PZ-16S	--	Downgradient	3/18/2014	2554581.44	1166977.63	379.3	382.52	370.6	360.6	19.1	10
PZ-17I	--	Downgradient	3/17/2014	2554702.42	1166313.81	362.3	365.33	329.2	319.2	43.5	10
PZ-18I	--	Downgradient	2/26/2014	2557745.51	1160766.13	359.6	362.55	331.3	321.3	38.4	10
PZ-18S	--	Downgradient	3/26/2014	2557747.42	1160757.41	359.7	362.82	345.0	335.0	24.2	10
PZ-19I	--	Downgradient	3/4/2014	2558899.87	1159797.10	368.9	371.74	335.6	325.6	43.7	10
PZ-19S	--	Downgradient	3/4/2014	2558894.60	1159805.43	368.4	371.42	350.8	340.8	28.0	10

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PZ-20I	--	Downgradient	3/5/2014	2560160.17	1159495.25	362.2	365.34	343.1	333.1	29.5	10
PZ-20S	--	Downgradient	3/5/2014	2560157.16	1159490.13	362.2	365.41	357.3	347.3	15.3	10
PZ-21I	--	Downgradient	3/10/2014	2561328.17	1160591.42	355.8	358.92	341.8	331.8	24.4	10
PZ-21S	--	Downgradient	3/11/2014	2561321.43	1160592.45	355.5	358.52	351.1	346.1	9.8	5
PZ-23I	--	Downgradient	7/29/2016	2557877.71	1162975.56	425.1	427.74	368.6	358.6	66.5	10
PZ-24S	BRGWC-24S	Downgradient A	7/27/2016	2562862.19	1162400.95	351.4	354.10	319.9	309.9	42.0	10
PZ-26I	--	Downgradient	7/26/2016	2561626.45	1160669.20	368.0	370.63	347.5	337.5	30.5	10
PZ-28I	--	Downgradient	7/24/2016	2560151.53	1159505.00	362.5	364.81	348.5	338.5	24.0	10
PZ-31S	--	Downgradient	7/26/2016	2557971.75	1160936.81	374.3	376.77	344.8	334.8	39.5	10
PZ-39	--	Downgradient	7/30/2016	2557460.52	1163675.53	432.0	434.78	397.3	387.3	44.7	10
PZ-40S	--	Downgradient A	2/14/2017	2562807.61	1162415.06	353.2	355.96	324.4	314.4	40.2	10
PZ-41S	--	Downgradient A	2/14/2017	2562759.44	1162431.76	354.3	357.17	320.5	310.5	44.2	10
PZ-42S	--	Downgradient A	2/9/2017	2562734.89	1162845.64	359.0	361.66	337.2	327.2	32.2	10
PZ-43	--	Downgradient A	2/7/2018	2562031.42	1162159.72	381.0	383.71	351.0	341.0	40.4	10
PZ-46	--	Downgradient B	2/5/2018	2560558.89	1162756.31	382.1	384.64	346.5	336.5	45.6	10
PZ-48	--	Downgradient D	1/24/2018	2558444.63	1163046.78	418.3	420.90	361.7	351.7	67.0	10
PZ-49	--	Downgradient B	1/30/2018	2561125.71	1163321.35	382.2	384.99	375.6	365.6	17.0	10
PZ-52D	--	Downgradient E	5/14/2020	2554051.53	1168053.71	414.3	417.03	364.8	354.8	59.5	10
PZ-53D	--	Downgradient E	5/17/2020	2554984.36	1164393.74	431.6	434.68	302.2	292.2	139.4	10
PZ-54	--	Downgradient E	5/15/2020	2555458.38	1164828.76	440.8	443.86	398.8	388.8	52.0	10
PZ-55	--	Downgradient E	5/19/2020	2554783.76	1163208.08	450.2	453.07	410.9	400.9	49.3	10
PZ-56	--	Downgradient B	5/20/2020	2554086.36	1162965.21	416.2	418.84	396.9	386.9	29.3	10
PB-1S	--	Downgradient	1/22/2019	2556355.89	1164910.63	400.4	403.16	372.4	362.4	38.0	10
PB-2D	--	Downgradient	12/4/2018	2556914.34	1164853.67	414.9	416.71	367.9	357.9	57.0	10
PB-4S	--	Downgradient	1/16/2019	2556069.32	1164335.20	409.3	411.15	371.3	361.3	48.0	10
PB-4D	--	Downgradient	1/16/2019	2556060.72	1164339.50	409.0	412.12	304.5	294.5	114.5	10
PB-7S	--	Downgradient	1/14/2019	2556186.30	1163831.09	399.7	402.88	376.7	366.7	33.0	10
PB-8S	--	Downgradient	1/8/2018	2556792.21	1163018.39	398.6	401.82	373.6	363.6	35.0	10
PB-8D	--	Downgradient	1/8/2018	2556786.65	1163024.53	398.2	401.74	304.2	294.2	106.0	10
PB-10S	--	Downgradient	1/16/2019	2558551.25	1163589.10	397.6	400.91	374.6	364.6	33.0	10
PB-10D	--	Downgradient	1/16/2019	2558546.62	1163593.43	397.5	400.31	322.5	312.5	85.0	10
PB-13S	--	Downgradient	12/10/2018	2556626.03	1162084.43	370.8	373.31	330.8	320.8	50.0	10
PB-13D	--	Downgradient	12/10/2018	2556638.88	1162084.53	371.1	373.77	284.1	274.1	97.0	10

Notes:
ft = feet
ft BTOC = feet below top of casing
-- = not applicable
(1) Coordinates in North American Datum (NAD) 1983, State Plane, Georgia-West, feet. Survey completed by GEL Solutions dated May 19, 2020 and September 10, 2020 (for wells HGWA-43D and HGWA-44D).
(2) Elevations referenced to the North American Vertical Datum of 1988 (NAVD88). Survey completed by GEL Solutions dated May 19, 2020 and September 10, 2020 (for wells HGWA-43D and HGWA-44D).
(3) Total well depth accounts for sump if data provided on well construction logs.

Table 2
Evaluation of Remedial Technologies
Plant Branch AP-BCD, Putnam County, Georgia

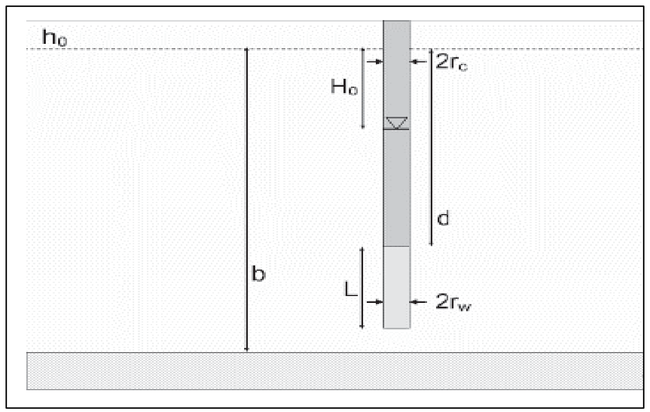
Regulatory Citation for Criteria:		40 CFR 257.96(C)(1)		40 CFR 257.96(C)(1)	40 CFR 257.96(C)(1)
Corrective Measure	**Description**	**Performance**	**Reliability**	**Ease of Implementation**	**Potential Impacts**
Geochemical Approaches (In-Situ Injection)	Use of an injection well network, or other means of introducing reagents or air into the subsurface, to provide suitable reagents for either anaerobic or aerobic attenuation of cadmium (Cd) and cobalt (Co). Under anaerobic conditions, Co would be attenuated within sparingly soluble sulfide minerals; which might also increase the attenuation of Cd. Under aerobic conditions, soluble iron or manganese and oxygen (either via air sparging or through a chemical oxidant) would be injected to promote the formation of iron or manganese (oxy-) hydroxides for subsequent sorption of Co and Cd onto these mineral phases. If sufficient iron is present in groundwater, the use of air sparging alone may be considered to precipitate iron (oxy-) hydroxides for sorption. In-situ chemical oxidation (ISCO) or in-situ chemical reduction (ISCR) can be used to chemically alter the redox environment in the subsurface to affect the mobility of certain inorganic compounds, including Co. However, the main attenuation mechanism for Co and Cd is sorption, which is more dependent on pH than redox.	Favorable. The effective immobilization of Co has been shown under aerobic and anaerobic conditions; however, the anaerobic approach (involving the injection of an electron donor together with iron or manganese and sulfur) requires careful study and testing. While aerobic approaches are somewhat less complex, additional aquifer characterization is needed to further evaluate these options. It is currently not well understood whether Cd can be efficiently attenuated using in-situ redox manipulations due to slow reaction kinetics. Cd attenuation under both aerobic and anaerobic conditions needs to be further evaluated but is expected to occur. Cd is more strongly sorbed to aluminum oxides than other metal oxides, and it is generally less sorptive and more mobile compared to Co.	Favorable. Reliability dependent on permeability of the subsurface and the amount and distribution of secondary iron or manganese (oxy-) hydroxides (for aerobic approach), or electron donors and soluble iron or manganese and sulfur that can be consistently distributed (for anaerobic approach). Reliable technology if injected materials can be distributed throughout the impacted aquifer. Bench- and/or pilot-scale treatability testing programs are needed to understand the biogeochemical processes that would effectively reduce migration of Co and Cd in groundwater.	Favorable. Installation of injection well network or other injection infrastructure would be required. Alternative installation approaches may be considered, such as along the downgradient edge of impacted groundwater, which would function similar to a PRB application. Potential for clogging of aquifer matrix and/or injection well infrastructure. Chemical distribution during injections (i.e., radius of influence) needs to be evaluated.	Favorable. Minimal impacts are expected if remedy works as designed, based on a thorough pre-design investigation, geochemical modeling, and bench/pilot study results. Redox-altering processes have the potential to mobilize naturally-occurring constituents as an unintended consequence if not properly evaluated and implemented. Consideration of groundwater flow to nearby sensitive environments may be needed.
Hydraulic Containment ("Pump and Treat")	Hydraulic containment refers to the use of groundwater extraction to induce a hydraulic gradient for hydraulic capture or control the migration of impacted groundwater. This approach uses extraction wells or trenches to capture groundwater, which may subsequently require above-ground treatment and permitted discharge to a receiving water, reinjection into the groundwater, or reuse [e.g., land application, coal combustion residual (CCR) conditioning, etc.]. It is applicable to a variable mix of inorganic constituents, including dissolved Co and Cd.	Favorable. Pump and treat (P&T) can be effective at providing hydraulic control, but it is unclear whether full groundwater remediation can be achieved without further understanding attenuation mechanisms at the Site. At AP-BCD, implementation of the corrective measure is contingent on completing additional assessment activities (i.e., high-resolution site characterization, additional pump tests, flow modeling, and capture zone analysis). This is needed to refine the constituent distribution in the subsurface to target specific zones for pumping for improved mass recovery efficiency/ effectiveness and to further evaluate the potential remedy performance.	Favorable. Generally reliable for hydraulic containment, but uncertainty exists whether groundwater remediation goals can be achieved within a reasonable time frame without further understanding attenuation mechanisms	Favorable. Proven approach, and supplemental installation of extraction wells/trenches is fairly straightforward. The extracted groundwater may potentially require an above-ground treatment system. A variety of sorption and precipitation approaches exist for ex-situ treatment of Co and Cd. Operation and maintenance (O&M) requirements are expected to include upkeep of infrastructure components (pumps, pipes, tanks, instrumentation and controls, above-ground treatment system) and handling of treatment residuals	Favorable. The main potential impacts are related to the presence and operation of an on-site above-ground water treatment facility and related infrastructure to convey and treat extracted groundwater. Pumping activity may unintentionally alter the geochemistry within the hydraulic capture zone.
In-Situ Stabilization (ISS)	In-situ stabilization is a technique that uses mixing of subsurface soil or CCR with additives (typically Cementous in nature) to solidify the subsurface material in place and reduce future dissolution of compounds into groundwater. Additives typically include Portland cement, and the solidification is completed in-situ using large diameter augers.	Favorable. Groundwater impacts would be addressed through source control and subsequent natural attenuation. This alternative would isolate/secure the source in a bound matrix, and over time, allow the concentrations of Co and Cd in downgradient groundwater to decline to below applicable standards.	Favorable. In-situ stabilization can be a reliable corrective measure for Co and Cd in groundwater. Reliability is dependent on the permeability of the subsurface and effectiveness of the stabilization.	Not Favorable. Implementation of ISS will require a detailed design effort with bench scale treatability study to determine the appropriate amendment mix. Pilot testing will also be needed to verify the ability of equipment to solidify material at depth.	Favorable. Potential impacts of the remedy will be negligible.
Monitored Natural Attenuation (MNA)	MNA relies on natural attenuation processes to achieve site-specific remediation objectives within a reasonable time frame relative to more active methods. Under certain conditions (e.g., through sorption, mineral precipitation or oxidation-reduction reactions), MNA effectively reduces the dissolved concentrations of inorganic constituents in groundwater. Attenuation mechanisms for inorganic constituents at CCR sites, including Co and Cd at AP-BCD are either physical (e.g., dilution, dispersion, flushing, and related processes) or chemical (sorption or oxidation reduction reactions). Chemical attenuation processes include precipitation, and sorption reactions such as adsorption on the surfaces of soil minerals, absorption into the matrix of soil minerals, or partitioning into organic matter. Further, oxidation-reduction (redox) reactions, via abiotic or biotic processes, can transform the valence states of some inorganic constituents to less soluble and thus less mobile forms. For Co and Cd, the main attenuation processes include sorption to iron and manganese oxides (Co and Cd), and formation of sparingly soluble sulfide minerals (Co).	Favorable. Physical and chemical MNA mechanisms for Co and Cd, including dilution, dispersion, sorption, and oxidation reduction reactions can be effective at achieving groundwater protection standards (GWPS) within a reasonable time frame. Attenuation processes for Co and Cd are already occurring at the site as evidenced by groundwater data from the delineation wells. Source control will improve the mass balance such that the buffer capacity of the aquifer is unlikely to be exhausted, and the attenuation processes already at work for Co and Cd at AP-BCD will further enhance ongoing MNA.	Favorable. Reliable as long as the aquifer conditions that result in Co and Cd attenuation remain favorable and/or are being enhanced and sufficient attenuation capacity is present. MNA is reliable and can either be used as a stand-alone corrective measure for groundwater impacted by dissolved Co and/or Cd, or in combination with a second technology.	Highly Favorable. Reasonably implementable with respect to infrastructure, but moderate to complex with respect to documentation. Proven approach, but additional data are needed to show that the existing attenuation capacity is sufficient to meet site objectives within a reasonable timeframe. A monitoring well network already exists to implement future groundwater monitoring efforts.	Highly Favorable. MNA relies on the natural processes active in the aquifer matrix to reduce constituent concentrations without disturbing the surface or the subsurface.
Permeable Reactive Barrier	PRB technology typically involves the installation of a permeable subsurface wall constructed with reactive media for the removal of constituents as groundwater passes through. Either ZVI- Carbon matrix or solid carbon (bio-barrier) are most likely viable for the concurrent removal of Co and Cd. The carbon could be composed of peat moss, mulch or another carbon source. Exact placement of the PRB would be contingent on finalization of the nature and extent of characterization. PRB walls are typically keyed into the bedrock or aquitard. While the shallow groundwater in the residuum and fractured bedrock is connected to the groundwater in more competent bedrock, the higher permeability/conductivity of the PRB is not expected to impede groundwater flow. PRBs can also be constructed as “funnel and gate” systems, where a barrier wall directs groundwater to a smaller “treatment gate” filled with reactive media.	Favorable. PRBs have been shown to effectively address Co and Cd in groundwater if the right mix of reactive materials (e.g., ZVI and carbon) is selected for concurrent removal/immobilization of these constituents. The approach is expected to achieve GWPS for both constituents as impacted groundwater passes through the reactive barrier. Cadmium redox kinetics may be slow and hence a thicker wall might be needed relative to solely treating for Co. Furthermore, additional testing is required to select the appropriate sorptive media mix, especially related to Cd.	Favorable. Reliable groundwater corrective measure technology, but loss of reactivity over time may require re-installation depending on the duration of the remedy. Additional data collection, including conducting a bench and/or pilot study, is needed to better characterize current attenuation mechanisms and/or select the appropriate reactive media mix for a PRB wall.	Not Favorable. Trenching would be required to install a mix of reactive materials in the subsurface. Continuous trenching may be the most feasible construction method. Site-specific geology (i.e., partially weathered bedrock layer) poses a possible constructability challenge when attempting to key PRB material into competent bedrock. Installation methods and materials are readily available. Once installed, treatment will be passive and O&M requirements are minimal if replacement of the PRB is not necessary.	Favorable. Minimal impacts are expected following the construction of the remedy. However, ZVI has the potential to create anaerobic conditions downgradient of the PRB wall that may mobilize redox-sensitive naturally-occurring constituents. These conditions need to be carefully monitored. Short-term impacts during the construction of the remedy can be mitigated through appropriate planning and health and safety measures.
Phytoremediation	Phytoremediation uses trees and other plants to degrade or immobilize constituents or achieve hydraulic control without the need for an above-ground water treatment system and infrastructure. Within the context of AP-BCD, this corrective measure would likely use an engineered TreeWell® phytoremediation system along the point of compliance or downgradient edge of the impacted groundwater for hydraulic control. The system promotes root development to the targeted groundwater zone (depth), allowing for hydraulic control of impacted groundwater. In addition, immobilization of Cd and Co within the root zone as well as incidental uptake of dissolved Cd and Co with groundwater is expected to occur concurrent with hydraulic control.	Favorable. Once established (typically at the end of the third growing season), a TreeWell® system is effective for providing hydraulic containment of groundwater, and potential reduction of Cd and Co concentrations through immobilization and/or uptake and sequestration in the tree biomass; however, the main purpose is to provide hydraulic control. Given the current groundwater flow velocities, the approach is currently not considered viable. However, changing site conditions may make the corrective measure viable for the area downgradient of AP-BCD. Additional aquifer testing and/or groundwater flow modeling may be needed to confirm the suitability at that time.	Favorable. Engineered phytoremediation is a proven technology where hydrogeologic factors are taken into account (e.g., hydraulic conductivity, flow velocity, depth to impacted groundwater zone, etc.). This is considered an active remedial approach through the use of trees as the "pumps" driving the system. Careful design will be needed to select the proper species, which will include consideration of groundwater chemistry, plant uptake of constituents, and groundwater flow modeling to evaluate the required number and placement of TreeWell® units.	Favorable. Engineered approach has been proven effective, and specific depth zones can be targeted. Trees are installed as "tree wells" in a large diameter boring to get the roots deep enough to intercept impacted groundwater flow paths. Area must be clear of above and below-ground structures (i.e., power lines). The system, once established (approximately three growing seasons), is a self-maintaining, sustainable remedial system that has no external energy requirements and little maintenance (i.e., efforts normally associated with landscaping).	Favorable. Minimal impacts are expected. In fact, there are several positive impacts expected, including enhanced aesthetics, wildlife habitat, and limited energy consumption.
Subsurface Vertical Barrier Walls	This approach involves placing a barrier to groundwater flow in the subsurface, frequently around a source area, to prevent future migration of dissolved constituents in groundwater from beneath the source to downgradient areas. In general, barrier walls are designed to provide containment; localized treatment achieved through the sorption or chemical precipitation reactions from construction of the walls are incidental to the design objective. Barrier walls can also be used in downgradient applications to limit discharge to a surface water feature or to reduce aquifer recharge from an adjacent surface water feature when groundwater extraction wells are placed near one. A variety of barrier materials can be used, including cement and/or bentonite slurries, geomembrane composite materials, or driven materials such as steel or vinyl sheet pile. Groundwater extraction from upgradient of the barrier is required to avoid groundwater mounding behind the barrier. Though highly effective, vertical barrier walls may serve as groundwater dams, so mounding of groundwater behind barrier walls, or flow of groundwater around the ends of barrier walls, should be considered in corrective action design.	Favorable. Barrier walls are a proven technology for groundwater cutoff at impoundments. Conventionally installed slurry walls are typically limited by installation depth, which is approximately 90 feet below ground surface (bgs). However, site-specific geologic and technology-specific considerations specific to AP-BCD may limit this depth to shallower installations. Within the context of AP-BCD, a barrier wall might be used in conjunction with a “funnel and gate” system for a PRB rather than a stand-alone technology. As such, groundwater with cobalt and cadmium above GWPS could either be directed to “treatment gates” for passive treatment (in a PRB) or migration of impacted groundwater could be minimized via barrier wall installation. Additional subsurface investigations and compatibility testing with groundwater from the former CCR Unit will be needed.	Favorable. Generally reliable as a barrier to groundwater flow; however, treatment of downgradient groundwater is incidental and not the primary objective.	Not Favorable. Trenching will be required to fill in the various slurry mixes; alternatively, sheet pile installations can be accomplished without excavation of trenches. The application of barrier walls is limited by the depth of installation, which similar to PRBs, should be keyed into a low permeability layer such as a thick clay layer or bedrock. Installation methods and materials are readily available. Once installed, above-ground infrastructure to pump and treat groundwater will be required. O&M requirements are expected to include upkeep of infrastructure components (e.g., pumps, pipes, tanks, instrumentation and controls, above- ground treatment system) and handling of treatment residuals.	Favorable. Minimal impacts are expected following the construction of the remedy. Short-term impacts during remedy construction can be mitigated through appropriate planning and health and safety measures. Changes to groundwater flow patterns due to installation of the barrier wall are expected, which can affect other aspects of groundwater corrective action. Groundwater extraction may unintentionally alter the geochemistry within the wall that may result in the mobilization of other constituents that require treatment.

Table 2
Evaluation of Remedial Technologies
Plant Branch AP-BCD, Putnam County, Georgia

Regulatory Citation for Criteria:	40 CFR 257.96(C)(2)	40 CFR 257.96(C)(3)			
Corrective Measure	**Time Requirement to Begin/Complete**	**Institutional Requirements**	**Other Env or Public Health Requirements**	**Relative Costs**	**Evaluation of Retainage**
Geochemical Approaches (In-Situ Injection)	Favorable. Installation of the injection network can be accomplished relatively quickly (1 to 2 months). However, a thorough pre-design investigation, geochemical modeling, and/or bench- and/or pilot- testing will be required to obtain design parameters prior to design and construction of the corrective measure, which may take up to 24 months. Once installed, the time required to achieve GWPS within the treatment area may be relatively quick but depends on the attenuation process kinetics of each targeted constituent. The time for complete distribution of the injected materials throughout the treatment area is also variable.	Favorable. An underground injection control (UIC) permit would be required to implement this corrective measure. No other institutional requirements are expected at this time.	Highly Favorable. None expected at this point. Potential for mobilization of redox-sensitive constituents exists during implementation of an anerobic attenuation approach. Following installation, the remedy is passive.	Favorable. Dependent on expanse of injection network required and injectate volume required per derived design parameters.	Remedial approach retained due to limited area of SSL exceedances, a targeted injection layout may result in decreased concentrations of Co and Cd in groundwater below the GWPS.
Hydraulic Containment ("Pump and Treat")	Favorable. Installation of extraction wells and/or trenches can be accomplished relatively quickly (1 to 2 months). However, additional aquifer testing, system design and installation, and permit approval may be required, which may take up to 24 months. The initiation of the approach would be contingent on the start-up of the wastewater treatment infrastructure. Hydraulic containment can be achieved relatively quickly after startup of the extraction system, but uncertainty exists with respect to the time to achieve GWPS without additional data collection to better understand attenuation mechanisms for Co and Cd.	Favorable. Depending on the effluent management strategy, modifications to the existing National Pollutant Discharge Elimination System (NPDES) permit may be required or obtaining a new UIC permit may be needed if groundwater reinjection is chosen.	Not Favorable. Above-ground treatment components may need to be present for an extended period of time, generating residuals requiring management and disposal.	Favorable. Dependent on remedy duration, complexity of above-ground treatment system, and volume of water processed.	During ash pond closure, there will be an on-site wastewater treatment plant that may be available for treatment of extracted groundwater. Therefore, P&T is a potentially viable interim corrective measure for cobalt and cadmium in groundwater at Plant Branch and will be retained for further evaluation.
In-Situ Stabilization (ISS)	Not Favorable. In-situ stabilization around the area of exceedance is predicted to take a number of years to complete, depending on the availability of specialized contractors, materials, and equipment.	Highly Favorable. No institutional requirements are expected at this time.	Not Favorable. Changes to groundwater chemistry relative to the mobility of Appendix IV constituents following completion of ISS, where large volumes of amendments (i.e., Portland cement) are added to the subsurface, are unknown and would require pilot testing.	Not Favorable. High cost for installation due to need for specialty contractors.	Not retained for further analysis; strategy is deemed impractical because AP-BCD will be closed by removal.
Monitored Natural Attenuation (MNA)	Not Favorable. The infrastructure to initiate MNA is already in place. Demonstrating attenuation mechanisms and capacity can be time-consuming and can take up to 24 months. MNA is expected to be successful within a reasonable time frame following pond closure. Engineering measures will be implemented during closure of AP-BCD to minimize potential impacts to the subsurface during closure activities and routine groundwater monitoring will be used to verify that groundwater impacts remain stable or decrease over time.	Highly Favorable. No institutional requirements are expected at this time.	Highly Favorable. Little to no physical disruption to remediation areas and no adverse construction related impacts are expected on the surrounding community.	Highly Favorable. Minimal cost requirements.	Under current conditions, attenuation processes for Cd and Co are already occurring as evidenced by groundwater data from delineation wells. Therefore, MNA is a potentially viable corrective measure for Co and Cd in groundwater at Plant Branch and will be retained for further evaluation.
Permeable Reactive Barrier	Not Favorable. Installation of a PRB can be accomplished relatively quickly (6 to 12 months), depending on the final location and configuration. However, bench- and/or pilot testing would be required to obtain design parameters prior to design and construction of the remedy, which may take up to 24 months. Once installed, the time to achieve GWPS downgradient of the PRB is anticipated to be relatively quick.	Highly Favorable. No institutional requirements are expected at this time.	Favorable. None expected at this point. Following installation, the remedy is passive. However, certain treatment media (such as ZVI) have the potential to mobilize naturally-occurring constituents downgradient of the PRB.	Not Favorable. Relatively high cost for installation. Minimal O&M requirements if replacement is not necessary	Because there is limited space available downgradient of wells where COCs exceed groundwater protection standards, PRB has not been retained for further consideration.
Phytoremediation	Not Favorable. The design phase will require some groundwater modeling for optimal placement of the TreeWell® units, which may take up to 6 months. Depending on the number of required units, the installation effort is expected to last several weeks. Hydraulic capture/control is expected approximately three years after planting and system performance is expected to further improve over time.	Highly Favorable. No institutional requirements are expected at this time.	Highly Favorable. None expected at this point. Following installation, the remedy is passive and does not require external energy.	Favorable. Mid-range cost for installation and minimal O&M requirements	Not retained for further analysis; due to the depth of groundwater and the limited physical space for installation of a phytoremediation system between the AP-BCD and the adjacent surface water bodies, phytoremediation has been removed from consideration for groundwater corrective action at AP-BCD.
Subsurface Vertical Barrier Walls	Not Favorable. Installation of a barrier wall can be accomplished relatively quickly (i.e., 6 to 12 months), depending on the final location and configuration. However, some design phase and additional aquifer and compatibility testing will be required, which may take up to 24 months. Once installed, preventing migration of constituents dissolved in groundwater is anticipated to be relatively quick. Since this approach does not treat the downgradient area of impacted groundwater but prevents migration from a source area, it will likely have to be maintained and coupled with other approaches.	Highly Favorable. No institutional requirements are expected at this time.	Not Favorable. Due to the need for groundwater extraction associated with barrier walls, above-ground treatment components may need to be present for an extended period of time, generating residuals requiring management and disposal.	Not Favorable. Dependent on length and depth of wall, remedy duration and complexity of above-ground treatment system.	Because there is limited space available downgradient of wells where COCs exceed groundwater protection standards, Subsurface Vertical Barrier Walls have not been retained for further consideration.

Table 3
Summary of AQTESOLV Input Parameters and Estimated Horizontal Hydraulic Conductivity Values
Plant Branch AP-BCD, Putnam County, Georgia

			Well Information						AQTESOLV Input Parameters												Horizontal Hydraulic Conductivity (K_h)					
Well ID	**Screen Zone Material**	**Slug Test Type**	**Depth to Sensor [ft bTOC]**	**Static DTW [ft bTOC]**	**DTW after Pressure Release[1] [ft bTOC]**	**Top Screen Depth [ft TOC]**	**Bottom Screen Depth [ft bTOC]**	**Total Depth [ft bTOC]**	**h_o [ft]**	**H [ft]**	**b [ft]**	**Kv/Kh**	**d [ft]**	**L [ft]**	**T [ft]**	**r(c) [ft]**	**r(eq) [ft]**	**r(p) [ft]**	**r(w) [ft]**	**r(sk) [ft]**	**Bouwer-Rice K_h [ft/day]**	**KGS or Hvorslev K_h [ft/day]**	**Geomean K_h [ft/day]**	**Bouwer-Rice K_h [cm/sec]**	**KGS or Hvorslev K_h [cm/sec]**	**Geomean K_h [cm/sec]**
PZ-57I Test 1	Regolith/PWR	pneumatic	79.12	35.20	45.738	70.87	80.87	81.12	10.538	45.92	45.92	0.1	70.87	10.0	79.12	0.083	0.03	0	0.25	0.25	**1.259**	**1.346**	**1.302**	**4.4E-04**	**4.7E-04**	**4.6E-04**
PZ-57I Test 2	Regolith/PWR	pneumatic	79.12	35.18	46.875	70.87	80.87	81.12	11.695	45.94	45.94	0.1	70.87	10.0	79.12	0.083	0.03	0	0.25	0.25	**1.037**	**1.183**	**1.108**	**3.7E-04**	**4.2E-04**	**3.9E-04**
PZ-60I Test 1	Regolith/PWR/Bedrock	pumping	61.98	37.22	42.194	53.73	63.73	63.98	4.974	26.76	26.76	0.1	53.73	10.0	61.98	0.083	0.03	0	0.25	0.25	**5.939**	**6.102**	**6.020**	**2.1E-03**	**2.2E-03**	**2.1E-03**
PZ-60I Test 2	Regolith/PWR/Bedrock	pumping	61.98	37.29	42.48	53.73	63.73	63.98	5.19	26.69	26.69	0.1	53.73	10.0	61.98	0.083	0.03	0	0.25	0.25	**4.967**	**5.588**	**5.268**	**1.8E-03**	**2.0E-03**	**1.9E-03**
PZ-62I Test 1	PWR/Bedrock	pneumatic	71.55	38.56	49.649	63.30	73.30	73.55	11.089	34.99	34.99	0.1	63.30	10.0	71.55	0.083	0.03	0	0.25	0.25	**0.887**	**0.887**	**0.887**	**3.1E-04**	**3.1E-04**	**3.1E-04**
PZ-62I Test 2	PWR/Bedrock	pneumatic	71.55	38.76	49.704	63.30	73.30	73.55	10.944	34.79	34.79	0.1	63.30	10.0	71.55	0.083	0.03	0	0.25	0.25	**0.866**	**0.885**	**0.875**	**3.1E-04**	**3.1E-04**	**3.1E-04**
PZ-63I Test 1	Regolith/PWR/Bedrock	pneumatic	58.04	38.79	49.044	49.79	59.79	60.04	10.254	21.25	21.25	0.1	49.79	10.0	58.04	0.083	0.03	0	0.25	0.25	**0.584**	**0.701**	**0.640**	**2.1E-04**	**2.5E-04**	**2.3E-04**
PZ-63I Test 2	Regolith/PWR/Bedrock	pneumatic	58.04	38.89	48.791	49.79	59.79	60.04	9.901	21.15	21.15	0.1	49.79	10.0	58.04	0.083	0.03	0	0.25	0.25	**0.622**	**0.700**	**0.660**	**2.2E-04**	**2.5E-04**	**2.3E-04**



Notes:

h_o	Observed initial displacement (change in water level from static)
H	Static water column height
b	Saturated thickness of aquifer. If bottom of aquifer is unknown set b=bottom of well.
Kv/Kh	Ratio of vertical to horizontal hydraulic conductivity
d	Depth to top of well screen - this is the length from the water level (or top confining unit) to the top of the screen.
L	Length of well screen
T	Transducer Depth below the water table
r(c)	Inside radius of well casing
r(eq)	Radius of downhole equipment
r(w)	Radius of well open or perforated interval
r(sk)	Outside radius of well skin disturbed zone enveloping filter pack
bTOC	Below Top Of Casing
DTW	Depth To Water
PWR	partially weathered rock
ft	feet
cm	centimeters
sec	seconds

1. For tests in which pumping was performed in lieu of applying pressurized gas, depth to water after pressure release refers to the depth after pumping is stopped.

Table 4
Quantitative X-Ray Diffraction Results
Plant Branch AP-BCD, Putnam County, Georgia

Sample ID	Sample Collection Date	Quartz (wt%)	Albite (wt%)	Microcline (wt%)	Muscovite (wt%)	Chlorite (wt%)	Kaolinite (wt%)	Hornblende (wt%)	Andesine (wt%)	Gypsum (wt%)	Lizardite (wt%)	Illmenite (wt%)	Montmorillonite (wt%)	Stilpnomelane (wt%)	Magnetite (wt%)	Biotite (wt%)	Illite-Montmorillonite (wt%)	Talc (wt%)	Diopside (wt%)	Clinochlore (wt%)
BRGWA-2S (40-43)	6/5/2020	15.10	-	3.60	-	-	29.00	39.30	4.80	1.40	0.40	3.80	2.60	-	-	-	-	-	-	-
BRGWA-5S (34-37)	6/5/2020	9.90	18.20	2.00	-	-	19.70	33.30	-	0.70	0.30	1.30	3.20	11.10	0.30	-	-	-	-	-
BRGWA-6S (44-48)	6/5/2020	9.90	-	5.60	-	-	51.90	24.70	-	-	0.02	0.60	6.80	-	0.30	-	-	-	-	-
BRGWC-50 (59)	6/5/2020	27.3	49.90	3	4.20	-	-	-	-	-	-	-	0.8	-	0.3	10.3	4.20	-	-	-
BRGWC-50 (63-63.5)	6/5/2020	24.60	50.10	9.30	2.60	2.10	-	-	-	-	-	-	-	-	0.50	10.80	-	-	-	-
PZ-60I	5/28/2021	26.30	48.80	11.30	2.80	1.20	-	-	-	-	-	-	-	-	-	9.60	-	-	-	-
PZ-61I	5/28/2021	33.60	30.40	23.70	4.70	-	-	-	-	-	-	-	-	-	-	4.20	-	-	0.90	2.50
PZ-57I	5/28/2021	24.20	52.70	7.30	-	-	-	5.90	-	-	-	0.50	-	-	-	5.60	-	1.90	2.00	-

Notes:
-- = Not identified by analyst
wt % = weight percent

Table 5
Sequential Extraction Procedure Results
Plant Branch AP-BCD, Putnam County, Georgia

Cadmium										
Sample ID	**Sample Collection Date**	**SEP Step 1 (Exchangeable Phase) (2)**	**SEP Step 2 (Carbonate Phase) (2)**	**SEP Step 3 (Non-Crystalline Materials Phase) (2)**	**SEP Step 4 (Metal Hydroxide Phase) (2)**	**SEP Step 5 (Organic Phase) (2)**	**SEP Step 6 (Acid/Sulfide Fraction) (2)**	**SEP Step 7 (Residual Fraction) (2)**	**Sum of SEP Steps 1-7**	**Total Metals Concentration (3)**
BRGWA-2S (39)	5/13/2020	ND	ND	0.016 JB	ND	ND	ND L	0.21 J	0.22 J	1.4 J
BRGWA-2S (43)	5/13/2020	ND	ND	ND	ND	ND	ND	0.59 J	0.59	1.6 J
BRGWA-5S (32)	5/14/2020	ND	ND	0.021 JB	0.018 J	ND	ND	0.17 J	0.21 J	2.2
BRGWA-5S (38)	5/14/2020	ND	ND	0.023 JB	ND	ND	ND	ND	0.023 J	2.2
BRGWA-6S (42)	5/14/2020	ND	ND	0.11 JB	ND	ND	ND L	0.49	0.60	1.7
BRGWA-6S (48)	5/14/2020	ND	ND	0.094 JB	0.022 J	ND	ND	0.28 J	0.39	0.66 J
BRGWC-50 (59)	5/15/2020	0.11 J	0.084 J	0.10 JB	0.36	ND	ND	0.047 J	0.70	0.72
BRGWC-50 (63-63.5)	5/15/2020	ND	ND	0.028 JB	ND	ND	ND	0.12 J	0.15 J	1.4
PZ-51S (40-45)	3/20/2021	ND	ND	0.015 JB	ND	ND	ND	ND	0.015 J	ND

Cobalt										
Sample ID	**Sample Collection Date**	**SEP Step 1 (Exchangeable Phase) (2)**	**SEP Step 2 (Carbonate Phase) (2)**	**SEP Step 3 (Non-Crystalline Materials Phase) (2)**	**SEP Step 4 (Metal Hydroxide Phase) (2)**	**SEP Step 5 (Organic Phase) (2)**	**SEP Step 6 (Acid/Sulfide Fraction) (2)**	**SEP Step 7 (Residual Fraction) (2)**	**Sum of SEP Steps 1-7**	**Total Metals Concentration (3)**
BRGWA-2S (39)	5/13/2020	ND	ND	14.0	6.5	ND	8.3	8.1 J	36.0	72.0
BRGWA-2S (43)	5/13/2020	ND	ND	14.0	13.0	ND	5.2	28.0 J	60.0	54.0 J
BRGWA-5S (32)	5/14/2020	ND	ND	4.9	2.7 J	ND	4.0	18.0	29.0	36.0
BRGWA-5S (38)	5/14/2020	ND	ND	6.0	2.9 J	ND	5.4	15.0	30.0	43.0
BRGWA-6S (42)	5/14/2020	ND	ND	19.0	9.9	ND	5.2	8.70 J	43.0	58.0
BRGWA-6S (48)	5/14/2020	ND	ND	21.0	9.9	ND	5.6	16.0 J	53.0	64.0
BRGWC-50 (59)	5/15/2020	1.60 J	1.10 J	2.6 J	1.5 J	ND	4.5 J	0.31 J	12.0	11.0 J
BRGWC-50 (63-63.5)	5/15/2020	ND	ND	ND	0.3 J	ND	8.9 J	1.2 J	10.0	12.0 J
PZ-51S (40-45)	3/20/2021	ND	ND	2.3 J	2.5 J	ND	5.9	6.4 J	17.0	18.0

Notes:
ND = Indicates the constituent was not detected above the analytical method detection limit (MDL)
J = Indicates the constituent was estimated and detected between the MDL and the reporting limit (RL)
mg/kg = milligrams per kilogram
SEP = Sequential extraction procedure
(1) All results are reported in mg/kg
(2) SEP Steps include:
1: Exchangeable Fraction: addition of 1M MgSO4 to extract elements reversibly bound to mineral surfaces by ion exchange;
2: Carbonate Fraction: addition of mild acidic solution (1 M acetate in 25% acetic acid at pH 5) to extract elements bound to carbonate minerals;
3: Non-crystalline Fraction: addition of 25 ml of 0.2M ammonium oxalate (pH 3) to extract elements complexed by, and co-precipitated with amorphous solids (e.g. iron oxides);
4: Metal Hydroxide Fraction: addition of 1M $HONH_2$-HCL in 25% acetic acid to extract elements bound to crystalline hydroxides;
5: Organic-bound Fraction: addition of 5% Nicoll (pH 9.5) to extract elements strongly bound to organic functional groups;
6: Acid/Sulfide Fraction: addition of 3:1:2 v/v solution of HCl:HNO3:H20 solution to dissolve metal sulfide minerals;
7: Residual Fraction: total dissolution of sample in HF, HCl, HNO_3 and H_3BO_3 to remove remaining elements distributed between silicates, phosphates, and refractory oxides.

(3) Total Metals: separate aliquot digested using HF, HCl, HNO_3 and $H3BO_3$.
(4) Total Metals: sample digestion using HF, HNO_3 and $H3BO_3$ (i.e. SEP Step 7 only).

Table 6
Summary of Groundwater Analytical Data
Plant Branch AP-BCD, Putnam County, Georgia

	Well ID:	BRGWA-2S	BRGWA-2I	BRGWA-5S	BRGWA-5I	BRGWA-6S	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:	2/1/2022	2/1/2022	2/1/2022	2/1/2022	2/1/2022	2/1/2022	2/1/2022	2/1/2022	2/2/2022	2/4/2022	2/3/2022	2/2/2022	2/2/2022	2/2/2022	2/2/2022	2/2/2022	2/2/2022
	Parameter [1,2,3]																	
APPENDIX III	Boron	<0.0086	<0.0086	<0.0086	<0.0086	<0.0086	<0.0086	<0.0086	0.046	1.1	1	0.93	1.9	1	0.034 J	0.48	0.31	1.5
	Calcium	4.4	14.4	19.1	14.5	4.2	5.3	14.2	10.7	44.3	61.7	58.7	232 M1	44.2	33.8	320	220	40.1
	Chloride	1.6	1.8	3.4	3.5	2.1	3.6	2.2	3.2	4.2	4.6	6.1	4	3.8	23.4	4.2	17.4	6.1
	Fluoride	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.055 J	<0.05	0.15	0.14	0.11	0.1	<0.05	<0.05	<0.05	0.42	0.098 J
	Sulfate	<0.5	5.4	<0.5	2	<0.5	<0.5	1.4	36.8	117	172	274	580	210	90.1	1170	1270	126
	TDS	72	126	124	129	61	63	114	130	283	301	419	1110	443	276	1850	1850	160
APPENDIX IV	Antimony	<0.00078	<0.00078	<0.00078	<0.00078	<0.00078	<0.00078	0.011	<0.00078	<0.00078	<0.00078	<0.00078	0.0013 J	<0.00078	<0.00078	<0.00078	<0.00078	<0.00078
	Arsenic	<0.0011	0.0012 J	0.0012 J	0.0013 J	<0.0011	<0.0011	0.0017 J	0.0018 J	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011	0.0056	<0.0011	<0.0011
	Barium	0.01	0.0066	0.04	0.028	0.014	0.064	0.057	0.08	0.023	0.015	0.016	0.031	0.023	0.063	0.028	0.016	0.013
	Beryllium	<0.000054	<0.000054	<0.000054	<0.000054	<0.000054	<0.000054	<0.000054	<0.000054	<0.000054	0.000054 J	0.00083	<0.000054	<0.000054	<0.000054	<0.000054	0.0071	<0.000054
	Cadmium	<0.00011	<0.00011	<0.00011	<0.00011	<0.00011	<0.00011	<0.00011	<0.00011	<0.00011	<0.00011	<0.00011	0.00014 J	<0.00011	<0.00011	0.00015 J	0.0085	<0.00011
	Chromium	0.0092	0.0013 J	0.0052	0.0066	0.015	0.0029 J	0.0027 J	0.0028 J	<0.0011	<0.0011	<0.0011	<0.0011	0.0021 J	<0.0011	<0.0011	<0.0011	<0.0011
	Cobalt	0.0011 J	0.00079 J	<0.00039	0.0007 J	<0.00039	<0.00039	<0.00039	0.00052 J	0.0027 J	0.0076	0.0077	0.0012 J	<0.00039	0.0054	<0.00039	1.5	<0.00039
	Fluoride	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.055 J	<0.05	0.15	0.14	0.11	0.1	<0.05	<0.05	<0.05	0.42	0.098 J
	Lead	<0.00089	<0.00089	<0.00089	<0.00089	<0.00089	<0.00089	<0.00089	<0.00089	<0.00089	<0.00089	<0.00089	<0.00089	<0.00089	<0.00089	<0.00089	<0.00089	<0.00089
	Lithium	<0.00073	0.023 J	<0.00073	0.0011 J	0.0029 J	<0.00073	0.0037 J	0.008 J	<0.00073	0.001 J	0.0026 J	0.021 J	0.0035 J	0.0022 J	0.04	0.038	0.0041 J
	Mercury	<0.00013	<0.00013	<0.00013	<0.00013	<0.00013	<0.00013	<0.00013	<0.00013	<0.00013	<0.00013	<0.00013	<0.00013	<0.00013	<0.00013	<0.00013	<0.00013	<0.00013
	Molybdenum	<0.00074	0.0013 J	<0.00074	0.002 J	<0.00074	<0.00074	<0.00074	<0.00074	0.0011 J	<0.00074	<0.00074	0.0012 J	<0.00074	<0.00074	<0.00074	<0.00074	<0.00074
	Comb. Radium 226/228	0.251 U	0.233 U	0.23 U	1.23	0.349 U	0.659 U	0.833 U	1.15	0.640 U	0.335 U	0.798 U	1.21 U	0.0265 U	0.219 U	0.145 U	1.15	2.33
	Selenium	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014	0.002 J	<0.0014	<0.0014	<0.0014	<0.0014	0.21	<0.0014	<0.0014	<0.0014	<0.0014
	Thallium	<0.00018	<0.00018	<0.00018	<0.00018	<0.00018	<0.00018	<0.00018	<0.00018	<0.00018	<0.00018	<0.00018	<0.00018	<0.00018	<0.00018	<0.00018	<0.00018	<0.00018
INORGANICS	Alkalinity (Bicarbonate as CaCO3)	30.1	72.3	77.5	75	27.6	29.6	71.2	31.1	71.7	31.3	<1.8	118	31.5	39.6	26.1	11.6	65.1
	Alkalinity (Carbonate as CaCO3)	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8
	Hardness	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1200	-
	Nitrite + Nitrate as N	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.017	-
	Alkalinity (total) as CaCO3	30.1	72.3	77.5	75	27.6	29.6	71.2	31.1	71.7	31.3	<1.8	118	31.5	39.6	26.1	11.6	65.1
	Dissolved Organic Carbon	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.53I	-
	Ferrous Iron	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.16 J	-
	Sodium	3.1	5.5	4.1	4.7	2.5	5.2	10	11.3	15.1	14.1	15	27.5	24.6	14.6	40.5	46.9	18.4
	Sulphide	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.05	-
	Ferric Iron	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.25	-
	Iron	0.13	0.21	0.3	<0.025	0.23	<0.025	<0.025	0.11	0.3	0.095	29.2	1.1	0.082	0.44	0.17	0.15	5.8
	Magnesium	4	7.4	7.4	9.2	3.7	2.8	3.7	5.6	16.4	5.5	7.3	46.7	28.6	16.2	114	158	18.1
	Manganese	0.052	0.021 J	0.021 J	<0.0043	0.0082 J	<0.0043	<0.0043	0.081	1.4	0.88	1.2	0.8	<0.0043	0.27	0.01 J	83.5	0.75
	Potassium	0.29	5.9	0.4	0.89	0.75	2.4	2.9	3	4	4.9	9	5.5	1.9	3.4	11.5	9.8	4.9
FIELD	DO (Field)	1.3	0.64	2.16	5.51	6.89	7.69	5.18	4.32	0.26	0.75	0.46	0.39	3.45	0.2	0.29	0.22	0.32
	Flow Rate	300	70	150	130	250	150	110	190	160	200	300	300	350	180	160	300	200
	Oxidation-reduction potential	90.6	69	129.3	119.1	90.3	104.6	100.4	109.6	52.6	171.9	228.4	78.3	106.1	97.3	121.2	116.3	20.1
	Temp (Field)	17.99	17.33	16.51	17.73	17.68	19.84	19.1	15.75	17.51	18.5	19.37	17.64	18.3	19.83	17.48	20.48	19.24
	EC (field)	69.07	164.4	165.6	166.4	62.36	77.6	138.7	162.8	490.7	490.9	650.8	1499	624.8	428.5	2151	2258	545.1
	pH (Field)	5.95	6.83	6.39	6.38	6.54	5.81 - 5.83	6.4	5.65	6.23	5.97	4.23	6.34	5.99	5.92	5.75	5.2	6.35
	Turbidity	0.81	2.25	3.15	0.95	2.74	1.81	2.43	2.38	2.74	0.44	0.51	4.87	2.3	2.23	3.22	1.01	2.51

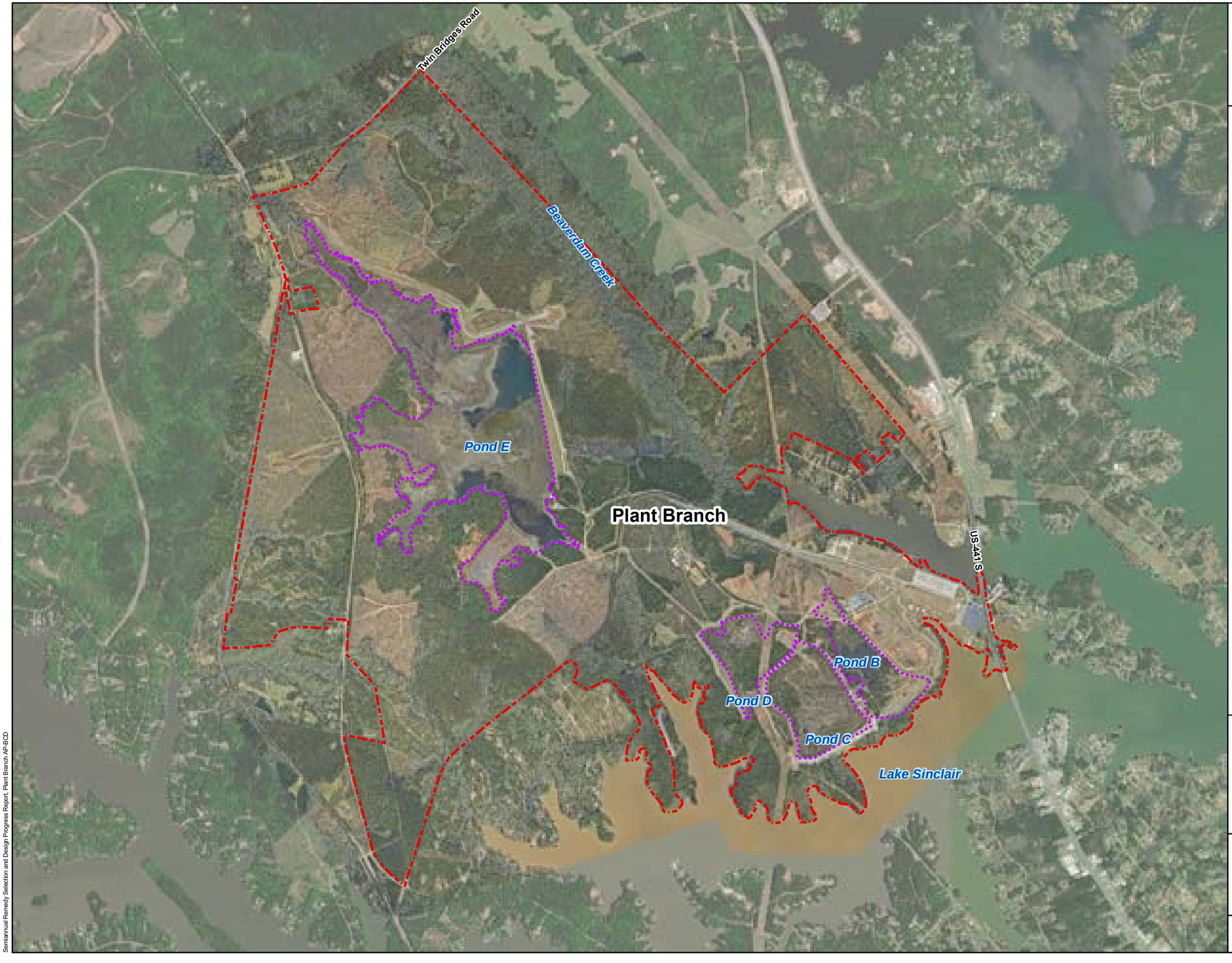
Notes:
-- = Parameter was not analyzed
< = I icates the parameter was not detected above the analytical method detection limit (MDL).
J = I icates the parameter was estimated a detected between the MDL a the reporting limit (RL).
TDS = total dissolved solids
U = I icates the parameter was not detected above the analytical minimum detectable concentration (MDC) (Specific to combined radium 226/228)
(1) Appe ix III/IV parameter per 40 CFR 257 Subpart D. Parameters are reported in units of milligrams per liter (mg/L), except for pH reported as s.u. (sta ard units) a combined radium reported as picocuries per liter (pCi/L).
(2) Metals were analyzed by EPA Method 6010D, 6020B, a 7470A, anions were analyzed by EPA Method 300.0, TDS was analyzed by SM2540-2011, a combined radium 226/228 by EPA Methods 9315/9320.
(3) The pH value presented was recorded at the time of sample collection in the field.

Table 6
Summary of Groundwater Analytical Data
Plant Branch AP-BCD, Putnam County, Georgia

	Well ID:	PZ-44	PZ-50D	PZ-51S	PZ-51I	PZ-51D	PZ-57I	PZ-58I	PZ-59I	PZ-60I	PZ-61I	PZ-62I	PZ-63I
	Sample Date:	2/2/2022	2/3/2022	2/2/2022	2/2/2022	2/3/2022	2/4/2022	2/3/2022	2/3/2022	2/3/2022	2/2/2022	2/4/2022	2/4/2022
	Parameter [1,2,3]												
APPENDIX III	Boron	1.6	0.22	<0.0086	0.42	0.034 J	0.51	0.38	0.055 J D3	0.25	0.32	0.5	0.67
	Calcium	25.1	222	7.8	187 M1	122	67.6	120	213	279	215	102	42.2
	Chloride	5.5	12.5	4.2	9.7	15.2	7.2	11.9	36.5	30.7	19.2	9.8	6.2
	Fluoride	0.065 J	0.15	0.053 J	<0.05	0.27	0.096 J	1.8	2.7	2.3	<0.05	0.071 J	0.14
	Sulfate	45.3	903	<0.5	889	339	336	767	2600	2020	1230	451	195
	TDS	181	1380	98	1590	686	630	1170	3610	2480	1970	818	403
APPENDIX IV	Antimony	<0.00078	<0.00078	<0.00078	<0.00078	<0.00078	<0.00078	<0.00078	<0.00078	<0.00078	<0.00078	<0.00078	<0.00078
	Arsenic	0.004 J	0.0012 J	0.002 J	<0.0011	0.0015 J	<0.0011	<0.0011	0.017	<0.0011	<0.0011	<0.0011	<0.0011
	Barium	0.052	0.033	0.027	0.015	0.057	0.024	0.016	0.013	0.021	0.015	0.058	0.037
	Beryllium	<0.000054	<0.000054	<0.000054	0.000071 J	<0.000054	0.00054	0.027	0.12	0.072	0.0015	<0.000054	<0.000054
	Cadmium	<0.00011	<0.00011	<0.00011	0.0043	<0.00011	0.00072	0.0038	0.006	0.016	0.00014 J	0.0004 J	<0.00011
	Chromium	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011	0.0032 J	<0.0011	<0.0011	<0.0011	<0.0011
	Cobalt	<0.00039	0.1	0.0028 J	0.023	<0.00039	0.094	0.43	1.6	3.4	0.51 M1	0.27	0.019
	Fluoride	0.065 J	0.15	0.053 J	<0.05	0.27	0.096 J	1.8	2.7	2.3	<0.05	0.071 J	0.14
	Lead	<0.00089	<0.00089	<0.00089	<0.00089	<0.00089	<0.00089	<0.0044 D3	<0.0044 D3	<0.0044	<0.00089	<0.00089	<0.00089
	Lithium	0.0058 J	0.024 J	<0.00073	0.021 J	0.0096 J	0.026 J	0.041	0.19	0.098	0.011 J	0.01 J	0.007 J
	Mercury	<0.00013	<0.00013	<0.00013	<0.00013	<0.00013	<0.00013	<0.00013	<0.00013	<0.00013	<0.00013	<0.00013	<0.00013
	Molybdenum	<0.00074	0.0012 J	<0.00074	<0.00074	0.0017 J	<0.00074	<0.00074	<0.00074	<0.00074	<0.00074	0.0011 J	0.00092 J
	Comb. Radium 226/228	0.244 U	1.0	2.23	0.992 U	0.0266 U	0.229 U	1.33	0.766 U	2.46	1.16	0.874	0.768
	Selenium	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014	0.0016 J	0.09	0.0026 J	0.0031 J	<0.0014	<0.0014
	Thallium	<0.00018	<0.00018	<0.00018	<0.00018	<0.00018	<0.00018	<0.0009 D3	<0.0009 D3	<0.0009	<0.00018	<0.00018	<0.00018
INORGANICS	Alkalinity (Bicarbonate as CaCO3)	76.6	72.9	69.6	22.4	133	13.3	<1.8	<1.8	3.2 J	14.4	40.9	37.1
	Alkalinity (Carbonate as CaCO3)	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8
	Hardness	-	-	-	-	-	-	575	1180	1450	-	-	-
	Nitrite + Nitrate as N	-	-	-	-	-	-	0.071	<0.017	<0.017	-	-	-
	Alkalinity (total) as CaCO3	76.6	72.9	69.6	22.4	133	13.3	<1.8	<1.8	3.2 J	14.4	40.9	37.1
	Dissolved Organic Carbon	-	-	-	-	-	-	<0.5	1.3	0.57I	-	-	-
	Ferrous Iron	-	-	-	-	-	-	47.3	2.6	0.22 J	-	-	-
	Sodium	11.6	47.5	10.7	43.3	39.8	18.4	29.8	75.5	59.2	57.2	28.7	16.2
	Sulphide	-	-	-	-	-	-	<0.05	<0.05	<0.05	-	-	-
	Ferric Iron	-	-	-	-	-	-	<0.25	342	<0.25	-	-	-
	Iron	0.29	4.8	<0.025	0.046	2.2	2	46.6	345	0.34	0.97	3.7	2.3
	Magnesium	10.9	82.6	9.1	121	29.8	40.3	67	157	182	173	54.1	29.2
	Manganese	0.41	9.7	1.7	41.9	1.2	17.1	23.4	60.6	166	106	24.8	5.5
	Potassium	2.7	13.3	2.4	10.9	10.7	5	7.7	15.6	13.8	7.4	10.9	8.9
FIELD	DO (Field)	0.24	5.64	3.64	0.18	0.16	0.12	0.16	1.35	0.13	0.11	0.16	0.14
	Flow Rate	170	200	150	180	225	180	200	220	225	200	170	250
	Oxidation-reduction potential	99.3	83.5	70.1	118.3	-17.4	60.6	203.5	161.5	328.3	4.5	60	22
	Temp (Field)	19.49	19.03	19.06	19.66	20.13	19.12	20.29	20.93	19.98	19.06	19.44	19.21
	EC (field)	290	1876	171.4	1920	999	847	1500	3648	3068	2440	1091	596.9
	pH (Field)	6.2	6.24	6.19	5.44	6.77	5.28	3.9	3.71	4.73	5.25	5.79	5.89
	Turbidity	3.76	1.9	0.55	0.57	2.43	3.28	3.55	4.3	2.76	1.93	4.16	0.93

Notes:
-- = Parameter was not analyzed
< = I icates the parameter was not detected above the analytical method detection limit (MDL).
J = I icates the parameter was estimated a detected between the MDL a the reporting limit (RL).
TDS = total dissolved solids
U = I icates the parameter was not detected above the analytical minimum detectable concentration (MDC) (Specific to combined radium 226/228)
(1) Appe ix III/IV parameter per 40 CFR 257 Subpart D. Parameters are reported in units of milligrams per liter (mg/L), except for pH reported as s.u. (sta ard units) a combined radium reported as picocuries per liter (pCi/L).
(2) Metals were analyzed by EPA Method 6010D, 6020B, a 7470A, anions were analyzed by EPA Method 300.0, TDS was analyzed by SM2540-2011, a combined radium 226/228 by EPA Methods 9315/9320.
(3) The pH value presented was recorded at the time of sample collection in the field.

FIGURES



N

LEGEND

Plant Branch Property Boundry

Approximate Ash Pond Boundary

Notes:
1. Coordinate System: NAD 1983 State Plane Georgia West_FIPS (U.S. Feet).
2. Property Boundary Provided by Southern Company Services.
3. Aerial Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community 2019 and Georgia Power Company, February 2022.

0 2,000 4,000

Scale in Feet

SITE LOCATION MAP

GEORGIA POWER COMPANY
PLANT BRANCH AP-BCD
PUTNAM COUNTY, GEORGIA

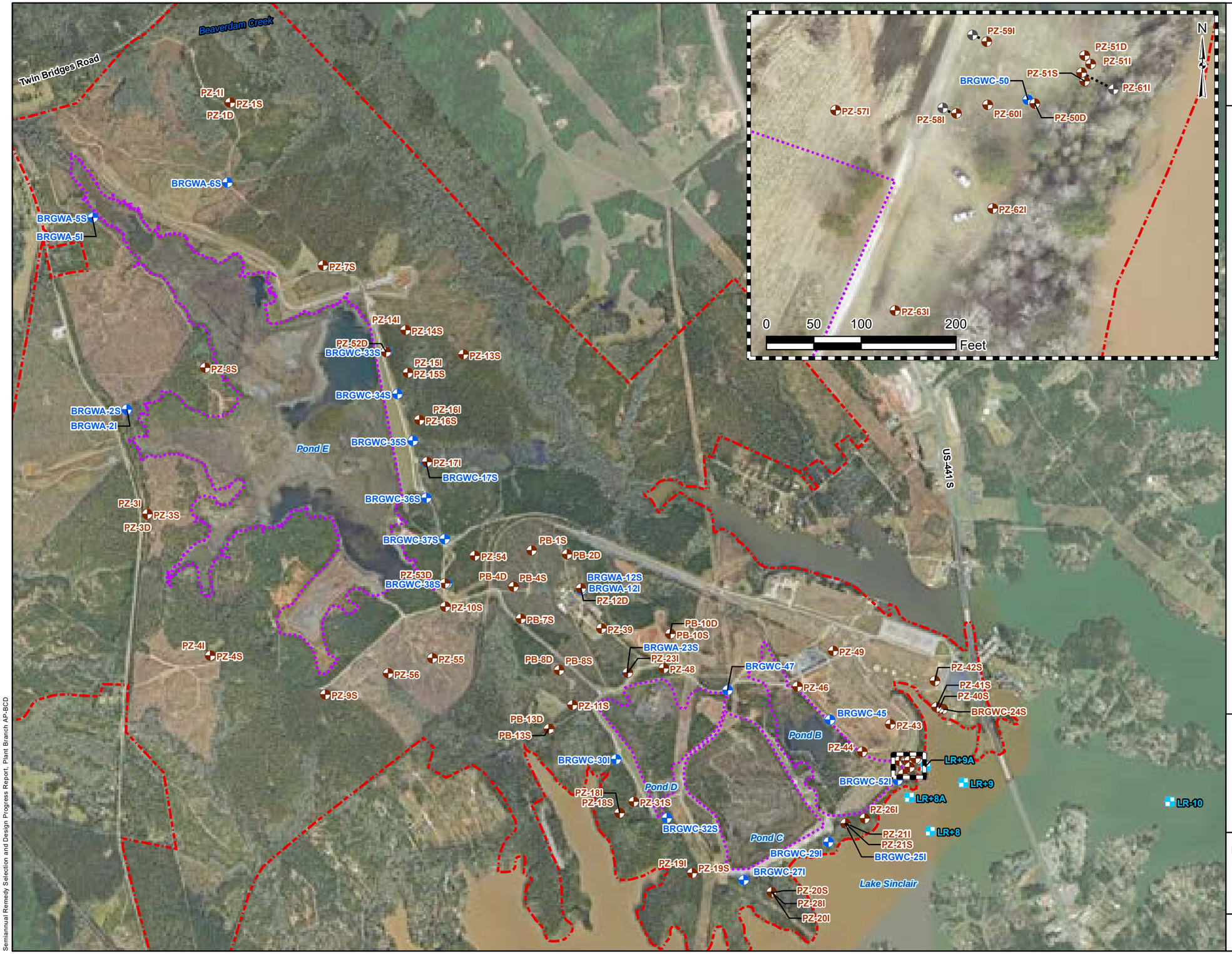
Prepared For: Georgia Power

Prepared By: Geosyntec consultants

KENNESAW, GA | JULY 2022

FIGURE 1

Semiannual Remedy Selection and Design Progress Report, Plant Branch AP-BCD



LEGEND

- Monitoring Well
- Piezometer
- Angled Well Screen
- Surface Water Sample Point
- Plant Branch Property Boundry
- Approximate Ash Pond Boundary

Notes:
1. Coordinate System: NAD 1983 State Plane Georgia West_FIPS (U.S. Feet).
2. Property Boundary Provided by Southern Company Services.
3. Aerial Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community 2019 and Georgia Power Company, February 2022.

0 1,500 3,000
Scale in Feet

SITE PLAN
MONITORING WELL AND SURFACE WATER LOCATION MAP

GEORGIA POWER COMPANY
PLANT BRANCH AP-BCD
PUTNAM COUNTY, GEORGIA

Prepared For: Georgia Power

Prepared By: Geosyntec consultants

KENNESAW, GA | JULY 2022

FIGURE 2

Semiannual Remedy Selection and Design Progress Report, Plant Branch AP-BCD

Semiannual Remedy Selection and Design Progress Report, Plant Branch AP-BCD

N

LEGEND

- Monitoring Well
- Piezometer
- Angled Well Screen
- Surface Water Sample Point
- Groundwater Elevation Iso-Contour (January 2022)
- 0.005 Cadmium GWPS Iso-Concentration Contour (mg/L)
- Plant Branch Property Boundry
- Approximate Ash Pond Boundary

Analyte	Units	GWPS
Cadmium	mg/L	0.005

Notes:
1. Concentration data from groundwater samples collected during the February 2022 semiannual monitoring event.
2. Concentrations are reported in milligrams per liter (mg/L).
3. Water level elevation recorded on January 31, 2022.
4. Elevation provided in feet (ft) referenced to the North American Vertical Datum (NAVD) 88.
5. Cadmium iso-contour shown represents the state Groundwater Protection Standards (GWPS).
6. J - Estimated value.
7. NS - Not Sampled.
8. Coordinate System: NAD 1983 State Plane Georgia West_FIPS (U.S. Feet).
9. Property Boundary Provided by Southern Company Services.
10. Aerial Source: Georgia Power Company, February 2022.

0 100 200
Scale in Feet

ISO-CONCENTRATION MAP, CADMIUM - FEBRUARY 2022

GEORGIA POWER COMPANY
PLANT BRANCH AP-BCD
PUTNAM COUNTY, GEORGIA

Prepared For: Georgia Power

Prepared By: Geosyntec consultants

KENNESAW, GA | JULY 2022

FIGURE 3

LEGEND

- Monitoring Well
- Piezometer
- Angled Well Screen
- Surface Water Sample Point
- Groundwater Elevation Iso-Contour (January 2022)
- 0.0135 Cobalt GWPS Iso-Concentration Contour (mg/L)
- Plant Branch Property Boundry
- Approximate Ash Pond Boundary

Analyte	Units	GWPS
Cobalt	mg/L	0.0135

Notes:
1. Concentration data from groundwater samples collected during the February 2022 semiannual monitoring event.
2. Concentrations are reported in milligrams per liter (mg/L).
3. Water level elevation recorded on January 31, 2022.
4. Elevation provided in feet (ft) referenced to the North American Vertical Datum (NAVD) 88.
5. Cobalt iso-contour shown represents the state Groundwater Protection Standards (GWPS).
6. J - Estimated value.
7. NS - Not Sampled.
8. * - Data reported for wells screened in the shallow aquifer were not used to generate the iso-concentration contour (PZ-51S).
9. Coordinate System: NAD 1983 State Plane Georgia West_FIPS (U.S. Feet).
10. Property Boundary Provided by Southern Company Services.
11. Aerial Source: Georgia Power Company, February 2022.

0 100 200
Scale in Feet

ISO-CONCENTRATION MAP, COBALT - FEBRUARY 2022

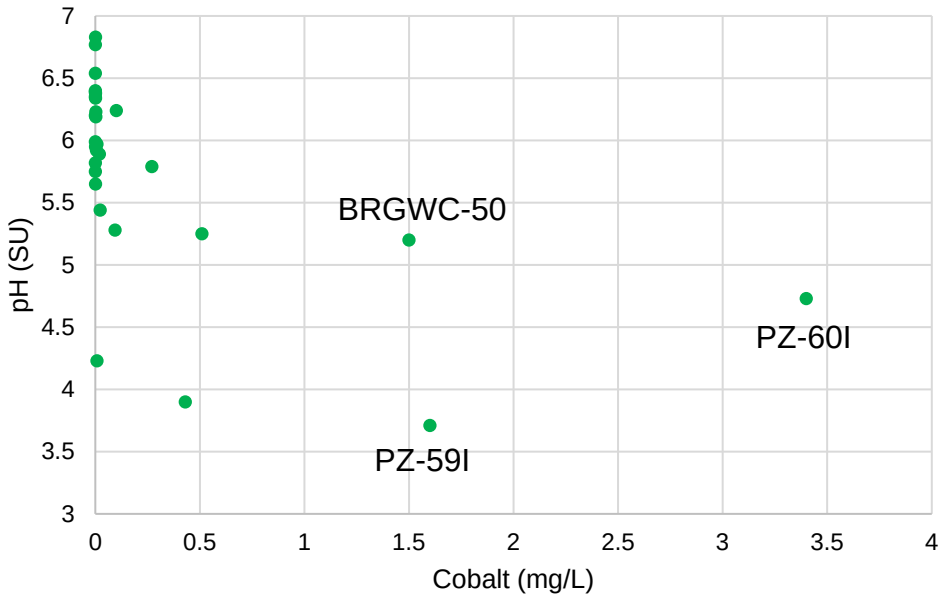
GEORGIA POWER COMPANY
PLANT BRANCH AP-BCD
PUTNAM COUNTY, GEORGIA

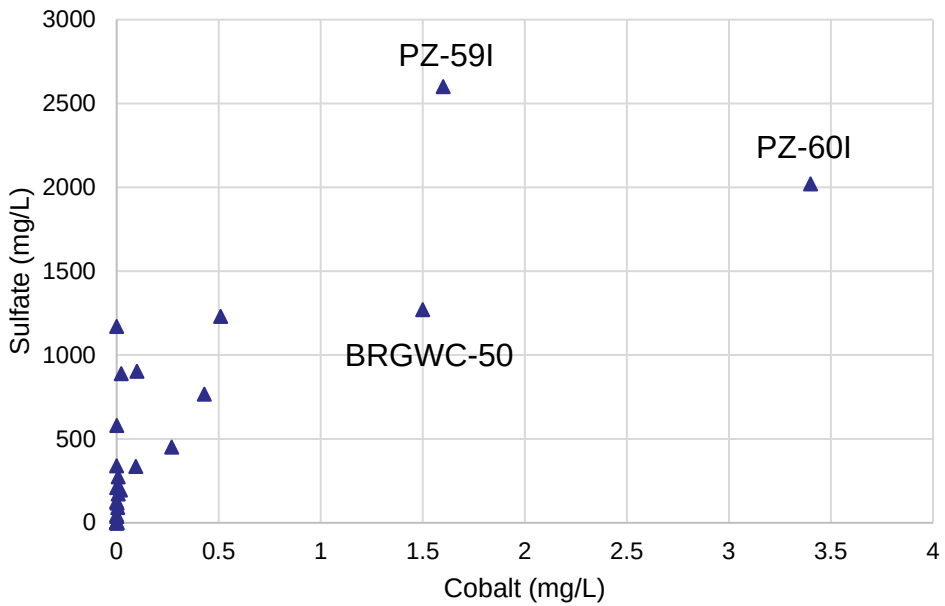
Prepared For: Georgia Power
Prepared By: Geosyntec consultants

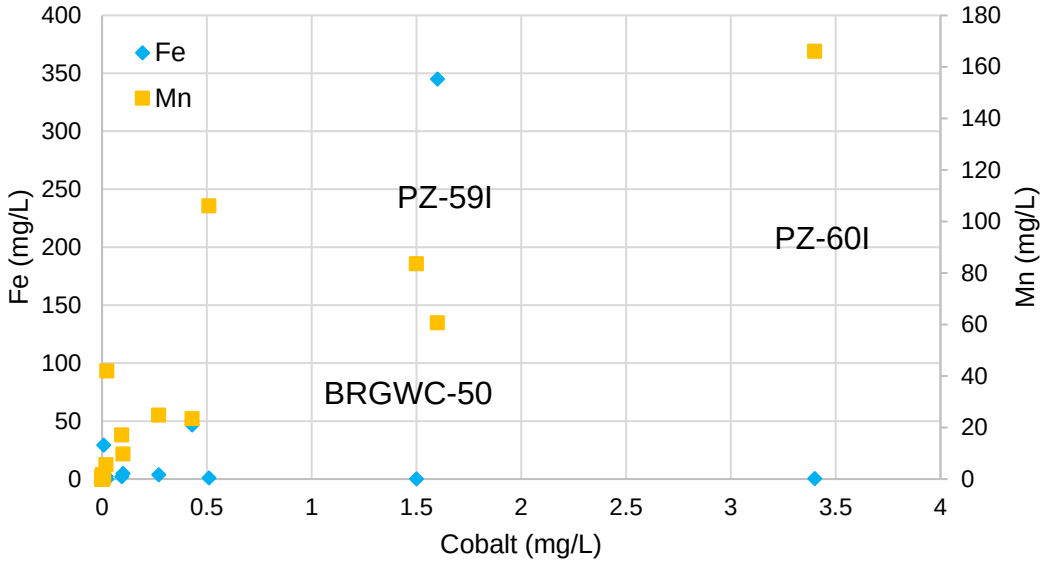
KENNESAW, GA | JULY 2022

FIGURE 4

Semiannual Remedy Selection and Design Progress Report, Plant Branch AP-BCD







Notes:
1. Groundwater samples collected during the spring semi-annual sampling event between 2/1/2022 and 2/4/2022.
2. Fe = iron; Mn = manganese
3. mg/L = milligrams per liter

Cobalt Correlations: pH, Sulfate, Fe and Mn

Georgia Power Company
Plant Branch AP-BCD
Putnam County, Georgia

Prepared For: Georgia Power

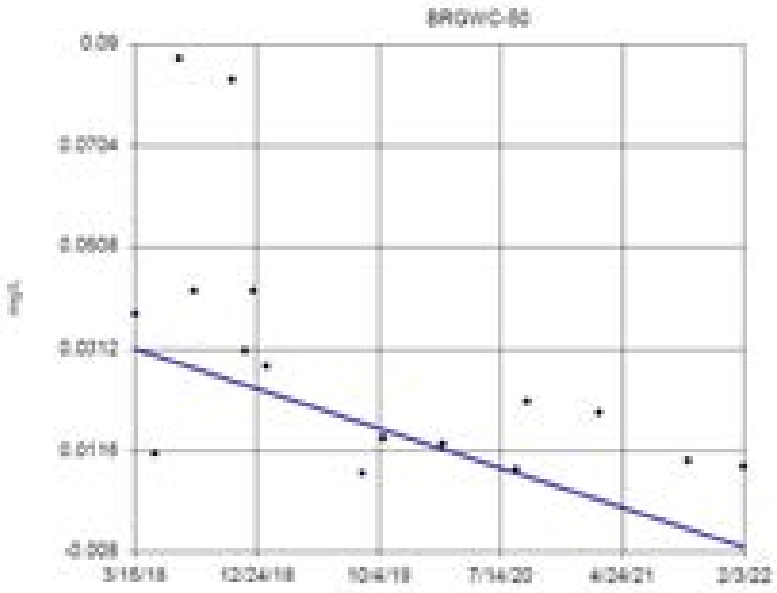
Prepared By: Geosyntec consultants

Kennesaw, GA

July 2022

Figure 5

Cadmium



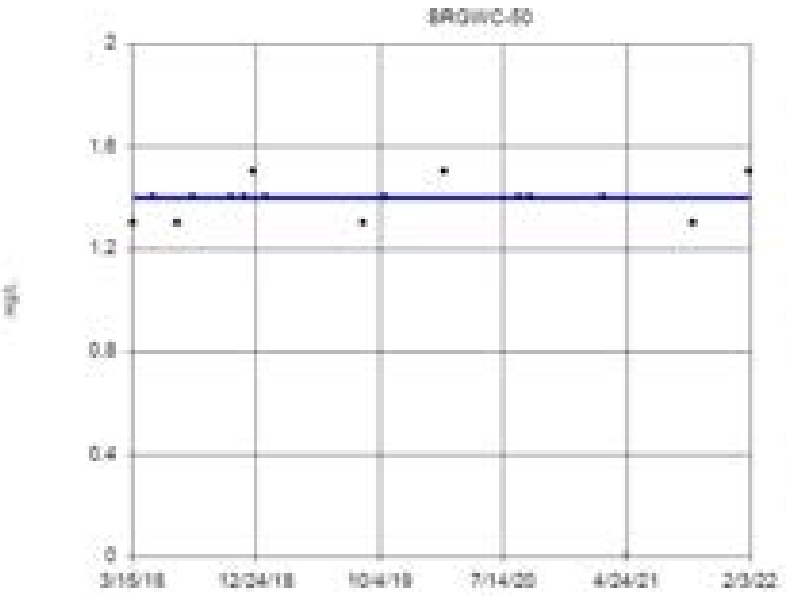
n = 16

Slope = -0.009878 units per year.

Mann-Kendall statistic = -57
critical = -58

Trend not significant at 99% confidence level (α = 0.005 per tail).

Cobalt

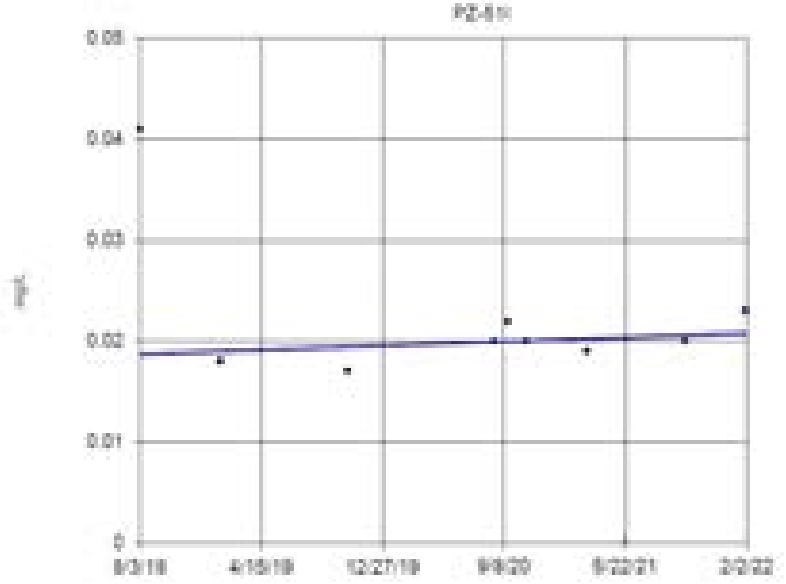


n = 16

Slope = 0 units per year.

Mann-Kendall statistic = 23
critical = 58

Trend not significant at 99% confidence level (α = 0.005 per tail).



n = 9

Slope = 0.0005983 units per year.

Mann-Kendall statistic = 5
critical = 25

Trend not significant at 99% confidence level (α = 0.005 per tail).

Notes:
1. Groundwater trends completed by Groundwater Stats Consulting using groundwater data collected for the full monitoring period through the February 2022 semiannual sampling event.
2. Trends show are in wells where statistically significant levels (SSLs) have been identified.
3. mg/L = milligrams per liter

Cadmium and Cobalt Concentration Trends

Georgia Power Company
Plant Branch AP-BCD
Putnam County, Georgia

Prepared For: Georgia Power

Prepared By: Geosyntec consultants

Kennesaw, GA | July 2022

Figure 6

APPENDIX A

Appendix IV Concentration Trend Tests – February 2022

FIGURE I.

Appendix IV Trend Tests - All Results (No Significant)

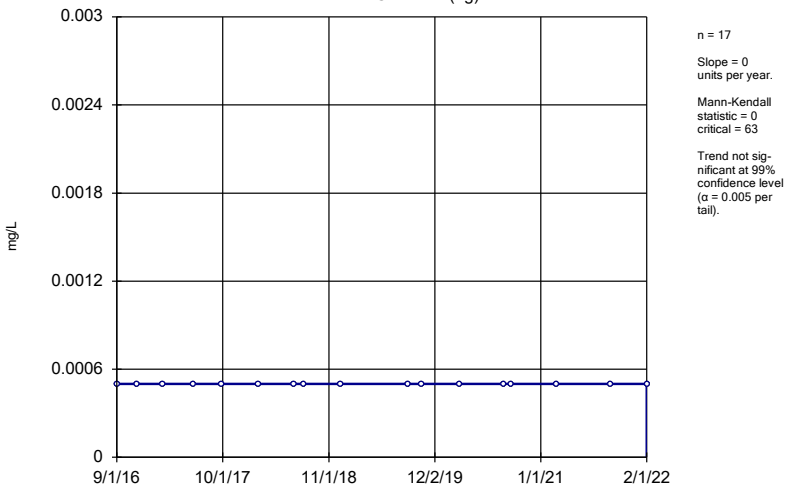
Plant Branch Client: Southern Company Data: Plant Branch AP Printed 4/12/2022, 11:29 AM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Cadmium (mg/L)	BRGWA-12I (bg)	0	0	63	No	17	100	n/a	n/a	0.01	NP
Cadmium (mg/L)	BRGWA-12S (bg)	0	0	63	No	17	100	n/a	n/a	0.01	NP
Cadmium (mg/L)	BRGWA-23S (bg)	0	3	58	No	16	87.5	n/a	n/a	0.01	NP
Cadmium (mg/L)	BRGWA-2I (bg)	0	0	58	No	16	100	n/a	n/a	0.01	NP
Cadmium (mg/L)	BRGWA-2S (bg)	0	0	58	No	16	100	n/a	n/a	0.01	NP
Cadmium (mg/L)	BRGWA-5I (bg)	0	0	58	No	16	100	n/a	n/a	0.01	NP
Cadmium (mg/L)	BRGWA-5S (bg)	0	0	58	No	16	100	n/a	n/a	0.01	NP
Cadmium (mg/L)	BRGWA-6S (bg)	0	0	58	No	16	100	n/a	n/a	0.01	NP
Cadmium (mg/L)	BRGWC-50	-0.009878	-57	-58	No	16	0	n/a	n/a	0.01	NP
Cobalt (mg/L)	BRGWA-12I (bg)	0	0	63	No	17	100	n/a	n/a	0.01	NP
Cobalt (mg/L)	BRGWA-12S (bg)	0	0	63	No	17	100	n/a	n/a	0.01	NP
Cobalt (mg/L)	BRGWA-23S (bg)	-0.0007123	-41	-58	No	16	12.5	n/a	n/a	0.01	NP
Cobalt (mg/L)	BRGWA-2I (bg)	0	-2	-58	No	16	75	n/a	n/a	0.01	NP
Cobalt (mg/L)	BRGWA-2S (bg)	-0.0004206	-54	-58	No	16	12.5	n/a	n/a	0.01	NP
Cobalt (mg/L)	BRGWA-5I (bg)	-0.0001573	-43	-48	No	14	0	n/a	n/a	0.01	NP
Cobalt (mg/L)	BRGWA-5S (bg)	0	21	58	No	16	68.75	n/a	n/a	0.01	NP
Cobalt (mg/L)	BRGWA-6S (bg)	0	-4	-58	No	16	68.75	n/a	n/a	0.01	NP
Cobalt (mg/L)	BRGWC-50	0	23	58	No	16	0	n/a	n/a	0.01	NP
Cobalt (mg/L)	PZ-51I	0.0005983	5	25	No	9	0	n/a	n/a	0.01	NP

Sanitas™ v.9.6.32j Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

BRGWA-12I (bg)



n = 17

Slope = 0 units per year.

Mann-Kendall statistic = 0 critical = 63

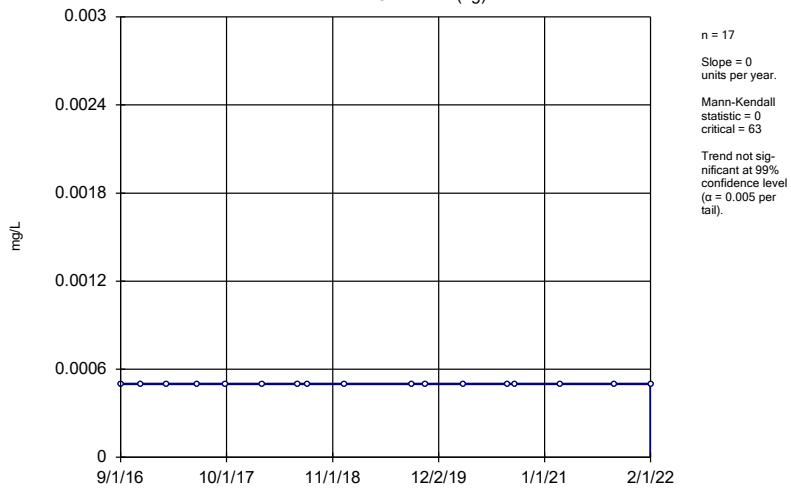
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Cadmium Analysis Run 4/12/2022 11:23 AM View: Pond BCD - Appendix IV Trend Tests
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.32j Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

BRGWA-12S (bg)



n = 17

Slope = 0 units per year.

Mann-Kendall statistic = 0 critical = 63

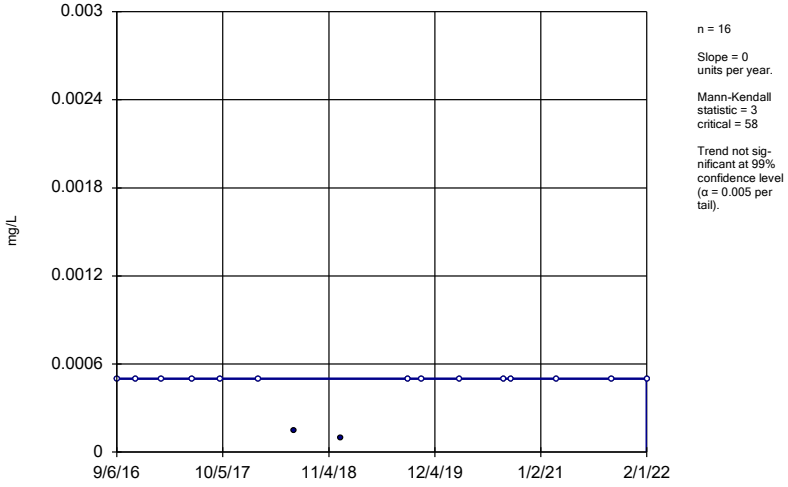
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Cadmium Analysis Run 4/12/2022 11:23 AM View: Pond BCD - Appendix IV Trend Tests
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.32j Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

BRGWA-23S (bg)



n = 16

Slope = 0 units per year.

Mann-Kendall statistic = 3 critical = 58

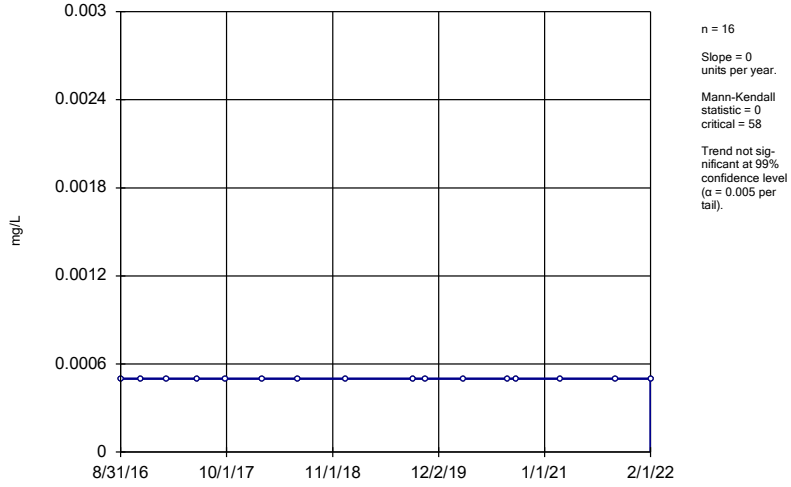
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Cadmium Analysis Run 4/12/2022 11:23 AM View: Pond BCD - Appendix IV Trend Tests
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.32j Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

BRGWA-2I (bg)



n = 16

Slope = 0 units per year.

Mann-Kendall statistic = 0 critical = 58

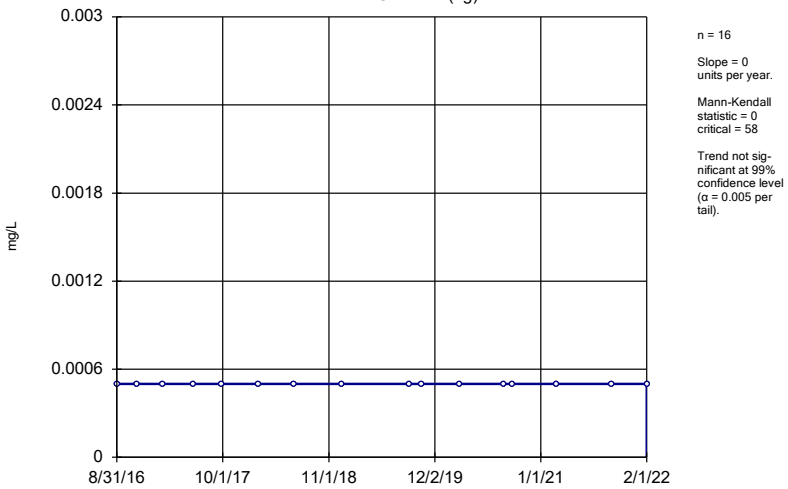
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Cadmium Analysis Run 4/12/2022 11:23 AM View: Pond BCD - Appendix IV Trend Tests
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.32j Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

BRGWA-2S (bg)



n = 16

Slope = 0
units per year.

Mann-Kendall
statistic = 0
critical = 58

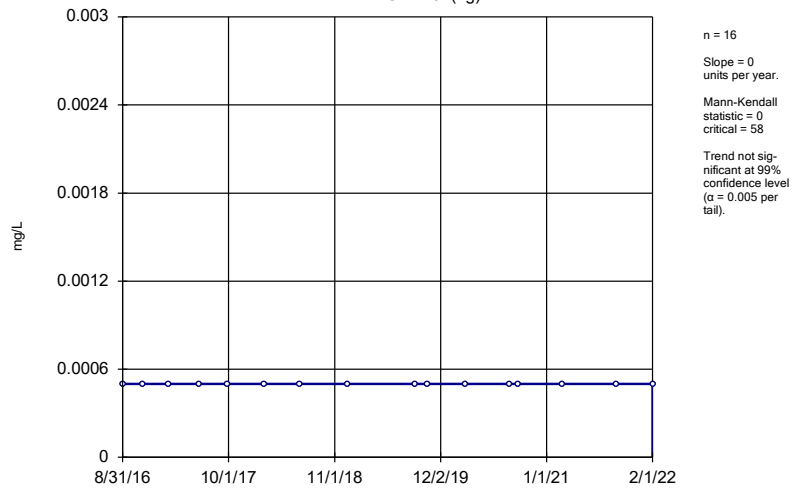
Trend not sig-
nificant at 99%
confidence level
(α = 0.005 per
tail).

Constituent: Cadmium Analysis Run 4/12/2022 11:23 AM View: Pond BCD - Appendix IV Trend Tests
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.32j Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

BRGWA-5I (bg)



n = 16

Slope = 0
units per year.

Mann-Kendall
statistic = 0
critical = 58

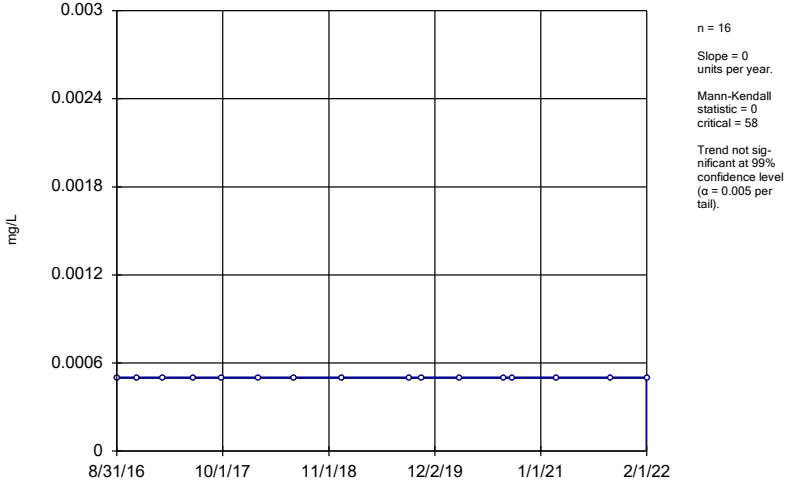
Trend not sig-
nificant at 99%
confidence level
(α = 0.005 per
tail).

Constituent: Cadmium Analysis Run 4/12/2022 11:23 AM View: Pond BCD - Appendix IV Trend Tests
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.32j Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

BRGWA-5S (bg)



n = 16

Slope = 0
units per year.

Mann-Kendall
statistic = 0
critical = 58

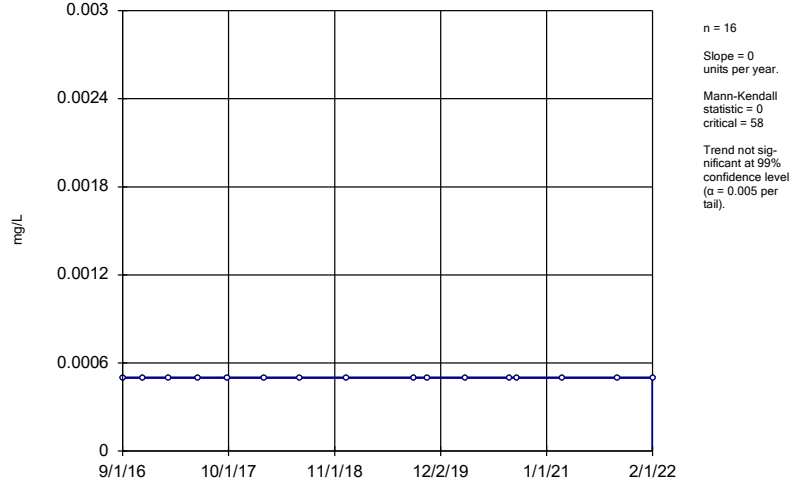
Trend not sig-
nificant at 99%
confidence level
(α = 0.005 per
tail).

Constituent: Cadmium Analysis Run 4/12/2022 11:23 AM View: Pond BCD - Appendix IV Trend Tests
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.32j Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

BRGWA-6S (bg)



n = 16

Slope = 0
units per year.

Mann-Kendall
statistic = 0
critical = 58

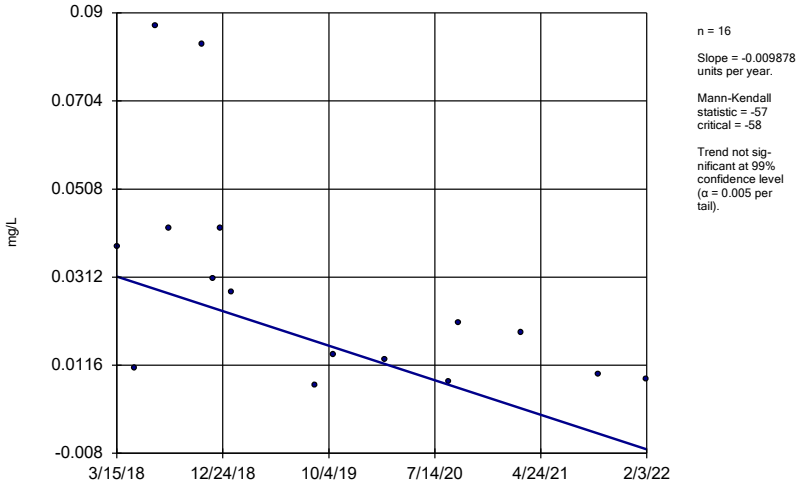
Trend not sig-
nificant at 99%
confidence level
(α = 0.005 per
tail).

Constituent: Cadmium Analysis Run 4/12/2022 11:23 AM View: Pond BCD - Appendix IV Trend Tests
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.32j Groundwater Stats Consulting. UG

Sen's Slope Estimator

BRGWC-50



n = 16

Slope = -0.009878 units per year.

Mann-Kendall statistic = -57 critical = -58

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Cadmium Analysis Run 4/12/2022 11:23 AM View: Pond BCD - Appendix IV Trend Tests

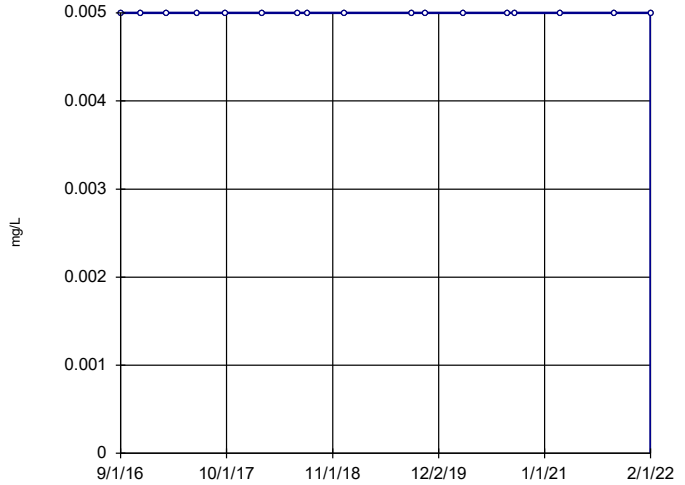
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.32j Groundwater Stats Consulting. UG

Hollow symbols indicate censored values.

Sen's Slope Estimator

BRGWA-12I (bg)



n = 17

Slope = 0 units per year.

Mann-Kendall statistic = 0 critical = 63

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Cobalt Analysis Run 4/12/2022 11:23 AM View: Pond BCD - Appendix IV Trend Tests

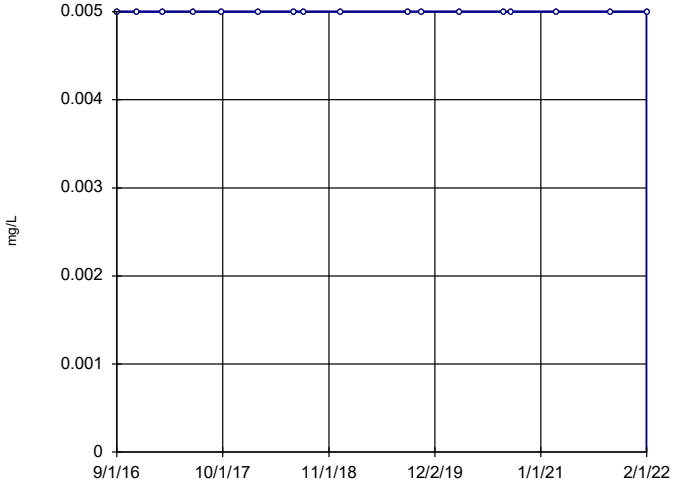
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.32j Groundwater Stats Consulting. UG

Hollow symbols indicate censored values.

Sen's Slope Estimator

BRGWA-12S (bg)



n = 17

Slope = 0 units per year.

Mann-Kendall statistic = 0 critical = 63

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Cobalt Analysis Run 4/12/2022 11:23 AM View: Pond BCD - Appendix IV Trend Tests

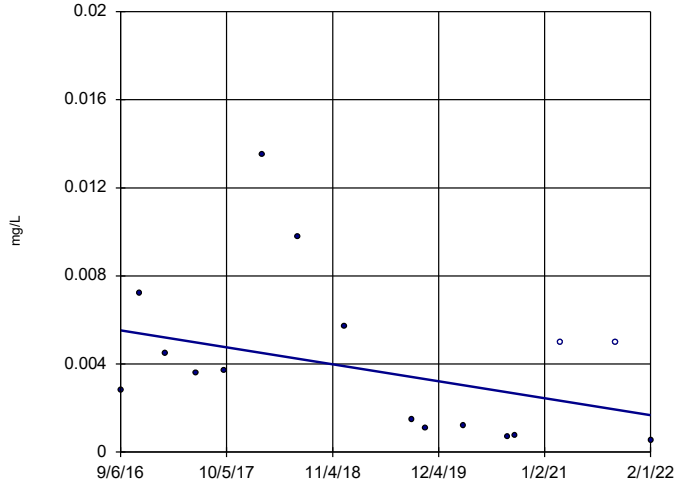
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.32j Groundwater Stats Consulting. UG

Hollow symbols indicate censored values.

Sen's Slope Estimator

BRGWA-23S (bg)



n = 16

Slope = -0.0007123 units per year.

Mann-Kendall statistic = -41 critical = -58

Trend not significant at 99% confidence level (α = 0.005 per tail).

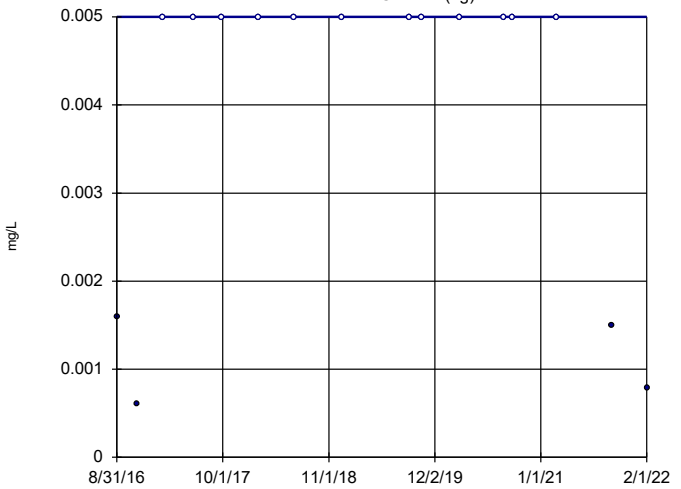
Constituent: Cobalt Analysis Run 4/12/2022 11:23 AM View: Pond BCD - Appendix IV Trend Tests

Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.32j Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

BRGWA-2I (bg)



n = 16

Slope = 0
units per year.

Mann-Kendall
statistic = -2
critical = -58

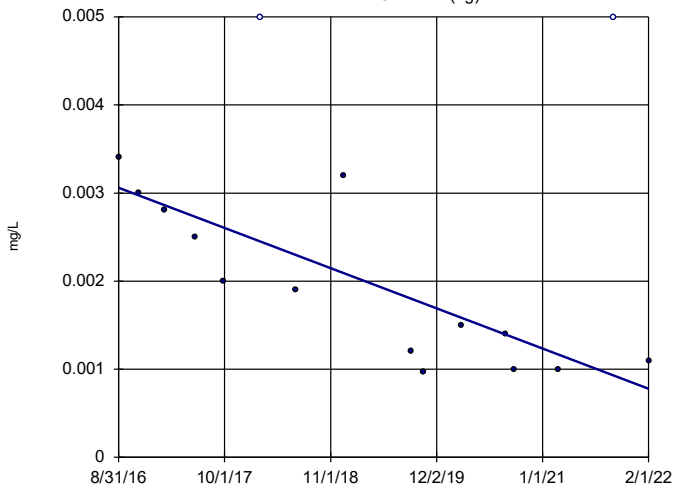
Trend not sig-
nificant at 99%
confidence level
(α = 0.005 per
tail).

Constituent: Cobalt Analysis Run 4/12/2022 11:23 AM View: Pond BCD - Appendix IV Trend Tests
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.32j Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

BRGWA-2S (bg)



n = 16

Slope = -0.0004206
units per year.

Mann-Kendall
statistic = -54
critical = -58

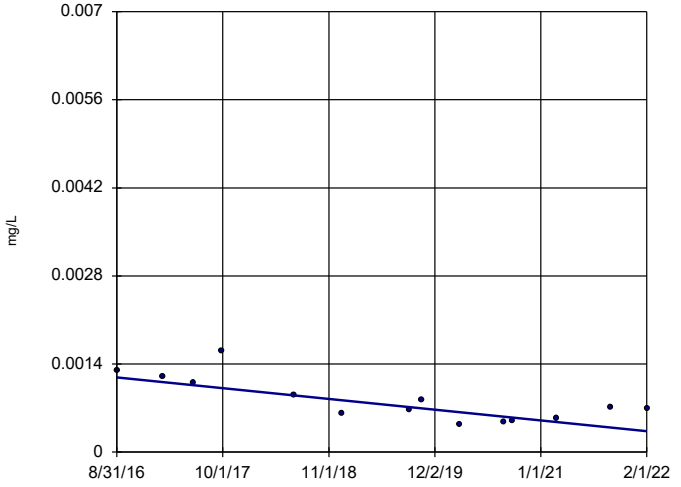
Trend not sig-
nificant at 99%
confidence level
(α = 0.005 per
tail).

Constituent: Cobalt Analysis Run 4/12/2022 11:23 AM View: Pond BCD - Appendix IV Trend Tests
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.32j Groundwater Stats Consulting. UG

Sen's Slope Estimator

BRGWA-5I (bg)



n = 14

Slope = -0.0001573
units per year.

Mann-Kendall
statistic = -43
critical = -48

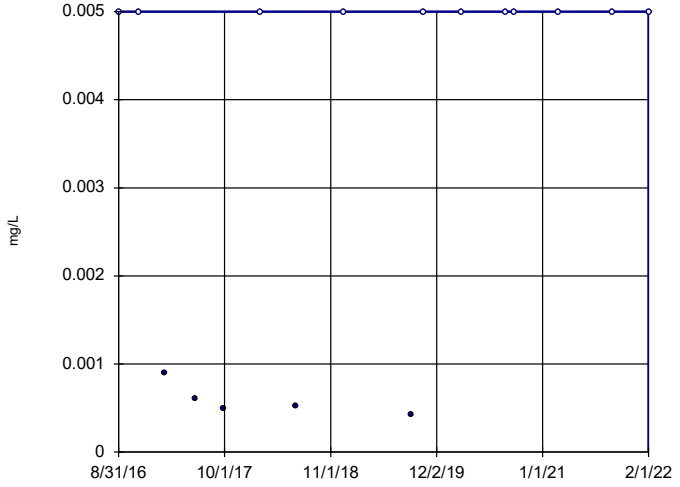
Trend not sig-
nificant at 99%
confidence level
(α = 0.005 per
tail).

Constituent: Cobalt Analysis Run 4/12/2022 11:23 AM View: Pond BCD - Appendix IV Trend Tests
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.32j Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

BRGWA-5S (bg)



n = 16

Slope = 0
units per year.

Mann-Kendall
statistic = 21
critical = 58

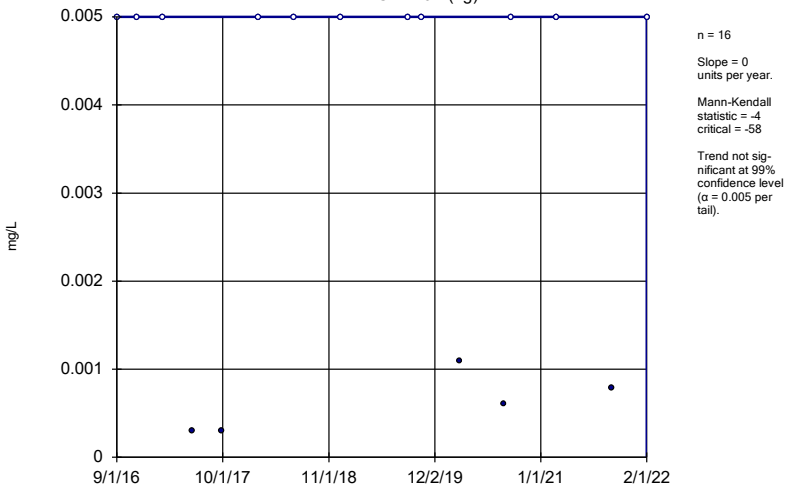
Trend not sig-
nificant at 99%
confidence level
(α = 0.005 per
tail).

Constituent: Cobalt Analysis Run 4/12/2022 11:23 AM View: Pond BCD - Appendix IV Trend Tests
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.32j Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

BRGWA-6S (bg)



n = 16

Slope = 0 units per year.

Mann-Kendall statistic = -4 critical = -58

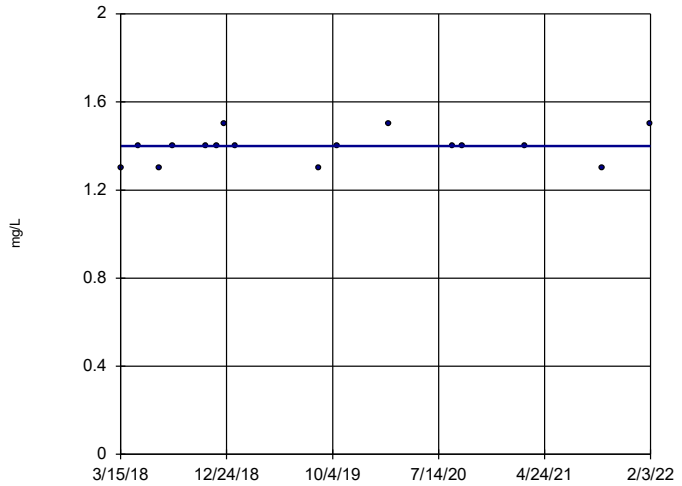
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Cobalt Analysis Run 4/12/2022 11:23 AM View: Pond BCD - Appendix IV Trend Tests
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.32j Groundwater Stats Consulting. UG

Sen's Slope Estimator

BRGWC-50



n = 16

Slope = 0 units per year.

Mann-Kendall statistic = 23 critical = 58

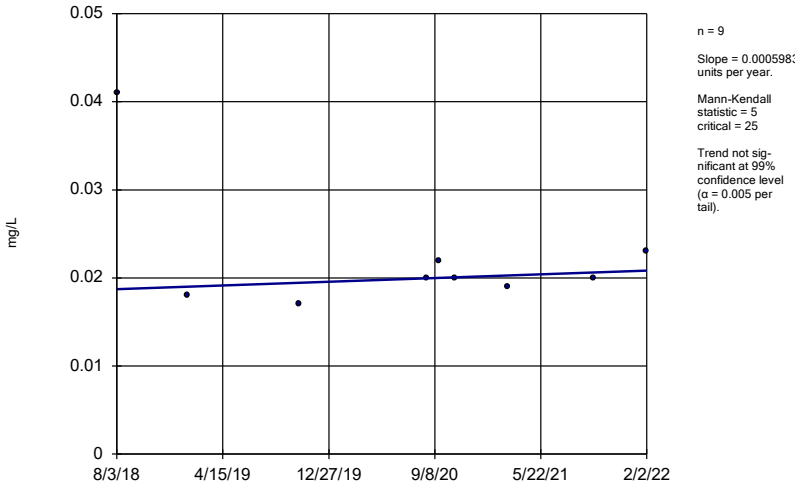
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Cobalt Analysis Run 4/12/2022 11:23 AM View: Pond BCD - Appendix IV Trend Tests
Plant Branch Client: Southern Company Data: Plant Branch AP

Sanitas™ v.9.6.32j Groundwater Stats Consulting. UG

Sen's Slope Estimator

PZ-51I



n = 9

Slope = 0.0005983 units per year.

Mann-Kendall statistic = 5 critical = 25

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Cobalt Analysis Run 4/12/2022 11:23 AM View: Pond BCD - Appendix IV Trend Tests
Plant Branch Client: Southern Company Data: Plant Branch AP

APPENDIX B

Piezometer Installation Report for Surface Impoundment Ash Pond BCD (AP-BCD)

March 14, 2022 Project No. 166625421

Mr. Joju Abraham, PG
Southern Company Services
241 Ralph McGill Blvd NE
Atlanta, GA 30308
JAbraham@southernco.com

PIEZOMETER INSTALLATION REPORT FOR SURFACE IMPOUNDMENT ASH POND BCD (AP-BCD) GEORGIA POWER PLANT BRANCH, MILLEDGEVILLE, GEORGIA

Dear Mr. Abraham:

Golder Associates USA Inc., a member of WSP (Golder), is submitting this *Piezometer Installation Report* to Southern Company Services, Inc. (SCS) and Georgia Power Company (Georgia Power), which documents the construction of piezometers at surface impoundment Ash Pond BCD (AP-BCD) at Plant Branch in Milledgeville, Georgia (Site). Piezometer construction activities were performed in general accordance with the standards described in the *RCRA Technical Enforcement Guidance Document* (1986) and the *Georgia Water Wells Standards Act of 1985*. The installation of the piezometers was conducted under the oversight and direction of Brian Steele, a Georgia-registered Professional Geologist (PG).

The field activities for this investigation were performed in January 2022. The field work consisted of the installation and development of two (2) piezometers in January 2022. Metro Engineering & Surveying Co., Inc. (Metro) conducted a survey of the installed piezometers in February 2022. A summary of the activities is presented below. Figure 1, *Site Plan and Piezometer Location Map*, presents the location of each of the newly installed piezometers.

Piezometer Drilling and Construction Activities

Piezometers PZ-62I and PZ-63I were drilled and installed by Cascade Drilling, LP, who was contracted through SCS, at the facility in January 2022. Cascade had a current and valid bond with the Water Wells Standards Advisory Council for the state of Georgia at the time of drilling (Appendix A). The driller's name is provided on the boring/construction diagrams presented in Appendix B.

An experienced Golder geologist was present on site to oversee and record the drilling and piezometer construction under the supervision of a professional geologist registered to practice in Georgia (Brian Steele). Drilling methods employed for borehole advancement were rotosonic drilling techniques. The drilling equipment consisted of a full-sized TSI 150T Truck-Mounted Sonic drilling rig, equipped with 4-inch sonic rods with an outer-casing sleeve. During the drilling, continuous core samples were logged in the field for lithologic and geotechnical properties.

Prior to use, and between boreholes, downhole equipment was steam cleaned. The boring (lithologic) logs and piezometer construction records for the newly installed piezometers are included in Appendix B. The construction data are summarized on Table 1, and the locations of the piezometers are provided on Figure 1.

Piezometers were constructed within the borehole using factory-cleaned and sealed Schedule 40 polyvinyl chloride (PVC) products with flush-threaded fittings. Specifically, piezometers were constructed with a 10-foot section of 4-inch outer diameter (OD) and 2-inch inner diameter (ID), flush-threaded, 0.010-inch factory-slotted PVC, U-Pack screen. The drillers filled the annulus of each U-Pack screen section with No. 1 filter sand. For each borehole, the screen was placed near the bottom of the borehole, with the remainder of the piezometer constructed from 10-foot sections of 2-inch ID, flush-threaded, PVC casing riser. A flush-threaded PVC end cap was placed on the bottom of each piezometer to provide a 0.4-foot sump/sediment trap, and the top of the piezometers to extend to approximately 2.8 feet above grade. Construction details for the piezometers are shown on the boring/construction logs in Appendix B. The PVC products used were American Society for Testing and Materials (ASTM) and National Sanitation Foundation (NSF) rated.

Following placement of the screen and casing, the annular space in each borehole adjacent to the screen was filled with US Standard Sieve size No. 1 filter pack sand as appropriate for the formation. The filter pack sand was placed into the borehole and extended approximately 2 to 3 feet above the depth of the top of the screen. Immediately following placement of the filter pack, each piezometer was pumped using a portable submersible pump until visibly clear water was discharged. A filter pack seal, composed of approximately 2.5 to 3 feet of hydrated 3/8” coated bentonite pellets, was then placed on top of the filter pack by slowly pouring the material down the borehole and tamping it into place. The bentonite was hydrated using potable water and allowed to cure for approximately two hours prior to grouting the piezometer.

Following hydration of the bentonite, the remaining annular space was grouted with an AquaGuard® bentonite grout mixture to approximately 2 feet below ground surface using a tremie method. Based on information provided by the product manufacturer, AquaGuard® is a bentonite grout consisting of bentonite and additives that allow for a mixture of 30% solids by weight to facilitate grouting via tremie pipe, with additives that slow the bentonite curing so that proper placement can be achieved. Each piezometer surface completion consists of a locked, anodized aluminum protective casing and a 4-foot by 4-foot by 4-inch concrete pad with an engraved tag showing the piezometer name. The annular space of the aluminum protective casing was filled with pea gravel to approximately 2 inches from top of PVC. A weep hole was drilled into the lower side of the protective casing.

Piezometer Development Activities

The newly installed piezometers were developed in January 2022 in general accordance with the *Monitoring Well Development Procedures* prepared by SCS (March 2016), and the US EPA Science and Ecosystem Support Division *Design and Installation of Monitoring Wells* (February 2008). The piezometers were surged using a Reclaimer pump system. During development, water quality measurements of pH, temperature, specific conductance, oxidation reduction potential (ORP), dissolved oxygen (DO), and turbidity were periodically collected using field-calibrated water quality equipment after the piezometer responded to improving conditions. Development activities were conducted utilizing an AquaTroll® multimeter and a Hach turbidimeter and for monitoring water quality measurements. Equipment calibration forms and development forms are included in Appendix B with development details summarized in Table 2.

As presented on Table 2, approximately 88 gallons of water were removed from PZ-62I and approximately 65 gallons were removed from PZ-63I during development. During development, a turbidity value below 10

nephelometric turbidity units (NTUs) was achieved at each piezometer. Water level measurements were collected using a decontaminated electronic water level indicator, referenced to a permanent marking at the top of the casing and recorded to within 0.01 foot.

Piezometer Survey

The newly installed piezometers were surveyed on February 1, 2022 by Metro Survey and Engineering. The survey was completed using Leica GS18T (survey-grade) global positioning system receiver and a closed level check loop with a Leica DNA 10 digital level with a positional tolerance of 0.5/0.01' H:V. The top of the PVC casing was surveyed to 0.5 foot horizontal and 0.01-foot vertical tolerance, and a marking was made on the PVC to use for reference during future measurements. Surveyed coordinates and elevations are presented on the boring/construction diagrams and on Table 1. The certified surveyor's report is attached as Appendix C.

Closing

We appreciate the opportunity to assist SCS and Georgia Power with this project. Should you have any questions or require additional information, please contact the undersigned at (770) 496-1893.

Sincerely,

Golder Associates USA Inc.

Brian Steele, PG
Lead Consultant, Geologist

Rachel P. Kirkman, PG
Senior Consultant & Geologist/ Assistant Vice President

BS/RPK/kld

Attachments: Figure 1: Piezometer Location Map
Table 1: Summary of Piezometer Construction Details
Table 2: Summary of Piezometer Development
Appendix A: Cascade Drilling Bond
Appendix B: Boring Logs/Construction Diagrams, Development Forms and Calibration Logs
Appendix C: Certified Well Survey

Figure

LEGEND

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

REFERENCE

1. SERVICE LAYER CREDITS: SOURCE: ESRI, MAXAR, 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. PROPERTY LINE PROVIDED BY SOUTHERN COMPANY SERVICES.

4. PIEZOMETER LOCATIONS PROVIDED BY METRO ENGINEERING.

5. SURFACE IMPOUNDMENT EXTENT PROVIDED BY SOUTHERN COMPANY SERVICES.

80 40 0 80
Feet

CLIENT
GEORGIA POWER COMPANY
PLANT BRANCH

PROJECT
PIEZOMETER INSTALLATION REPORT FOR
SURFACE IMPOUNDMENT ASH POND BCD (AP-BCD)

TITLE
PIEZOMETER LOCATION MAP

CONSULTANT
WSP GOLDER

YYYY-MM-DD	2022-02-11
PREPARED	SB
DESIGN	BS
REVIEW	RK
APPROVED	

PROJECT No.	CONTROL	Rev.	FIGURE
166625421	1666254V001-GIS.mxd	0	1

Path: Q:\GIS\Southern Company\PlantBranch\Environmental - CCR\Figures\PZ-52D through PZ-56 Installation Report\F igure 1 - Piezometer Location Map_additionalWells.mxd

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

0 1in

Tables

TABLE 1
SUMMARY OF PIEZOMETER CONSTRUCTION DETAILS
Georgia Power Company - Plant Branch

Borehole ID	Latitude	Longitude	NAD 83 Northing	NAD 83 Easting	Elevation On Top Of PVC (feet NAVD88)	Elevation Ground Surface (feet NAVD88)	Ground Surface Elevation at Concrete Pad (feet NAVD88)[1]	Total Depth (feet bgs)	Depth to Bedrock (feet bgs)	Screened Interval (feet bgs)	Core Available	Water Level (feet bTOC)	Date Installed
PZ-62I	33.190107	-83.297965	1161478.9	2562336.0	380.95	378.1	378.05	70.0	65.5	60.0 - 70.0	Sonic Core	37.79	1/6/2022
PZ-63I	33.189813	-83.298304	1161371.2	2562233.1	381.31	378.6	378.56	56.5	49.5	46.5 - 56.5	Sonic Core	36.64	1/5/2022

Notes:

1. Ground surface measured at the mag nail in the concrete pad

NAD - North American Datum

NAVD88 - North American Vertical Datum 1988

bgs - Below ground surface

bTOC - Below Top of Casing

Survey Data from Metro Engineering & Surveying Co., Inc.

ID - Identification

PVC - Polyvinyl chloride

TABLE 2
SUMMARY OF PIEZOMETER DEVELOPMENT
Georgia Power Company - Plant Branch

Piezometer ID	Date Started	Time Started (hr:min)	Development Method	Measured Total Depth of Well (feet bTOC)	Initial Water level (feet bTOC)	Final Water Level (feet bTOC)	Volume of Casing (gal)	Total Volume Removed (gal)	pH (SU)	Specific Conductance (mS/cm)	Temp (°C)	Turbidity (NTU)	ORP (mV)	DO (mg/L)
PZ-62I	1/19/2022	12:35	Reclaimer Pump	72.82	39.06	39.03	5.5	88	5.77	1.042	18.22	2.29	20.1	0.27
PZ-63I	1/18/2022	14:30	Reclaimer Pump	59.48	39.18	39.36	3.31	65	5.66	0.587	16.38	2.45	59.3	3.22

Notes:

hr:min - hours:minutes
bTOC - feet below Top of Casing
gal - gallons
SU - Standard Units
mS/cm - millisiemens per centimeter
°C - degrees Celcius
NTU - nephelometric turbidity units
mV - millivolts
mg/L - milligrams per liter
ORP - oxygen reduction potential
DO - dissolved oxygen
ID - Identification
PVC - Polyvinyl chloride
Temp - Tempeature

APPENDIX A

Cascade Drilling Bond

intact INSURANCE

Power of Attorney

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

CORPORATE SEAL 1986 NEW YORK

By [illegible]

[illegible]

NOTARY PUBLIC - MINNESOTA
My Commission Expires
January 31, 2025

[illegible]

[illegible]

CORPORATE SEAL 1986 NEW YORK

[illegible]

CONTINUATION
CERTIFICATE

Atlantic Specialty Insurance Company [illegible]

[illegible] 800033976

[illegible] 08-27-2017
MONTH-DAY-YEAR

[illegible] Ricky Davis / Cascade Drilling L.P.
PRINCIPAL

[illegible] Department of Natural Resources, State of Georgia
OBLIGEE

[illegible]

[illegible] 06-30-2021
MONTH-DAY-YEAR

[illegible] 06-30-2023
MONTH-DAY-YEAR

[illegible] Thirty Thousand and 00/100 Dollars ($30,000.00)

[illegible] Performance Bond for Water Well Contractors

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

[illegible] April 12th, 2021
MONTH-DAY-YEAR

Atlantic Specialty Insurance Company

By [signature]
Attorney-in-Fact Andrew P. [illegible]

Parker, Smith & Feek, Inc.
Agent

2233 112th Ave N.E. Bellevue, WA 98004
Address of Agent

425-709-3600
Telephone Number of Agent

[illegible]

APPENDIX B

Boring Logs/Construction Diagrams, Development Forms and Calibration Logs

RECORD OF BOREHOLE PZ-62I

PROJECT: SCS Plant Branch
PROJECT NUMBER: 166625421
DRILLED DEPTH: 70.00 ft
LOCATION: Milledgeville, GA

DRILL RIG: TSI 150
DATE STARTED: 1/5/22
DATE COMPLETED: 1/6/22

NORTHING: 1,161,478.9
EASTING: 2,562,336.0
GS ELEVATION: 378.1
TOC ELEVATION: 380.95 ft

DEPTH W.L.:37.79
ELEVATION W.L.: 343.16
DATE W.L.:1/6/22
TIME W.L.:15:58

DEPTH (ft)	ELEVATION (ft)	DESCRIPTION	USCS	ELEV. / DEPTH (ft)	SAMPLE NO.	REC
0	378	0.00 - 6.50 MLS, sandy SILT, moist, brown-red, micaceous	MLS	371.6	1	3.50 6.50
5	375					
10	370	6.50 - 11.00 MLS, sandy SILT with trace organics, moist, brown-red, micaceous	MLS	6.50 367.1		
15	365	11.00 - 17.50 SM, silty SAND, fine-medium grained, moist, reddish gray-brown, micaceous	SM	11.00 360.6	2	10.00 10.00
20	360	17.50 - 21.50 CL-SC, sandy CLAY and clayey SAND interbedded, fine-medium grained	CL-SC	17.50 356.6	3	7.00 10.00
25	355	21.50 - 26.50 SP, SAND, medium-fine grained, loose, dry, gray-brown	SP	21.50 351.6		
30	350	26.50 - 30.00 SM, silty SAND with some fine gravel, wet, brown-gray	SM	26.50 348.1		
35	345	30.00 - 36.50 CL-SC, sandy CLAY and clayey SAND interbedded with some poorly sorted gravels, W > PL	CL-SC	30.00 341.6	4	5.50 10.00
40	340	36.50 - 46.50 CL-ML, sandy silty CLAY, firm to soft, orange-red, micaceous	CL-ML	36.50 331.6	5	10.00 10.00
45	335					
50	330	46.50 - 56.50 CL, sandy CLAY, red-orange to gray, moist, soft, micaceous, W>PL	CL	46.50	6	10.00 10.00

Log continued on next page

PZ-62I MONITORING WELL DIAGRAM and NOTES

Bentonite Grout

WELL CONSTRUCTION DETAILS

WELL CASING
Interval: 0'-60'
Material: Schedule 40 PVC
Diameter: 2"
Joint Type: Threaded

WELL SCREEN
Interval: 60'-70'
Material: 0.010" Slotted
Diameter: 2"
Slot Size: 0.010"
End Cap: 3"

FILTER PACK
Interval: 57.9'-70'
Type: U-Pack GP-1 Sand
Quantity: 4.5 x 14L bags

FILTER PACK SEAL
Interval: 55'-57.9'
Type: 3/8" PEL-Plug Bentonite Pellets
Quantity: 0.5 x 5 gal bucket

ANNULUS SEAL
Interval: 0'-55'
Type: Aquaguard bentonite grout
Quantity: 4 bags + 80 gal H2O

WELL COMPLETION
Pad: 4' x 4'
Protective Casing: Aluminum

DRILLING METHODS
Soil Drill: 4-inch Sonic
Rock Drill: 4-inch Sonic
Sample Type: Rotosonic

LOG SCALE: 1 in = 6.5 ft
DRILLING COMPANY: Cascade Environmental
DRILLER: David Wilcox

GA INSPECTOR: Karim Minkara, PG
CHECKED BY: Brian Steele, PG
DATE: 2/11/22

WSP GOLDER

BOREHOLE RECORD PLANT BRANCH PZ-57I-PZ-63I.GPJ PIEDMONT.GDT 2/18/22

RECORD OF BOREHOLE PZ-62I

PROJECT: SCS Plant Branch
PROJECT NUMBER: 166625421
DRILLED DEPTH: 70.00 ft
LOCATION: Milledgeville, GA

DRILL RIG: TSI 150
DATE STARTED: 1/5/22
DATE COMPLETED: 1/6/22

NORTHING: 1,161,478.9
EASTING: 2,562,336.0
GS ELEVATION: 378.1
TOC ELEVATION: 380.95 ft

DEPTH W.L.:37.79
ELEVATION W.L.: 343.16
DATE W.L.:1/6/22
TIME W.L.:15:58

DEPTH (ft)	ELEVATION (ft)	SOIL PROFILE: DESCRIPTION	USCS	GRAPHIC LOG	ELEV. / DEPTH (ft)	SAMPLES: SAMPLE NO.	PHOTO	REC	PZ-62I MONITORING WELL DIAGRAM and NOTES	WELL CONSTRUCTION DETAILS
50		46.50 - 56.50 CL, sandy CLAY, red-orange to gray, moist, soft, micaceous, W>PL *(Continued)*								
	325		CL			6		10.00 10.00		
55					321.6				3/8" Pel-Plug Benotite Pellets	
		56.50 - 60.00 CL, silty CLAY with trace sand, gray, wet, very soft to soft, W>PL			56.50					
	320		CL						GP-1 Filter Sand	
60					318.1				0.010" Slotted Schedule 40 PVC U-pack Screen	
		60.00 - 65.00 Transitionally weathered rock (TWR), SAND with some gravel, brown-tan			60.00	7		10.00 9.00		
	315		TWR							
65					313.1					
		65.00 - 65.50 TWR, poorly sorted sandy GRAVEL	TWR		65.50					
		65.50 - 70.00 (BEDROCK) Biotite Gneiss, slightly weathered to fresh, with biotite, plagioclase, and hornblende	Bedrock			8		3.50 4.50		
	310				308.1				Sump	
70		Boring completed at 70.00 ft								
	305									
75										
	300									
80										
	295									
85										
	290									
90										
	285									
95										
	280									
100										

WELL CASING
Interval: 0'-60'
Material: Schedule 40 PVC
Diameter: 2"
Joint Type: Threaded

WELL SCREEN
Interval: 60'-70'
Material: 0.010" Slotted
Diameter: 2"
Slot Size: 0.010"
End Cap: 3"

FILTER PACK
Interval: 57.9'-70'
Type: U-Pack GP-1 Sand
Quantity: 4.5 x 14L bags

FILTER PACK SEAL
Interval: 55'-57.9'
Type: 3/8" PEL-Plug Bentonite Pellets
Quantity: 0.5 x 5 gal bucket

ANNULUS SEAL
Interval: 0'-55'
Type: Aquaguard bentonite grout
Quantity: 4 bags + 80 gal H2O

WELL COMPLETION
Pad: 4' x 4'
Protective Casing: Aluminum

DRILLING METHODS
Soil Drill: 4-inch Sonic
Rock Drill: 4-inch Sonic
Sample Type: Rotosonic

LOG SCALE: 1 in = 6.5 ft
DRILLING COMPANY: Cascade Environmental
DRILLER: David Wilcox

GA INSPECTOR: Karim Minkara, PG
CHECKED BY: Brian Steele, PG
DATE: 2/11/22

WSP GOLDER

RECORD OF BOREHOLE PZ-63I

SHEET 1 of 2

PROJECT: SCS Plant Branch
PROJECT NUMBER: 166625421
DRILLED DEPTH: 56.50 ft
LOCATION: Milledgeville, GA

DRILL RIG: TSI 150
DATE STARTED: 1/5/22
DATE COMPLETED: 1/5/22

NORTHING: 1,161,371.2
EASTING: 2,562,233.1
GS ELEVATION: 378.6
TOC ELEVATION: 381.31 ft

DEPTH W.L.:36.64
ELEVATION W.L.: 344.67
DATE W.L.:1/5/22
TIME W.L.:14:10

DEPTH (ft)	ELEVATION (ft)	DESCRIPTION	USCS	ELEV. / DEPTH (ft)	SAMPLE NO.	REC
0	378.6	0.00 - 13.50 SM, silty SAND with trace fine-coarse gravel, dry-moist, brown, micaceous	SM		1	6.50/6.50
					2	10.00/10.00
				365.1		
		13.50 - 24.00 CL, sandy CLAY, red-brown, moist, W>PL, soft to firm, micaceous	CL	13.50	3	9.00/10.00
				354.6		
		24.00 - 26.50 SC, clayey SAND, fine-medium grained, moist, loose to compact, red-brown, micaceous	SC	24.00		
				352.1		
		26.50 - 34.00 SM, silty SAND, fine-medium grained, moist, loose, gray-red-brown, micaceous, 6" red-brown sandy clay lens	SM	26.50	4	10.00/10.00
				344.6		
		34.00 - 36.50 SM, silty SAND, fine-medium grained, gray, loose	SM	34.00		
				342.1		
		36.50 - 41.00 CL, red CLAY, moist to saturated, stiff, W>PL, micaceous	CL	36.50	5	9.50/10.00
				337.6		
		41.00 - 44.00 SM, silty SAND, brown-tan-red, moist	SM	41.00		
				334.6		
		44.00 - 46.50 SM, silty SAND with poorly sorted gravel	SM	44.00		
				332.1		
		46.50 - 49.00 CL, gravelly CLAY, moist-saturated, gray, very soft to soft	CL	46.50	6	10.00/10.00
				329.6		
		49.00 - 49.50	TWR			
50				49.50		

Log continued on next page

PZ-63I MONITORING WELL DIAGRAM and NOTES

Bentonite Grout

3/8" Pel-Plug Benotite Pellets

GP-1 Filter Sand

0.010" Slotted Schedule 40 PVC U-pack Screen

WELL CONSTRUCTION DETAILS

WELL CASING
Interval: 0'-46.5'
Material: Schedule 40 PVC
Diameter: 2"
Joint Type: Threaded

WELL SCREEN
Interval: 46.5'-56.5'
Material: 0.010" Slotted
Diameter: 2"
Slot Size: 0.010"
End Cap: 3"

FILTER PACK
Interval: 43.8'-56.5'
Type: U-Pack GP-1 Sand
Quantity: 3.5 x 14L bags

FILTER PACK SEAL
Interval: 41.4'-43.8'
Type: 3/8" PEL-Plug Bentonite Pellets
Quantity: 0.5 x 5 gal bucket

ANNULUS SEAL
Interval: 0'-41.4'
Type: Aquaguard bentonite grout
Quantity: 2 bags + 40 gal H2O

WELL COMPLETION
Pad: 4' x 4'
Protective Casing: Aluminum

DRILLING METHODS
Soil Drill: 4-inch Sonic
Rock Drill: 4-inch Sonic
Sample Type: Rotosonic

LOG SCALE: 1 in = 6.5 ft
DRILLING COMPANY: Cascade Environmental
DRILLER: David Wilcox

GA INSPECTOR: Karim Minkara, PG
CHECKED BY: Brian Steele, PG
DATE: 2/11/22

WSP GOLDER

BOREHOLE RECORD PLANT BRANCH PZ-57I-PZ-63I.GPJ PIEDMONT.GDT 2/18/22

RECORD OF BOREHOLE PZ-63I

SHEET 2 of 2

PROJECT: SCS Plant Branch
PROJECT NUMBER: 166625421
DRILLED DEPTH: 56.50 ft
LOCATION: Milledgeville, GA

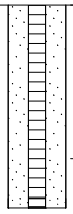
DRILL RIG: TSI 150
DATE STARTED: 1/5/22
DATE COMPLETED: 1/5/22

NORTHING: 1,161,371.2
EASTING: 2,562,233.1
GS ELEVATION: 378.6
TOC ELEVATION: 381.31 ft

DEPTH W.L.:36.64
ELEVATION W.L.: 344.67
DATE W.L.:1/5/22
TIME W.L.:14:10

DEPTH (ft)	ELEVATION (ft)	DESCRIPTION	USCS	GRAPHIC LOG	ELEV. / DEPTH (ft)	SAMPLE NO.	PHOTO	REC
50		Transitionally weathered rock (TWR), sandy GRAVEL, very loose sand with poorly sorted gravel, weathered biotite gneiss 49.50 - 56.50 (BEDROCK) Biotite Gneiss, fresh to slightly weathered with decreasing weathering with depth, coarse-fine grained, strong *(Continued)*	Bedrock			6		10.00 / 10.00
55	325				322.1			
		Boring completed at 56.50 ft						
60	320							
65	315							
70	310							
75	305							
80	300							
85	295							
90	290							
95	285							
100	280							

PZ-63I MONITORING WELL DIAGRAM and NOTES



WELL CONSTRUCTION DETAILS

WELL CASING
Interval: 0'-46.5'
Material: Schedule 40 PVC
Diameter: 2"
Joint Type: Threaded

WELL SCREEN
Interval: 46.5'-56.5'
Material: 0.010" Slotted
Diameter: 2"
Slot Size: 0.010"
End Cap: 3"

FILTER PACK
Interval: 43.8'-56.5'
Type: U-Pack GP-1 Sand
Quantity: 3.5 x 14L bags

FILTER PACK SEAL
Interval: 41.4'-43.8'
Type: 3/8" PEL-Plug Bentonite Pellets
Quantity: 0.5 x 5 gal bucket

ANNULUS SEAL
Interval: 0'-41.4'
Type: Aquaguard bentonite grout
Quantity: 2 bags + 40 gal H2O

WELL COMPLETION
Pad: 4' x 4'
Protective Casing: Aluminum

DRILLING METHODS
Soil Drill: 4-inch Sonic
Rock Drill: 4-inch Sonic
Sample Type: Rotosonic

LOG SCALE: 1 in = 6.5 ft
DRILLING COMPANY: Cascade Environmental
DRILLER: David Wilcox

GA INSPECTOR: Karim Minkara, PG
CHECKED BY: Brian Steele, PG
DATE: 2/18/22

WSP GOLDER

BOREHOLE RECORD PLANT BRANCH PZ-571-PZ-63I.GPJ PIEDMONT.GDT 2/18/22

GOLDER

WELL DEVELOPMENT FIELD RECORD

PROJECT NAME / NUMBER: 1666 25921

WELL ID: PZ-62i

WELL DIA (in): 2

DEVELOPED BY: L. McKinley

DATE OF INSTALL: 1-6-22

WL BEFORE DEVEL: 39.06 (WL) 1-19-22 (DATE) 1150 (TIME)

WL AFTER DEVEL: 39.03 (WL) 1-20-22 (DATE) 1056 (TIME)

STARTED DEVEL: 1-19-22 (DATE)

COMPLETED DEVEL: 1-20-22 (DATE) 1027 (TIME)

WELL DEPTH BEFORE DEVEL: 72.82' BTOC

WELL DEPTH AFTER DEVEL: 72.90

STANDING WATER COLUMN (FT): 33.76

STANDING WELL VOLUME: 5.54 gal

SCREEN INTERVAL: 62.82' – 72.82' BTOC

DRILLING WATER LOSS: — gal

Well volume

0.163 x 33.76 = 5.54 gal

DATE/TIME	VOLUME REMOVED (gal)	PUMPING RATE (ml/min)	DTW (ft bgs)	pH (s.u.)	Sp. Cond (mS/cm)	TEMP (°C)	Turbidity (NTU)	Color	RDO (mg/L)	ORP (mV)	REMARKS
1-19-22 1150	0	1500 ml	44.08	–	–	–	>1000	brown	–	–	Surge well
1240	1.98	1500 ml	48.54	6.86	0.27	19.73	>1000	brown	7.18	43.1	Surge well
1255	3.92	"	46.17	6.27	0.94	19.17	165.9	cloudy		34.3	RDO = 3.75 mg/L, surge
1300	4.90	"	47.90								pump stopped, allowed to recharge
1400	4.90	2000 ml	39.11	–	–	–	>1000	brown			pump on, surge
1415		3000 ml	45.75	6.63	0.90	19.82	>1000	brown	10.47	-16.6	surge
1430		3,000	49.68	6.63	0.97	18.53	60	cloudy	10.35	-5.9	raise pump 2 feet, surge, lower pump
1435	33.67	700 ml	46.09	6.41	0.96	20.13	97.3	cloudy	10.03	26.9	
1445		"	41.52	6.35	0.94	21.92	108.9	cloudy	5.68	46.9	
1500		"	41.09	6.09	0.97	22.57	27.3	clear	4.51	44.4	
1505	39.37	800	42.41	5.98	0.98	21.12	15.4	clear	3.54	46.9	surge, raise pump 2 ft
1508	40	2000 ml	43.13	6.02	0.99	19.90	761	cloudy	3.48	44.3	
1530	51.62	2000 ml	49.76	6.36	0.98	21.86	15.5	clear	6.54	35.9	surge, raise pump 2 ft
1535		"	47.52	6.84	0.98	20.98	403	cloudy	4.34	-5.0	
~~1538~~		~~"~~		~~6.54~~	~~0.96~~			~~cloudy~~	~~4.37~~	~~9.8~~	
1540		1000	49.38	6.67	1.01	19.79	138	cloudy	4.94	-3.3	
1545		2000	48.17	6.60	1.00	18.51	34.5	clear	4.88	3.2	surge, 2 ft pump moved up. top screen
1550		2000	45.72	6.35	0.97	18.29	135	cloudy	6.53	27.3	
1600		2000	47.15	6.05	1.01	18.01	73.8	clear	6.57	37.9	move pump to middle of well screen, surge
1605	70.11	1000	46.18	6.36	0.93	19.60	745	cloudy	10.63	24.7	
1615	72.35	450	41.30	5.99	1.00	19.24	39.7	clear	3.39	50.4	
1625	"	450	41.04	5.79	0.98	19.11	24.9	clear	3.46	55.1	set up low flow
1630	74.53	400	40.94	5.75	1.01	19.19	12.7	clear	2.43	56.3	
1635		400	40.38	5.78	1.01	19.09	19.7	clear	2.24	53.6	
1640		400	40.57	5.94	1.01	19.06	4.04	clear	2.21	57.3	
1645		400	40.41	5.80	1.00	19.99	16.4	clear	2.09	51.0	
1650	76.64	400	40.42	5.90	1.01	18.53	20.3	clear	1.80	47.3	
1700	77.64	600	41.94	5.90	1.01	19.91	28.8	clear	1.46	49.2	
1705	78.48	550	41.36	5.80	1.01	19.40	21.6	clear	1.15	38.1	pump stopped, let settle overnight

78.48 = TOTAL VOLUME REMOVED (gal)

DEVELOPMENT METHOD: Redi-flo / Reclaimer pump

NOTES:

GOLDER

WELL DEVELOPMENT FIELD RECORD

Page 2 of 2

PROJECT NAME / NUMBER: 16662592I
WELL DIA. (in): 2
DEVELOPED BY: C. Mikijus
W.L. BEFORE DEVEL.: 39.06 (WL) 1-19-22 (DATE) 1450 (TIME)
STARTED DEVEL.: 1-19-22 (DATE) [illegible] (TIME)
WELL DEPTH BEFORE DEVEL.: 72.82' BTOC
STANDING WATER COLUMN (FT.): 33.76
SCREEN INTERVAL: 62.82 - 72.82' BTOC

WELL ID: PZ-62i
DATE OF INSTALL: 1-6-22
WL AFTER DEVEL.: 39.01 (WL) 1-20-22 (DATE) 1035 (TIME)
COMPLETED DEVEL.: 1-20-22 (DATE) 1027 (TIME)
WELL DEPTH AFTER DEVEL.: 72.80' BTOC
STANDING WELL VOLUME: 5.54 gal
SPILLING WATER LOSS: — gal

DATE/TIME	VOLUME REMOVED (gal)	PUMPING RATE (gpm / ml)	DTW (ft bgs)	pH (s.u.)	Sp. Cond (mS/cm)	TEMP (°C)	Turbidity (NTU)	Color	DO (mg/L)	ORP (mV)	REMARKS
1-20-22	79.49		[illegible]								
913		500ml	39.03	6.09	1.03	17.85	4.62	clear	2.81	93.7	pump on
920		"	41.15	5.92	1.05	17.85	23.1	clear	1.71	64.3	
930		"	41.21	5.95	1.06	17.86	5.74	clear	0.99	44.4	
940		"	41.16	5.93	1.07	17.81	2.56	clear	0.70	39.3	
950		"	41.22	5.96	1.06	19.01	3.00	clear	0.49	34.9	
954			41.19				4.41	clear			low flow started
1005			41.09				4.36	clear			
1015			41.11				3.26	clear			
1025			41.15				2.79	clear			
1027	83.19										low flow ended

98.25 = TOTAL VOLUME REMOVED (gal)

DEVELOPMENT METHOD: Redi-flo pump

NOTES:

Low-Flow Test Report:

Test Date / Time: 1/20/2022 9:54:56 AM
Project: Plant Branch
Operator Name: C. Mikilitus

Location Name: PZ-62i **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 62.82 ft** **Total Depth: 72.82 ft** **Initial Depth to Water: 39.06 ft**	**Tubing Type: Polyethylene** **Estimated Total Volume Pumped: 15000 ml** **Flow Cell Volume: 90 ml** **Final Flow Rate: 500 ml/min** **Final Draw Down: 2.09 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 728550**

Test Notes:

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 10 %	+/- 10	+/- 10	+/- 5	
1/20/2022 9:54 AM	00:00	5.85 pH	18.11 °C	1,062.1 µS/cm	0.45 mg/L	4.41	32.2 mV	41.18 ft	500.00 ml/min
1/20/2022 9:57 AM	03:00	5.84 pH	18.08 °C	1,051.0 µS/cm	0.40 mg/L	--	31.1 mV	--	500.00 ml/min
1/20/2022 10:00 AM	06:00	5.83 pH	18.02 °C	1,050.4 µS/cm	0.37 mg/L	--	29.5 mV	--	500.00 ml/min
1/20/2022 10:03 AM	09:00	5.82 pH	18.13 °C	1,051.2 µS/cm	0.37 mg/L	--	28.2 mV	--	500.00 ml/min
1/20/2022 10:06 AM	12:00	5.81 pH	18.26 °C	1,046.4 µS/cm	0.33 mg/L	4.76	26.8 mV	41.09 ft	500.00 ml/min
1/20/2022 10:09 AM	15:00	5.80 pH	18.21 °C	1,049.6 µS/cm	0.34 mg/L	--	25.7 mV	--	500.00 ml/min
1/20/2022 10:12 AM	18:00	5.79 pH	18.20 °C	1,049.0 µS/cm	0.29 mg/L	--	25.0 mV	--	500.00 ml/min
1/20/2022 10:15 AM	21:00	5.79 pH	18.26 °C	1,047.3 µS/cm	0.28 mg/L	3.26	23.3 mV	41.11 ft	500.00 ml/min
1/20/2022 10:18 AM	24:00	5.77 pH	18.22 °C	1,047.4 µS/cm	0.27 mg/L	--	22.8 mV	--	500.00 ml/min
1/20/2022 10:21 AM	27:00	5.78 pH	18.35 °C	1,045.6 µS/cm	0.26 mg/L	--	20.9 mV	--	500.00 ml/min
1/20/2022 10:24 AM	30:00	5.77 pH	18.22 °C	1,041.7 µS/cm	0.27 mg/L	2.29	20.1 mV	41.15 ft	500.00 ml/min

Samples

Sample ID:	Description:

GOLDER

WELL DEVELOPMENT FIELD RECORD

PROJECT NAME / NUMBER: 1666625431   WELL ID: PZ - 63i

WELL DIA (in): 2

DEVELOPED BY: [illegible]   DATE OF INSTALL: 1-5-22

W.L. BEFORE DEVEL: 35.48 / 1-18-22 / 1302 (WL / DATE / TIME)   W.L. AFTER DEVEL: 35.36 / 1-19-22 / 1125 (WL / DATE / TIME)

STARTED DEVEL: 1-18-22 / 1430 (DATE / TIME)   COMPLETED DEVEL: 1-19-22 / 1056 (DATE / TIME)

WELL DEPTH BEFORE DEVEL: ~~59.48~~ 59.48' BTOC   WELL DEPTH AFTER DEVEL: 59.45

STANDING WATER COLUMN (FT): [illegible]   STANDING WELL VOLUME: 3.31 gal

SCREEN INTERVAL: 49.49' - 53.59' BTOC   DRILLING WATER LOSS: — gal

DATE/TIME	VOLUME REMOVED (gal)	PUMPING RATE (gpm)	DTW (ft bgs)	pH (s.u.)	Sp. Cond (mS/cm)	TEMP (°C)	Turbidity (NTU)	Color	DO (mg/L)	ORP (mV)	REMARKS
1430 pump on		400 ml					over				
1435			50.8	7.43	0.28	18.70	649	Cloudy	11.02	38.4	
1455	~~[illegible]~~	400 ml	54.38	7.43	0.36	18.97	31.5	Cloudy	9.97	11.0	
1505		—	56.70								stopped development for recharge
1510			47.79								
1515			49.86								
1525	~~[illegible]~~		40.79				[illegible]				pump on
1530	36000 ml	450 ml	49.60	6.91	0.39	19.52	117	Cloudy	9.52	21.9	
1545		450 ml	53.54	6.07	0.60	19.08	63	Cloudy	7.33	59.4	
1600	52500	650 ml	42.61	5.96	0.58	20.49	61	Cloudy	6.09	56.7	move pump up 3 ft
1615	102350	620 ml	45.26	5.85	0.59	19.89	11.1	Clear	4.70	59.7	
1630		"	49.63	6.25	0.59	17.40	34.2	Clear	9.49	55.5	
1635		"	48.18								stopped development for recharge
1645	120150	1000 ml	40.52	6.36	0.60	17.68	911	Cloudy	10.08	52.7	pump on moved up 2 ft
1655		"	46.40								
1700		"	49.8				34.8				
1715	160,350 ml	"	50.38								
	160,350 ml =	39.36 gallons									

14.45 = TOTAL VOLUME REMOVED (gal)

DEVELOPMENT METHOD: Reclaimer pump

NOTES:

GOLDER

WELL DEVELOPMENT FIELD RECORD

Page 2 of 2

PROJECT NAME / NUMBER: 1666754 21
WELL DIA (in): 2
DEVELOPED BY: C. M[illegible]
W.L. BEFORE DEVEL: 39.29 / 1-19-22 / 908 (WL / DATE / TIME)
STARTED DEVEL: 1-19-22 / 1930 (DATE / TIME)
WELL DEPTH BEFORE DEVEL: 59.43 BTOC
STANDING WATER COLUMN (FT.): 20.14
SCREEN INTERVAL: 49.45 - 59.45 BTOC

WELL ID: PZ-63i
DATE OF INSTALL: 1-5-22
WL AFTER DEVEL: 39.36 / 1-19-22 / 1015 (WL / DATE / TIME)
COMPLETED DEVEL: 1-19-22 / 1055 (DATE / TIME)
WELL DEPTH AFTER DEVEL: 59.48 BTOC
STANDING WELL VOLUME: 3.31 gal
DRILLING WATER LOSS: -- gal

20.14 X 0.164 =
Well Volume = 3.31 gal

DATE/TIME	VOLUME REMOVED (gal)	PUMPING RATE (gpm)	DTW (ft bgs)	pH (s.u.)	Sp. Cond (mS/cm)	TEMP (°C)	Turbidity (NTU)	Color	DO (mg/L)	ORP (mV)	REMARKS
1-19-22	39.85 gal										
~~1-19-22 1900~~ PM		1500									1-19-22 1905 pump on surged
915	42.39	1500 ml	43.74	6.31	0.62	15.94	416	cloudy	10.32	41.5	move pump off [illegible] and surge
925	47.74	1500 ml	45.66	6.56	0.61	15.76	27.9	clear	10.57	20.3	
945	53.05	1000 ml	46.84	6.78	0.60	15.68	78	cloudy	10.56	-16.5	move pump down to middle of scr[illegible] and surge
			47.48				38.3	clear			
1010	62.24	240 ml	43.09	5.79	0.59	15.81	=	clear	4.88	47.7	low flow setting up
1020		240 ml	41.06	5.75	0.59	16.96	12.9	clear	4.35	55.2	
1025		240 ml	40.85	5.71	0.59	15.99	8.91	clear	3.90	58.4	
1030		240 ml	40.72	5.69	0.59	16.12	5.50	clear	3.40	61.1	
1035		"	40.70				3.37				low flow sampled
1040		"	40.69				4.63				
1045		"	40.59				3.03				
1050		"	40.58				2.56				
1055	65.14	"	40.57				2.45				pump off End low Flow

65.14 = TOTAL VOLUME REMOVED (gal)

DEVELOPMENT METHOD: Reclaimer pump

NOTES:

Low-Flow Test Report:

Test Date / Time: 1/19/2022 10:35:24 AM
Project: Plant Branch
Operator Name: C. Mikilitus

Location Name: PZ-63i **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 4948 ft** **Total Depth: 59.48 ft** **Initial Depth to Water: 39.29 ft**	**Pump Type: Waterra** **Tubing Type: Polyethylene** **Estimated Total Volume Pumped: 4320 ml** **Flow Cell Volume: 90 ml** **Final Flow Rate: 240 ml/min Final Draw Down: 1.24 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 728550**

Test Notes:

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 10 %	+/- 10	+/- 10	+/- 5	
1/19/2022 10:35 AM	00:00	5.68 pH	16.33 °C	593.54 µS/cm	3.80 mg/L	3.37	58.4 mV	40.70 ft	240.00 ml/min
1/19/2022 10:38 AM	03:00	5.68 pH	16.23 °C	586.08 µS/cm	3.65 mg/L	--	58.7 mV	--	240.00 ml/min
1/19/2022 10:41 AM	06:00	5.68 pH	16.12 °C	589.77 µS/cm	3.59 mg/L	4.83	58.7 mV	40.68 ft	240.00 ml/min
1/19/2022 10:44 AM	09:00	5.67 pH	16.38 °C	586.52 µS/cm	3.46 mg/L	3.03	58.9 mV	40.59 ft	240.00 ml/min
1/19/2022 10:47 AM	12:00	5.66 pH	16.16 °C	586.52 µS/cm	3.41 mg/L	--	59.2 mV	--	240.00 ml/min
1/19/2022 10:50 AM	15:00	5.66 pH	16.34 °C	585.22 µS/cm	3.31 mg/L	2.56	59.2 mV	40.51 ft	240.00 ml/min
1/19/2022 10:53 AM	18:00	5.66 pH	16.38 °C	586.92 µS/cm	3.22 mg/L	2.45	59.3 mV	40.53 ft	240.00 ml/min

Samples

Sample ID:	Description:

Daily Calibration Log

Project Plant Branch Well Development 1666254.21
Field Staff C. Mullins

Instrument Calibration

		Date	1-18-22	1-19-22	1-20-22	1-21-22
		Time	1325	830	810	905
Parameter	**Units**	**Standard**	**SmarTROLL SN 723550 iPad #**	**SmarTROLL SN 718990 iPad #**	**SmarTROLL SN 723520 iPad #**	**SmarTROLL SN iPad #**
DO	% saturation	100	100.3	99.74	101.98	99.98
Conductivity	us/cm	4490	4445.1	4336.6	4413.0	4434.8
pH	S.U.	4.00	4.03	4.03	4.01	4.03
pH	S.U.	7.00	7.03	7.11	7.05	7.03
pH	S.U.	10.00	10.01	10.31	9.99	10.01
ORP	mV	228.00	234.5	228.3	215.4	226.9

Turbidity	**Units**	**Standard**	**LaMotte SN 2283**	**LaMotte SN 2283**	**LaMotte SN 2283**	**LaMotte SN 2283**
	NTU	0.0	0.04	0.03	0.13	0.42
	NTU	1.0	1.01	0.95	1.06	1.44
	NTU	10.0	10.13	9.20	11.21	9.93

		Date				
		Time				
Parameter	**Units**	**Standard**	**SmarTROLL SN iPad #**	**SmarTROLL SN iPad #**	**SmarTROLL SN iPad #**	**SmarTROLL SN iPad #**
DO	% saturation	100				
Conductivity	us/cm	4490				
pH	S.U.	4.00				
pH	S.U.	7.00				
pH	S.U.	10.00				
ORP	mV	228.00				

Turbidity	**Units**	**Standard**	**LaMotte SN**	**LaMotte SN**	**LaMotte SN**	**LaMotte SN**
	NTU	0.0				
	NTU	1.0				
	NTU	10.0				

Notes: DO - Dissolved Oxygen; us/cm - microsiemens/centimeter; ORP - oxidation-reduction potential; mV - millivolts; NTU - Nphelometric Turbidity Units; NC - Not calibrated

GOLDER

APPENDIX C

Certified Well Survey

METRO ENGINEERING & SURVEYING CO., INC.
SURVEYORS · ENGINEERS · PHOTOGRAMMETRISTS

1459 Highway 20 West • McDonough, GA 30253
phone: 770-707-0777 fax: 770-707-0756
WWW.METRO-ENGINEERING.COM

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 received via a cellular modem utilizing the Leica "Smartnet" RTK 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:

Leica GS18T 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 Leica GS18T GPS (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: 2/7/22

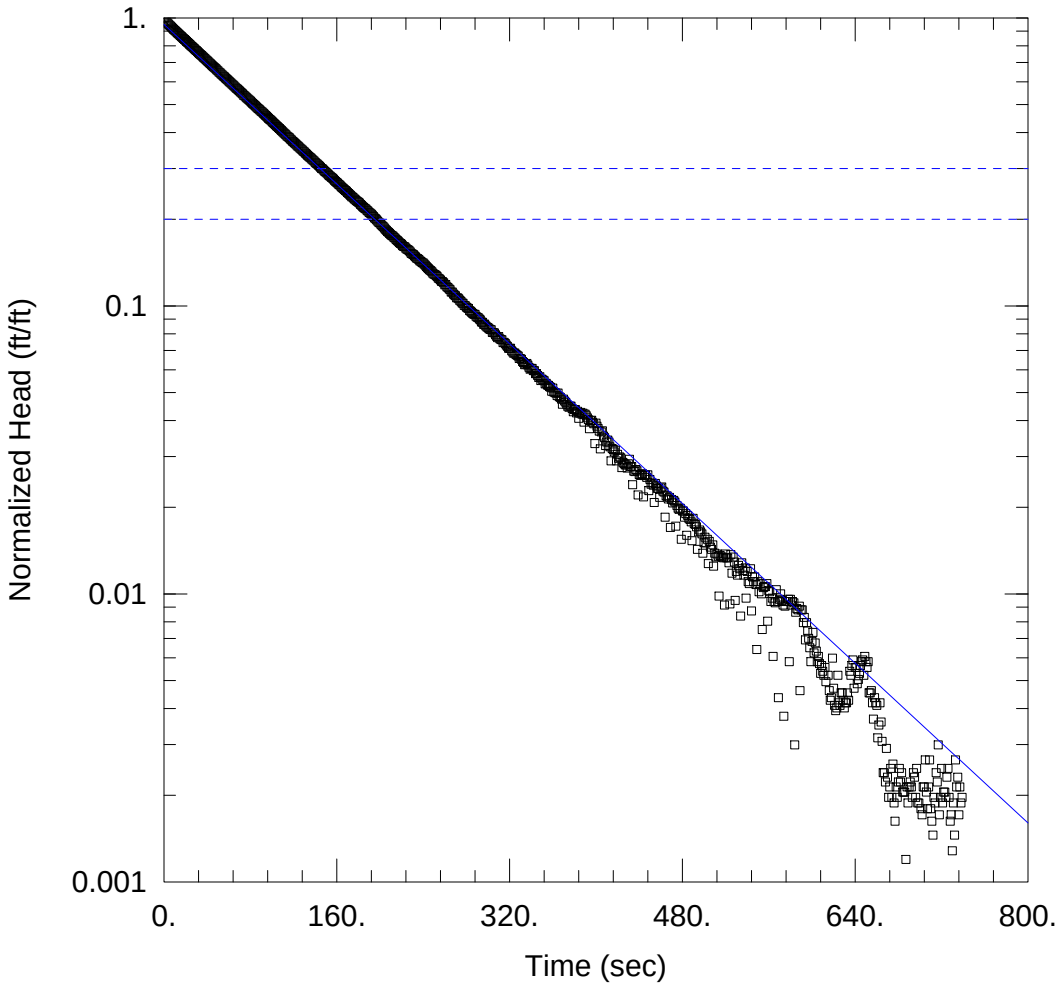
GEORGIA REGISTERED LAND SURVEYOR JAMES RANDOLPH GREEN

Plant Branch
Monitoring Well Locations
February 1, 2022

Well ID	LATITUDE	LONGITUDE	NAIL NORTH	NAIL EAST	NAIL ELEV	PVC NORTHING	PVC EASTING	TOP PVC ELEVATION	ELEV AT BASE CONC/GRD
PZ-62I	N33.190107	W83.297965	1161479.41	2562334.99	378.05	1161478.9	2562336.0	380.95	378.1
PZ-62II	N33.189813	W83.298304	1161371.80	2562232.29	378.56	1161371.2	2562233.1	381.31	378.6

APPENDIX C

Slug Test Data Plots



PZ-57I TEST 2

Data Set: N:\...\PZ-57I Test 2 BR.aqt
Date: 06/14/22 Time: 14:46:40

PROJECT INFORMATION

Company: Geosyntec
Client: GA-Power
Project: GW8862
Location: Plant Branch
Test Well: PZ-57I Test 2
Test Date: 6/1/2022

AQUIFER DATA

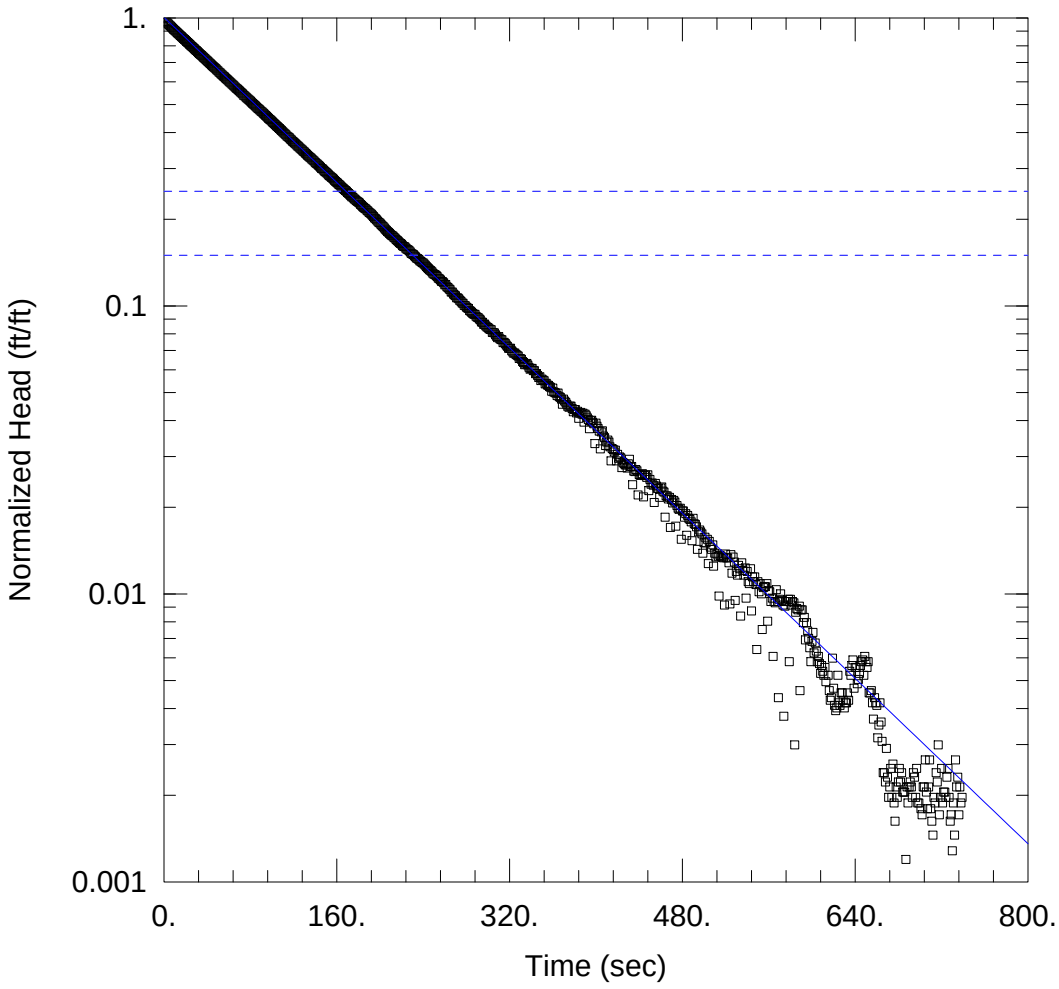
Saturated Thickness: 45.94 ft
Anisotropy Ratio (Kz/Kr): 0.1

WELL DATA (PZ-57I Test 2)

Initial Displacement: 11.7 ft
Total Well Penetration Depth: 80.87 ft
Casing Radius: 0.083 ft
Static Water Column Height: 45.94 ft
Screen Length: 10. ft
Well Radius: 0.25 ft

SOLUTION

Aquifer Model: Unconfined
Solution Method: Bouwer-Rice
K = 1.037 ft/day
y0 = 11.11 ft



PZ-57I TEST 2

Data Set: N:\...\PZ-57I Test 2 HS.aqt
Date: 06/14/22 Time: 14:47:30

PROJECT INFORMATION

Company: Geosyntec
Client: GA-Power
Project: GW8862
Location: Plant Branch
Test Well: PZ-57I Test 2
Test Date: 6/1/2022

AQUIFER DATA

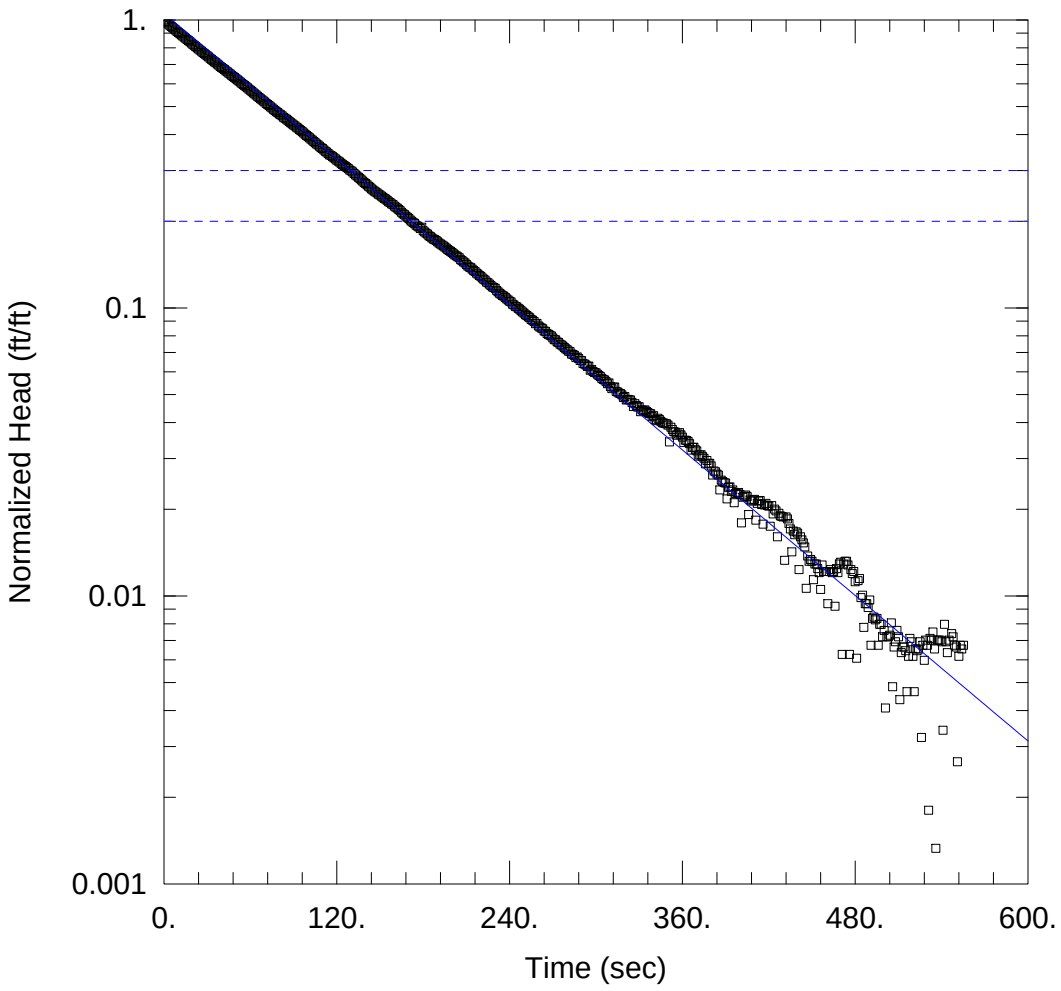
Saturated Thickness: 45.94 ft Anisotropy Ratio (Kz/Kr): 0.1

WELL DATA (PZ-57I Test 2)

Initial Displacement: 11.7 ft
Total Well Penetration Depth: 80.87 ft
Casing Radius: 0.083 ft
Static Water Column Height: 45.94 ft
Screen Length: 10. ft
Well Radius: 0.25 ft

SOLUTION

Aquifer Model: Unconfined
Solution Method: Hvorslev
K = 1.183 ft/day
y0 = 11.76 ft



PZ-57I TEST 1

Data Set: N:\...\PZ-57I Test1 BR.aqt
Date: 06/14/22 Time: 14:43:37

PROJECT INFORMATION

Company: Geosyntec
Client: GA-Power
Project: GW8862
Location: Plant Branch
Test Well: PZ-57I Test 1
Test Date: 6/1/2022

AQUIFER DATA

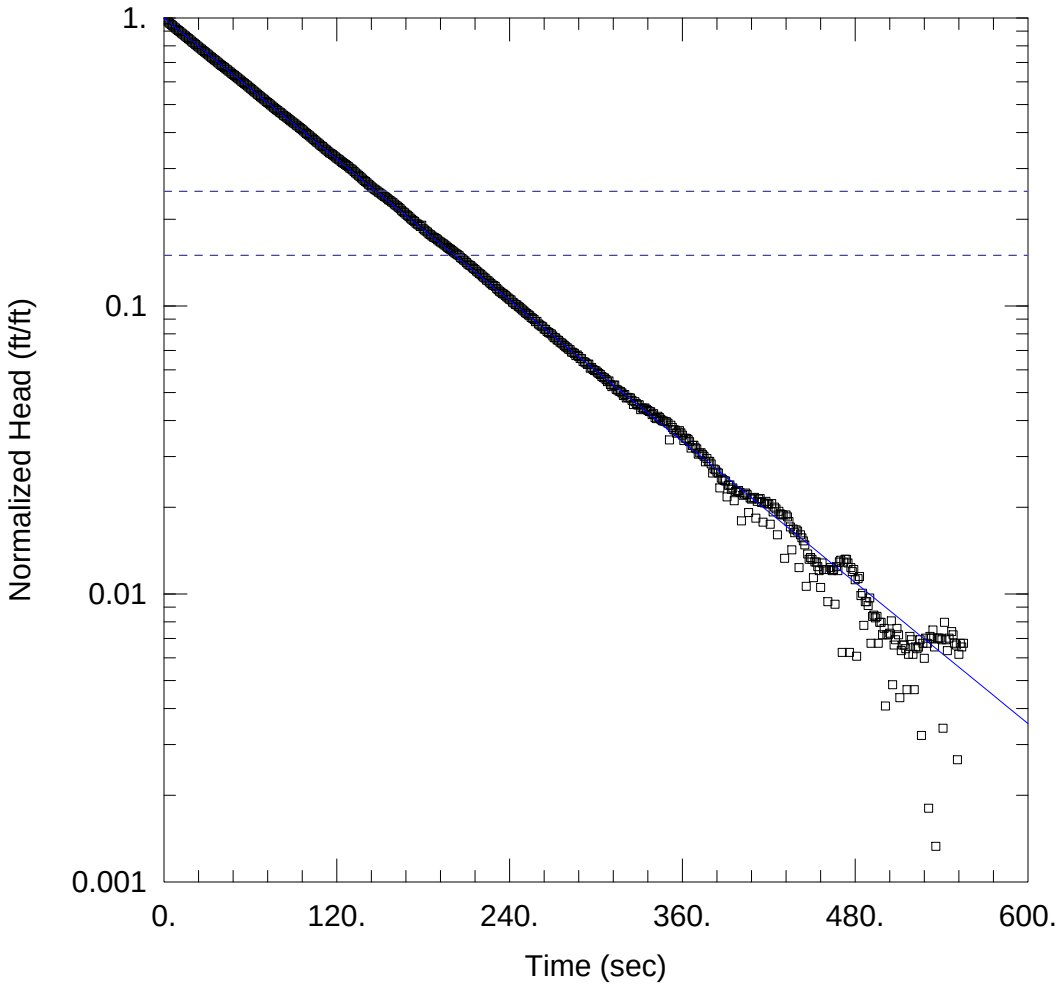
Saturated Thickness: 45.92 ft
Anisotropy Ratio (Kz/Kr): 0.1

WELL DATA (PZ-57I Test 1)

Initial Displacement: 10.54 ft
Total Well Penetration Depth: 80.87 ft
Casing Radius: 0.083 ft
Static Water Column Height: 45.92 ft
Screen Length: 10. ft
Well Radius: 0.25 ft

SOLUTION

Aquifer Model: Unconfined
Solution Method: Bouwer-Rice
K = 1.259 ft/day
y0 = 11.1 ft



PZ-57I TEST 1

Data Set: N:\...\PZ-57I Test1 HS.aqt
Date: 06/14/22 Time: 14:45:00

PROJECT INFORMATION

Company: Geosyntec
Client: GA-Power
Project: GW8862
Location: Plant Branch
Test Well: PZ-57I Test 1
Test Date: 6/1/2022

AQUIFER DATA

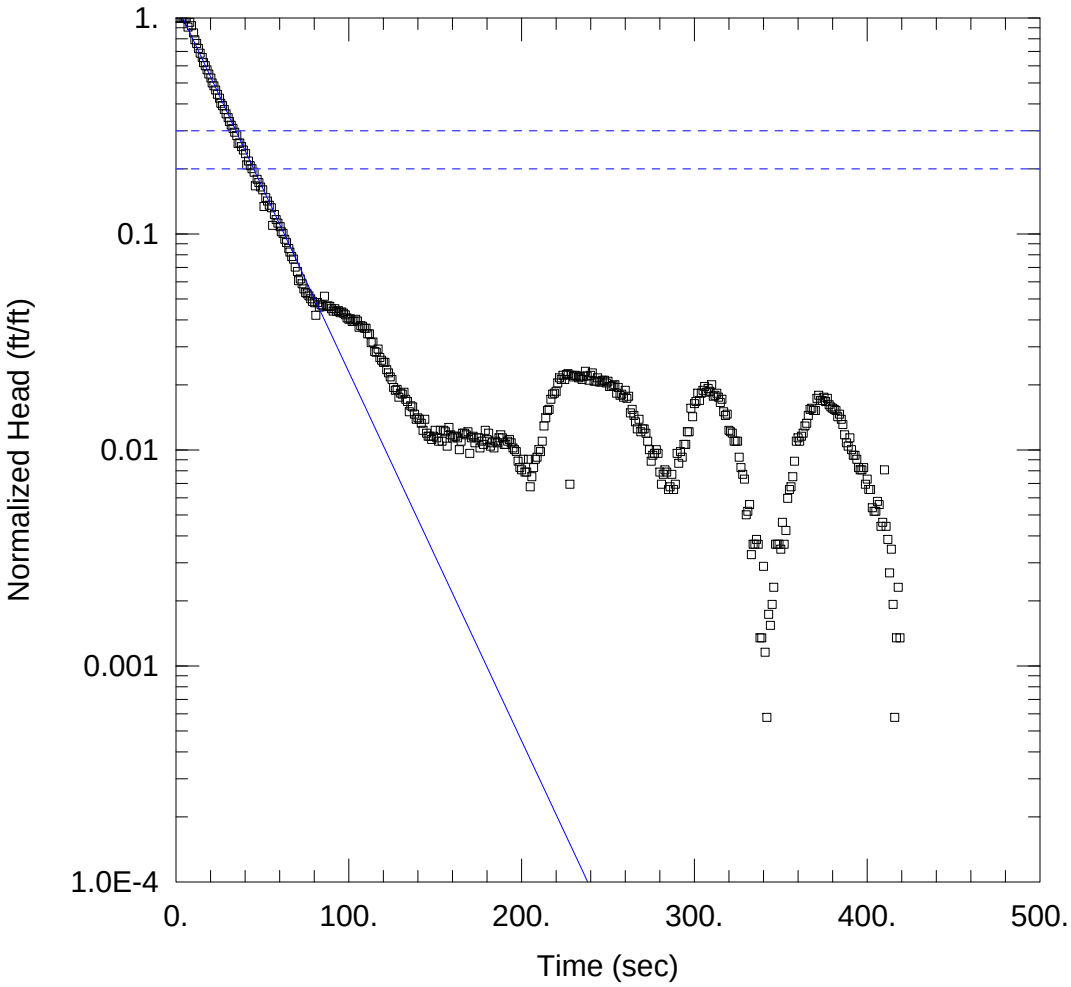
Saturated Thickness: 45.92 ft Anisotropy Ratio (Kz/Kr): 0.1

WELL DATA (PZ-57I Test 1)

Initial Displacement: 10.54 ft
Total Well Penetration Depth: 80.87 ft
Casing Radius: 0.083 ft
Static Water Column Height: 45.92 ft
Screen Length: 10. ft
Well Radius: 0.25 ft

SOLUTION

Aquifer Model: Unconfined
Solution Method: Hvorslev
K = 1.346 ft/day
y0 = 10.53 ft



PZ-60I TEST 2

Data Set: N:\...\PZ-60I Test 2 BR.aqt
Date: 06/14/22 Time: 14:51:29

PROJECT INFORMATION

Company: Geosyntec
Client: GA-Power
Project: GW8862
Location: Plant Branch
Test Well: PZ-60I Test 2
Test Date: 6/1/2022

AQUIFER DATA

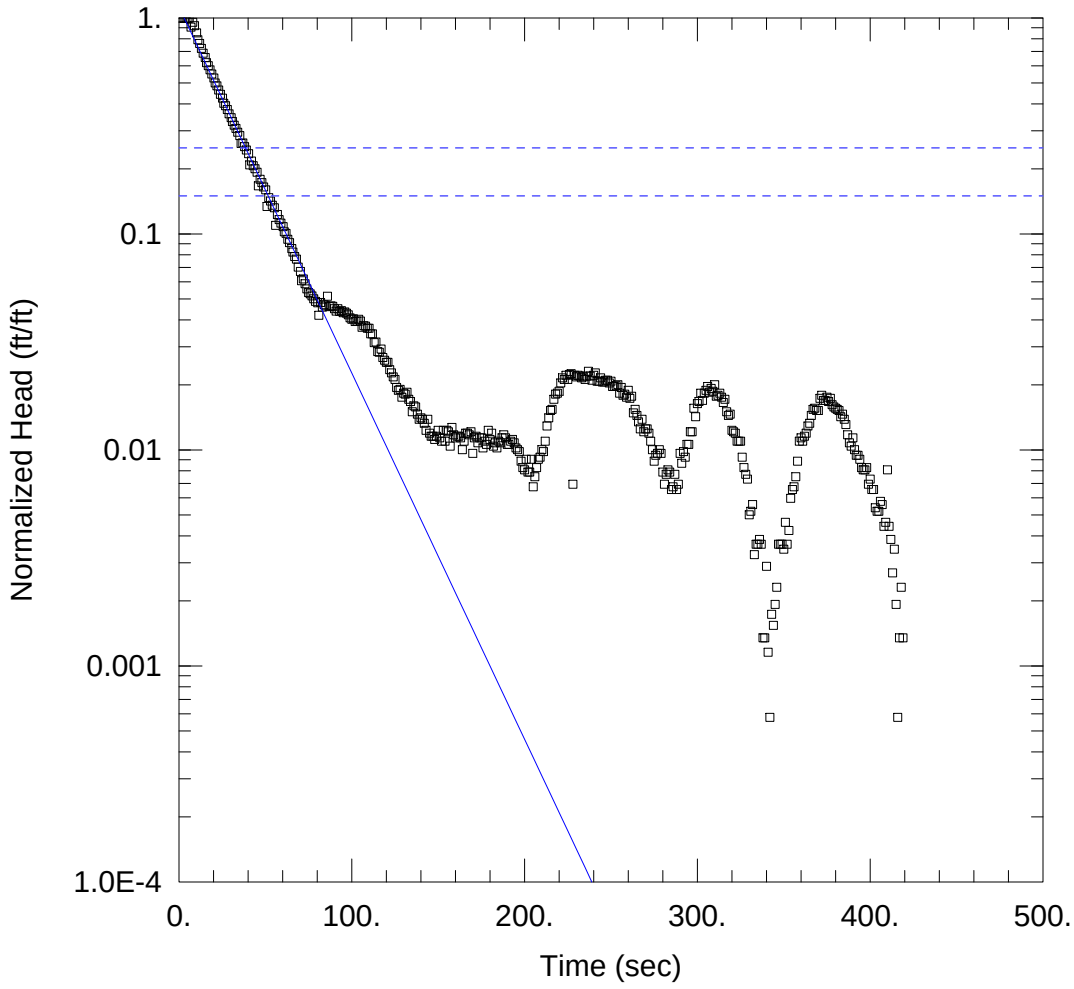
Saturated Thickness: 26.69 ft Anisotropy Ratio (Kz/Kr): 0.1

WELL DATA (PZ-60I Test 2)

Initial Displacement: 5.19 ft
Total Well Penetration Depth: 63.73 ft
Casing Radius: 0.083 ft
Static Water Column Height: 26.69 ft
Screen Length: 10. ft
Well Radius: 0.25 ft

SOLUTION

Aquifer Model: Unconfined
Solution Method: Bouwer-Rice
K = 4.967 ft/day
y0 = 6.083 ft



PZ-60I TEST 2

Data Set: N:\...\PZ-60I Test 2 HS.aqt
Date: 06/14/22 Time: 14:52:46

PROJECT INFORMATION

Company: Geosyntec
Client: GA-Power
Project: GW8862
Location: Plant Branch
Test Well: PZ-60I Test 2
Test Date: 6/1/2022

AQUIFER DATA

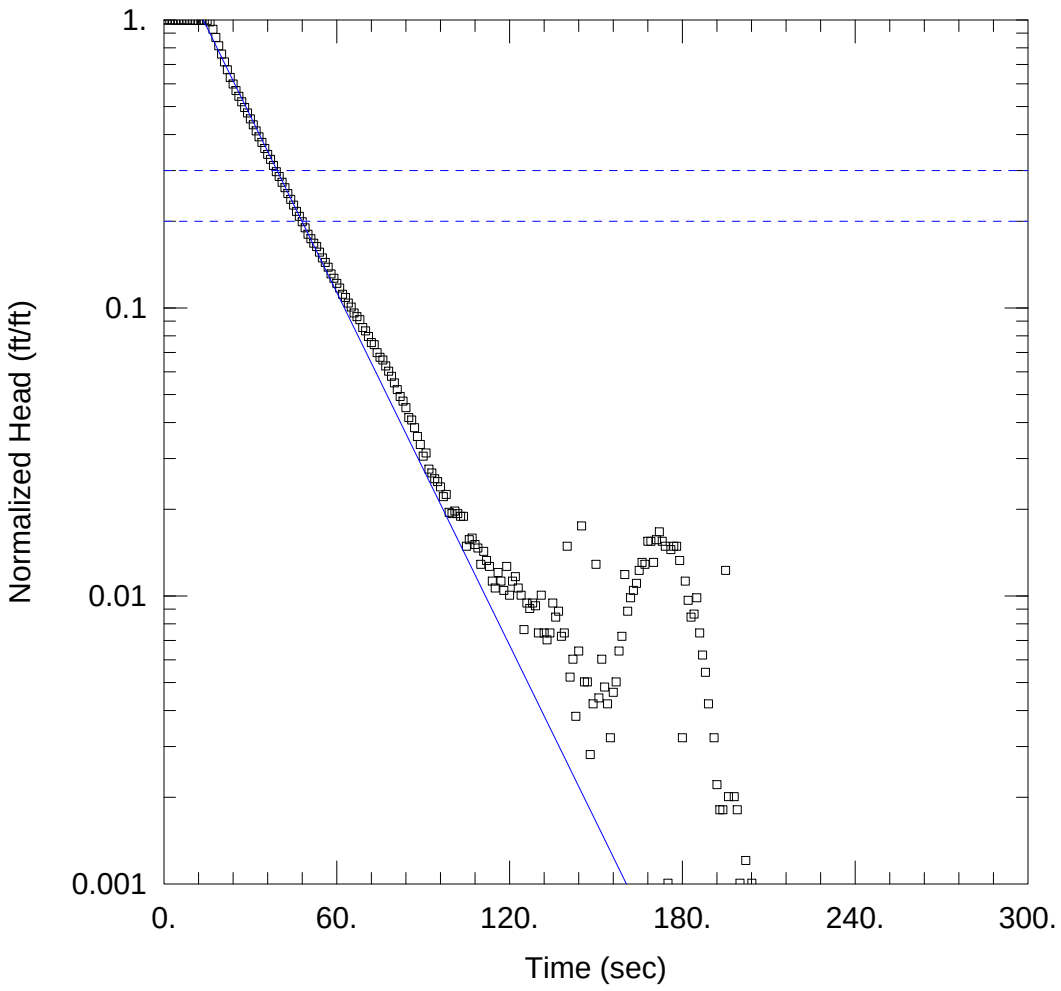
Saturated Thickness: 26.69 ft
Anisotropy Ratio (Kz/Kr): 0.1

WELL DATA (PZ-60I Test 2)

Initial Displacement: 5.19 ft
Total Well Penetration Depth: 63.73 ft
Casing Radius: 0.083 ft
Static Water Column Height: 26.69 ft
Screen Length: 10. ft
Well Radius: 0.25 ft

SOLUTION

Aquifer Model: Unconfined
Solution Method: Hvorslev
K = 5.588 ft/day
y0 = 5.835 ft



PZ-60I TEST 1

Data Set: N:\...\PZ-60I Test1 BR.aqt
Date: 06/14/22 Time: 14:49:05

PROJECT INFORMATION

Company: Geosyntec
Client: GA-Power
Project: GW8862
Location: Plant Branch
Test Well: PZ-60I Test 1
Test Date: 6/2/2022

AQUIFER DATA

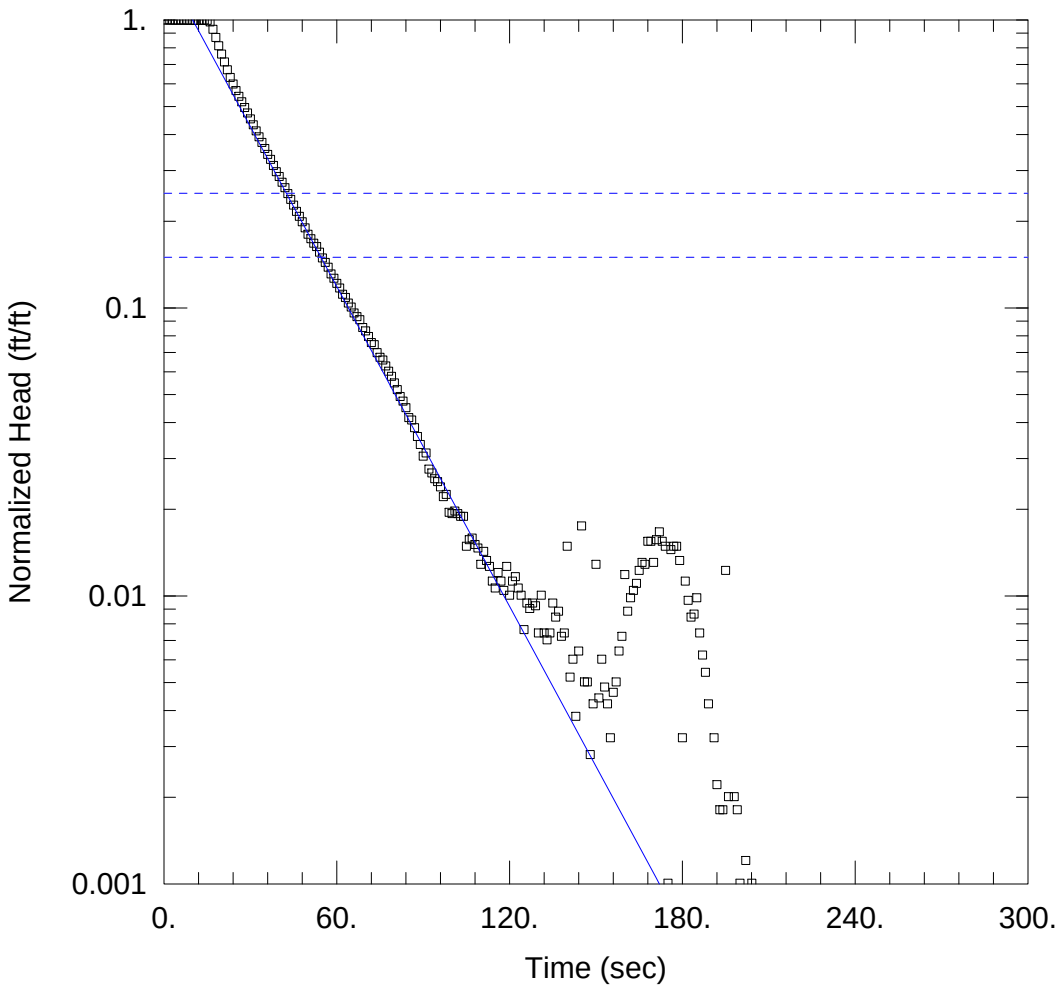
Saturated Thickness: 26.76 ft Anisotropy Ratio (Kz/Kr): 0.1

WELL DATA (PZ-60I Test 1)

Initial Displacement: 4.974 ft
Total Well Penetration Depth: 63.73 ft
Casing Radius: 0.083 ft
Static Water Column Height: 26.76 ft
Screen Length: 10. ft
Well Radius: 0.25 ft

SOLUTION

Aquifer Model: Unconfined
Solution Method: Bouwer-Rice
K = 5.939 ft/day
y0 = 9.451 ft



PZ-60I TEST 1

Data Set: N:\...\PZ-60I Test1 HS.aqt
Date: 06/14/22 Time: 14:50:13

PROJECT INFORMATION

Company: Geosyntec
Client: GA-Power
Project: GW8862
Location: Plant Branch
Test Well: PZ-60I Test 1
Test Date: 6/2/2022

AQUIFER DATA

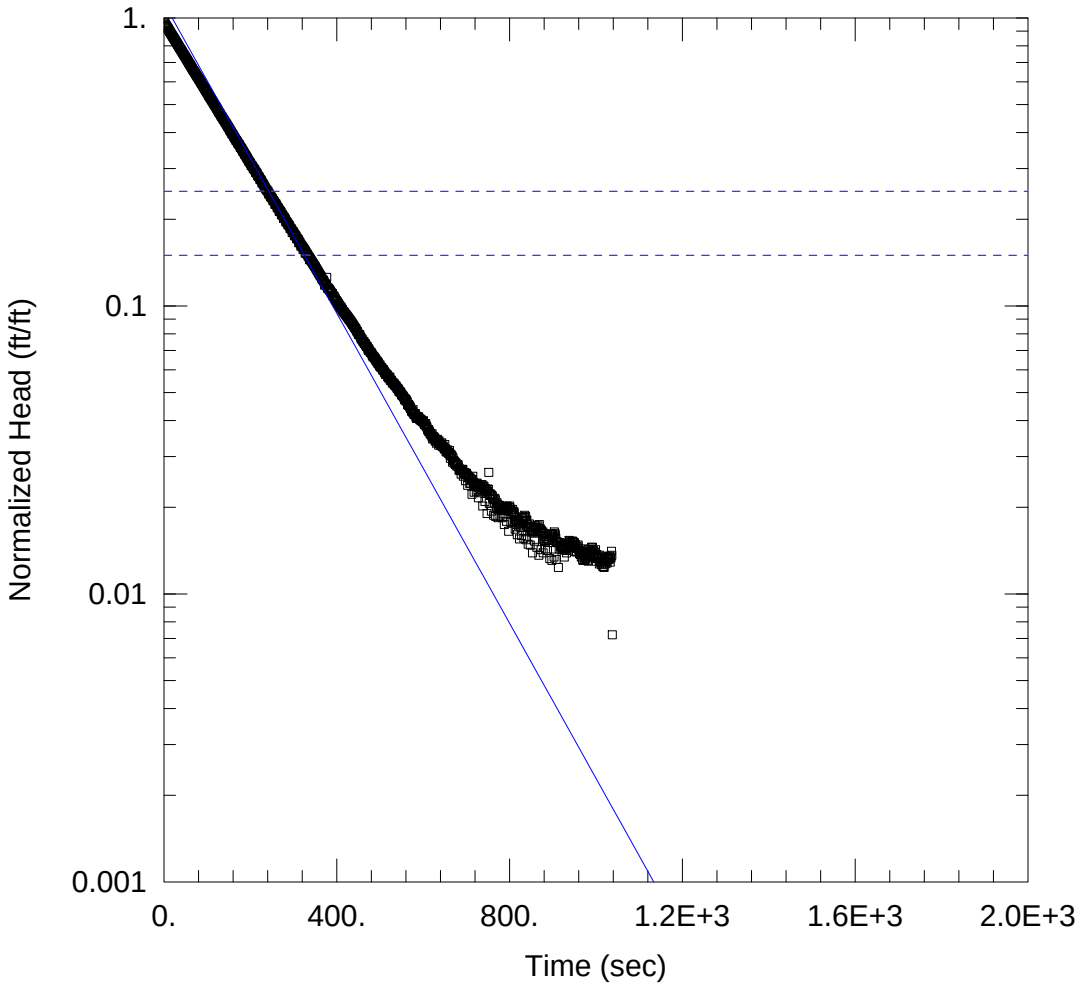
Saturated Thickness: 26.76 ft Anisotropy Ratio (Kz/Kr): 0.1

WELL DATA (PZ-60I Test 1)

Initial Displacement: 4.974 ft
Total Well Penetration Depth: 63.73 ft
Casing Radius: 0.083 ft
Static Water Column Height: 26.76 ft
Screen Length: 10. ft
Well Radius: 0.25 ft

SOLUTION

Aquifer Model: Unconfined
Solution Method: Hvorslev
K = 6.102 ft/day
y0 = 7.609 ft



PZ-62I TEST 1

Data Set: N:\...\PZ-62I Test 1 BR.aqt
Date: 06/14/22 Time: 14:53:44

PROJECT INFORMATION

Company: Geosyntec
Client: GA-Power
Project: GW8862
Location: Plant Branch
Test Well: PZ-62I Test 1
Test Date: 6/1/2022

AQUIFER DATA

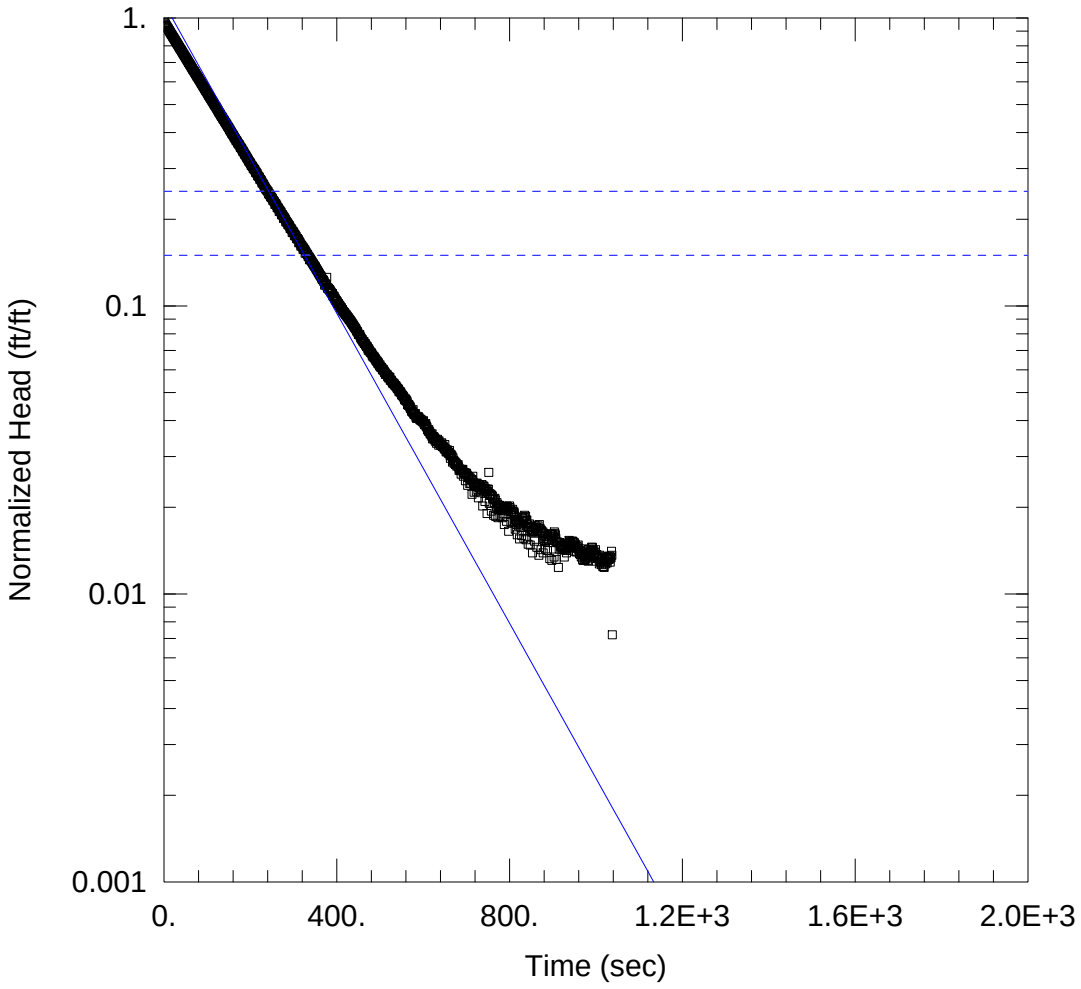
Saturated Thickness: 34.99 ft
Anisotropy Ratio (Kz/Kr): 0.1

WELL DATA (PZ-62I Test 1)

Initial Displacement: 11.09 ft
Total Well Penetration Depth: 73.3 ft
Casing Radius: 0.083 ft
Static Water Column Height: 34.99 ft
Screen Length: 10. ft
Well Radius: 0.25 ft

SOLUTION

Aquifer Model: Unconfined
Solution Method: Hvorslev
K = 0.887 ft/day
y0 = 12.47 ft



PZ-62I TEST 1

Data Set: N:\...\PZ-62I Test 1 HS.aqt
Date: 06/14/22 Time: 14:54:51

PROJECT INFORMATION

Company: Geosyntec
Client: GA-Power
Project: GW8862
Location: Plant Branch
Test Well: PZ-62I Test 1
Test Date: 6/1/2022

AQUIFER DATA

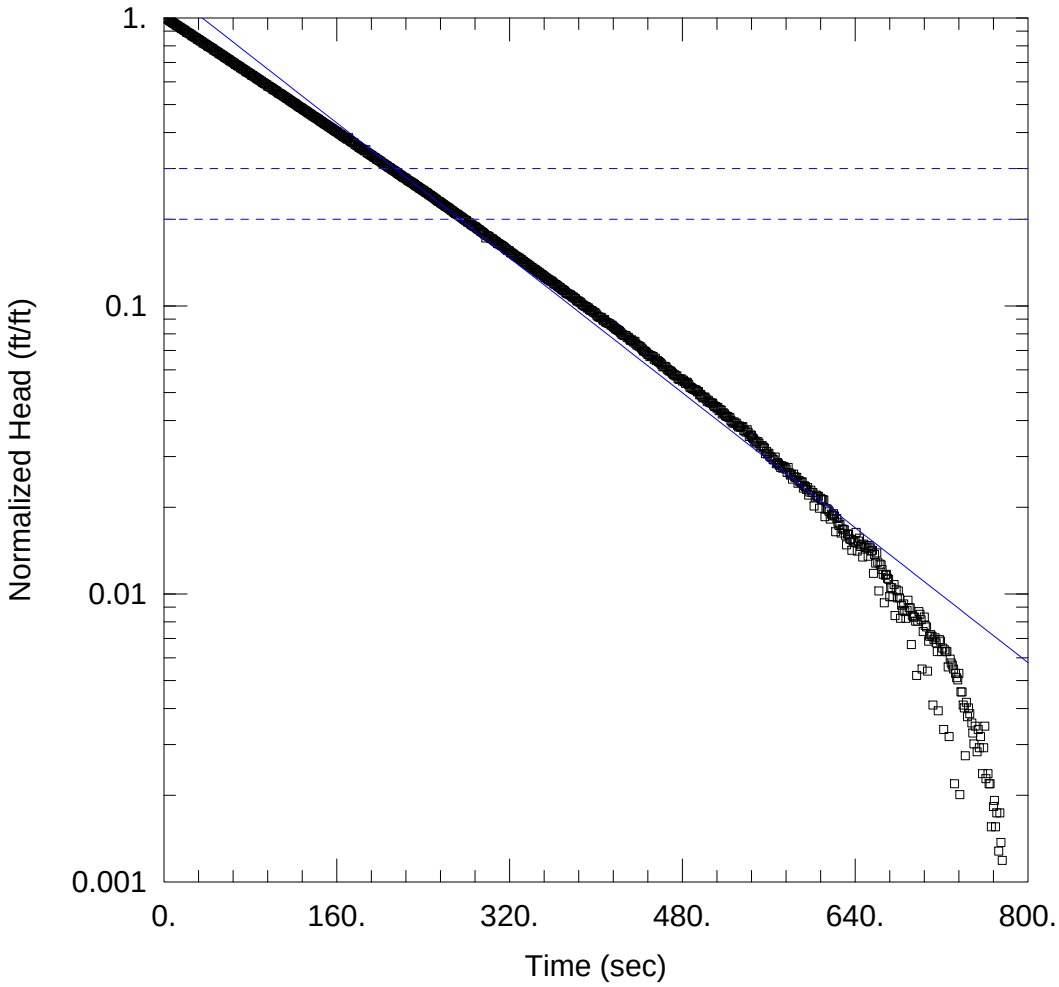
Saturated Thickness: 34.99 ft
Anisotropy Ratio (Kz/Kr): 0.1

WELL DATA (PZ-62I Test 1)

Initial Displacement: 11.09 ft
Total Well Penetration Depth: 73.3 ft
Casing Radius: 0.083 ft
Static Water Column Height: 34.99 ft
Screen Length: 10. ft
Well Radius: 0.25 ft

SOLUTION

Aquifer Model: Unconfined
Solution Method: Hvorslev
K = 0.887 ft/day
y0 = 12.47 ft



PZ-62I TEST 2

Data Set: N:\...\PZ-62I Test 2 BR.aqt
Date: 06/14/22 Time: 14:56:27

PROJECT INFORMATION

Company: Geosyntec
Client: GA-Power
Project: GW8862
Location: Plant Branch
Test Well: PZ-62I Test 2
Test Date: 6/1/2022

AQUIFER DATA

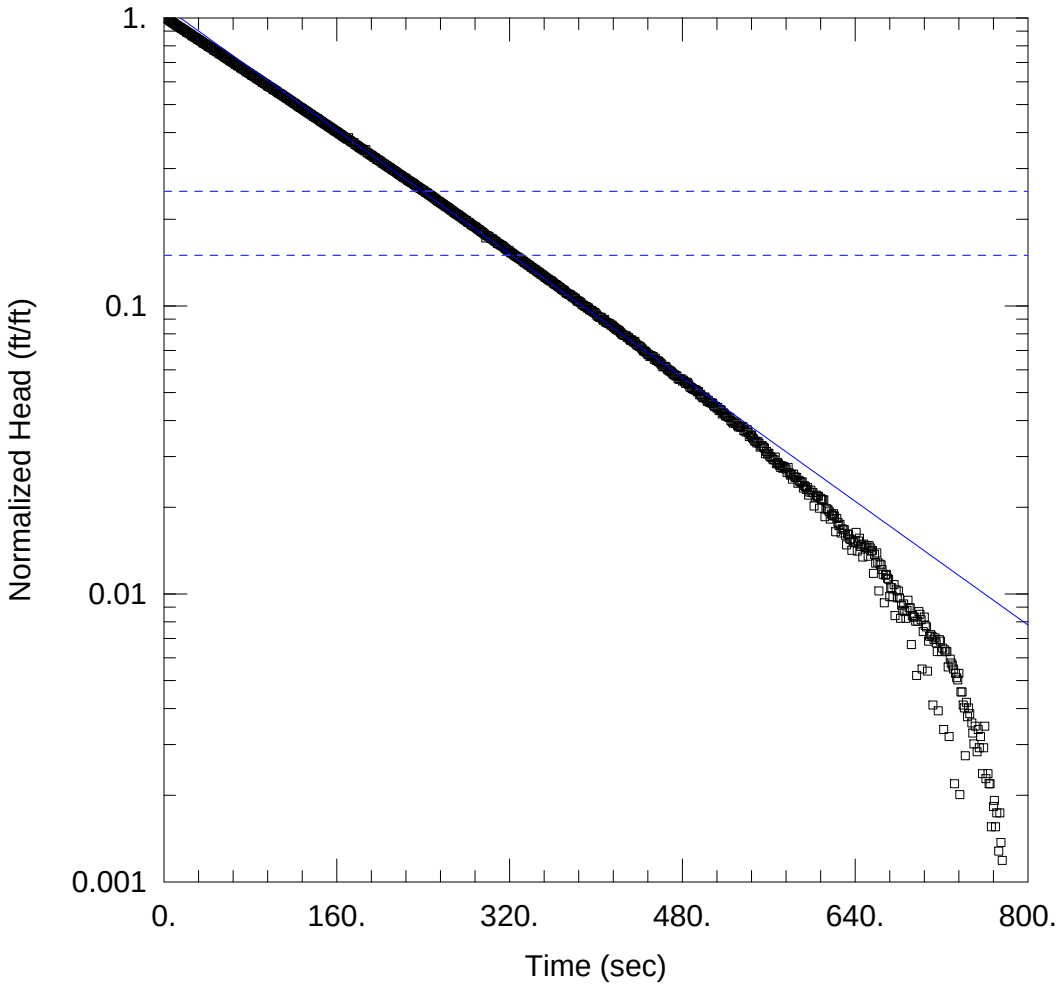
Saturated Thickness: 34.79 ft Anisotropy Ratio (Kz/Kr): 0.1

WELL DATA (PZ-62I Test 2)

Initial Displacement: 10.94 ft
Total Well Penetration Depth: 73.3 ft
Casing Radius: 0.083 ft
Static Water Column Height: 34.79 ft
Screen Length: 10. ft
Well Radius: 0.25 ft

SOLUTION

Aquifer Model: Unconfined
Solution Method: Bouwer-Rice
K = 0.8656 ft/day
y0 = 13.89 ft



PZ-62I TEST 2

Data Set: N:\...\PZ-62I Test 2 HS.aqt
Date: 06/14/22 Time: 14:57:37

PROJECT INFORMATION

Company: Geosyntec
Client: GA-Power
Project: GW8862
Location: Plant Branch
Test Well: PZ-62I Test 2
Test Date: 6/1/2022

AQUIFER DATA

Saturated Thickness: 34.79 ft Anisotropy Ratio (Kz/Kr): 0.1

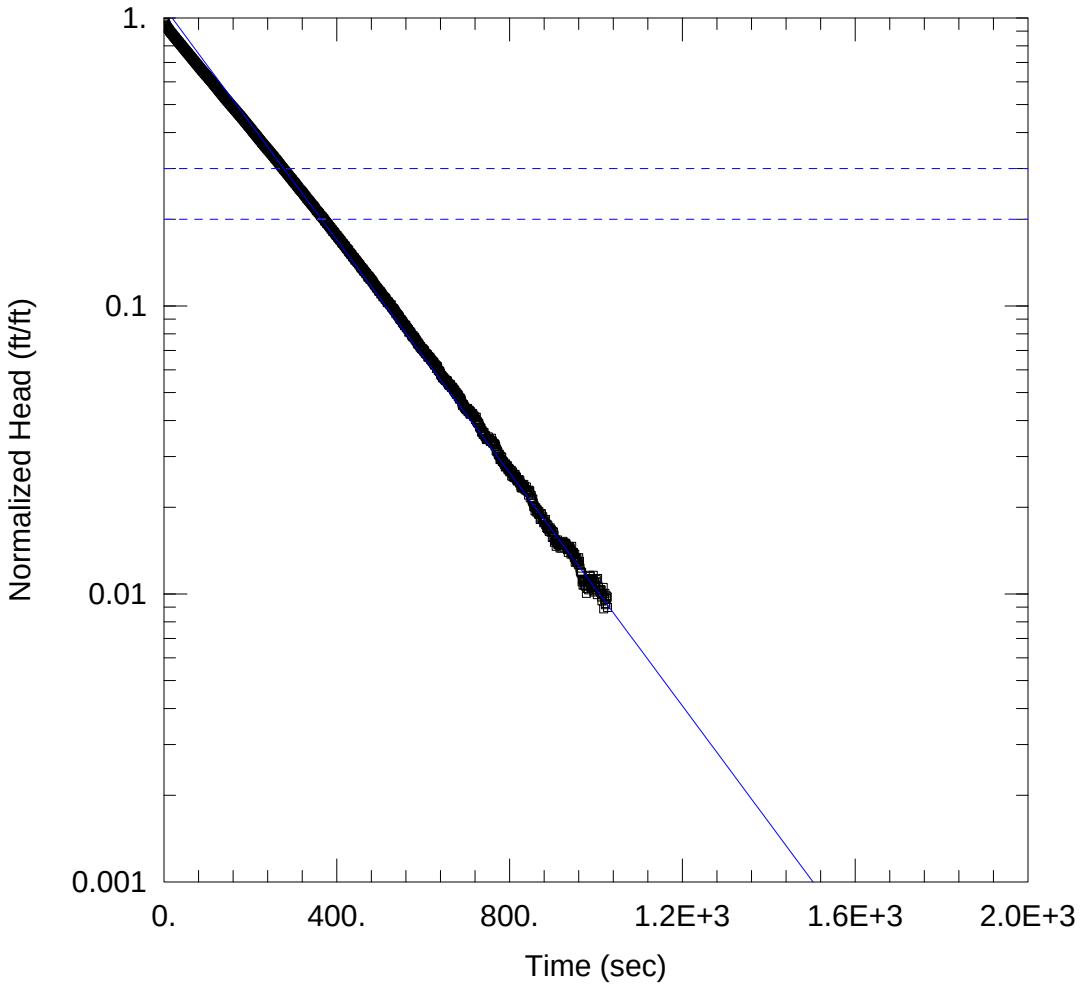
WELL DATA (PZ-62I Test 2)

Initial Displacement: 10.94 ft
Total Well Penetration Depth: 73.3 ft
Casing Radius: 0.083 ft
Static Water Column Height: 34.79 ft
Screen Length: 10. ft
Well Radius: 0.25 ft

SOLUTION

Aquifer Model: Unconfined Solution Method: Hvorslev

K = 0.8853 ft/day y0 = 12.01 ft



PZ-63I TEST 1

Data Set: N:\...\PZ-63I Test 1 BR.aqt
Date: 06/14/22 Time: 14:58:41

PROJECT INFORMATION

Company: Geosyntec
Client: GA-Power
Project: GW8862
Location: Plant Branch
Test Well: PZ-63I Test 1
Test Date: 6/1/2022

AQUIFER DATA

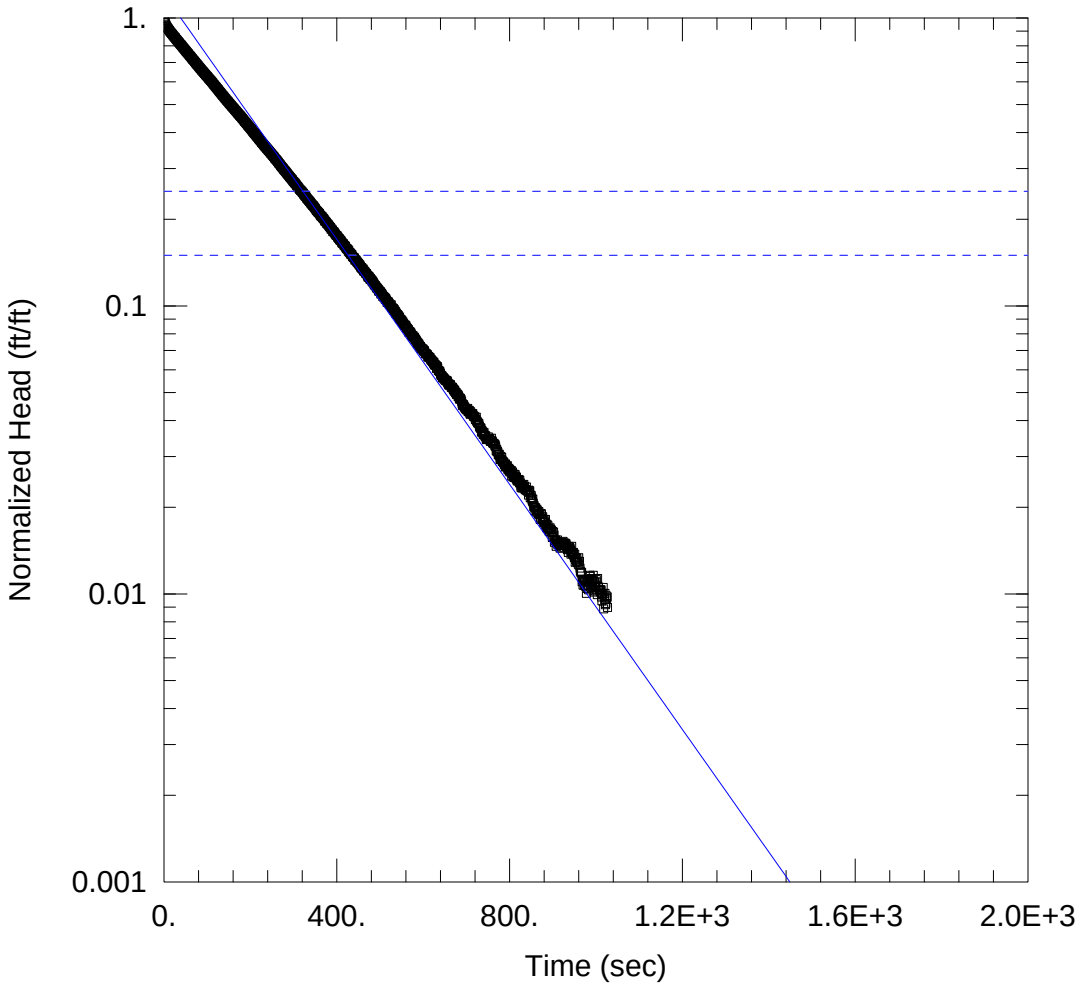
Saturated Thickness: 21.25 ft Anisotropy Ratio (Kz/Kr): 0.1

WELL DATA (PZ-63I Test 1)

Initial Displacement: 10.25 ft
Total Well Penetration Depth: 59.79 ft
Casing Radius: 0.083 ft
Static Water Column Height: 21.25 ft
Screen Length: 10. ft
Well Radius: 0.25 ft

SOLUTION

Aquifer Model: Unconfined
Solution Method: Bouwer-Rice
K = 0.5836 ft/day
y0 = 11.18 ft



PZ-63I TEST 1

Data Set: N:\...\PZ-63I Test 1 HS.aqt
Date: 06/14/22 Time: 14:59:28

PROJECT INFORMATION

Company: Geosyntec
Client: GA-Power
Project: GW8862
Location: Plant Branch
Test Well: PZ-63I Test 1
Test Date: 6/1/2022

AQUIFER DATA

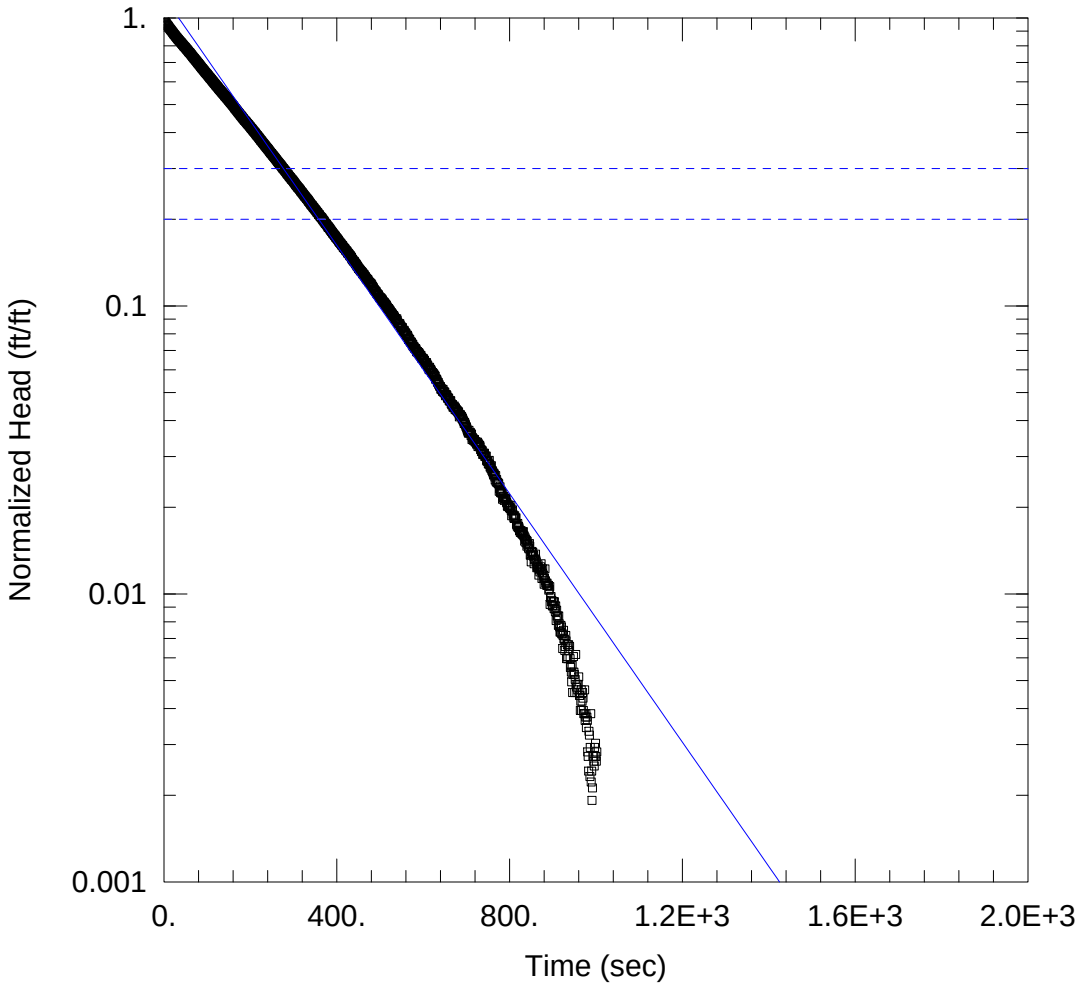
Saturated Thickness: 21.25 ft Anisotropy Ratio (Kz/Kr): 0.1

WELL DATA (PZ-63I Test 1)

Initial Displacement: 10.25 ft
Total Well Penetration Depth: 59.79 ft
Casing Radius: 0.083 ft
Static Water Column Height: 21.25 ft
Screen Length: 10. ft
Well Radius: 0.25 ft

SOLUTION

Aquifer Model: Unconfined
Solution Method: Hvorslev
K = 0.7012 ft/day
y0 = 12.39 ft



PZ-63I TEST 2

Data Set: N:\...\PZ-63I Test 2 BR.aqt
Date: 06/14/22 Time: 15:00:36

PROJECT INFORMATION

Company: Geosyntec
Client: GA-Power
Project: GW8862
Location: Plant Branch
Test Well: PZ-63I Test 2
Test Date: 6/1/2022

AQUIFER DATA

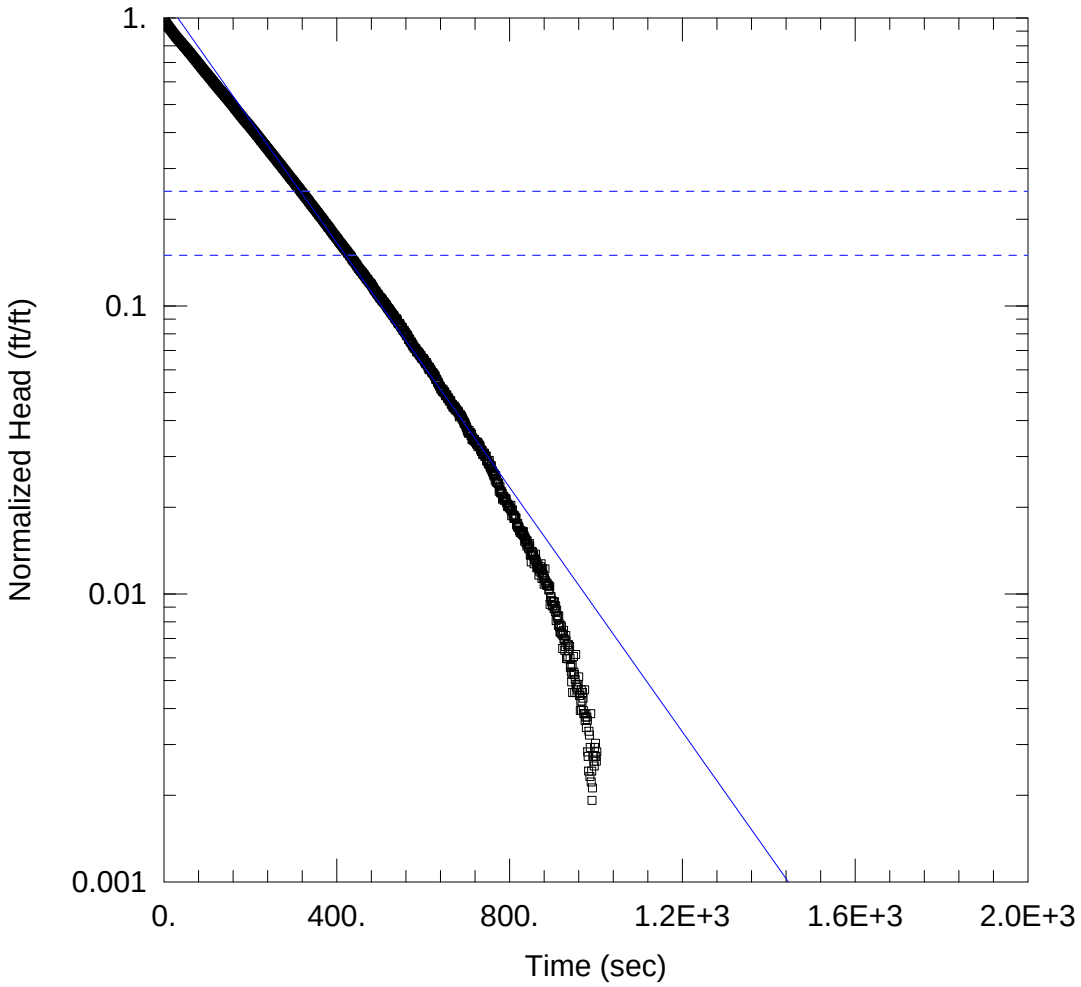
Saturated Thickness: 21.15 ft Anisotropy Ratio (Kz/Kr): 0.1

WELL DATA (PZ-63I Test 2)

Initial Displacement: 9.901 ft
Total Well Penetration Depth: 59.79 ft
Casing Radius: 0.083 ft
Static Water Column Height: 21.15 ft
Screen Length: 10. ft
Well Radius: 0.25 ft

SOLUTION

Aquifer Model: Unconfined
Solution Method: Bouwer-Rice
K = 0.6224 ft/day
y0 = 11.72 ft



PZ-63I TEST 2

Data Set: N:\...\PZ-63I Test 2 HS.aqt
Date: 06/14/22 Time: 15:01:44

PROJECT INFORMATION

Company: Geosyntec
Client: GA-Power
Project: GW8862
Location: Plant Branch
Test Well: PZ-63I Test 2
Test Date: 6/1/2022

AQUIFER DATA

Saturated Thickness: 21.15 ft Anisotropy Ratio (Kz/Kr): 0.1

WELL DATA (PZ-63I Test 2)

Initial Displacement: 9.901 ft
Total Well Penetration Depth: 59.79 ft
Casing Radius: 0.083 ft
Static Water Column Height: 21.15 ft
Screen Length: 10. ft
Well Radius: 0.25 ft

SOLUTION

Aquifer Model: Unconfined
Solution Method: Hvorslev
K = 0.6996 ft/day
y0 = 11.57 ft

APPENDIX D

Round 1 Jar Tests, Groundwater Treatability Study: Plant Branch

TECHNICAL MEMORANDUM

DATE May 11, 2022 **Proposal No.** 202207914/3.TP

TO Southern Company Services

CC Michael D. Lee, PhD

FROM Todd Rees, P.J. Nolan, Dawn Prell, Brian Steele **EMAIL todd.rees@wsp.com**

ROUND 1 JAR TESTS, GROUNDWATER TREATABILITY STUDY: PLANT BRANCH

1.0 INTRODUCTION

Golder Associates USA (Golder), a member of WSP, in collaboration with Terra Systems Inc (TSI), conducted laboratory testing to evaluate various treatment technologies for CCR type metals in groundwater such as arsenic, cadmium, cobalt, beryllium, lithium, molybdenum, and selenium. The bench-scale treatability tests (referred to as Round 1 Jar Tests) are to assist in the evaluation and potential application of in situ remedial technologies at the Georgia Power Company (Georgia Power) Plant Branch AP-B, C, and D (AP-BCD) that have cadmium and cobalt in four groundwaters (PZ-60I, PZ-58I, BRGWC-50, and PZ-59I).

The bulk of this evaluation was conducted by TSI at their Clayton, Delaware facility under the direction of Dr. Michael D. Lee, Vice-President Research and Development. The TSI Report is provided in its' entirety in Appendix A (TSI Report for Golder/WSP for Coal Combustion Residue Treatment Study Version 3, April 26, 2022).

In brief review, and directly quoting much of the TSI Report, the following describes the scope of work:

Sample Acquisition

Groundwater samples were collected in February 2022 in accordance with § 257.93(a), 391-3-4-.10(6) and US EPA procedures. 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® or AquaTroll® (In-Situ field instruments) 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 milligrams per liter (mg/L); if DO<0.5 mg/L (no stabilization criteria apply)
- Turbidity measurements less than 5 nephelometric turbidity units (NTUs).

Following well stabilization, samples were collected directly into appropriate laboratory approved sample containers, placed in ice-packed coolers, and submitted to the laboratory (TSI) following standard chain-of-custody protocol.

Baseline Characterization

At the beginning of the bench-scale treatability test, the baseline characterization was performed to verify contaminant concentrations in the samples. The groundwater samples were homogenized to the extent possible. The homogenized groundwater samples were analyzed for total cadmium, cobalt, arsenic, molybdenum, beryllium, lithium, selenium, iron, potassium, manganese, magnesium, and sodium (metals chosen based upon site characteristics); dissolved arsenic, beryllium, cadmium, cobalt, molybdenum, lithium, and selenium (based upon site characteristics); dissolved organic carbon (DOC), and sulfate, by the Eurofins Lancaster Laboratories and for pH, ORP, dissolved oxygen (DO), bicarbonate alkalinity, total hardness, ferrous iron, and sulfide by TSI using calibrated meters and Hach procedures.

Titration Tests

Alkaline titrations were conducted to determine the potassium bicarbonate and sodium bicarbonate testing dosages. An alkaline titration test was completed to determine the pH resulting from 0, 1, 2, 5, and 10 g/L additions of potassium bicarbonate and sodium bicarbonate reagent dosages. The total suspended solids (TSS) were determined by weighing the 0.2 mm nylon filter before filtering the samples and after filtration and drying in a 105 oC oven. The weight of the TSS collected was divided by the volume of groundwater that passed through the filters.

Reagent Screening

The purpose of this step was to select the most appropriate reagent for each of the nine groundwater samples. The reagent dosages were determined from the baseline characterization and titration. For each sample, a total of 12 to 13 reactors were set up for each site. The studies were prepared in an anerobic chamber with a 92% nitrogen, 5% carbon dioxide, and 3% hydrogen atmosphere to maintain the redox state of the groundwater, and the following treatments were prepared:

Plant Branch AP-BCD (Cadmium and Cobalt) PZ-60I, PZ-58I, BRGW-50, and PZ-59I

- Control
- Potassium Bicarbonate: 4 dosages (1, 2, 5, and 10 g/L)
- Sodium Bicarbonate: 4 dosages (1, 2, 5, and 10 g/L)
- ZVI: 3 Dosages (0.5, 1.0, and 1.5 g/L)

All containers were mixed and turned periodically for seven days. Groundwater samples (the supernatants in the reactors) were analyzed for:

- Total arsenic, beryllium, cadmium, cobalt, molybdenum, and selenium (based upon contaminants of concern for each site)
- Total iron, potassium, manganese, magnesium, and sodium
- Dissolved arsenic, beryllium, cadmium, cobalt, lithium, molybdenum, and selenium (based upon contaminants of concern for each site). The samples were filtered through 0.2 mm nylon filters and the filtrates were divided into bottles for DOC and metals

- Dissolved organic carbon (DOC)
- Sulfate.

Eurofins Lancaster Laboratories of Lancaster, PA. conducted the metals, DOC, and sulfate analyses. The pH, ORP, dissolved oxygen (DO), bicarbonate alkalinity, total hardness, ferrous iron, and sulfide were conducted by TSI using calibrated meters and Hach procedures. The estimated sample volumes for the initial characterization, screening, and rebound tests are shown in Table 1 of Appendix A. The volumes were adjusted to account for required dilutions and volumes of water available.

2.0 TSI REPORT CONCLUSIONS

Table 7 of Appendix A summarizes the percent removals from the initial characterization samples or the Control Day 0 for the Plant Branch dissolved metals of concern across the various treatments and groundwaters. Compounds highlighted in green were reduced to below the MCL by the treatments. Compounds highlighted in yellow were reduced by more than 50%.

- For cadmium. The 5 g/L KHCO3, 10 g/L KHCO3, 5 g/L NaHCO3, and 10 g/L NaHCO3 reduced dissolved cadmium to below the MCL in most cases (0.005 mg/l).
- For cobalt. Cobalt does not have an MCL, but the Site has a current GWPS for cobalt of 0.006 mg/l. Thought the highest loadings of 10 g/L buffers reduced dissolved cobalt by more than 50% with sodium bicarbonate slightly outperforming potassium bicarbonate for dissolved cobalt removal, the treatments were unable to reduce concentrations to below the Site GWPS of 0.006 mg/l

TSI Overall Conclusions. Addition of relatively high dosages of potassium or sodium bicarbonate buffers were generally able to reach the MCLs for cadmium and reduce cobalt concentrations.

Golder Associates USA Inc.

Attachments: TSI Report for Golder/WSP for Coal Combustion Residue Treatment Study Version 4, May 5, 2022).

APPENDIX A

Terra Systems, Inc. Report

May 5, 2022

Todd Rees, PhD, PE
Senior Program Leader

Golder Associates Inc.
Amherst, MA., Montrose, CO.

TERRA SYSTEMS, INC. FINAL REPORT FOR GOLDER/WSP FOR PLANT BRANCH COAL COMBUSTION RESIDUE TREATABILITY STUDY VERSION 4

1.0 INTRODUCTION

Coal combustion residue landfill may generate acidic conditions which allow metals such as arsenic, beryllium, cadmium, cobalt, lithium, molybdenum, and selenium to accumulate to levels above regulatory limits. This bench-scale treatability evaluated neutralization/precipitation with potassium bicarbonate, sodium bicarbonate, and precipitation/adsorption with zero valent iron (ZVI) for four groundwaters (PZ-60I, PZ-58I, BRGWC-50, and PZ-59I) from Georgia Plant Branch AP-B, C, and D (AP-BCD) which have cadmium (Cd) and cobalt (Co).

2.0 BENCH-SCALE STUDY SCOPE

The objective of the bench-scale study is to evaluate the appropriate in situ remediation technology for cadmium, and cobalt:

- Identify the feasibility of in-situ remediation.
- Determine the design parameters including reagent dosage and demand.

The bench-scale treatability study investigated three reagents: potassium bicarbonate, sodium bicarbonate, and zero valent iron.

2.1 Reagent Selection

The bench-scale treatability study assumes that one of the following technologies can be used for in-situ remediation of the metals:

- elevated pH precipitation
- direct sorption/precipitation onto the ZVI.

All reagents used for the bench-scale test were commercially available products. The reagent usages and their dosages could be adjusted according to the results of the activities and observations during the execution of the bench-scale treatability study. The following provides more detail on each of the reagents proposed for the bench-scale treatability testing:

- Potassium Bicarbonate: Potassium bicarbonate can increase the pH up to about 8.2 SU. Four loadings of LC Carlsen potassium bicarbonate were evaluated in the tests to determine the precipitation of cadmium and cobalt in the four groundwaters from Plant Branch AP-BCD (PZ-60I, PZ-58I, BRGWC-50, and PZ-59I).

- Sodium Bicarbonate: Sodium bicarbonate can increase the pH up to about 8.3 SU. Four loadings of Genesis sodium bicarbonate were evaluated in the tests to determine precipitation of cadmium and cobalt in the four groundwaters from Plant Branch AP-BCD (PZ-60I, PZ-58I, BRGWC-50, and PZ-59I).

- ZVI: ZVI can enhance precipitation of cadmium and cobalt and can sorb these metals. A commercially available product of submicron ZVI (Ferox Nanostar) from Hepure (Flemington NJ) and Nanoiron s.r.o (Zudicgivue, Czech Republic) were evaluated. Three loadings of ZVI were evaluated in the tests to determine the precipitation/sorption of cadmium and cobalt in the four groundwaters from Plant Branch AP-BCD (PZ-60I, PZ-58I, BRGWC-50, and PZ-59I).

2.2 Bench-scale Groundwater Collection

Groundwater samples were collected from the four locations. With 1 L reaction vessels for each treatment, about 5 gallons of each of the four groundwaters were required. The samples were delivered to the TSI under a chain of custody. The groundwater sample from Plant Branch AP-BCD BRGWC-50 was received on 2/7/22 and the groundwater samples from Plant Branch AP-BCD PZ-59I, PZ-58I, and PZ-60I were received on 2/8/22.

2.3 Baseline characterization

At the beginning of the bench-scale treatability test, the baseline characterization was performed to verify contaminant concentrations in the samples. The groundwater samples were homogenized to the extent possible. The homogenized groundwater samples were analyzed for total cadmium, cobalt, iron, potassium, manganese, magnesium, and sodium; dissolved cadmium and cobalt; dissolved organic carbon (DOC), and sulfate, by the Eurofins Lancaster Laboratories and for pH, ORP, dissolved oxygen (DO), bicarbonate alkalinity, total hardness, ferrous iron, and sulfide by TSI using calibrated meters and Hach procedures.

2.4 Titration Tests

Alkaline titrations were conducted to determine the potassium bicarbonate and sodium bicarbonate testing dosages. An alkaline titration test was completed to determine the pH resulting from 0, 1, 2, 5, and 10 g/L additions of potassium bicarbonate and sodium bicarbonate reagent dosages. The total suspended solids (TSS) were determined by weighing the 0.2 μm nylon filter before filtering the samples and after filtration and drying in a 105 ^{o}C oven. The weight of the TSS collected was divided by the volume of groundwater that passed through the filters.

2.5 Reagent Screening

The purpose of this step was to select the most appropriate reagent for each of the four groundwater samples.

The reagent dosages were determined from the baseline characterization and titration. For each sample, a total of 12 reactors were set up for each groundwater. The studies were

prepared in an anerobic chamber with a 92% nitrogen, 5% carbon dioxide, and 3% hydrogen atmosphere to maintain the redox state of the groundwater.

Plant Branch AP-BCD (Cadmium and Cobalt) PZ-60I, PZ-58I, BRGW-50, and PZ-59I

- Control
- Potassium Bicarbonate: 4 dosages (1, 2, 5, and 10 g/L)
- Sodium Bicarbonate: 4 dosages (1, 2, 5, and 10 g/L)
- ZVI: 3 Dosages (0.5, 1.0, and 1.5 g/L)

All containers were mixed and turned periodically for seven days. Groundwater samples (the supernatants in the reactors) were analyzed for:

- total cadmium, cobalt, iron, potassium, manganese, magnesium, and sodium;
- dissolved cadmium and cobalt. The samples were filtered through 0.2 μm nylon filters and the filtrates were divided into bottles for DOC and metals.
- dissolved organic carbon (DOC)
- sulfate

Eurofins Lancaster Laboratories of Lancaster PA conducted the metals, DOC, and sulfate analyses. The pH, ORP, dissolved oxygen (DO), bicarbonate alkalinity, total hardness, ferrous iron, and sulfide were conducted by TSI using calibrated meters and Hach procedures. The estimated sample volumes for the initial characterization, screening, and rebound tests are shown in Table 1. The volumes were adjusted to account for required dilutions and volumes of water available.

3.0 PLANT BRANCH AP-BCD

3.1 Plant Branch Initial Characterization

Table 2 has the results of the field parameters, Hach tests, metals, DOC, and sulfate results for the four groundwater samples from Plant Branch.

B1 PZ-60I. The pH ranged from 4.9 to 5.0 with a bicarbonate alkalinity of 5 mg/L CaCO3. There was a positive ORP (383 mV) and moderate dissolved oxygen (4.0 mg/L). The TSS was 0 mg/L with a hardness of 80 mg/L, 0.18 mg/L ferrous iron, and no sulfide. The pH increased from 4.9 to 6.6 SU with 1 g/L sodium bicarbonate and increased to 7.7 with 10 g/L. The pH increased from 5.0 to 6.9 SU with 1 g/L potassium bicarbonate and to 7.9 with 10 g/L. This groundwater has very high 2,200 mg/L sulfate and <0.5 mg/L DOC. Total cadmium was 0.016 mg/L and dissolved cadmium was 0.017 mg/L. Total cobalt was 3.1 mg/L and dissolved cobalt was 3.3 mg/L. The groundwater contained 0.26 mg/L total iron, 180 mg/L total magnesium, 170 mg/L total manganese, 13 mg/L potassium, and 58 mg/L sodium.

B2 PZ-58I. The pH ranged from 4.0 to 4.2 with no bicarbonate alkalinity (<5 mg/L CaCO3). There was a positive ORP (186 mV) and moderate dissolved oxygen (3.1 mg/L). The TSS was not measured with a hardness of 1,158 mg/L (very high), 31.75 mg/L ferrous iron (very high), and 0.01 sulfide. The pH increased from 4.2 to 7.0 SU with 1 g/L sodium bicarbonate and increased to 7.9 with 10 g/L. The pH increased from 4.0 to 6.5 SU with 1 g/L potassium bicarbonate and to 7.9 with 10 g/L. This groundwater has high 840 mg/L sulfate and 0.72 mg/L DOC. Total cadmium was 0.0043 mg/L and dissolved cadmium was 0.0053 mg/L. Total cobalt was 0.44 mg/L and dissolved cobalt was 0.46 mg/L. The groundwater contained 47 mg/L total iron, 69 mg/L total magnesium, 28 mg/L total manganese, 8 mg/L potassium, and 31 mg/L sodium.

B3 BRGWC-50. The pH ranged from 5.1 to 5.3 with a bicarbonate alkalinity of 15 mg/L CaCO3. There was a positive ORP (322 mV) and moderate dissolved oxygen (2.7 mg/L). The TSS was 0 mg/L with a hardness of 60 mg/L, 0.15 mg/L ferrous iron, and 0.01 sulfide. The pH increased from 5.3 to 7.1 SU with 1 g/L sodium bicarbonate and increased to 7.5 with 10 g/L. The pH increased from 5.1 to 6.7 SU with 1 g/L potassium bicarbonate and to 7.9 with 10 g/L. This groundwater has no detectable sulfate or DOC. Total cadmium was 0.0083 mg/L and dissolved cadmium was 0.0092 mg/L. Total cobalt was 1.2 mg/L and dissolved cobalt was 1.3 mg/L. The groundwater contained 0.15 mg/L total iron, 140 mg/L total magnesium, 82 mg/L total manganese, 10 mg/L potassium, and 47 mg/L sodium.

B4 PZ-59I. The pH was 3.8 with no bicarbonate alkalinity (<5 mg/L CaCO3). There was a positive ORP (184 mV) and moderate dissolved oxygen (3.1 mg/L). The TSS was 4.9 mg/L with a hardness of 40 mg/L, 194 mg/L ferrous iron (very high), and 0.01 sulfide. The pH increased from 3.8 to 6.4 SU with 1 g/L sodium bicarbonate and increased to 7.5 with 10 g/L. The pH increased from 3.8 to 5.9 SU with 1 g/L potassium bicarbonate and to 7.3 with 10 g/L. The final pHs were lower in this treatment. Well B4 PZ-59I has very high 2,900 mg/L sulfate and only 0.87 mg/L DOC. Total cadmium was 0.0063 mg/L and dissolved cadmium was 0.0064 mg/L. Total cobalt was 1.4 mg/L and dissolved cobalt was 1.4 mg/L. The groundwater contained 410 mg/L total iron, 190 mg/L total magnesium, 78 mg/L total manganese, 15 mg/L potassium, and 76 mg/L sodium.

3.2 Plant Branch AP-BCD Treatability Results

Well PZ-60I Summary. Table 3 has the field parameters and ELLE results for this groundwater. At Day 0, the control pH was 5.3 and increased to between 6.7 and 6.8 for the lowest loading of potassium and sodium bicarbonate. The pH dropped slightly (0.2 to 0.8 SU) from Day 0 to Day 7 except in the ZVI treatments. The highest dosage of buffers had pHs of 7.1 on Day 7. The ORPS were positive (except for the two highest ZVI loadings) and ranged from -44 to 373 mV. DO ranged from 2.8 to 6.1 mg/L. There were relatively low total suspended solids (3.0 mg/L) but the TSS increased to a maximum of 530 mg/L in the 10 g/L NaHCO3 treatment. Other treatments with elevated TSS included the 5 and 10 g/L NaHCO3 and ZVI. Bicarbonate alkalinity was low in the control and ZVI treatments (10-40 mg/L) and increased with bicarbonate additions. The hardness ranged from 20 to 1,360 mg/L as CaCO3 with the largest increases in the higher buffer loadings. Only the ZVI treatments had >1.0 mg/L ferrous iron. Sulfide was low (0 to 0.04 mg/L).

Sulfate ranged from 1,800 to 2,900 mg/L. Little DOC was detected (0.58 to 2.3 mg/L). Total Cd was moderate ranging from 0.00087 to 0.016 mg/L and dissolved Cd of 0.00023 to 0.016 mg/L. The following treatments showed more than 50% reductions in dissolved Cd: 5 g/L KHCO3, 10 g/L KHCO3, 5 g/L NaHCO3, and 10 g/L NaHCO3 with the dissolved Cd below the MCL of 0.0050 mg/L except in the 10 g/L KHCO3 treatment. Total Co ranged from 2.2 to 3.9 mg/L and dissolved Co from 1.4 to 4.0 mg/L. Only the 5 g/L NaHCO3 showed more than a 50% reduction in dissolved Co. Iron increased in almost all treatments from the IC but the most iron was found in the ZVI treatments. Total magnesium ranged from 160 to 210 mg/L and total manganese from 64 to 190 mg/L. Manganese exceeded the MCL in all samples. Potassium and sodium increased with the increasing loadings of potassium and sodium bicarbonate.

Only the 5 g/L NaHCO3 treatment showed significant reductions in dissolved cobalt to below the MCL. The 5 g/L KHCO3, 5 g/L NaHCO3, and 10 g/L NaHCO3 reduced the dissolved cadmium to below the MCL.

Well PZ-58I Summary. Table 4 has the field parameters and ELLE results for this groundwater. On Day 0, the control pH was 5.0 and increased to between 6.5 and 6.8 for the lowest loading of

potassium and sodium bicarbonate. The highest dosage of buffers had pHs of 7.4-7.5 on Day 0. The pH decreased by 0.1 to 0.4 SU between Days 0 and 7. The pHs in the ZVI treatment ranged from 4.7 to 5.7 on Day 7. The ORPS were negative on Day 7 (except for the Control) and ranged from -176 to 148 mV. DO ranged from 0.9 to 3.8 mg/L. There were high total suspended solids (61 to 235 mg/L) in the buffer treatments with lower TSS (27 to 103 mg/L) in the ZVI treatments. The high concentrations of minerals in the groundwater formed a copious precipitate with the buffers. Bicarbonate alkalinity was low (<5 mg/L CaCO3) and increased with bicarbonate additions. The hardness ranged from 340 to 1,140 mg/L. Only the Control and ZVI treatments had ferrous iron greater than 1.0 mg/L. Sulfide was low (0.01 to 0.06 mg/L).

Sulfate ranged from 780 to 1,400 mg/L. Little DOC (0.59 to 1.6 mg/L) was detected. Total Cd was low and ranged from 0.0026 to 0.0044 mg/L and the dissolved cadmium was 0.00032 and 0.0042 mg/L; all were below the MCL. The following treatments showed more than 50% reductions in dissolved Cd: 2 g/L KHCO3, 5 g/L KHCO3, 10 g/L KHCO3, 1 g/L NaHCO3, 5 g/L NaHCO3, and 10 g/L NaHCO3. Total Co ranged from 0.24 to 0.50 mg/L and dissolved cobalt from 0.13 to 0.45 mg/L. Only the 10 g/L KHCO3 and 10 g/L NaHCO3 showed more than 50% reductions in dissolved Co. Iron (31 to 170 mg/L) decreased in almost all treatments from the IC except for the ZVI treatments. Total magnesium ranged from 63 to 71 mg/L. Total manganese ranged from 4.3 to 26 mg/L with all samples more than the MCL. Total manganese reductions of >50% were observed in the 10 g/L KHCO3 treatment only. Potassium and sodium increased with the increasing loadings of potassium and sodium bicarbonate.

The higher buffer treatments showed significant reductions in dissolved cadmium but all measurements were below the MCL. The 10 g/L KHCO3 and 10 g/L NaHCO3 removed more than 50% of dissolved cobalt.

Well BRGWC-50 Summary. Table 5 has the field parameters and ELLE results for this groundwater. At Day 0, the control pH was 5.7 and increased to 6.8 for the lowest loading of potassium bicarbonate and to 7.0 for the lowest loading of sodium bicarbonate. The highest dosage of buffers had pHs of 7.3-7.4 on Day 7. The pH fell by between 0.1 to 0.7 units by Day 7 in the buffer treatments with lower pHs of 5.4 to 6.1 SU in the ZVI treatments. The ORPS were positive (except for the highest ZVI loading) and ranged from -38 to 345 mV. DO ranged from 3.1 to 4.7 mg/L. The total suspended solids ranged from 2.6 to 400 mg/L. The treatments with 10 g/L KHCO3, 10 g/L NaHCO3 and ZVI had elevated TSS. Bicarbonate alkalinity was low in the control (15 mg/L)and increased with bicarbonate additions. The hardness ranged from 20 to 1,140 mg/L. Only the ZVI treatments had ferrous iron > 1 mg/L. Sulfide was low (0.02 to 0.15 mg/L).

Sulfate ranged from 1,400 to 2,900 mg/L. Little DOC was detected; the highest dosage of buffer had the most, 4.1 and 9.9 mg/L. Total Cd was moderate and ranged from <0.00015 to 0.0091 mg/L and dissolved Cd of <0.00016 to 0.00089 mg/L. The following treatments showed more than 50% reductions in dissolved Cd and below the Cd MCL: 5 g/L KHCO3, 10 g/L KHCO3, 5 g/L NaHCO3, and 10 g/L NaHCO3. Total Co ranged from 0.36 to 1.5 mg/L and dissolved Co from 0.12 to 1.5 mg/L. The 5 g/L KHCO3, 10 g/L KHCO3, 5 g/L NaHCO3, and 10 g/L NaHCO3 showed more than a 50% reduction in dissolved Co. Iron increased in almost all treatments from the IC but the most iron was found in the ZVI treatments. Total magnesium did not change much. Total manganese was reduced by >50% in the 5 g/L KHCO3, 5 g/L NaHCO3, and 10 g/L NaHCO3 treatments but remained above the MCL of 0.050 mg/L. Potassium and sodium increased with the increasing loadings of potassium and sodium bicarbonate.,

The 5 and 10 g/L of both the potassium and sodium bicarbonate treatments showed significant reductions in dissolved cadmium to below the MCL and dissolved cobalt

Well PZ-59I Summary. Table 6 has the field parameters and ELLE results for this groundwater. At Day 0, the control pH was 3.9 and increased to between 6.2 and 6.4 for the lowest loading of potassium and sodium bicarbonate. The highest dosage of buffers had pHs of 6.9-7.0 on Day 7. The ORPs were negative (except for the Control and ZVI treatments) and ranged from -212 to 202 mV. DO ranged from 0.2 to 4.4 mg/L. There were low to moderate total suspended solids (5 to 871 mg/L) in the buffer treatments with moderate TSS in the ZVI treatments. Bicarbonate alkalinity was low (<5 mg/L CaCO3) and increased with bicarbonate additions. The hardness ranged from 460 to 2,280 mg/L. Ferrous iron was elevated in the control, buffer treatments, and ZVI treatments. Sulfide was low (0.01 to 0.08 mg/L).

Sulfate ranged from 2,500 to 3,300 mg/L. Little DOC was detected with between 0.74 and 3.5 mg/L. Total Cd was low ranging from 0.0038 to 0.0066 mg/L and dissolved Cd from 0.0017 to 0.0063 mg/L. The following treatments showed more than 50% reductions in dissolved Cd: : 10 g/L KHCO3, 5 g/L NaHCO3, and 10 g/L NaHCO3. The following treatments reduced Cd to below the MCL: 5 g/L KHCO3, 10 g/L KHCO3, 2 g/L NaHCO3, 5 g/L NaHCO3, and 10 g/L NaHCO3. Total Co ranged from 1.1 to 1.8 mg/L and dissolved Co from 0.59 to 1.7 mg/L. Only the 10 g/L NaHCO3 treatment showed more than a 50% reduction in dissolved Co. Iron decreased in many treatments from the IC except for the ZVI treatments. Total magnesium ranged from 170 to 200 mg/L and did not change much. Total manganese ranged from 36 to 99 mg/L was reduced by >50% in the 10 g/L NaHCO3 treatment. Potassium and sodium increased with the increasing loadings of potassium and sodium bicarbonate.

Both of the highest buffer treatments showed significant reductions in dissolved cadmium and the 10 g/L NaHCO3 treatment removed more than 50% of dissolved cobalt.

3.3 Plant Branch Conclusions

Table 7 summarizes the percent removals from the initial characterization samples or the Control Day 0 for the dissolved metals of concern across the various treatments and groundwaters. Compounds highlighted in green were reduced to below the MCL by the treatments. Compounds highlighted in yellow were reduced by more than 50%.

Cadmium. In the Branch groundwaters, the 5 g/L KHCO3, 10 g/L KHCO3, 5 g/L NaHCO3, and 10 g/L NaHCO3 treatments reduced dissolved cadmium to below the MCL in most cases.

Cobalt. There is no MCL for cobalt. The highest loadings of 10 g/L buffers generally reduced dissolved cobalt by more than 50% with sodium bicarbonate slightly outperforming potassium bicarbonate for dissolved cobalt removal.

Overall Conclusions. Addition of relatively high dosages of potassium or sodium bicarbonate buffers were generally able to reach the MCLs for cadmium and reduce cobalt concentrations.

Please let me know if you have any questions about this final report.

Terra Systems
INCORPORATED

Sincerely,
TERRA SYSTEMS, INC.

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Table 1
Estimated Sample Volumes and Preservatives

Analysis	Matrix	Volume mL per bottle	Preservative
Total Cd, Co, Fe, K, Mn, Mg, and Na	Aqueous	200	HNO_3
Filtered Cd and Co	Aqueous	200	HNO_3
DOC	Aqueous	45	H_3PO_4
Sulfate	Aqueous	50	None
Total		895	

Table 2
Plant Branch Initial Characterization Results

Field Parameters						
Well		USEPA MCL	B1 PZ-60I	B2 PZ-58I	B3 BRGWC-50	B4 PZ-59I
pH	SU					
ORP	mV		383	186	322	184
DO	mg/L		4.0	3.1	2.7	3.1
TSS	mg/L		0		0	4.9
Bicarbonate Alkalinity as CaCO3	mg/L		5	<5	15	<5
Hardness as CaCO3	mg/L		80	1158	60	40
Ferrous Iron	mg/L		0.18	31.75	0.15	194
Sulfide	mg/L		0	0.01	0.01	0.01
Sodium Hydroxide Titrations						
g/L NaHCO3	pH					
0			4.9	4.2	5.3	3.8
1			6.6	7.0	7.1	6.4
2			7.0	7.3	7.3	6.7
5			7.4	7.6	7.7	7.2
10			7.7	7.9	7.9	7.5
Potassium Hydroxide Titrations						
g/L KHCO3						
0			5.0	4.0	5.1	3.8
1			6.9	6.5	6.7	5.9
2			7.2	7.0	7.0	6.4
5			7.7	7.5	7.5	6.9
10			7.9	7.9	7.9	7.3
Sulfate	mg/L	250	**2200**	**840**	<3	**2900**
Dissolved Organic Carbon	mg/L		<0.5	0.72 J	<0.5	0.87 J
Total Cadmium	mg/L	0.005	**0.016**	0.0043	**0.0083**	**0.0063**
Dissolved Cadmium	mg/L	0.005	**0.017**	**0.0053**	**0.0092**	**0.0064**
Total Cobalt	mg/L		3.1	0.44	1.2	1.4
Dissolved Cobalt	mg/L		3.3	0.46	1.3	1.4
Total Selenium	mg/L	0.050				
Dissolved Selenium	mg/L	0.050				
Total Iron	mg/L	0.30	0.26	**47**	0.15	**410**
Total Magnesium	mg/L		180	69	140	190
Total Manganese	mg/L	0.05	**170**	**28**	**82**	**78**
Total Potassium	mg/L		13	8	10	15
Total Sodium	mg/L		58	31	47	76
0.010 Primary Standard						
0.05 Secondary Standard						
0.022 Exceeds Primary or Secondary MCL						

Table 3
Plant Branch AP-BCD B1 PZ-60I Treatability Results

		USEPA MCL	IC	Control	1 g/L KHCO3	2 g/L KHCO3	5 g/L KHCO3	10 g/L KHCO3	1 g/L NaHCO3	2 g/L NaHCO3	5 g/L NaHCO3	10 g/L NaHCO3	0.5 g/L ZVI	1.0 g/L ZVI	1.5 g/L ZVI
Day				0	0	0	0	0	0	0	0	0	0	0	0
pH	SU			5.3	6.7	7.1	7.6	7.9	6.8	7.2	7.5	7.7	6.5	5.3	5.3
Day				7	7	7	7	7	7	7	7	7	7	7	7
pH	SU		5.3	4.5	6.4	6.9	7.0	7.1	6.6	6.9	6.9	7.1	5.7	5.4	5.4
ORP	mV		383	364	373	326	330	314	257	237	249	243	31	-3	-44
DO	mg/L		4.0	6.1	4.0	4.1	3.6	3.7	4.3	3.7	5.8	3.8	3.1	3.0	2.8
TSS	mg/L		0	3.0	14	21	13	49	14	13	439	530	64	83	210
Bicarbonate Alkalinity as CaCO3	mg/L		5	10	700	940	1660	3540	700	1180	2360	5520	15	15	15
Hardness as CaCO3	mg/L		80	80	60	80	1360	1140	40	20	1140	1140	40	20	40
Ferrous Iron	mg/L		0.18	0.13	0.10	0.12	0.47	0.26	0.05	0.13	0.15	0.63	2.09	8.8	12.5
Sulfide	mg/L		0	0	0	0.01	0.02	0	0	0.02	0	0	0.03	0.03	0.04
ELLE Results															
Sulfate	mg/L	250	**2200**	**1900**	**2100**	**2000**	**2000**	**1900**	**2000**	**2900**	**2100**	**1900**	**1900**	**2000**	**1800**
DOC	mg/L		<0.5	0.69	0.67	0.9	1.1	2.3	0.77	0.83	1.9	2.2	0.66	0.58	<0.5
Total Cadmium	mg/L	0.005	**0.016**	**0.016**	**0.016**	**0.016**	0.00087	**0.013**	**0.015**	**0.016**	**0.012**	**0.012**	**0.015**	**0.014**	**0.014**
Dissolved Cadmium	mg/L	0.005	**0.017**	**0.015**	**0.016**	**0.014**	0.00023	**0.0071**	**0.016**	**0.016**	<0.00016	<0.00016	**0.014**	**0.014**	**0.014**
Total Cobalt	mg/L		3.1	3.9	3.5	3.5	2.5	2.2	3.8	3.5	2.9	2.3	3.9	3.2	3.3
Dissolved Cobalt	mg/L		3.3	3.4	3.7	3.4	2.7	1.7	3.7	4.0	1.4	1.7	3.2	3.4	3.5
Total Iron	mg/L	0.30	0.26	**0.42**	**0.37**	**0.51**	0.14	**0.33**	0.023	**0.45**	**0.32**	**0.36**	**47**	**96**	**190**
Total Magnesium	mg/L		180	200	180	180	180	180	200	180	180	170	210	160	170
Total Manganese	mg/L	0.050	**170**	**190**	**170**	**170**	**64**	**110**	**180**	**180**	**130**	**120**	**180**	**170**	**160**
Total Potassium	mg/L		13	14	390	750	2000	3800	15	14	14	16	14	14	14
Total Sodium	mg/L		58	61	64	65	64	69	360	590	1500	2700	61	61	58

0.010 Primary Standard
0.05 Secondary Standard
0.022 Exceeds Primary or Secondary MCL
0.039 J value. Compound detected above method detection limit but below method calibration limit.
28 Compound detected in blank

Table 4
Plant Branch AP-BCD B2 PZ-58I Treatability Results

		USEPA MCL		Control	1 g/L KHCO3	2 g/L KHCO3	5 g/L KHCO3	10 g/L KHCO3	1 g/L NaHCO3	2 g/L NaHCO3	5 g/L NaHCO3	10 g/L NaHCO3	0.5 g/L ZVI	1.0 g/L ZVI	1.5 g/L ZVI
Day				0	0	0	0	0	0	0	0	0	0	0	0
pH	SU			5.0	6.5	7.1	7.5	7.9	6.8	7.1	7.5	7.8	6.3	5.2	4.3
Day				7	7	7	7	7	7	7	7	7	7	7	7
pH	SU		5.0	4.8	6.4	6.7	7.2	7.5	6.5	6.8	7.2	7.4	4.7	5.7	5.4
ORP	mV		186	148	-64	-43	-176	-145	-89	-128	-157	-133	-87	-53	-29
DO	mg/L		3.1	3.8	1.9	2.2	0.9	1.4	1.8	1.2	1.1	1.4	2.3	1.8	1.8
TSS	mg/L		0.3	0	61	155	103	159	75	87	127	235	27	82	103
Bicarbonate Alkalinity as CaCO3	mg/L		<5	<5	480	940	2120	4340	700	1180	2360	5120	<5	5	10
Hardness as CaCO3	mg/L		1158	680	860	860	680	460	680	680	460	460	340	680	1140
Ferrous Iron	mg/L		31.75	29.8	0.95	0.13	0.02	0.01	0.01	0.16	0.05	0.23	6.6	10.5	30
Sulfide	mg/L		0.01	0.01	0.06	0.03	0.06	0.05	<0.01	0.01	0.02	0.04	0.01	0.03	<0.01
ELLE Results															
Sulfate	mg/L	250	**840**	**960**	**940**	**890**	**880**	**910**	**970**	**930**	**910**	**870**	**920**	**780**	**1400**
DOC	mg/L		0.72	<0.5	0.75	0.90	1.2	1.6	0.92	0.73	1.4	1.2	0.72	0.59	0.62
Total Cadmium	mg/L	0.005	0.0043	0.0044	0.0042	0.0043	0.0028	0.0027	0.0037	0.0038	0.0026	0.0037	0.0040	0.0037	0.0038
Dissolved Cadmium	mg/L	0.005	**0.0053**	0.0042	0.0030	0.0013	0.00032	<0.00016	0.0023	0.0018	<0.00016	<0.00016	0.0041	0.0034	0.0031
Total Cobalt	mg/L		0.44	0.46	0.49	0.50	0.45	0.24	0.46	0.47	0.35	0.29	0.48	0.45	0.44
Dissolved Cobalt	mg/L		0.46	0.45	0.43	0.40	0.36	0.13	0.42	0.40	0.25	0.13	0.44	0.41	0.39
Total Iron	mg/L	0.30	**47**	**45**	**46**	**46**	**42**	**31**	**44**	**44**	**37**	**33**	**100**	**140**	**170**
Total Magnesium	mg/L		69	67	68	71	65	63	67	66	68	64	67	68	68
Total Manganese	mg/L	0.050	**28**	**25**	**26**	**26**	**23**	**4.3**	**24**	**25**	**17**	**17**	**26**	**26**	**26**
Total Potassium	mg/L		8.0	7.9	400	800	2000	3900	9.8	8.7	8.7	12	7.7	8.2	8.2
Total Sodium	mg/L		31	30	32	33	34	23	280	550	1400	2600	30	31	31

0.010 Primary Standard
0.05 Secondary Standard
0.022 Exceeds Primary or Secondary MCL
0.039 J value. Compound detected above method detection limit but below method calibration limit.
28 Compound detected in blank

Table 5
Plant Branch AP-BCD B3 BRGWC-50 Treatability Results

		USEPA MCL		Control	1 g/L KHCO3	2 g/L KHCO3	5 g/L KHCO3	10 g/L KHCO3	1 g/L NaHCO3	2 g/L NaHCO3	5 g/L NaHCO3	10 g/L NaHCO3	0.5 g/L ZVI	1.0 g/L ZVI	1.5 g/L ZVI
Day				0	0	0	0	0	0	0	0	0	0	0	0
pH	SU			5.7	6.8	7.1	7.7	8.1	7.0	7.2	7.6	7.9	6.4	5.7	5.7
Day				7	7	7	7	7	7	7	7	7	7	7	7
pH	SU		5.7	5.7	6.6	7.0	7.0	7.4	6.8	7.0	7.0	7.3	6.1	5.4	5.5
ORP	mV		322	325	345	324	321	285	266	241	246	228	117	41	-58
DO	mg/L		2.7	4.2	3.9	4.3	3.9	4.7	4.2	4.4	3.9	4.5	3.3	3.1	3.1
TSS	mg/L		0	3.4	3.9	6.1	3.2	291	3.3	4.3	2.6	400	54	283	63
Bicarbonate Alkalinity as CaCO3	mg/L		15	15	480	940	1760	4120	590	940	2950	5900	30	5	40
Hardness as CaCO3	mg/L		60	20	20	20	920	860	20	1140	860	1140	20	40	40
Ferrous Iron	mg/L		0.15	0.02	<0.01	0.05	<0.01	<0.01	<0.01	<0.01	0.01	<0.01	1.04	7.55	13.75
Sulfide	mg/L		0.01	0.02	0.04	0.06	0.04	0.04	0.06	0.06	0.03	0.09	0.15	0.04	0.04
ELLE Results															
Sulfate	mg/L	250	<3	**2900**	**1900**	**1400**	**1600**	**1600**	**1600**	**1400**	**1500**	**1500**	**1600**	**1500**	**1500**
DOC	mg/L		<0.5	0.94	1.1	1.4	2.1	4.1	1.3	1.7	2.1	9.9	0.90	0.91	0.87
Total Cadmium	mg/L	0.005	**0.0083**	**0.0090**	**0.0077**	**0.0090**	<0.00015	0.0046	**0.0091**	**0.0090**	<0.00015	**0.0058**	**0.0091**	**0.0087**	**0.0079**
Dissolved Cadmium	mg/L	0.005	**0.0092**	**0.0089**	**0.0087**	**0.0085**	<0.00016	0.0011	**0.0085**	**0.0085**	<0.00016	0.00016	**0.0085**	**0.0080**	**0.0071**
Total Cobalt	mg/L		1.2	1.3	1.5	1.4	0.44	1.1	1.4	1.4	0.36	1.2	1.3	1.4	1.4
Dissolved Cobalt	mg/L		1.3	1.4	1.3	1.3	0.43	0.32	1.3	1.4	0.39	0.12	1.5	1.3	1.3
Total Iron	mg/L	0.30	0.15	0.11	0.38	**0.38**	<0.023	0.14	0.26	0.24	0.037	**250**	**69**	**110**	150
Total Magnesium	mg/L		140	130	150	140	140	140	150	150	150	170	130	140	150
Total Manganese	mg/L	0.050	**82**	**76**	**83**	**81**	**2.9**	**57**	**96**	**97**	**3.6**	**35**	**82**	**79**	**92**
Total Potassium	mg/L		10	10	420	720	1900	3900	13	12	12	13	9.8	10	11
Total Sodium	mg/L		47	46	49	49	53	52	330	590	1900	2500	45	48	52

0.010 Primary Standard
0.05 Secondary Standard
0.022 Exceeds Primary or Secondary MCL
0.039 J value. Compound detected above method detection limit but below method calibration limit.
28 Compound detected in blank

Table 6
Plant Branch AP-BCD B4 PZ-59I Treatability Results

				Control	1 g/L KHCO3	2 g/L KHCO3	5 g/L KHCO3	10 g/L KHCO3	1 g/L NaHCO3		2 g/L NaHCO3	5 g/L NaHCO3	10 g/L NaHCO3	0.5 g/L ZVI	1.0 g/L ZVI	1.5 g/L ZVI
Day				0	0	0	0	0	0		0	0	0	0	0	0
pH	SU			3.9	6.2	6.7	7.9	7.6	6.4		6.7	7.2	7.6	5.5	4.8	4.1
Day				7	7	7	7	7	7		7	7	7	7	7	7
pH	SU		3.9	3.5	5.8	6.3	6.6	7.0	6.1		6.4	6.8	6.9	4.7	4.4	4.4
ORP	mV		184	202	-30	-114	-174	-202	-81		-135	-212	-189	20	84	84
DO	mg/L		3.1	4.4	1.7	0.7	0.4	0.2	1.1		0.7	0.2	0.2	3.1	2.1	2.9
TSS	mg/L		4.9	4.7	201	250	241	871	211		269	361	719	123	81	738
Bicarbonate Alkalinity as CaCO3	mg/L		<5	<5	240	700	1420	3540	360		700	2060	4720	<5	10	5
Hardness as CaCO3	mg/L		40	1820	460	1100	1700	1700	1600		2280	2280	1140	2280	1820	1700
Ferrous Iron	mg/L		194	59.5	111	13.7	59.2	6.9	55.2		11.4	9.4	7.3	13.2	28.2	66.5
Sulfide	mg/L		0.01	0.02	0.08	<0.01	<0.01	0.02	<0.01		0.01	0.03	0.02	0.03	0.04	0.01
ELLE Results																
Sulfate	mg/L	250	**2900**	**2500**	**2700**	**2700**	**2900**	**2800**	**2600**		**2600**	**2900**	**2800**	**2800**	**3200**	**3300**
DOC	mg/L		0.87	0.74	0.89	1.1	1.5	2.6	2.2		2.4	3.5	2.2	1.9	1.7	3.1
Total Cadmium	mg/L	0.005	**0.0063**	**0.0064**	**0.0059**	**0.0063**	**0.0063**	**0.0050**	**0.0063**		**0.0061**	**0.0062**	0.0038	**0.0066**	0.0044	**0.0054**
Dissolved Cadmium	mg/L	0.005	**0.0064**	**0.0061**	**0.0058**	**0.0051**	0.0044	<0.00016	**0.0055**		0.0047	0.0017	<0.00016	**0.0063**	**0.0054**	**0.0051**
Total Cobalt	mg/L		1.4	1.8	1.6	1.7	1.5	1.4	1.6		1.6	1.5	1.1	1.5	1.4	1.5
Dissolved Cobalt	mg/L		1.4	1.6	1.5	1.5	1.5	0.85	1.7		1.7	1.5	0.59	1.6	1.6	1.5
Total Iron	mg/L	0.30	**410**	440	400	420	**380**	**340**	**410**		**410**	**390**	**240**	**470**	**530**	**510**
Total Magnesium	mg/L		190	200	190	200	170	180	170		170	170	200	170	180	170
Total Manganese	mg/L	0.05	**78**	**99**	**93**	**85**	**74**	**58**	**72**		**74**	**71**	**36**	**76**	**78**	**77**
Total Potassium	mg/L		15	20	420	850	1400	3600	19		17	33	19	17	15	18
Total Sodium	mg/L		76	100	97	100	85	84	370		670	1300	2900	80	75	85

0.010 Primary Standard
0.05 Secondary Standard
0.022 Exceeds Primary or Secondary MCL
0.039 J value. Compound detected above method detection limit but below method calibration limit.
28 Compound detected in blank

Table 7
Plant Branch Percent Removal from Initial Characterization for Dissolved Metals

PZ-60I	Cd	0.0050	**0.017**	% Rem from IC	11.8	5.9	17.6	98.6	58.2	5.9	5.9	>99.1	>99.1	17.6	17.6	17.6	
	Co	NA	3.3	% Rem from IC	-3.0	-12.1	-3.0	18.2	48.5	-12.1	-21.2	57.6	48.5	3.0	-3.0	-6.1	
PZ-58I	Cd	0.0050	**0.0053**	% Rem from IC	20.8	43.4	75.5	94.0	>97.0	56.6	66.0	>97.0	>97.0	22.6	35.8	41.5	
	Co	NA	0.46	% Rem from IC	2.2	6.5	13.0	21.7	71.7	8.7	13.0	45.7	71.7	4.3	10.9	15.2	
BRGW-50	Cd	0.0050	**0.0092**	% Rem from IC	3.3	5.4	7.6	>98.3	88.0	7.6	7.6	>98.3	98.3	7.6	13.0	22.8	
	Co	NA	1.3	% Rem from IC	-7.7	0.0	0.0	66.9	75.4	0.0	-7.7	70.0	90.8	-15.4	0.0	0.0	
PZ-59I	Cd	0.0050	**0.0064**	% Rem from IC	4.7	9.4	20.3	31.3	>97.5	14.1	26.6	73.4	>97.5	1.6	15.6	20.3	
	Co	NA	1.4	% Rem from IC	-14.3	-7.1	-7.1	-7.1	39.3	-21.4	-21.4	-7.1	57.9	-14.3	-14.3	-7.1	

>96.5	Dissolved metal reduced to below MCL
95.7	Dissolved metal reduced by more than 50%