REPORT

2023 Annual Groundwater Monitoring and Corrective Action Report

Georgia Power Company - Plant McDonough-Atkinson Ash Pond 1

Submitted to:

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Certification

This 2023 Annual Groundwater Monitoring and Corrective Action Report, Georgia Power Company - Plant McDonough - Atkinson–Ash Pond 1 (AP-1) has been prepared in compliance with the United States Environmental Protection Agency Coal Combustion Residual Rule (40 Code of Federal Regulations [CFR] 257 Subpart D), specifically § 257.90(e), and the Georgia Environmental Protection Division Rules for Solid Waste Management 391-3-4-.10 by a qualified groundwater scientist or engineer with WSP USA Inc. I hereby certify that I am a qualified groundwater scientist, in accordance with the Georgia Rules of Solid Waste Management 391-3-4-.01.

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Executive Summary

This summary of the *2023 Annual Groundwater Monitoring and Corrective Action Report* provides the status of the groundwater monitoring and corrective program from August 2022 through June 2023 at Georgia Power Company (Georgia Power)'s Plant McDonough-Atkinson Ash Pond 1 (AP-1). Groundwater monitoring and reporting for AP-1 are performed by WSP USA Inc., in accordance with the United States Environmental Protection Agency (US EPA) Coal Combustion Residuals (CCR) Rule published in the Code of Federal Regulations (CFR) Title 40 Part 257 (40 CFR Part 257, Subpart D) dated April 17, 2015, and revised July 2018, 40 CFR § 257.90 through § 257.98. As required in 40 CFR § 257.90(e), this Annual Report describes the status of the groundwater monitoring program, summarizes key actions completed, and presents projected key activities for the upcoming reporting period at AP-1. Other CCR units (AP-2 and 3/4) at Plant McDonough-Atkinson (Plant McDonough, Site) are reported separately.

Plant McDonough, formerly a coal-fired power generating facility, was converted to a natural gas combined-cycle power generating facility in 2011. Located approximately 7 miles northwest of Atlanta in southeast Cobb County (5551 South Cobb Drive SE, Atlanta, Georgia 30339), the property occupies approximately 390 acres and is bounded on the southeast by the Chattahoochee River.

Plant McDonough

Groundwater at AP-1 is monitored using a comprehensive network of upgradient and downgradient wells that meet federal and state monitoring requirements. Routine sampling and reporting for AP-1 began after the background groundwater conditions were established between 2016 and 2018. Based on groundwater quality, an assessment monitoring program and assessment of corrective measures were established on November 13, 2019, and July 9, 2020, respectively. During the 2023 annual reporting period, the Site remained in assessment monitoring as corrective measures are evaluated. Groundwater elevation measurements were recorded from the Site monitoring wells prior to each sampling event to confirm the groundwater flow direction. The AP-1 groundwater monitoring well network remains sufficient to monitor groundwater downgradient of the unit. Detection monitoring well DGWC-121 was added to the network in March 2022, was first sampled in June 2022, and background data collection is ongoing. There were no other changes to the AP-1 certified monitoring network in the August 2022 through June 2023 monitoring periods. Semi-annual groundwater monitoring events for AP-1 were conducted in September 2022, and January-February 2023.

Groundwater samples were collected and analyzed for Appendix III[1] and Appendix IV[2] required monitoring parameters.

Analytical data from the September 2022 and the January-February 2023 monitoring events have been statistically analyzed in accordance with the Site's certified statistical analysis method. For the September 2022 and the January-February 2023 semi-annual monitoring events, statistical analyses indicate statistically significant increases (SSIs) for Appendix III constituents and statistically significant levels (SSLs) of Appendix IV constituents above the GWPS as summarized below.

Appendix III Constituent	**September 2022 SSIs[1]**
Boron	DGWC-37, DGWC-38, DGWC-39, DGWC-40, DGWC-67, DGWC-68A, DGWC-69
Calcium	DGWC-37, DGWC-38, DGWC-39, DGWC-40, DGWC-67, DGWC-68A
Chloride	DGWC-38, DGWC-40, DGWC-67
pH	DGWC-40, DGWC-68A
Sulfate	DGWC-37, DGWC-38, DGWC-39, DGWC-40, DGWC-67
TDS	DGWC-37, DGWC-38, DGWC-39, DGWC-40, DGWC-68A
Appendix IV Constituent	**September 2022 SSLs[2]**
Arsenic	DGWC-69
Cobalt	DGWC-40
Molybdenum	DGWC-68A

Appendix III Constituent	**January-February 2023 SSIs[1]**
Boron	DGWC-37, DGWC-38, DGWC-39, DGWC-40, DGWC-67, DGWC-68A
Calcium	DGWC-37, DGWC-38, DGWC-39, DGWC-40, DGWC-67, DGWC-68A
Chloride	DGWC-38, DGWC-40, DGWC-67
pH	DGWC-40
Sulfate	DGWC-37, DGWC-38, DGWC-39, DGWC-40, DGWC-67, DGWC-68A
TDS	DGWC-37, DGWC-38, DGWC-39, DGWC-40, DGWC-67
Appendix IV Constituent	**January-February 2023 SSLs[2]**
Arsenic	DGWC-69
Cobalt	DGWC-40
Molybdenum	DGWC-68A

Note:
[1] An SSI is determined by an exceedance of the calculated prediction limit.
[2] An SSL is determined by comparing the confidence interval to the GWPS. GA EPD has defined the GWPS as: (i) the MCL or RSL or (ii) background levels for constituents where the background level is higher than the MCL or RSL.

The Appendix IV SSLs are horizontally delineated by surface water adjacent to the wells that exhibit SSLs. Surface water samples were collected during the September 2022 and January-February 2023 sampling events, and arsenic, cobalt, and molybdenum were not detected in the surface water bodies downgradient of AP-1. Arsenic, and cobalt are vertically delineated by on-Site wells. An alternate source demonstration for molybdenum that documents the natural presence of molybdenum in site soils/rock was approved by GA EPD on March 3, 2023. Based on review of the Appendix III and Appendix IV results noted above, the Site will remain in assessment monitoring. Georgia Power will continue routine groundwater monitoring and evaluation of corrective

[1] Appendix III: boron, calcium, chloride, fluoride, pH, sulfate, and total dissolved solids

[2] Appendix IV: antimony, arsenic, barium, beryllium, cadmium, chromium, cobalt, fluoride, lead, lithium, mercury, molybdenum, combined radium (226 + 228), selenium, and thallium.

action alternatives at the Site. Reports will be posted to the website and provided to the GA EPD semi-annually. A Draft Remedy Selection Report, which summarizes the evaluation and proposed selection of a corrective measure, or measures, is planned for submittal to GA EPD on August 31, 2023 in lieu of the Semi-annual Remedy Selection and Design Progress Report.

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1.0 INTRODUCTION

In accordance with the United States Environmental Protection Agency (US EPA) coal combustion residuals (CCR) Rule [40 Code of Federal Regulations (CFR) 257 Subpart D] and the Georgia (GA) Environmental Protection Division (EPD) Rules for Solid Waste Management 391-3-4-.10, this *2023 Annual Groundwater Monitoring and Corrective Action Report* was prepared to document groundwater monitoring activities conducted at Georgia Power Company (Georgia Power)'s Plant McDonough-Atkinson Ash Pond 1 (AP-1) and satisfies the requirements of § 257.90(e). To specify groundwater monitoring requirements, GA EPD Rule 391-3-4-.10(6)(a) incorporates by reference the US EPA CCR rule (40 CFR 257 Subpart D). For ease of reference, the US EPA CCR rules are cited within this report.

This annual report documents groundwater monitoring activities from both semi-annual monitoring events, conducted in September 2022, and January-February 2023 at AP-1. Activities completed at Plant McDonough's Ash Ponds 2, and 3/4 are reported under separate cover.

1.1 Site Description and Background

Plant McDonough-Atkinson (Plant McDonough, Site), formerly a coal-fired power generating facility, was converted to a natural gas combined-cycle power generating facility in 2011. Located approximately 7 miles northwest of Atlanta in southeast Cobb County (5551 South Cobb Dr SE, Smyrna, GA 30339), the property comprises approximately 390 acres and is bounded on the southeast by the Chattahoochee River. A Site location map is included as Figure 1.

Four CCR surface impoundments are located on Site: Ash Pond 1 (AP-1), Ash Pond 2 (AP-2), Ash Pond 3 (AP-3) and Ash Pond 4 (AP-4). AP-3 and AP-4 have historically operated together and are being closed as a Combined Unit (AP-3/4). AP-2 and 3/4 are reported separately from AP-1. A notification of intent to initiate closure of the inactive CCR surface impoundment for AP-1 was certified on December 7, 2015 and posted to Georgia Power's website. A permit application package was submitted to GA EPD in November 2018 and is pending approval. Groundwater monitoring and reporting for AP-1 are being performed to meet the alternate schedule in § 257.100(e)(5) of the revised US EPA CCR rule (August 5, 2016). CCR removal and consolidation at Plant McDonough AP-2, and 3/4 is substantially complete, pending certification. Areas of certified CCR removal are shown on Figure 2.

1.2 Regional Geology and Hydrogeologic Setting

The following section and subsections include a general description of regional geologic and hydrogeologic characteristics of formations that occur beneath the Site (WSP 2023a). The Site is located in the Piedmont/Blue Ridge geologic province, which contains some of the oldest rock formations in the southeastern United States. These late Precambrian to late Paleozoic rocks have undergone repeated cycles of igneous intrusions and extrusions, metamorphism, folding, faulting, shearing, and silicification. Rock outcrops near the Site consist of biotite gneiss, porphyritic gneiss, mica schist, and quartzite.

Residual soils, primarily clayey/sandy silt, sandy silt with clay, and silty sand, occur as a variably thick blanket overlying bedrock across most of the Site. These residual saprolitic soils along with saprolitic transitionally or partially weathered rock, collectively referred to as the overburden, range between approximately 9 to 61 feet in thickness across the Site, with an average thickness of approximately 38 feet. Saprolitic rock is considered to be

transitionally weathered rock (TWR) or partially weathered rock (PWR). Where TWR is a qualitative description, PWR is defined by Standard Penetration Test (SPT) blow counts that exceed 50 blows/six inches.

A regional, unconfined surficial aquifer system is present at the Site, existing within the overburden and weathered and fractured upper bedrock, depending on topographic location. Recharge primarily occurs through precipitation and subsequent infiltration. Generally, groundwater flow occurs through intergranular pore spaces in the overburden and is controlled by topography and top of rock variations. However, a relatively higher transmissive zone is interpreted to occur at the base of the overburden in the interface of weathered bedrock (i.e., TWR/PWR) to competent bedrock, and is the primary groundwater flow path. The overburden has an average horizontal hydraulic conductivity of 10^{-4} centimeters per second (cm/s) and groundwater flow is interpreted to flow south-southeast.

A limited and localized bedrock aquifer system also occurs beneath the Site. The upper bedrock is fractured and weathered, connected hydraulically with the overburden groundwater, and considered part of the upper aquifer. The overlying silt/clay-rich overburden may act to retard recharge into the bedrock aquifer system. In addition, deeper bedrock is unweathered with few discontinuities (e.g., fractures) available to store or transmit groundwater.

1.3 Groundwater Monitoring Network

Pursuant to § 257.91, a groundwater monitoring system was installed within the uppermost aquifer at AP-1 to monitor groundwater passing the waste boundary. Wells were located to monitor upgradient and downgradient groundwater conditions based on groundwater flow direction. The monitoring well network was certified by a Professional Engineer in Georgia on April 17, 2019, and the certification is maintained in the Operating Record pursuant to § 257.90(f). AP-1 monitoring well and piezometer locations are shown on Figure 3.

A comprehensive network of monitoring wells was installed for groundwater monitoring around AP-1. A separate well network for AP-2 and 3/4 as well as a series of piezometers are also installed at the Site. Construction details are presented in Table 1 for each well in the current Site groundwater monitoring network, including detection monitoring wells, assessment monitoring wells and piezometers for AP-1 and the separate multi-unit monitoring network wells for AP-2 and 3/4.

2.0 GROUNDWATER MONITORING ACTIVITIES

The following section describes monitoring-related activities for sampling performed at the Site from August 2022 through June 2023. Routine groundwater sampling was performed in September 2022 and in January-February 2023 in accordance with 40 CFR § 257.93. Field sampling forms for these monitoring events are provided in Appendix A and the laboratory analytical results are provided in Appendix B.

2.1 Monitoring Well Installation and Maintenance

There were no changes to the detection groundwater monitoring system during this reporting period. September 2022 and January-February 2023 field activities included visual inspection of well conditions prior to sampling, recording conditions around each well, and performing exterior maintenance to provide safe access for sampling. The well condition inspection forms are included in Appendix C.

Monitoring wells are inspected semi-annually 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)). Monitoring wells

were inspected, necessary corrective actions were identified and subsequently completed, as documented in Appendix C. This documentation was performed under the direction of a professional geologist or engineer registered in the State of Georgia.

2.2 Assessment Monitoring

Pursuant to § 257.94(e)(1), an assessment monitoring program has been established for AP-1 based on the statistically significant increases (SSIs). A notice of assessment monitoring was placed in the operating record on November 13, 2019. Following the requirements of § 257.96, an assessment of corrective measures is ongoing, and a Draft Remedy Selection Report is expected to be submitted to GA EPD by August 31, 2023.

Groundwater sampling was conducted for AP-1 in September 2022 and in January-February 2023 in accordance with § 257.93 and GA EPD rule 391-3-4-.10(6)(a). Samples were collected from each well in the certified detection monitoring network and the established assessment monitoring network for AP-1 (Table 1). The location of each of these monitoring wells is shown on Figure 3. Table 2 presents a summary of groundwater sampling events completed for AP-1 and the status of the monitoring network.

During the September 2022 and the January-February 2023 semi-annual sampling events, groundwater samples were collected and analyzed for Appendix III and Appendix IV constituents. Results of sampling activities conducted in September 2022 and in January-February 2023 are presented in Appendix B.

2.3 Additional Sampling

Additional sampling (i.e., non-routine) was conducted during the September 2022 and February 2023 semi-annual monitoring events in support of the assessment of corrective measures and in continuing to define the nature and extent of groundwater impacts from AP-1. Additional samples from upgradient monitoring wells B-116D, B-117D, B-118 and B-119D were collected in September 2022 to characterize background conditions at the Site and evaluate updating the statistical background evaluation. Additional analyses were also performed to characterize the groundwater chemistry as part on ongoing remedy selection activities as well as ongoing risk evaluation. Results of these analyses are presented in Appendix B.

Installation of additional wells to characterize groundwater downgradient of the existing AP-1 network wells exhibiting SSLs of arsenic, and cobalt is infeasible due to the proximity of the engineered stream channel [also referred to as the unnamed tributary (UT)] to the west and the Chattahoochee River to the southeast. Georgia Power therefore collected surface water samples from the engineered stream channel and the Chattahoochee River. Surface water samples were collected on October 27, 2022 and on February 7, 2023 at the locations shown on Figure 3 and analyzed for Appendix III parameters, selected Appendix IV parameters (i.e., arsenic, cobalt, lithium, and molybdenum), and major ions (i.e., magnesium, potassium, sodium, and total and bicarbonate alkalinity). Samples from the engineered stream channel are used for horizontal delineation (i.e., location UT02 for arsenic and location UT03 for molybdenum). Surface water samples were collected in accordance with *Surface Water Sampling*, (US EPA, 2021). Laboratory reports associated with both October 2022 and February 2023 surface water sampling events are provided in Appendix B. Georgia Power will continue collecting surface water samples semi-annually.

3.0 SAMPLE METHODOLOGY AND ANALYSIS

The following sections describe methods used to conduct the September 2022 and January-February 2023, AP-1 groundwater assessment monitoring. Groundwater analytical data and chain of custody records are presented in Appendix B.

3.1 Groundwater Elevation Measurement

Site-wide groundwater levels were measured at the start of the September 2022 and the January-February 2023 sampling events. Measured groundwater level data are listed in Table 3. These data were used to calculate water level elevations and develop the Site groundwater potentiometric surface maps (Figures 4 and 5). The potentiometric surface maps indicates that groundwater generally flows southeast and west/southwest across the Site, consistent with historical observations.

3.2 Groundwater Gradient and Flow Velocity

Hydraulic gradient is calculated as the difference in groundwater elevation (in feet) divided by the distance between two piezometers or wells (in feet). Groundwater elevation data for three piezometer/well pairings were used to calculate hydraulic gradients for AP-1. These pairings (B-29/DGWC-68A, B-28/DGWC-37, and B-50/DGWC-39) were used to calculate the gradients along inferred groundwater flow paths (i.e., perpendicular to the potentiometric contours).

Average groundwater flow velocities at the Site were calculated using hydraulic gradient data, hydraulic conductivity data generated from slug testing results (WSP, 2023a), and an estimated effective porosity of the screened portion of the uppermost aquifer. Based on slug test data, the average hydraulic conductivity of the overburden is 7.70 x 10^{-4} centimeters/second (cm/s). An effective porosity of 0.2 (20%) was used based on the default values for effective porosity recommended by US EPA for a silty sand-type soil (US EPA, 1989).

The horizontal flow velocities were calculated using the commonly used derivative of Darcy's Law:

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

Where:

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

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

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

n_e = Effective porosity

Using this equation, groundwater flow velocities were calculated for AP-1 using September 2022 and January 2023 groundwater elevation data as presented on Tables 4A and 4B.

Calculated (horizontal) flow velocities ranged from approximately 76 feet per year (ft/yr) to 145 ft/yr during the September 2022 and January-February 2023 sampling events. These estimated flow velocities are consistent with past results and are also generally consistent with other published velocities for regolith-upper bedrock aquifers of the Piedmont (Heath, R.C., 1982).

3.3 Groundwater Sampling

Groundwater samples were collected in accordance with § 257.93(a) and using *Groundwater Sampling* (US EPA, 2017) as a guide. Monitoring wells were purged and sampled using low-flow sampling procedures. Non-dedicated, low-flow pneumatic bladder pumps and peristaltic pumps were used to purge and sample the wells. Field equipment was decontaminated prior to use and between wells using the *Field Equipment Cleaning and Decontamination* (US EPA, 2020a). Aqua TROLL® 400 meters were used to monitor and record field water quality parameters [temperature, specific conductance, dissolved oxygen (DO), pH, and oxidation-reduction potential (ORP)] during purging. Turbidity was monitored using LaMotte and Hach turbidimeters. Groundwater samples were collected when the following stabilization criteria were met for a minimum of three consecutive readings:

- pH within ±0.1 standard units (S.U.)
- specific conductance within ±5%
- DO within ±10% or ±0.2 mg/L (whichever is greater) where DO>0.5 mg/L; if DO<0.5 mg/L, no stabilization criteria apply
- Turbidity less than 5 nephelometric turbidity units (NTU)

Upon achieving stabilization, unfiltered samples were collected directly in appropriately preserved laboratory-supplied sample containers, placed in ice-packed coolers, and submitted to the laboratory following standard chain-of-custody protocol.

Field data and sampling notes for each monitoring well are recorded on field information forms generated by the Aqua TROLL® 400. These forms include a description of the sampling equipment, sampling method, test notes, field observations, and purge logs (purge rate, stabilization parameters, and depth to water measurements) at each monitoring location. Deviations from the sample plan and stabilization criteria are noted on the field information forms. Field data sheets and daily field instrument calibration forms are included in Appendix A.

3.4 Laboratory Analysis

The groundwater samples were analyzed for Appendix III and Appendix IV monitoring parameters per 40 CFR § 257.93 and § 257.95(d)(2). Tables 5A through 5D present a tabulated summary of the September 2022 and the January-February 2023 detection, assessment, and supplemental sample results. Results of surface water samples collected in October 2022 and in February 2023 are presented on Table 6A and 6B. Analytical methods used for monitoring parameters are listed in the analytical data reports in Appendix B.

Laboratory analyses were performed by Pace Analytical Services, LLC (Pace) in Peachtree Corners, Georgia [Pace subcontracted some analyses to Analytical Environmental Services, Inc. (AES) of Atlanta, Georgia]. Pace is accredited by the National Environmental Laboratory Accreditation Program (NELAP) and maintains NELAP certification for the parameters analyzed for this project. Analytical data reports including chain-of-custody records for the monitoring events and laboratory NELAP certifications are presented in Appendix B.

3.5 Quality Assurance and Quality Control

Quality assurance/quality control (QA/QC) samples were collected at a minimum rate of one sample per every 10 samples during the semi-annual sampling event. QA/QC samples included equipment blanks (where non-dedicated sampling equipment was used), field blanks, and duplicate samples. QA/QC sample data were evaluated during data validation as described below.

Groundwater quality data in this report were independently validated in accordance with *Data Validation Standard Operating Procedures* (US EPA, 2016), *National Functional Guidelines for Inorganic Superfund Method Data Review* (US EPA 2020b), *US Department of Energy, Evaluation of Radiochemical Data Usability* (Paar, 1997) and the analytical methods. Data validation generally consisted of reviewing sample integrity, holding times, laboratory method blanks, laboratory control samples, matrix spikes/matrix spike duplicate recoveries, relative percent differences (RPDs), laboratory and field duplicate RPDs, field and equipment blanks, and reporting limits. Where appropriate, validation qualifiers and flags are applied to the data per US EPA procedures and guidance. Data validation summaries are provided in Appendix B. The September 2022 and January-February 2023 data are considered usable for meeting project objectives and the results are considered valid.

A value followed by a "J" flag in tables and laboratory reports indicate that the value is an estimated analyte concentration detected between the method detection limit (MDL) and the laboratory reporting limit (RL). The estimated value is positively identified but is below the lowest level that can be reliably achieved within specified limits of precision and accuracy under routine laboratory operating conditions. Total radium concentration (Radium 226+228) is a combination of isotopes 226 and 228. When radium data are reported below the Minimum Detectable Concentration (MDC), the values are followed by a "U" flag in tables.

4.0 STATISTICAL ANALYSIS

Statistical analysis of Appendix III and Appendix IV groundwater monitoring data was performed pursuant to §257.93-95 following the established statistical method for AP-1 (Groundwater Stats Consulting, 2019). The statistical analysis reports prepared by Groundwater Stats Consulting, LLC. are presented in Appendix D.

4.1 Statistical Method

The selected statistical method for AP-1 was developed in accordance with 40 CFR § 257.93(f), using methodology presented in *Statistical Analysis of Groundwater Monitoring Data at RCRA Facilities, Unified Guidance*, March 2009, (US EPA, 2009). Sanitas groundwater statistical software was used to perform statistical analyses. Sanitas is a decision-support software package that incorporates the statistical tests required of Subtitle C and D facilities by US EPA regulations and guidance as recommended in the US EPA Unified Guidance document (US EPA, 2009).

4.1.1 Appendix III Detection Monitoring Statistical Methods

Groundwater monitoring data for Appendix III parameters were statistically analyzed for comparison against background concentrations and to identify trends. Upgradient well data were pooled to establish background statistical limits. Data from the September 2022 and January-February 2023 assessment monitoring events were analyzed using interwell prediction limits applying an optional 1-of-2 verification resample plan and compared to the background statistical limits to evaluate whether concentrations exceed background levels. The Sen's Slope/Mann Kendall trend test was performed to evaluate whether concentrations in individual wells are statistically increasing, decreasing, or stabilizing over time. The results of the background comparisons and trend analyses are presented in Appendix D.

4.1.2 Appendix IV Assessment Monitoring Statistical Methods

Statistical analysis for assessment monitoring is performed by comparing confidence intervals against groundwater protection standards (GWPS). Parametric tolerance limits are 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 40 CFR § 257.95(h) and GA EPD Rule 391-3-4-.10(6)(a). As described in 40 CFR § 257.95(h)(1-3), the GWPS is:

- The maximum contaminant level (MCL) established under §§ 141.62 and 141.66 of this title
- Where an MCL has not been established, Federal and State CCR rules specified levels for cobalt (0.006 mg/L), lead (0.015 mg/L), lithium (0.040 mg/L), or molybdenum (0.100 mg/L)
- The respective background level for a constituent when the background level is higher than the MCL or Rule-identified GWPS.

Following the rule requirements, background concentrations were evaluated to establish site-specific GWPS for statistical comparison of Appendix IV constituents. Table 7 summarizes the background limit established at each monitoring well and the applicable GWPS established under State and Federal rules.

Confidence intervals were calculated for each of the Appendix IV parameters in each downgradient well for comparison to the GWPS. Only when the entire confidence interval is above a GWPS is the well/constituent pair considered to exceed its respective standard, and thus an SSL exceedance identified.

A summary table of the statistical results accompanies the prediction limits for Appendix III and confidence intervals for Appendix IV in Appendix D. The data included for statistical analyses of background concentrations includes historical results through the current event. Tolerance limits for confidence interval calculations have been updated to include current data. Due to varying reporting limits for background samples over time, the most recent reporting limit is used when analytes are reported as non-detects. This process results in a more appropriate statistical test of the data set.

4.2 Statistical Analysis Results

Analytical data from September 2022 and January-February 2023 at AP-1 have been statistically analyzed in accordance with the Site's certified Statistical Analysis Plan (Groundwater Stats Consulting, 2019). The statistical results are included in Appendix D.

4.2.1 September 2022 Appendix III Statistical Results

The statistical analysis of the Appendix III parameters identified SSIs of boron, calcium, chloride, pH, sulfate, and total dissolved solids (TDS) for the September 2022 assessment monitoring event. A detailed list of the noted exceedances is presented in Appendix D.

4.2.2 September 2022 Appendix IV Statistical Results

The statistical analysis of the Appendix IV analytes identified SSLs of the following parameters for the September 2022 monitoring event using the GWPS established according to both 40 CFR § 257.95(h) and 391-3-4-.10(6)(a):

AP-1 Confidence Interval Statistically Significant Level Exceedances, September 2022	
Appendix IV Parameter	**AP-1 Detection Monitoring Well**
Arsenic	DGWC-69
Cobalt	DGWC-40
Molybdenum[1]	DGWC-68A

Note:

[1] An ASD for Molybdenum at DGWC-68A was approved by GA EPD on March 3, 2023; refer to Section 4.3.

4.2.3 January-February 2023 Appendix III Statistical Results

Based on the statistical results, SSIs of boron, calcium, chloride, pH, sulfate, and TDS were identified following the January-February 2023 assessment monitoring event. A detailed list of the noted exceedances is presented in Appendix D.

4.2.4 January-February 2023 Appendix IV Statistical Results

Analytical data from the January-February 2023 monitoring event at AP-1 have been statistically analyzed in accordance with the certified statistical analysis method. Review of the Sanitas results indicates that using the GWPS established according to both 40 CFR § 257.95(h) and 391-3-4-.10(6)(a), the following SSLs were identified:

AP-1 Confidence Interval Statistically Significant Level Exceedances, January-February 2023	
Appendix IV Parameter	**AP-1 Detection Monitoring Well**
Arsenic	DGWC-69
Cobalt	DGWC-40
Molybdenum[1]	DGWC-68A

Note:

[1] An ASD for Molybdenum at DGWC-68A was approved by GA EPD on March 3, 2023; refer to Section 4.3.

4.3 Alternate Source Demonstration

In accordance with 40 CFR § 257.95, an ASD was submitted to GA EPD on July 29, 2022, to address SSLs of molybdenum in groundwater at AP-1 (Golder, 2022a). The ASD presented multiple lines of evidence for the natural occurrence of molybdenum in groundwater at the Site and support the conclusion that the SSLs of molybdenum present in monitoring well DGWC-68A is not the result of impact by AP-1, but rather from an alternate, natural source of molybdenum. GA EPD provided concurrence with the findings presented and approved the ASD for molybdenum in groundwater at monitoring well DGWC-68A on March 3, 2023. A copy of this approval is provided in Appendix E.

Following the provisions of 40 CFR § 257.95, *Alternate Source Demonstration for Combined Radium* was submitted to GA EPD on April 29, 2022, to address SSLs of combined radium in Site groundwater. Following EPD initial review and comments, a revised ASD was submitted to GA EPD on July 26, 2022 (Golder, 2022b). Based

on site investigation data, additional supporting evidence as to the natural presence of combined radium, a *Supplemental ASD for Combined Radium* was submitted to GA EPD on May 22, 2023 (WSP, 2023b), and is pending approval. A copy of the supplemental ASD is provided in Appendix E.

5.0 ASSESSMENT MONITORING AND DELINEATION STATUS

A network of piezometers has been installed at the Site, and several of these piezometers have been sampled to characterize the nature and extent of arsenic, cobalt, and molybdenum SSLs. In addition, Georgia Power conservatively elected to sample surface water at multiple locations to complete horizontal delineation where proximity to surface water prevented installation of additional wells downgradient of the detection monitoring wells exhibiting SSLs (Section 2.3). The table below summarizes the delineation wells established for each SSL. Horizontal and vertical delineation of the arsenic and cobalt is complete based on review of the analytical results, and statistical analyses.

Constituent of Concern	Detection Monitoring Well with SSL	Vertical Delineation Well	Horizontal Delineation Well/ Surface Water Monitoring Location
Arsenic	DGWC-69	B-112D	UT02
Cobalt	DGWC-40	B-105D	B-100 / B-62 / CR-0.1
Molybdenum[1]	DGWC-68A	B-113D	UT03

Note:
[1] An ASD for Molybdenum at DGWC-68A was approved by GA EPD on March 3, 2023; refer to Section 4.3.

Potential trends in SSL constituent concentrations were further evaluated by Groundwater Stats Consulting (GSC) using the Sen's Slope/Mann Kendall test (Appendix D). No statistically significant trends were noted in the three wells exhibiting SSLs. The lack of increasing trends confirms the chemical stability of the groundwater and the plume appears to be stable.

A *Draft Remedy Selection Report* is planned for submittal, under separate cover, to GA EPD on August 31, 2023 in lieu of the Semi-annual Remedy Selection and Design Progress Report. Assessment of Corrective Measures

Following the requirements of 40 CFR § 257.96, Plant McDonough documented an Assessment of Corrective Measures (ACM) on December 4, 2020 for arsenic, cobalt, and molybdenum (Golder, 2020).

In accordance with 40 CFR § 257.97(a), a remedy selection progress report has been prepared and submitted concurrent with each semi-annual groundwater monitoring report to document results associated with additional data collection, and present progress toward selection and design of a groundwater remedy. A *Draft Remedy Selection Report* is planned for submittal to GA EPD on August 31, 2023 in lieu of the *Semi-annual Remedy Selection and Design Progress Report* (semi-annual progress report) previously included in the appendix of the routine annual groundwater monitoring and corrective action reports. A summary of the forthcoming *Draft Remedy Selection Report* includes the following:

- The current groundwater conceptual site model applicable to evaluating groundwater corrective measures proposed in the ACM Report (Golder 2020);
- An assessment of corrective action investigations completed to date;

- An evaluation of each corrective measure retained for further consideration following the completed investigations;
- A comparison of corrective measure options using the comparative criteria such as long- and short-term effectiveness and protectiveness, source control effectiveness and ease of implementation; and
- A summary of the proposed corrective measure, or measures, for AP-1.

6.0 MONITORING PROGRAM STATUS

Statistical evaluations of the groundwater monitoring data for AP-1 confirm (1) SSIs of Appendix III groundwater monitoring parameters above background and (2) SSLs of Appendix IV groundwater monitoring parameters above the established GWPS. AP-1 will continue to be monitored in accordance with the assessment monitoring program pursuant to 40 CFR § 257.95. An ACM was documented on December 4, 2020 following the provisions of 40 CFR § 257.96. Pursuant to 40 CFR 257.95(g)(1)(iv), the additional delineation wells and surface water monitoring locations may continue to be sampled as part of the ongoing semi-annual assessment monitoring program.

7.0 CONCLUSIONS AND FUTURE ACTIONS

This *2023 Annual Groundwater Monitoring and Corrective Action Report, Georgia Power Plant McDonough-Atkinson - Ash Pond 1* was prepared to fulfill the requirements of US EPA CCR Rule 40 CFR 257 Subpart D and GA EPD Rule 391-3-4-.10.

The groundwater flow directions interpreted during the most recent sampling events are consistent with historical evaluations, and based on our review, the monitoring well network continues to effectively monitor the uppermost aquifer in the vicinity of AP-1.

Review of analytical results and statistical analyses developed for the Site indicates confirmed SSIs of Appendix III above background and SSLs of Appendix IV above the established GWPS. In accordance with 40 CFR § 257.96, Georgia Power has initiated an ACM study for the identified SSLs. Data collected to date have delineated the horizonal and vertical extent of arsenic, cobalt, and molybdenum for AP-1. An ASD for the occurrence of molybdenum in groundwater was approved by GA EPD on March 3, 2023. Results from rock analyses completed near DGWC-68A indicate naturally occurring molybdenum is present in the rock in the form of molybdenite. *Alternate Source Demonstration for Combined Radium* was submitted to GA EPD in April 2022 and a revised ASD was submitted July 2022, to address SSLs of combined radium in Site groundwater. Additional site investigation data provided further supporting evidence as to the natural presence of combined radium. A *Supplemental ASD for Combined Radium* was submitted to GA EPD on May 22, 2023, and was approved by EPD in correspondence dated June 15, 2023.

Based on the findings presented herein, Plant McDonough will continue with assessment groundwater monitoring and reporting. A *Draft Remedy Selection Report*, which summarizes the evaluation and proposed selection of corrective measures will be submitted to EPD on August 31, 2023. The next sampling event is tentatively scheduled for September 2023.

8.0 REFERENCES

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WSP, 2023b. Supplemental ASD for Combined Radium, Plant McDonough Ash Pond 1 and Ash Pond 2 and 3/4, May 22, 2023.

TABLES

TABLE 1
SUMMARY OF MONITORING WELL, ASSESSMENT WELL AND PIEZOMETER CONSTRUCTION DATA
Georgia Power Company - Plant McDonough Ash Pond 1
Atlanta, Georgia

Well-ID	Hydraulic Location	Screened Media	NAD 83 Northing	NAD 83 Easting	Top of Casing Elevation (feet NAVD 88)	Ground Surface Elevation (feet NAVD 88)	Total Well Depth (feet bgs)	Top of Screen Elevation (feet NAVD 88)	Bottom of Screen Elevation (feet NAVD 88)	Screen Length (feet)	Date of Installation
ASH POND 1 (AP-1) DETECTION MONITORING WELL NETWORK											
DGWA-53	Upgradient	Upper Bedrock	1393472.8	2201668.8	844.26	841.3	28.9	823.7	813.7	10	9/24/2016
DGWA-70A	Upgradient	Overburden	1390481.4	2200591.6	808.52	805.8	59.3	756.9	746.9	10	5/10/2017
DGWA-71	Upgradient	Overburden	1393963.3	2201714.8	863.84	861.2	43.8	827.8	817.8	10	2/28/2017
DGWC-37	Downgradient	Overburden	1390482.2	2200919.8	766.21	763.7	39.7	734.4	724.4	10	11/28/2012
DGWC-38	Downgradient	Overburden	1390362.7	2201148.6	757.43	754.7	25.0	740.0	730.0	10	11/29/2012
DGWC-39	Downgradient	Overburden	1390303.6	2201540.1	759.89	757.0	21.2	746.2	736.2	10	11/6/2012
DGWC-40	Downgradient	Overburden	1390625.7	2201825.9	779.06	776.2	34.9	751.7	741.7	10	11/5/2012
DGWC-67	Downgradient	Overburden	1390953.8	2200830.7	766.70	767.0	56.3	720.7	710.7	10	3/14/2017
DGWC-68A	Downgradient	Overburden	1391301.2	2200734.9	765.33	765.4	29.8	746.0	736.0	10	4/20/2017
DGWC-69	Downgradient	Overburden	1391585.0	2200657.1	763.75	764.0	24.3	749.7	739.7	10	3/16/2017
DGWC-121	Downgradient	Overburden	1390739.7	2200849.4	764.16	764.5	50.0	724.8	714.8	10	3/22/2022
ASH POND 1 (AP-1) ASSESSMENT MONITORING WELL NETWORK											
B-62	Downgradient	Upper Bedrock	1389828.1	2201811.2	760.08	760.4	39.9	730.7	720.7	10	10/4/2016
B-100	Downgradient	Overburden	1390254.8	2202242.1	777.95	775.3	44.8	740.5	730.5	10	7/8/2020
B-105D	Downgradient	Upper Bedrock	1390634.5	2201831.9	779.01	776.0	70.0	716.0	706.0	10	10/19/2020
B-112D	Downgradient	Upper Bedrock	1391564.2	2200664.1	765.58	766.1	55.0	721.4	711.4	10	3/22/2021

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Atlanta, Georgia

Well-ID	Hydraulic Location	Screened Media	NAD 83 Northing	NAD 83 Easting	Top of Casing Elevation (feet NAVD 88)	Ground Surface Elevation (feet NAVD 88)	Total Well Depth (feet bgs)	Top of Screen Elevation (feet NAVD 88)	Bottom of Screen Elevation (feet NAVD 88)	Screen Length (feet)	Date of Installation
ASH POND 2 and ASH PONDS 3/4 (AP-2, 3/4) DETECTION MONITORING WELL NETWORK											
DGWA-53	Upgradient	Upper Bedrock	1393472.8	2201668.8	844.26	841.3	28.9	823.7	813.7	10	9/24/2016
DGWA-70A	Upgradient	Overburden	1390481.4	2200591.6	808.52	805.8	59.3	756.9	746.9	10	5/10/2017
DGWA-71	Upgradient	Overburden	1393963.3	2201714.8	863.84	861.2	43.8	827.8	817.8	10	2/28/2017
DGWC-2	Downgradient	Overburden/Upper Bedrock	1393958.0	2202119.5	850.88	848.3	49.0	809.6	799.6	10	10/2/2012
DGWC-4	Downgradient	Overburden	1394171.5	2202662.4	814.85	812.1	45.0	777.4	767.4	10	10/3/2012
DGWC-5	Downgradient	Overburden/Upper Bedrock	1394306.3	2202965.1	791.75	788.7	30.0	769.0	759.0	10	10/4/2012
DGWC-8	Downgradient	Overburden	1394322.2	2203882.1	826.38	824.1	49.1	785.4	775.4	10	10/10/2012
DGWC-9	Downgradient	Overburden	1394055.9	2204170.0	824.35	821.8	30.0	802.2	792.2	10	10/10/2012
DGWC-10	Downgradient	Overburden	1393818.3	2204201.1	823.55	820.9	45.4	785.9	775.9	10	10/11/2012
DGWC-11	Downgradient	Overburden	1393547.1	2204166.2	800.57	798.1	49.1	759.3	749.3	10	10/15/2012
DGWC-12	Downgradient	Overburden	1393149.4	2204128.3	773.86	771.2	25.1	756.5	746.5	10	10/15/2012
DGWC-13	Downgradient	Overburden	1392881.1	2204084.6	794.10	791.3	43.8	757.9	747.9	10	11/29/2012
DGWC-14	Downgradient	Overburden/Upper Bedrock	1392574.2	2204013.3	792.40	789.8	34.3	765.9	755.9	10	12/18/2012
DGWC-15	Downgradient	Overburden	1392544.1	2203679.0	824.50	821.5	67.1	764.8	754.8	10	11/29/2012
DGWC-17	Downgradient	Overburden	1392645.6	2203051.0	837.05	834.2	44.5	800.0	790.0	10	1/9/2013
DGWC-19	Downgradient	Overburden	1392342.6	2202601.0	825.46	822.9	39.8	793.5	783.5	10	3/12/2013
DGWC-20	Downgradient	Overburden	1392164.5	2202315.6	822.14	819.8	39.7	790.7	780.7	10	3/5/2013
DGWC-21	Downgradient	Overburden/Upper Bedrock	1392067.5	2202063.5	816.28	813.5	69.0	754.9	744.9	10	10/31/2012
DGWC-22	Downgradient	Upper Bedrock	1392126.3	2201791.9	816.59	813.7	60.0	764.0	754.0	10	10/25/2012
DGWC-23	Downgradient	Upper Bedrock	1392239.7	2201582.0	818.37	815.7	60.1	765.9	755.9	10	10/25/2012
DGWC-42	Downgradient	Overburden	1391327.8	2201870.2	804.68	802.0	50.4	762.1	752.1	10	11/12/2012
DGWC-47	Downgradient	Overburden/Upper Bedrock	1391553.8	2202610.5	797.45	794.3	28.8	775.9	765.9	10	6/23/2016
DGWC-48	Downgradient	Overburden/Upper Bedrock	1391314.6	2202290.2	788.33	785.2	30.0	765.6	755.6	10	6/22/2016

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Atlanta, Georgia

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ASH POND 2 and ASH PONDS 3/4 (AP-2, 3/4) ASSESSMENT MONITORING WELL NETWORK											
B-56	Downgradient	Overburden	1393957.9	2204187.8	823.59	821.0	45.0	786.4	776.4	10	10/3/2016
B-62	Downgradient	Upper Bedrock	1389828.1	2201811.2	760.08	760.4	39.9	730.7	720.7	10	10/4/2016
B-63	Downgradient	Overburden	1390999.1	2202978.1	777.10	777.3	46.0	741.8	731.8	10	10/6/2016
B-66	Downgradient	Overburden	1393858.2	2204277.5	815.90	813.3	55.3	768.3	758.3	10	11/16/2016
B-77	Downgradient	Overburden	1390948.7	2202942.0	776.86	777.1	42.0	745.1	735.1	10	9/17/2019
B-82	Downgradient	Overburden	1393750.0	2204258.1	810.07	807.5	45.0	773.0	763.0	10	9/21/2019
B-83	Downgradient	Overburden	1390735.5	2202695.6	776.98	777.1	48.6	738.5	728.5	10	9/30/2019
B-88	Downgradient	Overburden	1394401.1	2203738.3	820.07	817.0	72.0	755.0	745.0	10	11/15/2019
B-92	Downgradient	Overburden	1394392.7	2203026.7	785.08	785.3	24.6	770.7	760.7	10	12/11/2019
B-93	Downgradient	Overburden	1394348.7	2202946.7	789.07	789.2	28.9	770.3	760.3	10	12/12/2019
B-97	Downgradient	Overburden/Upper Bedrock	1394430.0	2203008.3	786.29	786.6	31.0	765.3	755.3	10	2/11/2020
B-98	Downgradient	Overburden	1394392.5	2202934.0	789.67	789.8	19.4	780.8	770.8	10	2/10/2020
B-100	Downgradient	Overburden	1390254.8	2202242.1	777.95	775.3	44.8	740.5	730.5	10	7/8/2020
B-101D	Downgradient	Overburden/Upper Bedrock	1394063.6	2204168.2	824.29	821.2	75.0	756.3	746.3	10	11/12/2020
B-102D	Downgradient	Upper Bedrock	1393828.4	2204200.4	823.42	820.6	85.0	746.2	736.2	10	11/10/2020
B-104D	Downgradient	Upper Bedrock	1391318.3	2202298.5	787.90	785.3	60.0	735.3	725.3	10	10/20/2020
B-106D	Downgradient	Upper Bedrock	1394327.1	2203869.2	826.21	823.5	80.0	754.1	744.1	10	11/13/2020
B-107D	Downgradient	Upper Bedrock	1392334.5	2202596.4	823.38	820.6	85.8	745.5	735.5	10	10/28/2020
B-108D	Downgradient	Upper Bedrock	1392156.1	2202312.5	821.13	818.4	80.0	749.4	739.4	10	10/27/2020
B-109D	Downgradient	Upper Bedrock	1393957.5	2202127.0	850.73	847.8	100.0	758.4	748.4	10	10/31/2020
B-111D	Downgradient	Upper Bedrock	1394303.4	2202956.4	791.87	789.1	85.0	714.9	704.9	10	11/3/2020
B-122D	Downgradient	Bedrock	1390992.8	2202975.4	777.03	777.3	85.0	707.5	697.5	10	3/24/2022
B-125D	Downgradient	Bedrock	1394111.6	2202580.7	821.70	819.2	145.4	684.1	674.1	10	3/31/2023

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PIEZOMETERS											
B-3	Downgradient	Overburden/Upper Bedrock	1394045.1	2202411.5	837.78	835.0	37.0	808.3	798.3	10	10/3/2012
B-6	Downgradient	Overburden	1394419.5	2203266.5	789.47	786.5	35.4	761.5	751.5	10	10/9/2012
B-7	Downgradient	Overburden	1394374.6	2203596.1	809.16	806.1	25.2	791.3	781.3	10	10/9/2012
B-16	Downgradient	Overburden	1392595.1	2203315.4	826.47	823.6	43.7	790.2	780.2	10	12/19/2012
B-18	Downgradient	Overburden	1392521.0	2202875.5	826.56	823.9	32.6	801.5	791.5	10	1/10/2013
B-24	Downgradient	Upper Bedrock	1392479.9	2201450.0	822.11	819.3	79.1	751.0	741.0	10	10/24/2012
B-25	Downgradient	Upper Bedrock	1392813.3	2201502.7	836.54	833.5	54.8	789.1	779.1	10	10/24/2012
B-26	Downgradient	Upper Bedrock	1393105.6	2201550.4	853.60	850.6	49.3	811.7	801.7	10	10/23/2012
B-28	Downgradient	Overburden/Upper Bedrock	1391967.4	2201679.2	816.08	813.3	69.4	754.3	744.3	10	10/31/2012
B-29	Downgradient	Overburden	1391890.0	2201422.0	816.43	813.5	54.4	769.4	759.4	10	1/11/2013
B-31	Downgradient	Upper Bedrock	1392034.3	2200928.5	797.47	794.9	45.1	760.2	750.2	10	1/22/2013
B-41	Downgradient	Overburden	1390920.8	2201751.9	795.20	792.4	60.0	743.0	733.0	10	11/14/2012
B-50	Downgradient	Overburden	1391657.1	2201841.0	809.67	809.2	36.0	784.4	774.4	10	6/24/2016
B-51	Downgradient	Overburden	1390501.2	2200906.5	765.92	763.3	65.0	708.3	698.3	10	6/27/2016
B-52	Downgradient	Overburden	1392308.3	2201314.8	822.89	820.3	50.0	781.4	771.4	10	9/28/2016
B-54	Downgradient	Overburden/Upper Bedrock	1394423.5	2203140.7	785.46	782.6	34.2	758.8	748.8	10	9/26/2016
B-55	Downgradient	Overburden	1394142.6	2204147.9	825.12	822.9	52.0	781.9	771.9	10	9/22/2016
B-57	Downgradient	Upper Bedrock	1391396.3	2202736.9	789.04	786.0	50.5	746.0	736.0	10	9/24/2016
B-58	Downgradient	Overburden	1391125.7	2202426.5	788.17	785.2	45.0	750.7	740.7	10	9/23/2016
B-59	Downgradient	Overburden/Upper Bedrock	1394349.1	2203001.1	788.00	785.5	30.3	765.3	755.3	10	9/23/2016
B-60	Downgradient	Overburden	1391100.7	2202881.6	782.13	779.2	49.8	739.9	729.9	10	9/29/2016
B-61	Downgradient	Overburden	1390957.8	2202505.8	782.09	779.0	51.9	737.5	727.5	10	9/29/2016
B-64	Downgradient	Overburden	1394381.9	2203031.3	785.83	786.1	30.4	766.1	756.1	10	11/2/2016
B-65	Downgradient	Overburden/Upper Bedrock	1394381.2	2204050.8	821.95	822.3	45.4	787.9	777.9	10	11/15/2016

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PIEZOMETERS											
B-68	Downgradient	Overburden	1391298.2	2200714.2	758.68	759.0	18.0	751.0	741.0	10	3/16/2017
B-72	Downgradient	Overburden	1391242.2	2200723.9	758.85	758.1	21.9	746.6	736.6	10	4/19/2017
B-73	Downgradient	Overburden	1391352.4	2200697.5	759.46	758.9	15.8	753.5	743.5	10	4/19/2017
B-74	Downgradient	Overburden	1391279.8	2200665.3	759.44	759.0	16.5	748.2	743.2	5	4/25/2017
B-76	Downgradient	Overburden	1390716.9	2202756.0	760.31	760.5	38.5	732.0	722.0	10	9/18/2019
B-78	Downgradient	Overburden/Upper Bedrock	1394328.2	2202958.2	790.75	788.0	30.0	768.0	758.5	10	9/22/2019
B-79	Downgradient	Overburden	1394458.6	2203223.0	788.66	785.9	34.9	761.0	751.5	10	9/21/2019
B-80	Downgradient	Overburden	1394372.6	2203533.9	804.47	801.8	30.0	782.0	772.5	10	9/20/2019
B-81	Downgradient	Overburden	1394364.9	2203741.1	820.56	817.7	50.0	778.5	768.5	10	9/22/2019
B-84	Downgradient	Overburden	1390411.9	2202241.9	776.24	776.3	49.1	737.5	727.5	10	10/1/2019
B-85	Downgradient	Overburden/Upper Bedrock	1394433.4	2203134.5	782.54	782.7	34.5	758.5	748.5	10	11/18/2019
B-86	Downgradient	Overburden/Upper Bedrock	1394480.0	2203206.6	784.29	784.6	34.1	760.5	750.5	10	11/18/2019
B-87	Downgradient	Overburden	1394401.9	2203531.3	803.37	800.4	42.0	768.7	758.7	10	11/17/2019
B-89	Downgradient	Upper Bedrock	1394398.4	2204049.4	822.36	822.6	49.5	783.1	773.1	10	11/19/2019
B-90	Downgradient	Overburden	1394501.0	2203212.6	784.00	784.2	33.4	760.8	750.8	10	12/10/2019
B-91	Downgradient	Overburden	1394447.1	2203123.9	782.98	783.1	34.6	758.5	748.5	10	12/11/2019
B-94	Downgradient	Overburden	1394402.0	2203513.7	801.74	799.2	45.2	764.6	754.6	10	1/23/2020
B-95	Downgradient	Overburden	1394518.6	2203167.7	784.00	784.3	33.3	761.3	751.3	10	2/11/2020
B-96	Downgradient	Overburden	1394478.7	2203099.3	784.92	785.3	33.1	762.2	752.2	10	2/10/2020
B-99	Downgradient	Overburden	1394524.2	2203084.5	782.39	782.6	12.3	775.3	770.3	5	7/7/2020

TABLE 1
SUMMARY OF MONITORING WELL, ASSESSMENT WELL AND PIEZOMETER CONSTRUCTION DATA
Georgia Power Company - Plant McDonough Ash Pond 1
Atlanta, Georgia

Well-ID	Hydraulic Location	Screened Media	NAD 83 Northing	NAD 83 Easting	Top of Casing Elevation (feet NAVD 88)	Ground Surface Elevation (feet NAVD 88)	Total Well Depth (feet bgs)	Top of Screen Elevation (feet NAVD 88)	Bottom of Screen Elevation (feet NAVD 88)	Screen Length (feet)	Date of Installation
PIEZOMETERS											
B-103D	Downgradient	Upper Bedrock	1391543.5	2202614.4	795.96	793.8	70.0	733.8	723.8	10	10/15/2020
B-110D	Downgradient	Upper Bedrock	1391294.4	2200736.0	764.61	764.7	65.0	711.7	701.7	10	11/17/2020
B-113D	Downgradient	Upper Bedrock	1391264.6	2200719.2	758.22	758.8	85.0	684.4	674.4	10	3/30/2021
B-115D	Downgradient	Upper Bedrock	1391265.3	2202580.7	789.17	786.4	80.0	717.2	707.2	10	3/20/2021
B-116D	Upgradient	Upper Bedrock	1390483.7	2200611.0	807.82	805.3	90.0	726.1	716.1	10	3/8/2021
B-117D	Upgradient	Upper Bedrock	1393963.8	2201727.3	863.82	861.2	75.0	796.5	786.5	10	3/17/2021
B-118	Upgradient	Upper Bedrock	1391219.3	2200449.7	807.70	805.0	75.0	740.2	730.2	10	3/9/2021
B-119D	Upgradient	Upper Bedrock	1391236.4	2200446.6	807.15	804.5	105	709.8	699.8	10	3/16/2021
B-120D	Downgradient	Upper Bedrock	1394047.2	2202436.4	836.42	834.0	70.0	775.0	765.0	10	3/6/2021
B-123D	Downgradient	Bedrock	1391234.4	2202608.4	781.80	778.9	160.0	668.9	618.9	50	4/4/2022

Notes:

1. Coordinate System: North America Datum 1983 (NAD 83) Georgia State Plane ,West Zone (U.S. feet)
2. bgs - Below Ground Surface; NAD - North American Datum; NAVD - North American Vertical Datum

TABLE 2
GROUNDWATER SAMPLING EVENT SUMMARY
Georgia Power Company - Plant McDonough Ash Pond 1
Atlanta, Georgia

Well ID	Hydraulic Location	Summary of Sample Events			Status of Monitoring Well
		September 2022	January-February 2023	May 2023	
Purpose of Sampling Event		Detection/ Assessment	Detection/ Assessment	background sampling	
ASH POND 1 (AP-1) MONITORING WELL NETWORK					
DGWA-53	Upgradient	X	X		Assessment
DGWA-70A	Upgradient	X	X		Assessment
DGWA-71	Upgradient	X	X		Assessment
DGWC-37	Downgradient	X	X		Assessment
DGWC-38	Downgradient	X	X		Assessment
DGWC-39	Downgradient	X	X		Assessment
DGWC-40	Downgradient	X	X		Assessment
DGWC-67	Downgradient	X	X		Assessment
DGWC-68A	Downgradient	X	X		Assessment
DGWC-69	Downgradient	X	X		Assessment
DGWC-121	Downgradient	X	X	X	Assessment
ASH POND 1 (AP-1) ASSESSMENT MONITORING WELL NETWORK					
B-62	Downgradient	X	X		Assessment
B-100	Downgradient	X	X		Assessment
B-105D	Downgradient	X	X		Assessment
B-112D	Downgradient	X	X		Assessment
ASH POND 1 (AP-1) SUPPLEMENTAL SAMPLING					
B-113D	Downgradient	X	X		Supplemental
B-116D	Upgradient	X	--		Supplemental
B-117D	Upgradient	X	--		Supplemental
B-118	Upgradient	X	--		Supplemental
B-119D	Upgradient	X	--		Supplemental

Notes:

"--" Not Sampled

X - indicates well sampled during event

TABLE 3
SUMMARY OF GROUNDWATER ELEVATIONS
Georgia Power Company - Plant McDonough Ash Pond 1
Atlanta, Georgia

Well ID	Top of Casing Elevation (feet NAVD 88)	Groundwater Elevation (feet NAVD 88)	Groundwater Elevation (feet NAVD 88)
		9/6/2022	1/31/2023
ASH POND 1 (AP-1) DETECTION MONITORING WELL NETWORK			
DGWA-53	844.26	830.21	833.17
DGWA-70A	808.52	765.56	766.50
DGWA-71	863.84	834.48	834.26
DGWC-37	766.21	752.23	753.16
DGWC-38	757.43	750.93	751.50
DGWC-39	759.89	752.24	753.48
DGWC-40	779.06	760.17	762.10
DGWC-67	766.70	756.15	757.23
DGWC-68A	765.33	754.83	756.14
DGWC-69	763.75	757.45	758.53
DGWC-121	764.16	754.49	755.88
ASH POND 1 (AP-1) ASSESSMENT MONITORING WELL NETWORK			
B-62	760.08	743.73	745.57
B-100	777.95	743.66	745.05
B-105D	779.01	760.68	762.42
B-112D	765.58	757.70	758.89
ASH POND 2 and ASH PONDS 3/4 (AP-2, 3/4) DETECTION MONITORING WELL NETWORK			
DGWA-53	844.26	830.21	833.17
DGWA-70A	808.52	765.56	766.50
DGWA-71	863.84	834.48	834.26
DGWC-2	850.88	820.72	821.79
DGWC-4	814.85	789.10	790.66
DGWC-5	791.75	780.26	782.20
DGWC-8	826.38	786.86	788.20
DGWC-9	824.35	795.82	798.86
DGWC-10	823.55	791.80	796.78
DGWC-11	800.57	784.41	791.01
DGWC-12	773.86	763.28	766.45
DGWC-13	794.10	760.03	759.88
DGWC-14	792.40	770.85	772.78
DGWC-15	824.50	783.46	783.36
DGWC-17	837.05	800.32	800.02
DGWC-19	825.46	799.23	798.83
DGWC-20	822.14	797.91	798.78
DGWC-21	816.28	797.85	797.98
DGWC-22	816.59	794.02	795.31
DGWC-23	818.37	795.43	800.18
DGWC-42	804.68	774.48	774.88
DGWC-47	797.45	780.54	781.70
DGWC-48	788.33	773.65	774.25

TABLE 3
SUMMARY OF GROUNDWATER ELEVATIONS
Georgia Power Company - Plant McDonough Ash Pond 1
Atlanta, Georgia

Well ID	Top of Casing Elevation (feet NAVD 88)	Groundwater Elevation (feet NAVD 88)	Groundwater Elevation (feet NAVD 88)
		9/6/2022	1/31/2023
ASH POND 2 and ASH PONDS 3/4 (AP-2, 3/4) ASSESSMENT MONITORING WELL NETWORK			
B-56	823.59	793.37	796.24
B-62	760.08	743.73	745.57
B-63	777.10	746.63	748.67
B-66	815.90	794.45	799.50
B-77	776.86	745.99	748.44
B-82	810.07	792.13	799.75
B-83	776.98	745.44	747.04
B-88	820.07	782.33	782.56
B-92	785.08	779.00	780.11
B-93	789.07	779.87	782.19
B-97	786.29	779.27	781.48
B-98	789.67	779.46	783.16
B-100	777.95	743.66	745.05
B-101D	824.29	792.29	794.78
B-102D	823.42	789.27	791.92
B-104D	787.90	780.82	781.88
B-106D	826.21	785.96	786.82
B-107D	823.38	799.55	799.95
B-108D	821.13	798.40	798.70
B-109D	850.73	811.56	811.83
B-111D	791.87	779.43	781.72
B-122D	777.03	746.21	747.93
PIEZOMETERS			
B-3	837.78	800.94	801.05
B-6	789.47	782.06	783.45
B-7	809.16	782.92	783.38
B-16	826.47	790.16	789.93
B-18	826.56	802.04	803.29
B-24	822.11	799.68	802.02
B-25	836.54	816.07	823.35
B-26	853.60	824.89	826.78
B-28	816.08	784.54	786.24
B-29	816.43	786.02	789.01
B-31	797.47	763.12	764.06
B-41	795.20	769.93	770.80
B-50	809.67	786.10	787.20
B-51	765.92	752.64	753.60
B-52	822.89	793.02	793.47
B-54	785.46	779.07	779.77
B-55	825.12	797.89	801.63
B-57	789.04	769.63	770.22

TABLE 3
SUMMARY OF GROUNDWATER ELEVATIONS
Georgia Power Company - Plant McDonough Ash Pond 1
Atlanta, Georgia

Well ID	Top of Casing Elevation (feet NAVD 88)	Groundwater Elevation (feet NAVD 88)	Groundwater Elevation (feet NAVD 88)
		9/6/2022	1/31/2023
PIEZOMETERS			
B-58	788.17	768.27	768.81
B-59	788.00	779.44	780.51
B-60	782.13	750.08	751.28
B-61	782.09	762.50	765.41
B-64	785.83	779.03	779.97
B-65	821.95	804.03	809.90
B-68	758.68	754.58	755.68
B-72	758.46	754.86	755.63
B-73	759.21	754.48	756.06
B-74	759.06	754.61	755.71
B-76	760.53	744.63	746.19
B-78	790.75	779.19	780.56
B-79	788.66	781.01	781.92
B-80	804.47	783.21	784.07
B-81	820.56	782.91	783.05
B-85	782.54	779.10	779.78
B-86	784.29	781.56	782.57
B-87	803.37	783.35	784.43
B-89	822.36	797.69	801.06
B-90	784.00	781.48	782.30
B-91	782.98	778.93	779.40
B-94	801.74	783.27	784.40
B-95	784.00	781.30	782.15
B-96	784.92	778.77	779.61
B-99	782.39	778.27	779.37
B-103D	795.96	782.74	783.57
B-110D	764.61	755.43	756.49
B-113D	758.22	756.18	757.20
B-115D	789.17	767.79	768.34
B-116D	807.82	763.52	765.43
B-117D	863.82	833.87	834.35
B-118	807.70	755.79	756.73
B-119D	807.15	759.05	760.26
B-120D	836.42	801.03	801.14
B-123D	781.80	769.00	768.02

Notes:

1. Elevation data recorded in feet referenced to the North American Vertical Datum 1988 (NAVD 88)
2. Survey data for monitoring wells and piezometers provided by Metro Engineering.

TABLE 4A
GROUNDWATER VELOCITY CALCULATIONS - SEPTEMBER 2022
Georgia Power Company - Plant McDonough Ash Pond 1
Atlanta, Georgia

Flow Paths	Groundwater Elevation (feet NAVD 88)[1]	Δ h (feet)[2]	Δ l (feet)[3]	Hydraulic Gradient (Δ h/Δ l)[4]	Average Hydraulic Conductivity, K (centimeter per second)[6]	Assumed Effective Porosity (n_e)[7]	Average Linear Groundwater Velocity	
							(feet per day)[5]	(feet per year)[5]
ASH POND 1 (AP-1)								
B-29/DGWC-68A	786.02	31.19	900	0.035	0.00077	0.2	0.38	138
	754.83							
B-28/DGWC-37	784.54	32.31	1700	0.019	0.00077	0.2	0.21	76
	752.23							
B-50/DGWC-39	786.10	33.86	1400	0.024	0.00077	0.2	0.26	96
	752.24							

Notes:

1. Elevation data recorded in feet referenced to the North American Vertical Datum 1988 (NAVD 88)
2. Δ h = Change in groundwater elevation
3. Δ l =Distance along flow path
4. i = Δ h / Δ l gradient in feet
5. Velocity = $(i * K)/n_e$
6. Hydraulic conductivity based on historic aquifer performance tests
7. Assumed effective porosities for overburden was based on the default values recommended by USEPA for a silty sand-type soil (1996). Assumed effective porosity for upper bedrock was derived from Daniel and Dahlen (2002) and Dowd and Marshall (1995).

TABLE 4B
GROUNDWATER VELOCITY CALCULATIONS - January 2023
Georgia Power Company - Plant McDonough Ash Pond 1
Atlanta, Georgia

Flow Paths	Groundwater Elevation (feet NAVD 88)[1]	Δ h (feet)[2]	Δ l (feet)[3]	Hydraulic Gradient (Δ h/Δ l)[4]	Average Hydraulic Conductivity, K (centimeter per second)[6]	Assumed Effective Porosity (n_e)[7]	Average Linear Groundwater Velocity	
							(feet per day)[5]	(feet per year)[5]
ASH POND 1 (AP-1)								
B-29/DGWC-68A	789.01	32.87	900	0.037	0.00077	0.2	0.40	145
	756.14							
B-28/DGWC-37	786.24	33.08	1700	0.019	0.00077	0.2	0.21	78
	753.16							
B-50/DGWC-39	787.20	33.72	1400	0.024	0.00077	0.2	0.26	96
	753.48							

Notes:

1. Elevation data recorded in feet referenced to the North American Vertical Datum 1988 (NAVD 88)
2. Δ h = Change in groundwater elevation
3. Δ l =Distance along flow path
4. i = Δ h / Δ l gradient in feet
5. Velocity = $(i * K)/n_e$
6. Hydraulic conductivity based on historic aquifer performance tests
7. Assumed effective porosities for overburden was based on the default values recommended by USEPA for a silty sand-type soil (1996). Assumed effective porosity for upper bedrock was derived from Daniel and Dahlen (2002) and Dowd and Marshall (1995).

TABLE 5A
ANALYTICAL DATA SUMMARY
September 2022
Georgia Power Company - Plant McDonough Ash Pond 1
Atlanta, Georgia

Analyte	Units	DETECTION MONITORING WELLS										
		DGWA-53	DGWA-70A	DGWA-71	DGWC-37	DGWC-38	DGWC-39	DGWC-40	DGWC-67	DGWC-68A	DGWC-69	DGWC-121
		9/8/2022	9/7/2022	9/7/2022	9/9/2022	9/12/2022	9/7/2022	9/7/2022	9/8/2022	9/7/2022	9/7/2022	9/8/2022
Appendix III												
BORON, TOTAL	mg/L	0.054	< 0.0086	< 0.0086	2.0	2.8	3.3	0.84	4.3	2.0	0.23	2.1
CALCIUM, TOTAL	mg/L	17.2	5.90	6.40	66.2	87.6	92.5	44.8	47.4	53.5	13.1	45.0
CHLORIDE, TOTAL	mg/L	1.6	2.1	8.2	5.4	8.5	8.2	15	8.9	4.1	4.9	4.5
FLUORIDE, TOTAL	mg/L	0.11	0.061 J	0.056 J	0.082 J	0.12	0.11	0.14	0.096 J	0.11	0.11	0.093 J
pH	S.U.	6.32	5.60	5.65	6.30	6.05	6.43	4.54	6.21	6.62	6.20	6.32
SULFATE, TOTAL	mg/L	12.0	< 0.50	7.00	96.6	234	146	203	117	36.5	11.6	84.8
TOTAL DISSOLVED SOLIDS	mg/L	129	34.0	82.0	300	468	449	339	252	256	102	261
Appendix IV												
ANTIMONY, TOTAL	mg/L	< 0.00078	< 0.00078	< 0.00078	< 0.00078	< 0.00078	< 0.00078	< 0.00078	< 0.00078	< 0.00078	< 0.00078	< 0.00078
ARSENIC, TOTAL	mg/L	0.0029 J	0.0024 J	< 0.0022	< 0.0022	< 0.0022	< 0.0022	< 0.0022	< 0.0022	< 0.0022	0.024	< 0.0022
BARIUM, TOTAL	mg/L	0.077	0.039	0.025	0.079	0.027	0.099	0.016	0.082	0.098	0.065	0.042
BERYLLIUM, TOTAL	mg/L	< 0.000054	0.000084 J	0.000075 J	0.000057 J	< 0.000054	< 0.000054	0.0031	< 0.000054	< 0.000054	< 0.000054	< 0.000054
CADMIUM, TOTAL	mg/L	< 0.00011	< 0.00011	< 0.00011	< 0.00011	0.00013 J	< 0.00011	0.00081	< 0.00011	0.00020 J	< 0.00011	< 0.00011
CHROMIUM, TOTAL	mg/L	< 0.0011	< 0.0011	< 0.0011	< 0.0011	< 0.0011	< 0.0011	< 0.0011	< 0.0011	< 0.0011	< 0.0011	< 0.0011
COBALT, TOTAL	mg/L	0.012	< 0.00039	< 0.00039	< 0.00039	0.0014 J	0.0065	0.037	0.0010 J	< 0.00039	< 0.00039	0.0019 J
FLUORIDE, TOTAL	mg/L	0.11	0.061 J	0.056 J	0.082 J	0.12	0.11	0.14	0.096 J	0.11	0.11	0.093 J
LEAD, TOTAL	mg/L	< 0.00089	< 0.00089	< 0.00089	< 0.00089	< 0.00089	< 0.00089	< 0.00089	< 0.00089	< 0.00089	< 0.00089	< 0.00089
LITHIUM, TOTAL	mg/L	0.0083 J	< 0.00073	0.0012 J	0.0019 J	0.0030 J	< 0.00073	0.0023 J	0.0048 J	< 0.00073	0.0025 J	0.010 J
MERCURY, TOTAL	mg/L	< 0.00013	< 0.00013	0.00013 J	< 0.00013	< 0.00013	< 0.00013	< 0.00013	< 0.00013	< 0.00013	< 0.00013	< 0.00013
MOLYBDENUM, TOTAL	mg/L	0.027	< 0.00074	< 0.00074	< 0.00074	0.0012 J	< 0.00074	< 0.00074	< 0.00074	0.20	0.0067 J	< 0.00074
RADIUM (226 + 228)	pCi/L	1.69	0.504 U	0.588 U	0.719 U	0.479 U	0.637 U	0.772 U	0.699 U	0.174 U	1.82	2.00
SELENIUM, TOTAL	mg/L	< 0.0014	< 0.0014	< 0.0014	< 0.0014	< 0.0014	< 0.0014	0.0018 J	< 0.0014	< 0.0014	< 0.0014	< 0.0014
THALLIUM, TOTAL	mg/L	< 0.00018	< 0.00018	< 0.00018	< 0.00018	< 0.00018	< 0.00018	< 0.00018	< 0.00018	< 0.00018	< 0.00018	< 0.00018
Additional Parameters												
ALKALINITY , BICARBONATE	mg/L	78.6	27.6	16.0	134	87.1	256	< 5.00	99.1	201	54.2	111
ALKALINITY , CARBONATE	mg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
ALKALINITY , TOTAL	mg/L	78.6	27.6	16.0	134	87.1	256	< 5.00	99.1	201	54.2	111
MAGNESIUM	mg/L	5.80	2.30	0.870	14.7	26.4	22.4	19.4	18.5	17.6	3.40	12.7
POTASSIUM	mg/L	3.6	1.6	0.76	4.4	4.1	2.9	5.9	3.8	3.8	2.8	3.7
SODIUM	mg/L	7.30	3.40	8.10	11.0	12.0	13.6	19.2	10.8	9.60	9.60	10.8
IRON, TOTAL	mg/L	5.4	< 0.025	< 0.025	0.093	0.040	12.3	< 0.025	< 0.025	0.097	0.075	3.3
FERROUS (II)	mg/L	3.00	0.00	0.00	0.00	0.00	6.00	0.00	0.00	0.00	0.00	2.75
FERRIC (III)	mg/L	2.4	< 0.025	< 0.025	0.093	0.040	6.3	< 0.025	< 0.025	0.097	0.075	0.55

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

TABLE 5A
ANALYTICAL DATA SUMMARY
September 2022
Georgia Power Company - Plant McDonough Ash Pond 1
Atlanta, Georgia

Analyte	Units	ASSESSMENT MONITORING WELLS			
		B-62	B-100	B-105D	B-112D
		9/9/2022	9/8/2022	9/7/2022	9/7/2022
Appendix III					
BORON, TOTAL	mg/L	0.064	0.24	0.87	0.26
CALCIUM, TOTAL	mg/L	31.4	46.0	73.2	26.5
CHLORIDE, TOTAL	mg/L	5.30	10.2	16.4	2.90
FLUORIDE, TOTAL	mg/L	0.13	0.072 J	0.11	0.27
pH	S.U.	6.22	5.24	6.44	6.72
SULFATE, TOTAL	mg/L	45.8	399	263	18.2
TOTAL DISSOLVED SOLIDS	mg/L	160	606	479	153
Appendix IV					
ANTIMONY, TOTAL	mg/L	< 0.00078	< 0.00078	< 0.00078	< 0.00078
ARSENIC, TOTAL	mg/L	< 0.0022	< 0.0022	0.0026 J	< 0.0022
BARIUM, TOTAL	mg/L	0.018	0.021	0.035	0.0026 J
BERYLLIUM, TOTAL	mg/L	0.00013 J	0.00058	< 0.000054	< 0.000054
CADMIUM, TOTAL	mg/L	< 0.00011	0.00027 J	< 0.00011	< 0.00011
CHROMIUM, TOTAL	mg/L	< 0.0011	< 0.0011	< 0.0011	< 0.0011
COBALT, TOTAL	mg/L	< 0.00039	0.028	0.0040 J	< 0.00039
FLUORIDE, TOTAL	mg/L	0.13	0.072 J	0.11	0.27
LEAD, TOTAL	mg/L	< 0.00089	< 0.00089	< 0.00089	< 0.00089
LITHIUM, TOTAL	mg/L	0.0085 J	0.0023 J	0.013 J	0.0039 J
MERCURY, TOTAL	mg/L	< 0.00013	< 0.00013	0.00014 J	< 0.00013
MOLYBDENUM, TOTAL	mg/L	< 0.00074	< 0.00074	< 0.00074	0.028
RADIUM (226 + 228)	pCi/L	1.96	0.643 U	3.05	0.755 U
SELENIUM, TOTAL	mg/L	< 0.0014	< 0.0014	< 0.0014	< 0.0014
THALLIUM, TOTAL	mg/L	< 0.00018	< 0.00018	< 0.00018	< 0.00018
Additional Parameters					
ALKALINITY , BICARBONATE	mg/L	70.3	31.5	42.0	106
ALKALINITY , CARBONATE	mg/L	< 5.0	< 5.0	< 5.0	< 5.0
ALKALINITY , TOTAL	mg/L	70.3	31.5	42.0	106
MAGNESIUM	mg/L	5.10	46.3	25.2	8.00
POTASSIUM	mg/L	2.4	1.2	8.2	3.1
SODIUM	mg/L	10.2	27.0	19.9	15.0
IRON, TOTAL	mg/L	6.5	25	1.9	0.026 J
FERROUS (II)	mg/L	1.5	7.0	0.0	0.0
FERRIC (III)	mg/L	5.0	18	1.9	0.026 J

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

TABLE 5B
SUPPLEMENTAL ANALYTICAL DATA SUMMARY
September 2022
Georgia Power Company - Plant McDonough Ash Pond 1
Atlanta, Georgia

Analyte	Units	SUPPLEMENTAL SAMPLING				
		B-113D	B-116D	B-117D	B-118	B-119D
		9/12/2022	9/8/2022	9/15/2022	9/9/2022	9/12/2022
Appendix III						
BORON, TOTAL	mg/L	0.048	< 0.0086	0.011 J	< 0.0086	0.048
CALCIUM, TOTAL	mg/L	36.5	10.1	9.50	5.20	10.4
CHLORIDE, TOTAL	mg/L	7.6	2.4	4.6	3.1	1.8
FLUORIDE, TOTAL	mg/L	1.0	0.065 J	0.090 J	0.080 J	0.084 J
pH	S.U.	7.95	5.97	5.86	6.49	6.57
SULFATE, TOTAL	mg/L	35.0	0.54 J	14.4	2.8	2.8
TOTAL DISSOLVED SOLIDS	mg/L	197	82.0	106	78.0	87.0
Appendix IV						
ANTIMONY, TOTAL	mg/L	< 0.00078	< 0.00078	< 0.00078	< 0.00078	0.0015 J
ARSENIC, TOTAL	mg/L	< 0.0022	< 0.0022	< 0.0022	< 0.0022	< 0.0022
BARIUM, TOTAL	mg/L	0.0051	0.017	0.043	0.022	0.0029 J
BERYLLIUM, TOTAL	mg/L	< 0.000054	< 0.000054	< 0.000054	< 0.000054	< 0.000054
CADMIUM, TOTAL	mg/L	< 0.00011	< 0.00011	< 0.00011	< 0.00011	< 0.00011
CHROMIUM, TOTAL	mg/L	< 0.0011	< 0.0011	< 0.0011	0.0017 J	< 0.0011
COBALT, TOTAL	mg/L	< 0.00039	< 0.00039	< 0.00039	< 0.00039	0.0031 J
FLUORIDE, TOTAL	mg/L	1.0	0.065 J	0.090 J	0.080 J	0.084 J
LEAD, TOTAL	mg/L	< 0.00089	< 0.00089	< 0.00089	< 0.00089	< 0.00089
LITHIUM, TOTAL	mg/L	0.0084 J	0.0054 J	0.0094 J	0.0024 J	0.0045 J
MERCURY, TOTAL	mg/L	< 0.00013	< 0.00013	< 0.00013	< 0.00013	< 0.00013
MOLYBDENUM, TOTAL	mg/L	0.052	< 0.00074	< 0.00074	0.0047 J	0.015
RADIUM (226 + 228)	pCi/L	0.440 U	0.686 U	0.875 U	0.787 U	0.328 U
SELENIUM, TOTAL	mg/L	< 0.0014	< 0.0014	< 0.0014	< 0.0014	< 0.0014
THALLIUM, TOTAL	mg/L	< 0.00018	< 0.00018	< 0.00018	< 0.00018	< 0.00018
Additional Parameters						
ALKALINITY , BICARBONATE	mg/L	125	50.3	42.0	35.2	60.6
ALKALINITY , CARBONATE	mg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
ALKALINITY , TOTAL	mg/L	125	50.3	42.0	35.2	60.6
MAGNESIUM	mg/L	4.80	3.4	1.5	2.0	3.2
POTASSIUM	mg/L	4.8	2.2	2.6	2.3	2.0
SODIUM	mg/L	22.2	7.7	16.6	10.0	10.2
IRON, TOTAL	mg/L	0.25	0.087	< 0.025	0.14	1.5
FERROUS (II)	mg/L	0.0	0.0	0.0	0.0	0.0
FERRIC (III)	mg/L	0.25	0.087	< 0.025	0.14	1.5

Notes:

1. mg/L - milligrams per liter; pCi/L - picocuries per liter; S.U. - standard units.

2.-- -Substance Not analyzed

3. < indicates the substance was not detected above the analytical method detection limit (MDL). The value displayed is the method detection limit.

4. J indicates the substance was detected at such low levels that the precision of the laboratory instruments could not produce a reliable value. Therefore, the value displayed is qualified by the laboratory as an estimated number.

5. Radium data are a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.

TABLE 5C
ANALYTICAL DATA SUMMARY
January-February 2023
Georgia Power Company - Plant McDonough Ash Pond 1
Atlanta, Georgia

Analyte	Units	DETECTION MONITORING WELLS										
		DGWA-53	DGWA-70A	DGWA-71	DGWC-37	DGWC-38	DGWC-39	DGWC-40	DGWC-67	DGWC-68A	DGWC-69	DGWC-121
		2/1/2023	1/31/2023	1/31/2023	2/2/2023	2/2/2023	2/3/2023	2/1/2023	2/2/2023	2/1/2023	2/1/2023	2/2/2023
Appendix III												
BORON, TOTAL	mg/L	0.051	0.011 J	0.0097 J	1.5	2.6	2.1	0.68	3.9	1.7	0.035 J	1.6
CALCIUM, TOTAL	mg/L	14.1	6.20	5.70	61.7	83.6	77.4	41.1	48.6	64.8	8.30	40.1
CHLORIDE, TOTAL	mg/L	1.9	2.2	7.3	5.9	8.7	7.4	16	9.4	4.2	5.8	4.3
FLUORIDE, TOTAL	mg/L	0.10	0.053 J	0.05 J	0.089 J	0.10	0.12	0.15	0.068 J	0.11	0.10	0.11
pH	S.U.	6.42	5.59	5.78	6.23	6.08	6.49	4.66	6.27	6.60	6.12	6.35
SULFATE, TOTAL	mg/L	13.3	< 0.50	6.80	94.3	239	115	189	117	35.6	6.90	67.6
TOTAL DISSOLVED SOLIDS	mg/L	116	163	87.0	302	478	382	343	317	243	79.0	221
Appendix IV												
ANTIMONY, TOTAL	mg/L	< 0.00078	< 0.00078	< 0.00078	< 0.00078	< 0.00078	< 0.00078	< 0.00078	< 0.00078	< 0.00078	< 0.00078	< 0.00078
ARSENIC, TOTAL	mg/L	0.0029 J	< 0.0022	< 0.0022	< 0.0022	< 0.0022	< 0.0022	< 0.0022	< 0.0022	< 0.0022	0.021	< 0.0022
BARIUM, TOTAL	mg/L	0.089	0.041	0.028	0.081	0.030	0.087	0.017	0.080	0.099	0.044	0.049
BERYLLIUM, TOTAL	mg/L	0.00016 J	0.000094 J	0.00011 J	< 0.000054	< 0.000054	< 0.000054	0.0028	< 0.000054	< 0.000054	< 0.000054	< 0.000054
CADMIUM, TOTAL	mg/L	0.00019 J	< 0.00011	< 0.00011	< 0.00011	< 0.00011	< 0.00011	0.00063	< 0.00011	< 0.00011	< 0.00011	< 0.00011
CHROMIUM, TOTAL	mg/L	< 0.0011	< 0.0011	< 0.0011	< 0.0011	< 0.0011	< 0.0011	< 0.0011	< 0.0011	< 0.0011	< 0.0011	< 0.0011
COBALT, TOTAL	mg/L	0.008	< 0.00039	< 0.00039	< 0.00039	0.0017 J	0.0050	0.035	0.0014 J	< 0.00039	< 0.00039	0.0016 J
FLUORIDE, TOTAL	mg/L	0.10	0.053 J	0.050 J	0.089 J	0.10	0.12	0.15	0.068 J	0.11	0.10	0.11
LEAD, TOTAL	mg/L	< 0.00089	< 0.00089	< 0.00089	< 0.00089	< 0.00089	< 0.00089	< 0.00089	< 0.00089	< 0.00089	< 0.00089	< 0.00089
LITHIUM, TOTAL	mg/L	0.0088 J	< 0.00073	0.0014 J	0.0018 J	0.0026 J	< 0.00073	0.0021 J	0.0048 J	< 0.00073	0.0021 J	0.0059 J
MERCURY, TOTAL	mg/L	< 0.00013	< 0.00013	< 0.00013	< 0.00013	< 0.00013	< 0.00013	< 0.00013	< 0.00013	< 0.00013	< 0.00013	< 0.00013
MOLYBDENUM, TOTAL	mg/L	0.023	< 0.00074	< 0.00074	< 0.00074	0.0015 J	< 0.00074	< 0.00074	< 0.00074	0.19	0.0058 J	< 0.00074
RADIUM (226 + 228)	pCi/L	1.92	0.416 U	0.314 U	1.23	0.462 U	0.878 U	0.603 U	0.498 U	1.37	1.85	0.868 U
SELENIUM, TOTAL	mg/L	< 0.0014	< 0.0014	< 0.0014	< 0.0014	< 0.0014	< 0.0014	< 0.0014	< 0.0014	< 0.0014	< 0.0014	< 0.0014
THALLIUM, TOTAL	mg/L	< 0.00018	< 0.00018	< 0.00018	< 0.00018	< 0.00018	< 0.00018	< 0.00018	< 0.00018	< 0.00018	< 0.00018	< 0.00018
Additional Parameters												
ALKALINITY, BICARBONATE	mg/L	75.1	29.7	20.3	137	97.8	239	< 5.00	91.7	218	39.8	90.1
ALKALINITY, CARBONATE	mg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
ALKALINITY, TOTAL	mg/L	75.1	29.7	20.3	137	97.8	239	< 5.00	91.7	218	39.8	90.1
MAGNESIUM	mg/L	4.60	2.40	0.790	13.5	24.9	19.2	17.9	19.6	16.8	2.20	11.3
POTASSIUM	mg/L	3.3	1.7	0.73	4.0	4.3	2.6	5.7	4.2	4.2	2.4	5.7
SODIUM	mg/L	7.70	3.50	7.50	10.8	11.5	12.1	18.4	11.4	6.70	9.40	10.8
IRON, TOTAL	mg/L	8.4	0.038 J	< 0.025	0.097	0.036 J	11.6	0.056	0.040	0.66	0.076	2.9
FERROUS (II)	mg/L	3.2	0.00	0.00	0.00	0.00	7.0	0.00	0.00	0.00	0.00	2.0
FERRIC (III)	mg/L	8.4	< 0.25	< 0.25	< 0.25	< 0.25	11.6	< 0.25	< 0.25	0.66	< 0.25	2.9

Notes:
1. mg/L - milligrams per Liter.
2. pCi/L - picocuries per Liter.
3. S.U. - Standard Units.
4. -- indicated data is not available.
5. < indicates the substance was not detected above the analytical method detection limit (MDL). The value displayed is the method detection limit.
6. J indicates the substance was detected at such low levels that the precision of the laboratory instruments could not produce a reliable value. Therefore, the value displayed is qualified by the laboratory as an estimated number.
7. Radium data are a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
8. Monitorig well DGWC-121 is sampled on a quarterly basis.

TABLE 5C
ANALYTICAL DATA SUMMARY
January-February 2023
Georgia Power Company - Plant McDonough Ash Pond 1
Atlanta, Georgia

Analyte	Units	DGWC-121	ASSESSMENT MONITORING WELLS			
			B-62	B-100	B-105D	B-112D
		5/2/2023	2/2/2023	2/2/2023	2/1/2023	2/1/2023
Appendix III						
BORON, TOTAL	mg/L	1.1	0.064	1.6	0.89	0.29
CALCIUM, TOTAL	mg/L	29.4	32.4	46.9	70.2	25.3
CHLORIDE, TOTAL	mg/L	2.70	5.80	11.7	15.9	3.10
FLUORIDE, TOTAL	mg/L	0.076	0.16	0.052 J	0.089 J	0.30
pH	S.U.	6.21	6.33	5.30	6.39	6.72
SULFATE, TOTAL	mg/L	47.3	52.1	356	256	17.9
TOTAL DISSOLVED SOLIDS	mg/L	69.0	197	595	477	200
Appendix IV						
ANTIMONY, TOTAL	mg/L	0.00082	< 0.00078	< 0.00078	0.0016 J	< 0.00078
ARSENIC, TOTAL	mg/L	<0.0022	< 0.0022	< 0.0022	< 0.0022	< 0.0022
BARIUM, TOTAL	mg/L	0.048	0.019	0.098	0.036	0.0028 J
BERYLLIUM, TOTAL	mg/L	<0.000054	0.00012 J	< 0.000054	< 0.000054	< 0.000054
CADMIUM, TOTAL	mg/L	<0.00011	< 0.00011	< 0.00011	< 0.00011	< 0.00011
CHROMIUM, TOTAL	mg/L	<0.0011	< 0.0011	< 0.0011	< 0.0011	< 0.0011
COBALT, TOTAL	mg/L	0.0017	< 0.00039	< 0.00039	0.0040 J	< 0.00039
FLUORIDE, TOTAL	mg/L	0.076	0.16	0.052 J	0.089 J	0.30
LEAD, TOTAL	mg/L	<0.00089	< 0.00089	< 0.00089	< 0.00089	< 0.00089
LITHIUM, TOTAL	mg/L	0.0045	0.0082 J	< 0.00073	0.013 J	0.0038 J
MERCURY, TOTAL	mg/L	<0.00013	< 0.00013	< 0.00013	< 0.00013	< 0.00013
MOLYBDENUM, TOTAL	mg/L	0.00089	< 0.00074	0.19	< 0.00074	0.030
RADIUM (226 + 228)	pCi/L	0.374 U	1.60	0.981	6.88	1.76
SELENIUM, TOTAL	mg/L	<0.0014	< 0.0014	< 0.0014	< 0.0014	< 0.0014
THALLIUM, TOTAL	mg/L	<0.00018	< 0.00018	< 0.00018	< 0.00018	< 0.00018
Additional Parameters						
ALKALINITY , BICARBONATE	mg/L	--	73.3	11.4	38.6	110
ALKALINITY , CARBONATE	mg/L	--	< 5.0	< 5.0	< 5.0	< 5.0
ALKALINITY , TOTAL	mg/L	--	73.3	11.4	38.6	110
MAGNESIUM	mg/L	--	5.00	42.6	24.4	7.60
POTASSIUM	mg/L	--	2.3	1.1	7.8	3.1
SODIUM	mg/L	--	9.90	26.1	18.4	14.0
IRON, TOTAL	mg/L	--	6.50	20.9	1.80	< 0.025
FERROUS (II)	mg/L	--	2.4	7.0	0.00	0.00
FERRIC (III)	mg/L	--	6.50	20.9	1.80	< 0.250

Notes:
1. mg/L - milligrams per Liter.
2. pCi/L - picocuries per Liter.
3. S.U. - Standard Units.
4. -- indicated data is not available.
5. < indicates the substance was not detected above the analytical method detection limit (MDL). The value displayed is the method
6. J indicates the substance was detected at such low levels that the precision of the laboratory instruments could not produce a reliable value. Therefore, the value displayed is qualified by the laboratory as an estimated number.
7. Radium data are a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
8. Monitorig well DGWC-121 is sampled on a quarterly basis.

TABLE 5D
SUPPLEMENTAL ANALYTICAL DATA SUMMARY
February 2023
Georgia Power Company - Plant McDonough Ash Pond 1
Atlanta, Georgia

Analyte	Units	ADDITIONAL SAMPLING
		B-113D
		2/2/2023
Appendix III		
BORON, TOTAL	mg/L	0.038 J
CALCIUM, TOTAL	mg/L	35.1
CHLORIDE, TOTAL	mg/L	7.60
FLUORIDE, TOTAL	mg/L	0.97
pH	S.U.	7.78
SULFATE, TOTAL	mg/L	33.1
TOTAL DISSOLVED SOLIDS	mg/L	199
Appendix IV		
ANTIMONY, TOTAL	mg/L	< 0.00078
ARSENIC, TOTAL	mg/L	< 0.0022
BARIUM, TOTAL	mg/L	0.0060
BERYLLIUM, TOTAL	mg/L	< 0.000054
CADMIUM, TOTAL	mg/L	< 0.00011
CHROMIUM, TOTAL	mg/L	< 0.0011
COBALT, TOTAL	mg/L	< 0.00039
FLUORIDE, TOTAL	mg/L	0.97
LEAD, TOTAL	mg/L	< 0.00089
LITHIUM, TOTAL	mg/L	0.0063 J
MERCURY, TOTAL	mg/L	< 0.00013
MOLYBDENUM, TOTAL	mg/L	0.051
RADIUM (226 + 228)	pCi/L	0.178 U
SELENIUM, TOTAL	mg/L	< 0.0014
THALLIUM, TOTAL	mg/L	< 0.00018
Additional Parameters		
ALKALINITY , BICARBONATE	mg/L	121
ALKALINITY , CARBONATE	mg/L	< 5.0
ALKALINITY , TOTAL	mg/L	121
MAGNESIUM	mg/L	4.70
POTASSIUM	mg/L	4.7
SODIUM	mg/L	22.3
IRON, TOTAL	mg/L	0.360
FERROUS (II)	mg/L	0.50
FERRIC (III)	mg/L	0.360 J

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

TABLE 6A
SURFACE WATER ANALYTICAL DATA SUMMARY
October 2022
Georgia Power Company - Plant McDonough Ash Pond 1
Atlanta, Georgia

Analyte	Units	SURFACE WATER SAMPLES						
		UT01_DS	UT01_US	UT02	UT03	CR+0.4	CR+0.2	CR-0.1
		10/27/2022	10/27/2022	10/27/2022	10/27/2022	10/27/2022	10/27/2022	10/27/2022
Appendix III								
Boron	mg/L	0.16	0.059	0.092	0.21	< 0.040	< 0.040	0.041
Calcium	mg/L	15.1	14.2	15.2	16.6	7.7	7.8	8.1
Chloride	mg/L	10.9	11.8	11.6	11.0	11.7	11.9	12.7
Fluoride	mg/L	0.26	0.30	0.28	0.27	0.18	0.18	0.19
Sulfate	mg/L	15.3	11.9	13.6	16.7	7.6	7.7	9.1
Total Dissolved Solids	mg/L	167	51.0	116	92.0	55.0	36.0	42.0
Appendix IV								
Arsenic	mg/L	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	--	--
Cobalt	mg/L	--	--	--	--	< 0.0050	< 0.0050	< 0.0050
Lithium	mg/L	--	--	--	--	<0.030	<0.030	<0.030
Molybdenum	mg/L	< 0.010	< 0.010	--	< 0.010	< 0.010	--	--
Major Ions								
Alkalinity, Total as CaCO3	mg/L	46.6	40.5	42.7	43.5	27.3	27.0	27.4
Alkalinity,Bicarbonate (CaCO3)	mg/L	46.6	40.5	42.7	43.5	27.3	27.0	27.4
Magnesium	mg/L	3.0	2.7	2.8	3.4	2.3	2.3	2.4
Potassium	mg/L	3.4	3.6	3.6	3.6	4.3	4.3	4.3
Sodium	mg/L	11.1	11.9	12.2	12.1	12.8	12.9	13.8

Notes:

1. mg/L = miligrams per liter

2. < indicates the substance was not detected above the analytical reporting limit (RL). The value displayed is the RL.

3. "--" = Analyte not analyzed

TABLE 6B
SURFACE WATER ANALYTICAL DATA SUMMARY
February 2023
Georgia Power Company - Plant McDonough Ash Pond 1
Atlanta, Georgia

Analyte	Units	SURFACE WATER SAMPLES						
		UT01_DS	UT01_US	UT02	UT03	CR+0.4	CR+0.2	CR-0.1
		2/7/2023	2/7/2023	2/7/2023	2/7/2023	2/7/2023	2/7/2023	2/7/2023
Appendix III								
Boron	mg/L	0.083	0.045	0.053	0.058	< 0.040	< 0.040	< 0.040
Calcium	mg/L	14.5	14.3	14.6	14.5	5.3	5.5	5.7
Chloride	mg/L	13.1	13.6	13.5	13.5	8.9	9.0	9.5
Fluoride	mg/L	0.31	0.34	0.32	0.32	0.11	0.10	0.11
Sulfate	mg/L	17.5	16.0	16.7	16.8	7.2	7.3	8.3
Total Dissolved Solids	mg/L	179	116	98.0	180	45.0	54.0	50.0
Appendix IV								
Arsenic	mg/L	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	--	--
Cobalt	mg/L	--	--	--	--	< 0.0050	< 0.0050	< 0.0050
Lithium	mg/L	--	--	--	--	< 0.030	< 0.030	< 0.030
Molybdenum	mg/L	< 0.010	< 0.010	--	< 0.010	< 0.010	--	--
Major Ions								
Alkalinity, Total as CaCO3	mg/L	46.5	44.9	45.9	45.7	25.9	26.5	26.0
Alkalinity,Bicarbonate (CaCO3)	mg/L	46.5	44.9	45.9	45.7	25.9	26.5	26.0
Magnesium	mg/L	2.9	2.7	2.8	2.8	1.8	1.9	1.9
Potassium	mg/L	2.8	2.5	2.7	2.9	3.0	2.8	2.9
Sodium	mg/L	11.0	11.2	11.2	11.1	7.5	8.0	8.1

Notes:

1. mg/L = miligrams per liter

2. < indicates the substance was not detected above the analytical reporting limit (RL). The value displayed is the RL.

3. "--" = Analyte not analyzed

TABLE 7
SUMMARY OF BACKGROUND LEVELS AND GWPS
Georgia Power Company - Plant McDonough Ash Pond 1
Atlanta, Georgia

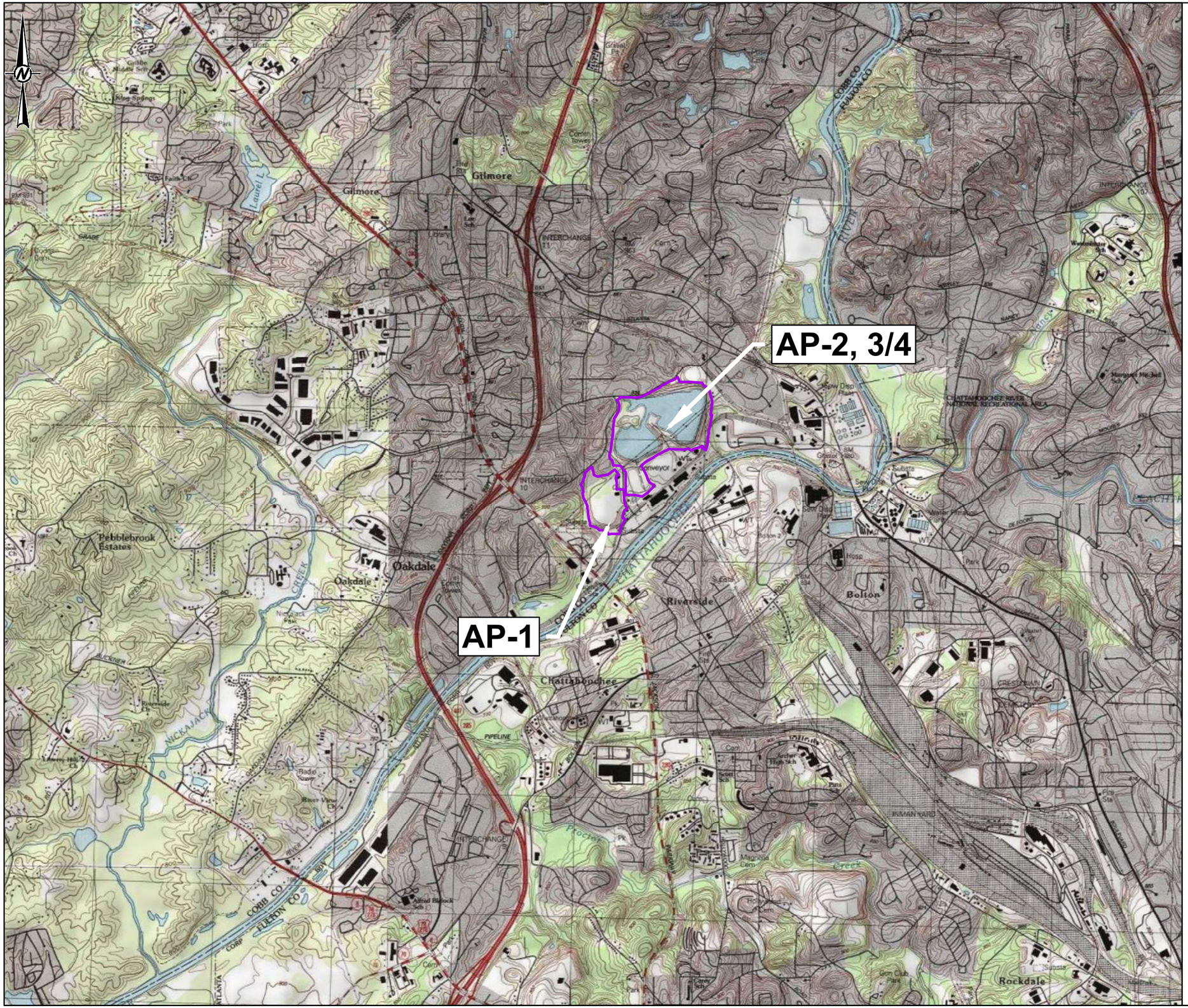
Analyte	Units	Maximum Contaminant Level (MCL)	Rule Specified Limit (RSL)	Site Specific Background September 2022[1]	Site Specific Background January-February 2023[1]	GWPS September 2022	GWPS January-February 2023
Antimony	mg/L	0.006	--	0.003[2]	0.003[2]	0.006	0.006
Arsenic	mg/L	0.01	--	0.0054[2]	0.0054	0.01	0.01
Barium	mg/L	2	--	0.19	0.19	2	2
Beryllium	mg/L	0.004	--	0.0009	0.0009	0.004	0.004
Cadmium	mg/L	0.005	--	0.0005[2]	0.0005[2]	0.005	0.005
Chromium	mg/L	0.1	--	0.005[2]	0.005[2]	0.1	0.1
Cobalt	mg/L	NA	0.006	0.0322	0.0322	0.0322	0.0322
Fluoride	mg/L	4	--	0.42	0.42	4	4
Lead	mg/L	NA	0.015	0.001[2]	0.001[2]	0.015	0.015
Lithium	mg/L	NA	0.04	0.03[2]	0.03[2]	0.04	0.04
Mercury	mg/L	0.002	--	0.0002[2]	0.0002[2]	0.002	0.002
Molybdenum	mg/L	NA	0.1	0.0409	0.0409	0.1	0.1
Radium (226 + 228)	pCi/L	5	--	4.8	5.008	5.000	5.008
Selenium	mg/L	0.05	--	0.005[2]	0.005[2]	0.05	0.05
Thallium	mg/L	0.002	--	0.001[2]	0.001[2]	0.002	0.002

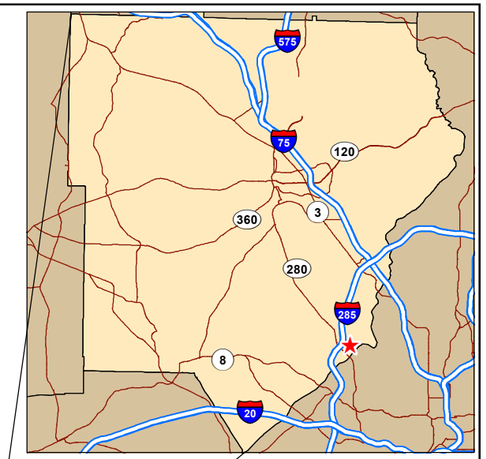
Notes:
mg/L = milligrams per liter; pCi/L = picocuries per liter; NA = Not Available

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

[2] The background tolerance limit (TL) used to evaluate GWPS for this analyte equals the laboratory specified reporting limit (RL). Per the Statistical Analysis Plan, and in accordance with the Unified Guidance, a non-parametric limit approach was used when the data set contains greater than 50% non-detect results for this analyte. Under this approach, the TL equals the highest value reported, for which is the laboratory RL.

FIGURES





REFERENCE

SERVICE LAYER CREDITS: COPYRIGHT:© 2013 NATIONAL GEOGRAPHIC SOCIETY, I-CUBED

0 0.5 1

1 INCH=0.5 MILES

CLIENT
GEORGIA POWER COMPANY
PLANT MCDONOUGH-ATKINSON

Georgia Power

PROJECT
2023 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT-ASH POND 1

TITLE
SITE LOCATION MAP

CONSULTANT

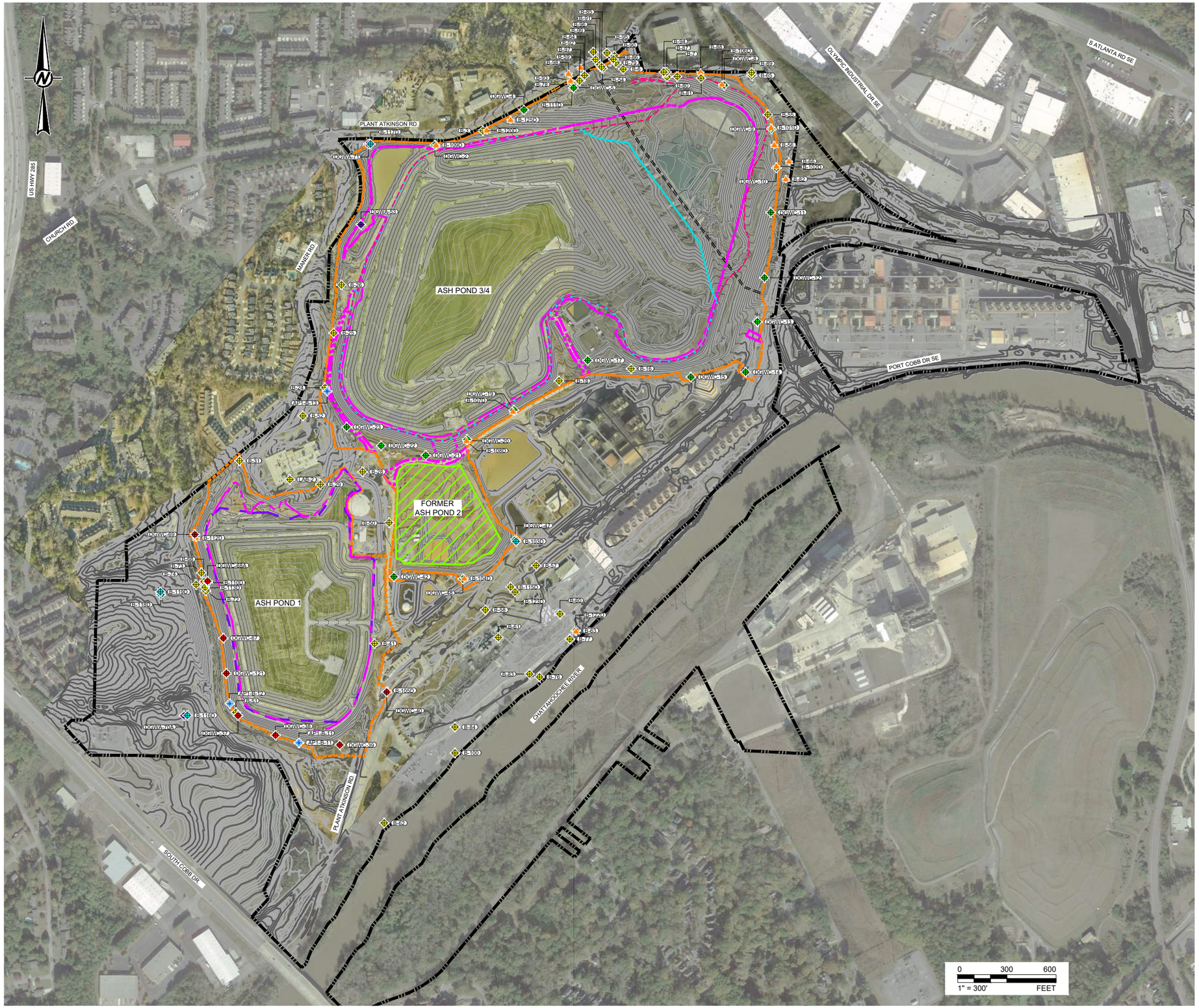
wsp

YYYY-MM-DD	2022-4-26
PREPARED	SEB
DESIGN	SEB
CHECKED	DLP
REVIEWED/APPROVED	RNQ

PROJECT No. 166849622

Rev. 0

FIGURE 1



LEGEND

- EXISTING CONTOURS (SEE REFERENCE 2)
- PROPERTY BOUNDARY (SEE REFERENCE 1)
- APPROXIMATE PRE-CLOSURE CCR LIMITS
- FINAL CLOSURE CCR LIMITS
- PERMIT BOUNDARY
- UPGRADIENT WELL
- AP-1 MONITORING WELL
- AP-2, 3/4 MONITORING WELL
- ASSESSMENT WELLS
- PIEZOMETER
- GOLDER 2017 BORINGS
- PIEZOMETERS GOLDER 2021 (SEE REFERENCE 3)
- AREA WHERE ASH HAS BEEN CERTIFIED REMOVED AS OF 2/28/2022

NOTES

1. EXISTING TOPOGRAPHIC CONTOUR INTERVAL = 1 FOOT.

2. CLOSURE ACTIVITIES FOR AP-1 WERE INITIATED IN JANUARY 2016 AND FINAL COVER CONSTRUCTION ACTIVITIES WERE COMPLETED IN Q1 2017. COMPLETION OF FINAL POST COVER CONSTRUCTION ACTIVITIES AND IMPROVEMENTS AT AP-1 ARE EXPECTED BY 2023. A PLANNED BARRIER WALL INSTALLATION IS CURRENTLY UNDER REVIEW WITH EPD.

CLOSURE ACTIVITIES FOR AP-2 WERE INITIATED IN JANUARY 2016. AP-2 CLOSURE ACTIVITIES CONSISTED OF CLOSURE BY REMOVAL OF CCR, WHERE CCR REMOVED FROM AP-2 WAS PLACED IN THE ADJACENT UNITS AP-1 AND AP-3. CLOSURE CONSTRUCTION ACTIVITIES AT AP-2 WERE COMPLETED IN Q1 OF 2017, AND BACKFILL DEVELOPMENT OF AP-2 WAS STARTED IN 2020 AND COMPLETED IN 2021.

CLOSURE ACTIVITIES FOR AP-3 AND AP-4 WERE INITIATED IN JANUARY 2016. AP-3 AND AP-4 ARE CURRENTLY UNDERGOING CLOSURE AS COMBINED UNIT AP-3/4, AND CLOSURE CONSTRUCTION ACTIVITIES ARE EXPECTED TO BE COMPLETE IN 2023.

REFERENCES

1. APPROXIMATE PROPERTY BOUNDARY PROVIDED BY SOUTHERN COMPANY SERVICES (2017).

2. THE EXISTING TOPOGRAPHY, CONTOUR ELEVATIONS FOR THE ASH PONDS 1 THROUGH 4 AREAS PROVIDED BY GEORGIA POWER COMPANY ON FEBRUARY 2023.

THE EXISTING AERIAL IMAGERY FOR THE ASH PONDS 1 THROUGH 4 AREAS PROVIDED BY GEORGIA POWER COMPANY. DATE OF THE AERIAL IMAGERY PROVIDED, AND SHOWN ON THIS PLAN FOR AP- 1 THROUGH 4 IS JANUARY, 2023.

3. SELECT BORING/PIEZOMETER LOCATIONS AND ELEVATIONS RESURVEYED BY METRO ENGINEERING & SURVEYING CO., INC., 2020 / 2021.

4. COORDINATES SYSTEM: NAD 1983 STATE PLANE GEORGIA WEST (U.S. FEET); ELEVATIONS DISPLAY IN FEET REFERENCED TO NORTH AMERICAN VERTICAL DATUM 1988 (FEET NAVD88).

5. AERIAL IMAGERY FOR THE SURROUNDING AREAS OF ASH PONDS 1 THROUGH 4 SOURCE: GOOGLE EARTH © PRO 2010, IMAGE DATED 09/5/2019. IMAGE GEORECTIFIED BY GOLDER AND INTENDED FOR INDICATIVE PURPOSES ONLY.

CLIENT
GEORGIA POWER COMPANY
PLANT MCDONOUGH - ATKINSON

Georgia Power

PROJECT
2023 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT-ASH POND 1

TITLE
PLANT MCDONOUGH CCR REMOVAL AREA

CONSULTANT
wsp

YYYY-MM-DD	2023-06-30
DESIGNED	SEB
PREPARED	CRP
CHECKED	DLP
REVIEWED / APPROVED	RNQ

PROJECT NO. 166849622
REV.
FIGURE 2

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

0 1 in

Path: \\atlanta\cadd\southern company\177449 plant mcdonough permitting\HAR\production\ | File Name: 2 CCR REMOVAL AREAS MAP.dwg

LEGEND

- AP-1 MONITORING WELL
- AP-2,3/4 MONITORING WELL
- UPGRADIENT WELL
- ASSESSMENT MONITORING WELLS
- PIEZOMETER
- TEMPORARY AEM WELL
- SURFACE WATER MONITORING LOCATION
- STAFF GUAGE
- PROPERTY BOUNDARY
- PERMIT BOUNDARY

NOTES

1. ALL LOCATIONS AND BOUNDARIES ARE APPROXIMATE.

REFERENCE

1. AERIAL IMAGE DATED NOVEMBER 2019 FROM GOOGLE EARTH AND JANUARY, 2023 PROVIDED BY GPC.

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

3. MONITORING WELL/PIEZOMETER LOCATIONS AND ELEVATIONS SURVEYED BY METRO ENGINEERING AND SURVEYING COMPANY IN AUGUST 2020 WITH ADDITIONAL SURVEY PROVIDED IN JANUARY 2021, MAY 2021, AND MAY 2023.

0 600 1,200

1 IN= 600 FT

CLIENT
GEORGIA POWER COMPANY
PLANT MCDONOUGH-ATKINSON

Georgia Power

PROJECT
2023 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT-ASH POND 1

TITLE
MONITORING WELL, PIEZOMETER AND SURFACE WATER LOCATION MAP

CONSULTANT

wsp

YYYY-MM-DD	2023-07-06
PREPARED	SEB
DESIGN	DLP
CHECKED	DP/RPK
REVIEWED/APPROVED	RNQ

PROJECT No. 166849621 | Rev. 0 | FIGURE 3

IF THIS BAR IS NOT EXACTLY ONE INCH WIDE THEN THE SHEET HAS BEEN MODIFIED FROM ANSI B

Path: C:\Users\dondel\Golder Associates\166849b - SCS Plant McDonough GW Cons Svcs GA - 800_Sharpfiles\MXD\Corrective Action Report\2023\Annual\AP-1\Figure3-Monitoring_Well_PiezometerandSWMap.mxd

LEGEND

- AP-1 MONITORING WELL
- AP-2,3/4 MONITORING WELL
- UPGRADIENT WELL
- ASSESSMENT MONITORING WELLS
- PIEZOMETER
- TEMPORARY AEM WELL
- APPROXIMATE GROUNDWATER FLOW
- GROUNDWATER SURFACE CONTOUR (FT-
- SURFACE WATER STREAM
- PERMIT BOUNDARY
- PROPERTY BOUNDARY
- EXISTING TOPOGRAPHY 10-FOOT
- EXISTING TOPOGRAPHY 2-FOOT

NOTES

1. ALL LOCATIONS AND BOUNDARIES ARE APPROXIMATE.

2. GROUNDWATER ELEVATION MEAUSREMENTS OBTAINED SEPTEMBER 6, 2022 BY WSP GOLDER.

3. GROUNDWATER ELEVATIONS DISPLAYED IN FEET REFERENCED TO NORTH AMERICAN VERTICAL DATUM (FT NAVD88).

4. WELLS AND PIEZOMETERS THAT CONTAIN A "D" DESIGNATION FOLLOWING THE NUMBER ARE DEEP WELLS AND ELEVATIONS ARE NOT USED FOR CONTOURING.

5. NM = NOT MEASURED.

REFERENCE

1. AERIAL IMAGE DATED NOVEMBER 2019 FROM GOOGLE EARTH AND AUGUST 31, 2022 PROVIDED BY GPC.

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

3. MONITORING WELL/PIEZOMETER LOCATIONS AND ELEVATIONS SURVEYED BY METRO ENGINEERING AND SURVEYING COMPANY IN AUGUST 2020 WITH ADDITIONAL SURVEY PROVIDED IN JANUARY 2021, MAY 2021, AND MAY 2023.

0 600 1,200

1 IN= 600 FT

CLIENT
GEORGIA POWER COMPANY
PLANT MCDONOUGH-ATKINSON

PROJECT
2023 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT-ASH POND 1

TITLE
SITE POTENTIOMETRIC MAP – SEPTEMBER 6, 2022

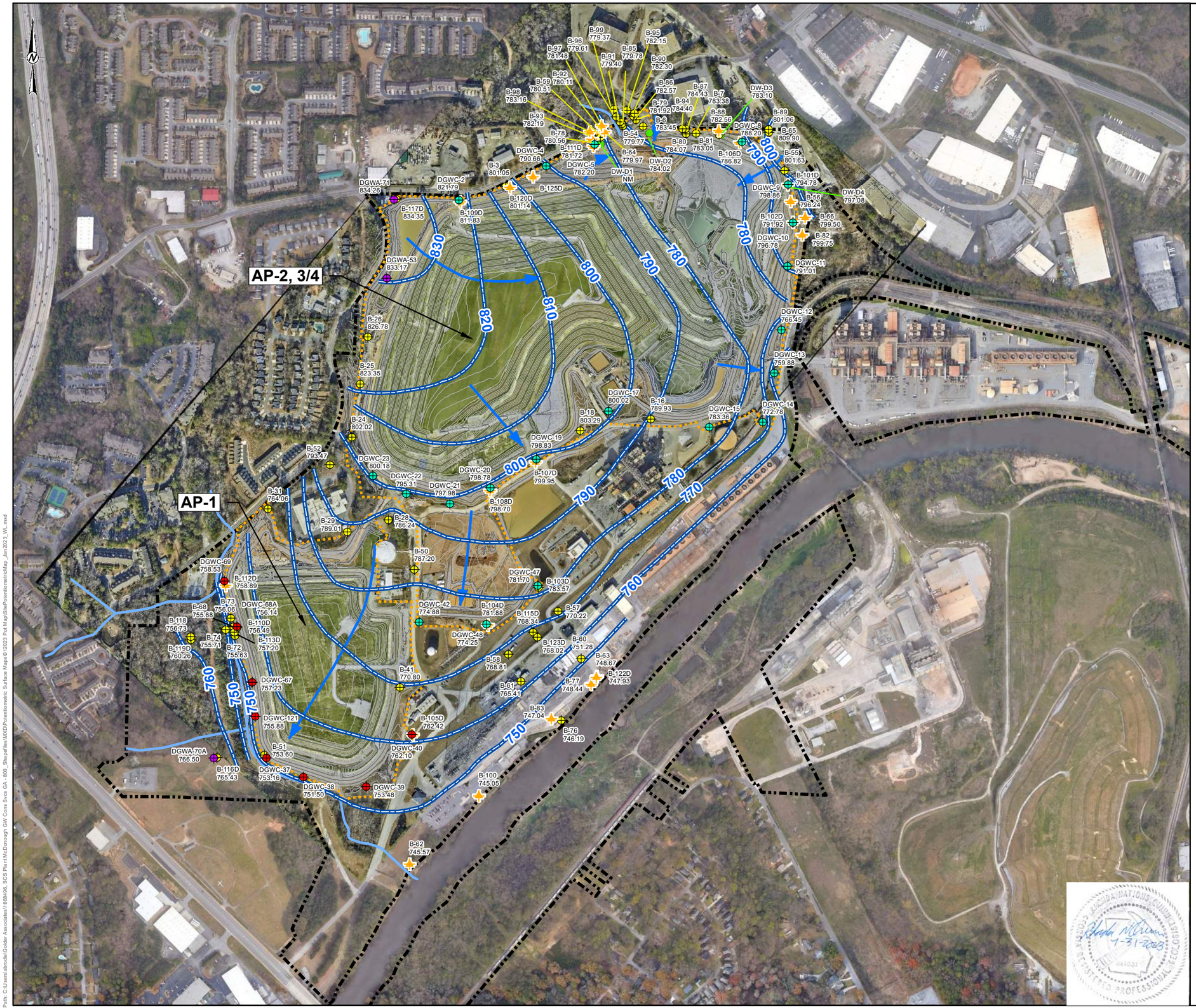
CONSULTANT

YYYY-MM-DD	2022-10-07
PREPARED	SEB
DESIGN	SEB
CHECKED	DLP
REVIEWED/APPROVED	RNQ

PROJECT No. 166849622 | Rev. 0 | FIGURE 4

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

Path: C:\Users\sbrodie\Golder Associates\166849\6. SCS Plant McDonough GW Cons Svcs GA - 800 _ Shapefiles\MXD\Potentiometric Surface Maps\September 2022 Pot.Map\SitePotentiometricMap_SEB_Sep2022_WL.mxd



LEGEND

- AP-1 MONITORING WELL
- AP-2,3/4 MONITORING WELL
- UPGRADIENT WELL
- ASSESSMENT MONITORING WELLS
- PIEZOMETER
- TEMPORARY AEM WEL
- GROUNDWATER SURFACE CONTOUR (FT-NAVD88)
- APPROXIMATE GROUNDWATER FLOW DIRECTION
- SURFACE WATER STREAM
- PERMIT BOUNDARY
- PROPERTY BOUNDARY
- EXISTING TOPOGRAPHY 10-FOOT
- EXISTING TOPOGRAPHY 2-FOOT

NOTES

1. ALL LOCATIONS AND BOUNDARIES ARE APPROXIMATE.

2. GROUNDWATER ELEVATION MEAUSREMENTS OBTAINED JANUARY 31, 2023 BY WSP.

3. GROUNDWATER ELEVATIONS DISPLAYED IN FEET REFERENCED TO NORTH AMERICAN VERTICAL DATUM (FT NAVD88).

4. WELLS AND PIEZOMETERS THAT CONTAIN A "D" DESIGNATION FOLLOWING THE NUMBER ARE DEEP WELLS AND ELEVATIONS ARE NOT USED FOR CONTOURING.

5. NM = NOT MEASURED.

REFERENCE

1. AERIAL IMAGE DATED NOVEMBER 2019 FROM GOOGLE EARTH AND JANUARY 2023 PROVIDED BY GPC.

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

3. MONITORING WELL/PIEZOMETER LOCATIONS AND ELEVATIONS SURVEYED BY METRO ENGINEERING AND SURVEYING COMPANY IN AUGUST 2020 WITH ADDITIONAL SURVEY PROVIDED IN JANUARY 2021, MAY 2021, AND MAY 2023.

0 600 1,200

1 IN= 600 FT

CLIENT
GEORGIA POWER COMPANY
PLANT MCDONOUGH-ATKINSON

Georgia Power

PROJECT
2023 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT-ASH POND 1

TITLE
SITE POTENTIOMETRIC MAP – JANUARY 31, 2023

CONSULTANT
wsp

YYYY-MM-DD	2023-07-06
PREPARED	SEB
DESIGN	SEB
CHECKED	DLP
REVIEWED/APPROVED	RPK

PROJECT No. 166849622

Rev. 0

FIGURE 5

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

Path: C:\Users\sbrodie\Golder Associates\166849\6. SCS Plant McDonough GW Cons Svcs GA - 600 _ Shapefiles\MXD\Potentiometric Surface Maps\0 2023 Pot Map\SitePotentiometricMap_Jan2023_WL.mxd

APPENDIX A

Field Data Forms and Instrument Calibration Records

APPENDIX A

Field Data Forms, September 2022

Low-Flow Test Report:

Test Date / Time: 9/9/2022 11:13:42 AM
Project: Plant McDonough
Operator Name: Jude Waguespack

Location Name: DGWC-37 **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 33.08 ft** **Total Depth: 43.08 ft** **Initial Depth to Water: 14.2 ft**	**Pump Type: dedicated bladder** **Tubing Type: LDPE** **Tubing Inner Diameter: 0.175 cm** **Tubing Length: 42 m** **Pump Intake From TOC: 38 ft** **Estimated Total Volume Pumped: 6250 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: 728541**

Test Notes:

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 10	+/- 5 %	+/- 10 %	+/- 2	+/- 1000 %	+/- 0.3	
9/9/2022 11:13 AM	00:00	6.92 pH	24.56 °C	0.46 µS/cm	5.69 mg/L	1.48 NTU	29.8 mV	14.20 ft	250.00 ml/min
9/9/2022 11:18 AM	05:00	6.32 pH	21.78 °C	0.50 µS/cm	1.64 mg/L	1.22 NTU	64.3 mV	14.35 ft	250.00 ml/min
9/9/2022 11:23 AM	10:00	6.30 pH	21.15 °C	0.50 µS/cm	1.29 mg/L	0.42 NTU	71.7 mV	14.35 ft	250.00 ml/min
9/9/2022 11:28 AM	15:00	6.30 pH	21.10 °C	0.50 µS/cm	0.96 mg/L	0.66 NTU	72.6 mV	14.35 ft	250.00 ml/min
9/9/2022 11:33 AM	20:00	6.30 pH	21.26 °C	0.50 µS/cm	0.98 mg/L	0.44 NTU	65.0 mV	14.35 ft	250.00 ml/min
9/9/2022 11:38 AM	25:00	6.30 pH	21.21 °C	0.50 µS/cm	0.87 mg/L	0.46 NTU	73.0 mV	14.35 ft	250.00 ml/min

Samples

Sample ID:	Description:
DGWC-37	

Created using VuSitu from In-Situ, Inc.

Low-Flow Test Report:

Test Date / Time: 9/12/2022 11:57:53 AM
Project: Plant McDonough
Operator Name: M. Mann

Location Name: DGWC-38 **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 18 ft** **Top of Screen: 10 ft** **Total Depth: 28.08 ft** **Initial Depth to Water: 6.64 ft**	**Pump Type: Dedicated Bladder** **Tubing Type: Polyethylene** **Pump Intake From TOC: 23 ft** **Estimated Total Volume Pumped: 3950 ml** **Flow Cell Volume: 90 ml** **Final Flow Rate: 140 ml/min** **Final Draw Down: 0.2 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 851413**

Test Notes:

Weather Conditions:
Sunny

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	
9/12/2022 11:57 AM	00:00	6.24 pH	24.11 °C	673.06 µS/cm	2.09 mg/L	1.84 NTU	45.9 mV	6.64 ft	300.00 ml/min
9/12/2022 12:02 PM	05:00	6.07 pH	21.10 °C	714.07 µS/cm	0.28 mg/L	0.80 NTU	46.0 mV	6.89 ft	140.00 ml/min
9/12/2022 12:07 PM	10:00	6.05 pH	22.09 °C	710.96 µS/cm	0.21 mg/L	0.63 NTU	45.3 mV	6.86 ft	140.00 ml/min
9/12/2022 12:12 PM	15:00	6.05 pH	21.73 °C	710.90 µS/cm	0.18 mg/L	1.45 NTU	45.7 mV	6.84 ft	140.00 ml/min

Samples

Sample ID:	Description:
DGWC-38	
FB-3	

Created using VuSitu from In-Situ, Inc.

Low-Flow Test Report:

Test Date / Time: 9/7/2022 2:23:39 PM
Project: Plant McDonough
Operator Name: Jude Waguespack

Location Name: DGWC-39 **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 14.65 ft** **Total Depth: 24.65 ft** **Initial Depth to Water: 7.85 ft**	**Pump Type: dedicated Bladder** **Tubing Type: LDPE** **Tubing Inner Diameter: 0.175 cm** **Tubing Length: 42 m** **Pump Intake From TOC: 19 ft** **Estimated Total Volume Pumped: 6000 ml** **Flow Cell Volume: 90 ml** **Final Flow Rate: 300 ml/min** **Final Draw Down: 1.21 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 728541**

Test Notes:

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 10	+/- 5 %	+/- 10 %	+/- 2	+/- 1000 %	+/- 0.3	
9/7/2022 2:23 PM	00:00	6.39 pH	71.95 °F	755.26 µS/cm	0.26 mg/L	28.00 NTU	-22.0 mV	7.85 ft	300.00 ml/min
9/7/2022 2:28 PM	05:00	6.41 pH	70.98 °F	763.39 µS/cm	0.12 mg/L	11.50 NTU	-33.9 mV	8.64 ft	300.00 ml/min
9/7/2022 2:33 PM	10:00	6.42 pH	70.73 °F	765.36 µS/cm	0.11 mg/L	5.61 NTU	-35.2 mV	9.02 ft	300.00 ml/min
9/7/2022 2:38 PM	15:00	6.43 pH	70.72 °F	766.03 µS/cm	0.11 mg/L	3.59 NTU	-42.1 mV	9.06 ft	300.00 ml/min
9/7/2022 2:43 PM	20:00	6.43 pH	70.96 °F	766.04 µS/cm	0.11 mg/L	2.99 NTU	-40.6 mV	9.06 ft	300.00 ml/min

Samples

Sample ID:	Description:
DGWC-39	

Low-Flow Test Report:

Test Date / Time: 9/7/2022 11:48:55 AM
Project: Plant McDonough (22)
Operator Name: Cole Mayer

Location Name: DGWC-40 **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 28.4 ft** **Total Depth: 38.4 ft** **Initial Depth to Water: 18.89 ft**	**Pump Type: Dedicated Bladder** **Tubing Type: LDPE** **Pump Intake From TOC: 33 ft** **Estimated Total Volume Pumped: 6250 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: 884187**

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	
9/7/2022 11:48 AM	00:00	4.76 pH	25.97 °C	440.77 µS/cm	5.35 mg/L	1.11 NTU	42.2 mV	18.89 ft	250.00 ml/min
9/7/2022 11:53 AM	05:00	4.56 pH	21.07 °C	468.43 µS/cm	3.06 mg/L	0.97 NTU	45.3 mV	18.80 ft	250.00 ml/min
9/7/2022 11:58 AM	10:00	4.56 pH	20.96 °C	469.24 µS/cm	2.60 mg/L	1.56 NTU	46.1 mV	18.80 ft	250.00 ml/min
9/7/2022 12:03 PM	15:00	4.55 pH	20.98 °C	469.86 µS/cm	2.71 mg/L	2.49 NTU	47.0 mV	18.60 ft	250.00 ml/min
9/7/2022 12:08 PM	20:00	4.54 pH	20.94 °C	469.97 µS/cm	2.72 mg/L	1.21 NTU	47.9 mV	18.90 ft	250.00 ml/min
9/7/2022 12:13 PM	25:00	4.54 pH	20.84 °C	469.34 µS/cm	2.64 mg/L	1.03 NTU	48.9 mV	18.90 ft	250.00 ml/min

Samples

Sample ID:	Description:
DGWC-40	
Dup-1	

Low-Flow Test Report:

Test Date / Time: 9/8/2022 10:23:34 AM
Project: SCS Plant McDonough
Operator Name: Duane Fulton

Location Name: DGWC-67 **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 45 ft** **Total Depth: 55.50 ft** **Initial Depth to Water: 10.60 ft**	**Pump Type: Alexis Peri Pump** **Tubing Type: LDPE** **Pump Intake From TOC: 50 ft** **Estimated Total Volume Pumped: 3500 ml** **Flow Cell Volume: 90 ml** **Final Flow Rate: 100 ml/min** **Final Draw Down: 0.3 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 883533**

Test Notes:

Weather Conditions:
Clear, 76

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	
9/8/2022 10:23 AM	00:00	6.49 pH	24.51 °C	453.57 µS/cm	6.42 mg/L	6.92 NTU	182.3 mV	10.78 ft	100.00 ml/min
9/8/2022 10:28 AM	05:00	6.20 pH	20.97 °C	434.63 µS/cm	0.45 mg/L	1.90 NTU	117.8 mV	10.87 ft	100.00 ml/min
9/8/2022 10:33 AM	10:00	6.20 pH	20.66 °C	440.67 µS/cm	0.23 mg/L	0.65 NTU	131.0 mV	10.88 ft	100.00 ml/min
9/8/2022 10:38 AM	15:00	6.20 pH	20.59 °C	441.80 µS/cm	0.19 mg/L	0.38 NTU	96.2 mV	10.90 ft	100.00 ml/min
9/8/2022 10:43 AM	20:00	6.20 pH	20.66 °C	441.73 µS/cm	0.16 mg/L	0.59 NTU	90.9 mV	10.91 ft	100.00 ml/min
9/8/2022 10:48 AM	25:00	6.20 pH	20.67 °C	440.84 µS/cm	0.14 mg/L	0.56 NTU	87.9 mV	10.91 ft	100.00 ml/min
9/8/2022 10:53 AM	30:00	6.21 pH	20.68 °C	439.93 µS/cm	0.12 mg/L	0.07 NTU	85.6 mV	10.91 ft	100.00 ml/min
9/8/2022 10:58 AM	35:00	6.21 pH	20.73 °C	440.00 µS/cm	0.12 mg/L	0.00 NTU	83.7 mV	10.90 ft	100.00 ml/min

Samples

Sample ID:	Description:
DGWC-67	

Low-Flow Test Report:

Test Date / Time: 9/7/2022 2:44:23 PM
Project: SCS Plant McDonough
Operator Name: Duane Fulton

Location Name: DGWC-68A **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 19.79 ft** **Total Depth: 29.79 ft** **Initial Depth to Water: 10.56 ft**	**Pump Type: Alexis Peri Pump** **Tubing Type: LDPE** **Pump Intake From TOC: 24 ft** **Estimated Total Volume Pumped: 3250 ml** **Flow Cell Volume: 90 ml** **Final Flow Rate: 130 ml/min** **Final Draw Down: 0.24 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 883533**

Test Notes:

Weather Conditions:
Cloudy, 83

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	
9/7/2022 2:44 PM	00:00	6.72 pH	29.22 °C	390.34 µS/cm	3.45 mg/L	0.00 NTU	44.2 mV	10.75 ft	130.00 ml/min
9/7/2022 2:49 PM	05:00	6.60 pH	21.94 °C	434.38 µS/cm	0.23 mg/L	3.76 NTU	49.9 mV	10.75 ft	130.00 ml/min
9/7/2022 2:54 PM	10:00	6.61 pH	21.04 °C	437.27 µS/cm	0.16 mg/L	1.25 NTU	48.8 mV	10.80 ft	130.00 ml/min
9/7/2022 2:59 PM	15:00	6.61 pH	21.09 °C	438.66 µS/cm	0.14 mg/L	0.50 NTU	43.4 mV	10.80 ft	130.00 ml/min
9/7/2022 3:04 PM	20:00	6.61 pH	21.37 °C	435.86 µS/cm	0.12 mg/L	0.00 NTU	46.4 mV	10.80 ft	130.00 ml/min
9/7/2022 3:09 PM	25:00	6.62 pH	21.17 °C	437.92 µS/cm	0.11 mg/L	0.00 NTU	44.8 mV	10.80 ft	130.00 ml/min

Samples

Sample ID:	Description:
DGWC-68A	

Low-Flow Test Report:

Test Date / Time: 9/7/2022 10:33:01 AM
Project: SCS Plant McDonough
Operator Name: Duane Fulton

Location Name: DGWC-69 **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 14.06 ft** **Total Depth: 24.06 ft** **Initial Depth to Water: 6.2 ft**	**Pump Type: Alexis Peri Pump** **Tubing Type: LDPE** **Pump Intake From TOC: 20 ft** **Estimated Total Volume Pumped: 6900 ml** **Flow Cell Volume: 90 ml** **Final Flow Rate: 95 ml/min** **Final Draw Down: 0.62 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 883533**

Test Notes:

Weather Conditions:
Cloudy, 75

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	
9/7/2022 10:33 AM	00:00	6.25 pH	28.90 °C	128.21 µS/cm	2.33 mg/L	51.70 NTU	92.3 mV	6.55 ft	100.00 ml/min
9/7/2022 10:38 AM	05:00	6.21 pH	23.66 °C	142.96 µS/cm	1.88 mg/L	43.40 NTU	131.5 mV	6.62 ft	100.00 ml/min
9/7/2022 10:43 AM	10:00	6.20 pH	23.12 °C	142.77 µS/cm	1.74 mg/L	44.00 NTU	136.7 mV	6.68 ft	90.00 ml/min
9/7/2022 10:48 AM	15:00	6.20 pH	23.13 °C	142.47 µS/cm	1.73 mg/L	20.10 NTU	183.5 mV	6.68 ft	90.00 ml/min
9/7/2022 10:53 AM	20:00	6.21 pH	22.83 °C	142.48 µS/cm	1.70 mg/L	12.90 NTU	139.5 mV	6.68 ft	90.00 ml/min
9/7/2022 10:58 AM	25:00	6.20 pH	22.88 °C	139.67 µS/cm	1.72 mg/L	9.03 NTU	132.4 mV	6.70 ft	90.00 ml/min
9/7/2022 11:03 AM	30:00	6.20 pH	22.67 °C	138.71 µS/cm	1.72 mg/L	7.34 NTU	126.6 mV	6.72 ft	90.00 ml/min
9/7/2022 11:08 AM	35:00	6.20 pH	22.75 °C	138.47 µS/cm	1.71 mg/L	8.54 NTU	116.9 mV	6.73 ft	90.00 ml/min
9/7/2022 11:13 AM	40:00	6.20 pH	22.86 °C	138.48 µS/cm	1.72 mg/L	7.25 NTU	148.7 mV	6.70 ft	80.00 ml/min
9/7/2022 11:18 AM	45:00	6.20 pH	22.94 °C	138.03 µS/cm	1.72 mg/L	7.21 NTU	155.6 mV	6.71 ft	90.00 ml/min
9/7/2022 11:23 AM	50:00	6.20 pH	22.73 °C	138.23 µS/cm	1.70 mg/L	6.87 NTU	161.4 mV	6.75 ft	90.00 ml/min
9/7/2022 11:28 AM	55:00	6.20 pH	22.44 °C	138.71 µS/cm	1.70 mg/L	5.85 NTU	164.9 mV	6.78 ft	95.00 ml/min
9/7/2022 11:33 AM	01:00:00	6.20 pH	22.29 °C	138.70 µS/cm	1.69 mg/L	6.77 NTU	167.2 mV	6.80 ft	95.00 ml/min

9/7/2022 11:38 AM	01:05:00	6.20 pH	22.13 °C	139.62 µS/cm	1.69 mg/L	7.10 NTU	125.1 mV	6.80 ft	95.00 ml/min
9/7/2022 11:43 AM	01:10:00	6.20 pH	22.36 °C	139.78 µS/cm	1.69 mg/L	5.21 NTU	118.0 mV	6.81 ft	95.00 ml/min
9/7/2022 11:48 AM	01:15:00	6.20 pH	22.33 °C	140.22 µS/cm	1.67 mg/L	4.33 NTU	113.4 mV	6.82 ft	95.00 ml/min

Samples

Sample ID:	Description:
DGWC-69	

Created using VuSitu from In-Situ, Inc.

Low-Flow Test Report:

Test Date / Time: 9/8/2022 11:58:27 AM
Project: SCS Plant McDonough
Operator Name: Duane Fulton

Location Name: DGWC-121 **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 39.4 ft** **Total Depth: 49.4 ft** **Initial Depth to Water: 9.48 ft**	**Pump Type: Alexis Peri Pump** **Tubing Type: LDPE** **Pump Intake From TOC: 45 ft** **Estimated Total Volume Pumped: 7315 ml** **Flow Cell Volume: 90 ml** **Final Flow Rate: 133 ml/min** **Final Draw Down: 5.63 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 883533**

Test Notes:

Weather Conditions:
Clear 78

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	
9/8/2022 11:58 AM	00:00	6.47 pH	28.75 °C	332.61 µS/cm	3.09 mg/L	12.47 NTU	-26.8 mV	9.84 ft	75.00 ml/min
9/8/2022 12:03 PM	05:00	6.33 pH	22.58 °C	387.63 µS/cm	0.65 mg/L	7.02 NTU	-80.6 mV	10.36 ft	75.00 ml/min
9/8/2022 12:08 PM	10:00	6.35 pH	22.85 °C	392.03 µS/cm	0.52 mg/L	5.50 NTU	-129.3 mV	10.65 ft	55.00 ml/min
9/8/2022 12:13 PM	15:00	6.35 pH	23.43 °C	392.35 µS/cm	0.51 mg/L	6.56 NTU	-87.2 mV	10.80 ft	45.00 ml/min
9/8/2022 12:18 PM	20:00	6.33 pH	23.40 °C	390.75 µS/cm	0.45 mg/L	5.78 NTU	-85.5 mV	10.90 ft	45.00 ml/min
9/8/2022 12:23 PM	25:00	6.37 pH	20.25 °C	381.58 µS/cm	0.08 mg/L	7.05 NTU	-129.4 mV	12.01 ft	220.00 ml/min
9/8/2022 12:28 PM	30:00	6.36 pH	19.71 °C	384.43 µS/cm	0.06 mg/L	5.15 NTU	-79.6 mV	13.30 ft	220.00 ml/min
9/8/2022 12:28 PM	30:30	6.36 pH	19.69 °C	384.94 µS/cm	0.06 mg/L	5.15 NTU	-110.4 mV	13.30 ft	220.00 ml/min
9/8/2022 12:33 PM	35:30	6.35 pH	19.64 °C	386.73 µS/cm	0.05 mg/L	4.08 NTU	-123.4 mV	14.20 ft	220.00 ml/min
9/8/2022 12:38 PM	40:30	6.34 pH	19.59 °C	385.75 µS/cm	0.04 mg/L	4.98 NTU	-77.6 mV	14.90 ft	220.00 ml/min
9/8/2022 12:43 PM	45:30	6.32 pH	19.99 °C	390.46 µS/cm	0.06 mg/L	3.03 NTU	-76.3 mV	15.09 ft	133.00 ml/min
9/8/2022 12:48 PM	50:30	6.32 pH	20.02 °C	389.47 µS/cm	0.06 mg/L	1.04 NTU	-74.6 mV	15.11 ft	133.00 ml/min
9/8/2022 12:53 PM	55:30	6.32 pH	20.14 °C	387.84 µS/cm	0.05 mg/L	0.99 NTU	-73.6 mV	15.11 ft	133.00 ml/min

Samples

Sample ID:	Description:
DGWC-121	

Low-Flow Test Report:

Test Date / Time: 9/8/2022 10:03:35 AM
Project: Plant McDonough
Operator Name: Jude Waguespack

Location Name: DGWA-53 **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 26.89 ft** **Total Depth: 36.89 ft** **Initial Depth to Water: 14.2 ft**	**Pump Type: peristaltic** **Tubing Type: LDPE** **Tubing Inner Diameter: 0.175 cm** **Tubing Length: 42 m** **Pump Intake From TOC: 31 ft** **Estimated Total Volume Pumped: 30750 ml** **Flow Cell Volume: 90 ml** **Final Flow Rate: 150 ml/min** **Final Draw Down: 13.25 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 728541**

Test Notes:

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 10	+/- 5 %	+/- 10 %	+/- 2	+/- 10	+/- 0.3	
9/8/2022 10:03 AM	00:00	6.60 pH	82.46 °F	0.17 µS/cm	5.60 mg/L	42.90 NTU	106.3 mV	14.20 ft	150.00 ml/min
9/8/2022 10:08 AM	05:00	6.12 pH	70.29 °F	0.17 µS/cm	2.33 mg/L	40.80 NTU	83.9 mV	15.53 ft	150.00 ml/min
9/8/2022 10:13 AM	10:00	6.13 pH	69.19 °F	0.17 µS/cm	2.42 mg/L	40.40 NTU	90.5 mV	16.81 ft	150.00 ml/min
9/8/2022 10:18 AM	15:00	6.14 pH	69.91 °F	0.17 µS/cm	2.49 mg/L	39.90 NTU	91.7 mV	17.75 ft	150.00 ml/min
9/8/2022 10:23 AM	20:00	6.14 pH	70.15 °F	0.17 µS/cm	2.61 mg/L	38.80 NTU	93.4 mV	18.58 ft	150.00 ml/min
9/8/2022 10:28 AM	25:00	6.15 pH	70.09 °F	0.17 µS/cm	2.62 mg/L	38.80 NTU	94.4 mV	19.43 ft	150.00 ml/min
9/8/2022 10:33 AM	30:00	6.15 pH	70.40 °F	0.17 µS/cm	2.61 mg/L	37.10 NTU	86.2 mV	20.10 ft	150.00 ml/min
9/8/2022 10:38 AM	35:00	6.16 pH	70.40 °F	0.17 µS/cm	2.67 mg/L	35.00 NTU	93.4 mV	20.63 ft	150.00 ml/min
9/8/2022 10:43 AM	40:00	6.17 pH	70.06 °F	0.17 µS/cm	2.65 mg/L	33.30 NTU	88.9 mV	21.23 ft	150.00 ml/min
9/8/2022 10:48 AM	45:00	6.18 pH	69.80 °F	0.17 µS/cm	2.87 mg/L	30.50 NTU	86.6 mV	21.75 ft	150.00 ml/min
9/8/2022 10:53 AM	50:00	6.18 pH	69.56 °F	0.17 µS/cm	3.07 mg/L	30.70 NTU	78.3 mV	22.40 ft	150.00 ml/min
9/8/2022 10:58 AM	55:00	6.19 pH	69.55 °F	0.17 µS/cm	3.16 mg/L	25.30 NTU	80.5 mV	22.65 ft	150.00 ml/min
9/8/2022 11:03 AM	01:00:00	6.19 pH	69.51 °F	0.17 µS/cm	3.20 mg/L	25.20 NTU	72.5 mV	23.00 ft	150.00 ml/min
9/8/2022 11:08 AM	01:05:00	6.20 pH	69.67 °F	0.17 µS/cm	3.29 mg/L	26.10 NTU	73.9 mV	23.40 ft	150.00 ml/min

9/8/2022 11:13 AM	01:10:00	6.20 pH	70.07 °F	0.18 µS/cm	3.29 mg/L	21.30 NTU	66.3 mV	23.75 ft	150.00 ml/min
9/8/2022 11:18 AM	01:15:00	6.20 pH	70.71 °F	0.18 µS/cm	3.24 mg/L	21.50 NTU	68.6 mV	24.01 ft	150.00 ml/min
9/8/2022 11:23 AM	01:20:00	6.21 pH	70.96 °F	0.18 µS/cm	3.33 mg/L	23.00 NTU	66.1 mV	24.35 ft	150.00 ml/min
9/8/2022 11:28 AM	01:25:00	6.22 pH	70.32 °F	0.18 µS/cm	3.26 mg/L	18.60 NTU	60.0 mV	24.63 ft	150.00 ml/min
9/8/2022 11:33 AM	01:30:00	6.23 pH	70.22 °F	0.18 µS/cm	3.21 mg/L	17.90 NTU	59.4 mV	24.95 ft	150.00 ml/min
9/8/2022 11:38 AM	01:35:00	6.23 pH	70.56 °F	0.18 µS/cm	3.19 mg/L	17.00 NTU	54.4 mV	25.25 ft	150.00 ml/min
9/8/2022 11:43 AM	01:40:00	6.24 pH	70.80 °F	0.18 µS/cm	3.15 mg/L	16.90 NTU	53.2 mV	25.45 ft	150.00 ml/min
9/8/2022 11:48 AM	01:45:00	6.25 pH	70.73 °F	0.18 µS/cm	3.08 mg/L	16.00 NTU	48.3 mV	25.64 ft	150.00 ml/min
9/8/2022 11:53 AM	01:50:00	6.27 pH	70.78 °F	0.19 µS/cm	3.05 mg/L	16.30 NTU	46.1 mV	25.90 ft	150.00 ml/min
9/8/2022 11:58 AM	01:55:00	6.28 pH	70.70 °F	0.19 µS/cm	2.97 mg/L	13.90 NTU	42.5 mV	26.05 ft	150.00 ml/min
9/8/2022 12:03 PM	02:00:00	6.28 pH	70.56 °F	0.19 µS/cm	2.93 mg/L	13.50 NTU	40.9 mV	26.20 ft	150.00 ml/min
9/8/2022 12:08 PM	02:05:00	6.28 pH	70.81 °F	0.19 µS/cm	2.86 mg/L	13.20 NTU	38.7 mV	26.32 ft	150.00 ml/min
9/8/2022 12:13 PM	02:10:00	6.27 pH	70.99 °F	0.19 µS/cm	2.80 mg/L	11.70 NTU	38.9 mV	26.45 ft	150.00 ml/min
9/8/2022 12:18 PM	02:15:00	6.28 pH	70.48 °F	0.19 µS/cm	2.72 mg/L	12.00 NTU	35.4 mV	26.60 ft	150.00 ml/min
9/8/2022 12:23 PM	02:20:00	6.28 pH	70.48 °F	0.19 µS/cm	2.58 mg/L	10.70 NTU	33.2 mV	26.70 ft	150.00 ml/min
9/8/2022 12:28 PM	02:25:00	6.28 pH	71.22 °F	0.19 µS/cm	2.56 mg/L	10.00 NTU	30.1 mV	26.85 ft	150.00 ml/min
9/8/2022 12:33 PM	02:30:00	6.28 pH	71.17 °F	0.19 µS/cm	2.45 mg/L	9.56 NTU	30.7 mV	26.85 ft	150.00 ml/min
9/8/2022 12:38 PM	02:35:00	6.29 pH	70.64 °F	0.19 µS/cm	2.41 mg/L	8.71 NTU	29.9 mV	26.93 ft	150.00 ml/min
9/8/2022 12:43 PM	02:40:00	6.30 pH	70.97 °F	0.20 µS/cm	2.29 mg/L	8.97 NTU	28.0 mV	27.03 ft	150.00 ml/min
9/8/2022 12:48 PM	02:45:00	6.30 pH	70.96 °F	0.20 µS/cm	2.24 mg/L	7.46 NTU	26.5 mV	27.10 ft	150.00 ml/min
9/8/2022 12:53 PM	02:50:00	6.31 pH	71.76 °F	0.20 µS/cm	2.18 mg/L	7.26 NTU	24.4 mV	27.16 ft	150.00 ml/min
9/8/2022 12:58 PM	02:55:00	6.31 pH	71.38 °F	0.20 µS/cm	2.12 mg/L	7.54 NTU	25.5 mV	27.24 ft	150.00 ml/min
9/8/2022 1:03 PM	03:00:00	6.31 pH	70.88 °F	0.20 µS/cm	2.08 mg/L	8.46 NTU	25.4 mV	27.30 ft	150.00 ml/min
9/8/2022 1:08 PM	03:05:00	6.31 pH	71.50 °F	0.20 µS/cm	2.01 mg/L	7.87 NTU	24.8 mV	27.38 ft	150.00 ml/min
9/8/2022 1:13 PM	03:10:00	6.32 pH	72.00 °F	0.20 µS/cm	1.89 mg/L	7.67 NTU	23.2 mV	27.40 ft	150.00 ml/min
9/8/2022 1:18 PM	03:15:00	6.31 pH	71.85 °F	0.20 µS/cm	1.83 mg/L	6.44 NTU	22.8 mV	27.40 ft	150.00 ml/min
9/8/2022 1:23 PM	03:20:00	6.32 pH	71.28 °F	0.20 µS/cm	1.73 mg/L	5.76 NTU	21.0 mV	27.45 ft	150.00 ml/min
9/8/2022 1:28 PM	03:25:00	6.32 pH	71.44 °F	0.20 µS/cm	1.70 mg/L	4.39 NTU	20.9 mV	27.45 ft	150.00 ml/min

Samples

Sample ID:	Description:
DGWA-53	

Low-Flow Test Report:

Test Date / Time: 9/7/2022 9:00:52 AM
Project: SCS Plant McDonough
Operator Name: Duane Fulton

Location Name: DGWA-70A **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 52.54 ft** **Total Depth: 62.54 ft** **Initial Depth to Water: 43.02 ft**	**Pump Type: Dedicated Bladder Pump** **Tubing Type: LDPE** **Pump Intake From TOC: 57 ft** **Estimated Total Volume Pumped: 4807.5 ml** **Flow Cell Volume: 90 ml** **Final Flow Rate: 150 ml/min** **Final Draw Down: 0.36 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 883533**

Test Notes:

Weather Conditions:
Cloudy, 75

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	
9/7/2022 9:00 AM	00:00	6.76 pH	23.69 °C	71.22 µS/cm	7.84 mg/L	1.10 NTU	142.3 mV	43.30 ft	150.00 ml/min
9/7/2022 9:05 AM	05:00	5.62 pH	19.53 °C	68.82 µS/cm	4.78 mg/L	0.16 NTU	142.9 mV	43.35 ft	150.00 ml/min
9/7/2022 9:10 AM	10:00	5.59 pH	18.70 °C	68.96 µS/cm	4.79 mg/L	0.00 NTU	139.4 mV	43.38 ft	150.00 ml/min
9/7/2022 9:15 AM	15:00	5.59 pH	18.57 °C	69.46 µS/cm	4.74 mg/L	0.00 NTU	136.2 mV	43.38 ft	150.00 ml/min
9/7/2022 9:20 AM	20:00	5.60 pH	18.57 °C	69.93 µS/cm	4.66 mg/L	0.00 NTU	134.6 mV	43.40 ft	150.00 ml/min
9/7/2022 9:25 AM	25:00	5.60 pH	19.06 °C	69.76 µS/cm	4.63 mg/L	0.00 NTU	133.7 mV	43.40 ft	150.00 ml/min
9/7/2022 9:27 AM	26:28	5.60 pH	19.15 °C	70.23 µS/cm	4.61 mg/L	0.00 NTU	126.1 mV	43.40 ft	150.00 ml/min
9/7/2022 9:27 AM	27:03	5.60 pH	19.10 °C	69.77 µS/cm	4.61 mg/L	0.00 NTU	145.9 mV	43.38 ft	150.00 ml/min
9/7/2022 9:32 AM	32:03	5.60 pH	18.99 °C	70.03 µS/cm	4.62 mg/L	0.00 NTU	137.2 mV	43.38 ft	150.00 ml/min

Samples

Sample ID:	Description:

Low-Flow Test Report:

Test Date / Time: 9/7/2022 9:48:54 AM
Project: Plant McDonough
Operator Name: Cole Mayer

Location Name: DGWA-71 **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 37.71 ft** **Total Depth: 47.71 ft** **Initial Depth to Water: 29.37 ft**	**Pump Type: Dedicated Bladder** **Tubing Type: LDPE** **Pump Intake From TOC: 42 ft** **Estimated Total Volume Pumped: 8750 ml** **Flow Cell Volume: 90 ml** **Final Flow Rate: 250 ml/min** **Final Draw Down: 0.55 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 884187**

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	
9/7/2022 9:48 AM	00:00	5.77 pH	25.20 °C	73.26 µS/cm	7.41 mg/L	1.97 NTU	49.9 mV	29.37 ft	250.00 ml/min
9/7/2022 9:53 AM	05:00	5.66 pH	18.99 °C	76.50 µS/cm	2.61 mg/L	1.85 NTU	18.6 mV	29.91 ft	250.00 ml/min
9/7/2022 9:58 AM	10:00	5.64 pH	18.83 °C	77.16 µS/cm	1.97 mg/L	0.99 NTU	10.0 mV	29.89 ft	250.00 ml/min
9/7/2022 10:03 AM	15:00	5.66 pH	18.84 °C	77.35 µS/cm	1.86 mg/L	0.81 NTU	9.0 mV	29.89 ft	250.00 ml/min
9/7/2022 10:08 AM	20:00	5.68 pH	18.79 °C	77.40 µS/cm	1.88 mg/L	1.83 NTU	9.0 mV	29.90 ft	250.00 ml/min
9/7/2022 10:13 AM	25:00	5.65 pH	18.89 °C	77.37 µS/cm	1.78 mg/L	1.05 NTU	6.4 mV	29.91 ft	250.00 ml/min
9/7/2022 10:18 AM	30:00	5.64 pH	18.85 °C	77.45 µS/cm	1.70 mg/L	0.58 NTU	5.0 mV	29.91 ft	250.00 ml/min
9/7/2022 10:23 AM	35:00	5.65 pH	18.80 °C	77.56 µS/cm	1.66 mg/L	1.43 NTU	4.6 mV	29.92 ft	250.00 ml/min

Samples

Sample ID:	Description:
DGWA-71	

Low-Flow Test Report:

Test Date / Time: 9/7/2022 2:04:59 PM
Project: Plant McDonough (23)
Operator Name: Cole Mayer

Location Name: B-105D **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 60 ft** **Total Depth: 70 ft** **Initial Depth to Water: 18.32 ft**	**Pump Type: Bladder** **Tubing Type: LDPE** **Pump Intake From TOC: 65 ft** **Estimated Total Volume Pumped: 8750 ml** **Flow Cell Volume: 90 ml** **Final Flow Rate: 175 ml/min** **Final Draw Down: 0.77 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 884187**

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	
9/7/2022 2:04 PM	00:00	6.50 pH	29.82 °C	558.95 µS/cm	2.49 mg/L	3.08 NTU	45.8 mV	18.32 ft	175.00 ml/min
9/7/2022 2:09 PM	05:00	6.43 pH	24.52 °C	598.90 µS/cm	0.43 mg/L	2.25 NTU	28.0 mV	18.98 ft	175.00 ml/min
9/7/2022 2:14 PM	10:00	6.45 pH	24.52 °C	598.69 µS/cm	0.24 mg/L	4.05 NTU	15.4 mV	19.02 ft	175.00 ml/min
9/7/2022 2:19 PM	15:00	6.47 pH	24.25 °C	594.43 µS/cm	0.19 mg/L	2.60 NTU	5.9 mV	19.02 ft	175.00 ml/min
9/7/2022 2:24 PM	20:00	6.48 pH	24.29 °C	600.54 µS/cm	0.16 mg/L	6.22 NTU	-1.7 mV	19.05 ft	175.00 ml/min
9/7/2022 2:29 PM	25:00	6.52 pH	24.12 °C	616.42 µS/cm	0.16 mg/L	2.12 NTU	-6.5 mV	19.04 ft	175.00 ml/min
9/7/2022 2:34 PM	30:00	6.54 pH	23.75 °C	635.40 µS/cm	0.15 mg/L	1.87 NTU	-6.2 mV	19.05 ft	175.00 ml/min
9/7/2022 2:39 PM	35:00	6.54 pH	24.11 °C	640.03 µS/cm	0.15 mg/L	1.04 NTU	-5.6 mV	19.05 ft	175.00 ml/min
9/7/2022 2:44 PM	40:00	6.50 pH	24.03 °C	631.63 µS/cm	0.14 mg/L	1.04 NTU	-4.4 mV	19.06 ft	175.00 ml/min
9/7/2022 2:49 PM	45:00	6.45 pH	24.21 °C	628.44 µS/cm	0.12 mg/L	1.40 NTU	-2.6 mV	19.07 ft	175.00 ml/min
9/7/2022 2:54 PM	50:00	6.44 pH	23.85 °C	623.28 µS/cm	0.10 mg/L	1.20 NTU	-0.5 mV	19.09 ft	175.00 ml/min

Samples

Sample ID:	Description:
B-105D	

Low-Flow Test Report:

Test Date / Time: 9/7/2022 12:31:54 PM
Project: SCS Plant McDonough
Operator Name: Duane Fulton

Location Name: B-112D **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 45 ft** **Total Depth: 55 ft** **Initial Depth to Water: 7.8 ft**	**Pump Type: Alexis Peri Pump** **Tubing Type: LDPE** **Pump Intake From TOC: 50 ft** **Estimated Total Volume Pumped: 4500 ml** **Flow Cell Volume: 90 ml** **Final Flow Rate: 150 ml/min** **Final Draw Down: 0.12 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 883533**

Test Notes:

Weather Conditions:
Clear, 82

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	
9/7/2022 12:31 PM	00:00	7.00 pH	31.91 °C	206.86 µS/cm	4.28 mg/L	0.00 NTU	-82.6 mV	7.88 ft	150.00 ml/min
9/7/2022 12:36 PM	05:00	6.75 pH	21.92 °C	252.26 µS/cm	0.36 mg/L	2.30 NTU	-13.6 mV	7.90 ft	150.00 ml/min
9/7/2022 12:41 PM	10:00	6.77 pH	21.07 °C	252.84 µS/cm	0.19 mg/L	1.22 NTU	-89.5 mV	7.92 ft	150.00 ml/min
9/7/2022 12:46 PM	15:00	6.75 pH	20.66 °C	253.83 µS/cm	0.13 mg/L	0.50 NTU	-47.5 mV	7.92 ft	150.00 ml/min
9/7/2022 12:51 PM	20:00	6.75 pH	20.47 °C	255.19 µS/cm	0.11 mg/L	0.45 NTU	-32.5 mV	7.92 ft	150.00 ml/min
9/7/2022 12:56 PM	25:00	6.74 pH	20.47 °C	256.95 µS/cm	0.09 mg/L	0.50 NTU	-18.7 mV	7.92 ft	150.00 ml/min
9/7/2022 1:01 PM	30:00	6.72 pH	20.37 °C	257.44 µS/cm	0.08 mg/L	0.75 NTU	-11.5 mV	7.92 ft	150.00 ml/min

Samples

Sample ID:	Description:
B-112D	

Low-Flow Test Report:

Test Date / Time: 9/12/2022 1:31:15 PM
Project: Plant McDonough
Operator Name: M. Mann

Location Name: B-113D **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 74 ft** **Total Depth: 84.18 ft** **Initial Depth to Water: 3.31 ft**	**Pump Type: Peristaltic** **Tubing Type: Polyethylene** **Pump Intake From TOC: 79 ft** **Estimated Total Volume Pumped: 7200 ml** **Flow Cell Volume: 90 ml** **Final Flow Rate: 100 ml/min** **Final Draw Down: 8.97 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 851413**

Test Notes:

Weather Conditions:
Sunny

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	
9/12/2022 1:31 PM	00:00	7.86 pH	21.10 °C	344.42 µS/cm	0.21 mg/L	1.47 NTU	-45.4 mV	3.31 ft	290.00 ml/min
9/12/2022 1:36 PM	05:00	7.91 pH	20.16 °C	345.66 µS/cm	0.14 mg/L	1.47 NTU	-82.5 mV	7.22 ft	290.00 ml/min
9/12/2022 1:41 PM	10:00	7.92 pH	20.84 °C	348.69 µS/cm	0.16 mg/L	2.83 NTU	-97.9 mV	8.26 ft	180.00 ml/min
9/12/2022 1:46 PM	15:00	7.95 pH	20.59 °C	348.23 µS/cm	0.14 mg/L	1.92 NTU	-104.0 mV	9.65 ft	180.00 ml/min
9/12/2022 1:51 PM	20:00	7.95 pH	20.97 °C	349.99 µS/cm	0.18 mg/L	1.35 NTU	-106.5 mV	10.49 ft	180.00 ml/min
9/12/2022 1:56 PM	25:00	7.95 pH	21.42 °C	349.62 µS/cm	0.18 mg/L	1.65 NTU	-140.5 mV	11.40 ft	120.00 ml/min
9/12/2022 2:01 PM	30:00	7.96 pH	21.61 °C	347.21 µS/cm	0.17 mg/L	1.72 NTU	-107.2 mV	12.00 ft	100.00 ml/min
9/12/2022 2:06 PM	35:00	7.96 pH	21.93 °C	351.68 µS/cm	0.20 mg/L	1.16 NTU	-141.1 mV	12.22 ft	100.00 ml/min
9/12/2022 2:11 PM	40:00	7.95 pH	22.61 °C	350.19 µS/cm	0.24 mg/L	0.97 NTU	-105.7 mV	12.28 ft	100.00 ml/min

Samples

Sample ID:	Description:
B-113D	

Low-Flow Test Report:

Test Date / Time: 9/9/2022 9:57:11 AM
Project: Plant McDonough (26)
Operator Name: Cole Mayer

Location Name: B-62 **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 29.62 ft** **Total Depth: 39.62 ft** **Initial Depth to Water: 15.52 ft**	**Pump Type: peristaltic** **Tubing Type: LDPE** **Pump Intake From TOC: 34 ft** **Estimated Total Volume Pumped: 9095 ml** **Flow Cell Volume: 90 ml** **Final Flow Rate: 100 ml/min** **Final Draw Down: -0.01 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 884187**

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	
9/9/2022 9:57 AM	00:00	6.78 pH	23.43 °C	509.32 µS/cm	4.36 mg/L	13.02 NTU	107.4 mV	15.58 ft	100.00 ml/min
9/9/2022 10:02 AM	05:00	6.48 pH	20.58 °C	505.34 µS/cm	0.44 mg/L	3.16 NTU	81.4 mV	15.61 ft	100.00 ml/min
9/9/2022 10:07 AM	10:00	6.48 pH	20.07 °C	491.81 µS/cm	0.26 mg/L	6.67 NTU	73.8 mV	15.61 ft	100.00 ml/min
9/9/2022 10:12 AM	15:00	6.38 pH	19.97 °C	398.62 µS/cm	0.19 mg/L	20.96 NTU	66.6 mV	15.62 ft	100.00 ml/min
9/9/2022 10:17 AM	20:00	6.36 pH	19.78 °C	375.78 µS/cm	0.17 mg/L	19.70 NTU	62.8 mV	15.62 ft	100.00 ml/min
9/9/2022 10:22 AM	25:00	6.30 pH	19.77 °C	334.58 µS/cm	0.17 mg/L	10.82 NTU	58.6 mV	15.62 ft	100.00 ml/min
9/9/2022 10:27 AM	30:00	6.26 pH	19.73 °C	305.81 µS/cm	0.19 mg/L	7.57 NTU	55.4 mV	15.61 ft	100.00 ml/min
9/9/2022 10:32 AM	35:00	6.24 pH	19.87 °C	294.79 µS/cm	0.20 mg/L	6.39 NTU	53.1 mV	15.60 ft	100.00 ml/min
9/9/2022 10:37 AM	40:00	6.23 pH	19.98 °C	284.80 µS/cm	0.21 mg/L	6.85 NTU	51.3 mV	15.60 ft	100.00 ml/min
9/9/2022 10:42 AM	45:00	6.23 pH	20.22 °C	281.88 µS/cm	0.25 mg/L	7.84 NTU	49.7 mV	15.59 ft	100.00 ml/min
9/9/2022 10:47 AM	50:00	6.22 pH	20.28 °C	280.42 µS/cm	0.17 mg/L	8.18 NTU	48.3 mV	15.58 ft	100.00 ml/min
9/9/2022 10:52 AM	55:00	6.23 pH	20.30 °C	277.68 µS/cm	0.16 mg/L	7.20 NTU	47.3 mV	15.57 ft	100.00 ml/min
9/9/2022 10:57 AM	01:00:00	6.23 pH	20.32 °C	275.94 µS/cm	0.16 mg/L	7.25 NTU	46.2 mV	15.56 ft	100.00 ml/min
9/9/2022 11:02 AM	01:05:00	6.22 pH	20.41 °C	274.68 µS/cm	0.15 mg/L	8.09 NTU	45.6 mV	15.55 ft	100.00 ml/min
9/9/2022 11:07 AM	01:10:00	6.23 pH	20.53 °C	274.55 µS/cm	0.16 mg/L	7.18 NTU	44.8 mV	15.54 ft	100.00 ml/min

9/9/2022 11:12 AM	01:15:00	6.23 pH	20.56 °C	272.70 µS/cm	0.16 mg/L	7.22 NTU	44.1 mV	15.54 ft	100.00 ml/min
9/9/2022 11:17 AM	01:20:00	6.22 pH	20.67 °C	271.88 µS/cm	0.13 mg/L	5.95 NTU	43.3 mV	15.54 ft	100.00 ml/min
9/9/2022 11:22 AM	01:25:00	6.22 pH	20.42 °C	271.27 µS/cm	0.12 mg/L	5.74 NTU	42.5 mV	15.52 ft	100.00 ml/min
9/9/2022 11:25 AM	01:30:00	6.22 pH	20.71 °C	270.15 µS/cm	0.12 mg/L	4.84 NTU	41.3 mV	15.51 ft	100.00 ml/min

Samples

Sample ID:	Description:
B-62	

Created using VuSitu from In-Situ, Inc.

Low-Flow Test Report:

Test Date / Time: 9/8/2022 10:00:04 AM
Project: Plant McDonough (24)
Operator Name: Cole Mayer

Location Name: B-100 **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 37.93 ft** **Total Depth: 47.93 ft** **Initial Depth to Water: 31.03 ft**	**Pump Type: Bladder** **Tubing Type: LDPE** **Pump Intake From TOC: 42 ft** **Estimated Total Volume Pumped: 7000 ml** **Flow Cell Volume: 90 ml** **Final Flow Rate: 100 ml/min** **Final Draw Down: -0.09 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 884187**

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	
9/8/2022 10:00 AM	00:00	5.23 pH	25.80 °C	0.67 µS/cm	3.82 mg/L	43.38 NTU	72.6 mV	31.04 ft	100.00 ml/min
9/8/2022 10:05 AM	05:00	5.16 pH	23.44 °C	0.80 µS/cm	0.63 mg/L	20.58 NTU	54.5 mV	31.03 ft	100.00 ml/min
9/8/2022 10:10 AM	10:00	5.17 pH	23.01 °C	0.81 µS/cm	0.37 mg/L	10.87 NTU	51.1 mV	31.02 ft	100.00 ml/min
9/8/2022 10:15 AM	15:00	5.18 pH	22.94 °C	0.81 µS/cm	0.28 mg/L	12.72 NTU	49.3 mV	31.01 ft	100.00 ml/min
9/8/2022 10:20 AM	20:00	5.19 pH	22.95 °C	0.82 µS/cm	0.20 mg/L	10.89 NTU	48.2 mV	31.03 ft	100.00 ml/min
9/8/2022 10:25 AM	25:00	5.20 pH	23.01 °C	0.82 µS/cm	0.20 mg/L	8.06 NTU	47.6 mV	30.99 ft	100.00 ml/min
9/8/2022 10:30 AM	30:00	5.21 pH	23.08 °C	0.82 µS/cm	0.15 mg/L	9.29 NTU	47.2 mV	30.99 ft	100.00 ml/min
9/8/2022 10:35 AM	35:00	5.21 pH	23.08 °C	0.82 µS/cm	0.14 mg/L	8.14 NTU	46.4 mV	30.99 ft	100.00 ml/min
9/8/2022 10:40 AM	40:00	5.22 pH	23.28 °C	0.83 µS/cm	0.13 mg/L	8.03 NTU	45.9 mV	30.99 ft	100.00 ml/min
9/8/2022 10:45 AM	45:00	5.22 pH	23.62 °C	0.82 µS/cm	0.15 mg/L	11.23 NTU	45.2 mV	30.94 ft	100.00 ml/min
9/8/2022 10:50 AM	50:00	5.23 pH	23.54 °C	0.82 µS/cm	0.14 mg/L	9.74 NTU	45.0 mV	30.94 ft	100.00 ml/min
9/8/2022 10:55 AM	55:00	5.23 pH	23.53 °C	0.83 µS/cm	0.13 mg/L	8.05 NTU	44.7 mV	30.96 ft	100.00 ml/min
9/8/2022 11:00 AM	01:00:00	5.24 pH	23.44 °C	0.83 µS/cm	0.12 mg/L	5.64 NTU	44.7 mV	30.94 ft	100.00 ml/min
9/8/2022 11:05 AM	01:05:00	5.24 pH	23.41 °C	0.83 µS/cm	0.12 mg/L	5.46 NTU	44.5 mV	30.96 ft	100.00 ml/min
9/8/2022 11:10 AM	01:10:00	5.24 pH	23.50 °C	0.83 µS/cm	0.10 mg/L	4.72 NTU	44.4 mV	30.94 ft	100.00 ml/min

Samples

Sample ID:	Description:
B100	

Low-Flow Test Report:

Test Date / Time: 9/8/2022 12:27:16 PM
Project: Plant Scherer (4)
Operator Name: Mark Mann

Location Name: B116D **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 82 ft** **Total Depth: 92.45 ft** **Initial Depth to Water: 44.78 ft**	**Pump Type: bladder** **Tubing Type: Polyethylene** **Pump Intake From TOC: 88 ft** **Estimated Total Volume Pumped: 3750 ml** **Flow Cell Volume: 90 ml** **Final Flow Rate: 250 ml/min** **Final Draw Down: 0.2 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 851413**

Test Notes:

Weather Conditions:
Sunny

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	
9/8/2022 12:27 PM	00:00	6.16 pH	30.75 °C	113.95 µS/cm	3.47 mg/L	14.10 NTU	39.6 mV	44.78 ft	250.00 ml/min
9/8/2022 12:32 PM	05:00	5.96 pH	20.48 °C	122.82 µS/cm	4.05 mg/L	6.83 NTU	43.5 mV	44.95 ft	250.00 ml/min
9/8/2022 12:37 PM	10:00	5.98 pH	20.57 °C	122.89 µS/cm	4.01 mg/L	4.13 NTU	41.6 mV	45.00 ft	250.00 ml/min
9/8/2022 12:42 PM	15:00	5.97 pH	20.94 °C	123.48 µS/cm	4.06 mg/L	3.05 NTU	41.1 mV	44.98 ft	250.00 ml/min

Samples

Sample ID:	Description:
B-116D	
DUP-2	

Low-Flow Test Report:

Test Date / Time: 9/15/2022 9:51:20 AM
Project: Plant McDonough
Operator Name: Jude Waguespack

Location Name: B-117D **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 69.03 ft** **Total Depth: 79.03 ft** **Initial Depth to Water: 30.1 ft**	**Pump Type: bladder** **Tubing Type: LDPE** **Tubing Inner Diameter: 0.175 cm** **Tubing Length: 42 m** **Pump Intake From TOC: 74 ft** **Estimated Total Volume Pumped: 9000 ml** **Flow Cell Volume: 90 ml** **Final Flow Rate: 200 ml/min** **Final Draw Down: 1.46 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 728541**

Test Notes:

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 10	+/- 5 %	+/- 10 %	+/- 2	+/- 1000 %	+/- 0.3	
9/15/2022 9:51 AM	00:00	6.73 pH	21.96 °C	131.37 µS/cm	7.85 mg/L	3.54 NTU	116.5 mV	30.10 ft	200.00 ml/min
9/15/2022 9:56 AM	05:00	5.83 pH	18.93 °C	113.71 µS/cm	1.43 mg/L	4.45 NTU	118.1 mV	30.90 ft	200.00 ml/min
9/15/2022 10:01 AM	10:00	5.73 pH	18.48 °C	114.24 µS/cm	0.94 mg/L	2.62 NTU	134.1 mV	31.30 ft	200.00 ml/min
9/15/2022 10:06 AM	15:00	5.71 pH	18.45 °C	121.45 µS/cm	1.41 mg/L	2.06 NTU	122.8 mV	31.45 ft	200.00 ml/min
9/15/2022 10:11 AM	20:00	5.73 pH	18.35 °C	130.07 µS/cm	1.53 mg/L	1.28 NTU	122.5 mV	31.45 ft	200.00 ml/min
9/15/2022 10:16 AM	25:00	5.77 pH	18.30 °C	140.07 µS/cm	1.51 mg/L	1.09 NTU	121.5 mV	31.45 ft	200.00 ml/min
9/15/2022 10:21 AM	30:00	5.80 pH	18.30 °C	147.84 µS/cm	1.46 mg/L	1.79 NTU	120.5 mV	31.45 ft	200.00 ml/min
9/15/2022 10:26 AM	35:00	5.83 pH	18.35 °C	153.55 µS/cm	1.30 mg/L	2.43 NTU	119.3 mV	31.45 ft	200.00 ml/min
9/15/2022 10:31 AM	40:00	5.85 pH	18.31 °C	155.74 µS/cm	1.23 mg/L	2.05 NTU	118.3 mV	31.56 ft	200.00 ml/min
9/15/2022 10:36 AM	45:00	5.86 pH	18.40 °C	154.14 µS/cm	1.30 mg/L	1.33 NTU	117.8 mV	31.56 ft	200.00 ml/min

Samples

Sample ID:	Description:
B-117D	

Low-Flow Test Report:

Test Date / Time: 9/9/2022 10:10:35 AM
Project: Plant McDonough
Operator Name: M. Mann

Location Name: B118 **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 68 ft** **Total Depth: 78.32 ft** **Initial Depth to Water: 52.13 ft**	**Pump Type: Bladder** **Tubing Type: Polyethylene** **Pump Intake From TOC: 73 ft** **Estimated Total Volume Pumped: 22000 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: 851413**

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 %	+/- 10 %	+/- 5	+/- 10	+/- 0.3	
9/9/2022 10:10 AM	00:00	6.77 pH	22.17 °C	0.44 µS/cm	8.11 mg/L	17.20 NTU	141.9 mV	52.13 ft	200.00 ml/min
9/9/2022 10:15 AM	05:00	6.49 pH	17.50 °C	89.05 µS/cm	9.44 mg/L	28.50 NTU	87.3 mV	52.09 ft	200.00 ml/min
9/9/2022 10:20 AM	10:00	6.50 pH	17.12 °C	88.60 µS/cm	9.89 mg/L	22.20 NTU	87.1 mV	52.03 ft	200.00 ml/min
9/9/2022 10:25 AM	15:00	6.54 pH	17.05 °C	88.97 µS/cm	9.85 mg/L	18.20 NTU	86.8 mV	52.07 ft	200.00 ml/min
9/9/2022 10:30 AM	20:00	6.54 pH	17.00 °C	90.83 µS/cm	9.84 mg/L	17.30 NTU	86.7 mV	52.04 ft	200.00 ml/min
9/9/2022 10:35 AM	25:00	6.55 pH	17.01 °C	92.35 µS/cm	9.88 mg/L	13.80 NTU	86.7 mV	52.05 ft	200.00 ml/min
9/9/2022 10:40 AM	30:00	6.54 pH	17.03 °C	93.50 µS/cm	10.41 mg/L	13.10 NTU	86.7 mV	52.08 ft	200.00 ml/min
9/9/2022 10:45 AM	35:00	6.53 pH	17.01 °C	94.56 µS/cm	10.26 mg/L	11.80 NTU	86.7 mV	52.09 ft	200.00 ml/min
9/9/2022 10:50 AM	40:00	6.52 pH	17.02 °C	95.20 µS/cm	10.28 mg/L	10.50 NTU	86.8 mV	52.11 ft	200.00 ml/min
9/9/2022 10:55 AM	45:00	6.51 pH	17.03 °C	95.56 µS/cm	10.39 mg/L	9.41 NTU	86.9 mV	52.08 ft	200.00 ml/min
9/9/2022 11:00 AM	50:00	6.51 pH	17.02 °C	95.79 µS/cm	10.55 mg/L	9.19 NTU	87.1 mV	52.07 ft	200.00 ml/min
9/9/2022 11:05 AM	55:00	6.50 pH	17.05 °C	96.01 µS/cm	10.63 mg/L	8.44 NTU	87.3 mV	52.09 ft	200.00 ml/min
9/9/2022 11:10 AM	01:00:00	6.50 pH	17.08 °C	95.13 µS/cm	10.53 mg/L	7.94 NTU	87.4 mV	52.08 ft	200.00 ml/min

9/9/2022 11:15 AM	01:05:00	6.50 pH	17.08 °C	95.02 µS/cm	10.49 mg/L	7.37 NTU	87.8 mV	52.05 ft	200.00 ml/min
9/9/2022 11:20 AM	01:10:00	6.49 pH	17.05 °C	94.82 µS/cm	10.35 mg/L	6.80 NTU	88.1 mV	52.07 ft	200.00 ml/min
9/9/2022 11:25 AM	01:15:00	6.50 pH	17.02 °C	94.37 µS/cm	10.34 mg/L	6.30 NTU	88.4 mV	52.07 ft	200.00 ml/min
9/9/2022 11:30 AM	01:20:00	6.49 pH	17.03 °C	93.85 µS/cm	10.47 mg/L	6.09 NTU	88.8 mV	52.04 ft	200.00 ml/min
9/9/2022 11:35 AM	01:25:00	6.49 pH	17.12 °C	93.62 µS/cm	10.39 mg/L	5.91 NTU	89.0 mV	52.08 ft	200.00 ml/min
9/9/2022 11:40 AM	01:30:00	6.50 pH	17.14 °C	93.63 µS/cm	10.60 mg/L	5.76 NTU	89.3 mV	52.10 ft	200.00 ml/min
9/9/2022 11:45 AM	01:35:00	6.49 pH	17.14 °C	93.09 µS/cm	10.64 mg/L	5.49 NTU	89.6 mV	52.03 ft	200.00 ml/min
9/9/2022 11:50 AM	01:40:00	6.50 pH	17.14 °C	92.83 µS/cm	10.68 mg/L	5.37 NTU	90.0 mV	52.08 ft	200.00 ml/min
9/9/2022 11:55 AM	01:45:00	6.50 pH	17.27 °C	93.17 µS/cm	10.64 mg/L	5.17 NTU	90.2 mV	52.07 ft	200.00 ml/min
9/9/2022 12:00 PM	01:50:00	6.49 pH	17.26 °C	92.95 µS/cm	10.62 mg/L	4.90 NTU	90.7 mV	52.12 ft	200.00 ml/min

Samples

Sample ID:	Description:
B-118	Extra Rad

Low-Flow Test Report:

Test Date / Time: 9/12/2022 9:57:33 AM
Project: Plant McDonough
Operator Name: M. Mann

Location Name: B-119D **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 98 ft** **Total Depth: 107.98 ft** **Initial Depth to Water: 47.04 ft**	**Pump Type: Bladder** **Tubing Type: Polyethylene** **Pump Intake From TOC: 103 ft** **Estimated Total Volume Pumped: 6300 ml** **Flow Cell Volume: 90 ml** **Final Flow Rate: 150 ml/min** **Final Draw Down: 5.22 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 851413**

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 %	+/- 10 %	+/- 5	+/- 10	+/- 0.3	
9/12/2022 9:57 AM	00:00	6.44 pH	21.23 °C	135.37 µS/cm	2.83 mg/L	5.29 NTU	21.8 mV	47.04 ft	170.00 ml/min
9/12/2022 10:02 AM	05:00	6.57 pH	17.98 °C	138.48 µS/cm	3.19 mg/L	5.21 NTU	2.2 mV	49.07 ft	170.00 ml/min
9/12/2022 10:07 AM	10:00	6.61 pH	17.68 °C	138.82 µS/cm	4.58 mg/L	4.68 NTU	2.9 mV	50.21 ft	170.00 ml/min
9/12/2022 10:12 AM	15:00	6.61 pH	17.47 °C	138.26 µS/cm	5.10 mg/L	5.03 NTU	7.0 mV	51.16 ft	150.00 ml/min
9/12/2022 10:17 AM	20:00	6.61 pH	17.58 °C	138.84 µS/cm	5.30 mg/L	4.77 NTU	10.9 mV	51.71 ft	150.00 ml/min
9/12/2022 10:22 AM	25:00	6.62 pH	17.99 °C	139.02 µS/cm	5.15 mg/L	3.48 NTU	11.7 mV	51.88 ft	150.00 ml/min
9/12/2022 10:27 AM	30:00	6.59 pH	18.16 °C	136.22 µS/cm	4.47 mg/L	3.21 NTU	11.2 mV	51.99 ft	150.00 ml/min
9/12/2022 10:32 AM	35:00	6.57 pH	17.99 °C	134.61 µS/cm	4.46 mg/L	2.78 NTU	16.8 mV	52.16 ft	150.00 ml/min
9/12/2022 10:37 AM	40:00	6.57 pH	17.91 °C	134.84 µS/cm	4.71 mg/L	2.47 NTU	19.1 mV	52.26 ft	150.00 ml/min

Samples

Sample ID:	Description:
B-119D	

Low-Flow Test Report:

Test Date / Time: 9/14/2022 10:03:46 AM
Project: Plant McDonough
Operator Name: M. Mann

Location Name: B-122D **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 70 ft** **Total Depth: 80.63 ft** **Initial Depth to Water: 31.12 ft**	**Pump Type: Bladder** **Tubing Type: Polyethylene** **Pump Intake From TOC: 75 ft** **Estimated Total Volume Pumped: 4725 ml** **Flow Cell Volume: 90 ml** **Final Flow Rate: 130 ml/min** **Final Draw Down: 2.4 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 851413**

Test Notes:

Weather Conditions:
Sunny

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	
9/14/2022 10:03 AM	00:00	6.15 pH	24.62 °C	450.12 µS/cm	3.36 mg/L	4.13 NTU	30.0 mV	31.12 ft	185.00 ml/min
9/14/2022 10:08 AM	05:00	6.12 pH	21.55 °C	452.23 µS/cm	0.87 mg/L	2.83 NTU	28.9 mV	32.96 ft	185.00 ml/min
9/14/2022 10:13 AM	10:00	6.11 pH	21.55 °C	455.01 µS/cm	0.61 mg/L	2.35 NTU	23.9 mV	33.80 ft	185.00 ml/min
9/14/2022 10:18 AM	15:00	6.11 pH	21.68 °C	454.27 µS/cm	0.44 mg/L	1.88 NTU	21.0 mV	33.13 ft	130.00 ml/min
9/14/2022 10:23 AM	20:00	6.11 pH	21.59 °C	454.72 µS/cm	0.34 mg/L	1.59 NTU	17.0 mV	33.31 ft	130.00 ml/min
9/14/2022 10:28 AM	25:00	6.11 pH	21.70 °C	454.67 µS/cm	0.29 mg/L	1.17 NTU	15.4 mV	33.49 ft	130.00 ml/min
9/14/2022 10:33 AM	30:00	6.07 pH	21.86 °C	459.33 µS/cm	0.26 mg/L	0.85 NTU	16.9 mV	33.52 ft	130.00 ml/min

Samples

Sample ID:	Description:
B-122D	
EB-4	

Low-Flow Test Report:

Test Date / Time: 9/20/2022 3:20:34 PM
Project: Plant McDonough
Operator Name: M. Mann

Location Name: B-123D **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 50 ft** **Top of Screen: 115 ft** **Total Depth: 164.9 ft** **Initial Depth to Water: 120.75 ft**	**Pump Type: reclaimer** **Tubing Type: Polyethylene** **Pump Intake From TOC: 135 ft** **Estimated Total Volume Pumped: 2500 ml** **Flow Cell Volume: 90 ml** **Final Flow Rate: 500 ml/min** **Final Draw Down: 0 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 851413**

Test Notes:
Over 150 gallons pumped over last 2 days, 52 pumped this day. Redeveloped before sampled.

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	
9/20/2022 3:20 PM	00:00	7.16 pH	21.55 °C	818.13 µS/cm	8.58 mg/L	3.91 NTU	0.4 mV	120.75 ft	500.00 ml/min
9/20/2022 3:25 PM	05:00	7.13 pH	21.87 °C	817.85 µS/cm	8.47 mg/L	4.57 NTU	4.9 mV	120.75 ft	500.00 ml/min

Samples

Sample ID:	Description:
B-123D	

Created using VuSitu from In-Situ, Inc.

Low-Flow Test Report:

Test Date / Time: 9/13/2022 9:09:37 AM
Project: SCS Plant McDonough
Operator Name: Duane Fulton

Location Name: B-54 **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 27.71 ft** **Total Depth: 37.71 ft** **Initial Depth to Water: 6.25 ft**	**Pump Type: Alexis Peri Pump** **Tubing Type: LDPE** **Pump Intake From TOC: 32 ft** **Estimated Total Volume Pumped: 4730 ml** **Flow Cell Volume: 90 ml** **Final Flow Rate: 195 ml/min** **Final Draw Down: 0.1 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 883533**

Test Notes:

Weather Conditions:
Clear, 67

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	
9/13/2022 9:09 AM	00:00	5.26 pH	19.55 °C	869.97 µS/cm	0.66 mg/L	2.84 NTU	130.2 mV	6.30 ft	166.00 ml/min
9/13/2022 9:14 AM	05:00	5.31 pH	20.15 °C	858.75 µS/cm	0.22 mg/L	2.60 NTU	131.2 mV	6.33 ft	195.00 ml/min
9/13/2022 9:19 AM	10:00	5.32 pH	19.95 °C	862.42 µS/cm	0.17 mg/L	0.87 NTU	167.7 mV	6.33 ft	195.00 ml/min
9/13/2022 9:24 AM	15:00	5.33 pH	19.95 °C	861.14 µS/cm	0.15 mg/L	0.68 NTU	123.8 mV	6.35 ft	195.00 ml/min
9/13/2022 9:29 AM	20:00	5.33 pH	19.92 °C	860.39 µS/cm	0.13 mg/L	0.41 NTU	115.1 mV	6.35 ft	195.00 ml/min
9/13/2022 9:34 AM	25:00	5.34 pH	19.92 °C	860.83 µS/cm	0.12 mg/L	0.17 NTU	110.4 mV	6.35 ft	195.00 ml/min

Samples

Sample ID:	Description:
B-54	

Low-Flow Test Report:

Test Date / Time: 9/14/2022 12:03:32 PM
Project: Plant McDonough
Operator Name: M. Mann

Location Name: B-63 **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 36 ft** **Total Depth: 46.15 ft** **Initial Depth to Water: 30.46 ft**	**Pump Type: bladder** **Tubing Type: Polyethylene** **Pump Intake From TOC: 41 ft** **Estimated Total Volume Pumped: 11681.667 ml** **Flow Cell Volume: 90 ml** **Final Flow Rate: 200 ml/min** **Final Draw Down: 0.92 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 851413**

Test Notes:

Weather Conditions:
Sunny

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	
9/14/2022 12:03 PM	00:00	5.80 pH	32.29 °C	283.55 µS/cm	2.10 mg/L	111.00 NTU	42.7 mV	30.46 ft	350.00 ml/min
9/14/2022 12:08 PM	04:50	5.33 pH	21.91 °C	334.46 µS/cm	0.20 mg/L	72.90 NTU	74.0 mV	31.35 ft	300.00 ml/min
9/14/2022 12:13 PM	09:50	5.34 pH	21.64 °C	339.74 µS/cm	0.31 mg/L	33.40 NTU	78.6 mV	31.29 ft	200.00 ml/min
9/14/2022 12:18 PM	14:50	5.33 pH	21.75 °C	334.56 µS/cm	0.49 mg/L	22.50 NTU	81.0 mV	31.29 ft	200.00 ml/min
9/14/2022 12:23 PM	19:50	5.32 pH	21.72 °C	333.13 µS/cm	0.46 mg/L	17.00 NTU	84.3 mV	31.27 ft	200.00 ml/min
9/14/2022 12:35 PM	32:17	5.34 pH	21.68 °C	331.12 µS/cm	0.43 mg/L	12.30 NTU	86.7 mV	31.32 ft	200.00 ml/min
9/14/2022 12:40 PM	37:17	5.35 pH	21.74 °C	333.36 µS/cm	0.43 mg/L	7.47 NTU	86.9 mV	31.34 ft	200.00 ml/min
9/14/2022 12:45 PM	42:17	5.33 pH	21.69 °C	331.22 µS/cm	0.44 mg/L	6.90 NTU	86.8 mV	31.37 ft	200.00 ml/min
9/14/2022 12:50 PM	47:17	5.33 pH	21.73 °C	334.89 µS/cm	0.41 mg/L	5.70 NTU	86.9 mV	31.38 ft	200.00 ml/min
9/14/2022 12:55 PM	52:17	5.31 pH	21.62 °C	331.42 µS/cm	0.39 mg/L	4.81 NTU	86.9 mV	31.38 ft	200.00 ml/min

Samples

Sample ID:	Description:

B-63	
FB-5	

Created using VuSitu from In-Situ, Inc.

Low-Flow Test Report:

Test Date / Time: 9/13/2022 1:29:48 PM
Project: SCS Plant McDonough
Operator Name: Duane Fulton

Location Name: B-64 **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 20.48 ft** **Total Depth: 30.48 ft** **Initial Depth to Water: 6.65 ft**	**Pump Type: Alexis Peri Pump** **Tubing Type: LDPE** **Pump Intake From TOC: 25 ft** **Estimated Total Volume Pumped: 4500 ml** **Flow Cell Volume: 90 ml** **Final Flow Rate: 100 ml/min** **Final Draw Down: 0.35 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 883533**

Test Notes:

Weather Conditions:
Clear, 82

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	
9/13/2022 1:29 PM	00:00	5.14 pH	25.15 °C	1,246.6 µS/cm	3.50 mg/L	4.07 NTU	248.5 mV	6.85 ft	200.00 ml/min
9/13/2022 1:34 PM	05:00	5.00 pH	21.67 °C	1,323.9 µS/cm	0.20 mg/L	1.57 NTU	495.3 mV	6.98 ft	100.00 ml/min
9/13/2022 1:39 PM	10:00	4.99 pH	21.42 °C	1,322.3 µS/cm	0.13 mg/L	0.73 NTU	557.7 mV	7.00 ft	100.00 ml/min
9/13/2022 1:44 PM	15:00	5.00 pH	21.33 °C	1,323.5 µS/cm	0.10 mg/L	0.77 NTU	502.6 mV	7.00 ft	100.00 ml/min
9/13/2022 1:49 PM	20:00	5.00 pH	21.19 °C	1,321.1 µS/cm	0.08 mg/L	0.76 NTU	503.9 mV	7.01 ft	100.00 ml/min
9/13/2022 1:54 PM	25:00	5.00 pH	21.13 °C	1,323.4 µS/cm	0.07 mg/L	0.75 NTU	503.4 mV	7.00 ft	100.00 ml/min
9/13/2022 1:59 PM	30:00	5.00 pH	21.10 °C	1,319.9 µS/cm	0.06 mg/L	0.78 NTU	502.1 mV	7.00 ft	100.00 ml/min
9/13/2022 2:04 PM	35:00	5.00 pH	21.11 °C	1,315.3 µS/cm	0.05 mg/L	0.75 NTU	501.4 mV	7.00 ft	100.00 ml/min
9/13/2022 2:09 PM	40:00	5.00 pH	21.01 °C	1,315.2 µS/cm	0.04 mg/L	0.75 NTU	500.5 mV	7.00 ft	100.00 ml/min

Samples

Sample ID:	Description:
B-64	

Low-Flow Test Report:

Test Date / Time: 9/16/2022 9:03:32 AM
Project: SCS Plant McDonough
Operator Name: Duane Fulton

Location Name: B-66 **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 47.99 ft** **Total Depth: 57.99 ft** **Initial Depth to Water: 21.74 ft**	**Pump Type: Alexis Peri Pump** **Tubing Type: LDPE** **Pump Intake From TOC: 52 ft** **Estimated Total Volume Pumped: 4060 ml** **Flow Cell Volume: 90 ml** **Final Flow Rate: 55 ml/min** **Final Draw Down: 1.76 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 883533**

Test Notes:

Weather Conditions:
Clear, 76

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	
9/16/2022 9:03 AM	00:00	6.65 pH	18.88 °C	781.83 µS/cm	4.12 mg/L	4.26 NTU	1.5 mV	22.01 ft	100.00 ml/min
9/16/2022 9:08 AM	05:00	6.58 pH	18.84 °C	795.39 µS/cm	0.75 mg/L	1.83 NTU	-19.5 mV	22.53 ft	85.00 ml/min
9/16/2022 9:13 AM	10:00	6.59 pH	18.94 °C	796.84 µS/cm	0.41 mg/L	1.14 NTU	-39.3 mV	22.80 ft	66.00 ml/min
9/16/2022 9:18 AM	15:00	6.59 pH	19.03 °C	796.70 µS/cm	0.32 mg/L	1.55 NTU	-24.4 mV	23.01 ft	66.00 ml/min
9/16/2022 9:23 AM	20:00	6.59 pH	19.16 °C	796.77 µS/cm	0.30 mg/L	1.79 NTU	-24.3 mV	23.13 ft	55.00 ml/min
9/16/2022 9:28 AM	25:00	6.59 pH	19.30 °C	794.25 µS/cm	0.29 mg/L	1.83 NTU	-23.8 mV	23.22 ft	55.00 ml/min
9/16/2022 9:33 AM	30:00	6.58 pH	19.37 °C	791.15 µS/cm	0.27 mg/L	1.78 NTU	-23.0 mV	23.30 ft	55.00 ml/min
9/16/2022 9:38 AM	35:00	6.57 pH	19.44 °C	788.89 µS/cm	0.29 mg/L	0.86 NTU	-21.2 mV	23.34 ft	55.00 ml/min
9/16/2022 9:43 AM	40:00	6.58 pH	19.52 °C	787.14 µS/cm	0.34 mg/L	1.87 NTU	-35.6 mV	23.40 ft	55.00 ml/min
9/16/2022 9:48 AM	45:00	6.58 pH	19.61 °C	787.64 µS/cm	0.42 mg/L	1.17 NTU	-18.7 mV	23.41 ft	55.00 ml/min
9/16/2022 9:53 AM	50:00	6.59 pH	19.70 °C	786.18 µS/cm	0.45 mg/L	1.05 NTU	-17.8 mV	23.45 ft	55.00 ml/min
9/16/2022 9:58 AM	55:00	6.59 pH	19.87 °C	788.28 µS/cm	0.49 mg/L	1.07 NTU	-32.1 mV	23.46 ft	55.00 ml/min
9/16/2022 10:03 AM	01:00:00	6.60 pH	19.95 °C	788.78 µS/cm	0.51 mg/L	1.05 NTU	-17.2 mV	23.48 ft	55.00 ml/min

9/16/2022 10:08 AM	01:05:00	6.60 pH	19.97 °C	788.53 µS/cm	0.52 mg/L	1.02 NTU	-30.5 mV	23.50 ft	55.00 ml/min

Samples

Sample ID:	Description:
B-66	

Created using VuSitu from In-Situ, Inc.

Low-Flow Test Report:

Test Date / Time: 9/13/2022 9:14:25 AM
Project: Plant McDonough
Operator Name: M. Mann

Location Name: B-76 **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 28 ft** **Total Depth: 38.5 ft** **Initial Depth to Water: 15.45 ft**	**Pump Type: Peristaltic** **Tubing Type: Polyethylene** **Pump Intake From TOC: 33.5 ft** **Estimated Total Volume Pumped: 6850 ml** **Flow Cell Volume: 90 ml** **Final Flow Rate: 120 ml/min** **Final Draw Down: 0.06 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 851413**

Test Notes:

Weather Conditions:
Sunny

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	
9/13/2022 9:14 AM	00:00	6.11 pH	20.66 °C	1,222.8 µS/cm	1.15 mg/L	85.20 NTU	83.2 mV	15.45 ft	150.00 ml/min
9/13/2022 9:19 AM	05:00	6.15 pH	20.84 °C	1,277.1 µS/cm	0.24 mg/L	38.50 NTU	70.3 mV	15.58 ft	200.00 ml/min
9/13/2022 9:24 AM	10:00	6.16 pH	21.15 °C	1,276.8 µS/cm	0.17 mg/L	14.30 NTU	61.3 mV	15.57 ft	200.00 ml/min
9/13/2022 9:29 AM	15:00	6.17 pH	21.26 °C	1,279.6 µS/cm	0.14 mg/L	5.52 NTU	56.1 mV	15.59 ft	200.00 ml/min
9/13/2022 9:34 AM	20:00	6.17 pH	21.33 °C	1,280.3 µS/cm	0.12 mg/L	9.09 NTU	53.3 mV	15.61 ft	200.00 ml/min
9/13/2022 9:39 AM	25:00	6.18 pH	21.37 °C	1,277.8 µS/cm	0.10 mg/L	6.04 NTU	50.5 mV	15.56 ft	150.00 ml/min
9/13/2022 9:44 AM	30:00	6.13 pH	21.11 °C	1,246.8 µS/cm	0.11 mg/L	6.88 NTU	48.9 mV	15.59 ft	150.00 ml/min
9/13/2022 9:49 AM	35:00	6.09 pH	21.15 °C	1,225.3 µS/cm	0.12 mg/L	5.11 NTU	49.1 mV	15.53 ft	120.00 ml/min
9/13/2022 9:54 AM	40:00	6.05 pH	21.31 °C	1,206.7 µS/cm	0.12 mg/L	2.51 NTU	49.1 mV	15.51 ft	120.00 ml/min

Samples

Sample ID:	Description:
B-76	

Low-Flow Test Report:

Test Date / Time: 9/13/2022 1:26:24 PM
Project: Plant McDonough
Operator Name: M. Mann

Location Name: B-77 **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 33 ft** **Total Depth: 43.46 ft** **Initial Depth to Water: 30.7 ft**	**Pump Type: bladder** **Tubing Type: Polyethylene** **Pump Intake From TOC: 38 ft** **Estimated Total Volume Pumped: 12875 ml** **Flow Cell Volume: 90 ml** **Final Flow Rate: 200 ml/min** **Final Draw Down: 2.22 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 851413**

Test Notes:

Weather Conditions:
Sunny

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	
9/13/2022 1:26 PM	00:00	6.12 pH	31.72 °C	301.01 µS/cm	2.47 mg/L	40.10 NTU	58.8 mV	30.70 ft	275.00 ml/min
9/13/2022 1:31 PM	05:00	6.36 pH	22.45 °C	323.88 µS/cm	0.18 mg/L	39.00 NTU	11.8 mV	31.75 ft	275.00 ml/min
9/13/2022 1:36 PM	10:00	6.39 pH	22.08 °C	322.42 µS/cm	0.13 mg/L	43.50 NTU	-5.4 mV	32.07 ft	275.00 ml/min
9/13/2022 1:41 PM	15:00	6.38 pH	22.82 °C	310.58 µS/cm	0.16 mg/L	31.40 NTU	-12.7 mV	31.99 ft	275.00 ml/min
9/13/2022 1:46 PM	20:00	6.35 pH	22.57 °C	292.32 µS/cm	0.09 mg/L	21.90 NTU	-13.2 mV	32.15 ft	275.00 ml/min
9/13/2022 1:51 PM	25:00	6.34 pH	21.87 °C	292.27 µS/cm	0.09 mg/L	28.30 NTU	-11.0 mV	32.39 ft	200.00 ml/min
9/13/2022 1:56 PM	30:00	6.32 pH	22.25 °C	289.74 µS/cm	0.08 mg/L	16.40 NTU	-12.6 mV	32.49 ft	200.00 ml/min
9/13/2022 2:01 PM	35:00	6.33 pH	22.29 °C	290.32 µS/cm	0.08 mg/L	12.60 NTU	-11.8 mV	32.61 ft	200.00 ml/min
9/13/2022 2:06 PM	40:00	6.33 pH	22.30 °C	289.81 µS/cm	0.07 mg/L	9.20 NTU	-13.5 mV	32.69 ft	200.00 ml/min
9/13/2022 2:11 PM	45:00	6.34 pH	22.30 °C	290.78 µS/cm	0.06 mg/L	7.17 NTU	-14.2 mV	32.78 ft	200.00 ml/min
9/13/2022 2:16 PM	50:00	6.33 pH	22.31 °C	292.30 µS/cm	0.06 mg/L	5.66 NTU	-14.9 mV	32.86 ft	200.00 ml/min
9/13/2022 2:21 PM	55:00	6.34 pH	22.29 °C	291.54 µS/cm	0.05 mg/L	4.94 NTU	-15.2 mV	32.92 ft	200.00 ml/min

Samples

Sample ID:	Description:
B-77	Extra Rad

Low-Flow Test Report:

Test Date / Time: 9/13/2022 1:53:58 PM
Project: Plant McDonough
Operator Name: Jude Waguespack

Location Name: B-78 **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 21.7 ft** **Total Depth: 31.7 ft** **Initial Depth to Water: 11.6 ft**	**Pump Type: peristaltic** **Tubing Type: LDPE** **Tubing Inner Diameter: 0.175 cm** **Tubing Length: 42 m** **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: 0.15 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 728541**

Test Notes:

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 10	+/- 5 %	+/- 10 %	+/- 2	+/- 1000 %	+/- 0.3	
9/13/2022 1:53 PM	00:00	4.53 pH	23.26 °C	1,071.4 µS/cm	0.44 mg/L	0.85 NTU	499.8 mV	11.60 ft	250.00 ml/min
9/13/2022 1:58 PM	05:00	4.53 pH	20.27 °C	1,043.5 µS/cm	0.21 mg/L	0.66 NTU	565.5 mV	11.75 ft	250.00 ml/min
9/13/2022 2:03 PM	10:00	4.54 pH	20.04 °C	1,045.6 µS/cm	0.17 mg/L	0.77 NTU	505.2 mV	11.75 ft	250.00 ml/min
9/13/2022 2:08 PM	15:00	4.54 pH	19.90 °C	1,051.0 µS/cm	0.16 mg/L	1.07 NTU	567.1 mV	11.75 ft	250.00 ml/min
9/13/2022 2:13 PM	20:00	4.56 pH	19.81 °C	1,050.7 µS/cm	0.15 mg/L	0.79 NTU	505.6 mV	11.75 ft	250.00 ml/min

Samples

Sample ID:	Description:
B-78	

Low-Flow Test Report:

Test Date / Time: 9/12/2022 9:45:12 AM
Project: Plant McDonough
Operator Name: Jude Waguespack

Location Name: B-79 **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 26.38 ft** **Total Depth: 36.38 ft** **Initial Depth to Water: 7.7 ft**	**Pump Type: peristaltic** **Tubing Type: LDPE** **Tubing Inner Diameter: 0.175 cm** **Tubing Length: 42 m** **Pump Intake From TOC: 31 ft** **Estimated Total Volume Pumped: 5004.167 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: 728541**

Test Notes:

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 10	+/- 5 %	+/- 10 %	+/- 2	+/- 1000 %	+/- 0.3	
9/12/2022 9:45 AM	00:00	7.29 pH	24.80 °C	0.00 µS/cm	8.14 mg/L	3.53 NTU	132.7 mV	7.70 ft	250.00 ml/min
9/12/2022 9:50 AM	05:00	4.86 pH	21.47 °C	0.50 µS/cm	0.71 mg/L	7.79 NTU	133.5 mV	8.30 ft	250.00 ml/min
9/12/2022 9:54 AM	09:42	4.88 pH	20.62 °C	0.51 µS/cm	0.34 mg/L		143.9 mV	8.30 ft	250.00 ml/min
9/12/2022 9:55 AM	10:01	4.88 pH	20.58 °C	0.51 µS/cm	0.33 mg/L	2.10 NTU	143.6 mV	8.35 ft	250.00 ml/min
9/12/2022 10:00 AM	15:01	4.89 pH	20.51 °C	0.52 µS/cm	0.25 mg/L	0.94 NTU	123.4 mV	8.39 ft	250.00 ml/min
9/12/2022 10:05 AM	20:01	4.92 pH	20.52 °C	0.53 µS/cm	0.22 mg/L	0.62 NTU	119.7 mV	8.45 ft	250.00 ml/min

Samples

Sample ID:	Description:
B-79	

Created using VuSitu from In-Situ, Inc.

Low-Flow Test Report:

Test Date / Time: 9/16/2022 11:32:15 AM
Project: SCS Plant McDonough
Operator Name: Duane Fulton

Location Name: B-82 **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 37.65 ft** **Total Depth: 47.65 ft** **Initial Depth to Water: 18.96 ft**	**Pump Type: Alexis Peri Pump** **Tubing Type: LDPE** **Pump Intake From TOC: 42 ft** **Estimated Total Volume Pumped: 3125 ml** **Flow Cell Volume: 90 ml** **Final Flow Rate: 75 ml/min** **Final Draw Down: 0.66 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 883533**

Test Notes:

Weather Conditions:
Clear, 77

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	
9/16/2022 11:32 AM	00:00	5.74 pH	28.31 °C	776.27 µS/cm	3.95 mg/L	3.77 NTU	121.6 mV	19.17 ft	100.00 ml/min
9/16/2022 11:37 AM	05:00	5.08 pH	22.88 °C	830.02 µS/cm	0.75 mg/L	3.65 NTU	233.7 mV	19.49 ft	75.00 ml/min
9/16/2022 11:42 AM	10:00	5.05 pH	22.48 °C	829.67 µS/cm	0.59 mg/L	4.14 NTU	165.1 mV	19.55 ft	75.00 ml/min
9/16/2022 11:47 AM	15:00	5.04 pH	22.29 °C	834.81 µS/cm	0.54 mg/L	2.45 NTU	209.2 mV	19.60 ft	75.00 ml/min
9/16/2022 11:52 AM	20:00	5.04 pH	22.15 °C	831.99 µS/cm	0.50 mg/L	2.27 NTU	150.4 mV	19.62 ft	75.00 ml/min
9/16/2022 11:57 AM	25:00	5.04 pH	22.23 °C	833.79 µS/cm	0.48 mg/L	2.15 NTU	188.8 mV	19.62 ft	75.00 ml/min
9/16/2022 12:02 PM	30:00	5.03 pH	22.55 °C	831.19 µS/cm	0.47 mg/L	1.82 NTU	141.3 mV	19.62 ft	75.00 ml/min
9/16/2022 12:07 PM	35:00	5.02 pH	22.54 °C	826.34 µS/cm	0.46 mg/L	2.01 NTU	132.3 mV	19.62 ft	75.00 ml/min
9/16/2022 12:12 PM	40:00	5.02 pH	22.36 °C	829.57 µS/cm	0.43 mg/L	2.23 NTU	169.7 mV	19.62 ft	75.00 ml/min

Samples

Sample ID:	Description:
B-82	

Low-Flow Test Report:

Test Date / Time: 9/16/2022 10:29:35 AM
Project: Plant McDonough
Operator Name: M. Mann

Location Name: B-88 **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 65 ft** **Total Depth: 75.06 ft** **Initial Depth to Water: 37.8 ft**	**Pump Type: bladder** **Tubing Type: Polyethylene** **Pump Intake From TOC: 70 ft** **Estimated Total Volume Pumped: 3000 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:

Weather Conditions:
Sunny

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	
9/16/2022 10:29 AM	00:00	6.17 pH	22.94 °C	815.44 µS/cm	4.12 mg/L	4.10 NTU	107.5 mV	37.80 ft	200.00 ml/min
9/16/2022 10:34 AM	05:00	5.49 pH	18.96 °C	967.19 µS/cm	0.45 mg/L	3.71 NTU	115.6 mV	37.88 ft	200.00 ml/min
9/16/2022 10:39 AM	10:00	5.46 pH	18.72 °C	977.78 µS/cm	0.47 mg/L	2.78 NTU	120.3 mV	37.91 ft	200.00 ml/min
9/16/2022 10:44 AM	15:00	5.47 pH	18.77 °C	979.56 µS/cm	0.52 mg/L	2.40 NTU	121.4 mV	37.90 ft	200.00 ml/min

Samples

Sample ID:	Description:
B-88	

Low-Flow Test Report:

Test Date / Time: 9/9/2022 9:57:11 AM
Project: Plant McDonough (26)
Operator Name: Cole Mayer

Location Name: B-62 **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 29.62 ft** **Total Depth: 39.62 ft** **Initial Depth to Water: 15.52 ft**	**Pump Type: peristaltic** **Tubing Type: LDPE** **Pump Intake From TOC: 34 ft** **Estimated Total Volume Pumped: 9095 ml** **Flow Cell Volume: 90 ml** **Final Flow Rate: 100 ml/min** **Final Draw Down: -0.01 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 884187**

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	
9/9/2022 9:57 AM	00:00	6.78 pH	23.43 °C	509.32 µS/cm	4.36 mg/L	13.02 NTU	107.4 mV	15.58 ft	100.00 ml/min
9/9/2022 10:02 AM	05:00	6.48 pH	20.58 °C	505.34 µS/cm	0.44 mg/L	3.16 NTU	81.4 mV	15.61 ft	100.00 ml/min
9/9/2022 10:07 AM	10:00	6.48 pH	20.07 °C	491.81 µS/cm	0.26 mg/L	6.67 NTU	73.8 mV	15.61 ft	100.00 ml/min
9/9/2022 10:12 AM	15:00	6.38 pH	19.97 °C	398.62 µS/cm	0.19 mg/L	20.96 NTU	66.6 mV	15.62 ft	100.00 ml/min
9/9/2022 10:17 AM	20:00	6.36 pH	19.78 °C	375.78 µS/cm	0.17 mg/L	19.70 NTU	62.8 mV	15.62 ft	100.00 ml/min
9/9/2022 10:22 AM	25:00	6.30 pH	19.77 °C	334.58 µS/cm	0.17 mg/L	10.82 NTU	58.6 mV	15.62 ft	100.00 ml/min
9/9/2022 10:27 AM	30:00	6.26 pH	19.73 °C	305.81 µS/cm	0.19 mg/L	7.57 NTU	55.4 mV	15.61 ft	100.00 ml/min
9/9/2022 10:32 AM	35:00	6.24 pH	19.87 °C	294.79 µS/cm	0.20 mg/L	6.39 NTU	53.1 mV	15.60 ft	100.00 ml/min
9/9/2022 10:37 AM	40:00	6.23 pH	19.98 °C	284.80 µS/cm	0.21 mg/L	6.85 NTU	51.3 mV	15.60 ft	100.00 ml/min
9/9/2022 10:42 AM	45:00	6.23 pH	20.22 °C	281.88 µS/cm	0.25 mg/L	7.84 NTU	49.7 mV	15.59 ft	100.00 ml/min
9/9/2022 10:47 AM	50:00	6.22 pH	20.28 °C	280.42 µS/cm	0.17 mg/L	8.18 NTU	48.3 mV	15.58 ft	100.00 ml/min
9/9/2022 10:52 AM	55:00	6.23 pH	20.30 °C	277.68 µS/cm	0.16 mg/L	7.20 NTU	47.3 mV	15.57 ft	100.00 ml/min
9/9/2022 10:57 AM	01:00:00	6.23 pH	20.32 °C	275.94 µS/cm	0.16 mg/L	7.25 NTU	46.2 mV	15.56 ft	100.00 ml/min
9/9/2022 11:02 AM	01:05:00	6.22 pH	20.41 °C	274.68 µS/cm	0.15 mg/L	8.09 NTU	45.6 mV	15.55 ft	100.00 ml/min
9/9/2022 11:07 AM	01:10:00	6.23 pH	20.53 °C	274.55 µS/cm	0.16 mg/L	7.18 NTU	44.8 mV	15.54 ft	100.00 ml/min

9/9/2022 11:12 AM	01:15:00	6.23 pH	20.56 °C	272.70 µS/cm	0.16 mg/L	7.22 NTU	44.1 mV	15.54 ft	100.00 ml/min
9/9/2022 11:17 AM	01:20:00	6.22 pH	20.67 °C	271.88 µS/cm	0.13 mg/L	5.95 NTU	43.3 mV	15.54 ft	100.00 ml/min
9/9/2022 11:22 AM	01:25:00	6.22 pH	20.42 °C	271.27 µS/cm	0.12 mg/L	5.74 NTU	42.5 mV	15.52 ft	100.00 ml/min
9/9/2022 11:25 AM	01:30:00	6.22 pH	20.71 °C	270.15 µS/cm	0.12 mg/L	4.84 NTU	41.3 mV	15.51 ft	100.00 ml/min

Samples

Sample ID:	Description:
B-62	

Created using VuSitu from In-Situ, Inc.

Low-Flow Test Report:

Test Date / Time: 9/9/2022 10:14:14 AM
Project: Plant McDonough
Operator Name: Jude Waguespack

Location Name: B-68 **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 8.03 ft** **Total Depth: 18.03 ft** **Initial Depth to Water: 4.25 ft**	**Pump Type: peristaltic** **Tubing Type: LDPE** **Tubing Inner Diameter: 0.175 cm** **Tubing Length: 42 m** **Pump Intake From TOC: 13 ft** **Estimated Total Volume Pumped: 7500 ml** **Flow Cell Volume: 90 ml** **Final Flow Rate: 250 ml/min** **Final Draw Down: 0.45 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 728541**

Test Notes:

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 10	+/- 5 %	+/- 10 %	+/- 2	+/- 1000 %	+/- 0.3	
9/9/2022 10:14 AM	00:00	6.26 pH	23.85 °C	0.47 µS/cm	3.83 mg/L	207.00 NTU	32.8 mV	4.25 ft	250.00 ml/min
9/9/2022 10:19 AM	05:00	6.52 pH	19.59 °C	0.49 µS/cm	0.15 mg/L	48.50 NTU	-12.1 mV	4.70 ft	250.00 ml/min
9/9/2022 10:24 AM	10:00	6.56 pH	18.96 °C	0.49 µS/cm	0.10 mg/L	26.00 NTU	-29.5 mV	4.70 ft	250.00 ml/min
9/9/2022 10:29 AM	15:00	6.59 pH	18.88 °C	0.49 µS/cm	0.09 mg/L	14.60 NTU	-28.5 mV	4.70 ft	250.00 ml/min
9/9/2022 10:34 AM	20:00	6.61 pH	19.18 °C	0.49 µS/cm	0.07 mg/L	11.80 NTU	-38.3 mV	4.70 ft	250.00 ml/min
9/9/2022 10:39 AM	25:00	6.62 pH	19.19 °C	0.49 µS/cm	0.07 mg/L	7.90 NTU	-31.8 mV	4.70 ft	250.00 ml/min
9/9/2022 10:44 AM	30:00	6.64 pH	19.09 °C	0.49 µS/cm	0.07 mg/L	4.71 NTU	-40.4 mV	4.70 ft	250.00 ml/min

Samples

Sample ID:	Description:
B-68	

Low-Flow Test Report:

Test Date / Time: 9/8/2022 2:18:20 PM
Project: SCS Plant McDonough
Operator Name: Duane Fulton

Location Name: B-73 **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 5.9 ft** **Total Depth: 15.9 ft** **Initial Depth to Water: 4.61 ft**	**Pump Type: Alexis Peri Pump** **Tubing Type: LDPE** **Pump Intake From TOC: 10 ft** **Estimated Total Volume Pumped: 3350 ml** **Flow Cell Volume: 90 ml** **Final Flow Rate: 100 ml/min** **Final Draw Down: 0.25 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 883533**

Test Notes:

Weather Conditions:
Cloudy 82

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	
9/8/2022 2:18 PM	00:00	6.79 pH	27.91 °C	399.50 µS/cm	2.67 mg/L	5.48 NTU	36.0 mV	4.75 ft	90.00 ml/min
9/8/2022 2:23 PM	05:00	6.62 pH	22.57 °C	426.42 µS/cm	0.21 mg/L	2.90 NTU	47.1 mV	4.75 ft	90.00 ml/min
9/8/2022 2:28 PM	10:00	6.63 pH	22.18 °C	428.80 µS/cm	0.14 mg/L	0.99 NTU	47.3 mV	4.83 ft	90.00 ml/min
9/8/2022 2:33 PM	15:00	6.63 pH	21.86 °C	429.63 µS/cm	0.12 mg/L	2.04 NTU	54.9 mV	4.85 ft	100.00 ml/min
9/8/2022 2:38 PM	20:00	6.63 pH	21.78 °C	430.65 µS/cm	0.11 mg/L	1.20 NTU	48.2 mV	4.85 ft	100.00 ml/min
9/8/2022 2:43 PM	25:00	6.63 pH	21.73 °C	430.03 µS/cm	0.10 mg/L	0.72 NTU	56.2 mV	4.86 ft	100.00 ml/min
9/8/2022 2:48 PM	30:00	6.63 pH	21.77 °C	430.02 µS/cm	0.09 mg/L	0.30 NTU	48.6 mV	4.85 ft	100.00 ml/min
9/8/2022 2:53 PM	35:00	6.63 pH	21.73 °C	429.75 µS/cm	0.10 mg/L	0.35 NTU	56.7 mV	4.86 ft	100.00 ml/min

Samples

Sample ID:	Description:
B-73	

Low-Flow Test Report:

Test Date / Time: 9/14/2022 10:42:16 AM
Project: Plant McDonough
Operator Name: Jude Waguespack

Location Name: B-74 **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 6.3 ft** **Total Depth: 16.3 ft** **Initial Depth to Water: 4.53 ft**	**Pump Type: peristaltic** **Tubing Type: LDPE** **Tubing Inner Diameter: 0.175 cm** **Tubing Length: 42 m** **Pump Intake From TOC: 11 ft** **Estimated Total Volume Pumped: 5000 ml** **Flow Cell Volume: 90 ml** **Final Flow Rate: 250 ml/min** **Final Draw Down: 1.12 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 728541**

Test Notes:

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 10	+/- 5 %	+/- 10 %	+/- 2	+/- 1000 %	+/- 0.3	
9/14/2022 10:42 AM	00:00	6.02 pH	21.47 °C	140.12 µS/cm	0.32 mg/L	0.61 NTU	127.4 mV	4.53 ft	250.00 ml/min
9/14/2022 10:47 AM	05:00	6.02 pH	19.80 °C	151.20 µS/cm	0.16 mg/L	1.34 NTU	119.4 mV	5.54 ft	250.00 ml/min
9/14/2022 10:52 AM	10:00	6.02 pH	19.52 °C	153.69 µS/cm	0.14 mg/L	1.18 NTU	113.0 mV	5.64 ft	250.00 ml/min
9/14/2022 10:57 AM	15:00	6.00 pH	19.43 °C	155.18 µS/cm	0.13 mg/L	0.63 NTU	106.8 mV	5.65 ft	250.00 ml/min
9/14/2022 11:02 AM	20:00	6.01 pH	19.40 °C	157.41 µS/cm	0.14 mg/L	0.49 NTU	102.7 mV	5.65 ft	250.00 ml/min

Samples

Sample ID:	Description:
B-74	

APPENDIX A

Instrument Calibration Records, September 2022

Daily Calibration Log

Project Plant McDonough **Incude daily mid-day pH check**
Field Staff J. Waguespack, M. Mann, J. Booth, A. Plowman, D. Fulton

Instrument Calibration

			Date:	9/7/22		9/7/22	
			Time:	7:54		10:15	
Parameter	**Units**	**Standard**	**AquaTROLL SN 884187 iPad # 80**	**Mid-Day pH**	**AquaTROLL SN 728541 iPad # 76**	**Mid-Day pH**
DO	% saturation	100	95.61	-------	101.81	-------
Conductivity	us/cm	4490	4795.7	-------	4416.8	-------
pH	S.U.	4.00	4.08		4.19	
pH	S.U.	7.00	7.12		7.26	
pH	S.U.	10.00	10.15		10.08	
ORP	mV	228.00	221.2	-------	221.7	-------

	Units	**Standard**	**Hach SN 140801034447**	**Hach SN**	**Hach SN**	**Hach SN**
Turbidity	NTU	20	19.5			
	NTU	100	99.9			
	NTU	800	794			
	NTU	10.0	9.88			

			Date:	9/8/22		9/9/22	
			Time:	0815		755	
Parameter	**Units**	**Standard**	**AquaTROLL SN 728541 iPad # 76**	**Mid-Day pH**	**AquaTROLL SN 728541 iPad # 76**	**Mid-Day pH**
DO	% saturation	100	107.23	-------	94.15	-------
Conductivity	us/cm	4490	4516.6	-------	4400	-------
pH	S.U.	4.00	3.99		4.03	
pH	S.U.	7.00	7.02		6.99	
pH	S.U.	10.00	9.97		9.95	
ORP	mV	228.00	226.9	-------	229.5	-------

	Units	**Standard**	**Hach SN 140801034447**	**Hach SN**	**Hach SN 140801034447**	**Hach SN**
Turbidity	NTU	20	21.7		20.5	
	NTU	100	101		104	
	NTU	800	791		801	
	NTU	10.0	10.2		9.97	

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 McDonough
Field Staff ~~J. Waguespack~~ M. Mann, D. Fulton

Instrument Calibration

			Date:	9/12/22		09/13/22	
			Time:	8:27	10:39	7:32	
Parameter	**Units**	**Standard**	**AquaTROLL SN 728541 iPad # 76**	**Mid-Day pH**	**AquaTROLL SN _____ iPad # _____**	**Mid-Day pH**	
DO	% saturation	100	99.14	-------	101.52	-------	
Conductivity	us/cm	4490	4610	4436.0	4476.1	-------	
pH	S.U.	4.00	4.05		4.03		
pH	S.U.	7.00	7.02		7.04		
pH	S.U.	10.00	10.02		10.04		
ORP	mV	228.00	227.(	-------	234.1	-------	

	Units	**Standard**	**Hach SN 140800034447**	**Hach SN _____**	**Hach SN _____**	**Hach SN _____**
Turbidity	NTU	20	19.5			
	NTU	100	98.4			
	NTU	800	800			
	NTU	10.0	9.87	10.1		

			Date:	9/15/22		9/16/22	
			Time:	7:46		7:47	
Parameter	**Units**	**Standard**	**AquaTROLL SN 728541 iPad # 76**	**Mid-Day pH**	**AquaTROLL SN 728541 iPad # 76**	**Mid-Day pH**	
DO	% saturation	100	100.80	-------	100.40	-------	
Conductivity	us/cm	4490	4559.7	-------	4443.6	-------	
pH	S.U.	4.00	4.04		4.02		
pH	S.U.	7.00	7.02		7.02		
pH	S.U.	10.00	10.04		10.08		
ORP	mV	228.00	231.0	-------	233.7	-------	

	Units	**Standard**	**Hach SN 140800034447**	**Hach SN _____**	**Hach SN 140800034447**	**Hach SN _____**
Turbidity	NTU	20	19.5		20.2	
	NTU	100	99.5		98.7	
	NTU	800	789		803	
	NTU	10.0	10.6		10.3	

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 McDonough **Incude daily mid-day pH check**
Field Staff J. Waguespack, M. Mann, J. Booth, A. Plowman, D. Fulton

Instrument Calibration

			Date:		9/19/22		9/20/22	
			Time:		8:19		8:40	
Parameter	**Units**	**Standard**	**AquaTROLL SN 728541 iPad # 76**	**Mid-Day pH**	**AquaTROLL SN 728541 iPad # 76**	**Mid-Day pH**
DO	% saturation	100	101.45	-------	99.58	-------
Conductivity	us/cm	4490	4651.9	-------	4415.8	-------
pH	S.U.	4.00	4.04		4.02	
pH	S.U.	7.00	7.02		6.98	
pH	S.U.	10.00	9.99		10.00	
ORP	mV	228.00	218.6	-------	223.7	-------

	Units	**Standard**	**Hach SN 14080C034447**	**Hach SN**	**Hach SN 14080C034447**	**Hach SN**
Turbidity	NTU	20	20.0		19.1	
	NTU	100	98.1		101	
	NTU	800	796		804	
	NTU	10.0	10.0		10.3	

			Date:					
			Time:					
Parameter	**Units**	**Standard**	**AquaTROLL SN _____ iPad # _____**	**Mid-Day pH**	**AquaTROLL 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**	**Hach SN**	**Hach SN**	**Hach SN**	**Hach SN**
Turbidity	NTU	20				
	NTU	100				
	NTU	800				
	NTU	10.0				

Notes: DO - Dissolved Oxygen; us/cm - microsiemens/centimeter; ORP - oxidation-reduction potential; mV - millivolts; NTU - Nphelometric Turbidity Units; NC - Not calibrated

July/August 2022

Daily Calibration Log

GL166849621.002

DUANE FULTON

Project Plant McDonough **Incude daily mid-day pH check**
Field Staff J. Waguespack, M. Mann, ~~J. Booth, A. Plowman~~, D. Fulton

Instrument Calibration

			Date:	09/07/22		09/08/22	
			Time:	06:30		10:06	13:52
Parameter	**Units**	**Standard**	**AquaTROLL SN 883533 iPad # 111**	**Mid-Day pH**	**AquaTROLL SN 883533 iPad # 111**	**Mid-Day pH**
DO	% saturation	100	101	-------	101.97	-------
Conductivity	us/cm	4490	4586.5	-------	4,357.5	-------
pH	S.U.	4.00	4.11	4.08	3.99	4.05
pH	S.U.	7.00	7.11	7.05	6.97	6.98
pH	S.U.	10.00	10.11	9.94	9.85	9.98
ORP	mV	228.00	219.4	-------	229.4	-------
			~~LA MAY~~		LA MAY	LA MAY
Turbidity	**Units**	**Standard**	**~~Hach~~ SN**	**Hach SN**	**~~Hach~~ SN 1436-3911**	**~~Hach~~ SN 1436-3911**
	NTU	20	19.1	—	0 / 0.5	0 / 0.3
	NTU	100	99.7	—	1 / 1.1	1 / 0.98
	NTU	800	794	—	10 / 9.7	10 / 9.9
	NTU	10.0	9.7	—		

			Date:	09/12/22		09/12/22	
			Time:	07:00	12:30	14:50	
Parameter	**Units**	**Standard**	**AquaTROLL SN 883533 iPad # 111**	**Mid-Day pH**	**AquaTROLL SN 883533 iPad # 111**	**Mid-Day pH**
DO	% saturation	100	~~230.3~~ 99.6	-------		-------
Conductivity	us/cm	4490	4417.7	4552.1		-------
pH	S.U.	4.00	3.98	4.05	4.04	
pH	S.U.	7.00	6.98	7.03	6.96	
pH	S.U.	10.00	9.98	10.05	9.96	
ORP	mV	228.00	230.3	-------		-------
			LA MAY			
Turbidity	**Units**	**Standard**	**~~Hach~~ SN 1436-3911**	**Hach SN**	**Hach SN**	**Hach SN**
	NTU	~~20~~ 0	0.05			
	NTU	~~100~~ 1	0.96			
	NTU	~~800~~ 10	9.92			
	NTU	10.0				

Notes: DO - Dissolved Oxygen; us/cm - microsiemens/centimeter; ORP - oxidation-reduction potential; mV - millivolts; NTU - Nphelometric Turbidity Units; NC - Not calibrated

July/August 2022

Daily Calibration Log

DUANE FULTON

GL166849621.002

Incude daily mid-day pH check

Project Plant McDonough
Field Staff J. Waguespack, M. Mann, D. Fulton

Instrument Calibration

			Date: 09/13/22			
			Time: 06:45	15:00		
Parameter	**Units**	**Standard**	**AquaTROLL SN 883533 iPad # 111**	**Mid-Day pH**	**AquaTROLL SN _____ iPad # _____**	**Mid-Day pH**
DO	% saturation	100	99.2	-------		-------
Conductivity	us/cm	4490	4419.0	-------		-------
pH	S.U.	4.00	3.94	4.06		
pH	S.U.	7.00	7.00	7.03		
pH	S.U.	10.00	9.95	9.99		
ORP	mV	228.00	236.2	-------		-------

			~~Lamotte~~ Hach SN 1438-391	Hach SN _____	Hach SN _____	Hach SN _____
Turbidity	**Units**	**Standard**				
	NTU	~~20~~ 0	0.0			
	NTU	~~100~~ 1	0.57			
	NTU	~~800~~ 10	10.51			
	NTU	~~10.0~~				

			Date:			
			Time:			
Parameter	**Units**	**Standard**	**AquaTROLL SN _____ iPad # _____**	**Mid-Day pH**	**AquaTROLL 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		-------		-------

			Hach SN _____	Hach SN _____	Hach SN _____	Hach SN _____
Turbidity	**Units**	**Standard**				
	NTU	20				
	NTU	100				
	NTU	800				
	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 McDonough **Incude daily mid-day pH check**
Field Staff J. Waguespack, M. Mann, J. Booth, A. Plowman, D. Fulton

Instrument Calibration

		Date:	09/15/22			
		Time:	07:20	12:15		
Parameter	**Units**	**Standard**	**AquaTROLL SN 583532 iPad # 111**	**Mid-Day pH**	**AquaTROLL SN 583533 iPad # 111**	**Mid-Day pH**
DO	% saturation	100	~~98~~ 100.9	-------	99.49	-------
Conductivity	us/cm	4490	4499	-------	4493.8	-------
pH	S.U.	4.00	3.96	4.09	3.90	
pH	S.U.	7.00	6.94	7.06	7.11	
pH	S.U.	10.00	9.98	10.05	10.23	
ORP	mV	228.00	231	-------	227.8	-------

			~~Hach~~ SN 1438-3911	~~Hach SN~~ 1438-2911	Hach SN _____	Hach SN _____
Turbidity	**Units**	**Standard**				
	NTU	~~20~~ 0	0.25	0.34		
	NTU	~~100~~ 1	1.03	1.03		
	NTU	~~800~~ 10	9.85	10.34		
	NTU	~~10.0~~	—			

		Date:				
		Time:				
Parameter	**Units**	**Standard**	**AquaTROLL SN _____ iPad # _____**	**Mid-Day pH**	**AquaTROLL 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		-------		-------

			Hach SN _____	Hach SN _____	Hach SN _____	Hach SN _____
Turbidity	**Units**	**Standard**				
	NTU	20				
	NTU	100				
	NTU	800				
	NTU	10.0				

Notes: DO - Dissolved Oxygen; us/cm - microsiemens/centimeter; ORP - oxidation-reduction potential; mV - millivolts; NTU - Nphelometric Turbidity Units; NC - Not calibrated

July/August 2022

Daily Calibration Log

GL166849621.002

Project Plant McDonough **Incude daily mid-day pH check**
Field Staff J. Waguespack, M. Mann, J. Booth, A. Plowman, D. Fulton

Instrument Calibration

		Date:	09/08/2022		09/09/2022	
		Time:	10:59		07:55	
Parameter	**Units**	**Standard**	**AquaTROLL SN 851413 iPad # 55**	**Mid-Day pH**	**AquaTROLL SN 851413 iPad # 55**	**Mid-Day pH**
DO	% saturation	100	108.89	-------	98.50	-------
Conductivity	us/cm	4490	4655.7	-------	4456.1	-------
pH	S.U.	4.00	4.13		4.03	
pH	S.U.	7.00	7.00		7.00	
pH	S.U.	10.00	10.00		10.06	
ORP	mV	228.00	226.8	-------	218.0	-------

	Units	**Standard**	**Hach SN 21010D000165**	**Hach SN**	**Hach SN 21010D000165**	**Hach SN**
Turbidity	NTU	20	19.2		20.0	
	NTU	100	100		101	
	NTU	800	859		806	
	NTU	10.0	9.89		9.94	

		Date:	09/12/2022		09/19/2022	
		Time:	07:40		07:42	
Parameter	**Units**	**Standard**	**AquaTROLL SN 851413 iPad # 55**	**Mid-Day pH**	**AquaTROLL SN 851413 iPad # 55**	**Mid-Day pH**
DO	% saturation	100	101.76	-------	102.54	-------
Conductivity	us/cm	4490	4421.2	-------	4499.6	-------
pH	S.U.	4.00	4.00		4.05	
pH	S.U.	7.00	6.98		7.00	
pH	S.U.	10.00	9.93		10.00	
ORP	mV	228.00	222.4	-------	220.8	-------

	Units	**Standard**	**Hach SN 21010D000165**	**Hach SN**	**Hach SN 21010D000165**	**Hach SN**
Turbidity	NTU	20	20.6		19.5	
	NTU	100	100		99.7	
	NTU	800	796		799	
	NTU	10.0	9.58		10.2	

Notes: DO - Dissolved Oxygen; us/cm - microsiemens/centimeter; ORP - oxidation-reduction potential; mV - millivolts; NTU - Nphelometric Turbidity Units; NC - Not calibrated

July/August 2022

Daily Calibration Log

GL166849621.002

Incude daily mid-day pH check

Project Plant McDonough
Field Staff J. Waguespack, M. Mann, D. Fulton

Instrument Calibration

			Date:		09/13/22		09/14/22	
			Time:		07:24		07:30	
Parameter	**Units**	**Standard**	**AquaTROLL SN 851413 iPad # 55**	**Mid-Day pH**	**AquaTROLL SN 851413 iPad # 55**	**Mid-Day pH**
DO	% saturation	100	94.24	-------	101.51	-------
Conductivity	us/cm	4490	4427.8	-------	4481.1	-------
pH	S.U.	4.00	4.01		4.03	
pH	S.U.	7.00	6.99		7.02	
pH	S.U.	10.00	9.99		10.06	
ORP	mV	228.00	225.7	-------	224.8	-------

	Units	**Standard**	**Hach SN 21010D000165**	**Hach SN**	**Hach SN 21010D000165**	**Hach SN**
Turbidity	NTU	20	19.9		19.8	
	NTU	100	101		100	
	NTU	800	807		802	
	NTU	10.0	9.66		9.98	

			Date:		09/15/22		09/16/22	
			Time:		07:27		07:22	
Parameter	**Units**	**Standard**	**AquaTROLL SN 851413 iPad # 55**	**Mid-Day pH**	**AquaTROLL SN 851413 iPad # 55**	**Mid-Day pH**
DO	% saturation	100	100.63	-------	99.10	-------
Conductivity	us/cm	4490	4452.6	-------	4465.3	-------
pH	S.U.	4.00	4.02		4.03	
pH	S.U.	7.00	6.99		6.99	
pH	S.U.	10.00	9.96		9.97	
ORP	mV	228.00	218.2	-------	221.8	-------

	Units	**Standard**	**Hach SN 21010D000165**	**Hach SN**	**Hach SN 21010D000165**	**Hach SN**
Turbidity	NTU	20	19.5		20.2	
	NTU	100	98.6		99.8	
	NTU	800	800		794	
	NTU	10.0	10.1		10.2	

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 McDonough **Incude daily mid-day pH check**
Field Staff J. Waguespack, M. Mann, J. Booth, A. Plowman, D. Fulton

COLE MAHER

Instrument Calibration

			Date: 9-7-22		9-8-2022	
			Time: 0820		0547	
Parameter	**Units**	**Standard**	**AquaTROLL SN 843285 iPad # ____**	**Mid-Day pH**	**AquaTROLL SN 884187 iPad # 80**	**Mid-Day pH**
DO	% saturation	100		-------	105.67	-------
Conductivity	us/cm	4490	4765	-------	4037.6	-------
pH	S.U.	4.00	4.10		3.87	
pH	S.U.	7.00	7.06		7.02	
pH	S.U.	10.00			10.00	
ORP	mV	228.00		-------	231.3	-------

	Units	**Standard**	**Hach SN 7007-14116**	**Hach SN ____**	**Hach SN 7007-14116**	**Hach SN ____**
Turbidity	NTU	~~20~~ 1	1.16		1.83	
	NTU	100				
	NTU	800				
	NTU	10.0	7.43		9.43	

			Date:	9-9-2022		
			Time:	0740		
Parameter	**Units**	**Standard**	**AquaTROLL SN 884187 iPad # 80**	**Mid-Day pH**	**AquaTROLL SN ____ iPad # ____**	**Mid-Day pH**
DO	% saturation	100	100.08	-------		-------
Conductivity	us/cm	4490	4610	-------		-------
pH	S.U.	4.00	4.04			
pH	S.U.	7.00	7.02			
pH	S.U.	10.00	9.99			
ORP	mV	228.00	226.0	-------		-------

	Units	**Standard**	**Hach SN 7007-14116**	**Hach SN ____**	**Hach SN ____**	**Hach SN ____**
Turbidity	NTU	~~20~~ 1	0.94			
	NTU	100				
	NTU	800				
	NTU	10.0	8.90			

Notes: DO - Dissolved Oxygen; us/cm - microsiemens/centimeter; ORP - oxidation-reduction potential; mV - millivolts; NTU - Nphelometric Turbidity Units; NC - Not calibrated

AquaTroll Unit malfunctioning (9-7-2022) SN 843285

Daily Calibration Log

Incude daily mid-day pH check

Project Plant McDonough
Field Staff J. Waguespack, M. Mann, D. Fulton Cole Mayer

Instrument Calibration

			Date:	09/13/2022		09/14/2022	
			Time:	0740		0730	
Parameter	**Units**	**Standard**	**AquaTROLL SN 884187 iPad # 80**	**Mid-Day pH**	**AquaTROLL SN 884187 iPad # 80**	**Mid-Day pH**
DO	% saturation	100	91.76	-------	100.65	-------
Conductivity	us/cm	4490	4484.5	-------	4510	-------
pH	S.U.	4.00	4.06		4.02	
pH	S.U.	7.00	6.99		7.02	
pH	S.U.	10.00	10.06		9.99	
ORP	mV	228.00	239.2	-------	233.1	-------

	Units	**Standard**	**Hach SN 2007-1446**	**Hach SN**	**Hach SN 2007-1446**	**Hach SN**
Turbidity	NTU	1	1.28		1.27	
	NTU	100				
	NTU	800				
	NTU	10.0	10.0		10.04	

			Date:	09/14/2022		9/15/2022	
			Time:	0745		0725	
Parameter	**Units**	**Standard**	**AquaTROLL SN 728541 iPad # 76**	**Mid-Day pH**	**AquaTROLL SN 884187 iPad # 80**	**Mid-Day pH**
DO	% saturation	100	97.66	-------	98.51	-------
Conductivity	us/cm	4490	4513.0	-------	4480	-------
pH	S.U.	4.00	4.01		4.02	
pH	S.U.	7.00	7.02		7.02	
pH	S.U.	10.00	9.98		10.03	
ORP	mV	228.00	223.6	-------	227.0	-------

	Units	**Standard**	**Hach SN 14080803 4447**	**Hach SN**	**Hach SN**	**Hach SN**
Turbidity	NTU	20	20.6	1 NTV	1.55	
	NTU	100	102			
	NTU	800	809			
	NTU	10.0	10.2	10 NTV	9.63	

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 McDonough **Incude daily mid-day pH check**
Field Staff J. Waguespack, M. Mann, J. Booth, A. Plowman, D. Fulton

Instrument Calibration COLE MAYER

		Date:	09/16/2022			
		Time:	0725			
Parameter	**Units**	**Standard**	**AquaTROLL SN** 884187 **iPad #** 80	**Mid-Day pH**	**AquaTROLL SN** _____ **iPad #** _____	**Mid-Day pH**
DO	% saturation	100	100.89	-------		-------
Conductivity	us/cm	4490	4449.2	-------		-------
pH	S.U.	4.00	4.02			
pH	S.U.	7.00	7.01			
pH	S.U.	10.00	10.04			
ORP	mV	228.00	226.5	-------		-------

	Units	**Standard**	**Hach SN** 7007-1416	**Hach SN** _____	**Hach SN** _____	**Hach SN** _____
Turbidity	NTU	~~20~~ 1	1.17			
	NTU	100				
	NTU	800				
	NTU	10.0	10.0			

		Date:				
		Time:				
Parameter	**Units**	**Standard**	**AquaTROLL SN** _____ **iPad #** _____	**Mid-Day pH**	**AquaTROLL 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**	**Hach SN** _____	**Hach SN** _____	**Hach SN** _____	**Hach SN** _____
Turbidity	NTU	20				
	NTU	100				
	NTU	800				
	NTU	10.0				

Notes: DO - Dissolved Oxygen; us/cm - microsiemens/centimeter; ORP - oxidation-reduction potential; mV - millivolts; NTU - Nphelometric Turbidity Units; NC - Not calibrated

APPENDIX A

Field Data Forms, January-February 2023

Low-Flow Test Report:

Test Date / Time: 2/1/2023 10:44:43 AM
Project: Plant McDoungh January 2023 (2)
Operator Name: Tiffany Messier

Location Name: MCD-DGWA-53 **Well Diameter: 2 in** **Casing Type: pvc** **Screen Length: 10 ft** **Top of Screen: 28.24 ft** **Total Depth: 38.4 ft** **Initial Depth to Water: 11 ft**	**Pump Type: Bladder** **Tubing Type: LDPE** **Pump Intake From TOC: 36.4 ft** **Estimated Total Volume Pumped: 11107.5 ml** **Flow Cell Volume: 90 ml** **Final Flow Rate: 90 ml/min** **Final Draw Down: 8.79 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 851413**

Test Notes:

Weather Conditions:
Cloudy 49

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 0.5	+/- 3 %	+/- 0.3	+/- 10	+/- 10	+/- 5	
2/1/2023 10:44 AM	00:00	6.75 pH	15.38 °C	217.66 µS/cm	9.57 mg/L	800.00 NTU	-24.4 mV	11.60 ft	90.00 ml/min
2/1/2023 10:49 AM	05:00	6.52 pH	16.69 °C	194.59 µS/cm	9.81 mg/L	800.00 NTU	-30.2 mV	14.80 ft	90.00 ml/min
2/1/2023 10:54 AM	10:00	6.57 pH	16.74 °C	185.89 µS/cm	9.94 mg/L	800.00 NTU	-19.0 mV	16.05 ft	90.00 ml/min
2/1/2023 10:59 AM	15:00	6.61 pH	16.78 °C	179.89 µS/cm	9.89 mg/L	789.00 NTU	-4.2 mV	18.15 ft	90.00 ml/min
2/1/2023 11:04 AM	20:00	6.66 pH	16.47 °C	174.56 µS/cm	9.59 mg/L	83.10 NTU	7.2 mV	17.40 ft	90.00 ml/min
2/1/2023 11:09 AM	25:00	6.67 pH	16.16 °C	175.02 µS/cm	9.28 mg/L	68.30 NTU	8.5 mV	18.43 ft	90.00 ml/min
2/1/2023 11:14 AM	30:00	6.66 pH	16.20 °C	175.08 µS/cm	8.83 mg/L	60.80 NTU	8.5 mV	18.70 ft	90.00 ml/min
2/1/2023 11:19 AM	35:00	6.65 pH	16.17 °C	175.92 µS/cm	8.37 mg/L	56.00 NTU	6.8 mV	18.91 ft	90.00 ml/min
2/1/2023 11:24 AM	40:00	6.63 pH	16.16 °C	177.87 µS/cm	7.79 mg/L	51.70 NTU	3.3 mV	19.10 ft	90.00 ml/min
2/1/2023 11:29 AM	45:00	6.61 pH	16.28 °C	181.44 µS/cm	7.19 mg/L	46.20 NTU	1.7 mV	19.35 ft	90.00 ml/min
2/1/2023 11:34 AM	50:00	6.59 pH	16.42 °C	184.28 µS/cm	6.51 mg/L	42.49 NTU	-2.0 mV	19.55 ft	90.00 ml/min
2/1/2023 11:39 AM	55:00	6.57 pH	16.31 °C	189.30 µS/cm	5.95 mg/L	40.90 NTU	-2.1 mV	19.60 ft	90.00 ml/min
2/1/2023 11:44 AM	01:00:00	6.54 pH	16.38 °C	194.91 µS/cm	5.11 mg/L	38.20 NTU	-8.0 mV	19.70 ft	90.00 ml/min

2/1/2023 11:49 AM	01:05:00	6.52 pH	16.38 °C	197.69 µS/cm	4.68 mg/L	30.40 NTU	-7.3 mV	19.88 ft	90.00 ml/min
2/1/2023 11:54 AM	01:10:00	6.50 pH	16.41 °C	202.93 µS/cm	4.27 mg/L	20.00 NTU	-2.5 mV	20.60 ft	90.00 ml/min
2/1/2023 11:59 AM	01:15:00	6.49 pH	16.47 °C	204.76 µS/cm	3.86 mg/L	25.80 NTU	-8.4 mV	20.02 ft	90.00 ml/min
2/1/2023 12:04 PM	01:20:00	6.47 pH	16.65 °C	206.39 µS/cm	3.45 mg/L	25.00 NTU	-9.7 mV	20.03 ft	90.00 ml/min
2/1/2023 12:09 PM	01:25:00	6.45 pH	16.56 °C	210.91 µS/cm	2.98 mg/L	21.40 NTU	-5.1 mV	20.03 ft	90.00 ml/min
2/1/2023 12:14 PM	01:30:00	6.46 pH	16.46 °C	208.94 µS/cm	2.69 mg/L	21.00 NTU	-12.3 mV	20.03 ft	90.00 ml/min
2/1/2023 12:19 PM	01:35:00	6.47 pH	16.43 °C	209.35 µS/cm	2.49 mg/L	22.60 NTU	-12.4 mV	20.30 ft	90.00 ml/min
2/1/2023 12:24 PM	01:40:00	6.45 pH	16.39 °C	215.18 µS/cm	2.03 mg/L	18.00 NTU	-14.4 mV	20.33 ft	90.00 ml/min
2/1/2023 12:29 PM	01:45:00	6.43 pH	16.45 °C	217.95 µS/cm	1.76 mg/L	12.50 NTU	-8.8 mV	20.33 ft	90.00 ml/min
2/1/2023 12:34 PM	01:50:00	6.43 pH	16.49 °C	218.73 µS/cm	1.57 mg/L	13.30 NTU	-14.8 mV	20.39 ft	90.00 ml/min
2/1/2023 12:39 PM	01:55:00	6.42 pH	16.64 °C	219.58 µS/cm	1.40 mg/L	10.40 NTU	-14.0 mV	20.39 ft	90.00 ml/min
2/1/2023 12:44 PM	02:00:00	6.42 pH	16.69 °C	221.14 µS/cm	1.27 mg/L	9.44 NTU	-10.3 mV	20.39 ft	90.00 ml/min
2/1/2023 12:48 PM	02:03:25	6.42 pH	16.73 °C	222.75 µS/cm	1.17 mg/L	9.45 NTU	-11.6 mV	20.39 ft	90.00 ml/min

Samples

Sample ID:	Description:
MCD-DGWA-53	TDS, Radium, Metals, Inorganics, Alkalinity

Low-Flow Test Report:

Test Date / Time: 1/31/2023 3:24:46 PM
Project: Plant McDoungh January 2023
Operator Name: Tiffany Messier

Location Name: MCD-DGWA-70A **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 52.41ft** **Total Depth: 62.41 ft** **Initial Depth to Water: 43.05 ft**	**Pump Type: Bladder** **Tubing Type: LDPE** **Pump Intake from TOC: 57.41 ft** **Estimated Total Volume Pumped: 7500 ml** **Flow Cell Volume: 90 ml** **Final Flow Rate: 150 ml/min** **Final Draw Down: 0.14 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 851413**

Test Notes:

Weather Conditions:
Light rain 65

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 0.5	+/- 3 %	+/- 0.3	+/- 10	+/- 10	+/- 5	
1/31/2023 3:24 PM	00:00	5.59 pH	17.18 °C	61.54 µS/cm	4.59 mg/L	16.70 NTU	141.3 mV	43.05 ft	150.00 ml/min
1/31/2023 3:29 PM	05:00	5.60 pH	17.19 °C	61.92 µS/cm	4.59 mg/L	9.99 NTU	119.2 mV	43.10 ft	150.00 ml/min
1/31/2023 3:34 PM	10:00	5.60 pH	17.19 °C	61.70 µS/cm	4.60 mg/L	6.35 NTU	119.5 mV	43.19 ft	150.00 ml/min
1/31/2023 3:39 PM	15:00	5.60 pH	17.23 °C	61.68 µS/cm	4.60 mg/L	6.26 NTU	108.8 mV	43.19 ft	150.00 ml/min
1/31/2023 3:44 PM	20:00	5.61 pH	17.25 °C	61.50 µS/cm	4.60 mg/L	6.11 NTU	105.3 mV	43.19 ft	150.00 ml/min
1/31/2023 3:49 PM	25:00	5.59 pH	17.23 °C	61.51 µS/cm	4.61 mg/L	2.49 NTU	105.0 mV	43.19 ft	150.00 ml/min
1/31/2023 3:54 PM	30:00	5.61 pH	17.23 °C	61.42 µS/cm	4.61 mg/L	1.60 NTU	101.5 mV	43.19 ft	150.00 ml/min
1/31/2023 3:59 PM	35:00	5.61 pH	17.19 °C	61.46 µS/cm	4.61 mg/L	0.72 NTU	100.3 mV	43.19 ft	150.00 ml/min
1/31/2023 4:04 PM	40:00	5.61 pH	17.18 °C	61.44 µS/cm	4.62 mg/L	0.35 NTU	97.6 mV	43.19 ft	150.00 ml/min
1/31/2023 4:09 PM	45:00	5.61 pH	17.17 °C	61.42 µS/cm	4.63 mg/L	0.06 NTU	98.4 mV	43.19 ft	150.00 ml/min
1/31/2023 4:14 PM	50:00	5.61 pH	17.14 °C	61.22 µS/cm	4.63 mg/L	0.01 NTU	132.1 mV	43.19 ft	150.00 ml/min

Samples

Sample ID:	Description:

MCD-DGWA-70A	TDS, Radium, Metals, Inorganics, Alkalinity

Created using VuSitu from In-Situ, Inc.

Low-Flow Test Report:

Test Date / Time: 1/31/2023 4:10:11 PM
Project: Plant McDonough January 2023 SAE
Operator Name: Taylor Johnson

Location Name: MCD-DGWA-71 **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 37.71 ft** **Total Depth: 47.71 ft** **Initial Depth to Water: 25.55 ft**	**Pump Type: QED Dedicated** **Tubing Type: HDPE** **Pump Intake From TOC: 42.71 ft** **Estimated Total Volume Pumped: 1668.333 ml** **Flow Cell Volume: 90 ml** **Final Flow Rate: 130 ml/min** **Final Draw Down: 3.51 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 884187**

Test Notes:
1.5 l prepurged

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 1000	+/- 5 %	+/- 10 %	+/- 5	+/- 1000 %	+/- 0.3	
1/31/2023 4:10 PM	00:00	5.81 pH	17.89 °C	65.68 µS/cm	1.18 mg/L	2.38 NTU	38.5 mV	25.55 ft	130.00 ml/min
1/31/2023 4:14 PM	04:00	5.79 pH	17.77 °C	65.34 µS/cm	1.16 mg/L	1.24 NTU	30.3 mV	29.03 ft	130.00 ml/min
1/31/2023 4:15 PM	04:50	5.79 pH	17.77 °C	65.34 µS/cm	1.18 mg/L	1.24 NTU	29.4 mV	29.03 ft	130.00 ml/min
1/31/2023 4:19 PM	08:50	5.79 pH	17.74 °C	65.28 µS/cm	1.17 mg/L	1.53 NTU	24.7 mV	29.04 ft	130.00 ml/min
1/31/2023 4:23 PM	12:50	5.78 pH	17.72 °C	65.24 µS/cm	1.02 mg/L	1.24 NTU	21.4 mV	29.06 ft	130.00 ml/min

Samples

Sample ID:	Description:
MCD-DGWA-71	TDS,radium, metals, Inorganics, alkalinity

Low-Flow Test Report:

Test Date / Time: 2/2/2023 10:08:54 AM
Project: Plant McDonough Jan 23 SAE (6)
Operator Name: Daniel Howard

Location Name: MCD-DGWC-37 **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 33.08 ft** **Total Depth: 43.08 ft** **Initial Depth to Water: 13.19 ft**	**Pump Type: Dedicated Bladder** **Tubing Type: HDPE** **Pump Intake From TOC: 38 ft** **Estimated Total Volume Pumped: 10000 ml** **Flow Cell Volume: 90 ml** **Final Flow Rate: 200 ml/min** **Final Draw Down: 0.24 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 883536**

Test Notes:
Low flow. Sample time 1059.

Weather Conditions:
Overcast, chance of rain, temp 45F

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	
2/2/2023 10:08 AM	00:00	6.22 pH	16.74 °C	503.06 µS/cm	0.58 mg/L	3.88 NTU	135.6 mV	13.19 ft	200.00 ml/min
2/2/2023 10:13 AM	05:00	6.22 pH	16.85 °C	499.85 µS/cm	0.39 mg/L	4.15 NTU	144.7 mV	13.43 ft	200.00 ml/min
2/2/2023 10:18 AM	10:00	6.22 pH	16.82 °C	490.76 µS/cm	0.40 mg/L	3.78 NTU	141.3 mV	13.43 ft	200.00 ml/min
2/2/2023 10:23 AM	15:00	6.22 pH	16.90 °C	486.50 µS/cm	0.43 mg/L	2.67 NTU	119.1 mV	13.43 ft	200.00 ml/min
2/2/2023 10:28 AM	20:00	6.22 pH	16.95 °C	481.95 µS/cm	0.42 mg/L	2.92 NTU	138.3 mV	13.43 ft	200.00 ml/min
2/2/2023 10:33 AM	25:00	6.22 pH	16.96 °C	482.91 µS/cm	0.43 mg/L	2.19 NTU	117.0 mV	13.43 ft	200.00 ml/min
2/2/2023 10:38 AM	30:00	6.22 pH	16.97 °C	483.13 µS/cm	0.43 mg/L	2.03 NTU	114.7 mV	13.43 ft	200.00 ml/min
2/2/2023 10:43 AM	35:00	6.23 pH	17.01 °C	481.45 µS/cm	0.44 mg/L	1.93 NTU	113.6 mV	13.43 ft	200.00 ml/min
2/2/2023 10:48 AM	40:00	6.23 pH	16.89 °C	475.87 µS/cm	0.47 mg/L	1.58 NTU	133.5 mV	13.43 ft	200.00 ml/min
2/2/2023 10:53 AM	45:00	6.23 pH	16.99 °C	479.64 µS/cm	0.44 mg/L	1.35 NTU	112.4 mV	13.43 ft	200.00 ml/min
2/2/2023 10:58 AM	50:00	6.23 pH	16.91 °C	474.75 µS/cm	0.46 mg/L	1.01 NTU	131.9 mV	13.43 ft	200.00 ml/min

Samples

Sample ID: MCD-DGWC-37	**Description:**TDS, Radium, Metals, Inorganics, Alkalinity

Created using VuSitu from In-Situ, Inc.

Low-Flow Test Report:

Test Date / Time: 2/2/2023 12:25:11 PM
Project: Plant McDonough Jan 23 SAE (7)
Operator Name: Daniel Howard

Location Name: MCD-DGWC-38 **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 18.08 ft** **Total Depth: 28.08 ft** **Initial Depth to Water: 6.09 ft**	**Pump Type: Dedicated Bladder** **Tubing Type: HDPE** **Pump Intake From TOC: 23 ft** **Estimated Total Volume Pumped: 9000 ml** **Flow Cell Volume: 90 ml** **Final Flow Rate: 200 ml/min** **Final Draw Down: 0.29 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 883536**

Test Notes:
Low flow. Sample time 1310.

Weather Conditions:
Overcast, slight rain, temp 48F

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	
2/2/2023 12:25 PM	00:00	5.98 pH	15.52 °C	603.23 µS/cm	0.54 mg/L	2.49 NTU	99.1 mV	6.09 ft	200.00 ml/min
2/2/2023 12:30 PM	05:00	5.99 pH	16.20 °C	677.33 µS/cm	0.22 mg/L	3.25 NTU	139.4 mV	6.38 ft	200.00 ml/min
2/2/2023 12:35 PM	10:00	6.01 pH	16.38 °C	681.08 µS/cm	0.16 mg/L	4.01 NTU	115.5 mV	6.38 ft	200.00 ml/min
2/2/2023 12:40 PM	15:00	6.01 pH	16.60 °C	682.29 µS/cm	0.13 mg/L	3.81 NTU	109.3 mV	6.38 ft	200.00 ml/min
2/2/2023 12:45 PM	20:00	6.01 pH	16.58 °C	679.53 µS/cm	0.10 mg/L	3.16 NTU	123.2 mV	6.38 ft	200.00 ml/min
2/2/2023 12:50 PM	25:00	6.01 pH	16.51 °C	676.74 µS/cm	0.09 mg/L	2.41 NTU	98.6 mV	6.38 ft	200.00 ml/min
2/2/2023 12:55 PM	30:00	6.02 pH	16.60 °C	681.51 µS/cm	0.08 mg/L	2.07 NTU	89.5 mV	6.38 ft	200.00 ml/min
2/2/2023 1:00 PM	35:00	6.02 pH	16.69 °C	682.74 µS/cm	0.08 mg/L	1.81 NTU	87.1 mV	6.38 ft	200.00 ml/min
2/2/2023 1:05 PM	40:00	6.03 pH	16.72 °C	683.47 µS/cm	0.07 mg/L	1.64 NTU	84.3 mV	6.38 ft	200.00 ml/min
2/2/2023 1:10 PM	45:00	6.03 pH	16.65 °C	681.88 µS/cm	0.07 mg/L	1.46 NTU	93.2 mV	6.38 ft	200.00 ml/min

Samples

Sample ID:MCD-DGWC-38	**Description:**TDS, Radium, Metals, Inorganics, Alkalinity

Created using VuSitu from In-Situ, Inc.

Low-Flow Test Report:

Test Date / Time: 2/3/2023 10:20:11 AM
Project: Plant McDonough Jan 23 SAE (8)
Operator Name: Daniel Howard

Location Name: MCD-DGWC-39 **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 14.65 ft** **Total Depth: 24.65 ft** **Initial Depth to Water: 6.39 ft**	**Pump Type: Dedicated Bladder** **Tubing Type: HDPE** **Pump Intake From TOC: 19 ft** **Estimated Total Volume Pumped: 6000 ml** **Flow Cell Volume: 90 ml** **Final Flow Rate: 200 ml/min** **Final Draw Down: 0.94 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 883536**

Test Notes:
Low flow. Sample time 1051.

Weather Conditions:
Cold, partly sunny, temp 40F

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	
2/3/2023 10:20 AM	00:00	6.43 pH	15.84 °C	668.70 µS/cm	1.22 mg/L	19.10 NTU	1.4 mV	6.39 ft	200.00 ml/min
2/3/2023 10:25 AM	05:00	6.44 pH	15.52 °C	682.47 µS/cm	0.27 mg/L	33.50 NTU	-22.8 mV	6.75 ft	200.00 ml/min
2/3/2023 10:30 AM	10:00	6.46 pH	15.03 °C	686.44 µS/cm	0.19 mg/L	19.30 NTU	-32.1 mV	7.30 ft	200.00 ml/min
2/3/2023 10:35 AM	15:00	6.47 pH	15.16 °C	686.34 µS/cm	0.24 mg/L	8.27 NTU	-37.2 mV	7.33 ft	200.00 ml/min
2/3/2023 10:40 AM	20:00	6.48 pH	15.62 °C	684.65 µS/cm	0.07 mg/L	4.82 NTU	-44.3 mV	7.33 ft	200.00 ml/min
2/3/2023 10:45 AM	25:00	6.48 pH	15.69 °C	685.11 µS/cm	0.05 mg/L	2.71 NTU	-32.0 mV	7.33 ft	200.00 ml/min
2/3/2023 10:50 AM	30:00	6.49 pH	15.79 °C	681.90 µS/cm	0.03 mg/L	2.55 NTU	-48.0 mV	7.33 ft	200.00 ml/min

Samples

Sample ID: MCD-DGWC-39	**Description:** TDS, Radium, Metals, Inorganics, Alkalinity
FB-3	TDS, Radium, Metals, Inorganics, Alkalinity

Low-Flow Test Report:

Test Date / Time: 2/1/2023 11:42:37 AM
Project: Plant McDonough January 2023 SAE (3)
Operator Name: Taylor Johnson

Location Name: MCD-DGWC-40 **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 37.4 ft** **Total Depth: 38.4 ft** **Initial Depth to Water: 16.93 ft**	**Pump Type: QED Dedicated** **Tubing Type: HDPE** **Pump Intake From TOC: 33.40 ft** **Estimated Total Volume Pumped: 8545.333 ml** **Flow Cell Volume: 90 ml** **Final Flow Rate: 170 ml/min** **Final Draw Down: 0.09 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 883553**

Test Notes:
Pre purged 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 %	+/- 5	+/- 1000 %	+/- 0.3	
2/1/2023 11:42 AM	00:00	4.66 pH	18.38 °C	432.63 µS/cm	2.94 mg/L	7.58 NTU	263.6 mV	16.93 ft	170.00 ml/min
2/1/2023 11:46 AM	03:28	4.66 pH	18.43 °C	432.25 µS/cm	2.94 mg/L	9.01 NTU	198.5 mV	16.96 ft	170.00 ml/min
2/1/2023 11:48 AM	06:05	4.66 pH	18.54 °C	431.48 µS/cm	2.98 mg/L	5.92 NTU	174.2 mV	16.99 ft	170.00 ml/min
2/1/2023 11:51 AM	08:41	4.65 pH	18.47 °C	436.86 µS/cm	2.94 mg/L	7.20 NTU	170.2 mV	17.00 ft	170.00 ml/min
2/1/2023 11:55 AM	12:41	4.66 pH	18.44 °C	431.98 µS/cm	2.93 mg/L	5.78 NTU	157.7 mV	17.02 ft	170.00 ml/min
2/1/2023 11:59 AM	16:41	4.66 pH	18.51 °C	431.80 µS/cm	2.95 mg/L	5.75 NTU	154.6 mV	17.00 ft	170.00 ml/min
2/1/2023 12:03 PM	20:41	4.66 pH	18.65 °C	431.14 µS/cm	2.93 mg/L	4.86 NTU	154.0 mV	17.00 ft	170.00 ml/min
2/1/2023 12:08 PM	25:39	4.66 pH	18.48 °C	431.79 µS/cm	2.93 mg/L	4.09 NTU	193.9 mV	17.01 ft	170.00 ml/min
2/1/2023 12:12 PM	29:39	4.66 pH	18.43 °C	431.84 µS/cm	2.95 mg/L	2.38 NTU	158.3 mV	17.01 ft	170.00 ml/min
2/1/2023 12:14 PM	32:06	4.65 pH	18.47 °C	431.83 µS/cm	2.94 mg/L	2.06 NTU	158.0 mV	17.01 ft	170.00 ml/min
2/1/2023 12:18 PM	36:06	4.66 pH	18.36 °C	432.08 µS/cm	2.93 mg/L	2.04 NTU	152.4 mV	16.98 ft	170.00 ml/min
2/1/2023 12:22 PM	40:06	4.65 pH	18.34 °C	432.08 µS/cm	2.94 mg/L	1.54 NTU	152.3 mV	16.99 ft	170.00 ml/min
2/1/2023 12:24 PM	42:16	4.66 pH	18.33 °C	431.58 µS/cm	2.93 mg/L	1.52 NTU	144.8 mV	17.02 ft	170.00 ml/min
2/1/2023 12:28 PM	46:16	4.66 pH	18.48 °C	431.91 µS/cm	2.98 mg/L	1.17 NTU	147.4 mV	17.02 ft	170.00 ml/min
2/1/2023 12:32 PM	50:16	4.66 pH	18.38 °C	431.51 µS/cm	2.95 mg/L	0.93 NTU	147.1 mV	17.02 ft	170.00 ml/min

Samples

Sample ID:	Description:
MCD-DGWC-40	TDS, Radium, metals,Inorganics, alkalinity

Created using VuSitu from In-Situ, Inc.

Low-Flow Test Report:

Test Date / Time: 2/2/2023 11:10:59 AM
Project: Jan. SAE 2023 McDonough (3)
Operator Name: M. Mann

Location Name: MCD-DGWC-67 **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 45.5 ft** **Total Depth: 55.5 ft** **Initial Depth to Water: 9.54 ft**	**Pump Type: Peristaltic** **Tubing Type: Tru-Poly** **Pump Intake From TOC: 50 ft** **Estimated Total Volume Pumped: 4000 ml** **Flow Cell Volume: 90 ml** **Final Flow Rate: 200 ml/min** **Final Draw Down: 0.59 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 884187**

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 %	+/- 10 %	+/- 5	+/- 10	+/- 0.3	
2/2/2023 11:10 AM	00:00	7.43 pH	11.16 °C	434.88 µS/cm	8.12 mg/L	7.32 NTU	65.8 mV	9.54 ft	200.00 ml/min
2/2/2023 11:15 AM	05:00	6.48 pH	15.07 °C	412.97 µS/cm	3.56 mg/L	4.50 NTU	65.1 mV	10.05 ft	200.00 ml/min
2/2/2023 11:20 AM	10:00	6.34 pH	15.72 °C	409.26 µS/cm	1.78 mg/L	1.60 NTU	65.0 mV	10.10 ft	200.00 ml/min
2/2/2023 11:25 AM	15:00	6.29 pH	15.86 °C	409.95 µS/cm	0.73 mg/L	0.24 NTU	65.2 mV	10.13 ft	200.00 ml/min
2/2/2023 11:30 AM	20:00	6.27 pH	15.98 °C	409.90 µS/cm	0.35 mg/L		65.5 mV	10.13 ft	200.00 ml/min

Samples

Sample ID:	Description:
DGWC-67	TDS, Radium, Metals, Inorganics, Alkalinity
FD-1	TDS, Radium, Metals, Inorganics, Alkalinity

Created using VuSitu from In-Situ, Inc.

Low-Flow Test Report:

Test Date / Time: 2/1/2023 2:29:26 PM
Project: Jan. SAE 2023 McDonough (2)
Operator Name: Mark Mann

Location Name: MCD-DGWC-68A **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 19.79 ft** **Total Depth: 29.79 ft** **Initial Depth to Water: 9.64 ft**	**Pump Type: Peristaltic** **Tubing Type: Try-Poly** **Pump Intake From TOC: 25 ft** **Estimated Total Volume Pumped: 8425 ml** **Flow Cell Volume: 90 ml** **Final Flow Rate: 130 ml/min** **Final Draw Down: 0.33 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 884187**

Test Notes:

Weather Conditions:
Sunny

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	
2/1/2023 2:29 PM	00:00	6.90 pH	21.85 °C	422.46 µS/cm	3.43 mg/L	64.50 NTU	38.5 mV	9.64 ft	225.00 ml/min
2/1/2023 2:34 PM	05:00	6.63 pH	17.69 °C	455.33 µS/cm	0.13 mg/L	75.00 NTU	38.3 mV	10.00 ft	150.00 ml/min
2/1/2023 2:39 PM	10:00	6.61 pH	17.42 °C	459.34 µS/cm	0.11 mg/L	15.70 NTU	39.1 mV	9.97 ft	150.00 ml/min
2/1/2023 2:44 PM	15:00	6.61 pH	17.41 °C	460.18 µS/cm	0.08 mg/L	8.54 NTU	39.8 mV	9.97 ft	150.00 ml/min
2/1/2023 2:49 PM	20:00	6.60 pH	17.35 °C	459.78 µS/cm	0.07 mg/L	5.54 NTU	40.4 mV	9.97 ft	150.00 ml/min
2/1/2023 2:54 PM	25:00	6.60 pH	17.40 °C	460.32 µS/cm	0.06 mg/L	2.95 NTU	40.8 mV	10.01 ft	150.00 ml/min
2/1/2023 2:59 PM	30:00	6.60 pH	17.37 °C	461.42 µS/cm	0.05 mg/L	3.01 NTU	41.2 mV	10.00 ft	150.00 ml/min
2/1/2023 3:04 PM	35:00	6.60 pH	17.42 °C	460.35 µS/cm	0.05 mg/L	2.66 NTU	41.9 mV	10.00 ft	150.00 ml/min
2/1/2023 3:09 PM	40:00	6.60 pH	17.30 °C	460.61 µS/cm	0.05 mg/L	2.53 NTU	42.1 mV	10.00 ft	150.00 ml/min
2/1/2023 3:14 PM	45:00	6.60 pH	17.28 °C	460.55 µS/cm	0.05 mg/L	4.90 NTU	42.3 mV	9.98 ft	130.00 ml/min
2/1/2023 3:19 PM	50:00	6.60 pH	17.25 °C	460.32 µS/cm	0.05 mg/L	2.15 NTU	42.6 mV	9.96 ft	130.00 ml/min
2/1/2023 3:24 PM	55:00	6.60 pH	17.22 °C	460.62 µS/cm	0.05 mg/L	1.86 NTU	42.9 mV	9.97 ft	130.00 ml/min

Samples

Sample ID:	Description:
MCD-DGWC-68A	TDS, Radium, Metals, Alkalinity, Inorganics

Created using VuSitu from In-Situ, Inc.

Low-Flow Test Report:

Test Date / Time: 2/1/2023 10:21:01 AM
Project: Jan. SAE 2023 McDonough
Operator Name: M. Mann

Location Name: MCD-DGWC-69 **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 14 ft** **Total Depth: 24.06 ft** **Initial Depth to Water: 5.42 ft**	**Pump Type: Peristaltic** **Tubing Type: Tru-Poly** **Pump Intake From TOC: 20 ft** **Estimated Total Volume Pumped: 15625 ml** **Flow Cell Volume: 90 ml** **Final Flow Rate: 150 ml/min** **Final Draw Down: 1.41 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 884187**

Test Notes:

Weather Conditions:
Foggy

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	
2/1/2023 10:21 AM	00:00	6.23 pH	14.73 °C	122.97 µS/cm	2.91 mg/L	208.00 NTU	73.2 mV	5.42 ft	250.00 ml/min
2/1/2023 10:26 AM	05:00	6.13 pH	16.52 °C	118.54 µS/cm	2.42 mg/L	112.00 NTU	61.9 mV	6.78 ft	200.00 ml/min
2/1/2023 10:31 AM	10:00	6.12 pH	16.66 °C	118.13 µS/cm	2.26 mg/L	69.90 NTU	58.6 mV	6.85 ft	200.00 ml/min
2/1/2023 10:36 AM	15:00	6.12 pH	16.80 °C	117.92 µS/cm	2.17 mg/L	72.10 NTU	56.2 mV	6.91 ft	200.00 ml/min
2/1/2023 10:41 AM	20:00	6.11 pH	16.75 °C	116.97 µS/cm	2.13 mg/L	53.50 NTU	54.9 mV	6.88 ft	175.00 ml/min
2/1/2023 10:46 AM	25:00	6.11 pH	16.87 °C	117.03 µS/cm	2.09 mg/L	52.60 NTU	53.4 mV	6.90 ft	175.00 ml/min
2/1/2023 10:51 AM	30:00	6.11 pH	16.94 °C	116.37 µS/cm	2.06 mg/L	46.60 NTU	52.4 mV	6.91 ft	175.00 ml/min
2/1/2023 10:56 AM	35:00	6.11 pH	16.92 °C	116.30 µS/cm	2.02 mg/L	34.50 NTU	51.5 mV	6.91 ft	175.00 ml/min
2/1/2023 11:01 AM	40:00	6.11 pH	17.06 °C	116.54 µS/cm	2.01 mg/L	24.30 NTU	50.4 mV	6.90 ft	175.00 ml/min
2/1/2023 11:06 AM	45:00	6.11 pH	17.10 °C	116.08 µS/cm	1.98 mg/L	21.60 NTU	49.7 mV	6.90 ft	175.00 ml/min
2/1/2023 11:11 AM	50:00	6.11 pH	17.19 °C	116.12 µS/cm	1.98 mg/L	19.10 NTU	48.9 mV	6.94 ft	175.00 ml/min
2/1/2023 11:16 AM	55:00	6.11 pH	17.02 °C	116.11 µS/cm	1.96 mg/L	18.00 NTU	48.5 mV	6.91 ft	150.00 ml/min
2/1/2023 11:21 AM	01:00:00	6.11 pH	16.97 °C	116.51 µS/cm	1.97 mg/L	15.00 NTU	48.0 mV	6.89 ft	150.00 ml/min

2/1/2023 11:26 AM	01:05:00	6.11 pH	17.07 °C	116.22 µS/cm	1.94 mg/L	12.60 NTU	47.4 mV	6.84 ft	150.00 ml/min
2/1/2023 11:31 AM	01:10:00	6.11 pH	17.07 °C	116.02 µS/cm	1.92 mg/L	9.17 NTU	47.5 mV	6.83 ft	150.00 ml/min
2/1/2023 11:36 AM	01:15:00	6.11 pH	17.01 °C	116.72 µS/cm	1.94 mg/L	6.29 NTU	46.9 mV	6.83 ft	150.00 ml/min
2/1/2023 11:41 AM	01:20:00	6.11 pH	17.05 °C	116.11 µS/cm	1.91 mg/L	6.13 NTU	46.6 mV	6.83 ft	150.00 ml/min
2/1/2023 11:46 AM	01:25:00	6.11 pH	17.03 °C	116.44 µS/cm	1.93 mg/L	5.18 NTU	46.1 mV	6.82 ft	150.00 ml/min
2/1/2023 11:51 AM	01:30:00	6.12 pH	17.15 °C	116.10 µS/cm	1.92 mg/L	4.42 NTU	45.7 mV	6.83 ft	150.00 ml/min

Samples

Sample ID:	Description:
MCD-DGWC-69	TDS, Radium, Metals, Inorganics, Alkalinity

Created using VuSitu from In-Situ, Inc.

Low-Flow Test Report:

Test Date / Time: 2/2/2023 12:30:58 PM
Project: Jan. SAE 2023 McDonough (4)
Operator Name: M. Mann

Location Name: MCD-DGWC-121 **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 39.4 ft** **Total Depth: 49.4 ft** **Initial Depth to Water: 8.13 ft**	**Pump Type: Peristaltic** **Tubing Type: Tru-Poly** **Pump Intake From TOC: 44 ft** **Estimated Total Volume Pumped: 8200 ml** **Flow Cell Volume: 90 ml** **Final Flow Rate: 130 ml/min** **Final Draw Down: 5.31 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 884187**

Test Notes:

Weather Conditions:
Rainy

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	
2/2/2023 12:30 PM	00:00	6.83 pH	11.66 °C	204.74 µS/cm	5.62 mg/L	9.37 NTU	106.2 mV	8.13 ft	250.00 ml/min
2/2/2023 12:35 PM	05:00	6.51 pH	15.71 °C	233.50 µS/cm	0.95 mg/L	8.17 NTU	101.8 mV	10.21 ft	175.00 ml/min
2/2/2023 12:40 PM	10:00	6.52 pH	15.61 °C	240.13 µS/cm	0.51 mg/L	6.14 NTU	99.6 mV	11.15 ft	175.00 ml/min
2/2/2023 12:45 PM	15:00	6.46 pH	15.67 °C	262.04 µS/cm	0.52 mg/L	9.17 NTU	93.1 mV	11.94 ft	175.00 ml/min
2/2/2023 12:50 PM	20:00	6.32 pH	15.80 °C	316.32 µS/cm	0.60 mg/L	19.20 NTU	75.5 mV	12.44 ft	175.00 ml/min
2/2/2023 12:55 PM	25:00	6.33 pH	15.67 °C	324.22 µS/cm	0.63 mg/L	11.70 NTU	73.7 mV	12.89 ft	150.00 ml/min
2/2/2023 1:00 PM	30:00	6.32 pH	15.62 °C	350.43 µS/cm	0.64 mg/L	13.80 NTU	65.8 mV	13.19 ft	150.00 ml/min
2/2/2023 1:05 PM	35:00	6.34 pH	15.49 °C	336.50 µS/cm	0.59 mg/L	8.30 NTU	68.3 mV	13.38 ft	130.00 ml/min
2/2/2023 1:10 PM	40:00	6.34 pH	15.26 °C	351.15 µS/cm	0.58 mg/L	6.70 NTU	62.4 mV	13.43 ft	130.00 ml/min
2/2/2023 1:15 PM	45:00	6.35 pH	15.40 °C	350.70 µS/cm	0.59 mg/L	7.53 NTU	61.4 mV	13.49 ft	130.00 ml/min
2/2/2023 1:20 PM	50:00	6.35 pH	15.26 °C	357.77 µS/cm	0.58 mg/L	2.58 NTU	58.7 mV	13.44 ft	130.00 ml/min

Samples

Sample ID:	Description:
MCD-DGWC-121	TDS, Radium, Metals, Inorgantics, Alkalinity

Created using VuSitu from In-Situ, Inc.

Low-Flow Test Report:

Test Date / Time: 5/2/2023 2:58:14 PM
Project: Plant McDonough
Operator Name: M. Mann

Location Name: MCD-DGWC-121 **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 39.4 ft** **Total Depth: 49.4 ft** **Initial Depth to Water: 8.62 ft**	**Pump Type: Peristaltic** **Tubing Type: Polyethylene** **Pump Intake From TOC: 45 ft** **Estimated Total Volume Pumped: 7633.333 ml** **Flow Cell Volume: 90 ml** **Final Flow Rate: 100 ml/min** **Final Draw Down: 4.06 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 989619**

Test Notes:

Weather Conditions:
Sunny

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	
5/2/2023 2:58 PM	00:00	6.29 pH	26.73 °C	124.99 µS/cm	3.64 mg/L	34.60 NTU	104.2 mV	8.62 ft	200.00 ml/min
5/2/2023 3:01 PM	03:10	6.27 pH	20.33 °C	146.22 µS/cm	1.03 mg/L	52.60 NTU	99.8 mV	10.26 ft	200.00 ml/min
5/2/2023 3:06 PM	08:10	6.25 pH	19.18 °C	163.24 µS/cm	0.98 mg/L	41.80 NTU	92.8 mV	10.94 ft	150.00 ml/min
5/2/2023 3:11 PM	13:10	6.23 pH	18.96 °C	198.89 µS/cm	0.78 mg/L	40.00 NTU	80.1 mV	11.64 ft	150.00 ml/min
5/2/2023 3:16 PM	18:10	6.22 pH	18.95 °C	228.70 µS/cm	0.62 mg/L	30.00 NTU	62.9 mV	11.98 ft	100.00 ml/min
5/2/2023 3:21 PM	23:10	6.20 pH	19.36 °C	257.51 µS/cm	0.42 mg/L	20.00 NTU	52.9 mV	12.08 ft	100.00 ml/min
5/2/2023 3:26 PM	28:10	6.21 pH	19.04 °C	259.85 µS/cm	0.35 mg/L	13.80 NTU	48.1 mV	12.20 ft	100.00 ml/min
5/2/2023 3:31 PM	33:10	6.20 pH	18.87 °C	263.48 µS/cm	0.30 mg/L	10.70 NTU	47.0 mV	12.32 ft	100.00 ml/min
5/2/2023 3:36 PM	38:10	6.21 pH	18.79 °C	269.98 µS/cm	0.28 mg/L	12.50 NTU	43.6 mV	12.40 ft	100.00 ml/min
5/2/2023 3:41 PM	43:10	6.21 pH	18.96 °C	277.55 µS/cm	0.25 mg/L	9.99 NTU	39.8 mV	12.48 ft	100.00 ml/min
5/2/2023 3:46 PM	48:10	6.21 pH	18.71 °C	281.18 µS/cm	0.22 mg/L	8.34 NTU	36.9 mV	12.55 ft	100.00 ml/min
5/2/2023 3:51 PM	53:10	6.22 pH	18.87 °C	286.91 µS/cm	0.22 mg/L	7.26 NTU	33.2 mV	12.59 ft	100.00 ml/min
5/2/2023 3:56 PM	58:10	6.22 pH	19.13 °C	291.12 µS/cm	0.19 mg/L	5.93 NTU	29.2 mV	12.63 ft	100.00 ml/min

5/2/2023 4:01 PM	01:03:10	6.21 pH	19.76 °C	292.70 µS/cm	0.17 mg/L	4.37 NTU	24.9 mV	12.68 ft	100.00 ml/min

Samples

Sample ID:	Description:
MCD-DGWC-121	
MCD-DUP-1	
MCD-FB-1	

Created using VuSitu from In-Situ, Inc.

Low-Flow Test Report:

Test Date / Time: 2/2/2023 1:09:25 PM
Project: Plant McDonough January 2023 SAE
Operator Name: Joe Booth

Location Name: MCD-B-62 **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 29.67 ft** **Total Depth: 39.67 ft** **Initial Depth to Water: 15.57 ft**	**Pump Type: Peristaltic** **Tubing Type: Hope** **Pump Intake From TOC: 35 ft** **Estimated Total Volume Pumped: 7672.667 ml** **Flow Cell Volume: 90 ml** **Final Flow Rate: 170 ml/min** **Final Draw Down: 0.34 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 843593**

Test Notes:
Prepurge 2 liters

Weather Conditions:
Rainy

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 1000	+/- 5 %	+/- 0.2	+/- 5	+/- 1000 %	+/- 0.3	
2/2/2023 1:09 PM	00:00	6.70 pH	17.19 °C	386.84 µS/cm	0.22 mg/L	52.60 NTU	-59.5 mV	15.57 ft	170.00 ml/min
2/2/2023 1:10 PM	01:08	6.67 pH	17.15 °C	362.79 µS/cm	0.25 mg/L	52.60 NTU	-74.8 mV	15.57 ft	170.00 ml/min
2/2/2023 1:14 PM	05:08	6.54 pH	17.21 °C	301.35 µS/cm	0.37 mg/L	41.10 NTU	-73.7 mV	15.91 ft	170.00 ml/min
2/2/2023 1:18 PM	09:08	6.43 pH	17.23 °C	266.95 µS/cm	0.28 mg/L	20.80 NTU	-54.4 mV	15.91 ft	170.00 ml/min
2/2/2023 1:22 PM	13:08	6.39 pH	17.29 °C	252.64 µS/cm	0.33 mg/L	19.20 NTU	-51.4 mV	15.91 ft	170.00 ml/min
2/2/2023 1:26 PM	17:08	6.38 pH	17.30 °C	247.32 µS/cm	0.28 mg/L	13.30 NTU	-49.5 mV	15.91 ft	170.00 ml/min
2/2/2023 1:30 PM	21:08	6.36 pH	17.31 °C	240.98 µS/cm	0.22 mg/L	10.70 NTU	-49.2 mV	15.91 ft	170.00 ml/min
2/2/2023 1:34 PM	25:08	6.35 pH	17.32 °C	238.83 µS/cm	0.19 mg/L	7.56 NTU	-48.5 mV	15.91 ft	170.00 ml/min
2/2/2023 1:38 PM	29:08	6.35 pH	17.36 °C	234.63 µS/cm	0.20 mg/L	7.34 NTU	-47.5 mV	15.91 ft	170.00 ml/min
2/2/2023 1:42 PM	33:08	6.35 pH	17.36 °C	232.61 µS/cm	0.15 mg/L	6.03 NTU	-47.1 mV	15.91 ft	170.00 ml/min
2/2/2023 1:46 PM	37:08	6.33 pH	17.36 °C	231.43 µS/cm	0.15 mg/L	4.63 NTU	-46.4 mV	15.91 ft	170.00 ml/min
2/2/2023 1:50 PM	41:08	6.34 pH	17.33 °C	228.61 µS/cm	0.16 mg/L		-46.0 mV	15.91 ft	170.00 ml/min
2/2/2023 1:54 PM	45:08	6.31 pH	16.85 °C	156.68 µS/cm	9.37 mg/L		-38.5 mV	15.91 ft	170.00 ml/min

Samples

Sample ID:	Description:
MCD-B-62	Metals, TDS, Alkalinity, Inorganics, radium

Created using VuSitu from In-Situ, Inc.

Low-Flow Test Report:

Test Date / Time: 2/2/2023 10:19:46 AM
Project: Plant McDonough January 2023 SAE (5)
Operator Name: Taylor Johnson

Location Name: MCD-B-100 **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 37.93 ft** **Total Depth: 47.93 ft** **Initial Depth to Water: 34.04 ft**	**Pump Type: Bladder** **Tubing Type: HDPE** **Pump Intake From TOC: 42.93 ft** **Estimated Total Volume Pumped: 17246 ml** **Flow Cell Volume: 90 ml** **Final Flow Rate: 120 ml/min** **Final Draw Down: 0.07 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 883553**

Test Notes:
Pre purged 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 %	+/- 5	+/- 1000 %	+/- 0.3	
2/2/2023 10:19 AM	00:00	5.28 pH	18.71 °C	781.16 µS/cm	0.38 mg/L	5.00 NTU	63.8 mV	34.04 ft	120.00 ml/min
2/2/2023 10:23 AM	04:00	5.28 pH	18.70 °C	785.14 µS/cm	0.41 mg/L	10.50 NTU	58.4 mV	34.09 ft	120.00 ml/min
2/2/2023 10:27 AM	08:00	5.28 pH	18.95 °C	782.07 µS/cm	0.45 mg/L	11.00 NTU	55.9 mV	34.01 ft	120.00 ml/min
2/2/2023 10:31 AM	12:00	5.29 pH	18.52 °C	778.33 µS/cm	0.44 mg/L	11.40 NTU	53.0 mV	34.06 ft	120.00 ml/min
2/2/2023 10:35 AM	15:43	5.29 pH	17.68 °C	780.86 µS/cm	0.42 mg/L	11.20 NTU	52.3 mV	34.06 ft	120.00 ml/min
2/2/2023 10:39 AM	19:43	5.29 pH	17.58 °C	779.89 µS/cm	0.57 mg/L	10.50 NTU	50.8 mV	34.05 ft	120.00 ml/min
2/2/2023 10:43 AM	23:43	5.29 pH	17.58 °C	779.46 µS/cm	0.57 mg/L	12.80 NTU	50.1 mV	34.03 ft	120.00 ml/min
2/2/2023 10:47 AM	27:43	5.29 pH	17.49 °C	779.14 µS/cm	0.60 mg/L	11.90 NTU	49.8 mV	34.05 ft	120.00 ml/min
2/2/2023 10:51 AM	31:43	5.29 pH	17.54 °C	779.73 µS/cm	0.61 mg/L	10.40 NTU	49.7 mV	34.04 ft	120.00 ml/min
2/2/2023 10:55 AM	35:43	5.29 pH	17.45 °C	778.73 µS/cm	0.61 mg/L	11.40 NTU	49.5 mV	34.04 ft	120.00 ml/min
2/2/2023 10:59 AM	39:43	5.30 pH	17.29 °C	778.68 µS/cm	0.62 mg/L	9.55 NTU	49.2 mV	34.04 ft	120.00 ml/min
2/2/2023 11:03 AM	43:43	5.30 pH	17.18 °C	779.62 µS/cm	0.64 mg/L	9.55 NTU	48.9 mV	34.06 ft	120.00 ml/min
2/2/2023 11:07 AM	47:43	5.30 pH	17.14 °C	779.35 µS/cm	0.64 mg/L	10.55 NTU	48.5 mV	34.03 ft	120.00 ml/min
2/2/2023 11:11 AM	51:43	5.30 pH	17.14 °C	780.29 µS/cm	0.65 mg/L	10.80 NTU	48.1 mV	34.04 ft	120.00 ml/min
2/2/2023 11:15 AM	55:43	5.30 pH	17.09 °C	779.89 µS/cm	0.64 mg/L	10.20 NTU	48.0 mV	34.03 ft	120.00 ml/min

2/2/2023 11:19 AM	59:43	5.30 pH	17.09 °C	779.43 µS/cm	0.62 mg/L	9.57 NTU	47.5 mV	34.04 ft	120.00 ml/min
2/2/2023 11:23 AM	01:03:43	5.30 pH	17.06 °C	779.94 µS/cm	0.63 mg/L	8.89 NTU	47.0 mV	34.04 ft	120.00 ml/min
2/2/2023 11:27 AM	01:07:43	5.30 pH	17.00 °C	779.63 µS/cm	0.63 mg/L	8.93 NTU	46.7 mV	34.05 ft	120.00 ml/min
2/2/2023 11:31 AM	01:11:43	5.30 pH	17.02 °C	782.59 µS/cm	0.61 mg/L	8.69 NTU	46.4 mV	34.05 ft	120.00 ml/min
2/2/2023 11:35 AM	01:15:43	5.30 pH	17.11 °C	782.66 µS/cm	0.61 mg/L	8.88 NTU	46.1 mV	34.04 ft	120.00 ml/min
2/2/2023 11:39 AM	01:19:43	5.30 pH	17.18 °C	783.20 µS/cm	0.61 mg/L	8.33 NTU	45.6 mV	34.02 ft	120.00 ml/min
2/2/2023 11:43 AM	01:23:43	5.30 pH	17.23 °C	781.96 µS/cm	0.60 mg/L	8.35 NTU	45.9 mV	34.02 ft	120.00 ml/min
2/2/2023 11:47 AM	01:27:43	5.30 pH	17.33 °C	783.28 µS/cm	0.62 mg/L	8.04 NTU	45.3 mV	34.01 ft	120.00 ml/min
2/2/2023 11:51 AM	01:31:43	5.30 pH	17.31 °C	782.28 µS/cm	0.60 mg/L	7.01 NTU	45.2 mV	33.99 ft	120.00 ml/min
2/2/2023 11:55 AM	01:35:43	5.30 pH	17.18 °C	783.22 µS/cm	0.60 mg/L	6.79 NTU	44.9 mV	34.00 ft	120.00 ml/min
2/2/2023 11:59 AM	01:39:43	5.30 pH	17.22 °C	785.32 µS/cm	0.60 mg/L	6.79 NTU	44.6 mV	34.01 ft	120.00 ml/min
2/2/2023 12:03 PM	01:43:43	5.30 pH	17.19 °C	782.86 µS/cm	0.58 mg/L	6.22 NTU	44.5 mV	33.98 ft	120.00 ml/min
2/2/2023 12:07 PM	01:47:43	5.30 pH	17.09 °C	786.55 µS/cm	0.58 mg/L	6.38 NTU	44.1 mV	34.00 ft	120.00 ml/min
2/2/2023 12:11 PM	01:51:43	5.30 pH	17.16 °C	785.92 µS/cm	0.58 mg/L	5.70 NTU	43.9 mV	34.00 ft	120.00 ml/min
2/2/2023 12:15 PM	01:55:43	5.30 pH	17.12 °C	786.32 µS/cm	0.57 mg/L	5.88 NTU	43.5 mV	33.99 ft	120.00 ml/min
2/2/2023 12:19 PM	01:59:43	5.30 pH	17.18 °C	782.64 µS/cm	0.57 mg/L	5.86 NTU	43.5 mV	33.99 ft	120.00 ml/min
2/2/2023 12:23 PM	02:03:43	5.30 pH	17.09 °C	784.79 µS/cm	0.56 mg/L	5.73 NTU	43.2 mV	34.00 ft	120.00 ml/min
2/2/2023 12:27 PM	02:07:43	5.30 pH	17.05 °C	784.45 µS/cm	0.55 mg/L	5.62 NTU	43.0 mV	33.98 ft	120.00 ml/min
2/2/2023 12:31 PM	02:11:43	5.31 pH	17.91 °C	782.11 µS/cm	0.54 mg/L	5.74 NTU	42.7 mV	33.97 ft	120.00 ml/min
2/2/2023 12:35 PM	02:15:43	5.30 pH	16.74 °C	783.35 µS/cm	0.51 mg/L	5.12 NTU	42.4 mV	33.95 ft	120.00 ml/min
2/2/2023 12:39 PM	02:19:43	5.30 pH	16.73 °C	785.42 µS/cm	0.51 mg/L	5.79 NTU	42.2 mV	33.97 ft	120.00 ml/min
2/2/2023 12:43 PM	02:23:43	5.30 pH	16.78°C	787.01 µS/cm	0.50 mg/L	4.78 NTU	42.0 mV	33.97 ft	120.00 ml/min

Samples

Sample ID:	Description:
MCD-B-100	TDS, Radium, metals, inorganics, alkalinity

Low-Flow Test Report:

Test Date / Time: 2/1/2023 3:46:51 PM
Project: Plant McDonough January 2023 SAE (4)
Operator Name: Taylor Johnson

Location Name: MCD-B-105D **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 60 ft** **Total Depth: 70 ft** **Initial Depth to Water: 16.53 ft**	**Pump Type: Bladder** **Tubing Type: HDPE** **Pump Intake From TOC: 65 ft** **Estimated Total Volume Pumped: 3000 ml** **Flow Cell Volume: 90 ml** **Final Flow Rate: 140 ml/min** **Final Draw Down: 0.91 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 883553**

Test Notes:
Pre purged 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 %	+/- 5	+/- 1000 %	+/- 0.3	
2/1/2023 3:46 PM	00:00	6.52 pH	18.60 °C	572.00 µS/cm	0.54 mg/L	5.00 NTU	-46.3 mV	16.53 ft	140.00 ml/min
2/1/2023 3:50 PM	04:00	6.47 pH	18.55 °C	566.10 µS/cm	0.37 mg/L	0.64 NTU	-31.1 mV	17.41 ft	140.00 ml/min
2/1/2023 3:54 PM	08:00	6.45 pH	18.56 °C	563.37 µS/cm	0.34 mg/L	0.36 NTU	-28.8 mV	17.44 ft	140.00 ml/min
2/1/2023 3:58 PM	12:00	6.43 pH	18.54 °C	559.72 µS/cm	0.24 mg/L	0.28 NTU	-25.6 mV	17.44 ft	140.00 ml/min
2/1/2023 4:02 PM	16:00	6.41 pH	18.52 °C	557.30 µS/cm	0.20 mg/L	0.35 NTU	-25.4 mV	17.44 ft	140.00 ml/min
2/1/2023 4:06 PM	20:00	6.39 pH	18.56 °C	554.26 µS/cm	0.17 mg/L	0.22 NTU	-23.2 mV	17.44 ft	140.00 ml/min

Samples

Sample ID:	Description:
MCD-B105D	TDS, Radium, metals, inorganics, alkalinity

Created using VuSitu from In-Situ, Inc.

Low-Flow Test Report:

Test Date / Time: 2/1/2023 12:50:18 PM
Project: Jan. SAE 2023 McDonough
Operator Name: Mark Mann

Location Name: MCD-B-112D **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 45 ft** **Total Depth: 55 ft** **Initial Depth to Water: 6.91 ft**	**Pump Type: Peristaltic** **Tubing Type: Try-Poly** **Pump Intake From TOC: 50 ft** **Estimated Total Volume Pumped: 3000 ml** **Flow Cell Volume: 90 ml** **Final Flow Rate: 200 ml/min** **Final Draw Down: 0.19 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 884187**

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 %	+/- 10 %	+/- 5	+/- 10	+/- 0.3	
2/1/2023 12:50 PM	00:00	6.80 pH	17.06 °C	227.30 µS/cm	6.42 mg/L	14.00 NTU	63.4 mV	6.91 ft	200.00 ml/min
2/1/2023 12:55 PM	05:00	6.71 pH	16.95 °C	270.92 µS/cm	0.39 mg/L	6.52 NTU	38.9 mV	7.07 ft	200.00 ml/min
2/1/2023 1:00 PM	10:00	6.71 pH	17.02 °C	271.83 µS/cm	0.18 mg/L	4.50 NTU	37.1 mV	7.09 ft	200.00 ml/min
2/1/2023 1:05 PM	15:00	6.72 pH	17.02 °C	271.37 µS/cm	0.11 mg/L	3.50 NTU	36.7 mV	7.10 ft	200.00 ml/min

Samples

Sample ID:	Description:
B-112D	TDS, Radium, Metals, Inorganics, Alkalinity

Low-Flow Test Report:

Test Date / Time: 2/2/2023 9:47:11 AM
Project: Jan. SAE 2023 McDonough (2)
Operator Name: M. Mann

Location Name: MCD-B-113D **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 74.18 ft** **Total Depth: 84.18 ft** **Initial Depth to Water: 0.6 ft**	**Pump Type: Peristaltic** **Tubing Type: Tru-Poly** **Pump Intake From TOC: 79 ft** **Estimated Total Volume Pumped: 3950 ml** **Flow Cell Volume: 90 ml** **Final Flow Rate: 125 ml/min** **Final Draw Down: 5.18 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 884187**

Test Notes:

Weather Conditions:
Rainy

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	
2/2/2023 9:47 AM	00:00	6.90 pH	9.70 °C	199.05 µS/cm	9.44 mg/L	1.29 NTU	117.0 mV	0.60 ft	225.00 ml/min
2/2/2023 9:52 AM	05:00	7.58 pH	13.68 °C	312.80 µS/cm	0.33 mg/L	0.95 NTU	92.7 mV	2.83 ft	190.00 ml/min
2/2/2023 9:57 AM	10:00	7.71 pH	13.81 °C	314.18 µS/cm	0.26 mg/L	0.65 NTU	87.1 mV	3.62 ft	125.00 ml/min
2/2/2023 10:02 AM	15:00	7.74 pH	13.82 °C	314.58 µS/cm	0.21 mg/L	0.84 NTU	82.7 mV	5.69 ft	125.00 ml/min
2/2/2023 10:07 AM	20:00	7.77 pH	13.98 °C	314.23 µS/cm	0.18 mg/L	0.84 NTU	78.0 mV	5.61 ft	125.00 ml/min
2/2/2023 10:12 AM	25:00	7.78 pH	14.23 °C	314.69 µS/cm	0.16 mg/L	1.43 NTU	74.1 mV	5.78 ft	125.00 ml/min

Samples

Sample ID:	Description:
B-113D	TDS, Radium, Metals, Inorganics, Alkalinity

APPENDIX A

Instrument Calibration Records, January-February 2023

Daily Calibration Log

Project Plant McDonough
Field Staff M. MANN

Instrument Calibration

Date:		**Time:**	02/01/23 830	02/02/23 805	02/03/23 815	02/06/23 815
Parameter	**Units**	**Standard**	**AquaTROLL SN** 884187	**AquaTROLL SN** 884187	**AquaTROLL SN** 884187	**AquaTROLL SN** 851413
DO	% saturation	100	106.29	99.84	101.51	107.43
Conductivity	us/cm	4490	4072.7	4839.7	4475.6	4473.4
pH	S.U.	4.00	3.96	3.98	4.00	3.96
pH	S.U.	7.00	7.02	6.99	7.05	6.98
pH	S.U.	10.00	10.08	9.97	10.15	10.13
ORP	mV	228.00	231.7	238.0	232.4	256.4

Turbidity	**Units**	**Standard**	**Hach SN** 22090D000089	**Hach SN** 22090D000089	**Hach SN** 22090D000089	**Hach SN** ~~22090D000089~~ 15540C040130
	20 NTU	20	20.2	20.2	21.0	18.2
	100 NTU	100	~~10.0~~ 100	99.8	102	99.7
	800 NTU	800	832	799	800	806
	10	10	10.1	9.81	10.4	9.10

Date:		**Time:**	02/06/23 1330	02/07/23 0800	02/08/23 0810	02/09/23 0400
Parameter	**Units**	**Standard**	**AquaTROLL SN** ~~____~~	**AquaTROLL SN** 851413	**AquaTROLL SN** 851413	**AquaTROLL SN** 851413
DO	% saturation	100		99.09	101.16	101.53
Conductivity	us/cm	4490		4452.8	4440.5	4597.1
pH	S.U.	4.00		3.99	4.03	4.03
pH	S.U.	7.00		7.07	7.03	7.05
pH	S.U.	10.00		10.03	10.12	10.08
ORP	mV	228.00		226.3	218.8	221.2

Turbidity	**Units**	**Standard**	**Hach SN** 22090D000239	**Hach SN** 22090D000239	**Hach SN** 22090D000239	**Hach SN** 22090D000239
	NTU	20	19.7	20.5	19.6	20.1
	NTU	100	94.4	102	98.3	100
	NTU	800	787	822	789	808
	10	10	9.56	9.56	9.80	9.63

Notes: DO - Dissolved Oxygen; us/cm - microsiemens/centimeter; ORP - oxidation-reduction potential; mV - millivolts; NTU - Nphelometric Turbidity Units; NC - Not calibrated

Project Plant McDonough

Calibration Report

Instrument	Aqua TROLL 400
Serial Number	884187
Created	1/31/2023

Sensor	**RDO**
Serial Number	878532
Last Calibrated	1/31/2023

Calibration Details

Slope	1.119225
Offset	0.00 mg/L

Calibration point 100%

Concentration	8.34 mg/L
Temperature	17.67 °C
Barometric Pressure	992.78 mbar

Sensor	**Conductivity**
Serial Number	884187
Last Calibrated	1/31/2023

Calibration Details

Cell Constant	0.839
Reference Temperature	20.00 °C
TDS Conversion Factor (ppm)	0.65

Sensor	**Level**
Serial Number	883844
Last Calibrated	Factory Defaults

Sensor	**pH/ORP**
Serial Number	21637
Last Calibrated	1/31/2023

Calibration Details

Total Calibration Points	3

Calibration Point 1

pH of Buffer	4.00 pH
pH mV	150.1 mV
Temperature	17.68 °C

Calibration Point 2

pH of Buffer	7.04 pH
pH mV	-18.6 mV
Temperature	16.92 °C

Calibration Point 3

pH of Buffer	10.11 pH
pH mV	-188.1 mV
Temperature	16.61 °C

Slope and Offset 1

Slope	-55.5 mV/pH
Offset	-16.4 mV

Slope and Offset 2

Slope	-55.22 mV/pH
Offset	-16.4 mV

ORP

ORP Solution	ORP Standard
Offset	10.8 mV
Temperature	16.66 °C

Calibration Report

Instrument	Aqua TROLL 400
Serial Number	843593
Created	2/2/2023

Sensor	**RDO**
Serial Number	849169
Last Calibrated	2/2/2023

Calibration Details

Slope	1.119936
Offset	0.00 mg/L

Calibration point 100%

Concentration	10.13 mg/L
Temperature	9.01 °C
Barometric Pressure	994.76 mbar

Sensor	**Conductivity**
Serial Number	843593
Last Calibrated	2/2/2023

Calibration Details

Cell Constant	0.896
Reference Temperature	20.00 °C
TDS Conversion Factor (ppm)	0.65

Sensor	**Level**
Serial Number	844244
Last Calibrated	Factory Defaults

Sensor	**pH/ORP**
Serial Number	21484
Last Calibrated	2/2/2023

Calibration Details

Total Calibration Points	3

Calibration Point 1

pH of Buffer	4.00 pH
pH mV	138.2 mV
Temperature	9.68 °C

Calibration Point 2

pH of Buffer	7.06 pH
pH mV	-26.3 mV
Temperature	9.84 °C

Calibration Point 3

pH of Buffer	10.14 pH
pH mV	-197.8 mV
Temperature	10.31 °C

Slope and Offset 1

Slope	-53.73 mV/pH
Offset	-23.0 mV

Slope and Offset 2

Slope	-55.7 mV/pH
Offset	-22.9 mV

ORP

ORP Solution	ORP Standard
Offset	6.1 mV
Temperature	10.22 °C

Calibration Report

Instrument	Aqua TROLL 400
Serial Number	843593
Created	2/6/2023

Sensor	**RDO**
Serial Number	849169
Last Calibrated	2/6/2023

Calibration Details

Slope	1.085564
Offset	0.00 mg/L

Calibration point 100%

Concentration	10.51 mg/L
Temperature	8.28 °C
Barometric Pressure	995.96 mbar

Sensor	**Conductivity**
Serial Number	843593
Last Calibrated	2/6/2023

Calibration Details

Cell Constant	1.236
Reference Temperature	20.00 °C
TDS Conversion Factor (ppm)	0.65

Sensor	**Level**
Serial Number	844244
Last Calibrated	Factory Defaults

Sensor	**pH/ORP**
Serial Number	21484
Last Calibrated	2/6/2023

Calibration Details

Total Calibration Points	3

Calibration Point 1

pH of Buffer	4.00 pH
pH mV	137.5 mV
Temperature	8.47 °C

Calibration Point 2

pH of Buffer	7.06 pH
pH mV	-26.1 mV
Temperature	8.52 °C

Calibration Point 3

pH of Buffer	10.14 pH
pH mV	-195.4 mV
Temperature	8.09 °C

Slope and Offset 1

Slope	-53.47 mV/pH
Offset	-22.9 mV

Slope and Offset 2

Slope	-54.98 mV/pH
Offset	-22.8 mV

ORP

ORP Solution	Zobell's
Offset	22.2 mV
Temperature	8.30 °C

Calibration Report

Instrument	Aqua TROLL 400
Serial Number	883553
Created	2/1/2023

Sensor	**RDO**
Serial Number	878536
Last Calibrated	2/1/2023

Calibration Details

Slope	1.096669
Offset	0.00 mg/L

Calibration point 100%

Concentration	9.56 mg/L
Temperature	12.49 °C
Barometric Pressure	997.41 mbar

Sensor	**Conductivity**
Serial Number	883553
Last Calibrated	2/1/2023

Calibration Details

Cell Constant	0.911
Reference Temperature	20.00 °C
TDS Conversion Factor (ppm)	0.65

Sensor	**Level**
Serial Number	879607
Last Calibrated	Factory Defaults

Sensor	**pH/ORP**
Serial Number	21638
Last Calibrated	2/1/2023

Calibration Details

Total Calibration Points	3

Calibration Point 1

pH of Buffer	4.00 pH
pH mV	154.1 mV
Temperature	13.26 °C

Calibration Point 2

pH of Buffer	7.04 pH
pH mV	-9.9 mV
Temperature	13.67 °C

Calibration Point 3

pH of Buffer	10.11 pH
pH mV	-177.7 mV
Temperature	13.86 °C

Slope and Offset 1

Slope	-53.96 mV/pH
Offset	-7.7 mV

Slope and Offset 2

Slope	-54.66 mV/pH
Offset	-7.7 mV

ORP

ORP Solution	Zobell's
Offset	12.0 mV
Temperature	14.02 °C

Calibration Report

Instrument	Aqua TROLL 400
Serial Number	883553
Created	2/2/2023

Sensor	**RDO**
Serial Number	878536
Last Calibrated	2/2/2023

Calibration Details

Slope	1.109211
Offset	0.00 mg/L

Calibration point 100%

Concentration	8.69 mg/L
Temperature	15.64 °C
Barometric Pressure	995.97 mbar

Sensor	**Conductivity**
Serial Number	883553
Last Calibrated	2/2/2023

Calibration Details

Cell Constant	1.07
Reference Temperature	20.00 °C
TDS Conversion Factor (ppm)	0.65

Sensor	**Level**
Serial Number	879607
Last Calibrated	Factory Defaults

Sensor	**pH/ORP**
Serial Number	21638
Last Calibrated	2/2/2023

Calibration Details

Total Calibration Points	3

Calibration Point 1

pH of Buffer	4.00 pH
pH mV	155.7 mV
Temperature	15.43 °C

Calibration Point 2

pH of Buffer	7.04 pH
pH mV	-10.8 mV
Temperature	15.59 °C

Calibration Point 3

pH of Buffer	10.11 pH
pH mV	-176.4 mV
Temperature	15.58 °C

Slope and Offset 1

Slope	-54.78 mV/pH
Offset	-8.6 mV

Slope and Offset 2

Slope	-53.95 mV/pH
Offset	-8.6 mV

ORP

ORP Solution	Zobell's
Offset	13.6 mV
Temperature	15.44 °C

Calibration Report

Instrument	Aqua TROLL 400
Serial Number	883553
Created	2/3/2023

Sensor	**RDO**
Serial Number	878536
Last Calibrated	2/3/2023

Calibration Details

Slope	1.115391
Offset	0.00 mg/L

Calibration point 100%

Concentration	8.79 mg/L
Temperature	14.76 °C
Barometric Pressure	996.77 mbar

Sensor	**Conductivity**
Serial Number	883553
Last Calibrated	2/3/2023

Calibration Details

Cell Constant	1.065
Reference Temperature	20.00 °C
TDS Conversion Factor (ppm)	0.65

Sensor	**Level**
Serial Number	879607
Last Calibrated	Factory Defaults

Sensor	**pH/ORP**
Serial Number	21638
Last Calibrated	2/3/2023

Calibration Details

Total Calibration Points	3

Calibration Point 1

pH of Buffer	4.00 pH
pH mV	154.6 mV
Temperature	14.43 °C

Calibration Point 2

pH of Buffer	7.04 pH
pH mV	-16.1 mV
Temperature	12.93 °C

Calibration Point 3

pH of Buffer	10.11 pH
pH mV	-178.2 mV
Temperature	13.31 °C

Slope and Offset 1

Slope	-56.16 mV/pH
Offset	-13.9 mV

Slope and Offset 2

Slope	-52.79 mV/pH
Offset	-14.0 mV

ORP

ORP Solution	Zobell's
Offset	14.3 mV
Temperature	12.19 °C

Calibration Report

Instrument	Aqua TROLL 400
Serial Number	883553
Created	2/6/2023

Sensor	**RDO**
Serial Number	878536
Last Calibrated	2/6/2023

Calibration Details

Slope	1.094213
Offset	0.00 mg/L

Calibration point 100%

Concentration	10.10 mg/L
Temperature	9.43 °C
Barometric Pressure	996.38 mbar

Sensor	**Conductivity**
Serial Number	883553
Last Calibrated	2/6/2023

Calibration Details

Cell Constant	1.068
Reference Temperature	20.00 °C
TDS Conversion Factor (ppm)	0.65

Sensor	**Level**
Serial Number	879607
Last Calibrated	Factory Defaults

Sensor	**pH/ORP**
Serial Number	21638
Last Calibrated	2/6/2023

Calibration Details

Total Calibration Points	3

Calibration Point 1

pH of Buffer	4.00 pH
pH mV	151.6 mV
Temperature	9.52 °C

Calibration Point 2

pH of Buffer	7.06 pH
pH mV	-11.2 mV
Temperature	9.47 °C

Calibration Point 3

pH of Buffer	10.14 pH
pH mV	-178.1 mV
Temperature	9.61 °C

Slope and Offset 1

Slope	-53.2 mV/pH
Offset	-8.0 mV

Slope and Offset 2

Slope	-54.19 mV/pH
Offset	-8.0 mV

ORP

ORP Solution	Zobell's
Offset	12.2 mV
Temperature	9.36 °C

Calibration Report

Instrument	Aqua TROLL 400
Serial Number	883553
Created	2/7/2023

Sensor	**RDO**
Serial Number	878536
Last Calibrated	2/7/2023

Calibration Details

Slope	1.106362
Offset	0.00 mg/L

Calibration point 100%

Concentration	9.49 mg/L
Temperature	11.77 °C
Barometric Pressure	999.60 mbar

Sensor	**Conductivity**
Serial Number	883553
Last Calibrated	2/7/2023

Calibration Details

Cell Constant	1.06
Reference Temperature	20.00 °C
TDS Conversion Factor (ppm)	0.65

Sensor	**Level**
Serial Number	879607
Last Calibrated	Factory Defaults

Sensor	**pH/ORP**
Serial Number	21638
Last Calibrated	2/7/2023

Calibration Details

Total Calibration Points	3

Calibration Point 1

pH of Buffer	4.00 pH
pH mV	153.1 mV
Temperature	11.66 °C

Calibration Point 2

pH of Buffer	7.06 pH
pH mV	-10.6 mV
Temperature	11.98 °C

Calibration Point 3

pH of Buffer	10.14 pH
pH mV	-176.7 mV
Temperature	12.26 °C

Slope and Offset 1

Slope	-53.51 mV/pH
Offset	-7.4 mV

Slope and Offset 2

Slope	-53.93 mV/pH
Offset	-7.4 mV

ORP

ORP Solution	Zobell's
Offset	14.5 mV
Temperature	12.23 °C

Calibration Report

Instrument	Aqua TROLL 400
Serial Number	884189
Created	1/31/2023

Sensor	**RDO**
Serial Number	878531
Last Calibrated	1/31/2023

Calibration Details

Slope	1.090011
Offset	0.00 mg/L

Calibration point 100%

Concentration	8.73 mg/L
Temperature	16.83 °C
Barometric Pressure	994.53 mbar

Sensor	**Conductivity**
Serial Number	884189
Last Calibrated	1/31/2023

Calibration Details

Cell Constant	0.099
Reference Temperature	25.00 °C
TDS Conversion Factor (ppm)	0.65

Sensor	**Level**
Serial Number	879249
Last Calibrated	Factory Defaults

Sensor	**pH/ORP**
Serial Number	21633
Last Calibrated	1/31/2023

Calibration Details

Total Calibration Points	3

Calibration Point 1

pH of Buffer	4.00 pH
pH mV	160.4 mV
Temperature	18.30 °C

Calibration Point 2

pH of Buffer	7.02 pH
pH mV	-8.6 mV
Temperature	18.39 °C

Calibration Point 3

pH of Buffer	10.05 pH
pH mV	-177.6 mV
Temperature	18.48 °C

Slope and Offset 1

Slope	-55.94 mV/pH
Offset	-7.4 mV

Slope and Offset 2

Slope	-55.8 mV/pH
Offset	-7.4 mV

ORP

ORP Solution	Zobell's
Offset	7.1 mV
Temperature	18.36 °C

Calibration Report

Instrument	Aqua TROLL 400
Serial Number	884189
Created	2/1/2023

Sensor	**RDO**
Serial Number	878531
Last Calibrated	2/1/2023

Calibration Details

Slope	1.076613
Offset	0.00 mg/L

Calibration point 100%

Concentration	8.91 mg/L
Temperature	16.47 °C
Barometric Pressure	994.90 mbar

Sensor	**Conductivity**
Serial Number	884189
Last Calibrated	2/1/2023

Calibration Details

Cell Constant	0.099
Reference Temperature	25.00 °C
TDS Conversion Factor (ppm)	0.65

Sensor	**Level**
Serial Number	879249
Last Calibrated	Factory Defaults

Sensor	**pH/ORP**
Serial Number	21633
Last Calibrated	2/1/2023

Calibration Details

Total Calibration Points	3

Calibration Point 1

pH of Buffer	4.00 pH
pH mV	159.4 mV
Temperature	17.74 °C

Calibration Point 2

pH of Buffer	7.02 pH
pH mV	-9.5 mV
Temperature	18.11 °C

Calibration Point 3

pH of Buffer	10.05 pH
pH mV	-178.6 mV
Temperature	18.39 °C

Slope and Offset 1

Slope	-55.92 mV/pH
Offset	-8.4 mV

Slope and Offset 2

Slope	-55.79 mV/pH
Offset	-8.4 mV

ORP

ORP Solution	Zobell's
Offset	8.2 mV
Temperature	18.36 °C

Calibration Report

Instrument	Aqua TROLL 400
Serial Number	884189
Created	2/3/2023

Sensor	**RDO**
Serial Number	878531
Last Calibrated	2/3/2023

Calibration Details

Slope	1.071187
Offset	0.00 mg/L

Calibration point 100%

Concentration	8.73 mg/L
Temperature	17.88 °C
Barometric Pressure	999.00 mbar

Sensor	**Conductivity**
Serial Number	884189
Last Calibrated	2/3/2023

Calibration Details

Cell Constant	0.994
Reference Temperature	25.00 °C
TDS Conversion Factor (ppm)	0.65

Sensor	**Level**
Serial Number	879249
Last Calibrated	Factory Defaults

Sensor	**pH/ORP**
Serial Number	21633
Last Calibrated	2/3/2023

Calibration Details

Total Calibration Points	3

Calibration Point 1

pH of Buffer	4.00 pH
pH mV	156.7 mV
Temperature	14.04 °C

Calibration Point 2

pH of Buffer	7.04 pH
pH mV	-8.3 mV
Temperature	13.02 °C

Calibration Point 3

pH of Buffer	10.14 pH
pH mV	-175.9 mV
Temperature	12.45 °C

Slope and Offset 1

Slope	-54.29 mV/pH
Offset	-6.1 mV

Slope and Offset 2

Slope	-54.07 mV/pH
Offset	-6.1 mV

ORP

ORP Solution	Zobell's
Offset	7.0 mV
Temperature	12.25 °C

Calibration Report

Instrument	Aqua TROLL 400
Serial Number	884189
Created	2/6/2023

Sensor	**RDO**
Serial Number	878531
Last Calibrated	2/6/2023

Calibration Details

Slope	1.078399
Offset	0.00 mg/L

Calibration point 100%

Concentration	9.85 mg/L
Temperature	11.85 °C
Barometric Pressure	995.88 mbar

Sensor	**Conductivity**
Serial Number	884189
Last Calibrated	2/6/2023

Calibration Details

Cell Constant	0.974
Reference Temperature	25.00 °C
TDS Conversion Factor (ppm)	0.65

Sensor	**Level**
Serial Number	879249
Last Calibrated	Factory Defaults

Sensor	**pH/ORP**
Serial Number	21633
Last Calibrated	2/6/2023

Calibration Details

Total Calibration Points	3

Calibration Point 1

pH of Buffer	4.00 pH
pH mV	152.5 mV
Temperature	10.55 °C

Calibration Point 2

pH of Buffer	7.06 pH
pH mV	-8.3 mV
Temperature	10.60 °C

Calibration Point 3

pH of Buffer	10.14 pH
pH mV	-172.8 mV
Temperature	10.48 °C

Slope and Offset 1

Slope	-52.58 mV/pH
Offset	-5.2 mV

Slope and Offset 2

Slope	-53.38 mV/pH
Offset	-5.1 mV

ORP

ORP Solution	Zobell's
Offset	7.3 mV
Temperature	10.46 °C

Date: 1/31/23
Time: 0530
Prepared By: Daniel Howard
Checked By: _____

~~Wood~~ WSP
Project No.
Plant McDonough

~~Pine~~ Sonde ID: 883536
~~Pine~~ Handset ID: 883536
Battery Voltage %: 82

CALIBRATION PRIOR TO SAMPLING

DISSOLVED OXYGEN (DO)		VALUE
Was DO membrane changed?	Yes_____ No ✓ Date:_____ Time:_____	
Current Air Temperature °C (meter reading):		20.26
Current Barometric Pressure (from Weather Channel or NOAA.gov, which is corrected to sea level):		
Elevation Corrected Barometric Pressure to enter into YSI DO calibration:	Ex.: 30.02 in. Hg x 25.4 = mm Hg; subtract 2.54 mm Hg for every 100 ft. above sea level: 565/100 x 2.54 = 14.4 mm Hg	mbar 981.98
Theoretical DO (mg/L) from DO table based on current temperature and elevation corrected pressure:		
DO concentration before Calibration (mg/L):	Depending on meter version, this may not be available.	8.92
DO concentration after Calibration (mg/L):		8.20
% Recovery (actual/theory x 100)	Range is 90 to 110% Recovery	100.82
DO Charge (DO ch):	Acceptable Range is 25 to 75	
DO Gain (should be between -0.7 and 1.5):	Exit Calibration menu and go to Advanced/Cal Constants	1.068379

Note: Slope

CONDUCTIVITY [Note: Calibrate before pH to avoid carry-over from pH standards (i.e. pH buffers are conductive)]		
Calibration standard used (mS/cm)	Lot 21470032 4/23	4.490
Temperature (°C)		19.85
Reading before Calibration (mS/cm)		5.778
Reading AFTER Calibration (mS/cm)		4.490
Conductivity Cell Constant (unitless):		1.009

Note: Be sure conductivity cell is submerged and free of bubbles (gently tap sonde on table)

pH		
pH 7.0 value before calibration:	Lot 22140169 8/23	7.23
pH 7.0 value after calibration:	19.50°C	7.02
pH 7.0 mV (range is -50 to +50 mV):		-20.8
pH 10 value before calibration:	Lot 22110130 8/23	10.15
pH 10 value after calibration:	18.88°C	10.05
pH 10 mV (range is -130 to -230 mV):		-191.0
pH 4.0 value before calibration:	Lot 21470032 4/23	4.05
pH 4.0 value after calibration:	19.90°C	4.00
pH 4.0 mV (range is 130 to 230 mV):		153.0

7.11

Note: Span between ph 4 and 7, and 7 and 10 should be between 165 to 180 mV

OXIDATION/REDUCTION POTENTIAL (ORP)		
Calibration Temperature (°C):	Lot 21140143 4/23	18.88
Theoretical Calibration standard (mV)	0.231+0.0013(25-T) x 1000 = mV (T is Temperature °C)	237.1
Reading before calibration (mV):	STD 228	249.1
Reading after calibration (mV):		237.1

Note: mV theory will change with temperature, so calculate based on your current temp.

TURBIDITY Note: Lens wiper should be parked 180 degrees from the optics.					
20 NTU Turbidity Standard	Lot A2231	12/23	Before Cal:	After Cal:	19.8
100 NTU Turbidity Standard	Lot A2239	12/23	Before Cal:	After Cal:	99.7
800 NTU Turbidity Standard	Lot A2231	12/23	Before Cal:	After Cal:	796
10 NTU Turbidity Check STD	Lot A2264	1/24	Before Cal:	After Cal:	10.0
_____ NTU Turbidity Check STD			Before Cal:	After Cal:	
CALIBRATION SUCCESSFUL?					

Hach SN: 22090D000345

Date: 2/1/23
Time: 0530
Prepared By: Daniel Howard
Checked By: _____

~~Wood~~ WSP
Project No.
Plant Mon McDonough

~~Pine~~ Sonde ID: 883536
~~Pine~~ Handset ID: _____
Battery Voltage %: 99

CALIBRATION PRIOR TO SAMPLING

DISSOLVED OXYGEN (DO)		VALUE
Was DO membrane changed?	Yes____ No✓ Date:____ Time:____	
Current Air Temperature °C (meter reading):		20.09
Current Barometric Pressure (from Weather Channel or NOAA.gov, which is corrected to sea level):		
Elevation Corrected Barometric Pressure to enter into YSI DO calibration:	Ex.: 30.02 in. Hg x 25.4 = mm Hg; subtract 2.54 mm Hg for every 100 ft. above sea level: 565/100 x 2.54 = 14.4 mm Hg	mbar 982.01
Theoretical DO (mg/L) from DO table based on current temperature and elevation corrected pressure:		
DO concentration before Calibration (mg/L):	Depending on meter version, this may not be available.	8.84
DO concentration after Calibration (mg/L):		8.27
% Recovery (actual/theory x 100)	Range is 90 to 110% Recovery	100.6
DO Charge (DO ch):	Acceptable Range is 25 to 75	
DO Gain (should be between -0.7 and 1.5):	Exit Calibration menu and go to Advanced/Cal Constants	1.06384 slope

Note:

CONDUCTIVITY [Note: Calibrate before pH to avoid carry-over from pH standards (i.e. pH buffers are conductive)]		
Calibration standard used (mS/cm)	Lot 21470032 4/23	4.490
Temperature (°C)		19.88
Reading before Calibration (mS/cm)		4.4626
Reading AFTER Calibration (mS/cm)		4.490
Conductivity Cell Constant (unitless):		1.015

Note: Be sure conductivity cell is submerged and free of bubbles (gently tap sonde on table)

pH		
pH 7.0 value before calibration:	Lot 22140169 8/23	7.11
pH 7.0 value after calibration:	19.95°C	7.02
pH 7.0 mV (range is -50 to +50 mV):		-25.6
pH 10 value before calibration:	Lot 22110130 8/23	10.09
pH 10 value after calibration:	19.60°C	10.05
pH 10 mV (range is -130 to -230 mV):		-194.7
pH 4.0 value before calibration:	Lot 21470032 4/23	4.08
pH 4.0 value after calibration:	19.96°C	4.00
pH 4.0 mV (range is 130 to 230 mV):		148.8

Note: Span between ph 4 and 7, and 7 and 10 should be between 165 to 180 mV

OXIDATION/REDUCTION POTENTIAL (ORP)		
Calibration Temperature (°C):	Lot 21140143 4/23	19.14
Theoretical Calibration standard (mV)	0.231+0.0013(25-T) x 1000 = mV (T is Temperature °C)	236.6
Reading before calibration (mV):	STD 228	233.4
Reading after calibration (mV):		236.6

Note: mV theory will change with temperature, so calculate based on your current temp.

TURBIDITY Note: Lens wiper should be parked 180 degrees from the optics.					
20 NTU Turbidity Standard	Lot A2231	12/23	Before Cal:	After Cal:	19.8
100 NTU Turbidity Standard	Lot A2239	12/23	Before Cal:	After Cal:	99.5
800 NTU Turbidity Standard	Lot A2231	12/23	Before Cal:	After Cal:	802
10 NTU Turbidity Check STD	Lot A2264	1/24	Before Cal:	After Cal:	10.2
____ NTU Turbidity Check STD			Before Cal:	After Cal:	
CALIBRATION SUCCESSFUL?					

Hach SN: 22090D000345

Date: 2/2/23
Time: 0535
Prepared By: Daniel Howard
Checked By: _____

~~Wood~~. WSP
Project No.
Plant McDonough

~~Pine~~ Sonde ID: 883536
~~Pine~~ Handset ID: _____
Battery Voltage %: 88

CALIBRATION PRIOR TO SAMPLING

DISSOLVED OXYGEN (DO)		VALUE
Was DO membrane changed?	Yes_____ No✓ Date:____ Time:____	
Current Air Temperature °C (meter reading):		20.03
Current Barometric Pressure (from Weather Channel or NOAA.gov, which is corrected to sea level):		
Elevation Corrected Barometric Pressure to enter into YSI DO calibration:	Ex.: 30.02 in. Hg x 25.4 = mm Hg; subtract 2.54 mm Hg for every 100 ft. above sea level: 565/100 x 2.54 = 14.4 mm Hg	mbar 982.68
Theoretical DO (mg/L) from DO table based on current temperature and elevation corrected pressure:		
DO concentration before Calibration (mg/L):	Depending on meter version, this may not be available.	8.83
DO concentration after Calibration (mg/L):		8.27
% Recovery (actual/theory x 100)	Range is 90 to 110% Recovery	100.02
DO Charge (DO ch):	Acceptable Range is 25 to 75	
DO Gain (should be between -0.7 and 1.5):	Exit Calibration menu and go to Advanced/Cal Constants	1.06462 slope

Note:

CONDUCTIVITY [Note: Calibrate before pH to avoid carry-over from pH standards (i.e. pH buffers are conductive)]		
Calibration standard used (mS/cm)	Lot 21470032 4/23	4.490
Temperature (°C)		19.96
Reading before Calibration (mS/cm)		4.4794
Reading AFTER Calibration (mS/cm)		4.490
Conductivity Cell Constant (unitless):		1.017

Note: Be sure conductivity cell is submerged and free of bubbles (gently tap sonde on table)

pH		
pH 7.0 value before calibration:	Lot 22140169 8/23	7.02
pH 7.0 value after calibration:	19.90°C	7.02
pH 7.0 mV (range is -50 to +50 mV):		-25.7
pH 10 value before calibration:	Lot 22110130 8/23	10.06
pH 10 value after calibration:	19.77°C	10.05
pH 10 mV (range is -130 to -230 mV):		-194.7
pH 4.0 value before calibration:	Lot 21470032 4/23	4.01
pH 4.0 value after calibration:	19.99°C	4.00
pH 4.0 mV (range is 130 to 230 mV):		148.2

Note: Span between ph 4 and 7, and 7 and 10 should be between 165 to 180 mV

OXIDATION/REDUCTION POTENTIAL (ORP)		
Calibration Temperature (°C):	Lot 21140143 4/23	19.68
Theoretical Calibration standard (mV)	0.231+0.0013(25-T) x 1000 = mV (T is Temperature °C)	236.0
Reading before calibration (mV):	STD 228	236.1
Reading after calibration (mV):		236.0

Note: mV theory will change with temperature, so calculate based on your current temp.

TURBIDITY Note: Lens wiper should be parked 180 degrees from the optics.				
20 NTU Turbidity Standard Lot A2231 12/23	Before Cal:	After Cal:	20.1
100 NTU Turbidity Standard Lot A2239 12/23	Before Cal:	After Cal:	100
800 NTU Turbidity Standard Lot A2231 12/23	Before Cal:	After Cal:	800
10 NTU Turbidity Check STD Lot A2264 1/24	Before Cal:	After Cal:	10.1
_____ NTU Turbidity Check STD	Before Cal:	After Cal:	
CALIBRATION SUCCESSFUL?			

Hach SN: 22090D000345

Date: 2/3/23
Time: 0538
Prepared By: Daniel Howard
Checked By: _____

~~Wood~~ WSP
Project No.
Plant McDonough

~~Pine~~ Sonde ID: 883536
~~Pine~~ Handset ID: _____
Battery Voltage %: 79

CALIBRATION PRIOR TO SAMPLING

DISSOLVED OXYGEN (DO)		VALUE
Was DO membrane changed?	Yes____ No✓ Date:____ Time:____	
Current Air Temperature °C (meter reading):		19.76
Current Barometric Pressure (from Weather Channel or NOAA.gov, which is corrected to sea level):		
Elevation Corrected Barometric Pressure to enter into YSI DO calibration:	Ex.: 30.02 in. Hg x 25.4 = mm Hg; subtract 2.54 mm Hg for every 100 ft. above sea level: 565/100 x 2.54 = 14.4 mm Hg	mbar 981.81
Theoretical DO (mg/L) from DO table based on current temperature and elevation corrected pressure:		
DO concentration before Calibration (mg/L):	Depending on meter version, this may not be available.	8.84
DO concentration after Calibration (mg/L):		8.29
% Recovery (actual/theory x 100)	Range is 90 to 110% Recovery	99.85
DO Charge (DO ch):	Acceptable Range is 25 to 75	
DO Gain (should be between -0.7 and 1.5):	Exit Calibration menu and go to Advanced/Cal Constants	1.06381 slope

Note:

CONDUCTIVITY [Note: Calibrate before pH to avoid carry-over from pH standards (i.e. pH buffers are conductive)]		
Calibration standard used (mS/cm)	Lot 21470032 4/23	4.490
Temperature (°C)		19.19
Reading before Calibration (mS/cm)	4.455	~~4.448~~ 4.455 DH 4
Reading AFTER Calibration (mS/cm)		4.490
Conductivity Cell Constant (unitless):		1.024

Note: Be sure conductivity cell is submerged and free of bubbles (gently tap sonde on table)

pH		
pH 7.0 value before calibration:	Lot 22140169 8/23	7.03
pH 7.0 value after calibration:	19.10°C	7.02
pH 7.0 mV (range is -50 to +50 mV):		-26.2
pH 10 value before calibration:	Lot 22110130 8/23	10.06
pH 10 value after calibration:	19.01°C	10.05
pH 10 mV (range is -130 to -230 mV):		-194.8
pH 4.0 value before calibration:	Lot 21470032 4/23	4.00
pH 4.0 value after calibration:	19.12°C	4.00
pH 4.0 mV (range is 130 to 230 mV):		147.7

Note: Span between ph 4 and 7, and 7 and 10 should be between 165 to 180 mV

OXIDATION/REDUCTION POTENTIAL (ORP)		
Calibration Temperature (°C):	Lot 21170143 4/23	20.61
Theoretical Calibration standard (mV)	0.231+0.0013(25-T) x 1000 = mV (T is Temperature °C)	234.9
Reading before calibration (mV):	STD 228	234.6
Reading after calibration (mV):		234.9

Note: mV theory will change with temperature, so calculate based on your current temp.

TURBIDITY Note: Lens wiper should be parked 180 degrees from the optics.			
20 NTU Turbidity Standard Lot A2231 12/23	Before Cal:	After Cal:	19.9
100 NTU Turbidity Standard Lot A2239 12/23	Before Cal:	After Cal:	99.9
800 NTU Turbidity Standard Lot A2231 12/23	Before Cal:	After Cal:	803
10 NTU Turbidity Check STD Lot A2264 1/24	Before Cal:	After Cal:	10.2
____ NTU Turbidity Check STD	Before Cal:	After Cal:	
CALIBRATION SUCCESSFUL?			

Hach SN: 22090D000345

Date: 2/16/23
Time: 0535
Prepared By: Daniel Howard
Checked By: _____

~~Wood~~ WSP
Project No.
Plant McDonough

~~Pine~~ Sonde ID: _____
~~Pine~~ Handset ID: 883536
Battery Voltage %: 99

CALIBRATION PRIOR TO SAMPLING

DISSOLVED OXYGEN (DO)		VALUE
Was DO membrane changed?	Yes____ No✓ Date:____ Time:____	
Current Air Temperature °C (meter reading):		19.89
Current Barometric Pressure (from Weather Channel or NOAA.gov, which is corrected to sea level):		
Elevation Corrected Barometric Pressure to enter into YSI DO calibration:	Ex.: 30.02 in. Hg x 25.4 = mm Hg; subtract 2.54 mm Hg for every 100 ft. above sea level: 565/100 x 2.54 = 14.4 mm Hg	mbar 982.02
Theoretical DO (mg/L) from DO table based on current temperature and elevation corrected pressure:		
DO concentration before Calibration (mg/L):	Depending on meter version, this may not be available.	8.85
DO concentration after Calibration (mg/L):		8.30
% Recovery (actual/theory x 100)	Range is 90 to 110% Recovery	100.25
DO Charge (DO ch):	Acceptable Range is 25 to 75	—
DO Gain (should be between -0.7 and 1.5):	Exit Calibration menu and go to Advanced/Cal Constants	1.063572 slope

Note:

CONDUCTIVITY [Note: Calibrate before pH to avoid carry-over from pH standards (i.e. pH buffers are conductive)]		
Calibration standard used (mS/cm)	Lot 21470032 4/23	4.490
Temperature (°C)		19.01
Reading before Calibration (mS/cm)		4.4848
Reading AFTER Calibration (mS/cm)		4.490
Conductivity Cell Constant (unitless):		1.025

Note: Be sure conductivity cell is submerged and free of bubbles (gently tap sonde on table)

pH		
pH 7.0 value before calibration:	Lot 22140169 8/23	7.05
pH 7.0 value after calibration:	19.44°C	7.02
pH 7.0 mV (range is -50 to +50 mV):		-27.6
pH 10 value before calibration:	Lot 22110130 8/23	10.06
pH 10 value after calibration:	19.12°C	10.05
pH 10 mV (range is -130 to -230 mV):		-195.4
pH 4.0 value before calibration:	Lot 21470032 4/23	4.06
pH 4.0 value after calibration:	19.01°C	4.00
pH 4.0 mV (range is 130 to 230 mV):		144.2

Note: Span between ph 4 and 7, and 7 and 10 should be between 165 to 180 mV

OXIDATION/REDUCTION POTENTIAL (ORP) 21140143		
Calibration Temperature (°C):	Lot ~~21470032~~ 4/23	21.23
Theoretical Calibration standard (mV)	0.231+0.0013(25-T) x 1000 = mV (T is Temperature °C)	234.1
Reading before calibration (mV):	STD 228	232.7
Reading after calibration (mV):		234.1

Note: mV theory will change with temperature, so calculate based on your current temp.

TURBIDITY Note: Lens wiper should be parked 180 degrees from the optics.			
20 NTU Turbidity Standard Lot A2231 12/23	Before Cal:	After Cal:	20.0
100 NTU Turbidity Standard Lot A2239 12/23	Before Cal:	After Cal:	101
800 NTU Turbidity Standard Lot A2231 12/23	Before Cal:	After Cal:	802
10 NTU Turbidity Check STD Lot A2264 1/24	Before Cal:	After Cal:	10.2
____ NTU Turbidity Check STD	Before Cal:	After Cal:	
CALIBRATION SUCCESSFUL?			

Hach SN! 22090D000345

Date: 2/7/23
Time: 0535
Prepared By: Daniel Howard
Checked By: _____

~~Wood~~ WSP
Project No.
Plant McDonough

~~Pine~~ Sonde ID: 883536
~~Pine~~ Handset ID: _____
Battery Voltage %: 78

CALIBRATION PRIOR TO SAMPLING

DISSOLVED OXYGEN (DO)		VALUE
Was DO membrane changed?	Yes_____ No ✓ Date:_____ Time:_____	
Current Air Temperature °C (meter reading):		18.70
Current Barometric Pressure (from Weather Channel or NOAA.gov, which is corrected to sea level):		
Elevation Corrected Barometric Pressure to enter into YSI DO calibration:	Ex.: 30.02 in. Hg x 25.4 = mm Hg; subtract 2.54 mm Hg for every 100 ft. above sea level: 565/100 x 2.54 = 14.4 mm Hg	mbar 984.98
Theoretical DO (mg/L) from DO table based on current temperature and elevation corrected pressure:		
DO concentration before Calibration (mg/L):	Depending on meter version, this may not be available.	9.05
DO concentration after Calibration (mg/L):		8.52
% Recovery (actual/theory x 100)	Range is 90 to 110% Recovery	99.97
DO Charge (DO ch):	Acceptable Range is 25 to 75	—
DO Gain (should be between -0.7 and 1.5):	Exit Calibration menu and go to Advanced/Cal Constants	1.064/45 slope

Note:

CONDUCTIVITY [Note: Calibrate before pH to avoid carry-over from pH standards (i.e. pH buffers are conductive)]		
Calibration standard used (mS/cm)	Lot 21470032 4/23	4.490
Temperature (°C)		19.48
Reading before Calibration (mS/cm)		4.4374
Reading AFTER Calibration (mS/cm)		4.490
Conductivity Cell Constant (unitless):		1.036

Note: Be sure conductivity cell is submerged and free of bubbles (gently tap sonde on table)

pH		
pH 7.0 value before calibration:	Lot 22140169 8/23	7.03
pH 7.0 value after calibration:	19.28°C	7.02
pH 7.0 mV (range is -50 to +50 mV):		-28.3
pH 10 value before calibration:	Lot 22110130 8/23	10.06
pH 10 value after calibration:	18.49°C	10.05
pH 10 mV (range is -130 to -230 mV):		-196.1
pH 4.0 value before calibration:	Lot 21470032 4/23	4.00
pH 4.0 value after calibration:	19.54°C	4.00
pH 4.0 mV (range is 130 to 230 mV):		144.5

Note: Span between ph 4 and 7, and 7 and 10 should be between 165 to 180 mV

OXIDATION/REDUCTION POTENTIAL (ORP)		
Calibration Temperature (°C):	Lot 21140143 4/23	18.88
Theoretical Calibration standard (mV)	0.231+0.0013(25-T) x 1000 = mV (T is Temperature °C)	238.56 237.1
Reading before calibration (mV):	STD 228	236.3
Reading after calibration (mV):		237.1

Note: mV theory will change with temperature, so calculate based on your current temp.

TURBIDITY Note: Lens wiper should be parked 180 degrees from the optics.			
20 NTU Turbidity Standard Lot A2231 12/23	Before Cal:	After Cal:	20.2
100 NTU Turbidity Standard Lot A2239 12/23	Before Cal:	After Cal:	99.7
800 NTU Turbidity Standard Lot A2231 12/23	Before Cal:	After Cal:	799
10 NTU Turbidity Check STD Lot A2264 1/24	Before Cal:	After Cal:	10.0
_____ NTU Turbidity Check STD	Before Cal:	After Cal:	
CALIBRATION SUCCESSFUL?			

Hach SN: 22090D000345

April 2023

Daily Calibration Log

GL166849622.000

Project Plant McDonough
Field Staff M. Mann

Instrument Calibration

			Date:	05/01/23	05/02/23
			Time:	1150	1345
Parameter	**Units**	**Standard**	**AquaTROLL SN** 989619 **iPad #** 41		**AquaTROLL SN** 989619 **iPad #** 41
DO	% saturation	100	118.92		101.96
Conductivity	us/cm	4490	5054.0		4262.0
pH	S.U.	4.00	4.05		4.01
pH	S.U.	7.00	7.03		6.98
pH	S.U.	10.00	10.03		9.98
ORP	mV	228.00	224.2		234.9

	Units	**Standard**	**Hach SN** 220900086	**Hach SN** 220900086
Turbidity	NTU	20	20.1	20.1
	NTU	100	101	101
	NTU	800	796	806
	NTU	10.0	10.6	10.3

			Date:		
			Time:		
Parameter	**Units**	**Standard**	**AquaTROLL SN** _____ **iPad #** _____		**AquaTROLL 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**	**Hach SN** _____	**Hach SN** _____
Turbidity	NTU	20		

APPENDIX B

Analytical Results, September 2022

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

November 10, 2022

Andrea McClure
WSP/Golder
5170 Peachtree Road
Building 100, Suite 300
Atlanta, GA 30341

RE: Project: McDonough Upgradient Wells-Revised Report
Pace Project No.: 92624376

Dear Andrea McClure:

Enclosed are the analytical results for sample(s) received by the laboratory between September 08, 2022 and September 09, 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

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

Sincerely,

Nicole D'Oleo

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

Enclosures

cc: Joju Abraham, Georgia Power-CCR
Stephen Benda, Southern Company
Noelia Gangi, Georgia Power
Daniela Herrera, Golder
Ben Hodges, Georgia Power
Kristen Jurinko
Laura Midkiff, Georgia Power
Karim Minkara, Golder Associates - Atlanta
J. Shelby Mobley, Southern Company
Charles Norton, Southern Company
Ms. Lauren Petty, Southern Company
Dawn Prell, Golder Associates Inc.
Michael Smilley, Georgia Power
Yong Cheng Soo, WSP/Golder
Tina Sullivan, ERM

REPORT OF LABORATORY ANALYSIS

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Peachtree Corners, GA 30092
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CERTIFICATIONS

Project: McDonough Upgradient Wells-Revised Report
Pace Project No.: 92624376

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

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SAMPLE SUMMARY

Project: McDonough Upgradient Wells-Revised Report
Pace Project No.: 92624376

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92624376001	**DGWA-70A**	Water	09/07/22 09:35	09/08/22 09:45
92624376002	**DGWA-71**	Water	09/07/22 10:24	09/08/22 09:45
92624376003	**DGWA-53**	Water	09/08/22 13:28	09/09/22 15:50

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SAMPLE ANALYTE COUNT

Project: McDonough Upgradient Wells-Revised Report
Pace Project No.: 92624376

Lab ID	Sample ID	Method	Analysts	Analytes Reported
92624376001	**DGWA-70A**	EPA 6010D	DRB	5
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	BTS	1
		SM 2320B-2011	SMS	3
		EPA 300.0 Rev 2.1 1993	JCM	3
92624376002	**DGWA-71**	EPA 6010D	DRB	5
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	BTS	1
		SM 2320B-2011	SMS	3
		EPA 300.0 Rev 2.1 1993	JCM	3
92624376003	**DGWA-53**	EPA 6010D	DRB	5
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	BTS	1
		SM 2320B-2011	SMS	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

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ANALYTICAL RESULTS

Project: McDonough Upgradient Wells-Revised Report
Pace Project No.: 92624376

Sample: DGWA-70A **Lab ID: 92624376001** Collected: 09/07/22 09:35 Received: 09/08/22 09:45 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		09/08/22 13:35		
pH	**5.60**	Std. Units			1		09/08/22 13:35		
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	09/21/22 12:19	09/21/22 20:31	7439-89-6	
Potassium	**1.6**	mg/L	0.20	0.15	1	09/21/22 12:19	09/21/22 20:31	7440-09-7	
Sodium	**3.4**	mg/L	1.0	0.58	1	09/21/22 12:19	09/21/22 20:31	7440-23-5	
Calcium	**5.9**	mg/L	1.0	0.12	1	09/21/22 12:19	09/21/22 20:31	7440-70-2	
Magnesium	**2.3**	mg/L	0.050	0.012	1	09/21/22 12:19	09/21/22 20:31	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	09/21/22 13:49	09/24/22 15:49	7440-36-0	
Arsenic	**0.0024J**	mg/L	0.0050	0.0022	1	09/21/22 13:49	09/24/22 15:49	7440-38-2	
Barium	**0.039**	mg/L	0.0050	0.00067	1	09/21/22 13:49	09/24/22 15:49	7440-39-3	
Beryllium	**0.000084J**	mg/L	0.00050	0.000054	1	09/21/22 13:49	09/24/22 15:49	7440-41-7	
Boron	ND	mg/L	0.040	0.0086	1	09/21/22 13:49	09/24/22 15:49	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	09/21/22 13:49	09/24/22 15:49	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	09/21/22 13:49	09/24/22 15:49	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	09/21/22 13:49	09/24/22 15:49	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	09/21/22 13:49	09/24/22 15:49	7439-92-1	
Lithium	ND	mg/L	0.030	0.00073	1	09/21/22 13:49	09/24/22 15:49	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	09/21/22 13:49	09/24/22 15:49	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	09/21/22 13:49	09/24/22 15:49	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	09/21/22 13:49	09/24/22 15:49	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	09/22/22 14:00	09/22/22 17:40	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**34.0**	mg/L	25.0	10.0	1		09/09/22 15:04		
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville								
Alkalinity,Bicarbonate (CaCO3)	**27.6**	mg/L	5.0	5.0	1		09/14/22 16:12		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		09/14/22 16:12		
Alkalinity, Total as CaCO3	**27.6**	mg/L	5.0	5.0	1		09/14/22 16:12		
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		09/09/22 23:55	16887-00-6	

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ANALYTICAL RESULTS

Project: McDonough Upgradient Wells-Revised Report
Pace Project No.: 92624376

Sample: DGWA-70A **Lab ID: 92624376001** Collected: 09/07/22 09:35 Received: 09/08/22 09:45 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								
Fluoride	**0.061J**	mg/L	0.10	0.050	1		09/09/22 23:55	16984-48-8	
Sulfate	ND	mg/L	1.0	0.50	1		09/09/22 23:55	14808-79-8	

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ANALYTICAL RESULTS

Project: McDonough Upgradient Wells-Revised Report
Pace Project No.: 92624376

Sample: DGWA-71 **Lab ID: 92624376002** Collected: 09/07/22 10:24 Received: 09/08/22 09:45 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		09/08/22 13:36		
pH	**5.65**	Std. Units			1		09/08/22 13:36		
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	09/21/22 12:19	09/21/22 20:36	7439-89-6	
Potassium	**0.76**	mg/L	0.20	0.15	1	09/21/22 12:19	09/21/22 20:36	7440-09-7	
Sodium	**8.1**	mg/L	1.0	0.58	1	09/21/22 12:19	09/21/22 20:36	7440-23-5	
Calcium	**6.4**	mg/L	1.0	0.12	1	09/21/22 12:19	09/21/22 20:36	7440-70-2	
Magnesium	**0.87**	mg/L	0.050	0.012	1	09/21/22 12:19	09/21/22 20:36	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	09/21/22 13:49	09/24/22 15:55	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0022	1	09/21/22 13:49	09/24/22 15:55	7440-38-2	
Barium	**0.025**	mg/L	0.0050	0.00067	1	09/21/22 13:49	09/24/22 15:55	7440-39-3	
Beryllium	**0.000075J**	mg/L	0.00050	0.000054	1	09/21/22 13:49	09/24/22 15:55	7440-41-7	
Boron	ND	mg/L	0.040	0.0086	1	09/21/22 13:49	09/24/22 15:55	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	09/21/22 13:49	09/24/22 15:55	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	09/21/22 13:49	09/24/22 15:55	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	09/21/22 13:49	09/24/22 15:55	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	09/21/22 13:49	09/24/22 15:55	7439-92-1	
Lithium	**0.0012J**	mg/L	0.030	0.00073	1	09/21/22 13:49	09/24/22 15:55	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	09/21/22 13:49	09/24/22 15:55	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	09/21/22 13:49	09/24/22 15:55	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	09/21/22 13:49	09/24/22 15:55	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	**0.00013J**	mg/L	0.00020	0.00013	1	09/22/22 14:00	09/22/22 17:48	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**82.0**	mg/L	25.0	10.0	1		09/09/22 15:04		
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville								
Alkalinity,Bicarbonate (CaCO3)	**16.0**	mg/L	5.0	5.0	1		09/14/22 16:28		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		09/14/22 16:28		
Alkalinity, Total as CaCO3	**16.0**	mg/L	5.0	5.0	1		09/14/22 16:28		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**8.2**	mg/L	1.0	0.60	1		09/10/22 00:09	16887-00-6	

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(770)734-4200

ANALYTICAL RESULTS

Project: McDonough Upgradient Wells-Revised Report
Pace Project No.: 92624376

Sample: DGWA-71 **Lab ID: 92624376002** Collected: 09/07/22 10:24 Received: 09/08/22 09:45 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								
Fluoride	**0.056J**	mg/L	0.10	0.050	1		09/10/22 00:09	16984-48-8	
Sulfate	**7.0**	mg/L	1.0	0.50	1		09/10/22 00:09	14808-79-8	

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ANALYTICAL RESULTS

Project: McDonough Upgradient Wells-Revised Report
Pace Project No.: 92624376

Sample: DGWA-53 **Lab ID: 92624376003** Collected: 09/08/22 13:28 Received: 09/09/22 15:50 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		09/09/22 17:33		
pH	**6.32**	Std. Units			1		09/09/22 17:33		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Iron	**5.4**	mg/L	0.040	0.025	1	09/21/22 12:19	09/21/22 21:24	7439-89-6	
Sodium	**7.3**	mg/L	1.0	0.58	1	09/21/22 12:19	09/21/22 21:24	7440-23-5	
Calcium	**17.2**	mg/L	1.0	0.12	1	09/21/22 12:19	09/21/22 21:24	7440-70-2	
Magnesium	**5.8**	mg/L	0.050	0.012	1	09/21/22 12:19	09/21/22 21:24	7439-95-4	
Potassium	**3.6**	mg/L	0.20	0.15	1	09/21/22 12:19	09/22/22 21:10	7440-09-7	
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	09/21/22 13:49	09/24/22 16:13	7440-36-0	
Arsenic	**0.0029J**	mg/L	0.0050	0.0022	1	09/21/22 13:49	09/24/22 16:13	7440-38-2	
Barium	**0.077**	mg/L	0.0050	0.00067	1	09/21/22 13:49	09/24/22 16:13	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	09/21/22 13:49	09/24/22 16:13	7440-41-7	
Boron	**0.054**	mg/L	0.040	0.0086	1	09/21/22 13:49	09/26/22 14:25	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	09/21/22 13:49	09/24/22 16:13	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	09/21/22 13:49	09/24/22 16:13	7440-47-3	
Cobalt	**0.012**	mg/L	0.0050	0.00039	1	09/21/22 13:49	09/24/22 16:13	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	09/21/22 13:49	09/24/22 16:13	7439-92-1	
Lithium	**0.0083J**	mg/L	0.030	0.00073	1	09/21/22 13:49	09/24/22 16:13	7439-93-2	
Molybdenum	**0.027**	mg/L	0.010	0.00074	1	09/21/22 13:49	09/24/22 16:13	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	09/21/22 13:49	09/24/22 16:13	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	09/21/22 13:49	09/24/22 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	09/22/22 14:00	09/22/22 17:51	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**129**	mg/L	25.0	10.0	1		09/14/22 12:26		
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville								
Alkalinity,Bicarbonate (CaCO3)	**78.6**	mg/L	5.0	5.0	1		09/14/22 17:49		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		09/14/22 17:49		
Alkalinity, Total as CaCO3	**78.6**	mg/L	5.0	5.0	1		09/14/22 17:49		
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		09/13/22 19:42	16887-00-6	

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ANALYTICAL RESULTS

Project: McDonough Upgradient Wells-Revised Report
Pace Project No.: 92624376

Sample: DGWA-53 **Lab ID: 92624376003** Collected: 09/08/22 13:28 Received: 09/09/22 15:50 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								
Fluoride	**0.11**	mg/L	0.10	0.050	1		09/13/22 19:42	16984-48-8	
Sulfate	**12.0**	mg/L	1.0	0.50	1		09/13/22 19:42	14808-79-8	

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QUALITY CONTROL DATA

Project: McDonough Upgradient Wells-Revised Report
Pace Project No.: 92624376

QC Batch: 724698
QC Batch Method: EPA 3010A
Analysis Method: EPA 6010D
Analysis Description: 6010D ATL
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92624376001, 92624376002, 92624376003

METHOD BLANK: 3775652 Matrix: Water
Associated Lab Samples: 92624376001, 92624376002, 92624376003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium	mg/L	ND	1.0	0.12	09/21/22 19:48	
Iron	mg/L	ND	0.040	0.025	09/21/22 19:48	
Magnesium	mg/L	ND	0.050	0.012	09/21/22 19:48	
Potassium	mg/L	ND	0.20	0.15	09/21/22 19:48	
Sodium	mg/L	ND	1.0	0.58	09/21/22 19:48	

LABORATORY CONTROL SAMPLE: 3775653

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium	mg/L	1	1.0	103	80-120	
Iron	mg/L	1	1.0	101	80-120	
Magnesium	mg/L	1	1.0	104	80-120	
Potassium	mg/L	1	1.0	103	80-120	
Sodium	mg/L	1	1.1	106	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3775654 3775655

Parameter	Units	92624373001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Calcium	mg/L	73.2	1	1	71.7	72.8	-152	-37	75-125	2	20	M1
Iron	mg/L	1.9	1	1	2.9	2.9	101	100	75-125	0	20	
Magnesium	mg/L	25.2	1	1	25.7	25.7	49	52	75-125	0	20	M1
Potassium	mg/L	8.2	1	1	9.0	9.1	75	90	75-125	2	20	
Sodium	mg/L	19.9	1	1	20.3	20.6	38	68	75-125	1	20	M1

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REPORT OF LABORATORY ANALYSIS

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Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL DATA

Project: McDonough Upgradient Wells-Revised Report
Pace Project No.: 92624376

QC Batch: 724800
QC Batch Method: EPA 3005A
Analysis Method: EPA 6020B
Analysis Description: 6020 MET
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92624376001, 92624376002, 92624376003

METHOD BLANK: 3776150 Matrix: Water
Associated Lab Samples: 92624376001, 92624376002, 92624376003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	ND	0.0030	0.00078	09/24/22 14:20	
Arsenic	mg/L	ND	0.0050	0.0022	09/24/22 14:20	
Barium	mg/L	ND	0.0050	0.00067	09/24/22 14:20	
Beryllium	mg/L	ND	0.00050	0.000054	09/24/22 14:20	
Boron	mg/L	ND	0.040	0.0086	09/24/22 14:20	
Cadmium	mg/L	ND	0.00050	0.00011	09/24/22 14:20	
Chromium	mg/L	ND	0.0050	0.0011	09/24/22 14:20	
Cobalt	mg/L	ND	0.0050	0.00039	09/24/22 14:20	
Lead	mg/L	ND	0.0010	0.00089	09/24/22 14:20	
Lithium	mg/L	ND	0.030	0.00073	09/24/22 14:20	
Molybdenum	mg/L	ND	0.010	0.00074	09/24/22 14:20	
Selenium	mg/L	ND	0.0050	0.0014	09/24/22 14:20	
Thallium	mg/L	ND	0.0010	0.00018	09/24/22 14:20	

LABORATORY CONTROL SAMPLE: 3776151

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.1	0.11	105	80-120	
Arsenic	mg/L	0.1	0.10	102	80-120	
Barium	mg/L	0.1	0.099	99	80-120	
Beryllium	mg/L	0.1	0.10	102	80-120	
Boron	mg/L	1	1.1	107	80-120	
Cadmium	mg/L	0.1	0.10	100	80-120	
Chromium	mg/L	0.1	0.10	104	80-120	
Cobalt	mg/L	0.1	0.10	101	80-120	
Lead	mg/L	0.1	0.10	100	80-120	
Lithium	mg/L	0.1	0.098	98	80-120	
Molybdenum	mg/L	0.1	0.10	100	80-120	
Selenium	mg/L	0.1	0.10	101	80-120	
Thallium	mg/L	0.1	0.10	100	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3776152 3776153

Parameter	Units	92625866027 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	106	109	75-125	2	20	
Arsenic	mg/L	ND	0.1	0.1	0.10	0.10	99	101	75-125	2	20	

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QUALITY CONTROL DATA

Project: McDonough Upgradient Wells-Revised Report
Pace Project No.: 92624376

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3776152 3776153

Parameter	Units	92625866027 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Barium	mg/L	14.6 ug/L	0.1	0.1	0.12	0.12	102	102	75-125	0	20	
Beryllium	mg/L	ND	0.1	0.1	0.10	0.10	104	102	75-125	1	20	
Boron	mg/L	393 ug/L	1	1	1.6	1.6	116	116	75-125	0	20	
Cadmium	mg/L	ND	0.1	0.1	0.10	0.10	101	102	75-125	1	20	
Chromium	mg/L	22.8 ug/L	0.1	0.1	0.13	0.14	112	118	75-125	4	20	
Cobalt	mg/L	0.44J ug/L	0.1	0.1	0.098	0.10	98	101	75-125	3	20	
Lead	mg/L	ND	0.1	0.1	0.095	0.098	94	98	75-125	4	20	
Lithium	mg/L	ND	0.1	0.1	0.10	0.10	103	102	75-125	1	20	
Molybdenum	mg/L	ND	0.1	0.1	0.10	0.11	100	105	75-125	5	20	
Selenium	mg/L	ND	0.1	0.1	0.098	0.10	98	100	75-125	2	20	
Thallium	mg/L	ND	0.1	0.1	0.095	0.099	95	99	75-125	4	20	

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QUALITY CONTROL DATA

Project: McDonough Upgradient Wells-Revised Report
Pace Project No.: 92624376

QC Batch: 724426
QC Batch Method: EPA 7470A
Analysis Method: EPA 7470A
Analysis Description: 7470 Mercury
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92624376001, 92624376002, 92624376003

METHOD BLANK: 3774367 Matrix: Water
Associated Lab Samples: 92624376001, 92624376002, 92624376003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	ND	0.00020	0.00013	09/22/22 17:16	

LABORATORY CONTROL SAMPLE: 3774368

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.0025	0.0024	98	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3774369 3774370

Parameter	Units	92624373001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	mg/L	0.00014J	0.0025	0.0025	0.0025	0.0025	93	93	75-125	1	20	

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QUALITY CONTROL DATA

Project: McDonough Upgradient Wells-Revised Report
Pace Project No.: 92624376

QC Batch: 722447
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: 92624376001, 92624376002

METHOD BLANK: 3764210 Matrix: Water
Associated Lab Samples: 92624376001, 92624376002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	25.0	10.0	09/09/22 14:58	

LABORATORY CONTROL SAMPLE: 3764211

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	382	96	80-120	

SAMPLE DUPLICATE: 3764212

Parameter	Units	92623815001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	351	346	1	10	

SAMPLE DUPLICATE: 3764213

Parameter	Units	92624372006 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	102	107	5	10	

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QUALITY CONTROL DATA

Project: McDonough Upgradient Wells-Revised Report
Pace Project No.: 92624376

QC Batch: 722879
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: 92624376003

METHOD BLANK: 3766430 Matrix: Water
Associated Lab Samples: 92624376003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	25.0	10.0	09/14/22 12:25	

LABORATORY CONTROL SAMPLE: 3766431

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	383	96	80-120	

SAMPLE DUPLICATE: 3766432

Parameter	Units	92624372008 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	261	266	2	10	

SAMPLE DUPLICATE: 3766433

Parameter	Units	92624840016 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	238	250	5	10	

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QUALITY CONTROL DATA

Project: McDonough Upgradient Wells-Revised Report
Pace Project No.: 92624376

QC Batch: 723206
QC Batch Method: SM 2320B-2011
Analysis Method: SM 2320B-2011
Analysis Description: 2320B Alkalinity
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92624376001, 92624376002, 92624376003

METHOD BLANK: 3768028 Matrix: Water
Associated Lab Samples: 92624376001, 92624376002, 92624376003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Alkalinity, Total as CaCO3	mg/L	ND	5.0	5.0	09/14/22 14:56	
Alkalinity,Bicarbonate (CaCO3)	mg/L	ND	5.0	5.0	09/14/22 14:56	
Alkalinity,Carbonate (CaCO3)	mg/L	ND	5.0	5.0	09/14/22 14:56	

LABORATORY CONTROL SAMPLE: 3768029

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	50	50.2	100	80-120	

LABORATORY CONTROL SAMPLE: 3768030

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	50	50.8	102	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3768031 3768032

Parameter	Units	92625359004 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	324	50	50	353	349	58	51	80-120	1	25	M1

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3768033 3768034

Parameter	Units	92624372011 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	134	50	50	193	185	118	102	80-120	4	25	

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QUALITY CONTROL DATA

Project: McDonough Upgradient Wells-Revised Report
Pace Project No.: 92624376

QC Batch: 722303
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: 92624376001, 92624376002

METHOD BLANK: 3763468 Matrix: Water
Associated Lab Samples: 92624376001, 92624376002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.60	09/09/22 22:31	
Fluoride	mg/L	ND	0.10	0.050	09/09/22 22:31	
Sulfate	mg/L	ND	1.0	0.50	09/09/22 22:31	

LABORATORY CONTROL SAMPLE: 3763469

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	50.6	101	90-110	
Fluoride	mg/L	2.5	2.5	100	90-110	
Sulfate	mg/L	50	50.5	101	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3763470 3763471

Parameter	Units	92624373001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	16.4	50	50	68.2	69.0	103	105	90-110	1	10	
Fluoride	mg/L	0.11	2.5	2.5	2.4	2.5	93	94	90-110	1	10	
Sulfate	mg/L	263	50	50	311	309	96	92	90-110	1	10	

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QUALITY CONTROL DATA

Project: McDonough Upgradient Wells-Revised Report
Pace Project No.: 92624376

QC Batch: 722843
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: 92624376003

METHOD BLANK: 3766296 Matrix: Water
Associated Lab Samples: 92624376003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.60	09/13/22 12:35	
Fluoride	mg/L	ND	0.10	0.050	09/13/22 12:35	
Sulfate	mg/L	ND	1.0	0.50	09/13/22 12:35	

LABORATORY CONTROL SAMPLE: 3766297

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	50.4	101	90-110	
Fluoride	mg/L	2.5	2.5	100	90-110	
Sulfate	mg/L	50	50.8	102	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3766298 3766299

Parameter	Units	92624945004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	938	50	50	975	975	73	74	90-110	0	10	M1
Fluoride	mg/L	ND	2.5	2.5	3.3J	3.8J	132	151	90-110		10	M1
Sulfate	mg/L	3180	50	50	3170	3160	-30	-43	90-110	0	10	M1

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3766300 3766301

Parameter	Units	92624372011 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	5.4	50	50	57.1	58.0	103	105	90-110	2	10	
Fluoride	mg/L	0.082J	2.5	2.5	2.4	2.4	92	92	90-110	0	10	
Sulfate	mg/L	96.6	50	50	150	153	106	113	90-110	2	10	M1

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QUALIFIERS

Project: McDonough Upgradient Wells-Revised Report
Pace Project No.: 92624376

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.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: McDonough Upgradient Wells-Revised Report
Pace Project No.: 92624376

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92624376001	**DGWA-70A**				
92624376002	**DGWA-71**				
92624376003	**DGWA-53**				
92624376001	**DGWA-70A**	EPA 3010A	724698	EPA 6010D	724853
92624376002	**DGWA-71**	EPA 3010A	724698	EPA 6010D	724853
92624376003	**DGWA-53**	EPA 3010A	724698	EPA 6010D	724853
92624376001	**DGWA-70A**	EPA 3005A	724800	EPA 6020B	724886
92624376002	**DGWA-71**	EPA 3005A	724800	EPA 6020B	724886
92624376003	**DGWA-53**	EPA 3005A	724800	EPA 6020B	724886
92624376001	**DGWA-70A**	EPA 7470A	724426	EPA 7470A	725130
92624376002	**DGWA-71**	EPA 7470A	724426	EPA 7470A	725130
92624376003	**DGWA-53**	EPA 7470A	724426	EPA 7470A	725130
92624376001	**DGWA-70A**	SM 2540C-2015	722447		
92624376002	**DGWA-71**	SM 2540C-2015	722447		
92624376003	**DGWA-53**	SM 2540C-2015	722879		
92624376001	**DGWA-70A**	SM 2320B-2011	723206		
92624376002	**DGWA-71**	SM 2320B-2011	723206		
92624376003	**DGWA-53**	SM 2320B-2011	723206		
92624376001	**DGWA-70A**	EPA 300.0 Rev 2.1 1993	722303		
92624376002	**DGWA-71**	EPA 300.0 Rev 2.1 1993	722303		
92624376003	**DGWA-53**	EPA 300.0 Rev 2.1 1993	722843		

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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 ☐

WO# : 92624376

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: 9/8/22 JM

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: 2.1 **Correction Factor:** Add/Subtract (°C) 0.0

Cooler Temp Corrected (°C): 2.1

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. 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: WG				
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#: 92624376

PM: NMG Due Date: 09/22/22

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)	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 (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)	6PIN	BP3A-250 mL Plastic (NH2)2SO4 (9.3-9.7)	AG0U-100 mL Amber Unpreserved vials (	VSGU-20 mL Scintillation vials (N/A)	DG9U-40 mL Amber Unpreserved vials (
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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.

Pace Analytical

CHAIN-OF-CUSTODY / Analytical Request Document

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

Page : 1 Of 1

Section A	Section B	Section C
Required Client Information:	Required Project Information:	Invoice Information:
Company: Georgia Power - Coal Combustion Residuals	Report To: Lauren Coker	Attention: scainvoices@southernco.com
Address: 2480 Maner Road Atlanta, GA 30339	Copy To: Golder	Company Name:
Email: laucoker@southernco.com	Purchase Order #:	Address:
Phone: (470) 620-6176 Fax:	Project Name: Plant McDonough Upgradient Wells	Pace Quote:
Requested Due Date: 10 Day TAT	Project #: GL166849621	Pace Project Manager: Nicole D'Oleo
		Pace Profile #:

Regulatory Agency

State / Location: GA

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID (One Character per box. (A-Z, 0-9 / , -) Sample ids must be unique)	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	DATE	TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved - Ice	H2SO4	HNO3 + Ice	HCl	NaOH + Zn Acetate	Na2S2O3	Methanol	Other	Analyses Test Y/N	App III/IV Total Metals	Cl, F, SO4, TDS	Radium 226/228	Mg, Na, K	CO3+HCO2	Fe Total, Fe 3+	Residual Chlorine (Y/N)	
	MATRIX: Drinking Water DW, Water WT, Waste Water WW, Product P, Soil/Solid SL, Oil OL, Wipe WP, Air AR, Other OT, Tissue TS															N	N	N	N	N	N		
3	DGWA-70A	WG	G	9/7/2022	9:35		6	3		3							X	X	X	X	X	X		pH = 5.80, Fe2 = 0.0 mg/L
5	DGWA-71	WG	G	9/7/2022	10:24		6	3		3							X	X	X	X	X	X		pH = 5.65, Fe2 = 0.0 mg/L
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ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
JUDE WAGUESPACK	[signature] / SAMPLER	9/8/22	8:40	M. BAH	9-8-22	8:40	
				[signature]	9/8/22	0945	

DATE Signed: 9/8/22

EMP in C | Received on ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N)

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:	Lauren Coker	Attention:	scsinvoices@southernco.com
Address:	2460 Maner Road	Copy To:	Golder	Company Name:	
	Atlanta, GA 30339			Address:	
Email:	laucoker@southernco.com	Purchase Order #:		Pace Quote:	
Phone:	(470) 620-6176 Fax	Project Name:	Plant McDonough Upgradient Wells	Pace Project Manager:	Nicole D'Olen
Requested Due Date:	10 Day TAT	Project #:	GL166849622	Pace Profile #:	

Regulatory Agency: —

State / Location: GA

ITEM #	SAMPLE ID (One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique)	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	DATE	TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved - Ice	H2SO4	HNO3 + Ice	HCl	NaOH + Zn Acetate	Na2S2O3	Methanol	Other	Analyses Test Y/N	Requested Analysis Filtered (Y/N): App III/IV Total Metals	Cl, F, SO4, TDS	Radium 226/228	Mg, Na, K	CO3+HCO2	Fe Total, Fe 3+	Residual Chlorine (Y/N)	4376
	MATRIX CODE: Drinking Water DW; Water WT; Waste Water WW; Product P; Soil/Solid SL; Oil OL; Wipe WP; Air AR; Other OT; Tissue TS															Y/N	N	N	N	N	N	N		
3	DGWA-53	WG	G	9/8/2022	13:28		6	3		3							X	X	X	X	X	X		pH = 6.32, Fe2 = 3.0 mg/L
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ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
	Mark Mann / Golder	09/09/22	15:50	Chuck Hentz	9/9/22	1550	

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: 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 #:

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

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

Date/Initials Person Examining Contents: 9/9/22 JM

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

Thermometer: ☐ IR Gun ID: 230

Type of Ice: ☑ Wet ☐ Blue ☐ None

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

Cooler Temp: 2.4 Correction Factor: Add/Subtract (°C) 0.0

Cooler Temp Corrected (°C): 2.4

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: _____

Pace

DC#_Title: ENV-FRM-HUN1-0083 v01_Sample Condition Upon Receipt

Effective Date: 05/12/2022

***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**

*****Check all unpreserved Nitrates for chlorine**

Project #

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)	DG9A-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)	DG9V-40 mL VOA H3PO4 (N/A)	DG9S-40 mL VOA H2SO4 (N/A)	V/GK (3 vials per kit)-VPH/Gas kit (N/A)	SPST-125 mL Sterile Plastic (N/A – lab)	SP2T-250 mL Sterile Plastic (N/A – lab)	BPIV	BP3R-250 mL Plastic (NH2)2SO4 (9.3-9.7)	AG0U-100 mL Amber Unpreserved (N/A) (Cl-)	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 DENR Certification Office (i.e. Out of hold, incorrect preservative, out of temp, incorrect containers

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

November 04, 2022

Andrea McClure
WSP/Golder
5170 Peachtree Road
Building 100, Suite 300
Atlanta, GA 30341

RE: Project: McDonough Upgradient Wells Rad-Revised Report
Pace Project No.: 92624378

Dear Andrea McClure:

Enclosed are the analytical results for sample(s) received by the laboratory between September 08, 2022 and September 09, 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

Revision 1: Issued on 11/4/22 to include Radium QC Sheets.

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

Sincerely,

Nicole D'Oleo

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

Enclosures

cc: Joju Abraham, Georgia Power-CCR
Stephen Benda, Southern Company
Noelia Gangi, Georgia Power
Daniela Herrera, Golder
Ben Hodges, Georgia Power
Kristen Jurinko
Laura Midkiff, Georgia Power
Karim Minkara, Golder Associates - Atlanta
J. Shelby Mobley, Southern Company
Charles Norton, Southern Company
Ms. Lauren Petty, Southern Company
Dawn Prell, Golder Associates Inc.
Michael Smilley, Georgia Power
Yong Cheng Soo, WSP/Golder
Tina Sullivan, ERM

REPORT OF LABORATORY ANALYSIS

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

CERTIFICATIONS

Project: McDonough Upgradient Wells Rad-Revised Report
Pace Project No.: 92624378

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: McDonough Upgradient Wells Rad-Revised Report
Pace Project No.: 92624378

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92624378001	**DGWA-70A**	Water	09/07/22 09:35	09/08/22 09:45
92624378002	**DGWA-71**	Water	09/07/22 10:24	09/08/22 09:45
92624378003	**DGWA-53**	Water	09/08/22 13:28	09/09/22 15:50

REPORT OF LABORATORY ANALYSIS

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SAMPLE ANALYTE COUNT

Project: McDonough Upgradient Wells Rad-Revised Report
Pace Project No.: 92624378

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92624378001	**DGWA-70A**	EPA 9315	RMS	1	PASI-PA
		EPA 9320	CMC	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92624378002	**DGWA-71**	EPA 9315	RMS	1	PASI-PA
		EPA 9320	CMC	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92624378003	**DGWA-53**	EPA 9315	RMS	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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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: McDonough Upgradient Wells Rad-Revised Report
Pace Project No.: 92624378

Sample: DGWA-70A **Lab ID: 92624378001** Collected: 09/07/22 09:35 Received: 09/08/22 09:45 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.115 ± 0.101 (0.182) C:97% T:NA**	pCi/L	09/27/22 09:19	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.389 ± 0.508 (1.08) C:70% T:94%**	pCi/L	09/23/22 19:06	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.504 ± 0.609 (1.26)**	pCi/L	09/27/22 14:32	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: McDonough Upgradient Wells Rad-Revised Report
Pace Project No.: 92624378

Sample: DGWA-71 **Lab ID: 92624378002** Collected: 09/07/22 10:24 Received: 09/08/22 09:45 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.169 ± 0.115 (0.181) C:99% T:NA**	pCi/L	09/27/22 09:19	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.419 ± 0.516 (1.09) C:71% T:86%**	pCi/L	09/23/22 19:06	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.588 ± 0.631 (1.27)**	pCi/L	09/27/22 14:32	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: McDonough Upgradient Wells Rad-Revised Report
Pace Project No.: 92624378

Sample: DGWA-53 **Lab ID: 92624378003** Collected: 09/08/22 13:28 Received: 09/09/22 15:50 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	**0.878 ± 0.244 (0.129) C:93% T:NA**	pCi/L	10/02/22 10:26	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.814 ± 0.382 (0.636) C:74% T:92%**	pCi/L	09/28/22 12:21	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.69 ± 0.626 (0.765)**	pCi/L	10/03/22 12:21	7440-14-4	

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QUALITY CONTROL - RADIOCHEMISTRY

Project: McDonough Upgradient Wells Rad-Revised Report
Pace Project No.: 92624378

QC Batch: 533110
QC Batch Method: EPA 9315
Analysis Method: EPA 9315
Analysis Description: 9315 Total Radium
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92624378003

METHOD BLANK: 2586601 Matrix: Water
Associated Lab Samples: 92624378003

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.00759 ± 0.0468 (0.133) C:88% T:NA	pCi/L	10/02/22 10:24	

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.

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QUALITY CONTROL - RADIOCHEMISTRY

Project: McDonough Upgradient Wells Rad-Revised Report
Pace Project No.: 92624378

QC Batch: 532087
QC Batch Method: EPA 9315
Analysis Method: EPA 9315
Analysis Description: 9315 Total Radium
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92624378001, 92624378002

METHOD BLANK: 2581306 Matrix: Water
Associated Lab Samples: 92624378001, 92624378002

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.122 ± 0.122 (0.241) C:95% T:NA	pCi/L	09/27/22 08:34	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL - RADIOCHEMISTRY

Project: McDonough Upgradient Wells Rad-Revised Report
Pace Project No.: 92624378

QC Batch: 533111
QC Batch Method: EPA 9320
Analysis Method: EPA 9320
Analysis Description: 9320 Radium 228
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92624378003

METHOD BLANK: 2586603
Matrix: Water
Associated Lab Samples: 92624378003

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.798 ± 0.368 (0.604) C:81% T:85%	pCi/L	09/28/22 11:36	

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

QUALITY CONTROL - RADIOCHEMISTRY

Project: McDonough Upgradient Wells Rad-Revised Report
Pace Project No.: 92624378

QC Batch: 532089
QC Batch Method: EPA 9320
Analysis Method: EPA 9320
Analysis Description: 9320 Radium 228
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92624378001, 92624378002

METHOD BLANK: 2581322 Matrix: Water
Associated Lab Samples: 92624378001, 92624378002

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.391 ± 0.413 (0.858) C:74% T:78%	pCi/L	09/23/22 16:00	

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

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without the written consent of Pace Analytical Services, LLC.

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

QUALIFIERS

Project: McDonough Upgradient Wells Rad-Revised Report
Pace Project No.: 92624378

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.

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

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: McDonough Upgradient Wells Rad-Revised Report
Pace Project No.: 92624378

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92624378001	**DGWA-70A**	EPA 9315	532087		
92624378002	**DGWA-71**	EPA 9315	532087		
92624378003	**DGWA-53**	EPA 9315	533110		
92624378001	**DGWA-70A**	EPA 9320	532089		
92624378002	**DGWA-71**	EPA 9320	532089		
92624378003	**DGWA-53**	EPA 9320	533111		
92624378001	**DGWA-70A**	Total Radium Calculation	535756		
92624378002	**DGWA-71**	Total Radium Calculation	535756		
92624378003	**DGWA-53**	Total Radium Calculation	536982		

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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# : 92624378

92624378

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

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

Date/Initials Person Examining Contents: 9/8/22 JM

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: 2.1 **Correction Factor:** Add/Subtract (°C) 0.0

Cooler Temp Corrected (°C): 2.1

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. 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: WG				
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 #

WO# : 92624378

PM: NMG Due Date: 09/29/22

CLIENT: GA-GA Power

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)	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 (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				
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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: 2480 Maner Road, Atlanta, GA 30339
Email: laucoker@southernco.com
Phone: (470) 620-6176 Fax:
Requested Due Date: 10 Day TAT

Section B — Required Project Information:
Report To: Lauren Coker
Copy To: Golder
Purchase Order #:
Project Name: Plant McDonough Upgradient Wells
Project #: GL166849621

Section C — Invoice Information:
Attention: scsinvoices@southernco.com
Company Name:
Address:
Pace Quote:
Pace Project Manager: Nicole D'Oleo
Pace Profile #:

Regulatory Agency:
State / Location: GA

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

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

Requested Analysis Filtered (Y/N): N N N N N N

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 Y/N	App III/IV Total Metals	Cl, F, SO4, TDS	Radium 226/228	Mg, Na, K	CO3+HCO2	Fe Total, Fe 3+	Residual Chlorine (Y/N)	
3	DGWA-70A	WG	G	9/7/2022	9:35		6	3		3							X	X	X	X	X	X		pH = 5.60, Fe2 = 0.0 mg/L
5	DGWA-71	WG	G	9/7/2022	10:24		6	3		3							X	X	X	X	X	X		pH = 5.65, Fe2 = 0.0 mg/L
6																								
7																								
8																								
9																								
10																								
11																								
12																								
13																								
14																								
15																								

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
JUDE WAGUESPACK	[signature] / SAMPLER	9/8/22	8:40	M. BAH	9-8-22	8:40	
				[signature]	9/8/22	0945	

DATE Signed: 9/8/22

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: 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 #:**

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

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

Date/Initials Person Examining Contents: 9/9/22 JM

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: 2.4 **Correction Factor:** Add/Subtract (°C) 0.0

Cooler Temp Corrected (°C): 2.4

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:** _____

*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
***Check all unpreserved Nitrates for chlorine

Project #

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)	DG94-250 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)	DG9V-40 mL VOA H3PO4 (N/A)	DG9S-40 mL VOA H2SO4 (N/A)	V/GK (3 vials per kit)-VPH/Gas kit (N/A)	SPST-125 mL Sterile Plastic (N/A – lab)	SP2T-250 mL Sterile Plastic (N/A – lab)	BPIV	BP3R-250 mL Plastic (NH2)2SO4 (9.3-9.7)	AG0U-100 mL Amber Unpreserved (N/A) (Cl-)	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 DENR 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:	Lauren Coker	Attention:	scsinvoices@southernco.com	
Address:	2460 Maner Road	Copy To:	Golder	Company Name:		
	Atlanta, GA 30339			Address:		Regulatory Agency
Email:	laucoker@southernco.com	Purchase Order #:		Pace Quote:		
Phone:	(470) 620-6176 Fax	Project Name:	Plant McDonough Upgradient Wells	Pace Project Manager:	Nicole D'Oleo	State / Location
Requested Due Date:	10 Day TAT	Project #:	GL166849622	Pace Profile #:		GA

ITEM #	SAMPLE ID (One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique)	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	DATE	TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved - Ice	H2SO4	HNO3 + Ice	HCl	NaOH + Zn Acetate	Na2S2O3	Methanol	Other	Analyses Test Y/N	App III/IV Total Metals	Cl, F, SO4, TDS	Radium 226/228	Mg, Na, K	CO3+HCO2	Fe Total, Fe 3+	Residual Chlorine (Y/N)	4378
	MATRIX CODE: Drinking Water DW, Water WT, Waste Water WW, Product P, Soil/Solid SL, Oil OL, Wipe WP, Air AR, Other OT, Tissue TS															Requested Analysis Filtered (Y/N)	N	N	N	N	N	N		
3	DGWA-53	WG	G	9/8/2022	13:28		6	3		3							X	X	X	X	X	X		pH = 6.32, Fe2 = 3.0 mg/L
5																								
6																								
7																								
8																								
9																								
10																								
11																								
12																								
13																								
14																								
15																								

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
	Mark Mann / Golder	09/09/22	15:50	Claudia Hentz	9/9/22	1550	

DATE Signed:

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

Quality Control Sample Performance Assessment

Pace Analytical
www.pacelabs.com

Test:	Ra-226
Analyst:	RMS
Date:	9/20/2022
Worklist:	68887
Matrix:	DW

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	2586601
MB concentration:	0.008
MB Counting Uncertainty:	0.047
MB MDC:	0.133
MB Numerical Performance Indicator:	0.32
MB Status vs Numerical Indicator:	N/A
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	LCSD (Y or N)?	N
	LCS68887	LCSD68887
Count Date:	10/2/2022	
Spike I.D.:	19-033	
Decay Corrected Spike Concentration (pCi/mL):	24.023	
Volume Used (mL):	0.10	
Aliquot Volume (L, g, F):	0.505	
Target Conc. (pCi/L, g, F):	4.760	
Uncertainty (Calculated):	0.057	
Result (pCi/L, g, F):	3.993	
LCS/LCSD Counting Uncertainty (pCi/L, g, F):	0.431	
Numerical Performance Indicator:	-3.46	
Percent Recovery:	83.89%	
Status vs Numerical Indicator:	N/A	
Status vs Recovery:	Pass	
Upper % Recovery Limits:	125%	
Lower % Recovery Limits:	75%	

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

Duplicate Sample Assessment		
Sample I.D.:	92624832001	92624832001
Duplicate Sample I.D.	92624832001DUP	92624832002
Sample Result (pCi/L, g, F):	0.124	0.124
Sample Result Counting Uncertainty (pCi/L, g, F):	0.091	0.091
Sample Duplicate Result (pCi/L, g, F):	0.071	0.187
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):	0.074	0.104
Are sample and/or duplicate results below RL?	See Below ##	See Below ##
Duplicate Numerical Performance Indicator:	0.874	-0.888
Duplicate RPD:	53.80%	40.52%
Duplicate Status vs Numerical Indicator:	N/A	N/A
Duplicate Status vs RPD:	Fail***	Fail***
% 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:

10/3/22

***~~Batch must be re-prepped due to unacceptable precision~~ N/A

LAM 10/3/22

LAM 10/3/22

Quality Control Sample Performance Assessment

Pace Analytical
www.pacelabs.com

Test:	Ra-228
Analyst:	VAL
Date:	9/14/2022
Worklist:	68823
Matrix:	WT

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	2581322
MB concentration:	0.391
MB 2 Sigma CSU:	0.413
MB MDC:	0.858
MB Numerical Performance Indicator:	1.86
MB Status vs Numerical Indicator:	Pass
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	LCSD (Y or N)?	Y
	LCS68823	LCSD68823
Count Date:	9/23/2022	9/23/2022
Spike I.D.:	20-030	20-030
Decay Corrected Spike Concentration (pCi/mL):	30.094	30.094
Volume Used (mL):	0.10	0.10
Aliquot Volume (L, g, F):	0.812	0.815
Target Conc. (pCi/L, g, F):	3.707	3.693
Uncertainty (Calculated):	0.182	0.181
Result (pCi/L, g, F):	3.342	3.360
LCS/LCSD 2 Sigma CSU (pCi/L, g, F):	0.875	0.865
Numerical Performance Indicator:	-0.80	-0.74
Percent Recovery:	90.14%	90.99%
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.:	LCS68823	Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Duplicate Sample I.D.	LCSD68823	
Sample Result (pCi/L, g, F):	3.342	
Sample Result 2 Sigma CSU (pCi/L, g, F):	0.875	
Sample Duplicate Result (pCi/L, g, F):	3.360	
Sample Duplicate Result 2 Sigma CSU (pCi/L, g, F):	0.865	
Are sample and/or duplicate results below RL?	NO	
Duplicate Numerical Performance Indicator:	-0.030	
(Based on the LCS/LCSD Percent Recoveries) Duplicate RPD:	0.94%	
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

Pace Analytical
www.pacelabs.com

Test:	Ra-228
Analyst:	VAL
Date:	9/19/2022
Worklist:	68888
Matrix:	WT

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	2586603
MB concentration:	0.798
M/B 2 Sigma CSU:	0.368
MB MDC:	0.604
MB Numerical Performance Indicator:	4.25
MB Status vs Numerical Indicator:	Fail*
MB Status vs. MDC:	See Comment*

Laboratory Control Sample Assessment	LCSD (Y or N)?	Y
	LCS68888	LCSD68888
Count Date:	9/28/2022	9/28/2022
Spike I.D.:	22-029	22-029
Decay Corrected Spike Concentration (pCi/mL):	19.913	19.913
Volume Used (mL):	0.20	0.20
Aliquot Volume (L, g, F):	0.808	0.809
Target Conc. (pCi/L, g, F):	4.927	4.925
Uncertainty (Calculated):	0.355	0.355
Result (pCi/L, g, F):	5.626	5.197
LCS/LCSD 2 Sigma CSU (pCi/L, g, F):	1.255	1.158
Numerical Performance Indicator:	1.05	0.44
Percent Recovery:	114.19%	105.52%
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.:	LCS68888	Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Duplicate Sample I.D.	LCSD68888	
Sample Result (pCi/L, g, F):	5.626	
Sample Result 2 Sigma CSU (pCi/L, g, F):	1.255	
Sample Duplicate Result (pCi/L, g, F):	5.197	
Sample Duplicate Result 2 Sigma CSU (pCi/L, g, F):	1.158	
Are sample and/or duplicate results below RL?	NO	
Duplicate Numerical Performance Indicator:	0.493	
(Based on the LCS/LCSD Percent Recoveries) Duplicate RPD:	7.89%	
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:
*The method blank result is below the reporting limit for this analysis and is acceptable.

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

November 10, 2022

Andrea McClure
WSP/Golder
5170 Peachtree Road
Building 100, Suite 300
Atlanta, GA 30341

RE: Project: Plant McDonough AP-1-Revised Report
Pace Project No.: 92624372

Dear Andrea McClure:

Enclosed are the analytical results for sample(s) received by the laboratory between September 08, 2022 and September 13, 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

Revision 1: Issued on 11/10/22 to remove Manganese.

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

Sincerely,

Nicole D'oleo

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

Enclosures

cc: Joju Abraham, Georgia Power-CCR
Stephen Benda, Southern Company
Noelia Gangi, Georgia Power
Daniela Herrera, Golder
Ben Hodges, Georgia Power
Kristen Jurinko
Laura Midkiff, Georgia Power
Karim Minkara, Golder Associates - Atlanta
J. Shelby Mobley, Southern Company
Charles Norton, Southern Company
Ms. Lauren Petty, Southern Company
Dawn Prell, Golder Associates Inc.

REPORT OF LABORATORY ANALYSIS

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cc: Michael Smilley, Georgia Power
Yong Cheng Soo, WSP/Golder
Tina Sullivan, ERM

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CERTIFICATIONS

Project: Plant McDonough AP-1-Revised Report
Pace Project No.: 92624372

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

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SAMPLE SUMMARY

Project: Plant McDonough AP-1-Revised Report
Pace Project No.: 92624372

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92624372001	**DGWC-39**	Water	09/07/22 14:44	09/08/22 09:45
92624372002	**DGWC-40**	Water	09/07/22 12:13	09/08/22 09:45
92624372003	**DGWC-68A**	Water	09/07/22 15:10	09/08/22 09:45
92624372004	**FB-1**	Water	09/07/22 15:15	09/08/22 09:45
92624372005	**DUP-1**	Water	09/07/22 00:00	09/08/22 09:45
92624372006	**DGWC-69**	Water	09/07/22 11:50	09/08/22 09:45
92624372007	**DGWC-67**	Water	09/08/22 11:00	09/09/22 15:50
92624372008	**DGWC-121**	Water	09/08/22 12:55	09/09/22 15:50
92624372009	**EB-1**	Water	09/08/22 11:30	09/09/22 15:50
92624372010	**FB-2**	Water	09/08/22 13:00	09/09/22 15:50
92624372011	**DGWC-37**	Water	09/09/22 11:38	09/09/22 15:50
92624372012	**DGWC-38**	Water	09/12/22 12:12	09/13/22 10:30
92624372013	**FB-3**	Water	09/12/22 12:10	09/13/22 10:30

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SAMPLE ANALYTE COUNT

Project: Plant McDonough AP-1-Revised Report
Pace Project No.: 92624372

Lab ID	Sample ID	Method	Analysts	Analytes Reported
92624372001	**DGWC-39**	EPA 6010D	DRB	5
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	BTS	1
		SM 2320B-2011	SMS	3
		EPA 300.0 Rev 2.1 1993	JCM	3
92624372002	**DGWC-40**	EPA 6010D	DRB	5
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	BTS	1
		SM 2320B-2011	SMS	3
		EPA 300.0 Rev 2.1 1993	JCM	3
92624372003	**DGWC-68A**	EPA 6010D	DRB	5
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	BTS	1
		SM 2320B-2011	SMS	3
		EPA 300.0 Rev 2.1 1993	JCM	3
92624372004	**FB-1**	EPA 6010D	DRB	5
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	BTS	1
		SM 2320B-2011	SMS	3
		EPA 300.0 Rev 2.1 1993	JCM	3
92624372005	**DUP-1**	EPA 6010D	DRB	5
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	BTS	1
		SM 2320B-2011	SMS	3
		EPA 300.0 Rev 2.1 1993	JCM	3
92624372006	**DGWC-69**	EPA 6010D	DRB	5
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	BTS	1
		SM 2320B-2011	SMS	3
		EPA 300.0 Rev 2.1 1993	JCM	3
92624372007	**DGWC-67**	EPA 6010D	DRB	5

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SAMPLE ANALYTE COUNT

Project: Plant McDonough AP-1-Revised Report
Pace Project No.: 92624372

Lab ID	Sample ID	Method	Analysts	Analytes Reported
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	BTS	1
		SM 2320B-2011	SMS	3
		EPA 300.0 Rev 2.1 1993	CDC	3
92624372008	**DGWC-121**	EPA 6010D	DRB	5
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	BTS	1
		SM 2320B-2011	SMS	3
		EPA 300.0 Rev 2.1 1993	CDC	3
92624372009	**EB-1**	EPA 6010D	DRB	5
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	BTS	1
		SM 2320B-2011	SMS	3
		EPA 300.0 Rev 2.1 1993	CDC	3
92624372010	**FB-2**	EPA 6010D	DRB	5
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	BTS	1
		SM 2320B-2011	SMS	3
		EPA 300.0 Rev 2.1 1993	CDC	3
92624372011	**DGWC-37**	EPA 6010D	DRB	5
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	BTS	1
		SM 2320B-2011	SMS	3
		EPA 300.0 Rev 2.1 1993	CDC	3
92624372012	**DGWC-38**	EPA 6010D	DRB	5
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	BTS	1
		SM 2320B-2011	SMS	3
		EPA 300.0 Rev 2.1 1993	CDC	3
92624372013	**FB-3**	EPA 6010D	DRB	5
		EPA 6020B	CW1	13

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SAMPLE ANALYTE COUNT

Project: Plant McDonough AP-1-Revised Report
Pace Project No.: 92624372

Lab ID	Sample ID	Method	Analysts	Analytes Reported
		EPA 7470A	VB	1
		SM 2540C-2015	BTS	1
		SM 2320B-2011	SMS	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

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Plant McDonough AP-1-Revised Report
Pace Project No.: 92624372

Sample: DGWC-39 **Lab ID: 92624372001** Collected: 09/07/22 14:44 Received: 09/08/22 09:45 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		09/08/22 13:38		
pH	**6.43**	Std. Units			1		09/08/22 13:38		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Iron	**12.3**	mg/L	0.040	0.025	1	09/21/22 17:50	09/22/22 18:37	7439-89-6	
Potassium	**2.9**	mg/L	0.20	0.15	1	09/21/22 17:50	09/22/22 18:37	7440-09-7	
Sodium	**13.6**	mg/L	1.0	0.58	1	09/21/22 17:50	09/22/22 18:37	7440-23-5	
Calcium	**92.5**	mg/L	1.0	0.12	1	09/21/22 17:50	09/22/22 18:37	7440-70-2	
Magnesium	**22.4**	mg/L	0.050	0.012	1	09/21/22 17:50	09/22/22 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	09/22/22 18:15	09/24/22 17:43	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0022	1	09/22/22 18:15	09/24/22 17:43	7440-38-2	
Barium	**0.099**	mg/L	0.0050	0.00067	1	09/22/22 18:15	09/24/22 17:43	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	09/22/22 18:15	09/24/22 17:43	7440-41-7	
Boron	**3.3**	mg/L	0.040	0.0086	1	09/22/22 18:15	09/24/22 17:43	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	09/22/22 18:15	09/24/22 17:43	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	09/22/22 18:15	09/24/22 17:43	7440-47-3	
Cobalt	**0.0065**	mg/L	0.0050	0.00039	1	09/22/22 18:15	09/24/22 17:43	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	09/22/22 18:15	09/24/22 17:43	7439-92-1	
Lithium	ND	mg/L	0.030	0.00073	1	09/22/22 18:15	09/24/22 17:43	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	09/22/22 18:15	09/24/22 17:43	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	09/22/22 18:15	09/24/22 17:43	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	09/22/22 18:15	09/24/22 17:43	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	09/22/22 14:00	09/22/22 18:01	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**449**	mg/L	25.0	10.0	1		09/09/22 14:58		
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville								
Alkalinity,Bicarbonate (CaCO3)	**256**	mg/L	5.0	5.0	1		09/13/22 15:15		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		09/13/22 15:15		
Alkalinity, Total as CaCO3	**256**	mg/L	5.0	5.0	1		09/13/22 15:15		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**8.2**	mg/L	1.0	0.60	1		09/09/22 20:39	16887-00-6	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Plant McDonough AP-1-Revised Report
Pace Project No.: 92624372

Sample: DGWC-39 **Lab ID: 92624372001** Collected: 09/07/22 14:44 Received: 09/08/22 09:45 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								
Fluoride	**0.11**	mg/L	0.10	0.050	1		09/09/22 20:39	16984-48-8	
Sulfate	**146**	mg/L	3.0	1.5	3		09/10/22 01:50	14808-79-8	

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ANALYTICAL RESULTS

Project: Plant McDonough AP-1-Revised Report
Pace Project No.: 92624372

Sample: DGWC-40 **Lab ID: 92624372002** Collected: 09/07/22 12:13 Received: 09/08/22 09:45 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		09/08/22 13:38		
pH	**4.54**	Std. Units			1		09/08/22 13:38		
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	09/21/22 17:50	09/22/22 18:42	7439-89-6	
Potassium	**5.9**	mg/L	0.20	0.15	1	09/21/22 17:50	09/22/22 18:42	7440-09-7	
Sodium	**19.2**	mg/L	1.0	0.58	1	09/21/22 17:50	09/22/22 18:42	7440-23-5	
Calcium	**44.8**	mg/L	1.0	0.12	1	09/21/22 17:50	09/22/22 18:42	7440-70-2	
Magnesium	**19.4**	mg/L	0.050	0.012	1	09/21/22 17:50	09/22/22 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	09/22/22 18:15	09/24/22 18:06	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0022	1	09/22/22 18:15	09/24/22 18:06	7440-38-2	
Barium	**0.016**	mg/L	0.0050	0.00067	1	09/22/22 18:15	09/24/22 18:06	7440-39-3	
Beryllium	**0.0031**	mg/L	0.00050	0.000054	1	09/22/22 18:15	09/24/22 18:06	7440-41-7	
Boron	**0.84**	mg/L	0.040	0.0086	1	09/22/22 18:15	09/24/22 18:06	7440-42-8	
Cadmium	**0.00081**	mg/L	0.00050	0.00011	1	09/22/22 18:15	09/24/22 18:06	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	09/22/22 18:15	09/24/22 18:06	7440-47-3	
Cobalt	**0.037**	mg/L	0.0050	0.00039	1	09/22/22 18:15	09/24/22 18:06	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	09/22/22 18:15	09/24/22 18:06	7439-92-1	
Lithium	**0.0023J**	mg/L	0.030	0.00073	1	09/22/22 18:15	09/24/22 18:06	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	09/22/22 18:15	09/24/22 18:06	7439-98-7	
Selenium	**0.0018J**	mg/L	0.0050	0.0014	1	09/22/22 18:15	09/24/22 18:06	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	09/22/22 18:15	09/24/22 18:06	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	09/22/22 14:00	09/22/22 18:04	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**339**	mg/L	25.0	10.0	1		09/09/22 14:58		
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville								
Alkalinity,Bicarbonate (CaCO3)	ND	mg/L	5.0	5.0	1		09/13/22 13:10		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		09/13/22 13:10		
Alkalinity, Total as CaCO3	ND	mg/L	5.0	5.0	1		09/13/22 13:10		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**15.0**	mg/L	1.0	0.60	1		09/09/22 20:53	16887-00-6	

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ANALYTICAL RESULTS

Project: Plant McDonough AP-1-Revised Report
Pace Project No.: 92624372

Sample: DGWC-40 **Lab ID: 92624372002** Collected: 09/07/22 12:13 Received: 09/08/22 09:45 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								
Fluoride	**0.14**	mg/L	0.10	0.050	1		09/09/22 20:53	16984-48-8	
Sulfate	**203**	mg/L	4.0	2.0	4		09/10/22 02:05	14808-79-8	

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ANALYTICAL RESULTS

Project: Plant McDonough AP-1-Revised Report
Pace Project No.: 92624372

Sample: DGWC-68A **Lab ID: 92624372003** Collected: 09/07/22 15:10 Received: 09/08/22 09:45 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		09/08/22 13:39		
pH	**6.62**	Std. Units			1		09/08/22 13:39		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Iron	**0.097**	mg/L	0.040	0.025	1	09/21/22 17:50	09/22/22 18:47	7439-89-6	
Potassium	**3.8**	mg/L	0.20	0.15	1	09/21/22 17:50	09/22/22 18:47	7440-09-7	
Sodium	**9.6**	mg/L	1.0	0.58	1	09/21/22 17:50	09/22/22 18:47	7440-23-5	
Calcium	**53.5**	mg/L	1.0	0.12	1	09/21/22 17:50	09/22/22 18:47	7440-70-2	
Magnesium	**17.6**	mg/L	0.050	0.012	1	09/21/22 17:50	09/22/22 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	09/22/22 18:15	09/24/22 18:12	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0022	1	09/22/22 18:15	09/24/22 18:12	7440-38-2	
Barium	**0.098**	mg/L	0.0050	0.00067	1	09/22/22 18:15	09/24/22 18:12	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	09/22/22 18:15	09/24/22 18:12	7440-41-7	
Boron	**2.0**	mg/L	0.040	0.0086	1	09/22/22 18:15	09/24/22 18:12	7440-42-8	
Cadmium	**0.00020J**	mg/L	0.00050	0.00011	1	09/22/22 18:15	09/24/22 18:12	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	09/22/22 18:15	09/24/22 18:12	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	09/22/22 18:15	09/24/22 18:12	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	09/22/22 18:15	09/24/22 18:12	7439-92-1	
Lithium	ND	mg/L	0.030	0.00073	1	09/22/22 18:15	09/24/22 18:12	7439-93-2	
Molybdenum	**0.20**	mg/L	0.010	0.00074	1	09/22/22 18:15	09/24/22 18:12	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	09/22/22 18:15	09/24/22 18:12	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	09/22/22 18:15	09/24/22 18:12	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	09/22/22 14:00	09/22/22 18:06	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**256**	mg/L	25.0	10.0	1		09/09/22 14:58		
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville								
Alkalinity,Bicarbonate (CaCO3)	**201**	mg/L	5.0	5.0	1		09/13/22 13:14		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		09/13/22 13:14		
Alkalinity, Total as CaCO3	**201**	mg/L	5.0	5.0	1		09/13/22 13:14		M1
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		09/09/22 21:07	16887-00-6	

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ANALYTICAL RESULTS

Project: Plant McDonough AP-1-Revised Report
Pace Project No.: 92624372

Sample: DGWC-68A **Lab ID: 92624372003** Collected: 09/07/22 15:10 Received: 09/08/22 09:45 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								
Fluoride	**0.11**	mg/L	0.10	0.050	1		09/09/22 21:07	16984-48-8	
Sulfate	**36.5**	mg/L	1.0	0.50	1		09/09/22 21:07	14808-79-8	

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ANALYTICAL RESULTS

Project: Plant McDonough AP-1-Revised Report
Pace Project No.: 92624372

Sample: FB-1 **Lab ID: 92624372004** Collected: 09/07/22 15:15 Received: 09/08/22 09:45 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	09/21/22 17:50	09/22/22 19:16	7439-89-6	
Potassium	ND	mg/L	0.20	0.15	1	09/21/22 17:50	09/22/22 19:16	7440-09-7	
Sodium	ND	mg/L	1.0	0.58	1	09/21/22 17:50	09/22/22 19:16	7440-23-5	
Calcium	ND	mg/L	1.0	0.12	1	09/21/22 17:50	09/22/22 19:16	7440-70-2	
Magnesium	ND	mg/L	0.050	0.012	1	09/21/22 17:50	09/22/22 19:16	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	09/22/22 18:15	09/24/22 18:18	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0022	1	09/22/22 18:15	09/24/22 18:18	7440-38-2	
Barium	**0.0023J**	mg/L	0.0050	0.00067	1	09/22/22 18:15	09/24/22 18:18	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	09/22/22 18:15	09/24/22 18:18	7440-41-7	
Boron	**0.031J**	mg/L	0.040	0.0086	1	09/22/22 18:15	09/24/22 18:18	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	09/22/22 18:15	09/24/22 18:18	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	09/22/22 18:15	09/24/22 18:18	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	09/22/22 18:15	09/24/22 18:18	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	09/22/22 18:15	09/24/22 18:18	7439-92-1	
Lithium	ND	mg/L	0.030	0.00073	1	09/22/22 18:15	09/24/22 18:18	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	09/22/22 18:15	09/24/22 18:18	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	09/22/22 18:15	09/24/22 18:18	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	09/22/22 18:15	09/24/22 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	0.00013	1	09/22/22 14:00	09/22/22 18:09	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	ND	mg/L	25.0	10.0	1		09/09/22 14:58		
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville								
Alkalinity,Bicarbonate (CaCO3)	ND	mg/L	5.0	5.0	1		09/13/22 13:42		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		09/13/22 13:42		
Alkalinity, Total as CaCO3	ND	mg/L	5.0	5.0	1		09/13/22 13:42		
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		09/09/22 21:21	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		09/09/22 21:21	16984-48-8	
Sulfate	ND	mg/L	1.0	0.50	1		09/09/22 21:21	14808-79-8	

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ANALYTICAL RESULTS

Project: Plant McDonough AP-1-Revised Report
Pace Project No.: 92624372

Sample: DUP-1 **Lab ID: 92624372005** Collected: 09/07/22 00:00 Received: 09/08/22 09:45 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	09/21/22 17:50	09/22/22 19:20	7439-89-6	
Potassium	**5.6**	mg/L	0.20	0.15	1	09/21/22 17:50	09/22/22 19:20	7440-09-7	
Sodium	**18.4**	mg/L	1.0	0.58	1	09/21/22 17:50	09/22/22 19:20	7440-23-5	
Calcium	**42.9**	mg/L	1.0	0.12	1	09/21/22 17:50	09/22/22 19:20	7440-70-2	
Magnesium	**18.6**	mg/L	0.050	0.012	1	09/21/22 17:50	09/22/22 19:20	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	09/22/22 18:15	09/24/22 18:24	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0022	1	09/22/22 18:15	09/24/22 18:24	7440-38-2	
Barium	**0.015**	mg/L	0.0050	0.00067	1	09/22/22 18:15	09/24/22 18:24	7440-39-3	
Beryllium	**0.0032**	mg/L	0.00050	0.000054	1	09/22/22 18:15	09/24/22 18:24	7440-41-7	
Boron	**0.79**	mg/L	0.040	0.0086	1	09/22/22 18:15	09/24/22 18:24	7440-42-8	
Cadmium	**0.00078**	mg/L	0.00050	0.00011	1	09/22/22 18:15	09/24/22 18:24	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	09/22/22 18:15	09/24/22 18:24	7440-47-3	
Cobalt	**0.036**	mg/L	0.0050	0.00039	1	09/22/22 18:15	09/24/22 18:24	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	09/22/22 18:15	09/24/22 18:24	7439-92-1	
Lithium	**0.0022J**	mg/L	0.030	0.00073	1	09/22/22 18:15	09/24/22 18:24	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	09/22/22 18:15	09/24/22 18:24	7439-98-7	
Selenium	**0.0017J**	mg/L	0.0050	0.0014	1	09/22/22 18:15	09/24/22 18:24	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	09/22/22 18:15	09/24/22 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	0.00013	1	09/22/22 14:00	09/22/22 18:12	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**344**	mg/L	25.0	10.0	1		09/09/22 14:58		
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville								
Alkalinity,Bicarbonate (CaCO3)	ND	mg/L	5.0	5.0	1		09/13/22 13:47		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		09/13/22 13:47		
Alkalinity, Total as CaCO3	ND	mg/L	5.0	5.0	1		09/13/22 13:47		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**15.0**	mg/L	1.0	0.60	1		09/09/22 21:35	16887-00-6	
Fluoride	**0.14**	mg/L	0.10	0.050	1		09/09/22 21:35	16984-48-8	
Sulfate	**247**	mg/L	4.0	2.0	4		09/12/22 18:15	14808-79-8	

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ANALYTICAL RESULTS

Project: Plant McDonough AP-1-Revised Report
Pace Project No.: 92624372

Sample: DGWC-69 **Lab ID: 92624372006** Collected: 09/07/22 11:50 Received: 09/08/22 09:45 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		09/08/22 13:39		
pH	**6.20**	Std. Units			1		09/08/22 13:39		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Iron	**0.075**	mg/L	0.040	0.025	1	09/21/22 17:50	09/22/22 19:25	7439-89-6	
Potassium	**2.8**	mg/L	0.20	0.15	1	09/21/22 17:50	09/22/22 19:25	7440-09-7	
Sodium	**9.6**	mg/L	1.0	0.58	1	09/21/22 17:50	09/22/22 19:25	7440-23-5	
Calcium	**13.1**	mg/L	1.0	0.12	1	09/21/22 17:50	09/22/22 19:25	7440-70-2	
Magnesium	**3.4**	mg/L	0.050	0.012	1	09/21/22 17:50	09/22/22 19:25	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	09/22/22 18:15	09/24/22 18:42	7440-36-0	
Arsenic	**0.024**	mg/L	0.0050	0.0022	1	09/22/22 18:15	09/24/22 18:42	7440-38-2	
Barium	**0.065**	mg/L	0.0050	0.00067	1	09/22/22 18:15	09/24/22 18:42	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	09/22/22 18:15	09/24/22 18:42	7440-41-7	
Boron	**0.23**	mg/L	0.040	0.0086	1	09/22/22 18:15	09/24/22 18:42	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	09/22/22 18:15	09/24/22 18:42	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	09/22/22 18:15	09/24/22 18:42	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	09/22/22 18:15	09/24/22 18:42	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	09/22/22 18:15	09/24/22 18:42	7439-92-1	
Lithium	**0.0025J**	mg/L	0.030	0.00073	1	09/22/22 18:15	09/24/22 18:42	7439-93-2	
Molybdenum	**0.0067J**	mg/L	0.010	0.00074	1	09/22/22 18:15	09/24/22 18:42	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	09/22/22 18:15	09/24/22 18:42	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	09/22/22 18:15	09/24/22 18:42	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	09/22/22 14:00	09/22/22 18:19	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**102**	mg/L	25.0	10.0	1		09/09/22 14:58		
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville								
Alkalinity,Bicarbonate (CaCO3)	**54.2**	mg/L	5.0	5.0	1		09/13/22 14:01		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		09/13/22 14:01		
Alkalinity, Total as CaCO3	**54.2**	mg/L	5.0	5.0	1		09/13/22 14:01		
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		09/09/22 21:49	16887-00-6	

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ANALYTICAL RESULTS

Project: Plant McDonough AP-1-Revised Report
Pace Project No.: 92624372

Sample: DGWC-69 **Lab ID: 92624372006** Collected: 09/07/22 11:50 Received: 09/08/22 09:45 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								
Fluoride	**0.11**	mg/L	0.10	0.050	1		09/09/22 21:49	16984-48-8	
Sulfate	**11.6**	mg/L	1.0	0.50	1		09/09/22 21:49	14808-79-8	

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ANALYTICAL RESULTS

Project: Plant McDonough AP-1-Revised Report
Pace Project No.: 92624372

Sample: DGWC-67 **Lab ID: 92624372007** Collected: 09/08/22 11:00 Received: 09/09/22 15:50 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		09/09/22 17:28		
pH	**6.21**	Std. Units			1		09/09/22 17:28		
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	09/21/22 17:50	09/22/22 19:30	7439-89-6	
Potassium	**3.8**	mg/L	0.20	0.15	1	09/21/22 17:50	09/22/22 19:30	7440-09-7	
Sodium	**10.8**	mg/L	1.0	0.58	1	09/21/22 17:50	09/22/22 19:30	7440-23-5	
Calcium	**47.4**	mg/L	1.0	0.12	1	09/21/22 17:50	09/22/22 19:30	7440-70-2	
Magnesium	**18.5**	mg/L	0.050	0.012	1	09/21/22 17:50	09/22/22 19:30	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	09/22/22 18:15	09/24/22 18:48	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0022	1	09/22/22 18:15	09/24/22 18:48	7440-38-2	
Barium	**0.082**	mg/L	0.0050	0.00067	1	09/22/22 18:15	09/24/22 18:48	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	09/22/22 18:15	09/24/22 18:48	7440-41-7	
Boron	**4.3**	mg/L	0.040	0.0086	1	09/22/22 18:15	09/24/22 18:48	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	09/22/22 18:15	09/24/22 18:48	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	09/22/22 18:15	09/24/22 18:48	7440-47-3	
Cobalt	**0.0010J**	mg/L	0.0050	0.00039	1	09/22/22 18:15	09/24/22 18:48	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	09/22/22 18:15	09/24/22 18:48	7439-92-1	
Lithium	**0.0048J**	mg/L	0.030	0.00073	1	09/22/22 18:15	09/24/22 18:48	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	09/22/22 18:15	09/24/22 18:48	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	09/22/22 18:15	09/24/22 18:48	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	09/22/22 18:15	09/24/22 18:48	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	09/22/22 14:00	09/22/22 18:22	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**252**	mg/L	25.0	10.0	1		09/14/22 11:31		
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville								
Alkalinity,Bicarbonate (CaCO3)	**99.1**	mg/L	5.0	5.0	1		09/13/22 14:52		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		09/13/22 14:52		
Alkalinity, Total as CaCO3	**99.1**	mg/L	5.0	5.0	1		09/13/22 14:52		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**8.9**	mg/L	1.0	0.60	1		09/13/22 16:04	16887-00-6	

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ANALYTICAL RESULTS

Project: Plant McDonough AP-1-Revised Report
Pace Project No.: 92624372

Sample: DGWC-67 **Lab ID: 92624372007** Collected: 09/08/22 11:00 Received: 09/09/22 15:50 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								
Fluoride	**0.096J**	mg/L	0.10	0.050	1		09/13/22 16:04	16984-48-8	
Sulfate	**117**	mg/L	2.0	1.0	2		09/14/22 19:58	14808-79-8	

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ANALYTICAL RESULTS

Project: Plant McDonough AP-1-Revised Report
Pace Project No.: 92624372

Sample: DGWC-121 **Lab ID: 92624372008** Collected: 09/08/22 12:55 Received: 09/09/22 15:50 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		09/09/22 17:28		
pH	**6.32**	Std. Units			1		09/09/22 17:28		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Iron	**3.3**	mg/L	0.040	0.025	1	09/21/22 17:50	09/22/22 19:35	7439-89-6	
Potassium	**3.7**	mg/L	0.20	0.15	1	09/21/22 17:50	09/22/22 19:35	7440-09-7	
Sodium	**10.8**	mg/L	1.0	0.58	1	09/21/22 17:50	09/22/22 19:35	7440-23-5	
Calcium	**45.0**	mg/L	1.0	0.12	1	09/21/22 17:50	09/22/22 19:35	7440-70-2	
Magnesium	**12.7**	mg/L	0.050	0.012	1	09/21/22 17:50	09/22/22 19:35	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	09/22/22 18:15	09/24/22 18:54	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0022	1	09/22/22 18:15	09/24/22 18:54	7440-38-2	
Barium	**0.042**	mg/L	0.0050	0.00067	1	09/22/22 18:15	09/24/22 18:54	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	09/22/22 18:15	09/24/22 18:54	7440-41-7	
Boron	**2.1**	mg/L	0.040	0.0086	1	09/22/22 18:15	09/24/22 18:54	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	09/22/22 18:15	09/24/22 18:54	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	09/22/22 18:15	09/24/22 18:54	7440-47-3	
Cobalt	**0.0019J**	mg/L	0.0050	0.00039	1	09/22/22 18:15	09/24/22 18:54	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	09/22/22 18:15	09/24/22 18:54	7439-92-1	
Lithium	**0.010J**	mg/L	0.030	0.00073	1	09/22/22 18:15	09/24/22 18:54	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	09/22/22 18:15	09/24/22 18:54	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	09/22/22 18:15	09/24/22 18:54	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	09/22/22 18:15	09/24/22 18:54	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	09/22/22 14:00	09/22/22 18:27	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**261**	mg/L	25.0	10.0	1		09/14/22 12:25		
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville								
Alkalinity,Bicarbonate (CaCO3)	**111**	mg/L	5.0	5.0	1		09/13/22 15:01		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		09/13/22 15:01		
Alkalinity, Total as CaCO3	**111**	mg/L	5.0	5.0	1		09/13/22 15:01		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**4.5**	mg/L	1.0	0.60	1		09/13/22 16:19	16887-00-6	

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ANALYTICAL RESULTS

Project: Plant McDonough AP-1-Revised Report
Pace Project No.: 92624372

Sample: DGWC-121 **Lab ID: 92624372008** Collected: 09/08/22 12:55 Received: 09/09/22 15:50 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								
Fluoride	**0.093J**	mg/L	0.10	0.050	1		09/13/22 16:19	16984-48-8	
Sulfate	**84.8**	mg/L	1.0	0.50	1		09/13/22 16:19	14808-79-8	

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ANALYTICAL RESULTS

Project: Plant McDonough AP-1-Revised Report
Pace Project No.: 92624372

Sample: EB-1 **Lab ID: 92624372009** Collected: 09/08/22 11:30 Received: 09/09/22 15:50 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	09/21/22 17:50	09/22/22 19:39	7439-89-6	
Potassium	ND	mg/L	0.20	0.15	1	09/21/22 17:50	09/22/22 19:39	7440-09-7	
Sodium	ND	mg/L	1.0	0.58	1	09/21/22 17:50	09/22/22 19:39	7440-23-5	
Calcium	ND	mg/L	1.0	0.12	1	09/21/22 17:50	09/22/22 19:39	7440-70-2	
Magnesium	ND	mg/L	0.050	0.012	1	09/21/22 17:50	09/22/22 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	09/22/22 18:15	09/24/22 19:00	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0022	1	09/22/22 18:15	09/24/22 19:00	7440-38-2	
Barium	ND	mg/L	0.0050	0.00067	1	09/22/22 18:15	09/24/22 19:00	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	09/22/22 18:15	09/24/22 19:00	7440-41-7	
Boron	**0.030J**	mg/L	0.040	0.0086	1	09/22/22 18:15	09/24/22 19:00	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	09/22/22 18:15	09/24/22 19:00	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	09/22/22 18:15	09/24/22 19:00	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	09/22/22 18:15	09/24/22 19:00	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	09/22/22 18:15	09/24/22 19:00	7439-92-1	
Lithium	ND	mg/L	0.030	0.00073	1	09/22/22 18:15	09/24/22 19:00	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	09/22/22 18:15	09/24/22 19:00	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	09/22/22 18:15	09/24/22 19:00	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	09/22/22 18:15	09/24/22 19:00	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	09/22/22 14:00	09/22/22 18:30	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	ND	mg/L	25.0	10.0	1		09/14/22 11:32		
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville								
Alkalinity,Bicarbonate (CaCO3)	ND	mg/L	5.0	5.0	1		09/13/22 15:10		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		09/13/22 15:10		
Alkalinity, Total as CaCO3	ND	mg/L	5.0	5.0	1		09/13/22 15:10		
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		09/13/22 16:33	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		09/13/22 16:33	16984-48-8	
Sulfate	ND	mg/L	1.0	0.50	1		09/13/22 16:33	14808-79-8	

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ANALYTICAL RESULTS

Project: Plant McDonough AP-1-Revised Report
Pace Project No.: 92624372

Sample: FB-2 **Lab ID: 92624372010** Collected: 09/08/22 13:00 Received: 09/09/22 15:50 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	09/21/22 17:50	09/22/22 19:44	7439-89-6	
Potassium	ND	mg/L	0.20	0.15	1	09/21/22 17:50	09/22/22 19:44	7440-09-7	
Sodium	ND	mg/L	1.0	0.58	1	09/21/22 17:50	09/22/22 19:44	7440-23-5	
Calcium	ND	mg/L	1.0	0.12	1	09/21/22 17:50	09/22/22 19:44	7440-70-2	
Magnesium	ND	mg/L	0.050	0.012	1	09/21/22 17:50	09/22/22 19:44	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	09/22/22 18:15	09/24/22 19:06	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0022	1	09/22/22 18:15	09/24/22 19:06	7440-38-2	
Barium	ND	mg/L	0.0050	0.00067	1	09/22/22 18:15	09/24/22 19:06	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	09/22/22 18:15	09/24/22 19:06	7440-41-7	
Boron	**0.014J**	mg/L	0.040	0.0086	1	09/22/22 18:15	09/24/22 19:06	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	09/22/22 18:15	09/24/22 19:06	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	09/22/22 18:15	09/24/22 19:06	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	09/22/22 18:15	09/24/22 19:06	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	09/22/22 18:15	09/24/22 19:06	7439-92-1	
Lithium	ND	mg/L	0.030	0.00073	1	09/22/22 18:15	09/24/22 19:06	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	09/22/22 18:15	09/24/22 19:06	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	09/22/22 18:15	09/24/22 19:06	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	09/22/22 18:15	09/24/22 19:06	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	09/22/22 14:00	09/22/22 18:32	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	ND	mg/L	25.0	10.0	1		09/14/22 11:32		
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville								
Alkalinity,Bicarbonate (CaCO3)	ND	mg/L	5.0	5.0	1		09/14/22 16:46		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		09/14/22 16:46		
Alkalinity, Total as CaCO3	ND	mg/L	5.0	5.0	1		09/14/22 16:46		
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		09/13/22 16:48	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		09/13/22 16:48	16984-48-8	
Sulfate	ND	mg/L	1.0	0.50	1		09/13/22 16:48	14808-79-8	

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ANALYTICAL RESULTS

Project: Plant McDonough AP-1-Revised Report
Pace Project No.: 92624372

Sample: DGWC-37 **Lab ID: 92624372011** Collected: 09/09/22 11:38 Received: 09/09/22 15:50 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		09/09/22 17:28		
pH	**6.30**	Std. Units			1		09/09/22 17:28		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Iron	**0.093**	mg/L	0.040	0.025	1	09/21/22 17:50	09/22/22 19:49	7439-89-6	
Potassium	**4.4**	mg/L	0.20	0.15	1	09/21/22 17:50	09/22/22 19:49	7440-09-7	
Sodium	**11.0**	mg/L	1.0	0.58	1	09/21/22 17:50	09/22/22 19:49	7440-23-5	
Calcium	**66.2**	mg/L	1.0	0.12	1	09/21/22 17:50	09/22/22 19:49	7440-70-2	
Magnesium	**14.7**	mg/L	0.050	0.012	1	09/21/22 17:50	09/22/22 19:49	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	09/22/22 18:15	09/24/22 19:12	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0022	1	09/22/22 18:15	09/24/22 19:12	7440-38-2	
Barium	**0.079**	mg/L	0.0050	0.00067	1	09/22/22 18:15	09/24/22 19:12	7440-39-3	
Beryllium	**0.000057J**	mg/L	0.00050	0.000054	1	09/22/22 18:15	09/24/22 19:12	7440-41-7	
Boron	**2.0**	mg/L	0.040	0.0086	1	09/22/22 18:15	09/24/22 19:12	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	09/22/22 18:15	09/24/22 19:12	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	09/22/22 18:15	09/24/22 19:12	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	09/22/22 18:15	09/24/22 19:12	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	09/22/22 18:15	09/24/22 19:12	7439-92-1	
Lithium	**0.0019J**	mg/L	0.030	0.00073	1	09/22/22 18:15	09/24/22 19:12	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	09/22/22 18:15	09/24/22 19:12	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	09/22/22 18:15	09/24/22 19:12	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	09/22/22 18:15	09/24/22 19:12	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	09/27/22 07:45	09/27/22 11:05	7439-97-6	M1,R1
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**300**	mg/L	25.0	10.0	1		09/14/22 11:32		
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville								
Alkalinity,Bicarbonate (CaCO3)	**134**	mg/L	5.0	5.0	1		09/14/22 16:51		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		09/14/22 16:51		
Alkalinity, Total as CaCO3	**134**	mg/L	5.0	5.0	1		09/14/22 16:51		
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		09/13/22 17:03	16887-00-6	

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ANALYTICAL RESULTS

Project: Plant McDonough AP-1-Revised Report
Pace Project No.: 92624372

Sample: DGWC-37 **Lab ID: 92624372011** Collected: 09/09/22 11:38 Received: 09/09/22 15:50 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								
Fluoride	**0.082J**	mg/L	0.10	0.050	1		09/13/22 17:03	16984-48-8	
Sulfate	**96.6**	mg/L	1.0	0.50	1		09/13/22 17:03	14808-79-8	M1

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ANALYTICAL RESULTS

Project: Plant McDonough AP-1-Revised Report
Pace Project No.: 92624372

Sample: DGWC-38 **Lab ID: 92624372012** Collected: 09/12/22 12:12 Received: 09/13/22 10:30 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		09/19/22 07:49		
pH	**6.05**	Std. Units			1		09/19/22 07:49		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Iron	**0.040**	mg/L	0.040	0.025	1	09/21/22 17:50	09/22/22 20:13	7439-89-6	
Potassium	**4.1**	mg/L	0.20	0.15	1	09/21/22 17:50	09/22/22 20:13	7440-09-7	
Sodium	**12.0**	mg/L	1.0	0.58	1	09/21/22 17:50	09/22/22 20:13	7440-23-5	
Calcium	**87.6**	mg/L	1.0	0.12	1	09/21/22 17:50	09/22/22 20:13	7440-70-2	
Magnesium	**26.4**	mg/L	0.050	0.012	1	09/21/22 17:50	09/22/22 20:13	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	09/22/22 18:15	09/24/22 20:00	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0022	1	09/22/22 18:15	09/24/22 20:00	7440-38-2	
Barium	**0.027**	mg/L	0.0050	0.00067	1	09/22/22 18:15	09/24/22 20:00	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	09/22/22 18:15	09/24/22 20:00	7440-41-7	
Boron	**2.8**	mg/L	0.20	0.043	5	09/22/22 18:15	09/26/22 14:31	7440-42-8	
Cadmium	**0.00013J**	mg/L	0.00050	0.00011	1	09/22/22 18:15	09/24/22 20:00	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	09/22/22 18:15	09/24/22 20:00	7440-47-3	
Cobalt	**0.0014J**	mg/L	0.0050	0.00039	1	09/22/22 18:15	09/24/22 20:00	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	09/22/22 18:15	09/24/22 20:00	7439-92-1	
Lithium	**0.0030J**	mg/L	0.030	0.00073	1	09/22/22 18:15	09/24/22 20:00	7439-93-2	
Molybdenum	**0.0012J**	mg/L	0.010	0.00074	1	09/22/22 18:15	09/24/22 20:00	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	09/22/22 18:15	09/24/22 20:00	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	09/22/22 18:15	09/24/22 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	09/27/22 07:45	09/27/22 11:21	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**468**	mg/L	25.0	10.0	1		09/15/22 11:46		
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville								
Alkalinity,Bicarbonate (CaCO3)	**87.1**	mg/L	5.0	5.0	1		09/14/22 18:20		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		09/14/22 18:20		
Alkalinity, Total as CaCO3	**87.1**	mg/L	5.0	5.0	1		09/14/22 18:20		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**8.5**	mg/L	1.0	0.60	1		09/15/22 21:16	16887-00-6	

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ANALYTICAL RESULTS

Project: Plant McDonough AP-1-Revised Report
Pace Project No.: 92624372

Sample: DGWC-38 **Lab ID: 92624372012** Collected: 09/12/22 12:12 Received: 09/13/22 10:30 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								
Fluoride	**0.12**	mg/L	0.10	0.050	1		09/15/22 21:16	16984-48-8	
Sulfate	**234**	mg/L	5.0	2.5	5		09/16/22 05:10	14808-79-8	

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ANALYTICAL RESULTS

Project: Plant McDonough AP-1-Revised Report
Pace Project No.: 92624372

Sample: FB-3 **Lab ID: 92624372013** Collected: 09/12/22 12:10 Received: 09/13/22 10:30 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	09/21/22 17:50	09/22/22 20:17	7439-89-6	
Potassium	ND	mg/L	0.20	0.15	1	09/21/22 17:50	09/22/22 20:17	7440-09-7	
Sodium	ND	mg/L	1.0	0.58	1	09/21/22 17:50	09/22/22 20:17	7440-23-5	
Calcium	ND	mg/L	1.0	0.12	1	09/21/22 17:50	09/22/22 20:17	7440-70-2	
Magnesium	ND	mg/L	0.050	0.012	1	09/21/22 17:50	09/22/22 20:17	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	09/22/22 18:15	09/24/22 20:06	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0022	1	09/22/22 18:15	09/24/22 20:06	7440-38-2	
Barium	ND	mg/L	0.0050	0.00067	1	09/22/22 18:15	09/24/22 20:06	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	09/22/22 18:15	09/24/22 20:06	7440-41-7	
Boron	**0.023J**	mg/L	0.040	0.0086	1	09/22/22 18:15	09/24/22 20:06	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	09/22/22 18:15	09/24/22 20:06	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	09/22/22 18:15	09/24/22 20:06	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	09/22/22 18:15	09/24/22 20:06	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	09/22/22 18:15	09/24/22 20:06	7439-92-1	
Lithium	ND	mg/L	0.030	0.00073	1	09/22/22 18:15	09/24/22 20:06	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	09/22/22 18:15	09/24/22 20:06	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	09/22/22 18:15	09/24/22 20:06	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	09/22/22 18:15	09/24/22 20:06	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	09/27/22 07:45	09/27/22 11:24	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	ND	mg/L	25.0	10.0	1		09/15/22 11:46		
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville								
Alkalinity,Bicarbonate (CaCO3)	ND	mg/L	5.0	5.0	1		09/14/22 18:29		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		09/14/22 18:29		
Alkalinity, Total as CaCO3	ND	mg/L	5.0	5.0	1		09/14/22 18:29		
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		09/15/22 21:31	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		09/15/22 21:31	16984-48-8	
Sulfate	ND	mg/L	1.0	0.50	1		09/15/22 21:31	14808-79-8	

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QUALITY CONTROL DATA

Project: Plant McDonough AP-1-Revised Report
Pace Project No.: 92624372

QC Batch: 724852
QC Batch Method: EPA 3010A
Analysis Method: EPA 6010D
Analysis Description: 6010D ATL
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92624372001, 92624372002, 92624372003, 92624372004, 92624372005, 92624372006, 92624372007, 92624372008, 92624372009, 92624372010, 92624372011, 92624372012, 92624372013

METHOD BLANK: 3776437 Matrix: Water
Associated Lab Samples: 92624372001, 92624372002, 92624372003, 92624372004, 92624372005, 92624372006, 92624372007, 92624372008, 92624372009, 92624372010, 92624372011, 92624372012, 92624372013

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium	mg/L	ND	1.0	0.12	09/22/22 17:49	
Iron	mg/L	ND	0.040	0.025	09/22/22 17:49	
Magnesium	mg/L	ND	0.050	0.012	09/22/22 17:49	
Potassium	mg/L	ND	0.20	0.15	09/22/22 17:49	
Sodium	mg/L	ND	1.0	0.58	09/22/22 17:49	

LABORATORY CONTROL SAMPLE: 3776438

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium	mg/L	1	0.97J	97	80-120	
Iron	mg/L	1	0.97	97	80-120	
Magnesium	mg/L	1	0.97	97	80-120	
Potassium	mg/L	1	0.95	95	80-120	
Sodium	mg/L	1	0.99J	99	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3776441 3776442

Parameter	Units	92622406011 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Calcium	mg/L	67.1	1	1	68.1	69.3	100	212	75-125	2	20	M1
Iron	mg/L	ND	1	1	1.0	1.1	104	105	75-125	1	20	
Magnesium	mg/L	1.0	1	1	2.1	2.1	106	107	75-125	1	20	
Potassium	mg/L	2.3	1	1	3.3	3.4	103	110	75-125	2	20	
Sodium	mg/L	1.5	1	1	2.5	2.6	101	107	75-125	2	20	

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QUALITY CONTROL DATA

Project: Plant McDonough AP-1-Revised Report
Pace Project No.: 92624372

QC Batch: 725176
QC Batch Method: EPA 3005A
Analysis Method: EPA 6020B
Analysis Description: 6020 MET
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92624372001, 92624372002, 92624372003, 92624372004, 92624372005, 92624372006, 92624372007, 92624372008, 92624372009, 92624372010, 92624372011, 92624372012, 92624372013

METHOD BLANK: 3778147 Matrix: Water
Associated Lab Samples: 92624372001, 92624372002, 92624372003, 92624372004, 92624372005, 92624372006, 92624372007, 92624372008, 92624372009, 92624372010, 92624372011, 92624372012, 92624372013

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	ND	0.0030	0.00078	09/24/22 17:31	
Arsenic	mg/L	ND	0.0050	0.0022	09/24/22 17:31	
Barium	mg/L	ND	0.0050	0.00067	09/24/22 17:31	
Beryllium	mg/L	ND	0.00050	0.000054	09/24/22 17:31	
Boron	mg/L	ND	0.040	0.0086	09/24/22 17:31	
Cadmium	mg/L	ND	0.00050	0.00011	09/24/22 17:31	
Chromium	mg/L	ND	0.0050	0.0011	09/24/22 17:31	
Cobalt	mg/L	ND	0.0050	0.00039	09/24/22 17:31	
Lead	mg/L	ND	0.0010	0.00089	09/24/22 17:31	
Lithium	mg/L	ND	0.030	0.00073	09/24/22 17:31	
Molybdenum	mg/L	ND	0.010	0.00074	09/24/22 17:31	
Selenium	mg/L	ND	0.0050	0.0014	09/24/22 17:31	
Thallium	mg/L	ND	0.0010	0.00018	09/24/22 17:31	

LABORATORY CONTROL SAMPLE: 3778148

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.1	0.10	104	80-120	
Arsenic	mg/L	0.1	0.10	100	80-120	
Barium	mg/L	0.1	0.098	98	80-120	
Beryllium	mg/L	0.1	0.099	99	80-120	
Boron	mg/L	1	1.1	108	80-120	
Cadmium	mg/L	0.1	0.098	98	80-120	
Chromium	mg/L	0.1	0.10	100	80-120	
Cobalt	mg/L	0.1	0.097	97	80-120	
Lead	mg/L	0.1	0.094	94	80-120	
Lithium	mg/L	0.1	0.098	98	80-120	
Molybdenum	mg/L	0.1	0.10	101	80-120	
Selenium	mg/L	0.1	0.097	97	80-120	
Thallium	mg/L	0.1	0.094	94	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3778149 3778150

Parameter	Units	92624372001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Antimony	mg/L	ND	0.1	0.1	0.10	0.11	104	105	75-125	1	20	

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QUALITY CONTROL DATA

Project: Plant McDonough AP-1-Revised Report
Pace Project No.: 92624372

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3778149 3778150

Parameter	Units	92624372001 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	0.10	100	102	75-125	2	20	
Barium	mg/L	0.099	0.1	0.1	0.19	0.19	87	92	75-125	3	20	
Beryllium	mg/L	ND	0.1	0.1	0.098	0.096	98	96	75-125	2	20	
Boron	mg/L	3.3	1	1	4.3	4.4	96	108	75-125	3	20	
Cadmium	mg/L	ND	0.1	0.1	0.097	0.098	97	98	75-125	1	20	
Chromium	mg/L	ND	0.1	0.1	0.098	0.098	98	98	75-125	0	20	
Cobalt	mg/L	0.0065	0.1	0.1	0.10	0.10	95	96	75-125	2	20	
Lead	mg/L	ND	0.1	0.1	0.090	0.093	90	93	75-125	3	20	
Lithium	mg/L	ND	0.1	0.1	0.10	0.10	100	101	75-125	1	20	
Molybdenum	mg/L	ND	0.1	0.1	0.10	0.10	99	102	75-125	2	20	
Selenium	mg/L	ND	0.1	0.1	0.098	0.10	98	101	75-125	3	20	
Thallium	mg/L	ND	0.1	0.1	0.092	0.095	92	95	75-125	3	20	

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QUALITY CONTROL DATA

Project: Plant McDonough AP-1-Revised Report
Pace Project No.: 92624372

QC Batch: 724426
QC Batch Method: EPA 7470A
Analysis Method: EPA 7470A
Analysis Description: 7470 Mercury
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92624372001, 92624372002, 92624372003, 92624372004, 92624372005, 92624372006, 92624372007, 92624372008, 92624372009, 92624372010

METHOD BLANK: 3774367 Matrix: Water
Associated Lab Samples: 92624372001, 92624372002, 92624372003, 92624372004, 92624372005, 92624372006, 92624372007, 92624372008, 92624372009, 92624372010

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	ND	0.00020	0.00013	09/22/22 17:16	

LABORATORY CONTROL SAMPLE: 3774368

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.0025	0.0024	98	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3774369 3774370

Parameter	Units	92624373001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	mg/L	0.00014J	0.0025	0.0025	0.0025	0.0025	93	93	75-125	1	20	

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QUALITY CONTROL DATA

Project: Plant McDonough AP-1-Revised Report
Pace Project No.: 92624372

QC Batch: 725890
QC Batch Method: EPA 7470A
Analysis Method: EPA 7470A
Analysis Description: 7470 Mercury
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92624372011, 92624372012, 92624372013

METHOD BLANK: 3781485 Matrix: Water
Associated Lab Samples: 92624372011, 92624372012, 92624372013

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	ND	0.00020	0.00013	09/27/22 11:00	

LABORATORY CONTROL SAMPLE: 3781486

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: 3781487 3781488

Parameter	Units	92624372011 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	mg/L	ND	0.0025	0.0025	0.0023	0.0018	94	71	75-125	28	20	M1,R1

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QUALITY CONTROL DATA

Project: Plant McDonough AP-1-Revised Report
Pace Project No.: 92624372

QC Batch: 722447 | 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: 92624372001, 92624372002, 92624372003, 92624372004, 92624372005, 92624372006

METHOD BLANK: 3764210 Matrix: Water
Associated Lab Samples: 92624372001, 92624372002, 92624372003, 92624372004, 92624372005, 92624372006

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	25.0	10.0	09/09/22 14:58	

LABORATORY CONTROL SAMPLE: 3764211

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	382	96	80-120	

SAMPLE DUPLICATE: 3764212

Parameter	Units	92623815001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	351	346	1	10	

SAMPLE DUPLICATE: 3764213

Parameter	Units	92624372006 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	102	107	5	10	

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QUALITY CONTROL DATA

Project: Plant McDonough AP-1-Revised Report
Pace Project No.: 92624372

QC Batch: 722879
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: 92624372008

METHOD BLANK: 3766430 Matrix: Water
Associated Lab Samples: 92624372008

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	25.0	10.0	09/14/22 12:25	

LABORATORY CONTROL SAMPLE: 3766431

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	383	96	80-120	

SAMPLE DUPLICATE: 3766432

Parameter	Units	92624372008 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	261	266	2	10	

SAMPLE DUPLICATE: 3766433

Parameter	Units	92624840016 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	238	250	5	10	

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QUALITY CONTROL DATA

Project: Plant McDonough AP-1-Revised Report
Pace Project No.: 92624372

QC Batch: 722886 | 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: 92624372007, 92624372009, 92624372010, 92624372011

METHOD BLANK: 3766455 Matrix: Water
Associated Lab Samples: 92624372007, 92624372009, 92624372010, 92624372011

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	25.0	10.0	09/14/22 11:30	

LABORATORY CONTROL SAMPLE: 3766456

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	384	96	80-120	

SAMPLE DUPLICATE: 3766458

Parameter	Units	92624840004 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	620000 ug/L	680	9	10	

SAMPLE DUPLICATE: 3767354

Parameter	Units	92624372007 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	252	297	16	10	R1

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QUALITY CONTROL DATA

Project: Plant McDonough AP-1-Revised Report
Pace Project No.: 92624372

QC Batch: 723325
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: 92624372012, 92624372013

METHOD BLANK: 3768875 Matrix: Water
Associated Lab Samples: 92624372012, 92624372013

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	25.0	10.0	09/15/22 11:44	

LABORATORY CONTROL SAMPLE: 3768876

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

SAMPLE DUPLICATE: 3768878

Parameter	Units	92625189005 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	87.0	83.0	5	10	

SAMPLE DUPLICATE: 3768892

Parameter	Units	92625181001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	197	193	2	10	

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QUALITY CONTROL DATA

Project: Plant McDonough AP-1-Revised Report
Pace Project No.: 92624372

QC Batch: 722880
QC Batch Method: SM 2320B-2011
Analysis Method: SM 2320B-2011
Analysis Description: 2320B Alkalinity
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92624372001, 92624372002, 92624372003, 92624372004, 92624372005, 92624372006, 92624372007, 92624372008, 92624372009

METHOD BLANK: 3766434 Matrix: Water
Associated Lab Samples: 92624372001, 92624372002, 92624372003, 92624372004, 92624372005, 92624372006, 92624372007, 92624372008, 92624372009

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Alkalinity, Total as CaCO3	mg/L	ND	5.0	5.0	09/13/22 11:19	
Alkalinity,Bicarbonate (CaCO3)	mg/L	ND	5.0	5.0	09/13/22 11:19	
Alkalinity,Carbonate (CaCO3)	mg/L	ND	5.0	5.0	09/13/22 11:19	

LABORATORY CONTROL SAMPLE: 3766435

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	50	51.6	103	80-120	

LABORATORY CONTROL SAMPLE: 3766436

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	50	50.8	102	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3766437 3766438

Parameter	Units	92624783002 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	85.1	50	50	137	140	104	109	80-120	2	25	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3766439 3766440

Parameter	Units	92624372003 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	201	50	50	267	246	132	91	80-120	8	25	M1

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QUALITY CONTROL DATA

Project: Plant McDonough AP-1-Revised Report
Pace Project No.: 92624372

QC Batch: 723206
QC Batch Method: SM 2320B-2011
Analysis Method: SM 2320B-2011
Analysis Description: 2320B Alkalinity
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92624372010, 92624372011, 92624372012, 92624372013

METHOD BLANK: 3768028 Matrix: Water
Associated Lab Samples: 92624372010, 92624372011, 92624372012, 92624372013

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Alkalinity, Total as CaCO3	mg/L	ND	5.0	5.0	09/14/22 14:56	
Alkalinity,Bicarbonate (CaCO3)	mg/L	ND	5.0	5.0	09/14/22 14:56	
Alkalinity,Carbonate (CaCO3)	mg/L	ND	5.0	5.0	09/14/22 14:56	

LABORATORY CONTROL SAMPLE: 3768029

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	50	50.2	100	80-120	

LABORATORY CONTROL SAMPLE: 3768030

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	50	50.8	102	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3768031 3768032

Parameter	Units	92625359004 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	324	50	50	353	349	58	51	80-120	1	25	M1

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3768033 3768034

Parameter	Units	92624372011 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	134	50	50	193	185	118	102	80-120	4	25	

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QUALITY CONTROL DATA

Project: Plant McDonough AP-1-Revised Report
Pace Project No.: 92624372

QC Batch: 722301
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: 92624372001, 92624372002, 92624372003, 92624372004, 92624372005, 92624372006

METHOD BLANK: 3763458 Matrix: Water
Associated Lab Samples: 92624372001, 92624372002, 92624372003, 92624372004, 92624372005, 92624372006

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.60	09/09/22 16:54	
Fluoride	mg/L	ND	0.10	0.050	09/09/22 16:54	
Sulfate	mg/L	ND	1.0	0.50	09/09/22 16:54	

LABORATORY CONTROL SAMPLE: 3763459

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	50.1	100	90-110	
Fluoride	mg/L	2.5	2.7	107	90-110	
Sulfate	mg/L	50	50.9	102	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3763460 3763461

Parameter	Units	92624528001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	1.2	50	50	51.9	53.1	101	104	90-110	2	10	
Fluoride	mg/L	ND	2.5	2.5	2.4	2.4	95	95	90-110	0	10	
Sulfate	mg/L	1.3	50	50	52.1	53.1	102	104	90-110	2	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3763462 3763463

Parameter	Units	92624503003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	0.83J	50	50	52.3	53.0	103	104	90-110	1	10	
Fluoride	mg/L	ND	2.5	2.5	2.4	2.4	93	96	90-110	3	10	
Sulfate	mg/L	1.4	50	50	52.8	53.4	103	104	90-110	1	10	

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QUALITY CONTROL DATA

Project: Plant McDonough AP-1-Revised Report
Pace Project No.: 92624372

QC Batch: 722843
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: 92624372007, 92624372008, 92624372009, 92624372010, 92624372011

METHOD BLANK: 3766296 Matrix: Water
Associated Lab Samples: 92624372007, 92624372008, 92624372009, 92624372010, 92624372011

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.60	09/13/22 12:35	
Fluoride	mg/L	ND	0.10	0.050	09/13/22 12:35	
Sulfate	mg/L	ND	1.0	0.50	09/13/22 12:35	

LABORATORY CONTROL SAMPLE: 3766297

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	50.4	101	90-110	
Fluoride	mg/L	2.5	2.5	100	90-110	
Sulfate	mg/L	50	50.8	102	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3766298 3766299

Parameter	Units	92624945004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	938	50	50	975	975	73	74	90-110	0	10	M1
Fluoride	mg/L	ND	2.5	2.5	3.3J	3.8J	132	151	90-110		10	M1
Sulfate	mg/L	3180	50	50	3170	3160	-30	-43	90-110	0	10	M1

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3766300 3766301

Parameter	Units	92624372011 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	5.4	50	50	57.1	58.0	103	105	90-110	2	10	
Fluoride	mg/L	0.082J	2.5	2.5	2.4	2.4	92	92	90-110	0	10	
Sulfate	mg/L	96.6	50	50	150	153	106	113	90-110	2	10	M1

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QUALITY CONTROL DATA

Project: Plant McDonough AP-1-Revised Report
Pace Project No.: 92624372

QC Batch: 723467
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: 92624372012, 92624372013

METHOD BLANK: 3769521 Matrix: Water
Associated Lab Samples: 92624372012, 92624372013

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.60	09/15/22 15:11	
Fluoride	mg/L	ND	0.10	0.050	09/15/22 15:11	
Sulfate	mg/L	ND	1.0	0.50	09/15/22 15:11	

LABORATORY CONTROL SAMPLE: 3769522

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	49.0	98	90-110	
Fluoride	mg/L	2.5	2.5	100	90-110	
Sulfate	mg/L	50	49.3	99	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3769523 3769524

Parameter	Units	92625147002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	94.2	50	50	133	134	77	79	90-110	1	10	M1
Fluoride	mg/L	0.49	2.5	2.5	3.0	3.0	101	102	90-110	1	10	
Sulfate	mg/L	53.6	50	50	99.3	100	91	93	90-110	1	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3769525 3769526

Parameter	Units	92625178002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	15.0	50	50	66.7	67.1	103	104	90-110	1	10	
Fluoride	mg/L	0.40	2.5	2.5	3.6	3.6	127	128	90-110	1	10	M1
Sulfate	mg/L	508	50	50	552	552	88	89	90-110	0	10	M1

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QUALIFIERS

Project: Plant McDonough AP-1-Revised Report
Pace Project No.: 92624372

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.

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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.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Plant McDonough AP-1-Revised Report
Pace Project No.: 92624372

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92624372001	**DGWC-39**				
92624372002	**DGWC-40**				
92624372003	**DGWC-68A**				
92624372006	**DGWC-69**				
92624372007	**DGWC-67**				
92624372008	**DGWC-121**				
92624372011	**DGWC-37**				
92624372012	**DGWC-38**				
92624372001	**DGWC-39**	EPA 3010A	724852	EPA 6010D	724979
92624372002	**DGWC-40**	EPA 3010A	724852	EPA 6010D	724979
92624372003	**DGWC-68A**	EPA 3010A	724852	EPA 6010D	724979
92624372004	**FB-1**	EPA 3010A	724852	EPA 6010D	724979
92624372005	**DUP-1**	EPA 3010A	724852	EPA 6010D	724979
92624372006	**DGWC-69**	EPA 3010A	724852	EPA 6010D	724979
92624372007	**DGWC-67**	EPA 3010A	724852	EPA 6010D	724979
92624372008	**DGWC-121**	EPA 3010A	724852	EPA 6010D	724979
92624372009	**EB-1**	EPA 3010A	724852	EPA 6010D	724979
92624372010	**FB-2**	EPA 3010A	724852	EPA 6010D	724979
92624372011	**DGWC-37**	EPA 3010A	724852	EPA 6010D	724979
92624372012	**DGWC-38**	EPA 3010A	724852	EPA 6010D	724979
92624372013	**FB-3**	EPA 3010A	724852	EPA 6010D	724979
92624372001	**DGWC-39**	EPA 3005A	725176	EPA 6020B	725367
92624372002	**DGWC-40**	EPA 3005A	725176	EPA 6020B	725367
92624372003	**DGWC-68A**	EPA 3005A	725176	EPA 6020B	725367
92624372004	**FB-1**	EPA 3005A	725176	EPA 6020B	725367
92624372005	**DUP-1**	EPA 3005A	725176	EPA 6020B	725367
92624372006	**DGWC-69**	EPA 3005A	725176	EPA 6020B	725367
92624372007	**DGWC-67**	EPA 3005A	725176	EPA 6020B	725367
92624372008	**DGWC-121**	EPA 3005A	725176	EPA 6020B	725367
92624372009	**EB-1**	EPA 3005A	725176	EPA 6020B	725367
92624372010	**FB-2**	EPA 3005A	725176	EPA 6020B	725367
92624372011	**DGWC-37**	EPA 3005A	725176	EPA 6020B	725367
92624372012	**DGWC-38**	EPA 3005A	725176	EPA 6020B	725367
92624372013	**FB-3**	EPA 3005A	725176	EPA 6020B	725367
92624372001	**DGWC-39**	EPA 7470A	724426	EPA 7470A	725130
92624372002	**DGWC-40**	EPA 7470A	724426	EPA 7470A	725130
92624372003	**DGWC-68A**	EPA 7470A	724426	EPA 7470A	725130
92624372004	**FB-1**	EPA 7470A	724426	EPA 7470A	725130
92624372005	**DUP-1**	EPA 7470A	724426	EPA 7470A	725130
92624372006	**DGWC-69**	EPA 7470A	724426	EPA 7470A	725130
92624372007	**DGWC-67**	EPA 7470A	724426	EPA 7470A	725130
92624372008	**DGWC-121**	EPA 7470A	724426	EPA 7470A	725130
92624372009	**EB-1**	EPA 7470A	724426	EPA 7470A	725130
92624372010	**FB-2**	EPA 7470A	724426	EPA 7470A	725130
92624372011	**DGWC-37**	EPA 7470A	725890	EPA 7470A	726012
92624372012	**DGWC-38**	EPA 7470A	725890	EPA 7470A	726012
92624372013	**FB-3**	EPA 7470A	725890	EPA 7470A	726012

REPORT OF LABORATORY ANALYSIS

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without the written consent of Pace Analytical Services, LLC.

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

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Plant McDonough AP-1-Revised Report
Pace Project No.: 92624372

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92624372001	**DGWC-39**	SM 2540C-2015	722447		
92624372002	**DGWC-40**	SM 2540C-2015	722447		
92624372003	**DGWC-68A**	SM 2540C-2015	722447		
92624372004	**FB-1**	SM 2540C-2015	722447		
92624372005	**DUP-1**	SM 2540C-2015	722447		
92624372006	**DGWC-69**	SM 2540C-2015	722447		
92624372007	**DGWC-67**	SM 2540C-2015	722886		
92624372008	**DGWC-121**	SM 2540C-2015	722879		
92624372009	**EB-1**	SM 2540C-2015	722886		
92624372010	**FB-2**	SM 2540C-2015	722886		
92624372011	**DGWC-37**	SM 2540C-2015	722886		
92624372012	**DGWC-38**	SM 2540C-2015	723325		
92624372013	**FB-3**	SM 2540C-2015	723325		
92624372001	**DGWC-39**	SM 2320B-2011	722880		
92624372002	**DGWC-40**	SM 2320B-2011	722880		
92624372003	**DGWC-68A**	SM 2320B-2011	722880		
92624372004	**FB-1**	SM 2320B-2011	722880		
92624372005	**DUP-1**	SM 2320B-2011	722880		
92624372006	**DGWC-69**	SM 2320B-2011	722880		
92624372007	**DGWC-67**	SM 2320B-2011	722880		
92624372008	**DGWC-121**	SM 2320B-2011	722880		
92624372009	**EB-1**	SM 2320B-2011	722880		
92624372010	**FB-2**	SM 2320B-2011	723206		
92624372011	**DGWC-37**	SM 2320B-2011	723206		
92624372012	**DGWC-38**	SM 2320B-2011	723206		
92624372013	**FB-3**	SM 2320B-2011	723206		
92624372001	**DGWC-39**	EPA 300.0 Rev 2.1 1993	722301		
92624372002	**DGWC-40**	EPA 300.0 Rev 2.1 1993	722301		
92624372003	**DGWC-68A**	EPA 300.0 Rev 2.1 1993	722301		
92624372004	**FB-1**	EPA 300.0 Rev 2.1 1993	722301		
92624372005	**DUP-1**	EPA 300.0 Rev 2.1 1993	722301		
92624372006	**DGWC-69**	EPA 300.0 Rev 2.1 1993	722301		
92624372007	**DGWC-67**	EPA 300.0 Rev 2.1 1993	722843		
92624372008	**DGWC-121**	EPA 300.0 Rev 2.1 1993	722843		
92624372009	**EB-1**	EPA 300.0 Rev 2.1 1993	722843		
92624372010	**FB-2**	EPA 300.0 Rev 2.1 1993	722843		
92624372011	**DGWC-37**	EPA 300.0 Rev 2.1 1993	722843		
92624372012	**DGWC-38**	EPA 300.0 Rev 2.1 1993	723467		
92624372013	**FB-3**	EPA 300.0 Rev 2.1 1993	723467		

REPORT OF LABORATORY ANALYSIS

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without the written consent of Pace Analytical Services, LLC.

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 ☐

WO# : 92624372

92624372

Sample Condition Upon Receipt

Client Name: Georgia Power **Project #**

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

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

Date/Initials Person Examining Contents: 7/13 JM

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

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

Thermometer: ☐ IR Gun ID: 214 ☑ Wet ☐ Blue ☐ None **Type of Ice:**

Cooler Temp: 2.1 **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): 2.1

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: WG				
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
	Document No.: F-CAR-CS-033-Rev.08	Page 2 of 2
		Issuing Authority:

***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# : 92624372

PM: NMG Due Date: 09/22/22

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)	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 (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 ✓																			4				
4		2	1			1 ✓																			2				
5		2	1			1 ✓																			2				
6		2	1			1 ✓																			2				
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

Pace Analytical

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: Lauren Coker	Attention: scsinvoices@southernco.com
Address: 2480 Maner Road Atlanta, GA 30339	Copy To: Golder	Company Name:
Email: alcoker@southernco.com	Purchase Order #:	Address:
Phone: (470) 620-6176 Fax	Project Name: Plant McDonough AP-1	Pace Quote:
Requested Due Date: 10 Day TAT	Project #: GL16684982	Pace Project Manager: Nicole D'Oleo
		Pace Profile #:

Regulatory Agency

State / Location: GA

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID (One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique)	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	DATE	TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H2SO4	HNO3 + Ice	HCl	NaOH + Zn Acetate	Na2S2O3	Methanol	Other	Analyses Test Y/N	App III/IV Total Metals	Cl, F, SO4, TDS	Radium 226/228	Mg, Na, K	CO3+HCO2	Fe Total, Fe 3+	Residual Chlorine (Y/N)	
																	N	N	N	N	N	N	
1	DGWC-39	WG	G	9/7/2022	14:44		6	3		3							X	X	X	X	X	X	pH = 6.43, Fe2 = 6.0 mg/L
2	DGWC-40	WG	G	9/7/2022	12:13		6	3		3							X	X	X	X	X	X	pH = 4.54, Fe2 = 0.0 mg/L
3	DGWC-68A	WG	G	9/7/2022	15:10		6	3		3							X	X	X	X	X	X	pH = 6.62, Fe2 = 0.0 mg/L
4	FB-1	WQ	G	9/7/2022	15:15		6	3		3							X	X	X	X	X	X	
6	Dup-1	WG	G	9/7/2022	--		6	3		3							X	X	X	X	X	X	
7	DGWC-69	WG	G	9/7/2022	11:50		6	3		3							X	X	X	X	X	X	pH = 6.20, Fe2 = 0.0 mg/L
8																							
9																							
10																							
11																							
12																							
13																							
14																							

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

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
JUDE WAGUESPACK	[signature] / SAMPLER	9/8/22	8:40	[signature] - BATH	9-8-22	8:40	
				[signature] - Golder	9/9/22	0945	

DATE Signed: 9/8/22

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: 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 #:

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

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

Date/Initials Person Examining Contents: 9/9/22 JM

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

Thermometer: ☐ IR Gun ID: 230

Type of Ice: ☑ Wet ☐ Blue ☐ None

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

Cooler Temp: 2.4 **Correction Factor:** Add/Subtract (°C) 0.0

Cooler Temp Corrected (°C): 2.4

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

CLIENT NOTIFICATION/RESOLUTION

Lot ID of split containers:

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

***Check all unpreserved Nitrates for chlorine

Project #

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)	DG94-250 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)	DG9V-40 mL VOA H3PO4 (N/A)	DG9S-40 mL VOA H2SO4 (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	BP3R-250 mL Plastic (NH2)2SO4 (9.3 9.7)	AG0U-100 mL Amber Unpreserved (N/A) (Cl-)	VSGU-20 mL Scintillation vials (N/A)	DG9U-40 mL Amber Unpreserved vials (N/A)
1		2	1			1																		1					
2		2	1			1																		1					
3		2	1			1																		1					
4		2	1			1																		1					
5		2	1			1																		1					
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 DENR Certification Office (i.e. Out of hold, incorrect preservative, out of temp, incorrect containers

Pace Analytical

CHAIN-OF-CUSTODY / Analytical Request Document

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

Page : 1 Of 1

Section A — Required Client Information:

Company	Georgia Power - Coal Combustion Residuals
Address	2480 Maner Road, Atlanta, GA 30339
Email	laucoker@southernco.com
Phone	(470) 620-6176
Fax	
Requested Due Date	10 Day TAT

Section B — Required Project Information:

Report To	Lauren Coker
Copy To	Golder
Purchase Order #	
Project Name	Plant McDonough AP-1
Project #	GL16684962

Section C — Invoice Information:

Attention	scsinvoices@southernco.com
Company Name	
Address	
Pace Quote	
Pace Project Manager	Nicole D'Oleo
Pace Profile #	

Regulatory Agency	
State / Location	GA

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

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

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	DATE	TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Unpreserved - Ice	H2SO4	HNO3 + Ice	HCl	NaOH + Zn Acetate	Na2S2O3	Methanol	Other	Analyses Test (Y/N)	App III/IV Total Metals (N)	Cl, F, SO4, TDS (N)	Radium 226/228 (N)	Mg Na K (N)	CO3+HCO2 (N)	Fe Total Fe 3+ (N)	Residual Chlorine (Y/N)	4372
1	DGWC-67	WG	G	9/8/2022	11:00		6	3		3							X	X	X	X	X	X		pH = 6.21, Fe2 = 0.0 mg/L
2	DGWC-121	WG	G	9/8/2022	12:55		6	3		3							X	X	X	X	X	X		pH = 6.32 Fe2 = 2.75 mg/L
3	EB-1	WQ	G	9/8/2022	11:30		6	3		3							X	X	X	X	X	X		
4	FB-2	WQ	G	9/8/2022	13:00		6	3		3							X	X	X	X	X	X		
6	DGWC-37	WG	G	9/9/2022	11:38		6	3		3							X	X	X	X	X	X		pH = 6.30 Fe2 = 0.0 mg/L
7																								
8																								
9																								
10																								
11																								
12																								
13																								
14																								

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
	Mark Mason [illegible] / Golder	09/09/22	15:50	[signature]	9/9/22	1540	

DATE Signed:

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

Pace ANALYTICAL SERVICES

DC#_Title: ENV-FRM-HUN1-0083 v01_Sample Condition Upon Receipt

Effective Date: 05/12/2022

Laboratory receiving samples:

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

Sample Condition Upon Receipt

Client Name: Georgia Power

Project #

WO#: 92624372

PM: NMG Due Date: 09/22/22

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: 09/13/22 JM

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

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

Thermometer: ☐ IR Gun ID: 083

Type of Ice: ☑ Wet ☐ Blue ☐ None

Cooler Temp: 1.9 **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): 1.9

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: WG				
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:**

WO# : 92624372

PM: NMG Due Date: 09/22/22

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

***Check all unpreserved Nitrates for chlorine

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)	DG94-250 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)	DG9V-40 mL VOA H3PO4 (N/A)	DG9S-40 mL VOA H2SO4 (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	BP3R-250 mL Plastic (NH2)2SO4 (9.3-9.7)	AG0U-100 mL Amber Unpreserved (N/A) (Cl-)	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																												
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 DENR 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:	Lauren Coker	Attention:	scsinvoices@southernco.com
Address:	2480 Maner Road	Copy To:	Golder	Company Name:	
	Atlanta, GA 30339			Address:	
Email:	laucoker@southernco.com	Purchase Order #:		Pace Quote:	
Phone:	(470) 620-6176 Fax	Project Name:	Plant McDonough AP-1	Pace Project Manager:	Nicole D'Oleo
Requested Due Date:	10 Day TAT	Project #:	GL186849822	Pace Profile #:	

Regulatory Agency

State / Location: GA

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID (One Character per box. (A-Z, 0-9 / , -) Sample ids must be unique)	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	DATE	TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved - Ice	H2SO4	HNO3 + Ice	HCl	NaOH + Zn Acetate	Na2S2O3	Methanol	Other	Analyses Test Y/N	App III/IV Total Metals	Cl, F, SO4, TDS	Radium 226/228	Mg, Na, K	CO3+HCO2	Fe Total, Fe 3+	Residual Chlorine (Y/N)	
	MATRIX: Drinking Water DW; Water WT; Waste Water WW; Product P; Soil/Solid SL; Oil OL; Wipe WP; Air AR; Other OT; Tissue TS															N	N	N	N	N	N		
1	DGWC-38	WG	G	9/12/2022	12:12		6	3		3						X	X	X	X	X	X		pH = 6.05, Fe2 = 0.0 mg/L
2	FB-3	WQ	G	9/12/2022	12:10		6	3		3						X	X	X	X	X	X		
3																							
4																							
5																							
6																							
7																							
8																							
9																							
10																							
11																							
12																							
13																							
14																							

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
	[illegible]/Sample	9/13/22	8:05	M. BATH	9/13/22	8:10	
				[signature]	9/13/22	10:36	

J. DE WEGNESPARK DATE Signed: 9/13/22

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

November 08, 2022

Andrea McClure
WSP/Golder
5170 Peachtree Road
Building 100, Suite 300
Atlanta, GA 30341

RE: Project: McDonough AP-1 Rads
Pace Project No.: 92624384

Dear Andrea McClure:

Enclosed are the analytical results for sample(s) received by the laboratory between September 08, 2022 and September 13, 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
nicole.d'oleo@pacelabs.com
(704)875-9092
Project Manager

Enclosures

cc: Joju Abraham, Georgia Power-CCR
Stephen Benda, Southern Company
Noelia Gangi, Georgia Power
Daniela Herrera, Golder
Ben Hodges, Georgia Power
Kristen Jurinko
Laura Midkiff, Georgia Power
Karim Minkara, Golder Associates - Atlanta
J. Shelby Mobley, Southern Company
Charles Norton, Southern Company
Ms. Lauren Petty, Southern Company
Dawn Prell, Golder Associates Inc.
Michael Smilley, Georgia Power
Yong Cheng Soo, WSP/Golder
Tina Sullivan, ERM

REPORT OF LABORATORY ANALYSIS

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CERTIFICATIONS

Project: McDonough AP-1 Rads
Pace Project No.: 92624384

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: McDonough AP-1 Rads
Pace Project No.: 92624384

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92624384001	**DGWC-39**	Water	09/07/22 14:44	09/08/22 09:45
92624384002	**DGWC-40**	Water	09/07/22 12:13	09/08/22 09:45
92624384003	**DGWC-68A**	Water	09/07/22 15:10	09/08/22 09:45
92624384004	**FB-1**	Water	09/07/22 15:15	09/08/22 09:45
92624384005	**DUP-1**	Water	09/07/22 00:00	09/08/22 09:45
92624384006	**DGWC-69**	Water	09/07/22 11:50	09/08/22 09:45
92624384007	**DGWC-67**	Water	09/08/22 11:00	09/09/22 15:50
92624384008	**DGWC-121**	Water	09/08/22 12:55	09/09/22 15:50
92624384009	**EB-1**	Water	09/08/22 11:30	09/09/22 15:50
92624384010	**FB-2**	Water	09/08/22 13:00	09/09/22 15:50
92624384011	**DGWC-37**	Water	09/09/22 11:38	09/09/22 15:50
92624384012	**DGWC-38**	Water	09/12/22 12:12	09/13/22 10:30
92624384013	**FB-3**	Water	09/12/22 12:10	09/13/22 10:30

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SAMPLE ANALYTE COUNT

Project: McDonough AP-1 Rads
Pace Project No.: 92624384

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92624384001	**DGWC-39**	EPA 9315	RMS	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92624384002	**DGWC-40**	EPA 9315	RMS	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92624384003	**DGWC-68A**	EPA 9315	RMS	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92624384004	**FB-1**	EPA 9315	RMS	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92624384005	**DUP-1**	EPA 9315	RMS	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92624384006	**DGWC-69**	EPA 9315	RMS	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92624384007	**DGWC-67**	EPA 9315	RMS	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92624384008	**DGWC-121**	EPA 9315	RMS	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92624384009	**EB-1**	EPA 9315	RMS	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92624384010	**FB-2**	EPA 9315	RMS	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92624384011	**DGWC-37**	EPA 9315	RMS	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92624384012	**DGWC-38**	EPA 9315	RMS	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92624384013	**FB-3**	EPA 9315	RMS	1	PASI-PA

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SAMPLE ANALYTE COUNT

Project: McDonough AP-1 Rads
Pace Project No.: 92624384

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA

PASI-PA = Pace Analytical Services - Greensburg

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: McDonough AP-1 Rads
Pace Project No.: 92624384

Sample: DGWC-39 **Lab ID: 92624384001** Collected: 09/07/22 14:44 Received: 09/08/22 09:45 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.191 ± 0.128 (0.203) C:89% T:NA**	pCi/L	09/27/22 08:39	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.446 ± 0.441 (0.900) C:76% T:88%**	pCi/L	09/23/22 19:05	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.637 ± 0.569 (1.10)**	pCi/L	09/27/22 14:32	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: McDonough AP-1 Rads
Pace Project No.: 92624384

Sample: DGWC-40 **Lab ID: 92624384002** Collected: 09/07/22 12:13 Received: 09/08/22 09:45 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.161 ± 0.130 (0.235) C:87% T:NA**	pCi/L	09/27/22 08:39	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.611 ± 0.407 (0.746) C:77% T:91%**	pCi/L	09/23/22 19:05	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.772 ± 0.537 (0.981)**	pCi/L	09/27/22 14:32	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: McDonough AP-1 Rads
Pace Project No.: 92624384

Sample: DGWC-68A **Lab ID: 92624384003** Collected: 09/07/22 15:10 Received: 09/08/22 09:45 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.174 ± 0.121 (0.189) C:86% T:NA**	pCi/L	09/27/22 09:19	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**-0.0436 ± 0.432 (1.02) C:76% T:91%**	pCi/L	09/23/22 19:05	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.174 ± 0.553 (1.21)**	pCi/L	09/27/22 14:32	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: McDonough AP-1 Rads
Pace Project No.: 92624384

Sample: FB-1 **Lab ID: 92624384004** Collected: 09/07/22 15:15 Received: 09/08/22 09:45 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.147 ± 0.111 (0.190) C:96% T:NA**	pCi/L	09/27/22 09:19	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.0194 ± 0.449 (1.05) C:74% T:87%**	pCi/L	09/23/22 19:05	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.166 ± 0.560 (1.24)**	pCi/L	09/27/22 14:32	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: McDonough AP-1 Rads
Pace Project No.: 92624384

Sample: DUP-1 **Lab ID: 92624384005** Collected: 09/07/22 00:00 Received: 09/08/22 09:45 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.0555 ± 0.0830 (0.179) C:92% T:NA**	pCi/L	09/27/22 09:19	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.570 ± 0.524 (1.06) C:69% T:91%**	pCi/L	09/23/22 19:05	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.626 ± 0.607 (1.24)**	pCi/L	09/27/22 14:32	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: McDonough AP-1 Rads
Pace Project No.: 92624384

Sample: DGWC-69 **Lab ID: 92624384006** Collected: 09/07/22 11:50 Received: 09/08/22 09:45 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.751 ± 0.239 (0.207) C:93% T:NA**	pCi/L	09/27/22 09:19	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**1.07 ± 0.578 (1.02) C:72% T:88%**	pCi/L	09/23/22 19:05	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.82 ± 0.817 (1.23)**	pCi/L	09/27/22 14:32	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: McDonough AP-1 Rads
Pace Project No.: 92624384

Sample: DGWC-67 **Lab ID: 92624384007** Collected: 09/08/22 11:00 Received: 09/09/22 15:50 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	**0.144 ± 0.112 (0.187) C:84% T:NA**	pCi/L	10/02/22 10:26	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.555 ± 0.304 (0.519) C:72% T:91%**	pCi/L	09/28/22 12:21	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.699 ± 0.416 (0.706)**	pCi/L	10/03/22 12:21	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: McDonough AP-1 Rads
Pace Project No.: 92624384

Sample: DGWC-121 **Lab ID: 92624384008** Collected: 09/08/22 12:55 Received: 09/09/22 15:50 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	**0.361 ± 0.166 (0.190) C:78% T:NA**	pCi/L	10/02/22 10:26	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**1.64 ± 0.538 (0.671) C:67% T:85%**	pCi/L	09/28/22 12:21	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**2.00 ± 0.704 (0.861)**	pCi/L	10/03/22 12:21	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: McDonough AP-1 Rads
Pace Project No.: 92624384

Sample: EB-1 **Lab ID: 92624384009** Collected: 09/08/22 11:30 Received: 09/09/22 15:50 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	**-0.0547 ± 0.0541 (0.202) C:97% T:NA**	pCi/L	10/02/22 10:27	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.690 ± 0.378 (0.671) C:74% T:86%**	pCi/L	09/28/22 12:21	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.690 ± 0.432 (0.873)**	pCi/L	10/03/22 12:21	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: McDonough AP-1 Rads
Pace Project No.: 92624384

Sample: FB-2 **Lab ID: 92624384010** Collected: 09/08/22 13:00 Received: 09/09/22 15:50 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	**0.0672 ± 0.0873 (0.182) C:93% T:NA**	pCi/L	10/02/22 10:27	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**1.14 ± 0.483 (0.773) C:66% T:89%**	pCi/L	09/28/22 12:21	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.21 ± 0.570 (0.955)**	pCi/L	10/03/22 12:21	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: McDonough AP-1 Rads
Pace Project No.: 92624384

Sample: DGWC-37 **Lab ID: 92624384011** Collected: 09/09/22 11:38 Received: 09/09/22 15:50 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	**0.0526 ± 0.0678 (0.135) C:91% T:NA**	pCi/L	10/02/22 10:27	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.666 ± 0.385 (0.691) C:67% T:87%**	pCi/L	09/28/22 12:22	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.719 ± 0.453 (0.826)**	pCi/L	10/03/22 12:21	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: McDonough AP-1 Rads
Pace Project No.: 92624384

Sample: DGWC-38 **Lab ID: 92624384012** Collected: 09/12/22 12:12 Received: 09/13/22 10:30 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.103 ± 0.0806 (0.120) C:94% T:NA**	pCi/L	10/12/22 20:08	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.376 ± 0.306 (0.596) C:78% T:82%**	pCi/L	10/10/22 15:45	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.479 ± 0.387 (0.716)**	pCi/L	10/14/22 17:44	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: McDonough AP-1 Rads
Pace Project No.: 92624384

Sample: FB-3 **Lab ID: 92624384013** Collected: 09/12/22 12:10 Received: 09/13/22 10:30 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.0204 ± 0.0552 (0.137) C:99% T:NA**	pCi/L	10/12/22 20:08	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.679 ± 0.518 (1.04) C:72% T:85%**	pCi/L	10/10/22 15:50	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.699 ± 0.573 (1.18)**	pCi/L	10/14/22 17:44	7440-14-4	

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QUALITY CONTROL - RADIOCHEMISTRY

Project: McDonough AP-1 Rads
Pace Project No.: 92624384

QC Batch: 535922
QC Batch Method: EPA 9315
Analysis Method: EPA 9315
Analysis Description: 9315 Total Radium
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92624384012, 92624384013

METHOD BLANK: 2600355 Matrix: Water
Associated Lab Samples: 92624384012, 92624384013

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.0438 ± 0.0695 (0.152) C:94% T:NA	pCi/L	10/12/22 20:23	

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QUALITY CONTROL - RADIOCHEMISTRY

Project: McDonough AP-1 Rads
Pace Project No.: 92624384

QC Batch: 535924
QC Batch Method: EPA 9320
Analysis Method: EPA 9320
Analysis Description: 9320 Radium 228
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92624384012, 92624384013

METHOD BLANK: 2600360 Matrix: Water
Associated Lab Samples: 92624384012, 92624384013

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.590 ± 0.382 (0.710) C:71% T:92%	pCi/L	10/10/22 13:30	

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QUALITY CONTROL - RADIOCHEMISTRY

Project: McDonough AP-1 Rads
Pace Project No.: 92624384

QC Batch: 533110 Analysis Method: EPA 9315
QC Batch Method: EPA 9315 Analysis Description: 9315 Total Radium
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92624384007, 92624384008, 92624384009, 92624384010, 92624384011

METHOD BLANK: 2586601 Matrix: Water
Associated Lab Samples: 92624384007, 92624384008, 92624384009, 92624384010, 92624384011

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.00759 ± 0.0468 (0.133) C:88% T:NA	pCi/L	10/02/22 10:24	

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QUALITY CONTROL - RADIOCHEMISTRY

Project: McDonough AP-1 Rads
Pace Project No.: 92624384

QC Batch: 532087 Analysis Method: EPA 9315
QC Batch Method: EPA 9315 Analysis Description: 9315 Total Radium
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92624384001, 92624384002, 92624384003, 92624384004, 92624384005, 92624384006

METHOD BLANK: 2581306 Matrix: Water
Associated Lab Samples: 92624384001, 92624384002, 92624384003, 92624384004, 92624384005, 92624384006

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.122 ± 0.122 (0.241) C:95% T:NA	pCi/L	09/27/22 08:34	

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QUALITY CONTROL - RADIOCHEMISTRY

Project: McDonough AP-1 Rads
Pace Project No.: 92624384

QC Batch: 533111 Analysis Method: EPA 9320
QC Batch Method: EPA 9320 Analysis Description: 9320 Radium 228
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92624384007, 92624384008, 92624384009, 92624384010, 92624384011

METHOD BLANK: 2586603 Matrix: Water
Associated Lab Samples: 92624384007, 92624384008, 92624384009, 92624384010, 92624384011

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.798 ± 0.368 (0.604) C:81% T:85%	pCi/L	09/28/22 11:36	

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QUALITY CONTROL - RADIOCHEMISTRY

Project: McDonough AP-1 Rads
Pace Project No.: 92624384

QC Batch: 532089 | Analysis Method: EPA 9320
QC Batch Method: EPA 9320 | Analysis Description: 9320 Radium 228
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92624384001, 92624384002, 92624384003, 92624384004, 92624384005, 92624384006

METHOD BLANK: 2581322 Matrix: Water
Associated Lab Samples: 92624384001, 92624384002, 92624384003, 92624384004, 92624384005, 92624384006

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.391 ± 0.413 (0.858) C:74% T:78%	pCi/L	09/23/22 16:00	

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QUALIFIERS

Project: McDonough AP-1 Rads
Pace Project No.: 92624384

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.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: McDonough AP-1 Rads
Pace Project No.: 92624384

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92624384001	**DGWC-39**	EPA 9315	532087		
92624384002	**DGWC-40**	EPA 9315	532087		
92624384003	**DGWC-68A**	EPA 9315	532087		
92624384004	**FB-1**	EPA 9315	532087		
92624384005	**DUP-1**	EPA 9315	532087		
92624384006	**DGWC-69**	EPA 9315	532087		
92624384007	**DGWC-67**	EPA 9315	533110		
92624384008	**DGWC-121**	EPA 9315	533110		
92624384009	**EB-1**	EPA 9315	533110		
92624384010	**FB-2**	EPA 9315	533110		
92624384011	**DGWC-37**	EPA 9315	533110		
92624384012	**DGWC-38**	EPA 9315	535922		
92624384013	**FB-3**	EPA 9315	535922		
92624384001	**DGWC-39**	EPA 9320	532089		
92624384002	**DGWC-40**	EPA 9320	532089		
92624384003	**DGWC-68A**	EPA 9320	532089		
92624384004	**FB-1**	EPA 9320	532089		
92624384005	**DUP-1**	EPA 9320	532089		
92624384006	**DGWC-69**	EPA 9320	532089		
92624384007	**DGWC-67**	EPA 9320	533111		
92624384008	**DGWC-121**	EPA 9320	533111		
92624384009	**EB-1**	EPA 9320	533111		
92624384010	**FB-2**	EPA 9320	533111		
92624384011	**DGWC-37**	EPA 9320	533111		
92624384012	**DGWC-38**	EPA 9320	535924		
92624384013	**FB-3**	EPA 9320	535924		
92624384001	**DGWC-39**	Total Radium Calculation	535756		
92624384002	**DGWC-40**	Total Radium Calculation	535756		
92624384003	**DGWC-68A**	Total Radium Calculation	535756		
92624384004	**FB-1**	Total Radium Calculation	535756		
92624384005	**DUP-1**	Total Radium Calculation	535756		
92624384006	**DGWC-69**	Total Radium Calculation	535756		
92624384007	**DGWC-67**	Total Radium Calculation	536982		
92624384008	**DGWC-121**	Total Radium Calculation	536982		
92624384009	**EB-1**	Total Radium Calculation	536982		
92624384010	**FB-2**	Total Radium Calculation	536982		
92624384011	**DGWC-37**	Total Radium Calculation	536982		
92624384012	**DGWC-38**	Total Radium Calculation	540022		
92624384013	**FB-3**	Total Radium Calculation	540022		

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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# : 92624384

92624384

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

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

Date/Initials Person Examining Contents: 9/8/22 JM

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

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

Thermometer: ☐ IR Gun ID: 214 ☑ Wet ☐ Blue ☐ None

Type of Ice:

Cooler Temp: 2.1 **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): 2.1

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: WG				
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# : 92624384

PM: NMG Due Date: 09/29/22

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)	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 (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 ✓																			4				
4		2	1			1 ✓																			2				
5		2	1			1 ✓																			2				
6		2	1			1 ✓																			2				
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.

Pace Analytical

CHAIN-OF-CUSTODY / Analytical Request Document

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

Page : 1 Of 1

Section A	Section B	Section C
Required Client Information:	Required Project Information:	Invoice Information:
Company: Georgia Power - Coal Combustion Residuals	Report To: Lauren Coker	Attention: scsinvoices@southernco.com
Address: 2480 Maner Road Atlanta, GA 30339	Copy To: Golder	Company Name:
Email: laucoker@southernco.com		Address:
Phone: (470) 620-6176 Fax	Purchase Order #:	Pace Quote:
Requested Due Date: 10 Day TAT	Project Name: Plant McDonough AP-1	Pace Project Manager: Nicole D'Oleo
	Project #: GL16684982	Pace Profile #:

Regulatory Agency	State / Location
	GA

ITEM #	SAMPLE ID One Character per box. (A-Z, 0-9 / , -) Sample ids must be unique MATRIX: Drinking Water DW; Water WT; Waste Water WW; Product P; Soil/Solid SL; Oil OL; Wipe WP; Air AR; Other OT; Tissue TS	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	DATE	TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H2SO4	HNO3 + Ice	HCl	NaOH + Zn Acetate	Na2S2O3	Methanol	Other	Analyses Test Y/N	Requested Analysis Filtered (Y/N): App III/IV Total Metals	Cl, F, SO4, TDS	Radium 226/228	Mg, Na, K	CO3+HCO2	Fe Total, Fe 3+	Residual Chlorine (Y/N)	
																Y/N	N	N	N	N	N	N		
1	DGWC-39	WG	G	9/7/2022	14:44		6	3		3						X	X	X	X	X	X			pH = 6.43, Fe2 = 6.0 mg/L
2	DGWC-40	WG	G	9/7/2022	12:13		6	3		3						X	X	X	X	X	X			pH = 4.54, Fe2 = 0.0 mg/L
3	DGWC-68A	WG	G	9/7/2022	15:10		6	3		3						X	X	X	X	X	X			pH = 6.62, Fe2 = 0.0 mg/L
4	FB-1	WG	G	9/7/2022	15:15		6	3		3						X	X	X	X	X	X			
6	Dup-1	WG	G	9/7/2022	--		6	3		3						X	X	X	X	X	X			
7	DGWC-69	WG	G	9/7/2022	11:50		6	3		3						X	X	X	X	X	X			pH = 6.20, Fe2 = 0.0 mg/L
8																								
9																								
10																								
11																								
12																								
13																								
14																								

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS: TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
JUDE WAGUESPACK	SAMPLER	9/8/22	8:40		9-8-22	8:40				
					9/9/22	0945				

DATE Signed: 9/8/22

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 #:

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

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

Date/Initials Person Examining Contents: 9/9/22 JM

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: 2.4 **Correction Factor:** Add/Subtract (°C) 0.0

Cooler Temp Corrected (°C): 2.4

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

CLIENT NOTIFICATION/RESOLUTION

Lot ID of split containers:

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

***Check all unpreserved Nitrates for chlorine

Project #

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)	DG94-250 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)	DG9V-40 mL VOA H3PO4 (N/A)	DG9S-40 mL VOA H2SO4 (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)	BPN	BP3R-250 mL Plastic (NH2)2SO4 (9.3-9.7)	AG0U-100 mL Amber Unpreserved (N/A) (Cl-)	VSGU-20 mL Scintillation vials (N/A)	DG9U-40 mL Amber Unpreserved vials (N/A)
1		2	1			1																		1				
2		2	1			1																		1				
3		2	1			1																		1				
4		2	1			1																		1				
5		2	1			1																		1				
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 DENR Certification Office (i.e. Out of hold, incorrect preservative, out of temp, incorrect containers

Pace Analytical

CHAIN-OF-CUSTODY / Analytical Request Document

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

Page : 1 Of 1

Section A — Required Client Information:	Section B — Required Project Information:	Section C — Invoice Information:
Company: Georgia Power - Coal Combustion Residuals	Report To: Lauren Coker	Attention: scsinvoices@southernco.com
Address: 2480 Maner Road	Copy To: Golder	Company Name:
Atlanta, GA 30339		Address:
Email: laucoker@southernco.com	Purchase Order #:	Pace Quote:
Phone: (470) 620-6178 Fax:	Project Name: Plant McDonough AP-1	Pace Project Manager: Nicole D'Oleo
Requested Due Date: 10 Day TAT	Project #: GL16684962	Pace Profile #:

Regulatory Agency	
State / Location	GA

Requested Analysis Filtered (Y/N)

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

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

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	Mg, Na, K	CO3+HCO2	Fe Total, Fe 3+	Residual Chlorine (Y/N)
Y/N																N	N	N (struck)	N	N	N	4384
1	DGWC-67	WG	G	9/8/2022	11:00		6	3		3						X	X		X	X	X	pH = 6.21, Fe2 = 0.0 mg/L
2	DGWC-121	WG	G	9/8/2022	12:55		6	3		3						X	X		X	X	X	pH = 6.32 Fe2 = 2.75 mg/L
3	EB-1	WQ	G	9/8/2022	11:30		6	3		3						X	X		X	X	X	
4	FB-2	WQ	G	9/8/2022	13:00		6	3		3						X	X		X	X	X	
6	DGWC-37	WG	G	9/9/2022	11:38		6	3		3						X	X		X	X	X	pH = 6.30 Fe2 = 0.0 mg/L
7																						
8																						
9																						
10																						
11																						
12																						
13																						
14																						

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
	Mark Mann / Golder	09/09/22	15:50	[signature]	9/9/22	1550	

DATE Signed:

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

Pace ANALYTICAL SERVICES

DC#_Title: ENV-FRM-HUN1-0083 v01_Sample Condition Upon Receipt

Effective Date: 05/12/2022

Laboratory receiving samples:

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

Sample Condition Upon Receipt

Client Name: Georgia Power

Project #

WO#: 92624384

PM: NMG Due Date: 09/29/22

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: 09/13/22 JM

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

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

Thermometer: ☐ IR Gun ID: 083 **Type of Ice:** ☑ Wet ☐ Blue ☐ None

Cooler Temp: 1.9 **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): 1.9

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: WG				
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

DC#_Title: ENV-FRM-HUN1-0083 v01_Sample Condition Upon Receipt

Effective Date: 05/12/2022

WO#: 92624384

PM: NMG Due Date: 09/29/22

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**

*****Check all unpreserved Nitrates for chlorine**

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)	DG94-250 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)	DG9V-40 mL VOA H3PO4 (N/A)	DG9S-40 mL VOA H2SO4 (N/A)	V/GK (3 vials per kit)-VPH/Gas kit (N/A)	5P5T-125 mL Sterile Plastic (N/A - lab)	5P2T-250 mL Sterile Plastic (N/A - lab)	BP/N	BP3R-250 mL Plastic (NH2)2SO4 (9.3-9.7)	AG0U-100 mL Amber Unpreserved (N/A) (Cl-)	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				
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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 DENR Certification Office (i.e. Out of hold, incorrect preservative, out of temp, incorrect containers.

Pace Analytical

CHAIN-OF-CUSTODY / Analytical Request Document

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

Page: 1 Of 1

Section A
Required Client Information:

Company:	Georgia Power - Coal Combustion Residuals
Address:	2480 Maner Road Atlanta, GA 30339
Email:	laucoker@southernco.com
Phone:	(470) 620-8176
Fax	
Requested Due Date:	10 Day TAT

Section B
Required Project Information:

Report To:	Lauren Coker
Copy To:	Golder
Purchase Order #:	
Project Name:	Plant McDonough AP-1
Project #:	GL186849622

Section C
Invoice Information:

Attention:	scsinvoices@southernco.com
Company Name:	
Address:	
Pace Quote:	
Pace Project Manager:	Nicole D'Oleo
Pace Profile #:	

Regulatory Agency	
State / Location	GA

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

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

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	DATE	TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Unpreserved - Ice	H2SO4	HNO3 + Ice	HCl	NaOH + Zn Acetate	Na2S2O3	Methanol	Other	Analyses Test Y/N	App III/IV Total Metals (N)	Cl, F, SO4, TDS (N)	Radium 226/228 (N)	Mg, Na, K, (N)	CO3+HCO2 (N)	Fe Total, Fe 3+ (N)	Residual Chlorine (Y/N)	
1	DGWC-38	WG	G	9/12/2022	12:12		6	3		3							X	X	X	X	X	X		pH = 6.05, Fe2 = 0.0 mg/L
2	FB-3	WQ	G	9/12/2022	12:10		6	3		3							X	X	X	X	X	X		
3																								
4																								
5																								
7																								
8																								
9																								
10																								
11																								
12																								
13																								
14																								

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
	JW... / Sample	9/12/22	8:05	M. BAH	9-13-22	8:10	
				[signature]	9/13/22	10 36	

SAMPLER NAME AND SIGNATURE: J. DE WAGUESPACK

DATE Signed: 9/13/22

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

Quality Control Sample Performance Assessment

Pace Analytical
www.pacelabs.com

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Test:	Ra-228
Analyst:	VAL
Date:	9/30/2022
Worklist:	69073
Matrix:	WT

Method Blank Assessment	
MB Sample ID	2600360
MB concentration:	0.590
MB 2 Sigma CSU:	0.362
MB MDC:	0.710
MB Numerical Performance Indicator:	3.02
MB Status vs Numerical Indicator:	Fail*
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	LCSD (Y or N)?	Y
	LCS69073	LCSD69073
Count Date:	10/10/2022	10/10/2022
Spike I.D.:	22-029	22-029
Decay Corrected Spike Concentration (pCi/mL):	19.834	19.834
Volume Used (mL):	0.20	0.20
Aliquot Volume (L, g, F):	0.808	0.810
Target Conc. (pCi/L, g, F):	4.907	4.895
Uncertainty (Calculated):	0.353	0.352
Result (pCi/L, g, F):	6.528	6.766
LCS/LCSD 2 Sigma CSU (pCi/L, g, F):	1.382	1.419
Numerical Performance Indicator:	2.23	2.51
Percent Recovery:	133.05%	138.22%
Status vs Numerical Indicator:	N/A	Warning
Status vs Recovery:	Pass	Fail High**
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.:	LCS69073	Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Duplicate Sample I.D.	LCSD69073	
Sample Result (pCi/L, g, F):	6.528	
Sample Result 2 Sigma CSU (pCi/L, g, F):	1.382	
Sample Duplicate Result (pCi/L, g, F):	6.766	
Sample Duplicate Result 2 Sigma CSU (pCi/L, g, F):	1.419	
Are sample and/or duplicate results below RL?	NO	
Duplicate Numerical Performance Indicator:	-0.235	
(Based on the LCS/LCSD Percent Recoveries) Duplicate RPD:	3.81%	
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:

~~*If the lowest activity sample in this batch is greater than ten times the blank value, the blank is acceptable; otherwise this batch must be reprepped.~~

~~**If all sample results are below MDC, the batch is acceptable, otherwise this batch must be reprepped due to LCSD failure.~~ QM 10/11/22

MB activity < MDC, Pass

NI < 3 acceptable for LCS/LCSD

QM 10/11/22

10/11/22

JW 10.11.22

Quality Control Sample Performance Assessment

Pace Analytical
www.pacelabs.com

Test:	Ra-226
Analyst:	RMS
Date:	9/30/2022
Worklist:	69072
Matrix:	DW

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	2600355
MB concentration:	0.044
MB Counting Uncertainty:	0.069
MB MDC:	0.152
MB Numerical Performance Indicator:	1.24
MB Status vs Numerical Indicator:	N/A
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	LCSD (Y or N)?	Y
	LCS69072	LCSD69072
Count Date:	10/12/2022	10/12/2022
Spike I.D.:	19-033	19-033
Decay Corrected Spike Concentration (pCi/mL):	24.023	24.023
Volume Used (mL):	0.10	0.10
Aliquot Volume (L, g, F):	0.505	0.511
Target Conc. (pCi/L, g, F):	4.758	4.704
Uncertainty (Calculated):	0.057	0.056
Result (pCi/L, g, F):	5.119	4.712
LCS/LCSD Counting Uncertainty (pCi/L, g, F):	0.487	0.471
Numerical Performance Indicator:	1.44	0.03
Percent Recovery:	107.59%	100.17%
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.:	LCS69072	2600355
Duplicate Sample I.D.	LCSD69072	92624384013
Sample Result (pCi/L, g, F):	5.119	0.044
Sample Result Counting Uncertainty (pCi/L, g, F):	0.487	0.069
Sample Duplicate Result (pCi/L, g, F):	4.712	0.020
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):	0.471	0.055
Are sample and/or duplicate results below RL?	NO	See Below ##
Duplicate Numerical Performance Indicator:	1.179	0.520
(Based on the LCS/LCSD Percent Recoveries) Duplicate RPD:	7.14%	73.02%
Duplicate Status vs Numerical Indicator:	N/A	N/A
Duplicate Status vs RPD:	Pass	Fail***
% 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.

LAM 10/13/22

Comments:

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

LAM 10/13/22

LAM 10/13/22

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

November 10, 2022

Andrea McClure
WSP/Golder
5170 Peachtree Road
Building 100, Suite 300
Atlanta, GA 30341

RE: Project: McDonough AP-1 Assessment MW-Revised Report
Pace Project No.: 92625181

Dear Andrea McClure:

Enclosed are the analytical results for sample(s) received by the laboratory between September 08, 2022 and September 13, 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

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

Sincerely,

Nicole D'Oleo

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

Enclosures

cc: Joju Abraham, Georgia Power-CCR
Stephen Benda, Southern Company
Noelia Gangi, Georgia Power
Daniela Herrera, Golder
Ben Hodges, Georgia Power
Kristen Jurinko
Laura Midkiff, Georgia Power
Karim Minkara, Golder Associates - Atlanta
J. Shelby Mobley, Southern Company
Charles Norton, Southern Company
Ms. Lauren Petty, Southern Company
Dawn Prell, Golder Associates Inc.
Michael Smilley, Georgia Power
Yong Cheng Soo, WSP/Golder
Tina Sullivan, ERM

REPORT OF LABORATORY ANALYSIS

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CERTIFICATIONS

Project: McDonough AP-1 Assessment MW-Revised Report
Pace Project No.: 92625181

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

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SAMPLE SUMMARY

Project: McDonough AP-1 Assessment MW-Revised Report
Pace Project No.: 92625181

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92625181001	**B-113D**	Water	09/12/22 14:11	09/13/22 10:30
92625181002	**EB-2**	Water	09/12/22 13:40	09/13/22 10:30
92624373001	**B-105D**	Water	09/07/22 14:54	09/08/22 09:45
92624373002	**B-112D**	Water	09/07/22 13:05	09/08/22 09:45

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SAMPLE ANALYTE COUNT

Project: McDonough AP-1 Assessment MW-Revised Report
Pace Project No.: 92625181

Lab ID	Sample ID	Method	Analysts	Analytes Reported
92625181001	**B-113D**	EPA 6010D	DRB	5
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	BTS	1
		SM 2320B-2011	SMS	3
		EPA 300.0 Rev 2.1 1993	CDC	3
92625181002	**EB-2**	EPA 6010D	DRB	5
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	BTS	1
		SM 2320B-2011	SMS	3
		EPA 300.0 Rev 2.1 1993	CDC	3
92624373001	**B-105D**	EPA 6010D	DRB	5
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	BTS	1
		SM 2320B-2011	SMS	3
		EPA 300.0 Rev 2.1 1993	JCM	3
92624373002	**B-112D**	EPA 6010D	DRB	5
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	BTS	1
		SM 2320B-2011	SMS	3
		EPA 300.0 Rev 2.1 1993	JCM	3

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

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ANALYTICAL RESULTS

Project: McDonough AP-1 Assessment MW-Revised Report
Pace Project No.: 92625181

Sample: B-113D **Lab ID: 92625181001** Collected: 09/12/22 14:11 Received: 09/13/22 10:30 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		09/13/22 13:47		
pH	**7.95**	Std. Units			1		09/13/22 13:47		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Iron	**0.25**	mg/L	0.040	0.025	1	09/21/22 17:50	09/22/22 19:54	7439-89-6	
Potassium	**4.8**	mg/L	0.20	0.15	1	09/21/22 17:50	09/22/22 19:54	7440-09-7	
Sodium	**22.2**	mg/L	1.0	0.58	1	09/21/22 17:50	09/22/22 19:54	7440-23-5	
Calcium	**36.5**	mg/L	1.0	0.12	1	09/21/22 17:50	09/22/22 19:54	7440-70-2	
Magnesium	**4.8**	mg/L	0.050	0.012	1	09/21/22 17:50	09/22/22 19:54	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	09/22/22 18:15	09/24/22 19:36	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0022	1	09/22/22 18:15	09/24/22 19:36	7440-38-2	
Barium	**0.0051**	mg/L	0.0050	0.00067	1	09/22/22 18:15	09/24/22 19:36	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	09/22/22 18:15	09/24/22 19:36	7440-41-7	
Boron	**0.048**	mg/L	0.040	0.0086	1	09/22/22 18:15	09/24/22 19:36	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	09/22/22 18:15	09/24/22 19:36	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	09/22/22 18:15	09/24/22 19:36	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	09/22/22 18:15	09/24/22 19:36	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	09/22/22 18:15	09/24/22 19:36	7439-92-1	
Lithium	**0.0084J**	mg/L	0.030	0.00073	1	09/22/22 18:15	09/24/22 19:36	7439-93-2	
Molybdenum	**0.052**	mg/L	0.010	0.00074	1	09/22/22 18:15	09/24/22 19:36	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	09/22/22 18:15	09/24/22 19:36	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	09/22/22 18:15	09/24/22 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	09/27/22 07:45	09/27/22 11:16	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**197**	mg/L	25.0	10.0	1		09/15/22 11:46		
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville								
Alkalinity,Bicarbonate (CaCO3)	**125**	mg/L	5.0	5.0	1		09/16/22 16:58		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		09/16/22 16:58		
Alkalinity, Total as CaCO3	**125**	mg/L	5.0	5.0	1		09/16/22 16:58		
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		09/15/22 19:56	16887-00-6	

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ANALYTICAL RESULTS

Project: McDonough AP-1 Assessment MW-Revised Report
Pace Project No.: 92625181

Sample: B-113D **Lab ID: 92625181001** Collected: 09/12/22 14:11 Received: 09/13/22 10:30 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								
Fluoride	**1.0**	mg/L	0.10	0.050	1		09/15/22 19:56	16984-48-8	
Sulfate	**35.0**	mg/L	1.0	0.50	1		09/15/22 19:56	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: McDonough AP-1 Assessment MW-Revised Report
Pace Project No.: 92625181

Sample: EB-2 **Lab ID: 92625181002** Collected: 09/12/22 13:40 Received: 09/13/22 10:30 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	09/21/22 17:50	09/22/22 20:08	7439-89-6	
Potassium	ND	mg/L	0.20	0.15	1	09/21/22 17:50	09/22/22 20:08	7440-09-7	
Sodium	ND	mg/L	1.0	0.58	1	09/21/22 17:50	09/22/22 20:08	7440-23-5	
Calcium	ND	mg/L	1.0	0.12	1	09/21/22 17:50	09/22/22 20:08	7440-70-2	
Magnesium	ND	mg/L	0.050	0.012	1	09/21/22 17:50	09/22/22 20:08	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	09/22/22 18:15	09/24/22 19:54	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0022	1	09/22/22 18:15	09/24/22 19:54	7440-38-2	
Barium	ND	mg/L	0.0050	0.00067	1	09/22/22 18:15	09/24/22 19:54	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	09/22/22 18:15	09/24/22 19:54	7440-41-7	
Boron	ND	mg/L	0.040	0.0086	1	09/22/22 18:15	09/24/22 19:54	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	09/22/22 18:15	09/24/22 19:54	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	09/22/22 18:15	09/24/22 19:54	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	09/22/22 18:15	09/24/22 19:54	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	09/22/22 18:15	09/24/22 19:54	7439-92-1	
Lithium	ND	mg/L	0.030	0.00073	1	09/22/22 18:15	09/24/22 19:54	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	09/22/22 18:15	09/24/22 19:54	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	09/22/22 18:15	09/24/22 19:54	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	09/22/22 18:15	09/24/22 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	09/27/22 07:45	09/27/22 11:19	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	ND	mg/L	25.0	10.0	1		09/15/22 11:46		
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville								
Alkalinity,Bicarbonate (CaCO3)	ND	mg/L	5.0	5.0	1		09/16/22 17:08		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		09/16/22 17:08		
Alkalinity, Total as CaCO3	ND	mg/L	5.0	5.0	1		09/16/22 17:08		
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		09/15/22 20:11	16887-00-6	
Fluoride	**0.068J**	mg/L	0.10	0.050	1		09/15/22 20:11	16984-48-8	
Sulfate	ND	mg/L	1.0	0.50	1		09/15/22 20:11	14808-79-8	

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ANALYTICAL RESULTS

Project: McDonough AP-1 Assessment MW-Revised Report
Pace Project No.: 92625181

Sample: B-105D **Lab ID: 92624373001** Collected: 09/07/22 14:54 Received: 09/08/22 09:45 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		09/08/22 13:36		
pH	**6.44**	Std. Units			1		09/08/22 13:36		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Iron	**1.9**	mg/L	0.040	0.025	1	09/21/22 12:19	09/21/22 19:58	7439-89-6	
Potassium	**8.2**	mg/L	0.20	0.15	1	09/21/22 12:19	09/21/22 19:58	7440-09-7	
Sodium	**19.9**	mg/L	1.0	0.58	1	09/21/22 12:19	09/21/22 19:58	7440-23-5	M1
Calcium	**73.2**	mg/L	1.0	0.12	1	09/21/22 12:19	09/21/22 19:58	7440-70-2	M1
Magnesium	**25.2**	mg/L	0.050	0.012	1	09/21/22 12:19	09/21/22 19:58	7439-95-4	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	09/21/22 13:49	09/24/22 15:37	7440-36-0	
Arsenic	**0.0026J**	mg/L	0.0050	0.0022	1	09/21/22 13:49	09/24/22 15:37	7440-38-2	
Barium	**0.035**	mg/L	0.0050	0.00067	1	09/21/22 13:49	09/24/22 15:37	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	09/21/22 13:49	09/24/22 15:37	7440-41-7	
Boron	**0.87**	mg/L	0.20	0.043	5	09/21/22 13:49	09/26/22 14:02	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	09/21/22 13:49	09/24/22 15:37	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	09/21/22 13:49	09/24/22 15:37	7440-47-3	
Cobalt	**0.0040J**	mg/L	0.0050	0.00039	1	09/21/22 13:49	09/24/22 15:37	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	09/21/22 13:49	09/24/22 15:37	7439-92-1	
Lithium	**0.013J**	mg/L	0.030	0.00073	1	09/21/22 13:49	09/24/22 15:37	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	09/21/22 13:49	09/24/22 15:37	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	09/21/22 13:49	09/24/22 15:37	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	09/21/22 13:49	09/24/22 15:37	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	**0.00014J**	mg/L	0.00020	0.00013	1	09/22/22 14:00	09/22/22 17:21	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**479**	mg/L	25.0	10.0	1		09/09/22 14:58		
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville								
Alkalinity,Bicarbonate (CaCO3)	**42.0**	mg/L	5.0	5.0	1		09/14/22 15:57		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		09/14/22 15:57		
Alkalinity, Total as CaCO3	**42.0**	mg/L	5.0	5.0	1		09/14/22 15:57		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**16.4**	mg/L	1.0	0.60	1		09/09/22 22:59	16887-00-6	

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ANALYTICAL RESULTS

Project: McDonough AP-1 Assessment MW-Revised Report
Pace Project No.: 92625181

Sample: B-105D **Lab ID: 92624373001** Collected: 09/07/22 14:54 Received: 09/08/22 09:45 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								
Fluoride	**0.11**	mg/L	0.10	0.050	1		09/09/22 22:59	16984-48-8	
Sulfate	**263**	mg/L	5.0	2.5	5		09/10/22 02:35	14808-79-8	

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ANALYTICAL RESULTS

Project: McDonough AP-1 Assessment MW-Revised Report
Pace Project No.: 92625181

Sample: B-112D **Lab ID: 92624373002** Collected: 09/07/22 13:05 Received: 09/08/22 09:45 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		09/08/22 13:36		
pH	**6.72**	Std. Units			1		09/08/22 13:36		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Iron	**0.026J**	mg/L	0.040	0.025	1	09/21/22 12:19	09/21/22 20:26	7439-89-6	
Potassium	**3.1**	mg/L	0.20	0.15	1	09/21/22 12:19	09/21/22 20:26	7440-09-7	
Sodium	**15.0**	mg/L	1.0	0.58	1	09/21/22 12:19	09/21/22 20:26	7440-23-5	
Calcium	**26.5**	mg/L	1.0	0.12	1	09/21/22 12:19	09/21/22 20:26	7440-70-2	
Magnesium	**8.0**	mg/L	0.050	0.012	1	09/21/22 12:19	09/21/22 20:26	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	09/21/22 13:49	09/24/22 15:43	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0022	1	09/21/22 13:49	09/24/22 15:43	7440-38-2	
Barium	**0.0026J**	mg/L	0.0050	0.00067	1	09/21/22 13:49	09/24/22 15:43	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	09/21/22 13:49	09/24/22 15:43	7440-41-7	
Boron	**0.26**	mg/L	0.040	0.0086	1	09/21/22 13:49	09/26/22 14:07	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	09/21/22 13:49	09/24/22 15:43	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	09/21/22 13:49	09/24/22 15:43	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	09/21/22 13:49	09/24/22 15:43	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	09/21/22 13:49	09/24/22 15:43	7439-92-1	
Lithium	**0.0039J**	mg/L	0.030	0.00073	1	09/21/22 13:49	09/24/22 15:43	7439-93-2	
Molybdenum	**0.028**	mg/L	0.010	0.00074	1	09/21/22 13:49	09/24/22 15:43	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	09/21/22 13:49	09/24/22 15:43	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	09/21/22 13:49	09/24/22 15:43	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	09/22/22 14:00	09/22/22 17:32	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**153**	mg/L	25.0	10.0	1		09/09/22 15:04		
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville								
Alkalinity,Bicarbonate (CaCO3)	**106**	mg/L	5.0	5.0	1		09/14/22 16:04		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		09/14/22 16:04		
Alkalinity, Total as CaCO3	**106**	mg/L	5.0	5.0	1		09/14/22 16:04		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**2.9**	mg/L	1.0	0.60	1		09/09/22 23:41	16887-00-6	

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ANALYTICAL RESULTS

Project: McDonough AP-1 Assessment MW-Revised Report
Pace Project No.: 92625181

Sample: B-112D **Lab ID: 92624373002** Collected: 09/07/22 13:05 Received: 09/08/22 09:45 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								
Fluoride	**0.27**	mg/L	0.10	0.050	1		09/09/22 23:41	16984-48-8	
Sulfate	**18.2**	mg/L	1.0	0.50	1		09/09/22 23:41	14808-79-8	

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QUALITY CONTROL DATA

Project: McDonough AP-1 Assessment MW-Revised Report
Pace Project No.: 92625181

QC Batch: 724698
QC Batch Method: EPA 3010A
Analysis Method: EPA 6010D
Analysis Description: 6010D ATL
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92624373001, 92624373002

METHOD BLANK: 3775652 Matrix: Water
Associated Lab Samples: 92624373001, 92624373002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium	mg/L	ND	1.0	0.12	09/21/22 19:48	
Iron	mg/L	ND	0.040	0.025	09/21/22 19:48	
Magnesium	mg/L	ND	0.050	0.012	09/21/22 19:48	
Potassium	mg/L	ND	0.20	0.15	09/21/22 19:48	
Sodium	mg/L	ND	1.0	0.58	09/21/22 19:48	

LABORATORY CONTROL SAMPLE: 3775653

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium	mg/L	1	1.0	103	80-120	
Iron	mg/L	1	1.0	101	80-120	
Magnesium	mg/L	1	1.0	104	80-120	
Potassium	mg/L	1	1.0	103	80-120	
Sodium	mg/L	1	1.1	106	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3775654 3775655

Parameter	Units	92624373001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Calcium	mg/L	73.2	1	1	71.7	72.8	-152	-37	75-125	2	20	M1
Iron	mg/L	1.9	1	1	2.9	2.9	101	100	75-125	0	20	
Magnesium	mg/L	25.2	1	1	25.7	25.7	49	52	75-125	0	20	M1
Potassium	mg/L	8.2	1	1	9.0	9.1	75	90	75-125	2	20	
Sodium	mg/L	19.9	1	1	20.3	20.6	38	68	75-125	1	20	M1

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QUALITY CONTROL DATA

Project: McDonough AP-1 Assessment MW-Revised Report
Pace Project No.: 92625181

QC Batch: 724852
QC Batch Method: EPA 3010A
Analysis Method: EPA 6010D
Analysis Description: 6010D ATL
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92625181001, 92625181002

METHOD BLANK: 3776437 Matrix: Water
Associated Lab Samples: 92625181001, 92625181002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium	mg/L	ND	1.0	0.12	09/22/22 17:49	
Iron	mg/L	ND	0.040	0.025	09/22/22 17:49	
Magnesium	mg/L	ND	0.050	0.012	09/22/22 17:49	
Potassium	mg/L	ND	0.20	0.15	09/22/22 17:49	
Sodium	mg/L	ND	1.0	0.58	09/22/22 17:49	

LABORATORY CONTROL SAMPLE: 3776438

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium	mg/L	1	0.97J	97	80-120	
Iron	mg/L	1	0.97	97	80-120	
Magnesium	mg/L	1	0.97	97	80-120	
Potassium	mg/L	1	0.95	95	80-120	
Sodium	mg/L	1	0.99J	99	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3776441 3776442

Parameter	Units	92622406011 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Calcium	mg/L	67.1	1	1	68.1	69.3	100	212	75-125	2	20	M1
Iron	mg/L	ND	1	1	1.0	1.1	104	105	75-125	1	20	
Magnesium	mg/L	1.0	1	1	2.1	2.1	106	107	75-125	1	20	
Potassium	mg/L	2.3	1	1	3.3	3.4	103	110	75-125	2	20	
Sodium	mg/L	1.5	1	1	2.5	2.6	101	107	75-125	2	20	

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QUALITY CONTROL DATA

Project: McDonough AP-1 Assessment MW-Revised Report
Pace Project No.: 92625181

QC Batch: 724800
QC Batch Method: EPA 3005A
Analysis Method: EPA 6020B
Analysis Description: 6020 MET
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92624373001, 92624373002

METHOD BLANK: 3776150 Matrix: Water
Associated Lab Samples: 92624373001, 92624373002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	ND	0.0030	0.00078	09/24/22 14:20	
Arsenic	mg/L	ND	0.0050	0.0022	09/24/22 14:20	
Barium	mg/L	ND	0.0050	0.00067	09/24/22 14:20	
Beryllium	mg/L	ND	0.00050	0.000054	09/24/22 14:20	
Boron	mg/L	ND	0.040	0.0086	09/24/22 14:20	
Cadmium	mg/L	ND	0.00050	0.00011	09/24/22 14:20	
Chromium	mg/L	ND	0.0050	0.0011	09/24/22 14:20	
Cobalt	mg/L	ND	0.0050	0.00039	09/24/22 14:20	
Lead	mg/L	ND	0.0010	0.00089	09/24/22 14:20	
Lithium	mg/L	ND	0.030	0.00073	09/24/22 14:20	
Molybdenum	mg/L	ND	0.010	0.00074	09/24/22 14:20	
Selenium	mg/L	ND	0.0050	0.0014	09/24/22 14:20	
Thallium	mg/L	ND	0.0010	0.00018	09/24/22 14:20	

LABORATORY CONTROL SAMPLE: 3776151

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.1	0.11	105	80-120	
Arsenic	mg/L	0.1	0.10	102	80-120	
Barium	mg/L	0.1	0.099	99	80-120	
Beryllium	mg/L	0.1	0.10	102	80-120	
Boron	mg/L	1	1.1	107	80-120	
Cadmium	mg/L	0.1	0.10	100	80-120	
Chromium	mg/L	0.1	0.10	104	80-120	
Cobalt	mg/L	0.1	0.10	101	80-120	
Lead	mg/L	0.1	0.10	100	80-120	
Lithium	mg/L	0.1	0.098	98	80-120	
Molybdenum	mg/L	0.1	0.10	100	80-120	
Selenium	mg/L	0.1	0.10	101	80-120	
Thallium	mg/L	0.1	0.10	100	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3776152 3776153

Parameter	Units	92625866027 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	106	109	75-125	2	20	
Arsenic	mg/L	ND	0.1	0.1	0.10	0.10	99	101	75-125	2	20	

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QUALITY CONTROL DATA

Project: McDonough AP-1 Assessment MW-Revised Report
Pace Project No.: 92625181

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3776152 3776153

Parameter	Units	92625866027 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Barium	mg/L	14.6 ug/L	0.1	0.1	0.12	0.12	102	102	75-125	0	20	
Beryllium	mg/L	ND	0.1	0.1	0.10	0.10	104	102	75-125	1	20	
Boron	mg/L	393 ug/L	1	1	1.6	1.6	116	116	75-125	0	20	
Cadmium	mg/L	ND	0.1	0.1	0.10	0.10	101	102	75-125	1	20	
Chromium	mg/L	22.8 ug/L	0.1	0.1	0.13	0.14	112	118	75-125	4	20	
Cobalt	mg/L	0.44J ug/L	0.1	0.1	0.098	0.10	98	101	75-125	3	20	
Lead	mg/L	ND	0.1	0.1	0.095	0.098	94	98	75-125	4	20	
Lithium	mg/L	ND	0.1	0.1	0.10	0.10	103	102	75-125	1	20	
Molybdenum	mg/L	ND	0.1	0.1	0.10	0.11	100	105	75-125	5	20	
Selenium	mg/L	ND	0.1	0.1	0.098	0.10	98	100	75-125	2	20	
Thallium	mg/L	ND	0.1	0.1	0.095	0.099	95	99	75-125	4	20	

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QUALITY CONTROL DATA

Project: McDonough AP-1 Assessment MW-Revised Report
Pace Project No.: 92625181

QC Batch: 725176
QC Batch Method: EPA 3005A
Analysis Method: EPA 6020B
Analysis Description: 6020 MET
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92625181001, 92625181002

METHOD BLANK: 3778147 Matrix: Water
Associated Lab Samples: 92625181001, 92625181002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	ND	0.0030	0.00078	09/24/22 17:31	
Arsenic	mg/L	ND	0.0050	0.0022	09/24/22 17:31	
Barium	mg/L	ND	0.0050	0.00067	09/24/22 17:31	
Beryllium	mg/L	ND	0.00050	0.000054	09/24/22 17:31	
Boron	mg/L	ND	0.040	0.0086	09/24/22 17:31	
Cadmium	mg/L	ND	0.00050	0.00011	09/24/22 17:31	
Chromium	mg/L	ND	0.0050	0.0011	09/24/22 17:31	
Cobalt	mg/L	ND	0.0050	0.00039	09/24/22 17:31	
Lead	mg/L	ND	0.0010	0.00089	09/24/22 17:31	
Lithium	mg/L	ND	0.030	0.00073	09/24/22 17:31	
Molybdenum	mg/L	ND	0.010	0.00074	09/24/22 17:31	
Selenium	mg/L	ND	0.0050	0.0014	09/24/22 17:31	
Thallium	mg/L	ND	0.0010	0.00018	09/24/22 17:31	

LABORATORY CONTROL SAMPLE: 3778148

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.1	0.10	104	80-120	
Arsenic	mg/L	0.1	0.10	100	80-120	
Barium	mg/L	0.1	0.098	98	80-120	
Beryllium	mg/L	0.1	0.099	99	80-120	
Boron	mg/L	1	1.1	108	80-120	
Cadmium	mg/L	0.1	0.098	98	80-120	
Chromium	mg/L	0.1	0.10	100	80-120	
Cobalt	mg/L	0.1	0.097	97	80-120	
Lead	mg/L	0.1	0.094	94	80-120	
Lithium	mg/L	0.1	0.098	98	80-120	
Molybdenum	mg/L	0.1	0.10	101	80-120	
Selenium	mg/L	0.1	0.097	97	80-120	
Thallium	mg/L	0.1	0.094	94	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3778149 3778150

Parameter	Units	92624372001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Antimony	mg/L	ND	0.1	0.1	0.10	0.11	104	105	75-125	1	20	
Arsenic	mg/L	ND	0.1	0.1	0.10	0.10	100	102	75-125	2	20	

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QUALITY CONTROL DATA

Project: McDonough AP-1 Assessment MW-Revised Report
Pace Project No.: 92625181

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3778149 3778150

Parameter	Units	92624372001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Barium	mg/L	0.099	0.1	0.1	0.19	0.19	87	92	75-125	3	20	
Beryllium	mg/L	ND	0.1	0.1	0.098	0.096	98	96	75-125	2	20	
Boron	mg/L	3.3	1	1	4.3	4.4	96	108	75-125	3	20	
Cadmium	mg/L	ND	0.1	0.1	0.097	0.098	97	98	75-125	1	20	
Chromium	mg/L	ND	0.1	0.1	0.098	0.098	98	98	75-125	0	20	
Cobalt	mg/L	0.0065	0.1	0.1	0.10	0.10	95	96	75-125	2	20	
Lead	mg/L	ND	0.1	0.1	0.090	0.093	90	93	75-125	3	20	
Lithium	mg/L	ND	0.1	0.1	0.10	0.10	100	101	75-125	1	20	
Molybdenum	mg/L	ND	0.1	0.1	0.10	0.10	99	102	75-125	2	20	
Selenium	mg/L	ND	0.1	0.1	0.098	0.10	98	101	75-125	3	20	
Thallium	mg/L	ND	0.1	0.1	0.092	0.095	92	95	75-125	3	20	

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QUALITY CONTROL DATA

Project: McDonough AP-1 Assessment MW-Revised Report
Pace Project No.: 92625181

QC Batch: 724426
QC Batch Method: EPA 7470A
Analysis Method: EPA 7470A
Analysis Description: 7470 Mercury
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92624373001, 92624373002

METHOD BLANK: 3774367 Matrix: Water
Associated Lab Samples: 92624373001, 92624373002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	ND	0.00020	0.00013	09/22/22 17:16	

LABORATORY CONTROL SAMPLE: 3774368

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.0025	0.0024	98	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3774369 3774370

Parameter	Units	92624373001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	mg/L	0.00014J	0.0025	0.0025	0.0025	0.0025	93	93	75-125	1	20	

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QUALITY CONTROL DATA

Project: McDonough AP-1 Assessment MW-Revised Report
Pace Project No.: 92625181

QC Batch: 725890
QC Batch Method: EPA 7470A
Analysis Method: EPA 7470A
Analysis Description: 7470 Mercury
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92625181001, 92625181002

METHOD BLANK: 3781485 Matrix: Water
Associated Lab Samples: 92625181001, 92625181002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	ND	0.00020	0.00013	09/27/22 11:00	

LABORATORY CONTROL SAMPLE: 3781486

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: 3781487 3781488

Parameter	Units	92624372011 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	mg/L	ND	0.0025	0.0025	0.0023	0.0018	94	71	75-125	28	20	M1,R1

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QUALITY CONTROL DATA

Project: McDonough AP-1 Assessment MW-Revised Report
Pace Project No.: 92625181

QC Batch: 722447
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: 92624373001, 92624373002

METHOD BLANK: 3764210 Matrix: Water
Associated Lab Samples: 92624373001, 92624373002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	25.0	10.0	09/09/22 14:58	

LABORATORY CONTROL SAMPLE: 3764211

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	382	96	80-120	

SAMPLE DUPLICATE: 3764212

Parameter	Units	92623815001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	351	346	1	10	

SAMPLE DUPLICATE: 3764213

Parameter	Units	92624372006 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	102	107	5	10	

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QUALITY CONTROL DATA

Project: McDonough AP-1 Assessment MW-Revised Report
Pace Project No.: 92625181

QC Batch: 723325
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: 92625181001, 92625181002

METHOD BLANK: 3768875 Matrix: Water
Associated Lab Samples: 92625181001, 92625181002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	25.0	10.0	09/15/22 11:44	

LABORATORY CONTROL SAMPLE: 3768876

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

SAMPLE DUPLICATE: 3768878

Parameter	Units	92625189005 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	87.0	83.0	5	10	

SAMPLE DUPLICATE: 3768892

Parameter	Units	92625181001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	197	193	2	10	

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REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: McDonough AP-1 Assessment MW-Revised Report
Pace Project No.: 92625181

QC Batch: 723206
QC Batch Method: SM 2320B-2011
Analysis Method: SM 2320B-2011
Analysis Description: 2320B Alkalinity
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92624373001, 92624373002

METHOD BLANK: 3768028 Matrix: Water
Associated Lab Samples: 92624373001, 92624373002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Alkalinity, Total as CaCO3	mg/L	ND	5.0	5.0	09/14/22 14:56	
Alkalinity,Bicarbonate (CaCO3)	mg/L	ND	5.0	5.0	09/14/22 14:56	
Alkalinity,Carbonate (CaCO3)	mg/L	ND	5.0	5.0	09/14/22 14:56	

LABORATORY CONTROL SAMPLE: 3768029

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	50	50.2	100	80-120	

LABORATORY CONTROL SAMPLE: 3768030

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	50	50.8	102	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3768031 3768032

Parameter	Units	92625359004 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	324	50	50	353	349	58	51	80-120	1	25	M1

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3768033 3768034

Parameter	Units	92624372011 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	134	50	50	193	185	118	102	80-120	4	25	

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QUALITY CONTROL DATA

Project: McDonough AP-1 Assessment MW-Revised Report
Pace Project No.: 92625181

QC Batch: 723613
QC Batch Method: SM 2320B-2011
Analysis Method: SM 2320B-2011
Analysis Description: 2320B Alkalinity
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92625181001, 92625181002

METHOD BLANK: 3770309 Matrix: Water
Associated Lab Samples: 92625181001, 92625181002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Alkalinity, Total as CaCO3	mg/L	ND	5.0	5.0	09/16/22 13:22	
Alkalinity,Bicarbonate (CaCO3)	mg/L	ND	5.0	5.0	09/16/22 13:22	
Alkalinity,Carbonate (CaCO3)	mg/L	ND	5.0	5.0	09/16/22 13:22	

LABORATORY CONTROL SAMPLE: 3770310

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	50	52.1	104	80-120	

LABORATORY CONTROL SAMPLE: 3770311

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	50	51.6	103	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3770314 3770315

Parameter	Units	92625683004 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	190	50	50	247	262	114	144	80-120	6	25	M1

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3771994 3771995

Parameter	Units	92625683003 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	54.9	54.9	104	103	80-120	0	25	

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QUALITY CONTROL DATA

Project: McDonough AP-1 Assessment MW-Revised Report
Pace Project No.: 92625181

QC Batch: 722303
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: 92624373001, 92624373002

METHOD BLANK: 3763468 Matrix: Water
Associated Lab Samples: 92624373001, 92624373002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.60	09/09/22 22:31	
Fluoride	mg/L	ND	0.10	0.050	09/09/22 22:31	
Sulfate	mg/L	ND	1.0	0.50	09/09/22 22:31	

LABORATORY CONTROL SAMPLE: 3763469

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	50.6	101	90-110	
Fluoride	mg/L	2.5	2.5	100	90-110	
Sulfate	mg/L	50	50.5	101	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3763470 3763471

Parameter	Units	92624373001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	16.4	50	50	68.2	69.0	103	105	90-110	1	10	
Fluoride	mg/L	0.11	2.5	2.5	2.4	2.5	93	94	90-110	1	10	
Sulfate	mg/L	263	50	50	311	309	96	92	90-110	1	10	

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QUALITY CONTROL DATA

Project: McDonough AP-1 Assessment MW-Revised Report
Pace Project No.: 92625181

QC Batch: 723467
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: 92625181001, 92625181002

METHOD BLANK: 3769521 Matrix: Water
Associated Lab Samples: 92625181001, 92625181002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.60	09/15/22 15:11	
Fluoride	mg/L	ND	0.10	0.050	09/15/22 15:11	
Sulfate	mg/L	ND	1.0	0.50	09/15/22 15:11	

LABORATORY CONTROL SAMPLE: 3769522

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	49.0	98	90-110	
Fluoride	mg/L	2.5	2.5	100	90-110	
Sulfate	mg/L	50	49.3	99	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3769523 3769524

Parameter	Units	92625147002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	94.2	50	50	133	134	77	79	90-110	1	10	M1
Fluoride	mg/L	0.49	2.5	2.5	3.0	3.0	101	102	90-110	1	10	
Sulfate	mg/L	53.6	50	50	99.3	100	91	93	90-110	1	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3769525 3769526

Parameter	Units	92625178002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	15.0	50	50	66.7	67.1	103	104	90-110	1	10	
Fluoride	mg/L	0.40	2.5	2.5	3.6	3.6	127	128	90-110	1	10	M1
Sulfate	mg/L	508	50	50	552	552	88	89	90-110	0	10	M1

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REPORT OF LABORATORY ANALYSIS

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QUALIFIERS

Project: McDonough AP-1 Assessment MW-Revised Report
Pace Project No.: 92625181

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.

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Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: McDonough AP-1 Assessment MW-Revised Report
Pace Project No.: 92625181

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92624373001	**B-105D**				
92624373002	**B-112D**				
92625181001	**B-113D**				
92624373001	**B-105D**	EPA 3010A	724698	EPA 6010D	724853
92624373002	**B-112D**	EPA 3010A	724698	EPA 6010D	724853
92625181001	**B-113D**	EPA 3010A	724852	EPA 6010D	724979
92625181002	**EB-2**	EPA 3010A	724852	EPA 6010D	724979
92624373001	**B-105D**	EPA 3005A	724800	EPA 6020B	724886
92624373002	**B-112D**	EPA 3005A	724800	EPA 6020B	724886
92625181001	**B-113D**	EPA 3005A	725176	EPA 6020B	725367
92625181002	**EB-2**	EPA 3005A	725176	EPA 6020B	725367
92624373001	**B-105D**	EPA 7470A	724426	EPA 7470A	725130
92624373002	**B-112D**	EPA 7470A	724426	EPA 7470A	725130
92625181001	**B-113D**	EPA 7470A	725890	EPA 7470A	726012
92625181002	**EB-2**	EPA 7470A	725890	EPA 7470A	726012
92624373001	**B-105D**	SM 2540C-2015	722447		
92624373002	**B-112D**	SM 2540C-2015	722447		
92625181001	**B-113D**	SM 2540C-2015	723325		
92625181002	**EB-2**	SM 2540C-2015	723325		
92624373001	**B-105D**	SM 2320B-2011	723206		
92624373002	**B-112D**	SM 2320B-2011	723206		
92625181001	**B-113D**	SM 2320B-2011	723613		
92625181002	**EB-2**	SM 2320B-2011	723613		
92624373001	**B-105D**	EPA 300.0 Rev 2.1 1993	722303		
92624373002	**B-112D**	EPA 300.0 Rev 2.1 1993	722303		
92625181001	**B-113D**	EPA 300.0 Rev 2.1 1993	723467		
92625181002	**EB-2**	EPA 300.0 Rev 2.1 1993	723467		

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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 ☐

WO# : 92625181

92625181

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: 9/8/22 JM

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

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

Thermometer: ☐ IR Gun ID: 214 ☑ Wet ☐ Blue ☐ None

Type of Ice:

Cooler Temp: 2.1 **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): 2.1

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: WG				
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**

Proje

WO#: 92625181

PM: NMG Due Date: 11/12/22

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)	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 (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																													
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.

Pace Analytical

CHAIN-OF-CUSTODY / Analytical Request Document

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

Page : 1 Of 1

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:	
Company:	Georgia Power - Coal Combustion Residuals	Report To:	Lauren Coker	Attention:	scsinvoices@southernco.com
Address:	2460 Maner Road	Copy To:	Golder	Company Name:	
	Atlanta, GA 30339			Address:	
Email:	laucoker@southernco.com	Purchase Order #:		Pace Quote:	
Phone:	(470) 620-6176 Fax	Project Name:	Plant McDonough AP-1 Assessment	Pace Project Manager:	Nicole D'Oleo
Requested Due Date:	10 Day TAT	Project #:	GL16684962	Pace Profile #:	

Regulatory Agency

State / Location: GA

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique MATRIX / CODE: Drinking Water DW; Water WT; Waste Water WW; Product P; Soil/Solid SL; Oil OL; Wipe WP; Air AR; Other OT; Tissue TS	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	DATE	TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved - Ice	H2SO4	HNO3 + Ice	HCl	NaOH + Zn Acetate	Na2S2O3	Methanol	Other	Analyses Test	Y/N	App III/IV Total Metals	Cl, F, SO4, TDS	Radium 226/228	Mg, Na, K	CO3+HCO2	Fe Total, Fe 3+	Residual Chlorine (Y/N)	
1	B-105D	WG	G	9/7/2022	14:54		6	3		3							N	X	X	X	X	X	X	pH = 6.44, Fe2 = 0.0 mg/L
2	B-112D	WG	G	9/7/2022	13:05		6	3		3							N	X	X	X	X	X	X	pH = 6.72, Fe2 = 0.0 mg/L
3																								
4																								
5																								
6																								
7																								
8																								
9																								
10																								
11																								
12																								
13																								
14																								

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
JUDE WAGUESPACK	JAN.../SAMPLER	9/8/22	8:40	[signature] BATH	9-8-22	8:40	
				[signature]	9/8/22	945	

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

[signature] DATE Signed: 9/8/22

DC#_Title: ENV-FRM-HUN1-0083 v01_Sample Condition Upon Receipt

Effective Date: 05/12/2022

Laboratory receiving samples:

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

WO#: 92625181

PM: NMG Due Date: 11/12/22

CLIENT: GA-GA Power

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: 09/13/22 JM

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

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

Thermometer: ☐ IR Gun ID: 083

Type of Ice: ☑ Wet ☐ Blue ☐ None

Cooler Temp: 1.9 **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): 1.9

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: WG				
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:

WO# : 92625181

PM: NMG Due Date: 11/12/22

CLIENT: GA-GA Power

Proje

*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

***Check all unpreserved Nitrates for chlorine

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)	DG94-250 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)	DG9V-40 mL VOA H3PO4 (N/A)	DG9S-40 mL VOA H2SO4 (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	BP3R-250 mL Plastic (NH2)2SO4 (9.3-9.7)	AG0U-100 mL Amber Unpreserved (N/A) (Cl-)	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																													
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 DENR Certification Office (i.e. Out of hold, incorrect preservative, out of temp, incorrect containers.

Pace Analytical

CHAIN-OF-CUSTODY / Analytical Request Document

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

Page : 1 Of 1

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:	
Company:	Georgia Power - Coal Combustion Residuals	Report To:	Lauren Coker	Attention:	acsinvoices@southernco.com
Address:	2480 Maner Road	Copy To:	Golder	Company Name:	
	Atlanta, GA 30339			Address:	
Email:	laucoker@southernco.com	Purchase Order #:		Pace Quote:	
Phone:	(470) 620-6176 Fax	Project Name:	Plant McD AP-1 Assessment Monitoring Well Network	Pace Project Manager:	Nicole D'Oleo
Requested Due Date:	10 Day TAT	Project #:	GL168849822	Pace Profile #:	

Regulatory Agency	
State / Location	
GA	

ITEM #	SAMPLE ID One Character per box. (A-Z, 0-9 / , -) Sample ids must be unique MATRIX / CODE: Drinking Water DW; Water WT; Waste Water WW; Product P; Soil/Solid SL; Oil OL; Wipe WP; Air AR; Other OT; Tissue TS	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	DATE	TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved - Ice	H2SO4	HNO3 + Ice	HCl	NaOH + Zn Acetate	Na2S2O3	Methanol	Other	Analyses Test	Y/N	Requested Analysis Filtered (Y/N): App III/IV Total Metals	Cl, F, SO4, TDS	Radium 226/228	Mg, Na, K	CO3+HCO2	Fe Total, Fe 3+	Residual Chlorine (Y/N)	
																		N	N	N	N	N	N		
1	B-113D	WG	G	9/12/2022	14:11		6	3		3								X	X	X	X	X	X		pH = 7.95, Fe2 = 0.0 mg/L
2	EB-2	WQ	G	9/12/2022	13:40		6	3		3								X	X	X	X	X	X		
3																									
4																									
5																									
6																									
7																									
8																									
9																									
10																									
11																									
12																									
13																									
14																									

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS: TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
	JW... / Sample	9/13/22	8:05	J.M. BAH	9-13-22	8:10				
					9/13/22	10:30				

JUDE WAGUESPACK DATE Signed: 9/13/22

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

November 09, 2022

Andrea McClure
WSP/Golder
5170 Peachtree Road
Building 100, Suite 300
Atlanta, GA 30341

RE: Project: McDonough AP-1 Assessment RADs-Revised Report
Pace Project No.: 92625217

Dear Andrea McClure:

Enclosed are the analytical results for sample(s) received by the laboratory between September 08, 2022 and September 13, 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

Revision 1: Issued on 11/4/22 to include Radium QC Sheets and to update the samples included in this report.

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

Sincerely,

Nicole D'Oleo

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

Enclosures

cc: Joju Abraham, Georgia Power-CCR
Stephen Benda, Southern Company
Noelia Gangi, Georgia Power
Daniela Herrera, Golder
Ben Hodges, Georgia Power
Kristen Jurinko
Laura Midkiff, Georgia Power
Karim Minkara, Golder Associates - Atlanta
J. Shelby Mobley, Southern Company
Charles Norton, Southern Company
Ms. Lauren Petty, Southern Company
Dawn Prell, Golder Associates Inc.
Michael Smilley, Georgia Power
Yong Cheng Soo, WSP/Golder
Tina Sullivan, ERM

REPORT OF LABORATORY ANALYSIS

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Peachtree Corners, GA 30092
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CERTIFICATIONS

Project: McDonough AP-1 Assessment RADs-Revised Report
Pace Project No.: 92625217

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: McDonough AP-1 Assessment RADs-Revised Report
Pace Project No.: 92625217

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92625217001	**B-113D**	Water	09/12/22 14:11	09/13/22 10:30
92625217002	**EB-2**	Water	09/12/22 13:40	09/13/22 10:30
92624383001	**B-105D**	Water	09/07/22 14:54	09/08/22 09:45
92624383002	**B-112D**	Water	09/07/22 13:05	09/08/22 09:45

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SAMPLE ANALYTE COUNT

Project: McDonough AP-1 Assessment RADs-Revised Report
Pace Project No.: 92625217

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92625217001	**B-113D**	EPA 9315	RMS	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92625217002	**EB-2**	EPA 9315	RMS	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92624383001	**B-105D**	EPA 9315	RMS	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92624383002	**B-112D**	EPA 9315	RMS	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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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: McDonough AP-1 Assessment RADs-Revised Report
Pace Project No.: 92625217

Sample: B-113D **Lab ID: 92625217001** Collected: 09/12/22 14:11 Received: 09/13/22 10:30 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.145 ± 0.104 (0.168) C:90% T:NA**	pCi/L	10/12/22 20:23	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.295 ± 0.398 (0.847) C:64% T:87%**	pCi/L	10/10/22 13:30	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.440 ± 0.502 (1.02)**	pCi/L	10/14/22 17:44	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: McDonough AP-1 Assessment RADs-Revised Report
Pace Project No.: 92625217

Sample: EB-2 **Lab ID: 92625217002** Collected: 09/12/22 13:40 Received: 09/13/22 10:30 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.0973 ± 0.0890 (0.160) C:90% T:NA**	pCi/L	10/12/22 20:23	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**-0.0739 ± 0.405 (0.963) C:63% T:91%**	pCi/L	10/10/22 13:31	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.0973 ± 0.494 (1.12)**	pCi/L	10/14/22 17:44	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: McDonough AP-1 Assessment RADs-Revised Report
Pace Project No.: 92625217

Sample: B-105D **Lab ID: 92624383001** Collected: 09/07/22 14:54 Received: 09/08/22 09:45 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.883 ± 0.271 (0.245) C:92% T:NA**	pCi/L	09/27/22 08:36	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**2.17 ± 0.787 (1.17) C:78% T:86%**	pCi/L	09/23/22 19:04	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**3.05 ± 1.06 (1.42)**	pCi/L	09/27/22 14:32	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: McDonough AP-1 Assessment RADs-Revised Report
Pace Project No.: 92625217

Sample: B-112D **Lab ID: 92624383002** Collected: 09/07/22 13:05 Received: 09/08/22 09:45 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.265 ± 0.148 (0.208) C:85% T:NA**	pCi/L	09/27/22 08:38	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.490 ± 0.529 (1.10) C:79% T:85%**	pCi/L	09/23/22 19:04	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.755 ± 0.677 (1.31)**	pCi/L	09/27/22 14:32	7440-14-4	

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QUALITY CONTROL - RADIOCHEMISTRY

Project: McDonough AP-1 Assessment RADs-Revised Report
Pace Project No.: 92625217

QC Batch: 535922
QC Batch Method: EPA 9315
Analysis Method: EPA 9315
Analysis Description: 9315 Total Radium
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92625217001, 92625217002

METHOD BLANK: 2600355
Matrix: Water
Associated Lab Samples: 92625217001, 92625217002

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.0438 ± 0.0695 (0.152) C:94% T:NA	pCi/L	10/12/22 20:23	

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QUALITY CONTROL - RADIOCHEMISTRY

Project: McDonough AP-1 Assessment RADs-Revised Report
Pace Project No.: 92625217

QC Batch: 535924
QC Batch Method: EPA 9320
Analysis Method: EPA 9320
Analysis Description: 9320 Radium 228
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92625217001, 92625217002

METHOD BLANK: 2600360
Matrix: Water
Associated Lab Samples: 92625217001, 92625217002

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.590 ± 0.382 (0.710) C:71% T:92%	pCi/L	10/10/22 13:30	

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QUALITY CONTROL - RADIOCHEMISTRY

Project: McDonough AP-1 Assessment RADs-Revised Report
Pace Project No.: 92625217

QC Batch:	532087	Analysis Method:	EPA 9315
QC Batch Method:	EPA 9315	Analysis Description:	9315 Total Radium
		Laboratory:	Pace Analytical Services - Greensburg

Associated Lab Samples: 92624383001, 92624383002

METHOD BLANK: 2581306 Matrix: Water

Associated Lab Samples: 92624383001, 92624383002

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.122 ± 0.122 (0.241) C:95% T:NA	pCi/L	09/27/22 08:34	

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QUALITY CONTROL - RADIOCHEMISTRY

Project: McDonough AP-1 Assessment RADs-Revised Report
Pace Project No.: 92625217

QC Batch: 533110
QC Batch Method: EPA 9315
Analysis Method: EPA 9315
Analysis Description: 9315 Total Radium
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples:

METHOD BLANK: 2586601 Matrix: Water
Associated Lab Samples:

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.00759 ± 0.0468 (0.133) C:88% T:NA	pCi/L	10/02/22 10:24	

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QUALITY CONTROL - RADIOCHEMISTRY

Project: McDonough AP-1 Assessment RADs-Revised Report
Pace Project No.: 92625217

QC Batch: 532089
QC Batch Method: EPA 9320
Analysis Method: EPA 9320
Analysis Description: 9320 Radium 228
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92624383001, 92624383002

METHOD BLANK: 2581322 Matrix: Water
Associated Lab Samples: 92624383001, 92624383002

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.391 ± 0.413 (0.858) C:74% T:78%	pCi/L	09/23/22 16:00	

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QUALITY CONTROL - RADIOCHEMISTRY

Project: McDonough AP-1 Assessment RADs-Revised Report
Pace Project No.: 92625217

QC Batch: 533111
QC Batch Method: EPA 9320
Analysis Method: EPA 9320
Analysis Description: 9320 Radium 228
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples:

METHOD BLANK: 2586603 Matrix: Water
Associated Lab Samples:

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.798 ± 0.368 (0.604) C:81% T:85%	pCi/L	09/28/22 11:36	

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QUALIFIERS

Project: McDonough AP-1 Assessment RADs-Revised Report
Pace Project No.: 92625217

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.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: McDonough AP-1 Assessment RADs-Revised Report
Pace Project No.: 92625217

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92624383001	**B-105D**	EPA 9315	532087		
92624383002	**B-112D**	EPA 9315	532087		
92625217001	**B-113D**	EPA 9315	535922		
92625217002	**EB-2**	EPA 9315	535922		
92624383001	**B-105D**	EPA 9320	532089		
92624383002	**B-112D**	EPA 9320	532089		
92625217001	**B-113D**	EPA 9320	535924		
92625217002	**EB-2**	EPA 9320	535924		
92624383001	**B-105D**	Total Radium Calculation	535756		
92624383002	**B-112D**	Total Radium Calculation	535756		
92625217001	**B-113D**	Total Radium Calculation	540022		
92625217002	**EB-2**	Total Radium Calculation	540022		

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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# : 92625217

92625217

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

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

Date/Initials Person Examining Contents: 7/8/22 JM

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: 2.1 Correction Factor: Add/Subtract (°C) 0.0

Cooler Temp Corrected (°C): 2.1

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. 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: WG				
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:

WO#: 92625217

PM: NMG Due Date: 10/04/22

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**

Proje

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 (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)	BP/N	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																													
4																													
5																													
6																													
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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.

Pace Analytical

CHAIN-OF-CUSTODY / Analytical Request Document

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

Page : 1 Of 1

Section A Required Client Information:	Section B Required Project Information:	Section C Invoice Information:
Company: Georgia Power - Coal Combustion Residuals	Report To: Lauren Coker	Attention: scainvoices@southernco.com
Address: 2480 Maner Road Atlanta, GA 30339	Copy To: Golder	Company Name:
Email: laucoker@southernco.com	Purchase Order #:	Address:
Phone: (470) 620-6176 Fax	Project Name: Plant McDonough AP-1 Assessment	Pace Quote:
Requested Due Date: 10 Day TAT	Project #: GL16684962	Pace Project Manager: Nicole D'Oleo
		Pace Profile #:

Regulatory Agency

State / Location: GA

ITEM #	SAMPLE ID (One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique)	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	DATE	TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved - Ice	H2SO4	HNO3 + Ice	HCl	NaOH + Zn Acetate	Na2S2O3	Methanol	Other	Analyses Test Y/N	Requested Analysis Filtered (Y/N): App III/IV Total Metals	Cl, F, SO4, TDS	Radium 226/228	Mg, Na, K	CO3+HCO2	Fe Total, Fe 3+	Residual Chlorine (Y/N)	
1	B-105D	WG	G	9/7/2022	14:54		6	3		3							X	X	X	X	X	X		pH = 6.44, Fe2 = 0.0 mg/L
2	B-112D	WG	G	9/7/2022	13:05		6	3		3							X	X	X	X	X	X		pH = 6.72, Fe2 = 0.0 mg/L
3																								
4																								
6																								
7																								
8																								
9																								
10																								
11																								
12																								
13																								
14																								

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS: TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
JUDE WAGUESPACK	JW.../SAMPLER	9/8/22	8:40	BYAI	9-8-22	8:40				
					9/9/22	945				

DATE Signed: 9/8/22

Pace ANALYTICAL SERVICES

DC#_Title: ENV-FRM-HUN1-0083 v01_Sample Condition Upon Receipt

Effective Date: 05/12/2022

Laboratory receiving samples:

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

Sample Condition Upon Receipt

Client Name: Georgia Power

Project #:

WO#: 92625217

PM: NMG **Due Date: 10/04/22**

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: 09/13/22 JM

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

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

Thermometer: ☐ IR Gun ID: 083

Type of Ice: ☑ Wet ☐ Blue ☐ None

Cooler Temp: 1.9 **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): 1.9

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: WG				
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 SERVICES	DC#_Title: ENV-FRM-HUN1-0083 v01_Sample Condition Upon Receipt
	Effective Date: 05/12/2022

WO#: 92625217
PM: NMG Due Date: 10/04/22
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

Proje

**Bottom half of box is to list number of bottles

***Check all unpreserved Nitrates for chlorine

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)	DG94-250 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)	DG9V-40 mL VOA H3PO4 (N/A)	DG9S-40 mL VOA H2SO4 (N/A)	V/GK (3 vials per kit)-VPH/Gas kit (N/A)	SPST-125 mL Sterile Plastic (N/A - lab)	SP2T-250 mL Sterile Plastic (N/A - lab)	BPIN	BP3R-250 mL Plastic (NH2)2SO4 (9.3-9.7)	AG0U-100 mL Amber Unpreserved (N/A) (Cl-)	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				
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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 DENR Certification Office (i.e. Out of hold, incorrect preservative, out of temp, incorrect containers.

Pace Analytical

CHAIN-OF-CUSTODY / Analytical Request Document

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

Page : 1 Of 1

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:	
Company:	Georgia Power - Coal Combustion Residuals	Report To:	Lauren Coker	Attention:	scainvoices@southernco.com
Address:	2480 Maner Road	Copy To:	Golder	Company Name:	
	Atlanta, GA 30339			Address:	
Email:	laucoker@southernco.com	Purchase Order #:		Pace Quote:	
Phone:	(470) 620-6176 Fax	Project Name:	Plant McD AP-1 Assessment Monitoring Well Network	Pace Project Manager:	Nicole D'Oleo
Requested Due Date:	10 Day TAT	Project #:	GL186849822	Pace Profile #:	

Regulatory Agency	
State / Location	GA

ITEM #	SAMPLE ID One Character per box. (A-Z, 0-9 / , -) Sample ids must be unique MATRIX CODE: Drinking Water DW; Water WT; Waste Water WW; Product P; Soil/Solid SL; Oil OL; Wipe WP; Air AR; Other OT; Tissue TS	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	DATE	TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved - Ice	H2SO4	HNO3 + Ice	HCl	NaOH + Zn Acetate	Na2S2O3	Methanol	Other	Analyses Test Y/N	App III/IV Total Metals	Cl, F, SO4, TDS	Radium 226/228	Mg, Na, K	CO3+HCO2	Fe Total, Fe 3+							Residual Chlorine (Y/N)	
																Requested Analysis Filtered (Y/N)	N	N	N	N	N	N							
1	B-113D	WG	G	9/12/2022	14:11		6	3		3						X	X	X	X	X	X							pH = 7.95, Fe2 = 0.0 mg/L
2	EB-2	WG	G	9/12/2022	13:40		6	3		3						X	X	X	X	X	X							
3																												
4																												
5																												
6																												
7																												
8																												
9																												
10																												
11																												
12																												
13																												
14																												

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
	JAN... / Sampler	9/13/22	8:05	J.M. BAH	9-13-22	8:10	
					9/13/22	10:30	

JUDE WAGUESPACK DATE Signed: 9/13/22

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

Quality Control Sample Performance Assessment

Pace Analytical
www.pacelabs.com

Test:	Ra-226
Analyst:	RMS
Date:	9/30/2022
Worklist:	69072
Matrix:	DW

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	2600355
MB concentration:	0.044
MB Counting Uncertainty:	0.069
MB MDC:	0.152
MB Numerical Performance Indicator:	1.24
MB Status vs Numerical Indicator:	N/A
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	LCSD (Y or N)?	Y
	LCS69072	LCSD69072
Count Date:	10/12/2022	10/12/2022
Spike I.D.:	19-033	19-033
Decay Corrected Spike Concentration (pCi/mL):	24.023	24.023
Volume Used (mL):	0.10	0.10
Aliquot Volume (L, g, F):	0.505	0.511
Target Conc. (pCi/L, g, F):	4.758	4.704
Uncertainty (Calculated):	0.057	0.056
Result (pCi/L, g, F):	5.119	4.712
LCS/LCSD Counting Uncertainty (pCi/L, g, F):	0.487	0.471
Numerical Performance Indicator:	1.44	0.03
Percent Recovery:	107.59%	100.17%
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.:	LCS69072	2600355
Duplicate Sample I.D.	LCSD69072	92624384013
Sample Result (pCi/L, g, F):	5.119	0.044
Sample Result Counting Uncertainty (pCi/L, g, F):	0.487	0.069
Sample Duplicate Result (pCi/L, g, F):	4.712	0.020
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):	0.471	0.055
Are sample and/or duplicate results below RL?	NO	See Below ##
Duplicate Numerical Performance Indicator:	1.179	0.520
(Based on the LCS/LCSD Percent Recoveries) Duplicate RPD:	7.14%	73.02%
Duplicate Status vs Numerical Indicator:	N/A	N/A
Duplicate Status vs RPD:	Pass	Fail***
% 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:

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

LAM 10/13/22

LAM 10/13/22

Quality Control Sample Performance Assessment

Pace Analytical
www.pacelabs.com

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Test:	Ra-228
Analyst:	VAL
Date:	9/30/2022
Worklist:	69073
Matrix:	WT

Method Blank Assessment	
MB Sample ID	2600360
MB concentration:	0.590
MB 2 Sigma CSU:	0.362
MB MDC:	0.710
MB Numerical Performance Indicator:	3.02
MB Status vs Numerical Indicator:	Fail*
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	LCSD (Y or N)?	Y
	LCS69073	LCSD69073
Count Date:	10/10/2022	10/10/2022
Spike I.D.:	22-029	22-029
Decay Corrected Spike Concentration (pCi/mL):	19.834	19.834
Volume Used (mL):	0.20	0.20
Aliquot Volume (L, g, F):	0.808	0.810
Target Conc. (pCi/L, g, F):	4.907	4.895
Uncertainty (Calculated):	0.353	0.352
Result (pCi/L, g, F):	6.528	6.766
LCS/LCSD 2 Sigma CSU (pCi/L, g, F):	1.382	1.419
Numerical Performance Indicator:	2.23	2.51
Percent Recovery:	133.05%	138.22%
Status vs Numerical Indicator:	N/A	Warning
Status vs Recovery:	Pass	Fail High**
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.:	LCS69073	Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Duplicate Sample I.D.	LCSD69073	
Sample Result (pCi/L, g, F):	6.528	
Sample Result 2 Sigma CSU (pCi/L, g, F):	1.382	
Sample Duplicate Result (pCi/L, g, F):	6.766	
Sample Duplicate Result 2 Sigma CSU (pCi/L, g, F):	1.419	
Are sample and/or duplicate results below RL?	NO	
Duplicate Numerical Performance Indicator:	-0.235	
(Based on the LCS/LCSD Percent Recoveries) Duplicate RPD:	3.81%	
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:

~~*If the lowest activity sample in this batch is greater than ten times the blank value, the blank is acceptable; otherwise this batch must be reprepped.~~ QM 10/11/22

~~**If all sample results are below MDC, the batch is acceptable, otherwise this batch must be reprepped due to LCSD failure.~~

MB activity < MDC, Pass

NI < 3 acceptable for LCS/LCSD

QM 10/11/22

10/11/22

JW 10.11.22

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

November 29, 2022

Andrea McClure
WSP/Golder
5170 Peachtree Road
Building 100, Suite 300
Atlanta, GA 30341

RE: Project: McDonough AP-1 Assessment-Revised Report
Pace Project No.: 92624373

Dear Andrea McClure:

Enclosed are the analytical results for sample(s) received by the laboratory on September 09, 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

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

Sincerely,

Bonnie Vang
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(704)875-9092
Project Manager

Enclosures

cc: Joju Abraham, Georgia Power-CCR
Stephen Benda, Southern Company
Noelia Gangi, Georgia Power
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Ben Hodges, Georgia Power
Kristen Jurinko
Laura Midkiff, Georgia Power
Karim Minkara, Golder Associates - Atlanta
J. Shelby Mobley, Southern Company
Charles Norton, Southern Company
Ms. Lauren Petty, Southern Company
Dawn Prell, Golder Associates Inc.
Michael Smilley, Georgia Power
Yong Cheng Soo, WSP/Golder
Tina Sullivan, ERM

REPORT OF LABORATORY ANALYSIS

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(770)734-4200

CERTIFICATIONS

Project: McDonough AP-1 Assessment-Revised Report
Pace Project No.: 92624373

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

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SAMPLE SUMMARY

Project: McDonough AP-1 Assessment-Revised Report
Pace Project No.: 92624373

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92624373003	**B-100**	Water	09/08/22 11:05	09/09/22 15:50
92624373004	**B-62**	Water	09/09/22 11:25	09/09/22 15:50

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SAMPLE ANALYTE COUNT

Project: McDonough AP-1 Assessment-Revised Report
Pace Project No.: 92624373

Lab ID	Sample ID	Method	Analysts	Analytes Reported
92624373003	**B-100**	EPA 6010D	DRB	5
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	BTS	1
		SM 2320B-2011	SMS	3
		EPA 300.0 Rev 2.1 1993	CDC	3
92624373004	**B-62**	EPA 6010D	DRB	5
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	BTS	1
		SM 2320B-2011	SMS	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

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ANALYTICAL RESULTS

Project: McDonough AP-1 Assessment-Revised Report
Pace Project No.: 92624373

Sample: B-100 **Lab ID: 92624373003** Collected: 09/08/22 11:05 Received: 09/09/22 15:50 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		09/09/22 17:31		
pH	**5.24**	Std. Units			1		09/09/22 17:31		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Iron	**25.0**	mg/L	0.040	0.025	1	09/21/22 12:19	09/21/22 21:14	7439-89-6	
Sodium	**27.0**	mg/L	1.0	0.58	1	09/21/22 12:19	09/21/22 21:14	7440-23-5	
Calcium	**46.0**	mg/L	1.0	0.12	1	09/21/22 12:19	09/21/22 21:14	7440-70-2	
Potassium	**1.2**	mg/L	0.20	0.15	1	09/21/22 12:19	09/22/22 20:51	7440-09-7	
Magnesium	**46.3**	mg/L	0.050	0.012	1	09/21/22 12:19	09/22/22 20:51	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	09/21/22 13:49	09/24/22 16:01	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0022	1	09/21/22 13:49	09/24/22 16:01	7440-38-2	
Barium	**0.021**	mg/L	0.0050	0.00067	1	09/21/22 13:49	09/24/22 16:01	7440-39-3	
Beryllium	**0.00058**	mg/L	0.00050	0.000054	1	09/21/22 13:49	09/24/22 16:01	7440-41-7	
Boron	**0.24**	mg/L	0.040	0.0086	1	09/21/22 13:49	09/26/22 14:13	7440-42-8	
Cadmium	**0.00027J**	mg/L	0.00050	0.00011	1	09/21/22 13:49	09/24/22 16:01	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	09/21/22 13:49	09/24/22 16:01	7440-47-3	
Cobalt	**0.028**	mg/L	0.0050	0.00039	1	09/21/22 13:49	09/24/22 16:01	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	09/21/22 13:49	09/24/22 16:01	7439-92-1	
Lithium	**0.0023J**	mg/L	0.030	0.00073	1	09/21/22 13:49	09/24/22 16:01	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	09/21/22 13:49	09/24/22 16:01	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	09/21/22 13:49	09/24/22 16:01	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	09/21/22 13:49	09/24/22 16:01	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	09/22/22 14:00	09/22/22 17:35	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**606**	mg/L	50.0	20.0	1		09/14/22 11:32		
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville								
Alkalinity,Bicarbonate (CaCO3)	**31.5**	mg/L	5.0	5.0	1		09/14/22 17:16		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		09/14/22 17:16		
Alkalinity, Total as CaCO3	**31.5**	mg/L	5.0	5.0	1		09/14/22 17:16		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**10.2**	mg/L	1.0	0.60	1		09/13/22 19:12	16887-00-6	

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ANALYTICAL RESULTS

Project: McDonough AP-1 Assessment-Revised Report
Pace Project No.: 92624373

Sample: B-100 **Lab ID: 92624373003** Collected: 09/08/22 11:05 Received: 09/09/22 15:50 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								
Fluoride	**0.072J**	mg/L	0.10	0.050	1		09/13/22 19:12	16984-48-8	
Sulfate	**399**	mg/L	8.0	4.0	8		09/14/22 21:32	14808-79-8	

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ANALYTICAL RESULTS

Project: McDonough AP-1 Assessment-Revised Report
Pace Project No.: 92624373

Sample: B-62 **Lab ID: 92624373004** Collected: 09/09/22 11:25 Received: 09/09/22 15:50 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		09/09/22 17:31		
pH	**6.22**	Std. Units			1		09/09/22 17:31		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Potassium	**2.4**	mg/L	0.20	0.15	1	09/21/22 12:19	09/22/22 21:05	7440-09-7	
Iron	**6.5**	mg/L	0.040	0.025	1	09/21/22 12:19	09/21/22 21:19	7439-89-6	
Sodium	**10.2**	mg/L	1.0	0.58	1	09/21/22 12:19	09/21/22 21:19	7440-23-5	
Calcium	**31.4**	mg/L	1.0	0.12	1	09/21/22 12:19	09/21/22 21:19	7440-70-2	
Magnesium	**5.1**	mg/L	0.050	0.012	1	09/21/22 12:19	09/21/22 21:19	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	09/21/22 13:49	09/24/22 16:07	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0022	1	09/21/22 13:49	09/24/22 16:07	7440-38-2	
Barium	**0.018**	mg/L	0.0050	0.00067	1	09/21/22 13:49	09/24/22 16:07	7440-39-3	
Beryllium	**0.00013J**	mg/L	0.00050	0.000054	1	09/21/22 13:49	09/24/22 16:07	7440-41-7	
Boron	**0.064**	mg/L	0.040	0.0086	1	09/21/22 13:49	09/26/22 14:19	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	09/21/22 13:49	09/24/22 16:07	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	09/21/22 13:49	09/24/22 16:07	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	09/21/22 13:49	09/24/22 16:07	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	09/21/22 13:49	09/24/22 16:07	7439-92-1	
Lithium	**0.0085J**	mg/L	0.030	0.00073	1	09/21/22 13:49	09/24/22 16:07	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	09/21/22 13:49	09/24/22 16:07	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	09/21/22 13:49	09/24/22 16:07	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	09/21/22 13:49	09/24/22 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	09/22/22 14:00	09/22/22 17:38	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**160**	mg/L	25.0	10.0	1		09/14/22 11:33		
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville								
Alkalinity,Bicarbonate (CaCO3)	**70.3**	mg/L	5.0	5.0	1		09/14/22 17:23		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		09/14/22 17:23		
Alkalinity, Total as CaCO3	**70.3**	mg/L	5.0	5.0	1		09/14/22 17:23		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**5.3**	mg/L	1.0	0.60	1		09/13/22 19:27	16887-00-6	

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ANALYTICAL RESULTS

Project: McDonough AP-1 Assessment-Revised Report
Pace Project No.: 92624373

Sample: B-62 **Lab ID: 92624373004** Collected: 09/09/22 11:25 Received: 09/09/22 15:50 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								
Fluoride	**0.13**	mg/L	0.10	0.050	1		09/13/22 19:27	16984-48-8	
Sulfate	**45.8**	mg/L	1.0	0.50	1		09/13/22 19:27	14808-79-8	

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QUALITY CONTROL DATA

Project: McDonough AP-1 Assessment-Revised Report
Pace Project No.: 92624373

QC Batch: 724698
QC Batch Method: EPA 3010A
Analysis Method: EPA 6010D
Analysis Description: 6010D ATL
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92624373003, 92624373004

METHOD BLANK: 3775652 Matrix: Water
Associated Lab Samples: 92624373003, 92624373004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium	mg/L	ND	1.0	0.12	09/21/22 19:48	
Iron	mg/L	ND	0.040	0.025	09/21/22 19:48	
Magnesium	mg/L	ND	0.050	0.012	09/21/22 19:48	
Potassium	mg/L	ND	0.20	0.15	09/21/22 19:48	
Sodium	mg/L	ND	1.0	0.58	09/21/22 19:48	

LABORATORY CONTROL SAMPLE: 3775653

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium	mg/L	1	1.0	103	80-120	
Iron	mg/L	1	1.0	101	80-120	
Magnesium	mg/L	1	1.0	104	80-120	
Potassium	mg/L	1	1.0	103	80-120	
Sodium	mg/L	1	1.1	106	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3775654 3775655

Parameter	Units	92624373001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Calcium	mg/L	73.2	1	1	71.7	72.8	-152	-37	75-125	2	20	M1
Iron	mg/L	1.9	1	1	2.9	2.9	101	100	75-125	0	20	
Magnesium	mg/L	25.2	1	1	25.7	25.7	49	52	75-125	0	20	M1
Potassium	mg/L	8.2	1	1	9.0	9.1	75	90	75-125	2	20	
Sodium	mg/L	19.9	1	1	20.3	20.6	38	68	75-125	1	20	M1

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QUALITY CONTROL DATA

Project: McDonough AP-1 Assessment-Revised Report
Pace Project No.: 92624373

QC Batch: 724800
QC Batch Method: EPA 3005A
Analysis Method: EPA 6020B
Analysis Description: 6020 MET
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92624373003, 92624373004

METHOD BLANK: 3776150 Matrix: Water
Associated Lab Samples: 92624373003, 92624373004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	ND	0.0030	0.00078	09/24/22 14:20	
Arsenic	mg/L	ND	0.0050	0.0022	09/24/22 14:20	
Barium	mg/L	ND	0.0050	0.00067	09/24/22 14:20	
Beryllium	mg/L	ND	0.00050	0.000054	09/24/22 14:20	
Boron	mg/L	ND	0.040	0.0086	09/24/22 14:20	
Cadmium	mg/L	ND	0.00050	0.00011	09/24/22 14:20	
Chromium	mg/L	ND	0.0050	0.0011	09/24/22 14:20	
Cobalt	mg/L	ND	0.0050	0.00039	09/24/22 14:20	
Lead	mg/L	ND	0.0010	0.00089	09/24/22 14:20	
Lithium	mg/L	ND	0.030	0.00073	09/24/22 14:20	
Molybdenum	mg/L	ND	0.010	0.00074	09/24/22 14:20	
Selenium	mg/L	ND	0.0050	0.0014	09/24/22 14:20	
Thallium	mg/L	ND	0.0010	0.00018	09/24/22 14:20	

LABORATORY CONTROL SAMPLE: 3776151

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.1	0.11	105	80-120	
Arsenic	mg/L	0.1	0.10	102	80-120	
Barium	mg/L	0.1	0.099	99	80-120	
Beryllium	mg/L	0.1	0.10	102	80-120	
Boron	mg/L	1	1.1	107	80-120	
Cadmium	mg/L	0.1	0.10	100	80-120	
Chromium	mg/L	0.1	0.10	104	80-120	
Cobalt	mg/L	0.1	0.10	101	80-120	
Lead	mg/L	0.1	0.10	100	80-120	
Lithium	mg/L	0.1	0.098	98	80-120	
Molybdenum	mg/L	0.1	0.10	100	80-120	
Selenium	mg/L	0.1	0.10	101	80-120	
Thallium	mg/L	0.1	0.10	100	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3776152 3776153

Parameter	Units	92625866027 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	106	109	75-125	2	20	
Arsenic	mg/L	ND	0.1	0.1	0.10	0.10	99	101	75-125	2	20	

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QUALITY CONTROL DATA

Project: McDonough AP-1 Assessment-Revised Report
Pace Project No.: 92624373

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3776152 3776153

Parameter	Units	92625866027 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Barium	mg/L	14.6 ug/L	0.1	0.1	0.12	0.12	102	102	75-125	0	20	
Beryllium	mg/L	ND	0.1	0.1	0.10	0.10	104	102	75-125	1	20	
Boron	mg/L	393 ug/L	1	1	1.6	1.6	116	116	75-125	0	20	
Cadmium	mg/L	ND	0.1	0.1	0.10	0.10	101	102	75-125	1	20	
Chromium	mg/L	22.8 ug/L	0.1	0.1	0.13	0.14	112	118	75-125	4	20	
Cobalt	mg/L	0.44J ug/L	0.1	0.1	0.098	0.10	98	101	75-125	3	20	
Lead	mg/L	ND	0.1	0.1	0.095	0.098	94	98	75-125	4	20	
Lithium	mg/L	ND	0.1	0.1	0.10	0.10	103	102	75-125	1	20	
Molybdenum	mg/L	ND	0.1	0.1	0.10	0.11	100	105	75-125	5	20	
Selenium	mg/L	ND	0.1	0.1	0.098	0.10	98	100	75-125	2	20	
Thallium	mg/L	ND	0.1	0.1	0.095	0.099	95	99	75-125	4	20	

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QUALITY CONTROL DATA

Project: McDonough AP-1 Assessment-Revised Report
Pace Project No.: 92624373

QC Batch: 724426
QC Batch Method: EPA 7470A
Analysis Method: EPA 7470A
Analysis Description: 7470 Mercury
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92624373003, 92624373004

METHOD BLANK: 3774367 Matrix: Water
Associated Lab Samples: 92624373003, 92624373004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	ND	0.00020	0.00013	09/22/22 17:16	

LABORATORY CONTROL SAMPLE: 3774368

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.0025	0.0024	98	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3774369 3774370

Parameter	Units	92624373001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	mg/L	0.00014J	0.0025	0.0025	0.0025	0.0025	93	93	75-125	1	20	

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REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: McDonough AP-1 Assessment-Revised Report
Pace Project No.: 92624373

QC Batch: 722886
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: 92624373003, 92624373004

METHOD BLANK: 3766455 Matrix: Water
Associated Lab Samples: 92624373003, 92624373004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	25.0	10.0	09/14/22 11:30	

LABORATORY CONTROL SAMPLE: 3766456

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	384	96	80-120	

SAMPLE DUPLICATE: 3766458

Parameter	Units	92624840004 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	620000 ug/L	680	9	10	

SAMPLE DUPLICATE: 3767354

Parameter	Units	92624372007 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	252	297	16	10	R1

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Peachtree Corners, GA 30092
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QUALITY CONTROL DATA

Project: McDonough AP-1 Assessment-Revised Report
Pace Project No.: 92624373

QC Batch: 723206
QC Batch Method: SM 2320B-2011
Analysis Method: SM 2320B-2011
Analysis Description: 2320B Alkalinity
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92624373003, 92624373004

METHOD BLANK: 3768028 Matrix: Water
Associated Lab Samples: 92624373003, 92624373004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Alkalinity, Total as CaCO3	mg/L	ND	5.0	5.0	09/14/22 14:56	
Alkalinity,Bicarbonate (CaCO3)	mg/L	ND	5.0	5.0	09/14/22 14:56	
Alkalinity,Carbonate (CaCO3)	mg/L	ND	5.0	5.0	09/14/22 14:56	

LABORATORY CONTROL SAMPLE: 3768029

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	50	50.2	100	80-120	

LABORATORY CONTROL SAMPLE: 3768030

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	50	50.8	102	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3768031 3768032

Parameter	Units	92625359004 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	324	50	50	353	349	58	51	80-120	1	25	M1

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3768033 3768034

Parameter	Units	92624372011 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	134	50	50	193	185	118	102	80-120	4	25	

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QUALITY CONTROL DATA

Project: McDonough AP-1 Assessment-Revised Report
Pace Project No.: 92624373

QC Batch: 722843
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: 92624373003, 92624373004

METHOD BLANK: 3766296 Matrix: Water
Associated Lab Samples: 92624373003, 92624373004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.60	09/13/22 12:35	
Fluoride	mg/L	ND	0.10	0.050	09/13/22 12:35	
Sulfate	mg/L	ND	1.0	0.50	09/13/22 12:35	

LABORATORY CONTROL SAMPLE: 3766297

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	50.4	101	90-110	
Fluoride	mg/L	2.5	2.5	100	90-110	
Sulfate	mg/L	50	50.8	102	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3766298 3766299

Parameter	Units	92624945004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	938	50	50	975	975	73	74	90-110	0	10	M1
Fluoride	mg/L	ND	2.5	2.5	3.3J	3.8J	132	151	90-110		10	M1
Sulfate	mg/L	3180	50	50	3170	3160	-30	-43	90-110	0	10	M1

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3766300 3766301

Parameter	Units	92624372011 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	5.4	50	50	57.1	58.0	103	105	90-110	2	10	
Fluoride	mg/L	0.082J	2.5	2.5	2.4	2.4	92	92	90-110	0	10	
Sulfate	mg/L	96.6	50	50	150	153	106	113	90-110	2	10	M1

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QUALIFIERS

Project: McDonough AP-1 Assessment-Revised Report
Pace Project No.: 92624373

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.

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(770)734-4200

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: McDonough AP-1 Assessment-Revised Report
Pace Project No.: 92624373

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92624373003	**B-100**				
92624373004	**B-62**				
92624373003	**B-100**	EPA 3010A	724698	EPA 6010D	724853
92624373004	**B-62**	EPA 3010A	724698	EPA 6010D	724853
92624373003	**B-100**	EPA 3005A	724800	EPA 6020B	724886
92624373004	**B-62**	EPA 3005A	724800	EPA 6020B	724886
92624373003	**B-100**	EPA 7470A	724426	EPA 7470A	725130
92624373004	**B-62**	EPA 7470A	724426	EPA 7470A	725130
92624373003	**B-100**	SM 2540C-2015	722886		
92624373004	**B-62**	SM 2540C-2015	722886		
92624373003	**B-100**	SM 2320B-2011	723206		
92624373004	**B-62**	SM 2320B-2011	723206		
92624373003	**B-100**	EPA 300.0 Rev 2.1 1993	722843		
92624373004	**B-62**	EPA 300.0 Rev 2.1 1993	722843		

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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#: 92624373

92624373

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

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

Date/Initials Person Examining Contents: 9/9/22 JM

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

Thermometer: ☐ IR Gun ID: 230

Type of Ice: ☑ Wet ☐ Blue ☐ None

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

Cooler Temp: 2.4 Correction Factor: Add/Subtract (°C) 0.0

Cooler Temp Corrected (°C): 2.4

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:

WO# : 92624373

PM: NMG Due Date: 11/12/22

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.

Project #

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

**Bottom half of box is to list number of bottles

***Check all unpreserved Nitrates for chlorine

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)	DG94-250 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)	DG9V-40 mL VOA H3PO4 (N/A)	DG9S-40 mL VOA H2SO4 (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	BP3R-250 mL Plastic (NH2)2SO4 (9.3-9.7)	AG0U-100 mL Amber Unpreserved (N/A) (Cl-)	VSGU-20 mL Scintillation vials (N/A)	DG9U-40 mL Amber Unpreserved vials (N/A)
1		2	—			✓																							
2		2	1			1 ✓																				2			
3						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 DENR Certification Office (i.e. Out of hold, incorrect preservative, out of temp, incorrect containers.

Pace Analytical

CHAIN-OF-CUSTODY / Analytical Request Document

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

Page : 1 Of 1

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:		
Company:	Georgia Power - Coal Combustion Residuals	Report To:	Lauren Coker	Attention:	scsinvoices@southernco.com	Regulatory Agency
Address:	2480 Maner Road Atlanta, GA 30339	Copy To:	Golder	Company Name:		
Email:	laucoker@southernco.com	Purchase Order #:		Address:		
Phone:	(470) 620-6176 Fax:	Project Name:	Plant McDonough AP-1234 Assessment	Pace Quote:		
Requested Due Date:	10 Day TAT	Project #:	GL16684962	Pace Project Manager:	Nicole D'Oleo	State / Location: GA
				Pace Profile #:		

ITEM #	SAMPLE ID (One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique)	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	DATE	TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved - Ice	H2SO4	HNO3 + Ice	HCl	NaOH + Zn Acetate	Na2S2O3	Methanol	Other	Requested Analysis Filtered (Y/N) Y/N	Analyses Test: App III/IV Total Metals	Cl, F, SO4, TDS	Radium 226/228	Mg, Na, K	CO3+HCO2	Fe Total, Fe 3+	Residual Chlorine (Y/N)	4373
																N	N	N	N	N	N			
1	B-100	WG	G	9/8/2022	11:05		6	3		3						X	X	X	X	X	X			pH = 5.24 Fe2 = 7.0 mg/L
2	B-62	WG	G	9/9/2022	11:25		6	3		3						X	X	X	X	X	X			pH = 6.22 Fe2 = 1.5 mg/L
3																								
4																								
6																								
7																								
8																								
9																								
10																								
11																								
12																								
13																								
14																								

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
	Mark Nash Golder	09/09/22	15:50	Charles Parker	9/9/22	1550	

DATE Signed:

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

November 10, 2022

Andrea McClure
WSP/Golder
5170 Peachtree Road
Building 100, Suite 300
Atlanta, GA 30341

RE: Project: McDonough AP1,2,3/4 ASSESS RAD-Revised Report
Pace Project No.: 92624383

Dear Andrea McClure:

Enclosed are the analytical results for sample(s) received by the laboratory on September 09, 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

Revision 2: Issued on 11/10/22 to update Project Name.

Revision 1: Issued on 11/4/22 to include Radium QC Sheets and to update the samples included in this report.

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

Sincerely,

Nicole D'Oleo

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

Enclosures

cc: Joju Abraham, Georgia Power-CCR
Stephen Benda, Southern Company
Noelia Gangi, Georgia Power
Daniela Herrera, Golder
Ben Hodges, Georgia Power
Kristen Jurinko
Laura Midkiff, Georgia Power
Karim Minkara, Golder Associates - Atlanta
J. Shelby Mobley, Southern Company
Charles Norton, Southern Company
Ms. Lauren Petty, Southern Company
Dawn Prell, Golder Associates Inc.
Michael Smilley, Georgia Power
Yong Cheng Soo, WSP/Golder

REPORT OF LABORATORY ANALYSIS

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cc: Tina Sullivan, ERM

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CERTIFICATIONS

Project: McDonough AP1,2,3/4 ASSESS RAD-Revised Report
Pace Project No.: 92624383

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: McDonough AP1,2,3/4 ASSESS RAD-Revised Report
Pace Project No.: 92624383

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92624383003	**B-100**	Water	09/08/22 11:05	09/09/22 15:50
92624383004	**B-62**	Water	09/09/22 11:25	09/09/22 15:50

REPORT OF LABORATORY ANALYSIS

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SAMPLE ANALYTE COUNT

Project: McDonough AP1,2,3/4 ASSESS RAD-Revised Report
Pace Project No.: 92624383

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92624383003	**B-100**	EPA 9315	RMS	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92624383004	**B-62**	EPA 9315	RMS	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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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: McDonough AP1,2,3/4 ASSESS RAD-Revised Report
Pace Project No.: 92624383

Sample: B-100 **Lab ID: 92624383003** Collected: 09/08/22 11:05 Received: 09/09/22 15:50 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	**0.114 ± 0.0896 (0.141) C:89% T:NA**	pCi/L	10/02/22 10:26	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.529 ± 0.360 (0.681) C:70% T:87%**	pCi/L	09/28/22 12:21	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.643 ± 0.450 (0.822)**	pCi/L	10/03/22 12:21	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: McDonough AP1,2,3/4 ASSESS RAD-Revised Report
Pace Project No.: 92624383

Sample: B-62 **Lab ID: 92624383004** Collected: 09/09/22 11:25 Received: 09/09/22 15:50 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	**0.627 ± 0.205 (0.135) C:86% T:NA**	pCi/L	10/02/22 10:26	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**1.33 ± 0.510 (0.781) C:71% T:88%**	pCi/L	09/28/22 12:21	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.96 ± 0.715 (0.916)**	pCi/L	10/03/22 12:21	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL - RADIOCHEMISTRY

Project: McDonough AP1,2,3/4 ASSESS RAD-Revised Report
Pace Project No.: 92624383

QC Batch: 532087
QC Batch Method: EPA 9315
Analysis Method: EPA 9315
Analysis Description: 9315 Total Radium
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples:

METHOD BLANK: 2581306 Matrix: Water
Associated Lab Samples:

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.122 ± 0.122 (0.241) C:95% T:NA	pCi/L	09/27/22 08:34	

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QUALITY CONTROL - RADIOCHEMISTRY

Project: McDonough AP1,2,3/4 ASSESS RAD-Revised Report
Pace Project No.: 92624383

QC Batch: 533110
QC Batch Method: EPA 9315
Analysis Method: EPA 9315
Analysis Description: 9315 Total Radium
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92624383003, 92624383004

METHOD BLANK: 2586601 Matrix: Water
Associated Lab Samples: 92624383003, 92624383004

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.00759 ± 0.0468 (0.133) C:88% T:NA	pCi/L	10/02/22 10:24	

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QUALITY CONTROL - RADIOCHEMISTRY

Project: McDonough AP1,2,3/4 ASSESS RAD-Revised Report
Pace Project No.: 92624383

QC Batch: 532089
QC Batch Method: EPA 9320
Analysis Method: EPA 9320
Analysis Description: 9320 Radium 228
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples:

METHOD BLANK: 2581322 Matrix: Water
Associated Lab Samples:

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.391 ± 0.413 (0.858) C:74% T:78%	pCi/L	09/23/22 16:00	

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QUALITY CONTROL - RADIOCHEMISTRY

Project: McDonough AP1,2,3/4 ASSESS RAD-Revised Report
Pace Project No.: 92624383

QC Batch: 533111
QC Batch Method: EPA 9320
Analysis Method: EPA 9320
Analysis Description: 9320 Radium 228
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92624383003, 92624383004

METHOD BLANK: 2586603 Matrix: Water
Associated Lab Samples: 92624383003, 92624383004

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.798 ± 0.368 (0.604) C:81% T:85%	pCi/L	09/28/22 11:36	

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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QUALIFIERS

Project: McDonough AP1,2,3/4 ASSESS RAD-Revised Report
Pace Project No.: 92624383

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.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: McDonough AP1,2,3/4 ASSESS RAD-Revised Report
Pace Project No.: 92624383

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92624383003	**B-100**	EPA 9315	533110		
92624383004	**B-62**	EPA 9315	533110		
92624383003	**B-100**	EPA 9320	533111		
92624383004	**B-62**	EPA 9320	533111		
92624383003	**B-100**	Total Radium Calculation	536982		
92624383004	**B-62**	Total Radium Calculation	536982		

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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# : 92624383

92624383

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

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

Date/Initials Person Examining Contents: 9/9/22 JM

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

Thermometer: ☐ IR Gun ID: 230

Type of Ice: ☑ Wet ☐ Blue ☐ None

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

Cooler Temp: 2.4 Correction Factor: Add/Subtract (°C) 0.0

Cooler Temp Corrected (°C): 2.4

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:

WO# : 92624383

PM: NMG Due Date: 09/29/22

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.

Project #

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

**Bottom half of box is to list number of bottles

***Check all unpreserved Nitrates for chlorine

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)	DG9A-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)	DG9V-40 mL VOA H3PO4 (N/A)	DG9S-40 mL VOA H2SO4 (N/A)	V/GK (3 vials per kit)-VPH/Gas kit (N/A)	SP5T-125 mL Sterile Plastic (N/A – ab)	SP2T-250 mL Sterile Plastic (N/A – ab)	BP1N	BP3R-250 mL Plastic (NH2)2SO4 (9.3-9.7)	AG0U-100 mL Amber Unpreserved (N/A) (Cl-)	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																													
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 DENR Certification Office (i.e. Out of hold, incorrect preservative, out of temp, incorrect containers.

Pace Analytical

CHAIN-OF-CUSTODY / Analytical Request Document

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

Page : 1 Of 1

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:		
Company:	Georgia Power - Coal Combustion Residuals	Report To:	Lauren Coker	Attention:	scsinvoices@southernco.com	
Address:	2480 Maner Road	Copy To:	Golder	Company Name:		Regulatory Agency
	Atlanta, GA 30339			Address:		
Email:	laucoker@southernco.com	Purchase Order #:		Pace Quote:		
Phone:	(470) 620-6176 Fax:	Project Name:	Plant McDonough AP-1234 Assessment	Pace Project Manager:	Nicole D'Oleo	State / Location
Requested Due Date:	10 Day TAT	Project #:	GL16684962	Pace Profile #:		GA

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

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

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	DATE	TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H2SO4	HNO3	HCl	NaOH + Zn Acetate	Na2S2O3	Methanol	Other	Analyses Test Y/N	Requested Analysis Filtered (Y/N): App III/IV Total Metals	Cl, F, SO4 TDS	Radium 226/228	Mg, Na, K	CO3+HCO2	Fe Total, Fe 3+	Residual Chlorine (Y/N)	4383
																Y/N	N	N	N	N	N	N		
1	B-100	WG	G	9/8/2022	11:05		6	3		3							X	X	X	X	X	X		pH = 5.24 Fe2 = 7.0 mg/L
2	B-62	WG	G	9/9/2022	11:25		6	3		3							X	X	X	X	X	X		pH = 6.22 Fe2 = 1.5 mg/L
3																								
4																								
6																								
7																								
8																								
9																								
10																								
11																								
12																								
13																								
14																								

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
	Mark Nunn / Golder	09/09/22	15:50	Charles Parker	9/9/22	1550	

DATE Signed:

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

Quality Control Sample Performance Assessment

Pace Analytical
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Test:	Ra-226
Analyst:	RMS
Date:	9/20/2022
Worklist:	68887
Matrix:	DW

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	2586601
MB concentration:	0.008
MB Counting Uncertainty:	0.047
MB MDC:	0.133
MB Numerical Performance Indicator:	0.32
MB Status vs Numerical Indicator:	N/A
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	LCSD (Y or N)?	N
	LCS68887	LCSD68887
Count Date:	10/2/2022	
Spike I.D.:	19-033	
Decay Corrected Spike Concentration (pCi/mL):	24.023	
Volume Used (mL):	0.10	
Aliquot Volume (L, g, F):	0.505	
Target Conc. (pCi/L, g, F):	4.760	
Uncertainty (Calculated):	0.057	
Result (pCi/L, g, F):	3.993	
LCS/LCSD Counting Uncertainty (pCi/L, g, F):	0.431	
Numerical Performance Indicator:	-3.46	
Percent Recovery:	83.89%	
Status vs Numerical Indicator:	N/A	
Status vs Recovery:	Pass	
Upper % Recovery Limits:	125%	
Lower % Recovery Limits:	75%	

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

Duplicate Sample Assessment		
Sample I.D.:	92624832001	92624832001
Duplicate Sample I.D.	92624832001DUP	92624832002
Sample Result (pCi/L, g, F):	0.124	0.124
Sample Result Counting Uncertainty (pCi/L, g, F):	0.091	0.091
Sample Duplicate Result (pCi/L, g, F):	0.071	0.187
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):	0.074	0.104
Are sample and/or duplicate results below RL?	See Below ##	See Below ##
Duplicate Numerical Performance Indicator:	0.874	-0.888
Duplicate RPD:	53.80%	40.52%
Duplicate Status vs Numerical Indicator:	N/A	N/A
Duplicate Status vs RPD:	Fail***	Fail***
% 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:

10/3/22

***~~Batch must be re-prepped due to unacceptable precision~~ N/A

LAM 10/3/22

LAM 10/3/22

Quality Control Sample Performance Assessment

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Test:	Ra-228
Analyst:	VAL
Date:	9/14/2022
Worklist:	68823
Matrix:	WT

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	2581322
MB concentration:	0.391
MB 2 Sigma CSU:	0.413
MB MDC:	0.858
MB Numerical Performance Indicator:	1.86
MB Status vs Numerical Indicator:	Pass
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	LCSD (Y or N)?	Y
	LCS68823	LCSD68823
Count Date:	9/23/2022	9/23/2022
Spike I.D.:	20-030	20-030
Decay Corrected Spike Concentration (pCi/mL):	30.094	30.094
Volume Used (mL):	0.10	0.10
Aliquot Volume (L, g, F):	0.812	0.815
Target Conc. (pCi/L, g, F):	3.707	3.693
Uncertainty (Calculated):	0.182	0.181
Result (pCi/L, g, F):	3.342	3.360
LCS/LCSD 2 Sigma CSU (pCi/L, g, F):	0.875	0.865
Numerical Performance Indicator:	-0.80	-0.74
Percent Recovery:	90.14%	90.99%
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.:	LCS68823	Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Duplicate Sample I.D.	LCSD68823	
Sample Result (pCi/L, g, F):	3.342	
Sample Result 2 Sigma CSU (pCi/L, g, F):	0.875	
Sample Duplicate Result (pCi/L, g, F):	3.360	
Sample Duplicate Result 2 Sigma CSU (pCi/L, g, F):	0.865	
Are sample and/or duplicate results below RL?	NO	
Duplicate Numerical Performance Indicator:	-0.030	
(Based on the LCS/LCSD Percent Recoveries) Duplicate RPD:	0.94%	
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

Pace Analytical
www.pacelabs.com

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Test:	Ra-228
Analyst:	VAL
Date:	9/19/2022
Worklist:	68888
Matrix:	WT

Method Blank Assessment	
MB Sample ID	2586603
MB concentration:	0.798
M/B 2 Sigma CSU:	0.368
MB MDC:	0.604
MB Numerical Performance Indicator:	4.25
MB Status vs Numerical Indicator:	Fail*
MB Status vs. MDC:	See Comment*

Laboratory Control Sample Assessment	LCSD (Y or N)?	Y
	LCS68888	LCSD68888
Count Date:	9/28/2022	9/28/2022
Spike I.D.:	22-029	22-029
Decay Corrected Spike Concentration (pCi/mL):	19.913	19.913
Volume Used (mL):	0.20	0.20
Aliquot Volume (L, g, F):	0.808	0.809
Target Conc. (pCi/L, g, F):	4.927	4.925
Uncertainty (Calculated):	0.355	0.355
Result (pCi/L, g, F):	5.626	5.197
LCS/LCSD 2 Sigma CSU (pCi/L, g, F):	1.255	1.158
Numerical Performance Indicator:	1.05	0.44
Percent Recovery:	114.19%	105.52%
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.:	LCS68888	Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Duplicate Sample I.D.	LCSD68888	
Sample Result (pCi/L, g, F):	5.626	
Sample Result 2 Sigma CSU (pCi/L, g, F):	1.255	
Sample Duplicate Result (pCi/L, g, F):	5.197	
Sample Duplicate Result 2 Sigma CSU (pCi/L, g, F):	1.158	
Are sample and/or duplicate results below RL?	NO	
Duplicate Numerical Performance Indicator:	0.493	
(Based on the LCS/LCSD Percent Recoveries) Duplicate RPD:	7.89%	
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:
*The method blank result is below the reporting limit for this analysis and is acceptable.

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

November 10, 2022

Andrea McClure
WSP/Golder
5170 Peachtree Road
Building 100, Suite 300
Atlanta, GA 30341

RE: Project: McDonough AP-1, 2, 3/4 Supplem-Revised Report
Pace Project No.: 92625189

Dear Andrea McClure:

Enclosed are the analytical results for sample(s) received by the laboratory between September 13, 2022 and September 21, 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

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

Sincerely,

Nicole D'Oleo

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

Enclosures

cc: Joju Abraham, Georgia Power-CCR
Stephen Benda, Southern Company
Noelia Gangi, Georgia Power
Daniela Herrera, Golder
Ben Hodges, Georgia Power
Kristen Jurinko
Laura Midkiff, Georgia Power
Karim Minkara, Golder Associates - Atlanta
J. Shelby Mobley, Southern Company
Charles Norton, Southern Company
Ms. Lauren Petty, Southern Company
Dawn Prell, Golder Associates Inc.
Michael Smilley, Georgia Power
Yong Cheng Soo, WSP/Golder
Tina Sullivan, ERM

REPORT OF LABORATORY ANALYSIS

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CERTIFICATIONS

Project: McDonough AP-1, 2, 3/4 Supplem-Revised Report
Pace Project No.: 92625189

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

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SAMPLE SUMMARY

Project: McDonough AP-1, 2, 3/4 Supplem-Revised Report
Pace Project No.: 92625189

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92625189001	**B-90**	Water	09/12/22 12:15	09/13/22 10:30
92625189002	**B-91**	Water	09/12/22 13:26	09/13/22 10:30
92625189003	**B-95**	Water	09/12/22 14:38	09/13/22 10:30
92625189004	**B-99**	Water	09/12/22 10:25	09/13/22 10:30
92625189005	**B-119D**	Water	09/12/22 10:37	09/13/22 10:30
92625189006	**Dup-3**	Water	09/12/22 00:00	09/13/22 10:30
92625189007	**B-96**	Water	09/13/22 11:33	09/14/22 09:53
92625189008	**B-122D**	Water	09/14/22 10:33	09/15/22 08:20
92625189009	**EB-4**	Water	09/14/22 11:23	09/15/22 08:20
92625189010	**B-117D**	Water	09/15/22 10:36	09/16/22 16:30
92625189011	**B-123D**	Water	09/20/22 15:25	09/21/22 15:05

REPORT OF LABORATORY ANALYSIS

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SAMPLE ANALYTE COUNT

Project: McDonough AP-1, 2, 3/4 Supplem-Revised Report
Pace Project No.: 92625189

Lab ID	Sample ID	Method	Analysts	Analytes Reported
92625189001	**B-90**	EPA 6020B	CW1	1
92625189002	**B-91**	EPA 6020B	CW1	1
92625189003	**B-95**	EPA 6020B	CW1	1
92625189004	**B-99**	EPA 6020B	CW1	1
92625189005	**B-119D**	EPA 6010D	DRB	5
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	BTS	1
		SM 2320B-2011	SMS	3
		EPA 300.0 Rev 2.1 1993	CDC	3
92625189006	**Dup-3**	EPA 6010D	DRB	5
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	BTS	1
		SM 2320B-2011	SMS	3
		EPA 300.0 Rev 2.1 1993	CDC	3
92625189007	**B-96**	EPA 6020B	CW1	1
92625189008	**B-122D**	EPA 6010D	DRB	5
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	BTS	1
		SM 2320B-2011	SMS	3
		EPA 300.0 Rev 2.1 1993	CDC	3
92625189009	**EB-4**	EPA 6010D	DRB	5
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	BTS	1
		SM 2320B-2011	SMS	3
		EPA 300.0 Rev 2.1 1993	CDC	3
92625189010	**B-117D**	EPA 6010D	DRB	5
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	BTS	1
		SM 2320B-2011	SMS	3
		EPA 300.0 Rev 2.1 1993	CDC	3
92625189011	**B-123D**	EPA 6010D	DRB	5
		EPA 6020B	CW1	13

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SAMPLE ANALYTE COUNT

Project: McDonough AP-1, 2, 3/4 Supplem-Revised Report
Pace Project No.: 92625189

Lab ID	Sample ID	Method	Analysts	Analytes Reported
		EPA 7470A	VB	1
		SM 2320B-2011	SMS	3
		SM 2540C-2011	MAB2	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

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ANALYTICAL RESULTS

Project: McDonough AP-1, 2, 3/4 Supplem-Revised Report
Pace Project No.: 92625189

Sample: B-90 **Lab ID: 92625189001** Collected: 09/12/22 12:15 Received: 09/13/22 10:30 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		09/13/22 13:55		
pH	**5.35**	Std. Units			1		09/13/22 13:55		
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Boron	**2.6**	mg/L	0.040	0.0086	1	09/27/22 18:00	09/28/22 23:37	7440-42-8	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: McDonough AP-1, 2, 3/4 Supplem-Revised Report
Pace Project No.: 92625189

Sample: B-91 **Lab ID: 92625189002** Collected: 09/12/22 13:26 Received: 09/13/22 10:30 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		09/13/22 13:55		
pH	**5.28**	Std. Units			1		09/13/22 13:55		
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Boron	**2.9**	mg/L	0.040	0.0086	1	09/27/22 18:00	09/29/22 00:01	7440-42-8	

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ANALYTICAL RESULTS

Project: McDonough AP-1, 2, 3/4 Supplem-Revised Report
Pace Project No.: 92625189

Sample: B-95 **Lab ID: 92625189003** Collected: 09/12/22 14:38 Received: 09/13/22 10:30 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		09/13/22 13:55		
pH	**5.33**	Std. Units			1		09/13/22 13:55		
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Boron	**1.5**	mg/L	0.040	0.0086	1	09/27/22 18:00	09/29/22 00:07	7440-42-8	

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ANALYTICAL RESULTS

Project: McDonough AP-1, 2, 3/4 Supplem-Revised Report
Pace Project No.: 92625189

Sample: B-99 **Lab ID: 92625189004** Collected: 09/12/22 10:25 Received: 09/13/22 10:30 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		09/13/22 13:56		
pH	**5.71**	Std. Units			1		09/13/22 13:56		
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Boron	**2.2**	mg/L	0.040	0.0086	1	09/27/22 18:00	09/29/22 00:13	7440-42-8	

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ANALYTICAL RESULTS

Project: McDonough AP-1, 2, 3/4 Supplem-Revised Report
Pace Project No.: 92625189

Sample: B-119D **Lab ID: 92625189005** Collected: 09/12/22 10:37 Received: 09/13/22 10:30 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		09/13/22 13:56		
pH	**6.57**	Std. Units			1		09/13/22 13:56		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Iron	**1.5**	mg/L	0.040	0.025	1	09/28/22 12:36	09/28/22 16:10	7439-89-6	
Potassium	**2.0**	mg/L	0.20	0.15	1	09/28/22 12:36	09/28/22 16:10	7440-09-7	
Sodium	**10.2**	mg/L	1.0	0.58	1	09/28/22 12:36	09/28/22 16:10	7440-23-5	M1
Calcium	**10.4**	mg/L	1.0	0.12	1	09/28/22 12:36	09/28/22 16:10	7440-70-2	M1
Magnesium	**3.2**	mg/L	0.050	0.012	1	09/28/22 12:36	09/28/22 16:10	7439-95-4	
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	09/27/22 18:00	09/29/22 00:19	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0022	1	09/27/22 18:00	09/29/22 00:19	7440-38-2	
Barium	**0.0029J**	mg/L	0.0050	0.00067	1	09/27/22 18:00	09/29/22 00:19	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	09/27/22 18:00	09/29/22 00:19	7440-41-7	
Boron	**0.048**	mg/L	0.040	0.0086	1	09/27/22 18:00	09/29/22 00:19	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	09/27/22 18:00	09/29/22 00:19	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	09/27/22 18:00	09/29/22 00:19	7440-47-3	
Cobalt	**0.0031J**	mg/L	0.0050	0.00039	1	09/27/22 18:00	09/29/22 00:19	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	09/27/22 18:00	09/29/22 00:19	7439-92-1	
Lithium	**0.0045J**	mg/L	0.030	0.00073	1	09/27/22 18:00	09/29/22 00:19	7439-93-2	
Molybdenum	**0.015**	mg/L	0.010	0.00074	1	09/27/22 18:00	09/29/22 00:19	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	09/27/22 18:00	09/29/22 00:19	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	09/27/22 18:00	09/29/22 00:19	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	10/03/22 11:30	10/03/22 13:22	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**87.0**	mg/L	25.0	10.0	1		09/15/22 11:46		
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville								
Alkalinity,Bicarbonate (CaCO3)	**60.6**	mg/L	5.0	5.0	1		09/16/22 17:12		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		09/16/22 17:12		
Alkalinity, Total as CaCO3	**60.6**	mg/L	5.0	5.0	1		09/16/22 17:12		
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		09/15/22 21:46	16887-00-6	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: McDonough AP-1, 2, 3/4 Supplem-Revised Report
Pace Project No.: 92625189

Sample: B-119D **Lab ID: 92625189005** Collected: 09/12/22 10:37 Received: 09/13/22 10:30 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								
Fluoride	**0.084J**	mg/L	0.10	0.050	1		09/15/22 21:46	16984-48-8	
Sulfate	**2.8**	mg/L	1.0	0.50	1		09/15/22 21:46	14808-79-8	

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ANALYTICAL RESULTS

Project: McDonough AP-1, 2, 3/4 Supplem-Revised Report
Pace Project No.: 92625189

Sample: Dup-3 **Lab ID: 92625189006** Collected: 09/12/22 00:00 Received: 09/13/22 10:30 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	**1.6**	mg/L	0.040	0.025	1	09/28/22 12:36	09/28/22 16:41	7439-89-6	
Potassium	**2.1**	mg/L	0.20	0.15	1	09/28/22 12:36	09/28/22 16:41	7440-09-7	
Sodium	**10.9**	mg/L	1.0	0.58	1	09/28/22 12:36	09/28/22 16:41	7440-23-5	
Calcium	**11.2**	mg/L	1.0	0.12	1	09/28/22 12:36	09/28/22 16:41	7440-70-2	
Magnesium	**3.5**	mg/L	0.050	0.012	1	09/28/22 12:36	09/28/22 16:41	7439-95-4	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	**0.0014J**	mg/L	0.0030	0.00078	1	09/27/22 18:00	09/29/22 00:37	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0022	1	09/27/22 18:00	09/29/22 00:37	7440-38-2	
Barium	**0.0028J**	mg/L	0.0050	0.00067	1	09/27/22 18:00	09/29/22 00:37	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	09/27/22 18:00	09/29/22 00:37	7440-41-7	
Boron	**0.023J**	mg/L	0.040	0.0086	1	09/27/22 18:00	09/29/22 00:37	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	09/27/22 18:00	09/29/22 00:37	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	09/27/22 18:00	09/29/22 00:37	7440-47-3	
Cobalt	**0.0030J**	mg/L	0.0050	0.00039	1	09/27/22 18:00	09/29/22 00:37	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	09/27/22 18:00	09/29/22 00:37	7439-92-1	
Lithium	**0.0045J**	mg/L	0.030	0.00073	1	09/27/22 18:00	09/29/22 00:37	7439-93-2	
Molybdenum	**0.015**	mg/L	0.010	0.00074	1	09/27/22 18:00	09/29/22 00:37	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	09/27/22 18:00	09/29/22 00:37	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	09/27/22 18:00	09/29/22 00:37	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	10/03/22 11:30	10/03/22 13:25	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**94.0**	mg/L	25.0	10.0	1		09/15/22 11:46		
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville								
Alkalinity,Bicarbonate (CaCO3)	**61.4**	mg/L	5.0	5.0	1		09/16/22 17:19		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		09/16/22 17:19		
Alkalinity, Total as CaCO3	**61.4**	mg/L	5.0	5.0	1		09/16/22 17:19		
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		09/15/22 22:01	16887-00-6	
Fluoride	**0.085J**	mg/L	0.10	0.050	1		09/15/22 22:01	16984-48-8	
Sulfate	**2.9**	mg/L	1.0	0.50	1		09/15/22 22:01	14808-79-8	

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

ANALYTICAL RESULTS

Project: McDonough AP-1, 2, 3/4 Supplem-Revised Report
Pace Project No.: 92625189

Sample: B-96 **Lab ID: 92625189007** Collected: 09/13/22 11:33 Received: 09/14/22 09:53 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		09/14/22 14:44		
pH	**5.03**	Std. Units			1		09/14/22 14:44		
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Boron	**3.4**	mg/L	0.040	0.0086	1	09/27/22 18:00	09/29/22 00:43	7440-42-8	

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ANALYTICAL RESULTS

Project: McDonough AP-1, 2, 3/4 Supplem-Revised Report
Pace Project No.: 92625189

Sample: B-122D **Lab ID: 92625189008** Collected: 09/14/22 10:33 Received: 09/15/22 08:20 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		09/15/22 17:33		
pH	**6.07**	Std. Units			1		09/15/22 17:33		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Iron	**13.8**	mg/L	0.040	0.025	1	09/28/22 12:36	09/28/22 16:46	7439-89-6	
Potassium	**4.0**	mg/L	0.20	0.15	1	09/28/22 12:36	09/28/22 16:46	7440-09-7	
Sodium	**31.3**	mg/L	1.0	0.58	1	09/28/22 12:36	09/28/22 16:46	7440-23-5	
Calcium	**51.0**	mg/L	1.0	0.12	1	09/28/22 12:36	09/28/22 16:46	7440-70-2	
Magnesium	**9.9**	mg/L	0.050	0.012	1	09/28/22 12:36	09/28/22 16:46	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	09/27/22 18:00	09/29/22 01:01	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0022	1	09/27/22 18:00	09/29/22 01:01	7440-38-2	
Barium	**0.046**	mg/L	0.0050	0.00067	1	09/27/22 18:00	09/29/22 01:01	7440-39-3	
Beryllium	**0.00028J**	mg/L	0.00050	0.000054	1	09/27/22 18:00	09/29/22 01:01	7440-41-7	
Boron	**0.25**	mg/L	0.040	0.0086	1	09/27/22 18:00	09/29/22 01:01	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	09/27/22 18:00	09/29/22 01:01	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	09/27/22 18:00	09/29/22 01:01	7440-47-3	
Cobalt	**0.0033J**	mg/L	0.0050	0.00039	1	09/27/22 18:00	09/29/22 01:01	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	09/27/22 18:00	09/29/22 01:01	7439-92-1	
Lithium	**0.013J**	mg/L	0.030	0.00073	1	09/27/22 18:00	09/29/22 01:01	7439-93-2	
Molybdenum	**0.0011J**	mg/L	0.010	0.00074	1	09/27/22 18:00	09/29/22 01:01	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	09/27/22 18:00	09/29/22 01:01	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	09/27/22 18:00	09/29/22 01:01	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	10/03/22 11:30	10/03/22 13:27	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**315**	mg/L	25.0	10.0	1		09/19/22 09:22		
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville								
Alkalinity,Bicarbonate (CaCO3)	**123**	mg/L	5.0	5.0	1		09/20/22 16:56		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		09/20/22 16:56		
Alkalinity, Total as CaCO3	**123**	mg/L	5.0	5.0	1		09/20/22 16:56		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**15.5**	mg/L	1.0	0.60	1		09/19/22 18:14	16887-00-6	

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ANALYTICAL RESULTS

Project: McDonough AP-1, 2, 3/4 Supplem-Revised Report
Pace Project No.: 92625189

Sample: B-122D **Lab ID: 92625189008** Collected: 09/14/22 10:33 Received: 09/15/22 08:20 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								
Fluoride	**0.17**	mg/L	0.10	0.050	1		09/19/22 18:14	16984-48-8	
Sulfate	**121**	mg/L	2.0	1.0	2		09/20/22 00:34	14808-79-8	

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ANALYTICAL RESULTS

Project: McDonough AP-1, 2, 3/4 Supplem-Revised Report
Pace Project No.: 92625189

Sample: EB-4 **Lab ID: 92625189009** Collected: 09/14/22 11:23 Received: 09/15/22 08:20 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	09/28/22 12:36	09/28/22 16:50	7439-89-6	
Potassium	ND	mg/L	0.20	0.15	1	09/28/22 12:36	09/28/22 16:50	7440-09-7	
Sodium	ND	mg/L	1.0	0.58	1	09/28/22 12:36	09/28/22 16:50	7440-23-5	
Calcium	ND	mg/L	1.0	0.12	1	09/28/22 12:36	09/28/22 16:50	7440-70-2	
Magnesium	ND	mg/L	0.050	0.012	1	09/28/22 12:36	09/28/22 16:50	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	09/27/22 18:00	09/29/22 01:07	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0022	1	09/27/22 18:00	09/29/22 01:07	7440-38-2	
Barium	**0.0024J**	mg/L	0.0050	0.00067	1	09/27/22 18:00	09/29/22 01:07	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	09/27/22 18:00	09/29/22 01:07	7440-41-7	
Boron	ND	mg/L	0.040	0.0086	1	09/27/22 18:00	09/29/22 01:07	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	09/27/22 18:00	09/29/22 01:07	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	09/27/22 18:00	09/29/22 01:07	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	09/27/22 18:00	09/29/22 01:07	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	09/27/22 18:00	09/29/22 01:07	7439-92-1	
Lithium	ND	mg/L	0.030	0.00073	1	09/27/22 18:00	09/29/22 01:07	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	09/27/22 18:00	09/29/22 01:07	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	09/27/22 18:00	09/29/22 01:07	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	09/27/22 18:00	09/29/22 01:07	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	10/03/22 11:30	10/03/22 13:30	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	ND	mg/L	25.0	10.0	1		09/19/22 09:22		
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville								
Alkalinity,Bicarbonate (CaCO3)	ND	mg/L	5.0	5.0	1		09/20/22 17:07		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		09/20/22 17:07		
Alkalinity, Total as CaCO3	ND	mg/L	5.0	5.0	1		09/20/22 17:07		
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		09/19/22 18:29	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		09/19/22 18:29	16984-48-8	
Sulfate	ND	mg/L	1.0	0.50	1		09/19/22 18:29	14808-79-8	

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ANALYTICAL RESULTS

Project: McDonough AP-1, 2, 3/4 Supplem-Revised Report
Pace Project No.: 92625189

Sample: B-117D **Lab ID: 92625189010** Collected: 09/15/22 10:36 Received: 09/16/22 16:30 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		09/19/22 10:29		
pH	**5.86**	Std. Units			1		09/19/22 10:29		
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	09/28/22 12:36	09/28/22 16:55	7439-89-6	
Potassium	**2.6**	mg/L	0.20	0.15	1	09/28/22 12:36	09/28/22 16:55	7440-09-7	
Sodium	**16.6**	mg/L	1.0	0.58	1	09/28/22 12:36	09/28/22 16:55	7440-23-5	
Calcium	**9.5**	mg/L	1.0	0.12	1	09/28/22 12:36	09/28/22 16:55	7440-70-2	
Magnesium	**1.5**	mg/L	0.050	0.012	1	09/28/22 12:36	09/28/22 16:55	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	09/27/22 18:00	09/29/22 15:21	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0022	1	09/27/22 18:00	09/29/22 15:21	7440-38-2	
Barium	**0.043**	mg/L	0.0050	0.00067	1	09/27/22 18:00	09/29/22 15:21	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	09/27/22 18:00	09/29/22 15:21	7440-41-7	
Boron	**0.011J**	mg/L	0.040	0.0086	1	09/27/22 18:00	09/29/22 15:21	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	09/27/22 18:00	09/29/22 15:21	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	09/27/22 18:00	09/29/22 15:21	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	09/27/22 18:00	09/29/22 15:21	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	09/27/22 18:00	09/29/22 15:21	7439-92-1	
Lithium	**0.0094J**	mg/L	0.030	0.00073	1	09/27/22 18:00	09/29/22 15:21	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	09/27/22 18:00	09/29/22 15:21	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	09/27/22 18:00	09/29/22 15:21	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	09/27/22 18:00	09/29/22 15:21	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	0.00013	1	10/03/22 11:30	10/03/22 13:33	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**106**	mg/L	25.0	10.0	1		09/20/22 13:21		
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville								
Alkalinity,Bicarbonate (CaCO3)	**42.0**	mg/L	5.0	5.0	1		09/20/22 17:38		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		09/20/22 17:38		
Alkalinity, Total as CaCO3	**42.0**	mg/L	5.0	5.0	1		09/20/22 17:38		
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		09/20/22 20:22	16887-00-6	

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ANALYTICAL RESULTS

Project: McDonough AP-1, 2, 3/4 Supplem-Revised Report
Pace Project No.: 92625189

Sample: B-117D **Lab ID: 92625189010** Collected: 09/15/22 10:36 Received: 09/16/22 16:30 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								
Fluoride	**0.090J**	mg/L	0.10	0.050	1		09/20/22 20:22	16984-48-8	
Sulfate	**14.4**	mg/L	1.0	0.50	1		09/20/22 20:22	14808-79-8	

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ANALYTICAL RESULTS

Project: McDonough AP-1, 2, 3/4 Supplem-Revised Report
Pace Project No.: 92625189

Sample: B-123D **Lab ID: 92625189011** Collected: 09/20/22 15:25 Received: 09/21/22 15:05 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		09/21/22 16:51		
pH	**7.13**	Std. Units			1		09/21/22 16:51		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Iron	**5.4**	mg/L	0.040	0.025	1	09/28/22 12:36	09/28/22 18:37	7439-89-6	
Potassium	**7.6**	mg/L	0.20	0.15	1	09/28/22 12:36	09/28/22 18:37	7440-09-7	
Sodium	**29.0**	mg/L	1.0	0.58	1	09/28/22 12:36	09/28/22 18:37	7440-23-5	
Calcium	**90.8**	mg/L	1.0	0.12	1	09/28/22 12:36	09/28/22 18:37	7440-70-2	
Magnesium	**13.0**	mg/L	0.050	0.012	1	09/28/22 12:36	09/28/22 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	09/27/22 18:00	09/29/22 16:41	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0022	1	09/27/22 18:00	09/29/22 16:41	7440-38-2	
Barium	**0.023**	mg/L	0.0050	0.00067	1	09/27/22 18:00	09/29/22 16:41	7440-39-3	
Beryllium	**0.00022J**	mg/L	0.00050	0.000054	1	09/27/22 18:00	09/29/22 16:41	7440-41-7	
Boron	**0.49**	mg/L	0.040	0.0086	1	09/27/22 18:00	09/29/22 16:41	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	09/27/22 18:00	09/29/22 16:41	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	09/27/22 18:00	09/29/22 16:41	7440-47-3	
Cobalt	**0.056**	mg/L	0.0050	0.00039	1	09/27/22 18:00	09/29/22 16:41	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	09/27/22 18:00	09/29/22 16:41	7439-92-1	
Lithium	**0.034**	mg/L	0.030	0.00073	1	09/27/22 18:00	09/29/22 16:41	7439-93-2	
Molybdenum	**0.0015J**	mg/L	0.010	0.00074	1	09/27/22 18:00	09/29/22 16:41	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	09/27/22 18:00	09/29/22 16:41	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	09/27/22 18:00	09/29/22 16:41	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	0.00013	1	10/03/22 11:30	10/03/22 13:35	7439-97-6	
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville								
Alkalinity,Bicarbonate (CaCO3)	**38.5**	mg/L	5.0	5.0	1		09/22/22 23:09		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		09/22/22 23:09		
Alkalinity, Total as CaCO3	**38.5**	mg/L	5.0	5.0	1		09/22/22 23:09		
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Asheville								
Total Dissolved Solids	**533**	mg/L	25.0	25.0	1		09/23/22 10:03		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**8.6**	mg/L	1.0	0.60	1		09/23/22 03:42	16887-00-6	

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ANALYTICAL RESULTS

Project: McDonough AP-1, 2, 3/4 Supplem-Revised Report
Pace Project No.: 92625189

Sample: B-123D **Lab ID: 92625189011** Collected: 09/20/22 15:25 Received: 09/21/22 15:05 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								
Fluoride	**0.57**	mg/L	0.10	0.050	1		09/23/22 03:42	16984-48-8	
Sulfate	**292**	mg/L	5.0	2.5	5		09/23/22 05:28	14808-79-8	

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QUALITY CONTROL DATA

Project: McDonough AP-1, 2, 3/4 Supplem-Revised Report
Pace Project No.: 92625189

QC Batch: 726415
QC Batch Method: EPA 3010A
Analysis Method: EPA 6010D
Analysis Description: 6010D ATL
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92625189005, 92625189006, 92625189008, 92625189009, 92625189010, 92625189011

METHOD BLANK: 3783437 Matrix: Water
Associated Lab Samples: 92625189005, 92625189006, 92625189008, 92625189009, 92625189010, 92625189011

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium	mg/L	ND	1.0	0.12	09/28/22 16:00	
Iron	mg/L	ND	0.040	0.025	09/28/22 16:00	
Magnesium	mg/L	ND	0.050	0.012	09/28/22 16:00	
Potassium	mg/L	ND	0.20	0.15	09/28/22 16:00	
Sodium	mg/L	ND	1.0	0.58	09/28/22 16:00	

LABORATORY CONTROL SAMPLE: 3783438

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium	mg/L	1	1.0	103	80-120	
Iron	mg/L	1	1.0	104	80-120	
Magnesium	mg/L	1	1.1	108	80-120	
Potassium	mg/L	1	1.0	100	80-120	
Sodium	mg/L	1	1.0	102	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3783439 3783440

Parameter	Units	92625189005 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Calcium	mg/L	10.4	1	1	11.7	11.7	130	136	75-125	1	20	M1
Iron	mg/L	1.5	1	1	2.6	2.6	106	107	75-125	0	20	
Magnesium	mg/L	3.2	1	1	4.3	4.4	113	123	75-125	2	20	
Potassium	mg/L	2.0	1	1	3.0	3.1	103	108	75-125	2	20	
Sodium	mg/L	10.2	1	1	11.5	11.5	129	135	75-125	0	20	M1

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QUALITY CONTROL DATA

Project: McDonough AP-1, 2, 3/4 Supplem-Revised Report
Pace Project No.: 92625189

QC Batch: 726202
QC Batch Method: EPA 3005A
Analysis Method: EPA 6020B
Analysis Description: 6020 MET
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92625189001, 92625189002, 92625189003, 92625189004, 92625189005, 92625189006, 92625189007, 92625189008, 92625189009

METHOD BLANK: 3782708 Matrix: Water
Associated Lab Samples: 92625189001, 92625189002, 92625189003, 92625189004, 92625189005, 92625189006, 92625189007, 92625189008, 92625189009

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	ND	0.0030	0.00078	09/28/22 23:25	
Arsenic	mg/L	ND	0.0050	0.0022	09/28/22 23:25	
Barium	mg/L	ND	0.0050	0.00067	09/28/22 23:25	
Beryllium	mg/L	ND	0.00050	0.000054	09/28/22 23:25	
Boron	mg/L	ND	0.040	0.0086	09/28/22 23:25	
Cadmium	mg/L	ND	0.00050	0.00011	09/28/22 23:25	
Chromium	mg/L	ND	0.0050	0.0011	09/28/22 23:25	
Cobalt	mg/L	ND	0.0050	0.00039	09/28/22 23:25	
Lead	mg/L	ND	0.0010	0.00089	09/28/22 23:25	
Lithium	mg/L	ND	0.030	0.00073	09/28/22 23:25	
Molybdenum	mg/L	ND	0.010	0.00074	09/28/22 23:25	
Selenium	mg/L	ND	0.0050	0.0014	09/28/22 23:25	
Thallium	mg/L	ND	0.0010	0.00018	09/28/22 23:25	

LABORATORY CONTROL SAMPLE: 3782709

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.1	0.11	106	80-120	
Arsenic	mg/L	0.1	0.097	97	80-120	
Barium	mg/L	0.1	0.098	98	80-120	
Beryllium	mg/L	0.1	0.099	99	80-120	
Boron	mg/L	1	0.99	99	80-120	
Cadmium	mg/L	0.1	0.10	100	80-120	
Chromium	mg/L	0.1	0.096	96	80-120	
Cobalt	mg/L	0.1	0.099	99	80-120	
Lead	mg/L	0.1	0.098	98	80-120	
Lithium	mg/L	0.1	0.10	100	80-120	
Molybdenum	mg/L	0.1	0.10	102	80-120	
Selenium	mg/L	0.1	0.098	98	80-120	
Thallium	mg/L	0.1	0.098	98	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3782710 3782711

Parameter	Units	92625189001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Antimony	mg/L	ND	0.1	0.1	0.10	0.10	100	103	75-125	3	20	

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QUALITY CONTROL DATA

Project: McDonough AP-1, 2, 3/4 Supplem-Revised Report
Pace Project No.: 92625189

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3782710 3782711

Parameter	Units	92625189001 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	0.095	0.097	95	97	75-125	1	20	
Barium	mg/L	0.014	0.1	0.1	0.11	0.11	93	96	75-125	3	20	
Beryllium	mg/L	0.0018	0.1	0.1	0.093	0.092	91	91	75-125	0	20	
Boron	mg/L	2.6	1	1	3.7	3.7	107	107	75-125	0	20	
Cadmium	mg/L	0.00092	0.1	0.1	0.098	0.10	97	100	75-125	2	20	
Chromium	mg/L	ND	0.1	0.1	0.090	0.089	90	89	75-125	1	20	
Cobalt	mg/L	0.0032J	0.1	0.1	0.094	0.094	90	91	75-125	1	20	
Lead	mg/L	ND	0.1	0.1	0.090	0.091	90	90	75-125	0	20	
Lithium	mg/L	0.0052J	0.1	0.1	0.10	0.10	97	96	75-125	1	20	
Molybdenum	mg/L	ND	0.1	0.1	0.094	0.095	93	95	75-125	1	20	
Selenium	mg/L	0.0020J	0.1	0.1	0.099	0.098	97	96	75-125	1	20	
Thallium	mg/L	0.00020J	0.1	0.1	0.091	0.090	91	90	75-125	1	20	

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QUALITY CONTROL DATA

Project: McDonough AP-1, 2, 3/4 Supplem-Revised Report
Pace Project No.: 92625189

QC Batch: 726205
QC Batch Method: EPA 3005A
Analysis Method: EPA 6020B
Analysis Description: 6020 MET
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92625189010, 92625189011

METHOD BLANK: 3782736 Matrix: Water
Associated Lab Samples: 92625189010, 92625189011

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	ND	0.0030	0.00078	09/29/22 14:50	
Arsenic	mg/L	ND	0.0050	0.0022	09/29/22 14:50	
Barium	mg/L	ND	0.0050	0.00067	09/29/22 14:50	
Beryllium	mg/L	ND	0.00050	0.000054	09/29/22 14:50	
Boron	mg/L	ND	0.040	0.0086	09/29/22 14:50	
Cadmium	mg/L	ND	0.00050	0.00011	09/29/22 14:50	
Chromium	mg/L	ND	0.0050	0.0011	09/29/22 14:50	
Cobalt	mg/L	ND	0.0050	0.00039	09/29/22 14:50	
Lead	mg/L	ND	0.0010	0.00089	09/29/22 14:50	
Lithium	mg/L	ND	0.030	0.00073	09/29/22 14:50	
Molybdenum	mg/L	ND	0.010	0.00074	09/29/22 14:50	
Selenium	mg/L	ND	0.0050	0.0014	09/29/22 14:50	
Thallium	mg/L	ND	0.0010	0.00018	09/29/22 14:50	

LABORATORY CONTROL SAMPLE: 3782737

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.1	0.099	99	80-120	
Arsenic	mg/L	0.1	0.095	95	80-120	
Barium	mg/L	0.1	0.094	94	80-120	
Beryllium	mg/L	0.1	0.096	96	80-120	
Boron	mg/L	1	1.0	102	80-120	
Cadmium	mg/L	0.1	0.098	98	80-120	
Chromium	mg/L	0.1	0.10	102	80-120	
Cobalt	mg/L	0.1	0.10	101	80-120	
Lead	mg/L	0.1	0.099	99	80-120	
Lithium	mg/L	0.1	0.098	98	80-120	
Molybdenum	mg/L	0.1	0.095	95	80-120	
Selenium	mg/L	0.1	0.097	97	80-120	
Thallium	mg/L	0.1	0.098	98	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3782738 3782739

Parameter	Units	92625189010 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Antimony	mg/L	ND	0.1	0.1	0.098	0.10	97	101	75-125	3	20	
Arsenic	mg/L	ND	0.1	0.1	0.094	0.097	93	96	75-125	3	20	

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QUALITY CONTROL DATA

Project: McDonough AP-1, 2, 3/4 Supplem-Revised Report
Pace Project No.: 92625189

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3782738 3782739

Parameter	Units	92625189010 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Barium	mg/L	0.043	0.1	0.1	0.13	0.14	90	93	75-125	2	20	
Beryllium	mg/L	ND	0.1	0.1	0.089	0.092	89	92	75-125	4	20	
Boron	mg/L	0.011J	1	1	0.92	0.98	91	97	75-125	6	20	
Cadmium	mg/L	ND	0.1	0.1	0.096	0.099	96	99	75-125	3	20	
Chromium	mg/L	ND	0.1	0.1	0.097	0.10	96	100	75-125	4	20	
Cobalt	mg/L	ND	0.1	0.1	0.098	0.10	98	103	75-125	4	20	
Lead	mg/L	ND	0.1	0.1	0.093	0.098	93	98	75-125	5	20	
Lithium	mg/L	0.0094J	0.1	0.1	0.099	0.10	90	94	75-125	4	20	
Molybdenum	mg/L	ND	0.1	0.1	0.095	0.10	95	100	75-125	6	20	
Selenium	mg/L	ND	0.1	0.1	0.094	0.095	94	95	75-125	1	20	
Thallium	mg/L	ND	0.1	0.1	0.094	0.098	94	98	75-125	4	20	

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QUALITY CONTROL DATA

Project: McDonough AP-1, 2, 3/4 Supplem-Revised Report
Pace Project No.: 92625189

QC Batch: 727398
QC Batch Method: EPA 7470A
Analysis Method: EPA 7470A
Analysis Description: 7470 Mercury
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92625189005, 92625189006, 92625189008, 92625189009, 92625189010, 92625189011

METHOD BLANK: 3787972 Matrix: Water
Associated Lab Samples: 92625189005, 92625189006, 92625189008, 92625189009, 92625189010, 92625189011

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	ND	0.00020	0.00013	10/03/22 13:17	

LABORATORY CONTROL SAMPLE: 3787973

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.0025	0.0023	92	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3787974 3787975

Parameter	Units	92625178002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	mg/L	0.00016J	0.0025	0.0025	0.0022	0.0022	82	81	75-125	1	20	

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QUALITY CONTROL DATA

Project: McDonough AP-1, 2, 3/4 Supplem-Revised Report
Pace Project No.: 92625189

QC Batch: 723325
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: 92625189005, 92625189006

METHOD BLANK: 3768875 Matrix: Water
Associated Lab Samples: 92625189005, 92625189006

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	25.0	10.0	09/15/22 11:44	

LABORATORY CONTROL SAMPLE: 3768876

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

SAMPLE DUPLICATE: 3768878

Parameter	Units	92625189005 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	87.0	83.0	5	10	

SAMPLE DUPLICATE: 3768892

Parameter	Units	92625181001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	197	193	2	10	

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QUALITY CONTROL DATA

Project: McDonough AP-1, 2, 3/4 Supplem-Revised Report
Pace Project No.: 92625189

QC Batch: 724043
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: 92625189008, 92625189009

METHOD BLANK: 3772705 Matrix: Water
Associated Lab Samples: 92625189008, 92625189009

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	25.0	10.0	09/19/22 09:17	

LABORATORY CONTROL SAMPLE: 3772706

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

SAMPLE DUPLICATE: 3772708

Parameter	Units	92625623010 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	572	582	2	10	

SAMPLE DUPLICATE: 3772903

Parameter	Units	92625178010 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	582	578	1	10	

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QUALITY CONTROL DATA

Project: McDonough AP-1, 2, 3/4 Supplem-Revised Report
Pace Project No.: 92625189

QC Batch: 724233
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: 92625189010

METHOD BLANK: 3773743 Matrix: Water
Associated Lab Samples: 92625189010

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	25.0	10.0	09/20/22 13:21	

LABORATORY CONTROL SAMPLE: 3773744

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	346	86	80-120	

SAMPLE DUPLICATE: 3773745

Parameter	Units	92625623012 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	437	420	4	10	

SAMPLE DUPLICATE: 3773746

Parameter	Units	92625623021 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	440	405	8	10	

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QUALITY CONTROL DATA

Project: McDonough AP-1, 2, 3/4 Supplem-Revised Report
Pace Project No.: 92625189

QC Batch: 723613
QC Batch Method: SM 2320B-2011
Analysis Method: SM 2320B-2011
Analysis Description: 2320B Alkalinity
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92625189005, 92625189006

METHOD BLANK: 3770309 Matrix: Water
Associated Lab Samples: 92625189005, 92625189006

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Alkalinity, Total as CaCO3	mg/L	ND	5.0	5.0	09/16/22 13:22	
Alkalinity,Bicarbonate (CaCO3)	mg/L	ND	5.0	5.0	09/16/22 13:22	
Alkalinity,Carbonate (CaCO3)	mg/L	ND	5.0	5.0	09/16/22 13:22	

LABORATORY CONTROL SAMPLE: 3770310

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	50	52.1	104	80-120	

LABORATORY CONTROL SAMPLE: 3770311

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	50	51.6	103	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3770314 3770315

Parameter	Units	92625683004 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	190	50	50	247	262	114	144	80-120	6	25	M1

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3771994 3771995

Parameter	Units	92625683003 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	54.9	54.9	104	103	80-120	0	25	

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QUALITY CONTROL DATA

Project: McDonough AP-1, 2, 3/4 Supplem-Revised Report
Pace Project No.: 92625189

QC Batch: 724379
QC Batch Method: SM 2320B-2011
Analysis Method: SM 2320B-2011
Analysis Description: 2320B Alkalinity
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92625189008, 92625189009, 92625189010

METHOD BLANK: 3774170 Matrix: Water
Associated Lab Samples: 92625189008, 92625189009, 92625189010

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Alkalinity, Total as CaCO3	mg/L	ND	5.0	5.0	09/20/22 15:05	
Alkalinity,Bicarbonate (CaCO3)	mg/L	ND	5.0	5.0	09/20/22 15:05	
Alkalinity,Carbonate (CaCO3)	mg/L	ND	5.0	5.0	09/20/22 15:05	

LABORATORY CONTROL SAMPLE: 3774171

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	50	51.8	104	80-120	

LABORATORY CONTROL SAMPLE: 3774172

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	50	51.4	103	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3774173 3774174

Parameter	Units	92625623006 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	50.8	51.4	102	103	80-120	1	25	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3774175 3774176

Parameter	Units	92625623011 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	56.4	56.1	104	104	80-120	1	25	

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QUALITY CONTROL DATA

Project: McDonough AP-1, 2, 3/4 Supplem-Revised Report
Pace Project No.: 92625189

QC Batch: 725081
QC Batch Method: SM 2320B-2011
Analysis Method: SM 2320B-2011
Analysis Description: 2320B Alkalinity
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92625189011

METHOD BLANK: 3777562 Matrix: Water
Associated Lab Samples: 92625189011

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Alkalinity, Total as CaCO3	mg/L	ND	5.0	5.0	09/23/22 14:29	
Alkalinity,Bicarbonate (CaCO3)	mg/L	ND	5.0	5.0	09/23/22 14:29	
Alkalinity,Carbonate (CaCO3)	mg/L	ND	5.0	5.0	09/23/22 14:29	

LABORATORY CONTROL SAMPLE: 3777563

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	50	50.5	101	80-120	

LABORATORY CONTROL SAMPLE: 3777564

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	50	50.4	101	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3777565 3777566

Parameter	Units	92626727004 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	449	50	50	471	468	43	37	80-120	1	25	M1

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3777567 3777568

Parameter	Units	92626727005 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	149	50	50	207	200	116	103	80-120	3	25	

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(770)734-4200

QUALITY CONTROL DATA

Project: McDonough AP-1, 2, 3/4 Supplem-Revised Report
Pace Project No.: 92625189

QC Batch: 725355
QC Batch Method: SM 2540C-2011
Analysis Method: SM 2540C-2011
Analysis Description: 2540C Total Dissolved Solids
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92625189011

METHOD BLANK: 3778984 Matrix: Water
Associated Lab Samples: 92625189011

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	25.0	25.0	09/23/22 10:01	

LABORATORY CONTROL SAMPLE: 3778985

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	250	242	97	90-110	

SAMPLE DUPLICATE: 3778986

Parameter	Units	92626923001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	29.0	33.0	13	25	

SAMPLE DUPLICATE: 3778987

Parameter	Units	92626865001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	2430	2480	2	25	

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QUALITY CONTROL DATA

Project: McDonough AP-1, 2, 3/4 Supplem-Revised Report
Pace Project No.: 92625189

QC Batch: 723467
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: 92625189005, 92625189006

METHOD BLANK: 3769521 Matrix: Water
Associated Lab Samples: 92625189005, 92625189006

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.60	09/15/22 15:11	
Fluoride	mg/L	ND	0.10	0.050	09/15/22 15:11	
Sulfate	mg/L	ND	1.0	0.50	09/15/22 15:11	

LABORATORY CONTROL SAMPLE: 3769522

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	49.0	98	90-110	
Fluoride	mg/L	2.5	2.5	100	90-110	
Sulfate	mg/L	50	49.3	99	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3769523 3769524

Parameter	Units	92625147002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	94.2	50	50	133	134	77	79	90-110	1	10	M1
Fluoride	mg/L	0.49	2.5	2.5	3.0	3.0	101	102	90-110	1	10	
Sulfate	mg/L	53.6	50	50	99.3	100	91	93	90-110	1	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3769525 3769526

Parameter	Units	92625178002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	15.0	50	50	66.7	67.1	103	104	90-110	1	10	
Fluoride	mg/L	0.40	2.5	2.5	3.6	3.6	127	128	90-110	1	10	M1
Sulfate	mg/L	508	50	50	552	552	88	89	90-110	0	10	M1

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QUALITY CONTROL DATA

Project: McDonough AP-1, 2, 3/4 Supplem-Revised Report
Pace Project No.: 92625189

QC Batch: 724055
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: 92625189008, 92625189009

METHOD BLANK: 3772745 Matrix: Water
Associated Lab Samples: 92625189008, 92625189009

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.60	09/19/22 00:00	
Fluoride	mg/L	ND	0.10	0.050	09/19/22 00:00	
Sulfate	mg/L	ND	1.0	0.50	09/19/22 00:00	

LABORATORY CONTROL SAMPLE: 3772746

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	49.9	100	90-110	
Fluoride	mg/L	2.5	2.6	104	90-110	
Sulfate	mg/L	50	50.9	102	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3772749 3772750

Parameter	Units	92625178011 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	10.3	50	50	61.5	61.6	102	103	90-110	0	10	
Fluoride	mg/L	0.38	2.5	2.5	3.0	3.0	106	107	90-110	1	10	
Sulfate	mg/L	228	50	50	276	279	97	102	90-110	1	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3772755 3772756

Parameter	Units	92625980001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	2.6	50	50	53.2	53.2	101	101	90-110	0	10	
Fluoride	mg/L	ND	2.5	2.5	2.6	2.6	101	102	90-110	0	10	
Sulfate	mg/L	5.5	50	50	56.9	56.6	103	102	90-110	0	10	

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QUALITY CONTROL DATA

Project: McDonough AP-1, 2, 3/4 Supplem-Revised Report
Pace Project No.: 92625189

QC Batch: 724437
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: 92625189010

METHOD BLANK: 3774398 Matrix: Water
Associated Lab Samples: 92625189010

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.60	09/20/22 18:23	
Fluoride	mg/L	ND	0.10	0.050	09/20/22 18:23	
Sulfate	mg/L	ND	1.0	0.50	09/20/22 18:23	

LABORATORY CONTROL SAMPLE: 3774399

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	49.4	99	90-110	
Fluoride	mg/L	2.5	2.5	101	90-110	
Sulfate	mg/L	50	50.2	100	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3774400 3774401

Parameter	Units	92626469002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	105	50	50	159	159	108	107	90-110	0	10	
Fluoride	mg/L	0.49	2.5	2.5	3.1	3.2	106	107	90-110	1	10	
Sulfate	mg/L	31.2	50	50	82.4	82.6	102	103	90-110	0	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3774402 3774403

Parameter	Units	92625623020 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	26.2	50	50	77.4	77.1	102	102	90-110	0	10	
Fluoride	mg/L	0.69	2.5	2.5	3.2	3.3	102	104	90-110	1	10	
Sulfate	mg/L	462	50	50	509	510	92	95	90-110	0	10	

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QUALITY CONTROL DATA

Project: McDonough AP-1, 2, 3/4 Supplem-Revised Report
Pace Project No.: 92625189

QC Batch: 725140
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: 92625189011

METHOD BLANK: 3777923 Matrix: Water
Associated Lab Samples: 92625189011

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.60	09/22/22 20:18	
Fluoride	mg/L	ND	0.10	0.050	09/22/22 20:18	
Sulfate	mg/L	ND	1.0	0.50	09/22/22 20:18	

LABORATORY CONTROL SAMPLE: 3777924

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	47.3	95	90-110	
Fluoride	mg/L	2.5	2.4	97	90-110	
Sulfate	mg/L	50	47.6	95	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3777925 3777926

Parameter	Units	92626959007 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	12.9	50	50	61.1	61.1	96	96	90-110	0	10	
Fluoride	mg/L	0.23	2.5	2.5	2.7	2.7	98	97	90-110	1	10	
Sulfate	mg/L	31.0	50	50	79.4	79.5	97	97	90-110	0	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3777927 3777928

Parameter	Units	92626959011 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	15.2	50	50	63.1	63.7	96	97	90-110	1	10	
Fluoride	mg/L	0.38	2.5	2.5	2.9	2.9	101	102	90-110	1	10	
Sulfate	mg/L	ND	50	50	47.9	48.6	95	96	90-110	1	10	

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QUALIFIERS

Project: McDonough AP-1, 2, 3/4 Supplem-Revised Report
Pace Project No.: 92625189

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.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: McDonough AP-1, 2, 3/4 Supplem-Revised Report
Pace Project No.: 92625189

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92625189001	**B-90**				
92625189002	**B-91**				
92625189003	**B-95**				
92625189004	**B-99**				
92625189005	**B-119D**				
92625189007	**B-96**				
92625189008	**B-122D**				
92625189010	**B-117D**				
92625189011	**B-123D**				
92625189005	**B-119D**	EPA 3010A	726415	EPA 6010D	726515
92625189006	**Dup-3**	EPA 3010A	726415	EPA 6010D	726515
92625189008	**B-122D**	EPA 3010A	726415	EPA 6010D	726515
92625189009	**EB-4**	EPA 3010A	726415	EPA 6010D	726515
92625189010	**B-117D**	EPA 3010A	726415	EPA 6010D	726515
92625189011	**B-123D**	EPA 3010A	726415	EPA 6010D	726515
92625189001	**B-90**	EPA 3005A	726202	EPA 6020B	726322
92625189002	**B-91**	EPA 3005A	726202	EPA 6020B	726322
92625189003	**B-95**	EPA 3005A	726202	EPA 6020B	726322
92625189004	**B-99**	EPA 3005A	726202	EPA 6020B	726322
92625189005	**B-119D**	EPA 3005A	726202	EPA 6020B	726322
92625189006	**Dup-3**	EPA 3005A	726202	EPA 6020B	726322
92625189007	**B-96**	EPA 3005A	726202	EPA 6020B	726322
92625189008	**B-122D**	EPA 3005A	726202	EPA 6020B	726322
92625189009	**EB-4**	EPA 3005A	726202	EPA 6020B	726322
92625189010	**B-117D**	EPA 3005A	726205	EPA 6020B	726325
92625189011	**B-123D**	EPA 3005A	726205	EPA 6020B	726325
92625189005	**B-119D**	EPA 7470A	727398	EPA 7470A	727474
92625189006	**Dup-3**	EPA 7470A	727398	EPA 7470A	727474
92625189008	**B-122D**	EPA 7470A	727398	EPA 7470A	727474
92625189009	**EB-4**	EPA 7470A	727398	EPA 7470A	727474
92625189010	**B-117D**	EPA 7470A	727398	EPA 7470A	727474
92625189011	**B-123D**	EPA 7470A	727398	EPA 7470A	727474
92625189005	**B-119D**	SM 2540C-2015	723325		
92625189006	**Dup-3**	SM 2540C-2015	723325		
92625189008	**B-122D**	SM 2540C-2015	724043		
92625189009	**EB-4**	SM 2540C-2015	724043		
92625189010	**B-117D**	SM 2540C-2015	724233		
92625189005	**B-119D**	SM 2320B-2011	723613		
92625189006	**Dup-3**	SM 2320B-2011	723613		
92625189008	**B-122D**	SM 2320B-2011	724379		
92625189009	**EB-4**	SM 2320B-2011	724379		
92625189010	**B-117D**	SM 2320B-2011	724379		
92625189011	**B-123D**	SM 2320B-2011	725081		

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: McDonough AP-1, 2, 3/4 Supplem-Revised Report
Pace Project No.: 92625189

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92625189011	**B-123D**	SM 2540C-2011	725355		
92625189005	**B-119D**	EPA 300.0 Rev 2.1 1993	723467		
92625189006	**Dup-3**	EPA 300.0 Rev 2.1 1993	723467		
92625189008	**B-122D**	EPA 300.0 Rev 2.1 1993	724055		
92625189009	**EB-4**	EPA 300.0 Rev 2.1 1993	724055		
92625189010	**B-117D**	EPA 300.0 Rev 2.1 1993	724437		
92625189011	**B-123D**	EPA 300.0 Rev 2.1 1993	725140		

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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: GA Power

Project #:

WO# : 92625189

92625189

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

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

Date/Initials Person Examining Contents: 9/15/22 COF

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: 3.8 **Correction Factor:** Add/Subtract (°C) 0.0

Cooler Temp Corrected (°C): 3.8

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: 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#: 92625189

PM: NMG Due Date: 09/27/22

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 (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	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.

Pace Analytical

CHAIN-OF-CUSTODY / Analytical Request Document

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

Page : 1 Of 1

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:	
Company:	Georgia Power - Coal Combustion Residuals	Report To:	Lauren Coker	Attention:	scainvoices@southernco.com
Address:	2480 Maner Road	Copy To:	Golder	Company Name:	
	Atlanta, GA 30339			Address:	
Email:	laucoker@southernco.com	Purchase Order #:		Pace Quote:	
Phone:	(470) 820-6176 Fax	Project Name:	Plant McD AP-1, AP-2, AP-3/4 Supplemental Sampling	Pace Project Manager:	Nicole D'Oleo
Requested Due Date:	10 Day TAT	Project #:	GL-166849622	Pace Profile #:	

Regulatory Agency: —

State / Location: GA

ITEM #	SAMPLE ID (One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique)	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	DATE	TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H2SO4	HNO3	HCl	NaOH + Zn Acetate	Na2S2O3	Methanol	Other	Analyses Test Y/N	Requested Analysis Filtered (Y/N): App III/IV Total Metals	Cl, F, SO4, TDS	Radium 226/228	Mg, Na, K	CO3+HCO2	Fe Total, Fe 3+	Boron	Residual Chlorine (Y/N)	
	MATRIX: Drinking Water DW, Water WT, Waste Water WW, Product P, Soil/Solid SL, Oil OL, Wipe WP, Air AR, Other OT, Tissue TS															Y/N	N	N	N	N	N	N		
1	B-90	WG	G	9/12/2022	12:15		1			1												X			pH = 5.35
2	B-91	WG	G	9/12/2022	13:26		1			1												X			pH = 5.28
3	B-95	WG	G	9/12/2022	14:38		1			1												X			pH = 5.33
4	B-99	WG	G	9/12/2022	10:25		1			1												X			pH = 5.71
6	B-119D	WG	G	9/12/2022	10:37		6	3		3							X	X	X	X	X	X			pH = 6.57, Fe2 = 0.0 mg/L
7	Dup-3	WG	G	9/12/2022	--		6	3		3							X	X	X	X	X	X			
8																									
9																									
10																									
11																									
12																									
13																									
14																									

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
	[illegible]/Sample	9/13/22	8:05	M. BATH	9/13/22	8:10	
				[signature]	9/13/22	1036	

JUDE WAGUESPACK DATE Signed: 9/13/22

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

DC#_Title: ENV-FRM-HUN1-0083 v01_Sample Condition Upon Receipt

Effective Date: 05/12/2022

Laboratory receiving samples:

Asheville ☐ Eden ☐ Greenwood ☐ Huntersville ☐ Raleigh ☐ Mec

Sample Condition Upon Receipt

Client Name: GA Power

Project #:

WO#: 92625189

PM: NMG Due Date: 09/27/22

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: 9/14/22 TDH

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

Thermometer: ☑ IR Gun ID: 230

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

Type of Ice: ☑ Wet ☐ Blue ☐ None

Cooler Temp: 3.2 Correction Factor: Add/Subtract (°C) 0.0

Cooler Temp Corrected (°C): 3.2

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.
Sample Labels Match COC?	☑ Yes	☐ No	☐ N/A	9.
-Includes Date/Time/ID/Analysis Matrix: WW				
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:

Qualtrax ID: 69614

Pace ANALYTICAL SERVICES	DC#_Title: ENV-FRM-HUN1-0083 v01_Sample Condition Upon Receipt
	Effective Date: 05/12/2022

*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

***Check all unpreserved Nitrates for chlorine

Project # **WO#: 92625189**

PM: NMG Due Date: 09/27/22

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)	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)	DG94-250 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)	DG9V-40 mL VOA H3PO4 (N/A)	DG9S-40 mL VOA H2SO4 (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-250 mL Plastic (NH2)2SO4 (9.3-9.7)	AG0U-100 mL Amber Unpreserved (N/A) (Cl-)	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 DENR Certification Office (i.e. Out of hold, incorrect preservative, out of temp, incorrect containers.

Pace Analytical

CHAIN-OF-CUSTODY / Analytical Request Document

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

Page : 1 Of 1

Section A – Required Client Information:		Section B – Required Project Information:		Section C – Invoice Information:	
Company:	Georgia Power - Coal Combustion Residuals	Report To:	Lauren Coker	Attention:	scsinvoices@southernco.com
Address:	2480 Maner Road	Copy To:	Golder	Company Name:	
	Atlanta, GA 30339			Address:	
Email:	laucoker@southernco.com	Purchase Order #:		Pace Quote:	
Phone:	(470) 820-6176 Fax	Project Name:	Plant McD AP-1, AP-2 and 3/4 Supplemental Sampling	Pace Project Manager:	Nicole D'Oleo
Requested Due Date:	10 Day TAT	Project #:	GL166849822	Pace Profile #:	

Regulatory Agency: —

State / Location: GA

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID (One Character per box. (A-Z, 0-9 / , -) Sample ids must be unique)	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	DATE	TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved - Ice	H2SO4	HNO3 + Ice	HCl	NaOH + Zn Acetate	Na2S2O3	Methanol	Other	Analyses Test: Y/N	Boron	Residual Chlorine (Y/N)	
1	B-98	WG	G	9/13/2022	11:33		1			1						Y	X		pH = 5.03
2																N			
3																			
4																			
5																			
6																			
7																			
8																			
9																			
10																			
11																			
12																			
13																			
14																			

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

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
	[signature]	9-14-22	8:53	[signature] 8:34	9/14/22	8:53	
	[signature]			[signature] 9/14/22		8:53	

JUDE WAGUESPACK — DATE Signed: 9-14-22

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

Pace ANALYTICAL SERVICES

DC#_Title: ENV-FRM-HUN1-0083 v01_Sample Condition Upon Receipt

Effective Date: 05/12/2022

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

Sample Condition Upon Receipt

Client Name: Georgia Power **Project**

WO#: 92625189
PM: NMG Due Date: 09/27/22
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: 09/13/22 JM

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

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

Thermometer: ☐ IR Gun ID: 083 **Type of Ice:** ☑ Wet ☐ Blue ☐ None

Cooler Temp: 1.9 **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): 1.9

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: WG				
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:** _____

Qualtrax ID: 69614

WO#: 92625189

PM: NMG Due Date: 09/27/22

CLIENT: GA-GA Power

Project #

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

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

**Bottom half of box is to list number of bottles

***Check all unpreserved Nitrates for chlorine

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)	DG9A-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)	DG9V-40 mL VOA H3PO4 (N/A)	DG9S-40 mL VOA H2SO4 (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	BP3R-250 mL Plastic (NH2)2SO4 (9 3-9.7)	AG0U-100 mL Amber Unpreserved (N/A) (Cl-)	VSGU-20 mL Scintillation vials (N/A)	DG9U-40 mL Amber Unpreserved vials (N/A)
1						1																							
2						1																							
3						1																							
4						1																							
5		2	1			1																			2				
6		2	1			1																			2				
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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 DENR Certification Office (i.e. Out of hold, incorrect preservative, out of temp, incorrect containers.

Pace Analytical

CHAIN-OF-CUSTODY / Analytical Request Document

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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:	Lauren Coker	Attention:	acsinvoices@southernco.com
Address:	2480 Maner Road	Copy To:	Golder	Company Name:	
	Atlanta, GA 30339			Address:	
Email:	laucoker@southernco.com	Purchase Order #:		Pace Quote:	
Phone:	(470) 620-6176 Fax	Project Name:	Plant McD AP-1, 2, 3/4 Supplemental Sampling	Pace Project Manager:	Nicole D'Oleo
Requested Due Date:	10 Day TAT	Project #:	GL165849822	Pace Profile #:	

Regulatory Agency: —

State / Location: GA

ITEM #	SAMPLE ID One Character per box. (A-Z, 0-9 / , -) Sample ids must be unique MATRIX: Drinking Water DW; Water WT; Waste Water WW; Product P; Soil/Solid SL; Oil OL; Wipe WP; Air AR; Other OT; Tissue TS	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	DATE	TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved - Ice	H2SO4	HNO3 + Ice	HCl	NaOH + Zn Acetate	Na2S2O3	Methanol	Other	Analyses Test Y/N	Requested Analysis Filtered (Y/N)	Residual Chlorine (Y/N)	
																	App III/IV Total Metals; Cl, F, SO4, TDS; Radium 226/228; Mg, Na, K; CO3+HCO2; Fe Total, Fe 3+		5189
1	B-122D	WG	G	9/14/2022	10:33		6	3		3						N	X X X X X X		pH = 6.07, Fe2 = 4.0 mg/L
2	EB-4	WQ	G	9/14/2022	11:23		6	3		3						N	X X X X X X		
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ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS: TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
		09/15/22	08:10		8-15-22	8:20				
					9/15/22	0945				

DUANE FULTON / WSP-GOLDER — DATE Signed: 09/15/22

Pace ANALYTICAL SERVICES

DC#_Title: ENV-FRM-HUN1-0083 v01_Sample Condition Upon Receipt

Effective Date: 05/12/2022

Laboratory receiving samples:

Asheville ☐ Eden ☐ Greenwood ☐ Huntersville ☐ Raleigh ☐ M... ☐ Atlanta ☑ Kernersville ☐

Sample Condition Upon Receipt

Client Name: Georgia Power

Project

WO#: 92625189

PM: NMG **Due Date: 09/27/22**

CLIENT: GA-GA Power

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

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

Date/Initials Person Examining Contents: 9/17/22 JM

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

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

Thermometer: ☐ IR Gun ID: 230

Cooler Temp: 3.3 **Correction Factor:** Add/Subtract (°C) 0.0 **Type of Ice:** ☑ Wet ☐ Blue ☐ None

Cooler Temp Corrected (°C): 3.3

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: WG				
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:

Qualtrax ID: 69614

*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

***Check all unpreserved Nitrates for chlorine

Project

WO#: 92625189

PM: NMG Due Date: 09/27/22

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)	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)	DG94-250 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)	DG9V-40 mL VOA H3PO4 (N/A)	DG9S-40 mL VOA H2SO4 (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	BP3R-250 mL Plastic (NH2)2SO4 (9.3-9.7)	AG0U-100 mL Amber Unpreserved (N/A) (Cl-)	VSGU-20 mL Scintillation vials (N/A)	DG9U-40 mL Amber Unpreserved vials (N/A)
1		2	1			1																			2				
2																													
3																													
4																													
5																													
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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 DENR Certification Office (i.e. Out of hold, incorrect preservative, out of temp, incorrect containers.

Pace Analytical

CHAIN-OF-CUSTODY / Analytical Request Document

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

Page : 1 Of 1

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:	
Company:	Georgia Power - Coal Combustion Residuals	Report To:	Lauren Coker	Attention:	scainvoices@southernco.com
Address:	2480 Maner Road	Copy To:	Golder	Company Name:	
	Atlanta, GA 30339			Address:	
Email:	laucoker@southernco.com	Purchase Order #:		Pace Quote	
Phone:	(470) 620-6176 Fax	Project Name:	Plant McD AP-1, 2, 3/4 Supplemental Well Network	Pace Project Manager:	Nicole D'Oleo
Requested Due Date:	10 Day TAT	Project #:	GL166849622	Pace Profile #	

Regulatory Agency

State / Location: GA

ITEM #	SAMPLE ID (One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique)	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	DATE	TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H2SO4	HNO3	HCl	NaOH + Zn Acetate	Na2S2O3	Methanol	Other	Analyses Test Y/N	Requested Analysis Filtered (Y/N): App III/IV Total Metals	Cl, F, SO4, TDS	Radium 226/228	Mg, Na, K	CO3+HCO2	Fe Total, Fe 3+	Residual Chlorine (Y/N)	
	MATRIX: Drinking Water DW, Water WT, Waste Water WW, Product P, Soil/Solid SL, Oil OL, Wipe WP, Air AR, Other OT, Tissue TS															N	N	N	N	N	N		
1	B-117D	WG	G	9/15/2022	10:36		6	3		3						X	X	X	X	X	X		pH = 5.86, Fe2 = 0.0 mg/L
2																							
3																							
4																							
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14																							

10

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS: TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
	Mark Mann Golder	9/16/22	16:25	[signature]	9/16	16:32				

DATE Signed:

Pace ANALYTICAL SERVICES	DC#_Title: ENV-FRM-HUN1-0083 v01_Sample Condition Upon Receipt
	Effective Date: 05/12/2022

Laboratory receiving samples:

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

Sample Condition Upon Receipt

Client Name: Georgia Power **Project #:**

WO#: 92625189

PM: NMG Due Date: 09/27/22

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: 4/21/22 AF

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: 3.6 **Correction Factor:** Add/Subtract (°C) 0.0

Temp should be above freezing to 6°C

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

Cooler Temp Corrected (°C): 3.6

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: W G				
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:** _____

WO#: 92625189

PM: NMG Due Date: 09/27/22

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

***Check all unpreserved Nitrates for chlorine

Proje

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)	DG94-250 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)	DG9V-40 mL VOA H3PO4 (N/A)	DG9S-40 mL VOA H2SO4 (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-250 mL Plastic (NH2)2SO4 (9.3-9.7)	AG0U-100 mL Amber Unpreserved (N/A) (Cl-)	VSGU-20 mL Scintillation vials (N/A)	DG9U-40 mL Amber Unpreserved vials (N/A)
1		2	1			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 DENR Certification Office (i.e. Out of hold, incorrect preservative, out of temp, incorrect containers.

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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:	Lauren Coker	Attention:	scsinvoices@southernco.com
Address:	2480 Maner Road	Copy To	Golder	Company Name	
	Atlanta, GA 30339			Address	
Email:	laucoker@southernco.com	Purchase Order #:		Pace Quote	
Phone	(470) 620-6176 Fax:	Project Name	Plant McD AP-1, 2, 3/4 Supplemental Well Network	Pace Project Manager	Nicole D'Oleo
Requested Due Date	10 Day TAT	Project #	GL166849622	Pace Profile #	

Regulatory Agency	
State / Location	GA

ITEM #	SAMPLE ID (One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique)	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	DATE	TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H2SO4	HNO3 + Ice	HCl	NaOH + Zn Acetate	Na2S2O3	Methanol	Other	Analyses Test Y/N	Requested Analysis Filtered (Y/N)	Residual Chlorine (Y/N)	
	MATRIX: Drinking Water DW, Water WT, Waste Water WW, Product P, Soil/Solid SL, Oil OL, Wipe WP, Air AR, Other OT, Tissue TS															Ag, Al, V, Total Metals; Cl, F, SO4, TDS; Radium 226/228; Mg, Na, K; CO3+HCO2; Fe Total, Fe 3+			5212 5189
1	B-12 30	WG	G	9/20/2022	15:25		6	3		3						X	X	X	X	X	X		pH = 7.13, Fe2 = 4.5 mg/L
2																			
3																			
4																			
6																			
7																			
8																			
9																			
10																			
11																			
12																			
13																			
14																			

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
	Mark Mann Golder	09/26/22	15:05		9/27/22	1505	

DATE Signed:

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

November 04, 2022

Andrea McClure
WSP/Golder
5170 Peachtree Road
Building 100, Suite 300
Atlanta, GA 30341

RE: Project: McDonough AP-1, 2, 3/4 Sup Rad-Revised Report
Pace Project No.: 92625212

Dear Andrea McClure:

Enclosed are the analytical results for sample(s) received by the laboratory between September 13, 2022 and September 21, 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

Revision 1: Issued on 11/4/22 to include Radium QC Sheets.

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

Sincerely,

Nicole D'Oleo

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

Enclosures

cc: Joju Abraham, Georgia Power-CCR
Stephen Benda, Southern Company
Noelia Gangi, Georgia Power
Daniela Herrera, Golder
Ben Hodges, Georgia Power
Kristen Jurinko
Laura Midkiff, Georgia Power
Karim Minkara, Golder Associates - Atlanta
J. Shelby Mobley, Southern Company
Charles Norton, Southern Company
Ms. Lauren Petty, Southern Company
Dawn Prell, Golder Associates Inc.
Michael Smilley, Georgia Power
Yong Cheng Soo, WSP/Golder
Tina Sullivan, ERM

REPORT OF LABORATORY ANALYSIS

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

CERTIFICATIONS

Project: McDonough AP-1, 2, 3/4 Sup Rad-Revised Report
Pace Project No.: 92625212

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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Peachtree Corners, GA 30092
(770)734-4200

SAMPLE SUMMARY

Project: McDonough AP-1, 2, 3/4 Sup Rad-Revised Report
Pace Project No.: 92625212

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92625212001	**B-119D**	Water	09/12/22 10:37	09/13/22 10:30
92625212002	**Dup-3**	Water	09/12/22 00:00	09/13/22 10:30
92625212003	**B-122D**	Water	09/14/22 10:33	09/15/22 08:20
92625212004	**EB-4**	Water	09/14/22 11:23	09/15/22 08:20
92625212005	**B-117D**	Water	09/15/22 10:36	09/16/22 16:30
92625212006	**B-123D**	Water	09/20/22 15:25	09/21/22 15:05

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SAMPLE ANALYTE COUNT

Project: McDonough AP-1, 2, 3/4 Sup Rad-Revised Report
Pace Project No.: 92625212

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92625212001	**B-119D**	EPA 9315	RMS	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92625212002	**Dup-3**	EPA 9315	RMS	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92625212003	**B-122D**	EPA 9315	RMS	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92625212004	**EB-4**	EPA 9315	RMS	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92625212005	**B-117D**	EPA 9315	RMS	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92625212006	**B-123D**	EPA 9315	RMS	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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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: McDonough AP-1, 2, 3/4 Sup Rad-Revised Report
Pace Project No.: 92625212

Sample: B-119D **Lab ID: 92625212001** Collected: 09/12/22 10:37 Received: 09/13/22 10:30 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.145 ± 0.105 (0.174) C:97% T:NA**	pCi/L	10/12/22 20:23	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.183 ± 0.492 (1.10) C:57% T:87%**	pCi/L	10/10/22 13:31	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.328 ± 0.597 (1.27)**	pCi/L	10/14/22 17:44	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: McDonough AP-1, 2, 3/4 Sup Rad-Revised Report
Pace Project No.: 92625212

Sample: Dup-3 **Lab ID: 92625212002** Collected: 09/12/22 00:00 Received: 09/13/22 10:30 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.181 ± 0.112 (0.162) C:89% T:NA**	pCi/L	10/12/22 20:23	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.486 ± 0.414 (0.828) C:80% T:84%**	pCi/L	10/10/22 13:31	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.667 ± 0.526 (0.990)**	pCi/L	10/14/22 17:44	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: McDonough AP-1, 2, 3/4 Sup Rad-Revised Report
Pace Project No.: 92625212

Sample: B-122D **Lab ID: 92625212003** Collected: 09/14/22 10:33 Received: 09/15/22 08:20 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**3.11 ± 0.608 (0.173) C:94% T:NA**	pCi/L	10/13/22 08:44	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**4.83 ± 1.10 (0.803) C:73% T:86%**	pCi/L	10/11/22 14:44	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**7.94 ± 1.71 (0.976)**	pCi/L	10/14/22 17:45	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: McDonough AP-1, 2, 3/4 Sup Rad-Revised Report
Pace Project No.: 92625212

Sample: EB-4 **Lab ID: 92625212004** Collected: 09/14/22 11:23 Received: 09/15/22 08:20 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.00481 ± 0.0724 (0.197) C:94% T:NA**	pCi/L	10/13/22 08:44	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.590 ± 0.416 (0.802) C:73% T:88%**	pCi/L	10/11/22 14:45	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.595 ± 0.488 (0.999)**	pCi/L	10/14/22 17:45	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: McDonough AP-1, 2, 3/4 Sup Rad-Revised Report
Pace Project No.: 92625212

Sample: B-117D **Lab ID: 92625212005** Collected: 09/15/22 10:36 Received: 09/16/22 16:30 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.241 ± 0.142 (0.224) C:96% T:NA**	pCi/L	10/07/22 08:30	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.634 ± 0.403 (0.757) C:76% T:84%**	pCi/L	10/04/22 15:43	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.875 ± 0.545 (0.981)**	pCi/L	10/07/22 15:37	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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Peachtree Corners, GA 30092
(770)734-4200

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: McDonough AP-1, 2, 3/4 Sup Rad-Revised Report
Pace Project No.: 92625212

Sample: B-123D **Lab ID: 92625212006** Collected: 09/20/22 15:25 Received: 09/21/22 15:05 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	**0.792 ± 0.230 (0.152) C:94% T:NA**	pCi/L	10/11/22 09:25	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**2.16 ± 0.657 (0.891) C:79% T:90%**	pCi/L	10/04/22 12:33	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**2.95 ± 0.887 (1.04)**	pCi/L	10/11/22 14:52	7440-14-4	

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QUALITY CONTROL - RADIOCHEMISTRY

Project: McDonough AP-1, 2, 3/4 Sup Rad-Revised Report
Pace Project No.: 92625212

QC Batch: 535740
QC Batch Method: EPA 9315
Analysis Method: EPA 9315
Analysis Description: 9315 Total Radium
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92625212006

METHOD BLANK: 2599417 Matrix: Water
Associated Lab Samples: 92625212006

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.0657 ± 0.105 (0.234) C:98% T:NA	pCi/L	10/11/22 09:17	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL - RADIOCHEMISTRY

Project: McDonough AP-1, 2, 3/4 Sup Rad-Revised Report
Pace Project No.: 92625212

QC Batch: 536956
QC Batch Method: EPA 9315
Analysis Method: EPA 9315
Analysis Description: 9315 Total Radium
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92625212003, 92625212004

METHOD BLANK: 2605313 Matrix: Water
Associated Lab Samples: 92625212003, 92625212004

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	-0.000824 ± 0.0487 (0.149) C:97% T:NA	pCi/L	10/12/22 20:07	

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QUALITY CONTROL - RADIOCHEMISTRY

Project: McDonough AP-1, 2, 3/4 Sup Rad-Revised Report
Pace Project No.: 92625212

QC Batch: 535922
QC Batch Method: EPA 9315
Analysis Method: EPA 9315
Analysis Description: 9315 Total Radium
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92625212001, 92625212002

METHOD BLANK: 2600355
Matrix: Water
Associated Lab Samples: 92625212001, 92625212002

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.0438 ± 0.0695 (0.152) C:94% T:NA	pCi/L	10/12/22 20:23	

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QUALITY CONTROL - RADIOCHEMISTRY

Project: McDonough AP-1, 2, 3/4 Sup Rad-Revised Report
Pace Project No.: 92625212

QC Batch: 534681
QC Batch Method: EPA 9315
Analysis Method: EPA 9315
Analysis Description: 9315 Total Radium
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92625212005

METHOD BLANK: 2594503
Matrix: Water
Associated Lab Samples: 92625212005

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.0423 ± 0.0706 (0.157) C:95% T:NA	pCi/L	10/07/22 09:37	

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QUALITY CONTROL - RADIOCHEMISTRY

Project: McDonough AP-1, 2, 3/4 Sup Rad-Revised Report
Pace Project No.: 92625212

QC Batch: 536957
QC Batch Method: EPA 9320
Analysis Method: EPA 9320
Analysis Description: 9320 Radium 228
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92625212003, 92625212004

METHOD BLANK: 2605315
Matrix: Water
Associated Lab Samples: 92625212003, 92625212004

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.660 ± 0.393 (0.716) C:65% T:87%	pCi/L	10/11/22 11:38	

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QUALITY CONTROL - RADIOCHEMISTRY

Project: McDonough AP-1, 2, 3/4 Sup Rad-Revised Report
Pace Project No.: 92625212

QC Batch: 534679
QC Batch Method: EPA 9320
Analysis Method: EPA 9320
Analysis Description: 9320 Radium 228
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92625212005

METHOD BLANK: 2594500 Matrix: Water
Associated Lab Samples: 92625212005

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	-0.343 ± 0.266 (0.703) C:75% T:90%	pCi/L	10/04/22 15:45	

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QUALITY CONTROL - RADIOCHEMISTRY

Project: McDonough AP-1, 2, 3/4 Sup Rad-Revised Report
Pace Project No.: 92625212

QC Batch: 535924
QC Batch Method: EPA 9320
Analysis Method: EPA 9320
Analysis Description: 9320 Radium 228
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92625212001, 92625212002

METHOD BLANK: 2600360
Matrix: Water
Associated Lab Samples: 92625212001, 92625212002

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.590 ± 0.382 (0.710) C:71% T:92%	pCi/L	10/10/22 13:30	

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QUALITY CONTROL - RADIOCHEMISTRY

Project: McDonough AP-1, 2, 3/4 Sup Rad-Revised Report
Pace Project No.: 92625212

QC Batch: 535739
QC Batch Method: EPA 9320
Analysis Method: EPA 9320
Analysis Description: 9320 Radium 228
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92625212006

METHOD BLANK: 2599416
Matrix: Water
Associated Lab Samples: 92625212006

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.0371 ± 0.270 (0.626) C:74% T:89%	pCi/L	10/04/22 12:22	

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QUALIFIERS

Project: McDonough AP-1, 2, 3/4 Sup Rad-Revised Report
Pace Project No.: 92625212

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.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: McDonough AP-1, 2, 3/4 Sup Rad-Revised Report
Pace Project No.: 92625212

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92625212001	**B-119D**	EPA 9315	535922		
92625212002	**Dup-3**	EPA 9315	535922		
92625212003	**B-122D**	EPA 9315	536956		
92625212004	**EB-4**	EPA 9315	536956		
92625212005	**B-117D**	EPA 9315	534681		
92625212006	**B-123D**	EPA 9315	535740		
92625212001	**B-119D**	EPA 9320	535924		
92625212002	**Dup-3**	EPA 9320	535924		
92625212003	**B-122D**	EPA 9320	536957		
92625212004	**EB-4**	EPA 9320	536957		
92625212005	**B-117D**	EPA 9320	534679		
92625212006	**B-123D**	EPA 9320	535739		
92625212001	**B-119D**	Total Radium Calculation	540022		
92625212002	**Dup-3**	Total Radium Calculation	540022		
92625212003	**B-122D**	Total Radium Calculation	540023		
92625212004	**EB-4**	Total Radium Calculation	540023		
92625212005	**B-117D**	Total Radium Calculation	538367		
92625212006	**B-123D**	Total Radium Calculation	538980		

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Pace ANALYTICAL SERVICES

DC#_Title: ENV-FRM-HUN1-0083 v01_Sample Condition Upon Receipt

Effective Date: 05/12/2022

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

Sample Condition Upon Receipt

Client Name: Georgia Power

Project

WO# : 92625212

92625212

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

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

Date/Initials Person Examining Contents: 09/13/22 JM

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

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

Thermometer:
☐ IR Gun ID: 083

Type of Ice: ☑ Wet ☐ Blue ☐ None

Cooler Temp: 1.9 **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): 1.9

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: WG				
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:** _____

WO#: 92625212

PM: NMG Due Date: 10/04/22

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

Project #

**Bottom half of box is to list number of bottles

***Check all unpreserved Nitrates for chlorine

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)	DG9T-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)	DG9V-40 mL VOA H3PO4 (N/A)	DG9S-40 mL VOA H2SO4 (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	BP3R-250 mL Plastic (NH2)2SO4 (9.3-9.7)	AG0U-100 mL Amber Unpreserved (N/A) (Cl-)	VSGU-20 mL Scintillation vials (N/A)	DG9U-40 mL Amber Unpreserved vials (N/A)
1						1																							
2						1																							
3																													
4						1																							
5		2	1			1																			2				
6		2	1			1																			2				
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 DENR Certification Office (i.e. Out of hold, Incorrect preservative, out of temp, incorrect containers.

Pace Analytical

CHAIN-OF-CUSTODY / Analytical Request Document

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

Page : 1 Of 1

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:	
Company:	Georgia Power - Coal Combustion Residuals	Report To:	Lauren Coker	Attention:	scainvoices@southernco.com
Address:	2480 Maner Road	Copy To:	Golder	Company Name:	
	Atlanta, GA 30339			Address:	
Email:	laucoker@southernco.com	Purchase Order #:		Pace Quote:	
Phone:	(470) 620-6176 Fax	Project Name:	Plant McD AP-1, AP-2, AP-3/4 Supplemental Sampling	Pace Project Manager:	Nicole D'Olso
Requested Due Date:	10 Day TAT	Project #:	GL166849622	Pace Profile #:	

Regulatory Agency	
State / Location	GA

ITEM #	SAMPLE ID One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique MATRIX CODE: Drinking Water DW, Water WT, Waste Water WW, Product P, Soil/Solid SL, Oil OL, Wipe WP, Air AR, Other OT, Tissue TS	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	DATE	TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved - Ice	H2SO4	HNO3 + Ice	HCl	NaOH + Zn Acetate	Na2S2O3	Methanol	Other	Analyses Test / Requested Analysis Filtered (Y/N)	Y/N	App III/IV Total Metals	Cl, F, SO4, TDS	Radium 226/228	Mg, Na, K	CO3+HCO2	Fe Total, Fe 3+	Boron	Residual Chlorine (Y/N)	
1	B-90	WG	G	9/12/2022	12:15		1			1						N							X		pH = 5.35
2	B-91	WG	G	9/12/2022	13:26		1			1						N							X		pH = 5.28
3	B-95	WG	G	9/12/2022	14:38		1			1						N							X		pH = 5.33
4	B-99	WG	G	9/12/2022	10:26		1			1						N							X		pH = 5.71
5	B-119D	WG	G	9/12/2022	10:37		6	3		3						N	X	X	X	X	X	X			pH = 6.57, Fe2 = 0.0 mg/L
7	Dup-3	WG	G	9/12/2022	--		6	3		3						N	X	X	X	X	X	X			
8																N									
9																N									
10																N									
11																N									
12																N									
13																N									
14																N									

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS: TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
	TW../sample	9/13/22	8:05	M. BAH	9/13/22	8:10				
				[signature]	9/13/22	1036				

JUDE WAGUESPACK DATE Signed: 9/13/22

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: GA Power

Project

WO#: 92625212
PM: NMG Due Date: 10/04/22
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: 9/15/22 COR

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: 3.8 **Correction Factor:** Add/Subtract (°C) 0.0

Cooler Temp Corrected (°C): 3.8

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: 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

Projec

WO# : 92625212

PM: NMG Due Date: 10/04/22

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 (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	1			1																			2	2			
	3																									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.

Pace Analytical

CHAIN-OF-CUSTODY / Analytical Request Document

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

Page : 1 Of 1

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:	
Company:	Georgia Power - Coal Combustion Residuals	Report To:	Lauren Coker	Attention:	acainvoices@southernco.com
Address:	2480 Maner Road	Copy To:	Golder	Company Name:	
	Atlanta, GA 30339			Address:	
Email:	laucoker@southernco.com	Purchase Order #:		Pace Quote:	
Phone:	(470) 620-6176 Fax	Project Name:	Plant McD AP-1, 2, 3/4 Supplemental Sampling	Pace Project Manager:	Nicole D'Oleo
Requested Due Date:	10 Day TAT	Project #:	GL166849622	Pace Profile #:	

Regulatory Agency: —

State / Location: GA

ITEM #	SAMPLE ID (One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique)	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	DATE	TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved - Ice	H2SO4	HNO3 + Ice	HCl	NaOH + Zn Acetate	Na2S2O3	Methanol	Other	Analyses Test Y/N	Requested Analysis Filtered (Y/N): App III/IV Total Metals	Cl, F, SO4, TDS	Radium 226/228	Mg, Na, K	CO3+HCO2	Fe Total, Fe 3+	Residual Chlorine (Y/N)	5189
	MATRIX: Drinking Water DW, Water WT, Waste Water WW, Product P, Soil/Solid SL, Oil OL, Wipe WP, Air AR, Other OT, Tissue TS															N	N	N	N	N	N		
1	B-122D	WG	G	9/14/2022	10:33		6	3		3						X	X	X	X	X	X		pH = 6.07, Fe2 = 4.0 mg/L
2	EB-4	WG	G	9/14/2022	11:23		6	3		3						X	X	X	X	X	X		
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008
009

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
		09/15/22	05:10	M. BATH	8-15-22	8:20	
				Chanda Hunter	9/15/22	0945	

DUANE FULTON / WSP-GOLDER — DATE Signed: 09/15/22

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

Pace ANALYTICAL SERVICES

DC#_Title: ENV-FRM-HUN1-0083 v01_Sample Condition Upon Receipt

Effective Date: 05/12/2022

Laboratory receiving samples:

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

Sample Condition Upon Receipt

Client Name: Georgia Power

Project

WO#: 92625212

PM: NMG Due Date: 10/04/22

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: 9/17/22 JM

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

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

Thermometer: ☐ IR Gun ID: 230

Cooler Temp: 3.3 Correction Factor: Add/Subtract (°C) 0.0

Type of Ice: ☑ Wet ☐ Blue ☐ None

Cooler Temp Corrected (°C): 3.3

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: WG				
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:

Qualtrax ID: 69614

WO#: 92625212

PM: NMG Due Date: 10/04/22

CLIENT: GA-GA Power

Proj

*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

***Check all unpreserved Nitrates for chlorine

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)	DG94-250 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)	DG9V-40 mL VOA H3PO4 (N/A)	DG9S-40 mL VOA H2SO4 (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	BP3R-250 mL Plastic (NH2)2SO4 (9.3-9.7)	AG0U-100 mL Amber Unpreserved (N/A) (Cl-)	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 DENR Certification Office (i.e. Out of hold, incorrect preservative, out of temp, incorrect containers.

Pace Analytical

CHAIN-OF-CUSTODY / Analytical Request Document

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

Page : 1 Of 1

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:	
Company:	Georgia Power - Coal Combustion Residuals	Report To:	Lauren Coker	Attention:	scsinvoices@southernco.com
Address:	2480 Maner Road	Copy To:	Golder	Company Name:	
	Atlanta, GA 30339			Address:	
Email:	laucoker@southernco.com	Purchase Order #:		Pace Quote:	
Phone:	(470) 620-6176 Fax	Project Name:	Plant McD AP-1, 2, 3/4 Supplemental Well Network	Pace Project Manager:	Nicole D'Oleo
Requested Due Date:	10 Day TAT	Project #:	GL166849522	Pace Profile #:	

Regulatory Agency	
State / Location	GA

ITEM #	SAMPLE ID One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique MATRIX CODE: Drinking Water DW, Water WT, Waste Water WW, Product P, Soil/Solid SL, Oil OL, Wipe WP, Air AR, Other OT, Tissue TS	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	DATE	TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved - Ice	H2SO4	HNO3 + Ice	HCl	NaOH + Zn Acetate	Na2S2O3	Methanol	Other	Analyses Test Y/N	Requested Analysis Filtered (Y/N): App III/IV Total Metals	Cl, F, SO4, TDS	Radium 226/228	Mg, Na, K	CO3+HCO2	Fe Total, Fe 3+	Residual Chlorine (Y/N)	
1	B-117D	WG	G	9/15/2022	10:36		6	3		3						X	X	X	X	X	X		pH = 5.86, Fe2 = 0.0 mg/L
2																								
3																								
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ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
	Mark Mann Golder	9/16/22	16:25	[signature]	9/16	16:34	

DATE Signed:

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

Pace ANALYTICAL SERVICES	DC#_Title: ENV-FRM-HUN1-0083 v01_Sample Condition Upon Receipt
	Effective Date: 05/12/2022

Laboratory receiving samples:

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

Sample Condition Upon Receipt

Client Name: Georgia Power **Project #:**

WO#: 92625212

PM: NMG Due Date: 10/04/22

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: 4/21/22 AF

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: 3.6 **Correction Factor:** Add/Subtract (°C) 0.0

Temp should be above freezing to 6°C

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

Cooler Temp Corrected (°C): 3.6

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: W G				
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 SERVICES	DC#_Title: ENV-FRM-HUN1-0083 v01_Sample Condition Upon Receipt
	Effective Date: 05/12/2022

WO# : 92625212
PM: NMG Due Date: 10/04/22
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

Project #

**Bottom half of box is to list number of bottles

***Check all unpreserved Nitrates for chlorine

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)	DG9A-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)	DG9V-40 mL VOA H3PO4 (N/A)	DG9S-40 mL VOA H2SO4 (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-250 mL Plastic (NH2)2SO4 (9.3-9.7)	AG0U-100 mL Amber Unpreserved (N/A) (Cl-)	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 DENR Certification Office (i.e. Out of hold, incorrect preservative, out of temp, incorrect containers.

Pace Analytical

CHAIN-OF-CUSTODY / Analytical Request Document

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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	Lauren Coker	Attention	scsinvoices@southernco.com
Address	2480 Maner Road	Copy To	Golder	Company Name	
	Atlanta, GA 30339			Address	
Email	laucoker@southernco.com	Purchase Order #		Pace Quote	
Phone	(470) 620-6176 Fax	Project Name	Plant McD AP-1, 2, 3/4 Supplemental Well Network	Pace Project Manager	Nicole D'Oleo
Requested Due Date	10 Day TAT	Project #	GL166849622	Pace Profile #	

Regulatory Agency	State / Location
	GA

ITEM #	SAMPLE ID (One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique)	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	DATE	TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H2SO4	HNO3 + Ice	HCl	NaOH + Zn Acetate	Na2S2O3	Methanol	Other	Analyses Test Y/N	Requested Analysis Filtered (Y/N)	Residual Chlorine (Y/N)	
	MATRIX CODE: Drinking Water DW, Water WT, Waste Water WW, Product P, Soil/Solid SL, Oil OL, Wipe WP, Air AR, Other OT, Tissue TS																		
																	App III/IV Total Metals		5212 5189
																	Cl, F, SO4, TDS		
																	Radium 226/228		
																	Mg, Na, K,		
																	CO3+HCO2		
																	Fe Total, Fe 3+		
1	B-123D	WG	G	9/20/2022	15:25		6	3		3							X		pH = 7.13, Fe2 = 4.5 mg/L
2																	X		
3																	X		
4																	X		
6																	X		
7																	X		
8																	X		
9																	X		
10																	X		
11																	X		
12																	X		
13																	X		
14																	X		

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
	Golder	09/21/22	15:05		9/21/22	1505	

DATE Signed:

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

Quality Control Sample Performance Assessment

Pace Analytical
www.pacelabs.com

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Test: Ra-226
Analyst: RMS
Date: 10/5/2022
Worklist: 69144
Matrix: DW

Method Blank Assessment	
MB Sample ID	2605313
MB concentration:	-0.001
MB Counting Uncertainty:	0.049
MB MDC:	0.149
MB Numerical Performance Indicator:	-0.03
MB Status vs Numerical Indicator:	N/A
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	LCSD (Y or N)?	Y
	LCS69144	LCSD69144
Count Date:	10/13/2022	10/13/2022
Spike I.D.:	19-033	19-033
Decay Corrected Spike Concentration (pCi/mL):	24.023	24.023
Volume Used (mL):	0.10	0.10
Aliquot Volume (L, g, F):	0.506	0.504
Target Conc. (pCi/L, g, F):	4.746	4.770
Uncertainty (Calculated):	0.057	0.057
Result (pCi/L, g, F):	4.962	5.296
LCS/LCSD Counting Uncertainty (pCi/L, g, F):	0.512	0.551
Numerical Performance Indicator:	0.82	1.86
Percent Recovery:	104.55%	111.03%
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.:	LCS69144	2605313
Duplicate Sample I.D.	LCSD69144	92625212004
Sample Result (pCi/L, g, F):	4.962	-0.001
Sample Result Counting Uncertainty (pCi/L, g, F):	0.512	0.049
Sample Duplicate Result (pCi/L, g, F):	5.296	0.005
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):	0.551	0.072
Are sample and/or duplicate results below RL?	NO	See Below ##
Duplicate Numerical Performance Indicator:	-0.870	-0.127
(Based on the LCS/LCSD Percent Recoveries) Duplicate RPD:	6.01%	282.60%
Duplicate Status vs Numerical Indicator:	N/A	N/A
Duplicate Status vs RPD:	Pass	Fail***
% 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:

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

LAM 10/13/22

LAM 10/13/22

LAM 10/13/22

LAM 10/13/22

Quality Control Sample Performance Assessment

Pace Analytical
www.pacelabs.com

Test:	Ra-226
Analyst:	RMS
Date:	9/26/2022
Worklist:	68985
Matrix:	DW

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	2594503
MB concentration:	0.042
MB Counting Uncertainty:	0.070
MB MDC:	0.157
MB Numerical Performance Indicator:	1.18
MB Status vs Numerical Indicator:	N/A
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	LCSD (Y or N)?	Y
	LCS68985	LCSD68985
Count Date:	10/7/2022	10/7/2022
Spike I.D.:	19-033	19-033
Decay Corrected Spike Concentration (pCi/mL):	24.023	24.023
Volume Used (mL):	0.10	0.10
Aliquot Volume (L, g, F):	0.505	0.501
Target Conc. (pCi/L, g, F):	4.756	4.792
Uncertainty (Calculated):	0.057	0.058
Result (pCi/L, g, F):	5.097	4.847
LCS/LCSD Counting Uncertainty (pCi/L, g, F):	0.493	0.496
Numerical Performance Indicator:	1.35	0.22
Percent Recovery:	107.17%	101.15%
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.:	LCS68985	2594503
Duplicate Sample I.D.	LCSD68985	92625631020
Sample Result (pCi/L, g, F):	5.097	0.042
Sample Result Counting Uncertainty (pCi/L, g, F):	0.493	0.070
Sample Duplicate Result (pCi/L, g, F):	4.847	0.033
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):	0.496	0.065
Are sample and/or duplicate results below RL?	NO	See Below ##
Duplicate Numerical Performance Indicator:	0.702	0.192
(Based on the LCS/LCSD Percent Recoveries) Duplicate RPD:	5.78%	26.02%
Duplicate Status vs Numerical Indicator:	N/A	N/A
Duplicate Status vs RPD:	Pass	Fail***
% 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:

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

LAM 10/7/22

LAM 10/7/22

Quality Control Sample Performance Assessment

Pace Analytical
www.pacelabs.com

Test:	Ra-226
Analyst:	RMS
Date:	9/29/2022
Worklist:	69056
Matrix:	DW

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	2599417
MB concentration:	0.066
M/B Counting Uncertainty:	0.104
MB MDC:	0.234
MB Numerical Performance Indicator:	1.23
MB Status vs Numerical Indicator:	N/A
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	LCSD (Y or N)?	Y
	LCS69056	LCSD69056
Count Date:	10/11/2022	10/11/2022
Spike I.D.:	19-033	19-033
Decay Corrected Spike Concentration (pCi/mL):	24.023	24.023
Volume Used (mL):	0.10	0.10
Aliquot Volume (L, g, F):	0.503	0.503
Target Conc. (pCi/L, g, F):	4.772	4.776
Uncertainty (Calculated):	0.057	0.057
Result (pCi/L, g, F):	4.561	5.048
LCS/LCSD Counting Uncertainty (pCi/L, g, F):	0.462	0.491
Numerical Performance Indicator:	-0.89	1.08
Percent Recovery:	95.59%	105.68%
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.:	LCS69056
Duplicate Sample I.D.	LCSD69056
Sample Result (pCi/L, g, F):	4.561
Sample Result Counting Uncertainty (pCi/L, g, F):	0.462
Sample Duplicate Result (pCi/L, g, F):	5.048
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):	0.491
Are sample and/or duplicate results below RL?	NO
Duplicate Numerical Performance Indicator:	-1.414
(Based on the LCS/LCSD Percent Recoveries) Duplicate RPD:	10.03%
Duplicate Status vs Numerical Indicator:	N/A
Duplicate Status vs RPD:	Pass
% RPD Limit:	25%

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

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

Comments:

VAM 10/11/22

Quality Control Sample Performance Assessment

Pace Analytical
www.pacelabs.com

Test:	Ra-226
Analyst:	RMS
Date:	9/30/2022
Worklist:	69072
Matrix:	DW

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	2600355
MB concentration:	0.044
MB Counting Uncertainty:	0.069
MB MDC:	0.152
MB Numerical Performance Indicator:	1.24
MB Status vs Numerical Indicator:	N/A
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	LCSD (Y or N)?	Y
	LCS69072	LCSD69072
Count Date:	10/12/2022	10/12/2022
Spike I.D.:	19-033	19-033
Decay Corrected Spike Concentration (pCi/mL):	24.023	24.023
Volume Used (mL):	0.10	0.10
Aliquot Volume (L, g, F):	0.505	0.511
Target Conc. (pCi/L, g, F):	4.758	4.704
Uncertainty (Calculated):	0.057	0.056
Result (pCi/L, g, F):	5.119	4.712
LCS/LCSD Counting Uncertainty (pCi/L, g, F):	0.487	0.471
Numerical Performance Indicator:	1.44	0.03
Percent Recovery:	107.59%	100.17%
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.:	LCS69072	2600355
Duplicate Sample I.D.	LCSD69072	92624384013
Sample Result (pCi/L, g, F):	5.119	0.044
Sample Result Counting Uncertainty (pCi/L, g, F):	0.487	0.069
Sample Duplicate Result (pCi/L, g, F):	4.712	0.020
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):	0.471	0.055
Are sample and/or duplicate results below RL?	NO	See Below ##
Duplicate Numerical Performance Indicator:	1.179	0.520
(Based on the LCS/LCSD Percent Recoveries) Duplicate RPD:	7.14%	73.02%
Duplicate Status vs Numerical Indicator:	N/A	N/A
Duplicate Status vs RPD:	Pass	Fail***
% 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:

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

LAM 10/13/22

LAM 10/13/22

Quality Control Sample Performance Assessment

Pace Analytical
www.pacelabs.com

Test: Ra-228
Analyst: VAL
Date: 9/28/2022
Worklist: 69055
Matrix: WT

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	2599416
MB concentration:	0.037
MB 2 Sigma CSU:	0.270
MB MDC:	0.626
MB Numerical Performance Indicator:	0.27
MB Status vs Numerical Indicator:	Pass
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	LCSD (Y or N)?	Y
	LCS69055	LCSD69055
Count Date:	10/4/2022	10/4/2022
Spike I.D.:	22-029	22-029
Decay Corrected Spike Concentration (pCi/mL):	19.874	19.874
Volume Used (mL):	0.20	0.20
Aliquot Volume (L, g, F):	0.806	0.805
Target Conc. (pCi/L, g, F):	4.933	4.940
Uncertainty (Calculated):	0.355	0.356
Result (pCi/L, g, F):	4.189	4.442
LCS/LCSD 2 Sigma CSU (pCi/L, g, F):	0.917	0.977
Numerical Performance Indicator:	-1.48	-0.94
Percent Recovery:	84.92%	89.91%
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.:	LCS69055	Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Duplicate Sample I.D.	LCSD69055	
Sample Result (pCi/L, g, F):	4.189	
Sample Result 2 Sigma CSU (pCi/L, g, F):	0.917	
Sample Duplicate Result (pCi/L, g, F):	4.442	
Sample Duplicate Result 2 Sigma CSU (pCi/L, g, F):	0.977	
Are sample and/or duplicate results below RL?	NO	
Duplicate Numerical Performance Indicator:	-0.370	
(Based on the LCS/LCSD Percent Recoveries) Duplicate RPD:	5.70%	
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

Pace Analytical
www.pacelabs.com

Test:	Ra-228
Analyst:	VAL
Date:	9/26/2022
Worklist:	68983
Matrix:	WT

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	2594500
MB concentration:	-0.343
M/B 2 Sigma CSU:	0.266
MB MDC:	0.703
MB Numerical Performance Indicator:	-2.52
MB Status vs Numerical Indicator:	Warning
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	LCSD (Y or N)?	Y
	LCS68983	LCSD68983
Count Date:	10/4/2022	10/4/2022
Spike I.D.:	22-029	22-029
Decay Corrected Spike Concentration (pCi/mL):	19.873	19.873
Volume Used (mL):	0.20	0.20
Aliquot Volume (L, g, F):	0.802	0.810
Target Conc. (pCi/L, g, F):	4.956	4.909
Uncertainty (Calculated):	0.357	0.353
Result (pCi/L, g, F):	3.835	3.327
LCS/LCSD 2 Sigma CSU (pCi/L, g, F):	0.896	0.797
Numerical Performance Indicator:	-2.28	-3.56
Percent Recovery:	77.37%	67.77%
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.:	LCS68983	Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Duplicate Sample I.D.	LCSD68983	
Sample Result (pCi/L, g, F):	3.835	
Sample Result 2 Sigma CSU (pCi/L, g, F):	0.896	
Sample Duplicate Result (pCi/L, g, F):	3.327	
Sample Duplicate Result 2 Sigma CSU (pCi/L, g, F):	0.797	
Are sample and/or duplicate results below RL?	NO	
Duplicate Numerical Performance Indicator:	0.830	
(Based on the LCS/LCSD Percent Recoveries) Duplicate RPD:	13.22%	
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

Pace Analytical
www.pacelabs.com

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Test:	Ra-228
Analyst:	VAL
Date:	9/30/2022
Worklist:	69073
Matrix:	WT

Method Blank Assessment	
MB Sample ID	2600360
MB concentration:	0.590
MB 2 Sigma CSU:	0.362
MB MDC:	0.710
MB Numerical Performance Indicator:	3.02
MB Status vs Numerical Indicator:	Fail*
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	LCSD (Y or N)?	Y
	LCS69073	LCSD69073
Count Date:	10/10/2022	10/10/2022
Spike I.D.:	22-029	22-029
Decay Corrected Spike Concentration (pCi/mL):	19.834	19.834
Volume Used (mL):	0.20	0.20
Aliquot Volume (L, g, F):	0.808	0.810
Target Conc. (pCi/L, g, F):	4.907	4.895
Uncertainty (Calculated):	0.353	0.352
Result (pCi/L, g, F):	6.528	6.766
LCS/LCSD 2 Sigma CSU (pCi/L, g, F):	1.382	1.419
Numerical Performance Indicator:	2.23	2.51
Percent Recovery:	133.05%	138.22%
Status vs Numerical Indicator:	N/A	Warning
Status vs Recovery:	Pass	Fail High**
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.:	LCS69073	Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Duplicate Sample I.D.	LCSD69073	
Sample Result (pCi/L, g, F):	6.528	
Sample Result 2 Sigma CSU (pCi/L, g, F):	1.382	
Sample Duplicate Result (pCi/L, g, F):	6.766	
Sample Duplicate Result 2 Sigma CSU (pCi/L, g, F):	1.419	
Are sample and/or duplicate results below RL?	NO	
Duplicate Numerical Performance Indicator:	-0.235	
(Based on the LCS/LCSD Percent Recoveries) Duplicate RPD:	3.81%	
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:

~~*If the lowest activity sample in this batch is greater than ten times the blank value, the blank is acceptable; otherwise this batch must be reprepped.~~

~~**If all sample results are below MDC, the batch is acceptable, otherwise this batch must be reprepped due to LCSD failure.~~ QM 10/11/22

MB activity < MDC, Pass

NI < 3 acceptable for LCS/LCSD

QM 10/11/22

10/11/22

JW 10.11.22

Quality Control Sample Performance Assessment

Pace Analytical
www.pacelabs.com

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Test:	Ra-228
Analyst:	VAL
Date:	10/5/2022
Worklist:	69145
Matrix:	WT

Method Blank Assessment	
MB Sample ID	2605315
MB concentration:	0.660
M/B 2 Sigma CSU:	0.393
MB MDC:	0.716
MB Numerical Performance Indicator:	3.29
MB Status vs Numerical Indicator:	Fail*
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	LCSD (Y or N)?	Y
	LCS69145	LCSD69145
Count Date:	10/11/2022	10/11/2022
Spike I.D.:	22-029	22-029
Decay Corrected Spike Concentration (pCi/mL):	19.827	19.827
Volume Used (mL):	0.20	0.20
Aliquot Volume (L, g, F):	0.807	0.806
Target Conc. (pCi/L, g, F):	4.914	4.922
Uncertainty (Calculated):	0.354	0.354
Result (pCi/L, g, F):	4.634	4.396
LCS/LCSD 2 Sigma CSU (pCi/L, g, F):	1.047	0.980
Numerical Performance Indicator:	-0.50	-0.99
Percent Recovery:	94.32%	89.31%
Status vs Numerical Indicator:	N/A	N/A
Status vs Recovery:	Pass	Pass
Upper % Recovery Limits:	135%	135%
Lower % Recovery Limits:	60%	60%

Duplicate Sample Assessment		Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Sample I.D.:	LCS69145	
Duplicate Sample I.D.	LCSD69145	
Sample Result (pCi/L, g, F):	4.634	
Sample Result 2 Sigma CSU (pCi/L, g, F):	1.047	
Sample Duplicate Result (pCi/L, g, F):	4.396	
Sample Duplicate Result 2 Sigma CSU (pCi/L, g, F):	0.980	
Are sample and/or duplicate results below RL?	NO	
Duplicate Numerical Performance Indicator:	0.326	
(Based on the LCS/LCSD Percent Recoveries) Duplicate RPD:	5.45%	
Duplicate Status vs Numerical Indicator:	Pass	
Duplicate Status vs RPD:	Pass	
% RPD Limit:	36%	

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:		

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:
~~*If the lowest activity sample in this batch is greater than ten times the blank value, the blank is acceptable, otherwise this batch must be re-prepped.~~ MB activity < MDC, Pass
Mu 10/12/22

LLO

JJY 10.13.22

Om 10/12/22

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

September 23, 2022

Andrea McClure
WSP/Golder
5170 Peachtree Road
Building 100, Suite 300
Atlanta, GA 30341

RE: Project: Plant McDonough Supplemental
Pace Project No.: 92624826

Dear Andrea McClure:

Enclosed are the analytical results for sample(s) received by the laboratory on September 09, 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

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

Sincerely,

Nicole D'Oleo

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

Enclosures

cc: Joju Abraham, Georgia Power-CCR
Stephen Benda, Southern Company
Noelia Gangi, Georgia Power
Daniela Herrera, Golder
Ben Hodges, Georgia Power
Kristen Jurinko
Laura Midkiff, Georgia Power
Karim Minkara, Golder Associates - Atlanta
J. Shelby Mobley, Southern Company
Charles Norton, Southern Company
Ms. Lauren Petty, Southern Company
Dawn Prell, Golder Associates Inc.
Michael Smilley, Georgia Power
Yong Cheng Soo, WSP/Golder
Tina Sullivan, ERM

REPORT OF LABORATORY ANALYSIS

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110 Technology Parkway
Peachtree Corners, GA 30092
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CERTIFICATIONS

Project: Plant McDonough Supplemental
Pace Project No.: 92624826

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

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SAMPLE SUMMARY

Project: Plant McDonough Supplemental
Pace Project No.: 92624826

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92624826001	**B-116D**	Water	09/08/22 12:42	09/09/22 15:50
92624826002	**DUP-2**	Water	09/08/22 00:00	09/09/22 15:50
92624826003	**B-118**	Water	09/09/22 12:00	09/09/22 15:50

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SAMPLE ANALYTE COUNT

Project: Plant McDonough Supplemental
Pace Project No.: 92624826

Lab ID	Sample ID	Method	Analysts	Analytes Reported
92624826001	**B-116D**	EPA 6010D	DRB	5
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	BTS	1
		SM 2320B-2011	SMS	3
		EPA 300.0 Rev 2.1 1993	CDC	3
92624826002	**DUP-2**	EPA 6010D	DRB	5
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	BTS	1
		SM 2320B-2011	SMS	3
		EPA 300.0 Rev 2.1 1993	CDC	3
92624826003	**B-118**	EPA 6010D	DRB	5
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	BTS	1
		SM 2320B-2011	SMS	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

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ANALYTICAL RESULTS

Project: Plant McDonough Supplemental
Pace Project No.: 92624826

Sample: B-116D **Lab ID: 92624826001** Collected: 09/08/22 12:42 Received: 09/09/22 15:50 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		09/09/22 17:41		
pH	**5.97**	Std. Units			1		09/09/22 17:41		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Iron	**0.087**	mg/L	0.040	0.025	1	09/21/22 12:19	09/21/22 21:29	7439-89-6	
Sodium	**7.7**	mg/L	1.0	0.58	1	09/21/22 12:19	09/21/22 21:29	7440-23-5	
Calcium	**10.1**	mg/L	1.0	0.12	1	09/21/22 12:19	09/21/22 21:29	7440-70-2	
Magnesium	**3.4**	mg/L	0.050	0.012	1	09/21/22 12:19	09/21/22 21:29	7439-95-4	
Potassium	**2.2**	mg/L	0.20	0.15	1	09/21/22 12:19	09/23/22 11:26	7440-09-7	
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	09/21/22 17:50	09/22/22 19:20	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0022	1	09/21/22 17:50	09/22/22 19:20	7440-38-2	
Barium	**0.017**	mg/L	0.0050	0.00067	1	09/21/22 17:50	09/22/22 19:20	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	09/21/22 17:50	09/22/22 19:20	7440-41-7	
Boron	ND	mg/L	0.040	0.0086	1	09/21/22 17:50	09/22/22 19:20	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	09/21/22 17:50	09/22/22 19:20	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	09/21/22 17:50	09/22/22 19:20	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	09/21/22 17:50	09/22/22 19:20	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	09/21/22 17:50	09/22/22 19:20	7439-92-1	
Lithium	**0.0054J**	mg/L	0.030	0.00073	1	09/21/22 17:50	09/22/22 19:20	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	09/21/22 17:50	09/22/22 19:20	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	09/21/22 17:50	09/22/22 19:20	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	09/21/22 17:50	09/22/22 19:20	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	09/22/22 14:00	09/22/22 17:53	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**82.0**	mg/L	25.0	10.0	1		09/14/22 11:33		
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville								
Alkalinity,Bicarbonate (CaCO3)	**50.3**	mg/L	5.0	5.0	1		09/14/22 17:56		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		09/14/22 17:56		
Alkalinity, Total as CaCO3	**50.3**	mg/L	5.0	5.0	1		09/14/22 17:56		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**2.4**	mg/L	1.0	0.60	1		09/13/22 19:57	16887-00-6	

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

ANALYTICAL RESULTS

Project: Plant McDonough Supplemental
Pace Project No.: 92624826

Sample: B-116D **Lab ID: 92624826001** Collected: 09/08/22 12:42 Received: 09/09/22 15:50 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								
Fluoride	**0.065J**	mg/L	0.10	0.050	1		09/13/22 19:57	16984-48-8	
Sulfate	**0.54J**	mg/L	1.0	0.50	1		09/13/22 19:57	14808-79-8	

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ANALYTICAL RESULTS

Project: Plant McDonough Supplemental
Pace Project No.: 92624826

Sample: DUP-2 **Lab ID: 92624826002** Collected: 09/08/22 00:00 Received: 09/09/22 15:50 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	**0.10**	mg/L	0.040	0.025	1	09/21/22 12:19	09/21/22 21:34	7439-89-6	
Sodium	**8.1**	mg/L	1.0	0.58	1	09/21/22 12:19	09/21/22 21:34	7440-23-5	
Calcium	**10.6**	mg/L	1.0	0.12	1	09/21/22 12:19	09/21/22 21:34	7440-70-2	
Magnesium	**3.6**	mg/L	0.050	0.012	1	09/21/22 12:19	09/21/22 21:34	7439-95-4	
Potassium	**2.5**	mg/L	0.20	0.15	1	09/21/22 12:19	09/23/22 11:31	7440-09-7	
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	09/21/22 17:50	09/22/22 19:38	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0022	1	09/21/22 17:50	09/22/22 19:38	7440-38-2	
Barium	**0.017**	mg/L	0.0050	0.00067	1	09/21/22 17:50	09/22/22 19:38	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	09/21/22 17:50	09/22/22 19:38	7440-41-7	
Boron	ND	mg/L	0.040	0.0086	1	09/21/22 17:50	09/22/22 19:38	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	09/21/22 17:50	09/22/22 19:38	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	09/21/22 17:50	09/22/22 19:38	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	09/21/22 17:50	09/22/22 19:38	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	09/21/22 17:50	09/22/22 19:38	7439-92-1	
Lithium	**0.0056J**	mg/L	0.030	0.00073	1	09/21/22 17:50	09/22/22 19:38	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	09/21/22 17:50	09/22/22 19:38	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	09/21/22 17:50	09/22/22 19:38	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	09/21/22 17:50	09/22/22 19:38	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	09/22/22 14:00	09/22/22 17:56	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**87.0**	mg/L	25.0	10.0	1		09/14/22 11:33		
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville								
Alkalinity,Bicarbonate (CaCO3)	**50.8**	mg/L	5.0	5.0	1		09/14/22 18:03		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		09/14/22 18:03		
Alkalinity, Total as CaCO3	**50.8**	mg/L	5.0	5.0	1		09/14/22 18:03		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**2.4**	mg/L	1.0	0.60	1		09/13/22 20:12	16887-00-6	
Fluoride	**0.065J**	mg/L	0.10	0.050	1		09/13/22 20:12	16984-48-8	
Sulfate	ND	mg/L	1.0	0.50	1		09/13/22 20:12	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: Plant McDonough Supplemental
Pace Project No.: 92624826

Sample: B-118 **Lab ID: 92624826003** Collected: 09/09/22 12:00 Received: 09/09/22 15:50 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		09/09/22 17:41		
pH	**6.49**	Std. Units			1		09/09/22 17:41		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Potassium	**2.3**	mg/L	0.20	0.15	1	09/21/22 12:19	09/22/22 21:25	7440-09-7	
Iron	**0.14**	mg/L	0.040	0.025	1	09/21/22 12:19	09/21/22 21:38	7439-89-6	
Sodium	**10.0**	mg/L	1.0	0.58	1	09/21/22 12:19	09/21/22 21:38	7440-23-5	
Calcium	**5.2**	mg/L	1.0	0.12	1	09/21/22 12:19	09/21/22 21:38	7440-70-2	
Magnesium	**2.0**	mg/L	0.050	0.012	1	09/21/22 12:19	09/21/22 21:38	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	09/21/22 17:50	09/22/22 19:44	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0022	1	09/21/22 17:50	09/22/22 19:44	7440-38-2	
Barium	**0.022**	mg/L	0.0050	0.00067	1	09/21/22 17:50	09/22/22 19:44	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	09/21/22 17:50	09/22/22 19:44	7440-41-7	
Boron	ND	mg/L	0.040	0.0086	1	09/21/22 17:50	09/22/22 19:44	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	09/21/22 17:50	09/22/22 19:44	7440-43-9	
Chromium	**0.0017J**	mg/L	0.0050	0.0011	1	09/21/22 17:50	09/22/22 19:44	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	09/21/22 17:50	09/22/22 19:44	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	09/21/22 17:50	09/22/22 19:44	7439-92-1	
Lithium	**0.0024J**	mg/L	0.030	0.00073	1	09/21/22 17:50	09/22/22 19:44	7439-93-2	
Molybdenum	**0.0047J**	mg/L	0.010	0.00074	1	09/21/22 17:50	09/22/22 19:44	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	09/21/22 17:50	09/22/22 19:44	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	09/21/22 17:50	09/22/22 19:44	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	09/22/22 14:00	09/22/22 17:59	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**78.0**	mg/L	25.0	10.0	1		09/14/22 11:36		
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville								
Alkalinity,Bicarbonate (CaCO3)	**35.2**	mg/L	5.0	5.0	1		09/14/22 18:10		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		09/14/22 18:10		
Alkalinity, Total as CaCO3	**35.2**	mg/L	5.0	5.0	1		09/14/22 18:10		
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	0.60	1		09/13/22 20:27	16887-00-6	

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ANALYTICAL RESULTS

Project: Plant McDonough Supplemental
Pace Project No.: 92624826

Sample: B-118 **Lab ID: 92624826003** Collected: 09/09/22 12:00 Received: 09/09/22 15:50 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								
Fluoride	**0.080J**	mg/L	0.10	0.050	1		09/13/22 20:27	16984-48-8	
Sulfate	**2.8**	mg/L	1.0	0.50	1		09/13/22 20:27	14808-79-8	

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QUALITY CONTROL DATA

Project: Plant McDonough Supplemental
Pace Project No.: 92624826

QC Batch: 724698
QC Batch Method: EPA 3010A
Analysis Method: EPA 6010D
Analysis Description: 6010D ATL
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92624826001, 92624826002, 92624826003

METHOD BLANK: 3775652 Matrix: Water
Associated Lab Samples: 92624826001, 92624826002, 92624826003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium	mg/L	ND	1.0	0.12	09/21/22 19:48	
Iron	mg/L	ND	0.040	0.025	09/21/22 19:48	
Magnesium	mg/L	ND	0.050	0.012	09/21/22 19:48	
Potassium	mg/L	ND	0.20	0.15	09/21/22 19:48	
Sodium	mg/L	ND	1.0	0.58	09/21/22 19:48	

LABORATORY CONTROL SAMPLE: 3775653

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium	mg/L	1	1.0	103	80-120	
Iron	mg/L	1	1.0	101	80-120	
Magnesium	mg/L	1	1.0	104	80-120	
Potassium	mg/L	1	1.0	103	80-120	
Sodium	mg/L	1	1.1	106	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3775654 3775655

Parameter	Units	92624373001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Calcium	mg/L	73.2	1	1	71.7	72.8	-152	-37	75-125	2	20	M1
Iron	mg/L	1.9	1	1	2.9	2.9	101	100	75-125	0	20	
Magnesium	mg/L	25.2	1	1	25.7	25.7	49	52	75-125	0	20	M1
Potassium	mg/L	8.2	1	1	9.0	9.1	75	90	75-125	2	20	
Sodium	mg/L	19.9	1	1	20.3	20.6	38	68	75-125	1	20	M1

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Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL DATA

Project: Plant McDonough Supplemental
Pace Project No.: 92624826

QC Batch: 724857
QC Batch Method: EPA 3005A
Analysis Method: EPA 6020B
Analysis Description: 6020 MET
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92624826001, 92624826002, 92624826003

METHOD BLANK: 3776475 Matrix: Water
Associated Lab Samples: 92624826001, 92624826002, 92624826003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	ND	0.0030	0.00078	09/22/22 16:16	
Arsenic	mg/L	ND	0.0050	0.0022	09/22/22 16:16	
Barium	mg/L	ND	0.0050	0.00067	09/22/22 16:16	
Beryllium	mg/L	ND	0.00050	0.000054	09/22/22 16:16	
Boron	mg/L	ND	0.040	0.0086	09/22/22 16:16	
Cadmium	mg/L	ND	0.00050	0.00011	09/22/22 16:16	
Chromium	mg/L	ND	0.0050	0.0011	09/22/22 16:16	
Cobalt	mg/L	ND	0.0050	0.00039	09/22/22 16:16	
Lead	mg/L	ND	0.0010	0.00089	09/22/22 16:16	
Lithium	mg/L	ND	0.030	0.00073	09/22/22 16:16	
Molybdenum	mg/L	ND	0.010	0.00074	09/22/22 16:16	
Selenium	mg/L	ND	0.0050	0.0014	09/22/22 16:16	
Thallium	mg/L	ND	0.0010	0.00018	09/22/22 16:16	

LABORATORY CONTROL SAMPLE: 3776476

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	0.096	96	80-120	
Beryllium	mg/L	0.1	0.098	98	80-120	
Boron	mg/L	1	1.0	100	80-120	
Cadmium	mg/L	0.1	0.098	98	80-120	
Chromium	mg/L	0.1	0.098	98	80-120	
Cobalt	mg/L	0.1	0.097	97	80-120	
Lead	mg/L	0.1	0.097	97	80-120	
Lithium	mg/L	0.1	0.098	98	80-120	
Molybdenum	mg/L	0.1	0.10	100	80-120	
Selenium	mg/L	0.1	0.095	95	80-120	
Thallium	mg/L	0.1	0.097	97	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3776477 3776478

Parameter	Units	92622406010 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Antimony	mg/L	0.0011J	0.1	0.1	0.10	0.10	99	104	75-125	5	20	
Arsenic	mg/L	ND	0.1	0.1	0.093	0.098	93	98	75-125	5	20	

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QUALITY CONTROL DATA

Project: Plant McDonough Supplemental
Pace Project No.: 92624826

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3776477 3776478

Parameter	Units	92622406010 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Barium	mg/L	0.010	0.1	0.1	0.10	0.11	89	96	75-125	6	20	
Beryllium	mg/L	ND	0.1	0.1	0.096	0.097	96	97	75-125	1	20	
Boron	mg/L	0.012J	1	1	1.0	1.0	100	103	75-125	3	20	
Cadmium	mg/L	ND	0.1	0.1	0.094	0.095	94	95	75-125	1	20	
Chromium	mg/L	0.0066	0.1	0.1	0.10	0.10	96	96	75-125	0	20	
Cobalt	mg/L	ND	0.1	0.1	0.096	0.096	96	96	75-125	0	20	
Lead	mg/L	ND	0.1	0.1	0.094	0.093	94	92	75-125	2	20	
Lithium	mg/L	0.0012J	0.1	0.1	0.096	0.098	95	97	75-125	2	20	
Molybdenum	mg/L	ND	0.1	0.1	0.099	0.099	99	99	75-125	0	20	
Selenium	mg/L	ND	0.1	0.1	0.093	0.095	93	95	75-125	2	20	
Thallium	mg/L	ND	0.1	0.1	0.095	0.095	95	95	75-125	0	20	

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QUALITY CONTROL DATA

Project: Plant McDonough Supplemental
Pace Project No.: 92624826

QC Batch: 724426
QC Batch Method: EPA 7470A
Analysis Method: EPA 7470A
Analysis Description: 7470 Mercury
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92624826001, 92624826002, 92624826003

METHOD BLANK: 3774367 Matrix: Water
Associated Lab Samples: 92624826001, 92624826002, 92624826003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	ND	0.00020	0.00013	09/22/22 17:16	

LABORATORY CONTROL SAMPLE: 3774368

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.0025	0.0024	98	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3774369 3774370

Parameter	Units	92624373001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	mg/L	0.00014J	0.0025	0.0025	0.0025	0.0025	93	93	75-125	1	20	

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QUALITY CONTROL DATA

Project: Plant McDonough Supplemental
Pace Project No.: 92624826

QC Batch: 722886 | 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: 92624826001, 92624826002, 92624826003

METHOD BLANK: 3766455 Matrix: Water
Associated Lab Samples: 92624826001, 92624826002, 92624826003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	25.0	10.0	09/14/22 11:30	

LABORATORY CONTROL SAMPLE: 3766456

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	384	96	80-120	

SAMPLE DUPLICATE: 3766458

Parameter	Units	92624840004 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	620000 ug/L	680	9	10	

SAMPLE DUPLICATE: 3767354

Parameter	Units	92624372007 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	252	297	16	10	R1

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QUALITY CONTROL DATA

Project: Plant McDonough Supplemental
Pace Project No.: 92624826

QC Batch: 723206
QC Batch Method: SM 2320B-2011
Analysis Method: SM 2320B-2011
Analysis Description: 2320B Alkalinity
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92624826001, 92624826002, 92624826003

METHOD BLANK: 3768028 Matrix: Water
Associated Lab Samples: 92624826001, 92624826002, 92624826003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Alkalinity, Total as CaCO3	mg/L	ND	5.0	5.0	09/14/22 14:56	
Alkalinity,Bicarbonate (CaCO3)	mg/L	ND	5.0	5.0	09/14/22 14:56	
Alkalinity,Carbonate (CaCO3)	mg/L	ND	5.0	5.0	09/14/22 14:56	

LABORATORY CONTROL SAMPLE: 3768029

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	50	50.2	100	80-120	

LABORATORY CONTROL SAMPLE: 3768030

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	50	50.8	102	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3768031 3768032

Parameter	Units	92625359004 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	324	50	50	353	349	58	51	80-120	1	25	M1

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3768033 3768034

Parameter	Units	92624372011 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	134	50	50	193	185	118	102	80-120	4	25	

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QUALITY CONTROL DATA

Project: Plant McDonough Supplemental
Pace Project No.: 92624826

QC Batch: 722843
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: 92624826001, 92624826002, 92624826003

METHOD BLANK: 3766296 Matrix: Water
Associated Lab Samples: 92624826001, 92624826002, 92624826003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.60	09/13/22 12:35	
Fluoride	mg/L	ND	0.10	0.050	09/13/22 12:35	
Sulfate	mg/L	ND	1.0	0.50	09/13/22 12:35	

LABORATORY CONTROL SAMPLE: 3766297

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	50.4	101	90-110	
Fluoride	mg/L	2.5	2.5	100	90-110	
Sulfate	mg/L	50	50.8	102	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3766298 3766299

Parameter	Units	92624945004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	938	50	50	975	975	73	74	90-110	0	10	M1
Fluoride	mg/L	ND	2.5	2.5	3.3J	3.8J	132	151	90-110		10	M1
Sulfate	mg/L	3180	50	50	3170	3160	-30	-43	90-110	0	10	M1

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3766300 3766301

Parameter	Units	92624372011 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	5.4	50	50	57.1	58.0	103	105	90-110	2	10	
Fluoride	mg/L	0.082J	2.5	2.5	2.4	2.4	92	92	90-110	0	10	
Sulfate	mg/L	96.6	50	50	150	153	106	113	90-110	2	10	M1

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QUALIFIERS

Project: Plant McDonough Supplemental
Pace Project No.: 92624826

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.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Plant McDonough Supplemental
Pace Project No.: 92624826

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92624826001	**B-116D**				
92624826003	**B-118**				
92624826001	**B-116D**	EPA 3010A	724698	EPA 6010D	724853
92624826002	**DUP-2**	EPA 3010A	724698	EPA 6010D	724853
92624826003	**B-118**	EPA 3010A	724698	EPA 6010D	724853
92624826001	**B-116D**	EPA 3005A	724857	EPA 6020B	724980
92624826002	**DUP-2**	EPA 3005A	724857	EPA 6020B	724980
92624826003	**B-118**	EPA 3005A	724857	EPA 6020B	724980
92624826001	**B-116D**	EPA 7470A	724426	EPA 7470A	725130
92624826002	**DUP-2**	EPA 7470A	724426	EPA 7470A	725130
92624826003	**B-118**	EPA 7470A	724426	EPA 7470A	725130
92624826001	**B-116D**	SM 2540C-2015	722886		
92624826002	**DUP-2**	SM 2540C-2015	722886		
92624826003	**B-118**	SM 2540C-2015	722886		
92624826001	**B-116D**	SM 2320B-2011	723206		
92624826002	**DUP-2**	SM 2320B-2011	723206		
92624826003	**B-118**	SM 2320B-2011	723206		
92624826001	**B-116D**	EPA 300.0 Rev 2.1 1993	722843		
92624826002	**DUP-2**	EPA 300.0 Rev 2.1 1993	722843		
92624826003	**B-118**	EPA 300.0 Rev 2.1 1993	722843		

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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# : 92624826

92624826

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

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

Date/Initials Person Examining Contents: 9/9/22 JM

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: 2.4 Correction Factor: Add/Subtract (°C) 0.0

Cooler Temp Corrected (°C): 2.4

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: _____

*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

***Check all unpreserved Nitrates for chlorine

Project

WO# : 92624826

PM: NMG Due Date: 09/23/22

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)	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)	DG94-250 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)	DG9V-40 mL VOA H3PO4 (N/A)	DG9S-40 mL VOA H2SO4 (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	BP3R-250 mL Plastic (NH2)2SO4 (9 3-9 7)	AG0U-100 mL Amber Unpreserved (N/A) (Cl-)	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 ✓																			4				
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 DENR Certification Office (i.e. Out of hold, incorrect preservative, out of temp, incorrect containers.

Pace Analytical

CHAIN-OF-CUSTODY / Analytical Request Document

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

Page : 1 Of 1

Section A
Required Client Information:

Company	Georgia Power - Coal Combustion Residuals
Address	2480 Maner Road
	Atlanta, GA 30339
Email	laucoker@southernco.com
Phone	(470) 620-6176 Fax:
Requested Due Date	10 Day TAT

Section B
Required Project Information:

Report To	Lauren Coker
Copy To	Golder
Purchase Order #	
Project Name	Plant McDonough Supplemental Sampling Network
Project #	GL16684962

Section C
Invoice Information:

Attention	scsinvoices@southernco.com
Company Name	
Address	
Pace Quote	
Pace Project Manager	Nicole D'Oleo
Pace Profile #	

Regulatory Agency

State / Location: GA

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

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

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	DATE	TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Unpreserved - Ice	H2SO4	HNO3 + Ice	HCl	NaOH + Zn Acetate	Na2S2O3	Methanol	Other	Analyses Test Y/N	App III/IV Total Metals (N)	Cl, F, SO4, TDS (N)	Radium 226/228 (N)	Mg, Na, K, (N)	CO3+HCO2 (N)	Fe Total, Fe 3+ (N)						Residual Chlorine (Y/N)	4826
1	B-116D	WG	G	9/8/2022	12:42		6	3		3							X	X	X	X	X	X							pH = 5.97, Fe2 = 0.0 mg/L
2	DUP-2	WG	G	9/8/2022	--		6	3		3							X	X	X	X	X	X							
3	B-118	WG	G	9/9/2022	12:00		8	3		5							X	X	X	X	X	X							pH = 6.49, Fe2 = 0.0 mg/L
4																													
5																													
7																													
8																													
9																													
10																													
11																													
12																													
13																													
14																													

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
	Mark Maxw... / Golder	09/09/22	15:50	[signature]	9/9/22	1550	

DATE Signed:

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

November 04, 2022

Andrea McClure
WSP/Golder
5170 Peachtree Road
Building 100, Suite 300
Atlanta, GA 30341

RE: Project: McDonough Supplemental Rads-Revised Report
Pace Project No.: 92624832

Dear Andrea McClure:

Enclosed are the analytical results for sample(s) received by the laboratory on September 09, 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

Revision 1: Issued on 11/4/22 to include Radium QC Sheets.

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

Sincerely,

Nicole D'oleo

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

Enclosures

cc: Joju Abraham, Georgia Power-CCR
Stephen Benda, Southern Company
Noelia Gangi, Georgia Power
Daniela Herrera, Golder
Ben Hodges, Georgia Power
Kristen Jurinko
Laura Midkiff, Georgia Power
Karim Minkara, Golder Associates - Atlanta
J. Shelby Mobley, Southern Company
Charles Norton, Southern Company
Ms. Lauren Petty, Southern Company
Dawn Prell, Golder Associates Inc.
Michael Smilley, Georgia Power
Yong Cheng Soo, WSP/Golder
Tina Sullivan, ERM

REPORT OF LABORATORY ANALYSIS

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

CERTIFICATIONS

Project: McDonough Supplemental Rads-Revised Report
Pace Project No.: 92624832

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: McDonough Supplemental Rads-Revised Report
Pace Project No.: 92624832

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92624832001	**B-116D**	Water	09/08/22 12:42	09/09/22 15:50
92624832002	**DUP-2**	Water	09/08/22 00:00	09/09/22 15:50
92624832003	**B-118**	Water	09/09/22 12:00	09/09/22 15:50

REPORT OF LABORATORY ANALYSIS

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(770)734-4200

SAMPLE ANALYTE COUNT

Project: McDonough Supplemental Rads-Revised Report
Pace Project No.: 92624832

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92624832001	**B-116D**	EPA 9315	RMS	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92624832002	**DUP-2**	EPA 9315	RMS	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92624832003	**B-118**	EPA 9315	RMS	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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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: McDonough Supplemental Rads-Revised Report
Pace Project No.: 92624832

Sample: B-116D **Lab ID: 92624832001** Collected: 09/08/22 12:42 Received: 09/09/22 15:50 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	**0.124 ± 0.0932 (0.143) C:94% T:NA**	pCi/L	10/02/22 10:25	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.562 ± 0.399 (0.777) C:76% T:84%**	pCi/L	09/28/22 11:36	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.686 ± 0.492 (0.920)**	pCi/L	10/03/22 12:21	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: McDonough Supplemental Rads-Revised Report
Pace Project No.: 92624832

Sample: DUP-2 **Lab ID: 92624832002** Collected: 09/08/22 00:00 Received: 09/09/22 15:50 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 ± 0.108 (0.140) C:93% T:NA**	pCi/L	10/02/22 10:25	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.247 ± 0.291 (0.614) C:81% T:98%**	pCi/L	09/28/22 11:36	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.434 ± 0.399 (0.754)**	pCi/L	10/03/22 12:21	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: McDonough Supplemental Rads-Revised Report
Pace Project No.: 92624832

Sample: B-118 **Lab ID: 92624832003** Collected: 09/09/22 12:00 Received: 09/09/22 15:50 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	**0.182 ± 0.108 (0.147) C:94% T:NA**	pCi/L	10/02/22 10:25	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.605 ± 0.375 (0.700) C:80% T:81%**	pCi/L	09/28/22 11:36	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.787 ± 0.483 (0.847)**	pCi/L	10/03/22 12:21	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL - RADIOCHEMISTRY

Project: McDonough Supplemental Rads-Revised Report
Pace Project No.: 92624832

QC Batch: 533110 Analysis Method: EPA 9315
QC Batch Method: EPA 9315 Analysis Description: 9315 Total Radium
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92624832001, 92624832002, 92624832003

METHOD BLANK: 2586601 Matrix: Water
Associated Lab Samples: 92624832001, 92624832002, 92624832003

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.00759 ± 0.0468 (0.133) C:88% T:NA	pCi/L	10/02/22 10:24	

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

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QUALITY CONTROL - RADIOCHEMISTRY

Project: McDonough Supplemental Rads-Revised Report
Pace Project No.: 92624832

QC Batch: 533111 Analysis Method: EPA 9320
QC Batch Method: EPA 9320 Analysis Description: 9320 Radium 228
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92624832001, 92624832002, 92624832003

METHOD BLANK: 2586603 Matrix: Water
Associated Lab Samples: 92624832001, 92624832002, 92624832003

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.798 ± 0.368 (0.604) C:81% T:85%	pCi/L	09/28/22 11:36	

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

REPORT OF LABORATORY ANALYSIS

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Peachtree Corners, GA 30092
(770)734-4200

QUALIFIERS

Project: McDonough Supplemental Rads-Revised Report
Pace Project No.: 92624832

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.

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

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: McDonough Supplemental Rads-Revised Report
Pace Project No.: 92624832

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92624832001	**B-116D**	EPA 9315	533110		
92624832002	**DUP-2**	EPA 9315	533110		
92624832003	**B-118**	EPA 9315	533110		
92624832001	**B-116D**	EPA 9320	533111		
92624832002	**DUP-2**	EPA 9320	533111		
92624832003	**B-118**	EPA 9320	533111		
92624832001	**B-116D**	Total Radium Calculation	536982		
92624832002	**DUP-2**	Total Radium Calculation	536982		
92624832003	**B-118**	Total Radium Calculation	536982		

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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

Proje

WO# : 92624832

92624832

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

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

Date/Initials Person Examining Contents: 9/9/22 JM

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: 2.4 **Correction Factor:** Add/Subtract (°C) 0.0

Cooler Temp Corrected (°C): 2.4

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:

Pace

DC#_Title: ENV-FRM-HUN1-0083 v01_Sample Condition Upon Receipt

Effective Date: 05/12/2022

WO# : 92624832

PM: NMG Due Date: 09/30/22

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

***Check all unpreserved Nitrates for chlorine

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)	DG94-250 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)	DG9V-40 mL VOA H3PO4 (N/A)	DG9S-40 mL VOA H2SO4 (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	BP3R-250 mL Plastic (NH2)2SO4 (9 3-9.7)	AG0U-100 mL Amber Unpreserved (N/A) (Cl-)	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 ✓																			4				
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 DENR Certification Office (i.e. Out of hold, incorrect preservative, out of temp, incorrect containers.

Pace Analytical

CHAIN-OF-CUSTODY / Analytical Request Document

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

Page : 1 Of 1

Section A — Required Client Information:

Company:	Georgia Power - Coal Combustion Residuals
Address:	2480 Maner Road, Atlanta, GA 30339
Email:	laucoker@southernco.com
Phone:	(470) 620-6176
Fax:	
Requested Due Date:	10 Day TAT

Section B — Required Project Information:

Report To:	Lauren Coker
Copy To:	Golder
Purchase Order #:	
Project Name:	Plant McDonough Supplemental Sampling Network
Project #:	GL16684962;

Section C — Invoice Information:

Attention:	scsinvoices@southernco.com
Company Name:	
Address:	
Pace Quote:	
Pace Project Manager:	Nicole D'Oleo
Pace Profile #:	

Regulatory Agency	
State / Location	GA

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

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

Preservatives: Unpreserved - Ice, H2SO4, HNO3 + Ice, HCl, NaOH + Zn Acetate, Na2S2O3, Methanol, Other

Requested Analysis Filtered (Y/N): N for each analysis (App III/IV Total Metals; Cl, F, SO4, TDS; Radium 226/228; Mg, Na, K; CO3+HCO2; Fe Total, Fe 3+)

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	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	Mg, Na, K	CO3+HCO2	Fe Total, Fe 3+	Residual Chlorine (Y/N)	4832
1	B-116D	WG	G	9/8/2022	12:42		6	3		3						X	X	X	X	X	X		pH = 5.97, Fe2 = 0.0 mg/L
2	DUP-2	WG	G	9/8/2022	--		6	3		3						X	X	X	X	X	X		
3	B-118	WG	G	9/9/2022	12:00		8	3		5						X	X	X	X	X	X		pH = 6.49, Fe2 = 0.0 mg/L
4																							
5																							
6																							
7																							
8																							
9																							
10																							
11																							
12																							
13																							
14																							

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
	Mark Mason / Golder	09/09/22	15:50	Charles Earle	9/9/22	1550	

DATE Signed:

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

Quality Control Sample Performance Assessment

Pace Analytical
www.paceanc.com

Test:	Ra-226
Analyst:	RMS
Date:	9/20/2022
Worklist:	68887
Matrix:	DW

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	2586601
MB concentration:	0.008
MB Counting Uncertainty:	0.047
MB MDC:	0.133
MB Numerical Performance Indicator:	0.32
MB Status vs Numerical Indicator:	N/A
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	LCSD (Y or N)?	N
	LCS68887	LCSD68887
Count Date:	10/2/2022	
Spike I.D.:	19-033	
Decay Corrected Spike Concentration (pCi/mL):	24.023	
Volume Used (mL):	0.10	
Aliquot Volume (L, g, F):	0.505	
Target Conc. (pCi/L, g, F):	4.760	
Uncertainty (Calculated):	0.057	
Result (pCi/L, g, F):	3.993	
LCS/LCSD Counting Uncertainty (pCi/L, g, F):	0.431	
Numerical Performance Indicator:	-3.46	
Percent Recovery:	83.89%	
Status vs Numerical Indicator:	N/A	
Status vs Recovery:	Pass	
Upper % Recovery Limits:	125%	
Lower % Recovery Limits:	75%	

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

Duplicate Sample Assessment		
Sample I.D.:	92624832001	92624832001
Duplicate Sample I.D.	92624832001DUP	92624832002
Sample Result (pCi/L, g, F):	0.124	0.124
Sample Result Counting Uncertainty (pCi/L, g, F):	0.091	0.091
Sample Duplicate Result (pCi/L, g, F):	0.071	0.187
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):	0.074	0.104
Are sample and/or duplicate results below RL?	See Below ##	See Below ##
Duplicate Numerical Performance Indicator:	0.874	-0.888
Duplicate RPD:	53.80%	40.52%
Duplicate Status vs Numerical Indicator:	N/A	N/A
Duplicate Status vs RPD:	Fail***	Fail***
% 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:

10/3/22

***~~Batch must be re-prepped due to unacceptable precision~~ N/A

LAM 10/3/22

LAM 10/3/22

Quality Control Sample Performance Assessment

Pace Analytical
www.pacelabs.com

Test:	Ra-228
Analyst:	VAL
Date:	9/19/2022
Worklist:	68888
Matrix:	WT

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	2586603
MB concentration:	0.798
M/B 2 Sigma CSU:	0.368
MB MDC:	0.604
MB Numerical Performance Indicator:	4.25
MB Status vs Numerical Indicator:	Fail*
MB Status vs. MDC:	See Comment*

Laboratory Control Sample Assessment	LCSD (Y or N)?	Y
	LCS68888	LCSD68888
Count Date:	9/28/2022	9/28/2022
Spike I.D.:	22-029	22-029
Decay Corrected Spike Concentration (pCi/mL):	19.913	19.913
Volume Used (mL):	0.20	0.20
Aliquot Volume (L, g, F):	0.808	0.809
Target Conc. (pCi/L, g, F):	4.927	4.925
Uncertainty (Calculated):	0.355	0.355
Result (pCi/L, g, F):	5.626	5.197
LCS/LCSD 2 Sigma CSU (pCi/L, g, F):	1.255	1.158
Numerical Performance Indicator:	1.05	0.44
Percent Recovery:	114.19%	105.52%
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.:	LCS68888	Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Duplicate Sample I.D.	LCSD68888	
Sample Result (pCi/L, g, F):	5.626	
Sample Result 2 Sigma CSU (pCi/L, g, F):	1.255	
Sample Duplicate Result (pCi/L, g, F):	5.197	
Sample Duplicate Result 2 Sigma CSU (pCi/L, g, F):	1.158	
Are sample and/or duplicate results below RL?	NO	
Duplicate Numerical Performance Indicator:	0.493	
(Based on the LCS/LCSD Percent Recoveries) Duplicate RPD:	7.89%	
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:
*The method blank result is below the reporting limit for this analysis and is acceptable.

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

September 23, 2022

Andrea McClure
WSP/Golder
5170 Peachtree Road
Building 100, Suite 300
Atlanta, GA 30341

RE: Project: McDonough AP-1 Risk Assessment
Pace Project No.: 92624830

Dear Andrea McClure:

Enclosed are the analytical results for sample(s) received by the laboratory on September 09, 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 - 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
nicole.d'oleo@pacelabs.com
(704)875-9092
Project Manager

Enclosures

cc: Joju Abraham, Georgia Power-CCR
Stephen Benda, Southern Company
Noelia Gangi, Georgia Power
Daniela Herrera, Golder
Ben Hodges, Georgia Power
Kristen Jurinko
Laura Midkiff, Georgia Power
Karim Minkara, Golder Associates - Atlanta
J. Shelby Mobley, Southern Company
Charles Norton, Southern Company
Ms. Lauren Petty, Southern Company
Dawn Prell, Golder Associates Inc.
Michael Smilley, Georgia Power
Yong Cheng Soo, WSP/Golder
Tina Sullivan, ERM

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CERTIFICATIONS

Project: McDonough AP-1 Risk Assessment
Pace Project No.: 92624830

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 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

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SAMPLE SUMMARY

Project: McDonough AP-1 Risk Assessment
Pace Project No.: 92624830

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92624830001	**B-73**	Water	09/08/22 14:55	09/09/22 15:50
92624830002	**B-62**	Water	09/09/22 11:25	09/09/22 15:50
92624830003	**B-68**	Water	09/09/22 10:44	09/09/22 15:50

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SAMPLE ANALYTE COUNT

Project: McDonough AP-1 Risk Assessment
Pace Project No.: 92624830

Lab ID	Sample ID	Method	Analysts	Analytes Reported
92624830001	**B-73**	EPA 6020B	CW1	1
92624830002	**B-62**	EPA 6020B	CW1	1
92624830003	**B-68**	EPA 6020B	CW1	2

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

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: McDonough AP-1 Risk Assessment
Pace Project No.: 92624830

Sample: B-73 **Lab ID: 92624830001** Collected: 09/08/22 14:55 Received: 09/09/22 15:50 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		09/09/22 17:46		
pH	**6.63**	Std. Units			1		09/09/22 17:46		
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Arsenic	**0.019**	mg/L	0.0050	0.0022	1	09/21/22 17:50	09/22/22 19:50	7440-38-2	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: McDonough AP-1 Risk Assessment
Pace Project No.: 92624830

Sample: B-62 **Lab ID: 92624830002** Collected: 09/09/22 11:25 Received: 09/09/22 15:50 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		09/09/22 17:47		
pH	**6.22**	Std. Units			1		09/09/22 17:47		
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Cobalt	ND	mg/L	0.0050	0.00039	1	09/21/22 17:50	09/22/22 19:56	7440-48-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: McDonough AP-1 Risk Assessment
Pace Project No.: 92624830

Sample: B-68 **Lab ID: 92624830003** Collected: 09/09/22 10:44 Received: 09/09/22 15:50 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		09/09/22 17:47		
pH	**6.64**	Std. Units			1		09/09/22 17:47		
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Arsenic	**0.51**	mg/L	0.0050	0.0022	1	09/21/22 17:50	09/22/22 20:02	7440-38-2	
Molybdenum	**0.17**	mg/L	0.010	0.00074	1	09/21/22 17:50	09/22/22 20:02	7439-98-7	

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QUALITY CONTROL DATA

Project: McDonough AP-1 Risk Assessment
Pace Project No.: 92624830

QC Batch: 724857
QC Batch Method: EPA 3005A
Analysis Method: EPA 6020B
Analysis Description: 6020 MET
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92624830001, 92624830002, 92624830003

METHOD BLANK: 3776475 Matrix: Water
Associated Lab Samples: 92624830001, 92624830002, 92624830003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Arsenic	mg/L	ND	0.0050	0.0022	09/22/22 16:16	
Cobalt	mg/L	ND	0.0050	0.00039	09/22/22 16:16	
Molybdenum	mg/L	ND	0.010	0.00074	09/22/22 16:16	

LABORATORY CONTROL SAMPLE: 3776476

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Arsenic	mg/L	0.1	0.096	96	80-120	
Cobalt	mg/L	0.1	0.097	97	80-120	
Molybdenum	mg/L	0.1	0.10	100	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3776477 3776478

Parameter	Units	92622406010 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	0.093	0.098	93	98	75-125	5	20	
Cobalt	mg/L	ND	0.1	0.1	0.096	0.096	96	96	75-125	0	20	
Molybdenum	mg/L	ND	0.1	0.1	0.099	0.099	99	99	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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QUALIFIERS

Project: McDonough AP-1 Risk Assessment
Pace Project No.: 92624830

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.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: McDonough AP-1 Risk Assessment
Pace Project No.: 92624830

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92624830001	**B-73**				
92624830002	**B-62**				
92624830003	**B-68**				
92624830001	**B-73**	EPA 3005A	724857	EPA 6020B	724980
92624830002	**B-62**	EPA 3005A	724857	EPA 6020B	724980
92624830003	**B-68**	EPA 3005A	724857	EPA 6020B	724980

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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

WO# : 92624830

92624830

Client Name: Georgia Power Project #:

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

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

Date/Initials Person Examining Contents: 9/9/22 JM

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: 2.4 Correction Factor: Add/Subtract (°C) 0.0

Cooler Temp Corrected (°C): 2.4

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? -Includes Date/Time/ID/Analysis Matrix: WT	☑ Yes	☐ No	☐ N/A	9.
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

***Check all unpreserved Nitrates for chlorine

Project # **WO#: 92624830**

PM: NMG Due Date: 09/23/22

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)	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)	DG94-250 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)	DG9V-40 mL VOA H3PO4 (N/A)	DG9S-40 mL VOA H2SO4 (N/A)	V/GK (3 vials per kit)-VPH/Gas kit (N/A)	SPST-125 mL Sterile Plastic (N/A – lab)	SP2T-250 mL Sterile Plastic (N/A – lab)		BP3R-250 mL Plastic (NH2)2SO4 (9.3-9.7)	AG0U-100 mL Amber Unpreserved (N/A) (Cl-)	VSGU-20 mL Scintillation vials (N/A)	DG9U-40 mL Amber Unpreserved vials (N/A)
1						1 ✓																						
2						1 ✓																						
3						1 ✓																						
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 DENR Certification Office (i.e. Out of hold, incorrect preservative, out of temp, incorrect containers.

Pace Analytical

CHAIN-OF-CUSTODY / Analytical Request Document

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

Page : 1 Of 1

Section A Required Client Information:

Company:	Georgia Power - Coal Combustion Residuals
Address:	2480 Maner Road, Atlanta, GA 30339
Email:	laucoker@southernco.com
Phone:	(470) 620-6176
Fax:	
Requested Due Date:	10 Day TAT

Section B Required Project Information:

Report To:	Lauren Coker
Copy To:	Golder
Purchase Order #:	
Project Name:	Plant McDonough AP-1234 Risk Assessment
Project #:	GL16684962:

Section C Invoice Information:

Attention:	scsinvoices@southernco.com
Company Name:	
Address:	
Pace Quote:	
Pace Project Manager:	Nicole D'Oleo
Pace Profile #:	

Regulatory Agency	
State / Location	GA

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

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

Requested Analysis Filtered (Y/N): N N N N N N

ITEM #	SAMPLE ID	MATRIX CODE	SAMPLE TYPE (G=GRAB C=COMP)	DATE	TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Unpreserved - Ice	HNO3 + Ice	Analyses Test	Arsenic	Cobalt	Molybdenum	Residual Chlorine (Y/N)	4830
1	B-73	WG	G	9/8/2022	14:55		1		1		X				pH = 6.63
2	B-62	WG	G	9/9/2022	11:25		1		1			X			pH = 6.22
3	B-68	WG	G	9/9/2022	10:44		1		1		X		X		pH = 6.64
4															
6															
7															
8															
9															
10															
11															
12															
13															
14															

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
	Mark Moon / Golder	09/09/22	15:50	[signature]	9/9/22	1550	

DATE Signed:

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

September 28, 2022

Andrea McClure
WSP/Golder
5170 Peachtree Road
Building 100, Suite 300
Atlanta, GA 30341

RE: Project: McDonough AP-1,2,3/4 Risk
Pace Project No.: 92625185

Dear Andrea McClure:

Enclosed are the analytical results for sample(s) received by the laboratory between September 13, 2022 and September 16, 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 - 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
nicole.d'oleo@pacelabs.com
(704)875-9092
Project Manager

Enclosures

cc: Joju Abraham, Georgia Power-CCR
Stephen Benda, Southern Company
Noelia Gangi, Georgia Power
Daniela Herrera, Golder
Ben Hodges, Georgia Power
Kristen Jurinko
Laura Midkiff, Georgia Power
Karim Minkara, Golder Associates - Atlanta
J. Shelby Mobley, Southern Company
Charles Norton, Southern Company
Ms. Lauren Petty, Southern Company
Dawn Prell, Golder Associates Inc.
Michael Smilley, Georgia Power
Yong Cheng Soo, WSP/Golder
Tina Sullivan, ERM

REPORT OF LABORATORY ANALYSIS

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CERTIFICATIONS

Project: McDonough AP-1,2,3/4 Risk
Pace Project No.: 92625185

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 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

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SAMPLE SUMMARY

Project: McDonough AP-1,2,3/4 Risk
Pace Project No.: 92625185

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92625185001	**B-79**	Water	09/12/22 10:05	09/13/22 10:30
92625185002	**B-54**	Water	09/13/22 09:40	09/14/22 09:53
92625185003	**B-64**	Water	09/13/22 14:15	09/14/22 09:53
92625185004	**B-78**	Water	09/13/22 14:14	09/14/22 09:53
92625185005	**B-76**	Water	09/13/22 09:54	09/14/22 09:53
92625185006	**B-77**	Water	09/13/22 14:21	09/14/22 09:53
92625185007	**B-63**	Water	09/14/22 12:56	09/15/22 08:20
92625185008	**B-74**	Water	09/14/22 11:02	09/15/22 08:20
92625185009	**B-66**	Water	09/16/22 10:10	09/16/22 16:30
92625185010	**B-88**	Water	09/16/22 10:44	09/16/22 16:30
92625185011	**B-82**	Water	09/16/22 12:15	09/16/22 16:30

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SAMPLE ANALYTE COUNT

Project: McDonough AP-1,2,3/4 Risk
Pace Project No.: 92625185

Lab ID	Sample ID	Method	Analysts	Analytes Reported
92625185001	**B-79**	EPA 6020B	CW1	1
92625185002	**B-54**	EPA 6020B	CW1	1
92625185003	**B-64**	EPA 6020B	CW1	1
92625185004	**B-78**	EPA 6020B	CW1	1
92625185005	**B-76**	EPA 6020B	CW1	2
92625185006	**B-77**	EPA 6020B	CW1	2
92625185007	**B-63**	EPA 6020B	CW1	2
92625185008	**B-74**	EPA 6020B	CW1	2
92625185009	**B-66**	EPA 6020B	CW1	2
92625185010	**B-88**	EPA 6020B	CW1	1
92625185011	**B-82**	EPA 6020B	CW1	2

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

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ANALYTICAL RESULTS

Project: McDonough AP-1,2,3/4 Risk
Pace Project No.: 92625185

Sample: B-79 **Lab ID: 92625185001** Collected: 09/12/22 10:05 Received: 09/13/22 10:30 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		09/19/22 05:42		
pH	**4.92**	Std. Units			1		09/19/22 05:42		
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Lithium	**0.0028J**	mg/L	0.030	0.00073	1	09/26/22 09:44	09/26/22 21:03	7439-93-2	

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ANALYTICAL RESULTS

Project: McDonough AP-1,2,3/4 Risk
Pace Project No.: 92625185

Sample: B-54 **Lab ID: 92625185002** Collected: 09/13/22 09:40 Received: 09/14/22 09:53 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		09/19/22 05:45		
pH	**5.34**	Std. Units			1		09/19/22 05:45		
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Lithium	**0.0058J**	mg/L	0.030	0.00073	1	09/26/22 09:44	09/26/22 21:27	7439-93-2	

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ANALYTICAL RESULTS

Project: McDonough AP-1,2,3/4 Risk
Pace Project No.: 92625185

Sample: B-64 **Lab ID: 92625185003** Collected: 09/13/22 14:15 Received: 09/14/22 09:53 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		09/19/22 05:45		
pH	**5.00**	Std. Units			1		09/19/22 05:45		
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Lithium	**0.013J**	mg/L	0.030	0.00073	1	09/26/22 09:44	09/26/22 21:33	7439-93-2	

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ANALYTICAL RESULTS

Project: McDonough AP-1,2,3/4 Risk
Pace Project No.: 92625185

Sample: B-78 **Lab ID: 92625185004** Collected: 09/13/22 14:14 Received: 09/14/22 09:53 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		09/19/22 05:44		
pH	**4.56**	Std. Units			1		09/19/22 05:44		
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Lithium	**0.011J**	mg/L	0.030	0.00073	1	09/26/22 09:44	09/26/22 21:39	7439-93-2	

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ANALYTICAL RESULTS

Project: McDonough AP-1,2,3/4 Risk
Pace Project No.: 92625185

Sample: B-76 **Lab ID: 92625185005** Collected: 09/13/22 09:54 Received: 09/14/22 09:53 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		09/19/22 05:45		
pH	**6.05**	Std. Units			1		09/19/22 05:45		
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Cobalt	**0.21**	mg/L	0.0050	0.00039	1	09/26/22 09:44	09/26/22 21:45	7440-48-4	
Lithium	**0.0067J**	mg/L	0.030	0.00073	1	09/26/22 09:44	09/26/22 21:45	7439-93-2	

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ANALYTICAL RESULTS

Project: McDonough AP-1,2,3/4 Risk
Pace Project No.: 92625185

Sample: B-77 **Lab ID: 92625185006** Collected: 09/13/22 14:21 Received: 09/14/22 09:53 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		09/19/22 05:48		
pH	**6.34**	Std. Units			1		09/19/22 05:48		
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Cobalt	ND	mg/L	0.0050	0.00039	1	09/26/22 09:44	09/26/22 22:02	7440-48-4	
Lithium	**0.0022J**	mg/L	0.030	0.00073	1	09/26/22 09:44	09/26/22 22:02	7439-93-2	

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ANALYTICAL RESULTS

Project: McDonough AP-1,2,3/4 Risk
Pace Project No.: 92625185

Sample: B-63 **Lab ID: 92625185007** Collected: 09/14/22 12:56 Received: 09/15/22 08:20 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		09/15/22 17:19		
pH	**5.31**	Std. Units			1		09/15/22 17:19		
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Cobalt	**0.043**	mg/L	0.0050	0.00039	1	09/26/22 09:44	09/26/22 22:50	7440-48-4	
Lithium	**0.0072J**	mg/L	0.030	0.00073	1	09/26/22 09:44	09/26/22 22:50	7439-93-2	

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ANALYTICAL RESULTS

Project: McDonough AP-1,2,3/4 Risk
Pace Project No.: 92625185

Sample: B-74 **Lab ID: 92625185008** Collected: 09/14/22 11:02 Received: 09/15/22 08:20 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		09/15/22 17:19		
pH	**6.01**	Std. Units			1		09/15/22 17:19		
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Arsenic	**0.0054**	mg/L	0.0050	0.0022	1	09/26/22 09:44	09/26/22 22:56	7440-38-2	
Molybdenum	**0.042**	mg/L	0.010	0.00074	1	09/26/22 09:44	09/26/22 22:56	7439-98-7	

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ANALYTICAL RESULTS

Project: McDonough AP-1,2,3/4 Risk
Pace Project No.: 92625185

Sample: B-66 **Lab ID: 92625185009** Collected: 09/16/22 10:10 Received: 09/16/22 16:30 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		09/19/22 10:34		
pH	**8.60**	Std. Units			1		09/19/22 10:34		
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Arsenic	ND	mg/L	0.0050	0.0022	1	09/26/22 09:44	09/26/22 23:26	7440-38-2	
Cobalt	**0.012**	mg/L	0.0050	0.00039	1	09/26/22 09:44	09/26/22 23:26	7440-48-4	

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ANALYTICAL RESULTS

Project: McDonough AP-1,2,3/4 Risk
Pace Project No.: 92625185

Sample: B-88 **Lab ID: 92625185010** Collected: 09/16/22 10:44 Received: 09/16/22 16:30 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		09/19/22 10:34		
pH	**5.47**	Std. Units			1		09/19/22 10:34		
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Cobalt	**0.0013J**	mg/L	0.0050	0.00039	1	09/26/22 09:44	09/26/22 23:32	7440-48-4	

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ANALYTICAL RESULTS

Project: McDonough AP-1,2,3/4 Risk
Pace Project No.: 92625185

Sample: B-82 **Lab ID: 92625185011** Collected: 09/16/22 12:15 Received: 09/16/22 16:30 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		09/19/22 10:34		
pH	**5.02**	Std. Units			1		09/19/22 10:34		
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Arsenic	ND	mg/L	0.0050	0.0022	1	09/26/22 09:44	09/26/22 23:38	7440-38-2	
Cobalt	**0.0018J**	mg/L	0.0050	0.00039	1	09/26/22 09:44	09/26/22 23:38	7440-48-4	

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QUALITY CONTROL DATA

Project: McDonough AP-1,2,3/4 Risk
Pace Project No.: 92625185

QC Batch: 725627
QC Batch Method: EPA 3005A
Analysis Method: EPA 6020B
Analysis Description: 6020 MET
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92625185001, 92625185002, 92625185003, 92625185004, 92625185005, 92625185006, 92625185007, 92625185008, 92625185009, 92625185010, 92625185011

METHOD BLANK: 3780267 Matrix: Water
Associated Lab Samples: 92625185001, 92625185002, 92625185003, 92625185004, 92625185005, 92625185006, 92625185007, 92625185008, 92625185009, 92625185010, 92625185011

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Arsenic	mg/L	ND	0.0050	0.0022	09/26/22 20:51	
Cobalt	mg/L	ND	0.0050	0.00039	09/26/22 20:51	
Lithium	mg/L	ND	0.030	0.00073	09/26/22 20:51	
Molybdenum	mg/L	ND	0.010	0.00074	09/26/22 20:51	

LABORATORY CONTROL SAMPLE: 3780268

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Arsenic	mg/L	0.1	0.099	99	80-120	
Cobalt	mg/L	0.1	0.097	97	80-120	
Lithium	mg/L	0.1	0.11	107	80-120	
Molybdenum	mg/L	0.1	0.10	100	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3780269 3780270

Parameter	Units	92625185001 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	0.099	0.098	99	98	75-125	2	20	
Cobalt	mg/L	0.0036J	0.1	0.1	0.097	0.095	93	91	75-125	2	20	
Lithium	mg/L	0.0028J	0.1	0.1	0.11	0.11	106	102	75-125	3	20	
Molybdenum	mg/L	ND	0.1	0.1	0.10	0.10	102	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.

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

QUALIFIERS

Project: McDonough AP-1,2,3/4 Risk
Pace Project No.: 92625185

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.

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

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: McDonough AP-1,2,3/4 Risk
Pace Project No.: 92625185

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92625185001	**B-79**				
92625185002	**B-54**				
92625185003	**B-64**				
92625185004	**B-78**				
92625185005	**B-76**				
92625185006	**B-77**				
92625185007	**B-63**				
92625185008	**B-74**				
92625185009	**B-66**				
92625185010	**B-88**				
92625185011	**B-82**				
92625185001	**B-79**	EPA 3005A	725627	EPA 6020B	725817
92625185002	**B-54**	EPA 3005A	725627	EPA 6020B	725817
92625185003	**B-64**	EPA 3005A	725627	EPA 6020B	725817
92625185004	**B-78**	EPA 3005A	725627	EPA 6020B	725817
92625185005	**B-76**	EPA 3005A	725627	EPA 6020B	725817
92625185006	**B-77**	EPA 3005A	725627	EPA 6020B	725817
92625185007	**B-63**	EPA 3005A	725627	EPA 6020B	725817
92625185008	**B-74**	EPA 3005A	725627	EPA 6020B	725817
92625185009	**B-66**	EPA 3005A	725627	EPA 6020B	725817
92625185010	**B-88**	EPA 3005A	725627	EPA 6020B	725817
92625185011	**B-82**	EPA 3005A	725627	EPA 6020B	725817

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DC#_Title: ENV-FRM-HUN1-0083 v01_Sample Condition Upon Receipt

Effective Date: 05/12/2022

Laboratory receiving samples:

Asheville ☐ Eden ☐ Greenwood ☐ Huntersville ☐ Raleigh ☐ Me[illegible] ☐ Atlanta ☑ Kernersville ☐

WO# : 92625185

92625185

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: 09/13/22 JM

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

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

Thermometer: ☐ IR Gun ID: 083

Type of Ice: ☑ Wet ☐ Blue ☐ None

Cooler Temp: 1.9 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): 1.9

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: WG				
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:

WO#: 92625185

PM: NMG Due Date: 09/27/22

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

***Check all unpreserved Nitrates for chlorine

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)	DG9A-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)	DG9V-40 mL VOA H3PO4 (N/A)	DG9S-40 mL VOA H2SO4 (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-250 mL Plastic (NH2)2SO4 (9.3-9.7)	AG0U-100 mL Amber Unpreserved (N/A) (Cl-)	VSGU-20 mL Scintillation vials (N/A)	DG9U-40 mL Amber Unpreserved vials (N/A)
1						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 DENR Certification Office (i.e. Out of hold, incorrect preservative, out of temp, incorrect containers.

Pace Analytical

CHAIN-OF-CUSTODY / Analytical Request Document

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

Page : 1 Of 1

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:	
Company:	Georgia Power - Coal Combustion Residuals	Report To:	Lauren Coker	Attention:	scainvoices@southernco.com
Address:	2480 Maner Road	Copy To:	Golder	Company Name:	
	Atlanta, GA 30339			Address:	
Email:	laucoker@southernco.com	Purchase Order #:		Pace Quote:	
Phone:	(470) 620-6176 Fax	Project Name:	Plant McDonough AP-1, AP-2, AP-3/4 Risk Assessment	Pace Project Manager:	Nicole D'Oleo
Requested Due Date:	10 Day TAT	Project #:	GL166849622	Pace Profile #:	

Regulatory Agency	
State / Location	GA

ITEM #	SAMPLE ID (One Character per box. (A-Z, 0-9 / , -) Sample ids must be unique)	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	DATE	TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H2SO4	HNO3 + Ice	HCl	NaOH + Zn Acetate	Na2S2O3	Methanol	Other	Analyses Test: Y/N	Lithium	Residual Chlorine (Y/N)	
1	B-79	WG	G	9/12/2022	10:05		1			1							X		pH = 4.92
2																			
3																			
4																			
6																			
7																			
8																			
9																			
10																			
11																			
12																			
13																			
14																			

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

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
	[signature] / Sampler	9/13/22	8:05	[signature] BAH	9-13-22	8:10	
				[signature]	9/13/22	1036	

JOE WAGESPACK DATE Signed: 9/13/22

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

Pace ANALYTICAL SERVICES	DC#_Title: ENV-FRM-HUN1-0083 v01_Sample Condition Upon Receipt
	Effective Date: 05/12/2022

Laboratory receiving samples:

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

Sample Condition Upon Receipt

Client Name: GA Power

Project #: 5185

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

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

Date/Initials Person Examining Contents: 9/14/22 DM

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: 3.2 **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): 3.2

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: WW				
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

***Check all unpreserved Nitrates for chlorine

Project #

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)	DG94-250 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)	DG9V-40 mL VOA H3PO4 (N/A)	DG9S-40 mL VOA H2SO4 (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-250 mL Plastic (NH2)2SO4 (9.3-9.7)	AG0U-100 mL Amber Unpreserved (N/A) (Cl-)	VSGU-20 mL Scintillation vials (N/A)	DG9U-40 mL Amber Unpreserved vials (N/A)
1						1																							
2						1																							
3						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 DENR Certification Office (i.e. Out of hold, incorrect preservative, out of temp, incorrect containers.

Pace Analytical

CHAIN-OF-CUSTODY / Analytical Request Document

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

Page : 1 Of 1

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:	
Company:	Georgia Power - Coal Combustion Residuals	Report To:	Lauren Coker	Attention:	scsinvoices@southernco.com
Address:	2480 Maner Road	Copy To:	Golder	Company Name:	
	Atlanta, GA 30339			Address:	
Email:	laucoker@southernco.com	Purchase Order #:		Pace Quote:	
Phone:	(470) 620-6176 Fax	Project Name:	Plant McD AP-1, AP-2 and 3/4 Risk Assessment	Pace Project Manager:	Nicole D'Oleo
Requested Due Date:	10 Day TAT	Project #:	GL166849822	Pace Profile #:	

Regulatory Agency
State / Location
GA

ITEM #	SAMPLE ID One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	DATE	TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved - Ice	H2SO4	HNO3 + Ice	HCl	NaOH + Zn Acetate	Na2S2O3	Methanol	Other	Requested Analysis Filtered (Y/N) Y/N	Analyses Test: Lithium	Cobalt	Residual Chlorine (Y/N)	
	MATRIX: Drinking Water DW, Water WT, Waste Water WW, Product P, Soil/Solid SL, Oil OL, Wipe WP, Air AR, Other OT, Tissue TS															N	N			
1	B-54	WG	G	9/13/2022	9:40		1			1							X			pH = 5.34
2	B-64	WG	G	9/13/2022	14:15		1			1							X			pH = 5.00
3	B-76	WG	G	9/13/2022	9:54		1			1							X	X		pH = 6.05
4	B-77	WG	G	9/13/2022	14:21		1			1							X	X		pH = 6.34
5	B-78	WG	G	9/13/2022	14:14		1			1							X			pH = 4.56
6																				
7																				
8																				
9																				
10																				
11																				
12																				
13																				
14																				

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
	JW / Sampler	9-14-22	8:53	[signature] 8534	9/14/22	8:53	
				[signature]	9/14/22	0945	

JUDE NAGUESPACK DATE Signed: 9-14-22

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: 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: GA Power Proj

WO#: 92625185
PM: NMG Due Date: 09/27/22
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: 9/15/22 CDB

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: 3.8 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): 3.8

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: 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# : 92625185

PM: NMG Due Date: 09/27/22

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 (3 vials per kit)-5035 kit (N/A)	V/GK (3 vials per kit)-VPH/Gas kit (N/A)	SPST-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)
	1						✓																						
	2																												
	3																												
	4																												
	5																												
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	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.

Pace Analytical

CHAIN-OF-CUSTODY / Analytical Request Document

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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:	Lauren Coker	Attention:	acsinvoices@southernco.com
Address:	2480 Maner Road	Copy To:	Golder	Company Name:	
	Atlanta, GA 30339			Address:	
Email:	lpucoker@southernco.com	Purchase Order #:		Pace Quote:	
Phone:	(470) 620-6176 Fax	Project Name:	Plant McD AP-1, 2, 3/4 Risk Assessment Network	Pace Project Manager:	Nicole D'Oleo
Requested Due Date:	10 Day TAT	Project #:	GL165849522	Pace Profile #:	

Regulatory Agency

State / Location: GA

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID (One Character per box. (A-Z, 0-9 / , -) Sample ids must be unique)	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	DATE	TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved - Ice	H2SO4	HNO3 + Ice	HCl	NaOH + Zn Acetate	Na2S2O3	Methanol	Other	Analyses Test Y/N	Cobalt	Lithium	Arsenic	Molybdenum	Residual Chlorine (Y/N)	92625185
1	B-63	WG	G	9/14/2022	12:56		1			1							X	X				pH = 5.31 007
2	B-74	WG	G	9/14/2022	11:02		1			1									X	X		pH = 6.01 008
3																						
4																						
6																						
7																						
8																						
9																						
10																						
11																						
12																						
13																						
14																						

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

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
		09/15/22	08:20	BAH	9-15-22	8:20	
					09/15/22	0945	

DIANE FULTON / HSA-BOUND2 DATE Signed: 09/15/22

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

Pace ANALYTICAL SERVICES

DC#_Title: ENV-FRM-HUN1-0083 v01_Sample Condition Upon Receipt

Effective Date: 05/12/2022

Laboratory receiving samples:

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

Sample Condition Upon Receipt

Client Name: Georgia Power

Project

WO#: 92625185

PM: NMG **Due Date: 09/27/22**

CLIENT: GA-GA Power

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

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

Date/Initials Person Examining Contents: 9/17/22 JM

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: 3.3 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): 3.3

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.
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: WG				
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: _____

Qualtrax ID: 69614

WO#: 92625185

PM: NMG Due Date: 09/27/22

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

***Check all unpreserved Nitrates for chlorine

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)	DG94-250 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)	DG9V-40 mL VOA H3PO4 (N/A)	DG9S-40 mL VOA H2SO4 (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	BP3R-250 mL Plastic (NH2)2SO4 (9.3-9.7)	AG0U-100 mL Amber Unpreserved (N/A) (Cl-)	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				
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 DENR Certification Office (i.e. Out of hold, incorrect preservative, out of temp, incorrect containers.

Pace Analytical

CHAIN-OF-CUSTODY / Analytical Request Document

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

Page : 1 Of 1

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:	
Company:	Georgia Power - Coal Combustion Residuals	Report To:	Lauren Coker	Attention:	scsinvoices@southernco.com
Address:	2480 Maner Road	Copy To:	Golder	Company Name:	
	Atlanta, GA 30339			Address:	
Email:	laucoker@southernco.com	Purchase Order #:		Pace Quote:	
Phone:	(470) 520-6176 Fax:	Project Name:	Plant McD AP-1 2 3/4 Risk Assesment	Pace Project Manager:	Nicole D'Oleo
Requested Due Date:	10 Day TAT	Project #:	GL166849622	Pace Profile #:	

Regulatory Agency	
State / Location	GA

ITEM #	SAMPLE ID One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique	MATRIX CODE (Use valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	DATE	TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H2SO4	HNO3 + Ice	HCl	NaOH + Zn Acetate	Na2S2O3	Methanol	Other	Analyses Test: Y/N	Arsenic	Cobalt	Residual Chlorine (Y/N)	
	MATRIX: Drinking Water DW, Water WT, Waste Water WW, Product P, Soil/Solid SL, Oil OL, Wipe WP, Air AR, Other OT, Tissue TS							Ice								Requested Analysis Filtered (Y/N)	N	N		
1	B-66	WG	G	9/16/2022	10:10		1			1							X	X		pH = 6.60
2	B-65	WG	G	9/16/2022	10:44		1			1								X		pH = 5.47
3	B-62	WG	G	9/16/2022	12:15		1			1							X	X		pH = 5.02
4																				
6																				
7																				
8																				
9																				
10																				
11																				
12																				
13																				
14																				

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
	Mark McGar Golder	09/16/22	16:25	[signature]	9/16	16:30	

DATE Signed:

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

November 03, 2022

Kelley Sharpe
ARCADIS - Atlanta
2839 Paces Ferry Rd
STE 900
Atlanta, GA 30339

RE: Project: Plant McDonough CCR-Ash Pond
Pace Project No.: 92633519

Dear Kelley Sharpe:

Enclosed are the analytical results for sample(s) received by the laboratory on October 28, 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 - 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
Allison Keefer, Southern Company
Laura Midkiff, Georgia Power
Tina Sullivan, ERM

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

CERTIFICATIONS

Project: Plant McDonough CCR-Ash Pond
Pace Project No.: 92633519

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

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

SAMPLE SUMMARY

Project: Plant McDonough CCR-Ash Pond
Pace Project No.: 92633519

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92633519001	**UT01_US**	Water	10/27/22 09:58	10/28/22 09:50
92633519002	**UT02**	Water	10/27/22 10:25	10/28/22 09:50
92633519003	**UT03**	Water	10/27/22 10:13	10/28/22 09:50
92633519004	**UT01_DS**	Water	10/27/22 10:35	10/28/22 09:50
92633519005	**CR-0.1**	Water	10/27/22 11:50	10/28/22 09:50
92633519006	**CR+0.2**	Water	10/27/22 11:38	10/28/22 09:50
92633519007	**CR+0.4**	Water	10/27/22 11:30	10/28/22 09:50

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(770)734-4200

SAMPLE ANALYTE COUNT

Project: Plant McDonough CCR-Ash Pond
Pace Project No.: 92633519

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92633519001	**UT01_US**	EPA 6010D	DRB	4	PASI-GA
		EPA 6020B	KH	3	PASI-GA
		SM 2540C-2015	DL1	1	PASI-GA
		SM 2320B-2011	SMS	2	PASI-A
		EPA 300.0 Rev 2.1 1993	CDC	3	PASI-A
92633519002	**UT02**	EPA 6010D	DRB	4	PASI-GA
		EPA 6020B	KH	2	PASI-GA
		SM 2540C-2015	DL1	1	PASI-GA
		SM 2320B-2011	SMS	2	PASI-A
		EPA 300.0 Rev 2.1 1993	CDC	3	PASI-A
92633519003	**UT03**	EPA 6010D	DRB	4	PASI-GA
		EPA 6020B	KH	3	PASI-GA
		SM 2540C-2015	DL1	1	PASI-GA
		SM 2320B-2011	SMS	2	PASI-A
		EPA 300.0 Rev 2.1 1993	CDC	3	PASI-A
92633519004	**UT01_DS**	EPA 6010D	DRB	4	PASI-GA
		EPA 6020B	KH	3	PASI-GA
		SM 2540C-2015	DL1	1	PASI-GA
		SM 2320B-2011	SMS	2	PASI-A
		EPA 300.0 Rev 2.1 1993	CDC	3	PASI-A
92633519005	**CR-0.1**	EPA 6010D	DRB	4	PASI-GA
		EPA 6020B	KH	3	PASI-GA
		SM 2540C-2015	DL1	1	PASI-GA
		SM 2320B-2011	SMS	2	PASI-A
		EPA 300.0 Rev 2.1 1993	CDC	3	PASI-A
92633519006	**CR+0.2**	EPA 6010D	DRB	4	PASI-GA
		EPA 6020B	KH	3	PASI-GA
		SM 2540C-2015	DL1	1	PASI-GA
		SM 2320B-2011	SMS	2	PASI-A
		EPA 300.0 Rev 2.1 1993	CDC	3	PASI-A
92633519007	**CR+0.4**	EPA 6010D	DRB	4	PASI-GA
		EPA 6020B	KH	5	PASI-GA
		SM 2540C-2015	DL1	1	PASI-GA
		SM 2320B-2011	SMS	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

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: Plant McDonough CCR-Ash Pond
Pace Project No.: 92633519

Sample: UT01_US **Lab ID: 92633519001** Collected: 10/27/22 09:58 Received: 10/28/22 09:50 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	**3.6**	mg/L	0.20	1	10/31/22 10:32	10/31/22 15:53	7440-09-7	
Sodium	**11.9**	mg/L	1.0	1	10/31/22 10:32	10/31/22 15:53	7440-23-5	
Calcium	**14.2**	mg/L	1.0	1	10/31/22 10:32	10/31/22 15:53	7440-70-2	
Magnesium	**2.7**	mg/L	0.050	1	10/31/22 10:32	10/31/22 15:53	7439-95-4	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA							
Arsenic	ND	mg/L	0.0050	1	10/31/22 10:06	10/31/22 19:40	7440-38-2	
Boron	**0.059**	mg/L	0.040	1	10/31/22 10:06	10/31/22 19:40	7440-42-8	
Molybdenum	ND	mg/L	0.010	1	10/31/22 10:06	10/31/22 19:40	7439-98-7	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA							
Total Dissolved Solids	**51.0**	mg/L	25.0	1		11/01/22 16:09		MW
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville							
Alkalinity,Bicarbonate (CaCO3)	**40.5**	mg/L	5.0	1		11/01/22 11:53		
Alkalinity, Total as CaCO3	**40.5**	mg/L	5.0	1		11/01/22 11:53		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville							
Chloride	**11.8**	mg/L	1.0	1		10/31/22 03:34	16887-00-6	
Fluoride	**0.30**	mg/L	0.10	1		10/31/22 03:34	16984-48-8	
Sulfate	**11.9**	mg/L	1.0	1		10/31/22 03:34	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: Plant McDonough CCR-Ash Pond
Pace Project No.: 92633519

Sample: UT02 **Lab ID: 92633519002** Collected: 10/27/22 10:25 Received: 10/28/22 09:50 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	**3.6**	mg/L	0.20	1	10/31/22 10:32	10/31/22 15:58	7440-09-7	
Sodium	**12.2**	mg/L	1.0	1	10/31/22 10:32	10/31/22 15:58	7440-23-5	
Calcium	**15.2**	mg/L	1.0	1	10/31/22 10:32	10/31/22 15:58	7440-70-2	
Magnesium	**2.8**	mg/L	0.050	1	10/31/22 10:32	10/31/22 15:58	7439-95-4	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA							
Arsenic	ND	mg/L	0.0050	1	10/31/22 10:06	10/31/22 19:46	7440-38-2	
Boron	**0.092**	mg/L	0.040	1	10/31/22 10:06	10/31/22 19:46	7440-42-8	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA							
Total Dissolved Solids	**116**	mg/L	25.0	1		11/01/22 16:09		MW
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville							
Alkalinity,Bicarbonate (CaCO3)	**42.7**	mg/L	5.0	1		11/01/22 11:59		
Alkalinity, Total as CaCO3	**42.7**	mg/L	5.0	1		11/01/22 11:59		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville							
Chloride	**11.6**	mg/L	1.0	1		10/31/22 03:49	16887-00-6	
Fluoride	**0.28**	mg/L	0.10	1		10/31/22 03:49	16984-48-8	
Sulfate	**13.6**	mg/L	1.0	1		10/31/22 03:49	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: Plant McDonough CCR-Ash Pond
Pace Project No.: 92633519

Sample: UT03 **Lab ID: 92633519003** Collected: 10/27/22 10:13 Received: 10/28/22 09:50 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	**3.6**	mg/L	0.20	1	10/31/22 10:32	10/31/22 16:03	7440-09-7	
Sodium	**12.1**	mg/L	1.0	1	10/31/22 10:32	10/31/22 16:03	7440-23-5	
Calcium	**16.6**	mg/L	1.0	1	10/31/22 10:32	10/31/22 16:03	7440-70-2	
Magnesium	**3.4**	mg/L	0.050	1	10/31/22 10:32	10/31/22 16:03	7439-95-4	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA							
Arsenic	ND	mg/L	0.0050	1	10/31/22 10:06	10/31/22 19:52	7440-38-2	
Boron	**0.21**	mg/L	0.040	1	10/31/22 10:06	10/31/22 19:52	7440-42-8	
Molybdenum	ND	mg/L	0.010	1	10/31/22 10:06	10/31/22 19:52	7439-98-7	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA							
Total Dissolved Solids	**92.0**	mg/L	25.0	1		11/01/22 16:09		MW
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville							
Alkalinity,Bicarbonate (CaCO3)	**43.5**	mg/L	5.0	1		11/01/22 12:06		
Alkalinity, Total as CaCO3	**43.5**	mg/L	5.0	1		11/01/22 12:06		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville							
Chloride	**11.0**	mg/L	1.0	1		10/31/22 04:05	16887-00-6	
Fluoride	**0.27**	mg/L	0.10	1		10/31/22 04:05	16984-48-8	
Sulfate	**16.7**	mg/L	1.0	1		10/31/22 04:05	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: Plant McDonough CCR-Ash Pond
Pace Project No.: 92633519

Sample: UT01_DS **Lab ID: 92633519004** Collected: 10/27/22 10:35 Received: 10/28/22 09:50 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	**3.4**	mg/L	0.20	1	10/31/22 10:32	10/31/22 16:08	7440-09-7	
Sodium	**11.1**	mg/L	1.0	1	10/31/22 10:32	10/31/22 16:08	7440-23-5	
Calcium	**15.1**	mg/L	1.0	1	10/31/22 10:32	10/31/22 16:08	7440-70-2	
Magnesium	**3.0**	mg/L	0.050	1	10/31/22 10:32	10/31/22 16:08	7439-95-4	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA							
Arsenic	ND	mg/L	0.0050	1	10/31/22 10:06	10/31/22 19:58	7440-38-2	
Boron	**0.16**	mg/L	0.040	1	10/31/22 10:06	10/31/22 19:58	7440-42-8	
Molybdenum	ND	mg/L	0.010	1	10/31/22 10:06	10/31/22 19:58	7439-98-7	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA							
Total Dissolved Solids	**167**	mg/L	25.0	1		11/01/22 16:09		D6,MW
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville							
Alkalinity,Bicarbonate (CaCO3)	**46.6**	mg/L	5.0	1		11/01/22 12:12		
Alkalinity, Total as CaCO3	**46.6**	mg/L	5.0	1		11/01/22 12:12		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville							
Chloride	**10.9**	mg/L	1.0	1		10/31/22 04:21	16887-00-6	
Fluoride	**0.26**	mg/L	0.10	1		10/31/22 04:21	16984-48-8	
Sulfate	**15.3**	mg/L	1.0	1		10/31/22 04:21	14808-79-8	

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ANALYTICAL RESULTS

Project: Plant McDonough CCR-Ash Pond
Pace Project No.: 92633519

Sample: CR-0.1 **Lab ID: 92633519005** Collected: 10/27/22 11:50 Received: 10/28/22 09:50 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	**4.3**	mg/L	0.20	1	10/31/22 10:32	10/31/22 16:12	7440-09-7	
Sodium	**13.8**	mg/L	1.0	1	10/31/22 10:32	10/31/22 16:12	7440-23-5	
Calcium	**8.1**	mg/L	1.0	1	10/31/22 10:32	10/31/22 16:12	7440-70-2	
Magnesium	**2.4**	mg/L	0.050	1	10/31/22 10:32	10/31/22 16:12	7439-95-4	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA							
Boron	**0.041**	mg/L	0.040	1	10/31/22 10:06	10/31/22 20:16	7440-42-8	
Cobalt	ND	mg/L	0.0050	1	10/31/22 10:06	10/31/22 20:16	7440-48-4	
Lithium	ND	mg/L	0.030	1	10/31/22 10:06	10/31/22 20:16	7439-93-2	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA							
Total Dissolved Solids	**42.0**	mg/L	25.0	1		11/01/22 16:09		MW
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville							
Alkalinity,Bicarbonate (CaCO3)	**27.4**	mg/L	5.0	1		11/01/22 12:19		
Alkalinity, Total as CaCO3	**27.4**	mg/L	5.0	1		11/01/22 12:19		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville							
Chloride	**12.7**	mg/L	1.0	1		10/31/22 05:08	16887-00-6	
Fluoride	**0.19**	mg/L	0.10	1		10/31/22 05:08	16984-48-8	
Sulfate	**9.1**	mg/L	1.0	1		10/31/22 05:08	14808-79-8	

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ANALYTICAL RESULTS

Project: Plant McDonough CCR-Ash Pond
Pace Project No.: 92633519

Sample: CR+0.2 **Lab ID: 92633519006** Collected: 10/27/22 11:38 Received: 10/28/22 09:50 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	**4.3**	mg/L	0.20	1	10/31/22 10:32	10/31/22 16:17	7440-09-7	
Sodium	**12.9**	mg/L	1.0	1	10/31/22 10:32	10/31/22 16:17	7440-23-5	
Calcium	**7.8**	mg/L	1.0	1	10/31/22 10:32	10/31/22 16:17	7440-70-2	
Magnesium	**2.3**	mg/L	0.050	1	10/31/22 10:32	10/31/22 16:17	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	10/31/22 10:06	10/31/22 20:22	7440-42-8	
Cobalt	ND	mg/L	0.0050	1	10/31/22 10:06	10/31/22 20:22	7440-48-4	
Lithium	ND	mg/L	0.030	1	10/31/22 10:06	10/31/22 20:22	7439-93-2	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA							
Total Dissolved Solids	**36.0**	mg/L	25.0	1		11/01/22 16:09		MW
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville							
Alkalinity,Bicarbonate (CaCO3)	**27.0**	mg/L	5.0	1		11/01/22 12:25		
Alkalinity, Total as CaCO3	**27.0**	mg/L	5.0	1		11/01/22 12:25		
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	1		10/31/22 05:24	16887-00-6	
Fluoride	**0.18**	mg/L	0.10	1		10/31/22 05:24	16984-48-8	
Sulfate	**7.7**	mg/L	1.0	1		10/31/22 05:24	14808-79-8	

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ANALYTICAL RESULTS

Project: Plant McDonough CCR-Ash Pond
Pace Project No.: 92633519

Sample: CR+0.4 **Lab ID: 92633519007** Collected: 10/27/22 11:30 Received: 10/28/22 09:50 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	**4.3**	mg/L	0.20	1	10/31/22 10:32	10/31/22 16:22	7440-09-7	
Sodium	**12.8**	mg/L	1.0	1	10/31/22 10:32	10/31/22 16:22	7440-23-5	
Calcium	**7.7**	mg/L	1.0	1	10/31/22 10:32	10/31/22 16:22	7440-70-2	
Magnesium	**2.3**	mg/L	0.050	1	10/31/22 10:32	10/31/22 16:22	7439-95-4	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA							
Arsenic	ND	mg/L	0.0050	1	10/31/22 10:06	10/31/22 20:28	7440-38-2	
Boron	ND	mg/L	0.040	1	10/31/22 10:06	10/31/22 20:28	7440-42-8	
Cobalt	ND	mg/L	0.0050	1	10/31/22 10:06	10/31/22 20:28	7440-48-4	
Lithium	ND	mg/L	0.030	1	10/31/22 10:06	10/31/22 20:28	7439-93-2	
Molybdenum	ND	mg/L	0.010	1	10/31/22 10:06	10/31/22 20:28	7439-98-7	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA							
Total Dissolved Solids	**55.0**	mg/L	25.0	1		11/01/22 16:09		
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville							
Alkalinity,Bicarbonate (CaCO3)	**27.3**	mg/L	5.0	1		11/01/22 12:31		
Alkalinity, Total as CaCO3	**27.3**	mg/L	5.0	1		11/01/22 12:31		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville							
Chloride	**11.7**	mg/L	1.0	1		10/31/22 05:40	16887-00-6	
Fluoride	**0.18**	mg/L	0.10	1		10/31/22 05:40	16984-48-8	
Sulfate	**7.6**	mg/L	1.0	1		10/31/22 05:40	14808-79-8	

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QUALITY CONTROL DATA

Project: Plant McDonough CCR-Ash Pond
Pace Project No.: 92633519

QC Batch: 733725 | Analysis Method: EPA 6010D
QC Batch Method: EPA 3010A | Analysis Description: 6010D ATL
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92633519001, 92633519002, 92633519003, 92633519004, 92633519005, 92633519006, 92633519007

METHOD BLANK: 3818800 Matrix: Water
Associated Lab Samples: 92633519001, 92633519002, 92633519003, 92633519004, 92633519005, 92633519006, 92633519007

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Calcium	mg/L	ND	1.0	10/31/22 14:27	
Magnesium	mg/L	ND	0.050	10/31/22 14:27	
Potassium	mg/L	ND	0.20	10/31/22 14:27	
Sodium	mg/L	ND	1.0	10/31/22 14:27	

LABORATORY CONTROL SAMPLE: 3818801

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium	mg/L	1	1.1	105	80-120	
Magnesium	mg/L	1	1.0	103	80-120	
Potassium	mg/L	1	1.0	102	80-120	
Sodium	mg/L	1	1.1	106	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3818802 3818803

Parameter	Units	92633366005 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Calcium	mg/L	114000 ug/L	1	1	116	118	196	385	75-125	2	20	M1
Magnesium	mg/L	27400 ug/L	1	1	28.8	29.3	138	185	75-125	2	20	M1
Potassium	mg/L	36900 ug/L	1	1	38.3	39.1	143	222	75-125	2	20	M1
Sodium	mg/L	266000 ug/L	1	1	270	275	337	867	75-125	2	20	M1

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QUALITY CONTROL DATA

Project: Plant McDonough CCR-Ash Pond
Pace Project No.: 92633519

QC Batch: 733721
QC Batch Method: EPA 3005A
Analysis Method: EPA 6020B
Analysis Description: 6020 MET
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92633519001, 92633519002, 92633519003, 92633519004, 92633519005, 92633519006, 92633519007

METHOD BLANK: 3818794 Matrix: Water
Associated Lab Samples: 92633519001, 92633519002, 92633519003, 92633519004, 92633519005, 92633519006, 92633519007

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Arsenic	mg/L	ND	0.0050	10/31/22 17:53	
Boron	mg/L	ND	0.040	10/31/22 17:53	
Cobalt	mg/L	ND	0.0050	10/31/22 17:53	
Lithium	mg/L	ND	0.030	10/31/22 17:53	
Molybdenum	mg/L	ND	0.010	10/31/22 17:53	

LABORATORY CONTROL SAMPLE: 3818795

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Arsenic	mg/L	0.1	0.10	100	80-120	
Boron	mg/L	1	1.1	108	80-120	
Cobalt	mg/L	0.1	0.11	105	80-120	
Lithium	mg/L	0.1	0.10	104	80-120	
Molybdenum	mg/L	0.1	0.10	100	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3818796 3818797

Parameter	Units	92633223001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Arsenic	mg/L	2.3J ug/L	0.1	0.1	0.10	0.10	102	99	75-125	3	20	
Boron	mg/L	24.7J ug/L	1	1	1.1	1.1	105	108	75-125	3	20	
Cobalt	mg/L	6.9J ug/L	0.1	0.1	0.11	0.11	104	101	75-125	3	20	
Lithium	mg/L	ND	0.1	0.1	0.10	0.10	101	104	75-125	2	20	
Molybdenum	mg/L	ND	0.1	0.1	0.10	0.097	103	96	75-125	7	20	

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QUALITY CONTROL DATA

Project: Plant McDonough CCR-Ash Pond
Pace Project No.: 92633519

QC Batch: 734041 | 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: 92633519001, 92633519002, 92633519003, 92633519004, 92633519005, 92633519006, 92633519007

METHOD BLANK: 3820511 Matrix: Water
Associated Lab Samples: 92633519001, 92633519002, 92633519003, 92633519004, 92633519005, 92633519006, 92633519007

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	25.0	11/01/22 16:09	

LABORATORY CONTROL SAMPLE: 3820512

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	379	95	80-120	

SAMPLE DUPLICATE: 3820513

Parameter	Units	92632809001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	2370	2160	9	10	

SAMPLE DUPLICATE: 3820514

Parameter	Units	92633519004 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	167	74.0	77	10	D6,MW

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QUALITY CONTROL DATA

Project: Plant McDonough CCR-Ash Pond
Pace Project No.: 92633519

QC Batch: 733493 | Analysis Method: SM 2320B-2011
QC Batch Method: SM 2320B-2011 | Analysis Description: 2320B Alkalinity
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92633519001, 92633519002, 92633519003, 92633519004, 92633519005, 92633519006, 92633519007

METHOD BLANK: 3817756 Matrix: Water
Associated Lab Samples: 92633519001, 92633519002, 92633519003, 92633519004, 92633519005, 92633519006, 92633519007

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Alkalinity, Total as CaCO3	mg/L	ND	5.0	11/01/22 11:33	
Alkalinity,Bicarbonate (CaCO3)	mg/L	ND	5.0	11/01/22 11:33	

LABORATORY CONTROL SAMPLE: 3817757

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	50	55.0	110	80-120	

LABORATORY CONTROL SAMPLE: 3817758

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	50	49.5	99	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3817759 3817760

Parameter	Units	92633455004 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	34.3	50	50	84.9	84.0	101	99	80-120	1	25	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3817761 3817762

Parameter	Units	92633455005 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	198	50	50	245	260	94	125	80-120	6	25	M1

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QUALITY CONTROL DATA

Project: Plant McDonough CCR-Ash Pond
Pace Project No.: 92633519

QC Batch: 733691
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: 92633519001, 92633519002, 92633519003, 92633519004, 92633519005, 92633519006, 92633519007

METHOD BLANK: 3818694 Matrix: Water
Associated Lab Samples: 92633519001, 92633519002, 92633519003, 92633519004, 92633519005, 92633519006, 92633519007

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	10/31/22 01:59	
Fluoride	mg/L	ND	0.10	10/31/22 01:59	
Sulfate	mg/L	ND	1.0	10/31/22 01:59	

LABORATORY CONTROL SAMPLE: 3818695

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	50.1	100	90-110	
Fluoride	mg/L	2.5	2.6	104	90-110	
Sulfate	mg/L	50	50.4	101	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3818696 3818697

Parameter	Units	92633612001 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	50.5	50.2	99	98	90-110	1	10	
Fluoride	mg/L	0.14	2.5	2.5	2.7	2.6	101	100	90-110	0	10	
Sulfate	mg/L	ND	50	50	49.9	49.5	98	98	90-110	1	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3818698 3818699

Parameter	Units	92633523002 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	61.7	61.4	100	99	90-110	1	10	
Fluoride	mg/L	0.17	2.5	2.5	2.7	2.7	101	101	90-110	0	10	
Sulfate	mg/L	7.0	50	50	57.2	56.9	100	100	90-110	1	10	

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QUALIFIERS

Project: Plant McDonough CCR-Ash Pond
Pace Project No.: 92633519

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.

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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.
MW	Due to matrix interference, achieving a constant weight is not possible.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Plant McDonough CCR-Ash Pond
Pace Project No.: 92633519

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92633519001	**UT01_US**	EPA 3010A	733725	EPA 6010D	733811
92633519002	**UT02**	EPA 3010A	733725	EPA 6010D	733811
92633519003	**UT03**	EPA 3010A	733725	EPA 6010D	733811
92633519004	**UT01_DS**	EPA 3010A	733725	EPA 6010D	733811
92633519005	**CR-0.1**	EPA 3010A	733725	EPA 6010D	733811
92633519006	**CR+0.2**	EPA 3010A	733725	EPA 6010D	733811
92633519007	**CR+0.4**	EPA 3010A	733725	EPA 6010D	733811
92633519001	**UT01_US**	EPA 3005A	733721	EPA 6020B	733812
92633519002	**UT02**	EPA 3005A	733721	EPA 6020B	733812
92633519003	**UT03**	EPA 3005A	733721	EPA 6020B	733812
92633519004	**UT01_DS**	EPA 3005A	733721	EPA 6020B	733812
92633519005	**CR-0.1**	EPA 3005A	733721	EPA 6020B	733812
92633519006	**CR+0.2**	EPA 3005A	733721	EPA 6020B	733812
92633519007	**CR+0.4**	EPA 3005A	733721	EPA 6020B	733812
92633519001	**UT01_US**	SM 2540C-2015	734041		
92633519002	**UT02**	SM 2540C-2015	734041		
92633519003	**UT03**	SM 2540C-2015	734041		
92633519004	**UT01_DS**	SM 2540C-2015	734041		
92633519005	**CR-0.1**	SM 2540C-2015	734041		
92633519006	**CR+0.2**	SM 2540C-2015	734041		
92633519007	**CR+0.4**	SM 2540C-2015	734041		
92633519001	**UT01_US**	SM 2320B-2011	733493		
92633519002	**UT02**	SM 2320B-2011	733493		
92633519003	**UT03**	SM 2320B-2011	733493		
92633519004	**UT01_DS**	SM 2320B-2011	733493		
92633519005	**CR-0.1**	SM 2320B-2011	733493		
92633519006	**CR+0.2**	SM 2320B-2011	733493		
92633519007	**CR+0.4**	SM 2320B-2011	733493		
92633519001	**UT01_US**	EPA 300.0 Rev 2.1 1993	733691		
92633519002	**UT02**	EPA 300.0 Rev 2.1 1993	733691		
92633519003	**UT03**	EPA 300.0 Rev 2.1 1993	733691		
92633519004	**UT01_DS**	EPA 300.0 Rev 2.1 1993	733691		
92633519005	**CR-0.1**	EPA 300.0 Rev 2.1 1993	733691		
92633519006	**CR+0.2**	EPA 300.0 Rev 2.1 1993	733691		
92633519007	**CR+0.4**	EPA 300.0 Rev 2.1 1993	733691		

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Pace Analytical

CHAIN-OF-CUSTODY / Analytical Request Document

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

Page : 1 Of 1

Section A Required Client Information:	Section B Required Project Information:	Section C Invoice Information:
Company: ARCADIS - Atlanta	Report To: Joju Abraham, Allison Keefer, Ben Hodges	Attention: Joju Abraham
Address: 2839 Paces Ferry Rd	Copy To: Warren Johnson	Company Name: GPC
Atlanta, GA 30339		Address:
Email: warren.johnson@arcadis.com	Purchase Order #: SCS10382775	Pace Quote:
Phone: 678.485.5298 Fax:	Project Name: Plant McDonough	Pace Project Manager: Mayia.Parks@pacelabs.com,
Requested Due Date: 5 day TAT	Project #:	Pace Profile #: 2239

Regulatory Agency	State / Location
	GA

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

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

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Analyses Test Y/N	CCR App III[1]	Major Ions[2]	Arsenic (As)	Cobalt (Co)	Lithium (Li)	Molybdenum (Mo)	Residual Chlorine (Y/N)
1	UT01_US	WS	G	10/27/2022	0958														X	X	X			X	
2	UT02	WS	G	10/27/2022	1025														X	X	X				
3	UT03	WS	G	10/27/2022	1013														X	X	X			X	
4	UT01_DS	WS	G	10/27/2022	1035														X	X	X			X	
5	CR-0.1	WS	G	10/27/2022	1150														X	X		X	X		
6	CR+0.2	WS	G	10/27/2022	1138														X	X		X	X		
7	CR+0.4	WS	G	10/27/2022	1130														X	X	X	X	X	X	
8																									
9																									
10																									
11																									
12																									

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
CCR App III[1] - Boron (B), Calcium(Ca), Chloride (Cl), Floride (F), Sulfate, Total Dissolved Solids	[signature] / Arcadis	10/28/22	0950	Charles Hart	10/28/22	0950	
Major Ions - Magnesium (Mg), Sodium (Na), Potassium (K), Total Alkalinity, Bicarbonate Alkalinity							

WO# : 92633519

92633519

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: [signature] Garrett Grabowski 10/28

Pace ANALYTICAL SERVICES	DC#_Title: ENV-FRM-HUN1-0083 v01_Sample Condition Upon Receipt
	Effective Date: 05/12/2022

Laboratory receiving samples:

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

Sample Condition Upon Receipt

Client Name: Arcadis

Project #: WO# : 92633519

PM: MP Due Date: 11/04/22

CLIENT: GA-ArcadAtl

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

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

Date/Initials Person Examining Contents: 10/28/22 EJ

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: 3.3 **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): 3.3

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.
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 SERVICES

DC#_Title: ENV-FRM-HUN1-0083 v01_Sample Condition Upon Receipt

Effective Date: 05/12/2022

WO#: 92633519

PM: MP **Due Date: 11/04/22**

CLIENT: GA-ArcadAtl

***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

Project #

****Bottom half of box is to list number of bottles**

*****Check all unpreserved Nitrates for chlorine**

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)	DG94-250 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)	DG9V-40 mL VOA H3PO4 (N/A)	DG9S-40 mL VOA H2SO4 (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-250 mL Plastic (NH2)2SO4 (9.3-9.7)	AG0U-100 mL Amber Unpreserved (N/A) (Cl-)	VSGU-20 mL Scintillation vials (N/A)	DG9U-40 mL Amber Unpreserved vials (N/A)
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		2	1			1																							
8						1																							
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 DENR Certification Office (i.e. Out of hold, incorrect preservative, out of temp, incorrect containers.

APPENDIX B

Data Validation Summary, September 2022

Quality Control Review of Analytical Data- Ash Pond AP-1
Submitted by Pace Analytical Services, LLC
September 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 Plant McDonough CCR Ash Pond AP-1 between September 7 and October 27, 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 assessment monitoring constituents listed in 40 CFR, Part 257, Appendix IV. Groundwater samples were also analyzed for alkalinity. 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 surface water samples were collected and analyzed for Total Metals (USEPA Method 6020B), Cations (6010D), Anions (300.0), Alkalinity by Titration through Standard Method 2320B (SM2320B), and TDS (SM 2540C).

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, equipment and laboratory blanks). Additionally, sample procedures, holding times and chains-of-custody were reviewed. Where there was a discrepancy between the QC criteria in the guidelines and the QC criterion established in the analytic methodology, method-specific criteria or professional judgment was used.

DATA QUALITY OBJECTIVES

Laboratory Precision: Laboratory goals for precision were met, with the exception of TDS as described in the qualification section below.

Field Precision: Field goals for precision were met.

Accuracy: Laboratory goals for accuracy were met, with the exception of mercury as described in the qualification section below.

Detection Limits and Blanks: Project goals for detection limits were met. Certain samples were diluted due to elevated concentrations of target analytes. Dilutions do not require qualifications based on USEPA guidelines. Detection and reporting limits of non-detect compounds are elevated proportional to the dilution when undiluted sample results are not provided by the laboratory. The data usability of diluted results was

evaluated by the data user in the context of site-wide characterization. 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.

QUALIFICATIONS

In general, chemical results for the samples collected at the Site were qualified on the basis of 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 reported above the method detection limit and below the reporting limit. The concentration reported is an estimated value.
J+	The analyte was reported above the method detection limit; however, the concentration reported is an estimated value that may be biased high.
U	The analyte was not detected above the method detection limit.
UJ	The analyte was not detected above the method detection limit and the associated numerical value is the approximate concentration of the analyte in the sample.

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 sample delivery groups (SDGs) listed in Table 1, qualifications may not have been required or applied to all samples collected. A summary of sample qualifications can be found in Table 2.

- Mercury result in sample DGWC-37 from SDG 92624372 was qualified as non-detect, estimated bias high (UJ) when the associated MS/MSD recovery and RPD exceeded laboratory criteria.
- TDS results in sample DGWC-67 from SDG 92624372 and UT01_DS from SDG 92633519 were qualified as estimated (J) when the associated lab duplicate exceeded the relative percent difference criteria. Certain TDS results from SDG 92633519 were unable to achieve a constant weight due to matrix interference during analysis. The TDS results were qualified as J, estimated.
- Radium-228 results in samples from SDGs 92624378, 92624384, and 92624383 were qualified as non-detect (U) and minimum detectable concentrations were raised to the original sample results, when the analyte was detected at a similar concentration in an associated field and laboratory blank samples or the two-sigma (2) Normalized Absolute Difference (NAD) of the original results is less than 2.58. Total radium in samples from SDGs 92624378, 92624384, and 92624383 were qualified as estimated bias high (J+) when the associated Radium-228 qualified U for blank contamination and the associated Radiun-226 is greater than minimum detectable concentration (MDC).

As described above, 100% of the results were acceptable for project use.

REFERENCE

Paar, J.G. & Porterfield, D.R. *Evaluation of Radiochemical Data Usability*. United States Department of Energy, Office of Environmental Restoration and Waste Management, Oak Ridge National Laboratory, April 1997.

USEPA, November 2020, National, Office of Superfund Remediation and Technology Innovation, *National Functional Guidelines for Inorganic Superfund Methods Data Review,* Revision 0.0.

USEPA, September 2011, Region 4, Science and Ecosystem Support Division, Quality Assurance Section, MTSB, *Data Validation Standard Operating Procedures for Contract Laboratory Program Inorganic Data By Inductively Coupled Plasma – Atomic Emission Spectroscopy and Inductively Coupled Plasma – Mass Spectroscopy,* Revision 2.0.

USEPA, September 2011, Region 4, Science and Ecosystem Support Division, Quality Assurance Section, MTSB, *Data Validation Standard Operating Procedures for Contract Laboratory Program Mercury Data By Cold Vapor Atomic Absorption,* Revision 2.0.

TABLE 1

Sample Summary Table
SCS Plant McDonough

						Analyses								
SDGs	***Field Identification***	***Collection Date***	***Lab Identification***	***Matrix***	***QC Samples***	**Field pH**	**Total Metals (EPA 6020B)**	**Cations (EPA 6010D)**	**Anions (EPA 300.0)**	**Total Mercury (EPA 7470A)**	**TDS (SM 2540C-2011)**	**Alkalinity (SM 2320B)**	**Radium-226 (EPA 9315)**	**Radium-228 (EPA 9320)**
92624376	DGWA-70A	9/7/2022	92624376001	WG	-	X	X	X	X	X	X	X	-	-
92624376	DGWA-71	9/7/2022	92624376002	WG	-	X	X	X	X	X	X	X	-	-
92624376	DGWA-53	9/8/2022	92624376003	WG	-	X	X	X	X	X	X	X	-	-
92624378	DGWA-70A	9/7/2022	92624378001	WG	-	-	-	-	-	-	-	-	X	X
92624378	DGWA-71	9/8/2022	92624378002	WG	-	-	-	-	-	-	-	-	X	X
92624378	DGWA-53	9/8/2022	92624378003	WG	-	-	-	-	-	-	-	-	X	X
92624372	DGWC-39	9/7/2022	92624372001	WG	-	X	X	X	X	X	X	X	-	-
92624372	DGWC-40	9/7/2022	92624372002	WG	-	X	X	X	X	X	X	X	-	-
92624372	DGWC-68A	9/7/2022	92624372003	WG	-	X	X	X	X	X	X	X	-	-
92624372	FB-1	9/7/2022	92624372004	WQ	FB (DGWC-39)	X	X	X	X	X	X	X	-	-
92624372	DUP-1	9/7/2022	92624372005	WG	FD (DGWC-40)	X	X	X	X	X	X	X	-	-
92624372	DGWC-69	9/7/2022	92624372006	WG	-	X	X	X	X	X	X	X	-	-
92624372	DGWC-67	9/8/2022	92624372007	WG	-	X	X	X	X	X	X	X	-	-
92624372	DGWC-121	9/8/2022	92624372008	WG	-	X	X	X	X	X	X	X	-	-
92624372	EB-1	9/8/2022	92624372009	WQ	EB (DGWC-67)	X	X	X	X	X	X	X	-	-
92624372	FB-2	9/8/2022	92624372010	WQ	FB (DGWC-121)	X	X	X	X	X	X	X	-	-
92624372	DGWC-37	9/8/2022	92624372011	WG	-	X	X	X	X	X	X	X	-	-
92624372	DGWC-38	9/12/2022	92624372012	WG	-	X	X	X	X	X	X	X	-	-
92624372	FB-3	9/12/2022	92624372013	WQ	FB (DGWC-38)	X	X	X	X	X	X	X	-	-
92624384	DGWC-39	9/7/2022	92624384001	WG	-	-	-	-	-	-	-	-	X	X
92624384	DGWC-40	9/7/2022	92624384002	WG	-	-	-	-	-	-	-	-	X	X
92624384	DGWC-68A	9/7/2022	92624384003	WG	-	-	-	-	-	-	-	-	X	X
92624384	FB-1	9/7/2022	92624384004	WQ	FB (DGWC-39)	-	-	-	-	-	-	-	X	X
92624384	DUP-1	9/7/2022	92624384005	WG	FD (DGWC-40)	-	-	-	-	-	-	-	X	X
92624384	DGWC-69	9/7/2022	92624384006	WG	-	-	-	-	-	-	-	-	X	X
92624384	DGWC-67	9/8/2022	92624384007	WG	-	-	-	-	-	-	-	-	X	X
92624384	DGWC-121	9/8/2022	92624384008	WG	-	-	-	-	-	-	-	-	X	X
92624384	EB-1	9/8/2022	92624384009	WQ	EB (DGWC-67)	-	-	-	-	-	-	-	X	X
92624384	FB-2	9/8/2022	92624384010	WQ	FB (DGWC-121)	-	-	-	-	-	-	-	X	X
92624384	DGWC-37	9/9/2022	92624384011	WG	-	-	-	-	-	-	-	-	X	X
92624384	DGWC-38	9/12/2022	92624384012	WG	-	-	-	-	-	-	-	-	X	X
92624384	FB-3	9/12/2022	92624384013	WQ	FB (DGWC-38)	-	-	-	-	-	-	-	X	X
92624373	B-105D	9/7/2022	92624373001	WG	-	X	X	X	X	X	X	X	-	-
92624373	B-112D	9/7/2022	92624373002	WG	-	X	X	X	X	X	X	X	-	-
92625181	B-113D	9/12/2022	92625181001	WG	-	X	X	X	X	X	X	X	-	-
92625181	EB-2	9/12/2022	92625181002	WQ	EB (B-113D)	X	X	X	X	X	X	X	-	-
92625217	B-113D	9/12/2022	92625217001	WG	-	-	-	-	-	-	-	-	X	X
92625217	EB-2	9/12/2022	92625217002	WQ	EB (B-113D)	-	-	-	-	-	-	-	X	X
92625217	B-105D	9/7/2022	92624383001	WG	-	-	-	-	-	-	-	-	X	X
92625217	B-112D	9/7/2022	92624383002	WG	-	-	-	-	-	-	-	-	X	X
92624373	B-100	9/8/2022	92624373003	WG	-	X	X	X	X	X	X	X	-	-
92624373	B-62	9/8/2022	92624373004	WG	-	X	X	X	X	X	X	X	-	-
92624383	B-100	9/8/2022	92624383003	WG	-	-	-	-	-	-	-	-	X	X
92624383	B-62	9/8/2022	92624383004	WG	-	-	-	-	-	-	-	-	X	X
92625189	B-90	9/13/2022	92625189001	WG	-	X	X	-	-	-	-	-	-	-
92625189	B-91	9/13/2022	92625189002	WG	-	X	X	-	-	-	-	-	-	-
92625189	B-95	9/13/2022	92625189003	WG	-	X	X	-	-	-	-	-	-	-
92625189	B-99	9/13/2022	92625189004	WG	-	X	X	-	-	-	-	-	-	-
92625189	B-119D	9/13/2022	92625189005	WG	-	X	X	X	X	X	X	X	-	-
92625189	Dup-3	9/13/2022	92625189006	WG	FD (B-119D)	-	X	X	X	X	X	X	-	-
92625189	B-96	9/14/2022	92625189007	WG	-	X	X	-	-	-	-	-	-	-
92625189	B-122D	9/14/2022	92625189008	WG	-	X	X	X	X	X	X	X	-	-
92625189	EB-4	9/14/2022	92625189009	WQ	EB (B-122D)	-	X	X	X	X	X	X	-	-
92625189	B-117D	9/14/2022	92625189010	WG	-	X	X	X	X	X	X	X	-	-
92625189	B-123D	9/14/2022	92625189011	WG	-	X	X	X	X	X	X	X	-	-
92625212	B-119D	9/12/2022	92625212001	WG	-	-	-	-	-	-	-	-	X	X
92625212	Dup-3	9/12/2022	92625212002	WG	FD (B-119D)	-	-	-	-	-	-	-	X	X
92625212	B-122D	9/14/2022	92625212003	WG	-	-	-	-	-	-	-	-	X	X
92625212	EB-4	9/14/2022	92625212004	WQ	EB (B-122D)	-	-	-	-	-	-	-	X	X
92625212	B-117D	9/15/2022	92625212005	WG	-	-	-	-	-	-	-	-	X	X
92625212	B-123D	9/20/2022	92625212006	WG	-	-	-	-	-	-	-	-	X	X
92624826	B-116D	9/8/2022	92624826001	WG	-	X	X	X	X	X	X	X	-	-
92624826	DUP-2	9/8/2022	92624826002	WG	FD (B-116D)	X	X	X	X	X	X	X	-	-
92624826	B-118	9/9/2022	92624826003	WG	-	X	X	X	X	X	X	X	-	-
92624832	B-116D	9/8/2022	92624832001	WG	-	-	-	-	-	-	-	-	X	X
92624832	DUP-2	9/8/2022	92624832002	WG	FD (B-116D)	-	-	-	-	-	-	-	X	X
92624832	B-118	9/9/2022	92624832003	WG	-	-	-	-	-	-	-	-	X	X

TABLE 1

Sample Summary Table
SCS Plant McDonough

						Analyses								
SDGs	***Field Identification***	***Collection Date***	***Lab Identification***	***Matrix***	***QC Samples***	**Field pH**	**Total Metals (EPA 6020B)**	**Cations (EPA 6010D)**	**Anions (EPA 300.0)**	**Total Mercury (EPA 7470A)**	**TDS (SM 2540C-2011)**	**Alkalinity (SM 2320B)**	**Radium-226 (EPA 9315)**	**Radium-228 (EPA 9320)**
92625185	B-79	9/12/2022	92625185001	WG	-	X	X	-	-	-	-	-	-	-
92625185	B-54	9/13/2022	92625185002	WG	-	X	X	-	-	-	-	-	-	-
92625185	B-64	9/13/2022	92625185003	WG	-	X	X	-	-	-	-	-	-	-
92625185	B-78	9/13/2022	92625185004	WG	-	X	X	-	-	-	-	-	-	-
92625185	B-76	9/13/2022	92625185005	WG	-	X	X	-	-	-	-	-	-	-
92625185	B-77	9/13/2022	92625185006	WG	-	X	X	-	-	-	-	-	-	-
92625185	B-63	9/14/2022	92625185007	WG	-	X	X	-	-	-	-	-	-	-
92625185	B-74	9/14/2022	92625185008	WG	-	X	X	-	-	-	-	-	-	-
92625185	B-66	9/16/2022	92625185009	WG	-	X	X	-	-	-	-	-	-	-
92625185	B-88	9/16/2022	92625185010	WG	-	X	X	-	-	-	-	-	-	-
92625185	B-82	9/16/2022	92625185011	WG	-	X	X	-	-	-	-	-	-	-
92633519	UT01_US	10/27/2022	92633519001	WS	-	-	X	X	X	-	X	X	-	-
92633519	UT02	10/27/2022	92633519002	WS	-	-	X	X	X	-	X	X	-	-
92633519	UT03	10/27/2022	92633519003	WS	-	-	X	X	X	-	X	X	-	-
92633519	UT01_DS	10/27/2022	92633519004	WS	-	-	X	X	X	-	X	X	-	-
92633519	CR-0.1	10/27/2022	92633519005	WS	-	-	X	X	X	-	X	X	-	-
92633519	CR+0.2	10/27/2022	92633519006	WS	-	-	X	X	X	-	X	X	-	-
92633519	CR+0.4	10/27/2022	92633519007	WS	-	-	X	X	X	-	X	X	-	-

Abbreviations:

SDG- Sample Delivery Group
QC - Quality Control
SM - Standard Method
WG - Groundwater
WQ - Water Quality control
WS - Surface Water
FD - Field Duplicate
TDS - Total Dissolved Solids

TABLE 2
Qualifier Summary Table
SCS Plant McDonough

SDG	*Sample Name*	*Constituent*	*New Result*	*New RL or MDC*	*Qualifier*	*Reason*
92624372	DGWC-37	Mercury	-	-	UJ	MS and RPD outside QC criteria
92624372	DGWC-67	TDS	-	-	J	Laboratory duplciate outside QC criteria
92624378	DGWA-53	Radium 228	-	0.814	U	Method blank contamination
92624378	DGWA-53	Total Radium	-	-	J+	Method blank contamination
92624384	DGWC-67	Radium 228	-	0.555	U	Equipment blank contamination
92624384	DGWC-121	Radium 228	-	1.64	U	Field blank contamination
92624384	DGWC-121	Total Radium	-	-	J+	Field blank contamination
92624383	B-62	Radium 228	-	1.33	U	Method blank contamination
92624383	B-62	Total Radium	-	-	J+	Method blank contamination
92633519	UT01_US	TDS	-	-	J	Inconsistent weight due to matrix interference
92633519	UT02	TDS	-	-	J	Inconsistent weight due to matrix interference
92633519	UT03	TDS	-	-	J	Inconsistent weight due to matrix interference
92633519	UT01_DS	TDS	-	-	J	Inconsistent weight due to matrix interference, laboratory duplicate contamination.
92633519	CR-0.1	TDS	-	-	J	Inconsistent weight due to matrix interference
92633519	CR+0.2	TDS	-	-	J	Inconsistent weight due to matrix interference

Abbreviations:
RL : Reporting limit
MDC : Minimum detectable concentration
SDG : Sample delivery group
TDS: Total Dissolved Solids

Qualifier
UJ: non-detect, estimated
J: estimated
J+: estimated, bias high
J-: estimated, bias low

APPENDIX B

Analytical Results, January-February 2023

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

July 28, 2023

Andrea McClure
WSP/Golder
5170 Peachtree Road
Building 100, Suite 300
Atlanta, GA 30341

RE: Project: Plant McD Background Monitorin
Pace Project No.: 92650179

Dear Andrea McClure:

Enclosed are the analytical results for sample(s) received by the laboratory on February 02, 2023. 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,

Bonnie Vang
bonnie.vang@pacelabs.com
(704)875-9092
Project Manager

Enclosures

cc: Stephen Benda, Southern Company
Daniela Herrera, Golder
Ben Hodges, Georgia Power-CCR
J. Shelby Mobley, Southern Company
Charles Norton, Southern Company
Dawn Prell, WSP USA E&I Inc_Atlanta
Yong Cheng Soo, WSP/Golder

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(770)734-4200

CERTIFICATIONS

Project: Plant McD Background Monitorin
Pace Project No.: 92650179

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
Virginia Certification #: 460204

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(770)734-4200

SAMPLE SUMMARY

Project: Plant McD Background Monitorin
Pace Project No.: 92650179

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92650179001	**MCD-DGWA-70A**	Water	01/31/23 16:20	02/02/23 11:36
92650179002	**MCD-DGWA-71**	Water	01/31/23 16:28	02/02/23 11:36
92650179003	**MCD-DGWA-53**	Water	02/01/23 12:50	02/02/23 11:36

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SAMPLE ANALYTE COUNT

Project: Plant McD Background Monitorin
Pace Project No.: 92650179

Lab ID	Sample ID	Method	Analysts	Analytes Reported
92650179001	**MCD-DGWA-70A**	EPA 6010D	MS	5
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
		SM 2320B-2011	SMS	3
		EPA 300.0 Rev 2.1 1993	CDC	3
92650179002	**MCD-DGWA-71**	EPA 6010D	MS	5
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
		SM 2320B-2011	SMS	3
		EPA 300.0 Rev 2.1 1993	CDC	3
92650179003	**MCD-DGWA-53**	EPA 6010D	MS	5
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	BTS	1
		SM 2320B-2011	SMS	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

REPORT OF LABORATORY ANALYSIS

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

SUMMARY OF DETECTION

Project: Plant McD Background Monitorin
Pace Project No.: 92650179

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92650179001	**MCD-DGWA-70A**					
	Performed by	Client			02/14/23 17:54	
	Collected Date	01/31/23			02/14/23 17:54	
	Collected Time	16:25			02/14/23 17:54	
	pH	5.59	Std. Units		02/14/23 17:54	
EPA 6010D	Iron	0.038J	mg/L	0.040	02/13/23 19:48	
EPA 6010D	Potassium	1.7	mg/L	0.20	02/13/23 19:48	
EPA 6010D	Sodium	3.5	mg/L	1.0	02/13/23 19:48	BC
EPA 6010D	Calcium	6.2	mg/L	1.0	02/13/23 19:48	
EPA 6010D	Magnesium	2.4	mg/L	0.050	02/13/23 19:48	
EPA 6020B	Barium	0.041	mg/L	0.0050	02/16/23 13:01	
EPA 6020B	Beryllium	0.000094J	mg/L	0.00050	02/16/23 13:01	
EPA 6020B	Boron	0.011J	mg/L	0.040	02/16/23 13:01	
SM 2540C-2015	Total Dissolved Solids	163	mg/L	25.0	02/03/23 15:50	
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	29.7	mg/L	5.0	02/04/23 17:39	
SM 2320B-2011	Alkalinity, Total as CaCO3	29.7	mg/L	5.0	02/04/23 17:39	
EPA 300.0 Rev 2.1 1993	Chloride	2.2	mg/L	1.0	02/06/23 18:03	
EPA 300.0 Rev 2.1 1993	Fluoride	0.053J	mg/L	0.10	02/06/23 18:03	
92650179002	**MCD-DGWA-71**					
	Performed by	Client			02/14/23 17:54	
	Collected Date	01/31/23			02/14/23 17:54	
	Collected Time	16:33			02/14/23 17:54	
	pH	5.78	Std. Units		02/14/23 17:54	
EPA 6010D	Potassium	0.73	mg/L	0.20	02/13/23 19:53	BC
EPA 6010D	Sodium	7.5	mg/L	1.0	02/13/23 19:53	
EPA 6010D	Calcium	5.7	mg/L	1.0	02/13/23 19:53	
EPA 6010D	Magnesium	0.79	mg/L	0.050	02/13/23 19:53	
EPA 6020B	Barium	0.028	mg/L	0.0050	02/16/23 13:07	
EPA 6020B	Beryllium	0.00011J	mg/L	0.00050	02/16/23 13:07	
EPA 6020B	Boron	0.0097J	mg/L	0.040	02/16/23 13:07	
EPA 6020B	Lithium	0.0014J	mg/L	0.030	02/16/23 13:07	
SM 2540C-2015	Total Dissolved Solids	87.0	mg/L	25.0	02/03/23 15:51	
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	20.3	mg/L	5.0	02/04/23 17:46	
SM 2320B-2011	Alkalinity, Total as CaCO3	20.3	mg/L	5.0	02/04/23 17:46	
EPA 300.0 Rev 2.1 1993	Chloride	7.3	mg/L	1.0	02/06/23 18:28	
EPA 300.0 Rev 2.1 1993	Fluoride	0.050J	mg/L	0.10	02/06/23 18:28	
EPA 300.0 Rev 2.1 1993	Sulfate	6.8	mg/L	1.0	02/06/23 18:28	
92650179003	**MCD-DGWA-53**					
	Performed by	Client			02/14/23 17:55	
	Collected Date	2/1/23			02/14/23 17:55	
	Collected Time	12:55			02/14/23 17:55	
	pH	6.42	Std. Units		02/14/23 17:55	
EPA 6010D	Iron	8.4	mg/L	0.040	02/13/23 19:58	
EPA 6010D	Potassium	3.3	mg/L	0.20	02/13/23 19:58	BC
EPA 6010D	Sodium	7.7	mg/L	1.0	02/13/23 19:58	
EPA 6010D	Calcium	14.1	mg/L	1.0	02/13/23 19:58	
EPA 6010D	Magnesium	4.6	mg/L	0.050	02/13/23 19:58	

REPORT OF LABORATORY ANALYSIS

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

SUMMARY OF DETECTION

Project: Plant McD Background Monitorin
Pace Project No.: 92650179

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92650179003	**MCD-DGWA-53**					
EPA 6020B	Arsenic	0.0029J	mg/L	0.0050	02/16/23 13:13	
EPA 6020B	Barium	0.089	mg/L	0.0050	02/16/23 13:13	
EPA 6020B	Beryllium	0.00016J	mg/L	0.00050	02/16/23 13:13	
EPA 6020B	Boron	0.051	mg/L	0.040	02/17/23 16:31	
EPA 6020B	Cadmium	0.00019J	mg/L	0.00050	02/16/23 13:13	
EPA 6020B	Cobalt	0.0080	mg/L	0.0050	02/16/23 13:13	
EPA 6020B	Lithium	0.0088J	mg/L	0.030	02/16/23 13:13	
EPA 6020B	Molybdenum	0.023	mg/L	0.010	02/16/23 13:13	
SM 2540C-2015	Total Dissolved Solids	116	mg/L	25.0	02/05/23 14:06	
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	75.1	mg/L	5.0	02/07/23 14:56	
SM 2320B-2011	Alkalinity, Total as CaCO3	75.1	mg/L	5.0	02/07/23 14:56	
EPA 300.0 Rev 2.1 1993	Chloride	1.9	mg/L	1.0	02/06/23 18:54	
EPA 300.0 Rev 2.1 1993	Fluoride	0.10	mg/L	0.10	02/06/23 18:54	
EPA 300.0 Rev 2.1 1993	Sulfate	13.3	mg/L	1.0	02/06/23 18:54	

REPORT OF LABORATORY ANALYSIS

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

PROJECT NARRATIVE

Project: Plant McD Background Monitorin
Pace Project No.: 92650179

Date: July 28, 2023

Georgia Power EQuIS Database Manager requested Pace Project Manager remove the sample matrix and date from the Sample IDs. This update ensures sample nomenclature is followed on final PDF and EDD for successful upload of laboratory data into the Georgia Power EQuIS database

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PROJECT NARRATIVE

Project: Plant McD Background Monitorin
Pace Project No.: 92650179

Method: **EPA 6010D**
Description: 6010D ATL ICP
Client: Georgia Power
Date: July 28, 2023

General Information:
3 samples were analyzed for EPA 6010D by Pace Analytical Services Peachtree Corners, GA. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3010A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: Plant McD Background Monitorin
Pace Project No.: 92650179

Method: **EPA 6020B**
Description: 6020 MET ICPMS
Client: Georgia Power
Date: July 28, 2023

General Information:
3 samples were analyzed for EPA 6020B by Pace Analytical Services Peachtree Corners, GA. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3005A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: Plant McD Background Monitorin
Pace Project No.: 92650179

Method: **EPA 7470A**
Description: 7470 Mercury
Client: Georgia Power
Date: July 28, 2023

General Information:
3 samples were analyzed for EPA 7470A by Pace Analytical Services Peachtree Corners, GA. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 7470A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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(770)734-4200

PROJECT NARRATIVE

Project: Plant McD Background Monitorin
Pace Project No.: 92650179

Method: **SM 2540C-2015**
Description: 2540C Total Dissolved Solids
Client: Georgia Power
Date: July 28, 2023

General Information:
3 samples were analyzed for SM 2540C-2015 by Pace Analytical Services Peachtree Corners, GA. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

QC Batch: 753740

D6: The precision between the sample and sample duplicate exceeded laboratory control limits.

- DUP (Lab ID: 3916055)
  - Total Dissolved Solids

Additional Comments:

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PROJECT NARRATIVE

Project: Plant McD Background Monitorin
Pace Project No.: 92650179

Method: **SM 2320B-2011**
Description: 2320B Alkalinity
Client: Georgia Power
Date: July 28, 2023

General Information:
3 samples were analyzed for SM 2320B-2011 by Pace Analytical Services Asheville. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 753922

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 92649235035,92649235036

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

- MS (Lab ID: 3916728)
  - Alkalinity, Total as CaCO3
- MS (Lab ID: 3916730)
  - Alkalinity, Total as CaCO3
- MSD (Lab ID: 3916729)
  - Alkalinity, Total as CaCO3

Additional Comments:

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PROJECT NARRATIVE

Project: Plant McD Background Monitorin
Pace Project No.: 92650179

Method: **EPA 300.0 Rev 2.1 1993**
Description: 300.0 IC Anions 28 Days
Client: Georgia Power
Date: July 28, 2023

General Information:
3 samples were analyzed for EPA 300.0 Rev 2.1 1993 by Pace Analytical Services Asheville. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 753991

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 92650019010,92650181004

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

- MS (Lab ID: 3916902)
  - Fluoride
- MS (Lab ID: 3916904)
  - Sulfate
- MSD (Lab ID: 3916903)
  - Fluoride
- MSD (Lab ID: 3916905)
  - Sulfate

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

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ANALYTICAL RESULTS

Project: Plant McD Background Monitorin
Pace Project No.: 92650179

Sample: MCD-DGWA-70A **Lab ID: 92650179001** Collected: 01/31/23 16:20 Received: 02/02/23 11:36 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Monitoring Well Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**Client**				1		02/14/23 17:54		
Collected Date	**01/31/23**				1		02/14/23 17:54		
Collected Time	**16:25**				1		02/14/23 17:54		
pH	**5.59**	Std. Units			1		02/14/23 17:54		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Iron	**0.038J**	mg/L	0.040	0.025	1	02/10/23 14:52	02/13/23 19:48	7439-89-6	
Potassium	**1.7**	mg/L	0.20	0.15	1	02/10/23 14:52	02/13/23 19:48	7440-09-7	
Sodium	**3.5**	mg/L	1.0	0.58	1	02/10/23 14:52	02/13/23 19:48	7440-23-5	BC
Calcium	**6.2**	mg/L	1.0	0.12	1	02/10/23 14:52	02/13/23 19:48	7440-70-2	
Magnesium	**2.4**	mg/L	0.050	0.012	1	02/10/23 14:52	02/13/23 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	02/15/23 10:18	02/16/23 13:01	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0022	1	02/15/23 10:18	02/16/23 13:01	7440-38-2	
Barium	**0.041**	mg/L	0.0050	0.00067	1	02/15/23 10:18	02/16/23 13:01	7440-39-3	
Beryllium	**0.000094J**	mg/L	0.00050	0.000054	1	02/15/23 10:18	02/16/23 13:01	7440-41-7	
Boron	**0.011J**	mg/L	0.040	0.0086	1	02/15/23 10:18	02/16/23 13:01	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	02/15/23 10:18	02/16/23 13:01	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	02/15/23 10:18	02/16/23 13:01	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	02/15/23 10:18	02/16/23 13:01	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	02/15/23 10:18	02/16/23 13:01	7439-92-1	
Lithium	ND	mg/L	0.030	0.00073	1	02/15/23 10:18	02/16/23 13:01	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	02/15/23 10:18	02/16/23 13:01	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	02/15/23 10:18	02/16/23 13:01	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	02/15/23 10:18	02/16/23 13:01	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	02/08/23 15:40	02/09/23 12:47	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**163**	mg/L	25.0	25.0	1		02/03/23 15:50		
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville								
Alkalinity,Bicarbonate (CaCO3)	**29.7**	mg/L	5.0	5.0	1		02/04/23 17:39		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		02/04/23 17:39		
Alkalinity, Total as CaCO3	**29.7**	mg/L	5.0	5.0	1		02/04/23 17:39		

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ANALYTICAL RESULTS

Project: Plant McD Background Monitorin
Pace Project No.: 92650179

Sample: MCD-DGWA-70A **Lab ID: 92650179001** Collected: 01/31/23 16:20 Received: 02/02/23 11:36 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		02/06/23 18:03	16887-00-6	
Fluoride	**0.053J**	mg/L	0.10	0.050	1		02/06/23 18:03	16984-48-8	
Sulfate	ND	mg/L	1.0	0.50	1		02/06/23 18:03	14808-79-8	

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ANALYTICAL RESULTS

Project: Plant McD Background Monitorin
Pace Project No.: 92650179

Sample: MCD-DGWA-71 **Lab ID: 92650179002** Collected: 01/31/23 16:28 Received: 02/02/23 11:36 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Monitoring Well Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**Client**				1		02/14/23 17:54		
Collected Date	**01/31/23**				1		02/14/23 17:54		
Collected Time	**16:33**				1		02/14/23 17:54		
pH	**5.78**	Std. Units			1		02/14/23 17:54		
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	02/10/23 14:52	02/13/23 19:53	7439-89-6	
Potassium	**0.73**	mg/L	0.20	0.15	1	02/10/23 14:52	02/13/23 19:53	7440-09-7	BC
Sodium	**7.5**	mg/L	1.0	0.58	1	02/10/23 14:52	02/13/23 19:53	7440-23-5	
Calcium	**5.7**	mg/L	1.0	0.12	1	02/10/23 14:52	02/13/23 19:53	7440-70-2	
Magnesium	**0.79**	mg/L	0.050	0.012	1	02/10/23 14:52	02/13/23 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	02/15/23 10:18	02/16/23 13:07	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0022	1	02/15/23 10:18	02/16/23 13:07	7440-38-2	
Barium	**0.028**	mg/L	0.0050	0.00067	1	02/15/23 10:18	02/16/23 13:07	7440-39-3	
Beryllium	**0.00011J**	mg/L	0.00050	0.000054	1	02/15/23 10:18	02/16/23 13:07	7440-41-7	
Boron	**0.0097J**	mg/L	0.040	0.0086	1	02/15/23 10:18	02/16/23 13:07	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	02/15/23 10:18	02/16/23 13:07	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	02/15/23 10:18	02/16/23 13:07	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	02/15/23 10:18	02/16/23 13:07	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	02/15/23 10:18	02/16/23 13:07	7439-92-1	
Lithium	**0.0014J**	mg/L	0.030	0.00073	1	02/15/23 10:18	02/16/23 13:07	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	02/15/23 10:18	02/16/23 13:07	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	02/15/23 10:18	02/16/23 13:07	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	02/15/23 10:18	02/16/23 13:07	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	02/08/23 15:40	02/09/23 12:50	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**87.0**	mg/L	25.0	25.0	1		02/03/23 15:51		
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville								
Alkalinity,Bicarbonate (CaCO3)	**20.3**	mg/L	5.0	5.0	1		02/04/23 17:46		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		02/04/23 17:46		
Alkalinity, Total as CaCO3	**20.3**	mg/L	5.0	5.0	1		02/04/23 17:46		

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ANALYTICAL RESULTS

Project: Plant McD Background Monitorin
Pace Project No.: 92650179

Sample: MCD-DGWA-71 **Lab ID: 92650179002** Collected: 01/31/23 16:28 Received: 02/02/23 11:36 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	**7.3**	mg/L	1.0	0.60	1		02/06/23 18:28	16887-00-6	
Fluoride	**0.050J**	mg/L	0.10	0.050	1		02/06/23 18:28	16984-48-8	
Sulfate	**6.8**	mg/L	1.0	0.50	1		02/06/23 18:28	14808-79-8	

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ANALYTICAL RESULTS

Project: Plant McD Background Monitorin
Pace Project No.: 92650179

Sample: MCD-DGWA-53 **Lab ID: 92650179003** Collected: 02/01/23 12:50 Received: 02/02/23 11:36 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Monitoring Well Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**Client**				1		02/14/23 17:55		
Collected Date	**2/1/23**				1		02/14/23 17:55		
Collected Time	**12:55**				1		02/14/23 17:55		
pH	**6.42**	Std. Units			1		02/14/23 17:55		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Iron	**8.4**	mg/L	0.040	0.025	1	02/10/23 14:52	02/13/23 19:58	7439-89-6	
Potassium	**3.3**	mg/L	0.20	0.15	1	02/10/23 14:52	02/13/23 19:58	7440-09-7	BC
Sodium	**7.7**	mg/L	1.0	0.58	1	02/10/23 14:52	02/13/23 19:58	7440-23-5	
Calcium	**14.1**	mg/L	1.0	0.12	1	02/10/23 14:52	02/13/23 19:58	7440-70-2	
Magnesium	**4.6**	mg/L	0.050	0.012	1	02/10/23 14:52	02/13/23 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	02/15/23 10:18	02/16/23 13:13	7440-36-0	
Arsenic	**0.0029J**	mg/L	0.0050	0.0022	1	02/15/23 10:18	02/16/23 13:13	7440-38-2	
Barium	**0.089**	mg/L	0.0050	0.00067	1	02/15/23 10:18	02/16/23 13:13	7440-39-3	
Beryllium	**0.00016J**	mg/L	0.00050	0.000054	1	02/15/23 10:18	02/16/23 13:13	7440-41-7	
Boron	**0.051**	mg/L	0.040	0.0086	1	02/15/23 10:18	02/17/23 16:31	7440-42-8	
Cadmium	**0.00019J**	mg/L	0.00050	0.00011	1	02/15/23 10:18	02/16/23 13:13	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	02/15/23 10:18	02/16/23 13:13	7440-47-3	
Cobalt	**0.0080**	mg/L	0.0050	0.00039	1	02/15/23 10:18	02/16/23 13:13	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	02/15/23 10:18	02/16/23 13:13	7439-92-1	
Lithium	**0.0088J**	mg/L	0.030	0.00073	1	02/15/23 10:18	02/16/23 13:13	7439-93-2	
Molybdenum	**0.023**	mg/L	0.010	0.00074	1	02/15/23 10:18	02/16/23 13:13	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	02/15/23 10:18	02/16/23 13:13	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	02/15/23 10:18	02/16/23 13:13	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	02/08/23 15:40	02/09/23 12:52	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**116**	mg/L	25.0	25.0	1		02/05/23 14:06		
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville								
Alkalinity,Bicarbonate (CaCO3)	**75.1**	mg/L	5.0	5.0	1		02/07/23 14:56		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		02/07/23 14:56		
Alkalinity, Total as CaCO3	**75.1**	mg/L	5.0	5.0	1		02/07/23 14:56		

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ANALYTICAL RESULTS

Project: Plant McD Background Monitorin
Pace Project No.: 92650179

Sample: MCD-DGWA-53 **Lab ID: 92650179003** Collected: 02/01/23 12:50 Received: 02/02/23 11:36 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	**1.9**	mg/L	1.0	0.60	1		02/06/23 18:54	16887-00-6	
Fluoride	**0.10**	mg/L	0.10	0.050	1		02/06/23 18:54	16984-48-8	
Sulfate	**13.3**	mg/L	1.0	0.50	1		02/06/23 18:54	14808-79-8	

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QUALITY CONTROL DATA

Project: Plant McD Background Monitorin
Pace Project No.: 92650179

QC Batch: 755238
QC Batch Method: EPA 3010A
Analysis Method: EPA 6010D
Analysis Description: 6010D ATL
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92650179001, 92650179002, 92650179003

METHOD BLANK: 3924100 Matrix: Water
Associated Lab Samples: 92650179001, 92650179002, 92650179003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium	mg/L	ND	1.0	0.12	02/13/23 18:46	
Iron	mg/L	ND	0.040	0.025	02/13/23 18:46	
Magnesium	mg/L	ND	0.050	0.012	02/13/23 18:46	
Potassium	mg/L	ND	0.20	0.15	02/14/23 13:53	
Sodium	mg/L	ND	1.0	0.58	02/13/23 18:46	

LABORATORY CONTROL SAMPLE: 3924101

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium	mg/L	1	0.94J	94	80-120	
Iron	mg/L	1	0.93	93	80-120	
Magnesium	mg/L	1	0.96	96	80-120	
Potassium	mg/L	1	1.0	104	80-120	
Sodium	mg/L	1	0.99J	99	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3924102 3924103

Parameter	Units	92650428004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Calcium	mg/L	708J ug/L	1	1	1.7	1.7	99	100	75-125	0	20	
Iron	mg/L	1150 ug/L	1	1	2.2	2.1	104	91	75-125	6	20	
Magnesium	mg/L	295 ug/L	1	1	1.3	1.3	101	98	75-125	3	20	
Potassium	mg/L	403 ug/L	1	1	1.5	1.4	105	95	75-125	7	20	
Sodium	mg/L	3610 ug/L	1	1	4.7	4.6	108	102	75-125	1	20	

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

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QUALITY CONTROL DATA

Project: Plant McD Background Monitorin
Pace Project No.: 92650179

QC Batch: 755857
QC Batch Method: EPA 3005A
Analysis Method: EPA 6020B
Analysis Description: 6020 MET
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92650179001, 92650179002, 92650179003

METHOD BLANK: 3927212 Matrix: Water
Associated Lab Samples: 92650179001, 92650179002, 92650179003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	ND	0.0030	0.00078	02/16/23 12:50	
Arsenic	mg/L	ND	0.0050	0.0022	02/16/23 12:50	
Barium	mg/L	ND	0.0050	0.00067	02/16/23 12:50	
Beryllium	mg/L	ND	0.00050	0.000054	02/16/23 12:50	
Boron	mg/L	ND	0.040	0.0086	02/16/23 12:50	
Cadmium	mg/L	ND	0.00050	0.00011	02/16/23 12:50	
Chromium	mg/L	ND	0.0050	0.0011	02/16/23 12:50	
Cobalt	mg/L	ND	0.0050	0.00039	02/16/23 12:50	
Lead	mg/L	ND	0.0010	0.00089	02/16/23 12:50	
Lithium	mg/L	ND	0.030	0.00073	02/16/23 12:50	
Molybdenum	mg/L	ND	0.010	0.00074	02/16/23 12:50	
Selenium	mg/L	ND	0.0050	0.0014	02/16/23 12:50	
Thallium	mg/L	ND	0.0010	0.00018	02/16/23 12:50	

LABORATORY CONTROL SAMPLE: 3927213

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.1	0.11	107	80-120	
Arsenic	mg/L	0.1	0.099	99	80-120	
Barium	mg/L	0.1	0.098	98	80-120	
Beryllium	mg/L	0.1	0.096	96	80-120	
Boron	mg/L	1	0.99	99	80-120	
Cadmium	mg/L	0.1	0.096	96	80-120	
Chromium	mg/L	0.1	0.10	100	80-120	
Cobalt	mg/L	0.1	0.098	98	80-120	
Lead	mg/L	0.1	0.099	99	80-120	
Lithium	mg/L	0.1	0.097	97	80-120	
Molybdenum	mg/L	0.1	0.10	101	80-120	
Selenium	mg/L	0.1	0.098	98	80-120	
Thallium	mg/L	0.1	0.098	98	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3927214 3927215

Parameter	Units	92650179003 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	0.092	111	91	75-125	19	20	
Arsenic	mg/L	0.0029J	0.1	0.1	0.11	0.098	104	95	75-125	9	20	

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REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: Plant McD Background Monitorin
Pace Project No.: 92650179

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3927214 3927215

Parameter	Units	92650179003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Barium	mg/L	0.089	0.1	0.1	0.19	0.19	102	97	75-125	3	20	
Beryllium	mg/L	0.00016J	0.1	0.1	0.10	0.097	105	97	75-125	7	20	
Boron	mg/L	0.051	1	1	1.1	1.0	108	99	75-125	8	20	
Cadmium	mg/L	0.00019J	0.1	0.1	0.10	0.096	102	96	75-125	6	20	
Chromium	mg/L	ND	0.1	0.1	0.11	0.10	111	99	75-125	12	20	
Cobalt	mg/L	0.0080	0.1	0.1	0.12	0.11	108	98	75-125	9	20	
Lead	mg/L	ND	0.1	0.1	0.10	0.097	102	97	75-125	5	20	
Lithium	mg/L	0.0088J	0.1	0.1	0.12	0.11	107	99	75-125	8	20	
Molybdenum	mg/L	0.023	0.1	0.1	0.13	0.12	111	102	75-125	7	20	
Selenium	mg/L	ND	0.1	0.1	0.10	0.096	103	96	75-125	7	20	
Thallium	mg/L	ND	0.1	0.1	0.10	0.098	102	98	75-125	4	20	

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QUALITY CONTROL DATA

Project: Plant McD Background Monitorin
Pace Project No.: 92650179

QC Batch: 754635
QC Batch Method: EPA 7470A
Analysis Method: EPA 7470A
Analysis Description: 7470 Mercury
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92650179001, 92650179002, 92650179003

METHOD BLANK: 3920549 Matrix: Water
Associated Lab Samples: 92650179001, 92650179002, 92650179003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	ND	0.00020	0.00013	02/09/23 11:41	

LABORATORY CONTROL SAMPLE: 3920550

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.0025	0.0023	92	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3920551 3920552

Parameter	Units	92649377001 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	3	20	

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QUALITY CONTROL DATA

Project: Plant McD Background Monitorin
Pace Project No.: 92650179

QC Batch: 753740
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: 92650179001, 92650179002

METHOD BLANK: 3916052 Matrix: Water
Associated Lab Samples: 92650179001, 92650179002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	25.0	25.0	02/03/23 15:47	

LABORATORY CONTROL SAMPLE: 3916053

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	413	103	80-120	

SAMPLE DUPLICATE: 3916054

Parameter	Units	92649885002 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	78.0	76.0	3	10	

SAMPLE DUPLICATE: 3916055

Parameter	Units	92649923015 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	76.0	103	30	10	D6

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QUALITY CONTROL DATA

Project: Plant McD Background Monitorin
Pace Project No.: 92650179

QC Batch: 753832
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: 92650179003

METHOD BLANK: 3916393 Matrix: Water
Associated Lab Samples: 92650179003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	25.0	25.0	02/05/23 14:03	

LABORATORY CONTROL SAMPLE: 3916394

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	382	96	80-120	

SAMPLE DUPLICATE: 3916858

Parameter	Units	92649872010 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	67.0	69.0	3	10	

SAMPLE DUPLICATE: 3916859

Parameter	Units	92650181004 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	536	543	1	10	

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QUALITY CONTROL DATA

Project: Plant McD Background Monitorin
Pace Project No.: 92650179

QC Batch: 753922
QC Batch Method: SM 2320B-2011
Analysis Method: SM 2320B-2011
Analysis Description: 2320B Alkalinity
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92650179001, 92650179002

METHOD BLANK: 3916725 Matrix: Water
Associated Lab Samples: 92650179001, 92650179002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Alkalinity, Total as CaCO3	mg/L	ND	5.0	5.0	02/04/23 16:09	
Alkalinity,Bicarbonate (CaCO3)	mg/L	ND	5.0	5.0	02/04/23 16:09	
Alkalinity,Carbonate (CaCO3)	mg/L	ND	5.0	5.0	02/04/23 16:09	

LABORATORY CONTROL SAMPLE: 3916726

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	50	49.6	99	80-120	

LABORATORY CONTROL SAMPLE: 3916727

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	50	49.7	99	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3916728 3916729

Parameter	Units	92649235035 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	214	50	50	284	279	141	130	80-120	2	25	M1

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3916730 3916731

Parameter	Units	92649235036 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	160	50	50	222	218	124	117	80-120	2	25	M1

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QUALITY CONTROL DATA

Project: Plant McD Background Monitorin
Pace Project No.: 92650179

QC Batch: 754277
QC Batch Method: SM 2320B-2011
Analysis Method: SM 2320B-2011
Analysis Description: 2320B Alkalinity
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92650179003

METHOD BLANK: 3918411 Matrix: Water
Associated Lab Samples: 92650179003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Alkalinity, Total as CaCO3	mg/L	ND	5.0	5.0	02/07/23 13:23	
Alkalinity,Bicarbonate (CaCO3)	mg/L	ND	5.0	5.0	02/07/23 13:23	
Alkalinity,Carbonate (CaCO3)	mg/L	ND	5.0	5.0	02/07/23 13:23	

LABORATORY CONTROL SAMPLE: 3918412

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	50	51.0	102	80-120	

LABORATORY CONTROL SAMPLE: 3918413

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	50	52.1	104	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3918414 3918415

Parameter	Units	92650183003 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	39.8	50	50	91.7	94.4	104	109	80-120	3	25	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3918416 3918417

Parameter	Units	92650183004 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	50.6	51.1	98	99	80-120	1	25	

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QUALITY CONTROL DATA

Project: Plant McD Background Monitorin
Pace Project No.: 92650179

QC Batch: 753991
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: 92650179001, 92650179002, 92650179003

METHOD BLANK: 3916900 Matrix: Water
Associated Lab Samples: 92650179001, 92650179002, 92650179003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.60	02/06/23 14:36	
Fluoride	mg/L	ND	0.10	0.050	02/06/23 14:36	
Sulfate	mg/L	ND	1.0	0.50	02/06/23 14:36	

LABORATORY CONTROL SAMPLE: 3916901

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	53.8	108	90-110	
Fluoride	mg/L	2.5	2.7	109	90-110	
Sulfate	mg/L	50	53.9	108	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3916902 3916903

Parameter	Units	92650019010 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	4.7	50	50	55.5	56.6	102	104	90-110	2	10	
Fluoride	mg/L	2.7	2.5	2.5	4.8	4.8	87	86	90-110	0	10	M1
Sulfate	mg/L	97.3	50	50	146	144	97	94	90-110	1	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3916904 3916905

Parameter	Units	92650181004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	19.2	50	50	70.5	71.4	102	104	90-110	1	10	
Fluoride	mg/L	ND	2.5	2.5	2.6	2.7	103	105	90-110	2	10	
Sulfate	mg/L	309	50	50	353	352	89	86	90-110	0	10	M1

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QUALIFIERS

Project: Plant McD Background Monitorin
Pace Project No.: 92650179

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.
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.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Plant McD Background Monitorin
Pace Project No.: 92650179

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92650179001	**MCD-DGWA-70A**				
92650179002	**MCD-DGWA-71**				
92650179003	**MCD-DGWA-53**				
92650179001	**MCD-DGWA-70A**	EPA 3010A	755238	EPA 6010D	755286
92650179002	**MCD-DGWA-71**	EPA 3010A	755238	EPA 6010D	755286
92650179003	**MCD-DGWA-53**	EPA 3010A	755238	EPA 6010D	755286
92650179001	**MCD-DGWA-70A**	EPA 3005A	755857	EPA 6020B	756083
92650179002	**MCD-DGWA-71**	EPA 3005A	755857	EPA 6020B	756083
92650179003	**MCD-DGWA-53**	EPA 3005A	755857	EPA 6020B	756083
92650179001	**MCD-DGWA-70A**	EPA 7470A	754635	EPA 7470A	754885
92650179002	**MCD-DGWA-71**	EPA 7470A	754635	EPA 7470A	754885
92650179003	**MCD-DGWA-53**	EPA 7470A	754635	EPA 7470A	754885
92650179001	**MCD-DGWA-70A**	SM 2540C-2015	753740		
92650179002	**MCD-DGWA-71**	SM 2540C-2015	753740		
92650179003	**MCD-DGWA-53**	SM 2540C-2015	753832		
92650179001	**MCD-DGWA-70A**	SM 2320B-2011	753922		
92650179002	**MCD-DGWA-71**	SM 2320B-2011	753922		
92650179003	**MCD-DGWA-53**	SM 2320B-2011	754277		
92650179001	**MCD-DGWA-70A**	EPA 300.0 Rev 2.1 1993	753991		
92650179002	**MCD-DGWA-71**	EPA 300.0 Rev 2.1 1993	753991		
92650179003	**MCD-DGWA-53**	EPA 300.0 Rev 2.1 1993	753991		

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Pace	DC#_Title: ENV-FRM-HUN1-0083 v02_Sample Condition Upon Receipt
	Effective Date: 11/14/2022

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

Sample Condition Upon Receipt

Client Name: GA Power

Project #:

WO# : 92650179

92650179

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

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

Date/Initials Person Examining Contents: 2/2/23 CH

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: 3.1 Correction Factor: Add/Subtract (°C) +0.0

Cooler Temp Corrected (°C): 3.1

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 SERVICES

DC#_Title: ENV-FRM-HUN1-0083 v02_Sample Condition Upon Receipt

Effective Date: 11/14/2022

***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**

*****Check all unpreserved Nitrates for chlorine**

Project # **WO#: 92650179**

PM: BV **Due Date: 02/16/23**

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)	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)	DG94-40 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)	DG9V-40 mL VOA H3PO4 (N/A)	KP7U-50 mL Plastic Unpreserved (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	BP3R-250 mL Plastic (NH2)2SO4 (9.3-9.7)	AG0U-100 mL Amber Unpreserved (N/A) (Cl-)	VSGU-20 mL Scintillation vials (N/A)	DG9U-40 mL Amber Unpreserved vials (N/A)
1		2	1			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 DENR Certification Office (i.e. Out of hold, incorrect preservative, out of temp, incorrect containers.

Pace Analytical

CHAIN-OF-CUSTODY / Analytical Request Document

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

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:	Lauren Coker	Attention:	scsinvoices@southernco.com
Address:	2480 Maner Road	Copy To:	Golder	Company Name:	
	Atlanta, GA 30339			Address:	
Email:	laucoker@southernco.com	Purchase Order #:		Pace Quote:	
Phone:	(470) 620-6176 Fax:	Project Name:	Plant McD Background Monitoring Well Network	Pace Project Manager:	Nicole D'Oleo
Requested Due Date:	10 Day TAT	Project #:	GL166849622	Pace Profile #:	

Regulatory Agency	
State / Location	GA

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID (One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique)	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	DATE	TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H2SO4	HNO3 + Ice	HCl	NaOH + Zn Acetate	Na2S2O3	Methanol	Other	Analyses Test Y/N	App III/IV + Mg, Na, K, Fe	Cl, F, SO4	Radium 9513/9320	TDS	Alkalinity	Fe Total, Fe 3+ (Ferric calculation)	Ferrous Iron			Residual Chlorine (Y/N)	92650179
	Analyses Test															N	N	N	N	N	N					
1	MCD-DGWA-70A-WG-20230131	WG	G	1/31/23	16:20		6	3		3						X	X	X	X	X	X	X				pH = 5.59, Fe2 = 0.0 mg/L (Fe2 analyzed 1/31/23 at 16:25) 001
2	MCD-DGWA-71-WG-20230131	WG	G	1/31/23	16:28		6	3		3						X	X	X	X	X	X	X				pH = 5.78, Fe2 = 0.0 mg/L (Fe2 analyzed 1/31/23 at 16:33) 002
3	MCD-DGWA-53-WG-20230201	WG	G	2/1/23	12:50		6	3		3						X	X	X	X	X	X	X				pH = 6.42, Fe2 = 3.2 mg/L (Fe2 analyzed 2/1/23 at 12:55) 003
4																										
6																										
7																										
8																										
9																										
10																										
11																										
12																										
13																										
14																										

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	SAMPLE CONDITIONS
Task Code = MCD-CCR-ASSMT-2023S1	[signature]	2/2/23	1055	M. BATH	2-2-23	
	M. BATH	2-2-23	11:36	[signature]	2/2/23 11:36	

DATE Signed:

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 20, 2023

Andrea McClure
WSP/Golder
5170 Peachtree Road
Building 100, Suite 300
Atlanta, GA 30341

RE: Project: Plant McD Background Monit RAD
Pace Project No.: 92650185

Dear Andrea McClure:

Enclosed are the analytical results for sample(s) received by the laboratory on February 02, 2023. 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,

Bonnie Vang
bonnie.vang@pacelabs.com
(704)875-9092
Project Manager

Enclosures

cc: Joju Abraham, Georgia Power-CCR
Stephen Benda, Southern Company
Noelia Gangi, Georgia Power
Daniela Herrera, Golder
Ben Hodges, Georgia Power-CCR
Kristen Jurinko
Laura Midkiff, Georgia Power
J. Shelby Mobley, Southern Company
Charles Norton, Southern Company
Dawn Prell, WSP USA E&I Inc_Atlanta
Michael Smilley, Georgia Power
Yong Cheng Soo, WSP/Golder
Tina Sullivan, ERM

REPORT OF LABORATORY ANALYSIS

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CERTIFICATIONS

Project: Plant McD Background Monit RAD
Pace Project No.: 92650185

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: Plant McD Background Monit RAD
Pace Project No.: 92650185

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92650185001	**MCD-DGWA-70A**	Water	01/31/23 16:20	02/02/23 11:36
92650185002	**MCD-DGWA-71**	Water	01/31/23 16:28	02/02/23 11:36
92650185003	**MCD-DGWA-53**	Water	02/01/23 12:50	02/02/23 11:36

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SAMPLE ANALYTE COUNT

Project: Plant McD Background Monit RAD
Pace Project No.: 92650185

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92650185001	**MCD-DGWA-70A**	EPA 9315	RMS	1	PASI-PA
		EPA 9320	ZPC	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92650185002	**MCD-DGWA-71**	EPA 9315	RMS	1	PASI-PA
		EPA 9320	ZPC	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92650185003	**MCD-DGWA-53**	EPA 9315	RMS	1	PASI-PA
		EPA 9320	ZPC	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA

PASI-PA = Pace Analytical Services - Greensburg

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PROJECT NARRATIVE

Project: Plant McD Background Monit RAD
Pace Project No.: 92650185

Date: March 20, 2023

Georgia Power EQuIS Database Manager requested Pace Project Manager remove the sample matrix and date from the Sample IDs. This update ensures sample nomenclature is followed on final PDF and EDD for successful upload of laboratory data into the Georgia Power EQuIS database.

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PROJECT NARRATIVE

Project: Plant McD Background Monit RAD
Pace Project No.: 92650185

Method: **EPA 9315**
Description: 9315 Total Radium
Client: Georgia Power
Date: March 20, 2023

General Information:
3 samples were analyzed for EPA 9315 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: Plant McD Background Monit RAD
Pace Project No.: 92650185

Method: **EPA 9320**
Description: 9320 Radium 228
Client: Georgia Power
Date: March 20, 2023

General Information:
3 samples were analyzed for EPA 9320 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: Plant McD Background Monit RAD
Pace Project No.: 92650185

Method: **Total Radium Calculation**
Description: Total Radium 228+226
Client: Georgia Power
Date: March 20, 2023

General Information:
3 samples were analyzed for Total Radium Calculation by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant McD Background Monit RAD
Pace Project No.: 92650185

Sample: MCD-DGWA-70A **Lab ID: 92650185001** Collected: 01/31/23 16:20 Received: 02/02/23 11:36 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	**0.102 ± 0.127 (0.255) C:99% T:NA**	pCi/L	02/17/23 18:50	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.314 ± 0.243 (0.468) C:84% T:94%**	pCi/L	02/14/23 13:14	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.416 ± 0.370 (0.723)**	pCi/L	02/21/23 11:36	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant McD Background Monit RAD
Pace Project No.: 92650185

Sample: MCD-DGWA-71 **Lab ID: 92650185002** Collected: 01/31/23 16:28 Received: 02/02/23 11:36 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	**0.0405 ± 0.111 (0.271) C:100% T:NA**	pCi/L	02/17/23 19:33	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.273 ± 0.258 (0.525) C:83% T:96%**	pCi/L	02/14/23 13:14	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.314 ± 0.369 (0.796)**	pCi/L	02/21/23 11:36	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant McD Background Monit RAD
Pace Project No.: 92650185

Sample: MCD-DGWA-53 **Lab ID: 92650185003** Collected: 02/01/23 12:50 Received: 02/02/23 11:36 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	**0.982 ± 0.335 (0.291) C:99% T:NA**	pCi/L	02/17/23 19:34	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.942 ± 0.428 (0.700) C:77% T:85%**	pCi/L	02/14/23 16:29	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.92 ± 0.763 (0.991)**	pCi/L	02/21/23 11:36	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL - RADIOCHEMISTRY

Project: Plant McD Background Monit RAD
Pace Project No.: 92650185

QC Batch: 565150
QC Batch Method: EPA 9320
Analysis Method: EPA 9320
Analysis Description: 9320 Radium 228
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92650185001, 92650185002, 92650185003

METHOD BLANK: 2743952 Matrix: Water
Associated Lab Samples: 92650185001, 92650185002, 92650185003

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.323 ± 0.277 (0.553) C:86% T:88%	pCi/L	02/14/23 13:14	

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

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL - RADIOCHEMISTRY

Project: Plant McD Background Monit RAD
Pace Project No.: 92650185

QC Batch: 565151
QC Batch Method: EPA 9315
Analysis Method: EPA 9315
Analysis Description: 9315 Total Radium
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92650185001, 92650185002, 92650185003

METHOD BLANK: 2743953 Matrix: Water
Associated Lab Samples: 92650185001, 92650185002, 92650185003

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.0640 ± 0.166 (0.397) C:100% T:NA	pCi/L	02/17/23 19:36	

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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QUALIFIERS

Project: Plant McD Background Monit RAD
Pace Project No.: 92650185

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.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Plant McD Background Monit RAD
Pace Project No.: 92650185

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92650185001	**MCD-DGWA-70A**	EPA 9315	565151		
92650185002	**MCD-DGWA-71**	EPA 9315	565151		
92650185003	**MCD-DGWA-53**	EPA 9315	565151		
92650185001	**MCD-DGWA-70A**	EPA 9320	565150		
92650185002	**MCD-DGWA-71**	EPA 9320	565150		
92650185003	**MCD-DGWA-53**	EPA 9320	565150		
92650185001	**MCD-DGWA-70A**	Total Radium Calculation	568700		
92650185002	**MCD-DGWA-71**	Total Radium Calculation	568700		
92650185003	**MCD-DGWA-53**	Total Radium Calculation	568700		

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Pace	DC#_Title: ENV-FRM-HUN1-0083 v02_Sample Condition Upon Receipt
	Effective Date: 11/14/2022

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

Sample Condition Upon Receipt

Client Name: GA Power

Project #: WO# : 92650185

92650185

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

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

Date/Initials Person Examining Contents: 2/2/23 CM

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: 3.1 **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): 3.1

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 SERVICES

DC#_Title: ENV-FRM-HUN1-0083 v02_Sample Condition Upon Receipt

Effective Date: 11/14/2022

***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**

*****Check all unpreserved Nitrates for chlorine**

Project # **WO#: 92650185**

PM: BV **Due Date: 02/23/23**

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)	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)	DG9A-40 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)	DG9V-40 mL VOA H3PO4 (N/A)	KP7U-50 mL Plastic Unpreserved (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	BP3R-250 mL Plastic (NH2)2SO4 (9.3-9.7)	AG0U-100 mL Amber Unpreserved (N/A) (Cl-)	VSGU-20 mL Scintillation vials (N/A)	DG9U-40 mL Amber Unpreserved vials (N/A)
1		2	1			1		3																	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 DENR 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.

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:	Lauren Coker	Attention:	scsinvoices@southernco.com
Address:	2480 Maner Road	Copy To:	Golder	Company Name:	
	Atlanta, GA 30339			Address:	
Email:	laucoker@southernco.com	Purchase Order #:		Pace Quote:	
Phone:	(470) 620-6176 Fax:	Project Name:	Plant McD Background Monitoring Well Network	Pace Project Manager:	Nicole D'Oleo
Requested Due Date:	10 Day TAT	Project #:	GL186849622	Pace Profile #:	

Regulatory Agency

State / Location: GA

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID (One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique)	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	DATE	TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved - Ice	H2SO4	HNO3 + Ice	HCl	NaOH + Zn Acetate	Na2S2O3	Methanol	Other	Analyses Test Y/N	App III/IV + Mg, Na, K, Fe	Cl, F, SO4	Radium 9513/9320	TDS	Alkalinity	Fe Total, Fe 3+ (Ferric calculation)	Ferrous Iron			Residual Chlorine (Y/N)	92650185
1	MCD-DGWA-70A-WG-20230131	WG	G	1/31/23	16:20		6	3		3						N	X	X	X	X	X	X	X				pH = 5.59, Fe2 = 0.0 mg/L (Fe2 analyzed 1/31/23 at 16:25) 001
2	MCD-DGWA-71-WG-20230131	WG	G	1/31/23	16:28		6	3		3						N	X	X	X	X	X	X	X				pH = 5.78, Fe2 = 0.0 mg/L (Fe2 analyzed 1/31/23 at 16:33) 002
3	MCD-DGWA-53-WG-20230201	WG	G	2/1/23	12:50		6	3		3						N	X	X	X	X	X	X	X				pH = 6.42, Fe2 = 3.2 mg/L (Fe2 analyzed 2/1/23 at 12:55) 003
4																											
6																											
7																											
8																											
9																											
10																											
11																											
12																											
13																											
14																											

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

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	SAMPLE CONDITIONS
Task Code = MCD-CCR-ASSMT-2023S1	[signature]	2/2/23	1055	M. BATH	2-2-23	
	M. BATH	2-2-23	11:36	[signature]	2/2/23	1136

DATE Signed:

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

Quality Control Sample Performance Assessment

Pace Analytical™ www.pacelabs.com

Test: Ra-226
Analyst: RMS
Date: 1/0/1900
Worklist: 71313
Matrix: DW

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	2743953
MB concentration:	0.064
M/B Counting Uncertainty:	0.166
MB MDC:	0.397
MB Numerical Performance Indicator:	0.76
MB Status vs Numerical Indicator:	N/A
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	LCSD (Y or N)?	Y
	LCS71313	LCSD71313
Count Date:	2/20/2023	2/20/2023
Spike I.D.:	19-033	19-033
Decay Corrected Spike Concentration (pCi/mL):	24.019	24.019
Volume Used (mL):	0.10	0.10
Aliquot Volume (L, g, F):	0.511	0.507
Target Conc. (pCi/L, g, F):	4.702	4.736
Uncertainty (Calculated):	0.056	0.057
Result (pCi/L, g, F):	4.223	5.069
LCS/LCSD Counting Uncertainty (pCi/L, g, F):	0.480	0.538
Numerical Performance Indicator:	-1.94	1.21
Percent Recovery:	89.81%	107.03%
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.:	LCS71313	92650188001
Duplicate Sample I.D.	LCSD71313	92650188001DUP
Sample Result (pCi/L, g, F):	4.223	0.181
Sample Result Counting Uncertainty (pCi/L, g, F):	0.480	0.150
Sample Duplicate Result (pCi/L, g, F):	5.069	0.073
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):	0.538	0.103
Are sample and/or duplicate results below RL?	NO	See Below ##
Duplicate Numerical Performance Indicator:	-2.299	1.172
(Based on the LCS/LCSD Percent Recoveries) Duplicate RPD:	17.50%	85.65%
Duplicate Status vs Numerical Indicator:	N/A	N/A
Duplicate Status vs RPD:	Pass	Fail***
% 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:

~~***Batch must be re-prepped due to unacceptable precision.~~ N/A
JDY 2-20-23

JDY 2/21/23

Quality Control Sample Performance Assessment

Pace Analytical™ www.pacelabs.com

Test:	Ra-228
Analyst:	ZPC
Date:	2/10/2023
Worklist:	71312
Matrix:	WT

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	2743952
MB concentration:	0.323
M/B 2 Sigma CSU:	0.277
MB MDC:	0.553
MB Numerical Performance Indicator:	2.29
MB Status vs Numerical Indicator:	Warning
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	LCSD (Y or N)?	Y
	LCS71312	LCSD71312
Count Date:	2/14/2023	2/14/2023
Spike I.D.:	22-040	22-040
Decay Corrected Spike Concentration (pCi/mL):	33.553	33.553
Volume Used (mL):	0.10	0.10
Aliquot Volume (L, g, F):	0.805	0.808
Target Conc. (pCi/L, g, F):	4.169	4.154
Uncertainty (Calculated):	0.204	0.204
Result (pCi/L, g, F):	3.240	3.606
LCS/LCSD 2 Sigma CSU (pCi/L, g, F):	0.779	0.858
Numerical Performance Indicator:	-2.26	-1.22
Percent Recovery:	77.72%	86.80%
Status vs Numerical Indicator:	N/A	N/A
Status vs Recovery:	Pass	Pass
Upper % Recovery Limits:	135%	135%
Lower % Recovery Limits:	60%	60%

Duplicate Sample Assessment		
Sample I.D.:	LCS71312	Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Duplicate Sample I.D.	LCSD71312	
Sample Result (pCi/L, g, F):	3.240	
Sample Result 2 Sigma CSU (pCi/L, g, F):	0.779	
Sample Duplicate Result (pCi/L, g, F):	3.606	
Sample Duplicate Result 2 Sigma CSU (pCi/L, g, F):	0.858	
Are sample and/or duplicate results below RL?	NO	
Duplicate Numerical Performance Indicator:	-0.618	
(Based on the LCS/LCSD Percent Recoveries) Duplicate RPD:	11.04%	
Duplicate Status vs Numerical Indicator:	Pass	
Duplicate Status vs RPD:	Pass	
% RPD Limit:	36%	

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:		

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:

2/15/23

VAL
2/15/23

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

July 28, 2023

Andrea McClure
WSP/Golder
5170 Peachtree Road
Building 100, Suite 300
Atlanta, GA 30341

RE: Project: Plant McD AP-1 Assessment Well
Pace Project No.: 92650180

Dear Andrea McClure:

Enclosed are the analytical results for sample(s) received by the laboratory between February 02, 2023 and February 03, 2023. 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

Revised on 5/11/23, the lab took off the H1 flag on sample ID B-112D.

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

Sincerely,

Bonnie Vang

Bonnie Vang
bonnie.vang@pacelabs.com
(704)875-9092
Project Manager

Enclosures

cc: Stephen Benda, Southern Company
Daniela Herrera, Golder
Ben Hodges, Georgia Power-CCR
J. Shelby Mobley, Southern Company
Charles Norton, Southern Company
Dawn Prell, WSP USA E&I Inc_Atlanta
Yong Cheng Soo, WSP/Golder

REPORT OF LABORATORY ANALYSIS

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

CERTIFICATIONS

Project: Plant McD AP-1 Assessment Well
Pace Project No.: 92650180

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
Virginia Certification #: 460204

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(770)734-4200

SAMPLE SUMMARY

Project: Plant McD AP-1 Assessment Well
Pace Project No.: 92650180

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92650180001	**MCD-B-105D**	Water	02/01/23 16:05	02/02/23 11:36
92650180002	**MCD-B-112D**	Water	02/01/23 13:05	02/02/23 11:36
92650180003	**MCD-B-113D**	Water	02/02/23 10:15	02/03/23 16:23

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SAMPLE ANALYTE COUNT

Project: Plant McD AP-1 Assessment Well
Pace Project No.: 92650180

Lab ID	Sample ID	Method	Analysts	Analytes Reported
92650180001	**MCD-B-105D**	EPA 6010D	DRB	5
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	BTS	1
		SM 2320B-2011	SMS	3
		EPA 300.0 Rev 2.1 1993	CDC	3
92650180002	**MCD-B-112D**	EPA 6010D	DRB	5
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
		SM 2320B-2011	SMS	3
		EPA 300.0 Rev 2.1 1993	CDC	3
92650180003	**MCD-B-113D**	EPA 6010D	DRB	5
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
		SM 2320B-2011	SMS	3
		EPA 300.0 Rev 2.1 1993	JCM	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

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Peachtree Corners, GA 30092
(770)734-4200

SUMMARY OF DETECTION

Project: Plant McD AP-1 Assessment Well
Pace Project No.: 92650180

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92650180001	**MCD-B-105D**					
	Performed by	Client			02/14/23 18:22	
	Collected Date	02/01/23			02/14/23 18:22	
	Collected Time	16:10			02/14/23 18:22	
	pH	6.39	Std. Units		02/14/23 18:22	
EPA 6010D	Iron	1.8	mg/L	0.040	02/15/23 17:17	
EPA 6010D	Potassium	7.8	mg/L	0.20	02/15/23 17:17	M1
EPA 6010D	Sodium	18.4	mg/L	1.0	02/15/23 17:17	M1
EPA 6010D	Calcium	70.2	mg/L	1.0	02/15/23 17:17	M1
EPA 6010D	Magnesium	24.4	mg/L	0.050	02/15/23 17:17	M1
EPA 6020B	Antimony	0.0016J	mg/L	0.0030	02/16/23 13:37	
EPA 6020B	Barium	0.036	mg/L	0.0050	02/16/23 13:37	
EPA 6020B	Boron	0.89	mg/L	0.20	02/20/23 13:10	
EPA 6020B	Cobalt	0.0040J	mg/L	0.0050	02/16/23 13:37	
EPA 6020B	Lithium	0.013J	mg/L	0.030	02/16/23 13:37	
SM 2540C-2015	Total Dissolved Solids	477	mg/L	25.0	02/05/23 14:06	
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	38.6	mg/L	5.0	02/07/23 15:04	
SM 2320B-2011	Alkalinity, Total as CaCO3	38.6	mg/L	5.0	02/07/23 15:04	
EPA 300.0 Rev 2.1 1993	Chloride	15.9	mg/L	1.0	02/06/23 19:20	
EPA 300.0 Rev 2.1 1993	Fluoride	0.089J	mg/L	0.10	02/06/23 19:20	
EPA 300.0 Rev 2.1 1993	Sulfate	256	mg/L	6.0	02/07/23 06:55	
92650180002	**MCD-B-112D**					
	Performed by	Client			02/14/23 18:23	
	Collected Date	02/01/23			02/14/23 18:23	
	Collected Time	13:10			02/14/23 18:23	
	pH	6.72	Std. Units		02/14/23 18:23	
EPA 6010D	Potassium	3.1	mg/L	0.20	02/15/23 17:45	
EPA 6010D	Sodium	14.0	mg/L	1.0	02/15/23 17:45	
EPA 6010D	Calcium	25.3	mg/L	1.0	02/15/23 17:45	
EPA 6010D	Magnesium	7.6	mg/L	0.050	02/15/23 17:45	
EPA 6020B	Barium	0.0028J	mg/L	0.0050	02/16/23 13:43	
EPA 6020B	Boron	0.29	mg/L	0.20	02/20/23 13:16	
EPA 6020B	Lithium	0.0038J	mg/L	0.030	02/16/23 13:43	
EPA 6020B	Molybdenum	0.030	mg/L	0.010	02/16/23 13:43	
SM 2540C-2015	Total Dissolved Solids	200	mg/L	25.0	02/03/23 15:51	
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	110	mg/L	5.0	02/04/23 17:52	
SM 2320B-2011	Alkalinity, Total as CaCO3	110	mg/L	5.0	02/04/23 17:52	
EPA 300.0 Rev 2.1 1993	Chloride	3.1	mg/L	1.0	02/06/23 19:46	
EPA 300.0 Rev 2.1 1993	Fluoride	0.30	mg/L	0.10	02/06/23 19:46	
EPA 300.0 Rev 2.1 1993	Sulfate	17.9	mg/L	1.0	02/06/23 19:46	
92650180003	**MCD-B-113D**					
	Performed by	Client			02/14/23 18:24	
	Collected Date	02/02/23			02/14/23 18:24	
	Collected Time	10:20			02/14/23 18:24	
	pH	7.78	Std. Units		02/14/23 18:24	
EPA 6010D	Iron	0.36	mg/L	0.040	02/15/23 18:38	
EPA 6010D	Potassium	4.7	mg/L	0.20	02/15/23 18:38	

REPORT OF LABORATORY ANALYSIS

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

SUMMARY OF DETECTION

Project: Plant McD AP-1 Assessment Well
Pace Project No.: 92650180

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92650180003	**MCD-B-113D**					
EPA 6010D	Sodium	22.3	mg/L	1.0	02/15/23 18:38	
EPA 6010D	Calcium	35.1	mg/L	1.0	02/15/23 18:38	
EPA 6010D	Magnesium	4.7	mg/L	0.050	02/15/23 18:38	
EPA 6020B	Barium	0.0060	mg/L	0.0050	02/16/23 14:45	
EPA 6020B	Boron	0.038J	mg/L	0.040	02/16/23 14:45	
EPA 6020B	Lithium	0.0063J	mg/L	0.030	02/16/23 14:45	
EPA 6020B	Molybdenum	0.051	mg/L	0.010	02/16/23 14:45	
SM 2540C-2015	Total Dissolved Solids	199	mg/L	25.0	02/07/23 13:15	
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	121	mg/L	5.0	02/08/23 15:02	
SM 2320B-2011	Alkalinity, Total as CaCO3	121	mg/L	5.0	02/08/23 15:02	
EPA 300.0 Rev 2.1 1993	Chloride	7.6	mg/L	1.0	02/08/23 01:10	
EPA 300.0 Rev 2.1 1993	Fluoride	0.97	mg/L	0.10	02/08/23 01:10	
EPA 300.0 Rev 2.1 1993	Sulfate	33.1	mg/L	1.0	02/08/23 01:10	

REPORT OF LABORATORY ANALYSIS

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

PROJECT NARRATIVE

Project: Plant McD AP-1 Assessment Well
Pace Project No.: 92650180

Date: July 28, 2023

Georgia Power EQuIS Database Manager requested Pace Project Manager remove the sample matrix and date from the Sample IDs. This update ensures sample nomenclature is followed on final PDF and EDD for successful upload of laboratory data into the Georgia Power EQuIS database

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PROJECT NARRATIVE

Project: Plant McD AP-1 Assessment Well
Pace Project No.: 92650180

Method: **EPA 6010D**
Description: 6010D ATL ICP
Client: Georgia Power
Date: July 28, 2023

General Information:
3 samples were analyzed for EPA 6010D by Pace Analytical Services Peachtree Corners, GA. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3010A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 755832

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 92650180001

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

- MS (Lab ID: 3927043)
  - Calcium
  - Magnesium
  - Sodium
- MSD (Lab ID: 3927044)
  - Potassium

Additional Comments:

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PROJECT NARRATIVE

Project: Plant McD AP-1 Assessment Well
Pace Project No.: 92650180

Method: **EPA 6020B**
Description: 6020 MET ICPMS
Client: Georgia Power
Date: July 28, 2023

General Information:
3 samples were analyzed for EPA 6020B by Pace Analytical Services Peachtree Corners, GA. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3005A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: Plant McD AP-1 Assessment Well
Pace Project No.: 92650180

Method: **EPA 7470A**
Description: 7470 Mercury
Client: Georgia Power
Date: July 28, 2023

General Information:
3 samples were analyzed for EPA 7470A by Pace Analytical Services Peachtree Corners, GA. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 7470A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: Plant McD AP-1 Assessment Well
Pace Project No.: 92650180

Method: **SM 2540C-2015**
Description: 2540C Total Dissolved Solids
Client: Georgia Power
Date: July 28, 2023

General Information:
3 samples were analyzed for SM 2540C-2015 by Pace Analytical Services Peachtree Corners, GA. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

QC Batch: 753740

D6: The precision between the sample and sample duplicate exceeded laboratory control limits.

- DUP (Lab ID: 3916055)
  - Total Dissolved Solids

QC Batch: 754311

D6: The precision between the sample and sample duplicate exceeded laboratory control limits.

- DUP (Lab ID: 3918594)
  - Total Dissolved Solids

Additional Comments:

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PROJECT NARRATIVE

Project: Plant McD AP-1 Assessment Well
Pace Project No.: 92650180

Method: **SM 2320B-2011**
Description: 2320B Alkalinity
Client: Georgia Power
Date: July 28, 2023

General Information:
3 samples were analyzed for SM 2320B-2011 by Pace Analytical Services Asheville. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 753922

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 92649235035,92649235036

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

- MS (Lab ID: 3916728)
  - Alkalinity, Total as CaCO3
- MS (Lab ID: 3916730)
  - Alkalinity, Total as CaCO3
- MSD (Lab ID: 3916729)
  - Alkalinity, Total as CaCO3

QC Batch: 754413

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 92650181010,92650181012

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

- MS (Lab ID: 3919375)
  - Alkalinity, Total as CaCO3
- MSD (Lab ID: 3919376)
  - Alkalinity, Total as CaCO3

Additional Comments:

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PROJECT NARRATIVE

Project: Plant McD AP-1 Assessment Well
Pace Project No.: 92650180

Method: **EPA 300.0 Rev 2.1 1993**
Description: 300.0 IC Anions 28 Days
Client: Georgia Power
Date: July 28, 2023

General Information:
3 samples were analyzed for EPA 300.0 Rev 2.1 1993 by Pace Analytical Services Asheville. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 753991

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 92650019010,92650181004

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

- MS (Lab ID: 3916902)
  - Fluoride
- MS (Lab ID: 3916904)
  - Sulfate
- MSD (Lab ID: 3916903)
  - Fluoride
- MSD (Lab ID: 3916905)
  - Sulfate

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

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ANALYTICAL RESULTS

Project: Plant McD AP-1 Assessment Well
Pace Project No.: 92650180

Sample: MCD-B-105D **Lab ID: 92650180001** Collected: 02/01/23 16:05 Received: 02/02/23 11:36 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Monitoring Well Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**Client**				1		02/14/23 18:22		
Collected Date	**02/01/23**				1		02/14/23 18:22		
Collected Time	**16:10**				1		02/14/23 18:22		
pH	**6.39**	Std. Units			1		02/14/23 18:22		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Iron	**1.8**	mg/L	0.040	0.025	1	02/14/23 17:00	02/15/23 17:17	7439-89-6	
Potassium	**7.8**	mg/L	0.20	0.15	1	02/14/23 17:00	02/15/23 17:17	7440-09-7	M1
Sodium	**18.4**	mg/L	1.0	0.58	1	02/14/23 17:00	02/15/23 17:17	7440-23-5	M1
Calcium	**70.2**	mg/L	1.0	0.12	1	02/14/23 17:00	02/15/23 17:17	7440-70-2	M1
Magnesium	**24.4**	mg/L	0.050	0.012	1	02/14/23 17:00	02/15/23 17:17	7439-95-4	M1
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	**0.0016J**	mg/L	0.0030	0.00078	1	02/15/23 10:18	02/16/23 13:37	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0022	1	02/15/23 10:18	02/16/23 13:37	7440-38-2	
Barium	**0.036**	mg/L	0.0050	0.00067	1	02/15/23 10:18	02/16/23 13:37	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	02/15/23 10:18	02/16/23 13:37	7440-41-7	
Boron	**0.89**	mg/L	0.20	0.043	5	02/15/23 10:18	02/20/23 13:10	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	02/15/23 10:18	02/16/23 13:37	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	02/15/23 10:18	02/16/23 13:37	7440-47-3	
Cobalt	**0.0040J**	mg/L	0.0050	0.00039	1	02/15/23 10:18	02/16/23 13:37	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	02/15/23 10:18	02/16/23 13:37	7439-92-1	
Lithium	**0.013J**	mg/L	0.030	0.00073	1	02/15/23 10:18	02/16/23 13:37	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	02/15/23 10:18	02/16/23 13:37	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	02/15/23 10:18	02/16/23 13:37	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	02/15/23 10:18	02/16/23 13:37	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	02/17/23 09:20	02/17/23 13:23	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**477**	mg/L	25.0	25.0	1		02/05/23 14:06		
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville								
Alkalinity,Bicarbonate (CaCO3)	**38.6**	mg/L	5.0	5.0	1		02/07/23 15:04		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		02/07/23 15:04		
Alkalinity, Total as CaCO3	**38.6**	mg/L	5.0	5.0	1		02/07/23 15:04		

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ANALYTICAL RESULTS

Project: Plant McD AP-1 Assessment Well
Pace Project No.: 92650180

Sample: MCD-B-105D **Lab ID: 92650180001** Collected: 02/01/23 16:05 Received: 02/02/23 11:36 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	**15.9**	mg/L	1.0	0.60	1		02/06/23 19:20	16887-00-6	
Fluoride	**0.089J**	mg/L	0.10	0.050	1		02/06/23 19:20	16984-48-8	
Sulfate	**256**	mg/L	6.0	3.0	6		02/07/23 06:55	14808-79-8	

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ANALYTICAL RESULTS

Project: Plant McD AP-1 Assessment Well
Pace Project No.: 92650180

Sample: MCD-B-112D **Lab ID: 92650180002** Collected: 02/01/23 13:05 Received: 02/02/23 11:36 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Monitoring Well Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**Client**				1		02/14/23 18:23		
Collected Date	**02/01/23**				1		02/14/23 18:23		
Collected Time	**13:10**				1		02/14/23 18:23		
pH	**6.72**	Std. Units			1		02/14/23 18:23		
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	02/14/23 17:00	02/15/23 17:45	7439-89-6	
Potassium	**3.1**	mg/L	0.20	0.15	1	02/14/23 17:00	02/15/23 17:45	7440-09-7	
Sodium	**14.0**	mg/L	1.0	0.58	1	02/14/23 17:00	02/15/23 17:45	7440-23-5	
Calcium	**25.3**	mg/L	1.0	0.12	1	02/14/23 17:00	02/15/23 17:45	7440-70-2	
Magnesium	**7.6**	mg/L	0.050	0.012	1	02/14/23 17:00	02/15/23 17:45	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	02/15/23 10:18	02/16/23 13:43	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0022	1	02/15/23 10:18	02/16/23 13:43	7440-38-2	
Barium	**0.0028J**	mg/L	0.0050	0.00067	1	02/15/23 10:18	02/16/23 13:43	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	02/15/23 10:18	02/16/23 13:43	7440-41-7	
Boron	**0.29**	mg/L	0.20	0.043	5	02/15/23 10:18	02/20/23 13:16	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	02/15/23 10:18	02/16/23 13:43	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	02/15/23 10:18	02/16/23 13:43	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	02/15/23 10:18	02/16/23 13:43	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	02/15/23 10:18	02/16/23 13:43	7439-92-1	
Lithium	**0.0038J**	mg/L	0.030	0.00073	1	02/15/23 10:18	02/16/23 13:43	7439-93-2	
Molybdenum	**0.030**	mg/L	0.010	0.00074	1	02/15/23 10:18	02/16/23 13:43	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	02/15/23 10:18	02/16/23 13:43	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	02/15/23 10:18	02/16/23 13:43	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	02/17/23 09:20	02/17/23 13:31	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**200**	mg/L	25.0	25.0	1		02/03/23 15:51		
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville								
Alkalinity,Bicarbonate (CaCO3)	**110**	mg/L	5.0	5.0	1		02/04/23 17:52		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		02/04/23 17:52		
Alkalinity, Total as CaCO3	**110**	mg/L	5.0	5.0	1		02/04/23 17:52		

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ANALYTICAL RESULTS

Project: Plant McD AP-1 Assessment Well
Pace Project No.: 92650180

Sample: MCD-B-112D **Lab ID: 92650180002** Collected: 02/01/23 13:05 Received: 02/02/23 11:36 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	**3.1**	mg/L	1.0	0.60	1		02/06/23 19:46	16887-00-6	
Fluoride	**0.30**	mg/L	0.10	0.050	1		02/06/23 19:46	16984-48-8	
Sulfate	**17.9**	mg/L	1.0	0.50	1		02/06/23 19:46	14808-79-8	

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ANALYTICAL RESULTS

Project: Plant McD AP-1 Assessment Well
Pace Project No.: 92650180

Sample: MCD-B-113D **Lab ID: 92650180003** Collected: 02/02/23 10:15 Received: 02/03/23 16:23 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Monitoring Well Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**Client**				1		02/14/23 18:24		
Collected Date	**02/02/23**				1		02/14/23 18:24		
Collected Time	**10:20**				1		02/14/23 18:24		
pH	**7.78**	Std. Units			1		02/14/23 18:24		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Iron	**0.36**	mg/L	0.040	0.025	1	02/14/23 17:00	02/15/23 18:38	7439-89-6	
Potassium	**4.7**	mg/L	0.20	0.15	1	02/14/23 17:00	02/15/23 18:38	7440-09-7	
Sodium	**22.3**	mg/L	1.0	0.58	1	02/14/23 17:00	02/15/23 18:38	7440-23-5	
Calcium	**35.1**	mg/L	1.0	0.12	1	02/14/23 17:00	02/15/23 18:38	7440-70-2	
Magnesium	**4.7**	mg/L	0.050	0.012	1	02/14/23 17:00	02/15/23 18:38	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	02/15/23 10:18	02/16/23 14:45	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0022	1	02/15/23 10:18	02/16/23 14:45	7440-38-2	
Barium	**0.0060**	mg/L	0.0050	0.00067	1	02/15/23 10:18	02/16/23 14:45	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	02/15/23 10:18	02/16/23 14:45	7440-41-7	
Boron	**0.038J**	mg/L	0.040	0.0086	1	02/15/23 10:18	02/16/23 14:45	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	02/15/23 10:18	02/16/23 14:45	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	02/15/23 10:18	02/16/23 14:45	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	02/15/23 10:18	02/16/23 14:45	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	02/15/23 10:18	02/16/23 14:45	7439-92-1	
Lithium	**0.0063J**	mg/L	0.030	0.00073	1	02/15/23 10:18	02/16/23 14:45	7439-93-2	
Molybdenum	**0.051**	mg/L	0.010	0.00074	1	02/15/23 10:18	02/16/23 14:45	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	02/15/23 10:18	02/16/23 14:45	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	02/15/23 10:18	02/16/23 14:45	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	02/17/23 09:20	02/17/23 13:34	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**199**	mg/L	25.0	25.0	1		02/07/23 13:15		
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville								
Alkalinity,Bicarbonate (CaCO3)	**121**	mg/L	5.0	5.0	1		02/08/23 15:02		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		02/08/23 15:02		
Alkalinity, Total as CaCO3	**121**	mg/L	5.0	5.0	1		02/08/23 15:02		

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ANALYTICAL RESULTS

Project: Plant McD AP-1 Assessment Well
Pace Project No.: 92650180

Sample: MCD-B-113D **Lab ID: 92650180003** Collected: 02/02/23 10:15 Received: 02/03/23 16:23 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		02/08/23 01:10	16887-00-6	
Fluoride	**0.97**	mg/L	0.10	0.050	1		02/08/23 01:10	16984-48-8	
Sulfate	**33.1**	mg/L	1.0	0.50	1		02/08/23 01:10	14808-79-8	

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QUALITY CONTROL DATA

Project: Plant McD AP-1 Assessment Well
Pace Project No.: 92650180

QC Batch: 755832
QC Batch Method: EPA 3010A
Analysis Method: EPA 6010D
Analysis Description: 6010D ATL
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92650180001, 92650180002, 92650180003

METHOD BLANK: 3927041 Matrix: Water
Associated Lab Samples: 92650180001, 92650180002, 92650180003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium	mg/L	ND	1.0	0.12	02/15/23 17:07	
Iron	mg/L	ND	0.040	0.025	02/15/23 17:07	
Magnesium	mg/L	ND	0.050	0.012	02/15/23 17:07	
Potassium	mg/L	ND	0.20	0.15	02/15/23 17:07	
Sodium	mg/L	ND	1.0	0.58	02/15/23 17:07	

LABORATORY CONTROL SAMPLE: 3927042

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium	mg/L	1	1.0	103	80-120	
Iron	mg/L	1	1.0	103	80-120	
Magnesium	mg/L	1	1.0	102	80-120	
Potassium	mg/L	1	0.99	99	80-120	
Sodium	mg/L	1	1.1	106	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3927043 3927044

Parameter	Units	92650180001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Calcium	mg/L	70.2	1	1	69.6	71.4	-66	116	75-125	3	20	M1
Iron	mg/L	1.8	1	1	2.8	2.8	98	104	75-125	2	20	
Magnesium	mg/L	24.4	1	1	24.8	25.5	42	113	75-125	3	20	M1
Potassium	mg/L	7.8	1	1	8.7	9.1	89	138	75-125	5	20	M1
Sodium	mg/L	18.4	1	1	19.0	19.5	60	112	75-125	3	20	M1

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QUALITY CONTROL DATA

Project: Plant McD AP-1 Assessment Well
Pace Project No.: 92650180

QC Batch: 755857
QC Batch Method: EPA 3005A
Analysis Method: EPA 6020B
Analysis Description: 6020 MET
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92650180001, 92650180002, 92650180003

METHOD BLANK: 3927212 Matrix: Water
Associated Lab Samples: 92650180001, 92650180002, 92650180003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	ND	0.0030	0.00078	02/16/23 12:50	
Arsenic	mg/L	ND	0.0050	0.0022	02/16/23 12:50	
Barium	mg/L	ND	0.0050	0.00067	02/16/23 12:50	
Beryllium	mg/L	ND	0.00050	0.000054	02/16/23 12:50	
Boron	mg/L	ND	0.040	0.0086	02/16/23 12:50	
Cadmium	mg/L	ND	0.00050	0.00011	02/16/23 12:50	
Chromium	mg/L	ND	0.0050	0.0011	02/16/23 12:50	
Cobalt	mg/L	ND	0.0050	0.00039	02/16/23 12:50	
Lead	mg/L	ND	0.0010	0.00089	02/16/23 12:50	
Lithium	mg/L	ND	0.030	0.00073	02/16/23 12:50	
Molybdenum	mg/L	ND	0.010	0.00074	02/16/23 12:50	
Selenium	mg/L	ND	0.0050	0.0014	02/16/23 12:50	
Thallium	mg/L	ND	0.0010	0.00018	02/16/23 12:50	

LABORATORY CONTROL SAMPLE: 3927213

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.1	0.11	107	80-120	
Arsenic	mg/L	0.1	0.099	99	80-120	
Barium	mg/L	0.1	0.098	98	80-120	
Beryllium	mg/L	0.1	0.096	96	80-120	
Boron	mg/L	1	0.99	99	80-120	
Cadmium	mg/L	0.1	0.096	96	80-120	
Chromium	mg/L	0.1	0.10	100	80-120	
Cobalt	mg/L	0.1	0.098	98	80-120	
Lead	mg/L	0.1	0.099	99	80-120	
Lithium	mg/L	0.1	0.097	97	80-120	
Molybdenum	mg/L	0.1	0.10	101	80-120	
Selenium	mg/L	0.1	0.098	98	80-120	
Thallium	mg/L	0.1	0.098	98	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3927214 3927215

Parameter	Units	92650179003 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	0.092	111	91	75-125	19	20	
Arsenic	mg/L	0.0029J	0.1	0.1	0.11	0.098	104	95	75-125	9	20	

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QUALITY CONTROL DATA

Project: Plant McD AP-1 Assessment Well
Pace Project No.: 92650180

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3927214 3927215

Parameter	Units	92650179003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Barium	mg/L	0.089	0.1	0.1	0.19	0.19	102	97	75-125	3	20	
Beryllium	mg/L	0.00016J	0.1	0.1	0.10	0.097	105	97	75-125	7	20	
Boron	mg/L	0.051	1	1	1.1	1.0	108	99	75-125	8	20	
Cadmium	mg/L	0.00019J	0.1	0.1	0.10	0.096	102	96	75-125	6	20	
Chromium	mg/L	ND	0.1	0.1	0.11	0.10	111	99	75-125	12	20	
Cobalt	mg/L	0.0080	0.1	0.1	0.12	0.11	108	98	75-125	9	20	
Lead	mg/L	ND	0.1	0.1	0.10	0.097	102	97	75-125	5	20	
Lithium	mg/L	0.0088J	0.1	0.1	0.12	0.11	107	99	75-125	8	20	
Molybdenum	mg/L	0.023	0.1	0.1	0.13	0.12	111	102	75-125	7	20	
Selenium	mg/L	ND	0.1	0.1	0.10	0.096	103	96	75-125	7	20	
Thallium	mg/L	ND	0.1	0.1	0.10	0.098	102	98	75-125	4	20	

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QUALITY CONTROL DATA

Project: Plant McD AP-1 Assessment Well
Pace Project No.: 92650180

QC Batch: 756583
QC Batch Method: EPA 7470A
Analysis Method: EPA 7470A
Analysis Description: 7470 Mercury
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92650180001, 92650180002, 92650180003

METHOD BLANK: 3930812 Matrix: Water
Associated Lab Samples: 92650180001, 92650180002, 92650180003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	ND	0.00020	0.00013	02/17/23 12:36	

LABORATORY CONTROL SAMPLE: 3930813

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.0025	0.0023	91	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3930814 3930815

Parameter	Units	92650183001 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	0.0023	100	92	75-125	9	20	

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QUALITY CONTROL DATA

Project: Plant McD AP-1 Assessment Well
Pace Project No.: 92650180

QC Batch: 753740
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: 92650180002

METHOD BLANK: 3916052 Matrix: Water
Associated Lab Samples: 92650180002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	25.0	25.0	02/03/23 15:47	

LABORATORY CONTROL SAMPLE: 3916053

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	413	103	80-120	

SAMPLE DUPLICATE: 3916054

Parameter	Units	92649885002 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	78.0	76.0	3	10	

SAMPLE DUPLICATE: 3916055

Parameter	Units	92649923015 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	76.0	103	30	10	D6

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QUALITY CONTROL DATA

Project: Plant McD AP-1 Assessment Well
Pace Project No.: 92650180

QC Batch: 753832
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: 92650180001

METHOD BLANK: 3916393 Matrix: Water
Associated Lab Samples: 92650180001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	25.0	25.0	02/05/23 14:03	

LABORATORY CONTROL SAMPLE: 3916394

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	382	96	80-120	

SAMPLE DUPLICATE: 3916858

Parameter	Units	92649872010 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	67.0	69.0	3	10	

SAMPLE DUPLICATE: 3916859

Parameter	Units	92650181004 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	536	543	1	10	

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QUALITY CONTROL DATA

Project: Plant McD AP-1 Assessment Well
Pace Project No.: 92650180

QC Batch: 754311
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: 92650180003

METHOD BLANK: 3918591 Matrix: Water
Associated Lab Samples: 92650180003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	25.0	25.0	02/07/23 13:13	

LABORATORY CONTROL SAMPLE: 3918592

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	415	104	80-120	

SAMPLE DUPLICATE: 3918593

Parameter	Units	92650181011 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	ND	ND		10	

SAMPLE DUPLICATE: 3918594

Parameter	Units	92650573003 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	40.0	56.0	33	10	D6

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QUALITY CONTROL DATA

Project: Plant McD AP-1 Assessment Well
Pace Project No.: 92650180

QC Batch: 753922
QC Batch Method: SM 2320B-2011
Analysis Method: SM 2320B-2011
Analysis Description: 2320B Alkalinity
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92650180002

METHOD BLANK: 3916725 Matrix: Water
Associated Lab Samples: 92650180002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Alkalinity, Total as CaCO3	mg/L	ND	5.0	5.0	02/04/23 16:09	
Alkalinity,Bicarbonate (CaCO3)	mg/L	ND	5.0	5.0	02/04/23 16:09	
Alkalinity,Carbonate (CaCO3)	mg/L	ND	5.0	5.0	02/04/23 16:09	

LABORATORY CONTROL SAMPLE: 3916726

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	50	49.6	99	80-120	

LABORATORY CONTROL SAMPLE: 3916727

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	50	49.7	99	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3916728 3916729

Parameter	Units	92649235035 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	214	50	50	284	279	141	130	80-120	2	25	M1

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3916730 3916731

Parameter	Units	92649235036 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	160	50	50	222	218	124	117	80-120	2	25	M1

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QUALITY CONTROL DATA

Project: Plant McD AP-1 Assessment Well
Pace Project No.: 92650180

QC Batch: 754277
QC Batch Method: SM 2320B-2011
Analysis Method: SM 2320B-2011
Analysis Description: 2320B Alkalinity
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92650180001

METHOD BLANK: 3918411 Matrix: Water
Associated Lab Samples: 92650180001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Alkalinity, Total as CaCO3	mg/L	ND	5.0	5.0	02/07/23 13:23	
Alkalinity,Bicarbonate (CaCO3)	mg/L	ND	5.0	5.0	02/07/23 13:23	
Alkalinity,Carbonate (CaCO3)	mg/L	ND	5.0	5.0	02/07/23 13:23	

LABORATORY CONTROL SAMPLE: 3918412

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	50	51.0	102	80-120	

LABORATORY CONTROL SAMPLE: 3918413

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	50	52.1	104	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3918414 3918415

Parameter	Units	92650183003 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	39.8	50	50	91.7	94.4	104	109	80-120	3	25	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3918416 3918417

Parameter	Units	92650183004 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	50.6	51.1	98	99	80-120	1	25	

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QUALITY CONTROL DATA

Project: Plant McD AP-1 Assessment Well
Pace Project No.: 92650180

QC Batch: 754413
QC Batch Method: SM 2320B-2011
Analysis Method: SM 2320B-2011
Analysis Description: 2320B Alkalinity
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92650180003

METHOD BLANK: 3919370 Matrix: Water
Associated Lab Samples: 92650180003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Alkalinity, Total as CaCO3	mg/L	ND	5.0	5.0	02/08/23 14:25	
Alkalinity,Bicarbonate (CaCO3)	mg/L	ND	5.0	5.0	02/08/23 14:25	
Alkalinity,Carbonate (CaCO3)	mg/L	ND	5.0	5.0	02/08/23 14:25	

LABORATORY CONTROL SAMPLE: 3919371

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	50	50.4	101	80-120	

LABORATORY CONTROL SAMPLE: 3919372

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	50	52.2	104	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3919373 3919374

Parameter	Units	92650181010 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	50.4	50.5	101	101	80-120	0	25	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3919375 3919376

Parameter	Units	92650181012 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	11.2	9.3	22	19	80-120	18	25	M1

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QUALITY CONTROL DATA

Project: Plant McD AP-1 Assessment Well
Pace Project No.: 92650180

QC Batch: 753991
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: 92650180001, 92650180002

METHOD BLANK: 3916900 Matrix: Water
Associated Lab Samples: 92650180001, 92650180002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.60	02/06/23 14:36	
Fluoride	mg/L	ND	0.10	0.050	02/06/23 14:36	
Sulfate	mg/L	ND	1.0	0.50	02/06/23 14:36	

LABORATORY CONTROL SAMPLE: 3916901

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	53.8	108	90-110	
Fluoride	mg/L	2.5	2.7	109	90-110	
Sulfate	mg/L	50	53.9	108	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3916902 3916903

Parameter	Units	92650019010 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	4.7	50	50	55.5	56.6	102	104	90-110	2	10	
Fluoride	mg/L	2.7	2.5	2.5	4.8	4.8	87	86	90-110	0	10	M1
Sulfate	mg/L	97.3	50	50	146	144	97	94	90-110	1	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3916904 3916905

Parameter	Units	92650181004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	19.2	50	50	70.5	71.4	102	104	90-110	1	10	
Fluoride	mg/L	ND	2.5	2.5	2.6	2.7	103	105	90-110	2	10	
Sulfate	mg/L	309	50	50	353	352	89	86	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

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without the written consent of Pace Analytical Services, LLC.

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

QUALITY CONTROL DATA

Project: Plant McD AP-1 Assessment Well
Pace Project No.: 92650180

QC Batch: 754261
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: 92650180003

METHOD BLANK: 3918330 Matrix: Water
Associated Lab Samples: 92650180003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.60	02/07/23 18:29	
Fluoride	mg/L	ND	0.10	0.050	02/07/23 18:29	
Sulfate	mg/L	ND	1.0	0.50	02/07/23 18:29	

LABORATORY CONTROL SAMPLE: 3918331

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	49.6	99	90-110	
Fluoride	mg/L	2.5	2.6	103	90-110	
Sulfate	mg/L	50	48.9	98	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3918332 3918333

Parameter	Units	92650181007 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	2.6	50	50	52.2	52.2	99	99	90-110	0	10	
Fluoride	mg/L	0.45	2.5	2.5	2.9	2.9	97	99	90-110	1	10	
Sulfate	mg/L	138	50	50	186	187	96	97	90-110	0	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3918334 3918335

Parameter	Units	92650183008 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	9.4	50	50	60.0	60.9	101	103	90-110	1	10	
Fluoride	mg/L	0.068J	2.5	2.5	2.5	2.6	98	101	90-110	2	10	
Sulfate	mg/L	117	50	50	166	166	98	99	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

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

QUALIFIERS

Project: Plant McD AP-1 Assessment Well
Pace Project No.: 92650180

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.

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

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Plant McD AP-1 Assessment Well
Pace Project No.: 92650180

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92650180001	**MCD-B-105D**				
92650180002	**MCD-B-112D**				
92650180003	**MCD-B-113D**				
92650180001	**MCD-B-105D**	EPA 3010A	755832	EPA 6010D	755852
92650180002	**MCD-B-112D**	EPA 3010A	755832	EPA 6010D	755852
92650180003	**MCD-B-113D**	EPA 3010A	755832	EPA 6010D	755852
92650180001	**MCD-B-105D**	EPA 3005A	755857	EPA 6020B	756083
92650180002	**MCD-B-112D**	EPA 3005A	755857	EPA 6020B	756083
92650180003	**MCD-B-113D**	EPA 3005A	755857	EPA 6020B	756083
92650180001	**MCD-B-105D**	EPA 7470A	756583	EPA 7470A	756603
92650180002	**MCD-B-112D**	EPA 7470A	756583	EPA 7470A	756603
92650180003	**MCD-B-113D**	EPA 7470A	756583	EPA 7470A	756603
92650180001	**MCD-B-105D**	SM 2540C-2015	753832		
92650180002	**MCD-B-112D**	SM 2540C-2015	753740		
92650180003	**MCD-B-113D**	SM 2540C-2015	754311		
92650180001	**MCD-B-105D**	SM 2320B-2011	754277		
92650180002	**MCD-B-112D**	SM 2320B-2011	753922		
92650180003	**MCD-B-113D**	SM 2320B-2011	754413		
92650180001	**MCD-B-105D**	EPA 300.0 Rev 2.1 1993	753991		
92650180002	**MCD-B-112D**	EPA 300.0 Rev 2.1 1993	753991		
92650180003	**MCD-B-113D**	EPA 300.0 Rev 2.1 1993	754261		

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DC#_Title: ENV-FRM-HUN1-0083 v02_Sample Condition Upon Receipt

Effective Date: 11/14/2022

Laboratory receiving samples:

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

Sample Condition Upon Receipt

Client Name: GA Power

Project #: **WO# : 92650180**

92650180

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

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

Date/Initials Person Examining Contents: 2/2/23 cst

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: 3.1 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): 3.1

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:

DC#_Title: ENV-FRM-HUN1-0083 v02_Sample Condition Upon Receipt

Effective Date: 11/14/2022

*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
***Check all unpreserved Nitrates for chlorine

Project # **WO#: 92650180**

PM: BV Due Date: 02/16/23
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)	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)	DG94-40 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)	DG9V-40 mL VOA H3PO4 (N/A)	KP7U-50 mL Plastic Unpreserved (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	BP3R-250 mL Plastic (NH2)2SO4 (9.3-9.7)	AG0U-100 mL Amber Unpreserved (N/A) (Cl-)	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 DENR Certification Office (i.e. Out of hold, incorrect preservative, out of temp, incorrect containers.

Pace ANALYTICAL SERVICES	DC#_Title: ENV-FRM-HUN1-0083 v02_Sample Condition Upon Receipt
	Effective Date: 11/14/2022

Laboratory receiving samples:

Asheville ☐ Eden ☐ Greenwood ☐ Huntersville ☐ Raleigh ☐ Mechanicsville ☐ Atlanta ☑ ~~Kernersville~~ ☐

Sample Condition Upon Receipt

Client Name: GA Power

Project #: **WO#: 92650180**

PM: BV **Due Date: 02/16/23**

CLIENT: GA-GA Power

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

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

Date/Initials Person Examining Contents: 2/3/23 CM

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

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

Thermometer: ☐ ~~IR Gun ID:~~ 230

Cooler Temp: 3.8 **Correction Factor: Add/Subtract (°C)** 0.0

Cooler Temp Corrected (°C): 3.8

Type of Ice: ☑ ~~Wet~~ ☐ Blue ☐ None

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

***Check all unpreserved Nitrates for chlorine

Project # **WO#: 92650180**

PM: BV Due Date: 02/16/23

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)	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)	DG9A-40 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)	DG9V-40 mL VOA H3PO4 (N/A)	KP7U-50 mL Plastic Unpreserved (N/A)	V/GK (3 vials per kit)-VPH/Gas kit (N/A)	SP5T-125 mL Sterile Plastic (N/A – lab)	SP2T-250 mL Stejle Plastic (N/A – lab)	6P1N	BP3R-250 mL Plastic (NH2)2SO4 (9.3-9.7)	AG0U-100 mL Amber Unpreserved (N/A) (Cl-)	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 DENR 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.

1 Of 1

Section A – Required Client Information:

Company:	Georgia Power - Coal Combustion Residuals
Address:	2480 Maner Road
	Atlanta, GA 30339
Email:	sucoker@southernco.com
Phone:	(470) 620-6176
Fax:	
Requested Due Date:	10 Day TAT

Section B – Required Project Information:

Report To:	Lauren Coker
Copy To:	Golder
Purchase Order #:	
Project Name:	Plant McD AP-1 Assessment Well Network
Project #:	GL166849622

Section C – Invoice Information:

Attention:	scsinvoices@southernco.com
Company Name:	
Address:	
Pace Quote:	
Pace Project Manager:	Nicole D'Oleo
Pace Profile #:	

Regulatory Agency

State / Location: GA

ITEM #	SAMPLE ID (One Character per box, (A-Z, 0-9 / , -), Sample Ids must be unique)	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	DATE	TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved - Ice	H2SO4	HNO3 + Ice	HCl	NaOH + Zn Acetate	Na2S2O3	Methanol	Other	Y/N	Analyses Test: App III/IV + Mg, Na, K, Fe	Cl, F, SO4	Radium 9513/9320	TDS	Alkalinity	Fe Total, Fe 3+ (Ferric calculation)	Ferrous Iron	Residual Chlorine (Y/N)	
																Y/N	N	N	N	N	N	N			
1	MCD-B-105D-WG-20230201	WG	G	2/1/23	16:05		6	3		3							X	X	X	X	X	X			pH = 8.39, Fe2 = 0.0 mg/L (Fe2 analyzed 2/1/23 at 16:10) 001
2	MCD-B-112D-WG-20230131	WG	G	1/31/23	13:05		6	3		3							X	X	X	X	X	X	X		pH = 6.72, Fe2 = 0.0 mg/L (Fe2 analyzed 2/1/23 at 13:10) 002
3																								
4																								
6																								
7																								
8																								
9																								
10																								
11																								
12																								
13																								
14																								

Residual Chlorine (Y/N): 9265080

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	SAMPLE CONDITIONS
Task Code = MCD-CCR-ASSMT-2023S1	[signature]	2/2/23	1005	M. BAH	2-2-23	
	M. BAH	2-2-23	11:36	Charles Hastie	2/2/23	1136

DATE Signed:

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

Pace Analytical

CHAIN-OF-CUSTODY / Analytical Request Document

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

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: Lauren Coker	Attention: scsinvoices@southernco.com
Address: 2460 Maner Road	Copy To: Golder	Company Name:
Atlanta, GA 30339		Address:
Email: laucoker@southernco.com	Purchase Order #:	Pace Quote:
Phone: (470) 620-6176 Fax:	Project Name: Plant McD AP-1 Assessment Well Network	Pace Project Manager: Bonnie Voltz
Requested Due Date: 10 Day TAT	Project #: GL166849622	Pace Profile #:

Regulatory Agency: State / Location: GA

ITEM #	SAMPLE ID (One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique)	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	DATE	TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved - Ice	H2SO4	HNO3 + Ice	HCl	NaOH + Zn Acetate	Na2S2O3	Methanol	Other	Analyses Test Y/N	Requested Analysis Filtered (Y/N): App III/IV + Mg, Na, K, Fe	Cl, F, SO4	Radium 9613/9320	TDS	Alkalinity	Fe Total, Fe 3+ (Ferric calculation)	Residual Chlorine (Y/N)	
1	MCD-B-113D-WG-20230202	WG	G	2/2/23	10:15		6	3		3							X	X	X	X	X	X		pH = 7.78, Fe2 = 0.5 mg/L (Fe2 analyzed 2/2/23 at 10:20)
2																								
3																								
4																								
5																								
6																								
7																								
8																								
9																								
10																								
11																								
12																								
13																								
14																								

96.5 0160

603

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

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	SAMPLE CONDITIONS
Task Code = MCD-CCR-ASSMT-2023S1	M.MANN Golder	02/03/23	820		2/3	1623

DATE Signed:

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

July 28, 2023

Andrea McClure
WSP/Golder
5170 Peachtree Road
Building 100, Suite 300
Atlanta, GA 30341

RE: Project: Plant McD AP-1 Detection Well
Pace Project No.: 92650183

Dear Andrea McClure:

Enclosed are the analytical results for sample(s) received by the laboratory between February 02, 2023 and February 03, 2023. 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,

Bonnie Vang
bonnie.vang@pacelabs.com
(704)875-9092
Project Manager

Enclosures

cc: Stephen Benda, Southern Company
Daniela Herrera, Golder
Ben Hodges, Georgia Power-CCR
J. Shelby Mobley, Southern Company
Charles Norton, Southern Company
Dawn Prell, WSP USA E&I Inc_Atlanta
Yong Cheng Soo, WSP/Golder

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

CERTIFICATIONS

Project: Plant McD AP-1 Detection Well
Pace Project No.: 92650183

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
Virginia Certification #: 460204

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SAMPLE SUMMARY

Project: Plant McD AP-1 Detection Well
Pace Project No.: 92650183

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92650183001	**MCD-DGWC-40**	Water	02/01/23 12:35	02/02/23 11:36
92650183002	**MCD-DGWC-68A**	Water	02/01/23 15:24	02/02/23 11:36
92650183003	**MCD-DGWC-69**	Water	02/01/23 11:51	02/02/23 11:36
92650183004	**MCD-AP1-EB-1**	Water	02/01/23 17:05	02/02/23 11:36
92650183005	**MCD-AP1-FB-1**	Water	02/01/23 13:45	02/02/23 11:36
92650183006	**MCD-DGWC-37**	Water	02/02/23 10:59	02/03/23 16:23
92650183007	**MCD-DGWC-38**	Water	02/02/23 13:10	02/03/23 16:23
92650183008	**MCD-DGWC-67**	Water	02/02/23 11:25	02/03/23 16:23
92650183009	**MCD-DGWC-121**	Water	02/02/23 13:15	02/03/23 16:23
92650183010	**MCD-DGWC-39**	Water	02/03/23 10:51	02/03/23 16:23
92650183011	**MCD-AP1-FD-1**	Water	02/02/23 00:00	02/03/23 16:23

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SAMPLE ANALYTE COUNT

Project: Plant McD AP-1 Detection Well
Pace Project No.: 92650183

Lab ID	Sample ID	Method	Analysts	Analytes Reported
92650183001	**MCD-DGWC-40**	EPA 6010D	DRB	5
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	BTS	1
		SM 2320B-2011	SMS	3
		EPA 300.0 Rev 2.1 1993	CDC	3
92650183002	**MCD-DGWC-68A**	EPA 6010D	DRB	5
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	BTS	1
		SM 2320B-2011	SMS	3
		EPA 300.0 Rev 2.1 1993	CDC	3
92650183003	**MCD-DGWC-69**	EPA 6010D	DRB	5
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	BTS	1
		SM 2320B-2011	SMS	3
		EPA 300.0 Rev 2.1 1993	CDC	3
92650183004	**MCD-AP1-EB-1**	EPA 6010D	DRB	5
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	BTS	1
		SM 2320B-2011	SMS	3
		EPA 300.0 Rev 2.1 1993	CDC	3
92650183005	**MCD-AP1-FB-1**	EPA 6010D	DRB	5
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
		SM 2320B-2011	SMS	3
		EPA 300.0 Rev 2.1 1993	CDC	3
92650183006	**MCD-DGWC-37**	EPA 6010D	DRB	5
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
		SM 2320B-2011	SMS	3
		EPA 300.0 Rev 2.1 1993	JCM	3
92650183007	**MCD-DGWC-38**	EPA 6010D	DRB	5

REPORT OF LABORATORY ANALYSIS

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SAMPLE ANALYTE COUNT

Project: Plant McD AP-1 Detection Well
Pace Project No.: 92650183

Lab ID	Sample ID	Method	Analysts	Analytes Reported
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
		SM 2320B-2011	SMS	3
		EPA 300.0 Rev 2.1 1993	JCM	3
92650183008	**MCD-DGWC-67**	EPA 6010D	DRB	5
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
		SM 2320B-2011	SMS	3
		EPA 300.0 Rev 2.1 1993	JCM	3
92650183009	**MCD-DGWC-121**	EPA 6010D	DRB	5
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
		SM 2320B-2011	SMS	3
		EPA 300.0 Rev 2.1 1993	JCM	3
92650183010	**MCD-DGWC-39**	EPA 6010D	DRB	5
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
		SM 2320B-2011	SMS	3
		EPA 300.0 Rev 2.1 1993	JCM	3
92650183011	**MCD-AP1-FD-1**	EPA 6010D	DRB	5
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
		SM 2320B-2011	SMS	3
		EPA 300.0 Rev 2.1 1993	JCM	3

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

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SUMMARY OF DETECTION

Project: Plant McD AP-1 Detection Well
Pace Project No.: 92650183

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92650183001	**MCD-DGWC-40**					
	Performed by	Client			02/14/23 18:14	
	Collected Date	02/01/23			02/14/23 18:14	
	Collected Time	12:40			02/14/23 18:14	
	pH	4.66	Std. Units		02/14/23 18:14	
EPA 6010D	Iron	0.056	mg/L	0.040	02/15/23 17:50	
EPA 6010D	Potassium	5.7	mg/L	0.20	02/15/23 17:50	
EPA 6010D	Sodium	18.4	mg/L	1.0	02/15/23 17:50	
EPA 6010D	Calcium	41.1	mg/L	1.0	02/15/23 17:50	
EPA 6010D	Magnesium	17.9	mg/L	0.050	02/15/23 17:50	
EPA 6020B	Barium	0.017	mg/L	0.0050	02/16/23 14:04	
EPA 6020B	Beryllium	0.0028	mg/L	0.00050	02/16/23 14:04	
EPA 6020B	Boron	0.68	mg/L	0.040	02/16/23 14:04	
EPA 6020B	Cadmium	0.00063	mg/L	0.00050	02/16/23 14:04	
EPA 6020B	Cobalt	0.035	mg/L	0.0050	02/16/23 14:04	
EPA 6020B	Lithium	0.0021J	mg/L	0.030	02/16/23 14:04	
SM 2540C-2015	Total Dissolved Solids	343	mg/L	25.0	02/05/23 14:08	
EPA 300.0 Rev 2.1 1993	Chloride	16.0	mg/L	1.0	02/07/23 01:21	
EPA 300.0 Rev 2.1 1993	Fluoride	0.15	mg/L	0.10	02/07/23 01:21	
EPA 300.0 Rev 2.1 1993	Sulfate	189	mg/L	4.0	02/07/23 12:03	
92650183002	**MCD-DGWC-68A**					
	Performed by	Client			02/14/23 18:14	
	Collected Date	02/01/23			02/14/23 18:14	
	Collected Time	15:29			02/14/23 18:14	
	pH	6.60	Std. Units		02/14/23 18:14	
EPA 6010D	Iron	0.66	mg/L	0.040	02/15/23 17:55	
EPA 6010D	Potassium	4.2	mg/L	0.20	02/15/23 17:55	
EPA 6010D	Sodium	6.7	mg/L	1.0	02/15/23 17:55	
EPA 6010D	Calcium	64.8	mg/L	1.0	02/15/23 17:55	
EPA 6010D	Magnesium	16.8	mg/L	0.050	02/15/23 17:55	
EPA 6020B	Barium	0.099	mg/L	0.0050	02/16/23 14:10	
EPA 6020B	Boron	1.7	mg/L	0.040	02/16/23 14:10	
EPA 6020B	Molybdenum	0.19	mg/L	0.010	02/16/23 14:10	
SM 2540C-2015	Total Dissolved Solids	243	mg/L	25.0	02/05/23 14:08	
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	218	mg/L	5.0	02/07/23 16:37	
SM 2320B-2011	Alkalinity, Total as CaCO3	218	mg/L	5.0	02/07/23 16:37	
EPA 300.0 Rev 2.1 1993	Chloride	4.2	mg/L	1.0	02/07/23 01:47	
EPA 300.0 Rev 2.1 1993	Fluoride	0.11	mg/L	0.10	02/07/23 01:47	
EPA 300.0 Rev 2.1 1993	Sulfate	35.6	mg/L	1.0	02/07/23 01:47	
92650183003	**MCD-DGWC-69**					
	Performed by	Client			02/14/23 18:15	
	Collected Date	02/01/23			02/14/23 18:15	
	Collected Time	11:56			02/14/23 18:15	
	pH	6.12	Std. Units		02/14/23 18:15	
EPA 6010D	Iron	0.076	mg/L	0.040	02/15/23 18:00	
EPA 6010D	Potassium	2.4	mg/L	0.20	02/15/23 18:00	
EPA 6010D	Sodium	9.4	mg/L	1.0	02/15/23 18:00	

REPORT OF LABORATORY ANALYSIS

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(770)734-4200

SUMMARY OF DETECTION

Project: Plant McD AP-1 Detection Well
Pace Project No.: 92650183

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92650183003	**MCD-DGWC-69**					
EPA 6010D	Calcium	8.3	mg/L	1.0	02/15/23 18:00	
EPA 6010D	Magnesium	2.2	mg/L	0.050	02/15/23 18:00	
EPA 6020B	Arsenic	0.021	mg/L	0.0050	02/16/23 14:16	
EPA 6020B	Barium	0.044	mg/L	0.0050	02/16/23 14:16	
EPA 6020B	Boron	0.035J	mg/L	0.040	02/16/23 14:16	
EPA 6020B	Lithium	0.0021J	mg/L	0.030	02/16/23 14:16	
EPA 6020B	Molybdenum	0.0058J	mg/L	0.010	02/16/23 14:16	
SM 2540C-2015	Total Dissolved Solids	79.0	mg/L	25.0	02/05/23 14:08	
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	39.8	mg/L	5.0	02/07/23 15:58	
SM 2320B-2011	Alkalinity, Total as CaCO3	39.8	mg/L	5.0	02/07/23 15:58	
EPA 300.0 Rev 2.1 1993	Chloride	5.8	mg/L	1.0	02/07/23 02:13	
EPA 300.0 Rev 2.1 1993	Fluoride	0.10	mg/L	0.10	02/07/23 02:13	
EPA 300.0 Rev 2.1 1993	Sulfate	6.9	mg/L	1.0	02/07/23 02:13	
92650183004	**MCD-AP1-EB-1**					
	Performed by	Client			02/14/23 18:16	
	Collected Date	02/01/23			02/14/23 18:16	
	Collected Time	17:10			02/14/23 18:16	
92650183005	**MCD-AP1-FB-1**					
	Performed by	Client			02/14/23 18:17	
	Collected Date	02/01/23			02/14/23 18:17	
	Collected Time	13:50			02/14/23 18:17	
SM 2540C-2015	Total Dissolved Solids	38.0	mg/L	25.0	02/06/23 13:43	
92650183006	**MCD-DGWC-37**					
	Performed by	Client			02/14/23 18:17	
	Collected Date	02/02/23			02/14/23 18:17	
	Collected Time	11:04			02/14/23 18:17	
	pH	6.23	Std. Units		02/14/23 18:17	
EPA 6010D	Iron	0.097	mg/L	0.040	02/15/23 18:43	
EPA 6010D	Potassium	4.0	mg/L	0.20	02/15/23 18:43	
EPA 6010D	Sodium	10.8	mg/L	1.0	02/15/23 18:43	
EPA 6010D	Calcium	61.7	mg/L	1.0	02/15/23 18:43	
EPA 6010D	Magnesium	13.5	mg/L	0.050	02/15/23 18:43	
EPA 6020B	Barium	0.081	mg/L	0.0050	02/16/23 14:51	
EPA 6020B	Boron	1.5	mg/L	0.040	02/16/23 14:51	
EPA 6020B	Lithium	0.0018J	mg/L	0.030	02/16/23 14:51	
SM 2540C-2015	Total Dissolved Solids	302	mg/L	25.0	02/07/23 13:15	
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	137	mg/L	5.0	02/08/23 15:12	
SM 2320B-2011	Alkalinity, Total as CaCO3	137	mg/L	5.0	02/08/23 15:12	
EPA 300.0 Rev 2.1 1993	Chloride	5.9	mg/L	1.0	02/08/23 01:25	
EPA 300.0 Rev 2.1 1993	Fluoride	0.089J	mg/L	0.10	02/08/23 01:25	
EPA 300.0 Rev 2.1 1993	Sulfate	94.3	mg/L	1.0	02/08/23 01:25	
92650183007	**MCD-DGWC-38**					
	Performed by	Client			02/14/23 18:18	
	Collected Date	02/02/23			02/14/23 18:18	
	Collected Time	13:15			02/14/23 18:18	

REPORT OF LABORATORY ANALYSIS

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SUMMARY OF DETECTION

Project: Plant McD AP-1 Detection Well
Pace Project No.: 92650183

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92650183007	**MCD-DGWC-38**					
	pH	6.08	Std. Units		02/14/23 18:18	
EPA 6010D	Iron	0.036J	mg/L	0.040	02/15/23 18:48	
EPA 6010D	Potassium	4.3	mg/L	0.20	02/15/23 18:48	
EPA 6010D	Sodium	11.5	mg/L	1.0	02/15/23 18:48	
EPA 6010D	Calcium	83.6	mg/L	1.0	02/15/23 18:48	
EPA 6010D	Magnesium	24.9	mg/L	0.050	02/15/23 18:48	
EPA 6020B	Barium	0.030	mg/L	0.0050	02/16/23 14:57	
EPA 6020B	Boron	2.6	mg/L	0.040	02/16/23 14:57	
EPA 6020B	Cobalt	0.0017J	mg/L	0.0050	02/16/23 14:57	
EPA 6020B	Lithium	0.0026J	mg/L	0.030	02/16/23 14:57	
EPA 6020B	Molybdenum	0.0015J	mg/L	0.010	02/16/23 14:57	
SM 2540C-2015	Total Dissolved Solids	478	mg/L	25.0	02/07/23 13:15	
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	97.8	mg/L	5.0	02/08/23 15:23	
SM 2320B-2011	Alkalinity, Total as CaCO3	97.8	mg/L	5.0	02/08/23 15:23	
EPA 300.0 Rev 2.1 1993	Chloride	8.7	mg/L	1.0	02/08/23 01:40	
EPA 300.0 Rev 2.1 1993	Fluoride	0.10	mg/L	0.10	02/08/23 01:40	
EPA 300.0 Rev 2.1 1993	Sulfate	239	mg/L	5.0	02/08/23 15:19	
92650183008	**MCD-DGWC-67**					
	Performed by	Client			02/14/23 18:19	
	Collected Date	02/02/23			02/14/23 18:19	
	Collected Time	11:30			02/14/23 18:19	
	pH	6.27	Std. Units		02/14/23 18:19	
EPA 6010D	Iron	0.040	mg/L	0.040	02/28/23 21:07	
EPA 6010D	Potassium	4.2	mg/L	0.50	02/28/23 21:07	
EPA 6010D	Sodium	11.4	mg/L	1.0	02/28/23 21:07	
EPA 6010D	Calcium	48.6	mg/L	1.0	02/28/23 21:07	
EPA 6010D	Magnesium	19.6	mg/L	0.050	02/28/23 21:07	
EPA 6020B	Barium	0.080	mg/L	0.0050	03/01/23 14:24	
EPA 6020B	Boron	3.9	mg/L	0.040	03/01/23 14:24	
EPA 6020B	Cobalt	0.0014J	mg/L	0.0050	03/01/23 14:24	
EPA 6020B	Lithium	0.0048J	mg/L	0.030	03/01/23 14:24	
SM 2540C-2015	Total Dissolved Solids	317	mg/L	25.0	02/07/23 13:15	
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	91.7	mg/L	5.0	02/08/23 15:42	
SM 2320B-2011	Alkalinity, Total as CaCO3	91.7	mg/L	5.0	02/08/23 15:42	
EPA 300.0 Rev 2.1 1993	Chloride	9.4	mg/L	1.0	02/08/23 02:25	
EPA 300.0 Rev 2.1 1993	Fluoride	0.068J	mg/L	0.10	02/08/23 02:25	
EPA 300.0 Rev 2.1 1993	Sulfate	117	mg/L	2.0	02/08/23 15:34	
92650183009	**MCD-DGWC-121**					
	Performed by	Client			02/14/23 18:19	
	Collected Date	02/02/23			02/14/23 18:19	
	Collected Time	13:20			02/14/23 18:19	
	pH	6.35	Std. Units		02/14/23 18:19	
EPA 6010D	Iron	2.9	mg/L	0.040	02/15/23 18:53	
EPA 6010D	Potassium	5.7	mg/L	0.20	02/15/23 18:53	
EPA 6010D	Sodium	10.8	mg/L	1.0	02/15/23 18:53	
EPA 6010D	Calcium	40.1	mg/L	1.0	02/15/23 18:53	

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SUMMARY OF DETECTION

Project: Plant McD AP-1 Detection Well
Pace Project No.: 92650183

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92650183009	**MCD-DGWC-121**					
EPA 6010D	Magnesium	11.3	mg/L	0.050	02/15/23 18:53	
EPA 6020B	Barium	0.049	mg/L	0.0050	02/16/23 15:15	
EPA 6020B	Boron	1.6	mg/L	0.040	02/16/23 15:15	
EPA 6020B	Cobalt	0.0016J	mg/L	0.0050	02/16/23 15:15	
EPA 6020B	Lithium	0.0059J	mg/L	0.030	02/16/23 15:15	
SM 2540C-2015	Total Dissolved Solids	221	mg/L	25.0	02/07/23 13:16	
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	90.1	mg/L	5.0	02/08/23 15:50	
SM 2320B-2011	Alkalinity, Total as CaCO3	90.1	mg/L	5.0	02/08/23 15:50	
EPA 300.0 Rev 2.1 1993	Chloride	4.3	mg/L	1.0	02/08/23 03:10	
EPA 300.0 Rev 2.1 1993	Fluoride	0.11	mg/L	0.10	02/08/23 03:10	
EPA 300.0 Rev 2.1 1993	Sulfate	67.6	mg/L	1.0	02/08/23 03:10	
92650183010	**MCD-DGWC-39**					
	Performed by	Client			02/14/23 18:20	
	Collected Date	02/03/23			02/14/23 18:20	
	Collected Time	10:56			02/14/23 18:20	
	pH	6.49	Std. Units		02/14/23 18:20	
EPA 6010D	Iron	11.6	mg/L	0.040	02/15/23 18:57	
EPA 6010D	Potassium	2.6	mg/L	0.20	02/15/23 18:57	
EPA 6010D	Sodium	12.1	mg/L	1.0	02/15/23 18:57	
EPA 6010D	Calcium	77.4	mg/L	1.0	02/15/23 18:57	
EPA 6010D	Magnesium	19.2	mg/L	0.050	02/15/23 18:57	
EPA 6020B	Barium	0.087	mg/L	0.0050	02/16/23 15:21	
EPA 6020B	Boron	2.1	mg/L	0.040	02/16/23 15:21	
EPA 6020B	Cobalt	0.0050	mg/L	0.0050	02/16/23 15:21	
SM 2540C-2015	Total Dissolved Solids	382	mg/L	25.0	02/08/23 18:55	
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	239	mg/L	5.0	02/09/23 16:16	
SM 2320B-2011	Alkalinity, Total as CaCO3	239	mg/L	5.0	02/09/23 16:16	
EPA 300.0 Rev 2.1 1993	Chloride	7.4	mg/L	1.0	02/08/23 03:25	
EPA 300.0 Rev 2.1 1993	Fluoride	0.12	mg/L	0.10	02/08/23 03:25	
EPA 300.0 Rev 2.1 1993	Sulfate	115	mg/L	2.0	02/08/23 16:18	
92650183011	**MCD-AP1-FD-1**					
	Performed by	Client			02/14/23 18:21	
	Collected Date	2/2/23			02/14/23 18:21	
	Collected Time	11:35			02/14/23 18:21	
EPA 6010D	Iron	0.032J	mg/L	0.040	02/15/23 19:02	
EPA 6010D	Potassium	4.0	mg/L	0.20	02/15/23 19:02	
EPA 6010D	Sodium	10.9	mg/L	1.0	02/15/23 19:02	
EPA 6010D	Calcium	46.2	mg/L	1.0	02/15/23 19:02	
EPA 6010D	Magnesium	18.3	mg/L	0.050	02/15/23 19:02	
EPA 6020B	Barium	0.084	mg/L	0.0050	02/16/23 15:33	
EPA 6020B	Boron	3.8	mg/L	0.040	02/16/23 15:33	
EPA 6020B	Cobalt	0.0011J	mg/L	0.0050	02/16/23 15:33	
EPA 6020B	Lithium	0.0045J	mg/L	0.030	02/16/23 15:33	
SM 2540C-2015	Total Dissolved Solids	303	mg/L	25.0	02/07/23 13:16	
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	93.5	mg/L	5.0	02/08/23 15:59	
SM 2320B-2011	Alkalinity, Total as CaCO3	93.5	mg/L	5.0	02/08/23 15:59	

REPORT OF LABORATORY ANALYSIS

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110 Technology Parkway
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(770)734-4200

SUMMARY OF DETECTION

Project: Plant McD AP-1 Detection Well
Pace Project No.: 92650183

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92650183011	**MCD-AP1-FD-1**					
EPA 300.0 Rev 2.1 1993	Chloride	9.4	mg/L	1.0	02/08/23 03:39	
EPA 300.0 Rev 2.1 1993	Fluoride	0.074J	mg/L	0.10	02/08/23 03:39	
EPA 300.0 Rev 2.1 1993	Sulfate	117	mg/L	2.0	02/08/23 16:33	

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PROJECT NARRATIVE

Project: Plant McD AP-1 Detection Well
Pace Project No.: 92650183

Date: July 28, 2023

Georgia Power EQuIS Database Manager requested Pace Project Manager remove the sample matrix and date from the Sample IDs. This update ensures sample nomenclature is followed on final PDF and EDD for successful upload of laboratory data into the Georgia Power EQuIS database.

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PROJECT NARRATIVE

Project: Plant McD AP-1 Detection Well
Pace Project No.: 92650183

Method: **EPA 6010D**
Description: 6010D ATL ICP
Client: Georgia Power
Date: July 28, 2023

General Information:
11 samples were analyzed for EPA 6010D by Pace Analytical Services Peachtree Corners, GA. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3010A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 755832

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 92650180001

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

- MS (Lab ID: 3927043)
  - Calcium
  - Magnesium
  - Sodium
- MSD (Lab ID: 3927044)
  - Potassium

REPORT OF LABORATORY ANALYSIS

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PROJECT NARRATIVE

Project: Plant McD AP-1 Detection Well
Pace Project No.: 92650183

Method: **EPA 6010D**
Description: 6010D ATL ICP
Client: Georgia Power
Date: July 28, 2023

QC Batch: 758465

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 92652511041

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

- MS (Lab ID: 3939631)
  - Potassium
  - Sodium
- MSD (Lab ID: 3939632)
  - Potassium
  - Sodium

Additional Comments:

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PROJECT NARRATIVE

Project: Plant McD AP-1 Detection Well
Pace Project No.: 92650183

Method: **EPA 6020B**
Description: 6020 MET ICPMS
Client: Georgia Power
Date: July 28, 2023

General Information:
11 samples were analyzed for EPA 6020B by Pace Analytical Services Peachtree Corners, GA. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3005A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: Plant McD AP-1 Detection Well
Pace Project No.: 92650183

Method: **EPA 7470A**
Description: 7470 Mercury
Client: Georgia Power
Date: July 28, 2023

General Information:
11 samples were analyzed for EPA 7470A by Pace Analytical Services Peachtree Corners, GA. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 7470A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: Plant McD AP-1 Detection Well
Pace Project No.: 92650183

Method: **SM 2540C-2015**
Description: 2540C Total Dissolved Solids
Client: Georgia Power
Date: July 28, 2023

General Information:
11 samples were analyzed for SM 2540C-2015 by Pace Analytical Services Peachtree Corners, GA. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

QC Batch: 754074

D6: The precision between the sample and sample duplicate exceeded laboratory control limits.

- DUP (Lab ID: 3917192)
  - Total Dissolved Solids
- DUP (Lab ID: 3917193)
  - Total Dissolved Solids

QC Batch: 754311

D6: The precision between the sample and sample duplicate exceeded laboratory control limits.

- DUP (Lab ID: 3918594)
  - Total Dissolved Solids

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PROJECT NARRATIVE

Project: Plant McD AP-1 Detection Well
Pace Project No.: 92650183

Method: **SM 2540C-2015**
Description: 2540C Total Dissolved Solids
Client: Georgia Power
Date: July 28, 2023

QC Batch: 754576

D6: The precision between the sample and sample duplicate exceeded laboratory control limits.

- DUP (Lab ID: 3921107)
  - Total Dissolved Solids

Additional Comments:

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PROJECT NARRATIVE

Project: Plant McD AP-1 Detection Well
Pace Project No.: 92650183

Method: **SM 2320B-2011**
Description: 2320B Alkalinity
Client: Georgia Power
Date: July 28, 2023

General Information:
11 samples were analyzed for SM 2320B-2011 by Pace Analytical Services Asheville. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 754305

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 92650219009,92650219010

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

- MSD (Lab ID: 3918545)
  - Alkalinity, Total as CaCO3

QC Batch: 754413

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 92650181010,92650181012

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

- MS (Lab ID: 3919375)
  - Alkalinity, Total as CaCO3
- MSD (Lab ID: 3919376)
  - Alkalinity, Total as CaCO3

Additional Comments:

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PROJECT NARRATIVE

Project: Plant McD AP-1 Detection Well
Pace Project No.: 92650183

Method: **EPA 300.0 Rev 2.1 1993**
Description: 300.0 IC Anions 28 Days
Client: Georgia Power
Date: July 28, 2023

General Information:
11 samples were analyzed for EPA 300.0 Rev 2.1 1993 by Pace Analytical Services Asheville. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 753991

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 92650019010,92650181004

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

- MS (Lab ID: 3916902)
  - Fluoride
- MS (Lab ID: 3916904)
  - Sulfate
- MSD (Lab ID: 3916903)
  - Fluoride
- MSD (Lab ID: 3916905)
  - Sulfate

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

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ANALYTICAL RESULTS

Project: Plant McD AP-1 Detection Well
Pace Project No.: 92650183

Sample: MCD-DGWC-40 **Lab ID: 92650183001** Collected: 02/01/23 12:35 Received: 02/02/23 11:36 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Monitoring Well Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**Client**				1		02/14/23 18:14		
Collected Date	**02/01/23**				1		02/14/23 18:14		
Collected Time	**12:40**				1		02/14/23 18:14		
pH	**4.66**	Std. Units			1		02/14/23 18:14		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Iron	**0.056**	mg/L	0.040	0.025	1	02/14/23 17:00	02/15/23 17:50	7439-89-6	
Potassium	**5.7**	mg/L	0.20	0.15	1	02/14/23 17:00	02/15/23 17:50	7440-09-7	
Sodium	**18.4**	mg/L	1.0	0.58	1	02/14/23 17:00	02/15/23 17:50	7440-23-5	
Calcium	**41.1**	mg/L	1.0	0.12	1	02/14/23 17:00	02/15/23 17:50	7440-70-2	
Magnesium	**17.9**	mg/L	0.050	0.012	1	02/14/23 17:00	02/15/23 17:50	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	02/15/23 10:18	02/16/23 14:04	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0022	1	02/15/23 10:18	02/16/23 14:04	7440-38-2	
Barium	**0.017**	mg/L	0.0050	0.00067	1	02/15/23 10:18	02/16/23 14:04	7440-39-3	
Beryllium	**0.0028**	mg/L	0.00050	0.000054	1	02/15/23 10:18	02/16/23 14:04	7440-41-7	
Boron	**0.68**	mg/L	0.040	0.0086	1	02/15/23 10:18	02/16/23 14:04	7440-42-8	
Cadmium	**0.00063**	mg/L	0.00050	0.00011	1	02/15/23 10:18	02/16/23 14:04	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	02/15/23 10:18	02/16/23 14:04	7440-47-3	
Cobalt	**0.035**	mg/L	0.0050	0.00039	1	02/15/23 10:18	02/16/23 14:04	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	02/15/23 10:18	02/16/23 14:04	7439-92-1	
Lithium	**0.0021J**	mg/L	0.030	0.00073	1	02/15/23 10:18	02/16/23 14:04	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	02/15/23 10:18	02/16/23 14:04	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	02/15/23 10:18	02/16/23 14:04	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	02/15/23 10:18	02/16/23 14:04	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	02/17/23 09:20	02/17/23 12:41	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**343**	mg/L	25.0	25.0	1		02/05/23 14:08		
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville								
Alkalinity,Bicarbonate (CaCO3)	ND	mg/L	5.0	5.0	1		02/07/23 15:33		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		02/07/23 15:33		
Alkalinity, Total as CaCO3	ND	mg/L	5.0	5.0	1		02/07/23 15:33		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Plant McD AP-1 Detection Well
Pace Project No.: 92650183

Sample: MCD-DGWC-40 **Lab ID: 92650183001** Collected: 02/01/23 12:35 Received: 02/02/23 11:36 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	**16.0**	mg/L	1.0	0.60	1		02/07/23 01:21	16887-00-6	
Fluoride	**0.15**	mg/L	0.10	0.050	1		02/07/23 01:21	16984-48-8	
Sulfate	**189**	mg/L	4.0	2.0	4		02/07/23 12:03	14808-79-8	

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ANALYTICAL RESULTS

Project: Plant McD AP-1 Detection Well
Pace Project No.: 92650183

Sample: MCD-DGWC-68A **Lab ID: 92650183002** Collected: 02/01/23 15:24 Received: 02/02/23 11:36 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Monitoring Well Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**Client**				1		02/14/23 18:14		
Collected Date	**02/01/23**				1		02/14/23 18:14		
Collected Time	**15:29**				1		02/14/23 18:14		
pH	**6.60**	Std. Units			1		02/14/23 18:14		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Iron	**0.66**	mg/L	0.040	0.025	1	02/14/23 17:00	02/15/23 17:55	7439-89-6	
Potassium	**4.2**	mg/L	0.20	0.15	1	02/14/23 17:00	02/15/23 17:55	7440-09-7	
Sodium	**6.7**	mg/L	1.0	0.58	1	02/14/23 17:00	02/15/23 17:55	7440-23-5	
Calcium	**64.8**	mg/L	1.0	0.12	1	02/14/23 17:00	02/15/23 17:55	7440-70-2	
Magnesium	**16.8**	mg/L	0.050	0.012	1	02/14/23 17:00	02/15/23 17:55	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	02/15/23 10:18	02/16/23 14:10	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0022	1	02/15/23 10:18	02/16/23 14:10	7440-38-2	
Barium	**0.099**	mg/L	0.0050	0.00067	1	02/15/23 10:18	02/16/23 14:10	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	02/15/23 10:18	02/16/23 14:10	7440-41-7	
Boron	**1.7**	mg/L	0.040	0.0086	1	02/15/23 10:18	02/16/23 14:10	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	02/15/23 10:18	02/16/23 14:10	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	02/15/23 10:18	02/16/23 14:10	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	02/15/23 10:18	02/16/23 14:10	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	02/15/23 10:18	02/16/23 14:10	7439-92-1	
Lithium	ND	mg/L	0.030	0.00073	1	02/15/23 10:18	02/16/23 14:10	7439-93-2	
Molybdenum	**0.19**	mg/L	0.010	0.00074	1	02/15/23 10:18	02/16/23 14:10	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	02/15/23 10:18	02/16/23 14:10	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	02/15/23 10:18	02/16/23 14:10	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	02/17/23 09:20	02/17/23 12:52	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**243**	mg/L	25.0	25.0	1		02/05/23 14:08		
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville								
Alkalinity,Bicarbonate (CaCO3)	**218**	mg/L	5.0	5.0	1		02/07/23 16:37		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		02/07/23 16:37		
Alkalinity, Total as CaCO3	**218**	mg/L	5.0	5.0	1		02/07/23 16:37		

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ANALYTICAL RESULTS

Project: Plant McD AP-1 Detection Well
Pace Project No.: 92650183

Sample: MCD-DGWC-68A **Lab ID: 92650183002** Collected: 02/01/23 15:24 Received: 02/02/23 11:36 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		02/07/23 01:47	16887-00-6	
Fluoride	**0.11**	mg/L	0.10	0.050	1		02/07/23 01:47	16984-48-8	
Sulfate	**35.6**	mg/L	1.0	0.50	1		02/07/23 01:47	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: Plant McD AP-1 Detection Well
Pace Project No.: 92650183

Sample: MCD-DGWC-69 **Lab ID: 92650183003** Collected: 02/01/23 11:51 Received: 02/02/23 11:36 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Monitoring Well Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**Client**				1		02/14/23 18:15		
Collected Date	**02/01/23**				1		02/14/23 18:15		
Collected Time	**11:56**				1		02/14/23 18:15		
pH	**6.12**	Std. Units			1		02/14/23 18:15		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Iron	**0.076**	mg/L	0.040	0.025	1	02/14/23 17:00	02/15/23 18:00	7439-89-6	
Potassium	**2.4**	mg/L	0.20	0.15	1	02/14/23 17:00	02/15/23 18:00	7440-09-7	
Sodium	**9.4**	mg/L	1.0	0.58	1	02/14/23 17:00	02/15/23 18:00	7440-23-5	
Calcium	**8.3**	mg/L	1.0	0.12	1	02/14/23 17:00	02/15/23 18:00	7440-70-2	
Magnesium	**2.2**	mg/L	0.050	0.012	1	02/14/23 17:00	02/15/23 18:00	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	02/15/23 10:18	02/16/23 14:16	7440-36-0	
Arsenic	**0.021**	mg/L	0.0050	0.0022	1	02/15/23 10:18	02/16/23 14:16	7440-38-2	
Barium	**0.044**	mg/L	0.0050	0.00067	1	02/15/23 10:18	02/16/23 14:16	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	02/15/23 10:18	02/16/23 14:16	7440-41-7	
Boron	**0.035J**	mg/L	0.040	0.0086	1	02/15/23 10:18	02/16/23 14:16	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	02/15/23 10:18	02/16/23 14:16	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	02/15/23 10:18	02/16/23 14:16	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	02/15/23 10:18	02/16/23 14:16	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	02/15/23 10:18	02/16/23 14:16	7439-92-1	
Lithium	**0.0021J**	mg/L	0.030	0.00073	1	02/15/23 10:18	02/16/23 14:16	7439-93-2	
Molybdenum	**0.0058J**	mg/L	0.010	0.00074	1	02/15/23 10:18	02/16/23 14:16	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	02/15/23 10:18	02/16/23 14:16	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	02/15/23 10:18	02/16/23 14:16	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	02/17/23 09:20	02/17/23 12:54	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**79.0**	mg/L	25.0	25.0	1		02/05/23 14:08		
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville								
Alkalinity,Bicarbonate (CaCO3)	**39.8**	mg/L	5.0	5.0	1		02/07/23 15:58		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		02/07/23 15:58		
Alkalinity, Total as CaCO3	**39.8**	mg/L	5.0	5.0	1		02/07/23 15:58		

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(770)734-4200

ANALYTICAL RESULTS

Project: Plant McD AP-1 Detection Well
Pace Project No.: 92650183

Sample: MCD-DGWC-69 **Lab ID: 92650183003** Collected: 02/01/23 11:51 Received: 02/02/23 11:36 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		02/07/23 02:13	16887-00-6	
Fluoride	**0.10**	mg/L	0.10	0.050	1		02/07/23 02:13	16984-48-8	
Sulfate	**6.9**	mg/L	1.0	0.50	1		02/07/23 02:13	14808-79-8	

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ANALYTICAL RESULTS

Project: Plant McD AP-1 Detection Well
Pace Project No.: 92650183

Sample: MCD-AP1-EB-1 **Lab ID: 92650183004** Collected: 02/01/23 17:05 Received: 02/02/23 11:36 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Monitoring Well Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**Client**				1		02/14/23 18:16		
Collected Date	**02/01/23**				1		02/14/23 18:16		
Collected Time	**17:10**				1		02/14/23 18:16		
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	02/14/23 17:00	02/15/23 18:04	7439-89-6	
Potassium	ND	mg/L	0.20	0.15	1	02/14/23 17:00	02/15/23 18:04	7440-09-7	
Sodium	ND	mg/L	1.0	0.58	1	02/14/23 17:00	02/15/23 18:04	7440-23-5	
Calcium	ND	mg/L	1.0	0.12	1	02/14/23 17:00	02/15/23 18:04	7440-70-2	
Magnesium	ND	mg/L	0.050	0.012	1	02/14/23 17:00	02/15/23 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	02/15/23 10:18	02/16/23 14:22	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0022	1	02/15/23 10:18	02/16/23 14:22	7440-38-2	
Barium	ND	mg/L	0.0050	0.00067	1	02/15/23 10:18	02/16/23 14:22	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	02/15/23 10:18	02/16/23 14:22	7440-41-7	
Boron	ND	mg/L	0.040	0.0086	1	02/15/23 10:18	02/16/23 14:22	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	02/15/23 10:18	02/16/23 14:22	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	02/15/23 10:18	02/16/23 14:22	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	02/15/23 10:18	02/16/23 14:22	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	02/15/23 10:18	02/16/23 14:22	7439-92-1	
Lithium	ND	mg/L	0.030	0.00073	1	02/15/23 10:18	02/16/23 14:22	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	02/15/23 10:18	02/16/23 14:22	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	02/15/23 10:18	02/16/23 14:22	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	02/15/23 10:18	02/16/23 14:22	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	02/17/23 09:20	02/17/23 13:02	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	ND	mg/L	25.0	25.0	1		02/05/23 14:09		
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville								
Alkalinity,Bicarbonate (CaCO3)	ND	mg/L	5.0	5.0	1		02/07/23 16:16		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		02/07/23 16:16		
Alkalinity, Total as CaCO3	ND	mg/L	5.0	5.0	1		02/07/23 16:16		

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ANALYTICAL RESULTS

Project: Plant McD AP-1 Detection Well
Pace Project No.: 92650183

Sample: MCD-AP1-EB-1 **Lab ID: 92650183004** Collected: 02/01/23 17:05 Received: 02/02/23 11:36 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	ND	mg/L	1.0	0.60	1		02/07/23 03:30	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		02/07/23 03:30	16984-48-8	
Sulfate	ND	mg/L	1.0	0.50	1		02/07/23 03:30	14808-79-8	

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ANALYTICAL RESULTS

Project: Plant McD AP-1 Detection Well
Pace Project No.: 92650183

Sample: MCD-AP1-FB-1 **Lab ID: 92650183005** Collected: 02/01/23 13:45 Received: 02/02/23 11:36 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Monitoring Well Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**Client**				1		02/14/23 18:17		
Collected Date	**02/01/23**				1		02/14/23 18:17		
Collected Time	**13:50**				1		02/14/23 18:17		
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	02/14/23 17:00	02/15/23 18:09	7439-89-6	
Potassium	ND	mg/L	0.20	0.15	1	02/14/23 17:00	02/15/23 18:09	7440-09-7	
Sodium	ND	mg/L	1.0	0.58	1	02/14/23 17:00	02/15/23 18:09	7440-23-5	
Calcium	ND	mg/L	1.0	0.12	1	02/14/23 17:00	02/15/23 18:09	7440-70-2	
Magnesium	ND	mg/L	0.050	0.012	1	02/14/23 17:00	02/15/23 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	02/15/23 10:18	02/16/23 14:28	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0022	1	02/15/23 10:18	02/16/23 14:28	7440-38-2	
Barium	ND	mg/L	0.0050	0.00067	1	02/15/23 10:18	02/16/23 14:28	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	02/15/23 10:18	02/16/23 14:28	7440-41-7	
Boron	ND	mg/L	0.040	0.0086	1	02/15/23 10:18	02/16/23 14:28	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	02/15/23 10:18	02/16/23 14:28	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	02/15/23 10:18	02/16/23 14:28	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	02/15/23 10:18	02/16/23 14:28	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	02/15/23 10:18	02/16/23 14:28	7439-92-1	
Lithium	ND	mg/L	0.030	0.00073	1	02/15/23 10:18	02/16/23 14:28	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	02/15/23 10:18	02/16/23 14:28	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	02/15/23 10:18	02/16/23 14:28	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	02/15/23 10:18	02/16/23 14:28	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	02/17/23 09:20	02/17/23 13:05	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**38.0**	mg/L	25.0	25.0	1		02/06/23 13:43		
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville								
Alkalinity,Bicarbonate (CaCO3)	ND	mg/L	5.0	5.0	1		02/07/23 17:14		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		02/07/23 17:14		
Alkalinity, Total as CaCO3	ND	mg/L	5.0	5.0	1		02/07/23 17:14		

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ANALYTICAL RESULTS

Project: Plant McD AP-1 Detection Well
Pace Project No.: 92650183

Sample: MCD-AP1-FB-1 **Lab ID: 92650183005** Collected: 02/01/23 13:45 Received: 02/02/23 11:36 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	ND	mg/L	1.0	0.60	1		02/07/23 03:56	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		02/07/23 03:56	16984-48-8	
Sulfate	ND	mg/L	1.0	0.50	1		02/07/23 03:56	14808-79-8	

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ANALYTICAL RESULTS

Project: Plant McD AP-1 Detection Well
Pace Project No.: 92650183

Sample: MCD-DGWC-37 **Lab ID: 92650183006** Collected: 02/02/23 10:59 Received: 02/03/23 16:23 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Monitoring Well Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**Client**				1		02/14/23 18:17		
Collected Date	**02/02/23**				1		02/14/23 18:17		
Collected Time	**11:04**				1		02/14/23 18:17		
pH	**6.23**	Std. Units			1		02/14/23 18:17		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Iron	**0.097**	mg/L	0.040	0.025	1	02/14/23 17:00	02/15/23 18:43	7439-89-6	
Potassium	**4.0**	mg/L	0.20	0.15	1	02/14/23 17:00	02/15/23 18:43	7440-09-7	
Sodium	**10.8**	mg/L	1.0	0.58	1	02/14/23 17:00	02/15/23 18:43	7440-23-5	
Calcium	**61.7**	mg/L	1.0	0.12	1	02/14/23 17:00	02/15/23 18:43	7440-70-2	
Magnesium	**13.5**	mg/L	0.050	0.012	1	02/14/23 17:00	02/15/23 18:43	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	02/15/23 10:18	02/16/23 14:51	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0022	1	02/15/23 10:18	02/16/23 14:51	7440-38-2	
Barium	**0.081**	mg/L	0.0050	0.00067	1	02/15/23 10:18	02/16/23 14:51	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	02/15/23 10:18	02/16/23 14:51	7440-41-7	
Boron	**1.5**	mg/L	0.040	0.0086	1	02/15/23 10:18	02/16/23 14:51	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	02/15/23 10:18	02/16/23 14:51	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	02/15/23 10:18	02/16/23 14:51	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	02/15/23 10:18	02/16/23 14:51	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	02/15/23 10:18	02/16/23 14:51	7439-92-1	
Lithium	**0.0018J**	mg/L	0.030	0.00073	1	02/15/23 10:18	02/16/23 14:51	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	02/15/23 10:18	02/16/23 14:51	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	02/15/23 10:18	02/16/23 14:51	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	02/15/23 10:18	02/16/23 14:51	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	02/17/23 09:20	02/17/23 13:07	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**302**	mg/L	25.0	25.0	1		02/07/23 13:15		
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville								
Alkalinity,Bicarbonate (CaCO3)	**137**	mg/L	5.0	5.0	1		02/08/23 15:12		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		02/08/23 15:12		
Alkalinity, Total as CaCO3	**137**	mg/L	5.0	5.0	1		02/08/23 15:12		

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ANALYTICAL RESULTS

Project: Plant McD AP-1 Detection Well
Pace Project No.: 92650183

Sample: MCD-DGWC-37 **Lab ID: 92650183006** Collected: 02/02/23 10:59 Received: 02/03/23 16:23 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		02/08/23 01:25	16887-00-6	
Fluoride	**0.089J**	mg/L	0.10	0.050	1		02/08/23 01:25	16984-48-8	
Sulfate	**94.3**	mg/L	1.0	0.50	1		02/08/23 01:25	14808-79-8	

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ANALYTICAL RESULTS

Project: Plant McD AP-1 Detection Well
Pace Project No.: 92650183

Sample: MCD-DGWC-38 **Lab ID: 92650183007** Collected: 02/02/23 13:10 Received: 02/03/23 16:23 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Monitoring Well Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**Client**				1		02/14/23 18:18		
Collected Date	**02/02/23**				1		02/14/23 18:18		
Collected Time	**13:15**				1		02/14/23 18:18		
pH	**6.08**	Std. Units			1		02/14/23 18:18		
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	02/14/23 17:00	02/15/23 18:48	7439-89-6	
Potassium	**4.3**	mg/L	0.20	0.15	1	02/14/23 17:00	02/15/23 18:48	7440-09-7	
Sodium	**11.5**	mg/L	1.0	0.58	1	02/14/23 17:00	02/15/23 18:48	7440-23-5	
Calcium	**83.6**	mg/L	1.0	0.12	1	02/14/23 17:00	02/15/23 18:48	7440-70-2	
Magnesium	**24.9**	mg/L	0.050	0.012	1	02/14/23 17:00	02/15/23 18:48	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	02/15/23 10:18	02/16/23 14:57	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0022	1	02/15/23 10:18	02/16/23 14:57	7440-38-2	
Barium	**0.030**	mg/L	0.0050	0.00067	1	02/15/23 10:18	02/16/23 14:57	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	02/15/23 10:18	02/16/23 14:57	7440-41-7	
Boron	**2.6**	mg/L	0.040	0.0086	1	02/15/23 10:18	02/16/23 14:57	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	02/15/23 10:18	02/16/23 14:57	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	02/15/23 10:18	02/16/23 14:57	7440-47-3	
Cobalt	**0.0017J**	mg/L	0.0050	0.00039	1	02/15/23 10:18	02/16/23 14:57	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	02/15/23 10:18	02/16/23 14:57	7439-92-1	
Lithium	**0.0026J**	mg/L	0.030	0.00073	1	02/15/23 10:18	02/16/23 14:57	7439-93-2	
Molybdenum	**0.0015J**	mg/L	0.010	0.00074	1	02/15/23 10:18	02/16/23 14:57	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	02/15/23 10:18	02/16/23 14:57	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	02/15/23 10:18	02/16/23 14:57	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	02/17/23 09:20	02/17/23 13:10	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**478**	mg/L	25.0	25.0	1		02/07/23 13:15		
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville								
Alkalinity,Bicarbonate (CaCO3)	**97.8**	mg/L	5.0	5.0	1		02/08/23 15:23		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		02/08/23 15:23		
Alkalinity, Total as CaCO3	**97.8**	mg/L	5.0	5.0	1		02/08/23 15:23		

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

ANALYTICAL RESULTS

Project: Plant McD AP-1 Detection Well
Pace Project No.: 92650183

Sample: MCD-DGWC-38 **Lab ID: 92650183007** Collected: 02/02/23 13:10 Received: 02/03/23 16:23 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	**8.7**	mg/L	1.0	0.60	1		02/08/23 01:40	16887-00-6	
Fluoride	**0.10**	mg/L	0.10	0.050	1		02/08/23 01:40	16984-48-8	
Sulfate	**239**	mg/L	5.0	2.5	5		02/08/23 15:19	14808-79-8	

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ANALYTICAL RESULTS

Project: Plant McD AP-1 Detection Well
Pace Project No.: 92650183

Sample: MCD-DGWC-67 **Lab ID: 92650183008** Collected: 02/02/23 11:25 Received: 02/03/23 16:23 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Monitoring Well Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**Client**				1		02/14/23 18:19		
Collected Date	**02/02/23**				1		02/14/23 18:19		
Collected Time	**11:30**				1		02/14/23 18:19		
pH	**6.27**	Std. Units			1		02/14/23 18:19		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Iron	**0.040**	mg/L	0.040	0.025	1	02/28/23 11:24	02/28/23 21:07	7439-89-6	
Potassium	**4.2**	mg/L	0.50	0.15	1	02/28/23 11:24	02/28/23 21:07	7440-09-7	
Sodium	**11.4**	mg/L	1.0	0.58	1	02/28/23 11:24	02/28/23 21:07	7440-23-5	
Calcium	**48.6**	mg/L	1.0	0.12	1	02/28/23 11:24	02/28/23 21:07	7440-70-2	
Magnesium	**19.6**	mg/L	0.050	0.012	1	02/28/23 11:24	02/28/23 21:07	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	02/28/23 10:11	03/01/23 14:24	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0022	1	02/28/23 10:11	03/01/23 14:24	7440-38-2	
Barium	**0.080**	mg/L	0.0050	0.00067	1	02/28/23 10:11	03/01/23 14:24	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	02/28/23 10:11	03/01/23 14:24	7440-41-7	
Boron	**3.9**	mg/L	0.040	0.0086	1	02/28/23 10:11	03/01/23 14:24	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	02/28/23 10:11	03/01/23 14:24	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	02/28/23 10:11	03/01/23 14:24	7440-47-3	
Cobalt	**0.0014J**	mg/L	0.0050	0.00039	1	02/28/23 10:11	03/01/23 14:24	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	02/28/23 10:11	03/01/23 14:24	7439-92-1	
Lithium	**0.0048J**	mg/L	0.030	0.00073	1	02/28/23 10:11	03/01/23 14:24	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	02/28/23 10:11	03/01/23 14:24	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	02/28/23 10:11	03/01/23 14:24	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	02/28/23 10:11	03/01/23 14:24	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	0.00013	1	03/02/23 09:00	03/02/23 15:19	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**317**	mg/L	25.0	25.0	1		02/07/23 13:15		
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville								
Alkalinity,Bicarbonate (CaCO3)	**91.7**	mg/L	5.0	5.0	1		02/08/23 15:42		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		02/08/23 15:42		
Alkalinity, Total as CaCO3	**91.7**	mg/L	5.0	5.0	1		02/08/23 15:42		

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ANALYTICAL RESULTS

Project: Plant McD AP-1 Detection Well
Pace Project No.: 92650183

Sample: MCD-DGWC-67 **Lab ID: 92650183008** Collected: 02/02/23 11:25 Received: 02/03/23 16:23 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		02/08/23 02:25	16887-00-6	
Fluoride	**0.068J**	mg/L	0.10	0.050	1		02/08/23 02:25	16984-48-8	
Sulfate	**117**	mg/L	2.0	1.0	2		02/08/23 15:34	14808-79-8	

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ANALYTICAL RESULTS

Project: Plant McD AP-1 Detection Well
Pace Project No.: 92650183

Sample: MCD-DGWC-121 **Lab ID: 92650183009** Collected: 02/02/23 13:15 Received: 02/03/23 16:23 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Monitoring Well Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**Client**				1		02/14/23 18:19		
Collected Date	**02/02/23**				1		02/14/23 18:19		
Collected Time	**13:20**				1		02/14/23 18:19		
pH	**6.35**	Std. Units			1		02/14/23 18:19		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Iron	**2.9**	mg/L	0.040	0.025	1	02/14/23 17:00	02/15/23 18:53	7439-89-6	
Potassium	**5.7**	mg/L	0.20	0.15	1	02/14/23 17:00	02/15/23 18:53	7440-09-7	
Sodium	**10.8**	mg/L	1.0	0.58	1	02/14/23 17:00	02/15/23 18:53	7440-23-5	
Calcium	**40.1**	mg/L	1.0	0.12	1	02/14/23 17:00	02/15/23 18:53	7440-70-2	
Magnesium	**11.3**	mg/L	0.050	0.012	1	02/14/23 17:00	02/15/23 18:53	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	02/15/23 10:18	02/16/23 15:15	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0022	1	02/15/23 10:18	02/16/23 15:15	7440-38-2	
Barium	**0.049**	mg/L	0.0050	0.00067	1	02/15/23 10:18	02/16/23 15:15	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	02/15/23 10:18	02/16/23 15:15	7440-41-7	
Boron	**1.6**	mg/L	0.040	0.0086	1	02/15/23 10:18	02/16/23 15:15	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	02/15/23 10:18	02/16/23 15:15	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	02/15/23 10:18	02/16/23 15:15	7440-47-3	
Cobalt	**0.0016J**	mg/L	0.0050	0.00039	1	02/15/23 10:18	02/16/23 15:15	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	02/15/23 10:18	02/16/23 15:15	7439-92-1	
Lithium	**0.0059J**	mg/L	0.030	0.00073	1	02/15/23 10:18	02/16/23 15:15	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	02/15/23 10:18	02/16/23 15:15	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	02/15/23 10:18	02/16/23 15:15	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	02/15/23 10:18	02/16/23 15:15	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	02/17/23 09:20	02/17/23 13:13	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**221**	mg/L	25.0	25.0	1		02/07/23 13:16		
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville								
Alkalinity,Bicarbonate (CaCO3)	**90.1**	mg/L	5.0	5.0	1		02/08/23 15:50		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		02/08/23 15:50		
Alkalinity, Total as CaCO3	**90.1**	mg/L	5.0	5.0	1		02/08/23 15:50		

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ANALYTICAL RESULTS

Project: Plant McD AP-1 Detection Well
Pace Project No.: 92650183

Sample: MCD-DGWC-121 **Lab ID: 92650183009** Collected: 02/02/23 13:15 Received: 02/03/23 16:23 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	**4.3**	mg/L	1.0	0.60	1		02/08/23 03:10	16887-00-6	
Fluoride	**0.11**	mg/L	0.10	0.050	1		02/08/23 03:10	16984-48-8	
Sulfate	**67.6**	mg/L	1.0	0.50	1		02/08/23 03:10	14808-79-8	

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ANALYTICAL RESULTS

Project: Plant McD AP-1 Detection Well
Pace Project No.: 92650183

Sample: MCD-DGWC-39 **Lab ID: 92650183010** Collected: 02/03/23 10:51 Received: 02/03/23 16:23 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Monitoring Well Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**Client**				1		02/14/23 18:20		
Collected Date	**02/03/23**				1		02/14/23 18:20		
Collected Time	**10:56**				1		02/14/23 18:20		
pH	**6.49**	Std. Units			1		02/14/23 18:20		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Iron	**11.6**	mg/L	0.040	0.025	1	02/14/23 17:00	02/15/23 18:57	7439-89-6	
Potassium	**2.6**	mg/L	0.20	0.15	1	02/14/23 17:00	02/15/23 18:57	7440-09-7	
Sodium	**12.1**	mg/L	1.0	0.58	1	02/14/23 17:00	02/15/23 18:57	7440-23-5	
Calcium	**77.4**	mg/L	1.0	0.12	1	02/14/23 17:00	02/15/23 18:57	7440-70-2	
Magnesium	**19.2**	mg/L	0.050	0.012	1	02/14/23 17:00	02/15/23 18:57	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	02/15/23 10:18	02/16/23 15:21	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0022	1	02/15/23 10:18	02/16/23 15:21	7440-38-2	
Barium	**0.087**	mg/L	0.0050	0.00067	1	02/15/23 10:18	02/16/23 15:21	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	02/15/23 10:18	02/16/23 15:21	7440-41-7	
Boron	**2.1**	mg/L	0.040	0.0086	1	02/15/23 10:18	02/16/23 15:21	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	02/15/23 10:18	02/16/23 15:21	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	02/15/23 10:18	02/16/23 15:21	7440-47-3	
Cobalt	**0.0050**	mg/L	0.0050	0.00039	1	02/15/23 10:18	02/16/23 15:21	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	02/15/23 10:18	02/16/23 15:21	7439-92-1	
Lithium	ND	mg/L	0.030	0.00073	1	02/15/23 10:18	02/16/23 15:21	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	02/15/23 10:18	02/16/23 15:21	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	02/15/23 10:18	02/16/23 15:21	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	02/15/23 10:18	02/16/23 15:21	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	0.00013	1	02/17/23 09:20	02/17/23 13:15	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**382**	mg/L	25.0	25.0	1		02/08/23 18:55		
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville								
Alkalinity,Bicarbonate (CaCO3)	**239**	mg/L	5.0	5.0	1		02/09/23 16:16		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		02/09/23 16:16		
Alkalinity, Total as CaCO3	**239**	mg/L	5.0	5.0	1		02/09/23 16:16		

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ANALYTICAL RESULTS

Project: Plant McD AP-1 Detection Well
Pace Project No.: 92650183

Sample: MCD-DGWC-39 **Lab ID: 92650183010** Collected: 02/03/23 10:51 Received: 02/03/23 16:23 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	**7.4**	mg/L	1.0	0.60	1		02/08/23 03:25	16887-00-6	
Fluoride	**0.12**	mg/L	0.10	0.050	1		02/08/23 03:25	16984-48-8	
Sulfate	**115**	mg/L	2.0	1.0	2		02/08/23 16:18	14808-79-8	

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ANALYTICAL RESULTS

Project: Plant McD AP-1 Detection Well
Pace Project No.: 92650183

Sample: MCD-AP1-FD-1 **Lab ID: 92650183011** Collected: 02/02/23 00:00 Received: 02/03/23 16:23 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Monitoring Well Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**Client**				1		02/14/23 18:21		
Collected Date	**2/2/23**				1		02/14/23 18:21		
Collected Time	**11:35**				1		02/14/23 18:21		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Iron	**0.032J**	mg/L	0.040	0.025	1	02/14/23 17:00	02/15/23 19:02	7439-89-6	
Potassium	**4.0**	mg/L	0.20	0.15	1	02/14/23 17:00	02/15/23 19:02	7440-09-7	
Sodium	**10.9**	mg/L	1.0	0.58	1	02/14/23 17:00	02/15/23 19:02	7440-23-5	
Calcium	**46.2**	mg/L	1.0	0.12	1	02/14/23 17:00	02/15/23 19:02	7440-70-2	
Magnesium	**18.3**	mg/L	0.050	0.012	1	02/14/23 17:00	02/15/23 19:02	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	02/15/23 10:18	02/16/23 15:33	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0022	1	02/15/23 10:18	02/16/23 15:33	7440-38-2	
Barium	**0.084**	mg/L	0.0050	0.00067	1	02/15/23 10:18	02/16/23 15:33	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	02/15/23 10:18	02/16/23 15:33	7440-41-7	
Boron	**3.8**	mg/L	0.040	0.0086	1	02/15/23 10:18	02/16/23 15:33	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	02/15/23 10:18	02/16/23 15:33	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	02/15/23 10:18	02/16/23 15:33	7440-47-3	
Cobalt	**0.0011J**	mg/L	0.0050	0.00039	1	02/15/23 10:18	02/16/23 15:33	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	02/15/23 10:18	02/16/23 15:33	7439-92-1	
Lithium	**0.0045J**	mg/L	0.030	0.00073	1	02/15/23 10:18	02/16/23 15:33	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	02/15/23 10:18	02/16/23 15:33	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	02/15/23 10:18	02/16/23 15:33	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	02/15/23 10:18	02/16/23 15:33	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	02/17/23 09:20	02/17/23 13:18	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**303**	mg/L	25.0	25.0	1		02/07/23 13:16		
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville								
Alkalinity,Bicarbonate (CaCO3)	**93.5**	mg/L	5.0	5.0	1		02/08/23 15:59		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		02/08/23 15:59		
Alkalinity, Total as CaCO3	**93.5**	mg/L	5.0	5.0	1		02/08/23 15:59		

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ANALYTICAL RESULTS

Project: Plant McD AP-1 Detection Well
Pace Project No.: 92650183

Sample: MCD-AP1-FD-1 **Lab ID: 92650183011** Collected: 02/02/23 00:00 Received: 02/03/23 16:23 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		02/08/23 03:39	16887-00-6	
Fluoride	**0.074J**	mg/L	0.10	0.050	1		02/08/23 03:39	16984-48-8	
Sulfate	**117**	mg/L	2.0	1.0	2		02/08/23 16:33	14808-79-8	

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QUALITY CONTROL DATA

Project: Plant McD AP-1 Detection Well
Pace Project No.: 92650183

QC Batch: 755832
QC Batch Method: EPA 3010A
Analysis Method: EPA 6010D
Analysis Description: 6010D ATL
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92650183001, 92650183002, 92650183003, 92650183004, 92650183005, 92650183006, 92650183007, 92650183009, 92650183010, 92650183011

METHOD BLANK: 3927041 Matrix: Water
Associated Lab Samples: 92650183001, 92650183002, 92650183003, 92650183004, 92650183005, 92650183006, 92650183007, 92650183009, 92650183010, 92650183011

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium	mg/L	ND	1.0	0.12	02/15/23 17:07	
Iron	mg/L	ND	0.040	0.025	02/15/23 17:07	
Magnesium	mg/L	ND	0.050	0.012	02/15/23 17:07	
Potassium	mg/L	ND	0.20	0.15	02/15/23 17:07	
Sodium	mg/L	ND	1.0	0.58	02/15/23 17:07	

LABORATORY CONTROL SAMPLE: 3927042

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium	mg/L	1	1.0	103	80-120	
Iron	mg/L	1	1.0	103	80-120	
Magnesium	mg/L	1	1.0	102	80-120	
Potassium	mg/L	1	0.99	99	80-120	
Sodium	mg/L	1	1.1	106	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3927043 3927044

Parameter	Units	92650180001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Calcium	mg/L	70.2	1	1	69.6	71.4	-66	116	75-125	3	20	M1
Iron	mg/L	1.8	1	1	2.8	2.8	98	104	75-125	2	20	
Magnesium	mg/L	24.4	1	1	24.8	25.5	42	113	75-125	3	20	M1
Potassium	mg/L	7.8	1	1	8.7	9.1	89	138	75-125	5	20	M1
Sodium	mg/L	18.4	1	1	19.0	19.5	60	112	75-125	3	20	M1

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QUALITY CONTROL DATA

Project: Plant McD AP-1 Detection Well
Pace Project No.: 92650183

QC Batch: 758465
QC Batch Method: EPA 3010A
Analysis Method: EPA 6010D
Analysis Description: 6010D ATL
Laboratory: Pace Analytical Services - Peachtree Corners, GA

Associated Lab Samples: 92650183008

METHOD BLANK: 3939629 Matrix: Water
Associated Lab Samples: 92650183008

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium	mg/L	ND	1.0	0.12	02/28/23 20:57	
Iron	mg/L	ND	0.040	0.025	02/28/23 20:57	
Magnesium	mg/L	ND	0.050	0.012	02/28/23 20:57	
Potassium	mg/L	0.16J	0.50	0.15	02/28/23 20:57	
Sodium	mg/L	ND	1.0	0.58	02/28/23 20:57	

LABORATORY CONTROL SAMPLE: 3939630

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium	mg/L	1	0.97J	97	80-120	
Iron	mg/L	1	1.0	103	80-120	
Magnesium	mg/L	1	1.0	104	80-120	
Potassium	mg/L	1	1.1	108	80-120	
Sodium	mg/L	1	1.0J	100	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3939631 3939632

Parameter	Units	92652511041 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Calcium	mg/L	1960 ug/L	1	1	2.9	2.9	93	90	75-125	1	20	
Iron	mg/L	188 ug/L	1	1	1.2	1.2	101	102	75-125	1	20	
Magnesium	mg/L	958 ug/L	1	1	2.0	2.0	102	100	75-125	1	20	
Potassium	mg/L	96800 ug/L	1	1	95.4	95.1	-141	-177	75-125	0	20	M1
Sodium	mg/L	45100 ug/L	1	1	44.8	44.7	-35	-43	75-125	0	20	M1

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QUALITY CONTROL DATA

Project: Plant McD AP-1 Detection Well
Pace Project No.: 92650183

QC Batch: 755857
QC Batch Method: EPA 3005A
Analysis Method: EPA 6020B
Analysis Description: 6020 MET
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92650183001, 92650183002, 92650183003, 92650183004, 92650183005, 92650183006, 92650183007, 92650183009, 92650183010, 92650183011

METHOD BLANK: 3927212 Matrix: Water
Associated Lab Samples: 92650183001, 92650183002, 92650183003, 92650183004, 92650183005, 92650183006, 92650183007, 92650183009, 92650183010, 92650183011

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	ND	0.0030	0.00078	02/16/23 12:50	
Arsenic	mg/L	ND	0.0050	0.0022	02/16/23 12:50	
Barium	mg/L	ND	0.0050	0.00067	02/16/23 12:50	
Beryllium	mg/L	ND	0.00050	0.000054	02/16/23 12:50	
Boron	mg/L	ND	0.040	0.0086	02/16/23 12:50	
Cadmium	mg/L	ND	0.00050	0.00011	02/16/23 12:50	
Chromium	mg/L	ND	0.0050	0.0011	02/16/23 12:50	
Cobalt	mg/L	ND	0.0050	0.00039	02/16/23 12:50	
Lead	mg/L	ND	0.0010	0.00089	02/16/23 12:50	
Lithium	mg/L	ND	0.030	0.00073	02/16/23 12:50	
Molybdenum	mg/L	ND	0.010	0.00074	02/16/23 12:50	
Selenium	mg/L	ND	0.0050	0.0014	02/16/23 12:50	
Thallium	mg/L	ND	0.0010	0.00018	02/16/23 12:50	

LABORATORY CONTROL SAMPLE: 3927213

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.1	0.11	107	80-120	
Arsenic	mg/L	0.1	0.099	99	80-120	
Barium	mg/L	0.1	0.098	98	80-120	
Beryllium	mg/L	0.1	0.096	96	80-120	
Boron	mg/L	1	0.99	99	80-120	
Cadmium	mg/L	0.1	0.096	96	80-120	
Chromium	mg/L	0.1	0.10	100	80-120	
Cobalt	mg/L	0.1	0.098	98	80-120	
Lead	mg/L	0.1	0.099	99	80-120	
Lithium	mg/L	0.1	0.097	97	80-120	
Molybdenum	mg/L	0.1	0.10	101	80-120	
Selenium	mg/L	0.1	0.098	98	80-120	
Thallium	mg/L	0.1	0.098	98	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3927214 3927215

Parameter	Units	92650179003 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	0.092	111	91	75-125	19	20	

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QUALITY CONTROL DATA

Project: Plant McD AP-1 Detection Well
Pace Project No.: 92650183

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3927214 3927215

Parameter	Units	92650179003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Arsenic	mg/L	0.0029J	0.1	0.1	0.11	0.098	104	95	75-125	9	20	
Barium	mg/L	0.089	0.1	0.1	0.19	0.19	102	97	75-125	3	20	
Beryllium	mg/L	0.00016J	0.1	0.1	0.10	0.097	105	97	75-125	7	20	
Boron	mg/L	0.051	1	1	1.1	1.0	108	99	75-125	8	20	
Cadmium	mg/L	0.00019J	0.1	0.1	0.10	0.096	102	96	75-125	6	20	
Chromium	mg/L	ND	0.1	0.1	0.11	0.10	111	99	75-125	12	20	
Cobalt	mg/L	0.0080	0.1	0.1	0.12	0.11	108	98	75-125	9	20	
Lead	mg/L	ND	0.1	0.1	0.10	0.097	102	97	75-125	5	20	
Lithium	mg/L	0.0088J	0.1	0.1	0.12	0.11	107	99	75-125	8	20	
Molybdenum	mg/L	0.023	0.1	0.1	0.13	0.12	111	102	75-125	7	20	
Selenium	mg/L	ND	0.1	0.1	0.10	0.096	103	96	75-125	7	20	
Thallium	mg/L	ND	0.1	0.1	0.10	0.098	102	98	75-125	4	20	

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QUALITY CONTROL DATA

Project: Plant McD AP-1 Detection Well
Pace Project No.: 92650183

QC Batch: 758452
QC Batch Method: EPA 3005A
Analysis Method: EPA 6020B
Analysis Description: 6020 MET
Laboratory: Pace Analytical Services - Peachtree Corners, GA

Associated Lab Samples: 92650183008

METHOD BLANK: 3939568 Matrix: Water
Associated Lab Samples: 92650183008

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	ND	0.0030	0.00078	03/01/23 14:12	
Arsenic	mg/L	ND	0.0050	0.0022	03/01/23 14:12	
Barium	mg/L	ND	0.0050	0.00067	03/01/23 14:12	
Beryllium	mg/L	ND	0.00050	0.000054	03/01/23 14:12	
Boron	mg/L	ND	0.040	0.0086	03/01/23 14:12	
Cadmium	mg/L	ND	0.00050	0.00011	03/01/23 14:12	
Chromium	mg/L	ND	0.0050	0.0011	03/01/23 14:12	
Cobalt	mg/L	ND	0.0050	0.00039	03/01/23 14:12	
Lead	mg/L	ND	0.0010	0.00089	03/01/23 14:12	
Lithium	mg/L	ND	0.030	0.00073	03/01/23 14:12	
Molybdenum	mg/L	ND	0.010	0.00074	03/01/23 14:12	
Selenium	mg/L	ND	0.0050	0.0014	03/01/23 14:12	
Thallium	mg/L	ND	0.0010	0.00018	03/01/23 14:12	

LABORATORY CONTROL SAMPLE: 3939569

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	103	80-120	
Barium	mg/L	0.1	0.10	104	80-120	
Beryllium	mg/L	0.1	0.11	109	80-120	
Boron	mg/L	1	1.0	102	80-120	
Cadmium	mg/L	0.1	0.10	102	80-120	
Chromium	mg/L	0.1	0.11	107	80-120	
Cobalt	mg/L	0.1	0.11	107	80-120	
Lead	mg/L	0.1	0.11	106	80-120	
Lithium	mg/L	0.1	0.11	111	80-120	
Molybdenum	mg/L	0.1	0.11	105	80-120	
Selenium	mg/L	0.1	0.10	103	80-120	
Thallium	mg/L	0.1	0.11	106	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3939570 3939571

Parameter	Units	92650183008 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Antimony	mg/L	ND	0.1	0.1	0.11	0.12	114	117	75-125	3	20	
Arsenic	mg/L	ND	0.1	0.1	0.10	0.11	104	106	75-125	2	20	

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QUALITY CONTROL DATA

Project: Plant McD AP-1 Detection Well
Pace Project No.: 92650183

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3939570 3939571

Parameter	Units	92650183008 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Barium	mg/L	0.080	0.1	0.1	0.18	0.19	102	108	75-125	3	20	
Beryllium	mg/L	ND	0.1	0.1	0.10	0.10	102	104	75-125	2	20	
Boron	mg/L	3.9	1	1	4.9	5.0	98	112	75-125	3	20	
Cadmium	mg/L	ND	0.1	0.1	0.10	0.10	100	105	75-125	4	20	
Chromium	mg/L	ND	0.1	0.1	0.11	0.11	105	108	75-125	2	20	
Cobalt	mg/L	0.0014J	0.1	0.1	0.10	0.11	103	105	75-125	2	20	
Lead	mg/L	ND	0.1	0.1	0.099	0.10	99	101	75-125	2	20	
Lithium	mg/L	0.0048J	0.1	0.1	0.11	0.11	104	106	75-125	2	20	
Molybdenum	mg/L	ND	0.1	0.1	0.11	0.11	106	106	75-125	0	20	
Selenium	mg/L	ND	0.1	0.1	0.10	0.11	103	105	75-125	2	20	
Thallium	mg/L	ND	0.1	0.1	0.099	0.10	98	101	75-125	3	20	

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QUALITY CONTROL DATA

Project: Plant McD AP-1 Detection Well
Pace Project No.: 92650183

QC Batch: 756583
QC Batch Method: EPA 7470A
Analysis Method: EPA 7470A
Analysis Description: 7470 Mercury
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92650183001, 92650183002, 92650183003, 92650183004, 92650183005, 92650183006, 92650183007, 92650183009, 92650183010, 92650183011

METHOD BLANK: 3930812 Matrix: Water
Associated Lab Samples: 92650183001, 92650183002, 92650183003, 92650183004, 92650183005, 92650183006, 92650183007, 92650183009, 92650183010, 92650183011

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	ND	0.00020	0.00013	02/17/23 12:36	

LABORATORY CONTROL SAMPLE: 3930813

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.0025	0.0023	91	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3930814 3930815

Parameter	Units	92650183001 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	0.0023	100	92	75-125	9	20	

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QUALITY CONTROL DATA

Project: Plant McD AP-1 Detection Well
Pace Project No.: 92650183

QC Batch: 758956
QC Batch Method: EPA 7470A
Analysis Method: EPA 7470A
Analysis Description: 7470 Mercury
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92650183008

METHOD BLANK: 3942309 Matrix: Water
Associated Lab Samples: 92650183008

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	ND	0.00020	0.00013	03/02/23 14:05	

LABORATORY CONTROL SAMPLE: 3942310

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.0025	0.0024	96	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3942311 3942312

Parameter	Units	92651580003 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	0.0021	0.0023	83	94	75-125	12	20	

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QUALITY CONTROL DATA

Project: Plant McD AP-1 Detection Well
Pace Project No.: 92650183

QC Batch: 753832 | 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: 92650183001, 92650183002, 92650183003, 92650183004

METHOD BLANK: 3916393 Matrix: Water
Associated Lab Samples: 92650183001, 92650183002, 92650183003, 92650183004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	25.0	25.0	02/05/23 14:03	

LABORATORY CONTROL SAMPLE: 3916394

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	382	96	80-120	

SAMPLE DUPLICATE: 3916858

Parameter	Units	92649872010 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	67.0	69.0	3	10	

SAMPLE DUPLICATE: 3916859

Parameter	Units	92650181004 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	536	543	1	10	

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(770)734-4200

QUALITY CONTROL DATA

Project: Plant McD AP-1 Detection Well
Pace Project No.: 92650183

QC Batch: 754074
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: 92650183005

METHOD BLANK: 3917190 Matrix: Water
Associated Lab Samples: 92650183005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	25.0	25.0	02/06/23 13:39	

LABORATORY CONTROL SAMPLE: 3917191

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	396	99	80-120	

SAMPLE DUPLICATE: 3917192

Parameter	Units	92649872005 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	84.0	70.0	18	10	D6

SAMPLE DUPLICATE: 3917193

Parameter	Units	92649235044 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	1820	1450	22	10	D6

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QUALITY CONTROL DATA

Project: Plant McD AP-1 Detection Well
Pace Project No.: 92650183

QC Batch: 754311 | 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: 92650183006, 92650183007, 92650183008, 92650183009, 92650183011

METHOD BLANK: 3918591 Matrix: Water
Associated Lab Samples: 92650183006, 92650183007, 92650183008, 92650183009, 92650183011

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	25.0	25.0	02/07/23 13:13	

LABORATORY CONTROL SAMPLE: 3918592

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	415	104	80-120	

SAMPLE DUPLICATE: 3918593

Parameter	Units	92650181011 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	ND	ND		10	

SAMPLE DUPLICATE: 3918594

Parameter	Units	92650573003 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	40.0	56.0	33	10	D6

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QUALITY CONTROL DATA

Project: Plant McD AP-1 Detection Well
Pace Project No.: 92650183

QC Batch: 754576
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: 92650183010

METHOD BLANK: 3920182 Matrix: Water
Associated Lab Samples: 92650183010

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	25.0	25.0	02/08/23 18:52	

LABORATORY CONTROL SAMPLE: 3920183

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	379	95	80-120	

SAMPLE DUPLICATE: 3921107

Parameter	Units	92649235040 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	2550	2940	14	10	D6

SAMPLE DUPLICATE: 3921108

Parameter	Units	92649235045 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	2850	2670	6	10	

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QUALITY CONTROL DATA

Project: Plant McD AP-1 Detection Well
Pace Project No.: 92650183

QC Batch: 754277
QC Batch Method: SM 2320B-2011
Analysis Method: SM 2320B-2011
Analysis Description: 2320B Alkalinity
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92650183001, 92650183002, 92650183003, 92650183004

METHOD BLANK: 3918411 Matrix: Water
Associated Lab Samples: 92650183001, 92650183002, 92650183003, 92650183004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Alkalinity, Total as CaCO3	mg/L	ND	5.0	5.0	02/07/23 13:23	
Alkalinity,Bicarbonate (CaCO3)	mg/L	ND	5.0	5.0	02/07/23 13:23	
Alkalinity,Carbonate (CaCO3)	mg/L	ND	5.0	5.0	02/07/23 13:23	

LABORATORY CONTROL SAMPLE: 3918412

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	50	51.0	102	80-120	

LABORATORY CONTROL SAMPLE: 3918413

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	50	52.1	104	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3918414 3918415

Parameter	Units	92650183003 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	39.8	50	50	91.7	94.4	104	109	80-120	3	25	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3918416 3918417

Parameter	Units	92650183004 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	50.6	51.1	98	99	80-120	1	25	

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QUALITY CONTROL DATA

Project: Plant McD AP-1 Detection Well
Pace Project No.: 92650183

QC Batch: 754305
QC Batch Method: SM 2320B-2011
Analysis Method: SM 2320B-2011
Analysis Description: 2320B Alkalinity
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92650183005

METHOD BLANK: 3918541 Matrix: Water
Associated Lab Samples: 92650183005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Alkalinity, Total as CaCO3	mg/L	ND	5.0	5.0	02/07/23 16:56	
Alkalinity,Bicarbonate (CaCO3)	mg/L	ND	5.0	5.0	02/07/23 16:56	
Alkalinity,Carbonate (CaCO3)	mg/L	ND	5.0	5.0	02/07/23 16:56	

LABORATORY CONTROL SAMPLE: 3918542

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	50	53.3	107	80-120	

LABORATORY CONTROL SAMPLE: 3918543

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	50	50.3	101	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3918544 3918545

Parameter	Units	92650219009 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	69.9	50	50	128	133	116	127	80-120	4	25	M1

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3918546 3918547

Parameter	Units	92650219010 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	118	50	50	163	166	91	98	80-120	2	25	

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QUALITY CONTROL DATA

Project: Plant McD AP-1 Detection Well
Pace Project No.: 92650183

QC Batch: 754413 | Analysis Method: SM 2320B-2011
QC Batch Method: SM 2320B-2011 | Analysis Description: 2320B Alkalinity
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92650183006, 92650183007, 92650183008, 92650183009, 92650183011

METHOD BLANK: 3919370 Matrix: Water
Associated Lab Samples: 92650183006, 92650183007, 92650183008, 92650183009, 92650183011

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Alkalinity, Total as CaCO3	mg/L	ND	5.0	5.0	02/08/23 14:25	
Alkalinity,Bicarbonate (CaCO3)	mg/L	ND	5.0	5.0	02/08/23 14:25	
Alkalinity,Carbonate (CaCO3)	mg/L	ND	5.0	5.0	02/08/23 14:25	

LABORATORY CONTROL SAMPLE: 3919371

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	50	50.4	101	80-120	

LABORATORY CONTROL SAMPLE: 3919372

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	50	52.2	104	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3919373 3919374

Parameter	Units	92650181010 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	50.4	50.5	101	101	80-120	0	25	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3919375 3919376

Parameter	Units	92650181012 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	11.2	9.3	22	19	80-120	18	25	M1

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QUALITY CONTROL DATA

Project: Plant McD AP-1 Detection Well
Pace Project No.: 92650183

QC Batch: 754583
QC Batch Method: SM 2320B-2011
Analysis Method: SM 2320B-2011
Analysis Description: 2320B Alkalinity
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92650183010

METHOD BLANK: 3920245 Matrix: Water
Associated Lab Samples: 92650183010

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Alkalinity, Total as CaCO3	mg/L	ND	5.0	5.0	02/09/23 13:05	
Alkalinity,Bicarbonate (CaCO3)	mg/L	ND	5.0	5.0	02/09/23 13:05	
Alkalinity,Carbonate (CaCO3)	mg/L	ND	5.0	5.0	02/09/23 13:05	

LABORATORY CONTROL SAMPLE: 3920246

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	50	50.1	100	80-120	

LABORATORY CONTROL SAMPLE: 3920247

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	50	49.2	98	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3920248 3920249

Parameter	Units	92650414004 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	40.7	50	50	93.2	93.5	105	106	80-120	0	25	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3920250 3920251

Parameter	Units	92650414005 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	24.7	50	50	73.9	74.3	98	99	80-120	1	25	

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QUALITY CONTROL DATA

Project: Plant McD AP-1 Detection Well
Pace Project No.: 92650183

QC Batch: 753991
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: 92650183001, 92650183002, 92650183003, 92650183004, 92650183005

METHOD BLANK: 3916900 Matrix: Water
Associated Lab Samples: 92650183001, 92650183002, 92650183003, 92650183004, 92650183005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.60	02/06/23 14:36	
Fluoride	mg/L	ND	0.10	0.050	02/06/23 14:36	
Sulfate	mg/L	ND	1.0	0.50	02/06/23 14:36	

LABORATORY CONTROL SAMPLE: 3916901

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	53.8	108	90-110	
Fluoride	mg/L	2.5	2.7	109	90-110	
Sulfate	mg/L	50	53.9	108	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3916902 3916903

Parameter	Units	92650019010 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	4.7	50	50	55.5	56.6	102	104	90-110	2	10	
Fluoride	mg/L	2.7	2.5	2.5	4.8	4.8	87	86	90-110	0	10	M1
Sulfate	mg/L	97.3	50	50	146	144	97	94	90-110	1	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3916904 3916905

Parameter	Units	92650181004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	19.2	50	50	70.5	71.4	102	104	90-110	1	10	
Fluoride	mg/L	ND	2.5	2.5	2.6	2.7	103	105	90-110	2	10	
Sulfate	mg/L	309	50	50	353	352	89	86	90-110	0	10	M1

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QUALITY CONTROL DATA

Project: Plant McD AP-1 Detection Well
Pace Project No.: 92650183

QC Batch: 754261
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: 92650183006, 92650183007, 92650183008, 92650183009, 92650183010, 92650183011

METHOD BLANK: 3918330 Matrix: Water
Associated Lab Samples: 92650183006, 92650183007, 92650183008, 92650183009, 92650183010, 92650183011

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.60	02/07/23 18:29	
Fluoride	mg/L	ND	0.10	0.050	02/07/23 18:29	
Sulfate	mg/L	ND	1.0	0.50	02/07/23 18:29	

LABORATORY CONTROL SAMPLE: 3918331

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	49.6	99	90-110	
Fluoride	mg/L	2.5	2.6	103	90-110	
Sulfate	mg/L	50	48.9	98	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3918332 3918333

Parameter	Units	92650181007 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	2.6	50	50	52.2	52.2	99	99	90-110	0	10	
Fluoride	mg/L	0.45	2.5	2.5	2.9	2.9	97	99	90-110	1	10	
Sulfate	mg/L	138	50	50	186	187	96	97	90-110	0	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3918334 3918335

Parameter	Units	92650183008 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	9.4	50	50	60.0	60.9	101	103	90-110	1	10	
Fluoride	mg/L	0.068J	2.5	2.5	2.5	2.6	98	101	90-110	2	10	
Sulfate	mg/L	117	50	50	166	166	98	99	90-110	0	10	

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QUALIFIERS

Project: Plant McD AP-1 Detection Well
Pace Project No.: 92650183

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.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Plant McD AP-1 Detection Well
Pace Project No.: 92650183

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92650183001	**MCD-DGWC-40**				
92650183002	**MCD-DGWC-68A**				
92650183003	**MCD-DGWC-69**				
92650183004	**MCD-AP1-EB-1**				
92650183005	**MCD-AP1-FB-1**				
92650183006	**MCD-DGWC-37**				
92650183007	**MCD-DGWC-38**				
92650183008	**MCD-DGWC-67**				
92650183009	**MCD-DGWC-121**				
92650183010	**MCD-DGWC-39**				
92650183011	**MCD-AP1-FD-1**				
92650183001	**MCD-DGWC-40**	EPA 3010A	755832	EPA 6010D	755852
92650183002	**MCD-DGWC-68A**	EPA 3010A	755832	EPA 6010D	755852
92650183003	**MCD-DGWC-69**	EPA 3010A	755832	EPA 6010D	755852
92650183004	**MCD-AP1-EB-1**	EPA 3010A	755832	EPA 6010D	755852
92650183005	**MCD-AP1-FB-1**	EPA 3010A	755832	EPA 6010D	755852
92650183006	**MCD-DGWC-37**	EPA 3010A	755832	EPA 6010D	755852
92650183007	**MCD-DGWC-38**	EPA 3010A	755832	EPA 6010D	755852
92650183008	**MCD-DGWC-67**	EPA 3010A	758465	EPA 6010D	758556
92650183009	**MCD-DGWC-121**	EPA 3010A	755832	EPA 6010D	755852
92650183010	**MCD-DGWC-39**	EPA 3010A	755832	EPA 6010D	755852
92650183011	**MCD-AP1-FD-1**	EPA 3010A	755832	EPA 6010D	755852
92650183001	**MCD-DGWC-40**	EPA 3005A	755857	EPA 6020B	756083
92650183002	**MCD-DGWC-68A**	EPA 3005A	755857	EPA 6020B	756083
92650183003	**MCD-DGWC-69**	EPA 3005A	755857	EPA 6020B	756083
92650183004	**MCD-AP1-EB-1**	EPA 3005A	755857	EPA 6020B	756083
92650183005	**MCD-AP1-FB-1**	EPA 3005A	755857	EPA 6020B	756083
92650183006	**MCD-DGWC-37**	EPA 3005A	755857	EPA 6020B	756083
92650183007	**MCD-DGWC-38**	EPA 3005A	755857	EPA 6020B	756083
92650183008	**MCD-DGWC-67**	EPA 3005A	758452	EPA 6020B	758555
92650183009	**MCD-DGWC-121**	EPA 3005A	755857	EPA 6020B	756083
92650183010	**MCD-DGWC-39**	EPA 3005A	755857	EPA 6020B	756083
92650183011	**MCD-AP1-FD-1**	EPA 3005A	755857	EPA 6020B	756083
92650183001	**MCD-DGWC-40**	EPA 7470A	756583	EPA 7470A	756603
92650183002	**MCD-DGWC-68A**	EPA 7470A	756583	EPA 7470A	756603
92650183003	**MCD-DGWC-69**	EPA 7470A	756583	EPA 7470A	756603
92650183004	**MCD-AP1-EB-1**	EPA 7470A	756583	EPA 7470A	756603
92650183005	**MCD-AP1-FB-1**	EPA 7470A	756583	EPA 7470A	756603
92650183006	**MCD-DGWC-37**	EPA 7470A	756583	EPA 7470A	756603
92650183007	**MCD-DGWC-38**	EPA 7470A	756583	EPA 7470A	756603
92650183008	**MCD-DGWC-67**	EPA 7470A	758956	EPA 7470A	759042
92650183009	**MCD-DGWC-121**	EPA 7470A	756583	EPA 7470A	756603
92650183010	**MCD-DGWC-39**	EPA 7470A	756583	EPA 7470A	756603
92650183011	**MCD-AP1-FD-1**	EPA 7470A	756583	EPA 7470A	756603

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

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Plant McD AP-1 Detection Well
Pace Project No.: 92650183

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92650183001	**MCD-DGWC-40**	SM 2540C-2015	753832		
92650183002	**MCD-DGWC-68A**	SM 2540C-2015	753832		
92650183003	**MCD-DGWC-69**	SM 2540C-2015	753832		
92650183004	**MCD-AP1-EB-1**	SM 2540C-2015	753832		
92650183005	**MCD-AP1-FB-1**	SM 2540C-2015	754074		
92650183006	**MCD-DGWC-37**	SM 2540C-2015	754311		
92650183007	**MCD-DGWC-38**	SM 2540C-2015	754311		
92650183008	**MCD-DGWC-67**	SM 2540C-2015	754311		
92650183009	**MCD-DGWC-121**	SM 2540C-2015	754311		
92650183010	**MCD-DGWC-39**	SM 2540C-2015	754576		
92650183011	**MCD-AP1-FD-1**	SM 2540C-2015	754311		
92650183001	**MCD-DGWC-40**	SM 2320B-2011	754277		
92650183002	**MCD-DGWC-68A**	SM 2320B-2011	754277		
92650183003	**MCD-DGWC-69**	SM 2320B-2011	754277		
92650183004	**MCD-AP1-EB-1**	SM 2320B-2011	754277		
92650183005	**MCD-AP1-FB-1**	SM 2320B-2011	754305		
92650183006	**MCD-DGWC-37**	SM 2320B-2011	754413		
92650183007	**MCD-DGWC-38**	SM 2320B-2011	754413		
92650183008	**MCD-DGWC-67**	SM 2320B-2011	754413		
92650183009	**MCD-DGWC-121**	SM 2320B-2011	754413		
92650183010	**MCD-DGWC-39**	SM 2320B-2011	754583		
92650183011	**MCD-AP1-FD-1**	SM 2320B-2011	754413		
92650183001	**MCD-DGWC-40**	EPA 300.0 Rev 2.1 1993	753991		
92650183002	**MCD-DGWC-68A**	EPA 300.0 Rev 2.1 1993	753991		
92650183003	**MCD-DGWC-69**	EPA 300.0 Rev 2.1 1993	753991		
92650183004	**MCD-AP1-EB-1**	EPA 300.0 Rev 2.1 1993	753991		
92650183005	**MCD-AP1-FB-1**	EPA 300.0 Rev 2.1 1993	753991		
92650183006	**MCD-DGWC-37**	EPA 300.0 Rev 2.1 1993	754261		
92650183007	**MCD-DGWC-38**	EPA 300.0 Rev 2.1 1993	754261		
92650183008	**MCD-DGWC-67**	EPA 300.0 Rev 2.1 1993	754261		
92650183009	**MCD-DGWC-121**	EPA 300.0 Rev 2.1 1993	754261		
92650183010	**MCD-DGWC-39**	EPA 300.0 Rev 2.1 1993	754261		
92650183011	**MCD-AP1-FD-1**	EPA 300.0 Rev 2.1 1993	754261		

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Pace ANALYTICAL SERVICES

DC#_Title: ENV-FRM-HUN1-0083 v02_Sample Condition Upon Receipt

Effective Date: 11/14/2022

Laboratory receiving samples:

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

Sample Condition Upon Receipt

Client Name: GA Power

Project #: **WO# : 92650183**

92650183

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

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

Date/Initials Person Examining Contents: 2/2/23 cst

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: 3.1 **Correction Factor:** Add/Subtract (°C) +0.0

Cooler Temp Corrected (°C): 3.1

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:** _____

WO#: 92650183

Project #

PM: BV **Due Date: 02/16/23**

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**

*****Check all unpreserved Nitrates for chlorine**

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)	DG94-40 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)	DG9V-40 mL VOA H3PO4 (N/A)	KP7U-50 mL Plastic Unpreserved (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	BP3R-250 mL Plastic (NH2)2SO4 (9.3-9.7)	AG0U-100 mL Amber Unpreserved (N/A) (Cl-)	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																													
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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 DENR Certification Office (i.e. Out of hold, incorrect preservative, out of temp, incorrect containers.

DC#_Title: ENV-FRM-HUN1-0083 v02_Sample Condition Upon Receipt

Effective Date: 11/14/2022

Laboratory receiving samples:

Asheville ☐ Eden ☐ Greenwood ☐ Huntersville ☐ Raleigh ☐ Mech:

Sample Condition Upon Receipt

WO# : 92650183

PM: BV Due Date: 02/16/23

CLIENT: GA-GA Power

Client Name: GA Power

Project #:

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

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

Date/Initials Person Examining Contents: 2/3/23 CW

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: 3.8 Correction Factor: Add/Subtract (°C) 0.0

Cooler Temp Corrected (°C): 3.8

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 SERVICES	DC#_Title: ENV-FRM-HUN1-0083 v02_Sample Condition Upon Receipt
	Effective Date: 11/14/2022

*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
***Check all unpreserved Nitrates for chlorine

Project #

WO# : 92650183

PM: BV Due Date: 02/16/23
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)	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)	DG94-40 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)	DG9V-40 mL VOA H3PO4 (N/A)	KP7U-50 mL Plastic Unpreserved (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	BP3R-250 mL Plastic (NH2)2SO4 (9.3-9.7)	AG0U-100 mL Amber Unpreserved (N/A) (Cl-)	VSGU-20 mL Scintillation vials (N/A)	DG9U-40 mL Amber Unpreserved vials (N/A)
1		2	—			1																			2	1			
2		2	1			1																			2	1			
3		2	1			1																			2	1			
4		2	1			1																			2	1			
5		2	1			1																			2	1			
6		2	1			1																			2	1			
7		2	1			1																			2	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 DENR 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.

Pace Analytical

1 Of 1

Section A
Required Client Information:

Company:	Georgia Power - Coal Combustion Residuals
Address:	2480 Maner Road
	Atlanta, GA 30339
Email:	laucoker@southernco.com
Phone:	(470) 620-6176
Fax:	
Requested Due Date:	10 Day TAT

Section B
Required Project Information:

Report To:	Lauren Coker
Copy To:	Golder
Purchase Order #:	
Project Name:	Plant McD AP-1 Detection Well Network
Project #:	GL166849622

Section C
Invoice Information:

Attention:	scsinvoices@southernco.com
Company Name:	
Address:	
Pace Quote:	
Pace Project Manager:	Nicole D'Oleo
Pace Profile #:	

Regulatory Agency	
State / Location	GA

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

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

92650183

Requested Analysis Filtered (Y/N): N N N N N N

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	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 Y/N	App III/IV + Mg, Na, K, Fe	Cl, F, SO4	Radium 9315/9320	TDS	Alkalinity	Fe Total, Fe 3+ (Ferric calculation)	~~Ferrous Iron~~	Residual Chlorine (Y/N)	
1	MCD-DGWC-40-WG-20230201	WG	G	2/1/23	12:35		6	3		3							X	X	X	X	X	X	~~X~~		pH = 4.66, Fe2 = 0.0 mg/L (Fe2 analyzed 2/1/23 at 12:40) 001
2	MCD-DGWC-68A-WG-20230201	WG	G	2/1/23	15:24		6	3		3							X	X	X	X	X	X	~~X~~		pH = 6.60, Fe2 = 0.0 mg/L (Fe2 analyzed 2/1/23 at 15:29) 002
3	MCD-DGWC-69-WG-20230201	WG	G	2/1/23	11:51		6	3		3							X	X	X	X	X	X	~~X~~		pH = 6.12, Fe2 = 0.0 mg/L (Fe2 analyzed 2/1/23 at 11:56) 003
4	MCD-AP1-EB-1-WG-20230201	WG	G	2/1/23	17:05		6	3		3							X	X	X	X	X	X	~~X~~		2/1/23 Fe2 = 0.0 1710 004
6	MCD-AP1-FB-1-WG-20230201	WG	G	2/1/23	13:45		6	3		3							X	X	X	X	X	X	~~X~~		2/1/23 Fe2 = 0.0 1350 005
7																									
8																									
9																									
10																									
11																									
12																									
13																									
14																									

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
Task Code = MCD-CCR-ASSMT-2023S1	[signature]	2/2/23	1055	M. BAH	2-2-23					
	M. BAH	2-2-23	11:36	[signature]	2/2/23	1136				

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

Pace Analytical

CHAIN-OF-CUSTODY / Analytical Request Document

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

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: Lauren Coker	Attention: scsinvoices@southernco.com
Address: 2480 Maner Road, Atlanta, GA 30339	Copy To: Golder	Company Name:
Email: lauco[illegible]@southernco.com	Purchase Order #:	Address:
Phone: (470) 620-6176 Fax:	Project Name: Plant McD AP-1 Detection Well Network	Pace Quote:
Requested Due Date: 10 Day TAT	Project #: GL186849622	Pace Project Manager: Bonnie Vang
		Pace Profile #:

Regulatory Agency

State / Location: GA

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

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

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	DATE	TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved + Ice	H2SO4	HNO3 + Ice	HCl	NaOH + Zn Acetate	Na2S2O3	Methanol	Other	Analyses Test Y/N	App III/IV + Mg, Na, K	Cl, F, SO4	Radium 9513/9320	TDS	Alkalinity	Fe Total, Fe 3+ (Ferric calculation)	Residual Chlorine (Y/N)	9260183
																N	N	N	N	N	N		
1	MCD-DGWC-37-WG-20230202	WG	G	2/2/23	10:58		6	3		3						X	X	X	X	X	X		pH = 6.23, Fe2 = 0.0 mg/L (Fe2 analyzed 2/2/23 at 11:04)
2	MCD-DGWC-38-WG-20230202	WG	G	2/2/23	13:10		6	3		3						X	X	X	X	X	X		pH = 6.06, Fe2 = 0.0 mg/L (Fe2 analyzed 2/2/23 at 13:15)
3	MCD-DGWC-67-WG-20230202	WG	G	2/2/23	11:25		6	3		3						X	X	X	X	X	X		pH = 6.27, Fe2 = 0.0 mg/L (Fe2 analyzed 2/2/23 at 11:30)
4	MCD-DGWC-121-WG-20230202	WG	G	2/2/23	13:15		6	3		3						X	X	X	X	X	X		pH = 6.35, Fe2 = 2.0 mg/L (Fe2 analyzed 2/2/23 at 13:20)
5	MCD-DGWC-39-WG-20230203	WG	G	2/3/23	10:51		6	3		3						X	X	X	X	X	X		pH = 6.49, Fe2 > 7.0 mg/L (Fe2 analyzed 2/3/23 at 10:56)
7	MCD-AP1-FD-1-WG-20230202	WG	G	2/2/23	--		6	3		3						X	X	X	X	X	X		Fe2 = 0.0 (Fe2 sampled at 11:30, analyzed at 11:35)
8	MCD-AP234-FB-3-WG-20230203	WG	G	2/3/23	9:35		6	3		3						X	X	X	X	X	X		
9																							
10																							
11																							
12																							
13																							
14																							

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	SAMPLE CONDITIONS
Task Code = MCD-CCR-ASSMT-2023S1	M. MANN Golder	02/03/23	1620	[signature]	2/3 1683	

DATE Signed:

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

001 002 003 004 005 006 007 008 009 010 011 012

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

March 20, 2023

Andrea McClure
WSP/Golder
5170 Peachtree Road
Building 100, Suite 300
Atlanta, GA 30341

RE: Project: Plant McD AP-1 DetectionWe RAD
Pace Project No.: 92650186

Dear Andrea McClure:

Enclosed are the analytical results for sample(s) received by the laboratory between February 02, 2023 and February 03, 2023. 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,

Bonnie Vang
bonnie.vang@pacelabs.com
(704)875-9092
Project Manager

Enclosures

cc: Joju Abraham, Georgia Power-CCR
Stephen Benda, Southern Company
Noelia Gangi, Georgia Power
Daniela Herrera, Golder
Ben Hodges, Georgia Power-CCR
Kristen Jurinko
Laura Midkiff, Georgia Power
J. Shelby Mobley, Southern Company
Charles Norton, Southern Company
Dawn Prell, WSP USA E&I Inc_Atlanta
Michael Smilley, Georgia Power
Yong Cheng Soo, WSP/Golder
Tina Sullivan, ERM

REPORT OF LABORATORY ANALYSIS

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

CERTIFICATIONS

Project: Plant McD AP-1 DetectionWe RAD
Pace Project No.: 92650186

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: Plant McD AP-1 DetectionWe RAD
Pace Project No.: 92650186

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92650186001	**MCD-DGWC-40**	Water	02/01/23 12:35	02/02/23 11:36
92650186002	**MCD-DGWC-68A**	Water	02/01/23 15:24	02/02/23 11:36
92650186003	**MCD-DGWC-69**	Water	02/01/23 11:51	02/02/23 11:36
92650186004	**MCD-AP1-EB-1**	Water	02/01/23 17:05	02/02/23 11:36
92650186005	**MCD-AP1-FB-1**	Water	02/01/23 13:45	02/02/23 11:36
92650186006	**MCD-DGWC-37**	Water	02/02/23 10:59	02/03/23 16:23
92650186007	**MCD-DGWC-38**	Water	02/02/23 13:10	02/03/23 16:23
92650186008	**MCD-DGWC-67**	Water	02/02/23 11:25	02/03/23 16:23
92650186009	**MCD-DGWC-121**	Water	02/02/23 13:15	02/03/23 16:23
92650186010	**MCD-DGWC-39**	Water	02/03/23 10:51	02/03/23 16:23
92650186011	**MCD-AP1-FD-1**	Water	02/02/23 00:00	02/03/23 16:23

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SAMPLE ANALYTE COUNT

Project: Plant McD AP-1 DetectionWe RAD
Pace Project No.: 92650186

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92650186001	**MCD-DGWC-40**	EPA 9315	RMS	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92650186002	**MCD-DGWC-68A**	EPA 9315	RMS	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92650186003	**MCD-DGWC-69**	EPA 9315	RMS	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92650186004	**MCD-AP1-EB-1**	EPA 9315	RMS	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92650186005	**MCD-AP1-FB-1**	EPA 9315	RMS	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92650186006	**MCD-DGWC-37**	EPA 9315	RMS	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92650186007	**MCD-DGWC-38**	EPA 9315	RMS	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92650186008	**MCD-DGWC-67**	EPA 9315	RMS	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92650186009	**MCD-DGWC-121**	EPA 9315	RMS	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92650186010	**MCD-DGWC-39**	EPA 9315	RMS	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92650186011	**MCD-AP1-FD-1**	EPA 9315	RMS	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA

PASI-PA = Pace Analytical Services - Greensburg

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PROJECT NARRATIVE

Project: Plant McD AP-1 DetectionWe RAD
Pace Project No.: 92650186

Date: March 20, 2023

Georgia Power EQuIS Database Manager requested Pace Project Manager remove the sample matrix and date from the Sample IDs. This update ensures sample nomenclature is followed on final PDF and EDD for successful upload of laboratory data into the Georgia Power EQuIS database.

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PROJECT NARRATIVE

Project: Plant McD AP-1 DetectionWe RAD
Pace Project No.: 92650186

Method: **EPA 9315**
Description: 9315 Total Radium
Client: Georgia Power
Date: March 20, 2023

General Information:
11 samples were analyzed for EPA 9315 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: Plant McD AP-1 DetectionWe RAD
Pace Project No.: 92650186

Method: **EPA 9320**
Description: 9320 Radium 228
Client: Georgia Power
Date: March 20, 2023

General Information:
11 samples were analyzed for EPA 9320 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: Plant McD AP-1 DetectionWe RAD
Pace Project No.: 92650186

Method: **Total Radium Calculation**
Description: Total Radium 228+226
Client: Georgia Power
Date: March 20, 2023

General Information:
11 samples were analyzed for Total Radium Calculation by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant McD AP-1 DetectionWe RAD
Pace Project No.: 92650186

Sample: MCD-DGWC-40 **Lab ID: 92650186001** Collected: 02/01/23 12:35 Received: 02/02/23 11:36 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	**0.138 ± 0.109 (0.183) C:95% T:NA**	pCi/L	02/23/23 12:08	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.465 ± 0.308 (0.568) C:73% T:93%**	pCi/L	02/21/23 15:11	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.603 ± 0.417 (0.751)**	pCi/L	02/24/23 16:16	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant McD AP-1 DetectionWe RAD
Pace Project No.: 92650186

Sample: MCD-DGWC-68A **Lab ID: 92650186002** Collected: 02/01/23 15:24 Received: 02/02/23 11:36 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.309 ± 0.154 (0.193) C:91% T:NA**	pCi/L	02/23/23 12:08	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**1.06 ± 0.474 (0.780) C:72% T:88%**	pCi/L	02/21/23 15:11	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.37 ± 0.628 (0.973)**	pCi/L	02/24/23 16:16	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant McD AP-1 DetectionWe RAD
Pace Project No.: 92650186

Sample: MCD-DGWC-69 **Lab ID: 92650186003** Collected: 02/01/23 11:51 Received: 02/02/23 11:36 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	**0.507 ± 0.190 (0.190) C:100% T:NA**	pCi/L	02/23/23 12:08	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**1.34 ± 0.492 (0.701) C:75% T:91%**	pCi/L	02/21/23 15:09	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.85 ± 0.682 (0.891)**	pCi/L	02/24/23 16:16	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant McD AP-1 DetectionWe RAD
Pace Project No.: 92650186

Sample: MCD-AP1-EB-1 **Lab ID: 92650186004** Collected: 02/01/23 17:05 Received: 02/02/23 11:36 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	**0.122 ± 0.102 (0.172) C:90% T:NA**	pCi/L	02/23/23 12:08	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**-0.0555 ± 0.246 (0.594) C:83% T:94%**	pCi/L	02/21/23 15:09	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.122 ± 0.348 (0.766)**	pCi/L	02/24/23 16:16	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant McD AP-1 DetectionWe RAD
Pace Project No.: 92650186

Sample: MCD-AP1-FB-1 **Lab ID: 92650186005** Collected: 02/01/23 13:45 Received: 02/02/23 11:36 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	**0.0276 ± 0.0748 (0.183) C:94% T:NA**	pCi/L	02/23/23 12:08	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.446 ± 0.324 (0.618) C:80% T:85%**	pCi/L	02/21/23 15:09	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.474 ± 0.399 (0.801)**	pCi/L	02/24/23 16:16	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant McD AP-1 DetectionWe RAD
Pace Project No.: 92650186

Sample: MCD-DGWC-37 **Lab ID: 92650186006** Collected: 02/02/23 10:59 Received: 02/03/23 16:23 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	**0.152 ± 0.116 (0.197) C:96% T:NA**	pCi/L	02/23/23 14:41	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**1.08 ± 0.516 (0.904) C:76% T:86%**	pCi/L	02/21/23 15:11	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.23 ± 0.632 (1.10)**	pCi/L	02/24/23 16:16	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant McD AP-1 DetectionWe RAD
Pace Project No.: 92650186

Sample: MCD-DGWC-38 **Lab ID: 92650186007** Collected: 02/02/23 13:10 Received: 02/03/23 16:23 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	**0.0833 ± 0.0902 (0.172) C:92% T:NA**	pCi/L	02/23/23 14:41	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.379 ± 0.435 (0.917) C:73% T:89%**	pCi/L	02/21/23 15:11	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.462 ± 0.525 (1.09)**	pCi/L	02/24/23 16:16	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant McD AP-1 DetectionWe RAD
Pace Project No.: 92650186

Sample: MCD-DGWC-67 **Lab ID: 92650186008** Collected: 02/02/23 11:25 Received: 02/03/23 16:23 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	**0.0275 ± 0.0746 (0.183) C:94% T:NA**	pCi/L	02/23/23 14:41	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.470 ± 0.443 (0.915) C:70% T:97%**	pCi/L	02/21/23 15:11	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.498 ± 0.518 (1.10)**	pCi/L	02/24/23 16:16	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant McD AP-1 DetectionWe RAD
Pace Project No.: 92650186

Sample: MCD-DGWC-121 **Lab ID: 92650186009** Collected: 02/02/23 13:15 Received: 02/03/23 16:23 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	**0.176 ± 0.137 (0.238) C:75% T:NA**	pCi/L	02/28/23 10:12	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.692 ± 0.397 (0.735) C:88% T:84%**	pCi/L	02/21/23 11:58	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.868 ± 0.534 (0.973)**	pCi/L	02/28/23 15:11	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant McD AP-1 DetectionWe RAD
Pace Project No.: 92650186

Sample: MCD-DGWC-39 **Lab ID: 92650186010** Collected: 02/03/23 10:51 Received: 02/03/23 16:23 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	**0.135 ± 0.110 (0.190) C:93% T:NA**	pCi/L	02/27/23 19:32	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.743 ± 0.391 (0.697) C:85% T:86%**	pCi/L	02/21/23 11:59	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.878 ± 0.501 (0.887)**	pCi/L	02/28/23 15:11	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant McD AP-1 DetectionWe RAD
Pace Project No.: 92650186

Sample: MCD-AP1-FD-1 **Lab ID: 92650186011** Collected: 02/02/23 00:00 Received: 02/03/23 16:23 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	**0.0879 ± 0.0966 (0.187) C:89% T:NA**	pCi/L	02/27/23 19:32	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.531 ± 0.405 (0.804) C:82% T:84%**	pCi/L	02/21/23 11:59	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.619 ± 0.502 (0.991)**	pCi/L	02/28/23 15:11	7440-14-4	

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QUALITY CONTROL - RADIOCHEMISTRY

Project: Plant McD AP-1 DetectionWe RAD
Pace Project No.: 92650186

QC Batch: 565962
QC Batch Method: EPA 9315
Analysis Method: EPA 9315
Analysis Description: 9315 Total Radium
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92650186001, 92650186002, 92650186003, 92650186004, 92650186005, 92650186006, 92650186007, 92650186008

METHOD BLANK: 2748582 Matrix: Water
Associated Lab Samples: 92650186001, 92650186002, 92650186003, 92650186004, 92650186005, 92650186006, 92650186007, 92650186008

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.0953 ± 0.0922 (0.167) C:96% T:NA	pCi/L	02/23/23 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.

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QUALITY CONTROL - RADIOCHEMISTRY

Project: Plant McD AP-1 DetectionWe RAD
Pace Project No.: 92650186

QC Batch: 565963 Analysis Method: EPA 9320
QC Batch Method: EPA 9320 Analysis Description: 9320 Radium 228
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92650186001, 92650186002, 92650186003, 92650186004, 92650186005, 92650186006, 92650186007, 92650186008

METHOD BLANK: 2748585 Matrix: Water
Associated Lab Samples: 92650186001, 92650186002, 92650186003, 92650186004, 92650186005, 92650186006, 92650186007, 92650186008

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.446 ± 0.307 (0.579) C:73% T:96%	pCi/L	02/21/23 15:11	

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

QUALITY CONTROL - RADIOCHEMISTRY

Project: Plant McD AP-1 DetectionWe RAD
Pace Project No.: 92650186

QC Batch: 565964
QC Batch Method: EPA 9315
Analysis Method: EPA 9315
Analysis Description: 9315 Total Radium
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92650186009, 92650186010, 92650186011

METHOD BLANK: 2748587 Matrix: Water
Associated Lab Samples: 92650186009, 92650186010, 92650186011

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.0712 ± 0.0809 (0.156) C:99% T:NA	pCi/L	02/27/23 19:32	

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

QUALITY CONTROL - RADIOCHEMISTRY

Project: Plant McD AP-1 DetectionWe RAD
Pace Project No.: 92650186

QC Batch: 565965
QC Batch Method: EPA 9320
Analysis Method: EPA 9320
Analysis Description: 9320 Radium 228
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92650186009, 92650186010, 92650186011

METHOD BLANK: 2748588 Matrix: Water
Associated Lab Samples: 92650186009, 92650186010, 92650186011

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.343 ± 0.275 (0.547) C:87% T:103%	pCi/L	02/21/23 11:58	

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

QUALIFIERS

Project: Plant McD AP-1 DetectionWe RAD
Pace Project No.: 92650186

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.

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

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Plant McD AP-1 DetectionWe RAD
Pace Project No.: 92650186

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92650186001	**MCD-DGWC-40**	EPA 9315	565962		
92650186002	**MCD-DGWC-68A**	EPA 9315	565962		
92650186003	**MCD-DGWC-69**	EPA 9315	565962		
92650186004	**MCD-AP1-EB-1**	EPA 9315	565962		
92650186005	**MCD-AP1-FB-1**	EPA 9315	565962		
92650186006	**MCD-DGWC-37**	EPA 9315	565962		
92650186007	**MCD-DGWC-38**	EPA 9315	565962		
92650186008	**MCD-DGWC-67**	EPA 9315	565962		
92650186009	**MCD-DGWC-121**	EPA 9315	565964		
92650186010	**MCD-DGWC-39**	EPA 9315	565964		
92650186011	**MCD-AP1-FD-1**	EPA 9315	565964		
92650186001	**MCD-DGWC-40**	EPA 9320	565963		
92650186002	**MCD-DGWC-68A**	EPA 9320	565963		
92650186003	**MCD-DGWC-69**	EPA 9320	565963		
92650186004	**MCD-AP1-EB-1**	EPA 9320	565963		
92650186005	**MCD-AP1-FB-1**	EPA 9320	565963		
92650186006	**MCD-DGWC-37**	EPA 9320	565963		
92650186007	**MCD-DGWC-38**	EPA 9320	565963		
92650186008	**MCD-DGWC-67**	EPA 9320	565963		
92650186009	**MCD-DGWC-121**	EPA 9320	565965		
92650186010	**MCD-DGWC-39**	EPA 9320	565965		
92650186011	**MCD-AP1-FD-1**	EPA 9320	565965		
92650186001	**MCD-DGWC-40**	Total Radium Calculation	569799		
92650186002	**MCD-DGWC-68A**	Total Radium Calculation	569799		
92650186003	**MCD-DGWC-69**	Total Radium Calculation	569799		
92650186004	**MCD-AP1-EB-1**	Total Radium Calculation	569799		
92650186005	**MCD-AP1-FB-1**	Total Radium Calculation	569799		
92650186006	**MCD-DGWC-37**	Total Radium Calculation	569799		
92650186007	**MCD-DGWC-38**	Total Radium Calculation	569799		
92650186008	**MCD-DGWC-67**	Total Radium Calculation	569799		
92650186009	**MCD-DGWC-121**	Total Radium Calculation	570492		
92650186010	**MCD-DGWC-39**	Total Radium Calculation	570492		
92650186011	**MCD-AP1-FD-1**	Total Radium Calculation	570492		

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Pace ANALYTICAL SERVICES

DC#_Title: ENV-FRM-HUN1-0083 v02_Sample Condition Upon Receipt

Effective Date: 11/14/2022

Laboratory receiving samples:

Asheville ☐ Eden ☐ Greenwood ☐ Huntersville ☐ Raleigh ☐ Mechanicsville ☐ Atlanta ☑ Kansas City ☐

Sample Condition Upon Receipt

Client Name: GA Power

Project #: WO# : 92650186

92650186

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

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

Date/Initials Person Examining Contents: 2/2/23 CH

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: 3.1 **Correction Factor:** Add/Subtract (°C) +0.0

Cooler Temp Corrected (°C): 3.1

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

CLIENT NOTIFICATION/RESOLUTION

Lot ID of split containers:

Person contacted: _____ Date/Time: _____

Project Manager SCURF Review: _____ **Date:** _____

Project Manager SRF Review: _____ **Date:** _____

Qualtrax ID: 69614

Pace ANALYTICAL SERVICES

DC#_Title: ENV-FRM-HUN1-0083 v02_Sample Condition Upon Receipt

Effective Date: 11/14/2022

***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**

*****Check all unpreserved Nitrates for chlorine**

Project # WO#: 92650186

PM: BV Due Date: 02/23/23

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)	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)	DG9A-40 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)	DG9V-40 mL VOA H3PO4 (N/A)	KP7U-50 mL Plastic Unpreserved (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	BP3R-250 mL Plastic (NH2)2SO4 (9.3-9.7)	AG0U-100 mL Amber Unpreserved (N/A) (Cl-)	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																													
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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 DENR Certification Office (i.e. Out of hold, incorrect preservative, out of temp, incorrect containers.

Pace Analytical

CHAIN-OF-CUSTODY / Analytical Request Document

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

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:	Lauren Coker	Attention:	sceinvoices@southernco.com
Address:	2480 Maner Road	Copy To:	Golder	Company Name:	
	Atlanta, GA 30339			Address:	
Email:	laucoker@southernco.com	Purchase Order #:		Pace Quote:	
Phone:	(470) 620-6178 Fax:	Project Name:	Plant McD AP-1 Detection Well Network	Pace Project Manager:	Nicole D'Oleo
Requested Due Date:	10 Day TAT	Project #:	GL168849622	Pace Profile #:	

Regulatory Agency

State / Location: GA

ITEM #	SAMPLE ID (One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique)	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	DATE	TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved – Ice	H2SO4	HNO3 + Ice	HCl	NaOH + Zn Acetate	Na2S2O3	Methanol	Other	Analyses Test Y/N	App III/IV + Mg, Na, K, Fe	Cl, F, SO4	Radium 9513/9320	TDS	Alkalinity	Fe Total, Fe 3+ (Ferric calculation)	Extraction	Residual Chlorine (Y/N)	92650186
	Requested Analysis Filtered (Y/N)															Y/N	N	N	N	N	N	N			
1	MCD-DGWC-40-WG-20230201	WG	G	2/1/23	12:35		6	3		3						X	X	X	X	X	X	X		pH = 4.66, Fe2 = 0.0 mg/L (Fe2 analyzed 2/1/23 at 12:40) 001
2	MCD-DGWC-68A-WG-20230201	WG	G	2/1/23	15:24		6	3		3						X	X	X	X	X	X	X		pH = 6.60, Fe2 = 0.0 mg/L (Fe2 analyzed 2/1/23 at 15:29) 002
3	MCD-DGWC-69-WG-20230201	WG	G	2/1/23	11:51		6	3		3						X	X	X	X	X	X	X		pH = 6.12, Fe2 = 0.0 mg/L (Fe2 analyzed 2/1/23 at 11:56) 003
4	MCD-AP1-EB-1-WG-20230201	WG	G	2/1/23	17:05		6	3		3						X	X	X	X	X	X	X		2/1/23 Fe2 = 0.0 1710 004
5	MCD-AP1-FB-1-WG-20230201	WG	G	2/1/23	13:45		6	3		3						X	X	X	X	X	X	X		2/1/23 Fe2 = 0.0 1350 005
6																								
7																								
8																								
9																								
10																								
11																								
12																								
13																								
14																								

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	SAMPLE CONDITIONS
Task Code = MCD-CCR-ASSMT-2023S1	RB	2/2/23	1055	M. BAH	2-2-23	
	M. BAH	2-2-23	11:36		2/2/23	11:36

DATE Signed:

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

DC#_Title: ENV-FRM-HUN1-0083 v02_Sample Condition Upon Receipt

Effective Date: 11/14/2022

Laboratory receiving samples:

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

Sample Condition Upon Receipt

Client Name: GA Power

Project #: **WO#: 92650186**

PM: BV **Due Date: 02/23/23**

CLIENT: GA-GA Power

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

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

Date/Initials Person Examining Contents: 2/3/23 CW

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

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

Thermometer: ☑ IR Gun ID: 230

Cooler Temp: 3.8 **Correction Factor:** Add/Subtract (°C) 0.0

Type of Ice: ☑ Wet ☐ Blue ☐ None

Cooler Temp Corrected (°C): 3.8

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:** _____

WO# : 92650186

***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

Project #

PM: BV **Due Date: 02/23/23**

CLIENT: GA-GA Power

****Bottom half of box is to list number of bottles**

*****Check all unpreserved Nitrates for chlorine**

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)	DG94-40 mL Amber NH4Cl (N/A)(Cl-)	DG9H-40 mL VOA HCl (N/A)	VG9T-40 mL VOA NaTS2O3 (N/A)	VG9U-40 mL VOA Unpreserved (N/A)	DG9V-40 mL VOA H3PO4 (N/A)	KP7U-50 mL Plastic Unpreserved (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)	Hg/1M	BP3R-250 mL Plastic (NH2)2SO4 (9.3-9.7)	AG0U-100 mL Amber Unpreserved (N/A) (Cl-)	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		2	1			1																		2				
7		2	1			1																		2				
8																												
9																												
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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 DENR Certification Office (i.e. Out of hold, Incorrect preservative, out of temp, incorrect containers.

Pace Analytical

CHAIN-OF-CUSTODY / Analytical Request Document

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

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:	Lauren Coker	Attention:	acsinvoices@southernco.com
Address:	2480 Maner Road	Copy To:	Golder	Company Name:	
	Atlanta, GA 30339			Address:	
Email:	laucoker@southernco.com	Purchase Order #:		Pace Quote:	
Phone:	(470) 620-6176 Fax:	Project Name:	Plant McD AP-1 Detection Well Network	Pace Project Manager:	Bonnie Vang
Requested Due Date:	10 Day TAT	Project #:	GL166849622	Pace Profile #:	

Regulatory Agency

State / Location: GA

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID (One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique)	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	DATE	TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved - Ice	H2SO4	HNO3 + Ice	HCl	NaOH + Zn Acetate	Na2S2O3	Methanol	Other	Analyses Test Y/N	App III/IV + Mg, Na, K	Cl, F, SO4	Radium 95136320	TDS	Alkalinity	Fe Total, Fe 3+ (Ferric calculation)	Residual Chlorine (Y/N)	
	MATRIX CODE: Drinking Water DW, Water WT, Waste Water WW, Product P, Soil/Solid SL, Oil OL, Wipe WP, Air AR, Other OT, Tissue TS															N	N	N	N	N	N		
1	MCD-DGWC-37-WG-20230202	WG	G	2/2/23	10:58		6	3		3							X	X	X	X	X	X		pH = 6.23, Fe2 = 0.0 mg/L (Fe2 analyzed 2/2/23 at 11:04)
2	MCD-DGWC-38-WG-20230202	WG	G	2/2/23	13:10		6	3		3							X	X	X	X	X	X		pH = 6.06, Fe2 = 0.0 mg/L (Fe2 analyzed 2/2/23 at 13:15)
3	MCD-DGWC-67-WG-20230202	WG	G	2/2/23	11:25		6	3		3							X	X	X	X	X	X		pH = 6.27, Fe2 = 0.0 mg/L (Fe2 analyzed 2/2/23 at 11:30)
4	MCD-DGWC-121-WG-20230202	WG	G	2/2/23	13:15		6	3		3							X	X	X	X	X	X		pH = 6.35, Fe2 = 2.0 mg/L (Fe2 analyzed 2/2/23 at 13:20)
6	MCD-DGWC-39-WG-20230203	WG	G	2/3/23	10:51		6	3		3							X	X	X	X	X	X		pH = 6.49, Fe2 > 7.0 mg/L (Fe2 analyzed 2/3/23 at 10:56)
7	MCD-AP1-FD-1-WG-20230202	WG	G	2/2/23	--		6	3		3							X	X	X	X	X	X		Fe2 = 0.0 (Fe2 sampled at 11:30, analyzed at 11:35)
8	MCD-AP234-FB-3-WQ-20230203	WQ	G	2/3/23	9:35		6	3		3							X	X	X	X	X	X		92
9																								
10																								
11																								
12																								
13																								
14																								

92650146

GW6 GW7 GW8 GW9 GW10 GW11

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	SAMPLE CONDITIONS
Task Code = MCD-CCR-ASSMT-2023S1	M. MANN Golder	02/03/23	1620		2/3 1623	

DATE Signed:

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

Quality Control Sample Performance Assessment

Pace Analytical™ www.pacelabs.com

Test:	Ra-226
Analyst:	RMS
Date:	2/16/2023
Worklist:	71387
Matrix:	WT

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	2748582
MB concentration:	0.095
M/B 2 Sigma CSU:	0.092
MB MDC:	0.167
MB Numerical Performance Indicator:	2.02
MB Status vs Numerical Indicator:	Warning
MB Status vs. MDC:	N/A

Laboratory Control Sample Assessment	LCSD (Y or N)?	Y
	LCS71387	LCSD71387
Count Date:	2/23/2023	2/23/2023
Spike I.D.:	19-033	19-033
Decay Corrected Spike Concentration (pCi/mL):	24.019	24.019
Volume Used (mL):	0.10	0.10
Aliquot Volume (L, g, F):	0.504	0.514
Target Conc. (pCi/L, g, F):	4.768	4.671
Uncertainty (Calculated):	0.057	0.056
Result (pCi/L, g, F):	5.706	5.440
LCS/LCSD 2 Sigma CSU (pCi/L, g, F):	0.993	0.959
Numerical Performance Indicator:	1.85	1.57
Percent Recovery:	119.67%	116.48%
Status vs Numerical Indicator:	Pass	Pass
Status vs Recovery:	N/A	N/A
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 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.:	LCS71387	92650189006
Duplicate Sample I.D.	LCSD71387	92650189006DUP
Sample Result (pCi/L, g, F):	5.706	0.190
Sample Result 2 Sigma CSU (pCi/L, g, F):	0.993	0.132
Sample Duplicate Result (pCi/L, g, F):	5.440	0.165
Sample Duplicate Result 2 Sigma CSU (pCi/L, g, F):	0.959	0.113
Are sample and/or duplicate results below RL?	NO	See Below ##
Duplicate Numerical Performance Indicator:	0.377	0.274
(Based on the LCS/LCSD Percent Recoveries) Duplicate RPD:	2.70%	13.74%
Duplicate Status vs Numerical Indicator:	Pass	Pass
Duplicate Status vs RPD:	N/A	N/A
% 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 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:

VAM 2/24/23

Quality Control Sample Performance Assessment

Pace Analytical™ www.pacelabs.com

Test: Ra-226
Analyst: RMS
Date: 2/16/2023
Worklist: 71389
Matrix: WT

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	2748587
MB concentration:	0.071
M/B 2 Sigma CSU:	0.081
MB MDC:	0.156
MB Numerical Performance Indicator:	1.72
MB Status vs Numerical Indicator:	Pass
MB Status vs. MDC:	N/A

Laboratory Control Sample Assessment	LCSD (Y or N)?	Y
	LCS71389	LCSD71389
Count Date:	2/28/2023	2/28/2023
Spike I.D.:	19-033	19-033
Decay Corrected Spike Concentration (pCi/mL):	24.019	24.019
Volume Used (mL):	0.10	0.10
Aliquot Volume (L, g, F):	0.508	0.501
Target Conc. (pCi/L, g, F):	4.732	4.790
Uncertainty (Calculated):	0.057	0.057
Result (pCi/L, g, F):	4.831	4.556
LCS/LCSD 2 Sigma CSU (pCi/L, g, F):	0.872	0.834
Numerical Performance Indicator:	0.22	-0.55
Percent Recovery:	102.08%	95.13%
Status vs Numerical Indicator:	Pass	Pass
Status vs Recovery:	N/A	N/A
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 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.:	LCS71389	92650186009
Duplicate Sample I.D.	LCSD71389	92650186009DUP
Sample Result (pCi/L, g, F):	4.831	0.176
Sample Result 2 Sigma CSU (pCi/L, g, F):	0.872	0.137
Sample Duplicate Result (pCi/L, g, F):	4.556	0.116
Sample Duplicate Result 2 Sigma CSU (pCi/L, g, F):	0.834	0.164
Are sample and/or duplicate results below RL?	NO	See Below ##
Duplicate Numerical Performance Indicator:	0.446	0.552
(Based on the LCS/LCSD Percent Recoveries) Duplicate RPD:	7.05%	41.14%
Duplicate Status vs Numerical Indicator:	Pass	Pass
Duplicate Status vs RPD:	N/A	N/A
% 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 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:

ET 2-28-23

LAM 2/28/23

Quality Control Sample Performance Assessment

Pace Analytical™ www.pacelabs.com

Test:	Ra-228
Analyst:	VAL
Date:	2/15/2023
Worklist:	71388
Matrix:	WT

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	2748585
MB concentration:	0.446
M/B 2 Sigma CSU:	0.307
MB MDC:	0.579
MB Numerical Performance Indicator:	2.85
MB Status vs Numerical Indicator:	Warning
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	LCSD (Y or N)?	Y
	LCS71388	LCSD71388
Count Date:	2/21/2023	2/21/2023
Spike I.D.:	22-040	22-040
Decay Corrected Spike Concentration (pCi/mL):	33.476	33.476
Volume Used (mL):	0.10	0.10
Aliquot Volume (L, g, F):	0.813	0.811
Target Conc. (pCi/L, g, F):	4.118	4.128
Uncertainty (Calculated):	0.202	0.202
Result (pCi/L, g, F):	3.606	3.974
LCS/LCSD 2 Sigma CSU (pCi/L, g, F):	0.898	0.917
Numerical Performance Indicator:	-1.09	-0.32
Percent Recovery:	87.57%	96.28%
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.:	LCS71388	Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Duplicate Sample I.D.	LCSD71388	
Sample Result (pCi/L, g, F):	3.606	
Sample Result 2 Sigma CSU (pCi/L, g, F):	0.898	
Sample Duplicate Result (pCi/L, g, F):	3.974	
Sample Duplicate Result 2 Sigma CSU (pCi/L, g, F):	0.917	
Are sample and/or duplicate results below RL?	NO	
Duplicate Numerical Performance Indicator:	-0.562	
(Based on the LCS/LCSD Percent Recoveries) Duplicate RPD:	9.47%	
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:

VAL
2/22/23

Quality Control Sample Performance Assessment

Pace Analytical™ www.pacelabs.com

Test:	Ra-228
Analyst:	JJS1
Date:	2/17/2023
Worklist:	71390
Matrix:	WT

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	2748588
MB concentration:	0.343
M/B 2 Sigma CSU:	0.275
MB MDC:	0.547
MB Numerical Performance Indicator:	2.45
MB Status vs Numerical Indicator:	Warning
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	LCSD (Y or N)?	Y
	LCS71390	LCSD71390
Count Date:	2/21/2023	2/21/2023
Spike I.D.:	22-040	22-040
Decay Corrected Spike Concentration (pCi/mL):	33.478	33.478
Volume Used (mL):	0.10	0.10
Aliquot Volume (L, g, F):	0.806	0.803
Target Conc. (pCi/L, g, F):	4.154	4.167
Uncertainty (Calculated):	0.204	0.204
Result (pCi/L, g, F):	3.777	3.155
LCS/LCSD 2 Sigma CSU (pCi/L, g, F):	0.876	0.749
Numerical Performance Indicator:	-0.82	-2.56
Percent Recovery:	90.92%	75.70%
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.:	LCS71390	Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Duplicate Sample I.D.	LCSD71390	
Sample Result (pCi/L, g, F):	3.777	
Sample Result 2 Sigma CSU (pCi/L, g, F):	0.876	
Sample Duplicate Result (pCi/L, g, F):	3.155	
Sample Duplicate Result 2 Sigma CSU (pCi/L, g, F):	0.749	
Are sample and/or duplicate results below RL?	NO	
Duplicate Numerical Performance Indicator:	1.058	
(Based on the LCS/LCSD Percent Recoveries) Duplicate RPD:	18.27%	
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:

VAL
2/22/23

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

March 20, 2023

Andrea McClure
WSP/Golder
5170 Peachtree Road
Building 100, Suite 300
Atlanta, GA 30341

RE: Project: Plant McD AP-1 Assessment RADS
Pace Project No.: 92650187

Dear Andrea McClure:

Enclosed are the analytical results for sample(s) received by the laboratory between February 02, 2023 and February 03, 2023. 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,

Bonnie Vang
bonnie.vang@pacelabs.com
(704)875-9092
Project Manager

Enclosures

cc: Joju Abraham, Georgia Power-CCR
Stephen Benda, Southern Company
Noelia Gangi, Georgia Power
Daniela Herrera, Golder
Ben Hodges, Georgia Power-CCR
Kristen Jurinko
Laura Midkiff, Georgia Power
J. Shelby Mobley, Southern Company
Charles Norton, Southern Company
Dawn Prell, WSP USA E&I Inc_Atlanta
Michael Smilley, Georgia Power
Yong Cheng Soo, WSP/Golder
Tina Sullivan, ERM

REPORT OF LABORATORY ANALYSIS

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

CERTIFICATIONS

Project: Plant McD AP-1 Assessment RADS
Pace Project No.: 92650187

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: Plant McD AP-1 Assessment RADS
Pace Project No.: 92650187

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92650187001	**MCD-B-105D**	Water	02/01/23 16:05	02/02/23 11:36
92650187002	**MCD-B-112D**	Water	02/01/23 13:05	02/02/23 11:36
92650187003	**MCD-B-113D**	Water	02/02/23 10:15	02/03/23 16:23

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SAMPLE ANALYTE COUNT

Project: Plant McD AP-1 Assessment RADS
Pace Project No.: 92650187

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92650187001	**MCD-B-105D**	EPA 9315	RMS	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92650187002	**MCD-B-112D**	EPA 9315	RMS	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92650187003	**MCD-B-113D**	EPA 9315	RMS	1	PASI-PA
		EPA 9320	ZPC	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA

PASI-PA = Pace Analytical Services - Greensburg

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

PROJECT NARRATIVE

Project: Plant McD AP-1 Assessment RADS
Pace Project No.: 92650187

Date: March 20, 2023

Georgia Power EQuIS Database Manager requested Pace Project Manager remove the sample matrix and date from the Sample IDs. This update ensures sample nomenclature is followed on final PDF and EDD for successful upload of laboratory data into the Georgia Power EQuIS database.

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

PROJECT NARRATIVE

Project: Plant McD AP-1 Assessment RADS
Pace Project No.: 92650187

Method: **EPA 9315**
Description: 9315 Total Radium
Client: Georgia Power
Date: March 20, 2023

General Information:
3 samples were analyzed for EPA 9315 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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

PROJECT NARRATIVE

Project: Plant McD AP-1 Assessment RADS
Pace Project No.: 92650187

Method: **EPA 9320**
Description: 9320 Radium 228
Client: Georgia Power
Date: March 20, 2023

General Information:
3 samples were analyzed for EPA 9320 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: Plant McD AP-1 Assessment RADS
Pace Project No.: 92650187

Method: **Total Radium Calculation**
Description: Total Radium 228+226
Client: Georgia Power
Date: March 20, 2023

General Information:
3 samples were analyzed for Total Radium Calculation by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant McD AP-1 Assessment RADS
Pace Project No.: 92650187

Sample: MCD-B-105D **Lab ID: 92650187001** Collected: 02/01/23 16:05 Received: 02/02/23 11:36 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	**1.74 ± 0.409 (0.254) C:89% T:NA**	pCi/L	02/23/23 12:08	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**5.14 ± 1.13 (0.669) C:81% T:87%**	pCi/L	02/21/23 15:09	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**6.88 ± 1.54 (0.923)**	pCi/L	02/24/23 16:16	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant McD AP-1 Assessment RADS
Pace Project No.: 92650187

Sample: MCD-B-112D **Lab ID: 92650187002** Collected: 02/01/23 13:05 Received: 02/02/23 11:36 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	**0.208 ± 0.136 (0.213) C:93% T:NA**	pCi/L	02/23/23 12:08	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**1.55 ± 0.577 (0.890) C:73% T:90%**	pCi/L	02/21/23 15:10	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.76 ± 0.713 (1.10)**	pCi/L	02/24/23 16:16	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant McD AP-1 Assessment RADS
Pace Project No.: 92650187

Sample: MCD-B-113D **Lab ID: 92650187003** Collected: 02/02/23 10:15 Received: 02/03/23 16:23 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	**0.104 ± 0.122 (0.243) C:84% T:NA**	pCi/L	02/28/23 08:39	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.0736 ± 0.317 (0.722) C:79% T:88%**	pCi/L	02/28/23 12:38	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.178 ± 0.439 (0.965)**	pCi/L	02/28/23 16:08	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL - RADIOCHEMISTRY

Project: Plant McD AP-1 Assessment RADS
Pace Project No.: 92650187

QC Batch: 565962
QC Batch Method: EPA 9315
Analysis Method: EPA 9315
Analysis Description: 9315 Total Radium
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92650187001, 92650187002

METHOD BLANK: 2748582 Matrix: Water
Associated Lab Samples: 92650187001, 92650187002

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.0953 ± 0.0922 (0.167) C:96% T:NA	pCi/L	02/23/23 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

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QUALITY CONTROL - RADIOCHEMISTRY

Project: Plant McD AP-1 Assessment RADS
Pace Project No.: 92650187

QC Batch: 565963
QC Batch Method: EPA 9320
Analysis Method: EPA 9320
Analysis Description: 9320 Radium 228
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92650187001, 92650187002

METHOD BLANK: 2748585 Matrix: Water
Associated Lab Samples: 92650187001, 92650187002

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.446 ± 0.307 (0.579) C:73% T:96%	pCi/L	02/21/23 15:11	

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: Plant McD AP-1 Assessment RADS
Pace Project No.: 92650187

QC Batch: 565966
QC Batch Method: EPA 9315
Analysis Method: EPA 9315
Analysis Description: 9315 Total Radium
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92650187003

METHOD BLANK: 2748589 Matrix: Water
Associated Lab Samples: 92650187003

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.221 ± 0.151 (0.221) C:84% T:NA	pCi/L	02/28/23 09:30	

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QUALITY CONTROL - RADIOCHEMISTRY

Project: Plant McD AP-1 Assessment RADS
Pace Project No.: 92650187

QC Batch: 565967
QC Batch Method: EPA 9320
Analysis Method: EPA 9320
Analysis Description: 9320 Radium 228
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92650187003

METHOD BLANK: 2748590 Matrix: Water
Associated Lab Samples: 92650187003

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.409 ± 0.324 (0.634) C:77% T:88%	pCi/L	02/28/23 12:36	

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: Plant McD AP-1 Assessment RADS
Pace Project No.: 92650187

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.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Plant McD AP-1 Assessment RADS
Pace Project No.: 92650187

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92650187001	**MCD-B-105D**	EPA 9315	565962		
92650187002	**MCD-B-112D**	EPA 9315	565962		
92650187003	**MCD-B-113D**	EPA 9315	565966		
92650187001	**MCD-B-105D**	EPA 9320	565963		
92650187002	**MCD-B-112D**	EPA 9320	565963		
92650187003	**MCD-B-113D**	EPA 9320	565967		
92650187001	**MCD-B-105D**	Total Radium Calculation	569799		
92650187002	**MCD-B-112D**	Total Radium Calculation	569799		
92650187003	**MCD-B-113D**	Total Radium Calculation	570512		

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DC#_Title: ENV-FRM-HUN1-0083 v02_Sample Condition Upon Receipt

Effective Date: 11/14/2022

Laboratory receiving samples:

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

Sample Condition Upon Receipt

Client Name: GA Power

Project #: WO# : 92650187

92650187

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

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

Date/Initials Person Examining Contents: 2/2/23 CM

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: 3.1 **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): 3.1

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:** _____

Qualtrax ID: 69614

DC#_Title: ENV-FRM-HUN1-0083 v02_Sample Condition Upon Receipt

Effective Date: 11/14/2022

***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**

*****Check all unpreserved Nitrates for chlorine**

Project # **WO#: 92650187**

PM: BV Due Date: 02/23/23

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)	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)	DG94-40 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)	DG9V-40 mL VOA H3PO4 (N/A)	KP7U-50 mL Plastic Unpreserved (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	BP3R-250 mL Plastic (NH2)2SO4 (9.3-9.7)	AG0U-100 mL Amber Unpreserved (N/A) (Cl-)	VSGU-20 mL Scintillation vials (N/A)	DG9U-40 mL Amber Unpreserved vials (N/A)
1		2	—			1																			2				
2		2	—			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 DENR Certification Office (i.e. Out of hold, incorrect preservative, out of temp, incorrect containers.

Pace Analytical

CHAIN-OF-CUSTODY / Analytical Request Document

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

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:	Lauren Coker	Attention:	scsinvoices@southernco.com
Address:	2480 Maner Road	Copy To:	Golder	Company Name:	
	Atlanta, GA 30339			Address:	
Email:	laucoker@southernco.com	Purchase Order #:		Pace Quote:	
Phone:	(470) 620-6176 Fax:	Project Name:	Plant McD AP-1 Assessment Well Network	Pace Project Manager:	Nicole D'Oleo
Requested Due Date:	10 Day TAT	Project #:	GL168849622	Pace Profile #:	

Regulatory Agency

State / Location: GA

ITEM #	SAMPLE ID (One Character per box, (A-Z, 0-9 / , -) Sample ids must be unique)	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	DATE	TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved + Ice	H2SO4	HNO3 + Ice	HCl	NaOH + Zn Acetate	Na2S2O3	Methanol	Other	Analyses Test Y/N	App III/IV + Mg, Na, K, Fe	Cl, F, SO4	Radium 9613/9320	TDS	Alkalinity	Fe Total, Fe 3+ (Ferric calculation)	Residual Chlorine (Y/N)	Remarks/Contaminant
	MATRIX: Drinking Water DW, Water WT, Waste Water WW, Product P, Soil/Solid SL, Oil OL, Wipe WP, Air AR, Other OT, Tissue TS															Requested Analysis Filtered (Y/N)	N	N	N	N	N	N		
1	MCD-B-105D-WG-20230201	WG	G	2/1/23	16:05		6	3		3							X	X	X	X	X	X		pH = 8.39, Fe2 = 0.0 mg/L (Fe2 analyzed 2/1/23 at 16:10) 001
2	MCD-B-112D-WG-20230131	WG	G	1/31/23	13:05		6	3		3							X	X	X	X	X	X	X	pH = 8.72, Fe2 = 0.0 mg/L (Fe2 analyzed 2/1/23 at 13:10) 002
3																								
4																								
5																								
6																								
7																								
8																								
9																								
10																								
11																								
12																								
13																								
14																								

926B0187

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	SAMPLE CONDITIONS
Task Code = MCD-CCR-ASSMT-2023S1	M. BAH	2/2/23	1035	M. BAH	2-2-23	
	M. BAH	2-2-23	11:36	Charles Hatch	2/2/23	1136

DATE Signed:

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

Pace ANALYTICAL SERVICES	DC#_Title: ENV-FRM-HUN1-0083 v02_Sample Condition Upon Receipt
	Effective Date: 11/14/2022

Laboratory receiving samples:

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

Sample Condition Upon Receipt

Client Name: GA Power

Project # **WO#: 92650187**

PM: BV **Due Date: 02/23/23**

CLIENT: GA-GA Power

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

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

Date/Initials Person Examining Contents: 2/3/23 CW

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: 3.8 **Correction Factor:** Add/Subtract (°C) 0.0

Cooler Temp Corrected (°C): 3.8

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

***Check all unpreserved Nitrates for chlorine

Project # WO#: 92650187

Due Date: 02/23/23

PM: BV

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)	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)	DG9H-40 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)	DG9V-40 mL VOA H3PO4 (N/A)	KP7U-50 mL Plastic Unpreserved (N/A)	V/GK (3 vials per kit)-VPH/Gas kit (N/A)	SP5T-125 mL Sterile Plastic (N/A – lab)	SP2T-250 mL Stejile Plastic (N/A – lab)	6P1N	BP3R-250 mL Plastic (NH2)2SO4 (9.3-9.7)	AG0U-100 mL Amber Unpreserved (N/A) (Cl-)	VSGU-20 mL Scintillation vials (N/A)	DG9U-40 mL Amber Unpreserved vials (N/A)
1		2				1																			4				
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 DENR Certification Office (i.e. Out of hold, incorrect preservative, out of temp, incorrect containers.

Pace Analytical

CHAIN-OF-CUSTODY / Analytical Request Document

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

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:	Lauren Coker	Attention:	scainvoices@southernco.com
Address:	2480 Maner Road	Copy To:	Golder	Company Name:	
	Atlanta, GA 30339			Address:	
Email:	laucoker@southernco.com	Purchase Order #:		Pace Quote:	
Phone:	(470) 620-6176 Fax:	Project Name:	Plant McD AP-1 Assessment Well Network	Pace Project Manager:	Bonnie Varg
Requested Due Date:	10 Day TAT	Project #:	GL156849622	Pace Profile #:	

Regulatory Agency

State / Location: GA

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID (One Character per box. (A-Z, 0-9 / , -) Sample ids must be unique)	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	DATE	TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H2SO4	HNO3 + Ice	HCl	NaOH + Zn Acetate	Na2S2O3	Methanol	Other	Analyses Test Y/N	App III/IV + Mg, Na, K, Fe	Cl, F, SO4	Radium 95136320	TDS	Alkalinity	Fe Total, Fe 3+ (Ferric calculation)	Residual Chlorine (Y/N)	42650167
1	MCD-B-113D-WG-20230202	WG	G	2/2/23	10:15		6	3		3						X	X	X	X	X	X			pH = 7.78, Fe2 = 0.5 mg/L (Fe2 analyzed 2/2/23 at 10:20)
2																								
3																								
4																								
6																								
7																								
8																								
9																								
10																								
11																								
12																								
13																								
14																								

003

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	SAMPLE CONDITIONS
Task Code = MCD-CCR-ASSMT-2023S1	M.MANN Golder	02/03/23	820		2/3 1625	

DATE Signed:

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

Quality Control Sample Performance Assessment

Pace Analytical™
www.pacelabs.com

Test:	Ra-226
Analyst:	RMS
Date:	2/23/2023
Worklist:	71391
Matrix:	WT

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	2748589
MB concentration:	0.221
M/B 2 Sigma CSU:	0.151
MB MDC:	0.221
MB Numerical Performance Indicator:	2.87
MB Status vs Numerical Indicator:	Warning
MB Status vs. MDC:	N/A

Laboratory Control Sample Assessment	LCSD (Y or N)?	Y
	LCS71391	LCSD71391
Count Date:	2/28/2023	2/28/2023
Spike I.D.:	19-033	19-033
Decay Corrected Spike Concentration (pCi/mL):	24.019	24.019
Volume Used (mL):	0.10	0.10
Aliquot Volume (L, g, F):	0.506	0.502
Target Conc. (pCi/L, g, F):	4.745	4.781
Uncertainty (Calculated):	0.057	0.057
Result (pCi/L, g, F):	4.766	4.933
LCS/LCSD 2 Sigma CSU (pCi/L, g, F):	0.930	0.930
Numerical Performance Indicator:	0.04	0.32
Percent Recovery:	100.44%	103.18%
Status vs Numerical Indicator:	Pass	Pass
Status vs Recovery:	N/A	N/A
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 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.:	LCS71391	92650188005
Duplicate Sample I.D.	LCSD71391	92650188005DUP
Sample Result (pCi/L, g, F):	4.766	0.285
Sample Result 2 Sigma CSU (pCi/L, g, F):	0.930	0.169
Sample Duplicate Result (pCi/L, g, F):	4.933	0.284
Sample Duplicate Result 2 Sigma CSU (pCi/L, g, F):	0.930	0.171
Are sample and/or duplicate results below RL?	NO	See Below ##
Duplicate Numerical Performance Indicator:	-0.249	0.012
(Based on the LCS/LCSD Percent Recoveries) Duplicate RPD:	2.70%	0.53%
Duplicate Status vs Numerical Indicator:	Pass	Pass
Duplicate Status vs RPD:	N/A	N/A
% 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 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:

ET 2-28-23

YAM 2/28/23

Quality Control Sample Performance Assessment

Pace Analytical™ www.pacelabs.com

Test:	Ra-228
Analyst:	ZPC
Date:	2/24/2023
Worklist:	71392
Matrix:	WT

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	2748590
MB concentration:	0.409
M/B 2 Sigma CSU:	0.324
MB MDC:	0.634
MB Numerical Performance Indicator:	2.48
MB Status vs Numerical Indicator:	Warning
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	LCSD (Y or N)?	Y
	LCS71392	LCSD71392
Count Date:	2/28/2023	2/28/2023
Spike I.D.:	22-040	22-040
Decay Corrected Spike Concentration (pCi/mL):	33.400	33.400
Volume Used (mL):	0.10	0.10
Aliquot Volume (L, g, F):	0.810	0.807
Target Conc. (pCi/L, g, F):	4.125	4.137
Uncertainty (Calculated):	0.202	0.203
Result (pCi/L, g, F):	4.220	5.556
LCS/LCSD 2 Sigma CSU (pCi/L, g, F):	0.946	1.189
Numerical Performance Indicator:	0.19	2.31
Percent Recovery:	102.30%	134.31%
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.:	LCS71392	Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Duplicate Sample I.D.	LCSD71392	
Sample Result (pCi/L, g, F):	4.220	
Sample Result 2 Sigma CSU (pCi/L, g, F):	0.946	
Sample Duplicate Result (pCi/L, g, F):	5.556	
Sample Duplicate Result 2 Sigma CSU (pCi/L, g, F):	1.189	
Are sample and/or duplicate results below RL?	NO	
Duplicate Numerical Performance Indicator:	-1.722	
(Based on the LCS/LCSD Percent Recoveries) Duplicate RPD:	27.05%	
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:

M 2/28/23

VAL
3/1/23

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

July 28, 2023

Andrea McClure
WSP/Golder
5170 Peachtree Road
Building 100, Suite 300
Atlanta, GA 30341

RE: Project: Plant McD AP-1/AP-234 Assessme
Pace Project No.: 92650426

Dear Andrea McClure:

Enclosed are the analytical results for sample(s) received by the laboratory on February 03, 2023. 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,

Bonnie Vang
bonnie.vang@pacelabs.com
(704)875-9092
Project Manager

Enclosures

cc: Stephen Benda, Southern Company
Daniela Herrera, Golder
Ben Hodges, Georgia Power-CCR
J. Shelby Mobley, Southern Company
Charles Norton, Southern Company
Dawn Prell, WSP USA E&I Inc_Atlanta
Yong Cheng Soo, WSP/Golder

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CERTIFICATIONS

Project: Plant McD AP-1/AP-234 Assessme
Pace Project No.: 92650426

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
Virginia Certification #: 460204

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SAMPLE SUMMARY

Project: Plant McD AP-1/AP-234 Assessme
Pace Project No.: 92650426

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92650426001	**MCD-B-62**	Water	02/02/23 13:52	02/03/23 16:23
92650426002	**MCD-B-100**	Water	02/02/23 12:43	02/03/23 16:23
92650426003	**MCD-AP234-FB-2**	Water	02/02/23 12:43	02/03/23 16:23

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SAMPLE ANALYTE COUNT

Project: Plant McD AP-1/AP-234 Assessme
Pace Project No.: 92650426

Lab ID	Sample ID	Method	Analysts	Analytes Reported
92650426001	**MCD-B-62**	EPA 6010D	DRB	5
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
		SM 2320B-2011	SMS	3
		EPA 300.0 Rev 2.1 1993	CDC	3
92650426002	**MCD-B-100**	EPA 6010D	DRB	5
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
		SM 2320B-2011	SMS	3
		EPA 300.0 Rev 2.1 1993	CDC	3
92650426003	**MCD-AP234-FB-2**	EPA 6010D	DRB	5
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
		SM 2320B-2011	SMS	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

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PROJECT NARRATIVE

Project: Plant McD AP-1/AP-234 Assessme
Pace Project No.: 92650426

Date: July 28, 2023

Georgia Power EQuIS Database Manager requested Pace Project Manager remove the sample matrix and date from the Sample IDs. This update ensures sample nomenclature is followed on final PDF and EDD for successful upload of laboratory data into the Georgia Power EQuIS database.

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PROJECT NARRATIVE

Project: Plant McD AP-1/AP-234 Assessme
Pace Project No.: 92650426

Method: **EPA 6010D**
Description: 6010D ATL ICP
Client: Georgia Power
Date: July 28, 2023

General Information:
3 samples were analyzed for EPA 6010D by Pace Analytical Services Peachtree Corners, GA. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3010A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 755832

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 92650180001

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

- MS (Lab ID: 3927043)
  - Calcium
  - Magnesium
  - Sodium
- MSD (Lab ID: 3927044)
  - Potassium

Additional Comments:

REPORT OF LABORATORY ANALYSIS

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PROJECT NARRATIVE

Project: Plant McD AP-1/AP-234 Assessme
Pace Project No.: 92650426

Method: **EPA 6020B**
Description: 6020 MET ICPMS
Client: Georgia Power
Date: July 28, 2023

General Information:
3 samples were analyzed for EPA 6020B by Pace Analytical Services Peachtree Corners, GA. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3005A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: Plant McD AP-1/AP-234 Assessme
Pace Project No.: 92650426

Method: **EPA 7470A**
Description: 7470 Mercury
Client: Georgia Power
Date: July 28, 2023

General Information:
3 samples were analyzed for EPA 7470A by Pace Analytical Services Peachtree Corners, GA. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 7470A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: Plant McD AP-1/AP-234 Assessme
Pace Project No.: 92650426

Method: **SM 2540C-2015**
Description: 2540C Total Dissolved Solids
Client: Georgia Power
Date: July 28, 2023

General Information:
3 samples were analyzed for SM 2540C-2015 by Pace Analytical Services Peachtree Corners, GA. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

Analyte Comments:

QC Batch: 754118

1g: Sample residue exceeded method SM 2540C recommended 200 mg.
- DUP (Lab ID: 3917653)
  - Total Dissolved Solids

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PROJECT NARRATIVE

Project: Plant McD AP-1/AP-234 Assessme
Pace Project No.: 92650426

Method: **SM 2320B-2011**
Description: 2320B Alkalinity
Client: Georgia Power
Date: July 28, 2023

General Information:
3 samples were analyzed for SM 2320B-2011 by Pace Analytical Services Asheville. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 754413

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 92650181010,92650181012

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

- MS (Lab ID: 3919375)
  - Alkalinity, Total as CaCO3
- MSD (Lab ID: 3919376)
  - Alkalinity, Total as CaCO3

Additional Comments:

REPORT OF LABORATORY ANALYSIS

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

PROJECT NARRATIVE

Project: Plant McD AP-1/AP-234 Assessme
Pace Project No.: 92650426

Method: **EPA 300.0 Rev 2.1 1993**
Description: 300.0 IC Anions 28 Days
Client: Georgia Power
Date: July 28, 2023

General Information:
3 samples were analyzed for EPA 300.0 Rev 2.1 1993 by Pace Analytical Services Asheville. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 754259

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 92650182006,92650416003

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

- MS (Lab ID: 3918327)
  - Sulfate
- MSD (Lab ID: 3918328)
  - Sulfate

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

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ANALYTICAL RESULTS

Project: Plant McD AP-1/AP-234 Assessme
Pace Project No.: 92650426

Sample: MCD-B-62 **Lab ID: 92650426001** Collected: 02/02/23 13:52 Received: 02/03/23 16:23 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Monitoring Well Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**Client**				1		02/14/23 18:25		
Collected Date	**02/02/23**				1		02/14/23 18:25		
Collected Time	**13:58**				1		02/14/23 18:25		
pH	**6.33**	Std. Units			1		02/14/23 18:25		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Iron	**6.5**	mg/L	0.040	0.025	1	02/14/23 17:00	02/15/23 18:14	7439-89-6	
Potassium	**2.3**	mg/L	0.20	0.15	1	02/14/23 17:00	02/15/23 18:14	7440-09-7	
Sodium	**9.9**	mg/L	1.0	0.58	1	02/14/23 17:00	02/15/23 18:14	7440-23-5	
Calcium	**32.4**	mg/L	1.0	0.12	1	02/14/23 17:00	02/15/23 18:14	7440-70-2	
Magnesium	**5.0**	mg/L	0.050	0.012	1	02/14/23 17:00	02/15/23 18:14	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	02/15/23 10:18	02/16/23 14:34	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0022	1	02/15/23 10:18	02/16/23 14:34	7440-38-2	
Barium	**0.019**	mg/L	0.0050	0.00067	1	02/15/23 10:18	02/16/23 14:34	7440-39-3	
Beryllium	**0.00012J**	mg/L	0.00050	0.000054	1	02/15/23 10:18	02/16/23 14:34	7440-41-7	
Boron	**0.064**	mg/L	0.040	0.0086	1	02/15/23 10:18	02/16/23 14:34	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	02/15/23 10:18	02/16/23 14:34	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	02/15/23 10:18	02/16/23 14:34	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	02/15/23 10:18	02/16/23 14:34	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	02/15/23 10:18	02/16/23 14:34	7439-92-1	
Lithium	**0.0082J**	mg/L	0.030	0.00073	1	02/15/23 10:18	02/16/23 14:34	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	02/15/23 10:18	02/16/23 14:34	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	02/15/23 10:18	02/16/23 14:34	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	02/15/23 10:18	02/16/23 14:34	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	02/17/23 09:20	02/17/23 13:42	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**197**	mg/L	25.0	25.0	1		02/07/23 18:41		
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville								
Alkalinity,Bicarbonate (CaCO3)	**73.3**	mg/L	5.0	5.0	1		02/08/23 13:36		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		02/08/23 13:36		
Alkalinity, Total as CaCO3	**73.3**	mg/L	5.0	5.0	1		02/08/23 13:36		

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ANALYTICAL RESULTS

Project: Plant McD AP-1/AP-234 Assessme
Pace Project No.: 92650426

Sample: MCD-B-62 **Lab ID: 92650426001** Collected: 02/02/23 13:52 Received: 02/03/23 16:23 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		02/08/23 06:31	16887-00-6	
Fluoride	**0.16**	mg/L	0.10	0.050	1		02/08/23 06:31	16984-48-8	
Sulfate	**52.1**	mg/L	1.0	0.50	1		02/08/23 06:31	14808-79-8	

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ANALYTICAL RESULTS

Project: Plant McD AP-1/AP-234 Assessme
Pace Project No.: 92650426

Sample: MCD-B-100 **Lab ID: 92650426002** Collected: 02/02/23 12:43 Received: 02/03/23 16:23 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Monitoring Well Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**Client**				1		02/14/23 18:26		
Collected Date	**02/02/23**				1		02/14/23 18:26		
Collected Time	**12:46**				1		02/14/23 18:26		
pH	**5.30**	Std. Units			1		02/14/23 18:26		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Iron	**20.9**	mg/L	0.040	0.025	1	02/14/23 17:00	02/15/23 18:19	7439-89-6	
Potassium	**1.1**	mg/L	0.20	0.15	1	02/14/23 17:00	02/15/23 18:19	7440-09-7	
Sodium	**26.1**	mg/L	1.0	0.58	1	02/14/23 17:00	02/15/23 18:19	7440-23-5	
Calcium	**46.9**	mg/L	1.0	0.12	1	02/14/23 17:00	02/15/23 18:19	7440-70-2	
Magnesium	**42.6**	mg/L	0.050	0.012	1	02/14/23 17:00	02/15/23 18:19	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	02/15/23 10:18	02/16/23 14:40	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0022	1	02/15/23 10:18	02/16/23 14:40	7440-38-2	
Barium	**0.098**	mg/L	0.0050	0.00067	1	02/15/23 10:18	02/16/23 14:40	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	02/15/23 10:18	02/16/23 14:40	7440-41-7	
Boron	**1.6**	mg/L	0.040	0.0086	1	02/15/23 10:18	02/16/23 14:40	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	02/15/23 10:18	02/16/23 14:40	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	02/15/23 10:18	02/16/23 14:40	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	02/15/23 10:18	02/16/23 14:40	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	02/15/23 10:18	02/16/23 14:40	7439-92-1	
Lithium	ND	mg/L	0.030	0.00073	1	02/15/23 10:18	02/16/23 14:40	7439-93-2	
Molybdenum	**0.19**	mg/L	0.010	0.00074	1	02/15/23 10:18	02/16/23 14:40	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	02/15/23 10:18	02/16/23 14:40	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	02/15/23 10:18	02/16/23 14:40	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	02/17/23 09:20	02/17/23 13:44	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**595**	mg/L	25.0	25.0	1		02/07/23 18:41		
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville								
Alkalinity,Bicarbonate (CaCO3)	**11.4**	mg/L	5.0	5.0	1		02/08/23 13:56		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		02/08/23 13:56		
Alkalinity, Total as CaCO3	**11.4**	mg/L	5.0	5.0	1		02/08/23 13:56		

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ANALYTICAL RESULTS

Project: Plant McD AP-1/AP-234 Assessme
Pace Project No.: 92650426

Sample: MCD-B-100 **Lab ID: 92650426002** Collected: 02/02/23 12:43 Received: 02/03/23 16:23 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	**11.7**	mg/L	1.0	0.60	1		02/08/23 07:19	16887-00-6	
Fluoride	**0.052J**	mg/L	0.10	0.050	1		02/08/23 07:19	16984-48-8	
Sulfate	**356**	mg/L	8.0	4.0	8		02/08/23 14:25	14808-79-8	

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ANALYTICAL RESULTS

Project: Plant McD AP-1/AP-234 Assessme
Pace Project No.: 92650426

Sample: MCD-AP234-FB-2 **Lab ID: 92650426003** Collected: 02/02/23 12:43 Received: 02/03/23 16:23 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	02/14/23 17:00	02/15/23 18:33	7439-89-6	
Potassium	ND	mg/L	0.20	0.15	1	02/14/23 17:00	02/15/23 18:33	7440-09-7	
Sodium	ND	mg/L	1.0	0.58	1	02/14/23 17:00	02/15/23 18:33	7440-23-5	
Calcium	ND	mg/L	1.0	0.12	1	02/14/23 17:00	02/15/23 18:33	7440-70-2	
Magnesium	ND	mg/L	0.050	0.012	1	02/14/23 17:00	02/15/23 18:33	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	02/16/23 13:08	02/17/23 13:44	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0022	1	02/16/23 13:08	02/17/23 13:44	7440-38-2	
Barium	ND	mg/L	0.0050	0.00067	1	02/16/23 13:08	02/17/23 13:44	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	02/16/23 13:08	02/17/23 13:44	7440-41-7	
Boron	**0.036J**	mg/L	0.040	0.0086	1	02/16/23 13:08	02/17/23 13:44	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	02/16/23 13:08	02/17/23 13:44	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	02/16/23 13:08	02/17/23 13:44	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	02/16/23 13:08	02/17/23 13:44	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	02/16/23 13:08	02/17/23 13:44	7439-92-1	
Lithium	ND	mg/L	0.030	0.00073	1	02/16/23 13:08	02/17/23 13:44	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	02/16/23 13:08	02/17/23 13:44	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	02/16/23 13:08	02/17/23 13:44	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	02/16/23 13:08	02/17/23 13:44	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	02/17/23 09:20	02/17/23 13:47	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	ND	mg/L	25.0	25.0	1		02/07/23 18:42		
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville								
Alkalinity,Bicarbonate (CaCO3)	ND	mg/L	5.0	5.0	1		02/08/23 14:43		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		02/08/23 14:43		
Alkalinity, Total as CaCO3	ND	mg/L	5.0	5.0	1		02/08/23 14:43		
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		02/08/23 07:35	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		02/08/23 07:35	16984-48-8	
Sulfate	ND	mg/L	1.0	0.50	1		02/08/23 07:35	14808-79-8	

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QUALITY CONTROL DATA

Project: Plant McD AP-1/AP-234 Assessme
Pace Project No.: 92650426

QC Batch: 755832
QC Batch Method: EPA 3010A
Analysis Method: EPA 6010D
Analysis Description: 6010D ATL
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92650426001, 92650426002, 92650426003

METHOD BLANK: 3927041 Matrix: Water
Associated Lab Samples: 92650426001, 92650426002, 92650426003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium	mg/L	ND	1.0	0.12	02/15/23 17:07	
Iron	mg/L	ND	0.040	0.025	02/15/23 17:07	
Magnesium	mg/L	ND	0.050	0.012	02/15/23 17:07	
Potassium	mg/L	ND	0.20	0.15	02/15/23 17:07	
Sodium	mg/L	ND	1.0	0.58	02/15/23 17:07	

LABORATORY CONTROL SAMPLE: 3927042

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium	mg/L	1	1.0	103	80-120	
Iron	mg/L	1	1.0	103	80-120	
Magnesium	mg/L	1	1.0	102	80-120	
Potassium	mg/L	1	0.99	99	80-120	
Sodium	mg/L	1	1.1	106	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3927043 3927044

Parameter	Units	92650180001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Calcium	mg/L	70.2	1	1	69.6	71.4	-66	116	75-125	3	20	M1
Iron	mg/L	1.8	1	1	2.8	2.8	98	104	75-125	2	20	
Magnesium	mg/L	24.4	1	1	24.8	25.5	42	113	75-125	3	20	M1
Potassium	mg/L	7.8	1	1	8.7	9.1	89	138	75-125	5	20	M1
Sodium	mg/L	18.4	1	1	19.0	19.5	60	112	75-125	3	20	M1

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QUALITY CONTROL DATA

Project: Plant McD AP-1/AP-234 Assessme
Pace Project No.: 92650426

QC Batch: 755857
QC Batch Method: EPA 3005A
Analysis Method: EPA 6020B
Analysis Description: 6020 MET
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92650426001, 92650426002

METHOD BLANK: 3927212 Matrix: Water
Associated Lab Samples: 92650426001, 92650426002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	ND	0.0030	0.00078	02/16/23 12:50	
Arsenic	mg/L	ND	0.0050	0.0022	02/16/23 12:50	
Barium	mg/L	ND	0.0050	0.00067	02/16/23 12:50	
Beryllium	mg/L	ND	0.00050	0.000054	02/16/23 12:50	
Boron	mg/L	ND	0.040	0.0086	02/16/23 12:50	
Cadmium	mg/L	ND	0.00050	0.00011	02/16/23 12:50	
Chromium	mg/L	ND	0.0050	0.0011	02/16/23 12:50	
Cobalt	mg/L	ND	0.0050	0.00039	02/16/23 12:50	
Lead	mg/L	ND	0.0010	0.00089	02/16/23 12:50	
Lithium	mg/L	ND	0.030	0.00073	02/16/23 12:50	
Molybdenum	mg/L	ND	0.010	0.00074	02/16/23 12:50	
Selenium	mg/L	ND	0.0050	0.0014	02/16/23 12:50	
Thallium	mg/L	ND	0.0010	0.00018	02/16/23 12:50	

LABORATORY CONTROL SAMPLE: 3927213

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.1	0.11	107	80-120	
Arsenic	mg/L	0.1	0.099	99	80-120	
Barium	mg/L	0.1	0.098	98	80-120	
Beryllium	mg/L	0.1	0.096	96	80-120	
Boron	mg/L	1	0.99	99	80-120	
Cadmium	mg/L	0.1	0.096	96	80-120	
Chromium	mg/L	0.1	0.10	100	80-120	
Cobalt	mg/L	0.1	0.098	98	80-120	
Lead	mg/L	0.1	0.099	99	80-120	
Lithium	mg/L	0.1	0.097	97	80-120	
Molybdenum	mg/L	0.1	0.10	101	80-120	
Selenium	mg/L	0.1	0.098	98	80-120	
Thallium	mg/L	0.1	0.098	98	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3927214 3927215

Parameter	Units	92650179003 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	0.092	111	91	75-125	19	20	
Arsenic	mg/L	0.0029J	0.1	0.1	0.11	0.098	104	95	75-125	9	20	

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QUALITY CONTROL DATA

Project: Plant McD AP-1/AP-234 Assessme
Pace Project No.: 92650426

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3927214 3927215

Parameter	Units	92650179003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Barium	mg/L	0.089	0.1	0.1	0.19	0.19	102	97	75-125	3	20	
Beryllium	mg/L	0.00016J	0.1	0.1	0.10	0.097	105	97	75-125	7	20	
Boron	mg/L	0.051	1	1	1.1	1.0	108	99	75-125	8	20	
Cadmium	mg/L	0.00019J	0.1	0.1	0.10	0.096	102	96	75-125	6	20	
Chromium	mg/L	ND	0.1	0.1	0.11	0.10	111	99	75-125	12	20	
Cobalt	mg/L	0.0080	0.1	0.1	0.12	0.11	108	98	75-125	9	20	
Lead	mg/L	ND	0.1	0.1	0.10	0.097	102	97	75-125	5	20	
Lithium	mg/L	0.0088J	0.1	0.1	0.12	0.11	107	99	75-125	8	20	
Molybdenum	mg/L	0.023	0.1	0.1	0.13	0.12	111	102	75-125	7	20	
Selenium	mg/L	ND	0.1	0.1	0.10	0.096	103	96	75-125	7	20	
Thallium	mg/L	ND	0.1	0.1	0.10	0.098	102	98	75-125	4	20	

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REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: Plant McD AP-1/AP-234 Assessme
Pace Project No.: 92650426

QC Batch: 756320
QC Batch Method: EPA 3005A
Analysis Method: EPA 6020B
Analysis Description: 6020 MET
Laboratory: Pace Analytical Services - Peachtree Corners, GA

Associated Lab Samples: 92650426003

METHOD BLANK: 3929306 Matrix: Water
Associated Lab Samples: 92650426003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	ND	0.0030	0.00078	02/17/23 12:51	
Arsenic	mg/L	ND	0.0050	0.0022	02/17/23 12:51	
Barium	mg/L	ND	0.0050	0.00067	02/17/23 12:51	
Beryllium	mg/L	ND	0.00050	0.000054	02/17/23 12:51	
Boron	mg/L	ND	0.040	0.0086	02/17/23 12:51	
Cadmium	mg/L	ND	0.00050	0.00011	02/17/23 12:51	
Chromium	mg/L	ND	0.0050	0.0011	02/17/23 12:51	
Cobalt	mg/L	ND	0.0050	0.00039	02/17/23 12:51	
Lead	mg/L	ND	0.0010	0.00089	02/17/23 12:51	
Lithium	mg/L	ND	0.030	0.00073	02/17/23 12:51	
Molybdenum	mg/L	ND	0.010	0.00074	02/17/23 12:51	
Selenium	mg/L	ND	0.0050	0.0014	02/17/23 12:51	
Thallium	mg/L	ND	0.0010	0.00018	02/17/23 12:51	

LABORATORY CONTROL SAMPLE: 3929307

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.1	0.12	118	80-120	
Arsenic	mg/L	0.1	0.10	104	80-120	
Barium	mg/L	0.1	0.11	105	80-120	
Beryllium	mg/L	0.1	0.10	104	80-120	
Boron	mg/L	1	0.99	99	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	101	80-120	
Lead	mg/L	0.1	0.11	107	80-120	
Lithium	mg/L	0.1	0.098	98	80-120	
Molybdenum	mg/L	0.1	0.10	105	80-120	
Selenium	mg/L	0.1	0.10	101	80-120	
Thallium	mg/L	0.1	0.11	106	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3929639 3929640

Parameter	Units	92648451004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Antimony	mg/L	ND	0.1	0.1	0.11	0.12	110	115	75-125	4	20	
Arsenic	mg/L	ND	0.1	0.1	0.11	0.11	106	109	75-125	2	20	

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QUALITY CONTROL DATA

Project: Plant McD AP-1/AP-234 Assessme
Pace Project No.: 92650426

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3929639 3929640

Parameter	Units	92648451004 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	0.13	110	111	75-125	1	20	
Beryllium	mg/L	0.000081J	0.1	0.1	0.094	0.095	94	95	75-125	1	20	
Boron	mg/L	2.4	1	1	3.4	3.3	98	89	75-125	3	20	
Cadmium	mg/L	0.0017	0.1	0.1	0.11	0.11	103	105	75-125	1	20	
Chromium	mg/L	ND	0.1	0.1	0.10	0.10	102	102	75-125	0	20	
Cobalt	mg/L	0.027	0.1	0.1	0.12	0.13	97	99	75-125	2	20	
Lead	mg/L	ND	0.1	0.1	0.10	0.11	105	105	75-125	0	20	
Lithium	mg/L	0.0011J	0.1	0.1	0.097	0.097	96	96	75-125	0	20	
Molybdenum	mg/L	ND	0.1	0.1	0.10	0.11	104	108	75-125	3	20	
Selenium	mg/L	ND	0.1	0.1	0.11	0.11	105	108	75-125	2	20	
Thallium	mg/L	ND	0.1	0.1	0.11	0.11	106	107	75-125	1	20	

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QUALITY CONTROL DATA

Project: Plant McD AP-1/AP-234 Assessme
Pace Project No.: 92650426

QC Batch: 756583
QC Batch Method: EPA 7470A
Analysis Method: EPA 7470A
Analysis Description: 7470 Mercury
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92650426001, 92650426002, 92650426003

METHOD BLANK: 3930812 Matrix: Water
Associated Lab Samples: 92650426001, 92650426002, 92650426003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	ND	0.00020	0.00013	02/17/23 12:36	

LABORATORY CONTROL SAMPLE: 3930813

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.0025	0.0023	91	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3930814 3930815

Parameter	Units	92650183001 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	0.0023	100	92	75-125	9	20	

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QUALITY CONTROL DATA

Project: Plant McD AP-1/AP-234 Assessme
Pace Project No.: 92650426

QC Batch: 754118
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: 92650426001, 92650426002, 92650426003

METHOD BLANK: 3917651 Matrix: Water
Associated Lab Samples: 92650426001, 92650426002, 92650426003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	25.0	25.0	02/07/23 18:37	

LABORATORY CONTROL SAMPLE: 3917652

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	408	102	80-120	

SAMPLE DUPLICATE: 3917653

Parameter	Units	92648451007 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	1950	2030	4	10	1g

SAMPLE DUPLICATE: 3917654

Parameter	Units	92649377019 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	528	540	2	10	

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QUALITY CONTROL DATA

Project: Plant McD AP-1/AP-234 Assessme
Pace Project No.: 92650426

QC Batch: 754359
QC Batch Method: SM 2320B-2011
Analysis Method: SM 2320B-2011
Analysis Description: 2320B Alkalinity
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92650426001, 92650426002

METHOD BLANK: 3918898 Matrix: Water
Associated Lab Samples: 92650426001, 92650426002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Alkalinity, Total as CaCO3	mg/L	ND	5.0	5.0	02/08/23 10:50	
Alkalinity,Bicarbonate (CaCO3)	mg/L	ND	5.0	5.0	02/08/23 10:50	
Alkalinity,Carbonate (CaCO3)	mg/L	ND	5.0	5.0	02/08/23 10:50	

LABORATORY CONTROL SAMPLE: 3918899

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	50	50.9	102	80-120	

LABORATORY CONTROL SAMPLE: 3918900

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	50	49.7	99	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3918901 3918902

Parameter	Units	92650426001 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	73.3	50	50	127	130	107	112	80-120	2	25	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3918903 3918904

Parameter	Units	92650426002 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	11.4	50	50	59.4	61.2	96	100	80-120	3	25	

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QUALITY CONTROL DATA

Project: Plant McD AP-1/AP-234 Assessme
Pace Project No.: 92650426

QC Batch: 754413
QC Batch Method: SM 2320B-2011
Analysis Method: SM 2320B-2011
Analysis Description: 2320B Alkalinity
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92650426003

METHOD BLANK: 3919370 Matrix: Water
Associated Lab Samples: 92650426003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Alkalinity, Total as CaCO3	mg/L	ND	5.0	5.0	02/08/23 14:25	
Alkalinity,Bicarbonate (CaCO3)	mg/L	ND	5.0	5.0	02/08/23 14:25	
Alkalinity,Carbonate (CaCO3)	mg/L	ND	5.0	5.0	02/08/23 14:25	

LABORATORY CONTROL SAMPLE: 3919371

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	50	50.4	101	80-120	

LABORATORY CONTROL SAMPLE: 3919372

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	50	52.2	104	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3919373 3919374

Parameter	Units	92650181010 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	50.4	50.5	101	101	80-120	0	25	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3919375 3919376

Parameter	Units	92650181012 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	11.2	9.3	22	19	80-120	18	25	M1

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QUALITY CONTROL DATA

Project: Plant McD AP-1/AP-234 Assessme
Pace Project No.: 92650426

QC Batch: 754259
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: 92650426001, 92650426002, 92650426003

METHOD BLANK: 3918323 Matrix: Water
Associated Lab Samples: 92650426001, 92650426002, 92650426003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.60	02/07/23 23:52	
Fluoride	mg/L	ND	0.10	0.050	02/07/23 23:52	
Sulfate	mg/L	ND	1.0	0.50	02/07/23 23:52	

LABORATORY CONTROL SAMPLE: 3918324

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	49.9	100	90-110	
Fluoride	mg/L	2.5	2.6	104	90-110	
Sulfate	mg/L	50	50.7	101	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3918325 3918326

Parameter	Units	92650416003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	0.93J	50	50	50.7	51.7	99	101	90-110	2	10	
Fluoride	mg/L	0.31	2.5	2.5	2.9	3.0	105	107	90-110	1	10	
Sulfate	mg/L	35.3	50	50	84.9	85.9	99	101	90-110	1	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3918327 3918328

Parameter	Units	92650182006 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	10.8	50	50	61.1	62.2	100	103	90-110	2	10	
Fluoride	mg/L	0.091J	2.5	2.5	2.7	2.8	105	108	90-110	3	10	
Sulfate	mg/L	252	50	50	296	296	88	88	90-110	0	10	M1

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QUALIFIERS

Project: Plant McD AP-1/AP-234 Assessme
Pace Project No.: 92650426

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

1g	Sample residue exceeded method SM 2540C recommended 200 mg.
M1	Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Plant McD AP-1/AP-234 Assessme
Pace Project No.: 92650426

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92650426001	**MCD-B-62**				
92650426002	**MCD-B-100**				
92650426001	**MCD-B-62**	EPA 3010A	755832	EPA 6010D	755852
92650426002	**MCD-B-100**	EPA 3010A	755832	EPA 6010D	755852
92650426003	**MCD-AP234-FB-2**	EPA 3010A	755832	EPA 6010D	755852
92650426001	**MCD-B-62**	EPA 3005A	755857	EPA 6020B	756083
92650426002	**MCD-B-100**	EPA 3005A	755857	EPA 6020B	756083
92650426003	**MCD-AP234-FB-2**	EPA 3005A	756320	EPA 6020B	756469
92650426001	**MCD-B-62**	EPA 7470A	756583	EPA 7470A	756603
92650426002	**MCD-B-100**	EPA 7470A	756583	EPA 7470A	756603
92650426003	**MCD-AP234-FB-2**	EPA 7470A	756583	EPA 7470A	756603
92650426001	**MCD-B-62**	SM 2540C-2015	754118		
92650426002	**MCD-B-100**	SM 2540C-2015	754118		
92650426003	**MCD-AP234-FB-2**	SM 2540C-2015	754118		
92650426001	**MCD-B-62**	SM 2320B-2011	754359		
92650426002	**MCD-B-100**	SM 2320B-2011	754359		
92650426003	**MCD-AP234-FB-2**	SM 2320B-2011	754413		
92650426001	**MCD-B-62**	EPA 300.0 Rev 2.1 1993	754259		
92650426002	**MCD-B-100**	EPA 300.0 Rev 2.1 1993	754259		
92650426003	**MCD-AP234-FB-2**	EPA 300.0 Rev 2.1 1993	754259		

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DC#_Title: ENV-FRM-HUN1-0083 v02_Sample Condition Upon Receipt

Effective Date: 11/14/2022

Laboratory receiving samples:

Asheville ☐ Eden ☐ Greenwood ☐ Huntersville ☐ Raleigh ☐ Mechanicsville ☐ Atlanta ☑ ~~Kernersville~~ ☐

Sample Condition Upon Receipt

Client Name: GA Power

Project WO# : 92650426

92650426

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

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

Date/Initials Person Examining Contents: 2/3/23 CW

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: 3.8 **Correction Factor:** Add/Subtract (°C) 0.0

Cooler Temp Corrected (°C): 3.8

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:** _____

DC#_Title: ENV-FRM-HUN1-0083 v02_Sample Condition Upon Receipt

Effective Date: 11/14/2022

***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**

*****Check all unpreserved Nitrates for chlorine**

Project # **WO#: 92650426**

PM: BV **Due Date:** 02/20/23

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)	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)	DG94-40 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)	DG9V-40 mL VOA H3PO4 (N/A)	KP7U-50 mL Plastic Unpreserved (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	BP3R-250 mL Plastic (NH2)2SO4 (9.3-9.7)	AG0U-100 mL Amber Unpreserved (N/A) (Cl-)	VSGU-20 mL Scintillation vials (N/A)	DG9U-40 mL Amber Unpreserved vials (N/A)
1		2	1			1																			2	1			
2		2	1			1																			2	1			
3		2	1			1																			2	1			
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 DENR Certification Office (i.e. Out of hold, incorrect preservative, out of temp, incorrect containers.

Pace Analytical

CHAIN-OF-CUSTODY / Analytical Request Document

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

Page : 1 Of 1

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:	
Company:	Georgia Power - Coal Combustion Residuals	Report To:	Lauren Coker	Attention:	scsinvoices@southernco.com
Address:	2480 Maner Road	Copy To:	Golder	Company Name:	
	Atlanta, GA 30339			Address:	
Email:	laucoker@southernco.com	Purchase Order #:		Pace Quote:	
Phone:	(470) 620-8178 Fax:	Project Name:	Plant McD AP-1 and AP-234 Assesment Well Network	Pace Project Manager:	Bonnie Vang
Requested Due Date:	10 Day TAT	Project #:	GL166849622	Pace Profile #:	

ITEM #	SAMPLE ID One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique MATRIX CODE: Drinking Water DW, Water WT, Waste Water WW, Product P, Soil/Solid SL, Oil OL, Wipe WP, Air AR, Other OT, Tissue TS	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	DATE	TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved - Ice	H2SO4	HNO3 + Ice	HCl	NaOH + Zn Acetate	Na2S2O3	Methanol	Other	Analyses Test Y/N	Requested Analysis Filtered (Y/N)	Residual Chlorine (Y/N)	
																	App III/IV + Mg, Na, K	Residual Chlorine (Y/N)	92656426
																	Cl, F, SO4		
																	Radium 95/13/9320		
																	TDS		
																	Alkalinity		
																	Fe Total, Fe 3+ (Ferric calculation)		
1	MCD-B-62-WG-20230202	WG	G	2/2/23	13:52		6	3		3						X	X	X	X	X	X		pH = 6.33, Fe2 = 2.4 mg/L (Fe2 analyzed 2/2/23 at 13:58) 901
2	MCD-B-100-WG-20230202	WG	G	2/2/23	12:43		6	3		3						X	X	X	X	X	X		pH = 6.30, Fe2 = 7.0 mg/L (Fe2 analyzed 2/2/23 at 12:48) 902
3	MCD-AP234-FB-2-WG-20230202	WG	G	2/2/23	12:43		6	3		3						X	X	X	X	X	X		903
4																							
6																							
7																							
8																							
9																							
10																							
11																							
12																							
13																							
14																							

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	SAMPLE CONDITIONS
Task Code = MCD-CCR-ASSMT-2023S1	M. Mann Golder	02/03/23	1620		2/3	1620

DATE Signed:

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 20, 2023

Andrea McClure
WSP/Golder
5170 Peachtree Road
Building 100, Suite 300
Atlanta, GA 30341

RE: Project: Plant McD AP-1234 Assessm RADS
Pace Project No.: 92650427

Dear Andrea McClure:

Enclosed are the analytical results for sample(s) received by the laboratory on February 03, 2023. 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,

Bonnie Vang
bonnie.vang@pacelabs.com
(704)875-9092
Project Manager

Enclosures

cc: Joju Abraham, Georgia Power-CCR
Stephen Benda, Southern Company
Noelia Gangi, Georgia Power
Daniela Herrera, Golder
Ben Hodges, Georgia Power-CCR
Kristen Jurinko
Laura Midkiff, Georgia Power
J. Shelby Mobley, Southern Company
Charles Norton, Southern Company
Dawn Prell, WSP USA E&I Inc_Atlanta
Michael Smilley, Georgia Power
Yong Cheng Soo, WSP/Golder
Tina Sullivan, ERM

REPORT OF LABORATORY ANALYSIS

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CERTIFICATIONS

Project: Plant McD AP-1234 Assessm RADS
Pace Project No.: 92650427

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: Plant McD AP-1234 Assessm RADS
Pace Project No.: 92650427

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92650427001	**MCD-B-62**	Water	02/02/23 13:52	02/03/23 16:23
92650427002	**MCD-B-100**	Water	02/02/23 12:43	02/03/23 16:23
92650427003	**MCD-AP234-FB-2**	Water	02/02/23 12:43	02/03/23 16:23

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SAMPLE ANALYTE COUNT

Project: Plant McD AP-1234 Assessm RADS
Pace Project No.: 92650427

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92650427001	**MCD-B-62**	EPA 9315	RMS	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92650427002	**MCD-B-100**	EPA 9315	RMS	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92650427003	**MCD-AP234-FB-2**	EPA 9315	RMS	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA

PASI-PA = Pace Analytical Services - Greensburg

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PROJECT NARRATIVE

Project: Plant McD AP-1234 Assessm RADS
Pace Project No.: 92650427

Date: March 20, 2023

Georgia Power EQuIS Database Manager requested Pace Project Manager remove the sample matrix and date from the Sample IDs. This update ensures sample nomenclature is followed on final PDF and EDD for successful upload of laboratory data into the Georgia Power EQuIS database.

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PROJECT NARRATIVE

Project: Plant McD AP-1234 Assessm RADS
Pace Project No.: 92650427

Method: **EPA 9315**
Description: 9315 Total Radium
Client: Georgia Power
Date: March 20, 2023

General Information:
3 samples were analyzed for EPA 9315 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: Plant McD AP-1234 Assessm RADS
Pace Project No.: 92650427

Method: **EPA 9320**
Description: 9320 Radium 228
Client: Georgia Power
Date: March 20, 2023

General Information:
3 samples were analyzed for EPA 9320 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: Plant McD AP-1234 Assessm RADS
Pace Project No.: 92650427

Method: **Total Radium Calculation**
Description: Total Radium 228+226
Client: Georgia Power
Date: March 20, 2023

General Information:
3 samples were analyzed for Total Radium Calculation by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant McD AP-1234 Assessm RADS
Pace Project No.: 92650427

Sample: MCD-B-62 **Lab ID: 92650427001** Collected: 02/02/23 13:52 Received: 02/03/23 16:23 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	**0.763 ± 0.263 (0.226) C:78% T:NA**	pCi/L	02/27/23 18:33	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.838 ± 0.426 (0.754) C:83% T:86%**	pCi/L	02/21/23 15:12	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.60 ± 0.689 (0.980)**	pCi/L	02/28/23 15:11	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant McD AP-1234 Assessm RADS
Pace Project No.: 92650427

Sample: MCD-B-100 **Lab ID: 92650427002** Collected: 02/02/23 12:43 Received: 02/03/23 16:23 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	**0.145 ± 0.120 (0.212) C:91% T:NA**	pCi/L	02/27/23 18:33	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.836 ± 0.395 (0.665) C:83% T:88%**	pCi/L	02/21/23 15:12	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.981 ± 0.515 (0.877)**	pCi/L	02/28/23 15:11	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant McD AP-1234 Assessm RADS
Pace Project No.: 92650427

Sample: MCD-AP234-FB-2 **Lab ID: 92650427003** Collected: 02/02/23 12:43 Received: 02/03/23 16:23 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	**0.00405 ± 0.0876 (0.240) C:83% T:NA**	pCi/L	02/27/23 18:34	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.366 ± 0.282 (0.552) C:86% T:100%**	pCi/L	02/21/23 15:12	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.370 ± 0.370 (0.792)**	pCi/L	02/28/23 15:11	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL - RADIOCHEMISTRY

Project: Plant McD AP-1234 Assessm RADS
Pace Project No.: 92650427

QC Batch: 565964
QC Batch Method: EPA 9315
Analysis Method: EPA 9315
Analysis Description: 9315 Total Radium
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92650427001, 92650427002, 92650427003

METHOD BLANK: 2748587
Matrix: Water
Associated Lab Samples: 92650427001, 92650427002, 92650427003

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.0712 ± 0.0809 (0.156) C:99% T:NA	pCi/L	02/27/23 19:32	

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

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL - RADIOCHEMISTRY

Project: Plant McD AP-1234 Assessm RADS
Pace Project No.: 92650427

QC Batch: 565965
QC Batch Method: EPA 9320
Analysis Method: EPA 9320
Analysis Description: 9320 Radium 228
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92650427001, 92650427002, 92650427003

METHOD BLANK: 2748588
Matrix: Water
Associated Lab Samples: 92650427001, 92650427002, 92650427003

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.343 ± 0.275 (0.547) C:87% T:103%	pCi/L	02/21/23 11:58	

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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QUALIFIERS

Project: Plant McD AP-1234 Assessm RADS
Pace Project No.: 92650427

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.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Plant McD AP-1234 Assessm RADS
Pace Project No.: 92650427

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92650427001	**MCD-B-62**	EPA 9315	565964		
92650427002	**MCD-B-100**	EPA 9315	565964		
92650427003	**MCD-AP234-FB-2**	EPA 9315	565964		
92650427001	**MCD-B-62**	EPA 9320	565965		
92650427002	**MCD-B-100**	EPA 9320	565965		
92650427003	**MCD-AP234-FB-2**	EPA 9320	565965		
92650427001	**MCD-B-62**	Total Radium Calculation	570492		
92650427002	**MCD-B-100**	Total Radium Calculation	570492		
92650427003	**MCD-AP234-FB-2**	Total Radium Calculation	570492		

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DC#_Title: ENV-FRM-HUN1-0083 v02_Sample Condition Upon Receipt

Effective Date: 11/14/2022

Laboratory receiving samples:

Asheville ☐ Eden ☐ Greenwood ☐ Huntersville ☐ Raleigh ☐ Mechanicsville ☐ ~~Atlanta ☑~~ Kernersville ☐

Sample Condition Upon Receipt

Client Name: GA Power

Project #: **WO# : 92650427**

92650427

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

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

Date/Initials Person Examining Contents: 2/3/23 CW

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: 3.8 Correction Factor: Add/Subtract (°C) 0.0

Cooler Temp Corrected (°C): 3.8

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: WL				
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

***Check all unpreserved Nitrates for chlorine

Project # **WO#: 92650427**

PM: BV Due Date: 02/27/23

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)	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)	DG9A-40 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)	DG9V-40 mL VOA H3PO4 (N/A)	KP7U-50 mL Plastic Unpreserved (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	BP3R-250 mL Plastic (NH2)2SO4 (9.3-9.7)	AG0U-100 mL Amber Unpreserved (N/A) (Cl-)	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			2																			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 DENR Certification Office (i.e. Out of hold, incorrect preservative, out of temp, incorrect containers.

Pace Analytical

CHAIN-OF-CUSTODY / Analytical Request Document

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

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:		Page : 1 Of 1
Company:	Georgia Power - Coal Combustion Residuals	Report To:	Lauren Coker	Attention:	scsinvoices@southernco.com	
Address:	2480 Maner Road	Copy To:	Golder	Company Name:		
	Atlanta, GA 30339			Address:		
Email:	laucoker@southernco.com	Purchase Order #:		Pace Quote:		
Phone:	(470) 620-6176 Fax:	Project Name:	Plant McD AP-1 and AP-2/3/4 Assement Well Network	Pace Project Manager:	Bonnie Vang	
Requested Due Date:	10 Day TAT	Project #:	GL186849622	Pace Profile #:		

ITEM #	SAMPLE ID (One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique)	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	DATE	TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved - Ice	H2SO4	HNO3 + Ice	HCl	NaOH + Zn Acetate	Na2S2O3	Methanol	Other	Analyses Test Y/N	Requested Analysis Filtered (Y/N): App IIB/V + Mg, Na, K	Cl, F, SO4	Radium 95/13/9/20	TDS	Alkalinity	Fe Total, Fe 3+ (Ferric calculation)	Residual Chlorine (Y/N)	
	MATRIX: Drinking Water DW, Water WT, Waste Water WW, Product P, Soil/Solid SL, Oil OL, Wipe WP, Air AR, Other OT, Tissue TS															Y/N	N	N	N	N	N	N		92605 0427
1	MCD-B-62-WG-20230202	WG	G	2/2/23	13:52		6	3		3							X	X	X	X	X	X		pH = 6.33, Fe2 = 2.4 mg/L (Fe2 analyzed 2/2/23 at 13:58) 001
2	MCD-B-100-WG-20230202	WG	G	2/2/23	12:43		6	3		3							X	X	X	X	X	X		pH = 5.30, Fe2 = 7.0 mg/L (Fe2 analyzed 2/2/23 at 12:48) 002
3	MCD-AP234-FB-2-WQ-20230202	WQ	G	2/2/23	12:43		6	3		3							X	X	X	X	X	X		003
4																								
6																								
7																								
8																								
9																								
10																								
11																								
12																								
13																								
14																								

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	SAMPLE CONDITIONS
Task Code = MCD-CCR-ASSMT-2023S1	E. MANN Golder	02/03/23	1620		2/3 1620	

DATE Signed:

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

Quality Control Sample Performance Assessment

Pace Analytical™ www.pacelabs.com

Test: Ra-226
Analyst: RMS
Date: 2/16/2023
Worklist: 71389
Matrix: WT

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	2748587
MB concentration:	0.071
M/B 2 Sigma CSU:	0.081
MB MDC:	0.156
MB Numerical Performance Indicator:	1.72
MB Status vs Numerical Indicator:	Pass
MB Status vs. MDC:	N/A

Laboratory Control Sample Assessment	LCSD (Y or N)?	Y
	LCS71389	LCSD71389
Count Date:	2/28/2023	2/28/2023
Spike I.D.:	19-033	19-033
Decay Corrected Spike Concentration (pCi/mL):	24.019	24.019
Volume Used (mL):	0.10	0.10
Aliquot Volume (L, g, F):	0.508	0.501
Target Conc. (pCi/L, g, F):	4.732	4.790
Uncertainty (Calculated):	0.057	0.057
Result (pCi/L, g, F):	4.831	4.556
LCS/LCSD 2 Sigma CSU (pCi/L, g, F):	0.872	0.834
Numerical Performance Indicator:	0.22	-0.55
Percent Recovery:	102.08%	95.13%
Status vs Numerical Indicator:	Pass	Pass
Status vs Recovery:	N/A	N/A
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 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.:	LCS71389	92650186009
Duplicate Sample I.D.	LCSD71389	92650186009DUP
Sample Result (pCi/L, g, F):	4.831	0.176
Sample Result 2 Sigma CSU (pCi/L, g, F):	0.872	0.137
Sample Duplicate Result (pCi/L, g, F):	4.556	0.116
Sample Duplicate Result 2 Sigma CSU (pCi/L, g, F):	0.834	0.164
Are sample and/or duplicate results below RL?	NO	See Below ##
Duplicate Numerical Performance Indicator:	0.446	0.552
(Based on the LCS/LCSD Percent Recoveries) Duplicate RPD:	7.05%	41.14%
Duplicate Status vs Numerical Indicator:	Pass	Pass
Duplicate Status vs RPD:	N/A	N/A
% 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 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:

ET 2-28-23

LAM 2/28/23

Quality Control Sample Performance Assessment

Pace Analytical™ www.pacelabs.com

Test:	Ra-228
Analyst:	JJS1
Date:	2/17/2023
Worklist:	71390
Matrix:	WT

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	2748588
MB concentration:	0.343
M/B 2 Sigma CSU:	0.275
MB MDC:	0.547
MB Numerical Performance Indicator:	2.45
MB Status vs Numerical Indicator:	Warning
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	LCSD (Y or N)?	Y
	LCS71390	LCSD71390
Count Date:	2/21/2023	2/21/2023
Spike I.D.:	22-040	22-040
Decay Corrected Spike Concentration (pCi/mL):	33.478	33.478
Volume Used (mL):	0.10	0.10
Aliquot Volume (L, g, F):	0.806	0.803
Target Conc. (pCi/L, g, F):	4.154	4.167
Uncertainty (Calculated):	0.204	0.204
Result (pCi/L, g, F):	3.777	3.155
LCS/LCSD 2 Sigma CSU (pCi/L, g, F):	0.876	0.749
Numerical Performance Indicator:	-0.82	-2.56
Percent Recovery:	90.92%	75.70%
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.:	LCS71390	Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Duplicate Sample I.D.	LCSD71390	
Sample Result (pCi/L, g, F):	3.777	
Sample Result 2 Sigma CSU (pCi/L, g, F):	0.876	
Sample Duplicate Result (pCi/L, g, F):	3.155	
Sample Duplicate Result 2 Sigma CSU (pCi/L, g, F):	0.749	
Are sample and/or duplicate results below RL?	NO	
Duplicate Numerical Performance Indicator:	1.058	
(Based on the LCS/LCSD Percent Recoveries) Duplicate RPD:	18.27%	
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:

VAL
2/22/23

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

March 17, 2023

Andrea McClure
WSP/Golder
5170 Peachtree Road
Building 100, Suite 300
Atlanta, GA 30341

RE: Project: Plant McD AP-2, 3/4 Suppl RADS
Pace Project No.: 92651710

Dear Andrea McClure:

Enclosed are the analytical results for sample(s) received by the laboratory on February 10, 2023. 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,

Bonnie Vang
bonnie.vang@pacelabs.com
(704)875-9092
Project Manager

Enclosures

cc: Joju Abraham, Georgia Power-CCR
Stephen Benda, Southern Company
Noelia Gangi, Georgia Power
Daniela Herrera, Golder
Ben Hodges, Georgia Power-CCR
Kristen Jurinko
Laura Midkiff, Georgia Power
J. Shelby Mobley, Southern Company
Charles Norton, Southern Company
Dawn Prell, WSP USA E&I Inc_Atlanta
Michael Smilley, Georgia Power
Yong Cheng Soo, WSP/Golder
Tina Sullivan, ERM

REPORT OF LABORATORY ANALYSIS

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

CERTIFICATIONS

Project: Plant McD AP-2, 3/4 Suppl RADS
Pace Project No.: 92651710

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: Plant McD AP-2, 3/4 Suppl RADS
Pace Project No.: 92651710

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92651710001	**MCD-B-123D**	Water	02/09/23 14:40	02/10/23 12:25

REPORT OF LABORATORY ANALYSIS

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(770)734-4200

SAMPLE ANALYTE COUNT

Project: Plant McD AP-2, 3/4 Suppl RADS
Pace Project No.: 92651710

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92651710001	**MCD-B-123D**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	ZPC	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA

PASI-PA = Pace Analytical Services - Greensburg

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(770)734-4200

PROJECT NARRATIVE

Project: Plant McD AP-2, 3/4 Suppl RADS
Pace Project No.: 92651710

Date: March 17, 2023

Georgia Power EQuIS Database Manager requested Pace Project Manager remove the sample matrix and date from the Sample IDs. This update ensures sample nomenclature is followed on final PDF and EDD for successful upload of laboratory data into the Georgia Power EQuIS database.

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(770)734-4200

PROJECT NARRATIVE

Project: Plant McD AP-2, 3/4 Suppl RADS
Pace Project No.: 92651710

Method: **EPA 9315**
Description: 9315 Total Radium
Client: Georgia Power
Date: March 17, 2023

General Information:
1 sample was analyzed for EPA 9315 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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(770)734-4200

PROJECT NARRATIVE

Project: Plant McD AP-2, 3/4 Suppl RADS
Pace Project No.: 92651710

Method: **EPA 9320**
Description: 9320 Radium 228
Client: Georgia Power
Date: March 17, 2023

General Information:
1 sample was analyzed for EPA 9320 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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Peachtree Corners, GA 30092
(770)734-4200

PROJECT NARRATIVE

Project: Plant McD AP-2, 3/4 Suppl RADS
Pace Project No.: 92651710

Method: **Total Radium Calculation**
Description: Total Radium 228+226
Client: Georgia Power
Date: March 17, 2023

General Information:
1 sample was analyzed for Total Radium Calculation by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant McD AP-2, 3/4 Suppl RADS
Pace Project No.: 92651710

Sample: MCD-B-123D **Lab ID: 92651710001** Collected: 02/09/23 14:40 Received: 02/10/23 12:25 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	**0.399 ± 0.202 (0.251) C:80% T:NA**	pCi/L	03/03/23 09:54	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**1.23 ± 0.525 (0.830) C:78% T:79%**	pCi/L	02/28/23 17:09	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.63 ± 0.727 (1.08)**	pCi/L	03/06/23 14:37	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL - RADIOCHEMISTRY

Project: Plant McD AP-2, 3/4 Suppl RADS
Pace Project No.: 92651710

QC Batch: 567129
QC Batch Method: EPA 9320
Analysis Method: EPA 9320
Analysis Description: 9320 Radium 228
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92651710001

METHOD BLANK: 2754449 Matrix: Water
Associated Lab Samples: 92651710001

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.353 ± 0.207 (0.369) C:83% T:82%	pCi/L	03/03/23 11:44	

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

REPORT OF LABORATORY ANALYSIS

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Peachtree Corners, GA 30092
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QUALITY CONTROL - RADIOCHEMISTRY

Project: Plant McD AP-2, 3/4 Suppl RADS
Pace Project No.: 92651710

QC Batch: 567128
QC Batch Method: EPA 9315
Analysis Method: EPA 9315
Analysis Description: 9315 Total Radium
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92651710001

METHOD BLANK: 2754448 Matrix: Water
Associated Lab Samples: 92651710001

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.113 ± 0.105 (0.185) C:106% T:NA	pCi/L	03/03/23 09:54	

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

REPORT OF LABORATORY ANALYSIS

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

QUALIFIERS

Project: Plant McD AP-2, 3/4 Suppl RADS
Pace Project No.: 92651710

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.

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Peachtree Corners, GA 30092
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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Plant McD AP-2, 3/4 Suppl RADS
Pace Project No.: 92651710

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92651710001	**MCD-B-123D**	EPA 9315	567128		
92651710001	**MCD-B-123D**	EPA 9320	567129		
92651710001	**MCD-B-123D**	Total Radium Calculation	571751		

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Pace ANALYTICAL SERVICES

DC#_Title: ENV-FRM-HUN1-0083 v02_Sample Condition Upon Receipt

Effective Date: 11/14/2022

Laboratory receiving samples:

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

Sample Condition Upon Receipt

Client Name: Georgia Power

Project #:

WO# : 92651710

92651710

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

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

Date/Initials Person Examining Contents: 2-10-23 AX

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) +0.2

Temp should be above freezing to 6°C

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

Cooler Temp Corrected (°C): 3.6

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: 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 Services	DC#_Title: ENV-FRM-HUN1-0083 v02_Sample Condition Upon Receipt
	Effective Date: 11/14/2022

Project # **WO#:92651710**
PM: BV Due Date: 03/03/23
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**

*****Check all unpreserved Nitrates for chlorine**

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)	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 H_2SO_4 (pH < 2)	AG3S-250 mL Amber H_2SO_4 (pH < 2)	DG94-40 mL Amber NH_4Cl (N/A)(Cl-)	DG9H-40 mL VOA HCl (N/A)	VG9T-40 mL VOA $Na_2S_2O_3$ (N/A)	VG9U-40 mL VOA Unpreserved (N/A)	DG9V-40 mL VOA H_3PO_4 (N/A)	KP7U-50 mL Plastic Unpreserved (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)	BP2N	BP3R-250 mL Plastic $(NH_2)_2SO_4$ (9.3-9.7)	AG0U-100 mL Amber Unpreserved (N/A) (Cl-)	VSGU-20 mL Scintillation vials (N/A)	DG9U-40 mL Amber Unpreserved vials (N/A)
1		3	1	2		2																		2				
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 DENR Certification Office (i.e. Out of hold, incorrect preservative, out of temp, incorrect containers.

Pace Analytical

CHAIN-OF-CUSTODY / Analytical Request Document

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

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:	Lauren Coker	Attention:	scsinvoices@southernco.com
Address:	2480 Maner Road	Copy To:	Golder	Company Name:	
	Atlanta, GA 30339			Address:	
Email:	laucoker@southernco.com	Purchase Order #:		Pace Quote:	
Phone:	(470) 620-6176 Fax:	Project Name:	Plant McD AP-2 3/4 Supplemental Sampling Well Network	Pace Project Manager:	Nicole D'Oleo
Requested Due Date:	10 Day TAT	Project #:	GL166849622	Pace Profile #:	

Regulatory Agency

State / Location: GA

ITEM #	SAMPLE ID (One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique)	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	DATE	TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H2SO4	HNO3	HCl	NaOH + Zn Acetate	Na2S2O3	Methanol	Other	Analyses Test Y/N	App III/IV + Mg, Na, K, Fe	Cl, F, SO4	Radium 9513/9320	TDS	Alkalinity	Fe Total, Fe 3+ (Ferric calculation)	App III/IV + Mg, Na, K, Fe (dissolved)	Residual Chlorine (Y/N)	
	Requested Analysis Filtered (Y/N)															Y/N	N	N	N	N	N	N	N		
1	MCD-B-123D-WG-20230209	WG	G	2/9/23	14:40		7	3		4							X	X	X	X	X	X	X		pH = 6.28, Fe2 = 4.0 mg/L (Fe2 analyzed 02/09/23 at 14:45); Dissolved App III/IV metals are field filtered
2																									
3																									
4																									
6																									
7																									
8																									
9																									
10																									
11																									
12																									
13																									
14																									

9265710

607

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	SAMPLE CONDITIONS: TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
Task Code = MCD-CCR-ASSMT-2023S1	Mark Kann WSP	02/10/23	1225		2-10-23	12:25			

DATE Signed:

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

May 22, 2023

Lauren Hartley
Southern Co.
241 Ralph McGill Blvd
NE, Bin 10160
Atlanta, GA 30308

RE: Project: Plant McDonough QTR
Pace Project No.: 92665496

Dear Lauren Hartley:

Enclosed are the analytical results for sample(s) received by the laboratory on May 03, 2023. 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,

Bonnie Vang
bonnie.vang@pacelabs.com
(704)875-9092
Project Manager

Enclosures

cc: Daniela Herrera, Golder
Laura Midkiff, Southern Co.
Dawn Prell, WSP USA E&I Inc_Atlanta

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Huntersville, NC 28078
(704)875-9092

CERTIFICATIONS

Project: Plant McDonough QTR
Pace Project No.: 92665496

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

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Huntersville, NC 28078
(704)875-9092

SAMPLE SUMMARY

Project: Plant McDonough QTR
Pace Project No.: 92665496

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92665496001	**MCD-DGWC-121**	Water	05/02/23 16:00	05/03/23 09:32
92665496002	**MCD-AP1-DUP-1**	Water	05/02/23 00:00	05/03/23 09:32
92665496003	**MCD-AP1-FB-1**	Water	05/02/23 14:30	05/03/23 09:32

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Huntersville, NC 28078
(704)875-9092

SAMPLE ANALYTE COUNT

Project: Plant McDonough QTR
Pace Project No.: 92665496

Lab ID	Sample ID	Method	Analysts	Analytes Reported
92665496001	**MCD-DGWC-121**	EPA 6010D	MS	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92665496002	**MCD-AP1-DUP-1**	EPA 6010D	MS	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92665496003	**MCD-AP1-FB-1**	EPA 6010D	MS	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	DL1	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

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Huntersville, NC 28078
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ANALYTICAL RESULTS

Project: Plant McDonough QTR
Pace Project No.: 92665496

Sample: MCD-DGWC-121 **Lab ID: 92665496001** Collected: 05/02/23 16:00 Received: 05/03/23 09:32 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**CUSTOMERS**				1		05/03/23 16:28		
pH	**6.21**	Std. Units			1		05/03/23 16:28		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	**29.4**	mg/L	1.0	0.12	1	05/04/23 11:13	05/04/23 19:29	7440-70-2	M1
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	**0.00082J**	mg/L	0.0030	0.00078	1	05/05/23 11:13	05/10/23 21:18	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0022	1	05/05/23 11:13	05/10/23 21:18	7440-38-2	
Barium	**0.048**	mg/L	0.0050	0.00067	1	05/05/23 11:13	05/10/23 21:18	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	05/05/23 11:13	05/10/23 21:18	7440-41-7	
Boron	**1.1**	mg/L	0.040	0.0086	1	05/05/23 11:13	05/10/23 21:18	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	05/05/23 11:13	05/10/23 21:18	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	05/05/23 11:13	05/10/23 21:18	7440-47-3	
Cobalt	**0.0017J**	mg/L	0.0050	0.00039	1	05/05/23 11:13	05/10/23 21:18	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	05/05/23 11:13	05/10/23 21:18	7439-92-1	
Lithium	**0.0045J**	mg/L	0.030	0.00073	1	05/05/23 11:13	05/10/23 21:18	7439-93-2	
Molybdenum	**0.00089J**	mg/L	0.010	0.00074	1	05/05/23 11:13	05/10/23 21:18	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	05/05/23 11:13	05/10/23 21:18	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	05/05/23 11:13	05/10/23 21:18	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	0.00013	1	05/12/23 10:15	05/12/23 14:29	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**69.0**	mg/L	25.0	25.0	1		05/05/23 12:45		
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		05/05/23 02:54	16887-00-6	
Fluoride	**0.076J**	mg/L	0.10	0.050	1		05/05/23 02:54	16984-48-8	
Sulfate	**47.3**	mg/L	1.0	0.50	1		05/05/23 02:54	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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Huntersville, NC 28078
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ANALYTICAL RESULTS

Project: Plant McDonough QTR
Pace Project No.: 92665496

Sample: MCD-AP1-DUP-1 **Lab ID: 92665496002** Collected: 05/02/23 00:00 Received: 05/03/23 09:32 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	**31.1**	mg/L	1.0	0.12	1	05/04/23 11:13	05/04/23 19:58	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	05/05/23 11:13	05/10/23 21:24	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0022	1	05/05/23 11:13	05/10/23 21:24	7440-38-2	
Barium	**0.045**	mg/L	0.0050	0.00067	1	05/05/23 11:13	05/10/23 21:24	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	05/05/23 11:13	05/10/23 21:24	7440-41-7	
Boron	**1.1**	mg/L	0.040	0.0086	1	05/05/23 11:13	05/10/23 21:24	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	05/05/23 11:13	05/10/23 21:24	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	05/05/23 11:13	05/10/23 21:24	7440-47-3	
Cobalt	**0.0017J**	mg/L	0.0050	0.00039	1	05/05/23 11:13	05/10/23 21:24	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	05/05/23 11:13	05/10/23 21:24	7439-92-1	
Lithium	**0.0043J**	mg/L	0.030	0.00073	1	05/05/23 11:13	05/10/23 21:24	7439-93-2	
Molybdenum	**0.00085J**	mg/L	0.010	0.00074	1	05/05/23 11:13	05/10/23 21:24	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	05/05/23 11:13	05/10/23 21:24	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	05/05/23 11:13	05/10/23 21:24	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	0.00013	1	05/12/23 10:15	05/12/23 14:32	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**181**	mg/L	25.0	25.0	1		05/05/23 12:46		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**3.0**	mg/L	1.0	0.60	1		05/05/23 03:09	16887-00-6	
Fluoride	**0.056J**	mg/L	0.10	0.050	1		05/05/23 03:09	16984-48-8	
Sulfate	**54.4**	mg/L	1.0	0.50	1		05/05/23 03:09	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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Huntersville, NC 28078
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ANALYTICAL RESULTS

Project: Plant McDonough QTR
Pace Project No.: 92665496

Sample: MCD-AP1-FB-1 **Lab ID: 92665496003** Collected: 05/02/23 14:30 Received: 05/03/23 09:32 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	05/04/23 11:13	05/04/23 20:08	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	05/05/23 11:13	05/10/23 21:30	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0022	1	05/05/23 11:13	05/10/23 21:30	7440-38-2	
Barium	ND	mg/L	0.0050	0.00067	1	05/05/23 11:13	05/10/23 21:30	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	05/05/23 11:13	05/10/23 21:30	7440-41-7	
Boron	ND	mg/L	0.040	0.0086	1	05/05/23 11:13	05/10/23 21:30	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	05/05/23 11:13	05/10/23 21:30	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	05/05/23 11:13	05/10/23 21:30	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	05/05/23 11:13	05/10/23 21:30	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	05/05/23 11:13	05/10/23 21:30	7439-92-1	
Lithium	ND	mg/L	0.030	0.00073	1	05/05/23 11:13	05/10/23 21:30	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	05/05/23 11:13	05/10/23 21:30	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	05/05/23 11:13	05/10/23 21:30	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	05/05/23 11:13	05/10/23 21:30	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	0.00013	1	05/12/23 10:15	05/12/23 14:35	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	ND	mg/L	25.0	25.0	1		05/05/23 12:46		
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		05/05/23 03:24	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		05/05/23 03:24	16984-48-8	
Sulfate	ND	mg/L	1.0	0.50	1		05/05/23 03:24	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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(704)875-9092

QUALITY CONTROL DATA

Project: Plant McDonough QTR
Pace Project No.: 92665496

QC Batch: 772346
QC Batch Method: EPA 3010A
Analysis Method: EPA 6010D
Analysis Description: 6010D ATL
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92665496001, 92665496002, 92665496003

METHOD BLANK: 4009350 Matrix: Water
Associated Lab Samples: 92665496001, 92665496002, 92665496003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium	mg/L	ND	1.0	0.12	05/04/23 19:09	

LABORATORY CONTROL SAMPLE: 4009351

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium	mg/L	1	0.97J	97	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4009395 4009396

Parameter	Units	92665496001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Calcium	mg/L	29.4	1	1	30.8	32.8	137	330	75-125	6	20	M1

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QUALITY CONTROL DATA

Project: Plant McDonough QTR
Pace Project No.: 92665496

QC Batch: 772603
QC Batch Method: EPA 3005A
Analysis Method: EPA 6020B
Analysis Description: 6020 MET
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92665496001, 92665496002, 92665496003

METHOD BLANK: 4010659 Matrix: Water
Associated Lab Samples: 92665496001, 92665496002, 92665496003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	ND	0.0030	0.00078	05/10/23 19:37	
Arsenic	mg/L	ND	0.0050	0.0022	05/10/23 19:37	
Barium	mg/L	ND	0.0050	0.00067	05/10/23 19:37	
Beryllium	mg/L	ND	0.00050	0.000054	05/10/23 19:37	
Boron	mg/L	ND	0.040	0.0086	05/10/23 19:37	
Cadmium	mg/L	ND	0.00050	0.00011	05/10/23 19:37	
Chromium	mg/L	ND	0.0050	0.0011	05/10/23 19:37	
Cobalt	mg/L	ND	0.0050	0.00039	05/10/23 19:37	
Lead	mg/L	ND	0.0010	0.00089	05/10/23 19:37	
Lithium	mg/L	ND	0.030	0.00073	05/10/23 19:37	
Molybdenum	mg/L	ND	0.010	0.00074	05/10/23 19:37	
Selenium	mg/L	ND	0.0050	0.0014	05/10/23 19:37	
Thallium	mg/L	ND	0.0010	0.00018	05/10/23 19:37	

LABORATORY CONTROL SAMPLE: 4010660

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.1	0.11	115	80-120	
Arsenic	mg/L	0.1	0.098	98	80-120	
Barium	mg/L	0.1	0.097	97	80-120	
Beryllium	mg/L	0.1	0.11	109	80-120	
Boron	mg/L	1	1.1	106	80-120	
Cadmium	mg/L	0.1	0.10	100	80-120	
Chromium	mg/L	0.1	0.10	102	80-120	
Cobalt	mg/L	0.1	0.10	101	80-120	
Lead	mg/L	0.1	0.10	100	80-120	
Lithium	mg/L	0.1	0.11	110	80-120	
Molybdenum	mg/L	0.1	0.099	99	80-120	
Selenium	mg/L	0.1	0.097	97	80-120	
Thallium	mg/L	0.1	0.099	99	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4010661 4010662

Parameter	Units	92665130011 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	0.12	119	120	75-125	1	20	
Arsenic	mg/L	3.8J ug/L	0.1	0.1	0.11	0.11	103	102	75-125	1	20	

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QUALITY CONTROL DATA

Project: Plant McDonough QTR
Pace Project No.: 92665496

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4010661 4010662

Parameter	Units	92665130011 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Barium	mg/L	71.4J ug/L	0.1	0.1	0.17	0.17	101	103	75-125	1	20	
Beryllium	mg/L	ND	0.1	0.1	0.094	0.093	94	93	75-125	2	20	
Boron	mg/L	1590 ug/L	1	1	2.6	2.5	98	96	75-125	1	20	
Cadmium	mg/L	ND	0.1	0.1	0.10	0.10	104	103	75-125	1	20	
Chromium	mg/L	ND	0.1	0.1	0.10	0.10	102	101	75-125	0	20	
Cobalt	mg/L	34.7 ug/L	0.1	0.1	0.14	0.14	102	104	75-125	1	20	
Lead	mg/L	ND	0.1	0.1	0.10	0.099	100	99	75-125	1	20	
Lithium	mg/L	1.3J ug/L	0.1	0.1	0.096	0.096	95	94	75-125	1	20	
Molybdenum	mg/L	ND	0.1	0.1	0.10	0.11	104	105	75-125	1	20	
Selenium	mg/L	ND	0.1	0.1	0.10	0.10	101	102	75-125	1	20	
Thallium	mg/L	ND	0.1	0.1	0.099	0.099	99	98	75-125	1	20	

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QUALITY CONTROL DATA

Project: Plant McDonough QTR
Pace Project No.: 92665496

QC Batch: 774106
QC Batch Method: EPA 7470A
Analysis Method: EPA 7470A
Analysis Description: 7470 Mercury
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92665496001, 92665496002, 92665496003

METHOD BLANK: 4017672 Matrix: Water
Associated Lab Samples: 92665496001, 92665496002, 92665496003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	ND	0.00020	0.00013	05/12/23 12:43	

LABORATORY CONTROL SAMPLE: 4017673

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.0025	0.0026	103	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4017674 4017675

Parameter	Units	92664779006 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	100	100	75-125	0	20	

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QUALITY CONTROL DATA

Project: Plant McDonough QTR
Pace Project No.: 92665496

QC Batch: 772669
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: 92665496001, 92665496002, 92665496003

METHOD BLANK: 4010986 Matrix: Water
Associated Lab Samples: 92665496001, 92665496002, 92665496003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	25.0	25.0	05/05/23 12:44	

LABORATORY CONTROL SAMPLE: 4010987

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	396	99	80-120	

SAMPLE DUPLICATE: 4010988

Parameter	Units	92665662001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	69.0	50.0	32	10	D6

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QUALITY CONTROL DATA

Project: Plant McDonough QTR
Pace Project No.: 92665496

QC Batch: 772278
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: 92665496001, 92665496002, 92665496003

METHOD BLANK: 4009100 Matrix: Water
Associated Lab Samples: 92665496001, 92665496002, 92665496003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.60	05/05/23 01:10	
Fluoride	mg/L	ND	0.10	0.050	05/05/23 01:10	
Sulfate	mg/L	ND	1.0	0.50	05/05/23 01:10	

LABORATORY CONTROL SAMPLE: 4009101

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	49.8	100	90-110	
Fluoride	mg/L	2.5	2.7	107	90-110	
Sulfate	mg/L	50	49.5	99	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4009102 4009103

Parameter	Units	92665461009 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	1.7	50	50	52.2	52.9	101	102	90-110	1	10	
Fluoride	mg/L	0.10	2.5	2.5	2.7	2.7	105	105	90-110	0	10	
Sulfate	mg/L	12.5	50	50	62.4	63.3	100	102	90-110	1	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4009104 4009105

Parameter	Units	92665446003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	5.8	50	50	56.7	57.3	102	103	90-110	1	10	
Fluoride	mg/L	0.099J	2.5	2.5	2.7	2.8	106	109	90-110	3	10	
Sulfate	mg/L	142	50	50	193	194	102	104	90-110	0	10	

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QUALIFIERS

Project: Plant McDonough QTR
Pace Project No.: 92665496

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.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Plant McDonough QTR
Pace Project No.: 92665496

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92665496001	**MCD-DGWC-121**				
92665496001	**MCD-DGWC-121**	EPA 3010A	772346	EPA 6010D	772412
92665496002	**MCD-AP1-DUP-1**	EPA 3010A	772346	EPA 6010D	772412
92665496003	**MCD-AP1-FB-1**	EPA 3010A	772346	EPA 6010D	772412
92665496001	**MCD-DGWC-121**	EPA 3005A	772603	EPA 6020B	772738
92665496002	**MCD-AP1-DUP-1**	EPA 3005A	772603	EPA 6020B	772738
92665496003	**MCD-AP1-FB-1**	EPA 3005A	772603	EPA 6020B	772738
92665496001	**MCD-DGWC-121**	EPA 7470A	774106	EPA 7470A	774125
92665496002	**MCD-AP1-DUP-1**	EPA 7470A	774106	EPA 7470A	774125
92665496003	**MCD-AP1-FB-1**	EPA 7470A	774106	EPA 7470A	774125
92665496001	**MCD-DGWC-121**	SM 2540C-2015	772669		
92665496002	**MCD-AP1-DUP-1**	SM 2540C-2015	772669		
92665496003	**MCD-AP1-FB-1**	SM 2540C-2015	772669		
92665496001	**MCD-DGWC-121**	EPA 300.0 Rev 2.1 1993	772278		
92665496002	**MCD-AP1-DUP-1**	EPA 300.0 Rev 2.1 1993	772278		
92665496003	**MCD-AP1-FB-1**	EPA 300.0 Rev 2.1 1993	772278		

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Pace ANALYTICAL SERVICES	DC#_Title: ENV-FRM-HUN1-0083 v02_Sample Condition Upon Receipt
	Effective Date: 11/14/2022

Laboratory receiving samples:

Asheville ☐ Eden ☐ Greenwood ☐ Huntersville ☐ Raleigh ☐ M...

Sample Condition Upon Receipt

WO# : 92665496

92665496

Client Name: WSP/Golder **Project**

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

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

Date/Initials Person Examining Contents: 5-3-23 A

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

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

Thermometer: ☑ IR Gun ID: 083 **Type of Ice:** ☑ Wet ☐ Blue ☐ None

Cooler Temp: 1.3 **Correction Factor:** Add/Subtract (°C) +0.3

Cooler Temp Corrected (°C): 1.6

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: WG				
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:** _____

Qualtrax ID: 69614

Pace ANALYTICAL SERVICES	DC#_Title: ENV-FRM-HUN1-0083 v02_Sample Condition Upon Receipt
	Effective Date: 11/14/2022

WO# : 92665496

PM: BV Due Date: 05/17/23

CLIENT: 92-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

Project #

****Bottom half of box is to list number of bottles**

*****Check all unpreserved Nitrates for chlorine**

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)	DG94-40 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)	DG9V-40 mL VOA H3PO4 (N/A)	KP7U-50 mL Plastic Unpreserved (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-250 mL Plastic (NH2)2SO4 (9.3-9.7)	AG0U-100 mL Amber Unpreserved (N/A) (Cl-)	VSGU-20 mL Scintillation vials (N/A)	DG9U-40 mL Amber Unpreserved vials (N/A)
1		1	1	2		1																						
2		1	1	2		1																						
3		1	1	2		1																						
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 DENR Certification Office (i.e. Out of hold, incorrect preservative, out of temp, incorrect containers.

Pace

CHAIN-OF-CUSTODY / Analytical Request Document

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

Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace Terms and Conditions found at https://info.pacelabs.com/hubfs/pas-standard-terms.pdf.

Page : 1 Of 1

Section A Required Client Information:	Section B Required Project Information:	Section C Invoice Information:
Company: WSP/Golder	Report To: ~~Romero, Daniela~~ LAUREN COKER	Attention:
Address: 5170 Peachtree Road	Copy To: GOLDER	Company Name:
Bldg 100, Suite 100, Atlanta, GA 30341	Email: laucoker@southernco.com	Address:
Email: daniela_herrera@golder.com	Purchase Order #:	Pace Quote:
Phone: 951-213-1576 Fax:	Project Name: Plant McDonough Quarterly	Pace Project Manager: bonnie.vang@pacelabs.com,
Requested Due Date:	Project #: ~~MCD-CCR-OTH~~ GL16550622	Pace Profile #: 16474-7

Regulatory Agency

State / Location: GA

ITEM #	SAMPLE ID (One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique)	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Analyses Test Y/N	Cl, F, SO4	TDS	Total Metals (APP III/IV)	RAD 9315/9320	Residual Chlorine (Y/N)	92665496
1	MCD-DGWC-121	~~WG~~		05/02/2023	1600				5	2	X	3							X	X	X	X		pH: 6.21 001
2	MCD-DUP-1	~~WQ~~		05/02/2023	—				5	2	X	3							X	X	X	X		002
3	MCD-FB-1	~~WQ~~		05/02/2023	1430				5	2	X	3							X	X	X	X		003
4	~~Extra~~	~~WP~~																	~~X~~	~~X~~	~~X~~	~~X~~		
5																								
6																								
7																								
8																								
9																								
10																								
11																								
12																								

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

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
MCD-CCR-OTH-20230501	MARK MANN / WSP	05/03/23	0930		5/3	0932	

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: MARK MANN

SIGNATURE of SAMPLER: DATE Signed: 05/02/2023

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

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

June 06, 2023

Lauren Hartley
Southern Co.
241 Ralph McGill Blvd
NE, Bin 10160
Atlanta, GA 30308

RE: Project: Plant McDonough QTR-RADS
Pace Project No.: 92665498

Dear Lauren Hartley:

Enclosed are the analytical results for sample(s) received by the laboratory on May 03, 2023. 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,

Bonnie Vang
bonnie.vang@pacelabs.com
(704)875-9092
Project Manager

Enclosures

cc: Daniela Herrera, Golder
Laura Midkiff, Southern Co.
Dawn Prell, WSP USA E&I Inc_Atlanta

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CERTIFICATIONS

Project: Plant McDonough QTR-RADS
Pace Project No.: 92665498

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: Plant McDonough QTR-RADS
Pace Project No.: 92665498

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92665498001	**MCD-DGWC-121**	Water	05/02/23 16:00	05/03/23 09:32
92665498002	**MCD-DUP-1**	Water	05/02/23 00:00	05/03/23 09:32
92665498003	**MCD-FB-1**	Water	05/02/23 14:30	05/03/23 09:32

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SAMPLE ANALYTE COUNT

Project: Plant McDonough QTR-RADS
Pace Project No.: 92665498

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92665498001	**MCD-DGWC-121**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92665498002	**MCD-DUP-1**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92665498003	**MCD-FB-1**	EPA 9315	SLC	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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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant McDonough QTR-RADS
Pace Project No.: 92665498

Sample: MCD-DGWC-121 **Lab ID: 92665498001** Collected: 05/02/23 16:00 Received: 05/03/23 09:32 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	**0.189 ± 0.129 (0.180) C:61% T:NA**	pCi/L	06/02/23 07:57	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.185 ± 0.286 (0.619) C:84% T:85%**	pCi/L	05/22/23 15:57	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.374 ± 0.415 (0.799)**	pCi/L	06/02/23 13:51	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant McDonough QTR-RADS
Pace Project No.: 92665498

Sample: MCD-DUP-1 **Lab ID: 92665498002** Collected: 05/02/23 00:00 Received: 05/03/23 09:32 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	**0.340 ± 0.194 (0.262) C:48% T:NA**	pCi/L	06/02/23 07:58	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.247 ± 0.320 (0.680) C:87% T:81%**	pCi/L	05/22/23 15:57	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.587 ± 0.514 (0.942)**	pCi/L	06/02/23 13:51	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant McDonough QTR-RADS
Pace Project No.: 92665498

Sample: MCD-FB-1 **Lab ID: 92665498003** Collected: 05/02/23 14:30 Received: 05/03/23 09:32 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	**0.135 ± 0.100 (0.159) C:88% T:NA**	pCi/L	06/02/23 07:58	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.144 ± 0.335 (0.744) C:79% T:85%**	pCi/L	05/22/23 15:57	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.279 ± 0.435 (0.903)**	pCi/L	06/02/23 13:51	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL - RADIOCHEMISTRY

Project: Plant McDonough QTR-RADS
Pace Project No.: 92665498

QC Batch:	588277	Analysis Method:	EPA 9315
QC Batch Method:	EPA 9315	Analysis Description:	9315 Total Radium
		Laboratory:	Pace Analytical Services - Greensburg

Associated Lab Samples: 92665498001, 92665498002, 92665498003

METHOD BLANK: 2858621 Matrix: Water

Associated Lab Samples: 92665498001, 92665498002, 92665498003

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.0819 ± 0.0879 (0.169) C:81% T:NA	pCi/L	06/02/23 07:57	

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

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL - RADIOCHEMISTRY

Project: Plant McDonough QTR-RADS
Pace Project No.: 92665498

QC Batch: 588032 Analysis Method: EPA 9320
QC Batch Method: EPA 9320 Analysis Description: 9320 Radium 228
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92665498001, 92665498002, 92665498003

METHOD BLANK: 2857357 Matrix: Water
Associated Lab Samples: 92665498001, 92665498002, 92665498003

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.120 ± 0.284 (0.634) C:84% T:90%	pCi/L	05/22/23 15:57	

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: Plant McDonough QTR-RADS
Pace Project No.: 92665498

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.

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Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Plant McDonough QTR-RADS
Pace Project No.: 92665498

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92665498001	**MCD-DGWC-121**	EPA 9315	588277		
92665498002	**MCD-DUP-1**	EPA 9315	588277		
92665498003	**MCD-FB-1**	EPA 9315	588277		
92665498001	**MCD-DGWC-121**	EPA 9320	588032		
92665498002	**MCD-DUP-1**	EPA 9320	588032		
92665498003	**MCD-FB-1**	EPA 9320	588032		
92665498001	**MCD-DGWC-121**	Total Radium Calculation	592358		
92665498002	**MCD-DUP-1**	Total Radium Calculation	592358		
92665498003	**MCD-FB-1**	Total Radium Calculation	592358		

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Pace ANALYTICAL SERVICES	DC#_Title: ENV-FRM-HUN1-0083 v02_Sample Condition Upon Receipt
	Effective Date: 11/14/2022

Laboratory receiving samples:

Asheville ☐ Eden ☐ Greenwood ☐ Huntersville ☐ Raleigh ☐ Me

WO# : 92665498

92665498

Sample Condition Upon Receipt

Client Name: WSP/Golder Project #:

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

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

Date/Initials Person Examining Contents: 5-3-23 A

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

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

Thermometer: ☑ IR Gun ID: 083 Type of Ice: ☑ Wet ☐ Blue ☐ None

Cooler Temp: 1.3 Correction Factor: Add/Subtract (°C) +0.3

Cooler Temp Corrected (°C): 1.6

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? -Includes Date/Time/ID/Analysis Matrix: WG	☑ Yes	☐ No	☐ N/A	9.
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 SERVICES	DC#_Title: ENV-FRM-HUN1-0083 v02_Sample Condition Upon Receipt
	Effective Date: 11/14/2022

WO# : 92665498
PM: BV Due Date: 05/24/23
CLIENT: 92-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

Project #

****Bottom half of box is to list number of bottles**
*****Check all unpreserved Nitrates for chlorine**

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)	DG94-40 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)	DG9V-40 mL VOA H3PO4 (N/A)	KP7U-50 mL Plastic Unpreserved (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-250 mL Plastic (NH2)2SO4 (9.3-9.7)	AG0U-100 mL Amber Unpreserved (N/A) (Cl-)	VSGU-20 mL Scintillation vials (N/A)	DG9U-40 mL Amber Unpreserved vials (N/A)
1		1	1	2		1																							
2		1	1	2		1																							
3		1	1	2		1																							
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 DENR Certification Office (i.e. Out of hold, incorrect preservative, out of temp, incorrect containers.

Pace

CHAIN-OF-CUSTODY / Analytical Request Document

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

Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace Terms and Conditions found at https://info.pacelabs.com/hubfs/pas-standard-terms.pdf.

Page : 1 Of 1

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:		
Company:	WSP/Golder	Report To: ~~Herrera, Daniela~~ LAUREN COKER		Attention:		
Address:	5170 Peachtree Road	Copy To: GOLDER		Company Name:		Regulatory Agency
Bldg 100, Suite 100, Atlanta, GA 30341		Email: laucoker@southernco.com		Address:		
Email:	daniela_herrera@golder.com	Purchase Order #:		Pace Quote:		
Phone:	951-213-1576 Fax	Project Name:	Plant McDonough Quarterly	Pace Project Manager:	bonnie.vang@pacelabs.com,	State / Location
Requested Due Date:		Project #: ~~MCD-CCR-OTH~~ 61658949622		Pace Profile #:	16474-7	GA

ITEM #	SAMPLE ID (One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique)	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Analyses Test Y/N	Cl, F, SO4	TDS	Total Metals (APP III/IV)	RAD 9315/9320	Residual Chlorine (Y/N)	92665496
1	MCD-DGWC-121	~~WT~~ WG		05/02/2023	1600				5	2	X	3							x	x	x	x			pH: 6.21 W1
2	MCD-DUP-1	~~WT~~ WQ		05/02/2023	—				5	2	X	3							x	x	x	x			W2
3	MCD-FB-1	~~WT~~ WQ		05/02/2023	1430				5	2	X	3							x	x	x	x			W3
4	~~Extra~~	~~WT~~																	x	x	x	x			
5																									
6																									
7																									
8																									
9																									
10																									
11																									
12																									

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

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
MCD-CCR-OTH-20230501	MARK MANN / WSP	05/03/23	0930		5/3	0932	

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: MARK MANN

SIGNATURE of SAMPLER: [signature] DATE Signed: 05/02/2023

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

Quality Control Sample Performance Assessment

Pace Analytical™ www.pacelabs.com

Test: Ra-228
Analyst: VAL
Date: 5/17/2023
Worklist: 73168
Matrix: WT

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	2857357
MB concentration:	0.120
M/B 2 Sigma CSU:	0.284
MB MDC:	0.634
MB Numerical Performance Indicator:	0.83
MB Status vs Numerical Indicator:	Pass
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	LCSD (Y or N)?	Y
	LCS73168	LCSD73168
Count Date:	5/22/2023	5/22/2023
Spike I.D.:	22-040	22-040
Decay Corrected Spike Concentration (pCi/mL):	32.496	32.496
Volume Used (mL):	0.10	0.10
Aliquot Volume (L, g, F):	0.806	0.804
Target Conc. (pCi/L, g, F):	4.033	4.042
Uncertainty (Calculated):	0.198	0.198
Result (pCi/L, g, F):	3.180	2.653
LCS/LCSD 2 Sigma CSU (pCi/L, g, F):	0.753	0.674
Numerical Performance Indicator:	-2.15	-3.87
Percent Recovery:	78.85%	65.65%
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.:	LCS73168	Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Duplicate Sample I.D.	LCSD73168	
Sample Result (pCi/L, g, F):	3.180	
Sample Result 2 Sigma CSU (pCi/L, g, F):	0.753	
Sample Duplicate Result (pCi/L, g, F):	2.653	
Sample Duplicate Result 2 Sigma CSU (pCi/L, g, F):	0.674	
Are sample and/or duplicate results below RL?	NO	
Duplicate Numerical Performance Indicator:	1.021	
(Based on the LCS/LCSD Percent Recoveries) Duplicate RPD:	18.27%	
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:

5-24-23
JJS

5/24/23

Quality Control Sample Performance Assessment

Pace Analytical™
www.pacelabs.com

Test:	Ra-226
Analyst:	SLC
Date:	5/18/2023
Worklist:	73191
Matrix:	WT

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	2858621
MB concentration:	0.082
M/B 2 Sigma CSU:	0.088
MB MDC:	0.169
MB Numerical Performance Indicator:	1.83
MB Status vs Numerical Indicator:	Pass
MB Status vs. MDC:	N/A

Laboratory Control Sample Assessment	LCSD (Y or N)?	Y
	LCS73191	LCSD73191
Count Date:	6/2/2023	6/2/2023
Spike I.D.:	19-033	19-033
Decay Corrected Spike Concentration (pCi/mL):	24.016	24.016
Volume Used (mL):	0.10	0.10
Aliquot Volume (L, g, F):	0.501	0.505
Target Conc. (pCi/L, g, F):	4.792	4.760
Uncertainty (Calculated):	0.058	0.057
Result (pCi/L, g, F):	5.027	4.728
LCS/LCSD 2 Sigma CSU (pCi/L, g, F):	0.881	0.843
Numerical Performance Indicator:	0.52	-0.07
Percent Recovery:	104.90%	99.32%
Status vs Numerical Indicator:	Pass	Pass
Status vs Recovery:	N/A	N/A
Upper % Recovery Limits:	125%	125%
Lower % Recovery Limits:	75%	75%

Sample Matrix Spike Control Assessment	MS/MSD 1	MS/MSD 2
Sample Collection Date:	4/18/2023	4/19/2023
Sample I.D.	30586893001	30586893013
Sample MS I.D.	30586893002	30586893014
Sample MSD I.D.	30586893003	30586893015
Spike I.D.:	19-033	19-033
MS/MSD Decay Corrected Spike Concentration (pCi/mL):	24.018	24.018
Spike Volume Used in MS (mL):	0.20	0.20
Spike Volume Used in MSD (mL):	0.20	0.20
MS Aliquot (L, g, F):	0.204	0.200
MS Target Conc.(pCi/L, g, F):	23.563	24.057
MSD Aliquot (L, g, F):	0.205	0.207
MSD Target Conc. (pCi/L, g, F):	23.407	23.239
MS Spike Uncertainty (calculated):	0.283	0.289
MSD Spike Uncertainty (calculated):	0.281	0.279
Sample Result:	0.238	0.387
Sample Result 2 Sigma CSU (pCi/L, g, F):	0.228	0.275
Sample Matrix Spike Result:	26.319	26.146
Matrix Spike Result 2 Sigma CSU (pCi/L, g, F):	4.197	4.207
Sample Matrix Spike Duplicate Result:	25.198	24.355
Matrix Spike Duplicate Result 2 Sigma CSU (pCi/L, g, F):	4.045	3.933
MS Numerical Performance Indicator:	1.171	0.789
MSD Numerical Performance Indicator:	0.750	0.362
MS Percent Recovery:	110.68%	107.07%
MSD Percent Recovery:	106.64%	103.14%
MS Status vs Numerical Indicator:	Pass	Pass
MSD Status vs Numerical Indicator:	Pass	Pass
MS Status vs Recovery:	N/A	N/A
MSD Status vs Recovery:	N/A	N/A
MS/MSD Upper % Recovery Limits:	125%	125%
MS/MSD Lower % Recovery Limits:	75%	75%

Duplicate Sample Assessment		
Sample I.D.:	LCS73191	
Duplicate Sample I.D.	LCSD73191	
Sample Result (pCi/L, g, F):	5.027	
Sample Result 2 Sigma CSU (pCi/L, g, F):	0.881	
Sample Duplicate Result (pCi/L, g, F):	4.728	
Sample Duplicate Result 2 Sigma CSU (pCi/L, g, F):	0.843	
Are sample and/or duplicate results below RL?	NQ	
Duplicate Numerical Performance Indicator:	0.480	
(Based on the LCS/LCSD Percent Recoveries) Duplicate RPD:	5.46%	
Duplicate Status vs Numerical Indicator:	Pass	
Duplicate Status vs RPD:	N/A	
% RPD Limit:	25%	

Matrix Spike/Matrix Spike Duplicate Sample Assessment		
Sample I.D.	30586893001	30586893013
Sample MS I.D.	30586893002	30586893014
Sample MSD I.D.	30586893003	30586893015
Sample Matrix Spike Result:	26.319	26.146
Matrix Spike Result 2 Sigma CSU (pCi/L, g, F):	4.197	4.207
Sample Matrix Spike Duplicate Result:	25.198	24.355
Matrix Spike Duplicate Result 2 Sigma CSU (pCi/L, g, F):	4.045	3.933
Duplicate Numerical Performance Indicator:	0.377	0.609
(Based on the Percent Recoveries) MS/ MSD Duplicate RPD:	3.73%	3.74%
MS/ MSD Duplicate Status vs Numerical Indicator:	Pass	Pass
MS/ MSD Duplicate Status vs RPD:	N/A	N/A
% RPD Limit:	25%	25%

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

Comments:

ET 6-2-23

VAM 6/2/23

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

February 15, 2023

Kelley Sharpe
ARCADIS - Atlanta
2839 Paces Ferry Rd
STE 900
Atlanta, GA 30339

RE: Project: Plant McDonough-CCR Ash Pond
Pace Project No.: 92650830

Dear Kelley Sharpe:

Enclosed are the analytical results for sample(s) received by the laboratory on February 07, 2023. 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@pacelabs.com
(770)734-4200
Project Manager

Enclosures

cc: Joju Abraham, Georgia Power-CCR
Ben Hodges, Georgia Power
Warren Johnson, ARCADIS - Atlanta
Allison Keefer, Southern Company
Laura Midkiff, Georgia Power
Tina Sullivan, ERM

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Peachtree Corners, GA 30092
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CERTIFICATIONS

Project: Plant McDonough-CCR Ash Pond
Pace Project No.: 92650830

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

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SAMPLE SUMMARY

Project: Plant McDonough-CCR Ash Pond
Pace Project No.: 92650830

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92650830001	**MCD-UT01_US**	Water	02/07/23 12:35	02/07/23 15:08
92650830002	**MCD-UT02**	Water	02/07/23 13:28	02/07/23 15:08
92650830003	**MCD-UT03**	Water	02/07/23 13:20	02/07/23 15:08
92650830004	**MCD-UT01_DS**	Water	02/07/23 13:11	02/07/23 15:08
92650830005	**MCD-CR-0.1**	Water	02/07/23 12:55	02/07/23 15:08
92650830006	**MCD-CR+0.2**	Water	02/07/23 12:50	02/07/23 15:08
92650830007	**MCD-CR+0.4**	Water	02/07/23 12:45	02/07/23 15:08

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SAMPLE ANALYTE COUNT

Project: Plant McDonough-CCR Ash Pond
Pace Project No.: 92650830

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92650830001	**MCD-UT01_US**	EPA 6010D	MS	4	PASI-GA
		EPA 6020B	CW1	3	PASI-GA
		SM 2540C-2015	DL1	1	PASI-GA
		SM 2320B-2011	SMS	2	PASI-A
		EPA 9056A	CDC	3	PASI-A
92650830002	**MCD-UT02**	EPA 6010D	MS	4	PASI-GA
		EPA 6020B	CW1	2	PASI-GA
		SM 2540C-2015	DL1	1	PASI-GA
		SM 2320B-2011	SMS	2	PASI-A
		EPA 9056A	CDC	3	PASI-A
92650830003	**MCD-UT03**	EPA 6010D	MS	4	PASI-GA
		EPA 6020B	CW1	3	PASI-GA
		SM 2540C-2015	DL1	1	PASI-GA
		SM 2320B-2011	SMS	2	PASI-A
		EPA 9056A	CDC	3	PASI-A
92650830004	**MCD-UT01_DS**	EPA 6010D	MS	4	PASI-GA
		EPA 6020B	CW1	3	PASI-GA
		SM 2540C-2015	DL1	1	PASI-GA
		SM 2320B-2011	SMS	2	PASI-A
		EPA 9056A	CDC	3	PASI-A
92650830005	**MCD-CR-0.1**	EPA 6010D	MS	4	PASI-GA
		EPA 6020B	CW1	3	PASI-GA
		SM 2540C-2015	DL1	1	PASI-GA
		SM 2320B-2011	SMS	2	PASI-A
		EPA 9056A	CDC	3	PASI-A
92650830006	**MCD-CR+0.2**	EPA 6010D	MS	4	PASI-GA
		EPA 6020B	CW1	3	PASI-GA
		SM 2540C-2015	DL1	1	PASI-GA
		SM 2320B-2011	SMS	2	PASI-A
		EPA 9056A	CDC	3	PASI-A
92650830007	**MCD-CR+0.4**	EPA 6010D	MS	4	PASI-GA
		EPA 6020B	CW1	5	PASI-GA
		SM 2540C-2015	DL1	1	PASI-GA
		SM 2320B-2011	SMS	2	PASI-A
		EPA 9056A	CDC	3	PASI-A

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

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: Plant McDonough-CCR Ash Pond
Pace Project No.: 92650830

Sample: MCD-UT01_US **Lab ID: 92650830001** Collected: 02/07/23 12:35 Received: 02/07/23 15:08 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	02/10/23 14:52	02/13/23 20:03	7440-09-7	BC
Sodium	**11.2**	mg/L	1.0	1	02/10/23 14:52	02/13/23 20:03	7440-23-5	
Calcium	**14.3**	mg/L	1.0	1	02/10/23 14:52	02/13/23 20:03	7440-70-2	
Magnesium	**2.7**	mg/L	0.050	1	02/10/23 14:52	02/13/23 20:03	7439-95-4	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA							
Arsenic	ND	mg/L	0.0050	1	02/13/23 11:28	02/13/23 18:40	7440-38-2	
Boron	**0.045**	mg/L	0.040	1	02/13/23 11:28	02/13/23 18:40	7440-42-8	
Molybdenum	ND	mg/L	0.010	1	02/13/23 11:28	02/13/23 18:40	7439-98-7	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA							
Total Dissolved Solids	**116**	mg/L	25.0	1		02/10/23 14:19		
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville							
Alkalinity,Bicarbonate (CaCO3)	**44.9**	mg/L	5.0	1		02/09/23 13:38		
Alkalinity, Total as CaCO3	**44.9**	mg/L	5.0	1		02/09/23 13:38		
9056 IC anions 28 Days	Analytical Method: EPA 9056A Pace Analytical Services - Asheville							
Chloride	**13.6**	mg/L	1.0	1		02/09/23 00:42	16887-00-6	
Fluoride	**0.34**	mg/L	0.10	1		02/09/23 00:42	16984-48-8	
Sulfate	**16.0**	mg/L	1.0	1		02/09/23 00:42	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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(770)734-4200

ANALYTICAL RESULTS

Project: Plant McDonough-CCR Ash Pond
Pace Project No.: 92650830

Sample: MCD-UT02 **Lab ID: 92650830002** Collected: 02/07/23 13:28 Received: 02/07/23 15:08 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	02/10/23 14:52	02/13/23 20:07	7440-09-7	BC
Sodium	**11.2**	mg/L	1.0	1	02/10/23 14:52	02/13/23 20:07	7440-23-5	
Calcium	**14.6**	mg/L	1.0	1	02/10/23 14:52	02/13/23 20:07	7440-70-2	
Magnesium	**2.8**	mg/L	0.050	1	02/10/23 14:52	02/13/23 20:07	7439-95-4	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA							
Arsenic	ND	mg/L	0.0050	1	02/13/23 11:28	02/13/23 18:46	7440-38-2	
Boron	**0.053**	mg/L	0.040	1	02/13/23 11:28	02/13/23 18:46	7440-42-8	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA							
Total Dissolved Solids	**98.0**	mg/L	25.0	1		02/10/23 20:12		
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville							
Alkalinity,Bicarbonate (CaCO3)	**45.9**	mg/L	5.0	1		02/09/23 13:44		
Alkalinity, Total as CaCO3	**45.9**	mg/L	5.0	1		02/09/23 13:44		
9056 IC anions 28 Days	Analytical Method: EPA 9056A Pace Analytical Services - Asheville							
Chloride	**13.5**	mg/L	1.0	1		02/09/23 01:31	16887-00-6	
Fluoride	**0.32**	mg/L	0.10	1		02/09/23 01:31	16984-48-8	
Sulfate	**16.7**	mg/L	1.0	1		02/09/23 01:31	14808-79-8	

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ANALYTICAL RESULTS

Project: Plant McDonough-CCR Ash Pond
Pace Project No.: 92650830

Sample: MCD-UT03 **Lab ID: 92650830003** Collected: 02/07/23 13:20 Received: 02/07/23 15:08 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	**2.9**	mg/L	0.20	1	02/10/23 14:52	02/13/23 20:12	7440-09-7	BC
Sodium	**11.1**	mg/L	1.0	1	02/10/23 14:52	02/13/23 20:12	7440-23-5	
Calcium	**14.5**	mg/L	1.0	1	02/10/23 14:52	02/13/23 20:12	7440-70-2	
Magnesium	**2.8**	mg/L	0.050	1	02/10/23 14:52	02/13/23 20:12	7439-95-4	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA							
Arsenic	ND	mg/L	0.0050	1	02/13/23 11:28	02/13/23 18:52	7440-38-2	
Boron	**0.058**	mg/L	0.040	1	02/13/23 11:28	02/13/23 18:52	7440-42-8	
Molybdenum	ND	mg/L	0.010	1	02/13/23 11:28	02/13/23 18:52	7439-98-7	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA							
Total Dissolved Solids	**180**	mg/L	25.0	1		02/10/23 20:12		
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville							
Alkalinity,Bicarbonate (CaCO3)	**45.7**	mg/L	5.0	1		02/09/23 13:51		
Alkalinity, Total as CaCO3	**45.7**	mg/L	5.0	1		02/09/23 13:51		
9056 IC anions 28 Days	Analytical Method: EPA 9056A Pace Analytical Services - Asheville							
Chloride	**13.5**	mg/L	1.0	1		02/09/23 02:21	16887-00-6	
Fluoride	**0.32**	mg/L	0.10	1		02/09/23 02:21	16984-48-8	
Sulfate	**16.8**	mg/L	1.0	1		02/09/23 02:21	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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(770)734-4200

ANALYTICAL RESULTS

Project: Plant McDonough-CCR Ash Pond
Pace Project No.: 92650830

Sample: MCD-UT01_DS **Lab ID: 92650830004** Collected: 02/07/23 13:11 Received: 02/07/23 15:08 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	**2.8**	mg/L	0.20	1	02/10/23 14:52	02/13/23 20:17	7440-09-7	BC
Sodium	**11.0**	mg/L	1.0	1	02/10/23 14:52	02/13/23 20:17	7440-23-5	
Calcium	**14.5**	mg/L	1.0	1	02/10/23 14:52	02/13/23 20:17	7440-70-2	
Magnesium	**2.9**	mg/L	0.050	1	02/10/23 14:52	02/13/23 20:17	7439-95-4	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA							
Arsenic	ND	mg/L	0.0050	1	02/13/23 11:28	02/13/23 18:58	7440-38-2	
Boron	**0.083**	mg/L	0.040	1	02/13/23 11:28	02/13/23 18:58	7440-42-8	
Molybdenum	ND	mg/L	0.010	1	02/13/23 11:28	02/13/23 18:58	7439-98-7	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA							
Total Dissolved Solids	**179**	mg/L	25.0	1		02/10/23 20:12		
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville							
Alkalinity,Bicarbonate (CaCO3)	**46.5**	mg/L	5.0	1		02/09/23 13:58		
Alkalinity, Total as CaCO3	**46.5**	mg/L	5.0	1		02/09/23 13:58		
9056 IC anions 28 Days	Analytical Method: EPA 9056A Pace Analytical Services - Asheville							
Chloride	**13.1**	mg/L	1.0	1		02/09/23 02:37	16887-00-6	
Fluoride	**0.31**	mg/L	0.10	1		02/09/23 02:37	16984-48-8	
Sulfate	**17.5**	mg/L	1.0	1		02/09/23 02:37	14808-79-8	

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ANALYTICAL RESULTS

Project: Plant McDonough-CCR Ash Pond
Pace Project No.: 92650830

Sample: MCD-CR-0.1 **Lab ID: 92650830005** Collected: 02/07/23 12:55 Received: 02/07/23 15:08 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	**2.9**	mg/L	0.20	1	02/10/23 14:52	02/13/23 20:32	7440-09-7	
Sodium	**8.1**	mg/L	1.0	1	02/10/23 14:52	02/13/23 20:32	7440-23-5	
Calcium	**5.7**	mg/L	1.0	1	02/10/23 14:52	02/13/23 20:32	7440-70-2	
Magnesium	**1.9**	mg/L	0.050	1	02/10/23 14:52	02/13/23 20:32	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	02/13/23 11:28	02/13/23 19:04	7440-42-8	
Cobalt	ND	mg/L	0.0050	1	02/13/23 11:28	02/13/23 19:04	7440-48-4	
Lithium	ND	mg/L	0.030	1	02/13/23 11:28	02/13/23 19:04	7439-93-2	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA							
Total Dissolved Solids	**50.0**	mg/L	25.0	1		02/10/23 20:12		
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville							
Alkalinity,Bicarbonate (CaCO3)	**26.0**	mg/L	5.0	1		02/09/23 14:05		
Alkalinity, Total as CaCO3	**26.0**	mg/L	5.0	1		02/09/23 14:05		
9056 IC anions 28 Days	Analytical Method: EPA 9056A Pace Analytical Services - Asheville							
Chloride	**9.5**	mg/L	1.0	1		02/09/23 02:54	16887-00-6	
Fluoride	**0.11**	mg/L	0.10	1		02/09/23 02:54	16984-48-8	
Sulfate	**8.3**	mg/L	1.0	1		02/09/23 02:54	14808-79-8	

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ANALYTICAL RESULTS

Project: Plant McDonough-CCR Ash Pond
Pace Project No.: 92650830

Sample: MCD-CR+0.2 **Lab ID: 92650830006** Collected: 02/07/23 12:50 Received: 02/07/23 15:08 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	**2.8**	mg/L	0.20	1	02/10/23 14:52	02/13/23 20:36	7440-09-7	
Sodium	**8.0**	mg/L	1.0	1	02/10/23 14:52	02/13/23 20:36	7440-23-5	
Calcium	**5.5**	mg/L	1.0	1	02/10/23 14:52	02/13/23 20:36	7440-70-2	
Magnesium	**1.9**	mg/L	0.050	1	02/10/23 14:52	02/13/23 20:36	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	02/13/23 11:28	02/13/23 19:10	7440-42-8	
Cobalt	ND	mg/L	0.0050	1	02/13/23 11:28	02/13/23 19:10	7440-48-4	
Lithium	ND	mg/L	0.030	1	02/13/23 11:28	02/13/23 19:10	7439-93-2	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA							
Total Dissolved Solids	**54.0**	mg/L	25.0	1		02/10/23 20:12		
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville							
Alkalinity,Bicarbonate (CaCO3)	**26.5**	mg/L	5.0	1		02/09/23 14:21		
Alkalinity, Total as CaCO3	**26.5**	mg/L	5.0	1		02/09/23 14:21		
9056 IC anions 28 Days	Analytical Method: EPA 9056A Pace Analytical Services - Asheville							
Chloride	**9.0**	mg/L	1.0	1		02/09/23 03:10	16887-00-6	
Fluoride	**0.10**	mg/L	0.10	1		02/09/23 03:10	16984-48-8	
Sulfate	**7.3**	mg/L	1.0	1		02/09/23 03:10	14808-79-8	

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ANALYTICAL RESULTS

Project: Plant McDonough-CCR Ash Pond
Pace Project No.: 92650830

Sample: MCD-CR+0.4 **Lab ID: 92650830007** Collected: 02/07/23 12:45 Received: 02/07/23 15:08 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	**3.0**	mg/L	0.20	1	02/10/23 14:52	02/13/23 20:41	7440-09-7	
Sodium	**7.5**	mg/L	1.0	1	02/10/23 14:52	02/13/23 20:41	7440-23-5	
Calcium	**5.3**	mg/L	1.0	1	02/10/23 14:52	02/13/23 20:41	7440-70-2	
Magnesium	**1.8**	mg/L	0.050	1	02/10/23 14:52	02/13/23 20:41	7439-95-4	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A							
	Pace Analytical Services - Peachtree Corners, GA							
Arsenic	ND	mg/L	0.0050	1	02/13/23 11:28	02/13/23 19:16	7440-38-2	
Boron	ND	mg/L	0.040	1	02/13/23 11:28	02/13/23 19:16	7440-42-8	
Cobalt	ND	mg/L	0.0050	1	02/13/23 11:28	02/13/23 19:16	7440-48-4	
Lithium	ND	mg/L	0.030	1	02/13/23 11:28	02/13/23 19:16	7439-93-2	
Molybdenum	ND	mg/L	0.010	1	02/13/23 11:28	02/13/23 19:16	7439-98-7	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015							
	Pace Analytical Services - Peachtree Corners, GA							
Total Dissolved Solids	**45.0**	mg/L	25.0	1		02/10/23 20:12		
2320B Alkalinity	Analytical Method: SM 2320B-2011							
	Pace Analytical Services - Asheville							
Alkalinity,Bicarbonate (CaCO3)	**25.9**	mg/L	5.0	1		02/09/23 14:28		
Alkalinity, Total as CaCO3	**25.9**	mg/L	5.0	1		02/09/23 14:28		
9056 IC anions 28 Days	Analytical Method: EPA 9056A							
	Pace Analytical Services - Asheville							
Chloride	**8.9**	mg/L	1.0	1		02/09/23 03:27	16887-00-6	
Fluoride	**0.11**	mg/L	0.10	1		02/09/23 03:27	16984-48-8	
Sulfate	**7.2**	mg/L	1.0	1		02/09/23 03:27	14808-79-8	

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QUALITY CONTROL DATA

Project: Plant McDonough-CCR Ash Pond
Pace Project No.: 92650830

QC Batch: 755238
QC Batch Method: EPA 3010A
Analysis Method: EPA 6010D
Analysis Description: 6010D ATL
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92650830001, 92650830002, 92650830003, 92650830004, 92650830005, 92650830006, 92650830007

METHOD BLANK: 3924100 Matrix: Water
Associated Lab Samples: 92650830001, 92650830002, 92650830003, 92650830004, 92650830005, 92650830006, 92650830007

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Calcium	mg/L	ND	1.0	02/13/23 18:46	
Magnesium	mg/L	ND	0.050	02/13/23 18:46	
Potassium	mg/L	ND	0.20	02/14/23 13:53	
Sodium	mg/L	ND	1.0	02/13/23 18:46	

LABORATORY CONTROL SAMPLE: 3924101

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium	mg/L	1	.94J	94	80-120	
Magnesium	mg/L	1	0.96	96	80-120	
Potassium	mg/L	1	1.0	104	80-120	
Sodium	mg/L	1	.99J	99	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3924102 3924103

Parameter	Units	92650428004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Calcium	mg/L	708J ug/L	1	1	1.7	1.7	99	100	75-125	0	20	
Magnesium	mg/L	295 ug/L	1	1	1.3	1.3	101	98	75-125	3	20	
Potassium	mg/L	403 ug/L	1	1	1.5	1.4	105	95	75-125	7	20	
Sodium	mg/L	3610 ug/L	1	1	4.7	4.6	108	102	75-125	1	20	

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QUALITY CONTROL DATA

Project: Plant McDonough-CCR Ash Pond
Pace Project No.: 92650830

QC Batch: 755475
QC Batch Method: EPA 3005A
Analysis Method: EPA 6020B
Analysis Description: 6020 MET
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92650830001, 92650830002, 92650830003, 92650830004, 92650830005, 92650830006, 92650830007

METHOD BLANK: 3925117 Matrix: Water
Associated Lab Samples: 92650830001, 92650830002, 92650830003, 92650830004, 92650830005, 92650830006, 92650830007

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Arsenic	mg/L	ND	0.0050	02/13/23 17:22	
Boron	mg/L	ND	0.040	02/13/23 17:22	
Cobalt	mg/L	ND	0.0050	02/13/23 17:22	
Lithium	mg/L	ND	0.030	02/13/23 17:22	
Molybdenum	mg/L	ND	0.010	02/13/23 17:22	

LABORATORY CONTROL SAMPLE: 3925118

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Arsenic	mg/L	0.1	0.10	100	80-120	
Boron	mg/L	1	0.98	98	80-120	
Cobalt	mg/L	0.1	0.092	92	80-120	
Lithium	mg/L	0.1	0.11	105	80-120	
Molybdenum	mg/L	0.1	0.10	103	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3925119 3925120

Parameter	Units	92649808024 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	0.10	97	100	75-125	4	20	
Boron	mg/L	ND	1	1	0.92	0.98	91	97	75-125	6	20	
Cobalt	mg/L	ND	0.1	0.1	0.088	0.094	88	94	75-125	6	20	
Lithium	mg/L	ND	0.1	0.1	0.097	0.10	95	98	75-125	3	20	
Molybdenum	mg/L	ND	0.1	0.1	0.099	0.11	98	104	75-125	6	20	

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QUALITY CONTROL DATA

Project: Plant McDonough-CCR Ash Pond
Pace Project No.: 92650830

QC Batch: 754918
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: 92650830001

METHOD BLANK: 3921953 Matrix: Water
Associated Lab Samples: 92650830001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	25.0	02/10/23 14:14	

LABORATORY CONTROL SAMPLE: 3921954

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	437	109	80-120	

SAMPLE DUPLICATE: 3921955

Parameter	Units	92651073001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	31.0	39.0	23	10	D6

SAMPLE DUPLICATE: 3921956

Parameter	Units	92650181024 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	ND	ND		10	

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QUALITY CONTROL DATA

Project: Plant McDonough-CCR Ash Pond
Pace Project No.: 92650830

QC Batch: 755255 | 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: 92650830002, 92650830003, 92650830004, 92650830005, 92650830006, 92650830007

METHOD BLANK: 3924151 Matrix: Water
Associated Lab Samples: 92650830002, 92650830003, 92650830004, 92650830005, 92650830006, 92650830007

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	25.0	02/10/23 20:11	

LABORATORY CONTROL SAMPLE: 3924152

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	404	101	80-120	

SAMPLE DUPLICATE: 3924153

Parameter	Units	92650830002 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	98.0	99.0	1	10	

SAMPLE DUPLICATE: 3924154

Parameter	Units	92651189001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	3260	3540	8	10	

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QUALITY CONTROL DATA

Project: Plant McDonough-CCR Ash Pond
Pace Project No.: 92650830

QC Batch: 754583 | Analysis Method: SM 2320B-2011
QC Batch Method: SM 2320B-2011 | Analysis Description: 2320B Alkalinity
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92650830001, 92650830002, 92650830003, 92650830004, 92650830005, 92650830006, 92650830007

METHOD BLANK: 3920245 Matrix: Water
Associated Lab Samples: 92650830001, 92650830002, 92650830003, 92650830004, 92650830005, 92650830006, 92650830007

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Alkalinity, Total as CaCO3	mg/L	ND	5.0	02/09/23 13:05	
Alkalinity,Bicarbonate (CaCO3)	mg/L	ND	5.0	02/09/23 13:05	

LABORATORY CONTROL SAMPLE: 3920246

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	50	50.1	100	80-120	

LABORATORY CONTROL SAMPLE: 3920247

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	50	49.2	98	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3920248 3920249

Parameter	Units	92650414004 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	40.7	50	50	93.2	93.5	105	106	80-120	0	25	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3920250 3920251

Parameter	Units	92650414005 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	24.7	50	50	73.9	74.3	98	99	80-120	1	25	

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QUALITY CONTROL DATA

Project: Plant McDonough-CCR Ash Pond
Pace Project No.: 92650830

QC Batch: 754535
QC Batch Method: EPA 9056A
Analysis Method: EPA 9056A
Analysis Description: 9056 IC anions 28 Days
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92650830001, 92650830002, 92650830003, 92650830004, 92650830005, 92650830006, 92650830007

METHOD BLANK: 3919953 Matrix: Water
Associated Lab Samples: 92650830001, 92650830002, 92650830003, 92650830004, 92650830005, 92650830006, 92650830007

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	02/09/23 09:59	
Fluoride	mg/L	ND	0.10	02/09/23 09:59	
Sulfate	mg/L	ND	1.0	02/09/23 09:59	

LABORATORY CONTROL SAMPLE: 3919954

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	52.8	106	90-110	
Fluoride	mg/L	2.5	2.6	106	90-110	
Sulfate	mg/L	50	53.8	108	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3919955 3919956

Parameter	Units	92650830001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	13.6	50	50	64.3	65.3	101	103	90-110	1	10	
Fluoride	mg/L	0.34	2.5	2.5	2.8	2.8	97	99	90-110	2	10	
Sulfate	mg/L	16.0	50	50	67.5	68.4	103	105	90-110	1	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3919957 3919958

Parameter	Units	92650835004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	8.5	50	50	59.6	59.9	102	103	90-110	0	10	
Fluoride	mg/L	0.10	2.5	2.5	2.5	2.6	97	99	90-110	1	10	
Sulfate	mg/L	5.8	50	50	57.7	57.9	104	104	90-110	0	10	

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QUALIFIERS

Project: Plant McDonough-CCR Ash Pond
Pace Project No.: 92650830

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.
D6	The precision between the sample and sample duplicate exceeded laboratory control limits.

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

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Plant McDonough-CCR Ash Pond
Pace Project No.: 92650830

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92650830001	**MCD-UT01_US**	EPA 3010A	755238	EPA 6010D	755286
92650830002	**MCD-UT02**	EPA 3010A	755238	EPA 6010D	755286
92650830003	**MCD-UT03**	EPA 3010A	755238	EPA 6010D	755286
92650830004	**MCD-UT01_DS**	EPA 3010A	755238	EPA 6010D	755286
92650830005	**MCD-CR-0.1**	EPA 3010A	755238	EPA 6010D	755286
92650830006	**MCD-CR+0.2**	EPA 3010A	755238	EPA 6010D	755286
92650830007	**MCD-CR+0.4**	EPA 3010A	755238	EPA 6010D	755286
92650830001	**MCD-UT01_US**	EPA 3005A	755475	EPA 6020B	755540
92650830002	**MCD-UT02**	EPA 3005A	755475	EPA 6020B	755540
92650830003	**MCD-UT03**	EPA 3005A	755475	EPA 6020B	755540
92650830004	**MCD-UT01_DS**	EPA 3005A	755475	EPA 6020B	755540
92650830005	**MCD-CR-0.1**	EPA 3005A	755475	EPA 6020B	755540
92650830006	**MCD-CR+0.2**	EPA 3005A	755475	EPA 6020B	755540
92650830007	**MCD-CR+0.4**	EPA 3005A	755475	EPA 6020B	755540
92650830001	**MCD-UT01_US**	SM 2540C-2015	754918		
92650830002	**MCD-UT02**	SM 2540C-2015	755255		
92650830003	**MCD-UT03**	SM 2540C-2015	755255		
92650830004	**MCD-UT01_DS**	SM 2540C-2015	755255		
92650830005	**MCD-CR-0.1**	SM 2540C-2015	755255		
92650830006	**MCD-CR+0.2**	SM 2540C-2015	755255		
92650830007	**MCD-CR+0.4**	SM 2540C-2015	755255		
92650830001	**MCD-UT01_US**	SM 2320B-2011	754583		
92650830002	**MCD-UT02**	SM 2320B-2011	754583		
92650830003	**MCD-UT03**	SM 2320B-2011	754583		
92650830004	**MCD-UT01_DS**	SM 2320B-2011	754583		
92650830005	**MCD-CR-0.1**	SM 2320B-2011	754583		
92650830006	**MCD-CR+0.2**	SM 2320B-2011	754583		
92650830007	**MCD-CR+0.4**	SM 2320B-2011	754583		
92650830001	**MCD-UT01_US**	EPA 9056A	754535		
92650830002	**MCD-UT02**	EPA 9056A	754535		
92650830003	**MCD-UT03**	EPA 9056A	754535		
92650830004	**MCD-UT01_DS**	EPA 9056A	754535		
92650830005	**MCD-CR-0.1**	EPA 9056A	754535		
92650830006	**MCD-CR+0.2**	EPA 9056A	754535		
92650830007	**MCD-CR+0.4**	EPA 9056A	754535		

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Pace Analytical

CHAIN-OF-CUSTODY / Analytical Request Document

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

Page : 1 Of 1

Section A
Required Client Information:

Company:	ARCADIS - Atlanta
Address:	2839 Paces Ferry Rd
	Atlanta, GA 30339
Email:	warren.johnson@arcadis.com
Phone:	678.485.5298 Fax:
Requested Due Date:	5 day TAT

Section B
Required Project Information:

Report To:	Joju Abraham, Ben Hodges
Copy To:	Warren Johnson
Purchase Order #:	SCS10382775
Project Name:	Plant McDonough
Project #:	

Section C
Invoice Information:

Attention:	Joju Abraham
Company Name:	GPC
Address:	
Pace Quote:	
Pace Project Manager:	Mayia.Parks@pacelabs.com,
Pace Profile #:	2239

WO# : 92650830
92650830

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

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

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	START TIME	END DATE	END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Analyses Test Y/N	CCR App III[1]	Major Ions[2]	Arsenic (As)	Cobalt (Co)	Lithium (Li)	Molybdenum (Mo)	Residual Chlorine (Y/N)
1	MCD-UT01_US	WS	G	2/7/2023	1335														X	X	X			X	
2	MCD-UT02	WS	G	2/7/2023	1328														X	X	X				
3	MCD-UT03	WS	G	2/7/2023	1320														X	X	X			X	
4	MCD-UT01_DS	WS	G	2/7/2023	1311														X	X	X			X	
5	MCD-CR-0.1	WS	G	2/7/2023	1255														X	X		X	X		
6	MCD-CR+0.2	WS	G	2/7/2023	1250														X	X		X	X		
7	MCD-CR+0.4	WS	G	2/7/2023	1245														X	X	X	X	X	X	
8																									
9																									
10																									
11																									
12																									

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
CCR App III[1] - Boron (B), Calcium(Ca), Chloride (Cl), Floride (F), Sulfate, Total Dissolved Solids	[signature] / Arcadis	2/7/23	1508	[signature]	2/7/23	1508	
Major Ions - Magnesium (Mg), Sodium (Na), Potassium (K), Total Alkalinity, Bicarbonate Alkalinity							

SAMPLER NAME AND SIGNATURE
PRINT Name of SAMPLER: Garrett G [signature] 2-7-23

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Pace ANALYTICAL SERVICES	DC#_Title: ENV-FRM-HUN1-0083 v02_Sample Condition Upon Receipt
	Effective Date: 11/14/2022

Laboratory receiving samples:

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

Sample Condition Upon Receipt

Client Name: ARCADIS

Project #:

WO#: 92650830

PM: MP **Due Date: 02/15/23**

CLIENT: GA-ArcadAtl

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

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

Date/Initials Person Examining Contents: 2-7-23 AG

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: 5.3 **Correction Factor:** Add/Subtract (°C) 0.0

Cooler Temp Corrected (°C): 5.3

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: 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 SERVICES

DC#_Title: ENV-FRM-HUN1-0083 v02_Sample Condition Upon Receipt

Effective Date: 11/14/2022

***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**

*****Check all unpreserved Nitrates for chlorine**

Project

WO#: 92650830

PM: MP **Due Date: 02/15/23**

CLIENT: GA-AreadAtl

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)	DG94-40 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)	DG9V-40 mL VOA H3PO4 (N/A)	KP7U-50 mL Plastic Unpreserved (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-250 mL Plastic (NH2)2SO4 (9.3-9.7)	AG0U-100 mL Amber Unpreserved (N/A) (Cl-)	VSGU-20 mL Scintillation vials (N/A)	DG9U-40 mL Amber Unpreserved vials (N/A)
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		2	1			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 DENR Certification Office (i.e. Out of hold, incorrect preservative, out of temp, incorrect containers.

APPENDIX B

Data Validation Summary, January-May 2023

Quality Control Review of Analytical Data- Ash Pond AP-1
Submitted by Pace Analytical Services, LLC
January-May 2023

This narrative presents results of the quality control (QC) data review performed on analytical data submitted by Pace Analytical Services, LLC. for groundwater samples collected at Plant McDonough CCR Ash Pond AP-1 between January 31, 2023, and May 2, 2023. The chemical data were reviewed to identify quality issues which could affect the use of the data for decision making purposes.

Information regarding the primary sample locations, analytical parameters, QC samples, sampling dates, and laboratory sample delivery group (SDG) designations is summarized in Table 1. In accordance with groundwater monitoring and corrective action procedures discussed in Title 40 CFR, Subpart D - Standards for the Disposal of Coal Combustion Residuals in Landfills and Surface Impoundments, the samples were analyzed for detection monitoring constituents listed in 40 CFR, Part 257, Appendix III and assessment monitoring constituents listed in 40 CFR, Part 257, Appendix IV. Additional analysis included alkalinity, cations (magnesium, potassium, and sodium) and total, ferrous, and ferric Iron. 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 (Standard Methods 2540C), Radium-226 (USEPA Method 9315), Radium-228 (USEPA Method 9320), Alkalinity by Titration (Standard Methods 2320B) and Iron (Standard Methods SM 3500-Fe).

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, equipment, and laboratory blanks). Additionally, sample procedures, holding times and chains-of-custody were reviewed. Where there was a discrepancy between the QC criteria in the guidelines and the QC criterion established in the analytic methodology, method-specific criteria or professional judgment was used.

DATA QUALITY OBJECTIVES

Laboratory Precision: Laboratory goals for precision were met.

Field Precision: Field goals for precision were met with the exception of total dissolved solids (TDS) as described in the qualification section below.

Accuracy: Laboratory goals for accuracy were met.

Detection Limits and Blanks: Project goals for detection limits were met with the exception of TDS. Certain samples were diluted due to elevated concentrations of target analytes. Dilutions do not require qualifications based on USEPA guidelines. Detection and reporting limits of non-detect compounds are elevated proportional to the dilution when undiluted sample results are not provided by the laboratory. The data usability of diluted results was evaluated by the data user in the context of site-wide characterization. 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.

QUALIFICATIONS

In general, chemical results for the samples collected at the Site were qualified on the basis of 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 reported above the method detection limit and below the reporting limit. The concentration reported is an estimated value.

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 sample delivery groups (SDGs) listed in Table 1, qualifications may not have been required or applied to all samples collected. A summary of sample qualifications can be found in Table 2.

- Certain TDS results from SDG 92665496 exceeded the relative percent difference (RPD) between the parent and duplicate sample. Detected and non-detected results were qualified as estimated, J.

- Certain potassium and boron results from SDGs 92650183 and 92650426 were qualified as non-detect (U) when the analyte was detected at a similar concentration in an associated field or laboratory blank sample. As shown in Table 2, if the original sample results were below the reporting limit (RL), the results were qualified as non-detect (U) and the RL was reported as the new results. If the original sample results were greater than the RL, the results were qualified U and the RL was raised to the sample result.

Golder reviewed the data from samples collected at Plant McDonough CCR Ash Pond AP-1 between January 31, 2023, and May 2, 2023, in accordance with the analytical methods, the laboratory specific QC criteria, and the guidelines. As described above, 100% of the results were acceptable for project use.

REFERENCE

Paar, J.G. & Porterfield, D.R. *Evaluation of Radiochemical Data Usability*. United States Department of Energy, Office of Environmental Restoration and Waste Management, Oak Ridge National Laboratory, April 1997.

USEPA, November 2020, National, Office of Superfund Remediation and Technology Innovation, *National Functional Guidelines for Inorganic Superfund Methods Data Review,* Revision 0.0.

USEPA, September 2011, Region 4, Science and Ecosystem Support Division, Quality Assurance Section, MTSB, *Data Validation Standard Operating Procedures for Contract Laboratory Program Inorganic Data By Inductively Coupled Plasma – Atomic Emission Spectroscopy and Inductively Coupled Plasma – Mass Spectroscopy,* Revision 2.0.

USEPA, September 2011, Region 4, Science and Ecosystem Support Division, Quality Assurance Section, MTSB, *Data Validation Standard Operating Procedures for Contract Laboratory Program Mercury Data By Cold Vapor Atomic Absorption,* Revision 2.0.

July 28, 2023

TABLE 1

Sample Summary Table
SCS Plant McDonough

						Analyses									
SDGs	***Field Identification***	***Collection Date***	***Lab Identification***	***Matrix***	***QC Samples***	**Field pH**	**Total Metals (EPA 6020B)**	**Cations (EPA 6010D)**	**Anions (EPA 300.0)**	**Total Mercury (EPA 7470A)**	**TDS (SM 2540C-2011)**	**Alkalinity (SM 2320B)**	**Iron, Ferric (SM3500-Fe-D)**	**Radium-226 (EPA 9315)**	**Radium-228 (EPA 9320)**
92650179	DGWA-70A	1/31/2023	92650179001	WG	-	X	X	X	X	X	X	X	X	-	-
92650179	DGWA-71	1/31/2023	92650179002	WG	-	X	X	X	X	X	X	X	X	-	-
92650179	DGWA-53	2/1/2023	92650179003	WG	-	X	X	X	X	X	X	X	X	-	-
92650180	B-105D	2/1/2023	92650180001	WG	-	X	X	X	X	X	X	X	X	-	-
92650180	B-112D	2/1/2023	92650180002	WG	-	X	X	X	X	X	X	X	X	-	-
92650180	B-113D	2/2/2023	92650180003	WG	-	X	X	X	X	X	X	X	X	-	-
92650183	DGWC-40	2/1/2023	92650183001	WG	-	X	X	X	X	X	X	X	X	-	-
92650183	DGWC-68A	2/1/2023	92650183002	WG	-	X	X	X	X	X	X	X	X	-	-
92650183	DGWC-69	2/1/2023	92650183003	WG	-	X	X	X	X	X	X	X	X	-	-
92650183	DGWC-37	2/2/2023	92650183006	WG	-	X	X	X	X	X	X	X	X	-	-
92650183	DGWC-38	2/2/2023	92650183007	WG	-	X	X	X	X	X	X	X	X	-	-
92650183	DGWC-67	2/2/2023	92650183008	WG	-	X	X	X	X	X	X	X	X	-	-
92650183	DGWC-121	2/2/2023	92650183009	WG	-	X	X	X	X	X	X	X	X	-	-
92650183	DGWC-39	2/3/2023	92650183010	WG	-	X	X	X	X	X	X	X	X	-	-
92650183	AP1-EB-1	2/1/2023	92650183004	WQ	EB (DGWC-40)	X	X	X	X	X	X	X	X	-	-
92650183	AP1-FB-1	2/1/2023	92650183005	WQ	FB (B-112D)	X	X	X	X	X	X	X	X	-	-
92650183	AP1-FD-1	2/2/2023	92650183011	WG	FD (DGWC-67)	X	X	X	X	X	X	X	X	-	-
92650186	DGWC-40	2/1/2023	92650186001	WG	-	-	-	-	-	-	-	-	-	X	X
92650186	DGWC-68A	2/1/2023	92650186002	WG	-	-	-	-	-	-	-	-	-	X	X
92650186	DGWC-69	2/1/2023	92650186003	WG	-	-	-	-	-	-	-	-	-	X	X
92650186	AP1-EB-1	2/1/2023	92650186004	WQ	EB (DGWC-40)	-	-	-	-	-	-	-	-	X	X
92650186	AP1-FB-1	2/1/2023	92650186005	WQ	FB ('B-112D)	-	-	-	-	-	-	-	-	X	X
92650186	DGWC-37	2/2/2023	92650186006	WG		-	-	-	-	-	-	-	-	X	X
92650186	DGWC-38	2/2/2023	92650186007	WG		-	-	-	-	-	-	-	-	X	X
92650186	DGWC-67	2/2/2023	92650186008	WG		-	-	-	-	-	-	-	-	X	X
92650186	DGWC-121	2/2/2023	92650186009	WG		-	-	-	-	-	-	-	-	X	X
92650186	DGWC-39	2/3/2023	92650186010	WG		-	-	-	-	-	-	-	-	X	X
92650186	AP1-FD-1	2/2/2023	92650186011	WG	FD (DGWC-67)	-	-	-	-	-	-	-	-	X	X
92650187	B-105D	2/1/2023	92650187001	WG	-	-	-	-	-	-	-	-	-	X	X
92650187	B-112D	2/1/2023	92650187002	WG	-	-	-	-	-	-	-	-	-	X	X
92650187	B-113D	2/2/2023	92650187003	WG	-	-	-	-	-	-	-	-	-	X	X
92650427	B-62	2/2/2023	92650427001	WG	-	-	-	-	-	-	-	-	-	X	X
92650427	B-100	2/2/2023	92650427002	WG	-	-	-	-	-	-	-	-	-	X	X
92650426	B-62	2/2/2023	92650426001	WG	-	X	X	X	X	X	X	X	X	-	-
92650426	B-100	2/2/2023	92650426002	WG	-	X	X	X	X	X	X	X	X	-	-
92650426	FB-2	2/2/2023	92650426003	WQ	FB (AP234)	X	X	X	X	X	X	X	X	-	-
92650185	DGWA-70A	1/31/2023	92650185001	WG	-	-	-	-	-	-	-	-	-	X	X
92650185	DGWA-71	1/31/2023	92650185002	WG	-	-	-	-	-	-	-	-	-	X	X
92650185	DGWA-53	2/1/2023	92650185003	WG	-	-	-	-	-	-	-	-	-	X	X
92665496	DGWC-121	5/2/2023	92665496001	WG	-	X	X	X	X	X	X	X	X	-	-
92665496	AP1-DUP-1	5/2/2023	92665496002	WG	FD (DGWC-121)	X	X	X	X	X	X	X	X	-	-
92665496	AP1-FB-1	5/2/2023	92665496003	WQ	FB (DGWC-121)	X	X	X	X	X	X	X	X	-	-
92665498	DGWC-121	5/2/2023	92665498001	WG	-	-	-	-	-	-	-	-	-	X	X
92665498	DUP-1	5/2/2023	92665498002	WG	FD (DGWC-121)	-	-	-	-	-	-	-	-	X	X
92665498	FB-1	5/2/2023	92665498003	WQ	FB (DGWC-121)	-	-	-	-	-	-	-	-	X	X

Abbreviations:

SDG- Sample Delivery Group
QC - Quality Control
SM - Standard Method
WG - Groundwater
WQ - Water Quality control
FD - Field Duplicate
TDS - Total Dissolved Solids
FB - Field Blank
EB - Equipment Blank

TABLE 2
Qualifier Summary Table
SCS Plant McDonough

SDG	*Sample Name*	*Constituent*	*New Result*	*New RL or MDC*	*Qualifier*	*Reason*
92650183	DGWC-67	Potassium	0.5	-	U	Method blank contamination
92650426	B-62	Boron	-	0.064	U	Field blank contamination
92665496	DGWC-121	TDS	-	-	J	Field duplicate imprecision
92665496	AP1-DUP-1	TDS	-	-	J	Field duplicate imprecision

Abbreviations:
RL : Reporting limit
MDC : Minimum detectable concentration
SDG : Sample delivery group

Qualifier
U: Non-detect
J: Estimated value

APPENDIX B

Laboratory Accreditation

July 14, 2022

RE: Georgia Commercial Laboratory Accreditation Rule

Stipulation Requirements for Analysis of Non-Potable Water and Solid and Chemical Materials
Georgia state law requires any person submitting data to the GA Environmental Protection Division for regulatory purposes to stipulate that the laboratory responsible for preparing the data is approved or accredited to perform analysis of environmental samples. This stipulation must be included within each report or may be submitted in a separate document with the first report of the calendar year; alternatively, the attached scope of accreditation may be submitted in lieu of a stipulation.

The information provided below may be used to generate a stipulation for data reporting purposes:

Name of Laboratory:	Pace Analytical Services, LLC – Asheville, NC
Name of Accrediting Agency:	Commonwealth of Virginia Department of General Services Division of Consolidated Laboratory Services [Primary NELAP Accreditation]
Accreditation Number:	460222
Scopes of Accreditation:	Non-Potable Water Solid and Chemical Materials
Accreditation Effective Date:	June 15, 2022
Accreditation Expiration Date:	June 14, 2023

For additional information regarding the Georgia Commercial Laboratory Accreditation Rule, please contact the Georgia Environmental Protection Division at 404-656-4713.

Sincerely,

Jacob Cottrell
Quality Manager

[O] 828.417.6052
jacob.cottrell@pacelabs.com
2225 Riverside Drive, Asheville, NC 28804

June 15, 2022

Stipulation of Approval for Commercial Laboratory

According to Georgia State Law (O.C.G.A. 12-2-9) Commercial Rules for Commercial Laboratory Accreditation, any person submitting data to EPD prepared by a commercial laboratory shall stipulate that the laboratory is approved (Chapter 391-3-26-.05). The following information is provided as requested.

Laboratory	**Pace Analytical Services, LLC** 9800 Kincey Avenue, Suite 100 Huntersville, NC 28078 Phone: 704.875.9092
Accredited By:	Commonwealth of Virginia, Department of General Services: Accrediting NELAP Authority
Accreditation ID:	Laboratory ID#: 460221
Scope:	Clean Water Act – Extractable Organics, Pesticides, PCB's, Volatile Organics RCRA/CERCLA – Extractable Organics, Pesticides, PCB's, Volatile Organics
Effective:	June 15, 2022
Expires:	June 14, 2023

Any question regarding this stipulation of approval may be directed to Pace Analytical at 704.875.9092. Thank you for your business and please do not hesitate to contact us if we can be of further assistance.

Sincerely,

Ross Simmons
Quality Assurance Manager

[O] 704.875.9092 [F] 704.875.9091
9800 Kincey Avenue, Suite 100, Huntersville, NC 28078

PACELABS.COM

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

Phone: 770.734.4200
Fax: 770.734.4201
www.pacelabs.com

Stipulation of Approval for Commercial Environmental Laboratories

Pursuant to the *Rules and Regulations of the State of Georgia* (O.C.G.A. 12-2-9) and *Rule 391-3-26.05* for "Commercial Environmental Laboratories", any person submitting data prepared by a commercial analytical laboratory to the Division for regulatory purposes shall stipulate that the laboratory is approved.

The stipulations for which Pace-Atlanta is approved, is as follows:

Laboratory:	**Pace Analytical Services, LLC – Atlanta GA** 110 Technology Parkway Peachtree Corners, GA 30092 Phone: (770) 734-4200 Fax: (770) 734-4201
Accredited By:	Authority Florida Department of Health (FL - DOH) Program Florida Environmental Laboratory Certification Program (TNI/NELAP)
Accreditation ID:	E87315
Scope of Accreditation:	Non-Potable Water (NPW) -General Chemistry (Wet Chemistry) -Metals -Microbiology Solid and Chemical Materials (SCM) -General Chemistry -Metals - Microbiology
Effective Dates:	July 1, 2022 – June 30, 2023

Any question regarding this stipulation of approval may be directed to Pace-Atlanta at (770) 734-4200. Thank you for your business and please do not hesitate to contact us if we can be of further assistance.

Sincerely,

Ross Simmons
Quality Manager – Atlanta Laboratory
Pace Analytical Services, LLC

GEORGIA
DEPARTMENT OF NATURAL RESOURCES
ENVIRONMENTAL PROTECTION DIVISION

Richard E. Dunn, Director

Watershed Protection Branch
2 Martin Luther King, Jr. Drive
Suite 1152, East Tower
Atlanta, Georgia 30334
404-463-1511

Mr. William Billings, Laboratory Director
Pace Analytical Services, LLC - Pittsburgh
1638 Roseytown Road, Suites 2, 3 and 4
Greensburg, PA 15601

June 14, 2022

RE: Certification by Reciprocity
Pace Analytical Services, Inc. - Pittsburgh
Georgia ID #C040

Dear Mr. Billings:

The Georgia Department of Natural Resources, Environmental Protection Division (EPD) is in receipt of all required data necessary to fulfill your laboratory's request for Certification by Reciprocity in Georgia for the analysis of the parameters listed in the attached certificate. Therefore, in accordance with the Georgia Safe Drinking Water Act of 1977 (Sections 12-5-170 through 12-5-193, O.C.G.A.) and the Rules for Safe Drinking Water (Chapter 391-3-5), this certification is valid until March 31, 2023. This certificate is contingent upon continued Certification by the Commonwealth of Pennsylvania's Department of Environmental Protection and is non-transferable. This certificate is also contingent upon continued acceptable semi-annual Proficiency Testing results.

If Pace Analytical Services, LLC – Pittsburgh's certification status is downgraded for any analyte/method by your Primary Accrediting Agency, the GA Certification Program must be notified. Any downgrade will result in the withdrawal of reciprocity for that analyte.

Prior to the expiration of this certification, please contact your accrediting/certifying authority and request that the following information be forwarded to me at lynne.grubb@dnr.ga.gov.

1. Copies of the most current on-site report, and proposed and accepted corrective actions
2. Copies of the Certificate and scope of accreditation listing analytes

For additional information please feel free to contact Lynne Grubb at 470-604-9528.

Sincerely,

Lynne Grubb

Lynne Grubb
Laboratory Certification Officer
Drinking Water Compliance Unit

Sean Earley
Program Manager
Drinking Water Compliance Unit

PACE ANALYTICAL SERVICES, INC.- PITTSBURGH (GA LAB ID# C040)
1638 Roseytown Road, Suites 2,3 and 4, Greensburg, PA 15601
Effective April 1, 2022 - March 31, 2023

ANALYTE	CERTIFIED BY	METHOD
RADIONUCLIDES		
Gross Alpha	PA DEP	900.0, SM 7110C
Gross Beta	PA DEP	900.0
Radium 226	PA DEP	903.0, 903.1
Radium 228	PA DEP	904.0
Uranium	PA DEP	ASTM D5174-97

APPENDIX C

Well Condition Assessment Forms and Well Maintenance and Repair Documentation

APPENDIX C

Well Condition Assessment Forms September 2022

Groundwater Monitoring Well Integrity Form

Site Name: Plant McDonough

Permit Number:

Well ID: DGWA-53

Date: 9/6/2022

		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:		Access overgrown vegetation		
Signature and Seal of PE/PG responsible for inspection				

Groundwater Monitoring Well Integrity Form

Site Name: Plant McDonough

Permit Number:

Well ID: DGWA-70A

Date: 9/6/2022

		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 McDonough

Permit Number:

Well ID: DGWA-71

Date: 9/6/2022

		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:		Overgrown vegetation		
Signature and Seal of PE/PG responsible for inspection				

Groundwater Monitoring Well Integrity Form

Site Name: Plant McDonough

Permit Number:

Well ID: DGWC-37

Date: 9/6/2022

		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 McDonough

Permit Number:

Well ID: DGWC-38

Date: 9/6/2022

		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 McDonough

Permit Number:

Well ID: DGWC-39

Date: 9/6/2022

		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 McDonough

Permit Number:

Well ID: DGWC-40

Date: 9/6/2022

		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 McDonough

Permit Number:

Well ID: DGWC-67

Date: 9/6/2022

		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 McDonough

Permit Number:

Well ID: DGWC-68A

Date: 9/6/2022

		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 McDonough

Permit Number:

Well ID: DGWC-69

Date: 9/6/2022

		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 McDonough

Permit Number:

Well ID: DGWC-121

Date: 9/6/2022

		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 McDonough

Permit Number:

Well ID: B-3

Date: 9/6/2022

		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 McDonough

Permit Number:

Well ID: B-6

Date: 9/6/2022

		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 McDonough

Permit Number:

Well ID: B-7

Date: 9/6/2022

		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:		Bollard missing		
Signature and Seal of PE/PG responsible for inspection				

Groundwater Monitoring Well Integrity Form

Site Name: Plant McDonough

Permit Number:

Well ID: B-16

Date: 9/6/2022

		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 McDonough

Permit Number:

Well ID: B-18

Date: 9/6/2022

		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 McDonough

Permit Number:

Well ID: B-24

Date: 9/6/2022

		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 McDonough

Permit Number:

Well ID: B-25

Date: 9/6/2022

		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 McDonough

Permit Number:

Well ID: B-26

Date: 9/6/2022

		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 McDonough

Permit Number:

Well ID: B-28

Date: 9/6/2022

		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 McDonough

Permit Number:

Well ID: B-29

Date: 9/6/2022

		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 McDonough

Permit Number:

Well ID: B-31

Date: 9/6/2022

		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 McDonough

Permit Number:

Well ID: B-41

Date: 9/6/2022

		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 McDonough

Permit Number:

Well ID: B-50

Date: 9/6/2022

		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 McDonough

Permit Number:

Well ID: B-51

Date: 9/6/2022

		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 McDonough

Permit Number:

Well ID: B-52

Date: 9/6/2022

		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 McDonough

Permit Number:

Well ID: B-54

Date: 9/6/2022

		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 McDonough

Permit Number:

Well ID: B-55

Date: 9/6/2022

		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 McDonough

Permit Number:

Well ID: B-56

Date: 9/6/2022

		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 McDonough

Permit Number:

Well ID: B-57

Date: 9/6/2022

		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 McDonough

Permit Number:

Well ID: B-58

Date: 9/6/2022

		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 McDonough

Permit Number:

Well ID: B-59

Date: 9/6/2022

		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:		Overgrown vegetation		
Signature and Seal of PE/PG responsible for inspection				

Groundwater Monitoring Well Integrity Form

Site Name: Plant McDonough

Permit Number:

Well ID: B-60

Date: 9/6/2022

		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 McDonough

Permit Number:

Well ID: B-61

Date: 9/6/2022

		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 McDonough

Permit Number:

Well ID: B-62

Date: 9/6/2022

		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 McDonough

Permit Number:

Well ID: B-63

Date: 9/6/2022

		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:		Damaged manhole lid		
Signature and Seal of PE/PG responsible for inspection				

Groundwater Monitoring Well Integrity Form

Site Name: Plant McDonough

Permit Number:

Well ID: B-64

Date: 9/6/2022

		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:		Well lock and bar destroyed		
Signature and Seal of PE/PG responsible for inspection				

Groundwater Monitoring Well Integrity Form

Site Name: Plant McDonough

Permit Number:

Well ID: B-65

Date: 9/6/2022

		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:		Broken bolt holes		
Signature and Seal of PE/PG responsible for inspection				

Groundwater Monitoring Well Integrity Form

Site Name: Plant McDonough

Permit Number:

Well ID: B-66

Date: 9/6/2022

		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 McDonough

Permit Number:

Well ID: B-68

Date: 9/6/2022

		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 McDonough

Permit Number:

Well ID: B-72

Date: 9/6/2022

		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 McDonough

Permit Number:

Well ID: B-73

Date: 9/6/2022

		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 McDonough

Permit Number:

Well ID: B-74

Date: 9/6/2022

		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 McDonough

Permit Number:

Well ID: B-76

Date: 9/6/2022

		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 McDonough

Permit Number:

Well ID: B-77

Date: 9/6/2022

		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 McDonough

Permit Number:

Well ID: B-78

Date: 9/6/2022

		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:		Overgrown vegetation		
Signature and Seal of PE/PG responsible for inspection				

Groundwater Monitoring Well Integrity Form

Site Name: Plant McDonough

Permit Number:

Well ID: B-79

Date: 9/6/2022

		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 McDonough

Permit Number:

Well ID: B-80

Date: 9/6/2022

		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:		Two bollards missing		
Signature and Seal of PE/PG responsible for inspection				

Groundwater Monitoring Well Integrity Form

Site Name: Plant McDonough

Permit Number:

Well ID: B-81

Date: 9/6/2022

		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 McDonough

Permit Number:

Well ID: B-82

Date: 9/6/2022

		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:		No weep hole		
Signature and Seal of PE/PG responsible for inspection				

Groundwater Monitoring Well Integrity Form

Site Name: Plant McDonough

Permit Number:

Well ID: B-83

Date: 9/6/2022

		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 McDonough

Permit Number:

Well ID: B-85

Date: 9/6/2022

		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 McDonough

Permit Number:

Well ID: B-86

Date: 9/6/2022

		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 McDonough

Permit Number:

Well ID: B-87

Date: 9/6/2022

		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:		Overgrown vegetation		
Signature and Seal of PE/PG responsible for inspection				

Groundwater Monitoring Well Integrity Form

Site Name: Plant McDonough

Permit Number:

Well ID: B-88

Date: 9/6/2022

		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:		Overgrown vegetation		
Signature and Seal of PE/PG responsible for inspection				

Groundwater Monitoring Well Integrity Form

Site Name: Plant McDonough

Permit Number:

Well ID: B-89

Date: 9/6/2022

		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:		Broken bolt hole		
Signature and Seal of PE/PG responsible for inspection				

Groundwater Monitoring Well Integrity Form

Site Name: Plant McDonough

Permit Number:

Well ID: B-90

Date: 9/6/2022

		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:		Overgrown vegetation		
Signature and Seal of PE/PG responsible for inspection				

Groundwater Monitoring Well Integrity Form

Site Name: Plant McDonough

Permit Number:

Well ID: B-91

Date: 9/6/2022

		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:		Flooded annulus		
Signature and Seal of PE/PG responsible for inspection				

Groundwater Monitoring Well Integrity Form

Site Name: Plant McDonough

Permit Number:

Well ID: B-92

Date: 9/6/2022

		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 McDonough

Permit Number:

Well ID: B-93

Date: 9/6/2022

		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 McDonough

Permit Number:

Well ID: B-94

Date: 9/6/2022

		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:		Need flat well cap, lock bar		
Signature and Seal of PE/PG responsible for inspection				

Groundwater Monitoring Well Integrity Form

Site Name: Plant McDonough

Permit Number:

Well ID: B-95

Date: 9/6/2022

		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:		Off site well, no lock bar		
Signature and Seal of PE/PG responsible for inspection				

Groundwater Monitoring Well Integrity Form

Site Name: Plant McDonough

Permit Number:

Well ID: B-96

Date: 9/6/2022

		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:		Off site well, no lock bar		
Signature and Seal of PE/PG responsible for inspection				

Groundwater Monitoring Well Integrity Form

Site Name: Plant McDonough

Permit Number:

Well ID: B-97

Date: 9/6/2022

		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:		Off site well, no lock bar		
Signature and Seal of PE/PG responsible for inspection				

Groundwater Monitoring Well Integrity Form

Site Name: Plant McDonough

Permit Number:

Well ID: B-98

Date: 9/6/2022

		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:		Off site well, no lock bar		
Signature and Seal of PE/PG responsible for inspection				

Groundwater Monitoring Well Integrity Form

Site Name: Plant McDonough

Permit Number:

Well ID: B-99

Date: 9/6/2022

		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 McDonough

Permit Number:

Well ID: B-100

Date: 9/6/2022

		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 McDonough

Permit Number:

Well ID: B-101D

Date: 9/6/2022

		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 McDonough

Permit Number:

Well ID: B-102D

Date: 9/6/2022

		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 McDonough

Permit Number:

Well ID: B-103D

Date: 9/6/2022

		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 McDonough

Permit Number:

Well ID: B-104D

Date: 9/6/2022

		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 McDonough

Permit Number:

Well ID: B-105D

Date: 9/6/2022

		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 McDonough

Permit Number:

Well ID: B-106D

Date: 9/6/2022

		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:		Two bollards fallen, overgrown		
Signature and Seal of PE/PG responsible for inspection				

Groundwater Monitoring Well Integrity Form

Site Name: Plant McDonough

Permit Number:

Well ID: B-107D

Date: 9/6/2022

		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 McDonough

Permit Number:

Well ID: B-108D

Date: 9/6/2022

		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 McDonough

Permit Number:

Well ID: B-109D

Date: 9/6/2022

		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 McDonough

Permit Number:

Well ID: B-110D

Date: 9/6/2022

		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 McDonough

Permit Number:

Well ID: B-111D

Date: 9/6/2022

		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:		Overgrown vegetation		
Signature and Seal of PE/PG responsible for inspection				

Groundwater Monitoring Well Integrity Form

Site Name: Plant McDonough

Permit Number:

Well ID: B-112D

Date: 9/6/2022

		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 McDonough

Permit Number:

Well ID: B-113D

Date: 9/6/2022

		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:		Wash out around well pad		
Signature and Seal of PE/PG responsible for inspection				

Groundwater Monitoring Well Integrity Form

Site Name: Plant McDonough

Permit Number:

Well ID: B-115D

Date: 9/6/2022

		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 McDonough

Permit Number:

Well ID: B-116D

Date: 9/6/2022

		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 McDonough

Permit Number:

Well ID: B-117D

Date: 9/6/2022

		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:		Overgrown vegetation		
Signature and Seal of PE/PG responsible for inspection				

Groundwater Monitoring Well Integrity Form

Site Name: Plant McDonough

Permit Number:

Well ID: B-118

Date: 9/6/2022

		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 McDonough

Permit Number:

Well ID: B-119D

Date: 9/6/2022

		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 McDonough

Permit Number:

Well ID: B-120D

Date: 9/6/2022

		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 McDonough

Permit Number:

Well ID: B-122D

Date: 9/6/2022

		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:		Cracked well pad		
Signature and Seal of PE/PG responsible for inspection				

Groundwater Monitoring Well Integrity Form

Site Name: Plant McDonough

Permit Number:

Well ID: B-123D

Date: 9/6/2022

		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 McDonough

Permit Number:

Well ID: AP-1-B-3

Date: 9/6/2022

		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 McDonough

Permit Number:

Well ID: AP-1-B-7

Date: 9/6/2022

		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 McDonough

Permit Number:

Well ID: AP-1-B-8

Date: 9/6/2022

		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 C

Well Condition Assessment Forms January 2023

Groundwater Monitoring Well Integrity Form

Site Name: Plant McDonough

Permit Number:

Well ID: DGWA-53

Date: 1/30/2023

		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 into 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 approved 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 McDonough

Permit Number:

Well ID: DGWA-70A

Date: 1/30/2023

		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 into 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 approved 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 McDonough

Permit Number:

Well ID: DGWA-71

Date: 1/31/2023

		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 into 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 approved 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 McDonough

Permit Number:

Well ID: DGWC-37

Date: 1/30/2023

		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 into 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 approved 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 McDonough

Permit Number:

Well ID: DGWC-38

Date: 1/30/2023

		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 into 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 approved 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 McDonough

Permit Number:

Well ID: DGWC-39

Date: 1/30/2023

		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 into 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 approved 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 McDonough

Permit Number:

Well ID: DGWC-40

Date: 1/30/2023

		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 into 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 approved 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 McDonough

Permit Number:

Well ID: DGWC-67

Date: 1/30/2023

		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 into 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 approved 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 McDonough

Permit Number:

Well ID: DGWC-68A

Date: 1/30/2023

		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 into 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 approved 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 McDonough

Permit Number:

Well ID: DGWC-69

Date: 1/30/2023

		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 into 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 approved 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 McDonough

Permit Number:

Well ID: DGWC-121

Date: 1/30/2023

		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 into 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 approved 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 McDonough

Permit Number:

Well ID: DGWC-2

Date: 1/30/2023

		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 into 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 approved 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 McDonough

Permit Number:

Well ID: DGWC-4

Date: 1/31/2023

		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 into 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 approved 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 McDonough

Permit Number:

Well ID: DGWC-5

Date: 1/31/2023

		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 into 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 approved 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 McDonough

Permit Number:

Well ID: DGWC-8

Date: 1/30/2023

		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 into 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 approved 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 McDonough

Permit Number:

Well ID: DGWC-9

Date: 1/30/2023

		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 into 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 approved 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:		Well cap needs replacement		
Signature and Seal of PE/PG responsible for inspection				

Groundwater Monitoring Well Integrity Form

Site Name: Plant McDonough

Permit Number:

Well ID: DGWC-10

Date: 1/30/2023

		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 into 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 approved 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 McDonough

Permit Number:

Well ID: DGWC-11

Date: 1/30/2023

		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 into 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 approved 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 McDonough

Permit Number:

Well ID: DGWC-12

Date: 1/30/2023

		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 into 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 approved 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 McDonough

Permit Number:

Well ID: DGWC-13

Date: 1/30/2023

		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 into 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 approved 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 McDonough

Permit Number:

Well ID: DGWC-14

Date: 1/30/2023

		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 into 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 approved 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 McDonough

Permit Number:

Well ID: DGWC-15

Date: 1/31/2023

		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 into 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 approved 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 McDonough

Permit Number:

Well ID: DGWC-17

Date: 1/31/2023

		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 into 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 approved 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 McDonough

Permit Number:

Well ID: DGWC-19

Date: 1/31/2023

		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 into 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 approved 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 McDonough

Permit Number:

Well ID: DGWC-20

Date: 1/31/2023

		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 into 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 approved 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 McDonough

Permit Number:

Well ID: DGWC-21

Date: 1/30/2023

		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 into 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 approved 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:		Remove ant mound on pad		
Signature and Seal of PE/PG responsible for inspection				

Groundwater Monitoring Well Integrity Form

Site Name: Plant McDonough

Permit Number:

Well ID: DGWC-22

Date: 1/30/2023

		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 into 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 approved 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 McDonough

Permit Number:

Well ID: DGWC-23

Date: 1/30/2023

		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 into 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 approved 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 McDonough

Permit Number:

Well ID: DGWC-42

Date: 1/30/2023

		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 into 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 approved 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:		Remove ant mound on pad		
Signature and Seal of PE/PG responsible for inspection				

Groundwater Monitoring Well Integrity Form

Site Name: Plant McDonough

Permit Number:

Well ID: DGWC-47

Date: 1/30/2023

		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 into 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 approved 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 McDonough

Permit Number:

Well ID: DGWC-48

Date: 1/30/2023

		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 into 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 approved 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 McDonough

Permit Number:

Well ID: B-3

Date: 1/31/2023

		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 into 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 approved 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 McDonough

Permit Number:

Well ID: B-6

Date: 1/30/2023

		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 into 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 approved 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 McDonough

Permit Number:

Well ID: B-7

Date: 1/30/2023

		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 into 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 approved 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 McDonough

Permit Number:

Well ID: B-16

Date: 1/31/2023

		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 into 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 approved 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 McDonough

Permit Number:

Well ID: B-18

Date: 1/31/2023

		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 into 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 approved 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 McDonough

Permit Number:

Well ID: B-24

Date: 1/30/2023

		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 into 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 approved 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 McDonough

Permit Number:

Well ID: B-25

Date: 1/30/2023

		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 into 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 approved 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 McDonough

Permit Number:

Well ID: B-26

Date: 1/30/2023

		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 into 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 approved 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 McDonough

Permit Number:

Well ID: B-28

Date: 1/30/2023

		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 into 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 approved 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 McDonough

Permit Number:

Well ID: B-29

Date: 1/31/2023

		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 into 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 approved 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 McDonough

Permit Number:

Well ID: B-31

Date: 1/31/2023

		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 into 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 approved 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 McDonough

Permit Number:

Well ID: B-41

Date: 1/30/2023

		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 into 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 approved 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 McDonough

Permit Number:

Well ID: B-50

Date: 1/30/2023

		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 into 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 approved 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 McDonough

Permit Number:

Well ID: B-51

Date: 1/30/2023

		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 into 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 approved 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 McDonough

Permit Number:

Well ID: B-52

Date: 1/31/2023

		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 into 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 approved 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 McDonough

Permit Number:

Well ID: B-54

Date: 1/30/2023

		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 into 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 approved 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 McDonough

Permit Number:

Well ID: B-55

Date: 1/31/2023

		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 into 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 approved 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 McDonough

Permit Number:

Well ID: B-56

Date: 1/30/2023

		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 into 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 approved 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 McDonough

Permit Number:

Well ID: B-57

Date: 1/30/2023

		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 into 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 approved 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 McDonough

Permit Number:

Well ID: B-58

Date: 1/30/2023

		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 into 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 approved 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 McDonough

Permit Number:

Well ID: B-59

Date: 1/31/2023

		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 into 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 approved 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 McDonough

Permit Number:

Well ID: B-60

Date: 1/30/2023

		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 into 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 approved 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 McDonough

Permit Number:

Well ID: B-61

Date: 1/30/2023

		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 into 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 approved 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 McDonough

Permit Number:

Well ID: B-62

Date: 1/30/2023

		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 into 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 approved 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 McDonough

Permit Number:

Well ID: B-63

Date: 1/30/2023

		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 into 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 approved 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:		Replace missing bolts		
Signature and Seal of PE/PG responsible for inspection				

Groundwater Monitoring Well Integrity Form

Site Name: Plant McDonough

Permit Number:

Well ID: B-64

Date: 1/31/2023

		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 into 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 approved 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 McDonough

Permit Number:

Well ID: B-65

Date: 1/31/2023

		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 into 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 approved 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 McDonough

Permit Number:

Well ID: B-66

Date: 1/31/2023

		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 into 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 approved 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 McDonough

Permit Number:

Well ID: B-68

Date: 1/30/2023

		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 into 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 approved 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 McDonough

Permit Number:

Well ID: B-72

Date: 1/30/2023

		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 into 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 approved 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 McDonough

Permit Number:

Well ID: B-73

Date: 1/30/2023

		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 into 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 approved 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 McDonough

Permit Number:

Well ID: B-74

Date: 1/30/2023

		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 into 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 approved 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 McDonough

Permit Number:

Well ID: B-76

Date: 1/30/2023

		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 into 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 approved 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 McDonough

Permit Number:

Well ID: B-77

Date: 1/30/2023

		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 into 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 approved 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 McDonough

Permit Number:

Well ID: B-78

Date: 1/31/2023

		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 into 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 approved 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 McDonough

Permit Number:

Well ID: B-79

Date: 1/31/2023

		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 into 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 approved 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 McDonough

Permit Number:

Well ID: B-80

Date: 1/30/2023

		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 into 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 approved 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 McDonough

Permit Number:

Well ID: B-81

Date: 1/30/2023

		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 into 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 approved 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 McDonough

Permit Number:

Well ID: B-82

Date: 1/31/2023

		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 into 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 approved 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 McDonough

Permit Number:

Well ID: B-83

Date: 1/30/2023

		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 into 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 approved 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 McDonough

Permit Number:

Well ID: B-85

Date: 1/30/2023

		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 into 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 approved 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:		Needs label		
Signature and Seal of PE/PG responsible for inspection				

Groundwater Monitoring Well Integrity Form

Site Name: Plant McDonough

Permit Number:

Well ID: B-86

Date: 1/30/2023

		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 into 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 approved 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:		Needs label		
Signature and Seal of PE/PG responsible for inspection				

Groundwater Monitoring Well Integrity Form

Site Name: Plant McDonough

Permit Number:

Well ID: B-87

Date: 1/30/2023

		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 into 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 approved 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 McDonough

Permit Number:

Well ID: B-88

Date: 1/31/2023

		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 into 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 approved 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 McDonough

Permit Number:

Well ID: B-89

Date: 1/31/2023

		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 into 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 approved 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 McDonough

Permit Number:

Well ID: B-90

Date: 1/31/2023

		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 into 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 approved 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 McDonough

Permit Number:

Well ID: B-91

Date: 1/31/2023

		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 into 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 approved 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 McDonough

Permit Number:

Well ID: B-92

Date: 1/31/2023

		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 into 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 approved 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 McDonough

Permit Number:

Well ID: B-93

Date: 1/31/2023

		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 into 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 approved 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 McDonough

Permit Number:

Well ID: B-94

Date: 1/30/2023

		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 into 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 approved 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:		Lock needs replacement		
Signature and Seal of PE/PG responsible for inspection				

Groundwater Monitoring Well Integrity Form

Site Name: Plant McDonough

Permit Number:

Well ID: B-95

Date: 1/31/2023

		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 into 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 approved 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 McDonough

Permit Number:

Well ID: B-96

Date: 1/31/2023

		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 into 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 approved 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 McDonough

Permit Number:

Well ID: B-97

Date: 1/31/2023

		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 into 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 approved 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 McDonough

Permit Number:

Well ID: B-98

Date: 1/31/2023

		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 into 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 approved 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 McDonough

Permit Number:

Well ID: B-99

Date: 1/30/2023

		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 into 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 approved 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 McDonough

Permit Number:

Well ID: B-100

Date: 1/30/2023

		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 into 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 approved 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 McDonough

Permit Number:

Well ID: B-101D

Date: 1/31/2023

		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 into 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 approved 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 McDonough

Permit Number:

Well ID: B-102D

Date: 1/30/2023

		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 into 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 approved 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:		Ant mound on pad		
Signature and Seal of PE/PG responsible for inspection				

Groundwater Monitoring Well Integrity Form

Site Name: Plant McDonough

Permit Number:

Well ID: B-103D

Date: 1/30/2023

		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 into 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 approved 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 McDonough

Permit Number:

Well ID: B-104D

Date: 1/30/2023

		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 into 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 approved 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 McDonough

Permit Number:

Well ID: B-105D

Date: 1/30/2023

		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 into 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 approved 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 McDonough

Permit Number:

Well ID: B-106D

Date: 1/30/2023

		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 into 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 approved 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 McDonough

Permit Number:

Well ID: B-107D

Date: 1/31/2023

		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 into 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 approved 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 McDonough

Permit Number:

Well ID: B-108D

Date: 1/31/2023

		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 into 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 approved 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 McDonough

Permit Number:

Well ID: B-109D

Date: 1/30/2023

		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 into 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 approved 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 McDonough

Permit Number:

Well ID: B-110D

Date: 1/30/2023

		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 into 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 approved 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 McDonough

Permit Number:

Well ID: B-111D

Date: 1/31/2023

		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 into 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 approved 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 McDonough

Permit Number:

Well ID: B-112D

Date: 1/30/2023

		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 into 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 approved 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 McDonough

Permit Number:

Well ID: B-113D

Date: 1/30/2023

		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 into 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 approved 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 McDonough

Permit Number:

Well ID: B-115D

Date: 1/30/2023

		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 into 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 approved 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 McDonough

Permit Number:

Well ID: B-116D

Date: 1/30/2023

		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 into 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 approved 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 McDonough

Permit Number:

Well ID: B-117D

Date: 1/31/2023

		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 into 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 approved 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 McDonough

Permit Number:

Well ID: B-118

Date: 1/30/2023

		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 into 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 approved 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 McDonough

Permit Number:

Well ID: B-119D

Date: 1/31/2023

		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 into 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 approved 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 McDonough

Permit Number:

Well ID: B-120D

Date: 1/31/2023

		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 into 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 approved 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 McDonough

Permit Number:

Well ID: B-122D

Date: 1/30/2023

		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 into 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 approved 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 McDonough

Permit Number:

Well ID: B-123D

Date: 1/30/2023

		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 into 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 approved 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 McDonough

Permit Number:

Well ID: AP-1-B-3

Date: 1/31/2023

		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 into 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 approved 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 McDonough

Permit Number:

Well ID: AP-1-B-7

Date: 1/31/2023

		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 into 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 approved 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 McDonough

Permit Number:

Well ID: AP-1-B-8

Date: 1/31/2023

		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 into 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 approved 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 McDonough

Permit Number:

Well ID: DW-1

Date: 1/31/2023

		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 into 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 approved 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 McDonough

Permit Number:

Well ID: DW-2

Date: 1/31/2023

		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 into 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 approved 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 McDonough

Permit Number:

Well ID: DW-3

Date: 1/31/2023

		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 into 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 approved 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 McDonough

Permit Number:

Well ID: DW-4

Date: 1/31/2023

		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 into 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 approved 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				

Surface Water Monitoring Integrity Form

Site Name: Plant McDonough

Permit Number:

Well ID: WT-1

Date: 1/30/2023

		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 into 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 approved 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				

Surface Water Monitoring Integrity Form

Site Name: Plant McDonough

Permit Number:

Well ID: WT-2

Date: 1/30/2023

		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 into 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 approved 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				

Surface Water Monitoring Integrity Form

Site Name: Plant McDonough

Permit Number:

Well ID: WT-3

Date: 1/30/2023

		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 into 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 approved 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				

Surface Water Monitoring Integrity Form

Site Name: Plant McDonough

Permit Number:

Well ID: WT-4

Date: 1/30/2023

		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 into 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 approved 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				

Surface Water Monitoring Integrity Form

Site Name: Plant McDonough

Permit Number:

Well ID: WT-5

Date: 1/30/2023

		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 into 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 approved 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				

Surface Water Monitoring Integrity Form

Site Name: Plant McDonough

Permit Number:

Well ID: WT-6

Date: 1/30/2023

		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 into 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 approved 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:		Tree fallen on gauge		
Signature and Seal of PE/PG responsible for inspection				

Surface Water Monitoring Integrity Form

Site Name: Plant McDonough

Permit Number:

Well ID: WT-7

Date: 1/30/2023

		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 into 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 approved 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				

Surface Water Monitoring Integrity Form

Site Name: Plant McDonough

Permit Number:

Well ID: ET-1

Date: 1/30/2023

		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 into 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 approved 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				

TECHNICAL MEMORANDUM

DATE July 31, 2023

TO Joju Abraham, PG
Southern Company Services

CC Ben Hodges, Georgia Power Company

FROM WSP USA Inc

PLANT MCDONOUGH ASH POND 1, ASH POND 2, AND ASH POND 3/4
WELL MAINTENANCE AND REPAIR DOCUMENTATION
GEORGIA POWER COMPANY

WSP USA Inc. (WSP) has prepared this memorandum to provide documentation of groundwater monitoring well maintenance and/or repair performed at Plant McDonough Ash Pond 1, and Ash Pond 2 and 3/4 on March 30, and April 3 and 4, 2023. Repairs and maintenance were completed in accordance with 12-5-134 (5)(D)vii of the Georgia Well Standards Act (1985) for routine visual inspections of groundwater monitoring wells (i.e., at least once every five years) under the direction of a Georgia licensed professional engineer or geologist.

Table 1: Plant McDonough Ash Pond 1 – Well Maintenance Summary

Well ID	Date Performed	Maintenance/Repair Performed
DGWA-53	March and April 2023	Vegetation cleared to improve access and visibility
DGWC-9	March and April 2023	Vegetation cleared to improve access and visibility
DGWC-21	March and April 2023	Ant bed removed to improve access
B-62	March and April 2023	Bolts reinstalled
DGWC-8	March and April 2023	Vegetation cleared to improve access and visibility
B-64	March and April 2023	Locking bar repaired
B-82	March and April 2023	Weep hole added
B-94	March and April 2023	Well cap replaced
B-95	March and April 2023	Locking bar installed
B-96	March and April 2023	Locking bar installed
B-97	March and April 2023	Locking bar installed
B-98	March and April 2023	Locking bar installed

Well ID	Date Performed	Maintenance/Repair Performed
WT-6	March and April 2023	Gauge straightened up
B-122D	March and April 2023	Demolished cracked well pad and replaced
B-89	March and April 2023	Bolt holes retapped in manhole, locking bar added
B-63	March and April 2023	Old well pad and manhole demolished, new manhole and well pad installed
B-65	March and April 2023	Old well pad and manhole demolished, new well pad and 5” manhole installed, locking bar reinstalled

WSP USA Inc.

Dawn L. Prell
Senior Consultant, Hydrogeologist

Rhonda Quinn, PG
Senior Consultant, Geologist

Attachments: Southern Company CFS
Plant McDonough March/April 2023 Well O&M
(Mar 30th, April 3-4)

https://golderassociates.sharepoint.com/sites/11950g/shared documents/200_reports_technical work/annual gw monitoring rpt/2023 annual report/ap-1/appendices/appendix c well condition/mcdonough ap1234 well repair memo apr 2023.docx

Southern Company CFS
Plant McDonough March/April 2023 Well O&M
(Mar 30th, April 3-4)

DGWA-53 – Cut weeds back from around well pad.

DGWC-9 – Removed bee's nest, installed locking cap.

Southern Company

Southern Company CFS
Plant McDonough March/April 2023 Well O&M
(Mar 30th, April 3-4)

DGWC-21 – Removed ant bed.

DGWC-42 – Removed ant bed.

B-62 – Reinstalled bolts. (Notes indicated broken bracket. After inspection bracket was not broken, bolts laying inside the cover.)

Southern Company

Southern Company CFS
Plant McDonough March/April 2023 Well O&M
(Mar 30th, April 3-4)

B-6 – Inspected B-6 and did not need maintenance. (Notes indicated needed locking bar but B-6 is a stickup well, not flush mount.)

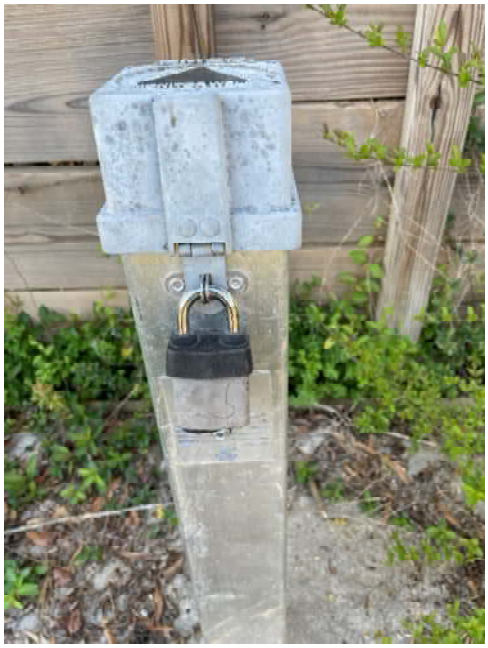
B-64 – Repaired locking bar.

Southern Company

Southern Company CFS
Plant McDonough March/April 2023 Well O&M
(Mar 30th, April 3-4)

B-82 – Drilled weep hole.

B-94 – replaced well cap so the protective cover will lock.



Southern Company

Southern Company CFS
Plant McDonough March/April 2023 Well O&M
(Mar 30th, April 3-4)

B-95 – Installed locking bar.

B-96 – Installed Locking bar.

Southern Company

Southern Company CFS
Plant McDonough March/April 2023 Well O&M
(Mar 30th, April 3-4)

B-97 – Installed locking bar.

B-98 – Installed locking bar.

Southern Company

Southern Company CFS
Plant McDonough March/April 2023 Well O&M
(Mar 30th, April 3-4)

B-102D – No ant beds on pad currently

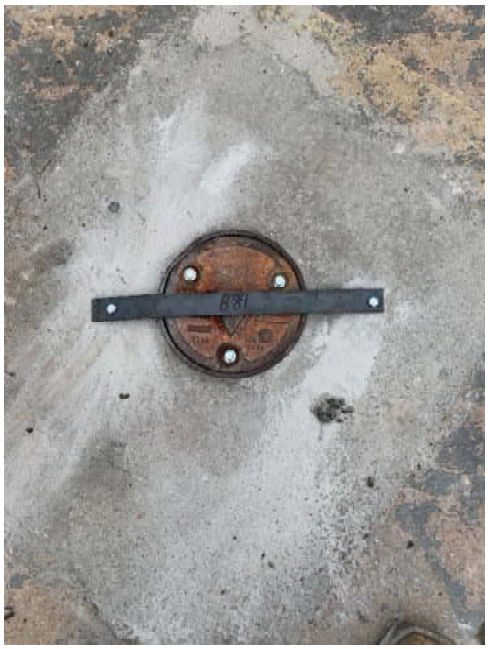
WT-6 – Straightened the gauge up, however the wires connecting the gauge to the tree (yellow wire seen in picture) was ripped out of the gauge by whatever hit the gauge. The wiring will need to be repaired/reinstalled, and the gauge needs to be resurveyed.

Southern Company

Southern Company CFS
Plant McDonough March/April 2023 Well O&M
(Mar 30th, April 3-4)

B-122D – Demolished cracked well pad and replaced.

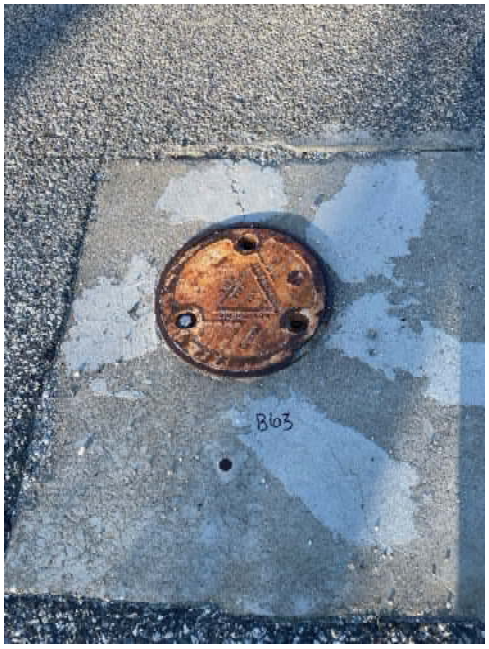
B-89 – Retapped bolt holes in manhole, added bar.



Southern Company

Southern Company CFS
Plant McDonough March/April 2023 Well O&M
(Mar 30th, April 3-4)

B-63 – Demolished old pad and manhole, installed new manhole and pad.



B-65 – Demolished old pad and manhole, Installed new 5” manhole (to try to take pressure off the manhole from the concrete trucks), reinstalled bar.

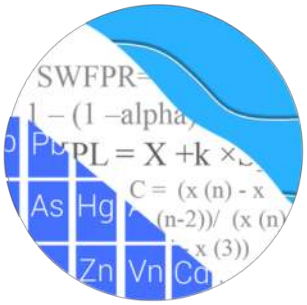
Southern Company

APPENDIX D

Statistical Analyses, September 2022

GROUNDWATER STATS CONSULTING

February 28, 2023



Southern Company Services
Attn: Mr. Joju Abraham
241 Ralph McGill Blvd NE, Bin 10160
Atlanta, Georgia 30308-3374

Re: Plant McDonough Ash Pond (AP-1)
September 2022 Statistical Analysis

Dear Mr. Abraham,

Groundwater Stats Consulting, formerly the statistical consulting division of Sanitas Technologies, is pleased to provide the September 2022 Semi-Annual Groundwater Monitoring and Corrective Action Statistical summary of groundwater data for Georgia Power Company's Plant McDonough AP-1. The analysis complies with the federal rule for the Disposal of Coal Combustion Residuals from Electric Utilities (CCR Rule, 2015), the Georgia Environmental Protection Division Rules for Solid Waste Management Chapter 391-3-4-.10 and follows the United States Environmental Protection Agency (USEPA) Unified Guidance (2009).

Sampling for the Appendix III parameters began in 2016, and at least 8 background samples were collected at each of the groundwater monitoring wells. The assessment wells were installed at various times since 2020 and have limited data. Semi-annual sampling of the majority of Appendix IV constituents has been performed for the groundwater monitoring wells for several years in accordance with the Georgia Department of Natural Resources, Environmental Protection Division groundwater monitoring regulations. A list of all parameters is provided below.

The monitoring well network, as provided by Southern Company Services, consists of the following:

- **Upgradient wells:** DGWA-53, DGWA-70A, and DGWA-71
- **Downgradient wells:** DGWC-37, DGWC-38, DGWC-39, DGWC-40, DGWC-67, DGWC-68A, DGWC-69, and DGWC-121
- **Assessment wells:** B-62, B-100, B-105D, B-112D, and B-113D

Note that downgradient well DGWC-121 was installed in March 2022 and was first sampled in June 2022, for all constituents except combined radium 226 + 228, which was first sampled in September 2022. Data from this well are plotted on the time series graphs and box plots, and Appendix IV constituents will be evaluated using confidence intervals, which require a minimum of 4 samples, once a sufficient number of samples are available. Interwell prediction limits will be used to evaluate Appendix III data at these wells when a minimum of 8 samples are available.

Data were sent electronically to Groundwater Stats Consulting, and the statistical analysis was reviewed by Andrew Collins, Project Manager of Groundwater Stats Consulting. The analysis is prepared according to the recommended statistical methodology prepared in the Fall 2017 by Dr. Kirk Cameron, PhD Statistician with MacStat Consulting, primary author of the USEPA Unified Guidance.

The Coal Combustion Residual (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 downgradient and assessment well/constituent pairs with 100% non-detects follows this letter.

Time series plots for Appendix III and IV parameters at all wells are provided for the purpose of screening data at these wells (Figure A). Additionally, a separate section of box plots is included for all constituents at upgradient and downgradient wells (Figure B). The time series plots are used to initially screen for suspected outliers and trends, while the box plots provide visual representation of variation within individual wells and between all wells. Note that due to flooding in well DGWC-68A during the September 2021 sample event, this well was, reportedly, re-developed and resamples were collected in October 2021 for arsenic, barium, chromium, cobalt, and pH. While the September 2021 reported results remain in the database for this well, these measurements were flagged as outliers. 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. Non-detects are handled as follows:

- 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 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 the intrawell case, data for all wells and constituents may be re-evaluated when a minimum of 4 new data points are available to determine whether earlier concentrations are representative of present-day groundwater quality. In some cases, the earlier portion of data may require deselection 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 are used to identify suspected outliers, or extreme values that would result in limits that are not representative of the current background data population. Suspected outliers at all wells for Appendix III and Appendix IV parameters are formally tested using Tukey's box plot method and, when identified, flagged in the computer database with "o" and deselected prior to construction of statistical limits.

Using the Tukey box plot method, several outliers were identified, and the reports were submitted with the screening. In cases where the most recent value was identified as an outlier, values were not flagged in the database at that time 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 laboratory's 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.

Of the outliers identified by Tukey's method, only a few of these values were flagged in the database as all other values are similar to remaining measurements within a given well or neighboring wells or were non-detects.

Additionally, when any values are flagged in the database as outliers, they are plotted in a disconnected and lighter symbol on the time series graph. The accompanying data pages display the flagged value in a lighter font as well. A substitution of the most recent

reporting limit was applied when varying detection limits existed in data. When the reporting limit was higher than the Regional Screening Levels discussed below, non-detects were substituted with one half the reporting limit.

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 Test Evaluation

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, all available data are evaluated to determine whether earlier concentration levels are significantly different than current reported concentrations and will be deselected as necessary. When any 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 were included with the previous screening and showed two statistically significant decreasing trends for the Appendix III parameters. The only trend identified in the upgradient wells was a statistically significant decreasing trend for sulfate in well DGWA-71. 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 are not representative of the current background data population; 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 which would indicate intrawell analyses may be most appropriate for these parameters. 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.

Statistical Analysis of Appendix III Parameters – September 2022

Interwell Prediction Limits

Interwell prediction limits, combined with a 1-of-2 resample plan, were constructed using all historical upgradient well data through September 2022 (Figure D). Interwell prediction limits pool upgradient well data to establish a background limit for an individual constituent. The September 2022 sample event 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 a resample confirms the initial exceedance, a statistically significant increase is identified, and further research would be required to identify the cause of the exceedance (i.e., impact from the site, natural variation, or an off-site source). If the resample falls within the statistical limit, the initial exceedance is considered to be a false positive result. Therefore, no exceedance is noted, and no further action is necessary. If no resample is collected, the original result is considered a confirmed exceedance. Several prediction limit exceedances were noted for Appendix III parameters. A summary table of the interwell prediction limits follows this letter. Exceedances were noted for the following well/constituent pairs:

- Boron: DGWC-37, GDWC-38, DGWC-39, DGWC-40, DGWC-67, DGWC-68A, and DGWC-69
- Calcium: DGWC-37, DGWC-38, DGWC-39, DGWC-40, DGWC-67, and DGWC-68A
- Chloride: DGWC-38, DGWC-40, and DGWC-67

- pH: DGWC-40 and DGWC-68A
- Sulfate: DGWC-37, DGWC-38, DGWC-39, DGWC-40, and DGWC-67
- TDS: DGWC-37, DGWC-38, DGWC-39, DGWC-40, and DGWC-68A

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 at the 99% confidence level to determine whether concentrations are statistically increasing, decreasing, or stable (Figure E). Upgradient wells are included in the trend analyses for all parameters found to exceed their prediction limit in downgradient wells. Similar patterns that are present in both upgradient and downgradient wells are an indication of natural variability in groundwater quality, unrelated to practices at the site. A summary of the trend test results follows this letter. Statistically significant trends were noted for the following well/constituent pairs:

Increasing trends:
- Chloride: DGWC-67

Decreasing trends:
- Calcium: DGWA-53 (upgradient)
- Chloride: DGWA-53 (upgradient) and DGWC-40
- Sulfate: DGWA-70A (upgradient), DGWA-71 (upgradient), DGWC-38, DGWC-39, and DGWC-40
- TDS: DGWA-53 (upgradient) and DGWC-39

Statistical Analysis of Appendix IV Parameters – September 2022

For Appendix IV parameters, confidence intervals for each downgradient well/constituent were compared against corresponding Groundwater Protection Standards (GWPS). GWPS were developed as described below. Downgradient well/constituent pairs that have 100% non-detects do not require analysis. Data from all wells for Appendix IV parameters are reassessed for outliers during each analysis prior to constructing statistical limits. No new values were flagged during this analysis and a complete list of flagged outliers follows this report (Figure C).

Interwell Upper Tolerance Limits

Interwell upper tolerance limits were used to calculate site-specific background limits from all available pooled upgradient well data through September 2022 for Appendix IV

constituents (Figure F). Parametric tolerance limits are used when data follow a normal or transformed-normal distribution such as for combined radium. When data contained greater than 50% non-detects or did not follow a normal or transformed-normal distribution, non-parametric tolerance limits were used.

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 accordance with the state requirements in each downgradient well (Figure H). Note that confidence intervals require a minimum of 4 samples and, in many cases, the assessment wells had insufficient samples at this time. The Sanitas software was used to calculate the tolerance limits and the confidence intervals.

Due to the required transformations to fit the data to a transformed normal distribution, the lower confidence limits resulted in negative numbers for some well/constituent pairs. Therefore, non-parametric confidence intervals, which are bound by reported high and low measurements within a given well, were constructed for these particular cases and may be found at the end of Figure H. This is a more conservative approach in that the

lower confidence limit reflects the lowest reported measurement in the data set rather than a negative number.

Confidence intervals were compared to the GWPS prepared as described above. 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. A summary of the confidence intervals follows this letter. Exceedances were noted for the following well/constituent pairs:

- Arsenic: DGWC-69
- Cobalt: DGWC-40
- Molybdenum: DGWC-68A

Trend Test Evaluation – Appendix IV

Data at wells with confidence interval exceedances are further evaluated using the Sen's Slope/Mann Kendall trend test at the 99% confidence level to determine whether concentrations are statistically increasing, decreasing, or stable (Figure I). Upgradient wells are included in the trend analyses for all parameters found to exceed their prediction limit in downgradient wells to identify whether similar patterns exist upgradient of the site. 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. Statistically significant trends were identified for the following well/constituent pairs:

Increasing
- None

Decreasing
- Cobalt: DGWA-53 (upgradient)

Thank you for the opportunity to assist you in the statistical analysis of groundwater quality for McDonough Ash Pond 1. If you have any questions or comments, please feel free to contact us.

For Groundwater Stats Consulting,

Tristan Clark
Groundwater Analyst

Andrew Collins
Project Manager

100% Non-Detects: Appendix IV Downgradient & Assessment

Analysis Run 11/18/2022 12:17 PM View: AP 1 Confidence Intervals
Plant McDonough Client: Southern Company Data: McDonough AP

Antimony (mg/L)
DGWC-37, DGWC-38, DGWC-39

Arsenic (mg/L)
B-100

Beryllium (mg/L)
DGWC-39, DGWC-67, B-105D, B-112D, B-113D

Cadmium (mg/L)
DGWC-39, B-105D, B-112D, B-62

Chromium (mg/L)
DGWC-39

Cobalt (mg/L)
B-113D

Lead (mg/L)
B-62

Lithium (mg/L)
DGWC-39

Mercury (mg/L)
B-112D, B-113D, B-62

Molybdenum (mg/L)
DGWC-37, DGWC-39, DGWC-40, DGWC-67, B-100, B-62

Selenium (mg/L)
DGWC-37, DGWC-39, DGWC-69, B-105D, B-112D, B-113D, B-62

Thallium (mg/L)
DGWC-37, DGWC-67, DGWC-69, B-100, B-105D, B-112D, B-113D, B-62

Interwell Prediction Limit - Significant Results

Plant McDonough Client: Southern Company Data: McDonough AP Printed 10/17/2022, 2:06 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	%NDs	ND Adj.	Transform	Alpha	Method
Boron, total (mg/L)	DGWC-37	0.13	n/a	9/8/2022	2	Yes	47	27.66	n/a	n/a	0.0008532	NP Inter (normality) 1 of 2
Boron, total (mg/L)	DGWC-38	0.13	n/a	9/12/2022	2.8	Yes	47	27.66	n/a	n/a	0.0008532	NP Inter (normality) 1 of 2
Boron, total (mg/L)	DGWC-39	0.13	n/a	9/7/2022	3.3	Yes	47	27.66	n/a	n/a	0.0008532	NP Inter (normality) 1 of 2
Boron, total (mg/L)	DGWC-40	0.13	n/a	9/7/2022	0.84	Yes	47	27.66	n/a	n/a	0.0008532	NP Inter (normality) 1 of 2
Boron, total (mg/L)	DGWC-67	0.13	n/a	9/8/2022	4.3	Yes	47	27.66	n/a	n/a	0.0008532	NP Inter (normality) 1 of 2
Boron, total (mg/L)	DGWC-68A	0.13	n/a	9/7/2022	2	Yes	47	27.66	n/a	n/a	0.0008532	NP Inter (normality) 1 of 2
Boron, total (mg/L)	DGWC-69	0.13	n/a	9/7/2022	0.23	Yes	47	27.66	n/a	n/a	0.0008532	NP Inter (normality) 1 of 2
Calcium, total (mg/L)	DGWC-37	40.3	n/a	9/8/2022	66.2	Yes	47	4.255	n/a	n/a	0.0008532	NP Inter (normality) 1 of 2
Calcium, total (mg/L)	DGWC-38	40.3	n/a	9/12/2022	87.6	Yes	47	4.255	n/a	n/a	0.0008532	NP Inter (normality) 1 of 2
Calcium, total (mg/L)	DGWC-39	40.3	n/a	9/7/2022	92.5	Yes	47	4.255	n/a	n/a	0.0008532	NP Inter (normality) 1 of 2
Calcium, total (mg/L)	DGWC-40	40.3	n/a	9/7/2022	44.8	Yes	47	4.255	n/a	n/a	0.0008532	NP Inter (normality) 1 of 2
Calcium, total (mg/L)	DGWC-67	40.3	n/a	9/8/2022	47.4	Yes	47	4.255	n/a	n/a	0.0008532	NP Inter (normality) 1 of 2
Calcium, total (mg/L)	DGWC-68A	40.3	n/a	9/7/2022	53.5	Yes	47	4.255	n/a	n/a	0.0008532	NP Inter (normality) 1 of 2
Chloride, Total (mg/L)	DGWC-38	8.2	n/a	9/12/2022	8.5	Yes	49	0	n/a	n/a	0.0007761	NP Inter (normality) 1 of 2
Chloride, Total (mg/L)	DGWC-40	8.2	n/a	9/7/2022	15	Yes	49	0	n/a	n/a	0.0007761	NP Inter (normality) 1 of 2
Chloride, Total (mg/L)	DGWC-67	8.2	n/a	9/8/2022	8.9	Yes	49	0	n/a	n/a	0.0007761	NP Inter (normality) 1 of 2
pH, Field (SU)	DGWC-40	6.568	5.268	9/7/2022	4.54	Yes	56	0	None	ln(x)	0.0005373	Param Inter 1 of 2
pH, Field (SU)	DGWC-68A	6.568	5.268	9/7/2022	6.62	Yes	56	0	None	ln(x)	0.0005373	Param Inter 1 of 2
Sulfate as SO4 (mg/L)	DGWC-37	49	n/a	9/8/2022	96.6	Yes	49	14.29	n/a	n/a	0.0007761	NP Inter (normality) 1 of 2
Sulfate as SO4 (mg/L)	DGWC-38	49	n/a	9/12/2022	234	Yes	49	14.29	n/a	n/a	0.0007761	NP Inter (normality) 1 of 2
Sulfate as SO4 (mg/L)	DGWC-39	49	n/a	9/7/2022	146	Yes	49	14.29	n/a	n/a	0.0007761	NP Inter (normality) 1 of 2
Sulfate as SO4 (mg/L)	DGWC-40	49	n/a	9/7/2022	203	Yes	49	14.29	n/a	n/a	0.0007761	NP Inter (normality) 1 of 2
Sulfate as SO4 (mg/L)	DGWC-67	49	n/a	9/8/2022	117	Yes	49	14.29	n/a	n/a	0.0007761	NP Inter (normality) 1 of 2
Total Dissolved Solids [TDS] (mg/L)	DGWC-37	254.7	n/a	9/8/2022	300	Yes	48	0	None	x^(1/3)	0.001075	Param Inter 1 of 2
Total Dissolved Solids [TDS] (mg/L)	DGWC-38	254.7	n/a	9/12/2022	468	Yes	48	0	None	x^(1/3)	0.001075	Param Inter 1 of 2
Total Dissolved Solids [TDS] (mg/L)	DGWC-39	254.7	n/a	9/7/2022	449	Yes	48	0	None	x^(1/3)	0.001075	Param Inter 1 of 2
Total Dissolved Solids [TDS] (mg/L)	DGWC-40	254.7	n/a	9/7/2022	339	Yes	48	0	None	x^(1/3)	0.001075	Param Inter 1 of 2
Total Dissolved Solids [TDS] (mg/L)	DGWC-68A	254.7	n/a	9/7/2022	256	Yes	48	0	None	x^(1/3)	0.001075	Param Inter 1 of 2

Interwell Prediction Limit - All Results

Plant McDonough Client: Southern Company Data: McDonough AP Printed 10/17/2022, 2:06 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	%NDs	ND Adj.	Transform	Alpha	Method
Boron, total (mg/L)	**DGWC-37**	**0.13**	**n/a**	**9/8/2022**	**2**	**Yes**	**47**	**27.66**	**n/a**	**n/a**	**0.0008532**	**NP Inter (normality) 1 of 2**
Boron, total (mg/L)	**DGWC-38**	**0.13**	**n/a**	**9/12/2022**	**2.8**	**Yes**	**47**	**27.66**	**n/a**	**n/a**	**0.0008532**	**NP Inter (normality) 1 of 2**
Boron, total (mg/L)	**DGWC-39**	**0.13**	**n/a**	**9/7/2022**	**3.3**	**Yes**	**47**	**27.66**	**n/a**	**n/a**	**0.0008532**	**NP Inter (normality) 1 of 2**
Boron, total (mg/L)	**DGWC-40**	**0.13**	**n/a**	**9/7/2022**	**0.84**	**Yes**	**47**	**27.66**	**n/a**	**n/a**	**0.0008532**	**NP Inter (normality) 1 of 2**
Boron, total (mg/L)	**DGWC-67**	**0.13**	**n/a**	**9/8/2022**	**4.3**	**Yes**	**47**	**27.66**	**n/a**	**n/a**	**0.0008532**	**NP Inter (normality) 1 of 2**
Boron, total (mg/L)	**DGWC-68A**	**0.13**	**n/a**	**9/7/2022**	**2**	**Yes**	**47**	**27.66**	**n/a**	**n/a**	**0.0008532**	**NP Inter (normality) 1 of 2**
Boron, total (mg/L)	**DGWC-69**	**0.13**	**n/a**	**9/7/2022**	**0.23**	**Yes**	**47**	**27.66**	**n/a**	**n/a**	**0.0008532**	**NP Inter (normality) 1 of 2**
Calcium, total (mg/L)	**DGWC-37**	**40.3**	**n/a**	**9/8/2022**	**66.2**	**Yes**	**47**	**4.255**	**n/a**	**n/a**	**0.0008532**	**NP Inter (normality) 1 of 2**
Calcium, total (mg/L)	**DGWC-38**	**40.3**	**n/a**	**9/12/2022**	**87.6**	**Yes**	**47**	**4.255**	**n/a**	**n/a**	**0.0008532**	**NP Inter (normality) 1 of 2**
Calcium, total (mg/L)	**DGWC-39**	**40.3**	**n/a**	**9/7/2022**	**92.5**	**Yes**	**47**	**4.255**	**n/a**	**n/a**	**0.0008532**	**NP Inter (normality) 1 of 2**
Calcium, total (mg/L)	**DGWC-40**	**40.3**	**n/a**	**9/7/2022**	**44.8**	**Yes**	**47**	**4.255**	**n/a**	**n/a**	**0.0008532**	**NP Inter (normality) 1 of 2**
Calcium, total (mg/L)	**DGWC-67**	**40.3**	**n/a**	**9/8/2022**	**47.4**	**Yes**	**47**	**4.255**	**n/a**	**n/a**	**0.0008532**	**NP Inter (normality) 1 of 2**
Calcium, total (mg/L)	**DGWC-68A**	**40.3**	**n/a**	**9/7/2022**	**53.5**	**Yes**	**47**	**4.255**	**n/a**	**n/a**	**0.0008532**	**NP Inter (normality) 1 of 2**
Calcium, total (mg/L)	DGWC-69	40.3	n/a	9/7/2022	13.1	No	47	4.255	n/a	n/a	0.0008532	NP Inter (normality) 1 of 2
Chloride, Total (mg/L)	DGWC-37	8.2	n/a	9/8/2022	5.4	No	49	0	n/a	n/a	0.0007761	NP Inter (normality) 1 of 2
Chloride, Total (mg/L)	**DGWC-38**	**8.2**	**n/a**	**9/12/2022**	**8.5**	**Yes**	**49**	**0**	**n/a**	**n/a**	**0.0007761**	**NP Inter (normality) 1 of 2**
Chloride, Total (mg/L)	DGWC-39	8.2	n/a	9/7/2022	8.2	No	49	0	n/a	n/a	0.0007761	NP Inter (normality) 1 of 2
Chloride, Total (mg/L)	**DGWC-40**	**8.2**	**n/a**	**9/7/2022**	**15**	**Yes**	**49**	**0**	**n/a**	**n/a**	**0.0007761**	**NP Inter (normality) 1 of 2**
Chloride, Total (mg/L)	**DGWC-67**	**8.2**	**n/a**	**9/8/2022**	**8.9**	**Yes**	**49**	**0**	**n/a**	**n/a**	**0.0007761**	**NP Inter (normality) 1 of 2**
Chloride, Total (mg/L)	DGWC-68A	8.2	n/a	9/7/2022	4.1	No	49	0	n/a	n/a	0.0007761	NP Inter (normality) 1 of 2
Chloride, Total (mg/L)	DGWC-69	8.2	n/a	9/7/2022	4.9	No	49	0	n/a	n/a	0.0007761	NP Inter (normality) 1 of 2
Fluoride, total (mg/L)	DGWC-37	0.42	n/a	9/8/2022	0.082J	No	54	50	n/a	n/a	0.0006506	NP Inter (normality) 1 of 2
Fluoride, total (mg/L)	DGWC-38	0.42	n/a	9/12/2022	0.12	No	54	50	n/a	n/a	0.0006506	NP Inter (normality) 1 of 2
Fluoride, total (mg/L)	DGWC-39	0.42	n/a	9/7/2022	0.11	No	54	50	n/a	n/a	0.0006506	NP Inter (normality) 1 of 2
Fluoride, total (mg/L)	DGWC-40	0.42	n/a	9/7/2022	0.14	No	54	50	n/a	n/a	0.0006506	NP Inter (normality) 1 of 2
Fluoride, total (mg/L)	DGWC-67	0.42	n/a	9/8/2022	0.096J	No	54	50	n/a	n/a	0.0006506	NP Inter (normality) 1 of 2
Fluoride, total (mg/L)	DGWC-68A	0.42	n/a	9/7/2022	0.11	No	54	50	n/a	n/a	0.0006506	NP Inter (normality) 1 of 2
Fluoride, total (mg/L)	DGWC-69	0.42	n/a	9/7/2022	0.11	No	54	50	n/a	n/a	0.0006506	NP Inter (normality) 1 of 2
pH, Field (SU)	DGWC-37	6.568	5.268	9/9/2022	6.3	No	56	0	None	ln(x)	0.0005373	Param Inter 1 of 2
pH, Field (SU)	DGWC-38	6.568	5.268	9/12/2022	6.05	No	56	0	None	ln(x)	0.0005373	Param Inter 1 of 2
pH, Field (SU)	DGWC-39	6.568	5.268	9/7/2022	6.43	No	56	0	None	ln(x)	0.0005373	Param Inter 1 of 2
pH, Field (SU)	**DGWC-40**	**6.568**	**5.268**	**9/7/2022**	**4.54**	**Yes**	**56**	**0**	**None**	**ln(x)**	**0.0005373**	**Param Inter 1 of 2**
pH, Field (SU)	DGWC-67	6.568	5.268	9/8/2022	6.21	No	56	0	None	ln(x)	0.0005373	Param Inter 1 of 2
pH, Field (SU)	**DGWC-68A**	**6.568**	**5.268**	**9/7/2022**	**6.62**	**Yes**	**56**	**0**	**None**	**ln(x)**	**0.0005373**	**Param Inter 1 of 2**
pH, Field (SU)	DGWC-69	6.568	5.268	9/7/2022	6.2	No	56	0	None	ln(x)	0.0005373	Param Inter 1 of 2
Sulfate as SO4 (mg/L)	**DGWC-37**	**49**	**n/a**	**9/8/2022**	**96.6**	**Yes**	**49**	**14.29**	**n/a**	**n/a**	**0.0007761**	**NP Inter (normality) 1 of 2**
Sulfate as SO4 (mg/L)	**DGWC-38**	**49**	**n/a**	**9/12/2022**	**234**	**Yes**	**49**	**14.29**	**n/a**	**n/a**	**0.0007761**	**NP Inter (normality) 1 of 2**
Sulfate as SO4 (mg/L)	**DGWC-39**	**49**	**n/a**	**9/7/2022**	**146**	**Yes**	**49**	**14.29**	**n/a**	**n/a**	**0.0007761**	**NP Inter (normality) 1 of 2**
Sulfate as SO4 (mg/L)	**DGWC-40**	**49**	**n/a**	**9/7/2022**	**203**	**Yes**	**49**	**14.29**	**n/a**	**n/a**	**0.0007761**	**NP Inter (normality) 1 of 2**
Sulfate as SO4 (mg/L)	**DGWC-67**	**49**	**n/a**	**9/8/2022**	**117**	**Yes**	**49**	**14.29**	**n/a**	**n/a**	**0.0007761**	**NP Inter (normality) 1 of 2**
Sulfate as SO4 (mg/L)	DGWC-68A	49	n/a	9/7/2022	36.5	No	49	14.29	n/a	n/a	0.0007761	NP Inter (normality) 1 of 2
Sulfate as SO4 (mg/L)	DGWC-69	49	n/a	9/7/2022	11.6	No	49	14.29	n/a	n/a	0.0007761	NP Inter (normality) 1 of 2
Total Dissolved Solids [TDS] (mg/L)	**DGWC-37**	**254.7**	**n/a**	**9/8/2022**	**300**	**Yes**	**48**	**0**	**None**	**x^(1/3)**	**0.001075**	**Param Inter 1 of 2**
Total Dissolved Solids [TDS] (mg/L)	**DGWC-38**	**254.7**	**n/a**	**9/12/2022**	**468**	**Yes**	**48**	**0**	**None**	**x^(1/3)**	**0.001075**	**Param Inter 1 of 2**
Total Dissolved Solids [TDS] (mg/L)	**DGWC-39**	**254.7**	**n/a**	**9/7/2022**	**449**	**Yes**	**48**	**0**	**None**	**x^(1/3)**	**0.001075**	**Param Inter 1 of 2**
Total Dissolved Solids [TDS] (mg/L)	**DGWC-40**	**254.7**	**n/a**	**9/7/2022**	**339**	**Yes**	**48**	**0**	**None**	**x^(1/3)**	**0.001075**	**Param Inter 1 of 2**
Total Dissolved Solids [TDS] (mg/L)	DGWC-67	254.7	n/a	9/8/2022	252	No	48	0	None	x^(1/3)	0.001075	Param Inter 1 of 2
Total Dissolved Solids [TDS] (mg/L)	**DGWC-68A**	**254.7**	**n/a**	**9/7/2022**	**256**	**Yes**	**48**	**0**	**None**	**x^(1/3)**	**0.001075**	**Param Inter 1 of 2**
Total Dissolved Solids [TDS] (mg/L)	DGWC-69	254.7	n/a	9/7/2022	102	No	48	0	None	x^(1/3)	0.001075	Param Inter 1 of 2

Appendix III Trend Test - Significant Results

Plant McDonough Client: Southern Company Data: McDonough AP Printed 10/17/2022, 2:09 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Calcium, total (mg/L)	**DGWA-53 (bg)**	**-3.715**	**-76**	**-58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride, Total (mg/L)	**DGWA-53 (bg)**	**-0.1771**	**-85**	**-63**	**Yes**	**17**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride, Total (mg/L)	**DGWC-40**	**-0.4831**	**-61**	**-58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride, Total (mg/L)	**DGWC-67**	**0.5636**	**100**	**58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate as SO4 (mg/L)	**DGWA-70A (bg)**	**-0.1765**	**-60**	**-58**	**Yes**	**16**	**43.75**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate as SO4 (mg/L)	**DGWA-71 (bg)**	**-1.051**	**-88**	**-58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate as SO4 (mg/L)	**DGWC-38**	**-10.06**	**-61**	**-58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate as SO4 (mg/L)	**DGWC-39**	**-23.39**	**-81**	**-58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate as SO4 (mg/L)	**DGWC-40**	**-9.834**	**-60**	**-58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Total Dissolved Solids [TDS] (mg/L)	**DGWA-53 (bg)**	**-21.09**	**-79**	**-58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Total Dissolved Solids [TDS] (mg/L)	**DGWC-39**	**-15.95**	**-60**	**-58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**

Appendix III Trend Test - All Results

Plant McDonough Client: Southern Company Data: McDonough AP Printed 10/17/2022, 2:09 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Boron, total (mg/L)	DGWA-53 (bg)	-0.003305	-39	-58	No	16	0	n/a	n/a	0.01	NP
Boron, total (mg/L)	DGWA-70A (bg)	0	33	58	No	16	56.25	n/a	n/a	0.01	NP
Boron, total (mg/L)	DGWA-71 (bg)	0.0007215	16	53	No	15	26.67	n/a	n/a	0.01	NP
Boron, total (mg/L)	DGWC-37	-0.0417	-33	-58	No	16	0	n/a	n/a	0.01	NP
Boron, total (mg/L)	DGWC-38	-0.04359	-36	-58	No	16	0	n/a	n/a	0.01	NP
Boron, total (mg/L)	DGWC-39	-0.08204	-54	-58	No	16	0	n/a	n/a	0.01	NP
Boron, total (mg/L)	DGWC-40	-0.02553	-55	-58	No	16	0	n/a	n/a	0.01	NP
Boron, total (mg/L)	DGWC-67	0.1184	55	58	No	16	0	n/a	n/a	0.01	NP
Boron, total (mg/L)	DGWC-68A	-0.04241	-21	-58	No	16	0	n/a	n/a	0.01	NP
Boron, total (mg/L)	DGWC-69	-0.03589	-58	-68	No	18	0	n/a	n/a	0.01	NP
Calcium, total (mg/L)	**DGWA-53 (bg)**	**-3.715**	**-76**	**-58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium, total (mg/L)	DGWA-70A (bg)	-0.03479	-12	-58	No	16	6.25	n/a	n/a	0.01	NP
Calcium, total (mg/L)	DGWA-71 (bg)	-0.4482	-35	-53	No	15	6.667	n/a	n/a	0.01	NP
Calcium, total (mg/L)	DGWC-37	1.067	39	58	No	16	0	n/a	n/a	0.01	NP
Calcium, total (mg/L)	DGWC-38	2.106	58	58	No	16	0	n/a	n/a	0.01	NP
Calcium, total (mg/L)	DGWC-39	0.6502	15	58	No	16	0	n/a	n/a	0.01	NP
Calcium, total (mg/L)	DGWC-40	0.5648	37	58	No	16	0	n/a	n/a	0.01	NP
Calcium, total (mg/L)	DGWC-67	1.043	58	58	No	16	0	n/a	n/a	0.01	NP
Calcium, total (mg/L)	DGWC-68A	1.413	56	58	No	16	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	**DGWA-53 (bg)**	**-0.1771**	**-85**	**-63**	**Yes**	**17**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride, Total (mg/L)	DGWA-70A (bg)	-0.06575	-45	-58	No	16	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	DGWA-71 (bg)	0.3259	40	58	No	16	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	DGWC-38	0.1424	49	58	No	16	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	**DGWC-40**	**-0.4831**	**-61**	**-58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride, Total (mg/L)	**DGWC-67**	**0.5636**	**100**	**58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
pH, Field (SU)	DGWA-53 (bg)	0.01874	12	74	No	19	0	n/a	n/a	0.01	NP
pH, Field (SU)	DGWA-70A (bg)	-0.02257	-32	-68	No	18	0	n/a	n/a	0.01	NP
pH, Field (SU)	DGWA-71 (bg)	0	1	74	No	19	0	n/a	n/a	0.01	NP
pH, Field (SU)	DGWC-40	-0.02747	-46	-68	No	18	0	n/a	n/a	0.01	NP
pH, Field (SU)	DGWC-68A	-0.008902	-26	-68	No	18	0	n/a	n/a	0.01	NP
Sulfate as SO4 (mg/L)	DGWA-53 (bg)	-0.7643	-32	-63	No	17	0	n/a	n/a	0.01	NP
Sulfate as SO4 (mg/L)	**DGWA-70A (bg)**	**-0.1765**	**-60**	**-58**	**Yes**	**16**	**43.75**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate as SO4 (mg/L)	**DGWA-71 (bg)**	**-1.051**	**-88**	**-58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate as SO4 (mg/L)	DGWC-37	-2.312	-38	-53	No	15	0	n/a	n/a	0.01	NP
Sulfate as SO4 (mg/L)	**DGWC-38**	**-10.06**	**-61**	**-58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate as SO4 (mg/L)	**DGWC-39**	**-23.39**	**-81**	**-58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate as SO4 (mg/L)	**DGWC-40**	**-9.834**	**-60**	**-58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate as SO4 (mg/L)	DGWC-67	-0.2587	-17	-58	No	16	0	n/a	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	**DGWA-53 (bg)**	**-21.09**	**-79**	**-58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Total Dissolved Solids [TDS] (mg/L)	DGWA-70A (bg)	-2.113	-12	-58	No	16	0	n/a	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	DGWA-71 (bg)	-3.712	-40	-58	No	16	0	n/a	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	DGWC-37	-2.185	-9	-58	No	16	0	n/a	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	DGWC-38	-0.4188	-2	-58	No	16	0	n/a	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	**DGWC-39**	**-15.95**	**-60**	**-58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Total Dissolved Solids [TDS] (mg/L)	DGWC-40	-4.306	-21	-53	No	15	0	n/a	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	DGWC-68A	-5.853	-43	-58	No	16	0	n/a	n/a	0.01	NP

Upper Tolerance Limit Summary Table

Plant McDonough Client: Southern Company Data: McDonough AP Printed 11/16/2022, 1:37 PM

Constituent	Well	Upper Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Antimony (mg/L)	n/a	0.003	n/a	n/a	n/a	50	n/a	n/a	82	n/a	n/a	0.07694	NP Inter(NDs)
Arsenic (mg/L)	n/a	0.0054	n/a	n/a	n/a	50	n/a	n/a	74	n/a	n/a	0.07694	NP Inter(normality)
Barium (mg/L)	n/a	0.19	n/a	n/a	n/a	50	n/a	n/a	0	n/a	n/a	0.07694	NP Inter(normality)
Beryllium (mg/L)	n/a	0.0009	n/a	n/a	n/a	51	n/a	n/a	58.82	n/a	n/a	0.0731	NP Inter(normality)
Cadmium (mg/L)	n/a	0.0005	n/a	n/a	n/a	50	n/a	n/a	94	n/a	n/a	0.07694	NP Inter(NDs)
Chromium (mg/L)	n/a	0.005	n/a	n/a	n/a	49	n/a	n/a	65.31	n/a	n/a	0.08099	NP Inter(normality)
Cobalt (mg/L)	n/a	0.0322	n/a	n/a	n/a	50	n/a	n/a	40	n/a	n/a	0.07694	NP Inter(normality)
Combined Radium 226 + 228 (pCi/L)	n/a	4.8	n/a	n/a	n/a	52	1.098	0.5322	0	None	sqrt(x)	0.05	Inter
Fluoride, total (mg/L)	n/a	0.42	n/a	n/a	n/a	54	n/a	n/a	50	n/a	n/a	0.06267	NP Inter(normality)
Lead (mg/L)	n/a	0.001	n/a	n/a	n/a	50	n/a	n/a	82	n/a	n/a	0.07694	NP Inter(NDs)
Lithium (mg/L)	n/a	0.03	n/a	n/a	n/a	50	n/a	n/a	36	n/a	n/a	0.07694	NP Inter(normality)
Mercury (mg/L)	n/a	0.0002	n/a	n/a	n/a	50	n/a	n/a	84	n/a	n/a	0.07694	NP Inter(NDs)
Molybdenum (mg/L)	n/a	0.0409	n/a	n/a	n/a	50	n/a	n/a	64	n/a	n/a	0.07694	NP Inter(normality)
Selenium (mg/L)	n/a	0.005	n/a	n/a	n/a	50	n/a	n/a	100	n/a	n/a	0.07694	NP Inter(NDs)
Thallium (mg/L)	n/a	0.001	n/a	n/a	n/a	50	n/a	n/a	96	n/a	n/a	0.07694	NP Inter(NDs)

PLANT MCDONOUGH ASH POND 1 GWPS TABLE				
Constituent Name	**MCL**	**CCR-Rule Specified**	**Background Limit**	**GWPS**
Antimony, Total (mg/L)	0.006		0.003	0.006
Arsenic, Total (mg/L)	0.01		0.0054	0.01
Barium, Total (mg/L)	2		0.19	2
Beryllium, Total (mg/L)	0.004		0.0009	0.004
Cadmium, Total (mg/L)	0.005		0.0005	0.005
Chromium, Total (mg/L)	0.1		0.005	0.1
Cobalt, Total (mg/L)		0.006	0.032	0.032
Combined Radium, Total (pCi/L)	5		4.8	5
Fluoride, Total (mg/L)	4		0.42	4
Lead, Total (mg/L)		0.015	0.001	0.015
Lithium, Total (mg/L)		0.04	0.03	0.04
Mercury, Total (mg/L)	0.002		0.0002	0.002
Molybdenum, Total (mg/L)		0.1	0.041	0.1
Selenium, Total (mg/L)	0.05		0.005	0.05
Thallium, Total (mg/L)	0.002		0.001	0.002

**Highlighted cells indicated Background is higher than MCLs or CCR-Rule*

**MCL = Maximum Contaminant Level*

**CCR = Coal Combustion Residual*

**GWPS = Groundwater Protection Standard*

Confidence Intervals - Significant Results

Plant McDonough Client: Southern Company Data: McDonough AP Printed 11/18/2022, 1:02 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Arsenic (mg/L)	**DGWC-69**	**0.03677**	**0.01314**	**0.01**	**Yes**	**19**	**0.03285**	**0.03918**	**0**	**None**	**ln(x)**	**0.01**	**Param.**
Cobalt (mg/L)	**DGWC-40**	**0.04503**	**0.03796**	**0.032**	**Yes**	**17**	**0.04149**	**0.005638**	**0**	**None**	**No**	**0.01**	**Param.**
Molybdenum (mg/L)	**DGWC-68A**	**0.2224**	**0.1962**	**0.1**	**Yes**	**17**	**0.2096**	**0.02181**	**0**	**None**	**x^(1/3)**	**0.01**	**Param.**

Confidence Intervals - All Results

Plant McDonough Client: Southern Company Data: McDonough AP Printed 11/18/2022, 1:02 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Antimony (mg/L)	B-100	0.003	0.0013	0.006	No	6	0.0025	0.0007849	66.67	None	No	0.0155	NP (NDs)
Antimony (mg/L)	B-105D	0.0082	0.00069	0.006	No	5	0.003578	0.002771	60	None	No	0.031	NP (NDs)
Antimony (mg/L)	B-112D	0.003	0.00041	0.006	No	4	0.002353	0.001295	75	None	No	0.0625	NP (NDs)
Antimony (mg/L)	B-113D	0.003	0.0021	0.006	No	4	0.002775	0.00045	75	None	No	0.0625	NP (NDs)
Antimony (mg/L)	B-62	0.003	0.00046	0.006	No	9	0.002718	0.0008467	88.89	None	No	0.002	NP (NDs)
Antimony (mg/L)	DGWC-40	0.003	0.00033	0.006	No	16	0.002833	0.0006675	93.75	None	No	0.01	NP (NDs)
Antimony (mg/L)	DGWC-67	0.003	0.0023	0.006	No	16	0.002656	0.0008246	81.25	None	No	0.01	NP (NDs)
Antimony (mg/L)	DGWC-68A	0.003	0.0008	0.006	No	16	0.002695	0.000838	87.5	None	No	0.01	NP (NDs)
Antimony (mg/L)	DGWC-69	0.003	0.0019	0.006	No	17	0.002729	0.0006469	82.35	None	No	0.01	NP (NDs)
Arsenic (mg/L)	B-105D	0.0051	0.0025	0.01	No	5	0.00404	0.001361	40	None	No	0.031	NP (normality)
Arsenic (mg/L)	B-112D	0.005	0.00078	0.01	No	4	0.003945	0.00211	50	None	No	0.0625	NP (normality)
Arsenic (mg/L)	B-113D	0.005	0.0018	0.01	No	4	0.0042	0.0016	75	None	No	0.0625	NP (NDs)
Arsenic (mg/L)	B-62	0.005	0.0033	0.01	No	9	0.004811	0.0005667	88.89	None	No	0.002	NP (NDs)
Arsenic (mg/L)	DGWC-37	0.005	0.0019	0.01	No	17	0.004818	0.0007519	94.12	None	No	0.01	NP (NDs)
Arsenic (mg/L)	DGWC-38	0.005	0.0005	0.01	No	17	0.004735	0.001091	94.12	None	No	0.01	NP (NDs)
Arsenic (mg/L)	DGWC-39	0.005	0.00075	0.01	No	17	0.003069	0.002132	52.94	None	No	0.01	NP (NDs)
Arsenic (mg/L)	DGWC-40	0.005	0.003	0.01	No	17	0.004138	0.001675	76.47	None	No	0.01	NP (NDs)
Arsenic (mg/L)	DGWC-67	0.005	0.0033	0.01	No	17	0.004384	0.00148	82.35	None	No	0.01	NP (NDs)
Arsenic (mg/L)	DGWC-68A	0.005	0.0016	0.01	No	17	0.0048	0.0008246	94.12	None	No	0.01	NP (NDs)
Arsenic (mg/L)	**DGWC-69**	**0.03677**	**0.01314**	**0.01**	**Yes**	**19**	**0.03285**	**0.03918**	**0**	**None**	**ln(x)**	**0.01**	**Param.**
Barium (mg/L)	B-100	0.02353	0.01731	2	No	6	0.02067	0.002875	0	None	x^4	0.01	Param.
Barium (mg/L)	B-105D	0.04396	0.02924	2	No	5	0.0366	0.004393	0	None	No	0.01	Param.
Barium (mg/L)	B-112D	0.026	0.0026	2	No	4	0.0088	0.01147	0	None	No	0.0625	NP (normality)
Barium (mg/L)	B-113D	0.0051	0.0032	2	No	4	0.00455	0.000911	0	None	No	0.0625	NP (selected)
Barium (mg/L)	B-62	0.02611	0.01944	2	No	9	0.02278	0.003456	0	None	No	0.01	Param.
Barium (mg/L)	DGWC-37	0.1078	0.08781	2	No	17	0.09782	0.01597	0	None	No	0.01	Param.
Barium (mg/L)	DGWC-38	0.03344	0.03161	2	No	17	0.03242	0.001701	0	None	x^5	0.01	Param.
Barium (mg/L)	DGWC-39	0.09609	0.08532	2	No	17	0.09071	0.008597	0	None	No	0.01	Param.
Barium (mg/L)	DGWC-40	0.019	0.0168	2	No	17	0.01793	0.002504	0	None	No	0.01	NP (normality)
Barium (mg/L)	DGWC-67	0.1105	0.09714	2	No	17	0.1038	0.01067	0	None	No	0.01	Param.
Barium (mg/L)	DGWC-68A	0.092	0.086	2	No	17	0.08978	0.00419	0	None	No	0.01	NP (normality)
Barium (mg/L)	DGWC-69	0.09793	0.06626	2	No	18	0.08209	0.02617	0	None	No	0.01	Param.
Beryllium (mg/L)	B-100	0.0005956	0.0003544	0.004	No	6	0.000475	0.00008781	0	None	No	0.01	Param.
Beryllium (mg/L)	B-62	0.0005	0.00009	0.004	No	10	0.0001948	0.0001623	20	None	No	0.011	NP (normality)
Beryllium (mg/L)	DGWC-37	0.0005	0.00007	0.004	No	17	0.0003246	0.0002163	58.82	None	No	0.01	NP (NDs)
Beryllium (mg/L)	DGWC-38	0.0005	0.000058	0.004	No	17	0.000474	0.0001072	94.12	None	No	0.01	NP (NDs)
Beryllium (mg/L)	DGWC-40	0.00331	0.002937	0.004	No	17	0.003124	0.0002969	5.882	None	No	0.01	Param.
Beryllium (mg/L)	DGWC-68A	0.0005	0.000084	0.004	No	17	0.0004497	0.000142	88.24	None	No	0.01	NP (NDs)
Beryllium (mg/L)	DGWC-69	0.0005	0.000061	0.004	No	18	0.0003298	0.0002196	61.11	None	No	0.01	NP (NDs)
Cadmium (mg/L)	B-100	0.00059	0.00027	0.005	No	6	0.00038	0.0001628	0	None	No	0.0155	NP (normality)
Cadmium (mg/L)	B-113D	0.0005	0.00019	0.005	No	4	0.0004225	0.000155	75	None	No	0.0625	NP (NDs)
Cadmium (mg/L)	DGWC-37	0.0005	0.0002	0.005	No	17	0.0004	0.0001639	70.59	None	No	0.01	NP (NDs)
Cadmium (mg/L)	DGWC-38	0.0005	0.00017	0.005	No	17	0.0003194	0.0002461	17.65	None	No	0.01	NP (normality)
Cadmium (mg/L)	DGWC-40	0.0008771	0.0007382	0.005	No	17	0.0008076	0.0001108	11.76	None	No	0.01	Param.
Cadmium (mg/L)	DGWC-67	0.00053	0.00021	0.005	No	17	0.0004259	0.0001426	70.59	None	No	0.01	NP (NDs)
Cadmium (mg/L)	DGWC-68A	0.0002439	0.0001408	0.005	No	17	0.0003747	0.0002229	47.06	Kaplan-Meier	sqrt(x)	0.01	Param.
Cadmium (mg/L)	DGWC-69	0.0005	0.0002	0.005	No	18	0.0004261	0.0001436	77.78	Kaplan-Meier	No	0.01	NP (NDs)
Chromium (mg/L)	B-100	0.005	0.00057	0.1	No	6	0.003585	0.002195	66.67	None	No	0.0155	NP (NDs)
Chromium (mg/L)	B-105D	0.005	0.0012	0.1	No	5	0.00424	0.001699	80	None	No	0.031	NP (NDs)
Chromium (mg/L)	B-112D	0.00182	0.0005715	0.1	No	4	0.003062	0.002248	50	Kaplan-Meier	sqrt(x)	0.01	Param.
Chromium (mg/L)	B-113D	0.005	0.0011	0.1	No	4	0.004025	0.00195	75	Kaplan-Meier	No	0.0625	NP (NDs)
Chromium (mg/L)	B-62	0.005	0.00098	0.1	No	9	0.004553	0.00134	88.89	Kaplan-Meier	No	0.002	NP (NDs)
Chromium (mg/L)	DGWC-37	0.005	0.0007	0.1	No	17	0.004487	0.001448	88.24	None	No	0.01	NP (NDs)
Chromium (mg/L)	DGWC-38	0.005	0.00092	0.1	No	17	0.004227	0.001724	82.35	None	No	0.01	NP (NDs)
Chromium (mg/L)	DGWC-40	0.005	0.00061	0.1	No	17	0.002589	0.002108	41.18	None	No	0.01	NP (normality)

Confidence Intervals - All Results

Plant McDonough Client: Southern Company Data: McDonough AP Printed 11/18/2022, 1:02 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Chromium (mg/L)	DGWC-67	0.005	0.0014	0.1	No	17	0.004028	0.001814	76.47	None	No	0.01	NP (NDs)
Chromium (mg/L)	DGWC-68A	0.005	0.0005	0.1	No	17	0.004735	0.001091	94.12	None	No	0.01	NP (NDs)
Chromium (mg/L)	DGWC-69	0.005	0.0012	0.1	No	18	0.003888	0.001851	72.22	None	No	0.01	NP (NDs)
Cobalt (mg/L)	B-100	0.087	0.028	0.032	No	8	0.05125	0.02684	0	None	No	0.004	NP (normality)
Cobalt (mg/L)	B-105D	0.01197	0.001108	0.032	No	5	0.00654	0.003242	0	None	No	0.01	Param.
Cobalt (mg/L)	B-112D	0.005	0.00054	0.032	No	4	0.00326	0.002163	50	None	No	0.0625	NP (selected)
Cobalt (mg/L)	B-62	0.005	0.00031	0.032	No	10	0.004061	0.00198	80	None	No	0.011	NP (NDs)
Cobalt (mg/L)	DGWC-37	0.005	0.0005	0.032	No	17	0.004182	0.001821	82.35	None	No	0.01	NP (NDs)
Cobalt (mg/L)	DGWC-38	0.0017	0.0015	0.032	No	17	0.002259	0.002165	11.76	None	No	0.01	NP (normality)
Cobalt (mg/L)	DGWC-39	0.0071	0.0059	0.032	No	17	0.006594	0.001071	11.76	None	No	0.01	NP (normality)
Cobalt (mg/L)	**DGWC-40**	**0.04503**	**0.03796**	**0.032**	**Yes**	**17**	**0.04149**	**0.005638**	**0**	**None**	**No**	**0.01**	**Param.**
Cobalt (mg/L)	DGWC-67	0.0041	0.0012	0.032	No	17	0.002847	0.002442	11.76	None	No	0.01	NP (normality)
Cobalt (mg/L)	DGWC-68A	0.005	0.0015	0.032	No	17	0.004253	0.001679	82.35	None	No	0.01	NP (NDs)
Cobalt (mg/L)	DGWC-69	0.005	0.0022	0.032	No	18	0.003944	0.001641	66.67	None	No	0.01	NP (NDs)
Combined Radium 226 + 228 (pCi/L)	B-100	1.3	0.2178	5	No	6	0.7588	0.3938	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	B-105D	3.252	1	5	No	5	2.126	0.6718	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	B-112D	0.945	0.241	5	No	4	0.6698	0.3008	0	None	No	0.0625	NP (selected)
Combined Radium 226 + 228 (pCi/L)	B-113D	1.383	0.1014	5	No	4	0.742	0.2822	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	B-62	1.964	1.348	5	No	8	1.656	0.2907	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	DGWC-37	1.002	0.5303	5	No	17	0.7924	0.4146	0	None	sqrt(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	DGWC-38	1.004	0.339	5	No	17	0.7331	0.5821	0	None	sqrt(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	DGWC-39	1.265	0.6155	5	No	17	0.9404	0.5186	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	DGWC-40	1.515	0.6792	5	No	17	1.097	0.6673	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	DGWC-67	0.9662	0.4851	5	No	17	0.7256	0.3839	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	DGWC-68A	1.238	0.4841	5	No	17	0.9218	0.6257	0	None	sqrt(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	DGWC-69	1.801	1.18	5	No	18	1.49	0.5135	0	None	No	0.01	Param.
Fluoride, total (mg/L)	B-100	0.072	0.05	4	No	6	0.05367	0.008981	83.33	None	No	0.0155	NP (NDs)
Fluoride, total (mg/L)	B-105D	0.3186	0.0337	4	No	5	0.1282	0.1089	0	None	ln(x)	0.01	Param.
Fluoride, total (mg/L)	B-112D	0.3789	0.2011	4	No	4	0.29	0.03916	0	None	No	0.01	Param.
Fluoride, total (mg/L)	B-113D	1.132	0.5282	4	No	4	0.83	0.1329	0	None	No	0.01	Param.
Fluoride, total (mg/L)	B-62	0.43	0.093	4	No	8	0.1678	0.1145	0	None	No	0.004	NP (normality)
Fluoride, total (mg/L)	DGWC-37	0.084	0.054	4	No	18	0.09767	0.07404	5.556	None	No	0.01	NP (normality)
Fluoride, total (mg/L)	DGWC-38	0.13	0.058	4	No	18	0.1201	0.1064	11.11	None	No	0.01	NP (normality)
Fluoride, total (mg/L)	DGWC-39	0.17	0.085	4	No	18	0.1517	0.1134	5.556	None	No	0.01	NP (normality)
Fluoride, total (mg/L)	DGWC-40	0.2755	0.1304	4	No	18	0.2286	0.1538	5.556	None	ln(x)	0.01	Param.
Fluoride, total (mg/L)	DGWC-67	0.07	0.038	4	No	18	0.08628	0.1147	50	None	No	0.01	NP (normality)
Fluoride, total (mg/L)	DGWC-68A	0.15	0.076	4	No	18	0.1471	0.1237	5.556	None	No	0.01	NP (normality)
Fluoride, total (mg/L)	DGWC-69	0.1633	0.08908	4	No	19	0.1311	0.06853	5.263	None	sqrt(x)	0.01	Param.
Lead (mg/L)	B-100	0.001	0.000088	0.015	No	6	0.0005797	0.0004622	50	None	No	0.0155	NP (normality)
Lead (mg/L)	B-105D	0.001	0.000052	0.015	No	5	0.0008104	0.000424	80	None	No	0.031	NP (NDs)
Lead (mg/L)	B-112D	0.001	0.00014	0.015	No	4	0.000785	0.00043	75	None	No	0.0625	NP (NDs)
Lead (mg/L)	B-113D	0.001	0.00014	0.015	No	4	0.000785	0.00043	75	None	No	0.0625	NP (NDs)
Lead (mg/L)	DGWC-37	0.0014	0.000061	0.015	No	17	0.0009683	0.0002531	88.24	None	No	0.01	NP (NDs)
Lead (mg/L)	DGWC-38	0.001	0.0001	0.015	No	17	0.0007362	0.0004217	70.59	None	No	0.01	NP (NDs)
Lead (mg/L)	DGWC-39	0.001	0.00022	0.015	No	17	0.0009	0.0002834	88.24	None	No	0.01	NP (NDs)
Lead (mg/L)	DGWC-40	0.001	0.00007	0.015	No	17	0.0005838	0.0004581	52.94	None	No	0.01	NP (NDs)
Lead (mg/L)	DGWC-67	0.001	0.00025	0.015	No	17	0.0007908	0.000391	76.47	None	No	0.01	NP (NDs)
Lead (mg/L)	DGWC-68A	0.001	0.00035	0.015	No	17	0.0009069	0.0002676	88.24	None	No	0.01	NP (NDs)
Lead (mg/L)	DGWC-69	0.001	0.0001	0.015	No	18	0.0007005	0.0004363	66.67	None	No	0.01	NP (NDs)
Lithium (mg/L)	B-100	0.002815	0.001518	0.04	No	6	0.002167	0.0004719	0	None	No	0.01	Param.
Lithium (mg/L)	B-105D	0.0152	0.0124	0.04	No	5	0.0138	0.0008367	0	None	No	0.01	Param.
Lithium (mg/L)	B-112D	0.004947	0.003353	0.04	No	4	0.00415	0.0003512	0	None	No	0.01	Param.
Lithium (mg/L)	B-113D	0.01663	0.005079	0.04	No	4	0.0121	0.002511	0	None	x^2	0.01	Param.
Lithium (mg/L)	B-62	0.03	0.0078	0.04	No	9	0.01094	0.007166	11.11	None	No	0.002	NP (normality)
Lithium (mg/L)	DGWC-37	0.03	0.002	0.04	No	17	0.008794	0.01213	23.53	None	No	0.01	NP (normality)

Confidence Intervals - All Results

Plant McDonough Client: Southern Company Data: McDonough AP Printed 11/18/2022, 1:02 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Lithium (mg/L)	DGWC-38	0.0035	0.0029	0.04	No	17	0.004735	0.006516	5.882	None	No	0.01	NP (normality)
Lithium (mg/L)	DGWC-40	0.0027	0.0022	0.04	No	17	0.005588	0.009191	11.76	None	No	0.01	NP (normality)
Lithium (mg/L)	DGWC-67	0.005	0.0043	0.04	No	17	0.006147	0.006156	5.882	None	No	0.01	NP (normality)
Lithium (mg/L)	DGWC-68A	0.03	0.0016	0.04	No	17	0.02661	0.009562	88.24	None	No	0.01	NP (NDs)
Lithium (mg/L)	DGWC-69	0.0032	0.0024	0.04	No	18	0.004306	0.006423	5.556	None	No	0.01	NP (normality)
Mercury (mg/L)	B-100	0.0002	0.00011	0.002	No	5	0.000182	0.00004025	80	None	No	0.031	NP (NDs)
Mercury (mg/L)	B-105D	0.0001737	0.00005334	0.002	No	4	0.0001567	0.00005443	50	Kaplan-Meier	No	0.01	Param.
Mercury (mg/L)	DGWC-37	0.0002	0.000091	0.002	No	16	0.0001747	0.00005512	81.25	None	No	0.01	NP (NDs)
Mercury (mg/L)	DGWC-38	0.0002	0.000085	0.002	No	16	0.0001747	0.00005506	81.25	None	No	0.01	NP (NDs)
Mercury (mg/L)	DGWC-39	0.0002	0.000059	0.002	No	16	0.0001912	0.00003525	93.75	None	No	0.01	NP (NDs)
Mercury (mg/L)	DGWC-40	0.0002	0.00009	0.002	No	16	0.0001737	0.00005738	81.25	None	No	0.01	NP (NDs)
Mercury (mg/L)	DGWC-67	0.0002	0.00007	0.002	No	16	0.0001919	0.0000325	93.75	None	No	0.01	NP (NDs)
Mercury (mg/L)	DGWC-68A	0.0002	0.00007	0.002	No	16	0.0001919	0.0000325	93.75	None	No	0.01	NP (NDs)
Mercury (mg/L)	DGWC-69	0.0002	0.00007	0.002	No	17	0.0001924	0.00003153	94.12	None	No	0.01	NP (NDs)
Molybdenum (mg/L)	B-105D	0.01	0.0011	0.1	No	5	0.00822	0.00398	80	None	No	0.031	NP (NDs)
Molybdenum (mg/L)	B-112D	0.04062	0.02388	0.1	No	4	0.03225	0.003686	0	None	No	0.01	Param.
Molybdenum (mg/L)	B-113D	0.0981	0.0231	0.1	No	5	0.0606	0.02238	0	None	No	0.01	Param.
Molybdenum (mg/L)	DGWC-38	0.01	0.00099	0.1	No	17	0.004752	0.004527	41.18	None	No	0.01	NP (normality)
Molybdenum (mg/L)	**DGWC-68A**	**0.2224**	**0.1962**	**0.1**	**Yes**	**17**	**0.2096**	**0.02181**	**0**	**None**	**x^(1/3)**	**0.01**	**Param.**
Molybdenum (mg/L)	DGWC-69	0.0117	0.0057	0.1	No	18	0.009783	0.005661	5.556	None	No	0.01	NP (normality)
Selenium (mg/L)	B-100	0.005	0.0019	0.05	No	6	0.004483	0.001266	83.33	Kaplan-Meier	No	0.0155	NP (NDs)
Selenium (mg/L)	DGWC-38	0.005	0.0019	0.05	No	17	0.004818	0.0007519	94.12	None	No	0.01	NP (NDs)
Selenium (mg/L)	DGWC-40	0.00316	0.001836	0.05	No	17	0.003582	0.002276	23.53	Kaplan-Meier	ln(x)	0.01	Param.
Selenium (mg/L)	DGWC-67	0.005	0.0027	0.05	No	17	0.004865	0.0005578	94.12	Kaplan-Meier	No	0.01	NP (NDs)
Selenium (mg/L)	DGWC-68A	0.005	0.0017	0.05	No	17	0.004806	0.0008004	94.12	Kaplan-Meier	No	0.01	NP (NDs)
Thallium (mg/L)	DGWC-38	0.001	0.0001	0.002	No	17	0.0005888	0.0004499	52.94	None	No	0.01	NP (NDs)
Thallium (mg/L)	DGWC-39	0.001	0.00009	0.002	No	17	0.0007312	0.0004293	70.59	None	No	0.01	NP (NDs)
Thallium (mg/L)	DGWC-40	0.001	0.000068	0.002	No	17	0.0007252	0.0004389	70.59	None	No	0.01	NP (NDs)
Thallium (mg/L)	DGWC-68A	0.001	0.00015	0.002	No	17	0.00095	0.0002062	94.12	None	No	0.01	NP (NDs)

Appendix IV Trend Test - Confidence Interval Exceedances - Significant Results

Plant McDonough Client: Southern Company Data: McDonough AP Printed 11/15/2022, 4:52 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Cobalt (mg/L)	**DGWA-53 (bg)**	**-0.004341**	**-86**	**-63**	**Yes**	**17**	**0**	**n/a**	**n/a**	**0.01**	**NP**

Appendix IV Trend Test - Confidence Interval Exceedances - All Results

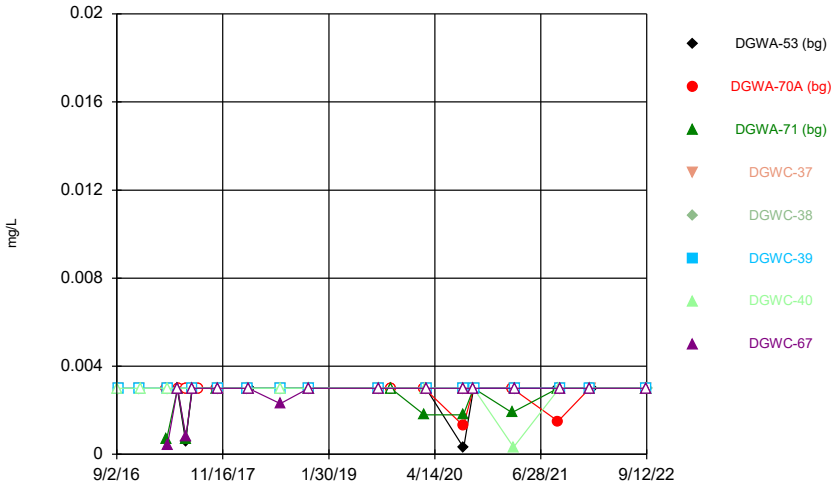
Plant McDonough Client: Southern Company Data: McDonough AP Printed 11/15/2022, 4:52 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Arsenic (mg/L)	DGWA-53 (bg)	0	2	63	No	17	58.82	n/a	n/a	0.01	NP
Arsenic (mg/L)	DGWA-70A (bg)	0	-31	-63	No	17	82.35	n/a	n/a	0.01	NP
Arsenic (mg/L)	DGWA-71 (bg)	0	24	58	No	16	81.25	n/a	n/a	0.01	NP
Arsenic (mg/L)	DGWC-69	0.003451	60	74	No	19	0	n/a	n/a	0.01	NP
Cobalt (mg/L)	**DGWA-53 (bg)**	**-0.004341**	**-86**	**-63**	**Yes**	**17**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Cobalt (mg/L)	DGWA-70A (bg)	0	29	63	No	17	52.94	n/a	n/a	0.01	NP
Cobalt (mg/L)	DGWA-71 (bg)	0	45	58	No	16	68.75	n/a	n/a	0.01	NP
Cobalt (mg/L)	DGWC-40	0.001513	45	63	No	17	0	n/a	n/a	0.01	NP
Molybdenum (mg/L)	DGWA-53 (bg)	-0.00174	-31	-63	No	17	0	n/a	n/a	0.01	NP
Molybdenum (mg/L)	DGWA-70A (bg)	0	0	63	No	17	100	n/a	n/a	0.01	NP
Molybdenum (mg/L)	DGWA-71 (bg)	0	15	58	No	16	93.75	n/a	n/a	0.01	NP
Molybdenum (mg/L)	DGWC-68A	-0.004125	-34	-63	No	17	0	n/a	n/a	0.01	NP

FIGURE A.

Sanitas™ v.9.6.35 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Time Series



Constituent: Antimony Analysis Run 11/18/2022 12:01 PM View: AP 1
Plant McDonough Client: Southern Company Data: McDonough AP

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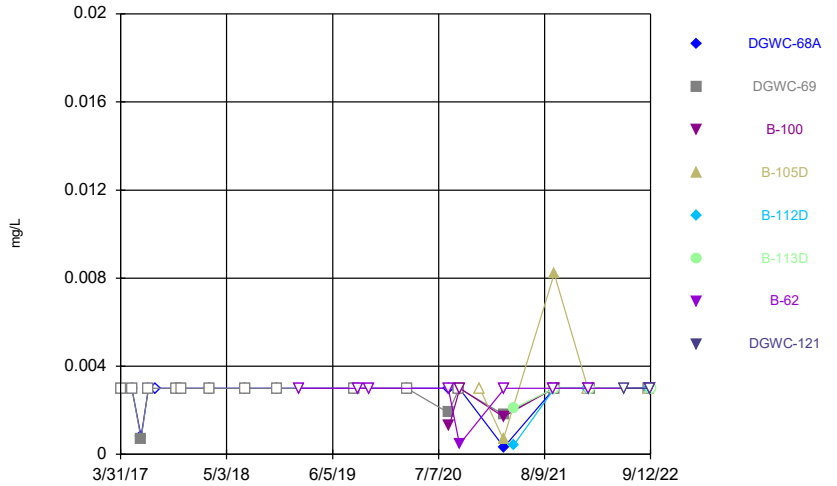

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Sanitas™ v.9.6.35 Groundwater Stats Consulting. UG
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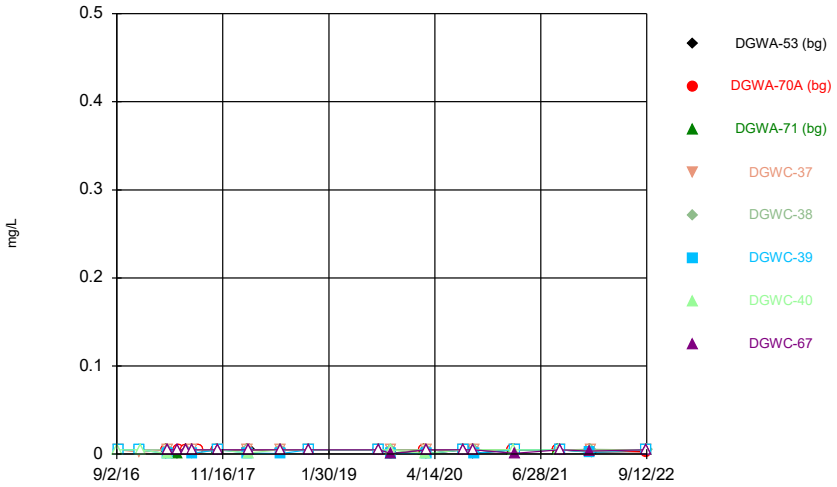

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Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.9.6.35 Groundwater Stats Consulting. UG
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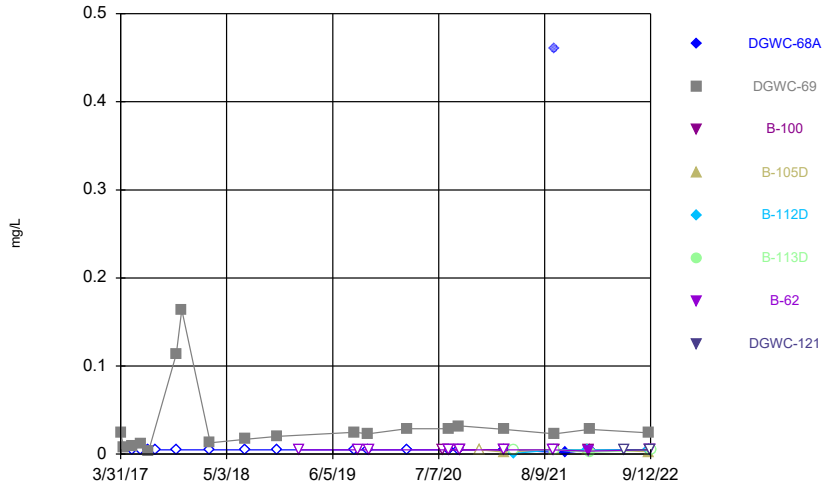

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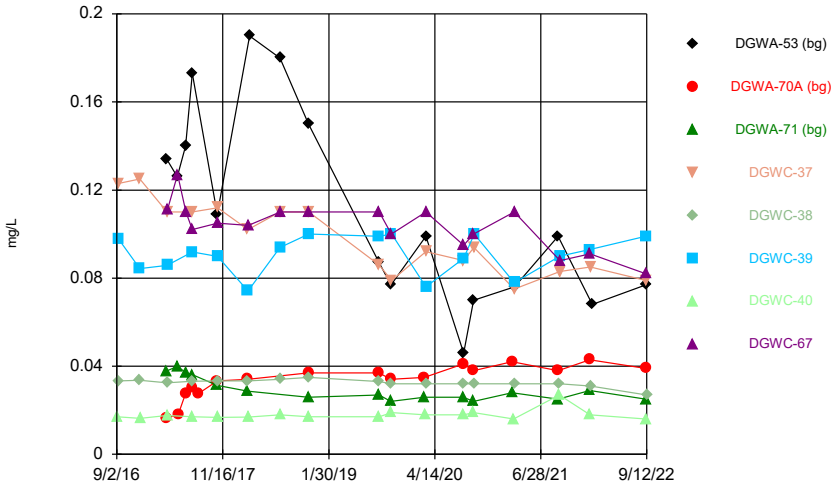
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.9.6.35 Groundwater Stats Consulting. UG

Time Series



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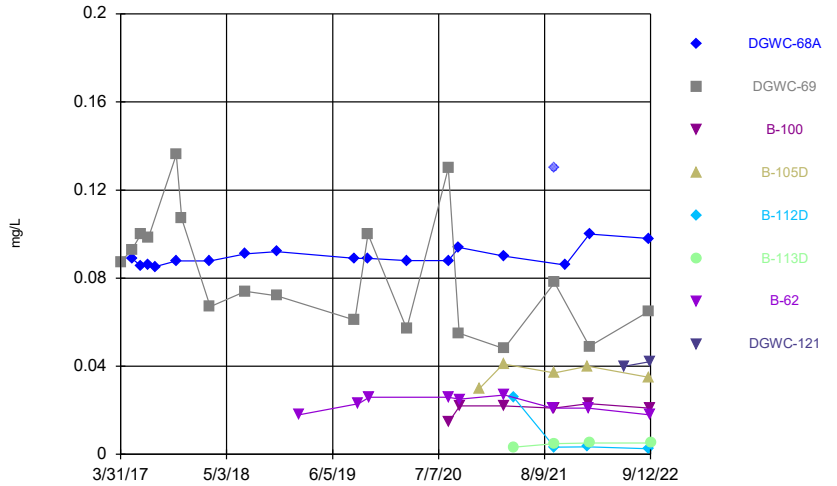
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.9.6.35 Groundwater Stats Consulting. UG

Time Series



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Plant McDonough Client: Southern Company Data: McDonough AP

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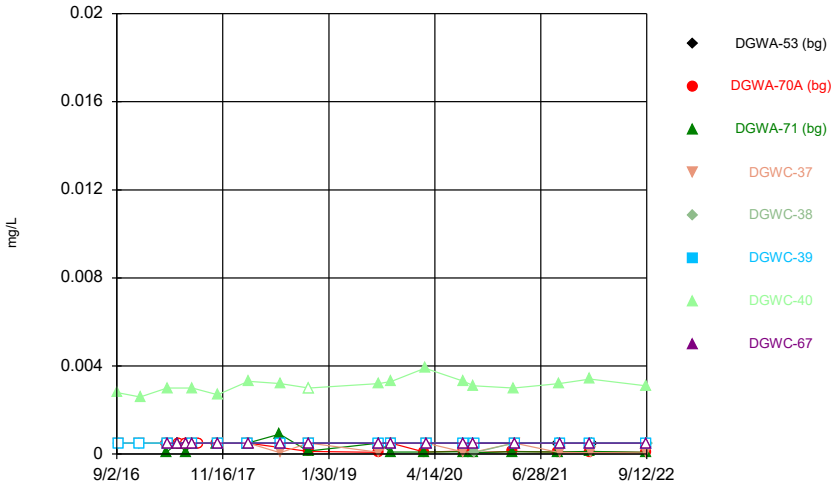

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Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.9.6.35 Groundwater Stats Consulting. UG
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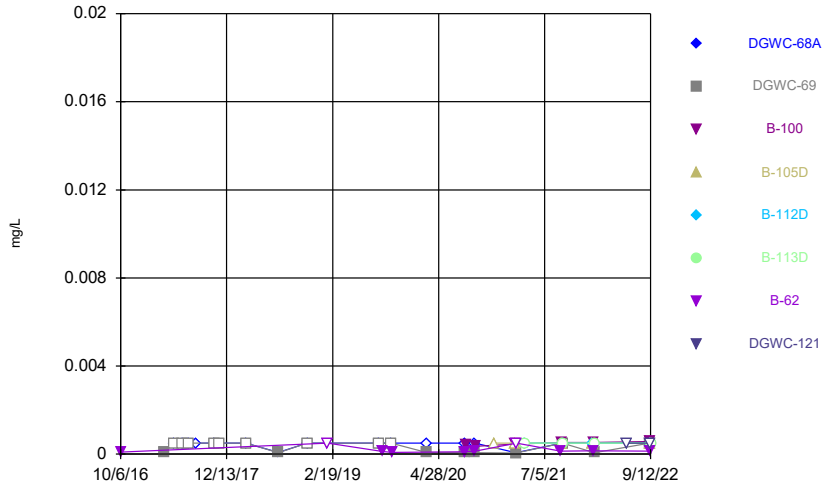

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Plant McDonough Client: Southern Company Data: McDonough AP

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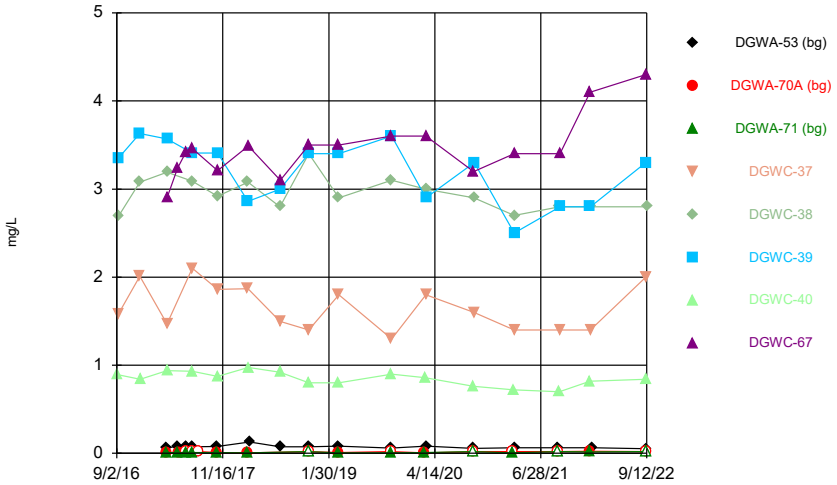

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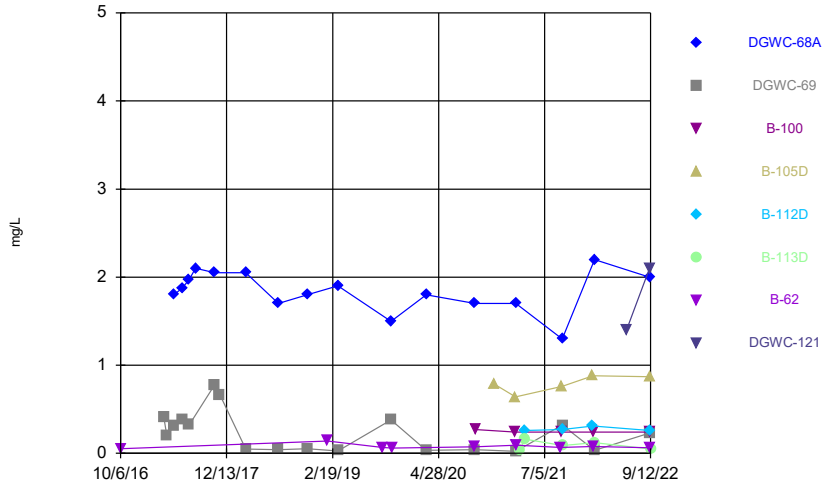
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.9.6.35 Groundwater Stats Consulting. UG

Time Series



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Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.9.6.35 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

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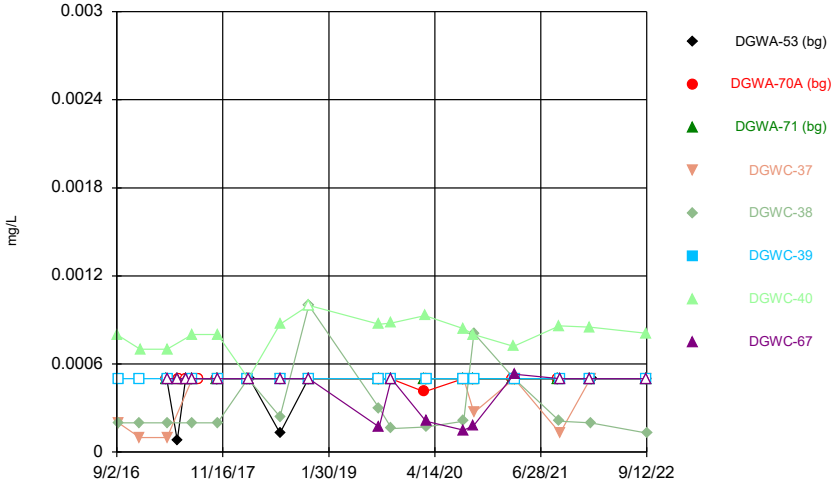

Constituent: Cadmium Analysis Run 11/18/2022 12:01 PM View: AP 1
Plant McDonough Client: Southern Company Data: McDonough AP

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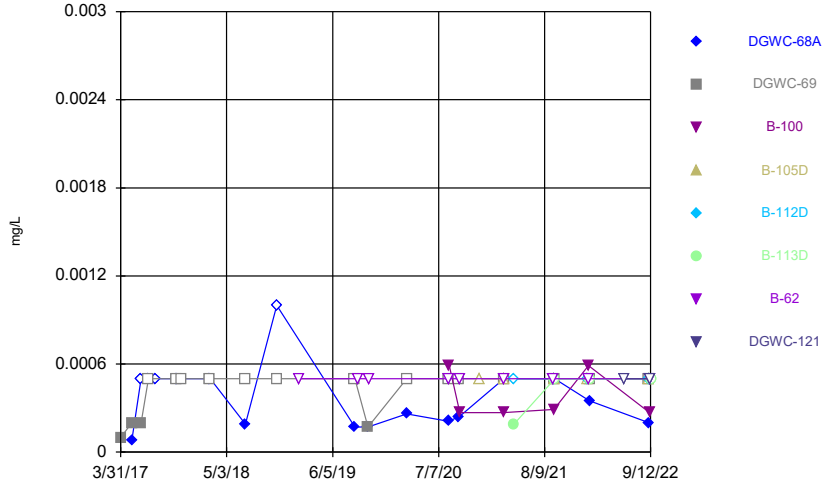

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Sanitas™ v.9.6.35 Groundwater Stats Consulting. UG
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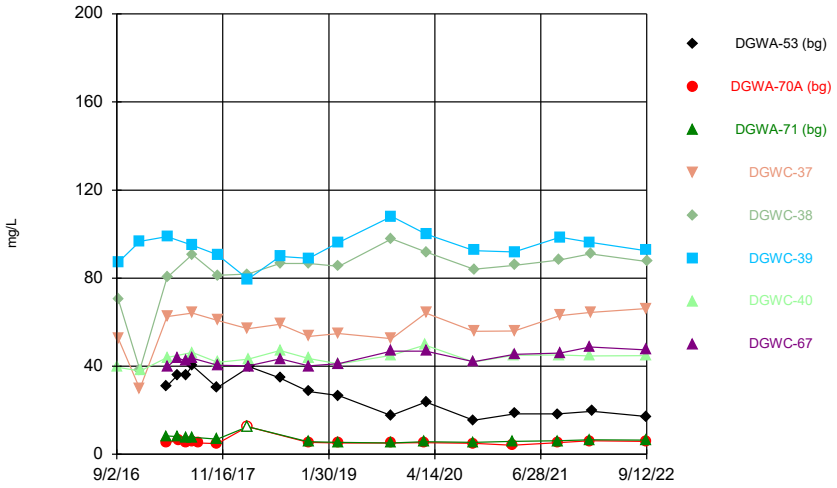

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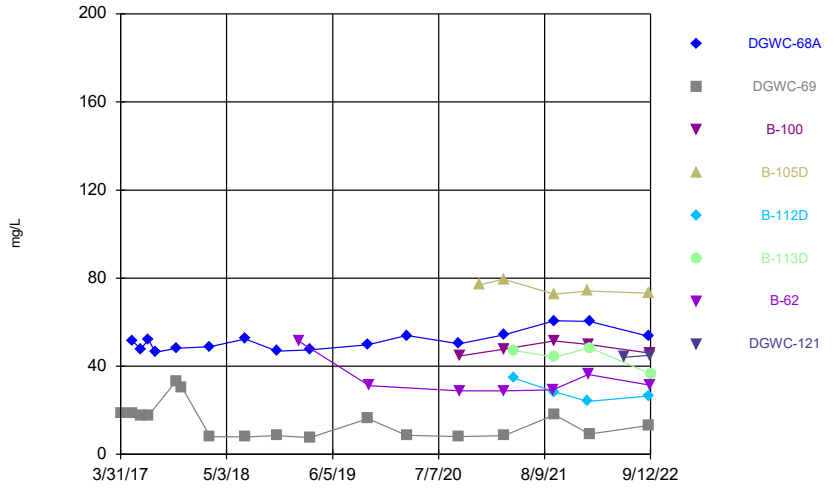
Sanitas™ v.9.6.35 Groundwater Stats Consulting. UG

Time Series



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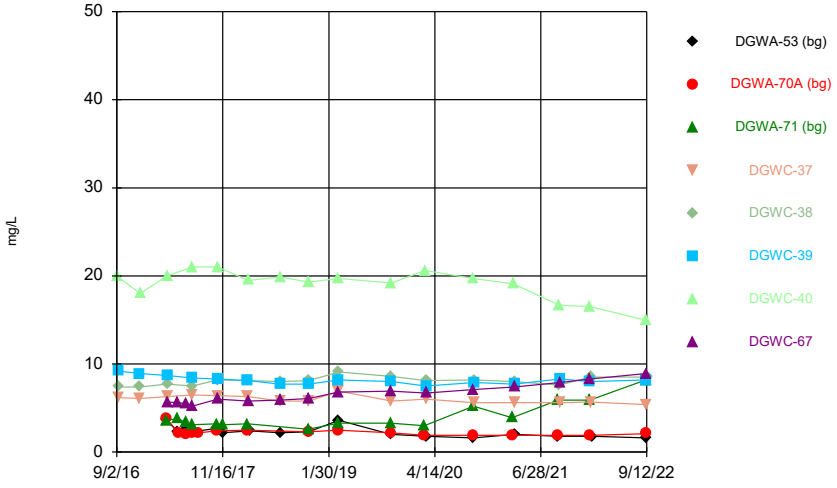
Sanitas™ v.9.6.35 Groundwater Stats Consulting. UG

Time Series



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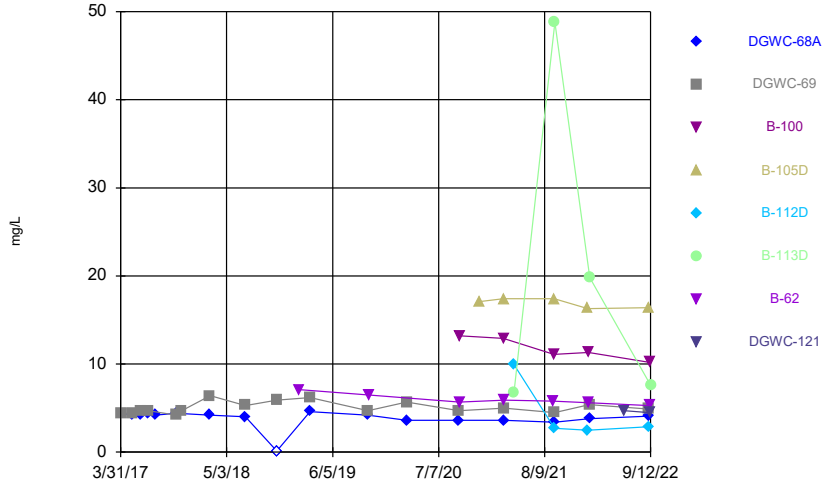

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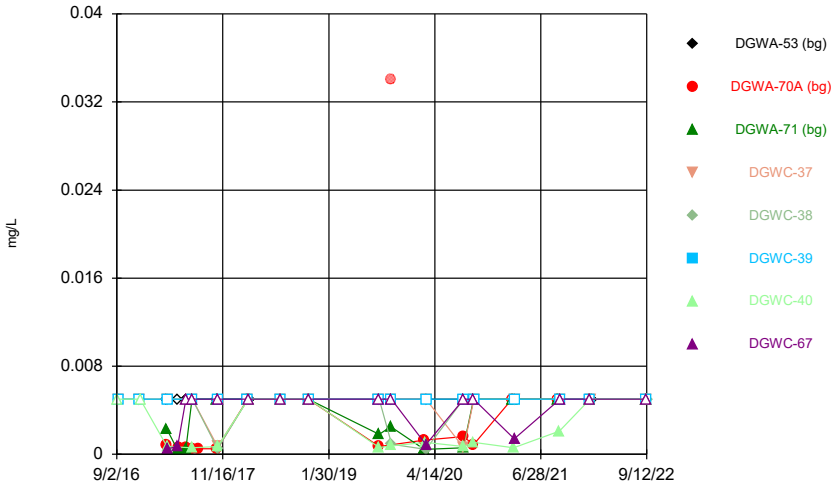

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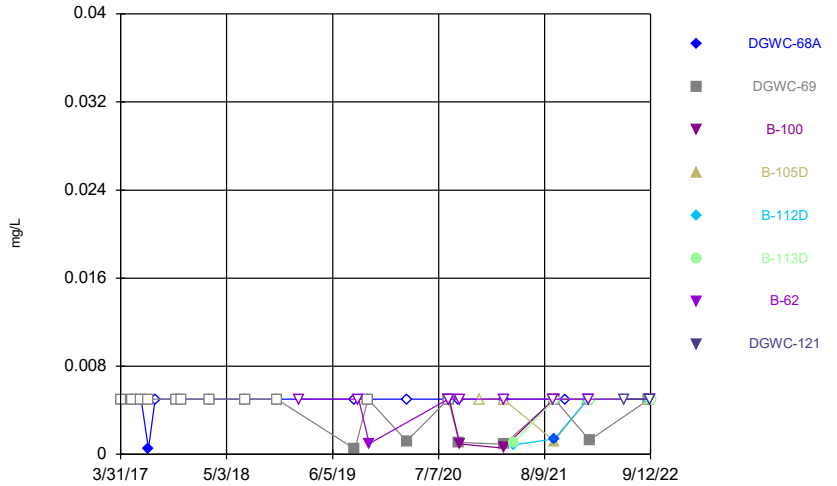

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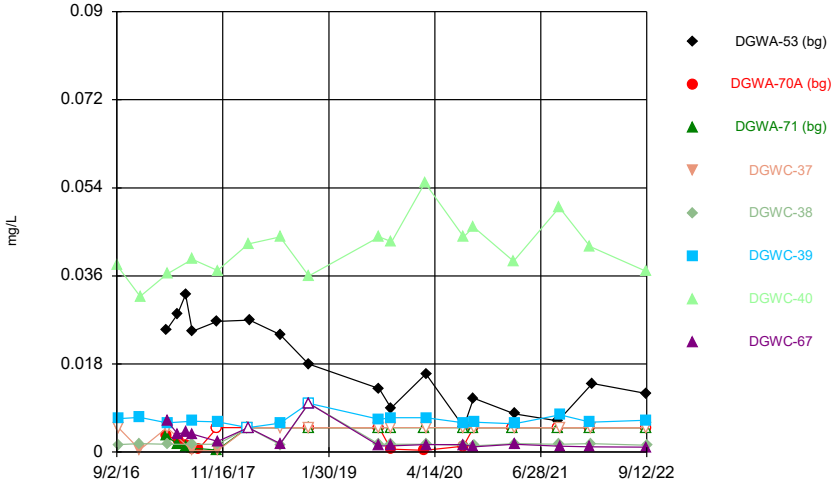

Constituent: Cobalt Analysis Run 11/18/2022 12:01 PM View: AP 1
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Hollow symbols indicate censored values.

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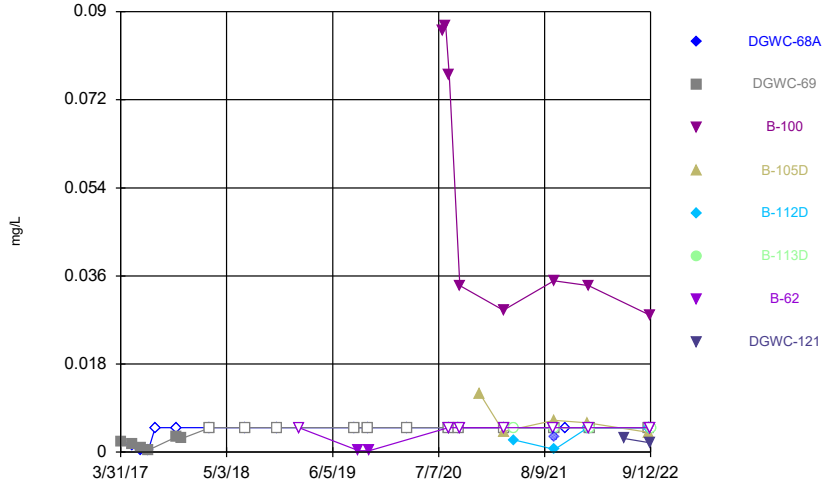

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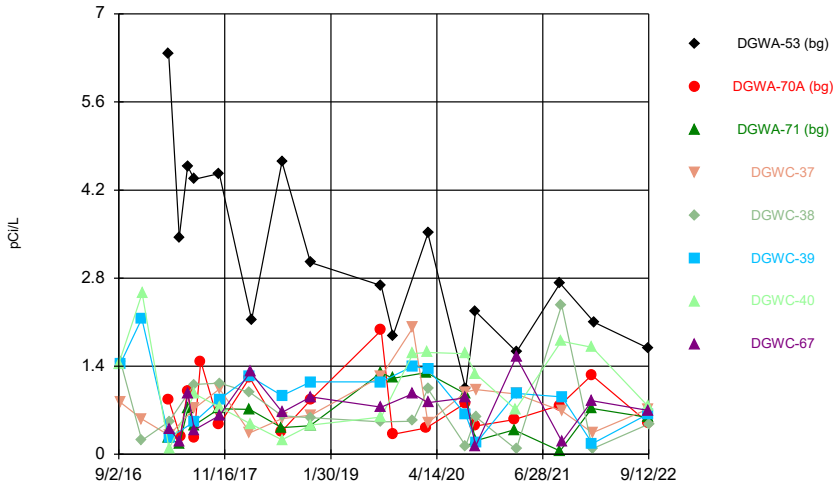
Sanitas™ v.9.6.35 Groundwater Stats Consulting. UG

Time Series

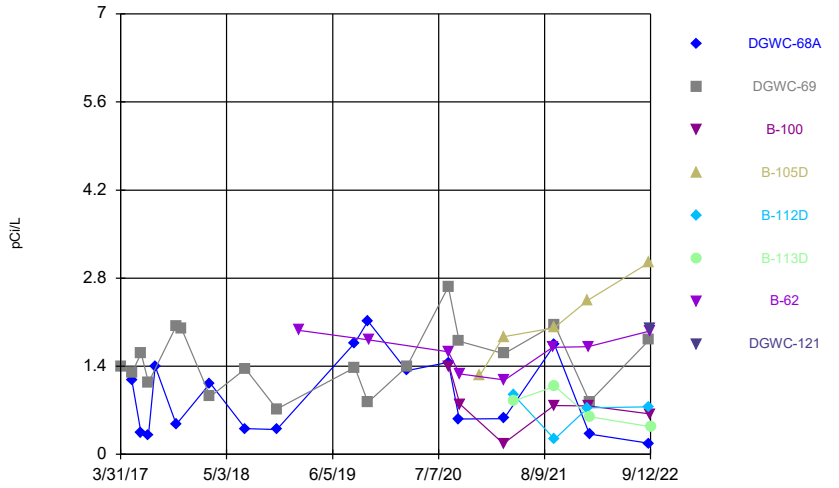


Constituent: Combined Radium 226 + 228 Analysis Run 11/18/2022 12:01 PM View: AP 1

Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.9.6.35 Groundwater Stats Consulting. UG

Time Series



Constituent: Combined Radium 226 + 228 Analysis Run 11/18/2022 12:01 PM View: AP 1

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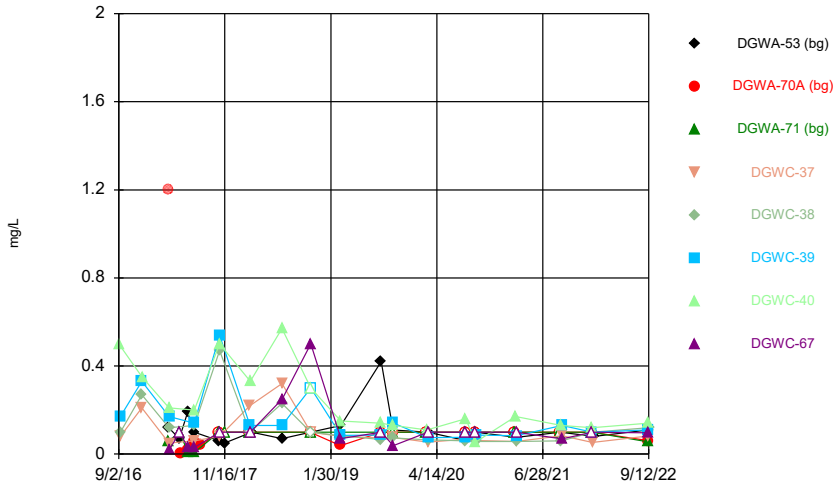
Sanitas™ v.9.6.35 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Time Series

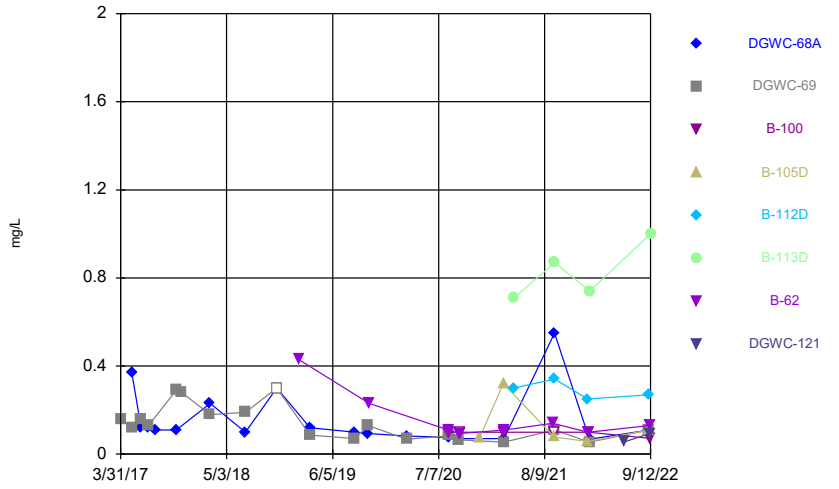


Constituent: Fluoride, total Analysis Run 11/18/2022 12:01 PM View: AP 1

Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.9.6.35 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Time Series

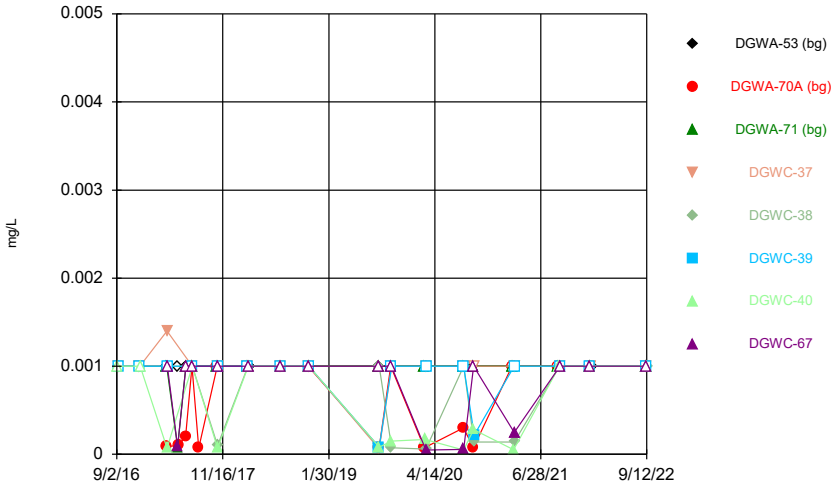


Constituent: Fluoride, total Analysis Run 11/18/2022 12:01 PM View: AP 1

Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.9.6.35 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

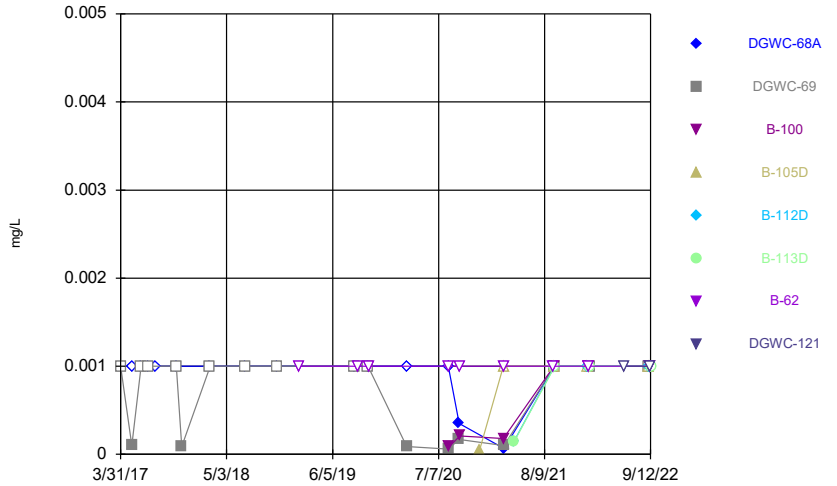
Time Series



Constituent: Lead Analysis Run 11/18/2022 12:01 PM View: AP 1
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.9.6.35 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

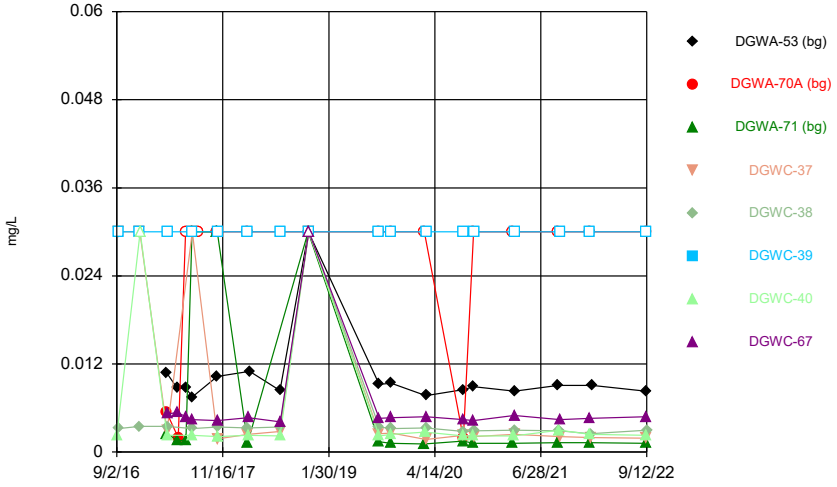
Time Series



Constituent: Lead Analysis Run 11/18/2022 12:01 PM View: AP 1
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.9.6.35 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

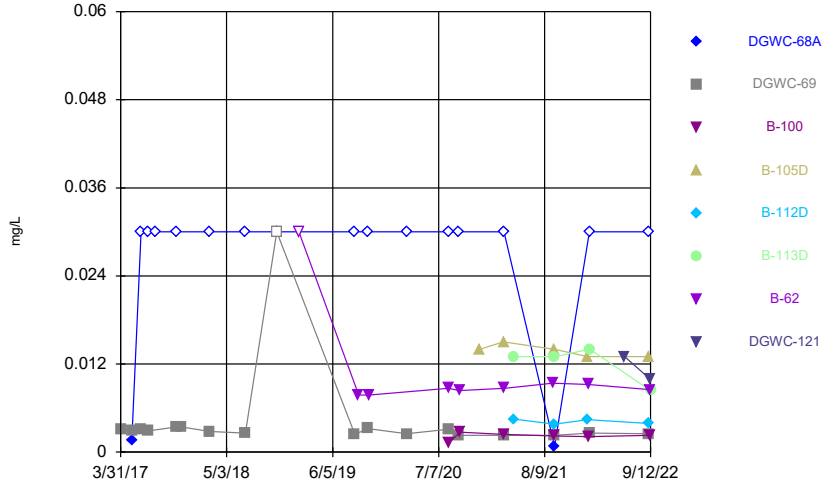
Time Series



Constituent: Lithium Analysis Run 11/18/2022 12:01 PM View: AP 1
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.9.6.35 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

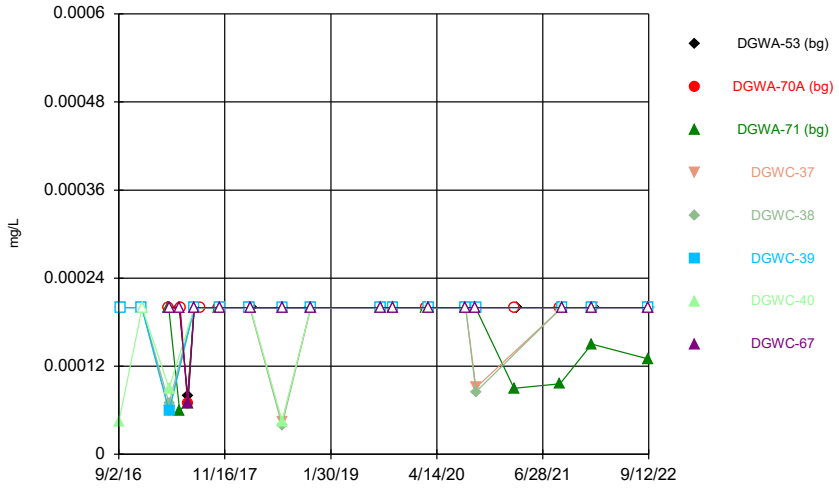
Time Series



Constituent: Lithium Analysis Run 11/18/2022 12:01 PM View: AP 1
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.9.6.35 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

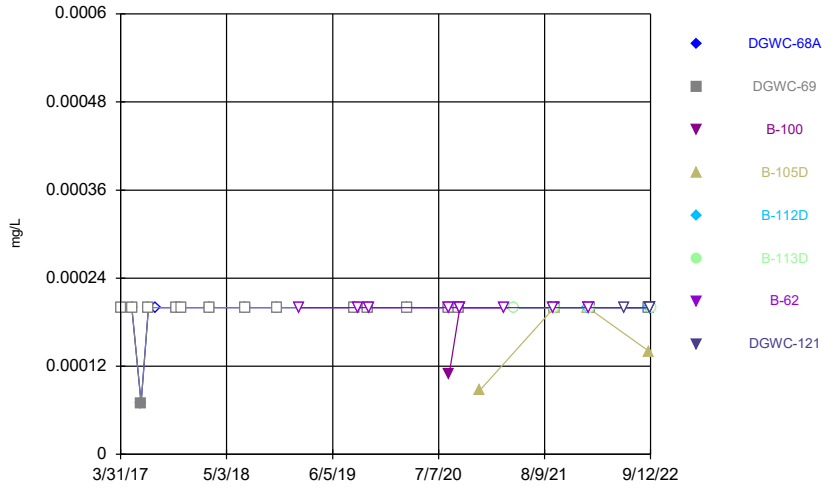
Time Series



Constituent: Mercury Analysis Run 11/18/2022 12:01 PM View: AP 1
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.9.6.35 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

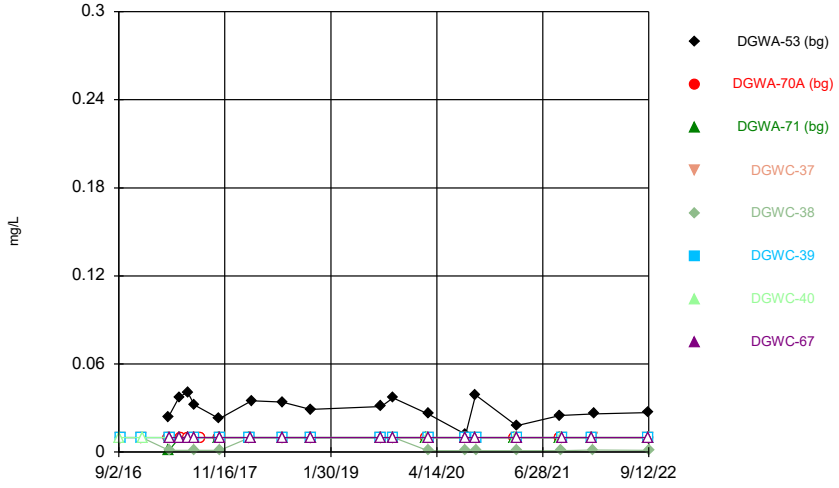
Time Series



Constituent: Mercury Analysis Run 11/18/2022 12:01 PM View: AP 1
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.9.6.35 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

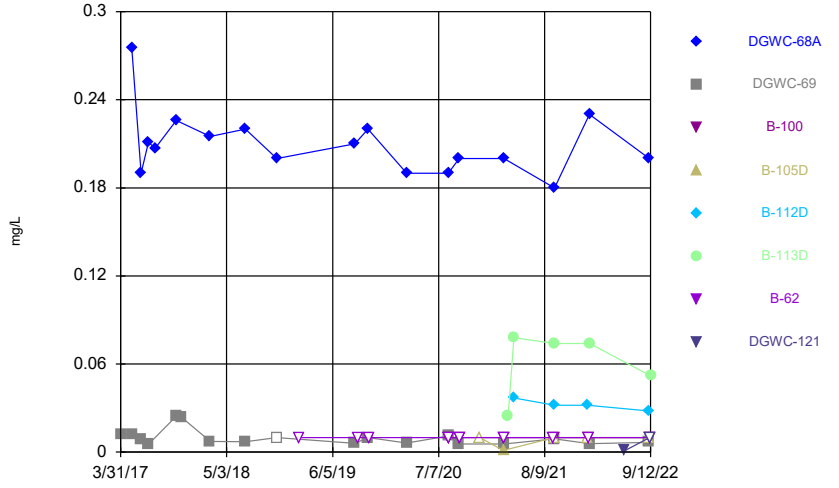
Time Series



Constituent: Molybdenum Analysis Run 11/18/2022 12:01 PM View: AP 1
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.9.6.35 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

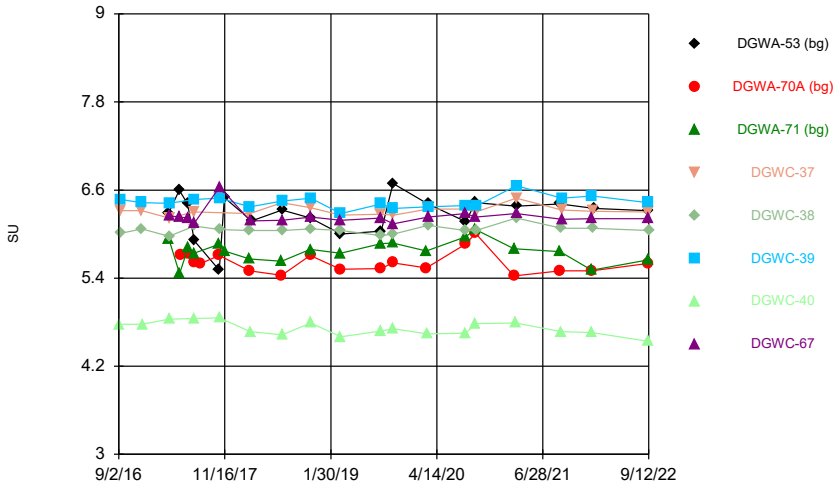
Time Series



Constituent: Molybdenum Analysis Run 11/18/2022 12:01 PM View: AP 1
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.9.6.35 Groundwater Stats Consulting. UG

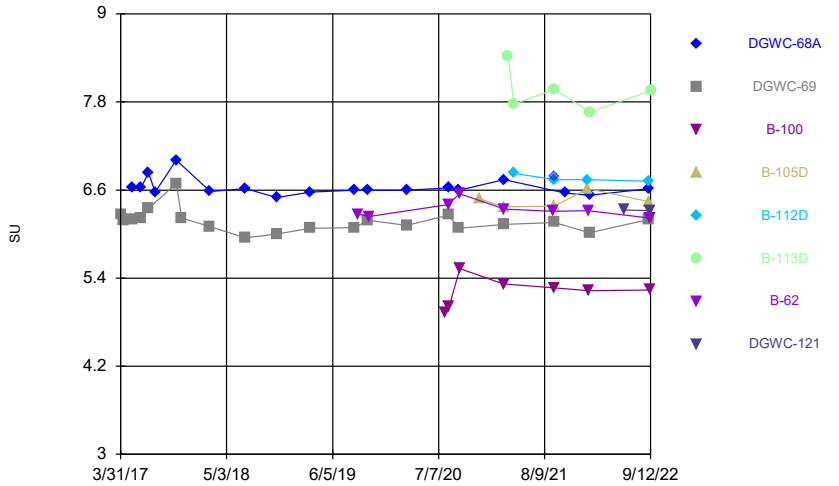
Time Series



Constituent: pH, Field Analysis Run 11/18/2022 12:01 PM View: AP 1
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.9.6.35 Groundwater Stats Consulting. UG

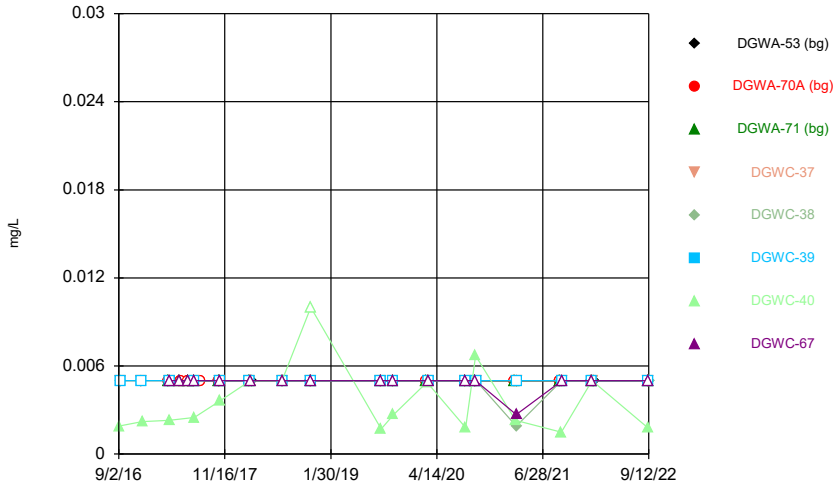
Time Series



Constituent: pH, Field Analysis Run 11/18/2022 12:01 PM View: AP 1
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.9.6.35 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

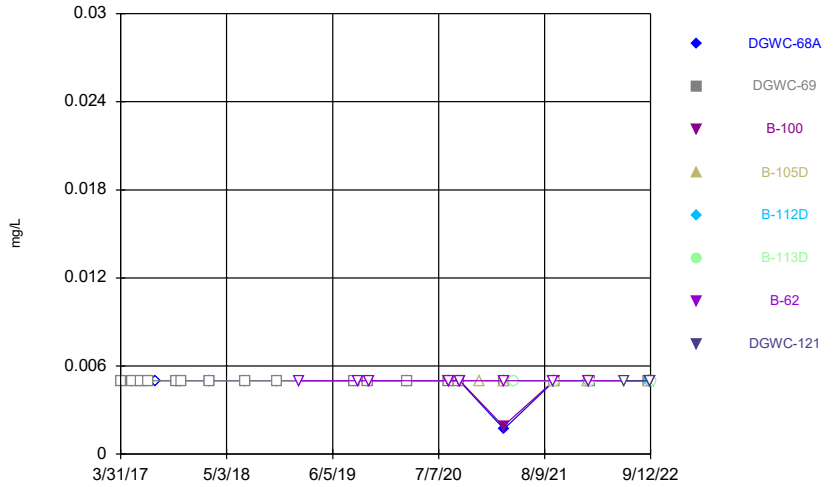
Time Series



Constituent: Selenium Analysis Run 11/18/2022 12:01 PM View: AP 1
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.9.6.35 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

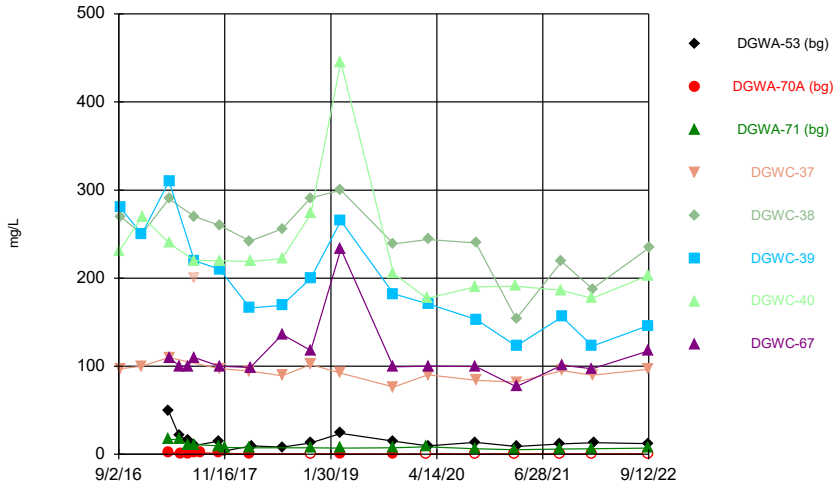
Time Series



Constituent: Selenium Analysis Run 11/18/2022 12:01 PM View: AP 1
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.9.6.35 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

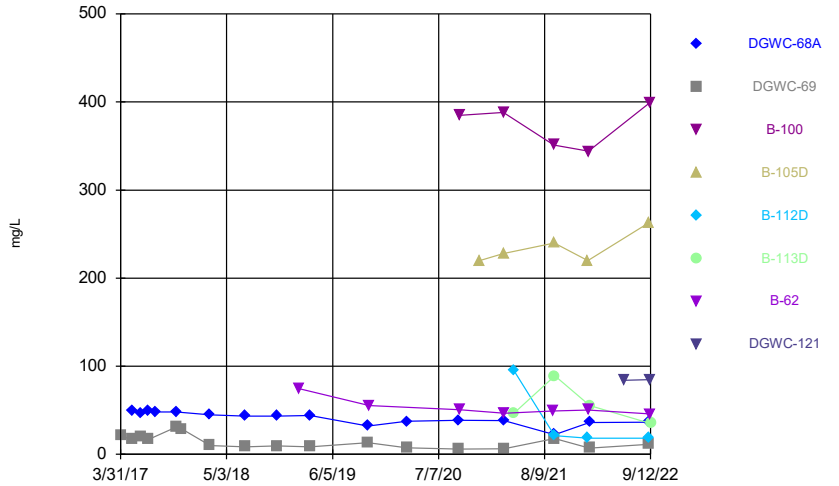
Time Series



Constituent: Sulfate as SO4 Analysis Run 11/18/2022 12:01 PM View: AP 1
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.9.6.35 Groundwater Stats Consulting. UG

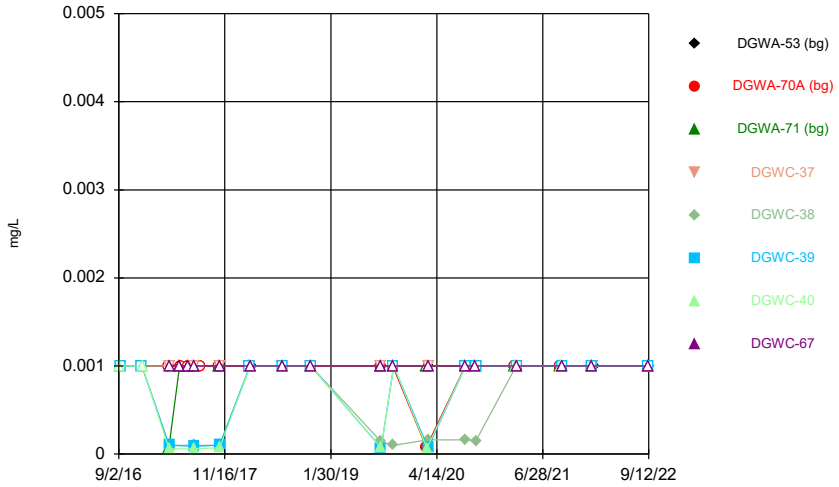
Time Series



Constituent: Sulfate as SO4 Analysis Run 11/18/2022 12:01 PM View: AP 1
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.9.6.35 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

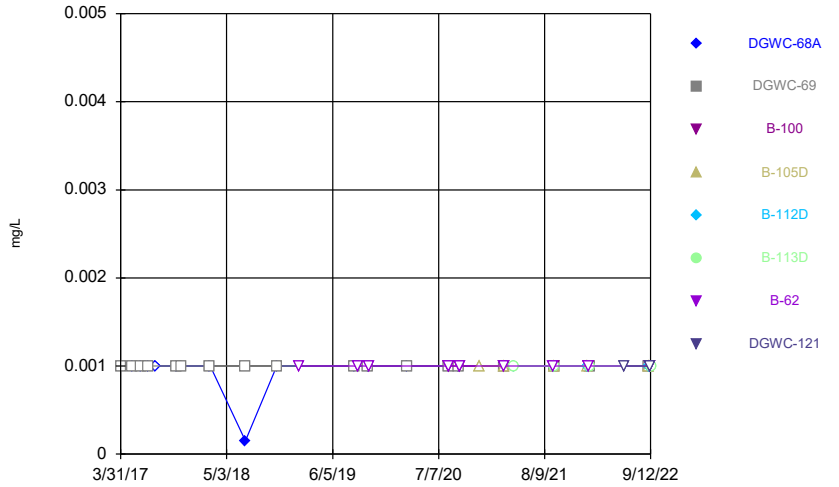
Time Series



Constituent: Thallium Analysis Run 11/18/2022 12:01 PM View: AP 1
Plant McDonough Client: Southern Company Data: McDonough AP

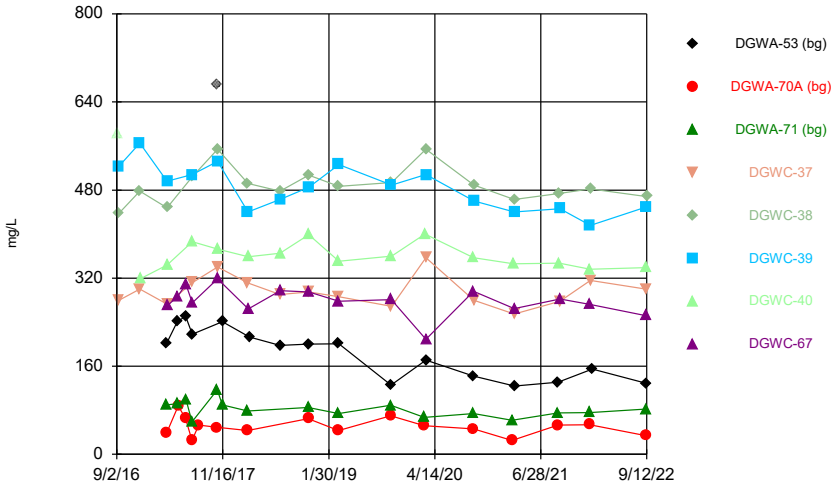
Sanitas™ v.9.6.35 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Time Series



Constituent: Thallium Analysis Run 11/18/2022 12:01 PM View: AP 1
Plant McDonough Client: Southern Company Data: McDonough AP

Time Series

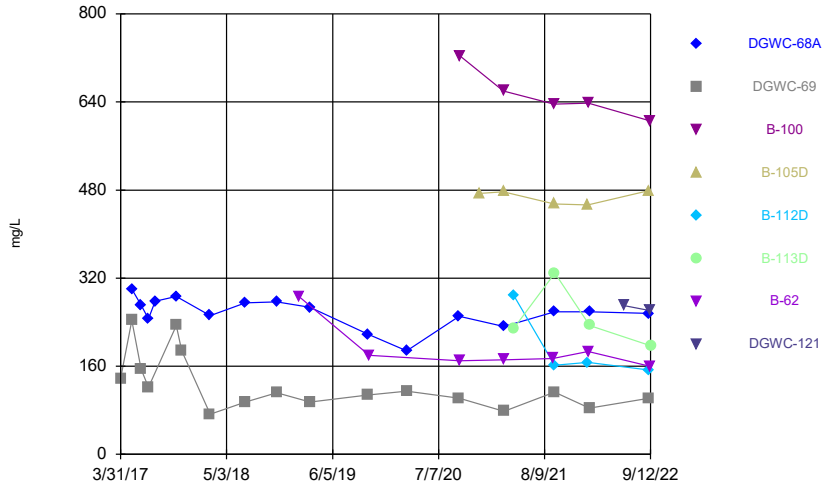


Constituent: Total Dissolved Solids [TDS] Analysis Run 11/18/2022 12:02 PM View: AP 1

Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.9.6.35 Groundwater Stats Consulting. UG

Time Series



Constituent: Total Dissolved Solids [TDS] Analysis Run 11/18/2022 12:02 PM View: AP 1

Plant McDonough Client: Southern Company Data: McDonough AP

Time Series

Constituent: Antimony (mg/L) Analysis Run 11/18/2022 12:02 PM View: AP 1

Plant McDonough Client: Southern Company Data: McDonough AP

	DGWA-53 (bg)	DGWA-70A (bg)	DGWA-71 (bg)	DGWC-37	DGWC-38	DGWC-39	DGWC-40	DGWC-67
9/2/2016							<0.003	
9/8/2016				<0.003	<0.003	<0.003		
12/7/2016				<0.003	<0.003	<0.003		
12/8/2016							<0.003	
3/28/2017	<0.003	<0.003	0.0007 (J)					
3/30/2017				<0.003	<0.003	<0.003	<0.003	
3/31/2017								0.0004 (J)
5/11/2017	<0.003							
5/12/2017			<0.003					<0.003
5/15/2017		<0.003						
6/15/2017	0.0006 (J)	<0.003						
6/16/2017			0.0007 (J)					0.0008 (J)
7/11/2017		<0.003	<0.003					
7/12/2017	<0.003							
7/13/2017				<0.003	<0.003	<0.003	<0.003	<0.003
8/8/2017		<0.003						
10/24/2017	<0.003	<0.003	<0.003					
10/26/2017				<0.003	<0.003	<0.003	<0.003	<0.003
2/27/2018		<0.003	<0.003					
3/1/2018				<0.003	<0.003	<0.003		
3/2/2018							<0.003	<0.003
3/8/2018	<0.003							
7/12/2018	<0.003			<0.003	<0.003	<0.003	<0.003	
7/13/2018								0.0023 (J)
11/6/2018		<0.003	<0.003					
11/7/2018	<0.003							
11/8/2018				<0.003	<0.003	<0.003	<0.003	<0.003
8/27/2019		<0.003	<0.003					
8/28/2019	<0.003			<0.003	<0.003	<0.003	<0.003	<0.003
10/15/2019		<0.003	<0.003					
10/16/2019	<0.003							
3/2/2020		<0.003	0.0018 (J)					
3/4/2020							<0.003	
3/9/2020	<0.003			<0.003	<0.003	<0.003		<0.003
8/11/2020		0.0013 (J)	0.0018 (J)					
8/13/2020	0.0003 (J)			<0.003	<0.003	<0.003	<0.003	<0.003
9/22/2020	<0.003	<0.003	<0.003					
9/23/2020							<0.003	<0.003
9/24/2020				<0.003	<0.003			
9/25/2020						<0.003		
3/1/2021		<0.003	0.0019 (J)					
3/8/2021							0.00033 (J)	
3/11/2021				<0.003	<0.003	<0.003		<0.003
3/12/2021	<0.003							
9/8/2021			<0.003					
9/9/2021	<0.003	0.0015 (J)						
9/14/2021							<0.003	
9/15/2021					<0.003			
9/16/2021				<0.003				<0.003
9/17/2021						<0.003		
1/18/2022		<0.003	<0.003					
1/19/2022							<0.003	<0.003

Time Series

Constituent: Antimony (mg/L) Analysis Run 11/18/2022 12:02 PM View: AP 1

Plant McDonough Client: Southern Company Data: McDonough AP

	DGWA-53 (bg)	DGWA-70A (bg)	DGWA-71 (bg)	DGWC-37	DGWC-38	DGWC-39	DGWC-40	DGWC-67
1/20/2022						<0.003		
1/21/2022				<0.003	<0.003			
1/28/2022	<0.003							
9/7/2022		<0.003	<0.003			<0.003	<0.003	
9/8/2022	<0.003			<0.003				<0.003
9/12/2022					<0.003			

Time Series

Constituent: Antimony (mg/L) Analysis Run 11/18/2022 12:02 PM View: AP 1

Plant McDonough Client: Southern Company Data: McDonough AP

	DGWC-68A	DGWC-69	B-100	B-105D	B-112D	B-113D	B-62	DGWC-121
3/31/2017		<0.003						
5/12/2017	<0.003	<0.003						
6/16/2017	0.0008 (J)	0.0007 (J)						
7/13/2017	<0.003	<0.003						
8/8/2017	<0.003							
10/26/2017	<0.003	<0.003						
11/15/2017		<0.003						
3/2/2018	<0.003	<0.003						
7/13/2018	<0.003	<0.003						
11/8/2018	<0.003	<0.003						
1/30/2019							<0.003	
8/28/2019	<0.003	<0.003						
9/11/2019							<0.003	
10/21/2019							<0.003	
3/9/2020	<0.003	<0.003						
8/13/2020	<0.003	0.0019 (J)					<0.003	
8/17/2020			0.0013 (J)					
9/23/2020	<0.003	<0.003						
9/24/2020							0.00046 (J)	
9/25/2020			<0.003					
12/9/2020				<0.003				
3/8/2021			0.0017 (J)	0.00069 (J)				
3/10/2021	0.00032 (J)	0.0018 (J)						
3/12/2021							<0.003	
4/15/2021					0.00041 (J)			
4/16/2021						0.0021 (J)		
9/9/2021							<0.003	
9/13/2021			<0.003					
9/15/2021				0.0082				
9/16/2021	<0.003	<0.003			<0.003			
9/17/2021						<0.003		
1/19/2022				<0.003	<0.003			
1/20/2022							<0.003	
1/21/2022			<0.003					
1/25/2022	<0.003	<0.003						
1/26/2022						<0.003		
6/6/2022								<0.003
9/7/2022	<0.003	<0.003		<0.003	<0.003			
9/8/2022			<0.003				<0.003	<0.003
9/12/2022						<0.003		

Time Series

Constituent: Arsenic (mg/L) Analysis Run 11/18/2022 12:02 PM View: AP 1

Plant McDonough Client: Southern Company Data: McDonough AP

	DGWA-53 (bg)	DGWA-70A (bg)	DGWA-71 (bg)	DGWC-37	DGWC-38	DGWC-39	DGWC-40	DGWC-67
9/2/2016							<0.005	
9/8/2016				<0.005	<0.005	<0.005		
12/7/2016				0.0019 (J)	<0.005	<0.005		
12/8/2016							<0.005	
3/28/2017	0.0005 (J)	<0.005	<0.005					
3/30/2017				<0.005	<0.005	0.0007 (J)	0.0006 (J)	
3/31/2017								<0.005
5/11/2017	0.0005 (J)							
5/12/2017			0.0004 (J)					<0.005
5/15/2017		<0.005						
6/15/2017	<0.005	<0.005						
6/16/2017			<0.005					<0.005
7/11/2017		<0.005	<0.005					
7/12/2017	<0.005							
7/13/2017				<0.005	0.0005 (J)	0.0009 (J)	<0.005	<0.005
8/8/2017		<0.005						
10/24/2017	<0.005	<0.005	<0.005					
10/26/2017				<0.005	<0.005	<0.005	<0.005	<0.005
2/27/2018		<0.005	<0.005					
3/1/2018				<0.005	<0.005	0.0011 (J)		
3/2/2018							0.0011 (J)	<0.005
3/8/2018	<0.005							
7/12/2018	<0.005			<0.005	<0.005	0.00057 (J)	<0.005	
7/13/2018								<0.005
11/6/2018		<0.005	<0.005					
11/7/2018	<0.005 (J)							
11/8/2018				<0.005	<0.005	<0.005	<0.005	<0.005
8/27/2019		<0.005	<0.005					
8/28/2019	<0.005			<0.005	<0.005	<0.005	<0.005	<0.005
10/15/2019		0.00052 (J)	0.00071 (J)					
10/16/2019	0.0018 (J)							
10/17/2019								0.00042 (J)
10/18/2019				<0.005	<0.005	0.00075 (J)	<0.005	
3/2/2020		<0.005	<0.005					
3/4/2020							0.00065 (J)	
3/9/2020	0.00068 (J)			<0.005	<0.005	0.00039 (J)		<0.005
8/11/2020		<0.005	<0.005					
8/13/2020	<0.005			<0.005	<0.005	<0.005	<0.005	<0.005
9/22/2020	0.00093 (J)	<0.005	<0.005					
9/23/2020							<0.005	<0.005
9/24/2020				<0.005	<0.005			
9/25/2020						0.00087 (J)		
3/1/2021		<0.005	<0.005					
3/8/2021							<0.005	
3/11/2021				<0.005	<0.005	<0.005		0.0008 (J)
3/12/2021	<0.005							
9/8/2021			<0.005					
9/9/2021	<0.005	<0.005						
9/14/2021							<0.005	
9/15/2021					<0.005			
9/16/2021				<0.005				<0.005
9/17/2021						<0.005		

Time Series

Constituent: Arsenic (mg/L) Analysis Run 11/18/2022 12:02 PM View: AP 1

Plant McDonough Client: Southern Company Data: McDonough AP

	DGWA-53 (bg)	DGWA-70A (bg)	DGWA-71 (bg)	DGWC-37	DGWC-38	DGWC-39	DGWC-40	DGWC-67
1/18/2022		0.0046 (J)	0.0054					
1/19/2022							0.003 (J)	0.0033 (J)
1/20/2022						0.0019 (J)		
1/21/2022				<0.005	<0.005			
1/28/2022	0.0024 (J)							
9/7/2022		0.0024 (J)	<0.005			<0.005	<0.005	
9/8/2022	0.0029 (J)			<0.005				<0.005
9/12/2022					<0.005			

Time Series

Constituent: Arsenic (mg/L) Analysis Run 11/18/2022 12:02 PM View: AP 1

Plant McDonough Client: Southern Company Data: McDonough AP

	DGWC-68A	DGWC-69	B-100	B-105D	B-112D	B-113D	B-62	DGWC-121
3/31/2017		0.0239						
4/12/2017		0.0077						
5/12/2017	<0.005	0.0097						
6/16/2017	<0.005	0.0113						
7/13/2017	<0.005	0.0029 (J)						
8/8/2017	<0.005							
10/26/2017	<0.005	0.114						
11/15/2017		0.164						
3/2/2018	<0.005	0.0127						
7/13/2018	<0.005	0.017						
11/8/2018	<0.005 (J)	0.02						
1/30/2019							<0.005	
8/28/2019	<0.005	0.025						
9/11/2019							<0.005	
10/16/2019	<0.005	0.023						
10/21/2019							<0.005	
3/9/2020	<0.005	0.029						
7/23/2020			<0.005					
8/13/2020	<0.005	0.029					<0.005	
8/17/2020			<0.005					
9/23/2020	<0.005	0.032						
9/24/2020							<0.005	
9/25/2020			<0.005					
12/9/2020				<0.005				
3/8/2021			<0.005	0.0025 (J)				
3/10/2021	<0.005	0.028						
3/12/2021							<0.005	
4/15/2021					0.00078 (J)			
4/16/2021						<0.005		
9/9/2021							<0.005	
9/13/2021			<0.005					
9/15/2021				<0.005				
9/16/2021	0.46 (o)	0.023			<0.005			
9/17/2021						<0.005		
10/27/2021	0.0016 (J)							
1/19/2022				0.0051	0.005			
1/20/2022							0.0033 (J)	
1/21/2022			<0.005					
1/25/2022	<0.005	0.028						
1/26/2022						0.0018 (J)		
6/6/2022								<0.005
9/7/2022	<0.005	0.024		0.0026 (J)	<0.005			
9/8/2022			<0.005				<0.005	<0.005
9/12/2022						<0.005		

Time Series

Constituent: Barium (mg/L) Analysis Run 11/18/2022 12:02 PM View: AP 1

Plant McDonough Client: Southern Company Data: McDonough AP

	DGWA-53 (bg)	DGWA-70A (bg)	DGWA-71 (bg)	DGWC-37	DGWC-38	DGWC-39	DGWC-40	DGWC-67
9/2/2016							0.0171	
9/8/2016				0.123	0.0333	0.0978		
12/7/2016				0.125	0.0336	0.0844		
12/8/2016							0.0163	
3/28/2017	0.134	0.0166	0.0378					
3/30/2017				0.11	0.0325	0.0858	0.0177	
3/31/2017								0.111
5/11/2017	0.126							
5/12/2017			0.04					0.127
5/15/2017		0.0181						
6/15/2017	0.14	0.0277						
6/16/2017			0.0369					0.11
7/11/2017		0.0306	0.0362					
7/12/2017	0.173							
7/13/2017				0.11	0.0332	0.0919	0.017	0.102
8/8/2017		0.0277						
10/24/2017	0.109	0.0333	0.0313					
10/26/2017				0.112	0.0333	0.0899	0.0168	0.105
2/27/2018		0.0341	0.0287					
3/1/2018				0.102	0.0333	0.0742		
3/2/2018							0.0169	0.104
3/8/2018	0.19							
7/12/2018	0.18			0.11	0.034	0.094	0.018	
7/13/2018								0.11
11/6/2018		0.037	0.026					
11/7/2018	0.15							
11/8/2018				0.11	0.035	0.1	0.017	0.11
8/27/2019		0.037	0.027					
8/28/2019	0.087			0.086	0.033	0.099	0.017	0.11
10/15/2019		0.034	0.024					
10/16/2019	0.077							
10/17/2019								0.1
10/18/2019				0.079	0.032	0.1	0.019	
3/2/2020		0.035	0.026					
3/4/2020							0.018	
3/9/2020	0.099			0.092	0.032	0.076		0.11
8/11/2020		0.041	0.026					
8/13/2020	0.046			0.088	0.032	0.089	0.018	0.095
9/22/2020	0.07	0.038	0.024					
9/23/2020							0.019	0.1
9/24/2020				0.094	0.032			
9/25/2020						0.1		
3/1/2021		0.042	0.028					
3/8/2021							0.016	
3/11/2021				0.075	0.032	0.078		0.11
3/12/2021	0.076							
9/8/2021			0.025					
9/9/2021	0.099	0.038						
9/14/2021							0.027	
9/15/2021					0.032			
9/16/2021				0.083				0.088
9/17/2021						0.09		

Time Series

Constituent: Barium (mg/L) Analysis Run 11/18/2022 12:02 PM View: AP 1

Plant McDonough Client: Southern Company Data: McDonough AP

	DGWA-53 (bg)	DGWA-70A (bg)	DGWA-71 (bg)	DGWC-37	DGWC-38	DGWC-39	DGWC-40	DGWC-67
1/18/2022		0.043	0.029					
1/19/2022							0.018	0.091
1/20/2022						0.093		
1/21/2022				0.085	0.031			
1/28/2022	0.068							
9/7/2022		0.039	0.025			0.099	0.016	
9/8/2022	0.077			0.079				0.082
9/12/2022					0.027			

Time Series

Constituent: Barium (mg/L) Analysis Run 11/18/2022 12:02 PM View: AP 1

Plant McDonough Client: Southern Company Data: McDonough AP

	DGWC-68A	DGWC-69	B-100	B-105D	B-112D	B-113D	B-62	DGWC-121
3/31/2017		0.0872						
5/12/2017	0.089	0.0929						
6/16/2017	0.0855	0.1						
7/13/2017	0.0859	0.0985						
8/8/2017	0.0852							
10/26/2017	0.0878	0.136						
11/15/2017		0.107						
3/2/2018	0.0878	0.0671						
7/13/2018	0.091	0.074						
11/8/2018	0.092	0.072						
1/30/2019							0.018	
8/28/2019	0.089	0.061						
9/11/2019							0.023	
10/16/2019	0.089	0.1						
10/21/2019							0.026	
3/9/2020	0.088	0.057						
8/13/2020	0.088	0.13					0.026	
8/17/2020			0.015					
9/23/2020	0.094	0.055						
9/24/2020							0.025	
9/25/2020			0.022					
12/9/2020				0.03				
3/8/2021			0.022	0.041				
3/10/2021	0.09	0.048						
3/12/2021							0.027	
4/15/2021					0.026			
4/16/2021						0.0032 (J)		
9/9/2021							0.021	
9/13/2021			0.021					
9/15/2021				0.037				
9/16/2021	0.13 (o)	0.078			0.0032 (J)			
9/17/2021						0.0048 (J)		
10/27/2021	0.086							
1/19/2022				0.04	0.0034 (J)			
1/20/2022							0.021	
1/21/2022			0.023					
1/25/2022	0.1	0.049						
1/26/2022						0.0051		
6/6/2022								0.04
9/7/2022	0.098	0.065		0.035	0.0026 (J)			
9/8/2022			0.021				0.018	0.042
9/12/2022						0.0051		

Time Series

Constituent: Beryllium (mg/L) Analysis Run 11/18/2022 12:02 PM View: AP 1

Plant McDonough Client: Southern Company Data: McDonough AP

	DGWA-53 (bg)	DGWA-70A (bg)	DGWA-71 (bg)	DGWC-37	DGWC-38	DGWC-39	DGWC-40	DGWC-67
9/2/2016							0.0028 (J)	
9/8/2016				<0.0005	<0.0005	<0.0005		
12/7/2016				<0.0005	<0.0005	<0.0005		
12/8/2016							0.0026 (J)	
3/28/2017	<0.0005	<0.0005	9E-05 (J)					
3/30/2017				<0.0005	<0.0005	<0.0005	0.003	
3/31/2017								<0.0005
5/11/2017	<0.0005							
5/12/2017			<0.0005					<0.0005
5/15/2017		<0.0005						
6/15/2017	<0.0005	<0.0005						
6/16/2017			0.0001 (J)					<0.0005
7/11/2017		<0.0005	<0.0005					
7/12/2017	<0.0005							
7/13/2017				<0.0005	<0.0005	<0.0005	0.003 (J)	<0.0005
8/8/2017		<0.0005						
10/24/2017	<0.0005	<0.0005	<0.0005					
10/26/2017				<0.0005	<0.0005	<0.0005	0.0027 (J)	<0.0005
2/27/2018		<0.0005	<0.0005					
3/1/2018				<0.0005	<0.0005	<0.0005		
3/2/2018							0.0033	<0.0005
3/8/2018	<0.0005							
7/10/2018			0.0009 (J)					
7/12/2018	<0.0005			7E-05 (J)	<0.0005	<0.0005	0.0032	
7/13/2018								<0.0005
11/6/2018		0.00012 (J)	0.00013 (J)					
11/7/2018	<0.0005							
11/8/2018				<0.0005	<0.0005	<0.0005	<0.003 (J)	<0.0005
8/27/2019		7.9E-05 (J)	<0.0005					
8/28/2019	<0.0005			8.6E-05 (J)	<0.0005	<0.0005	0.0032	<0.0005
10/15/2019		<0.0005	8.8E-05 (J)					
10/16/2019	<0.0005							
10/17/2019								<0.0005
10/18/2019				<0.0005	<0.0005	<0.0005	0.0033	
3/2/2020		9.6E-05 (J)	0.0001 (J)					
3/4/2020							0.0039	
3/9/2020	<0.0005			<0.0005	<0.0005	<0.0005		<0.0005
8/11/2020		0.00013 (J)	0.00011 (J)					
8/13/2020	<0.0005			0.0001 (J)	<0.0005	<0.0005	0.0033	<0.0005
9/22/2020	<0.0005	6.8E-05 (J)	6.9E-05 (J)					
9/23/2020							0.0031	<0.0005
9/24/2020				8.8E-05 (J)	5.8E-05 (J)			
9/25/2020						<0.0005		
3/1/2021		0.00012 (J)	0.00011 (J)					
3/8/2021							0.003	
3/11/2021				<0.0005	<0.0005	<0.0005		<0.0005
3/12/2021	<0.0005							
9/8/2021			9.1E-05 (J)					
9/9/2021	<0.0005	8.9E-05 (J)						
9/14/2021							0.0032	
9/15/2021					<0.0005			
9/16/2021				5.9E-05 (J)				<0.0005

Time Series

Constituent: Beryllium (mg/L) Analysis Run 11/18/2022 12:02 PM View: AP 1

Plant McDonough Client: Southern Company Data: McDonough AP

	DGWA-53 (bg)	DGWA-70A (bg)	DGWA-71 (bg)	DGWC-37	DGWC-38	DGWC-39	DGWC-40	DGWC-67
9/17/2021						<0.0005		
1/18/2022		9.2E-05 (J)	0.00012 (J)					
1/19/2022							0.0034	<0.0005
1/20/2022						<0.0005		
1/21/2022				5.9E-05 (J)	<0.0005			
1/28/2022	<0.0005							
9/7/2022		8.4E-05 (J)	7.5E-05 (J)			<0.0005	0.0031	
9/8/2022	<0.0005			5.7E-05 (J)				<0.0005
9/12/2022					<0.0005			

Time Series

Constituent: Beryllium (mg/L) Analysis Run 11/18/2022 12:02 PM View: AP 1

Plant McDonough Client: Southern Company Data: McDonough AP

	DGWC-68A	DGWC-69	B-100	B-105D	B-112D	B-113D	B-62	DGWC-121
10/6/2016							9E-05 (J)	
3/31/2017		7E-05 (J)						
5/12/2017	<0.0005	<0.0005						
6/16/2017	<0.0005	<0.0005						
7/13/2017	<0.0005	<0.0005						
8/8/2017	<0.0005							
10/26/2017	<0.0005	<0.0005						
11/15/2017		<0.0005						
3/2/2018	<0.0005	<0.0005						
7/13/2018	8.4E-05 (J)	5.8E-05 (J)						
11/8/2018	<0.0005	<0.0005						
1/30/2019							<0.0005	
8/28/2019	<0.0005	<0.0005						
9/11/2019							0.00012 (J)	
10/16/2019	<0.0005	<0.0005						
10/21/2019							7.8E-05 (J)	
3/9/2020	<0.0005	7.5E-05 (J)						
8/13/2020	<0.0005	6.3E-05 (J)					0.00011 (J)	
8/17/2020			0.0004 (J)					
9/23/2020	<0.0005	6.1E-05 (J)						
9/24/2020							0.00013 (J)	
9/25/2020			0.00035 (J)					
12/9/2020				<0.0005				
3/8/2021			0.00046 (J)	<0.0005				
3/10/2021	6.1E-05 (J)	5E-05 (J)						
3/12/2021							<0.0005	
4/15/2021					<0.0005			
4/16/2021						<0.0005		
9/9/2021							0.00014 (J)	
9/13/2021			0.00053					
9/15/2021				<0.0005				
9/16/2021	<0.0005	<0.0005			<0.0005			
9/17/2021						<0.0005		
1/19/2022				<0.0005	<0.0005			
1/20/2022							0.00015 (J)	
1/21/2022			0.00053					
1/25/2022	<0.0005	5.9E-05 (J)						
1/26/2022						<0.0005		
6/6/2022								<0.0005
9/7/2022	<0.0005	<0.0005		<0.0005	<0.0005			
9/8/2022			0.00058				0.00013 (J)	<0.0005
9/12/2022						<0.0005		

Time Series

Constituent: Boron, total (mg/L) Analysis Run 11/18/2022 12:02 PM View: AP 1

Plant McDonough Client: Southern Company Data: McDonough AP

	DGWA-53 (bg)	DGWA-70A (bg)	DGWA-71 (bg)	DGWC-37	DGWC-38	DGWC-39	DGWC-40	DGWC-67
9/2/2016							0.895	
9/8/2016				1.58	2.69	3.35		
12/7/2016				2.01	3.08	3.63		
12/8/2016							0.841	
3/28/2017	0.0612	0.0067 (J)	0.0097 (J)					
3/30/2017				1.47	3.19	3.57	0.937	
3/31/2017								2.91
5/11/2017	0.0805							
5/12/2017			0.0082 (J)					3.24
5/15/2017		0.0073 (J)						
6/15/2017	0.0725	<0.04						
6/16/2017			0.0085 (J)					3.42
7/11/2017		<0.04	0.0077 (J)					
7/12/2017	0.0735							
7/13/2017				2.1	3.09	3.41	0.933	3.46
8/8/2017		<0.04						
10/24/2017	0.077	0.0082 (J)	0.0083 (J)					
10/26/2017				1.86	2.92	3.41	0.873	3.21
2/27/2018		0.0062 (J)	0.0069 (J)					
3/1/2018				1.87	3.08	2.86		
3/2/2018							0.974	3.49
3/8/2018	0.13 (J)							
7/12/2018	0.076			1.5	2.8	3	0.92	
7/13/2018								3.1
11/6/2018		<0.04 (J)	<0.04 (J)					
11/7/2018	0.073							
11/8/2018				1.4	3.4	3.4	0.8	3.5
3/12/2019		0.0073 (J)	0.0068 (J)					
3/13/2019	0.08			1.8	2.9	3.4	0.8	3.5
10/15/2019		<0.04	0.0054 (J)					
10/16/2019	0.059							
10/17/2019								3.6
10/18/2019				1.3	3.1	3.6	0.9	
3/2/2020		0.0055 (J)	0.01 (J)					
3/4/2020							0.86	
3/9/2020	0.08 (J)			1.8	3	2.9		3.6
9/22/2020	0.056 (J)	<0.04	<0.04					
9/23/2020							0.76	3.2
9/24/2020				1.6	2.9			
9/25/2020						3.3		
3/1/2021		<0.04	0.0054 (J)					
3/8/2021							0.72	
3/11/2021				1.4	2.7	2.5		3.4
3/12/2021	0.064							
9/8/2021			<0.04					
9/9/2021	0.065	<0.04						
9/14/2021							0.7	
9/15/2021					2.8			
9/16/2021				1.4				3.4
9/17/2021						2.8		
1/18/2022		0.024 (J)	0.015 (J)					
1/19/2022							0.82	4.1

Time Series

Constituent: Boron, total (mg/L) Analysis Run 11/18/2022 12:02 PM View: AP 1

Plant McDonough Client: Southern Company Data: McDonough AP

	DGWA-53 (bg)	DGWA-70A (bg)	DGWA-71 (bg)	DGWC-37	DGWC-38	DGWC-39	DGWC-40	DGWC-67
1/20/2022						2.8		
1/21/2022				1.4	2.8			
1/28/2022	0.062							
9/7/2022		<0.04	<0.04			3.3	0.84	
9/8/2022	0.054			2				4.3
9/12/2022					2.8			

Time Series

Constituent: Boron, total (mg/L) Analysis Run 11/18/2022 12:02 PM View: AP 1

Plant McDonough Client: Southern Company Data: McDonough AP

	DGWC-68A	DGWC-69	B-100	B-105D	B-112D	B-113D	B-62	DGWC-121
10/6/2016							0.053 (J)	
3/31/2017		0.407						
4/12/2017		0.207						
5/12/2017	1.8	0.311						
6/16/2017	1.88	0.381						
7/13/2017	1.97	0.323						
8/8/2017	2.1							
10/26/2017	2.05	0.779						
11/15/2017		0.667						
3/2/2018	2.05	0.0478						
7/13/2018	1.7	0.043						
11/8/2018	1.8	0.054						
1/30/2019							0.14	
3/13/2019	1.9	0.028 (J)						
9/11/2019							0.068	
10/16/2019	1.5	0.38						
10/21/2019							0.058	
3/9/2020	1.8	0.035 (J)						
9/23/2020	1.7	0.041 (J)						
9/24/2020							0.074 (J)	
9/25/2020			0.27					
12/9/2020				0.79				
3/8/2021			0.24	0.64				
3/10/2021	1.7	0.024 (J)						
3/12/2021							0.092 (J)	
3/26/2021						0.034 (J)		
4/15/2021					0.26			
4/16/2021						0.16		
9/9/2021							0.068	
9/13/2021			0.24					
9/15/2021				0.76				
9/16/2021	1.3	0.32			0.27			
9/17/2021						0.089		
1/19/2022				0.88	0.31			
1/20/2022							0.077	
1/21/2022			0.24					
1/25/2022	2.2	0.035 (J)						
1/26/2022						0.12		
6/6/2022								1.4
9/7/2022	2	0.23		0.87	0.26			
9/8/2022			0.24				0.064	2.1
9/12/2022						0.048		

Time Series

Constituent: Cadmium (mg/L) Analysis Run 11/18/2022 12:02 PM View: AP 1

Plant McDonough Client: Southern Company Data: McDonough AP

	DGWA-53 (bg)	DGWA-70A (bg)	DGWA-71 (bg)	DGWC-37	DGWC-38	DGWC-39	DGWC-40	DGWC-67
9/2/2016							0.0008 (J)	
9/8/2016				0.0002 (J)	0.0002 (J)	<0.0005		
12/7/2016				0.0001 (J)	0.0002 (J)	<0.0005		
12/8/2016							0.0007 (J)	
3/28/2017	<0.0005	<0.0005	<0.0005					
3/30/2017				0.0001 (J)	0.0002 (J)	<0.0005	0.0007 (J)	
3/31/2017								<0.0005
5/11/2017	8E-05 (J)							
5/12/2017			<0.0005					<0.0005
5/15/2017		<0.0005						
6/15/2017	<0.0005	<0.0005						
6/16/2017			<0.0005					<0.0005
7/11/2017		<0.0005	<0.0005					
7/12/2017	<0.0005							
7/13/2017				<0.0005	0.0002 (J)	<0.0005	0.0008 (J)	<0.0005
8/8/2017		<0.0005						
10/24/2017	<0.0005	<0.0005	<0.0005					
10/26/2017				<0.0005	0.0002 (J)	<0.0005	0.0008 (J)	<0.0005
2/27/2018		<0.0005	<0.0005					
3/1/2018				<0.0005	<0.0005	<0.0005		
3/2/2018							<0.0005	<0.0005
3/8/2018	<0.0005							
7/12/2018	0.00013 (J)			<0.0005	0.00024 (J)	<0.0005	0.00087 (J)	
7/13/2018								<0.0005
11/6/2018		<0.0005	<0.0005					
11/7/2018	<0.0005							
11/8/2018				<0.0005	<0.001 (J)	<0.0005	<0.001 (J)	<0.0005
8/27/2019		<0.0005	<0.0005					
8/28/2019	<0.0005			<0.0005	0.0003 (J)	<0.0005	0.00087 (J)	0.00017 (J)
10/15/2019		<0.0005	<0.0005					
10/16/2019	<0.0005							
10/17/2019								<0.0005
10/18/2019				<0.0005	0.00016 (J)	<0.0005	0.00088 (J)	
3/2/2020		0.00041 (J)	<0.0005					
3/4/2020							0.00093 (J)	
3/9/2020	<0.0005			<0.0005	0.00017 (J)	<0.0005		0.00021 (J)
8/11/2020		<0.0005	<0.0005					
8/13/2020	<0.0005			<0.0005	0.00021 (J)	<0.0005	0.00084 (J)	0.00015 (J)
9/22/2020	<0.0005	<0.0005	<0.0005					
9/23/2020							0.0008 (J)	0.00018 (J)
9/24/2020				0.00027 (J)	0.00081 (J)			
9/25/2020						<0.0005		
3/1/2021		<0.0005	<0.0005					
3/8/2021							0.00072	
3/11/2021				<0.0005	<0.0005	<0.0005		0.00053
3/12/2021	<0.0005							
9/8/2021			<0.0005					
9/9/2021	<0.0005	<0.0005						
9/14/2021							0.00086	
9/15/2021					0.00021 (J)			
9/16/2021				0.00013 (J)				<0.0005
9/17/2021						<0.0005		

Time Series

Constituent: Cadmium (mg/L) Analysis Run 11/18/2022 12:02 PM View: AP 1

Plant McDonough Client: Southern Company Data: McDonough AP

	DGWA-53 (bg)	DGWA-70A (bg)	DGWA-71 (bg)	DGWC-37	DGWC-38	DGWC-39	DGWC-40	DGWC-67
1/18/2022		<0.0005	<0.0005					
1/19/2022							0.00085	<0.0005
1/20/2022						<0.0005		
1/21/2022				<0.0005	0.0002 (J)			
1/28/2022	<0.0005							
9/7/2022		<0.0005	<0.0005			<0.0005	0.00081	
9/8/2022	<0.0005			<0.0005				<0.0005
9/12/2022					0.00013 (J)			

Time Series

Constituent: Cadmium (mg/L) Analysis Run 11/18/2022 12:02 PM View: AP 1

Plant McDonough Client: Southern Company Data: McDonough AP

	DGWC-68A	DGWC-69	B-100	B-105D	B-112D	B-113D	B-62	DGWC-121
3/31/2017		0.0001 (J)						
5/12/2017	8E-05 (J)	0.0002 (J)						
6/16/2017	<0.0005	0.0002 (J)						
7/13/2017	<0.0005	<0.0005						
8/8/2017	<0.0005							
10/26/2017	<0.0005	<0.0005						
11/15/2017		<0.0005						
3/2/2018	<0.0005	<0.0005						
7/13/2018	0.00019 (J)	<0.0005						
11/8/2018	<0.001 (J)	<0.0005						
1/30/2019							<0.0005	
8/28/2019	0.00017 (J)	<0.0005						
9/11/2019							<0.0005	
10/16/2019	0.00017 (J)	0.00017 (J)						
10/21/2019							<0.0005	
3/9/2020	0.00026 (J)	<0.0005						
8/13/2020	0.00021 (J)	<0.0005					<0.0005	
8/17/2020			0.00059 (J)					
9/23/2020	0.00024 (J)	<0.0005						
9/24/2020							<0.0005	
9/25/2020			0.00027 (J)					
12/9/2020				<0.0005				
3/8/2021			0.00027 (J)	<0.0005				
3/10/2021	<0.0005	<0.0005						
3/12/2021							<0.0005	
4/15/2021					<0.0005			
4/16/2021						0.00019 (J)		
9/9/2021							<0.0005	
9/13/2021			0.00029 (J)					
9/15/2021				<0.0005				
9/16/2021	<0.0005	<0.0005			<0.0005			
9/17/2021						<0.0005		
1/19/2022				<0.0005	<0.0005			
1/20/2022							<0.0005	
1/21/2022			0.00059					
1/25/2022	0.00035 (J)	<0.0005						
1/26/2022						<0.0005		
6/6/2022								<0.0005
9/7/2022	0.0002 (J)	<0.0005		<0.0005	<0.0005			
9/8/2022			0.00027 (J)				<0.0005	<0.0005
9/12/2022						<0.0005		

Time Series

Constituent: Calcium, total (mg/L) Analysis Run 11/18/2022 12:02 PM View: AP 1

Plant McDonough Client: Southern Company Data: McDonough AP

	DGWA-53 (bg)	DGWA-70A (bg)	DGWA-71 (bg)	DGWC-37	DGWC-38	DGWC-39	DGWC-40	DGWC-67
9/2/2016							39.6	
9/8/2016				52.5	70.3	87.2		
12/7/2016				29.7	38.4	96.7		
12/8/2016							37.9	
3/28/2017	30.8	5.14	8.31					
3/30/2017				62.6	80.3	98.9	43.9	
3/31/2017								39.9
5/11/2017	35.8							
5/12/2017			8.04					43.6
5/15/2017		6.5						
6/15/2017	36	5.38						
6/16/2017			7.66					42.5
7/11/2017		5.96	7.71					
7/12/2017	40.3							
7/13/2017				64.1	90.8	95	46.2	43.7
8/8/2017		5.2						
10/24/2017	30.3	4.93	6.86					
10/26/2017				60.8	81.3	90.6	41.8	40.4
2/27/2018		<25	<25					
3/1/2018				57	81.8	79.6		
3/2/2018							43.2	40.1
3/8/2018	39.8							
7/12/2018	34.7			59.1	86.7	89.8	47.1	
7/13/2018								43.3
11/6/2018		5.5	5.7					
11/7/2018	28.6							
11/8/2018				53.6	86.6	89	43.5	40.1
3/12/2019		5.1	5.5					
3/13/2019	26.7			54.8	85.3	96.3	41	41.2
10/15/2019		5.1	5.1					
10/16/2019	17.7							
10/17/2019								46.9
10/18/2019				52.5	97.8	108	44.9	
3/2/2020		5.3	5.8					
3/4/2020							49.6	
3/9/2020	23.7			64.2	91.9	100		46.9
9/22/2020	15.5	5	5.4					
9/23/2020							41.9	42
9/24/2020				55.9	84.1			
9/25/2020						92.5		
3/1/2021		4.1	5.9					
3/8/2021							44.9	
3/11/2021				56	85.8	91.9		45.4
3/12/2021	18.4							
9/8/2021			6.1					
9/9/2021	18.3	5.3						
9/14/2021							45.1	
9/15/2021					88.3			
9/16/2021				63				46
9/17/2021						98.6		
1/18/2022		6.1	6.6					
1/19/2022							44.7	48.8

Time Series

Constituent: Calcium, total (mg/L) Analysis Run 11/18/2022 12:02 PM View: AP 1

Plant McDonough Client: Southern Company Data: McDonough AP

	DGWA-53 (bg)	DGWA-70A (bg)	DGWA-71 (bg)	DGWC-37	DGWC-38	DGWC-39	DGWC-40	DGWC-67
1/20/2022						96.2		
1/21/2022				64.4	91			
1/28/2022	19.5							
9/7/2022		5.9	6.4			92.5	44.8	
9/8/2022	17.2			66.2				47.4
9/12/2022					87.6			

Time Series

Constituent: Calcium, total (mg/L) Analysis Run 11/18/2022 12:02 PM View: AP 1

Plant McDonough Client: Southern Company Data: McDonough AP

	DGWC-68A	DGWC-69	B-100	B-105D	B-112D	B-113D	B-62	DGWC-121
3/31/2017		18.6 (J)						
5/12/2017	51.7	18.9 (J)						
6/16/2017	47.9	17.7						
7/13/2017	52.3	17.6						
8/8/2017	46.3							
10/26/2017	48.2	33.3						
11/15/2017		30.6						
3/2/2018	48.9	8.09						
7/13/2018	52.4	7.9						
11/8/2018	46.8	8.5						
1/30/2019							51.4	
3/13/2019	47.5	7.6						
10/16/2019	49.7	16.2						
10/21/2019							31.2	
3/9/2020	54	8.6						
9/23/2020	50.2	8						
9/24/2020							28.8	
9/25/2020			44.7					
12/9/2020				76.9				
3/8/2021			47.7	79.6				
3/10/2021	54.2	8.5						
3/12/2021							28.8	
4/15/2021					34.6			
4/16/2021						47.2		
9/9/2021							29.2	
9/13/2021			51.5					
9/15/2021				72.7				
9/16/2021	60.6	18			28.4			
9/17/2021						44.1		
1/19/2022				74.2	24.1			
1/20/2022							36.3	
1/21/2022			49.9					
1/25/2022	60.4	9.2						
1/26/2022						48.4		
6/6/2022								44.1
9/7/2022	53.5	13.1		73.2	26.5			
9/8/2022			46				31.4	45
9/12/2022						36.5		

Time Series

Constituent: Chloride, Total (mg/L) Analysis Run 11/18/2022 12:02 PM View: AP 1

Plant McDonough Client: Southern Company Data: McDonough AP

	DGWA-53 (bg)	DGWA-70A (bg)	DGWA-71 (bg)	DGWC-37	DGWC-38	DGWC-39	DGWC-40	DGWC-67
9/2/2016							20	
9/8/2016				6.2	7.4	9.2		
12/7/2016				6.1	7.4	8.9		
12/8/2016							18	
3/28/2017	3.7	3.8	3.6					
3/30/2017				6.3	7.7	8.7	20	
3/31/2017								5.7
5/11/2017	2.3							
5/12/2017			3.8					5.6
5/15/2017		2.2						
6/15/2017	2.6	2						
6/16/2017			3.4					5.5
7/11/2017		2.1	3.1					
7/12/2017	2.3							
7/13/2017				6.5	7.5	8.4	21	5.2
8/8/2017		2.2						
10/24/2017	2.7	2.4	3.2					
10/26/2017				6.4	8.2	8.3	21	6
11/15/2017	2.2		3.1					
2/27/2018		2.5	3.2					
3/1/2018				6.3	8.1	8.1		
3/2/2018							19.5	5.8
3/8/2018	2.4							
7/12/2018	2.2			5.8	8	7.7	19.9	
7/13/2018								5.9
11/6/2018		2.3	2.6					
11/7/2018	2.3							
11/8/2018				5.8	8.1	7.7	19.3	6.1
3/12/2019		2.5	3.3					
3/13/2019	3.6			6.9	9.1	8.2	19.7	6.8
10/15/2019		2.2	3.3					
10/16/2019	2							
10/17/2019								6.9
10/18/2019				5.8	8.6	8	19.2	
3/2/2020		1.9	3					
3/4/2020							20.6	
3/9/2020	1.8			6	8.1	7.5		6.7
9/22/2020	1.6	1.9	5.2					
9/23/2020							19.7	7.1
9/24/2020				5.6	8.2			
9/25/2020						7.9		
3/1/2021		1.9	3.9					
3/8/2021							19.1	
3/11/2021				5.6	8	7.7		7.4
3/12/2021	2							
9/8/2021			5.9					
9/9/2021	1.8	1.9						
9/14/2021							16.7	
9/15/2021					7.6			
9/16/2021				5.6				7.9
9/17/2021						8.3		
1/18/2022		1.9	5.9					

Time Series

Constituent: Chloride, Total (mg/L) Analysis Run 11/18/2022 12:02 PM View: AP 1

Plant McDonough Client: Southern Company Data: McDonough AP

	DGWA-53 (bg)	DGWA-70A (bg)	DGWA-71 (bg)	DGWC-37	DGWC-38	DGWC-39	DGWC-40	DGWC-67
1/19/2022							16.5	8.3
1/20/2022						8		
1/21/2022				5.7	8.5			
1/28/2022	1.8							
9/7/2022		2.1	8.2			8.2	15	
9/8/2022	1.6			5.4				8.9
9/12/2022					8.5			

Time Series

Constituent: Chloride, Total (mg/L) Analysis Run 11/18/2022 12:02 PM View: AP 1

Plant McDonough Client: Southern Company Data: McDonough AP

	DGWC-68A	DGWC-69	B-100	B-105D	B-112D	B-113D	B-62	DGWC-121
3/31/2017		4.4						
5/12/2017	4.2	4.4						
6/16/2017	4.2	4.7						
7/13/2017	4.4	4.7						
8/8/2017	4.2							
10/26/2017	4.4	4.2						
11/15/2017		4.7						
3/2/2018	4.2	6.4						
7/13/2018	4	5.3						
11/8/2018	<0.25	5.9						
1/30/2019							7.1	
3/13/2019	4.6	6.2						
10/16/2019	4.2	4.7						
10/21/2019							6.5	
3/9/2020	3.6	5.7						
9/23/2020	3.6	4.7						
9/24/2020							5.7	
9/25/2020			13.2					
12/9/2020				17.1				
3/8/2021			12.9	17.4				
3/10/2021	3.6	5						
3/12/2021							5.9	
4/15/2021					10			
4/16/2021						6.7		
9/9/2021							5.8	
9/13/2021			11.1					
9/15/2021				17.4				
9/16/2021	3.4	4.5			2.7			
9/17/2021						48.8		
1/19/2022				16.3	2.5			
1/20/2022							5.6	
1/21/2022			11.3					
1/25/2022	3.8	5.4						
1/26/2022						19.8		
6/6/2022								4.7
9/7/2022	4.1	4.9		16.4	2.9			
9/8/2022			10.2				5.3	4.5
9/12/2022						7.6		

Time Series

Constituent: Chromium (mg/L) Analysis Run 11/18/2022 12:02 PM View: AP 1

Plant McDonough Client: Southern Company Data: McDonough AP

	DGWA-53 (bg)	DGWA-70A (bg)	DGWA-71 (bg)	DGWC-37	DGWC-38	DGWC-39	DGWC-40	DGWC-67
9/2/2016							<0.005	
9/8/2016				<0.005	<0.005	<0.005		
12/7/2016				<0.005	<0.005	<0.005		
12/8/2016							<0.005	
3/28/2017	<0.005	0.0008 (J)	0.0023 (J)					
3/30/2017				<0.005	<0.005	<0.005	0.0007 (J)	
3/31/2017								0.0005 (J)
5/11/2017	<0.005							
5/12/2017			0.0004 (J)					0.0007 (J)
5/15/2017		0.0006 (J)						
6/15/2017	<0.005	0.0006 (J)						
6/16/2017			0.0005 (J)					<0.005
7/11/2017		0.0005 (J)	<0.005					
7/12/2017	<0.005							
7/13/2017				<0.005	<0.005	<0.005	0.0006 (J)	<0.005
8/8/2017		0.0005 (J)						
10/24/2017	<0.005	0.0005 (J)	<0.005					
10/26/2017				0.0007 (J)	0.0005 (J)	<0.005	0.0007 (J)	<0.005
2/27/2018		<0.005	<0.005					
3/1/2018				<0.005	<0.005	<0.005		
3/2/2018							<0.005	<0.005
3/8/2018	<0.005							
7/12/2018	<0.005			<0.005	<0.005	<0.005	<0.005	
7/13/2018								<0.005
11/6/2018		<0.005	<0.005					
11/7/2018	<0.005							
11/8/2018				<0.005	<0.005	<0.005	<0.005	<0.005
8/27/2019		0.00071 (J)	0.0018 (J)					
8/28/2019	<0.005			<0.005	<0.005	<0.005	0.00061 (J)	<0.005
10/15/2019		0.034 (O)	0.0025 (J)					
10/16/2019	<0.005							
10/17/2019								<0.005
10/18/2019				<0.005	0.00092 (J)	<0.005	0.00078 (J)	
3/2/2020		0.0013 (J)	0.00045 (J)					
3/4/2020							0.0011 (J)	
3/9/2020	<0.005			<0.005	0.00044 (J)	<0.005		0.00088 (J)
8/11/2020		0.0016 (J)	0.0006 (J)					
8/13/2020	<0.005			0.00058 (J)	<0.005	<0.005	0.00072 (J)	<0.005
9/22/2020	<0.005	0.00089 (J)	<0.005					
9/23/2020							0.0011 (J)	<0.005
9/24/2020				<0.005	<0.005			
9/25/2020						<0.005		
3/1/2021		<0.005	<0.005					
3/8/2021							0.0006 (J)	
3/11/2021				<0.005	<0.005	<0.005		0.0014 (J)
3/12/2021	<0.005							
9/8/2021			<0.005					
9/9/2021	<0.005	<0.005						
9/14/2021							0.0021 (J)	
9/15/2021					<0.005			
9/16/2021				<0.005				<0.005
9/17/2021						<0.005		

Time Series

Constituent: Chromium (mg/L) Analysis Run 11/18/2022 12:02 PM View: AP 1

Plant McDonough Client: Southern Company Data: McDonough AP

	DGWA-53 (bg)	DGWA-70A (bg)	DGWA-71 (bg)	DGWC-37	DGWC-38	DGWC-39	DGWC-40	DGWC-67
1/18/2022		<0.005	<0.005					
1/19/2022							<0.005	<0.005
1/20/2022						<0.005		
1/21/2022				<0.005	<0.005			
1/28/2022	<0.005							
9/7/2022		<0.005	<0.005			<0.005	<0.005	
9/8/2022	<0.005			<0.005				<0.005
9/12/2022					<0.005			

Time Series

Constituent: Chromium (mg/L) Analysis Run 11/18/2022 12:02 PM View: AP 1

Plant McDonough Client: Southern Company Data: McDonough AP

	DGWC-68A	DGWC-69	B-100	B-105D	B-112D	B-113D	B-62	DGWC-121
3/31/2017		<0.005						
5/12/2017	<0.005	<0.005						
6/16/2017	<0.005	<0.005						
7/13/2017	0.0005 (J)	<0.005						
8/8/2017	<0.005							
10/26/2017	<0.005	<0.005						
11/15/2017		<0.005						
3/2/2018	<0.005	<0.005						
7/13/2018	<0.005	<0.005						
11/8/2018	<0.005	<0.005						
1/30/2019							<0.005	
8/28/2019	<0.005	0.00049 (J)						
9/11/2019							<0.005	
10/16/2019	<0.005	<0.005						
10/21/2019							0.00098 (J)	
3/9/2020	<0.005	0.0012 (J)						
8/13/2020	<0.005	<0.005					<0.005	
8/17/2020			<0.005					
9/23/2020	<0.005	0.0011 (J)						
9/24/2020							<0.005	
9/25/2020			0.00094 (J)					
12/9/2020				<0.005				
3/8/2021			0.00057 (J)	<0.005				
3/10/2021	<0.005	0.0009 (J)						
3/12/2021							<0.005	
4/15/2021					0.00085 (J)			
4/16/2021						0.0011 (J)		
9/9/2021							<0.005	
9/13/2021			<0.005					
9/15/2021				0.0012 (J)				
9/16/2021	0.0014 (J,o)	<0.005			0.0014 (J)			
9/17/2021						<0.005		
10/27/2021	<0.005							
1/19/2022				<0.005	<0.005			
1/20/2022							<0.005	
1/21/2022			<0.005					
1/25/2022	<0.005	0.0013 (J)						
1/26/2022						<0.005		
6/6/2022								<0.005
9/7/2022	<0.005	<0.005		<0.005	<0.005			
9/8/2022			<0.005				<0.005	<0.005
9/12/2022						<0.005		

Time Series

Constituent: Cobalt (mg/L) Analysis Run 11/18/2022 12:02 PM View: AP 1

Plant McDonough Client: Southern Company Data: McDonough AP

	DGWA-53 (bg)	DGWA-70A (bg)	DGWA-71 (bg)	DGWC-37	DGWC-38	DGWC-39	DGWC-40	DGWC-67
9/2/2016							0.0382	
9/8/2016				<0.005	0.0015 (J)	0.0068 (J)		
12/7/2016				0.0005 (J)	0.0017 (J)	0.0071 (J)		
12/8/2016							0.0318	
3/28/2017	0.025	0.0034 (J)	0.0033 (J)					
3/30/2017				<0.005	0.0016 (J)	0.006 (J)	0.0364	
3/31/2017								0.0064 (J)
5/11/2017	0.0281							
5/12/2017			0.0016 (J)					0.0037 (J)
5/15/2017		0.0024 (J)						
6/15/2017	0.0322	0.0014 (J)						
6/16/2017			0.0011 (J)					0.0041 (J)
7/11/2017		0.0007 (J)	0.0008 (J)					
7/12/2017	0.0247							
7/13/2017				0.0003 (J)	0.0016 (J)	0.0063 (J)	0.0394	0.0037 (J)
8/8/2017		0.0007 (J)						
10/24/2017	0.0267	<0.005	0.0004 (J)					
10/26/2017				0.0003 (J)	0.0016 (J)	0.0062 (J)	0.0371	0.0022 (J)
2/27/2018		<0.005	<0.005					
3/1/2018				<0.005	<0.005	<0.005		
3/2/2018							0.0425	<0.005
3/8/2018	0.027							
7/12/2018	0.024			<0.005	0.0015 (J)	0.0059 (J)	0.044	
7/13/2018								0.0017 (J)
11/6/2018		<0.005	<0.005					
11/7/2018	0.018							
11/8/2018				<0.005	<0.01 (J)	<0.01 (J)	0.036	<0.01 (J)
8/27/2019		<0.005	<0.005					
8/28/2019	0.013			<0.005	0.0016 (J)	0.0067	0.044	0.0013 (J)
10/15/2019		0.00064 (J)	<0.005					
10/16/2019	0.009							
10/17/2019								0.0013 (J)
10/18/2019				<0.005	0.0016 (J)	0.007	0.043	
3/2/2020		0.00037 (J)	<0.005					
3/4/2020							0.055	
3/9/2020	0.016			<0.005	0.0016 (J)	0.007		0.0015 (J)
8/11/2020		0.0012 (J)	<0.005					
8/13/2020	0.0051			<0.005	0.0014 (J)	0.006	0.044	0.0015 (J)
9/22/2020	0.011	<0.005	<0.005					
9/23/2020							0.046	0.0011 (J)
9/24/2020				<0.005	0.0013 (J)			
9/25/2020						0.0061		
3/1/2021		<0.005	<0.005					
3/8/2021							0.039	
3/11/2021				<0.005	0.0017 (J)	0.0058		0.0016 (J)
3/12/2021	0.0078							
9/8/2021			<0.005					
9/9/2021	0.0064	<0.005						
9/14/2021							0.05	
9/15/2021					0.0016 (J)			
9/16/2021				<0.005				0.0012 (J)
9/17/2021						0.0076		

Time Series

Constituent: Cobalt (mg/L) Analysis Run 11/18/2022 12:02 PM View: AP 1

Plant McDonough Client: Southern Company Data: McDonough AP

	DGWA-53 (bg)	DGWA-70A (bg)	DGWA-71 (bg)	DGWC-37	DGWC-38	DGWC-39	DGWC-40	DGWC-67
1/18/2022		<0.005	<0.005					
1/19/2022							0.042	0.0011 (J)
1/20/2022						0.0061		
1/21/2022				<0.005	0.0017 (J)			
1/28/2022	0.014							
9/7/2022		<0.005	<0.005			0.0065	0.037	
9/8/2022	0.012			<0.005				0.001 (J)
9/12/2022					0.0014 (J)			

Time Series

Constituent: Cobalt (mg/L) Analysis Run 11/18/2022 12:02 PM View: AP 1

Plant McDonough Client: Southern Company Data: McDonough AP

	DGWC-68A	DGWC-69	B-100	B-105D	B-112D	B-113D	B-62	DGWC-121
3/31/2017		0.0022 (J)						
5/12/2017	0.0015 (J)	0.0016 (J)						
6/16/2017	0.0003 (J)	0.0009 (J)						
7/13/2017	0.0005 (J)	0.0004 (J)						
8/8/2017	<0.005							
10/26/2017	<0.005	0.0031 (J)						
11/15/2017		0.0028 (J)						
3/2/2018	<0.005	<0.005						
7/13/2018	<0.005	<0.005						
11/8/2018	<0.005	<0.005						
1/30/2019							<0.005	
8/28/2019	<0.005	<0.005						
9/11/2019							0.0003 (J)	
10/16/2019	<0.005	<0.005						
10/21/2019							0.00031 (J)	
3/9/2020	<0.005	<0.005						
7/23/2020			0.086					
8/3/2020			0.087					
8/13/2020	<0.005	<0.005					<0.005	
8/17/2020			0.077					
9/23/2020	<0.005	<0.005						
9/24/2020							<0.005	
9/25/2020			0.034					
12/9/2020				0.012				
3/8/2021			0.029	0.0042 (J)				
3/10/2021	<0.005	<0.005						
3/12/2021							<0.005	
4/15/2021					0.0025 (J)			
4/16/2021						<0.005		
9/9/2021							<0.005	
9/13/2021			0.035					
9/15/2021				0.0065				
9/16/2021	0.0032 (J,o)	<0.005			0.00054 (J)			
9/17/2021						<0.005		
10/27/2021	<0.005							
1/19/2022				0.006	<0.005			
1/20/2022							<0.005	
1/21/2022			0.034					
1/25/2022	<0.005	<0.005						
1/26/2022						<0.005		
6/6/2022								0.0028 (J)
9/7/2022	<0.005	<0.005		0.004 (J)	<0.005			
9/8/2022			0.028				<0.005	0.0019 (J)
9/9/2022							<0.005	
9/12/2022						<0.005		

Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 11/18/2022 12:02 PM View: AP 1

Plant McDonough Client: Southern Company Data: McDonough AP

	DGWA-53 (bg)	DGWA-70A (bg)	DGWA-71 (bg)	DGWC-37	DGWC-38	DGWC-39	DGWC-40	DGWC-67
9/2/2016							1.44	
9/8/2016				0.827 (U)	1.48	1.44		
12/7/2016				0.56 (U)	0.22 (U)	2.16		
12/8/2016							2.56	
3/28/2017	6.36	0.866 (U)	0.257 (U)					
3/30/2017				0.302 (U)	0.519 (U)	0.264 (U)	0.0844 (U)	
3/31/2017								0.404 (U)
5/11/2017	3.45							
5/12/2017			0.165 (U)					0.206 (U)
5/15/2017		0.288 (U)						
6/15/2017	4.58	1.01 (U)						
6/16/2017			0.732 (U)					0.966 (U)
7/11/2017		0.254 (U)	0.461 (U)					
7/12/2017	4.37							
7/13/2017				0.731 (U)	1.11	0.517 (U)	0.963 (U)	0.387 (U)
8/8/2017		1.48						
10/24/2017	4.46	0.472 (U)	0.724 (U)					
10/26/2017				1.04 (U)	1.13 (U)	0.875 (U)	0.748 (U)	0.619 (U)
2/27/2018		1.22	0.714 (U)					
3/1/2018				0.344 (U)	0.985 (U)	1.24		
3/2/2018							0.485 (U)	1.31
3/8/2018	2.14							
7/10/2018		0.362 (U)	0.426 (U)					
7/12/2018	4.65			0.566 (U)	0.615 (U)	0.935 (U)	0.231 (U)	
7/13/2018								0.667 (U)
11/6/2018		0.859 (U)	0.455 (U)					
11/7/2018	3.05							
11/8/2018				0.623 (U)	0.58 (U)	1.15 (U)	0.465 (U)	0.911 (U)
8/27/2019		1.97	1.3 (U)					
8/28/2019	2.68			1.24 (U)	0.517 (U)	1.15 (U)	0.592 (U)	0.751 (U)
10/15/2019		0.319 (U)	1.21 (U)					
10/16/2019	1.89							
1/6/2020				2.01	0.527 (U)	1.4	1.6	0.965 (U)
3/2/2020		0.419 (U)	1.3					
3/4/2020							1.62	
3/9/2020	3.51			0.499 (U)	1.04	1.36		0.819 (U)
8/11/2020		0.812 (U)	0.965 (U)					
8/13/2020	1.04			0.99	0.132 (U)	0.626 (U)	1.6	0.897 (U)
9/22/2020	2.27	0.45 (U)	0.216 (U)					
9/23/2020							1.28 (U)	0.131 (U)
9/24/2020				1.03 (U)	0.593 (U)			
9/25/2020						0.181 (U)		
3/1/2021		0.552 (U)	0.389 (U)					
3/8/2021							0.714 (U)	
3/11/2021				0.956 (U)	0.0784 (U)	0.969 (U)		1.55
3/12/2021	1.63							
9/8/2021			0.051 (U)					
9/9/2021	2.72	0.779 (U)						
9/14/2021							1.8	
9/15/2021					2.37			
9/16/2021				0.691 (U)				0.201 (U)
9/17/2021						0.911 (U)		

Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 11/18/2022 12:02 PM View: AP 1

Plant McDonough Client: Southern Company Data: McDonough AP

	DGWA-53 (bg)	DGWA-70A (bg)	DGWA-71 (bg)	DGWC-37	DGWC-38	DGWC-39	DGWC-40	DGWC-67
1/18/2022		1.26	0.729 (U)					
1/19/2022							1.7	0.853 (U)
1/20/2022						0.172 (U)		
1/21/2022				0.343 (U)	0.0873 (U)			
1/28/2022	2.1							
9/7/2022		0.504 (U)	0.588 (U)			0.637 (U)	0.772 (U)	
9/8/2022	1.69							0.699 (U)
9/9/2022				0.719 (U)				
9/12/2022					0.479 (U)			

Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 11/18/2022 12:02 PM View: AP 1

Plant McDonough Client: Southern Company Data: McDonough AP

	DGWC-68A	DGWC-69	B-100	B-105D	B-112D	B-113D	B-62	DGWC-121
3/31/2017		1.39						
5/12/2017	1.18	1.29						
6/16/2017	0.332 (U)	1.61						
7/13/2017	0.304 (U)	1.14						
8/8/2017	1.4							
10/26/2017	0.477 (U)	2.04						
11/15/2017		1.99						
3/2/2018	1.13	0.918 (U)						
7/13/2018	0.407 (U)	1.36 (U)						
11/8/2018	0.393 (U)	0.719 (U)						
1/30/2019							1.97 (U)	
8/28/2019	1.77	1.38						
10/16/2019	2.12	0.826 (U)						
10/21/2019							1.82	
3/9/2020	1.33	1.39						
8/13/2020	1.46	2.66					1.63	
8/17/2020			1.4 (U)					
9/23/2020	0.563 (U)	1.8						
9/24/2020							1.28 (U)	
9/25/2020			0.799 (U)					
12/9/2020				1.25 (U)				
3/8/2021			0.168 (U)	1.87				
3/10/2021	0.568 (U)	1.6						
3/12/2021							1.18 (U)	
4/15/2021					0.945 (U)			
4/16/2021						0.852 (U)		
9/9/2021							1.7	
9/13/2021			0.774 (U)					
9/15/2021				2.01				
9/16/2021	1.74	2.06			0.241 (U)			
9/17/2021						1.08 (U)		
1/19/2022				2.45	0.738 (U)			
1/20/2022							1.71	
1/21/2022			0.769 (U)					
1/25/2022	0.323 (U)	0.834 (U)						
1/26/2022						0.596 (U)		
9/7/2022	0.174 (U)	1.82		3.05	0.755 (U)			
9/8/2022			0.643 (U)					2
9/9/2022							1.96	
9/12/2022						0.44 (U)		

Time Series

Constituent: Fluoride, total (mg/L) Analysis Run 11/18/2022 12:02 PM View: AP 1

Plant McDonough Client: Southern Company Data: McDonough AP

	DGWA-53 (bg)	DGWA-70A (bg)	DGWA-71 (bg)	DGWC-37	DGWC-38	DGWC-39	DGWC-40	DGWC-67
9/2/2016							0.5	
9/8/2016				0.08 (J)	0.1 (J)	0.17 (J)		
12/7/2016				0.21 (J)	0.27 (J)	0.33		
12/8/2016							0.35	
3/28/2017	0.12 (J)	1.2 (O)	0.06 (J)					
3/30/2017				0.05 (J)	0.12 (J)	0.17 (J)	0.21 (J)	
3/31/2017								0.02 (J)
5/11/2017	0.07 (J)							
5/12/2017			<0.1					<0.1
5/15/2017		0.005 (J)						
6/15/2017	0.19 (J)	0.02 (J)						
6/16/2017			0.008 (J)					0.03 (J)
7/11/2017		0.06 (J)	0.007 (J)					
7/12/2017	0.1 (J)							
7/13/2017				0.06 (J)	0.13 (J)	0.14 (J)	0.2 (J)	0.03 (J)
8/8/2017		0.04 (J)						
10/24/2017	0.06 (J)	<0.1	<0.1					
10/26/2017				0.08 (J)	0.47	0.54	0.5	<0.1
11/15/2017	0.05 (J)		<0.1					
2/27/2018		<0.1	<0.1					
3/1/2018				0.22	<0.1	0.13		
3/2/2018							0.33	<0.1
3/8/2018	<0.1							
7/12/2018	0.071 (J)			0.32	0.23 (J)	0.13 (J)	0.57	
7/13/2018								0.25 (J)
11/6/2018		<0.1	<0.1					
11/7/2018	<0.1							
11/8/2018				<0.1	<0.1	<0.3 (J)	<0.3 (J)	0.5
3/12/2019		0.039 (J)	<0.1					
3/13/2019	0.13 (J)			0.08 (J)	0.084 (J)	0.085 (J)	0.15 (J)	0.07 (J)
8/27/2019		<0.1	<0.1					
8/28/2019	0.42			0.074 (J)	0.066 (J)	0.086 (J)	0.14	<0.1
10/15/2019		<0.1	<0.1					
10/16/2019	0.11 (J)							
10/17/2019								0.038 (J)
10/18/2019				0.075 (J)	0.073 (J)	0.14 (J)	0.13 (J)	
3/2/2020		<0.1	<0.1					
3/4/2020							0.11 (J)	
3/9/2020	0.1 (J)			0.054 (J)	0.064 (J)	0.075 (J)		<0.1
8/11/2020		<0.1	<0.1					
8/13/2020	0.062 (J)			0.068 (J)	0.06 (J)	0.076 (J)	0.16	<0.1
9/22/2020	0.099 (J)	<0.1	<0.1					
9/23/2020							0.054 (J)	<0.1
9/24/2020				0.061 (J)	0.057 (J)			
9/25/2020						0.086 (J)		
3/1/2021		<0.1	<0.1					
3/8/2021							0.17	
3/11/2021				0.057 (J)	0.058 (J)	0.083 (J)		<0.1
3/12/2021	0.076 (J)							
9/8/2021			<0.1					
9/9/2021	0.099 (J)	<0.1						
9/14/2021							0.13	

Time Series

Constituent: Fluoride, total (mg/L) Analysis Run 11/18/2022 12:02 PM View: AP 1

Plant McDonough Client: Southern Company Data: McDonough AP

	DGWA-53 (bg)	DGWA-70A (bg)	DGWA-71 (bg)	DGWC-37	DGWC-38	DGWC-39	DGWC-40	DGWC-67
9/15/2021					0.06 (J)			
9/16/2021				0.084 (J)				0.069 (J)
9/17/2021						0.13		
1/18/2022		<0.1	<0.1					
1/19/2022							0.12	<0.1
1/20/2022						0.1		
1/21/2022				0.053 (J)	0.1			
1/28/2022	0.08 (J)							
9/7/2022		0.061 (J)	0.056 (J)			0.11	0.14	
9/8/2022	0.11			0.082 (J)				0.096 (J)
9/12/2022					0.12			

Time Series

Constituent: Fluoride, total (mg/L) Analysis Run 11/18/2022 12:02 PM View: AP 1

Plant McDonough Client: Southern Company Data: McDonough AP

	DGWC-68A	DGWC-69	B-100	B-105D	B-112D	B-113D	B-62	DGWC-121
3/31/2017		0.16 (J)						
5/12/2017	0.37	0.12 (J)						
6/16/2017	0.12 (J)	0.16 (J)						
7/13/2017	0.12 (J)	0.13 (J)						
8/8/2017	0.11 (J)							
10/26/2017	0.11 (J)	0.29 (J)						
11/15/2017		0.28 (J)						
3/2/2018	0.23	0.18						
7/13/2018	0.099 (J)	0.19 (J)						
11/8/2018	<0.3 (J)	<0.3 (J)						
1/30/2019							0.43	
3/13/2019	0.12 (J)	0.086 (J)						
8/28/2019	0.1	0.07 (J)						
10/16/2019	0.093 (J)	0.13 (J)						
10/21/2019							0.23 (J)	
3/9/2020	0.082 (J)	0.068 (J)						
8/13/2020	0.076 (J)	0.084 (J)					0.11	
8/17/2020			<0.1					
9/23/2020	0.07 (J)	0.064 (J)						
9/24/2020							0.093 (J)	
9/25/2020			<0.1					
12/9/2020				0.075 (J)				
3/8/2021			<0.1	0.32				
3/10/2021	0.07 (J)	0.055 (J)						
3/12/2021							0.11	
4/15/2021					0.3			
4/16/2021						0.71		
9/9/2021							0.14	
9/13/2021			<0.1					
9/15/2021				0.078 (J)				
9/16/2021	0.55	0.11			0.34			
9/17/2021						0.87		
1/19/2022				0.058 (J)	0.25			
1/20/2022							0.099 (J)	
1/21/2022			<0.1					
1/25/2022	0.067 (J)	0.054 (J)						
1/26/2022						0.74		
6/6/2022								0.056 (J)
9/7/2022	0.11	0.11		0.11	0.27			
9/8/2022			0.072 (J)				0.13	0.093 (J)
9/12/2022						1		

Time Series

Constituent: Lead (mg/L) Analysis Run 11/18/2022 12:02 PM View: AP 1

Plant McDonough Client: Southern Company Data: McDonough AP

	DGWA-53 (bg)	DGWA-70A (bg)	DGWA-71 (bg)	DGWC-37	DGWC-38	DGWC-39	DGWC-40	DGWC-67
9/2/2016							<0.001	
9/8/2016				<0.001	<0.001	<0.001		
12/7/2016				<0.001	<0.001	<0.001		
12/8/2016							<0.001	
3/28/2017	<0.001	9E-05 (J)	<0.001					
3/30/2017				0.0014 (J)	<0.001	<0.001	7E-05 (J)	
3/31/2017								<0.001
5/11/2017	<0.001							
5/12/2017			8E-05 (J)					9E-05 (J)
5/15/2017		0.0001 (J)						
6/15/2017	<0.001	0.0002 (J)						
6/16/2017			<0.001					<0.001
7/11/2017		<0.001	<0.001					
7/12/2017	<0.001							
7/13/2017				<0.001	<0.001	<0.001	<0.001	<0.001
8/8/2017		7E-05 (J)						
10/24/2017	<0.001	<0.001	<0.001					
10/26/2017				<0.001	0.0001 (J)	<0.001	7E-05 (J)	<0.001
2/27/2018		<0.001	<0.001					
3/1/2018				<0.001	<0.001	<0.001		
3/2/2018							<0.001	<0.001
3/8/2018	<0.001							
7/12/2018	<0.001			<0.001	<0.001	<0.001	<0.001	
7/13/2018								<0.001
11/6/2018		<0.001	<0.001					
11/7/2018	<0.001							
11/8/2018				<0.001	<0.001	<0.001	<0.001	<0.001
8/27/2019		7.8E-05 (J)	<0.001					
8/28/2019	<0.001			6.1E-05 (J)	<0.001	8E-05 (J)	8.1E-05 (J)	<0.001
10/15/2019		<0.001	<0.001					
10/16/2019	<0.001							
10/17/2019								<0.001
10/18/2019				<0.001	7.4E-05 (J)	<0.001	0.00015 (J)	
3/2/2020		7.4E-05 (J)	<0.001					
3/4/2020							0.00017 (J)	
3/9/2020	<0.001			<0.001	6.1E-05 (J)	<0.001		4.7E-05 (J)
8/11/2020		0.0003 (J)	<0.001					
8/13/2020	<0.001			<0.001	<0.001	<0.001	4.9E-05 (J)	5.6E-05 (J)
9/22/2020	<0.001	7.8E-05 (J)	<0.001					
9/23/2020							0.00028 (J)	<0.001
9/24/2020				<0.001	0.00014 (J)			
9/25/2020						0.00022 (J)		
3/1/2021		<0.001	<0.001					
3/8/2021							5.4E-05 (J)	
3/11/2021				<0.001	0.00014 (J)	<0.001		0.00025 (J)
3/12/2021	<0.001							
9/8/2021			<0.001					
9/9/2021	<0.001	<0.001						
9/14/2021							<0.001	
9/15/2021					<0.001			
9/16/2021				<0.001				<0.001
9/17/2021						<0.001		

Time Series

Constituent: Lead (mg/L) Analysis Run 11/18/2022 12:02 PM View: AP 1

Plant McDonough Client: Southern Company Data: McDonough AP

	DGWA-53 (bg)	DGWA-70A (bg)	DGWA-71 (bg)	DGWC-37	DGWC-38	DGWC-39	DGWC-40	DGWC-67
1/18/2022		<0.001	<0.001					
1/19/2022							<0.001	<0.001
1/20/2022						<0.001		
1/21/2022				<0.001	<0.001			
1/28/2022	<0.001							
9/7/2022		<0.001	<0.001			<0.001	<0.001	
9/8/2022	<0.001			<0.001				<0.001
9/12/2022					<0.001			

Time Series

Constituent: Lead (mg/L) Analysis Run 11/18/2022 12:02 PM View: AP 1

Plant McDonough Client: Southern Company Data: McDonough AP

	DGWC-68A	DGWC-69	B-100	B-105D	B-112D	B-113D	B-62	DGWC-121
3/31/2017		<0.001						
5/12/2017	<0.001	0.0001 (J)						
6/16/2017	<0.001	<0.001						
7/13/2017	<0.001	<0.001						
8/8/2017	<0.001							
10/26/2017	<0.001	<0.001						
11/15/2017		9E-05 (J)						
3/2/2018	<0.001	<0.001						
7/13/2018	<0.001	<0.001						
11/8/2018	<0.001	<0.001						
1/30/2019							<0.001	
8/28/2019	<0.001	<0.001						
9/11/2019							<0.001	
10/16/2019	<0.001	<0.001						
10/21/2019							<0.001	
3/9/2020	<0.001	9E-05 (J)						
8/13/2020	<0.001	5.9E-05 (J)					<0.001	
8/17/2020			8.8E-05 (J)					
9/23/2020	0.00035 (J)	0.00017 (J)						
9/24/2020							<0.001	
9/25/2020			0.00021 (J)					
12/9/2020				5.2E-05 (J)				
3/8/2021			0.00018 (J)	<0.001				
3/10/2021	6.7E-05 (J)	0.0001 (J)						
3/12/2021							<0.001	
4/15/2021					0.00014 (J)			
4/16/2021						0.00014 (J)		
9/9/2021							<0.001	
9/13/2021			<0.001					
9/15/2021				<0.001				
9/16/2021	<0.001	<0.001			<0.001			
9/17/2021						<0.001		
1/19/2022				<0.001	<0.001			
1/20/2022							<0.001	
1/21/2022			<0.001					
1/25/2022	<0.001	<0.001						
1/26/2022						<0.001		
6/6/2022								<0.001
9/7/2022	<0.001	<0.001		<0.001	<0.001			
9/8/2022			<0.001				<0.001	<0.001
9/12/2022						<0.001		

Time Series

Constituent: Lithium (mg/L) Analysis Run 11/18/2022 12:02 PM View: AP 1

Plant McDonough Client: Southern Company Data: McDonough AP

	DGWA-53 (bg)	DGWA-70A (bg)	DGWA-71 (bg)	DGWC-37	DGWC-38	DGWC-39	DGWC-40	DGWC-67
9/2/2016							0.0022 (J)	
9/8/2016				<0.03	0.0032 (J)	<0.03		
12/7/2016				<0.03	0.0035 (J)	<0.03		
12/8/2016							<0.03	
3/28/2017	0.0108 (J)	0.0054 (J)	0.0025 (J)					
3/30/2017				0.0029 (J)	0.0035 (J)	<0.03	0.0023 (J)	
3/31/2017								0.0052 (J)
5/11/2017	0.0087 (J)							
5/12/2017			0.0016 (J)					0.0054 (J)
5/15/2017		0.002 (J)						
6/15/2017	0.0088 (J)	<0.03						
6/16/2017			0.0016 (J)					0.0048 (J)
7/11/2017		<0.03	<0.03					
7/12/2017	0.0075 (J)							
7/13/2017				<0.03	0.0032 (J)	<0.03	0.0023 (J)	0.0044 (J)
8/8/2017		<0.03						
10/24/2017	0.0103 (J)	<0.03	<0.03					
10/26/2017				0.0018 (J)	0.0034 (J)	<0.03	0.0021 (J)	0.0043 (J)
2/27/2018		<0.03	0.0013 (J)					
3/1/2018				0.0024 (J)	0.0033 (J)	<0.03		
3/2/2018							0.0023 (J)	0.0047 (J)
3/8/2018	0.011 (J)							
7/12/2018	0.0084 (J)			0.0028 (J)	0.0034 (J)	<0.03	0.0022 (J)	
7/13/2018								0.0041 (J)
11/6/2018		<0.03	<0.03					
11/7/2018	<0.03							
11/8/2018				<0.03	<0.03	<0.03	<0.03	<0.03
8/27/2019		<0.03	0.0014 (J)					
8/28/2019	0.0092 (J)			0.0025 (J)	0.0034 (J)	<0.03	0.0022 (J)	0.0046 (J)
10/15/2019		<0.03	0.0012 (J)					
10/16/2019	0.0094 (J)							
10/17/2019								0.0047 (J)
10/18/2019				0.0026 (J)	0.0032 (J)	<0.03	0.0024 (J)	
3/2/2020		<0.03	0.0011 (J)					
3/4/2020							0.0027 (J)	
3/9/2020	0.0077 (J)			0.0017 (J)	0.0033 (J)	<0.03		0.0048 (J)
8/11/2020		0.0019 (J)	0.0015 (J)					
8/13/2020	0.0085 (J)			0.0023 (J)	0.0028 (J)	<0.03	0.0022 (J)	0.0044 (J)
9/22/2020	0.0089 (J)	<0.03	0.0012 (J)					
9/23/2020							0.0022 (J)	0.0043 (J)
9/24/2020				0.0021 (J)	0.0029 (J)			
9/25/2020						<0.03		
3/1/2021		<0.03	0.0012 (J)					
3/8/2021							0.0022 (J)	
3/11/2021				0.0024 (J)	0.003 (J)	<0.03		0.005 (J)
3/12/2021	0.0083 (J)							
9/8/2021			0.0013 (J)					
9/9/2021	0.0091 (J)	<0.03						
9/14/2021							0.003 (J)	
9/15/2021					0.0029 (J)			
9/16/2021				0.0021 (J)				0.0044 (J)
9/17/2021						<0.03		

Time Series

Constituent: Lithium (mg/L) Analysis Run 11/18/2022 12:02 PM View: AP 1

Plant McDonough Client: Southern Company Data: McDonough AP

	DGWA-53 (bg)	DGWA-70A (bg)	DGWA-71 (bg)	DGWC-37	DGWC-38	DGWC-39	DGWC-40	DGWC-67
1/18/2022		<0.03	0.0013 (J)					
1/19/2022							0.0024 (J)	0.0046 (J)
1/20/2022						<0.03		
1/21/2022				0.002 (J)	0.0025 (J)			
1/28/2022	0.0091 (J)							
9/7/2022		<0.03	0.0012 (J)			<0.03	0.0023 (J)	
9/8/2022	0.0083 (J)			0.0019 (J)				0.0048 (J)
9/12/2022					0.003 (J)			

Time Series

Constituent: Lithium (mg/L) Analysis Run 11/18/2022 12:02 PM View: AP 1

Plant McDonough Client: Southern Company Data: McDonough AP

	DGWC-68A	DGWC-69	B-100	B-105D	B-112D	B-113D	B-62	DGWC-121
3/31/2017		0.0031 (J)						
5/12/2017	0.0016 (J)	0.003 (J)						
6/16/2017	<0.03	0.0031 (J)						
7/13/2017	<0.03	0.0029 (J)						
8/8/2017	<0.03							
10/26/2017	<0.03	0.0034 (J)						
11/15/2017		0.0034 (J)						
3/2/2018	<0.03	0.0028 (J)						
7/13/2018	<0.03	0.0026 (J)						
11/8/2018	<0.03	<0.03						
1/30/2019							<0.03	
8/28/2019	<0.03	0.0024 (J)						
9/11/2019							0.0078 (J)	
10/16/2019	<0.03	0.0032 (J)						
10/21/2019							0.0078 (J)	
3/9/2020	<0.03	0.0025 (J)						
8/13/2020	<0.03	0.0031 (J)					0.0087 (J)	
8/17/2020			0.0013 (J)					
9/23/2020	<0.03	0.0023 (J)						
9/24/2020							0.0084 (J)	
9/25/2020			0.0027 (J)					
12/9/2020				0.014 (J)				
3/8/2021			0.0024 (J)	0.015 (J)				
3/10/2021	<0.03	0.0023 (J)						
3/12/2021							0.0087 (J)	
4/15/2021					0.0045 (J)			
4/16/2021						0.013 (J)		
9/9/2021							0.0094 (J)	
9/13/2021			0.0022 (J)					
9/15/2021				0.014 (J)				
9/16/2021	0.00082 (J)	0.0023 (J)			0.0038 (J)			
9/17/2021						0.013 (J)		
1/19/2022				0.013 (J)	0.0044 (J)			
1/20/2022							0.0092 (J)	
1/21/2022			0.0021 (J)					
1/25/2022	<0.03	0.0026 (J)						
1/26/2022						0.014 (J)		
6/6/2022								0.013 (J)
9/7/2022	<0.03	0.0025 (J)		0.013 (J)	0.0039 (J)			
9/8/2022			0.0023 (J)				0.0085 (J)	0.01 (J)
9/12/2022						0.0084 (J)		

Time Series

Constituent: Mercury (mg/L) Analysis Run 11/18/2022 12:02 PM View: AP 1

Plant McDonough Client: Southern Company Data: McDonough AP

	DGWA-53 (bg)	DGWA-70A (bg)	DGWA-71 (bg)	DGWC-37	DGWC-38	DGWC-39	DGWC-40	DGWC-67
9/2/2016							4.4E-05 (J)	
9/8/2016				<0.0002	<0.0002	<0.0002		
12/7/2016				<0.0002	<0.0002	<0.0002		
12/8/2016							<0.0002	
3/28/2017	<0.0002	<0.0002	<0.0002					
3/30/2017				6E-05 (J)	7E-05 (J)	5.9E-05 (J)	9E-05 (J)	
3/31/2017								<0.0002
5/11/2017	<0.0002							
5/12/2017			6E-05 (J)					<0.0002
5/15/2017		<0.0002						
6/15/2017	8E-05 (J)	7E-05 (J)						
6/16/2017			7E-05 (J)					7E-05 (J)
7/11/2017		<0.0002	<0.0002					
7/12/2017	<0.0002							
7/13/2017				<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
8/8/2017		<0.0002						
10/24/2017	<0.0002	<0.0002	<0.0002					
10/26/2017				<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
2/27/2018		<0.0002	<0.0002					
3/1/2018				<0.0002	<0.0002	<0.0002		
3/2/2018							<0.0002	<0.0002
3/8/2018	<0.0002							
7/12/2018	<0.0002			4.4E-05 (J)	4E-05 (J)	<0.0002	4.5E-05 (J)	
7/13/2018								<0.0002
11/6/2018		<0.0002	<0.0002					
11/7/2018	<0.0002							
11/8/2018				<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
8/27/2019		<0.0002	<0.0002					
8/28/2019	<0.0002			<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
10/15/2019		<0.0002	<0.0002					
10/16/2019	<0.0002							
10/17/2019								<0.0002
10/18/2019				<0.0002	<0.0002	<0.0002	<0.0002	
3/2/2020		<0.0002	<0.0002					
3/4/2020							<0.0002	
3/9/2020	<0.0002			<0.0002	<0.0002	<0.0002		<0.0002
8/11/2020		<0.0002	<0.0002					
8/13/2020	<0.0002			<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
9/22/2020	<0.0002	<0.0002	<0.0002					
9/23/2020							<0.0002	<0.0002
9/24/2020				9.1E-05 (J)	8.5E-05 (J)			
9/25/2020						<0.0002		
3/1/2021		<0.0002	9E-05 (J)					
3/12/2021	<0.0002							
9/8/2021			9.6E-05 (J)					
9/9/2021	<0.0002	<0.0002						
9/14/2021							<0.0002	
9/15/2021					<0.0002			
9/16/2021				<0.0002				<0.0002
9/17/2021						<0.0002		
1/18/2022		<0.0002	0.00015 (J)					
1/19/2022							<0.0002	<0.0002

Time Series

Constituent: Mercury (mg/L) Analysis Run 11/18/2022 12:02 PM View: AP 1

Plant McDonough Client: Southern Company Data: McDonough AP

	DGWA-53 (bg)	DGWA-70A (bg)	DGWA-71 (bg)	DGWC-37	DGWC-38	DGWC-39	DGWC-40	DGWC-67
1/20/2022						<0.0002		
1/21/2022				<0.0002	<0.0002			
1/28/2022	<0.0002							
9/7/2022		<0.0002	0.00013 (J)			<0.0002	<0.0002	
9/8/2022	<0.0002			<0.0002				<0.0002
9/12/2022					<0.0002			

Time Series

Constituent: Mercury (mg/L) Analysis Run 11/18/2022 12:02 PM View: AP 1

Plant McDonough Client: Southern Company Data: McDonough AP

	DGWC-68A	DGWC-69	B-100	B-105D	B-112D	B-113D	B-62	DGWC-121
3/31/2017		<0.0002						
5/12/2017	<0.0002	<0.0002						
6/16/2017	7E-05 (J)	7E-05 (J)						
7/13/2017	<0.0002	<0.0002						
8/8/2017	<0.0002							
10/26/2017	<0.0002	<0.0002						
11/15/2017		<0.0002						
3/2/2018	<0.0002	<0.0002						
7/13/2018	<0.0002	<0.0002						
11/8/2018	<0.0002	<0.0002						
1/30/2019							<0.0002	
8/28/2019	<0.0002	<0.0002						
9/11/2019							<0.0002	
10/16/2019	<0.0002	<0.0002						
10/21/2019							<0.0002	
3/9/2020	<0.0002	<0.0002						
8/13/2020	<0.0002	<0.0002					<0.0002	
8/17/2020			0.00011 (J)					
9/23/2020	<0.0002	<0.0002						
9/24/2020							<0.0002	
9/25/2020			<0.0002					
12/9/2020				8.7E-05 (J)				
3/12/2021							<0.0002	
4/15/2021					<0.0002			
4/16/2021						<0.0002		
9/9/2021							<0.0002	
9/13/2021			<0.0002					
9/15/2021				<0.0002				
9/16/2021	<0.0002	<0.0002			<0.0002			
9/17/2021						<0.0002		
1/19/2022				<0.0002	<0.0002			
1/20/2022							<0.0002	
1/21/2022			<0.0002					
1/25/2022	<0.0002	<0.0002						
1/26/2022						<0.0002		
6/6/2022								<0.0002
9/7/2022	<0.0002	<0.0002		0.00014 (J)	<0.0002			
9/8/2022			<0.0002				<0.0002	<0.0002
9/12/2022						<0.0002		

Time Series

Constituent: Molybdenum (mg/L) Analysis Run 11/18/2022 12:02 PM View: AP 1

Plant McDonough Client: Southern Company Data: McDonough AP

	DGWA-53 (bg)	DGWA-70A (bg)	DGWA-71 (bg)	DGWC-37	DGWC-38	DGWC-39	DGWC-40	DGWC-67
9/2/2016							<0.01	
9/8/2016				<0.01	<0.01	<0.01		
12/7/2016				<0.01	<0.01	<0.01		
12/8/2016							<0.01	
3/28/2017	0.0242	<0.01	0.0009 (J)					
3/30/2017				<0.01	0.0011 (J)	<0.01	<0.01	
3/31/2017								<0.01
5/11/2017	0.0375							
5/12/2017			<0.01					<0.01
5/15/2017		<0.01						
6/15/2017	0.0409	<0.01						
6/16/2017			<0.01					<0.01
7/11/2017		<0.01	<0.01					
7/12/2017	0.0321							
7/13/2017				<0.01	0.0012 (J)	<0.01	<0.01	<0.01
8/8/2017		<0.01						
10/24/2017	0.0227	<0.01	<0.01					
10/26/2017				<0.01	0.0011 (J)	<0.01	<0.01	<0.01
2/27/2018		<0.01	<0.01					
3/1/2018				<0.01	<0.01	<0.01		
3/2/2018							<0.01	<0.01
3/8/2018	0.035							
7/12/2018	0.034			<0.01	<0.01	<0.01	<0.01	
7/13/2018								<0.01
11/6/2018		<0.01	<0.01					
11/7/2018	0.029							
11/8/2018				<0.01	<0.01	<0.01	<0.01	<0.01
8/27/2019		<0.01	<0.01					
8/28/2019	0.031			<0.01	<0.01	<0.01	<0.01	<0.01
10/15/2019		<0.01	<0.01					
10/16/2019	0.037							
10/17/2019								<0.01
10/18/2019				<0.01	<0.01	<0.01	<0.01	
3/2/2020		<0.01	<0.01					
3/4/2020							<0.01	
3/9/2020	0.026			<0.01	0.001 (J)	<0.01		<0.01
8/11/2020		<0.01	<0.01					
8/13/2020	0.012			<0.01	0.00098 (J)	<0.01	<0.01	<0.01
9/22/2020	0.039	<0.01	<0.01					
9/23/2020							<0.01	<0.01
9/24/2020				<0.01	0.001 (J)			
9/25/2020						<0.01		
3/1/2021		<0.01	<0.01					
3/8/2021							<0.01	
3/11/2021				<0.01	0.00092 (J)	<0.01		<0.01
3/12/2021	0.018							
9/8/2021			<0.01					
9/9/2021	0.025	<0.01						
9/14/2021							<0.01	
9/15/2021					0.00099 (J)			
9/16/2021				<0.01				<0.01
9/17/2021						<0.01		

Time Series

Constituent: Molybdenum (mg/L) Analysis Run 11/18/2022 12:02 PM View: AP 1

Plant McDonough Client: Southern Company Data: McDonough AP

	DGWA-53 (bg)	DGWA-70A (bg)	DGWA-71 (bg)	DGWC-37	DGWC-38	DGWC-39	DGWC-40	DGWC-67
1/18/2022		<0.01	<0.01					
1/19/2022							<0.01	<0.01
1/20/2022						<0.01		
1/21/2022				<0.01	0.0013 (J)			
1/28/2022	0.026							
9/7/2022		<0.01	<0.01			<0.01	<0.01	
9/8/2022	0.027			<0.01				<0.01
9/12/2022					0.0012 (J)			

Time Series

Constituent: Molybdenum (mg/L) Analysis Run 11/18/2022 12:02 PM View: AP 1

Plant McDonough Client: Southern Company Data: McDonough AP

	DGWC-68A	DGWC-69	B-100	B-105D	B-112D	B-113D	B-62	DGWC-121
3/31/2017		0.0124						
5/12/2017	0.275	0.0117						
6/16/2017	0.19	0.0087 (J)						
7/13/2017	0.211	0.0053 (J)						
8/8/2017	0.207							
10/26/2017	0.226	0.0244						
11/15/2017		0.0237						
3/2/2018	0.215	0.0072 (J)						
7/13/2018	0.22	0.007 (J)						
11/8/2018	0.2	<0.01 (J)						
1/30/2019							<0.01	
8/28/2019	0.21	0.0059 (J)						
9/11/2019							<0.01	
10/16/2019	0.22	0.01						
10/21/2019							<0.01	
3/9/2020	0.19	0.0062 (J)						
8/13/2020	0.19	0.011					<0.01	
8/17/2020			<0.01					
9/23/2020	0.2	0.0056 (J)						
9/24/2020							<0.01	
9/25/2020			<0.01					
12/9/2020				<0.01				
3/8/2021			<0.01	0.0011 (J)				
3/10/2021	0.2	0.0056 (J)						
3/12/2021							<0.01	
3/26/2021						0.025		
4/15/2021					0.037			
4/16/2021						0.078		
9/9/2021							<0.01	
9/13/2021			<0.01					
9/15/2021				<0.01				
9/16/2021	0.18	0.009 (J)			0.032			
9/17/2021						0.074		
1/19/2022				<0.01	0.032			
1/20/2022							<0.01	
1/21/2022			<0.01					
1/25/2022	0.23	0.0057 (J)						
1/26/2022						0.074		
6/6/2022								0.00093 (J)
9/7/2022	0.2	0.0067 (J)		<0.01	0.028			
9/8/2022			<0.01				<0.01	<0.01
9/12/2022						0.052		

Time Series

Constituent: pH, Field (SU) Analysis Run 11/18/2022 12:02 PM View: AP 1

Plant McDonough Client: Southern Company Data: McDonough AP

	DGWA-53 (bg)	DGWA-70A (bg)	DGWA-71 (bg)	DGWC-37	DGWC-38	DGWC-39	DGWC-40	DGWC-67
9/2/2016							4.77	
9/8/2016				6.32	6.01	6.47		
12/7/2016				6.32	6.07	6.43		
12/8/2016							4.77	
3/28/2017	6.29		5.94					
3/30/2017				6.22	5.97	6.42	4.84	
3/31/2017								6.25
5/11/2017	6.6							
5/12/2017			5.46					6.23
5/15/2017		5.72						
6/15/2017	6.41	5.74						
6/16/2017			5.81					6.22
7/11/2017		5.62	5.74					
7/12/2017	5.91							
7/13/2017				6.3	6.11	6.47	4.85	6.15
8/8/2017		5.6						
10/24/2017	5.51	5.71	5.86					
10/26/2017					6.06	6.49	4.86	6.64
11/15/2017	6.5		5.77					
2/27/2018		5.5	5.66					
3/1/2018				6.28	6.05	6.37		
3/2/2018							4.67	6.18
3/8/2018	6.18							
7/10/2018		5.44	5.63					
7/12/2018	6.33			6.43	6.05	6.45	4.63	
7/13/2018								6.19
11/6/2018		5.71	5.79					
11/7/2018	6.22							
11/8/2018				6.36	6.07	6.49	4.79	6.23
3/12/2019		5.52	5.74					
3/13/2019	6			6.26	6.05	6.28	4.6	6.19
8/27/2019		5.53	5.87					
8/28/2019	6.04			6.27	5.98	6.41	4.68	6.22
10/15/2019		5.61	5.88					
10/16/2019	6.69							
10/17/2019								6.14
10/18/2019				6.26	6	6.35	4.71	
3/2/2020		5.54	5.77					
3/4/2020							4.64	
3/9/2020	6.41			6.34	6.12	6.37		6.23
8/11/2020		5.86	5.96					
8/13/2020	6.17			6.34	6.05	6.39	4.65	6.28
9/22/2020	6.43	6.01	6.06					
9/23/2020							4.78	6.23
9/24/2020				6.3	6.05			
9/25/2020						6.38		
3/1/2021		5.43	5.8					
3/8/2021							4.79	
3/11/2021				6.49	6.22	6.66		6.28
3/12/2021	6.38							
9/8/2021			5.76					
9/9/2021	6.41	5.5						

Time Series

Constituent: pH, Field (SU) Analysis Run 11/18/2022 12:02 PM View: AP 1

Plant McDonough Client: Southern Company Data: McDonough AP

	DGWA-53 (bg)	DGWA-70A (bg)	DGWA-71 (bg)	DGWC-37	DGWC-38	DGWC-39	DGWC-40	DGWC-67
9/14/2021							4.67	
9/15/2021					6.08			
9/16/2021				6.33				6.2
9/17/2021						6.49		
1/18/2022		5.5	5.51					
1/19/2022							4.66	6.21
1/20/2022						6.52		
1/21/2022				6.31	6.08			
1/28/2022	6.35							
9/7/2022		5.6	5.65			6.43	4.54	
9/8/2022	6.32			6.3				6.21
9/9/2022				6.3				
9/12/2022					6.05			

Time Series

Constituent: pH, Field (SU) Analysis Run 11/18/2022 12:02 PM View: AP 1

Plant McDonough Client: Southern Company Data: McDonough AP

	DGWC-68A	DGWC-69	B-100	B-105D	B-112D	B-113D	B-62	DGWC-121
3/31/2017		6.26						
4/12/2017		6.19						
5/12/2017	6.63	6.2						
6/16/2017	6.63	6.22						
7/13/2017	6.84	6.35						
8/8/2017	6.57							
10/26/2017	7.01	6.69						
11/15/2017		6.22						
3/2/2018	6.58	6.1						
7/13/2018	6.62	5.95						
11/8/2018	6.5	6						
3/13/2019	6.57	6.08						
8/28/2019	6.6	6.09						
9/11/2019							6.27	
10/16/2019	6.6	6.19						
10/21/2019							6.24	
3/9/2020	6.6	6.12						
8/3/2020			4.93					
8/13/2020	6.63	6.26					6.4	
8/17/2020			5.02					
9/23/2020	6.6	6.08						
9/24/2020							6.55	
9/25/2020			5.53					
12/9/2020				6.48				
3/8/2021			5.32	6.37				
3/10/2021	6.74	6.13						
3/12/2021							6.34	
3/26/2021						8.42		
4/15/2021					6.83			
4/16/2021						7.77		
9/9/2021							6.31	
9/13/2021			5.27					
9/15/2021				6.38				
9/16/2021	6.79 (o)	6.16			6.74			
9/17/2021						7.97		
10/27/2021	6.56							
1/19/2022				6.62	6.74			
1/20/2022							6.32	
1/21/2022			5.23					
1/25/2022	6.53	6.02						
1/26/2022						7.66		
6/6/2022								6.33
9/7/2022	6.62	6.2		6.44	6.72			
9/8/2022			5.24				6.22	6.32
9/9/2022							6.22 (D)	
9/12/2022						7.95		

Time Series

Constituent: Selenium (mg/L) Analysis Run 11/18/2022 12:02 PM View: AP 1

Plant McDonough Client: Southern Company Data: McDonough AP

	DGWA-53 (bg)	DGWA-70A (bg)	DGWA-71 (bg)	DGWC-37	DGWC-38	DGWC-39	DGWC-40	DGWC-67
9/2/2016							0.0019 (J)	
9/8/2016				<0.005	<0.005	<0.005		
12/7/2016				<0.005	<0.005	<0.005		
12/8/2016							0.0022 (J)	
3/28/2017	<0.005	<0.005	<0.005					
3/30/2017				<0.005	<0.005	<0.005	0.0023 (J)	
3/31/2017								<0.005
5/11/2017	<0.005							
5/12/2017			<0.005					<0.005
5/15/2017		<0.005						
6/15/2017	<0.005	<0.005						
6/16/2017			<0.005					<0.005
7/11/2017		<0.005	<0.005					
7/12/2017	<0.005							
7/13/2017				<0.005	<0.005	<0.005	0.0025 (J)	<0.005
8/8/2017		<0.005						
10/24/2017	<0.005	<0.005	<0.005					
10/26/2017				<0.005	<0.005	<0.005	0.0036 (J)	<0.005
2/27/2018		<0.005	<0.005					
3/1/2018				<0.005	<0.005	<0.005		
3/2/2018							<0.005	<0.005
3/8/2018	<0.005							
7/12/2018	<0.005			<0.005	<0.005	<0.005	<0.005	
7/13/2018								<0.005
11/6/2018		<0.005	<0.005					
11/7/2018	<0.005							
11/8/2018				<0.005	<0.005	<0.005	<0.01 (J)	<0.005
8/27/2019		<0.005	<0.005					
8/28/2019	<0.005			<0.005	<0.005	<0.005	0.0017 (J)	<0.005
10/15/2019		<0.005	<0.005					
10/16/2019	<0.005							
10/17/2019								<0.005
10/18/2019				<0.005	<0.005	<0.005	0.0027 (J)	
3/2/2020		<0.005	<0.005					
3/4/2020							0.0049 (J)	
3/9/2020	<0.005			<0.005	<0.005	<0.005		<0.005
8/11/2020		<0.005	<0.005					
8/13/2020	<0.005			<0.005	<0.005	<0.005	0.0018 (J)	<0.005
9/22/2020	<0.005	<0.005	<0.005					
9/23/2020							0.0067 (J)	<0.005
9/24/2020				<0.005	<0.005			
9/25/2020						<0.005		
3/1/2021		<0.005	<0.005					
3/8/2021							0.0023 (J)	
3/11/2021				<0.005	0.0019 (J)	<0.005		0.0027 (J)
3/12/2021	<0.005							
9/8/2021			<0.005					
9/9/2021	<0.005	<0.005						
9/14/2021							0.0015 (J)	
9/15/2021					<0.005			
9/16/2021				<0.005				<0.005
9/17/2021						<0.005		

Time Series

Constituent: Selenium (mg/L) Analysis Run 11/18/2022 12:02 PM View: AP 1

Plant McDonough Client: Southern Company Data: McDonough AP

	DGWA-53 (bg)	DGWA-70A (bg)	DGWA-71 (bg)	DGWC-37	DGWC-38	DGWC-39	DGWC-40	DGWC-67
1/18/2022		<0.005	<0.005					
1/19/2022							<0.005	<0.005
1/20/2022						<0.005		
1/21/2022				<0.005	<0.005			
1/28/2022	<0.005							
9/7/2022		<0.005	<0.005			<0.005	0.0018 (J)	
9/8/2022	<0.005			<0.005				<0.005
9/12/2022					<0.005			

Time Series

Constituent: Selenium (mg/L) Analysis Run 11/18/2022 12:02 PM View: AP 1

Plant McDonough Client: Southern Company Data: McDonough AP

	DGWC-68A	DGWC-69	B-100	B-105D	B-112D	B-113D	B-62	DGWC-121
3/31/2017		<0.005						
5/12/2017	<0.005	<0.005						
6/16/2017	<0.005	<0.005						
7/13/2017	<0.005	<0.005						
8/8/2017	<0.005							
10/26/2017	<0.005	<0.005						
11/15/2017		<0.005						
3/2/2018	<0.005	<0.005						
7/13/2018	<0.005	<0.005						
11/8/2018	<0.005	<0.005						
1/30/2019							<0.005	
8/28/2019	<0.005	<0.005						
9/11/2019							<0.005	
10/16/2019	<0.005	<0.005						
10/21/2019							<0.005	
3/9/2020	<0.005	<0.005						
8/13/2020	<0.005	<0.005					<0.005	
8/17/2020			<0.005					
9/23/2020	<0.005	<0.005						
9/24/2020							<0.005	
9/25/2020			<0.005					
12/9/2020				<0.005				
3/8/2021			0.0019 (J)	<0.005				
3/10/2021	0.0017 (J)	<0.005						
3/12/2021							<0.005	
4/15/2021					<0.005			
4/16/2021						<0.005		
9/9/2021							<0.005	
9/13/2021			<0.005					
9/15/2021				<0.005				
9/16/2021	<0.005	<0.005			<0.005			
9/17/2021						<0.005		
1/19/2022				<0.005	<0.005			
1/20/2022							<0.005	
1/21/2022			<0.005					
1/25/2022	<0.005	<0.005						
1/26/2022						<0.005		
6/6/2022								<0.005
9/7/2022	<0.005	<0.005		<0.005	<0.005			
9/8/2022			<0.005				<0.005	<0.005
9/12/2022						<0.005		

Time Series

Constituent: Sulfate as SO4 (mg/L) Analysis Run 11/18/2022 12:02 PM View: AP 1

Plant McDonough Client: Southern Company Data: McDonough AP

	DGWA-53 (bg)	DGWA-70A (bg)	DGWA-71 (bg)	DGWC-37	DGWC-38	DGWC-39	DGWC-40	DGWC-67
9/2/2016							230	
9/8/2016				97	270	280		
12/7/2016				100	250	250		
12/8/2016							270	
3/28/2017	49	2.7	17					
3/30/2017				110	290	310	240	
3/31/2017								110
5/11/2017	21							
5/12/2017			17					100
5/15/2017		1						
6/15/2017	16	0.86 (J)						
6/16/2017			11					100
7/11/2017		1.4	11					
7/12/2017	10							
7/13/2017				200 (O)	270	220	220	110
8/8/2017		1.5						
10/24/2017	15	1.4	9.6					
10/26/2017				97	260	210	220	100
11/15/2017	3.8		7.8					
2/27/2018		0.54 (J)	7.4					
3/1/2018				94.6	242	166		
3/2/2018							219	98.5
3/8/2018	9.7							
7/12/2018	8			89.2	256	169	222	
7/13/2018								136
11/6/2018		<1 (J)	7.3					
11/7/2018	12.8							
11/8/2018				102	291	200	273	118
3/12/2019		0.35 (J)	7					
3/13/2019	23.7			92.2	300	265	445	233
10/15/2019		0.16 (J)	7.4					
10/16/2019	15.1							
10/17/2019								99.4
10/18/2019				76.4	239	182	205	
3/2/2020		<1	8.5					
3/4/2020							177	
3/9/2020	9.5			90.3	244	171		100
9/22/2020	13.5	<1	6.5					
9/23/2020							190	99.8
9/24/2020				84.1	240			
9/25/2020						153		
3/1/2021		<1	5.2					
3/8/2021							191	
3/11/2021				81.9	154	123		76.7
3/12/2021	8.8							
9/8/2021			6.1					
9/9/2021	11.9	<1						
9/14/2021							186	
9/15/2021					219			
9/16/2021				95				101
9/17/2021						156		
1/18/2022		<1	6.3					

Time Series

Constituent: Sulfate as SO4 (mg/L) Analysis Run 11/18/2022 12:02 PM View: AP 1

Plant McDonough Client: Southern Company Data: McDonough AP

	DGWA-53 (bg)	DGWA-70A (bg)	DGWA-71 (bg)	DGWC-37	DGWC-38	DGWC-39	DGWC-40	DGWC-67
1/19/2022							177	97.2
1/20/2022						123		
1/21/2022				89.8	188			
1/28/2022	13.1							
9/7/2022		<1	7			146	203	
9/8/2022	12			96.6				117
9/12/2022					234			

Time Series

Constituent: Sulfate as SO4 (mg/L) Analysis Run 11/18/2022 12:02 PM View: AP 1

Plant McDonough Client: Southern Company Data: McDonough AP

	DGWC-68A	DGWC-69	B-100	B-105D	B-112D	B-113D	B-62	DGWC-121
3/31/2017		21						
5/12/2017	50	17						
6/16/2017	47	20						
7/13/2017	49	17						
8/8/2017	48							
10/26/2017	48	31						
11/15/2017		29						
3/2/2018	44.7	10.1						
7/13/2018	43.3	8.6						
11/8/2018	43.5	9.7						
1/30/2019							74.7	
3/13/2019	44.1	8.4						
10/16/2019	32.1	13.3						
10/21/2019							55.3	
3/9/2020	37.4	7.6						
9/23/2020	38.7	5.9						
9/24/2020							50.6	
9/25/2020			385					
12/9/2020				220				
3/8/2021			388	228				
3/10/2021	38.4	6.4						
3/12/2021							46.5	
4/15/2021					95.6			
4/16/2021						46.5		
9/9/2021							49.2	
9/13/2021			351					
9/15/2021				240				
9/16/2021	22.3	17.9			21.2			
9/17/2021						89.1		
1/19/2022				220	18.4			
1/20/2022							50.3	
1/21/2022			344					
1/25/2022	36.3	7.1						
1/26/2022						55.5		
6/6/2022								83.9
9/7/2022	36.5	11.6		263	18.2			
9/8/2022			399				45.8	84.8
9/12/2022						35		

Time Series

Constituent: Thallium (mg/L) Analysis Run 11/18/2022 12:02 PM View: AP 1

Plant McDonough Client: Southern Company Data: McDonough AP

	DGWA-53 (bg)	DGWA-70A (bg)	DGWA-71 (bg)	DGWC-37	DGWC-38	DGWC-39	DGWC-40	DGWC-67
9/2/2016							<0.001	
9/8/2016				<0.001	<0.001	<0.001		
12/7/2016				<0.001	<0.001	<0.001		
12/8/2016							<0.001	
3/28/2017	<0.001	<0.001	6E-05 (J)					
3/30/2017				<0.001	0.0001 (J)	0.0001 (J)	6E-05 (J)	
3/31/2017								<0.001
5/11/2017	<0.001							
5/12/2017			<0.001					<0.001
5/15/2017		<0.001						
6/15/2017	<0.001	<0.001						
6/16/2017			<0.001					<0.001
7/11/2017		<0.001	<0.001					
7/12/2017	<0.001							
7/13/2017				<0.001	0.0001 (J)	9E-05 (J)	6E-05 (J)	<0.001
8/8/2017		<0.001						
10/24/2017	<0.001	<0.001	<0.001					
10/26/2017				<0.001	0.0001 (J)	0.0001 (J)	7E-05 (J)	<0.001
2/27/2018		<0.001	<0.001					
3/1/2018				<0.001	<0.001	<0.001		
3/2/2018							<0.001	<0.001
3/8/2018	<0.001							
7/12/2018	<0.001			<0.001	<0.001	<0.001	<0.001	
7/13/2018								<0.001
11/6/2018		<0.001	<0.001					
11/7/2018	<0.001							
11/8/2018				<0.001	<0.001	<0.001	<0.001	<0.001
8/27/2019		<0.001	<0.001					
8/28/2019	<0.001			<0.001	0.00014 (J)	6.9E-05 (J)	7E-05 (J)	<0.001
10/15/2019		<0.001	<0.001					
10/16/2019	<0.001							
10/17/2019								<0.001
10/18/2019				<0.001	0.0001 (J)	<0.001	<0.001	
3/2/2020		7.8E-05 (J)	<0.001					
3/4/2020							6.8E-05 (J)	
3/9/2020	<0.001			<0.001	0.00016 (J)	7.1E-05 (J)		<0.001
8/11/2020		<0.001	<0.001					
8/13/2020	<0.001			<0.001	0.00016 (J)	<0.001	<0.001	<0.001
9/22/2020	<0.001	<0.001	<0.001					
9/23/2020							<0.001	<0.001
9/24/2020				<0.001	0.00015 (J)			
9/25/2020						<0.001		
3/1/2021		<0.001	<0.001					
3/8/2021							<0.001	
3/11/2021				<0.001	<0.001	<0.001		<0.001
3/12/2021	<0.001							
9/8/2021			<0.001					
9/9/2021	<0.001	<0.001						
9/14/2021							<0.001	
9/15/2021					<0.001			
9/16/2021				<0.001				<0.001
9/17/2021						<0.001		

Time Series

Constituent: Thallium (mg/L) Analysis Run 11/18/2022 12:02 PM View: AP 1

Plant McDonough Client: Southern Company Data: McDonough AP

	DGWA-53 (bg)	DGWA-70A (bg)	DGWA-71 (bg)	DGWC-37	DGWC-38	DGWC-39	DGWC-40	DGWC-67
1/18/2022		<0.001	<0.001					
1/19/2022							<0.001	<0.001
1/20/2022						<0.001		
1/21/2022				<0.001	<0.001			
1/28/2022	<0.001							
9/7/2022		<0.001	<0.001			<0.001	<0.001	
9/8/2022	<0.001			<0.001				<0.001
9/12/2022					<0.001			

Time Series

Constituent: Thallium (mg/L) Analysis Run 11/18/2022 12:02 PM View: AP 1

Plant McDonough Client: Southern Company Data: McDonough AP

	DGWC-68A	DGWC-69	B-100	B-105D	B-112D	B-113D	B-62	DGWC-121
3/31/2017		<0.001						
5/12/2017	<0.001	<0.001						
6/16/2017	<0.001	<0.001						
7/13/2017	<0.001	<0.001						
8/8/2017	<0.001							
10/26/2017	<0.001	<0.001						
11/15/2017		<0.001						
3/2/2018	<0.001	<0.001						
7/13/2018	0.00015 (J)	<0.001						
11/8/2018	<0.001	<0.001						
1/30/2019							<0.001	
8/28/2019	<0.001	<0.001						
9/11/2019							<0.001	
10/16/2019	<0.001	<0.001						
10/21/2019							<0.001	
3/9/2020	<0.001	<0.001						
8/13/2020	<0.001	<0.001					<0.001	
8/17/2020			<0.001					
9/23/2020	<0.001	<0.001						
9/24/2020							<0.001	
9/25/2020			<0.001					
12/9/2020				<0.001				
3/8/2021			<0.001	<0.001				
3/10/2021	<0.001	<0.001						
3/12/2021							<0.001	
4/15/2021					<0.001			
4/16/2021						<0.001		
9/9/2021							<0.001	
9/13/2021			<0.001					
9/15/2021				<0.001				
9/16/2021	<0.001	<0.001			<0.001			
9/17/2021						<0.001		
1/19/2022				<0.001	<0.001			
1/20/2022							<0.001	
1/21/2022			<0.001					
1/25/2022	<0.001	<0.001						
1/26/2022						<0.001		
6/6/2022								<0.001
9/7/2022	<0.001	<0.001		<0.001	<0.001			
9/8/2022			<0.001				<0.001	<0.001
9/12/2022						<0.001		

Time Series

Constituent: Total Dissolved Solids [TDS] (mg/L) Analysis Run 11/18/2022 12:02 PM View: AP 1

Plant McDonough Client: Southern Company Data: McDonough AP

	DGWA-53 (bg)	DGWA-70A (bg)	DGWA-71 (bg)	DGWC-37	DGWC-38	DGWC-39	DGWC-40	DGWC-67
9/2/2016							583 (O)	
9/8/2016				279	437	522		
12/7/2016				300	478	565		
12/8/2016							319	
3/28/2017	202	39	90					
3/30/2017				273	448	496	344	
3/31/2017								270
5/11/2017	241							
5/12/2017			92					287
5/15/2017		88						
6/15/2017	251	65						
6/16/2017			100					309
7/11/2017		25	59					
7/12/2017	218							
7/13/2017				312	504	508	386	275
8/8/2017		53						
10/24/2017	671 (O)	49	117					
10/26/2017				340	554	532	373	319
11/15/2017	241		90					
2/27/2018		43	79					
3/1/2018				311	492	440		
3/2/2018							359	264
3/8/2018	213							
7/12/2018	198			290	478	463	365	
7/13/2018								297
11/6/2018		65	85					
11/7/2018	200							
11/8/2018				295	507	485	399	295
3/12/2019		43	74					
3/13/2019	201			286	487	526	351	278
10/15/2019		70	89					
10/16/2019	126							
10/17/2019								281
10/18/2019				269	494	489	360	
3/2/2020		52	67					
3/4/2020							400	
3/9/2020	171			357	554	508		209
9/22/2020	142	46	74					
9/23/2020							357	296
9/24/2020				280	489			
9/25/2020						460		
3/1/2021		25	62					
3/8/2021							346	
3/11/2021				255	463	440		265
3/12/2021	124							
9/8/2021			75					
9/9/2021	131	53						
9/14/2021							347	
9/15/2021					474			
9/16/2021				278				282
9/17/2021						446		
1/18/2022		54	76					

Time Series

Constituent: Total Dissolved Solids [TDS] (mg/L) Analysis Run 11/18/2022 12:02 PM View: AP 1

Plant McDonough Client: Southern Company Data: McDonough AP

	DGWA-53 (bg)	DGWA-70A (bg)	DGWA-71 (bg)	DGWC-37	DGWC-38	DGWC-39	DGWC-40	DGWC-67
1/19/2022							336	272
1/20/2022						416		
1/21/2022				316	482			
1/28/2022	155							
9/7/2022		34	82			449	339	
9/8/2022	129			300				252
9/12/2022					468			

Time Series

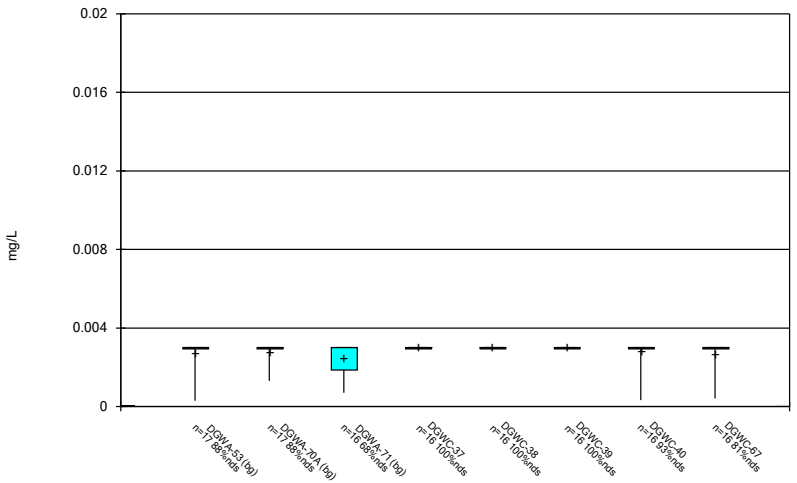
Constituent: Total Dissolved Solids [TDS] (mg/L) Analysis Run 11/18/2022 12:02 PM View: AP 1

Plant McDonough Client: Southern Company Data: McDonough AP

	DGWC-68A	DGWC-69	B-100	B-105D	B-112D	B-113D	B-62	DGWC-121
3/31/2017		138						
5/12/2017	300	243						
6/16/2017	271	155						
7/13/2017	246	122						
8/8/2017	278							
10/26/2017	287	234						
11/15/2017		188						
3/2/2018	252	73						
7/13/2018	275	95						
11/8/2018	277	112						
1/30/2019							287	
3/13/2019	267	95						
10/16/2019	218	108						
10/21/2019							180	
3/9/2020	188	115						
9/23/2020	251	102						
9/24/2020							170	
9/25/2020			724					
12/9/2020				474				
3/8/2021			660	477				
3/10/2021	232	78						
3/12/2021							172	
4/15/2021					289			
4/16/2021						229		
9/9/2021							174	
9/13/2021			636					
9/15/2021				455				
9/16/2021	259	113			162			
9/17/2021						329		
1/19/2022				453	167			
1/20/2022							187	
1/21/2022			638					
1/25/2022	259	84						
1/26/2022						234		
6/6/2022								270
9/7/2022	256	102		479	153			
9/8/2022			606				160	261
9/12/2022						197		

FIGURE B.

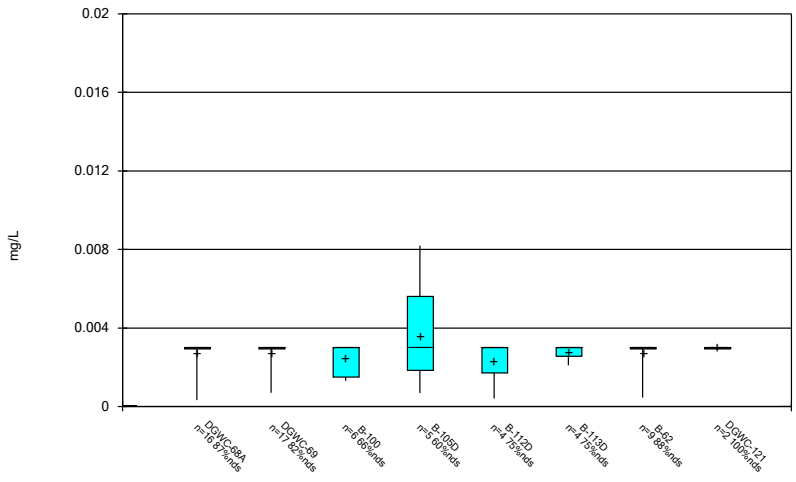
Box & Whiskers Plot



Constituent: Antimony Analysis Run 11/18/2022 12:02 PM View: AP 1
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.9.6.35 Groundwater Stats Consulting. UG

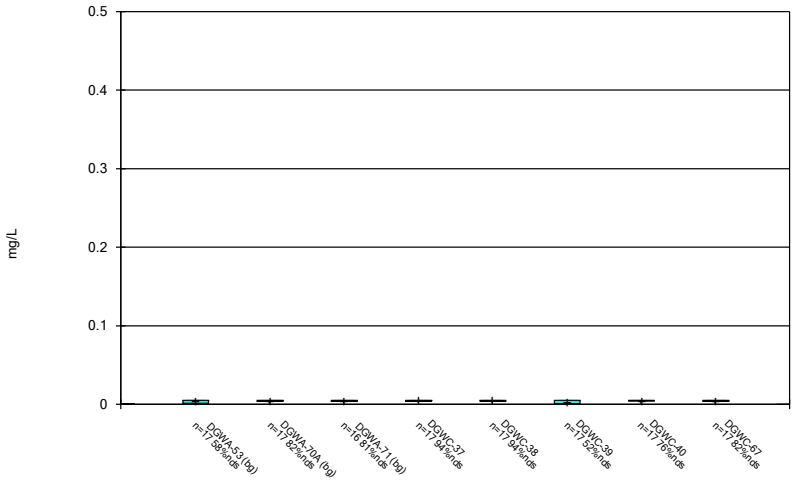
Box & Whiskers Plot



Constituent: Antimony Analysis Run 11/18/2022 12:02 PM View: AP 1
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.9.6.35 Groundwater Stats Consulting. UG

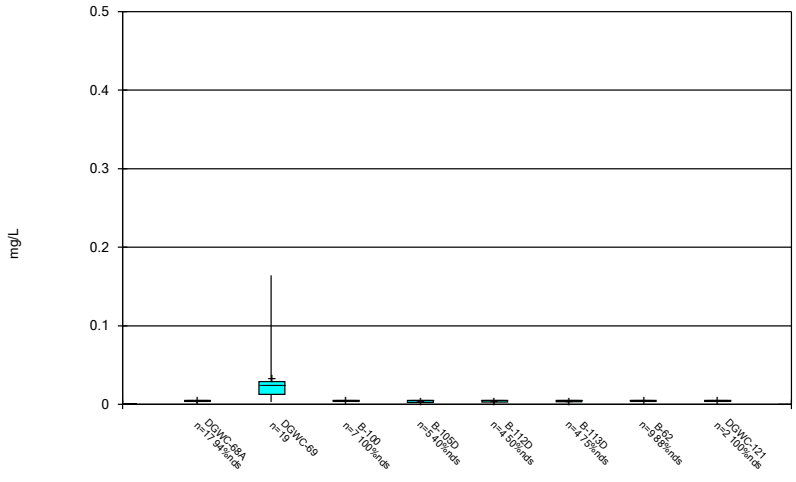
Box & Whiskers Plot



Constituent: Arsenic Analysis Run 11/18/2022 12:02 PM View: AP 1
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.9.6.35 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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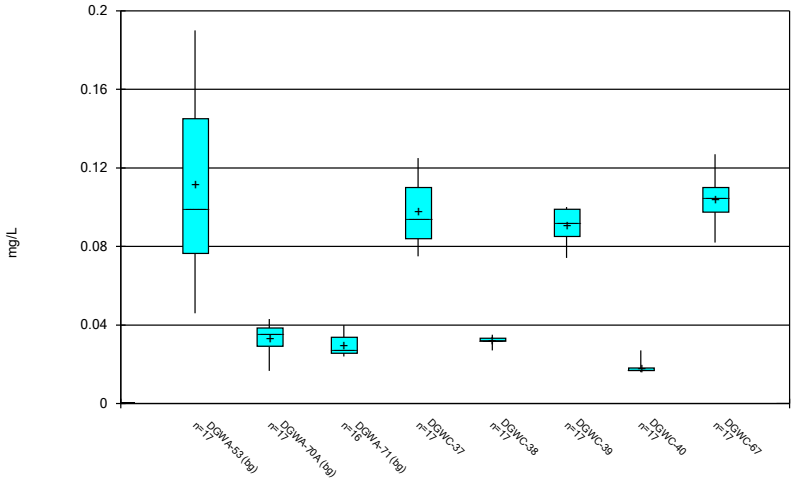
Plant McDonough Client: Southern Company Data: McDonough AP

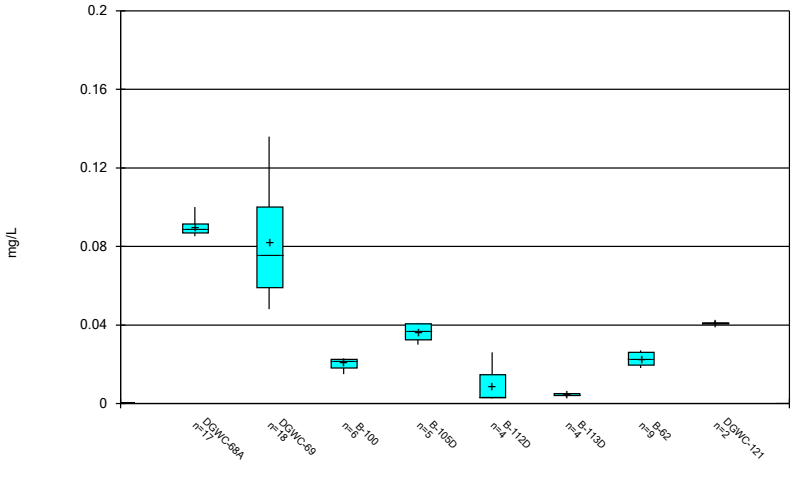
Box & Whiskers Plot



Constituent: Barium Analysis Run 11/18/2022 12:02 PM View: AP 1
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.9.6.35 Groundwater Stats Consulting. UG

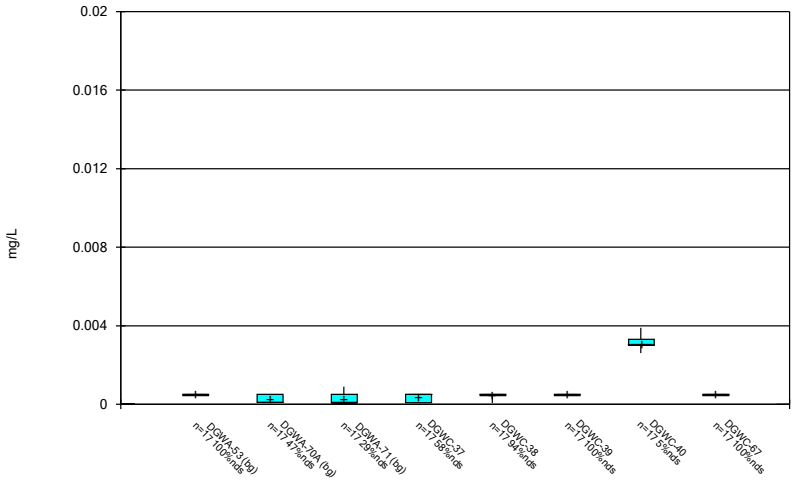
Box & Whiskers Plot



Constituent: Barium Analysis Run 11/18/2022 12:02 PM View: AP 1
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.9.6.35 Groundwater Stats Consulting. UG

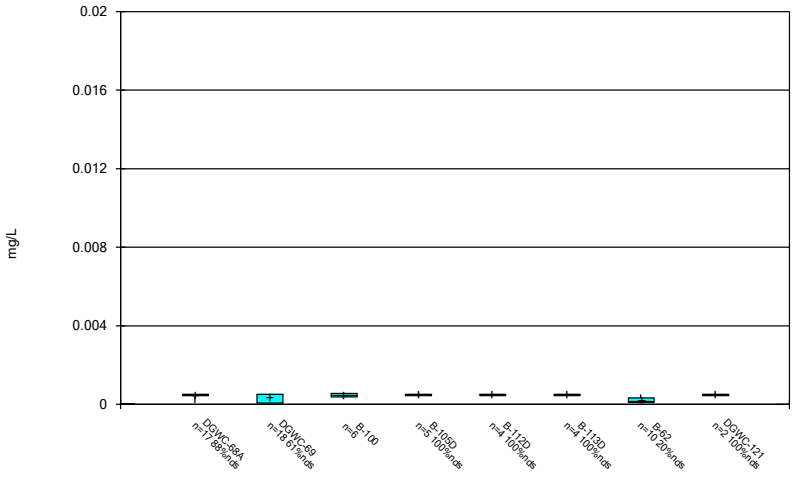
Box & Whiskers Plot



Constituent: Beryllium Analysis Run 11/18/2022 12:02 PM View: AP 1
Plant McDonough Client: Southern Company Data: McDonough AP

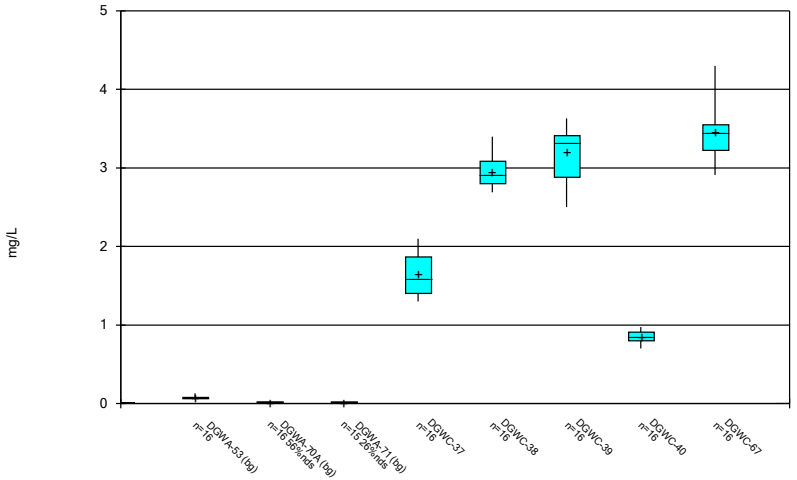
Sanitas™ v.9.6.35 Groundwater Stats Consulting. UG

Box & Whiskers Plot



Constituent: Beryllium Analysis Run 11/18/2022 12:02 PM View: AP 1
Plant McDonough Client: Southern Company Data: McDonough AP

Box & Whiskers Plot



Constituent: Boron, total Analysis Run 11/18/2022 12:02 PM View: AP 1
Plant McDonough Client: Southern Company Data: McDonough AP

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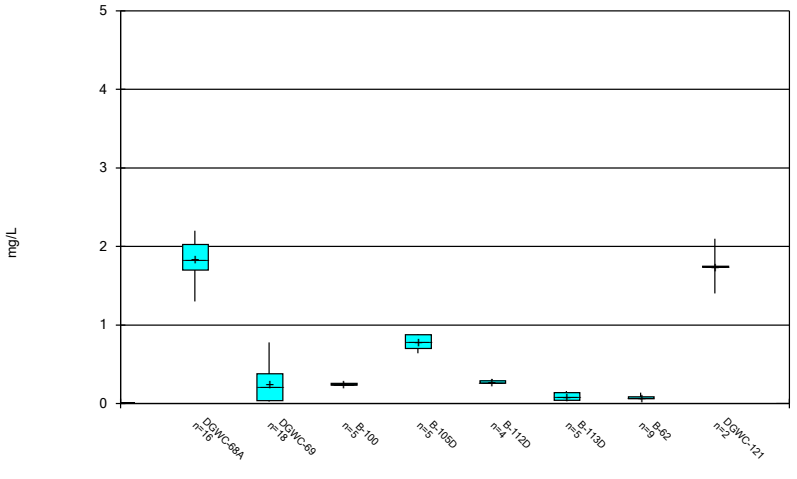
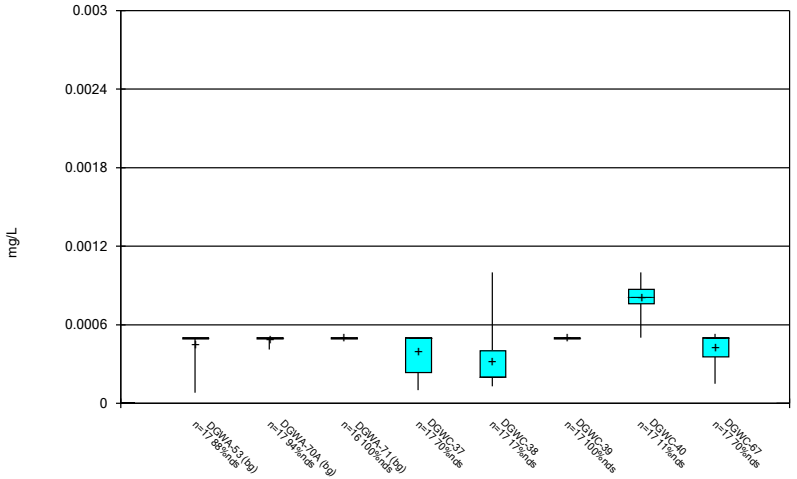
Box & Whiskers Plot



Constituent: Boron, total Analysis Run 11/18/2022 12:02 PM View: AP 1
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.9.6.35 Groundwater Stats Consulting. UG

Box & Whiskers Plot



Constituent: Cadmium Analysis Run 11/18/2022 12:02 PM View: AP 1
Plant McDonough Client: Southern Company Data: McDonough AP

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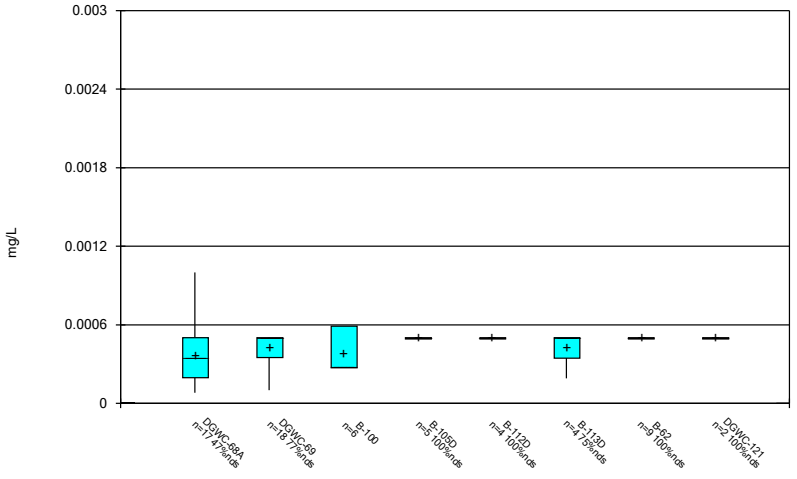
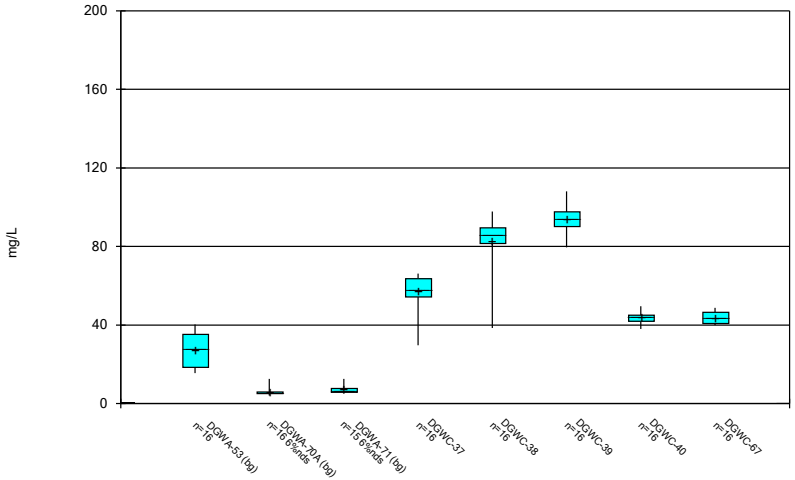
Box & Whiskers Plot



Constituent: Cadmium Analysis Run 11/18/2022 12:02 PM View: AP 1
Plant McDonough Client: Southern Company Data: McDonough AP

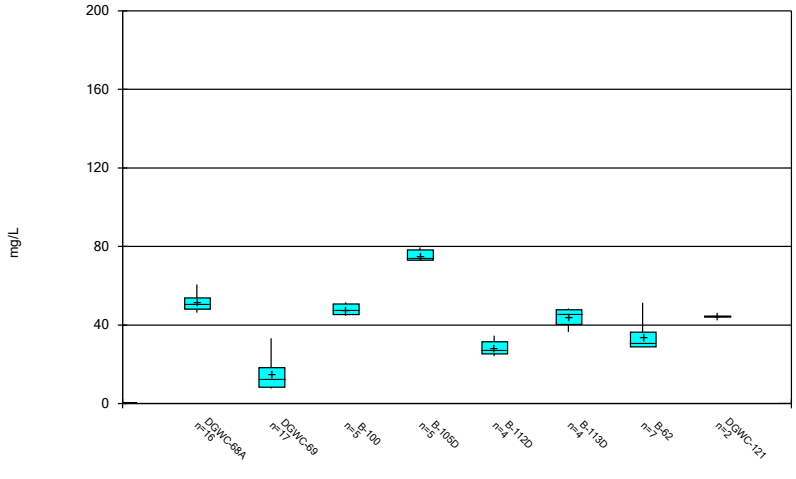
Box & Whiskers Plot



Constituent: Calcium, total Analysis Run 11/18/2022 12:02 PM View: AP 1
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.9.6.35 Groundwater Stats Consulting. UG

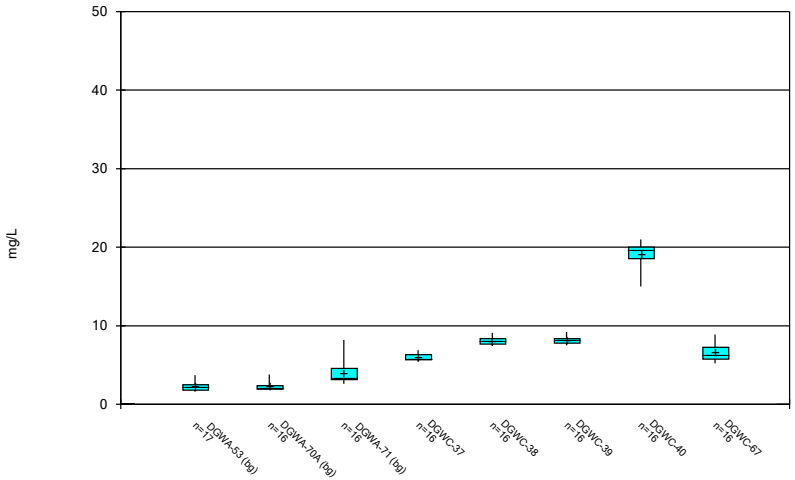
Box & Whiskers Plot



Constituent: Calcium, total Analysis Run 11/18/2022 12:02 PM View: AP 1
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.9.6.35 Groundwater Stats Consulting. UG

Box & Whiskers Plot



Constituent: Chloride, Total Analysis Run 11/18/2022 12:02 PM View: AP 1
Plant McDonough Client: Southern Company Data: McDonough AP

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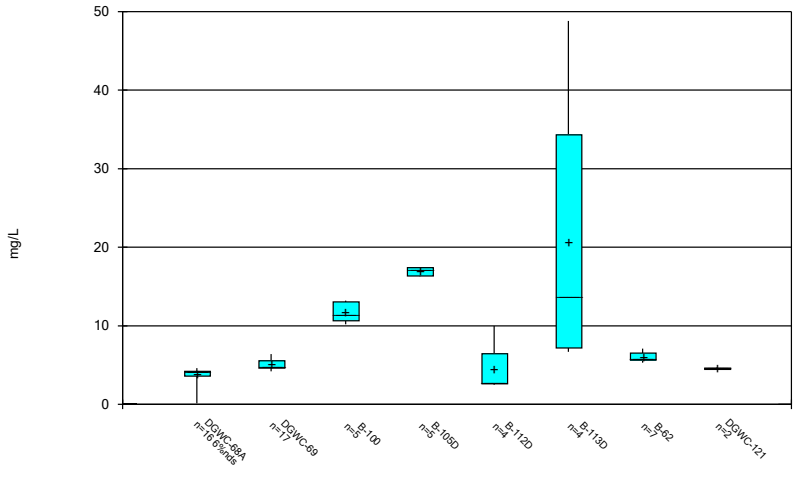
Box & Whiskers Plot



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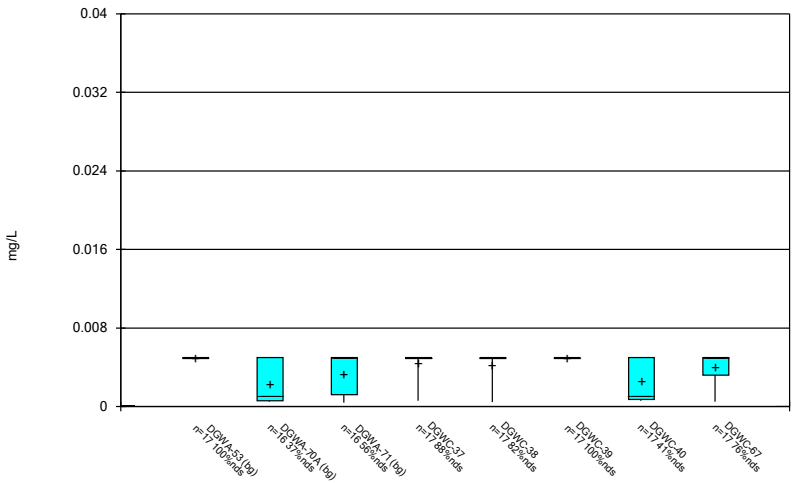
Plant McDonough Client: Southern Company Data: McDonough AP

Box & Whiskers Plot



Constituent: Chromium Analysis Run 11/18/2022 12:02 PM View: AP 1
Plant McDonough Client: Southern Company Data: McDonough AP

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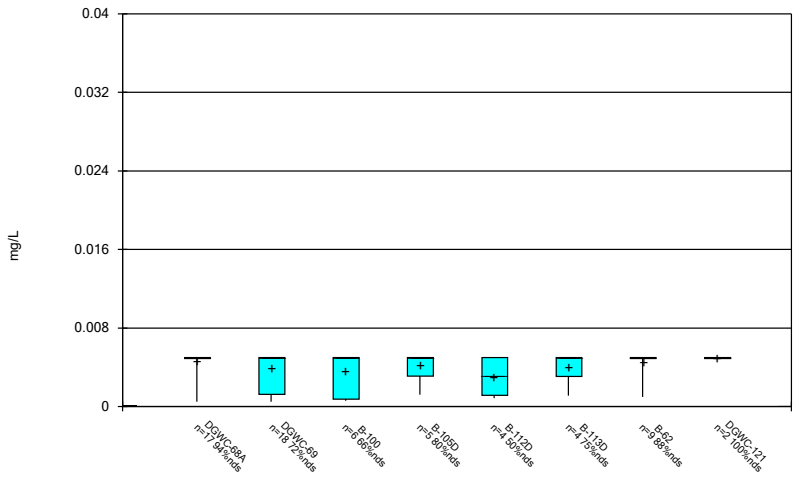
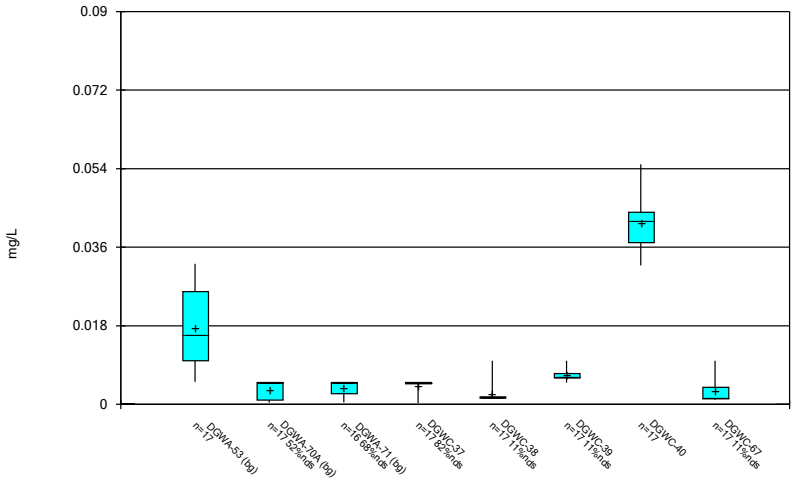
Box & Whiskers Plot



Constituent: Chromium Analysis Run 11/18/2022 12:02 PM View: AP 1
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.9.6.35 Groundwater Stats Consulting. UG

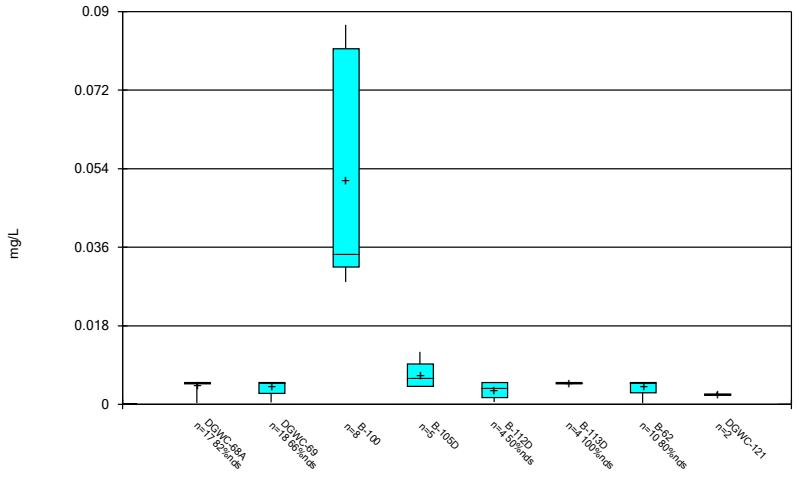
Box & Whiskers Plot



Constituent: Cobalt Analysis Run 11/18/2022 12:03 PM View: AP 1
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.9.6.35 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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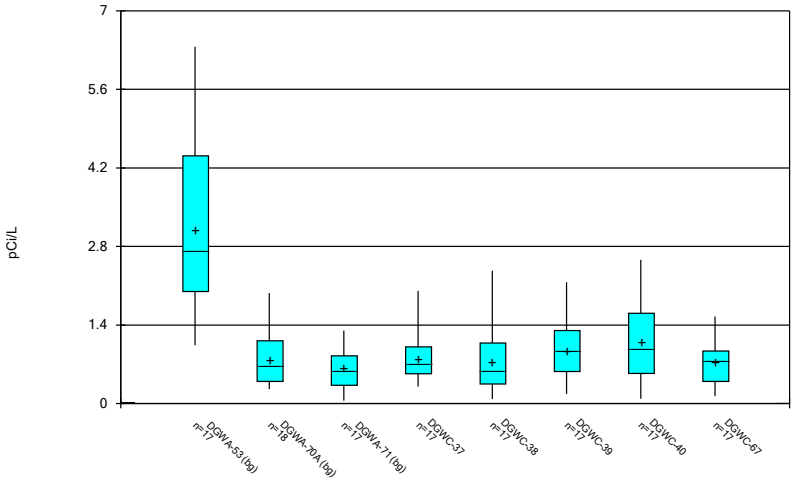
Plant McDonough Client: Southern Company Data: McDonough AP

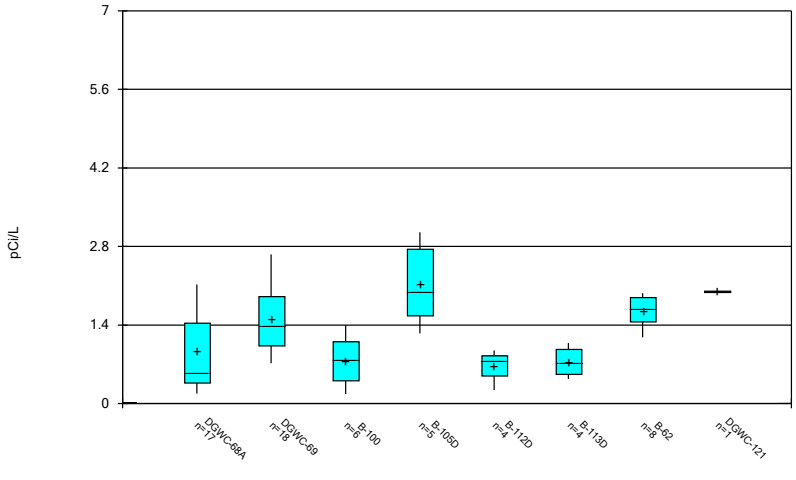
Box & Whiskers Plot



Constituent: Combined Radium 226 + 228 Analysis Run 11/18/2022 12:03 PM View: AP 1
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.9.6.35 Groundwater Stats Consulting. UG

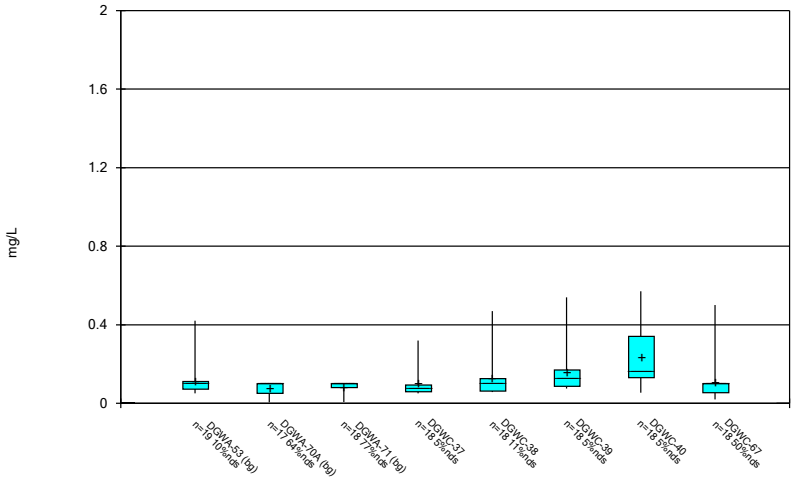
Box & Whiskers Plot



Constituent: Combined Radium 226 + 228 Analysis Run 11/18/2022 12:03 PM View: AP 1
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.9.6.35 Groundwater Stats Consulting. UG

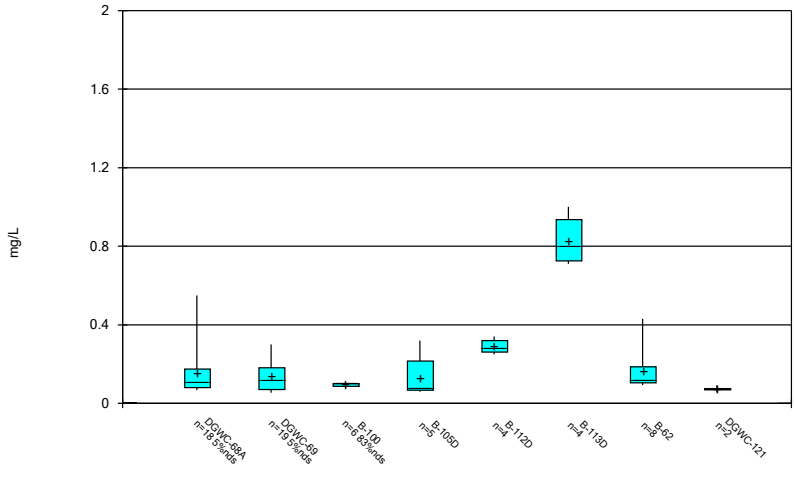
Box & Whiskers Plot



Constituent: Fluoride, total Analysis Run 11/18/2022 12:03 PM View: AP 1
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.9.6.35 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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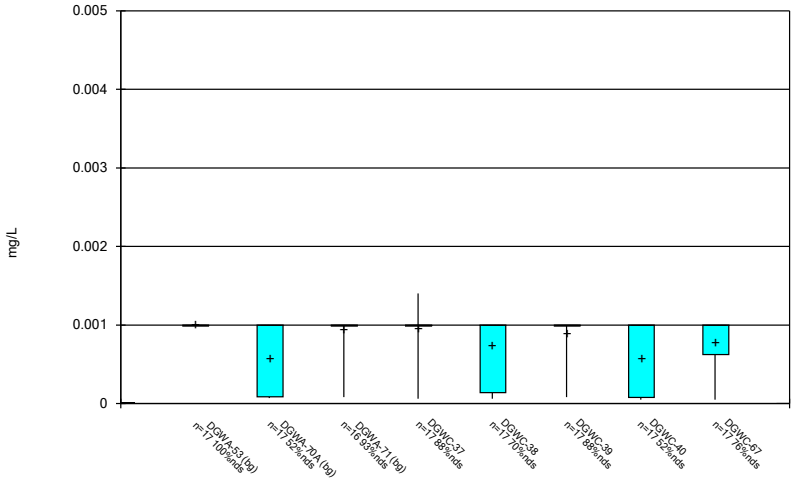
Plant McDonough Client: Southern Company Data: McDonough AP

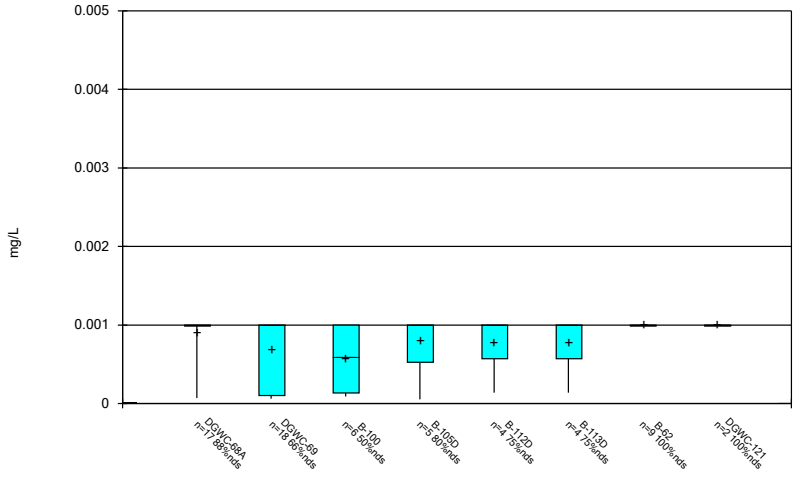
Box & Whiskers Plot



Constituent: Lead Analysis Run 11/18/2022 12:03 PM View: AP 1
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.9.6.35 Groundwater Stats Consulting. UG

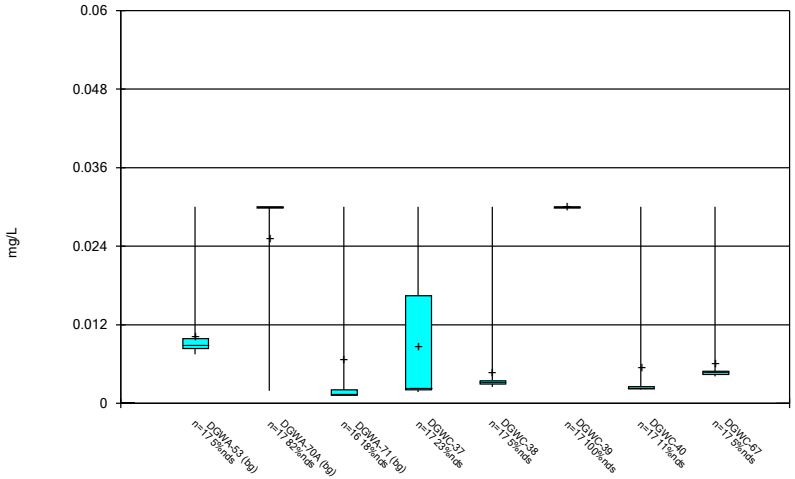
Box & Whiskers Plot



Constituent: Lead Analysis Run 11/18/2022 12:03 PM View: AP 1
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.9.6.35 Groundwater Stats Consulting. UG

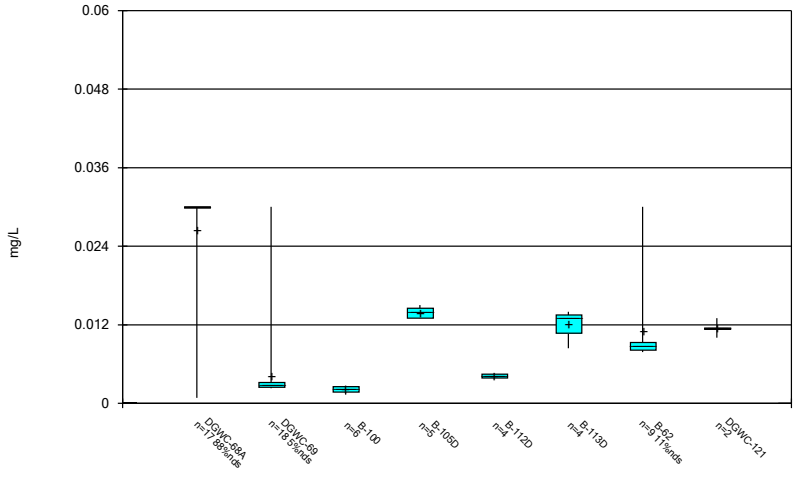
Box & Whiskers Plot



Constituent: Lithium Analysis Run 11/18/2022 12:03 PM View: AP 1
Plant McDonough Client: Southern Company Data: McDonough AP

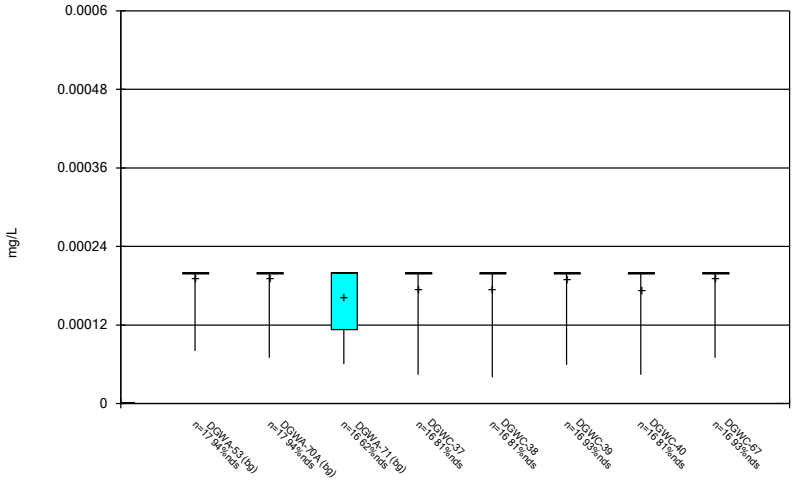
Sanitas™ v.9.6.35 Groundwater Stats Consulting. UG

Box & Whiskers Plot



Constituent: Lithium Analysis Run 11/18/2022 12:03 PM View: AP 1
Plant McDonough Client: Southern Company Data: McDonough AP

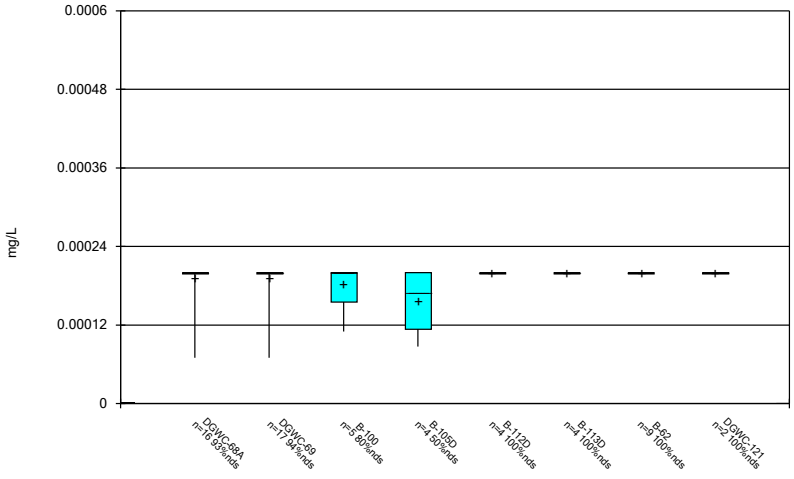
Box & Whiskers Plot



Constituent: Mercury Analysis Run 11/18/2022 12:03 PM View: AP 1
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.9.6.35 Groundwater Stats Consulting. UG

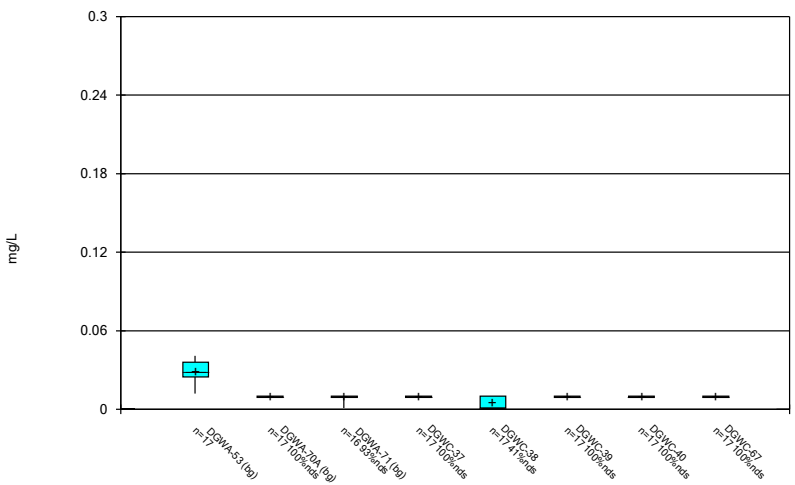
Box & Whiskers Plot



Constituent: Mercury Analysis Run 11/18/2022 12:03 PM View: AP 1
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.9.6.35 Groundwater Stats Consulting. UG

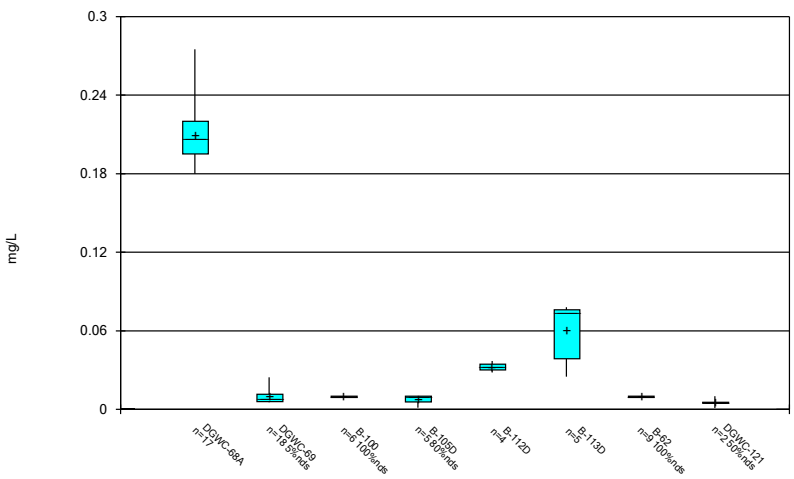
Box & Whiskers Plot



Constituent: Molybdenum Analysis Run 11/18/2022 12:03 PM View: AP 1
Plant McDonough Client: Southern Company Data: McDonough AP

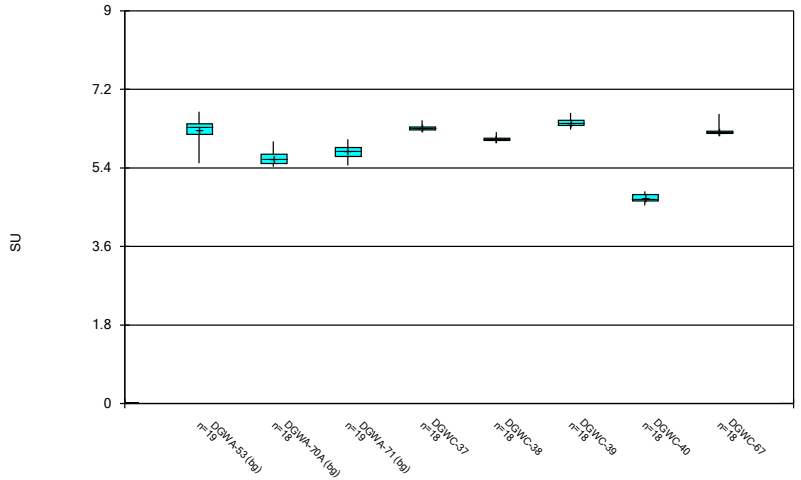
Sanitas™ v.9.6.35 Groundwater Stats Consulting. UG

Box & Whiskers Plot



Constituent: Molybdenum Analysis Run 11/18/2022 12:03 PM View: AP 1
Plant McDonough Client: Southern Company Data: McDonough AP

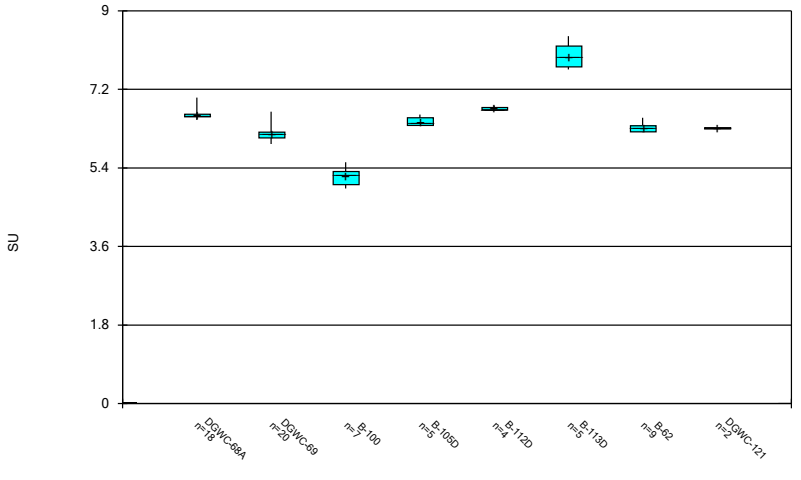
Box & Whiskers Plot



Constituent: pH, Field Analysis Run 11/18/2022 12:03 PM View: AP 1
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.9.6.35 Groundwater Stats Consulting. UG

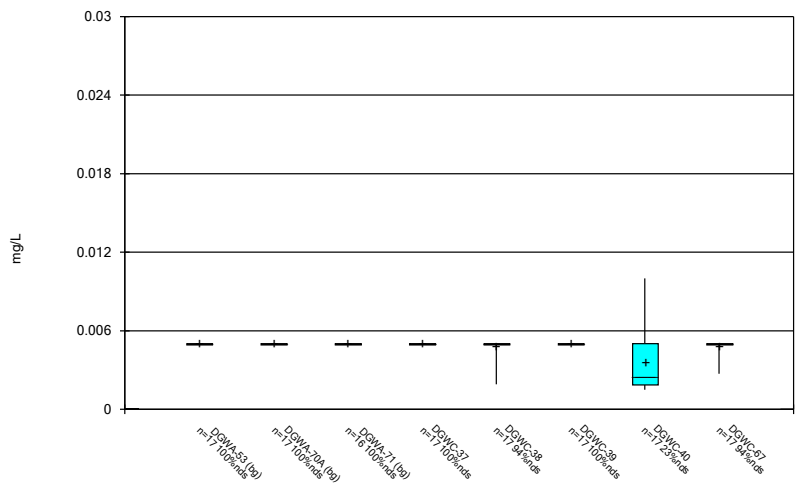
Box & Whiskers Plot



Constituent: pH, Field Analysis Run 11/18/2022 12:03 PM View: AP 1
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.9.6.35 Groundwater Stats Consulting. UG

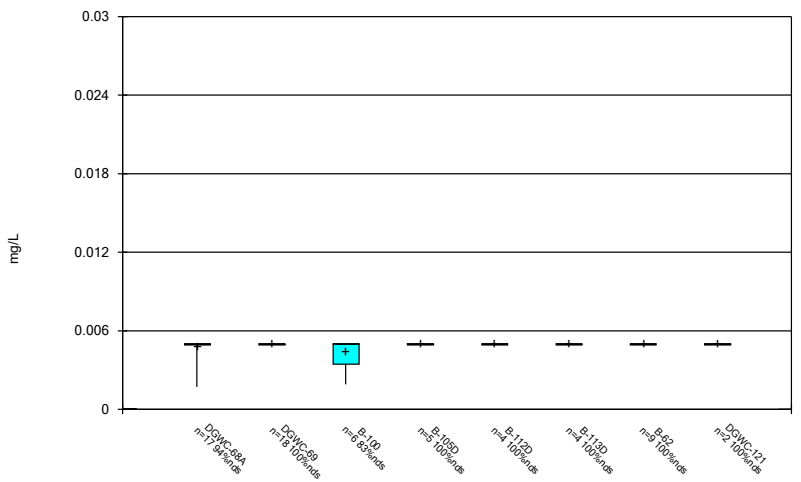
Box & Whiskers Plot



Constituent: Selenium Analysis Run 11/18/2022 12:03 PM View: AP 1
Plant McDonough Client: Southern Company Data: McDonough AP

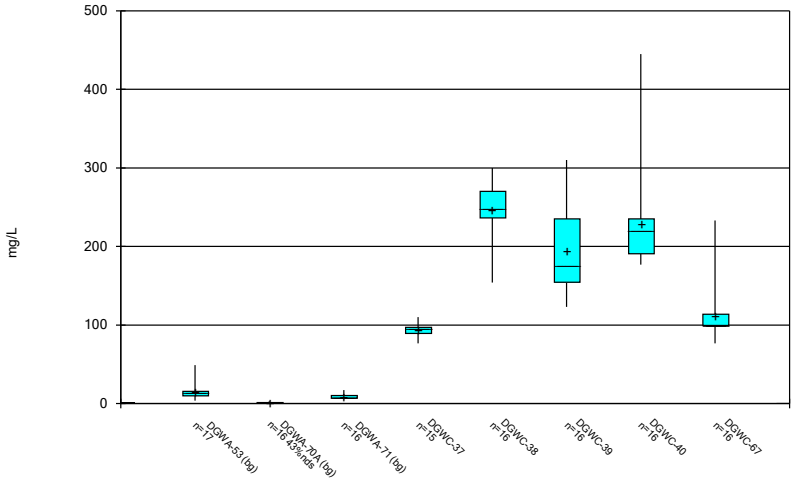
Sanitas™ v.9.6.35 Groundwater Stats Consulting. UG

Box & Whiskers Plot



Constituent: Selenium Analysis Run 11/18/2022 12:03 PM View: AP 1
Plant McDonough Client: Southern Company Data: McDonough AP

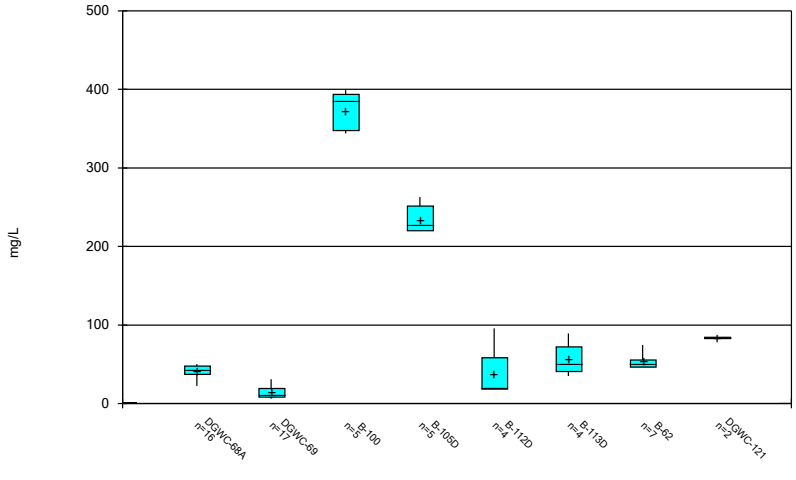
Box & Whiskers Plot



Constituent: Sulfate as SO4 Analysis Run 11/18/2022 12:03 PM View: AP 1
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.9.6.35 Groundwater Stats Consulting. UG

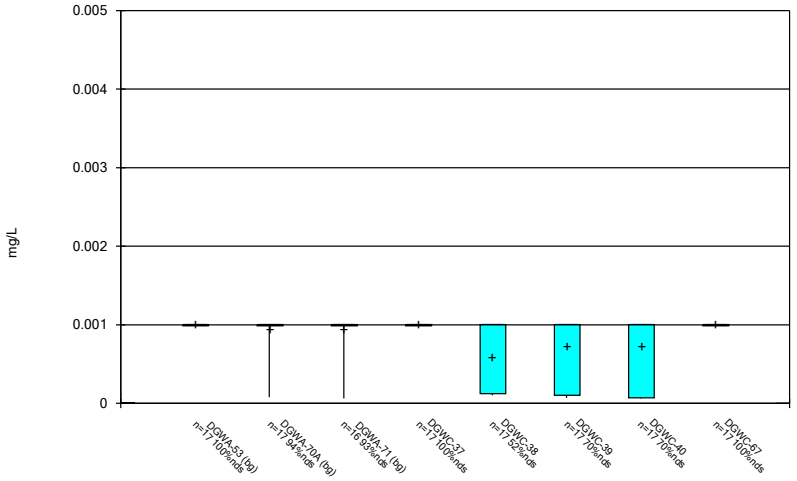
Box & Whiskers Plot



Constituent: Sulfate as SO4 Analysis Run 11/18/2022 12:03 PM View: AP 1
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.9.6.35 Groundwater Stats Consulting. UG

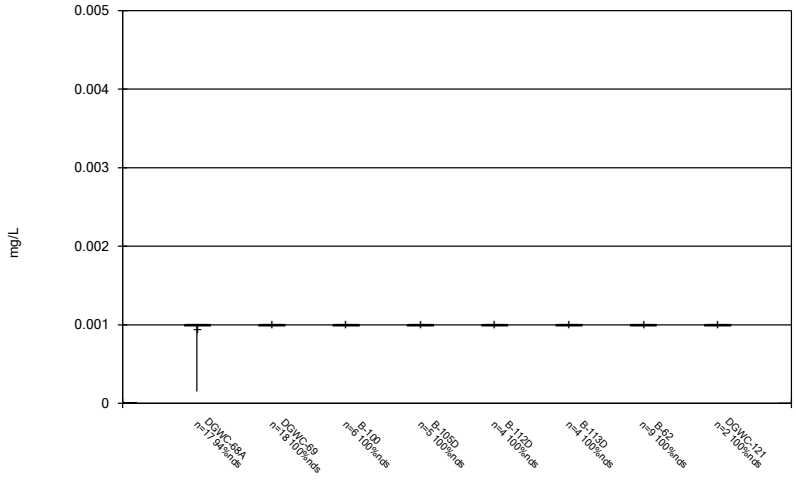
Box & Whiskers Plot



Constituent: Thallium Analysis Run 11/18/2022 12:03 PM View: AP 1
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.9.6.35 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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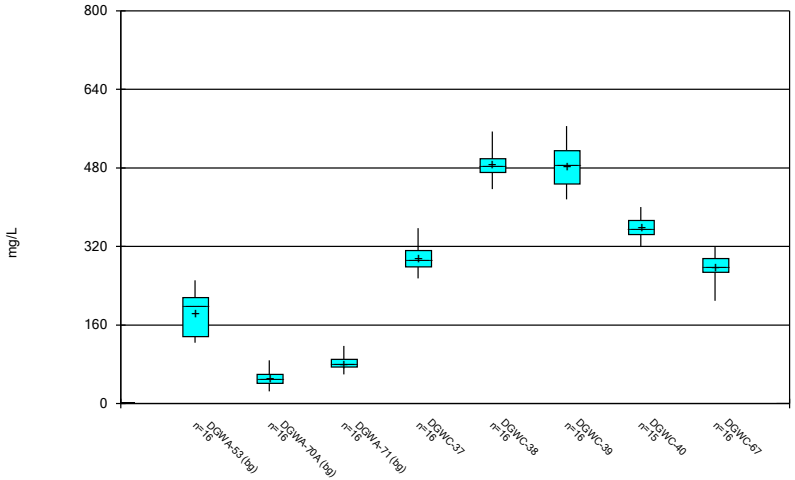
Plant McDonough Client: Southern Company Data: McDonough AP

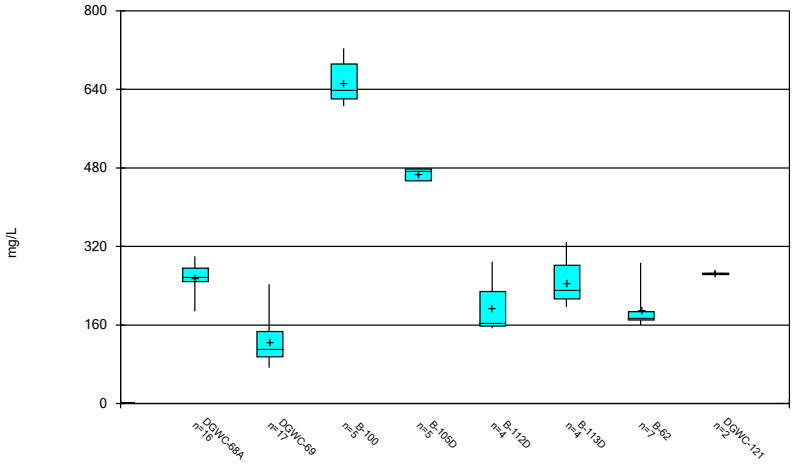
Box & Whiskers Plot



Constituent: Total Dissolved Solids [TDS] Analysis Run 11/18/2022 12:03 PM View: AP 1
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.9.6.35 Groundwater Stats Consulting. UG

Box & Whiskers Plot



Constituent: Total Dissolved Solids [TDS] Analysis Run 11/18/2022 12:03 PM View: AP 1
Plant McDonough Client: Southern Company Data: McDonough AP

FIGURE C.

Outlier Summary

Plant McDonough Client: Southern Company Data: McDonough AP Printed 11/14/2022, 2:32 PM

	DGWC-68A Arsenic (mg/L)	DGWC-68A Barium (mg/L)	DGWA-70A Chromium (mg/L)	DGWC-68A Chromium (mg/L)	DGWC-68A Cobalt (mg/L)	DGWA-70A Fluoride, total (mg/L)	DGWC-68A pH, Field (SU)	DGWC-37 Sulfate as SO4 (mg/L)	DGWA-53 Total Dissolved Solids [TDS] (mg/L)	DGWC-40 Total Dissolved Solids [TDS] (mg/L)
9/2/2016										583 (O)
3/28/2017					1.2 (O)					
7/13/2017							200 (O)			
10/24/2017								671 (O)		
10/15/2019			0.034 (O)							
9/16/2021	0.46 (O)	0.13 (O)		0.0014 (J,O)	0.0032 (J,O)	6.79 (O)				

FIGURE D.

Interwell Prediction Limit - Significant Results

Plant McDonough Client: Southern Company Data: McDonough AP Printed 10/17/2022, 2:06 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	%NDs	ND Adj.	Transform	Alpha	Method
Boron, total (mg/L)	DGWC-37	0.13	n/a	9/8/2022	2	Yes	47	27.66	n/a	n/a	0.0008532	NP Inter (normality) 1 of 2
Boron, total (mg/L)	DGWC-38	0.13	n/a	9/12/2022	2.8	Yes	47	27.66	n/a	n/a	0.0008532	NP Inter (normality) 1 of 2
Boron, total (mg/L)	DGWC-39	0.13	n/a	9/7/2022	3.3	Yes	47	27.66	n/a	n/a	0.0008532	NP Inter (normality) 1 of 2
Boron, total (mg/L)	DGWC-40	0.13	n/a	9/7/2022	0.84	Yes	47	27.66	n/a	n/a	0.0008532	NP Inter (normality) 1 of 2
Boron, total (mg/L)	DGWC-67	0.13	n/a	9/8/2022	4.3	Yes	47	27.66	n/a	n/a	0.0008532	NP Inter (normality) 1 of 2
Boron, total (mg/L)	DGWC-68A	0.13	n/a	9/7/2022	2	Yes	47	27.66	n/a	n/a	0.0008532	NP Inter (normality) 1 of 2
Boron, total (mg/L)	DGWC-69	0.13	n/a	9/7/2022	0.23	Yes	47	27.66	n/a	n/a	0.0008532	NP Inter (normality) 1 of 2
Calcium, total (mg/L)	DGWC-37	40.3	n/a	9/8/2022	66.2	Yes	47	4.255	n/a	n/a	0.0008532	NP Inter (normality) 1 of 2
Calcium, total (mg/L)	DGWC-38	40.3	n/a	9/12/2022	87.6	Yes	47	4.255	n/a	n/a	0.0008532	NP Inter (normality) 1 of 2
Calcium, total (mg/L)	DGWC-39	40.3	n/a	9/7/2022	92.5	Yes	47	4.255	n/a	n/a	0.0008532	NP Inter (normality) 1 of 2
Calcium, total (mg/L)	DGWC-40	40.3	n/a	9/7/2022	44.8	Yes	47	4.255	n/a	n/a	0.0008532	NP Inter (normality) 1 of 2
Calcium, total (mg/L)	DGWC-67	40.3	n/a	9/8/2022	47.4	Yes	47	4.255	n/a	n/a	0.0008532	NP Inter (normality) 1 of 2
Calcium, total (mg/L)	DGWC-68A	40.3	n/a	9/7/2022	53.5	Yes	47	4.255	n/a	n/a	0.0008532	NP Inter (normality) 1 of 2
Chloride, Total (mg/L)	DGWC-38	8.2	n/a	9/12/2022	8.5	Yes	49	0	n/a	n/a	0.0007761	NP Inter (normality) 1 of 2
Chloride, Total (mg/L)	DGWC-40	8.2	n/a	9/7/2022	15	Yes	49	0	n/a	n/a	0.0007761	NP Inter (normality) 1 of 2
Chloride, Total (mg/L)	DGWC-67	8.2	n/a	9/8/2022	8.9	Yes	49	0	n/a	n/a	0.0007761	NP Inter (normality) 1 of 2
pH, Field (SU)	DGWC-40	6.568	5.268	9/7/2022	4.54	Yes	56	0	None	ln(x)	0.0005373	Param Inter 1 of 2
pH, Field (SU)	DGWC-68A	6.568	5.268	9/7/2022	6.62	Yes	56	0	None	ln(x)	0.0005373	Param Inter 1 of 2
Sulfate as SO4 (mg/L)	DGWC-37	49	n/a	9/8/2022	96.6	Yes	49	14.29	n/a	n/a	0.0007761	NP Inter (normality) 1 of 2
Sulfate as SO4 (mg/L)	DGWC-38	49	n/a	9/12/2022	234	Yes	49	14.29	n/a	n/a	0.0007761	NP Inter (normality) 1 of 2
Sulfate as SO4 (mg/L)	DGWC-39	49	n/a	9/7/2022	146	Yes	49	14.29	n/a	n/a	0.0007761	NP Inter (normality) 1 of 2
Sulfate as SO4 (mg/L)	DGWC-40	49	n/a	9/7/2022	203	Yes	49	14.29	n/a	n/a	0.0007761	NP Inter (normality) 1 of 2
Sulfate as SO4 (mg/L)	DGWC-67	49	n/a	9/8/2022	117	Yes	49	14.29	n/a	n/a	0.0007761	NP Inter (normality) 1 of 2
Total Dissolved Solids [TDS] (mg/L)	DGWC-37	254.7	n/a	9/8/2022	300	Yes	48	0	None	x^(1/3)	0.001075	Param Inter 1 of 2
Total Dissolved Solids [TDS] (mg/L)	DGWC-38	254.7	n/a	9/12/2022	468	Yes	48	0	None	x^(1/3)	0.001075	Param Inter 1 of 2
Total Dissolved Solids [TDS] (mg/L)	DGWC-39	254.7	n/a	9/7/2022	449	Yes	48	0	None	x^(1/3)	0.001075	Param Inter 1 of 2
Total Dissolved Solids [TDS] (mg/L)	DGWC-40	254.7	n/a	9/7/2022	339	Yes	48	0	None	x^(1/3)	0.001075	Param Inter 1 of 2
Total Dissolved Solids [TDS] (mg/L)	DGWC-68A	254.7	n/a	9/7/2022	256	Yes	48	0	None	x^(1/3)	0.001075	Param Inter 1 of 2

Interwell Prediction Limit - All Results

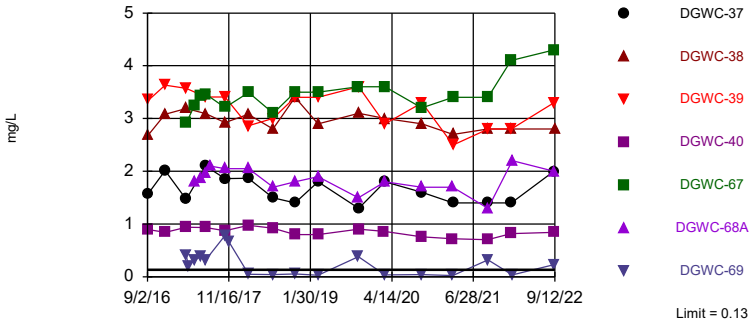
Plant McDonough Client: Southern Company Data: McDonough AP Printed 10/17/2022, 2:06 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	%NDs	ND Adj.	Transform	Alpha	Method
Boron, total (mg/L)	**DGWC-37**	**0.13**	**n/a**	**9/8/2022**	**2**	**Yes**	**47**	**27.66**	**n/a**	**n/a**	**0.0008532**	**NP Inter (normality) 1 of 2**
Boron, total (mg/L)	**DGWC-38**	**0.13**	**n/a**	**9/12/2022**	**2.8**	**Yes**	**47**	**27.66**	**n/a**	**n/a**	**0.0008532**	**NP Inter (normality) 1 of 2**
Boron, total (mg/L)	**DGWC-39**	**0.13**	**n/a**	**9/7/2022**	**3.3**	**Yes**	**47**	**27.66**	**n/a**	**n/a**	**0.0008532**	**NP Inter (normality) 1 of 2**
Boron, total (mg/L)	**DGWC-40**	**0.13**	**n/a**	**9/7/2022**	**0.84**	**Yes**	**47**	**27.66**	**n/a**	**n/a**	**0.0008532**	**NP Inter (normality) 1 of 2**
Boron, total (mg/L)	**DGWC-67**	**0.13**	**n/a**	**9/8/2022**	**4.3**	**Yes**	**47**	**27.66**	**n/a**	**n/a**	**0.0008532**	**NP Inter (normality) 1 of 2**
Boron, total (mg/L)	**DGWC-68A**	**0.13**	**n/a**	**9/7/2022**	**2**	**Yes**	**47**	**27.66**	**n/a**	**n/a**	**0.0008532**	**NP Inter (normality) 1 of 2**
Boron, total (mg/L)	**DGWC-69**	**0.13**	**n/a**	**9/7/2022**	**0.23**	**Yes**	**47**	**27.66**	**n/a**	**n/a**	**0.0008532**	**NP Inter (normality) 1 of 2**
Calcium, total (mg/L)	**DGWC-37**	**40.3**	**n/a**	**9/8/2022**	**66.2**	**Yes**	**47**	**4.255**	**n/a**	**n/a**	**0.0008532**	**NP Inter (normality) 1 of 2**
Calcium, total (mg/L)	**DGWC-38**	**40.3**	**n/a**	**9/12/2022**	**87.6**	**Yes**	**47**	**4.255**	**n/a**	**n/a**	**0.0008532**	**NP Inter (normality) 1 of 2**
Calcium, total (mg/L)	**DGWC-39**	**40.3**	**n/a**	**9/7/2022**	**92.5**	**Yes**	**47**	**4.255**	**n/a**	**n/a**	**0.0008532**	**NP Inter (normality) 1 of 2**
Calcium, total (mg/L)	**DGWC-40**	**40.3**	**n/a**	**9/7/2022**	**44.8**	**Yes**	**47**	**4.255**	**n/a**	**n/a**	**0.0008532**	**NP Inter (normality) 1 of 2**
Calcium, total (mg/L)	**DGWC-67**	**40.3**	**n/a**	**9/8/2022**	**47.4**	**Yes**	**47**	**4.255**	**n/a**	**n/a**	**0.0008532**	**NP Inter (normality) 1 of 2**
Calcium, total (mg/L)	**DGWC-68A**	**40.3**	**n/a**	**9/7/2022**	**53.5**	**Yes**	**47**	**4.255**	**n/a**	**n/a**	**0.0008532**	**NP Inter (normality) 1 of 2**
Calcium, total (mg/L)	DGWC-69	40.3	n/a	9/7/2022	13.1	No	47	4.255	n/a	n/a	0.0008532	NP Inter (normality) 1 of 2
Chloride, Total (mg/L)	DGWC-37	8.2	n/a	9/8/2022	5.4	No	49	0	n/a	n/a	0.0007761	NP Inter (normality) 1 of 2
Chloride, Total (mg/L)	**DGWC-38**	**8.2**	**n/a**	**9/12/2022**	**8.5**	**Yes**	**49**	**0**	**n/a**	**n/a**	**0.0007761**	**NP Inter (normality) 1 of 2**
Chloride, Total (mg/L)	DGWC-39	8.2	n/a	9/7/2022	8.2	No	49	0	n/a	n/a	0.0007761	NP Inter (normality) 1 of 2
Chloride, Total (mg/L)	**DGWC-40**	**8.2**	**n/a**	**9/7/2022**	**15**	**Yes**	**49**	**0**	**n/a**	**n/a**	**0.0007761**	**NP Inter (normality) 1 of 2**
Chloride, Total (mg/L)	**DGWC-67**	**8.2**	**n/a**	**9/8/2022**	**8.9**	**Yes**	**49**	**0**	**n/a**	**n/a**	**0.0007761**	**NP Inter (normality) 1 of 2**
Chloride, Total (mg/L)	DGWC-68A	8.2	n/a	9/7/2022	4.1	No	49	0	n/a	n/a	0.0007761	NP Inter (normality) 1 of 2
Chloride, Total (mg/L)	DGWC-69	8.2	n/a	9/7/2022	4.9	No	49	0	n/a	n/a	0.0007761	NP Inter (normality) 1 of 2
Fluoride, total (mg/L)	DGWC-37	0.42	n/a	9/8/2022	0.082J	No	54	50	n/a	n/a	0.0006506	NP Inter (normality) 1 of 2
Fluoride, total (mg/L)	DGWC-38	0.42	n/a	9/12/2022	0.12	No	54	50	n/a	n/a	0.0006506	NP Inter (normality) 1 of 2
Fluoride, total (mg/L)	DGWC-39	0.42	n/a	9/7/2022	0.11	No	54	50	n/a	n/a	0.0006506	NP Inter (normality) 1 of 2
Fluoride, total (mg/L)	DGWC-40	0.42	n/a	9/7/2022	0.14	No	54	50	n/a	n/a	0.0006506	NP Inter (normality) 1 of 2
Fluoride, total (mg/L)	DGWC-67	0.42	n/a	9/8/2022	0.096J	No	54	50	n/a	n/a	0.0006506	NP Inter (normality) 1 of 2
Fluoride, total (mg/L)	DGWC-68A	0.42	n/a	9/7/2022	0.11	No	54	50	n/a	n/a	0.0006506	NP Inter (normality) 1 of 2
Fluoride, total (mg/L)	DGWC-69	0.42	n/a	9/7/2022	0.11	No	54	50	n/a	n/a	0.0006506	NP Inter (normality) 1 of 2
pH, Field (SU)	DGWC-37	6.568	5.268	9/9/2022	6.3	No	56	0	None	ln(x)	0.0005373	Param Inter 1 of 2
pH, Field (SU)	DGWC-38	6.568	5.268	9/12/2022	6.05	No	56	0	None	ln(x)	0.0005373	Param Inter 1 of 2
pH, Field (SU)	DGWC-39	6.568	5.268	9/7/2022	6.43	No	56	0	None	ln(x)	0.0005373	Param Inter 1 of 2
pH, Field (SU)	**DGWC-40**	**6.568**	**5.268**	**9/7/2022**	**4.54**	**Yes**	**56**	**0**	**None**	**ln(x)**	**0.0005373**	**Param Inter 1 of 2**
pH, Field (SU)	DGWC-67	6.568	5.268	9/8/2022	6.21	No	56	0	None	ln(x)	0.0005373	Param Inter 1 of 2
pH, Field (SU)	**DGWC-68A**	**6.568**	**5.268**	**9/7/2022**	**6.62**	**Yes**	**56**	**0**	**None**	**ln(x)**	**0.0005373**	**Param Inter 1 of 2**
pH, Field (SU)	DGWC-69	6.568	5.268	9/7/2022	6.2	No	56	0	None	ln(x)	0.0005373	Param Inter 1 of 2
Sulfate as SO4 (mg/L)	**DGWC-37**	**49**	**n/a**	**9/8/2022**	**96.6**	**Yes**	**49**	**14.29**	**n/a**	**n/a**	**0.0007761**	**NP Inter (normality) 1 of 2**
Sulfate as SO4 (mg/L)	**DGWC-38**	**49**	**n/a**	**9/12/2022**	**234**	**Yes**	**49**	**14.29**	**n/a**	**n/a**	**0.0007761**	**NP Inter (normality) 1 of 2**
Sulfate as SO4 (mg/L)	**DGWC-39**	**49**	**n/a**	**9/7/2022**	**146**	**Yes**	**49**	**14.29**	**n/a**	**n/a**	**0.0007761**	**NP Inter (normality) 1 of 2**
Sulfate as SO4 (mg/L)	**DGWC-40**	**49**	**n/a**	**9/7/2022**	**203**	**Yes**	**49**	**14.29**	**n/a**	**n/a**	**0.0007761**	**NP Inter (normality) 1 of 2**
Sulfate as SO4 (mg/L)	**DGWC-67**	**49**	**n/a**	**9/8/2022**	**117**	**Yes**	**49**	**14.29**	**n/a**	**n/a**	**0.0007761**	**NP Inter (normality) 1 of 2**
Sulfate as SO4 (mg/L)	DGWC-68A	49	n/a	9/7/2022	36.5	No	49	14.29	n/a	n/a	0.0007761	NP Inter (normality) 1 of 2
Sulfate as SO4 (mg/L)	DGWC-69	49	n/a	9/7/2022	11.6	No	49	14.29	n/a	n/a	0.0007761	NP Inter (normality) 1 of 2
Total Dissolved Solids [TDS] (mg/L)	**DGWC-37**	**254.7**	**n/a**	**9/8/2022**	**300**	**Yes**	**48**	**0**	**None**	**x^(1/3)**	**0.001075**	**Param Inter 1 of 2**
Total Dissolved Solids [TDS] (mg/L)	**DGWC-38**	**254.7**	**n/a**	**9/12/2022**	**468**	**Yes**	**48**	**0**	**None**	**x^(1/3)**	**0.001075**	**Param Inter 1 of 2**
Total Dissolved Solids [TDS] (mg/L)	**DGWC-39**	**254.7**	**n/a**	**9/7/2022**	**449**	**Yes**	**48**	**0**	**None**	**x^(1/3)**	**0.001075**	**Param Inter 1 of 2**
Total Dissolved Solids [TDS] (mg/L)	**DGWC-40**	**254.7**	**n/a**	**9/7/2022**	**339**	**Yes**	**48**	**0**	**None**	**x^(1/3)**	**0.001075**	**Param Inter 1 of 2**
Total Dissolved Solids [TDS] (mg/L)	DGWC-67	254.7	n/a	9/8/2022	252	No	48	0	None	x^(1/3)	0.001075	Param Inter 1 of 2
Total Dissolved Solids [TDS] (mg/L)	**DGWC-68A**	**254.7**	**n/a**	**9/7/2022**	**256**	**Yes**	**48**	**0**	**None**	**x^(1/3)**	**0.001075**	**Param Inter 1 of 2**
Total Dissolved Solids [TDS] (mg/L)	DGWC-69	254.7	n/a	9/7/2022	102	No	48	0	None	x^(1/3)	0.001075	Param Inter 1 of 2

Exceeds Limit: DGWC-37, DGWC-38, DGWC-39, DGWC-40, DGWC-67, DGWC-68A. DGWC-69

Prediction Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 47 background values. 27.66% NDs. Annual per-constituent alpha = 0.01188. Individual comparison alpha = 0.0008532 (1 of 2). Comparing 7 points to limit.

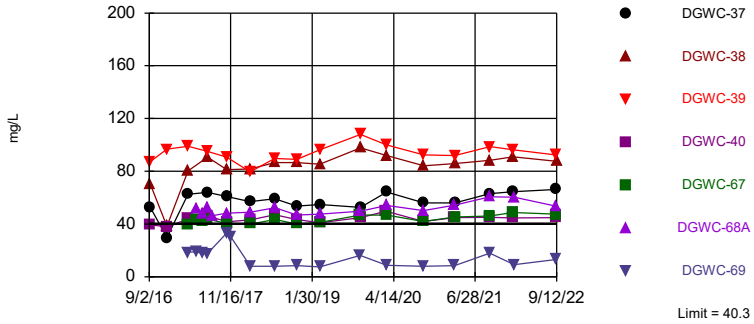
Constituent: Boron, total Analysis Run 10/17/2022 2:03 PM View: Interwell PL

Plant McDonough Client: Southern Company Data: McDonough AP

Exceeds Limit: DGWC-37, DGWC-38, DGWC-39, DGWC-40, DGWC-67, DGWC-68A

Prediction Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 47 background values. 4.255% NDs. Annual per-constituent alpha = 0.01188. Individual comparison alpha = 0.0008532 (1 of 2). Comparing 7 points to limit.

Constituent: Calcium, total Analysis Run 10/17/2022 2:03 PM View: Interwell PL

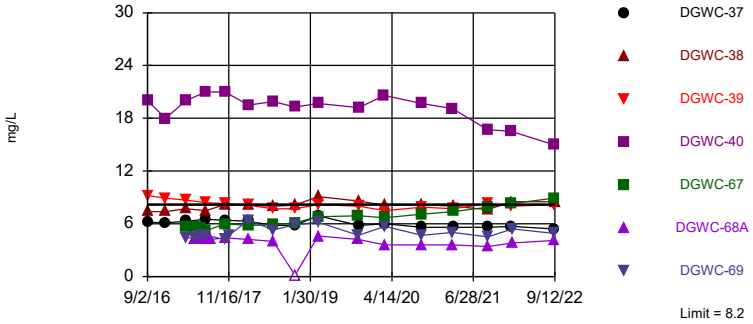
Plant McDonough Client: Southern Company Data: McDonough AP

Hollow symbols indicate censored values.

Exceeds Limit: DGWC-38, DGWC-40, DGWC-67

Prediction Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 49 background values. Annual per-constituent alpha = 0.01081. Individual comparison alpha = 0.0007761 (1 of 2). Comparing 7 points to limit.

Constituent: Chloride, Total Analysis Run 10/17/2022 2:03 PM View: Interwell PL

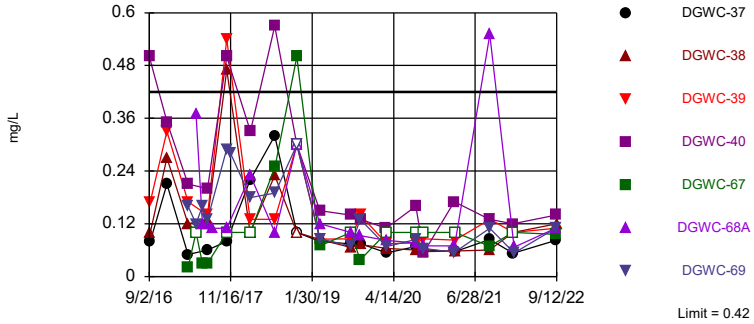
Plant McDonough Client: Southern Company Data: McDonough AP

Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Francia normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 54 background values. 50% NDs. Annual per-constituent alpha = 0.009071. Individual comparison alpha = 0.0006506 (1 of 2). Comparing 7 points to limit.

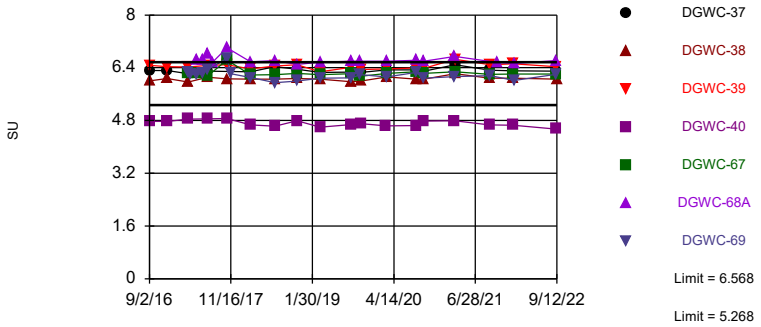
Constituent: Fluoride, total Analysis Run 10/17/2022 2:03 PM View: Interwell PL

Plant McDonough Client: Southern Company Data: McDonough AP

Exceeds Limits: DGWC-40, DGWC-68A

Prediction Limit

Interwell Parametric



Background Data Summary (based on natural log transformation): Mean=1.772, Std. Dev.=0.05718, n=56. Normality test: Shapiro Francia @alpha = 0.01, calculated = 0.9444, critical = 0.942. Kappa = 1.928 (c=7, w=7, 1 of 2, event alpha = 0.05132). Report alpha = 0.007498. Individual comparison alpha = 0.0005373. Comparing 7 points to limit.

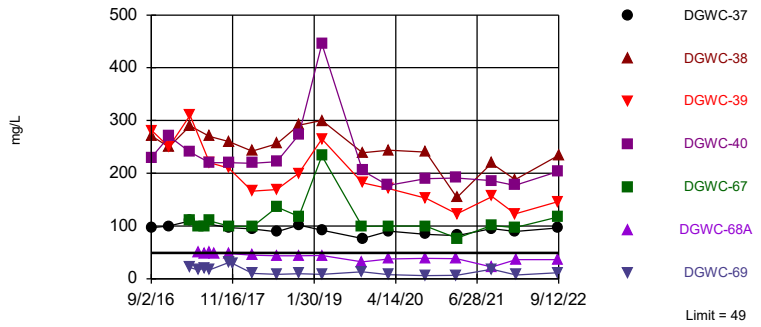
Constituent: pH, Field Analysis Run 10/17/2022 2:03 PM View: Interwell PL

Plant McDonough Client: Southern Company Data: McDonough AP

Exceeds Limit: DGWC-37, DGWC-38, DGWC-39, DGWC-40, DGWC-67

Prediction Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 49 background values. 14.29% NDs. Annual per-constituent alpha = 0.01081. Individual comparison alpha = 0.0007761 (1 of 2). Comparing 7 points to limit.

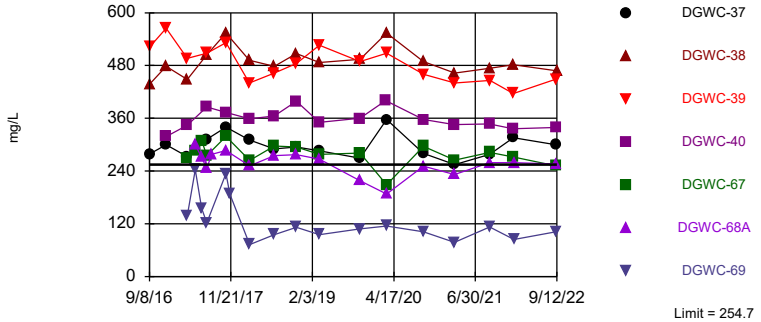
Constituent: Sulfate as SO4 Analysis Run 10/17/2022 2:03 PM View: Interwell PL

Plant McDonough Client: Southern Company Data: McDonough AP

Exceeds Limit: DGWC-37, DGWC-38, DGWC-39, DGWC-40, DGWC-68A

Prediction Limit

Interwell Parametric



Background Data Summary (based on cube root transformation): Mean=4.543, Std. Dev.=0.9224, n=48. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9399, critical = 0.929. Kappa = 1.948 (c=7, w=7, 1 of 2, event alpha = 0.05132). Report alpha = 0.007498. Individual comparison alpha = 0.001075. Comparing 7 points to limit.

Constituent: Total Dissolved Solids [TDS] Analysis Run 10/17/2022 2:03 PM View: Interwell PL

Plant McDonough Client: Southern Company Data: McDonough AP

Prediction Limit

Constituent: Boron, total (mg/L) Analysis Run 10/17/2022 2:06 PM View: Interwell PL

Plant McDonough Client: Southern Company Data: McDonough AP

	DGWC-40	DGWC-39	DGWC-38	DGWC-37	DGWA-71 (bg)	DGWA-70A (bg)	DGWA-53 (bg)	DGWC-69	DGWC-67
9/2/2016	0.895								
9/8/2016		3.35	2.69	1.58					
12/7/2016		3.63	3.08	2.01					
12/8/2016	0.841								
3/28/2017					0.0097 (J)	0.0067 (J)	0.0612		
3/30/2017	0.937	3.57	3.19	1.47					
3/31/2017								0.407	2.91
4/12/2017								0.207	
5/11/2017							0.0805		
5/12/2017					0.0082 (J)			0.311	3.24
5/15/2017						0.0073 (J)			
6/15/2017						<0.04	0.0725		
6/16/2017					0.0085 (J)			0.381	3.42
7/11/2017					0.0077 (J)	<0.04			
7/12/2017							0.0735		
7/13/2017	0.933	3.41	3.09	2.1				0.323	3.46
8/8/2017						<0.04			
10/24/2017					0.0083 (J)	0.0082 (J)	0.077		
10/26/2017	0.873	3.41	2.92	1.86				0.779	3.21
11/15/2017								0.667	
2/27/2018					0.0069 (J)	0.0062 (J)			
3/1/2018		2.86	3.08	1.87					
3/2/2018	0.974							0.0478	3.49
3/8/2018							0.13 (J)		
7/12/2018	0.92	3	2.8	1.5			0.076		
7/13/2018								0.043	3.1
11/6/2018					<0.04 (J)	<0.04 (J)			
11/7/2018							0.073		
11/8/2018	0.8	3.4	3.4	1.4				0.054	3.5
3/12/2019					0.0068 (J)	0.0073 (J)			
3/13/2019	0.8	3.4	2.9	1.8			0.08	0.028 (J)	3.5
10/15/2019					0.0054 (J)	<0.04			
10/16/2019							0.059	0.38	
10/17/2019									3.6
10/18/2019	0.9	3.6	3.1	1.3					
3/2/2020					0.01 (J)	0.0055 (J)			
3/4/2020	0.86								
3/9/2020		2.9	3	1.8			0.08 (J)	0.035 (J)	3.6
9/22/2020					<0.04	<0.04	0.056 (J)		
9/23/2020	0.76							0.041 (J)	3.2
9/24/2020			2.9	1.6					
9/25/2020		3.3							
3/1/2021					0.0054 (J)	<0.04			
3/8/2021	0.72								
3/10/2021								0.024 (J)	
3/11/2021		2.5	2.7	1.4					3.4
3/12/2021							0.064		
9/8/2021					<0.04				
9/9/2021						<0.04	0.065		
9/14/2021	0.7								
9/15/2021			2.8						
9/16/2021				1.4				0.32	3.4

Prediction Limit

Constituent: Boron, total (mg/L) Analysis Run 10/17/2022 2:06 PM View: Interwell PL

Plant McDonough Client: Southern Company Data: McDonough AP

	DGWC-40	DGWC-39	DGWC-38	DGWC-37	DGWA-71 (bg)	DGWA-70A (bg)	DGWA-53 (bg)	DGWC-69	DGWC-67
9/17/2021		2.8							
1/18/2022					0.015 (J)	0.024 (J)			
1/19/2022	0.82								4.1
1/20/2022		2.8							
1/21/2022			2.8	1.4					
1/25/2022								0.035 (J)	
1/28/2022							0.062		
9/7/2022	0.84	3.3			<0.04	<0.04		0.23	
9/8/2022				2			0.054		4.3
9/12/2022			2.8						

Prediction Limit

Constituent: Boron, total (mg/L) Analysis Run 10/17/2022 2:06 PM View: Interwell PL

Plant McDonough Client: Southern Company Data: McDonough AP

	DGWC-68A
9/2/2016	
9/8/2016	
12/7/2016	
12/8/2016	
3/28/2017	
3/30/2017	
3/31/2017	
4/12/2017	
5/11/2017	
5/12/2017	1.8
5/15/2017	
6/15/2017	
6/16/2017	1.88
7/11/2017	
7/12/2017	
7/13/2017	1.97
8/8/2017	2.1
10/24/2017	
10/26/2017	2.05
11/15/2017	
2/27/2018	
3/1/2018	
3/2/2018	2.05
3/8/2018	
7/12/2018	
7/13/2018	1.7
11/6/2018	
11/7/2018	
11/8/2018	1.8
3/12/2019	
3/13/2019	1.9
10/15/2019	
10/16/2019	1.5
10/17/2019	
10/18/2019	
3/2/2020	
3/4/2020	
3/9/2020	1.8
9/22/2020	
9/23/2020	1.7
9/24/2020	
9/25/2020	
3/1/2021	
3/8/2021	
3/10/2021	1.7
3/11/2021	
3/12/2021	
9/8/2021	
9/9/2021	
9/14/2021	
9/15/2021	
9/16/2021	1.3

Prediction Limit

Constituent: Boron, total (mg/L) Analysis Run 10/17/2022 2:06 PM View: Interwell PL

Plant McDonough Client: Southern Company Data: McDonough AP

	DGWC-68A
9/17/2021	
1/18/2022	
1/19/2022	
1/20/2022	
1/21/2022	
1/25/2022	2.2
1/28/2022	
9/7/2022	2
9/8/2022	
9/12/2022	

Prediction Limit

Constituent: Calcium, total (mg/L) Analysis Run 10/17/2022 2:06 PM View: Interwell PL

Plant McDonough Client: Southern Company Data: McDonough AP

	DGWC-40	DGWC-39	DGWC-38	DGWC-37	DGWA-71 (bg)	DGWA-70A (bg)	DGWA-53 (bg)	DGWC-69	DGWC-67
9/2/2016	39.6								
9/8/2016		87.2	70.3	52.5					
12/7/2016		96.7	38.4	29.7					
12/8/2016	37.9								
3/28/2017					8.31	5.14	30.8		
3/30/2017	43.9	98.9	80.3	62.6					
3/31/2017								18.6 (J)	39.9
5/11/2017							35.8		
5/12/2017					8.04			18.9 (J)	43.6
5/15/2017						6.5			
6/15/2017						5.38	36		
6/16/2017					7.66			17.7	42.5
7/11/2017					7.71	5.96			
7/12/2017							40.3		
7/13/2017	46.2	95	90.8	64.1				17.6	43.7
8/8/2017						5.2			
10/24/2017					6.86	4.93	30.3		
10/26/2017	41.8	90.6	81.3	60.8				33.3	40.4
11/15/2017								30.6	
2/27/2018					<25	<25			
3/1/2018		79.6	81.8	57					
3/2/2018	43.2							8.09	40.1
3/8/2018							39.8		
7/12/2018	47.1	89.8	86.7	59.1			34.7		
7/13/2018								7.9	43.3
11/6/2018					5.7	5.5			
11/7/2018							28.6		
11/8/2018	43.5	89	86.6	53.6				8.5	40.1
3/12/2019					5.5	5.1			
3/13/2019	41	96.3	85.3	54.8			26.7	7.6	41.2
10/15/2019					5.1	5.1			
10/16/2019							17.7	16.2	
10/17/2019									46.9
10/18/2019	44.9	108	97.8	52.5					
3/2/2020					5.8	5.3			
3/4/2020	49.6								
3/9/2020		100	91.9	64.2			23.7	8.6	46.9
9/22/2020					5.4	5	15.5		
9/23/2020	41.9							8	42
9/24/2020			84.1	55.9					
9/25/2020		92.5							
3/1/2021					5.9	4.1			
3/8/2021	44.9								
3/10/2021								8.5	
3/11/2021		91.9	85.8	56					45.4
3/12/2021							18.4		
9/8/2021					6.1				
9/9/2021						5.3	18.3		
9/14/2021	45.1								
9/15/2021			88.3						
9/16/2021				63				18	46
9/17/2021		98.6							

Prediction Limit

Constituent: Calcium, total (mg/L) Analysis Run 10/17/2022 2:06 PM View: Interwell PL

Plant McDonough Client: Southern Company Data: McDonough AP

	DGWC-40	DGWC-39	DGWC-38	DGWC-37	DGWA-71 (bg)	DGWA-70A (bg)	DGWA-53 (bg)	DGWC-69	DGWC-67
1/18/2022					6.6	6.1			
1/19/2022	44.7								48.8
1/20/2022		96.2							
1/21/2022			91	64.4					
1/25/2022								9.2	
1/28/2022							19.5		
9/7/2022	44.8	92.5			6.4	5.9		13.1	
9/8/2022				66.2			17.2		47.4
9/12/2022			87.6						

Prediction Limit

Constituent: Calcium, total (mg/L) Analysis Run 10/17/2022 2:06 PM View: Interwell PL

Plant McDonough Client: Southern Company Data: McDonough AP

	DGWC-68A
9/2/2016	
9/8/2016	
12/7/2016	
12/8/2016	
3/28/2017	
3/30/2017	
3/31/2017	
5/11/2017	
5/12/2017	51.7
5/15/2017	
6/15/2017	
6/16/2017	47.9
7/11/2017	
7/12/2017	
7/13/2017	52.3
8/8/2017	46.3
10/24/2017	
10/26/2017	48.2
11/15/2017	
2/27/2018	
3/1/2018	
3/2/2018	48.9
3/8/2018	
7/12/2018	
7/13/2018	52.4
11/6/2018	
11/7/2018	
11/8/2018	46.8
3/12/2019	
3/13/2019	47.5
10/15/2019	
10/16/2019	49.7
10/17/2019	
10/18/2019	
3/2/2020	
3/4/2020	
3/9/2020	54
9/22/2020	
9/23/2020	50.2
9/24/2020	
9/25/2020	
3/1/2021	
3/8/2021	
3/10/2021	54.2
3/11/2021	
3/12/2021	
9/8/2021	
9/9/2021	
9/14/2021	
9/15/2021	
9/16/2021	60.6
9/17/2021	

Prediction Limit

Constituent: Calcium, total (mg/L) Analysis Run 10/17/2022 2:06 PM View: Interwell PL

Plant McDonough Client: Southern Company Data: McDonough AP

	DGWC-68A
1/18/2022	
1/19/2022	
1/20/2022	
1/21/2022	
1/25/2022	60.4
1/28/2022	
9/7/2022	53.5
9/8/2022	
9/12/2022	

Prediction Limit

Constituent: Chloride, Total (mg/L) Analysis Run 10/17/2022 2:06 PM View: Interwell PL

Plant McDonough Client: Southern Company Data: McDonough AP

	DGWC-40	DGWC-38	DGWC-37	DGWC-39	DGWA-71 (bg)	DGWA-70A (bg)	DGWA-53 (bg)	DGWC-67	DGWC-69
9/2/2016	20								
9/8/2016		7.4	6.2	9.2					
12/7/2016		7.4	6.1	8.9					
12/8/2016	18								
3/28/2017					3.6	3.8	3.7		
3/30/2017	20	7.7	6.3	8.7					
3/31/2017								5.7	4.4
5/11/2017							2.3		
5/12/2017					3.8			5.6	4.4
5/15/2017						2.2			
6/15/2017						2	2.6		
6/16/2017					3.4			5.5	4.7
7/11/2017					3.1	2.1			
7/12/2017							2.3		
7/13/2017	21	7.5	6.5	8.4				5.2	4.7
8/8/2017						2.2			
10/24/2017					3.2	2.4	2.7		
10/26/2017	21	8.2	6.4	8.3				6	4.2
11/15/2017					3.1		2.2		4.7
2/27/2018					3.2	2.5			
3/1/2018		8.1	6.3	8.1					
3/2/2018	19.5							5.8	6.4
3/8/2018							2.4		
7/12/2018	19.9	8	5.8	7.7			2.2		
7/13/2018								5.9	5.3
11/6/2018					2.6	2.3			
11/7/2018							2.3		
11/8/2018	19.3	8.1	5.8	7.7				6.1	5.9
3/12/2019					3.3	2.5			
3/13/2019	19.7	9.1	6.9	8.2			3.6	6.8	6.2
10/15/2019					3.3	2.2			
10/16/2019							2		4.7
10/17/2019								6.9	
10/18/2019	19.2	8.6	5.8	8					
3/2/2020					3	1.9			
3/4/2020	20.6								
3/9/2020		8.1	6	7.5			1.8	6.7	5.7
9/22/2020					5.2	1.9	1.6		
9/23/2020	19.7							7.1	4.7
9/24/2020		8.2	5.6						
9/25/2020				7.9					
3/1/2021					3.9	1.9			
3/8/2021	19.1								
3/10/2021									5
3/11/2021		8	5.6	7.7				7.4	
3/12/2021							2		
9/8/2021					5.9				
9/9/2021						1.9	1.8		
9/14/2021	16.7								
9/15/2021		7.6							
9/16/2021			5.6					7.9	4.5
9/17/2021				8.3					

Prediction Limit

Constituent: Chloride, Total (mg/L) Analysis Run 10/17/2022 2:06 PM View: Interwell PL

Plant McDonough Client: Southern Company Data: McDonough AP

	DGWC-40	DGWC-38	DGWC-37	DGWC-39	DGWA-71 (bg)	DGWA-70A (bg)	DGWA-53 (bg)	DGWC-67	DGWC-69
1/18/2022					5.9	1.9			
1/19/2022	16.5							8.3	
1/20/2022				8					
1/21/2022		8.5	5.7						
1/25/2022									5.4
1/28/2022							1.8		
9/7/2022	15			8.2	8.2	2.1			4.9
9/8/2022			5.4				1.6	8.9	
9/12/2022		8.5							

Prediction Limit

Constituent: Chloride, Total (mg/L) Analysis Run 10/17/2022 2:06 PM View: Interwell PL

Plant McDonough Client: Southern Company Data: McDonough AP

	DGWC-68A
9/2/2016	
9/8/2016	
12/7/2016	
12/8/2016	
3/28/2017	
3/30/2017	
3/31/2017	
5/11/2017	
5/12/2017	4.2
5/15/2017	
6/15/2017	
6/16/2017	4.2
7/11/2017	
7/12/2017	
7/13/2017	4.4
8/8/2017	4.2
10/24/2017	
10/26/2017	4.4
11/15/2017	
2/27/2018	
3/1/2018	
3/2/2018	4.2
3/8/2018	
7/12/2018	
7/13/2018	4
11/6/2018	
11/7/2018	
11/8/2018	<0.25
3/12/2019	
3/13/2019	4.6
10/15/2019	
10/16/2019	4.2
10/17/2019	
10/18/2019	
3/2/2020	
3/4/2020	
3/9/2020	3.6
9/22/2020	
9/23/2020	3.6
9/24/2020	
9/25/2020	
3/1/2021	
3/8/2021	
3/10/2021	3.6
3/11/2021	
3/12/2021	
9/8/2021	
9/9/2021	
9/14/2021	
9/15/2021	
9/16/2021	3.4
9/17/2021	

Prediction Limit

Constituent: Chloride, Total (mg/L) Analysis Run 10/17/2022 2:06 PM View: Interwell PL

Plant McDonough Client: Southern Company Data: McDonough AP

	DGWC-68A
1/18/2022	
1/19/2022	
1/20/2022	
1/21/2022	
1/25/2022	3.8
1/28/2022	
9/7/2022	4.1
9/8/2022	
9/12/2022	

Prediction Limit

Constituent: Fluoride, total (mg/L) Analysis Run 10/17/2022 2:06 PM View: Interwell PL

Plant McDonough Client: Southern Company Data: McDonough AP

	DGWC-40	DGWC-39	DGWC-38	DGWC-37	DGWA-71 (bg)	DGWA-53 (bg)	DGWC-69	DGWC-67	DGWC-68A
9/2/2016	0.5								
9/8/2016		0.17 (J)	0.1 (J)	0.08 (J)					
12/7/2016		0.33	0.27 (J)	0.21 (J)					
12/8/2016	0.35								
3/28/2017					0.06 (J)	0.12 (J)			
3/30/2017	0.21 (J)	0.17 (J)	0.12 (J)	0.05 (J)					
3/31/2017							0.16 (J)	0.02 (J)	
5/11/2017						0.07 (J)			
5/12/2017					<0.1		0.12 (J)	<0.1	0.37
5/15/2017									
6/15/2017						0.19 (J)			
6/16/2017					0.008 (J)		0.16 (J)	0.03 (J)	0.12 (J)
7/11/2017					0.007 (J)				
7/12/2017						0.1 (J)			
7/13/2017	0.2 (J)	0.14 (J)	0.13 (J)	0.06 (J)			0.13 (J)	0.03 (J)	0.12 (J)
8/8/2017									0.11 (J)
10/24/2017					<0.1	0.06 (J)			
10/26/2017	0.5	0.54	0.47	0.08 (J)			0.29 (J)	<0.1	0.11 (J)
11/15/2017					<0.1	0.05 (J)	0.28 (J)		
2/27/2018					<0.1				
3/1/2018		0.13	<0.1	0.22					
3/2/2018	0.33						0.18	<0.1	0.23
3/8/2018						<0.1			
7/12/2018	0.57	0.13 (J)	0.23 (J)	0.32		0.071 (J)			
7/13/2018							0.19 (J)	0.25 (J)	0.099 (J)
11/6/2018					<0.1				
11/7/2018						<0.1			
11/8/2018	<0.3 (J)	<0.3 (J)	<0.1	<0.1			<0.3 (J)	0.5	<0.3 (J)
3/12/2019					<0.1				
3/13/2019	0.15 (J)	0.085 (J)	0.084 (J)	0.08 (J)		0.13 (J)	0.086 (J)	0.07 (J)	0.12 (J)
8/27/2019					<0.1				
8/28/2019	0.14	0.086 (J)	0.066 (J)	0.074 (J)		0.42	0.07 (J)	<0.1	0.1
10/15/2019					<0.1				
10/16/2019						0.11 (J)	0.13 (J)		0.093 (J)
10/17/2019								0.038 (J)	
10/18/2019	0.13 (J)	0.14 (J)	0.073 (J)	0.075 (J)					
3/2/2020					<0.1				
3/4/2020	0.11 (J)								
3/9/2020		0.075 (J)	0.064 (J)	0.054 (J)		0.1 (J)	0.068 (J)	<0.1	0.082 (J)
8/11/2020					<0.1				
8/13/2020	0.16	0.076 (J)	0.06 (J)	0.068 (J)		0.062 (J)	0.084 (J)	<0.1	0.076 (J)
9/22/2020					<0.1	0.099 (J)			
9/23/2020	0.054 (J)						0.064 (J)	<0.1	0.07 (J)
9/24/2020			0.057 (J)	0.061 (J)					
9/25/2020		0.086 (J)							
3/1/2021					<0.1				
3/8/2021	0.17								
3/10/2021							0.055 (J)		0.07 (J)
3/11/2021		0.083 (J)	0.058 (J)	0.057 (J)				<0.1	
3/12/2021						0.076 (J)			
9/8/2021					<0.1				
9/9/2021						0.099 (J)			

Prediction Limit

Constituent: Fluoride, total (mg/L) Analysis Run 10/17/2022 2:06 PM View: Interwell PL

Plant McDonough Client: Southern Company Data: McDonough AP

	DGWC-40	DGWC-39	DGWC-38	DGWC-37	DGWA-71 (bg)	DGWA-53 (bg)	DGWC-69	DGWC-67	DGWC-68A
9/14/2021	0.13								
9/15/2021			0.06 (J)						
9/16/2021				0.084 (J)			0.11	0.069 (J)	0.55
9/17/2021		0.13							
1/18/2022					<0.1				
1/19/2022	0.12							<0.1	
1/20/2022		0.1							
1/21/2022			0.1	0.053 (J)					
1/25/2022							0.054 (J)		0.067 (J)
1/28/2022						0.08 (J)			
9/7/2022	0.14	0.11			0.056 (J)		0.11		0.11
9/8/2022				0.082 (J)		0.11		0.096 (J)	
9/12/2022			0.12						

Prediction Limit

Constituent: Fluoride, total (mg/L) Analysis Run 10/17/2022 2:06 PM View: Interwell PL

Plant McDonough Client: Southern Company Data: McDonough AP

	DGWA-70A (bg)
9/2/2016	
9/8/2016	
12/7/2016	
12/8/2016	
3/28/2017	1.2 (O)
3/30/2017	
3/31/2017	
5/11/2017	
5/12/2017	
5/15/2017	0.005 (J)
6/15/2017	0.02 (J)
6/16/2017	
7/11/2017	0.06 (J)
7/12/2017	
7/13/2017	
8/8/2017	0.04 (J)
10/24/2017	<0.1
10/26/2017	
11/15/2017	
2/27/2018	<0.1
3/1/2018	
3/2/2018	
3/8/2018	
7/12/2018	
7/13/2018	
11/6/2018	<0.1
11/7/2018	
11/8/2018	
3/12/2019	0.039 (J)
3/13/2019	
8/27/2019	<0.1
8/28/2019	
10/15/2019	<0.1
10/16/2019	
10/17/2019	
10/18/2019	
3/2/2020	<0.1
3/4/2020	
3/9/2020	
8/11/2020	<0.1
8/13/2020	
9/22/2020	<0.1
9/23/2020	
9/24/2020	
9/25/2020	
3/1/2021	<0.1
3/8/2021	
3/10/2021	
3/11/2021	
3/12/2021	
9/8/2021	
9/9/2021	<0.1

Prediction Limit

Constituent: Fluoride, total (mg/L) Analysis Run 10/17/2022 2:06 PM View: Interwell PL

Plant McDonough Client: Southern Company Data: McDonough AP

	DGWA-70A (bg)
9/14/2021	
9/15/2021	
9/16/2021	
9/17/2021	
1/18/2022	<0.1
1/19/2022	
1/20/2022	
1/21/2022	
1/25/2022	
1/28/2022	
9/7/2022	0.061 (J)
9/8/2022	
9/12/2022	

Prediction Limit

Constituent: pH, Field (SU) Analysis Run 10/17/2022 2:06 PM View: Interwell PL

Plant McDonough Client: Southern Company Data: McDonough AP

	DGWC-40	DGWC-38	DGWC-39	DGWC-37	DGWA-71 (bg)	DGWA-53 (bg)	DGWC-67	DGWC-69	DGWC-68A
9/2/2016	4.77								
9/8/2016		6.01	6.47	6.32					
12/7/2016		6.07	6.43	6.32					
12/8/2016	4.77								
3/28/2017					5.94	6.29			
3/30/2017	4.84	5.97	6.42	6.22					
3/31/2017							6.25	6.26	
4/12/2017								6.19	
5/11/2017						6.6			
5/12/2017					5.46		6.23	6.2	6.63
5/15/2017									
6/15/2017						6.41			
6/16/2017					5.81		6.22	6.22	6.63
7/11/2017					5.74				
7/12/2017						5.91			
7/13/2017	4.85	6.11	6.47	6.3			6.15	6.35	6.84
8/8/2017									6.57
10/24/2017					5.86	5.51			
10/26/2017	4.86	6.06	6.49				6.64	6.69	7.01
11/15/2017					5.77	6.5		6.22	
2/27/2018					5.66				
3/1/2018		6.05	6.37	6.28					
3/2/2018	4.67						6.18	6.1	6.58
3/8/2018						6.18			
7/10/2018					5.63				
7/12/2018	4.63	6.05	6.45	6.43		6.33			
7/13/2018							6.19	5.95	6.62
11/6/2018					5.79				
11/7/2018						6.22			
11/8/2018	4.79	6.07	6.49	6.36			6.23	6	6.5
3/12/2019					5.74				
3/13/2019	4.6	6.05	6.28	6.26		6	6.19	6.08	6.57
8/27/2019					5.87				
8/28/2019	4.68	5.98	6.41	6.27		6.04	6.22	6.09	6.6
10/15/2019					5.88				
10/16/2019						6.69		6.19	6.6
10/17/2019							6.14		
10/18/2019	4.71	6	6.35	6.26					
3/2/2020					5.77				
3/4/2020	4.64								
3/9/2020		6.12	6.37	6.34		6.41	6.23	6.12	6.6
8/11/2020					5.96				
8/13/2020	4.65	6.05	6.39	6.34		6.17	6.28	6.26	6.63
9/22/2020					6.06	6.43			
9/23/2020	4.78						6.23	6.08	6.6
9/24/2020		6.05		6.3					
9/25/2020			6.38						
3/1/2021					5.8				
3/8/2021	4.79								
3/10/2021								6.13	6.74
3/11/2021		6.22	6.66	6.49			6.28		
3/12/2021						6.38			

Prediction Limit

Constituent: pH, Field (SU) Analysis Run 10/17/2022 2:06 PM View: Interwell PL

Plant McDonough Client: Southern Company Data: McDonough AP

	DGWC-40	DGWC-38	DGWC-39	DGWC-37	DGWA-71 (bg)	DGWA-53 (bg)	DGWC-67	DGWC-69	DGWC-68A
9/8/2021					5.76				
9/9/2021						6.41			
9/14/2021	4.67								
9/15/2021		6.08							
9/16/2021				6.33			6.2	6.16	6.79 (o)
9/17/2021			6.49						
10/27/2021									6.56
1/18/2022					5.51				
1/19/2022	4.66						6.21		
1/20/2022			6.52						
1/21/2022		6.08		6.31					
1/25/2022								6.02	6.53
1/28/2022						6.35			
9/7/2022	4.54		6.43		5.65			6.2	6.62
9/8/2022				6.3		6.32	6.21		
9/9/2022				6.3					
9/12/2022		6.05							

Prediction Limit

Constituent: pH, Field (SU) Analysis Run 10/17/2022 2:06 PM View: Interwell PL

Plant McDonough Client: Southern Company Data: McDonough AP

	DGWA-70A (bg)
9/2/2016	
9/8/2016	
12/7/2016	
12/8/2016	
3/28/2017	
3/30/2017	
3/31/2017	
4/12/2017	
5/11/2017	
5/12/2017	
5/15/2017	5.72
6/15/2017	5.74
6/16/2017	
7/11/2017	5.62
7/12/2017	
7/13/2017	
8/8/2017	5.6
10/24/2017	5.71
10/26/2017	
11/15/2017	
2/27/2018	5.5
3/1/2018	
3/2/2018	
3/8/2018	
7/10/2018	5.44
7/12/2018	
7/13/2018	
11/6/2018	5.71
11/7/2018	
11/8/2018	
3/12/2019	5.52
3/13/2019	
8/27/2019	5.53
8/28/2019	
10/15/2019	5.61
10/16/2019	
10/17/2019	
10/18/2019	
3/2/2020	5.54
3/4/2020	
3/9/2020	
8/11/2020	5.86
8/13/2020	
9/22/2020	6.01
9/23/2020	
9/24/2020	
9/25/2020	
3/1/2021	5.43
3/8/2021	
3/10/2021	
3/11/2021	
3/12/2021	

Prediction Limit

Constituent: pH, Field (SU) Analysis Run 10/17/2022 2:06 PM View: Interwell PL

Plant McDonough Client: Southern Company Data: McDonough AP

	DGWA-70A (bg)
9/8/2021	
9/9/2021	5.5
9/14/2021	
9/15/2021	
9/16/2021	
9/17/2021	
10/27/2021	
1/18/2022	5.5
1/19/2022	
1/20/2022	
1/21/2022	
1/25/2022	
1/28/2022	
9/7/2022	5.6
9/8/2022	
9/9/2022	
9/12/2022	

Prediction Limit

Constituent: Sulfate as SO4 (mg/L) Analysis Run 10/17/2022 2:06 PM View: Interwell PL

Plant McDonough Client: Southern Company Data: McDonough AP

	DGWC-40	DGWC-39	DGWC-38	DGWC-37	DGWA-71 (bg)	DGWA-70A (bg)	DGWA-53 (bg)	DGWC-69	DGWC-67
9/2/2016	230								
9/8/2016		280	270	97					
12/7/2016		250	250	100					
12/8/2016	270								
3/28/2017					17	2.7	49		
3/30/2017	240	310	290	110					
3/31/2017								21	110
5/11/2017							21		
5/12/2017					17			17	100
5/15/2017						1			
6/15/2017						0.86 (J)	16		
6/16/2017					11			20	100
7/11/2017					11	1.4			
7/12/2017							10		
7/13/2017	220	220	270	200 (O)				17	110
8/8/2017						1.5			
10/24/2017					9.6	1.4	15		
10/26/2017	220	210	260	97				31	100
11/15/2017					7.8		3.8	29	
2/27/2018					7.4	0.54 (J)			
3/1/2018		166	242	94.6					
3/2/2018	219							10.1	98.5
3/8/2018							9.7		
7/12/2018	222	169	256	89.2			8		
7/13/2018								8.6	136
11/6/2018					7.3	<1 (J)			
11/7/2018							12.8		
11/8/2018	273	200	291	102				9.7	118
3/12/2019					7	0.35 (J)			
3/13/2019	445	265	300	92.2			23.7	8.4	233
10/15/2019					7.4	0.16 (J)			
10/16/2019							15.1	13.3	
10/17/2019									99.4
10/18/2019	205	182	239	76.4					
3/2/2020					8.5	<1			
3/4/2020	177								
3/9/2020		171	244	90.3			9.5	7.6	100
9/22/2020					6.5	<1	13.5		
9/23/2020	190							5.9	99.8
9/24/2020			240	84.1					
9/25/2020		153							
3/1/2021					5.2	<1			
3/8/2021	191								
3/10/2021								6.4	
3/11/2021		123	154	81.9					76.7
3/12/2021							8.8		
9/8/2021					6.1				
9/9/2021						<1	11.9		
9/14/2021	186								
9/15/2021			219						
9/16/2021				95				17.9	101
9/17/2021		156							

Prediction Limit

Constituent: Sulfate as SO4 (mg/L) Analysis Run 10/17/2022 2:06 PM View: Interwell PL

Plant McDonough Client: Southern Company Data: McDonough AP

	DGWC-40	DGWC-39	DGWC-38	DGWC-37	DGWA-71 (bg)	DGWA-70A (bg)	DGWA-53 (bg)	DGWC-69	DGWC-67
1/18/2022					6.3	<1			
1/19/2022	177								97.2
1/20/2022		123							
1/21/2022			188	89.8					
1/25/2022								7.1	
1/28/2022							13.1		
9/7/2022	203	146			7	<1		11.6	
9/8/2022				96.6			12		117
9/12/2022			234						

Prediction Limit

Constituent: Sulfate as SO4 (mg/L) Analysis Run 10/17/2022 2:06 PM View: Interwell PL

Plant McDonough Client: Southern Company Data: McDonough AP

	DGWC-68A
9/2/2016	
9/8/2016	
12/7/2016	
12/8/2016	
3/28/2017	
3/30/2017	
3/31/2017	
5/11/2017	
5/12/2017	50
5/15/2017	
6/15/2017	
6/16/2017	47
7/11/2017	
7/12/2017	
7/13/2017	49
8/8/2017	48
10/24/2017	
10/26/2017	48
11/15/2017	
2/27/2018	
3/1/2018	
3/2/2018	44.7
3/8/2018	
7/12/2018	
7/13/2018	43.3
11/6/2018	
11/7/2018	
11/8/2018	43.5
3/12/2019	
3/13/2019	44.1
10/15/2019	
10/16/2019	32.1
10/17/2019	
10/18/2019	
3/2/2020	
3/4/2020	
3/9/2020	37.4
9/22/2020	
9/23/2020	38.7
9/24/2020	
9/25/2020	
3/1/2021	
3/8/2021	
3/10/2021	38.4
3/11/2021	
3/12/2021	
9/8/2021	
9/9/2021	
9/14/2021	
9/15/2021	
9/16/2021	22.3
9/17/2021	

Prediction Limit

Constituent: Sulfate as SO4 (mg/L) Analysis Run 10/17/2022 2:06 PM View: Interwell PL

Plant McDonough Client: Southern Company Data: McDonough AP

	DGWC-68A
1/18/2022	
1/19/2022	
1/20/2022	
1/21/2022	
1/25/2022	36.3
1/28/2022	
9/7/2022	36.5
9/8/2022	
9/12/2022	

Prediction Limit

Constituent: Total Dissolved Solids [TDS] (mg/L) Analysis Run 10/17/2022 2:06 PM View: Interwell PL

Plant McDonough Client: Southern Company Data: McDonough AP

	DGWC-38	DGWC-37	DGWC-39	DGWC-40	DGWA-71 (bg)	DGWA-70A (bg)	DGWA-53 (bg)	DGWC-69	DGWC-67
9/2/2016				583 (O)					
9/8/2016	437	279	522						
12/7/2016	478	300	565						
12/8/2016				319					
3/28/2017					90	39	202		
3/30/2017	448	273	496	344					
3/31/2017								138	270
5/11/2017							241		
5/12/2017					92			243	287
5/15/2017						88			
6/15/2017						65	251		
6/16/2017					100			155	309
7/11/2017					59	25			
7/12/2017							218		
7/13/2017	504	312	508	386				122	275
8/8/2017						53			
10/24/2017					117	49	671 (O)		
10/26/2017	554	340	532	373				234	319
11/15/2017					90		241	188	
2/27/2018					79	43			
3/1/2018	492	311	440						
3/2/2018				359				73	264
3/8/2018							213		
7/12/2018	478	290	463	365			198		
7/13/2018								95	297
11/6/2018					85	65			
11/7/2018							200		
11/8/2018	507	295	485	399				112	295
3/12/2019					74	43			
3/13/2019	487	286	526	351			201	95	278
10/15/2019					89	70			
10/16/2019							126	108	
10/17/2019									281
10/18/2019	494	269	489	360					
3/2/2020					67	52			
3/4/2020				400					
3/9/2020	554	357	508				171	115	209
9/22/2020					74	46	142		
9/23/2020				357				102	296
9/24/2020	489	280							
9/25/2020			460						
3/1/2021					62	25			
3/8/2021				346					
3/10/2021								78	
3/11/2021	463	255	440						265
3/12/2021							124		
9/8/2021					75				
9/9/2021						53	131		
9/14/2021				347					
9/15/2021	474								
9/16/2021		278						113	282
9/17/2021			446						

Prediction Limit

Constituent: Total Dissolved Solids [TDS] (mg/L) Analysis Run 10/17/2022 2:06 PM View: Interwell PL

Plant McDonough Client: Southern Company Data: McDonough AP

	DGWC-38	DGWC-37	DGWC-39	DGWC-40	DGWA-71 (bg)	DGWA-70A (bg)	DGWA-53 (bg)	DGWC-69	DGWC-67
1/18/2022					76	54			
1/19/2022				336					272
1/20/2022			416						
1/21/2022	482	316							
1/25/2022								84	
1/28/2022							155		
9/7/2022			449	339	82	34		102	
9/8/2022		300					129		252
9/12/2022	468								

Prediction Limit

Constituent: Total Dissolved Solids [TDS] (mg/L) Analysis Run 10/17/2022 2:06 PM View: Interwell PL

Plant McDonough Client: Southern Company Data: McDonough AP

	DGWC-68A
9/2/2016	
9/8/2016	
12/7/2016	
12/8/2016	
3/28/2017	
3/30/2017	
3/31/2017	
5/11/2017	
5/12/2017	300
5/15/2017	
6/15/2017	
6/16/2017	271
7/11/2017	
7/12/2017	
7/13/2017	246
8/8/2017	278
10/24/2017	
10/26/2017	287
11/15/2017	
2/27/2018	
3/1/2018	
3/2/2018	252
3/8/2018	
7/12/2018	
7/13/2018	275
11/6/2018	
11/7/2018	
11/8/2018	277
3/12/2019	
3/13/2019	267
10/15/2019	
10/16/2019	218
10/17/2019	
10/18/2019	
3/2/2020	
3/4/2020	
3/9/2020	188
9/22/2020	
9/23/2020	251
9/24/2020	
9/25/2020	
3/1/2021	
3/8/2021	
3/10/2021	232
3/11/2021	
3/12/2021	
9/8/2021	
9/9/2021	
9/14/2021	
9/15/2021	
9/16/2021	259
9/17/2021	

Prediction Limit

Constituent: Total Dissolved Solids [TDS] (mg/L) Analysis Run 10/17/2022 2:06 PM View: Interwell PL

Plant McDonough Client: Southern Company Data: McDonough AP

	DGWC-68A
1/18/2022	
1/19/2022	
1/20/2022	
1/21/2022	
1/25/2022	259
1/28/2022	
9/7/2022	256
9/8/2022	
9/12/2022	

FIGURE E.

Appendix III Trend Test - Significant Results

Plant McDonough Client: Southern Company Data: McDonough AP Printed 10/17/2022, 2:09 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Calcium, total (mg/L)	**DGWA-53 (bg)**	**-3.715**	**-76**	**-58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride, Total (mg/L)	**DGWA-53 (bg)**	**-0.1771**	**-85**	**-63**	**Yes**	**17**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride, Total (mg/L)	**DGWC-40**	**-0.4831**	**-61**	**-58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride, Total (mg/L)	**DGWC-67**	**0.5636**	**100**	**58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate as SO4 (mg/L)	**DGWA-70A (bg)**	**-0.1765**	**-60**	**-58**	**Yes**	**16**	**43.75**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate as SO4 (mg/L)	**DGWA-71 (bg)**	**-1.051**	**-88**	**-58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate as SO4 (mg/L)	**DGWC-38**	**-10.06**	**-61**	**-58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate as SO4 (mg/L)	**DGWC-39**	**-23.39**	**-81**	**-58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate as SO4 (mg/L)	**DGWC-40**	**-9.834**	**-60**	**-58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Total Dissolved Solids [TDS] (mg/L)	**DGWA-53 (bg)**	**-21.09**	**-79**	**-58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Total Dissolved Solids [TDS] (mg/L)	**DGWC-39**	**-15.95**	**-60**	**-58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**

Appendix III Trend Test - All Results

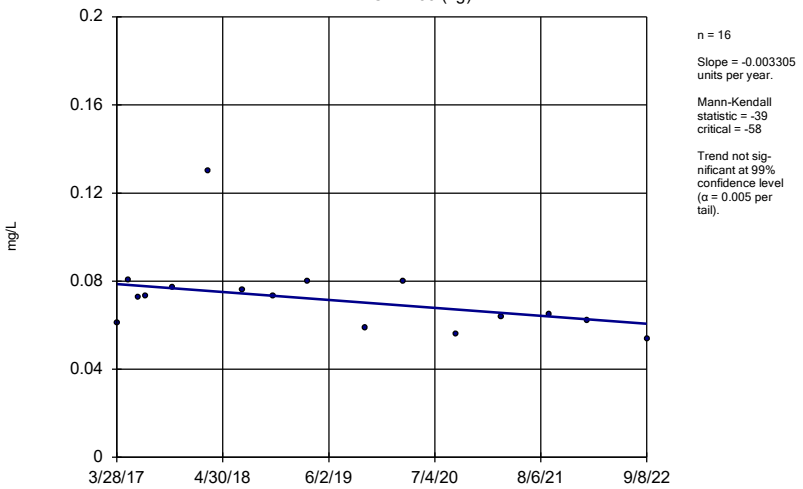
Plant McDonough Client: Southern Company Data: McDonough AP Printed 10/17/2022, 2:09 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Boron, total (mg/L)	DGWA-53 (bg)	-0.003305	-39	-58	No	16	0	n/a	n/a	0.01	NP
Boron, total (mg/L)	DGWA-70A (bg)	0	33	58	No	16	56.25	n/a	n/a	0.01	NP
Boron, total (mg/L)	DGWA-71 (bg)	0.0007215	16	53	No	15	26.67	n/a	n/a	0.01	NP
Boron, total (mg/L)	DGWC-37	-0.0417	-33	-58	No	16	0	n/a	n/a	0.01	NP
Boron, total (mg/L)	DGWC-38	-0.04359	-36	-58	No	16	0	n/a	n/a	0.01	NP
Boron, total (mg/L)	DGWC-39	-0.08204	-54	-58	No	16	0	n/a	n/a	0.01	NP
Boron, total (mg/L)	DGWC-40	-0.02553	-55	-58	No	16	0	n/a	n/a	0.01	NP
Boron, total (mg/L)	DGWC-67	0.1184	55	58	No	16	0	n/a	n/a	0.01	NP
Boron, total (mg/L)	DGWC-68A	-0.04241	-21	-58	No	16	0	n/a	n/a	0.01	NP
Boron, total (mg/L)	DGWC-69	-0.03589	-58	-68	No	18	0	n/a	n/a	0.01	NP
Calcium, total (mg/L)	**DGWA-53 (bg)**	**-3.715**	**-76**	**-58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium, total (mg/L)	DGWA-70A (bg)	-0.03479	-12	-58	No	16	6.25	n/a	n/a	0.01	NP
Calcium, total (mg/L)	DGWA-71 (bg)	-0.4482	-35	-53	No	15	6.667	n/a	n/a	0.01	NP
Calcium, total (mg/L)	DGWC-37	1.067	39	58	No	16	0	n/a	n/a	0.01	NP
Calcium, total (mg/L)	DGWC-38	2.106	58	58	No	16	0	n/a	n/a	0.01	NP
Calcium, total (mg/L)	DGWC-39	0.6502	15	58	No	16	0	n/a	n/a	0.01	NP
Calcium, total (mg/L)	DGWC-40	0.5648	37	58	No	16	0	n/a	n/a	0.01	NP
Calcium, total (mg/L)	DGWC-67	1.043	58	58	No	16	0	n/a	n/a	0.01	NP
Calcium, total (mg/L)	DGWC-68A	1.413	56	58	No	16	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	**DGWA-53 (bg)**	**-0.1771**	**-85**	**-63**	**Yes**	**17**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride, Total (mg/L)	DGWA-70A (bg)	-0.06575	-45	-58	No	16	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	DGWA-71 (bg)	0.3259	40	58	No	16	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	DGWC-38	0.1424	49	58	No	16	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	**DGWC-40**	**-0.4831**	**-61**	**-58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride, Total (mg/L)	**DGWC-67**	**0.5636**	**100**	**58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
pH, Field (SU)	DGWA-53 (bg)	0.01874	12	74	No	19	0	n/a	n/a	0.01	NP
pH, Field (SU)	DGWA-70A (bg)	-0.02257	-32	-68	No	18	0	n/a	n/a	0.01	NP
pH, Field (SU)	DGWA-71 (bg)	0	1	74	No	19	0	n/a	n/a	0.01	NP
pH, Field (SU)	DGWC-40	-0.02747	-46	-68	No	18	0	n/a	n/a	0.01	NP
pH, Field (SU)	DGWC-68A	-0.008902	-26	-68	No	18	0	n/a	n/a	0.01	NP
Sulfate as SO4 (mg/L)	DGWA-53 (bg)	-0.7643	-32	-63	No	17	0	n/a	n/a	0.01	NP
Sulfate as SO4 (mg/L)	**DGWA-70A (bg)**	**-0.1765**	**-60**	**-58**	**Yes**	**16**	**43.75**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate as SO4 (mg/L)	**DGWA-71 (bg)**	**-1.051**	**-88**	**-58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate as SO4 (mg/L)	DGWC-37	-2.312	-38	-53	No	15	0	n/a	n/a	0.01	NP
Sulfate as SO4 (mg/L)	**DGWC-38**	**-10.06**	**-61**	**-58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate as SO4 (mg/L)	**DGWC-39**	**-23.39**	**-81**	**-58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate as SO4 (mg/L)	**DGWC-40**	**-9.834**	**-60**	**-58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate as SO4 (mg/L)	DGWC-67	-0.2587	-17	-58	No	16	0	n/a	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	**DGWA-53 (bg)**	**-21.09**	**-79**	**-58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Total Dissolved Solids [TDS] (mg/L)	DGWA-70A (bg)	-2.113	-12	-58	No	16	0	n/a	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	DGWA-71 (bg)	-3.712	-40	-58	No	16	0	n/a	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	DGWC-37	-2.185	-9	-58	No	16	0	n/a	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	DGWC-38	-0.4188	-2	-58	No	16	0	n/a	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	**DGWC-39**	**-15.95**	**-60**	**-58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Total Dissolved Solids [TDS] (mg/L)	DGWC-40	-4.306	-21	-53	No	15	0	n/a	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	DGWC-68A	-5.853	-43	-58	No	16	0	n/a	n/a	0.01	NP

Sanitas™ v.9.6.33 Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

DGWA-53 (bg)



n = 16

Slope = -0.003305 units per year.

Mann-Kendall statistic = -39
critical = -58

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron, total Analysis Run 10/17/2022 2:07 PM View: AIII Trend Test

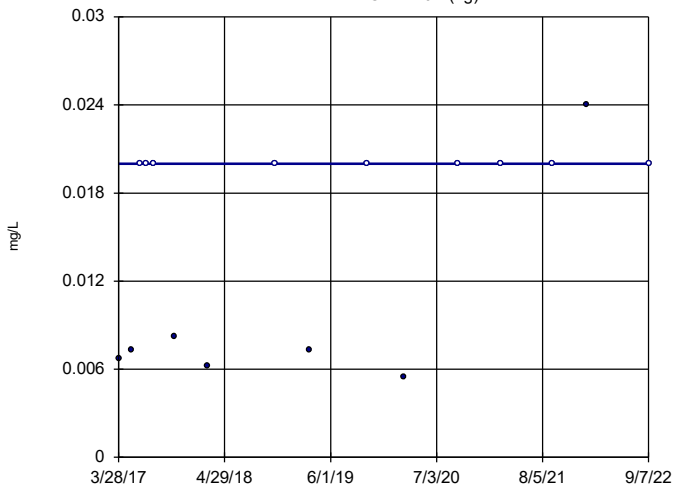
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.9.6.33 Sanitas software utilized by Groundwater Stats Consulting. UG

Hollow symbols indicate censored values.

Sen's Slope Estimator

DGWA-70A (bg)



n = 16

Slope = 0 units per year.

Mann-Kendall statistic = 33
critical = 58

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron, total Analysis Run 10/17/2022 2:07 PM View: AIII Trend Test

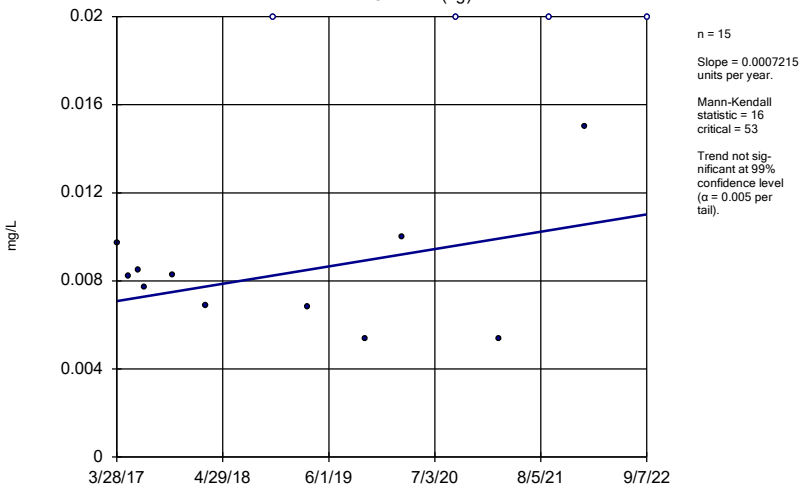
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.9.6.33 Sanitas software utilized by Groundwater Stats Consulting. UG

Hollow symbols indicate censored values.

Sen's Slope Estimator

DGWA-71 (bg)



n = 15

Slope = 0.0007215 units per year.

Mann-Kendall statistic = 16
critical = 53

Trend not significant at 99% confidence level (α = 0.005 per tail).

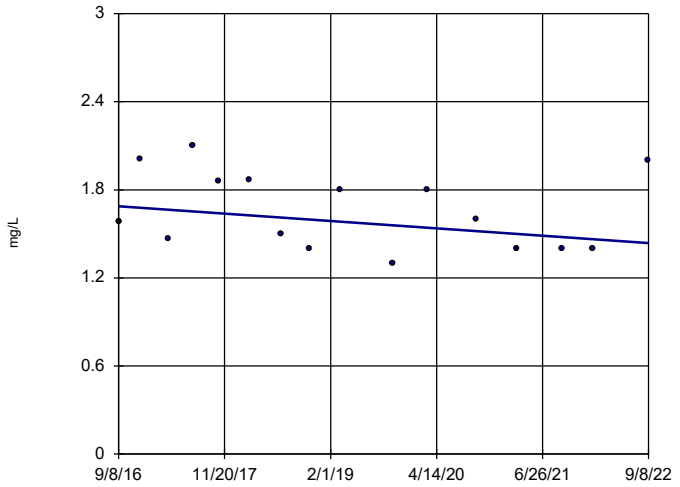
Constituent: Boron, total Analysis Run 10/17/2022 2:07 PM View: AIII Trend Test

Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.9.6.33 Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

DGWC-37



n = 16

Slope = -0.0417 units per year.

Mann-Kendall statistic = -33
critical = -58

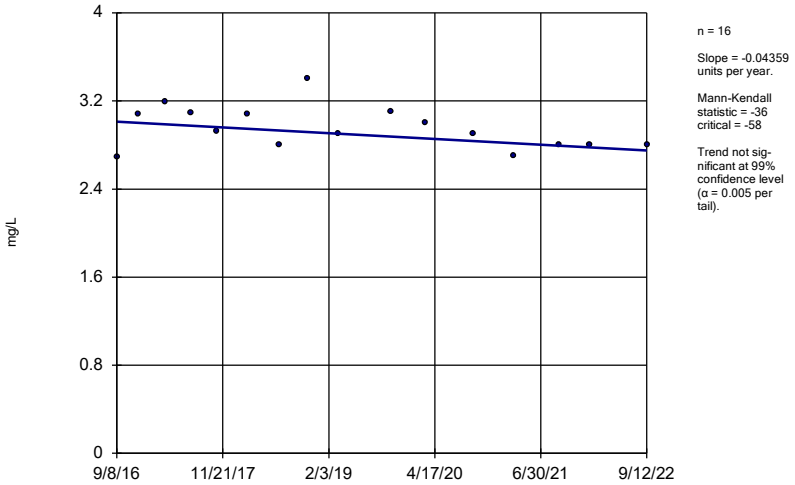
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron, total Analysis Run 10/17/2022 2:07 PM View: AIII Trend Test

Plant McDonough Client: Southern Company Data: McDonough AP

Sen's Slope Estimator

DGWC-38



n = 16

Slope = -0.04359 units per year.

Mann-Kendall statistic = -36
critical = -58

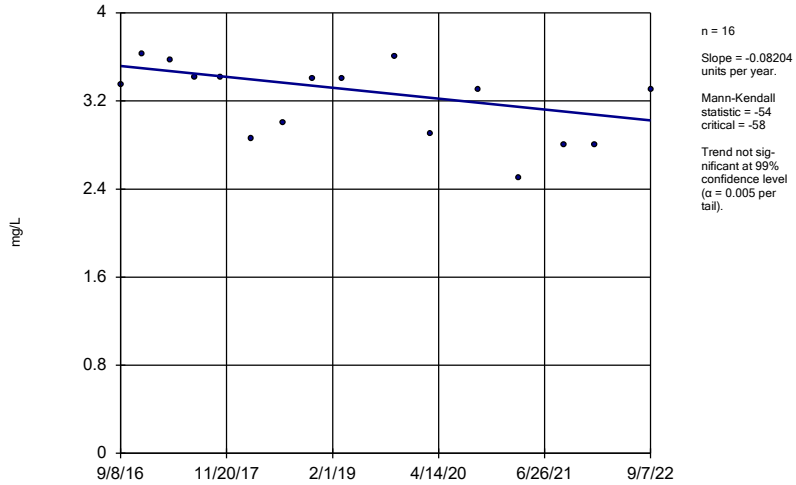
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron, total Analysis Run 10/17/2022 2:07 PM View: AIII Trend Test
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.9.6.33 Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

DGWC-39



n = 16

Slope = -0.08204 units per year.

Mann-Kendall statistic = -54
critical = -58

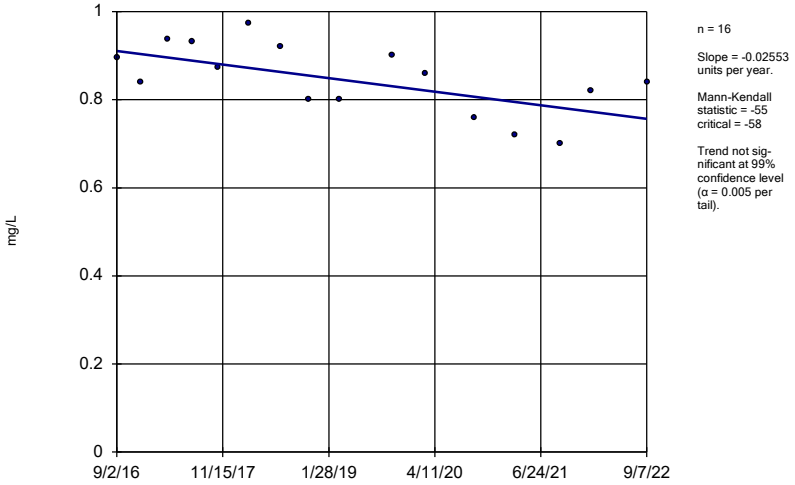
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron, total Analysis Run 10/17/2022 2:07 PM View: AIII Trend Test
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.9.6.33 Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

DGWC-40



n = 16

Slope = -0.02553 units per year.

Mann-Kendall statistic = -55
critical = -58

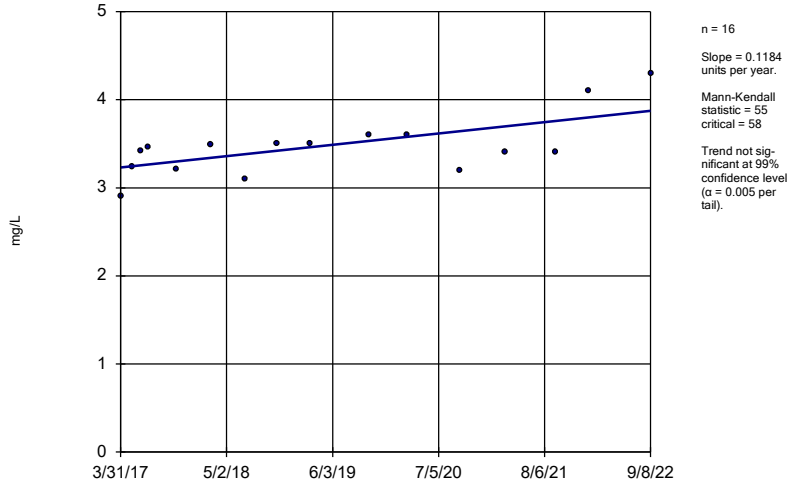
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron, total Analysis Run 10/17/2022 2:07 PM View: AIII Trend Test
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.9.6.33 Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

DGWC-67



n = 16

Slope = 0.1184 units per year.

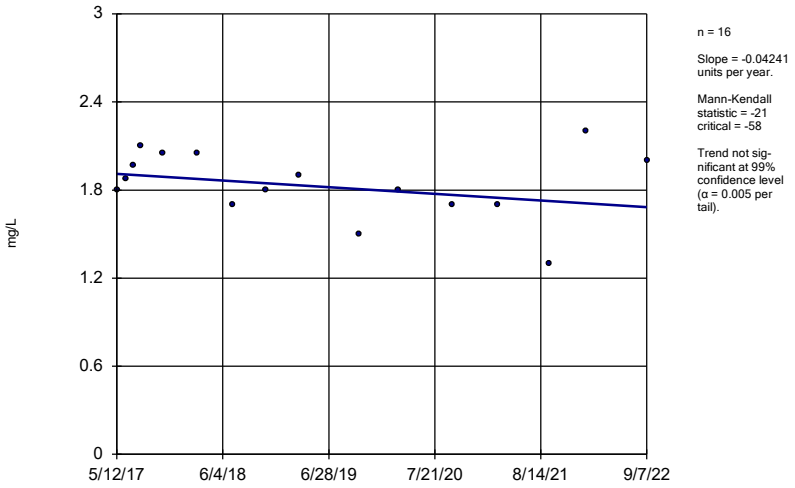
Mann-Kendall statistic = 55
critical = 58

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron, total Analysis Run 10/17/2022 2:07 PM View: AIII Trend Test
Plant McDonough Client: Southern Company Data: McDonough AP

Sen's Slope Estimator

DGWC-68A



n = 16

Slope = -0.04241 units per year.

Mann-Kendall statistic = -21
critical = -58

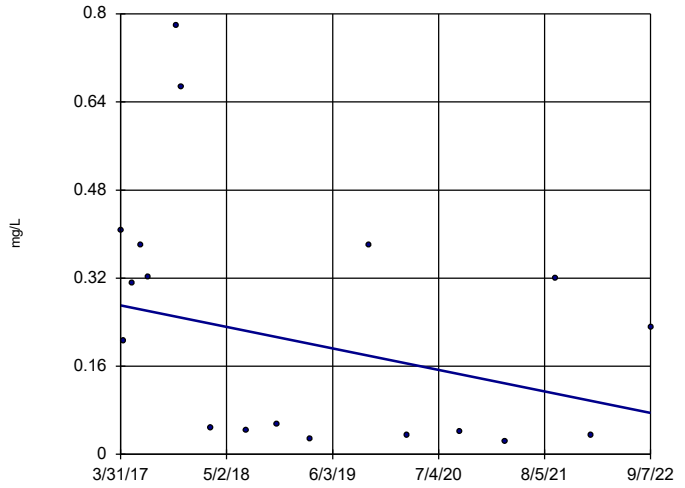
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron, total Analysis Run 10/17/2022 2:07 PM View: AIII Trend Test
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.9.6.33 Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

DGWC-69



n = 18

Slope = -0.03589 units per year.

Mann-Kendall statistic = -58
critical = -68

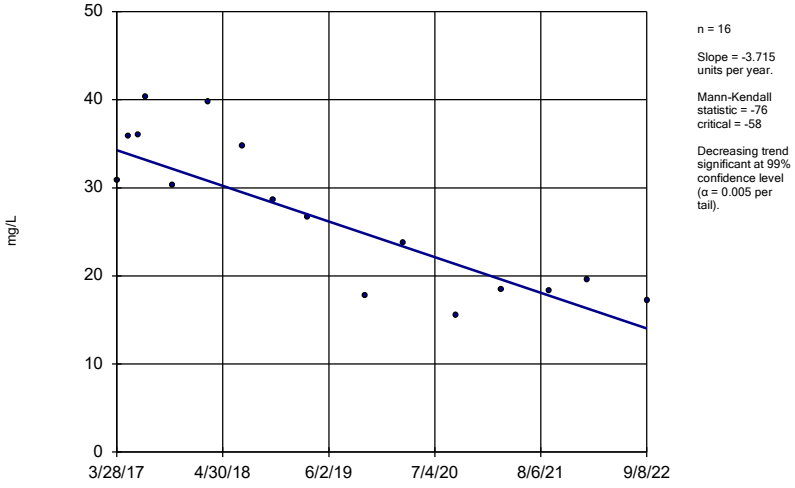
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron, total Analysis Run 10/17/2022 2:07 PM View: AIII Trend Test
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.9.6.33 Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

DGWA-53 (bg)



n = 16

Slope = -3.715 units per year.

Mann-Kendall statistic = -76
critical = -58

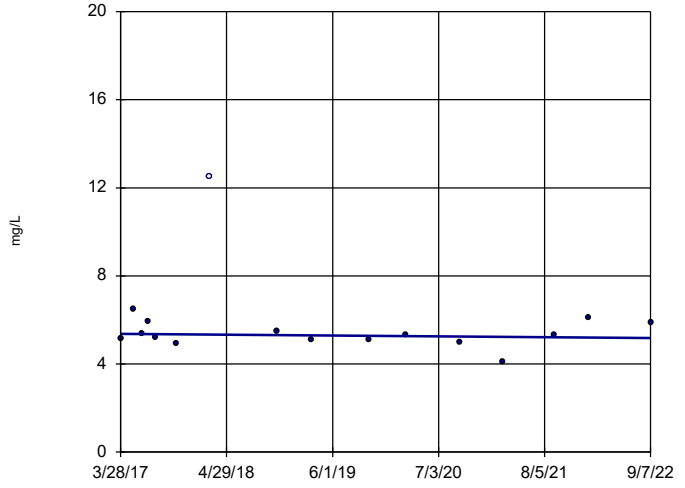
Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium, total Analysis Run 10/17/2022 2:07 PM View: AIII Trend Test
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.9.6.33 Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

DGWA-70A (bg)



n = 16

Slope = -0.03479 units per year.

Mann-Kendall statistic = -12
critical = -58

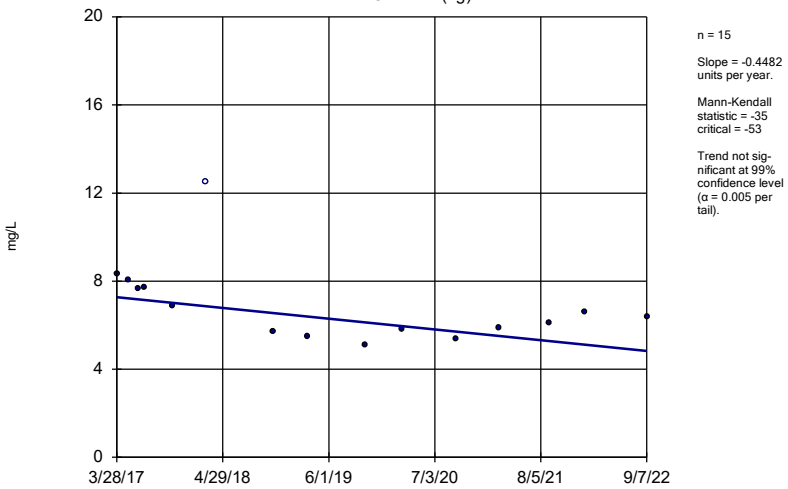
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium, total Analysis Run 10/17/2022 2:07 PM View: AIII Trend Test
Plant McDonough Client: Southern Company Data: McDonough AP

Hollow symbols indicate censored values.

Sen's Slope Estimator

DGWA-71 (bg)



n = 15

Slope = -0.4482 units per year.

Mann-Kendall statistic = -35
critical = -53

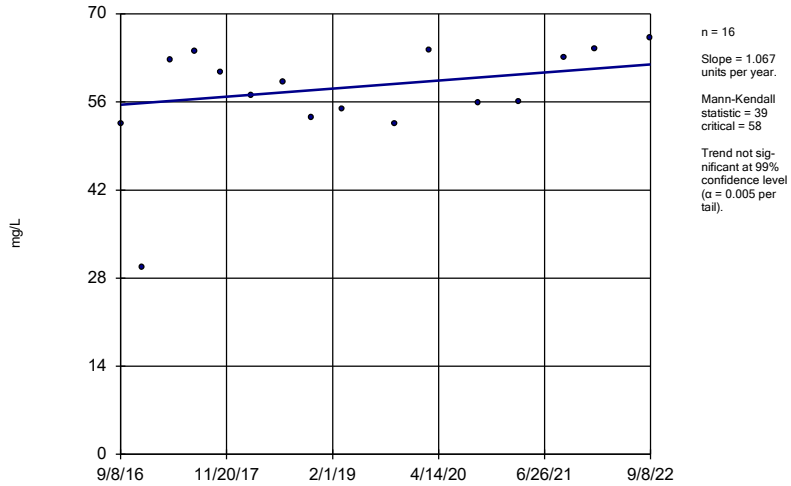
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium, total Analysis Run 10/17/2022 2:07 PM View: AIII Trend Test
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.9.6.33 Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

DGWC-37



n = 16

Slope = 1.067 units per year.

Mann-Kendall statistic = 39
critical = 58

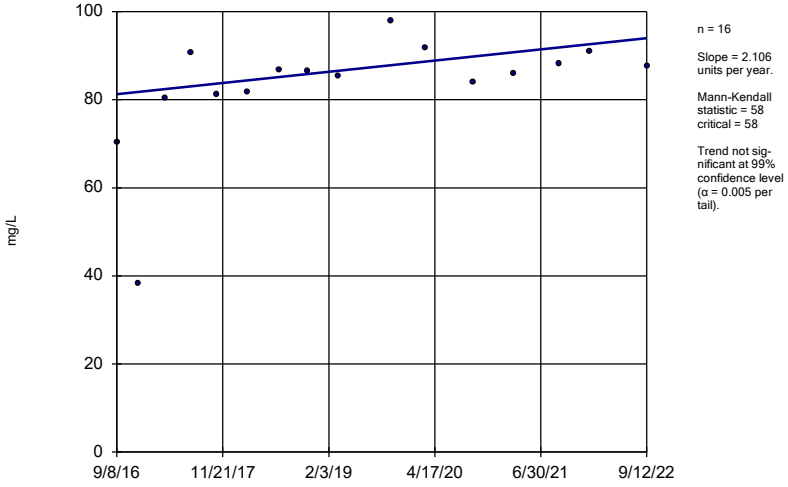
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium, total Analysis Run 10/17/2022 2:08 PM View: AIII Trend Test
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.9.6.33 Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

DGWC-38



n = 16

Slope = 2.106 units per year.

Mann-Kendall statistic = 58
critical = 58

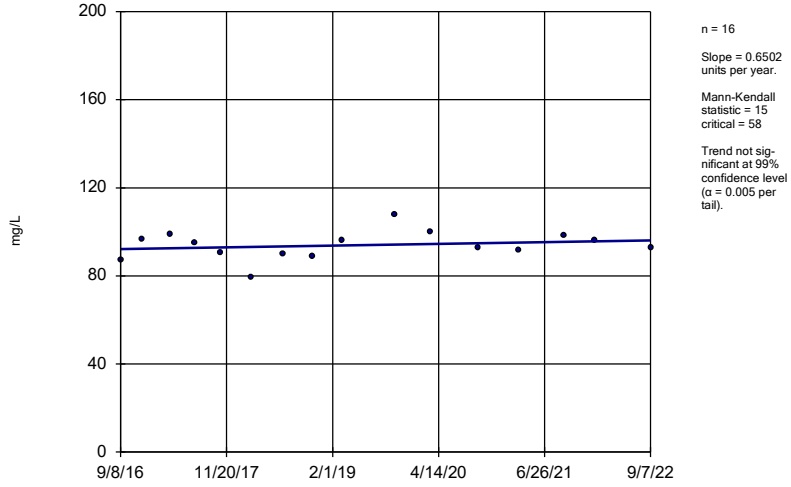
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium, total Analysis Run 10/17/2022 2:08 PM View: AIII Trend Test
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.9.6.33 Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

DGWC-39



n = 16

Slope = 0.6502 units per year.

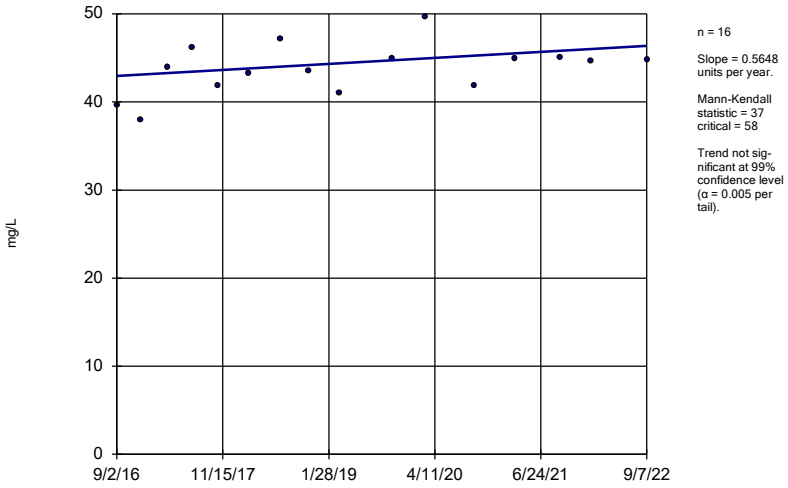
Mann-Kendall statistic = 15
critical = 58

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium, total Analysis Run 10/17/2022 2:08 PM View: AIII Trend Test
Plant McDonough Client: Southern Company Data: McDonough AP

Sen's Slope Estimator

DGWC-40



n = 16

Slope = 0.5648 units per year.

Mann-Kendall statistic = 37 critical = 58

Trend not significant at 99% confidence level (α = 0.005 per tail).

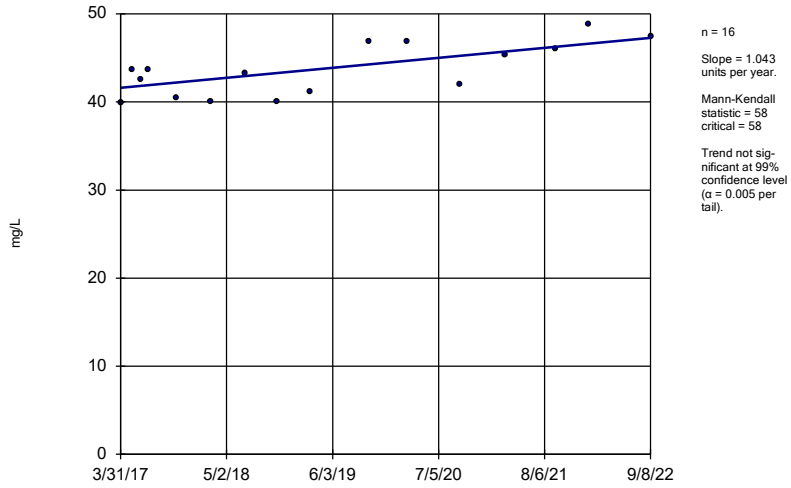
Constituent: Calcium, total Analysis Run 10/17/2022 2:08 PM View: AIII Trend Test

Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.9.6.33 Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

DGWC-67



n = 16

Slope = 1.043 units per year.

Mann-Kendall statistic = 58 critical = 58

Trend not significant at 99% confidence level (α = 0.005 per tail).

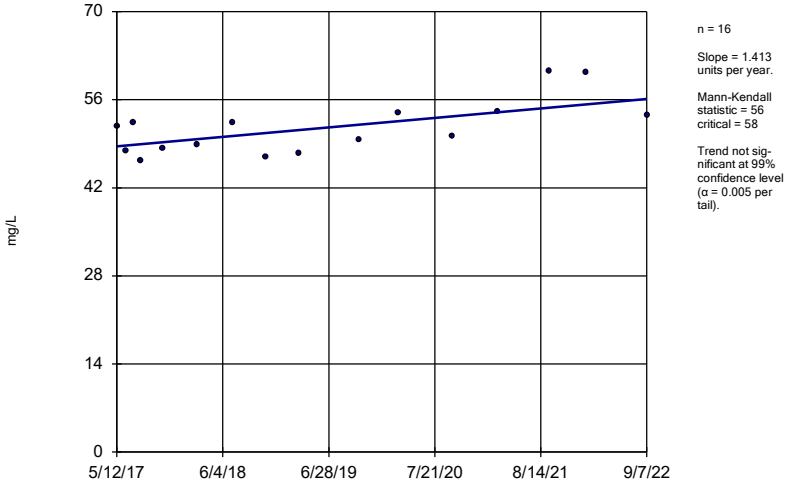
Constituent: Calcium, total Analysis Run 10/17/2022 2:08 PM View: AIII Trend Test

Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.9.6.33 Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

DGWC-68A



n = 16

Slope = 1.413 units per year.

Mann-Kendall statistic = 56 critical = 58

Trend not significant at 99% confidence level (α = 0.005 per tail).

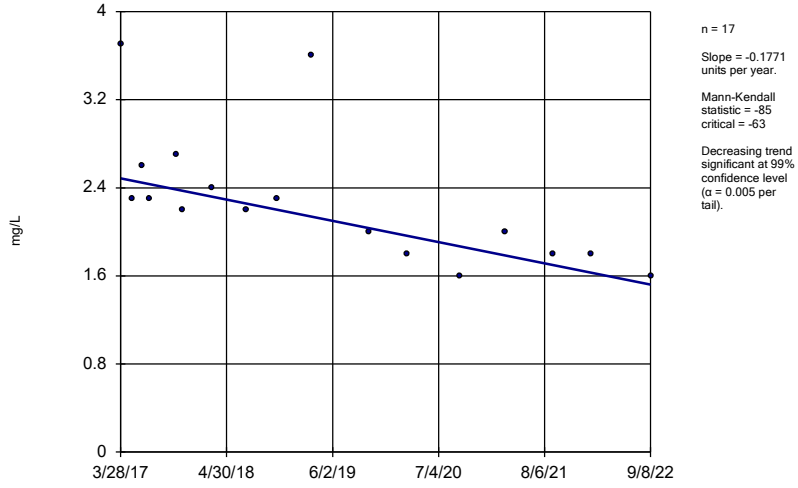
Constituent: Calcium, total Analysis Run 10/17/2022 2:08 PM View: AIII Trend Test

Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.9.6.33 Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

DGWA-53 (bg)



n = 17

Slope = -0.1771 units per year.

Mann-Kendall statistic = -85 critical = -63

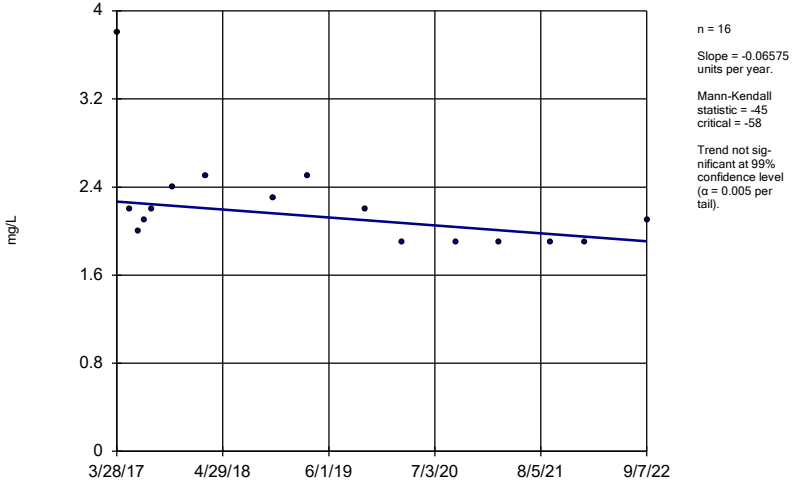
Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride, Total Analysis Run 10/17/2022 2:08 PM View: AIII Trend Test

Plant McDonough Client: Southern Company Data: McDonough AP

Sen's Slope Estimator

DGWA-70A (bg)



n = 16

Slope = -0.06575 units per year.

Mann-Kendall statistic = -45 critical = -58

Trend not significant at 99% confidence level (α = 0.005 per tail).

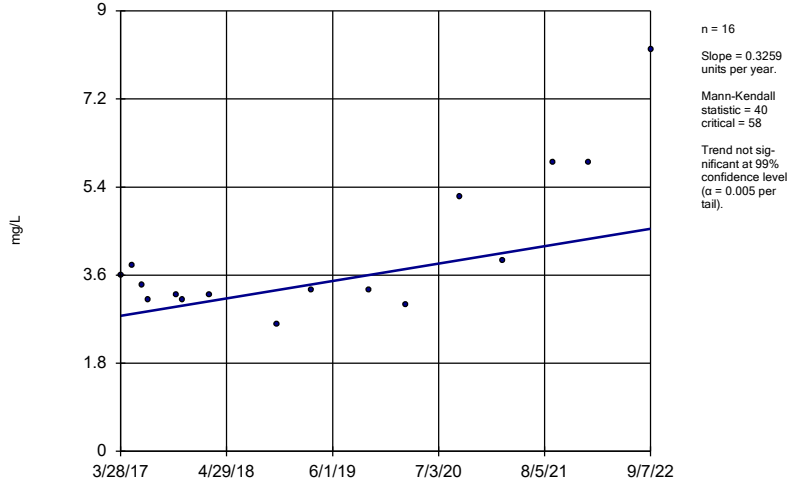
Constituent: Chloride, Total Analysis Run 10/17/2022 2:08 PM View: AIII Trend Test

Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.9.6.33 Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

DGWA-71 (bg)



n = 16

Slope = 0.3259 units per year.

Mann-Kendall statistic = 40 critical = 58

Trend not significant at 99% confidence level (α = 0.005 per tail).

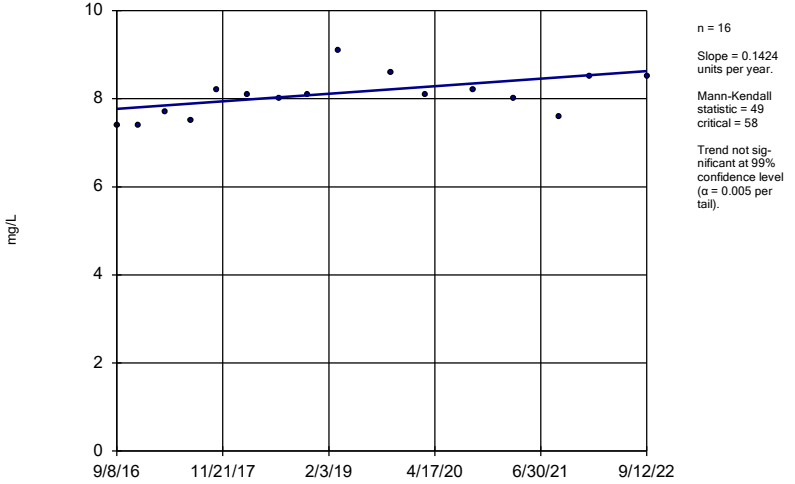
Constituent: Chloride, Total Analysis Run 10/17/2022 2:08 PM View: AIII Trend Test

Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.9.6.33 Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

DGWC-38



n = 16

Slope = 0.1424 units per year.

Mann-Kendall statistic = 49 critical = 58

Trend not significant at 99% confidence level (α = 0.005 per tail).

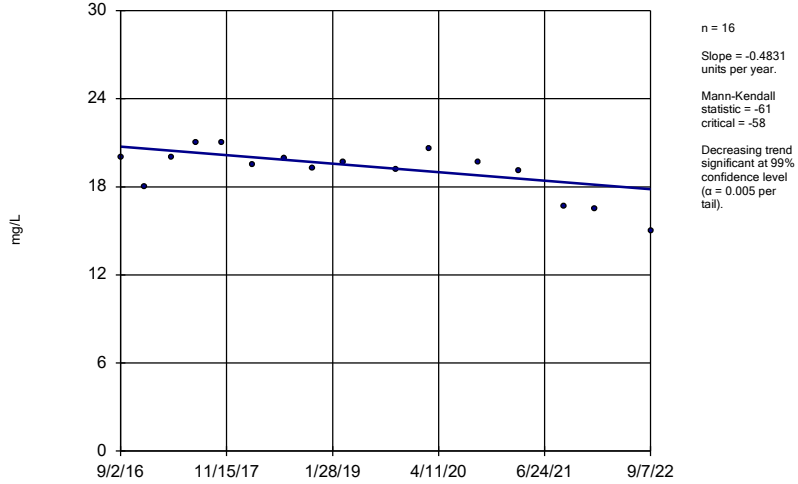
Constituent: Chloride, Total Analysis Run 10/17/2022 2:08 PM View: AIII Trend Test

Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.9.6.33 Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

DGWC-40



n = 16

Slope = -0.4831 units per year.

Mann-Kendall statistic = -61 critical = -58

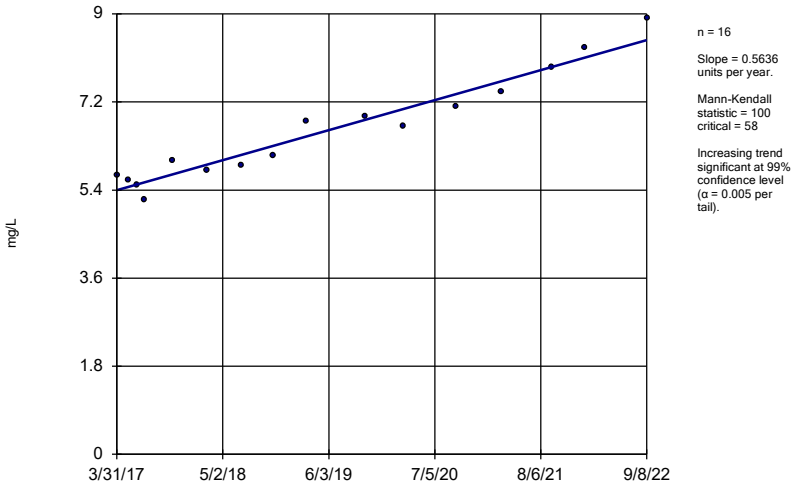
Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride, Total Analysis Run 10/17/2022 2:08 PM View: AIII Trend Test

Plant McDonough Client: Southern Company Data: McDonough AP

Sen's Slope Estimator

DGWC-67



n = 16

Slope = 0.5636 units per year.

Mann-Kendall statistic = 100 critical = 58

Increasing trend significant at 99% confidence level (α = 0.005 per tail).

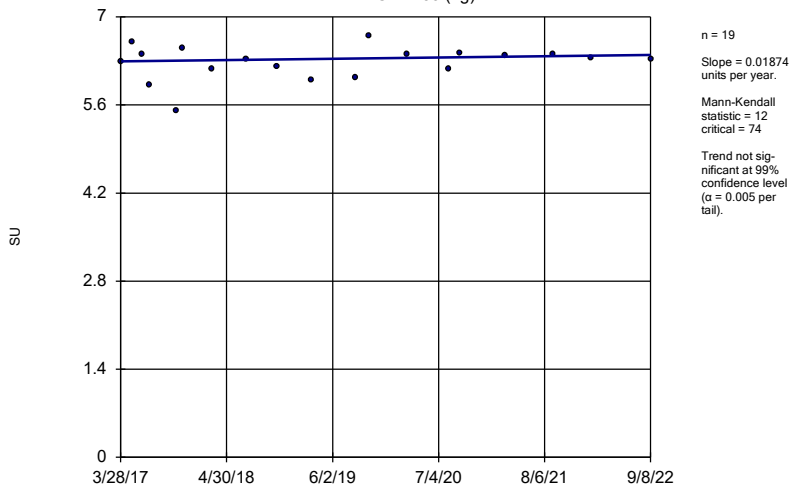
Constituent: Chloride, Total Analysis Run 10/17/2022 2:08 PM View: AIII Trend Test

Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.9.6.33 Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

DGWA-53 (bg)



n = 19

Slope = 0.01874 units per year.

Mann-Kendall statistic = 12 critical = 74

Trend not sig-nificant at 99% confidence level (α = 0.005 per tail).

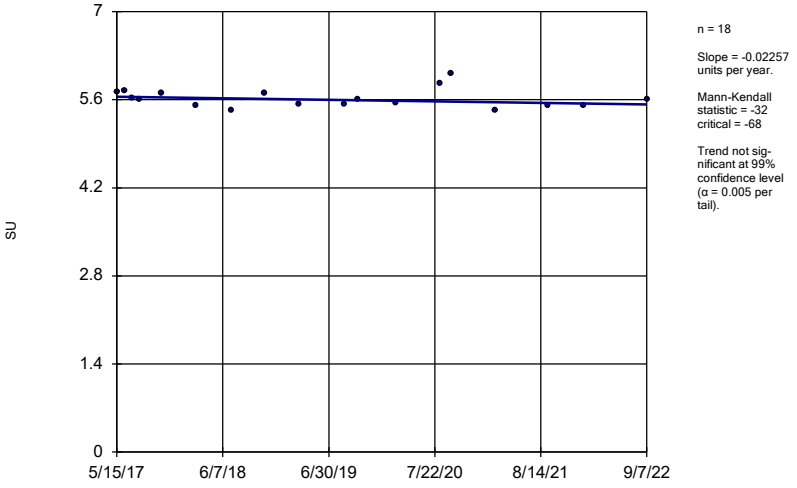
Constituent: pH, Field Analysis Run 10/17/2022 2:08 PM View: AIII Trend Test

Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.9.6.33 Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

DGWA-70A (bg)



n = 18

Slope = -0.02257 units per year.

Mann-Kendall statistic = -32 critical = -68

Trend not sig-nificant at 99% confidence level (α = 0.005 per tail).

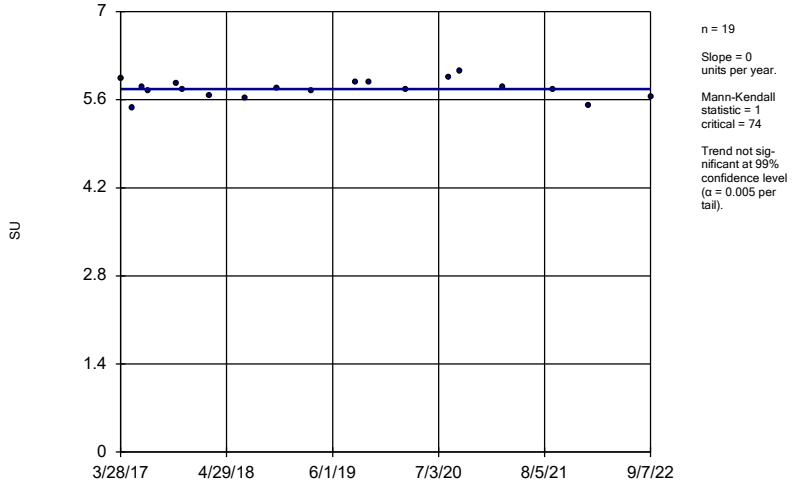
Constituent: pH, Field Analysis Run 10/17/2022 2:08 PM View: AIII Trend Test

Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.9.6.33 Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

DGWA-71 (bg)



n = 19

Slope = 0 units per year.

Mann-Kendall statistic = 1 critical = 74

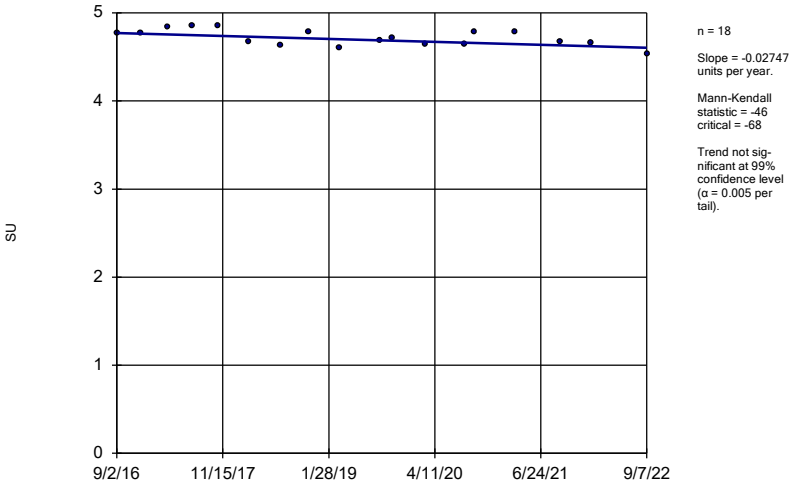
Trend not sig-nificant at 99% confidence level (α = 0.005 per tail).

Constituent: pH, Field Analysis Run 10/17/2022 2:08 PM View: AIII Trend Test

Plant McDonough Client: Southern Company Data: McDonough AP

Sen's Slope Estimator

DGWC-40



n = 18

Slope = -0.02747 units per year.

Mann-Kendall statistic = -46
critical = -68

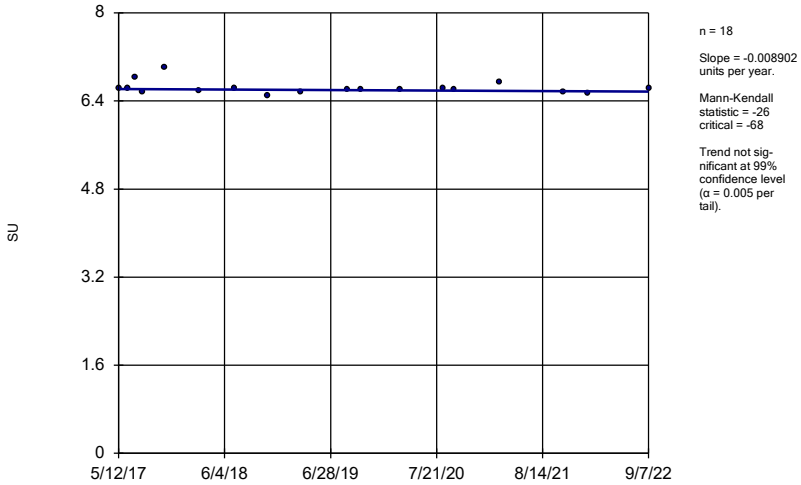
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: pH, Field Analysis Run 10/17/2022 2:08 PM View: AIII Trend Test
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.9.6.33 Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

DGWC-68A



n = 18

Slope = -0.008902 units per year.

Mann-Kendall statistic = -26
critical = -68

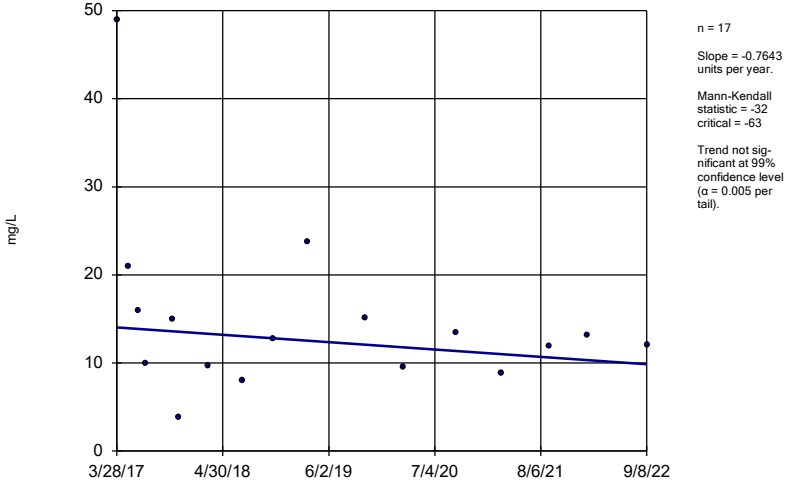
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: pH, Field Analysis Run 10/17/2022 2:08 PM View: AIII Trend Test
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.9.6.33 Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

DGWA-53 (bg)



n = 17

Slope = -0.7643 units per year.

Mann-Kendall statistic = -32
critical = -63

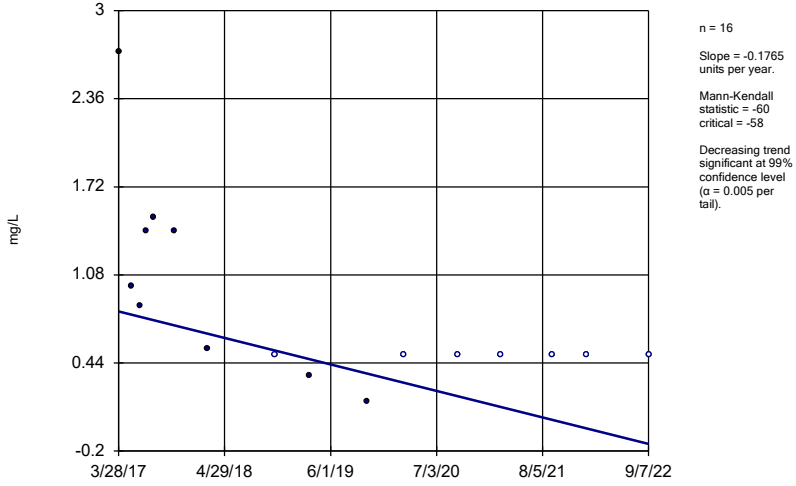
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate as SO4 Analysis Run 10/17/2022 2:08 PM View: AIII Trend Test
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.9.6.33 Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

DGWA-70A (bg)



n = 16

Slope = -0.1765 units per year.

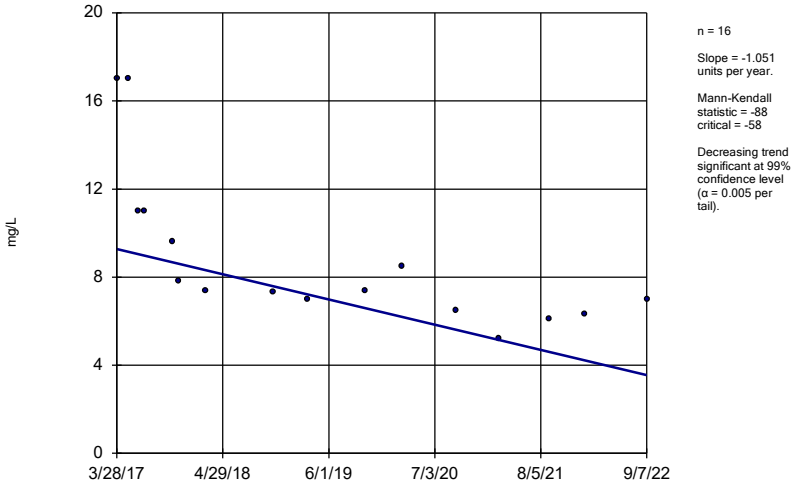
Mann-Kendall statistic = -60
critical = -58

Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate as SO4 Analysis Run 10/17/2022 2:08 PM View: AIII Trend Test
Plant McDonough Client: Southern Company Data: McDonough AP

Sen's Slope Estimator

DGWA-71 (bg)



n = 16

Slope = -1.051 units per year.

Mann-Kendall statistic = -88
critical = -58

Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

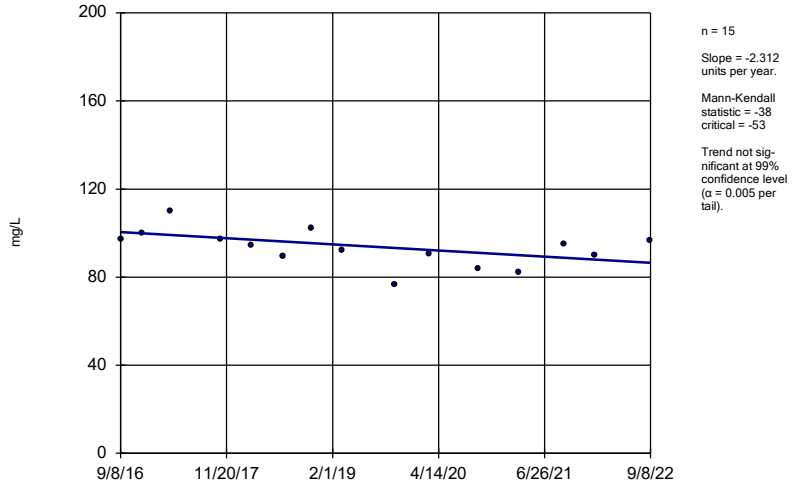
Constituent: Sulfate as SO4 Analysis Run 10/17/2022 2:08 PM View: AIII Trend Test

Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.9.6.33 Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

DGWC-37



n = 15

Slope = -2.312 units per year.

Mann-Kendall statistic = -38
critical = -53

Trend not significant at 99% confidence level (α = 0.005 per tail).

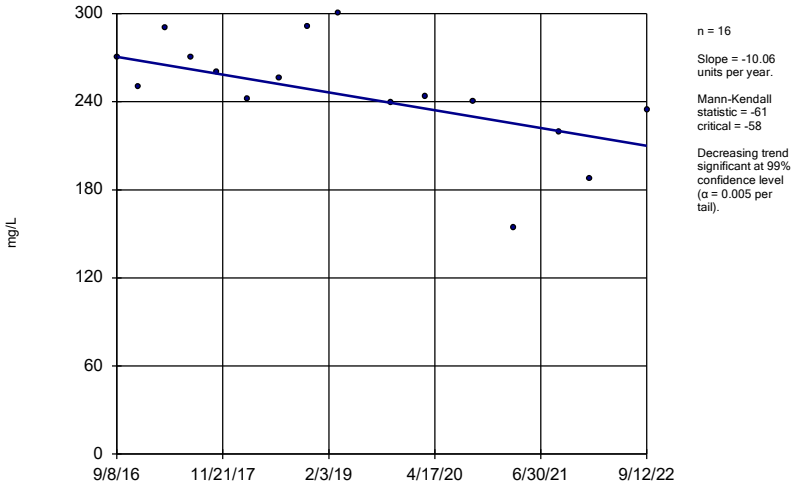
Constituent: Sulfate as SO4 Analysis Run 10/17/2022 2:08 PM View: AIII Trend Test

Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.9.6.33 Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

DGWC-38



n = 16

Slope = -10.06 units per year.

Mann-Kendall statistic = -61
critical = -58

Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

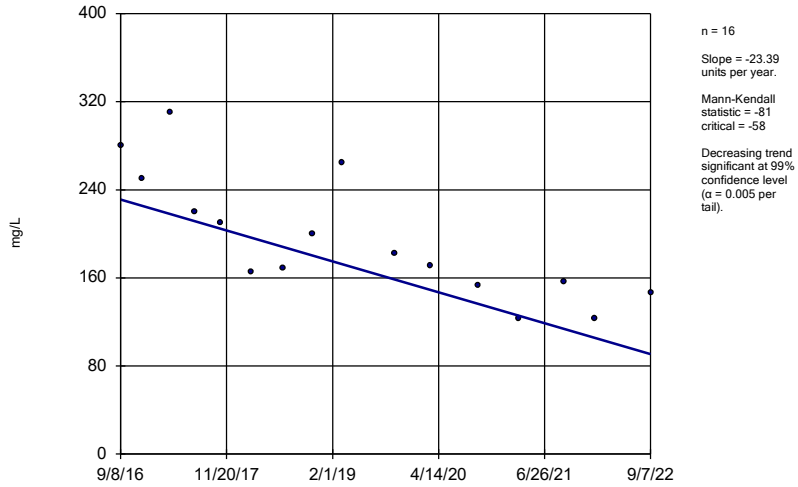
Constituent: Sulfate as SO4 Analysis Run 10/17/2022 2:08 PM View: AIII Trend Test

Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.9.6.33 Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

DGWC-39



n = 16

Slope = -23.39 units per year.

Mann-Kendall statistic = -81
critical = -58

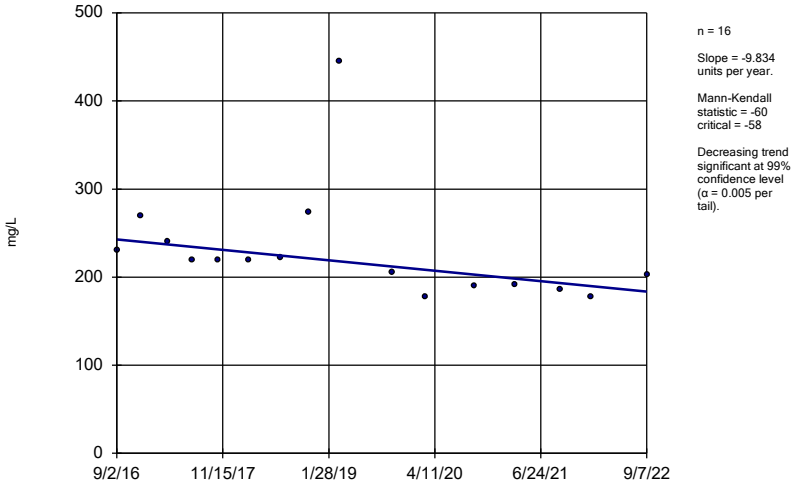
Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate as SO4 Analysis Run 10/17/2022 2:08 PM View: AIII Trend Test

Plant McDonough Client: Southern Company Data: McDonough AP

Sen's Slope Estimator

DGWC-40



n = 16

Slope = -9.834 units per year.

Mann-Kendall statistic = -60 critical = -58

Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

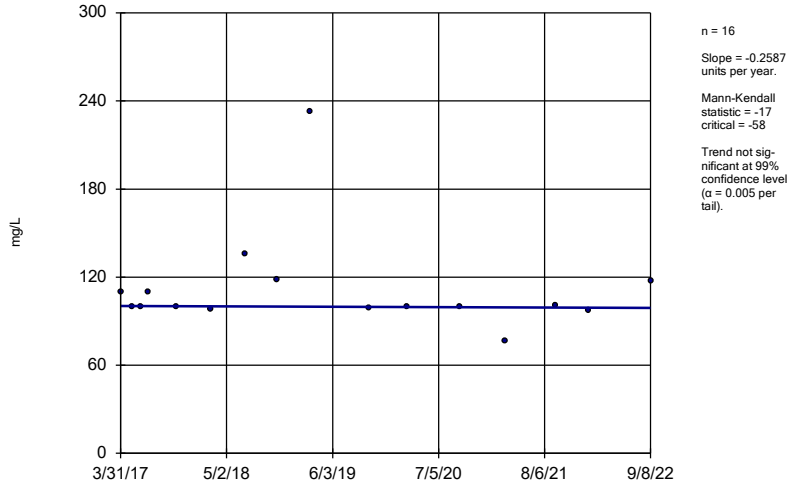
Constituent: Sulfate as SO4 Analysis Run 10/17/2022 2:08 PM View: AIII Trend Test

Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.9.6.33 Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

DGWC-67



n = 16

Slope = -0.2587 units per year.

Mann-Kendall statistic = -17 critical = -58

Trend not significant at 99% confidence level (α = 0.005 per tail).

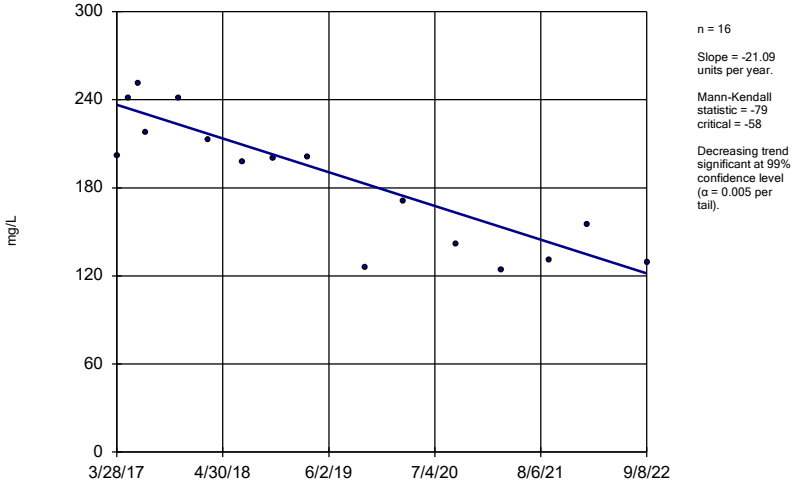
Constituent: Sulfate as SO4 Analysis Run 10/17/2022 2:08 PM View: AIII Trend Test

Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.9.6.33 Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

DGWA-53 (bg)



n = 16

Slope = -21.09 units per year.

Mann-Kendall statistic = -79 critical = -58

Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

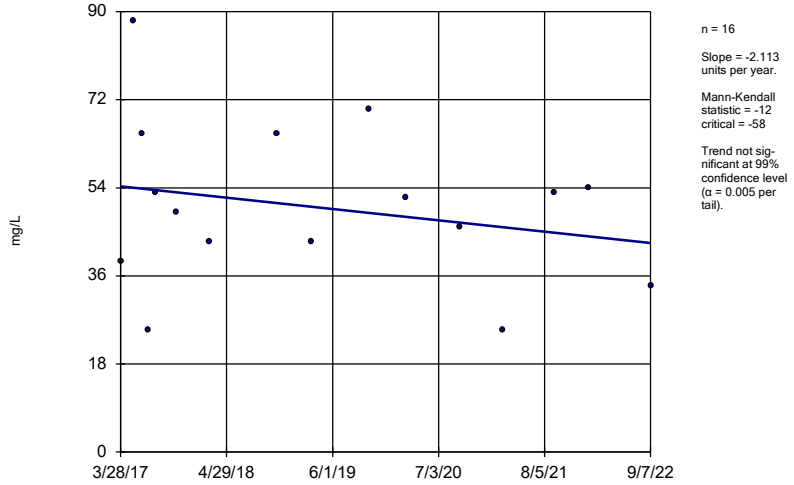
Constituent: Total Dissolved Solids [TDS] Analysis Run 10/17/2022 2:08 PM View: AIII Trend Test

Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.9.6.33 Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

DGWA-70A (bg)



n = 16

Slope = -2.113 units per year.

Mann-Kendall statistic = -12 critical = -58

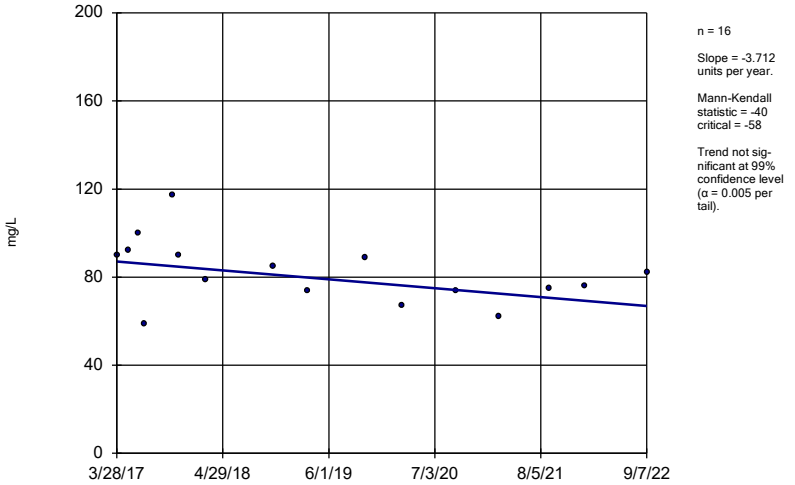
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Total Dissolved Solids [TDS] Analysis Run 10/17/2022 2:08 PM View: AIII Trend Test

Plant McDonough Client: Southern Company Data: McDonough AP

Sen's Slope Estimator

DGWA-71 (bg)



n = 16

Slope = -3.712 units per year.

Mann-Kendall statistic = -40
critical = -58

Trend not significant at 99% confidence level (α = 0.005 per tail).

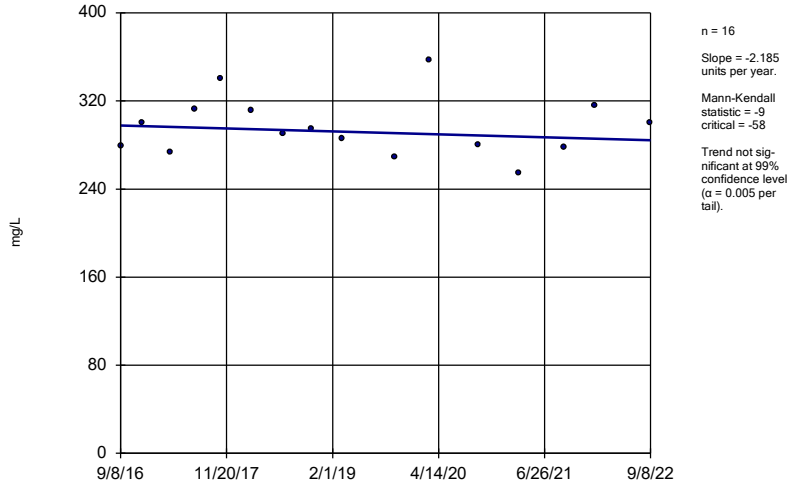
Constituent: Total Dissolved Solids [TDS] Analysis Run 10/17/2022 2:08 PM View: AIII Trend Test

Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.9.6.33 Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

DGWC-37



n = 16

Slope = -2.185 units per year.

Mann-Kendall statistic = -9
critical = -58

Trend not significant at 99% confidence level (α = 0.005 per tail).

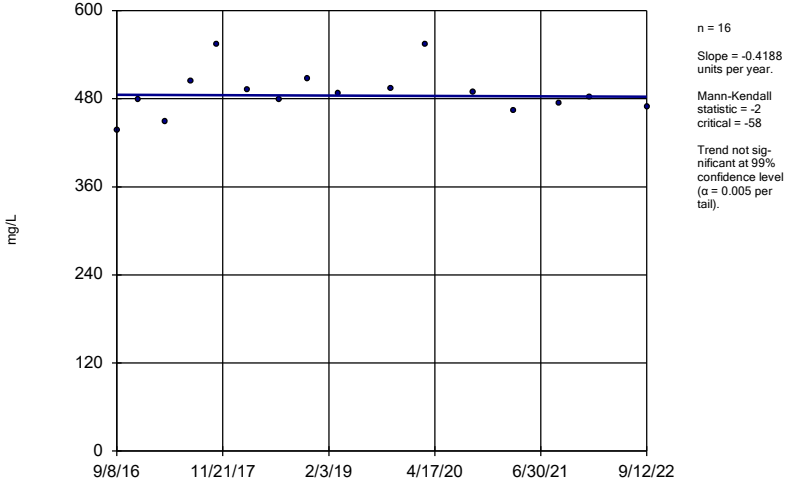
Constituent: Total Dissolved Solids [TDS] Analysis Run 10/17/2022 2:08 PM View: AIII Trend Test

Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.9.6.33 Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

DGWC-38



n = 16

Slope = -0.4188 units per year.

Mann-Kendall statistic = -2
critical = -58

Trend not significant at 99% confidence level (α = 0.005 per tail).

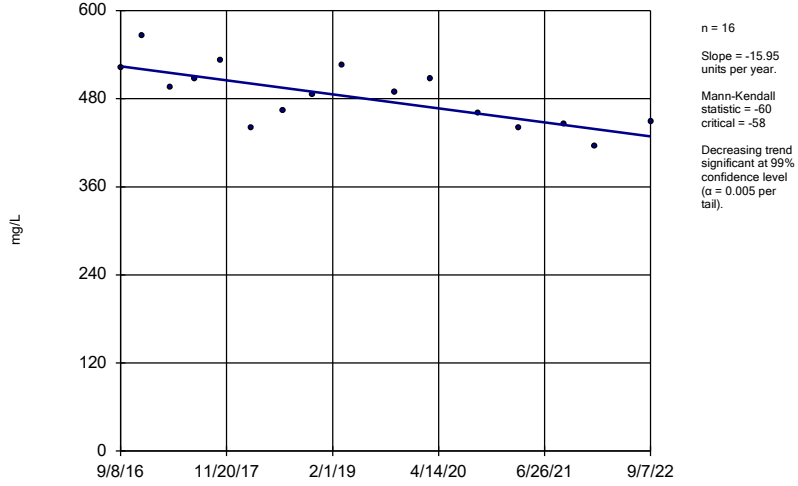
Constituent: Total Dissolved Solids [TDS] Analysis Run 10/17/2022 2:08 PM View: AIII Trend Test

Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.9.6.33 Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

DGWC-39



n = 16

Slope = -15.95 units per year.

Mann-Kendall statistic = -60
critical = -58

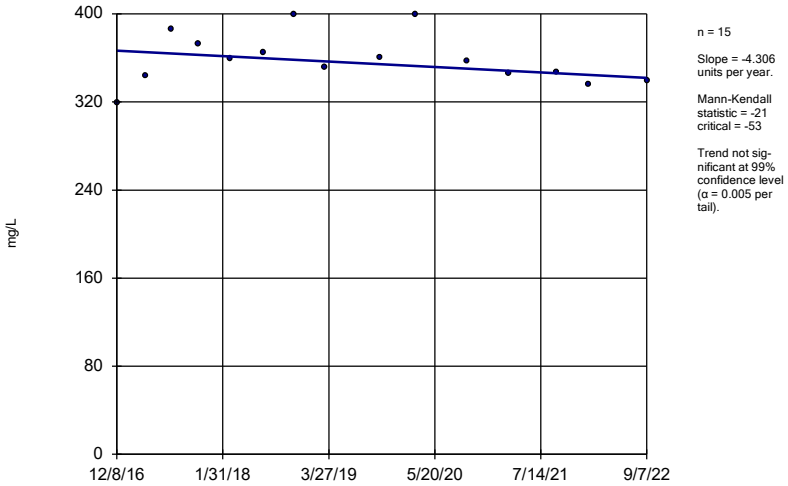
Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Total Dissolved Solids [TDS] Analysis Run 10/17/2022 2:08 PM View: AIII Trend Test

Plant McDonough Client: Southern Company Data: McDonough AP

Sen's Slope Estimator

DGWC-40



n = 15

Slope = -4.306 units per year.

Mann-Kendall statistic = -21 critical = -53

Trend not significant at 99% confidence level (α = 0.005 per tail).

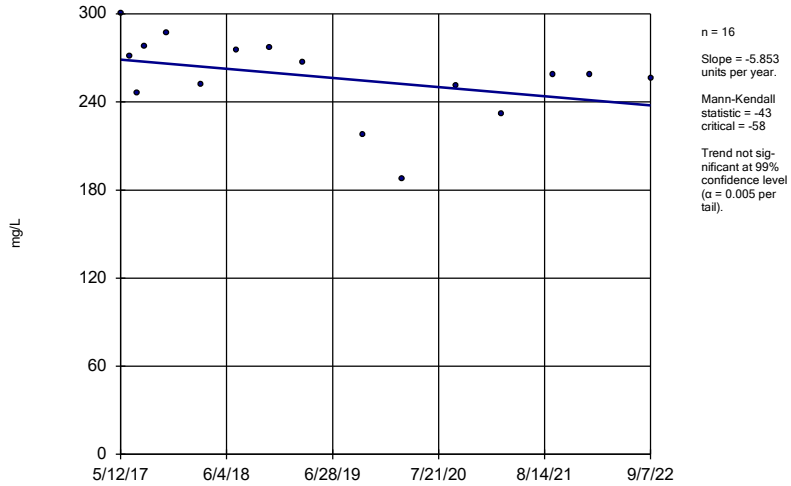
Constituent: Total Dissolved Solids [TDS] Analysis Run 10/17/2022 2:08 PM View: AIII Trend Test

Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.9.6.33 Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

DGWC-68A



n = 16

Slope = -5.853 units per year.

Mann-Kendall statistic = -43 critical = -58

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Total Dissolved Solids [TDS] Analysis Run 10/17/2022 2:08 PM View: AIII Trend Test

Plant McDonough Client: Southern Company Data: McDonough AP

FIGURE F.

Upper Tolerance Limit Summary Table

Plant McDonough Client: Southern Company Data: McDonough AP Printed 11/16/2022, 1:37 PM

Constituent	Well	Upper Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Antimony (mg/L)	n/a	0.003	n/a	n/a	n/a	50	n/a	n/a	82	n/a	n/a	0.07694	NP Inter(NDs)
Arsenic (mg/L)	n/a	0.0054	n/a	n/a	n/a	50	n/a	n/a	74	n/a	n/a	0.07694	NP Inter(normality)
Barium (mg/L)	n/a	0.19	n/a	n/a	n/a	50	n/a	n/a	0	n/a	n/a	0.07694	NP Inter(normality)
Beryllium (mg/L)	n/a	0.0009	n/a	n/a	n/a	51	n/a	n/a	58.82	n/a	n/a	0.0731	NP Inter(normality)
Cadmium (mg/L)	n/a	0.0005	n/a	n/a	n/a	50	n/a	n/a	94	n/a	n/a	0.07694	NP Inter(NDs)
Chromium (mg/L)	n/a	0.005	n/a	n/a	n/a	49	n/a	n/a	65.31	n/a	n/a	0.08099	NP Inter(normality)
Cobalt (mg/L)	n/a	0.0322	n/a	n/a	n/a	50	n/a	n/a	40	n/a	n/a	0.07694	NP Inter(normality)
Combined Radium 226 + 228 (pCi/L)	n/a	4.8	n/a	n/a	n/a	52	1.098	0.5322	0	None	sqrt(x)	0.05	Inter
Fluoride, total (mg/L)	n/a	0.42	n/a	n/a	n/a	54	n/a	n/a	50	n/a	n/a	0.06267	NP Inter(normality)
Lead (mg/L)	n/a	0.001	n/a	n/a	n/a	50	n/a	n/a	82	n/a	n/a	0.07694	NP Inter(NDs)
Lithium (mg/L)	n/a	0.03	n/a	n/a	n/a	50	n/a	n/a	36	n/a	n/a	0.07694	NP Inter(normality)
Mercury (mg/L)	n/a	0.0002	n/a	n/a	n/a	50	n/a	n/a	84	n/a	n/a	0.07694	NP Inter(NDs)
Molybdenum (mg/L)	n/a	0.0409	n/a	n/a	n/a	50	n/a	n/a	64	n/a	n/a	0.07694	NP Inter(normality)
Selenium (mg/L)	n/a	0.005	n/a	n/a	n/a	50	n/a	n/a	100	n/a	n/a	0.07694	NP Inter(NDs)
Thallium (mg/L)	n/a	0.001	n/a	n/a	n/a	50	n/a	n/a	96	n/a	n/a	0.07694	NP Inter(NDs)

FIGURE G.

PLANT MCDONOUGH ASH POND 1 GWPS TABLE				
Constituent Name	**MCL**	**CCR-Rule Specified**	**Background Limit**	**GWPS**
Antimony, Total (mg/L)	0.006		0.003	0.006
Arsenic, Total (mg/L)	0.01		0.0054	0.01
Barium, Total (mg/L)	2		0.19	2
Beryllium, Total (mg/L)	0.004		0.0009	0.004
Cadmium, Total (mg/L)	0.005		0.0005	0.005
Chromium, Total (mg/L)	0.1		0.005	0.1
Cobalt, Total (mg/L)		0.006	0.032	0.032
Combined Radium, Total (pCi/L)	5		4.8	5
Fluoride, Total (mg/L)	4		0.42	4
Lead, Total (mg/L)		0.015	0.001	0.015
Lithium, Total (mg/L)		0.04	0.03	0.04
Mercury, Total (mg/L)	0.002		0.0002	0.002
Molybdenum, Total (mg/L)		0.1	0.041	0.1
Selenium, Total (mg/L)	0.05		0.005	0.05
Thallium, Total (mg/L)	0.002		0.001	0.002

**Highlighted cells indicated Background is higher than MCLs or CCR-Rule*

**MCL = Maximum Contaminant Level*

**CCR = Coal Combustion Residual*

**GWPS = Groundwater Protection Standard*

FIGURE H.

Confidence Intervals - Significant Results

Plant McDonough Client: Southern Company Data: McDonough AP Printed 11/18/2022, 1:02 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Arsenic (mg/L)	**DGWC-69**	**0.03677**	**0.01314**	**0.01**	**Yes**	**19**	**0.03285**	**0.03918**	**0**	**None**	**ln(x)**	**0.01**	**Param.**
Cobalt (mg/L)	**DGWC-40**	**0.04503**	**0.03796**	**0.032**	**Yes**	**17**	**0.04149**	**0.005638**	**0**	**None**	**No**	**0.01**	**Param.**
Molybdenum (mg/L)	**DGWC-68A**	**0.2224**	**0.1962**	**0.1**	**Yes**	**17**	**0.2096**	**0.02181**	**0**	**None**	**x^(1/3)**	**0.01**	**Param.**

Confidence Intervals - All Results

Plant McDonough Client: Southern Company Data: McDonough AP Printed 11/18/2022, 1:02 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Antimony (mg/L)	B-100	0.003	0.0013	0.006	No	6	0.0025	0.0007849	66.67	None	No	0.0155	NP (NDs)
Antimony (mg/L)	B-105D	0.0082	0.00069	0.006	No	5	0.003578	0.002771	60	None	No	0.031	NP (NDs)
Antimony (mg/L)	B-112D	0.003	0.00041	0.006	No	4	0.002353	0.001295	75	None	No	0.0625	NP (NDs)
Antimony (mg/L)	B-113D	0.003	0.0021	0.006	No	4	0.002775	0.00045	75	None	No	0.0625	NP (NDs)
Antimony (mg/L)	B-62	0.003	0.00046	0.006	No	9	0.002718	0.0008467	88.89	None	No	0.002	NP (NDs)
Antimony (mg/L)	DGWC-40	0.003	0.00033	0.006	No	16	0.002833	0.0006675	93.75	None	No	0.01	NP (NDs)
Antimony (mg/L)	DGWC-67	0.003	0.0023	0.006	No	16	0.002656	0.0008246	81.25	None	No	0.01	NP (NDs)
Antimony (mg/L)	DGWC-68A	0.003	0.0008	0.006	No	16	0.002695	0.000838	87.5	None	No	0.01	NP (NDs)
Antimony (mg/L)	DGWC-69	0.003	0.0019	0.006	No	17	0.002729	0.0006469	82.35	None	No	0.01	NP (NDs)
Arsenic (mg/L)	B-105D	0.0051	0.0025	0.01	No	5	0.00404	0.001361	40	None	No	0.031	NP (normality)
Arsenic (mg/L)	B-112D	0.005	0.00078	0.01	No	4	0.003945	0.00211	50	None	No	0.0625	NP (normality)
Arsenic (mg/L)	B-113D	0.005	0.0018	0.01	No	4	0.0042	0.0016	75	None	No	0.0625	NP (NDs)
Arsenic (mg/L)	B-62	0.005	0.0033	0.01	No	9	0.004811	0.0005667	88.89	None	No	0.002	NP (NDs)
Arsenic (mg/L)	DGWC-37	0.005	0.0019	0.01	No	17	0.004818	0.0007519	94.12	None	No	0.01	NP (NDs)
Arsenic (mg/L)	DGWC-38	0.005	0.0005	0.01	No	17	0.004735	0.001091	94.12	None	No	0.01	NP (NDs)
Arsenic (mg/L)	DGWC-39	0.005	0.00075	0.01	No	17	0.003069	0.002132	52.94	None	No	0.01	NP (NDs)
Arsenic (mg/L)	DGWC-40	0.005	0.003	0.01	No	17	0.004138	0.001675	76.47	None	No	0.01	NP (NDs)
Arsenic (mg/L)	DGWC-67	0.005	0.0033	0.01	No	17	0.004384	0.00148	82.35	None	No	0.01	NP (NDs)
Arsenic (mg/L)	DGWC-68A	0.005	0.0016	0.01	No	17	0.0048	0.0008246	94.12	None	No	0.01	NP (NDs)
Arsenic (mg/L)	**DGWC-69**	**0.03677**	**0.01314**	**0.01**	**Yes**	**19**	**0.03285**	**0.03918**	**0**	**None**	**ln(x)**	**0.01**	**Param.**
Barium (mg/L)	B-100	0.02353	0.01731	2	No	6	0.02067	0.002875	0	None	x^4	0.01	Param.
Barium (mg/L)	B-105D	0.04396	0.02924	2	No	5	0.0366	0.004393	0	None	No	0.01	Param.
Barium (mg/L)	B-112D	0.026	0.0026	2	No	4	0.0088	0.01147	0	None	No	0.0625	NP (normality)
Barium (mg/L)	B-113D	0.0051	0.0032	2	No	4	0.00455	0.000911	0	None	No	0.0625	NP (selected)
Barium (mg/L)	B-62	0.02611	0.01944	2	No	9	0.02278	0.003456	0	None	No	0.01	Param.
Barium (mg/L)	DGWC-37	0.1078	0.08781	2	No	17	0.09782	0.01597	0	None	No	0.01	Param.
Barium (mg/L)	DGWC-38	0.03344	0.03161	2	No	17	0.03242	0.001701	0	None	x^5	0.01	Param.
Barium (mg/L)	DGWC-39	0.09609	0.08532	2	No	17	0.09071	0.008597	0	None	No	0.01	Param.
Barium (mg/L)	DGWC-40	0.019	0.0168	2	No	17	0.01793	0.002504	0	None	No	0.01	NP (normality)
Barium (mg/L)	DGWC-67	0.1105	0.09714	2	No	17	0.1038	0.01067	0	None	No	0.01	Param.
Barium (mg/L)	DGWC-68A	0.092	0.086	2	No	17	0.08978	0.00419	0	None	No	0.01	NP (normality)
Barium (mg/L)	DGWC-69	0.09793	0.06626	2	No	18	0.08209	0.02617	0	None	No	0.01	Param.
Beryllium (mg/L)	B-100	0.0005956	0.0003544	0.004	No	6	0.000475	0.00008781	0	None	No	0.01	Param.
Beryllium (mg/L)	B-62	0.0005	0.00009	0.004	No	10	0.0001948	0.0001623	20	None	No	0.011	NP (normality)
Beryllium (mg/L)	DGWC-37	0.0005	0.00007	0.004	No	17	0.0003246	0.0002163	58.82	None	No	0.01	NP (NDs)
Beryllium (mg/L)	DGWC-38	0.0005	0.000058	0.004	No	17	0.000474	0.0001072	94.12	None	No	0.01	NP (NDs)
Beryllium (mg/L)	DGWC-40	0.00331	0.002937	0.004	No	17	0.003124	0.0002969	5.882	None	No	0.01	Param.
Beryllium (mg/L)	DGWC-68A	0.0005	0.000084	0.004	No	17	0.0004497	0.000142	88.24	None	No	0.01	NP (NDs)
Beryllium (mg/L)	DGWC-69	0.0005	0.000061	0.004	No	18	0.0003298	0.0002196	61.11	None	No	0.01	NP (NDs)
Cadmium (mg/L)	B-100	0.00059	0.00027	0.005	No	6	0.00038	0.0001628	0	None	No	0.0155	NP (normality)
Cadmium (mg/L)	B-113D	0.0005	0.00019	0.005	No	4	0.0004225	0.000155	75	None	No	0.0625	NP (NDs)
Cadmium (mg/L)	DGWC-37	0.0005	0.0002	0.005	No	17	0.0004	0.0001639	70.59	None	No	0.01	NP (NDs)
Cadmium (mg/L)	DGWC-38	0.0005	0.00017	0.005	No	17	0.0003194	0.0002461	17.65	None	No	0.01	NP (normality)
Cadmium (mg/L)	DGWC-40	0.0008771	0.0007382	0.005	No	17	0.0008076	0.0001108	11.76	None	No	0.01	Param.
Cadmium (mg/L)	DGWC-67	0.00053	0.00021	0.005	No	17	0.0004259	0.0001426	70.59	None	No	0.01	NP (NDs)
Cadmium (mg/L)	DGWC-68A	0.0002439	0.0001408	0.005	No	17	0.0003747	0.0002229	47.06	Kaplan-Meier	sqrt(x)	0.01	Param.
Cadmium (mg/L)	DGWC-69	0.0005	0.0002	0.005	No	18	0.0004261	0.0001436	77.78	Kaplan-Meier	No	0.01	NP (NDs)
Chromium (mg/L)	B-100	0.005	0.00057	0.1	No	6	0.003585	0.002195	66.67	None	No	0.0155	NP (NDs)
Chromium (mg/L)	B-105D	0.005	0.0012	0.1	No	5	0.00424	0.001699	80	None	No	0.031	NP (NDs)
Chromium (mg/L)	B-112D	0.00182	0.0005715	0.1	No	4	0.003062	0.002248	50	Kaplan-Meier	sqrt(x)	0.01	Param.
Chromium (mg/L)	B-113D	0.005	0.0011	0.1	No	4	0.004025	0.00195	75	Kaplan-Meier	No	0.0625	NP (NDs)
Chromium (mg/L)	B-62	0.005	0.00098	0.1	No	9	0.004553	0.00134	88.89	Kaplan-Meier	No	0.002	NP (NDs)
Chromium (mg/L)	DGWC-37	0.005	0.0007	0.1	No	17	0.004487	0.001448	88.24	None	No	0.01	NP (NDs)
Chromium (mg/L)	DGWC-38	0.005	0.00092	0.1	No	17	0.004227	0.001724	82.35	None	No	0.01	NP (NDs)
Chromium (mg/L)	DGWC-40	0.005	0.00061	0.1	No	17	0.002589	0.002108	41.18	None	No	0.01	NP (normality)

Confidence Intervals - All Results

Plant McDonough Client: Southern Company Data: McDonough AP Printed 11/18/2022, 1:02 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Chromium (mg/L)	DGWC-67	0.005	0.0014	0.1	No	17	0.004028	0.001814	76.47	None	No	0.01	NP (NDs)
Chromium (mg/L)	DGWC-68A	0.005	0.0005	0.1	No	17	0.004735	0.001091	94.12	None	No	0.01	NP (NDs)
Chromium (mg/L)	DGWC-69	0.005	0.0012	0.1	No	18	0.003888	0.001851	72.22	None	No	0.01	NP (NDs)
Cobalt (mg/L)	B-100	0.087	0.028	0.032	No	8	0.05125	0.02684	0	None	No	0.004	NP (normality)
Cobalt (mg/L)	B-105D	0.01197	0.001108	0.032	No	5	0.00654	0.003242	0	None	No	0.01	Param.
Cobalt (mg/L)	B-112D	0.005	0.00054	0.032	No	4	0.00326	0.002163	50	None	No	0.0625	NP (selected)
Cobalt (mg/L)	B-62	0.005	0.00031	0.032	No	10	0.004061	0.00198	80	None	No	0.011	NP (NDs)
Cobalt (mg/L)	DGWC-37	0.005	0.0005	0.032	No	17	0.004182	0.001821	82.35	None	No	0.01	NP (NDs)
Cobalt (mg/L)	DGWC-38	0.0017	0.0015	0.032	No	17	0.002259	0.002165	11.76	None	No	0.01	NP (normality)
Cobalt (mg/L)	DGWC-39	0.0071	0.0059	0.032	No	17	0.006594	0.001071	11.76	None	No	0.01	NP (normality)
Cobalt (mg/L)	**DGWC-40**	**0.04503**	**0.03796**	**0.032**	**Yes**	**17**	**0.04149**	**0.005638**	**0**	**None**	**No**	**0.01**	**Param.**
Cobalt (mg/L)	DGWC-67	0.0041	0.0012	0.032	No	17	0.002847	0.002442	11.76	None	No	0.01	NP (normality)
Cobalt (mg/L)	DGWC-68A	0.005	0.0015	0.032	No	17	0.004253	0.001679	82.35	None	No	0.01	NP (NDs)
Cobalt (mg/L)	DGWC-69	0.005	0.0022	0.032	No	18	0.003944	0.001641	66.67	None	No	0.01	NP (NDs)
Combined Radium 226 + 228 (pCi/L)	B-100	1.3	0.2178	5	No	6	0.7588	0.3938	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	B-105D	3.252	1	5	No	5	2.126	0.6718	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	B-112D	0.945	0.241	5	No	4	0.6698	0.3008	0	None	No	0.0625	NP (selected)
Combined Radium 226 + 228 (pCi/L)	B-113D	1.383	0.1014	5	No	4	0.742	0.2822	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	B-62	1.964	1.348	5	No	8	1.656	0.2907	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	DGWC-37	1.002	0.5303	5	No	17	0.7924	0.4146	0	None	sqrt(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	DGWC-38	1.004	0.339	5	No	17	0.7331	0.5821	0	None	sqrt(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	DGWC-39	1.265	0.6155	5	No	17	0.9404	0.5186	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	DGWC-40	1.515	0.6792	5	No	17	1.097	0.6673	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	DGWC-67	0.9662	0.4851	5	No	17	0.7256	0.3839	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	DGWC-68A	1.238	0.4841	5	No	17	0.9218	0.6257	0	None	sqrt(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	DGWC-69	1.801	1.18	5	No	18	1.49	0.5135	0	None	No	0.01	Param.
Fluoride, total (mg/L)	B-100	0.072	0.05	4	No	6	0.05367	0.008981	83.33	None	No	0.0155	NP (NDs)
Fluoride, total (mg/L)	B-105D	0.3186	0.0337	4	No	5	0.1282	0.1089	0	None	ln(x)	0.01	Param.
Fluoride, total (mg/L)	B-112D	0.3789	0.2011	4	No	4	0.29	0.03916	0	None	No	0.01	Param.
Fluoride, total (mg/L)	B-113D	1.132	0.5282	4	No	4	0.83	0.1329	0	None	No	0.01	Param.
Fluoride, total (mg/L)	B-62	0.43	0.093	4	No	8	0.1678	0.1145	0	None	No	0.004	NP (normality)
Fluoride, total (mg/L)	DGWC-37	0.084	0.054	4	No	18	0.09767	0.07404	5.556	None	No	0.01	NP (normality)
Fluoride, total (mg/L)	DGWC-38	0.13	0.058	4	No	18	0.1201	0.1064	11.11	None	No	0.01	NP (normality)
Fluoride, total (mg/L)	DGWC-39	0.17	0.085	4	No	18	0.1517	0.1134	5.556	None	No	0.01	NP (normality)
Fluoride, total (mg/L)	DGWC-40	0.2755	0.1304	4	No	18	0.2286	0.1538	5.556	None	ln(x)	0.01	Param.
Fluoride, total (mg/L)	DGWC-67	0.07	0.038	4	No	18	0.08628	0.1147	50	None	No	0.01	NP (normality)
Fluoride, total (mg/L)	DGWC-68A	0.15	0.076	4	No	18	0.1471	0.1237	5.556	None	No	0.01	NP (normality)
Fluoride, total (mg/L)	DGWC-69	0.1633	0.08908	4	No	19	0.1311	0.06853	5.263	None	sqrt(x)	0.01	Param.
Lead (mg/L)	B-100	0.001	0.000088	0.015	No	6	0.0005797	0.0004622	50	None	No	0.0155	NP (normality)
Lead (mg/L)	B-105D	0.001	0.000052	0.015	No	5	0.0008104	0.000424	80	None	No	0.031	NP (NDs)
Lead (mg/L)	B-112D	0.001	0.00014	0.015	No	4	0.000785	0.00043	75	None	No	0.0625	NP (NDs)
Lead (mg/L)	B-113D	0.001	0.00014	0.015	No	4	0.000785	0.00043	75	None	No	0.0625	NP (NDs)
Lead (mg/L)	DGWC-37	0.0014	0.000061	0.015	No	17	0.0009683	0.0002531	88.24	None	No	0.01	NP (NDs)
Lead (mg/L)	DGWC-38	0.001	0.0001	0.015	No	17	0.0007362	0.0004217	70.59	None	No	0.01	NP (NDs)
Lead (mg/L)	DGWC-39	0.001	0.00022	0.015	No	17	0.0009	0.0002834	88.24	None	No	0.01	NP (NDs)
Lead (mg/L)	DGWC-40	0.001	0.00007	0.015	No	17	0.0005838	0.0004581	52.94	None	No	0.01	NP (NDs)
Lead (mg/L)	DGWC-67	0.001	0.00025	0.015	No	17	0.0007908	0.000391	76.47	None	No	0.01	NP (NDs)
Lead (mg/L)	DGWC-68A	0.001	0.00035	0.015	No	17	0.0009069	0.0002676	88.24	None	No	0.01	NP (NDs)
Lead (mg/L)	DGWC-69	0.001	0.0001	0.015	No	18	0.0007005	0.0004363	66.67	None	No	0.01	NP (NDs)
Lithium (mg/L)	B-100	0.002815	0.001518	0.04	No	6	0.002167	0.0004719	0	None	No	0.01	Param.
Lithium (mg/L)	B-105D	0.0152	0.0124	0.04	No	5	0.0138	0.0008367	0	None	No	0.01	Param.
Lithium (mg/L)	B-112D	0.004947	0.003353	0.04	No	4	0.00415	0.0003512	0	None	No	0.01	Param.
Lithium (mg/L)	B-113D	0.01663	0.005079	0.04	No	4	0.0121	0.002511	0	None	x^2	0.01	Param.
Lithium (mg/L)	B-62	0.03	0.0078	0.04	No	9	0.01094	0.007166	11.11	None	No	0.002	NP (normality)
Lithium (mg/L)	DGWC-37	0.03	0.002	0.04	No	17	0.008794	0.01213	23.53	None	No	0.01	NP (normality)

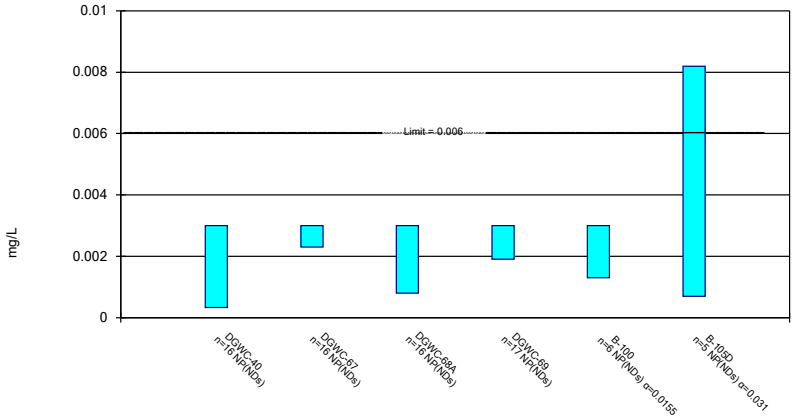
Confidence Intervals - All Results

Plant McDonough Client: Southern Company Data: McDonough AP Printed 11/18/2022, 1:02 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Lithium (mg/L)	DGWC-38	0.0035	0.0029	0.04	No	17	0.004735	0.006516	5.882	None	No	0.01	NP (normality)
Lithium (mg/L)	DGWC-40	0.0027	0.0022	0.04	No	17	0.005588	0.009191	11.76	None	No	0.01	NP (normality)
Lithium (mg/L)	DGWC-67	0.005	0.0043	0.04	No	17	0.006147	0.006156	5.882	None	No	0.01	NP (normality)
Lithium (mg/L)	DGWC-68A	0.03	0.0016	0.04	No	17	0.02661	0.009562	88.24	None	No	0.01	NP (NDs)
Lithium (mg/L)	DGWC-69	0.0032	0.0024	0.04	No	18	0.004306	0.006423	5.556	None	No	0.01	NP (normality)
Mercury (mg/L)	B-100	0.0002	0.00011	0.002	No	5	0.000182	0.00004025	80	None	No	0.031	NP (NDs)
Mercury (mg/L)	B-105D	0.0001737	0.00005334	0.002	No	4	0.0001567	0.00005443	50	Kaplan-Meier	No	0.01	Param.
Mercury (mg/L)	DGWC-37	0.0002	0.000091	0.002	No	16	0.0001747	0.00005512	81.25	None	No	0.01	NP (NDs)
Mercury (mg/L)	DGWC-38	0.0002	0.000085	0.002	No	16	0.0001747	0.00005506	81.25	None	No	0.01	NP (NDs)
Mercury (mg/L)	DGWC-39	0.0002	0.000059	0.002	No	16	0.0001912	0.00003525	93.75	None	No	0.01	NP (NDs)
Mercury (mg/L)	DGWC-40	0.0002	0.00009	0.002	No	16	0.0001737	0.00005738	81.25	None	No	0.01	NP (NDs)
Mercury (mg/L)	DGWC-67	0.0002	0.00007	0.002	No	16	0.0001919	0.0000325	93.75	None	No	0.01	NP (NDs)
Mercury (mg/L)	DGWC-68A	0.0002	0.00007	0.002	No	16	0.0001919	0.0000325	93.75	None	No	0.01	NP (NDs)
Mercury (mg/L)	DGWC-69	0.0002	0.00007	0.002	No	17	0.0001924	0.00003153	94.12	None	No	0.01	NP (NDs)
Molybdenum (mg/L)	B-105D	0.01	0.0011	0.1	No	5	0.00822	0.00398	80	None	No	0.031	NP (NDs)
Molybdenum (mg/L)	B-112D	0.04062	0.02388	0.1	No	4	0.03225	0.003686	0	None	No	0.01	Param.
Molybdenum (mg/L)	B-113D	0.0981	0.0231	0.1	No	5	0.0606	0.02238	0	None	No	0.01	Param.
Molybdenum (mg/L)	DGWC-38	0.01	0.00099	0.1	No	17	0.004752	0.004527	41.18	None	No	0.01	NP (normality)
Molybdenum (mg/L)	**DGWC-68A**	**0.2224**	**0.1962**	**0.1**	**Yes**	**17**	**0.2096**	**0.02181**	**0**	**None**	**x^(1/3)**	**0.01**	**Param.**
Molybdenum (mg/L)	DGWC-69	0.0117	0.0057	0.1	No	18	0.009783	0.005661	5.556	None	No	0.01	NP (normality)
Selenium (mg/L)	B-100	0.005	0.0019	0.05	No	6	0.004483	0.001266	83.33	Kaplan-Meier	No	0.0155	NP (NDs)
Selenium (mg/L)	DGWC-38	0.005	0.0019	0.05	No	17	0.004818	0.0007519	94.12	None	No	0.01	NP (NDs)
Selenium (mg/L)	DGWC-40	0.00316	0.001836	0.05	No	17	0.003582	0.002276	23.53	Kaplan-Meier	ln(x)	0.01	Param.
Selenium (mg/L)	DGWC-67	0.005	0.0027	0.05	No	17	0.004865	0.0005578	94.12	Kaplan-Meier	No	0.01	NP (NDs)
Selenium (mg/L)	DGWC-68A	0.005	0.0017	0.05	No	17	0.004806	0.0008004	94.12	Kaplan-Meier	No	0.01	NP (NDs)
Thallium (mg/L)	DGWC-38	0.001	0.0001	0.002	No	17	0.0005888	0.0004499	52.94	None	No	0.01	NP (NDs)
Thallium (mg/L)	DGWC-39	0.001	0.00009	0.002	No	17	0.0007312	0.0004293	70.59	None	No	0.01	NP (NDs)
Thallium (mg/L)	DGWC-40	0.001	0.000068	0.002	No	17	0.0007252	0.0004389	70.59	None	No	0.01	NP (NDs)
Thallium (mg/L)	DGWC-68A	0.001	0.00015	0.002	No	17	0.00095	0.0002062	94.12	None	No	0.01	NP (NDs)

Non-Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted.

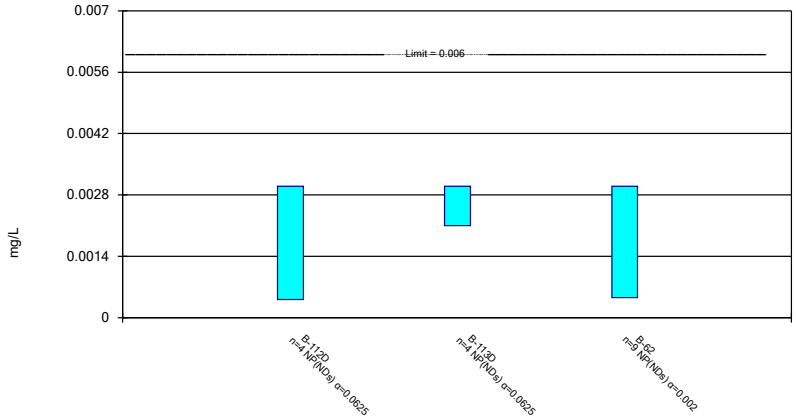


Constituent: Antimony Analysis Run 11/18/2022 12:34 PM View: AP 1 Confidence Intervals
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.9.6.35 Groundwater Stats Consulting. UG

Non-Parametric Confidence Interval

Compliance Limit is not exceeded.

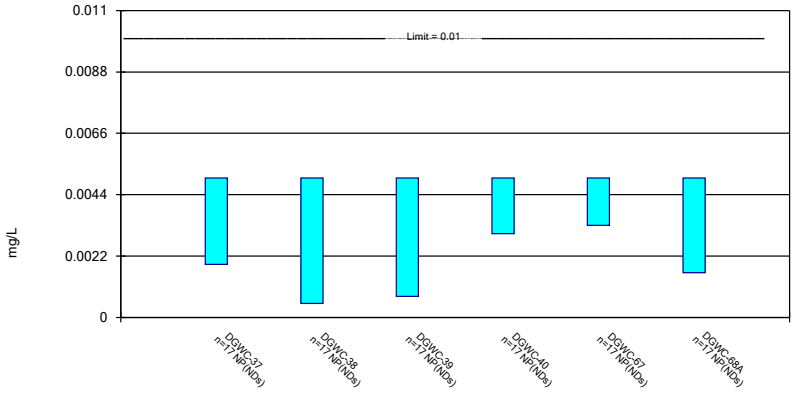


Constituent: Antimony Analysis Run 11/18/2022 12:34 PM View: AP 1 Confidence Intervals
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.9.6.35 Groundwater Stats Consulting. UG

Non-Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01.

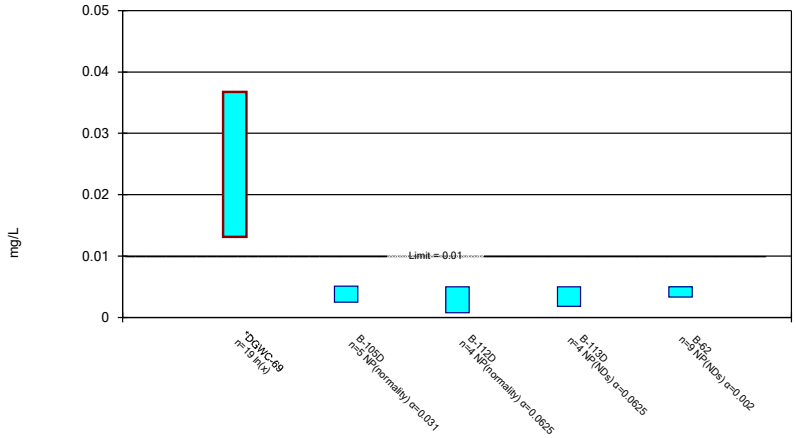


Constituent: Arsenic Analysis Run 11/18/2022 12:34 PM View: AP 1 Confidence Intervals
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.9.6.35 Groundwater Stats Consulting. UG

Parametric and Non-Parametric (NP) Confidence Interval

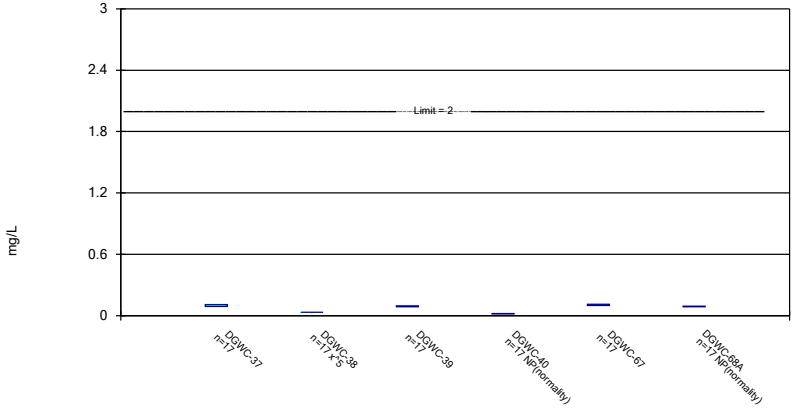
Compliance limit is exceeded.* Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Arsenic Analysis Run 11/18/2022 12:34 PM View: AP 1 Confidence Intervals
Plant McDonough Client: Southern Company Data: McDonough AP

Parametric and Non-Parametric (NP) Confidence Interval

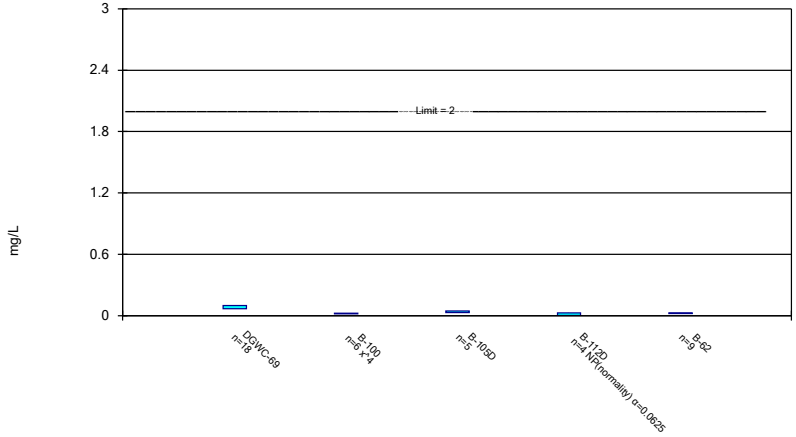
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Barium Analysis Run 11/18/2022 12:34 PM View: AP 1 Confidence Intervals
Plant McDonough Client: Southern Company Data: McDonough AP

Parametric and Non-Parametric (NP) Confidence Interval

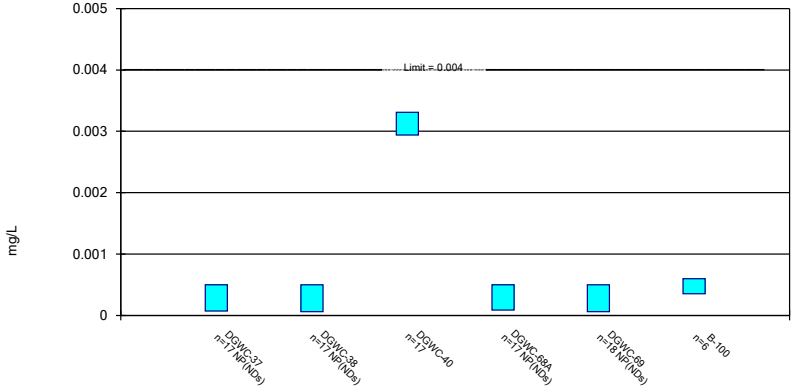
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Barium Analysis Run 11/18/2022 12:34 PM View: AP 1 Confidence Intervals
Plant McDonough Client: Southern Company Data: McDonough AP

Parametric and Non-Parametric (NP) Confidence Interval

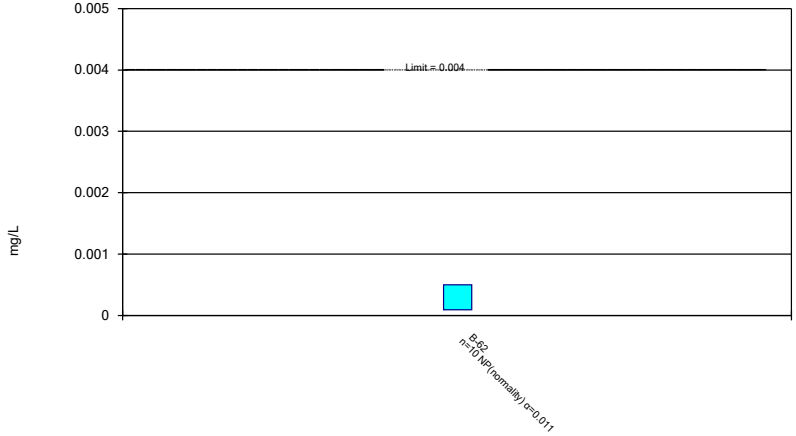
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Beryllium Analysis Run 11/18/2022 12:34 PM View: AP 1 Confidence Intervals
Plant McDonough Client: Southern Company Data: McDonough AP

Non-Parametric Confidence Interval

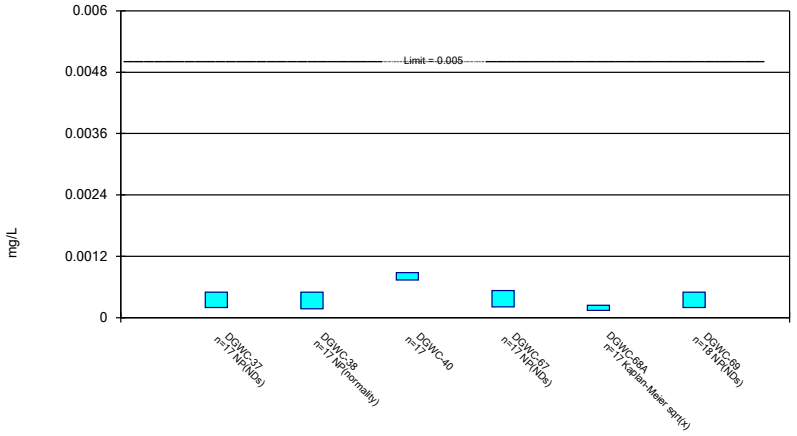
Compliance Limit is not exceeded.



Constituent: Beryllium Analysis Run 11/18/2022 12:34 PM View: AP 1 Confidence Intervals
Plant McDonough Client: Southern Company Data: McDonough AP

Parametric and Non-Parametric (NP) Confidence Interval

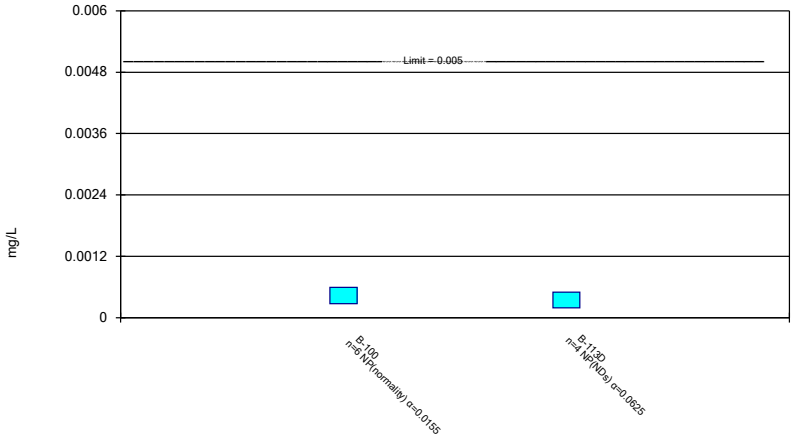
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Cadmium Analysis Run 11/18/2022 12:34 PM View: AP 1 Confidence Intervals
Plant McDonough Client: Southern Company Data: McDonough AP

Non-Parametric Confidence Interval

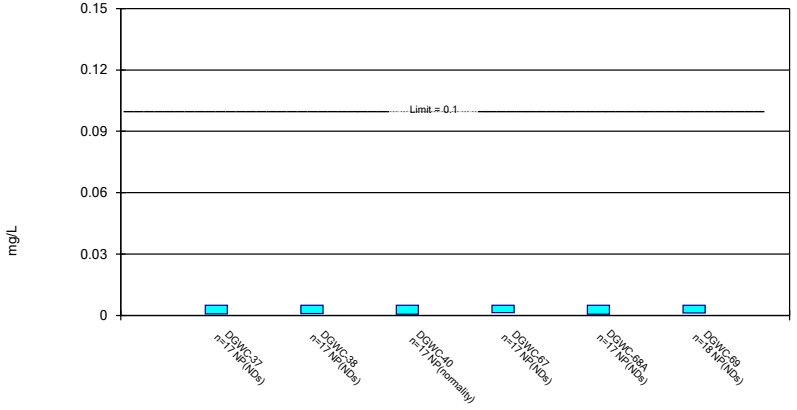
Compliance Limit is not exceeded.



Constituent: Cadmium Analysis Run 11/18/2022 12:34 PM View: AP 1 Confidence Intervals
Plant McDonough Client: Southern Company Data: McDonough AP

Non-Parametric Confidence Interval

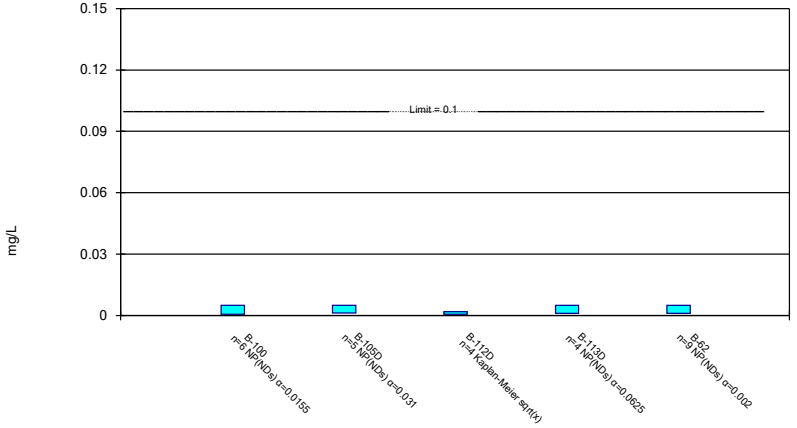
Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Chromium Analysis Run 11/18/2022 12:34 PM View: AP 1 Confidence Intervals
Plant McDonough Client: Southern Company Data: McDonough AP

Parametric and Non-Parametric (NP) Confidence Interval

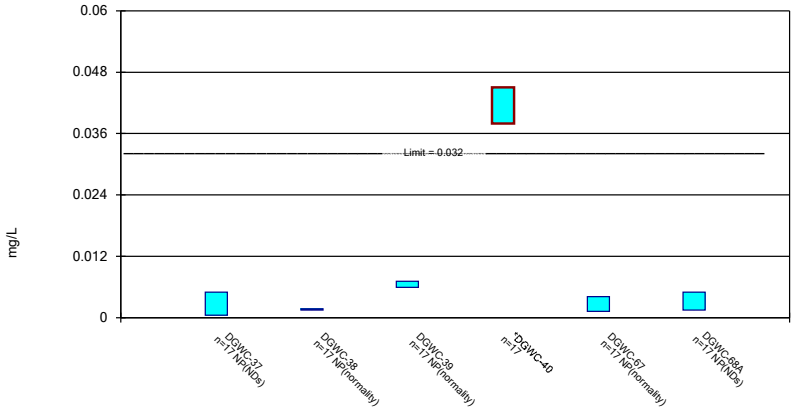
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Chromium Analysis Run 11/18/2022 12:34 PM View: AP 1 Confidence Intervals
Plant McDonough Client: Southern Company Data: McDonough AP

Parametric and Non-Parametric (NP) Confidence Interval

Compliance limit is exceeded.* Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Cobalt Analysis Run 11/18/2022 12:35 PM View: AP 1 Confidence Intervals
Plant McDonough Client: Southern Company Data: McDonough AP

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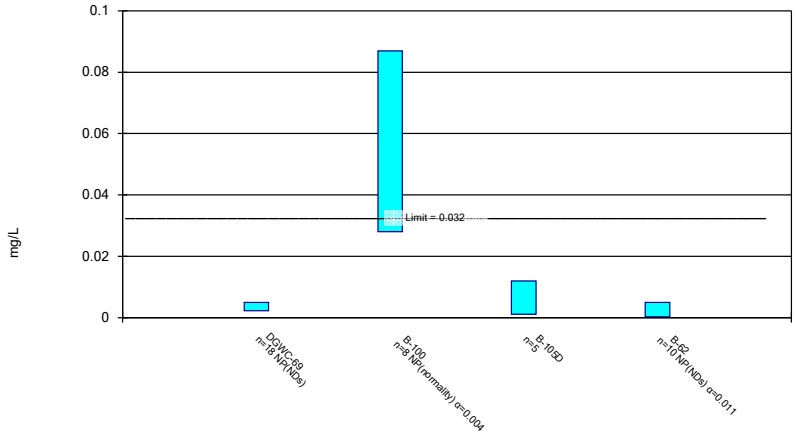
Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.

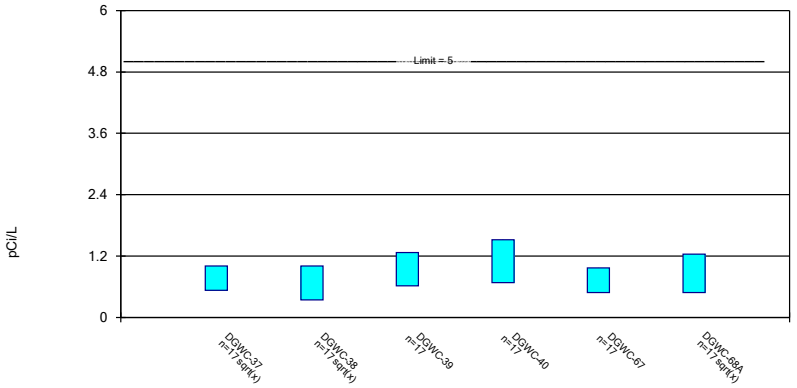


Constituent: Cobalt Analysis Run 11/18/2022 12:35 PM View: AP 1 Confidence Intervals
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.9.6.35 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.

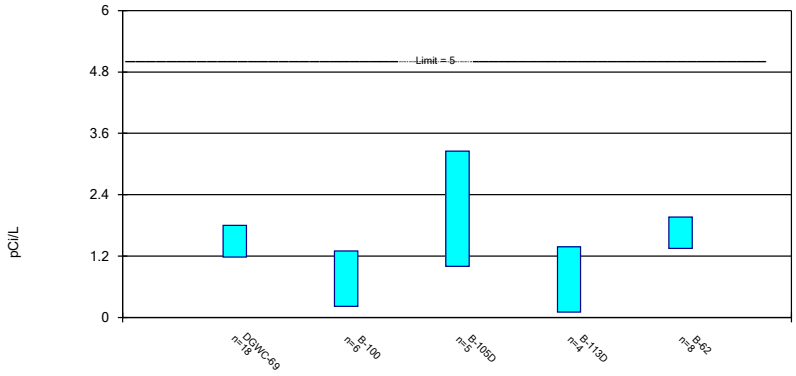


Constituent: Combined Radium 226 + 228 Analysis Run 11/18/2022 12:35 PM View: AP 1 Confidence Inte
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.9.6.35 Groundwater Stats Consulting. UG

Parametric Confidence Interval

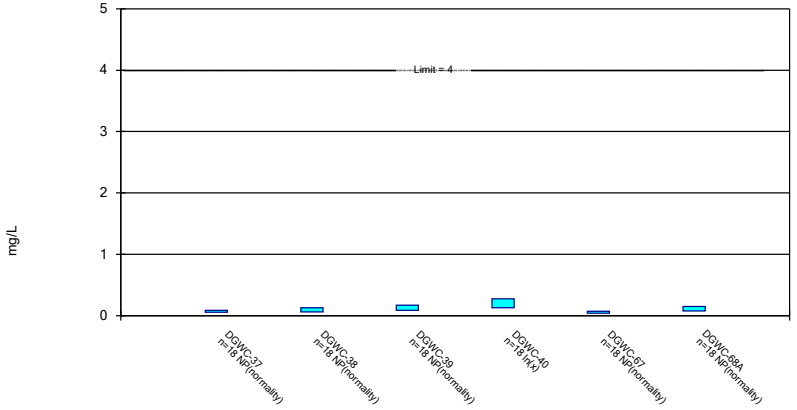
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Combined Radium 226 + 228 Analysis Run 11/18/2022 12:35 PM View: AP 1 Confidence Inte
Plant McDonough Client: Southern Company Data: McDonough 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.

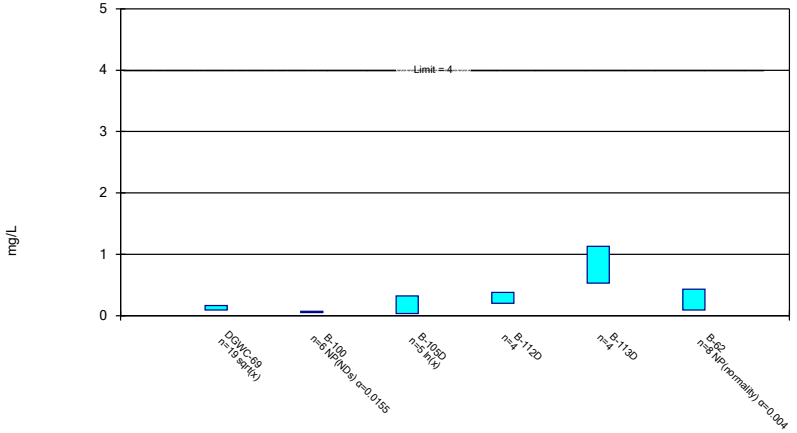


Constituent: Fluoride, total Analysis Run 11/18/2022 12:35 PM View: AP 1 Confidence Intervals

Plant McDonough Client: Southern Company Data: McDonough 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.

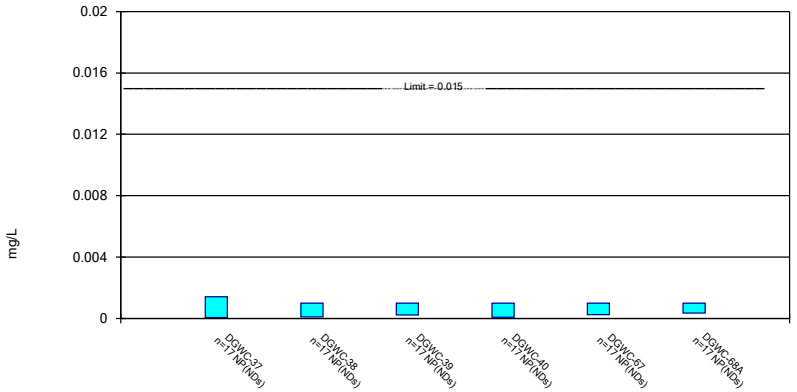


Constituent: Fluoride, total Analysis Run 11/18/2022 12:35 PM View: AP 1 Confidence Intervals

Plant McDonough Client: Southern Company Data: McDonough AP

Non-Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01.

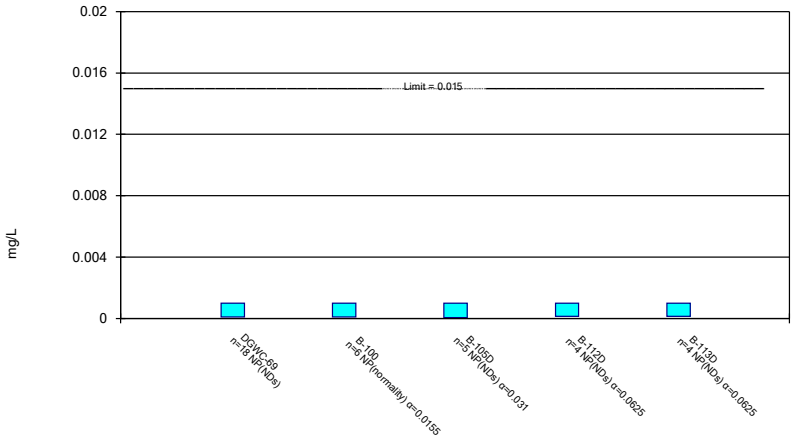


Constituent: Lead Analysis Run 11/18/2022 12:35 PM View: AP 1 Confidence Intervals

Plant McDonough Client: Southern Company Data: McDonough AP

Non-Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted.

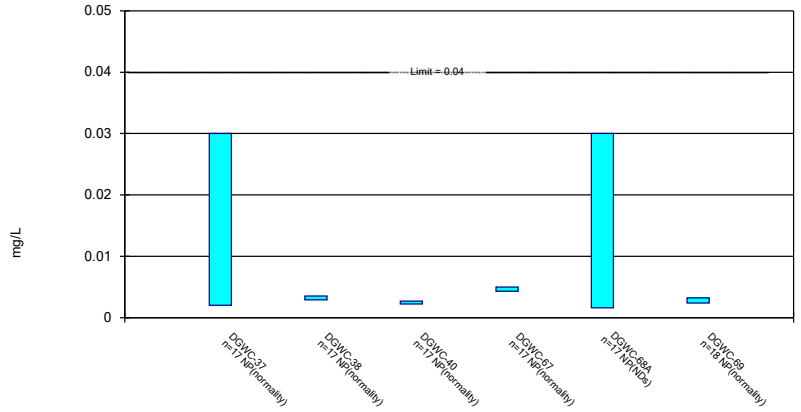


Constituent: Lead Analysis Run 11/18/2022 12:35 PM View: AP 1 Confidence Intervals

Plant McDonough Client: Southern Company Data: McDonough AP

Non-Parametric Confidence Interval

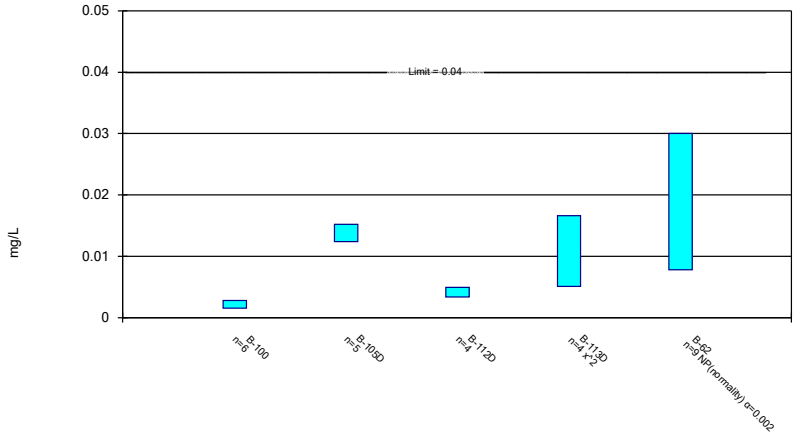
Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Lithium Analysis Run 11/18/2022 12:35 PM View: AP 1 Confidence Intervals
Plant McDonough Client: Southern Company Data: McDonough AP

Parametric and Non-Parametric (NP) Confidence Interval

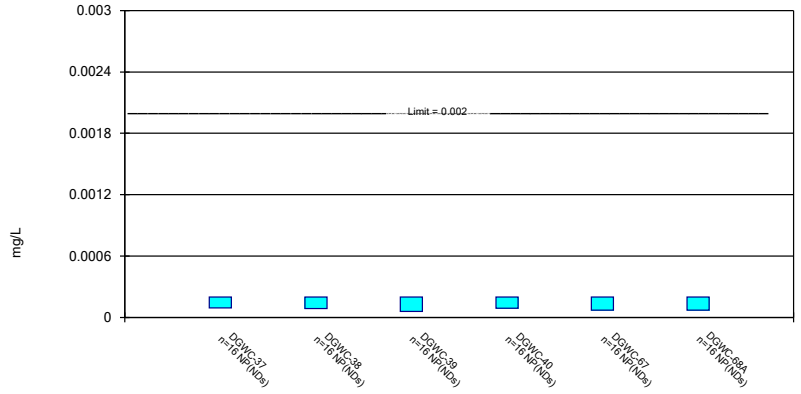
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Lithium Analysis Run 11/18/2022 12:35 PM View: AP 1 Confidence Intervals
Plant McDonough Client: Southern Company Data: McDonough AP

Non-Parametric Confidence Interval

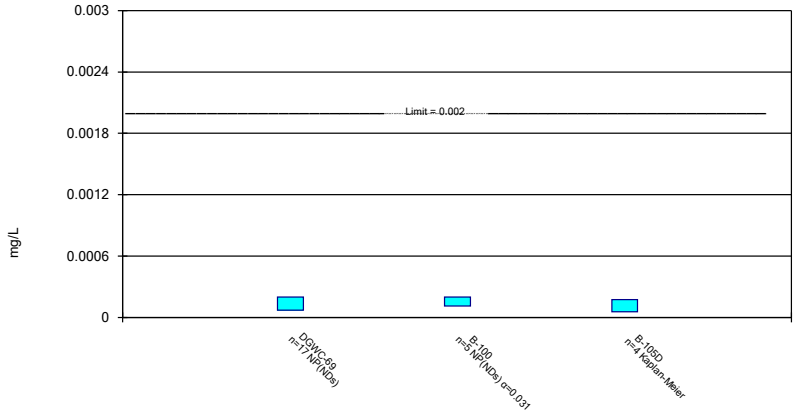
Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Mercury Analysis Run 11/18/2022 12:35 PM View: AP 1 Confidence Intervals
Plant McDonough Client: Southern Company Data: McDonough AP

Parametric and Non-Parametric (NP) Confidence Interval

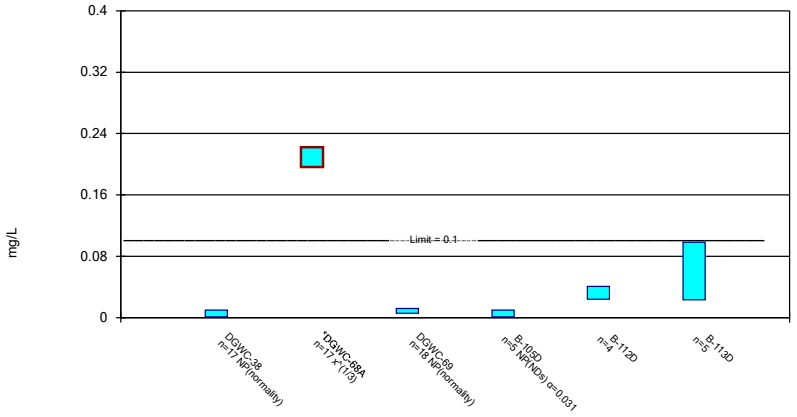
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Mercury Analysis Run 11/18/2022 12:35 PM View: AP 1 Confidence Intervals
Plant McDonough Client: Southern Company Data: McDonough AP

Parametric and Non-Parametric (NP) Confidence Interval

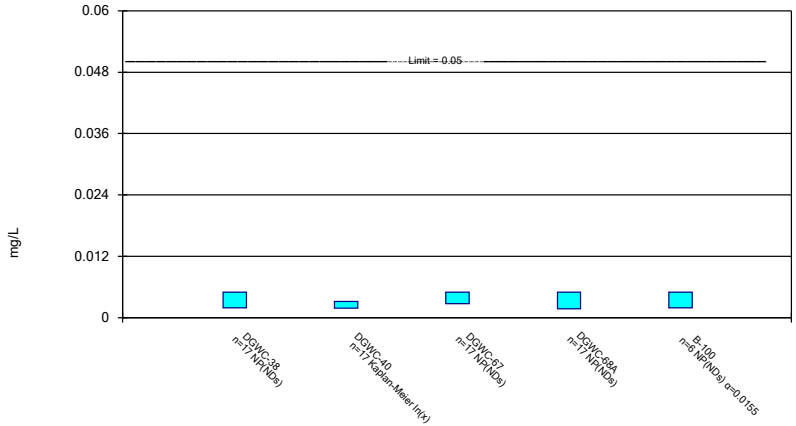
Compliance limit is exceeded.* Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Molybdenum Analysis Run 11/18/2022 12:35 PM View: AP 1 Confidence Intervals
Plant McDonough Client: Southern Company Data: McDonough AP

Parametric and Non-Parametric (NP) Confidence Interval

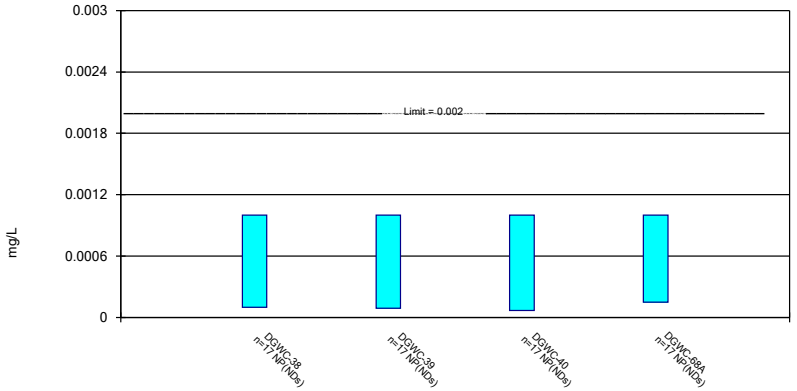
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Selenium Analysis Run 11/18/2022 12:35 PM View: AP 1 Confidence Intervals
Plant McDonough Client: Southern Company Data: McDonough AP

Non-Parametric Confidence Interval

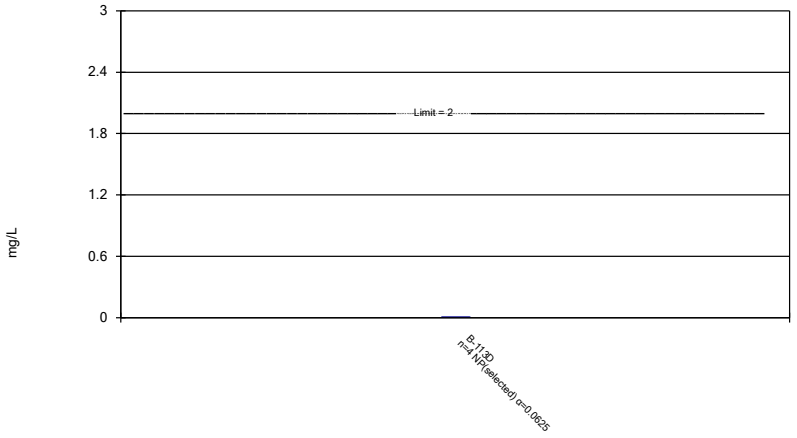
Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Thallium Analysis Run 11/18/2022 12:35 PM View: AP 1 Confidence Intervals
Plant McDonough Client: Southern Company Data: McDonough AP

Non-Parametric Confidence Interval

Compliance Limit is not exceeded.



Normality testing disabled.

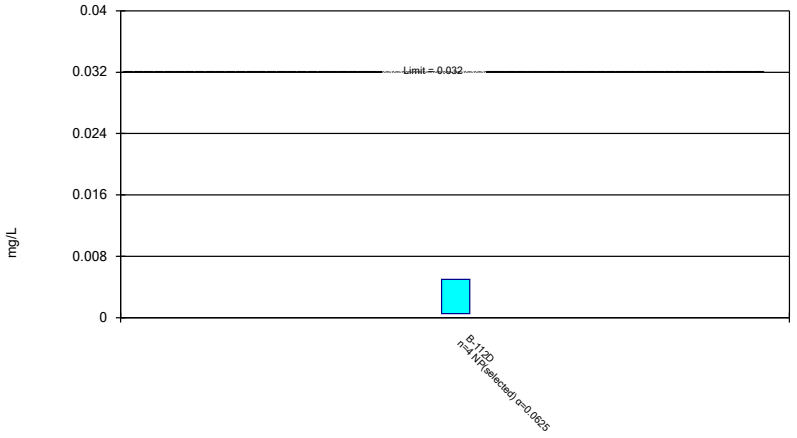
Constituent: Barium Analysis Run 11/18/2022 12:59 PM View: AP 1 Confidence Intervals Nonparametric

Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.9.6.35 Groundwater Stats Consulting. UG

Non-Parametric Confidence Interval

Compliance Limit is not exceeded.



Normality testing disabled.

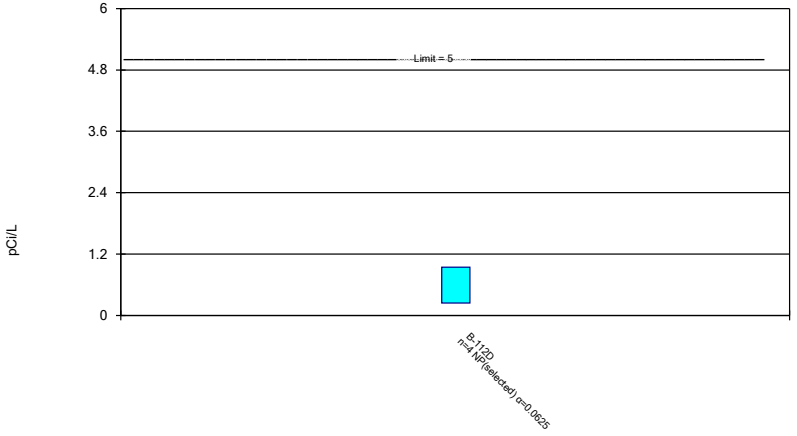
Constituent: Cobalt Analysis Run 11/18/2022 12:59 PM View: AP 1 Confidence Intervals Nonparametric

Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.9.6.35 Groundwater Stats Consulting. UG

Non-Parametric Confidence Interval

Compliance Limit is not exceeded.



Normality testing disabled.

Constituent: Combined Radium 226 + 228 Analysis Run 11/18/2022 12:59 PM View: AP 1 Confidence Inte

Plant McDonough Client: Southern Company Data: McDonough AP

Confidence Interval

Constituent: Antimony (mg/L) Analysis Run 11/18/2022 1:02 PM View: AP 1 Confidence Intervals

Plant McDonough Client: Southern Company Data: McDonough AP

	DGWC-40	DGWC-67	DGWC-68A	DGWC-69	B-100	B-105D
9/2/2016	<0.003					
12/8/2016	<0.003					
3/30/2017	<0.003					
3/31/2017		0.0004 (J)		<0.003		
5/12/2017		<0.003	<0.003	<0.003		
6/16/2017		0.0008 (J)	0.0008 (J)	0.0007 (J)		
7/13/2017	<0.003	<0.003	<0.003	<0.003		
8/8/2017			<0.003			
10/26/2017	<0.003	<0.003	<0.003	<0.003		
11/15/2017				<0.003		
3/2/2018	<0.003	<0.003	<0.003	<0.003		
7/12/2018	<0.003					
7/13/2018		0.0023 (J)	<0.003	<0.003		
11/8/2018	<0.003	<0.003	<0.003	<0.003		
8/28/2019	<0.003	<0.003	<0.003	<0.003		
3/4/2020	<0.003					
3/9/2020		<0.003	<0.003	<0.003		
8/13/2020	<0.003	<0.003	<0.003	0.0019 (J)		
8/17/2020					0.0013 (J)	
9/23/2020	<0.003	<0.003	<0.003	<0.003		
9/25/2020					<0.003	
12/9/2020						<0.003
3/8/2021	0.00033 (J)				0.0017 (J)	0.00069 (J)
3/10/2021			0.00032 (J)	0.0018 (J)		
3/11/2021		<0.003				
9/13/2021					<0.003	
9/14/2021	<0.003					
9/15/2021						0.0082
9/16/2021		<0.003	<0.003	<0.003		
1/19/2022	<0.003	<0.003				<0.003
1/21/2022					<0.003	
1/25/2022			<0.003	<0.003		
9/7/2022	<0.003		<0.003	<0.003		<0.003
9/8/2022		<0.003			<0.003	
Mean	0.002833	0.002656	0.002695	0.002729	0.0025	0.003578
Std. Dev.	0.0006675	0.0008246	0.000838	0.0006469	0.0007849	0.002771
Upper Lim.	0.003	0.003	0.003	0.003	0.003	0.0082
Lower Lim.	0.00033	0.0023	0.0008	0.0019	0.0013	0.00069

Confidence Interval

Constituent: Antimony (mg/L) Analysis Run 11/18/2022 1:02 PM View: AP 1 Confidence Intervals

Plant McDonough Client: Southern Company Data: McDonough AP

	B-112D	B-113D	B-62
1/30/2019			<0.003
9/11/2019			<0.003
10/21/2019			<0.003
8/13/2020			<0.003
9/24/2020			0.00046 (J)
3/12/2021			<0.003
4/15/2021	0.00041 (J)		
4/16/2021		0.0021 (J)	
9/9/2021			<0.003
9/16/2021	<0.003		
9/17/2021		<0.003	
1/19/2022	<0.003		
1/20/2022			<0.003
1/26/2022		<0.003	
9/7/2022	<0.003		
9/8/2022			<0.003
9/12/2022		<0.003	
Mean	0.002353	0.002775	0.002718
Std. Dev.	0.001295	0.00045	0.0008467
Upper Lim.	0.003	0.003	0.003
Lower Lim.	0.00041	0.0021	0.00046

Confidence Interval

Constituent: Arsenic (mg/L) Analysis Run 11/18/2022 1:02 PM View: AP 1 Confidence Intervals

Plant McDonough Client: Southern Company Data: McDonough AP

	DGWC-37	DGWC-38	DGWC-39	DGWC-40	DGWC-67	DGWC-68A
9/2/2016				<0.005		
9/8/2016	<0.005	<0.005	<0.005			
12/7/2016	0.0019 (J)	<0.005	<0.005			
12/8/2016				<0.005		
3/30/2017	<0.005	<0.005	0.0007 (J)	0.0006 (J)		
3/31/2017					<0.005	
5/12/2017					<0.005	<0.005
6/16/2017					<0.005	<0.005
7/13/2017	<0.005	0.0005 (J)	0.0009 (J)	<0.005	<0.005	<0.005
8/8/2017						<0.005
10/26/2017	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
3/1/2018	<0.005	<0.005	0.0011 (J)			
3/2/2018				0.0011 (J)	<0.005	<0.005
7/12/2018	<0.005	<0.005	0.00057 (J)	<0.005		
7/13/2018					<0.005	<0.005
11/8/2018	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005 (J)
8/28/2019	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
10/16/2019						<0.005
10/17/2019					0.00042 (J)	
10/18/2019	<0.005	<0.005	0.00075 (J)	<0.005		
3/4/2020				0.00065 (J)		
3/9/2020	<0.005	<0.005	0.00039 (J)		<0.005	<0.005
8/13/2020	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
9/23/2020				<0.005	<0.005	<0.005
9/24/2020	<0.005	<0.005				
9/25/2020			0.00087 (J)			
3/8/2021				<0.005		
3/10/2021						<0.005
3/11/2021	<0.005	<0.005	<0.005		0.0008 (J)	
9/14/2021				<0.005		
9/15/2021		<0.005				
9/16/2021	<0.005				<0.005	0.46 (o)
9/17/2021			<0.005			
10/27/2021						0.0016 (J)
1/19/2022				0.003 (J)	0.0033 (J)	
1/20/2022			0.0019 (J)			
1/21/2022	<0.005	<0.005				
1/25/2022						<0.005
9/7/2022			<0.005	<0.005		<0.005
9/8/2022	<0.005				<0.005	
9/12/2022		<0.005				
Mean	0.004818	0.004735	0.003069	0.004138	0.004384	0.0048
Std. Dev.	0.0007519	0.001091	0.002132	0.001675	0.00148	0.0008246
Upper Lim.	0.005	0.005	0.005	0.005	0.005	0.005
Lower Lim.	0.0019	0.0005	0.00075	0.003	0.0033	0.0016

Confidence Interval

Constituent: Arsenic (mg/L) Analysis Run 11/18/2022 1:02 PM View: AP 1 Confidence Intervals

Plant McDonough Client: Southern Company Data: McDonough AP

	DGWC-69	B-105D	B-112D	B-113D	B-62
3/31/2017	0.0239				
4/12/2017	0.0077				
5/12/2017	0.0097				
6/16/2017	0.0113				
7/13/2017	0.0029 (J)				
10/26/2017	0.114				
11/15/2017	0.164				
3/2/2018	0.0127				
7/13/2018	0.017				
11/8/2018	0.02				
1/30/2019					<0.005
8/28/2019	0.025				
9/11/2019					<0.005
10/16/2019	0.023				
10/21/2019					<0.005
3/9/2020	0.029				
8/13/2020	0.029				<0.005
9/23/2020	0.032				
9/24/2020					<0.005
12/9/2020		<0.005			
3/8/2021		0.0025 (J)			
3/10/2021	0.028				
3/12/2021					<0.005
4/15/2021			0.00078 (J)		
4/16/2021				<0.005	
9/9/2021					<0.005
9/15/2021		<0.005			
9/16/2021	0.023		<0.005		
9/17/2021				<0.005	
1/19/2022		0.0051	0.005		
1/20/2022					0.0033 (J)
1/25/2022	0.028				
1/26/2022				0.0018 (J)	
9/7/2022	0.024	0.0026 (J)	<0.005		
9/8/2022					<0.005
9/12/2022				<0.005	
Mean	0.03285	0.00404	0.003945	0.0042	0.004811
Std. Dev.	0.03918	0.001361	0.00211	0.0016	0.0005667
Upper Lim.	0.03677	0.0051	0.005	0.005	0.005
Lower Lim.	0.01314	0.0025	0.00078	0.0018	0.0033

Confidence Interval

Constituent: Barium (mg/L) Analysis Run 11/18/2022 1:02 PM View: AP 1 Confidence Intervals

Plant McDonough Client: Southern Company Data: McDonough AP

	DGWC-37	DGWC-38	DGWC-39	DGWC-40	DGWC-67	DGWC-68A
9/2/2016				0.0171		
9/8/2016	0.123	0.0333	0.0978			
12/7/2016	0.125	0.0336	0.0844			
12/8/2016				0.0163		
3/30/2017	0.11	0.0325	0.0858	0.0177		
3/31/2017					0.111	
5/12/2017					0.127	0.089
6/16/2017					0.11	0.0855
7/13/2017	0.11	0.0332	0.0919	0.017	0.102	0.0859
8/8/2017						0.0852
10/26/2017	0.112	0.0333	0.0899	0.0168	0.105	0.0878
3/1/2018	0.102	0.0333	0.0742			
3/2/2018				0.0169	0.104	0.0878
7/12/2018	0.11	0.034	0.094	0.018		
7/13/2018					0.11	0.091
11/8/2018	0.11	0.035	0.1	0.017	0.11	0.092
8/28/2019	0.086	0.033	0.099	0.017	0.11	0.089
10/16/2019						0.089
10/17/2019					0.1	
10/18/2019	0.079	0.032	0.1	0.019		
3/4/2020				0.018		
3/9/2020	0.092	0.032	0.076		0.11	0.088
8/13/2020	0.088	0.032	0.089	0.018	0.095	0.088
9/23/2020				0.019	0.1	0.094
9/24/2020	0.094	0.032				
9/25/2020			0.1			
3/8/2021				0.016		
3/10/2021						0.09
3/11/2021	0.075	0.032	0.078		0.11	
9/14/2021				0.027		
9/15/2021		0.032				
9/16/2021	0.083				0.088	0.13 (o)
9/17/2021			0.09			
10/27/2021						0.086
1/19/2022				0.018	0.091	
1/20/2022			0.093			
1/21/2022	0.085	0.031				
1/25/2022						0.1
9/7/2022			0.099	0.016		0.098
9/8/2022	0.079				0.082	
9/12/2022		0.027				
Mean	0.09782	0.03242	0.09071	0.01793	0.1038	0.08978
Std. Dev.	0.01597	0.001701	0.008597	0.002504	0.01067	0.00419
Upper Lim.	0.1078	0.03344	0.09609	0.019	0.1105	0.092
Lower Lim.	0.08781	0.03161	0.08532	0.0168	0.09714	0.086

Confidence Interval

Constituent: Barium (mg/L) Analysis Run 11/18/2022 1:02 PM View: AP 1 Confidence Intervals

Plant McDonough Client: Southern Company Data: McDonough AP

	DGWC-69	B-100	B-105D	B-112D	B-62
3/31/2017	0.0872				
5/12/2017	0.0929				
6/16/2017	0.1				
7/13/2017	0.0985				
10/26/2017	0.136				
11/15/2017	0.107				
3/2/2018	0.0671				
7/13/2018	0.074				
11/8/2018	0.072				
1/30/2019					0.018
8/28/2019	0.061				
9/11/2019					0.023
10/16/2019	0.1				
10/21/2019					0.026
3/9/2020	0.057				
8/13/2020	0.13				0.026
8/17/2020		0.015			
9/23/2020	0.055				
9/24/2020					0.025
9/25/2020		0.022			
12/9/2020			0.03		
3/8/2021		0.022	0.041		
3/10/2021	0.048				
3/12/2021					0.027
4/15/2021				0.026	
9/9/2021					0.021
9/13/2021		0.021			
9/15/2021			0.037		
9/16/2021	0.078			0.0032 (J)	
1/19/2022			0.04	0.0034 (J)	
1/20/2022					0.021
1/21/2022		0.023			
1/25/2022	0.049				
9/7/2022	0.065		0.035	0.0026 (J)	
9/8/2022		0.021			0.018
Mean	0.08209	0.02067	0.0366	0.0088	0.02278
Std. Dev.	0.02617	0.002875	0.004393	0.01147	0.003456
Upper Lim.	0.09793	0.02353	0.04396	0.026	0.02611
Lower Lim.	0.06626	0.01731	0.02924	0.0026	0.01944

Confidence Interval

Constituent: Beryllium (mg/L) Analysis Run 11/18/2022 1:02 PM View: AP 1 Confidence Intervals

Plant McDonough Client: Southern Company Data: McDonough AP

	DGWC-37	DGWC-38	DGWC-40	DGWC-68A	DGWC-69	B-100
9/2/2016			0.0028 (J)			
9/8/2016	<0.0005	<0.0005				
12/7/2016	<0.0005	<0.0005				
12/8/2016			0.0026 (J)			
3/30/2017	<0.0005	<0.0005	0.003			
3/31/2017					7E-05 (J)	
5/12/2017				<0.0005	<0.0005	
6/16/2017				<0.0005	<0.0005	
7/13/2017	<0.0005	<0.0005	0.003 (J)	<0.0005	<0.0005	
8/8/2017				<0.0005		
10/26/2017	<0.0005	<0.0005	0.0027 (J)	<0.0005	<0.0005	
11/15/2017					<0.0005	
3/1/2018	<0.0005	<0.0005				
3/2/2018			0.0033	<0.0005	<0.0005	
7/12/2018	7E-05 (J)	<0.0005	0.0032			
7/13/2018				8.4E-05 (J)	5.8E-05 (J)	
11/8/2018	<0.0005	<0.0005	<0.003 (J)	<0.0005	<0.0005	
8/28/2019	8.6E-05 (J)	<0.0005	0.0032	<0.0005	<0.0005	
10/16/2019				<0.0005	<0.0005	
10/18/2019	<0.0005	<0.0005	0.0033			
3/4/2020			0.0039			
3/9/2020	<0.0005	<0.0005		<0.0005	7.5E-05 (J)	
8/13/2020	0.0001 (J)	<0.0005	0.0033	<0.0005	6.3E-05 (J)	
8/17/2020						0.0004 (J)
9/23/2020			0.0031	<0.0005	6.1E-05 (J)	
9/24/2020	8.8E-05 (J)	5.8E-05 (J)				
9/25/2020						0.00035 (J)
3/8/2021			0.003			0.00046 (J)
3/10/2021				6.1E-05 (J)	5E-05 (J)	
3/11/2021	<0.0005	<0.0005				
9/13/2021						0.00053
9/14/2021			0.0032			
9/15/2021		<0.0005				
9/16/2021	5.9E-05 (J)			<0.0005	<0.0005	
1/19/2022			0.0034			
1/21/2022	5.9E-05 (J)	<0.0005				0.00053
1/25/2022				<0.0005	5.9E-05 (J)	
9/7/2022			0.0031	<0.0005	<0.0005	
9/8/2022	5.7E-05 (J)					0.00058
9/12/2022		<0.0005				
Mean	0.0003246	0.000474	0.003124	0.0004497	0.0003298	0.000475
Std. Dev.	0.0002163	0.0001072	0.0002969	0.000142	0.0002196	8.781E-05
Upper Lim.	0.0005	0.0005	0.00331	0.0005	0.0005	0.0005956
Lower Lim.	7E-05	5.8E-05	0.002937	8.4E-05	6.1E-05	0.0003544

Confidence Interval

Constituent: Beryllium (mg/L) Analysis Run 11/18/2022 1:02 PM View: AP 1 Confidence Intervals

Plant McDonough Client: Southern Company Data: McDonough AP

	B-62
10/6/2016	9E-05 (J)
1/30/2019	<0.0005
9/11/2019	0.00012 (J)
10/21/2019	7.8E-05 (J)
8/13/2020	0.00011 (J)
9/24/2020	0.00013 (J)
3/12/2021	<0.0005
9/9/2021	0.00014 (J)
1/20/2022	0.00015 (J)
9/8/2022	0.00013 (J)
Mean	0.0001948
Std. Dev.	0.0001623
Upper Lim.	0.0005
Lower Lim.	9E-05

Confidence Interval

Constituent: Cadmium (mg/L) Analysis Run 11/18/2022 1:02 PM View: AP 1 Confidence Intervals

Plant McDonough Client: Southern Company Data: McDonough AP

	DGWC-37	DGWC-38	DGWC-40	DGWC-67	DGWC-68A	DGWC-69
9/2/2016			0.0008 (J)			
9/8/2016	0.0002 (J)	0.0002 (J)				
12/7/2016	0.0001 (J)	0.0002 (J)				
12/8/2016			0.0007 (J)			
3/30/2017	0.0001 (J)	0.0002 (J)	0.0007 (J)			
3/31/2017				<0.0005		0.0001 (J)
5/12/2017				<0.0005	8E-05 (J)	0.0002 (J)
6/16/2017				<0.0005	<0.0005	0.0002 (J)
7/13/2017	<0.0005	0.0002 (J)	0.0008 (J)	<0.0005	<0.0005	<0.0005
8/8/2017					<0.0005	
10/26/2017	<0.0005	0.0002 (J)	0.0008 (J)	<0.0005	<0.0005	<0.0005
11/15/2017						<0.0005
3/1/2018	<0.0005	<0.0005				
3/2/2018			<0.0005	<0.0005	<0.0005	<0.0005
7/12/2018	<0.0005	0.00024 (J)	0.00087 (J)			
7/13/2018				<0.0005	0.00019 (J)	<0.0005
11/8/2018	<0.0005	<0.001 (J)	<0.001 (J)	<0.0005	<0.001 (J)	<0.0005
8/28/2019	<0.0005	0.0003 (J)	0.00087 (J)	0.00017 (J)	0.00017 (J)	<0.0005
10/16/2019					0.00017 (J)	0.00017 (J)
10/17/2019				<0.0005		
10/18/2019	<0.0005	0.00016 (J)	0.00088 (J)			
3/4/2020			0.00093 (J)			
3/9/2020	<0.0005	0.00017 (J)		0.00021 (J)	0.00026 (J)	<0.0005
8/13/2020	<0.0005	0.00021 (J)	0.00084 (J)	0.00015 (J)	0.00021 (J)	<0.0005
9/23/2020			0.0008 (J)	0.00018 (J)	0.00024 (J)	<0.0005
9/24/2020	0.00027 (J)	0.00081 (J)				
3/8/2021			0.00072			
3/10/2021					<0.0005	<0.0005
3/11/2021	<0.0005	<0.0005		0.00053		
9/14/2021			0.00086			
9/15/2021		0.00021 (J)				
9/16/2021	0.00013 (J)			<0.0005	<0.0005	<0.0005
1/19/2022			0.00085	<0.0005		
1/21/2022	<0.0005	0.0002 (J)				
1/25/2022					0.00035 (J)	<0.0005
9/7/2022			0.00081		0.0002 (J)	<0.0005
9/8/2022	<0.0005			<0.0005		
9/12/2022		0.00013 (J)				
Mean	0.0004	0.0003194	0.0008076	0.0004259	0.0003747	0.0004261
Std. Dev.	0.0001639	0.0002461	0.0001108	0.0001426	0.0002229	0.0001436
Upper Lim.	0.0005	0.0005	0.0008771	0.00053	0.0002439	0.0005
Lower Lim.	0.0002	0.00017	0.0007382	0.00021	0.0001408	0.0002

Confidence Interval

Constituent: Cadmium (mg/L) Analysis Run 11/18/2022 1:02 PM View: AP 1 Confidence Intervals

Plant McDonough Client: Southern Company Data: McDonough AP

	B-100	B-113D
8/17/2020	0.00059 (J)	
9/25/2020	0.00027 (J)	
3/8/2021	0.00027 (J)	
4/16/2021		0.00019 (J)
9/13/2021	0.00029 (J)	
9/17/2021		<0.0005
1/21/2022	0.00059	
1/26/2022		<0.0005
9/8/2022	0.00027 (J)	
9/12/2022		<0.0005
Mean	0.00038	0.0004225
Std. Dev.	0.0001628	0.000155
Upper Lim.	0.00059	0.0005
Lower Lim.	0.00027	0.00019

Confidence Interval

Constituent: Chromium (mg/L) Analysis Run 11/18/2022 1:02 PM View: AP 1 Confidence Intervals

Plant McDonough Client: Southern Company Data: McDonough AP

	DGWC-37	DGWC-38	DGWC-40	DGWC-67	DGWC-68A	DGWC-69
9/2/2016			<0.005			
9/8/2016	<0.005	<0.005				
12/7/2016	<0.005	<0.005				
12/8/2016			<0.005			
3/30/2017	<0.005	<0.005	0.0007 (J)			
3/31/2017				0.0005 (J)		<0.005
5/12/2017				0.0007 (J)	<0.005	<0.005
6/16/2017				<0.005	<0.005	<0.005
7/13/2017	<0.005	<0.005	0.0006 (J)	<0.005	0.0005 (J)	<0.005
8/8/2017					<0.005	
10/26/2017	0.0007 (J)	0.0005 (J)	0.0007 (J)	<0.005	<0.005	<0.005
11/15/2017						<0.005
3/1/2018	<0.005	<0.005				
3/2/2018			<0.005	<0.005	<0.005	<0.005
7/12/2018	<0.005	<0.005	<0.005			
7/13/2018				<0.005	<0.005	<0.005
11/8/2018	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
8/28/2019	<0.005	<0.005	0.00061 (J)	<0.005	<0.005	0.00049 (J)
10/16/2019					<0.005	<0.005
10/17/2019				<0.005		
10/18/2019	<0.005	0.00092 (J)	0.00078 (J)			
3/4/2020			0.0011 (J)			
3/9/2020	<0.005	0.00044 (J)		0.00088 (J)	<0.005	0.0012 (J)
8/13/2020	0.00058 (J)	<0.005	0.00072 (J)	<0.005	<0.005	<0.005
9/23/2020			0.0011 (J)	<0.005	<0.005	0.0011 (J)
9/24/2020	<0.005	<0.005				
3/8/2021			0.0006 (J)			
3/10/2021					<0.005	0.0009 (J)
3/11/2021	<0.005	<0.005		0.0014 (J)		
9/14/2021			0.0021 (J)			
9/15/2021		<0.005				
9/16/2021	<0.005			<0.005	0.0014 (J,o)	<0.005
10/27/2021					<0.005	
1/19/2022			<0.005	<0.005		
1/21/2022	<0.005	<0.005				
1/25/2022					<0.005	0.0013 (J)
9/7/2022			<0.005		<0.005	<0.005
9/8/2022	<0.005			<0.005		
9/12/2022		<0.005				
Mean	0.004487	0.004227	0.002589	0.004028	0.004735	0.003888
Std. Dev.	0.001448	0.001724	0.002108	0.001814	0.001091	0.001851
Upper Lim.	0.005	0.005	0.005	0.005	0.005	0.005
Lower Lim.	0.0007	0.00092	0.00061	0.0014	0.0005	0.0012

Confidence Interval

Constituent: Chromium (mg/L) Analysis Run 11/18/2022 1:02 PM View: AP 1 Confidence Intervals

Plant McDonough Client: Southern Company Data: McDonough AP

	B-100	B-105D	B-112D	B-113D	B-62
1/30/2019					<0.005
9/11/2019					<0.005
10/21/2019					0.00098 (J)
8/13/2020					<0.005
8/17/2020	<0.005				
9/24/2020					<0.005
9/25/2020	0.00094 (J)				
12/9/2020		<0.005			
3/8/2021	0.00057 (J)	<0.005			
3/12/2021					<0.005
4/15/2021			0.00085 (J)		
4/16/2021				0.0011 (J)	
9/9/2021					<0.005
9/13/2021	<0.005				
9/15/2021		0.0012 (J)			
9/16/2021			0.0014 (J)		
9/17/2021				<0.005	
1/19/2022		<0.005	<0.005		
1/20/2022					<0.005
1/21/2022	<0.005				
1/26/2022				<0.005	
9/7/2022		<0.005	<0.005		
9/8/2022	<0.005				<0.005
9/12/2022				<0.005	
Mean	0.003585	0.00424	0.003062	0.004025	0.004553
Std. Dev.	0.002195	0.001699	0.002248	0.00195	0.00134
Upper Lim.	0.005	0.005	0.00182	0.005	0.005
Lower Lim.	0.00057	0.0012	0.0005715	0.0011	0.00098

Confidence Interval

Constituent: Cobalt (mg/L) Analysis Run 11/18/2022 1:02 PM View: AP 1 Confidence Intervals

Plant McDonough Client: Southern Company Data: McDonough AP

	DGWC-37	DGWC-38	DGWC-39	DGWC-40	DGWC-67	DGWC-68A
9/2/2016				0.0382		
9/8/2016	<0.005	0.0015 (J)	0.0068 (J)			
12/7/2016	0.0005 (J)	0.0017 (J)	0.0071 (J)			
12/8/2016				0.0318		
3/30/2017	<0.005	0.0016 (J)	0.006 (J)	0.0364		
3/31/2017					0.0064 (J)	
5/12/2017					0.0037 (J)	0.0015 (J)
6/16/2017					0.0041 (J)	0.0003 (J)
7/13/2017	0.0003 (J)	0.0016 (J)	0.0063 (J)	0.0394	0.0037 (J)	0.0005 (J)
8/8/2017						<0.005
10/26/2017	0.0003 (J)	0.0016 (J)	0.0062 (J)	0.0371	0.0022 (J)	<0.005
3/1/2018	<0.005	<0.005	<0.005			
3/2/2018				0.0425	<0.005	<0.005
7/12/2018	<0.005	0.0015 (J)	0.0059 (J)	0.044		
7/13/2018					0.0017 (J)	<0.005
11/8/2018	<0.005	<0.01 (J)	<0.01 (J)	0.036	<0.01 (J)	<0.005
8/28/2019	<0.005	0.0016 (J)	0.0067	0.044	0.0013 (J)	<0.005
10/16/2019						<0.005
10/17/2019					0.0013 (J)	
10/18/2019	<0.005	0.0016 (J)	0.007	0.043		
3/4/2020				0.055		
3/9/2020	<0.005	0.0016 (J)	0.007		0.0015 (J)	<0.005
8/13/2020	<0.005	0.0014 (J)	0.006	0.044	0.0015 (J)	<0.005
9/23/2020				0.046	0.0011 (J)	<0.005
9/24/2020	<0.005	0.0013 (J)				
9/25/2020			0.0061			
3/8/2021				0.039		
3/10/2021						<0.005
3/11/2021	<0.005	0.0017 (J)	0.0058		0.0016 (J)	
9/14/2021				0.05		
9/15/2021		0.0016 (J)				
9/16/2021	<0.005				0.0012 (J)	0.0032 (J,o)
9/17/2021			0.0076			
10/27/2021						<0.005
1/19/2022				0.042	0.0011 (J)	
1/20/2022			0.0061			
1/21/2022	<0.005	0.0017 (J)				
1/25/2022						<0.005
9/7/2022			0.0065	0.037		<0.005
9/8/2022	<0.005				0.001 (J)	
9/12/2022		0.0014 (J)				
Mean	0.004182	0.002259	0.006594	0.04149	0.002847	0.004253
Std. Dev.	0.001821	0.002165	0.001071	0.005638	0.002442	0.001679
Upper Lim.	0.005	0.0017	0.0071	0.04503	0.0041	0.005
Lower Lim.	0.0005	0.0015	0.0059	0.03796	0.0012	0.0015

Confidence Interval

Constituent: Cobalt (mg/L) Analysis Run 11/18/2022 1:02 PM View: AP 1 Confidence Intervals

Plant McDonough Client: Southern Company Data: McDonough AP

	DGWC-69	B-100	B-105D	B-62
3/31/2017	0.0022 (J)			
5/12/2017	0.0016 (J)			
6/16/2017	0.0009 (J)			
7/13/2017	0.0004 (J)			
10/26/2017	0.0031 (J)			
11/15/2017	0.0028 (J)			
3/2/2018	<0.005			
7/13/2018	<0.005			
11/8/2018	<0.005			
1/30/2019				<0.005
8/28/2019	<0.005			
9/11/2019				0.0003 (J)
10/16/2019	<0.005			
10/21/2019				0.00031 (J)
3/9/2020	<0.005			
7/23/2020		0.086		
8/3/2020		0.087		
8/13/2020	<0.005			<0.005
8/17/2020		0.077		
9/23/2020	<0.005			
9/24/2020				<0.005
9/25/2020		0.034		
12/9/2020			0.012	
3/8/2021		0.029	0.0042 (J)	
3/10/2021	<0.005			
3/12/2021				<0.005
9/9/2021				<0.005
9/13/2021		0.035		
9/15/2021			0.0065	
9/16/2021	<0.005			
1/19/2022			0.006	
1/20/2022				<0.005
1/21/2022		0.034		
1/25/2022	<0.005			
9/7/2022	<0.005		0.004 (J)	
9/8/2022		0.028		<0.005
9/9/2022				<0.005
Mean	0.003944	0.05125	0.00654	0.004061
Std. Dev.	0.001641	0.02684	0.003242	0.00198
Upper Lim.	0.005	0.087	0.01197	0.005
Lower Lim.	0.0022	0.028	0.001108	0.00031

Confidence Interval

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 11/18/2022 1:02 PM View: AP 1 Confidence Intervals

Plant McDonough Client: Southern Company Data: McDonough AP

	DGWC-37	DGWC-38	DGWC-39	DGWC-40	DGWC-67	DGWC-68A
9/2/2016				1.44		
9/8/2016	0.827 (U)	1.48	1.44			
12/7/2016	0.56 (U)	0.22 (U)	2.16			
12/8/2016				2.56		
3/30/2017	0.302 (U)	0.519 (U)	0.264 (U)	0.0844 (U)		
3/31/2017					0.404 (U)	
5/12/2017					0.206 (U)	1.18
6/16/2017					0.966 (U)	0.332 (U)
7/13/2017	0.731 (U)	1.11	0.517 (U)	0.963 (U)	0.387 (U)	0.304 (U)
8/8/2017						1.4
10/26/2017	1.04 (U)	1.13 (U)	0.875 (U)	0.748 (U)	0.619 (U)	0.477 (U)
3/1/2018	0.344 (U)	0.985 (U)	1.24			
3/2/2018				0.485 (U)	1.31	1.13
7/12/2018	0.566 (U)	0.615 (U)	0.935 (U)	0.231 (U)		
7/13/2018					0.667 (U)	0.407 (U)
11/8/2018	0.623 (U)	0.58 (U)	1.15 (U)	0.465 (U)	0.911 (U)	0.393 (U)
8/28/2019	1.24 (U)	0.517 (U)	1.15 (U)	0.592 (U)	0.751 (U)	1.77
10/16/2019						2.12
1/6/2020	2.01	0.527 (U)	1.4	1.6	0.965 (U)	
3/4/2020				1.62		
3/9/2020	0.499 (U)	1.04	1.36		0.819 (U)	1.33
8/13/2020	0.99	0.132 (U)	0.626 (U)	1.6	0.897 (U)	1.46
9/23/2020				1.28 (U)	0.131 (U)	0.563 (U)
9/24/2020	1.03 (U)	0.593 (U)				
9/25/2020			0.181 (U)			
3/8/2021				0.714 (U)		
3/10/2021						0.568 (U)
3/11/2021	0.956 (U)	0.0784 (U)	0.969 (U)		1.55	
9/14/2021				1.8		
9/15/2021		2.37				
9/16/2021	0.691 (U)				0.201 (U)	1.74
9/17/2021			0.911 (U)			
1/19/2022				1.7	0.853 (U)	
1/20/2022			0.172 (U)			
1/21/2022	0.343 (U)	0.0873 (U)				
1/25/2022						0.323 (U)
9/7/2022			0.637 (U)	0.772 (U)		0.174 (U)
9/8/2022					0.699 (U)	
9/9/2022	0.719 (U)					
9/12/2022		0.479 (U)				
Mean	0.7924	0.7331	0.9404	1.097	0.7256	0.9218
Std. Dev.	0.4146	0.5821	0.5186	0.6673	0.3839	0.6257
Upper Lim.	1.002	1.004	1.265	1.515	0.9662	1.238
Lower Lim.	0.5303	0.339	0.6155	0.6792	0.4851	0.4841

Confidence Interval

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 11/18/2022 1:02 PM View: AP 1 Confidence Intervals

Plant McDonough Client: Southern Company Data: McDonough AP

	DGWC-69	B-100	B-105D	B-113D	B-62
3/31/2017	1.39				
5/12/2017	1.29				
6/16/2017	1.61				
7/13/2017	1.14				
10/26/2017	2.04				
11/15/2017	1.99				
3/2/2018	0.918 (U)				
7/13/2018	1.36 (U)				
11/8/2018	0.719 (U)				
1/30/2019					1.97 (U)
8/28/2019	1.38				
10/16/2019	0.826 (U)				
10/21/2019					1.82
3/9/2020	1.39				
8/13/2020	2.66				1.63
8/17/2020		1.4 (U)			
9/23/2020	1.8				
9/24/2020					1.28 (U)
9/25/2020		0.799 (U)			
12/9/2020			1.25 (U)		
3/8/2021		0.168 (U)	1.87		
3/10/2021	1.6				
3/12/2021					1.18 (U)
4/16/2021				0.852 (U)	
9/9/2021					1.7
9/13/2021		0.774 (U)			
9/15/2021			2.01		
9/16/2021	2.06				
9/17/2021				1.08 (U)	
1/19/2022			2.45		
1/20/2022					1.71
1/21/2022		0.769 (U)			
1/25/2022	0.834 (U)				
1/26/2022				0.596 (U)	
9/7/2022	1.82		3.05		
9/8/2022		0.643 (U)			
9/9/2022					1.96
9/12/2022				0.44 (U)	
Mean	1.49	0.7588	2.126	0.742	1.656
Std. Dev.	0.5135	0.3938	0.6718	0.2822	0.2907
Upper Lim.	1.801	1.3	3.252	1.383	1.964
Lower Lim.	1.18	0.2178	1	0.1014	1.348

Confidence Interval

Constituent: Fluoride, total (mg/L) Analysis Run 11/18/2022 1:02 PM View: AP 1 Confidence Intervals

Plant McDonough Client: Southern Company Data: McDonough AP

	DGWC-37	DGWC-38	DGWC-39	DGWC-40	DGWC-67	DGWC-68A
9/2/2016				0.5		
9/8/2016	0.08 (J)	0.1 (J)	0.17 (J)			
12/7/2016	0.21 (J)	0.27 (J)	0.33			
12/8/2016				0.35		
3/30/2017	0.05 (J)	0.12 (J)	0.17 (J)	0.21 (J)		
3/31/2017					0.02 (J)	
5/12/2017					<0.1	0.37
6/16/2017					0.03 (J)	0.12 (J)
7/13/2017	0.06 (J)	0.13 (J)	0.14 (J)	0.2 (J)	0.03 (J)	0.12 (J)
8/8/2017						0.11 (J)
10/26/2017	0.08 (J)	0.47	0.54	0.5	<0.1	0.11 (J)
3/1/2018	0.22	<0.1	0.13			
3/2/2018				0.33	<0.1	0.23
7/12/2018	0.32	0.23 (J)	0.13 (J)	0.57		
7/13/2018					0.25 (J)	0.099 (J)
11/8/2018	<0.1	<0.1	<0.3 (J)	<0.3 (J)	0.5	<0.3 (J)
3/13/2019	0.08 (J)	0.084 (J)	0.085 (J)	0.15 (J)	0.07 (J)	0.12 (J)
8/28/2019	0.074 (J)	0.066 (J)	0.086 (J)	0.14	<0.1	0.1
10/16/2019						0.093 (J)
10/17/2019					0.038 (J)	
10/18/2019	0.075 (J)	0.073 (J)	0.14 (J)	0.13 (J)		
3/4/2020				0.11 (J)		
3/9/2020	0.054 (J)	0.064 (J)	0.075 (J)		<0.1	0.082 (J)
8/13/2020	0.068 (J)	0.06 (J)	0.076 (J)	0.16	<0.1	0.076 (J)
9/23/2020				0.054 (J)	<0.1	0.07 (J)
9/24/2020	0.061 (J)	0.057 (J)				
9/25/2020			0.086 (J)			
3/8/2021				0.17		
3/10/2021						0.07 (J)
3/11/2021	0.057 (J)	0.058 (J)	0.083 (J)		<0.1	
9/14/2021				0.13		
9/15/2021		0.06 (J)				
9/16/2021	0.084 (J)				0.069 (J)	0.55
9/17/2021			0.13			
1/19/2022				0.12	<0.1	
1/20/2022			0.1			
1/21/2022	0.053 (J)	0.1				
1/25/2022						0.067 (J)
9/7/2022			0.11	0.14		0.11
9/8/2022	0.082 (J)				0.096 (J)	
9/12/2022		0.12				
Mean	0.09767	0.1201	0.1517	0.2286	0.08628	0.1471
Std. Dev.	0.07404	0.1064	0.1134	0.1538	0.1147	0.1237
Upper Lim.	0.084	0.13	0.17	0.2755	0.07	0.15
Lower Lim.	0.054	0.058	0.085	0.1304	0.038	0.076

Confidence Interval

Constituent: Fluoride, total (mg/L) Analysis Run 11/18/2022 1:02 PM View: AP 1 Confidence Intervals

Plant McDonough Client: Southern Company Data: McDonough AP

	DGWC-69	B-100	B-105D	B-112D	B-113D	B-62
3/31/2017	0.16 (J)					
5/12/2017	0.12 (J)					
6/16/2017	0.16 (J)					
7/13/2017	0.13 (J)					
10/26/2017	0.29 (J)					
11/15/2017	0.28 (J)					
3/2/2018	0.18					
7/13/2018	0.19 (J)					
11/8/2018	<0.3 (J)					
1/30/2019						0.43
3/13/2019	0.086 (J)					
8/28/2019	0.07 (J)					
10/16/2019	0.13 (J)					
10/21/2019						0.23 (J)
3/9/2020	0.068 (J)					
8/13/2020	0.084 (J)					0.11
8/17/2020		<0.1				
9/23/2020	0.064 (J)					
9/24/2020						0.093 (J)
9/25/2020		<0.1				
12/9/2020			0.075 (J)			
3/8/2021		<0.1	0.32			
3/10/2021	0.055 (J)					
3/12/2021						0.11
4/15/2021				0.3		
4/16/2021					0.71	
9/9/2021						0.14
9/13/2021		<0.1				
9/15/2021			0.078 (J)			
9/16/2021	0.11			0.34		
9/17/2021					0.87	
1/19/2022			0.058 (J)	0.25		
1/20/2022						0.099 (J)
1/21/2022		<0.1				
1/25/2022	0.054 (J)					
1/26/2022					0.74	
9/7/2022	0.11		0.11	0.27		
9/8/2022		0.072 (J)				0.13
9/12/2022					1	
Mean	0.1311	0.05367	0.1282	0.29	0.83	0.1678
Std. Dev.	0.06853	0.008981	0.1089	0.03916	0.1329	0.1145
Upper Lim.	0.1633	0.072	0.3186	0.3789	1.132	0.43
Lower Lim.	0.08908	0.05	0.0337	0.2011	0.5282	0.093

Confidence Interval

Constituent: Lead (mg/L) Analysis Run 11/18/2022 1:02 PM View: AP 1 Confidence Intervals

Plant McDonough Client: Southern Company Data: McDonough AP

	DGWC-37	DGWC-38	DGWC-39	DGWC-40	DGWC-67	DGWC-68A
9/2/2016				<0.001		
9/8/2016	<0.001	<0.001	<0.001			
12/7/2016	<0.001	<0.001	<0.001			
12/8/2016				<0.001		
3/30/2017	0.0014 (J)	<0.001	<0.001	7E-05 (J)		
3/31/2017					<0.001	
5/12/2017					9E-05 (J)	<0.001
6/16/2017					<0.001	<0.001
7/13/2017	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
8/8/2017						<0.001
10/26/2017	<0.001	0.0001 (J)	<0.001	7E-05 (J)	<0.001	<0.001
3/1/2018	<0.001	<0.001	<0.001			
3/2/2018				<0.001	<0.001	<0.001
7/12/2018	<0.001	<0.001	<0.001	<0.001		
7/13/2018					<0.001	<0.001
11/8/2018	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
8/28/2019	6.1E-05 (J)	<0.001	8E-05 (J)	8.1E-05 (J)	<0.001	<0.001
10/16/2019						<0.001
10/17/2019					<0.001	
10/18/2019	<0.001	7.4E-05 (J)	<0.001	0.00015 (J)		
3/4/2020				0.00017 (J)		
3/9/2020	<0.001	6.1E-05 (J)	<0.001		4.7E-05 (J)	<0.001
8/13/2020	<0.001	<0.001	<0.001	4.9E-05 (J)	5.6E-05 (J)	<0.001
9/23/2020				0.00028 (J)	<0.001	0.00035 (J)
9/24/2020	<0.001	0.00014 (J)				
9/25/2020			0.00022 (J)			
3/8/2021				5.4E-05 (J)		
3/10/2021						6.7E-05 (J)
3/11/2021	<0.001	0.00014 (J)	<0.001		0.00025 (J)	
9/14/2021				<0.001		
9/15/2021		<0.001				
9/16/2021	<0.001				<0.001	<0.001
9/17/2021			<0.001			
1/19/2022				<0.001	<0.001	
1/20/2022			<0.001			
1/21/2022	<0.001	<0.001				
1/25/2022						<0.001
9/7/2022			<0.001	<0.001		<0.001
9/8/2022	<0.001				<0.001	
9/12/2022		<0.001				
Mean	0.0009683	0.0007362	0.0009	0.0005838	0.0007908	0.0009069
Std. Dev.	0.0002531	0.0004217	0.0002834	0.0004581	0.000391	0.0002676
Upper Lim.	0.0014	0.001	0.001	0.001	0.001	0.001
Lower Lim.	6.1E-05	0.0001	0.00022	7E-05	0.00025	0.00035

Confidence Interval

Constituent: Lead (mg/L) Analysis Run 11/18/2022 1:02 PM View: AP 1 Confidence Intervals

Plant McDonough Client: Southern Company Data: McDonough AP

	DGWC-69	B-100	B-105D	B-112D	B-113D
3/31/2017	<0.001				
5/12/2017	0.0001 (J)				
6/16/2017	<0.001				
7/13/2017	<0.001				
10/26/2017	<0.001				
11/15/2017	9E-05 (J)				
3/2/2018	<0.001				
7/13/2018	<0.001				
11/8/2018	<0.001				
8/28/2019	<0.001				
10/16/2019	<0.001				
3/9/2020	9E-05 (J)				
8/13/2020	5.9E-05 (J)				
8/17/2020		8.8E-05 (J)			
9/23/2020	0.00017 (J)				
9/25/2020		0.00021 (J)			
12/9/2020			5.2E-05 (J)		
3/8/2021		0.00018 (J)	<0.001		
3/10/2021	0.0001 (J)				
4/15/2021				0.00014 (J)	
4/16/2021					0.00014 (J)
9/13/2021		<0.001			
9/15/2021			<0.001		
9/16/2021	<0.001			<0.001	
9/17/2021					<0.001
1/19/2022			<0.001	<0.001	
1/21/2022		<0.001			
1/25/2022	<0.001				
1/26/2022					<0.001
9/7/2022	<0.001		<0.001	<0.001	
9/8/2022		<0.001			
9/12/2022					<0.001
Mean	0.0007005	0.0005797	0.0008104	0.000785	0.000785
Std. Dev.	0.0004363	0.0004622	0.000424	0.00043	0.00043
Upper Lim.	0.001	0.001	0.001	0.001	0.001
Lower Lim.	0.0001	8.8E-05	5.2E-05	0.00014	0.00014

Confidence Interval

Constituent: Lithium (mg/L) Analysis Run 11/18/2022 1:02 PM View: AP 1 Confidence Intervals

Plant McDonough Client: Southern Company Data: McDonough AP

	DGWC-37	DGWC-38	DGWC-40	DGWC-67	DGWC-68A	DGWC-69
9/2/2016			0.0022 (J)			
9/8/2016	<0.03	0.0032 (J)				
12/7/2016	<0.03	0.0035 (J)				
12/8/2016			<0.03			
3/30/2017	0.0029 (J)	0.0035 (J)	0.0023 (J)			
3/31/2017				0.0052 (J)		0.0031 (J)
5/12/2017				0.0054 (J)	0.0016 (J)	0.003 (J)
6/16/2017				0.0048 (J)	<0.03	0.0031 (J)
7/13/2017	<0.03	0.0032 (J)	0.0023 (J)	0.0044 (J)	<0.03	0.0029 (J)
8/8/2017					<0.03	
10/26/2017	0.0018 (J)	0.0034 (J)	0.0021 (J)	0.0043 (J)	<0.03	0.0034 (J)
11/15/2017						0.0034 (J)
3/1/2018	0.0024 (J)	0.0033 (J)				
3/2/2018			0.0023 (J)	0.0047 (J)	<0.03	0.0028 (J)
7/12/2018	0.0028 (J)	0.0034 (J)	0.0022 (J)			
7/13/2018				0.0041 (J)	<0.03	0.0026 (J)
11/8/2018	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
8/28/2019	0.0025 (J)	0.0034 (J)	0.0022 (J)	0.0046 (J)	<0.03	0.0024 (J)
10/16/2019					<0.03	0.0032 (J)
10/17/2019				0.0047 (J)		
10/18/2019	0.0026 (J)	0.0032 (J)	0.0024 (J)			
3/4/2020			0.0027 (J)			
3/9/2020	0.0017 (J)	0.0033 (J)		0.0048 (J)	<0.03	0.0025 (J)
8/13/2020	0.0023 (J)	0.0028 (J)	0.0022 (J)	0.0044 (J)	<0.03	0.0031 (J)
9/23/2020			0.0022 (J)	0.0043 (J)	<0.03	0.0023 (J)
9/24/2020	0.0021 (J)	0.0029 (J)				
3/8/2021			0.0022 (J)			
3/10/2021					<0.03	0.0023 (J)
3/11/2021	0.0024 (J)	0.003 (J)		0.005 (J)		
9/14/2021			0.003 (J)			
9/15/2021		0.0029 (J)				
9/16/2021	0.0021 (J)			0.0044 (J)	0.00082 (J)	0.0023 (J)
1/19/2022			0.0024 (J)	0.0046 (J)		
1/21/2022	0.002 (J)	0.0025 (J)				
1/25/2022					<0.03	0.0026 (J)
9/7/2022			0.0023 (J)		<0.03	0.0025 (J)
9/8/2022	0.0019 (J)			0.0048 (J)		
9/12/2022		0.003 (J)				
Mean	0.008794	0.004735	0.005588	0.006147	0.02661	0.004306
Std. Dev.	0.01213	0.006516	0.009191	0.006156	0.009562	0.006423
Upper Lim.	0.03	0.0035	0.0027	0.005	0.03	0.0032
Lower Lim.	0.002	0.0029	0.0022	0.0043	0.0016	0.0024

Confidence Interval

Constituent: Lithium (mg/L) Analysis Run 11/18/2022 1:02 PM View: AP 1 Confidence Intervals

Plant McDonough Client: Southern Company Data: McDonough AP

	B-100	B-105D	B-112D	B-113D	B-62
1/30/2019					<0.03
9/11/2019					0.0078 (J)
10/21/2019					0.0078 (J)
8/13/2020					0.0087 (J)
8/17/2020	0.0013 (J)				
9/24/2020					0.0084 (J)
9/25/2020	0.0027 (J)				
12/9/2020		0.014 (J)			
3/8/2021	0.0024 (J)	0.015 (J)			
3/12/2021					0.0087 (J)
4/15/2021			0.0045 (J)		
4/16/2021				0.013 (J)	
9/9/2021					0.0094 (J)
9/13/2021	0.0022 (J)				
9/15/2021		0.014 (J)			
9/16/2021			0.0038 (J)		
9/17/2021				0.013 (J)	
1/19/2022		0.013 (J)	0.0044 (J)		
1/20/2022					0.0092 (J)
1/21/2022	0.0021 (J)				
1/26/2022				0.014 (J)	
9/7/2022		0.013 (J)	0.0039 (J)		
9/8/2022	0.0023 (J)				0.0085 (J)
9/12/2022				0.0084 (J)	
Mean	0.002167	0.0138	0.00415	0.0121	0.01094
Std. Dev.	0.0004719	0.0008367	0.0003512	0.002511	0.007166
Upper Lim.	0.002815	0.0152	0.004947	0.01663	0.03
Lower Lim.	0.001518	0.0124	0.003353	0.005079	0.0078

Confidence Interval

Constituent: Mercury (mg/L) Analysis Run 11/18/2022 1:02 PM View: AP 1 Confidence Intervals

Plant McDonough Client: Southern Company Data: McDonough AP

	DGWC-37	DGWC-38	DGWC-39	DGWC-40	DGWC-67	DGWC-68A
9/2/2016				4.4E-05 (J)		
9/8/2016	<0.0002	<0.0002	<0.0002			
12/7/2016	<0.0002	<0.0002	<0.0002			
12/8/2016				<0.0002		
3/30/2017	6E-05 (J)	7E-05 (J)	5.9E-05 (J)	9E-05 (J)		
3/31/2017					<0.0002	
5/12/2017					<0.0002	<0.0002
6/16/2017					7E-05 (J)	7E-05 (J)
7/13/2017	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
8/8/2017						<0.0002
10/26/2017	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
3/1/2018	<0.0002	<0.0002	<0.0002			
3/2/2018				<0.0002	<0.0002	<0.0002
7/12/2018	4.4E-05 (J)	4E-05 (J)	<0.0002	4.5E-05 (J)		
7/13/2018					<0.0002	<0.0002
11/8/2018	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
8/28/2019	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
10/16/2019						<0.0002
10/17/2019					<0.0002	
10/18/2019	<0.0002	<0.0002	<0.0002	<0.0002		
3/4/2020				<0.0002		
3/9/2020	<0.0002	<0.0002	<0.0002		<0.0002	<0.0002
8/13/2020	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
9/23/2020				<0.0002	<0.0002	<0.0002
9/24/2020	9.1E-05 (J)	8.5E-05 (J)				
9/25/2020			<0.0002			
9/14/2021				<0.0002		
9/15/2021		<0.0002				
9/16/2021	<0.0002				<0.0002	<0.0002
9/17/2021			<0.0002			
1/19/2022				<0.0002	<0.0002	
1/20/2022			<0.0002			
1/21/2022	<0.0002	<0.0002				
1/25/2022						<0.0002
9/7/2022			<0.0002	<0.0002		<0.0002
9/8/2022	<0.0002				<0.0002	
9/12/2022		<0.0002				
Mean	0.0001747	0.0001747	0.0001912	0.0001737	0.0001919	0.0001919
Std. Dev.	5.512E-05	5.506E-05	3.525E-05	5.738E-05	3.25E-05	3.25E-05
Upper Lim.	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002
Lower Lim.	9.1E-05	8.5E-05	5.9E-05	9E-05	7E-05	7E-05

Confidence Interval

Constituent: Mercury (mg/L) Analysis Run 11/18/2022 1:02 PM View: AP 1 Confidence Intervals

Plant McDonough Client: Southern Company Data: McDonough AP

	DGWC-69	B-100	B-105D
3/31/2017	<0.0002		
5/12/2017	<0.0002		
6/16/2017	7E-05 (J)		
7/13/2017	<0.0002		
10/26/2017	<0.0002		
11/15/2017	<0.0002		
3/2/2018	<0.0002		
7/13/2018	<0.0002		
11/8/2018	<0.0002		
8/28/2019	<0.0002		
10/16/2019	<0.0002		
3/9/2020	<0.0002		
8/13/2020	<0.0002		
8/17/2020		0.00011 (J)	
9/23/2020	<0.0002		
9/25/2020		<0.0002	
12/9/2020			8.7E-05 (J)
9/13/2021		<0.0002	
9/15/2021			<0.0002
9/16/2021	<0.0002		
1/19/2022			<0.0002
1/21/2022		<0.0002	
1/25/2022	<0.0002		
9/7/2022	<0.0002		0.00014 (J)
9/8/2022		<0.0002	
Mean	0.0001924	0.000182	0.0001567
Std. Dev.	3.153E-05	4.025E-05	5.443E-05
Upper Lim.	0.0002	0.0002	0.0001737
Lower Lim.	7E-05	0.00011	5.334E-05

Confidence Interval

Constituent: Molybdenum (mg/L) Analysis Run 11/18/2022 1:02 PM View: AP 1 Confidence Intervals

Plant McDonough Client: Southern Company Data: McDonough AP

	DGWC-38	DGWC-68A	DGWC-69	B-105D	B-112D	B-113D
9/8/2016	<0.01					
12/7/2016	<0.01					
3/30/2017	0.0011 (J)					
3/31/2017			0.0124			
5/12/2017		0.275	0.0117			
6/16/2017		0.19	0.0087 (J)			
7/13/2017	0.0012 (J)	0.211	0.0053 (J)			
8/8/2017		0.207				
10/26/2017	0.0011 (J)	0.226	0.0244			
11/15/2017			0.0237			
3/1/2018	<0.01					
3/2/2018		0.215	0.0072 (J)			
7/12/2018	<0.01					
7/13/2018		0.22	0.007 (J)			
11/8/2018	<0.01	0.2	<0.01 (J)			
8/28/2019	<0.01	0.21	0.0059 (J)			
10/16/2019		0.22	0.01			
10/18/2019	<0.01					
3/9/2020	0.001 (J)	0.19	0.0062 (J)			
8/13/2020	0.00098 (J)	0.19	0.011			
9/23/2020		0.2	0.0056 (J)			
9/24/2020	0.001 (J)					
12/9/2020				<0.01		
3/8/2021				0.0011 (J)		
3/10/2021		0.2	0.0056 (J)			
3/11/2021	0.00092 (J)					
3/26/2021						0.025
4/15/2021					0.037	
4/16/2021						0.078
9/15/2021	0.00099 (J)			<0.01		
9/16/2021		0.18	0.009 (J)		0.032	
9/17/2021						0.074
1/19/2022				<0.01	0.032	
1/21/2022	0.0013 (J)					
1/25/2022		0.23	0.0057 (J)			
1/26/2022						0.074
9/7/2022		0.2	0.0067 (J)	<0.01	0.028	
9/12/2022	0.0012 (J)					0.052
Mean	0.004752	0.2096	0.009783	0.00822	0.03225	0.0606
Std. Dev.	0.004527	0.02181	0.005661	0.00398	0.003686	0.02238
Upper Lim.	0.01	0.2224	0.0117	0.01	0.04062	0.0981
Lower Lim.	0.00099	0.1962	0.0057	0.0011	0.02388	0.0231

Confidence Interval

Constituent: Selenium (mg/L) Analysis Run 11/18/2022 1:02 PM View: AP 1 Confidence Intervals

Plant McDonough Client: Southern Company Data: McDonough AP

	DGWC-38	DGWC-40	DGWC-67	DGWC-68A	B-100
9/2/2016		0.0019 (J)			
9/8/2016	<0.005				
12/7/2016	<0.005				
12/8/2016		0.0022 (J)			
3/30/2017	<0.005	0.0023 (J)			
3/31/2017			<0.005		
5/12/2017			<0.005	<0.005	
6/16/2017			<0.005	<0.005	
7/13/2017	<0.005	0.0025 (J)	<0.005	<0.005	
8/8/2017				<0.005	
10/26/2017	<0.005	0.0036 (J)	<0.005	<0.005	
3/1/2018	<0.005				
3/2/2018		<0.005	<0.005	<0.005	
7/12/2018	<0.005	<0.005			
7/13/2018			<0.005	<0.005	
11/8/2018	<0.005	<0.01 (J)	<0.005	<0.005	
8/28/2019	<0.005	0.0017 (J)	<0.005	<0.005	
10/16/2019				<0.005	
10/17/2019			<0.005		
10/18/2019	<0.005	0.0027 (J)			
3/4/2020		0.0049 (J)			
3/9/2020	<0.005		<0.005	<0.005	
8/13/2020	<0.005	0.0018 (J)	<0.005	<0.005	
8/17/2020					<0.005
9/23/2020		0.0067 (J)	<0.005	<0.005	
9/24/2020	<0.005				
9/25/2020					<0.005
3/8/2021		0.0023 (J)			0.0019 (J)
3/10/2021				0.0017 (J)	
3/11/2021	0.0019 (J)		0.0027 (J)		
9/13/2021					<0.005
9/14/2021		0.0015 (J)			
9/15/2021	<0.005				
9/16/2021			<0.005	<0.005	
1/19/2022		<0.005	<0.005		
1/21/2022	<0.005				<0.005
1/25/2022				<0.005	
9/7/2022		0.0018 (J)		<0.005	
9/8/2022			<0.005		<0.005
9/12/2022	<0.005				
Mean	0.004818	0.003582	0.004865	0.004806	0.004483
Std. Dev.	0.0007519	0.002276	0.0005578	0.0008004	0.001266
Upper Lim.	0.005	0.00316	0.005	0.005	0.005
Lower Lim.	0.0019	0.001836	0.0027	0.0017	0.0019

Confidence Interval

Constituent: Thallium (mg/L) Analysis Run 11/18/2022 1:02 PM View: AP 1 Confidence Intervals

Plant McDonough Client: Southern Company Data: McDonough AP

	DGWC-38	DGWC-39	DGWC-40	DGWC-68A
9/2/2016			<0.001	
9/8/2016	<0.001	<0.001		
12/7/2016	<0.001	<0.001		
12/8/2016			<0.001	
3/30/2017	0.0001 (J)	0.0001 (J)	6E-05 (J)	
5/12/2017				<0.001
6/16/2017				<0.001
7/13/2017	0.0001 (J)	9E-05 (J)	6E-05 (J)	<0.001
8/8/2017				<0.001
10/26/2017	0.0001 (J)	0.0001 (J)	7E-05 (J)	<0.001
3/1/2018	<0.001	<0.001		
3/2/2018			<0.001	<0.001
7/12/2018	<0.001	<0.001	<0.001	
7/13/2018				0.00015 (J)
11/8/2018	<0.001	<0.001	<0.001	<0.001
8/28/2019	0.00014 (J)	6.9E-05 (J)	7E-05 (J)	<0.001
10/16/2019				<0.001
10/18/2019	0.0001 (J)	<0.001	<0.001	
3/4/2020			6.8E-05 (J)	
3/9/2020	0.00016 (J)	7.1E-05 (J)		<0.001
8/13/2020	0.00016 (J)	<0.001	<0.001	<0.001
9/23/2020			<0.001	<0.001
9/24/2020	0.00015 (J)			
9/25/2020		<0.001		
3/8/2021			<0.001	
3/10/2021				<0.001
3/11/2021	<0.001	<0.001		
9/14/2021			<0.001	
9/15/2021	<0.001			
9/16/2021				<0.001
9/17/2021		<0.001		
1/19/2022			<0.001	
1/20/2022		<0.001		
1/21/2022	<0.001			
1/25/2022				<0.001
9/7/2022		<0.001	<0.001	<0.001
9/12/2022	<0.001			
Mean	0.0005888	0.0007312	0.0007252	0.00095
Std. Dev.	0.0004499	0.0004293	0.0004389	0.0002062
Upper Lim.	0.001	0.001	0.001	0.001
Lower Lim.	0.0001	9E-05	6.8E-05	0.00015

Confidence Interval

Constituent: Barium (mg/L) Analysis Run 11/18/2022 1:02 PM View: AP 1 Confidence Intervals Nonparametric

Plant McDonough Client: Southern Company Data: McDonough AP

	B-113D
4/16/2021	0.0032 (J)
9/17/2021	0.0048 (J)
1/26/2022	0.0051
9/12/2022	0.0051
Mean	0.00455
Std. Dev.	0.000911
Upper Lim.	0.0051
Lower Lim.	0.0032

Confidence Interval

Constituent: Cobalt (mg/L) Analysis Run 11/18/2022 1:02 PM View: AP 1 Confidence Intervals Nonparametric

Plant McDonough Client: Southern Company Data: McDonough AP

	B-112D
4/15/2021	0.0025 (J)
9/16/2021	0.00054 (J)
1/19/2022	<0.005
9/7/2022	<0.005
Mean	0.00326
Std. Dev.	0.002163
Upper Lim.	0.005
Lower Lim.	0.00054

Confidence Interval

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 11/18/2022 1:02 PM View: AP 1 Confidence Intervals Nonparametric
Plant McDonough Client: Southern Company Data: McDonough AP

	B-112D
4/15/2021	0.945 (U)
9/16/2021	0.241 (U)
1/19/2022	0.738 (U)
9/7/2022	0.755 (U)
Mean	0.6698
Std. Dev.	0.3008
Upper Lim.	0.945
Lower Lim.	0.241

FIGURE I.

Appendix IV Trend Test - Confidence Interval Exceedances - Significant Results

Plant McDonough Client: Southern Company Data: McDonough AP Printed 11/15/2022, 4:52 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Cobalt (mg/L)	**DGWA-53 (bg)**	**-0.004341**	**-86**	**-63**	**Yes**	**17**	**0**	**n/a**	**n/a**	**0.01**	**NP**

Appendix IV Trend Test - Confidence Interval Exceedances - All Results

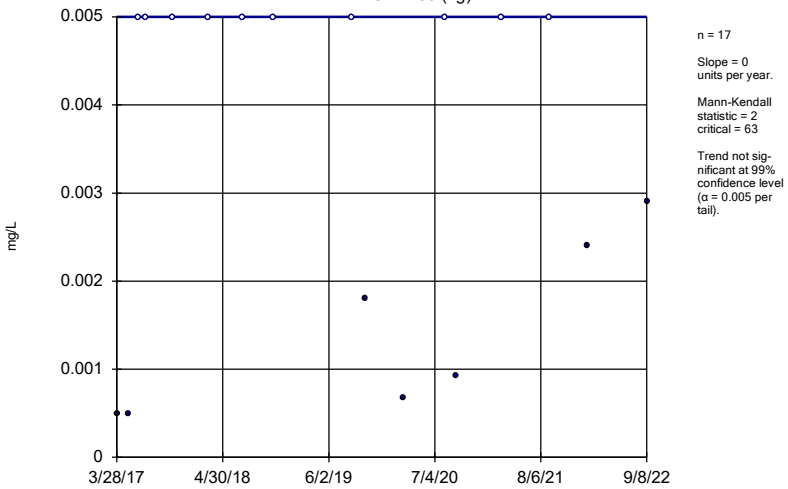
Plant McDonough Client: Southern Company Data: McDonough AP Printed 11/15/2022, 4:52 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Arsenic (mg/L)	DGWA-53 (bg)	0	2	63	No	17	58.82	n/a	n/a	0.01	NP
Arsenic (mg/L)	DGWA-70A (bg)	0	-31	-63	No	17	82.35	n/a	n/a	0.01	NP
Arsenic (mg/L)	DGWA-71 (bg)	0	24	58	No	16	81.25	n/a	n/a	0.01	NP
Arsenic (mg/L)	DGWC-69	0.003451	60	74	No	19	0	n/a	n/a	0.01	NP
Cobalt (mg/L)	**DGWA-53 (bg)**	**-0.004341**	**-86**	**-63**	**Yes**	**17**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Cobalt (mg/L)	DGWA-70A (bg)	0	29	63	No	17	52.94	n/a	n/a	0.01	NP
Cobalt (mg/L)	DGWA-71 (bg)	0	45	58	No	16	68.75	n/a	n/a	0.01	NP
Cobalt (mg/L)	DGWC-40	0.001513	45	63	No	17	0	n/a	n/a	0.01	NP
Molybdenum (mg/L)	DGWA-53 (bg)	-0.00174	-31	-63	No	17	0	n/a	n/a	0.01	NP
Molybdenum (mg/L)	DGWA-70A (bg)	0	0	63	No	17	100	n/a	n/a	0.01	NP
Molybdenum (mg/L)	DGWA-71 (bg)	0	15	58	No	16	93.75	n/a	n/a	0.01	NP
Molybdenum (mg/L)	DGWC-68A	-0.004125	-34	-63	No	17	0	n/a	n/a	0.01	NP

Sanitas™ v.9.6.33 Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

DGWA-53 (bg)



n = 17

Slope = 0 units per year.

Mann-Kendall statistic = 2
critical = 63

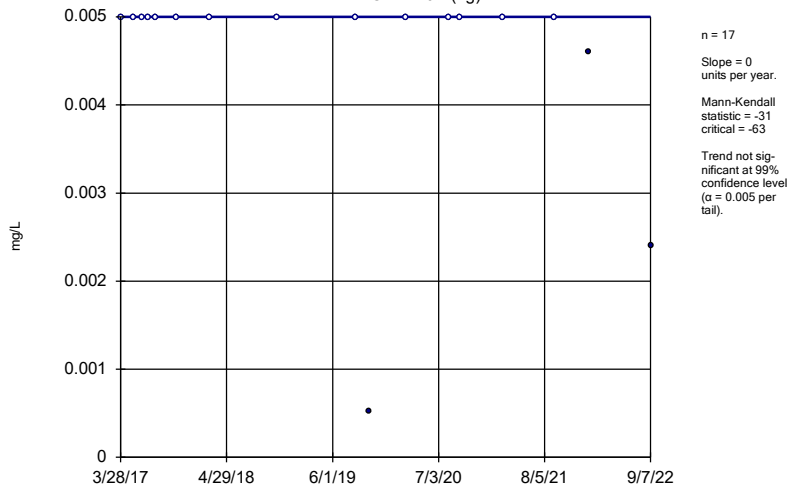
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Arsenic Analysis Run 11/15/2022 4:51 PM View: A4 Trend Test
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.9.6.33 Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

DGWA-70A (bg)



n = 17

Slope = 0 units per year.

Mann-Kendall statistic = -31
critical = -63

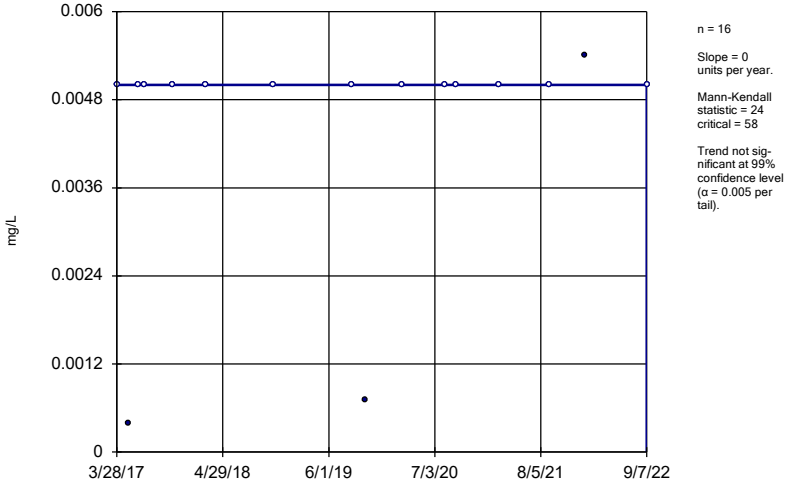
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Arsenic Analysis Run 11/15/2022 4:51 PM View: A4 Trend Test
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.9.6.33 Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

DGWA-71 (bg)



n = 16

Slope = 0 units per year.

Mann-Kendall statistic = 24
critical = 58

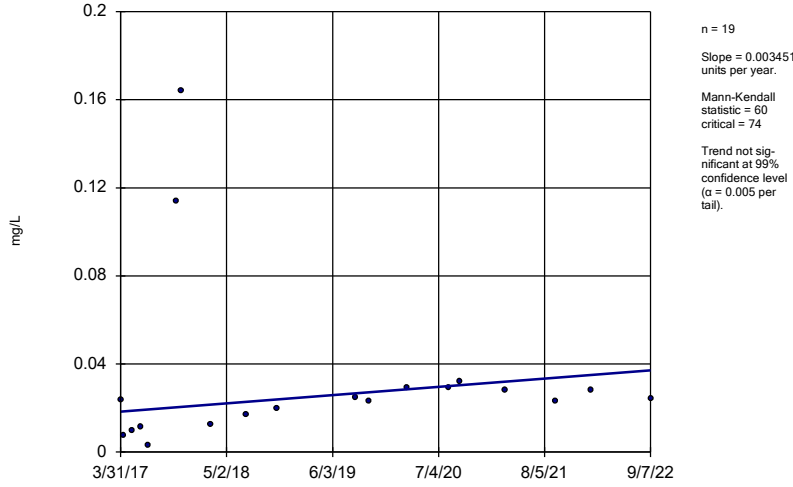
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Arsenic Analysis Run 11/15/2022 4:51 PM View: A4 Trend Test
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.9.6.33 Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

DGWC-69



n = 19

Slope = 0.003451 units per year.

Mann-Kendall statistic = 60
critical = 74

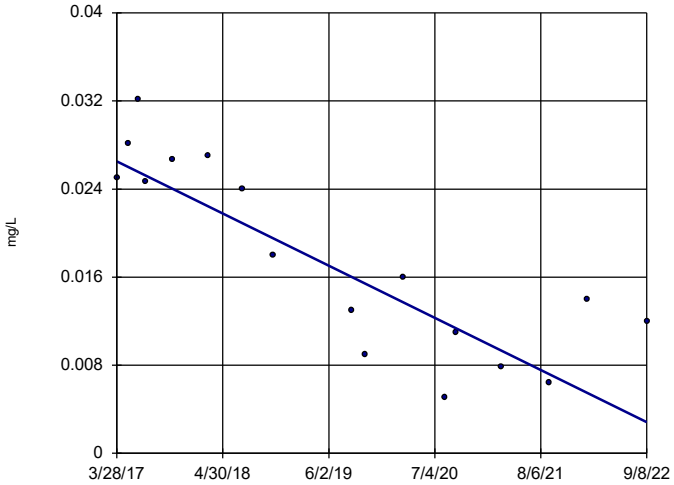
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Arsenic Analysis Run 11/15/2022 4:51 PM View: A4 Trend Test
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.9.6.33 Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

DGWA-53 (bg)



n = 17

Slope = -0.004341 units per year.

Mann-Kendall statistic = -86
critical = -63

Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Cobalt Analysis Run 11/15/2022 4:51 PM View: A4 Trend Test

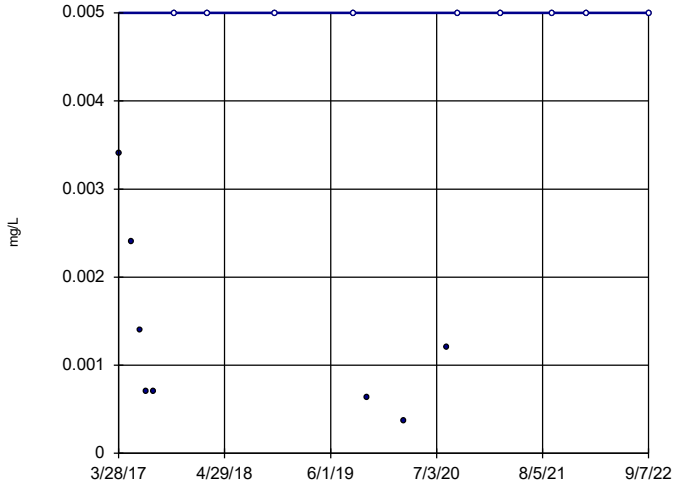
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.9.6.33 Sanitas software utilized by Groundwater Stats Consulting. UG

Hollow symbols indicate censored values.

Sen's Slope Estimator

DGWA-70A (bg)



n = 17

Slope = 0 units per year.

Mann-Kendall statistic = 29
critical = 63

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Cobalt Analysis Run 11/15/2022 4:51 PM View: A4 Trend Test

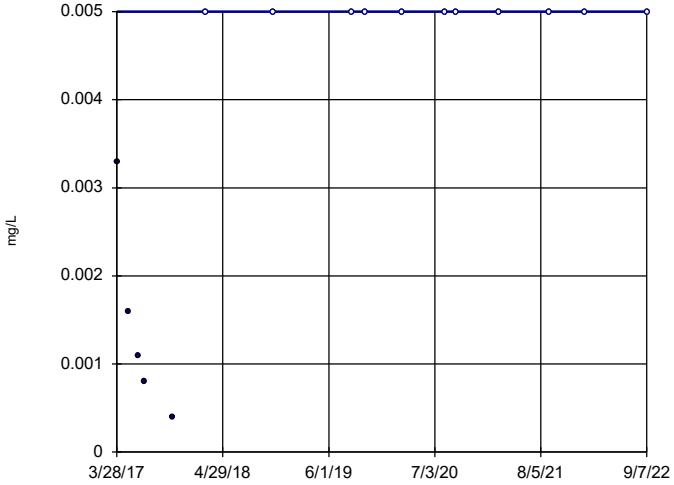
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.9.6.33 Sanitas software utilized by Groundwater Stats Consulting. UG

Hollow symbols indicate censored values.

Sen's Slope Estimator

DGWA-71 (bg)



n = 16

Slope = 0 units per year.

Mann-Kendall statistic = 45
critical = 58

Trend not significant at 99% confidence level (α = 0.005 per tail).

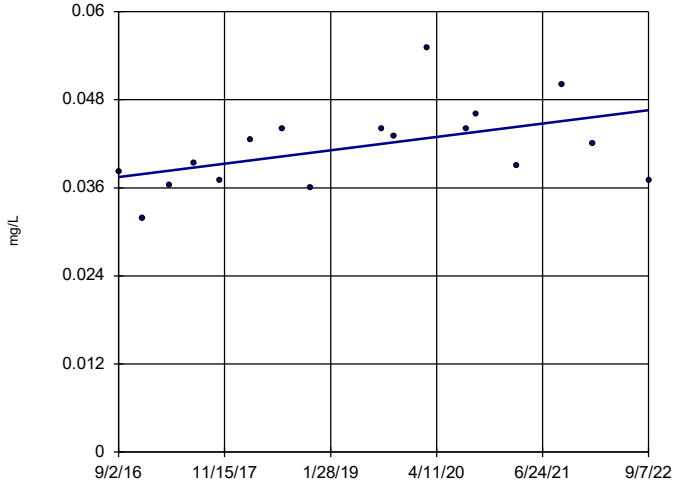
Constituent: Cobalt Analysis Run 11/15/2022 4:51 PM View: A4 Trend Test

Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.9.6.33 Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

DGWC-40



n = 17

Slope = 0.001513 units per year.

Mann-Kendall statistic = 45
critical = 63

Trend not significant at 99% confidence level (α = 0.005 per tail).

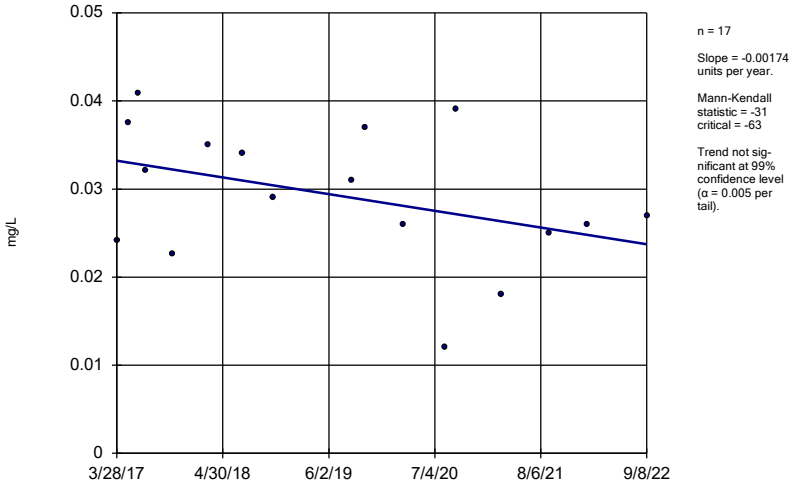
Constituent: Cobalt Analysis Run 11/15/2022 4:51 PM View: A4 Trend Test

Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.9.6.33 Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

DGWA-53 (bg)



n = 17

Slope = -0.00174 units per year.

Mann-Kendall statistic = -31 critical = -63

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Molybdenum Analysis Run 11/15/2022 4:51 PM View: A4 Trend Test

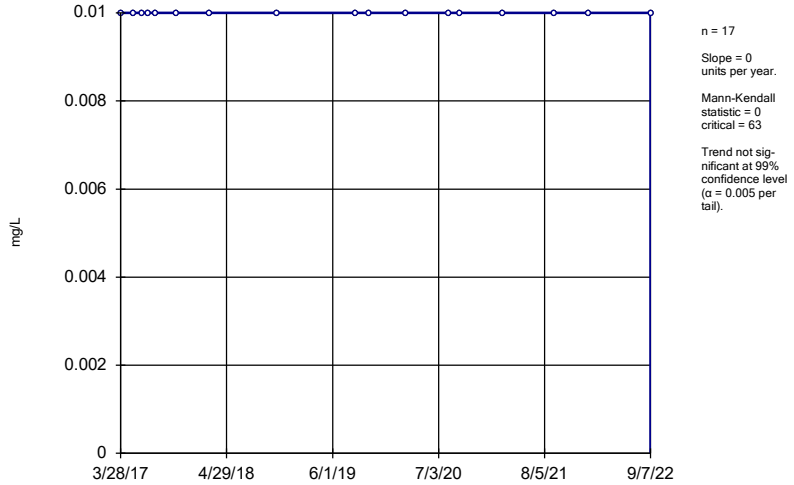
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.9.6.33 Sanitas software utilized by Groundwater Stats Consulting. UG

Hollow symbols indicate censored values.

Sen's Slope Estimator

DGWA-70A (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: Molybdenum Analysis Run 11/15/2022 4:51 PM View: A4 Trend Test

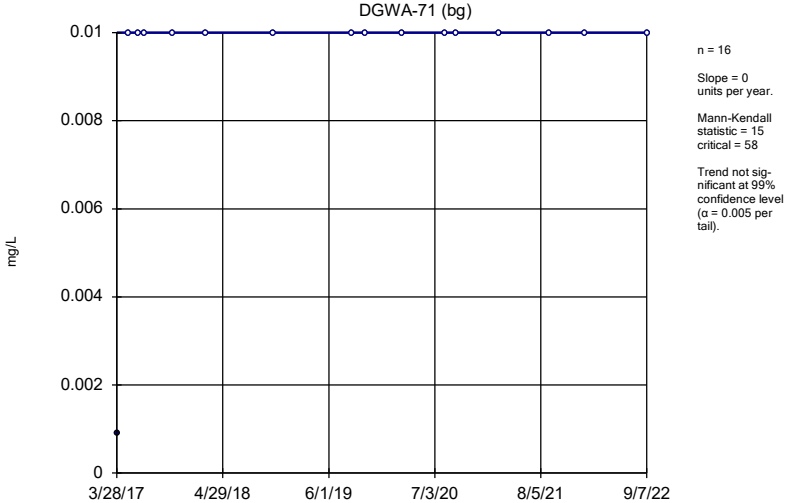
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.9.6.33 Sanitas software utilized by Groundwater Stats Consulting. UG

Hollow symbols indicate censored values.

Sen's Slope Estimator

DGWA-71 (bg)



n = 16

Slope = 0 units per year.

Mann-Kendall statistic = 15 critical = 58

Trend not significant at 99% confidence level (α = 0.005 per tail).

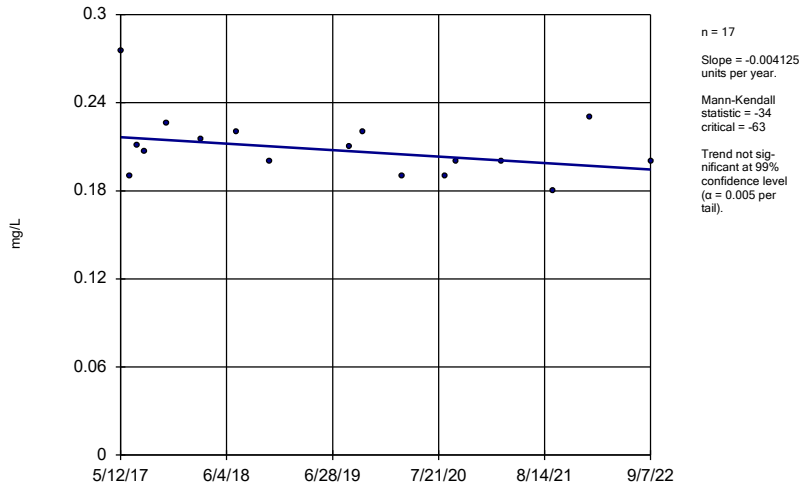
Constituent: Molybdenum Analysis Run 11/15/2022 4:51 PM View: A4 Trend Test

Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.9.6.33 Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

DGWC-68A



n = 17

Slope = -0.004125 units per year.

Mann-Kendall statistic = -34 critical = -63

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Molybdenum Analysis Run 11/15/2022 4:51 PM View: A4 Trend Test

Plant McDonough Client: Southern Company Data: McDonough AP

APPENDIX D

Statistical Analyses, January-February 2023

GROUNDWATER STATS CONSULTING

July 31, 2023

Southern Company Services
Attn: Mr. Joju Abraham
241 Ralph McGill Blvd NE, Bin 10160
Atlanta, Georgia 30308-3374

Re: Plant McDonough Ash Pond (AP-1)
January/February 2023 Statistical Analysis

Dear Mr. Abraham,

Groundwater Stats Consulting, formerly the statistical consulting division of Sanitas Technologies, is pleased to provide the January/February 2023 Semi-Annual Groundwater Monitoring and Corrective Action Statistical summary of groundwater data for Georgia Power Company's Plant McDonough AP-1. The analysis complies with the federal rule for the Disposal of Coal Combustion Residuals from Electric Utilities (CCR Rule, 2015), the Georgia Environmental Protection Division Rules for Solid Waste Management Chapter 391-3-4-.10 and follows the United States Environmental Protection Agency (USEPA) Unified Guidance (2009).

Sampling for the Appendix III parameters began in 2016, and at least 8 background samples were collected at each of the groundwater monitoring wells. The assessment wells were installed at various times since 2020 and have limited data. Semi-annual sampling of the majority of Appendix IV constituents has been performed for the groundwater monitoring wells for several years in accordance with the Georgia Department of Natural Resources, Environmental Protection Division groundwater monitoring regulations. A list of all parameters is provided below.

The monitoring well network, as provided by Southern Company Services, consists of the following:

- **Upgradient wells:** DGWA-53, DGWA-70A, and DGWA-71
- **Downgradient wells:** DGWC-37, DGWC-38, DGWC-39, DGWC-40, DGWC-67, DGWC-68A, DGWC-69, and DGWC-121
- **Assessment wells:** B-62, B-100, B-105D, and B-112D

Note that downgradient well DGWC-121 was installed in March 2022 and was first sampled in June 2022, for all constituents except combined radium 226 + 228 which was first sampled in September 2022. Data from this well are plotted on the time series graphs and box plots, and Appendix IV constituents will be evaluated using confidence intervals, which require a minimum of 4 samples, once a sufficient number of samples are available. Interwell prediction limits will be used to evaluate Appendix III data at these wells when a minimum of 8 samples are available.

Data were sent electronically to Groundwater Stats Consulting, and the statistical analysis was reviewed by Andrew Collins, Project Manager of Groundwater Stats Consulting. The analysis is prepared according to the recommended statistical methodology prepared in the Fall 2017 by Dr. Kirk Cameron, PhD Statistician with MacStat Consulting, primary author of the USEPA Unified Guidance.

The Coal Combustion Residual (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 downgradient and assessment well/constituent pairs with 100% non-detects follows this letter.

Time series plots for Appendix III and IV parameters at all wells are provided for the purpose of screening data at these wells (Figure A). Additionally, a separate section of box plots is included for all constituents at upgradient and downgradient wells (Figure B). The time series plots are used to initially screen for suspected outliers and trends, while the box plots provide visual representation of variation within individual wells and between all wells. Note that due to flooding in well DGWC-68A during the September 2021 sample event, this well was, reportedly, re-developed and resamples were collected in October 2021 for arsenic, barium, chromium, cobalt, and pH. While the September 2021 reported results remain in the database for this well, these measurements were flagged as outliers. 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. Non-detects are handled as follows:

- 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, simple substitution of one-half the 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 the intrawell case, data for all wells and constituents may be re-evaluated when a minimum of 4 new data points are available to determine whether earlier concentrations are representative of present-day groundwater quality. In some cases, the earlier portion of data may require deselection 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 are used to identify suspected outliers, or extreme values that would result in limits that are not representative of the current background data population. Suspected outliers at all wells for Appendix III and Appendix IV parameters are formally tested using Tukey's box plot method and, when identified, flagged in the computer database with "o" and deselected prior to construction of statistical limits.

Using the Tukey box plot method, several outliers were identified, and the reports were submitted with the screening. In cases where the most recent value was identified as an outlier, values were not flagged in the database at that time 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 laboratory's 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.

Of the outliers identified by Tukey's method, only a few of these values were flagged in the database as all other values are similar to remaining measurements within a given well or neighboring wells or were non-detects.

Additionally, when any values are flagged in the database as outliers, they are plotted in a disconnected and lighter symbol on the time series graph. The accompanying data pages display the flagged value in a lighter font as well. A substitution of the most recent

reporting limit was applied when varying detection limits existed in data. When the reporting limit was higher than the Regional Screening Levels discussed below, non-detects were substituted with one half the reporting limit.

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 Test Evaluation

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, all available data are evaluated to determine whether earlier concentration levels are significantly different than current reported concentrations and will be deselected as necessary. When any 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 were included with the previous screening and showed two statistically significant decreasing trends for the Appendix III parameters. The only trend identified in the upgradient wells was a statistically significant decreasing trend for sulfate in well DGWA-71. 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 are not representative of the current background data population; 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 which would indicate intrawell analyses may be most appropriate for these parameters. 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.

Statistical Analysis of Appendix III Parameters – January/February 2023

Interwell Prediction Limits

Interwell prediction limits, combined with a 1-of-2 resample plan, were constructed using all historical upgradient well data through February 2023 (Figure D). Interwell prediction limits pool upgradient well data to establish a background limit for an individual constituent. The January/February 2023 sample event 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 a resample confirms the initial exceedance, a statistically significant increase is identified, and further research would be required to identify the cause of the exceedance (i.e., impact from the site, natural variation, or an off-site source). If the resample falls within the statistical limit, the initial exceedance is considered to be a false positive result. Therefore, no exceedance is noted, and no further action is necessary. If no resample is collected, the original result is considered a confirmed exceedance. Several prediction limit exceedances were noted for Appendix III parameters. A summary table of the interwell prediction limits follows this letter. Exceedances were noted for the following well/constituent pairs:

- Boron: DGWC-37, GDWC-38, DGWC-39, DGWC-40, DGWC-67, and DGWC-68A
- Calcium: DGWC-37, DGWC-38, DGWC-39, DGWC-40, DGWC-67, and DGWC-68A
- Chloride: DGWC-38, DGWC-40, and DGWC-67

- pH: DGWC-40
- Sulfate: DGWC-37, DGWC-38, DGWC-39, DGWC-40, DGWC-67, and DGWC-68A
- TDS: DGWC-37, DGWC-38, DGWC-39, DGWC-40, and DGWC-67

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 at the 99% confidence level to determine whether concentrations are statistically increasing, decreasing, or stable (Figure E). Upgradient wells are included in the trend analyses for all parameters found to exceed their prediction limit in downgradient wells. Similar patterns that are present in both upgradient and downgradient wells may be an indication of variability in groundwater quality unrelated to practices at the site. A summary of the trend test results follows this letter. Statistically significant trends were noted for the following well/constituent pairs:

Increasing trends:
- Boron: DGWC-67
- Calcium: DGWC-67 and DGWA-68A
- Chloride: DGWC-67

Decreasing trends:
- Boron: DGWC-39 and DGWC-40
- Calcium: DGWA-53 (upgradient)
- Chloride: DGWA-53 (upgradient) and DGWC-40
- Sulfate: DGWA-71 (upgradient), DGWC-38, DGWC-39, DGWC-40, and DGWC-68A
- TDS: DGWA-53 (upgradient) and DGWC-39

Statistical Analysis of Appendix IV Parameters – January/February 2023

For Appendix IV parameters, confidence intervals for each downgradient well/constituent were compared against corresponding Groundwater Protection Standards (GWPS). GWPS were developed as described below. Downgradient well/constituent pairs that have 100% non-detects do not require analysis. Data from all wells for Appendix IV parameters are reassessed for outliers during each analysis prior to constructing statistical limits. No new values were flagged during this analysis and a complete list of flagged outliers follows this report (Figure C).

Interwell Upper Tolerance Limits

Interwell upper tolerance limits were used to calculate site-specific background limits from all available pooled upgradient well data through February 2023 for Appendix IV constituents (Figure F). Parametric tolerance limits are used when data follow a normal or transformed-normal distribution such as for combined radium. When data contained greater than 50% non-detects or did not follow a normal or transformed-normal distribution, non-parametric tolerance limits were used.

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 accordance with the state requirements in each downgradient well (Figure H). Note that confidence intervals require a minimum of 4 samples and, in many cases, the assessment wells had insufficient samples at this time. The Sanitas software was used to calculate the tolerance limits and the confidence intervals. These intervals were constructed as either parametric or nonparametric confidence intervals depending on the data distribution and percentage of non-detects. When data followed a normal or transformed-normal distribution, parametric confidence

intervals were used for Appendix IV parameters. The lower confidence limit, which is constructed with 99% confidence for parametric confidence intervals, is compared to the GWPS prepared as described above. Nonparametric confidence intervals were constructed when data did not follow a normal or transformed-normal distribution or when there were greater than 50% non-detects. The confidence level associated with nonparametric confidence intervals is dependent upon the number samples available.

Due to limited sample size, the lower confidence limit resulted in a negative number for combined radium 226 + 228 at well B-112D. Therefore, a non-parametric confidence interval, which are bound by high and low reported measurements within a given well, was constructed for this particular case and may be found at the end of Figure H. This is a more conservative approach in that the lower confidence limit reflects the lowest reported measurement in the data set rather than a negative number.

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. A summary of the confidence intervals follows this letter. Exceedances were noted for the following well/constituent pairs:

- Arsenic: DGWC-69
- Cobalt: DGWC-40
- Molybdenum: DGWC-68A

Trend Test Evaluation – Appendix IV

Data at wells with confidence interval exceedances are further evaluated using the Sen's Slope/Mann Kendall trend test at the 99% confidence level to determine whether concentrations are statistically increasing, decreasing, or stable (Figure I). Upgradient wells are included in the trend analyses for all parameters found to exceed their prediction limit in downgradient wells to identify whether similar patterns exist upgradient of the site. When trends are present in upgradient trends, it is an indication of variability in groundwater quality unrelated to practices at the site. A summary of the Appendix IV trend test results follows this letter. Statistically significant trends were identified for the following well/constituent pairs:

Increasing trends:

- None

Decreasing trends:

- Cobalt: DGWA-53 (upgradient)

Thank you for the opportunity to assist you in the statistical analysis of groundwater quality for McDonough Ash Pond 1. If you have any questions or comments, please feel free to contact us.

For Groundwater Stats Consulting,

Abdul Diane
Groundwater Analyst

Andrew Collins
Project Manager

100% Non-Detects: Appendix IV Downgradient & Assessment

Analysis Run 4/18/2023 1:23 PM View: AP 1 Confidence Intervals
Plant McDonough Client: Southern Company Data: McDonough AP

Antimony (mg/L)
DGWC-37, DGWC-38, DGWC-39

Arsenic (mg/L)
B-100

Beryllium (mg/L)
B-105D, B-112D, DGWC-39, DGWC-67

Cadmium (mg/L)
B-105D, B-112D, B-62, DGWC-39

Chromium (mg/L)
DGWC-39

Lead (mg/L)
B-62

Lithium (mg/L)
DGWC-39

Mercury (mg/L)
B-112D, B-62

Molybdenum (mg/L)
B-62, DGWC-37, DGWC-39, DGWC-40, DGWC-67

Selenium (mg/L)
B-105D, B-112D, B-62, DGWC-37, DGWC-39, DGWC-69

Thallium (mg/L)
B-100, B-105D, B-112D, B-62, DGWC-37, DGWC-67, DGWC-69

Appendix III - Interwell Prediction Limits - Significant Results

Plant McDonough Client: Southern Company Data: McDonough AP Printed 4/16/2023, 12:45 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)	DGWC-37	0.13	n/a	2/2/2023	1.5	Yes	50	n/a	n/a	26	n/a	n/a	0.0007375	NP Inter (normality) 1 of 2
Boron (mg/L)	DGWC-38	0.13	n/a	2/2/2023	2.6	Yes	50	n/a	n/a	26	n/a	n/a	0.0007375	NP Inter (normality) 1 of 2
Boron (mg/L)	DGWC-39	0.13	n/a	2/3/2023	2.1	Yes	50	n/a	n/a	26	n/a	n/a	0.0007375	NP Inter (normality) 1 of 2
Boron (mg/L)	DGWC-40	0.13	n/a	2/1/2023	0.68	Yes	50	n/a	n/a	26	n/a	n/a	0.0007375	NP Inter (normality) 1 of 2
Boron (mg/L)	DGWC-67	0.13	n/a	2/2/2023	3.9	Yes	50	n/a	n/a	26	n/a	n/a	0.0007375	NP Inter (normality) 1 of 2
Boron (mg/L)	DGWC-68A	0.13	n/a	2/1/2023	1.7	Yes	50	n/a	n/a	26	n/a	n/a	0.0007375	NP Inter (normality) 1 of 2
Calcium (mg/L)	DGWC-37	40.3	n/a	2/2/2023	61.7	Yes	50	n/a	n/a	4	n/a	n/a	0.0007375	NP Inter (normality) 1 of 2
Calcium (mg/L)	DGWC-38	40.3	n/a	2/2/2023	83.6	Yes	50	n/a	n/a	4	n/a	n/a	0.0007375	NP Inter (normality) 1 of 2
Calcium (mg/L)	DGWC-39	40.3	n/a	2/3/2023	77.4	Yes	50	n/a	n/a	4	n/a	n/a	0.0007375	NP Inter (normality) 1 of 2
Calcium (mg/L)	DGWC-40	40.3	n/a	2/1/2023	41.1	Yes	50	n/a	n/a	4	n/a	n/a	0.0007375	NP Inter (normality) 1 of 2
Calcium (mg/L)	DGWC-67	40.3	n/a	2/2/2023	48.6	Yes	50	n/a	n/a	4	n/a	n/a	0.0007375	NP Inter (normality) 1 of 2
Calcium (mg/L)	DGWC-68A	40.3	n/a	2/1/2023	64.8	Yes	50	n/a	n/a	4	n/a	n/a	0.0007375	NP Inter (normality) 1 of 2
Chloride (mg/L)	DGWC-38	8.2	n/a	2/2/2023	8.7	Yes	52	n/a	n/a	0	n/a	n/a	0.0006941	NP Inter (normality) 1 of 2
Chloride (mg/L)	DGWC-40	8.2	n/a	2/1/2023	16	Yes	52	n/a	n/a	0	n/a	n/a	0.0006941	NP Inter (normality) 1 of 2
Chloride (mg/L)	DGWC-67	8.2	n/a	2/2/2023	9.4	Yes	52	n/a	n/a	0	n/a	n/a	0.0006941	NP Inter (normality) 1 of 2
pH, Field (SU)	DGWC-40	6.69	5.43	2/1/2023	4.66	Yes	59	n/a	n/a	0	n/a	n/a	0.001084	NP Inter (normality) 1 of 2
Sulfate (mg/L)	DGWC-37	30.83	n/a	2/2/2023	94.3	Yes	52	1.694	0.7439	15.38	Kaplan-Meier	x^(1/3)	0.001075	Param Inter 1 of 2
Sulfate (mg/L)	DGWC-38	30.83	n/a	2/2/2023	239	Yes	52	1.694	0.7439	15.38	Kaplan-Meier	x^(1/3)	0.001075	Param Inter 1 of 2
Sulfate (mg/L)	DGWC-39	30.83	n/a	2/3/2023	115	Yes	52	1.694	0.7439	15.38	Kaplan-Meier	x^(1/3)	0.001075	Param Inter 1 of 2
Sulfate (mg/L)	DGWC-40	30.83	n/a	2/1/2023	189	Yes	52	1.694	0.7439	15.38	Kaplan-Meier	x^(1/3)	0.001075	Param Inter 1 of 2
Sulfate (mg/L)	DGWC-67	30.83	n/a	2/2/2023	117	Yes	52	1.694	0.7439	15.38	Kaplan-Meier	x^(1/3)	0.001075	Param Inter 1 of 2
Sulfate (mg/L)	DGWC-68A	30.83	n/a	2/1/2023	35.6	Yes	52	1.694	0.7439	15.38	Kaplan-Meier	x^(1/3)	0.001075	Param Inter 1 of 2
Total Dissolved Solids (mg/L)	DGWC-37	243.1	n/a	2/2/2023	302	Yes	51	9.894	2.938	0	None	sqrt(x)	0.001075	Param Inter 1 of 2
Total Dissolved Solids (mg/L)	DGWC-38	243.1	n/a	2/2/2023	478	Yes	51	9.894	2.938	0	None	sqrt(x)	0.001075	Param Inter 1 of 2
Total Dissolved Solids (mg/L)	DGWC-39	243.1	n/a	2/3/2023	382	Yes	51	9.894	2.938	0	None	sqrt(x)	0.001075	Param Inter 1 of 2
Total Dissolved Solids (mg/L)	DGWC-40	243.1	n/a	2/1/2023	343	Yes	51	9.894	2.938	0	None	sqrt(x)	0.001075	Param Inter 1 of 2
Total Dissolved Solids (mg/L)	DGWC-67	243.1	n/a	2/2/2023	317	Yes	51	9.894	2.938	0	None	sqrt(x)	0.001075	Param Inter 1 of 2

Appendix III - Interwell Prediction Limits - All Results

Plant McDonough Client: Southern Company Data: McDonough AP Printed 4/16/2023, 12:45 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)	**DGWC-37**	**0.13**	**n/a**	**2/2/2023**	**1.5**	**Yes**	**50**	**n/a**	**n/a**	**26**	**n/a**	**n/a**	**0.0007375**	**NP Inter (normality) 1 of 2**
Boron (mg/L)	**DGWC-38**	**0.13**	**n/a**	**2/2/2023**	**2.6**	**Yes**	**50**	**n/a**	**n/a**	**26**	**n/a**	**n/a**	**0.0007375**	**NP Inter (normality) 1 of 2**
Boron (mg/L)	**DGWC-39**	**0.13**	**n/a**	**2/3/2023**	**2.1**	**Yes**	**50**	**n/a**	**n/a**	**26**	**n/a**	**n/a**	**0.0007375**	**NP Inter (normality) 1 of 2**
Boron (mg/L)	**DGWC-40**	**0.13**	**n/a**	**2/1/2023**	**0.68**	**Yes**	**50**	**n/a**	**n/a**	**26**	**n/a**	**n/a**	**0.0007375**	**NP Inter (normality) 1 of 2**
Boron (mg/L)	**DGWC-67**	**0.13**	**n/a**	**2/2/2023**	**3.9**	**Yes**	**50**	**n/a**	**n/a**	**26**	**n/a**	**n/a**	**0.0007375**	**NP Inter (normality) 1 of 2**
Boron (mg/L)	**DGWC-68A**	**0.13**	**n/a**	**2/1/2023**	**1.7**	**Yes**	**50**	**n/a**	**n/a**	**26**	**n/a**	**n/a**	**0.0007375**	**NP Inter (normality) 1 of 2**
Boron (mg/L)	DGWC-69	0.13	n/a	2/1/2023	0.035J	No	50	n/a	n/a	26	n/a	n/a	0.0007375	NP Inter (normality) 1 of 2
Calcium (mg/L)	**DGWC-37**	**40.3**	**n/a**	**2/2/2023**	**61.7**	**Yes**	**50**	**n/a**	**n/a**	**4**	**n/a**	**n/a**	**0.0007375**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	**DGWC-38**	**40.3**	**n/a**	**2/2/2023**	**83.6**	**Yes**	**50**	**n/a**	**n/a**	**4**	**n/a**	**n/a**	**0.0007375**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	**DGWC-39**	**40.3**	**n/a**	**2/3/2023**	**77.4**	**Yes**	**50**	**n/a**	**n/a**	**4**	**n/a**	**n/a**	**0.0007375**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	**DGWC-40**	**40.3**	**n/a**	**2/1/2023**	**41.1**	**Yes**	**50**	**n/a**	**n/a**	**4**	**n/a**	**n/a**	**0.0007375**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	**DGWC-67**	**40.3**	**n/a**	**2/2/2023**	**48.6**	**Yes**	**50**	**n/a**	**n/a**	**4**	**n/a**	**n/a**	**0.0007375**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	**DGWC-68A**	**40.3**	**n/a**	**2/1/2023**	**64.8**	**Yes**	**50**	**n/a**	**n/a**	**4**	**n/a**	**n/a**	**0.0007375**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	DGWC-69	40.3	n/a	2/1/2023	8.3	No	50	n/a	n/a	4	n/a	n/a	0.0007375	NP Inter (normality) 1 of 2
Chloride (mg/L)	DGWC-37	8.2	n/a	2/2/2023	5.9	No	52	n/a	n/a	0	n/a	n/a	0.0006941	NP Inter (normality) 1 of 2
Chloride (mg/L)	**DGWC-38**	**8.2**	**n/a**	**2/2/2023**	**8.7**	**Yes**	**52**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0006941**	**NP Inter (normality) 1 of 2**
Chloride (mg/L)	DGWC-39	8.2	n/a	2/3/2023	7.4	No	52	n/a	n/a	0	n/a	n/a	0.0006941	NP Inter (normality) 1 of 2
Chloride (mg/L)	**DGWC-40**	**8.2**	**n/a**	**2/1/2023**	**16**	**Yes**	**52**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0006941**	**NP Inter (normality) 1 of 2**
Chloride (mg/L)	**DGWC-67**	**8.2**	**n/a**	**2/2/2023**	**9.4**	**Yes**	**52**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0006941**	**NP Inter (normality) 1 of 2**
Chloride (mg/L)	DGWC-68A	8.2	n/a	2/1/2023	4.2	No	52	n/a	n/a	0	n/a	n/a	0.0006941	NP Inter (normality) 1 of 2
Chloride (mg/L)	DGWC-69	8.2	n/a	2/1/2023	5.8	No	52	n/a	n/a	0	n/a	n/a	0.0006941	NP Inter (normality) 1 of 2
Fluoride (mg/L)	DGWC-37	0.42	n/a	2/2/2023	0.089J	No	57	n/a	n/a	47.37	n/a	n/a	0.0005856	NP Inter (normality) 1 of 2
Fluoride (mg/L)	DGWC-38	0.42	n/a	2/2/2023	0.1	No	57	n/a	n/a	47.37	n/a	n/a	0.0005856	NP Inter (normality) 1 of 2
Fluoride (mg/L)	DGWC-39	0.42	n/a	2/3/2023	0.12	No	57	n/a	n/a	47.37	n/a	n/a	0.0005856	NP Inter (normality) 1 of 2
Fluoride (mg/L)	DGWC-40	0.42	n/a	2/1/2023	0.15	No	57	n/a	n/a	47.37	n/a	n/a	0.0005856	NP Inter (normality) 1 of 2
Fluoride (mg/L)	DGWC-67	0.42	n/a	2/2/2023	0.068J	No	57	n/a	n/a	47.37	n/a	n/a	0.0005856	NP Inter (normality) 1 of 2
Fluoride (mg/L)	DGWC-68A	0.42	n/a	2/1/2023	0.11	No	57	n/a	n/a	47.37	n/a	n/a	0.0005856	NP Inter (normality) 1 of 2
Fluoride (mg/L)	DGWC-69	0.42	n/a	2/1/2023	0.1	No	57	n/a	n/a	47.37	n/a	n/a	0.0005856	NP Inter (normality) 1 of 2
pH, Field (SU)	DGWC-37	6.69	5.43	2/2/2023	6.23	No	59	n/a	n/a	0	n/a	n/a	0.001084	NP Inter (normality) 1 of 2
pH, Field (SU)	DGWC-38	6.69	5.43	2/2/2023	6.08	No	59	n/a	n/a	0	n/a	n/a	0.001084	NP Inter (normality) 1 of 2
pH, Field (SU)	DGWC-39	6.69	5.43	2/3/2023	6.49	No	59	n/a	n/a	0	n/a	n/a	0.001084	NP Inter (normality) 1 of 2
pH, Field (SU)	**DGWC-40**	**6.69**	**5.43**	**2/1/2023**	**4.66**	**Yes**	**59**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.001084**	**NP Inter (normality) 1 of 2**
pH, Field (SU)	DGWC-67	6.69	5.43	2/2/2023	6.27	No	59	n/a	n/a	0	n/a	n/a	0.001084	NP Inter (normality) 1 of 2
pH, Field (SU)	DGWC-68A	6.69	5.43	2/1/2023	6.6	No	59	n/a	n/a	0	n/a	n/a	0.001084	NP Inter (normality) 1 of 2
pH, Field (SU)	DGWC-69	6.69	5.43	2/1/2023	6.12	No	59	n/a	n/a	0	n/a	n/a	0.001084	NP Inter (normality) 1 of 2
Sulfate (mg/L)	**DGWC-37**	**30.83**	**n/a**	**2/2/2023**	**94.3**	**Yes**	**52**	**1.694**	**0.7439**	**15.38**	**Kaplan-Meier**	**x^(1/3)**	**0.001075**	**Param Inter 1 of 2**
Sulfate (mg/L)	**DGWC-38**	**30.83**	**n/a**	**2/2/2023**	**239**	**Yes**	**52**	**1.694**	**0.7439**	**15.38**	**Kaplan-Meier**	**x^(1/3)**	**0.001075**	**Param Inter 1 of 2**
Sulfate (mg/L)	**DGWC-39**	**30.83**	**n/a**	**2/3/2023**	**115**	**Yes**	**52**	**1.694**	**0.7439**	**15.38**	**Kaplan-Meier**	**x^(1/3)**	**0.001075**	**Param Inter 1 of 2**
Sulfate (mg/L)	**DGWC-40**	**30.83**	**n/a**	**2/1/2023**	**189**	**Yes**	**52**	**1.694**	**0.7439**	**15.38**	**Kaplan-Meier**	**x^(1/3)**	**0.001075**	**Param Inter 1 of 2**
Sulfate (mg/L)	**DGWC-67**	**30.83**	**n/a**	**2/2/2023**	**117**	**Yes**	**52**	**1.694**	**0.7439**	**15.38**	**Kaplan-Meier**	**x^(1/3)**	**0.001075**	**Param Inter 1 of 2**
Sulfate (mg/L)	**DGWC-68A**	**30.83**	**n/a**	**2/1/2023**	**35.6**	**Yes**	**52**	**1.694**	**0.7439**	**15.38**	**Kaplan-Meier**	**x^(1/3)**	**0.001075**	**Param Inter 1 of 2**
Sulfate (mg/L)	DGWC-69	30.83	n/a	2/1/2023	6.9	No	52	1.694	0.7439	15.38	Kaplan-Meier	x^(1/3)	0.001075	Param Inter 1 of 2
Total Dissolved Solids (mg/L)	**DGWC-37**	**243.1**	**n/a**	**2/2/2023**	**302**	**Yes**	**51**	**9.894**	**2.938**	**0**	**None**	**sqrt(x)**	**0.001075**	**Param Inter 1 of 2**
Total Dissolved Solids (mg/L)	**DGWC-38**	**243.1**	**n/a**	**2/2/2023**	**478**	**Yes**	**51**	**9.894**	**2.938**	**0**	**None**	**sqrt(x)**	**0.001075**	**Param Inter 1 of 2**
Total Dissolved Solids (mg/L)	**DGWC-39**	**243.1**	**n/a**	**2/3/2023**	**382**	**Yes**	**51**	**9.894**	**2.938**	**0**	**None**	**sqrt(x)**	**0.001075**	**Param Inter 1 of 2**
Total Dissolved Solids (mg/L)	**DGWC-40**	**243.1**	**n/a**	**2/1/2023**	**343**	**Yes**	**51**	**9.894**	**2.938**	**0**	**None**	**sqrt(x)**	**0.001075**	**Param Inter 1 of 2**
Total Dissolved Solids (mg/L)	**DGWC-67**	**243.1**	**n/a**	**2/2/2023**	**317**	**Yes**	**51**	**9.894**	**2.938**	**0**	**None**	**sqrt(x)**	**0.001075**	**Param Inter 1 of 2**
Total Dissolved Solids (mg/L)	DGWC-68A	243.1	n/a	2/1/2023	243	No	51	9.894	2.938	0	None	sqrt(x)	0.001075	Param Inter 1 of 2
Total Dissolved Solids (mg/L)	DGWC-69	243.1	n/a	2/1/2023	79	No	51	9.894	2.938	0	None	sqrt(x)	0.001075	Param Inter 1 of 2

Appendix III - Trend Tests - Significant Results

Plant McDonough Client: Southern Company Data: McDonough AP Printed 4/16/2023, 12:53 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Boron (mg/L)	**DGWC-39**	**-0.1193**	**-70**	**-63**	**Yes**	**17**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	**DGWC-40**	**-0.02842**	**-71**	**-63**	**Yes**	**17**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	**DGWC-67**	**0.1112**	**67**	**63**	**Yes**	**17**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**DGWA-53 (bg)**	**-3.645**	**-92**	**-63**	**Yes**	**17**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**DGWC-67**	**1.118**	**72**	**63**	**Yes**	**17**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**DGWC-68A**	**1.769**	**72**	**63**	**Yes**	**17**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	**DGWA-53 (bg)**	**-0.1584**	**-92**	**-68**	**Yes**	**18**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	**DGWC-40**	**-0.5581**	**-75**	**-63**	**Yes**	**17**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	**DGWC-67**	**0.5945**	**116**	**63**	**Yes**	**17**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**DGWA-71 (bg)**	**-0.9093**	**-96**	**-63**	**Yes**	**17**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**DGWC-38**	**-7.515**	**-68**	**-63**	**Yes**	**17**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**DGWC-39**	**-22.12**	**-97**	**-63**	**Yes**	**17**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**DGWC-40**	**-9.349**	**-70**	**-63**	**Yes**	**17**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**DGWC-68A**	**-2.694**	**-99**	**-63**	**Yes**	**17**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Total Dissolved Solids (mg/L)	**DGWA-53 (bg)**	**-20.92**	**-95**	**-63**	**Yes**	**17**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Total Dissolved Solids (mg/L)	**DGWC-39**	**-17.62**	**-76**	**-63**	**Yes**	**17**	**0**	**n/a**	**n/a**	**0.01**	**NP**

Appendix III - Trend Tests - All Results

Plant McDonough Client: Southern Company Data: McDonough AP Printed 4/16/2023, 12:53 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Boron (mg/L)	DGWA-53 (bg)	-0.003677	-55	-63	No	17	0	n/a	n/a	0.01	NP
Boron (mg/L)	DGWA-70A (bg)	0	15	63	No	17	52.94	n/a	n/a	0.01	NP
Boron (mg/L)	DGWA-71 (bg)	0.0003125	18	58	No	16	25	n/a	n/a	0.01	NP
Boron (mg/L)	DGWC-37	-0.04117	-36	-63	No	17	0	n/a	n/a	0.01	NP
Boron (mg/L)	DGWC-38	-0.05736	-52	-63	No	17	0	n/a	n/a	0.01	NP
Boron (mg/L)	**DGWC-39**	**-0.1193**	**-70**	**-63**	**Yes**	**17**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	**DGWC-40**	**-0.02842**	**-71**	**-63**	**Yes**	**17**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	**DGWC-67**	**0.1112**	**67**	**63**	**Yes**	**17**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	DGWC-68A	-0.03824	-30	-63	No	17	0	n/a	n/a	0.01	NP
Calcium (mg/L)	**DGWA-53 (bg)**	**-3.645**	**-92**	**-63**	**Yes**	**17**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	DGWA-70A (bg)	0	0	63	No	17	5.882	n/a	n/a	0.01	NP
Calcium (mg/L)	DGWA-71 (bg)	-0.365	-43	-58	No	16	6.25	n/a	n/a	0.01	NP
Calcium (mg/L)	DGWC-37	0.9897	43	63	No	17	0	n/a	n/a	0.01	NP
Calcium (mg/L)	DGWC-38	1.684	52	63	No	17	0	n/a	n/a	0.01	NP
Calcium (mg/L)	DGWC-39	-0.01748	-1	-63	No	17	0	n/a	n/a	0.01	NP
Calcium (mg/L)	DGWC-40	0.385	27	63	No	17	0	n/a	n/a	0.01	NP
Calcium (mg/L)	**DGWC-67**	**1.118**	**72**	**63**	**Yes**	**17**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**DGWC-68A**	**1.769**	**72**	**63**	**Yes**	**17**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	**DGWA-53 (bg)**	**-0.1584**	**-92**	**-68**	**Yes**	**18**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	DGWA-70A (bg)	-0.05005	-42	-63	No	17	0	n/a	n/a	0.01	NP
Chloride (mg/L)	DGWA-71 (bg)	0.4815	54	63	No	17	0	n/a	n/a	0.01	NP
Chloride (mg/L)	DGWC-38	0.1529	63	63	No	17	0	n/a	n/a	0.01	NP
Chloride (mg/L)	**DGWC-40**	**-0.5581**	**-75**	**-63**	**Yes**	**17**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	**DGWC-67**	**0.5945**	**116**	**63**	**Yes**	**17**	**0**	**n/a**	**n/a**	**0.01**	**NP**
pH, Field (SU)	DGWA-53 (bg)	0.02167	23	81	No	20	0	n/a	n/a	0.01	NP
pH, Field (SU)	DGWA-70A (bg)	-0.02248	-34	-74	No	19	0	n/a	n/a	0.01	NP
pH, Field (SU)	DGWA-71 (bg)	0.000959	2	81	No	20	0	n/a	n/a	0.01	NP
pH, Field (SU)	DGWC-40	-0.02164	-53	-74	No	19	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	DGWA-53 (bg)	-0.5457	-29	-68	No	18	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	DGWA-70A (bg)	0	-25	-63	No	17	47.06	n/a	n/a	0.01	NP
Sulfate (mg/L)	**DGWA-71 (bg)**	**-0.9093**	**-96**	**-63**	**Yes**	**17**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	DGWC-37	-1.865	-39	-58	No	16	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	**DGWC-38**	**-7.515**	**-68**	**-63**	**Yes**	**17**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**DGWC-39**	**-22.12**	**-97**	**-63**	**Yes**	**17**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**DGWC-40**	**-9.349**	**-70**	**-63**	**Yes**	**17**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	DGWC-67	-0.02967	-8	-63	No	17	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	**DGWC-68A**	**-2.694**	**-99**	**-63**	**Yes**	**17**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Total Dissolved Solids (mg/L)	**DGWA-53 (bg)**	**-20.92**	**-95**	**-63**	**Yes**	**17**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Total Dissolved Solids (mg/L)	DGWA-70A (bg)	0.1124	4	63	No	17	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	DGWA-71 (bg)	-2.859	-36	-63	No	17	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	DGWC-37	-0.8828	-3	-63	No	17	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	DGWC-38	-1.003	-6	-63	No	17	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	**DGWC-39**	**-17.62**	**-76**	**-63**	**Yes**	**17**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Total Dissolved Solids (mg/L)	DGWC-40	-4.124	-30	-58	No	16	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	DGWC-67	-2.691	-16	-63	No	17	0	n/a	n/a	0.01	NP

Upper Tolerance Limits Summary Table

Plant McDonough Client: Southern Company Data: McDonough AP Printed 4/10/2023, 6:23 PM

Constituent	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	%NDs	Transform	Alpha	Method
Antimony (mg/L)	0.003	n/a	n/a	n/a	n/a	53	83.02	n/a	0.06597	NP Inter(NDs)
Arsenic (mg/L)	0.0054	n/a	n/a	n/a	n/a	53	73.58	n/a	0.06597	NP Inter(normality)
Barium (mg/L)	0.19	n/a	n/a	n/a	n/a	53	0	n/a	0.06597	NP Inter(normality)
Beryllium (mg/L)	0.0009	n/a	n/a	n/a	n/a	54	55.56	n/a	0.06267	NP Inter(normality)
Cadmium (mg/L)	0.0005	n/a	n/a	n/a	n/a	53	92.45	n/a	0.06597	NP Inter(NDs)
Chromium (mg/L)	0.005	n/a	n/a	n/a	n/a	52	67.31	n/a	0.06944	NP Inter(normality)
Cobalt (mg/L)	0.0322	n/a	n/a	n/a	n/a	53	41.51	n/a	0.06597	NP Inter(normality)
Combined Radium 226 + 228 (pCi/L)	5.008	n/a	n/a	n/a	n/a	55	0	x^(1/3)	0.05	Inter
Fluoride (mg/L)	0.42	n/a	n/a	n/a	n/a	57	47.37	n/a	0.05373	NP Inter(normality)
Lead (mg/L)	0.001	n/a	n/a	n/a	n/a	53	83.02	n/a	0.06597	NP Inter(NDs)
Lithium (mg/L)	0.03	n/a	n/a	n/a	n/a	53	35.85	n/a	0.06597	NP Inter(normality)
Mercury (mg/L)	0.0002	n/a	n/a	n/a	n/a	53	84.91	n/a	0.06597	NP Inter(NDs)
Molybdenum (mg/L)	0.0409	n/a	n/a	n/a	n/a	53	64.15	n/a	0.06597	NP Inter(normality)
Selenium (mg/L)	0.005	n/a	n/a	n/a	n/a	53	100	n/a	0.06597	NP Inter(NDs)
Thallium (mg/L)	0.001	n/a	n/a	n/a	n/a	53	96.23	n/a	0.06597	NP Inter(NDs)

PLANT MCDONOUGH ASH POND AP-1 GWPS TABLE				
Constituent Name	**MCL**	**CCR-Rule Specified**	**Background Limit**	**GWPS**
Antimony, Total (mg/L)	0.006		0.003	0.006
Arsenic, Total (mg/L)	0.01		0.0054	0.01
Barium, Total (mg/L)	2		0.19	2
Beryllium, Total (mg/L)	0.004		0.0009	0.004
Cadmium, Total (mg/L)	0.005		0.0005	0.005
Chromium, Total (mg/L)	0.1		0.005	0.1
Cobalt, Total (mg/L)		0.006	0.032	0.032
Combined Radium, Total (pCi/L)	5		5.01	5.01
Fluoride, Total (mg/L)	4		0.42	4
Lead, Total (mg/L)		0.015	0.001	0.015
Lithium, Total (mg/L)		0.04	0.03	0.04
Mercury, Total (mg/L)	0.002		0.0002	0.002
Molybdenum, Total (mg/L)		0.1	0.041	0.1
Selenium, Total (mg/L)	0.05		0.005	0.05
Thallium, Total (mg/L)	0.002		0.001	0.002

**Highlighted cells indicated Background is higher than MCLs or CCR-Rule*

**MCL = Maximum Contaminant Level*

**CCR = Coal Combustion Residual*

**GWPS = Groundwater Protection Standard*

Confidence Intervals - Significant Results

Plant McDonough Client: Southern Company Data: McDonough AP Printed 5/4/2023, 2:20 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Arsenic (mg/L)	**DGWC-69**	**0.03564**	**0.0135**	**0.01**	**Yes**	**20**	**0.03226**	**0.03823**	**0**	**None**	**ln(x)**	**0.01**	**Param.**
Cobalt (mg/L)	**DGWC-40**	**0.04457**	**0.0377**	**0.032**	**Yes**	**18**	**0.04113**	**0.005679**	**0**	**None**	**No**	**0.01**	**Param.**
Molybdenum (mg/L)	**DGWC-68A**	**0.2202**	**0.1957**	**0.1**	**Yes**	**18**	**0.2086**	**0.02166**	**0**	**None**	**ln(x)**	**0.01**	**Param.**

Confidence Intervals - All Results

Plant McDonough Client: Southern Company Data: McDonough AP Printed 5/4/2023, 2:20 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Antimony (mg/L)	B-100	0.003	0.0013	0.006	No	7	0.002571	0.000741	71.43	None	No	0.008	NP (NDs)
Antimony (mg/L)	B-105D	0.005378	0.0001457	0.006	No	6	0.003248	0.002606	50	Kaplan-Meier	sqrt(x)	0.01	Param.
Antimony (mg/L)	B-112D	0.003	0.00041	0.006	No	5	0.002482	0.001158	80	Kaplan-Meier	No	0.031	NP (NDs)
Antimony (mg/L)	B-62	0.003	0.003	0.006	No	10	0.002746	0.0008032	90	Kaplan-Meier	No	0.011	NP (NDs)
Antimony (mg/L)	DGWC-40	0.003	0.00033	0.006	No	17	0.002843	0.0006476	94.12	Kaplan-Meier	No	0.01	NP (NDs)
Antimony (mg/L)	DGWC-67	0.003	0.0023	0.006	No	17	0.002676	0.0008028	82.35	Kaplan-Meier	No	0.01	NP (NDs)
Antimony (mg/L)	DGWC-68A	0.003	0.0008	0.006	No	17	0.002713	0.0008148	88.24	None	No	0.01	NP (NDs)
Antimony (mg/L)	DGWC-69	0.003	0.0019	0.006	No	18	0.002744	0.0006308	83.33	None	No	0.01	NP (NDs)
Arsenic (mg/L)	B-105D	0.0051	0.0025	0.01	No	6	0.0042	0.001279	50	None	No	0.0155	NP (normality)
Arsenic (mg/L)	B-112D	0.005	0.00078	0.01	No	5	0.004156	0.001887	60	None	No	0.031	NP (NDs)
Arsenic (mg/L)	B-62	0.005	0.005	0.01	No	10	0.00483	0.0005376	90	None	No	0.011	NP (NDs)
Arsenic (mg/L)	DGWC-37	0.005	0.0019	0.01	No	18	0.004828	0.0007307	94.44	None	No	0.01	NP (NDs)
Arsenic (mg/L)	DGWC-38	0.005	0.0005	0.01	No	18	0.00475	0.001061	94.44	None	No	0.01	NP (NDs)
Arsenic (mg/L)	DGWC-39	0.005	0.00075	0.01	No	18	0.003177	0.002118	55.56	None	No	0.01	NP (NDs)
Arsenic (mg/L)	DGWC-40	0.005	0.003	0.01	No	18	0.004186	0.001637	77.78	None	No	0.01	NP (NDs)
Arsenic (mg/L)	DGWC-67	0.005	0.0033	0.01	No	18	0.004418	0.001443	83.33	None	No	0.01	NP (NDs)
Arsenic (mg/L)	DGWC-68A	0.005	0.0016	0.01	No	18	0.004811	0.0008014	94.44	None	No	0.01	NP (NDs)
Arsenic (mg/L)	**DGWC-69**	**0.03564**	**0.0135**	**0.01**	**Yes**	**20**	**0.03226**	**0.03823**	**0**	**None**	**ln(x)**	**0.01**	**Param.**
Barium (mg/L)	B-100	0.098	0.015	2	No	7	0.03171	0.02935	0	None	No	0.008	NP (normality)
Barium (mg/L)	B-105D	0.04191	0.03109	2	No	6	0.0365	0.003937	0	None	No	0.01	Param.
Barium (mg/L)	B-112D	0.026	0.0026	2	No	5	0.0076	0.01029	0	None	No	0.031	NP (normality)
Barium (mg/L)	B-62	0.0255	0.0193	2	No	10	0.0224	0.003471	0	None	No	0.01	Param.
Barium (mg/L)	DGWC-37	0.1066	0.08721	2	No	18	0.09689	0.016	0	None	No	0.01	Param.
Barium (mg/L)	DGWC-38	0.03333	0.03137	2	No	18	0.03229	0.001746	0	None	x^3	0.01	Param.
Barium (mg/L)	DGWC-39	0.09557	0.08543	2	No	18	0.0905	0.008386	0	None	No	0.01	Param.
Barium (mg/L)	DGWC-40	0.018	0.0168	2	No	18	0.01788	0.00244	0	None	No	0.01	NP (normality)
Barium (mg/L)	DGWC-67	0.1096	0.09538	2	No	18	0.1025	0.01177	0	None	No	0.01	Param.
Barium (mg/L)	DGWC-68A	0.094	0.086	2	No	18	0.09029	0.00461	0	None	No	0.01	NP (normality)
Barium (mg/L)	DGWC-69	0.09584	0.06434	2	No	19	0.08009	0.02689	0	None	No	0.01	Param.
Beryllium (mg/L)	B-100	0.0005817	0.000304	0.004	No	7	0.0004429	0.0001169	14.29	None	No	0.01	Param.
Beryllium (mg/L)	B-62	0.0025	0.00009	0.004	No	11	0.0005516	0.0009635	18.18	None	No	0.006	NP (normality)
Beryllium (mg/L)	DGWC-37	0.0005	0.00007	0.004	No	18	0.0003344	0.0002139	61.11	None	No	0.01	NP (NDs)
Beryllium (mg/L)	DGWC-38	0.0005	0.000058	0.004	No	18	0.0004754	0.0001042	94.44	None	No	0.01	NP (NDs)
Beryllium (mg/L)	DGWC-40	0.003306	0.002789	0.004	No	18	0.003022	0.0004821	5.556	None	x^2	0.01	Param.
Beryllium (mg/L)	DGWC-68A	0.0005	0.000084	0.004	No	18	0.0004525	0.0001383	88.89	None	No	0.01	NP (NDs)
Beryllium (mg/L)	DGWC-69	0.0005	0.000061	0.004	No	19	0.0003387	0.000217	63.16	None	No	0.01	NP (NDs)
Cadmium (mg/L)	B-100	0.00059	0.00025	0.005	No	7	0.0003614	0.0001566	14.29	None	No	0.008	NP (normality)
Cadmium (mg/L)	DGWC-37	0.0005	0.0002	0.005	No	18	0.0004056	0.0001607	72.22	None	No	0.01	NP (NDs)
Cadmium (mg/L)	DGWC-38	0.0005	0.00017	0.005	No	18	0.0003294	0.0002425	22.22	None	No	0.01	NP (normality)
Cadmium (mg/L)	DGWC-40	0.0008446	0.0007081	0.005	No	18	0.00077	0.0001237	11.11	None	x^2	0.01	Param.
Cadmium (mg/L)	DGWC-67	0.00053	0.00021	0.005	No	18	0.00043	0.0001395	72.22	None	No	0.01	NP (NDs)
Cadmium (mg/L)	DGWC-68A	0.0002406	0.0001398	0.005	No	18	0.0003817	0.0002183	50	Kaplan-Meier	x^(1/3)	0.01	Param.
Cadmium (mg/L)	DGWC-69	0.0005	0.0002	0.005	No	19	0.00043	0.0001406	78.95	None	No	0.01	NP (NDs)
Chromium (mg/L)	B-100	0.005	0.00057	0.1	No	7	0.003787	0.002074	71.43	None	No	0.008	NP (NDs)
Chromium (mg/L)	B-105D	0.005	0.0012	0.1	No	6	0.004367	0.001551	83.33	None	No	0.0155	NP (NDs)
Chromium (mg/L)	B-112D	0.005	0.00085	0.1	No	5	0.00345	0.002131	60	None	No	0.031	NP (NDs)
Chromium (mg/L)	B-62	0.005	0.005	0.1	No	10	0.004598	0.001271	90	None	No	0.011	NP (NDs)
Chromium (mg/L)	DGWC-37	0.005	0.0007	0.1	No	18	0.004516	0.00141	88.89	None	No	0.01	NP (NDs)
Chromium (mg/L)	DGWC-38	0.005	0.00092	0.1	No	18	0.00427	0.001682	83.33	None	No	0.01	NP (NDs)
Chromium (mg/L)	DGWC-40	0.005	0.0007	0.1	No	18	0.002723	0.002123	44.44	None	No	0.01	NP (normality)
Chromium (mg/L)	DGWC-67	0.005	0.0014	0.1	No	18	0.004082	0.001774	77.78	None	No	0.01	NP (NDs)
Chromium (mg/L)	DGWC-68A	0.005	0.0005	0.1	No	18	0.00475	0.001061	94.44	None	No	0.01	NP (NDs)
Chromium (mg/L)	DGWC-69	0.005	0.0012	0.1	No	19	0.003947	0.001817	73.68	None	No	0.01	NP (NDs)
Cobalt (mg/L)	B-100	0.07642	0.01578	0.032	No	9	0.04583	0.02991	11.11	None	sqrt(x)	0.01	Param.
Cobalt (mg/L)	B-105D	0.01012	0.00312	0.032	No	6	0.006117	0.003079	0	None	ln(x)	0.01	Param.

Confidence Intervals - All Results

Plant McDonough Client: Southern Company Data: McDonough AP Printed 5/4/2023, 2:20 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Cobalt (mg/L)	B-112D	0.005	0.00054	0.032	No	5	0.003608	0.002028	60	None	No	0.031	NP (NDs)
Cobalt (mg/L)	B-62	0.005	0.00031	0.032	No	11	0.004146	0.001899	81.82	None	No	0.006	NP (NDs)
Cobalt (mg/L)	DGWC-37	0.005	0.0005	0.032	No	18	0.004228	0.001777	83.33	None	No	0.01	NP (NDs)
Cobalt (mg/L)	DGWC-38	0.0017	0.0015	0.032	No	18	0.00195	0.001115	11.11	None	No	0.01	NP (normality)
Cobalt (mg/L)	DGWC-39	0.006678	0.005777	0.032	No	18	0.006228	0.0007442	11.11	None	No	0.01	Param.
Cobalt (mg/L)	**DGWC-40**	**0.04457**	**0.0377**	**0.032**	**Yes**	**18**	**0.04113**	**0.005679**	**0**	**None**	**No**	**0.01**	**Param.**
Cobalt (mg/L)	DGWC-67	0.0041	0.0012	0.032	No	18	0.002489	0.001691	11.11	None	No	0.01	NP (normality)
Cobalt (mg/L)	DGWC-68A	0.005	0.0015	0.032	No	18	0.004294	0.001638	83.33	None	No	0.01	NP (NDs)
Cobalt (mg/L)	DGWC-69	0.005	0.0022	0.032	No	19	0.004	0.001613	68.42	None	No	0.01	NP (NDs)
Combined Radium 226 + 228 (pCi/L)	B-100	1.229	0.352	5.01	No	7	0.7906	0.3692	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	B-105D	6.794	0.5813	5.01	No	5	2.892	2.27	0	None	x^(1/3)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	B-112D	1.76	0.241	5.01	No	4	0.921	0.6326	0	None	No	0.0625	NP (selected)
Combined Radium 226 + 228 (pCi/L)	B-62	1.913	1.387	5.01	No	9	1.65	0.2725	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	DGWC-37	1.09	0.5547	5.01	No	17	0.8225	0.4273	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	DGWC-38	1.003	0.3379	5.01	No	17	0.7321	0.5826	0	None	sqrt(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	DGWC-39	1.276	0.6331	5.01	No	17	0.9546	0.513	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	DGWC-40	1.51	0.6652	5.01	No	17	1.087	0.6737	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	DGWC-67	0.9568	0.4708	5.01	No	17	0.7138	0.3878	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	DGWC-68A	1.46	0.393	5.01	No	17	0.9922	0.6032	0	None	No	0.01	NP (normality)
Combined Radium 226 + 228 (pCi/L)	DGWC-69	1.803	1.181	5.01	No	18	1.492	0.5147	0	None	No	0.01	Param.
Fluoride (mg/L)	B-100	0.1	0.052	4	No	7	0.08914	0.01942	71.43	None	No	0.008	NP (NDs)
Fluoride (mg/L)	B-105D	0.32	0.058	4	No	6	0.1217	0.09867	0	None	No	0.0155	NP (normality)
Fluoride (mg/L)	B-112D	0.3493	0.2347	4	No	5	0.292	0.03421	0	None	No	0.01	Param.
Fluoride (mg/L)	B-62	0.43	0.093	4	No	9	0.1669	0.1072	0	None	No	0.002	NP (normality)
Fluoride (mg/L)	DGWC-37	0.15	0.057	4	No	19	0.1025	0.072	5.263	None	No	0.01	NP (normality)
Fluoride (mg/L)	DGWC-38	0.15	0.064	4	No	19	0.1296	0.1008	10.53	None	No	0.01	NP (normality)
Fluoride (mg/L)	DGWC-39	0.15	0.085	4	No	19	0.1501	0.1105	5.263	None	No	0.01	NP (normality)
Fluoride (mg/L)	DGWC-40	0.2665	0.1315	4	No	19	0.2244	0.1505	5.263	None	ln(x)	0.01	Param.
Fluoride (mg/L)	DGWC-67	0.25	0.038	4	No	19	0.109	0.1064	47.37	None	No	0.01	NP (normality)
Fluoride (mg/L)	DGWC-68A	0.15	0.076	4	No	19	0.1451	0.1206	5.263	None	No	0.01	NP (normality)
Fluoride (mg/L)	DGWC-69	0.1676	0.09147	4	No	20	0.1296	0.06706	5	None	No	0.01	Param.
Lead (mg/L)	B-100	0.001	0.000088	0.015	No	7	0.0006397	0.0004509	57.14	None	No	0.008	NP (NDs)
Lead (mg/L)	B-105D	0.001	0.000052	0.015	No	6	0.000842	0.000387	83.33	None	No	0.0155	NP (NDs)
Lead (mg/L)	B-112D	0.001	0.00014	0.015	No	5	0.000828	0.0003846	80	None	No	0.031	NP (NDs)
Lead (mg/L)	DGWC-37	0.0014	0.000061	0.015	No	18	0.0009701	0.0002456	88.89	None	No	0.01	NP (NDs)
Lead (mg/L)	DGWC-38	0.001	0.00014	0.015	No	18	0.0007508	0.0004138	72.22	None	No	0.01	NP (NDs)
Lead (mg/L)	DGWC-39	0.001	0.00022	0.015	No	18	0.0009056	0.0002759	88.89	None	No	0.01	NP (NDs)
Lead (mg/L)	DGWC-40	0.001	0.00007	0.015	No	18	0.0006069	0.0004552	55.56	None	No	0.01	NP (NDs)
Lead (mg/L)	DGWC-67	0.001	0.00025	0.015	No	18	0.0008024	0.0003825	77.78	None	No	0.01	NP (NDs)
Lead (mg/L)	DGWC-68A	0.001	0.00035	0.015	No	18	0.0009121	0.0002605	88.89	None	No	0.01	NP (NDs)
Lead (mg/L)	DGWC-69	0.001	0.0001	0.015	No	19	0.0007163	0.0004295	68.42	None	No	0.01	NP (NDs)
Lithium (mg/L)	B-100	0.015	0.0013	0.04	No	7	0.004	0.00487	14.29	None	No	0.008	NP (normality)
Lithium (mg/L)	B-105D	0.015	0.013	0.04	No	6	0.01367	0.0008165	0	None	No	0.0155	NP (normality)
Lithium (mg/L)	B-112D	0.0045	0.0038	0.04	No	5	0.00408	0.0003421	0	None	No	0.031	NP (normality)
Lithium (mg/L)	B-62	0.0094	0.0078	0.04	No	10	0.01017	0.005237	10	None	No	0.011	NP (normality)
Lithium (mg/L)	DGWC-37	0.0029	0.0019	0.04	No	18	0.01285	0.02044	22.22	None	No	0.01	NP (normality)
Lithium (mg/L)	DGWC-38	0.0034	0.0029	0.04	No	18	0.004339	0.005165	5.556	None	No	0.01	NP (normality)
Lithium (mg/L)	DGWC-40	0.0027	0.0022	0.04	No	18	0.004839	0.007338	11.11	None	No	0.01	NP (normality)
Lithium (mg/L)	DGWC-67	0.005	0.0044	0.04	No	18	0.005794	0.004804	5.556	None	No	0.01	NP (normality)
Lithium (mg/L)	DGWC-68A	0.03	0.0016	0.04	No	18	0.0268	0.009311	88.89	None	No	0.01	NP (NDs)
Lithium (mg/L)	DGWC-69	0.0032	0.0024	0.04	No	19	0.003926	0.005119	5.263	None	No	0.01	NP (normality)
Mercury (mg/L)	B-100	0.0002	0.00011	0.002	No	6	0.000185	0.00003674	83.33	None	No	0.0155	NP (NDs)
Mercury (mg/L)	B-105D	0.0002	0.000087	0.002	No	5	0.0001654	0.00005095	60	None	No	0.031	NP (NDs)
Mercury (mg/L)	DGWC-37	0.0002	0.000091	0.002	No	17	0.0001762	0.00005372	82.35	None	No	0.01	NP (NDs)
Mercury (mg/L)	DGWC-38	0.0002	0.000085	0.002	No	17	0.0001762	0.00005366	82.35	None	No	0.01	NP (NDs)

Confidence Intervals - All Results

Plant McDonough Client: Southern Company Data: McDonough AP Printed 5/4/2023, 2:20 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Mercury (mg/L)	DGWC-39	0.0002	0.000059	0.002	No	17	0.0001917	0.0000342	94.12	None	No	0.01	NP (NDs)
Mercury (mg/L)	DGWC-40	0.0002	0.00009	0.002	No	17	0.0001752	0.00005592	82.35	None	No	0.01	NP (NDs)
Mercury (mg/L)	DGWC-67	0.0002	0.00007	0.002	No	17	0.0001924	0.00003153	94.12	None	No	0.01	NP (NDs)
Mercury (mg/L)	DGWC-68A	0.0002	0.00007	0.002	No	17	0.0001924	0.00003153	94.12	None	No	0.01	NP (NDs)
Mercury (mg/L)	DGWC-69	0.0002	0.00007	0.002	No	18	0.0001928	0.00003064	94.44	None	No	0.01	NP (NDs)
Molybdenum (mg/L)	B-100	0.19	0.01	0.1	No	7	0.03571	0.06803	85.71	None	No	0.008	NP (NDs)
Molybdenum (mg/L)	B-105D	0.01	0.0011	0.1	No	6	0.008517	0.003633	83.33	None	No	0.0155	NP (NDs)
Molybdenum (mg/L)	B-112D	0.03741	0.02619	0.1	No	5	0.0318	0.003347	0	None	No	0.01	Param.
Molybdenum (mg/L)	DGWC-38	0.01	0.001	0.1	No	18	0.004572	0.004458	38.89	None	No	0.01	NP (normality)
Molybdenum (mg/L)	**DGWC-68A**	**0.2202**	**0.1957**	**0.1**	**Yes**	**18**	**0.2086**	**0.02166**	**0**	**None**	**ln(x)**	**0.01**	**Param.**
Molybdenum (mg/L)	DGWC-69	0.0117	0.0057	0.1	No	19	0.009311	0.005673	5.263	None	No	0.01	NP (normality)
Selenium (mg/L)	B-100	0.005	0.0019	0.05	No	7	0.004557	0.001172	85.71	None	No	0.008	NP (NDs)
Selenium (mg/L)	DGWC-38	0.005	0.0019	0.05	No	18	0.004828	0.0007307	94.44	None	No	0.01	NP (NDs)
Selenium (mg/L)	DGWC-40	0.003105	0.001849	0.05	No	18	0.003661	0.002233	27.78	Kaplan-Meier	ln(x)	0.01	Param.
Selenium (mg/L)	DGWC-67	0.005	0.0027	0.05	No	18	0.004872	0.0005421	94.44	Kaplan-Meier	No	0.01	NP (NDs)
Selenium (mg/L)	DGWC-68A	0.005	0.0017	0.05	No	18	0.004817	0.0007778	94.44	Kaplan-Meier	No	0.01	NP (NDs)
Thallium (mg/L)	DGWC-38	0.001	0.00014	0.002	No	18	0.0006117	0.0004471	55.56	None	No	0.01	NP (NDs)
Thallium (mg/L)	DGWC-39	0.001	0.0001	0.002	No	18	0.0007461	0.0004213	72.22	None	No	0.01	NP (NDs)
Thallium (mg/L)	DGWC-40	0.001	0.00007	0.002	No	18	0.0007404	0.0004307	72.22	None	No	0.01	NP (NDs)
Thallium (mg/L)	DGWC-68A	0.001	0.00015	0.002	No	18	0.0009528	0.0002003	94.44	None	No	0.01	NP (NDs)

Appendix IV - Trend Tests - Significant Result

Plant McDonough Client: Southern Company Data: McDonough AP Printed 4/16/2023, 12:30 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Cobalt (mg/L)	**DGWA-53 (bg)**	**-0.004011**	**-97**	**-68**	**Yes**	**18**	**0**	**n/a**	**n/a**	**0.01**	**NP**

Appendix IV - Trend Tests - All Results

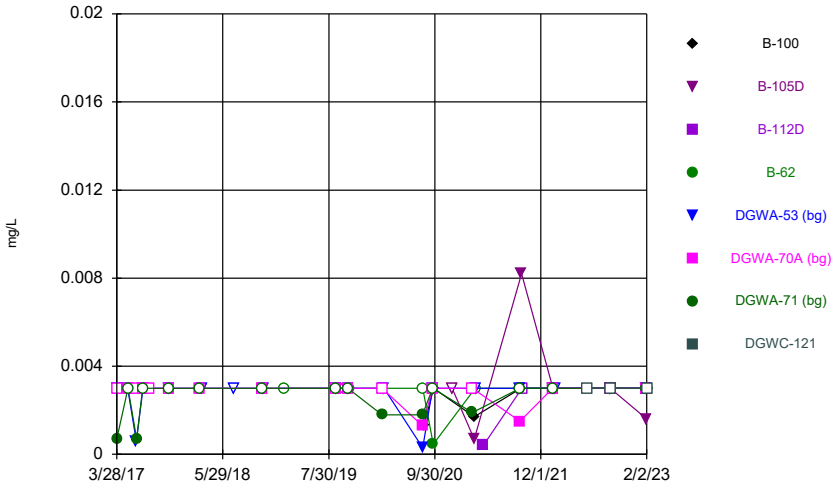
Plant McDonough Client: Southern Company Data: McDonough AP Printed 4/16/2023, 12:30 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Arsenic (mg/L)	DGWA-53 (bg)	0	-2	-68	No	18	55.56	n/a	n/a	0.01	NP
Arsenic (mg/L)	DGWA-70A (bg)	0	-28	-68	No	18	83.33	n/a	n/a	0.01	NP
Arsenic (mg/L)	DGWA-71 (bg)	0	25	63	No	17	82.35	n/a	n/a	0.01	NP
Arsenic (mg/L)	DGWC-69	0.002592	55	81	No	20	0	n/a	n/a	0.01	NP
Cobalt (mg/L)	**DGWA-53 (bg)**	**-0.004011**	**-97**	**-68**	**Yes**	**18**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Cobalt (mg/L)	DGWA-70A (bg)	0	37	68	No	18	55.56	n/a	n/a	0.01	NP
Cobalt (mg/L)	DGWA-71 (bg)	0	50	63	No	17	70.59	n/a	n/a	0.01	NP
Cobalt (mg/L)	DGWC-40	0.001157	30	68	No	18	0	n/a	n/a	0.01	NP
Molybdenum (mg/L)	DGWA-53 (bg)	-0.001775	-42	-68	No	18	0	n/a	n/a	0.01	NP
Molybdenum (mg/L)	DGWA-70A (bg)	0	0	68	No	18	100	n/a	n/a	0.01	NP
Molybdenum (mg/L)	DGWA-71 (bg)	0	16	63	No	17	94.12	n/a	n/a	0.01	NP
Molybdenum (mg/L)	DGWC-68A	-0.004812	-46	-68	No	18	0	n/a	n/a	0.01	NP

FIGURE A.

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Time Series



Constituent: Antimony Analysis Run 5/4/2023 2:09 PM View: AP 1
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG
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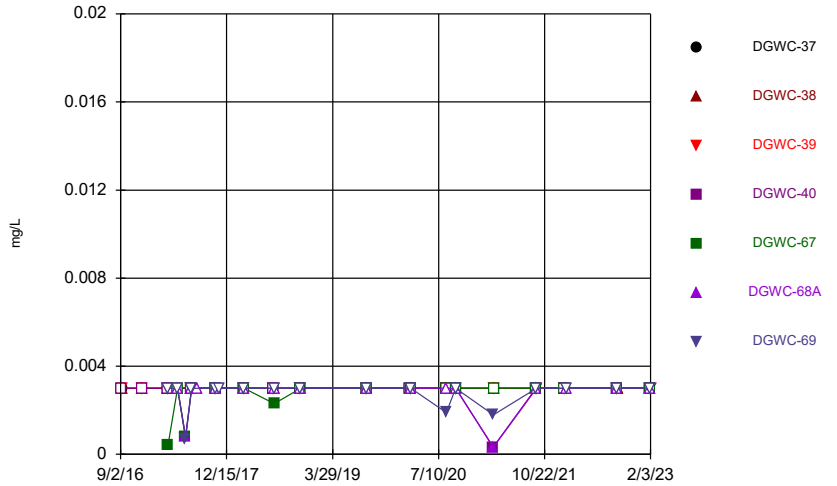

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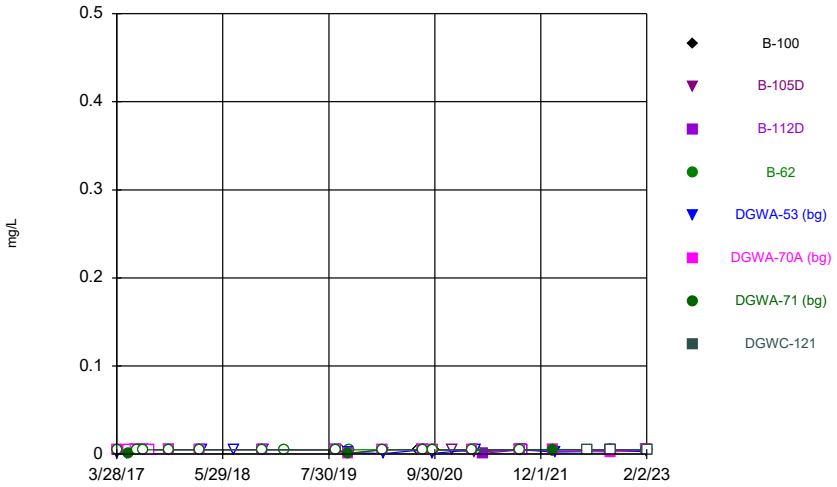

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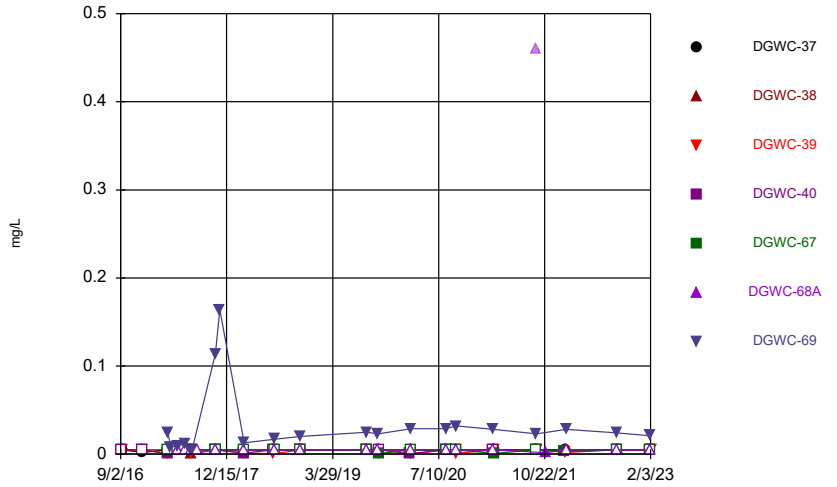

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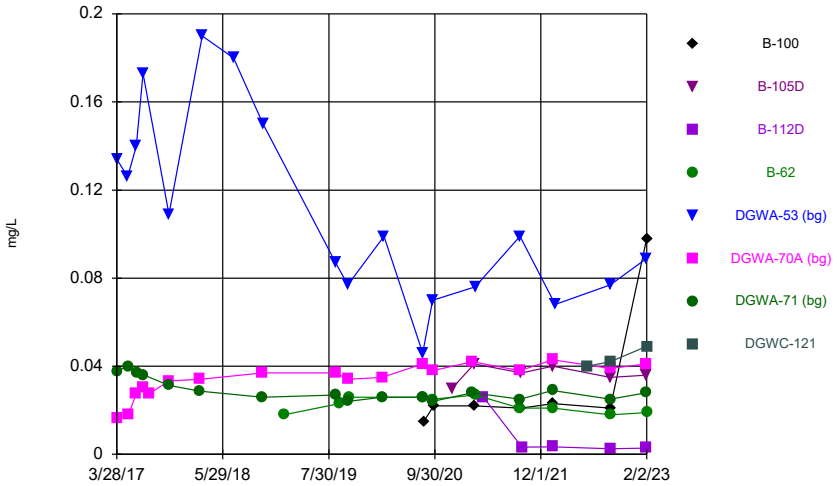
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Time Series



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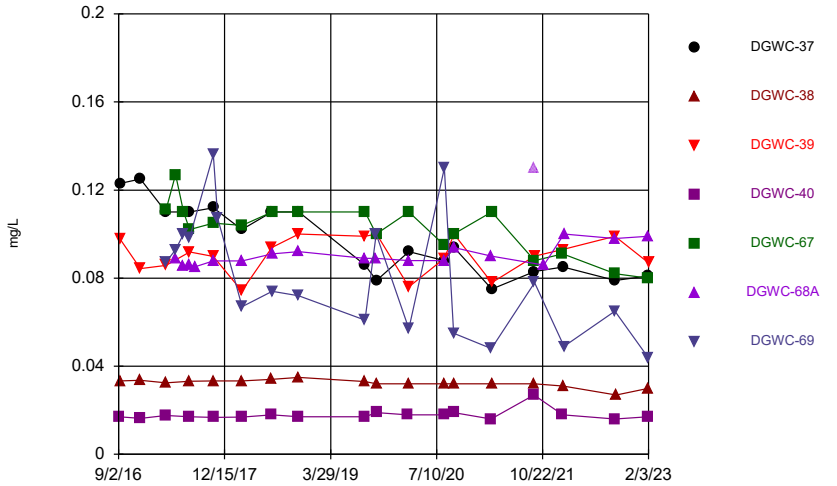
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Time Series



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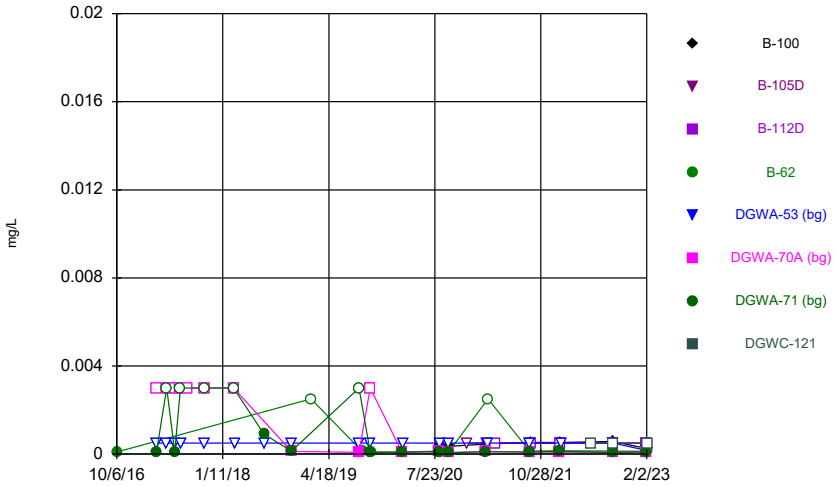

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Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

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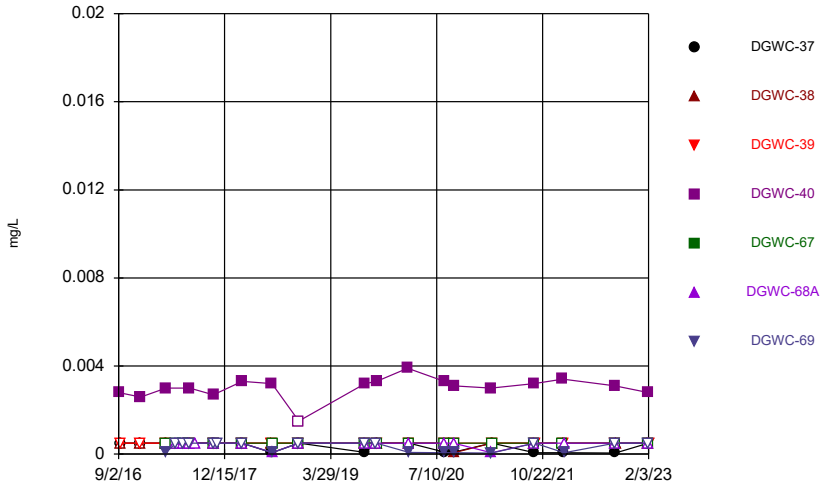

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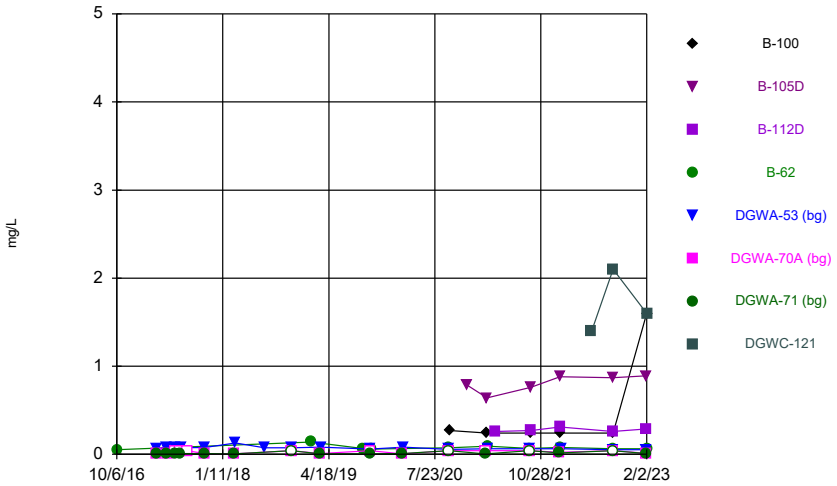

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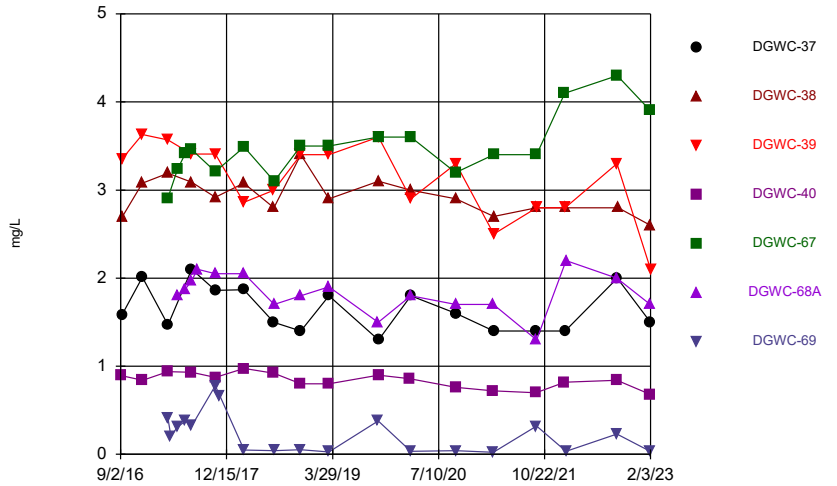
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Time Series



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Plant McDonough Client: Southern Company Data: McDonough AP

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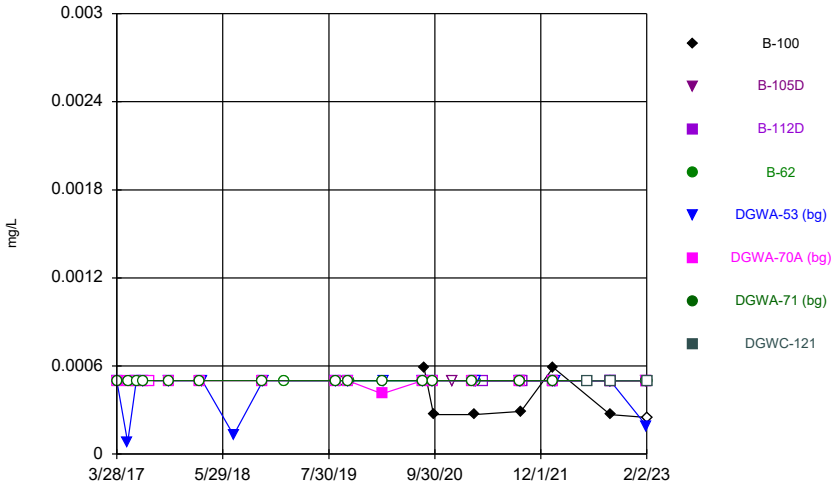

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Plant McDonough Client: Southern Company Data: McDonough AP

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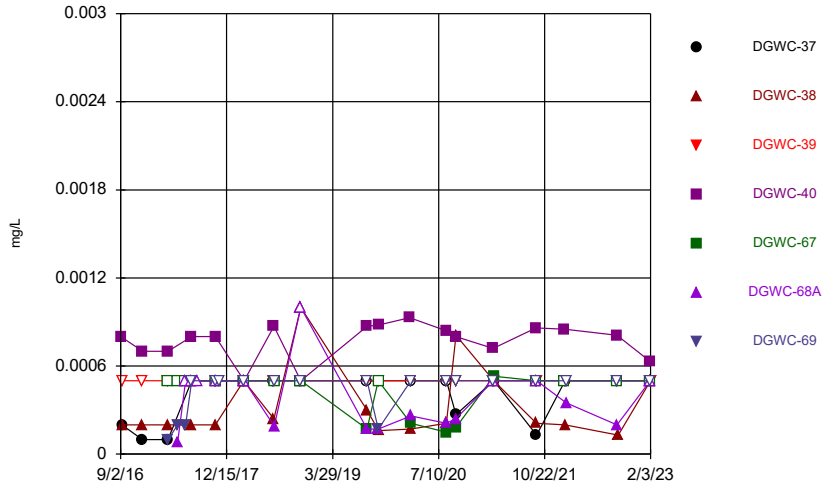

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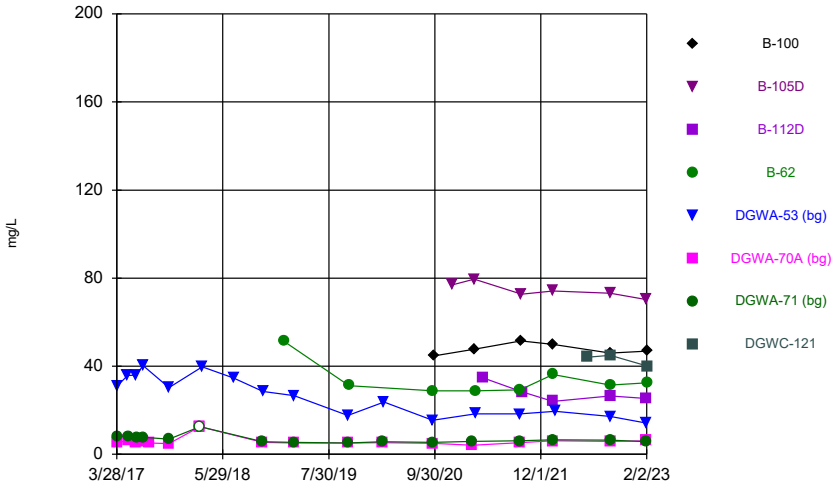

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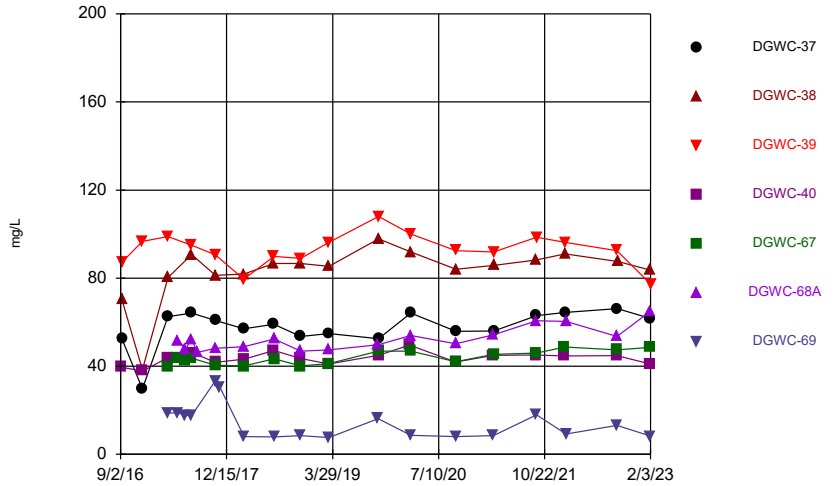
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

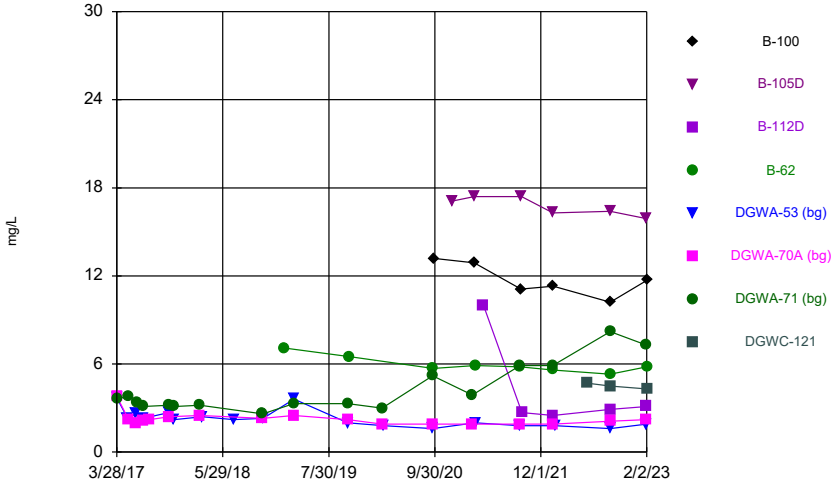
Time Series



Constituent: Calcium Analysis Run 5/4/2023 2:09 PM View: AP 1
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

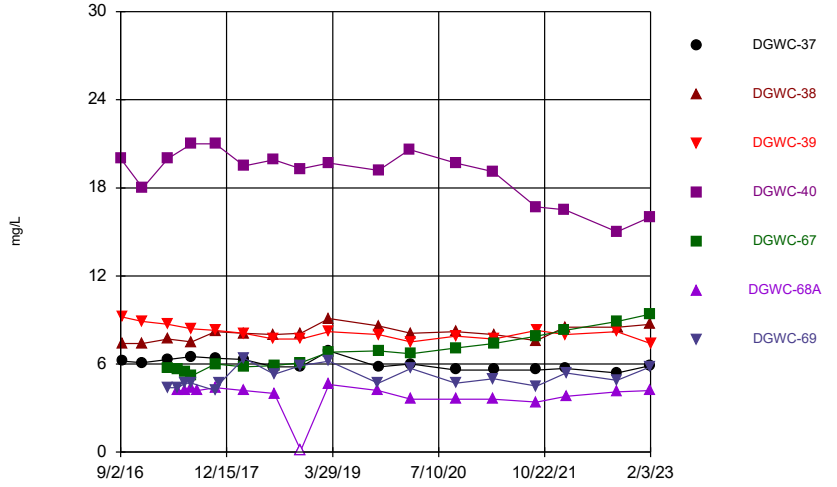
Time Series



Constituent: Chloride Analysis Run 5/4/2023 2:09 PM View: AP 1
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

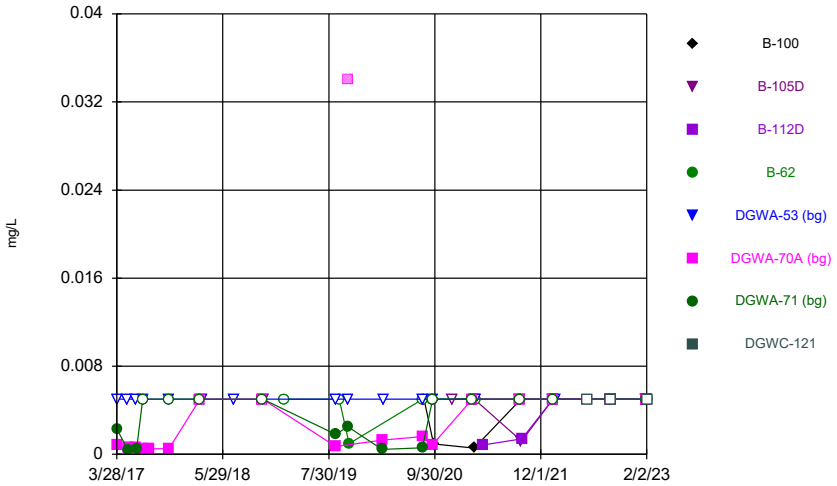
Time Series



Constituent: Chloride Analysis Run 5/4/2023 2:09 PM View: AP 1
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

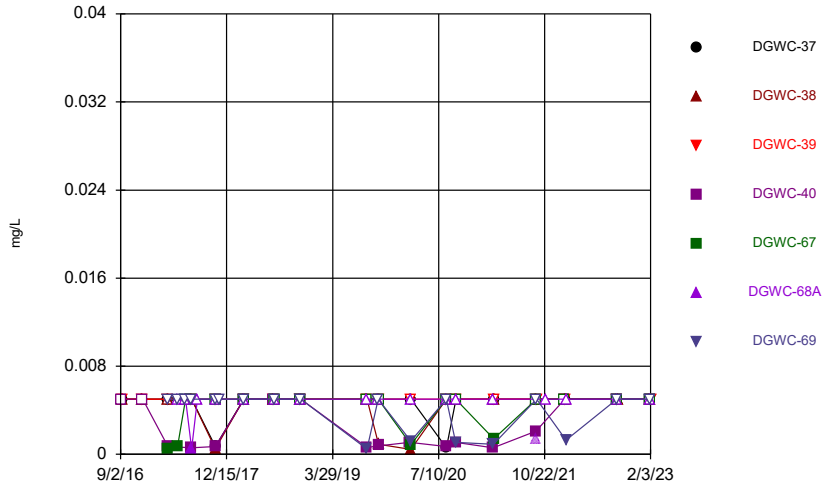
Time Series



Constituent: Chromium Analysis Run 5/4/2023 2:09 PM View: AP 1
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

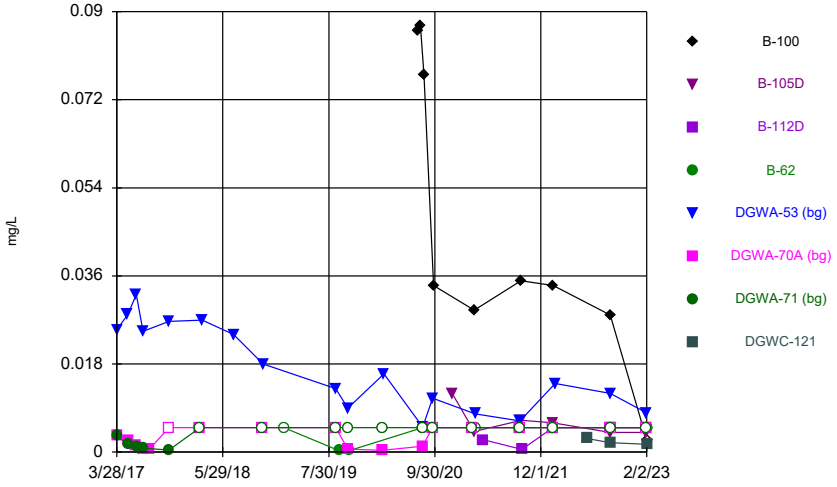
Time Series



Constituent: Chromium Analysis Run 5/4/2023 2:09 PM View: AP 1
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

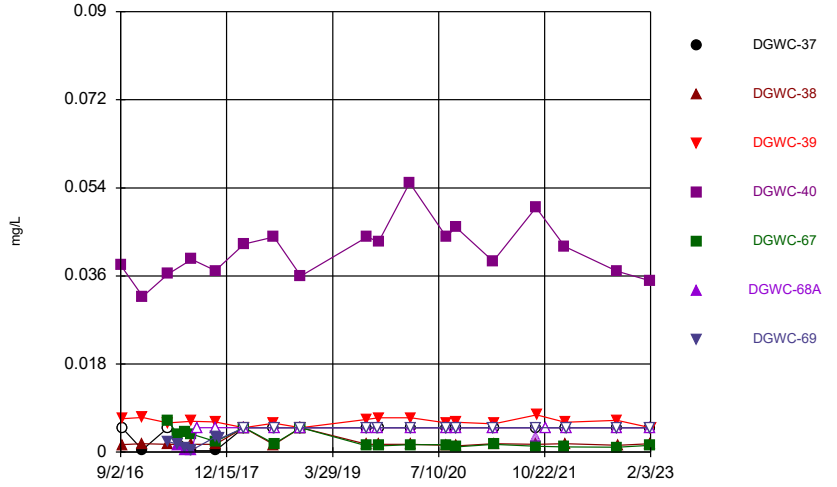
Time Series



Constituent: Cobalt Analysis Run 5/4/2023 2:09 PM View: AP 1
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

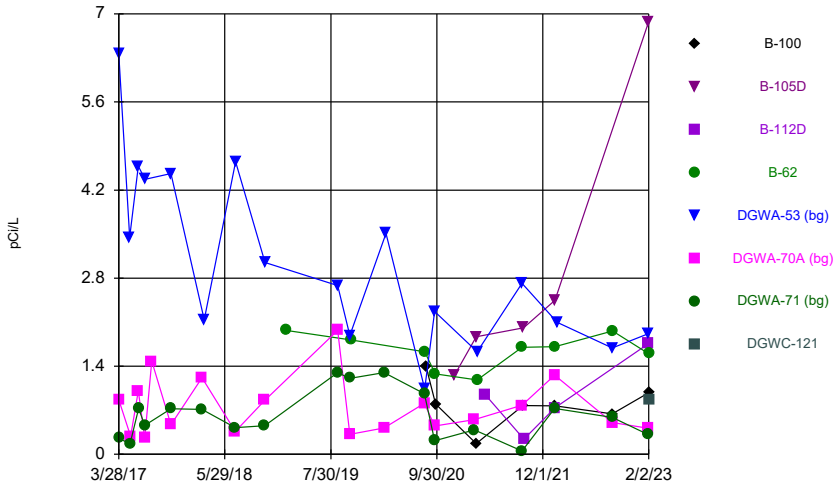
Time Series



Constituent: Cobalt Analysis Run 5/4/2023 2:09 PM View: AP 1
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

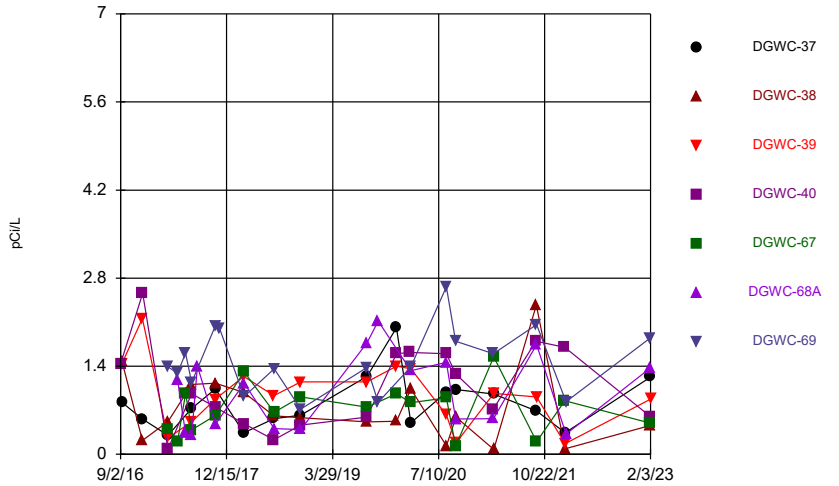
Time Series



Constituent: Combined Radium 226 + 228 Analysis Run 5/4/2023 2:09 PM View: AP 1
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

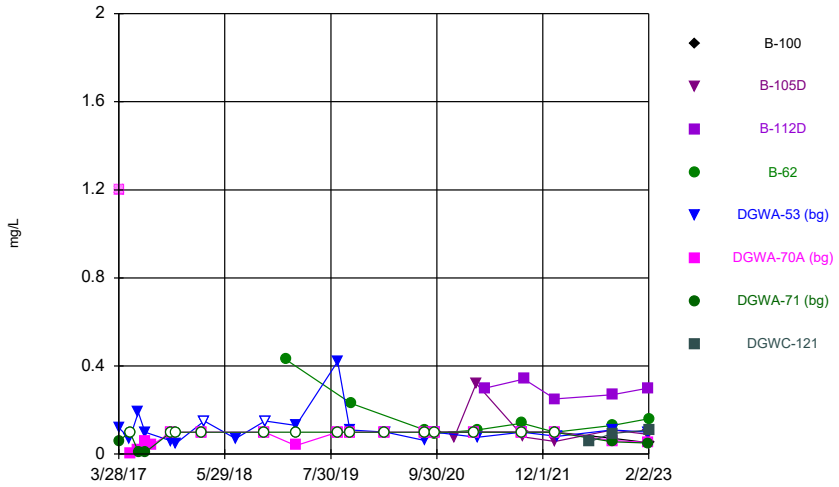
Time Series



Constituent: Combined Radium 226 + 228 Analysis Run 5/4/2023 2:09 PM View: AP 1
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

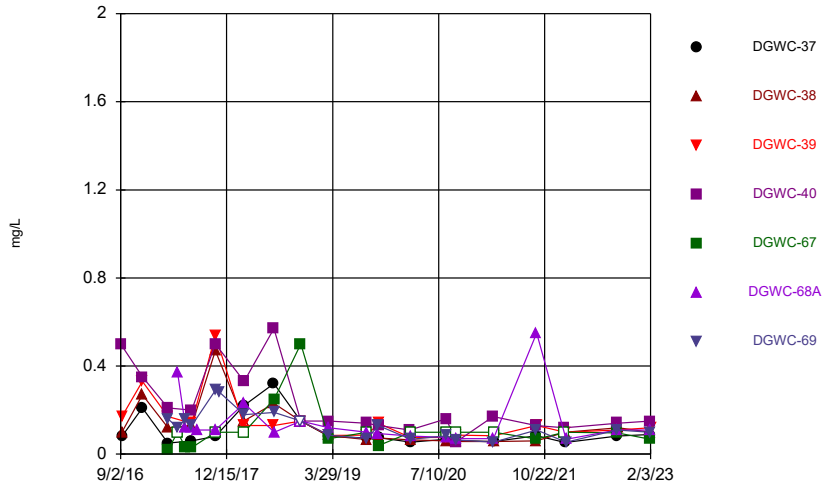
Time Series



Constituent: Fluoride Analysis Run 5/4/2023 2:09 PM View: AP 1
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

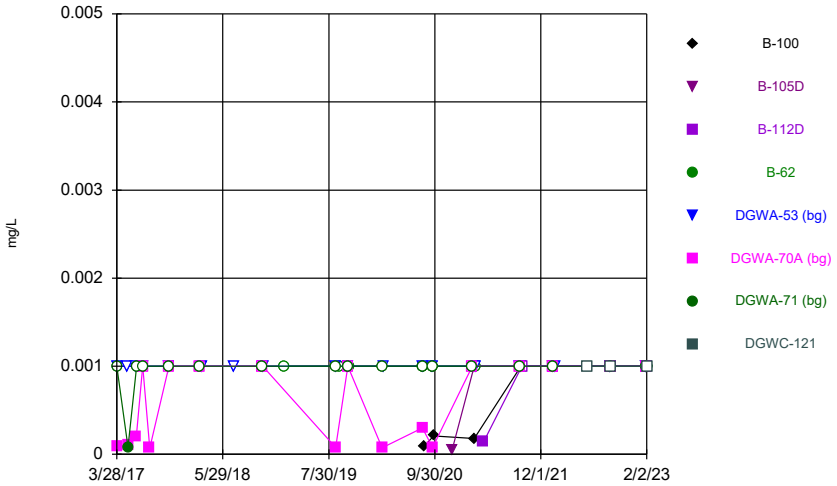
Time Series



Constituent: Fluoride Analysis Run 5/4/2023 2:09 PM View: AP 1
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

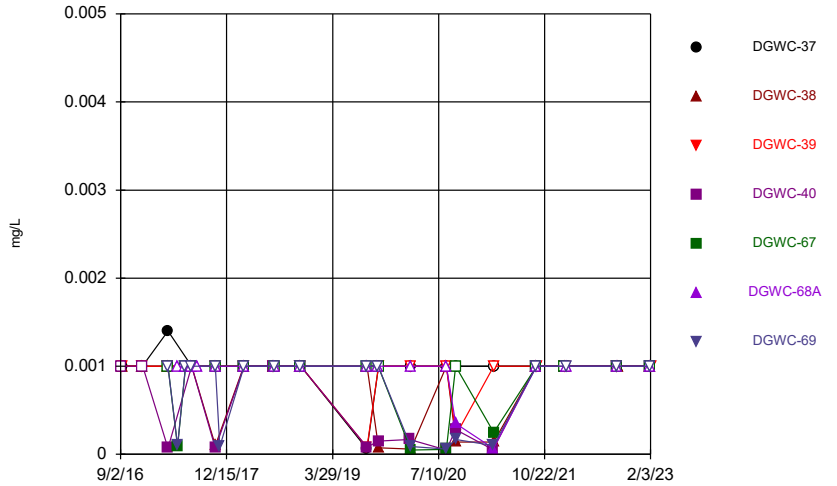
Time Series



Constituent: Lead Analysis Run 5/4/2023 2:09 PM View: AP 1
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

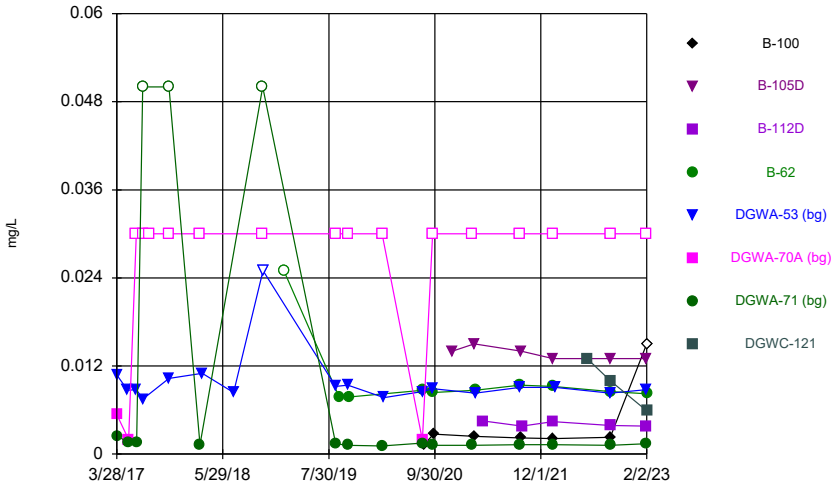
Time Series



Constituent: Lead Analysis Run 5/4/2023 2:09 PM View: AP 1
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

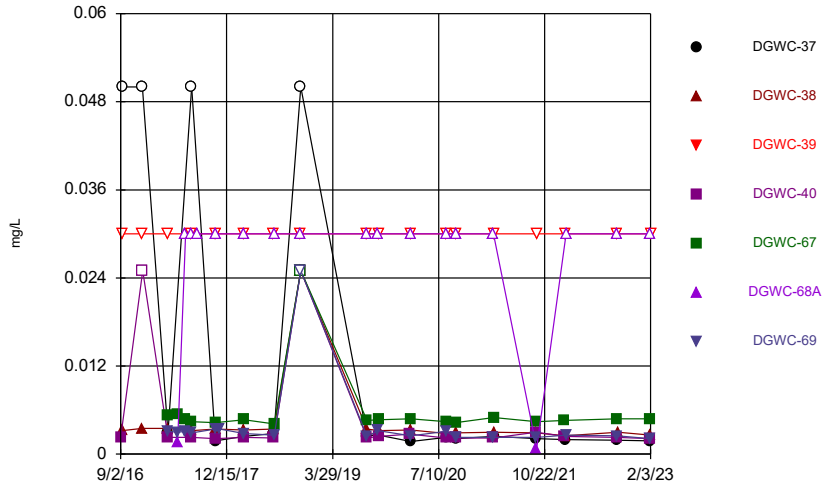
Time Series



Constituent: Lithium Analysis Run 5/4/2023 2:09 PM View: AP 1
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

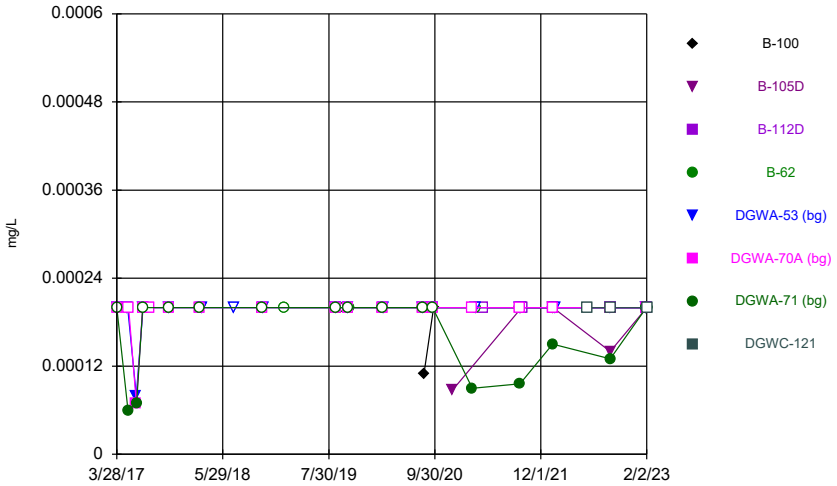
Time Series



Constituent: Lithium Analysis Run 5/4/2023 2:09 PM View: AP 1
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

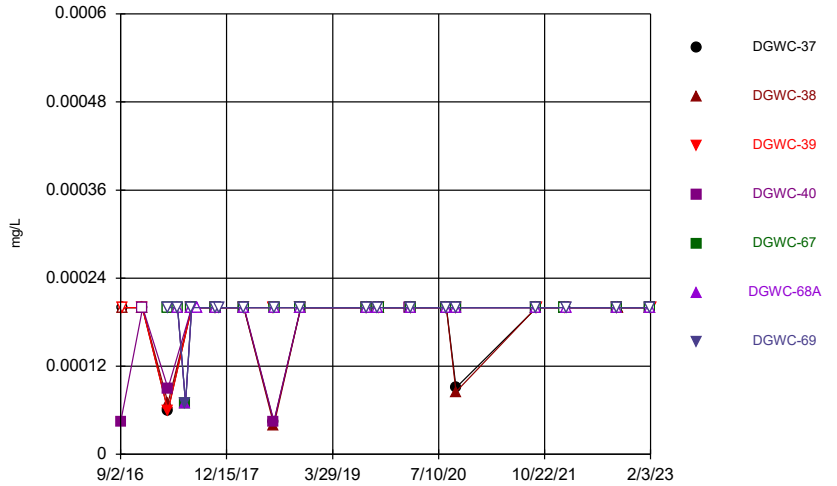
Time Series



Constituent: Mercury Analysis Run 5/4/2023 2:09 PM View: AP 1
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

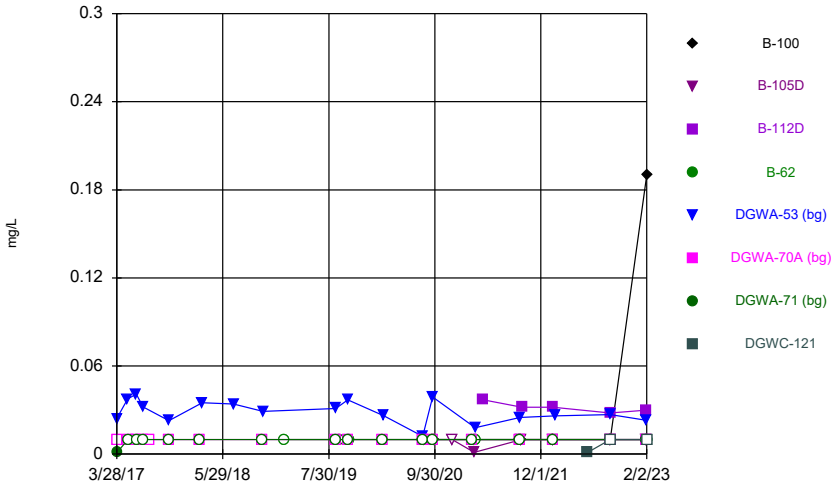
Time Series



Constituent: Mercury Analysis Run 5/4/2023 2:09 PM View: AP 1
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

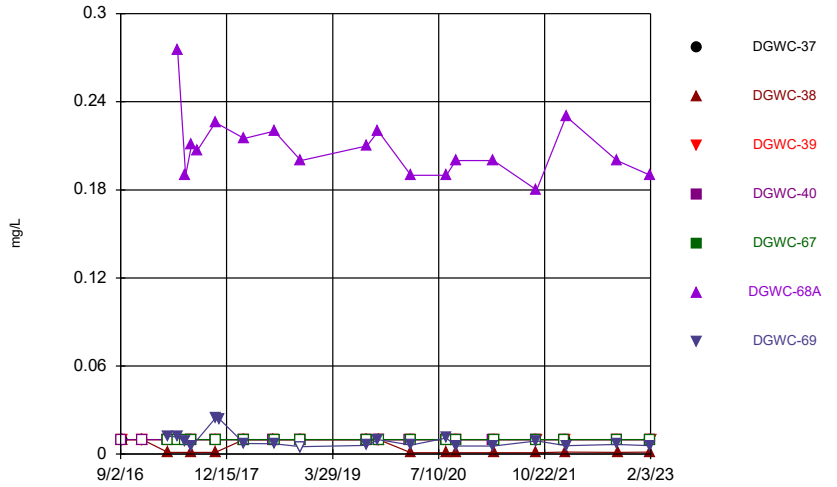
Time Series



Constituent: Molybdenum Analysis Run 5/4/2023 2:09 PM View: AP 1
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

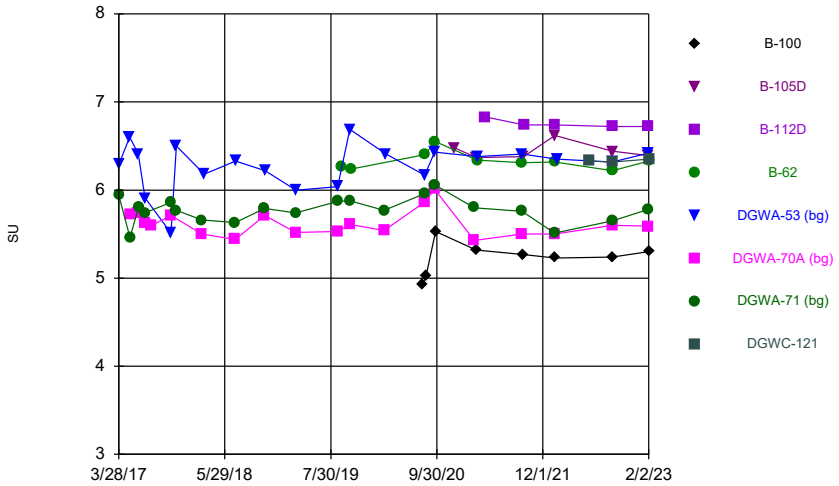
Time Series



Constituent: Molybdenum Analysis Run 5/4/2023 2:09 PM View: AP 1
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Time Series

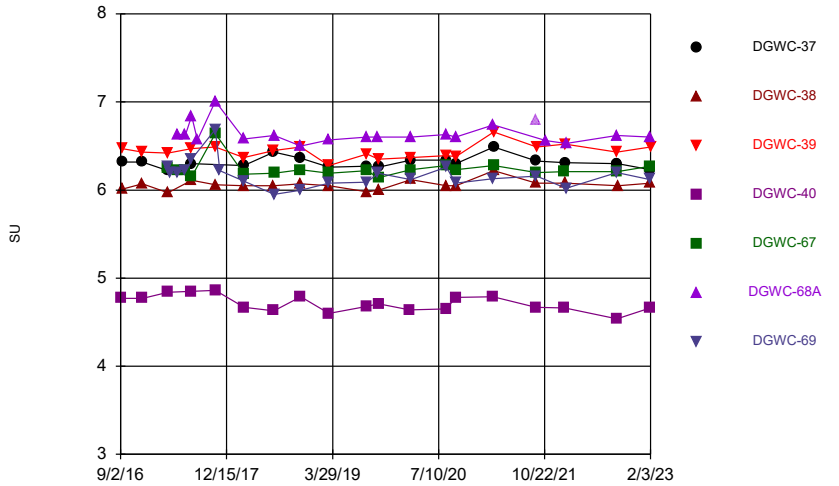


Constituent: pH, Field Analysis Run 5/4/2023 2:09 PM View: AP 1

Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Time Series



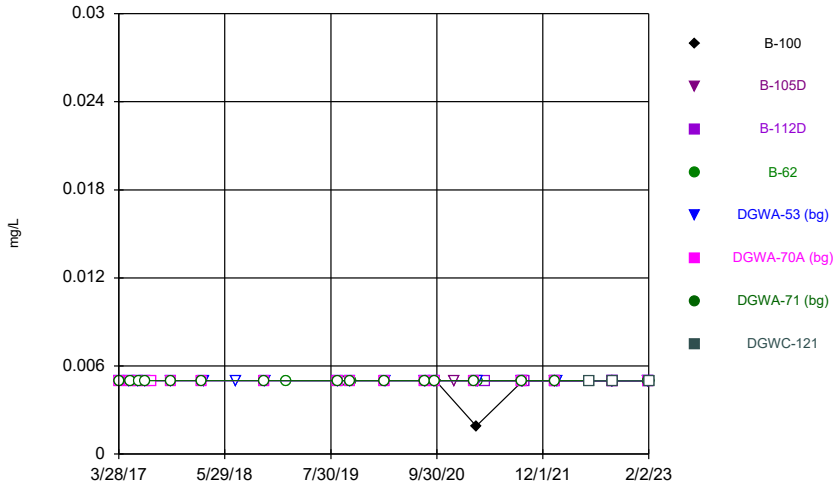
Constituent: pH, Field Analysis Run 5/4/2023 2:09 PM View: AP 1

Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Hollow symbols indicate censored values.

Time Series



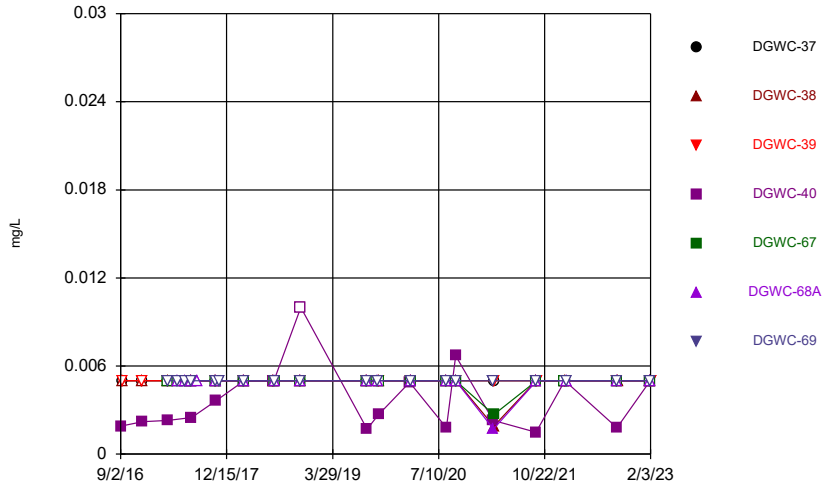
Constituent: Selenium Analysis Run 5/4/2023 2:09 PM View: AP 1

Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Hollow symbols indicate censored values.

Time Series

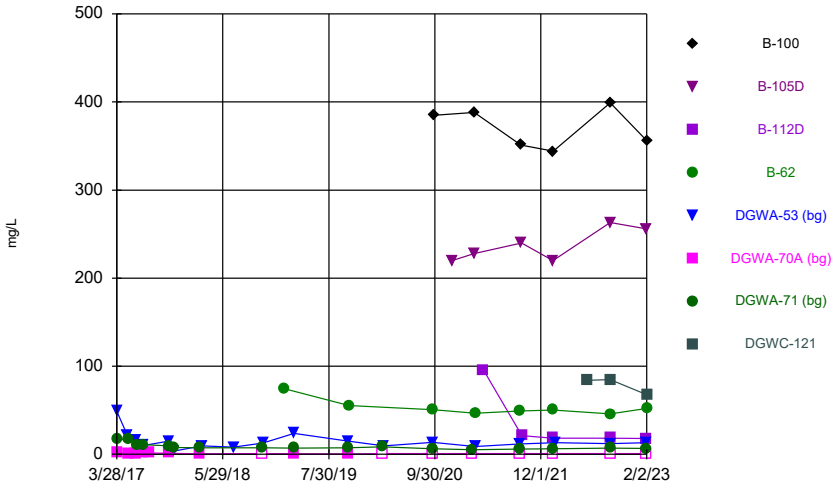


Constituent: Selenium Analysis Run 5/4/2023 2:09 PM View: AP 1

Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

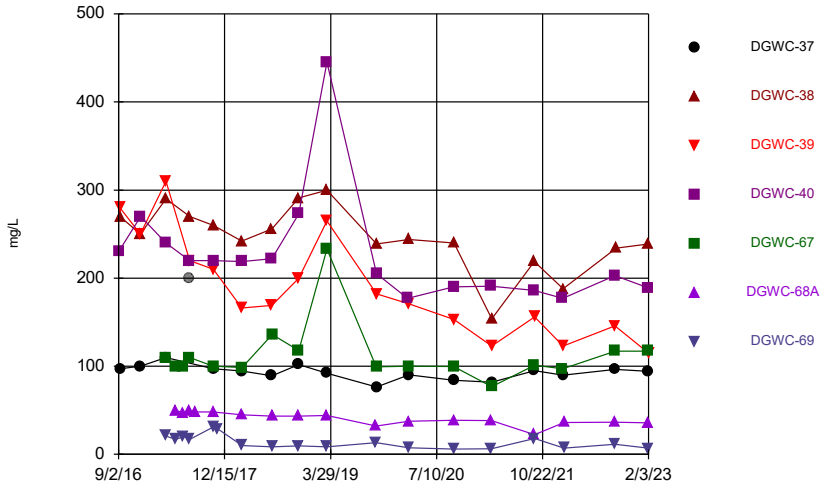
Time Series



Constituent: Sulfate Analysis Run 5/4/2023 2:09 PM View: AP 1
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

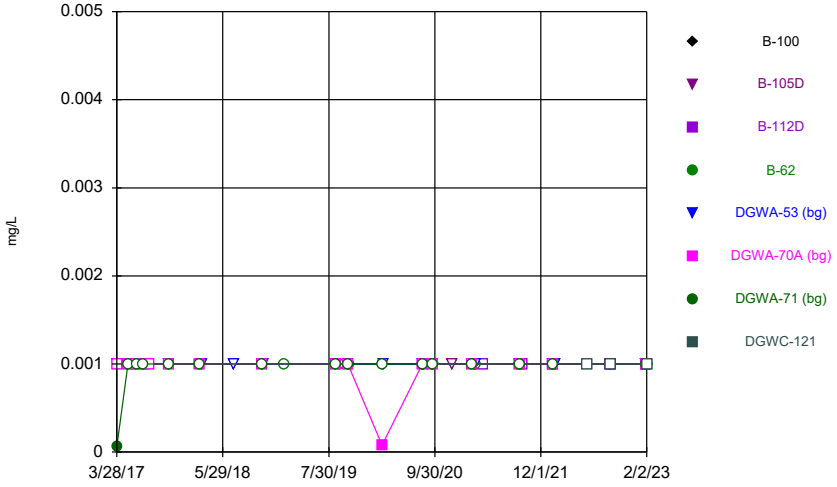
Time Series



Constituent: Sulfate Analysis Run 5/4/2023 2:09 PM View: AP 1
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

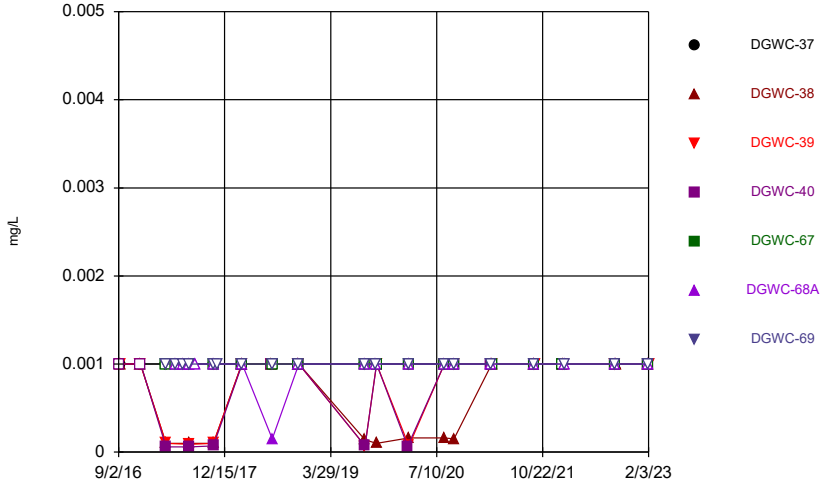
Time Series



Constituent: Thallium Analysis Run 5/4/2023 2:09 PM View: AP 1
Plant McDonough Client: Southern Company Data: McDonough AP

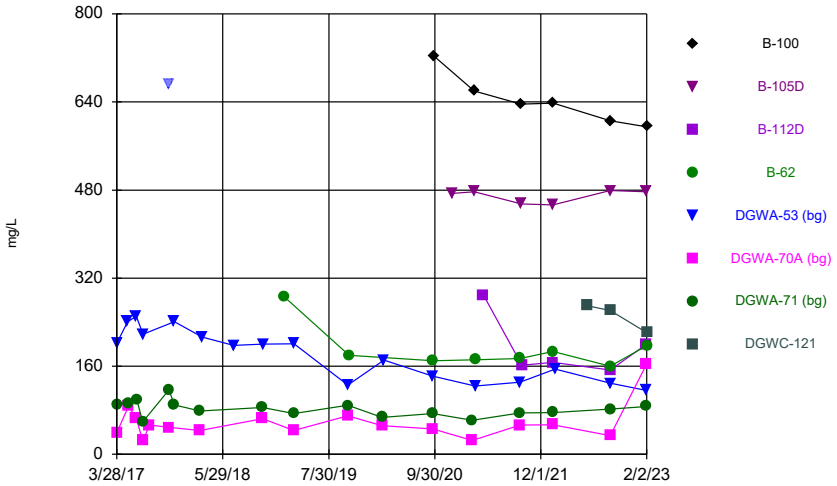
Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Time Series



Constituent: Thallium Analysis Run 5/4/2023 2:09 PM View: AP 1
Plant McDonough Client: Southern Company Data: McDonough AP

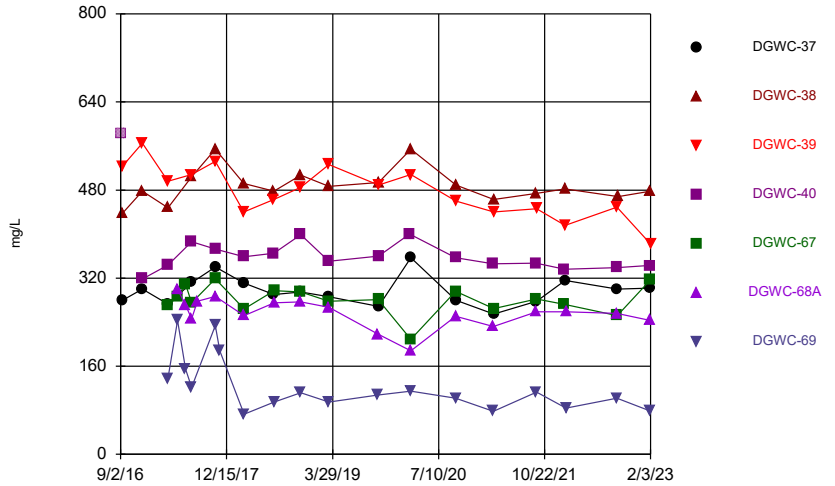
Time Series



Constituent: Total Dissolved Solids Analysis Run 5/4/2023 2:09 PM View: AP 1
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Time Series



Constituent: Total Dissolved Solids Analysis Run 5/4/2023 2:09 PM View: AP 1
Plant McDonough Client: Southern Company Data: McDonough AP

Time Series

Constituent: Antimony (mg/L) Analysis Run 5/4/2023 2:11 PM View: AP 1

Plant McDonough Client: Southern Company Data: McDonough AP

	B-100	B-105D	B-112D	B-62	DGWA-53 (bg)	DGWA-70A (bg)	DGWA-71 (bg)	DGWC-121
3/28/2017					<0.003	<0.003	0.0007 (J)	
5/11/2017					<0.003			
5/12/2017							<0.003	
5/15/2017						<0.003		
6/15/2017					0.0006 (J)	<0.003		
6/16/2017							0.0007 (J)	
7/11/2017						<0.003	<0.003	
7/12/2017					<0.003			
8/8/2017						<0.003		
10/24/2017					<0.003	<0.003	<0.003	
2/27/2018						<0.003	<0.003	
3/8/2018					<0.003			
7/12/2018					<0.003			
11/6/2018						<0.003	<0.003	
11/7/2018					<0.003			
1/30/2019				<0.003				
8/27/2019						<0.003	<0.003	
8/28/2019					<0.003			
9/11/2019				<0.003				
10/15/2019						<0.003	<0.003	
10/16/2019					<0.003			
10/21/2019				<0.003				
3/2/2020						<0.003	0.0018 (J)	
3/9/2020					<0.003			
8/11/2020						0.0013 (J)	0.0018 (J)	
8/13/2020				<0.003	0.0003 (J)			
8/17/2020	0.0013 (J)							
9/22/2020					<0.003	<0.003	<0.003	
9/24/2020				0.00046 (J)				
9/25/2020	<0.003							
12/9/2020		<0.003						
3/1/2021						<0.003	0.0019 (J)	
3/8/2021	0.0017 (J)	0.00069 (J)						
3/12/2021				<0.003	<0.003			
4/15/2021			0.00041 (J)					
9/8/2021							<0.003	
9/9/2021				<0.003	<0.003	0.0015 (J)		
9/13/2021	<0.003							
9/15/2021		0.0082						
9/16/2021			<0.003					
1/18/2022						<0.003	<0.003	
1/19/2022		<0.003	<0.003					
1/20/2022				<0.003				
1/21/2022	<0.003							
1/28/2022					<0.003			
6/6/2022								<0.003
9/7/2022		<0.003	<0.003			<0.003	<0.003	
9/8/2022	<0.003			<0.003	<0.003			<0.003
1/31/2023						<0.003	<0.003	
2/1/2023		0.0016 (J)	<0.003		<0.003			
2/2/2023	<0.003			<0.003				<0.003

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Antimony (mg/L) Analysis Run 5/4/2023 2:11 PM View: AP 1

Plant McDonough Client: Southern Company Data: McDonough AP

	DGWC-37	DGWC-38	DGWC-39	DGWC-40	DGWC-67	DGWC-68A	DGWC-69
9/2/2016				<0.003			
9/8/2016	<0.003	<0.003	<0.003				
12/7/2016	<0.003	<0.003	<0.003				
12/8/2016				<0.003			
3/30/2017	<0.003	<0.003	<0.003	<0.003			
3/31/2017					0.0004 (J)		<0.003
5/12/2017					<0.003	<0.003	<0.003
6/16/2017					0.0008 (J)	0.0008 (J)	0.0007 (J)
7/13/2017	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
8/8/2017						<0.003	
10/26/2017	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
11/15/2017							<0.003
3/1/2018	<0.003	<0.003	<0.003				
3/2/2018				<0.003	<0.003	<0.003	<0.003
7/12/2018	<0.003	<0.003	<0.003	<0.003			
7/13/2018					0.0023 (J)	<0.003	<0.003
11/8/2018	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
8/28/2019	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
3/4/2020				<0.003			
3/9/2020	<0.003	<0.003	<0.003		<0.003	<0.003	<0.003
8/13/2020	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	0.0019 (J)
9/23/2020				<0.003	<0.003	<0.003	<0.003
9/24/2020	<0.003	<0.003					
9/25/2020			<0.003				
3/8/2021				0.00033 (J)			
3/10/2021						0.00032 (J)	0.0018 (J)
3/11/2021	<0.003	<0.003	<0.003		<0.003		
9/14/2021				<0.003			
9/15/2021		<0.003					
9/16/2021	<0.003				<0.003	<0.003	<0.003
9/17/2021			<0.003				
1/19/2022				<0.003	<0.003		
1/20/2022			<0.003				
1/21/2022	<0.003	<0.003					
1/25/2022						<0.003	<0.003
9/7/2022			<0.003	<0.003		<0.003	<0.003
9/8/2022	<0.003				<0.003		
9/12/2022		<0.003					
2/1/2023				<0.003		<0.003	<0.003
2/2/2023	<0.003	<0.003			<0.003		
2/3/2023			<0.003				

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Arsenic (mg/L) Analysis Run 5/4/2023 2:11 PM View: AP 1

Plant McDonough Client: Southern Company Data: McDonough AP

	B-100	B-105D	B-112D	B-62	DGWA-53 (bg)	DGWA-70A (bg)	DGWA-71 (bg)	DGWC-121
3/28/2017					0.0005 (J)	<0.005	<0.005	
5/11/2017					0.0005 (J)			
5/12/2017							0.0004 (J)	
5/15/2017						<0.005		
6/15/2017					<0.005	<0.005		
6/16/2017							<0.005	
7/11/2017						<0.005	<0.005	
7/12/2017					<0.005			
8/8/2017						<0.005		
10/24/2017					<0.005	<0.005	<0.005	
2/27/2018						<0.005	<0.005	
3/8/2018					<0.005			
7/12/2018					<0.005			
11/6/2018						<0.005	<0.005	
11/7/2018					<0.005 (J)			
1/30/2019				<0.005				
8/27/2019						<0.005	<0.005	
8/28/2019					<0.005			
9/11/2019				<0.005				
10/15/2019						0.00052 (J)	0.00071 (J)	
10/16/2019					0.0018 (J)			
10/21/2019				<0.005				
3/2/2020						<0.005	<0.005	
3/9/2020					0.00068 (J)			
7/23/2020	<0.005							
8/11/2020						<0.005	<0.005	
8/13/2020				<0.005	<0.005			
8/17/2020	<0.005							
9/22/2020					0.00093 (J)	<0.005	<0.005	
9/24/2020				<0.005				
9/25/2020	<0.005							
12/9/2020		<0.005						
3/1/2021						<0.005	<0.005	
3/8/2021	<0.005	0.0025 (J)						
3/12/2021				<0.005	<0.005			
4/15/2021			0.00078 (J)					
9/8/2021							<0.005	
9/9/2021				<0.005	<0.005	<0.005		
9/13/2021	<0.005							
9/15/2021		<0.005						
9/16/2021			<0.005					
1/18/2022						0.0046 (J)	0.0054	
1/19/2022		0.0051	0.005					
1/20/2022				0.0033 (J)				
1/21/2022	<0.005							
1/28/2022					0.0024 (J)			
6/6/2022								<0.005
9/7/2022		0.0026 (J)	<0.005			0.0024 (J)	<0.005	
9/8/2022	<0.005			<0.005	0.0029 (J)			<0.005
1/31/2023						<0.005	<0.005	
2/1/2023		<0.005	<0.005		0.0029 (J)			
2/2/2023	<0.005			<0.005				<0.005

ND substitution: RL or RL/2 if <15% NDs. Substitution method for trace values of the form <PQL(J): PQL.

Time Series

Constituent: Arsenic (mg/L) Analysis Run 5/4/2023 2:11 PM View: AP 1

Plant McDonough Client: Southern Company Data: McDonough AP

	DGWC-37	DGWC-38	DGWC-39	DGWC-40	DGWC-67	DGWC-68A	DGWC-69
9/2/2016				<0.005			
9/8/2016	<0.005	<0.005	<0.005				
12/7/2016	0.0019 (J)	<0.005	<0.005				
12/8/2016				<0.005			
3/30/2017	<0.005	<0.005	0.0007 (J)	0.0006 (J)			
3/31/2017					<0.005		0.0239
4/12/2017							0.0077
5/12/2017					<0.005	<0.005	0.0097
6/16/2017					<0.005	<0.005	0.0113
7/13/2017	<0.005	0.0005 (J)	0.0009 (J)	<0.005	<0.005	<0.005	0.0029 (J)
8/8/2017						<0.005	
10/26/2017	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.114
11/15/2017							0.164
3/1/2018	<0.005	<0.005	0.0011 (J)				
3/2/2018				0.0011 (J)	<0.005	<0.005	0.0127
7/12/2018	<0.005	<0.005	0.00057 (J)	<0.005			
7/13/2018					<0.005	<0.005	0.017
11/8/2018	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005 (J)	0.02
8/28/2019	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.025
10/16/2019						<0.005	0.023
10/17/2019					0.00042 (J)		
10/18/2019	<0.005	<0.005	0.00075 (J)	<0.005			
3/4/2020				0.00065 (J)			
3/9/2020	<0.005	<0.005	0.00039 (J)		<0.005	<0.005	0.029
8/13/2020	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.029
9/23/2020				<0.005	<0.005	<0.005	0.032
9/24/2020	<0.005	<0.005					
9/25/2020			0.00087 (J)				
3/8/2021				<0.005			
3/10/2021						<0.005	0.028
3/11/2021	<0.005	<0.005	<0.005		0.0008 (J)		
9/14/2021				<0.005			
9/15/2021		<0.005					
9/16/2021	<0.005				<0.005	0.46 (o)	0.023
9/17/2021			<0.005				
10/27/2021						0.0016 (J)	
1/19/2022				0.003 (J)	0.0033 (J)		
1/20/2022			0.0019 (J)				
1/21/2022	<0.005	<0.005					
1/25/2022						<0.005	0.028
9/7/2022			<0.005	<0.005		<0.005	0.024
9/8/2022	<0.005				<0.005		
9/12/2022		<0.005					
2/1/2023				<0.005		<0.005	0.021
2/2/2023	<0.005	<0.005			<0.005		
2/3/2023			<0.005				

ND substitution: RL or RL/2 if <15% NDs. Substitution method for trace values of the form <PQL(J): PQL.

Time Series

Constituent: Barium (mg/L) Analysis Run 5/4/2023 2:11 PM View: AP 1

Plant McDonough Client: Southern Company Data: McDonough AP

	B-100	B-105D	B-112D	B-62	DGWA-53 (bg)	DGWA-70A (bg)	DGWA-71 (bg)	DGWC-121
3/28/2017					0.134	0.0166	0.0378	
5/11/2017					0.126			
5/12/2017							0.04	
5/15/2017						0.0181		
6/15/2017					0.14	0.0277		
6/16/2017							0.0369	
7/11/2017						0.0306	0.0362	
7/12/2017					0.173			
8/8/2017						0.0277		
10/24/2017					0.109	0.0333	0.0313	
2/27/2018						0.0341	0.0287	
3/8/2018					0.19			
7/12/2018					0.18			
11/6/2018						0.037	0.026	
11/7/2018					0.15			
1/30/2019				0.018				
8/27/2019						0.037	0.027	
8/28/2019					0.087			
9/11/2019				0.023				
10/15/2019						0.034	0.024	
10/16/2019					0.077			
10/21/2019				0.026				
3/2/2020						0.035	0.026	
3/9/2020					0.099			
8/11/2020						0.041	0.026	
8/13/2020				0.026	0.046			
8/17/2020	0.015							
9/22/2020					0.07	0.038	0.024	
9/24/2020				0.025				
9/25/2020	0.022							
12/9/2020		0.03						
3/1/2021						0.042	0.028	
3/8/2021	0.022	0.041						
3/12/2021				0.027	0.076			
4/15/2021			0.026					
9/8/2021							0.025	
9/9/2021				0.021	0.099	0.038		
9/13/2021	0.021							
9/15/2021		0.037						
9/16/2021			0.0032 (J)					
1/18/2022						0.043	0.029	
1/19/2022		0.04	0.0034 (J)					
1/20/2022				0.021				
1/21/2022	0.023							
1/28/2022					0.068			
6/6/2022								0.04
9/7/2022		0.035	0.0026 (J)			0.039	0.025	
9/8/2022	0.021			0.018	0.077			0.042
1/31/2023						0.041	0.028	
2/1/2023		0.036	0.0028 (J)		0.089			
2/2/2023	0.098			0.019				0.049

Time Series

Constituent: Barium (mg/L) Analysis Run 5/4/2023 2:11 PM View: AP 1

Plant McDonough Client: Southern Company Data: McDonough AP

	DGWC-37	DGWC-38	DGWC-39	DGWC-40	DGWC-67	DGWC-68A	DGWC-69
9/2/2016				0.0171			
9/8/2016	0.123	0.0333	0.0978				
12/7/2016	0.125	0.0336	0.0844				
12/8/2016				0.0163			
3/30/2017	0.11	0.0325	0.0858	0.0177			
3/31/2017					0.111		0.0872
5/12/2017					0.127	0.089	0.0929
6/16/2017					0.11	0.0855	0.1
7/13/2017	0.11	0.0332	0.0919	0.017	0.102	0.0859	0.0985
8/8/2017						0.0852	
10/26/2017	0.112	0.0333	0.0899	0.0168	0.105	0.0878	0.136
11/15/2017							0.107
3/1/2018	0.102	0.0333	0.0742				
3/2/2018				0.0169	0.104	0.0878	0.0671
7/12/2018	0.11	0.034	0.094	0.018			
7/13/2018					0.11	0.091	0.074
11/8/2018	0.11	0.035	0.1	0.017	0.11	0.092	0.072
8/28/2019	0.086	0.033	0.099	0.017	0.11	0.089	0.061
10/16/2019						0.089	0.1
10/17/2019					0.1		
10/18/2019	0.079	0.032	0.1	0.019			
3/4/2020				0.018			
3/9/2020	0.092	0.032	0.076		0.11	0.088	0.057
8/13/2020	0.088	0.032	0.089	0.018	0.095	0.088	0.13
9/23/2020				0.019	0.1	0.094	0.055
9/24/2020	0.094	0.032					
9/25/2020			0.1				
3/8/2021				0.016			
3/10/2021						0.09	0.048
3/11/2021	0.075	0.032	0.078		0.11		
9/14/2021				0.027			
9/15/2021		0.032					
9/16/2021	0.083				0.088	0.13 (o)	0.078
9/17/2021			0.09				
10/27/2021						0.086	
1/19/2022				0.018	0.091		
1/20/2022			0.093				
1/21/2022	0.085	0.031					
1/25/2022						0.1	0.049
9/7/2022			0.099	0.016		0.098	0.065
9/8/2022	0.079				0.082		
9/12/2022		0.027					
2/1/2023				0.017		0.099	0.044
2/2/2023	0.081	0.03			0.08		
2/3/2023			0.087				

Time Series

Constituent: Beryllium (mg/L) Analysis Run 5/4/2023 2:11 PM View: AP 1

Plant McDonough Client: Southern Company Data: McDonough AP

	B-100	B-105D	B-112D	B-62	DGWA-53 (bg)	DGWA-70A (bg)	DGWA-71 (bg)	DGWC-121
10/6/2016				9E-05 (J)				
3/28/2017					<0.0005	<0.003	9E-05 (J)	
5/11/2017					<0.0005			
5/12/2017							<0.003	
5/15/2017						<0.003		
6/15/2017					<0.0005	<0.003		
6/16/2017							0.0001 (J)	
7/11/2017						<0.003	<0.003	
7/12/2017					<0.0005			
8/8/2017						<0.003		
10/24/2017					<0.0005	<0.003	<0.003	
2/27/2018						<0.003	<0.003	
3/8/2018					<0.0005			
7/10/2018							0.0009 (J)	
7/12/2018					<0.0005			
11/6/2018						0.00012 (J)	0.00013 (J)	
11/7/2018					<0.0005			
1/30/2019				<0.0025				
8/27/2019						7.9E-05 (J)	<0.003	
8/28/2019					<0.0005			
9/11/2019				0.00012 (J)				
10/15/2019						<0.003	8.8E-05 (J)	
10/16/2019					<0.0005			
10/21/2019				7.8E-05 (J)				
3/2/2020						9.6E-05 (J)	0.0001 (J)	
3/9/2020					<0.0005			
8/11/2020						0.00013 (J)	0.00011 (J)	
8/13/2020				0.00011 (J)	<0.0005			
8/17/2020	0.0004 (J)							
9/22/2020					<0.0005	6.8E-05 (J)	6.9E-05 (J)	
9/24/2020				0.00013 (J)				
9/25/2020	0.00035 (J)							
12/9/2020		<0.0005						
3/1/2021						0.00012 (J)	0.00011 (J)	
3/8/2021	0.00046 (J)	<0.0005						
3/12/2021				<0.0025	<0.0005			
4/15/2021			<0.0005					
9/8/2021							9.1E-05 (J)	
9/9/2021				0.00014 (J)	<0.0005	8.9E-05 (J)		
9/13/2021	0.00053							
9/15/2021		<0.0005						
9/16/2021			<0.0005					
1/18/2022						9.2E-05 (J)	0.00012 (J)	
1/19/2022		<0.0005	<0.0005					
1/20/2022				0.00015 (J)				
1/21/2022	0.00053							
1/28/2022					<0.0005			
6/6/2022								<0.0005
9/7/2022		<0.0005	<0.0005			8.4E-05 (J)	7.5E-05 (J)	
9/8/2022	0.00058			0.00013 (J)	<0.0005			<0.0005
1/31/2023						9.4E-05 (J)	0.00011 (J)	
2/1/2023		<0.0005	<0.0005		0.00016 (J)			

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Beryllium (mg/L) Analysis Run 5/4/2023 2:11 PM View: AP 1

Plant McDonough Client: Southern Company Data: McDonough AP

	B-100	B-105D	B-112D	B-62	DGWA-53 (bg)	DGWA-70A (bg)	DGWA-71 (bg)	DGWC-121
2/2/2023	<0.0005			0.00012 (J)				<0.0005

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Beryllium (mg/L) Analysis Run 5/4/2023 2:11 PM View: AP 1

Plant McDonough Client: Southern Company Data: McDonough AP

	DGWC-37	DGWC-38	DGWC-39	DGWC-40	DGWC-67	DGWC-68A	DGWC-69
9/2/2016				0.0028 (J)			
9/8/2016	<0.0005	<0.0005	<0.0005				
12/7/2016	<0.0005	<0.0005	<0.0005				
12/8/2016				0.0026 (J)			
3/30/2017	<0.0005	<0.0005	<0.0005	0.003			
3/31/2017					<0.0005		7E-05 (J)
5/12/2017					<0.0005	<0.0005	<0.0005
6/16/2017					<0.0005	<0.0005	<0.0005
7/13/2017	<0.0005	<0.0005	<0.0005	0.003 (J)	<0.0005	<0.0005	<0.0005
8/8/2017						<0.0005	
10/26/2017	<0.0005	<0.0005	<0.0005	0.0027 (J)	<0.0005	<0.0005	<0.0005
11/15/2017							<0.0005
3/1/2018	<0.0005	<0.0005	<0.0005				
3/2/2018				0.0033	<0.0005	<0.0005	<0.0005
7/12/2018	7E-05 (J)	<0.0005	<0.0005	0.0032			
7/13/2018					<0.0005	8.4E-05 (J)	5.8E-05 (J)
11/8/2018	<0.0005	<0.0005	<0.0005	<0.003 (J)	<0.0005	<0.0005	<0.0005
8/28/2019	8.6E-05 (J)	<0.0005	<0.0005	0.0032	<0.0005	<0.0005	<0.0005
10/16/2019						<0.0005	<0.0005
10/17/2019					<0.0005		
10/18/2019	<0.0005	<0.0005	<0.0005	0.0033			
3/4/2020				0.0039			
3/9/2020	<0.0005	<0.0005	<0.0005		<0.0005	<0.0005	7.5E-05 (J)
8/13/2020	0.0001 (J)	<0.0005	<0.0005	0.0033	<0.0005	<0.0005	6.3E-05 (J)
9/23/2020				0.0031	<0.0005	<0.0005	6.1E-05 (J)
9/24/2020	8.8E-05 (J)	5.8E-05 (J)					
9/25/2020			<0.0005				
3/8/2021				0.003			
3/10/2021						6.1E-05 (J)	5E-05 (J)
3/11/2021	<0.0005	<0.0005	<0.0005		<0.0005		
9/14/2021				0.0032			
9/15/2021		<0.0005					
9/16/2021	5.9E-05 (J)				<0.0005	<0.0005	<0.0005
9/17/2021			<0.0005				
1/19/2022				0.0034	<0.0005		
1/20/2022			<0.0005				
1/21/2022	5.9E-05 (J)	<0.0005					
1/25/2022						<0.0005	5.9E-05 (J)
9/7/2022			<0.0005	0.0031		<0.0005	<0.0005
9/8/2022	5.7E-05 (J)				<0.0005		
9/12/2022		<0.0005					
2/1/2023				0.0028		<0.0005	<0.0005
2/2/2023	<0.0005	<0.0005			<0.0005		
2/3/2023			<0.0005				

ND substitution: RL or RL/2 if <15% NDs. Substitution method for trace values of the form <PQL(J): PQL.

Time Series

Constituent: Boron (mg/L) Analysis Run 5/4/2023 2:11 PM View: AP 1

Plant McDonough Client: Southern Company Data: McDonough AP

	B-100	B-105D	B-112D	B-62	DGWA-53 (bg)	DGWA-70A (bg)	DGWA-71 (bg)	DGWC-121
10/6/2016				0.053 (J)				
3/28/2017					0.0612	0.0067 (J)	0.0097 (J)	
5/11/2017					0.0805			
5/12/2017							0.0082 (J)	
5/15/2017						0.0073 (J)		
6/15/2017					0.0725	<0.04		
6/16/2017							0.0085 (J)	
7/11/2017						<0.04	0.0077 (J)	
7/12/2017					0.0735			
8/8/2017						<0.04		
10/24/2017					0.077	0.0082 (J)	0.0083 (J)	
2/27/2018						0.0062 (J)	0.0069 (J)	
3/8/2018					0.13 (J)			
7/12/2018					0.076			
11/6/2018						<0.04 (J)	<0.04 (J)	
11/7/2018					0.073			
1/30/2019				0.14				
3/12/2019						0.0073 (J)	0.0068 (J)	
3/13/2019					0.08			
9/11/2019				0.068				
10/15/2019						<0.04	0.0054 (J)	
10/16/2019					0.059			
10/21/2019				0.058				
3/2/2020						0.0055 (J)	0.01 (J)	
3/9/2020					0.08 (J)			
9/22/2020					0.056 (J)	<0.04	<0.04	
9/24/2020				0.074 (J)				
9/25/2020	0.27							
12/9/2020		0.79						
3/1/2021						<0.04	0.0054 (J)	
3/8/2021	0.24	0.64						
3/12/2021				0.092 (J)	0.064			
4/15/2021			0.26					
9/8/2021							<0.04	
9/9/2021				0.068	0.065	<0.04		
9/13/2021	0.24							
9/15/2021		0.76						
9/16/2021			0.27					
1/18/2022						0.024 (J)	0.015 (J)	
1/19/2022		0.88	0.31					
1/20/2022				0.077				
1/21/2022	0.24							
1/28/2022					0.062			
6/6/2022								1.4
9/7/2022		0.87	0.26			<0.04	<0.04	
9/8/2022	0.24			0.064	0.054			2.1
1/31/2023						0.011 (J)	0.0097 (J)	
2/1/2023		0.89	0.29		0.051			
2/2/2023	1.6			0.064				1.6

ND substitution: RL or RL/2 if <15% NDs. Substitution method for trace values of the form <PQL(J): PQL.

Time Series

Constituent: Boron (mg/L) Analysis Run 5/4/2023 2:11 PM View: AP 1

Plant McDonough Client: Southern Company Data: McDonough AP

	DGWC-37	DGWC-38	DGWC-39	DGWC-40	DGWC-67	DGWC-68A	DGWC-69
9/2/2016				0.895			
9/8/2016	1.58	2.69	3.35				
12/7/2016	2.01	3.08	3.63				
12/8/2016				0.841			
3/30/2017	1.47	3.19	3.57	0.937			
3/31/2017					2.91		0.407
4/12/2017							0.207
5/12/2017					3.24	1.8	0.311
6/16/2017					3.42	1.88	0.381
7/13/2017	2.1	3.09	3.41	0.933	3.46	1.97	0.323
8/8/2017						2.1	
10/26/2017	1.86	2.92	3.41	0.873	3.21	2.05	0.779
11/15/2017							0.667
3/1/2018	1.87	3.08	2.86				
3/2/2018				0.974	3.49	2.05	0.0478
7/12/2018	1.5	2.8	3	0.92			
7/13/2018					3.1	1.7	0.043
11/8/2018	1.4	3.4	3.4	0.8	3.5	1.8	0.054
3/13/2019	1.8	2.9	3.4	0.8	3.5	1.9	0.028 (J)
10/16/2019						1.5	0.38
10/17/2019					3.6		
10/18/2019	1.3	3.1	3.6	0.9			
3/4/2020				0.86			
3/9/2020	1.8	3	2.9		3.6	1.8	0.035 (J)
9/23/2020				0.76	3.2	1.7	0.041 (J)
9/24/2020	1.6	2.9					
9/25/2020			3.3				
3/8/2021				0.72			
3/10/2021						1.7	0.024 (J)
3/11/2021	1.4	2.7	2.5		3.4		
9/14/2021				0.7			
9/15/2021		2.8					
9/16/2021	1.4				3.4	1.3	0.32
9/17/2021			2.8				
1/19/2022				0.82	4.1		
1/20/2022			2.8				
1/21/2022	1.4	2.8					
1/25/2022						2.2	0.035 (J)
9/7/2022			3.3	0.84		2	0.23
9/8/2022	2				4.3		
9/12/2022		2.8					
2/1/2023				0.68		1.7	0.035 (J)
2/2/2023	1.5	2.6			3.9		
2/3/2023			2.1				

Time Series

Constituent: Cadmium (mg/L) Analysis Run 5/4/2023 2:11 PM View: AP 1

Plant McDonough Client: Southern Company Data: McDonough AP

	B-100	B-105D	B-112D	B-62	DGWA-53 (bg)	DGWA-70A (bg)	DGWA-71 (bg)	DGWC-121
3/28/2017					<0.0005	<0.0005	<0.0005	
5/11/2017					8E-05 (J)			
5/12/2017							<0.0005	
5/15/2017						<0.0005		
6/15/2017					<0.0005	<0.0005		
6/16/2017							<0.0005	
7/11/2017						<0.0005	<0.0005	
7/12/2017					<0.0005			
8/8/2017						<0.0005		
10/24/2017					<0.0005	<0.0005	<0.0005	
2/27/2018						<0.0005	<0.0005	
3/8/2018					<0.0005			
7/12/2018					0.00013 (J)			
11/6/2018						<0.0005	<0.0005	
11/7/2018					<0.0005			
1/30/2019				<0.0005				
8/27/2019						<0.0005	<0.0005	
8/28/2019					<0.0005			
9/11/2019				<0.0005				
10/15/2019						<0.0005	<0.0005	
10/16/2019					<0.0005			
10/21/2019				<0.0005				
3/2/2020						0.00041 (J)	<0.0005	
3/9/2020					<0.0005			
8/11/2020						<0.0005	<0.0005	
8/13/2020				<0.0005	<0.0005			
8/17/2020	0.00059 (J)							
9/22/2020					<0.0005	<0.0005	<0.0005	
9/24/2020				<0.0005				
9/25/2020	0.00027 (J)							
12/9/2020		<0.0005						
3/1/2021						<0.0005	<0.0005	
3/8/2021	0.00027 (J)	<0.0005						
3/12/2021				<0.0005	<0.0005			
4/15/2021			<0.0005					
9/8/2021							<0.0005	
9/9/2021				<0.0005	<0.0005	<0.0005		
9/13/2021	0.00029 (J)							
9/15/2021		<0.0005						
9/16/2021			<0.0005					
1/18/2022						<0.0005	<0.0005	
1/19/2022		<0.0005	<0.0005					
1/20/2022				<0.0005				
1/21/2022	0.00059							
1/28/2022					<0.0005			
6/6/2022								<0.0005
9/7/2022		<0.0005	<0.0005			<0.0005	<0.0005	
9/8/2022	0.00027 (J)			<0.0005	<0.0005			<0.0005
1/31/2023						<0.0005	<0.0005	
2/1/2023		<0.0005	<0.0005		0.00019 (J)			
2/2/2023	<0.0005			<0.0005				<0.0005

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Cadmium (mg/L) Analysis Run 5/4/2023 2:11 PM View: AP 1

Plant McDonough Client: Southern Company Data: McDonough AP

	DGWC-37	DGWC-38	DGWC-39	DGWC-40	DGWC-67	DGWC-68A	DGWC-69
9/2/2016				0.0008 (J)			
9/8/2016	0.0002 (J)	0.0002 (J)	<0.0005				
12/7/2016	0.0001 (J)	0.0002 (J)	<0.0005				
12/8/2016				0.0007 (J)			
3/30/2017	0.0001 (J)	0.0002 (J)	<0.0005	0.0007 (J)			
3/31/2017					<0.0005		0.0001 (J)
5/12/2017					<0.0005	8E-05 (J)	0.0002 (J)
6/16/2017					<0.0005	<0.0005	0.0002 (J)
7/13/2017	<0.0005	0.0002 (J)	<0.0005	0.0008 (J)	<0.0005	<0.0005	<0.0005
8/8/2017						<0.0005	
10/26/2017	<0.0005	0.0002 (J)	<0.0005	0.0008 (J)	<0.0005	<0.0005	<0.0005
11/15/2017							<0.0005
3/1/2018	<0.0005	<0.0005	<0.0005				
3/2/2018				<0.001	<0.0005	<0.0005	<0.0005
7/12/2018	<0.0005	0.00024 (J)	<0.0005	0.00087 (J)			
7/13/2018					<0.0005	0.00019 (J)	<0.0005
11/8/2018	<0.0005	<0.001 (J)	<0.0005	<0.001 (J)	<0.0005	<0.001 (J)	<0.0005
8/28/2019	<0.0005	0.0003 (J)	<0.0005	0.00087 (J)	0.00017 (J)	0.00017 (J)	<0.0005
10/16/2019						0.00017 (J)	0.00017 (J)
10/17/2019					<0.0005		
10/18/2019	<0.0005	0.00016 (J)	<0.0005	0.00088 (J)			
3/4/2020				0.00093 (J)			
3/9/2020	<0.0005	0.00017 (J)	<0.0005		0.00021 (J)	0.00026 (J)	<0.0005
8/13/2020	<0.0005	0.00021 (J)	<0.0005	0.00084 (J)	0.00015 (J)	0.00021 (J)	<0.0005
9/23/2020				0.0008 (J)	0.00018 (J)	0.00024 (J)	<0.0005
9/24/2020	0.00027 (J)	0.00081 (J)					
9/25/2020			<0.0005				
3/8/2021				0.00072			
3/10/2021						<0.0005	<0.0005
3/11/2021	<0.0005	<0.0005	<0.0005		0.00053		
9/14/2021				0.00086			
9/15/2021		0.00021 (J)					
9/16/2021	0.00013 (J)				<0.0005	<0.0005	<0.0005
9/17/2021			<0.0005				
1/19/2022				0.00085	<0.0005		
1/20/2022			<0.0005				
1/21/2022	<0.0005	0.0002 (J)					
1/25/2022						0.00035 (J)	<0.0005
9/7/2022			<0.0005	0.00081		0.0002 (J)	<0.0005
9/8/2022	<0.0005				<0.0005		
9/12/2022		0.00013 (J)					
2/1/2023				0.00063		<0.0005	<0.0005
2/2/2023	<0.0005	<0.0005			<0.0005		
2/3/2023			<0.0005				

ND substitution: RL or RL/2 if <15% NDs. Substitution method for trace values of the form <PQL(J): PQL.

Time Series

Constituent: Calcium (mg/L) Analysis Run 5/4/2023 2:11 PM View: AP 1

Plant McDonough Client: Southern Company Data: McDonough AP

	B-100	B-105D	B-112D	B-62	DGWA-53 (bg)	DGWA-70A (bg)	DGWA-71 (bg)	DGWC-121
3/28/2017					30.8	5.14	8.31	
5/11/2017					35.8			
5/12/2017							8.04	
5/15/2017						6.5		
6/15/2017					36	5.38		
6/16/2017							7.66	
7/11/2017						5.96	7.71	
7/12/2017					40.3			
8/8/2017						5.2		
10/24/2017					30.3	4.93	6.86	
2/27/2018						<25	<25	
3/8/2018					39.8			
7/12/2018					34.7			
11/6/2018						5.5	5.7	
11/7/2018					28.6			
1/30/2019				51.4				
3/12/2019						5.1	5.5	
3/13/2019					26.7			
10/15/2019						5.1	5.1	
10/16/2019					17.7			
10/21/2019				31.2				
3/2/2020						5.3	5.8	
3/9/2020					23.7			
9/22/2020					15.5	5	5.4	
9/24/2020				28.8				
9/25/2020	44.7							
12/9/2020		76.9						
3/1/2021						4.1	5.9	
3/8/2021	47.7	79.6						
3/12/2021				28.8	18.4			
4/15/2021			34.6					
9/8/2021							6.1	
9/9/2021				29.2	18.3	5.3		
9/13/2021	51.5							
9/15/2021		72.7						
9/16/2021			28.4					
1/18/2022						6.1	6.6	
1/19/2022		74.2	24.1					
1/20/2022				36.3				
1/21/2022	49.9							
1/28/2022					19.5			
6/6/2022								44.1
9/7/2022		73.2	26.5			5.9	6.4	
9/8/2022	46			31.4	17.2			45
1/31/2023						6.2	5.7	
2/1/2023		70.2	25.3		14.1			
2/2/2023	46.9			32.4				40.1

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Calcium (mg/L) Analysis Run 5/4/2023 2:11 PM View: AP 1

Plant McDonough Client: Southern Company Data: McDonough AP

	DGWC-37	DGWC-38	DGWC-39	DGWC-40	DGWC-67	DGWC-68A	DGWC-69
9/2/2016				39.6			
9/8/2016	52.5	70.3	87.2				
12/7/2016	29.7	38.4	96.7				
12/8/2016				37.9			
3/30/2017	62.6	80.3	98.9	43.9			
3/31/2017					39.9		18.6 (J)
5/12/2017					43.6	51.7	18.9 (J)
6/16/2017					42.5	47.9	17.7
7/13/2017	64.1	90.8	95	46.2	43.7	52.3	17.6
8/8/2017						46.3	
10/26/2017	60.8	81.3	90.6	41.8	40.4	48.2	33.3
11/15/2017							30.6
3/1/2018	57	81.8	79.6				
3/2/2018				43.2	40.1	48.9	8.09
7/12/2018	59.1	86.7	89.8	47.1			
7/13/2018					43.3	52.4	7.9
11/8/2018	53.6	86.6	89	43.5	40.1	46.8	8.5
3/13/2019	54.8	85.3	96.3	41	41.2	47.5	7.6
10/16/2019						49.7	16.2
10/17/2019					46.9		
10/18/2019	52.5	97.8	108	44.9			
3/4/2020				49.6			
3/9/2020	64.2	91.9	100		46.9	54	8.6
9/23/2020				41.9	42	50.2	8
9/24/2020	55.9	84.1					
9/25/2020			92.5				
3/8/2021				44.9			
3/10/2021						54.2	8.5
3/11/2021	56	85.8	91.9		45.4		
9/14/2021				45.1			
9/15/2021		88.3					
9/16/2021	63				46	60.6	18
9/17/2021			98.6				
1/19/2022				44.7	48.8		
1/20/2022			96.2				
1/21/2022	64.4	91					
1/25/2022						60.4	9.2
9/7/2022			92.5	44.8		53.5	13.1
9/8/2022	66.2				47.4		
9/12/2022		87.6					
2/1/2023				41.1		64.8	8.3
2/2/2023	61.7	83.6			48.6		
2/3/2023			77.4				

Time Series

Constituent: Chloride (mg/L) Analysis Run 5/4/2023 2:11 PM View: AP 1

Plant McDonough Client: Southern Company Data: McDonough AP

	B-100	B-105D	B-112D	B-62	DGWA-53 (bg)	DGWA-70A (bg)	DGWA-71 (bg)	DGWC-121
3/28/2017					3.7	3.8	3.6	
5/11/2017					2.3			
5/12/2017							3.8	
5/15/2017						2.2		
6/15/2017					2.6	2		
6/16/2017							3.4	
7/11/2017						2.1	3.1	
7/12/2017					2.3			
8/8/2017						2.2		
10/24/2017					2.7	2.4	3.2	
11/15/2017					2.2		3.1	
2/27/2018						2.5	3.2	
3/8/2018					2.4			
7/12/2018					2.2			
11/6/2018						2.3	2.6	
11/7/2018					2.3			
1/30/2019				7.1				
3/12/2019						2.5	3.3	
3/13/2019					3.6			
10/15/2019						2.2	3.3	
10/16/2019					2			
10/21/2019				6.5				
3/2/2020						1.9	3	
3/9/2020					1.8			
9/22/2020					1.6	1.9	5.2	
9/24/2020				5.7				
9/25/2020	13.2							
12/9/2020		17.1						
3/1/2021						1.9	3.9	
3/8/2021	12.9	17.4						
3/12/2021				5.9	2			
4/15/2021			10					
9/8/2021							5.9	
9/9/2021				5.8	1.8	1.9		
9/13/2021	11.1							
9/15/2021		17.4						
9/16/2021			2.7					
1/18/2022						1.9	5.9	
1/19/2022		16.3	2.5					
1/20/2022				5.6				
1/21/2022	11.3							
1/28/2022					1.8			
6/6/2022								4.7
9/7/2022		16.4	2.9			2.1	8.2	
9/8/2022	10.2			5.3	1.6			4.5
1/31/2023						2.2	7.3	
2/1/2023		15.9	3.1		1.9			
2/2/2023	11.7			5.8				4.3

Time Series

Constituent: Chloride (mg/L) Analysis Run 5/4/2023 2:11 PM View: AP 1

Plant McDonough Client: Southern Company Data: McDonough AP

	DGWC-37	DGWC-38	DGWC-39	DGWC-40	DGWC-67	DGWC-68A	DGWC-69
9/2/2016				20			
9/8/2016	6.2	7.4	9.2				
12/7/2016	6.1	7.4	8.9				
12/8/2016				18			
3/30/2017	6.3	7.7	8.7	20			
3/31/2017					5.7		4.4
5/12/2017					5.6	4.2	4.4
6/16/2017					5.5	4.2	4.7
7/13/2017	6.5	7.5	8.4	21	5.2	4.4	4.7
8/8/2017						4.2	
10/26/2017	6.4	8.2	8.3	21	6	4.4	4.2
11/15/2017							4.7
3/1/2018	6.3	8.1	8.1				
3/2/2018				19.5	5.8	4.2	6.4
7/12/2018	5.8	8	7.7	19.9			
7/13/2018					5.9	4	5.3
11/8/2018	5.8	8.1	7.7	19.3	6.1	<0.25	5.9
3/13/2019	6.9	9.1	8.2	19.7	6.8	4.6	6.2
10/16/2019						4.2	4.7
10/17/2019					6.9		
10/18/2019	5.8	8.6	8	19.2			
3/4/2020				20.6			
3/9/2020	6	8.1	7.5		6.7	3.6	5.7
9/23/2020				19.7	7.1	3.6	4.7
9/24/2020	5.6	8.2					
9/25/2020			7.9				
3/8/2021				19.1			
3/10/2021						3.6	5
3/11/2021	5.6	8	7.7		7.4		
9/14/2021				16.7			
9/15/2021		7.6					
9/16/2021	5.6				7.9	3.4	4.5
9/17/2021			8.3				
1/19/2022				16.5	8.3		
1/20/2022			8				
1/21/2022	5.7	8.5					
1/25/2022						3.8	5.4
9/7/2022			8.2	15		4.1	4.9
9/8/2022	5.4				8.9		
9/12/2022		8.5					
2/1/2023				16		4.2	5.8
2/2/2023	5.9	8.7			9.4		
2/3/2023			7.4				

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Chromium (mg/L) Analysis Run 5/4/2023 2:11 PM View: AP 1

Plant McDonough Client: Southern Company Data: McDonough AP

	B-100	B-105D	B-112D	B-62	DGWA-53 (bg)	DGWA-70A (bg)	DGWA-71 (bg)	DGWC-121
3/28/2017					<0.005	0.0008 (J)	0.0023 (J)	
5/11/2017					<0.005			
5/12/2017							0.0004 (J)	
5/15/2017						0.0006 (J)		
6/15/2017					<0.005	0.0006 (J)		
6/16/2017							0.0005 (J)	
7/11/2017						0.0005 (J)	<0.005	
7/12/2017					<0.005			
8/8/2017						0.0005 (J)		
10/24/2017					<0.005	0.0005 (J)	<0.005	
2/27/2018						<0.005	<0.005	
3/8/2018					<0.005			
7/12/2018					<0.005			
11/6/2018						<0.005	<0.005	
11/7/2018					<0.005			
1/30/2019				<0.005				
8/27/2019						0.00071 (J)	0.0018 (J)	
8/28/2019					<0.005			
9/11/2019				<0.005				
10/15/2019						0.034 (O)	0.0025 (J)	
10/16/2019					<0.005			
10/21/2019				0.00098 (J)				
3/2/2020						0.0013 (J)	0.00045 (J)	
3/9/2020					<0.005			
8/11/2020						0.0016 (J)	0.0006 (J)	
8/13/2020				<0.005	<0.005			
8/17/2020	<0.005							
9/22/2020					<0.005	0.00089 (J)	<0.005	
9/24/2020				<0.005				
9/25/2020	0.00094 (J)							
12/9/2020		<0.005						
3/1/2021						<0.005	<0.005	
3/8/2021	0.00057 (J)	<0.005						
3/12/2021				<0.005	<0.005			
4/15/2021			0.00085 (J)					
9/8/2021							<0.005	
9/9/2021				<0.005	<0.005	<0.005		
9/13/2021	<0.005							
9/15/2021		0.0012 (J)						
9/16/2021			0.0014 (J)					
1/18/2022						<0.005	<0.005	
1/19/2022		<0.005	<0.005					
1/20/2022				<0.005				
1/21/2022	<0.005							
1/28/2022					<0.005			
6/6/2022								<0.005
9/7/2022		<0.005	<0.005			<0.005	<0.005	
9/8/2022	<0.005			<0.005	<0.005			<0.005
1/31/2023						<0.005	<0.005	
2/1/2023		<0.005	<0.005		<0.005			
2/2/2023	<0.005			<0.005				<0.005

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Chromium (mg/L) Analysis Run 5/4/2023 2:11 PM View: AP 1

Plant McDonough Client: Southern Company Data: McDonough AP

	DGWC-37	DGWC-38	DGWC-39	DGWC-40	DGWC-67	DGWC-68A	DGWC-69
9/2/2016				<0.005			
9/8/2016	<0.005	<0.005	<0.005				
12/7/2016	<0.005	<0.005	<0.005				
12/8/2016				<0.005			
3/30/2017	<0.005	<0.005	<0.005	0.0007 (J)			
3/31/2017					0.0005 (J)		<0.005
5/12/2017					0.0007 (J)	<0.005	<0.005
6/16/2017					<0.005	<0.005	<0.005
7/13/2017	<0.005	<0.005	<0.005	0.0006 (J)	<0.005	0.0005 (J)	<0.005
8/8/2017						<0.005	
10/26/2017	0.0007 (J)	0.0005 (J)	<0.005	0.0007 (J)	<0.005	<0.005	<0.005
11/15/2017							<0.005
3/1/2018	<0.005	<0.005	<0.005				
3/2/2018				<0.005	<0.005	<0.005	<0.005
7/12/2018	<0.005	<0.005	<0.005	<0.005			
7/13/2018					<0.005	<0.005	<0.005
11/8/2018	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
8/28/2019	<0.005	<0.005	<0.005	0.00061 (J)	<0.005	<0.005	0.00049 (J)
10/16/2019						<0.005	<0.005
10/17/2019					<0.005		
10/18/2019	<0.005	0.00092 (J)	<0.005	0.00078 (J)			
3/4/2020				0.0011 (J)			
3/9/2020	<0.005	0.00044 (J)	<0.005		0.00088 (J)	<0.005	0.0012 (J)
8/13/2020	0.00058 (J)	<0.005	<0.005	0.00072 (J)	<0.005	<0.005	<0.005
9/23/2020				0.0011 (J)	<0.005	<0.005	0.0011 (J)
9/24/2020	<0.005	<0.005					
9/25/2020			<0.005				
3/8/2021				0.0006 (J)			
3/10/2021						<0.005	0.0009 (J)
3/11/2021	<0.005	<0.005	<0.005		0.0014 (J)		
9/14/2021				0.0021 (J)			
9/15/2021		<0.005					
9/16/2021	<0.005				<0.005	0.0014 (Jo)	<0.005
9/17/2021			<0.005				
10/27/2021						<0.005	
1/19/2022				<0.005	<0.005		
1/20/2022			<0.005				
1/21/2022	<0.005	<0.005					
1/25/2022						<0.005	0.0013 (J)
9/7/2022			<0.005	<0.005		<0.005	<0.005
9/8/2022	<0.005				<0.005		
9/12/2022		<0.005					
2/1/2023				<0.005		<0.005	<0.005
2/2/2023	<0.005	<0.005			<0.005		
2/3/2023			<0.005				

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Cobalt (mg/L) Analysis Run 5/4/2023 2:11 PM View: AP 1

Plant McDonough Client: Southern Company Data: McDonough AP

	B-100	B-105D	B-112D	B-62	DGWA-53 (bg)	DGWA-70A (bg)	DGWA-71 (bg)	DGWC-121
3/28/2017					0.025	0.0034 (J)	0.0033 (J)	
5/11/2017					0.0281			
5/12/2017							0.0016 (J)	
5/15/2017						0.0024 (J)		
6/15/2017					0.0322	0.0014 (J)		
6/16/2017							0.0011 (J)	
7/11/2017						0.0007 (J)	0.0008 (J)	
7/12/2017					0.0247			
8/8/2017						0.0007 (J)		
10/24/2017					0.0267	<0.005	0.0004 (J)	
2/27/2018						<0.005	<0.005	
3/8/2018					0.027			
7/12/2018					0.024			
11/6/2018						<0.005	<0.005	
11/7/2018					0.018			
1/30/2019				<0.005				
8/27/2019						<0.005	<0.005	
8/28/2019					0.013			
9/11/2019				0.0003 (J)				
10/15/2019						0.00064 (J)	<0.005	
10/16/2019					0.009			
10/21/2019				0.00031 (J)				
3/2/2020						0.00037 (J)	<0.005	
3/9/2020					0.016			
7/23/2020	0.086							
8/3/2020	0.087							
8/11/2020						0.0012 (J)	<0.005	
8/13/2020				<0.005	0.0051			
8/17/2020	0.077							
9/22/2020					0.011	<0.005	<0.005	
9/24/2020				<0.005				
9/25/2020	0.034							
12/9/2020		0.012						
3/1/2021						<0.005	<0.005	
3/8/2021	0.029	0.0042 (J)						
3/12/2021				<0.005	0.0078			
4/15/2021			0.0025 (J)					
9/8/2021							<0.005	
9/9/2021				<0.005	0.0064	<0.005		
9/13/2021	0.035							
9/15/2021		0.0065						
9/16/2021			0.00054 (J)					
1/18/2022						<0.005	<0.005	
1/19/2022		0.006	<0.005					
1/20/2022				<0.005				
1/21/2022	0.034							
1/28/2022					0.014			
6/6/2022								0.0028 (J)
9/7/2022		0.004 (J)	<0.005			<0.005	<0.005	
9/8/2022	0.028			<0.005	0.012			0.0019 (J)
9/9/2022				<0.005				
1/31/2023						<0.005	<0.005	

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Cobalt (mg/L) Analysis Run 5/4/2023 2:11 PM View: AP 1

Plant McDonough Client: Southern Company Data: McDonough AP

	B-100	B-105D	B-112D	B-62	DGWA-53 (bg)	DGWA-70A (bg)	DGWA-71 (bg)	DGWC-121
2/1/2023		0.004 (J)	<0.005		0.008			
2/2/2023	<0.005			<0.005				0.0016 (J)

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Cobalt (mg/L) Analysis Run 5/4/2023 2:11 PM View: AP 1

Plant McDonough Client: Southern Company Data: McDonough AP

	DGWC-37	DGWC-38	DGWC-39	DGWC-40	DGWC-67	DGWC-68A	DGWC-69
9/2/2016				0.0382			
9/8/2016	<0.005	0.0015 (J)	0.0068 (J)				
12/7/2016	0.0005 (J)	0.0017 (J)	0.0071 (J)				
12/8/2016				0.0318			
3/30/2017	<0.005	0.0016 (J)	0.006 (J)	0.0364			
3/31/2017					0.0064 (J)		0.0022 (J)
5/12/2017					0.0037 (J)	0.0015 (J)	0.0016 (J)
6/16/2017					0.0041 (J)	0.0003 (J)	0.0009 (J)
7/13/2017	0.0003 (J)	0.0016 (J)	0.0063 (J)	0.0394	0.0037 (J)	0.0005 (J)	0.0004 (J)
8/8/2017						<0.005	
10/26/2017	0.0003 (J)	0.0016 (J)	0.0062 (J)	0.0371	0.0022 (J)	<0.005	0.0031 (J)
11/15/2017							0.0028 (J)
3/1/2018	<0.005	<0.01	<0.01				
3/2/2018				0.0425	<0.01	<0.005	<0.005
7/12/2018	<0.005	0.0015 (J)	0.0059 (J)	0.044			
7/13/2018					0.0017 (J)	<0.005	<0.005
11/8/2018	<0.005	<0.01 (J)	<0.01 (J)	0.036	<0.01 (J)	<0.005	<0.005
8/28/2019	<0.005	0.0016 (J)	0.0067	0.044	0.0013 (J)	<0.005	<0.005
10/16/2019						<0.005	<0.005
10/17/2019					0.0013 (J)		
10/18/2019	<0.005	0.0016 (J)	0.007	0.043			
3/4/2020				0.055			
3/9/2020	<0.005	0.0016 (J)	0.007		0.0015 (J)	<0.005	<0.005
8/13/2020	<0.005	0.0014 (J)	0.006	0.044	0.0015 (J)	<0.005	<0.005
9/23/2020				0.046	0.0011 (J)	<0.005	<0.005
9/24/2020	<0.005	0.0013 (J)					
9/25/2020			0.0061				
3/8/2021				0.039			
3/10/2021						<0.005	<0.005
3/11/2021	<0.005	0.0017 (J)	0.0058		0.0016 (J)		
9/14/2021				0.05			
9/15/2021		0.0016 (J)					
9/16/2021	<0.005				0.0012 (J)	0.0032 (Jo)	<0.005
9/17/2021			0.0076				
10/27/2021						<0.005	
1/19/2022				0.042	0.0011 (J)		
1/20/2022			0.0061				
1/21/2022	<0.005	0.0017 (J)					
1/25/2022						<0.005	<0.005
9/7/2022			0.0065	0.037		<0.005	<0.005
9/8/2022	<0.005				0.001 (J)		
9/12/2022		0.0014 (J)					
2/1/2023				0.035		<0.005	<0.005
2/2/2023	<0.005	0.0017 (J)			0.0014 (J)		
2/3/2023			0.005				

ND substitution: RL or RL/2 if <15% NDs. Substitution method for trace values of the form <PQL(J): PQL.

Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 5/4/2023 2:11 PM View: AP 1

Plant McDonough Client: Southern Company Data: McDonough AP

	B-100	B-105D	B-112D	B-62	DGWA-53 (bg)	DGWA-70A (bg)	DGWA-71 (bg)	DGWC-121
3/28/2017					6.36	0.866 (U)	0.257 (U)	
5/11/2017					3.45			
5/12/2017							0.165 (U)	
5/15/2017						0.288 (U)		
6/15/2017					4.58	1.01 (U)		
6/16/2017							0.732 (U)	
7/11/2017						0.254 (U)	0.461 (U)	
7/12/2017					4.37			
8/8/2017						1.48		
10/24/2017					4.46	0.472 (U)	0.724 (U)	
2/27/2018						1.22	0.714 (U)	
3/8/2018					2.14			
7/10/2018						0.362 (U)	0.426 (U)	
7/12/2018					4.65			
11/6/2018						0.859 (U)	0.455 (U)	
11/7/2018					3.05			
1/30/2019				1.97 (U)				
8/27/2019						1.97	1.3 (U)	
8/28/2019					2.68			
10/15/2019						0.319 (U)	1.21 (U)	
10/16/2019					1.89			
10/21/2019				1.82				
3/2/2020						0.419 (U)	1.3	
3/9/2020					3.51			
8/11/2020						0.812 (U)	0.965 (U)	
8/13/2020				1.63	1.04			
8/17/2020	1.4 (U)							
9/22/2020					2.27	0.45 (U)	0.216 (U)	
9/24/2020				1.28 (U)				
9/25/2020	0.799 (U)							
12/9/2020		1.25 (U)						
3/1/2021						0.552 (U)	0.389 (U)	
3/8/2021	0.168 (U)	1.87						
3/12/2021				1.18 (U)	1.63			
4/15/2021			0.945 (U)					
9/8/2021							0.051 (U)	
9/9/2021				1.7	2.72	0.779 (U)		
9/13/2021	0.774 (U)							
9/15/2021		2.01						
9/16/2021			0.241 (U)					
1/18/2022						1.26	0.729 (U)	
1/19/2022		2.45	0.738 (U)					
1/20/2022				1.71				
1/21/2022	0.769 (U)							
1/28/2022					2.1			
9/7/2022						0.504 (U)	0.588 (U)	
9/8/2022	0.643 (U)				1.69			
9/9/2022				1.96				
1/31/2023						0.416 (U)	0.314 (U)	
2/1/2023		6.88	1.76		1.92			
2/2/2023	0.981			1.6				0.868 (U)

Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 5/4/2023 2:11 PM View: AP 1

Plant McDonough Client: Southern Company Data: McDonough AP

	DGWC-37	DGWC-38	DGWC-39	DGWC-40	DGWC-67	DGWC-68A	DGWC-69
9/2/2016				1.44			
9/8/2016	0.827 (U)	1.48	1.44				
12/7/2016	0.56 (U)	0.22 (U)	2.16				
12/8/2016				2.56			
3/30/2017	0.302 (U)	0.519 (U)	0.264 (U)	0.0844 (U)			
3/31/2017					0.404 (U)		1.39
5/12/2017					0.206 (U)	1.18	1.29
6/16/2017					0.966 (U)	0.332 (U)	1.61
7/13/2017	0.731 (U)	1.11	0.517 (U)	0.963 (U)	0.387 (U)	0.304 (U)	1.14
8/8/2017						1.4	
10/26/2017	1.04 (U)	1.13 (U)	0.875 (U)	0.748 (U)	0.619 (U)	0.477 (U)	2.04
11/15/2017							1.99
3/1/2018	0.344 (U)	0.985 (U)	1.24				
3/2/2018				0.485 (U)	1.31	1.13	0.918 (U)
7/12/2018	0.566 (U)	0.615 (U)	0.935 (U)	0.231 (U)			
7/13/2018					0.667 (U)	0.407 (U)	1.36 (U)
11/8/2018	0.623 (U)	0.58 (U)	1.15 (U)	0.465 (U)	0.911 (U)	0.393 (U)	0.719 (U)
8/28/2019	1.24 (U)	0.517 (U)	1.15 (U)	0.592 (U)	0.751 (U)	1.77	1.38
10/16/2019						2.12	0.826 (U)
1/6/2020	2.01	0.527 (U)	1.4	1.6	0.965 (U)		
3/4/2020				1.62			
3/9/2020	0.499 (U)	1.04	1.36		0.819 (U)	1.33	1.39
8/13/2020	0.99	0.132 (U)	0.626 (U)	1.6	0.897 (U)	1.46	2.66
9/23/2020				1.28 (U)	0.131 (U)	0.563 (U)	1.8
9/24/2020	1.03 (U)	0.593 (U)					
9/25/2020			0.181 (U)				
3/8/2021				0.714 (U)			
3/10/2021						0.568 (U)	1.6
3/11/2021	0.956 (U)	0.0784 (U)	0.969 (U)		1.55		
9/14/2021				1.8			
9/15/2021		2.37					
9/16/2021	0.691 (U)				0.201 (U)	1.74	2.06
9/17/2021			0.911 (U)				
1/19/2022				1.7	0.853 (U)		
1/20/2022			0.172 (U)				
1/21/2022	0.343 (U)	0.0873 (U)					
1/25/2022						0.323 (U)	0.834 (U)
2/1/2023				0.603 (U)		1.37	1.85
2/2/2023	1.23	0.462 (U)			0.498 (U)		
2/3/2023			0.878 (U)				

Time Series

Constituent: Fluoride (mg/L) Analysis Run 5/4/2023 2:11 PM View: AP 1

Plant McDonough Client: Southern Company Data: McDonough AP

	B-100	B-105D	B-112D	B-62	DGWA-53 (bg)	DGWA-70A (bg)	DGWA-71 (bg)	DGWC-121
3/28/2017					0.12 (J)	1.2 (O)	0.06 (J)	
5/11/2017					0.07 (J)			
5/12/2017							<0.1	
5/15/2017						0.005 (J)		
6/15/2017					0.19 (J)	0.02 (J)		
6/16/2017							0.008 (J)	
7/11/2017						0.06 (J)	0.007 (J)	
7/12/2017					0.1 (J)			
8/8/2017						0.04 (J)		
10/24/2017					0.06 (J)	<0.1	<0.1	
11/15/2017					0.05 (J)		<0.1	
2/27/2018						<0.1	<0.1	
3/8/2018					<0.3			
7/12/2018					0.071 (J)			
11/6/2018						<0.1	<0.1	
11/7/2018					<0.3			
1/30/2019				0.43				
3/12/2019						0.039 (J)	<0.1	
3/13/2019					0.13 (J)			
8/27/2019						<0.1	<0.1	
8/28/2019					0.42			
10/15/2019						<0.1	<0.1	
10/16/2019					0.11 (J)			
10/21/2019				0.23 (J)				
3/2/2020						<0.1	<0.1	
3/9/2020					0.1 (J)			
8/11/2020						<0.1	<0.1	
8/13/2020				0.11	0.062 (J)			
8/17/2020	<0.1							
9/22/2020					0.099 (J)	<0.1	<0.1	
9/24/2020				0.093 (J)				
9/25/2020	<0.1							
12/9/2020		0.075 (J)						
3/1/2021						<0.1	<0.1	
3/8/2021	<0.1	0.32						
3/12/2021				0.11	0.076 (J)			
4/15/2021			0.3					
9/8/2021							<0.1	
9/9/2021				0.14	0.099 (J)	<0.1		
9/13/2021	<0.1							
9/15/2021		0.078 (J)						
9/16/2021			0.34					
1/18/2022						<0.1	<0.1	
1/19/2022		0.058 (J)	0.25					
1/20/2022				0.099 (J)				
1/21/2022	<0.1							
1/28/2022					0.08 (J)			
6/6/2022								0.056 (J)
9/7/2022		0.11	0.27			0.061 (J)	0.056 (J)	
9/8/2022	0.072 (J)			0.13	0.11			0.093 (J)
1/31/2023						0.053 (J)	0.05 (J)	
2/1/2023		0.089 (J)	0.3		0.1			

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Fluoride (mg/L) Analysis Run 5/4/2023 2:11 PM View: AP 1

Plant McDonough Client: Southern Company Data: McDonough AP

	B-100	B-105D	B-112D	B-62	DGWA-53 (bg)	DGWA-70A (bg)	DGWA-71 (bg)	DGWC-121
2/2/2023	0.052 (J)			0.16				0.11

Time Series

Constituent: Fluoride (mg/L) Analysis Run 5/4/2023 2:11 PM View: AP 1

Plant McDonough Client: Southern Company Data: McDonough AP

	DGWC-37	DGWC-38	DGWC-39	DGWC-40	DGWC-67	DGWC-68A	DGWC-69
9/2/2016				0.5			
9/8/2016	0.08 (J)	0.1 (J)	0.17 (J)				
12/7/2016	0.21 (J)	0.27 (J)	0.33				
12/8/2016				0.35			
3/30/2017	0.05 (J)	0.12 (J)	0.17 (J)	0.21 (J)			
3/31/2017					0.02 (J)		0.16 (J)
5/12/2017					<0.1	0.37	0.12 (J)
6/16/2017					0.03 (J)	0.12 (J)	0.16 (J)
7/13/2017	0.06 (J)	0.13 (J)	0.14 (J)	0.2 (J)	0.03 (J)	0.12 (J)	0.13 (J)
8/8/2017						0.11 (J)	
10/26/2017	0.08 (J)	0.47	0.54	0.5	<0.1	0.11 (J)	0.29 (J)
11/15/2017							0.28 (J)
3/1/2018	0.22	<0.3	0.13				
3/2/2018				0.33	<0.1	0.23	0.18
7/12/2018	0.32	0.23 (J)	0.13 (J)	0.57			
7/13/2018					0.25 (J)	0.099 (J)	0.19 (J)
11/8/2018	<0.3	<0.3	<0.3 (J)	<0.3 (J)	0.5	<0.3 (J)	<0.3 (J)
3/13/2019	0.08 (J)	0.084 (J)	0.085 (J)	0.15 (J)	0.07 (J)	0.12 (J)	0.086 (J)
8/28/2019	0.074 (J)	0.066 (J)	0.086 (J)	0.14	<0.1	0.1	0.07 (J)
10/16/2019						0.093 (J)	0.13 (J)
10/17/2019					0.038 (J)		
10/18/2019	0.075 (J)	0.073 (J)	0.14 (J)	0.13 (J)			
3/4/2020				0.11 (J)			
3/9/2020	0.054 (J)	0.064 (J)	0.075 (J)		<0.1	0.082 (J)	0.068 (J)
8/13/2020	0.068 (J)	0.06 (J)	0.076 (J)	0.16	<0.1	0.076 (J)	0.084 (J)
9/23/2020				0.054 (J)	<0.1	0.07 (J)	0.064 (J)
9/24/2020	0.061 (J)	0.057 (J)					
9/25/2020			0.086 (J)				
3/8/2021				0.17			
3/10/2021						0.07 (J)	0.055 (J)
3/11/2021	0.057 (J)	0.058 (J)	0.083 (J)		<0.1		
9/14/2021				0.13			
9/15/2021		0.06 (J)					
9/16/2021	0.084 (J)				0.069 (J)	0.55	0.11
9/17/2021			0.13				
1/19/2022				0.12	<0.1		
1/20/2022			0.1				
1/21/2022	0.053 (J)	0.1					
1/25/2022						0.067 (J)	0.054 (J)
9/7/2022			0.11	0.14		0.11	0.11
9/8/2022	0.082 (J)				0.096 (J)		
9/12/2022		0.12					
2/1/2023				0.15		0.11	0.1
2/2/2023	0.089 (J)	0.1			0.068 (J)		
2/3/2023			0.12				

ND substitution: RL or RL/2 if <15% NDs. Substitution method for trace values of the form <PQL(J): PQL.

Time Series

Constituent: Lead (mg/L) Analysis Run 5/4/2023 2:11 PM View: AP 1

Plant McDonough Client: Southern Company Data: McDonough AP

	B-100	B-105D	B-112D	B-62	DGWA-53 (bg)	DGWA-70A (bg)	DGWA-71 (bg)	DGWC-121
3/28/2017					<0.001	9E-05 (J)	<0.001	
5/11/2017					<0.001			
5/12/2017							8E-05 (J)	
5/15/2017						0.0001 (J)		
6/15/2017					<0.001	0.0002 (J)		
6/16/2017							<0.001	
7/11/2017						<0.001	<0.001	
7/12/2017					<0.001			
8/8/2017						7E-05 (J)		
10/24/2017					<0.001	<0.001	<0.001	
2/27/2018						<0.001	<0.001	
3/8/2018					<0.001			
7/12/2018					<0.001			
11/6/2018						<0.001	<0.001	
11/7/2018					<0.001			
1/30/2019				<0.001				
8/27/2019						7.8E-05 (J)	<0.001	
8/28/2019					<0.001			
9/11/2019				<0.001				
10/15/2019						<0.001	<0.001	
10/16/2019					<0.001			
10/21/2019				<0.001				
3/2/2020						7.4E-05 (J)	<0.001	
3/9/2020					<0.001			
8/11/2020						0.0003 (J)	<0.001	
8/13/2020				<0.001	<0.001			
8/17/2020	8.8E-05 (J)							
9/22/2020					<0.001	7.8E-05 (J)	<0.001	
9/24/2020				<0.001				
9/25/2020	0.00021 (J)							
12/9/2020		5.2E-05 (J)						
3/1/2021						<0.001	<0.001	
3/8/2021	0.00018 (J)	<0.001						
3/12/2021				<0.001	<0.001			
4/15/2021			0.00014 (J)					
9/8/2021							<0.001	
9/9/2021				<0.001	<0.001	<0.001		
9/13/2021	<0.001							
9/15/2021		<0.001						
9/16/2021			<0.001					
1/18/2022						<0.001	<0.001	
1/19/2022		<0.001	<0.001					
1/20/2022				<0.001				
1/21/2022	<0.001							
1/28/2022					<0.001			
6/6/2022								<0.001
9/7/2022		<0.001	<0.001			<0.001	<0.001	
9/8/2022	<0.001			<0.001	<0.001			<0.001
1/31/2023						<0.001	<0.001	
2/1/2023		<0.001	<0.001		<0.001			
2/2/2023	<0.001			<0.001				<0.001

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Lead (mg/L) Analysis Run 5/4/2023 2:11 PM View: AP 1
Plant McDonough Client: Southern Company Data: McDonough AP

	DGWC-37	DGWC-38	DGWC-39	DGWC-40	DGWC-67	DGWC-68A	DGWC-69
9/2/2016				<0.001			
9/8/2016	<0.001	<0.001	<0.001				
12/7/2016	<0.001	<0.001	<0.001				
12/8/2016				<0.001			
3/30/2017	0.0014 (J)	<0.001	<0.001	7E-05 (J)			
3/31/2017					<0.001		<0.001
5/12/2017					9E-05 (J)	<0.001	0.0001 (J)
6/16/2017					<0.001	<0.001	<0.001
7/13/2017	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
8/8/2017						<0.001	
10/26/2017	<0.001	0.0001 (J)	<0.001	7E-05 (J)	<0.001	<0.001	<0.001
11/15/2017							9E-05 (J)
3/1/2018	<0.001	<0.001	<0.001				
3/2/2018				<0.001	<0.001	<0.001	<0.001
7/12/2018	<0.001	<0.001	<0.001	<0.001			
7/13/2018					<0.001	<0.001	<0.001
11/8/2018	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
8/28/2019	6.1E-05 (J)	<0.001	8E-05 (J)	8.1E-05 (J)	<0.001	<0.001	<0.001
10/16/2019						<0.001	<0.001
10/17/2019					<0.001		
10/18/2019	<0.001	7.4E-05 (J)	<0.001	0.00015 (J)			
3/4/2020				0.00017 (J)			
3/9/2020	<0.001	6.1E-05 (J)	<0.001		4.7E-05 (J)	<0.001	9E-05 (J)
8/13/2020	<0.001	<0.001	<0.001	4.9E-05 (J)	5.6E-05 (J)	<0.001	5.9E-05 (J)
9/23/2020				0.00028 (J)	<0.001	0.00035 (J)	0.00017 (J)
9/24/2020	<0.001	0.00014 (J)					
9/25/2020			0.00022 (J)				
3/8/2021				5.4E-05 (J)			
3/10/2021						6.7E-05 (J)	0.0001 (J)
3/11/2021	<0.001	0.00014 (J)	<0.001		0.00025 (J)		
9/14/2021				<0.001			
9/15/2021		<0.001					
9/16/2021	<0.001				<0.001	<0.001	<0.001
9/17/2021			<0.001				
1/19/2022				<0.001	<0.001		
1/20/2022			<0.001				
1/21/2022	<0.001	<0.001					
1/25/2022						<0.001	<0.001
9/7/2022			<0.001	<0.001		<0.001	<0.001
9/8/2022	<0.001				<0.001		
9/12/2022		<0.001					
2/1/2023				<0.001		<0.001	<0.001
2/2/2023	<0.001	<0.001			<0.001		
2/3/2023			<0.001				

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Lithium (mg/L) Analysis Run 5/4/2023 2:11 PM View: AP 1

Plant McDonough Client: Southern Company Data: McDonough AP

	B-100	B-105D	B-112D	B-62	DGWA-53 (bg)	DGWA-70A (bg)	DGWA-71 (bg)	DGWC-121
3/28/2017					0.0108 (J)	0.0054 (J)	0.0025 (J)	
5/11/2017					0.0087 (J)			
5/12/2017							0.0016 (J)	
5/15/2017						0.002 (J)		
6/15/2017					0.0088 (J)	<0.03		
6/16/2017							0.0016 (J)	
7/11/2017						<0.03	<0.05	
7/12/2017					0.0075 (J)			
8/8/2017						<0.03		
10/24/2017					0.0103 (J)	<0.03	<0.05	
2/27/2018						<0.03	0.0013 (J)	
3/8/2018					0.011 (J)			
7/12/2018					0.0084 (J)			
11/6/2018						<0.03	<0.05	
11/7/2018					<0.05			
1/30/2019				<0.05				
8/27/2019						<0.03	0.0014 (J)	
8/28/2019					0.0092 (J)			
9/11/2019				0.0078 (J)				
10/15/2019						<0.03	0.0012 (J)	
10/16/2019					0.0094 (J)			
10/21/2019				0.0078 (J)				
3/2/2020						<0.03	0.0011 (J)	
3/9/2020					0.0077 (J)			
8/11/2020						0.0019 (J)	0.0015 (J)	
8/13/2020				0.0087 (J)	0.0085 (J)			
8/17/2020	0.0013 (J)							
9/22/2020					0.0089 (J)	<0.03	0.0012 (J)	
9/24/2020				0.0084 (J)				
9/25/2020	0.0027 (J)							
12/9/2020		0.014 (J)						
3/1/2021						<0.03	0.0012 (J)	
3/8/2021	0.0024 (J)	0.015 (J)						
3/12/2021				0.0087 (J)	0.0083 (J)			
4/15/2021			0.0045 (J)					
9/8/2021							0.0013 (J)	
9/9/2021				0.0094 (J)	0.0091 (J)	<0.03		
9/13/2021	0.0022 (J)							
9/15/2021		0.014 (J)						
9/16/2021			0.0038 (J)					
1/18/2022						<0.03	0.0013 (J)	
1/19/2022		0.013 (J)	0.0044 (J)					
1/20/2022				0.0092 (J)				
1/21/2022	0.0021 (J)							
1/28/2022					0.0091 (J)			
6/6/2022								0.013 (J)
9/7/2022		0.013 (J)	0.0039 (J)			<0.03	0.0012 (J)	
9/8/2022	0.0023 (J)			0.0085 (J)	0.0083 (J)			0.01 (J)
1/31/2023						<0.03	0.0014 (J)	
2/1/2023		0.013 (J)	0.0038 (J)		0.0088 (J)			
2/2/2023	<0.03			0.0082 (J)				0.0059 (J)

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Lithium (mg/L) Analysis Run 5/4/2023 2:11 PM View: AP 1

Plant McDonough Client: Southern Company Data: McDonough AP

	DGWC-37	DGWC-38	DGWC-39	DGWC-40	DGWC-67	DGWC-68A	DGWC-69
9/2/2016				0.0022 (J)			
9/8/2016	<0.05	0.0032 (J)	<0.03				
12/7/2016	<0.05	0.0035 (J)	<0.03				
12/8/2016				<0.05			
3/30/2017	0.0029 (J)	0.0035 (J)	<0.03	0.0023 (J)			
3/31/2017					0.0052 (J)		0.0031 (J)
5/12/2017					0.0054 (J)	0.0016 (J)	0.003 (J)
6/16/2017					0.0048 (J)	<0.03	0.0031 (J)
7/13/2017	<0.05	0.0032 (J)	<0.03	0.0023 (J)	0.0044 (J)	<0.03	0.0029 (J)
8/8/2017						<0.03	
10/26/2017	0.0018 (J)	0.0034 (J)	<0.03	0.0021 (J)	0.0043 (J)	<0.03	0.0034 (J)
11/15/2017							0.0034 (J)
3/1/2018	0.0024 (J)	0.0033 (J)	<0.03				
3/2/2018				0.0023 (J)	0.0047 (J)	<0.03	0.0028 (J)
7/12/2018	0.0028 (J)	0.0034 (J)	<0.03	0.0022 (J)			
7/13/2018					0.0041 (J)	<0.03	0.0026 (J)
11/8/2018	<0.05	<0.05	<0.03	<0.05	<0.05	<0.03	<0.05
8/28/2019	0.0025 (J)	0.0034 (J)	<0.03	0.0022 (J)	0.0046 (J)	<0.03	0.0024 (J)
10/16/2019						<0.03	0.0032 (J)
10/17/2019					0.0047 (J)		
10/18/2019	0.0026 (J)	0.0032 (J)	<0.03	0.0024 (J)			
3/4/2020				0.0027 (J)			
3/9/2020	0.0017 (J)	0.0033 (J)	<0.03		0.0048 (J)	<0.03	0.0025 (J)
8/13/2020	0.0023 (J)	0.0028 (J)	<0.03	0.0022 (J)	0.0044 (J)	<0.03	0.0031 (J)
9/23/2020				0.0022 (J)	0.0043 (J)	<0.03	0.0023 (J)
9/24/2020	0.0021 (J)	0.0029 (J)					
9/25/2020			<0.03				
3/8/2021				0.0022 (J)			
3/10/2021						<0.03	0.0023 (J)
3/11/2021	0.0024 (J)	0.003 (J)	<0.03		0.005 (J)		
9/14/2021				0.003 (J)			
9/15/2021		0.0029 (J)					
9/16/2021	0.0021 (J)				0.0044 (J)	0.00082 (J)	0.0023 (J)
9/17/2021			<0.03				
1/19/2022				0.0024 (J)	0.0046 (J)		
1/20/2022			<0.03				
1/21/2022	0.002 (J)	0.0025 (J)					
1/25/2022						<0.03	0.0026 (J)
9/7/2022			<0.03	0.0023 (J)		<0.03	0.0025 (J)
9/8/2022	0.0019 (J)				0.0048 (J)		
9/12/2022		0.003 (J)					
2/1/2023				0.0021 (J)		<0.03	0.0021 (J)
2/2/2023	0.0018 (J)	0.0026 (J)			0.0048 (J)		
2/3/2023			<0.03				

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Mercury (mg/L) Analysis Run 5/4/2023 2:11 PM View: AP 1

Plant McDonough Client: Southern Company Data: McDonough AP

	B-100	B-105D	B-112D	B-62	DGWA-53 (bg)	DGWA-70A (bg)	DGWA-71 (bg)	DGWC-121
3/28/2017					<0.0002	<0.0002	<0.0002	
5/11/2017					<0.0002			
5/12/2017							6E-05 (J)	
5/15/2017						<0.0002		
6/15/2017					8E-05 (J)	7E-05 (J)		
6/16/2017							7E-05 (J)	
7/11/2017						<0.0002	<0.0002	
7/12/2017					<0.0002			
8/8/2017						<0.0002		
10/24/2017					<0.0002	<0.0002	<0.0002	
2/27/2018						<0.0002	<0.0002	
3/8/2018					<0.0002			
7/12/2018					<0.0002			
11/6/2018						<0.0002	<0.0002	
11/7/2018					<0.0002			
1/30/2019				<0.0002				
8/27/2019						<0.0002	<0.0002	
8/28/2019					<0.0002			
9/11/2019				<0.0002				
10/15/2019						<0.0002	<0.0002	
10/16/2019					<0.0002			
10/21/2019				<0.0002				
3/2/2020						<0.0002	<0.0002	
3/9/2020					<0.0002			
8/11/2020						<0.0002	<0.0002	
8/13/2020				<0.0002	<0.0002			
8/17/2020	0.00011 (J)							
9/22/2020					<0.0002	<0.0002	<0.0002	
9/24/2020				<0.0002				
9/25/2020	<0.0002							
12/9/2020		8.7E-05 (J)						
3/1/2021						<0.0002	9E-05 (J)	
3/12/2021				<0.0002	<0.0002			
4/15/2021			<0.0002					
9/8/2021							9.6E-05 (J)	
9/9/2021				<0.0002	<0.0002	<0.0002		
9/13/2021	<0.0002							
9/15/2021		<0.0002						
9/16/2021			<0.0002					
1/18/2022						<0.0002	0.00015 (J)	
1/19/2022		<0.0002	<0.0002					
1/20/2022				<0.0002				
1/21/2022	<0.0002							
1/28/2022					<0.0002			
6/6/2022								<0.0002
9/7/2022		0.00014 (J)	<0.0002			<0.0002	0.00013 (J)	
9/8/2022	<0.0002			<0.0002	<0.0002			<0.0002
1/31/2023						<0.0002	<0.0002	
2/1/2023		<0.0002	<0.0002		<0.0002			
2/2/2023	<0.0002			<0.0002				<0.0002

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Mercury (mg/L) Analysis Run 5/4/2023 2:11 PM View: AP 1

Plant McDonough Client: Southern Company Data: McDonough AP

	DGWC-37	DGWC-38	DGWC-39	DGWC-40	DGWC-67	DGWC-68A	DGWC-69
9/2/2016				4.4E-05 (J)			
9/8/2016	<0.0002	<0.0002	<0.0002				
12/7/2016	<0.0002	<0.0002	<0.0002				
12/8/2016				<0.0002			
3/30/2017	6E-05 (J)	7E-05 (J)	5.9E-05 (J)	9E-05 (J)			
3/31/2017					<0.0002		<0.0002
5/12/2017					<0.0002	<0.0002	<0.0002
6/16/2017					7E-05 (J)	7E-05 (J)	7E-05 (J)
7/13/2017	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
8/8/2017						<0.0002	
10/26/2017	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
11/15/2017							<0.0002
3/1/2018	<0.0002	<0.0002	<0.0002				
3/2/2018				<0.0002	<0.0002	<0.0002	<0.0002
7/12/2018	4.4E-05 (J)	4E-05 (J)	<0.0002	4.5E-05 (J)			
7/13/2018					<0.0002	<0.0002	<0.0002
11/8/2018	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
8/28/2019	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
10/16/2019						<0.0002	<0.0002
10/17/2019					<0.0002		
10/18/2019	<0.0002	<0.0002	<0.0002	<0.0002			
3/4/2020				<0.0002			
3/9/2020	<0.0002	<0.0002	<0.0002		<0.0002	<0.0002	<0.0002
8/13/2020	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
9/23/2020				<0.0002	<0.0002	<0.0002	<0.0002
9/24/2020	9.1E-05 (J)	8.5E-05 (J)					
9/25/2020			<0.0002				
9/14/2021				<0.0002			
9/15/2021		<0.0002					
9/16/2021	<0.0002				<0.0002	<0.0002	<0.0002
9/17/2021			<0.0002				
1/19/2022				<0.0002	<0.0002		
1/20/2022			<0.0002				
1/21/2022	<0.0002	<0.0002					
1/25/2022						<0.0002	<0.0002
9/7/2022			<0.0002	<0.0002		<0.0002	<0.0002
9/8/2022	<0.0002				<0.0002		
9/12/2022		<0.0002					
2/1/2023				<0.0002		<0.0002	<0.0002
2/2/2023	<0.0002	<0.0002			<0.0002		
2/3/2023			<0.0002				

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Molybdenum (mg/L) Analysis Run 5/4/2023 2:11 PM View: AP 1

Plant McDonough Client: Southern Company Data: McDonough AP

	B-100	B-105D	B-112D	B-62	DGWA-53 (bg)	DGWA-70A (bg)	DGWA-71 (bg)	DGWC-121
3/28/2017					0.0242	<0.01	0.0009 (J)	
5/11/2017					0.0375			
5/12/2017							<0.01	
5/15/2017						<0.01		
6/15/2017					0.0409	<0.01		
6/16/2017							<0.01	
7/11/2017						<0.01	<0.01	
7/12/2017					0.0321			
8/8/2017						<0.01		
10/24/2017					0.0227	<0.01	<0.01	
2/27/2018						<0.01	<0.01	
3/8/2018					0.035			
7/12/2018					0.034			
11/6/2018						<0.01	<0.01	
11/7/2018					0.029			
1/30/2019				<0.01				
8/27/2019						<0.01	<0.01	
8/28/2019					0.031			
9/11/2019				<0.01				
10/15/2019						<0.01	<0.01	
10/16/2019					0.037			
10/21/2019				<0.01				
3/2/2020						<0.01	<0.01	
3/9/2020					0.026			
8/11/2020						<0.01	<0.01	
8/13/2020				<0.01	0.012			
8/17/2020	<0.01							
9/22/2020					0.039	<0.01	<0.01	
9/24/2020				<0.01				
9/25/2020	<0.01							
12/9/2020		<0.01						
3/1/2021						<0.01	<0.01	
3/8/2021	<0.01	0.0011 (J)						
3/12/2021				<0.01	0.018			
4/15/2021			0.037					
9/8/2021							<0.01	
9/9/2021				<0.01	0.025	<0.01		
9/13/2021	<0.01							
9/15/2021		<0.01						
9/16/2021			0.032					
1/18/2022						<0.01	<0.01	
1/19/2022		<0.01	0.032					
1/20/2022				<0.01				
1/21/2022	<0.01							
1/28/2022					0.026			
6/6/2022								0.00093 (J)
9/7/2022		<0.01	0.028			<0.01	<0.01	
9/8/2022	<0.01			<0.01	0.027			<0.01
1/31/2023						<0.01	<0.01	
2/1/2023		<0.01	0.03		0.023			
2/2/2023	0.19			<0.01				<0.01

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Molybdenum (mg/L) Analysis Run 5/4/2023 2:11 PM View: AP 1

Plant McDonough Client: Southern Company Data: McDonough AP

	DGWC-37	DGWC-38	DGWC-39	DGWC-40	DGWC-67	DGWC-68A	DGWC-69
9/2/2016				<0.01			
9/8/2016	<0.01	<0.01	<0.01				
12/7/2016	<0.01	<0.01	<0.01				
12/8/2016				<0.01			
3/30/2017	<0.01	0.0011 (J)	<0.01	<0.01			
3/31/2017					<0.01		0.0124
5/12/2017					<0.01	0.275	0.0117
6/16/2017					<0.01	0.19	0.0087 (J)
7/13/2017	<0.01	0.0012 (J)	<0.01	<0.01	<0.01	0.211	0.0053 (J)
8/8/2017						0.207	
10/26/2017	<0.01	0.0011 (J)	<0.01	<0.01	<0.01	0.226	0.0244
11/15/2017							0.0237
3/1/2018	<0.01	<0.01	<0.01				
3/2/2018				<0.01	<0.01	0.215	0.0072 (J)
7/12/2018	<0.01	<0.01	<0.01	<0.01			
7/13/2018					<0.01	0.22	0.007 (J)
11/8/2018	<0.01	<0.01	<0.01	<0.01	<0.01	0.2	<0.01 (J)
8/28/2019	<0.01	<0.01	<0.01	<0.01	<0.01	0.21	0.0059 (J)
10/16/2019						0.22	0.01
10/17/2019					<0.01		
10/18/2019	<0.01	<0.01	<0.01	<0.01			
3/4/2020				<0.01			
3/9/2020	<0.01	0.001 (J)	<0.01		<0.01	0.19	0.0062 (J)
8/13/2020	<0.01	0.00098 (J)	<0.01	<0.01	<0.01	0.19	0.011
9/23/2020				<0.01	<0.01	0.2	0.0056 (J)
9/24/2020	<0.01	0.001 (J)					
9/25/2020			<0.01				
3/8/2021				<0.01			
3/10/2021						0.2	0.0056 (J)
3/11/2021	<0.01	0.00092 (J)	<0.01		<0.01		
9/14/2021				<0.01			
9/15/2021		0.00099 (J)					
9/16/2021	<0.01				<0.01	0.18	0.009 (J)
9/17/2021			<0.01				
1/19/2022				<0.01	<0.01		
1/20/2022			<0.01				
1/21/2022	<0.01	0.0013 (J)					
1/25/2022						0.23	0.0057 (J)
9/7/2022			<0.01	<0.01		0.2	0.0067 (J)
9/8/2022	<0.01				<0.01		
9/12/2022		0.0012 (J)					
2/1/2023				<0.01		0.19	0.0058 (J)
2/2/2023	<0.01	0.0015 (J)			<0.01		
2/3/2023			<0.01				

ND substitution: RL or RL/2 if <15% NDs. Substitution method for trace values of the form <PQL(J): PQL.

Time Series

Constituent: pH, Field (SU) Analysis Run 5/4/2023 2:11 PM View: AP 1

Plant McDonough Client: Southern Company Data: McDonough AP

	B-100	B-105D	B-112D	B-62	DGWA-53 (bg)	DGWA-70A (bg)	DGWA-71 (bg)	DGWC-121
3/28/2017					6.29		5.94	
5/11/2017					6.6			
5/12/2017							5.46	
5/15/2017						5.72		
6/15/2017					6.41	5.74		
6/16/2017							5.81	
7/11/2017						5.62	5.74	
7/12/2017					5.91			
8/8/2017						5.6		
10/24/2017					5.51	5.71	5.86	
11/15/2017					6.5		5.77	
2/27/2018						5.5	5.66	
3/8/2018					6.18			
7/10/2018						5.44	5.63	
7/12/2018					6.33			
11/6/2018						5.71	5.79	
11/7/2018					6.22			
3/12/2019						5.52	5.74	
3/13/2019					6			
8/27/2019						5.53	5.87	
8/28/2019					6.04			
9/11/2019				6.27				
10/15/2019						5.61	5.88	
10/16/2019					6.69			
10/21/2019				6.24				
3/2/2020						5.54	5.77	
3/9/2020					6.41			
8/3/2020	4.93							
8/11/2020						5.86	5.96	
8/13/2020				6.4	6.17			
8/17/2020	5.02							
9/22/2020					6.43	6.01	6.06	
9/24/2020				6.55				
9/25/2020	5.53							
12/9/2020		6.48						
3/1/2021						5.43	5.8	
3/8/2021	5.32	6.37						
3/12/2021				6.34	6.38			
4/15/2021			6.83					
9/8/2021							5.76	
9/9/2021				6.31	6.41	5.5		
9/13/2021	5.27							
9/15/2021		6.38						
9/16/2021			6.74					
1/18/2022						5.5	5.51	
1/19/2022		6.62	6.74					
1/20/2022				6.32				
1/21/2022	5.23							
1/28/2022					6.35			
6/6/2022								6.33
9/7/2022		6.44	6.72			5.6	5.65	
9/8/2022	5.24			6.22	6.32			6.32

Time Series

Constituent: pH, Field (SU) Analysis Run 5/4/2023 2:11 PM View: AP 1

Plant McDonough Client: Southern Company Data: McDonough AP

	B-100	B-105D	B-112D	B-62	DGWA-53 (bg)	DGWA-70A (bg)	DGWA-71 (bg)	DGWC-121
9/9/2022				6.22 (D)				
1/31/2023						5.59	5.78	
2/1/2023		6.39	6.72		6.42			
2/2/2023	5.3			6.33				6.35

Time Series

Constituent: pH, Field (SU) Analysis Run 5/4/2023 2:11 PM View: AP 1

Plant McDonough Client: Southern Company Data: McDonough AP

	DGWC-37	DGWC-38	DGWC-39	DGWC-40	DGWC-67	DGWC-68A	DGWC-69
9/2/2016				4.77			
9/8/2016	6.32	6.01	6.47				
12/7/2016	6.32	6.07	6.43				
12/8/2016				4.77			
3/30/2017	6.22	5.97	6.42	4.84			
3/31/2017					6.25		6.26
4/12/2017							6.19
5/12/2017					6.23	6.63	6.2
6/16/2017					6.22	6.63	6.22
7/13/2017	6.3	6.11	6.47	4.85	6.15	6.84	6.35
8/8/2017						6.57	
10/26/2017		6.06	6.49	4.86	6.64	7.01	6.69
11/15/2017							6.22
3/1/2018	6.28	6.05	6.37				
3/2/2018				4.67	6.18	6.58	6.1
7/12/2018	6.43	6.05	6.45	4.63			
7/13/2018					6.19	6.62	5.95
11/8/2018	6.36	6.07	6.49	4.79	6.23	6.5	6
3/13/2019	6.26	6.05	6.28	4.6	6.19	6.57	6.08
8/28/2019	6.27	5.98	6.41	4.68	6.22	6.6	6.09
10/16/2019						6.6	6.19
10/17/2019					6.14		
10/18/2019	6.26	6	6.35	4.71			
3/4/2020				4.64			
3/9/2020	6.34	6.12	6.37		6.23	6.6	6.12
8/13/2020	6.34	6.05	6.39	4.65	6.28	6.63	6.26
9/23/2020				4.78	6.23	6.6	6.08
9/24/2020	6.3	6.05					
9/25/2020			6.38				
3/8/2021				4.79			
3/10/2021						6.74	6.13
3/11/2021	6.49	6.22	6.66		6.28		
9/14/2021				4.67			
9/15/2021		6.08					
9/16/2021	6.33				6.2	6.79 (o)	6.16
9/17/2021			6.49				
10/27/2021						6.56	
1/19/2022				4.66	6.21		
1/20/2022			6.52				
1/21/2022	6.31	6.08					
1/25/2022						6.53	6.02
9/7/2022			6.43	4.54		6.62	6.2
9/8/2022	6.3				6.21		
9/9/2022	6.3						
9/12/2022		6.05					
2/1/2023				4.66		6.6	6.12
2/2/2023	6.23	6.08			6.27		
2/3/2023			6.49				

Time Series

Constituent: Selenium (mg/L) Analysis Run 5/4/2023 2:11 PM View: AP 1

Plant McDonough Client: Southern Company Data: McDonough AP

	B-100	B-105D	B-112D	B-62	DGWA-53 (bg)	DGWA-70A (bg)	DGWA-71 (bg)	DGWC-121
3/28/2017					<0.005	<0.005	<0.005	
5/11/2017					<0.005			
5/12/2017							<0.005	
5/15/2017						<0.005		
6/15/2017					<0.005	<0.005		
6/16/2017							<0.005	
7/11/2017						<0.005	<0.005	
7/12/2017					<0.005			
8/8/2017						<0.005		
10/24/2017					<0.005	<0.005	<0.005	
2/27/2018						<0.005	<0.005	
3/8/2018					<0.005			
7/12/2018					<0.005			
11/6/2018						<0.005	<0.005	
11/7/2018					<0.005			
1/30/2019				<0.005				
8/27/2019						<0.005	<0.005	
8/28/2019					<0.005			
9/11/2019				<0.005				
10/15/2019						<0.005	<0.005	
10/16/2019					<0.005			
10/21/2019				<0.005				
3/2/2020						<0.005	<0.005	
3/9/2020					<0.005			
8/11/2020						<0.005	<0.005	
8/13/2020				<0.005	<0.005			
8/17/2020	<0.005							
9/22/2020					<0.005	<0.005	<0.005	
9/24/2020				<0.005				
9/25/2020	<0.005							
12/9/2020		<0.005						
3/1/2021						<0.005	<0.005	
3/8/2021	0.0019 (J)	<0.005						
3/12/2021				<0.005	<0.005			
4/15/2021			<0.005					
9/8/2021							<0.005	
9/9/2021				<0.005	<0.005	<0.005		
9/13/2021	<0.005							
9/15/2021		<0.005						
9/16/2021			<0.005					
1/18/2022						<0.005	<0.005	
1/19/2022		<0.005	<0.005					
1/20/2022				<0.005				
1/21/2022	<0.005							
1/28/2022					<0.005			
6/6/2022								<0.005
9/7/2022		<0.005	<0.005			<0.005	<0.005	
9/8/2022	<0.005			<0.005	<0.005			<0.005
1/31/2023						<0.005	<0.005	
2/1/2023		<0.005	<0.005		<0.005			
2/2/2023	<0.005			<0.005				<0.005

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Selenium (mg/L) Analysis Run 5/4/2023 2:11 PM View: AP 1

Plant McDonough Client: Southern Company Data: McDonough AP

	DGWC-37	DGWC-38	DGWC-39	DGWC-40	DGWC-67	DGWC-68A	DGWC-69
9/2/2016				0.0019 (J)			
9/8/2016	<0.005	<0.005	<0.005				
12/7/2016	<0.005	<0.005	<0.005				
12/8/2016				0.0022 (J)			
3/30/2017	<0.005	<0.005	<0.005	0.0023 (J)			
3/31/2017					<0.005		<0.005
5/12/2017					<0.005	<0.005	<0.005
6/16/2017					<0.005	<0.005	<0.005
7/13/2017	<0.005	<0.005	<0.005	0.0025 (J)	<0.005	<0.005	<0.005
8/8/2017						<0.005	
10/26/2017	<0.005	<0.005	<0.005	0.0036 (J)	<0.005	<0.005	<0.005
11/15/2017							<0.005
3/1/2018	<0.005	<0.005	<0.005				
3/2/2018				<0.005	<0.005	<0.005	<0.005
7/12/2018	<0.005	<0.005	<0.005	<0.005			
7/13/2018					<0.005	<0.005	<0.005
11/8/2018	<0.005	<0.005	<0.005	<0.01 (J)	<0.005	<0.005	<0.005
8/28/2019	<0.005	<0.005	<0.005	0.0017 (J)	<0.005	<0.005	<0.005
10/16/2019						<0.005	<0.005
10/17/2019					<0.005		
10/18/2019	<0.005	<0.005	<0.005	0.0027 (J)			
3/4/2020				0.0049 (J)			
3/9/2020	<0.005	<0.005	<0.005		<0.005	<0.005	<0.005
8/13/2020	<0.005	<0.005	<0.005	0.0018 (J)	<0.005	<0.005	<0.005
9/23/2020				0.0067 (J)	<0.005	<0.005	<0.005
9/24/2020	<0.005	<0.005					
9/25/2020			<0.005				
3/8/2021				0.0023 (J)			
3/10/2021						0.0017 (J)	<0.005
3/11/2021	<0.005	0.0019 (J)	<0.005		0.0027 (J)		
9/14/2021				0.0015 (J)			
9/15/2021		<0.005					
9/16/2021	<0.005				<0.005	<0.005	<0.005
9/17/2021			<0.005				
1/19/2022				<0.005	<0.005		
1/20/2022			<0.005				
1/21/2022	<0.005	<0.005					
1/25/2022						<0.005	<0.005
9/7/2022			<0.005	0.0018 (J)		<0.005	<0.005
9/8/2022	<0.005				<0.005		
9/12/2022		<0.005					
2/1/2023				<0.005		<0.005	<0.005
2/2/2023	<0.005	<0.005			<0.005		
2/3/2023			<0.005				

ND substitution: RL or RL/2 if <15% NDs. Substitution method for trace values of the form <PQL(J): PQL.

Time Series

Constituent: Sulfate (mg/L) Analysis Run 5/4/2023 2:11 PM View: AP 1

Plant McDonough Client: Southern Company Data: McDonough AP

	B-100	B-105D	B-112D	B-62	DGWA-53 (bg)	DGWA-70A (bg)	DGWA-71 (bg)	DGWC-121
3/28/2017					49	2.7	17	
5/11/2017					21			
5/12/2017							17	
5/15/2017						1		
6/15/2017					16	0.86 (J)		
6/16/2017							11	
7/11/2017						1.4	11	
7/12/2017					10			
8/8/2017						1.5		
10/24/2017					15	1.4	9.6	
11/15/2017					3.8		7.8	
2/27/2018						0.54 (J)	7.4	
3/8/2018					9.7			
7/12/2018					8			
11/6/2018						<1 (J)	7.3	
11/7/2018					12.8			
1/30/2019				74.7				
3/12/2019						0.35 (J)	7	
3/13/2019					23.7			
10/15/2019						0.16 (J)	7.4	
10/16/2019					15.1			
10/21/2019				55.3				
3/2/2020						<1	8.5	
3/9/2020					9.5			
9/22/2020					13.5	<1	6.5	
9/24/2020				50.6				
9/25/2020	385							
12/9/2020		220						
3/1/2021						<1	5.2	
3/8/2021	388	228						
3/12/2021				46.5	8.8			
4/15/2021			95.6					
9/8/2021							6.1	
9/9/2021				49.2	11.9	<1		
9/13/2021	351							
9/15/2021		240						
9/16/2021			21.2					
1/18/2022						<1	6.3	
1/19/2022		220	18.4					
1/20/2022				50.3				
1/21/2022	344							
1/28/2022					13.1			
6/6/2022								83.9
9/7/2022		263	18.2			<1	7	
9/8/2022	399			45.8	12			84.8
1/31/2023						<1	6.8	
2/1/2023		256	17.9		13.3			
2/2/2023	356			52.1				67.6

ND substitution: RL or RL/2 if <15% NDs. Substitution method for trace values of the form <PQL(J): PQL.

Time Series

Constituent: Sulfate (mg/L) Analysis Run 5/4/2023 2:11 PM View: AP 1

Plant McDonough Client: Southern Company Data: McDonough AP

	DGWC-37	DGWC-38	DGWC-39	DGWC-40	DGWC-67	DGWC-68A	DGWC-69
9/2/2016				230			
9/8/2016	97	270	280				
12/7/2016	100	250	250				
12/8/2016				270			
3/30/2017	110	290	310	240			
3/31/2017					110		21
5/12/2017					100	50	17
6/16/2017					100	47	20
7/13/2017	200 (O)	270	220	220	110	49	17
8/8/2017						48	
10/26/2017	97	260	210	220	100	48	31
11/15/2017							29
3/1/2018	94.6	242	166				
3/2/2018				219	98.5	44.7	10.1
7/12/2018	89.2	256	169	222			
7/13/2018					136	43.3	8.6
11/8/2018	102	291	200	273	118	43.5	9.7
3/13/2019	92.2	300	265	445	233	44.1	8.4
10/16/2019						32.1	13.3
10/17/2019					99.4		
10/18/2019	76.4	239	182	205			
3/4/2020				177			
3/9/2020	90.3	244	171		100	37.4	7.6
9/23/2020				190	99.8	38.7	5.9
9/24/2020	84.1	240					
9/25/2020			153				
3/8/2021				191			
3/10/2021						38.4	6.4
3/11/2021	81.9	154	123		76.7		
9/14/2021				186			
9/15/2021		219					
9/16/2021	95				101	22.3	17.9
9/17/2021			156				
1/19/2022				177	97.2		
1/20/2022			123				
1/21/2022	89.8	188					
1/25/2022						36.3	7.1
9/7/2022			146	203		36.5	11.6
9/8/2022	96.6				117		
9/12/2022		234					
2/1/2023				189		35.6	6.9
2/2/2023	94.3	239			117		
2/3/2023			115				

Time Series

Constituent: Thallium (mg/L) Analysis Run 5/4/2023 2:11 PM View: AP 1

Plant McDonough Client: Southern Company Data: McDonough AP

	B-100	B-105D	B-112D	B-62	DGWA-53 (bg)	DGWA-70A (bg)	DGWA-71 (bg)	DGWC-121
3/28/2017					<0.001	<0.001	6E-05 (J)	
5/11/2017					<0.001			
5/12/2017							<0.001	
5/15/2017						<0.001		
6/15/2017					<0.001	<0.001		
6/16/2017							<0.001	
7/11/2017						<0.001	<0.001	
7/12/2017					<0.001			
8/8/2017						<0.001		
10/24/2017					<0.001	<0.001	<0.001	
2/27/2018						<0.001	<0.001	
3/8/2018					<0.001			
7/12/2018					<0.001			
11/6/2018						<0.001	<0.001	
11/7/2018					<0.001			
1/30/2019				<0.001				
8/27/2019						<0.001	<0.001	
8/28/2019					<0.001			
9/11/2019				<0.001				
10/15/2019						<0.001	<0.001	
10/16/2019					<0.001			
10/21/2019				<0.001				
3/2/2020						7.8E-05 (J)	<0.001	
3/9/2020					<0.001			
8/11/2020						<0.001	<0.001	
8/13/2020				<0.001	<0.001			
8/17/2020	<0.001							
9/22/2020					<0.001	<0.001	<0.001	
9/24/2020				<0.001				
9/25/2020	<0.001							
12/9/2020		<0.001						
3/1/2021						<0.001	<0.001	
3/8/2021	<0.001	<0.001						
3/12/2021				<0.001	<0.001			
4/15/2021			<0.001					
9/8/2021							<0.001	
9/9/2021				<0.001	<0.001	<0.001		
9/13/2021	<0.001							
9/15/2021		<0.001						
9/16/2021			<0.001					
1/18/2022						<0.001	<0.001	
1/19/2022		<0.001	<0.001					
1/20/2022				<0.001				
1/21/2022	<0.001							
1/28/2022					<0.001			
6/6/2022								<0.001
9/7/2022		<0.001	<0.001			<0.001	<0.001	
9/8/2022	<0.001			<0.001	<0.001			<0.001
1/31/2023						<0.001	<0.001	
2/1/2023		<0.001	<0.001		<0.001			
2/2/2023	<0.001			<0.001				<0.001

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Thallium (mg/L) Analysis Run 5/4/2023 2:11 PM View: AP 1

Plant McDonough Client: Southern Company Data: McDonough AP

	DGWC-37	DGWC-38	DGWC-39	DGWC-40	DGWC-67	DGWC-68A	DGWC-69
9/2/2016				<0.001			
9/8/2016	<0.001	<0.001	<0.001				
12/7/2016	<0.001	<0.001	<0.001				
12/8/2016				<0.001			
3/30/2017	<0.001	0.0001 (J)	0.0001 (J)	6E-05 (J)			
3/31/2017					<0.001		<0.001
5/12/2017					<0.001	<0.001	<0.001
6/16/2017					<0.001	<0.001	<0.001
7/13/2017	<0.001	0.0001 (J)	9E-05 (J)	6E-05 (J)	<0.001	<0.001	<0.001
8/8/2017						<0.001	
10/26/2017	<0.001	0.0001 (J)	0.0001 (J)	7E-05 (J)	<0.001	<0.001	<0.001
11/15/2017							<0.001
3/1/2018	<0.001	<0.001	<0.001				
3/2/2018				<0.001	<0.001	<0.001	<0.001
7/12/2018	<0.001	<0.001	<0.001	<0.001			
7/13/2018					<0.001	0.00015 (J)	<0.001
11/8/2018	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
8/28/2019	<0.001	0.00014 (J)	6.9E-05 (J)	7E-05 (J)	<0.001	<0.001	<0.001
10/16/2019						<0.001	<0.001
10/17/2019					<0.001		
10/18/2019	<0.001	0.0001 (J)	<0.001	<0.001			
3/4/2020				6.8E-05 (J)			
3/9/2020	<0.001	0.00016 (J)	7.1E-05 (J)		<0.001	<0.001	<0.001
8/13/2020	<0.001	0.00016 (J)	<0.001	<0.001	<0.001	<0.001	<0.001
9/23/2020				<0.001	<0.001	<0.001	<0.001
9/24/2020	<0.001	0.00015 (J)					
9/25/2020			<0.001				
3/8/2021				<0.001			
3/10/2021						<0.001	<0.001
3/11/2021	<0.001	<0.001	<0.001		<0.001		
9/14/2021				<0.001			
9/15/2021		<0.001					
9/16/2021	<0.001				<0.001	<0.001	<0.001
9/17/2021			<0.001				
1/19/2022				<0.001	<0.001		
1/20/2022			<0.001				
1/21/2022	<0.001	<0.001					
1/25/2022						<0.001	<0.001
9/7/2022			<0.001	<0.001		<0.001	<0.001
9/8/2022	<0.001				<0.001		
9/12/2022		<0.001					
2/1/2023				<0.001		<0.001	<0.001
2/2/2023	<0.001	<0.001			<0.001		
2/3/2023			<0.001				

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Total Dissolved Solids (mg/L) Analysis Run 5/4/2023 2:11 PM View: AP 1

Plant McDonough Client: Southern Company Data: McDonough AP

	B-100	B-105D	B-112D	B-62	DGWA-53 (bg)	DGWA-70A (bg)	DGWA-71 (bg)	DGWC-121
3/28/2017					202	39	90	
5/11/2017					241			
5/12/2017							92	
5/15/2017						88		
6/15/2017					251	65		
6/16/2017							100	
7/11/2017						25	59	
7/12/2017					218			
8/8/2017						53		
10/24/2017					671 (O)	49	117	
11/15/2017					241		90	
2/27/2018						43	79	
3/8/2018					213			
7/12/2018					198			
11/6/2018						65	85	
11/7/2018					200			
1/30/2019				287				
3/12/2019						43	74	
3/13/2019					201			
10/15/2019						70	89	
10/16/2019					126			
10/21/2019				180				
3/2/2020						52	67	
3/9/2020					171			
9/22/2020					142	46	74	
9/24/2020				170				
9/25/2020	724							
12/9/2020		474						
3/1/2021						25	62	
3/8/2021	660	477						
3/12/2021				172	124			
4/15/2021			289					
9/8/2021							75	
9/9/2021				174	131	53		
9/13/2021	636							
9/15/2021		455						
9/16/2021			162					
1/18/2022						54	76	
1/19/2022		453	167					
1/20/2022				187				
1/21/2022	638							
1/28/2022					155			
6/6/2022								270
9/7/2022		479	153			34	82	
9/8/2022	606			160	129			261
1/31/2023						163	87	
2/1/2023		477	200		116			
2/2/2023	595			197				221

Time Series

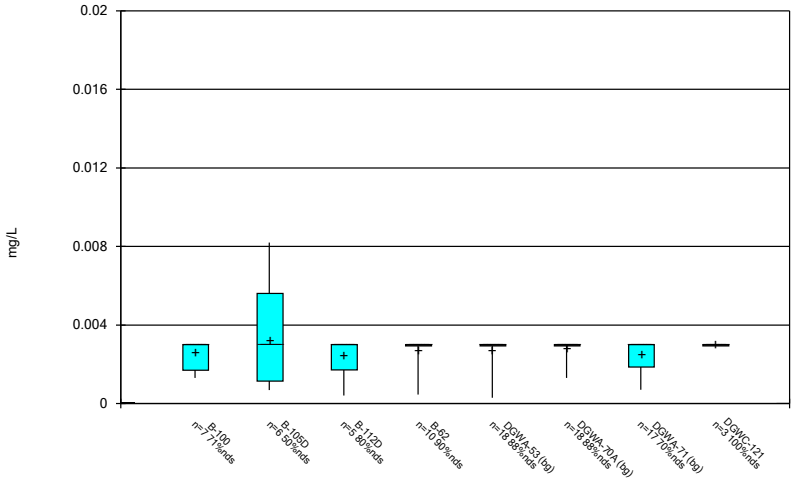
Constituent: Total Dissolved Solids (mg/L) Analysis Run 5/4/2023 2:11 PM View: AP 1

Plant McDonough Client: Southern Company Data: McDonough AP

	DGWC-37	DGWC-38	DGWC-39	DGWC-40	DGWC-67	DGWC-68A	DGWC-69
9/2/2016				583 (O)			
9/8/2016	279	437	522				
12/7/2016	300	478	565				
12/8/2016				319			
3/30/2017	273	448	496	344			
3/31/2017					270		138
5/12/2017					287	300	243
6/16/2017					309	271	155
7/13/2017	312	504	508	386	275	246	122
8/8/2017						278	
10/26/2017	340	554	532	373	319	287	234
11/15/2017							188
3/1/2018	311	492	440				
3/2/2018				359	264	252	73
7/12/2018	290	478	463	365			
7/13/2018					297	275	95
11/8/2018	295	507	485	399	295	277	112
3/13/2019	286	487	526	351	278	267	95
10/16/2019						218	108
10/17/2019					281		
10/18/2019	269	494	489	360			
3/4/2020				400			
3/9/2020	357	554	508		209	188	115
9/23/2020				357	296	251	102
9/24/2020	280	489					
9/25/2020			460				
3/8/2021				346			
3/10/2021						232	78
3/11/2021	255	463	440		265		
9/14/2021				347			
9/15/2021		474					
9/16/2021	278				282	259	113
9/17/2021			446				
1/19/2022				336	272		
1/20/2022			416				
1/21/2022	316	482					
1/25/2022						259	84
9/7/2022			449	339		256	102
9/8/2022	300				252		
9/12/2022		468					
2/1/2023				343		243	79
2/2/2023	302	478			317		
2/3/2023			382				

FIGURE B.

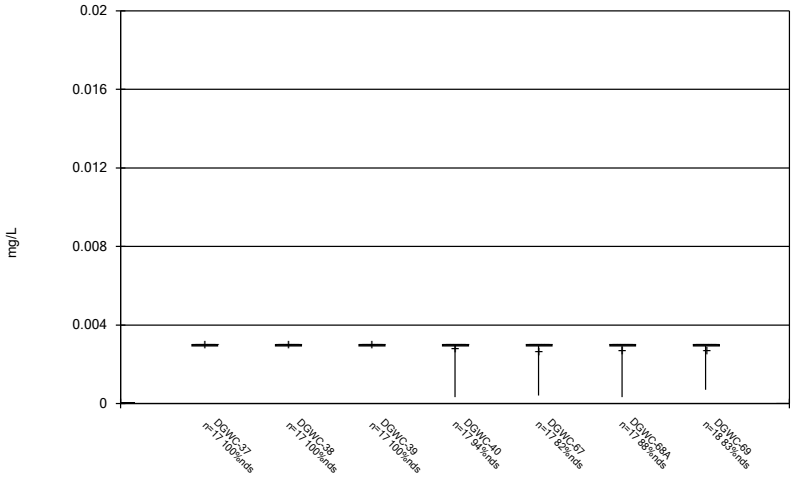
Box & Whiskers Plot



Constituent: Antimony Analysis Run 5/4/2023 2:11 PM View: AP 1
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

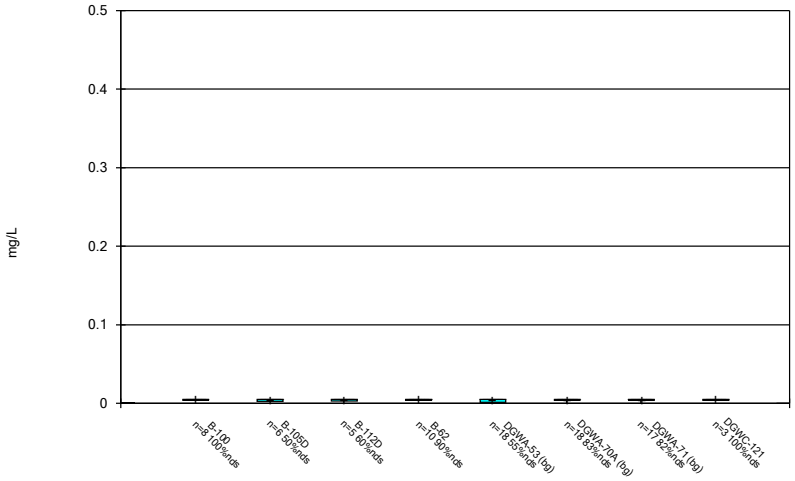
Box & Whiskers Plot



Constituent: Antimony Analysis Run 5/4/2023 2:11 PM View: AP 1
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

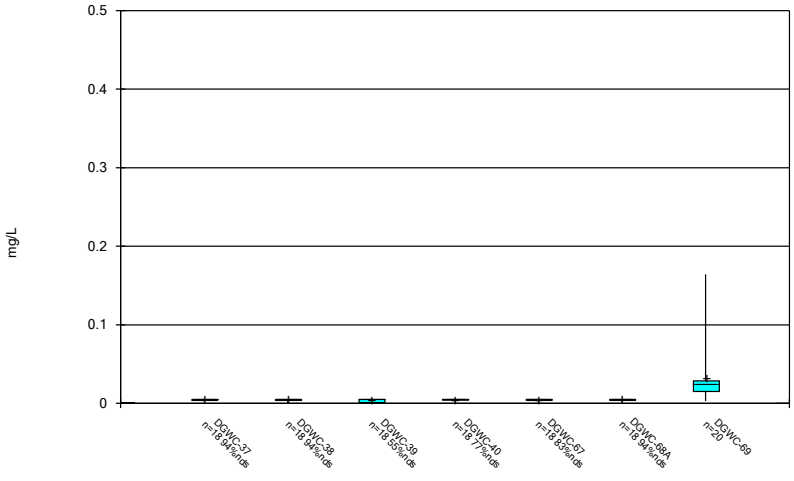
Box & Whiskers Plot



Constituent: Arsenic Analysis Run 5/4/2023 2:12 PM View: AP 1
Plant McDonough Client: Southern Company Data: McDonough AP

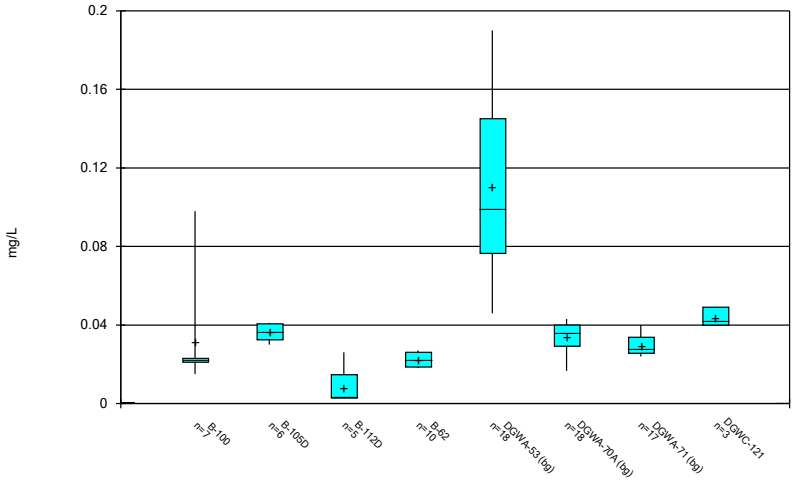
Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Box & Whiskers Plot



Constituent: Arsenic Analysis Run 5/4/2023 2:12 PM View: AP 1
Plant McDonough Client: Southern Company Data: McDonough AP

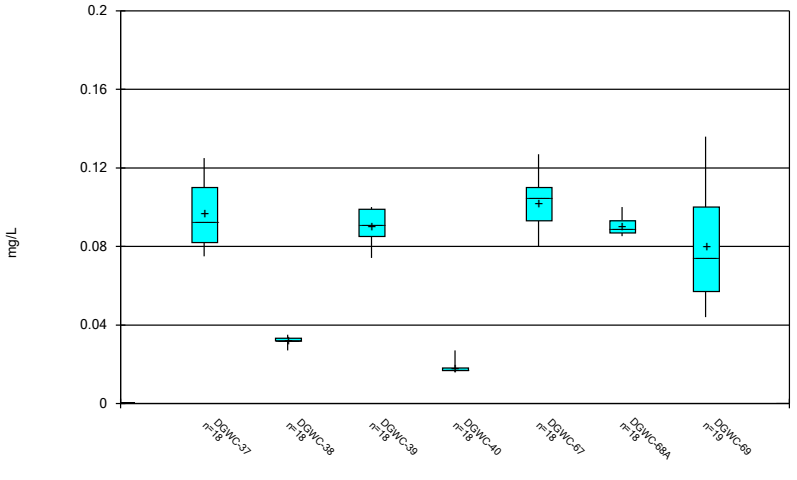
Box & Whiskers Plot



Constituent: Barium Analysis Run 5/4/2023 2:12 PM View: AP 1
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

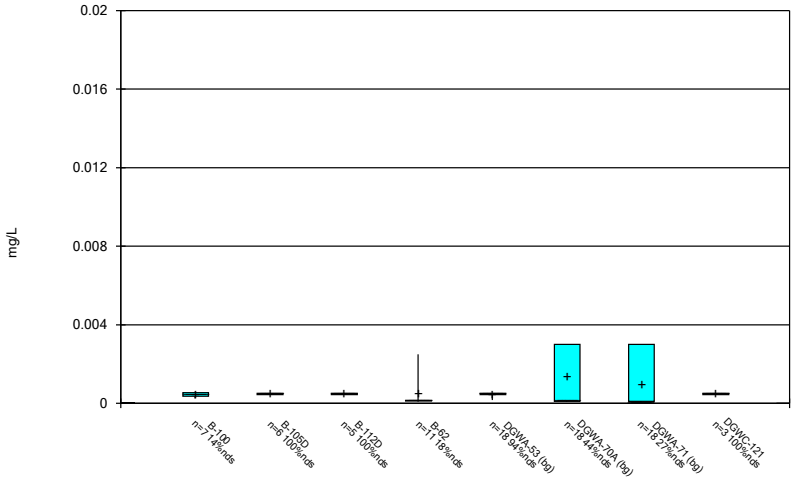
Box & Whiskers Plot



Constituent: Barium Analysis Run 5/4/2023 2:12 PM View: AP 1
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

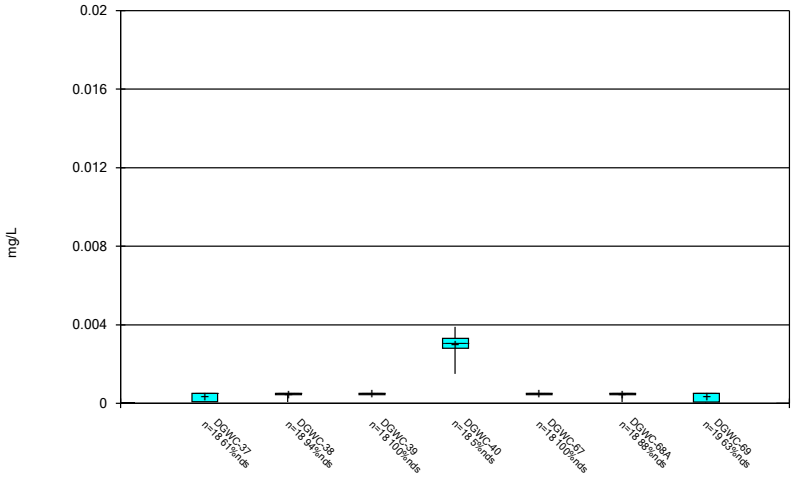
Box & Whiskers Plot



Constituent: Beryllium Analysis Run 5/4/2023 2:12 PM View: AP 1
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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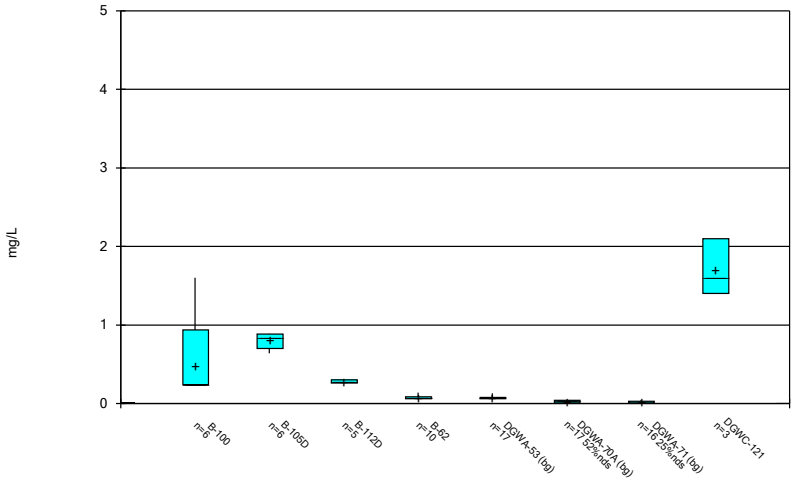
Plant McDonough Client: Southern Company Data: McDonough AP

Box & Whiskers Plot



Constituent: Boron Analysis Run 5/4/2023 2:12 PM View: AP 1
Plant McDonough Client: Southern Company Data: McDonough AP

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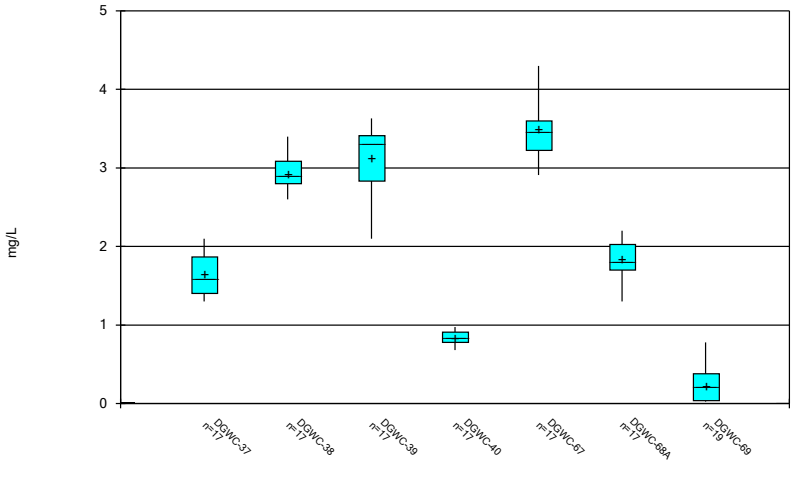
Box & Whiskers Plot



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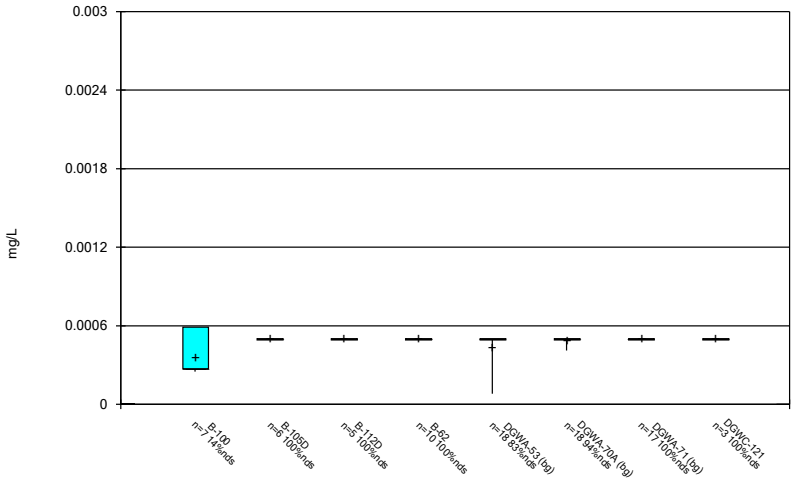
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Box & Whiskers Plot



Constituent: Cadmium Analysis Run 5/4/2023 2:12 PM View: AP 1
Plant McDonough Client: Southern Company Data: McDonough AP

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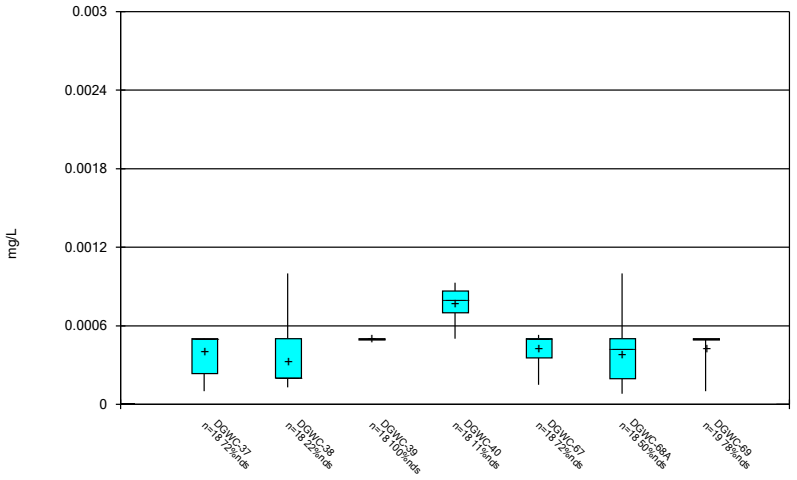
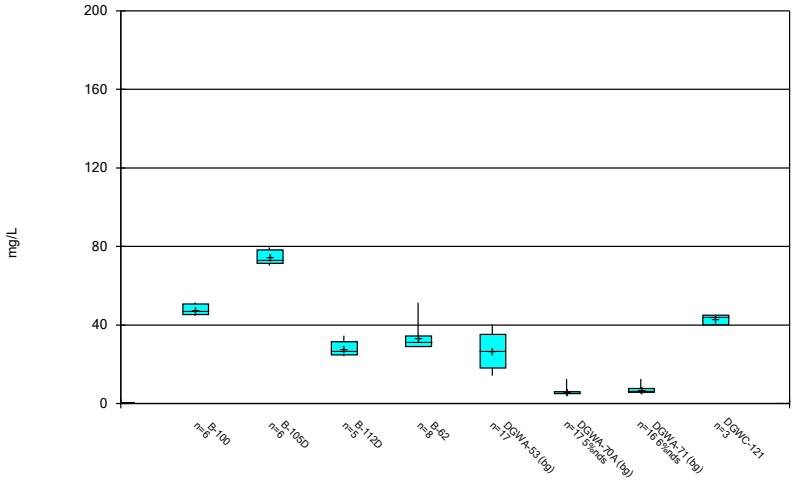
Box & Whiskers Plot



Constituent: Cadmium Analysis Run 5/4/2023 2:12 PM View: AP 1
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

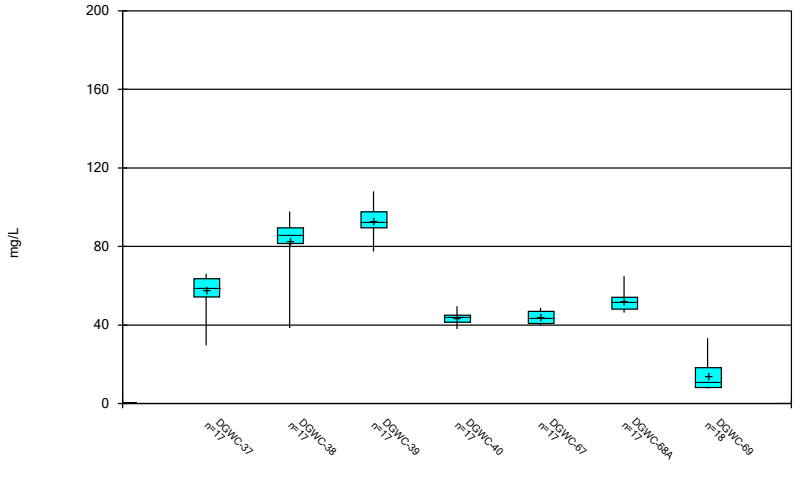
Box & Whiskers Plot



Constituent: Calcium Analysis Run 5/4/2023 2:12 PM View: AP 1
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

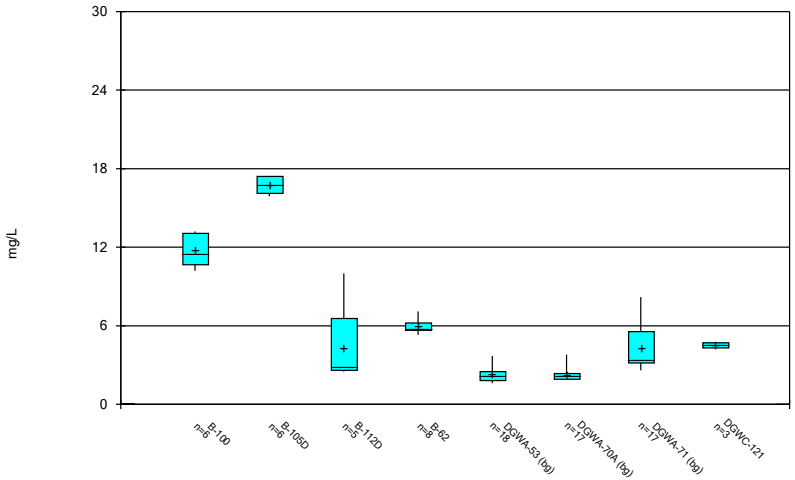
Box & Whiskers Plot



Constituent: Calcium Analysis Run 5/4/2023 2:12 PM View: AP 1
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Box & Whiskers Plot



Constituent: Chloride Analysis Run 5/4/2023 2:12 PM View: AP 1
Plant McDonough Client: Southern Company Data: McDonough AP

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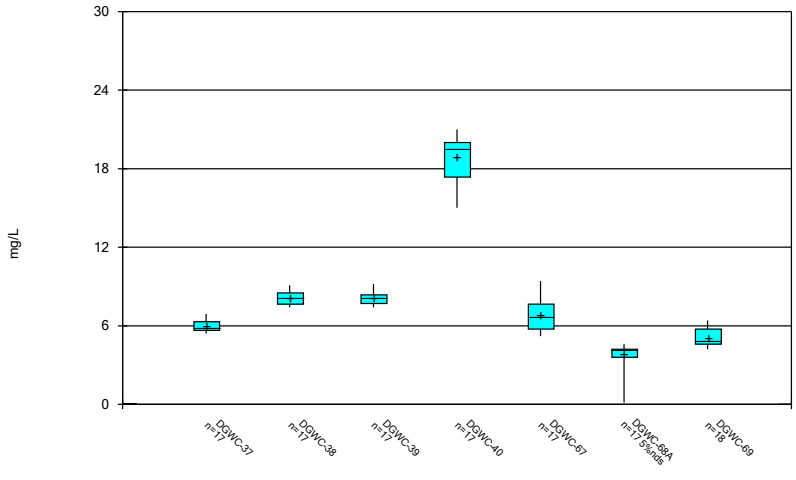
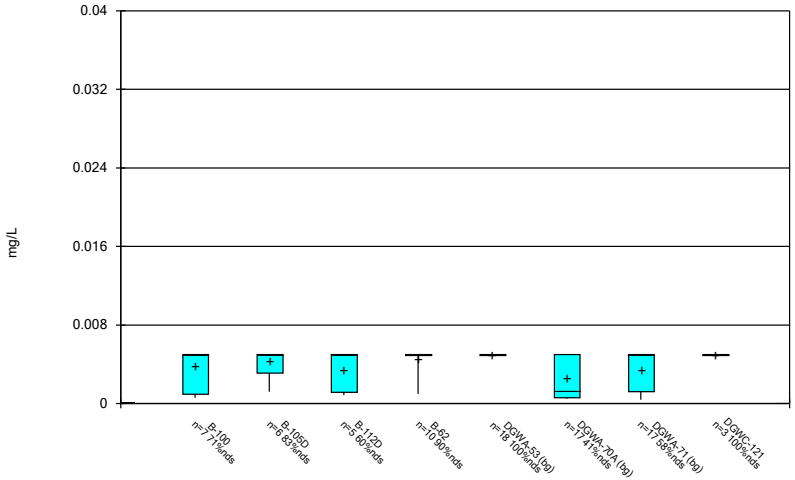
Box & Whiskers Plot



Constituent: Chloride Analysis Run 5/4/2023 2:12 PM View: AP 1
Plant McDonough Client: Southern Company Data: McDonough AP

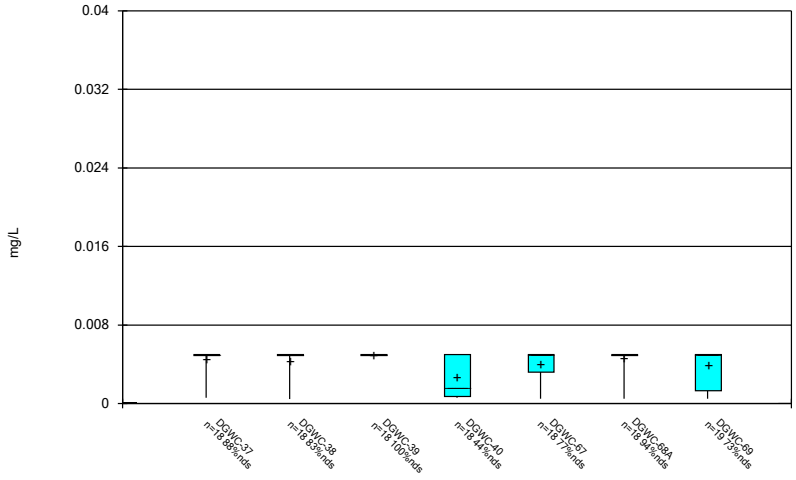
Box & Whiskers Plot



Constituent: Chromium Analysis Run 5/4/2023 2:12 PM View: AP 1
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

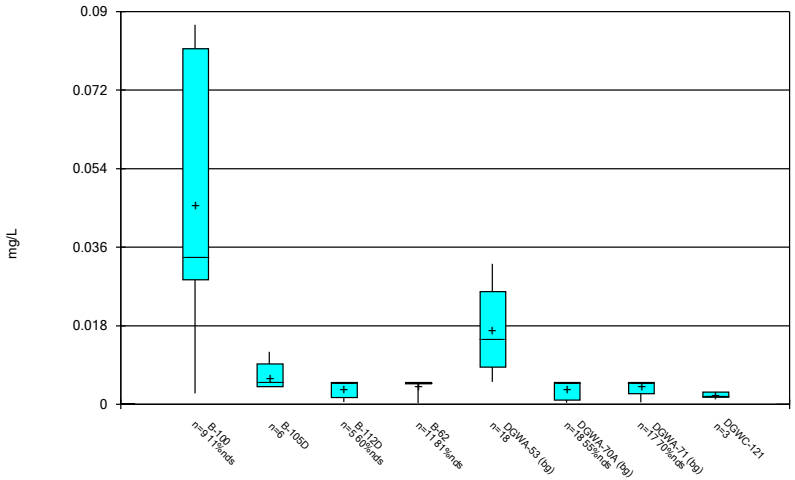
Box & Whiskers Plot



Constituent: Chromium Analysis Run 5/4/2023 2:12 PM View: AP 1
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

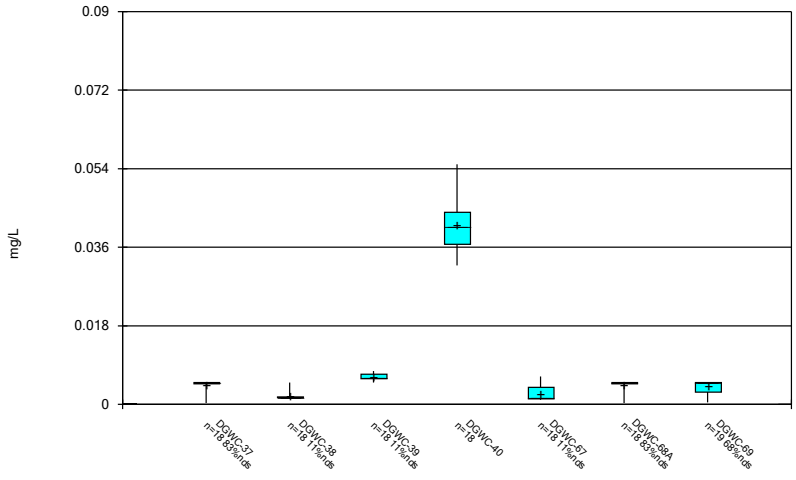
Box & Whiskers Plot



Constituent: Cobalt Analysis Run 5/4/2023 2:12 PM View: AP 1
Plant McDonough Client: Southern Company Data: McDonough AP

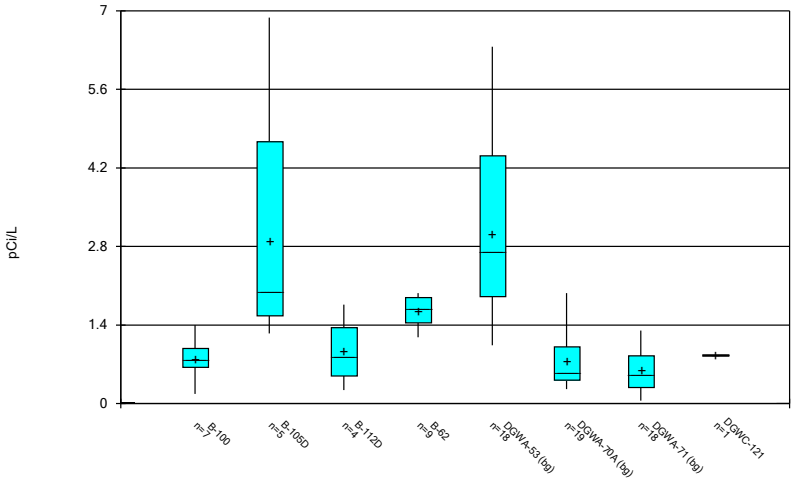
Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Box & Whiskers Plot



Constituent: Cobalt Analysis Run 5/4/2023 2:12 PM View: AP 1
Plant McDonough Client: Southern Company Data: McDonough AP

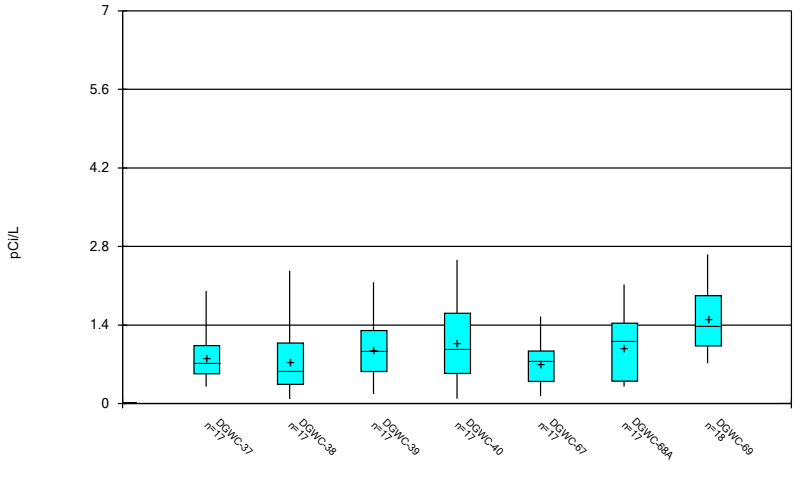
Box & Whiskers Plot



Constituent: Combined Radium 226 + 228 Analysis Run 5/4/2023 2:12 PM View: AP 1
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

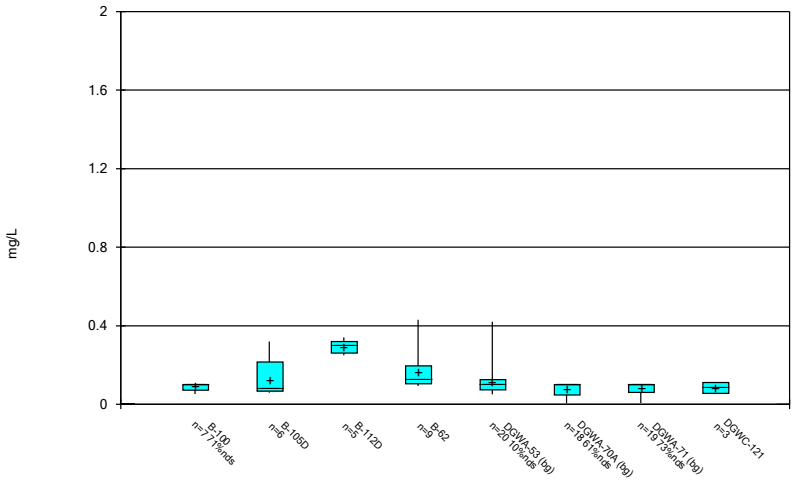
Box & Whiskers Plot



Constituent: Combined Radium 226 + 228 Analysis Run 5/4/2023 2:12 PM View: AP 1
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

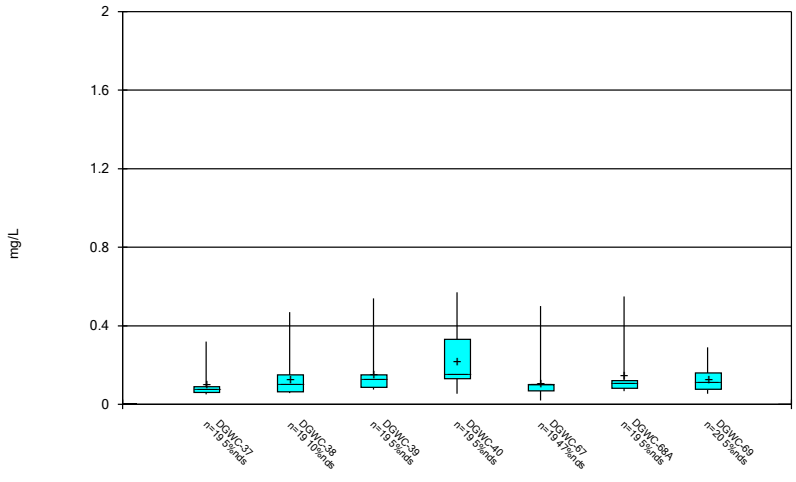
Box & Whiskers Plot



Constituent: Fluoride Analysis Run 5/4/2023 2:12 PM View: AP 1
Plant McDonough Client: Southern Company Data: McDonough AP

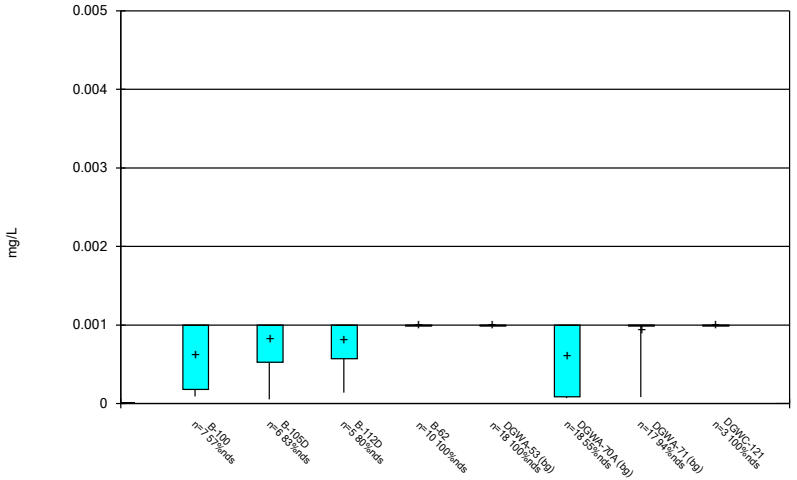
Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Box & Whiskers Plot



Constituent: Fluoride Analysis Run 5/4/2023 2:12 PM View: AP 1
Plant McDonough Client: Southern Company Data: McDonough AP

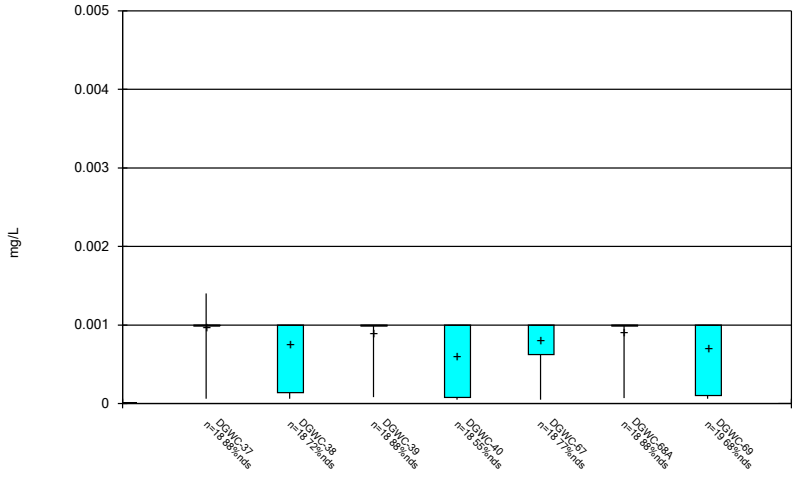
Box & Whiskers Plot



Constituent: Lead Analysis Run 5/4/2023 2:12 PM View: AP 1
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

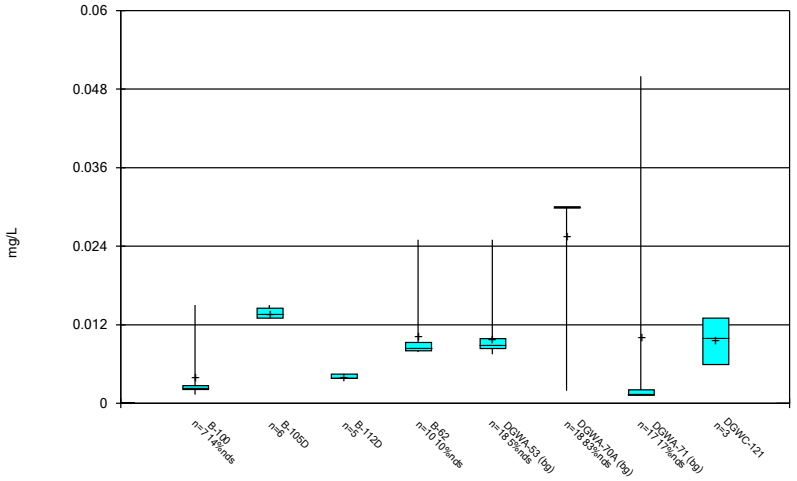
Box & Whiskers Plot



Constituent: Lead Analysis Run 5/4/2023 2:12 PM View: AP 1
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

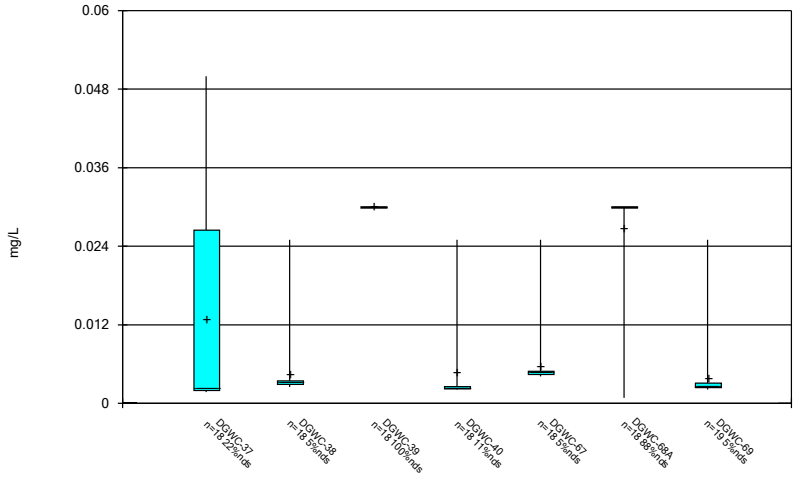
Box & Whiskers Plot



Constituent: Lithium Analysis Run 5/4/2023 2:12 PM View: AP 1
Plant McDonough Client: Southern Company Data: McDonough AP

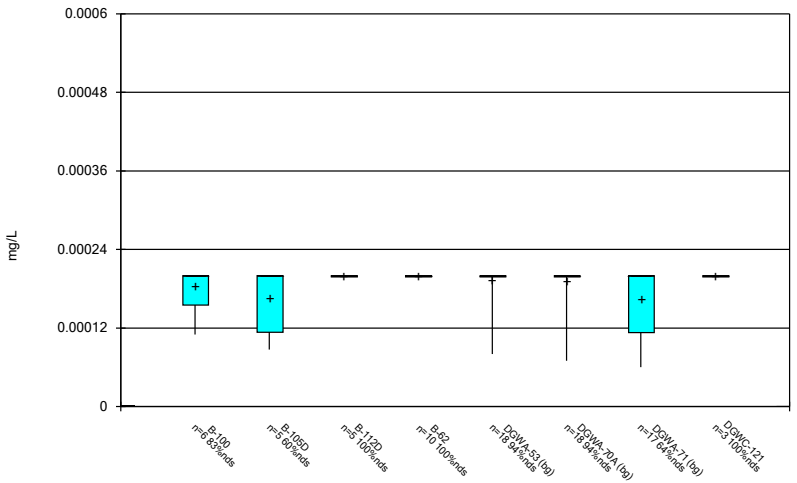
Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Box & Whiskers Plot



Constituent: Lithium Analysis Run 5/4/2023 2:12 PM View: AP 1
Plant McDonough Client: Southern Company Data: McDonough AP

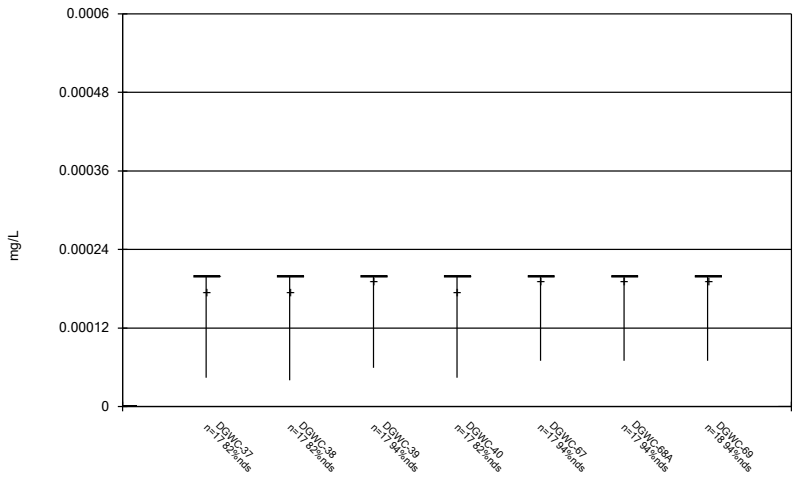
Box & Whiskers Plot



Constituent: Mercury Analysis Run 5/4/2023 2:12 PM View: AP 1
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

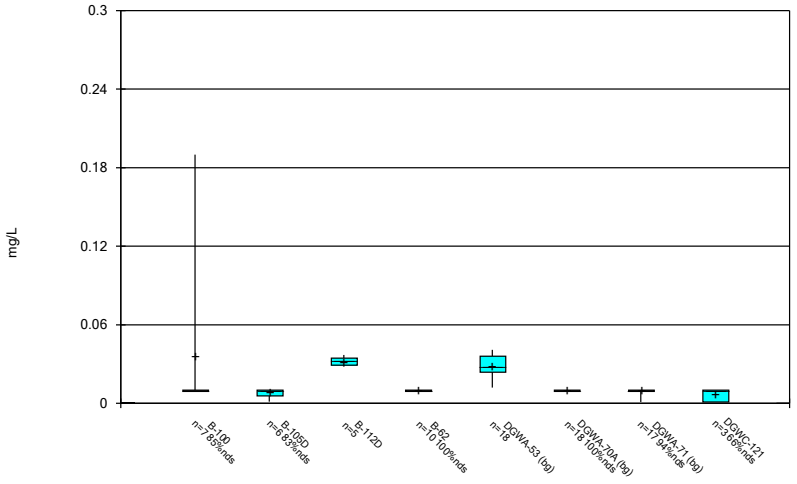
Box & Whiskers Plot



Constituent: Mercury Analysis Run 5/4/2023 2:12 PM View: AP 1
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

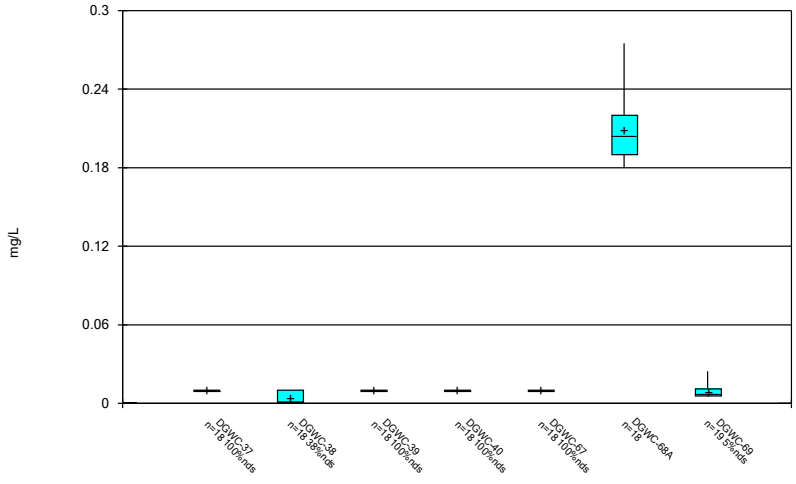
Box & Whiskers Plot



Constituent: Molybdenum Analysis Run 5/4/2023 2:12 PM View: AP 1
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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Plant McDonough Client: Southern Company Data: McDonough AP

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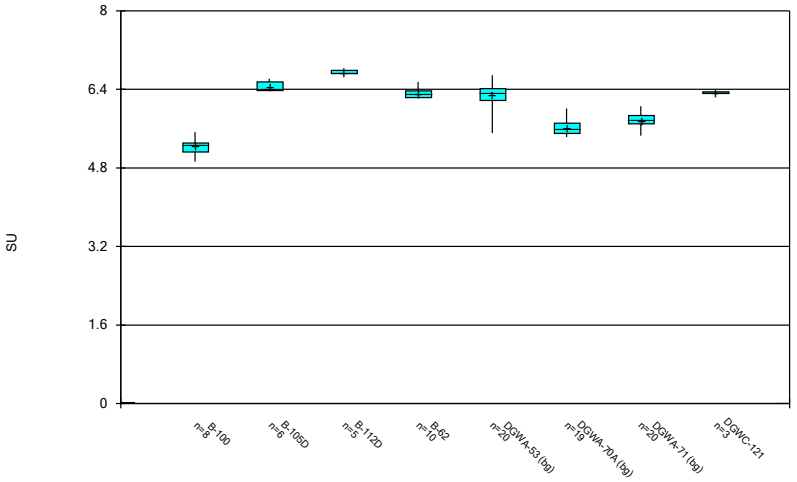
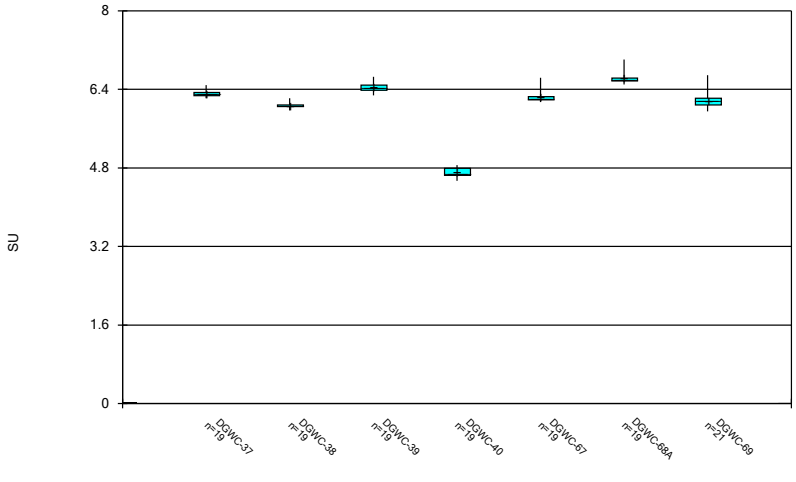


Constituent: pH, Field Analysis Run 5/4/2023 2:12 PM View: AP 1
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

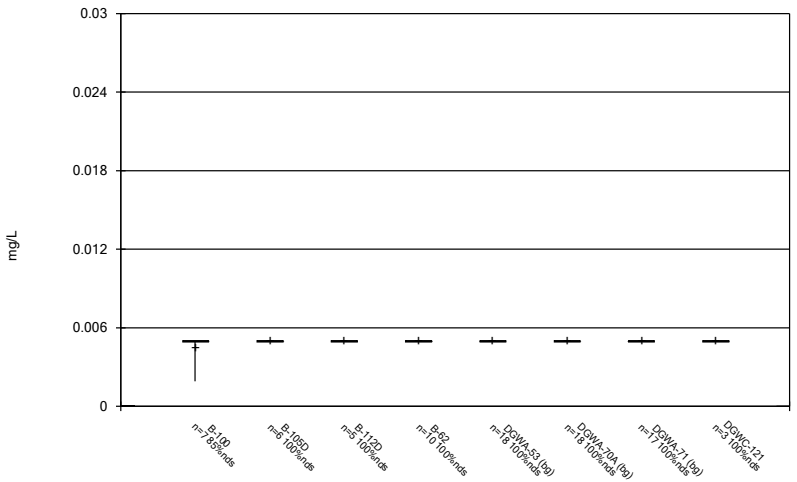
Box & Whiskers Plot



Constituent: pH, Field Analysis Run 5/4/2023 2:12 PM View: AP 1
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

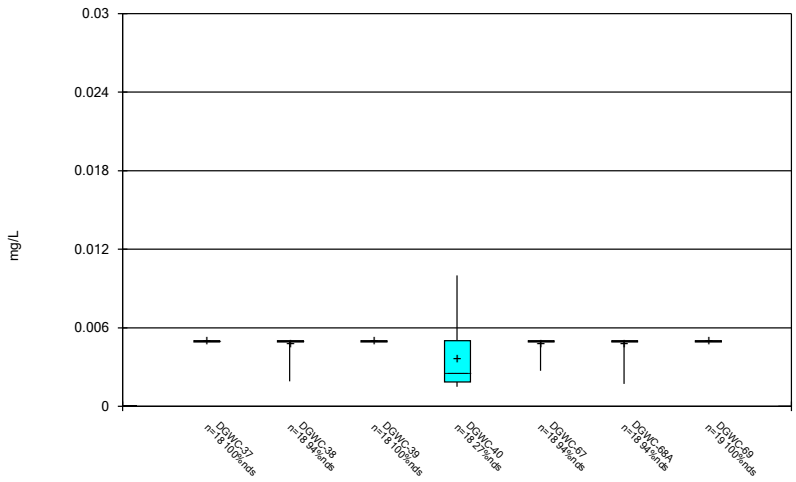
Box & Whiskers Plot



Constituent: Selenium Analysis Run 5/4/2023 2:12 PM View: AP 1
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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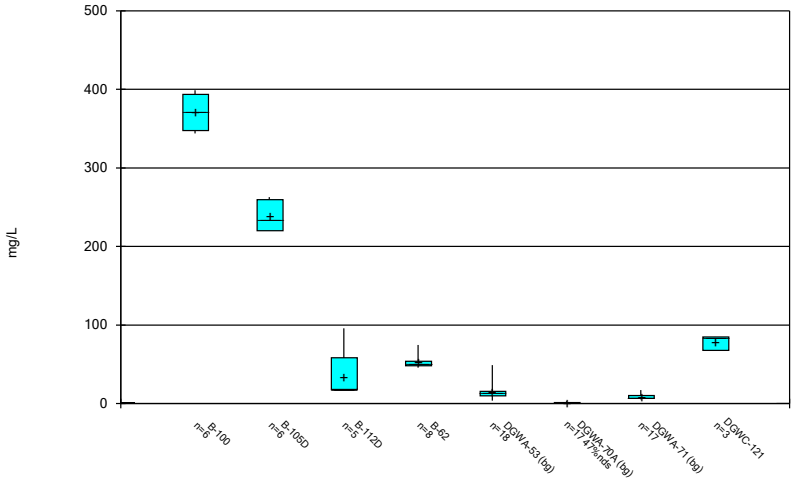
Plant McDonough Client: Southern Company Data: McDonough AP

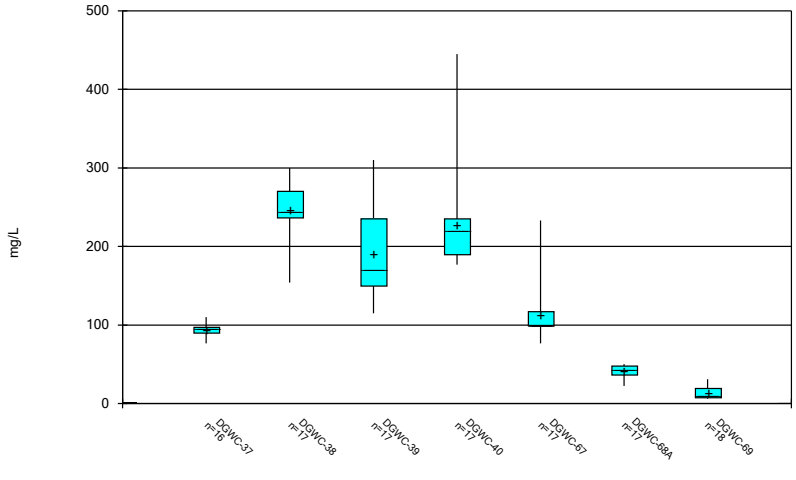
Box & Whiskers Plot



Constituent: Sulfate Analysis Run 5/4/2023 2:12 PM View: AP 1
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

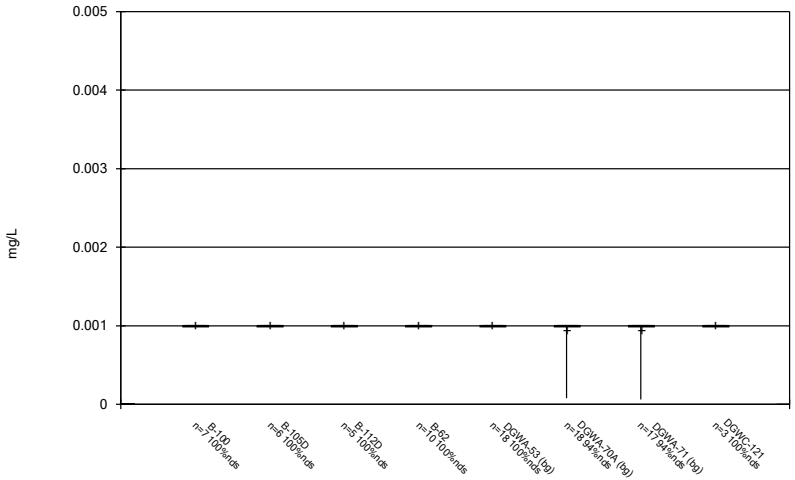
Box & Whiskers Plot



Constituent: Sulfate Analysis Run 5/4/2023 2:12 PM View: AP 1
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

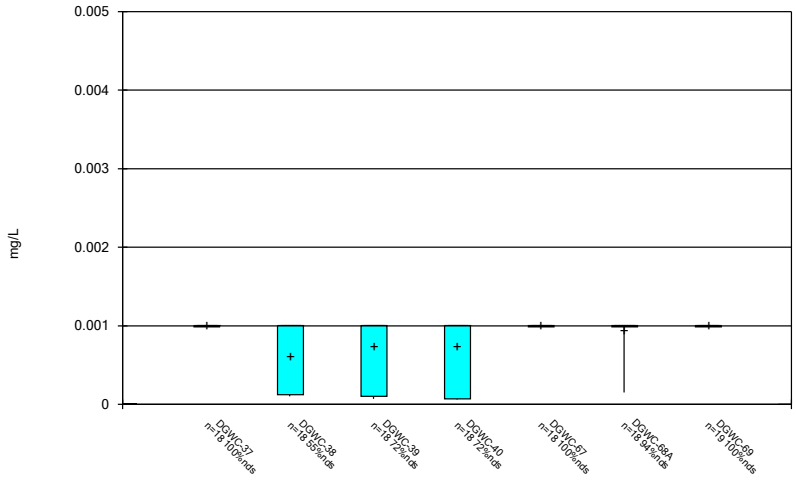
Box & Whiskers Plot



Constituent: Thallium Analysis Run 5/4/2023 2:12 PM View: AP 1
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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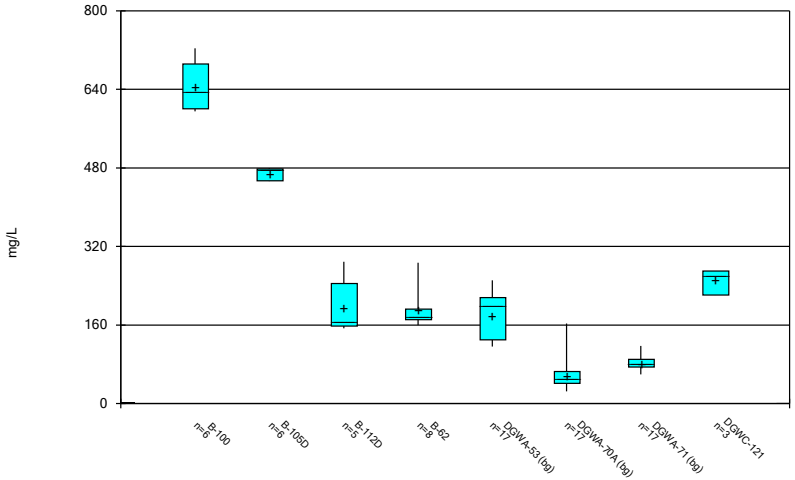
Plant McDonough Client: Southern Company Data: McDonough AP

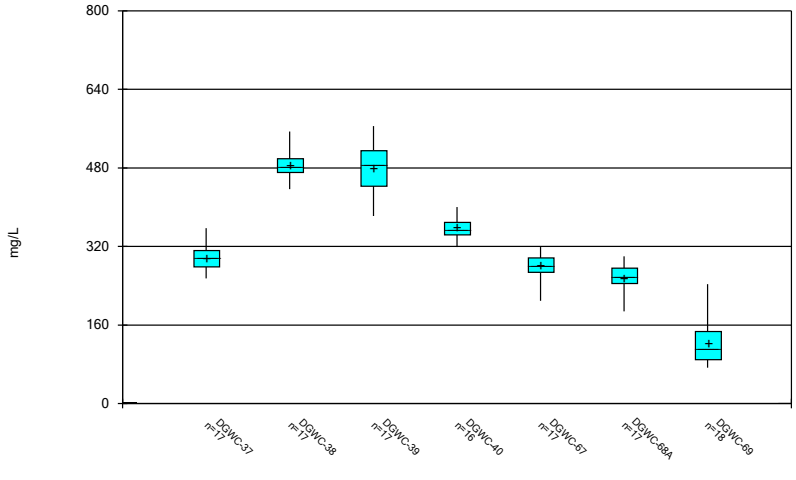
Box & Whiskers Plot



Constituent: Total Dissolved Solids Analysis Run 5/4/2023 2:12 PM View: AP 1
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Box & Whiskers Plot



Constituent: Total Dissolved Solids Analysis Run 5/4/2023 2:12 PM View: AP 1
Plant McDonough Client: Southern Company Data: McDonough AP

FIGURE C.

Outlier Summary

Plant McDonough Client: Southern Company Data: McDonough AP Printed 4/10/2023, 6:15 PM

	DGWC-68A Arsenic (mg/L)	DGWC-68A Barium (mg/L)	DGWA-70A Chromium (mg/L)	DGWC-68A Chromium (mg/L)	DGWC-68A Cobalt (mg/L)	DGWA-70A Fluoride (mg/L)	DGWC-68A pH, Field (SU)	DGWC-37 Sulfate (mg/L)	DGWA-53 Total Dissolved Solids (mg/L)	DGWC-40 Total Dissolved Solids (mg/L)
9/2/2016										583 (O)
3/28/2017						1.2 (O)				
7/13/2017							200 (O)			
10/24/2017								671 (O)		
10/15/2019			0.034 (O)							
9/16/2021	0.46 (o)	0.13 (o)		0.0014 (Jo)	0.0032 (Jo)	6.79 (o)				

FIGURE D.

Appendix III - Interwell Prediction Limits - Significant Results

Plant McDonough Client: Southern Company Data: McDonough AP Printed 4/16/2023, 12:45 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)	DGWC-37	0.13	n/a	2/2/2023	1.5	Yes	50	n/a	n/a	26	n/a	n/a	0.0007375	NP Inter (normality) 1 of 2
Boron (mg/L)	DGWC-38	0.13	n/a	2/2/2023	2.6	Yes	50	n/a	n/a	26	n/a	n/a	0.0007375	NP Inter (normality) 1 of 2
Boron (mg/L)	DGWC-39	0.13	n/a	2/3/2023	2.1	Yes	50	n/a	n/a	26	n/a	n/a	0.0007375	NP Inter (normality) 1 of 2
Boron (mg/L)	DGWC-40	0.13	n/a	2/1/2023	0.68	Yes	50	n/a	n/a	26	n/a	n/a	0.0007375	NP Inter (normality) 1 of 2
Boron (mg/L)	DGWC-67	0.13	n/a	2/2/2023	3.9	Yes	50	n/a	n/a	26	n/a	n/a	0.0007375	NP Inter (normality) 1 of 2
Boron (mg/L)	DGWC-68A	0.13	n/a	2/1/2023	1.7	Yes	50	n/a	n/a	26	n/a	n/a	0.0007375	NP Inter (normality) 1 of 2
Calcium (mg/L)	DGWC-37	40.3	n/a	2/2/2023	61.7	Yes	50	n/a	n/a	4	n/a	n/a	0.0007375	NP Inter (normality) 1 of 2
Calcium (mg/L)	DGWC-38	40.3	n/a	2/2/2023	83.6	Yes	50	n/a	n/a	4	n/a	n/a	0.0007375	NP Inter (normality) 1 of 2
Calcium (mg/L)	DGWC-39	40.3	n/a	2/3/2023	77.4	Yes	50	n/a	n/a	4	n/a	n/a	0.0007375	NP Inter (normality) 1 of 2
Calcium (mg/L)	DGWC-40	40.3	n/a	2/1/2023	41.1	Yes	50	n/a	n/a	4	n/a	n/a	0.0007375	NP Inter (normality) 1 of 2
Calcium (mg/L)	DGWC-67	40.3	n/a	2/2/2023	48.6	Yes	50	n/a	n/a	4	n/a	n/a	0.0007375	NP Inter (normality) 1 of 2
Calcium (mg/L)	DGWC-68A	40.3	n/a	2/1/2023	64.8	Yes	50	n/a	n/a	4	n/a	n/a	0.0007375	NP Inter (normality) 1 of 2
Chloride (mg/L)	DGWC-38	8.2	n/a	2/2/2023	8.7	Yes	52	n/a	n/a	0	n/a	n/a	0.0006941	NP Inter (normality) 1 of 2
Chloride (mg/L)	DGWC-40	8.2	n/a	2/1/2023	16	Yes	52	n/a	n/a	0	n/a	n/a	0.0006941	NP Inter (normality) 1 of 2
Chloride (mg/L)	DGWC-67	8.2	n/a	2/2/2023	9.4	Yes	52	n/a	n/a	0	n/a	n/a	0.0006941	NP Inter (normality) 1 of 2
pH, Field (SU)	DGWC-40	6.69	5.43	2/1/2023	4.66	Yes	59	n/a	n/a	0	n/a	n/a	0.001084	NP Inter (normality) 1 of 2
Sulfate (mg/L)	DGWC-37	30.83	n/a	2/2/2023	94.3	Yes	52	1.694	0.7439	15.38	Kaplan-Meier	x^(1/3)	0.001075	Param Inter 1 of 2
Sulfate (mg/L)	DGWC-38	30.83	n/a	2/2/2023	239	Yes	52	1.694	0.7439	15.38	Kaplan-Meier	x^(1/3)	0.001075	Param Inter 1 of 2
Sulfate (mg/L)	DGWC-39	30.83	n/a	2/3/2023	115	Yes	52	1.694	0.7439	15.38	Kaplan-Meier	x^(1/3)	0.001075	Param Inter 1 of 2
Sulfate (mg/L)	DGWC-40	30.83	n/a	2/1/2023	189	Yes	52	1.694	0.7439	15.38	Kaplan-Meier	x^(1/3)	0.001075	Param Inter 1 of 2
Sulfate (mg/L)	DGWC-67	30.83	n/a	2/2/2023	117	Yes	52	1.694	0.7439	15.38	Kaplan-Meier	x^(1/3)	0.001075	Param Inter 1 of 2
Sulfate (mg/L)	DGWC-68A	30.83	n/a	2/1/2023	35.6	Yes	52	1.694	0.7439	15.38	Kaplan-Meier	x^(1/3)	0.001075	Param Inter 1 of 2
Total Dissolved Solids (mg/L)	DGWC-37	243.1	n/a	2/2/2023	302	Yes	51	9.894	2.938	0	None	sqrt(x)	0.001075	Param Inter 1 of 2
Total Dissolved Solids (mg/L)	DGWC-38	243.1	n/a	2/2/2023	478	Yes	51	9.894	2.938	0	None	sqrt(x)	0.001075	Param Inter 1 of 2
Total Dissolved Solids (mg/L)	DGWC-39	243.1	n/a	2/3/2023	382	Yes	51	9.894	2.938	0	None	sqrt(x)	0.001075	Param Inter 1 of 2
Total Dissolved Solids (mg/L)	DGWC-40	243.1	n/a	2/1/2023	343	Yes	51	9.894	2.938	0	None	sqrt(x)	0.001075	Param Inter 1 of 2
Total Dissolved Solids (mg/L)	DGWC-67	243.1	n/a	2/2/2023	317	Yes	51	9.894	2.938	0	None	sqrt(x)	0.001075	Param Inter 1 of 2

Appendix III - Interwell Prediction Limits - All Results

Plant McDonough Client: Southern Company Data: McDonough AP Printed 4/16/2023, 12:45 PM

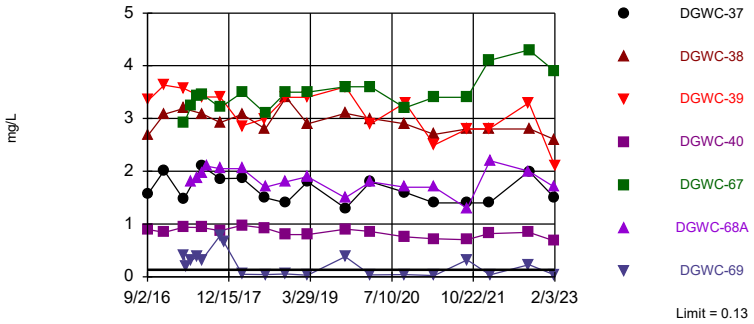
Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Boron (mg/L)	**DGWC-37**	**0.13**	**n/a**	**2/2/2023**	**1.5**	**Yes**	**50**	**n/a**	**n/a**	**26**	**n/a**	**n/a**	**0.0007375**	**NP Inter (normality) 1 of 2**
Boron (mg/L)	**DGWC-38**	**0.13**	**n/a**	**2/2/2023**	**2.6**	**Yes**	**50**	**n/a**	**n/a**	**26**	**n/a**	**n/a**	**0.0007375**	**NP Inter (normality) 1 of 2**
Boron (mg/L)	**DGWC-39**	**0.13**	**n/a**	**2/3/2023**	**2.1**	**Yes**	**50**	**n/a**	**n/a**	**26**	**n/a**	**n/a**	**0.0007375**	**NP Inter (normality) 1 of 2**
Boron (mg/L)	**DGWC-40**	**0.13**	**n/a**	**2/1/2023**	**0.68**	**Yes**	**50**	**n/a**	**n/a**	**26**	**n/a**	**n/a**	**0.0007375**	**NP Inter (normality) 1 of 2**
Boron (mg/L)	**DGWC-67**	**0.13**	**n/a**	**2/2/2023**	**3.9**	**Yes**	**50**	**n/a**	**n/a**	**26**	**n/a**	**n/a**	**0.0007375**	**NP Inter (normality) 1 of 2**
Boron (mg/L)	**DGWC-68A**	**0.13**	**n/a**	**2/1/2023**	**1.7**	**Yes**	**50**	**n/a**	**n/a**	**26**	**n/a**	**n/a**	**0.0007375**	**NP Inter (normality) 1 of 2**
Boron (mg/L)	DGWC-69	0.13	n/a	2/1/2023	0.035J	No	50	n/a	n/a	26	n/a	n/a	0.0007375	NP Inter (normality) 1 of 2
Calcium (mg/L)	**DGWC-37**	**40.3**	**n/a**	**2/2/2023**	**61.7**	**Yes**	**50**	**n/a**	**n/a**	**4**	**n/a**	**n/a**	**0.0007375**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	**DGWC-38**	**40.3**	**n/a**	**2/2/2023**	**83.6**	**Yes**	**50**	**n/a**	**n/a**	**4**	**n/a**	**n/a**	**0.0007375**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	**DGWC-39**	**40.3**	**n/a**	**2/3/2023**	**77.4**	**Yes**	**50**	**n/a**	**n/a**	**4**	**n/a**	**n/a**	**0.0007375**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	**DGWC-40**	**40.3**	**n/a**	**2/1/2023**	**41.1**	**Yes**	**50**	**n/a**	**n/a**	**4**	**n/a**	**n/a**	**0.0007375**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	**DGWC-67**	**40.3**	**n/a**	**2/2/2023**	**48.6**	**Yes**	**50**	**n/a**	**n/a**	**4**	**n/a**	**n/a**	**0.0007375**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	**DGWC-68A**	**40.3**	**n/a**	**2/1/2023**	**64.8**	**Yes**	**50**	**n/a**	**n/a**	**4**	**n/a**	**n/a**	**0.0007375**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	DGWC-69	40.3	n/a	2/1/2023	8.3	No	50	n/a	n/a	4	n/a	n/a	0.0007375	NP Inter (normality) 1 of 2
Chloride (mg/L)	DGWC-37	8.2	n/a	2/2/2023	5.9	No	52	n/a	n/a	0	n/a	n/a	0.0006941	NP Inter (normality) 1 of 2
Chloride (mg/L)	**DGWC-38**	**8.2**	**n/a**	**2/2/2023**	**8.7**	**Yes**	**52**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0006941**	**NP Inter (normality) 1 of 2**
Chloride (mg/L)	DGWC-39	8.2	n/a	2/3/2023	7.4	No	52	n/a	n/a	0	n/a	n/a	0.0006941	NP Inter (normality) 1 of 2
Chloride (mg/L)	**DGWC-40**	**8.2**	**n/a**	**2/1/2023**	**16**	**Yes**	**52**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0006941**	**NP Inter (normality) 1 of 2**
Chloride (mg/L)	**DGWC-67**	**8.2**	**n/a**	**2/2/2023**	**9.4**	**Yes**	**52**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0006941**	**NP Inter (normality) 1 of 2**
Chloride (mg/L)	DGWC-68A	8.2	n/a	2/1/2023	4.2	No	52	n/a	n/a	0	n/a	n/a	0.0006941	NP Inter (normality) 1 of 2
Chloride (mg/L)	DGWC-69	8.2	n/a	2/1/2023	5.8	No	52	n/a	n/a	0	n/a	n/a	0.0006941	NP Inter (normality) 1 of 2
Fluoride (mg/L)	DGWC-37	0.42	n/a	2/2/2023	0.089J	No	57	n/a	n/a	47.37	n/a	n/a	0.0005856	NP Inter (normality) 1 of 2
Fluoride (mg/L)	DGWC-38	0.42	n/a	2/2/2023	0.1	No	57	n/a	n/a	47.37	n/a	n/a	0.0005856	NP Inter (normality) 1 of 2
Fluoride (mg/L)	DGWC-39	0.42	n/a	2/3/2023	0.12	No	57	n/a	n/a	47.37	n/a	n/a	0.0005856	NP Inter (normality) 1 of 2
Fluoride (mg/L)	DGWC-40	0.42	n/a	2/1/2023	0.15	No	57	n/a	n/a	47.37	n/a	n/a	0.0005856	NP Inter (normality) 1 of 2
Fluoride (mg/L)	DGWC-67	0.42	n/a	2/2/2023	0.068J	No	57	n/a	n/a	47.37	n/a	n/a	0.0005856	NP Inter (normality) 1 of 2
Fluoride (mg/L)	DGWC-68A	0.42	n/a	2/1/2023	0.11	No	57	n/a	n/a	47.37	n/a	n/a	0.0005856	NP Inter (normality) 1 of 2
Fluoride (mg/L)	DGWC-69	0.42	n/a	2/1/2023	0.1	No	57	n/a	n/a	47.37	n/a	n/a	0.0005856	NP Inter (normality) 1 of 2
pH, Field (SU)	DGWC-37	6.69	5.43	2/2/2023	6.23	No	59	n/a	n/a	0	n/a	n/a	0.001084	NP Inter (normality) 1 of 2
pH, Field (SU)	DGWC-38	6.69	5.43	2/2/2023	6.08	No	59	n/a	n/a	0	n/a	n/a	0.001084	NP Inter (normality) 1 of 2
pH, Field (SU)	DGWC-39	6.69	5.43	2/3/2023	6.49	No	59	n/a	n/a	0	n/a	n/a	0.001084	NP Inter (normality) 1 of 2
pH, Field (SU)	**DGWC-40**	**6.69**	**5.43**	**2/1/2023**	**4.66**	**Yes**	**59**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.001084**	**NP Inter (normality) 1 of 2**
pH, Field (SU)	DGWC-67	6.69	5.43	2/2/2023	6.27	No	59	n/a	n/a	0	n/a	n/a	0.001084	NP Inter (normality) 1 of 2
pH, Field (SU)	DGWC-68A	6.69	5.43	2/1/2023	6.6	No	59	n/a	n/a	0	n/a	n/a	0.001084	NP Inter (normality) 1 of 2
pH, Field (SU)	DGWC-69	6.69	5.43	2/1/2023	6.12	No	59	n/a	n/a	0	n/a	n/a	0.001084	NP Inter (normality) 1 of 2
Sulfate (mg/L)	**DGWC-37**	**30.83**	**n/a**	**2/2/2023**	**94.3**	**Yes**	**52**	**1.694**	**0.7439**	**15.38**	**Kaplan-Meier**	**x^(1/3)**	**0.001075**	**Param Inter 1 of 2**
Sulfate (mg/L)	**DGWC-38**	**30.83**	**n/a**	**2/2/2023**	**239**	**Yes**	**52**	**1.694**	**0.7439**	**15.38**	**Kaplan-Meier**	**x^(1/3)**	**0.001075**	**Param Inter 1 of 2**
Sulfate (mg/L)	**DGWC-39**	**30.83**	**n/a**	**2/3/2023**	**115**	**Yes**	**52**	**1.694**	**0.7439**	**15.38**	**Kaplan-Meier**	**x^(1/3)**	**0.001075**	**Param Inter 1 of 2**
Sulfate (mg/L)	**DGWC-40**	**30.83**	**n/a**	**2/1/2023**	**189**	**Yes**	**52**	**1.694**	**0.7439**	**15.38**	**Kaplan-Meier**	**x^(1/3)**	**0.001075**	**Param Inter 1 of 2**
Sulfate (mg/L)	**DGWC-67**	**30.83**	**n/a**	**2/2/2023**	**117**	**Yes**	**52**	**1.694**	**0.7439**	**15.38**	**Kaplan-Meier**	**x^(1/3)**	**0.001075**	**Param Inter 1 of 2**
Sulfate (mg/L)	**DGWC-68A**	**30.83**	**n/a**	**2/1/2023**	**35.6**	**Yes**	**52**	**1.694**	**0.7439**	**15.38**	**Kaplan-Meier**	**x^(1/3)**	**0.001075**	**Param Inter 1 of 2**
Sulfate (mg/L)	DGWC-69	30.83	n/a	2/1/2023	6.9	No	52	1.694	0.7439	15.38	Kaplan-Meier	x^(1/3)	0.001075	Param Inter 1 of 2
Total Dissolved Solids (mg/L)	**DGWC-37**	**243.1**	**n/a**	**2/2/2023**	**302**	**Yes**	**51**	**9.894**	**2.938**	**0**	**None**	**sqrt(x)**	**0.001075**	**Param Inter 1 of 2**
Total Dissolved Solids (mg/L)	**DGWC-38**	**243.1**	**n/a**	**2/2/2023**	**478**	**Yes**	**51**	**9.894**	**2.938**	**0**	**None**	**sqrt(x)**	**0.001075**	**Param Inter 1 of 2**
Total Dissolved Solids (mg/L)	**DGWC-39**	**243.1**	**n/a**	**2/3/2023**	**382**	**Yes**	**51**	**9.894**	**2.938**	**0**	**None**	**sqrt(x)**	**0.001075**	**Param Inter 1 of 2**
Total Dissolved Solids (mg/L)	**DGWC-40**	**243.1**	**n/a**	**2/1/2023**	**343**	**Yes**	**51**	**9.894**	**2.938**	**0**	**None**	**sqrt(x)**	**0.001075**	**Param Inter 1 of 2**
Total Dissolved Solids (mg/L)	**DGWC-67**	**243.1**	**n/a**	**2/2/2023**	**317**	**Yes**	**51**	**9.894**	**2.938**	**0**	**None**	**sqrt(x)**	**0.001075**	**Param Inter 1 of 2**
Total Dissolved Solids (mg/L)	DGWC-68A	243.1	n/a	2/1/2023	243	No	51	9.894	2.938	0	None	sqrt(x)	0.001075	Param Inter 1 of 2
Total Dissolved Solids (mg/L)	DGWC-69	243.1	n/a	2/1/2023	79	No	51	9.894	2.938	0	None	sqrt(x)	0.001075	Param Inter 1 of 2

Sanitas™ v.9.6.37 . UG

Exceeds Limit: DGWC-37, DGWC-38, DGWC-39, DGWC-40, DGWC-67, DGWC-68A

Prediction Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Francia normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 50 background values. 26% NDs. Annual per-constituent alpha = 0.01028. Individual comparison alpha = 0.0007375 (1 of 2). Comparing 7 points to limit.

Constituent: Boron Analysis Run 4/16/2023 12:41 PM View: Appendix III

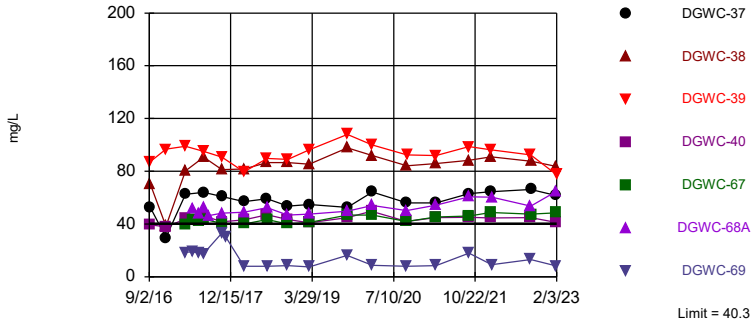
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.9.6.37 . UG

Exceeds Limit: DGWC-37, DGWC-38, DGWC-39, DGWC-40, DGWC-67, DGWC-68A

Prediction Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Francia normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 50 background values. 4% NDs. Annual per-constituent alpha = 0.01028. Individual comparison alpha = 0.0007375 (1 of 2). Comparing 7 points to limit.

Constituent: Calcium Analysis Run 4/16/2023 12:41 PM View: Appendix III

Plant McDonough Client: Southern Company Data: McDonough AP

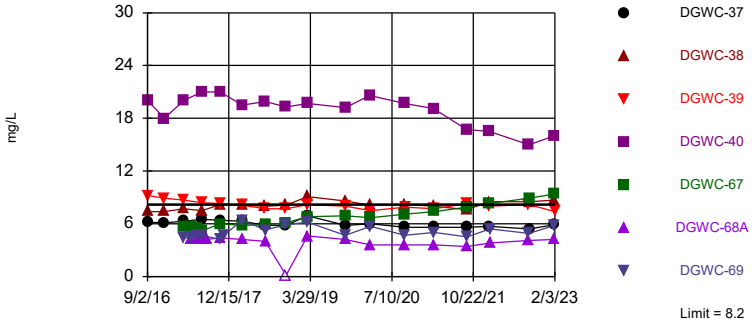
Sanitas™ v.9.6.37 . UG

Hollow symbols indicate censored values.

Exceeds Limit: DGWC-38, DGWC-40, DGWC-67

Prediction Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Francia normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 52 background values. Annual per-constituent alpha = 0.009673. Individual comparison alpha = 0.0006941 (1 of 2). Comparing 7 points to limit.

Constituent: Chloride Analysis Run 4/16/2023 12:41 PM View: Appendix III

Plant McDonough Client: Southern Company Data: McDonough AP

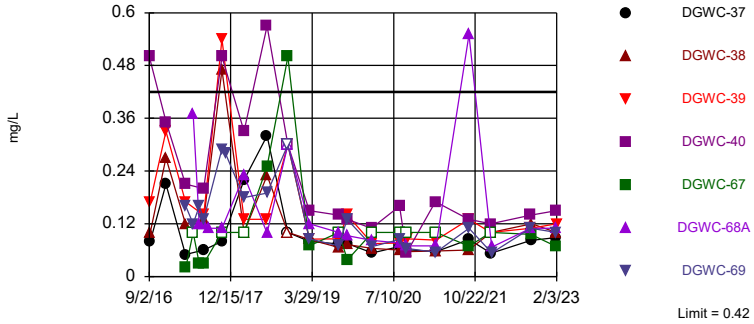
Sanitas™ v.9.6.37 . UG

Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Francia normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 57 background values. 47.37% NDs. Annual per-constituent alpha = 0.008167. Individual comparison alpha = 0.0005856 (1 of 2). Comparing 7 points to limit.

Constituent: Fluoride Analysis Run 4/16/2023 12:41 PM View: Appendix III

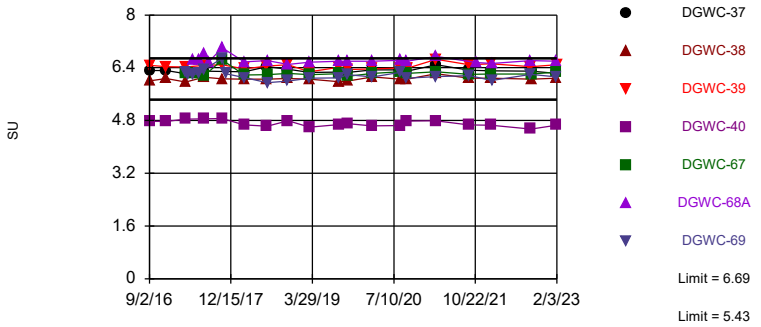
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.9.6.37 . UG

Exceeds Limits: DGWC-40

Prediction Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Francia normality test showed the data to be non-normal at the 0.01 alpha level. Limits are highest and lowest of 59 background values. Annual per-constituent alpha = 0.01513. Individual comparison alpha = 0.001084 (1 of 2). Comparing 7 points to limit.

Constituent: pH, Field Analysis Run 4/16/2023 12:41 PM View: Appendix III

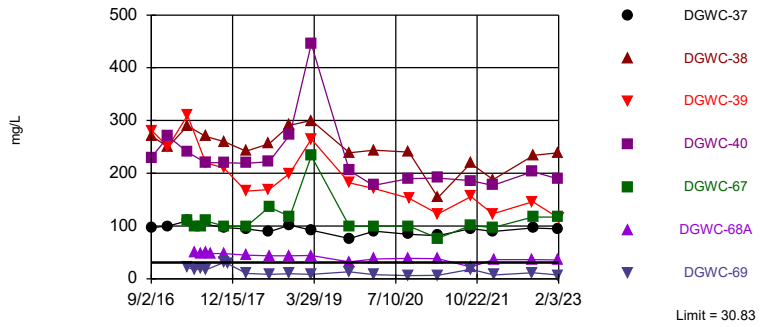
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.9.6.37 . UG

Exceeds Limit: DGWC-37, DGWC-38, DGWC-39, DGWC-40, DGWC-67, DGWC-68A

Prediction Limit

Interwell Parametric



Background Data Summary (based on cube root transformation) (after Kaplan-Meier Adjustment): Mean=1.694, Std. Dev.=0.7439, n=52, 15.38% NDs. Normality test: Shapiro Francia @alpha = 0.01, calculated = 0.9401, critical = 0.937. Kappa = 1.937 (c=7, w=7, 1 of 2, event alpha = 0.05132). Report alpha = 0.007498. Individual comparison alpha = 0.001075. Comparing 7 points to limit.

Constituent: Sulfate Analysis Run 4/16/2023 12:41 PM View: Appendix III

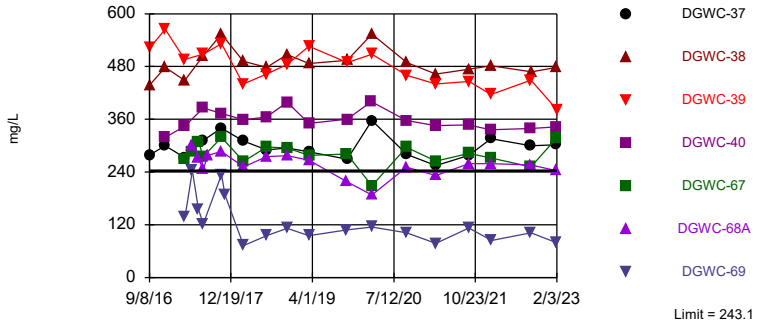
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.9.6.37 . UG

Exceeds Limit: DGWC-37, DGWC-38, DGWC-39, DGWC-40, DGWC-67

Prediction Limit

Interwell Parametric



Background Data Summary (based on square root transformation): Mean=9.894, Std. Dev.=2.938, n=51. Normality test: Shapiro Francia @alpha = 0.01, calculated = 0.9588, critical = 0.935. Kappa = 1.94 (c=7, w=7, 1 of 2, event alpha = 0.05132). Report alpha = 0.007498. Individual comparison alpha = 0.001075. Comparing 7 points to limit.

Constituent: Total Dissolved Solids Analysis Run 4/16/2023 12:41 PM View: Appendix III

Plant McDonough Client: Southern Company Data: McDonough AP

Prediction Limit

Constituent: Boron (mg/L) Analysis Run 4/16/2023 12:45 PM View: Appendix III

Plant McDonough Client: Southern Company Data: McDonough AP

	DGWC-40	DGWC-39	DGWC-38	DGWC-37	DGWA-71 (bg)	DGWA-70A (bg)	DGWA-53 (bg)	DGWC-69	DGWC-67
9/2/2016	0.895								
9/8/2016		3.35	2.69	1.58					
12/7/2016		3.63	3.08	2.01					
12/8/2016	0.841								
3/28/2017					0.0097 (J)	0.0067 (J)	0.0612		
3/30/2017	0.937	3.57	3.19	1.47					
3/31/2017								0.407	2.91
4/12/2017								0.207	
5/11/2017							0.0805		
5/12/2017					0.0082 (J)			0.311	3.24
5/15/2017						0.0073 (J)			
6/15/2017						<0.04	0.0725		
6/16/2017					0.0085 (J)			0.381	3.42
7/11/2017					0.0077 (J)	<0.04			
7/12/2017							0.0735		
7/13/2017	0.933	3.41	3.09	2.1				0.323	3.46
8/8/2017						<0.04			
10/24/2017					0.0083 (J)	0.0082 (J)	0.077		
10/26/2017	0.873	3.41	2.92	1.86				0.779	3.21
11/15/2017								0.667	
2/27/2018					0.0069 (J)	0.0062 (J)			
3/1/2018		2.86	3.08	1.87					
3/2/2018	0.974							0.0478	3.49
3/8/2018							0.13 (J)		
7/12/2018	0.92	3	2.8	1.5			0.076		
7/13/2018								0.043	3.1
11/6/2018					<0.04 (J)	<0.04 (J)			
11/7/2018							0.073		
11/8/2018	0.8	3.4	3.4	1.4				0.054	3.5
3/12/2019					0.0068 (J)	0.0073 (J)			
3/13/2019	0.8	3.4	2.9	1.8			0.08	0.028 (J)	3.5
10/15/2019					0.0054 (J)	<0.04			
10/16/2019							0.059	0.38	
10/17/2019									3.6
10/18/2019	0.9	3.6	3.1	1.3					
3/2/2020					0.01 (J)	0.0055 (J)			
3/4/2020	0.86								
3/9/2020		2.9	3	1.8			0.08 (J)	0.035 (J)	3.6
9/22/2020					<0.04	<0.04	0.056 (J)		
9/23/2020	0.76							0.041 (J)	3.2
9/24/2020			2.9	1.6					
9/25/2020		3.3							
3/1/2021					0.0054 (J)	<0.04			
3/8/2021	0.72								
3/10/2021								0.024 (J)	
3/11/2021		2.5	2.7	1.4					3.4
3/12/2021							0.064		
9/8/2021					<0.04				
9/9/2021						<0.04	0.065		
9/14/2021	0.7								
9/15/2021			2.8						
9/16/2021				1.4				0.32	3.4

ND substitution: RL or RL/2 if <15% NDs. Substitution method for trace values of the form <PQL(J): PQL.

Prediction Limit

Constituent: Boron (mg/L) Analysis Run 4/16/2023 12:45 PM View: Appendix III

Plant McDonough Client: Southern Company Data: McDonough AP

	DGWC-40	DGWC-39	DGWC-38	DGWC-37	DGWA-71 (bg)	DGWA-70A (bg)	DGWA-53 (bg)	DGWC-69	DGWC-67
9/17/2021		2.8							
1/18/2022					0.015 (J)	0.024 (J)			
1/19/2022	0.82								4.1
1/20/2022		2.8							
1/21/2022			2.8	1.4					
1/25/2022								0.035 (J)	
1/28/2022							0.062		
9/7/2022	0.84	3.3			<0.04	<0.04		0.23	
9/8/2022				2			0.054		4.3
9/12/2022			2.8						
1/31/2023					0.0097 (J)	0.011 (J)			
2/1/2023	0.68						0.051	0.035 (J)	
2/2/2023			2.6	1.5					3.9
2/3/2023		2.1							

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Boron (mg/L) Analysis Run 4/16/2023 12:45 PM View: Appendix III

Plant McDonough Client: Southern Company Data: McDonough AP

	DGWC-68A
9/2/2016	
9/8/2016	
12/7/2016	
12/8/2016	
3/28/2017	
3/30/2017	
3/31/2017	
4/12/2017	
5/11/2017	
5/12/2017	1.8
5/15/2017	
6/15/2017	
6/16/2017	1.88
7/11/2017	
7/12/2017	
7/13/2017	1.97
8/8/2017	2.1
10/24/2017	
10/26/2017	2.05
11/15/2017	
2/27/2018	
3/1/2018	
3/2/2018	2.05
3/8/2018	
7/12/2018	
7/13/2018	1.7
11/6/2018	
11/7/2018	
11/8/2018	1.8
3/12/2019	
3/13/2019	1.9
10/15/2019	
10/16/2019	1.5
10/17/2019	
10/18/2019	
3/2/2020	
3/4/2020	
3/9/2020	1.8
9/22/2020	
9/23/2020	1.7
9/24/2020	
9/25/2020	
3/1/2021	
3/8/2021	
3/10/2021	1.7
3/11/2021	
3/12/2021	
9/8/2021	
9/9/2021	
9/14/2021	
9/15/2021	
9/16/2021	1.3

Prediction Limit

Constituent: Boron (mg/L) Analysis Run 4/16/2023 12:45 PM View: Appendix III

Plant McDonough Client: Southern Company Data: McDonough AP

	DGWC-68A
9/17/2021	
1/18/2022	
1/19/2022	
1/20/2022	
1/21/2022	
1/25/2022	2.2
1/28/2022	
9/7/2022	2
9/8/2022	
9/12/2022	
1/31/2023	
2/1/2023	1.7
2/2/2023	
2/3/2023	

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 4/16/2023 12:45 PM View: Appendix III

Plant McDonough Client: Southern Company Data: McDonough AP

	DGWC-40	DGWC-39	DGWC-38	DGWC-37	DGWA-71 (bg)	DGWA-70A (bg)	DGWA-53 (bg)	DGWC-67	DGWC-69
9/2/2016	39.6								
9/8/2016		87.2	70.3	52.5					
12/7/2016		96.7	38.4	29.7					
12/8/2016	37.9								
3/28/2017					8.31	5.14	30.8		
3/30/2017	43.9	98.9	80.3	62.6					
3/31/2017								39.9	18.6 (J)
5/11/2017							35.8		
5/12/2017					8.04			43.6	18.9 (J)
5/15/2017						6.5			
6/15/2017						5.38	36		
6/16/2017					7.66			42.5	17.7
7/11/2017					7.71	5.96			
7/12/2017							40.3		
7/13/2017	46.2	95	90.8	64.1				43.7	17.6
8/8/2017						5.2			
10/24/2017					6.86	4.93	30.3		
10/26/2017	41.8	90.6	81.3	60.8				40.4	33.3
11/15/2017									30.6
2/27/2018					<25	<25			
3/1/2018		79.6	81.8	57					
3/2/2018	43.2							40.1	8.09
3/8/2018							39.8		
7/12/2018	47.1	89.8	86.7	59.1			34.7		
7/13/2018								43.3	7.9
11/6/2018					5.7	5.5			
11/7/2018							28.6		
11/8/2018	43.5	89	86.6	53.6				40.1	8.5
3/12/2019					5.5	5.1			
3/13/2019	41	96.3	85.3	54.8			26.7	41.2	7.6
10/15/2019					5.1	5.1			
10/16/2019							17.7		16.2
10/17/2019								46.9	
10/18/2019	44.9	108	97.8	52.5					
3/2/2020					5.8	5.3			
3/4/2020	49.6								
3/9/2020		100	91.9	64.2			23.7	46.9	8.6
9/22/2020					5.4	5	15.5		
9/23/2020	41.9							42	8
9/24/2020			84.1	55.9					
9/25/2020		92.5							
3/1/2021					5.9	4.1			
3/8/2021	44.9								
3/10/2021									8.5
3/11/2021		91.9	85.8	56				45.4	
3/12/2021							18.4		
9/8/2021					6.1				
9/9/2021						5.3	18.3		
9/14/2021	45.1								
9/15/2021			88.3						
9/16/2021				63				46	18
9/17/2021		98.6							

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 4/16/2023 12:45 PM View: Appendix III

Plant McDonough Client: Southern Company Data: McDonough AP

	DGWC-40	DGWC-39	DGWC-38	DGWC-37	DGWA-71 (bg)	DGWA-70A (bg)	DGWA-53 (bg)	DGWC-67	DGWC-69
1/18/2022					6.6	6.1			
1/19/2022	44.7							48.8	
1/20/2022		96.2							
1/21/2022			91	64.4					
1/25/2022									9.2
1/28/2022							19.5		
9/7/2022	44.8	92.5			6.4	5.9			13.1
9/8/2022				66.2			17.2	47.4	
9/12/2022			87.6						
1/31/2023					5.7	6.2			
2/1/2023	41.1						14.1		8.3
2/2/2023			83.6	61.7				48.6	
2/3/2023		77.4							

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 4/16/2023 12:46 PM View: Appendix III

Plant McDonough Client: Southern Company Data: McDonough AP

	DGWC-68A
9/2/2016	
9/8/2016	
12/7/2016	
12/8/2016	
3/28/2017	
3/30/2017	
3/31/2017	
5/11/2017	
5/12/2017	51.7
5/15/2017	
6/15/2017	
6/16/2017	47.9
7/11/2017	
7/12/2017	
7/13/2017	52.3
8/8/2017	46.3
10/24/2017	
10/26/2017	48.2
11/15/2017	
2/27/2018	
3/1/2018	
3/2/2018	48.9
3/8/2018	
7/12/2018	
7/13/2018	52.4
11/6/2018	
11/7/2018	
11/8/2018	46.8
3/12/2019	
3/13/2019	47.5
10/15/2019	
10/16/2019	49.7
10/17/2019	
10/18/2019	
3/2/2020	
3/4/2020	
3/9/2020	54
9/22/2020	
9/23/2020	50.2
9/24/2020	
9/25/2020	
3/1/2021	
3/8/2021	
3/10/2021	54.2
3/11/2021	
3/12/2021	
9/8/2021	
9/9/2021	
9/14/2021	
9/15/2021	
9/16/2021	60.6
9/17/2021	

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 4/16/2023 12:46 PM View: Appendix III

Plant McDonough Client: Southern Company Data: McDonough AP

	DGWC-68A
1/18/2022	
1/19/2022	
1/20/2022	
1/21/2022	
1/25/2022	60.4
1/28/2022	
9/7/2022	53.5
9/8/2022	
9/12/2022	
1/31/2023	
2/1/2023	64.8
2/2/2023	
2/3/2023	

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 4/16/2023 12:46 PM View: Appendix III

Plant McDonough Client: Southern Company Data: McDonough AP

	DGWC-40	DGWC-38	DGWC-37	DGWC-39	DGWA-71 (bg)	DGWA-70A (bg)	DGWA-53 (bg)	DGWC-69	DGWC-67
9/2/2016	20								
9/8/2016		7.4	6.2	9.2					
12/7/2016		7.4	6.1	8.9					
12/8/2016	18								
3/28/2017					3.6	3.8	3.7		
3/30/2017	20	7.7	6.3	8.7					
3/31/2017								4.4	5.7
5/11/2017							2.3		
5/12/2017					3.8			4.4	5.6
5/15/2017						2.2			
6/15/2017						2	2.6		
6/16/2017					3.4			4.7	5.5
7/11/2017					3.1	2.1			
7/12/2017							2.3		
7/13/2017	21	7.5	6.5	8.4				4.7	5.2
8/8/2017						2.2			
10/24/2017					3.2	2.4	2.7		
10/26/2017	21	8.2	6.4	8.3				4.2	6
11/15/2017					3.1		2.2	4.7	
2/27/2018					3.2	2.5			
3/1/2018		8.1	6.3	8.1					
3/2/2018	19.5							6.4	5.8
3/8/2018							2.4		
7/12/2018	19.9	8	5.8	7.7			2.2		
7/13/2018								5.3	5.9
11/6/2018					2.6	2.3			
11/7/2018							2.3		
11/8/2018	19.3	8.1	5.8	7.7				5.9	6.1
3/12/2019					3.3	2.5			
3/13/2019	19.7	9.1	6.9	8.2			3.6	6.2	6.8
10/15/2019					3.3	2.2			
10/16/2019							2	4.7	
10/17/2019									6.9
10/18/2019	19.2	8.6	5.8	8					
3/2/2020					3	1.9			
3/4/2020	20.6								
3/9/2020		8.1	6	7.5			1.8	5.7	6.7
9/22/2020					5.2	1.9	1.6		
9/23/2020	19.7							4.7	7.1
9/24/2020		8.2	5.6						
9/25/2020				7.9					
3/1/2021					3.9	1.9			
3/8/2021	19.1								
3/10/2021								5	
3/11/2021		8	5.6	7.7					7.4
3/12/2021							2		
9/8/2021					5.9				
9/9/2021						1.9	1.8		
9/14/2021	16.7								
9/15/2021		7.6							
9/16/2021			5.6					4.5	7.9
9/17/2021				8.3					

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 4/16/2023 12:46 PM View: Appendix III

Plant McDonough Client: Southern Company Data: McDonough AP

	DGWC-40	DGWC-38	DGWC-37	DGWC-39	DGWA-71 (bg)	DGWA-70A (bg)	DGWA-53 (bg)	DGWC-69	DGWC-67
1/18/2022					5.9	1.9			
1/19/2022	16.5								8.3
1/20/2022				8					
1/21/2022		8.5	5.7						
1/25/2022								5.4	
1/28/2022							1.8		
9/7/2022	15			8.2	8.2	2.1		4.9	
9/8/2022			5.4				1.6		8.9
9/12/2022		8.5							
1/31/2023					7.3	2.2			
2/1/2023	16						1.9	5.8	
2/2/2023		8.7	5.9						9.4
2/3/2023				7.4					

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 4/16/2023 12:46 PM View: Appendix III

Plant McDonough Client: Southern Company Data: McDonough AP

	DGWC-68A
9/2/2016	
9/8/2016	
12/7/2016	
12/8/2016	
3/28/2017	
3/30/2017	
3/31/2017	
5/11/2017	
5/12/2017	4.2
5/15/2017	
6/15/2017	
6/16/2017	4.2
7/11/2017	
7/12/2017	
7/13/2017	4.4
8/8/2017	4.2
10/24/2017	
10/26/2017	4.4
11/15/2017	
2/27/2018	
3/1/2018	
3/2/2018	4.2
3/8/2018	
7/12/2018	
7/13/2018	4
11/6/2018	
11/7/2018	
11/8/2018	<0.25
3/12/2019	
3/13/2019	4.6
10/15/2019	
10/16/2019	4.2
10/17/2019	
10/18/2019	
3/2/2020	
3/4/2020	
3/9/2020	3.6
9/22/2020	
9/23/2020	3.6
9/24/2020	
9/25/2020	
3/1/2021	
3/8/2021	
3/10/2021	3.6
3/11/2021	
3/12/2021	
9/8/2021	
9/9/2021	
9/14/2021	
9/15/2021	
9/16/2021	3.4
9/17/2021	

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 4/16/2023 12:46 PM View: Appendix III

Plant McDonough Client: Southern Company Data: McDonough AP

	DGWC-68A
1/18/2022	
1/19/2022	
1/20/2022	
1/21/2022	
1/25/2022	3.8
1/28/2022	
9/7/2022	4.1
9/8/2022	
9/12/2022	
1/31/2023	
2/1/2023	4.2
2/2/2023	
2/3/2023	

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 4/16/2023 12:46 PM View: Appendix III

Plant McDonough Client: Southern Company Data: McDonough AP

	DGWC-40	DGWC-39	DGWC-38	DGWC-37	DGWA-71 (bg)	DGWA-53 (bg)	DGWC-67	DGWC-69	DGWC-68A
9/2/2016	0.5								
9/8/2016		0.17 (J)	0.1 (J)	0.08 (J)					
12/7/2016		0.33	0.27 (J)	0.21 (J)					
12/8/2016	0.35								
3/28/2017					0.06 (J)	0.12 (J)			
3/30/2017	0.21 (J)	0.17 (J)	0.12 (J)	0.05 (J)					
3/31/2017							0.02 (J)	0.16 (J)	
5/11/2017						0.07 (J)			
5/12/2017					<0.1		<0.1	0.12 (J)	0.37
5/15/2017									
6/15/2017						0.19 (J)			
6/16/2017					0.008 (J)		0.03 (J)	0.16 (J)	0.12 (J)
7/11/2017					0.007 (J)				
7/12/2017						0.1 (J)			
7/13/2017	0.2 (J)	0.14 (J)	0.13 (J)	0.06 (J)			0.03 (J)	0.13 (J)	0.12 (J)
8/8/2017									0.11 (J)
10/24/2017					<0.1	0.06 (J)			
10/26/2017	0.5	0.54	0.47	0.08 (J)			<0.1	0.29 (J)	0.11 (J)
11/15/2017					<0.1	0.05 (J)		0.28 (J)	
2/27/2018					<0.1				
3/1/2018		0.13	<0.1	0.22					
3/2/2018	0.33						<0.1	0.18	0.23
3/8/2018						<0.1			
7/12/2018	0.57	0.13 (J)	0.23 (J)	0.32		0.071 (J)			
7/13/2018							0.25 (J)	0.19 (J)	0.099 (J)
11/6/2018					<0.1				
11/7/2018						<0.1			
11/8/2018	<0.3 (J)	<0.3 (J)	<0.1	<0.1			0.5	<0.3 (J)	<0.3 (J)
3/12/2019					<0.1				
3/13/2019	0.15 (J)	0.085 (J)	0.084 (J)	0.08 (J)		0.13 (J)	0.07 (J)	0.086 (J)	0.12 (J)
8/27/2019					<0.1				
8/28/2019	0.14	0.086 (J)	0.066 (J)	0.074 (J)		0.42	<0.1	0.07 (J)	0.1
10/15/2019					<0.1				
10/16/2019						0.11 (J)		0.13 (J)	0.093 (J)
10/17/2019							0.038 (J)		
10/18/2019	0.13 (J)	0.14 (J)	0.073 (J)	0.075 (J)					
3/2/2020					<0.1				
3/4/2020	0.11 (J)								
3/9/2020		0.075 (J)	0.064 (J)	0.054 (J)		0.1 (J)	<0.1	0.068 (J)	0.082 (J)
8/11/2020					<0.1				
8/13/2020	0.16	0.076 (J)	0.06 (J)	0.068 (J)		0.062 (J)	<0.1	0.084 (J)	0.076 (J)
9/22/2020					<0.1	0.099 (J)			
9/23/2020	0.054 (J)						<0.1	0.064 (J)	0.07 (J)
9/24/2020			0.057 (J)	0.061 (J)					
9/25/2020		0.086 (J)							
3/1/2021					<0.1				
3/8/2021	0.17								
3/10/2021								0.055 (J)	0.07 (J)
3/11/2021		0.083 (J)	0.058 (J)	0.057 (J)			<0.1		
3/12/2021						0.076 (J)			
9/8/2021					<0.1				
9/9/2021						0.099 (J)			

ND substitution: RL or RL/2 if <15% NDs. Substitution method for trace values of the form <PQL(J): PQL.

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 4/16/2023 12:46 PM View: Appendix III

Plant McDonough Client: Southern Company Data: McDonough AP

	DGWC-40	DGWC-39	DGWC-38	DGWC-37	DGWA-71 (bg)	DGWA-53 (bg)	DGWC-67	DGWC-69	DGWC-68A
9/14/2021	0.13								
9/15/2021			0.06 (J)						
9/16/2021				0.084 (J)			0.069 (J)	0.11	0.55
9/17/2021		0.13							
1/18/2022					<0.1				
1/19/2022	0.12						<0.1		
1/20/2022		0.1							
1/21/2022			0.1	0.053 (J)					
1/25/2022								0.054 (J)	0.067 (J)
1/28/2022						0.08 (J)			
9/7/2022	0.14	0.11			0.056 (J)			0.11	0.11
9/8/2022				0.082 (J)		0.11	0.096 (J)		
9/12/2022			0.12						
1/31/2023					0.05 (J)				
2/1/2023	0.15					0.1		0.1	0.11
2/2/2023			0.1	0.089 (J)			0.068 (J)		
2/3/2023		0.12							

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 4/16/2023 12:46 PM View: Appendix III

Plant McDonough Client: Southern Company Data: McDonough AP

	DGWA-70A (bg)
9/2/2016	
9/8/2016	
12/7/2016	
12/8/2016	
3/28/2017	1.2 (O)
3/30/2017	
3/31/2017	
5/11/2017	
5/12/2017	
5/15/2017	0.005 (J)
6/15/2017	0.02 (J)
6/16/2017	
7/11/2017	0.06 (J)
7/12/2017	
7/13/2017	
8/8/2017	0.04 (J)
10/24/2017	<0.1
10/26/2017	
11/15/2017	
2/27/2018	<0.1
3/1/2018	
3/2/2018	
3/8/2018	
7/12/2018	
7/13/2018	
11/6/2018	<0.1
11/7/2018	
11/8/2018	
3/12/2019	0.039 (J)
3/13/2019	
8/27/2019	<0.1
8/28/2019	
10/15/2019	<0.1
10/16/2019	
10/17/2019	
10/18/2019	
3/2/2020	<0.1
3/4/2020	
3/9/2020	
8/11/2020	<0.1
8/13/2020	
9/22/2020	<0.1
9/23/2020	
9/24/2020	
9/25/2020	
3/1/2021	<0.1
3/8/2021	
3/10/2021	
3/11/2021	
3/12/2021	
9/8/2021	
9/9/2021	<0.1

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 4/16/2023 12:46 PM View: Appendix III

Plant McDonough Client: Southern Company Data: McDonough AP

	DGWA-70A (bg)
9/14/2021	
9/15/2021	
9/16/2021	
9/17/2021	
1/18/2022	<0.1
1/19/2022	
1/20/2022	
1/21/2022	
1/25/2022	
1/28/2022	
9/7/2022	0.061 (J)
9/8/2022	
9/12/2022	
1/31/2023	0.053 (J)
2/1/2023	
2/2/2023	
2/3/2023	

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: pH, Field (SU) Analysis Run 4/16/2023 12:46 PM View: Appendix III

Plant McDonough Client: Southern Company Data: McDonough AP

	DGWC-40	DGWC-37	DGWC-38	DGWC-39	DGWA-53 (bg)	DGWA-71 (bg)	DGWC-69	DGWC-67	DGWC-68A
9/2/2016	4.77								
9/8/2016		6.32	6.01	6.47					
12/7/2016		6.32	6.07	6.43					
12/8/2016	4.77								
3/28/2017					6.29	5.94			
3/30/2017	4.84	6.22	5.97	6.42					
3/31/2017							6.26	6.25	
4/12/2017							6.19		
5/11/2017					6.6				
5/12/2017						5.46	6.2	6.23	6.63
5/15/2017									
6/15/2017					6.41				
6/16/2017						5.81	6.22	6.22	6.63
7/11/2017						5.74			
7/12/2017					5.91				
7/13/2017	4.85	6.3	6.11	6.47			6.35	6.15	6.84
8/8/2017									6.57
10/24/2017					5.51	5.86			
10/26/2017	4.86		6.06	6.49			6.69	6.64	7.01
11/15/2017					6.5	5.77	6.22		
2/27/2018						5.66			
3/1/2018		6.28	6.05	6.37					
3/2/2018	4.67						6.1	6.18	6.58
3/8/2018					6.18				
7/10/2018						5.63			
7/12/2018	4.63	6.43	6.05	6.45	6.33				
7/13/2018							5.95	6.19	6.62
11/6/2018						5.79			
11/7/2018					6.22				
11/8/2018	4.79	6.36	6.07	6.49			6	6.23	6.5
3/12/2019						5.74			
3/13/2019	4.6	6.26	6.05	6.28	6		6.08	6.19	6.57
8/27/2019						5.87			
8/28/2019	4.68	6.27	5.98	6.41	6.04		6.09	6.22	6.6
10/15/2019						5.88			
10/16/2019					6.69		6.19		6.6
10/17/2019								6.14	
10/18/2019	4.71	6.26	6	6.35					
3/2/2020						5.77			
3/4/2020	4.64								
3/9/2020		6.34	6.12	6.37	6.41		6.12	6.23	6.6
8/11/2020						5.96			
8/13/2020	4.65	6.34	6.05	6.39	6.17		6.26	6.28	6.63
9/22/2020					6.43	6.06			
9/23/2020	4.78						6.08	6.23	6.6
9/24/2020		6.3	6.05						
9/25/2020				6.38					
3/1/2021						5.8			
3/8/2021	4.79								
3/10/2021							6.13		6.74
3/11/2021		6.49	6.22	6.66				6.28	
3/12/2021					6.38				

Prediction Limit

Constituent: pH, Field (SU) Analysis Run 4/16/2023 12:46 PM View: Appendix III

Plant McDonough Client: Southern Company Data: McDonough AP

	DGWC-40	DGWC-37	DGWC-38	DGWC-39	DGWA-53 (bg)	DGWA-71 (bg)	DGWC-69	DGWC-67	DGWC-68A
9/8/2021						5.76			
9/9/2021					6.41				
9/14/2021	4.67								
9/15/2021			6.08						
9/16/2021		6.33					6.16	6.2	6.79 (o)
9/17/2021				6.49					
10/27/2021									6.56
1/18/2022						5.51			
1/19/2022	4.66							6.21	
1/20/2022				6.52					
1/21/2022		6.31	6.08						
1/25/2022							6.02		6.53
1/28/2022					6.35				
9/7/2022	4.54			6.43		5.65	6.2		6.62
9/8/2022		6.3			6.32			6.21	
9/9/2022		6.3							
9/12/2022			6.05						
1/31/2023						5.78			
2/1/2023	4.66				6.42		6.12		6.6
2/2/2023		6.23	6.08					6.27	
2/3/2023				6.49					

Prediction Limit

Constituent: pH, Field (SU) Analysis Run 4/16/2023 12:46 PM View: Appendix III

Plant McDonough Client: Southern Company Data: McDonough AP

	DGWA-70A (bg)
9/2/2016	
9/8/2016	
12/7/2016	
12/8/2016	
3/28/2017	
3/30/2017	
3/31/2017	
4/12/2017	
5/11/2017	
5/12/2017	
5/15/2017	5.72
6/15/2017	5.74
6/16/2017	
7/11/2017	5.62
7/12/2017	
7/13/2017	
8/8/2017	5.6
10/24/2017	5.71
10/26/2017	
11/15/2017	
2/27/2018	5.5
3/1/2018	
3/2/2018	
3/8/2018	
7/10/2018	5.44
7/12/2018	
7/13/2018	
11/6/2018	5.71
11/7/2018	
11/8/2018	
3/12/2019	5.52
3/13/2019	
8/27/2019	5.53
8/28/2019	
10/15/2019	5.61
10/16/2019	
10/17/2019	
10/18/2019	
3/2/2020	5.54
3/4/2020	
3/9/2020	
8/11/2020	5.86
8/13/2020	
9/22/2020	6.01
9/23/2020	
9/24/2020	
9/25/2020	
3/1/2021	5.43
3/8/2021	
3/10/2021	
3/11/2021	
3/12/2021	

Prediction Limit

Constituent: pH, Field (SU) Analysis Run 4/16/2023 12:46 PM View: Appendix III

Plant McDonough Client: Southern Company Data: McDonough AP

	DGWA-70A (bg)
9/8/2021	
9/9/2021	5.5
9/14/2021	
9/15/2021	
9/16/2021	
9/17/2021	
10/27/2021	
1/18/2022	5.5
1/19/2022	
1/20/2022	
1/21/2022	
1/25/2022	
1/28/2022	
9/7/2022	5.6
9/8/2022	
9/9/2022	
9/12/2022	
1/31/2023	5.59
2/1/2023	
2/2/2023	
2/3/2023	

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 4/16/2023 12:46 PM View: Appendix III

Plant McDonough Client: Southern Company Data: McDonough AP

	DGWC-40	DGWC-39	DGWC-38	DGWC-37	DGWA-71 (bg)	DGWA-70A (bg)	DGWA-53 (bg)	DGWC-67	DGWC-69
9/2/2016	230								
9/8/2016		280	270	97					
12/7/2016		250	250	100					
12/8/2016	270								
3/28/2017					17	2.7	49		
3/30/2017	240	310	290	110					
3/31/2017								110	21
5/11/2017							21		
5/12/2017					17			100	17
5/15/2017						1			
6/15/2017						0.86 (J)	16		
6/16/2017					11			100	20
7/11/2017					11	1.4			
7/12/2017							10		
7/13/2017	220	220	270	200 (O)				110	17
8/8/2017						1.5			
10/24/2017					9.6	1.4	15		
10/26/2017	220	210	260	97				100	31
11/15/2017					7.8		3.8		29
2/27/2018					7.4	0.54 (J)			
3/1/2018		166	242	94.6					
3/2/2018	219							98.5	10.1
3/8/2018							9.7		
7/12/2018	222	169	256	89.2			8		
7/13/2018								136	8.6
11/6/2018					7.3	<1 (J)			
11/7/2018							12.8		
11/8/2018	273	200	291	102				118	9.7
3/12/2019					7	0.35 (J)			
3/13/2019	445	265	300	92.2			23.7	233	8.4
10/15/2019					7.4	0.16 (J)			
10/16/2019							15.1		13.3
10/17/2019								99.4	
10/18/2019	205	182	239	76.4					
3/2/2020					8.5	<1			
3/4/2020	177								
3/9/2020		171	244	90.3			9.5	100	7.6
9/22/2020					6.5	<1	13.5		
9/23/2020	190							99.8	5.9
9/24/2020			240	84.1					
9/25/2020		153							
3/1/2021					5.2	<1			
3/8/2021	191								
3/10/2021									6.4
3/11/2021		123	154	81.9				76.7	
3/12/2021							8.8		
9/8/2021					6.1				
9/9/2021						<1	11.9		
9/14/2021	186								
9/15/2021			219						
9/16/2021				95				101	17.9
9/17/2021		156							

ND substitution: RL or RL/2 if <15% NDs. Substitution method for trace values of the form <PQL(J): PQL.

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 4/16/2023 12:46 PM View: Appendix III

Plant McDonough Client: Southern Company Data: McDonough AP

	DGWC-40	DGWC-39	DGWC-38	DGWC-37	DGWA-71 (bg)	DGWA-70A (bg)	DGWA-53 (bg)	DGWC-67	DGWC-69
1/18/2022					6.3	<1			
1/19/2022	177							97.2	
1/20/2022		123							
1/21/2022			188	89.8					
1/25/2022									7.1
1/28/2022							13.1		
9/7/2022	203	146			7	<1			11.6
9/8/2022				96.6			12	117	
9/12/2022			234						
1/31/2023					6.8	<1			
2/1/2023	189						13.3		6.9
2/2/2023			239	94.3				117	
2/3/2023		115							

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 4/16/2023 12:46 PM View: Appendix III

Plant McDonough Client: Southern Company Data: McDonough AP

	DGWC-68A
9/2/2016	
9/8/2016	
12/7/2016	
12/8/2016	
3/28/2017	
3/30/2017	
3/31/2017	
5/11/2017	
5/12/2017	50
5/15/2017	
6/15/2017	
6/16/2017	47
7/11/2017	
7/12/2017	
7/13/2017	49
8/8/2017	48
10/24/2017	
10/26/2017	48
11/15/2017	
2/27/2018	
3/1/2018	
3/2/2018	44.7
3/8/2018	
7/12/2018	
7/13/2018	43.3
11/6/2018	
11/7/2018	
11/8/2018	43.5
3/12/2019	
3/13/2019	44.1
10/15/2019	
10/16/2019	32.1
10/17/2019	
10/18/2019	
3/2/2020	
3/4/2020	
3/9/2020	37.4
9/22/2020	
9/23/2020	38.7
9/24/2020	
9/25/2020	
3/1/2021	
3/8/2021	
3/10/2021	38.4
3/11/2021	
3/12/2021	
9/8/2021	
9/9/2021	
9/14/2021	
9/15/2021	
9/16/2021	22.3
9/17/2021	

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 4/16/2023 12:46 PM View: Appendix III

Plant McDonough Client: Southern Company Data: McDonough AP

	DGWC-68A
1/18/2022	
1/19/2022	
1/20/2022	
1/21/2022	
1/25/2022	36.3
1/28/2022	
9/7/2022	36.5
9/8/2022	
9/12/2022	
1/31/2023	
2/1/2023	35.6
2/2/2023	
2/3/2023	

Prediction Limit

Constituent: Total Dissolved Solids (mg/L) Analysis Run 4/16/2023 12:46 PM View: Appendix III

Plant McDonough Client: Southern Company Data: McDonough AP

	DGWC-39	DGWC-38	DGWC-37	DGWC-40	DGWA-71 (bg)	DGWA-70A (bg)	DGWA-53 (bg)	DGWC-69	DGWC-67
9/2/2016				583 (O)					
9/8/2016	522	437	279						
12/7/2016	565	478	300						
12/8/2016				319					
3/28/2017					90	39	202		
3/30/2017	496	448	273	344					
3/31/2017								138	270
5/11/2017							241		
5/12/2017					92			243	287
5/15/2017						88			
6/15/2017						65	251		
6/16/2017					100			155	309
7/11/2017					59	25			
7/12/2017							218		
7/13/2017	508	504	312	386				122	275
8/8/2017						53			
10/24/2017					117	49	671 (O)		
10/26/2017	532	554	340	373				234	319
11/15/2017					90		241	188	
2/27/2018					79	43			
3/1/2018	440	492	311						
3/2/2018				359				73	264
3/8/2018							213		
7/12/2018	463	478	290	365			198		
7/13/2018								95	297
11/6/2018					85	65			
11/7/2018							200		
11/8/2018	485	507	295	399				112	295
3/12/2019					74	43			
3/13/2019	526	487	286	351			201	95	278
10/15/2019					89	70			
10/16/2019							126	108	
10/17/2019									281
10/18/2019	489	494	269	360					
3/2/2020					67	52			
3/4/2020				400					
3/9/2020	508	554	357				171	115	209
9/22/2020					74	46	142		
9/23/2020				357				102	296
9/24/2020		489	280						
9/25/2020	460								
3/1/2021					62	25			
3/8/2021				346					
3/10/2021								78	
3/11/2021	440	463	255						265
3/12/2021							124		
9/8/2021					75				
9/9/2021						53	131		
9/14/2021				347					
9/15/2021		474							
9/16/2021			278					113	282
9/17/2021	446								

Prediction Limit

Constituent: Total Dissolved Solids (mg/L) Analysis Run 4/16/2023 12:46 PM View: Appendix III

Plant McDonough Client: Southern Company Data: McDonough AP

	DGWC-39	DGWC-38	DGWC-37	DGWC-40	DGWA-71 (bg)	DGWA-70A (bg)	DGWA-53 (bg)	DGWC-69	DGWC-67
1/18/2022					76	54			
1/19/2022				336					272
1/20/2022	416								
1/21/2022		482	316						
1/25/2022								84	
1/28/2022							155		
9/7/2022	449			339	82	34		102	
9/8/2022			300				129		252
9/12/2022		468							
1/31/2023					87	163			
2/1/2023				343			116	79	
2/2/2023		478	302						317
2/3/2023	382								

Prediction Limit

Constituent: Total Dissolved Solids (mg/L) Analysis Run 4/16/2023 12:46 PM View: Appendix III

Plant McDonough Client: Southern Company Data: McDonough AP

	DGWC-68A
9/2/2016	
9/8/2016	
12/7/2016	
12/8/2016	
3/28/2017	
3/30/2017	
3/31/2017	
5/11/2017	
5/12/2017	300
5/15/2017	
6/15/2017	
6/16/2017	271
7/11/2017	
7/12/2017	
7/13/2017	246
8/8/2017	278
10/24/2017	
10/26/2017	287
11/15/2017	
2/27/2018	
3/1/2018	
3/2/2018	252
3/8/2018	
7/12/2018	
7/13/2018	275
11/6/2018	
11/7/2018	
11/8/2018	277
3/12/2019	
3/13/2019	267
10/15/2019	
10/16/2019	218
10/17/2019	
10/18/2019	
3/2/2020	
3/4/2020	
3/9/2020	188
9/22/2020	
9/23/2020	251
9/24/2020	
9/25/2020	
3/1/2021	
3/8/2021	
3/10/2021	232
3/11/2021	
3/12/2021	
9/8/2021	
9/9/2021	
9/14/2021	
9/15/2021	
9/16/2021	259
9/17/2021	

Prediction Limit

Constituent: Total Dissolved Solids (mg/L) Analysis Run 4/16/2023 12:46 PM View: Appendix III

Plant McDonough Client: Southern Company Data: McDonough AP

	DGWC-68A
1/18/2022	
1/19/2022	
1/20/2022	
1/21/2022	
1/25/2022	259
1/28/2022	
9/7/2022	256
9/8/2022	
9/12/2022	
1/31/2023	
2/1/2023	243
2/2/2023	
2/3/2023	

FIGURE E.

Appendix III - Trend Tests - Significant Results

Plant McDonough Client: Southern Company Data: McDonough AP Printed 4/16/2023, 12:53 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Boron (mg/L)	**DGWC-39**	**-0.1193**	**-70**	**-63**	**Yes**	**17**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	**DGWC-40**	**-0.02842**	**-71**	**-63**	**Yes**	**17**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	**DGWC-67**	**0.1112**	**67**	**63**	**Yes**	**17**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**DGWA-53 (bg)**	**-3.645**	**-92**	**-63**	**Yes**	**17**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**DGWC-67**	**1.118**	**72**	**63**	**Yes**	**17**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**DGWC-68A**	**1.769**	**72**	**63**	**Yes**	**17**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	**DGWA-53 (bg)**	**-0.1584**	**-92**	**-68**	**Yes**	**18**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	**DGWC-40**	**-0.5581**	**-75**	**-63**	**Yes**	**17**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	**DGWC-67**	**0.5945**	**116**	**63**	**Yes**	**17**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**DGWA-71 (bg)**	**-0.9093**	**-96**	**-63**	**Yes**	**17**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**DGWC-38**	**-7.515**	**-68**	**-63**	**Yes**	**17**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**DGWC-39**	**-22.12**	**-97**	**-63**	**Yes**	**17**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**DGWC-40**	**-9.349**	**-70**	**-63**	**Yes**	**17**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**DGWC-68A**	**-2.694**	**-99**	**-63**	**Yes**	**17**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Total Dissolved Solids (mg/L)	**DGWA-53 (bg)**	**-20.92**	**-95**	**-63**	**Yes**	**17**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Total Dissolved Solids (mg/L)	**DGWC-39**	**-17.62**	**-76**	**-63**	**Yes**	**17**	**0**	**n/a**	**n/a**	**0.01**	**NP**

Appendix III - Trend Tests - All Results

Plant McDonough Client: Southern Company Data: McDonough AP Printed 4/16/2023, 12:53 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Boron (mg/L)	DGWA-53 (bg)	-0.003677	-55	-63	No	17	0	n/a	n/a	0.01	NP
Boron (mg/L)	DGWA-70A (bg)	0	15	63	No	17	52.94	n/a	n/a	0.01	NP
Boron (mg/L)	DGWA-71 (bg)	0.0003125	18	58	No	16	25	n/a	n/a	0.01	NP
Boron (mg/L)	DGWC-37	-0.04117	-36	-63	No	17	0	n/a	n/a	0.01	NP
Boron (mg/L)	DGWC-38	-0.05736	-52	-63	No	17	0	n/a	n/a	0.01	NP
Boron (mg/L)	**DGWC-39**	**-0.1193**	**-70**	**-63**	**Yes**	**17**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	**DGWC-40**	**-0.02842**	**-71**	**-63**	**Yes**	**17**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	**DGWC-67**	**0.1112**	**67**	**63**	**Yes**	**17**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	DGWC-68A	-0.03824	-30	-63	No	17	0	n/a	n/a	0.01	NP
Calcium (mg/L)	**DGWA-53 (bg)**	**-3.645**	**-92**	**-63**	**Yes**	**17**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	DGWA-70A (bg)	0	0	63	No	17	5.882	n/a	n/a	0.01	NP
Calcium (mg/L)	DGWA-71 (bg)	-0.365	-43	-58	No	16	6.25	n/a	n/a	0.01	NP
Calcium (mg/L)	DGWC-37	0.9897	43	63	No	17	0	n/a	n/a	0.01	NP
Calcium (mg/L)	DGWC-38	1.684	52	63	No	17	0	n/a	n/a	0.01	NP
Calcium (mg/L)	DGWC-39	-0.01748	-1	-63	No	17	0	n/a	n/a	0.01	NP
Calcium (mg/L)	DGWC-40	0.385	27	63	No	17	0	n/a	n/a	0.01	NP
Calcium (mg/L)	**DGWC-67**	**1.118**	**72**	**63**	**Yes**	**17**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**DGWC-68A**	**1.769**	**72**	**63**	**Yes**	**17**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	**DGWA-53 (bg)**	**-0.1584**	**-92**	**-68**	**Yes**	**18**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	DGWA-70A (bg)	-0.05005	-42	-63	No	17	0	n/a	n/a	0.01	NP
Chloride (mg/L)	DGWA-71 (bg)	0.4815	54	63	No	17	0	n/a	n/a	0.01	NP
Chloride (mg/L)	DGWC-38	0.1529	63	63	No	17	0	n/a	n/a	0.01	NP
Chloride (mg/L)	**DGWC-40**	**-0.5581**	**-75**	**-63**	**Yes**	**17**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	**DGWC-67**	**0.5945**	**116**	**63**	**Yes**	**17**	**0**	**n/a**	**n/a**	**0.01**	**NP**
pH, Field (SU)	DGWA-53 (bg)	0.02167	23	81	No	20	0	n/a	n/a	0.01	NP
pH, Field (SU)	DGWA-70A (bg)	-0.02248	-34	-74	No	19	0	n/a	n/a	0.01	NP
pH, Field (SU)	DGWA-71 (bg)	0.000959	2	81	No	20	0	n/a	n/a	0.01	NP
pH, Field (SU)	DGWC-40	-0.02164	-53	-74	No	19	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	DGWA-53 (bg)	-0.5457	-29	-68	No	18	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	DGWA-70A (bg)	0	-25	-63	No	17	47.06	n/a	n/a	0.01	NP
Sulfate (mg/L)	**DGWA-71 (bg)**	**-0.9093**	**-96**	**-63**	**Yes**	**17**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	DGWC-37	-1.865	-39	-58	No	16	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	**DGWC-38**	**-7.515**	**-68**	**-63**	**Yes**	**17**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**DGWC-39**	**-22.12**	**-97**	**-63**	**Yes**	**17**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**DGWC-40**	**-9.349**	**-70**	**-63**	**Yes**	**17**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	DGWC-67	-0.02967	-8	-63	No	17	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	**DGWC-68A**	**-2.694**	**-99**	**-63**	**Yes**	**17**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Total Dissolved Solids (mg/L)	**DGWA-53 (bg)**	**-20.92**	**-95**	**-63**	**Yes**	**17**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Total Dissolved Solids (mg/L)	DGWA-70A (bg)	0.1124	4	63	No	17	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	DGWA-71 (bg)	-2.859	-36	-63	No	17	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	DGWC-37	-0.8828	-3	-63	No	17	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	DGWC-38	-1.003	-6	-63	No	17	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	**DGWC-39**	**-17.62**	**-76**	**-63**	**Yes**	**17**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Total Dissolved Solids (mg/L)	DGWC-40	-4.124	-30	-58	No	16	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	DGWC-67	-2.691	-16	-63	No	17	0	n/a	n/a	0.01	NP

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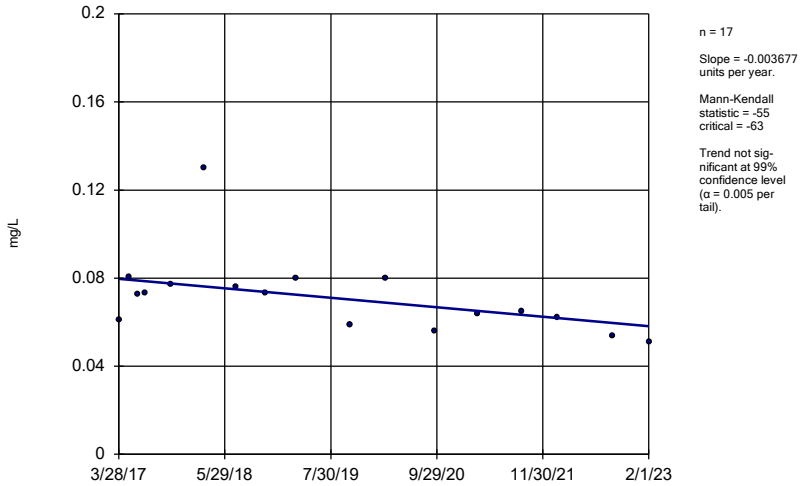
Sen's Slope Estimator

DGWA-53 (bg)



n = 17

Slope = -0.003677 units per year.

Mann-Kendall statistic = -55
critical = -63

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 4/16/2023 12:46 PM View: Appendix III - Trend Test
Plant McDonough Client: Southern Company Data: McDonough AP

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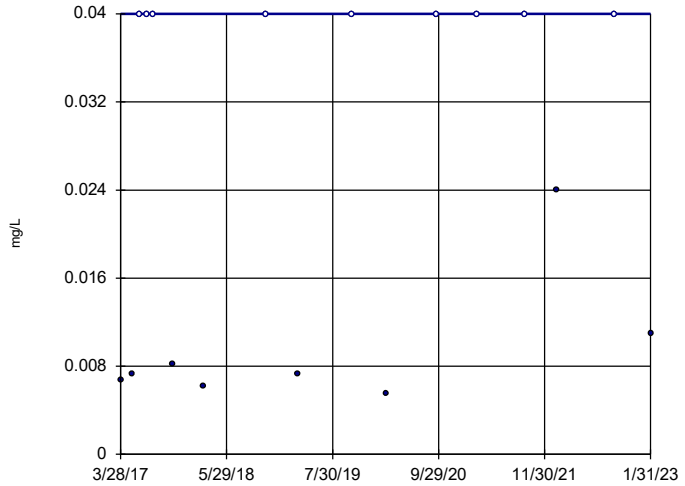
Hollow symbols indicate censored values.

Sen's Slope Estimator

DGWA-70A (bg)



n = 17

Slope = 0 units per year.

Mann-Kendall statistic = 15
critical = 63

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 4/16/2023 12:46 PM View: Appendix III - Trend Test
Plant McDonough Client: Southern Company Data: McDonough AP

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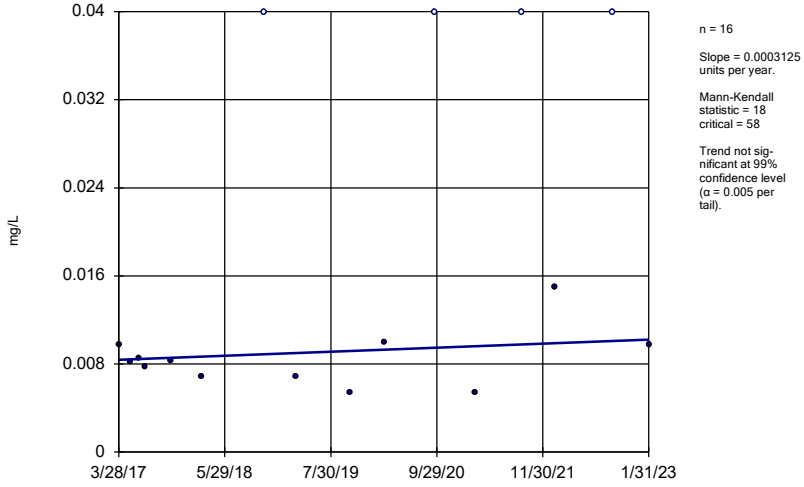
Hollow symbols indicate censored values.

Sen's Slope Estimator

DGWA-71 (bg)



n = 16

Slope = 0.0003125 units per year.

Mann-Kendall statistic = 18
critical = 58

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 4/16/2023 12:46 PM View: Appendix III - Trend Test
Plant McDonough Client: Southern Company Data: McDonough AP

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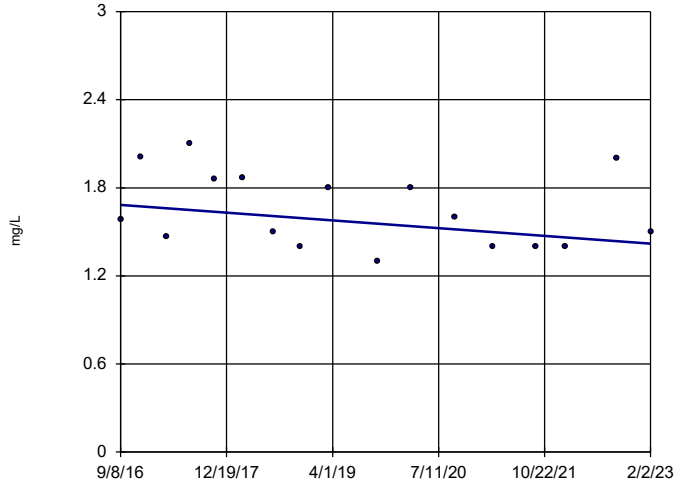
Sen's Slope Estimator

DGWC-37



n = 17

Slope = -0.04117 units per year.

Mann-Kendall statistic = -36
critical = -63

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 4/16/2023 12:46 PM View: Appendix III - Trend Test
Plant McDonough Client: Southern Company Data: McDonough AP

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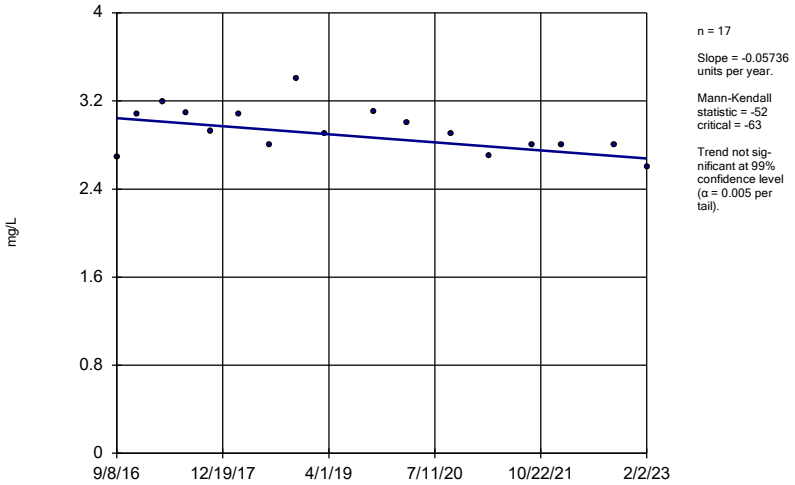
Sen's Slope Estimator

DGWC-38



n = 17

Slope = -0.05736 units per year.

Mann-Kendall statistic = -52
critical = -63

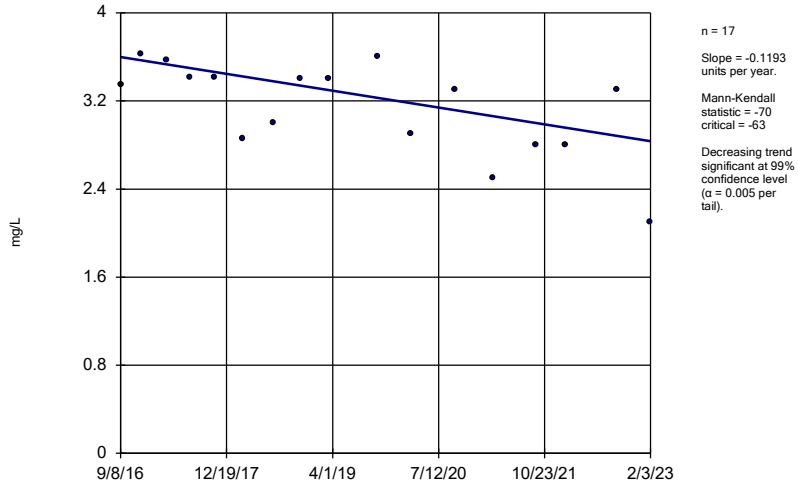
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 4/16/2023 12:46 PM View: Appendix III - Trend Test
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.9.6.37 . UG

Sen's Slope Estimator

DGWC-39



n = 17

Slope = -0.1193 units per year.

Mann-Kendall statistic = -70
critical = -63

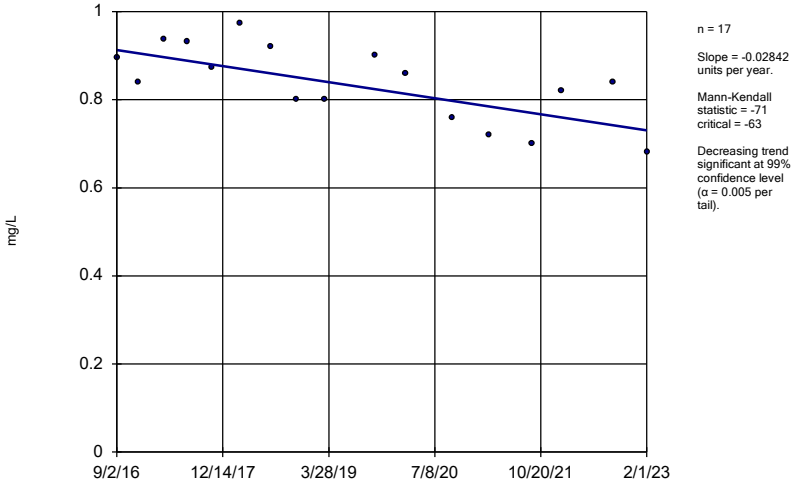
Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 4/16/2023 12:47 PM View: Appendix III - Trend Test
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.9.6.37 . UG

Sen's Slope Estimator

DGWC-40



n = 17

Slope = -0.02842 units per year.

Mann-Kendall statistic = -71
critical = -63

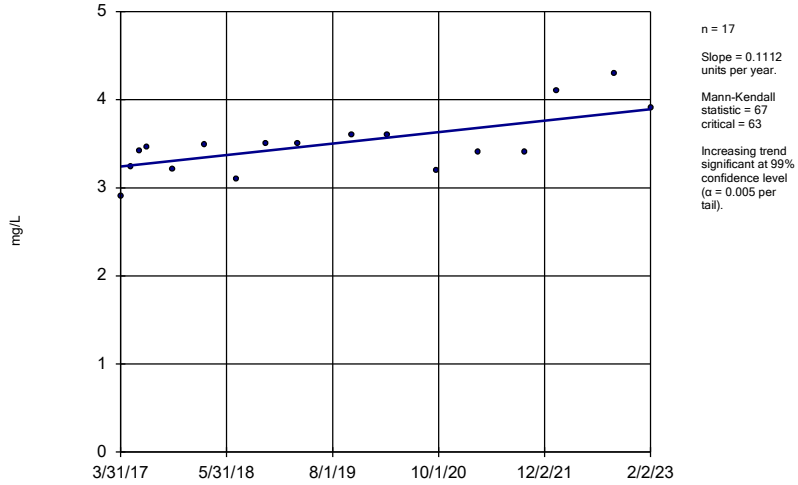
Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 4/16/2023 12:47 PM View: Appendix III - Trend Test
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.9.6.37 . UG

Sen's Slope Estimator

DGWC-67



n = 17

Slope = 0.1112 units per year.

Mann-Kendall statistic = 67
critical = 63

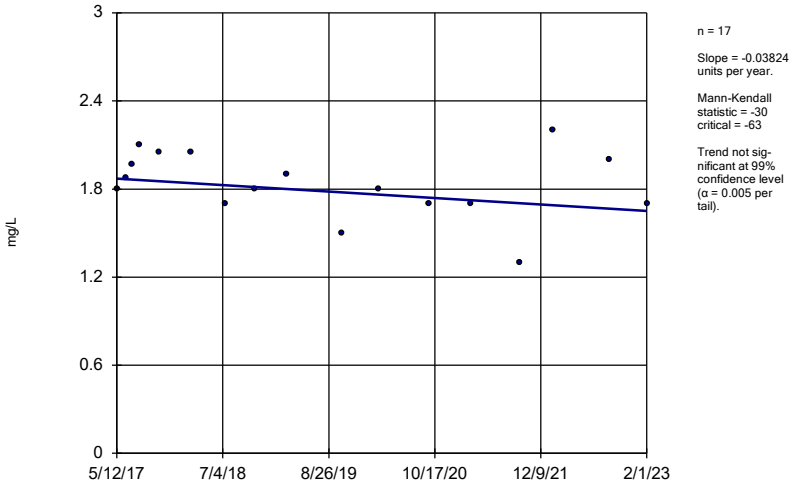
Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 4/16/2023 12:47 PM View: Appendix III - Trend Test
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.9.6.37 . UG

Sen's Slope Estimator

DGWC-68A



n = 17

Slope = -0.03824 units per year.

Mann-Kendall statistic = -30 critical = -63

Trend not significant at 99% confidence level (α = 0.005 per tail).

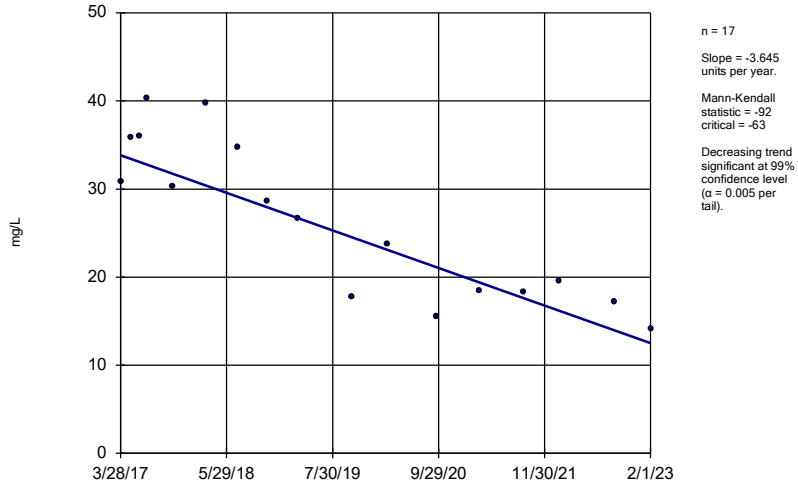
Constituent: Boron Analysis Run 4/16/2023 12:47 PM View: Appendix III - Trend Test

Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.9.6.37 . UG

Sen's Slope Estimator

DGWA-53 (bg)



n = 17

Slope = -3.645 units per year.

Mann-Kendall statistic = -92 critical = -63

Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 4/16/2023 12:47 PM View: Appendix III - Trend Test

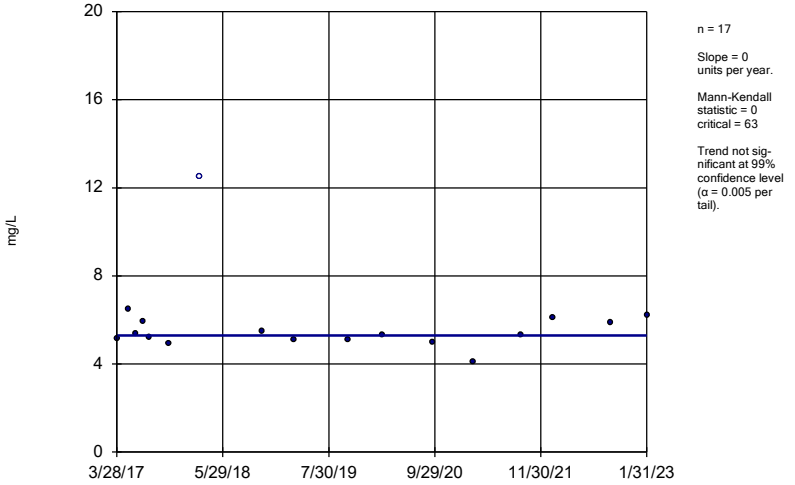
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.9.6.37 . UG

Hollow symbols indicate censored values.

Sen's Slope Estimator

DGWA-70A (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: Calcium Analysis Run 4/16/2023 12:47 PM View: Appendix III - Trend Test

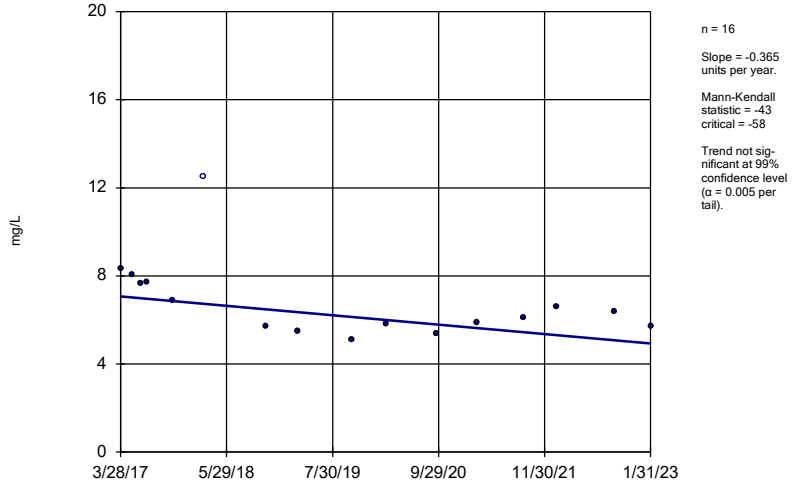
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.9.6.37 . UG

Hollow symbols indicate censored values.

Sen's Slope Estimator

DGWA-71 (bg)



n = 16

Slope = -0.365 units per year.

Mann-Kendall statistic = -43 critical = -58

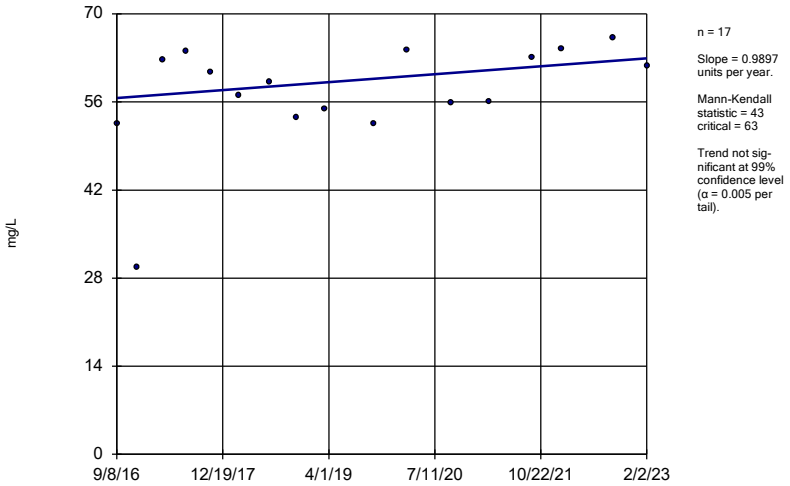
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 4/16/2023 12:47 PM View: Appendix III - Trend Test

Plant McDonough Client: Southern Company Data: McDonough AP

Sen's Slope Estimator

DGWC-37



n = 17

Slope = 0.9897 units per year.

Mann-Kendall statistic = 43
critical = 63

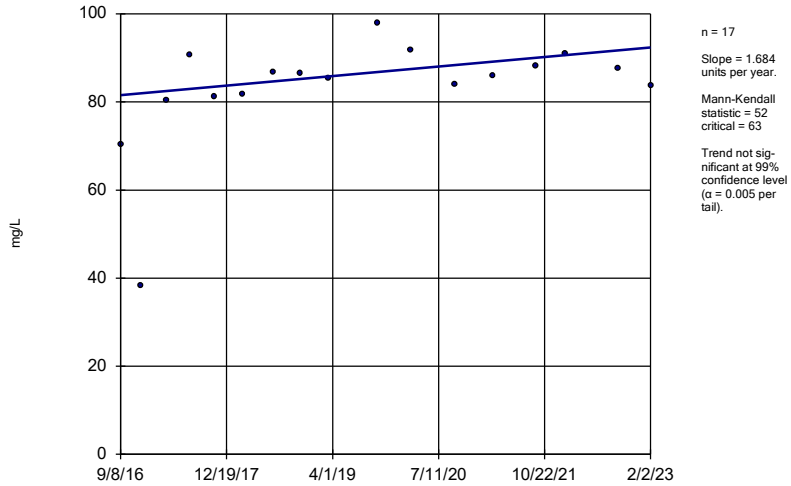
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 4/16/2023 12:47 PM View: Appendix III - Trend Test
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.9.6.37 . UG

Sen's Slope Estimator

DGWC-38



n = 17

Slope = 1.684 units per year.

Mann-Kendall statistic = 52
critical = 63

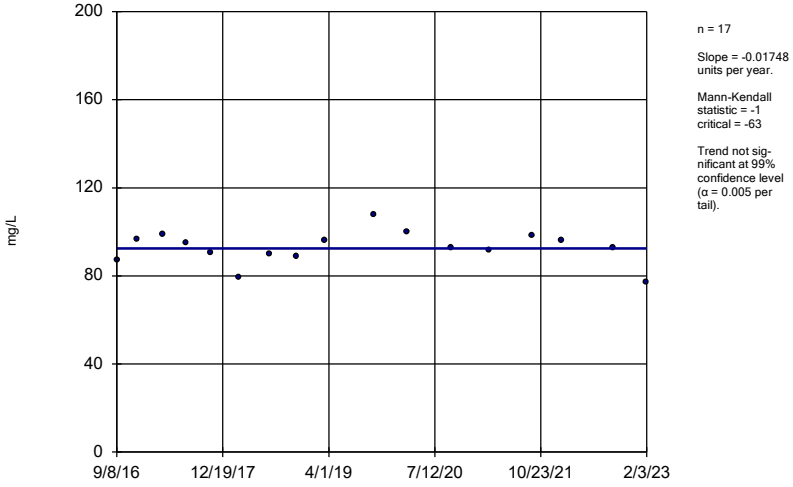
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 4/16/2023 12:47 PM View: Appendix III - Trend Test
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.9.6.37 . UG

Sen's Slope Estimator

DGWC-39



n = 17

Slope = -0.01748 units per year.

Mann-Kendall statistic = -1
critical = -63

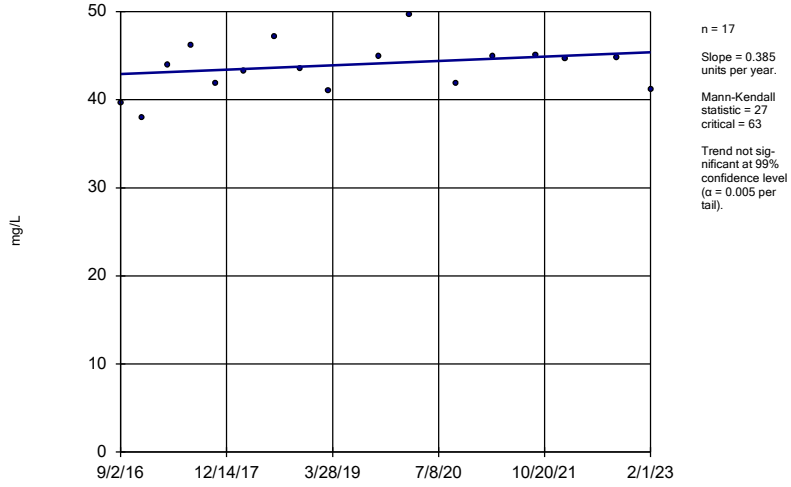
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 4/16/2023 12:47 PM View: Appendix III - Trend Test
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.9.6.37 . UG

Sen's Slope Estimator

DGWC-40



n = 17

Slope = 0.385 units per year.

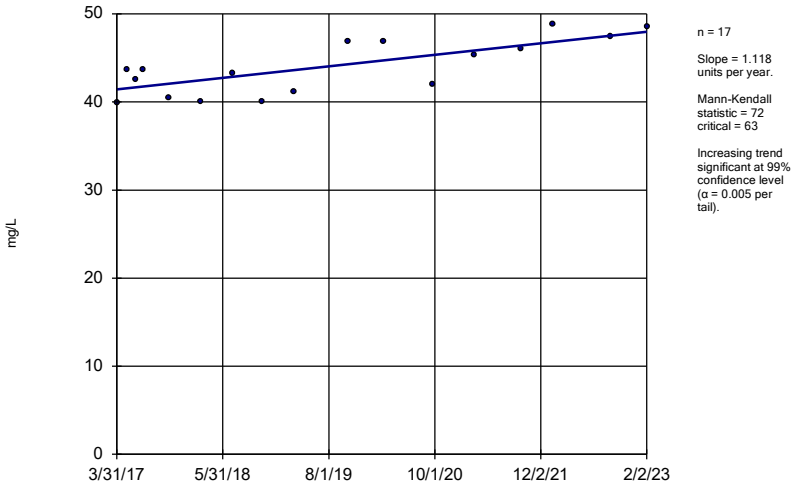
Mann-Kendall statistic = 27
critical = 63

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 4/16/2023 12:47 PM View: Appendix III - Trend Test
Plant McDonough Client: Southern Company Data: McDonough AP

Sen's Slope Estimator

DGWC-67



n = 17

Slope = 1.118 units per year.

Mann-Kendall statistic = 72
critical = 63

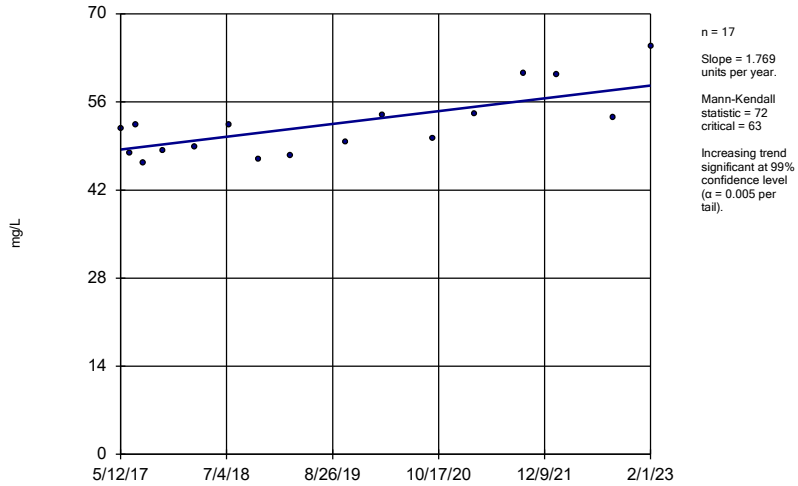
Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 4/16/2023 12:47 PM View: Appendix III - Trend Test
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.9.6.37 . UG

Sen's Slope Estimator

DGWC-68A



n = 17

Slope = 1.769 units per year.

Mann-Kendall statistic = 72
critical = 63

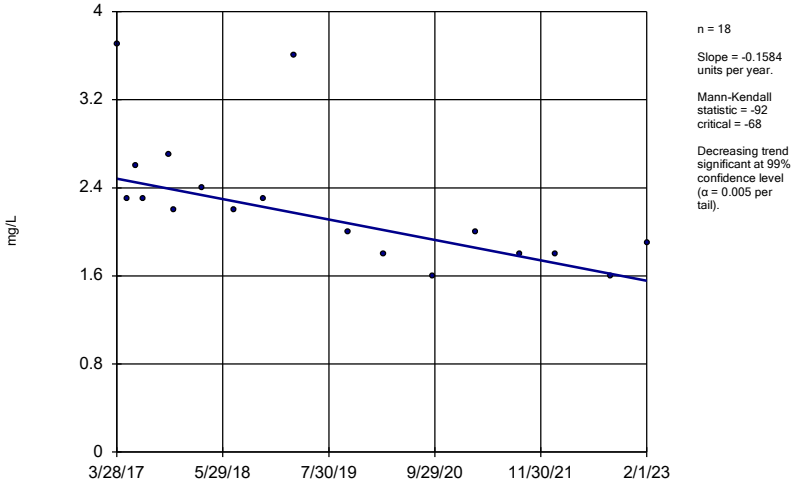
Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 4/16/2023 12:47 PM View: Appendix III - Trend Test
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.9.6.37 . UG

Sen's Slope Estimator

DGWA-53 (bg)



n = 18

Slope = -0.1584 units per year.

Mann-Kendall statistic = -92
critical = -68

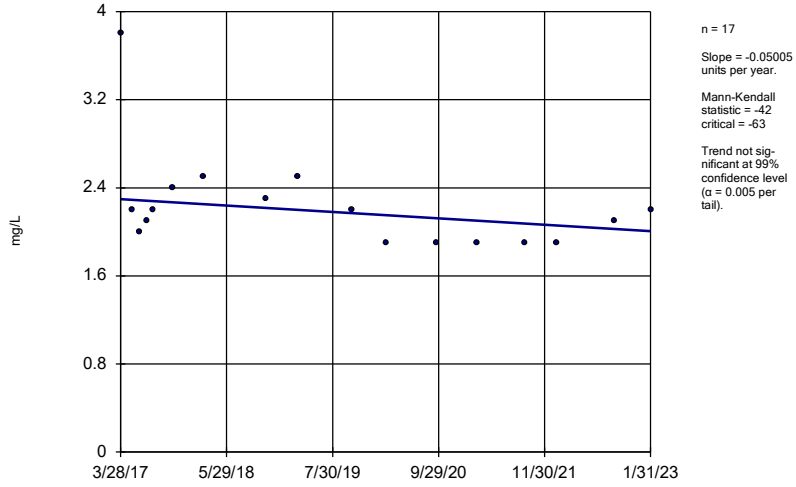
Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride Analysis Run 4/16/2023 12:47 PM View: Appendix III - Trend Test
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.9.6.37 . UG

Sen's Slope Estimator

DGWA-70A (bg)



n = 17

Slope = -0.05005 units per year.

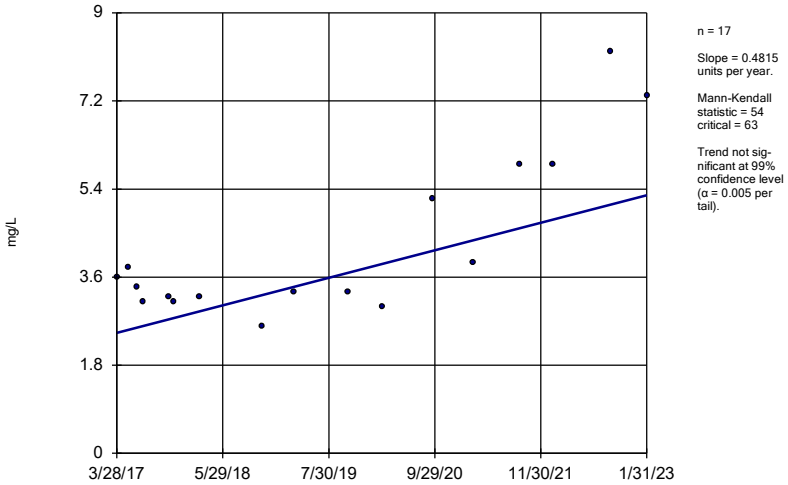
Mann-Kendall statistic = -42
critical = -63

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride Analysis Run 4/16/2023 12:47 PM View: Appendix III - Trend Test
Plant McDonough Client: Southern Company Data: McDonough AP

Sen's Slope Estimator

DGWA-71 (bg)



n = 17

Slope = 0.4815 units per year.

Mann-Kendall statistic = 54
critical = 63

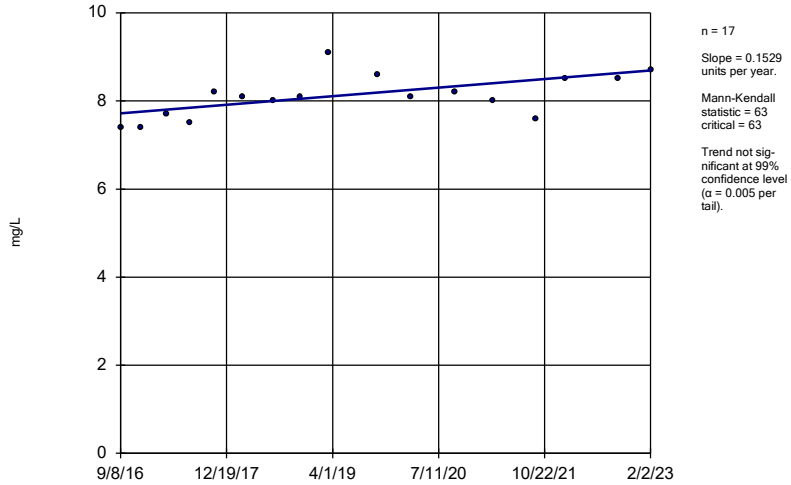
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride Analysis Run 4/16/2023 12:47 PM View: Appendix III - Trend Test
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.9.6.37 . UG

Sen's Slope Estimator

DGWC-38



n = 17

Slope = 0.1529 units per year.

Mann-Kendall statistic = 63
critical = 63

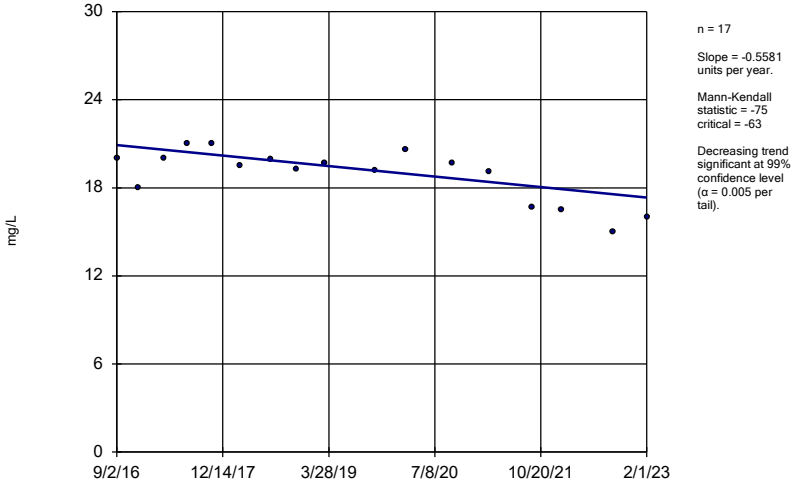
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride Analysis Run 4/16/2023 12:47 PM View: Appendix III - Trend Test
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.9.6.37 . UG

Sen's Slope Estimator

DGWC-40



n = 17

Slope = -0.5581 units per year.

Mann-Kendall statistic = -75
critical = -63

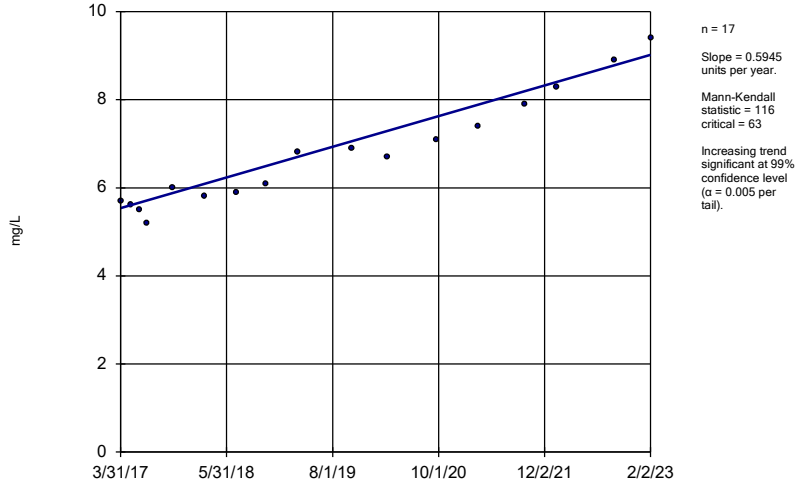
Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride Analysis Run 4/16/2023 12:47 PM View: Appendix III - Trend Test
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.9.6.37 . UG

Sen's Slope Estimator

DGWC-67



n = 17

Slope = 0.5945 units per year.

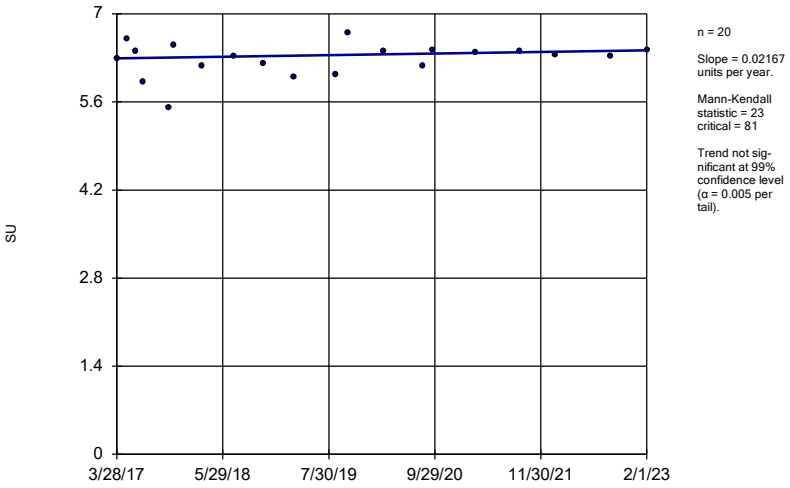
Mann-Kendall statistic = 116
critical = 63

Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride Analysis Run 4/16/2023 12:47 PM View: Appendix III - Trend Test
Plant McDonough Client: Southern Company Data: McDonough AP

Sen's Slope Estimator

DGWA-53 (bg)



n = 20

Slope = 0.02167 units per year.

Mann-Kendall statistic = 23
critical = 81

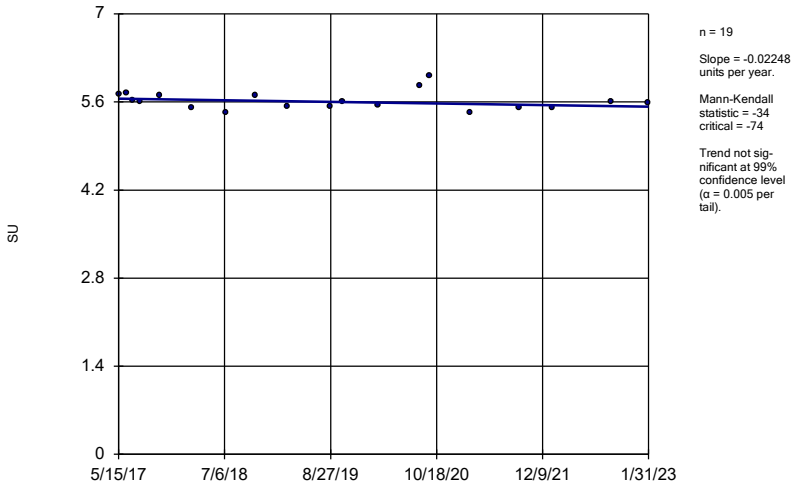
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: pH, Field Analysis Run 4/16/2023 12:47 PM View: Appendix III - Trend Test
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.9.6.37 . UG

Sen's Slope Estimator

DGWA-70A (bg)



n = 19

Slope = -0.02248 units per year.

Mann-Kendall statistic = -34
critical = -74

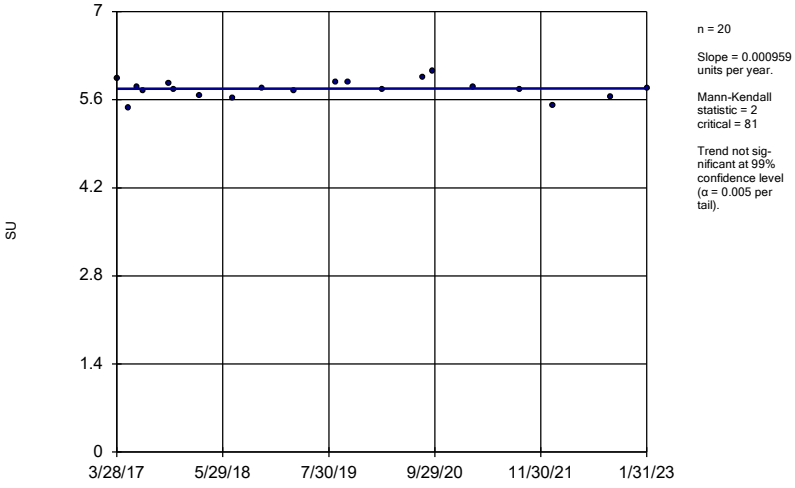
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: pH, Field Analysis Run 4/16/2023 12:47 PM View: Appendix III - Trend Test
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.9.6.37 . UG

Sen's Slope Estimator

DGWA-71 (bg)



n = 20

Slope = 0.000959 units per year.

Mann-Kendall statistic = 2
critical = 81

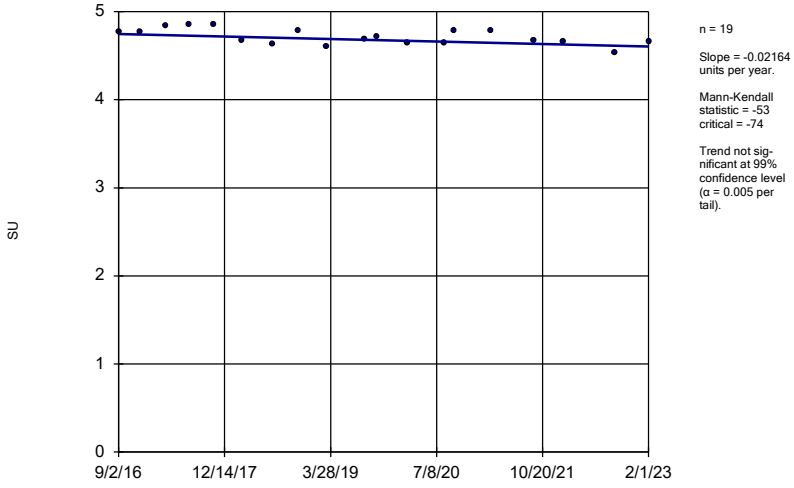
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: pH, Field Analysis Run 4/16/2023 12:47 PM View: Appendix III - Trend Test
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.9.6.37 . UG

Sen's Slope Estimator

DGWC-40



n = 19

Slope = -0.02164 units per year.

Mann-Kendall statistic = -53
critical = -74

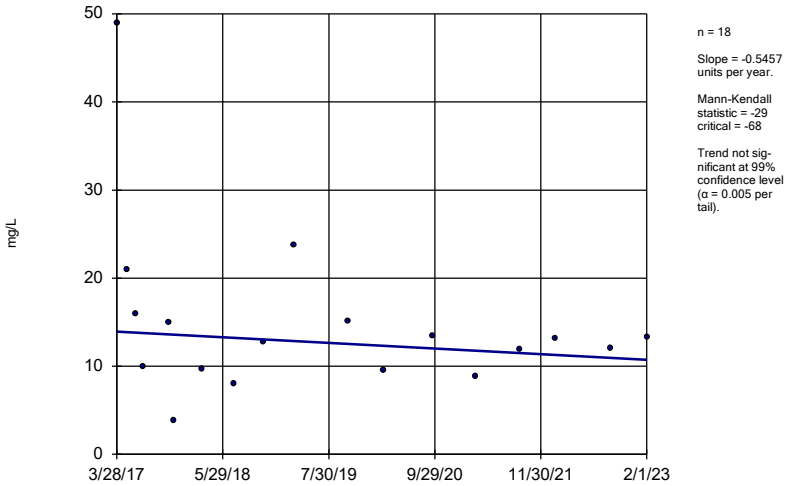
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: pH, Field Analysis Run 4/16/2023 12:47 PM View: Appendix III - Trend Test
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.9.6.37 . UG

Sen's Slope Estimator

DGWA-53 (bg)



n = 18

Slope = -0.5457 units per year.

Mann-Kendall statistic = -29 critical = -68

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 4/16/2023 12:47 PM View: Appendix III - Trend Test

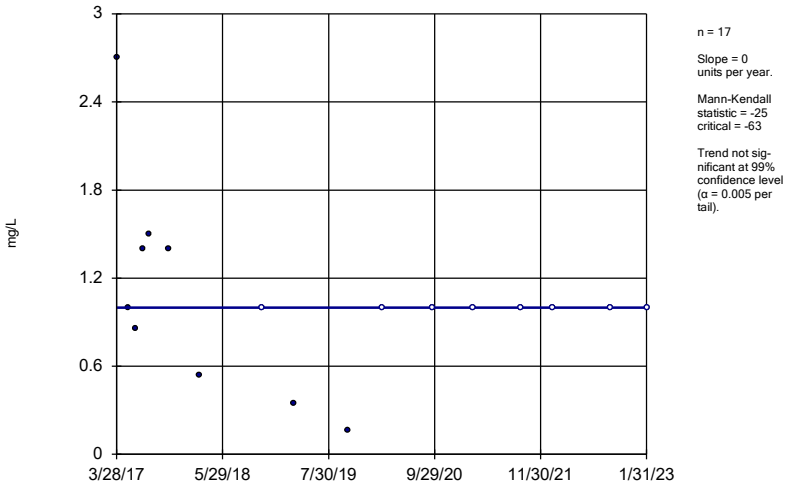
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.9.6.37 . UG

Hollow symbols indicate censored values.

Sen's Slope Estimator

DGWA-70A (bg)



n = 17

Slope = 0 units per year.

Mann-Kendall statistic = -25 critical = -63

Trend not significant at 99% confidence level (α = 0.005 per tail).

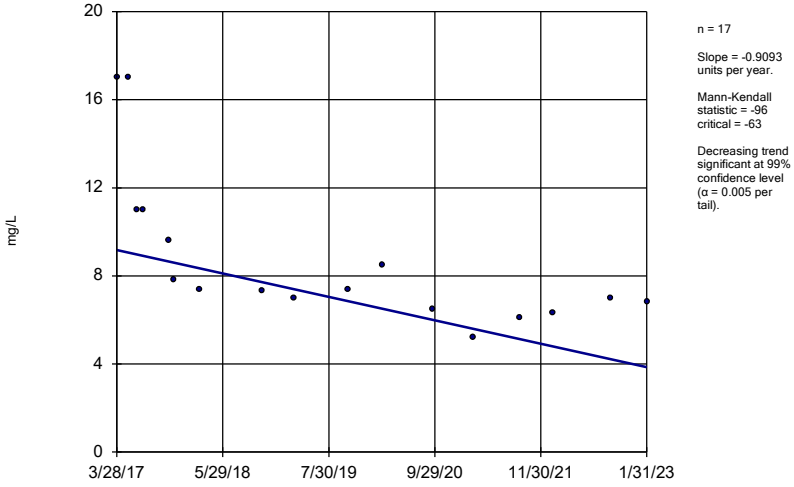
Constituent: Sulfate Analysis Run 4/16/2023 12:47 PM View: Appendix III - Trend Test

Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.9.6.37 . UG

Sen's Slope Estimator

DGWA-71 (bg)



n = 17

Slope = -0.9093 units per year.

Mann-Kendall statistic = -96 critical = -63

Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

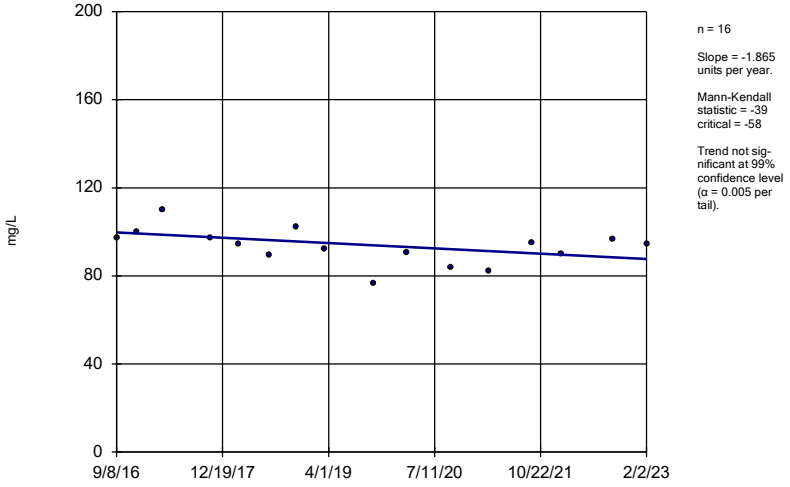
Constituent: Sulfate Analysis Run 4/16/2023 12:47 PM View: Appendix III - Trend Test

Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.9.6.37 . UG

Sen's Slope Estimator

DGWC-37



n = 16

Slope = -1.865 units per year.

Mann-Kendall statistic = -39 critical = -58

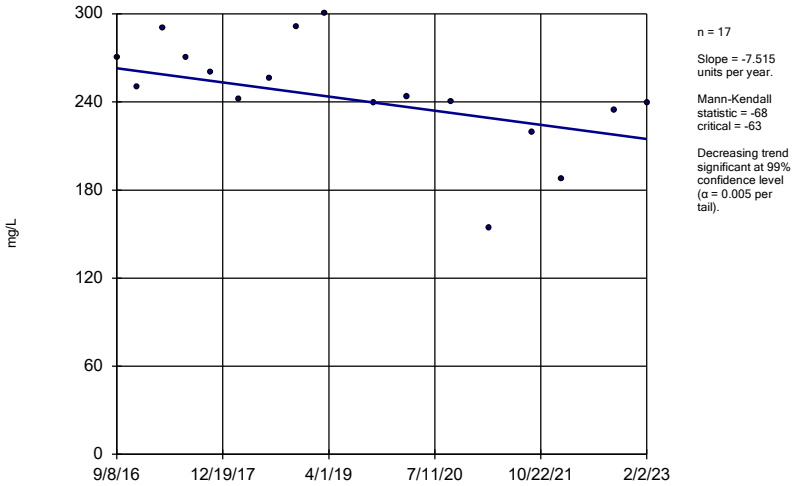
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 4/16/2023 12:47 PM View: Appendix III - Trend Test

Plant McDonough Client: Southern Company Data: McDonough AP

Sen's Slope Estimator

DGWC-38



n = 17

Slope = -7.515 units per year.

Mann-Kendall statistic = -68
critical = -63

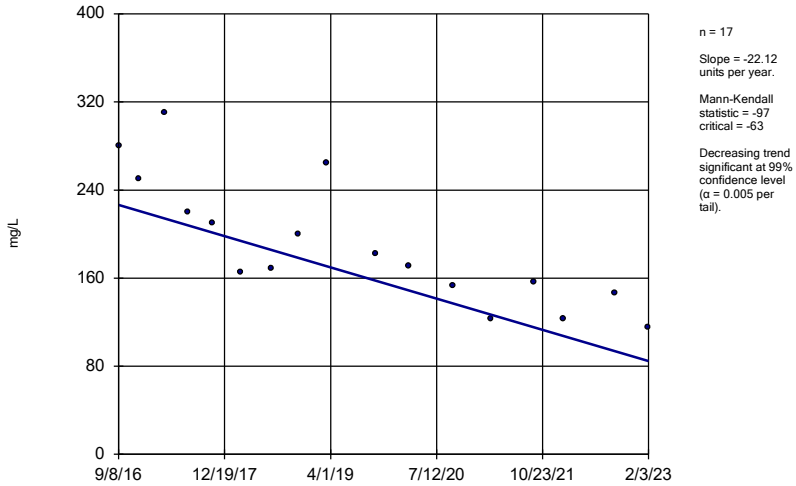
Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 4/16/2023 12:47 PM View: Appendix III - Trend Test
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.9.6.37 . UG

Sen's Slope Estimator

DGWC-39



n = 17

Slope = -22.12 units per year.

Mann-Kendall statistic = -97
critical = -63

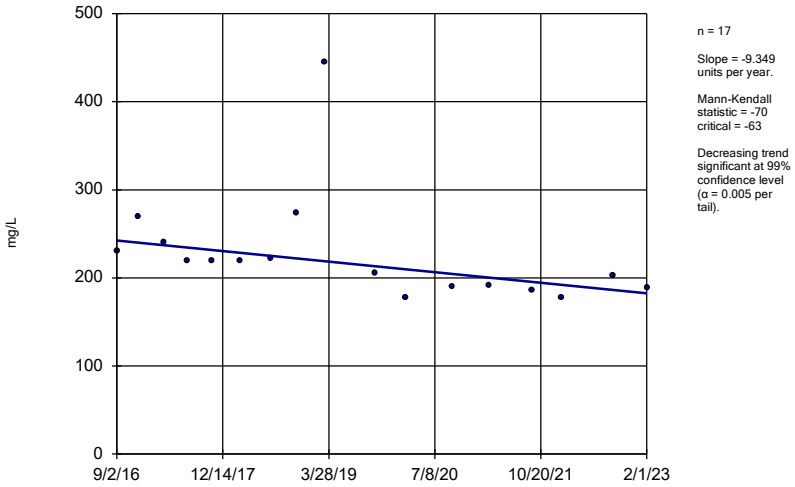
Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 4/16/2023 12:47 PM View: Appendix III - Trend Test
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.9.6.37 . UG

Sen's Slope Estimator

DGWC-40



n = 17

Slope = -9.349 units per year.

Mann-Kendall statistic = -70
critical = -63

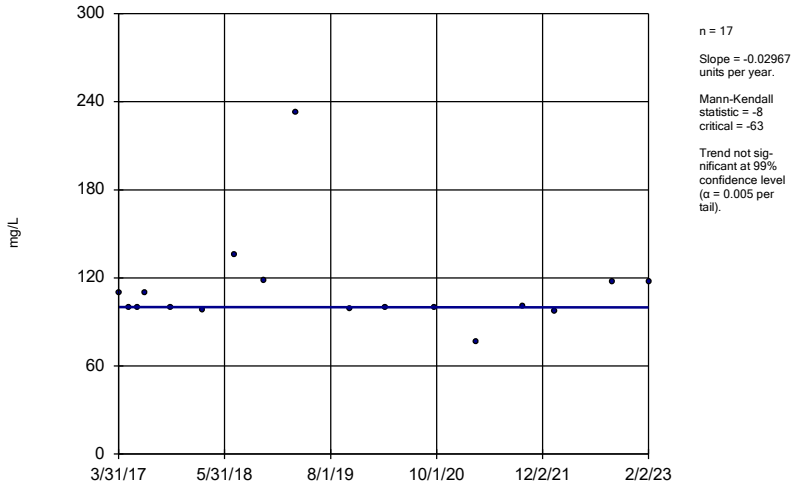
Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 4/16/2023 12:47 PM View: Appendix III - Trend Test
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.9.6.37 . UG

Sen's Slope Estimator

DGWC-67



n = 17

Slope = -0.02967 units per year.

Mann-Kendall statistic = -8
critical = -63

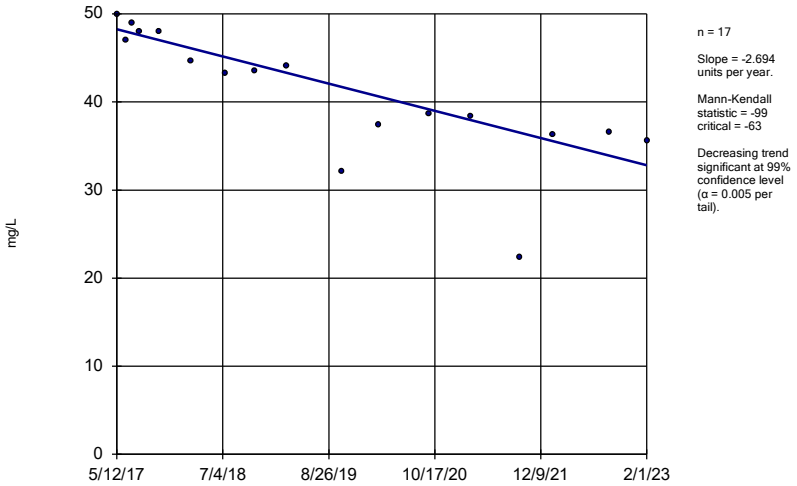
Trend not sig-nificant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 4/16/2023 12:47 PM View: Appendix III - Trend Test
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.9.6.37 . UG

Sen's Slope Estimator

DGWC-68A



n = 17

Slope = -2.694 units per year.

Mann-Kendall statistic = -99 critical = -63

Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

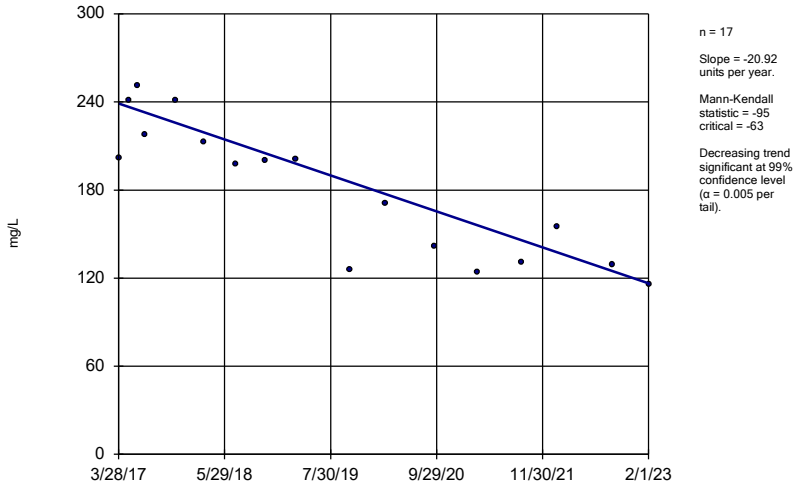
Constituent: Sulfate Analysis Run 4/16/2023 12:47 PM View: Appendix III - Trend Test

Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.9.6.37 . UG

Sen's Slope Estimator

DGWA-53 (bg)



n = 17

Slope = -20.92 units per year.

Mann-Kendall statistic = -95 critical = -63

Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

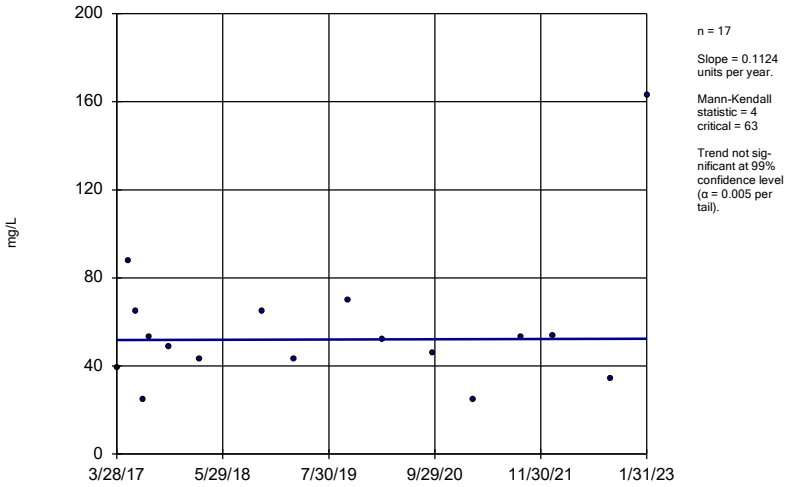
Constituent: Total Dissolved Solids Analysis Run 4/16/2023 12:47 PM View: Appendix III - Trend Test

Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.9.6.37 . UG

Sen's Slope Estimator

DGWA-70A (bg)



n = 17

Slope = 0.1124 units per year.

Mann-Kendall statistic = 4 critical = 63

Trend not significant at 99% confidence level (α = 0.005 per tail).

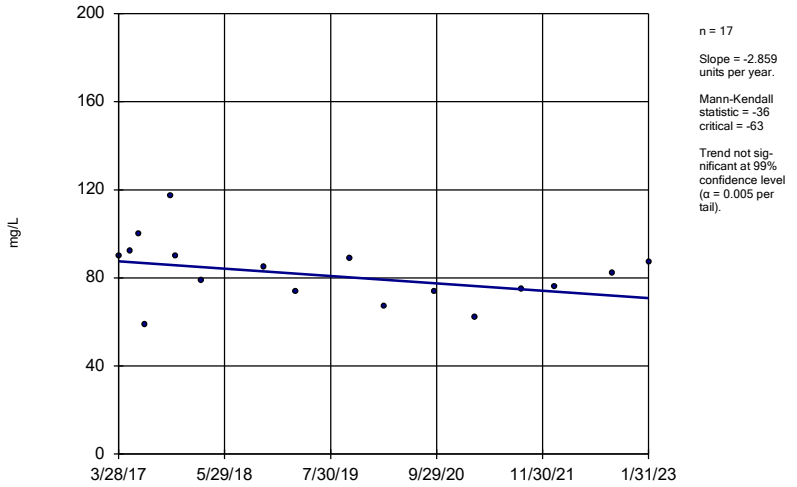
Constituent: Total Dissolved Solids Analysis Run 4/16/2023 12:47 PM View: Appendix III - Trend Test

Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.9.6.37 . UG

Sen's Slope Estimator

DGWA-71 (bg)



n = 17

Slope = -2.859 units per year.

Mann-Kendall statistic = -36 critical = -63

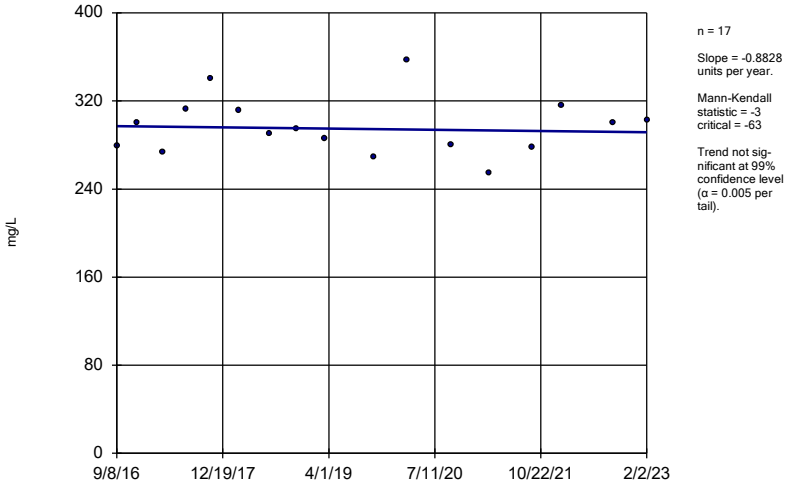
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Total Dissolved Solids Analysis Run 4/16/2023 12:47 PM View: Appendix III - Trend Test

Plant McDonough Client: Southern Company Data: McDonough AP

Sen's Slope Estimator

DGWC-37



n = 17

Slope = -0.8828 units per year.

Mann-Kendall statistic = -3
critical = -63

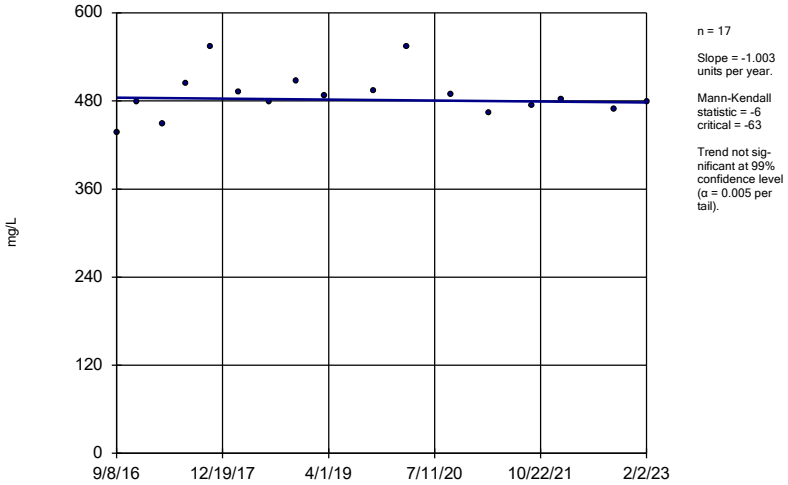
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Total Dissolved Solids Analysis Run 4/16/2023 12:47 PM View: Appendix III - Trend Test
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.9.6.37 . UG

Sen's Slope Estimator

DGWC-38



n = 17

Slope = -1.003 units per year.

Mann-Kendall statistic = -6
critical = -63

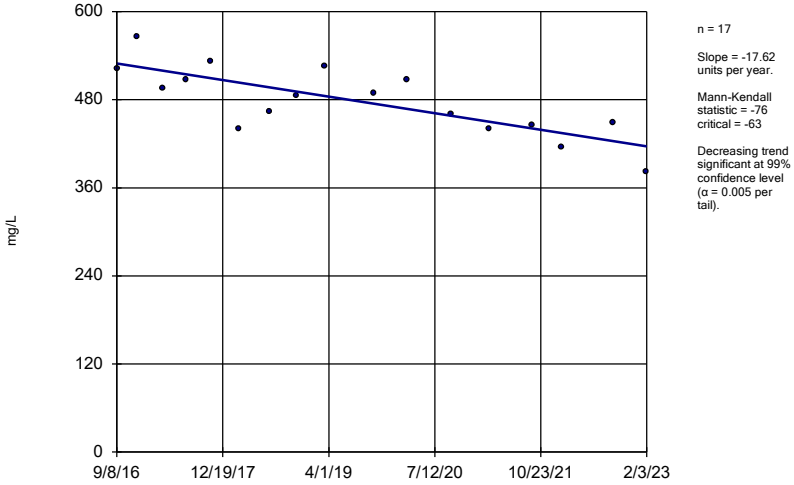
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Total Dissolved Solids Analysis Run 4/16/2023 12:47 PM View: Appendix III - Trend Test
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.9.6.37 . UG

Sen's Slope Estimator

DGWC-39



n = 17

Slope = -17.62 units per year.

Mann-Kendall statistic = -76
critical = -63

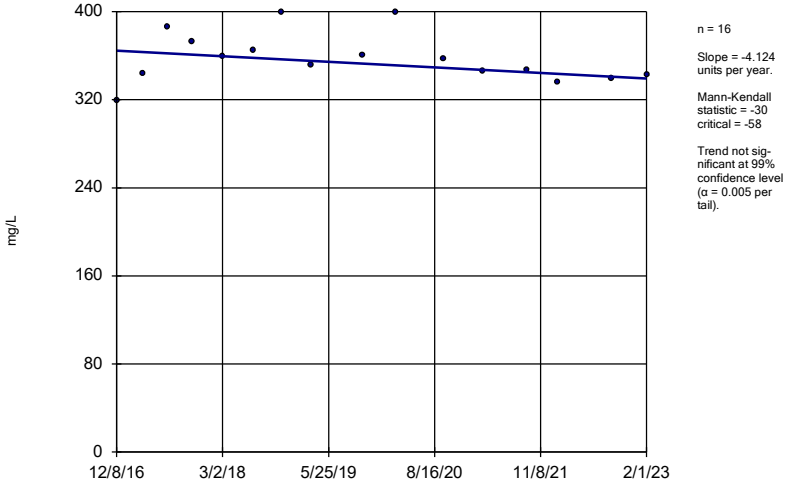
Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Total Dissolved Solids Analysis Run 4/16/2023 12:47 PM View: Appendix III - Trend Test
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.9.6.37 . UG

Sen's Slope Estimator

DGWC-40



n = 16

Slope = -4.124 units per year.

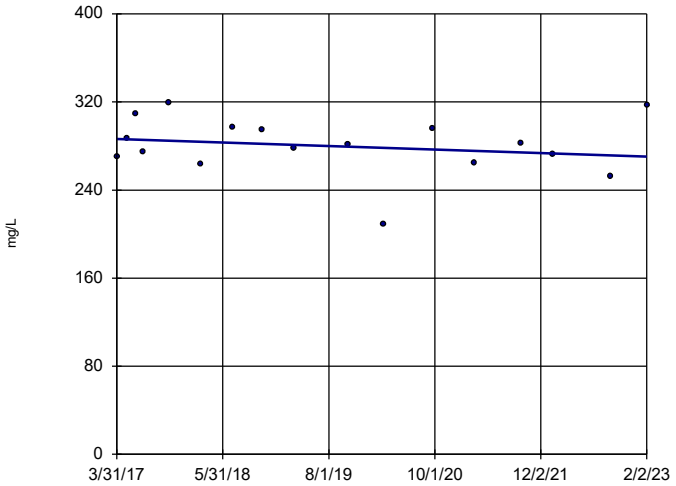
Mann-Kendall statistic = -30
critical = -58

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Total Dissolved Solids Analysis Run 4/16/2023 12:47 PM View: Appendix III - Trend Test
Plant McDonough Client: Southern Company Data: McDonough AP

Sen's Slope Estimator

DGWC-67



n = 17

Slope = -2.691 units per year.

Mann-Kendall statistic = -16
critical = -63

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Total Dissolved Solids Analysis Run 4/16/2023 12:47 PM View: Appendix III - Trend Test

Plant McDonough Client: Southern Company Data: McDonough AP

FIGURE F.

Upper Tolerance Limits Summary Table

Plant McDonough Client: Southern Company Data: McDonough AP Printed 4/10/2023, 6:23 PM

Constituent	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	%NDs	Transform	Alpha	Method
Antimony (mg/L)	0.003	n/a	n/a	n/a	n/a	53	83.02	n/a	0.06597	NP Inter(NDs)
Arsenic (mg/L)	0.0054	n/a	n/a	n/a	n/a	53	73.58	n/a	0.06597	NP Inter(normality)
Barium (mg/L)	0.19	n/a	n/a	n/a	n/a	53	0	n/a	0.06597	NP Inter(normality)
Beryllium (mg/L)	0.0009	n/a	n/a	n/a	n/a	54	55.56	n/a	0.06267	NP Inter(normality)
Cadmium (mg/L)	0.0005	n/a	n/a	n/a	n/a	53	92.45	n/a	0.06597	NP Inter(NDs)
Chromium (mg/L)	0.005	n/a	n/a	n/a	n/a	52	67.31	n/a	0.06944	NP Inter(normality)
Cobalt (mg/L)	0.0322	n/a	n/a	n/a	n/a	53	41.51	n/a	0.06597	NP Inter(normality)
Combined Radium 226 + 228 (pCi/L)	5.008	n/a	n/a	n/a	n/a	55	0	x^(1/3)	0.05	Inter
Fluoride (mg/L)	0.42	n/a	n/a	n/a	n/a	57	47.37	n/a	0.05373	NP Inter(normality)
Lead (mg/L)	0.001	n/a	n/a	n/a	n/a	53	83.02	n/a	0.06597	NP Inter(NDs)
Lithium (mg/L)	0.03	n/a	n/a	n/a	n/a	53	35.85	n/a	0.06597	NP Inter(normality)
Mercury (mg/L)	0.0002	n/a	n/a	n/a	n/a	53	84.91	n/a	0.06597	NP Inter(NDs)
Molybdenum (mg/L)	0.0409	n/a	n/a	n/a	n/a	53	64.15	n/a	0.06597	NP Inter(normality)
Selenium (mg/L)	0.005	n/a	n/a	n/a	n/a	53	100	n/a	0.06597	NP Inter(NDs)
Thallium (mg/L)	0.001	n/a	n/a	n/a	n/a	53	96.23	n/a	0.06597	NP Inter(NDs)

FIGURE G.

PLANT MCDONOUGH ASH POND AP-1 GWPS TABLE				
Constituent Name	**MCL**	**CCR-Rule Specified**	**Background Limit**	**GWPS**
Antimony, Total (mg/L)	0.006		0.003	0.006
Arsenic, Total (mg/L)	0.01		0.0054	0.01
Barium, Total (mg/L)	2		0.19	2
Beryllium, Total (mg/L)	0.004		0.0009	0.004
Cadmium, Total (mg/L)	0.005		0.0005	0.005
Chromium, Total (mg/L)	0.1		0.005	0.1
Cobalt, Total (mg/L)		0.006	0.032	0.032
Combined Radium, Total (pCi/L)	5		5.01	5.01
Fluoride, Total (mg/L)	4		0.42	4
Lead, Total (mg/L)		0.015	0.001	0.015
Lithium, Total (mg/L)		0.04	0.03	0.04
Mercury, Total (mg/L)	0.002		0.0002	0.002
Molybdenum, Total (mg/L)		0.1	0.041	0.1
Selenium, Total (mg/L)	0.05		0.005	0.05
Thallium, Total (mg/L)	0.002		0.001	0.002

**Highlighted cells indicated Background is higher than MCLs or CCR-Rule*

**MCL = Maximum Contaminant Level*

**CCR = Coal Combustion Residual*

**GWPS = Groundwater Protection Standard*

FIGURE H.

Confidence Intervals - Significant Results

Plant McDonough Client: Southern Company Data: McDonough AP Printed 5/4/2023, 2:20 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Arsenic (mg/L)	**DGWC-69**	**0.03564**	**0.0135**	**0.01**	**Yes**	**20**	**0.03226**	**0.03823**	**0**	**None**	**ln(x)**	**0.01**	**Param.**
Cobalt (mg/L)	**DGWC-40**	**0.04457**	**0.0377**	**0.032**	**Yes**	**18**	**0.04113**	**0.005679**	**0**	**None**	**No**	**0.01**	**Param.**
Molybdenum (mg/L)	**DGWC-68A**	**0.2202**	**0.1957**	**0.1**	**Yes**	**18**	**0.2086**	**0.02166**	**0**	**None**	**ln(x)**	**0.01**	**Param.**

Confidence Intervals - All Results

Plant McDonough Client: Southern Company Data: McDonough AP Printed 5/4/2023, 2:20 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Antimony (mg/L)	B-100	0.003	0.0013	0.006	No	7	0.002571	0.000741	71.43	None	No	0.008	NP (NDs)
Antimony (mg/L)	B-105D	0.005378	0.0001457	0.006	No	6	0.003248	0.002606	50	Kaplan-Meier	sqrt(x)	0.01	Param.
Antimony (mg/L)	B-112D	0.003	0.00041	0.006	No	5	0.002482	0.001158	80	Kaplan-Meier	No	0.031	NP (NDs)
Antimony (mg/L)	B-62	0.003	0.003	0.006	No	10	0.002746	0.0008032	90	Kaplan-Meier	No	0.011	NP (NDs)
Antimony (mg/L)	DGWC-40	0.003	0.00033	0.006	No	17	0.002843	0.0006476	94.12	Kaplan-Meier	No	0.01	NP (NDs)
Antimony (mg/L)	DGWC-67	0.003	0.0023	0.006	No	17	0.002676	0.0008028	82.35	Kaplan-Meier	No	0.01	NP (NDs)
Antimony (mg/L)	DGWC-68A	0.003	0.0008	0.006	No	17	0.002713	0.0008148	88.24	None	No	0.01	NP (NDs)
Antimony (mg/L)	DGWC-69	0.003	0.0019	0.006	No	18	0.002744	0.0006308	83.33	None	No	0.01	NP (NDs)
Arsenic (mg/L)	B-105D	0.0051	0.0025	0.01	No	6	0.0042	0.001279	50	None	No	0.0155	NP (normality)
Arsenic (mg/L)	B-112D	0.005	0.00078	0.01	No	5	0.004156	0.001887	60	None	No	0.031	NP (NDs)
Arsenic (mg/L)	B-62	0.005	0.005	0.01	No	10	0.00483	0.0005376	90	None	No	0.011	NP (NDs)
Arsenic (mg/L)	DGWC-37	0.005	0.0019	0.01	No	18	0.004828	0.0007307	94.44	None	No	0.01	NP (NDs)
Arsenic (mg/L)	DGWC-38	0.005	0.0005	0.01	No	18	0.00475	0.001061	94.44	None	No	0.01	NP (NDs)
Arsenic (mg/L)	DGWC-39	0.005	0.00075	0.01	No	18	0.003177	0.002118	55.56	None	No	0.01	NP (NDs)
Arsenic (mg/L)	DGWC-40	0.005	0.003	0.01	No	18	0.004186	0.001637	77.78	None	No	0.01	NP (NDs)
Arsenic (mg/L)	DGWC-67	0.005	0.0033	0.01	No	18	0.004418	0.001443	83.33	None	No	0.01	NP (NDs)
Arsenic (mg/L)	DGWC-68A	0.005	0.0016	0.01	No	18	0.004811	0.0008014	94.44	None	No	0.01	NP (NDs)
Arsenic (mg/L)	**DGWC-69**	**0.03564**	**0.0135**	**0.01**	**Yes**	**20**	**0.03226**	**0.03823**	**0**	**None**	**ln(x)**	**0.01**	**Param.**
Barium (mg/L)	B-100	0.098	0.015	2	No	7	0.03171	0.02935	0	None	No	0.008	NP (normality)
Barium (mg/L)	B-105D	0.04191	0.03109	2	No	6	0.0365	0.003937	0	None	No	0.01	Param.
Barium (mg/L)	B-112D	0.026	0.0026	2	No	5	0.0076	0.01029	0	None	No	0.031	NP (normality)
Barium (mg/L)	B-62	0.0255	0.0193	2	No	10	0.0224	0.003471	0	None	No	0.01	Param.
Barium (mg/L)	DGWC-37	0.1066	0.08721	2	No	18	0.09689	0.016	0	None	No	0.01	Param.
Barium (mg/L)	DGWC-38	0.03333	0.03137	2	No	18	0.03229	0.001746	0	None	x^3	0.01	Param.
Barium (mg/L)	DGWC-39	0.09557	0.08543	2	No	18	0.0905	0.008386	0	None	No	0.01	Param.
Barium (mg/L)	DGWC-40	0.018	0.0168	2	No	18	0.01788	0.00244	0	None	No	0.01	NP (normality)
Barium (mg/L)	DGWC-67	0.1096	0.09538	2	No	18	0.1025	0.01177	0	None	No	0.01	Param.
Barium (mg/L)	DGWC-68A	0.094	0.086	2	No	18	0.09029	0.00461	0	None	No	0.01	NP (normality)
Barium (mg/L)	DGWC-69	0.09584	0.06434	2	No	19	0.08009	0.02689	0	None	No	0.01	Param.
Beryllium (mg/L)	B-100	0.0005817	0.000304	0.004	No	7	0.0004429	0.0001169	14.29	None	No	0.01	Param.
Beryllium (mg/L)	B-62	0.0025	0.00009	0.004	No	11	0.0005516	0.0009635	18.18	None	No	0.006	NP (normality)
Beryllium (mg/L)	DGWC-37	0.0005	0.00007	0.004	No	18	0.0003344	0.0002139	61.11	None	No	0.01	NP (NDs)
Beryllium (mg/L)	DGWC-38	0.0005	0.000058	0.004	No	18	0.0004754	0.0001042	94.44	None	No	0.01	NP (NDs)
Beryllium (mg/L)	DGWC-40	0.003306	0.002789	0.004	No	18	0.003022	0.0004821	5.556	None	x^2	0.01	Param.
Beryllium (mg/L)	DGWC-68A	0.0005	0.000084	0.004	No	18	0.0004525	0.0001383	88.89	None	No	0.01	NP (NDs)
Beryllium (mg/L)	DGWC-69	0.0005	0.000061	0.004	No	19	0.0003387	0.000217	63.16	None	No	0.01	NP (NDs)
Cadmium (mg/L)	B-100	0.00059	0.00025	0.005	No	7	0.0003614	0.0001566	14.29	None	No	0.008	NP (normality)
Cadmium (mg/L)	DGWC-37	0.0005	0.0002	0.005	No	18	0.0004056	0.0001607	72.22	None	No	0.01	NP (NDs)
Cadmium (mg/L)	DGWC-38	0.0005	0.00017	0.005	No	18	0.0003294	0.0002425	22.22	None	No	0.01	NP (normality)
Cadmium (mg/L)	DGWC-40	0.0008446	0.0007081	0.005	No	18	0.00077	0.0001237	11.11	None	x^2	0.01	Param.
Cadmium (mg/L)	DGWC-67	0.00053	0.00021	0.005	No	18	0.00043	0.0001395	72.22	None	No	0.01	NP (NDs)
Cadmium (mg/L)	DGWC-68A	0.0002406	0.0001398	0.005	No	18	0.0003817	0.0002183	50	Kaplan-Meier	x^(1/3)	0.01	Param.
Cadmium (mg/L)	DGWC-69	0.0005	0.0002	0.005	No	19	0.00043	0.0001406	78.95	None	No	0.01	NP (NDs)
Chromium (mg/L)	B-100	0.005	0.00057	0.1	No	7	0.003787	0.002074	71.43	None	No	0.008	NP (NDs)
Chromium (mg/L)	B-105D	0.005	0.0012	0.1	No	6	0.004367	0.001551	83.33	None	No	0.0155	NP (NDs)
Chromium (mg/L)	B-112D	0.005	0.00085	0.1	No	5	0.00345	0.002131	60	None	No	0.031	NP (NDs)
Chromium (mg/L)	B-62	0.005	0.005	0.1	No	10	0.004598	0.001271	90	None	No	0.011	NP (NDs)
Chromium (mg/L)	DGWC-37	0.005	0.0007	0.1	No	18	0.004516	0.00141	88.89	None	No	0.01	NP (NDs)
Chromium (mg/L)	DGWC-38	0.005	0.00092	0.1	No	18	0.00427	0.001682	83.33	None	No	0.01	NP (NDs)
Chromium (mg/L)	DGWC-40	0.005	0.0007	0.1	No	18	0.002723	0.002123	44.44	None	No	0.01	NP (normality)
Chromium (mg/L)	DGWC-67	0.005	0.0014	0.1	No	18	0.004082	0.001774	77.78	None	No	0.01	NP (NDs)
Chromium (mg/L)	DGWC-68A	0.005	0.0005	0.1	No	18	0.00475	0.001061	94.44	None	No	0.01	NP (NDs)
Chromium (mg/L)	DGWC-69	0.005	0.0012	0.1	No	19	0.003947	0.001817	73.68	None	No	0.01	NP (NDs)
Cobalt (mg/L)	B-100	0.07642	0.01578	0.032	No	9	0.04583	0.02991	11.11	None	sqrt(x)	0.01	Param.
Cobalt (mg/L)	B-105D	0.01012	0.00312	0.032	No	6	0.006117	0.003079	0	None	ln(x)	0.01	Param.

Confidence Intervals - All Results

Plant McDonough Client: Southern Company Data: McDonough AP Printed 5/4/2023, 2:20 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Cobalt (mg/L)	B-112D	0.005	0.00054	0.032	No	5	0.003608	0.002028	60	None	No	0.031	NP (NDs)
Cobalt (mg/L)	B-62	0.005	0.00031	0.032	No	11	0.004146	0.001899	81.82	None	No	0.006	NP (NDs)
Cobalt (mg/L)	DGWC-37	0.005	0.0005	0.032	No	18	0.004228	0.001777	83.33	None	No	0.01	NP (NDs)
Cobalt (mg/L)	DGWC-38	0.0017	0.0015	0.032	No	18	0.00195	0.001115	11.11	None	No	0.01	NP (normality)
Cobalt (mg/L)	DGWC-39	0.006678	0.005777	0.032	No	18	0.006228	0.0007442	11.11	None	No	0.01	Param.
Cobalt (mg/L)	**DGWC-40**	**0.04457**	**0.0377**	**0.032**	**Yes**	**18**	**0.04113**	**0.005679**	**0**	**None**	**No**	**0.01**	**Param.**
Cobalt (mg/L)	DGWC-67	0.0041	0.0012	0.032	No	18	0.002489	0.001691	11.11	None	No	0.01	NP (normality)
Cobalt (mg/L)	DGWC-68A	0.005	0.0015	0.032	No	18	0.004294	0.001638	83.33	None	No	0.01	NP (NDs)
Cobalt (mg/L)	DGWC-69	0.005	0.0022	0.032	No	19	0.004	0.001613	68.42	None	No	0.01	NP (NDs)
Combined Radium 226 + 228 (pCi/L)	B-100	1.229	0.352	5.01	No	7	0.7906	0.3692	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	B-105D	6.794	0.5813	5.01	No	5	2.892	2.27	0	None	x^(1/3)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	B-112D	1.76	0.241	5.01	No	4	0.921	0.6326	0	None	No	0.0625	NP (selected)
Combined Radium 226 + 228 (pCi/L)	B-62	1.913	1.387	5.01	No	9	1.65	0.2725	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	DGWC-37	1.09	0.5547	5.01	No	17	0.8225	0.4273	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	DGWC-38	1.003	0.3379	5.01	No	17	0.7321	0.5826	0	None	sqrt(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	DGWC-39	1.276	0.6331	5.01	No	17	0.9546	0.513	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	DGWC-40	1.51	0.6652	5.01	No	17	1.087	0.6737	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	DGWC-67	0.9568	0.4708	5.01	No	17	0.7138	0.3878	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	DGWC-68A	1.46	0.393	5.01	No	17	0.9922	0.6032	0	None	No	0.01	NP (normality)
Combined Radium 226 + 228 (pCi/L)	DGWC-69	1.803	1.181	5.01	No	18	1.492	0.5147	0	None	No	0.01	Param.
Fluoride (mg/L)	B-100	0.1	0.052	4	No	7	0.08914	0.01942	71.43	None	No	0.008	NP (NDs)
Fluoride (mg/L)	B-105D	0.32	0.058	4	No	6	0.1217	0.09867	0	None	No	0.0155	NP (normality)
Fluoride (mg/L)	B-112D	0.3493	0.2347	4	No	5	0.292	0.03421	0	None	No	0.01	Param.
Fluoride (mg/L)	B-62	0.43	0.093	4	No	9	0.1669	0.1072	0	None	No	0.002	NP (normality)
Fluoride (mg/L)	DGWC-37	0.15	0.057	4	No	19	0.1025	0.072	5.263	None	No	0.01	NP (normality)
Fluoride (mg/L)	DGWC-38	0.15	0.064	4	No	19	0.1296	0.1008	10.53	None	No	0.01	NP (normality)
Fluoride (mg/L)	DGWC-39	0.15	0.085	4	No	19	0.1501	0.1105	5.263	None	No	0.01	NP (normality)
Fluoride (mg/L)	DGWC-40	0.2665	0.1315	4	No	19	0.2244	0.1505	5.263	None	ln(x)	0.01	Param.
Fluoride (mg/L)	DGWC-67	0.25	0.038	4	No	19	0.109	0.1064	47.37	None	No	0.01	NP (normality)
Fluoride (mg/L)	DGWC-68A	0.15	0.076	4	No	19	0.1451	0.1206	5.263	None	No	0.01	NP (normality)
Fluoride (mg/L)	DGWC-69	0.1676	0.09147	4	No	20	0.1296	0.06706	5	None	No	0.01	Param.
Lead (mg/L)	B-100	0.001	0.000088	0.015	No	7	0.0006397	0.0004509	57.14	None	No	0.008	NP (NDs)
Lead (mg/L)	B-105D	0.001	0.000052	0.015	No	6	0.000842	0.000387	83.33	None	No	0.0155	NP (NDs)
Lead (mg/L)	B-112D	0.001	0.00014	0.015	No	5	0.000828	0.0003846	80	None	No	0.031	NP (NDs)
Lead (mg/L)	DGWC-37	0.0014	0.000061	0.015	No	18	0.0009701	0.0002456	88.89	None	No	0.01	NP (NDs)
Lead (mg/L)	DGWC-38	0.001	0.00014	0.015	No	18	0.0007508	0.0004138	72.22	None	No	0.01	NP (NDs)
Lead (mg/L)	DGWC-39	0.001	0.00022	0.015	No	18	0.0009056	0.0002759	88.89	None	No	0.01	NP (NDs)
Lead (mg/L)	DGWC-40	0.001	0.00007	0.015	No	18	0.0006069	0.0004552	55.56	None	No	0.01	NP (NDs)
Lead (mg/L)	DGWC-67	0.001	0.00025	0.015	No	18	0.0008024	0.0003825	77.78	None	No	0.01	NP (NDs)
Lead (mg/L)	DGWC-68A	0.001	0.00035	0.015	No	18	0.0009121	0.0002605	88.89	None	No	0.01	NP (NDs)
Lead (mg/L)	DGWC-69	0.001	0.0001	0.015	No	19	0.0007163	0.0004295	68.42	None	No	0.01	NP (NDs)
Lithium (mg/L)	B-100	0.015	0.0013	0.04	No	7	0.004	0.00487	14.29	None	No	0.008	NP (normality)
Lithium (mg/L)	B-105D	0.015	0.013	0.04	No	6	0.01367	0.0008165	0	None	No	0.0155	NP (normality)
Lithium (mg/L)	B-112D	0.0045	0.0038	0.04	No	5	0.00408	0.0003421	0	None	No	0.031	NP (normality)
Lithium (mg/L)	B-62	0.0094	0.0078	0.04	No	10	0.01017	0.005237	10	None	No	0.011	NP (normality)
Lithium (mg/L)	DGWC-37	0.0029	0.0019	0.04	No	18	0.01285	0.02044	22.22	None	No	0.01	NP (normality)
Lithium (mg/L)	DGWC-38	0.0034	0.0029	0.04	No	18	0.004339	0.005165	5.556	None	No	0.01	NP (normality)
Lithium (mg/L)	DGWC-40	0.0027	0.0022	0.04	No	18	0.004839	0.007338	11.11	None	No	0.01	NP (normality)
Lithium (mg/L)	DGWC-67	0.005	0.0044	0.04	No	18	0.005794	0.004804	5.556	None	No	0.01	NP (normality)
Lithium (mg/L)	DGWC-68A	0.03	0.0016	0.04	No	18	0.0268	0.009311	88.89	None	No	0.01	NP (NDs)
Lithium (mg/L)	DGWC-69	0.0032	0.0024	0.04	No	19	0.003926	0.005119	5.263	None	No	0.01	NP (normality)
Mercury (mg/L)	B-100	0.0002	0.00011	0.002	No	6	0.000185	0.00003674	83.33	None	No	0.0155	NP (NDs)
Mercury (mg/L)	B-105D	0.0002	0.000087	0.002	No	5	0.0001654	0.00005095	60	None	No	0.031	NP (NDs)
Mercury (mg/L)	DGWC-37	0.0002	0.000091	0.002	No	17	0.0001762	0.00005372	82.35	None	No	0.01	NP (NDs)
Mercury (mg/L)	DGWC-38	0.0002	0.000085	0.002	No	17	0.0001762	0.00005366	82.35	None	No	0.01	NP (NDs)

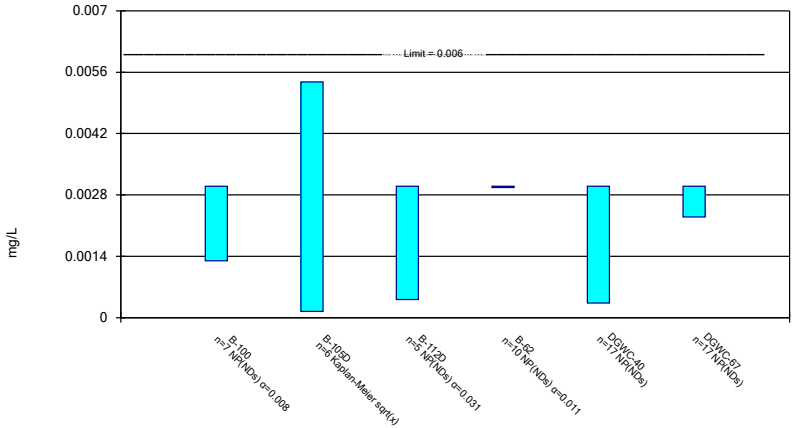
Confidence Intervals - All Results

Plant McDonough Client: Southern Company Data: McDonough AP Printed 5/4/2023, 2:20 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Mercury (mg/L)	DGWC-39	0.0002	0.000059	0.002	No	17	0.0001917	0.0000342	94.12	None	No	0.01	NP (NDs)
Mercury (mg/L)	DGWC-40	0.0002	0.00009	0.002	No	17	0.0001752	0.00005592	82.35	None	No	0.01	NP (NDs)
Mercury (mg/L)	DGWC-67	0.0002	0.00007	0.002	No	17	0.0001924	0.00003153	94.12	None	No	0.01	NP (NDs)
Mercury (mg/L)	DGWC-68A	0.0002	0.00007	0.002	No	17	0.0001924	0.00003153	94.12	None	No	0.01	NP (NDs)
Mercury (mg/L)	DGWC-69	0.0002	0.00007	0.002	No	18	0.0001928	0.00003064	94.44	None	No	0.01	NP (NDs)
Molybdenum (mg/L)	B-100	0.19	0.01	0.1	No	7	0.03571	0.06803	85.71	None	No	0.008	NP (NDs)
Molybdenum (mg/L)	B-105D	0.01	0.0011	0.1	No	6	0.008517	0.003633	83.33	None	No	0.0155	NP (NDs)
Molybdenum (mg/L)	B-112D	0.03741	0.02619	0.1	No	5	0.0318	0.003347	0	None	No	0.01	Param.
Molybdenum (mg/L)	DGWC-38	0.01	0.001	0.1	No	18	0.004572	0.004458	38.89	None	No	0.01	NP (normality)
Molybdenum (mg/L)	**DGWC-68A**	**0.2202**	**0.1957**	**0.1**	**Yes**	**18**	**0.2086**	**0.02166**	**0**	**None**	**ln(x)**	**0.01**	**Param.**
Molybdenum (mg/L)	DGWC-69	0.0117	0.0057	0.1	No	19	0.009311	0.005673	5.263	None	No	0.01	NP (normality)
Selenium (mg/L)	B-100	0.005	0.0019	0.05	No	7	0.004557	0.001172	85.71	None	No	0.008	NP (NDs)
Selenium (mg/L)	DGWC-38	0.005	0.0019	0.05	No	18	0.004828	0.0007307	94.44	None	No	0.01	NP (NDs)
Selenium (mg/L)	DGWC-40	0.003105	0.001849	0.05	No	18	0.003661	0.002233	27.78	Kaplan-Meier	ln(x)	0.01	Param.
Selenium (mg/L)	DGWC-67	0.005	0.0027	0.05	No	18	0.004872	0.0005421	94.44	Kaplan-Meier	No	0.01	NP (NDs)
Selenium (mg/L)	DGWC-68A	0.005	0.0017	0.05	No	18	0.004817	0.0007778	94.44	Kaplan-Meier	No	0.01	NP (NDs)
Thallium (mg/L)	DGWC-38	0.001	0.00014	0.002	No	18	0.0006117	0.0004471	55.56	None	No	0.01	NP (NDs)
Thallium (mg/L)	DGWC-39	0.001	0.0001	0.002	No	18	0.0007461	0.0004213	72.22	None	No	0.01	NP (NDs)
Thallium (mg/L)	DGWC-40	0.001	0.00007	0.002	No	18	0.0007404	0.0004307	72.22	None	No	0.01	NP (NDs)
Thallium (mg/L)	DGWC-68A	0.001	0.00015	0.002	No	18	0.0009528	0.0002003	94.44	None	No	0.01	NP (NDs)

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.

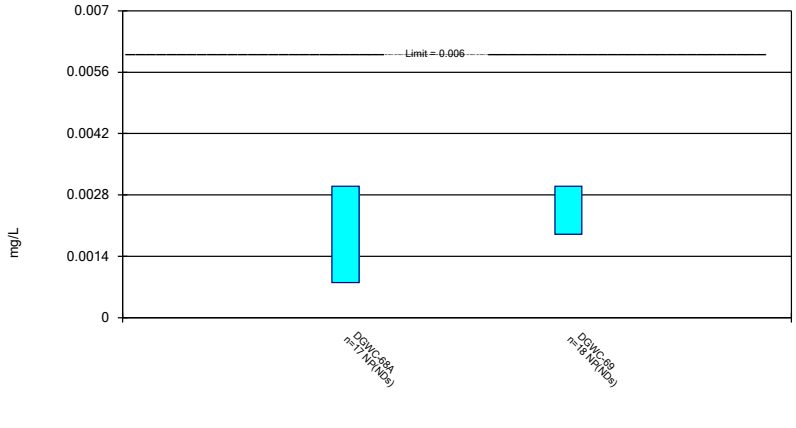


Constituent: Antimony Analysis Run 5/4/2023 2:16 PM View: AP 1 Confidence Intervals
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Non-Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01.

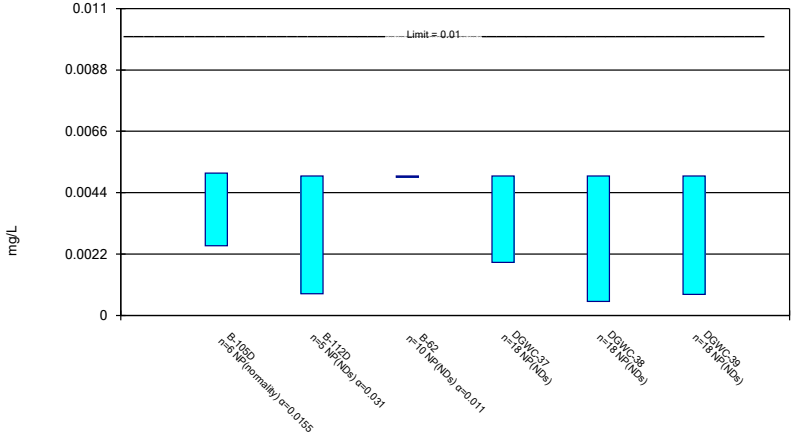


Constituent: Antimony Analysis Run 5/4/2023 2:16 PM View: AP 1 Confidence Intervals
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Non-Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted.

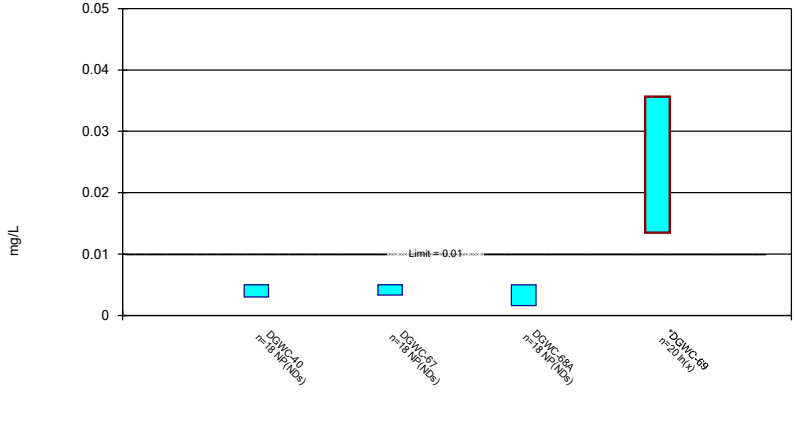


Constituent: Arsenic Analysis Run 5/4/2023 2:16 PM View: AP 1 Confidence Intervals
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Parametric and Non-Parametric (NP) Confidence Interval

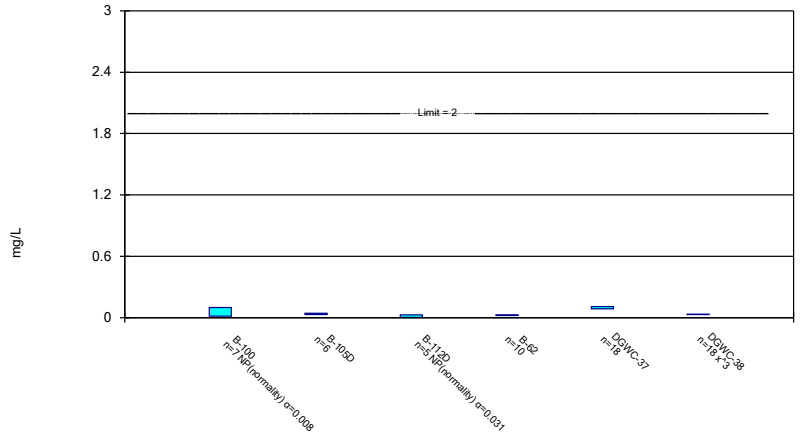
Compliance limit is exceeded.* Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Arsenic Analysis Run 5/4/2023 2:16 PM View: AP 1 Confidence Intervals
Plant McDonough Client: Southern Company Data: McDonough 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.

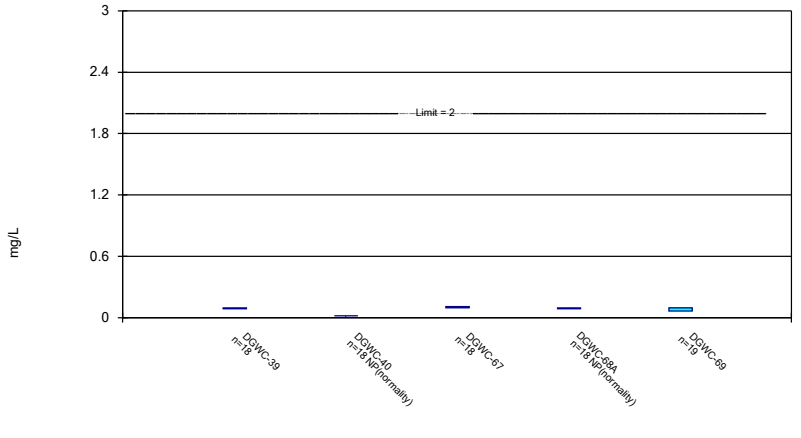


Constituent: Barium Analysis Run 5/4/2023 2:16 PM View: AP 1 Confidence Intervals
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.

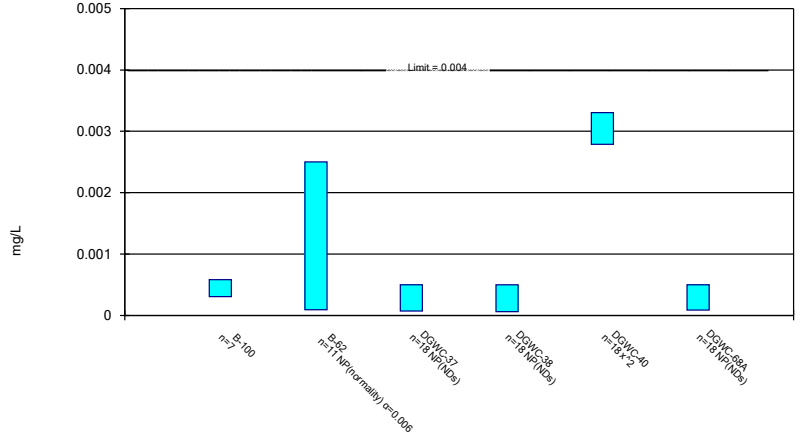


Constituent: Barium Analysis Run 5/4/2023 2:16 PM View: AP 1 Confidence Intervals
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.

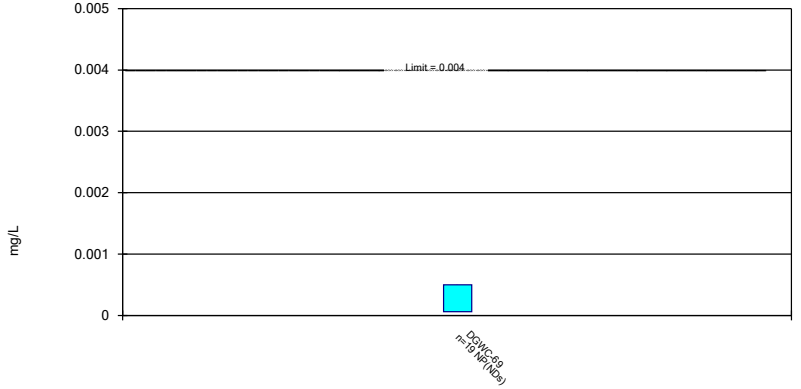


Constituent: Beryllium Analysis Run 5/4/2023 2:16 PM View: AP 1 Confidence Intervals
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Non-Parametric Confidence Interval

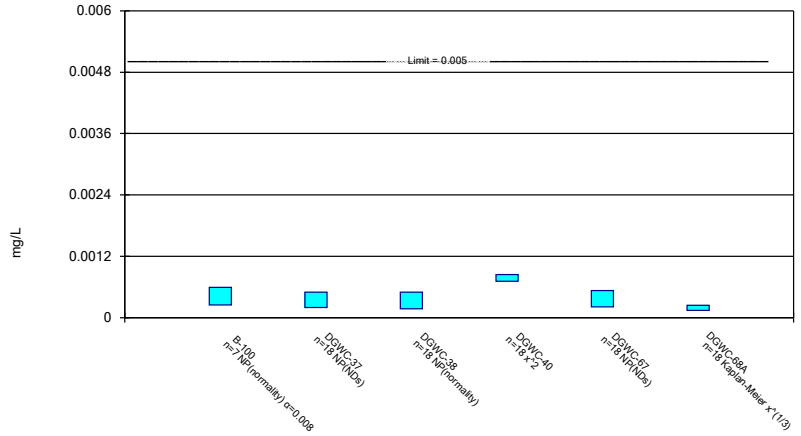
Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Beryllium Analysis Run 5/4/2023 2:16 PM View: AP 1 Confidence Intervals
Plant McDonough Client: Southern Company Data: McDonough 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.

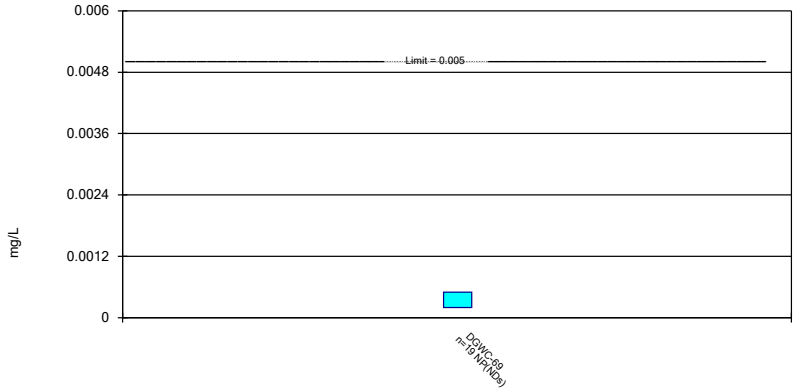


Constituent: Cadmium Analysis Run 5/4/2023 2:16 PM View: AP 1 Confidence Intervals
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Non-Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01.

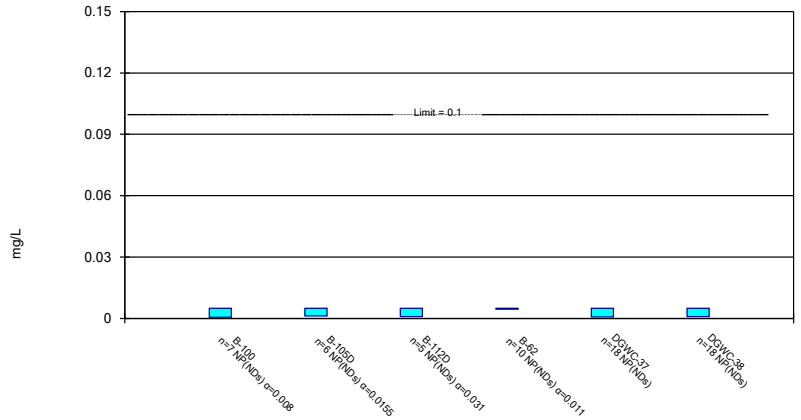


Constituent: Cadmium Analysis Run 5/4/2023 2:16 PM View: AP 1 Confidence Intervals
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Non-Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted.

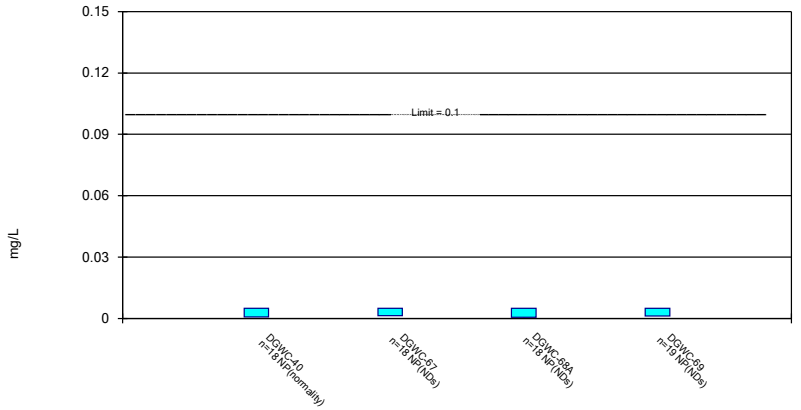


Constituent: Chromium Analysis Run 5/4/2023 2:16 PM View: AP 1 Confidence Intervals
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Non-Parametric Confidence Interval

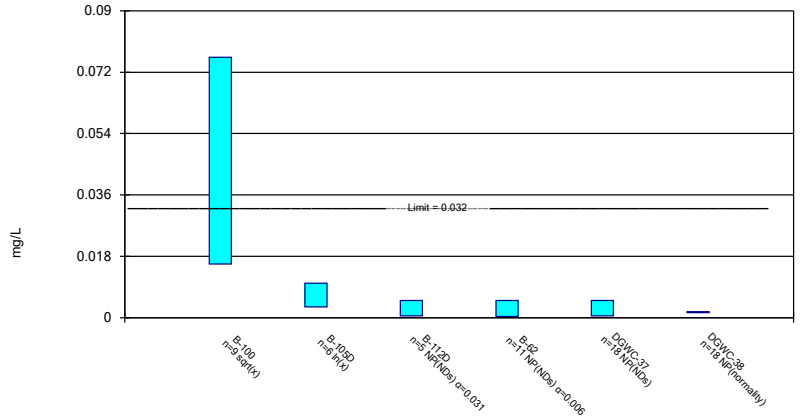
Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Chromium Analysis Run 5/4/2023 2:17 PM View: AP 1 Confidence Intervals
Plant McDonough Client: Southern Company Data: McDonough AP

Parametric and Non-Parametric (NP) Confidence Interval

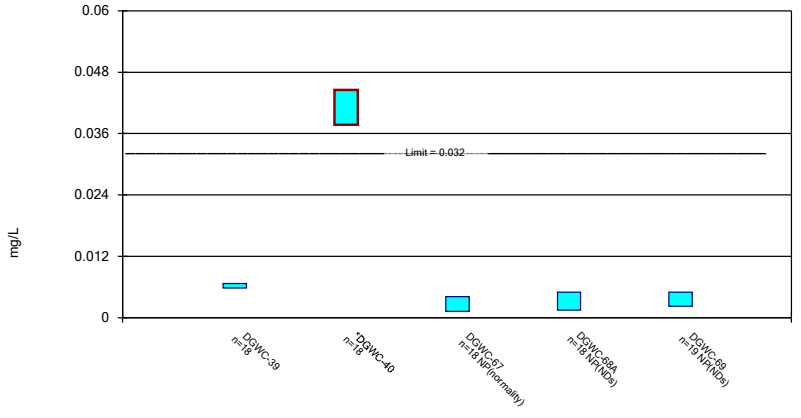
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Cobalt Analysis Run 5/4/2023 2:17 PM View: AP 1 Confidence Intervals
Plant McDonough Client: Southern Company Data: McDonough AP

Parametric and Non-Parametric (NP) Confidence Interval

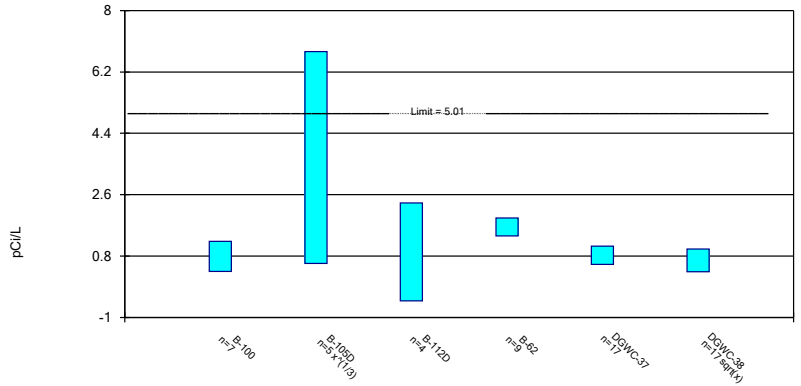
Compliance limit is exceeded.* Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Cobalt Analysis Run 5/4/2023 2:17 PM View: AP 1 Confidence Intervals
Plant McDonough Client: Southern Company Data: McDonough AP

Parametric Confidence Interval

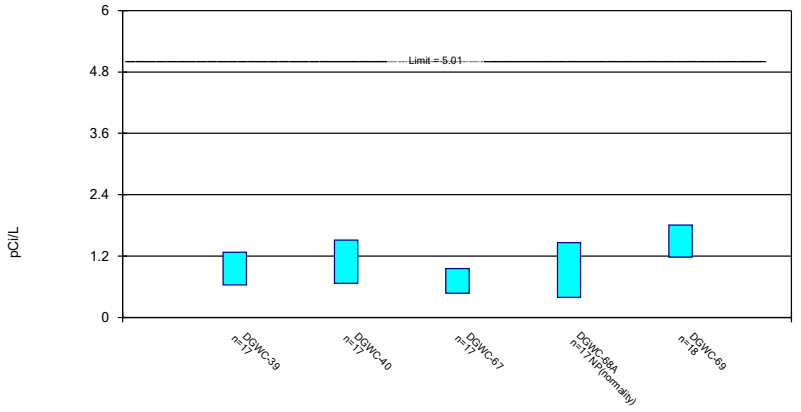
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Combined Radium 226 + 228 Analysis Run 5/4/2023 2:17 PM View: AP 1 Confidence Interval
Plant McDonough Client: Southern Company Data: McDonough AP

Parametric and Non-Parametric (NP) Confidence Interval

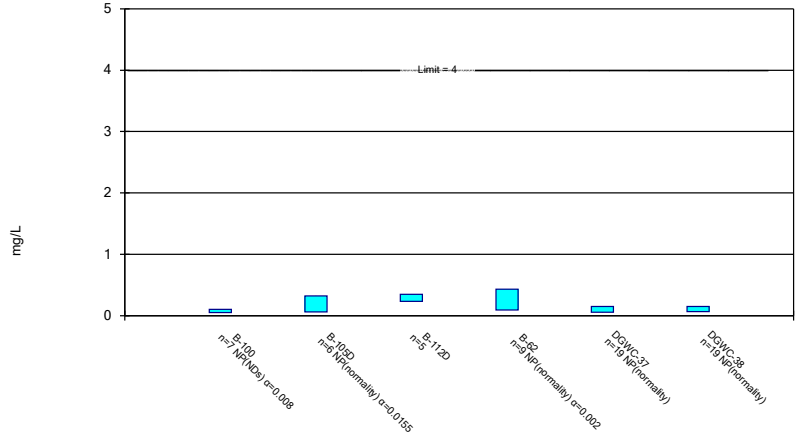
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Combined Radium 226 + 228 Analysis Run 5/4/2023 2:17 PM View: AP 1 Confidence Interval
Plant McDonough Client: Southern Company Data: McDonough AP

Parametric and Non-Parametric (NP) Confidence Interval

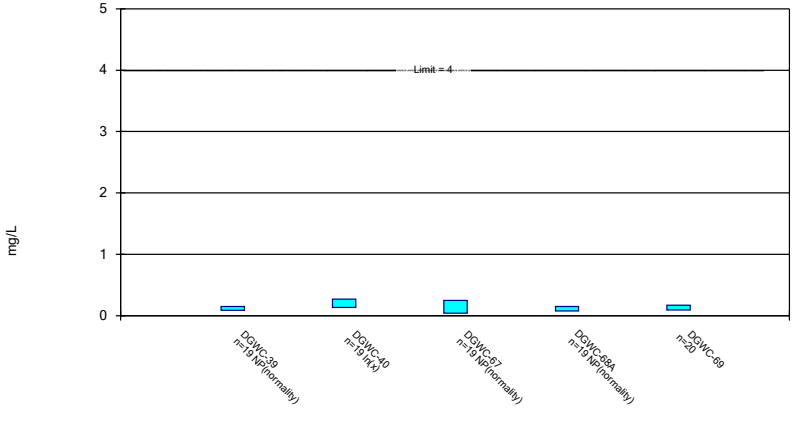
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Fluoride Analysis Run 5/4/2023 2:17 PM View: AP 1 Confidence Intervals
Plant McDonough Client: Southern Company Data: McDonough AP

Parametric and Non-Parametric (NP) Confidence Interval

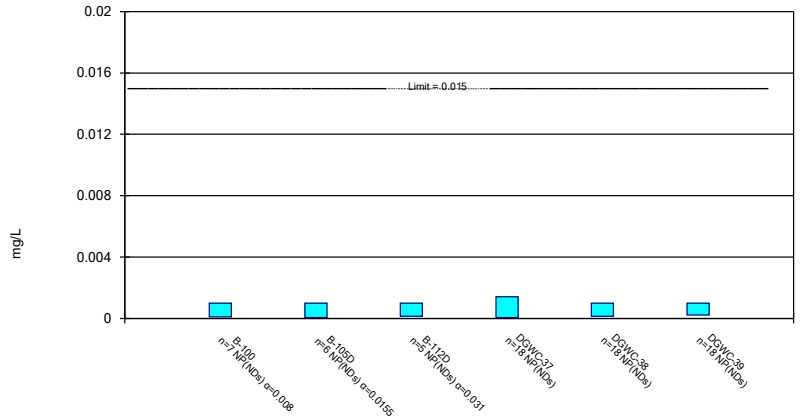
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Fluoride Analysis Run 5/4/2023 2:17 PM View: AP 1 Confidence Intervals
Plant McDonough Client: Southern Company Data: McDonough AP

Non-Parametric Confidence Interval

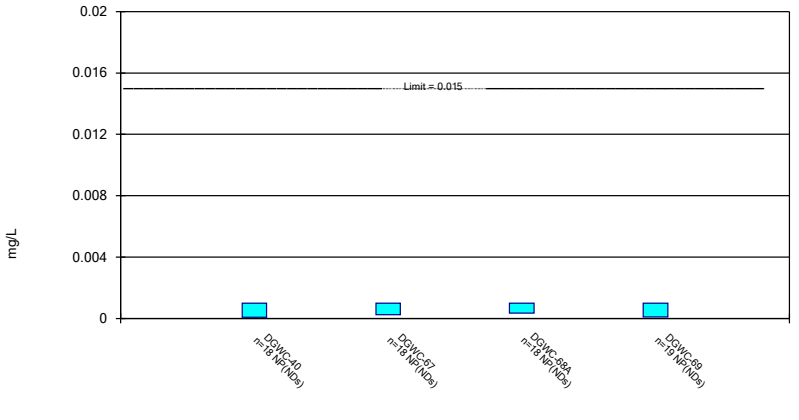
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted.



Constituent: Lead Analysis Run 5/4/2023 2:17 PM View: AP 1 Confidence Intervals
Plant McDonough Client: Southern Company Data: McDonough AP

Non-Parametric Confidence Interval

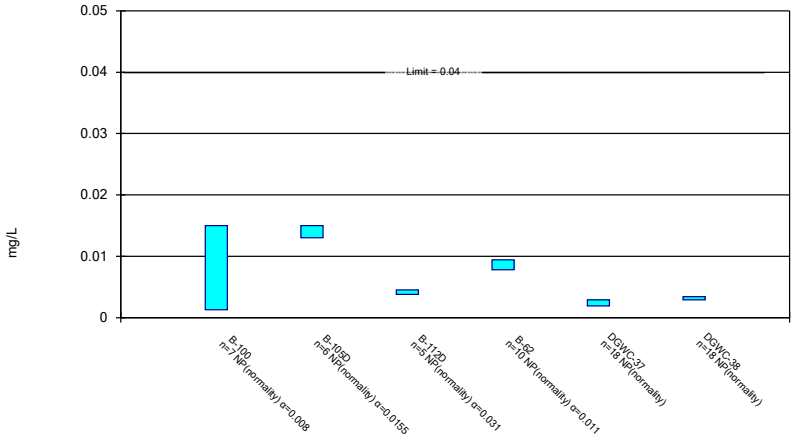
Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Lead Analysis Run 5/4/2023 2:17 PM View: AP 1 Confidence Intervals
Plant McDonough Client: Southern Company Data: McDonough AP

Non-Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted.

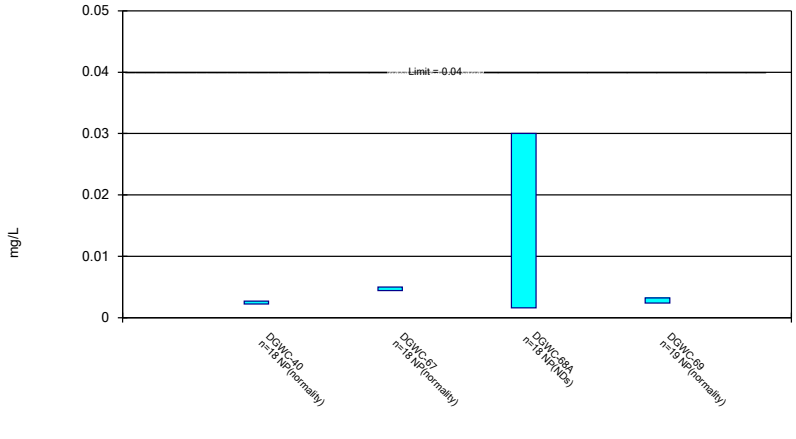


Constituent: Lithium Analysis Run 5/4/2023 2:17 PM View: AP 1 Confidence Intervals
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Non-Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01.

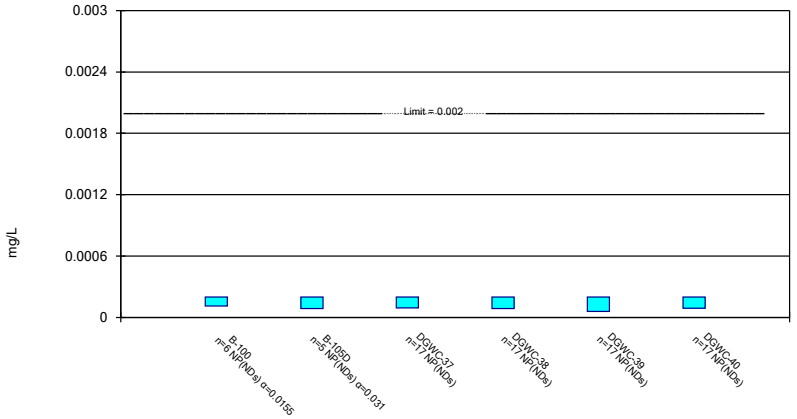


Constituent: Lithium Analysis Run 5/4/2023 2:17 PM View: AP 1 Confidence Intervals
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Non-Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted.

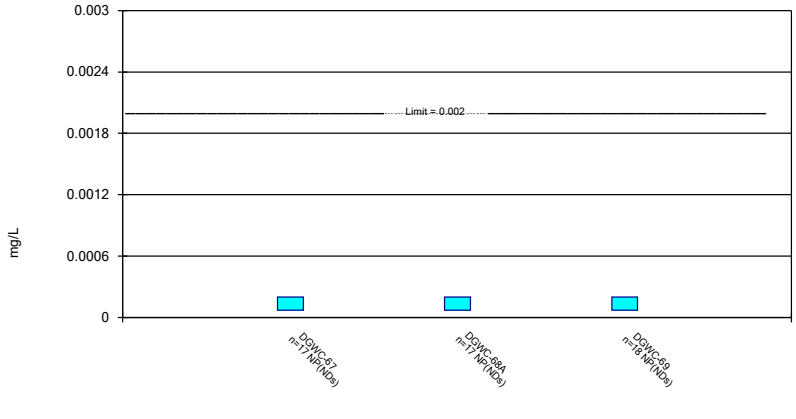


Constituent: Mercury Analysis Run 5/4/2023 2:17 PM View: AP 1 Confidence Intervals
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Non-Parametric Confidence Interval

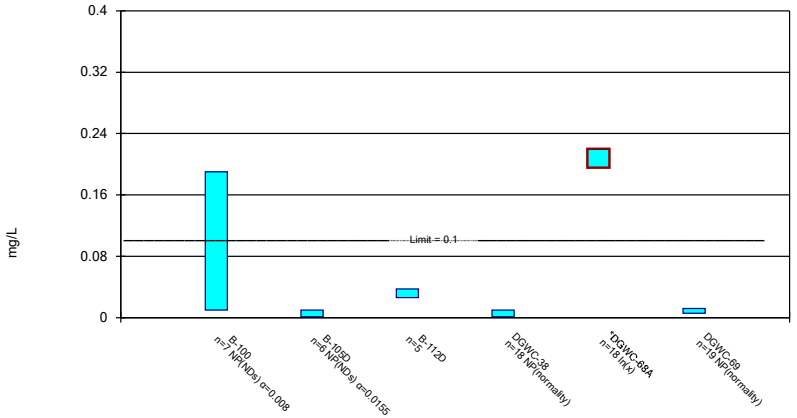
Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Mercury Analysis Run 5/4/2023 2:17 PM View: AP 1 Confidence Intervals
Plant McDonough Client: Southern Company Data: McDonough AP

Parametric and Non-Parametric (NP) Confidence Interval

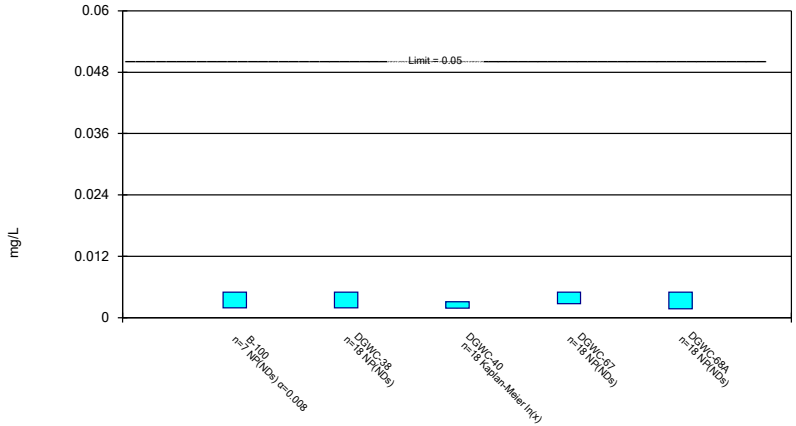
Compliance limit is exceeded.* Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Molybdenum Analysis Run 5/4/2023 2:17 PM View: AP 1 Confidence Intervals
Plant McDonough Client: Southern Company Data: McDonough AP

Parametric and Non-Parametric (NP) Confidence Interval

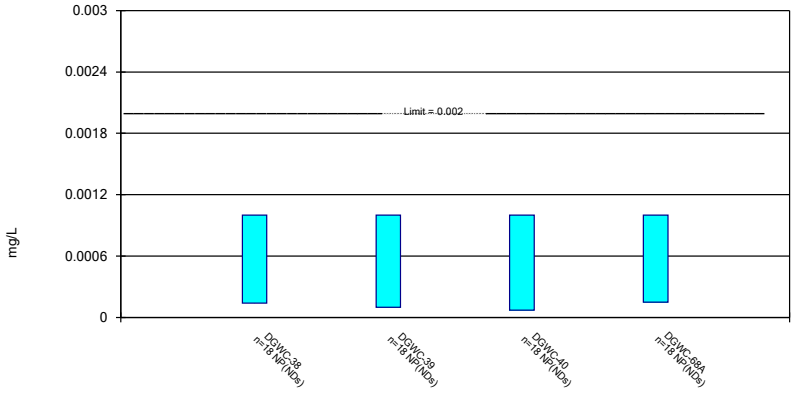
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Selenium Analysis Run 5/4/2023 2:17 PM View: AP 1 Confidence Intervals
Plant McDonough Client: Southern Company Data: McDonough AP

Non-Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Thallium Analysis Run 5/4/2023 2:17 PM View: AP 1 Confidence Intervals
Plant McDonough Client: Southern Company Data: McDonough AP

Confidence Interval

Constituent: Antimony (mg/L) Analysis Run 5/4/2023 2:20 PM View: AP 1 Confidence Intervals

Plant McDonough Client: Southern Company Data: McDonough AP

	B-100	B-105D	B-112D	B-62	DGWC-40	DGWC-67
9/2/2016					<0.003	
12/8/2016					<0.003	
3/30/2017					<0.003	
3/31/2017						0.0004 (J)
5/12/2017						<0.003
6/16/2017						0.0008 (J)
7/13/2017					<0.003	<0.003
10/26/2017					<0.003	<0.003
3/2/2018					<0.003	<0.003
7/12/2018					<0.003	
7/13/2018						0.0023 (J)
11/8/2018					<0.003	<0.003
1/30/2019				<0.003		
8/28/2019					<0.003	<0.003
9/11/2019				<0.003		
10/21/2019				<0.003		
3/4/2020					<0.003	
3/9/2020						<0.003
8/13/2020				<0.003	<0.003	<0.003
8/17/2020	0.0013 (J)					
9/23/2020					<0.003	<0.003
9/24/2020				0.00046 (J)		
9/25/2020	<0.003					
12/9/2020		<0.003				
3/8/2021	0.0017 (J)	0.00069 (J)			0.00033 (J)	
3/11/2021						<0.003
3/12/2021				<0.003		
4/15/2021			0.00041 (J)			
9/9/2021				<0.003		
9/13/2021	<0.003					
9/14/2021					<0.003	
9/15/2021		0.0082				
9/16/2021			<0.003			<0.003
1/19/2022		<0.003	<0.003		<0.003	<0.003
1/20/2022				<0.003		
1/21/2022	<0.003					
9/7/2022		<0.003	<0.003		<0.003	
9/8/2022	<0.003			<0.003		<0.003
2/1/2023		0.0016 (J)	<0.003		<0.003	
2/2/2023	<0.003			<0.003		<0.003
Mean	0.002571	0.003248	0.002482	0.002746	0.002843	0.002676
Std. Dev.	0.000741	0.002606	0.001158	0.0008032	0.0006476	0.0008028
Upper Lim.	0.003	0.005378	0.003	0.003	0.003	0.003
Lower Lim.	0.0013	0.0001457	0.00041	0.003	0.00033	0.0023

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Antimony (mg/L) Analysis Run 5/4/2023 2:20 PM View: AP 1 Confidence Intervals

Plant McDonough Client: Southern Company Data: McDonough AP

	DGWC-68A	DGWC-69
3/31/2017		<0.003
5/12/2017	<0.003	<0.003
6/16/2017	0.0008 (J)	0.0007 (J)
7/13/2017	<0.003	<0.003
8/8/2017	<0.003	
10/26/2017	<0.003	<0.003
11/15/2017		<0.003
3/2/2018	<0.003	<0.003
7/13/2018	<0.003	<0.003
11/8/2018	<0.003	<0.003
8/28/2019	<0.003	<0.003
3/9/2020	<0.003	<0.003
8/13/2020	<0.003	0.0019 (J)
9/23/2020	<0.003	<0.003
3/10/2021	0.00032 (J)	0.0018 (J)
9/16/2021	<0.003	<0.003
1/25/2022	<0.003	<0.003
9/7/2022	<0.003	<0.003
2/1/2023	<0.003	<0.003
Mean	0.002713	0.002744
Std. Dev.	0.0008148	0.0006308
Upper Lim.	0.003	0.003
Lower Lim.	0.0008	0.0019

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Arsenic (mg/L) Analysis Run 5/4/2023 2:20 PM View: AP 1 Confidence Intervals

Plant McDonough Client: Southern Company Data: McDonough AP

	B-105D	B-112D	B-62	DGWC-37	DGWC-38	DGWC-39
9/8/2016				<0.005	<0.005	<0.005
12/7/2016				0.0019 (J)	<0.005	<0.005
3/30/2017				<0.005	<0.005	0.0007 (J)
7/13/2017				<0.005	0.0005 (J)	0.0009 (J)
10/26/2017				<0.005	<0.005	<0.005
3/1/2018				<0.005	<0.005	0.0011 (J)
7/12/2018				<0.005	<0.005	0.00057 (J)
11/8/2018				<0.005	<0.005	<0.005
1/30/2019			<0.005			
8/28/2019				<0.005	<0.005	<0.005
9/11/2019			<0.005			
10/18/2019				<0.005	<0.005	0.00075 (J)
10/21/2019			<0.005			
3/9/2020				<0.005	<0.005	0.00039 (J)
8/13/2020			<0.005	<0.005	<0.005	<0.005
9/24/2020			<0.005	<0.005	<0.005	
9/25/2020						0.00087 (J)
12/9/2020	<0.005					
3/8/2021	0.0025 (J)					
3/11/2021				<0.005	<0.005	<0.005
3/12/2021			<0.005			
4/15/2021		0.00078 (J)				
9/9/2021			<0.005			
9/15/2021	<0.005				<0.005	
9/16/2021		<0.005		<0.005		
9/17/2021						<0.005
1/19/2022	0.0051	0.005				
1/20/2022			0.0033 (J)			0.0019 (J)
1/21/2022				<0.005	<0.005	
9/7/2022	0.0026 (J)	<0.005				<0.005
9/8/2022			<0.005	<0.005		
9/12/2022					<0.005	
2/1/2023	<0.005	<0.005				
2/2/2023			<0.005	<0.005	<0.005	
2/3/2023						<0.005
Mean	0.0042	0.004156	0.00483	0.004828	0.00475	0.003177
Std. Dev.	0.001279	0.001887	0.0005376	0.0007307	0.001061	0.002118
Upper Lim.	0.0051	0.005	0.005	0.005	0.005	0.005
Lower Lim.	0.0025	0.00078	0.005	0.0019	0.0005	0.00075

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Arsenic (mg/L) Analysis Run 5/4/2023 2:20 PM View: AP 1 Confidence Intervals

Plant McDonough Client: Southern Company Data: McDonough AP

	DGWC-40	DGWC-67	DGWC-68A	DGWC-69
9/2/2016	<0.005			
12/8/2016	<0.005			
3/30/2017	0.0006 (J)			
3/31/2017		<0.005		0.0239
4/12/2017				0.0077
5/12/2017		<0.005	<0.005	0.0097
6/16/2017		<0.005	<0.005	0.0113
7/13/2017	<0.005	<0.005	<0.005	0.0029 (J)
8/8/2017			<0.005	
10/26/2017	<0.005	<0.005	<0.005	0.114
11/15/2017				0.164
3/2/2018	0.0011 (J)	<0.005	<0.005	0.0127
7/12/2018	<0.005			
7/13/2018		<0.005	<0.005	0.017
11/8/2018	<0.005	<0.005	<0.005 (J)	0.02
8/28/2019	<0.005	<0.005	<0.005	0.025
10/16/2019			<0.005	0.023
10/17/2019		0.00042 (J)		
10/18/2019	<0.005			
3/4/2020	0.00065 (J)			
3/9/2020		<0.005	<0.005	0.029
8/13/2020	<0.005	<0.005	<0.005	0.029
9/23/2020	<0.005	<0.005	<0.005	0.032
3/8/2021	<0.005			
3/10/2021			<0.005	0.028
3/11/2021		0.0008 (J)		
9/14/2021	<0.005			
9/16/2021		<0.005	0.46 (o)	0.023
10/27/2021			0.0016 (J)	
1/19/2022	0.003 (J)	0.0033 (J)		
1/25/2022			<0.005	0.028
9/7/2022	<0.005		<0.005	0.024
9/8/2022		<0.005		
2/1/2023	<0.005		<0.005	0.021
2/2/2023		<0.005		
Mean	0.004186	0.004418	0.004811	0.03226
Std. Dev.	0.001637	0.001443	0.0008014	0.03823
Upper Lim.	0.005	0.005	0.005	0.03564
Lower Lim.	0.003	0.0033	0.0016	0.0135

ND substitution: RL or RL/2 if <15% NDs. Substitution method for trace values of the form <PQL(J): PQL.

Confidence Interval

Constituent: Barium (mg/L) Analysis Run 5/4/2023 2:20 PM View: AP 1 Confidence Intervals

Plant McDonough Client: Southern Company Data: McDonough AP

	B-100	B-105D	B-112D	B-62	DGWC-37	DGWC-38
9/8/2016					0.123	0.0333
12/7/2016					0.125	0.0336
3/30/2017					0.11	0.0325
7/13/2017					0.11	0.0332
10/26/2017					0.112	0.0333
3/1/2018					0.102	0.0333
7/12/2018					0.11	0.034
11/8/2018					0.11	0.035
1/30/2019				0.018		
8/28/2019					0.086	0.033
9/11/2019				0.023		
10/18/2019					0.079	0.032
10/21/2019				0.026		
3/9/2020					0.092	0.032
8/13/2020				0.026	0.088	0.032
8/17/2020	0.015					
9/24/2020				0.025	0.094	0.032
9/25/2020	0.022					
12/9/2020		0.03				
3/8/2021	0.022	0.041				
3/11/2021					0.075	0.032
3/12/2021				0.027		
4/15/2021			0.026			
9/9/2021				0.021		
9/13/2021	0.021					
9/15/2021		0.037				0.032
9/16/2021			0.0032 (J)		0.083	
1/19/2022		0.04	0.0034 (J)			
1/20/2022				0.021		
1/21/2022	0.023				0.085	0.031
9/7/2022		0.035	0.0026 (J)			
9/8/2022	0.021			0.018	0.079	
9/12/2022						0.027
2/1/2023		0.036	0.0028 (J)			
2/2/2023	0.098			0.019	0.081	0.03
Mean	0.03171	0.0365	0.0076	0.0224	0.09689	0.03229
Std. Dev.	0.02935	0.003937	0.01029	0.003471	0.016	0.001746
Upper Lim.	0.098	0.04191	0.026	0.0255	0.1066	0.03333
Lower Lim.	0.015	0.03109	0.0026	0.0193	0.08721	0.03137

Confidence Interval

Constituent: Barium (mg/L) Analysis Run 5/4/2023 2:20 PM View: AP 1 Confidence Intervals
Plant McDonough Client: Southern Company Data: McDonough AP

	DGWC-39	DGWC-40	DGWC-67	DGWC-68A	DGWC-69
9/2/2016		0.0171			
9/8/2016	0.0978				
12/7/2016	0.0844				
12/8/2016		0.0163			
3/30/2017	0.0858	0.0177			
3/31/2017			0.111		0.0872
5/12/2017			0.127	0.089	0.0929
6/16/2017			0.11	0.0855	0.1
7/13/2017	0.0919	0.017	0.102	0.0859	0.0985
8/8/2017				0.0852	
10/26/2017	0.0899	0.0168	0.105	0.0878	0.136
11/15/2017					0.107
3/1/2018	0.0742				
3/2/2018		0.0169	0.104	0.0878	0.0671
7/12/2018	0.094	0.018			
7/13/2018			0.11	0.091	0.074
11/8/2018	0.1	0.017	0.11	0.092	0.072
8/28/2019	0.099	0.017	0.11	0.089	0.061
10/16/2019				0.089	0.1
10/17/2019			0.1		
10/18/2019	0.1	0.019			
3/4/2020		0.018			
3/9/2020	0.076		0.11	0.088	0.057
8/13/2020	0.089	0.018	0.095	0.088	0.13
9/23/2020		0.019	0.1	0.094	0.055
9/25/2020	0.1				
3/8/2021		0.016			
3/10/2021				0.09	0.048
3/11/2021	0.078		0.11		
9/14/2021		0.027			
9/16/2021			0.088	0.13 (o)	0.078
9/17/2021	0.09				
10/27/2021				0.086	
1/19/2022		0.018	0.091		
1/20/2022	0.093				
1/25/2022				0.1	0.049
9/7/2022	0.099	0.016		0.098	0.065
9/8/2022			0.082		
2/1/2023		0.017		0.099	0.044
2/2/2023			0.08		
2/3/2023	0.087				
Mean	0.0905	0.01788	0.1025	0.09029	0.08009
Std. Dev.	0.008386	0.00244	0.01177	0.00461	0.02689
Upper Lim.	0.09557	0.018	0.1096	0.094	0.09584
Lower Lim.	0.08543	0.0168	0.09538	0.086	0.06434

Confidence Interval

Constituent: Beryllium (mg/L) Analysis Run 5/4/2023 2:20 PM View: AP 1 Confidence Intervals

Plant McDonough Client: Southern Company Data: McDonough AP

	B-100	B-62	DGWC-37	DGWC-38	DGWC-40	DGWC-68A
9/2/2016					0.0028 (J)	
9/8/2016			<0.0005	<0.0005		
10/6/2016		9E-05 (J)				
12/7/2016			<0.0005	<0.0005		
12/8/2016					0.0026 (J)	
3/30/2017			<0.0005	<0.0005	0.003	
5/12/2017						<0.0005
6/16/2017						<0.0005
7/13/2017			<0.0005	<0.0005	0.003 (J)	<0.0005
8/8/2017						<0.0005
10/26/2017			<0.0005	<0.0005	0.0027 (J)	<0.0005
3/1/2018			<0.0005	<0.0005		
3/2/2018					0.0033	<0.0005
7/12/2018			7E-05 (J)	<0.0005	0.0032	
7/13/2018						8.4E-05 (J)
11/8/2018			<0.0005	<0.0005	<0.003 (J)	<0.0005
1/30/2019		<0.0025				
8/28/2019			8.6E-05 (J)	<0.0005	0.0032	<0.0005
9/11/2019		0.00012 (J)				
10/16/2019						<0.0005
10/18/2019			<0.0005	<0.0005	0.0033	
10/21/2019		7.8E-05 (J)				
3/4/2020					0.0039	
3/9/2020			<0.0005	<0.0005		<0.0005
8/13/2020		0.00011 (J)	0.0001 (J)	<0.0005	0.0033	<0.0005
8/17/2020	0.0004 (J)					
9/23/2020					0.0031	<0.0005
9/24/2020		0.00013 (J)	8.8E-05 (J)	5.8E-05 (J)		
9/25/2020	0.00035 (J)					
3/8/2021	0.00046 (J)				0.003	
3/10/2021						6.1E-05 (J)
3/11/2021			<0.0005	<0.0005		
3/12/2021		<0.0025				
9/9/2021		0.00014 (J)				
9/13/2021	0.00053					
9/14/2021					0.0032	
9/15/2021				<0.0005		
9/16/2021			5.9E-05 (J)			<0.0005
1/19/2022					0.0034	
1/20/2022		0.00015 (J)				
1/21/2022	0.00053		5.9E-05 (J)	<0.0005		
1/25/2022						<0.0005
9/7/2022					0.0031	<0.0005
9/8/2022	0.00058	0.00013 (J)	5.7E-05 (J)			
9/12/2022				<0.0005		
2/1/2023					0.0028	<0.0005
2/2/2023	<0.0005	0.00012 (J)	<0.0005	<0.0005		
Mean	0.0004429	0.0005516	0.0003344	0.0004754	0.003022	0.0004525
Std. Dev.	0.0001169	0.0009635	0.0002139	0.0001042	0.0004821	0.0001383
Upper Lim.	0.0005817	0.0025	0.0005	0.0005	0.003306	0.0005
Lower Lim.	0.000304	9E-05	7E-05	5.8E-05	0.002789	8.4E-05

ND substitution: RL or RL/2 if <15% NDs. Substitution method for trace values of the form <PQL(J): PQL.

Confidence Interval

Constituent: Beryllium (mg/L) Analysis Run 5/4/2023 2:20 PM View: AP 1 Confidence Intervals

Plant McDonough Client: Southern Company Data: McDonough AP

	DGWC-69
3/31/2017	7E-05 (J)
5/12/2017	<0.0005
6/16/2017	<0.0005
7/13/2017	<0.0005
10/26/2017	<0.0005
11/15/2017	<0.0005
3/2/2018	<0.0005
7/13/2018	5.8E-05 (J)
11/8/2018	<0.0005
8/28/2019	<0.0005
10/16/2019	<0.0005
3/9/2020	7.5E-05 (J)
8/13/2020	6.3E-05 (J)
9/23/2020	6.1E-05 (J)
3/10/2021	5E-05 (J)
9/16/2021	<0.0005
1/25/2022	5.9E-05 (J)
9/7/2022	<0.0005
2/1/2023	<0.0005
Mean	0.0003387
Std. Dev.	0.000217
Upper Lim.	0.0005
Lower Lim.	6.1E-05

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Cadmium (mg/L) Analysis Run 5/4/2023 2:20 PM View: AP 1 Confidence Intervals

Plant McDonough Client: Southern Company Data: McDonough AP

	B-100	DGWC-37	DGWC-38	DGWC-40	DGWC-67	DGWC-68A
9/2/2016				0.0008 (J)		
9/8/2016		0.0002 (J)	0.0002 (J)			
12/7/2016		0.0001 (J)	0.0002 (J)			
12/8/2016				0.0007 (J)		
3/30/2017		0.0001 (J)	0.0002 (J)	0.0007 (J)		
3/31/2017					<0.0005	
5/12/2017					<0.0005	8E-05 (J)
6/16/2017					<0.0005	<0.0005
7/13/2017		<0.0005	0.0002 (J)	0.0008 (J)	<0.0005	<0.0005
8/8/2017						<0.0005
10/26/2017		<0.0005	0.0002 (J)	0.0008 (J)	<0.0005	<0.0005
3/1/2018		<0.0005	<0.0005			
3/2/2018				<0.001	<0.0005	<0.0005
7/12/2018		<0.0005	0.00024 (J)	0.00087 (J)		
7/13/2018					<0.0005	0.00019 (J)
11/8/2018		<0.0005	<0.001 (J)	<0.001 (J)	<0.0005	<0.001 (J)
8/28/2019		<0.0005	0.0003 (J)	0.00087 (J)	0.00017 (J)	0.00017 (J)
10/16/2019						0.00017 (J)
10/17/2019					<0.0005	
10/18/2019		<0.0005	0.00016 (J)	0.00088 (J)		
3/4/2020				0.00093 (J)		
3/9/2020		<0.0005	0.00017 (J)		0.00021 (J)	0.00026 (J)
8/13/2020		<0.0005	0.00021 (J)	0.00084 (J)	0.00015 (J)	0.00021 (J)
8/17/2020	0.00059 (J)					
9/23/2020				0.0008 (J)	0.00018 (J)	0.00024 (J)
9/24/2020		0.00027 (J)	0.00081 (J)			
9/25/2020	0.00027 (J)					
3/8/2021	0.00027 (J)			0.00072		
3/10/2021						<0.0005
3/11/2021		<0.0005	<0.0005		0.00053	
9/13/2021	0.00029 (J)					
9/14/2021				0.00086		
9/15/2021			0.00021 (J)			
9/16/2021		0.00013 (J)			<0.0005	<0.0005
1/19/2022				0.00085	<0.0005	
1/21/2022	0.00059	<0.0005	0.0002 (J)			
1/25/2022						0.00035 (J)
9/7/2022				0.00081		0.0002 (J)
9/8/2022	0.00027 (J)	<0.0005			<0.0005	
9/12/2022			0.00013 (J)			
2/1/2023				0.00063		<0.0005
2/2/2023	<0.0005	<0.0005	<0.0005		<0.0005	
Mean	0.0003614	0.0004056	0.0003294	0.00077	0.00043	0.0003817
Std. Dev.	0.0001566	0.0001607	0.0002425	0.0001237	0.0001395	0.0002183
Upper Lim.	0.00059	0.0005	0.0005	0.0008446	0.00053	0.0002406
Lower Lim.	0.00025	0.0002	0.00017	0.0007081	0.00021	0.0001398

ND substitution: RL or RL/2 if <15% NDs. Substitution method for trace values of the form <PQL(J): PQL.

Confidence Interval

Constituent: Cadmium (mg/L) Analysis Run 5/4/2023 2:20 PM View: AP 1 Confidence Intervals

Plant McDonough Client: Southern Company Data: McDonough AP

	DGWC-69
3/31/2017	0.0001 (J)
5/12/2017	0.0002 (J)
6/16/2017	0.0002 (J)
7/13/2017	<0.0005
10/26/2017	<0.0005
11/15/2017	<0.0005
3/2/2018	<0.0005
7/13/2018	<0.0005
11/8/2018	<0.0005
8/28/2019	<0.0005
10/16/2019	0.00017 (J)
3/9/2020	<0.0005
8/13/2020	<0.0005
9/23/2020	<0.0005
3/10/2021	<0.0005
9/16/2021	<0.0005
1/25/2022	<0.0005
9/7/2022	<0.0005
2/1/2023	<0.0005
Mean	0.00043
Std. Dev.	0.0001406
Upper Lim.	0.0005
Lower Lim.	0.0002

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Chromium (mg/L) Analysis Run 5/4/2023 2:20 PM View: AP 1 Confidence Intervals

Plant McDonough Client: Southern Company Data: McDonough AP

	B-100	B-105D	B-112D	B-62	DGWC-37	DGWC-38
9/8/2016					<0.005	<0.005
12/7/2016					<0.005	<0.005
3/30/2017					<0.005	<0.005
7/13/2017					<0.005	<0.005
10/26/2017					0.0007 (J)	0.0005 (J)
3/1/2018					<0.005	<0.005
7/12/2018					<0.005	<0.005
11/8/2018					<0.005	<0.005
1/30/2019				<0.005		
8/28/2019					<0.005	<0.005
9/11/2019				<0.005		
10/18/2019					<0.005	0.00092 (J)
10/21/2019				0.00098 (J)		
3/9/2020					<0.005	0.00044 (J)
8/13/2020				<0.005	0.00058 (J)	<0.005
8/17/2020	<0.005					
9/24/2020				<0.005	<0.005	<0.005
9/25/2020	0.00094 (J)					
12/9/2020		<0.005				
3/8/2021	0.00057 (J)	<0.005				
3/11/2021					<0.005	<0.005
3/12/2021				<0.005		
4/15/2021			0.00085 (J)			
9/9/2021				<0.005		
9/13/2021	<0.005					
9/15/2021		0.0012 (J)				<0.005
9/16/2021			0.0014 (J)		<0.005	
1/19/2022		<0.005	<0.005			
1/20/2022				<0.005		
1/21/2022	<0.005				<0.005	<0.005
9/7/2022		<0.005	<0.005			
9/8/2022	<0.005			<0.005	<0.005	
9/12/2022						<0.005
2/1/2023		<0.005	<0.005			
2/2/2023	<0.005			<0.005	<0.005	<0.005
Mean	0.003787	0.004367	0.00345	0.004598	0.004516	0.00427
Std. Dev.	0.002074	0.001551	0.002131	0.001271	0.00141	0.001682
Upper Lim.	0.005	0.005	0.005	0.005	0.005	0.005
Lower Lim.	0.00057	0.0012	0.00085	0.005	0.0007	0.00092

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Chromium (mg/L) Analysis Run 5/4/2023 2:20 PM View: AP 1 Confidence Intervals

Plant McDonough Client: Southern Company Data: McDonough AP

	DGWC-40	DGWC-67	DGWC-68A	DGWC-69
9/2/2016	<0.005			
12/8/2016	<0.005			
3/30/2017	0.0007 (J)			
3/31/2017		0.0005 (J)		<0.005
5/12/2017		0.0007 (J)	<0.005	<0.005
6/16/2017		<0.005	<0.005	<0.005
7/13/2017	0.0006 (J)	<0.005	0.0005 (J)	<0.005
8/8/2017			<0.005	
10/26/2017	0.0007 (J)	<0.005	<0.005	<0.005
11/15/2017				<0.005
3/2/2018	<0.005	<0.005	<0.005	<0.005
7/12/2018	<0.005			
7/13/2018		<0.005	<0.005	<0.005
11/8/2018	<0.005	<0.005	<0.005	<0.005
8/28/2019	0.00061 (J)	<0.005	<0.005	0.00049 (J)
10/16/2019			<0.005	<0.005
10/17/2019		<0.005		
10/18/2019	0.00078 (J)			
3/4/2020	0.0011 (J)			
3/9/2020		0.00088 (J)	<0.005	0.0012 (J)
8/13/2020	0.00072 (J)	<0.005	<0.005	<0.005
9/23/2020	0.0011 (J)	<0.005	<0.005	0.0011 (J)
3/8/2021	0.0006 (J)			
3/10/2021			<0.005	0.0009 (J)
3/11/2021		0.0014 (J)		
9/14/2021	0.0021 (J)			
9/16/2021		<0.005	0.0014 (Jo)	<0.005
10/27/2021			<0.005	
1/19/2022	<0.005	<0.005		
1/25/2022			<0.005	0.0013 (J)
9/7/2022	<0.005		<0.005	<0.005
9/8/2022		<0.005		
2/1/2023	<0.005		<0.005	<0.005
2/2/2023		<0.005		
Mean	0.002723	0.004082	0.00475	0.003947
Std. Dev.	0.002123	0.001774	0.001061	0.001817
Upper Lim.	0.005	0.005	0.005	0.005
Lower Lim.	0.0007	0.0014	0.0005	0.0012

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Cobalt (mg/L) Analysis Run 5/4/2023 2:20 PM View: AP 1 Confidence Intervals

Plant McDonough Client: Southern Company Data: McDonough AP

	B-100	B-105D	B-112D	B-62	DGWC-37	DGWC-38
9/8/2016					<0.005	0.0015 (J)
12/7/2016					0.0005 (J)	0.0017 (J)
3/30/2017					<0.005	0.0016 (J)
7/13/2017					0.0003 (J)	0.0016 (J)
10/26/2017					0.0003 (J)	0.0016 (J)
3/1/2018					<0.005	<0.01
7/12/2018					<0.005	0.0015 (J)
11/8/2018					<0.005	<0.01 (J)
1/30/2019				<0.005		
8/28/2019					<0.005	0.0016 (J)
9/11/2019				0.0003 (J)		
10/18/2019					<0.005	0.0016 (J)
10/21/2019				0.00031 (J)		
3/9/2020					<0.005	0.0016 (J)
7/23/2020	0.086					
8/3/2020	0.087					
8/13/2020				<0.005	<0.005	0.0014 (J)
8/17/2020	0.077					
9/24/2020				<0.005	<0.005	0.0013 (J)
9/25/2020	0.034					
12/9/2020		0.012				
3/8/2021	0.029	0.0042 (J)				
3/11/2021					<0.005	0.0017 (J)
3/12/2021				<0.005		
4/15/2021			0.0025 (J)			
9/9/2021				<0.005		
9/13/2021	0.035					
9/15/2021		0.0065				0.0016 (J)
9/16/2021			0.00054 (J)		<0.005	
1/19/2022		0.006	<0.005			
1/20/2022				<0.005		
1/21/2022	0.034				<0.005	0.0017 (J)
9/7/2022		0.004 (J)	<0.005			
9/8/2022	0.028			<0.005	<0.005	
9/9/2022				<0.005		
9/12/2022						0.0014 (J)
2/1/2023		0.004 (J)	<0.005			
2/2/2023	<0.005			<0.005	<0.005	0.0017 (J)
Mean	0.04583	0.006117	0.003608	0.004146	0.004228	0.00195
Std. Dev.	0.02991	0.003079	0.002028	0.001899	0.001777	0.001115
Upper Lim.	0.07642	0.01012	0.005	0.005	0.005	0.0017
Lower Lim.	0.01578	0.00312	0.00054	0.00031	0.0005	0.0015

ND substitution: RL or RL/2 if <15% NDs. Substitution method for trace values of the form <PQL(J): PQL.

Confidence Interval

Constituent: Cobalt (mg/L) Analysis Run 5/4/2023 2:20 PM View: AP 1 Confidence Intervals

Plant McDonough Client: Southern Company Data: McDonough AP

	DGWC-39	DGWC-40	DGWC-67	DGWC-68A	DGWC-69
9/2/2016		0.0382			
9/8/2016	0.0068 (J)				
12/7/2016	0.0071 (J)				
12/8/2016		0.0318			
3/30/2017	0.006 (J)	0.0364			
3/31/2017			0.0064 (J)		0.0022 (J)
5/12/2017			0.0037 (J)	0.0015 (J)	0.0016 (J)
6/16/2017			0.0041 (J)	0.0003 (J)	0.0009 (J)
7/13/2017	0.0063 (J)	0.0394	0.0037 (J)	0.0005 (J)	0.0004 (J)
8/8/2017				<0.005	
10/26/2017	0.0062 (J)	0.0371	0.0022 (J)	<0.005	0.0031 (J)
11/15/2017					0.0028 (J)
3/1/2018	<0.01				
3/2/2018		0.0425	<0.01	<0.005	<0.005
7/12/2018	0.0059 (J)	0.044			
7/13/2018			0.0017 (J)	<0.005	<0.005
11/8/2018	<0.01 (J)	0.036	<0.01 (J)	<0.005	<0.005
8/28/2019	0.0067	0.044	0.0013 (J)	<0.005	<0.005
10/16/2019				<0.005	<0.005
10/17/2019			0.0013 (J)		
10/18/2019	0.007	0.043			
3/4/2020		0.055			
3/9/2020	0.007		0.0015 (J)	<0.005	<0.005
8/13/2020	0.006	0.044	0.0015 (J)	<0.005	<0.005
9/23/2020		0.046	0.0011 (J)	<0.005	<0.005
9/25/2020	0.0061				
3/8/2021		0.039			
3/10/2021				<0.005	<0.005
3/11/2021	0.0058		0.0016 (J)		
9/14/2021		0.05			
9/16/2021			0.0012 (J)	0.0032 (Jo)	<0.005
9/17/2021	0.0076				
10/27/2021				<0.005	
1/19/2022		0.042	0.0011 (J)		
1/20/2022	0.0061				
1/25/2022				<0.005	<0.005
9/7/2022	0.0065	0.037		<0.005	<0.005
9/8/2022			0.001 (J)		
2/1/2023		0.035		<0.005	<0.005
2/2/2023			0.0014 (J)		
2/3/2023	0.005				
Mean	0.006228	0.04113	0.002489	0.004294	0.004
Std. Dev.	0.0007442	0.005679	0.001691	0.001638	0.001613
Upper Lim.	0.006678	0.04457	0.0041	0.005	0.005
Lower Lim.	0.005777	0.0377	0.0012	0.0015	0.0022

ND substitution: RL or RL/2 if <15% NDs. Substitution method for trace values of the form <PQL(J): PQL.

Confidence Interval

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 5/4/2023 2:20 PM View: AP 1 Confidence Intervals

Plant McDonough Client: Southern Company Data: McDonough AP

	B-100	B-105D	B-112D	B-62	DGWC-37	DGWC-38
9/8/2016					0.827 (U)	1.48
12/7/2016					0.56 (U)	0.22 (U)
3/30/2017					0.302 (U)	0.519 (U)
7/13/2017					0.731 (U)	1.11
10/26/2017					1.04 (U)	1.13 (U)
3/1/2018					0.344 (U)	0.985 (U)
7/12/2018					0.566 (U)	0.615 (U)
11/8/2018					0.623 (U)	0.58 (U)
1/30/2019				1.97 (U)		
8/28/2019					1.24 (U)	0.517 (U)
10/21/2019				1.82		
1/6/2020					2.01	0.527 (U)
3/9/2020					0.499 (U)	1.04
8/13/2020				1.63	0.99	0.132 (U)
8/17/2020	1.4 (U)					
9/24/2020				1.28 (U)	1.03 (U)	0.593 (U)
9/25/2020	0.799 (U)					
12/9/2020		1.25 (U)				
3/8/2021	0.168 (U)	1.87				
3/11/2021					0.956 (U)	0.0784 (U)
3/12/2021				1.18 (U)		
4/15/2021			0.945 (U)			
9/9/2021				1.7		
9/13/2021	0.774 (U)					
9/15/2021		2.01				2.37
9/16/2021			0.241 (U)		0.691 (U)	
1/19/2022		2.45	0.738 (U)			
1/20/2022				1.71		
1/21/2022	0.769 (U)				0.343 (U)	0.0873 (U)
9/8/2022	0.643 (U)					
9/9/2022				1.96		
2/1/2023		6.88	1.76			
2/2/2023	0.981			1.6	1.23	0.462 (U)
Mean	0.7906	2.892	0.921	1.65	0.8225	0.7321
Std. Dev.	0.3692	2.27	0.6326	0.2725	0.4273	0.5826
Upper Lim.	1.229	6.794	2.357	1.913	1.09	1.003
Lower Lim.	0.352	0.5813	-0.5151	1.387	0.5547	0.3379

Confidence Interval

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 5/4/2023 2:20 PM View: AP 1 Confidence Intervals

Plant McDonough Client: Southern Company Data: McDonough AP

	DGWC-39	DGWC-40	DGWC-67	DGWC-68A	DGWC-69
9/2/2016		1.44			
9/8/2016	1.44				
12/7/2016	2.16				
12/8/2016		2.56			
3/30/2017	0.264 (U)	0.0844 (U)			
3/31/2017			0.404 (U)		1.39
5/12/2017			0.206 (U)	1.18	1.29
6/16/2017			0.966 (U)	0.332 (U)	1.61
7/13/2017	0.517 (U)	0.963 (U)	0.387 (U)	0.304 (U)	1.14
8/8/2017				1.4	
10/26/2017	0.875 (U)	0.748 (U)	0.619 (U)	0.477 (U)	2.04
11/15/2017					1.99
3/1/2018	1.24				
3/2/2018		0.485 (U)	1.31	1.13	0.918 (U)
7/12/2018	0.935 (U)	0.231 (U)			
7/13/2018			0.667 (U)	0.407 (U)	1.36 (U)
11/8/2018	1.15 (U)	0.465 (U)	0.911 (U)	0.393 (U)	0.719 (U)
8/28/2019	1.15 (U)	0.592 (U)	0.751 (U)	1.77	1.38
10/16/2019				2.12	0.826 (U)
1/6/2020	1.4	1.6	0.965 (U)		
3/4/2020		1.62			
3/9/2020	1.36		0.819 (U)	1.33	1.39
8/13/2020	0.626 (U)	1.6	0.897 (U)	1.46	2.66
9/23/2020		1.28 (U)	0.131 (U)	0.563 (U)	1.8
9/25/2020	0.181 (U)				
3/8/2021		0.714 (U)			
3/10/2021				0.568 (U)	1.6
3/11/2021	0.969 (U)		1.55		
9/14/2021		1.8			
9/16/2021			0.201 (U)	1.74	2.06
9/17/2021	0.911 (U)				
1/19/2022		1.7	0.853 (U)		
1/20/2022	0.172 (U)				
1/25/2022				0.323 (U)	0.834 (U)
2/1/2023		0.603 (U)		1.37	1.85
2/2/2023			0.498 (U)		
2/3/2023	0.878 (U)				
Mean	0.9546	1.087	0.7138	0.9922	1.492
Std. Dev.	0.513	0.6737	0.3878	0.6032	0.5147
Upper Lim.	1.276	1.51	0.9568	1.46	1.803
Lower Lim.	0.6331	0.6652	0.4708	0.393	1.181

Confidence Interval

Constituent: Fluoride (mg/L) Analysis Run 5/4/2023 2:20 PM View: AP 1 Confidence Intervals

Plant McDonough Client: Southern Company Data: McDonough AP

	B-100	B-105D	B-112D	B-62	DGWC-37	DGWC-38
9/8/2016					0.08 (J)	0.1 (J)
12/7/2016					0.21 (J)	0.27 (J)
3/30/2017					0.05 (J)	0.12 (J)
7/13/2017					0.06 (J)	0.13 (J)
10/26/2017					0.08 (J)	0.47
3/1/2018					0.22	<0.3
7/12/2018					0.32	0.23 (J)
11/8/2018					<0.3	<0.3
1/30/2019				0.43		
3/13/2019					0.08 (J)	0.084 (J)
8/28/2019					0.074 (J)	0.066 (J)
10/18/2019					0.075 (J)	0.073 (J)
10/21/2019				0.23 (J)		
3/9/2020					0.054 (J)	0.064 (J)
8/13/2020				0.11	0.068 (J)	0.06 (J)
8/17/2020	<0.1					
9/24/2020				0.093 (J)	0.061 (J)	0.057 (J)
9/25/2020	<0.1					
12/9/2020		0.075 (J)				
3/8/2021	<0.1	0.32				
3/11/2021					0.057 (J)	0.058 (J)
3/12/2021				0.11		
4/15/2021			0.3			
9/9/2021				0.14		
9/13/2021	<0.1					
9/15/2021		0.078 (J)				0.06 (J)
9/16/2021			0.34		0.084 (J)	
1/19/2022		0.058 (J)	0.25			
1/20/2022				0.099 (J)		
1/21/2022	<0.1				0.053 (J)	0.1
9/7/2022		0.11	0.27			
9/8/2022	0.072 (J)			0.13	0.082 (J)	
9/12/2022						0.12
2/1/2023		0.089 (J)	0.3			
2/2/2023	0.052 (J)			0.16	0.089 (J)	0.1
Mean	0.08914	0.1217	0.292	0.1669	0.1025	0.1296
Std. Dev.	0.01942	0.09867	0.03421	0.1072	0.072	0.1008
Upper Lim.	0.1	0.32	0.3493	0.43	0.15	0.15
Lower Lim.	0.052	0.058	0.2347	0.093	0.057	0.064

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Fluoride (mg/L) Analysis Run 5/4/2023 2:20 PM View: AP 1 Confidence Intervals

Plant McDonough Client: Southern Company Data: McDonough AP

	DGWC-39	DGWC-40	DGWC-67	DGWC-68A	DGWC-69
9/2/2016		0.5			
9/8/2016	0.17 (J)				
12/7/2016	0.33				
12/8/2016		0.35			
3/30/2017	0.17 (J)	0.21 (J)			
3/31/2017			0.02 (J)		0.16 (J)
5/12/2017			<0.1	0.37	0.12 (J)
6/16/2017			0.03 (J)	0.12 (J)	0.16 (J)
7/13/2017	0.14 (J)	0.2 (J)	0.03 (J)	0.12 (J)	0.13 (J)
8/8/2017				0.11 (J)	
10/26/2017	0.54	0.5	<0.1	0.11 (J)	0.29 (J)
11/15/2017					0.28 (J)
3/1/2018	0.13				
3/2/2018		0.33	<0.1	0.23	0.18
7/12/2018	0.13 (J)	0.57			
7/13/2018			0.25 (J)	0.099 (J)	0.19 (J)
11/8/2018	<0.3 (J)	<0.3 (J)	0.5	<0.3 (J)	<0.3 (J)
3/13/2019	0.085 (J)	0.15 (J)	0.07 (J)	0.12 (J)	0.086 (J)
8/28/2019	0.086 (J)	0.14	<0.1	0.1	0.07 (J)
10/16/2019				0.093 (J)	0.13 (J)
10/17/2019			0.038 (J)		
10/18/2019	0.14 (J)	0.13 (J)			
3/4/2020		0.11 (J)			
3/9/2020	0.075 (J)		<0.1	0.082 (J)	0.068 (J)
8/13/2020	0.076 (J)	0.16	<0.1	0.076 (J)	0.084 (J)
9/23/2020		0.054 (J)	<0.1	0.07 (J)	0.064 (J)
9/25/2020	0.086 (J)				
3/8/2021		0.17			
3/10/2021				0.07 (J)	0.055 (J)
3/11/2021	0.083 (J)		<0.1		
9/14/2021		0.13			
9/16/2021			0.069 (J)	0.55	0.11
9/17/2021	0.13				
1/19/2022		0.12	<0.1		
1/20/2022	0.1				
1/25/2022				0.067 (J)	0.054 (J)
9/7/2022	0.11	0.14		0.11	0.11
9/8/2022			0.096 (J)		
2/1/2023		0.15		0.11	0.1
2/2/2023			0.068 (J)		
2/3/2023	0.12				
Mean	0.1501	0.2244	0.109	0.1451	0.1296
Std. Dev.	0.1105	0.1505	0.1064	0.1206	0.06706
Upper Lim.	0.15	0.2665	0.25	0.15	0.1676
Lower Lim.	0.085	0.1315	0.038	0.076	0.09147

ND substitution: RL or RL/2 if <15% NDs. Substitution method for trace values of the form <PQL(J): PQL.

Confidence Interval

Constituent: Lead (mg/L) Analysis Run 5/4/2023 2:20 PM View: AP 1 Confidence Intervals

Plant McDonough Client: Southern Company Data: McDonough AP

	B-100	B-105D	B-112D	DGWC-37	DGWC-38	DGWC-39
9/8/2016				<0.001	<0.001	<0.001
12/7/2016				<0.001	<0.001	<0.001
3/30/2017				0.0014 (J)	<0.001	<0.001
7/13/2017				<0.001	<0.001	<0.001
10/26/2017				<0.001	0.0001 (J)	<0.001
3/1/2018				<0.001	<0.001	<0.001
7/12/2018				<0.001	<0.001	<0.001
11/8/2018				<0.001	<0.001	<0.001
8/28/2019				6.1E-05 (J)	<0.001	8E-05 (J)
10/18/2019				<0.001	7.4E-05 (J)	<0.001
3/9/2020				<0.001	6.1E-05 (J)	<0.001
8/13/2020				<0.001	<0.001	<0.001
8/17/2020	8.8E-05 (J)					
9/24/2020				<0.001	0.00014 (J)	
9/25/2020	0.00021 (J)					0.00022 (J)
12/9/2020		5.2E-05 (J)				
3/8/2021	0.00018 (J)	<0.001				
3/11/2021				<0.001	0.00014 (J)	<0.001
4/15/2021			0.00014 (J)			
9/13/2021	<0.001					
9/15/2021		<0.001			<0.001	
9/16/2021			<0.001	<0.001		
9/17/2021						<0.001
1/19/2022		<0.001	<0.001			
1/20/2022						<0.001
1/21/2022	<0.001			<0.001	<0.001	
9/7/2022		<0.001	<0.001			<0.001
9/8/2022	<0.001			<0.001		
9/12/2022					<0.001	
2/1/2023		<0.001	<0.001			
2/2/2023	<0.001			<0.001	<0.001	
2/3/2023						<0.001
Mean	0.0006397	0.000842	0.000828	0.0009701	0.0007508	0.0009056
Std. Dev.	0.0004509	0.000387	0.0003846	0.0002456	0.0004138	0.0002759
Upper Lim.	0.001	0.001	0.001	0.0014	0.001	0.001
Lower Lim.	8.8E-05	5.2E-05	0.00014	6.1E-05	0.00014	0.00022

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Lead (mg/L) Analysis Run 5/4/2023 2:20 PM View: AP 1 Confidence Intervals

Plant McDonough Client: Southern Company Data: McDonough AP

	DGWC-40	DGWC-67	DGWC-68A	DGWC-69
9/2/2016	<0.001			
12/8/2016	<0.001			
3/30/2017	7E-05 (J)			
3/31/2017		<0.001		<0.001
5/12/2017		9E-05 (J)	<0.001	0.0001 (J)
6/16/2017		<0.001	<0.001	<0.001
7/13/2017	<0.001	<0.001	<0.001	<0.001
8/8/2017			<0.001	
10/26/2017	7E-05 (J)	<0.001	<0.001	<0.001
11/15/2017				9E-05 (J)
3/2/2018	<0.001	<0.001	<0.001	<0.001
7/12/2018	<0.001			
7/13/2018		<0.001	<0.001	<0.001
11/8/2018	<0.001	<0.001	<0.001	<0.001
8/28/2019	8.1E-05 (J)	<0.001	<0.001	<0.001
10/16/2019			<0.001	<0.001
10/17/2019		<0.001		
10/18/2019	0.00015 (J)			
3/4/2020	0.00017 (J)			
3/9/2020		4.7E-05 (J)	<0.001	9E-05 (J)
8/13/2020	4.9E-05 (J)	5.6E-05 (J)	<0.001	5.9E-05 (J)
9/23/2020	0.00028 (J)	<0.001	0.00035 (J)	0.00017 (J)
3/8/2021	5.4E-05 (J)			
3/10/2021			6.7E-05 (J)	0.0001 (J)
3/11/2021		0.00025 (J)		
9/14/2021	<0.001			
9/16/2021		<0.001	<0.001	<0.001
1/19/2022	<0.001	<0.001		
1/25/2022			<0.001	<0.001
9/7/2022	<0.001		<0.001	<0.001
9/8/2022		<0.001		
2/1/2023	<0.001		<0.001	<0.001
2/2/2023		<0.001		
Mean	0.0006069	0.0008024	0.0009121	0.0007163
Std. Dev.	0.0004552	0.0003825	0.0002605	0.0004295
Upper Lim.	0.001	0.001	0.001	0.001
Lower Lim.	7E-05	0.00025	0.00035	0.0001

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Lithium (mg/L) Analysis Run 5/4/2023 2:20 PM View: AP 1 Confidence Intervals

Plant McDonough Client: Southern Company Data: McDonough AP

	B-100	B-105D	B-112D	B-62	DGWC-37	DGWC-38
9/8/2016					<0.05	0.0032 (J)
12/7/2016					<0.05	0.0035 (J)
3/30/2017					0.0029 (J)	0.0035 (J)
7/13/2017					<0.05	0.0032 (J)
10/26/2017					0.0018 (J)	0.0034 (J)
3/1/2018					0.0024 (J)	0.0033 (J)
7/12/2018					0.0028 (J)	0.0034 (J)
11/8/2018					<0.05	<0.05
1/30/2019				<0.05		
8/28/2019					0.0025 (J)	0.0034 (J)
9/11/2019				0.0078 (J)		
10/18/2019					0.0026 (J)	0.0032 (J)
10/21/2019				0.0078 (J)		
3/9/2020					0.0017 (J)	0.0033 (J)
8/13/2020				0.0087 (J)	0.0023 (J)	0.0028 (J)
8/17/2020	0.0013 (J)					
9/24/2020				0.0084 (J)	0.0021 (J)	0.0029 (J)
9/25/2020	0.0027 (J)					
12/9/2020		0.014 (J)				
3/8/2021	0.0024 (J)	0.015 (J)				
3/11/2021					0.0024 (J)	0.003 (J)
3/12/2021				0.0087 (J)		
4/15/2021			0.0045 (J)			
9/9/2021				0.0094 (J)		
9/13/2021	0.0022 (J)					
9/15/2021		0.014 (J)				0.0029 (J)
9/16/2021			0.0038 (J)		0.0021 (J)	
1/19/2022		0.013 (J)	0.0044 (J)			
1/20/2022				0.0092 (J)		
1/21/2022	0.0021 (J)				0.002 (J)	0.0025 (J)
9/7/2022		0.013 (J)	0.0039 (J)			
9/8/2022	0.0023 (J)			0.0085 (J)	0.0019 (J)	
9/12/2022						0.003 (J)
2/1/2023		0.013 (J)	0.0038 (J)			
2/2/2023	<0.03			0.0082 (J)	0.0018 (J)	0.0026 (J)
Mean	0.004	0.01367	0.00408	0.01017	0.01285	0.004339
Std. Dev.	0.00487	0.0008165	0.0003421	0.005237	0.02044	0.005165
Upper Lim.	0.015	0.015	0.0045	0.0094	0.0029	0.0034
Lower Lim.	0.0013	0.013	0.0038	0.0078	0.0019	0.0029

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Lithium (mg/L) Analysis Run 5/4/2023 2:20 PM View: AP 1 Confidence Intervals

Plant McDonough Client: Southern Company Data: McDonough AP

	DGWC-40	DGWC-67	DGWC-68A	DGWC-69
9/2/2016	0.0022 (J)			
12/8/2016	<0.05			
3/30/2017	0.0023 (J)			
3/31/2017		0.0052 (J)		0.0031 (J)
5/12/2017		0.0054 (J)	0.0016 (J)	0.003 (J)
6/16/2017		0.0048 (J)	<0.03	0.0031 (J)
7/13/2017	0.0023 (J)	0.0044 (J)	<0.03	0.0029 (J)
8/8/2017			<0.03	
10/26/2017	0.0021 (J)	0.0043 (J)	<0.03	0.0034 (J)
11/15/2017				0.0034 (J)
3/2/2018	0.0023 (J)	0.0047 (J)	<0.03	0.0028 (J)
7/12/2018	0.0022 (J)			
7/13/2018		0.0041 (J)	<0.03	0.0026 (J)
11/8/2018	<0.05	<0.05	<0.03	<0.05
8/28/2019	0.0022 (J)	0.0046 (J)	<0.03	0.0024 (J)
10/16/2019			<0.03	0.0032 (J)
10/17/2019		0.0047 (J)		
10/18/2019	0.0024 (J)			
3/4/2020	0.0027 (J)			
3/9/2020		0.0048 (J)	<0.03	0.0025 (J)
8/13/2020	0.0022 (J)	0.0044 (J)	<0.03	0.0031 (J)
9/23/2020	0.0022 (J)	0.0043 (J)	<0.03	0.0023 (J)
3/8/2021	0.0022 (J)			
3/10/2021			<0.03	0.0023 (J)
3/11/2021		0.005 (J)		
9/14/2021	0.003 (J)			
9/16/2021		0.0044 (J)	0.00082 (J)	0.0023 (J)
1/19/2022	0.0024 (J)	0.0046 (J)		
1/25/2022			<0.03	0.0026 (J)
9/7/2022	0.0023 (J)		<0.03	0.0025 (J)
9/8/2022		0.0048 (J)		
2/1/2023	0.0021 (J)		<0.03	0.0021 (J)
2/2/2023		0.0048 (J)		
Mean	0.004839	0.005794	0.0268	0.003926
Std. Dev.	0.007338	0.004804	0.009311	0.005119
Upper Lim.	0.0027	0.005	0.03	0.0032
Lower Lim.	0.0022	0.0044	0.0016	0.0024

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Mercury (mg/L) Analysis Run 5/4/2023 2:20 PM View: AP 1 Confidence Intervals

Plant McDonough Client: Southern Company Data: McDonough AP

	B-100	B-105D	DGWC-37	DGWC-38	DGWC-39	DGWC-40
9/2/2016						4.4E-05 (J)
9/8/2016			<0.0002	<0.0002	<0.0002	
12/7/2016			<0.0002	<0.0002	<0.0002	
12/8/2016						<0.0002
3/30/2017			6E-05 (J)	7E-05 (J)	5.9E-05 (J)	9E-05 (J)
7/13/2017			<0.0002	<0.0002	<0.0002	<0.0002
10/26/2017			<0.0002	<0.0002	<0.0002	<0.0002
3/1/2018			<0.0002	<0.0002	<0.0002	
3/2/2018						<0.0002
7/12/2018			4.4E-05 (J)	4E-05 (J)	<0.0002	4.5E-05 (J)
11/8/2018			<0.0002	<0.0002	<0.0002	<0.0002
8/28/2019			<0.0002	<0.0002	<0.0002	<0.0002
10/18/2019			<0.0002	<0.0002	<0.0002	<0.0002
3/4/2020						<0.0002
3/9/2020			<0.0002	<0.0002	<0.0002	
8/13/2020			<0.0002	<0.0002	<0.0002	<0.0002
8/17/2020	0.00011 (J)					
9/23/2020						<0.0002
9/24/2020			9.1E-05 (J)	8.5E-05 (J)		
9/25/2020	<0.0002				<0.0002	
12/9/2020		8.7E-05 (J)				
9/13/2021	<0.0002					
9/14/2021						<0.0002
9/15/2021		<0.0002		<0.0002		
9/16/2021			<0.0002			
9/17/2021					<0.0002	
1/19/2022		<0.0002				<0.0002
1/20/2022					<0.0002	
1/21/2022	<0.0002		<0.0002	<0.0002		
9/7/2022		0.00014 (J)			<0.0002	<0.0002
9/8/2022	<0.0002		<0.0002			
9/12/2022				<0.0002		
2/1/2023		<0.0002				<0.0002
2/2/2023	<0.0002		<0.0002	<0.0002		
2/3/2023					<0.0002	
Mean	0.000185	0.0001654	0.0001762	0.0001762	0.0001917	0.0001752
Std. Dev.	3.674E-05	5.095E-05	5.372E-05	5.366E-05	3.42E-05	5.592E-05
Upper Lim.	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002
Lower Lim.	0.00011	8.7E-05	9.1E-05	8.5E-05	5.9E-05	9E-05

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Mercury (mg/L) Analysis Run 5/4/2023 2:20 PM View: AP 1 Confidence Intervals

Plant McDonough Client: Southern Company Data: McDonough AP

	DGWC-67	DGWC-68A	DGWC-69
3/31/2017	<0.0002		<0.0002
5/12/2017	<0.0002	<0.0002	<0.0002
6/16/2017	7E-05 (J)	7E-05 (J)	7E-05 (J)
7/13/2017	<0.0002	<0.0002	<0.0002
8/8/2017		<0.0002	
10/26/2017	<0.0002	<0.0002	<0.0002
11/15/2017			<0.0002
3/2/2018	<0.0002	<0.0002	<0.0002
7/13/2018	<0.0002	<0.0002	<0.0002
11/8/2018	<0.0002	<0.0002	<0.0002
8/28/2019	<0.0002	<0.0002	<0.0002
10/16/2019		<0.0002	<0.0002
10/17/2019	<0.0002		
3/9/2020	<0.0002	<0.0002	<0.0002
8/13/2020	<0.0002	<0.0002	<0.0002
9/23/2020	<0.0002	<0.0002	<0.0002
9/16/2021	<0.0002	<0.0002	<0.0002
1/19/2022	<0.0002		
1/25/2022		<0.0002	<0.0002
9/7/2022		<0.0002	<0.0002
9/8/2022	<0.0002		
2/1/2023		<0.0002	<0.0002
2/2/2023	<0.0002		
Mean	0.0001924	0.0001924	0.0001928
Std. Dev.	3.153E-05	3.153E-05	3.064E-05
Upper Lim.	0.0002	0.0002	0.0002
Lower Lim.	7E-05	7E-05	7E-05

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Molybdenum (mg/L) Analysis Run 5/4/2023 2:20 PM View: AP 1 Confidence Intervals

Plant McDonough Client: Southern Company Data: McDonough AP

	B-100	B-105D	B-112D	DGWC-38	DGWC-68A	DGWC-69
9/8/2016				<0.01		
12/7/2016				<0.01		
3/30/2017				0.0011 (J)		
3/31/2017						0.0124
5/12/2017					0.275	0.0117
6/16/2017					0.19	0.0087 (J)
7/13/2017				0.0012 (J)	0.211	0.0053 (J)
8/8/2017					0.207	
10/26/2017				0.0011 (J)	0.226	0.0244
11/15/2017						0.0237
3/1/2018				<0.01		
3/2/2018					0.215	0.0072 (J)
7/12/2018				<0.01		
7/13/2018					0.22	0.007 (J)
11/8/2018				<0.01	0.2	<0.01 (J)
8/28/2019				<0.01	0.21	0.0059 (J)
10/16/2019					0.22	0.01
10/18/2019				<0.01		
3/9/2020				0.001 (J)	0.19	0.0062 (J)
8/13/2020				0.00098 (J)	0.19	0.011
8/17/2020	<0.01					
9/23/2020					0.2	0.0056 (J)
9/24/2020				0.001 (J)		
9/25/2020	<0.01					
12/9/2020		<0.01				
3/8/2021	<0.01	0.0011 (J)				
3/10/2021					0.2	0.0056 (J)
3/11/2021				0.00092 (J)		
4/15/2021			0.037			
9/13/2021	<0.01					
9/15/2021		<0.01		0.00099 (J)		
9/16/2021			0.032		0.18	0.009 (J)
1/19/2022		<0.01	0.032			
1/21/2022	<0.01			0.0013 (J)		
1/25/2022					0.23	0.0057 (J)
9/7/2022		<0.01	0.028		0.2	0.0067 (J)
9/8/2022	<0.01					
9/12/2022				0.0012 (J)		
2/1/2023		<0.01	0.03		0.19	0.0058 (J)
2/2/2023	0.19			0.0015 (J)		
Mean	0.03571	0.008517	0.0318	0.004572	0.2086	0.009311
Std. Dev.	0.06803	0.003633	0.003347	0.004458	0.02166	0.005673
Upper Lim.	0.19	0.01	0.03741	0.01	0.2202	0.0117
Lower Lim.	0.01	0.0011	0.02619	0.001	0.1957	0.0057

ND substitution: RL or RL/2 if <15% NDs. Substitution method for trace values of the form <PQL(J): PQL.

Confidence Interval

Constituent: Selenium (mg/L) Analysis Run 5/4/2023 2:20 PM View: AP 1 Confidence Intervals

Plant McDonough Client: Southern Company Data: McDonough AP

	B-100	DGWC-38	DGWC-40	DGWC-67	DGWC-68A
9/2/2016			0.0019 (J)		
9/8/2016		<0.005			
12/7/2016		<0.005			
12/8/2016			0.0022 (J)		
3/30/2017		<0.005	0.0023 (J)		
3/31/2017				<0.005	
5/12/2017				<0.005	<0.005
6/16/2017				<0.005	<0.005
7/13/2017		<0.005	0.0025 (J)	<0.005	<0.005
8/8/2017					<0.005
10/26/2017		<0.005	0.0036 (J)	<0.005	<0.005
3/1/2018		<0.005			
3/2/2018			<0.005	<0.005	<0.005
7/12/2018		<0.005	<0.005		
7/13/2018				<0.005	<0.005
11/8/2018		<0.005	<0.01 (J)	<0.005	<0.005
8/28/2019		<0.005	0.0017 (J)	<0.005	<0.005
10/16/2019					<0.005
10/17/2019				<0.005	
10/18/2019		<0.005	0.0027 (J)		
3/4/2020			0.0049 (J)		
3/9/2020		<0.005		<0.005	<0.005
8/13/2020		<0.005	0.0018 (J)	<0.005	<0.005
8/17/2020	<0.005				
9/23/2020			0.0067 (J)	<0.005	<0.005
9/24/2020		<0.005			
9/25/2020	<0.005				
3/8/2021	0.0019 (J)		0.0023 (J)		
3/10/2021					0.0017 (J)
3/11/2021		0.0019 (J)		0.0027 (J)	
9/13/2021	<0.005				
9/14/2021			0.0015 (J)		
9/15/2021		<0.005			
9/16/2021				<0.005	<0.005
1/19/2022			<0.005	<0.005	
1/21/2022	<0.005	<0.005			
1/25/2022					<0.005
9/7/2022			0.0018 (J)		<0.005
9/8/2022	<0.005			<0.005	
9/12/2022		<0.005			
2/1/2023			<0.005		<0.005
2/2/2023	<0.005	<0.005		<0.005	
Mean	0.004557	0.004828	0.003661	0.004872	0.004817
Std. Dev.	0.001172	0.0007307	0.002233	0.0005421	0.0007778
Upper Lim.	0.005	0.005	0.003105	0.005	0.005
Lower Lim.	0.0019	0.0019	0.001849	0.0027	0.0017

ND substitution: RL or RL/2 if <15% NDs. Substitution method for trace values of the form <PQL(J): PQL.

Confidence Interval

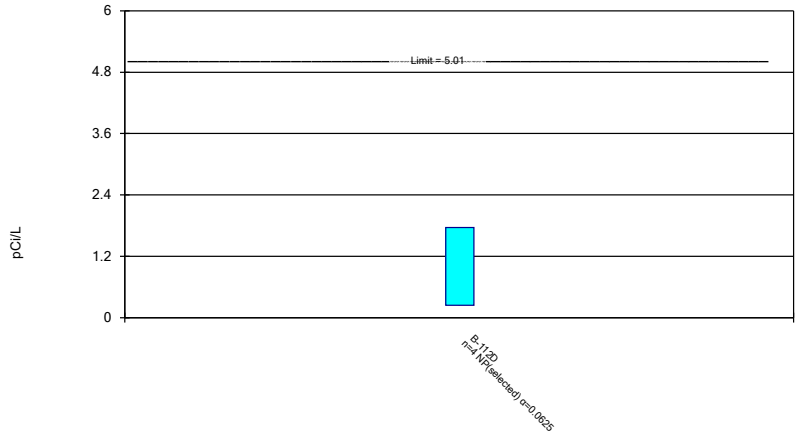
Constituent: Thallium (mg/L) Analysis Run 5/4/2023 2:20 PM View: AP 1 Confidence Intervals
Plant McDonough Client: Southern Company Data: McDonough AP

	DGWC-38	DGWC-39	DGWC-40	DGWC-68A
9/2/2016			<0.001	
9/8/2016	<0.001	<0.001		
12/7/2016	<0.001	<0.001		
12/8/2016			<0.001	
3/30/2017	0.0001 (J)	0.0001 (J)	6E-05 (J)	
5/12/2017				<0.001
6/16/2017				<0.001
7/13/2017	0.0001 (J)	9E-05 (J)	6E-05 (J)	<0.001
8/8/2017				<0.001
10/26/2017	0.0001 (J)	0.0001 (J)	7E-05 (J)	<0.001
3/1/2018	<0.001	<0.001		
3/2/2018			<0.001	<0.001
7/12/2018	<0.001	<0.001	<0.001	
7/13/2018				0.00015 (J)
11/8/2018	<0.001	<0.001	<0.001	<0.001
8/28/2019	0.00014 (J)	6.9E-05 (J)	7E-05 (J)	<0.001
10/16/2019				<0.001
10/18/2019	0.0001 (J)	<0.001	<0.001	
3/4/2020			6.8E-05 (J)	
3/9/2020	0.00016 (J)	7.1E-05 (J)		<0.001
8/13/2020	0.00016 (J)	<0.001	<0.001	<0.001
9/23/2020			<0.001	<0.001
9/24/2020	0.00015 (J)			
9/25/2020		<0.001		
3/8/2021			<0.001	
3/10/2021				<0.001
3/11/2021	<0.001	<0.001		
9/14/2021			<0.001	
9/15/2021	<0.001			
9/16/2021				<0.001
9/17/2021		<0.001		
1/19/2022			<0.001	
1/20/2022		<0.001		
1/21/2022	<0.001			
1/25/2022				<0.001
9/7/2022		<0.001	<0.001	<0.001
9/12/2022	<0.001			
2/1/2023			<0.001	<0.001
2/2/2023	<0.001			
2/3/2023		<0.001		
Mean	0.0006117	0.0007461	0.0007404	0.0009528
Std. Dev.	0.0004471	0.0004213	0.0004307	0.0002003
Upper Lim.	0.001	0.001	0.001	0.001
Lower Lim.	0.00014	0.0001	7E-05	0.00015

ND substitution: RL or RL/2 if <15% NDs.

Non-Parametric Confidence Interval

Compliance Limit is not exceeded.



Normality testing disabled.

Constituent: Combined Radium 226 + 228 Analysis Run 5/4/2023 2:18 PM View: AP 1 Confidence Interval

Plant McDonough Client: Southern Company Data: McDonough AP

Confidence Interval

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 5/4/2023 2:20 PM View: AP 1 Confidence Intervals Nonparametric

Plant McDonough Client: Southern Company Data: McDonough AP

	B-112D
4/15/2021	0.945 (U)
9/16/2021	0.241 (U)
1/19/2022	0.738 (U)
2/1/2023	1.76
Mean	0.921
Std. Dev.	0.6326
Upper Lim.	1.76
Lower Lim.	0.241

FIGURE I.

Appendix IV - Trend Tests - Significant Result

Plant McDonough Client: Southern Company Data: McDonough AP Printed 4/16/2023, 12:30 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Cobalt (mg/L)	**DGWA-53 (bg)**	**-0.004011**	**-97**	**-68**	**Yes**	**18**	**0**	**n/a**	**n/a**	**0.01**	**NP**

Appendix IV - Trend Tests - All Results

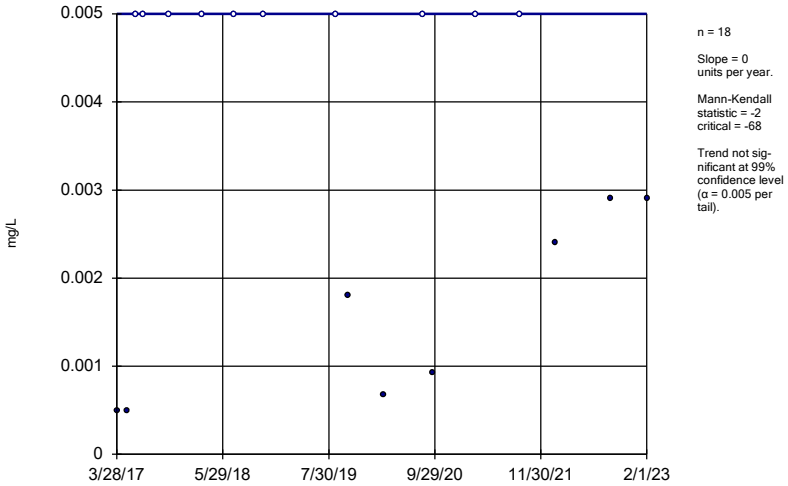
Plant McDonough Client: Southern Company Data: McDonough AP Printed 4/16/2023, 12:30 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Arsenic (mg/L)	DGWA-53 (bg)	0	-2	-68	No	18	55.56	n/a	n/a	0.01	NP
Arsenic (mg/L)	DGWA-70A (bg)	0	-28	-68	No	18	83.33	n/a	n/a	0.01	NP
Arsenic (mg/L)	DGWA-71 (bg)	0	25	63	No	17	82.35	n/a	n/a	0.01	NP
Arsenic (mg/L)	DGWC-69	0.002592	55	81	No	20	0	n/a	n/a	0.01	NP
Cobalt (mg/L)	**DGWA-53 (bg)**	**-0.004011**	**-97**	**-68**	**Yes**	**18**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Cobalt (mg/L)	DGWA-70A (bg)	0	37	68	No	18	55.56	n/a	n/a	0.01	NP
Cobalt (mg/L)	DGWA-71 (bg)	0	50	63	No	17	70.59	n/a	n/a	0.01	NP
Cobalt (mg/L)	DGWC-40	0.001157	30	68	No	18	0	n/a	n/a	0.01	NP
Molybdenum (mg/L)	DGWA-53 (bg)	-0.001775	-42	-68	No	18	0	n/a	n/a	0.01	NP
Molybdenum (mg/L)	DGWA-70A (bg)	0	0	68	No	18	100	n/a	n/a	0.01	NP
Molybdenum (mg/L)	DGWA-71 (bg)	0	16	63	No	17	94.12	n/a	n/a	0.01	NP
Molybdenum (mg/L)	DGWC-68A	-0.004812	-46	-68	No	18	0	n/a	n/a	0.01	NP

Sanitas™ v.9.6.37 . UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

DGWA-53 (bg)



n = 18

Slope = 0 units per year.

Mann-Kendall statistic = -2
critical = -68

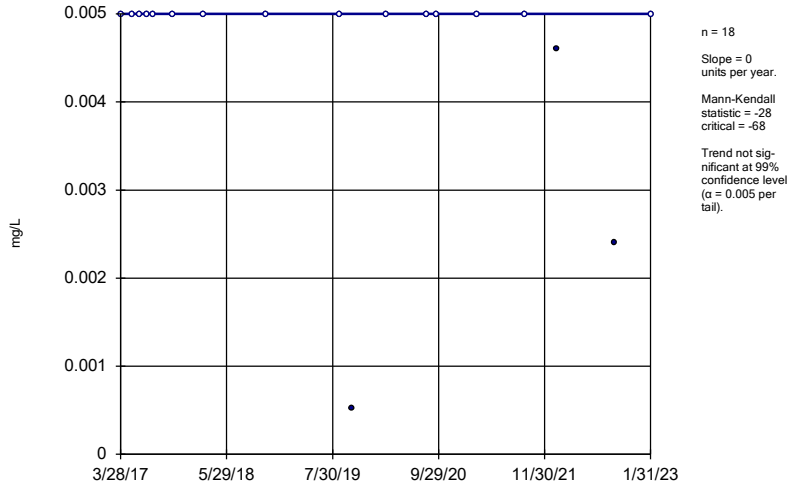
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Arsenic Analysis Run 4/16/2023 12:28 PM View: CI Trend Test
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.9.6.37 . UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

DGWA-70A (bg)



n = 18

Slope = 0 units per year.

Mann-Kendall statistic = -28
critical = -68

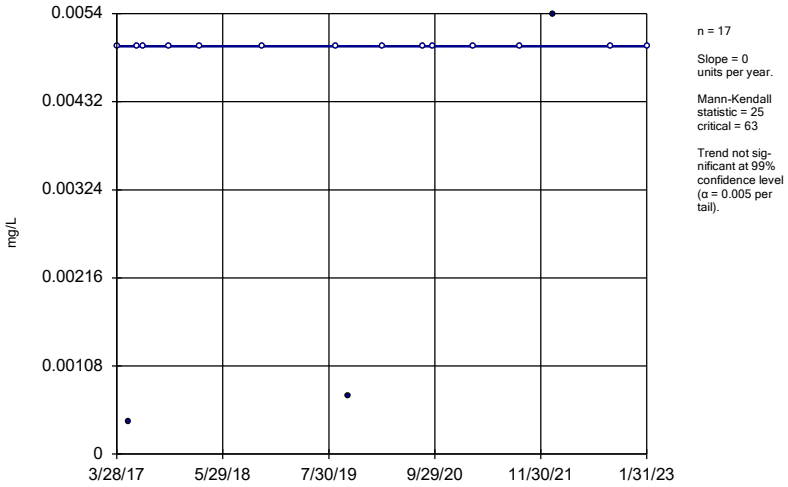
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Arsenic Analysis Run 4/16/2023 12:28 PM View: CI Trend Test
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.9.6.37 . UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

DGWA-71 (bg)



n = 17

Slope = 0 units per year.

Mann-Kendall statistic = 25
critical = 63

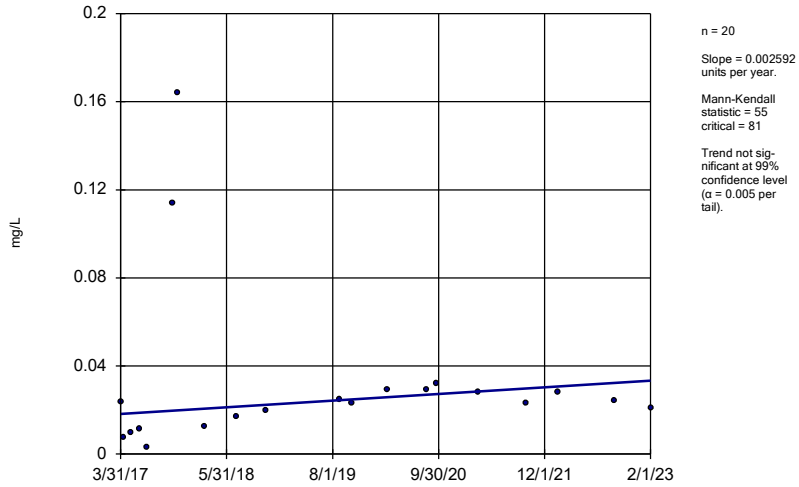
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Arsenic Analysis Run 4/16/2023 12:28 PM View: CI Trend Test
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.9.6.37 . UG

Sen's Slope Estimator

DGWC-69



n = 20

Slope = 0.002592 units per year.

Mann-Kendall statistic = 55
critical = 81

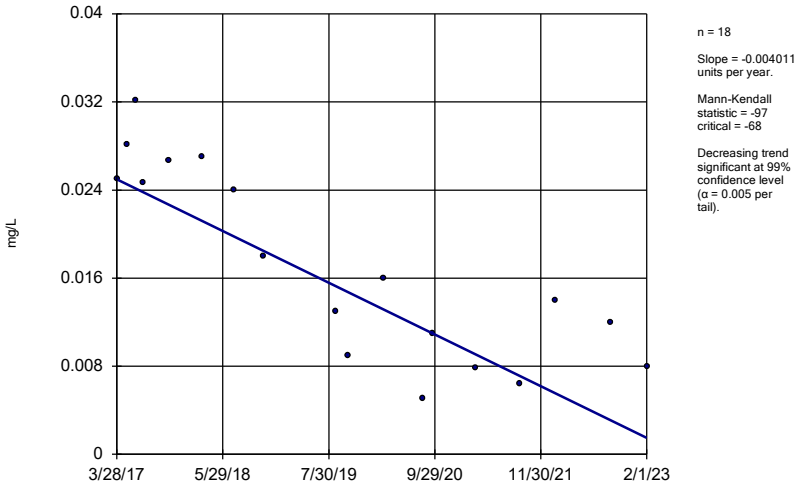
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Arsenic Analysis Run 4/16/2023 12:28 PM View: CI Trend Test
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.9.6.37 . UG

Sen's Slope Estimator

DGWA-53 (bg)



n = 18

Slope = -0.004011 units per year.

Mann-Kendall statistic = -97
critical = -68

Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Cobalt Analysis Run 4/16/2023 12:28 PM View: CI Trend Test

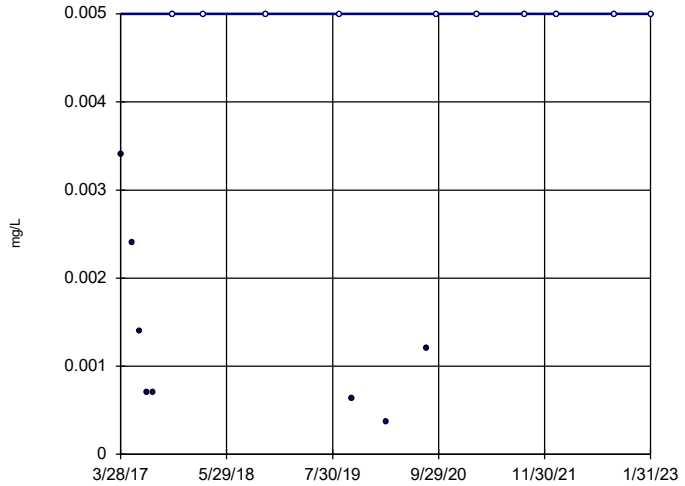
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.9.6.37 . UG

Hollow symbols indicate censored values.

Sen's Slope Estimator

DGWA-70A (bg)



n = 18

Slope = 0 units per year.

Mann-Kendall statistic = 37
critical = 68

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Cobalt Analysis Run 4/16/2023 12:28 PM View: CI Trend Test

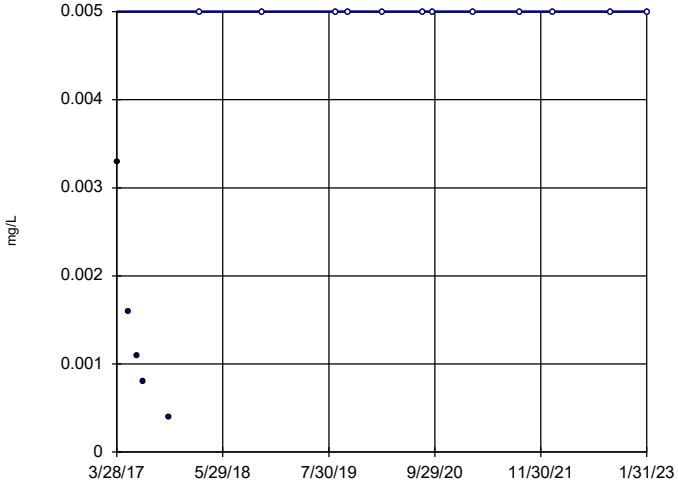
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.9.6.37 . UG

Hollow symbols indicate censored values.

Sen's Slope Estimator

DGWA-71 (bg)



n = 17

Slope = 0 units per year.

Mann-Kendall statistic = 50
critical = 63

Trend not significant at 99% confidence level (α = 0.005 per tail).

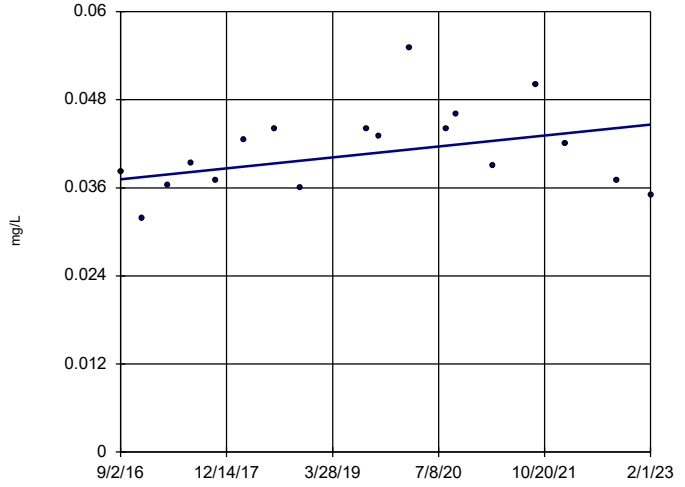
Constituent: Cobalt Analysis Run 4/16/2023 12:29 PM View: CI Trend Test

Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.9.6.37 . UG

Sen's Slope Estimator

DGWC-40



n = 18

Slope = 0.001157 units per year.

Mann-Kendall statistic = 30
critical = 68

Trend not significant at 99% confidence level (α = 0.005 per tail).

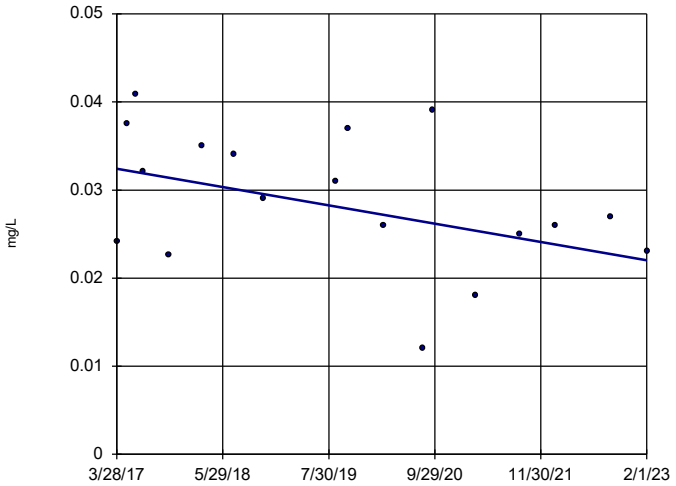
Constituent: Cobalt Analysis Run 4/16/2023 12:29 PM View: CI Trend Test

Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.9.6.37 . UG

Sen's Slope Estimator

DGWA-53 (bg)



n = 18

Slope = -0.001775 units per year.

Mann-Kendall statistic = -42
critical = -68

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Molybdenum Analysis Run 4/16/2023 12:29 PM View: CI Trend Test

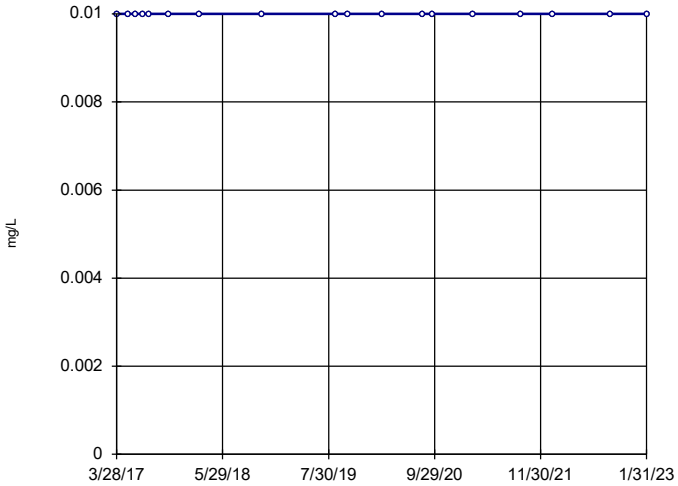
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.9.6.37 . UG

Hollow symbols indicate censored values.

Sen's Slope Estimator

DGWA-70A (bg)



n = 18

Slope = 0 units per year.

Mann-Kendall statistic = 0
critical = 68

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Molybdenum Analysis Run 4/16/2023 12:29 PM View: CI Trend Test

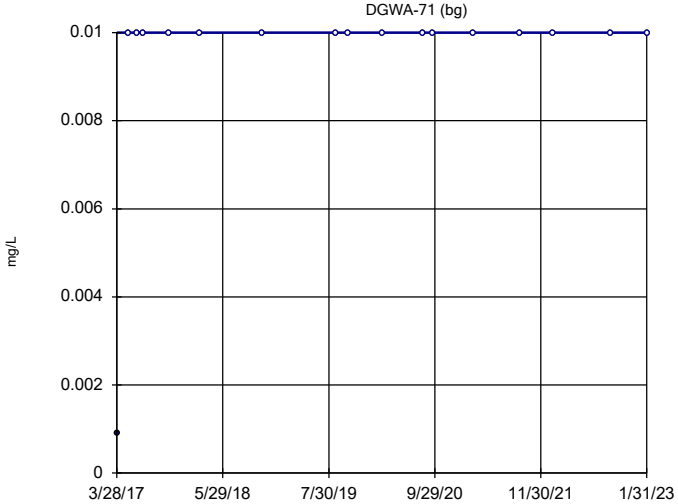
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.9.6.37 . UG

Hollow symbols indicate censored values.

Sen's Slope Estimator

DGWA-71 (bg)



n = 17

Slope = 0 units per year.

Mann-Kendall statistic = 16
critical = 63

Trend not significant at 99% confidence level (α = 0.005 per tail).

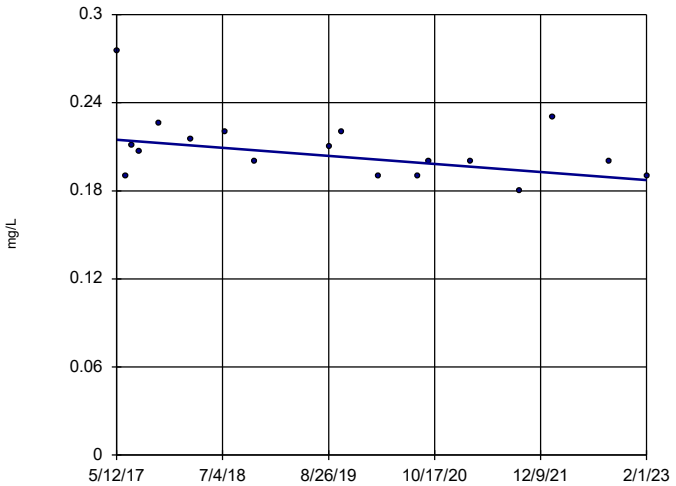
Constituent: Molybdenum Analysis Run 4/16/2023 12:29 PM View: CI Trend Test

Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.9.6.37 . UG

Sen's Slope Estimator

DGWC-68A



n = 18

Slope = -0.004812 units per year.

Mann-Kendall statistic = -46
critical = -68

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Molybdenum Analysis Run 4/16/2023 12:29 PM View: CI Trend Test

Plant McDonough Client: Southern Company Data: McDonough AP

APPENDIX E

Alternate Source Demonstration(s)

GEORGIA
DEPARTMENT OF NATURAL RESOURCES
ENVIRONMENTAL PROTECTION DIVISION

Richard E. Dunn, Director

Land Protection Branch
4244 International Parkway
Suite 104
Atlanta, Georgia 30354
404-362-2537

March 03, 2023

Aaron Mitchell
Vice President of Environmental Affairs
241 Ralph McGill Boulevard
Atlanta, GA 30308

SUBJECT: Georgia Power Company–Plant McDonough Ash Pond 1 (AP-1)
Alternate Source Demonstration: Molybdenum at DGWC-68A
GEOS Submittal: 686467

Dear Mr. Mitchell:

The Georgia Environmental Protection Division (EPD) has reviewed the alternate source demonstration (ASD) for molybdenum at groundwater monitoring well DGWC-68A submitted on July 29, 2022. The demonstration attributed molybdenum detected at statistically significant levels above groundwater protection standards at groundwater monitoring well DGWC-68A to natural variation in groundwater quality.

In accordance with the Georgia Rules for Solid Waste Management Section 394-3-4-.10(6) and 40 CFR 257.94, and based upon information included in the submittal, EPD hereby approves this alternate source demonstration (ASD) for molybdenum in groundwater monitoring well DGWC-68A.

If future monitoring data does not continue to support this alternate source demonstration, EPD will require additional supporting evidence for continued concurrence.

If you have any questions regarding this letter, please contact Nabil Murshed at nabil.murshed@dnr.ga.gov or (470) 251-8106.

Sincerely,

Nabil Murshed
Geologist
Environmental Monitoring Unit
Solid Waste Management Program

Beverly Tipton
Manager
Environmental Monitoring Unit
Solid Waste Management Program

cc: Ben Hodges, Lauren Petty, Tim Earl, Tyler Boyles: Georgia Power Company via e-mail.
William Cook, Beverly Tipton, Keith Stevens, Brian Love, and Mark Wescott: GA EPD via e-mail.

File: S:\Land\LANDDOCS\SW\CCR Applications\GP Plant McDonough-Atkinson\AP-1\EPD Correspondence\Groundwater Correspondence

REPORT

Alternate Source Demonstration for Molybdenum

Plant McDonough-Atkinson Ash Pond 1

Submitted to:

Georgia Power Company
341 Ralph McGill Blvd, Atlanta, GA 30341

Submitted by:

Golder Associates USA Inc.
5170 Peachtree Road Building 100 Suite 300, Atlanta, Georgia, USA 30341
+1 770 496-1893

166849621

July 29, 2022

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Tables

Figures

Appendix

Certification

This *Alternate Source Demonstration for Molybdenum*, Georgia Power Company Plant McDonough-Atkinson, Ash Pond 1, has been prepared in compliance with applicable United States Environmental Protection Agency (USEPA) coal combustion residual (CCR) rule (40 Code of Federal Regulations [CFR] 257 Subpart D; published in 80 FR 21302-21501, April 17, 2015) and Georgia Environmental Protection Division Rule 391-3-4-.10(6)(a-c) under the direction of a qualified groundwater scientist or licensed professional engineer with Golder Associates USA Inc.

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) and that this *Alternate Source Demonstration for Molybdenum* has been prepared to meet the requirements of 40 CFR §257.95(g)(3)(ii) and Georgia Environmental Protection Division Rule 391-3-4-.10(6)(a-c).

Golder Associates USA Inc.

P.J. Nolan, PhD
Lead Geochemist

Dawn L. Prell, CPG
Senior Hydrogeologist

Todd Rees, PhD, PE
Georgia Registered Professional Engineer No. 047845

1.0 INTRODUCTION

In accordance with the United States Environmental Protection Agency (US EPA) coal combustion residual (CCR) rule (40 Code of Federal Regulations [CFR] 257 Subpart D; published in 80 FR 21302-21501, April 17, 2015) (CCR Rule or the Rule), this Alternate Source Demonstration (ASD) for Plant McDonough Ash Pond 1 (AP-1) has been prepared to document a natural source for Statistically Significant Levels (SSLs) of molybdenum identified in well DGWC-68A at Georgia Power Company's Plant McDonough AP-1 (Site) during assessment monitoring. This document satisfies the requirements of § 257.95(g)(3)(ii) and § 391-3-4-.14(23)(c) which allows the owner or operator to demonstrate that a source other than the CCR Unit has caused an SSL.

This ASD presents the results of an investigation for the presence of naturally occurring molybdenum at DGWC-68A, which is part of the compliance monitoring network for AP-1. This evaluation presents a summary of observations made from review of publicly available information and site-specific data and provides an evaluation of the potential sources of the molybdenum identified in the groundwater samples from DGWC-68A.

The isolated molybdenum exceedance in monitoring well DGWC-68A is attributed to naturally occurring molybdenite in pegmatitic bedrock documented in boring logs at this location. Using mineralogical and chemical analysis, high concentrations [1,787 milligrams per kilogram (mg/kg)] of molybdenum and pure molybdenite (MoS_2) crystals were identified in the pegmatitic bedrock in the rock core for delineation well B-113D adjacent to and immediately below the elevation that comprises the screened interval of DGWC-68A. As presented in this report, the source of molybdenum SSL at DGWC-68A is the naturally occurring molybdenite naturally present in the pegmatitic bedrock in which the well is screened.

2.0 SITE DESCRIPTION AND BACKGROUND

Plant McDonough, a natural gas power plant converted in 2012 from a coal-fired power plant, is located in southeast Cobb County, Georgia near the Fulton County line, and is owned and operated by the Georgia Power Company. The Plant is located approximately 7 miles northwest of Atlanta, Georgia, and is surrounded primarily by industrial and residential land use. The property occupies approximately 390 acres and is bounded on the southeast by the Chattahoochee River. Figure 1 presents the location of Plant McDonough relative to local topography and surrounding features. Figure 2 shows the location of on-site monitoring wells and piezometers.

2.1 Geological Setting

The Site is located in the Piedmont province, in a regional zone of geologic deformation, referred to as the Brevard Zone, which extends from Alabama to Virginia. An unnamed, faulted, intrusive contact traverses' northeast-southwest across the site and is observed throughout most of the metro-Atlanta area. The plant property northwest of the faulted contact is underlain by the Long Island Creek Gneiss, which is a medium- to coarse-grained felsic rock. Near faults and shear zones, the gneiss is locally intruded by another felsic rock, i.e., granitic pegmatites (borehole logs indicating the presence of pegmatites at the Site are presented in Appendix A). Pegmatites are coarse-grained igneous rocks formed in the late stage of magma crystallization and noted for their high textural and compositional variability and enrichment of trace elements such as molybdenum, lithium, beryllium, radionuclides, rare-earth elements, etc. (e.g., Adams et al. 1980; Hess 1924; Rose et al. 1979).

2.2 Hydrogeological Setting

A regional, unconfined surficial aquifer system is present at the Site within the overburden and weathered and fractured upper bedrock (i.e., approximately the first 30 feet), depending on topographic location. Recharge primarily occurs through precipitation and subsequent infiltration. Generally, groundwater flow takes place

through intergranular pore spaces in the overburden and is controlled by topography and top of rock variations. However, a relatively higher transmissive zone is interpreted to occur at the base of the overburden, at the interface of weathered bedrock and competent bedrock, which is the primary groundwater flow path.

A limited and localized bedrock aquifer system is also present beneath the Site. The upper bedrock is fractured and weathered, connected hydraulically with the overburden groundwater, and is considered part of the uppermost aquifer. The overlying silt/clay-rich overburden may act to retard recharge into the bedrock aquifer system. However, deeper bedrock (i.e., approximately greater than 30 feet into the bedrock) is unweathered with few discontinuities (e.g., fractures) available to store and transmit groundwater.

3.0 STATISTICAL ANALYSES METHODS

The monitoring well network at AP-1 is in assessment monitoring and an assessment of corrective measures is currently being performed at the Site. During assessment monitoring, concentrations of Appendix IV constituents are compared to an applicable Groundwater Protection Standard (GWPS). The range of molybdenum concentrations at DGWC-68A relative to the GWMPs of 0.1 mg/L are summarized below.

Table 1. Plant McDonough Ash Pond Elevated Molybdenum Concentrations

Appendix IV Parameter	Plant McDonough Ash Pond Monitoring Well	Result[1] (mg/L)	GWPS (mg/L)
Molybdenum	DGWC-68A	0.18 – 0.275	0.1

[1] Sixteen groundwater samples have been collected from DGWC-68A between May 2017 and January 2022. The range of concentrations is given.

4.0 CHARACTERIZATION OF AQUIFER MATERIALS

4.1.1 Sample Collection

In March 2021, a core sample of bedrock was collected from B-113D, a delineation well completed immediately adjacent (<40 ft. lateral distance) to monitoring well DGWC-68A (see Figure 2). A sample of the bedrock was collected (sample Core JUN7012-01) and crystals within the core material (see Figure 3) were also identified and collected separately for analysis (sample Core Extruded Material JUN7012-02). Based on boring logs (Appendix A), material collected from B-113D represents the same geological unit that is present immediately below the screen interval of well DGWC-68A (Figure 3). A WSP Golder field geologist preliminary identified the crystals in the core as molybdenite (MoS_2) and characterized the bedrock core material as medium-grained gneiss with vein quartz and contains epidote and garnets. The samples are listed in Table 2 and the geochemical characterization is described in Section 4.1.2.

Table 2: Boring Sample Identification and Descriptions

Sample ID	Sample Depth (feet below ground surface)	Geologic Material Field Identification
Core JUN7012-01	36.1	Medium-grained gneiss; locally contains vein quartz, epidote, and garnets
Core Extruded Material JUN7012-02	36.1	Molybdenite crystal

4.1.2 Geochemical Characterization

The two samples were analyzed for mineralogical and chemical composition using the following methods:

- **Mineralogical composition**: The purpose of the mineralogical analysis was to identify and quantify the crystalline mineral phases in each sample. The mineralogical analysis was performed using quantitative (Rietveld) X-ray diffraction (XRD) (ME-LR-MIN-MET-MN-DO5) and a Bruker AXS D8 Advance Diffractometer. Results are presented in Appendix B.
- **Total metals:** This test was used to quantify the chemical composition of the rock. The core samples were digested using sodium peroxide using an alkaline fusion method (Bock 1979). Target metals of interest were then analyzed using USEPA Method SW846 6010C "Inductively Coupled Plasma-Atomic Emission Spectrometry", Revision 3, November 2000. Results are presented in Appendix C.

5.0 ALTERNATE SOURCE DEMONSTRATION

The natural sources of molybdenum in the region and at the Site are presented below.

5.1 Published Data

Molybdenum is naturally occurring in the soils, rock, and groundwater of the aquifers in the U.S. at varying levels (Hem 1985; Smith and Huyck 1999). For reference, the average molybdenum concentration in the earth's crust is 2 milligrams per kilogram (mg/kg). In basalt (a mafic rock) the average molybdenum content is 1 mg/kg, and in granite (a felsic rock) 2 mg/kg, respectively (Smith and Huyck 1999). Molybdenite-bearing gneiss observed in the Piedmont Heights neighborhood of Atlanta, located approximately 6 miles east of the Site, indicates that molybdenum in local bedrock (gneiss/pegmatites) is elevated relative to general crust/rock (Cook 1978). The Piedmont province, in which the Site is located, contains gneiss and pegmatite bedrock and previous studies in nearby Fulton and Dekalb counties have identified elevated concentration of molybdenum in those formations (Cook 1978).

5.2 Site-Specific Data

Molybdenum in groundwater at the site has only ever exceeded the GWPS of 0.1 mg/L at one well, DGWC--68A. The samples collected from delineation well B-113D confirm the relatively high concentrations of molybdenum in the bedrock unit at DGWC-68A. Crystal sample Core Extruded Material JUN7012-02 was found to consist of pure molybdenite while rock sample Core JUN7012-01 contained 0.2 percent by weight molybdenite.

The concentration of molybdenum in bedrock sample Core JUN7012-01 (1,780 mg/kg) was substantially elevated relative to the average crustal rock concentration of 2 mg/kg, and also well above the average concentrations for granitic and basaltic rocks (2 and 1 mg/kg, respectively; Smith and Huyck 1999). Bedrock with molybdenite mineralogy and crystals weather over geologic time and molybdenum becomes dispersed in the saturated saprolite that now overlies more competent, less weather bedrock (Butt et al. 2000; Greaney et al. 2021). As such, the analytical results demonstrate the natural occurrence of molybdenum at the Site and the bedrock material expressly represents a natural source of molybdenum for the groundwater molybdenum SSL in well DGWC-68A.

6.0 CONCLUSIONS

This ASD has been prepared pursuant to 40 CFR § 257.95(g)(3)(ii) and § 391-3-4-.10(6)(a-c), to address the SSL of molybdenum observed at monitoring well DGWC-68A at Plant McDonough. Based on the evidence

established in this ASD, the molybdenum SSL at the Site is the result of naturally occurring molybdenum in the bedrock influencing groundwater chemistry and not the result of a release from the Ash Pond. The evidence for a natural source of molybdenum to groundwater is as follows:

- Pure molybdenite crystals were identified in gneissic/pegmatitic bedrock at the base of the screened interval adjacent to monitoring well DGWC-68A.
- Molybdenum concentrations in bedrock samples were substantially (>800 times) higher than average values for various rock types (i.e., crustal, felsic, or mafic).
- Molybdenum is known to be present in regional aquifer materials based on previous studies.
- The SSL identified at DGWC-68A represents the only SSL of molybdenum at the site.

Based on the evidence presented in this ASD, the molybdenum concentrations at DGWC-68A are attributed to a natural source, i.e., the molybdenum-rich aquifer materials in which DGWC-68A is screened, and not due to a release from the Ash Pond.

7.0 REFERENCES

Adams, J., Arengi, J. and Parrish, I., 1980. Uranium-and thorium-bearing pegmatites of the United States, No. GJBX-166 (80). Derry, Michener and Booth, Inc., Golden, CO.

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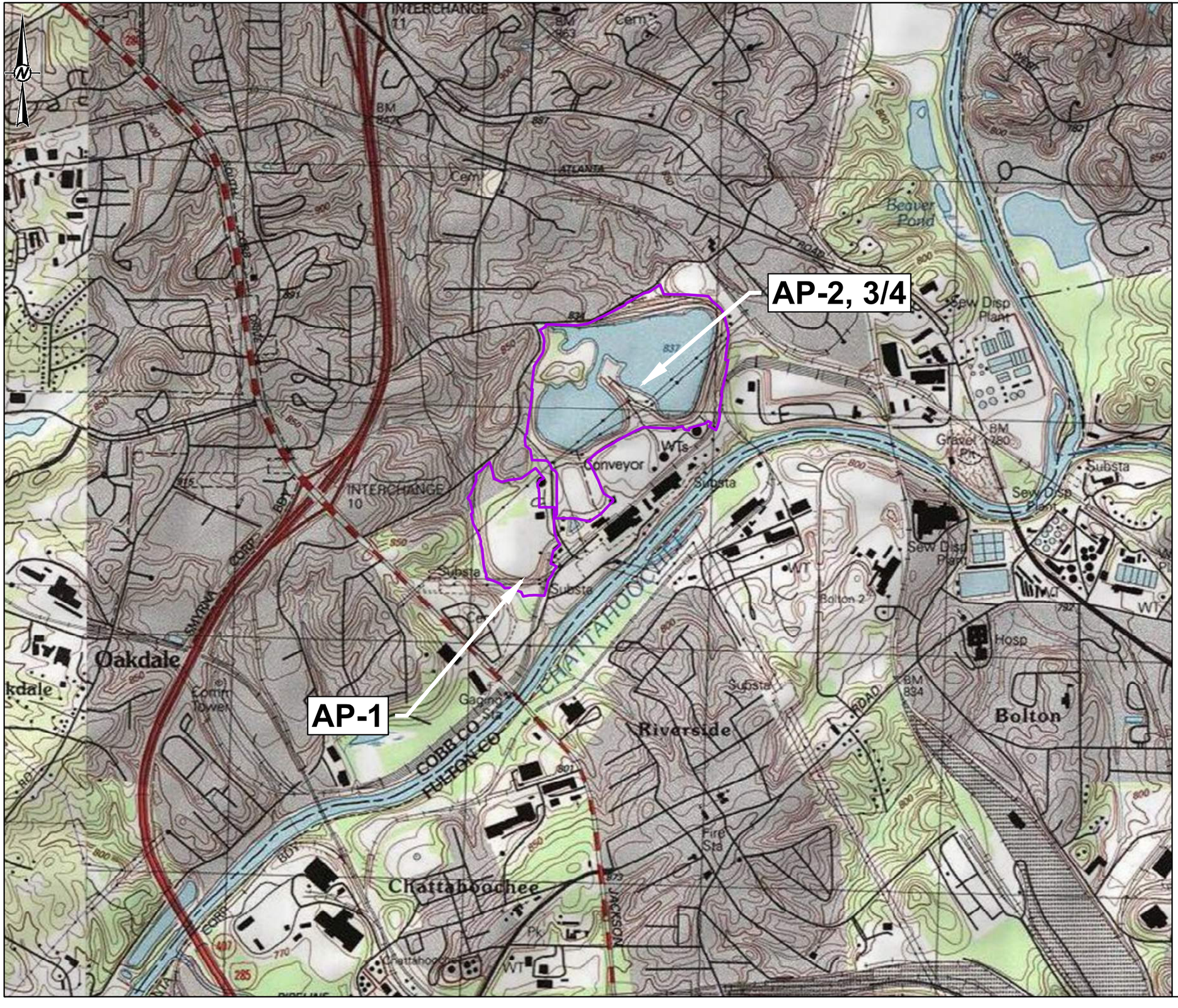
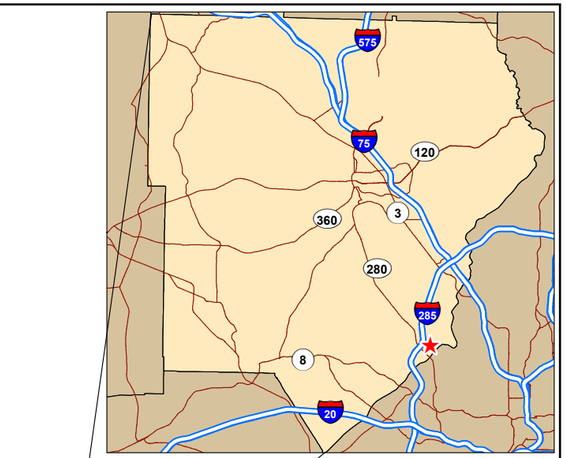
Figures





REFERENCE

SERVICE LAYER CREDITS: COPYRIGHT:© 2013 NATIONAL GEOGRAPHIC SOCIETY, I-CUBED

0 0.25 0.5

1 INCH=0.25 MILES

CLIENT
GEORGIA POWER COMPANY
PLANT MCDONOUGH

Georgia Power

PROJECT
SEMI-ANNUAL REMEDY SELECTION AND DESIGN PROGRESS REPORT PLANT MCDONOUGH-ATKINSON

TITLE
SITE LOCATION MAP

CONSULTANT
GOLDER
MEMBER OF WSP

YYYY-MM-DD	2019-1-31
PREPARED	SEB
DESIGN	SEB
CHECKED	DP
REVIEWED/APPROVED	RPK

PROJECT No. 166849618

Rev. 0

FIGURE 1

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

LEGEND

- AP-1 MONITORING WELL
- AP-2,3/4 MONITORING WELL
- UPGRADIENT WELL
- ASSESSMENT MONITORING WELLS
- PIEZOMETER
- DEWATERING WELL
- STAFF GUAGE
- PROPERTY BOUNDARY
- PERMIT BOUNDARY

NOTES

1. ALL LOCATIONS AND BOUNDARIES ARE APPROXIMATE.

REFERENCE

1. AERIAL IMAGE DATED NOVEMBER 2019 FROM GOOGLE EARTH AND JUNE 23, 2022 FROM COOPER, BARNETTE & PAGE, INC. (CBP).

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

3. MONITORING WELL/PIEZOMETER LOCATIONS AND ELEVATIONS SURVEYED BY METRO ENGINEERING AND SURVEYING COMPANY IN AUGUST 2020 WITH ADDITIONAL SURVEY PROVIDED IN JANUARY 2021 AND MAY 2021.

0 250 500

1 IN= 250 FT

CLIENT
GEORGIA POWER COMPANY
PLANT MCDONOUGH

Georgia Power

PROJECT
NATURAL SOURCE EVALUATION FOR MOLYBDENUM PLANT MCDONOUGH-ATKINSON ASH POND 1

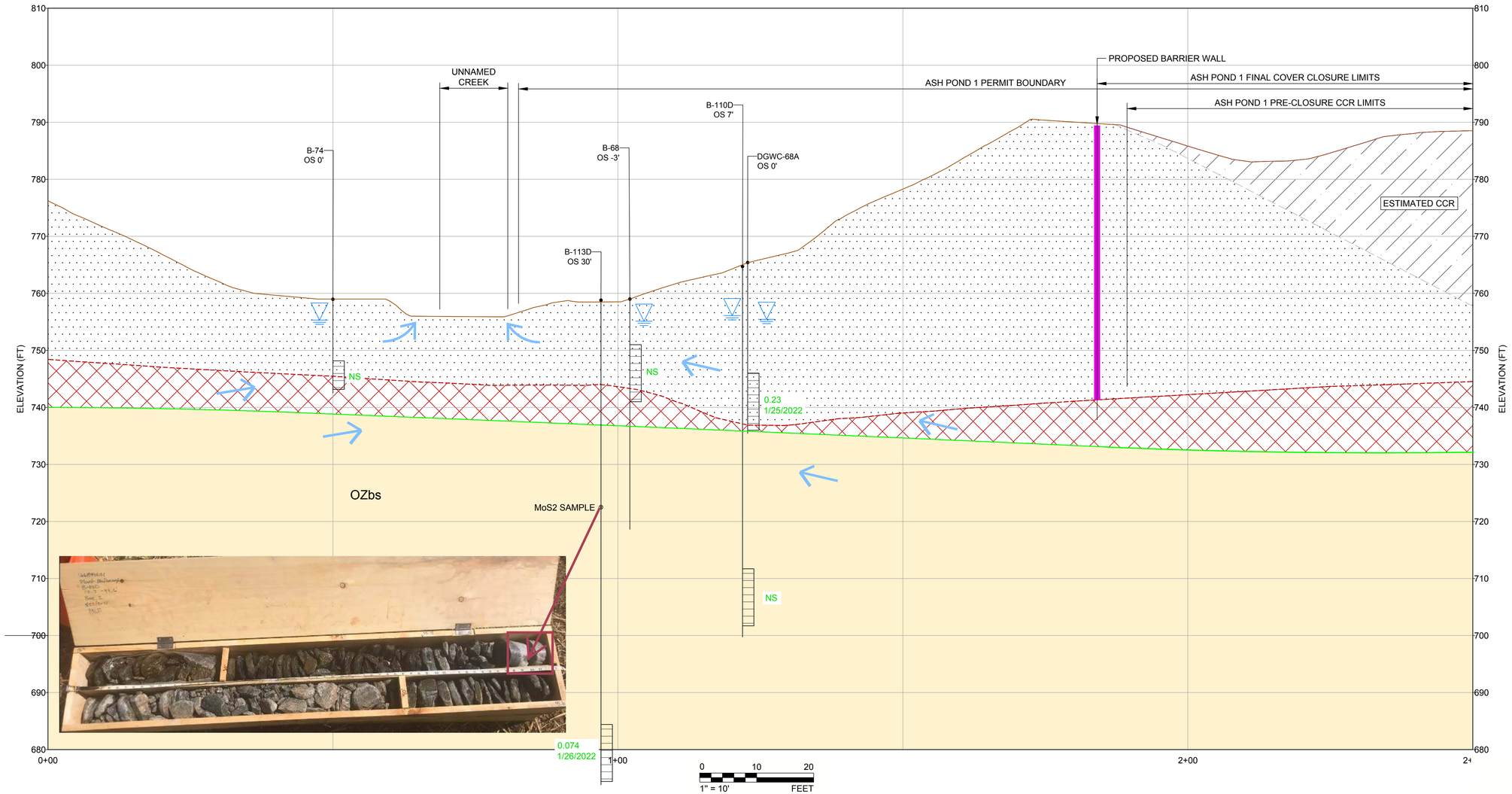
TITLE
SITE PLAN AND WELL LOCATION MAP

CONSULTANT
WSP GOLDER

YYYY-MM-DD	2022-07-20
PREPARED	SEB
DESIGN	DLP
CHECKED	DP/RPK
REVIEWED/APPROVED	RPK

PROJECT No. 166849621
Rev. 0
FIGURE 2

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



LEGEND

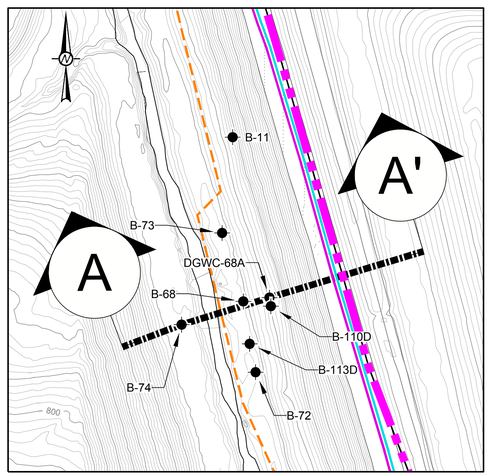
- EXISTING GRADE (SEE REFERENCE 1)
- ESTIMATED TOP OF PARTIALLY WEATHERED ROCK
- ESTIMATED TOP OF ROCK SURFACE
- ESTIMATED PRE-CLOSURE BOTTOM OF CCR LIMITS
- FINAL COVER SYSTEM
- PROPOSED BARRIER WALL
- WATER LEVELS 1/18/2022
- ESTIMATED CCR TO REMAIN IN PLACE
- OVERBURDEN (COMPRISED OF RESIDUAL SOILS, TRANSITIONALLY WEATHERED ROCK, AND FILL)
- PARTIALLY WEATHERED ROCK
- PHYLLONITE, BUTTON SCHIST, MYLONITE, AND MYLONITIC BIOTITE GNEISS (OZbs)
- 0.23 1/25/2022 — MOLYBDENUM CONCENTRATION IN mg/L (SEE NOTE 3) AND DATE OF SAMPLING.
- DIRECTION OF GROUNDWATER FLOW
- B-29 -144' — BORING ID; DISTANCE FROM CROSS-SECTION (FEET) (- REPRESENTS LEFT OF ALIGNMENT); GROUND SURFACE ELEVATION; SCREEN INTERNAL

REFERENCES

1. THE EXISTING TOPOGRAPHY AND CONTOUR ELEVATIONS WERE PROVIDED BY GEORGIA POWER. THE DATE OF THE SURVEY PROVIDED AND SHOWN ON THIS SET OF PLANS IS JULY 2021. GEORGIA STATE PLANE WEST SURVEY FEET.
2. GEOLOGIC UNITS TAKEN FROM PETROLOGIC SOLUTIONS GEOLOGIC MAPPING, OCTOBER 2016.
3. SELECT BORING/PIEZOMETER LOCATIONS AND ELEVATIONS SURVEYED AND/OR RESURVEYED BY METRO ENGINEERING & SURVEYING CO., INC., 2020 / 2021.

NOTE

1. THE PWR AND ROCK SURFACES ARE INTERPOLATED FROM AVAILABLE BORINGS.
2. THE ELEVATION OF THE UPPER SURFACE OF PWR AND ROCK IS LIKELY TO VARY SIGNIFICANTLY OVER SHORT HORIZONTAL DISTANCES.
3. REPORTED CONCENTRATIONS ARE FROM JANUARY 2022 UNLESS OTHERWISE NOTED IN FIGURE. ALL CONCENTRATIONS ARE IN MILLIGRAMS PER LITER (mg/L). J = ESTIMATED CONCENTRATION. LESS THAN (<) REFERS TO CONCENTRATIONS BELOW DETECTION LIMITS. GWPS = GROUNDWATER PROTECTION STANDARD. NS = NOT SAMPLED.
4. THE GWPS FOR THE MOLYBDENUM IS 0.1 mg/L



KEY MAP

REV			DES	CADD	CHK	RVW

CLIENT
GEORGIA POWER COMPANY
SOUTHERN COMPANY SERVICES

PROJECT
PLANT McDONOUGH-ATKINSON
ASH POND 1

TITLE
AP-1 SCHEMATIC GEOLOGIC CROSS SECTIONS A - A'

CONSULTANT
WSP GOLDER

YYYY-MM-DD	2022/05/06
DESIGNED	SEP
PREPARED	CRP
CHECKED	DLP
REVIEWED / APPROVED	RPK / GLH

PROJECT NO. 1777449-01
REV.
FIGURE 3

IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM: ANSI D
0 1in

APPENDIX A

Boring Logs & Well Construction Diagrams

RECORD OF BOREHOLE DGWC-68A/B-68A

SHEET 1 of 1

PROJECT: Plant McDonough
PROJECT NUMBER: 1668496-01
DRILLED DEPTH: 30.00 ft
LOCATION: ~15' East of B-68

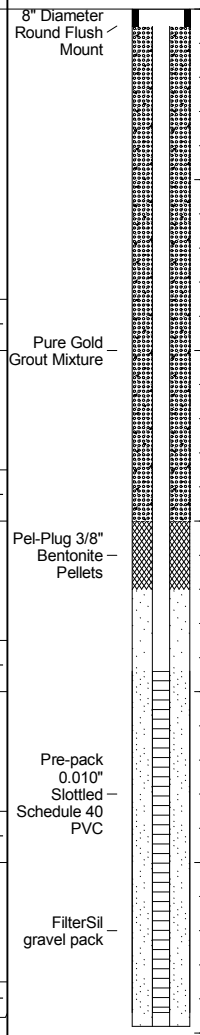
DRILL RIG: Geoprobe 7822DT
DATE STARTED: 4/19/17
DATE COMPLETED: 4/20/17

NORTHING: 1,391,301.86
EASTING: 2,200,732.41
GS ELEVATION: 765.00
TOC ELEVATION: 765.61 ft

DEPTH W.L.:18.8
DATE W.L.:4/20/2017
TIME W.L.:08:48
GW ELEVATION:746.81

DEPTH (ft)	ELEVATION (ft)	DESCRIPTION	USCS	GRAPHIC LOG	ELEV. / DEPTH (ft)	SAMPLE NO.	TYPE	BLOWS per 6 in (140 lb hammer 30 inch drop)	N-VALUE	REC
0	765	0.00 - 8.50 SM, Silty SAND, fine to coarse, moderate plasticity; red-orange to orange-brown, fill; non-cohesive, moist, w~PL, loose.	SM							
5	760									
					756.5					
		8.50 - 13.50 CL, CLAY, with trace sand, moderate plasticity; red-orange brown, fill; cohesive, moist, w<PL, soft to firm.	CL		8.50	S1	DO	13-18-9	27	1.50 / 1.50
10	755				751.5					
		13.50 - 28.50 ML, SILT, low plasticity; brown to silver, relict structure; cohesive, moist to wet, w<PL, very soft.	ML		13.50	S2	DO	WOH-WOH-3	3	1.50 / 1.50
15	750									
						S3	DO	4-6-16	22	1.33 / 1.50
20	745									
						S4	DO	WOH-16-24	40	1.50 / 1.50
25	740				736.5					
		28.50 - 30.00 SM, Silty SAND, fine to coarse, non-plastic to low plasticity; gray to white to silver, weathered saprolite, gneiss; cohesive, wet, w<PL, firm.	SM		28.50	S5	DO	13-50/5	50/5	0.75 / 0.92
30	735	Boring completed at 30.00 ft			735					
35	730									
40	725									
45	720									

MONITORING WELL/ PIEZOMETER DIAGRAM and NOTES



WELL CONSTRUCTION DETAILS

WELL CASING
Interval: 0' - 29.8'
Material: Schedule 40 PVC
Diameter: 2"
Joint Type: Flush/Screw

WELL SCREEN
Interval: 19.4' - 29.4 '
Material: Schedule 40 PVC pre-pack
Diameter: 2"
Slot Size: 0.010"
End Cap: 29.4' - 29.8'

FILTER PACK
Interval: 17.0' - 29.8'
Type: FilterSil gravel pack

FILTER PACK SEAL
Interval: 15.0' - 17.0'
Type: Pel-Plug 3/8" Bentonite Pellets

ANNULUS SEAL
Interval: 0' - 15.0'
Type: Pure Gold Grout Mixture

WELL COMPLETION
Pad: 4' x 4' concrete
Protective Casing: 8" Diameter Round Flush Mount

DRILLING METHODS
Soil Drill: 4.25-inch ID HSA
Rock Drill: N/A

LOG SCALE: 1 in = 5.5 ft
DRILLING COMPANY: Southern Company Services
DRILLER: S. Milam

GA INSPECTOR: Michael Boatman PG
CHECKED BY: Rachel Kirkman, PG
DATE: 1/16/18

Golder Associates

BOREHOLE RECORD 165977801_GRN(B-47-B-71) (1).GPJ PIEDMONT.GDT 1/15/18

RECORD OF BOREHOLE B-113D

PROJECT: Plant McDonough
PROJECT NUMBER: 166849621
DRILLED DEPTH: 85.00 ft
LOCATION: Offset of B-72

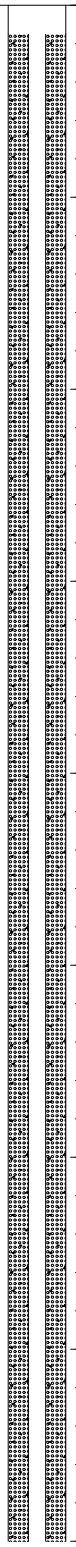
DRILL RIG: TSi 150CC
DATE STARTED: 3/22/21
DATE COMPLETED: 3/30/21

NORTHING: 1,391,264.6
EASTING: 2,200,719.2
GS ELEVATION: 758.8
TOC ELEVATION: 758.22 ft

DEPTH W.L.:1.46
ELEVATION W.L.: 756.76
DATE W.L.:4/12/2021
TIME W.L.:12:00

DEPTH (ft)	ELEVATION (ft)	DESCRIPTION	USCS	ELEV. / DEPTH (ft)	SAMPLE NO.	REC
0		0.00 - 3.00 CL, Silty CLAY, low plasticity; red-brown; soft, dry to moist, W<PL	CL	755.8		
5	755	3.00 - 10.00 ML, Clayey SILT, non to low plasticity; dark brown to brown; soft, moist to wet (with depth), W<PL	ML	3.00 748.8	Hand Auger	0.00 10.00
10	750	10.00 - 15.50 ML, Clayey SILT with some sand, low plasticity; dark brown to brown; soft to firm, dry to moist, W<PL	ML	10.00 743.3	1	7.60 10.00
15	745	15.50 - 20.00 TWR, Transitional Weathered Rock; breaks down to a ML, Clayey SILT with some sand, low plasticity; dark brown to brown; soft to firm, dry to moist, W<PL	TWR	15.50 738.8		
20	740	20.00 - 30.00 Highly weathered, poorly foliated, poorly jointed, gray to black, fine-medium grained, very weak to weak, quartz-feldspar-biotite-muscovite SCHIST; locally contians vein quartz and water staining	BR	20.00 728.8	2	3.80 10.00
25	735					
30	730	30.00 - 35.15 Highly weathered, poorly foliated, poorly jointed, gray to black, fine-medium grained, very weak to weak, quartz-feldspar-biotite-muscovite SCHIST; locally contians vein quartz, water staining, and garnets	BR	30.00 723.65	3	7.00 10.00
35	725	35.15 - 50.00 Fresh to slightly weathered, poorly foliated, white to pink and green, very fine to medium grained, medium strong to very strong, muscovite-plagioclase-k-spar-quartz GNEISS; locally contains vein quartz, epidote, and garnets	BR	35.15		
40	720	Log continued on next page				

PIEZOMETER DIAGRAM and NOTES



PIEZOMETER CONSTRUCTION DETAILS

WELL CASING
Interval: 0-74.4'
Material: Schedule 40 PVC
Diameter: 2"
Joint Type: Flush/Screw

WELL SCREEN
Interval: 74.4-84.4'
Material: Schedule 40 PVC
Diameter: 2"
Slot Size: 0.010"
End Cap: 84.4-84.7'

FILTER PACK
Interval: 72.4-84.7'
Type: #1 Filter Sand
Quantity: 3.5 - 50 lbs bags

FILTER PACK SEAL
Interval: 68.0-72.4'
Type: 3/8" Uncoated Pel-Plug
Quantity: 1 - 5 gallon bucket

ANNULUS SEAL
Interval: 0-68.0'
Type: AquaGuard Bentonite Grout
Quantity: Approximately 80 gallons

WELL COMPLETION
Pad: 4'x4'x4" Concrete
Protective Casing: 8" Flush Mount

DRILLING METHODS
Soil Drill: Rotosonic (6 inch casing by 4 inch core barrel)
Rock Drill: Rotosonic
Sample Type: Rotosonic

LOG SCALE: 1 in = 5 ft
DRILLING COMPANY: Cascade Drilling
DRILLER: Tommy Ardito

INSPECTOR: Michael Boatman, PG
CHECKED BY: Rachel Kirkman, PG
DATE: 5/24/21

GOLDER
MEMBER OF WSP

RECORD OF BOREHOLE B-113D

PROJECT: Plant McDonough
PROJECT NUMBER: 166849621
DRILLED DEPTH: 85.00 ft
LOCATION: Offset of B-72

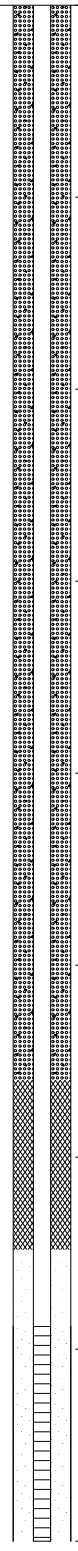
DRILL RIG: TSi 150CC
DATE STARTED: 3/22/21
DATE COMPLETED: 3/30/21

NORTHING: 1,391,264.6
EASTING: 2,200,719.2
GS ELEVATION: 758.8
TOC ELEVATION: 758.22 ft

DEPTH W.L.:1.46
ELEVATION W.L.: 756.76
DATE W.L.:4/12/2021
TIME W.L.:12:00

DEPTH (ft)	ELEVATION (ft)	DESCRIPTION	USCS	GRAPHIC LOG	ELEV. / DEPTH (ft)	SAMPLE NO.	PHOTO	REC
40		35.15 - 50.00 Fresh to slightly weathered, poorly foliated, white to pink and green, very fine to medium grained, medium strong to very strong, muscovite-plagioclase-k-spar-quartz GNEISS; locally contains vein quartz, epidote, and garnets *(Continued)*						
	715		BR			4		6.50 10.00
45								
	710				708.8			
50		50.00 - 60.00 Fresh, weakly foliated, poorly jointed, light gray to greenish white, fine to medium grained, medium strong to strong, epidote-muscovite-biotite-feldspar-quartz GNEISS; locally contains garnets and pyrite.			50.00			
	705		BR			5		10.00 10.00
55								
	700				698.8			
60		60.00 - 76.00 Fresh, weakly foliated, poorly jointed, green to white to gray, fine to medium grained, medium strong to strong, GNEISS; locally contains vein quartz and garnets			60.00			
	695							
65						6		7.50 10.00
	690		BR					
70								
	685							
75					682.8	7		8.70 10.00
	680	76.00 - 85.00 Fresh to slightly weathered, weak to moderately foliated, poorly jointed, greenish white to gray, fine to medium grained, strong, GNEISS; locally contains folds, vein quartz, and garnets; rock becomes schistose in localized areas.	BR		76.00			
80		Log continued on next page						

PIEZOMETER DIAGRAM and NOTES



PIEZOMETER CONSTRUCTION DETAILS

WELL CASING
Interval: 0-74.4'
Material: Schedule 40 PVC
Diameter: 2"
Joint Type: Flush/Screw

WELL SCREEN
Interval: 74.4-84.4'
Material: Schedule 40 PVC
Diameter: 2"
Slot Size: 0.010"
End Cap: 84.4-84.7'

FILTER PACK
Interval: 72.4-84.7'
Type: #1 Filter Sand
Quantity: 3.5 - 50 lbs bags

FILTER PACK SEAL
Interval: 68.0-72.4'
Type: 3/8" Uncoated Pel-Plug
Quantity: 1 - 5 gallon bucket

ANNULUS SEAL
Interval: 0-68.0'
Type: AquaGuard Bentonite Grout
Quantity: Approximately 80 gallons

WELL COMPLETION
Pad: 4'x4'x4" Concrete
Protective Casing: 8" Flush Mount

DRILLING METHODS
Soil Drill: Rotosonic (6 inch casing by 4 inch core barrel)
Rock Drill: Rotosonic
Sample Type: Rotosonic

LOG SCALE: 1 in = 5 ft
DRILLING COMPANY: Cascade Drilling
DRILLER: Tommy Ardito

INSPECTOR: Michael Boatman, PG
CHECKED BY: Rachel Kirkman, PG
DATE: 5/24/21

GOLDER
MEMBER OF WSP

RECORD OF BOREHOLE B-113D

SHEET 3 of 3

PROJECT: Plant McDonough
PROJECT NUMBER: 166849621
DRILLED DEPTH: 85.00 ft
LOCATION: Offset of B-72

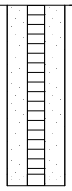
DRILL RIG: TSi 150CC
DATE STARTED: 3/22/21
DATE COMPLETED: 3/30/21

NORTHING: 1,391,264.6
EASTING: 2,200,719.2
GS ELEVATION: 758.8
TOC ELEVATION: 758.22 ft

DEPTH W.L.:1.46
ELEVATION W.L.: 756.76
DATE W.L.:4/12/2021
TIME W.L.:12:00

DEPTH (ft)	ELEVATION (ft)	DESCRIPTION	USCS	GRAPHIC LOG	ELEV. / DEPTH (ft)	SAMPLE NO.	PHOTO	REC
80		76.00 - 85.00 Fresh to slightly weathered, weak to moderately foliated, poorly jointed, greenish white to gray, fine to medium grained, strong, GNEISS; locally contains folds, vein quartz, and garnets; rock becomes schistose in localized areas. *(Continued)*	BR			8		4.50 / 5.00
	675				673.8			
85		Boring completed at 85.00 ft						
	670							
90								
	665							
95								
	660							
100								
	655							
105								
	650							
110								
	645							
115								
	640							
120								

PIEZOMETER DIAGRAM and NOTES



PIEZOMETER CONSTRUCTION DETAILS

WELL CASING
Interval: 0-74.4'
Material: Schedule 40 PVC
Diameter: 2"
Joint Type: Flush/Screw

WELL SCREEN
Interval: 74.4-84.4'
Material: Schedule 40 PVC
Diameter: 2"
Slot Size: 0.010"
End Cap: 84.4-84.7'

FILTER PACK
Interval: 72.4-84.7'
Type: #1 Filter Sand
Quantity: 3.5 - 50 lbs bags

FILTER PACK SEAL
Interval: 68.0-72.4'
Type: 3/8" Uncoated Pel-Plug
Quantity: 1 - 5 gallon bucket

ANNULUS SEAL
Interval: 0-68.0'
Type: AquaGuard Bentonite Grout
Quantity: Approximately 80 gallons

WELL COMPLETION
Pad: 4'x4'x4" Concrete
Protective Casing: 8" Flush Mount

DRILLING METHODS
Soil Drill: Rotosonic (6 inch casing by 4 inch core barrel)
Rock Drill: Rotosonic
Sample Type: Rotosonic

LOG SCALE: 1 in = 5 ft
DRILLING COMPANY: Cascade Drilling
DRILLER: Tommy Ardito

INSPECTOR: Michael Boatman, PG
CHECKED BY: Rachel Kirkman, PG
DATE: 5/24/21

GOLDER
MEMBER OF WSP

BOREHOLE RECORD 166849621.GPJ PIEDMONT.GDT 5/24/21

APPENDIX B

MINERALOGY RESULTS

Quantitative X-Ray Diffraction by Rietveld Refinement

Report Prepared for:	*Golder (USA)*
Project Number/ LIMS No.	*CA20I-00000-211-18665-01/MI7012-JUN21*
Sample Receipt:	*June 29, 2021*
Sample Analysis:	*June 30, 2021*
Reporting Date:	*August 11, 2021*

Instrument:	Panalytical X'pert Pro Diffractometer
Test Conditions:	Co radiation, 40 kV, 45 mA Regular Scanning: Step: 0.033°, Step time:0.15s, 2θ range: 5-80°
Interpretations :	PDF2/PDF4 powder diffraction databases issued by the International Center for Diffraction Data (ICDD). DiffracPlus Eva and Topas software.
Detection Limit :	0.5-2%. Strongly dependent on crystallinity.

Contents:

Landon Kapusianyk, B.Sc.
Junior Mineralogist

Huyun Zhou, Ph.D., P.Geo.
Senior Mineralogist

Method Summary

Mineral Identification and Interpretation:

Mineral identification and interpretation involves matching the diffraction pattern of an unknown material to patterns of single-phase reference materials. The reference patterns are compiled by the Joint Committee on Powder Diffraction Standards - International Center for Diffraction Data (JCPDS-ICDD) database and released on software as Powder Diffraction Files (PDF).

Interpretations do not reflect the presence of non-crystalline and/or amorphous compounds, except when internal standards have been added by request. Mineral proportions may be strongly influenced by crystallinity, crystal structure and preferred orientations. Mineral or compound identification and quantitative analysis results should be accompanied by supporting chemical assay data or other additional tests.

Quantitative Rietveld Analysis:

Quantitative Rietveld Analysis is performed by using Topas 4.2 (Bruker AXS), a graphics based profile analysis program built around a non-linear least squares fitting system, to determine the amount of different phases present in a multicomponent sample. Whole pattern analyses are predicated by the fact that the X-ray diffraction pattern is a total sum of both instrumental and specimen factors. Unlike other peak intensity-based methods, the Rietveld method uses a least squares approach to refine a theoretical line profile until it matches the obtained experimental patterns.

Rietveld refinement is completed with a set of minerals specifically identified for the sample. Zero values indicate that the mineral was included in the refinement calculations, but the calculated concentration was less than 0.05wt%. Minerals not identified by the analyst are not included in refinement calculations for specific samples and are indicated with a dash.

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Summary of Rietveld Quantitative Analysis X-Ray Diffraction Results

Mineral/Compound	Core JUN7012-01 (wt %)	Core Extruded Material JUN7012-02 (wt %)
Quartz	71.9	-
Biotite	1.8	-
Muscovite	2.5	-
Microcline	6.1	-
Albite	17.5	-
Molybdenite	0.2	100
TOTAL	100	100

Zero values indicate that the mineral was included in the refinement, but the calculated concentration is below a measurable value.

Dashes indicate that the mineral was not identified by the analyst and not included in the refinement calculation for the sample.

The weight percent quantities indicated have been normalized to a sum of 100%. The quantity of amorphous material has not been determined.

Mineral/Compound	Formula
Quartz	SiO_2
Biotite	$K(Mg,Fe)_3(AlSi_3O_{10})(OH)_2$
Muscovite	$KAl_2(AlSi_3O_{10})(OH)_2$
Microcline	$KAlSi_3O_8$
Albite	$NaAlSi_3O_8$
Molybdenite	MoS_2

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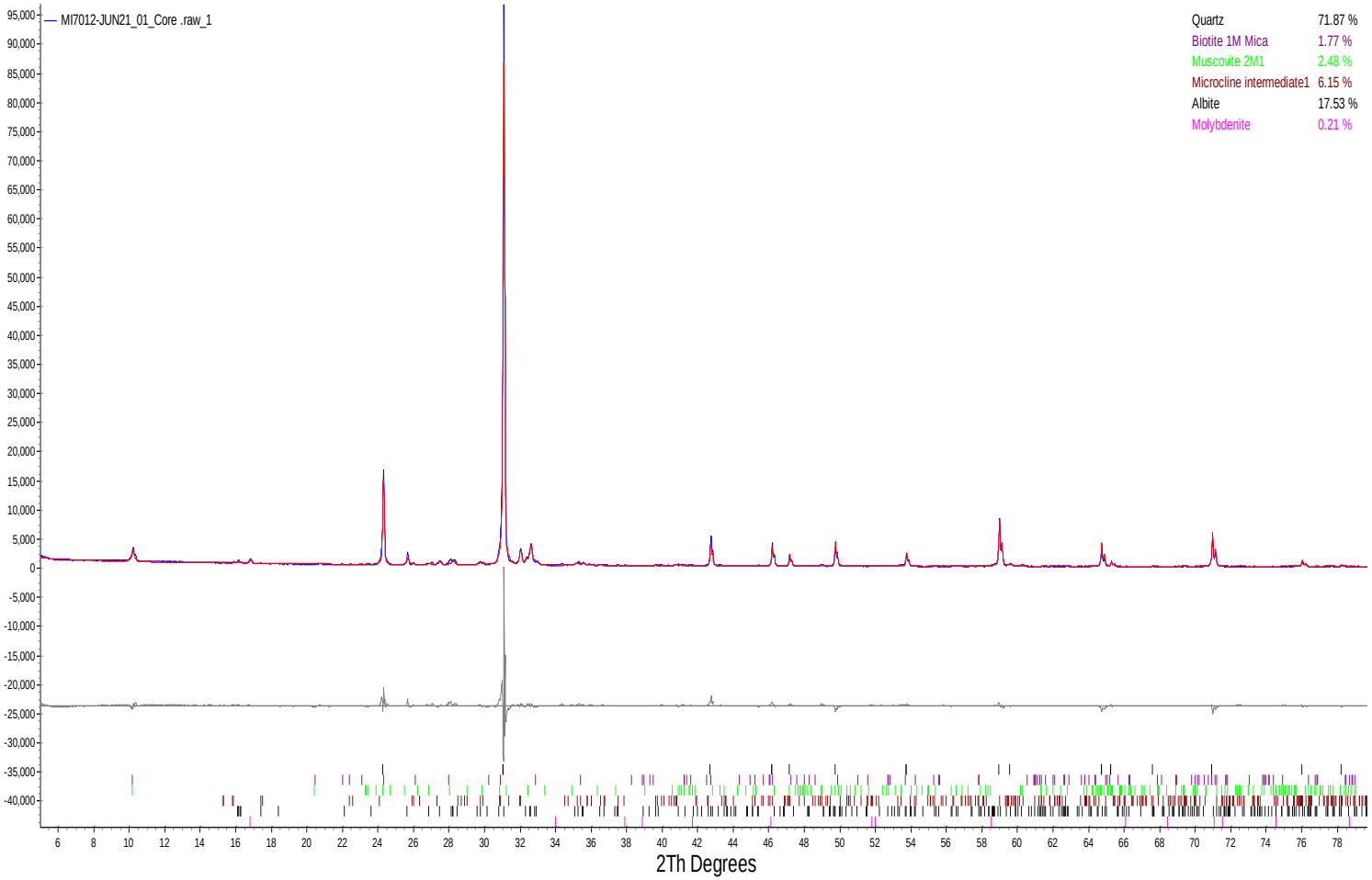
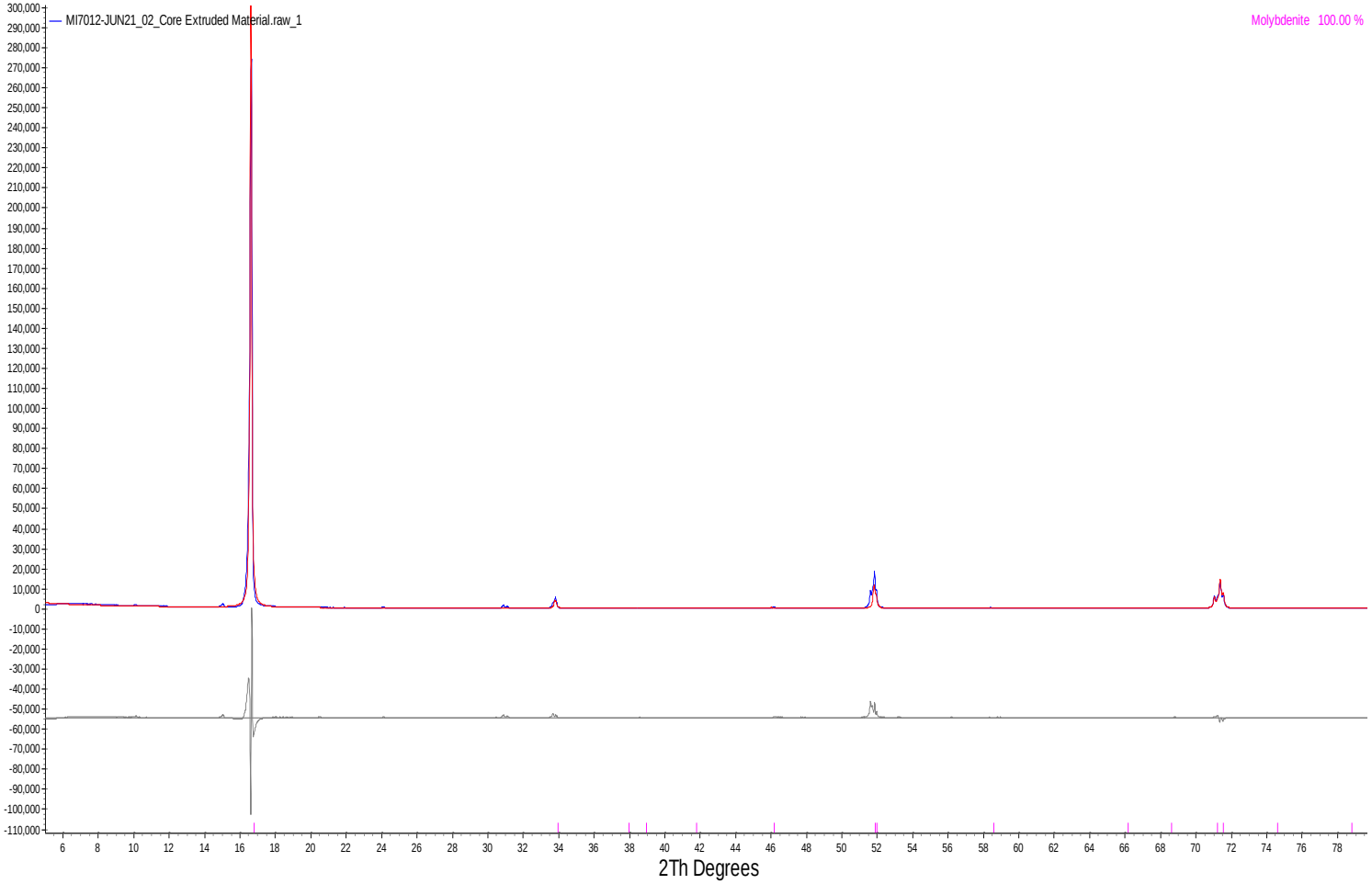
18665-01 /MI7012-JUN21
8/11/2021

Core



Core Extruded Material



APPENDIX C

TOTAL METALS ANALYSIS RESULTS

ANALYSIS REPORT BBM21-10949

To F400101 SGS CANADA INC
LAIN GLOSSOP
3260 PRODUCTION WAY
BURNABY V5A 4W4
BC
CANADA

Project	CA20I-00000-110-18664-01	Date Received	12-Jul-2021
Submission Number	*BBY* 18665-01I / MI7012-JUN21 / 1	Date Analysed	14-Jul-2021 - 16-Jul-2021
Pulp		Date Completed	16-Jul-2021
Number of Samples	1	SGS Order Number	BBM21-10949

Methods Summary

Number of Sample	Method Code	Description
1	GE_FUZ90A50	Fusion, 550°C, HNO3, 0.1g-50ml, Zr crucibles
1	GE_ICP90A50	Na2O2 Fusion, ICPAES, 0.1g-50ml
1	GC_CSA06V	Control grade Total Sulphur and Carbon, IR Combustion
1	GO_XRF72	Borate Fusion, XRF, Ore Grade, variable wt.g

Authorised Signatory

John Chiang
Laboratory Operations Manager

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- not analysed | -- element not determined | I.S. insufficient sample | L.N.R. listed not received

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Project CA20I-00000-110-18664-01
Submission Number *BBY* 18665-01I / MI7012-JUN21 / 1
Pulp
Number of Samples 1

ANALYSIS REPORT BBM21-10949

Element	Al	As	Ba	Be	Ca	Cd
Method	GE_ICP90A50	GE_ICP90A50	GE_ICP90A50	GE_ICP90A50	GE_ICP90A50	GE_ICP90A50
Lower Limit	0.01	30	10	5	0.1	10
Upper Limit	25	100,000	50,000	25,000	25	50,000
Unit	%	ppm m / m	ppm m / m	ppm m / m	%	ppm m / m
Core	3.01	<30	264	<5	0.4	<10

Element	Co	Cr	Cu	Fe	K	La
Method	GE_ICP90A50	GE_ICP90A50	GE_ICP90A50	GE_ICP90A50	GE_ICP90A50	GE_ICP90A50
Lower Limit	10	10	10	0.01	0.1	10
Upper Limit	50,000	50,000	50,000	25	25	50,000
Unit	ppm m / m	ppm m / m	ppm m / m	%	%	ppm m / m
Core	<10	384	32	0.80	1.4	<10

Element	Li	Mg	Mn	Mo	Ni	P
Method	GE_ICP90A50	GE_ICP90A50	GE_ICP90A50	GE_ICP90A50	GE_ICP90A50	GE_ICP90A50
Lower Limit	10	0.01	10	10	10	0.01
Upper Limit	50,000	25	100,000	50,000	100,000	25
Unit	ppm m / m	%	ppm m / m	ppm m / m	ppm m / m	%
Core	<10	0.14	141	1780	16	<0.01

Element	Pb	Sb	Sc	Si	Sn	Sr
Method	GE_ICP90A50	GE_ICP90A50	GE_ICP90A50	GE_ICP90A50	GE_ICP90A50	GE_ICP90A50
Lower Limit	20	50	5	0.1	50	10
Upper Limit	100,000	100,000	50,000	30	50,000	5,000
Unit	ppm m / m	ppm m / m	ppm m / m	%	ppm m / m	ppm m / m
Core	<20	<50	<5	>30.0	<50	45

Element	Ti	V	W	Y	Zn	@S
Method	GE_ICP90A50	GE_ICP90A50	GE_ICP90A50	GE_ICP90A50	GE_ICP90A50	GC_CSA06V
Lower Limit	0.01	10	50	5	10	0.01
Upper Limit	25	50,000	40,000	25,000	50,000	100
Unit	%	ppm m / m	ppm m / m	ppm m / m	ppm m / m	%

- not analysed | -- element not determined | I.S. insufficient sample | L.N.R. listed not received

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Project	CA20I-00000-110-18664-01
Submission Number	*BBY* 18665-01I / MI7012-JUN21 / 1
Pulp	
Number of Samples	1

ANALYSIS REPORT BBM21-10949

Element	Ti	V	W	Y	Zn	@S
Method	GE_ICP90A50	GE_ICP90A50	GE_ICP90A50	GE_ICP90A50	GE_ICP90A50	GC_CSA06V
Lower Limit	0.01	10	50	5	10	0.01
Upper Limit	25	50,000	40,000	25,000	50,000	100
Unit	%	ppm m / m	ppm m / m	ppm m / m	ppm m / m	%
Core	0.03	22	<50	10	23	0.15
*Rep Core	-	-	-	-	-	0.16
*Std OREAS 135	-	-	-	-	-	7.43
*Blk BLANK	-	-	-	-	-	<0.01

Element	@LOI	@Al2O3	@CaO	@Cr2O3	@Fe2O3	@K2O
Method	GO_XRF72	GO_XRF72	GO_XRF72	GO_XRF72	GO_XRF72	GO_XRF72
Lower Limit	-10	0.01	0.01	0.01	0.01	0.01
Upper Limit	100	100	60	5	100	70
Unit	%	%	%	%	%	%
Core	0.52942	5.79	0.63	0.06	1.09	1.67
*Rep Core	0.53000	5.71	0.64	0.06	1.09	1.67
*Std OREAS 751	0.69600	16.05	1.07	<0.01	2.45	2.93
*Blk BLANK	99.9900	<0.01	<0.01	<0.01	<0.01	<0.01

Element	@MgO	Mn3O4	@Na2O	@P2O5	@SiO2	@TiO2
Method	GO_XRF72	GO_XRF72	GO_XRF72	GO_XRF72	GO_XRF72	GO_XRF72
Lower Limit	0.01	0.01	0.01	0.01	0.01	0.01
Upper Limit	100	100	60	55	100	100
Unit	%	%	%	%	%	%
Core	0.29	0.02	1.49	0.03	89.32	0.04
*Rep Core	0.29	0.02	1.48	0.03	88.51	0.05
*Std OREAS 751	0.53	0.09	3.46	0.28	71.99	0.25
*Blk BLANK	0.01	<0.01	<0.01	<0.01	<0.01	<0.01

- not analysed | -- element not determined | I.S. insufficient sample | L.N.R. listed not received

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Project	CA20I-00000-110-18664-01
Submission Number	*BBY* 18665-01I / MI7012-JUN21 / 1
Pulp	
Number of Samples	1

ANALYSIS REPORT BBM21-10949

Element	@V2O5	Sum
Method	GO_XRF72	GO_XRF72
Lower Limit	0.01	0.01
Upper Limit	10	100
Unit	%	%
Core	0.01	>100
*Rep Core	<0.01	99.82
*Std OREAS 751	<0.01	99.23
*Blk BLANK	<0.01	0.02

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