REPORT

2024 Annual Groundwater Monitoring and Corrective Action Report

Georgia Power Company - Plant McDonough-Atkinson Ash Pond 1

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Certification

This *2024 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 *2024 Annual Groundwater Monitoring and Corrective Action Report* provides the status of the groundwater monitoring and corrective program from July 2023 through June 2024 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, Smyrna, 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 2024 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. There were no changes to the AP-1 certified monitoring network in the July 2023 through June 2024 monitoring period. Semi-annual groundwater monitoring events for AP-1 were conducted

in September 2023, and January-February 2024. Groundwater samples were collected and analyzed for Appendix III[1] and Appendix IV[2] required monitoring parameters.

Analytical data from the September 2023 and January-February 2024 monitoring events have been statistically analyzed in accordance with the Site's certified statistical analysis method. For the September 2023 and January-February 2024 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 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-40, DGWC-67
pH	DGWC-40
Sulfate	DGWC-37, DGWC-38, DGWC-39, DGWC-40, DGWC-67
TDS	DGWC-37, DGWC-38, DGWC-39, DGWC-40, DGWC-67, DGWC-68A
Appendix IV Constituent	**September 2023 SSLs[2]**
Arsenic	DGWC-69
Cobalt	DGWC-40
Molybdenum	DGWC-68A[3]
Appendix III Constituent	**January-February 2024 SSIs[1]**
Boron	DGWC-37, DGWC-38, DGWC-39, DGWC-40, DGWC-67, DGWC-68A
Calcium	DGWC-37, DGWC-38, DGWC-39, 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
TDS	DGWC-37, DGWC-38, DGWC-39, DGWC-40, DGWC-67, DGWC-68A
Appendix IV Constituent	**January-February 2024 SSLs[2]**
Arsenic	DGWC-69
Cobalt	DGWC-40
Molybdenum	DGWC-68A[3]

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.
[3] An Alternate Source Demonstration for molybdenum at DGWC-68A was approved by GA EPD on March 3, 2023.

Appendix IV SSLs of arsenic and cobalt are horizontally delineated by surface water due to close proximity and limited space for installing additional monitoring wells. Surface water samples were collected during the September 2023 and January-February 2024 sampling events, and arsenic and cobalt 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

[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.

groundwater monitoring and evaluation of corrective 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, was submitted to GA EPD on August 31, 2023.

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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 *2024 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 the semi-annual monitoring events conducted in September 2023 and January-February 2024 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). 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).

The AP-1 surface impoundment at Plant McDonough has been closed in place. The closure process included placement of a permanent cover system designed to minimize infiltration and erosion and to meet or exceed the requirements of 257.102(d)(3)(ii). To further enhance the in-place closure of AP-1, a subsurface perimeter barrier wall (barrier wall) is included in the Closure Plan as an Advanced Engineering Measure (AEM). The term AEM refers to engineering controls that are technologies or measures designed to enhance the protection of groundwater and closure effectiveness, and/or further minimize future maintenance of the unit. The proposed barrier wall will fully encircle the AP-1 footprint (as a laterally continuous feature); however, the target installation depth is under review and approval by GA EPD. 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. 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 65 feet in thickness across the Site, with an average thickness of approximately 43 feet. Saprolitic rock is considered to be transitionally weathered rock (TWR) or partially weathered rock (PWR). Where TWR is a qualitative description based on visual observations, 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 (e.g., approximately the first 30 feet), 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 uppermost aquifer. The overlying silt/clay-rich overburden may act to retard recharge into the bedrock aquifer system. In addition, deeper bedrock (i.e., greater than approximately 30 feet into the 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. 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 July 2023 through June 2024. Routine groundwater sampling was performed in September 2023 and in January-February 2024 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 2023 and January-February 2024 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 table is 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.

Former Site piezometers B-31 and B-74 were abandoned due to on-site construction/replacement of an industrial water line. Abandonment was performed in accordance with procedures outlined in *Georgia Water Well Standards Act.* A copy of the abandonment report submitted to GA EPD on November 13, 2023 is included as Appendix D. Abandonment of these piezometers does not affect the interpretation of Site potentiometric surface contours or groundwater flow direction.

2.2 Assessment Monitoring

Pursuant to § 257.94(e)(1), an assessment monitoring program has been established for AP-1 based on identified 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* was submitted to GA EPD on August 31, 2023.

Groundwater sampling was conducted for AP-1 in September 2023 and in January-February 2024 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 event completed for AP-1 and the status of the monitoring network.

During the September 2023 and January-February 2024 semi-annual sampling events, groundwater samples were collected and analyzed for Appendix III and Appendix IV constituents. Results of sampling activities conducted in September 2023 and in January-February 2024 are presented in Appendix B.

2.3 Additional Sampling

The 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. Therefore, Arcadis, on behalf of Georgia Power, collected surface water samples from the engineered stream channel and the Chattahoochee River. Surface water samples were collected on September 12 and 13, 2023, and on February 6, 2024 at the locations shown on Figure 3. These samples were analyzed for Appendix III parameters, selected Appendix IV parameters (i.e., arsenic, cobalt, and lithium), and major ions (i.e., magnesium, potassium, sodium, and total and bicarbonate alkalinity). Surface water samples were collected in accordance with Region 4 U.S. Environmental Protection Agency Laboratory Services and Applied Science Division, Operating Procedure: *Surface Water Sampling* (US EPA 2023a). Laboratory reports associated with both September 2023 and

February 2024 surface water sampling events are provided in Appendix B. Georgia Power will continue collecting surface water samples semi-annually as needed for site delineation.

Additional data analyses continue to be analyzed to provide data to support the selected corrective measure (i.e., in-situ injections and monitored natural attenuation). Groundwater samples collected from the detection and assessment monitoring well networks in September 2023 and in January-February 2024 were analyzed for major ions (magnesium, potassium, sodium, and total and bicarbonate alkalinity) and minor ions (iron and sulfide).

3.0 SAMPLE METHODOLOGY AND ANALYSIS

The following sections describe methods used to conduct the September 2023 and January-February 2024, semi-annual 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 2023 and the January-February 2024 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 indicate that groundwater generally flows southeast across the Site and west/southwest in the northeast corner of the Site due to ongoing dewatering in that area, 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 2.18 feet/day (ft/day) or 7.70 x 10^{-4} centimeters/second (cm/s), (WSP 2023a). 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 1996).

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 2023 and January-February 2024 groundwater elevation data as presented in Tables 4A and 4B.

Calculated (horizontal) flow velocities ranged from approximately 76 feet per year (ft/yr) to 142 ft/yr during the September 2023 and January-February 2024 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 2023b) 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 or 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, the DO stabilization criterion does not 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). Analytical methods used for monitoring parameters are listed in the analytical data reports in Appendix B. Table 5A and 5B present a tabulated summary of the September 2023 and January-February 2024 detection and assessment sample results. Results of surface water samples collected in September 2023 and January-February 2024 are presented in Tables 6A and 6B.

Laboratory analyses were performed by Pace Analytical Services, LLC (Pace) in Peachtree Corners, Georgia, Asheville, North Carolina, and Greensburg, Pennsylvania. 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, and are included in Appendix B.

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. The data validation summary report is provided in Appendix B, along with laboratory reports. The validated data meet project objectives.

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 E.

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 September 2023 and January-February 2024 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 E.

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 E. The background period for statistical analyses included historical data through the current event. Tolerance limits for confidence interval calculations have been updated to include current data. Due to varying reporting limits for background 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 for the data set.

Based on a recent evaluation conducted by Groundwater Stats Consulting, the background data period for cobalt at DGWA-53 has been truncated to eliminate historically elevated concentrations that are no longer representative of current background conditions. The revised background period for statistical analyses of cobalt at DGWA-53 includes data from July 12, 2018, through the most recent event (January-February 2024). Excluding the historical elevated concentrations of cobalt at DGWA-53 from background analysis has resulted in a lower GWPS for cobalt.

4.2 Statistical Analysis Results

Analytical data from September 2023 and January-February 2024 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 E.

4.2.1 September 2023 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 2023 assessment monitoring event. A detailed list of the noted exceedances is presented in Appendix E.

4.2.2 September 2023 Appendix IV Statistical Results

The statistical analysis of the Appendix IV analytes identified SSLs of the following parameters for the September 2023 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 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.

4.2.3 January-February 2024 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 January-February 2024 assessment monitoring event. A detailed list of the noted exceedances is presented in Appendix E.

4.2.4 January-February 2024 Appendix IV Statistical Results

The statistical analysis of the Appendix IV analytes identified SSLs of the following parameters for the January-February 2024 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, January-February 2024	
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 an SSL 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 SSL 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. Results from rock analyses completed near DGWC 68A indicate naturally occurring molybdenum is present in the rock in the form of molybdenite. 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. The ASD for molybdenum at DGWC-68A is applicable in consideration of the September 2023 and the January-February 2024 monitoring results, and the Site will continue with assessment monitoring at this location.

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 and cobalt 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. Figures 6A, 6B, 7A, and 7B present isoconcentration contour maps for arsenic and cobalt, the two constituents with an exceedance of the GWPS.

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-62 / CR-0.1

Potential trends in SSL concentrations were further evaluated by Groundwater Stats Consulting (GSC) using the Sen's Slope/Mann Kendall test (Appendix E). A statistically increasing trend was identified at monitoring well DGWC-69 for arsenic following the September 2023 and January-February 2024 monitoring events. This trend is based on historical data from 2016 through 2024. In considering the more recent data from 2020 to 2024, the trend has reversed to a negative slope, thus suggesting improvement to groundwater quality. No statistically significant trend was noted for cobalt in monitoring well DGWC-40.

6.0 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), remedy selection progress reports have previously 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* was submitted to GA EPD on August 31, 2023. The *Draft Remedy Selection Report* (WSP 2023c) 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;

- 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.

The Site has completed a pre-design investigation (PDI) and are moving towards a pilot study work plan to evaluate the effectiveness of in-situ injections for corrective action. In addition, a treatability study has been completed to determine injectate materials and to identify proper dosage information.

PDI activities were conducted from March 22nd through 27th, 2024. Cascade Technical Services (Cascade) advanced ten direct push technology (DPT) Waterloo Aquifer Profiling System (Waterloo^{APS}) borings. Depth-discrete groundwater screening samples were also collected using stainless-steel Waterloo^{APS} tooling and a peristaltic pump. Attempts were made to collect groundwater samples for chemical analyses from each of the PDI boring locations, but insufficient yield precluded sample collection at some locations. These data are currently being evaluated and will be presented in a future pilot study workplan.

The *Draft Remedy Selection Report* is currently under review by GA EPD and Georgia Power is awaiting concurrence to submit a Pilot Test Workplan for further evaluation of the proposed remedy.

7.0 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 assessment of corrective measures was initiated following the provisions of 40 CFR § 257.96. Pursuant to 40 CFR 257.95(g)(1)(iv), the additional delineation wells may continue to be sampled as part of the ongoing semi-annual assessment monitoring program.

8.0 CONCLUSIONS AND FUTURE ACTIONS

This *2024 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 and cobalt 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.

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 was submitted to EPD on August 31, 2023 and is pending GA EPD review. A high-resolution site characterization has been completed and data are being used to prepare a pilot study work plan which will be submitted for EPD review and approval following concurrence with the draft remedy selection report. The next sampling event is tentatively scheduled for September 2024.

9.0 REFERENCES

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WSP, 2023b, Groundwater Monitoring Plan, Georgia Power Company – Plant McDonough-Atkinson CCR Surface Impoundment (CCR Unit AP-1) March 2023.

WSP, 2023c, Draft Remedy Selection Report, Georgia Power Company – Plant McDonough-Atkinson Ash Pond 1, August 31, 2023.

TABLES

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

Well ID	Hydraulic Location	Screened Media	NAD 83 Northing	NAD 83 Easting	Top of Casing Elevation (feet, NAVD88)	Ground Surface Elevation (feet, NAVD88)	Total Well Depth (feet below land surface)	Top of Screen Elevation (feet, NAVD88)	Bottom of Screen Elevation (feet, NAVD88)	Screen Length (feet)	Installation Date
ASH POND 1 (AP-1) DETECTION MONITORING WELL NETWORK											
DGWA-53	Upgradient	Upper Bedrock	1393472.80	2201668.80	844.26	841.37	28.90	823.77	813.77	10.00	09/24/2016
DGWA-70A	Upgradient	Overburden	1390481.40	2200591.60	808.52	805.67	59.30	756.77	746.77	10.00	05/10/2017
DGWA-71	Upgradient	Overburden	1393963.30	2201714.80	863.84	861.22	43.80	827.82	817.82	10.00	02/28/2017
DGWC-37	Downgradient	Overburden	1390482.20	2200919.80	766.21	763.64	39.70	734.34	724.34	10.00	11/28/2012
DGWC-38	Downgradient	Overburden	1390362.70	2201148.60	757.43	754.67	25.00	739.97	729.97	10.00	11/29/2012
DGWC-39	Downgradient	Overburden	1390303.60	2201540.10	759.89	756.93	21.20	746.13	736.13	10.00	11/06/2012
DGWC-40	Downgradient	Overburden	1390625.70	2201825.90	779.06	776.12	34.90	751.62	741.62	10.00	11/05/2012
DGWC-67	Downgradient	Overburden	1390953.80	2200830.70	766.70	766.80	56.30	720.50	710.50	10.00	03/14/2017
DGWC-68A	Downgradient	Overburden	1391301.20	2200734.90	765.33	765.06	29.80	745.66	735.66	10.00	04/20/2017
DGWC-69	Downgradient	Overburden	1391585.00	2200657.10	763.75	763.99	24.30	749.69	739.69	10.00	03/16/2017
DGWC-121	Downgradient	Overburden	1390739.70	2200849.40	764.16	764.52	50.00	724.82	714.82	10.00	03/22/2022
ASH POND 1 (AP-1) ASSESSMENT MONITORING WELL NETWORK											
B-62	Downgradient	Upper Bedrock	1389828.10	2201811.20	760.08	760.40	39.90	730.70	720.70	10.00	10/04/2016
B-100	Downgradient	Overburden	1390254.80	2202242.10	777.95	775.32	44.80	740.52	730.52	10.00	07/08/2020
B-105D	Downgradient	Upper Bedrock	1390634.50	2201831.90	779.01	776.03	70.00	716.03	706.03	10.00	10/19/2020
B-112D	Downgradient	Upper Bedrock	1391564.20	2200664.10	765.58	765.98	55.00	721.28	711.28	10.00	03/22/2021
ASH POND 2 and ASH PONDS 3/4 (AP-2, 3/4) DETECTION MONITORING WELL NETWORK											
DGWA-53	Upgradient	Upper Bedrock	1393472.80	2201668.80	844.26	841.37	28.90	823.77	813.77	10.00	09/24/2016
DGWA-70A	Upgradient	Overburden	1390481.40	2200591.60	808.52	805.67	59.30	756.77	746.77	10.00	05/10/2017
DGWA-71	Upgradient	Overburden	1393963.30	2201714.80	863.84	861.22	43.80	827.82	817.82	10.00	02/28/2017
DGWC-2	Downgradient	Overburden/Upper Bedrock	1393958.00	2202119.50	850.88	848.17	49.00	809.47	799.47	10.00	10/02/2012
DGWC-4	Downgradient	Overburden	1394171.50	2202662.40	814.85	812.06	45.00	777.36	767.36	10.00	10/03/2012
DGWC-5	Downgradient	Overburden/Upper Bedrock	1394306.30	2202965.10	791.75	788.64	30.00	768.94	758.94	10.00	10/04/2012
DGWC-8	Downgradient	Overburden	1394322.20	2203882.10	826.38	824.02	49.10	785.32	775.32	10.00	10/10/2012
DGWC-9	Downgradient	Overburden	1394055.90	2204170.00	824.35	821.86	30.00	802.26	792.26	10.00	10/10/2012
DGWC-10	Downgradient	Overburden	1393818.30	2204201.10	823.55	820.82	45.40	785.82	775.82	10.00	10/11/2012
DGWC-11	Downgradient	Overburden	1393547.10	2204166.20	800.57	797.99	49.10	759.19	749.19	10.00	10/15/2012
DGWC-12	Downgradient	Overburden	1393149.40	2204128.30	773.86	771.10	25.10	756.40	746.40	10.00	10/15/2012
DGWC-13	Downgradient	Overburden	1392881.10	2204084.60	794.10	791.20	43.80	757.80	747.80	10.00	11/29/2012
DGWC-14	Downgradient	Overburden/Upper Bedrock	1392574.20	2204013.30	792.40	789.69	34.30	765.79	755.79	10.00	12/18/2012
DGWC-15	Downgradient	Overburden	1392544.10	2203679.00	824.50	821.43	67.10	764.73	754.73	10.00	11/29/2012
DGWC-17	Downgradient	Overburden	1392645.60	2203051.00	837.05	834.14	44.50	799.94	789.94	10.00	01/09/2013
DGWC-19	Downgradient	Overburden	1392342.60	2202601.00	825.46	822.87	39.80	793.47	783.47	10.00	03/12/2013
DGWC-20	Downgradient	Overburden	1392164.50	2202315.60	822.14	819.66	39.70	790.56	780.56	10.00	03/05/2013
DGWC-21	Downgradient	Overburden/Upper Bedrock	1392067.50	2202063.50	816.28	813.47	69.00	754.87	744.87	10.00	10/31/2012
DGWC-22	Downgradient	Upper Bedrock	1392126.30	2201791.90	816.59	813.69	60.00	763.99	753.99	10.00	10/25/2012
DGWC-23	Downgradient	Upper Bedrock	1392239.70	2201582.00	818.37	815.63	60.10	765.83	755.83	10.00	10/25/2012
DGWC-42	Downgradient	Overburden	1391327.80	2201870.20	804.68	801.98	50.40	762.08	752.08	10.00	11/12/2012
DGWC-47	Downgradient	Overburden/Upper Bedrock	1391553.80	2202610.50	797.45	794.35	28.80	775.95	765.95	10.00	06/23/2016
DGWC-48	Downgradient	Overburden/Upper Bedrock	1391314.60	2202290.20	788.33	785.21	30.00	765.61	755.61	10.00	06/22/2016

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Plant McDonough - Ash Pond 1
Cobb County, GA

Well ID	Hydraulic Location	Screened Media	NAD 83 Northing	NAD 83 Easting	Top of Casing Elevation (feet, NAVD88)	Ground Surface Elevation (feet, NAVD88)	Total Well Depth (feet below land surface)	Top of Screen Elevation (feet, NAVD88)	Bottom of Screen Elevation (feet, NAVD88)	Screen Length (feet)	Installation Date
ASH POND 2 and ASH PONDS 3/4 (AP-2, 3/4) ASSESSMENT MONITORING WELL NETWORK											
B-56	Downgradient	Overburden	1393957.90	2204187.80	823.59	820.95	45.00	786.35	776.35	10.00	10/03/2016
B-62	Downgradient	Upper Bedrock	1389828.10	2201811.20	760.08	760.40	39.90	730.70	720.70	10.00	10/04/2016
B-63	Downgradient	Overburden	1390999.10	2202978.10	777.10	777.37	46.00	741.87	731.87	10.00	10/06/2016
B-66	Downgradient	Overburden	1393858.20	2204277.50	815.90	813.33	55.30	768.33	758.33	10.00	11/16/2016
B-77	Downgradient	Overburden	1390948.70	2202942.00	776.86	777.12	42.00	745.12	735.12	10.00	09/17/2019
B-82	Downgradient	Overburden	1393750.00	2204258.10	810.07	807.55	45.00	773.05	763.05	10.00	09/21/2019
B-83	Downgradient	Overburden	1390735.50	2202695.60	776.98	777.17	48.60	738.57	728.57	10.00	09/30/2019
B-88	Downgradient	Overburden	1394401.10	2203738.30	820.07	816.80	72.00	754.80	744.80	10.00	11/15/2019
B-92	Downgradient	Overburden	1394392.70	2203026.70	785.08	785.30	25.00	770.70	760.70	10.00	12/11/2019
B-93	Downgradient	Overburden	1394348.70	2202946.70	789.07	789.19	29.20	770.29	760.29	10.00	12/12/2019
B-97	Downgradient	Overburden/Upper Bedrock	1394430.00	2203008.30	786.29	786.50	31.70	765.20	755.20	10.00	02/11/2020
B-98	Downgradient	Overburden	1394392.50	2202934.00	789.67	789.81	19.40	780.81	770.81	10.00	02/10/2020
B-100	Downgradient	Overburden	1390254.80	2202242.10	777.95	775.32	44.80	740.52	730.52	10.00	07/08/2020
B-101D	Downgradient	Overburden/Upper Bedrock	1394063.60	2204168.20	824.29	821.24	75.00	756.34	746.34	10.00	11/12/2020
B-102D	Downgradient	Upper Bedrock	1393828.40	2204200.40	823.42	820.64	85.00	746.24	736.24	10.00	11/10/2020
B-104D	Downgradient	Upper Bedrock	1391318.30	2202298.50	787.90	785.31	60.00	735.31	725.31	10.00	10/20/2020
B-106D	Downgradient	Upper Bedrock	1394327.10	2203869.20	826.21	823.39	80.00	753.99	743.99	10.00	11/13/2020
B-107D	Downgradient	Upper Bedrock	1392334.50	2202596.40	823.38	820.44	85.80	745.34	735.34	10.00	10/28/2020
B-108D	Downgradient	Upper Bedrock	1392156.10	2202312.50	821.13	818.33	80.00	749.33	739.33	10.00	10/27/2020
B-111D	Downgradient	Upper Bedrock	1394303.40	2202956.40	791.84	788.99	85.00	714.79	704.79	10.00	11/03/2020
B-120D	Downgradient	Upper Bedrock	1394047.20	2202436.40	836.42	834.03	69.30	775.03	765.03	10.00	03/06/2021
B-122D	Downgradient	Bedrock	1390992.80	2202975.40	777.03	777.32	79.80	707.52	697.52	10.00	03/24/2022
B-125D	Downgradient	Bedrock	1394111.10	2202580.90	821.70	819.15	145.40	684.05	674.05	10.00	03/31/2023
PIEZOMETERS											
B-3	Downgradient	Overburden/Upper Bedrock	1394045.10	2202411.50	837.78	834.86	37.00	808.16	798.16	10.00	10/03/2012
B-6	Downgradient	Overburden	1394419.50	2203266.50	789.47	786.45	35.40	761.45	751.45	10.00	10/09/2012
B-7	Downgradient	Overburden	1394374.60	2203596.10	809.16	806.04	25.20	791.24	781.24	10.00	10/09/2012
B-16	Downgradient	Overburden	1392595.10	2203315.40	826.47	823.54	43.70	790.14	780.14	10.00	12/19/2012
B-18	Downgradient	Overburden	1392521.00	2202875.50	826.56	823.89	32.60	801.49	791.49	10.00	01/10/2013
B-24	Downgradient	Upper Bedrock	1392479.90	2201450.00	822.11	819.19	79.10	750.89	740.89	10.00	10/24/2012
B-25	Downgradient	Upper Bedrock	1392813.30	2201502.70	836.54	833.41	54.80	789.01	779.01	10.00	10/24/2012
B-26	Downgradient	Upper Bedrock	1393105.60	2201550.40	853.60	850.61	49.30	811.71	801.71	10.00	10/23/2012
B-28	Downgradient	Overburden/Upper Bedrock	1391967.40	2201679.20	816.08	813.28	69.40	754.28	744.28	10.00	10/31/2012
B-29	Downgradient	Overburden	1391890.00	2201422.00	816.43	813.47	54.40	769.37	759.37	10.00	01/11/2013
B-41	Downgradient	Overburden	1390920.80	2201751.90	795.20	792.40	60.00	743.00	733.00	10.00	11/14/2012
B-50	Downgradient	Overburden	1391657.10	2201841.00	809.67	809.20	35.20	784.40	774.40	10.00	06/24/2016
B-51	Downgradient	Overburden	1390501.20	2200906.50	765.92	763.29	65.00	708.29	698.29	10.00	06/27/2016
B-52	Downgradient	Overburden	1392308.30	2201314.80	822.89	820.18	50.00	781.28	771.28	10.00	09/28/2016
B-54	Downgradient	Overburden/Upper Bedrock	1394423.50	2203140.70	785.46	782.54	34.20	758.74	748.74	10.00	09/26/2016
B-55	Downgradient	Overburden	1394142.60	2204147.90	825.12	822.86	52.00	781.86	771.86	10.00	09/22/2016
B-57	Downgradient	Upper Bedrock	1391396.30	2202736.90	789.04	786.03	50.50	746.03	736.03	10.00	09/24/2016
B-58	Downgradient	Overburden	1391125.70	2202426.50	788.17	785.20	45.00	750.70	740.70	10.00	09/23/2016
B-59	Downgradient	Overburden/Upper Bedrock	1394349.10	2203001.10	788.00	785.41	30.30	765.21	755.21	10.00	09/23/2016
B-60	Downgradient	Overburden	1391100.70	2202881.60	782.13	779.25	49.80	739.95	729.95	10.00	09/29/2016
B-61	Downgradient	Overburden	1390957.80	2202505.80	782.09	778.95	51.90	737.45	727.45	10.00	09/29/2016
B-64	Downgradient	Overburden	1394381.90	2203031.30	785.83	785.98	30.40	765.98	755.98	10.00	11/02/2016
B-65	Downgradient	Overburden/Upper Bedrock	1394381.20	2204050.80	821.95	822.30	45.40	787.90	777.90	10.00	11/15/2016

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PIEZOMETERS											
B-68	Downgradient	Overburden	1391298.20	2200714.20	758.68	759.05	18.00	751.05	741.05	10.00	03/16/2017
B-72	Downgradient	Overburden	1391242.20	2200723.90	758.46	758.45	21.90	746.95	736.95	10.00	04/19/2017
B-73	Downgradient	Overburden	1391352.40	2200697.50	759.21	759.16	15.80	753.76	743.76	10.00	04/19/2017
B-76	Downgradient	Overburden	1390686.39	2202743.19	760.53	760.87	38.50	732.37	722.37	10.00	09/18/2019
B-78	Downgradient	Overburden/Upper Bedrock	1394328.20	2202958.20	790.75	787.79	30.00	767.79	758.29	10.00	09/22/2019
B-79	Downgradient	Overburden	1394458.60	2203223.00	788.66	785.84	34.90	760.94	751.40	10.00	09/21/2019
B-80	Downgradient	Overburden	1394372.60	2203533.90	804.47	801.73	30.00	781.93	772.40	10.00	09/20/2019
B-81	Downgradient	Overburden	1394364.90	2203741.10	820.56	817.64	50.00	778.50	768.50	10.00	09/22/2019
B-85	Downgradient	Overburden/Upper Bedrock	1394433.40	2203134.50	782.54	782.71	34.50	758.51	748.51	10.00	11/18/2019
B-86	Downgradient	Overburden/Upper Bedrock	1394480.00	2203206.60	784.29	784.52	34.10	760.42	750.42	10.00	11/18/2019
B-87	Downgradient	Overburden	1394401.90	2203531.30	803.37	800.32	42.00	768.62	758.62	10.00	11/17/2019
B-89	Downgradient	Upper Bedrock	1394398.40	2204049.40	822.36	822.53	49.50	783.03	773.03	10.00	11/19/2019
B-90	Downgradient	Overburden	1394501.00	2203212.60	784.00	784.16	33.40	760.76	750.76	10.00	12/10/2019
B-91	Downgradient	Overburden	1394447.10	2203123.90	782.98	783.10	35.00	758.50	748.50	10.00	12/11/2019
B-94	Downgradient	Overburden	1394402.00	2203513.70	801.74	799.12	45.20	764.52	754.52	10.00	01/23/2020
B-95	Downgradient	Overburden	1394518.60	2203167.70	784.00	784.18	33.30	761.18	751.18	10.00	02/11/2020
B-96	Downgradient	Overburden	1394478.70	2203099.30	784.92	785.19	33.10	762.09	752.09	10.00	02/10/2020
B-99	Downgradient	Overburden	1394524.20	2203084.50	782.39	782.57	12.30	775.27	770.27	5.00	07/07/2020
B-103D	Downgradient	Upper Bedrock	1391543.50	2202614.40	795.96	793.77	70.00	733.77	723.77	10.00	10/15/2020
B-109D	Downgradient	Upper Bedrock	1393957.50	2202127.00	850.73	847.78	100.00	758.38	748.38	10.00	10/31/2020
B-110D	Downgradient	Upper Bedrock	1391294.40	2200736.00	764.61	764.55	65.00	711.55	701.55	10.00	11/17/2020
B-113D	Downgradient	Upper Bedrock	1391264.60	2200719.20	758.22	758.87	84.70	684.47	674.47	10.00	03/30/2021
B-115D	Downgradient	Upper Bedrock	1391265.30	2202580.70	789.17	786.43	79.50	717.23	707.23	10.00	03/20/2021
B-116D	Upgradient	Upper Bedrock	1390483.70	2200611.00	807.82	805.31	89.50	726.11	716.11	10.00	03/08/2021
B-117D	Upgradient	Upper Bedrock	1393963.80	2201727.30	863.82	861.23	75.00	796.53	786.53	10.00	03/17/2021
B-118	Upgradient	Upper Bedrock	1391219.30	2200449.70	807.70	804.99	75.20	740.09	730.09	10.00	03/09/2021
B-119D	Upgradient	Upper Bedrock	1391236.40	2200446.60	807.15	804.53	105.00	709.83	699.83	10.00	03/16/2021
B-123D	Downgradient	Bedrock	1391234.40	2202608.40	781.80	778.85	160.00	668.85	618.85	50.00	04/04/2022

Notes:

1. Coordinate System: NAD 1983 State Plane Georgia West (U.S. feet)
2. NAD - North American Datum; NAVD - North American Vertical Datum of 1988
3. Ground surface elevations shown are the elevation of the survey nail.
4. Piezometers B-31 and B-74 were decommissioned and abandoned in October 2023.

Table 2
Groundwater Event Summary
Georgia Power Company
Plant McDonough - Ash Pond 1
Cobb County, GA

Well ID	Hydraulic Location	Compliance Purpose	September 2023	November 2023	January-February 2024	May 2024
			Assessment	Assessment	Assessment	Assessment
Georgia Power Company - Plant McDonough - Ash Pond 1						
DGWA-53	Upgradient	Detection	X		X	
DGWA-70A	Upgradient	Detection	X		--	
DGWA-71	Upgradient	Detection	X		X	
DGWC-37	Downgradient	Detection	X		X	
DGWC-38	Downgradient	Detection	X		X	
DGWC-39	Downgradient	Detection	X		X	
DGWC-40	Downgradient	Detection	X		X	
DGWC-67	Downgradient	Detection	X		X	
DGWC-68A	Downgradient	Detection	X		X	
DGWC-69	Downgradient	Detection	X		X	
DGWC-121	Downgradient	Assessment	X	X	X	X
B-62	Downgradient	Assessment	X		X	
B-100	Downgradient	Assessment	X		X	
B-105D	Downgradient	Assessment	X		X	
B-112D	Downgradient	Assessment	X		X	

Notes:
X - Indicates well sampled during event
-- - Indicates well not sampled due to restricted access at the time of collection

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

Well ID	Top of Casing Elevation (feet)	September 5, 2023		January 29, 2024	
		Depth to Water (feet, BTOC)	Groundwater Elevation (feet)	Depth to Water (feet, BTOC)	Groundwater Elevation (feet)
ASH POND 1 (AP-1) DETECTION MONITORING WELL NETWORK					
DGWA-53	844.26	13.21	831.05	14.35	829.91
DGWA-70A	808.52	41.35	767.17	41.51	767.01
DGWA-71	863.84	31.32	832.52	33.11	830.73
DGWC-37	766.21	13.99	752.22	13.42	752.79
DGWC-38	757.43	6.58	750.85	6.47	750.96
DGWC-39	759.89	7.55	752.34	7.12	752.77
DGWC-40	779.06	17.85	761.21	18.09	760.97
DGWC-67	766.70	10.42	756.28	9.72	756.98
DGWC-68A	765.33	10.45	754.88	9.89	755.44
DGWC-69	763.75	6.07	757.68	5.60	758.15
DGWC-121	764.16	9.23	754.93	8.57	755.59
ASH POND 1 (AP-1) ASSESSMENT MONITORING WELL NETWORK					
B-62	760.08	15.88	744.20	15.91	744.17
B-100	777.95	33.97	743.98	34.07	743.88
B-105D	779.01	17.44	761.57	17.68	761.33
B-112D	765.58	7.56	758.02	6.84	758.74
ASH POND 2 and ASH PONDS 3/4 (AP-2, 3/4) ASSESSMENT MONITORING WELL NETWORK					
DGWA-53	844.26	13.21	831.05	14.35	829.91
DGWA-70A	808.52	41.35	767.17	41.51	767.01
DGWA-71	863.84	31.32	832.52	33.11	830.73
DGWC-2	850.88	29.23	821.65	31.59	819.29
DGWC-4	814.85	25.45	789.40	25.53	789.32
DGWC-5	791.75	14.37	777.38	12.08	779.67
DGWC-8	826.38	35.46	790.92	39.91	786.47
DGWC-9	824.35	Dry		Dry	
DGWC-10	823.55	29.69	793.86	29.72	793.83
DGWC-11	800.57	12.88	787.69	13.24	787.33
DGWC-12	773.86	9.62	764.24	8.35	765.51
DGWC-13	794.10	34.02	760.08	34.54	759.56
DGWC-14	792.40	19.97	772.43	20.76	771.64
DGWC-15	824.50	39.86	784.64	41.58	782.92
DGWC-17	837.05	37.96	799.09	38.54	798.51
DGWC-19	825.46	26.65	798.81	26.78	798.68
DGWC-20	822.14	24.59	797.55	24.53	797.61
DGWC-21	816.28	19.04	797.24	19.71	796.57
DGWC-22	816.59	22.55	794.04	22.94	793.65
DGWC-23	818.37	22.17	796.20	20.09	798.28
DGWC-42	804.68	30.36	774.32	30.83	773.85
DGWC-47	797.45	16.55	780.90	17.45	780.00
DGWC-48	788.33	15.05	773.28	15.50	772.83

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

Well ID	Top of Casing Elevation (feet)	September 5, 2023		January 29, 2024	
		Depth to Water (feet, BTOC)	Groundwater Elevation (feet)	Depth to Water (feet, BTOC)	Groundwater Elevation (feet)
ASH POND 2 and ASH PONDS 3/4 (AP-2, 3/4) ASSESSMENT MONITORING WELL NETWORK					
B-56	823.59	30.36	793.23	30.43	793.16
B-62	760.08	15.88	744.20	15.91	744.17
B-63	777.10	29.63	747.47	29.33	747.77
B-66	815.90	19.15	796.75	18.88	797.02
B-77	776.86	29.75	747.11	29.09	747.77
B-82	810.07	14.54	795.53	15.13	794.94
B-83	776.98	30.95	746.03	31.15	745.83
B-88	820.07	38.76	781.31	39.35	780.72
B-92	785.08	7.95	777.13	5.87	779.21
B-93	789.07	10.21	778.86	8.40	780.67
B-97	786.29	5.41	780.88	4.89	781.40
B-98	789.67	11.82	777.85	7.53	782.14
B-100	777.95	33.97	743.98	34.07	743.88
B-101D	824.29	38.20	786.09	37.15	787.14
B-102D	823.42	34.10	789.32	34.08	789.34
B-104D	787.90	6.87	781.03	7.10	780.80
B-106D	826.21	38.96	787.25	40.97	785.24
B-107D	823.38	24.48	798.90	24.65	798.73
B-108D	821.13	23.45	797.68	23.77	797.36
B-111D	791.84	12.37	779.47	10.76	781.08
B-120D	836.42	35.15	801.27	36.09	800.33
B-122D	777.03	30.28	746.75	30.32	746.71
B-125D	821.70	23.40	798.30	24.20	797.50
PIEZOMETERS					
B-3	837.78	36.59	801.19	37.49	800.29
B-6	789.47	12.33	777.14	9.70	779.77
B-7	809.16	27.87	781.29	28.03	781.13
B-16	826.47	36.98	789.49	37.08	789.39
B-18	826.56	24.99	801.57	24.65	801.91
B-24	822.11	22.03	800.08	23.49	798.62
B-25	836.54	16.12	820.42	14.33	822.21
B-26	853.60	22.16	831.44	27.85	825.75
B-28	816.08	30.59	785.49	31.10	784.98
B-29	816.43	29.39	787.04	29.36	787.07
B-31	797.47	34.02	763.45	Abandoned	
B-41	795.20	25.11	770.09	25.40	769.80
B-50	809.67	23.12	786.55	23.59	786.08
B-51	765.92	13.22	752.70	12.76	753.16

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

Well ID	Top of Casing Elevation (feet)	September 5, 2023		January 29, 2024	
		Depth to Water (feet, BTOC)	Groundwater Elevation (feet)	Depth to Water (feet, BTOC)	Groundwater Elevation (feet)
PIEZOMETERS					
B-52	822.89	30.09	792.80	31.28	791.61
B-54	785.46	8.93	776.53	6.91	778.55
B-55	825.12	27.12	798.00	27.42	797.70
B-57	789.04	18.58	770.46	19.95	769.09
B-58	788.17	19.29	768.88	20.92	767.25
B-59	788.00	12.92	775.08	9.44	778.56
B-60	782.13	31.15	750.98	31.50	750.63
B-61	782.09	18.76	763.33	20.19	761.90
B-64	785.83	9.82	776.01	7.01	778.82
B-65	821.95	14.52	807.43	21.02	800.93
B-68	758.68	4.07	754.61	3.57	755.11
B-72	758.46	3.60	754.86	3.30	755.16
B-73	759.21	4.63	754.58	3.84	755.37
B-74	759.06	4.24	754.82	Abandoned	
B-76	760.53	15.37	745.16	15.59	744.94
B-78	790.75	13.24	777.51	11.45	779.30
B-79	788.66	10.01	778.65	8.65	780.01
B-80	804.47	23.38	781.09	23.32	781.15
B-81	820.56	37.99	782.57	38.98	781.58
B-85	782.54	5.38	777.16	3.78	778.76
B-86	784.29	4.84	779.45	3.50	780.79
B-87	803.37	22.25	781.12	22.01	781.36
B-89	822.36	23.92	798.44	26.26	796.10
B-90	784.00	4.17	779.83	3.02	780.98
B-91	782.98	5.11	777.87	4.32	778.66
B-94	801.74	20.93	780.81	20.56	781.18
B-95	784.00	3.75	780.25	3.13	780.87
B-96	784.92	7.25	777.67	5.74	779.18
B-99	782.39	4.53	777.86	3.16	779.23
B-103D	795.96	13.50	782.46	13.71	782.25
B-109D	850.73	38.89	811.84	40.65	810.08
B-110D	764.61	9.21	755.40	8.72	755.89
B-113D	758.22	1.97	756.25	2.01	756.21
B-115D	789.17	20.59	768.58	22.14	767.03
B-116D	807.82	43.32	764.50	42.58	765.24
B-117D	863.82	31.83	831.99	33.74	830.08
B-118	807.70	51.96	755.74	51.63	756.07
B-119D	807.15	47.91	759.24	47.42	759.73
B-123D	781.80	12.24	769.56	13.65	768.15

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.
3. Piezometers B-31 and B-74 were abandoned in October 2023.
4. BTOC indicates below top of casing.

TABLE 4A
GROUNDWATER FLOW VELOCITY CALCULATIONS - September 2023
Georgia Power Company
Plant McDonough - Ash Pond 1
Cobb County, GA

Gauging Event	Well Pair	Groundwater Elevations in Well Pairs (ft)		Change in Elevation (Δ h) (ft)	Distance Between Well 1 and Well 2 (Δ l) (ft)	Hydraulic Gradient (i) (ft/ft)	Average Hydraulic Conductivity (K) (ft/day)	Assumed Effective Porosity (ne)	Calculated Groundwater Flow Velocity (ft/day)	Calculated Groundwater Flow Velocity (ft/year)
September 2023	B-28 to DGWC-37	785.49	752.22	33.27	1700	0.020	2.18	0.2	0.22	80
September 2023	B-29 to DGWC-68A	787.04	754.88	32.16	900	0.036	2.18	0.2	0.39	142
September 2023	B-50 to DGWC-39	786.55	752.34	34.21	1400	0.024	2.18	0.2	0.26	95

Notes:
ft = feet, ft/ft = feet/foot, ne = effective porosity
1. Δ h = Change in groundwater elevation
2. Δ l =Distance along flow path
3. i = Δ h / Δ l
4. Velocity = $(i * K)/n_e$
5. Hydraulic conductivity based on historic aquifer performance tests
6. Assumed effective porosities for overburden was based on the default values recommended by US EPA for a silty sand-type soil (1996).

TABLE 4B
GROUNDWATER FLOW VELOCITY CALCULATIONS - January 2024
Georgia Power Company
Plant McDonough - Ash Pond 1
Cobb County, GA

Gauging Event	Well Pair	Groundwater Elevations in Well Pairs (ft)		Change in Elevation (Δ h) (ft)	Distance Between Well 1 and Well 2 (Δ l) (ft)	Hydraulic Gradient (i) (ft/ft)	Average Hydraulic Conductivity (K) (ft/day)	Assumed Effective Porosity (ne)	Calculated Groundwater Flow Velocity (ft/day)	Calculated Groundwater Flow Velocity (ft/year)
January 2024	B-28 to DGWC-37	784.98	752.79	32.19	1700	0.019	2.18	0.2	0.21	76
January 2024	B-29 to DGWC-68A	787.07	755.44	31.63	900	0.035	2.18	0.2	0.38	139
January 2024	B-50 to DGWC-39	786.08	752.77	33.31	1400	0.024	2.18	0.2	0.26	96

Notes:
ft = feet, ft/ft = feet/foot, ne = effective porosity
1. Δ h = Change in groundwater elevation
2. Δ l =Distance along flow path
3. i = Δ h / Δ l
4. Velocity = $(i * K)/n_e$
5. Hydraulic conductivity based on historic aquifer performance tests
6. Assumed effective porosities for overburden was based on the default values recommended by US EPA for a silty sand-type soil (1996).

TABLE 5A
GROUNDWATER ANALYTICAL DATA SUMMARY- September 2023
Georgia Power Company
Plant McDonough - Ash Pond 1
Cobb County, GA

	Sample Location	DGWA-53	DGWA-70A	DGWA-71	DGWC-37	DGWC-38	DGWC-39	DGWC-40	DGWC-67	DGWC-68A	DGWC-69
	Sample Date	09/07/2023	09/06/2023	09/06/2023	09/06/2023	09/07/2023	09/07/2023	09/07/2023	09/07/2023	09/07/2023	09/07/2023
ANALYTE	UNITS										
APPENDIX III											
Boron	mg/L	0.052	0.012 J	0.015 J	1.7	2.8	2.7	0.73	3.9	1.8	0.052
Calcium	mg/L	16.3	6.6	7.0	59.1	86.5	81.2	41.0	43.3	53.6	8.1
Chloride	mg/L	1.7	2.2	7.8	5.4	8.2	7.2	13.6	9.2	3.9	5.1
Fluoride	mg/L	0.082 J	< 0.050	< 0.050	0.053 J	0.072 J	0.092 J	0.14	< 0.050	0.096 J	0.063 J
pH, Field	SU	6.51	5.50	5.82	6.26	6.07	6.55	4.67	6.21	6.60	6.16
Sulfate	mg/L	15.4	< 0.50	7.2	83.4	212	124	177	106	34.2	6.9
TDS	mg/L	123	46.0	80.0	324	526	421	359	337	253	106
APPENDIX IV											
Antimony	mg/L	< 0.0012	< 0.0012	0.0045	0.0014 J	< 0.0012	< 0.0012	< 0.0012	0.0039	< 0.0012	< 0.0012
Arsenic	mg/L	< 0.0037	< 0.0037	< 0.0037	< 0.0037	< 0.0037	< 0.0037	< 0.0037	< 0.0037	< 0.0037	0.029
Barium	mg/L	0.12	0.041	0.030	0.082	0.027	0.11	0.016	0.076	0.11	0.047
Beryllium	mg/L	< 0.000054	0.00012 J	0.00011 J	0.000058 J	< 0.000054	< 0.000054	0.0031	< 0.000054	< 0.000054	0.000078 J
Cadmium	mg/L	< 0.00011	< 0.00011	< 0.00011	< 0.00011	0.00013 J	< 0.00011	0.00074	< 0.00011	0.00015 J	< 0.00011
Chromium	mg/L	< 0.0011	< 0.0011	< 0.0011	< 0.0011	< 0.0011	< 0.0011	< 0.0011	< 0.0011	< 0.0011	< 0.0011
Cobalt	mg/L	0.0086	< 0.00039	< 0.00039	< 0.00039	0.0015 J	0.0059	0.035	0.0010 J	< 0.00039	< 0.00039
Lead	mg/L	< 0.00012	< 0.00012	< 0.00012	< 0.00012	< 0.00012	< 0.00012	< 0.00012	< 0.00012	< 0.00012	0.00020 J
Lithium	mg/L	0.0085 J	< 0.00073	0.0013 J	0.0021 J	0.0026 J	< 0.00073	0.0022 J	0.0046 J	< 0.00073	0.0022 J
Mercury	mg/L	< 0.00013	< 0.00012	< 0.00012	< 0.00012	< 0.00012	< 0.00012	< 0.00012	< 0.00012	< 0.00012	< 0.00012
Molybdenum	mg/L	0.022	< 0.00074	< 0.00074	< 0.00074	0.0013 J	0.0016 J	< 0.00074	0.0013 J	0.18	0.0056 J
Combined Radium 226 + 228	pCi/L	2.16	0.651 U	0.572 U	0.732 U	0.358 U	0.728 U	0.902 U	0.565 U	0.782 U	0.910
Selenium	mg/L	< 0.0014	< 0.0014	< 0.0014	< 0.0014	< 0.0014	< 0.0014	< 0.0014	< 0.0014	< 0.0014	< 0.0014
Thallium	mg/L	< 0.00018	0.00053 J	< 0.00018	< 0.00018	< 0.00018	< 0.00018	< 0.00018	< 0.00018	< 0.00018	< 0.00018
Fluoride	mg/L	0.082 J	< 0.050	< 0.050	0.053 J	0.072 J	0.092 J	0.14	< 0.050	0.096 J	0.063 J
ADDITIONAL PARAMETERS											
Bicarbonate Alkalinity as CaCO3	mg/L	74.5	27.2	16.4	129	97.7	215	< 5.0	90.9	201	38.9
Carbonate Alkalinity as CaCO3	mg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Total Alkalinity as CaCO3	mg/L	74.5	27.2	16.4	129	97.7	215	< 5.0	90.9	201	38.9
Iron	mg/L	14.9	< 0.025	0.091	0.040	0.028 J	11.5	< 0.025	< 0.025	0.093	0.35
Ferrous (II) Iron	mg/L	7.0	0.0	0.0	0.0	0.0	6.5	0.0	0.0	0.0	0.0
Magnesium	mg/L	5.1	2.6	0.98	13.0	25.7	19.8	18.0	17.2	18.1	2.3
Potassium	mg/L	3.8	1.6	0.77	4.0	4.4	2.8	5.9	3.6	4.0	2.3
Sodium	mg/L	7.6	3.4	8.8	10.3	12.1	12.6	18.9	10.3	9.8	9.3
Sulfide	mg/L	< 0.022	< 0.022	< 0.022	< 0.022	< 0.022	< 0.022	< 0.022	< 0.022	< 0.022	< 0.022

Notes:

1. mg/L - milligrams per Liter; pCi/L - picocuries per Liter; S.U. - Standard Units.
2. -- indicates substance was 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.
6. Monitoring well DGWC-121 is sampled on a quarterly basis.

TABLE 5A
GROUNDWATER ANALYTICAL DATA SUMMARY- September 2023
Georgia Power Company
Plant McDonough - Ash Pond 1
Cobb County, GA

	Sample Location	DGWC-121	DGWC-121	B-62	B-100	B-105D	B-112D
	Sample Date	09/08/2023	11/07/2023	09/07/2023	09/06/2023	09/07/2023	09/07/2023
ANALYTE	UNITS						
APPENDIX III							
Boron	mg/L	1.9	1.7	0.071	0.24	0.76	0.24
Calcium	mg/L	43.9	41.3	35.1	49.9	71.8	24.0
Chloride	mg/L	4.5	4.6	5.4	10.0	14.9	2.6
Fluoride	mg/L	< 0.050	< 0.050	0.13	< 0.050	0.10	0.32
pH, Field	SU	6.25	6.21	6.38	5.25	6.52	6.77
Sulfate	mg/L	87.8	85.7	49.3	322	236	16.3
TDS	mg/L	286	279	181	641	520	155
APPENDIX IV							
Antimony	mg/L	< 0.0012	<0.00054	< 0.0012	< 0.0012	< 0.0012	< 0.0012
Arsenic	mg/L	< 0.0037	0.0011 J	< 0.0037	< 0.0037	< 0.0037	< 0.0037
Barium	mg/L	0.047	0.053	0.015	0.021	0.035	0.0027 J
Beryllium	mg/L	< 0.000054	<0.000094	0.00011 J	0.00054	< 0.000054	< 0.000054
Cadmium	mg/L	< 0.00011	<0.00010	< 0.00011	0.00035 J	< 0.00011	< 0.00011
Chromium	mg/L	< 0.0011	<0.0019	< 0.0011	< 0.0011	< 0.0011	< 0.0011
Cobalt	mg/L	0.0016 J	0.0012 J	< 0.00039	0.031	0.0027 J	0.00040 J
Lead	mg/L	< 0.00012	<0.00016	< 0.00012	< 0.00012	< 0.00012	< 0.00012
Lithium	mg/L	0.0055 J	0.0065 J	0.0092 J	0.0023 J	0.013 J	0.0043 J
Mercury	mg/L	< 0.00012	<0.00013	< 0.00013	< 0.00012	< 0.00012	< 0.00012
Molybdenum	mg/L	< 0.00074	<0.00062	< 0.00074	< 0.00074	< 0.00074	0.026
Combined Radium 226 + 228	pCi/L	0.986 U	0.643 U	2.24	0.326 U	2.88	0.902
Selenium	mg/L	< 0.0014	<0.00096	< 0.0014	< 0.0014	< 0.0014	< 0.0014
Thallium	mg/L	< 0.00018	<0.00038	< 0.00018	< 0.00018	< 0.00018	< 0.00018
Fluoride	mg/L	< 0.050	< 0.050	0.13	< 0.050	0.10	0.32
ADDITIONAL PARAMETERS							
Bicarbonate Alkalinity as CaCO3	mg/L	96.9	--	75.7	< 5.0	45.9	109
Carbonate Alkalinity as CaCO3	mg/L	< 5.0	--	< 5.0	< 5.0	< 5.0	< 5.0
Total Alkalinity as CaCO3	mg/L	96.9	--	75.7	< 5.0	45.9	109
Iron	mg/L	2.6	--	5.0	21.7	2.1	0.035 J
Ferrous (II) Iron	mg/L	1.5	--	1.5	7.0	2.0	0.0
Magnesium	mg/L	13.2	--	5.1	46.9	24.6	7.3
Potassium	mg/L	3.6	--	2.4	1.3	8.2	2.8
Sodium	mg/L	10.9	--	10.1	28.1	20.0	12.5
Sulfide	mg/L	0.071 J	--	< 0.022	< 0.022	0.43	< 0.022

Notes:

1. mg/L - milligrams per Liter; pCi/L - picocuries per Liter; S.U. - Standard Units.
2. -- indicates substance was 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.
6. Monitoring well DGWC-121 is sampled on a quarterly basis.

TABLE 5B
GROUNDWATER ANALYTICAL DATA SUMMARY - January-February 2024
Georgia Power Company
Plant McDonough - Ash Pond 1
Cobb County, GA

	Sample Location	DGWA-53	DGWA-71	DGWC-37	DGWC-38	DGWC-39	DGWC-40	DGWC-67	DGWC-68A	DGWC-69
	Sample Date	01/30/2024	01/30/2024	01/31/2024	01/30/2024	01/31/2024	01/30/2024	02/01/2024	01/31/2024	01/31/2024
ANALYTE	UNITS									
APPENDIX III										
Boron	mg/L	0.065	0.015 J	1.9	2.9	2.3	0.73	3.9	1.9	0.025 J
Calcium	mg/L	13.7	6.1	60.1	80.8	76.6	38.2	44.4	54.6	8.8
Chloride	mg/L	1.6	8.2	5.8	8.5	6.8	14.7	9.8	3.9	6.0
Fluoride	mg/L	0.070 J	< 0.050	0.069 J	0.078 J	0.11	0.12	0.057 J	0.092 J	0.086 J
pH, Field	SU	6.28	5.79	6.32	5.94	6.58	4.64	6.27	6.62	6.26
Sulfate	mg/L	13.4	7.9	98.4	220	106	179	111	33.2	7.2
TDS	mg/L	130	86.0	310	492	387	348	313	261	82.0
APPENDIX IV										
Antimony	mg/L	< 0.00054	< 0.00054	< 0.00054	< 0.00054	0.00058 J	< 0.00054	< 0.00054	< 0.00054	< 0.00054
Arsenic	mg/L	< 0.00084	< 0.00084	< 0.00084	< 0.00084	< 0.00084	< 0.00084	< 0.00084	< 0.00084	0.026
Barium	mg/L	0.096	0.029	0.086	0.031	0.10	0.017	0.077	0.11	0.048
Beryllium	mg/L	< 0.000094	0.000098 J	< 0.000094	< 0.000094	< 0.000094	0.0032	< 0.000094	< 0.000094	< 0.000094
Cadmium	mg/L	< 0.00010	< 0.00010	< 0.00010	0.00024 J	< 0.00010	0.00073	< 0.00010	0.00026 J	< 0.00010
Chromium	mg/L	< 0.0019	< 0.0019	< 0.0019	< 0.0019	< 0.0019	< 0.0019	< 0.0019	< 0.0019	< 0.0019
Cobalt	mg/L	0.0083	< 0.00032	< 0.00032	0.0020 J	0.0058	0.037	0.0011 J	< 0.00032	< 0.00032
Lead	mg/L	< 0.00016	< 0.00016	< 0.00016	< 0.00016	< 0.00016	< 0.00016	< 0.00016	< 0.00016	< 0.00016
Lithium	mg/L	0.0087 J	< 0.0016	< 0.0016	0.0030 J	< 0.0016	0.0023 J	0.0045 J	< 0.0016	0.0021 J
Mercury	mg/L	< 0.00013	< 0.00013	< 0.00013	< 0.00013	< 0.00013	< 0.00013	< 0.00013	< 0.00013	< 0.00013
Molybdenum	mg/L	0.025	< 0.00062	< 0.00062	0.0018 J	< 0.00062	< 0.00062	< 0.00062	0.20	0.0066 J
Combined Radium 226 + 228	pCi/L	0.478 U	0.305 U	0.140 U	0.606 U	0.156 U	0.534 U	0.667 U	0.0595 U	0.588 U
Selenium	mg/L	< 0.00096	< 0.00096	< 0.00096	< 0.00096	< 0.00096	0.0027 J	< 0.00096	< 0.00096	< 0.00096
Thallium	mg/L	< 0.00038	< 0.00038	< 0.00038	< 0.00038	< 0.00038	< 0.00038	< 0.00038	< 0.00038	< 0.00038
Fluoride	mg/L	0.070 J	< 0.050	0.069 J	0.078 J	0.11	0.12	0.057 J	0.092 J	0.086 J
ADDITIONAL PARAMETERS										
Bicarbonate Alkalinity as CaCO3	mg/L	66.5	17.8	143	102	232	< 5.0	88.2	202	40.7
Carbonate Alkalinity as CaCO3	mg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Total Alkalinity as CaCO3	mg/L	66.5	17.8	143	102	232	< 5.0	88.2	202	40.7
Iron	mg/L	10.1	< 0.025	0.11	0.087	11.3	< 0.025	0.045	0.064	0.17
Ferrous (II) Iron	mg/L	4.5	0.0	0.0	0.0	5.0	0.0	0.0	0.0	0.0
Magnesium	mg/L	4.7	0.91	14.0	25.6	19.7	17.7	17.3	19.1	2.5
Potassium	mg/L	3.6	0.81	4.0	4.7	2.3	6.3	3.9	4.3	2.4
Sodium	mg/L	6.3	7.8	9.6	11.3	11.6	17.8	12.0	9.8	9.4
Sulfide	mg/L	< 0.022	< 0.022	< 0.022	< 0.022	< 0.022	< 0.022	< 0.022	< 0.022	< 0.022

Notes:

1. mg/L - milligrams per Liter; pCi/L - picocuries per Liter; S.U. - Standard Units.
2. -- indicates substance was 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.
6. DGWA-70A was not sampled due to restricted access at the time of collection.
7. Monitoring well DGWC-121 is sampled on a quarterly basis.

TABLE 5B
GROUNDWATER ANALYTICAL DATA SUMMARY - January-February 2024
Georgia Power Company
Plant McDonough - Ash Pond 1
Cobb County, GA

	Sample Location	DGWC-121	DGWC-121	B-62	B-100	B-105D	B-112D
	Sample Date	01/31/2024	05/20/2024	02/01/2024	01/31/2024	01/31/2024	02/01/2024
ANALYTE	UNITS						
APPENDIX III							
Boron	mg/L	1.6	1.7	0.083	0.13	0.77	0.26
Calcium	mg/L	37.8	43.4	33.2	24.3	67.9	23.6
Chloride	mg/L	3.8	4.5	5.6	7.5	15.2	3.0
Fluoride	mg/L	0.070 J	0.062 J	0.14	0.063 J	0.081 J	0.29
pH, Field	SU	6.19	6.20	6.41	5.35	6.37	6.81
Sulfate	mg/L	73.7	88.0	49.4	340	249	15.5
TDS	mg/L	220	291	205	582	307	159
APPENDIX IV							
Antimony	mg/L	< 0.00054	0.00062 J	< 0.00054	< 0.00054	< 0.00054	< 0.00054
Arsenic	mg/L	< 0.00084	< 0.00084	< 0.00084	< 0.00084	< 0.00084	< 0.00084
Barium	mg/L	0.050	0.044	0.017	0.019	0.039	0.0028 J
Beryllium	mg/L	< 0.000094	< 0.000094	0.00015 J	0.00047 J	< 0.000094	< 0.000094
Cadmium	mg/L	< 0.00010	< 0.00010	< 0.00010	0.00033 J	< 0.00010	< 0.00010
Chromium	mg/L	< 0.0019	< 0.0019	< 0.0019	< 0.0019	< 0.0019	< 0.0019
Cobalt	mg/L	0.0015 J	0.0013 J	< 0.00032	0.065	0.0026 J	< 0.00032
Lead	mg/L	< 0.00016	< 0.00016	< 0.00016	< 0.00016	< 0.00016	< 0.00016
Lithium	mg/L	0.0045 J	0.0050 J	0.0094 J	< 0.0016	0.013 J	0.0042 J
Mercury	mg/L	< 0.00013	< 0.00013	< 0.00013	< 0.00013	< 0.00013	< 0.00013
Molybdenum	mg/L	0.00092 J	< 0.00062	< 0.00062	< 0.00062	< 0.00062	0.027
Combined Radium 226 + 228	pCi/L	0.580 U	1.05 U	2.08	0.0563 U	6.38	1.25
Selenium	mg/L	< 0.00096	< 0.00096	< 0.00096	< 0.00096	< 0.00096	< 0.00096
Thallium	mg/L	< 0.00038	< 0.00038	< 0.00038	< 0.00038	< 0.00038	< 0.00038
Fluoride	mg/L	0.070 J	0.062 J	0.14	0.063 J	0.081 J	0.29
ADDITIONAL PARAMETERS							
Bicarbonate Alkalinity as CaCO3	mg/L	84.3	--	86.5	28.8	47.1	108
Carbonate Alkalinity as CaCO3	mg/L	< 5.0	--	< 5.0	< 5.0	< 5.0	< 5.0
Total Alkalinity as CaCO3	mg/L	84.3	--	86.5	28.8	47.1	108
Iron	mg/L	2.0	--	5.3	10.5	3.0	0.14
Ferrous (II) Iron	mg/L	1.5	1.5	6.0	6.0	0.0	0.0
Magnesium	mg/L	10.9	--	4.7	25.4	24.5	7.0
Potassium	mg/L	5.3	--	2.6	0.84	8.6	2.3 J
Sodium	mg/L	8.9	--	10.6	19.3	20.6	13.9
Sulfide	mg/L	0.053 J	--	< 0.022	< 0.022	< 0.022	< 0.022

Notes:

1. mg/L - milligrams per Liter; pCi/L - picocuries per Liter; S.U. - Standard Units.
2. -- indicates substance was 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.
6. DGWA-70A was not sampled due to restricted access at the time of collection.
7. Monitoring well DGWC-121 is sampled on a quarterly basis.

TABLE 6A
SURFACE WATER ANALYTICAL DATA SUMMARY - September 2023
Georgia Power Company
Plant McDonough - Ash Pond 1
Cobb County, GA

Sample Location		UT01_DS	UT01_US	UT02	UT03	CR+0.4	CR+0.2	CR-0.1
Sample Date		09/13/2023	09/13/2023	09/13/2023	09/13/2023	09/12/2023	09/12/2023	09/12/2023
ANALYTE	UNITS							
APPENDIX III								
Boron	mg/L	0.058	< 0.040	0.040	0.049	0.041	< 0.040	0.043
Calcium	mg/L	11.2	11.8	11.5	11.7	6.7	6.9	7.0
Chloride	mg/L	4.7	5.1	5.2	4.9	9.1	9.2	9.5
Fluoride	mg/L	0.17	0.19	0.20	0.18	0.13	0.13	0.13
Sulfate	mg/L	7.7	7.3	7.8	7.9	6.8	6.6	7.1
TDS	mg/L	88.0	56.0	63.0	89.0	47.0	65.0	50.0
APPENDIX IV								
Arsenic	mg/L	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	NA	NA
Cobalt	mg/L	NA	NA	NA	NA	< 0.0050	< 0.0050	< 0.0050
Major Ions								
Alkalinity Total as CaCO3	mg/L	34.1	35.3	34.9	35.3	25.7	26.5	27.0
Bicarbonate Alkalinity as CaCO3	mg/L	34.1	35.3	34.9	35.3	25.7	26.5	27.0
Magnesium	mg/L	1.8	1.9	1.8	1.9	2.1	2.2	2.2
Potassium	mg/L	2.5	2.8	2.6	2.7	3.3	3.4	3.4
Sodium	mg/L	5.1	5.5	5.5	5.5	8.8	9.2	9.4

Notes:
mg/L - milligrams per liter
NA - Indicates not sampled
< indicates the substance was not detected above the reporting limit (RL). The value displayed is the RL.

TABLE 6B
SURFACE WATER ANALYTICAL DATA SUMMARY - January -February 2024
Georgia Power Company
Plant McDonough - Ash Pond 1
Cobb County, GA

Sample Location		UT01_DS	UT01_US	UT02	UT03	CR+0.4	CR+0.2	CR-0.1
Sample Date		02/06/2024	02/06/2024	02/06/2024	02/06/2024	02/06/2024	02/06/2024	02/06/2024
ANALYTE	UNITS							
APPENDIX III								
Boron	mg/L	0.095	0.042	0.054	0.061	0.061	0.044	< 0.040
Calcium	mg/L	17.7	15.9	16.0	17.3	9.4	8.9	8.7
Chloride	mg/L	13.4	13.8	13.7	13.5	12.8	12.5	12.4
Fluoride	mg/L	0.16	0.16	0.16	0.16	0.13	0.12	0.12
Sulfate	mg/L	15.7	14.0	14.8	14.7	10.2	8.6	7.8
TDS	mg/L	115	123	125	121	94.0	94.0	86.0
APPENDIX IV								
Arsenic	mg/L	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	NA	NA
Cobalt	mg/L	NA	NA	NA	NA	< 0.0050	< 0.0050	< 0.0050
Major Ions								
Alkalinity Total as CaCO3	mg/L	52.5	49.4	50.9	51.3	32.9	32.7	32.0
Bicarbonate Alkalinity as CaCO3	mg/L	52.5	49.4	50.9	51.3	32.9	32.7	32.0
Magnesium	mg/L	3.6	3.0	3.1	3.3	2.7	2.5	2.4
Potassium	mg/L	3.3	3.1	3.1	3.3	3.7	3.7	3.7
Sodium	mg/L	13.4	12.7	12.6	13.4	11.8	11.4	11.2

Notes:
mg/L - milligrams per liter
NA - Indicates not sampled
< indicates the substance was not detected above the reporting limit (RL). The value displayed is the RL.

Table 7
Summary of Background Levels and GWPS
Georgia Power Company
Plant McDonough - Ash Pond 1
Cobb County, GA

Analyte	Units	EPA MCL	Federal Regional Screening Level (RSL)	Background September 2023[1]	GWPS September 2023	Background January-February 2024[1]	GWPS Janury-February 2024
Antimony	mg/L	0.006		0.0045[2]	0.006	0.0045[2]	0.006
Arsenic	mg/L	0.01		0.0054[2]	0.01	0.0054[2]	0.01
Barium	mg/L	2		0.19	2	0.19	2
Beryllium	mg/L	0.004		0.0009[2]	0.004	0.0009[2]	0.004
Cadmium	mg/L	0.005		0.0005[2]	0.005	0.0005[2]	0.005
Chromium	mg/L	0.1		0.005[2]	0.1	0.005[2]	0.1
Cobalt	mg/L	NA	0.006	0.032	0.032	0.024	0.024
Fluoride	mg/L	4		0.42	4	0.42	4
Lead	mg/L	NA	0.015	0.001[2]	0.015	0.001[2]	0.015
Lithium	mg/L	NA	0.04	0.03	0.04	0.03	0.04
Mercury	mg/L	0.002		0.0002[2]	0.002	0.0002[2]	0.002
Molybdenum	mg/L	NA	0.1	0.041[2]	0.1	0.041[2]	0.1
Radium (226 + 228)	pCi/L	5		4.87	5	4.74	5
Selenium	mg/L	0.05		0.005[2]	0.05	0.005[2]	0.05
Thallium	mg/L	0.002		0.001[2]	0.002	0.001[2]	0.002

Notes:

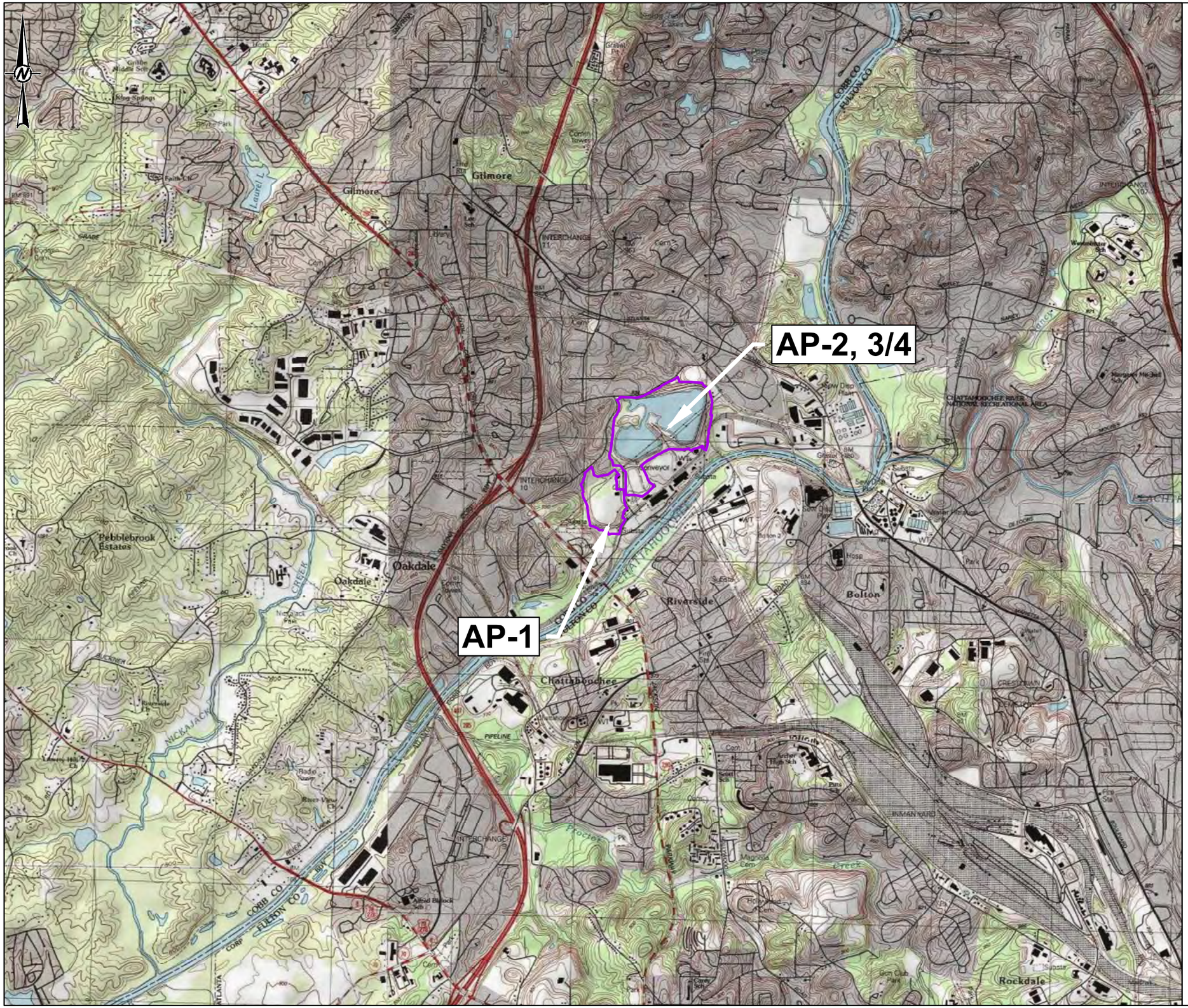
mg/L = milligrams per liter; pCi/L = picocuries per liter; NA = Not Available

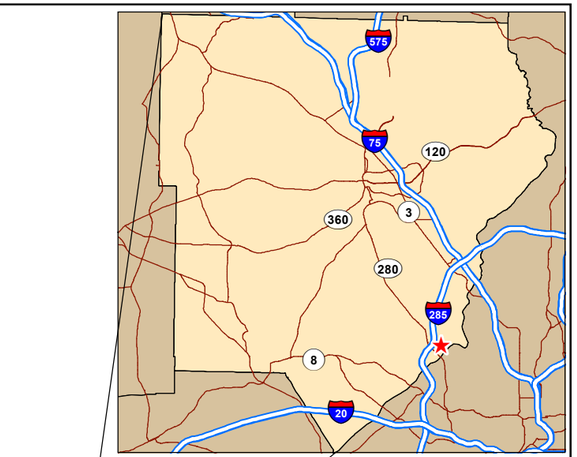
GWPS = Groundwater Protection Standard; EPA MCL = Environmental Protection Agency Maximum Contaminant Level

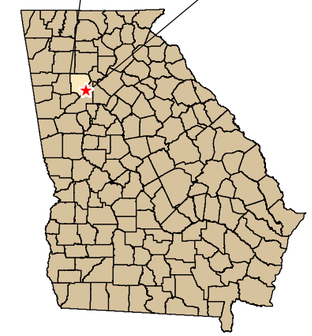
[1] The background limits are used when determining the ground water protection standard (GWPS) under 40 CFR § 257.95(h) and 391-3-4-.10(6)(a).

[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

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1 INCH=0.5 MILES

CLIENT
GEORGIA POWER COMPANY
PLANT MCDONOUGH-ATKINSON

Georgia Power

PROJECT
2024 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT-ASH POND 1

TITLE
SITE LOCATION MAP

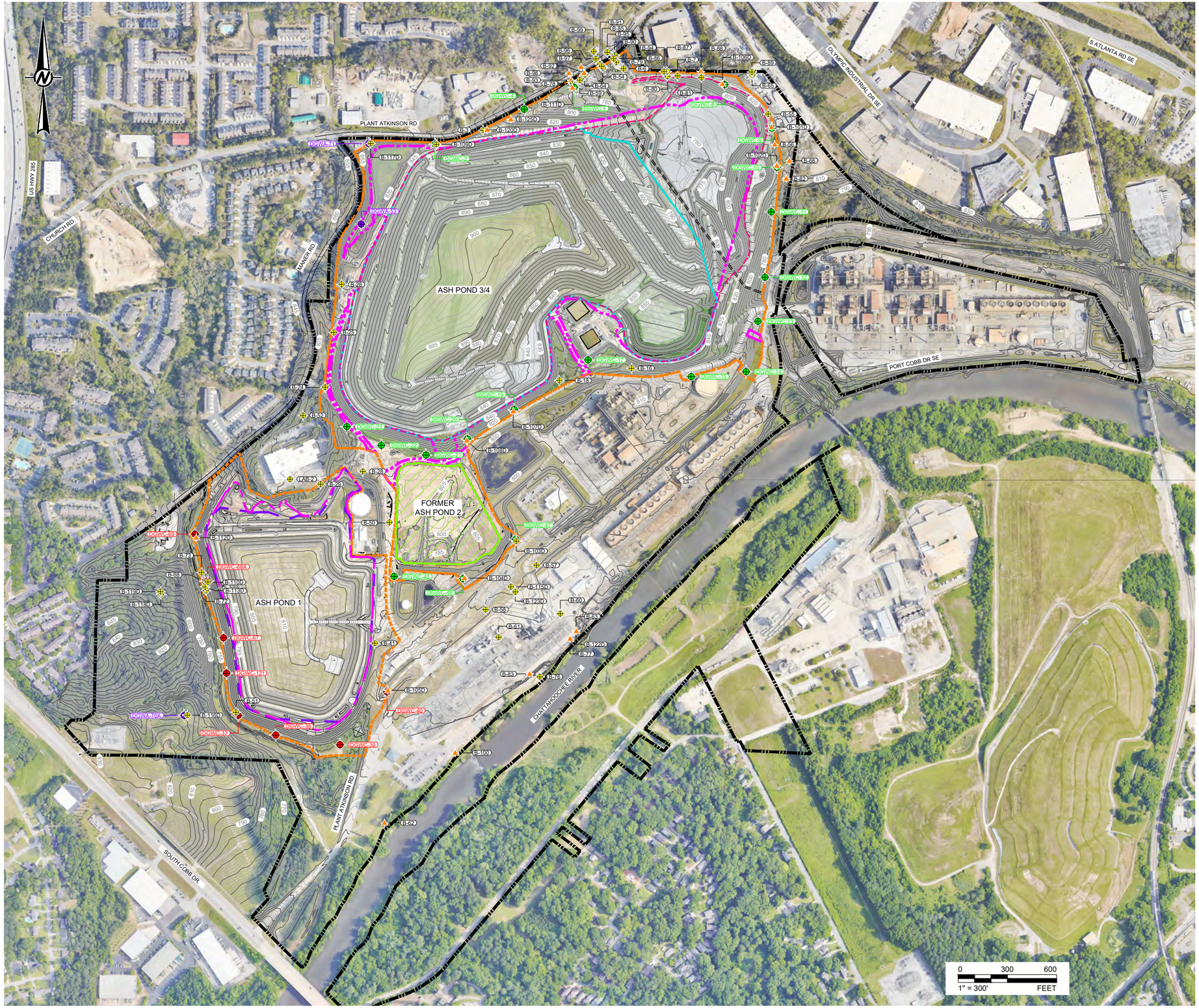
CONSULTANT
wsp

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

PROJECT No.
31406440.MCD23

Rev.
1

FIGURE
1



LEGEND

- EXISTING CONTOURS (SEE REFERENCE 2)
- PROPERTY BOUNDARY (SEE REFERENCE 1)
- APPROXIMATE PRE-CLOSURE CCR LIMITS
- FINAL CLOSURE CCR LIMITS
- PERMIT BOUNDARY
- FINAL COVER SYSTEM LIMITS
- POST CLOSURE CCR LIMITS
- UPGRADIENT WELL
- AP-1 MONITORING WELL
- AP-2, 3/4 MONITORING WELL
- ASSESSMENT WELLS
- PIEZOMETER
- AREA WHERE ASH HAS BEEN CERTIFIED REMOVED AS OF 2/28/2024

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 2017. COMPLETION OF FINAL POST COVER CONSTRUCTION ACTIVITIES AND IMPROVEMENTS AT AP-1 ARE SUBSTANTIALLY COMPLETE. A PLANNED BARRIER WALL INSTALLATION IS CURRENTLY UNDER REVIEW WITH EPD.
3. 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 2017. BACKFILLING OF THE AP-2 FOOTPRINT WAS COMPLETE IN Q4 2023.
4. CLOSURE ACTIVITIES FOR AP-3 AND AP-4 WERE INITIATED IN JANUARY 2016. AP-3 AND AP-4 ARE CURRENTLY UNDERGOING CLOSURE AS A COMBINED UNIT AP-3/4.
5. DATA PRESENTED FOR CCR UNITS AP-2 AND AP-3/4 IS INCLUDED FOR REFERENCE ONLY. THIS DATA SHOULD NOT BE CONSIDERED FOR PERMITTING OF CCR UNIT AP-1.

REFERENCES

1. APPROXIMATE PROPERTY BOUNDARY PROVIDED BY SOUTHERN COMPANY SERVICES (2017).
2. THE EXISTING TOPOGRAPHY, AND CONTOUR ELEVATIONS FOR THE ASH PONDS 1 THROUGH 4 AREAS WERE PROVIDED BY GEORGIA POWER. THE DATE OF THE SURVEY PROVIDED AND SHOWN ON THIS SET OF PLANS, ON THE AP-1 IS AUGUST 31, 2022, ON AP-2, 3/4 IS NOVEMBER 2, 2022. AERIAL IMAGERY DATE FOR AP-3/4 PROVIDED BY GEORGIA POWER IS MAY 24, 2023, AND FOR AP-1, AP-2 AND SURROUNDING AREAS OF AP- 3/4, SOURCED BY PLEXEARTH, IS SEPTEMBER 28, 2023. THE TOPOGRAPHIC CONTOUR INTERVALS IS 1 FOOT.
   THE EXISTING TOPOGRAPHY AND CONTOUR ELEVATIONS FOR THE SURROUNDING AREAS OF ASH PONDS 1 THROUGH 4 WERE PROVIDED BY GEORGIA LAND DEPARTMENT AND METRO ENGINEERING AND SURVEYING CO, INC. THE DATE OF THE SURVEY PROVIDED AND SHOWN ON THIS SET OF PLANS, AT THE SURROUNDING AREAS, IS 03-18-2018. REFER TO THE SURVEY DRAWING TITLED "TOPOGRAPHIC MAP PREPARED FOR GEORGIA POWER COMPANY PLANT MCDONOUGH - GEORGIA STATE PLANE WEST SURVEY FEET.
4. SELECT BORING/PIEZOMETER LOCATIONS AND ELEVATIONS RESURVEYED BY METRO ENGINEERING & SURVEYING CO., INC., 2020-2021.
6. COORDINATES SYSTEM: NAD 1983 STATE PLANE GEORGIA WEST (U.S. FEET); ELEVATIONS DISPLAY IN FEET REFERENCED TO NORTH AMERICAN VERTICAL DATUM 1988 (FEET NAVD88).

CLIENT
GEORGIA POWER COMPANY
PLANT MCDONOUGH - ATKINSON

Georgia Power

PROJECT
2024 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTIONS REPORT - ASH POND 1

TITLE
PLANT MCDONOUGH CCR REMOVAL AREA

CONSULTANT
wsp

YYYY-MM-DD	2024-01-05
DESIGNED	SEB
PREPARED	CRP
CHECKED	DLP
REVIEWED / APPROVED	RNQ

PROJECT NO. 31406440.MCD23
REV.
FIGURE 2

0 1 in
IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM: ANSI D



LEGEND

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

NOTES

1. ALL LOCATIONS AND BOUNDARIES ARE APPROXIMATE.

2. PIEZOMETERS B-31 AND B-74 WERE DECOMMISSIONED AND ABANDONED IN OCTOBER 2023.

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

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

CLIENT
GEORGIA POWER COMPANY
PLANT MCDONOUGH-ATKINSON

Georgia Power

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

TITLE
MONITORING WELL, PIEZOMETER AND SURFACE WATER LOCATION MAP

CONSULTANT

wsp

YYYY-MM-DD	2024-07-08
PREPARED	YCS
DESIGN	DLP
CHECKED	DP/RPK
REVIEWED/APPROVED	RNQ

PROJECT No. 31406440.MCD23

Rev. 0

FIGURE 3



LEGEND

- AP-1 MONITORING WELL
- AP-2,3/4 MONITORING WELL
- UPGRADIENT WELL
- ASSESSMENT MONITORING WELL
- PIEZOMETER
- DEWATERING WELL
- APPROXIMATE GROUNDWATER FLOW DIRECTION
- GROUNDWATER SURFACE CONTOUR (FT-NAVD88)
- 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 5, 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.

REFERENCE

1. AERIAL IMAGERY DATE FOR AP-3/4 PROVIDED BY GEORGIA POWER IS MAY 24, 2023, AND FOR AP-1, AP-2 AND SURROUNDING AREAS OF AP- 3/4, SOURCED BY PLEXEARTH, IS SEPTEMBER 28, 2023.

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 2022 AND 2023.

0 600 1,200

1 IN= 600 FT

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

CLIENT
GEORGIA POWER COMPANY
PLANT MCDONOUGH-ATKINSON

PROJECT
2024 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT-ASH POND 1

TITLE
SITE POTENTIOMETRIC MAP – SEPTEMBER 5, 2023

CONSULTANT
wsp

YYYY-MM-DD	2024-05-02
PREPARED	YCS
DESIGN	SEB
CHECKED	DLP
REVIEWED/APPROVED	RNQ

PROJECT No.
31406440.MCD23

Rev.
0

FIGURE
4



LEGEND

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

NOTES

1. ALL LOCATIONS AND BOUNDARIES ARE APPROXIMATE.

2. GROUNDWATER ELEVATION MEAUSREMENTS OBTAINED JANUARY 29, 2024 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.

REFERENCE

1. AERIAL IMAGERY DATE FOR AP-3/4 PROVIDED BY GEORGIA POWER IS MAY 24, 2023, AND FOR AP-1, AP-2 AND SURROUNDING AREAS OF AP- 3/4, SOURCED BY PLEXEARTH, IS SEPTEMBER 28, 2023.

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, APRIL 2021, MAY 2022, AND MAY 2023.

0 600 1,200

1 IN= 600 FT

CLIENT
GEORGIA POWER COMPANY
PLANT MCDONOUGH-ATKINSON

Georgia Power

PROJECT
2024 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT-ASH POND 1

TITLE
SITE POTENTIOMETRIC MAP – JANUARY 29, 2024

CONSULTANT
wsp

YYYY-MM-DD	2024-07-08
PREPARED	YCS
DESIGN	SEB
CHECKED	DLP
REVIEWED/APPROVED	RNQ

PROJECT No. 31406440.MCD23

Rev. 0

FIGURE 5

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 WELL
- PIEZOMETER
- SURFACE WATER MONITORING LOCATION
- 0.01 ARSENIC GWPS ISOCONCENTRATION CONTOUR
- INFERRED POTENTIOMETRIC SURFACE CONTOUR (SEPT 2023)
- PROPERTY BOUNDARY
- PERMIT BOUNDARY

NOTES

1. ALL LOCATIONS AND BOUNDARIES ARE APPROXIMATE

2. GROUNDWATER CONCENTRATIONS IN MILLIGRAMS PER LITER (MG/L). GWPS = GROUNDWATER PROTECTION STANDARD.

3. DATA SHOWN REPRESENT THE SEPTEMBER 2023 SEMI-ANNUAL MONITORING EVENT RESULTS AS WELL AS APPLICABLE DELINEATION WELL DATA.

4. GWPS IS EQUAL TO THE MCL.

5. DEEP WELL DATA IS NOT USED FOR ISOCONCENTRATION CONTOURING.

6. POTENTIOMETRIC SURFACE DETERMINED USING SEPTEMBER 2023 WATER LEVELS.

Analyte	Units	GWPS
Arsenic	mg/L	0.01

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, APRIL 2021, MAY 2022 AND MAY 2023.

0 200 400

1 IN= 200 FT

CLIENT
GEORGIA POWER COMPANY
PLANT MCDONOUGH-ATKINSON

Georgia Power

PROJECT
2024 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT - ASH POND 1

TITLE
ARSENIC ISOCONCENTRATION CONTOUR MAP - SEPTEMBER 2023

CONSULTANT
wsp

YYYY-MM-DD	2024-06-06
PREPARED	YCS
DESIGN	DLP
CHECKED	RPK
REVIEWED/APPROVED	RNQ

PROJECT No.
31406440.MCD23

Rev.
0

FIGURE
6A

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 WELL
- PIEZOMETER
- SURFACE WATER MONITORING LOCATION
- 0.01 ARSENIC GWPS ISOCONCENTRATION CONTOUR
- INFERRED POTENTIOMETRIC SURFACE CONTOUR (JAN 2024)
- PROPERTY BOUNDARY
- PERMIT BOUNDARY

NOTES

1. ALL LOCATIONS AND BOUNDARIES ARE APPROXIMATE

2. GROUNDWATER CONCENTRATIONS IN MILLIGRAMS PER LITER (MG/L). GWPS = GROUNDWATER PROTECTION STANDARD.

3. DATA SHOWN REPRESENT THE JANUARY-FEBRUARY 2024 ANNUAL MONITORING EVENT RESULTS AS WELL AS APPLICABLE DELINEATION WELL DATA.

4. GWPS IS EQUAL TO THE MCL.

5. DEEP WELL DATA IS NOT USED FOR ISOCONCENTRATION CONTOURING.

6. POTENTIOMETRIC SURFACE DETERMINED USING JANUARY 2024 WATER LEVELS.

7. DGWA-70A WAS NOT SAMPLED DUE TO RESTRICTED ACCESS AT THE TIME OF COLLECTION.

Analyte	Units	GWPS
Arsenic	mg/L	0.01

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, APRIL 2021, MAY 2022 AND MAY 2023.

0 200 400

1 IN= 200 FT

CLIENT
GEORGIA POWER COMPANY
PLANT MCDONOUGH-ATKINSON

PROJECT
2024 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT - ASH POND 1

TITLE
ARSENIC ISOCONCENTRATION CONTOUR MAP - JANUARY-FEBRUARY 2024

CONSULTANT

YYYY-MM-DD	2024-06-30
PREPARED	YCS
DESIGN	DLP
CHECKED	RPK
REVIEWED/APPROVED	RNQ

PROJECT No. 31406440.MCD23

Rev. 0

FIGURE **6B**

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 WELL
- PIEZOMETER
- SURFACE WATER MONITORING LOCATION
- 0.032 COBALT GWPS ISOCONCENTRATION CONTOUR
- COBALT GWPS ISOCONCENTRATION CONTOUR (INFERRED)
- INFERRED POTENTIOMETRIC SURFACE CONTOUR (SEPT 2023)
- PROPERTY BOUNDARY
- PERMIT BOUNDARY

NOTES

1. ALL LOCATIONS AND BOUNDARIES ARE APPROXIMATE

2. GROUNDWATER CONCENTRATIONS IN MILLIGRAMS PER LITER (MG/L). GWPS = GROUNDWATER PROTECTION STANDARD. RSL = (FEDERAL REGIONAL SCREENING LEVEL)

3. DATA SHOWN REPRESENT THE SEPTEMBER 2023 SEMI-ANNUAL MONITORING EVENT RESULTS AS WELL AS APPLICABLE DELINEATION WELL DATA.

4. GWPS IS EQUAL TO SITE SPECIFIC BACKGROUND CONCENTRATION AS THERE IS NO MCL AND THE RSL IS BELOW SITE SPECIFIC BACKGROUND CONCENTRATION.

5. DEEP WELL ANALYTICAL RESULTS NOT USED FOR ISOCONCENTRATION CONTOURING.

6. POTENTIOMETRIC SURFACE DETERMINED USING SEPTEMBER 2023 WATER LEVELS.

Analyte	Units	GWPS
Cobalt	mg/L	0.032

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, APRIL 2021, MAY 2022 AND MAY 2023.

0 300 600

1 IN= 300 FT

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

CLIENT
GEORGIA POWER COMPANY
PLANT MCDONOUGH-ATKINSON

Georgia Power

PROJECT
2024 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT - ASH POND 1

TITLE
COBALT ISOCONCENTRATION CONTOUR MAP - SEPTEMBER 2023

CONSULTANT

wsp

YYYY-MM-DD	2024-06-06
PREPARED	YCS
DESIGN	DLP
CHECKED	DLP
REVIEWED/APPROVED	RNQ

PROJECT No. 31406440.MCD23

Rev. 0

FIGURE **7A**



LEGEND

- AP-1 MONITORING WELL
- AP-2,3/4 MONITORING WELL
- UPGRADIENT WELL
- ASSESSMENT MONITORING WELL
- PIEZOMETER
- SURFACE WATER MONITORING LOCATION
- 0.024 COBALT GWPS ISOCONCENTRATION CONTOUR
- COBALT GWPS ISOCONCENTRATION CONTOUR (INFERRED)
- INFERRED POTENTIOMETRIC SURFACE CONTOUR (JAN 2024)
- PROPERTY BOUNDARY
- PERMIT BOUNDARY

NOTES

1. ALL LOCATIONS AND BOUNDARIES ARE APPROXIMATE

2. GROUNDWATER CONCENTRATIONS IN MILLIGRAMS PER LITER (MG/L). GWPS = GROUNDWATER PROTECTION STANDARD. RSL = (FEDERAL REGIONAL SCREENING LEVEL)

3. DATA SHOWN REPRESENT THE JANUARY-FEBRUARY 2024 ANNUAL MONITORING EVENT RESULTS AS WELL AS APPLICABLE DELINEATION WELL DATA.

4. GWPS IS EQUAL TO SITE SPECIFIC BACKGROUND CONCENTRATION AS THERE IS NO MCL AND THE RSL IS BELOW SITE SPECIFIC BACKGROUND CONCENTRATION.

5. DEEP WELL ANALYTICAL RESULTS NOT USED FOR ISOCONCENTRATION CONTOURING.

6. POTENTIOMETRIC SURFACE DETERMINED USING JANUARY 2024 WATER LEVELS.

7. DGWA-70A WAS NOT SAMPLED DUE TO RESTRICTED ACCESS AT THE TIME OF COLLECTION.

Analyte	Units	GWPS
Cobalt	mg/L	0.024

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, APRIL 2021, MAY 2022 AND MAY 2023 .

0 300 600

1 IN= 300 FT

CLIENT
GEORGIA POWER COMPANY
PLANT MCDONOUGH-ATKINSON

Georgia Power

PROJECT
2024 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT - ASH POND 1

TITLE
COBALT ISOCONCENTRATION CONTOUR MAP - JANUARY-FEBRUARY 2024

CONSULTANT

wsp

YYYY-MM-DD	2024-06-30
PREPARED	YCS
DESIGN	DLP
CHECKED	DLP
REVIEWED/APPROVED	RNQ

PROJECT No. 31406440.MCD23

Rev. 0

FIGURE **7B**

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

APPENDIX A

Field Data Forms and Instrument Calibration Records

APPENDIX A

Field Data Forms
September 2023

Low-Flow Test Report:

Test Date / Time: 9/7/2023 10:05:11 AM
Project: SCS MCD (5)
Operator Name: Dana Bloomfield

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: 17.38 ft**	**Pump Type: Bladder** **Tubing Type: LDPE** **Estimated Total Volume Pumped: 6350 ml** **Flow Cell Volume: 90 ml** **Final Flow Rate: 140 ml/min** **Final Draw Down: 1.23 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 883553**

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 %	+/- 0.2	+/- 10	+/- 10	+/- 0.3	
9/7/2023 10:05 AM	00:00	6.79 pH	27.98 °C	595.75 µS/cm	4.35 mg/L	6.83 NTU	86.9 mV	17.38 ft	250.00 ml/min
9/7/2023 10:10 AM	05:00	6.67 pH	21.59 °C	654.54 µS/cm	1.48 mg/L	3.43 NTU	-87.2 mV	18.61 ft	150.00 ml/min
9/7/2023 10:15 AM	10:00	6.65 pH	22.16 °C	657.88 µS/cm	0.92 mg/L	3.58 NTU	-145.7 mV	18.66 ft	150.00 ml/min
9/7/2023 10:20 AM	15:00	6.63 pH	22.04 °C	661.89 µS/cm	0.77 mg/L	3.73 NTU	-83.6 mV	18.66 ft	150.00 ml/min
9/7/2023 10:25 AM	20:00	6.63 pH	22.09 °C	668.94 µS/cm	0.71 mg/L	4.29 NTU	-77.5 mV	18.66 ft	150.00 ml/min
9/7/2023 10:30 AM	25:00	6.65 pH	22.05 °C	673.80 µS/cm	0.65 mg/L	4.28 NTU	-75.8 mV	18.66 ft	140.00 ml/min
9/7/2023 10:35 AM	30:00	6.61 pH	23.20 °C	684.31 µS/cm	0.60 mg/L	2.48 NTU	-60.8 mV	18.61 ft	140.00 ml/min
9/7/2023 10:40 AM	35:00	6.55 pH	23.43 °C	679.64 µS/cm	0.45 mg/L	1.67 NTU	-91.7 mV	18.61 ft	140.00 ml/min
9/7/2023 10:45 AM	40:00	6.52 pH	23.39 °C	676.30 µS/cm	0.40 mg/L	1.62 NTU	-43.2 mV	18.61 ft	140.00 ml/min

Samples

Sample ID:	Description:
MCD-B-105D	

Low-Flow Test Report:

Test Date / Time: 9/7/2023 3:57:00 PM
Project: MCD SAGW 2 (7)
Operator Name: P Wahl

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: 7.56 ft**	**Pump Type: Peristaltic** **Tubing Type: LDPE** **Pump Intake From TOC: 50 ft** **Estimated Total Volume Pumped: 9000 ml** **Flow Cell Volume: 90 ml** **Final Flow Rate: 200 ml/min** **Final Draw Down: 0.12 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 980712**

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	+/- 10	+/- 10	+/- 0.3	
9/7/2023 3:57 PM	00:00	7.42 pH	36.89 °C	168.26 µS/cm	4.40 mg/L	17.90 NTU	32.1 mV	7.56 ft	200.00 ml/min
9/7/2023 4:02 PM	05:00	7.41 pH	24.26 °C	246.16 µS/cm	0.34 mg/L	9.51 NTU	-75.2 mV	7.66 ft	200.00 ml/min
9/7/2023 4:07 PM	10:00	7.46 pH	23.47 °C	248.79 µS/cm	0.25 mg/L	8.19 NTU	-115.2 mV	7.68 ft	200.00 ml/min
9/7/2023 4:12 PM	15:00	7.48 pH	23.49 °C	248.50 µS/cm	0.24 mg/L	10.80 NTU	-89.6 mV	7.68 ft	200.00 ml/min
9/7/2023 4:17 PM	20:00	7.47 pH	23.34 °C	248.76 µS/cm	0.21 mg/L	4.95 NTU	-90.2 mV	7.68 ft	200.00 ml/min
9/7/2023 4:22 PM	25:00	7.44 pH	23.17 °C	248.14 µS/cm	0.20 mg/L	6.23 NTU	-87.4 mV	7.68 ft	200.00 ml/min
9/7/2023 4:27 PM	30:00	7.19 pH	23.15 °C	248.43 µS/cm	0.19 mg/L	5.86 NTU	-90.6 mV	7.68 ft	200.00 ml/min
9/7/2023 4:32 PM	35:00	6.79 pH	22.97 °C	248.03 µS/cm	0.21 mg/L	4.88 NTU	-14.6 mV	7.68 ft	200.00 ml/min
9/7/2023 4:37 PM	40:00	6.78 pH	23.10 °C	247.07 µS/cm	0.21 mg/L	4.89 NTU	-29.5 mV	7.68 ft	200.00 ml/min
9/7/2023 4:42 PM	45:00	6.77 pH	23.02 °C	247.05 µS/cm	0.20 mg/L	3.15 NTU	-7.9 mV	7.68 ft	200.00 ml/min

Samples

Sample ID:	Description:

MCD-B-112D	

Created using VuSitu from In-Situ, Inc.

Low-Flow Test Report:

Test Date / Time: 9/6/2023 2:13:13 PM
Project: MCD SAGW 2 (3)
Operator Name: P Wahl

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: 14.01 ft**	**Pump Type: Dedicated Bladder** **Tubing Type: LDPE** **Pump Intake From TOC: 38 ft** **Estimated Total Volume Pumped: 7000 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: 980712**

Test Notes:

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 10 %	+/- 10	+/- 10	+/- 0.3	
9/6/2023 2:13 PM	00:00	7.02 pH	34.71 °C	400.23 µS/cm	5.56 mg/L	4.59 NTU	56.1 mV	14.16 ft	200.00 ml/min
9/6/2023 2:18 PM	05:00	6.24 pH	23.27 °C	469.50 µS/cm	0.87 mg/L	3.32 NTU	72.1 mV	14.18 ft	200.00 ml/min
9/6/2023 2:23 PM	10:00	6.24 pH	22.52 °C	476.12 µS/cm	0.53 mg/L	2.77 NTU	87.3 mV	14.22 ft	200.00 ml/min
9/6/2023 2:28 PM	15:00	6.24 pH	22.12 °C	468.44 µS/cm	0.50 mg/L	1.57 NTU	71.2 mV	14.21 ft	200.00 ml/min
9/6/2023 2:33 PM	20:00	6.24 pH	21.90 °C	460.53 µS/cm	0.60 mg/L	1.49 NTU	88.2 mV	14.23 ft	200.00 ml/min
9/6/2023 2:38 PM	25:00	6.26 pH	21.60 °C	454.84 µS/cm	0.67 mg/L	1.32 NTU	72.5 mV	14.24 ft	200.00 ml/min
9/6/2023 2:43 PM	30:00	6.26 pH	21.38 °C	449.62 µS/cm	0.72 mg/L	0.89 NTU	72.2 mV	14.24 ft	200.00 ml/min
9/6/2023 2:48 PM	35:00	6.26 pH	21.20 °C	445.10 µS/cm	0.76 mg/L	1.24 NTU	89.9 mV	14.25 ft	200.00 ml/min

Samples

Sample ID:	Description:
MCD-DGWC-37	

Low-Flow Test Report:

Test Date / Time: 9/7/2023 1:07:17 PM
Project: MCD SAGW 2 (5)
Operator Name: P Wahl

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: 6.65 ft**	**Pump Type: Dedicated Bladder** **Tubing Type: LDPE** **Pump Intake From TOC: 23 ft** **Estimated Total Volume Pumped: 4000 ml** **Flow Cell Volume: 90 ml** **Final Flow Rate: 200 ml/min** **Final Draw Down: 0.47 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 980712**

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 %	+/- 0.2	+/- 10	+/- 10	+/- 0.3	
9/7/2023 1:07 PM	00:00	6.08 pH	26.96 °C	603.29 µS/cm	1.53 mg/L	6.39 NTU	88.8 mV	7.00 ft	200.00 ml/min
9/7/2023 1:12 PM	05:00	6.06 pH	21.68 °C	646.95 µS/cm	0.90 mg/L	5.27 NTU	111.8 mV	7.04 ft	200.00 ml/min
9/7/2023 1:17 PM	10:00	6.06 pH	21.49 °C	649.13 µS/cm	0.43 mg/L	2.83 NTU	108.9 mV	7.10 ft	200.00 ml/min
9/7/2023 1:22 PM	15:00	6.07 pH	21.10 °C	646.30 µS/cm	0.28 mg/L	1.52 NTU	106.7 mV	7.12 ft	200.00 ml/min
9/7/2023 1:27 PM	20:00	6.07 pH	20.93 °C	644.58 µS/cm	0.21 mg/L	2.27 NTU	105.2 mV	7.12 ft	200.00 ml/min

Samples

Sample ID:	Description:
MCD-DGWC-38	
Extra Rad	

Low-Flow Test Report:

Test Date / Time: 9/7/2023 2:25:14 PM
Project: MCD SAGW 2 (6)
Operator Name: P Wahl

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: 7.23 ft**	**Pump Type: Dedicated Bladder** **Tubing Type: LDPE** **Pump Intake From TOC: 19 ft** **Estimated Total Volume Pumped: 4000 ml** **Flow Cell Volume: 90 ml** **Final Flow Rate: 200 ml/min** **Final Draw Down: 0.82 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 980712**

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 %	+/- 0.2	+/- 10	+/- 10	+/- 0.3	
9/7/2023 2:25 PM	00:00	6.56 pH	34.98 °C	527.24 µS/cm	3.69 mg/L	22.20 NTU	11.1 mV	7.76 ft	200.00 ml/min
9/7/2023 2:30 PM	05:00	6.53 pH	22.61 °C	680.79 µS/cm	0.84 mg/L	5.68 NTU	-24.2 mV	7.95 ft	200.00 ml/min
9/7/2023 2:35 PM	10:00	6.55 pH	22.21 °C	693.89 µS/cm	0.28 mg/L	2.27 NTU	-35.2 mV	8.01 ft	200.00 ml/min
9/7/2023 2:40 PM	15:00	6.55 pH	22.05 °C	694.39 µS/cm	0.19 mg/L	2.23 NTU	-29.8 mV	8.02 ft	200.00 ml/min
9/7/2023 2:45 PM	20:00	6.55 pH	22.12 °C	694.36 µS/cm	0.17 mg/L	1.46 NTU	-30.2 mV	8.05 ft	200.00 ml/min

Samples

Sample ID:	Description:
MCD-DGWC-39	

Created using VuSitu from In-Situ, Inc.

Low-Flow Test Report:

Test Date / Time: 9/7/2023 12:05:45 PM
Project: SCS MCD (6)
Operator Name: Dana Bloomfield

Location Name: MCD-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: 17.79 ft**	**Pump Type: Dedicated Bladder** **Tubing Type: LDPE** **Estimated Total Volume Pumped: 6403.167 ml** **Flow Cell Volume: 90 ml** **Final Flow Rate: 170 ml/min** **Final Draw Down: 0.06 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 883553**

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 %	+/- 0.2	+/- 10	+/- 10	+/- 0.3	
9/7/2023 12:05 PM	00:00	5.12 pH	27.27 °C	478.05 µS/cm	2.77 mg/L	19.10 NTU	107.6 mV	17.79 ft	200.00 ml/min
9/7/2023 12:10 PM	05:00	4.75 pH	22.29 °C	501.37 µS/cm	2.79 mg/L	24.30 NTU	103.4 mV	17.85 ft	170.00 ml/min
9/7/2023 12:12 PM	06:47	4.74 pH	22.51 °C	498.88 µS/cm	4.66 mg/L	18.30 NTU	163.0 mV	17.85 ft	170.00 ml/min
9/7/2023 12:17 PM	11:47	4.71 pH	22.04 °C	501.03 µS/cm	2.78 mg/L	21.00 NTU	121.9 mV	17.85 ft	170.00 ml/min
9/7/2023 12:22 PM	16:47	4.69 pH	22.39 °C	500.35 µS/cm	2.77 mg/L	12.90 NTU	121.5 mV	17.85 ft	170.00 ml/min
9/7/2023 12:27 PM	21:47	4.69 pH	22.44 °C	500.03 µS/cm	2.76 mg/L	8.51 NTU	178.5 mV	17.85 ft	170.00 ml/min
9/7/2023 12:32 PM	26:47	4.68 pH	22.67 °C	502.51 µS/cm	2.77 mg/L	3.88 NTU	128.4 mV	17.85 ft	170.00 ml/min
9/7/2023 12:37 PM	31:47	4.68 pH	22.92 °C	500.36 µS/cm	2.75 mg/L	2.31 NTU	123.2 mV	17.85 ft	170.00 ml/min
9/7/2023 12:42 PM	36:47	4.67 pH	23.12 °C	501.70 µS/cm	2.76 mg/L	1.53 NTU	123.7 mV	17.85 ft	170.00 ml/min

Samples

Sample ID:	Description:
MCD-DGWC-40	Sample time 1242
MCD-AP1-EB1	Sample time 1300

Low-Flow Test Report:

Test Date / Time: 9/7/2023 11:04:08 AM
Project: McDonoughSAGW02 2023 (3)
Operator Name: Mark 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: 10.39 ft**	**Pump Type: Peri** **Tubing Type: LDPE** **Pump Intake From TOC: 50 ft** **Estimated Total Volume Pumped: 5500 ml** **Flow Cell Volume: 90 ml** **Final Flow Rate: 150 ml/min** **Final Draw Down: 0.61 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 965586**

Test Notes:
Purge stopped between 11:09 and 11:19. Fe2+: 0.0

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	
9/7/2023 11:04 AM	00:00	6.60 pH	29.96 °C	402.48 µS/cm	6.02 mg/L	4.38 NTU	139.8 mV	10.39 ft	200.00 ml/min
9/7/2023 11:09 AM	05:00	6.20 pH	21.90 °C	450.62 µS/cm	0.28 mg/L	4.38 NTU	111.3 mV	10.39 ft	0.00 ml/min
9/7/2023 11:14 AM	10:00	6.19 pH	23.02 °C	455.97 µS/cm	0.44 mg/L	4.38 NTU	126.8 mV	10.39 ft	0.00 ml/min
9/7/2023 11:19 AM	15:00	6.18 pH	24.78 °C	456.36 µS/cm	0.54 mg/L	3.02 NTU	97.0 mV	10.63 ft	200.00 ml/min
9/7/2023 11:24 AM	20:00	6.20 pH	22.74 °C	443.69 µS/cm	0.26 mg/L	2.36 NTU	83.1 mV	10.87 ft	200.00 ml/min
9/7/2023 11:29 AM	25:00	6.21 pH	21.01 °C	457.51 µS/cm	1.32 mg/L	1.27 NTU	50.9 mV	10.96 ft	200.00 ml/min
9/7/2023 11:34 AM	30:00	6.20 pH	21.37 °C	462.73 µS/cm	1.12 mg/L	2.13 NTU	80.1 mV	11.01 ft	150.00 ml/min
9/7/2023 11:39 AM	35:00	6.21 pH	22.15 °C	459.15 µS/cm	0.65 mg/L	1.47 NTU	88.0 mV	11.06 ft	150.00 ml/min
9/7/2023 11:44 AM	40:00	6.21 pH	21.55 °C	455.55 µS/cm	0.10 mg/L	1.17 NTU	87.0 mV	11.00 ft	150.00 ml/min

Samples

Sample ID:	Description:
MCD-DGWC-67	

MCD-AP1-FB-1	

Created using VuSitu from In-Situ, Inc.

Low-Flow Test Report:

Test Date / Time: 9/7/2023 1:16:59 PM
Project: McDonoughSAGW02 2023 (4)
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: 10.51 ft**	**Pump Type: Peri** **Tubing Type: LDPE** **Pump Intake From TOC: 24 ft** **Estimated Total Volume Pumped: 3250 ml** **Flow Cell Volume: 90 ml** **Final Flow Rate: 150 ml/min** **Final Draw Down: 0.27 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 965586**

Test Notes:
Fe2+: 0.0

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	
9/7/2023 1:16 PM	00:00	7.16 pH	36.45 °C	393.19 µS/cm	3.81 mg/L	8.24 NTU	95.1 mV	10.51 ft	200.00 ml/min
9/7/2023 1:21 PM	05:00	6.58 pH	23.00 °C	460.52 µS/cm	0.18 mg/L	7.68 NTU	53.7 mV	10.75 ft	150.00 ml/min
9/7/2023 1:26 PM	10:00	6.60 pH	22.26 °C	463.86 µS/cm	0.14 mg/L	2.01 NTU	48.2 mV	10.76 ft	150.00 ml/min
9/7/2023 1:31 PM	15:00	6.61 pH	22.35 °C	466.60 µS/cm	0.12 mg/L	1.95 NTU	43.7 mV	10.76 ft	150.00 ml/min
9/7/2023 1:36 PM	20:00	6.60 pH	22.51 °C	463.62 µS/cm	0.10 mg/L	1.25 NTU	44.6 mV	10.78 ft	150.00 ml/min

Samples

Sample ID:	Description:
MCD-DGWC-68A	

Low-Flow Test Report:

Test Date / Time: 9/7/2023 2:36:47 PM
Project: McDonoughSAGW02 2023 (5)
Operator Name: Mark Mann

Location Name: MCD-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: 6.02 ft**	**Pump Type: Peri** **Tubing Type: LDPE** **Pump Intake From TOC: 20 ft** **Estimated Total Volume Pumped: 4125 ml** **Flow Cell Volume: 90 ml** **Final Flow Rate: 150 ml/min** **Final Draw Down: 1.11 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 965586**

Test Notes:
Fe2+: 0.0

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	
9/7/2023 2:36 PM	00:00	6.91 pH	37.79 °C	98.44 µS/cm	3.61 mg/L	30.70 NTU	91.8 mV	6.02 ft	225.00 ml/min
9/7/2023 2:41 PM	05:00	6.18 pH	23.34 °C	117.37 µS/cm	2.40 mg/L	11.70 NTU	109.6 mV	6.89 ft	150.00 ml/min
9/7/2023 2:46 PM	10:00	6.17 pH	22.84 °C	117.55 µS/cm	2.24 mg/L	7.25 NTU	108.4 mV	6.98 ft	150.00 ml/min
9/7/2023 2:51 PM	15:00	6.17 pH	22.50 °C	117.22 µS/cm	2.18 mg/L	6.15 NTU	106.1 mV	7.04 ft	150.00 ml/min
9/7/2023 2:56 PM	20:00	6.16 pH	22.22 °C	117.28 µS/cm	2.18 mg/L	5.36 NTU	103.9 mV	7.09 ft	150.00 ml/min
9/7/2023 3:01 PM	25:00	6.16 pH	22.03 °C	116.99 µS/cm	2.17 mg/L	4.90 NTU	102.0 mV	7.13 ft	150.00 ml/min

Samples

Sample ID:	Description:
MCD-DGWC-69	

Low-Flow Test Report:

Test Date / Time: 9/8/2023 9:03:42 AM
Project: MCD SAGW 2 (8)
Operator Name: P Wahl

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: 9.03 ft**	**Pump Type: Peristaltic** **Tubing Type: LDPE** **Pump Intake From TOC: 44 ft** **Estimated Total Volume Pumped: 4800 ml** **Flow Cell Volume: 90 ml** **Final Flow Rate: 120 ml/min** **Final Draw Down: 3.1 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 980712**

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 %	+/- 0.2	+/- 10	+/- 10	+/- 0.3	
9/8/2023 9:03 AM	00:00	6.36 pH	20.92 °C	201.42 µS/cm	4.25 mg/L	6.24 NTU	74.4 mV	9.51 ft	120.00 ml/min
9/8/2023 9:08 AM	05:00	6.23 pH	19.67 °C	362.94 µS/cm	0.56 mg/L	12.60 NTU	7.2 mV	9.82 ft	120.00 ml/min
9/8/2023 9:13 AM	10:00	6.26 pH	19.36 °C	334.12 µS/cm	0.35 mg/L	12.40 NTU	0.9 mV	10.63 ft	120.00 ml/min
9/8/2023 9:18 AM	15:00	6.26 pH	19.59 °C	331.93 µS/cm	0.30 mg/L	12.30 NTU	9.8 mV	11.25 ft	120.00 ml/min
9/8/2023 9:23 AM	20:00	6.25 pH	20.26 °C	334.06 µS/cm	0.26 mg/L	13.20 NTU	13.2 mV	11.60 ft	120.00 ml/min
9/8/2023 9:28 AM	25:00	6.25 pH	20.69 °C	342.07 µS/cm	0.25 mg/L	4.85 NTU	7.1 mV	11.87 ft	120.00 ml/min
9/8/2023 9:33 AM	30:00	6.25 pH	21.00 °C	347.41 µS/cm	0.23 mg/L	4.16 NTU	12.9 mV	11.98 ft	120.00 ml/min
9/8/2023 9:38 AM	35:00	6.25 pH	21.19 °C	357.98 µS/cm	0.23 mg/L	5.82 NTU	11.8 mV	12.06 ft	120.00 ml/min
9/8/2023 9:43 AM	40:00	6.25 pH	21.41 °C	363.26 µS/cm	0.22 mg/L	3.10 NTU	3.9 mV	12.13 ft	120.00 ml/min

Samples

Sample ID:	Description:
MCD-DGWC-121	

Low-Flow Test Report:

Test Date / Time: 9/7/2023 3:09:52 PM
Project: SCS MCD (7)
Operator Name: Dana Bloomfield

Location Name: MCD-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: 13.2 ft**	**Pump Type: peristaltic** **Tubing Type: LDPE** **Estimated Total Volume Pumped: 8500 ml** **Flow Cell Volume: 90 ml** **Final Flow Rate: 100 ml/min** **Final Draw Down: 0.29 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 883553**

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 %	+/- 0.2	+/- 10	+/- 10	+/- 0.3	
9/7/2023 3:09 PM	00:00	6.55 pH	26.10 °C	424.39 µS/cm	0.35 mg/L	26.60 NTU	29.2 mV	13.49 ft	100.00 ml/min
9/7/2023 3:14 PM	05:00	6.58 pH	26.05 °C	408.50 µS/cm	0.21 mg/L	14.00 NTU	16.7 mV	13.49 ft	100.00 ml/min
9/7/2023 3:19 PM	10:00	6.56 pH	25.51 °C	382.95 µS/cm	0.18 mg/L	11.70 NTU	15.4 mV	13.49 ft	100.00 ml/min
9/7/2023 3:24 PM	15:00	6.52 pH	25.62 °C	360.99 µS/cm	0.15 mg/L	10.20 NTU	5.3 mV	13.49 ft	100.00 ml/min
9/7/2023 3:29 PM	20:00	6.50 pH	25.42 °C	342.22 µS/cm	0.19 mg/L	7.79 NTU	14.1 mV	13.49 ft	100.00 ml/min
9/7/2023 3:34 PM	25:00	6.48 pH	25.55 °C	335.25 µS/cm	0.18 mg/L	6.83 NTU	14.4 mV	13.49 ft	100.00 ml/min
9/7/2023 3:39 PM	30:00	6.47 pH	25.64 °C	325.89 µS/cm	0.18 mg/L	8.37 NTU	15.9 mV	13.49 ft	100.00 ml/min
9/7/2023 3:44 PM	35:00	6.44 pH	25.51 °C	306.78 µS/cm	0.19 mg/L	9.71 NTU	6.4 mV	13.49 ft	100.00 ml/min
9/7/2023 3:49 PM	40:00	6.43 pH	25.21 °C	307.22 µS/cm	0.17 mg/L	5.54 NTU	15.2 mV	13.49 ft	100.00 ml/min
9/7/2023 3:54 PM	45:00	6.42 pH	25.24 °C	303.50 µS/cm	0.17 mg/L	6.30 NTU	8.9 mV	13.49 ft	100.00 ml/min
9/7/2023 3:59 PM	50:00	6.40 pH	25.28 °C	302.27 µS/cm	0.17 mg/L	6.16 NTU	19.0 mV	13.49 ft	100.00 ml/min
9/7/2023 4:04 PM	55:00	6.40 pH	25.41 °C	300.17 µS/cm	0.19 mg/L	7.09 NTU	22.1 mV	13.49 ft	100.00 ml/min
9/7/2023 4:09 PM	01:00:00	6.35 pH	25.19 °C	284.95 µS/cm	0.18 mg/L	3.91 NTU	18.5 mV	13.49 ft	100.00 ml/min
9/7/2023 4:14 PM	01:05:00	6.43 pH	25.32 °C	313.63 µS/cm	0.18 mg/L	3.95 NTU	24.7 mV	13.49 ft	100.00 ml/min
9/7/2023 4:19 PM	01:10:00	6.37 pH	25.34 °C	295.01 µS/cm	0.21 mg/L	4.25 NTU	21.7 mV	13.49 ft	100.00 ml/min
9/7/2023 4:24 PM	01:15:00	6.36 pH	25.44 °C	292.64 µS/cm	0.21 mg/L	4.26 NTU	21.8 mV	13.49 ft	100.00 ml/min

9/7/2023 4:29 PM	01:20:00	6.37 pH	25.19 °C	278.87 µS/cm	0.19 mg/L	4.89 NTU	23.1 mV	13.49 ft	100.00 ml/min
9/7/2023 4:34 PM	01:25:00	6.38 pH	24.69 °C	291.01 µS/cm	0.21 mg/L	4.93 NTU	25.8 mV	13.49 ft	100.00 ml/min

Samples

Sample ID:	Description:
MCD-B-62	

Created using VuSitu from In-Situ, Inc.

Low-Flow Test Report:

Test Date / Time: 9/6/2023 9:19:43 AM
Project: SCS MCD
Operator Name: Dana Bloomfield

Location Name: MCD-B-100 **Well Diameter: 2 in** **Casing Type: PVC** **Initial Depth to Water: 32.59 ft**	**Pump Type: Bladder** **Tubing Type: LDPE** **Estimated Total Volume Pumped: 9706.667 ml** **Flow Cell Volume: 90 ml** **Final Flow Rate: 200 ml/min** **Final Draw Down: -22.657 m**	**Instrument Used: Aqua TROLL 400** **Serial Number: 883553**

Test Notes:

Weather Conditions:
Sunny 85F

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	+/- 10	+/- 10	+/- 0.3	
9/6/2023 9:19 AM	00:00	5.25 pH	23.39 °C	696.92 µS/cm	4.68 mg/L	34.00 NTU	97.9 mV	32.59 ft	200.00 ml/min
9/6/2023 9:24 AM	05:00	5.22 pH	21.43 °C	772.85 µS/cm	0.47 mg/L	16.90 NTU	-24.5 mV	32.59 ft	200.00 ml/min
9/6/2023 9:29 AM	10:00	5.23 pH	21.70 °C	774.04 µS/cm	0.42 mg/L	17.80 NTU	-35.7 mV	32.59 ft	200.00 ml/min
9/6/2023 9:34 AM	15:00	5.24 pH	21.67 °C	774.36 µS/cm	0.39 mg/L	9.98 NTU	-35.1 mV	32.59 ft	200.00 ml/min
9/6/2023 9:39 AM	20:00	5.24 pH	21.68 °C	776.19 µS/cm	0.35 mg/L	8.25 NTU	-32.6 mV	32.59 ft	200.00 ml/min
9/6/2023 9:44 AM	25:00	5.25 pH	21.67 °C	777.56 µS/cm	0.29 mg/L	7.71 NTU	-10.6 mV	32.59 ft	200.00 ml/min
9/6/2023 9:46 AM	26:41	5.24 pH	21.69 °C	777.73 µS/cm	0.29 mg/L	6.62 NTU	-7.2 mV	32.59 ft	200.00 ml/min
9/6/2023 9:51 AM	31:41	5.25 pH	21.73 °C	776.36 µS/cm	0.27 mg/L	5.69 NTU	-7.2 mV	32.59 ft	200.00 ml/min
9/6/2023 9:56 AM	36:41	5.25 pH	21.73 °C	775.13 µS/cm	0.25 mg/L	5.38 NTU	-5.0 mV	32.59 ft	200.00 ml/min
9/6/2023 9:58 AM	38:32	5.25 pH	21.79 °C	774.95 µS/cm	0.25 mg/L	5.68 NTU	-2.7 mV	32.59 ft	200.00 ml/min
9/6/2023 10:03 AM	43:32	5.25 pH	21.86 °C	775.01 µS/cm	0.23 mg/L	5.95 NTU	-3.3 mV	32.59 ft	200.00 ml/min
9/6/2023 10:08 AM	48:32	5.25 pH	21.94 °C	773.74 µS/cm	0.23 mg/L	3.55 NTU	-1.7 mV	32.59 ft	200.00 ml/min

Samples

MCD-B-100	Description:

Low-Flow Test Report:

Test Date / Time: 9/7/2023 9:18:23 AM
Project: MCD SAGW 2 (4)
Operator Name: P Wahl

Location Name: MCD-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: 13.7 ft**	**Pump Type: Peristaltic** **Tubing Type: LDPE** **Pump Intake From TOC: 30 ft** **Estimated Total Volume Pumped: 9500 ml** **Flow Cell Volume: 90 ml** **Final Flow Rate: 100 ml/min** **Final Draw Down: 4.53 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 980712**

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 %	+/- 0.2	+/- 10	+/- 10	+/- 0.3	
9/7/2023 9:18 AM	00:00	6.39 pH	23.72 °C	215.96 µS/cm	1.73 mg/L	8.00 NTU	-27.5 mV	14.06 ft	100.00 ml/min
9/7/2023 9:23 AM	05:00	6.45 pH	21.77 °C	220.36 µS/cm	0.43 mg/L	9.19 NTU	-48.0 mV	14.70 ft	100.00 ml/min
9/7/2023 9:28 AM	10:00	6.47 pH	21.92 °C	220.20 µS/cm	0.35 mg/L	7.32 NTU	-40.2 mV	15.20 ft	100.00 ml/min
9/7/2023 9:33 AM	15:00	6.49 pH	22.03 °C	219.42 µS/cm	0.34 mg/L	8.62 NTU	-40.7 mV	15.62 ft	100.00 ml/min
9/7/2023 9:38 AM	20:00	6.49 pH	22.25 °C	219.54 µS/cm	0.31 mg/L	8.81 NTU	-41.8 mV	15.95 ft	100.00 ml/min
9/7/2023 9:43 AM	25:00	6.49 pH	22.45 °C	219.91 µS/cm	0.56 mg/L	8.52 NTU	-42.2 mV	16.22 ft	100.00 ml/min
9/7/2023 9:48 AM	30:00	6.49 pH	22.48 °C	220.00 µS/cm	0.28 mg/L	8.23 NTU	-54.1 mV	16.52 ft	100.00 ml/min
9/7/2023 9:53 AM	35:00	6.49 pH	22.66 °C	219.76 µS/cm	0.27 mg/L	8.63 NTU	-42.5 mV	16.75 ft	100.00 ml/min
9/7/2023 9:58 AM	40:00	6.49 pH	22.84 °C	219.36 µS/cm	0.27 mg/L	7.89 NTU	-43.1 mV	16.95 ft	100.00 ml/min
9/7/2023 10:03 AM	45:00	6.50 pH	22.93 °C	217.45 µS/cm	0.24 mg/L	8.65 NTU	-54.2 mV	17.13 ft	100.00 ml/min
9/7/2023 10:08 AM	50:00	6.49 pH	22.93 °C	217.15 µS/cm	0.25 mg/L	7.49 NTU	-42.4 mV	17.30 ft	100.00 ml/min
9/7/2023 10:13 AM	55:00	6.49 pH	23.13 °C	218.02 µS/cm	0.25 mg/L	6.26 NTU	-44.6 mV	17.45 ft	100.00 ml/min
9/7/2023 10:18 AM	01:00:00	6.49 pH	23.31 °C	216.70 µS/cm	0.24 mg/L	6.37 NTU	-55.7 mV	17.58 ft	100.00 ml/min
9/7/2023 10:23 AM	01:05:00	6.50 pH	23.42 °C	216.36 µS/cm	0.23 mg/L	5.44 NTU	-46.4 mV	17.70 ft	100.00 ml/min
9/7/2023 10:28 AM	01:10:00	6.49 pH	23.12 °C	216.53 µS/cm	0.22 mg/L	5.20 NTU	-56.7 mV	17.80 ft	100.00 ml/min

9/7/2023 10:33 AM	01:15:00	6.49 pH	23.60 °C	217.14 µS/cm	0.22 mg/L	5.23 NTU	-46.9 mV	18.88 ft	100.00 ml/min
9/7/2023 10:38 AM	01:20:00	6.50 pH	23.76 °C	217.00 µS/cm	0.22 mg/L	6.11 NTU	-49.4 mV	18.99 ft	100.00 ml/min
9/7/2023 10:43 AM	01:25:00	6.50 pH	23.62 °C	217.01 µS/cm	0.22 mg/L	6.30 NTU	-49.3 mV	18.09 ft	100.00 ml/min
9/7/2023 10:48 AM	01:30:00	6.50 pH	23.60 °C	217.75 µS/cm	0.22 mg/L	5.13 NTU	-50.3 mV	18.16 ft	100.00 ml/min
9/7/2023 10:53 AM	01:35:00	6.51 pH	23.78 °C	218.59 µS/cm	0.21 mg/L	4.85 NTU	-61.7 mV	18.23 ft	100.00 ml/min

Samples

Sample ID:	Description:
MCD-DGWA-53	

Low-Flow Test Report:

Test Date / Time: 9/6/2023 12:20:36 PM
Project: MCD SAGW 2 (2)
Operator Name: P Wahl

Location Name: MCD-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: 41.33 ft**	**Pump Type: Dedicated Bladder** **Tubing Type: LDPE** **Pump Intake From TOC: 57 ft** **Estimated Total Volume Pumped: 5000 ml** **Flow Cell Volume: 90 ml** **Final Flow Rate: 200 ml/min** **Final Draw Down: 0.41 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 980712**

Test Notes:

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 10 %	+/- 10	+/- 10	+/- 0.3	
9/6/2023 12:20 PM	00:00	5.65 pH	25.87 °C	70.30 µS/cm	5.69 mg/L	13.20 NTU	126.7 mV	41.63 ft	200.00 ml/min
9/6/2023 12:25 PM	05:00	5.49 pH	22.43 °C	69.73 µS/cm	5.01 mg/L	5.30 NTU	136.2 mV	41.65 ft	200.00 ml/min
9/6/2023 12:30 PM	10:00	5.48 pH	21.94 °C	68.56 µS/cm	5.00 mg/L	2.52 NTU	137.6 mV	41.69 ft	200.00 ml/min
9/6/2023 12:35 PM	15:00	5.50 pH	21.52 °C	70.50 µS/cm	4.96 mg/L	2.73 NTU	136.8 mV	41.72 ft	200.00 ml/min
9/6/2023 12:40 PM	20:00	5.51 pH	21.76 °C	70.66 µS/cm	4.95 mg/L	2.09 NTU	136.3 mV	41.73 ft	200.00 ml/min
9/6/2023 12:45 PM	25:00	5.50 pH	21.68 °C	70.93 µS/cm	4.89 mg/L	1.53 NTU	136.0 mV	41.74 ft	200.00 ml/min

Samples

Sample ID:	Description:
MCD-DGWA-70A	

Created using VuSitu from In-Situ, Inc.

Low-Flow Test Report:

Test Date / Time: 9/6/2023 3:43:36 PM
Project: SCS MCD (4)
Operator Name: Dana Bloomfield

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: 31.29 ft**	**Pump Type: Bladder** **Tubing Type: LDPE** **Estimated Total Volume Pumped: 5000 ml** **Flow Cell Volume: 90 ml** **Final Flow Rate: 200 ml/min** **Final Draw Down: 0.3 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 883553**

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 %	+/- 0.2	+/- 10	+/- 10	+/- 0.3	
9/6/2023 3:43 PM	00:00	5.91 pH	21.06 °C	86.44 µS/cm	1.75 mg/L	9.97 NTU	131.8 mV	31.29 ft	200.00 ml/min
9/6/2023 3:48 PM	05:00	5.88 pH	21.46 °C	88.12 µS/cm	1.37 mg/L	4.25 NTU	139.2 mV	31.50 ft	200.00 ml/min
9/6/2023 3:53 PM	10:00	5.86 pH	21.51 °C	87.92 µS/cm	1.23 mg/L	4.25 NTU	144.2 mV	31.59 ft	200.00 ml/min
9/6/2023 3:58 PM	15:00	5.85 pH	21.50 °C	88.06 µS/cm	1.16 mg/L	5.80 NTU	146.6 mV	31.59 ft	200.00 ml/min
9/6/2023 4:03 PM	20:00	5.83 pH	21.51 °C	87.61 µS/cm	1.22 mg/L	3.93 NTU	140.7 mV	31.59 ft	200.00 ml/min
9/6/2023 4:08 PM	25:00	5.82 pH	21.60 °C	88.04 µS/cm	1.30 mg/L	1.94 NTU	127.8 mV	31.59 ft	200.00 ml/min

Samples

Sample ID:	Description:
MCD-DGWA-71	

APPENDIX A

Field Data Forms
November 2023

Low-Flow Test Report:

Test Date / Time: 11/7/2023 10:56:17 AM
Project: McDonough Quarterly Q4 2023
Operator Name: Mark 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: 9.37 ft**	**Pump Type: Peristaltic** **Tubing Type: LDPE** **Pump Intake From TOC: 44 ft** **Estimated Total Volume Pumped: 5625 ml** **Flow Cell Volume: 90 ml** **Final Flow Rate: 105 ml/min** **Final Draw Down: 3.7 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 883553**

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 %	+/- 10	+/- 10	+/- 0.3	
11/7/2023 10:56 AM	00:00	5.86 pH	23.99 °C	179.61 µS/cm	4.62 mg/L	6.56 NTU	93.8 mV	9.37 ft	150.00 ml/min
11/7/2023 11:01 AM	05:00	6.21 pH	21.42 °C	235.44 µS/cm	0.28 mg/L	7.25 NTU	47.6 mV	10.62 ft	150.00 ml/min
11/7/2023 11:06 AM	10:00	6.21 pH	21.15 °C	226.22 µS/cm	0.19 mg/L	5.34 NTU	-27.5 mV	11.46 ft	150.00 ml/min
11/7/2023 11:11 AM	15:00	6.20 pH	21.18 °C	254.98 µS/cm	0.16 mg/L	6.20 NTU	-57.8 mV	12.05 ft	120.00 ml/min
11/7/2023 11:16 AM	20:00	6.21 pH	21.23 °C	300.34 µS/cm	0.17 mg/L	5.32 NTU	-105.5 mV	12.41 ft	120.00 ml/min
11/7/2023 11:21 AM	25:00	6.20 pH	21.30 °C	314.63 µS/cm	0.16 mg/L	3.21 NTU	-70.0 mV	12.61 ft	120.00 ml/min
11/7/2023 11:26 AM	30:00	6.20 pH	21.45 °C	330.38 µS/cm	0.15 mg/L	3.99 NTU	-72.1 mV	12.84 ft	105.00 ml/min
11/7/2023 11:31 AM	35:00	6.21 pH	21.67 °C	352.15 µS/cm	0.15 mg/L	3.83 NTU	-121.2 mV	12.94 ft	105.00 ml/min
11/7/2023 11:36 AM	40:00	6.20 pH	21.81 °C	363.83 µS/cm	0.15 mg/L	2.86 NTU	-84.1 mV	13.01 ft	105.00 ml/min
11/7/2023 11:41 AM	45:00	6.21 pH	21.69 °C	365.77 µS/cm	0.14 mg/L	2.31 NTU	-84.4 mV	13.07 ft	105.00 ml/min

Samples

Sample ID:	Description:

MCD-DGWC-121	
MCD-AP-1-FD-1	
MCD-AP-1-FB-1	

Created using VuSitu from In-Situ, Inc.

APPENDIX A

Field Data Forms
January-February 2024

Low-Flow Test Report:

Test Date / Time: 1/30/2024 1:39:43 PM
Project: Plant McDonough SA
Operator Name: D Bloomfield

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: 17.63 ft**	**Pump Type: Bladder** **Tubing Type: LDPE** **Pump Intake From TOC: 60 ft** **Estimated Total Volume Pumped: 4092.667 ml** **Flow Cell Volume: 90 ml** **Final Flow Rate: 140 ml/min** **Final Draw Down: 0.36 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 1080297**

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	+/- 3 %	+/- 0.3	+/- 10	+/- 10	+/- 5	
1/30/2024 1:39 PM	00:00	6.13 pH	23.63 °C	618.65 µS/cm	1.80 mg/L	5.80 NTU	6.5 mV	17.63 ft	140.00 ml/min
1/30/2024 1:41 PM	02:15	6.23 pH	20.86 °C	672.13 µS/cm	2.18 mg/L	5.80 NTU	-25.4 mV	17.98 ft	140.00 ml/min
1/30/2024 1:42 PM	03:06	6.24 pH	20.50 °C	681.49 µS/cm	1.87 mg/L	5.80 NTU	-30.1 mV	18.02 ft	140.00 ml/min
1/30/2024 1:46 PM	07:06	6.48 pH	19.98 °C	691.78 µS/cm	0.75 mg/L	1.73 NTU	-44.3 mV	17.99 ft	140.00 ml/min
1/30/2024 1:50 PM	11:06	6.49 pH	19.65 °C	693.32 µS/cm	0.57 mg/L	1.44 NTU	-41.8 mV	17.99 ft	140.00 ml/min
1/30/2024 1:54 PM	15:06	6.47 pH	19.55 °C	693.97 µS/cm	0.42 mg/L	0.90 NTU	-40.0 mV	17.99 ft	140.00 ml/min
1/30/2024 1:56 PM	16:56	6.45 pH	19.49 °C	692.90 µS/cm	0.34 mg/L	0.90 NTU	-36.9 mV	17.99 ft	140.00 ml/min
1/30/2024 2:03 PM	23:41	6.42 pH	18.69 °C	684.50 µS/cm	0.21 mg/L	0.65 NTU	-36.9 mV	17.99 ft	140.00 ml/min
1/30/2024 2:04 PM	25:14	6.39 pH	19.06 °C	680.57 µS/cm	0.20 mg/L	0.65 NTU	-33.0 mV	17.99 ft	140.00 ml/min
1/30/2024 2:08 PM	29:14	6.37 pH	19.51 °C	673.54 µS/cm	0.17 mg/L	0.84 NTU	-32.8 mV	17.99 ft	140.00 ml/min

Samples

Sample ID:	Description:
MCD-B-105D	

Created using VuSitu from In-Situ, Inc.

Low-Flow Test Report:

Test Date / Time: 2/1/2024 11:17:54 AM
Project: McDonough SAGW01 2024 (4)
Operator Name: John Bankhead

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: 6.93 ft**	**Pump Type: Peristaltic** **Tubing Type: LDPE** **Pump Intake From TOC: 50 ft** **Estimated Total Volume Pumped: 6250 ml** **Flow Cell Volume: 90 ml** **Final Flow Rate: 200 ml/min** **Final Draw Down: 0.21 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 1080302**

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	
2/1/2024 11:17 AM	00:00	6.80 pH	20.61 °C	196.22 µS/cm	3.95 mg/L	3.31 NTU	71.8 mV	6.93 ft	250.00 ml/min
2/1/2024 11:22 AM	05:00	6.79 pH	17.80 °C	253.22 µS/cm	0.29 mg/L	3.58 NTU	48.3 mV	7.11 ft	200.00 ml/min
2/1/2024 11:27 AM	10:00	6.80 pH	17.70 °C	253.01 µS/cm	0.23 mg/L	4.68 NTU	44.4 mV	7.12 ft	200.00 ml/min
2/1/2024 11:32 AM	15:00	6.80 pH	17.71 °C	253.88 µS/cm	0.20 mg/L	3.14 NTU	43.3 mV	7.12 ft	200.00 ml/min
2/1/2024 11:37 AM	20:00	6.82 pH	17.77 °C	254.47 µS/cm	0.17 mg/L	3.35 NTU	42.7 mV	7.14 ft	200.00 ml/min
2/1/2024 11:42 AM	25:00	6.81 pH	17.80 °C	254.30 µS/cm	0.15 mg/L	5.61 NTU	42.0 mV	7.14 ft	200.00 ml/min
2/1/2024 11:47 AM	30:00	6.81 pH	17.83 °C	253.91 µS/cm	0.14 mg/L	1.86 NTU	41.9 mV	7.14 ft	200.00 ml/min

Samples

Sample ID:	Description:

Created using VuSitu from In-Situ, Inc.

Low-Flow Test Report:

Test Date / Time: 1/31/2024 11:02:37 AM
Project: McDonough SAGW01 2024
Operator Name: John Bankhead

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: 13.57 ft**	**Pump Type: Dedicated Bladder** **Tubing Type: LDPE** **Pump Intake From TOC: 38 ft** **Estimated Total Volume Pumped: 8000 ml** **Flow Cell Volume: 90 ml** **Final Flow Rate: 200 ml/min** **Final Draw Down: 0.25 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 1080302**

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	
1/31/2024 11:02 AM	00:00	7.00 pH	15.70 °C	366.83 µS/cm	9.32 mg/L	0.45 NTU	32.1 mV	13.57 ft	250.00 ml/min
1/31/2024 11:07 AM	05:00	6.35 pH	16.82 °C	472.94 µS/cm	1.62 mg/L	0.63 NTU	41.4 mV	13.86 ft	100.00 ml/min
1/31/2024 11:12 AM	10:00	6.31 pH	17.25 °C	469.60 µS/cm	1.39 mg/L	1.00 NTU	38.4 mV	13.89 ft	250.00 ml/min
1/31/2024 11:17 AM	15:00	6.31 pH	17.04 °C	481.32 µS/cm	0.71 mg/L	1.36 NTU	51.7 mV	13.82 ft	250.00 ml/min
1/31/2024 11:22 AM	20:00	6.32 pH	17.21 °C	475.79 µS/cm	0.71 mg/L	1.28 NTU	51.9 mV	13.82 ft	250.00 ml/min
1/31/2024 11:27 AM	25:00	6.32 pH	17.06 °C	472.42 µS/cm	1.13 mg/L	1.54 NTU	52.0 mV	13.84 ft	250.00 ml/min
1/31/2024 11:32 AM	30:00	6.32 pH	17.18 °C	470.25 µS/cm	1.06 mg/L	1.86 NTU	51.8 mV	13.82 ft	250.00 ml/min
1/31/2024 11:37 AM	35:00	6.32 pH	17.18 °C	466.22 µS/cm	0.86 mg/L	1.38 NTU	52.1 mV	13.82 ft	250.00 ml/min

Samples

Sample ID:	Description:

Low-Flow Test Report:

Test Date / Time: 1/30/2024 2:22:22 PM
Project: McDonough SAGW01 2024 (2)
Operator Name: John Bankhead

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: 6.53 ft**	**Pump Type: Dedicated Bladder** **Tubing Type: LDPE** **Pump Intake From TOC: 23 ft** **Estimated Total Volume Pumped: 5000 ml** **Flow Cell Volume: 90 ml** **Final Flow Rate: 200 ml/min** **Final Draw Down: 0.38 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 1080302**

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	
1/30/2024 2:22 PM	00:00	5.76 pH	19.92 °C	562.57 µS/cm	6.36 mg/L	3.88 NTU	84.9 mV	6.53 ft	200.00 ml/min
1/30/2024 2:27 PM	05:00	5.98 pH	18.34 °C	590.15 µS/cm	6.55 mg/L	1.26 NTU	63.7 mV	6.73 ft	200.00 ml/min
1/30/2024 2:32 PM	10:00	5.89 pH	17.90 °C	588.24 µS/cm	4.62 mg/L	2.97 NTU	59.5 mV	6.87 ft	200.00 ml/min
1/30/2024 2:37 PM	15:00	5.92 pH	17.84 °C	605.96 µS/cm	2.54 mg/L	2.88 NTU	85.3 mV	6.89 ft	200.00 ml/min
1/30/2024 2:42 PM	20:00	5.93 pH	17.84 °C	605.03 µS/cm	0.22 mg/L	3.47 NTU	83.2 mV	6.91 ft	200.00 ml/min
1/30/2024 2:47 PM	25:00	5.94 pH	17.84 °C	606.68 µS/cm	0.18 mg/L	3.29 NTU	53.8 mV	6.91 ft	200.00 ml/min

Samples

Sample ID:	Description:

Created using VuSitu from In-Situ, Inc.

Low-Flow Test Report:

Test Date / Time: 1/31/2024 9:40:45 AM
Project: McDonough SAGW01 2024
Operator Name: John Bankhead

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: 7.32 ft**	**Pump Type: Dedicated Bladder** **Tubing Type: LDPE** **Pump Intake From TOC: 19 ft** **Estimated Total Volume Pumped: 5750 ml** **Flow Cell Volume: 90 ml** **Final Flow Rate: 150 ml/min** **Final Draw Down: 0.8 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 1080302**

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	
1/31/2024 9:40 AM	00:00	6.92 pH	7.86 °C	649.37 µS/cm	12.55 mg/L	635.00 NTU	49.0 mV	7.32 ft	400.00 ml/min
1/31/2024 9:45 AM	05:00	6.57 pH	15.30 °C	613.07 µS/cm	1.28 mg/L	22.50 NTU	-30.4 mV	8.25 ft	150.00 ml/min
1/31/2024 9:50 AM	10:00	6.57 pH	14.69 °C	611.93 µS/cm	1.02 mg/L	8.67 NTU	-59.2 mV	8.08 ft	150.00 ml/min
1/31/2024 9:55 AM	15:00	6.57 pH	14.76 °C	612.06 µS/cm	0.81 mg/L	11.80 NTU	-59.8 mV	8.10 ft	150.00 ml/min
1/31/2024 10:00 AM	20:00	6.57 pH	14.84 °C	611.51 µS/cm	0.71 mg/L	6.04 NTU	-59.8 mV	8.15 ft	150.00 ml/min
1/31/2024 10:05 AM	25:00	6.58 pH	14.97 °C	611.88 µS/cm	0.65 mg/L	4.60 NTU	-31.3 mV	8.12 ft	150.00 ml/min
1/31/2024 10:10 AM	30:00	6.58 pH	14.99 °C	613.34 µS/cm	0.59 mg/L	3.16 NTU	-60.4 mV	8.12 ft	150.00 ml/min

Samples

Sample ID:	Description:

Low-Flow Test Report:

Test Date / Time: 1/30/2024 11:46:51 AM
Project: McDonough SAGW01 2024
Operator Name: D Bloomfield

Location Name: MCD-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: 18.06 ft**	**Estimated Total Volume Pumped: 8542.5 ml** **Flow Cell Volume: 90 ml** **Final Flow Rate: 170 ml/min** **Final Draw Down: -12.549 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 1080297**

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	+/- 3 %	+/- 0.3	+/- 10	+/- 10	+/- 5	
1/30/2024 11:46 AM	00:00	4.78 pH	19.59 °C	500.45 µS/cm	2.84 mg/L	8.92 NTU	138.7 mV	18.06 ft	170.00 ml/min
1/30/2024 11:48 AM	01:58	4.73 pH	19.06 °C	489.90 µS/cm	2.88 mg/L	8.92 NTU	171.4 mV	18.06 ft	170.00 ml/min
1/30/2024 11:49 AM	02:15	4.73 pH	19.07 °C	489.76 µS/cm	2.86 mg/L	8.92 NTU	170.8 mV	18.06 ft	170.00 ml/min
1/30/2024 11:53 AM	06:15	4.68 pH	19.48 °C	498.01 µS/cm	2.39 mg/L	26.10 NTU	174.7 mV	18.08 ft	170.00 ml/min
1/30/2024 11:57 AM	10:15	4.66 pH	19.89 °C	498.03 µS/cm	2.40 mg/L	5.70 NTU	117.4 mV	18.08 ft	170.00 ml/min
1/30/2024 12:01 PM	14:15	4.64 pH	20.06 °C	497.96 µS/cm	2.33 mg/L	16.50 NTU	112.2 mV	18.08 ft	170.00 ml/min
1/30/2024 12:05 PM	18:15	4.64 pH	19.98 °C	499.10 µS/cm	2.30 mg/L	5.44 NTU	109.9 mV	18.08 ft	170.00 ml/min
1/30/2024 12:09 PM	22:15	4.64 pH	20.17 °C	498.85 µS/cm	2.30 mg/L	4.13 NTU	108.5 mV	18.08 ft	170.00 ml/min
1/30/2024 12:13 PM	26:15	4.64 pH	20.10 °C	500.92 µS/cm	2.29 mg/L	3.53 NTU	106.5 mV	18.08 ft	170.00 ml/min
1/30/2024 12:17 PM	30:15	4.64 pH	19.95 °C	501.15 µS/cm	2.29 mg/L	3.05 NTU	105.0 mV	18.08 ft	170.00 ml/min
1/30/2024 12:21 PM	34:15	4.64 pH	20.03 °C	500.55 µS/cm	2.29 mg/L	2.41 NTU	104.4 mV	18.08 ft	170.00 ml/min
1/30/2024 12:25 PM	38:15	4.64 pH	20.03 °C	499.60 µS/cm	2.27 mg/L	1.40 NTU	103.7 mV	18.08 ft	170.00 ml/min
1/30/2024 12:29 PM	42:15	4.64 pH	19.98 °C	500.26 µS/cm	2.27 mg/L	1.21 NTU	103.0 mV	18.08 ft	170.00 ml/min
1/30/2024 12:33 PM	46:15	4.64 pH	20.08 °C	499.19 µS/cm	2.25 mg/L	1.43 NTU	99.7 mV	18.08 ft	170.00 ml/min
1/30/2024 12:40 PM	53:15	4.64 pH	20.07 °C	500.12 µS/cm	2.27 mg/L	0.65 NTU	99.7 mV	18.08 ft	170.00 ml/min

Samples

Sample ID:	Description:
MCD-DGWC-40	
MCD-AP1-FD-1	

Created using VuSitu from In-Situ, Inc.

Low-Flow Test Report:

Test Date / Time: 2/1/2024 9:55:52 AM
Project: McDonough SAGW01 2024
Operator Name: John Bankhead

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: 9.95 ft**	**Pump Type: Peristaltic** **Tubing Type: LDPE** **Pump Intake From TOC: 50 ft** **Estimated Total Volume Pumped: 3620 ml** **Flow Cell Volume: 90 ml** **Final Flow Rate: 200 ml/min** **Final Draw Down: 0.79 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 1080302**

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	
2/1/2024 9:55 AM	00:00	6.19 pH	11.64 °C	446.05 µS/cm	10.05 mg/L	2.81 NTU	124.0 mV	9.95 ft	200.00 ml/min
2/1/2024 10:00 AM	05:00	6.22 pH	16.26 °C	463.78 µS/cm	0.30 mg/L	1.38 NTU	66.7 mV	10.44 ft	200.00 ml/min
2/1/2024 10:03 AM	08:06	6.24 pH	16.81 °C	452.85 µS/cm	0.20 mg/L	1.59 NTU	76.3 mV	10.58 ft	200.00 ml/min
2/1/2024 10:08 AM	13:06	6.23 pH	17.01 °C	456.27 µS/cm	0.13 mg/L	1.04 NTU	52.4 mV	10.72 ft	200.00 ml/min
2/1/2024 10:13 AM	18:06	6.27 pH	17.13 °C	451.20 µS/cm	0.11 mg/L	0.81 NTU	49.4 mV	10.74 ft	200.00 ml/min

Samples

Sample ID:	Description:

Created using VuSitu from In-Situ, Inc.

Low-Flow Test Report:

Test Date / Time: 1/31/2024 11:30:10 AM
Project: McDonough SAGW01 2024
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: 10.13 ft**	**Pump Type: Peristaltic** **Tubing Type: LDPE** **Pump Intake From TOC: 24 ft** **Estimated Total Volume Pumped: 3500 ml** **Flow Cell Volume: 90 ml** **Final Flow Rate: 175 ml/min** **Final Draw Down: 0.36 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 1080293**

Test Notes:

Weather Conditions:
Clear

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 10 %	+/- 5	+/- 10	+/- 0.3	
1/31/2024 11:30 AM	00:00	6.75 pH	20.48 °C	406.79 µS/cm	5.23 mg/L	0.82 NTU	151.1 mV	10.13 ft	175.00 ml/min
1/31/2024 11:35 AM	05:00	6.63 pH	17.54 °C	446.72 µS/cm	0.23 mg/L	0.84 NTU	43.4 mV	10.41 ft	175.00 ml/min
1/31/2024 11:40 AM	10:00	6.63 pH	17.21 °C	457.06 µS/cm	0.16 mg/L	1.18 NTU	39.8 mV	10.47 ft	175.00 ml/min
1/31/2024 11:45 AM	15:00	6.62 pH	17.56 °C	453.91 µS/cm	0.13 mg/L	1.50 NTU	17.5 mV	10.48 ft	175.00 ml/min
1/31/2024 11:50 AM	20:00	6.62 pH	17.63 °C	454.00 µS/cm	0.10 mg/L	0.64 NTU	13.8 mV	10.49 ft	175.00 ml/min

Samples

Sample ID:	Description:
MCD-DGWC-68A	
MCD-AP1-EB-1	

Low-Flow Test Report:

Test Date / Time: 1/31/2024 12:45:40 PM
Project: McDonough SAGW01 2024
Operator Name: Mark Mann

Location Name: MCD-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: 5.66 ft**	**Pump Type: Peristaltic** **Tubing Type: LDPE** **Pump Intake From TOC: 18 ft** **Estimated Total Volume Pumped: 22625 ml** **Flow Cell Volume: 90 ml** **Final Flow Rate: 125 ml/min** **Final Draw Down: 1.27 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 1080293**

Test Notes:

Weather Conditions:
Clear

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 10 %	+/- 5	+/- 10	+/- 0.3	
1/31/2024 12:45 PM	00:00	6.33 pH	19.07 °C	117.56 µS/cm	2.55 mg/L	81.10 NTU	99.8 mV	5.66 ft	250.00 ml/min
1/31/2024 12:50 PM	05:00	6.30 pH	16.90 °C	124.00 µS/cm	1.83 mg/L	283.00 NTU	54.0 mV	6.94 ft	200.00 ml/min
1/31/2024 12:55 PM	10:00	6.28 pH	16.54 °C	123.69 µS/cm	1.66 mg/L	263.00 NTU	42.1 mV	7.03 ft	200.00 ml/min
1/31/2024 1:00 PM	15:00	6.27 pH	16.47 °C	123.33 µS/cm	1.59 mg/L	207.00 NTU	37.5 mV	7.09 ft	200.00 ml/min
1/31/2024 1:05 PM	20:00	6.27 pH	16.42 °C	123.52 µS/cm	1.60 mg/L	117.00 NTU	34.9 mV	7.13 ft	200.00 ml/min
1/31/2024 1:10 PM	25:00	6.27 pH	16.42 °C	123.51 µS/cm	1.58 mg/L	97.80 NTU	34.4 mV	7.16 ft	200.00 ml/min
1/31/2024 1:15 PM	30:00	6.26 pH	16.48 °C	123.77 µS/cm	1.55 mg/L	81.90 NTU	33.1 mV	7.20 ft	200.00 ml/min
1/31/2024 1:20 PM	35:00	6.26 pH	16.52 °C	123.55 µS/cm	1.51 mg/L	57.00 NTU	32.7 mV	7.22 ft	200.00 ml/min
1/31/2024 1:25 PM	40:00	6.26 pH	16.56 °C	123.54 µS/cm	1.50 mg/L	46.20 NTU	30.7 mV	7.20 ft	200.00 ml/min
1/31/2024 1:30 PM	45:00	6.26 pH	16.64 °C	123.46 µS/cm	1.49 mg/L	31.70 NTU	30.4 mV	7.20 ft	200.00 ml/min
1/31/2024 1:35 PM	50:00	6.26 pH	16.62 °C	123.43 µS/cm	1.50 mg/L	21.30 NTU	30.6 mV	7.22 ft	200.00 ml/min
1/31/2024 1:40 PM	55:00	6.26 pH	16.59 °C	123.25 µS/cm	1.49 mg/L	16.50 NTU	29.8 mV	7.21 ft	200.00 ml/min
1/31/2024 1:45 PM	01:00:00	6.27 pH	16.56 °C	122.45 µS/cm	1.46 mg/L	17.10 NTU	28.7 mV	7.22 ft	200.00 ml/min

1/31/2024 1:50 PM	01:05:00	6.26 pH	16.66 °C	123.28 µS/cm	1.47 mg/L	16.40 NTU	29.8 mV	7.25 ft	200.00 ml/min
1/31/2024 1:55 PM	01:10:00	6.26 pH	16.60 °C	123.25 µS/cm	1.47 mg/L	16.10 NTU	28.4 mV	7.12 ft	150.00 ml/min
1/31/2024 2:00 PM	01:15:00	6.26 pH	16.48 °C	122.87 µS/cm	1.47 mg/L	13.20 NTU	27.8 mV	7.00 ft	150.00 ml/min
1/31/2024 2:05 PM	01:20:00	6.27 pH	16.45 °C	123.65 µS/cm	1.46 mg/L	12.30 NTU	28.4 mV	7.04 ft	150.00 ml/min
1/31/2024 2:10 PM	01:25:00	6.26 pH	16.57 °C	123.05 µS/cm	1.45 mg/L	11.80 NTU	27.8 mV	7.07 ft	150.00 ml/min
1/31/2024 2:15 PM	01:30:00	6.26 pH	16.44 °C	123.06 µS/cm	1.46 mg/L	9.26 NTU	28.2 mV	7.04 ft	150.00 ml/min
1/31/2024 2:20 PM	01:35:00	6.27 pH	16.56 °C	123.06 µS/cm	1.46 mg/L	8.50 NTU	27.2 mV	7.05 ft	150.00 ml/min
1/31/2024 2:25 PM	01:40:00	6.26 pH	16.56 °C	124.19 µS/cm	1.44 mg/L	8.46 NTU	26.8 mV	7.03 ft	150.00 ml/min
1/31/2024 2:30 PM	01:45:00	6.27 pH	16.48 °C	121.33 µS/cm	1.46 mg/L	7.70 NTU	26.4 mV	6.95 ft	125.00 ml/min
1/31/2024 2:35 PM	01:50:00	6.26 pH	16.38 °C	122.26 µS/cm	1.47 mg/L	7.09 NTU	26.4 mV	6.95 ft	125.00 ml/min
1/31/2024 2:40 PM	01:55:00	6.26 pH	16.39 °C	122.37 µS/cm	1.45 mg/L	6.86 NTU	25.9 mV	6.90 ft	125.00 ml/min
1/31/2024 2:45 PM	02:00:00	6.26 pH	16.43 °C	121.73 µS/cm	1.43 mg/L	6.29 NTU	27.1 mV	6.89 ft	125.00 ml/min
1/31/2024 2:50 PM	02:05:00	6.27 pH	16.45 °C	122.30 µS/cm	1.43 mg/L	5.58 NTU	25.4 mV	6.90 ft	125.00 ml/min
1/31/2024 2:55 PM	02:10:00	6.26 pH	16.38 °C	122.17 µS/cm	1.44 mg/L	4.89 NTU	24.5 mV	6.93 ft	125.00 ml/min

Samples

Sample ID:	Description:
MCD-DGWC-69	

Low-Flow Test Report:

Test Date / Time: 1/31/2024 2:27:58 PM
Project: McDonough SAGW01 2024
Operator Name: John Bankhead

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: 8.75 ft**	**Pump Type: Peristaltic** **Tubing Type: LDPE** **Pump Intake From TOC: 44 ft** **Estimated Total Volume Pumped: 8000 ml** **Flow Cell Volume: 90 ml** **Final Flow Rate: 200 ml/min** **Final Draw Down: 5.38 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 1080302**

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	
1/31/2024 2:27 PM	00:00	6.40 pH	20.79 °C	225.93 µS/cm	5.94 mg/L	5.98 NTU	25.5 mV	8.75 ft	250.00 ml/min
1/31/2024 2:32 PM	05:00	6.21 pH	17.99 °C	380.54 µS/cm	0.31 mg/L	5.72 NTU	-6.1 mV	10.59 ft	250.00 ml/min
1/31/2024 2:37 PM	10:00	6.20 pH	17.94 °C	348.92 µS/cm	0.18 mg/L	4.26 NTU	1.3 mV	11.73 ft	250.00 ml/min
1/31/2024 2:42 PM	15:00	6.18 pH	17.93 °C	293.66 µS/cm	0.12 mg/L	3.21 NTU	1.0 mV	12.70 ft	250.00 ml/min
1/31/2024 2:47 PM	20:00	6.18 pH	17.73 °C	313.98 µS/cm	0.11 mg/L	2.88 NTU	-1.6 mV	13.45 ft	200.00 ml/min
1/31/2024 2:52 PM	25:00	6.19 pH	17.81 °C	343.40 µS/cm	0.12 mg/L	1.97 NTU	-4.0 mV	13.73 ft	200.00 ml/min
1/31/2024 2:57 PM	30:00	6.19 pH	17.59 °C	351.56 µS/cm	0.12 mg/L	1.30 NTU	-4.0 mV	13.98 ft	200.00 ml/min
1/31/2024 3:02 PM	35:00	6.19 pH	17.31 °C	359.54 µS/cm	0.11 mg/L	0.99 NTU	-4.4 mV	14.13 ft	200.00 ml/min

Samples

Sample ID:	Description:

Low-Flow Test Report:

Test Date / Time: 2/1/2024 9:18:43 AM
Project: Plant McDonough SA (4)
Operator Name: D Bloomfield

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: 16.55 ft**	**Pump Type: peristaltic** **Tubing Type: LDPE** **Pump Intake From TOC: 35 ft** **Estimated Total Volume Pumped: 15527.667 ml** **Flow Cell Volume: 90 ml** **Final Flow Rate: 170 ml/min** **Final Draw Down: 0.3 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 1080297**

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 %	+/- 0.3	+/- 10	+/- 10	+/- 5	
2/1/2024 9:18 AM	00:00	7.02 pH	9.98 °C	532.34 µS/cm	8.15 mg/L	9.56 NTU	-11.0 mV	16.55 ft	200.00 ml/min
2/1/2024 9:22 AM	04:00	6.68 pH	12.85 °C	504.84 µS/cm	0.40 mg/L	10.70 NTU	-19.0 mV	16.85 ft	170.00 ml/min
2/1/2024 9:26 AM	08:00	6.69 pH	13.76 °C	491.33 µS/cm	0.29 mg/L	34.30 NTU	-21.5 mV	16.85 ft	170.00 ml/min
2/1/2024 9:30 AM	12:00	6.70 pH	13.53 °C	490.40 µS/cm	0.25 mg/L	42.50 NTU	-21.3 mV	16.85 ft	170.00 ml/min
2/1/2024 9:34 AM	16:00	6.70 pH	13.66 °C	486.24 µS/cm	0.22 mg/L	29.80 NTU	-21.6 mV	16.85 ft	170.00 ml/min
2/1/2024 9:38 AM	20:00	6.70 pH	14.15 °C	483.79 µS/cm	0.22 mg/L	37.50 NTU	-21.0 mV	16.85 ft	170.00 ml/min
2/1/2024 9:42 AM	24:00	6.70 pH	14.55 °C	481.09 µS/cm	0.26 mg/L	27.80 NTU	-20.5 mV	16.85 ft	170.00 ml/min
2/1/2024 9:46 AM	28:00	6.68 pH	14.88 °C	464.16 µS/cm	0.31 mg/L	22.70 NTU	-20.1 mV	16.85 ft	170.00 ml/min
2/1/2024 9:50 AM	31:57	6.63 pH	15.11 °C	420.38 µS/cm	0.33 mg/L	18.50 NTU	-26.0 mV	16.85 ft	170.00 ml/min
2/1/2024 9:54 AM	35:57	6.55 pH	15.52 °C	376.58 µS/cm	0.34 mg/L	16.50 NTU	-18.8 mV	16.85 ft	170.00 ml/min
2/1/2024 9:58 AM	39:57	6.51 pH	15.40 °C	346.68 µS/cm	0.37 mg/L	13.30 NTU	-16.9 mV	16.85 ft	170.00 ml/min
2/1/2024 10:02 AM	43:57	6.48 pH	15.85 °C	332.41 µS/cm	0.39 mg/L	10.70 NTU	-15.4 mV	16.85 ft	170.00 ml/min
2/1/2024 10:06 AM	47:57	6.46 pH	15.92 °C	322.46 µS/cm	0.41 mg/L	10.80 NTU	-14.1 mV	16.85 ft	170.00 ml/min
2/1/2024 10:10 AM	51:57	6.44 pH	16.02 °C	313.02 µS/cm	0.43 mg/L	9.89 NTU	-13.3 mV	16.85 ft	170.00 ml/min
2/1/2024 10:13 AM	54:38	6.45 pH	15.65 °C	311.14 µS/cm	0.46 mg/L	9.10 NTU	-14.2 mV	16.85 ft	170.00 ml/min

2/1/2024 10:17 AM	58:38	6.44 pH	16.10 °C	310.07 µS/cm	0.47 mg/L	8.97 NTU	-13.8 mV	16.85 ft	170.00 ml/min
2/1/2024 10:21 AM	01:02:38	6.44 pH	16.35 °C	311.97 µS/cm	0.49 mg/L	9.66 NTU	-12.3 mV	16.85 ft	170.00 ml/min
2/1/2024 10:25 AM	01:06:38	6.44 pH	16.46 °C	306.58 µS/cm	0.52 mg/L	8.30 NTU	-11.9 mV	16.85 ft	170.00 ml/min
2/1/2024 10:29 AM	01:10:38	6.43 pH	16.37 °C	297.92 µS/cm	0.52 mg/L	6.47 NTU	-11.7 mV	16.85 ft	170.00 ml/min
2/1/2024 10:33 AM	01:14:38	6.42 pH	16.53 °C	297.51 µS/cm	0.54 mg/L	6.48 NTU	-11.9 mV	16.85 ft	170.00 ml/min
2/1/2024 10:37 AM	01:18:38	6.42 pH	16.58 °C	297.91 µS/cm	0.55 mg/L	5.84 NTU	-11.8 mV	16.85 ft	170.00 ml/min
2/1/2024 10:41 AM	01:22:38	6.42 pH	16.56 °C	297.26 µS/cm	0.54 mg/L	6.00 NTU	-11.3 mV	16.85 ft	170.00 ml/min
2/1/2024 10:45 AM	01:26:38	6.41 pH	16.90 °C	293.38 µS/cm	0.52 mg/L	5.68 NTU	-12.0 mV	16.85 ft	170.00 ml/min
2/1/2024 10:50 AM	01:31:38	6.41 pH	16.88 °C	291.03 µS/cm	0.53 mg/L	4.73 NTU	-11.9 mV	16.85 ft	170.00 ml/min

Samples

Sample ID:	Description:
MCD-B-62	

Created using VuSitu from In-Situ, Inc.

Low-Flow Test Report:

Test Date / Time: 1/31/2024 1:21:30 PM
Project: Plant McDonough SA (2)
Operator Name: D Bloomfield

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: 34.87 ft**	**Pump Type: Bladder** **Tubing Type: LDPE** **Pump Intake From TOC: 37 ft** **Estimated Total Volume Pumped: 3400 ml** **Flow Cell Volume: 90 ml** **Final Flow Rate: 100 ml/min** **Final Draw Down: 0.14 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 1080297**

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	+/- 3 %	+/- 0.3	+/- 10	+/- 10	+/- 5	
1/31/2024 1:21 PM	00:00	5.51 pH	23.10 °C	518.61 µS/cm	3.30 mg/L	63.00 NTU	129.4 mV	34.87 ft	150.00 ml/min
1/31/2024 1:25 PM	04:00	5.48 pH	20.83 °C	509.79 µS/cm	2.87 mg/L	60.30 NTU	116.1 mV	35.01 ft	100.00 ml/min
1/31/2024 1:29 PM	08:00	5.43 pH	19.97 °C	540.00 µS/cm	2.41 mg/L	43.40 NTU	189.0 mV	35.01 ft	100.00 ml/min
1/31/2024 1:33 PM	12:00	5.38 pH	20.19 °C	548.76 µS/cm	1.79 mg/L	26.80 NTU	224.9 mV	35.01 ft	100.00 ml/min
1/31/2024 1:37 PM	16:00	5.29 pH	20.24 °C	591.90 µS/cm	1.14 mg/L	17.30 NTU	144.6 mV	35.01 ft	100.00 ml/min
1/31/2024 1:41 PM	20:00	5.28 pH	20.05 °C	630.34 µS/cm	0.81 mg/L	9.01 NTU	86.5 mV	35.01 ft	100.00 ml/min
1/31/2024 1:45 PM	24:00	5.34 pH	20.25 °C	648.84 µS/cm	0.59 mg/L	3.89 NTU	60.8 mV	35.01 ft	100.00 ml/min
1/31/2024 1:49 PM	28:00	5.37 pH	20.23 °C	660.06 µS/cm	0.46 mg/L	3.13 NTU	45.6 mV	35.01 ft	100.00 ml/min
1/31/2024 1:55 PM	34:00	5.35 pH	20.37 °C	667.01 µS/cm	0.39 mg/L	1.59 NTU	38.8 mV	35.01 ft	100.00 ml/min

Samples

Sample ID:	Description:

Low-Flow Test Report:

Test Date / Time: 1/30/2024 9:59:29 AM
Project: McDonough SAGW01 2024
Operator Name: John Bankhead

Location Name: MCD-DGWA-53 **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: 14.52 ft**	**Pump Type: Peristaltic** **Tubing Type: LDPE** **Pump Intake From TOC: 33 ft** **Estimated Total Volume Pumped: 14350 ml** **Flow Cell Volume: 90 ml** **Final Flow Rate: 150 ml/min** **Final Draw Down: 12.29 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 1080302**

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	
1/30/2024 9:59 AM	00:00	6.28 pH	9.79 °C	194.80 µS/cm	7.48 mg/L	20.30 NTU	20.8 mV	14.52 ft	200.00 ml/min
1/30/2024 10:04 AM	05:00	6.22 pH	15.52 °C	225.37 µS/cm	0.26 mg/L	20.20 NTU	-33.7 mV	16.57 ft	200.00 ml/min
1/30/2024 10:09 AM	10:00	6.21 pH	16.27 °C	210.78 µS/cm	0.22 mg/L	18.70 NTU	-16.7 mV	17.97 ft	200.00 ml/min
1/30/2024 10:14 AM	15:00	6.15 pH	16.32 °C	171.89 µS/cm	2.12 mg/L	18.50 NTU	33.5 mV	19.35 ft	200.00 ml/min
1/30/2024 10:19 AM	20:00	6.14 pH	16.24 °C	168.40 µS/cm	3.29 mg/L	15.00 NTU	36.8 mV	20.57 ft	200.00 ml/min
1/30/2024 10:24 AM	25:00	6.15 pH	16.10 °C	169.73 µS/cm	3.39 mg/L	12.20 NTU	33.1 mV	21.71 ft	200.00 ml/min
1/30/2024 10:29 AM	30:00	6.16 pH	16.50 °C	169.94 µS/cm	3.61 mg/L	10.20 NTU	30.8 mV	22.81 ft	200.00 ml/min
1/30/2024 10:34 AM	35:00	6.18 pH	16.64 °C	171.67 µS/cm	3.50 mg/L	8.16 NTU	14.8 mV	23.55 ft	200.00 ml/min
1/30/2024 10:39 AM	40:00	6.19 pH	16.58 °C	172.48 µS/cm	3.39 mg/L	7.33 NTU	21.8 mV	24.29 ft	160.00 ml/min
1/30/2024 10:44 AM	45:00	6.22 pH	16.25 °C	178.83 µS/cm	3.14 mg/L	6.67 NTU	12.2 mV	24.77 ft	160.00 ml/min
1/30/2024 10:49 AM	50:00	6.22 pH	16.37 °C	180.49 µS/cm	3.02 mg/L	5.79 NTU	10.6 mV	25.19 ft	160.00 ml/min
1/30/2024 10:54 AM	55:00	6.24 pH	16.34 °C	181.10 µS/cm	2.79 mg/L	5.65 NTU	6.5 mV	25.56 ft	160.00 ml/min
1/30/2024 10:59 AM	01:00:00	6.26 pH	16.37 °C	184.88 µS/cm	2.64 mg/L	4.60 NTU	4.0 mV	25.88 ft	160.00 ml/min

1/30/2024 11:04 AM	01:05:00	6.26 pH	16.37 °C	185.07 µS/cm	2.49 mg/L	4.48 NTU	-15.8 mV	26.18 ft	160.00 ml/min
1/30/2024 11:09 AM	01:10:00	6.28 pH	16.42 °C	184.19 µS/cm	2.34 mg/L	3.33 NTU	-1.6 mV	26.41 ft	160.00 ml/min
1/30/2024 11:14 AM	01:15:00	6.27 pH	16.47 °C	185.18 µS/cm	2.23 mg/L	2.83 NTU	-2.5 mV	26.61 ft	150.00 ml/min
1/30/2024 11:19 AM	01:20:00	6.28 pH	16.47 °C	185.60 µS/cm	2.16 mg/L	2.72 NTU	-3.9 mV	26.81 ft	150.00 ml/min

Samples

Sample ID:	Description:

Created using VuSitu from In-Situ, Inc.

Low-Flow Test Report:

Test Date / Time: 1/30/2024 12:38:31 PM
Project: McDonough SAGW01 2024
Operator Name: Mark Mann

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: 33.13 ft**	**Pump Type: Dedicated Bladder** **Tubing Type: LDPE** **Pump Intake From TOC: 42.71 ft** **Estimated Total Volume Pumped: 5204.167 ml** **Flow Cell Volume: 90 ml** **Final Flow Rate: 250 ml/min** **Final Draw Down: 0.51 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 1080293**

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	
1/30/2024 12:38 PM	00:00	6.06 pH	19.73 °C	110.58 µS/cm	4.20 mg/L	1.88 NTU	160.9 mV	33.13 ft	250.00 ml/min
1/30/2024 12:43 PM	05:00	5.82 pH	17.10 °C	107.23 µS/cm	1.39 mg/L	2.14 NTU	102.3 mV	33.62 ft	250.00 ml/min
1/30/2024 12:48 PM	10:00	5.81 pH	17.04 °C	106.35 µS/cm	0.94 mg/L	0.49 NTU	144.7 mV	33.63 ft	250.00 ml/min
1/30/2024 12:53 PM	15:00	5.80 pH	16.97 °C	106.69 µS/cm	0.87 mg/L	0.36 NTU	91.1 mV	33.65 ft	250.00 ml/min
1/30/2024 12:58 PM	20:00	5.79 pH	17.04 °C	106.98 µS/cm	0.96 mg/L	0.26 NTU	78.0 mV	33.64 ft	250.00 ml/min
1/30/2024 12:59 PM	20:49	5.79 pH	17.06 °C	107.54 µS/cm	0.97 mg/L	0.26 NTU	70.9 mV	33.64 ft	250.00 ml/min

Samples

Sample ID:	Description:
MCD-DGWA-71	

APPENDIX A

Field Data Forms
May 2024

Low-Flow Test Report:

Test Date / Time: 5/20/2024 12:20:03 PM
Project: Plant McDonough Quarterly
Operator Name: DCB

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: 9.63 ft**	**Pump Type: Peristaltic** **Tubing Type: LDPE** **Pump Intake From TOC: 44 ft** **Estimated Total Volume Pumped: 6300 ml** **Flow Cell Volume: 90 ml** **Final Flow Rate: 105 ml/min** **Final Draw Down: 1.41 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 1082817**

Test Notes:

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 5	+/- 5 %	+/- 0.2	+/- 10	+/- 50	+/- 0.3	
5/20/2024 12:20 PM	00:00	6.16 pH	23.88 °C	373.89 µS/cm	0.96 mg/L	1.24 NTU	-87.4 mV	9.63 ft	105.00 ml/min
5/20/2024 12:24 PM	04:00	6.17 pH	23.66 °C	379.25 µS/cm	0.55 mg/L	1.91 NTU	-97.3 mV	10.51 ft	105.00 ml/min
5/20/2024 12:28 PM	08:00	6.17 pH	23.83 °C	378.02 µS/cm	0.48 mg/L	2.39 NTU	-98.5 mV	10.75 ft	105.00 ml/min
5/20/2024 12:32 PM	12:00	6.17 pH	23.92 °C	375.85 µS/cm	0.41 mg/L	7.67 NTU	-97.1 mV	10.98 ft	105.00 ml/min
5/20/2024 12:36 PM	16:00	6.16 pH	24.55 °C	380.18 µS/cm	0.41 mg/L	15.10 NTU	-95.1 mV	11.04 ft	105.00 ml/min
5/20/2024 12:40 PM	20:00	6.17 pH	25.36 °C	377.26 µS/cm	0.42 mg/L	8.41 NTU	-93.8 mV	11.04 ft	105.00 ml/min
5/20/2024 12:44 PM	24:00	6.18 pH	24.21 °C	368.38 µS/cm	0.43 mg/L	18.70 NTU	-92.9 mV	11.04 ft	105.00 ml/min
5/20/2024 12:48 PM	28:00	6.18 pH	23.38 °C	373.36 µS/cm	0.34 mg/L	23.10 NTU	-94.8 mV	11.04 ft	105.00 ml/min
5/20/2024 12:52 PM	32:00	6.18 pH	23.41 °C	375.70 µS/cm	0.30 mg/L	17.40 NTU	-95.4 mV	11.04 ft	105.00 ml/min
5/20/2024 12:56 PM	36:00	6.19 pH	23.45 °C	361.29 µS/cm	0.29 mg/L	22.10 NTU	-85.1 mV	11.04 ft	105.00 ml/min
5/20/2024 1:00 PM	40:00	6.19 pH	23.52 °C	346.27 µS/cm	0.30 mg/L	15.20 NTU	-69.5 mV	11.04 ft	105.00 ml/min
5/20/2024 1:04 PM	44:00	6.19 pH	23.89 °C	343.89 µS/cm	0.34 mg/L	8.30 NTU	-65.0 mV	11.04 ft	105.00 ml/min
5/20/2024 1:08 PM	48:00	6.19 pH	23.92 °C	341.95 µS/cm	0.36 mg/L	7.72 NTU	-63.5 mV	11.04 ft	105.00 ml/min
5/20/2024 1:12 PM	52:00	6.20 pH	23.64 °C	339.50 µS/cm	0.36 mg/L	9.33 NTU	-62.9 mV	11.04 ft	105.00 ml/min
5/20/2024 1:16 PM	56:00	6.20 pH	23.57 °C	335.44 µS/cm	0.37 mg/L	10.80 NTU	-53.3 mV	11.04 ft	105.00 ml/min

5/20/2024 1:20 PM	01:00:00	6.20 pH	23.23 °C	338.02 µS/cm	0.37 mg/L	4.21 NTU	-48.7 mV	11.04 ft	105.00 ml/min

Samples

Sample ID:	Description:
MCD-DGWC-121	

Created using VuSitu from In-Situ, Inc.

APPENDIX A

Instrument Calibration Records
September 2023

Site Name: Plant McDonough

Field Instrumentation Calibration Form

Date: 9/6

Calibrated By: D. Bloomfield

Field Conditions: Sunny, 80°F

Instrument	Manufactuer/ Model	Serial Number
Water Quality Meter	Aquaread	983553
Turbidity Meter	2100Q IntelliCAL	22090D0082 39

Calibration Standard Information				
Parameter	Standard	Lot #	Date of Expiration	Brand
Specific Conductance (µS/cm)	4,490	24000094	5/24	AIR
pH (SU)	4.00	"	"	
pH (SU)	7.00	22290139	04/24	
pH (SU)	10.00	22110130	04/24	
D.O. (%)	N/A	24000044	05/24	
ORP (mV)	228.0	24002258	06/24	

Calibration					
Time Start 0750			Time Finish 0815		
Parameter	Standard	Calibration Value	Calibration Solution Temperature (°C)	Acceptance Criteria	Reference
Specific Conductance (µS/cm)	4,490	4185.5	22.04	± 10% of standard	EPA 2023
pH (SU)	4.00	4.01	22.19	± 0.1	GWMP
pH (SU)	7.00	6.95	22.51	± 0.1	GWMP
pH (SU)	10.00	10.31	22.98	± 0.1	GWMP
D.O. (%)	N/A	98.86	22.04	± 10%	NA
ORP (mV)	228.0	226.6	22.82	± 10	EPA 2023

	Standard	Calibration Value	Acceptance Criteria	Reference
Turbidity (NTU)	20	19.8	± 10% of standard	EPA 2023
	100	98.4		
	800	801		
	10	10.3		

Calibration Check					
Time Start 1521			Time Finish 1530		
Parameter	Standard	Calibration Value	Calibration Solution Temperature (°C)	Acceptance Criteria	Reference
Specific Conductance (µS/cm)	4,490	4320.6	25.00	± 10% of standard	EPA 2023
pH (SU)	4.00	4.07	37.15	± 0.1	GWMP
pH (SU)	7.00	7.03	34.85	± 0.1	GWMP
pH (SU)	10.00	9.94	34.77	± 0.1	GWMP

	Standard	Calibration Value	Acceptance Criteria	Reference
Turbidity (NTU)	20	19.7	± 10% of standard	EPA 2023
	100	98.7		
	800	793		
	10	9.05		

Notes:

Site Name: Plant McDonough

Field Instrumentation Calibration Form

Date: 9/7/23

Calibrated By: D. Bloomfield

Field Conditions: Sunny, 80°F

Instrument	Manufactuer/ Model	Serial Number
Water Quality Meter	Aquaprobe	883553
Turbidity Meter	2100QHACH	22090D000239

Calibration Standard Information				
Parameter	**Standard**	**Lot #**	**Date of Expiration**	**Brand**
Specific Conductance (µS/cm)	4,490			
pH (SU)	4.00			
pH (SU)	7.00			
pH (SU)	10.00			
D.O. (%)	N/A			
ORP (mV)	228.0			

same as previous

Calibration					
Time Start 0855		**Time Finish** 0910			
Parameter	**Standard**	**Calibration Value**	**Calibration Solution Temperature (°C)**	**Acceptance Criteria**	**Reference**
Specific Conductance (µS/cm)	4,490	4572.3	25.16	± 10% of standard	EPA 2023
pH (SU)	4.00	4.04	25.14	± 0.1	GWMP
pH (SU)	7.00	6.96	26.44	± 0.1	GWMP
pH (SU)	10.00	9.95	27.37	± 0.1	GWMP
D.O. (%)	N/A	96.57	25.15	± 10%	NA
ORP (mV)	228.0	219.1	27.75	± 10	EPA 2023

	Standard	**Calibration Value**	**Acceptance Criteria**	**Reference**
Turbidity (NTU)	20	18.0	± 10% of standard	EPA 2023
	100	90.2		
	800	812		
	10	9.77		

Calibration Check					
Time Start 1730		**Time Finish** 1745			
Parameter	**Standard**	**Calibration Value**	**Calibration Solution Temperature (°C)**	**Acceptance Criteria**	**Reference**
Specific Conductance (µS/cm)	4,490	4654.3	34.50	± 10% of standard	EPA 2023
pH (SU)	4.00	4.00	35.18	± 0.1	GWMP
pH (SU)	7.00	6.98	35.03	± 0.1	GWMP
pH (SU)	10.00	9.92	35.18	± 0.1	GWMP

	Standard	**Calibration Value**	**Acceptance Criteria**	**Reference**
Turbidity (NTU)	20	20.6	± 10% of standard	EPA 2023
	100	100		
	800	807		
	10	10.6		

Notes:

Site Name: Plant McDonough

Field Instrumentation Calibration Form

Date: 9/8

Calibrated By: D. Bicomfield

Field Conditions: 65° sunny

Instrument	Manufactuer/ Model	Serial Number
Water Quality Meter	Aquatroll	885553
Turbidity Meter	HACH 2100Q	22090000739

Calibration Standard Information				
Parameter	Standard	Lot #	Date of Expiration	Brand
Specific Conductance (µS/cm)	4,490	2400044	5/24	YSI
pH (SU)	4.00	"	"	"
pH (SU)	7.00	22200139	4/24	"
pH (SU)	10.00	22110132	4/24	"
D.O. (%)	N/A	2400044	5/24	"
ORP (mV)	228.0	24002258	6/24	"

Calibration					
Time Start 0745			Time Finish 0800		
Parameter	Standard	Calibration Value	Calibration Solution Temperature (°C)	Acceptance Criteria	Reference
Specific Conductance (µS/cm)	4,490	4366.9	24.33	± 10% of standard	EPA 2023
pH (SU)	4.00	4.10	24.03	± 0.1	GWMP
pH (SU)	7.00	7.01	24.44	± 0.1	GWMP
pH (SU)	10.00	9.99	25.06	± 0.1	GWMP
D.O. (%)	N/A	99.7	24.65	± 10%	NA
ORP (mV)	228.0	228.8	24.61	± 10	EPA 2023

	Standard	Calibration Value	Acceptance Criteria	Reference
Turbidity (NTU)	20	22.2	± 10% of standard	EPA 2023
	100	104		
	800	802		
	10	9.7		

Calibration Check					
Time Start			Time Finish		
Parameter	Standard	Calibration Value	Calibration Solution Temperature (°C)	Acceptance Criteria	Reference
Specific Conductance (µS/cm)	4,490			± 10% of standard	EPA 2023
pH (SU)	4.00			± 0.1	GWMP
pH (SU)	7.00			± 0.1	GWMP
pH (SU)	10.00			± 0.1	GWMP

	Standard	Calibration Value	Acceptance Criteria	Reference
Turbidity (NTU)			± 10% of standard	EPA 2023

Notes: Last sample before 12pm - no cal check

Site Name: Plant McDonough

Field Instrumentation Calibration Form

Date: 9/12/23

Calibrated By: D. Bloomfield

Field Conditions: sunny, 80°F

Instrument	Manufactuer/ Model	Serial Number
Water Quality Meter	Quadrell	883553
Turbidity Meter	HACH 2100Q	22090D00239

Calibration Standard Information				
Parameter	Standard	Lot #	Date of Expiration	Brand
Specific Conductance (µS/cm)	4,490	2400044	5/24	AIR
pH (SU)	4.00	"	"	
pH (SU)	7.00	22200139	4/24	
pH (SU)	10.00	22110130	4/24	
D.O. (%)	N/A	2400044	5/24	
ORP (mV)	228.0	2400 2258	6/24	

Calibration					
Time Start 810		Time Finish 0825			
Parameter	Standard	Calibration Value	Calibration Solution Temperature (°C)	Acceptance Criteria	Reference
Specific Conductance (µS/cm)	4,490	4606.5	25.87	± 10% of standard	EPA 2023
pH (SU)	4.00	3.99	25.82	± 0.1	GWMP
pH (SU)	7.00	6.98	26.42	± 0.1	GWMP
pH (SU)	10.00	9.96	26.32	± 0.1	GWMP
D.O. (%)	N/A	103.99	25.82	± 10%	NA
ORP (mV)	228.0	225.3	27.06	± 10	EPA 2023

	Standard	Calibration Value	Acceptance Criteria	Reference
Turbidity (NTU)	20	20.1	± 10% of standard	EPA 2023
	100	97.6		
	800	796		
	10	10.1		

Calibration Check					
Time Start		Time Finish			
Parameter	Standard	Calibration Value	Calibration Solution Temperature (°C)	Acceptance Criteria	Reference
Specific Conductance (µS/cm)	4,490			± 10% of standard	EPA 2023
pH (SU)	4.00			± 0.1	GWMP
pH (SU)	7.00			± 0.1	GWMP
pH (SU)	10.00			± 0.1	GWMP

	Standard	Calibration Value	Acceptance Criteria	Reference
Turbidity (NTU)			± 10% of standard	EPA 2023

Notes: pumped on same well from 10 am ~ 3:30 pm, no cal check

Site Name: Plant McDonough

Field Instrumentation Calibration Form

Date: 2/13/23

Calibrated By: D. Bloomfield

Field Conditions: Rainy, 70°F

Instrument	Manufactuer/ Model	Serial Number
Water Quality Meter	AQUA TROLL	803555
Turbidity Meter	HACH 2100Q	22040D002349

Calibration Standard Information				
Parameter	Standard	Lot #	Date of Expiration	Brand
Specific Conductance (µS/cm)	4,490	2400044	5/24	YSI
pH (SU)	4.00	1,	"	"
pH (SU)	7.00	22001139	4/24	"
pH (SU)	10.00	22101130	4/24	"
D.O. (%)	N/A	2400044	5/24	"
ORP (mV)	228.0	24002258	6/24	"

Calibration					
Time Start 0805		Time Finish 0820			
Parameter	Standard	Calibration Value	Calibration Solution Temperature (°C)	Acceptance Criteria	Reference
Specific Conductance (µS/cm)	4,490	4376.2	24.42	± 10% of standard	EPA 2023
pH (SU)	4.00	4.02	24.42	± 0.1	GWMP
pH (SU)	7.00	6.98	24.82	± 0.1	GWMP
pH (SU)	10.00	10.05	24.96	± 0.1	GWMP
D.O. (%)	N/A	98.00	25.06	± 10%	NA
ORP (mV)	228.0	230.5	24.96	± 10	EPA 2023

	Standard	Calibration Value	Acceptance Criteria	Reference
Turbidity (NTU)	20	21.1	± 10% of standard	EPA 2023
	100	100		
	900	785		
	10	9.86		

Calibration Check					
Time Start 1503		Time Finish 1515			
Parameter	Standard	Calibration Value	Calibration Solution Temperature (°C)	Acceptance Criteria	Reference
Specific Conductance (µS/cm)	4,490	4474.8	29.62	± 10% of standard	EPA 2023
pH (SU)	4.00	4.03	29.70	± 0.1	GWMP
pH (SU)	7.00	6.99	29.13	± 0.1	GWMP
pH (SU)	10.00	9.94	28.63	± 0.1	GWMP

	Standard	Calibration Value	Acceptance Criteria	Reference
Turbidity (NTU)	20	20.2	± 10% of standard	EPA 2023
	100	107		
	800	817		
	10	9.41		

Notes:

Site Name: Plant McDonough

Field Instrumentation Calibration Form

Date: 09/06/23

Calibrated By: P Wani

Field Conditions: Sunny

Instrument	Manufactuer/ Model	Serial Number
Water Quality Meter	AQUAREOII 400	980712
Turbidity Meter	HACH 2100Q	22090000086

Calibration Standard Information				
Parameter	Standard	Lot #	Date of Expiration	Brand
Specific Conductance (µS/cm)	4,490	24000414	05/2024	Atlanta Instrument Rentals (AIR)
pH (SU)	4.00	24000414	05/2024	AIR
pH (SU)	7.00	22290139	04/2024	AIR
pH (SU)	10.00	2132 0202	12/2023	AIR
D.O. (%)	N/A	—	—	—
ORP (mV)	228.0	21390144	11/2023	AIR

Calibration					
Time Start 0757		Time Finish 0820			
Parameter	Standard	Calibration Value	Calibration Solution Temperature (°C)	Acceptance Criteria	Reference
Specific Conductance (µS/cm)	4,490	4225.6	24.63	± 10% of standard	EPA 2023
pH (SU)	4.00	PW ~~4.04~~ 4.10	PW ~~24.69~~ 25.27	± 0.1	GWMP
pH (SU)	7.00	PW ~~6.98~~ 6.99	PW ~~25.24~~ 25.27	± 0.1	GWMP
pH (SU)	10.00	9.99	25.41	± 0.1	GWMP
D.O. (%)	N/A	106.70	24.96	± 10%	NA
ORP (mV)	228.0	221.2	25.39	± 10	EPA 2023

	Standard	Calibration Value	Acceptance Criteria	Reference
Turbidity (NTU)	20	20.1	± 10% of standard	EPA 2023
	100	100		
	800	715		
	10	9.73		

Calibration Check					
Time Start ~~0~~ 1350		Time Finish 1410			
Parameter	Standard	Calibration Value	Calibration Solution Temperature (°C)	Acceptance Criteria	Reference
Specific Conductance (µS/cm)	4,490	4450.6	40.48	± 10% of standard	EPA 2023
pH (SU)	4.00	4.02	40.50	± 0.1	GWMP
pH (SU)	7.00	6.98	38.47	± 0.1	GWMP
pH (SU)	10.00	9.93	36.60	± 0.1	GWMP

	Standard	Calibration Value	Acceptance Criteria	Reference
Turbidity (NTU)	10	9.74	± 10% of standard	EPA 2023

Notes:

Field Instrumentation Calibration Form

Site Name: Plant McDonough 4 Date: 09/07/23

Calibrated By: P Wani Field Conditions: Sunny 75°F

Instrument	Manufactuer/ Model	Serial Number
Water Quality Meter	Aquaread 400	980712
Turbidity Meter	HACH 2100Q	22090000086

Calibration Standard Information				
Parameter	Standard	Lot #	Date of Expiration	Brand
Specific Conductance (µS/cm)	4,490	21000044	05/2024	Atlanta Instrument Rental (AIR)
pH (SU)	4.00	24000044	05/2024	AIR
pH (SU)	7.00	22290139	04/2024	AIR
pH (SU)	10.00	21320202	12/2023	AIR
D.O. (%)	N/A	—	—	—
ORP (mV)	228.0	21390144	11/2023	AIR

Calibration					
Time Start ~~0935~~ 0800		Time Finish 0830			
Parameter	Standard	Calibration Value	Calibration Solution Temperature (°C)	Acceptance Criteria	Reference
Specific Conductance (µS/cm)	4,490	4477.7	27.82	± 10% of standard	EPA 2023
pH (SU)	4.00	PW ~~4.00~~ 4.04	PW ~~27.90~~ 26.41	± 0.1	GWMP
pH (SU)	7.00	6.99	26.59	± 0.1	GWMP
pH (SU)	10.00	10.00	26.17	± 0.1	GWMP
D.O. (%)	N/A	99.91	PW ~~27~~ 26.56	± 10%	NA
ORP (mV)	228.0	223.9	27.26	± 10	EPA 2023

	Standard	Calibration Value	Acceptance Criteria	Reference
Turbidity (NTU)	20	21.4	± 10% of standard	EPA 2023
	100	104		
	~~800~~	807		
	10	9.85		

Calibration Check					
Time Start 1500		Time Finish 1515			
Parameter	Standard	Calibration Value	Calibration Solution Temperature (°C)	Acceptance Criteria	Reference
Specific Conductance (µS/cm)	4,490	4556.3	37.59	± 10% of standard	EPA 2023
pH (SU)	4.00	4.09	37.90	± 0.1	GWMP
pH (SU)	7.00	7.00	36.31	± 0.1	GWMP
pH (SU)	10.00	9.95	34.62	± 0.1	GWMP

	Standard	Calibration Value	Acceptance Criteria	Reference
Turbidity (NTU)	10	9.73	± 10% of standard	EPA 2023

Notes:

Site Name: Plant McDonough

Field Instrumentation Calibration Form

Date: 09/08/23

Calibrated By: P Wahl

Field Conditions: Sunny 65°F

Instrument	Manufactuer/ Model	Serial Number
Water Quality Meter	Aquatrol 400	980712
Turbidity Meter	HACH 2100 Q	22090000096

Calibration Standard Information

Parameter	Standard	Lot #	Date of Expiration	Brand
Specific Conductance (µS/cm)	4,490	24000044	05/2024	Atlanta Instrument Rentals (AIR)
pH (SU)	4.00	24000044	05/2024	AIR
pH (SU)	7.00	22290039	01/2024	AIR
pH (SU)	10.00	21320202	12/2023	AIR
D.O. (%)	N/A	—	—	—
ORP (mV)	228.0	21390144	11/2023	AIR

Calibration

Time Start 0800 Time Finish 0830

Parameter	Standard	Calibration Value	Calibration Solution Temperature (°C)	Acceptance Criteria	Reference
Specific Conductance (µS/cm)	4,490	4407.8	25.34	± 10% of standard	EPA 2023
pH (SU)	4.00	4.06	25.24	± 0.1	GWMP
pH (SU)	7.00	6.97	25.05	± 0.1	GWMP
pH (SU)	10.00	9.96	25.44	± 0.1	GWMP
D.O. (%)	N/A	100.31	23.83	± 10%	NA
ORP (mV)	228.0	230.1	25.64	± 10	EPA 2023

	Standard	Calibration Value	Acceptance Criteria	Reference
Turbidity (NTU)	20	20.6	± 10% of standard	EPA 2023
	100	99.3		
	800	800		
	10	9.40		

Calibration Check

Time Start 1251 Time Finish 1300

Parameter	Standard	Calibration Value	Calibration Solution Temperature (°C)	Acceptance Criteria	Reference
Specific Conductance (µS/cm)	4,490			± 10% of standard	EPA 2023
pH (SU)	4.00	4.01	36.54	± 0.1	GWMP
pH (SU)	7.00	6.99	34.21	± 0.1	GWMP
pH (SU)	10.00	9.94	32.06	± 0.1	GWMP

	Standard	Calibration Value	Acceptance Criteria	Reference
Turbidity (NTU)			± 10% of standard	EPA 2023

Notes:

Site Name: Plant McDonough

Field Instrumentation Calibration Form

Date: 9/11/23

Calibrated By: P Wahl

Field Conditions: Sunny 68°F

Instrument	Manufactuer/ Model	Serial Number
Water Quality Meter	Aquatroll 400	980712
Turbidity Meter	HACH 2100Q	22090000086

Calibration Standard Information				
Parameter	Standard	Lot #	Date of Expiration	Brand
Specific Conductance (µS/cm)	4,490	24000044	05/2024	Atlanta Instrument Rentals (AIR)
pH (SU)	4.00	24000044	05/2024	AIR
pH (SU)	7.00	22290139	04/2024	AIR
pH (SU)	10.00	21320202	12/2023	AIR
D.O. (%)	N/A	—	—	—
ORP (mV)	228.0	21390149	11/2023	AIR

Calibration					
Time Start 0749			Time Finish 0805		
Parameter	Standard	Calibration Value	Calibration Solution Temperature (°C)	Acceptance Criteria	Reference
Specific Conductance (µS/cm)	4,490	4464.7	22.00	± 10% of standard	EPA 2023
pH (SU)	4.00	4.02	22.01	± 0.1	GWMP
pH (SU)	7.00	7.01	22.04	± 0.1	GWMP
pH (SU)	10.00	9.99	22.08	± 0.1	GWMP
D.O. (%)	N/A	99.04	21.82	± 10%	NA
ORP (mV)	228.0	233.8	22.05	± 10	EPA 2023

	Standard	Calibration Value	Acceptance Criteria	Reference
Turbidity (NTU)	20	19.9	± 10% of standard	EPA 2023
	100	100		
	800	787		
	10	9.69		

Calibration Check					
Time Start 1253			Time Finish		
Parameter	Standard	Calibration Value	Calibration Solution Temperature (°C)	Acceptance Criteria	Reference
Specific Conductance (µS/cm)	4,490	4466.6	40.23	± 10% of standard	EPA 2023
pH (SU)	4.00	4.07	40.12	± 0.1	GWMP
pH (SU)	7.00	7.00	37.64	± 0.1	GWMP
pH (SU)	10.00	9.96	34.92	± 0.1	GWMP

	Standard	Calibration Value	Acceptance Criteria	Reference
Turbidity (NTU)	10	9.70	± 10% of standard	EPA 2023

Notes:

Site Name: Plant McDonough

Field Instrumentation Calibration Form

Date: 9/12/23

Calibrated By: P Wahl

Field Conditions: Sunny 70°F

Instrument	Manufactuer/ Model	Serial Number
Water Quality Meter	Aquatroll 400	480712
Turbidity Meter	HACH 2100Q	22090000008

Calibration Standard Information				
Parameter	Standard	Lot #	Date of Expiration	Brand
Specific Conductance (µS/cm)	4,490	24000044	05/2024	Atlanta Instrument Rentals (AIR)
pH (SU)	4.00	24000044	05/2024	AIR
pH (SU)	7.00	22290139	04/2024	AIR
pH (SU)	10.00	21320202	12/2023	AIR
D.O. (%)	N/A	—	—	—
ORP (mV)	228.0	21390144	11/2023	AIR

Calibration					
Time Start 0740		Time Finish 0800			
Parameter	Standard	Calibration Value	Calibration Solution Temperature (°C)	Acceptance Criteria	Reference
Specific Conductanse (µS/cm)	4,490	4513.5	21.32	± 10% of standard	EPA 2023
pH (SU)	4.00	4.00	24.32	± 0.1	GWMP
pH (SU)	7.00	6.95	24.22	± 0.1	GWMP
pH (SU)	10.00	10.00	25.16	± 0.1	GWMP
D.O. (%)	N/A	101.44	24.62	± 10%	NA
ORP (mV)	228.0	221.9	25.18	± 10	EPA 2023

	Standard	Calibration Value	Acceptance Criteria	Reference
Turbidity (NTU)	20	20.1	± 10% of standard	EPA 2023
	100	101		
	800	803		
	10	9.74		

Calibration Check					
Time Start 1245		Time Finish 1250			
Parameter	Standard	Calibration Value	Calibration Solution Temperature (°C)	Acceptance Criteria	Reference
Specific Conductance (µS/cm)	4,490	4648.1	32.20	± 10% of standard	EPA 2023
pH (SU)	4.00	4.09	34.06	± 0.1	GWMP
pH (SU)	7.00	7.05	33.99	± 0.1	GWMP
pH (SU)	10.00	9.98	33.05	± 0.1	GWMP

	Standard	Calibration Value	Acceptance Criteria	Reference
Turbidity (NTU)	10	9.45	± 10% of standard	EPA 2023

Notes:

Site Name: Plant McDonough

Field Instrumentation Calibration Form

Date: 9/13/23

Calibrated By: P Wahl

Field Conditions: Cloudy 70°F

Instrument	Manufactuer/ Model	Serial Number
Water Quality Meter	Aquaread 400	480712
Turbidity Meter	HACH 2100Q	22090000086

Calibration Standard Information				
Parameter	Standard	Lot #	Date of Expiration	Brand
Specific Conductance (µS/cm)	4,490	24000044	05/2024	Atlanta Instrument Rentals (AIR)
pH (SU)	4.00	24000414	05/2024	AIR
pH (SU)	7.00	22290139	04/2024	AIR
pH (SU)	10.00	21320202	12/2023	AIR
D.O. (%)	N/A	—	—	—
ORP (mV)	228.0	23901447	11/2023	AIR

Calibration					
Time Start 0815		Time Finish			
Parameter	Standard	Calibration Value	Calibration Solution Temperature (°C)	Acceptance Criteria	Reference
Specific Conductance (µS/cm)	4,490	4455.1	22.79	± 10% of standard	EPA 2023
pH (SU)	4.00	4.03	22.79	± 0.1	GWMP
pH (SU)	7.00	6.98	23.45	± 0.1	GWMP
pH (SU)	10.00	10.01	23.88	± 0.1	GWMP
D.O. (%)	N/A	98.30	23.75	± 10%	NA
ORP (mV)	228.0	229.5	24.04	± 10	EPA 2023

	Standard	Calibration Value	Acceptance Criteria	Reference
Turbidity (NTU)	10	9.70	± 10% of standard	EPA 2023
	20	19.8		
	100	99.7		
	800	787		

Calibration Check					
Time Start 1358		Time Finish 1405			
Parameter	Standard	Calibration Value	Calibration Solution Temperature (°C)	Acceptance Criteria	Reference
Specific Conductance (µS/cm)	4,490	4444.0	32.90	± 10% of standard	EPA 2023
pH (SU)	4.00	4.04	32.79	± 0.1	GWMP
pH (SU)	7.00	7.06	31.20	± 0.1	GWMP
pH (SU)	10.00	9.97	30.49	± 0.1	GWMP

	Standard	Calibration Value	Acceptance Criteria	Reference
Turbidity (NTU)	10	9.54	± 10% of standard	EPA 2023

Notes:

Site Name: PLANT MCDONOUGH

Field Instrumentation Calibration Form

Date: 09/06/23

Calibrated By: M. MANN

Field Conditions: NOMINAL

Instrument	Manufactuer/ Model	Serial Number
Water Quality Meter	In-Situ	965586
Turbidity Meter	HACH 2100Q	12050C017705

Calibration Standard Information				
Parameter	Standard	Lot #	Date of Expiration	Brand
Specific Conductance (µS/cm)	4,490	24000044	05/2024	AIR
pH (SU)	4.00	24000044	05/2024	"
pH (SU)	7.00	22901139	04/2024	"
pH (SU)	10.00	22110130	04/2024	"
D.O. (%)	N/A	/	/	"
ORP (mV)	228.0	24002258	06/2024	"

Calibration					
Time Start		Time Finish			
Parameter	Standard	Calibration Value	Calibration Solution Temperature (°C)	Acceptance Criteria	Reference
Specific Conductance (µS/cm)	4,490	4158.8	24.84	± 10% of standard	EPA 2023
pH (SU)	4.00	4.03	25.02	± 0.1	GWMP
pH (SU)	7.00	AM ~~6.92~~ ~~7.07~~	25.28	± 0.1	GWMP
pH (SU)	10.00	10.00	25.82	± 0.1	GWMP
D.O. (%)	N/A	106.6	25.89	± 10%	NA
ORP (mV)	228.0	223.5	25.75	± 10	EPA 2023

	Standard	Calibration Value	Acceptance Criteria	Reference
Turbidity (NTU)	19.8	20	± 10% of standard	EPA 2023
	101	100		
	792	800		
	9.87	10		

Calibration Check					
Time Start 1230		Time Finish 12.37			
Parameter	Standard	Calibration Value	Calibration Solution Temperature (°C)	Acceptance Criteria	Reference
Specific Conductance (µS/cm)	4,490	4095.5	32.04	± 10% of standard	EPA 2023
pH (SU)	4.00	4.03	32.04	± 0.1	GWMP
pH (SU)	7.00	6.97	32.17	± 0.1	GWMP
pH (SU)	10.00	9.93	32.49	± 0.1	GWMP

	Standard	Calibration Value	Acceptance Criteria	Reference
Turbidity (NTU)	10	9.95	± 10% of standard	EPA 2023
	20	19.5		
	100	105		
	800	781		

Notes:

Site Name: PLANT MCDONOUGH

Field Instrumentation Calibration Form

Date: 09/07/23

Calibrated By: M. MANN

Field Conditions: GOOD

Instrument	Manufactuer/ Model	Serial Number
Water Quality Meter	In-Situ	965586
Turbidity Meter	HACH 2100Q	12050C017705

Calibration Standard Information				
Parameter	**Standard**	**Lot #**	**Date of Expiration**	**Brand**
Specific Conductance (µS/cm)	4,490	24000044	05/2024	AIR
pH (SU)	4.00	↓	↓	↓
pH (SU)	7.00	2290139	04/2024	
pH (SU)	10.00	22110130	04/2024	
D.O. (%)	N/A	/	/	
ORP (mV)	228.0	24002258	06/2024	

Calibration					
Time Start		**Time Finish**			
Parameter	**Standard**	**Calibration Value**	**Calibration Solution Temperature (°C)**	**Acceptance Criteria**	**Reference**
Specific Conductance (µS/cm)	4,490	4227.5	23.20	± 10% of standard	EPA 2023
pH (SU)	4.00	4.07	23.24	± 0.1	GWMP
pH (SU)	7.00	6.92	23.92	± 0.1	GWMP
pH (SU)	10.00	9.97	24.42	± 0.1	GWMP
D.O. (%)	N/A	99.12	25.52	± 10%	NA
ORP (mV)	228.0	230.7	24.62	± 10	EPA 2023

	Standard	**Calibration Value**	**Acceptance Criteria**	**Reference**
Turbidity (NTU)	20	19.9	± 10% of standard	EPA 2023
	100	99.8		
	800	801		
	10	9.84		

Calibration Check					
Time Start 1251		**Time Finish** 1255			
Parameter	**Standard**	**Calibration Value**	**Calibration Solution Temperature (°C)**	**Acceptance Criteria**	**Reference**
Specific Conductance (µS/cm)	4,490	4429.2	31.28	± 10% of standard	EPA 2023
pH (SU)	4.00	4.02	31.28	± 0.1	GWMP
pH (SU)	7.00	7.01	31.46	± 0.1	GWMP
pH (SU)	10.00	9.93	30.54	± 0.1	GWMP

	Standard	**Calibration Value**	**Acceptance Criteria**	**Reference**
Turbidity (NTU)	10	10.2	± 10% of standard	EPA 2023
	20	20.9		
	100	109		
	800	795		

Notes:

Site Name: PLANT MCDONOUGH

Field Instrumentation Calibration Form

Date: 09/08/23

Calibrated By: M. MANN

Field Conditions: GOOD

Instrument	Manufactuer/ Model	Serial Number
Water Quality Meter	In-Situ AQUATROLL	965586
Turbidity Meter	HACH 2100D	120500017705

Calibration Standard Information				
Parameter	Standard	Lot #	Date of Expiration	Brand
Specific Conductance (µS/cm)	4,490	24000044	05/2024	AIR
pH (SU)	4.00	↓	↓	↓
pH (SU)	7.00	2290139	~~2290139~~ 04/2024	
pH (SU)	10.00	22110130	04/2024	
D.O. (%)	N/A			
ORP (mV)	228.0	24002258	06/2024	

Calibration					
Time Start		Time Finish			
Parameter	Standard	Calibration Value	Calibration Solution Temperature (°C)	Acceptance Criteria	Reference
Specific Conductance (µS/cm)	4,490	4318.3	22.68	± 10% of standard	EPA 2023
pH (SU)	4.00	3.99	22.68	± 0.1	GWMP
pH (SU)	7.00	6.98	23.47	± 0.1	GWMP
pH (SU)	10.00	9.96	23.62	± 0.1	GWMP
D.O. (%)	N/A	98.40	22.08	± 10%	NA
ORP (mV)	228.0	228.1	23.57	± 10	EPA 2023

	Standard	Calibration Value	Acceptance Criteria	Reference
Turbidity (NTU)	20	19.7	± 10% of standard	EPA 2023
	100	101		
	800	798		
	10	10.2		

Calibration Check					
Time Start		Time Finish			
Parameter	Standard	Calibration Value	Calibration Solution Temperature (°C)	Acceptance Criteria	Reference
Specific Conductance (µS/cm)	4,490			± 10% of standard	EPA 2023
pH (SU)	4.00			± 0.1	GWMP
pH (SU)	7.00			± 0.1	GWMP
pH (SU)	10.00			± 0.1	GWMP

	Standard	Calibration Value	Acceptance Criteria	Reference
Turbidity (NTU)			± 10% of standard	EPA 2023

Notes:

Site Name: PLANT MCDONOUGH **Field Instrumentation Calibration Form** Date: 09/11/23

Calibrated By: M. MANN Field Conditions: GOOD

Instrument	Manufactuer/ Model	Serial Number
Water Quality Meter	In-Situ AQuaTroll	965586
Turbidity Meter	HACH 2100Q	12050C017705

Calibration Standard Information				
Parameter	Standard	Lot #	Date of Expiration	Brand
Specific Conductance (µS/cm)	4,490	24000044	05/2024	AIR
pH (SU)	4.00	↓	↓	↓
pH (SU)	7.00	2290139	04/2024	
pH (SU)	10.00	22110130	04/2024	
D.O. (%)	N/A	/	/	
ORP (mV)	228.0	24002258	06/2024	

Calibration					
Time Start		Time Finish			
Parameter	Standard	Calibration Value	Calibration Solution Temperature (°C)	Acceptance Criteria	Reference
Specific Conductance (µS/cm)	4,490	4341.7	22.98	± 10% of standard	EPA 2023
pH (SU)	4.00	4.03	22.98	± 0.1	GWMP
pH (SU)	7.00	7.01	23.13	± 0.1	GWMP
pH (SU)	10.00	10.06	23.29	± 0.1	GWMP
D.O. (%)	N/A	100.16	23.25	± 10%	NA
ORP (mV)	228.0	228.0	23.38	± 10	EPA 2023

	Standard	Calibration Value	Acceptance Criteria	Reference
Turbidity (NTU)	20	21.9	± 10% of standard	EPA 2023
	100	105		
	800	823		
	10	9.94		

Calibration Check					
Time Start	1258	Time Finish	1304		
Parameter	Standard	Calibration Value	Calibration Solution Temperature (°C)	Acceptance Criteria	Reference
Specific Conductance (µS/cm)	4,490	4243.0	33.81	± 10% of standard	EPA 2023
pH (SU)	4.00	4.09	33.81	± 0.1	GWMP
pH (SU)	7.00	7.05	32.55	± 0.1	GWMP
pH (SU)	10.00	9.92	33.82	± 0.1	GWMP

	Standard	Calibration Value	Acceptance Criteria	Reference
Turbidity (NTU)	10	9.32	± 10% of standard	EPA 2023
	20	19.8		
	100	94.1		
	800	788		

Notes:

Site Name: PLANT McDONOUGH

Field Instrumentation Calibration Form

Date: 9/12/23

Calibrated By: M. MANN

Field Conditions: GOOD

Instrument	Manufactuer/ Model	Serial Number
Water Quality Meter	YSI-556 AQUATROLL	965586
Turbidity Meter	HACH 2100Q	12050C017705

Calibration Standard Information				
Parameter	Standard	Lot #	Date of Expiration	Brand
Specific Conductance (µS/cm)	4,490	24000044	05/2024	AII
pH (SU)	4.00	24000044	05/2024	↓
pH (SU)	7.00	~~22110130~~	04/2024	↓
pH (SU)	10.00	22110130	04/2024	↓
D.O. (%)	N/A	/	/	↓
ORP (mV)	228.0	24002258	06/2024	↓

LOT # 22110134

Calibration					
Time Start 910		Time Finish			
Parameter	Standard	Calibration Value	Calibration Solution Temperature (°C)	Acceptance Criteria	Reference
Specific Conductance (µS/cm)	4,490	4584.4	24.10	± 10% of standard	EPA 2023
pH (SU)	4.00	4.03	24.12	± 0.1	GWMP
pH (SU)	7.00	6.98	25.00	± 0.1	GWMP
pH (SU)	10.00	9.91	25.55	± 0.1	GWMP
D.O. (%)	N/A	104.05	25.32	± 10%	NA
ORP (mV)	228.0	223.5	25.59	± 10	EPA 2023

	Standard	Calibration Value	Acceptance Criteria	Reference
Turbidity (NTU)	20	22.0	± 10% of standard	EPA 2023
	100	109		
	800	822		
	10	9.86		

Calibration Check					
Time Start 1447		Time Finish 1451			
Parameter	Standard	Calibration Value	Calibration Solution Temperature (°C)	Acceptance Criteria	Reference
Specific Conductance (µS/cm)	4,490	4435.4	32.20	± 10% of standard	EPA 2023
pH (SU)	4.00	4.09	↓	± 0.1	GWMP
pH (SU)	7.00	7.00	32.06	± 0.1	GWMP
pH (SU)	10.00	9.94	31.48	± 0.1	GWMP

	Standard	Calibration Value	Acceptance Criteria	Reference
Turbidity (NTU)	10	10.5	± 10% of standard	EPA 2023
	20	20.1		
	800	746		
	100	93.2		

Notes:

Site Name: PLANT McDONOUGH **Field Instrumentation Calibration Form** Date: 9/13/23

Calibrated By: M. MANN Field Conditions: GOOD

Instrument	Manufactuer/ Model	Serial Number
Water Quality Meter	IN-SITU AQUATROLL	965586
Turbidity Meter	HACH 2100Q	~~[illegible]~~ 22090D000235 MM

Calibration Standard Information				
Parameter	Standard	Lot #	Date of Expiration	Brand
Specific Conductance (µS/cm)	4,490	24000044	05/2024	AIR
pH (SU)	4.00	↓	↓	↓
pH (SU)	7.00	2290139	04/2024	
pH (SU)	10.00	22110130	04/2024	
D.O. (%)	N/A	✓	✓	✓
ORP (mV)	228.0	24002258	06/2024	

Calibration					
Time Start 855		Time Finish 913			
Parameter	Standard	Calibration Value	Calibration Solution Temperature (°C)	Acceptance Criteria	Reference
Specific Conductance (µS/cm)	4,490	4368.8	24.06	± 10% of standard	EPA 2023
pH (SU)	4.00	4.08	24.55	± 0.1	GWMP
pH (SU)	7.00	6.96	24.86	± 0.1	GWMP
pH (SU)	10.00	9.98	25.21	± 0.1	GWMP
D.O. (%)	N/A	98.42	~~24.91~~	± 10%	NA
ORP (mV)	228.0	225.4	~~225.4~~ 25.42 MM	± 10	EPA 2023

	Standard	Calibration Value	Acceptance Criteria	Reference
Turbidity (NTU)	20	20.1	± 10% of standard	EPA 2023
	100	99.7		
	800	797		
	10	9.79		

Calibration Check					
Time Start		Time Finish			
Parameter	Standard	Calibration Value	Calibration Solution Temperature (°C)	Acceptance Criteria	Reference
Specific Conductance (µS/cm)	4,490	4383.4	33.79	± 10% of standard	EPA 2023
pH (SU)	4.00	4.02	↓	± 0.1	GWMP
pH (SU)	7.00	7.01	32.36	± 0.1	GWMP
pH (SU)	10.00	9.91	31.37	± 0.1	GWMP

	Standard	Calibration Value	Acceptance Criteria	Reference
Turbidity (NTU)	10	10.2	± 10% of standard	EPA 2023
	20	20.7		
	80	79.3		
	100	790		

Notes:

Site Name: PLANT MCDONOUGH **Field Instrumentation Calibration Form** Date: 9/14/23

Calibrated By: M. MANN Field Conditions: GOOD

Instrument	Manufactuer/ Model	Serial Number
Water Quality Meter	IN-SITU AQUATROLL	965586
Turbidity Meter	HACH 2100Q	22090D000234

Calibration Standard Information				
Parameter	Standard	Lot #	Date of Expiration	Brand
Specific Conductance (µS/cm)	4,490	24000444	05/2024	AIR
pH (SU)	4.00	↓	↓	↓
pH (SU)	7.00	2290139	04/2024	
pH (SU)	10.00	22110130	04/2024	
D.O. (%)	N/A	/	/	
ORP (mV)	228.0	24002258	06/2024	

Calibration					
Time Start		Time Finish			
Parameter	Standard	Calibration Value	Calibration Solution Temperature (°C)	Acceptance Criteria	Reference
Specific Conductance (µS/cm)	4,490	4360.7	23.66	± 10% of standard	EPA 2023
pH (SU)	4.00	3.99	23.70	± 0.1	GWMP
pH (SU)	7.00	6.98	24.51	± 0.1	GWMP
pH (SU)	10.00	9.93	25.14	± 0.1	GWMP
D.O. (%)	N/A	99.28	24.51	± 10%	NA
ORP (mV)	228.0	219.4	25.14	± 10	EPA 2023

	Standard	Calibration Value	Acceptance Criteria	Reference
Turbidity (NTU)	20	20.0	± 10% of standard	EPA 2023
	100	101		
	800	805		
	10	9.84		

Calibration Check					
Time Start		Time Finish			
Parameter	Standard	Calibration Value	Calibration Solution Temperature (°C)	Acceptance Criteria	Reference
Specific Conductance (µS/cm)	4,490			± 10% of standard	EPA 2023
pH (SU)	4.00			± 0.1	GWMP
pH (SU)	7.00			± 0.1	GWMP
pH (SU)	10.00			± 0.1	GWMP

	Standard	Calibration Value	Acceptance Criteria	Reference
Turbidity (NTU)			± 10% of standard	EPA 2023

Notes:

Site Name: Plant McDonough

Field Instrumentation Calibration Form

Date: 9/7/23

Calibrated By: Daniel Howard

Field Conditions: Clear + Sunny

Instrument	Manufactuer/ Model	Serial Number
Water Quality Meter	AquaTroll 400	850751
Turbidity Meter	Hach 2100 Q	23060D000290

Calibration Standard Information				
Parameter	Standard	Lot #	Date of Expiration	Brand
Specific Conductance (µS/cm)	4,490	24000044	5/24	AIR
pH (SU)	4.00	24000044	5/24	↓
pH (SU)	7.00	22290139	4/24	↓
pH (SU)	10.00	22110130	4/24	↓
D.O. (%)	N/A	—	—	—
ORP (mV)	228.0	24002258	6/24	AIR

Calibration					
Time Start		Time Finish			
Parameter	Standard	Calibration Value	Calibration Solution Temperature (°C)	Acceptance Criteria	Reference
Specific Conductance (µS/cm)	4,490	4,490	24.45	± 10% of standard	EPA 2023
pH (SU)	4.00	4.00	24.47	± 0.1	GWMP
pH (SU)	7.00	7.00	24.56	± 0.1	GWMP
pH (SU)	10.00	10.00	24.65	± 0.1	GWMP
D.O. (%)	N/A	7.44	23.23	± 10%	NA
ORP (mV)	228.0	229.7	24.52	± 10	EPA 2023

	Standard	Calibration Value	Acceptance Criteria	Reference
Turbidity (NTU)	20	20.4	± 10% of standard	EPA 2023
	100	101		
	800	803		
CK std →	10	10.1		

Calibration Check					
Time Start	1301 ~~131~~	Time Finish	1315		
Parameter	Standard	Calibration Value	Calibration Solution Temperature (°C)	Acceptance Criteria	Reference
Specific Conductance (µS/cm)	4,490	4.53	31.44	± 10% of standard	EPA 2023
pH (SU)	4.00	4.04	31.43	± 0.1	GWMP
pH (SU)	7.00	7.03	31.47	± 0.1	GWMP
pH (SU)	10.00	9.96	31.48	± 0.1	GWMP

	Standard	Calibration Value	Acceptance Criteria	Reference
Turbidity (NTU)	10	10.3	± 10% of standard	EPA 2023

Notes:

Site Name: Plant McDonough

Calibrated By: Daniel Howard

Field Instrumentation Calibration Form

Date: 9/8/23

Field Conditions: Partly Sunny

Instrument	Manufactuer/ Model	Serial Number
Water Quality Meter	AquaTroll 400	850751
Turbidity Meter	Hach 2100 Q	23060D000298

Calibration Standard Information				
Parameter	Standard	Lot #	Date of Expiration	Brand
Specific Conductance (µS/cm)	4,490	24000044	5/24	AIA
pH (SU)	4.00	24000044	5/24	↓
pH (SU)	7.00	22290139	4/24	↓
pH (SU)	10.00	22110130	4/24	↓
D.O. (%)	N/A	—	—	—
ORP (mV)	228.0	24002258	6/24	AIR

Calibration					
Time Start		Time Finish			
Parameter	Standard	Calibration Value	Calibration Solution Temperature (°C)	Acceptance Criteria	Reference
Specific Conductance (µS/cm)	4,490	4490	23.03	± 10% of standard	EPA 2023
pH (SU)	4.00	4.00	23.48	± 0.1	GWMP
pH (SU)	7.00	7.00	23.63	± 0.1	GWMP
pH (SU)	10.00	10.00	23.72	± 0.1	GWMP
D.O. (%)	N/A 7.70	~~231.1740~~	20.96	± 10%	NA
ORP (mV)	228.0	231.1	23.51	± 10	EPA 2023

	Standard	Calibration Value	Acceptance Criteria	Reference
Turbidity (NTU)	20	20.1	± 10% of standard	EPA 2023
	100	99.7		
	800	802		
ck std	10	10.2		

Calibration Check					
Time Start	1140	Time Finish	1155		
Parameter	Standard	Calibration Value	Calibration Solution Temperature (°C)	Acceptance Criteria	Reference
Specific Conductance (µS/cm)	4,490	4440	24.89	± 10% of standard	EPA 2023
pH (SU)	4.00	4.03	24.98	± 0.1	GWMP
pH (SU)	7.00	7.02	24.96	± 0.1	GWMP
pH (SU)	10.00	9.98	24.71	± 0.1	GWMP

	Standard	Calibration Value	Acceptance Criteria	Reference
Turbidity (NTU) ck std	10	10.2	± 10% of standard	EPA 2023

Notes:

Site Name: Plant McDonough

Calibrated By: Daniel Howard

Field Instrumentation Calibration Form

Date: 9/11/23

Field Conditions: Sunny

Instrument	Manufactuer/ Model	Serial Number
Water Quality Meter	AquaTroll 400	850751
Turbidity Meter	Hach 2100Q	23060D000290

Calibration Standard Information				
Parameter	Standard	Lot #	Date of Expiration	Brand
Specific Conductance (µS/cm)	4,490	24000074	5/24	AIR
pH (SU)	4.00	24000044	5/24	↓
pH (SU)	7.00	22290139	4/24	↓
pH (SU)	10.00	22110130	4/24	↓
D.O. (%)	N/A	—	—	—
ORP (mV)	228.0	24002258	6/24	AIR

Calibration					
Time Start		Time Finish			
Parameter	Standard	Calibration Value	Calibration Solution Temperature (°C)	Acceptance Criteria	Reference
Specific Conductance (µS/cm)	4,490	4490	23.48	± 10% of standard	EPA 2023
pH (SU)	4.00	4.00	23.53	± 0.1	GWMP
pH (SU)	7.00	7.00	23.57	± 0.1	GWMP
pH (SU)	10.00	10.00	23.66	± 0.1	GWMP
D.O. (%)	N/A	7.40	23.25	± 10%	NA
ORP (mV)	228.0	231.0	23.52	± 10	EPA 2023

	Standard	Calibration Value	Acceptance Criteria	Reference
Turbidity (NTU)	20	19.9	± 10% of standard	EPA 2023
	100	99.6		
	800	804		
ck std	10	10.2		

Calibration Check					
Time Start	1208	Time Finish	1220		
Parameter	Standard	Calibration Value	Calibration Solution Temperature (°C)	Acceptance Criteria	Reference
Specific Conductance (µS/cm)	4,490	4490	28.36	± 10% of standard	EPA 2023
pH (SU)	4.00	4.09	28.34	± 0.1	GWMP
pH (SU)	7.00	7.07	27.30	± 0.1	GWMP
pH (SU)	10.00	9.96	27.29	± 0.1	GWMP

	Standard	Calibration Value	Acceptance Criteria	Reference
Turbidity (NTU) ck std	10	10.2	± 10% of standard	EPA 2023

Notes:

Site Name: Plant McDonough

Calibrated By: Daniel Howard

Field Instrumentation Calibration Form

Date: 9/12/23

Field Conditions: Partly ~~Cloud~~ Sunny OH

Instrument	Manufactuer/ Model	Serial Number
Water Quality Meter	AquaTroll 400	850251
Turbidity Meter	Hach 2100Q	23060D000290

Calibration Standard Information				
Parameter	Standard	Lot #	Date of Expiration	Brand
Specific Conductance (µS/cm)	4,490	24000044	5/24	AIR
pH (SU)	4.00	24000044	5/24	↓
pH (SU)	7.00	22290139	4/24	↓
pH (SU)	10.00	22110130	4/24	↓
D.O. (%)	N/A	—	—	—
ORP (mV)	228.0	24002258	6/24	AIR

Calibration					
Time Start		Time Finish			
Parameter	Standard	Calibration Value	Calibration Solution Temperature (°C)	Acceptance Criteria	Reference
Specific Conductance (µS/cm)	4,490	4490	24.34	± 10% of standard	EPA 2023
pH (SU)	4.00	4.00	24.55	± 0.1	GWMP
pH (SU)	7.00	7.00	24.70	± 0.1	GWMP
pH (SU)	10.00	10.00	24.90	± 0.1	GWMP
D.O. (%)	N/A	7.45	23.11	± 10%	NA
ORP (mV)	228.0	229.5	24.71	± 10	EPA 2023

	Standard	Calibration Value	Acceptance Criteria	Reference
Turbidity (NTU)	20	19.9	± 10% of standard	EPA 2023
	100	101		
	800	792		
ckstd	10	10.3		

Calibration Check					
Time Start	1155	Time Finish	1205		
Parameter	Standard	Calibration Value	Calibration Solution Temperature (°C)	Acceptance Criteria	Reference
Specific Conductance (µS/cm)	4,490	4430	30.44	± 10% of standard	EPA 2023
pH (SU)	4.00	4.01	30.62	± 0.1	GWMP
pH (SU)	7.00	7.00	29.76	± 0.1	GWMP
pH (SU)	10.00	9.94	29.45	± 0.1	GWMP

	Standard	Calibration Value	Acceptance Criteria	Reference
Turbidity (NTU) ckstd	10	10.2	± 10% of standard	EPA 2023

Notes:

Site Name: Plant McDonough

Calibrated By: Daniel Howard

Field Instrumentation Calibration Form

Date: 9/13/23

Field Conditions: Overcast

Instrument	Manufactuer/ Model	Serial Number
Water Quality Meter	AquaTroll 400	850751
Turbidity Meter	Hach 2100 Q	13060D000290

Calibration Standard Information				
Parameter	Standard	Lot #	Date of Expiration	Brand
Specific Conductance (µS/cm)	4,490	24000044	5/24	AIR
pH (SU)	4.00	24000044	5/24	↓
pH (SU)	7.00	22290139	4/24	↓
pH (SU)	10.00	22110130	4/24	↓
D.O. (%)	N/A	—	—	—
ORP (mV)	228.0	24002258	6/24	AIR

Calibration					
Time Start		Time Finish			
Parameter	Standard	Calibration Value	Calibration Solution Temperature (°C)	Acceptance Criteria	Reference
Specific Conductance (µS/cm)	4,490	4490	23.61	± 10% of standard	EPA 2023
pH (SU)	4.00	4.00	23.84	± 0.1	GWMP
pH (SU)	7.00	7.00	23.92	± 0.1	GWMP
pH (SU)	10.00	10.00	24.02	± 0.1	GWMP
D.O. (%)	N/A	7.57	22.00	± 10%	NA
ORP (mV)	228.0	230.2	24.15	± 10	EPA 2023

	Standard	Calibration Value	Acceptance Criteria	Reference
Turbidity (NTU)	20	20.1	± 10% of standard	EPA 2023
	100	99.4		
	800	802		
ckstd	10	10.2		

Calibration Check					
Time Start	1305	Time Finish	1317		
Parameter	Standard	Calibration Value	Calibration Solution Temperature (°C)	Acceptance Criteria	Reference
Specific Conductance (µS/cm)	4,490	4430	27.19	± 10% of standard	EPA 2023
pH (SU)	4.00	4.01	27.23	± 0.1	GWMP
pH (SU)	7.00	7.00	27.36	± 0.1	GWMP
pH (SU)	10.00	9.97	28.05	± 0.1	GWMP

	Standard	Calibration Value	Acceptance Criteria	Reference
Turbidity (NTU) ckstd	10	10.1	± 10% of standard	EPA 2023

Notes:

APPENDIX A

Instrument Calibration Records
November 2023

11/7/2023

Site Name: PLANT MCDONOUGH

Field Instrumentation Calibration Form

Date: ~~10/09/23~~

Calibrated By: M-MANN

Field Conditions: GOOD

Instrument	Manufactuer/ Model	Serial Number
Water Quality Meter	IN-SITU AQUATROLL	883553
Turbidity Meter	HACH 2100Q	23060D000290

Calibration Standard Information				
Parameter	Standard	Lot #	Date of Expiration	Brand
Specific Conductance (µS/cm)	4,490	24000044	05/2024	AIR
pH (SU)	4.00	24000044	05/2024	↓
pH (SU)	7.00	22901139	04/2024	↓
pH (SU)	10.00	22110130	04/2024	↓
D.O. (%)	N/A	—	—	—
ORP (mV)	228.0	24602258	06/2024	AIR

Calibration					
Time Start 905		Time Finish 925			
Parameter	Standard	Calibration Value	Calibration Solution Temperature (°C)	Acceptance Criteria	Reference
Specific Conductance (µS/cm)	4,490	4379.6	17.91	± 10% of standard	EPA 2023
pH (SU)	4.00	4.03	~~18.54~~ 19.22	± 0.1	GWMP
pH (SU)	7.00	7.06	19.24	± 0.1	GWMP
pH (SU)	10.00	10.06	19.15	± 0.1	GWMP
D.O. (%)	N/A	105.55	20.10	± 10%	NA
ORP (mV)	228.0	221.8	19.00	± 10	EPA 2023

	Standard	Calibration Value	Acceptance Criteria	Reference
Turbidity (NTU)	20	20.3	± 10% of standard	EPA 2023
	100	100		
	800	799		
	10	10.1		

Calibration Check					
Time Start 1220		Time Finish 1230			
Parameter	Standard	Calibration Value	Calibration Solution Temperature (°C)	Acceptance Criteria	Reference
Specific Conductance (µS/cm)	4,490	4344.3	29.84	± 10% of standard	EPA 2023
pH (SU)	4.00	3.92	" "	± 0.1	GWMP
pH (SU)	7.00	6.90	28.40	± 0.1	GWMP
pH (SU)	10.00	9.96	25.78	± 0.1	GWMP

	Standard	Calibration Value	Acceptance Criteria	Reference
Turbidity (NTU)	20	20.5	± 10% of standard	EPA 2023
	100	99.9		
	800	781		
	10	10.5		

Notes:

APPENDIX A

Instrument Calibration Records January-February 2024

Site Name: McDONOUGH

Field Instrumentation Calibration Form

Date: 01/30/24

Calibrated By: M-MANN

Field Conditions: 43°F CLR

Instrument	Manufactuer/ Model	Serial Number
Water Quality Meter	IN-SITU 4 QUATROLL	1080293
Turbidity Meter	HACK 2100Q	14080C03447

Calibration Standard Information				
Parameter	Standard	Lot #	Date of Expiration	Brand
Specific Conductance (µS/cm)	4,490	24005593	11/24	AIR
pH (SU)	4.00	24005593	11/24	
pH (SU)	7.00	24003597	11/24	
pH (SU)	10.00	24004996	11/24	
D.O. (%)	N/A	—	—	
ORP (mV)	228.0	24006903	11/24	

Calibration					
Time Start 1115		Time Finish 1200			
Parameter	Standard	Calibration Value	Calibration Solution Temperature (°C)	Acceptance Criteria	Reference
Specific Conductance (µS/cm)	4,490	4488.7	8.62	± 10% of standard	EPA 2023
pH (SU)	4.00	4.02	8.67	± 0.1	GWMP
pH (SU)	7.00	~~6.92~~ 7.02	7.90	± 0.1	GWMP
pH (SU)	10.00	10.06	8.92	± 0.1	GWMP
D.O. (%)	N/A	115.00	12.7	± 10%	NA
ORP (mV)	228.0	241.2	~~[illegible]~~ 8.80	± 10	EPA 2023

	Standard	Calibration Value	Acceptance Criteria	Reference
Turbidity (NTU)	10	9.74	± 10% of standard	EPA 2023
	20	21.1		
	100	101		
	800	815		

Calibration Check					
Time Start		Time Finish			
Parameter	Standard	Calibration Value	Calibration Solution Temperature (°C)	Acceptance Criteria	Reference
Specific Conductance (µS/cm)	4,490	4818.8	16.87	± 10% of standard	EPA 2023
pH (SU)	4.00	4.05	16.37	± 0.1	GWMP
pH (SU)	7.00	7.09	14.83	± 0.1	GWMP
pH (SU)	10.00	10.06	13.74	± 0.1	GWMP

	Standard	Calibration Value	Acceptance Criteria	Reference
Turbidity (NTU)	10	10.1	± 10% of standard	EPA 2023
	20	20.8		
	800	813 ~~[illegible]~~		
	100	99.2		

Notes:

Site Name: MCDONOUGH

Field Instrumentation Calibration Form

Date: 01/31/24

Calibrated By: MDM

Field Conditions: 41°F CLR

Instrument	Manufactuer/ Model	Serial Number
Water Quality Meter	In-Situ Aquatroll	1080293
Turbidity Meter	Hach 2100Q	14080C03447

Calibration Standard Information

Parameter	Standard	Lot #	Date of Expiration	Brand
Specific Conductance (µS/cm)	4,490	24005593	11/24	AIR
pH (SU)	4.00	24005593	11/24	↓
pH (SU)	7.00	24005597	11/24	↓
pH (SU)	10.00	24004996	11/24	↓
D.O. (%)	N/A	—	—	↓
ORP (mV)	228.0	24006903	11/24	✓

Calibration

Time Start: 0930 Time Finish: 1015

Parameter	Standard	Calibration Value	Calibration Solution Temperature (°C)	Acceptance Criteria	Reference
Specific Conductance (µS/cm)	4,490	4496.2	14.40	± 10% of standard	EPA 2023
pH (SU)	4.00	3.99	14.24	± 0.1	GWMP
pH (SU)	7.00	6.95	13.81	± 0.1	GWMP
pH (SU)	10.00	10.00	13.55	± 0.1	GWMP
D.O. (%)	N/A	95.03	12.67	± 10%	NA
ORP (mV)	228.0	221.2	13.13	± 10	EPA 2023

	Standard	Calibration Value	Acceptance Criteria	Reference
Turbidity (NTU)	10	9.97	± 10% of standard	EPA 2023
	20	19.3		
	100	96.6		
	800	798		

Calibration Check

Time Start: 1620 Time Finish: 1630

Parameter	Standard	Calibration Value	Calibration Solution Temperature (°C)	Acceptance Criteria	Reference
Specific Conductance (µS/cm)	4,490	4139.8	17.56	± 10% of standard	EPA 2023
pH (SU)	4.00	4.05	17.56	± 0.1	GWMP
pH (SU)	7.00	7.01	17.16	± 0.1	GWMP
pH (SU)	10.00	9.98	17.36	± 0.1	GWMP

	Standard	Calibration Value	Acceptance Criteria	Reference
Turbidity (NTU)	10	10.2	± 10% of standard	EPA 2023
	20	20.0		
	100	102		
	800	775		

Notes:

Site Name: MCDONOUGH

Field Instrumentation Calibration Form

Date: 02/01/24

Calibrated By: M. MANN

Field Conditions: 31°/57°F CLR

Instrument	Manufactuer/ Model	Serial Number
Water Quality Meter	IN-SITU AQUATROLL	1080293
Turbidity Meter	HACH 2100Q	14080C034447

Calibration Standard Information

Parameter	Standard	Lot #	Date of Expiration	Brand
Specific Conductance (µS/cm)	4,490	24005593	11/24	AER
pH (SU)	4.00	24005593	11/24	↓
pH (SU)	7.00	24003597	11/24	↓
pH (SU)	10.00	24004906	11/24	↓
D.O. (%)	N/A	—	—	↓
ORP (mV)	228.0	24006403	11/24	↓

Calibration

Time Start 0900 Time Finish

Parameter	Standard	Calibration Value	Calibration Solution Temperature (°C)	Acceptance Criteria	Reference
Specific Conductance (µS/cm)	4,490	4567.7	10.7	± 10% of standard	EPA 2023
pH (SU)	4.00	4.00	8.35	± 0.1	GWMP
pH (SU)	7.00	6.92	8.59	± 0.1	GWMP
pH (SU)	10.00	9.89	8.78	± 0.1	GWMP
D.O. (%)	N/A	101.68	7.98	± 10%	NA
ORP (mV)	228.0	235.2	8.92	± 10	EPA 2023

	Standard	Calibration Value	Acceptance Criteria	Reference
Turbidity (NTU)	10	9.72	± 10% of standard	EPA 2023
	20	19.0		
	100	105		
	800	809		

Calibration Check

Time Start ~~1620~~ 1518 Time Finish 1630

Parameter	Standard	Calibration Value	Calibration Solution Temperature (°C)	Acceptance Criteria	Reference
Specific Conductance (µS/cm)	4,490	4486.9	17.99	± 10% of standard	EPA 2023
pH (SU)	4.00	4.08	17.99	± 0.1	GWMP
pH (SU)	7.00	7.04	18.25	± 0.1	GWMP
pH (SU)	10.00	10.05	17.70	± 0.1	GWMP

	Standard	Calibration Value	Acceptance Criteria	Reference
Turbidity (NTU)	10	10.6	± 10% of standard	EPA 2023
	20	21.1		
	100	97.9		
	800	764		

Notes:

Site Name: MCDONOUGH

Field Instrumentation Calibration Form

Date: 02/02/24

Calibrated By: M. MANN

Field Conditions:

Instrument	Manufactuer/ Model	Serial Number
Water Quality Meter	EN-SITU AQUAPROBE	10EC293
Turbidity Meter	HACH 2100Q	140800034447

Calibration Standard Information				
Parameter	Standard	Lot #	Date of Expiration	Brand
Specific Conductance (µS/cm)	4,490	24005593	11/24	AER
pH (SU)	4.00	24005593	11/24	↓
pH (SU)	7.00	24003597	11/24	
pH (SU)	10.00	24004996	11/24	
D.O. (%)	N/A			
ORP (mV)	228.0	24006903	11/24	

Calibration

Time Start: Time Finish:

Parameter	Standard	Calibration Value	Calibration Solution Temperature (°C)	Acceptance Criteria	Reference
Specific Conductance (µS/cm)	4,490	4389.0	~~9.38~~ 9.38	± 10% of standard	EPA 2023
pH (SU)	4.00	4.01	9.36	± 0.1	GWMP
pH (SU)	7.00	6.97	10.87	± 0.1	GWMP
pH (SU)	10.00	10.00	11.71	± 0.1	GWMP
D.O. (%)	N/A	99.8	11.25	± 10%	NA
ORP (mV)	228.0	222.8	12.06	± 10	EPA 2023

	Standard	Calibration Value	Acceptance Criteria	Reference
Turbidity (NTU)	10	9.40	± 10% of standard	EPA 2023
	20	21.6		
	100	99.5		
	800	~~796~~		

Calibration Check

Time Start: Time Finish:

Parameter	Standard	Calibration Value	Calibration Solution Temperature (°C)	Acceptance Criteria	Reference
Specific Conductance (µS/cm)	4,490			± 10% of standard	EPA 2023
pH (SU)	4.00			± 0.1	GWMP
pH (SU)	7.00			± 0.1	GWMP
pH (SU)	10.00			± 0.1	GWMP

	Standard	Calibration Value	Acceptance Criteria	Reference
Turbidity (NTU)			± 10% of standard	EPA 2023

Notes:

Site Name: MCDONOUGH

Field Instrumentation Calibration Form

Date: 02/05/24

Calibrated By: MDM

Field Conditions: 39°/57°F CLR

Instrument	Manufactuer/ Model	Serial Number
Water Quality Meter		1080293
Turbidity Meter		22090200337

Calibration Standard Information				
Parameter	**Standard**	**Lot #**	**Date of Expiration**	**Brand**
Specific Conductance (µS/cm)	4,490			
pH (SU)	4.00			
pH (SU)	7.00			
pH (SU)	10.00			
D.O. (%)	N/A			
ORP (mV)	228.0			

Calibration					
Time Start		**Time Finish**			
Parameter	**Standard**	**Calibration Value**	**Calibration Solution Temperature (°C)**	**Acceptance Criteria**	**Reference**
Specific Conductance (µS/cm)	4,490	4603.4	8.61	± 10% of standard	EPA 2023
pH (SU)	4.00	4.04	~~8.06~~ 8.09	± 0.1	GWMP
pH (SU)	7.00	7.02	7.86	± 0.1	GWMP
pH (SU)	10.00	10.01	7.89	± 0.1	GWMP
D.O. (%)	N/A	100.95	8.53	± 10%	NA
ORP (mV)	228.0	235.3	7.92	± 10	EPA 2023

	Standard	Calibration Value	Acceptance Criteria	Reference
Turbidity (NTU)	10	9.74	± 10% of standard	EPA 2023
	20	21.1		
	100	101		
	900	922		

Calibration Check					
Time Start		**Time Finish**			
Parameter	**Standard**	**Calibration Value**	**Calibration Solution Temperature (°C)**	**Acceptance Criteria**	**Reference**
Specific Conductance (µS/cm)	4,490			± 10% of standard	EPA 2023
pH (SU)	4.00			± 0.1	GWMP
pH (SU)	7.00			± 0.1	GWMP
pH (SU)	10.00			± 0.1	GWMP

	Standard	Calibration Value	Acceptance Criteria	Reference
Turbidity (NTU)			± 10% of standard	EPA 2023

Notes:

Site Name: MCDONOUGH

Field Instrumentation Calibration Form

Date: 2/6/24

Calibrated By: M. MANN

Field Conditions: _____

Instrument	Manufactuer/ Model	Serial Number
Water Quality Meter		1080293
Turbidity Meter		22090D00337

Calibration Standard Information				
Parameter	**Standard**	**Lot #**	**Date of Expiration**	**Brand**
Specific Conductance (µS/cm)	4,490			
pH (SU)	4.00			
pH (SU)	7.00			
pH (SU)	10.00			
D.O. (%)	N/A			
ORP (mV)	228.0			

Calibration					
Time Start	0815	**Time Finish**			
Parameter	**Standard**	**Calibration Value**	**Calibration Solution Temperature (°C)**	**Acceptance Criteria**	**Reference**
Specific Conductance (µS/cm)	4,490	4492.2	7.75	± 10% of standard	EPA 2023
pH (SU)	4.00	3.96	7.78	± 0.1	GWMP
pH (SU)	7.00	7.03	9.42	± 0.1	GWMP
pH (SU)	10.00	9.98	10.17	± 0.1	GWMP
D.O. (%)	N/A	99.75	10.26	± 10%	NA
ORP (mV)	228.0	222.5	10.48	± 10	EPA 2023

	Standard	**Calibration Value**	**Acceptance Criteria**	**Reference**
Turbidity (NTU)	10	10.9	± 10% of standard	EPA 2023
	20	22.0		
	100	108		
	800	803		

Calibration Check					
Time Start		**Time Finish**			
Parameter	**Standard**	**Calibration Value**	**Calibration Solution Temperature (°C)**	**Acceptance Criteria**	**Reference**
Specific Conductance (µS/cm)	4,490			± 10% of standard	EPA 2023
pH (SU)	4.00			± 0.1	GWMP
pH (SU)	7.00			± 0.1	GWMP
pH (SU)	10.00			± 0.1	GWMP

	Standard	**Calibration Value**	**Acceptance Criteria**	**Reference**
Turbidity (NTU)			± 10% of standard	EPA 2023

Notes:

Site Name: Plant McDonough

Field Instrumentation Calibration Form

Date: 1/30/24

Calibrated By: Daniel Howard

Field Conditions: clear + cold

Instrument	Manufactuer/ Model	Serial Number
Water Quality Meter	In-Situ/AquaTroll	1080302
Turbidity Meter	Hach 2100 Q	22080D000173

Calibration Standard Information				
Parameter	Standard	Lot #	Date of Expiration	Brand
Specific Conductance (µS/cm)	4,490	24005593	11/24	Atlanta Instrument
pH (SU)	4.00	24005593	11/24	" "
pH (SU)	7.00	24063597	11/24	" "
pH (SU)	10.00	24004996	11/24	" "
D.O. (%)	N/A	—	—	—
ORP (mV)	228.0	24006903	11/24	Atlanta Instrument

Calibration					
Time Start		Time Finish			
Parameter	Standard	Calibration Value	Calibration Solution Temperature (°C)	Acceptance Criteria	Reference
Specific Conductance (µS/cm)	4,490	4490	18.58	± 10% of standard	EPA 2023
pH (SU)	4.00	4.00	18.71	± 0.1	GWMP
pH (SU)	7.00	7.02	18.17	± 0.1	GWMP
pH (SU)	10.00	10.11	17.40	± 0.1	GWMP
D.O. (%)	N/A	100.74	18.65	± 10%	NA
ORP (mV)	228.0	239.3	17.19	± 10	EPA 2023

	Standard	Calibration Value	Acceptance Criteria	Reference
Turbidity (NTU)	20	20.6	± 10% of standard	EPA 2023
	100	101		
	800	837		
	CK 10	9.96		

Calibration Check					
Time Start 1211		Time Finish 1225			
Parameter	Standard	Calibration Value	Calibration Solution Temperature (°C)	Acceptance Criteria	Reference
Specific Conductance (µS/cm)	4,490	4526	16.85	± 10% of standard	EPA 2023
pH (SU)	4.00	4.07	16.88	± 0.1	GWMP
pH (SU)	7.00	7.04	16.92	± 0.1	GWMP
pH (SU)	10.00	10.14	16.95	± 0.1	GWMP

	Standard	Calibration Value	Acceptance Criteria	Reference
Turbidity (NTU)	10	9.68	± 10% of standard	EPA 2023
	20	19.5		
	100	98.8		
	800	794		

Notes:

Site Name: Plant McDonough

Calibrated By: Daniel Howard

Field Instrumentation Calibration Form

Date: 1/31/24

Field Conditions: Clear & Cold

Instrument	Manufacturer/ Model	Serial Number
Water Quality Meter	In-Situ Aquatroll	1080300
Turbidity Meter	Hach 2100Q	22080D000173

Calibration Standard Information				
Parameter	Standard	Lot #	Date of Expiration	Brand
Specific Conductance (µS/cm)	4,490	24005593	11/24	A+I Instrument
pH (SU)	4.00	24005593	11/24	" "
pH (SU)	7.00	24003597	11/24	" "
pH (SU)	10.00	24004996	11/24	" "
D.O. (%)	N/A	—	—	—
ORP (mV)	228.0	24006903	11/24	A+I Instrument

Calibration					
Time Start		Time Finish			
Parameter	Standard	Calibration Value	Calibration Solution Temperature (°C)	Acceptance Criteria	Reference
Specific Conductance (µS/cm)	4,490	4490	19.72	± 10% of standard	EPA 2023
pH (SU)	4.00	4.0	19.70	± 0.1	GWMP
pH (SU)	7.00	7.02	18.87	± 0.1	GWMP
pH (SU)	10.00	10.05	18.61	± 0.1	GWMP
D.O. (%)	N/A	100.45	20.52	± 10%	NA
ORP (mV)	228.0	237.8	18.30	± 10	EPA 2023

	Standard	Calibration Value	Acceptance Criteria	Reference
Turbidity (NTU)	20	19.2	± 10% of standard	EPA 2023
	100	98.2		
	800	790		
	CK 10	10.0		

Calibration Check					
Time Start	1520	Time Finish	1535		
Parameter	Standard	Calibration Value	Calibration Solution Temperature (°C)	Acceptance Criteria	Reference
Specific Conductance (µS/cm)	4,490	4415	20.30	± 10% of standard	EPA 2023
pH (SU)	4.00	4.01	20.24	± 0.1	GWMP
pH (SU)	7.00	7.00	18.71	± 0.1	GWMP
pH (SU)	10.00	10.02	17.96	± 0.1	GWMP

	Standard	Calibration Value	Acceptance Criteria	Reference
Turbidity (NTU)	20	20.1	± 10% of standard	EPA 2023
	100	99.8		
	800	787		
	10	10.1		

Notes:

Site Name: Plant McDonough

Field Instrumentation Calibration Form

Date: 2/1/24

Calibrated By: Daniel Howard

Field Conditions: Clear, Cold

Instrument	Manufactuer/ Model	Serial Number
Water Quality Meter	In-Situ Aquatroll	1080300
Turbidity Meter	Hach 2100Q	22080D000173

Calibration Standard Information				
Parameter	Standard	Lot #	Date of Expiration	Brand
Specific Conductance (µS/cm)	4,490	24005593	11/24	Atl Instrument
pH (SU)	4.00	24005593	11/24	" "
pH (SU)	7.00	24003597	11/24	" "
pH (SU)	10.00	24004996	11/24	" "
D.O. (%)	N/A	—	—	—
ORP (mV)	228.0	2400 6903	H/24	Atl Instrument

Calibration					
Time Start		Time Finish			
Parameter	Standard	Calibration Value	Calibration Solution Temperature (°C)	Acceptance Criteria	Reference
Specific Conductance (µS/cm)	4,490	4498	19.45	± 10% of standard	EPA 2023
pH (SU)	4.00	4.00	19.34	± 0.1	GWMP
pH (SU)	7.00	7.02	18.74	± 0.1	GWMP
pH (SU)	10.00	10.05	17.99	± 0.1	GWMP
D.O. (%)	N/A	99.49	20.04	± 10%	NA
ORP (mV)	228.0	238.7	17.64	± 10	EPA 2023

	Standard	Calibration Value	Acceptance Criteria	Reference
Turbidity (NTU)	20	20.0	± 10% of standard	EPA 2023
	100	99.7		
	800	795		
	ck 10	10.0		

Calibration Check					
Time Start	1305	Time Finish	1405		
Parameter	Standard	Calibration Value	Calibration Solution Temperature (°C)	Acceptance Criteria	Reference
Specific Conductance (µS/cm)	4,490	4571	21.97	± 10% of standard	EPA 2023
pH (SU)	4.00	4.01	21.97	± 0.1	GWMP
pH (SU)	7.00	7.02	21.67	± 0.1	GWMP
pH (SU)	10.00	10.03	21.50	± 0.1	GWMP

	Standard	Calibration Value	Acceptance Criteria	Reference
Turbidity (NTU)	20	20.9	± 10% of standard	EPA 2023
	100	101		
	800	792		
	ck 10	10.1		

Notes:

Site Name: Plant McDonough

Field Instrumentation Calibration Form

Date: 2/2/24

Calibrated By: Daniel Howard

Field Conditions: Clear + Cold

Instrument	Manufactuer/ Model	Serial Number
Water Quality Meter	In Situ Aquatroll	1080300
Turbidity Meter	Hach 2100 Q	22080D00178

Calibration Standard Information				
Parameter	Standard	Lot #	Date of Expiration	Brand
Specific Conductance (µS/cm)	4,490	24005593	11/24	At1 Instrument
pH (SU)	4.00	24005593	11/24	" "
pH (SU)	7.00	24003597	11/24	" "
pH (SU)	10.00	24004996	11/24	" "
D.O. (%)	N/A	—	—	—
ORP (mV)	228.0	24006903	11/24	At1 Instrument

Calibration					
Time Start		Time Finish			
Parameter	Standard	Calibration Value	Calibration Solution Temperature (°C)	Acceptance Criteria	Reference
Specific Conductance (µS/cm)	4,490	4,490	19.82	± 10% of standard	EPA 2023
pH (SU)	4.00	4.00	19.75°C	± 0.1	GWMP
pH (SU)	7.00	7.02	19.98°C	± 0.1	GWMP
pH (SU)	10.00	10.05	20.12	± 0.1	GWMP
D.O. (%)	N/A	100.43	—	± 10%	NA
ORP (mV)	228.0	236.9	19.04	± 10	EPA 2023

	Standard	Calibration Value	Acceptance Criteria	Reference
Turbidity (NTU)	20	19.9	± 10% of standard	EPA 2023
	100	100		
	800	804		
	ck 10	10.0		

Calibration Check					
Time Start	1120	Time Finish	1135		
Parameter	Standard	Calibration Value	Calibration Solution Temperature (°C)	Acceptance Criteria	Reference
Specific Conductance (µS/cm)	4,490	4479	18.64	± 10% of standard	EPA 2023
pH (SU)	4.00	3.99	18.64	± 0.1	GWMP
pH (SU)	7.00	7.03	18.25	± 0.1	GWMP
pH (SU)	10.00	10.06	18.15	± 0.1	GWMP

	Standard	Calibration Value	Acceptance Criteria	Reference
Turbidity (NTU)	20	20.2	± 10% of standard	EPA 2023
	100	98.9		
	800	791		
	ck 10	10.0		

Notes:

Site Name: Plant McDonough

Field Instrumentation Calibration Form

Date: 2/5/24

Calibrated By: Daniel Howard

Field Conditions: Overcast, slight chance of rain

Instrument	Manufactuer/ Model	Serial Number
Water Quality Meter	In-Situ Aquatroll	1080305
Turbidity Meter	Hach 2100 Q	22080B000173

Calibration Standard Information				
Parameter	Standard	Lot #	Date of Expiration	Brand
Specific Conductance (µS/cm)	4,490	2400593	11/24	A+I Instrument
pH (SU)	4.00	2400593	11/24	" "
pH (SU)	7.00	24003597	11/24	" "
pH (SU)	10.00	24004996	11/24	" "
D.O. (%)	N/A	—	—	—
ORP (mV)	228.0	24006903	11/24	A+I Instrument

Calibration					
Time Start		Time Finish			
Parameter	Standard	Calibration Value	Calibration Solution Temperature (°C)	Acceptance Criteria	Reference
Specific Conductance (µS/cm)	4,490	4490	18.41	± 10% of standard	EPA 2023
pH (SU)	4.00	4.00	18.61	± 0.1	GWMP
pH (SU)	7.00	7.02	18.88	± 0.1	GWMP
pH (SU)	10.00	10.05	18.79	± 0.1	GWMP
D.O. (%)	N/A	~~100~~ 100.04	~~18~~ 18.97	± 10%	NA
ORP (mV)	228.0	237.4	18.63	± 10	EPA 2023

	Standard	Calibration Value	Acceptance Criteria	Reference
Turbidity (NTU)	20	20.1	± 10% of standard	EPA 2023
	~~800~~ 100	99.9		
	800	797		
	ck 10	9.96		

Calibration Check					
Time Start	1230	Time Finish	1245		
Parameter	Standard	Calibration Value	Calibration Solution Temperature (°C)	Acceptance Criteria	Reference
Specific Conductance (µS/cm)	4,490	4485	16.84	± 10% of standard	EPA 2023
pH (SU)	4.00	3.94	16.84	± 0.1	GWMP
pH (SU)	7.00	7.00	16.84	± 0.1	GWMP
pH (SU)	10.00	10.01	16.64	± 0.1	GWMP

	Standard	Calibration Value	Acceptance Criteria	Reference
Turbidity (NTU)	20	20.3	± 10% of standard	EPA 2023
	100	100		
	800	793		
	ck 10	10.01		

Notes:

Site Name: Plant McDonough

Field Instrumentation Calibration Form

Date: 1/30/24

Calibrated By: P Wahl

Field Conditions: Sunny, cold

Instrument	Manufactuer/ Model	Serial Number
Water Quality Meter	Aquadroll 400	1082817
Turbidity Meter	HACH 2100Q	220900000086

Calibration Standard Information				
Parameter	Standard	Lot #	Date of Expiration	Brand
Specific Conductance (µS/cm)	4,490	24005593	11/2024	Atlanta Instrument Rentals (AIR)
pH (SU)	4.00	24005593	11/2024	AIR
pH (SU)	7.00	24003597	11/2024	↓
pH (SU)	10.00	24004996	11/2024	↓
D.O. (%)	N/A	—	—	N/A
ORP (mV)	228.0	24006403	11/2024	AIR

Calibration					
Time Start 0800		Time Finish 0830			
Parameter	Standard	Calibration Value	Calibration Solution Temperature (°C)	Acceptance Criteria	Reference
Specific Conductance (µS/cm)	4,490	4110.8	3.95	± 10% of standard	EPA 2023
pH (SU)	4.00	PW ~~3.97~~ 3.97	PW ~~4.09~~ 4.97	± 0.1	GWMP
pH (SU)	7.00	7.00	4.97	± 0.1	GWMP
pH (SU)	10.00	10.05	5.00	± 0.1	GWMP
D.O. (%)	N/A	104.78	4.67	± 10%	NA
ORP (mV)	228.0	228.0	4.76	± 10	EPA 2023

	Standard	Calibration Value	Acceptance Criteria	Reference
Turbidity (NTU)	10	9.85	± 10% of standard	EPA 2023
	20	20.5		
	100	103		
	800	828		

Calibration Check					
Time Start 1245		Time Finish 1355			
Parameter	Standard	Calibration Value	Calibration Solution Temperature (°C)	Acceptance Criteria	Reference
Specific Conductance (µS/cm)	4,490	3764.5	21.40	± 10% of standard	EPA 2023
pH (SU)	4.00	4.00	21.40	± 0.1	GWMP
pH (SU)	7.00	6.90	16.04	± 0.1	GWMP
pH (SU)	10.00	4.91	16.01	± 0.1	GWMP

	Standard	Calibration Value	Acceptance Criteria	Reference
Turbidity (NTU)	10	10.1	± 10% of standard	EPA 2023
	20	19.9		
	100	97.8		
	800	775		

Notes:

Site Name: McDonough

Field Instrumentation Calibration Form

Date: 1/31/24

Calibrated By: D Wahl

Field Conditions: Clear, cold

Instrument	Manufactuer/ Model	Serial Number
Water Quality Meter	Aquatroll 400	1082817
Turbidity Meter	HACH 2100Q	22090C0000

Calibration Standard Information				
Parameter	Standard	Lot #	Date of Expiration	Brand
Specific Conductance (µS/cm)	4,490	24005593	11/24	AIR
pH (SU)	4.00	24005593	11/24	"
pH (SU)	7.00	24003597	11/24	"
pH (SU)	10.00	24004996	11/24	"
D.O. (%)	N/A	—	—	N/A
ORP (mV)	228.0	24006903	11/24	AIR

Calibration					
Time Start 0800		Time Finish 0830			
Parameter	Standard	Calibration Value	Calibration Solution Temperature (°C)	Acceptance Criteria	Reference
Specific Conductance (µS/cm)	4,490	4355.6	16.64	± 10% of standard	EPA 2023
pH (SU)	4.00	3.99	16.45	± 0.1	GWMP
pH (SU)	7.00	6.92	16.35	± 0.1	GWMP
pH (SU)	10.00	10.04	16.36	± 0.1	GWMP
D.O. (%)	N/A	99.70	15.48	± 10%	NA
ORP (mV)	228.0	227.8	16.34	± 10	EPA 2023

	Standard	Calibration Value	Acceptance Criteria	Reference
Turbidity (NTU)	10	9.59	± 10% of standard	EPA 2023
	20	20.0		
	100	97.8		
	800	806		

Calibration Check DW DW					
Time Start ~~0800~~ 1430		Time Finish ~~0830~~ ~~1430~~ 1440			
Parameter	Standard	Calibration Value	Calibration Solution Temperature (°C)	Acceptance Criteria	Reference
Specific Conductance (µS/cm)	4,490	4468.9	17.68	± 10% of standard	EPA 2023
pH (SU)	4.00	3.90	17.68	± 0.1	GWMP
pH (SU)	7.00	6.97	17.58	± 0.1	GWMP
pH (SU)	10.00	10.09	17.02	± 0.1	GWMP

	Standard	Calibration Value	Acceptance Criteria	Reference
Turbidity (NTU)	10	10.2	± 10% of standard	EPA 2023
	20	19.9		
	100	105		
	800	781		

Notes:

Field Instrumentation Calibration Form

Site Name: McDonough

Date: 2/1/24

Calibrated By: P Vahl

Field Conditions: Sunny, cold

Instrument	Manufactuer/ Model	Serial Number
Water Quality Meter	Aquatrol 400	10826817
Turbidity Meter	HACH 2100Q	22090000086

Calibration Standard Information				
Parameter	Standard	Lot #	Date of Expiration	Brand
Specific Conductance (µS/cm)	4,490	24005593	11/24	AIR
pH (SU)	4.00	24005543		
pH (SU)	7.00	24005597		
pH (SU)	10.00	24004996		
D.O. (%)	N/A			
ORP (mV)	228.0	24006903	11/24	AIR

Calibration					
Time Start 0830		Time Finish 0900			
Parameter	Standard	Calibration Value	Calibration Solution Temperature (°C)	Acceptance Criteria	Reference
Specific Conductance (µS/cm)	4,490	4483.1	16.83	± 10% of standard	EPA 2023
pH (SU)	4.00	~~4.00~~ 4.05	16.69	± 0.1	GWMP
pH (SU)	7.00	~~6.92~~ 7.03	16.56	± 0.1	GWMP
pH (SU)	10.00	10.10	16.75	± 0.1	GWMP
D.O. (%)	N/A	98.75	13.89	± 10%	NA
ORP (mV)	228.0	229.2	15.18	± 10	EPA 2023

	Standard	Calibration Value	Acceptance Criteria	Reference
Turbidity (NTU)	10	9.68	± 10% of standard	EPA 2023
	20	20.3		
	100	100		
	800	789		

Calibration Check					
Time Start 1338		Time Finish			
Parameter	Standard	Calibration Value	Calibration Solution Temperature (°C)	Acceptance Criteria	Reference
Specific Conductance (µS/cm)	4,490	4506.2	18.03	± 10% of standard	EPA 2023
pH (SU)	4.00	4.05	18.03	± 0.1	GWMP
pH (SU)	7.00	7.01	17.50	± 0.1	GWMP
pH (SU)	10.00	9.90		± 0.1	GWMP

	Standard	Calibration Value	Acceptance Criteria	Reference
Turbidity (NTU)	10	9.42	± 10% of standard	EPA 2023
	20	19.9		
	100	98.6		
	800	816		

Notes:

Field Instrumentation Calibration Form

Site Name: McDonough

Date: 2/2/24

Calibrated By: P Wani

Field Conditions: clear, cold

Instrument	Manufactuer/ Model	Serial Number
Water Quality Meter	Aquatroll 400	1802817
Turbidity Meter	HACH 2100Q	21900000086

Calibration Standard Information				
Parameter	Standard	Lot #	Date of Expiration	Brand
Specific Conductance (µS/cm)	4,490	24005593	11/24	ATR
pH (SU)	4.00	24005593	"	"
pH (SU)	7.00	24003547	"	"
pH (SU)	10.00	24004016	"	"
D.O. (%)	N/A	—	—	—
ORP (mV)	228.0	24003503	11/24	ATR

Calibration					
Time Start 0950		Time Finish			
Parameter	Standard	Calibration Value	Calibration Solution Temperature (°C)	Acceptance Criteria	Reference
Specific Conductance (µS/cm)	4,490	4487.6	17.97	± 10% of standard	EPA 2023
pH (SU)	4.00	3.97	17.88	± 0.1	GWMP
pH (SU)	7.00	7.00	17.95	± 0.1	GWMP
pH (SU)	10.00	10.08	18.11	± 0.1	GWMP
D.O. (%)	N/A	101.62	17.25	± 10%	NA
ORP (mV)	228.0	223.3	18.05	± 10	EPA 2023

	Standard	Calibration Value	Acceptance Criteria	Reference
Turbidity (NTU)	10	9.83	± 10% of standard	EPA 2023
	20	19.6		
	100	95.9		
	800	803		

Calibration Check					
Time Start		Time Finish			
Parameter	Standard	Calibration Value	Calibration Solution Temperature (°C)	Acceptance Criteria	Reference
Specific Conductance (µS/cm)	4,490			± 10% of standard	EPA 2023
pH (SU)	4.00			± 0.1	GWMP
pH (SU)	7.00			± 0.1	GWMP
pH (SU)	10.00			± 0.1	GWMP

	Standard	Calibration Value	Acceptance Criteria	Reference
Turbidity (NTU)			± 10% of standard	EPA 2023

Notes:

Half day of Sampling

3.97 17.88
~~3.98~~
7.00 17.95
10.08 18.11

Site Name: McDonough

Field Instrumentation Calibration Form

Date: 2/5/24

Calibrated By: P Wani

Field Conditions: Cloudy, cold

Instrument	Manufactuer/ Model	Serial Number
Water Quality Meter	Aquatroll 400	1802817
Turbidity Meter	HACH 2100Q	220900000086

Calibration Standard Information				
Parameter	Standard	Lot #	Date of Expiration	Brand
Specific Conductance (µS/cm)	4,490	24005593	11/24	AIR
pH (SU)	4.00	24005593		
pH (SU)	7.00	24003597		
pH (SU)	10.00	24004996		
D.O. (%)	N/A	—	—	—
ORP (mV)	228.0	24006403	11/24	AIR

Calibration					
Time Start 0745		Time Finish			
Parameter	Standard	Calibration Value	Calibration Solution Temperature (°C)	Acceptance Criteria	Reference
Specific Conductance (µS/cm)	4,490	4560.6	18.70	± 10% of standard	EPA 2023
pH (SU)	4.00	4.01	18.70	± 0.1	GWMP
pH (SU)	7.00	7.04	17.79	± 0.1	GWMP
pH (SU)	10.00	10.08	17.34	± 0.1	GWMP
D.O. (%)	N/A	100.50	16.02	± 10%	NA
ORP (mV)	228.0	229.4	17.01	± 10	EPA 2023

	Standard	Calibration Value	Acceptance Criteria	Reference
Turbidity (NTU)	10	9.84	± 10% of standard	EPA 2023
	20	20.1		
	100	110		
	800	774		

Calibration Check					
Time Start 1320		Time Finish 1330			
Parameter	Standard	Calibration Value	Calibration Solution Temperature (°C)	Acceptance Criteria	Reference
Specific Conductance (µS/cm)	4,490	4,897.1	15.95	± 10% of standard	EPA 2023
pH (SU)	4.00	4.09	15.95	± 0.1	GWMP
pH (SU)	7.00	6.98	14.98	± 0.1	GWMP
pH (SU)	10.00	10.09	14.62	± 0.1	GWMP

	Standard	Calibration Value	Acceptance Criteria	Reference
Turbidity (NTU)	10	9.94	± 10% of standard	EPA 2023
	20	19.6		
	100	94.9		
	800	792		

Notes:

4.01 18.70

7.04 17.79

10.08 17.34

Field Instrumentation Calibration Form

Site Name: McDonough

Date: 1-30-24

Calibrated By: J. BANKHEAD

Field Conditions: 30°F, SUNNY

Instrument	Manufactuer/ Model	Serial Number
Water Quality Meter	IN-SITU / AQUA TROLL	~~1080293~~ 98 1080302
Turbidity Meter	HACH / 2100 Q	22090D000397

Calibration Standard Information				
Parameter	Standard	Lot #	Date of Expiration	Brand
Specific Conductance (µS/cm)	4,490	24005593	11/2024	AIR, INC
pH (SU)	4.00	24005593	11/2024	↓
pH (SU)	7.00	24003597	11/2024	↓
pH (SU)	10.00	24004996	11/2024	↓
D.O. (%)	N/A	B.O.: 993.62 mbar	—	—
ORP (mV)	228.0	24006903	11/2024	AIR, INC

Calibration					
Time Start 8:25		Time Finish 8:54			
Parameter	Standard	Calibration Value	Calibration Solution Temperature (°C)	Acceptance Criteria	Reference
Specific Conductance (µS/cm)	4,490	4579	3.33	± 10% of standard	EPA 2023
pH (SU)	4.00	3.87	3.44	± 0.1	GWMP
pH (SU)	7.00	7.30	3.74	± 0.1	GWMP
pH (SU)	10.00	10.28	3.75	± 0.1	GWMP
D.O. (%)	N/A	100.15	2.20	± 10%	NA
ORP (mV)	228.0	252.2	3.60	± 10	EPA 2023

	Standard	Calibration Value	Acceptance Criteria	Reference
Turbidity (NTU)	20	22.0	± 10% of standard	EPA 2023
	100	99.7		
	800	775		

Calibration Check					
Time Start 13:05		Time Finish 13:14			
Parameter	Standard	Calibration Value	Calibration Solution Temperature (°C)	Acceptance Criteria	Reference
Specific Conductance (µS/cm)	4,490	4.09 ms/cm	15.72	± 10% of standard	EPA 2023
pH (SU)	4.00	4.01	15.72	± 0.1	GWMP
pH (SU)	7.00	7.02	16.43	± 0.1	GWMP
pH (SU)	10.00	10.01	14.78	± 0.1	GWMP

	Standard	Calibration Value	Acceptance Criteria	Reference
Turbidity (NTU)	20	~~22.0~~ 98 19.6	± 10% of standard	EPA 2023
	100	~~99.7~~ 98 96.5		
	800	~~775~~ 98 787		

Notes:

Field Instrumentation Calibration Form

Site Name: McDonough

Date: 1-31-24

Calibrated By: J. BANKHEAD

Field Conditions: SUNNY, 38°F

Instrument	Manufactuer/ Model	Serial Number
Water Quality Meter	In-Situ / Aqua TROLL	1080302
Turbidity Meter	HACH / 2100Q	22090D000397

Calibration Standard Information				
Parameter	Standard	Lot #	Date of Expiration	Brand
Specific Conductance (µS/cm)	4,490	24003593	11-2024	AIR
pH (SU)	4.00	24005993	11-2024	AIR
pH (SU)	7.00	24003594	11-2024	AIR
pH (SU)	10.00	24004996	11-2024	AIR
D.O. (%)	N/A			
ORP (mV)	228.0	24006903	11-2024	AIR

Calibration					
Time Start 8:00			Time Finish 8:10		
Parameter	Standard	Calibration Value	Calibration Solution Temperature (°C)	Acceptance Criteria	Reference
Specific Conductance (µS/cm)	4,490	4564	13.40	± 10% of standard	EPA 2023
pH (SU)	4.00	4.04	13.92	± 0.1	GWMP
pH (SU)	7.00	6.78	14.01	± 0.1	GWMP
pH (SU)	10.00	10.05	13.90	± 0.1	GWMP
D.O. (%)	N/A	93.9	11.20	± 10%	NA
ORP (mV)	228.0	239.2	13.02	± 10	EPA 2023

	Standard	Calibration Value	Acceptance Criteria	Reference
Turbidity (NTU)	20	21.5	± 10% of standard	EPA 2023
	100	98.8		
	800	800		

Calibration Check					
Time Start 13:20			Time Finish 13:36		
Parameter	Standard	Calibration Value	Calibration Solution Temperature (°C)	Acceptance Criteria	Reference
Specific Conductance (µS/cm)	4,490	4250	15.63	± 10% of standard	EPA 2023
pH (SU)	4.00	3.98	15.63	± 0.1	GWMP
pH (SU)	7.00	7.04	14.90	± 0.1	GWMP
pH (SU)	10.00	10.01	14.99	± 0.1	GWMP

	Standard	Calibration Value	Acceptance Criteria	Reference
Turbidity (NTU)	20	21.2	± 10% of standard	EPA 2023
	100	99.4		
	800	805		

Notes:

Field Instrumentation Calibration Form

Site Name: McDonough

Date: 2-1-24

Calibrated By: J. BANKHEAD

Field Conditions: 30°F, SUNNY

Instrument	Manufactuer/ Model	Serial Number
Water Quality Meter	In-Situ / Aqua Troll	1080302
Turbidity Meter	~~HF-98~~ HACH 2100Q	22090D000397

Calibration Standard Information				
Parameter	Standard	Lot #	Date of Expiration	Brand
Specific Conductance (µS/cm)	4,490	24005593	11-2024	AIR, INC
pH (SU)	4.00	24005593	11-2024	↓
pH (SU)	7.00	24003597	11-2024	↓
pH (SU)	10.00	24004996	11-2024	↓
D.O. (%)	N/A	—	—	—
ORP (mV)	228.0	24006963	11-2024	AIR, INC

Calibration					
Time Start 8:27			Time Finish 8:50		
Parameter	Standard	Calibration Value	Calibration Solution Temperature (°C)	Acceptance Criteria	Reference
Specific Conductance (µS/cm)	4,490	4439	11.90	± 10% of standard	EPA 2023
pH (SU)	4.00	3.93	12.25	± 0.1	GWMP
pH (SU)	7.00	7.00	12.36	± 0.1	GWMP
pH (SU)	10.00	10.09	12.18	± 0.1	GWMP
D.O. (%)	N/A	99.4	10.46	± 10%	NA
ORP (mV)	228.0	230.1	12.01	± 10	EPA 2023

	Standard	Calibration Value	Acceptance Criteria	Reference
Turbidity (NTU)	20	21.8	± 10% of standard	EPA 2023
	100	102		
	800	819		

Calibration Check					
Time Start 13:15			Time Finish		
Parameter	Standard	Calibration Value	Calibration Solution Temperature (°C)	Acceptance Criteria	Reference
Specific Conductance (µS/cm)	4,490	4,330	16.99	± 10% of standard	EPA 2023
pH (SU)	4.00	4.09	16.92	± 0.1	GWMP
pH (SU)	7.00	7.14	16.02	± 0.1	GWMP
pH (SU)	10.00	10.12	15.51	± 0.1	GWMP

	Standard	Calibration Value	Acceptance Criteria	Reference
Turbidity (NTU)	20	21.2	± 10% of standard	EPA 2023
	100	100		
	800	789		

Notes:

Site Name: McDonough

Field Instrumentation Calibration Form

Date: 2-2-24

Calibrated By: J. Bankhead

Field Conditions: Sunny, 36°F

Instrument	Manufactuer/ Model	Serial Number
Water Quality Meter	In-situ/Aquatrol	1080302
Turbidity Meter	HACH/2100Q	~~2100Q~~ 220900000397

Calibration Standard Information				
Parameter	Standard	Lot #	Date of Expiration	Brand
Specific Conductance (µS/cm)	4,490	24005593	11-2024	Air, Rentals Inc
pH (SU)	4.00	24005593	11-2024	Air, Rentals Inc
pH (SU)	7.00	24003597	11-2024	Air, Rentals Inc
pH (SU)	10.00	24004496	11-2024	"
D.O. (%)	N/A	—	—	—
ORP (mV)	228.0	24006903	11-2024	Air, Inc

Calibration					
Time Start 8:12		Time Finish 8:22			
Parameter	Standard	Calibration Value	Calibration Solution Temperature (°C)	Acceptance Criteria	Reference
Specific Conductance (µS/cm)	4,490	4,486	14.52	± 10% of standard	EPA 2023
pH (SU)	4.00	4.02	14.58	± 0.1	GWMP
pH (SU)	7.00	7.03	14.62	± 0.1	GWMP
pH (SU)	10.00	10.11	14.54	± 0.1	GWMP
D.O. (%)	N/A	100.35	12.01	± 10%	NA
ORP (mV)	228.0	243.3	14.09	± 10	EPA 2023

	Standard	Calibration Value	Acceptance Criteria	Reference
Turbidity (NTU)	20	22	± 10% of standard	EPA 2023
	100	101		
	800	817		

Calibration Check					
Time Start		Time Finish			
Parameter	Standard	Calibration Value	Calibration Solution Temperature (°C)	Acceptance Criteria	Reference
Specific Conductance (µS/cm)	4,490			± 10% of standard	EPA 2023
pH (SU)	4.00			± 0.1	GWMP
pH (SU)	7.00			± 0.1	GWMP
pH (SU)	10.00			± 0.1	GWMP

	Standard	Calibration Value	Acceptance Criteria	Reference
Turbidity (NTU)			± 10% of standard	EPA 2023

Notes:

Field Instrumentation Calibration Form

Site Name: McDonough

Date: 2-5-24

Calibrated By: J. BANCHERO

Field Conditions: Cloudy, 45°F

Instrument	Manufactuer/ Model	Serial Number
Water Quality Meter	In-Situ / Aqua Troll	1080302
Turbidity Meter	HACH / 2100Q	14080C034497

Calibration Standard Information

Parameter	Standard	Lot #	Date of Expiration	Brand
Specific Conductance (µS/cm)	4,490	24005593	11-2024	AIR INC
pH (SU)	4.00	24005593	11-2024	↓
pH (SU)	7.00	24003597	11-2024	
pH (SU)	10.00	24004956	11-2024	
D.O. (%)	N/A	—	—	
ORP (mV)	228.0	24006903	11-2024	AIR INC

Calibration

Time Start 8:13 Time Finish 8:20

Parameter	Standard	Calibration Value	Calibration Solution Temperature (°C)	Acceptance Criteria	Reference
Specific Conductance (µS/cm)	4,490	4496	15.33	± 10% of standard	EPA 2023
pH (SU)	4.00	3.99	15.62	± 0.1	GWMP
pH (SU)	7.00	7.04	15.81	± 0.1	GWMP
pH (SU)	10.00	10.11	15.60	± 0.1	GWMP
D.O. (%)	N/A	100.05	~~14.76~~ 13.93	± 10%	NA
ORP (mV)	228.0	240.7	15.16	± 10	EPA 2023

	Standard	Calibration Value	Acceptance Criteria	Reference
Turbidity (NTU)	20	19.8	± 10% of standard	EPA 2023
	100	98.1		
	800	~~779~~		

Calibration Check

Time Start 14:05 Time Finish 14:12

Parameter	Standard	Calibration Value	Calibration Solution Temperature (°C)	Acceptance Criteria	Reference
Specific Conductance (µS/cm)	4,490	4360	16.56	± 10% of standard	EPA 2023
pH (SU)	4.00	4.14	16.56	± 0.1	GWMP
pH (SU)	7.00	7.13	15.36	± 0.1	GWMP
pH (SU)	10.00	10.14	15.12	± 0.1	GWMP

	Standard	Calibration Value	Acceptance Criteria	Reference
Turbidity (NTU)	20	19.4	± 10% of standard	EPA 2023
	100	95		
	800	776		

Notes:

Site Name: Plant McDonough **Field Instrumentation Calibration Form** Date: 01/20/24

Calibrated By: DB Field Conditions: 40° F wd

Instrument	Manufactuer/ Model	Serial Number
Water Quality Meter	[illegible]	1080297
Turbidity Meter	HACH	22090D00239

Calibration Standard Information				
Parameter	**Standard**	**Lot #**	**Date of Expiration**	**Brand**
Specific Conductance (µS/cm)	4,490	24065545	11/24	AIR
pH (SU)	4.00	"	"	"
pH (SU)	7.00	24003597	" /24	"
pH (SU)	10.00	24004996	11/24	"
D.O. (%)	N/A	24005593	11/24	"
ORP (mV)	228.0	24006803	11/24	"

Calibration					
Time Start 1045		**Time Finish** 1125			
Parameter	**Standard**	**Calibration Value**	**Calibration Solution Temperature (°C)**	**Acceptance Criteria**	**Reference**
Specific Conductance (µS/cm)	4,490	4472.6	6.98	± 10% of standard	EPA 2023
pH (SU)	4.00	3.97 ~~4.05~~	7.00	± 0.1	GWMP
pH (SU)	7.00	6.98	7.98	± 0.1	GWMP
pH (SU)	10.00	10.31	9.98	± 0.1	GWMP
D.O. (%)	N/A	103.04	6.97	± 10%	NA
ORP (mV)	228.0	237.9	7.98	± 10	EPA 2023

	Standard	Calibration Value	Acceptance Criteria	Reference
Turbidity (NTU)	20	19.4	± 10% of standard	EPA 2023
	100	96.7		
	800	803		
	10	9.8		

Calibration Check					
Time Start		**Time Finish**			
Parameter	**Standard**	**Calibration Value**	**Calibration Solution Temperature (°C)**	**Acceptance Criteria**	**Reference**
Specific Conductance (µS/cm)	4,490			± 10% of standard	EPA 2023
pH (SU)	4.00			± 0.1	GWMP
pH (SU)	7.00			± 0.1	GWMP
pH (SU)	10.00			± 0.1	GWMP

	Standard	Calibration Value	Acceptance Criteria	Reference
Turbidity (NTU)			± 10% of standard	EPA 2023

Notes:

Site Name: Plant McDonough **Field Instrumentation Calibration Form**

Date: 01/31/24

Field Conditions: Sunny 55°F

Calibrated By:

Instrument	Manufactuer/ Model	Serial Number
Water Quality Meter	aquaread	11
Turbidity Meter	HACH	11

Calibration Standard Information				
Parameter	Standard	Lot #	Date of Expiration	Brand
Specific Conductance (µS/cm)	4,490			
pH (SU)	4.00			
pH (SU)	7.00			
pH (SU)	10.00			
D.O. (%)	N/A			
ORP (mV)	228.0			

Calibration					
Time Start 1150		Time Finish			
Parameter	Standard	Calibration Value	Calibration Solution Temperature (°C)	Acceptance Criteria	Reference
Specific Conductance (µS/cm)	4,490	4559.2	9.41	± 10% of standard	EPA 2023
pH (SU)	4.00	~~3.99~~ 3.90 ~~4.10~~	11.20	± 0.1	GWMP
pH (SU)	7.00	6.93	11.37	± 0.1	GWMP
pH (SU)	10.00	10.07	11.71	± 0.1	GWMP
D.O. (%)	N/A	92.04	9.24	± 10%	NA
ORP (mV)	228.0	225.0	11.13	± 10	EPA 2023

	Standard	Calibration Value	Acceptance Criteria	Reference
Turbidity (NTU)	20	19.7	± 10% of standard	EPA 2023
	100	103		
	800	833		
	10	10.3		

Calibration Check					
Time Start		Time Finish			
Parameter	Standard	Calibration Value	Calibration Solution Temperature (°C)	Acceptance Criteria	Reference
Specific Conductance (µS/cm)	4,490			± 10% of standard	EPA 2023
pH (SU)	4.00			± 0.1	GWMP
pH (SU)	7.00			± 0.1	GWMP
pH (SU)	10.00			± 0.1	GWMP

	Standard	Calibration Value	Acceptance Criteria	Reference
Turbidity (NTU)			± 10% of standard	EPA 2023

Notes:

Site Name: Plant McDonough

Field Instrumentation Calibration Form

Date: 02/01/24

Calibrated By: D. Bloomfield

Field Conditions: Sunny, 40°F

Instrument	Manufactuer/ Model	Serial Number
Water Quality Meter		
Turbidity Meter		

Calibration Standard Information				
Parameter	**Standard**	**Lot #**	**Date of Expiration**	**Brand**
Specific Conductance (µS/cm)	4,490			
pH (SU)	4.00			
pH (SU)	7.00			
pH (SU)	10.00			
D.O. (%)	N/A			
ORP (mV)	228.0			

Calibration

Time Start 0745 **Time Finish**

Parameter	Standard	Calibration Value	Calibration Solution Temperature (°C)	Acceptance Criteria	Reference
Specific Conductance (µS/cm)	4,490	4457.3	3.65	± 10% of standard	EPA 2023
pH (SU)	4.00	4.03 394	~~3.85~~ 4.88	± 0.1	GWMP
pH (SU)	7.00	7.10	~~7.05~~ 5.93	± 0.1	GWMP
pH (SU)	10.00	10.09	6.04	± 0.1	GWMP
D.O. (%)	N/A	93.98	3.63	± 10%	NA
ORP (mV)	228.0	235.2	6.61	± 10	EPA 2023

	Standard	Calibration Value	Acceptance Criteria	Reference
Turbidity (NTU)	20	21.7	± 10% of standard	EPA 2023
	100	102		
	200	734		
	10	9.59		

Calibration Check

Time Start **Time Finish**

Parameter	Standard	Calibration Value	Calibration Solution Temperature (°C)	Acceptance Criteria	Reference
Specific Conductance (µS/cm)	4,490			± 10% of standard	EPA 2023
pH (SU)	4.00			± 0.1	GWMP
pH (SU)	7.00			± 0.1	GWMP
pH (SU)	10.00			± 0.1	GWMP

	Standard	Calibration Value	Acceptance Criteria	Reference
Turbidity (NTU)			± 10% of standard	EPA 2023

Notes:

APPENDIX A

Instrument Calibration Records
May 2024

Site Name: Plant McD

Field Instrumentation Calibration Form

Date: 5/20/24

Calibrated By: DCB

Field Conditions: Sunny 65

Instrument	Manufactuer/ Model	Serial Number
Water Quality Meter	Aquatrol	1082E17
Turbidity Meter	HACH	21010D000165

Calibration Standard Information				
Parameter	Standard	Lot #	Date of Expiration	Brand
Specific Conductance (µS/cm)	4,490	"	"	"
pH (SU)	4.00	24005595	12/24	AIR
pH (SU)	7.00	24004517	12/24	AIR
pH (SU)	10.00	24000085	12/24	AIR
D.O. (%)	N/A	—	—	—
ORP (mV)	228.0	24006403	12/24	AIR

Calibration					
Time Start 1145		Time Finish 1200			
Parameter	Standard	Calibration Value	Calibration Solution Temperature (°C)	Acceptance Criteria	Reference
Specific Conductance (µS/cm)	4,490	45625	24.59	± 10% of standard	EPA 2023
pH (SU)	4.00	3.97	24.57	± 0.1	GWMP
pH (SU)	7.00	7.04	24.62	± 0.1	GWMP
pH (SU)	10.00	10.08	24.46	± 0.1	GWMP
D.O. (%)	N/A	103.03	26.37	± 10%	NA
ORP (mV)	228.0	222.6	24.57	± 10	EPA 2023

	Standard	Calibration Value	Acceptance Criteria	Reference
Turbidity (NTU)	20	19.8	± 10% of standard	EPA 2023
	100	100		
	800	783		
	10	10.7		

Calibration Check					
Time Start		Time Finish			
Parameter	Standard	Calibration Value	Calibration Solution Temperature (°C)	Acceptance Criteria	Reference
Specific Conductance (µS/cm)	4,490			± 10% of standard	EPA 2023
pH (SU)	4.00			± 0.1	GWMP
pH (SU)	7.00			± 0.1	GWMP
pH (SU)	10.00			± 0.1	GWMP

	Standard	Calibration Value	Acceptance Criteria	Reference
Turbidity (NTU)			± 10% of standard	EPA 2023

Notes:

APPENDIX B

Analytical Results, Data Validation Summary and Laboratory Accreditation

APPENDIX B

Laboratory Analytical Data
September 2023

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

October 04, 2023

Lauren Hartley
Southern Co.
241 Ralph McGill Blvd
NE, Bin 10160
Atlanta, GA 30308

RE: Project: Background Wells
Pace Project No.: 92686676

Dear Lauren Hartley:

Enclosed are the analytical results for sample(s) received by the laboratory between September 07, 2023 and September 08, 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,

Bonnie Vang
bonnie.vang@pacelabs.com
704-977-0968
Project Manager

Enclosures

cc: Yong Cheng, WSP
Daniela Herrera, Golder
Andrea McClure, WSP
Laura Midkiff, Southern Co.
Dawn Prell, WSP USA E&I Inc_Atlanta

REPORT OF LABORATORY ANALYSIS

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

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

CERTIFICATIONS

Project: Background Wells
Pace Project No.: 92686676

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

REPORT OF LABORATORY ANALYSIS

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SAMPLE SUMMARY

Project: Background Wells
Pace Project No.: 92686676

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92686676001	**MCD-DGWA-70A**	Water	09/06/23 12:45	09/07/23 09:00
92686676002	**MCD-DGWA-71**	Water	09/06/23 16:09	09/07/23 09:00
92686676003	**MCD-DGWA-53**	Water	09/07/23 10:53	09/08/23 15:50

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SAMPLE ANALYTE COUNT

Project: Background Wells
Pace Project No.: 92686676

Lab ID	Sample ID	Method	Analysts	Analytes Reported
92686676001	**MCD-DGWA-70A**	EPA 6010D	DRB	5
		EPA 6020B	CW1	13
		SM 2540C-2015	DL1	1
		EPA 7470A	BM	1
		SM 2320B-2011	YEG	3
		SM 4500-S2D-2011	JP1	1
		EPA 300.0 Rev 2.1 1993	JCM	3
92686676002	**MCD-DGWA-71**	EPA 6010D	DRB	5
		EPA 6020B	CW1	13
		SM 2540C-2015	DL1	1
		EPA 7470A	BM	1
		SM 2320B-2011	YEG	3
		SM 4500-S2D-2011	JP1	1
		EPA 300.0 Rev 2.1 1993	JCM	3
92686676003	**MCD-DGWA-53**	EPA 6010D	DRB	5
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
		SM 2320B-2011	SMS	3
		SM 4500-S2D-2011	JP1	1
		EPA 300.0 Rev 2.1 1993	CDC	3

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

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ANALYTICAL RESULTS

Project: Background Wells
Pace Project No.: 92686676

Sample: MCD-DGWA-70A **Lab ID: 92686676001** Collected: 09/06/23 12:45 Received: 09/07/23 09:00 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	09/09/23 08:25	09/11/23 20:36	7439-89-6	
Potassium	**1.6**	mg/L	0.50	0.15	1	09/09/23 08:25	09/11/23 20:36	7440-09-7	
Sodium	**3.4**	mg/L	1.0	0.58	1	09/09/23 08:25	09/11/23 20:36	7440-23-5	
Calcium	**6.6**	mg/L	1.0	0.12	1	09/09/23 08:25	09/11/23 20:36	7440-70-2	
Magnesium	**2.6**	mg/L	0.050	0.012	1	09/09/23 08:25	09/11/23 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	0.0012	1	09/09/23 08:50	09/13/23 12:47	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0037	1	09/09/23 08:50	09/13/23 12:47	7440-38-2	
Barium	**0.041**	mg/L	0.0050	0.00067	1	09/09/23 08:50	09/14/23 16:46	7440-39-3	
Beryllium	**0.00012J**	mg/L	0.00050	0.000054	1	09/09/23 08:50	09/13/23 12:47	7440-41-7	
Boron	**0.012J**	mg/L	0.040	0.0086	1	09/09/23 08:50	09/13/23 12:47	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	09/09/23 08:50	09/13/23 12:47	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	09/09/23 08:50	09/13/23 12:47	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	09/09/23 08:50	09/13/23 12:47	7440-48-4	
Lead	ND	mg/L	0.0010	0.00012	1	09/09/23 08:50	09/13/23 12:47	7439-92-1	
Lithium	ND	mg/L	0.030	0.00073	1	09/09/23 08:50	09/13/23 12:47	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	09/09/23 08:50	09/13/23 12:47	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	09/09/23 08:50	09/13/23 12:47	7782-49-2	
Thallium	**0.00053J**	mg/L	0.0010	0.00018	1	09/09/23 08:50	09/13/23 12:47	7440-28-0	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**46.0**	mg/L	25.0	25.0	1		09/11/23 13:27		
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Asheville								
Mercury	ND	mg/L	0.00020	0.00012	1	09/19/23 17:10	09/20/23 13:39	7439-97-6	
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville								
Alkalinity,Bicarbonate (CaCO3)	**27.2**	mg/L	5.0	5.0	1		09/11/23 14:35		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		09/11/23 14:35		
Alkalinity, Total as CaCO3	**27.2**	mg/L	5.0	5.0	1		09/11/23 14:35		
4500S2D Sulfide Water	Analytical Method: SM 4500-S2D-2011 Pace Analytical Services - Asheville								
Sulfide	ND	mg/L	0.10	0.022	1		09/09/23 04:32	18496-25-8	
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		09/09/23 18:55	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		09/09/23 18:55	16984-48-8	

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ANALYTICAL RESULTS

Project: Background Wells
Pace Project No.: 92686676

Sample: MCD-DGWA-70A **Lab ID: 92686676001** Collected: 09/06/23 12:45 Received: 09/07/23 09:00 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								
Sulfate	ND	mg/L	1.0	0.50	1		09/09/23 18:55	14808-79-8	

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ANALYTICAL RESULTS

Project: Background Wells
Pace Project No.: 92686676

Sample: MCD-DGWA-71 **Lab ID: 92686676002** Collected: 09/06/23 16:09 Received: 09/07/23 09:00 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	**0.091**	mg/L	0.040	0.025	1	09/09/23 08:25	09/11/23 20:41	7439-89-6	
Potassium	**0.77**	mg/L	0.50	0.15	1	09/09/23 08:25	09/11/23 20:41	7440-09-7	
Sodium	**8.8**	mg/L	1.0	0.58	1	09/09/23 08:25	09/11/23 20:41	7440-23-5	M1
Calcium	**7.0**	mg/L	1.0	0.12	1	09/09/23 08:25	09/11/23 20:41	7440-70-2	M1
Magnesium	**0.98**	mg/L	0.050	0.012	1	09/09/23 08:25	09/11/23 20:41	7439-95-4	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	**0.0045**	mg/L	0.0030	0.0012	1	09/09/23 08:50	09/13/23 13:03	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0037	1	09/09/23 08:50	09/13/23 13:03	7440-38-2	
Barium	**0.030**	mg/L	0.0050	0.00067	1	09/09/23 08:50	09/14/23 16:58	7440-39-3	
Beryllium	**0.00011J**	mg/L	0.00050	0.000054	1	09/09/23 08:50	09/13/23 13:03	7440-41-7	
Boron	**0.015J**	mg/L	0.040	0.0086	1	09/09/23 08:50	09/13/23 13:03	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	09/09/23 08:50	09/13/23 13:03	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	09/09/23 08:50	09/13/23 13:03	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	09/09/23 08:50	09/13/23 13:03	7440-48-4	
Lead	ND	mg/L	0.0010	0.00012	1	09/09/23 08:50	09/13/23 13:03	7439-92-1	
Lithium	**0.0013J**	mg/L	0.030	0.00073	1	09/09/23 08:50	09/13/23 13:03	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	09/09/23 08:50	09/13/23 13:03	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	09/09/23 08:50	09/13/23 13:03	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	09/09/23 08:50	09/13/23 13:03	7440-28-0	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**80.0**	mg/L	25.0	25.0	1		09/11/23 13:27		
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Asheville								
Mercury	ND	mg/L	0.00020	0.00012	1	09/19/23 17:10	09/20/23 13:46	7439-97-6	
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville								
Alkalinity,Bicarbonate (CaCO3)	**16.4**	mg/L	5.0	5.0	1		09/11/23 14:41		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		09/11/23 14:41		
Alkalinity, Total as CaCO3	**16.4**	mg/L	5.0	5.0	1		09/11/23 14:41		
4500S2D Sulfide Water	Analytical Method: SM 4500-S2D-2011 Pace Analytical Services - Asheville								
Sulfide	ND	mg/L	0.10	0.022	1		09/09/23 04:33	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**7.8**	mg/L	1.0	0.60	1		09/09/23 19:09	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		09/09/23 19:09	16984-48-8	

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ANALYTICAL RESULTS

Project: Background Wells
Pace Project No.: 92686676

Sample: MCD-DGWA-71 **Lab ID: 92686676002** Collected: 09/06/23 16:09 Received: 09/07/23 09:00 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								
Sulfate	**7.2**	mg/L	1.0	0.50	1		09/09/23 19:09	14808-79-8	

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ANALYTICAL RESULTS

Project: Background Wells
Pace Project No.: 92686676

Sample: MCD-DGWA-53 **Lab ID: 92686676003** Collected: 09/07/23 10:53 Received: 09/08/23 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	**14.9**	mg/L	0.040	0.025	1	09/11/23 11:12	09/13/23 11:59	7439-89-6	
Potassium	**3.8**	mg/L	0.50	0.15	1	09/11/23 11:12	09/13/23 11:59	7440-09-7	
Sodium	**7.6**	mg/L	1.0	0.58	1	09/11/23 11:12	09/13/23 11:59	7440-23-5	
Calcium	**16.3**	mg/L	1.0	0.12	1	09/11/23 11:12	09/13/23 11:59	7440-70-2	
Magnesium	**5.1**	mg/L	0.050	0.012	1	09/11/23 11:12	09/13/23 11:59	7439-95-4	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.0012	1	09/11/23 14:11	09/14/23 18:15	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0037	1	09/11/23 14:11	09/14/23 18:15	7440-38-2	
Barium	**0.12**	mg/L	0.0050	0.00067	1	09/11/23 14:11	09/14/23 18:15	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	09/11/23 14:11	09/14/23 18:15	7440-41-7	
Boron	**0.052**	mg/L	0.040	0.0086	1	09/11/23 14:11	09/14/23 18:15	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	09/11/23 14:11	09/14/23 18:15	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	09/11/23 14:11	09/14/23 18:15	7440-47-3	
Cobalt	**0.0086**	mg/L	0.0050	0.00039	1	09/11/23 14:11	09/14/23 18:15	7440-48-4	
Lead	ND	mg/L	0.0010	0.00012	1	09/11/23 14:11	09/14/23 18:15	7439-92-1	
Lithium	**0.0085J**	mg/L	0.030	0.00073	1	09/11/23 14:11	09/14/23 18:15	7439-93-2	
Molybdenum	**0.022**	mg/L	0.010	0.00074	1	09/11/23 14:11	09/15/23 19:10	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	09/11/23 14:11	09/14/23 18:15	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	09/11/23 14:11	09/14/23 18:15	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	10/02/23 12:15	10/02/23 16:35	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**123**	mg/L	25.0	25.0	1		09/12/23 11:44		
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville								
Alkalinity,Bicarbonate (CaCO3)	**74.5**	mg/L	5.0	5.0	1		09/12/23 17:19		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		09/12/23 17:19		
Alkalinity, Total as CaCO3	**74.5**	mg/L	5.0	5.0	1		09/12/23 17:19		
4500S2D Sulfide Water	Analytical Method: SM 4500-S2D-2011 Pace Analytical Services - Asheville								
Sulfide	ND	mg/L	0.10	0.022	1		09/13/23 02:29	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**1.7**	mg/L	1.0	0.60	1		09/12/23 17:51	16887-00-6	
Fluoride	**0.082J**	mg/L	0.10	0.050	1		09/12/23 17:51	16984-48-8	

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ANALYTICAL RESULTS

Project: Background Wells
Pace Project No.: 92686676

Sample: MCD-DGWA-53 **Lab ID: 92686676003** Collected: 09/07/23 10:53 Received: 09/08/23 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								
Sulfate	**15.4**	mg/L	1.0	0.50	1		09/12/23 17:51	14808-79-8	

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QUALITY CONTROL DATA

Project: Background Wells
Pace Project No.: 92686676

QC Batch: 798622
QC Batch Method: EPA 3010A
Analysis Method: EPA 6010D
Analysis Description: 6010D ATL
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92686676001, 92686676002

METHOD BLANK: 4136598 Matrix: Water
Associated Lab Samples: 92686676001, 92686676002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium	mg/L	ND	1.0	0.12	09/11/23 20:25	
Iron	mg/L	ND	0.040	0.025	09/11/23 20:25	
Magnesium	mg/L	ND	0.050	0.012	09/11/23 20:25	
Potassium	mg/L	ND	0.50	0.15	09/11/23 20:25	
Sodium	mg/L	ND	1.0	0.58	09/11/23 20:25	

LABORATORY CONTROL SAMPLE: 4136599

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium	mg/L	1	1.0	104	80-120	
Iron	mg/L	1	1.1	106	80-120	
Magnesium	mg/L	1	1.1	106	80-120	
Potassium	mg/L	1	1.0	103	80-120	
Sodium	mg/L	1	0.99J	99	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4136986 4136987

Parameter	Units	92686676002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Calcium	mg/L	7.0	1	1	8.2	7.6	115	58	75-125	7	20	M1
Iron	mg/L	0.091	1	1	1.2	1.1	108	106	75-125	2	20	
Magnesium	mg/L	0.98	1	1	2.1	2.0	108	101	75-125	4	20	
Potassium	mg/L	0.77	1	1	1.8	1.8	104	101	75-125	1	20	
Sodium	mg/L	8.8	1	1	9.9	9.2	117	42	75-125	8	20	M1

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

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QUALITY CONTROL DATA

Project: Background Wells
Pace Project No.: 92686676

QC Batch: 798869
QC Batch Method: EPA 3010A
Analysis Method: EPA 6010D
Analysis Description: 6010D ATL
Laboratory: Pace Analytical Services - Peachtree Corners, GA

Associated Lab Samples: 92686676003

METHOD BLANK: 4137528 Matrix: Water
Associated Lab Samples: 92686676003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium	mg/L	ND	1.0	0.12	09/13/23 10:22	
Iron	mg/L	ND	0.040	0.025	09/13/23 10:22	
Magnesium	mg/L	ND	0.050	0.012	09/13/23 10:22	
Potassium	mg/L	ND	0.50	0.15	09/13/23 10:22	
Sodium	mg/L	ND	1.0	0.58	09/13/23 10:22	

LABORATORY CONTROL SAMPLE: 4137529

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium	mg/L	1	1.0J	100	80-120	
Iron	mg/L	1	1.0	100	80-120	
Magnesium	mg/L	1	1.0	102	80-120	
Potassium	mg/L	1	0.92	92	80-120	
Sodium	mg/L	1	0.96J	96	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4137530 4137531

Parameter	Units	92686941001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Calcium	mg/L	71.8	1	1	68.4	71.2	-338	-59	75-125	4	20	M1
Iron	mg/L	2.1	1	1	3.0	3.0	86	93	75-125	2	20	
Magnesium	mg/L	24.6	1	1	24.1	25.0	-53	33	75-125	4	20	M1
Potassium	mg/L	8.2	1	1	8.7	9.1	42	82	75-125	5	20	M1
Sodium	mg/L	20.0	1	1	19.8	20.6	-19	59	75-125	4	20	M1

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QUALITY CONTROL DATA

Project: Background Wells
Pace Project No.: 92686676

QC Batch: 798623
QC Batch Method: EPA 3005A
Analysis Method: EPA 6020B
Analysis Description: 6020 MET
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92686676001, 92686676002

METHOD BLANK: 4136603 Matrix: Water
Associated Lab Samples: 92686676001, 92686676002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	ND	0.0030	0.0012	09/13/23 12:38	
Arsenic	mg/L	ND	0.0050	0.0037	09/13/23 12:38	
Barium	mg/L	ND	0.0050	0.00067	09/14/23 16:38	
Beryllium	mg/L	ND	0.00050	0.000054	09/13/23 12:38	
Boron	mg/L	ND	0.040	0.0086	09/13/23 12:38	
Cadmium	mg/L	ND	0.00050	0.00011	09/13/23 12:38	
Chromium	mg/L	ND	0.0050	0.0011	09/13/23 12:38	
Cobalt	mg/L	ND	0.0050	0.00039	09/13/23 12:38	
Lead	mg/L	ND	0.0010	0.00012	09/13/23 12:38	
Lithium	mg/L	ND	0.030	0.00073	09/13/23 12:38	
Molybdenum	mg/L	ND	0.010	0.00074	09/13/23 12:38	
Selenium	mg/L	ND	0.0050	0.0014	09/13/23 12:38	
Thallium	mg/L	ND	0.0010	0.00018	09/13/23 12:38	

LABORATORY CONTROL SAMPLE: 4136604

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	0.097	97	80-120	
Barium	mg/L	0.1	0.098	98	80-120	
Beryllium	mg/L	0.1	0.097	97	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	0.10	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	0.099	99	80-120	
Molybdenum	mg/L	0.1	0.10	105	80-120	
Selenium	mg/L	0.1	0.099	99	80-120	
Thallium	mg/L	0.1	0.096	96	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4136605 4136606

Parameter	Units	92686676001 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	104	105	75-125	1	20	
Arsenic	mg/L	ND	0.1	0.1	0.098	0.099	98	98	75-125	1	20	

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QUALITY CONTROL DATA

Project: Background Wells
Pace Project No.: 92686676

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4136605 4136606

Parameter	Units	92686676001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Barium	mg/L	0.041	0.1	0.1	0.15	0.15	105	107	75-125	2	20	
Beryllium	mg/L	0.00012J	0.1	0.1	0.098	0.097	98	97	75-125	1	20	
Boron	mg/L	0.012J	1	1	1.0	1.0	102	102	75-125	0	20	
Cadmium	mg/L	ND	0.1	0.1	0.099	0.10	99	102	75-125	3	20	
Chromium	mg/L	ND	0.1	0.1	0.10	0.10	102	104	75-125	2	20	
Cobalt	mg/L	ND	0.1	0.1	0.10	0.10	102	104	75-125	2	20	
Lead	mg/L	ND	0.1	0.1	0.098	0.098	97	98	75-125	1	20	
Lithium	mg/L	ND	0.1	0.1	0.098	0.096	97	96	75-125	2	20	
Molybdenum	mg/L	ND	0.1	0.1	0.10	0.10	100	102	75-125	2	20	
Selenium	mg/L	ND	0.1	0.1	0.098	0.10	98	99	75-125	2	20	
Thallium	mg/L	0.00053J	0.1	0.1	0.095	0.095	94	95	75-125	0	20	

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QUALITY CONTROL DATA

Project: Background Wells
Pace Project No.: 92686676

QC Batch: 798903
QC Batch Method: EPA 3005A
Analysis Method: EPA 6020B
Analysis Description: 6020 MET
Laboratory: Pace Analytical Services - Peachtree Corners, GA

Associated Lab Samples: 92686676003

METHOD BLANK: 4137724 Matrix: Water
Associated Lab Samples: 92686676003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	ND	0.0030	0.0012	09/14/23 16:50	
Arsenic	mg/L	ND	0.0050	0.0037	09/14/23 16:50	
Barium	mg/L	ND	0.0050	0.00067	09/14/23 16:50	
Beryllium	mg/L	ND	0.00050	0.000054	09/14/23 16:50	
Boron	mg/L	ND	0.040	0.0086	09/14/23 16:50	
Cadmium	mg/L	ND	0.00050	0.00011	09/14/23 16:50	
Chromium	mg/L	ND	0.0050	0.0011	09/14/23 16:50	
Cobalt	mg/L	ND	0.0050	0.00039	09/14/23 16:50	
Lead	mg/L	ND	0.0010	0.00012	09/14/23 16:50	
Lithium	mg/L	ND	0.030	0.00073	09/14/23 16:50	
Molybdenum	mg/L	ND	0.010	0.00074	09/14/23 16:50	
Selenium	mg/L	ND	0.0050	0.0014	09/14/23 16:50	
Thallium	mg/L	ND	0.0010	0.00018	09/14/23 16:50	

LABORATORY CONTROL SAMPLE: 4137725

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.1	0.11	109	80-120	
Arsenic	mg/L	0.1	0.10	102	80-120	
Barium	mg/L	0.1	0.10	102	80-120	
Beryllium	mg/L	0.1	0.098	98	80-120	
Boron	mg/L	1	0.99	99	80-120	
Cadmium	mg/L	0.1	0.10	102	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	0.10	101	80-120	
Molybdenum	mg/L	0.1	0.10	101	80-120	
Selenium	mg/L	0.1	0.10	102	80-120	
Thallium	mg/L	0.1	0.097	97	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4137726 4137727

Parameter	Units	92686941002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Antimony	mg/L	ND	0.1	0.1	0.11	0.10	110	104	75-125	6	20	
Arsenic	mg/L	ND	0.1	0.1	0.11	0.099	106	99	75-125	7	20	

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QUALITY CONTROL DATA

Project: Background Wells
Pace Project No.: 92686676

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4137726 4137727

Parameter	Units	92686941002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Barium	mg/L	0.0027J	0.1	0.1	0.11	0.10	105	100	75-125	5	20	
Beryllium	mg/L	ND	0.1	0.1	0.10	0.097	100	97	75-125	4	20	
Boron	mg/L	0.24	1	1	1.3	1.2	103	99	75-125	3	20	
Cadmium	mg/L	ND	0.1	0.1	0.11	0.10	107	100	75-125	6	20	
Chromium	mg/L	ND	0.1	0.1	0.10	0.094	102	93	75-125	8	20	
Cobalt	mg/L	0.00040J	0.1	0.1	0.10	0.094	101	94	75-125	8	20	
Lead	mg/L	ND	0.1	0.1	0.095	0.091	95	91	75-125	4	20	
Lithium	mg/L	0.0043J	0.1	0.1	0.10	0.099	100	94	75-125	6	20	
Molybdenum	mg/L	0.026	0.1	0.1	0.13	0.12	105	97	75-125	6	20	
Selenium	mg/L	ND	0.1	0.1	0.10	0.098	104	98	75-125	6	20	
Thallium	mg/L	ND	0.1	0.1	0.092	0.089	92	89	75-125	4	20	

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QUALITY CONTROL DATA

Project: Background Wells
Pace Project No.: 92686676

QC Batch: 803461
QC Batch Method: EPA 7470A
Analysis Method: EPA 7470A
Analysis Description: 7470 Mercury
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92686676003

METHOD BLANK: 4161104 Matrix: Water
Associated Lab Samples: 92686676003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	ND	0.00020	0.00013	10/02/23 16:27	

LABORATORY CONTROL SAMPLE: 4161105

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: 4161106 4161107

Parameter	Units	92686676003 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	0.0027	0.0026	104	101	75-125	3	20	

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QUALITY CONTROL DATA

Project: Background Wells
Pace Project No.: 92686676

QC Batch: 798883
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: 92686676001, 92686676002

METHOD BLANK: 4137624 Matrix: Water
Associated Lab Samples: 92686676001, 92686676002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	25.0	25.0	09/11/23 13:25	

LABORATORY CONTROL SAMPLE: 4137625

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	427	107	80-120	

SAMPLE DUPLICATE: 4137626

Parameter	Units	92686830001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	1540	1500	3	10	

SAMPLE DUPLICATE: 4137627

Parameter	Units	92686679004 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	207	174	17	10	D6

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QUALITY CONTROL DATA

Project: Background Wells
Pace Project No.: 92686676

QC Batch: 799142
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: 92686676003

METHOD BLANK: 4138899 Matrix: Water
Associated Lab Samples: 92686676003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	25.0	25.0	09/12/23 11:42	

LABORATORY CONTROL SAMPLE: 4138900

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	394	98	80-120	

SAMPLE DUPLICATE: 4138901

Parameter	Units	92686677006 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	253	259	2	10	

SAMPLE DUPLICATE: 4138902

Parameter	Units	92687108002 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	100	101	1	10	

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QUALITY CONTROL DATA

Project: Background Wells
Pace Project No.: 92686676

QC Batch: 800476
QC Batch Method: EPA 7470A
Analysis Method: EPA 7470A
Analysis Description: 7470 Mercury
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92686676001, 92686676002

METHOD BLANK: 4146097 Matrix: Water
Associated Lab Samples: 92686676001, 92686676002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	ND	0.00020	0.00012	09/20/23 13:34	

LABORATORY CONTROL SAMPLE: 4146098

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.0025	0.0020	81	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4146099 4146100

Parameter	Units	92686676001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	mg/L	ND	0.0025	0.0025	0.0025	0.0024	100	95	75-125	5	25	

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QUALITY CONTROL DATA

Project: Background Wells
Pace Project No.: 92686676

QC Batch: 798842
QC Batch Method: SM 2320B-2011
Analysis Method: SM 2320B-2011
Analysis Description: 2320B Alkalinity
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92686676001, 92686676002

METHOD BLANK: 4137442 Matrix: Water
Associated Lab Samples: 92686676001, 92686676002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Alkalinity, Total as CaCO3	mg/L	ND	5.0	5.0	09/11/23 11:24	
Alkalinity,Bicarbonate (CaCO3)	mg/L	ND	5.0	5.0	09/11/23 11:24	
Alkalinity,Carbonate (CaCO3)	mg/L	ND	5.0	5.0	09/11/23 11:24	

LABORATORY CONTROL SAMPLE: 4137443

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	50	51.1	102	80-120	

LABORATORY CONTROL SAMPLE: 4137444

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	50	51.0	102	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4137445 4137446

Parameter	Units	92686252001 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	<5.0	50	50	48.4	47.8	97	96	80-120	1	25	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4137447 4137448

Parameter	Units	92686487004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Alkalinity, Total as CaCO3	mg/L	32.6	50	50	83.1	82.1	101	99	80-120	1	25	

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QUALITY CONTROL DATA

Project: Background Wells
Pace Project No.: 92686676

QC Batch: 799173
QC Batch Method: SM 2320B-2011
Analysis Method: SM 2320B-2011
Analysis Description: 2320B Alkalinity
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92686676003

METHOD BLANK: 4139096 Matrix: Water
Associated Lab Samples: 92686676003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Alkalinity, Total as CaCO3	mg/L	ND	5.0	5.0	09/12/23 15:04	
Alkalinity,Bicarbonate (CaCO3)	mg/L	ND	5.0	5.0	09/12/23 15:04	
Alkalinity,Carbonate (CaCO3)	mg/L	ND	5.0	5.0	09/12/23 15:04	

LABORATORY CONTROL SAMPLE: 4139097

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: 4139098

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	50	50.9	102	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4139099 4139100

Parameter	Units	92686679012 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Alkalinity, Total as CaCO3	mg/L	ND	50	50	51.2	51.0	102	102	80-120	0	25	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4139101 4139102

Parameter	Units	92686677009 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	96.9	50	50	148	148	103	102	80-120	0	25	

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QUALITY CONTROL DATA

Project: Background Wells
Pace Project No.: 92686676

QC Batch: 798662
QC Batch Method: SM 4500-S2D-2011
Analysis Method: SM 4500-S2D-2011
Analysis Description: 4500S2D Sulfide Water
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92686676001, 92686676002

METHOD BLANK: 4136899 Matrix: Water
Associated Lab Samples: 92686676001, 92686676002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Sulfide	mg/L	ND	0.10	0.022	09/09/23 04:31	

LABORATORY CONTROL SAMPLE: 4136900

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Sulfide	mg/L	0.5	0.52	104	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4136901 4136902

Parameter	Units	92686676001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Sulfide	mg/L	ND	0.5	0.5	0.54	0.56	106	111	80-120	5	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4136903 4136904

Parameter	Units	92686861001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Sulfide	mg/L	ND	0.5	0.5	0.38	0.37	76	75	80-120	2	10	M1

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QUALITY CONTROL DATA

Project: Background Wells
Pace Project No.: 92686676

QC Batch: 799296
QC Batch Method: SM 4500-S2D-2011
Analysis Method: SM 4500-S2D-2011
Analysis Description: 4500S2D Sulfide Water
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92686676003

METHOD BLANK: 4140098 Matrix: Water
Associated Lab Samples: 92686676003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Sulfide	mg/L	ND	0.10	0.022	09/13/23 02:23	

LABORATORY CONTROL SAMPLE: 4140099

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Sulfide	mg/L	0.5	0.52	104	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4140102 4140103

Parameter	Units	92686679007 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Sulfide	mg/L	ND	0.5	0.5	0.44	0.43	87	85	80-120	1	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4140133 4140134

Parameter	Units	92686941002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Sulfide	mg/L	ND	0.5	0.5	0.52	0.49	104	97	80-120	7	10	

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

REPORT OF LABORATORY ANALYSIS

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Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: Background Wells
Pace Project No.: 92686676

QC Batch: 798687
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: 92686676001, 92686676002

METHOD BLANK: 4136953 Matrix: Water
Associated Lab Samples: 92686676001, 92686676002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.60	09/09/23 13:26	
Fluoride	mg/L	ND	0.10	0.050	09/09/23 13:26	
Sulfate	mg/L	ND	1.0	0.50	09/09/23 13:26	

LABORATORY CONTROL SAMPLE: 4136954

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	50.0	100	90-110	
Fluoride	mg/L	2.5	2.4	96	90-110	
Sulfate	mg/L	50	50.1	100	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4136955 4136956

Parameter	Units	92686882001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	23.0	50	50	75.9	75.9	106	106	90-110	0	10	
Fluoride	mg/L	0.13	2.5	2.5	2.6	2.7	101	101	90-110	1	10	
Sulfate	mg/L	13.2	50	50	66.5	66.7	107	107	90-110	0	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4136957 4136958

Parameter	Units	92686872001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	840	50	50	885	882	89	82	90-110	0	10	M1
Fluoride	mg/L	15.2	2.5	2.5	17.5	17.7	92	98	90-110	1	10	
Sulfate	mg/L	55.9	50	50	93.3	93.1	75	74	90-110	0	10	M1

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REPORT OF LABORATORY ANALYSIS

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9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: Background Wells
Pace Project No.: 92686676

QC Batch: 799070
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: 92686676003

METHOD BLANK: 4138708 Matrix: Water
Associated Lab Samples: 92686676003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.60	09/12/23 12:51	
Fluoride	mg/L	ND	0.10	0.050	09/12/23 12:51	
Sulfate	mg/L	ND	1.0	0.50	09/12/23 12:51	

LABORATORY CONTROL SAMPLE: 4138709

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	50.1	100	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4138710 4138711

Parameter	Units	92687087001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	8.0	50	50	59.4	59.8	103	104	90-110	1	10	
Fluoride	mg/L	0.63	2.5	2.5	3.5	3.5	113	115	90-110	1	10	M1
Sulfate	mg/L	9.9	50	50	60.7	61.4	102	103	90-110	1	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4138712 4138713

Parameter	Units	92686677010 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	ND	50	50	52.1	53.1	104	106	90-110	2	10	
Fluoride	mg/L	ND	2.5	2.5	2.7	2.7	109	108	90-110	0	10	
Sulfate	mg/L	ND	50	50	52.7	54.0	105	108	90-110	2	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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Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALIFIERS

Project: Background Wells
Pace Project No.: 92686676

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
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Background Wells
Pace Project No.: 92686676

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92686676001	**MCD-DGWA-70A**	EPA 3010A	798622	EPA 6010D	798709
92686676002	**MCD-DGWA-71**	EPA 3010A	798622	EPA 6010D	798709
92686676003	**MCD-DGWA-53**	EPA 3010A	798869	EPA 6010D	798954
92686676001	**MCD-DGWA-70A**	EPA 3005A	798623	EPA 6020B	798699
92686676002	**MCD-DGWA-71**	EPA 3005A	798623	EPA 6020B	798699
92686676003	**MCD-DGWA-53**	EPA 3005A	798903	EPA 6020B	798992
92686676003	**MCD-DGWA-53**	EPA 7470A	803461	EPA 7470A	803573
92686676001	**MCD-DGWA-70A**	SM 2540C-2015	798883		
92686676002	**MCD-DGWA-71**	SM 2540C-2015	798883		
92686676003	**MCD-DGWA-53**	SM 2540C-2015	799142		
92686676001	**MCD-DGWA-70A**	EPA 7470A	800476	EPA 7470A	800627
92686676002	**MCD-DGWA-71**	EPA 7470A	800476	EPA 7470A	800627
92686676001	**MCD-DGWA-70A**	SM 2320B-2011	798842		
92686676002	**MCD-DGWA-71**	SM 2320B-2011	798842		
92686676003	**MCD-DGWA-53**	SM 2320B-2011	799173		
92686676001	**MCD-DGWA-70A**	SM 4500-S2D-2011	798662		
92686676002	**MCD-DGWA-71**	SM 4500-S2D-2011	798662		
92686676003	**MCD-DGWA-53**	SM 4500-S2D-2011	799296		
92686676001	**MCD-DGWA-70A**	EPA 300.0 Rev 2.1 1993	798687		
92686676002	**MCD-DGWA-71**	EPA 300.0 Rev 2.1 1993	798687		
92686676003	**MCD-DGWA-53**	EPA 300.0 Rev 2.1 1993	799070		

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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 ☐ Me

WO# : 92686676

92686676

Sample Condition Upon Receipt

Client Name: Ga-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: 9-7-23 JC

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: 2.3 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): 2.3

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

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

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

				Comments/Discrepancy:
Chain of Custody Present?	☑ Yes	☐ No	☐ N/A	1.
Samples Arrived within Hold Time?	☑ Yes	☐ No	☐ N/A	2.
Short Hold Time Analysis (<72 hr.)?	☑ Yes	☐ No	☐ N/A	3.
Rush Turn Around Time Requested?	☐ Yes	☑ No	☐ N/A	4.
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

*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# : 92686676**

PM: BV Due Date: 09/21/23

CLIENT: 92-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) (DF)	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		1																2					
2		2	1			1		1																2					
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pH Adjustment Log for Preserved Samples

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

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina 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:	WSP	Company Name:	
	Atlanta, GA 30339			Address:	
Email:	laucoker@southernco.com	Purchase Order #:		Pace Quote:	
Phone:	(470) 620-6176 Fax:	Project Name:	Background Wells	Pace Project Manager:	Bonnie Vang
Requested Due Date:	10 Day TAT	Project #:	31405440.McD23	Pace Profile #:	16434-2

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	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	Sulfide	Residual Chlorine (Y/N)	92686676
																	N	N	N	N	N	N		
1	MCD-DGWA-70A	WG	G	9/6/23	12:45		7	3		3		1					X	X	X	X	X	X		001
3	MCD-DGWA-71	WG	G	9/6/23	16:09		7	3		3		1					X	X	X	X	X	X		002
5																								
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-GGR-1-COMP-[illegible]	[illegible] WSP	09/09/23	0900	[illegible]	9/9/23	

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 ☑ Kernersville ☐

Sample Condition Upon Receipt

Client Name: GA Power

Project # **WO#: 92686676**

PM: BV **Due Date: 09/21/23**

CLIENT: 92-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: 9/8/23 TBE

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: 4.1 **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): 4.1

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:** _____

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#: 92686676**

PM: BV Due Date: 09/21/23

CLIENT: 92-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 Sterile Plastic (N/A – lab)	BP1U	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	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.

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:	WSP	Company Name:	
	Atlanta, GA 30339			Address:	
Email:	laucoker@southernco.com	Purchase Order #:		Pace Quote:	
Phone: (470) 620-6176	Fax:	Project Name:	Background Wells	Pace Project Manager:	Bonnie Vang
Requested Due Date:	10 Day TAT	Project #:	31406440.McD23	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	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	Sulfide	Residual Chlorine (Y/N)	92686676
								Preservatives									N	N	N	N	N	N		
1	MCD-DGWA-53	WG	G	9/7/23	10:53		7	3		3		1					X	X	X	X	X	X		WS3
3																								
5																								
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-2023S2	MARK MEUR WSP	09/08/23	1550	Ice - Pace	9/11/23	

DATE Signed:

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

Pace Analytical Services, LLC
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Huntersville, NC 28078
(704)875-9092

October 04, 2023

Lauren Hartley
Southern Co.
241 Ralph McGill Blvd
NE, Bin 10160
Atlanta, GA 30308

RE: Project: Plant McD AP-1- Well Network
Pace Project No.: 92686677

Dear Lauren Hartley:

Enclosed are the analytical results for sample(s) received by the laboratory between September 07, 2023 and September 08, 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,

Bonnie Vang
bonnie.vang@pacelabs.com
704-977-0968
Project Manager

Enclosures

cc: Yong Cheng, WSP
Daniela Herrera, Golder
Andrea McClure, WSP
Laura Midkiff, Southern Co.
Dawn Prell, WSP USA E&I Inc_Atlanta

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CERTIFICATIONS

Project: Plant McD AP-1- Well Network
Pace Project No.: 92686677

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- Well Network
Pace Project No.: 92686677

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92686677001	**MCD-DGWC-37**	Water	09/06/23 14:48	09/07/23 09:00
92686677002	**MCD-AP1-FD-1**	Water	09/06/23 00:00	09/07/23 09:00
92686677003	**MCD-DGWC-67**	Water	09/07/23 11:44	09/08/23 15:50
92686677004	**MCD-DGWC-40**	Water	09/07/23 12:42	09/08/23 15:50
92686677005	**MCD-DGWC-38**	Water	09/07/23 13:27	09/08/23 15:50
92686677006	**MCD-DGWC-68A**	Water	09/07/23 13:38	09/08/23 15:50
92686677007	**MCD-DGWC-39**	Water	09/07/23 14:45	09/08/23 15:50
92686677008	**MCD-DGWC-69**	Water	09/07/23 15:01	09/08/23 15:50
92686677009	**MCD-DGWC-121**	Water	09/08/23 09:43	09/08/23 15:50
92686677010	**MCD-AP1-FB-1**	Water	09/08/23 12:00	09/08/23 15:50
92686677011	**MCD-AP1-EB-1**	Water	09/08/23 13:00	09/08/23 15:50

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SAMPLE ANALYTE COUNT

Project: Plant McD AP-1- Well Network
Pace Project No.: 92686677

Lab ID	Sample ID	Method	Analysts	Analytes Reported
92686677001	**MCD-DGWC-37**	EPA 6010D	DRB	5
		EPA 6020B	CW1	13
		SM 2540C-2015	DL1	1
		EPA 7470A	BM	1
		SM 2320B-2011	YEG	3
		SM 4500-S2D-2011	JP1	1
		EPA 300.0 Rev 2.1 1993	JCM	3
92686677002	**MCD-AP1-FD-1**	EPA 6010D	DRB	5
		EPA 6020B	CW1	13
		SM 2540C-2015	DL1	1
		EPA 7470A	BM	1
		SM 2320B-2011	YEG	3
		SM 4500-S2D-2011	JP1	1
		EPA 300.0 Rev 2.1 1993	JCM	3
92686677003	**MCD-DGWC-67**	EPA 6010D	DRB	5
		EPA 6020B	CW1	13
		SM 2540C-2015	DL1	1
		EPA 7470A	BM	1
		SM 2320B-2011	SMS	3
		SM 4500-S2D-2011	JP1	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92686677004	**MCD-DGWC-40**	EPA 6010D	DRB	5
		EPA 6020B	CW1	13
		SM 2540C-2015	DL1	1
		EPA 7470A	BM	1
		SM 2320B-2011	SMS	3
		SM 4500-S2D-2011	JP1	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92686677005	**MCD-DGWC-38**	EPA 6010D	DRB	5
		EPA 6020B	CW1	13
		SM 2540C-2015	DL1	1
		EPA 7470A	BM	1
		SM 2320B-2011	SMS	3
		SM 4500-S2D-2011	JP1	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92686677006	**MCD-DGWC-68A**	EPA 6010D	DRB	5
		EPA 6020B	CW1	13

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SAMPLE ANALYTE COUNT

Project: Plant McD AP-1- Well Network
Pace Project No.: 92686677

Lab ID	Sample ID	Method	Analysts	Analytes Reported
		SM 2540C-2015	DL1	1
		EPA 7470A	BM	1
		SM 2320B-2011	SMS	3
		SM 4500-S2D-2011	JP1	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92686677007	**MCD-DGWC-39**	EPA 6010D	DRB	5
		EPA 6020B	CW1	13
		SM 2540C-2015	DL1	1
		EPA 7470A	BM	1
		SM 2320B-2011	SMS	3
		SM 4500-S2D-2011	JP1	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92686677008	**MCD-DGWC-69**	EPA 6010D	DRB	5
		EPA 6020B	CW1	13
		SM 2540C-2015	DL1	1
		EPA 7470A	BM	1
		SM 2320B-2011	SMS	3
		SM 4500-S2D-2011	JP1	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92686677009	**MCD-DGWC-121**	EPA 6010D	DRB	5
		EPA 6020B	CW1	13
		SM 2540C-2015	DL1	1
		EPA 7470A	BM	1
		SM 2320B-2011	SMS	3
		SM 4500-S2D-2011	JP1	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92686677010	**MCD-AP1-FB-1**	EPA 6010D	DRB	5
		EPA 6020B	CW1	13
		SM 2540C-2015	DL1	1
		EPA 7470A	BM	1
		SM 2320B-2011	SMS	3
		SM 4500-S2D-2011	JP1	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92686677011	**MCD-AP1-EB-1**	EPA 6010D	DRB	5
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	DL1	1

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SAMPLE ANALYTE COUNT

Project: Plant McD AP-1- Well Network
Pace Project No.: 92686677

Lab ID	Sample ID	Method	Analysts	Analytes Reported
		SM 2320B-2011	SMS	3
		SM 4500-S2D-2011	JP1	1
		EPA 300.0 Rev 2.1 1993	CDC	3

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

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ANALYTICAL RESULTS

Project: Plant McD AP-1- Well Network
Pace Project No.: 92686677

Sample: MCD-DGWC-37 **Lab ID: 92686677001** Collected: 09/06/23 14:48 Received: 09/07/23 09:00 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	**0.040**	mg/L	0.040	0.025	1	09/09/23 08:25	09/11/23 21:02	7439-89-6	
Potassium	**4.0**	mg/L	0.50	0.15	1	09/09/23 08:25	09/11/23 21:02	7440-09-7	
Sodium	**10.3**	mg/L	1.0	0.58	1	09/09/23 08:25	09/11/23 21:02	7440-23-5	
Calcium	**59.1**	mg/L	1.0	0.12	1	09/09/23 08:25	09/11/23 21:02	7440-70-2	
Magnesium	**13.0**	mg/L	0.050	0.012	1	09/09/23 08:25	09/11/23 21:02	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	0.0012	1	09/09/23 08:50	09/13/23 13:07	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0037	1	09/09/23 08:50	09/13/23 13:07	7440-38-2	
Barium	**0.082**	mg/L	0.0050	0.00067	1	09/09/23 08:50	09/14/23 17:02	7440-39-3	
Beryllium	**0.000058J**	mg/L	0.00050	0.000054	1	09/09/23 08:50	09/13/23 13:07	7440-41-7	
Boron	**1.7**	mg/L	0.040	0.0086	1	09/09/23 08:50	09/13/23 13:07	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	09/09/23 08:50	09/13/23 13:07	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	09/09/23 08:50	09/13/23 13:07	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	09/09/23 08:50	09/13/23 13:07	7440-48-4	
Lead	ND	mg/L	0.0010	0.00012	1	09/09/23 08:50	09/13/23 13:07	7439-92-1	
Lithium	**0.0021J**	mg/L	0.030	0.00073	1	09/09/23 08:50	09/13/23 13:07	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	09/09/23 08:50	09/13/23 13:07	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	09/09/23 08:50	09/13/23 13:07	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	09/09/23 08:50	09/13/23 13:07	7440-28-0	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**324**	mg/L	25.0	25.0	1		09/11/23 13:27		
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Asheville								
Mercury	ND	mg/L	0.00020	0.00012	1	09/19/23 17:10	09/20/23 13:48	7439-97-6	
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville								
Alkalinity,Bicarbonate (CaCO3)	**129**	mg/L	5.0	5.0	1		09/11/23 14:46		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		09/11/23 14:46		
Alkalinity, Total as CaCO3	**129**	mg/L	5.0	5.0	1		09/11/23 14:46		
4500S2D Sulfide Water	Analytical Method: SM 4500-S2D-2011 Pace Analytical Services - Asheville								
Sulfide	ND	mg/L	0.10	0.022	1		09/09/23 04:34	18496-25-8	
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		09/09/23 19:23	16887-00-6	
Fluoride	**0.053J**	mg/L	0.10	0.050	1		09/09/23 19:23	16984-48-8	

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ANALYTICAL RESULTS

Project: Plant McD AP-1- Well Network
Pace Project No.: 92686677

Sample: MCD-DGWC-37 **Lab ID: 92686677001** Collected: 09/06/23 14:48 Received: 09/07/23 09:00 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								
Sulfate	**83.4**	mg/L	1.0	0.50	1		09/09/23 19:23	14808-79-8	

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ANALYTICAL RESULTS

Project: Plant McD AP-1- Well Network
Pace Project No.: 92686677

Sample: MCD-AP1-FD-1 **Lab ID: 92686677002** Collected: 09/06/23 00:00 Received: 09/07/23 09:00 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	**0.041**	mg/L	0.040	0.025	1	09/09/23 08:25	09/11/23 21:07	7439-89-6	
Potassium	**3.9**	mg/L	0.50	0.15	1	09/09/23 08:25	09/11/23 21:07	7440-09-7	
Sodium	**10.3**	mg/L	1.0	0.58	1	09/09/23 08:25	09/11/23 21:07	7440-23-5	
Calcium	**58.9**	mg/L	1.0	0.12	1	09/09/23 08:25	09/11/23 21:07	7440-70-2	
Magnesium	**12.9**	mg/L	0.050	0.012	1	09/09/23 08:25	09/11/23 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	0.0012	1	09/09/23 08:50	09/13/23 13:11	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0037	1	09/09/23 08:50	09/13/23 13:11	7440-38-2	
Barium	**0.076**	mg/L	0.0050	0.00067	1	09/09/23 08:50	09/14/23 17:06	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	09/09/23 08:50	09/13/23 13:11	7440-41-7	
Boron	**1.6**	mg/L	0.040	0.0086	1	09/09/23 08:50	09/13/23 13:11	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	09/09/23 08:50	09/13/23 13:11	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	09/09/23 08:50	09/13/23 13:11	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	09/09/23 08:50	09/13/23 13:11	7440-48-4	
Lead	ND	mg/L	0.0010	0.00012	1	09/09/23 08:50	09/13/23 13:11	7439-92-1	
Lithium	**0.0021J**	mg/L	0.030	0.00073	1	09/09/23 08:50	09/13/23 13:11	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	09/09/23 08:50	09/13/23 13:11	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	09/09/23 08:50	09/13/23 13:11	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	09/09/23 08:50	09/13/23 13:11	7440-28-0	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**304**	mg/L	25.0	25.0	1		09/11/23 13:27		
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Asheville								
Mercury	ND	mg/L	0.00020	0.00012	1	09/19/23 17:10	09/20/23 13:50	7439-97-6	
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville								
Alkalinity,Bicarbonate (CaCO3)	**128**	mg/L	5.0	5.0	1		09/11/23 14:57		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		09/11/23 14:57		
Alkalinity, Total as CaCO3	**128**	mg/L	5.0	5.0	1		09/11/23 14:57		
4500S2D Sulfide Water	Analytical Method: SM 4500-S2D-2011 Pace Analytical Services - Asheville								
Sulfide	ND	mg/L	0.10	0.022	1		09/09/23 04:34	18496-25-8	
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		09/09/23 19:38	16887-00-6	
Fluoride	**0.052J**	mg/L	0.10	0.050	1		09/09/23 19:38	16984-48-8	

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ANALYTICAL RESULTS

Project: Plant McD AP-1- Well Network
Pace Project No.: 92686677

Sample: MCD-AP1-FD-1 **Lab ID: 92686677002** Collected: 09/06/23 00:00 Received: 09/07/23 09:00 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								
Sulfate	**83.2**	mg/L	1.0	0.50	1		09/09/23 19:38	14808-79-8	

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ANALYTICAL RESULTS

Project: Plant McD AP-1- Well Network
Pace Project No.: 92686677

Sample: MCD-DGWC-67 **Lab ID: 92686677003** Collected: 09/07/23 11:44 Received: 09/08/23 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	09/11/23 11:12	09/13/23 11:12	7439-89-6	
Potassium	**3.6**	mg/L	0.50	0.15	1	09/11/23 11:12	09/13/23 11:12	7440-09-7	
Sodium	**10.3**	mg/L	1.0	0.58	1	09/11/23 11:12	09/13/23 11:12	7440-23-5	
Calcium	**43.3**	mg/L	1.0	0.12	1	09/11/23 11:12	09/13/23 11:12	7440-70-2	
Magnesium	**17.2**	mg/L	0.050	0.012	1	09/11/23 11:12	09/13/23 11:12	7439-95-4	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	**0.0039**	mg/L	0.0030	0.0012	1	09/11/23 14:11	09/14/23 17:22	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0037	1	09/11/23 14:11	09/14/23 17:22	7440-38-2	
Barium	**0.076**	mg/L	0.0050	0.00067	1	09/11/23 14:11	09/14/23 17:22	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	09/11/23 14:11	09/14/23 17:22	7440-41-7	
Boron	**3.9**	mg/L	0.040	0.0086	1	09/11/23 14:11	09/14/23 17:22	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	09/11/23 14:11	09/14/23 17:22	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	09/11/23 14:11	09/14/23 17:22	7440-47-3	
Cobalt	**0.0010J**	mg/L	0.0050	0.00039	1	09/11/23 14:11	09/14/23 17:22	7440-48-4	
Lead	ND	mg/L	0.0010	0.00012	1	09/11/23 14:11	09/14/23 17:22	7439-92-1	
Lithium	**0.0046J**	mg/L	0.030	0.00073	1	09/11/23 14:11	09/14/23 17:22	7439-93-2	
Molybdenum	**0.0013J**	mg/L	0.010	0.00074	1	09/11/23 14:11	09/14/23 17:22	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	09/11/23 14:11	09/14/23 17:22	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	09/11/23 14:11	09/14/23 17:22	7440-28-0	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**337**	mg/L	25.0	25.0	1		09/11/23 13:32		
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Asheville								
Mercury	ND	mg/L	0.00020	0.00012	1	09/19/23 17:10	09/20/23 15:25	7439-97-6	
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville								
Alkalinity,Bicarbonate (CaCO3)	**90.9**	mg/L	5.0	5.0	1		09/12/23 16:23		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		09/12/23 16:23		
Alkalinity, Total as CaCO3	**90.9**	mg/L	5.0	5.0	1		09/12/23 16:23		
4500S2D Sulfide Water	Analytical Method: SM 4500-S2D-2011 Pace Analytical Services - Asheville								
Sulfide	ND	mg/L	0.10	0.022	1		09/13/23 02:26	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**9.2**	mg/L	1.0	0.60	1		09/12/23 14:36	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		09/12/23 14:36	16984-48-8	

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ANALYTICAL RESULTS

Project: Plant McD AP-1- Well Network
Pace Project No.: 92686677

Sample: MCD-DGWC-67 **Lab ID: 92686677003** Collected: 09/07/23 11:44 Received: 09/08/23 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								
Sulfate	**106**	mg/L	2.0	1.0	2		09/13/23 07:38	14808-79-8	

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ANALYTICAL RESULTS

Project: Plant McD AP-1- Well Network
Pace Project No.: 92686677

Sample: MCD-DGWC-40 **Lab ID: 92686677004** Collected: 09/07/23 12:42 Received: 09/08/23 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	09/11/23 11:12	09/13/23 11:17	7439-89-6	
Potassium	**5.9**	mg/L	0.50	0.15	1	09/11/23 11:12	09/13/23 11:17	7440-09-7	
Sodium	**18.9**	mg/L	1.0	0.58	1	09/11/23 11:12	09/13/23 11:17	7440-23-5	
Calcium	**41.0**	mg/L	1.0	0.12	1	09/11/23 11:12	09/13/23 11:17	7440-70-2	
Magnesium	**18.0**	mg/L	0.050	0.012	1	09/11/23 11:12	09/13/23 11:17	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	0.0012	1	09/11/23 14:11	09/14/23 17:26	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0037	1	09/11/23 14:11	09/14/23 17:26	7440-38-2	
Barium	**0.016**	mg/L	0.0050	0.00067	1	09/11/23 14:11	09/14/23 17:26	7440-39-3	
Beryllium	**0.0031**	mg/L	0.00050	0.000054	1	09/11/23 14:11	09/14/23 17:26	7440-41-7	
Boron	**0.73**	mg/L	0.040	0.0086	1	09/11/23 14:11	09/14/23 17:26	7440-42-8	
Cadmium	**0.00074**	mg/L	0.00050	0.00011	1	09/11/23 14:11	09/14/23 17:26	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	09/11/23 14:11	09/14/23 17:26	7440-47-3	
Cobalt	**0.035**	mg/L	0.0050	0.00039	1	09/11/23 14:11	09/14/23 17:26	7440-48-4	
Lead	ND	mg/L	0.0010	0.00012	1	09/11/23 14:11	09/14/23 17:26	7439-92-1	
Lithium	**0.0022J**	mg/L	0.030	0.00073	1	09/11/23 14:11	09/14/23 17:26	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	09/11/23 14:11	09/14/23 17:26	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	09/11/23 14:11	09/14/23 17:26	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	09/11/23 14:11	09/14/23 17:26	7440-28-0	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**359**	mg/L	25.0	25.0	1		09/11/23 13:33		
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Asheville								
Mercury	ND	mg/L	0.00020	0.00012	1	09/19/23 17:10	09/20/23 15:27	7439-97-6	
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville								
Alkalinity,Bicarbonate (CaCO3)	ND	mg/L	5.0	5.0	1		09/12/23 16:32		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		09/12/23 16:32		
Alkalinity, Total as CaCO3	ND	mg/L	5.0	5.0	1		09/12/23 16:32		
4500S2D Sulfide Water	Analytical Method: SM 4500-S2D-2011 Pace Analytical Services - Asheville								
Sulfide	ND	mg/L	0.10	0.022	1		09/13/23 02:27	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**13.6**	mg/L	1.0	0.60	1		09/12/23 14:51	16887-00-6	
Fluoride	**0.14**	mg/L	0.10	0.050	1		09/12/23 14:51	16984-48-8	

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ANALYTICAL RESULTS

Project: Plant McD AP-1- Well Network
Pace Project No.: 92686677

Sample: MCD-DGWC-40 **Lab ID: 92686677004** Collected: 09/07/23 12:42 Received: 09/08/23 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								
Sulfate	**177**	mg/L	4.0	2.0	4		09/13/23 07:52	14808-79-8	

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ANALYTICAL RESULTS

Project: Plant McD AP-1- Well Network
Pace Project No.: 92686677

Sample: MCD-DGWC-38 **Lab ID: 92686677005** Collected: 09/07/23 13:27 Received: 09/08/23 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	**0.028J**	mg/L	0.040	0.025	1	09/11/23 11:12	09/13/23 11:22	7439-89-6	
Potassium	**4.4**	mg/L	0.50	0.15	1	09/11/23 11:12	09/13/23 11:22	7440-09-7	
Sodium	**12.1**	mg/L	1.0	0.58	1	09/11/23 11:12	09/13/23 11:22	7440-23-5	
Calcium	**86.5**	mg/L	1.0	0.12	1	09/11/23 11:12	09/13/23 11:22	7440-70-2	
Magnesium	**25.7**	mg/L	0.050	0.012	1	09/11/23 11:12	09/13/23 11:22	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	0.0012	1	09/11/23 14:11	09/14/23 17:30	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0037	1	09/11/23 14:11	09/14/23 17:30	7440-38-2	
Barium	**0.027**	mg/L	0.0050	0.00067	1	09/11/23 14:11	09/14/23 17:30	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	09/11/23 14:11	09/14/23 17:30	7440-41-7	
Boron	**2.8**	mg/L	0.040	0.0086	1	09/11/23 14:11	09/14/23 17:30	7440-42-8	
Cadmium	**0.00013J**	mg/L	0.00050	0.00011	1	09/11/23 14:11	09/14/23 17:30	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	09/11/23 14:11	09/14/23 17:30	7440-47-3	
Cobalt	**0.0015J**	mg/L	0.0050	0.00039	1	09/11/23 14:11	09/14/23 17:30	7440-48-4	
Lead	ND	mg/L	0.0010	0.00012	1	09/11/23 14:11	09/14/23 17:30	7439-92-1	
Lithium	**0.0026J**	mg/L	0.030	0.00073	1	09/11/23 14:11	09/14/23 17:30	7439-93-2	
Molybdenum	**0.0013J**	mg/L	0.010	0.00074	1	09/11/23 14:11	09/14/23 17:30	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	09/11/23 14:11	09/14/23 17:30	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	09/11/23 14:11	09/14/23 17:30	7440-28-0	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**526**	mg/L	25.0	25.0	1		09/11/23 13:33		
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Asheville								
Mercury	ND	mg/L	0.00020	0.00012	1	09/19/23 17:10	09/20/23 15:30	7439-97-6	
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville								
Alkalinity,Bicarbonate (CaCO3)	**97.7**	mg/L	5.0	5.0	1		09/12/23 16:36		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		09/12/23 16:36		
Alkalinity, Total as CaCO3	**97.7**	mg/L	5.0	5.0	1		09/12/23 16:36		
4500S2D Sulfide Water	Analytical Method: SM 4500-S2D-2011 Pace Analytical Services - Asheville								
Sulfide	ND	mg/L	0.10	0.022	1		09/13/23 02:27	18496-25-8	
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		09/12/23 15:06	16887-00-6	
Fluoride	**0.072J**	mg/L	0.10	0.050	1		09/12/23 15:06	16984-48-8	

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ANALYTICAL RESULTS

Project: Plant McD AP-1- Well Network
Pace Project No.: 92686677

Sample: MCD-DGWC-38 **Lab ID: 92686677005** Collected: 09/07/23 13:27 Received: 09/08/23 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								
Sulfate	**212**	mg/L	4.0	2.0	4		09/13/23 08:07	14808-79-8	

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ANALYTICAL RESULTS

Project: Plant McD AP-1- Well Network
Pace Project No.: 92686677

Sample: MCD-DGWC-68A **Lab ID: 92686677006** Collected: 09/07/23 13:38 Received: 09/08/23 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	**0.093**	mg/L	0.040	0.025	1	09/11/23 11:12	09/13/23 11:27	7439-89-6	
Potassium	**4.0**	mg/L	0.50	0.15	1	09/11/23 11:12	09/13/23 11:27	7440-09-7	
Sodium	**9.8**	mg/L	1.0	0.58	1	09/11/23 11:12	09/13/23 11:27	7440-23-5	
Calcium	**53.6**	mg/L	1.0	0.12	1	09/11/23 11:12	09/13/23 11:27	7440-70-2	
Magnesium	**18.1**	mg/L	0.050	0.012	1	09/11/23 11:12	09/13/23 11:27	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	0.0012	1	09/11/23 14:11	09/14/23 17:50	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0037	1	09/11/23 14:11	09/14/23 17:50	7440-38-2	
Barium	**0.11**	mg/L	0.0050	0.00067	1	09/11/23 14:11	09/14/23 17:50	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	09/11/23 14:11	09/14/23 17:50	7440-41-7	
Boron	**1.8**	mg/L	0.040	0.0086	1	09/11/23 14:11	09/14/23 17:50	7440-42-8	
Cadmium	**0.00015J**	mg/L	0.00050	0.00011	1	09/11/23 14:11	09/14/23 17:50	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	09/11/23 14:11	09/14/23 17:50	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	09/11/23 14:11	09/14/23 17:50	7440-48-4	
Lead	ND	mg/L	0.0010	0.00012	1	09/11/23 14:11	09/14/23 17:50	7439-92-1	
Lithium	ND	mg/L	0.030	0.00073	1	09/11/23 14:11	09/14/23 17:50	7439-93-2	
Molybdenum	**0.18**	mg/L	0.010	0.00074	1	09/11/23 14:11	09/15/23 18:45	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	09/11/23 14:11	09/14/23 17:50	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	09/11/23 14:11	09/14/23 17:50	7440-28-0	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**253**	mg/L	25.0	25.0	1		09/12/23 11:42		
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Asheville								
Mercury	ND	mg/L	0.00020	0.00012	1	09/19/23 17:10	09/20/23 15:32	7439-97-6	
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville								
Alkalinity,Bicarbonate (CaCO3)	**201**	mg/L	5.0	5.0	1		09/12/23 16:46		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		09/12/23 16:46		
Alkalinity, Total as CaCO3	**201**	mg/L	5.0	5.0	1		09/12/23 16:46		
4500S2D Sulfide Water	Analytical Method: SM 4500-S2D-2011 Pace Analytical Services - Asheville								
Sulfide	ND	mg/L	0.10	0.022	1		09/13/23 02:27	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**3.9**	mg/L	1.0	0.60	1		09/12/23 15:51	16887-00-6	
Fluoride	**0.096J**	mg/L	0.10	0.050	1		09/12/23 15:51	16984-48-8	

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ANALYTICAL RESULTS

Project: Plant McD AP-1- Well Network
Pace Project No.: 92686677

Sample: MCD-DGWC-68A **Lab ID: 92686677006** Collected: 09/07/23 13:38 Received: 09/08/23 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								
Sulfate	**34.2**	mg/L	1.0	0.50	1		09/12/23 15:51	14808-79-8	

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ANALYTICAL RESULTS

Project: Plant McD AP-1- Well Network
Pace Project No.: 92686677

Sample: MCD-DGWC-39 **Lab ID: 92686677007** Collected: 09/07/23 14:45 Received: 09/08/23 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	**11.5**	mg/L	0.040	0.025	1	09/11/23 11:12	09/13/23 11:32	7439-89-6	
Potassium	**2.8**	mg/L	0.50	0.15	1	09/11/23 11:12	09/13/23 11:32	7440-09-7	
Sodium	**12.6**	mg/L	1.0	0.58	1	09/11/23 11:12	09/13/23 11:32	7440-23-5	
Calcium	**81.2**	mg/L	1.0	0.12	1	09/11/23 11:12	09/13/23 11:32	7440-70-2	
Magnesium	**19.8**	mg/L	0.050	0.012	1	09/11/23 11:12	09/13/23 11:32	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	0.0012	1	09/11/23 14:11	09/14/23 17:55	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0037	1	09/11/23 14:11	09/14/23 17:55	7440-38-2	
Barium	**0.11**	mg/L	0.0050	0.00067	1	09/11/23 14:11	09/14/23 17:55	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	09/11/23 14:11	09/14/23 17:55	7440-41-7	
Boron	**2.7**	mg/L	0.040	0.0086	1	09/11/23 14:11	09/14/23 17:55	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	09/11/23 14:11	09/14/23 17:55	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	09/11/23 14:11	09/14/23 17:55	7440-47-3	
Cobalt	**0.0059**	mg/L	0.0050	0.00039	1	09/11/23 14:11	09/14/23 17:55	7440-48-4	
Lead	ND	mg/L	0.0010	0.00012	1	09/11/23 14:11	09/14/23 17:55	7439-92-1	
Lithium	ND	mg/L	0.030	0.00073	1	09/11/23 14:11	09/14/23 17:55	7439-93-2	
Molybdenum	**0.0016J**	mg/L	0.010	0.00074	1	09/11/23 14:11	09/15/23 18:49	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	09/11/23 14:11	09/14/23 17:55	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	09/11/23 14:11	09/14/23 17:55	7440-28-0	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**421**	mg/L	25.0	25.0	1		09/12/23 11:43		
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Asheville								
Mercury	ND	mg/L	0.00020	0.00012	1	09/19/23 17:10	09/20/23 15:34	7439-97-6	
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville								
Alkalinity,Bicarbonate (CaCO3)	**215**	mg/L	5.0	5.0	1		09/12/23 16:59		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		09/12/23 16:59		
Alkalinity, Total as CaCO3	**215**	mg/L	5.0	5.0	1		09/12/23 16:59		
4500S2D Sulfide Water	Analytical Method: SM 4500-S2D-2011 Pace Analytical Services - Asheville								
Sulfide	ND	mg/L	0.10	0.022	1		09/13/23 02:28	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**7.2**	mg/L	1.0	0.60	1		09/12/23 16:06	16887-00-6	
Fluoride	**0.092J**	mg/L	0.10	0.050	1		09/12/23 16:06	16984-48-8	

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Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: Plant McD AP-1- Well Network
Pace Project No.: 92686677

Sample: MCD-DGWC-39 **Lab ID: 92686677007** Collected: 09/07/23 14:45 Received: 09/08/23 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								
Sulfate	**124**	mg/L	3.0	1.5	3		09/13/23 08:23	14808-79-8	

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ANALYTICAL RESULTS

Project: Plant McD AP-1- Well Network
Pace Project No.: 92686677

Sample: MCD-DGWC-69 **Lab ID: 92686677008** Collected: 09/07/23 15:01 Received: 09/08/23 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	**0.35**	mg/L	0.040	0.025	1	09/11/23 11:12	09/13/23 11:38	7439-89-6	
Potassium	**2.3**	mg/L	0.50	0.15	1	09/11/23 11:12	09/13/23 11:38	7440-09-7	
Sodium	**9.3**	mg/L	1.0	0.58	1	09/11/23 11:12	09/13/23 11:38	7440-23-5	
Calcium	**8.1**	mg/L	1.0	0.12	1	09/11/23 11:12	09/13/23 11:38	7440-70-2	
Magnesium	**2.3**	mg/L	0.050	0.012	1	09/11/23 11:12	09/13/23 11:38	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	0.0012	1	09/11/23 14:11	09/14/23 17:59	7440-36-0	
Arsenic	**0.029**	mg/L	0.0050	0.0037	1	09/11/23 14:11	09/14/23 17:59	7440-38-2	
Barium	**0.047**	mg/L	0.0050	0.00067	1	09/11/23 14:11	09/14/23 17:59	7440-39-3	
Beryllium	**0.000078J**	mg/L	0.00050	0.000054	1	09/11/23 14:11	09/14/23 17:59	7440-41-7	
Boron	**0.052**	mg/L	0.040	0.0086	1	09/11/23 14:11	09/14/23 17:59	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	09/11/23 14:11	09/14/23 17:59	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	09/11/23 14:11	09/14/23 17:59	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	09/11/23 14:11	09/14/23 17:59	7440-48-4	
Lead	**0.00020J**	mg/L	0.0010	0.00012	1	09/11/23 14:11	09/14/23 17:59	7439-92-1	
Lithium	**0.0022J**	mg/L	0.030	0.00073	1	09/11/23 14:11	09/14/23 17:59	7439-93-2	
Molybdenum	**0.0056J**	mg/L	0.010	0.00074	1	09/11/23 14:11	09/15/23 18:53	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	09/11/23 14:11	09/14/23 17:59	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	09/11/23 14:11	09/14/23 17:59	7440-28-0	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**106**	mg/L	25.0	25.0	1		09/12/23 11:43		
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Asheville								
Mercury	ND	mg/L	0.00020	0.00012	1	09/19/23 17:10	09/20/23 15:36	7439-97-6	
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville								
Alkalinity,Bicarbonate (CaCO3)	**38.9**	mg/L	5.0	5.0	1		09/12/23 17:13		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		09/12/23 17:13		
Alkalinity, Total as CaCO3	**38.9**	mg/L	5.0	5.0	1		09/12/23 17:13		
4500S2D Sulfide Water	Analytical Method: SM 4500-S2D-2011 Pace Analytical Services - Asheville								
Sulfide	ND	mg/L	0.10	0.022	1		09/13/23 02:29	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**5.1**	mg/L	1.0	0.60	1		09/12/23 16:21	16887-00-6	
Fluoride	**0.063J**	mg/L	0.10	0.050	1		09/12/23 16:21	16984-48-8	

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ANALYTICAL RESULTS

Project: Plant McD AP-1- Well Network
Pace Project No.: 92686677

Sample: MCD-DGWC-69 **Lab ID: 92686677008** Collected: 09/07/23 15:01 Received: 09/08/23 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								
Sulfate	**6.9**	mg/L	1.0	0.50	1		09/12/23 16:21	14808-79-8	

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ANALYTICAL RESULTS

Project: Plant McD AP-1- Well Network
Pace Project No.: 92686677

Sample: MCD-DGWC-121 **Lab ID: 92686677009** Collected: 09/08/23 09:43 Received: 09/08/23 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	**2.6**	mg/L	0.040	0.025	1	09/11/23 11:12	09/13/23 11:43	7439-89-6	
Potassium	**3.6**	mg/L	0.50	0.15	1	09/11/23 11:12	09/13/23 11:43	7440-09-7	
Sodium	**10.9**	mg/L	1.0	0.58	1	09/11/23 11:12	09/13/23 11:43	7440-23-5	
Calcium	**43.9**	mg/L	1.0	0.12	1	09/11/23 11:12	09/13/23 11:43	7440-70-2	
Magnesium	**13.2**	mg/L	0.050	0.012	1	09/11/23 11:12	09/13/23 11:43	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	0.0012	1	09/11/23 14:11	09/14/23 18:03	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0037	1	09/11/23 14:11	09/14/23 18:03	7440-38-2	
Barium	**0.047**	mg/L	0.0050	0.00067	1	09/11/23 14:11	09/14/23 18:03	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	09/11/23 14:11	09/14/23 18:03	7440-41-7	
Boron	**1.9**	mg/L	0.040	0.0086	1	09/11/23 14:11	09/14/23 18:03	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	09/11/23 14:11	09/14/23 18:03	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	09/11/23 14:11	09/14/23 18:03	7440-47-3	
Cobalt	**0.0016J**	mg/L	0.0050	0.00039	1	09/11/23 14:11	09/14/23 18:03	7440-48-4	
Lead	ND	mg/L	0.0010	0.00012	1	09/11/23 14:11	09/14/23 18:03	7439-92-1	
Lithium	**0.0055J**	mg/L	0.030	0.00073	1	09/11/23 14:11	09/14/23 18:03	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	09/11/23 14:11	09/15/23 18:57	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	09/11/23 14:11	09/14/23 18:03	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	09/11/23 14:11	09/14/23 18:03	7440-28-0	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**286**	mg/L	25.0	25.0	1		09/12/23 12:00		
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Asheville								
Mercury	ND	mg/L	0.00020	0.00012	1	09/19/23 17:10	09/20/23 15:39	7439-97-6	
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville								
Alkalinity,Bicarbonate (CaCO3)	**96.9**	mg/L	5.0	5.0	1		09/12/23 18:29		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		09/12/23 18:29		
Alkalinity, Total as CaCO3	**96.9**	mg/L	5.0	5.0	1		09/12/23 18:29		
4500S2D Sulfide Water	Analytical Method: SM 4500-S2D-2011 Pace Analytical Services - Asheville								
Sulfide	**0.071J**	mg/L	0.10	0.022	1		09/13/23 02:35	18496-25-8	
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		09/12/23 16:36	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		09/12/23 16:36	16984-48-8	

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ANALYTICAL RESULTS

Project: Plant McD AP-1- Well Network
Pace Project No.: 92686677

Sample: MCD-DGWC-121 **Lab ID: 92686677009** Collected: 09/08/23 09:43 Received: 09/08/23 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								
Sulfate	**87.8**	mg/L	1.0	0.50	1		09/12/23 16:36	14808-79-8	

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ANALYTICAL RESULTS

Project: Plant McD AP-1- Well Network
Pace Project No.: 92686677

Sample: MCD-AP1-FB-1 **Lab ID: 92686677010** Collected: 09/08/23 12:00 Received: 09/08/23 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	09/11/23 11:12	09/13/23 11:48	7439-89-6	
Potassium	ND	mg/L	0.50	0.15	1	09/11/23 11:12	09/13/23 11:48	7440-09-7	
Sodium	ND	mg/L	1.0	0.58	1	09/11/23 11:12	09/13/23 11:48	7440-23-5	
Calcium	ND	mg/L	1.0	0.12	1	09/11/23 11:12	09/13/23 11:48	7440-70-2	
Magnesium	ND	mg/L	0.050	0.012	1	09/11/23 11:12	09/13/23 11:48	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	0.0012	1	09/11/23 14:11	09/14/23 18:07	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0037	1	09/11/23 14:11	09/14/23 18:07	7440-38-2	
Barium	ND	mg/L	0.0050	0.00067	1	09/11/23 14:11	09/14/23 18:07	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	09/11/23 14:11	09/14/23 18:07	7440-41-7	
Boron	**0.028J**	mg/L	0.040	0.0086	1	09/11/23 14:11	09/14/23 18:07	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	09/11/23 14:11	09/14/23 18:07	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	09/11/23 14:11	09/14/23 18:07	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	09/11/23 14:11	09/14/23 18:07	7440-48-4	
Lead	ND	mg/L	0.0010	0.00012	1	09/11/23 14:11	09/14/23 18:07	7439-92-1	
Lithium	ND	mg/L	0.030	0.00073	1	09/11/23 14:11	09/14/23 18:07	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	09/11/23 14:11	09/15/23 19:01	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	09/11/23 14:11	09/14/23 18:07	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	09/11/23 14:11	09/14/23 18:07	7440-28-0	
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		09/12/23 12:00		
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Asheville								
Mercury	ND	mg/L	0.00020	0.00012	1	09/19/23 17:10	09/20/23 15:41	7439-97-6	
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville								
Alkalinity,Bicarbonate (CaCO3)	ND	mg/L	5.0	5.0	1		09/14/23 11:54		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		09/14/23 11:54		
Alkalinity, Total as CaCO3	ND	mg/L	5.0	5.0	1		09/14/23 11:54		
4500S2D Sulfide Water	Analytical Method: SM 4500-S2D-2011 Pace Analytical Services - Asheville								
Sulfide	ND	mg/L	0.10	0.022	1		09/13/23 02:35	18496-25-8	
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		09/12/23 16:51	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		09/12/23 16:51	16984-48-8	

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ANALYTICAL RESULTS

Project: Plant McD AP-1- Well Network
Pace Project No.: 92686677

Sample: MCD-AP1-FB-1 **Lab ID: 92686677010** Collected: 09/08/23 12:00 Received: 09/08/23 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								
Sulfate	ND	mg/L	1.0	0.50	1		09/12/23 16:51	14808-79-8	

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ANALYTICAL RESULTS

Project: Plant McD AP-1- Well Network
Pace Project No.: 92686677

Sample: MCD-AP1-EB-1 **Lab ID: 92686677011** Collected: 09/08/23 13:00 Received: 09/08/23 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	09/26/23 13:30	09/27/23 19:49	7439-89-6	
Potassium	ND	mg/L	0.50	0.15	1	09/26/23 13:30	09/27/23 19:49	7440-09-7	
Sodium	ND	mg/L	1.0	0.58	1	09/26/23 13:30	09/27/23 19:49	7440-23-5	
Calcium	ND	mg/L	1.0	0.12	1	09/26/23 13:30	09/27/23 19:49	7440-70-2	
Magnesium	ND	mg/L	0.050	0.012	1	09/26/23 13:30	09/27/23 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	0.0012	1	09/11/23 14:11	09/14/23 18:11	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0037	1	09/11/23 14:11	09/14/23 18:11	7440-38-2	
Barium	ND	mg/L	0.0050	0.00067	1	09/11/23 14:11	09/14/23 18:11	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	09/11/23 14:11	09/14/23 18:11	7440-41-7	
Boron	**0.011J**	mg/L	0.040	0.0086	1	09/11/23 14:11	09/14/23 18:11	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	09/11/23 14:11	09/14/23 18:11	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	09/11/23 14:11	09/14/23 18:11	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	09/11/23 14:11	09/14/23 18:11	7440-48-4	
Lead	ND	mg/L	0.0010	0.00012	1	09/11/23 14:11	09/14/23 18:11	7439-92-1	
Lithium	ND	mg/L	0.030	0.00073	1	09/11/23 14:11	09/14/23 18:11	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	09/11/23 14:11	09/15/23 19:05	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	09/11/23 14:11	09/14/23 18:11	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	09/11/23 14:11	09/14/23 18:11	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.00013	1	10/02/23 12:15	10/02/23 16:33	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		09/12/23 12:00		
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville								
Alkalinity,Bicarbonate (CaCO3)	ND	mg/L	5.0	5.0	1		09/14/23 11:59		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		09/14/23 11:59		
Alkalinity, Total as CaCO3	ND	mg/L	5.0	5.0	1		09/14/23 11:59		
4500S2D Sulfide Water	Analytical Method: SM 4500-S2D-2011 Pace Analytical Services - Asheville								
Sulfide	ND	mg/L	0.10	0.022	1		09/13/23 02:37	18496-25-8	
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		09/12/23 17:36	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		09/12/23 17:36	16984-48-8	

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ANALYTICAL RESULTS

Project: Plant McD AP-1- Well Network
Pace Project No.: 92686677

Sample: MCD-AP1-EB-1 **Lab ID: 92686677011** Collected: 09/08/23 13:00 Received: 09/08/23 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								
Sulfate	ND	mg/L	1.0	0.50	1		09/12/23 17:36	14808-79-8	

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QUALITY CONTROL DATA

Project: Plant McD AP-1- Well Network
Pace Project No.: 92686677

QC Batch: 798622
QC Batch Method: EPA 3010A
Analysis Method: EPA 6010D
Analysis Description: 6010D ATL
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92686677001, 92686677002

METHOD BLANK: 4136598 Matrix: Water
Associated Lab Samples: 92686677001, 92686677002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium	mg/L	ND	1.0	0.12	09/11/23 20:25	
Iron	mg/L	ND	0.040	0.025	09/11/23 20:25	
Magnesium	mg/L	ND	0.050	0.012	09/11/23 20:25	
Potassium	mg/L	ND	0.50	0.15	09/11/23 20:25	
Sodium	mg/L	ND	1.0	0.58	09/11/23 20:25	

LABORATORY CONTROL SAMPLE: 4136599

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium	mg/L	1	1.0	104	80-120	
Iron	mg/L	1	1.1	106	80-120	
Magnesium	mg/L	1	1.1	106	80-120	
Potassium	mg/L	1	1.0	103	80-120	
Sodium	mg/L	1	0.99J	99	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4136986 4136987

Parameter	Units	92686676002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Calcium	mg/L	7.0	1	1	8.2	7.6	115	58	75-125	7	20	M1
Iron	mg/L	0.091	1	1	1.2	1.1	108	106	75-125	2	20	
Magnesium	mg/L	0.98	1	1	2.1	2.0	108	101	75-125	4	20	
Potassium	mg/L	0.77	1	1	1.8	1.8	104	101	75-125	1	20	
Sodium	mg/L	8.8	1	1	9.9	9.2	117	42	75-125	8	20	M1

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QUALITY CONTROL DATA

Project: Plant McD AP-1- Well Network
Pace Project No.: 92686677

QC Batch: 798869
QC Batch Method: EPA 3010A
Analysis Method: EPA 6010D
Analysis Description: 6010D ATL
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92686677003, 92686677004, 92686677005, 92686677006, 92686677007, 92686677008, 92686677009, 92686677010

METHOD BLANK: 4137528 Matrix: Water
Associated Lab Samples: 92686677003, 92686677004, 92686677005, 92686677006, 92686677007, 92686677008, 92686677009, 92686677010

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium	mg/L	ND	1.0	0.12	09/13/23 10:22	
Iron	mg/L	ND	0.040	0.025	09/13/23 10:22	
Magnesium	mg/L	ND	0.050	0.012	09/13/23 10:22	
Potassium	mg/L	ND	0.50	0.15	09/13/23 10:22	
Sodium	mg/L	ND	1.0	0.58	09/13/23 10:22	

LABORATORY CONTROL SAMPLE: 4137529

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium	mg/L	1	1.0J	100	80-120	
Iron	mg/L	1	1.0	100	80-120	
Magnesium	mg/L	1	1.0	102	80-120	
Potassium	mg/L	1	0.92	92	80-120	
Sodium	mg/L	1	0.96J	96	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4137530 4137531

Parameter	Units	92686941001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Calcium	mg/L	71.8	1	1	68.4	71.2	-338	-59	75-125	4	20	M1
Iron	mg/L	2.1	1	1	3.0	3.0	86	93	75-125	2	20	
Magnesium	mg/L	24.6	1	1	24.1	25.0	-53	33	75-125	4	20	M1
Potassium	mg/L	8.2	1	1	8.7	9.1	42	82	75-125	5	20	M1
Sodium	mg/L	20.0	1	1	19.8	20.6	-19	59	75-125	4	20	M1

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QUALITY CONTROL DATA

Project: Plant McD AP-1- Well Network
Pace Project No.: 92686677

QC Batch: 802166
QC Batch Method: EPA 3010A
Analysis Method: EPA 6010D
Analysis Description: 6010D ATL
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92686677011

METHOD BLANK: 4155260 Matrix: Water
Associated Lab Samples: 92686677011

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium	mg/L	ND	1.0	0.12	09/27/23 19:28	
Iron	mg/L	ND	0.040	0.025	09/27/23 19:28	
Magnesium	mg/L	ND	0.050	0.012	09/27/23 19:28	
Potassium	mg/L	ND	0.50	0.15	09/27/23 19:28	
Sodium	mg/L	ND	1.0	0.58	09/27/23 19:28	

LABORATORY CONTROL SAMPLE: 4155261

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium	mg/L	1	1.1	106	80-120	
Iron	mg/L	1	1.0	102	80-120	
Magnesium	mg/L	1	1.0	103	80-120	
Potassium	mg/L	1	0.95	95	80-120	
Sodium	mg/L	1	1.1	107	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4155262 4155263

Parameter	Units	92688921026 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Calcium	mg/L	3780 ug/L	1	1	4.5	4.6	72	82	75-125	2	20	M1
Iron	mg/L	ND	1	1	0.97	1.1	93	107	75-125	13	20	
Magnesium	mg/L	1740 ug/L	1	1	2.6	2.7	83	94	75-125	4	20	
Potassium	mg/L	1080 ug/L	1	1	1.9	2.0	82	92	75-125	6	20	
Sodium	mg/L	5260 ug/L	1	1	5.8	5.9	58	67	75-125	2	20	M1

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QUALITY CONTROL DATA

Project: Plant McD AP-1- Well Network
Pace Project No.: 92686677

QC Batch: 798623
QC Batch Method: EPA 3005A
Analysis Method: EPA 6020B
Analysis Description: 6020 MET
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92686677001, 92686677002

METHOD BLANK: 4136603 Matrix: Water
Associated Lab Samples: 92686677001, 92686677002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	ND	0.0030	0.0012	09/13/23 12:38	
Arsenic	mg/L	ND	0.0050	0.0037	09/13/23 12:38	
Barium	mg/L	ND	0.0050	0.00067	09/14/23 16:38	
Beryllium	mg/L	ND	0.00050	0.000054	09/13/23 12:38	
Boron	mg/L	ND	0.040	0.0086	09/13/23 12:38	
Cadmium	mg/L	ND	0.00050	0.00011	09/13/23 12:38	
Chromium	mg/L	ND	0.0050	0.0011	09/13/23 12:38	
Cobalt	mg/L	ND	0.0050	0.00039	09/13/23 12:38	
Lead	mg/L	ND	0.0010	0.00012	09/13/23 12:38	
Lithium	mg/L	ND	0.030	0.00073	09/13/23 12:38	
Molybdenum	mg/L	ND	0.010	0.00074	09/13/23 12:38	
Selenium	mg/L	ND	0.0050	0.0014	09/13/23 12:38	
Thallium	mg/L	ND	0.0010	0.00018	09/13/23 12:38	

LABORATORY CONTROL SAMPLE: 4136604

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	0.097	97	80-120	
Barium	mg/L	0.1	0.098	98	80-120	
Beryllium	mg/L	0.1	0.097	97	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	0.10	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	0.099	99	80-120	
Molybdenum	mg/L	0.1	0.10	105	80-120	
Selenium	mg/L	0.1	0.099	99	80-120	
Thallium	mg/L	0.1	0.096	96	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4136605 4136606

Parameter	Units	92686676001 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	104	105	75-125	1	20	
Arsenic	mg/L	ND	0.1	0.1	0.098	0.099	98	98	75-125	1	20	

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QUALITY CONTROL DATA

Project: Plant McD AP-1- Well Network
Pace Project No.: 92686677

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4136605 4136606

Parameter	Units	92686676001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Barium	mg/L	0.041	0.1	0.1	0.15	0.15	105	107	75-125	2	20	
Beryllium	mg/L	0.00012J	0.1	0.1	0.098	0.097	98	97	75-125	1	20	
Boron	mg/L	0.012J	1	1	1.0	1.0	102	102	75-125	0	20	
Cadmium	mg/L	ND	0.1	0.1	0.099	0.10	99	102	75-125	3	20	
Chromium	mg/L	ND	0.1	0.1	0.10	0.10	102	104	75-125	2	20	
Cobalt	mg/L	ND	0.1	0.1	0.10	0.10	102	104	75-125	2	20	
Lead	mg/L	ND	0.1	0.1	0.098	0.098	97	98	75-125	1	20	
Lithium	mg/L	ND	0.1	0.1	0.098	0.096	97	96	75-125	2	20	
Molybdenum	mg/L	ND	0.1	0.1	0.10	0.10	100	102	75-125	2	20	
Selenium	mg/L	ND	0.1	0.1	0.098	0.10	98	99	75-125	2	20	
Thallium	mg/L	0.00053J	0.1	0.1	0.095	0.095	94	95	75-125	0	20	

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QUALITY CONTROL DATA

Project: Plant McD AP-1- Well Network
Pace Project No.: 92686677

QC Batch: 798903
QC Batch Method: EPA 3005A
Analysis Method: EPA 6020B
Analysis Description: 6020 MET
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92686677003, 92686677004, 92686677005, 92686677006, 92686677007, 92686677008, 92686677009, 92686677010, 92686677011

METHOD BLANK: 4137724 Matrix: Water
Associated Lab Samples: 92686677003, 92686677004, 92686677005, 92686677006, 92686677007, 92686677008, 92686677009, 92686677010, 92686677011

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	ND	0.0030	0.0012	09/14/23 16:50	
Arsenic	mg/L	ND	0.0050	0.0037	09/14/23 16:50	
Barium	mg/L	ND	0.0050	0.00067	09/14/23 16:50	
Beryllium	mg/L	ND	0.00050	0.000054	09/14/23 16:50	
Boron	mg/L	ND	0.040	0.0086	09/14/23 16:50	
Cadmium	mg/L	ND	0.00050	0.00011	09/14/23 16:50	
Chromium	mg/L	ND	0.0050	0.0011	09/14/23 16:50	
Cobalt	mg/L	ND	0.0050	0.00039	09/14/23 16:50	
Lead	mg/L	ND	0.0010	0.00012	09/14/23 16:50	
Lithium	mg/L	ND	0.030	0.00073	09/14/23 16:50	
Molybdenum	mg/L	ND	0.010	0.00074	09/14/23 16:50	
Selenium	mg/L	ND	0.0050	0.0014	09/14/23 16:50	
Thallium	mg/L	ND	0.0010	0.00018	09/14/23 16:50	

LABORATORY CONTROL SAMPLE: 4137725

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.1	0.11	109	80-120	
Arsenic	mg/L	0.1	0.10	102	80-120	
Barium	mg/L	0.1	0.10	102	80-120	
Beryllium	mg/L	0.1	0.098	98	80-120	
Boron	mg/L	1	0.99	99	80-120	
Cadmium	mg/L	0.1	0.10	102	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	0.10	101	80-120	
Molybdenum	mg/L	0.1	0.10	101	80-120	
Selenium	mg/L	0.1	0.10	102	80-120	
Thallium	mg/L	0.1	0.097	97	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4137726 4137727

Parameter	Units	92686941002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Antimony	mg/L	ND	0.1	0.1	0.11	0.10	110	104	75-125	6	20	

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QUALITY CONTROL DATA

Project: Plant McD AP-1- Well Network
Pace Project No.: 92686677

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4137726 4137727

Parameter	Units	92686941002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Arsenic	mg/L	ND	0.1	0.1	0.11	0.099	106	99	75-125	7	20	
Barium	mg/L	0.0027J	0.1	0.1	0.11	0.10	105	100	75-125	5	20	
Beryllium	mg/L	ND	0.1	0.1	0.10	0.097	100	97	75-125	4	20	
Boron	mg/L	0.24	1	1	1.3	1.2	103	99	75-125	3	20	
Cadmium	mg/L	ND	0.1	0.1	0.11	0.10	107	100	75-125	6	20	
Chromium	mg/L	ND	0.1	0.1	0.10	0.094	102	93	75-125	8	20	
Cobalt	mg/L	0.00040J	0.1	0.1	0.10	0.094	101	94	75-125	8	20	
Lead	mg/L	ND	0.1	0.1	0.095	0.091	95	91	75-125	4	20	
Lithium	mg/L	0.0043J	0.1	0.1	0.10	0.099	100	94	75-125	6	20	
Molybdenum	mg/L	0.026	0.1	0.1	0.13	0.12	105	97	75-125	6	20	
Selenium	mg/L	ND	0.1	0.1	0.10	0.098	104	98	75-125	6	20	
Thallium	mg/L	ND	0.1	0.1	0.092	0.089	92	89	75-125	4	20	

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QUALITY CONTROL DATA

Project: Plant McD AP-1- Well Network
Pace Project No.: 92686677

QC Batch: 803461
QC Batch Method: EPA 7470A
Analysis Method: EPA 7470A
Analysis Description: 7470 Mercury
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92686677011

METHOD BLANK: 4161104 Matrix: Water
Associated Lab Samples: 92686677011

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	ND	0.00020	0.00013	10/02/23 16:27	

LABORATORY CONTROL SAMPLE: 4161105

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: 4161106 4161107

Parameter	Units	92686676003 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	0.0027	0.0026	104	101	75-125	3	20	

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QUALITY CONTROL DATA

Project: Plant McD AP-1- Well Network
Pace Project No.: 92686677

QC Batch: 798883 | 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: 92686677001, 92686677002, 92686677003, 92686677004, 92686677005

METHOD BLANK: 4137624 Matrix: Water
Associated Lab Samples: 92686677001, 92686677002, 92686677003, 92686677004, 92686677005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	25.0	25.0	09/11/23 13:25	

LABORATORY CONTROL SAMPLE: 4137625

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	427	107	80-120	

SAMPLE DUPLICATE: 4137626

Parameter	Units	92686830001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	1540	1500	3	10	

SAMPLE DUPLICATE: 4137627

Parameter	Units	92686679004 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	207	174	17	10	D6

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QUALITY CONTROL DATA

Project: Plant McD AP-1- Well Network
Pace Project No.: 92686677

QC Batch: 799142 | 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: 92686677006, 92686677007, 92686677008, 92686677009, 92686677010, 92686677011

METHOD BLANK: 4138899 Matrix: Water
Associated Lab Samples: 92686677006, 92686677007, 92686677008, 92686677009, 92686677010, 92686677011

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	25.0	25.0	09/12/23 11:42	

LABORATORY CONTROL SAMPLE: 4138900

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	394	98	80-120	

SAMPLE DUPLICATE: 4138901

Parameter	Units	92686677006 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	253	259	2	10	

SAMPLE DUPLICATE: 4138902

Parameter	Units	92687108002 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	100	101	1	10	

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QUALITY CONTROL DATA

Project: Plant McD AP-1- Well Network
Pace Project No.: 92686677

QC Batch: 800476
QC Batch Method: EPA 7470A
Analysis Method: EPA 7470A
Analysis Description: 7470 Mercury
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92686677001, 92686677002

METHOD BLANK: 4146097 Matrix: Water
Associated Lab Samples: 92686677001, 92686677002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	ND	0.00020	0.00012	09/20/23 13:34	

LABORATORY CONTROL SAMPLE: 4146098

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.0025	0.0020	81	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4146099 4146100

Parameter	Units	92686676001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	mg/L	ND	0.0025	0.0025	0.0025	0.0024	100	95	75-125	5	25	

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QUALITY CONTROL DATA

Project: Plant McD AP-1- Well Network
Pace Project No.: 92686677

QC Batch: 800478
QC Batch Method: EPA 7470A
Analysis Method: EPA 7470A
Analysis Description: 7470 Mercury
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92686677003, 92686677004, 92686677005, 92686677006, 92686677007, 92686677008, 92686677009, 92686677010

METHOD BLANK: 4146121 Matrix: Water
Associated Lab Samples: 92686677003, 92686677004, 92686677005, 92686677006, 92686677007, 92686677008, 92686677009, 92686677010

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	ND	0.00020	0.00012	09/20/23 14:38	

LABORATORY CONTROL SAMPLE: 4146122

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.0025	0.0022	87	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4146123 4146124

Parameter	Units	92686920009 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	0.0026	0.0026	102	104	75-125	1	25	

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QUALITY CONTROL DATA

Project: Plant McD AP-1- Well Network
Pace Project No.: 92686677

QC Batch: 798842
QC Batch Method: SM 2320B-2011
Analysis Method: SM 2320B-2011
Analysis Description: 2320B Alkalinity
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92686677001, 92686677002

METHOD BLANK: 4137442 Matrix: Water
Associated Lab Samples: 92686677001, 92686677002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Alkalinity, Total as CaCO3	mg/L	ND	5.0	5.0	09/11/23 11:24	
Alkalinity,Bicarbonate (CaCO3)	mg/L	ND	5.0	5.0	09/11/23 11:24	
Alkalinity,Carbonate (CaCO3)	mg/L	ND	5.0	5.0	09/11/23 11:24	

LABORATORY CONTROL SAMPLE: 4137443

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	50	51.1	102	80-120	

LABORATORY CONTROL SAMPLE: 4137444

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	50	51.0	102	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4137445 4137446

Parameter	Units	92686252001 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	<5.0	50	50	48.4	47.8	97	96	80-120	1	25	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4137447 4137448

Parameter	Units	92686487004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Alkalinity, Total as CaCO3	mg/L	32.6	50	50	83.1	82.1	101	99	80-120	1	25	

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QUALITY CONTROL DATA

Project: Plant McD AP-1- Well Network
Pace Project No.: 92686677

QC Batch: 799173 | Analysis Method: SM 2320B-2011
QC Batch Method: SM 2320B-2011 | Analysis Description: 2320B Alkalinity
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92686677003, 92686677004, 92686677005, 92686677006, 92686677007, 92686677008, 92686677009

METHOD BLANK: 4139096 Matrix: Water
Associated Lab Samples: 92686677003, 92686677004, 92686677005, 92686677006, 92686677007, 92686677008, 92686677009

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Alkalinity, Total as CaCO3	mg/L	ND	5.0	5.0	09/12/23 15:04	
Alkalinity,Bicarbonate (CaCO3)	mg/L	ND	5.0	5.0	09/12/23 15:04	
Alkalinity,Carbonate (CaCO3)	mg/L	ND	5.0	5.0	09/12/23 15:04	

LABORATORY CONTROL SAMPLE: 4139097

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: 4139098

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	50	50.9	102	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4139099 4139100

Parameter	Units	92686679012 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Alkalinity, Total as CaCO3	mg/L	ND	50	50	51.2	51.0	102	102	80-120	0	25	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4139101 4139102

Parameter	Units	92686677009 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	96.9	50	50	148	148	103	102	80-120	0	25	

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QUALITY CONTROL DATA

Project: Plant McD AP-1- Well Network
Pace Project No.: 92686677

QC Batch: 799657
QC Batch Method: SM 2320B-2011
Analysis Method: SM 2320B-2011
Analysis Description: 2320B Alkalinity
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92686677010, 92686677011

METHOD BLANK: 4141803 Matrix: Water
Associated Lab Samples: 92686677010, 92686677011

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Alkalinity, Total as CaCO3	mg/L	ND	5.0	5.0	09/14/23 11:08	
Alkalinity,Bicarbonate (CaCO3)	mg/L	ND	5.0	5.0	09/14/23 11:08	
Alkalinity,Carbonate (CaCO3)	mg/L	ND	5.0	5.0	09/14/23 11:08	

LABORATORY CONTROL SAMPLE: 4141804

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	50	50.6	101	80-120	

LABORATORY CONTROL SAMPLE: 4141805

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	50	48.9	98	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4141806 4141807

Parameter	Units	92686947003 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	17.5	50	50	70.9	70.2	107	105	80-120	1	25	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4141808 4141809

Parameter	Units	92686947004 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	55.2	55.3	104	104	80-120	0	25	

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QUALITY CONTROL DATA

Project: Plant McD AP-1- Well Network
Pace Project No.: 92686677

QC Batch: 798662
QC Batch Method: SM 4500-S2D-2011
Analysis Method: SM 4500-S2D-2011
Analysis Description: 4500S2D Sulfide Water
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92686677001, 92686677002

METHOD BLANK: 4136899 Matrix: Water
Associated Lab Samples: 92686677001, 92686677002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Sulfide	mg/L	ND	0.10	0.022	09/09/23 04:31	

LABORATORY CONTROL SAMPLE: 4136900

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Sulfide	mg/L	0.5	0.52	104	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4136901 4136902

Parameter	Units	92686676001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Sulfide	mg/L	ND	0.5	0.5	0.54	0.56	106	111	80-120	5	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4136903 4136904

Parameter	Units	92686861001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Sulfide	mg/L	ND	0.5	0.5	0.38	0.37	76	75	80-120	2	10	M1

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QUALITY CONTROL DATA

Project: Plant McD AP-1- Well Network
Pace Project No.: 92686677

QC Batch: 799296
QC Batch Method: SM 4500-S2D-2011
Analysis Method: SM 4500-S2D-2011
Analysis Description: 4500S2D Sulfide Water
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92686677003, 92686677004, 92686677005, 92686677006, 92686677007, 92686677008, 92686677009, 92686677010

METHOD BLANK: 4140098 Matrix: Water
Associated Lab Samples: 92686677003, 92686677004, 92686677005, 92686677006, 92686677007, 92686677008, 92686677009, 92686677010

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Sulfide	mg/L	ND	0.10	0.022	09/13/23 02:23	

LABORATORY CONTROL SAMPLE: 4140099

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Sulfide	mg/L	0.5	0.52	104	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4140102 4140103

Parameter	Units	92686679007 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Sulfide	mg/L	ND	0.5	0.5	0.44	0.43	87	85	80-120	1	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4140133 4140134

Parameter	Units	92686941002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Sulfide	mg/L	ND	0.5	0.5	0.52	0.49	104	97	80-120	7	10	

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QUALITY CONTROL DATA

Project: Plant McD AP-1- Well Network
Pace Project No.: 92686677

QC Batch: 799297
QC Batch Method: SM 4500-S2D-2011
Analysis Method: SM 4500-S2D-2011
Analysis Description: 4500S2D Sulfide Water
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92686677011

METHOD BLANK: 4140104 Matrix: Water
Associated Lab Samples: 92686677011

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Sulfide	mg/L	ND	0.10	0.022	09/13/23 02:36	

LABORATORY CONTROL SAMPLE: 4140105

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Sulfide	mg/L	0.5	0.52	105	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4140106 4140107

Parameter	Units	92686677011 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Sulfide	mg/L	ND	0.5	0.5	0.50	0.53	100	107	80-120	6	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4140108 4140109

Parameter	Units	92686947008 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Sulfide	mg/L	ND	0.5	0.5	0.52	0.51	104	102	80-120	2	10	

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QUALITY CONTROL DATA

Project: Plant McD AP-1- Well Network
Pace Project No.: 92686677

QC Batch: 798687
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: 92686677001, 92686677002

METHOD BLANK: 4136953 Matrix: Water
Associated Lab Samples: 92686677001, 92686677002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.60	09/09/23 13:26	
Fluoride	mg/L	ND	0.10	0.050	09/09/23 13:26	
Sulfate	mg/L	ND	1.0	0.50	09/09/23 13:26	

LABORATORY CONTROL SAMPLE: 4136954

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	50.0	100	90-110	
Fluoride	mg/L	2.5	2.4	96	90-110	
Sulfate	mg/L	50	50.1	100	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4136955 4136956

Parameter	Units	92686882001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	23.0	50	50	75.9	75.9	106	106	90-110	0	10	
Fluoride	mg/L	0.13	2.5	2.5	2.6	2.7	101	101	90-110	1	10	
Sulfate	mg/L	13.2	50	50	66.5	66.7	107	107	90-110	0	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4136957 4136958

Parameter	Units	92686872001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	840	50	50	885	882	89	82	90-110	0	10	M1
Fluoride	mg/L	15.2	2.5	2.5	17.5	17.7	92	98	90-110	1	10	
Sulfate	mg/L	55.9	50	50	93.3	93.1	75	74	90-110	0	10	M1

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QUALITY CONTROL DATA

Project: Plant McD AP-1- Well Network
Pace Project No.: 92686677

QC Batch: 799070
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: 92686677003, 92686677004, 92686677005, 92686677006, 92686677007, 92686677008, 92686677009, 92686677010, 92686677011

METHOD BLANK: 4138708 Matrix: Water
Associated Lab Samples: 92686677003, 92686677004, 92686677005, 92686677006, 92686677007, 92686677008, 92686677009, 92686677010, 92686677011

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.60	09/12/23 12:51	
Fluoride	mg/L	ND	0.10	0.050	09/12/23 12:51	
Sulfate	mg/L	ND	1.0	0.50	09/12/23 12:51	

LABORATORY CONTROL SAMPLE: 4138709

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	50.1	100	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4138710 4138711

Parameter	Units	92687087001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	8.0	50	50	59.4	59.8	103	104	90-110	1	10	
Fluoride	mg/L	0.63	2.5	2.5	3.5	3.5	113	115	90-110	1	10	M1
Sulfate	mg/L	9.9	50	50	60.7	61.4	102	103	90-110	1	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4138712 4138713

Parameter	Units	92686677010 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	ND	50	50	52.1	53.1	104	106	90-110	2	10	
Fluoride	mg/L	ND	2.5	2.5	2.7	2.7	109	108	90-110	0	10	
Sulfate	mg/L	ND	50	50	52.7	54.0	105	108	90-110	2	10	

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QUALIFIERS

Project: Plant McD AP-1- Well Network
Pace Project No.: 92686677

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.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Plant McD AP-1- Well Network
Pace Project No.: 92686677

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92686677001	**MCD-DGWC-37**	EPA 3010A	798622	EPA 6010D	798709
92686677002	**MCD-AP1-FD-1**	EPA 3010A	798622	EPA 6010D	798709
92686677003	**MCD-DGWC-67**	EPA 3010A	798869	EPA 6010D	798954
92686677004	**MCD-DGWC-40**	EPA 3010A	798869	EPA 6010D	798954
92686677005	**MCD-DGWC-38**	EPA 3010A	798869	EPA 6010D	798954
92686677006	**MCD-DGWC-68A**	EPA 3010A	798869	EPA 6010D	798954
92686677007	**MCD-DGWC-39**	EPA 3010A	798869	EPA 6010D	798954
92686677008	**MCD-DGWC-69**	EPA 3010A	798869	EPA 6010D	798954
92686677009	**MCD-DGWC-121**	EPA 3010A	798869	EPA 6010D	798954
92686677010	**MCD-AP1-FB-1**	EPA 3010A	798869	EPA 6010D	798954
92686677011	**MCD-AP1-EB-1**	EPA 3010A	802166	EPA 6010D	802210
92686677001	**MCD-DGWC-37**	EPA 3005A	798623	EPA 6020B	798699
92686677002	**MCD-AP1-FD-1**	EPA 3005A	798623	EPA 6020B	798699
92686677003	**MCD-DGWC-67**	EPA 3005A	798903	EPA 6020B	798992
92686677004	**MCD-DGWC-40**	EPA 3005A	798903	EPA 6020B	798992
92686677005	**MCD-DGWC-38**	EPA 3005A	798903	EPA 6020B	798992
92686677006	**MCD-DGWC-68A**	EPA 3005A	798903	EPA 6020B	798992
92686677007	**MCD-DGWC-39**	EPA 3005A	798903	EPA 6020B	798992
92686677008	**MCD-DGWC-69**	EPA 3005A	798903	EPA 6020B	798992
92686677009	**MCD-DGWC-121**	EPA 3005A	798903	EPA 6020B	798992
92686677010	**MCD-AP1-FB-1**	EPA 3005A	798903	EPA 6020B	798992
92686677011	**MCD-AP1-EB-1**	EPA 3005A	798903	EPA 6020B	798992
92686677011	**MCD-AP1-EB-1**	EPA 7470A	803461	EPA 7470A	803573
92686677001	**MCD-DGWC-37**	SM 2540C-2015	798883		
92686677002	**MCD-AP1-FD-1**	SM 2540C-2015	798883		
92686677003	**MCD-DGWC-67**	SM 2540C-2015	798883		
92686677004	**MCD-DGWC-40**	SM 2540C-2015	798883		
92686677005	**MCD-DGWC-38**	SM 2540C-2015	798883		
92686677006	**MCD-DGWC-68A**	SM 2540C-2015	799142		
92686677007	**MCD-DGWC-39**	SM 2540C-2015	799142		
92686677008	**MCD-DGWC-69**	SM 2540C-2015	799142		
92686677009	**MCD-DGWC-121**	SM 2540C-2015	799142		
92686677010	**MCD-AP1-FB-1**	SM 2540C-2015	799142		
92686677011	**MCD-AP1-EB-1**	SM 2540C-2015	799142		
92686677001	**MCD-DGWC-37**	EPA 7470A	800476	EPA 7470A	800627
92686677002	**MCD-AP1-FD-1**	EPA 7470A	800476	EPA 7470A	800627
92686677003	**MCD-DGWC-67**	EPA 7470A	800478	EPA 7470A	800630
92686677004	**MCD-DGWC-40**	EPA 7470A	800478	EPA 7470A	800630
92686677005	**MCD-DGWC-38**	EPA 7470A	800478	EPA 7470A	800630
92686677006	**MCD-DGWC-68A**	EPA 7470A	800478	EPA 7470A	800630
92686677007	**MCD-DGWC-39**	EPA 7470A	800478	EPA 7470A	800630
92686677008	**MCD-DGWC-69**	EPA 7470A	800478	EPA 7470A	800630
92686677009	**MCD-DGWC-121**	EPA 7470A	800478	EPA 7470A	800630
92686677010	**MCD-AP1-FB-1**	EPA 7470A	800478	EPA 7470A	800630

REPORT OF LABORATORY ANALYSIS

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without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Plant McD AP-1- Well Network
Pace Project No.: 92686677

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92686677001	**MCD-DGWC-37**	SM 2320B-2011	798842		
92686677002	**MCD-AP1-FD-1**	SM 2320B-2011	798842		
92686677003	**MCD-DGWC-67**	SM 2320B-2011	799173		
92686677004	**MCD-DGWC-40**	SM 2320B-2011	799173		
92686677005	**MCD-DGWC-38**	SM 2320B-2011	799173		
92686677006	**MCD-DGWC-68A**	SM 2320B-2011	799173		
92686677007	**MCD-DGWC-39**	SM 2320B-2011	799173		
92686677008	**MCD-DGWC-69**	SM 2320B-2011	799173		
92686677009	**MCD-DGWC-121**	SM 2320B-2011	799173		
92686677010	**MCD-AP1-FB-1**	SM 2320B-2011	799657		
92686677011	**MCD-AP1-EB-1**	SM 2320B-2011	799657		
92686677001	**MCD-DGWC-37**	SM 4500-S2D-2011	798662		
92686677002	**MCD-AP1-FD-1**	SM 4500-S2D-2011	798662		
92686677003	**MCD-DGWC-67**	SM 4500-S2D-2011	799296		
92686677004	**MCD-DGWC-40**	SM 4500-S2D-2011	799296		
92686677005	**MCD-DGWC-38**	SM 4500-S2D-2011	799296		
92686677006	**MCD-DGWC-68A**	SM 4500-S2D-2011	799296		
92686677007	**MCD-DGWC-39**	SM 4500-S2D-2011	799296		
92686677008	**MCD-DGWC-69**	SM 4500-S2D-2011	799296		
92686677009	**MCD-DGWC-121**	SM 4500-S2D-2011	799296		
92686677010	**MCD-AP1-FB-1**	SM 4500-S2D-2011	799296		
92686677011	**MCD-AP1-EB-1**	SM 4500-S2D-2011	799297		
92686677001	**MCD-DGWC-37**	EPA 300.0 Rev 2.1 1993	798687		
92686677002	**MCD-AP1-FD-1**	EPA 300.0 Rev 2.1 1993	798687		
92686677003	**MCD-DGWC-67**	EPA 300.0 Rev 2.1 1993	799070		
92686677004	**MCD-DGWC-40**	EPA 300.0 Rev 2.1 1993	799070		
92686677005	**MCD-DGWC-38**	EPA 300.0 Rev 2.1 1993	799070		
92686677006	**MCD-DGWC-68A**	EPA 300.0 Rev 2.1 1993	799070		
92686677007	**MCD-DGWC-39**	EPA 300.0 Rev 2.1 1993	799070		
92686677008	**MCD-DGWC-69**	EPA 300.0 Rev 2.1 1993	799070		
92686677009	**MCD-DGWC-121**	EPA 300.0 Rev 2.1 1993	799070		
92686677010	**MCD-AP1-FB-1**	EPA 300.0 Rev 2.1 1993	799070		
92686677011	**MCD-AP1-EB-1**	EPA 300.0 Rev 2.1 1993	799070		

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Pace ANALYTICAL SERVICES

DC#_Title: ENV-FRM-HUN1-0083 v02_Sample Condition Upon Receipt

Effective Date: 11/14/2022

oratory receiving samples:

heville ☐ **Eden** ☐ **Greenwood** ☐ **Huntersville** ☐ **Raleigh** ☐ **Mech...** ☐

Sample Condition Upon Receipt

Client Name: Ga-Power

Project #:

WO#: 92686677

92686677

urier: ☐ Fed Ex ☐ UPS ☐ USPS ☑ Client
Commercial ☐ Pace ☐ Other:____

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

Date/Initials Person Examining Contents: 9-7-23 JLC

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

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

ermometer:
☐ IR Gun ID: 230

Type of ice: ☑ Wet ☐ Blue ☐ None

oler Temp: 2.3 **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

oler Temp Corrected (°C) 2.3

DA 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	

IMMENTS/SAMPLE DISCREPANCY **Field Data Required?** ☐ Yes ☐ No

Lot ID of split containers:

ENT NOTIFICATION/RESOLUTION

erson 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# : 92686677**

PM: BV Due Date: 09/21/23

CLIENT: 92-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)	[illegible]	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		1																	2				
3																													
4																													
5																													
6																													
7																													
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9																													
10																													
11																													
12																													

pH Adjustment Log for Preserved Samples

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

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina 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 Atlanta, GA 30339	Copy To: WSP	Company Name:
Email: lacoker@southernco.com	Purchase Order #:	Address:
Phone: (470) 620-6176 Fax:	Project Name: Plant McD AP-1 Well Network	Pace Quote:
Requested Due Date: 10 Day TAT	Project #: 31405440.McD23	Pace Project Manager: Bonnie Vaig
		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	Analysis Test: Y/N	Pop III/IV + Mg, Na, K, Fe	Cl, F, SO4	Radium 226/228	TDS	Alkalinity	Sulfide	Residual Chlorine (Y/N)	92686677
																	N	N	N	N	N	N	
2	MCD-DGWC-37	WG	G	9/6/23	14:48		7	3		3		1					X	X	X	X	X	X		001
4	MCD-AP1-FD-1	WG	G	9/6/23	--		7	3		3		1					X	X	X	X	X	X		002
5																								
6																								
7																								
8																								
9																								
10																								
11																								
12																								
13																								
14																								

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

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE
Task Code = MCD-CCR-ASSMT-2023S2	MARK MANN WSP	09/6/23	0900	[illegible]	9/6/23

DATE Signed:

SAMPLE CONDITION(S)			
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 ☐ Mech[illegible] ☐ Atlanta ☑ Kernersville ☐

Sample Condition Upon Receipt

Client Name: GA Power

Project #:

WO#: 92686677

PM: BV Due Date: 09/21/23

CLIENT: 92-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: 9/8/23 TAC

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: 4.1 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): 4.1

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:

*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# : 92686677**

PM: BV Due Date: 09/21/23

CLIENT: 92-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	1																		2				
2		2	1			1	1																		2				
3		2	1			1	1																		4				
4		2	1			1	1																		2				
5		2	1			1	1																		2				
6		2	1			1	1																		2				
7		2	1			1	1																		2				
8		2	1			1	1																		2				
9		2	1			1	1																		2				
10		2	1			1	1																		2				
11		2	1			1	1																		2				
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:	WSP	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 Wells Network	Pace Project Manager:	Bonnie Vang
Requested Due Date:	10 Day TAT	Project #:	31406440.McD23	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	Sulfide			Residual Chlorine (Y/N)	92686677
	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				
2	MCD-DGWC-67	WG	G	9/7/23	11:44		7	3		3		1					X	X	X	X	X	X				003
4	MCD-DGWC-40	WG	G	9/7/23	12:42		7	3		3		1					X	X	X	X	X	X				004
5	MCD-DGWC-38	WG	G	9/7/23	13:27		9	3		5		1					X	X	X	X	X	X				005 EXTRA RADS
6	MCD-DGWC-68A	WG	G	9/7/23	13:38		7	3		3		1					X	X	X	X	X	X				006
7	MCD-DGWC-39	WG	G	9/7/23	14:45		7	3		3		1					X	X	X	X	X	X				007
8	MCD-DGWC-69	WG	G	9/7/23	15:01		7	3		3		1					X	X	X	X	X	X				008
9	MCD-DGWC-121	WG	G	9/8/2023	9:43		7	3		3		1					X	X	X	X	X	X				009
10	MCD-AP1-FB-1	WQ	G	9/7/2023	12:00		7	3		3		1					X	X	X	X	X	X				010
11	MCD-AP1-EB-1	WQ	G	9/7/2023	13:00		7	3		3		1					X	X	X	X	X	X				011
12																										
13																										
14																										

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	SAMPLE CONDITIONS
Task Code = MCD-CCR-ASSMT-2023S2	MARK MANN WSP	09/08/23	1550	JEC	9/8/23 1550	

DATE Signed:

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

October 18, 2023

Lauren Hartley
Southern Co.
241 Ralph McGill Blvd
NE, Bin 10160
Atlanta, GA 30308

RE: Project: Plant McD AP-1 Well Networ-RAD
Pace Project No.: 92686680

Dear Lauren Hartley:

Enclosed are the analytical results for sample(s) received by the laboratory between September 07, 2023 and September 08, 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

Revision 1: Report revised to amend collected time on MCD-DGWC-37.

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

Sincerely,

Bonnie Vang
bonnie.vang@pacelabs.com
704-977-0968
Project Manager

Enclosures

cc: Yong Cheng, WSP
Daniela Herrera, Golder
Andrea McClure, WSP
Laura Midkiff, Southern Co.
Dawn Prell, WSP USA E&I Inc_Atlanta

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Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

CERTIFICATIONS

Project: Plant McD AP-1 Well Networ-RAD
Pace Project No.: 92686680

Pace Analytical Services Pennsylvania
1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
ANAB DOD-ELAP Rad Accreditation #: L2417
ANABISO/IEC 17025:2017 Rad Cert#: L24170
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California Certification #: 2950
Colorado Certification #: PA01547
Connecticut Certification #: PH-0694
EPA Region 4 DW Rad
Florida/TNI Certification #: E87683
Georgia Certification #: C040
Guam Certification
Hawaii Certification
Idaho Certification
Illinois Certification
Indiana Certification
Iowa Certification #: 391
Kansas Certification #: E-10358
Kentucky Certification #: KY90133
KY WW Permit #: KY0098221
KY WW Permit #: KY0000221
Louisiana DHH/TNI Certification #: LA010
Louisiana DEQ/TNI Certification #: 04086
Maine Certification #: 2023021
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 #: PA014572023-03
New Hampshire/TNI Certification #: 297622
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 #: PA200002-015
Pennsylvania/TNI Certification #: 65-00282
Puerto Rico Certification #: PA01457
Rhode Island Certification #: 65-00282
South Dakota Certification
Tennessee Certification #: TN02867
Texas/TNI Certification #: T104704188-22-18
Utah/TNI Certification #: PA014572223-14
USDA Soil Permit #: 525-23-67-77263
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

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SAMPLE SUMMARY

Project: Plant McD AP-1 Well Networ-RAD
Pace Project No.: 92686680

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92686680001	**MCD-DGWC-37**	Water	09/06/23 14:48	09/07/23 00:00
92686680002	**MCD-AP1-FD-1**	Water	09/06/23 00:00	09/07/23 00:00
92686680003	**MCD-DGWC-67**	Water	09/07/23 11:44	09/08/23 15:50
92686680004	**MCD-DGWC-40**	Water	09/07/23 12:42	09/08/23 15:50
92686680005	**MCD-DGWC-38**	Water	09/07/23 13:27	09/08/23 15:50
92686680006	**MCD-DGWC-68A**	Water	09/07/23 13:38	09/08/23 15:50
92686680007	**MCD-DGWC-39**	Water	09/07/23 14:45	09/08/23 15:50
92686680008	**MCD-DGWC-69**	Water	09/07/23 15:01	09/08/23 15:50
92686680009	**MCD-DGWC-121**	Water	09/08/23 09:43	09/08/23 15:50
92686680010	**MCD-AP1-FB-1**	Water	09/07/23 12:00	09/08/23 15:50
92686680011	**MCD-AP1-EB-1**	Water	09/07/23 13:00	09/08/23 15:50

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SAMPLE ANALYTE COUNT

Project: Plant McD AP-1 Well Networ-RAD
Pace Project No.: 92686680

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92686680001	**MCD-DGWC-37**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	ZPC	1	PASI-PA
		Total Radium Calculation	LAL	1	PASI-PA
92686680002	**MCD-AP1-FD-1**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	ZPC	1	PASI-PA
		Total Radium Calculation	LAL	1	PASI-PA
92686680003	**MCD-DGWC-67**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	ZPC	1	PASI-PA
		Total Radium Calculation	LAL	1	PASI-PA
92686680004	**MCD-DGWC-40**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	ZPC	1	PASI-PA
		Total Radium Calculation	LAL	1	PASI-PA
92686680005	**MCD-DGWC-38**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	ZPC	1	PASI-PA
		Total Radium Calculation	LAL	1	PASI-PA
92686680006	**MCD-DGWC-68A**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	ZPC	1	PASI-PA
		Total Radium Calculation	LAL	1	PASI-PA
92686680007	**MCD-DGWC-39**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	ZPC	1	PASI-PA
		Total Radium Calculation	LAL	1	PASI-PA
92686680008	**MCD-DGWC-69**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	LAL	1	PASI-PA
92686680009	**MCD-DGWC-121**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	LAL	1	PASI-PA
92686680010	**MCD-AP1-FB-1**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	LAL	1	PASI-PA
92686680011	**MCD-AP1-EB-1**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	LAL	1	PASI-PA

PASI-PA = Pace Analytical Services - Greensburg

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant McD AP-1 Well Networ-RAD
Pace Project No.: 92686680

Sample: MCD-DGWC-37 **Lab ID: 92686680001** Collected: 09/06/23 14:48 Received: 09/07/23 00:00 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.129U ± 0.106 (0.185) C:79% T:NA**	pCi/L	10/03/23 08:18	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.603U ± 0.436 (0.855) C:82% T:83%**	pCi/L	09/26/23 15:54	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.732U ± 0.542 (1.04)**	pCi/L	10/03/23 15:18	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant McD AP-1 Well Networ-RAD
Pace Project No.: 92686680

Sample: MCD-AP1-FD-1 **Lab ID: 92686680002** Collected: 09/06/23 00:00 Received: 09/07/23 00:00 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.194U ± 0.137 (0.243) C:86% T:NA**	pCi/L	10/03/23 08:18	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.161U ± 0.381 (0.846) C:78% T:87%**	pCi/L	09/26/23 15:54	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.355U ± 0.518 (1.09)**	pCi/L	10/03/23 15:18	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant McD AP-1 Well Networ-RAD
Pace Project No.: 92686680

Sample: MCD-DGWC-67 **Lab ID: 92686680003** Collected: 09/07/23 11:44 Received: 09/08/23 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	**0.256 ± 0.141 (0.199) C:78% T:NA**	pCi/L	10/03/23 08:18	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.309U ± 0.360 (0.757) C:79% T:86%**	pCi/L	09/26/23 15:54	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.565U ± 0.501 (0.956)**	pCi/L	10/03/23 15:18	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant McD AP-1 Well Networ-RAD
Pace Project No.: 92686680

Sample: MCD-DGWC-40 **Lab ID: 92686680004** Collected: 09/07/23 12:42 Received: 09/08/23 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	**0.135U ± 0.111 (0.204) C:92% T:NA**	pCi/L	10/03/23 13:25	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.767 ± 0.418 (0.747) C:79% T:83%**	pCi/L	09/26/23 15:54	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.902U ± 0.529 (0.951)**	pCi/L	10/03/23 15:18	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant McD AP-1 Well Networ-RAD
Pace Project No.: 92686680

Sample: MCD-DGWC-38 **Lab ID: 92686680005** Collected: 09/07/23 13:27 Received: 09/08/23 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	**0.0704U ± 0.113 (0.252) C:84% T:NA**	pCi/L	10/03/23 08:19	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.288U ± 0.416 (0.896) C:81% T:77%**	pCi/L	09/26/23 15:54	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.358U ± 0.529 (1.15)**	pCi/L	10/03/23 15:18	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant McD AP-1 Well Networ-RAD
Pace Project No.: 92686680

Sample: MCD-DGWC-68A **Lab ID: 92686680006** Collected: 09/07/23 13:38 Received: 09/08/23 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	**0.288 ± 0.143 (0.200) C:96% T:NA**	pCi/L	10/03/23 08:19	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.494U ± 0.349 (0.669) C:82% T:88%**	pCi/L	09/26/23 15:52	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.782U ± 0.492 (0.869)**	pCi/L	10/03/23 15:18	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant McD AP-1 Well Networ-RAD
Pace Project No.: 92686680

Sample: MCD-DGWC-39 **Lab ID: 92686680007** Collected: 09/07/23 14:45 Received: 09/08/23 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	**0.233 ± 0.134 (0.201) C:93% T:NA**	pCi/L	10/03/23 08:19	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.495U ± 0.366 (0.700) C:77% T:82%**	pCi/L	09/26/23 15:52	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.728U ± 0.500 (0.901)**	pCi/L	10/03/23 15:18	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant McD AP-1 Well Networ-RAD
Pace Project No.: 92686680

Sample: MCD-DGWC-69 **Lab ID: 92686680008** Collected: 09/07/23 15:01 Received: 09/08/23 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	**0.501 ± 0.194 (0.232) C:85% T:NA**	pCi/L	10/03/23 08:21	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.409U ± 0.319 (0.624) C:81% T:90%**	pCi/L	09/26/23 11:39	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.910 ± 0.513 (0.856)**	pCi/L	10/03/23 15:16	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant McD AP-1 Well Networ-RAD
Pace Project No.: 92686680

Sample: MCD-DGWC-121 **Lab ID: 92686680009** Collected: 09/08/23 09:43 Received: 09/08/23 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	**0.212U ± 0.143 (0.239) C:78% T:NA**	pCi/L	10/03/23 08:21	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.774U ± 0.475 (0.899) C:78% T:86%**	pCi/L	09/26/23 11:39	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.986U ± 0.618 (1.14)**	pCi/L	10/03/23 15:16	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant McD AP-1 Well Networ-RAD
Pace Project No.: 92686680

Sample: MCD-AP1-FB-1 **Lab ID: 92686680010** Collected: 09/07/23 12:00 Received: 09/08/23 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	**0.164U ± 0.117 (0.196) C:87% T:NA**	pCi/L	10/03/23 08:22	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.493U ± 0.329 (0.616) C:79% T:91%**	pCi/L	09/26/23 11:59	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.657U ± 0.446 (0.812)**	pCi/L	10/03/23 15:16	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant McD AP-1 Well Networ-RAD
Pace Project No.: 92686680

Sample: MCD-AP1-EB-1 **Lab ID: 92686680011** Collected: 09/07/23 13:00 Received: 09/08/23 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	**0.133U ± 0.119 (0.228) C:85% T:NA**	pCi/L	10/03/23 08:23	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.526U ± 0.366 (0.700) C:79% T:85%**	pCi/L	09/26/23 11:40	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.659U ± 0.485 (0.928)**	pCi/L	10/03/23 15:16	7440-14-4	

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QUALITY CONTROL - RADIOCHEMISTRY

Project: Plant McD AP-1 Well Networ-RAD
Pace Project No.: 92686680

QC Batch: 615444 Analysis Method: EPA 9315
QC Batch Method: EPA 9315 Analysis Description: 9315 Total Radium
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92686680001, 92686680002, 92686680003, 92686680004, 92686680005, 92686680006, 92686680007

METHOD BLANK: 2997136 Matrix: Water
Associated Lab Samples: 92686680001, 92686680002, 92686680003, 92686680004, 92686680005, 92686680006, 92686680007

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.131 ± 0.132 (0.266) C:78% T:NA	pCi/L	10/02/23 13:17	

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QUALITY CONTROL - RADIOCHEMISTRY

Project: Plant McD AP-1 Well Networ-RAD
Pace Project No.: 92686680

QC Batch: 615447 Analysis Method: EPA 9315
QC Batch Method: EPA 9315 Analysis Description: 9315 Total Radium
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92686680008, 92686680009, 92686680010, 92686680011

METHOD BLANK: 2997146 Matrix: Water
Associated Lab Samples: 92686680008, 92686680009, 92686680010, 92686680011

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.171 ± 0.140 (0.267) C:87% T:NA	pCi/L	10/03/23 08:21	

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QUALITY CONTROL - RADIOCHEMISTRY

Project: Plant McD AP-1 Well Networ-RAD
Pace Project No.: 92686680

QC Batch: 615445 Analysis Method: EPA 9320
QC Batch Method: EPA 9320 Analysis Description: 9320 Radium 228
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92686680001, 92686680002, 92686680003, 92686680004, 92686680005, 92686680006, 92686680007

METHOD BLANK: 2997141 Matrix: Water
Associated Lab Samples: 92686680001, 92686680002, 92686680003, 92686680004, 92686680005, 92686680006, 92686680007

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.465 ± 0.323 (0.609) C:77% T:85%	pCi/L	09/26/23 12:28	

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QUALITY CONTROL - RADIOCHEMISTRY

Project: Plant McD AP-1 Well Networ-RAD
Pace Project No.: 92686680

QC Batch: 615448 Analysis Method: EPA 9320
QC Batch Method: EPA 9320 Analysis Description: 9320 Radium 228
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92686680008, 92686680009, 92686680010, 92686680011

METHOD BLANK: 2997151 Matrix: Water
Associated Lab Samples: 92686680008, 92686680009, 92686680010, 92686680011

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.338 ± 0.316 (0.637) C:80% T:88%	pCi/L	09/26/23 11:59	

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QUALIFIERS

Project: Plant McD AP-1 Well Networ-RAD
Pace Project No.: 92686680

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
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Plant McD AP-1 Well Networ-RAD
Pace Project No.: 92686680

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92686680001	**MCD-DGWC-37**	EPA 9315	615444		
92686680002	**MCD-AP1-FD-1**	EPA 9315	615444		
92686680003	**MCD-DGWC-67**	EPA 9315	615444		
92686680004	**MCD-DGWC-40**	EPA 9315	615444		
92686680005	**MCD-DGWC-38**	EPA 9315	615444		
92686680006	**MCD-DGWC-68A**	EPA 9315	615444		
92686680007	**MCD-DGWC-39**	EPA 9315	615444		
92686680008	**MCD-DGWC-69**	EPA 9315	615447		
92686680009	**MCD-DGWC-121**	EPA 9315	615447		
92686680010	**MCD-AP1-FB-1**	EPA 9315	615447		
92686680011	**MCD-AP1-EB-1**	EPA 9315	615447		
92686680001	**MCD-DGWC-37**	EPA 9320	615445		
92686680002	**MCD-AP1-FD-1**	EPA 9320	615445		
92686680003	**MCD-DGWC-67**	EPA 9320	615445		
92686680004	**MCD-DGWC-40**	EPA 9320	615445		
92686680005	**MCD-DGWC-38**	EPA 9320	615445		
92686680006	**MCD-DGWC-68A**	EPA 9320	615445		
92686680007	**MCD-DGWC-39**	EPA 9320	615445		
92686680008	**MCD-DGWC-69**	EPA 9320	615448		
92686680009	**MCD-DGWC-121**	EPA 9320	615448		
92686680010	**MCD-AP1-FB-1**	EPA 9320	615448		
92686680011	**MCD-AP1-EB-1**	EPA 9320	615448		
92686680001	**MCD-DGWC-37**	Total Radium Calculation	619773		
92686680002	**MCD-AP1-FD-1**	Total Radium Calculation	619773		
92686680003	**MCD-DGWC-67**	Total Radium Calculation	619773		
92686680004	**MCD-DGWC-40**	Total Radium Calculation	619773		
92686680005	**MCD-DGWC-38**	Total Radium Calculation	619773		
92686680006	**MCD-DGWC-68A**	Total Radium Calculation	619773		
92686680007	**MCD-DGWC-39**	Total Radium Calculation	619773		
92686680008	**MCD-DGWC-69**	Total Radium Calculation	619760		
92686680009	**MCD-DGWC-121**	Total Radium Calculation	619760		
92686680010	**MCD-AP1-FB-1**	Total Radium Calculation	619760		
92686680011	**MCD-AP1-EB-1**	Total Radium Calculation	619760		

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Pace ANALYTICAL SERVICES

DC#_Title: ENV-FRM-HUN1-0083 v02_Sample Condition Upon Receipt

Effective Date: 11/14/2022

oratory receiving samples:

heville ☐ **Eden** ☐ **Greenwood** ☐ **Huntersville** ☐ **Raleigh** ☐ **Mechanicsville** ☐ **Atlanta** ☑ **Kernersville** ☐

Sample Condition Upon Receipt

Client Name: Ga-Power

Project #: **WO# : 92686680**

92686680

urier: Commercial ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Pace ☐ Other:____

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

Date/Initials Person Examining Contents: 9-7-23 JLC

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

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

ermometer: ☐ IR Gun ID: 210

Type of Ice: ☑ Wet ☐ Blue ☐ None

oler Temp: 2.3 **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

oler Temp Corrected (°C): 2.3

DA 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	

IMMENTS/SAMPLE DISCREPANCY

Field Data Required? ☐ Yes ☐ No

Lot ID of split containers:

ENT NOTIFICATION/RESOLUTION

erson 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#: 92686680**

PM: BV Due Date: 09/28/23

CLIENT: 92-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)		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		1																	2				
3																													
4																													
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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.

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: aucoker@southernco.com
Phone: (470) 620-6176 Fax:
Requested Due Date: 10 Day TAT

Section B – Required Project Information:

Report To: Lauren Coles
Copy To: WSP
Purchase Order #:
Project Name: Plant McD AP-1 Well Network
Project #: 31408440.McD23

Section C – Invoice Information:

Attention: scslnvoices@southernco.com
Company Name:
Address:
Pace Quote:
Pace Project Manager: Bonnie Vahg
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	HCl	NaOH	Na2S2O3	Methanol	Other	Analysis Test Y/N	App IV/V + Hg, Na, K, Pb	Cl, F, SO4	Radium 226/228	TDS	Alkalinity	Sulfide	Residual Chlorine (Y/N)	92686680
2	MCD-DGWC-37	WG	G	9/6/23	14:48		7	3		3		1					X	X	X	X	X	X		001
4	MCD-AP1-FD-1	WG	G	9/6/23	--		7	3		3		1					X	X	X	X	X	X		002
6																								
8																								
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-202352	MARK MANN UGD	9/6/23	0900	[illegible]	9/6/23	

DATE Signed:

TEMP in C | Received on Ice (Y/N) | Custody Sealed (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 ☑ Kernersville ☐

Sample Condition Upon Receipt

Client Name: GA Power

Project #: **WO#: 92686680**

PM: BV Due Date: 09/28/23

CLIENT: 92-GA Power

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

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

Date/Initials Person Examining Contents: 9/8/23

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: 4.1 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): 4.1

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

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#: 92686680**

PM: BV Due Date: 09/28/23

CLIENT: 92-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)	5P5T-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	1																	2				
2		2	1			1	1																	2				
3		2	1			1	1																	4				
4		2	1			1	1																	2				
5		2	1			1	1																	2				
6		2	1			1	1																	2				
7		2	1			1	1																	2				
8		2	1			1	1																	2				
9		2	1			1	1																	2				
10		2	1			1	1																	2				
11		2	1			1	1																	2				
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:
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: WSP
Purchase Order #:
Project Name: Plant McD AP-1 Well Network
Project #: 31406440 McD23

Section C — Invoice Information:
Attention: scsinvoices@southernco.com
Company Name:
Address:
Pace Quote:
Pace Project Manager: Bonnie Vang
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 9513/9320	TDS	Alkalinity	Sulfide	Residual Chlorine (Y/N)	9268668
	Matrix codes: 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		
2	MCD-DGWC-67	WG	G	9/7/23	11:44		7	3		3		1					X	X	X	X	X	X		003
4	MCD-DGWC-40	WG	G	9/7/23	12:42		7	3		3		1					X	X	X	X	X	X		004
5	MCD-DGWC-38	WG	G	9/7/23	13:27		9	3		5		1					X	X	X	X	X	X		005 EXTRA RADS
6	MCD-DGWC-68A	WG	G	9/7/23	13:38		7	3		3		1					X	X	X	X	X	X		006
7	MCD-DGWC-39	WG	G	9/7/23	14:45		7	3		3		1					X	X	X	X	X	X		007
8	MGD-DGWC-69	WG	G	9/7/23	15:01		7	3		3		1					X	X	X	X	X	X		008
9	MCD-DGWC-121	WG	G	9/8/2023	9:43		7	3		3		1					X	X	X	X	X	X		009
10	MCD-AP1-FB-1	WQ	G	9/7/2023	12:00		7	3		3		1					X	X	X	X	X	X		010
11	MCD-AP1-EB-1	WQ	G	9/7/2023	13:00		7	3		3		1					X	X	X	X	X	X		011
12																								
13																								
14																								

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	SAMPLE CONDITIONS
Task Code = MCD-CCR-ASSMT-2023S2	MARK MANN WSP	09/08/23	1550	JC	1550 9/1	

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-228
Analyst:	ZPC
Date:	9/19/2023
Worklist:	75311
Matrix:	WT

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	2997141
MB concentration:	0.465
M/B 2 Sigma CSU:	0.323
MB MDC:	0.609
MB Numerical Performance Indicator:	2.83
MB Status vs Numerical Indicator:	Warning
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	LCSD (Y or N)?	Y
	LCS75311	LCSD75311
Count Date:	9/26/2023	9/26/2023
Spike I.D.:	23-043	23-043
Decay Corrected Spike Concentration (pCi/mL):	39.668	39.668
Volume Used (mL):	0.10	0.10
Aliquot Volume (L, g, F):	0.817	0.817
Target Conc. (pCi/L, g, F):	4.854	4.857
Uncertainty (Calculated):	0.238	0.238
Result (pCi/L, g, F):	4.557	3.686
LCS/LCSD 2 Sigma CSU (pCi/L, g, F):	1.042	0.891
Numerical Performance Indicator:	-0.54	-2.49
Percent Recovery:	93.89%	75.90%
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.:	LCS75311	Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Duplicate Sample I.D.	LCSD75311	
Sample Result (pCi/L, g, F):	4.557	
Sample Result 2 Sigma CSU (pCi/L, g, F):	1.042	
Sample Duplicate Result (pCi/L, g, F):	3.686	
Sample Duplicate Result 2 Sigma CSU (pCi/L, g, F):	0.891	
Are sample and/or duplicate results below RL?	NO	
Duplicate Numerical Performance Indicator:	1.245	
(Based on the LCS/LCSD Percent Recoveries) Duplicate RPD:	21.19%	
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:

VAL
9/27/23

Quality Control Sample Performance Assessment

Pace Analytical™ www.pacelabs.com

Test:	Ra-228
Analyst:	JJS1
Date:	9/19/2023
Worklist:	75313
Matrix:	WT

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	2997151
MB concentration:	0.338
M/B 2 Sigma CSU:	0.316
MB MDC:	0.637
MB Numerical Performance Indicator:	2.10
MB Status vs Numerical Indicator:	Warning
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	LCSD (Y or N)?	Y
	LCS75313	LCSD75313
Count Date:	9/26/2023	9/26/2023
Spike I.D.:	23-043	23-043
Decay Corrected Spike Concentration (pCi/mL):	39.668	39.668
Volume Used (mL):	0.10	0.10
Aliquot Volume (L, g, F):	0.817	0.816
Target Conc. (pCi/L, g, F):	4.857	4.860
Uncertainty (Calculated):	0.238	0.238
Result (pCi/L, g, F):	4.556	5.205
LCS/LCSD 2 Sigma CSU (pCi/L, g, F):	1.028	1.164
Numerical Performance Indicator:	-0.56	0.57
Percent Recovery:	93.80%	107.12%
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.:	LCS75313	Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Duplicate Sample I.D.	LCSD75313	
Sample Result (pCi/L, g, F):	4.556	
Sample Result 2 Sigma CSU (pCi/L, g, F):	1.028	
Sample Duplicate Result (pCi/L, g, F):	5.205	
Sample Duplicate Result 2 Sigma CSU (pCi/L, g, F):	1.164	
Are sample and/or duplicate results below RL?	NO	
Duplicate Numerical Performance Indicator:	-0.820	
(Based on the LCS/LCSD Percent Recoveries) Duplicate RPD:	13.26%	
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
9/27/23

VAM 9/27/23

Quality Control Sample Performance Assessment

Pace Analytical™ www.pacelabs.com

Test:	Ra-226
Analyst:	SLC
Date:	9/20/2023
Worklist:	75310
Matrix:	WI

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	2997136
MB concentration:	0.131
M/B 2 Sigma CSU:	0.132
MB MDC:	0.266
MB Numerical Performance Indicator:	1.94
MB Status vs Numerical Indicator:	Pass
MB Status vs. MDC:	N/A

Laboratory Control Sample Assessment	LCSD (Y or N)?	Y
	LCS75310	LCSD75310
Count Date:	10/3/2023	10/3/2023
Spike I.D.:	23-014	23-014
Decay Corrected Spike Concentration (pCi/mL):	25.030	25.030
Volume Used (mL):	0.10	0.10
Aliquot Volume (L, g, F):	0.506	0.504
Target Conc. (pCi/L, g, F):	4.951	4.969
Uncertainty (Calculated):	0.233	0.234
Result (pCi/L, g, F):	4.534	5.823
LCS/LCSD 2 Sigma CSU (pCi/L, g, F):	0.814	1.006
Numerical Performance Indicator:	-0.96	1.62
Percent Recovery:	91.59%	117.17%
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.:	LCS75310	92686680007
Duplicate Sample I.D.	LCSD75310	92686680007DUP
Sample Result (pCi/L, g, F):	4.534	0.233
Sample Result 2 Sigma CSU (pCi/L, g, F):	0.814	0.134
Sample Duplicate Result (pCi/L, g, F):	5.823	0.176
Sample Duplicate Result 2 Sigma CSU (pCi/L, g, F):	1.006	0.137
Are sample and/or duplicate results below RL?	NO	See Below ##
Duplicate Numerical Performance Indicator:	-1.951	0.580
(Based on the LCS/LCSD Percent Recoveries) Duplicate RPD:	24.51%	27.72%
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 10-3-23

VAM 10/3/23

Quality Control Sample Performance Assessment

Pace Analytical
www.pacelabs.com

Test:	Ra-226
Analyst:	SLC
Date:	9/20/2023
Worklist:	75312
Matrix:	W I

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	2997146
MB concentration:	0.171
M/B 2 Sigma CSU:	0.140
MB MDC:	0.267
MB Numerical Performance Indicator:	2.41
MB Status vs Numerical Indicator:	Warning
MB Status vs. MDC:	N/A

Laboratory Control Sample Assessment	LCSD (Y or N)?	Y
	LCS75312	LCSD75312
Count Date:	10/3/2023	10/3/2023
Spike I.D.:	23-014	23-014
Decay Corrected Spike Concentration (pCi/mL):	25.030	25.030
Volume Used (mL):	0.10	0.10
Aliquot Volume (L, g, F):	0.503	0.506
Target Conc. (pCi/L, g, F):	4.976	4.942
Uncertainty (Calculated):	0.234	0.232
Result (pCi/L, g, F):	5.204	4.922
LCS/LCSD 2 Sigma CSU (pCi/L, g, F):	0.905	0.879
Numerical Performance Indicator:	0.48	-0.04
Percent Recovery:	104.59%	99.59%
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.:	LCS75312	92686684012
Duplicate Sample I.D.	LCSD75312	92686684012DUP
Sample Result (pCi/L, g, F):	5.204	0.088
Sample Result 2 Sigma CSU (pCi/L, g, F):	0.905	0.102
Sample Duplicate Result (pCi/L, g, F):	4.922	0.169
Sample Duplicate Result 2 Sigma CSU (pCi/L, g, F):	0.879	0.128
Are sample and/or duplicate results below RL?	NO	See Below ##
Duplicate Numerical Performance Indicator:	0.438	-0.967
(Based on the LCS/LCSD Percent Recoveries) Duplicate RPD:	4.90%	62.74%
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:

ET 10-3-23

LAM 10/3/23

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

October 04, 2023

Lauren Hartley
Southern Co.
241 Ralph McGill Blvd
NE, Bin 10160
Atlanta, GA 30308

RE: Project: Plant McD AP-1234 Assessment
Pace Project No.: 92686681

Dear Lauren Hartley:

Enclosed are the analytical results for sample(s) received by the laboratory between September 07, 2023 and September 08, 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,

Bonnie Vang
bonnie.vang@pacelabs.com
704-977-0968
Project Manager

Enclosures

cc: Yong Cheng, WSP
Daniela Herrera, Golder
Andrea McClure, WSP
Laura Midkiff, Southern Co.
Dawn Prell, WSP USA E&I Inc_Atlanta

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CERTIFICATIONS

Project: Plant McD AP-1234 Assessment
Pace Project No.: 92686681

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-1234 Assessment
Pace Project No.: 92686681

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92686681001	**MCD-B-100**	Water	09/06/23 10:10	09/07/23 09:00
92686681002	**MCD-B-62**	Water	09/07/23 16:36	09/08/23 15:50

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SAMPLE ANALYTE COUNT

Project: Plant McD AP-1234 Assessment
Pace Project No.: 92686681

Lab ID	Sample ID	Method	Analysts	Analytes Reported
92686681001	**MCD-B-100**	EPA 6010D	DRB	5
		EPA 6020B	CW1	13
		SM 2540C-2015	DL1	1
		EPA 7470A	BM	1
		SM 2320B-2011	YEG	3
		SM 4500-S2D-2011	JP1	1
		EPA 300.0 Rev 2.1 1993	JCM	3
92686681002	**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
		SM 4500-S2D-2011	JP1	1
		EPA 300.0 Rev 2.1 1993	CDC	3

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

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Plant McD AP-1234 Assessment
Pace Project No.: 92686681

Sample: MCD-B-100 **Lab ID: 92686681001** Collected: 09/06/23 10:10 Received: 09/07/23 09:00 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	**21.7**	mg/L	0.040	0.025	1	09/09/23 08:25	09/11/23 21:54	7439-89-6	
Potassium	**1.3**	mg/L	0.50	0.15	1	09/09/23 08:25	09/11/23 21:54	7440-09-7	
Sodium	**28.1**	mg/L	1.0	0.58	1	09/09/23 08:25	09/11/23 21:54	7440-23-5	
Calcium	**49.9**	mg/L	1.0	0.12	1	09/09/23 08:25	09/11/23 21:54	7440-70-2	
Magnesium	**46.9**	mg/L	0.050	0.012	1	09/09/23 08:25	09/11/23 21:54	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	0.0012	1	09/09/23 08:50	09/13/23 13:54	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0037	1	09/09/23 08:50	09/13/23 13:54	7440-38-2	
Barium	**0.021**	mg/L	0.0050	0.00067	1	09/09/23 08:50	09/13/23 13:54	7440-39-3	
Beryllium	**0.00054**	mg/L	0.00050	0.000054	1	09/09/23 08:50	09/13/23 13:54	7440-41-7	
Boron	**0.24**	mg/L	0.040	0.0086	1	09/09/23 08:50	09/13/23 13:54	7440-42-8	
Cadmium	**0.00035J**	mg/L	0.00050	0.00011	1	09/09/23 08:50	09/13/23 13:54	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	09/09/23 08:50	09/13/23 13:54	7440-47-3	
Cobalt	**0.031**	mg/L	0.0050	0.00039	1	09/09/23 08:50	09/13/23 13:54	7440-48-4	
Lead	ND	mg/L	0.0010	0.00012	1	09/09/23 08:50	09/13/23 13:54	7439-92-1	
Lithium	**0.0023J**	mg/L	0.030	0.00073	1	09/09/23 08:50	09/13/23 13:54	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	09/09/23 08:50	09/13/23 13:54	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	09/09/23 08:50	09/13/23 13:54	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	09/09/23 08:50	09/13/23 13:54	7440-28-0	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**641**	mg/L	25.0	25.0	1		09/11/23 13:31		
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Asheville								
Mercury	ND	mg/L	0.00020	0.00012	1	09/19/23 17:10	09/20/23 14:10	7439-97-6	
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville								
Alkalinity,Bicarbonate (CaCO3)	ND	mg/L	5.0	5.0	1		09/11/23 16:48		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		09/11/23 16:48		
Alkalinity, Total as CaCO3	ND	mg/L	5.0	5.0	1		09/11/23 16:48		
4500S2D Sulfide Water	Analytical Method: SM 4500-S2D-2011 Pace Analytical Services - Asheville								
Sulfide	ND	mg/L	0.10	0.022	1		09/09/23 04:37	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**10.0**	mg/L	1.0	0.60	1		09/09/23 22:44	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		09/09/23 22:44	16984-48-8	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Plant McD AP-1234 Assessment
Pace Project No.: 92686681

Sample: MCD-B-100 **Lab ID: 92686681001** Collected: 09/06/23 10:10 Received: 09/07/23 09:00 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								
Sulfate	**322**	mg/L	7.0	3.5	7		09/10/23 06:21	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Plant McD AP-1234 Assessment
Pace Project No.: 92686681

Sample: MCD-B-62 **Lab ID: 92686681002** Collected: 09/07/23 16:36 Received: 09/08/23 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	**5.0**	mg/L	0.040	0.025	1	09/11/23 11:12	09/13/23 12:36	7439-89-6	
Potassium	**2.4**	mg/L	0.50	0.15	1	09/11/23 11:12	09/13/23 12:36	7440-09-7	
Sodium	**10.1**	mg/L	1.0	0.58	1	09/11/23 11:12	09/13/23 12:36	7440-23-5	
Calcium	**35.1**	mg/L	1.0	0.12	1	09/11/23 11:12	09/13/23 12:36	7440-70-2	
Magnesium	**5.1**	mg/L	0.050	0.012	1	09/11/23 11:12	09/13/23 12:36	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	0.0012	1	09/11/23 14:11	09/14/23 18:19	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0037	1	09/11/23 14:11	09/14/23 18:19	7440-38-2	
Barium	**0.015**	mg/L	0.0050	0.00067	1	09/11/23 14:11	09/14/23 18:19	7440-39-3	
Beryllium	**0.00011J**	mg/L	0.00050	0.000054	1	09/11/23 14:11	09/14/23 18:19	7440-41-7	
Boron	**0.071**	mg/L	0.040	0.0086	1	09/11/23 14:11	09/14/23 18:19	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	09/11/23 14:11	09/14/23 18:19	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	09/11/23 14:11	09/14/23 18:19	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	09/11/23 14:11	09/14/23 18:19	7440-48-4	
Lead	ND	mg/L	0.0010	0.00012	1	09/11/23 14:11	09/14/23 18:19	7439-92-1	
Lithium	**0.0092J**	mg/L	0.030	0.00073	1	09/11/23 14:11	09/14/23 18:19	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	09/11/23 14:11	09/15/23 19:14	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	09/11/23 14:11	09/14/23 18:19	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	09/11/23 14:11	09/14/23 18:19	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	10/02/23 12:15	10/02/23 16:46	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		09/12/23 11:44		
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville								
Alkalinity,Bicarbonate (CaCO3)	**75.7**	mg/L	5.0	5.0	1		09/12/23 17:28		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		09/12/23 17:28		
Alkalinity, Total as CaCO3	**75.7**	mg/L	5.0	5.0	1		09/12/23 17:28		
4500S2D Sulfide Water	Analytical Method: SM 4500-S2D-2011 Pace Analytical Services - Asheville								
Sulfide	ND	mg/L	0.10	0.022	1		09/13/23 02:30	18496-25-8	
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		09/12/23 18:06	16887-00-6	
Fluoride	**0.13**	mg/L	0.10	0.050	1		09/12/23 18:06	16984-48-8	

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ANALYTICAL RESULTS

Project: Plant McD AP-1234 Assessment
Pace Project No.: 92686681

Sample: MCD-B-62 **Lab ID: 92686681002** Collected: 09/07/23 16:36 Received: 09/08/23 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								
Sulfate	**49.3**	mg/L	1.0	0.50	1		09/12/23 18:06	14808-79-8	

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QUALITY CONTROL DATA

Project: Plant McD AP-1234 Assessment
Pace Project No.: 92686681

QC Batch: 798622
QC Batch Method: EPA 3010A
Analysis Method: EPA 6010D
Analysis Description: 6010D ATL
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92686681001

METHOD BLANK: 4136598 Matrix: Water
Associated Lab Samples: 92686681001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium	mg/L	ND	1.0	0.12	09/11/23 20:25	
Iron	mg/L	ND	0.040	0.025	09/11/23 20:25	
Magnesium	mg/L	ND	0.050	0.012	09/11/23 20:25	
Potassium	mg/L	ND	0.50	0.15	09/11/23 20:25	
Sodium	mg/L	ND	1.0	0.58	09/11/23 20:25	

LABORATORY CONTROL SAMPLE: 4136599

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium	mg/L	1	1.0	104	80-120	
Iron	mg/L	1	1.1	106	80-120	
Magnesium	mg/L	1	1.1	106	80-120	
Potassium	mg/L	1	1.0	103	80-120	
Sodium	mg/L	1	0.99J	99	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4136986 4136987

Parameter	Units	92686676002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Calcium	mg/L	7.0	1	1	8.2	7.6	115	58	75-125	7	20	M1
Iron	mg/L	0.091	1	1	1.2	1.1	108	106	75-125	2	20	
Magnesium	mg/L	0.98	1	1	2.1	2.0	108	101	75-125	4	20	
Potassium	mg/L	0.77	1	1	1.8	1.8	104	101	75-125	1	20	
Sodium	mg/L	8.8	1	1	9.9	9.2	117	42	75-125	8	20	M1

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QUALITY CONTROL DATA

Project: Plant McD AP-1234 Assessment
Pace Project No.: 92686681

QC Batch: 798869
QC Batch Method: EPA 3010A
Analysis Method: EPA 6010D
Analysis Description: 6010D ATL
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92686681002

METHOD BLANK: 4137528 Matrix: Water
Associated Lab Samples: 92686681002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium	mg/L	ND	1.0	0.12	09/13/23 10:22	
Iron	mg/L	ND	0.040	0.025	09/13/23 10:22	
Magnesium	mg/L	ND	0.050	0.012	09/13/23 10:22	
Potassium	mg/L	ND	0.50	0.15	09/13/23 10:22	
Sodium	mg/L	ND	1.0	0.58	09/13/23 10:22	

LABORATORY CONTROL SAMPLE: 4137529

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium	mg/L	1	1.0J	100	80-120	
Iron	mg/L	1	1.0	100	80-120	
Magnesium	mg/L	1	1.0	102	80-120	
Potassium	mg/L	1	0.92	92	80-120	
Sodium	mg/L	1	0.96J	96	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4137530 4137531

Parameter	Units	92686941001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Calcium	mg/L	71.8	1	1	68.4	71.2	-338	-59	75-125	4	20	M1
Iron	mg/L	2.1	1	1	3.0	3.0	86	93	75-125	2	20	
Magnesium	mg/L	24.6	1	1	24.1	25.0	-53	33	75-125	4	20	M1
Potassium	mg/L	8.2	1	1	8.7	9.1	42	82	75-125	5	20	M1
Sodium	mg/L	20.0	1	1	19.8	20.6	-19	59	75-125	4	20	M1

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QUALITY CONTROL DATA

Project: Plant McD AP-1234 Assessment
Pace Project No.: 92686681

QC Batch: 798623
QC Batch Method: EPA 3005A
Analysis Method: EPA 6020B
Analysis Description: 6020 MET
Laboratory: Pace Analytical Services - Peachtree Corners, GA

Associated Lab Samples: 92686681001

METHOD BLANK: 4136603 Matrix: Water
Associated Lab Samples: 92686681001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	ND	0.0030	0.0012	09/13/23 12:38	
Arsenic	mg/L	ND	0.0050	0.0037	09/13/23 12:38	
Barium	mg/L	ND	0.0050	0.00067	09/14/23 16:38	
Beryllium	mg/L	ND	0.00050	0.000054	09/13/23 12:38	
Boron	mg/L	ND	0.040	0.0086	09/13/23 12:38	
Cadmium	mg/L	ND	0.00050	0.00011	09/13/23 12:38	
Chromium	mg/L	ND	0.0050	0.0011	09/13/23 12:38	
Cobalt	mg/L	ND	0.0050	0.00039	09/13/23 12:38	
Lead	mg/L	ND	0.0010	0.00012	09/13/23 12:38	
Lithium	mg/L	ND	0.030	0.00073	09/13/23 12:38	
Molybdenum	mg/L	ND	0.010	0.00074	09/13/23 12:38	
Selenium	mg/L	ND	0.0050	0.0014	09/13/23 12:38	
Thallium	mg/L	ND	0.0010	0.00018	09/13/23 12:38	

LABORATORY CONTROL SAMPLE: 4136604

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	0.097	97	80-120	
Barium	mg/L	0.1	0.098	98	80-120	
Beryllium	mg/L	0.1	0.097	97	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	0.10	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	0.099	99	80-120	
Molybdenum	mg/L	0.1	0.10	105	80-120	
Selenium	mg/L	0.1	0.099	99	80-120	
Thallium	mg/L	0.1	0.096	96	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4136605 4136606

Parameter	Units	92686676001 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	104	105	75-125	1	20	
Arsenic	mg/L	ND	0.1	0.1	0.098	0.099	98	98	75-125	1	20	

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QUALITY CONTROL DATA

Project: Plant McD AP-1234 Assessment
Pace Project No.: 92686681

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4136605 4136606

Parameter	Units	92686676001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Barium	mg/L	0.041	0.1	0.1	0.15	0.15	105	107	75-125	2	20	
Beryllium	mg/L	0.00012J	0.1	0.1	0.098	0.097	98	97	75-125	1	20	
Boron	mg/L	0.012J	1	1	1.0	1.0	102	102	75-125	0	20	
Cadmium	mg/L	ND	0.1	0.1	0.099	0.10	99	102	75-125	3	20	
Chromium	mg/L	ND	0.1	0.1	0.10	0.10	102	104	75-125	2	20	
Cobalt	mg/L	ND	0.1	0.1	0.10	0.10	102	104	75-125	2	20	
Lead	mg/L	ND	0.1	0.1	0.098	0.098	97	98	75-125	1	20	
Lithium	mg/L	ND	0.1	0.1	0.098	0.096	97	96	75-125	2	20	
Molybdenum	mg/L	ND	0.1	0.1	0.10	0.10	100	102	75-125	2	20	
Selenium	mg/L	ND	0.1	0.1	0.098	0.10	98	99	75-125	2	20	
Thallium	mg/L	0.00053J	0.1	0.1	0.095	0.095	94	95	75-125	0	20	

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QUALITY CONTROL DATA

Project: Plant McD AP-1234 Assessment
Pace Project No.: 92686681

QC Batch: 798903
QC Batch Method: EPA 3005A
Analysis Method: EPA 6020B
Analysis Description: 6020 MET
Laboratory: Pace Analytical Services - Peachtree Corners, GA

Associated Lab Samples: 92686681002

METHOD BLANK: 4137724 Matrix: Water
Associated Lab Samples: 92686681002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	ND	0.0030	0.0012	09/14/23 16:50	
Arsenic	mg/L	ND	0.0050	0.0037	09/14/23 16:50	
Barium	mg/L	ND	0.0050	0.00067	09/14/23 16:50	
Beryllium	mg/L	ND	0.00050	0.000054	09/14/23 16:50	
Boron	mg/L	ND	0.040	0.0086	09/14/23 16:50	
Cadmium	mg/L	ND	0.00050	0.00011	09/14/23 16:50	
Chromium	mg/L	ND	0.0050	0.0011	09/14/23 16:50	
Cobalt	mg/L	ND	0.0050	0.00039	09/14/23 16:50	
Lead	mg/L	ND	0.0010	0.00012	09/14/23 16:50	
Lithium	mg/L	ND	0.030	0.00073	09/14/23 16:50	
Molybdenum	mg/L	ND	0.010	0.00074	09/14/23 16:50	
Selenium	mg/L	ND	0.0050	0.0014	09/14/23 16:50	
Thallium	mg/L	ND	0.0010	0.00018	09/14/23 16:50	

LABORATORY CONTROL SAMPLE: 4137725

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.1	0.11	109	80-120	
Arsenic	mg/L	0.1	0.10	102	80-120	
Barium	mg/L	0.1	0.10	102	80-120	
Beryllium	mg/L	0.1	0.098	98	80-120	
Boron	mg/L	1	0.99	99	80-120	
Cadmium	mg/L	0.1	0.10	102	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	0.10	101	80-120	
Molybdenum	mg/L	0.1	0.10	101	80-120	
Selenium	mg/L	0.1	0.10	102	80-120	
Thallium	mg/L	0.1	0.097	97	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4137726 4137727

Parameter	Units	92686941002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Antimony	mg/L	ND	0.1	0.1	0.11	0.10	110	104	75-125	6	20	
Arsenic	mg/L	ND	0.1	0.1	0.11	0.099	106	99	75-125	7	20	

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QUALITY CONTROL DATA

Project: Plant McD AP-1234 Assessment
Pace Project No.: 92686681

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4137726 4137727

Parameter	Units	92686941002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Barium	mg/L	0.0027J	0.1	0.1	0.11	0.10	105	100	75-125	5	20	
Beryllium	mg/L	ND	0.1	0.1	0.10	0.097	100	97	75-125	4	20	
Boron	mg/L	0.24	1	1	1.3	1.2	103	99	75-125	3	20	
Cadmium	mg/L	ND	0.1	0.1	0.11	0.10	107	100	75-125	6	20	
Chromium	mg/L	ND	0.1	0.1	0.10	0.094	102	93	75-125	8	20	
Cobalt	mg/L	0.00040J	0.1	0.1	0.10	0.094	101	94	75-125	8	20	
Lead	mg/L	ND	0.1	0.1	0.095	0.091	95	91	75-125	4	20	
Lithium	mg/L	0.0043J	0.1	0.1	0.10	0.099	100	94	75-125	6	20	
Molybdenum	mg/L	0.026	0.1	0.1	0.13	0.12	105	97	75-125	6	20	
Selenium	mg/L	ND	0.1	0.1	0.10	0.098	104	98	75-125	6	20	
Thallium	mg/L	ND	0.1	0.1	0.092	0.089	92	89	75-125	4	20	

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QUALITY CONTROL DATA

Project: Plant McD AP-1234 Assessment
Pace Project No.: 92686681

QC Batch: 803461
QC Batch Method: EPA 7470A
Analysis Method: EPA 7470A
Analysis Description: 7470 Mercury
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92686681002

METHOD BLANK: 4161104 Matrix: Water
Associated Lab Samples: 92686681002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	ND	0.00020	0.00013	10/02/23 16:27	

LABORATORY CONTROL SAMPLE: 4161105

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: 4161106 4161107

Parameter	Units	92686676003 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	0.0027	0.0026	104	101	75-125	3	20	

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QUALITY CONTROL DATA

Project: Plant McD AP-1234 Assessment
Pace Project No.: 92686681

QC Batch: 798883
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: 92686681001

METHOD BLANK: 4137624 Matrix: Water
Associated Lab Samples: 92686681001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	25.0	25.0	09/11/23 13:25	

LABORATORY CONTROL SAMPLE: 4137625

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	427	107	80-120	

SAMPLE DUPLICATE: 4137626

Parameter	Units	92686830001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	1540	1500	3	10	

SAMPLE DUPLICATE: 4137627

Parameter	Units	92686679004 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	207	174	17	10	D6

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QUALITY CONTROL DATA

Project: Plant McD AP-1234 Assessment
Pace Project No.: 92686681

QC Batch: 799142
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: 92686681002

METHOD BLANK: 4138899 Matrix: Water
Associated Lab Samples: 92686681002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	25.0	25.0	09/12/23 11:42	

LABORATORY CONTROL SAMPLE: 4138900

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	394	98	80-120	

SAMPLE DUPLICATE: 4138901

Parameter	Units	92686677006 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	253	259	2	10	

SAMPLE DUPLICATE: 4138902

Parameter	Units	92687108002 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	100	101	1	10	

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QUALITY CONTROL DATA

Project: Plant McD AP-1234 Assessment
Pace Project No.: 92686681

QC Batch: 800476
QC Batch Method: EPA 7470A
Analysis Method: EPA 7470A
Analysis Description: 7470 Mercury
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92686681001

METHOD BLANK: 4146097 Matrix: Water
Associated Lab Samples: 92686681001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	ND	0.00020	0.00012	09/20/23 13:34	

LABORATORY CONTROL SAMPLE: 4146098

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.0025	0.0020	81	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4146099 4146100

Parameter	Units	92686676001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	mg/L	ND	0.0025	0.0025	0.0025	0.0024	100	95	75-125	5	25	

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REPORT OF LABORATORY ANALYSIS

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Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: Plant McD AP-1234 Assessment
Pace Project No.: 92686681

QC Batch: 798846
QC Batch Method: SM 2320B-2011
Analysis Method: SM 2320B-2011
Analysis Description: 2320B Alkalinity
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92686681001

METHOD BLANK: 4137453 Matrix: Water
Associated Lab Samples: 92686681001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Alkalinity, Total as CaCO3	mg/L	ND	5.0	5.0	09/11/23 15:34	
Alkalinity,Bicarbonate (CaCO3)	mg/L	ND	5.0	5.0	09/11/23 15:34	
Alkalinity,Carbonate (CaCO3)	mg/L	ND	5.0	5.0	09/11/23 15:34	

LABORATORY CONTROL SAMPLE: 4137454

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: 4137455

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	50	50.6	101	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4137456 4137457

Parameter	Units	92686679001 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	9.5	50	50	60.9	61.8	103	105	80-120	1	25	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4137458 4137459

Parameter	Units	92686836005 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	15.3	50	50	67.7	68.0	105	105	80-120	0	25	

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QUALITY CONTROL DATA

Project: Plant McD AP-1234 Assessment
Pace Project No.: 92686681

QC Batch: 799173
QC Batch Method: SM 2320B-2011
Analysis Method: SM 2320B-2011
Analysis Description: 2320B Alkalinity
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92686681002

METHOD BLANK: 4139096 Matrix: Water
Associated Lab Samples: 92686681002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Alkalinity, Total as CaCO3	mg/L	ND	5.0	5.0	09/12/23 15:04	
Alkalinity,Bicarbonate (CaCO3)	mg/L	ND	5.0	5.0	09/12/23 15:04	
Alkalinity,Carbonate (CaCO3)	mg/L	ND	5.0	5.0	09/12/23 15:04	

LABORATORY CONTROL SAMPLE: 4139097

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: 4139098

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	50	50.9	102	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4139099 4139100

Parameter	Units	92686679012 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Alkalinity, Total as CaCO3	mg/L	ND	50	50	51.2	51.0	102	102	80-120	0	25	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4139101 4139102

Parameter	Units	92686677009 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	96.9	50	50	148	148	103	102	80-120	0	25	

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QUALITY CONTROL DATA

Project: Plant McD AP-1234 Assessment
Pace Project No.: 92686681

QC Batch: 798662
QC Batch Method: SM 4500-S2D-2011
Analysis Method: SM 4500-S2D-2011
Analysis Description: 4500S2D Sulfide Water
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92686681001

METHOD BLANK: 4136899 Matrix: Water
Associated Lab Samples: 92686681001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Sulfide	mg/L	ND	0.10	0.022	09/09/23 04:31	

LABORATORY CONTROL SAMPLE: 4136900

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Sulfide	mg/L	0.5	0.52	104	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4136901 4136902

Parameter	Units	92686676001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Sulfide	mg/L	ND	0.5	0.5	0.54	0.56	106	111	80-120	5	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4136903 4136904

Parameter	Units	92686861001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Sulfide	mg/L	ND	0.5	0.5	0.38	0.37	76	75	80-120	2	10	M1

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QUALITY CONTROL DATA

Project: Plant McD AP-1234 Assessment
Pace Project No.: 92686681

QC Batch: 799296
QC Batch Method: SM 4500-S2D-2011
Analysis Method: SM 4500-S2D-2011
Analysis Description: 4500S2D Sulfide Water
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92686681002

METHOD BLANK: 4140098 Matrix: Water
Associated Lab Samples: 92686681002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Sulfide	mg/L	ND	0.10	0.022	09/13/23 02:23	

LABORATORY CONTROL SAMPLE: 4140099

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Sulfide	mg/L	0.5	0.52	104	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4140102 4140103

Parameter	Units	92686679007 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Sulfide	mg/L	ND	0.5	0.5	0.44	0.43	87	85	80-120	1	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4140133 4140134

Parameter	Units	92686941002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Sulfide	mg/L	ND	0.5	0.5	0.52	0.49	104	97	80-120	7	10	

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QUALITY CONTROL DATA

Project: Plant McD AP-1234 Assessment
Pace Project No.: 92686681

QC Batch: 798688
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: 92686681001

METHOD BLANK: 4136959 Matrix: Water
Associated Lab Samples: 92686681001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.60	09/09/23 21:04	
Fluoride	mg/L	ND	0.10	0.050	09/09/23 21:04	
Sulfate	mg/L	ND	1.0	0.50	09/09/23 21:04	

LABORATORY CONTROL SAMPLE: 4136960

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

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4136961 4136962

Parameter	Units	92686679004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	3.2	50	50	56.8	57.1	107	108	90-110	1	10	
Fluoride	mg/L	0.10	2.5	2.5	2.7	2.7	102	104	90-110	1	10	
Sulfate	mg/L	53.9	50	50	100	99.4	92	91	90-110	1	10	

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QUALITY CONTROL DATA

Project: Plant McD AP-1234 Assessment
Pace Project No.: 92686681

QC Batch: 799070
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: 92686681002

METHOD BLANK: 4138708 Matrix: Water
Associated Lab Samples: 92686681002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.60	09/12/23 12:51	
Fluoride	mg/L	ND	0.10	0.050	09/12/23 12:51	
Sulfate	mg/L	ND	1.0	0.50	09/12/23 12:51	

LABORATORY CONTROL SAMPLE: 4138709

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	50.1	100	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4138710 4138711

Parameter	Units	92687087001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	8.0	50	50	59.4	59.8	103	104	90-110	1	10	
Fluoride	mg/L	0.63	2.5	2.5	3.5	3.5	113	115	90-110	1	10	M1
Sulfate	mg/L	9.9	50	50	60.7	61.4	102	103	90-110	1	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4138712 4138713

Parameter	Units	92686677010 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	ND	50	50	52.1	53.1	104	106	90-110	2	10	
Fluoride	mg/L	ND	2.5	2.5	2.7	2.7	109	108	90-110	0	10	
Sulfate	mg/L	ND	50	50	52.7	54.0	105	108	90-110	2	10	

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(704)875-9092

QUALIFIERS

Project: Plant McD AP-1234 Assessment
Pace Project No.: 92686681

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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Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Plant McD AP-1234 Assessment
Pace Project No.: 92686681

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92686681001	**MCD-B-100**	EPA 3010A	798622	EPA 6010D	798709
92686681002	**MCD-B-62**	EPA 3010A	798869	EPA 6010D	798954
92686681001	**MCD-B-100**	EPA 3005A	798623	EPA 6020B	798699
92686681002	**MCD-B-62**	EPA 3005A	798903	EPA 6020B	798992
92686681002	**MCD-B-62**	EPA 7470A	803461	EPA 7470A	803573
92686681001	**MCD-B-100**	SM 2540C-2015	798883		
92686681002	**MCD-B-62**	SM 2540C-2015	799142		
92686681001	**MCD-B-100**	EPA 7470A	800476	EPA 7470A	800627
92686681001	**MCD-B-100**	SM 2320B-2011	798846		
92686681002	**MCD-B-62**	SM 2320B-2011	799173		
92686681001	**MCD-B-100**	SM 4500-S2D-2011	798662		
92686681002	**MCD-B-62**	SM 4500-S2D-2011	799296		
92686681001	**MCD-B-100**	EPA 300.0 Rev 2.1 1993	798688		
92686681002	**MCD-B-62**	EPA 300.0 Rev 2.1 1993	799070		

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Pace ANALYTICAL SERVICES

DC#_Title: ENV-FRM-HUN1-0083 v02_Sample Condition Upon Receipt

Effective Date: 11/14/2022

oratory receiving samples:

sheville ☐ **Eden** ☐ **Greenwood** ☐ **Huntersville** ☐ **Raleigh** ☐ **Mechanicsville** ☐ **Atlanta** ☑ **Kernersville** ☐

Sample Condition Upon Receipt

Client Name: Ga - Power

Project #: **WO# : 92686681**

92686681

urier: ☐ Fed Ex ☐ UPS ☐ USPS ☑ Client
] Commercial ☐ Pace ☐ Other:____

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

Date/Initials Person Examining Contents: 9-7-23 JIC

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

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

ermometer:
☐ IR Gun ID: 230

Type of Ice: ☑ Wet ☐ Blue ☐ None

ooler Temp: 2.3 **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

ooler Temp Corrected (°C): 2.3

SDA 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	

OMMENTS/SAMPLE DISCREPANCY

Field Data Required? ☐ Yes ☐ No

Lot ID of split containers:

IENT 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#: 92686681

***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 #

PM: BV **Due Date: 09/21/23**

CLIENT: 92-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)	BP3S-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)	SPZT-250 mL Sterile Plastic (N/A – lab)	15 mL	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																													
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:	WSP	Company Name:	
	Atlanta, GA 30339			Address:	
Email:	lcucker@southernco.com	Purchase Order #:		Pace Quote:	
Phone: (470) 820-6176	Fax:	Project Name:	Plant McD AP-1234 Assessment	Pace Project Manager:	Bonnie Vang
Requested Due Date:	10 Day TAT	Project #:	31408440.MCD23	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	H2SO4	HNO3	HCl	NaOH + Zn Acetate	Na2S2O3	Methanol	Other	Analysis Test: Y/N	App III/IV + Mg, Na, K, Fe	Cl, F, SO4	Radium 95139220	TDS	Alkalinity	Sulfide	Residual Chlorine (Y/N)	Requested Analysis Filtered (Y/N)
		MATRIX CODE: Drinking Water DW, Water WT, Waste Water WW, Product PD, Soil/Solid SL, Oil OL, Wipe WP, Air AR, Other OT, Tissue TS														N	N	N	N	N	N		
1	MCD-B-100	WG	G	9/6/23	10:10		7	3		3		1				X	X	X	X	X	X		92608661 001
2																							
3																							
4																							
5																							
6																							
7																							
8																							
9																							
10																							
11																							
12																							
13																							
14																							

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	SAMPLE CONDITIONS
Pace Quote: MCD-CCR-Assmt-23456	Alexandria Hall WSP	9/07/23	0900		9/7/23	

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 ☑ Kernersville ☐

Sample Condition Upon Receipt

Client Name: GA Power

Project # WO#: 92686681

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

PM: BV Due Date: 09/21/23

CLIENT: 92-GA Power

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

Date/Initials Person Examining Contents: 9/8/23 TDR

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: 4.1 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): 4.1

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# : 92686681

PM: BV Due Date: 09/21/23

CLIENT: 92-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)	BP1U	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																													
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:	WSP	Company Name:	
	Atlanta, GA 30339			Address:	
Email:	laucoker@southernco.com	Purchase Order #:		Pace Quote:	
Phone:	(470) 620-6176 Fax:	Project Name:	Plant McD AP-1234 Assessment	Pace Project Manager:	Bonnie Vang
Requested Due Date:	10 Day TAT	Project #:	31406440.McD23	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	H2SO4	HNO3	HCl	NaOH + Zn Acetate	Na2S2O3	Methanol	Other	Analyses Test: Y/N	App III/IV + Mg, Na, K, Fe	Cl, F, SO4	Radium 951/349/320	TDS	Alkalinity	Sulfide	Residual Chlorine (Y/N)	92666661
																Requested Analysis Filtered (Y/N)	N	N	N	N	N	N		
1	MCD-B-62	WG	G	9/7/23	16:36		7	3		3		1					X	X	X	X	X	X		002
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	SAMPLE CONDITIONS
Task Code = MCD-CCR-ASSMT-2023S2	MARK MANN WSP	09/08/23	1550	JCL	9/8 1550	

DATE Signed:

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

October 13, 2023

Lauren Hartley
Southern Co.
241 Ralph McGill Blvd
NE, Bin 10160
Atlanta, GA 30308

RE: Project: Plant McD AP-1234 Assessme-RAD
Pace Project No.: 92686682

Dear Lauren Hartley:

Enclosed are the analytical results for sample(s) received by the laboratory between September 07, 2023 and September 08, 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

Revision 1: Sample ID for 92686682-001 corrected to match COC

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

Sincerely,

Kayla Slaughter for
Bonnie Vang
bonnie.vang@pacelabs.com
704-977-0968
Project Manager

Enclosures

cc: Yong Cheng, WSP
Daniela Herrera, Golder
Andrea McClure, WSP
Laura Midkiff, Southern Co.
Dawn Prell, WSP USA E&I Inc_Atlanta

REPORT OF LABORATORY ANALYSIS

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CERTIFICATIONS

Project: Plant McD AP-1234 Assessme-RAD
Pace Project No.: 92686682

Pace Analytical Services Pennsylvania
1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
ANAB DOD-ELAP Rad Accreditation #: L2417
ANABISO/IEC 17025:2017 Rad Cert#: L24170
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California Certification #: 2950
Colorado Certification #: PA01547
Connecticut Certification #: PH-0694
EPA Region 4 DW Rad
Florida/TNI Certification #: E87683
Georgia Certification #: C040
Guam Certification
Hawaii Certification
Idaho Certification
Illinois Certification
Indiana Certification
Iowa Certification #: 391
Kansas Certification #: E-10358
Kentucky Certification #: KY90133
KY WW Permit #: KY0098221
KY WW Permit #: KY0000221
Louisiana DHH/TNI Certification #: LA010
Louisiana DEQ/TNI Certification #: 04086
Maine Certification #: 2023021
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 #: PA014572023-03
New Hampshire/TNI Certification #: 297622
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 #: PA200002-015
Pennsylvania/TNI Certification #: 65-00282
Puerto Rico Certification #: PA01457
Rhode Island Certification #: 65-00282
South Dakota Certification
Tennessee Certification #: TN02867
Texas/TNI Certification #: T104704188-22-18
Utah/TNI Certification #: PA014572223-14
USDA Soil Permit #: 525-23-67-77263
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

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SAMPLE SUMMARY

Project: Plant McD AP-1234 Assessme-RAD
Pace Project No.: 92686682

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92686682001	**MCD-B-100**	Water	09/06/23 10:10	09/07/23 00:00
92686682002	**MCD-B-62**	Water	09/07/23 16:36	09/08/23 15:50

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SAMPLE ANALYTE COUNT

Project: Plant McD AP-1234 Assessme-RAD
Pace Project No.: 92686682

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92686682001	**MCD-B-100**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	ZPC	1	PASI-PA
		Total Radium Calculation	LAL	1	PASI-PA
92686682002	**MCD-B-62**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	ZPC	1	PASI-PA
		Total Radium Calculation	LAL	1	PASI-PA

PASI-PA = Pace Analytical Services - Greensburg

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant McD AP-1234 Assessme-RAD
Pace Project No.: 92686682

Sample: MCD-B-100 **Lab ID: 92686682001** Collected: 09/06/23 10:10 Received: 09/07/23 00:00 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.204U ± 0.130 (0.215) C:90% T:NA**	pCi/L	10/03/23 08:17	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.122U ± 0.416 (0.936) C:78% T:79%**	pCi/L	09/26/23 15:53	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.326U ± 0.546 (1.15)**	pCi/L	10/03/23 15:18	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant McD AP-1234 Assessme-RAD
Pace Project No.: 92686682

Sample: MCD-B-62 **Lab ID: 92686682002** Collected: 09/07/23 16:36 Received: 09/08/23 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	**0.756 ± 0.230 (0.167) C:80% T:NA**	pCi/L	10/03/23 08:18	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**1.48 ± 0.533 (0.786) C:81% T:84%**	pCi/L	09/26/23 15:54	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**2.24 ± 0.763 (0.953)**	pCi/L	10/03/23 15:18	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL - RADIOCHEMISTRY

Project: Plant McD AP-1234 Assessme-RAD
Pace Project No.: 92686682

QC Batch: 615444
QC Batch Method: EPA 9315
Analysis Method: EPA 9315
Analysis Description: 9315 Total Radium
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92686682001, 92686682002

METHOD BLANK: 2997136
Matrix: Water
Associated Lab Samples: 92686682001, 92686682002

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.131 ± 0.132 (0.266) C:78% T:NA	pCi/L	10/02/23 13:17	

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

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QUALITY CONTROL - RADIOCHEMISTRY

Project: Plant McD AP-1234 Assessme-RAD
Pace Project No.: 92686682

QC Batch: 615445
QC Batch Method: EPA 9320
Analysis Method: EPA 9320
Analysis Description: 9320 Radium 228
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92686682001, 92686682002

METHOD BLANK: 2997141
Matrix: Water
Associated Lab Samples: 92686682001, 92686682002

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.465 ± 0.323 (0.609) C:77% T:85%	pCi/L	09/26/23 12:28	

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

REPORT OF LABORATORY ANALYSIS

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QUALIFIERS

Project: Plant McD AP-1234 Assessme-RAD
Pace Project No.: 92686682

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 Assessme-RAD
Pace Project No.: 92686682

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92686682001	**MCD-B-100**	EPA 9315	615444		
92686682002	**MCD-B-62**	EPA 9315	615444		
92686682001	**MCD-B-100**	EPA 9320	615445		
92686682002	**MCD-B-62**	EPA 9320	615445		
92686682001	**MCD-B-100**	Total Radium Calculation	619773		
92686682002	**MCD-B-62**	Total Radium Calculation	619773		

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Pace ANALYTICAL SERVICES

DC#_Title: ENV-FRM-HUN1-0083 v02_Sample Condition Upon Receipt

Effective Date: 11/14/2022

oratory receiving samples:

sheville ☐ **Eden** ☐ **Greenwood** ☐ **Huntersville** ☐ **Raleigh** ☐ **Mechanicsville** ☐ **Atlanta** ☑ **Kernersville** ☐

Sample Condition Upon Receipt

Client Name: Gw - Power

Project #: **WO# : 92686682**

92686682

urier: ☐ Fed Ex ☐ UPS ☐ USPS ☑ Client
☐ Commercial ☐ Pace ☐ Other:____

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

Date/Initials Person Examining Contents: 9-7-23 JLC

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

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

ermometer:
☐ IR Gun ID: 230

Type of Ice: ☑ Wet ☐ Blue ☐ None

oler Temp: 2.3 **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

oler Temp Corrected (°C): 2.3

SDA 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	

OMMENTS/SAMPLE DISCREPANCY **Field Data Required?** ☐ Yes ☐ No

Lot ID of split containers:

IENT 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# : 92686682**

PM: BV Due Date: 09/28/23

CLIENT: 92-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)	1SPUV	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		1																	2				
3																													
4																													
5																													
6																													
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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.

Dualtrax ID: 69614

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:	
Company:	Georgia Power - Coal Combustion Residuals	Report To:	Lauren Coker	Attention:	scalinvoices@southernco.com
Address:	2480 Maner Road Atlanta, GA 30339	Copy To:	WSP	Company Name:	
Email:	lacoker@southernco.com	Purchase Order #:		Address:	
Phone:	(470) 620-6176 Fax	Project Name:	Plant McD AP-1234 Assessment	Pace Quote:	
Requested Due Date:	10 Day TAT	Project #:	31406440.MC023	Pace Project Manager:	Bonnie Verg
				Pace Profile #:	

Page : 1 Of 1

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	Analysis Test	Requested Analysis Filtered (Y/N)	Residual Chlorine (Y/N)	
1	MCD-B-100	WG	G	9/6/23	10:10		7	3		3		1					N		92686682 001
2																	N		
3																	N		
4																	N		
5																	N		
6																	N		
7																	N		
8																	N		
9																	N		
10																	N		
11																	N		
12																	N		
13																	N		
14																	N		

Analysis Test: Ag, Al, B, Ba, Be, Cd, Co, Cr, Cu, Fe, Pb, Li, Mn, Mo, Ni, Sb, Se, Sn, Sr, Tl, V, Zn, Hg, Ca, Mg, Na, K, Fe
Requested Analysis Filtered (Y/N): Cl, F, SO4; Radium 95136300; TDS; Alkalinity; Sulfide

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	SAMPLE CONDITIONS
Rush Due - Mid-Oct Report Needed	Lauren Coker WSP	9/07/23	0900	[signature]	9/7/23	

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#: 92686682**

PM: BV Due Date: 09/28/23

CLIENT: 92-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: 9/8/23 TBR

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: 4.1 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): 4.1

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

*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# : 92686682**

PM: BV Due Date: 09/28/23

CLIENT: 92-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)	SPST-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	1																		2				
2																													
3																													
4																													
5																													
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.

PaceAnalytical

CHAIN-OF-CUSTODY / Analytical Request Document

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

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:	
Company:	Georgia Power - Coal Combustion Residuals	Report To:	Lauren Coker	Attention:	scsinvoices@southernco.com
Address:	2480 Maner Road	Copy To:	WSP	Company Name:	
	Atlanta, GA 30339			Address:	
Email:	laucoker@southernco.com	Purchase Order #:		Pace Quote:	
Phone: (470) 620-6176	Fax:	Project Name:	Plant McD AP-1234 Assessment	Pace Project Manager:	Bonnie Veng
Requested Due Date:	10 Day TAT	Project #:	31406440.McD23	Pace Profile #:	

Page : 1 Of 1

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 + Mg, Na, K, Fe	Cl, F, SO4	Radium 9513/9320	TDS	Alkalinity	Sulfide	Residual Chlorine (Y/N)	92486688
1	MCD-B-62	WG	G	9/7/23	16:36		7	3		3		1					X	X	X	X	X	X		WR
2																								
3																								
4																								
6																								
7																								
8																								
9																								
10																								
11																								
12																								
13																								
14																								

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	SAMPLE CONDITIONS
ask Code = MCD-CCR-ASSMT-2023S2	MARK MANN WSP	09/08/23	1550	[signature]	9/8 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-228
Analyst:	ZPC
Date:	9/19/2023
Worklist:	75311
Matrix:	WT

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	2997141
MB concentration:	0.465
M/B 2 Sigma CSU:	0.323
MB MDC:	0.609
MB Numerical Performance Indicator:	2.83
MB Status vs Numerical Indicator:	Warning
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	LCSD (Y or N)?	Y
	LCS75311	LCSD75311
Count Date:	9/26/2023	9/26/2023
Spike I.D.:	23-043	23-043
Decay Corrected Spike Concentration (pCi/mL):	39.668	39.668
Volume Used (mL):	0.10	0.10
Aliquot Volume (L, g, F):	0.817	0.817
Target Conc. (pCi/L, g, F):	4.854	4.857
Uncertainty (Calculated):	0.238	0.238
Result (pCi/L, g, F):	4.557	3.686
LCS/LCSD 2 Sigma CSU (pCi/L, g, F):	1.042	0.891
Numerical Performance Indicator:	-0.54	-2.49
Percent Recovery:	93.89%	75.90%
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.:	LCS75311	Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Duplicate Sample I.D.	LCSD75311	
Sample Result (pCi/L, g, F):	4.557	
Sample Result 2 Sigma CSU (pCi/L, g, F):	1.042	
Sample Duplicate Result (pCi/L, g, F):	3.686	
Sample Duplicate Result 2 Sigma CSU (pCi/L, g, F):	0.891	
Are sample and/or duplicate results below RL?	NO	
Duplicate Numerical Performance Indicator:	1.245	
(Based on the LCS/LCSD Percent Recoveries) Duplicate RPD:	21.19%	
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:

VAL
9/27/23

Quality Control Sample Performance Assessment

Pace Analytical™ www.pacelabs.com

Test:	Ra-226
Analyst:	SLC
Date:	9/20/2023
Worklist:	75310
Matrix:	WI

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	2997136
MB concentration:	0.131
M/B 2 Sigma CSU:	0.132
MB MDC:	0.266
MB Numerical Performance Indicator:	1.94
MB Status vs Numerical Indicator:	Pass
MB Status vs. MDC:	N/A

Laboratory Control Sample Assessment	LCSD (Y or N)?	Y
	LCS75310	LCSD75310
Count Date:	10/3/2023	10/3/2023
Spike I.D.:	23-014	23-014
Decay Corrected Spike Concentration (pCi/mL):	25.030	25.030
Volume Used (mL):	0.10	0.10
Aliquot Volume (L, g, F):	0.506	0.504
Target Conc. (pCi/L, g, F):	4.951	4.969
Uncertainty (Calculated):	0.233	0.234
Result (pCi/L, g, F):	4.534	5.823
LCS/LCSD 2 Sigma CSU (pCi/L, g, F):	0.814	1.006
Numerical Performance Indicator:	-0.96	1.62
Percent Recovery:	91.59%	117.17%
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.:	LCS75310	92686680007
Duplicate Sample I.D.	LCSD75310	92686680007DUP
Sample Result (pCi/L, g, F):	4.534	0.233
Sample Result 2 Sigma CSU (pCi/L, g, F):	0.814	0.134
Sample Duplicate Result (pCi/L, g, F):	5.823	0.176
Sample Duplicate Result 2 Sigma CSU (pCi/L, g, F):	1.006	0.137
Are sample and/or duplicate results below RL?	NO	See Below ##
Duplicate Numerical Performance Indicator:	-1.951	0.580
(Based on the LCS/LCSD Percent Recoveries) Duplicate RPD:	24.51%	27.72%
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 10-3-23

VAM 10/3/23

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

October 18, 2023

Lauren Hartley
Southern Co.
241 Ralph McGill Blvd
NE, Bin 10160
Atlanta, GA 30308

RE: Project: Background Wells- RAD
Pace Project No.: 92686685

Dear Lauren Hartley:

Enclosed are the analytical results for sample(s) received by the laboratory between September 07, 2023 and September 08, 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

Revision 1: Report revised to amend collected time for MCD-DGWA-71.

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

Sincerely,

Bonnie Vang
bonnie.vang@pacelabs.com
704-977-0968
Project Manager

Enclosures

cc: Yong Cheng, WSP
Daniela Herrera, Golder
Andrea McClure, WSP
Laura Midkiff, Southern Co.
Dawn Prell, WSP USA E&I Inc_Atlanta

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Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

CERTIFICATIONS

Project: Background Wells- RAD
Pace Project No.: 92686685

Pace Analytical Services Pennsylvania

1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
ANAB DOD-ELAP Rad Accreditation #: L2417
ANABISO/IEC 17025:2017 Rad Cert#: L24170
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California Certification #: 2950
Colorado Certification #: PA01547
Connecticut Certification #: PH-0694
EPA Region 4 DW Rad
Florida/TNI Certification #: E87683
Georgia Certification #: C040
Guam Certification
Hawaii Certification
Idaho Certification
Illinois Certification
Indiana Certification
Iowa Certification #: 391
Kansas Certification #: E-10358
Kentucky Certification #: KY90133
KY WW Permit #: KY0098221
KY WW Permit #: KY0000221
Louisiana DHH/TNI Certification #: LA010
Louisiana DEQ/TNI Certification #: 04086
Maine Certification #: 2023021
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 #: PA014572023-03
New Hampshire/TNI Certification #: 297622
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 #: PA200002-015
Pennsylvania/TNI Certification #: 65-00282
Puerto Rico Certification #: PA01457
Rhode Island Certification #: 65-00282
South Dakota Certification
Tennessee Certification #: TN02867
Texas/TNI Certification #: T104704188-22-18
Utah/TNI Certification #: PA014572223-14
USDA Soil Permit #: 525-23-67-77263
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

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9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

SAMPLE SUMMARY

Project: Background Wells- RAD
Pace Project No.: 92686685

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92686685001	**MCD-DGWA-70A**	Water	09/06/23 12:45	09/07/23 00:00
92686685002	**MCD-DGWA-71**	Water	09/06/23 16:09	09/07/23 00:00
92686685003	**MCD-DGWA-53**	Water	09/07/23 10:53	09/08/23 15:50

REPORT OF LABORATORY ANALYSIS

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Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

SAMPLE ANALYTE COUNT

Project: Background Wells- RAD
Pace Project No.: 92686685

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92686685001	**MCD-DGWA-70A**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	ZPC	1	PASI-PA
		Total Radium Calculation	LAL	1	PASI-PA
92686685002	**MCD-DGWA-71**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	ZPC	1	PASI-PA
		Total Radium Calculation	LAL	1	PASI-PA
92686685003	**MCD-DGWA-53**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	ZPC	1	PASI-PA
		Total Radium Calculation	LAL	1	PASI-PA

PASI-PA = Pace Analytical Services - Greensburg

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Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Background Wells- RAD
Pace Project No.: 92686685

Sample: MCD-DGWA-70A **Lab ID: 92686685001** Collected: 09/06/23 12:45 Received: 09/07/23 00:00 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.0368U ± 0.0854 (0.202) C:91% T:NA**	pCi/L	10/02/23 13:21	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.614U ± 0.394 (0.750) C:80% T:92%**	pCi/L	09/26/23 12:29	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.651U ± 0.479 (0.952)**	pCi/L	10/03/23 15:18	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Background Wells- RAD
Pace Project No.: 92686685

Sample: MCD-DGWA-71 **Lab ID: 92686685002** Collected: 09/06/23 16:09 Received: 09/07/23 00:00 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.203U ± 0.130 (0.215) C:92% T:NA**	pCi/L	10/02/23 13:22	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.369U ± 0.305 (0.595) C:81% T:86%**	pCi/L	09/26/23 12:32	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.572U ± 0.435 (0.810)**	pCi/L	10/03/23 15:18	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Background Wells- RAD
Pace Project No.: 92686685

Sample: MCD-DGWA-53 **Lab ID: 92686685003** Collected: 09/07/23 10:53 Received: 09/08/23 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	**1.49 ± 0.350 (0.173) C:89% T:NA**	pCi/L	10/02/23 13:22	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.666U ± 0.428 (0.807) C:76% T:84%**	pCi/L	09/26/23 15:53	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**2.16 ± 0.778 (0.980)**	pCi/L	10/03/23 15:18	7440-14-4	

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Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL - RADIOCHEMISTRY

Project: Background Wells- RAD
Pace Project No.: 92686685

QC Batch: 615444
QC Batch Method: EPA 9315
Analysis Method: EPA 9315
Analysis Description: 9315 Total Radium
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92686685001, 92686685002, 92686685003

METHOD BLANK: 2997136 Matrix: Water
Associated Lab Samples: 92686685001, 92686685002, 92686685003

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.131 ± 0.132 (0.266) C:78% T:NA	pCi/L	10/02/23 13:17	

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

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QUALITY CONTROL - RADIOCHEMISTRY

Project: Background Wells- RAD
Pace Project No.: 92686685

QC Batch: 615445
QC Batch Method: EPA 9320
Analysis Method: EPA 9320
Analysis Description: 9320 Radium 228
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92686685001, 92686685002, 92686685003

METHOD BLANK: 2997141 Matrix: Water
Associated Lab Samples: 92686685001, 92686685002, 92686685003

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.465 ± 0.323 (0.609) C:77% T:85%	pCi/L	09/26/23 12:28	

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

REPORT OF LABORATORY ANALYSIS

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Huntersville, NC 28078
(704)875-9092

QUALIFIERS

Project: Background Wells- RAD
Pace Project No.: 92686685

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
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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Background Wells- RAD
Pace Project No.: 92686685

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92686685001	**MCD-DGWA-70A**	EPA 9315	615444		
92686685002	**MCD-DGWA-71**	EPA 9315	615444		
92686685003	**MCD-DGWA-53**	EPA 9315	615444		
92686685001	**MCD-DGWA-70A**	EPA 9320	615445		
92686685002	**MCD-DGWA-71**	EPA 9320	615445		
92686685003	**MCD-DGWA-53**	EPA 9320	615445		
92686685001	**MCD-DGWA-70A**	Total Radium Calculation	619773		
92686685002	**MCD-DGWA-71**	Total Radium Calculation	619773		
92686685003	**MCD-DGWA-53**	Total Radium Calculation	619773		

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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# : 92686685**

92686685

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

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

Date/Initials Person Examining Contents: 9-7-23 JC

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: 2.3 **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): 2.3

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

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

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

				Comments/Discrepancy:
Chain of Custody Present?	☑ Yes	☐ No	☐ N/A	1.
Samples Arrived within Hold Time?	☑ Yes	☐ No	☐ N/A	2.
Short Hold Time Analysis (<72 hr.)?	☑ Yes	☐ No	☐ N/A	3.
Rush Turn Around Time Requested?	☐ Yes	☑ No	☐ N/A	4.
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: W	☑ 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#: 92686685**

PM: BV Due Date: 09/28/23

CLIENT: 92-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)	AGOU-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		1																	2				
3		2	1			1		1																	2				
4		2	1			1		1																	2				
5		2	1			1		1																	2				
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: WSP	Company Name:
Atlanta, GA 30339		Address:
Email: laucoker@southernco.com	Purchase Order #:	Pace Quote:
Phone: (470) 620-6176 Fax	Project Name: Background Wells	Pace Project Manager: Bonnie Vang
Requested Due Date: 10 Day TAT	Project #: 31405440.McD23	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	Unpreserved - Ice	H2SO4	HNO3 + Ice	HCl	NaOH + Zn Acetate	Na2S2O3	Methanol	Other	App III/IV + Mg, Na, K, Fe	Cl, F, SO4	Radium 9513/9320	TDS	Alkalinity	Sulfide	Residual Chlorine (Y/N)	92686685
								Preservatives								Y/N	N	N	N	N	N	N	
1	MCD-DGWA-70A	WG	G	9/6/23	12:45		7	3		3		1					X	X	X	X	X	X	001
3	MCD-DGWA-71	WG	G	9/6/23	16:09		7	3		3		1					X	X	X	X	X	X	002
5																							
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-GOR-ACCMT-[illegible]	[illegible] WSP	09/09/23	0900	[illegible]	9/9/23	

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 ☑ Kernersville ☐

Sample Condition Upon Receipt

Client Name: GA Power

Project #: **WO#: 92686685**

PM: BV Due Date: 09/28/23

CLIENT: 92-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: 9/8/23 [illegible]

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: 4.1 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): 4.1

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:** _____

**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#: 92686685

PM: BV Due Date: 09/28/23

CLIENT: 92-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)	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	1																	2 BP1U				
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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: scsinvoices@southernco.com
Address: 2480 Maner Road Atlanta, GA 30339	Copy To: WSP	Company Name:
Email: lbcoker@southernco.com	Purchase Order #:	Address:
Phone: (470) 626-6176 Fax:	Project Name: Background Wells	Pace Quote:
Requested Due Date: 10 Day TAT	Project #: 31406440 McD23	Pace Project Manager: Bonnie Vang
		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	Agg III/V + Mg, Na, K, Fe	Cl, F, SO4	Radium 9513/9320	TDS	Alkalinity	Sulfide	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															Y/N	N	N	N	N	N	N	
1	MCD-DGWA-53	WG	G	9/7/23	10:53		7	3		3		1					X	X	X	X	X	X	
3																							
5																							
6																							
7																							
8																							
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13																							
14																							

9268 6665

W3

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	SAMPLE CONDITIONS
Task Code = MCD-CCR-ASSMT-2023S2	MARK MEUX WSP	09/08/23	1550	FCC - Pace	9/8/23	

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-228
Analyst:	ZPC
Date:	9/19/2023
Worklist:	75311
Matrix:	WT

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	2997141
MB concentration:	0.465
M/B 2 Sigma CSU:	0.323
MB MDC:	0.609
MB Numerical Performance Indicator:	2.83
MB Status vs Numerical Indicator:	Warning
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	LCSD (Y or N)?	Y
	LCS75311	LCSD75311
Count Date:	9/26/2023	9/26/2023
Spike I.D.:	23-043	23-043
Decay Corrected Spike Concentration (pCi/mL):	39.668	39.668
Volume Used (mL):	0.10	0.10
Aliquot Volume (L, g, F):	0.817	0.817
Target Conc. (pCi/L, g, F):	4.854	4.857
Uncertainty (Calculated):	0.238	0.238
Result (pCi/L, g, F):	4.557	3.686
LCS/LCSD 2 Sigma CSU (pCi/L, g, F):	1.042	0.891
Numerical Performance Indicator:	-0.54	-2.49
Percent Recovery:	93.89%	75.90%
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.:	LCS75311	Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Duplicate Sample I.D.	LCSD75311	
Sample Result (pCi/L, g, F):	4.557	
Sample Result 2 Sigma CSU (pCi/L, g, F):	1.042	
Sample Duplicate Result (pCi/L, g, F):	3.686	
Sample Duplicate Result 2 Sigma CSU (pCi/L, g, F):	0.891	
Are sample and/or duplicate results below RL?	NO	
Duplicate Numerical Performance Indicator:	1.245	
(Based on the LCS/LCSD Percent Recoveries) Duplicate RPD:	21.19%	
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:

VAL
9/27/23

Quality Control Sample Performance Assessment

Pace Analytical™ www.pacelabs.com

Test:	Ra-226
Analyst:	SLC
Date:	9/20/2023
Worklist:	75310
Matrix:	WI

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	2997136
MB concentration:	0.131
M/B 2 Sigma CSU:	0.132
MB MDC:	0.266
MB Numerical Performance Indicator:	1.94
MB Status vs Numerical Indicator:	Pass
MB Status vs. MDC:	N/A

Laboratory Control Sample Assessment	LCSD (Y or N)?	Y
	LCS75310	LCSD75310
Count Date:	10/3/2023	10/3/2023
Spike I.D.:	23-014	23-014
Decay Corrected Spike Concentration (pCi/mL):	25.030	25.030
Volume Used (mL):	0.10	0.10
Aliquot Volume (L, g, F):	0.506	0.504
Target Conc. (pCi/L, g, F):	4.951	4.969
Uncertainty (Calculated):	0.233	0.234
Result (pCi/L, g, F):	4.534	5.823
LCS/LCSD 2 Sigma CSU (pCi/L, g, F):	0.814	1.006
Numerical Performance Indicator:	-0.96	1.62
Percent Recovery:	91.59%	117.17%
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.:	LCS75310	92686680007
Duplicate Sample I.D.	LCSD75310	92686680007DUP
Sample Result (pCi/L, g, F):	4.534	0.233
Sample Result 2 Sigma CSU (pCi/L, g, F):	0.814	0.134
Sample Duplicate Result (pCi/L, g, F):	5.823	0.176
Sample Duplicate Result 2 Sigma CSU (pCi/L, g, F):	1.006	0.137
Are sample and/or duplicate results below RL?	NO	See Below ##
Duplicate Numerical Performance Indicator:	-1.951	0.580
(Based on the LCS/LCSD Percent Recoveries) Duplicate RPD:	24.51%	27.72%
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 10-3-23

VAM 10/3/23

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

September 22, 2023

Lauren Hartley
Southern Co.
241 Ralph McGill Blvd
NE, Bin 10160
Atlanta, GA 30308

RE: Project: Plant McD AP-1 Assessment
Pace Project No.: 92686941

Dear Lauren Hartley:

Enclosed are the analytical results for sample(s) received by the laboratory on September 08, 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,

Bonnie Vang
bonnie.vang@pacelabs.com
704-977-0968
Project Manager

Enclosures

cc: Yong Cheng, WSP
Daniela Herrera, Golder
Andrea McClure, WSP
Laura Midkiff, Southern Co.
Dawn Prell, WSP USA E&I Inc_Atlanta

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CERTIFICATIONS

Project: Plant McD AP-1 Assessment
Pace Project No.: 92686941

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 Assessment
Pace Project No.: 92686941

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92686941001	**MCD-B-105D**	Water	09/07/23 10:52	09/08/23 15:50
92686941002	**MCD-B-112D**	Water	09/07/23 16:42	09/08/23 15:50

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SAMPLE ANALYTE COUNT

Project: Plant McD AP-1 Assessment
Pace Project No.: 92686941

Lab ID	Sample ID	Method	Analysts	Analytes Reported
92686941001	**MCD-B-105D**	EPA 6010D	DRB	5
		EPA 6020B	CW1	13
		SM 2540C-2015	DL1	1
		EPA 7470A	BM	1
		SM 2320B-2011	SMS	3
		SM 4500-S2D-2011	JP1	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92686941002	**MCD-B-112D**	EPA 6010D	DRB	5
		EPA 6020B	CW1	13
		SM 2540C-2015	DL1	1
		EPA 7470A	BM	1
		SM 2320B-2011	SMS	3
		SM 4500-S2D-2011	JP1	1
		EPA 300.0 Rev 2.1 1993	CDC	3

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

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Plant McD AP-1 Assessment
Pace Project No.: 92686941

Sample: MCD-B-105D **Lab ID: 92686941001** Collected: 09/07/23 10:52 Received: 09/08/23 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	**2.1**	mg/L	0.040	0.025	1	09/11/23 11:12	09/13/23 10:32	7439-89-6	
Potassium	**8.2**	mg/L	0.50	0.15	1	09/11/23 11:12	09/13/23 10:32	7440-09-7	M1
Sodium	**20.0**	mg/L	1.0	0.58	1	09/11/23 11:12	09/13/23 10:32	7440-23-5	M1
Calcium	**71.8**	mg/L	1.0	0.12	1	09/11/23 11:12	09/13/23 10:32	7440-70-2	M1
Magnesium	**24.6**	mg/L	0.050	0.012	1	09/11/23 11:12	09/13/23 10:32	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	0.0012	1	09/11/23 14:11	09/14/23 17:01	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0037	1	09/11/23 14:11	09/14/23 17:01	7440-38-2	
Barium	**0.035**	mg/L	0.0050	0.00067	1	09/11/23 14:11	09/14/23 17:01	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	09/11/23 14:11	09/14/23 17:01	7440-41-7	
Boron	**0.76**	mg/L	0.040	0.0086	1	09/11/23 14:11	09/14/23 17:01	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	09/11/23 14:11	09/14/23 17:01	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	09/11/23 14:11	09/14/23 17:01	7440-47-3	
Cobalt	**0.0027J**	mg/L	0.0050	0.00039	1	09/11/23 14:11	09/14/23 17:01	7440-48-4	
Lead	ND	mg/L	0.0010	0.00012	1	09/11/23 14:11	09/14/23 17:01	7439-92-1	
Lithium	**0.013J**	mg/L	0.030	0.00073	1	09/11/23 14:11	09/14/23 17:01	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	09/11/23 14:11	09/14/23 17:01	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	09/11/23 14:11	09/14/23 17:01	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	09/11/23 14:11	09/14/23 17:01	7440-28-0	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**520**	mg/L	25.0	25.0	1		09/11/23 13:32		
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Asheville								
Mercury	ND	mg/L	0.00020	0.00012	1	09/19/23 17:10	09/20/23 15:14	7439-97-6	
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville								
Alkalinity,Bicarbonate (CaCO3)	**45.9**	mg/L	5.0	5.0	1		09/12/23 15:56		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		09/12/23 15:56		
Alkalinity, Total as CaCO3	**45.9**	mg/L	5.0	5.0	1		09/12/23 15:56		
4500S2D Sulfide Water	Analytical Method: SM 4500-S2D-2011 Pace Analytical Services - Asheville								
Sulfide	**0.43**	mg/L	0.10	0.022	1		09/13/23 02:25	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**14.9**	mg/L	1.0	0.60	1		09/12/23 14:06	16887-00-6	
Fluoride	**0.10**	mg/L	0.10	0.050	1		09/12/23 14:06	16984-48-8	

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ANALYTICAL RESULTS

Project: Plant McD AP-1 Assessment
Pace Project No.: 92686941

Sample: MCD-B-105D **Lab ID: 92686941001** Collected: 09/07/23 10:52 Received: 09/08/23 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								
Sulfate	**236**	mg/L	5.0	2.5	5		09/13/23 07:21	14808-79-8	

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ANALYTICAL RESULTS

Project: Plant McD AP-1 Assessment
Pace Project No.: 92686941

Sample: MCD-B-112D **Lab ID: 92686941002** Collected: 09/07/23 16:42 Received: 09/08/23 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	**0.035J**	mg/L	0.040	0.025	1	09/11/23 11:12	09/13/23 10:53	7439-89-6	
Potassium	**2.8**	mg/L	0.50	0.15	1	09/11/23 11:12	09/13/23 10:53	7440-09-7	
Sodium	**12.5**	mg/L	1.0	0.58	1	09/11/23 11:12	09/13/23 10:53	7440-23-5	
Calcium	**24.0**	mg/L	1.0	0.12	1	09/11/23 11:12	09/13/23 10:53	7440-70-2	
Magnesium	**7.3**	mg/L	0.050	0.012	1	09/11/23 11:12	09/13/23 10:53	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	0.0012	1	09/11/23 14:11	09/14/23 17:05	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0037	1	09/11/23 14:11	09/14/23 17:05	7440-38-2	
Barium	**0.0027J**	mg/L	0.0050	0.00067	1	09/11/23 14:11	09/14/23 17:05	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	09/11/23 14:11	09/14/23 17:05	7440-41-7	
Boron	**0.24**	mg/L	0.040	0.0086	1	09/11/23 14:11	09/14/23 17:05	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	09/11/23 14:11	09/14/23 17:05	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	09/11/23 14:11	09/14/23 17:05	7440-47-3	
Cobalt	**0.00040J**	mg/L	0.0050	0.00039	1	09/11/23 14:11	09/14/23 17:05	7440-48-4	
Lead	ND	mg/L	0.0010	0.00012	1	09/11/23 14:11	09/14/23 17:05	7439-92-1	
Lithium	**0.0043J**	mg/L	0.030	0.00073	1	09/11/23 14:11	09/14/23 17:05	7439-93-2	
Molybdenum	**0.026**	mg/L	0.010	0.00074	1	09/11/23 14:11	09/14/23 17:05	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	09/11/23 14:11	09/14/23 17:05	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	09/11/23 14:11	09/14/23 17:05	7440-28-0	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**155**	mg/L	25.0	25.0	1		09/11/23 13:32		
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Asheville								
Mercury	ND	mg/L	0.00020	0.00012	1	09/19/23 17:10	09/20/23 15:16	7439-97-6	
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville								
Alkalinity,Bicarbonate (CaCO3)	**109**	mg/L	5.0	5.0	1		09/12/23 16:04		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		09/12/23 16:04		
Alkalinity, Total as CaCO3	**109**	mg/L	5.0	5.0	1		09/12/23 16:04		
4500S2D Sulfide Water	Analytical Method: SM 4500-S2D-2011 Pace Analytical Services - Asheville								
Sulfide	ND	mg/L	0.10	0.022	1		09/13/23 02:26	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**2.6**	mg/L	1.0	0.60	1		09/12/23 14:21	16887-00-6	
Fluoride	**0.32**	mg/L	0.10	0.050	1		09/12/23 14:21	16984-48-8	

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ANALYTICAL RESULTS

Project: Plant McD AP-1 Assessment
Pace Project No.: 92686941

Sample: MCD-B-112D **Lab ID: 92686941002** Collected: 09/07/23 16:42 Received: 09/08/23 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								
Sulfate	**16.3**	mg/L	1.0	0.50	1		09/12/23 14:21	14808-79-8	

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QUALITY CONTROL DATA

Project: Plant McD AP-1 Assessment
Pace Project No.: 92686941

QC Batch: 798869
QC Batch Method: EPA 3010A
Analysis Method: EPA 6010D
Analysis Description: 6010D ATL
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92686941001, 92686941002

METHOD BLANK: 4137528 Matrix: Water
Associated Lab Samples: 92686941001, 92686941002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium	mg/L	ND	1.0	0.12	09/13/23 10:22	
Iron	mg/L	ND	0.040	0.025	09/13/23 10:22	
Magnesium	mg/L	ND	0.050	0.012	09/13/23 10:22	
Potassium	mg/L	ND	0.50	0.15	09/13/23 10:22	
Sodium	mg/L	ND	1.0	0.58	09/13/23 10:22	

LABORATORY CONTROL SAMPLE: 4137529

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium	mg/L	1	1.0J	100	80-120	
Iron	mg/L	1	1.0	100	80-120	
Magnesium	mg/L	1	1.0	102	80-120	
Potassium	mg/L	1	0.92	92	80-120	
Sodium	mg/L	1	0.96J	96	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4137530 4137531

Parameter	Units	92686941001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Calcium	mg/L	71.8	1	1	68.4	71.2	-338	-59	75-125	4	20	M1
Iron	mg/L	2.1	1	1	3.0	3.0	86	93	75-125	2	20	
Magnesium	mg/L	24.6	1	1	24.1	25.0	-53	33	75-125	4	20	M1
Potassium	mg/L	8.2	1	1	8.7	9.1	42	82	75-125	5	20	M1
Sodium	mg/L	20.0	1	1	19.8	20.6	-19	59	75-125	4	20	M1

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

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QUALITY CONTROL DATA

Project: Plant McD AP-1 Assessment
Pace Project No.: 92686941

QC Batch: 798903
QC Batch Method: EPA 3005A
Analysis Method: EPA 6020B
Analysis Description: 6020 MET
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92686941001, 92686941002

METHOD BLANK: 4137724 Matrix: Water
Associated Lab Samples: 92686941001, 92686941002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	ND	0.0030	0.0012	09/14/23 16:50	
Arsenic	mg/L	ND	0.0050	0.0037	09/14/23 16:50	
Barium	mg/L	ND	0.0050	0.00067	09/14/23 16:50	
Beryllium	mg/L	ND	0.00050	0.000054	09/14/23 16:50	
Boron	mg/L	ND	0.040	0.0086	09/14/23 16:50	
Cadmium	mg/L	ND	0.00050	0.00011	09/14/23 16:50	
Chromium	mg/L	ND	0.0050	0.0011	09/14/23 16:50	
Cobalt	mg/L	ND	0.0050	0.00039	09/14/23 16:50	
Lead	mg/L	ND	0.0010	0.00012	09/14/23 16:50	
Lithium	mg/L	ND	0.030	0.00073	09/14/23 16:50	
Molybdenum	mg/L	ND	0.010	0.00074	09/14/23 16:50	
Selenium	mg/L	ND	0.0050	0.0014	09/14/23 16:50	
Thallium	mg/L	ND	0.0010	0.00018	09/14/23 16:50	

LABORATORY CONTROL SAMPLE: 4137725

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.1	0.11	109	80-120	
Arsenic	mg/L	0.1	0.10	102	80-120	
Barium	mg/L	0.1	0.10	102	80-120	
Beryllium	mg/L	0.1	0.098	98	80-120	
Boron	mg/L	1	0.99	99	80-120	
Cadmium	mg/L	0.1	0.10	102	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	0.10	101	80-120	
Molybdenum	mg/L	0.1	0.10	101	80-120	
Selenium	mg/L	0.1	0.10	102	80-120	
Thallium	mg/L	0.1	0.097	97	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4137726 4137727

Parameter	Units	92686941002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Antimony	mg/L	ND	0.1	0.1	0.11	0.10	110	104	75-125	6	20	
Arsenic	mg/L	ND	0.1	0.1	0.11	0.099	106	99	75-125	7	20	

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REPORT OF LABORATORY ANALYSIS

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Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: Plant McD AP-1 Assessment
Pace Project No.: 92686941

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4137726 4137727

Parameter	Units	92686941002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Barium	mg/L	0.0027J	0.1	0.1	0.11	0.10	105	100	75-125	5	20	
Beryllium	mg/L	ND	0.1	0.1	0.10	0.097	100	97	75-125	4	20	
Boron	mg/L	0.24	1	1	1.3	1.2	103	99	75-125	3	20	
Cadmium	mg/L	ND	0.1	0.1	0.11	0.10	107	100	75-125	6	20	
Chromium	mg/L	ND	0.1	0.1	0.10	0.094	102	93	75-125	8	20	
Cobalt	mg/L	0.00040J	0.1	0.1	0.10	0.094	101	94	75-125	8	20	
Lead	mg/L	ND	0.1	0.1	0.095	0.091	95	91	75-125	4	20	
Lithium	mg/L	0.0043J	0.1	0.1	0.10	0.099	100	94	75-125	6	20	
Molybdenum	mg/L	0.026	0.1	0.1	0.13	0.12	105	97	75-125	6	20	
Selenium	mg/L	ND	0.1	0.1	0.10	0.098	104	98	75-125	6	20	
Thallium	mg/L	ND	0.1	0.1	0.092	0.089	92	89	75-125	4	20	

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QUALITY CONTROL DATA

Project: Plant McD AP-1 Assessment
Pace Project No.: 92686941

QC Batch: 798883
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: 92686941001, 92686941002

METHOD BLANK: 4137624 Matrix: Water
Associated Lab Samples: 92686941001, 92686941002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	25.0	25.0	09/11/23 13:25	

LABORATORY CONTROL SAMPLE: 4137625

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	427	107	80-120	

SAMPLE DUPLICATE: 4137626

Parameter	Units	92686830001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	1540	1500	3	10	

SAMPLE DUPLICATE: 4137627

Parameter	Units	92686679004 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	207	174	17	10	D6

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QUALITY CONTROL DATA

Project: Plant McD AP-1 Assessment
Pace Project No.: 92686941

QC Batch: 800478
QC Batch Method: EPA 7470A
Analysis Method: EPA 7470A
Analysis Description: 7470 Mercury
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92686941001, 92686941002

METHOD BLANK: 4146121 Matrix: Water
Associated Lab Samples: 92686941001, 92686941002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	ND	0.00020	0.00012	09/20/23 14:38	

LABORATORY CONTROL SAMPLE: 4146122

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.0025	0.0022	87	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4146123 4146124

Parameter	Units	92686920009 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	0.0026	0.0026	102	104	75-125	1	25	

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QUALITY CONTROL DATA

Project: Plant McD AP-1 Assessment
Pace Project No.: 92686941

QC Batch: 799173
QC Batch Method: SM 2320B-2011
Analysis Method: SM 2320B-2011
Analysis Description: 2320B Alkalinity
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92686941001, 92686941002

METHOD BLANK: 4139096 Matrix: Water
Associated Lab Samples: 92686941001, 92686941002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Alkalinity, Total as CaCO3	mg/L	ND	5.0	5.0	09/12/23 15:04	
Alkalinity,Bicarbonate (CaCO3)	mg/L	ND	5.0	5.0	09/12/23 15:04	
Alkalinity,Carbonate (CaCO3)	mg/L	ND	5.0	5.0	09/12/23 15:04	

LABORATORY CONTROL SAMPLE: 4139097

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: 4139098

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	50	50.9	102	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4139099 4139100

Parameter	Units	92686679012 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Alkalinity, Total as CaCO3	mg/L	ND	50	50	51.2	51.0	102	102	80-120	0	25	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4139101 4139102

Parameter	Units	92686677009 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	96.9	50	50	148	148	103	102	80-120	0	25	

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QUALITY CONTROL DATA

Project: Plant McD AP-1 Assessment
Pace Project No.: 92686941

QC Batch: 799296
QC Batch Method: SM 4500-S2D-2011
Analysis Method: SM 4500-S2D-2011
Analysis Description: 4500S2D Sulfide Water
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92686941001, 92686941002

METHOD BLANK: 4140098 Matrix: Water
Associated Lab Samples: 92686941001, 92686941002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Sulfide	mg/L	ND	0.10	0.022	09/13/23 02:23	

LABORATORY CONTROL SAMPLE: 4140099

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Sulfide	mg/L	0.5	0.52	104	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4140102 4140103

Parameter	Units	92686679007 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Sulfide	mg/L	ND	0.5	0.5	0.44	0.43	87	85	80-120	1	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4140133 4140134

Parameter	Units	92686941002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Sulfide	mg/L	ND	0.5	0.5	0.52	0.49	104	97	80-120	7	10	

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QUALITY CONTROL DATA

Project: Plant McD AP-1 Assessment
Pace Project No.: 92686941

QC Batch: 799070
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: 92686941001, 92686941002

METHOD BLANK: 4138708 Matrix: Water
Associated Lab Samples: 92686941001, 92686941002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.60	09/12/23 12:51	
Fluoride	mg/L	ND	0.10	0.050	09/12/23 12:51	
Sulfate	mg/L	ND	1.0	0.50	09/12/23 12:51	

LABORATORY CONTROL SAMPLE: 4138709

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	50.1	100	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4138710 4138711

Parameter	Units	92687087001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	8.0	50	50	59.4	59.8	103	104	90-110	1	10	
Fluoride	mg/L	0.63	2.5	2.5	3.5	3.5	113	115	90-110	1	10	M1
Sulfate	mg/L	9.9	50	50	60.7	61.4	102	103	90-110	1	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4138712 4138713

Parameter	Units	92686677010 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	ND	50	50	52.1	53.1	104	106	90-110	2	10	
Fluoride	mg/L	ND	2.5	2.5	2.7	2.7	109	108	90-110	0	10	
Sulfate	mg/L	ND	50	50	52.7	54.0	105	108	90-110	2	10	

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QUALIFIERS

Project: Plant McD AP-1 Assessment
Pace Project No.: 92686941

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 Assessment
Pace Project No.: 92686941

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92686941001	**MCD-B-105D**	EPA 3010A	798869	EPA 6010D	798954
92686941002	**MCD-B-112D**	EPA 3010A	798869	EPA 6010D	798954
92686941001	**MCD-B-105D**	EPA 3005A	798903	EPA 6020B	798992
92686941002	**MCD-B-112D**	EPA 3005A	798903	EPA 6020B	798992
92686941001	**MCD-B-105D**	SM 2540C-2015	798883		
92686941002	**MCD-B-112D**	SM 2540C-2015	798883		
92686941001	**MCD-B-105D**	EPA 7470A	800478	EPA 7470A	800630
92686941002	**MCD-B-112D**	EPA 7470A	800478	EPA 7470A	800630
92686941001	**MCD-B-105D**	SM 2320B-2011	799173		
92686941002	**MCD-B-112D**	SM 2320B-2011	799173		
92686941001	**MCD-B-105D**	SM 4500-S2D-2011	799296		
92686941002	**MCD-B-112D**	SM 4500-S2D-2011	799296		
92686941001	**MCD-B-105D**	EPA 300.0 Rev 2.1 1993	799070		
92686941002	**MCD-B-112D**	EPA 300.0 Rev 2.1 1993	799070		

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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# : 92686941

92686941

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

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

Date/Initials Person Examining Contents: 9/8/23 TDC

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: 4.1 **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): 4.1

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

WO# : 92686941

PM: BV Due Date: 09/25/23

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		2	1			1	1																	2				
2		2	1			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.

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:	Regulatory Agency
Email: laucoker@southernco.com	Purchase Order #:	Pace Quote:	
Phone: (470) 620-6176 Fax:	Project Name: Plant McD AP-1 Assessment	Pace Project Manager: Bonnie Vang	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: 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 + Mg, Na, K, Fe	Cl, F, SO4	Radium 9513/9320	TDS	Alkalinity	Sulfide				Residual Chlorine (Y/N)	92686941
																Y/N	N	N	N	N	N	N					
1	MCD-B-105D	WG	G	9/7/23	10:52		7	3		3		1					X	X	X	X	X	X					001
2	MCD-B-112D	WG	G	9/7/23	16:42		7	3		3		1					X	X	X	X	X	X					002
3																											
4																											
6																											
7																											
8																											
9																											
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11																											
12																											
13																											
14																											

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	SAMPLE CONDITIONS
Task Code = MCD-CCR-ASSMT-2023S1	MARK MANN WSP	09/08/23	1550		9-8-23 1550	

DATE Signed:

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

October 04, 2023

Lauren Hartley
Southern Co.
241 Ralph McGill Blvd
NE, Bin 10160
Atlanta, GA 30308

RE: Project: Plant McD AP-1 Assessment- RAD
Pace Project No.: 92686975

Dear Lauren Hartley:

Enclosed are the analytical results for sample(s) received by the laboratory on September 08, 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
bonnie.vang@pacelabs.com
704-977-0968
Project Manager

Enclosures

cc: Yong Cheng, WSP
Daniela Herrera, Golder
Andrea McClure, WSP
Laura Midkiff, Southern Co.
Dawn Prell, WSP USA E&I Inc_Atlanta

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CERTIFICATIONS

Project: Plant McD AP-1 Assessment- RAD
Pace Project No.: 92686975

Pace Analytical Services Pennsylvania
1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
ANAB DOD-ELAP Rad Accreditation #: L2417
ANABISO/IEC 17025:2017 Rad Cert#: L24170
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California Certification #: 2950
Colorado Certification #: PA01547
Connecticut Certification #: PH-0694
EPA Region 4 DW Rad
Florida/TNI Certification #: E87683
Georgia Certification #: C040
Guam Certification
Hawaii Certification
Idaho Certification
Illinois Certification
Indiana Certification
Iowa Certification #: 391
Kansas Certification #: E-10358
Kentucky Certification #: KY90133
KY WW Permit #: KY0098221
KY WW Permit #: KY0000221
Louisiana DHH/TNI Certification #: LA010
Louisiana DEQ/TNI Certification #: 04086
Maine Certification #: 2023021
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 #: PA014572023-03
New Hampshire/TNI Certification #: 297622
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 #: PA200002-015
Pennsylvania/TNI Certification #: 65-00282
Puerto Rico Certification #: PA01457
Rhode Island Certification #: 65-00282
South Dakota Certification
Tennessee Certification #: TN02867
Texas/TNI Certification #: T104704188-22-18
Utah/TNI Certification #: PA014572223-14
USDA Soil Permit #: 525-23-67-77263
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

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SAMPLE SUMMARY

Project: Plant McD AP-1 Assessment- RAD
Pace Project No.: 92686975

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92686975001	**MCD-B-105D**	Water	09/07/23 10:52	09/08/23 15:50
92686975002	**MCD-B-112D**	Water	09/07/23 16:42	09/08/23 15:50

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SAMPLE ANALYTE COUNT

Project: Plant McD AP-1 Assessment- RAD
Pace Project No.: 92686975

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92686975001	**MCD-B-105D**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	LAL	1	PASI-PA
92686975002	**MCD-B-112D**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	LAL	1	PASI-PA

PASI-PA = Pace Analytical Services - Greensburg

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant McD AP-1 Assessment- RAD
Pace Project No.: 92686975

Sample: MCD-B-105D **Lab ID: 92686975001** Collected: 09/07/23 10:52 Received: 09/08/23 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	**0.807 ± 0.253 (0.208) C:76% T:NA**	pCi/L	10/03/23 08:23	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**2.07 ± 0.629 (0.754) C:79% T:78%**	pCi/L	09/26/23 11:40	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**2.88 ± 0.882 (0.962)**	pCi/L	10/03/23 15:16	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant McD AP-1 Assessment- RAD
Pace Project No.: 92686975

Sample: MCD-B-112D **Lab ID: 92686975002** Collected: 09/07/23 16:42 Received: 09/08/23 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	**0.267 ± 0.142 (0.204) C:88% T:NA**	pCi/L	10/03/23 08:23	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.635U ± 0.369 (0.660) C:77% T:84%**	pCi/L	09/26/23 11:40	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.902 ± 0.511 (0.864)**	pCi/L	10/03/23 15:16	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL - RADIOCHEMISTRY

Project: Plant McD AP-1 Assessment- RAD
Pace Project No.: 92686975

QC Batch: 615447
QC Batch Method: EPA 9315
Analysis Method: EPA 9315
Analysis Description: 9315 Total Radium
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92686975001, 92686975002

METHOD BLANK: 2997146
Matrix: Water
Associated Lab Samples: 92686975001, 92686975002

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.171 ± 0.140 (0.267) C:87% T:NA	pCi/L	10/03/23 08:21	

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

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QUALITY CONTROL - RADIOCHEMISTRY

Project: Plant McD AP-1 Assessment- RAD
Pace Project No.: 92686975

QC Batch: 615448
QC Batch Method: EPA 9320
Analysis Method: EPA 9320
Analysis Description: 9320 Radium 228
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92686975001, 92686975002

METHOD BLANK: 2997151 Matrix: Water
Associated Lab Samples: 92686975001, 92686975002

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.338 ± 0.316 (0.637) C:80% T:88%	pCi/L	09/26/23 11:59	

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

REPORT OF LABORATORY ANALYSIS

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QUALIFIERS

Project: Plant McD AP-1 Assessment- RAD
Pace Project No.: 92686975

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- RAD
Pace Project No.: 92686975

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92686975001	**MCD-B-105D**	EPA 9315	615447		
92686975002	**MCD-B-112D**	EPA 9315	615447		
92686975001	**MCD-B-105D**	EPA 9320	615448		
92686975002	**MCD-B-112D**	EPA 9320	615448		
92686975001	**MCD-B-105D**	Total Radium Calculation	619760		
92686975002	**MCD-B-112D**	Total Radium Calculation	619760		

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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# : 92686975

92686975

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

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

Date/Initials Person Examining Contents: 9/8/23 TBE

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: 4.1 **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): 4.1

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

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#: 92686975

PM: BV Due Date: 10/02/23

CLIENT: 92-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)	13 BM	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	1			
2		2	1			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.

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	Pace Project Manager:	Bonnie Vang
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 9513/9320	TDS	Alkalinity	Sulfide	Residual Chlorine (Y/N)	92666975
1	MCD-B-105D	WG	G	9/7/23	10:52		7	3		3		1					X	X	X	X	X	X		avl
2	MCD-B-112D	WG	G	9/7/23	16:42		7	3		3		1					X	X	X	X	X	X		avl
3																								
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	MARK MANA WSP	09/08/23	1550	ICE	9-8-23	

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-228
Analyst:	JJS1
Date:	9/19/2023
Worklist:	75313
Matrix:	WT

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	2997151
MB concentration:	0.338
M/B 2 Sigma CSU:	0.316
MB MDC:	0.637
MB Numerical Performance Indicator:	2.10
MB Status vs Numerical Indicator:	Warning
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	LCSD (Y or N)?	Y
	LCS75313	LCSD75313
Count Date:	9/26/2023	9/26/2023
Spike I.D.:	23-043	23-043
Decay Corrected Spike Concentration (pCi/mL):	39.668	39.668
Volume Used (mL):	0.10	0.10
Aliquot Volume (L, g, F):	0.817	0.816
Target Conc. (pCi/L, g, F):	4.857	4.860
Uncertainty (Calculated):	0.238	0.238
Result (pCi/L, g, F):	4.556	5.205
LCS/LCSD 2 Sigma CSU (pCi/L, g, F):	1.028	1.164
Numerical Performance Indicator:	-0.56	0.57
Percent Recovery:	93.80%	107.12%
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.:	LCS75313	Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Duplicate Sample I.D.	LCSD75313	
Sample Result (pCi/L, g, F):	4.556	
Sample Result 2 Sigma CSU (pCi/L, g, F):	1.028	
Sample Duplicate Result (pCi/L, g, F):	5.205	
Sample Duplicate Result 2 Sigma CSU (pCi/L, g, F):	1.164	
Are sample and/or duplicate results below RL?	NO	
Duplicate Numerical Performance Indicator:	-0.820	
(Based on the LCS/LCSD Percent Recoveries) Duplicate RPD:	13.26%	
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
9/27/23

VAM 9/27/23

Quality Control Sample Performance Assessment

Pace Analytical
www.pacelabs.com

Test:	Ra-226
Analyst:	SLC
Date:	9/20/2023
Worklist:	75312
Matrix:	W I

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	2997146
MB concentration:	0.171
M/B 2 Sigma CSU:	0.140
MB MDC:	0.267
MB Numerical Performance Indicator:	2.41
MB Status vs Numerical Indicator:	Warning
MB Status vs. MDC:	N/A

Laboratory Control Sample Assessment	LCSD (Y or N)?	Y
	LCS75312	LCSD75312
Count Date:	10/3/2023	10/3/2023
Spike I.D.:	23-014	23-014
Decay Corrected Spike Concentration (pCi/mL):	25.030	25.030
Volume Used (mL):	0.10	0.10
Aliquot Volume (L, g, F):	0.503	0.506
Target Conc. (pCi/L, g, F):	4.976	4.942
Uncertainty (Calculated):	0.234	0.232
Result (pCi/L, g, F):	5.204	4.922
LCS/LCSD 2 Sigma CSU (pCi/L, g, F):	0.905	0.879
Numerical Performance Indicator:	0.48	-0.04
Percent Recovery:	104.59%	99.59%
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.:	LCS75312	92686684012
Duplicate Sample I.D.	LCSD75312	92686684012DUP
Sample Result (pCi/L, g, F):	5.204	0.088
Sample Result 2 Sigma CSU (pCi/L, g, F):	0.905	0.102
Sample Duplicate Result (pCi/L, g, F):	4.922	0.169
Sample Duplicate Result 2 Sigma CSU (pCi/L, g, F):	0.879	0.128
Are sample and/or duplicate results below RL?	NO	See Below ##
Duplicate Numerical Performance Indicator:	0.438	-0.967
(Based on the LCS/LCSD Percent Recoveries) Duplicate RPD:	4.90%	62.74%
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:

ET 10-3-23

LAM 10/3/23

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

September 22, 2023

Kelley Sharpe
ARCADIS - Atlanta
2839 Paces Ferry Rd
STE 900
Atlanta, GA 30339

RE: Project: Plant McDonough-CCR Ash Pond
Pace Project No.: 92687817

Dear Kelley Sharpe:

Enclosed are the analytical results for sample(s) received by the laboratory on September 14, 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
770-734-4205
Project Manager

Enclosures

cc: Joju Abraham, Georgia Power-CCR
Jordan Gamble, ARCADIS - Atlanta
Ben Hodges, Georgia Power-CCR
Warren Johnson, ARCADIS - Atlanta
Allison Keefer, Southern Company
Laura Midkiff, Georgia Power
Tina Sullivan, ERM

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CERTIFICATIONS

Project: Plant McDonough-CCR Ash Pond
Pace Project No.: 92687817

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

REPORT OF LABORATORY ANALYSIS

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SAMPLE SUMMARY

Project: Plant McDonough-CCR Ash Pond
Pace Project No.: 92687817

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92687817001	**MCD-UT01_US**	Water	09/13/23 14:06	09/14/23 09:29
92687817002	**MCD-UT02**	Water	09/13/23 13:58	09/14/23 09:29
92687817003	**MCD-UT03**	Water	09/13/23 13:47	09/14/23 09:29
92687817004	**MCD-UT01_DS**	Water	09/13/23 13:37	09/14/23 09:29
92687817005	**MCD-CR-0.1**	Water	09/12/23 13:40	09/14/23 09:29
92687817006	**MCD-CR+0.2**	Water	09/12/23 13:44	09/14/23 09:29
92687817007	**MCD-CR+0.4**	Water	09/12/23 13:47	09/14/23 09:29
92687817008	**MCD-DW_DS**	Water	09/12/23 13:35	09/14/23 09:29
92687817009	**MCD-DW_US**	Water	09/12/23 13:30	09/14/23 09:29
92687817010	**MCD-CR-0.2**	Water	09/12/23 13:24	09/14/23 09:29
92687817011	**MCD-CR-0.5**	Water	09/12/23 13:15	09/14/23 09:29

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SAMPLE ANALYTE COUNT

Project: Plant McDonough-CCR Ash Pond
Pace Project No.: 92687817

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92687817001	**MCD-UT01_US**	EPA 6010D	DRB	5	PASI-GA
		EPA 6020B	CW1	1	PASI-GA
		SM 2540C-2015	DL1	1	PASI-GA
		SM 2320B-2011	YEG	2	PASI-A
		EPA 300.0 Rev 2.1 1993	CDC	3	PASI-A
92687817002	**MCD-UT02**	EPA 6010D	DRB	5	PASI-GA
		EPA 6020B	CW1	1	PASI-GA
		SM 2540C-2015	DL1	1	PASI-GA
		SM 2320B-2011	YEG	2	PASI-A
		EPA 300.0 Rev 2.1 1993	CDC	3	PASI-A
92687817003	**MCD-UT03**	EPA 6010D	DRB	5	PASI-GA
		EPA 6020B	CW1	1	PASI-GA
		SM 2540C-2015	DL1	1	PASI-GA
		SM 2320B-2011	YEG	2	PASI-A
		EPA 300.0 Rev 2.1 1993	CDC	3	PASI-A
92687817004	**MCD-UT01_DS**	EPA 6010D	DRB	5	PASI-GA
		EPA 6020B	CW1	1	PASI-GA
		SM 2540C-2015	DL1	1	PASI-GA
		SM 2320B-2011	YEG	2	PASI-A
		EPA 300.0 Rev 2.1 1993	CDC	3	PASI-A
92687817005	**MCD-CR-0.1**	EPA 6010D	DRB	5	PASI-GA
		EPA 6020B	CW1	2	PASI-GA
		SM 2540C-2015	DL1	1	PASI-GA
		SM 2320B-2011	YEG	2	PASI-A
		EPA 300.0 Rev 2.1 1993	CDC	3	PASI-A
92687817006	**MCD-CR+0.2**	EPA 6010D	DRB	5	PASI-GA
		EPA 6020B	CW1	2	PASI-GA
		SM 2540C-2015	DL1	1	PASI-GA
		SM 2320B-2011	YEG	2	PASI-A
		EPA 300.0 Rev 2.1 1993	CDC	3	PASI-A
92687817007	**MCD-CR+0.4**	EPA 6010D	DRB	5	PASI-GA
		EPA 6020B	CW1	3	PASI-GA
		SM 2540C-2015	DL1	1	PASI-GA
		SM 2320B-2011	YEG	2	PASI-A
		EPA 300.0 Rev 2.1 1993	CDC	3	PASI-A
92687817008	**MCD-DW_DS**	EPA 6010D	DRB	5	PASI-GA
		EPA 6020B	CW1	2	PASI-GA

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SAMPLE ANALYTE COUNT

Project: Plant McDonough-CCR Ash Pond
Pace Project No.: 92687817

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		SM 2540C-2015	DL1	1	PASI-GA
		SM 2320B-2011	YEG	2	PASI-A
		EPA 300.0 Rev 2.1 1993	CDC	3	PASI-A
92687817009	**MCD-DW_US**	EPA 6010D	DRB	5	PASI-GA
		EPA 6020B	CW1	2	PASI-GA
		SM 2540C-2015	DL1	1	PASI-GA
		SM 2320B-2011	YEG	2	PASI-A
		EPA 300.0 Rev 2.1 1993	CDC	3	PASI-A
92687817010	**MCD-CR-0.2**	EPA 6010D	DRB	5	PASI-GA
		EPA 6020B	CW1	2	PASI-GA
		SM 2540C-2015	DL1	1	PASI-GA
		SM 2320B-2011	YEG	2	PASI-A
		EPA 300.0 Rev 2.1 1993	CDC	3	PASI-A
92687817011	**MCD-CR-0.5**	EPA 6010D	DRB	5	PASI-GA
		EPA 6020B	CW1	2	PASI-GA
		SM 2540C-2015	DL1	1	PASI-GA
		SM 2320B-2011	YEG	2	PASI-A
		EPA 300.0 Rev 2.1 1993	CDC	3	PASI-A

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

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ANALYTICAL RESULTS

Project: Plant McDonough-CCR Ash Pond
Pace Project No.: 92687817

Sample: MCD-UT01_US **Lab ID: 92687817001** Collected: 09/13/23 14:06 Received: 09/14/23 09:29 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							
Boron	ND	mg/L	0.040	1	09/15/23 13:12	09/17/23 14:38	7440-42-8	
Potassium	**2.8**	mg/L	0.50	1	09/15/23 13:12	09/17/23 14:38	7440-09-7	
Sodium	**5.5**	mg/L	1.0	1	09/15/23 13:12	09/17/23 14:38	7440-23-5	
Calcium	**11.8**	mg/L	1.0	1	09/15/23 13:12	09/17/23 14:38	7440-70-2	
Magnesium	**1.9**	mg/L	0.050	1	09/15/23 13:12	09/17/23 14:38	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	09/15/23 09:34	09/15/23 19:19	7440-38-2	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA							
Total Dissolved Solids	**56.0**	mg/L	25.0	1		09/19/23 17:46		
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville							
Alkalinity,Bicarbonate (CaCO3)	**35.3**	mg/L	5.0	1		09/15/23 16:12		
Alkalinity, Total as CaCO3	**35.3**	mg/L	5.0	1		09/15/23 16:12		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville							
Chloride	**5.1**	mg/L	1.0	1		09/15/23 13:06	16887-00-6	
Fluoride	**0.19**	mg/L	0.10	1		09/15/23 13:06	16984-48-8	
Sulfate	**7.3**	mg/L	1.0	1		09/15/23 13:06	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Plant McDonough-CCR Ash Pond
Pace Project No.: 92687817

Sample: MCD-UT02 **Lab ID: 92687817002** Collected: 09/13/23 13:58 Received: 09/14/23 09:29 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							
Boron	**0.040**	mg/L	0.040	1	09/15/23 13:12	09/17/23 14:43	7440-42-8	
Potassium	**2.6**	mg/L	0.50	1	09/15/23 13:12	09/17/23 14:43	7440-09-7	
Sodium	**5.5**	mg/L	1.0	1	09/15/23 13:12	09/17/23 14:43	7440-23-5	
Calcium	**11.5**	mg/L	1.0	1	09/15/23 13:12	09/17/23 14:43	7440-70-2	
Magnesium	**1.8**	mg/L	0.050	1	09/15/23 13:12	09/17/23 14:43	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	09/15/23 09:34	09/15/23 19:23	7440-38-2	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA							
Total Dissolved Solids	**63.0**	mg/L	25.0	1		09/19/23 17:46		
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville							
Alkalinity,Bicarbonate (CaCO3)	**34.9**	mg/L	5.0	1		09/15/23 16:19		
Alkalinity, Total as CaCO3	**34.9**	mg/L	5.0	1		09/15/23 16:19		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville							
Chloride	**5.2**	mg/L	1.0	1		09/15/23 13:52	16887-00-6	
Fluoride	**0.20**	mg/L	0.10	1		09/15/23 13:52	16984-48-8	
Sulfate	**7.8**	mg/L	1.0	1		09/15/23 13:52	14808-79-8	

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ANALYTICAL RESULTS

Project: Plant McDonough-CCR Ash Pond
Pace Project No.: 92687817

Sample: MCD-UT03 **Lab ID: 92687817003** Collected: 09/13/23 13:47 Received: 09/14/23 09:29 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							
Boron	**0.049**	mg/L	0.040	1	09/15/23 13:12	09/17/23 14:48	7440-42-8	
Potassium	**2.7**	mg/L	0.50	1	09/15/23 13:12	09/17/23 14:48	7440-09-7	
Sodium	**5.5**	mg/L	1.0	1	09/15/23 13:12	09/17/23 14:48	7440-23-5	
Calcium	**11.7**	mg/L	1.0	1	09/15/23 13:12	09/17/23 14:48	7440-70-2	M1
Magnesium	**1.9**	mg/L	0.050	1	09/15/23 13:12	09/17/23 14:48	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	09/15/23 09:34	09/15/23 19:27	7440-38-2	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA							
Total Dissolved Solids	**89.0**	mg/L	25.0	1		09/19/23 14:23		
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville							
Alkalinity,Bicarbonate (CaCO3)	**35.3**	mg/L	5.0	1		09/15/23 16:25		
Alkalinity, Total as CaCO3	**35.3**	mg/L	5.0	1		09/15/23 16:25		
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	1		09/15/23 14:08	16887-00-6	
Fluoride	**0.18**	mg/L	0.10	1		09/15/23 14:08	16984-48-8	
Sulfate	**7.9**	mg/L	1.0	1		09/15/23 14:08	14808-79-8	

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ANALYTICAL RESULTS

Project: Plant McDonough-CCR Ash Pond
Pace Project No.: 92687817

Sample: MCD-UT01_DS **Lab ID: 92687817004** Collected: 09/13/23 13:37 Received: 09/14/23 09:29 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							
Boron	**0.058**	mg/L	0.040	1	09/15/23 13:12	09/17/23 15:09	7440-42-8	
Potassium	**2.5**	mg/L	0.50	1	09/15/23 13:12	09/17/23 15:09	7440-09-7	
Sodium	**5.1**	mg/L	1.0	1	09/15/23 13:12	09/17/23 15:09	7440-23-5	
Calcium	**11.2**	mg/L	1.0	1	09/15/23 13:12	09/17/23 15:09	7440-70-2	
Magnesium	**1.8**	mg/L	0.050	1	09/15/23 13:12	09/17/23 15:09	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	09/15/23 09:34	09/15/23 19:30	7440-38-2	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA							
Total Dissolved Solids	**88.0**	mg/L	25.0	1		09/19/23 14:23		
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville							
Alkalinity,Bicarbonate (CaCO3)	**34.1**	mg/L	5.0	1		09/15/23 16:31		
Alkalinity, Total as CaCO3	**34.1**	mg/L	5.0	1		09/15/23 16:31		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville							
Chloride	**4.7**	mg/L	1.0	1		09/15/23 14:23	16887-00-6	
Fluoride	**0.17**	mg/L	0.10	1		09/15/23 14:23	16984-48-8	
Sulfate	**7.7**	mg/L	1.0	1		09/15/23 14:23	14808-79-8	

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ANALYTICAL RESULTS

Project: Plant McDonough-CCR Ash Pond
Pace Project No.: 92687817

Sample: MCD-CR-0.1 **Lab ID: 92687817005** Collected: 09/12/23 13:40 Received: 09/14/23 09:29 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							
Boron	**0.043**	mg/L	0.040	1	09/15/23 13:12	09/17/23 15:14	7440-42-8	
Potassium	**3.4**	mg/L	0.50	1	09/15/23 13:12	09/17/23 15:14	7440-09-7	
Sodium	**9.4**	mg/L	1.0	1	09/15/23 13:12	09/17/23 15:14	7440-23-5	
Calcium	**7.0**	mg/L	1.0	1	09/15/23 13:12	09/17/23 15:14	7440-70-2	
Magnesium	**2.2**	mg/L	0.050	1	09/15/23 13:12	09/17/23 15:14	7439-95-4	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA							
Cobalt	ND	mg/L	0.0050	1	09/15/23 09:34	09/15/23 19:34	7440-48-4	
Lithium	ND	mg/L	0.030	1	09/15/23 09:34	09/15/23 19:34	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		09/18/23 12:54		
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville							
Alkalinity,Bicarbonate (CaCO3)	**27.0**	mg/L	5.0	1		09/15/23 16:38		
Alkalinity, Total as CaCO3	**27.0**	mg/L	5.0	1		09/15/23 16:38		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville							
Chloride	**9.5**	mg/L	1.0	1		09/15/23 15:10	16887-00-6	
Fluoride	**0.13**	mg/L	0.10	1		09/15/23 15:10	16984-48-8	
Sulfate	**7.1**	mg/L	1.0	1		09/15/23 15:10	14808-79-8	

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ANALYTICAL RESULTS

Project: Plant McDonough-CCR Ash Pond
Pace Project No.: 92687817

Sample: MCD-CR+0.2 **Lab ID: 92687817006** Collected: 09/12/23 13:44 Received: 09/14/23 09:29 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							
Boron	ND	mg/L	0.040	1	09/15/23 13:12	09/17/23 15:19	7440-42-8	
Potassium	**3.4**	mg/L	0.50	1	09/15/23 13:12	09/17/23 15:19	7440-09-7	
Sodium	**9.2**	mg/L	1.0	1	09/15/23 13:12	09/17/23 15:19	7440-23-5	
Calcium	**6.9**	mg/L	1.0	1	09/15/23 13:12	09/17/23 15:19	7440-70-2	
Magnesium	**2.2**	mg/L	0.050	1	09/15/23 13:12	09/17/23 15:19	7439-95-4	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA							
Cobalt	ND	mg/L	0.0050	1	09/15/23 09:34	09/15/23 19:38	7440-48-4	
Lithium	ND	mg/L	0.030	1	09/15/23 09:34	09/15/23 19:38	7439-93-2	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA							
Total Dissolved Solids	**65.0**	mg/L	25.0	1		09/18/23 12:54		
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville							
Alkalinity,Bicarbonate (CaCO3)	**26.5**	mg/L	5.0	1		09/15/23 16:44		
Alkalinity, Total as CaCO3	**26.5**	mg/L	5.0	1		09/15/23 16:44		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville							
Chloride	**9.2**	mg/L	1.0	1		09/15/23 15:25	16887-00-6	
Fluoride	**0.13**	mg/L	0.10	1		09/15/23 15:25	16984-48-8	
Sulfate	**6.6**	mg/L	1.0	1		09/15/23 15:25	14808-79-8	

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ANALYTICAL RESULTS

Project: Plant McDonough-CCR Ash Pond
Pace Project No.: 92687817

Sample: MCD-CR+0.4 **Lab ID: 92687817007** Collected: 09/12/23 13:47 Received: 09/14/23 09:29 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							
Boron	**0.041**	mg/L	0.040	1	09/15/23 13:12	09/17/23 15:35	7440-42-8	
Potassium	**3.3**	mg/L	0.50	1	09/15/23 13:12	09/17/23 15:35	7440-09-7	
Sodium	**8.8**	mg/L	1.0	1	09/15/23 13:12	09/17/23 15:35	7440-23-5	
Calcium	**6.7**	mg/L	1.0	1	09/15/23 13:12	09/17/23 15:35	7440-70-2	
Magnesium	**2.1**	mg/L	0.050	1	09/15/23 13:12	09/17/23 15:35	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	09/15/23 09:34	09/15/23 19:42	7440-38-2	
Cobalt	ND	mg/L	0.0050	1	09/15/23 09:34	09/15/23 19:42	7440-48-4	
Lithium	ND	mg/L	0.030	1	09/15/23 09:34	09/15/23 19:42	7439-93-2	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA							
Total Dissolved Solids	**47.0**	mg/L	25.0	1		09/18/23 12:55		
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville							
Alkalinity,Bicarbonate (CaCO3)	**25.7**	mg/L	5.0	1		09/15/23 16:50		
Alkalinity, Total as CaCO3	**25.7**	mg/L	5.0	1		09/15/23 16:50		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville							
Chloride	**9.1**	mg/L	1.0	1		09/15/23 15:41	16887-00-6	
Fluoride	**0.13**	mg/L	0.10	1		09/15/23 15:41	16984-48-8	
Sulfate	**6.8**	mg/L	1.0	1		09/15/23 15:41	14808-79-8	

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ANALYTICAL RESULTS

Project: Plant McDonough-CCR Ash Pond
Pace Project No.: 92687817

Sample: MCD-DW_DS **Lab ID: 92687817008** Collected: 09/12/23 13:35 Received: 09/14/23 09:29 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							
Boron	**0.050**	mg/L	0.040	1	09/15/23 13:12	09/17/23 15:40	7440-42-8	
Potassium	**3.3**	mg/L	0.50	1	09/15/23 13:12	09/17/23 15:40	7440-09-7	
Sodium	**9.4**	mg/L	1.0	1	09/15/23 13:12	09/17/23 15:40	7440-23-5	
Calcium	**7.1**	mg/L	1.0	1	09/15/23 13:12	09/17/23 15:40	7440-70-2	
Magnesium	**2.3**	mg/L	0.050	1	09/15/23 13:12	09/17/23 15:40	7439-95-4	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA							
Cobalt	ND	mg/L	0.0050	1	09/15/23 09:34	09/15/23 19:54	7440-48-4	
Lithium	ND	mg/L	0.030	1	09/15/23 09:34	09/15/23 19:54	7439-93-2	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA							
Total Dissolved Solids	**63.0**	mg/L	25.0	1		09/18/23 12:55		
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville							
Alkalinity,Bicarbonate (CaCO3)	**25.7**	mg/L	5.0	1		09/15/23 17:05		
Alkalinity, Total as CaCO3	**25.7**	mg/L	5.0	1		09/15/23 17:05		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville							
Chloride	**9.6**	mg/L	1.0	1		09/15/23 15:56	16887-00-6	
Fluoride	**0.13**	mg/L	0.10	1		09/15/23 15:56	16984-48-8	
Sulfate	**7.8**	mg/L	1.0	1		09/15/23 15:56	14808-79-8	

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ANALYTICAL RESULTS

Project: Plant McDonough-CCR Ash Pond
Pace Project No.: 92687817

Sample: MCD-DW_US **Lab ID: 92687817009** Collected: 09/12/23 13:30 Received: 09/14/23 09:29 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							
Boron	ND	mg/L	0.040	1	09/15/23 13:12	09/17/23 15:45	7440-42-8	
Potassium	**3.2**	mg/L	0.50	1	09/15/23 13:12	09/17/23 15:45	7440-09-7	
Sodium	**8.5**	mg/L	1.0	1	09/15/23 13:12	09/17/23 15:45	7440-23-5	
Calcium	**6.4**	mg/L	1.0	1	09/15/23 13:12	09/17/23 15:45	7440-70-2	
Magnesium	**2.0**	mg/L	0.050	1	09/15/23 13:12	09/17/23 15:45	7439-95-4	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA							
Cobalt	ND	mg/L	0.0050	1	09/15/23 09:34	09/15/23 19:58	7440-48-4	
Lithium	ND	mg/L	0.030	1	09/15/23 09:34	09/15/23 19:58	7439-93-2	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA							
Total Dissolved Solids	**46.0**	mg/L	25.0	1		09/18/23 12:55		
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville							
Alkalinity,Bicarbonate (CaCO3)	**25.7**	mg/L	5.0	1		09/15/23 17:11		
Alkalinity, Total as CaCO3	**25.7**	mg/L	5.0	1		09/15/23 17:11		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville							
Chloride	**9.0**	mg/L	1.0	1		09/15/23 16:12	16887-00-6	
Fluoride	ND	mg/L	0.10	1		09/15/23 16:12	16984-48-8	
Sulfate	**6.2**	mg/L	1.0	1		09/15/23 16:12	14808-79-8	

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ANALYTICAL RESULTS

Project: Plant McDonough-CCR Ash Pond
Pace Project No.: 92687817

Sample: MCD-CR-0.2 **Lab ID: 92687817010** Collected: 09/12/23 13:24 Received: 09/14/23 09:29 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							
Boron	ND	mg/L	0.040	1	09/15/23 13:12	09/17/23 15:50	7440-42-8	
Potassium	**3.4**	mg/L	0.50	1	09/15/23 13:12	09/17/23 15:50	7440-09-7	
Sodium	**9.0**	mg/L	1.0	1	09/15/23 13:12	09/17/23 15:50	7440-23-5	
Calcium	**6.8**	mg/L	1.0	1	09/15/23 13:12	09/17/23 15:50	7440-70-2	
Magnesium	**2.2**	mg/L	0.050	1	09/15/23 13:12	09/17/23 15:50	7439-95-4	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA							
Cobalt	ND	mg/L	0.0050	1	09/15/23 09:34	09/15/23 20:02	7440-48-4	
Lithium	ND	mg/L	0.030	1	09/15/23 09:34	09/15/23 20:02	7439-93-2	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA							
Total Dissolved Solids	**53.0**	mg/L	25.0	1		09/18/23 12:55		
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville							
Alkalinity,Bicarbonate (CaCO3)	**25.3**	mg/L	5.0	1		09/15/23 17:17		
Alkalinity, Total as CaCO3	**25.3**	mg/L	5.0	1		09/15/23 17:17		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville							
Chloride	**9.2**	mg/L	1.0	1		09/15/23 16:58	16887-00-6	
Fluoride	**0.11**	mg/L	0.10	1		09/15/23 16:58	16984-48-8	
Sulfate	**6.4**	mg/L	1.0	1		09/15/23 16:58	14808-79-8	

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ANALYTICAL RESULTS

Project: Plant McDonough-CCR Ash Pond
Pace Project No.: 92687817

Sample: MCD-CR-0.5 **Lab ID: 92687817011** Collected: 09/12/23 13:15 Received: 09/14/23 09:29 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							
Boron	ND	mg/L	0.040	1	09/15/23 13:12	09/17/23 15:55	7440-42-8	
Potassium	**3.2**	mg/L	0.50	1	09/15/23 13:12	09/17/23 15:55	7440-09-7	
Sodium	**8.6**	mg/L	1.0	1	09/15/23 13:12	09/17/23 15:55	7440-23-5	
Calcium	**6.5**	mg/L	1.0	1	09/15/23 13:12	09/17/23 15:55	7440-70-2	
Magnesium	**2.1**	mg/L	0.050	1	09/15/23 13:12	09/17/23 15:55	7439-95-4	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA							
Cobalt	ND	mg/L	0.0050	1	09/15/23 09:34	09/15/23 20:06	7440-48-4	
Lithium	ND	mg/L	0.030	1	09/15/23 09:34	09/15/23 20:06	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		09/19/23 17:35		
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville							
Alkalinity,Bicarbonate (CaCO3)	**25.5**	mg/L	5.0	1		09/15/23 17:23		
Alkalinity, Total as CaCO3	**25.5**	mg/L	5.0	1		09/15/23 17:23		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville							
Chloride	**9.2**	mg/L	1.0	1		09/15/23 17:14	16887-00-6	
Fluoride	ND	mg/L	0.10	1		09/15/23 17:14	16984-48-8	
Sulfate	**6.2**	mg/L	1.0	1		09/15/23 17:14	14808-79-8	

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QUALITY CONTROL DATA

Project: Plant McDonough-CCR Ash Pond
Pace Project No.: 92687817

QC Batch: 799977
QC Batch Method: EPA 3010A
Analysis Method: EPA 6010D
Analysis Description: 6010D ATL
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92687817001, 92687817002, 92687817003, 92687817004, 92687817005, 92687817006, 92687817007, 92687817008, 92687817009, 92687817010, 92687817011

METHOD BLANK: 4143584 Matrix: Water
Associated Lab Samples: 92687817001, 92687817002, 92687817003, 92687817004, 92687817005, 92687817006, 92687817007, 92687817008, 92687817009, 92687817010, 92687817011

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Boron	mg/L	ND	0.040	09/17/23 14:17	
Calcium	mg/L	ND	1.0	09/17/23 14:17	
Magnesium	mg/L	ND	0.050	09/17/23 14:17	
Potassium	mg/L	ND	0.50	09/17/23 14:17	
Sodium	mg/L	ND	1.0	09/17/23 14:17	

LABORATORY CONTROL SAMPLE: 4143585

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Boron	mg/L	1	0.95	95	80-120	
Calcium	mg/L	1	.99J	99	80-120	
Magnesium	mg/L	1	1.0	103	80-120	
Potassium	mg/L	1	0.85	85	80-120	
Sodium	mg/L	1	ND	100	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4143586 4143587

Parameter	Units	92687817003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Boron	mg/L	0.049	1	1	1.1	1.1	104	103	75-125	0	20	
Calcium	mg/L	11.7	1	1	12.5	12.4	89	71	75-125	1	20	M1
Magnesium	mg/L	1.9	1	1	2.9	2.9	106	104	75-125	1	20	
Potassium	mg/L	2.7	1	1	3.7	3.6	104	92	75-125	3	20	
Sodium	mg/L	5.5	1	1	6.3	6.3	84	81	75-125	0	20	

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QUALITY CONTROL DATA

Project: Plant McDonough-CCR Ash Pond
Pace Project No.: 92687817

QC Batch: 799918
QC Batch Method: EPA 3005A
Analysis Method: EPA 6020B
Analysis Description: 6020 MET
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92687817001, 92687817002, 92687817003, 92687817004, 92687817005, 92687817006, 92687817007, 92687817008, 92687817009, 92687817010, 92687817011

METHOD BLANK: 4143353 Matrix: Water
Associated Lab Samples: 92687817001, 92687817002, 92687817003, 92687817004, 92687817005, 92687817006, 92687817007, 92687817008, 92687817009, 92687817010, 92687817011

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Arsenic	mg/L	ND	0.0050	09/15/23 18:19	
Cobalt	mg/L	ND	0.0050	09/15/23 18:19	
Lithium	mg/L	ND	0.030	09/15/23 18:19	

LABORATORY CONTROL SAMPLE: 4143354

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Arsenic	mg/L	0.1	0.098	98	80-120	
Cobalt	mg/L	0.1	0.098	98	80-120	
Lithium	mg/L	0.1	0.098	98	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4143355 4143356

Parameter	Units	92687591008 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	101	101	75-125	0	20	
Cobalt	mg/L	12.0 ug/L	0.1	0.1	0.12	0.12	103	104	75-125	1	20	
Lithium	mg/L	ND	0.1	0.1	0.096	0.098	95	97	75-125	2	20	

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QUALITY CONTROL DATA

Project: Plant McDonough-CCR Ash Pond
Pace Project No.: 92687817

QC Batch: 800282 | 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: 92687817005, 92687817006, 92687817007, 92687817008, 92687817009, 92687817010

METHOD BLANK: 4144980 Matrix: Water
Associated Lab Samples: 92687817005, 92687817006, 92687817007, 92687817008, 92687817009, 92687817010

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	25.0	09/18/23 12:43	

LABORATORY CONTROL SAMPLE: 4144981

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	370	92	80-120	

SAMPLE DUPLICATE: 4144982

Parameter	Units	92687223010 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	ND	ND		10	

SAMPLE DUPLICATE: 4144983

Parameter	Units	92686679022 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	560	567	1	10	

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QUALITY CONTROL DATA

Project: Plant McDonough-CCR Ash Pond
Pace Project No.: 92687817

QC Batch: 800459
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: 92687817001, 92687817002, 92687817011

METHOD BLANK: 4145961 Matrix: Water
Associated Lab Samples: 92687817001, 92687817002, 92687817011

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	25.0	09/19/23 17:34	

LABORATORY CONTROL SAMPLE: 4145962

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	378	94	80-120	

SAMPLE DUPLICATE: 4145963

Parameter	Units	92687817011 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	50.0	51.0	2	10	

SAMPLE DUPLICATE: 4145964

Parameter	Units	92687572003 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	77.0	81.0	5	10	

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(770)734-4200

QUALITY CONTROL DATA

Project: Plant McDonough-CCR Ash Pond
Pace Project No.: 92687817

QC Batch: 800526
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: 92687817003, 92687817004

METHOD BLANK: 4146467 Matrix: Water
Associated Lab Samples: 92687817003, 92687817004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	25.0	09/19/23 14:21	

LABORATORY CONTROL SAMPLE: 4146468

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	379	95	80-120	

SAMPLE DUPLICATE: 4146469

Parameter	Units	92687621001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	65.0	52.0	22	10	D6

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QUALITY CONTROL DATA

Project: Plant McDonough-CCR Ash Pond
Pace Project No.: 92687817

QC Batch: 799970
QC Batch Method: SM 2320B-2011
Analysis Method: SM 2320B-2011
Analysis Description: 2320B Alkalinity
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92687817001, 92687817002, 92687817003, 92687817004, 92687817005, 92687817006, 92687817007, 92687817008, 92687817009, 92687817010, 92687817011

METHOD BLANK: 4143554 Matrix: Water
Associated Lab Samples: 92687817001, 92687817002, 92687817003, 92687817004, 92687817005, 92687817006, 92687817007, 92687817008, 92687817009, 92687817010, 92687817011

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Alkalinity, Total as CaCO3	mg/L	ND	5.0	09/15/23 15:54	
Alkalinity,Bicarbonate (CaCO3)	mg/L	ND	5.0	09/15/23 15:54	

LABORATORY CONTROL SAMPLE: 4143555

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: 4143556

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

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4143557 4143558

Parameter	Units	92686679021 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	13.1	50	50	66.9	67.5	107	109	80-120	1	25	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4143559 4143560

Parameter	Units	92686679022 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	28.4	50	50	80.2	81.5	104	106	80-120	2	25	

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QUALITY CONTROL DATA

Project: Plant McDonough-CCR Ash Pond
Pace Project No.: 92687817

QC Batch: 799893
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: 92687817001, 92687817002, 92687817003, 92687817004, 92687817005, 92687817006, 92687817007, 92687817008, 92687817009, 92687817010, 92687817011

METHOD BLANK: 4143260 Matrix: Water
Associated Lab Samples: 92687817001, 92687817002, 92687817003, 92687817004, 92687817005, 92687817006, 92687817007, 92687817008, 92687817009, 92687817010, 92687817011

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	09/15/23 12:02	
Fluoride	mg/L	ND	0.10	09/15/23 12:02	
Sulfate	mg/L	ND	1.0	09/15/23 12:02	

LABORATORY CONTROL SAMPLE: 4143261

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	2.5	100	90-110	
Sulfate	mg/L	50	50.8	102	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4143264 4143265

Parameter	Units	92687817009 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	9.0	50	50	58.5	59.5	99	101	90-110	2	10	
Fluoride	mg/L	ND	2.5	2.5	2.6	2.7	101	103	90-110	2	10	
Sulfate	mg/L	6.2	50	50	55.8	56.9	99	101	90-110	2	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4143456 4143457

Parameter	Units	92687817001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	5.1	50	50	54.3	55.5	98	101	90-110	2	10	
Fluoride	mg/L	0.19	2.5	2.5	2.7	2.8	100	103	90-110	3	10	
Sulfate	mg/L	7.3	50	50	56.6	58.0	99	101	90-110	2	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 McDonough-CCR Ash Pond
Pace Project No.: 92687817

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-CCR Ash Pond
Pace Project No.: 92687817

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92687817001	**MCD-UT01_US**	EPA 3010A	799977	EPA 6010D	800078
92687817002	**MCD-UT02**	EPA 3010A	799977	EPA 6010D	800078
92687817003	**MCD-UT03**	EPA 3010A	799977	EPA 6010D	800078
92687817004	**MCD-UT01_DS**	EPA 3010A	799977	EPA 6010D	800078
92687817005	**MCD-CR-0.1**	EPA 3010A	799977	EPA 6010D	800078
92687817006	**MCD-CR+0.2**	EPA 3010A	799977	EPA 6010D	800078
92687817007	**MCD-CR+0.4**	EPA 3010A	799977	EPA 6010D	800078
92687817008	**MCD-DW_DS**	EPA 3010A	799977	EPA 6010D	800078
92687817009	**MCD-DW_US**	EPA 3010A	799977	EPA 6010D	800078
92687817010	**MCD-CR-0.2**	EPA 3010A	799977	EPA 6010D	800078
92687817011	**MCD-CR-0.5**	EPA 3010A	799977	EPA 6010D	800078
92687817001	**MCD-UT01_US**	EPA 3005A	799918	EPA 6020B	800012
92687817002	**MCD-UT02**	EPA 3005A	799918	EPA 6020B	800012
92687817003	**MCD-UT03**	EPA 3005A	799918	EPA 6020B	800012
92687817004	**MCD-UT01_DS**	EPA 3005A	799918	EPA 6020B	800012
92687817005	**MCD-CR-0.1**	EPA 3005A	799918	EPA 6020B	800012
92687817006	**MCD-CR+0.2**	EPA 3005A	799918	EPA 6020B	800012
92687817007	**MCD-CR+0.4**	EPA 3005A	799918	EPA 6020B	800012
92687817008	**MCD-DW_DS**	EPA 3005A	799918	EPA 6020B	800012
92687817009	**MCD-DW_US**	EPA 3005A	799918	EPA 6020B	800012
92687817010	**MCD-CR-0.2**	EPA 3005A	799918	EPA 6020B	800012
92687817011	**MCD-CR-0.5**	EPA 3005A	799918	EPA 6020B	800012
92687817001	**MCD-UT01_US**	SM 2540C-2015	800459		
92687817002	**MCD-UT02**	SM 2540C-2015	800459		
92687817003	**MCD-UT03**	SM 2540C-2015	800526		
92687817004	**MCD-UT01_DS**	SM 2540C-2015	800526		
92687817005	**MCD-CR-0.1**	SM 2540C-2015	800282		
92687817006	**MCD-CR+0.2**	SM 2540C-2015	800282		
92687817007	**MCD-CR+0.4**	SM 2540C-2015	800282		
92687817008	**MCD-DW_DS**	SM 2540C-2015	800282		
92687817009	**MCD-DW_US**	SM 2540C-2015	800282		
92687817010	**MCD-CR-0.2**	SM 2540C-2015	800282		
92687817011	**MCD-CR-0.5**	SM 2540C-2015	800459		
92687817001	**MCD-UT01_US**	SM 2320B-2011	799970		
92687817002	**MCD-UT02**	SM 2320B-2011	799970		
92687817003	**MCD-UT03**	SM 2320B-2011	799970		
92687817004	**MCD-UT01_DS**	SM 2320B-2011	799970		
92687817005	**MCD-CR-0.1**	SM 2320B-2011	799970		
92687817006	**MCD-CR+0.2**	SM 2320B-2011	799970		
92687817007	**MCD-CR+0.4**	SM 2320B-2011	799970		
92687817008	**MCD-DW_DS**	SM 2320B-2011	799970		
92687817009	**MCD-DW_US**	SM 2320B-2011	799970		
92687817010	**MCD-CR-0.2**	SM 2320B-2011	799970		
92687817011	**MCD-CR-0.5**	SM 2320B-2011	799970		
92687817001	**MCD-UT01_US**	EPA 300.0 Rev 2.1 1993	799893		

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Plant McDonough-CCR Ash Pond
Pace Project No.: 92687817

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92687817002	**MCD-UT02**	EPA 300.0 Rev 2.1 1993	799893		
92687817003	**MCD-UT03**	EPA 300.0 Rev 2.1 1993	799893		
92687817004	**MCD-UT01_DS**	EPA 300.0 Rev 2.1 1993	799893		
92687817005	**MCD-CR-0.1**	EPA 300.0 Rev 2.1 1993	799893		
92687817006	**MCD-CR+0.2**	EPA 300.0 Rev 2.1 1993	799893		
92687817007	**MCD-CR+0.4**	EPA 300.0 Rev 2.1 1993	799893		
92687817008	**MCD-DW_DS**	EPA 300.0 Rev 2.1 1993	799893		
92687817009	**MCD-DW_US**	EPA 300.0 Rev 2.1 1993	799893		
92687817010	**MCD-CR-0.2**	EPA 300.0 Rev 2.1 1993	799893		
92687817011	**MCD-CR-0.5**	EPA 300.0 Rev 2.1 1993	799893		

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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

WO# : 92687817

92687817

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:	
Company:	ARCADIS - Atlanta	Report To:	Kelley Sharpe, Warren Johnson	Attention:	
Address:	2839 Paces Ferry Rd	Copy To:	Ben Hodges, Joju Abraham	Company Name:	
Atlanta, GA 30339		Copy To:		Address:	
Email:	kelley.sharpe@arcadis.com	Purchase Order #:	GPC11066177	Pace Quote:	
Phone:	(770)384-6584 Fax:	Project Name:	Plant McDonough/CCR-Ash Pond Closure	Pace Project Manager:	maiya.parks@pacelabs.com,
Requested Due Date:	5 Day TAT	Project #:		Pace Profile #:	12896

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	Total/Bicarb Alkalinity	TDS	Cl, F, SO4	App. III Metals + Mg, Na, K	Metals - As, Co, Li	Metals - As	Metals - Co, Li	Residual Chlorine (Y/N)
1	MCD-UT01_US	WS	G	9/13/23	1406				3	X		X														
2	MCD-UT02	WS	G	9/13/23	1358				3	X		X														
3	MCD-UT03	WS	G	9/13/23	1347				3	X		X														
4	MCD-UT01_DS	WS	G	9/13/23	1337				3	X		X														
5	MCD-CR-0.1	WS	G	9/12/23	1340				3	X		X														
6	MCD-CR+0.2	WS	G	9/12/23	1344				3	X		X														
7	MCD-CR+0.4	WS	G	9/12/23	1347				3	X		X														
8	MCD-DW_DS	WS	G	9/12/23	1335				3	X		X														
9	MCD-DW_US	WS	G	9/12/23	1330				3	X		X														
10	MCD-CR-0.2	WS	G	9/12/23	1324				3	X		X														
11	MCD-CR-0.5	WS	G	9/12/23	1315				3	X		X														
12																										

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
MCD-CSURF-ASSMT-2023	[signature] / Arcadis	9/14/23	0915	[signature]	9-14	0929	
6020: As, Co, Li							
6010: B, Ca, Mg, K, Na							

SAMPLER NAME AND SIGNATURE			TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
PRINT Name of SAMPLER:	Garrett G					
SIGNATURE of SAMPLER:	[signature]	DATE Signed: 9-14-23				

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#: 92687817

PM: MP Due Date: 09/21/23

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: 4-14-23 AL

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

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

Thermometer: ☑ IR Gun ID: 093

Type of Ice: ☑ Wet ☐ Blue ☐ None

Cooler Temp: 16.6 **Correction Factor:** Add/Subtract (°C) 0.0

Cooler Temp Corrected (°C): 16.6

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: WS				
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#: 92687817

PM: MP **Due Date: 09/21/23**

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)	DG94-40 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	X																						
2			2			1	X																						
3			2			1	X																						
4			2			1	X																						
5			2			1	X																						
6			2			1	X																						
7			2			1	X																						
8			2			1	X																						
9			2			1	X																						
10			2			1	X																						
11			2			1	X																						
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

Laboratory Analytical Data
November 2023

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

November 28, 2023

Lauren Hartley
Southern Co.
241 Ralph McGill Blvd
NE, Bin 10160
Atlanta, GA 30308

RE: Project: Plant McDonough QTR
Pace Project No.: 92697332

Dear Lauren Hartley:

Enclosed are the analytical results for sample(s) received by the laboratory on November 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,

Bonnie Vang
bonnie.vang@pacelabs.com
704-977-0968
Project Manager

Enclosures

cc: Yong Cheng, WSP
Daniela Herrera, Golder
Andrea McClure, WSP
Laura Midkiff, Southern Co.
Dawn Prell, WSP USA E&I Inc_Atlanta

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CERTIFICATIONS

Project: Plant McDonough QTR
Pace Project No.: 92697332

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 McDonough QTR
Pace Project No.: 92697332

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92697332001	**MCD-DGWC-121**	Water	11/07/23 11:41	11/07/23 17:30
92697332002	**MCD-AP-1-FD-1**	Water	11/07/23 00:00	11/07/23 17:30
92697332003	**MCD-AP-1-FB-1**	Water	11/07/23 12:00	11/07/23 17:30

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SAMPLE ANALYTE COUNT

Project: Plant McDonough QTR
Pace Project No.: 92697332

Lab ID	Sample ID	Method	Analysts	Analytes Reported
92697332001	**MCD-DGWC-121**	EPA 6010D	DRB	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
		EPA 300.0 Rev 2.1 1993	JCM	3
92697332002	**MCD-AP-1-FD-1**	EPA 6010D	DRB	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
		EPA 300.0 Rev 2.1 1993	JCM	3
92697332003	**MCD-AP-1-FB-1**	EPA 6010D	DRB	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
		EPA 300.0 Rev 2.1 1993	JCM	3

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

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ANALYTICAL RESULTS

Project: Plant McDonough QTR
Pace Project No.: 92697332

Sample: MCD-DGWC-121 **Lab ID: 92697332001** Collected: 11/07/23 11:41 Received: 11/07/23 17:30 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								
Calcium	**41.3**	mg/L	1.0	0.12	1	11/16/23 11:00	11/27/23 11:51	7440-70-2	M1
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00054	1	11/08/23 14:06	11/10/23 21:19	7440-36-0	
Arsenic	**0.0011J**	mg/L	0.0050	0.00084	1	11/08/23 14:06	11/10/23 21:19	7440-38-2	
Barium	**0.053**	mg/L	0.0050	0.00047	1	11/08/23 14:06	11/10/23 21:19	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000094	1	11/08/23 14:06	11/10/23 21:19	7440-41-7	
Boron	**1.7**	mg/L	0.040	0.012	1	11/08/23 14:06	11/14/23 17:12	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00010	1	11/08/23 14:06	11/10/23 21:19	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0019	1	11/08/23 14:06	11/10/23 21:19	7440-47-3	
Cobalt	**0.0012J**	mg/L	0.0050	0.00032	1	11/08/23 14:06	11/14/23 17:12	7440-48-4	
Lead	ND	mg/L	0.0010	0.00016	1	11/08/23 14:06	11/10/23 21:19	7439-92-1	
Lithium	**0.0065J**	mg/L	0.030	0.0016	1	11/08/23 14:06	11/10/23 21:19	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00062	1	11/08/23 14:06	11/10/23 21:19	7439-98-7	
Selenium	ND	mg/L	0.0050	0.00096	1	11/08/23 14:06	11/10/23 21:19	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00038	1	11/08/23 14:06	11/10/23 21:19	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	11/16/23 16:00	11/17/23 09:25	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**279**	mg/L	25.0	25.0	1		11/08/23 15:49		
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		11/09/23 02:19	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		11/09/23 02:19	16984-48-8	
Sulfate	**85.7**	mg/L	1.0	0.50	1		11/09/23 02:19	14808-79-8	

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ANALYTICAL RESULTS

Project: Plant McDonough QTR
Pace Project No.: 92697332

Sample: MCD-AP-1-FD-1 **Lab ID: 92697332002** Collected: 11/07/23 00:00 Received: 11/07/23 17:30 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								
Calcium	**41.9**	mg/L	1.0	0.12	1	11/16/23 11:00	11/27/23 12:10	7440-70-2	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00054	1	11/08/23 14:06	11/10/23 21:36	7440-36-0	
Arsenic	**0.0012J**	mg/L	0.0050	0.00084	1	11/08/23 14:06	11/10/23 21:36	7440-38-2	
Barium	**0.055**	mg/L	0.0050	0.00047	1	11/08/23 14:06	11/10/23 21:36	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000094	1	11/08/23 14:06	11/10/23 21:36	7440-41-7	
Boron	**1.8**	mg/L	0.040	0.012	1	11/08/23 14:06	11/16/23 14:44	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00010	1	11/08/23 14:06	11/10/23 21:36	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0019	1	11/08/23 14:06	11/10/23 21:36	7440-47-3	
Cobalt	**0.0014J**	mg/L	0.0050	0.00032	1	11/08/23 14:06	11/16/23 14:44	7440-48-4	
Lead	ND	mg/L	0.0010	0.00016	1	11/08/23 14:06	11/10/23 21:36	7439-92-1	
Lithium	**0.0060J**	mg/L	0.030	0.0016	1	11/08/23 14:06	11/10/23 21:36	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00062	1	11/08/23 14:06	11/10/23 21:36	7439-98-7	
Selenium	ND	mg/L	0.0050	0.00096	1	11/08/23 14:06	11/10/23 21:36	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00038	1	11/08/23 14:06	11/10/23 21:36	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	11/16/23 16:00	11/17/23 09:28	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**272**	mg/L	25.0	25.0	1		11/08/23 15:49		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**4.4**	mg/L	1.0	0.60	1		11/09/23 02:32	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		11/09/23 02:32	16984-48-8	
Sulfate	**81.1**	mg/L	1.0	0.50	1		11/09/23 02:32	14808-79-8	

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ANALYTICAL RESULTS

Project: Plant McDonough QTR
Pace Project No.: 92697332

Sample: MCD-AP-1-FB-1 **Lab ID: 92697332003** Collected: 11/07/23 12:00 Received: 11/07/23 17:30 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								
Calcium	ND	mg/L	1.0	0.12	1	11/16/23 11:00	11/27/23 12:50	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	0.00054	1	11/08/23 14:06	11/10/23 21:40	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00084	1	11/08/23 14:06	11/10/23 21:40	7440-38-2	
Barium	ND	mg/L	0.0050	0.00047	1	11/08/23 14:06	11/10/23 21:40	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000094	1	11/08/23 14:06	11/10/23 21:40	7440-41-7	
Boron	ND	mg/L	0.040	0.012	1	11/08/23 14:06	11/14/23 16:53	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00010	1	11/08/23 14:06	11/10/23 21:40	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0019	1	11/08/23 14:06	11/10/23 21:40	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00032	1	11/08/23 14:06	11/14/23 16:53	7440-48-4	
Lead	ND	mg/L	0.0010	0.00016	1	11/08/23 14:06	11/10/23 21:40	7439-92-1	
Lithium	ND	mg/L	0.030	0.0016	1	11/08/23 14:06	11/10/23 21:40	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00062	1	11/08/23 14:06	11/10/23 21:40	7439-98-7	
Selenium	ND	mg/L	0.0050	0.00096	1	11/08/23 14:06	11/10/23 21:40	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00038	1	11/08/23 14:06	11/10/23 21:40	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	11/16/23 16:00	11/17/23 09:31	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		11/08/23 15:50		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	ND	mg/L	1.0	0.60	1		11/09/23 02:46	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		11/09/23 02:46	16984-48-8	
Sulfate	ND	mg/L	1.0	0.50	1		11/09/23 02:46	14808-79-8	

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QUALITY CONTROL DATA

Project: Plant McDonough QTR
Pace Project No.: 92697332

QC Batch: 813738
QC Batch Method: EPA 3010A
Analysis Method: EPA 6010D
Analysis Description: 6010D ATL
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92697332001, 92697332002, 92697332003

METHOD BLANK: 4213032 Matrix: Water
Associated Lab Samples: 92697332001, 92697332002, 92697332003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium	mg/L	ND	1.0	0.12	11/27/23 11:41	

LABORATORY CONTROL SAMPLE: 4213033

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium	mg/L	1	1.0	102	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4213034 4213035

Parameter	Units	92697332001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Calcium	mg/L	41.3	1	1	44.1	42.4	276	108	75-125	4	20	M1

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QUALITY CONTROL DATA

Project: Plant McDonough QTR
Pace Project No.: 92697332

QC Batch: 811845
QC Batch Method: EPA 3005A
Analysis Method: EPA 6020B
Analysis Description: 6020 MET
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92697332001, 92697332002, 92697332003

METHOD BLANK: 4203300 Matrix: Water
Associated Lab Samples: 92697332001, 92697332002, 92697332003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	ND	0.0030	0.00054	11/10/23 20:42	
Arsenic	mg/L	ND	0.0050	0.00084	11/10/23 20:42	
Barium	mg/L	ND	0.0050	0.00047	11/10/23 20:42	
Beryllium	mg/L	ND	0.00050	0.000094	11/10/23 20:42	
Boron	mg/L	ND	0.040	0.012	11/10/23 20:42	
Cadmium	mg/L	ND	0.00050	0.00010	11/10/23 20:42	
Chromium	mg/L	ND	0.0050	0.0019	11/10/23 20:42	
Cobalt	mg/L	ND	0.0050	0.00032	11/14/23 16:36	
Lead	mg/L	ND	0.0010	0.00016	11/10/23 20:42	
Lithium	mg/L	ND	0.030	0.0016	11/10/23 20:42	
Molybdenum	mg/L	ND	0.010	0.00062	11/10/23 20:42	
Selenium	mg/L	ND	0.0050	0.00096	11/10/23 20:42	
Thallium	mg/L	ND	0.0010	0.00038	11/10/23 20:42	

LABORATORY CONTROL SAMPLE: 4203301

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	0.11	110	80-120	
Barium	mg/L	0.1	0.10	103	80-120	
Beryllium	mg/L	0.1	0.12	115	80-120	
Boron	mg/L	1	1.0	105	80-120	
Cadmium	mg/L	0.1	0.10	100	80-120	
Chromium	mg/L	0.1	0.099	99	80-120	
Cobalt	mg/L	0.1	0.10	102	80-120	
Lead	mg/L	0.1	0.11	113	80-120	
Lithium	mg/L	0.1	0.12	116	80-120	
Molybdenum	mg/L	0.1	0.11	109	80-120	
Selenium	mg/L	0.1	0.11	113	80-120	
Thallium	mg/L	0.1	0.11	108	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4203302 4203303

Parameter	Units	92696416001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Antimony	mg/L	ND	0.1	0.1	0.11	0.11	113	112	75-125	1	20	
Arsenic	mg/L	10 ug/L	0.1	0.1	0.12	0.13	112	121	75-125	7	20	

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QUALITY CONTROL DATA

Project: Plant McDonough QTR
Pace Project No.: 92697332

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4203302 4203303

Parameter	Units	92696416001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Barium	mg/L	91.7 ug/L	0.1	0.1	0.19	0.19	101	94	75-125	4	20	
Beryllium	mg/L	0.16J ug/L	0.1	0.1	0.089	0.088	89	88	75-125	1	20	
Boron	mg/L	18.1	1	1	20.7	22.2	254	412	75-125	7	20	M1
Cadmium	mg/L	ND	0.1	0.1	0.093	0.092	93	92	75-125	1	20	
Chromium	mg/L	ND	0.1	0.1	0.10	0.10	101	103	75-125	2	20	
Cobalt	mg/L	0.020J	0.1	0.1	0.12	0.11	97	95	75-125	2	20	
Lead	mg/L	ND	0.1	0.1	0.10	0.097	100	97	75-125	4	20	
Lithium	mg/L	27.2J ug/L	0.1	0.1	0.12	0.12	97	94	75-125	2	20	
Molybdenum	mg/L	62.5 ug/L	0.1	0.1	0.17	0.17	110	111	75-125	1	20	
Selenium	mg/L	1.8J ug/L	0.1	0.1	0.12	0.13	118	128	75-125	8	20	M1
Thallium	mg/L	1.1 ug/L	0.1	0.1	0.11	0.10	104	101	75-125	4	20	

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QUALITY CONTROL DATA

Project: Plant McDonough QTR
Pace Project No.: 92697332

QC Batch: 813851
QC Batch Method: EPA 7470A
Analysis Method: EPA 7470A
Analysis Description: 7470 Mercury
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92697332001, 92697332002, 92697332003

METHOD BLANK: 4213634 Matrix: Water
Associated Lab Samples: 92697332001, 92697332002, 92697332003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	ND	0.00020	0.00013	11/17/23 09:20	

LABORATORY CONTROL SAMPLE: 4213635

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: 4213636 4213637

Parameter	Units	92698092002 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	0.0022	91	88	75-125	3	20	

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QUALITY CONTROL DATA

Project: Plant McDonough QTR
Pace Project No.: 92697332

QC Batch: 811761 | 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: 92697332001, 92697332002, 92697332003

METHOD BLANK: 4202861 Matrix: Water
Associated Lab Samples: 92697332001, 92697332002, 92697332003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	25.0	25.0	11/08/23 15:40	

LABORATORY CONTROL SAMPLE: 4202862

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	381	95	80-120	

SAMPLE DUPLICATE: 4202863

Parameter	Units	92696723001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	4280	4380	2	10	

SAMPLE DUPLICATE: 4202864

Parameter	Units	92697332001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	279	289	4	10	

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

REPORT OF LABORATORY ANALYSIS

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9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: Plant McDonough QTR
Pace Project No.: 92697332

QC Batch: 811950
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: 92697332001, 92697332002, 92697332003

METHOD BLANK: 4204159 Matrix: Water
Associated Lab Samples: 92697332001, 92697332002, 92697332003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.60	11/08/23 20:26	
Fluoride	mg/L	ND	0.10	0.050	11/08/23 20:26	
Sulfate	mg/L	ND	1.0	0.50	11/08/23 20:26	

LABORATORY CONTROL SAMPLE: 4204160

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	52.5	105	90-110	
Fluoride	mg/L	2.5	2.7	109	90-110	
Sulfate	mg/L	50	51.7	103	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4204161 4204162

Parameter	Units	92697397007 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	4.0	50	50	57.0	58.3	106	109	90-110	2	10	
Fluoride	mg/L	0.052J	2.5	2.5	2.7	2.7	105	108	90-110	2	10	
Sulfate	mg/L	ND	50	50	52.0	53.3	103	106	90-110	2	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4204163 4204164

Parameter	Units	92697473001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	2.8	50	50	55.7	57.4	106	109	90-110	3	10	
Fluoride	mg/L	ND	2.5	2.5	2.7	2.7	106	108	90-110	2	10	
Sulfate	mg/L	1.4	50	50	53.0	54.7	103	107	90-110	3	10	

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QUALIFIERS

Project: Plant McDonough QTR
Pace Project No.: 92697332

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: Plant McDonough QTR
Pace Project No.: 92697332

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92697332001	**MCD-DGWC-121**	EPA 3010A	813738	EPA 6010D	813803
92697332002	**MCD-AP-1-FD-1**	EPA 3010A	813738	EPA 6010D	813803
92697332003	**MCD-AP-1-FB-1**	EPA 3010A	813738	EPA 6010D	813803
92697332001	**MCD-DGWC-121**	EPA 3005A	811845	EPA 6020B	811959
92697332002	**MCD-AP-1-FD-1**	EPA 3005A	811845	EPA 6020B	811959
92697332003	**MCD-AP-1-FB-1**	EPA 3005A	811845	EPA 6020B	811959
92697332001	**MCD-DGWC-121**	EPA 7470A	813851	EPA 7470A	813986
92697332002	**MCD-AP-1-FD-1**	EPA 7470A	813851	EPA 7470A	813986
92697332003	**MCD-AP-1-FB-1**	EPA 7470A	813851	EPA 7470A	813986
92697332001	**MCD-DGWC-121**	SM 2540C-2015	811761		
92697332002	**MCD-AP-1-FD-1**	SM 2540C-2015	811761		
92697332003	**MCD-AP-1-FB-1**	SM 2540C-2015	811761		
92697332001	**MCD-DGWC-121**	EPA 300.0 Rev 2.1 1993	811950		
92697332002	**MCD-AP-1-FD-1**	EPA 300.0 Rev 2.1 1993	811950		
92697332003	**MCD-AP-1-FB-1**	EPA 300.0 Rev 2.1 1993	811950		

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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# : 92697332

92697332

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

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

Date/Initials Person Examining Contents: 11/7/23 tmf

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: 5.9 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): 5.9

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.
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: W	☑ 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: _____

WO#: 92697332

PM: BV Due Date: 11/22/23

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.

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)	DG94-40 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		1	1			1	1																		2				
2		1	1			1	1																		2				
3		1	1			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

ction A quired Client Information:	Section B Required Project Information:	Section C Invoice Information:
mpany: Georgia Power - Coal Combustion Residuals	Report To: Lauren Coker	Attention: scsinvoices@southernco.com
dress: 2480 Maner Road	Copy To: WSP	Company Name:
Atlanta, GA 30339		Address:
ail: laucoker@southernco.com	Purchase Order #:	Pace Quote:
one: (470) 620-6176 Fax:	Project Name: Plant McDonough Quarterly	Pace Project Manager: Bonnie Vang
quested Due Date: 10 Day TAT	Project #: 31406440.McD23	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 + Mg, Na, K, Fe	Cl, F SO4	Radium 9513/9320	TDS	Sulfide	Residual Chlorine (Y/N)	92657332
																	N	N	N	N	N		
1	MCD-DGWC-121	WG	G	11/7/23	11:41		6	2		3		1					X	X	X	X	X		WW1
3	MCD-AP-1-FD-1	WG	G	11/7/23	-		6	2		3		1					X	X	X	X	X		WW2
5	MCD-AP-1-FB-1	WQ	G	11/7/23	12:00		6	2		3		1					X	X	X	X	X		WW3
6																							
7																							
8																							
9																							
10																							
11																							
12																							
13																							
14																							

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	SAMPLE CONDITIONS
sk Code: MCD-CCR-OTH-20231107	M. Eric Mann WSP	11/07/23	1730	Charles Harris	11/7/23	1730

DATE Signed:

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

November 30, 2023

Lauren Hartley
Southern Co.
241 Ralph McGill Blvd
NE, Bin 10160
Atlanta, GA 30308

RE: Project: Plant McDonough QTR- RADs
Pace Project No.: 92697333

Dear Lauren Hartley:

Enclosed are the analytical results for sample(s) received by the laboratory on November 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 - Greensburg

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

Sincerely,

Bonnie Vang
bonnie.vang@pacelabs.com
704-977-0968
Project Manager

Enclosures

cc: Yong Cheng, WSP
Daniela Herrera, Golder
Andrea McClure, WSP
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.: 92697333

Pace Analytical Services Pennsylvania

1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
ANAB DOD-ELAP Rad Accreditation #: L2417
ANABISO/IEC 17025:2017 Rad Cert#: L24170
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California Certification #: 2950
Colorado Certification #: PA01547
Connecticut Certification #: PH-0694
EPA Region 4 DW Rad
Florida/TNI Certification #: E87683
Georgia Certification #: C040
Guam Certification
Hawaii Certification
Idaho Certification
Illinois Certification
Indiana Certification
Iowa Certification #: 391
Kansas Certification #: E-10358
Kentucky Certification #: KY90133
KY WW Permit #: KY0098221
KY WW Permit #: KY0000221
Louisiana DHH/TNI Certification #: LA010
Louisiana DEQ/TNI Certification #: 04086
Maine Certification #: 2023021
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 #: PA014572023-03
New Hampshire/TNI Certification #: 297622
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 #: PA200002-015
Pennsylvania/TNI Certification #: 65-00282
Puerto Rico Certification #: PA01457
Rhode Island Certification #: 65-00282
South Dakota Certification
Tennessee Certification #: TN02867
Texas/TNI Certification #: T104704188-22-18
Utah/TNI Certification #: PA014572223-14
USDA Soil Permit #: 525-23-67-77263
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

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SAMPLE SUMMARY

Project: Plant McDonough QTR- RADs
Pace Project No.: 92697333

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92697333001	**MCD-DGWC-121**	Water	11/07/23 11:41	11/07/23 17:30
92697333002	**MCD-AP-1-FD-1**	Water	11/07/23 00:00	11/07/23 17:30
92697333003	**MCD-AP-1-FB-1**	Water	11/07/23 12:00	11/07/23 17:30

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SAMPLE ANALYTE COUNT

Project: Plant McDonough QTR- RADs
Pace Project No.: 92697333

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92697333001	**MCD-DGWC-121**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	ZPC	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92697333002	**MCD-AP-1-FD-1**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	ZPC	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92697333003	**MCD-AP-1-FB-1**	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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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant McDonough QTR- RADs
Pace Project No.: 92697333

Sample: MCD-DGWC-121 **Lab ID: 92697333001** Collected: 11/07/23 11:41 Received: 11/07/23 17:30 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	**0.285 ± 0.150 (0.210) C:78% T:NA**	pCi/L	11/28/23 08:16	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.358U ± 0.350 (0.719) C:82% T:86%**	pCi/L	11/20/23 15:09	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.643U ± 0.500 (0.929)**	pCi/L	11/30/23 10:38	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant McDonough QTR- RADs
Pace Project No.: 92697333

Sample: MCD-AP-1-FD-1 **Lab ID: 92697333002** Collected: 11/07/23 00:00 Received: 11/07/23 17:30 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	**0.161U ± 0.128 (0.229) C:75% T:NA**	pCi/L	11/28/23 08:19	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.650 ± 0.360 (0.633) C:82% T:85%**	pCi/L	11/20/23 15:09	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.811U ± 0.488 (0.862)**	pCi/L	11/30/23 10:38	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant McDonough QTR- RADs
Pace Project No.: 92697333

Sample: MCD-AP-1-FB-1 **Lab ID: 92697333003** Collected: 11/07/23 12:00 Received: 11/07/23 17:30 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	**0.0267U ± 0.109 (0.268) C:85% T:NA**	pCi/L	11/28/23 08:16	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.322U ± 0.311 (0.634) C:85% T:83%**	pCi/L	11/20/23 15:09	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.349U ± 0.420 (0.902)**	pCi/L	11/30/23 10:38	7440-14-4	

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QUALITY CONTROL - RADIOCHEMISTRY

Project: Plant McDonough QTR- RADs
Pace Project No.: 92697333

QC Batch: 629157 Analysis Method: EPA 9315
QC Batch Method: EPA 9315 Analysis Description: 9315 Total Radium
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92697333001, 92697333002, 92697333003

METHOD BLANK: 3067420 Matrix: Water
Associated Lab Samples: 92697333001, 92697333002, 92697333003

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	-0.0320 ± 0.0670 (0.209) C:96% T:NA	pCi/L	11/28/23 08:15	

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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9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL - RADIOCHEMISTRY

Project: Plant McDonough QTR- RADs
Pace Project No.: 92697333

QC Batch: 629421
QC Batch Method: EPA 9320
Analysis Method: EPA 9320
Analysis Description: 9320 Radium 228
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92697333001, 92697333002, 92697333003

METHOD BLANK: 3068446
Matrix: Water
Associated Lab Samples: 92697333001, 92697333002, 92697333003

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.204 ± 0.284 (0.605) C:83% T:91%	pCi/L	11/20/23 15:09	

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

REPORT OF LABORATORY ANALYSIS

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Huntersville, NC 28078
(704)875-9092

QUALIFIERS

Project: Plant McDonough QTR- RADs
Pace Project No.: 92697333

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.: 92697333

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92697333001	**MCD-DGWC-121**	EPA 9315	629157		
92697333002	**MCD-AP-1-FD-1**	EPA 9315	629157		
92697333003	**MCD-AP-1-FB-1**	EPA 9315	629157		
92697333001	**MCD-DGWC-121**	EPA 9320	629421		
92697333002	**MCD-AP-1-FD-1**	EPA 9320	629421		
92697333003	**MCD-AP-1-FB-1**	EPA 9320	629421		
92697333001	**MCD-DGWC-121**	Total Radium Calculation	632927		
92697333002	**MCD-AP-1-FD-1**	Total Radium Calculation	632927		
92697333003	**MCD-AP-1-FB-1**	Total Radium Calculation	632927		

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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# : 92697333**

92697333

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

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

Date/Initials Person Examining Contents: 11/7/23 tmm

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: 5.9 **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): 5.9

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.
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: W	☑ 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#: 92697333

PM: BV Due Date: 12/01/23

CLIENT: 92-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)	8012	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			1	1																		2				
2		1	1			1	1																		2				
3		1	1			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

Section A	Section B	Section C	
Required Client Information:	Required Project Information:	Invoice Information:	1 Of 1
Company: Georgia Power - Coal Combustion Residuals	Report To: Lauren Coker	Attention: scsinvoices@southernco.com	
Address: 2480 Maner Road Atlanta, GA 30339	Copy To: WSP	Company Name:	Regulatory Agency
Email: laucoker@southernco.com	Purchase Order #:	Address:	
Phone: (470) 620-6176 Fax:	Project Name: Plant McDonough Quarterly	Pace Quote:	
Requested Due Date: 10 Day TAT	Project #: 31406440.McD23	Pace Project Manager: Bonnie Vang	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	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 9513/9320	TDS	Sulfide	Residual Chlorine (Y/N)	92697333
1	MCD-DGWC-121	WG	G	11/7/23	11:41		6	2		3		1					X	X	X	X	X		001
3	MCD-AP-1-FD-1	WG	G	11/7/23	-		6	2		3		1					X	X	X	X	X		002
5	MCD-AP-1-FB-1	WQ	G	11/7/23	12:00		6	2		3		1					X	X	X	X	X		003
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-OTH-20231107	[illegible] WSP	11/07/23	1730	[signature]	11/9/23	1730

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-228
Analyst:	ZPC
Date:	11/16/2023
Worklist:	76364
Matrix:	WT

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	3068446
MB concentration:	0.204
M/B 2 Sigma CSU:	0.284
MB MDC:	0.605
MB Numerical Performance Indicator:	1.41
MB Status vs Numerical Indicator:	Pass
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	LCSD (Y or N)?	Y
	LCS76364	LCSD76364
Count Date:	11/20/2023	11/20/2023
Spike I.D.:	23-043	23-043
Decay Corrected Spike Concentration (pCi/mL):	38.955	38.955
Volume Used (mL):	0.10	0.10
Aliquot Volume (L, g, F):	0.817	0.821
Target Conc. (pCi/L, g, F):	4.766	4.746
Uncertainty (Calculated):	0.234	0.233
Result (pCi/L, g, F):	4.696	4.344
LCS/LCSD 2 Sigma CSU (pCi/L, g, F):	1.038	0.977
Numerical Performance Indicator:	-0.13	-0.78
Percent Recovery:	98.52%	91.55%
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.:	LCS76364	Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Duplicate Sample I.D.	LCSD76364	
Sample Result (pCi/L, g, F):	4.696	
Sample Result 2 Sigma CSU (pCi/L, g, F):	1.038	
Sample Duplicate Result (pCi/L, g, F):	4.344	
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:	0.483	
(Based on the LCS/LCSD Percent Recoveries) Duplicate RPD:	7.34%	
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
11/21/23

11.21.23

Quality Control Sample Performance Assessment

Pace Analytical
www.pacelabs.com

Test:	Ra-226
Analyst:	SLC
Date:	11/15/2023
Worklist:	76332
Matrix:	DW

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	3067420
MB concentration:	-0.032
M/B Counting Uncertainty:	0.067
MB MDC:	0.209
MB Numerical Performance Indicator:	-0.94
MB Status vs Numerical Indicator:	N/A
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	LCSD (Y or N)?	Y
	LCS76332	LCSD76332
Count Date:	11/28/2023	11/28/2023
Spike I.D.:	23-014	23-014
Decay Corrected Spike Concentration (pCi/mL):	25.028	25.028
Volume Used (mL):	0.10	0.10
Aliquot Volume (L, g, F):	0.501	0.501
Target Conc. (pCi/L, g, F):	4.992	4.991
Uncertainty (Calculated):	0.235	0.235
Result (pCi/L, g, F):	5.340	4.917
LCS/LCSD Counting Uncertainty (pCi/L, g, F):	0.507	0.480
Numerical Performance Indicator:	1.22	-0.27
Percent Recovery:	106.99%	98.50%
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.:	LCS76332	
Duplicate Sample I.D.	LCSD76332	
Sample Result (pCi/L, g, F):	5.340	
Sample Result Counting Uncertainty (pCi/L, g, F):	0.507	
Sample Duplicate Result (pCi/L, g, F):	4.917	
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):	0.480	
Are sample and/or duplicate results below RL?	NO	
Duplicate Numerical Performance Indicator:	1.190	
(Based on the LCS/LCSD Percent Recoveries) Duplicate RPD:	8.26%	
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:

CT 11-28-23

LAM 11/28/23

APPENDIX B

Laboratory Analytical Data January-February 2024

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

February 19, 2024

Lauren Hartley
Southern Co.
241 Ralph McGill Blvd
NE, Bin 10160
Atlanta, GA 30308

RE: Project: Plant McD AP-1 Well Network
Pace Project No.: 92710939

Dear Lauren Hartley:

Enclosed are the analytical results for sample(s) received by the laboratory between January 31, 2024 and February 02, 2024. 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,

Bonnie Vang

Bonnie Vang
bonnie.vang@pacelabs.com
704-977-0968
Project Manager

Enclosures

cc: Yong Cheng, WSP
Daniela Herrera, Golder
Andrea McClure, WSP
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 McD AP-1 Well Network
Pace Project No.: 92710939

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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Huntersville, NC 28078
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SAMPLE SUMMARY

Project: Plant McD AP-1 Well Network
Pace Project No.: 92710939

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92710939001	**MCD-DGWC-38**	Water	01/30/24 14:47	01/31/24 09:28
92710939002	**MCD-DGWC-40**	Water	01/30/24 12:40	01/31/24 09:28
92710939003	**MCD-AP1-FD-1**	Water	01/30/24 00:00	01/31/24 09:28
92710939004	**MCD-DGWC-39**	Water	01/31/24 10:10	02/01/24 09:42
92710939005	**MCD-DGWC-68A**	Water	01/31/24 11:50	02/01/24 09:42
92710939006	**MCD-DGWC-121**	Water	01/31/24 15:02	02/01/24 09:42
92710939007	**MCD-DGWC-69**	Water	01/31/24 14:55	02/01/24 09:42
92710939008	**MCD-AP1-FB-1**	Water	01/31/24 15:30	02/01/24 09:42
92710939009	**MCD-DGWC-37**	Water	01/31/24 11:37	02/01/24 09:42
92710939010	**MCD-AP1-EB-1**	Water	01/31/24 10:30	02/01/24 09:42
92710939011	**MCD-DGWC-67**	Water	02/01/24 10:13	02/02/24 14:17

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Huntersville, NC 28078
(704)875-9092

SAMPLE ANALYTE COUNT

Project: Plant McD AP-1 Well Network
Pace Project No.: 92710939

Lab ID	Sample ID	Method	Analysts	Analytes Reported
92710939001	**MCD-DGWC-38**	EPA 6010D	AJM, DRB	5
		EPA 6020B	MT1	13
		EPA 7470A	VB	1
		SM 2320B-2011	YEG	3
		SM 2540C-2015	JAY	1
		SM 4500-S2D-2011	JP1	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92710939002	**MCD-DGWC-40**	EPA 6010D	AJM, DRB	5
		EPA 6020B	MT1	13
		EPA 7470A	VB	1
		SM 2320B-2011	YEG	3
		SM 2540C-2015	JAY	1
		SM 4500-S2D-2011	JP1	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92710939003	**MCD-AP1-FD-1**	EPA 6010D	AJM, DRB	5
		EPA 6020B	MT1	13
		EPA 7470A	VB	1
		SM 2320B-2011	YEG	3
		SM 2540C-2015	JAY	1
		SM 4500-S2D-2011	JP1	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92710939004	**MCD-DGWC-39**	EPA 6010D	AJM, DRB	5
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2320B-2011	YEG	3
		SM 2540C-2015	JAY	1
		SM 4500-S2D-2011	JP1	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92710939005	**MCD-DGWC-68A**	EPA 6010D	AJM, DRB	5
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2320B-2011	YEG	3
		SM 2540C-2015	JAY	1
		SM 4500-S2D-2011	JP1	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92710939006	**MCD-DGWC-121**	EPA 6010D	AJM, DRB	5
		EPA 6020B	CW1	13

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SAMPLE ANALYTE COUNT

Project: Plant McD AP-1 Well Network
Pace Project No.: 92710939

Lab ID	Sample ID	Method	Analysts	Analytes Reported
		EPA 7470A	VB	1
		SM 2320B-2011	YEG	3
		SM 2540C-2015	JAY	1
		SM 4500-S2D-2011	JP1	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92710939007	**MCD-DGWC-69**	EPA 6010D	AJM, DRB	5
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2320B-2011	YEG	3
		SM 2540C-2015	JAY	1
		SM 4500-S2D-2011	JP1	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92710939008	**MCD-AP1-FB-1**	EPA 6010D	DRB	5
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2320B-2011	YEG	3
		SM 2540C-2015	JAY	1
		SM 4500-S2D-2011	JP1	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92710939009	**MCD-DGWC-37**	EPA 6010D	AJM, DRB	5
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2320B-2011	YEG	3
		SM 2540C-2015	JAY	1
		SM 4500-S2D-2011	JP1	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92710939010	**MCD-AP1-EB-1**	EPA 6010D	DRB	5
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2320B-2011	YEG	3
		SM 2540C-2015	JAY	1
		SM 4500-S2D-2011	JP1	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92710939011	**MCD-DGWC-67**	EPA 6010D	AJM, DRB	5
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2320B-2011	SMS	3

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SAMPLE ANALYTE COUNT

Project: Plant McD AP-1 Well Network
Pace Project No.: 92710939

Lab ID	Sample ID	Method	Analysts	Analytes Reported
		SM 2540C-2015	JAY	1
		SM 4500-S2D-2011	JP1	1
		EPA 300.0 Rev 2.1 1993	JCM	3

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

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ANALYTICAL RESULTS

Project: Plant McD AP-1 Well Network
Pace Project No.: 92710939

Sample: MCD-DGWC-38 **Lab ID: 92710939001** Collected: 01/30/24 14:47 Received: 01/31/24 09:28 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								
Sodium	**11.3**	mg/L	1.0	0.58	1	02/01/24 15:40	02/07/24 00:53	7440-23-5	
Iron	**0.087**	mg/L	0.040	0.025	1	02/01/24 15:40	02/06/24 02:07	7439-89-6	
Potassium	**4.7**	mg/L	0.50	0.15	1	02/01/24 15:40	02/06/24 02:07	7440-09-7	
Calcium	**80.8**	mg/L	1.0	0.12	1	02/01/24 15:40	02/06/24 02:07	7440-70-2	
Magnesium	**25.6**	mg/L	0.050	0.012	1	02/01/24 15:40	02/06/24 02:07	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	0.00054	1	02/01/24 10:22	02/01/24 19:01	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00084	1	02/01/24 10:22	02/01/24 19:01	7440-38-2	
Barium	**0.031**	mg/L	0.0050	0.00047	1	02/01/24 10:22	02/01/24 19:01	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000094	1	02/01/24 10:22	02/01/24 19:01	7440-41-7	
Boron	**2.9**	mg/L	0.040	0.012	1	02/01/24 10:22	02/01/24 19:01	7440-42-8	
Cadmium	**0.00024J**	mg/L	0.00050	0.00010	1	02/01/24 10:22	02/01/24 19:01	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0019	1	02/01/24 10:22	02/01/24 19:01	7440-47-3	
Cobalt	**0.0020J**	mg/L	0.0050	0.00032	1	02/01/24 10:22	02/01/24 19:01	7440-48-4	
Lead	ND	mg/L	0.0010	0.00016	1	02/01/24 10:22	02/01/24 19:01	7439-92-1	
Lithium	**0.0030J**	mg/L	0.030	0.0016	1	02/01/24 10:22	02/01/24 19:01	7439-93-2	
Molybdenum	**0.0018J**	mg/L	0.010	0.00062	1	02/01/24 10:22	02/01/24 19:01	7439-98-7	
Selenium	ND	mg/L	0.0050	0.00096	1	02/01/24 10:22	02/01/24 19:01	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00038	1	02/01/24 10:22	02/01/24 19:01	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	02/08/24 13:00	02/08/24 16:02	7439-97-6	
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville								
Alkalinity,Bicarbonate (CaCO3)	**102**	mg/L	5.0	5.0	1		02/05/24 14:51		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		02/05/24 14:51		
Alkalinity, Total as CaCO3	**102**	mg/L	5.0	5.0	1		02/05/24 14:51		
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Asheville								
Total Dissolved Solids	**492**	mg/L	25.0	25.0	1		02/01/24 11:53		
4500S2D Sulfide Water	Analytical Method: SM 4500-S2D-2011 Pace Analytical Services - Asheville								
Sulfide	ND	mg/L	0.10	0.022	1		02/01/24 06:25	18496-25-8	
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		02/01/24 21:37	16887-00-6	M1
Fluoride	**0.078J**	mg/L	0.10	0.050	1		02/01/24 21:37	16984-48-8	M1

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ANALYTICAL RESULTS

Project: Plant McD AP-1 Well Network
Pace Project No.: 92710939

Sample: MCD-DGWC-38 **Lab ID: 92710939001** Collected: 01/30/24 14:47 Received: 01/31/24 09:28 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								
Sulfate	**220**	mg/L	5.0	2.5	5		02/01/24 12:20	14808-79-8	

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ANALYTICAL RESULTS

Project: Plant McD AP-1 Well Network
Pace Project No.: 92710939

Sample: MCD-DGWC-40 **Lab ID: 92710939002** Collected: 01/30/24 12:40 Received: 01/31/24 09:28 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								
Sodium	**17.8**	mg/L	1.0	0.58	1	02/01/24 15:40	02/07/24 00:57	7440-23-5	
Iron	ND	mg/L	0.040	0.025	1	02/01/24 15:40	02/06/24 02:11	7439-89-6	
Potassium	**6.3**	mg/L	0.50	0.15	1	02/01/24 15:40	02/06/24 02:11	7440-09-7	
Calcium	**38.2**	mg/L	1.0	0.12	1	02/01/24 15:40	02/06/24 02:11	7440-70-2	
Magnesium	**17.7**	mg/L	0.050	0.012	1	02/01/24 15:40	02/06/24 02:11	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	0.00054	1	02/01/24 10:22	02/01/24 19:05	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00084	1	02/01/24 10:22	02/01/24 19:05	7440-38-2	
Barium	**0.017**	mg/L	0.0050	0.00047	1	02/01/24 10:22	02/01/24 19:05	7440-39-3	
Beryllium	**0.0032**	mg/L	0.00050	0.000094	1	02/01/24 10:22	02/01/24 19:05	7440-41-7	
Boron	**0.73**	mg/L	0.040	0.012	1	02/01/24 10:22	02/01/24 19:05	7440-42-8	
Cadmium	**0.00073**	mg/L	0.00050	0.00010	1	02/01/24 10:22	02/01/24 19:05	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0019	1	02/01/24 10:22	02/01/24 19:05	7440-47-3	
Cobalt	**0.037**	mg/L	0.0050	0.00032	1	02/01/24 10:22	02/01/24 19:05	7440-48-4	
Lead	ND	mg/L	0.0010	0.00016	1	02/01/24 10:22	02/01/24 19:05	7439-92-1	
Lithium	**0.0023J**	mg/L	0.030	0.0016	1	02/01/24 10:22	02/01/24 19:05	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00062	1	02/01/24 10:22	02/01/24 19:05	7439-98-7	
Selenium	**0.0027J**	mg/L	0.0050	0.00096	1	02/01/24 10:22	02/01/24 19:05	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00038	1	02/01/24 10:22	02/01/24 19:05	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	02/08/24 13:00	02/08/24 16:12	7439-97-6	
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville								
Alkalinity,Bicarbonate (CaCO3)	ND	mg/L	5.0	5.0	1		02/05/24 15:00		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		02/05/24 15:00		
Alkalinity, Total as CaCO3	ND	mg/L	5.0	5.0	1		02/05/24 15:00		
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Asheville								
Total Dissolved Solids	**348**	mg/L	25.0	25.0	1		02/01/24 11:53		
4500S2D Sulfide Water	Analytical Method: SM 4500-S2D-2011 Pace Analytical Services - Asheville								
Sulfide	ND	mg/L	0.10	0.022	1		02/01/24 06:25	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**14.7**	mg/L	1.0	0.60	1		02/01/24 23:07	16887-00-6	
Fluoride	**0.12**	mg/L	0.10	0.050	1		02/01/24 23:07	16984-48-8	

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ANALYTICAL RESULTS

Project: Plant McD AP-1 Well Network
Pace Project No.: 92710939

Sample: MCD-DGWC-40 **Lab ID: 92710939002** Collected: 01/30/24 12:40 Received: 01/31/24 09:28 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								
Sulfate	**179**	mg/L	4.0	2.0	4		02/01/24 13:02	14808-79-8	

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ANALYTICAL RESULTS

Project: Plant McD AP-1 Well Network
Pace Project No.: 92710939

Sample: MCD-AP1-FD-1 **Lab ID: 92710939003** Collected: 01/30/24 00:00 Received: 01/31/24 09:28 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								
Sodium	**17.3**	mg/L	1.0	0.58	1	02/01/24 15:40	02/07/24 01:02	7440-23-5	
Iron	ND	mg/L	0.040	0.025	1	02/01/24 15:40	02/06/24 02:16	7439-89-6	
Potassium	**6.1**	mg/L	0.50	0.15	1	02/01/24 15:40	02/06/24 02:16	7440-09-7	
Calcium	**37.1**	mg/L	1.0	0.12	1	02/01/24 15:40	02/06/24 02:16	7440-70-2	
Magnesium	**17.1**	mg/L	0.050	0.012	1	02/01/24 15:40	02/06/24 02:16	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	0.00054	1	02/01/24 10:22	02/01/24 19:09	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00084	1	02/01/24 10:22	02/01/24 19:09	7440-38-2	
Barium	**0.017**	mg/L	0.0050	0.00047	1	02/01/24 10:22	02/01/24 19:09	7440-39-3	
Beryllium	**0.0031**	mg/L	0.00050	0.000094	1	02/01/24 10:22	02/01/24 19:09	7440-41-7	
Boron	**0.73**	mg/L	0.040	0.012	1	02/01/24 10:22	02/01/24 19:09	7440-42-8	
Cadmium	**0.00077**	mg/L	0.00050	0.00010	1	02/01/24 10:22	02/01/24 19:09	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0019	1	02/01/24 10:22	02/01/24 19:09	7440-47-3	
Cobalt	**0.037**	mg/L	0.0050	0.00032	1	02/01/24 10:22	02/01/24 19:09	7440-48-4	
Lead	ND	mg/L	0.0010	0.00016	1	02/01/24 10:22	02/01/24 19:09	7439-92-1	
Lithium	**0.0023J**	mg/L	0.030	0.0016	1	02/01/24 10:22	02/01/24 19:09	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00062	1	02/01/24 10:22	02/01/24 19:09	7439-98-7	
Selenium	**0.0019J**	mg/L	0.0050	0.00096	1	02/01/24 10:22	02/01/24 19:09	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00038	1	02/01/24 10:22	02/01/24 19:09	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.00013	1	02/08/24 13:00	02/08/24 16:15	7439-97-6	
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville								
Alkalinity,Bicarbonate (CaCO3)	ND	mg/L	5.0	5.0	1		02/05/24 15:04		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		02/05/24 15:04		
Alkalinity, Total as CaCO3	ND	mg/L	5.0	5.0	1		02/05/24 15:04		
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Asheville								
Total Dissolved Solids	**345**	mg/L	25.0	25.0	1		02/01/24 11:53		
4500S2D Sulfide Water	Analytical Method: SM 4500-S2D-2011 Pace Analytical Services - Asheville								
Sulfide	ND	mg/L	0.10	0.022	1		02/01/24 06:25	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**14.5**	mg/L	1.0	0.60	1		02/01/24 23:22	16887-00-6	
Fluoride	**0.11**	mg/L	0.10	0.050	1		02/01/24 23:22	16984-48-8	

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ANALYTICAL RESULTS

Project: Plant McD AP-1 Well Network
Pace Project No.: 92710939

Sample: MCD-AP1-FD-1 **Lab ID: 92710939003** Collected: 01/30/24 00:00 Received: 01/31/24 09:28 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								
Sulfate	**177**	mg/L	4.0	2.0	4		02/01/24 13:16	14808-79-8	

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ANALYTICAL RESULTS

Project: Plant McD AP-1 Well Network
Pace Project No.: 92710939

Sample: MCD-DGWC-39 **Lab ID: 92710939004** Collected: 01/31/24 10:10 Received: 02/01/24 09:42 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	**11.3**	mg/L	0.040	0.025	1	02/02/24 10:25	02/10/24 11:17	7439-89-6	M1
Potassium	**2.3**	mg/L	0.50	0.15	1	02/02/24 10:25	02/10/24 11:17	7440-09-7	
Sodium	**11.6**	mg/L	1.0	0.58	1	02/02/24 10:25	02/07/24 02:34	7440-23-5	M1
Calcium	**76.6**	mg/L	1.0	0.12	1	02/02/24 10:25	02/07/24 02:34	7440-70-2	M1
Magnesium	**19.7**	mg/L	0.050	0.012	1	02/02/24 10:25	02/07/24 02:34	7439-95-4	M1
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	**0.00058J**	mg/L	0.0030	0.00054	1	02/02/24 09:55	02/02/24 17:32	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00084	1	02/02/24 09:55	02/02/24 17:32	7440-38-2	
Barium	**0.10**	mg/L	0.0050	0.00047	1	02/02/24 09:55	02/02/24 17:32	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000094	1	02/02/24 09:55	02/02/24 17:32	7440-41-7	
Boron	**2.3**	mg/L	0.040	0.012	1	02/02/24 09:55	02/02/24 17:32	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00010	1	02/02/24 09:55	02/02/24 17:32	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0019	1	02/02/24 09:55	02/02/24 17:32	7440-47-3	
Cobalt	**0.0058**	mg/L	0.0050	0.00032	1	02/02/24 09:55	02/02/24 17:32	7440-48-4	
Lead	ND	mg/L	0.0010	0.00016	1	02/02/24 09:55	02/02/24 17:32	7439-92-1	
Lithium	ND	mg/L	0.030	0.0016	1	02/02/24 09:55	02/02/24 17:32	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00062	1	02/02/24 09:55	02/02/24 17:32	7439-98-7	
Selenium	ND	mg/L	0.0050	0.00096	1	02/02/24 09:55	02/02/24 17:32	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00038	1	02/02/24 09:55	02/02/24 17:32	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	02/08/24 13:00	02/08/24 16:18	7439-97-6	
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville								
Alkalinity,Bicarbonate (CaCO3)	**232**	mg/L	5.0	5.0	1		02/05/24 17:34		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		02/05/24 17:34		
Alkalinity, Total as CaCO3	**232**	mg/L	5.0	5.0	1		02/05/24 17:34		
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Asheville								
Total Dissolved Solids	**387**	mg/L	25.0	25.0	1		02/04/24 12:59		
4500S2D Sulfide Water	Analytical Method: SM 4500-S2D-2011 Pace Analytical Services - Asheville								
Sulfide	ND	mg/L	0.10	0.022	1		02/03/24 06:15	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**6.8**	mg/L	1.0	0.60	1		02/02/24 04:01	16887-00-6	
Fluoride	**0.11**	mg/L	0.10	0.050	1		02/02/24 04:01	16984-48-8	

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ANALYTICAL RESULTS

Project: Plant McD AP-1 Well Network
Pace Project No.: 92710939

Sample: MCD-DGWC-39 **Lab ID: 92710939004** Collected: 01/31/24 10:10 Received: 02/01/24 09:42 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								
Sulfate	**106**	mg/L	2.0	1.0	2		02/02/24 08:24	14808-79-8	

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ANALYTICAL RESULTS

Project: Plant McD AP-1 Well Network
Pace Project No.: 92710939

Sample: MCD-DGWC-68A **Lab ID: 92710939005** Collected: 01/31/24 11:50 Received: 02/01/24 09:42 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	**0.064**	mg/L	0.040	0.025	1	02/02/24 10:25	02/10/24 11:32	7439-89-6	
Potassium	**4.3**	mg/L	0.50	0.15	1	02/02/24 10:25	02/10/24 11:32	7440-09-7	
Sodium	**9.8**	mg/L	1.0	0.58	1	02/02/24 10:25	02/07/24 03:09	7440-23-5	
Calcium	**54.6**	mg/L	1.0	0.12	1	02/02/24 10:25	02/07/24 03:09	7440-70-2	
Magnesium	**19.1**	mg/L	0.050	0.012	1	02/02/24 10:25	02/07/24 03:09	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	0.00054	1	02/02/24 09:55	02/02/24 17:37	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00084	1	02/02/24 09:55	02/02/24 17:37	7440-38-2	
Barium	**0.11**	mg/L	0.0050	0.00047	1	02/02/24 09:55	02/02/24 17:37	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000094	1	02/02/24 09:55	02/02/24 17:37	7440-41-7	
Boron	**1.9**	mg/L	0.040	0.012	1	02/02/24 09:55	02/02/24 17:37	7440-42-8	
Cadmium	**0.00026J**	mg/L	0.00050	0.00010	1	02/02/24 09:55	02/02/24 17:37	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0019	1	02/02/24 09:55	02/02/24 17:37	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00032	1	02/02/24 09:55	02/02/24 17:37	7440-48-4	
Lead	ND	mg/L	0.0010	0.00016	1	02/02/24 09:55	02/02/24 17:37	7439-92-1	
Lithium	ND	mg/L	0.030	0.0016	1	02/02/24 09:55	02/02/24 17:37	7439-93-2	
Molybdenum	**0.20**	mg/L	0.010	0.00062	1	02/02/24 09:55	02/02/24 17:37	7439-98-7	
Selenium	ND	mg/L	0.0050	0.00096	1	02/02/24 09:55	02/02/24 17:37	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00038	1	02/02/24 09:55	02/02/24 17:37	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	02/08/24 13:00	02/08/24 16:26	7439-97-6	
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville								
Alkalinity,Bicarbonate (CaCO3)	**202**	mg/L	5.0	5.0	1		02/05/24 17:42		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		02/05/24 17:42		
Alkalinity, Total as CaCO3	**202**	mg/L	5.0	5.0	1		02/05/24 17:42		
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Asheville								
Total Dissolved Solids	**261**	mg/L	25.0	25.0	1		02/04/24 12:59		
4500S2D Sulfide Water	Analytical Method: SM 4500-S2D-2011 Pace Analytical Services - Asheville								
Sulfide	ND	mg/L	0.10	0.022	1		02/03/24 06:16	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**3.9**	mg/L	1.0	0.60	1		02/02/24 04:15	16887-00-6	
Fluoride	**0.092J**	mg/L	0.10	0.050	1		02/02/24 04:15	16984-48-8	

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ANALYTICAL RESULTS

Project: Plant McD AP-1 Well Network
Pace Project No.: 92710939

Sample: MCD-DGWC-68A **Lab ID: 92710939005** Collected: 01/31/24 11:50 Received: 02/01/24 09:42 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								
Sulfate	**33.2**	mg/L	1.0	0.50	1		02/02/24 04:15	14808-79-8	

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ANALYTICAL RESULTS

Project: Plant McD AP-1 Well Network
Pace Project No.: 92710939

Sample: MCD-DGWC-121 **Lab ID: 92710939006** Collected: 01/31/24 15:02 Received: 02/01/24 09:42 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	**2.0**	mg/L	0.20	0.13	5	02/02/24 10:25	02/10/24 11:37	7439-89-6	
Potassium	**5.3**	mg/L	2.5	0.76	5	02/02/24 10:25	02/10/24 11:37	7440-09-7	
Sodium	**8.9**	mg/L	1.0	0.58	1	02/02/24 10:25	02/07/24 03:28	7440-23-5	
Calcium	**37.8**	mg/L	1.0	0.12	1	02/02/24 10:25	02/07/24 03:28	7440-70-2	
Magnesium	**10.9**	mg/L	0.050	0.012	1	02/02/24 10:25	02/07/24 03:28	7439-95-4	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00054	1	02/02/24 09:55	02/02/24 17:41	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00084	1	02/02/24 09:55	02/02/24 17:41	7440-38-2	
Barium	**0.050**	mg/L	0.0050	0.00047	1	02/02/24 09:55	02/02/24 17:41	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000094	1	02/02/24 09:55	02/02/24 17:41	7440-41-7	
Boron	**1.6**	mg/L	0.040	0.012	1	02/02/24 09:55	02/02/24 17:41	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00010	1	02/02/24 09:55	02/02/24 17:41	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0019	1	02/02/24 09:55	02/02/24 17:41	7440-47-3	
Cobalt	**0.0015J**	mg/L	0.0050	0.00032	1	02/02/24 09:55	02/02/24 17:41	7440-48-4	
Lead	ND	mg/L	0.0010	0.00016	1	02/02/24 09:55	02/02/24 17:41	7439-92-1	
Lithium	**0.0045J**	mg/L	0.030	0.0016	1	02/02/24 09:55	02/02/24 17:41	7439-93-2	
Molybdenum	**0.00092J**	mg/L	0.010	0.00062	1	02/02/24 09:55	02/02/24 17:41	7439-98-7	
Selenium	ND	mg/L	0.0050	0.00096	1	02/02/24 09:55	02/02/24 17:41	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00038	1	02/02/24 09:55	02/02/24 17:41	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	02/08/24 13:00	02/08/24 16:28	7439-97-6	
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville								
Alkalinity,Bicarbonate (CaCO3)	**84.3**	mg/L	5.0	5.0	1		02/05/24 17:56		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		02/05/24 17:56		
Alkalinity, Total as CaCO3	**84.3**	mg/L	5.0	5.0	1		02/05/24 17:56		
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Asheville								
Total Dissolved Solids	**220**	mg/L	25.0	25.0	1		02/04/24 12:59		
4500S2D Sulfide Water	Analytical Method: SM 4500-S2D-2011 Pace Analytical Services - Asheville								
Sulfide	**0.053J**	mg/L	0.10	0.022	1		02/03/24 06:16	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**3.8**	mg/L	1.0	0.60	1		02/02/24 04:29	16887-00-6	
Fluoride	**0.070J**	mg/L	0.10	0.050	1		02/02/24 04:29	16984-48-8	

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ANALYTICAL RESULTS

Project: Plant McD AP-1 Well Network
Pace Project No.: 92710939

Sample: MCD-DGWC-121 **Lab ID: 92710939006** Collected: 01/31/24 15:02 Received: 02/01/24 09:42 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								
Sulfate	**73.7**	mg/L	1.0	0.50	1		02/02/24 04:29	14808-79-8	

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ANALYTICAL RESULTS

Project: Plant McD AP-1 Well Network
Pace Project No.: 92710939

Sample: MCD-DGWC-69 **Lab ID: 92710939007** Collected: 01/31/24 14:55 Received: 02/01/24 09:42 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	**0.17**	mg/L	0.040	0.025	1	02/02/24 10:25	02/10/24 11:42	7439-89-6	
Potassium	**2.4**	mg/L	0.50	0.15	1	02/02/24 10:25	02/10/24 11:42	7440-09-7	
Sodium	**9.4**	mg/L	1.0	0.58	1	02/02/24 10:25	02/07/24 03:37	7440-23-5	
Calcium	**8.8**	mg/L	1.0	0.12	1	02/02/24 10:25	02/07/24 03:37	7440-70-2	
Magnesium	**2.5**	mg/L	0.050	0.012	1	02/02/24 10:25	02/07/24 03:37	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	0.00054	1	02/02/24 09:55	02/02/24 17:53	7440-36-0	
Arsenic	**0.026**	mg/L	0.0050	0.00084	1	02/02/24 09:55	02/02/24 17:53	7440-38-2	
Barium	**0.048**	mg/L	0.0050	0.00047	1	02/02/24 09:55	02/02/24 17:53	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000094	1	02/02/24 09:55	02/02/24 17:53	7440-41-7	
Boron	**0.025J**	mg/L	0.040	0.012	1	02/02/24 09:55	02/02/24 17:53	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00010	1	02/02/24 09:55	02/02/24 17:53	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0019	1	02/02/24 09:55	02/02/24 17:53	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00032	1	02/02/24 09:55	02/02/24 17:53	7440-48-4	
Lead	ND	mg/L	0.0010	0.00016	1	02/02/24 09:55	02/02/24 17:53	7439-92-1	
Lithium	**0.0021J**	mg/L	0.030	0.0016	1	02/02/24 09:55	02/02/24 17:53	7439-93-2	
Molybdenum	**0.0066J**	mg/L	0.010	0.00062	1	02/02/24 09:55	02/02/24 17:53	7439-98-7	
Selenium	ND	mg/L	0.0050	0.00096	1	02/02/24 09:55	02/02/24 17:53	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00038	1	02/02/24 09:55	02/02/24 17:53	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.00013	1	02/08/24 13:00	02/08/24 16:31	7439-97-6	
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville								
Alkalinity,Bicarbonate (CaCO3)	**40.7**	mg/L	5.0	5.0	1		02/05/24 18:04		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		02/05/24 18:04		
Alkalinity, Total as CaCO3	**40.7**	mg/L	5.0	5.0	1		02/05/24 18:04		
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Asheville								
Total Dissolved Solids	**82.0**	mg/L	25.0	25.0	1		02/04/24 13:00		
4500S2D Sulfide Water	Analytical Method: SM 4500-S2D-2011 Pace Analytical Services - Asheville								
Sulfide	ND	mg/L	0.10	0.022	1		02/03/24 06:17	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**6.0**	mg/L	1.0	0.60	1		02/02/24 04:44	16887-00-6	
Fluoride	**0.086J**	mg/L	0.10	0.050	1		02/02/24 04:44	16984-48-8	

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ANALYTICAL RESULTS

Project: Plant McD AP-1 Well Network
Pace Project No.: 92710939

Sample: MCD-DGWC-69 **Lab ID: 92710939007** Collected: 01/31/24 14:55 Received: 02/01/24 09:42 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								
Sulfate	**7.2**	mg/L	1.0	0.50	1		02/02/24 04:44	14808-79-8	

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ANALYTICAL RESULTS

Project: Plant McD AP-1 Well Network
Pace Project No.: 92710939

Sample: MCD-AP1-FB-1 **Lab ID: 92710939008** Collected: 01/31/24 15:30 Received: 02/01/24 09:42 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	02/02/24 10:25	02/10/24 11:46	7439-89-6	
Potassium	ND	mg/L	0.50	0.15	1	02/02/24 10:25	02/10/24 11:46	7440-09-7	
Sodium	ND	mg/L	1.0	0.58	1	02/02/24 10:25	02/10/24 11:46	7440-23-5	
Calcium	ND	mg/L	1.0	0.12	1	02/02/24 10:25	02/10/24 11:46	7440-70-2	
Magnesium	ND	mg/L	0.050	0.012	1	02/02/24 10:25	02/10/24 11:46	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	0.00054	1	02/02/24 09:55	02/02/24 17:57	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00084	1	02/02/24 09:55	02/02/24 17:57	7440-38-2	
Barium	ND	mg/L	0.0050	0.00047	1	02/02/24 09:55	02/02/24 17:57	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000094	1	02/02/24 09:55	02/02/24 17:57	7440-41-7	
Boron	ND	mg/L	0.040	0.012	1	02/02/24 09:55	02/02/24 17:57	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00010	1	02/02/24 09:55	02/02/24 17:57	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0019	1	02/02/24 09:55	02/02/24 17:57	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00032	1	02/02/24 09:55	02/02/24 17:57	7440-48-4	
Lead	ND	mg/L	0.0010	0.00016	1	02/02/24 09:55	02/02/24 17:57	7439-92-1	
Lithium	ND	mg/L	0.030	0.0016	1	02/02/24 09:55	02/02/24 17:57	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00062	1	02/02/24 09:55	02/02/24 17:57	7439-98-7	
Selenium	ND	mg/L	0.0050	0.00096	1	02/02/24 09:55	02/02/24 17:57	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00038	1	02/02/24 09:55	02/02/24 17:57	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.00013	1	02/08/24 13:00	02/08/24 16:33	7439-97-6	
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville								
Alkalinity,Bicarbonate (CaCO3)	ND	mg/L	5.0	5.0	1		02/05/24 18:20		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		02/05/24 18:20		
Alkalinity, Total as CaCO3	ND	mg/L	5.0	5.0	1		02/05/24 18:20		
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Asheville								
Total Dissolved Solids	ND	mg/L	25.0	25.0	1		02/04/24 13:00		
4500S2D Sulfide Water	Analytical Method: SM 4500-S2D-2011 Pace Analytical Services - Asheville								
Sulfide	ND	mg/L	0.10	0.022	1		02/03/24 06:17	18496-25-8	
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		02/02/24 01:18	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		02/02/24 01:18	16984-48-8	

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ANALYTICAL RESULTS

Project: Plant McD AP-1 Well Network
Pace Project No.: 92710939

Sample: MCD-AP1-FB-1 **Lab ID: 92710939008** Collected: 01/31/24 15:30 Received: 02/01/24 09:42 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								
Sulfate	ND	mg/L	1.0	0.50	1		02/02/24 01:18	14808-79-8	

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ANALYTICAL RESULTS

Project: Plant McD AP-1 Well Network
Pace Project No.: 92710939

Sample: MCD-DGWC-37 **Lab ID: 92710939009** Collected: 01/31/24 11:37 Received: 02/01/24 09:42 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	**0.11**	mg/L	0.040	0.025	1	02/02/24 10:25	02/10/24 11:51	7439-89-6	
Potassium	**4.0**	mg/L	0.50	0.15	1	02/02/24 10:25	02/10/24 11:51	7440-09-7	
Sodium	**9.6**	mg/L	1.0	0.58	1	02/02/24 10:25	02/07/24 03:57	7440-23-5	
Calcium	**60.1**	mg/L	1.0	0.12	1	02/02/24 10:25	02/07/24 03:57	7440-70-2	
Magnesium	**14.0**	mg/L	0.050	0.012	1	02/02/24 10:25	02/07/24 03:57	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	0.00054	1	02/02/24 09:55	02/02/24 18:02	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00084	1	02/02/24 09:55	02/02/24 18:02	7440-38-2	
Barium	**0.086**	mg/L	0.0050	0.00047	1	02/02/24 09:55	02/02/24 18:02	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000094	1	02/02/24 09:55	02/02/24 18:02	7440-41-7	
Boron	**1.9**	mg/L	0.040	0.012	1	02/02/24 09:55	02/02/24 18:02	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00010	1	02/02/24 09:55	02/02/24 18:02	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0019	1	02/02/24 09:55	02/02/24 18:02	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00032	1	02/02/24 09:55	02/02/24 18:02	7440-48-4	
Lead	ND	mg/L	0.0010	0.00016	1	02/02/24 09:55	02/02/24 18:02	7439-92-1	
Lithium	ND	mg/L	0.030	0.0016	1	02/02/24 09:55	02/02/24 18:02	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00062	1	02/02/24 09:55	02/02/24 18:02	7439-98-7	
Selenium	ND	mg/L	0.0050	0.00096	1	02/02/24 09:55	02/02/24 18:02	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00038	1	02/02/24 09:55	02/02/24 18:02	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.00013	1	02/08/24 13:00	02/08/24 16:36	7439-97-6	
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville								
Alkalinity,Bicarbonate (CaCO3)	**143**	mg/L	5.0	5.0	1		02/05/24 18:24		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		02/05/24 18:24		
Alkalinity, Total as CaCO3	**143**	mg/L	5.0	5.0	1		02/05/24 18:24		
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Asheville								
Total Dissolved Solids	**310**	mg/L	25.0	25.0	1		02/04/24 13:00		
4500S2D Sulfide Water	Analytical Method: SM 4500-S2D-2011 Pace Analytical Services - Asheville								
Sulfide	ND	mg/L	0.10	0.022	1		02/03/24 06:18	18496-25-8	
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		02/02/24 04:58	16887-00-6	
Fluoride	**0.069J**	mg/L	0.10	0.050	1		02/02/24 04:58	16984-48-8	

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ANALYTICAL RESULTS

Project: Plant McD AP-1 Well Network
Pace Project No.: 92710939

Sample: MCD-DGWC-37 **Lab ID: 92710939009** Collected: 01/31/24 11:37 Received: 02/01/24 09:42 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								
Sulfate	**98.4**	mg/L	1.0	0.50	1		02/02/24 04:58	14808-79-8	

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ANALYTICAL RESULTS

Project: Plant McD AP-1 Well Network
Pace Project No.: 92710939

Sample: MCD-AP1-EB-1 **Lab ID: 92710939010** Collected: 01/31/24 10:30 Received: 02/01/24 09:42 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	02/02/24 10:25	02/10/24 12:06	7439-89-6	
Potassium	ND	mg/L	0.50	0.15	1	02/02/24 10:25	02/10/24 12:06	7440-09-7	
Sodium	ND	mg/L	1.0	0.58	1	02/02/24 10:25	02/10/24 12:06	7440-23-5	
Calcium	ND	mg/L	1.0	0.12	1	02/02/24 10:25	02/10/24 12:06	7440-70-2	
Magnesium	ND	mg/L	0.050	0.012	1	02/02/24 10:25	02/10/24 12:06	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	0.00054	1	02/02/24 09:55	02/02/24 18:06	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00084	1	02/02/24 09:55	02/02/24 18:06	7440-38-2	
Barium	ND	mg/L	0.0050	0.00047	1	02/02/24 09:55	02/02/24 18:06	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000094	1	02/02/24 09:55	02/02/24 18:06	7440-41-7	
Boron	**0.021J**	mg/L	0.040	0.012	1	02/02/24 09:55	02/02/24 18:06	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00010	1	02/02/24 09:55	02/02/24 18:06	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0019	1	02/02/24 09:55	02/02/24 18:06	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00032	1	02/02/24 09:55	02/02/24 18:06	7440-48-4	
Lead	ND	mg/L	0.0010	0.00016	1	02/02/24 09:55	02/02/24 18:06	7439-92-1	
Lithium	ND	mg/L	0.030	0.0016	1	02/02/24 09:55	02/02/24 18:06	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00062	1	02/02/24 09:55	02/02/24 18:06	7439-98-7	
Selenium	ND	mg/L	0.0050	0.00096	1	02/02/24 09:55	02/02/24 18:06	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00038	1	02/02/24 09:55	02/02/24 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	02/08/24 13:00	02/08/24 16:39	7439-97-6	
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville								
Alkalinity,Bicarbonate (CaCO3)	ND	mg/L	5.0	5.0	1		02/05/24 18:35		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		02/05/24 18:35		
Alkalinity, Total as CaCO3	ND	mg/L	5.0	5.0	1		02/05/24 18:35		
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Asheville								
Total Dissolved Solids	ND	mg/L	25.0	25.0	1		02/04/24 13:00		
4500S2D Sulfide Water	Analytical Method: SM 4500-S2D-2011 Pace Analytical Services - Asheville								
Sulfide	ND	mg/L	0.10	0.022	1		02/03/24 06:18	18496-25-8	
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		02/02/24 01:33	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		02/02/24 01:33	16984-48-8	

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ANALYTICAL RESULTS

Project: Plant McD AP-1 Well Network
Pace Project No.: 92710939

Sample: MCD-AP1-EB-1 **Lab ID: 92710939010** Collected: 01/31/24 10:30 Received: 02/01/24 09:42 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								
Sulfate	ND	mg/L	1.0	0.50	1		02/02/24 01:33	14808-79-8	

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ANALYTICAL RESULTS

Project: Plant McD AP-1 Well Network
Pace Project No.: 92710939

Sample: MCD-DGWC-67 **Lab ID: 92710939011** Collected: 02/01/24 10:13 Received: 02/02/24 14:17 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	**44.4**	mg/L	1.0	0.12	1	02/03/24 10:10	02/07/24 22:29	7440-70-2	
Magnesium	**17.3**	mg/L	0.050	0.012	1	02/03/24 10:10	02/07/24 22:29	7439-95-4	
Potassium	**3.9**	mg/L	2.5	0.76	5	02/03/24 10:10	02/18/24 20:15	7440-09-7	
Iron	**0.045**	mg/L	0.040	0.025	1	02/03/24 10:10	02/10/24 22:12	7439-89-6	
Sodium	**12.0**	mg/L	1.0	0.58	1	02/03/24 10:10	02/10/24 22:12	7440-23-5	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00054	1	02/03/24 09:04	02/06/24 18:19	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00084	1	02/03/24 09:04	02/06/24 18:19	7440-38-2	
Barium	**0.077**	mg/L	0.0050	0.00047	1	02/03/24 09:04	02/06/24 18:19	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000094	1	02/03/24 09:04	02/06/24 18:19	7440-41-7	
Boron	**3.9**	mg/L	0.040	0.012	1	02/03/24 09:04	02/06/24 18:19	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00010	1	02/03/24 09:04	02/06/24 18:19	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0019	1	02/03/24 09:04	02/06/24 18:19	7440-47-3	
Cobalt	**0.0011J**	mg/L	0.0050	0.00032	1	02/03/24 09:04	02/06/24 18:19	7440-48-4	
Lead	ND	mg/L	0.0010	0.00016	1	02/03/24 09:04	02/06/24 18:19	7439-92-1	
Lithium	**0.0045J**	mg/L	0.030	0.0016	1	02/03/24 09:04	02/06/24 18:19	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00062	1	02/03/24 09:04	02/06/24 18:19	7439-98-7	
Selenium	ND	mg/L	0.0050	0.00096	1	02/03/24 09:04	02/06/24 18:19	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00038	1	02/03/24 09:04	02/06/24 18:19	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.00013	1	02/08/24 13:00	02/08/24 16:41	7439-97-6	
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville								
Alkalinity,Bicarbonate (CaCO3)	**88.2**	mg/L	5.0	5.0	1		02/06/24 18:01		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		02/06/24 18:01		
Alkalinity, Total as CaCO3	**88.2**	mg/L	5.0	5.0	1		02/06/24 18:01		
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Asheville								
Total Dissolved Solids	**313**	mg/L	25.0	25.0	1		02/04/24 12:51		
4500S2D Sulfide Water	Analytical Method: SM 4500-S2D-2011 Pace Analytical Services - Asheville								
Sulfide	ND	mg/L	0.10	0.022	1		02/08/24 06:15	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**9.8**	mg/L	1.0	0.60	1		02/04/24 00:39	16887-00-6	
Fluoride	**0.057J**	mg/L	0.10	0.050	1		02/04/24 00:39	16984-48-8	

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ANALYTICAL RESULTS

Project: Plant McD AP-1 Well Network
Pace Project No.: 92710939

Sample: MCD-DGWC-67 **Lab ID: 92710939011** Collected: 02/01/24 10:13 Received: 02/02/24 14:17 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								
Sulfate	**111**	mg/L	2.0	1.0	2		02/04/24 12:57	14808-79-8	

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QUALITY CONTROL DATA

Project: Plant McD AP-1 Well Network
Pace Project No.: 92710939

QC Batch: 829488
QC Batch Method: EPA 3010A
Analysis Method: EPA 6010D
Analysis Description: 6010D ATL
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92710939001, 92710939002, 92710939003

METHOD BLANK: 4287316 Matrix: Water
Associated Lab Samples: 92710939001, 92710939002, 92710939003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium	mg/L	ND	1.0	0.12	02/06/24 01:47	
Iron	mg/L	ND	0.040	0.025	02/06/24 01:47	
Magnesium	mg/L	ND	0.050	0.012	02/06/24 01:47	
Potassium	mg/L	ND	0.50	0.15	02/06/24 01:47	
Sodium	mg/L	ND	1.0	0.58	02/06/24 01:47	

LABORATORY CONTROL SAMPLE: 4287317

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium	mg/L	1	0.92J	92	80-120	
Iron	mg/L	1	0.98	98	80-120	
Magnesium	mg/L	1	0.99	99	80-120	
Potassium	mg/L	1	0.99	99	80-120	
Sodium	mg/L	1	1.1	110	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4287318 4287319

Parameter	Units	92710944002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Calcium	mg/L	140	1	1	137	137	-336	-322	75-125	0	20	M1
Iron	mg/L	ND	1	1	0.90	0.86	90	86	75-125	5	20	
Magnesium	mg/L	26.0	1	1	26.3	26.2	34	26	75-125	0	20	M1
Potassium	mg/L	6.6	1	1	7.5	7.5	86	90	75-125	0	20	
Sodium	mg/L	29.2	1	1	30.2	30.2	95	93	75-125	0	20	

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QUALITY CONTROL DATA

Project: Plant McD AP-1 Well Network
Pace Project No.: 92710939

QC Batch: 829702
QC Batch Method: EPA 3010A
Analysis Method: EPA 6010D
Analysis Description: 6010D ATL
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92710939004, 92710939005, 92710939006, 92710939007, 92710939008, 92710939009, 92710939010

METHOD BLANK: 4288119 Matrix: Water
Associated Lab Samples: 92710939004, 92710939005, 92710939006, 92710939007, 92710939008, 92710939009, 92710939010

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium	mg/L	ND	1.0	0.12	02/07/24 02:24	
Iron	mg/L	ND	0.040	0.025	02/07/24 02:24	
Magnesium	mg/L	ND	0.050	0.012	02/07/24 02:24	
Potassium	mg/L	ND	0.50	0.15	02/10/24 11:07	
Sodium	mg/L	ND	1.0	0.58	02/07/24 02:24	

LABORATORY CONTROL SAMPLE: 4288120

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium	mg/L	1	0.95J	95	80-120	
Iron	mg/L	1	1.1	109	80-120	
Magnesium	mg/L	1	0.98	98	80-120	
Potassium	mg/L	1	1.0	102	80-120	
Sodium	mg/L	1	0.95J	95	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4288121 4288122

Parameter	Units	92710939004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Calcium	mg/L	76.6	1	1	79.0	72.5	242	-409	75-125	9	20	M1
Iron	mg/L	11.3	1	1	13.1	12.7	176	140	75-125	3	20	M1
Magnesium	mg/L	19.7	1	1	21.1	19.2	144	-46	75-125	9	20	M1
Potassium	mg/L	2.3	1	1	3.5	3.4	125	109	75-125	4	20	
Sodium	mg/L	11.6	1	1	12.8	11.7	128	12	75-125	10	20	M1

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QUALITY CONTROL DATA

Project: Plant McD AP-1 Well Network
Pace Project No.: 92710939

QC Batch: 829906
QC Batch Method: EPA 3010A
Analysis Method: EPA 6010D
Analysis Description: 6010D ATL
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92710939011

METHOD BLANK: 4289495 Matrix: Water
Associated Lab Samples: 92710939011

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium	mg/L	ND	1.0	0.12	02/07/24 21:23	
Iron	mg/L	ND	0.040	0.025	02/10/24 21:13	
Magnesium	mg/L	ND	0.050	0.012	02/07/24 21:23	
Potassium	mg/L	ND	0.50	0.15	02/07/24 21:23	
Sodium	mg/L	ND	1.0	0.58	02/07/24 21:23	

LABORATORY CONTROL SAMPLE: 4289496

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium	mg/L	1	0.97J	97	80-120	
Iron	mg/L	1	0.93	93	80-120	
Magnesium	mg/L	1	0.95	95	80-120	
Potassium	mg/L	1	1.1	115	80-120	
Sodium	mg/L	1	1.1	114	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4289497 4289498

Parameter	Units	92710944013 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Calcium	mg/L	64.5	1	1	61.3	62.9	-324	-166	75-125	3	20	M1
Iron	mg/L	0.029J	1	1	1.0	0.97	99	94	75-125	4	20	
Magnesium	mg/L	13.7	1	1	13.9	14.3	23	57	75-125	2	20	M1
Potassium	mg/L	5.7	1	1	7.4	6.5	168	85	75-125	12	20	M1
Sodium	mg/L	19.7	1	1	19.6	19.6	-7	-10	75-125	0	20	M1

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QUALITY CONTROL DATA

Project: Plant McD AP-1 Well Network
Pace Project No.: 92710939

QC Batch: 829343
QC Batch Method: EPA 3005A
Analysis Method: EPA 6020B
Analysis Description: 6020 MET
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92710939001, 92710939002, 92710939003

METHOD BLANK: 4286710 Matrix: Water
Associated Lab Samples: 92710939001, 92710939002, 92710939003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	ND	0.0030	0.00054	02/01/24 18:02	
Arsenic	mg/L	ND	0.0050	0.00084	02/01/24 18:02	
Barium	mg/L	ND	0.0050	0.00047	02/01/24 18:02	
Beryllium	mg/L	ND	0.00050	0.000094	02/01/24 18:02	
Boron	mg/L	ND	0.040	0.012	02/01/24 18:02	
Cadmium	mg/L	ND	0.00050	0.00010	02/01/24 18:02	
Chromium	mg/L	ND	0.0050	0.0019	02/01/24 18:02	
Cobalt	mg/L	ND	0.0050	0.00032	02/01/24 18:02	
Lead	mg/L	ND	0.0010	0.00016	02/01/24 18:02	
Lithium	mg/L	ND	0.030	0.0016	02/01/24 18:02	
Molybdenum	mg/L	ND	0.010	0.00062	02/01/24 18:02	
Selenium	mg/L	ND	0.0050	0.00096	02/01/24 18:02	
Thallium	mg/L	ND	0.0010	0.00038	02/01/24 18:02	

LABORATORY CONTROL SAMPLE: 4286711

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.1	0.10	100	80-120	
Arsenic	mg/L	0.1	0.097	97	80-120	
Barium	mg/L	0.1	0.099	99	80-120	
Beryllium	mg/L	0.1	0.098	98	80-120	
Boron	mg/L	1	0.98	98	80-120	
Cadmium	mg/L	0.1	0.10	102	80-120	
Chromium	mg/L	0.1	0.099	99	80-120	
Cobalt	mg/L	0.1	0.10	100	80-120	
Lead	mg/L	0.1	0.098	98	80-120	
Lithium	mg/L	0.1	0.10	101	80-120	
Molybdenum	mg/L	0.1	0.10	100	80-120	
Selenium	mg/L	0.1	0.097	97	80-120	
Thallium	mg/L	0.1	0.096	96	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4286712 4286713

Parameter	Units	92710878001 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	0.096	98	96	75-125	2	20	
Arsenic	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 Well Network
Pace Project No.: 92710939

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4286712 4286713

Parameter	Units	92710878001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Barium	mg/L	0.020	0.1	0.1	0.12	0.11	98	93	75-125	5	20	
Beryllium	mg/L	0.0013	0.1	0.1	0.099	0.099	98	97	75-125	0	20	
Boron	mg/L	1.6	1	1	2.5	2.4	93	84	75-125	4	20	
Cadmium	mg/L	0.00046J	0.1	0.1	0.10	0.099	103	99	75-125	5	20	
Chromium	mg/L	ND	0.1	0.1	0.10	0.10	102	100	75-125	3	20	
Cobalt	mg/L	0.0022J	0.1	0.1	0.11	0.10	105	101	75-125	4	20	
Lead	mg/L	ND	0.1	0.1	0.096	0.093	96	93	75-125	4	20	
Lithium	mg/L	0.0047J	0.1	0.1	0.10	0.10	99	99	75-125	1	20	
Molybdenum	mg/L	ND	0.1	0.1	0.10	0.098	102	97	75-125	4	20	
Selenium	mg/L	0.0022J	0.1	0.1	0.10	0.096	99	94	75-125	6	20	
Thallium	mg/L	ND	0.1	0.1	0.097	0.091	96	91	75-125	6	20	

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QUALITY CONTROL DATA

Project: Plant McD AP-1 Well Network
Pace Project No.: 92710939

QC Batch: 829689 | Analysis Method: EPA 6020B
QC Batch Method: EPA 3005A | Analysis Description: 6020 MET
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92710939004, 92710939005, 92710939006, 92710939007, 92710939008, 92710939009, 92710939010

METHOD BLANK: 4288084 Matrix: Water
Associated Lab Samples: 92710939004, 92710939005, 92710939006, 92710939007, 92710939008, 92710939009, 92710939010

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	ND	0.0030	0.00054	02/02/24 17:03	
Arsenic	mg/L	ND	0.0050	0.00084	02/02/24 17:03	
Barium	mg/L	ND	0.0050	0.00047	02/02/24 17:03	
Beryllium	mg/L	ND	0.00050	0.000094	02/02/24 17:03	
Boron	mg/L	ND	0.040	0.012	02/02/24 17:03	
Cadmium	mg/L	ND	0.00050	0.00010	02/02/24 17:03	
Chromium	mg/L	ND	0.0050	0.0019	02/02/24 17:03	
Cobalt	mg/L	ND	0.0050	0.00032	02/02/24 17:03	
Lead	mg/L	ND	0.0010	0.00016	02/02/24 17:03	
Lithium	mg/L	ND	0.030	0.0016	02/02/24 17:03	
Molybdenum	mg/L	ND	0.010	0.00062	02/02/24 17:03	
Selenium	mg/L	ND	0.0050	0.00096	02/02/24 17:03	
Thallium	mg/L	ND	0.0010	0.00038	02/02/24 17:03	

LABORATORY CONTROL SAMPLE: 4288085

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	0.11	106	80-120	
Barium	mg/L	0.1	0.10	104	80-120	
Beryllium	mg/L	0.1	0.11	105	80-120	
Boron	mg/L	1	1.1	106	80-120	
Cadmium	mg/L	0.1	0.10	103	80-120	
Chromium	mg/L	0.1	0.10	105	80-120	
Cobalt	mg/L	0.1	0.11	107	80-120	
Lead	mg/L	0.1	0.10	101	80-120	
Lithium	mg/L	0.1	0.10	104	80-120	
Molybdenum	mg/L	0.1	0.10	102	80-120	
Selenium	mg/L	0.1	0.11	108	80-120	
Thallium	mg/L	0.1	0.11	106	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4288086 4288087

Parameter	Units	92710878004 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	100	106	75-125	6	20	
Arsenic	mg/L	ND	0.1	0.1	0.11	0.11	107	111	75-125	4	20	

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QUALITY CONTROL DATA

Project: Plant McD AP-1 Well Network
Pace Project No.: 92710939

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4288086 4288087

Parameter	Units	92710878004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Barium	mg/L	0.019	0.1	0.1	0.12	0.13	102	106	75-125	3	20	
Beryllium	mg/L	0.0011	0.1	0.1	0.091	0.096	90	95	75-125	5	20	
Boron	mg/L	1.2	1	1	2.1	2.2	83	94	75-125	5	20	
Cadmium	mg/L	0.00041J	0.1	0.1	0.099	0.11	99	105	75-125	6	20	
Chromium	mg/L	ND	0.1	0.1	0.099	0.10	98	103	75-125	5	20	
Cobalt	mg/L	0.00068J	0.1	0.1	0.10	0.10	100	103	75-125	3	20	
Lead	mg/L	ND	0.1	0.1	0.090	0.094	90	94	75-125	4	20	
Lithium	mg/L	0.0037J	0.1	0.1	0.095	0.10	91	96	75-125	5	20	
Molybdenum	mg/L	ND	0.1	0.1	0.097	0.10	97	102	75-125	5	20	
Selenium	mg/L	0.0016J	0.1	0.1	0.11	0.11	107	110	75-125	3	20	
Thallium	mg/L	ND	0.1	0.1	0.093	0.097	93	97	75-125	4	20	

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QUALITY CONTROL DATA

Project: Plant McD AP-1 Well Network
Pace Project No.: 92710939

QC Batch: 829900
QC Batch Method: EPA 3005A
Analysis Method: EPA 6020B
Analysis Description: 6020 MET
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92710939011

METHOD BLANK: 4289478 Matrix: Water
Associated Lab Samples: 92710939011

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	ND	0.0030	0.00054	02/06/24 16:40	
Arsenic	mg/L	ND	0.0050	0.00084	02/06/24 16:40	
Barium	mg/L	ND	0.0050	0.00047	02/06/24 16:40	
Beryllium	mg/L	ND	0.00050	0.000094	02/06/24 16:40	
Boron	mg/L	ND	0.040	0.012	02/06/24 16:40	
Cadmium	mg/L	ND	0.00050	0.00010	02/06/24 16:40	
Chromium	mg/L	ND	0.0050	0.0019	02/06/24 16:40	
Cobalt	mg/L	ND	0.0050	0.00032	02/06/24 16:40	
Lead	mg/L	ND	0.0010	0.00016	02/06/24 16:40	
Lithium	mg/L	ND	0.030	0.0016	02/06/24 16:40	
Molybdenum	mg/L	ND	0.010	0.00062	02/06/24 16:40	
Selenium	mg/L	ND	0.0050	0.00096	02/06/24 16:40	
Thallium	mg/L	ND	0.0010	0.00038	02/06/24 16:40	

LABORATORY CONTROL SAMPLE: 4289479

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.1	0.10	102	80-120	
Arsenic	mg/L	0.1	0.099	99	80-120	
Barium	mg/L	0.1	0.099	99	80-120	
Beryllium	mg/L	0.1	0.10	103	80-120	
Boron	mg/L	1	1.0	101	80-120	
Cadmium	mg/L	0.1	0.10	102	80-120	
Chromium	mg/L	0.1	0.098	98	80-120	
Cobalt	mg/L	0.1	0.10	101	80-120	
Lead	mg/L	0.1	0.099	99	80-120	
Lithium	mg/L	0.1	0.10	102	80-120	
Molybdenum	mg/L	0.1	0.10	100	80-120	
Selenium	mg/L	0.1	0.096	96	80-120	
Thallium	mg/L	0.1	0.10	101	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4289480 4289481

Parameter	Units	92710944012 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Antimony	mg/L	0.00062J	0.1	0.1	0.10	0.10	101	101	75-125	0	20	
Arsenic	mg/L	ND	0.1	0.1	0.10	0.10	104	101	75-125	3	20	

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QUALITY CONTROL DATA

Project: Plant McD AP-1 Well Network
Pace Project No.: 92710939

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4289480 4289481

Parameter	Units	92710944012 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Barium	mg/L	0.071	0.1	0.1	0.17	0.17	101	96	75-125	3	20	
Beryllium	mg/L	ND	0.1	0.1	0.089	0.090	89	90	75-125	1	20	
Boron	mg/L	1.3	1	1	2.2	2.2	91	85	75-125	3	20	
Cadmium	mg/L	ND	0.1	0.1	0.10	0.099	100	99	75-125	1	20	
Chromium	mg/L	ND	0.1	0.1	0.11	0.099	105	98	75-125	7	20	
Cobalt	mg/L	0.0026J	0.1	0.1	0.10	0.10	100	98	75-125	2	20	
Lead	mg/L	ND	0.1	0.1	0.096	0.096	96	96	75-125	1	20	
Lithium	mg/L	0.015J	0.1	0.1	0.10	0.11	89	90	75-125	1	20	
Molybdenum	mg/L	ND	0.1	0.1	0.098	0.098	98	97	75-125	1	20	
Selenium	mg/L	ND	0.1	0.1	0.10	0.10	103	101	75-125	2	20	
Thallium	mg/L	ND	0.1	0.1	0.099	0.098	99	98	75-125	1	20	

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QUALITY CONTROL DATA

Project: Plant McD AP-1 Well Network
Pace Project No.: 92710939

QC Batch: 831019
QC Batch Method: EPA 7470A
Analysis Method: EPA 7470A
Analysis Description: 7470 Mercury
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92710939001, 92710939002, 92710939003, 92710939004, 92710939005, 92710939006, 92710939007, 92710939008, 92710939009, 92710939010, 92710939011

METHOD BLANK: 4294943 Matrix: Water
Associated Lab Samples: 92710939001, 92710939002, 92710939003, 92710939004, 92710939005, 92710939006, 92710939007, 92710939008, 92710939009, 92710939010, 92710939011

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	ND	0.00020	0.00013	02/08/24 15:57	

LABORATORY CONTROL SAMPLE: 4294944

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.0025	0.0026	105	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4294945 4294946

Parameter	Units	92710939001 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	0.0026	0.0027	102	105	75-125	3	20	

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QUALITY CONTROL DATA

Project: Plant McD AP-1 Well Network
Pace Project No.: 92710939

QC Batch: 830057
QC Batch Method: SM 2320B-2011
Analysis Method: SM 2320B-2011
Analysis Description: 2320B Alkalinity
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92710939001, 92710939002, 92710939003

METHOD BLANK: 4289992 Matrix: Water
Associated Lab Samples: 92710939001, 92710939002, 92710939003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Alkalinity, Total as CaCO3	mg/L	ND	5.0	5.0	02/05/24 12:18	
Alkalinity,Bicarbonate (CaCO3)	mg/L	ND	5.0	5.0	02/05/24 12:18	
Alkalinity,Carbonate (CaCO3)	mg/L	ND	5.0	5.0	02/05/24 12:18	

LABORATORY CONTROL SAMPLE: 4289993

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	50	51.4	103	80-120	

LABORATORY CONTROL SAMPLE: 4289994

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: 4289995 4289996

Parameter	Units	92711030010 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	17.9	50	50	69.6	68.3	104	101	80-120	2	25	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4289997 4289998

Parameter	Units	92711030011 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	17.5	50	50	70.1	68.5	105	102	80-120	2	25	

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QUALITY CONTROL DATA

Project: Plant McD AP-1 Well Network
Pace Project No.: 92710939

QC Batch: 830058 | Analysis Method: SM 2320B-2011
QC Batch Method: SM 2320B-2011 | Analysis Description: 2320B Alkalinity
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92710939004, 92710939005, 92710939006, 92710939007, 92710939008, 92710939009, 92710939010

METHOD BLANK: 4289999 Matrix: Water
Associated Lab Samples: 92710939004, 92710939005, 92710939006, 92710939007, 92710939008, 92710939009, 92710939010

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Alkalinity, Total as CaCO3	mg/L	ND	5.0	5.0	02/05/24 15:37	
Alkalinity,Bicarbonate (CaCO3)	mg/L	ND	5.0	5.0	02/05/24 15:37	
Alkalinity,Carbonate (CaCO3)	mg/L	ND	5.0	5.0	02/05/24 15:37	

LABORATORY CONTROL SAMPLE: 4290000

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: 4290001

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	50	51.9	104	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4290002 4290003

Parameter	Units	92710958001 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	47.1	50	50	94.7	95.1	95	96	80-120	0	25	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4290004 4290005

Parameter	Units	92710968001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Alkalinity, Total as CaCO3	mg/L	66.5	50	50	117	119	102	105	80-120	1	25	

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QUALITY CONTROL DATA

Project: Plant McD AP-1 Well Network
Pace Project No.: 92710939

QC Batch: 830324
QC Batch Method: SM 2320B-2011
Analysis Method: SM 2320B-2011
Analysis Description: 2320B Alkalinity
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92710939011

METHOD BLANK: 4291303 Matrix: Water
Associated Lab Samples: 92710939011

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Alkalinity, Total as CaCO3	mg/L	ND	5.0	5.0	02/06/24 16:22	
Alkalinity,Bicarbonate (CaCO3)	mg/L	ND	5.0	5.0	02/06/24 16:22	
Alkalinity,Carbonate (CaCO3)	mg/L	ND	5.0	5.0	02/06/24 16:22	

LABORATORY CONTROL SAMPLE: 4291304

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	50	51.4	103	80-120	

LABORATORY CONTROL SAMPLE: 4291305

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	50	51.1	102	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4291306 4291307

Parameter	Units	92710886015 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	41.3	39.7	83	79	80-120	4	25	M1

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4291308 4291309

Parameter	Units	92710886016 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Alkalinity, Total as CaCO3	mg/L	ND	50	50	51.1	50.9	100	100	80-120	0	25	

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QUALITY CONTROL DATA

Project: Plant McD AP-1 Well Network
Pace Project No.: 92710939

QC Batch: 829339 | Analysis Method: SM 2540C-2015
QC Batch Method: SM 2540C-2015 | Analysis Description: 2540C Total Dissolved Solids
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92710939001, 92710939002, 92710939003

METHOD BLANK: 4286695 Matrix: Water
Associated Lab Samples: 92710939001, 92710939002, 92710939003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	25.0	25.0	02/01/24 11:52	

LABORATORY CONTROL SAMPLE: 4286696

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	250	250	100	90-110	

SAMPLE DUPLICATE: 4286697

Parameter	Units	92711023001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	27.0	27.0	0	25	

SAMPLE DUPLICATE: 4286698

Parameter	Units	92710944003 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	154	136	12	25	

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QUALITY CONTROL DATA

Project: Plant McD AP-1 Well Network
Pace Project No.: 92710939

QC Batch: 829971 | Analysis Method: SM 2540C-2015
QC Batch Method: SM 2540C-2015 | Analysis Description: 2540C Total Dissolved Solids
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92710939004, 92710939005, 92710939006, 92710939007, 92710939008, 92710939009, 92710939010

METHOD BLANK: 4289656 Matrix: Water
Associated Lab Samples: 92710939004, 92710939005, 92710939006, 92710939007, 92710939008, 92710939009, 92710939010

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	25.0	25.0	02/04/24 12:59	

LABORATORY CONTROL SAMPLE: 4289657

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	251	242	97	90-110	

SAMPLE DUPLICATE: 4289659

Parameter	Units	92710886003 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	503	535	6	25	

SAMPLE DUPLICATE: 4289660

Parameter	Units	92710939004 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	387	386	0	25	

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QUALITY CONTROL DATA

Project: Plant McD AP-1 Well Network
Pace Project No.: 92710939

QC Batch: 829973
QC Batch Method: SM 2540C-2015
Analysis Method: SM 2540C-2015
Analysis Description: 2540C Total Dissolved Solids
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92710939011

METHOD BLANK: 4289665 Matrix: Water
Associated Lab Samples: 92710939011

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	25.0	25.0	02/04/24 12:45	

LABORATORY CONTROL SAMPLE: 4289666

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	251	270	108	90-110	

SAMPLE DUPLICATE: 4289667

Parameter	Units	92711015015 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	445	445	0	25	

SAMPLE DUPLICATE: 4289668

Parameter	Units	92710944010 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	212	212	0	25	

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QUALITY CONTROL DATA

Project: Plant McD AP-1 Well Network
Pace Project No.: 92710939

QC Batch: 829293
QC Batch Method: SM 4500-S2D-2011
Analysis Method: SM 4500-S2D-2011
Analysis Description: 4500S2D Sulfide Water
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92710939001, 92710939002, 92710939003

METHOD BLANK: 4286594 Matrix: Water
Associated Lab Samples: 92710939001, 92710939002, 92710939003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Sulfide	mg/L	ND	0.10	0.022	02/01/24 06:20	

LABORATORY CONTROL SAMPLE: 4286595

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Sulfide	mg/L	0.5	0.51	101	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4286596 4286597

Parameter	Units	92710443001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Sulfide	mg/L	ND	0.5	0.5	0.48	0.49	96	97	80-120	1	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4286598 4286599

Parameter	Units	92710968002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Sulfide	mg/L	ND	0.5	0.5	0.52	0.52	103	103	80-120	0	10	

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QUALITY CONTROL DATA

Project: Plant McD AP-1 Well Network
Pace Project No.: 92710939

QC Batch: 829632
QC Batch Method: SM 4500-S2D-2011
Analysis Method: SM 4500-S2D-2011
Analysis Description: 4500S2D Sulfide Water
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92710939004, 92710939005, 92710939006, 92710939007, 92710939008, 92710939009, 92710939010

METHOD BLANK: 4287991 Matrix: Water
Associated Lab Samples: 92710939004, 92710939005, 92710939006, 92710939007, 92710939008, 92710939009, 92710939010

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Sulfide	mg/L	ND	0.10	0.022	02/03/24 06:11	

LABORATORY CONTROL SAMPLE: 4287992

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Sulfide	mg/L	0.5	0.53	106	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4287993 4287994

Parameter	Units	92710944001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Sulfide	mg/L	ND	0.5	0.5	0.49	0.47	97	93	80-120	4	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4287995 4287996

Parameter	Units	92710886003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Sulfide	mg/L	ND	0.5	0.5	0.47	0.47	93	94	80-120	1	10	

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QUALITY CONTROL DATA

Project: Plant McD AP-1 Well Network
Pace Project No.: 92710939

QC Batch: 830837
QC Batch Method: SM 4500-S2D-2011
Analysis Method: SM 4500-S2D-2011
Analysis Description: 4500S2D Sulfide Water
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92710939011

METHOD BLANK: 4294225 Matrix: Water
Associated Lab Samples: 92710939011

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Sulfide	mg/L	ND	0.10	0.022	02/08/24 06:05	

LABORATORY CONTROL SAMPLE: 4294226

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Sulfide	mg/L	0.5	0.53	106	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4294227 4294228

Parameter	Units	92711015009 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Sulfide	mg/L	ND	0.5	0.5	0.51	0.53	102	107	80-120	5	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4294229 4294230

Parameter	Units	92710944006 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Sulfide	mg/L	ND	0.5	0.5	0.47	0.48	94	96	80-120	1	10	

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QUALITY CONTROL DATA

Project: Plant McD AP-1 Well Network
Pace Project No.: 92710939

QC Batch: 829251
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: 92710939001, 92710939002, 92710939003

METHOD BLANK: 4286390 Matrix: Water
Associated Lab Samples: 92710939001, 92710939002, 92710939003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.60	01/31/24 21:29	
Fluoride	mg/L	ND	0.10	0.050	01/31/24 21:29	
Sulfate	mg/L	ND	1.0	0.50	01/31/24 21:29	

LABORATORY CONTROL SAMPLE: 4286391

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	48.9	98	90-110	
Fluoride	mg/L	2.5	2.5	100	90-110	
Sulfate	mg/L	50	48.9	98	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4286392 4286393

Parameter	Units	92710726002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	36.6	50	50	78.9	80.2	85	87	90-110	2	10	M1
Fluoride	mg/L	0.90	2.5	2.5	2.7	2.8	73	76	90-110	3	10	M1
Sulfate	mg/L	178	50	50	226	228	96	99	90-110	1	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4286394 4286395

Parameter	Units	92710939001 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	52.6	53.3	88	90	90-110	1	10	M1
Fluoride	mg/L	0.078J	2.5	2.5	1.8	1.9	71	74	90-110	5	10	M1
Sulfate	mg/L	220	50	50	265	265	90	90	90-110	0	10	

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QUALITY CONTROL DATA

Project: Plant McD AP-1 Well Network
Pace Project No.: 92710939

QC Batch: 829579
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: 92710939004, 92710939005, 92710939006, 92710939007, 92710939008, 92710939009, 92710939010

METHOD BLANK: 4287877 Matrix: Water
Associated Lab Samples: 92710939004, 92710939005, 92710939006, 92710939007, 92710939008, 92710939009, 92710939010

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.60	02/01/24 23:04	
Fluoride	mg/L	ND	0.10	0.050	02/01/24 23:04	
Sulfate	mg/L	ND	1.0	0.50	02/01/24 23:04	

LABORATORY CONTROL SAMPLE: 4287878

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	50.5	101	90-110	
Fluoride	mg/L	2.5	2.4	97	90-110	
Sulfate	mg/L	50	50.6	101	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4287879 4287880

Parameter	Units	92711297001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	1.5	50	50	52.1	53.2	101	103	90-110	2	10	
Fluoride	mg/L	ND	2.5	2.5	2.4	2.4	94	96	90-110	2	10	
Sulfate	mg/L	1.4	50	50	52.0	53.1	101	103	90-110	2	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4287881 4287882

Parameter	Units	92710886004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	16.0	50	50	64.9	65.1	98	98	90-110	0	10	
Fluoride	mg/L	ND	2.5	2.5	2.4	2.4	94	94	90-110	0	10	
Sulfate	mg/L	224	50	50	266	266	85	85	90-110	0	10	M1

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QUALITY CONTROL DATA

Project: Plant McD AP-1 Well Network
Pace Project No.: 92710939

QC Batch: 829909
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: 92710939011

METHOD BLANK: 4289509 Matrix: Water
Associated Lab Samples: 92710939011

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.60	02/03/24 20:43	
Fluoride	mg/L	ND	0.10	0.050	02/03/24 20:43	
Sulfate	mg/L	ND	1.0	0.50	02/03/24 20:43	

LABORATORY CONTROL SAMPLE: 4289510

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	50.0	100	90-110	
Fluoride	mg/L	2.5	2.4	96	90-110	
Sulfate	mg/L	50	50.1	100	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4289511 4289512

Parameter	Units	92710944008 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	28.9	50	50	79.7	80.5	101	103	90-110	1	10	
Fluoride	mg/L	0.13	2.5	2.5	2.6	2.7	100	102	90-110	2	10	
Sulfate	mg/L	337	50	50	378	379	82	84	90-110	0	10	M1

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4289513 4289514

Parameter	Units	92710958002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	3.0	50	50	54.6	55.4	103	105	90-110	1	10	
Fluoride	mg/L	0.29	2.5	2.5	2.7	2.8	97	98	90-110	2	10	
Sulfate	mg/L	15.5	50	50	67.2	68.0	103	105	90-110	1	10	

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QUALIFIERS

Project: Plant McD AP-1 Well Network
Pace Project No.: 92710939

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: Plant McD AP-1 Well Network
Pace Project No.: 92710939

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92710939001	**MCD-DGWC-38**	EPA 3010A	829488	EPA 6010D	829578
92710939002	**MCD-DGWC-40**	EPA 3010A	829488	EPA 6010D	829578
92710939003	**MCD-AP1-FD-1**	EPA 3010A	829488	EPA 6010D	829578
92710939004	**MCD-DGWC-39**	EPA 3010A	829702	EPA 6010D	829783
92710939005	**MCD-DGWC-68A**	EPA 3010A	829702	EPA 6010D	829783
92710939006	**MCD-DGWC-121**	EPA 3010A	829702	EPA 6010D	829783
92710939007	**MCD-DGWC-69**	EPA 3010A	829702	EPA 6010D	829783
92710939008	**MCD-AP1-FB-1**	EPA 3010A	829702	EPA 6010D	829783
92710939009	**MCD-DGWC-37**	EPA 3010A	829702	EPA 6010D	829783
92710939010	**MCD-AP1-EB-1**	EPA 3010A	829702	EPA 6010D	829783
92710939011	**MCD-DGWC-67**	EPA 3010A	829906	EPA 6010D	829935
92710939001	**MCD-DGWC-38**	EPA 3005A	829343	EPA 6020B	829504
92710939002	**MCD-DGWC-40**	EPA 3005A	829343	EPA 6020B	829504
92710939003	**MCD-AP1-FD-1**	EPA 3005A	829343	EPA 6020B	829504
92710939004	**MCD-DGWC-39**	EPA 3005A	829689	EPA 6020B	829819
92710939005	**MCD-DGWC-68A**	EPA 3005A	829689	EPA 6020B	829819
92710939006	**MCD-DGWC-121**	EPA 3005A	829689	EPA 6020B	829819
92710939007	**MCD-DGWC-69**	EPA 3005A	829689	EPA 6020B	829819
92710939008	**MCD-AP1-FB-1**	EPA 3005A	829689	EPA 6020B	829819
92710939009	**MCD-DGWC-37**	EPA 3005A	829689	EPA 6020B	829819
92710939010	**MCD-AP1-EB-1**	EPA 3005A	829689	EPA 6020B	829819
92710939011	**MCD-DGWC-67**	EPA 3005A	829900	EPA 6020B	829945
92710939001	**MCD-DGWC-38**	EPA 7470A	831019	EPA 7470A	831089
92710939002	**MCD-DGWC-40**	EPA 7470A	831019	EPA 7470A	831089
92710939003	**MCD-AP1-FD-1**	EPA 7470A	831019	EPA 7470A	831089
92710939004	**MCD-DGWC-39**	EPA 7470A	831019	EPA 7470A	831089
92710939005	**MCD-DGWC-68A**	EPA 7470A	831019	EPA 7470A	831089
92710939006	**MCD-DGWC-121**	EPA 7470A	831019	EPA 7470A	831089
92710939007	**MCD-DGWC-69**	EPA 7470A	831019	EPA 7470A	831089
92710939008	**MCD-AP1-FB-1**	EPA 7470A	831019	EPA 7470A	831089
92710939009	**MCD-DGWC-37**	EPA 7470A	831019	EPA 7470A	831089
92710939010	**MCD-AP1-EB-1**	EPA 7470A	831019	EPA 7470A	831089
92710939011	**MCD-DGWC-67**	EPA 7470A	831019	EPA 7470A	831089
92710939001	**MCD-DGWC-38**	SM 2320B-2011	830057		
92710939002	**MCD-DGWC-40**	SM 2320B-2011	830057		
92710939003	**MCD-AP1-FD-1**	SM 2320B-2011	830057		
92710939004	**MCD-DGWC-39**	SM 2320B-2011	830058		
92710939005	**MCD-DGWC-68A**	SM 2320B-2011	830058		
92710939006	**MCD-DGWC-121**	SM 2320B-2011	830058		
92710939007	**MCD-DGWC-69**	SM 2320B-2011	830058		
92710939008	**MCD-AP1-FB-1**	SM 2320B-2011	830058		
92710939009	**MCD-DGWC-37**	SM 2320B-2011	830058		
92710939010	**MCD-AP1-EB-1**	SM 2320B-2011	830058		
92710939011	**MCD-DGWC-67**	SM 2320B-2011	830324		

REPORT OF LABORATORY ANALYSIS

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without the written consent of Pace Analytical Services, LLC.

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Plant McD AP-1 Well Network
Pace Project No.: 92710939

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92710939001	**MCD-DGWC-38**	SM 2540C-2015	829339		
92710939002	**MCD-DGWC-40**	SM 2540C-2015	829339		
92710939003	**MCD-AP1-FD-1**	SM 2540C-2015	829339		
92710939004	**MCD-DGWC-39**	SM 2540C-2015	829971		
92710939005	**MCD-DGWC-68A**	SM 2540C-2015	829971		
92710939006	**MCD-DGWC-121**	SM 2540C-2015	829971		
92710939007	**MCD-DGWC-69**	SM 2540C-2015	829971		
92710939008	**MCD-AP1-FB-1**	SM 2540C-2015	829971		
92710939009	**MCD-DGWC-37**	SM 2540C-2015	829971		
92710939010	**MCD-AP1-EB-1**	SM 2540C-2015	829971		
92710939011	**MCD-DGWC-67**	SM 2540C-2015	829973		
92710939001	**MCD-DGWC-38**	SM 4500-S2D-2011	829293		
92710939002	**MCD-DGWC-40**	SM 4500-S2D-2011	829293		
92710939003	**MCD-AP1-FD-1**	SM 4500-S2D-2011	829293		
92710939004	**MCD-DGWC-39**	SM 4500-S2D-2011	829632		
92710939005	**MCD-DGWC-68A**	SM 4500-S2D-2011	829632		
92710939006	**MCD-DGWC-121**	SM 4500-S2D-2011	829632		
92710939007	**MCD-DGWC-69**	SM 4500-S2D-2011	829632		
92710939008	**MCD-AP1-FB-1**	SM 4500-S2D-2011	829632		
92710939009	**MCD-DGWC-37**	SM 4500-S2D-2011	829632		
92710939010	**MCD-AP1-EB-1**	SM 4500-S2D-2011	829632		
92710939011	**MCD-DGWC-67**	SM 4500-S2D-2011	830837		
92710939001	**MCD-DGWC-38**	EPA 300.0 Rev 2.1 1993	829251		
92710939002	**MCD-DGWC-40**	EPA 300.0 Rev 2.1 1993	829251		
92710939003	**MCD-AP1-FD-1**	EPA 300.0 Rev 2.1 1993	829251		
92710939004	**MCD-DGWC-39**	EPA 300.0 Rev 2.1 1993	829579		
92710939005	**MCD-DGWC-68A**	EPA 300.0 Rev 2.1 1993	829579		
92710939006	**MCD-DGWC-121**	EPA 300.0 Rev 2.1 1993	829579		
92710939007	**MCD-DGWC-69**	EPA 300.0 Rev 2.1 1993	829579		
92710939008	**MCD-AP1-FB-1**	EPA 300.0 Rev 2.1 1993	829579		
92710939009	**MCD-DGWC-37**	EPA 300.0 Rev 2.1 1993	829579		
92710939010	**MCD-AP1-EB-1**	EPA 300.0 Rev 2.1 1993	829579		
92710939011	**MCD-DGWC-67**	EPA 300.0 Rev 2.1 1993	829909		

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Pace ANALYTICAL SERVICES

DOC_TITLE: ENV-FRM-HUNT-0083 v03_Sample Condition Upon Receipt

Effective Date: 11/29/2023

Laboratory receiving samples:

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

Sample Condition Upon Receipt

Client Name: Georgia Power - Coal Combustion Res.

Project #:

WO# : 92710939

92710939

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

Custody Seal Present? ☐ Yes ☒ No **Seals Intact?** ☐ Yes ☐ No ☒ N/A

Date/Initials Person Examining Contents: JG 1/31/2

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

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

Thermometer: ☑ IR Gun ID: 214

Type of Ice: ☑ Wet ☐ Blue ☐ None

Cooler Temp: 2.0 **Correction Factor:** Add/Subtract (°C) -0.1

Cooler Temp Corrected (°C): 1.9

Temp should be above freezing to 6°C

☐ Samples out of temp criteria. Samples on ice, cooling proces 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:** _____

WO#: 92710939

PM: BV Due Date: 02/14/24

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

****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)	DG94-40 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																		4				
2		2	1			1	1																		2				
3		2	1			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 Atlanta, GA 30339	Copy To: WSP	Company Name:
aucoker@southernco.com	Purchase Order #:	Address:
Phone: (470) 620-6176 Fax	Project Name: Plant McD AP-1 Well Network	Pace Quote:
Requested Due Date: 10 Day TAT	Project #: 31406440.McD23	Pace Project Manager: Bonnie Vang
		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

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 + 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	Sulfide	Residual Chlorine (Y/N)	92710939
MCD-DGWC-38	WG	G	1/30/24	14:47		9	3		3		1				N	X	X	X	X	X	X		05 Extra Rad
MCD-DGWC-40	WG	G	1/30/2024	12:40		7	3		3		1				N	X	X	X	X	X	X		02
MCD-AP1-FD-1	WG	G	1/30/24	--		7	3		3		1				N	X	X	X	X	X	X		03

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	SAMPLE CONDITIONS
Code = MCD-CCR-ASSMT-2024S1	MARK MANN	1/31/24	0840	Chase Bender Courier New	1/31	
				Pace	1/31/24	0928

Pace ANALYTICAL SERVICES

DC#_Title: ENV-FRM-HUNT-0083 v03_Sample Condition Upon Receipt

Effective Date: 11/29/2023

Laboratory receiving samples:

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

Sample Condition Upon Receipt

Client Name: Ga Power

Project #:

WO#: 92710939

PM: BV **Due Date: 02/14/24**

CLIENT: 92-GA Power

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

Custody Seal Present? ☑ Yes ☐ No **Seals Intact?** ☑ Yes ☐ No ☐ N/A

Date/Initials Person Examining Contents: 2/11/24 BV

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

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

Thermometer:

☑ IR Gun ID: 23C **Type of Ice:** ☑ Wet ☐ Blue ☐ None

Cooler Temp: 1.1 **Correction Factor:** Add/Subtract (°C) -0.1

Cooler Temp Corrected (°C): 1.2

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: 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#: 92710939**

PM: BV Due Date: 02/14/24

CLIENT: 92-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)	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		2	1			1	1																		2				
3		2	1			1	1																		2				
4		2	1			1	1																		2				
5		2	1			1	1																		2				
6		2	1			1	1																		2				
7		2	1			1	1																		2				
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

tion A uired Client Information:	Section B Required Project Information:	Section C Invoice Information:
npany: Georgia Power - Coal Combustion Residuals	Report To: Lauren Coker	Attention: scsinvoices@southernco.com
ress: 2480 Maner Road	Copy To: WSP	Company Name:
Atlanta, GA 30339		Address:
il: laucoker@southernco.com	Purchase Order #:	Pace Quote:
ne: (470) 620-6176 Fax	Project Name: Plant McD AP-1 Well Network	Pace Project Manager: Bonnie Vang
uested Due Date: 10 Day TAT	Project #: 31406440.McD23	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 + Mg, Na, K, Fe	Cl, F, SO4	Radium 9513/9320	TDS	Alkalinity	Sulfide	Residual Chlorine (Y/N)	92710939
1	MCD-DGWC-39	WG	G	1/31/24	10:10		7	3		3		1					X	X	X	X	X	X		004
2	MCD-DGWC-68A	WG	G	1/31/24	11:50		7	3		3		1					X	X	X	X	X	X		005
3	MCD-DGWC-121	WG	G	1/31/24	15:02		7	3		3		1					X	X	X	X	X	X		006
4	MCD-DGWC-69	WG	G	1/31/24	14:55		7	3		3		1					X	X	X	X	X	X		007
5	MCD-AP1-FB-1	WQ	G	1/31/24	15:30		7	3		3		1					X	X	X	X	X	X		008
6	MCD-DGWC-37	WG	G	1/31/24	11:37		7	3		3		1					X	X	X	X	X	X		009
7	MCD-AP1-EB-1	WQ	G	1/31/24	10:30		7	3		3		1					X	X	X	X	X	X		010
8																								
9																								
10																								
11																								
12																								

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	SAMPLE CONDITIONS
k Code = MCD-CCR-ASSMT-2024S1	MARK MANN / [signature] / WSP	02/01/24	835	Chase Sander Couriers Nov	2-1-24	
				[signature] C942	2/1/24	

MP in C | eived on | tody ed ler | nples

Pace ANALYTICAL SERVICES

DC#_Title: ENV-FRM-HUN1-0083 v03_Sample Condition Upon Receipt

Effective Date: 11/29/2023

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

Sample Condition Upon Receipt

Client Name: Ga Power

Project #: **WO#: 92710939**

PM: BV **Due Date: 02/14/24**
CLIENT: 92-GA Power

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

Custody Seal Present? ☑ Yes ☐ No Seals Intact? ☑ Yes ☐ No ☐ N/A

Date/Initials Person Examining Contents: 2/12/24 SC

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: 4.1 Correction Factor: Add/Subtract (°C) +0.1

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

Cooler Temp Corrected (°C): 4.2

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

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

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

Field Data Required? ☐ Yes ☐ No

COMMENTS/SAMPLE DISCREPANCY

Lot ID of split containers:

CLIENT NOTIFICATION/RESOLUTION

Person contacted: Date/Time:

Project Manager SCURF Review: Date:

Project Manager SRF Review: Date:

Qualtrax ID: 69614

DC#_Title: ENV-FRM-HUN1-0083 v03_Sample Condition Upon Receipt

Effective Date: 11/29/2023

*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#: 92710939**

PM: BV Due Date: 02/14/24

CLIENT: 92-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)	BP3P/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	1																		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.

Section A Required Client Information:		Section B Required Project Information:	Section C Invoice Information:	1 Of 1
Company:	Georgia Power - Coal Combustion Residuals	Report To: Lauren Coker	Attention: scsinvoices@southernco.com	
Address:	2480 Maner Road	Copy To: WSP	Company Name:	
	Atlanta, GA 30339		Address:	Regulatory Agency
Email:	laucoker@southernco.com	Purchase Order #:	Pace Quote:	
Phone: (470) 620-6176	Fax	Project Name: Plant McD AP-1 Well Network	Pace Project Manager: Bonnie Vang	State / Location
Requested Due Date:	10 Day TAT	Project #: 31406440.McD23	Pace Profile #:	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 + Mg, Na, K, Fe	Cl, F, SO4	Radium 9513/9320	TDS	Alkalinity	Sulfide				Residual Chlorine (Y/N)	92710939
								N	N	N	N	N	N	N												
1	MCD-DGWC-67	WG	G	2/1/24	10:13		7	3		3		1					X	X	X	X	X	X					011
2																											
3																											
4																											
5																											
6																											
7																											
8																											
9																											
10																											
11																											
12																											

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	SAMPLE CONDITIONS
Task Code = MCD-CCR-ASSMT-2024S1	MARK MANN / [illegible] WSP	2/2/24	1417	[signature] Pace	2/2/24	1417

DATE Signed:

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
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(704)875-9092

February 19, 2024

Lauren Hartley
Southern Co.
241 Ralph McGill Blvd
NE, Bin 10160
Atlanta, GA 30308

RE: Project: Plant McD AP-1 Assessment
Pace Project No.: 92710958

Dear Lauren Hartley:

Enclosed are the analytical results for sample(s) received by the laboratory between January 31, 2024 and February 02, 2024. 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,

Bonnie Vang
bonnie.vang@pacelabs.com
704-977-0968
Project Manager

Enclosures

cc: Yong Cheng, WSP
Daniela Herrera, Golder
Andrea McClure, WSP
Laura Midkiff, Southern Co.
Dawn Prell, WSP USA E&I Inc - Atlanta

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CERTIFICATIONS

Project: Plant McD AP-1 Assessment
Pace Project No.: 92710958

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 Assessment
Pace Project No.: 92710958

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92710958001	**MCD-B-105D**	Water	01/30/24 14:10	01/31/24 09:28
92710958002	**MCD-B-112D**	Water	02/01/24 11:47	02/02/24 14:17

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SAMPLE ANALYTE COUNT

Project: Plant McD AP-1 Assessment
Pace Project No.: 92710958

Lab ID	Sample ID	Method	Analysts	Analytes Reported
92710958001	**MCD-B-105D**	EPA 6010D	AJM, DRB	5
		EPA 6020B	MT1	13
		EPA 7470A	VB	1
		SM 2320B-2011	YEG	3
		SM 2540C-2015	JAY	1
		SM 4500-S2D-2011	JP1	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92710958002	**MCD-B-112D**	EPA 6010D	AJM, DRB	5
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2320B-2011	SMS	3
		SM 2540C-2015	JAY	1
		SM 4500-S2D-2011	JP1	1
		EPA 300.0 Rev 2.1 1993	JCM	3

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

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Plant McD AP-1 Assessment
Pace Project No.: 92710958

Sample: MCD-B-105D **Lab ID: 92710958001** Collected: 01/30/24 14:10 Received: 01/31/24 09:28 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								
Sodium	**20.6**	mg/L	1.0	0.58	1	02/01/24 15:40	02/07/24 01:41	7440-23-5	
Iron	**3.0**	mg/L	0.040	0.025	1	02/01/24 15:40	02/06/24 03:00	7439-89-6	
Potassium	**8.6**	mg/L	0.50	0.15	1	02/01/24 15:40	02/06/24 03:00	7440-09-7	
Calcium	**67.9**	mg/L	1.0	0.12	1	02/01/24 15:40	02/06/24 03:00	7440-70-2	
Magnesium	**24.5**	mg/L	0.050	0.012	1	02/01/24 15:40	02/06/24 03:00	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	0.00054	1	02/01/24 10:22	02/01/24 19:31	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00084	1	02/01/24 10:22	02/01/24 19:31	7440-38-2	
Barium	**0.039**	mg/L	0.0050	0.00047	1	02/01/24 10:22	02/01/24 19:31	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000094	1	02/01/24 10:22	02/01/24 19:31	7440-41-7	
Boron	**0.77**	mg/L	0.040	0.012	1	02/01/24 10:22	02/01/24 19:31	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00010	1	02/01/24 10:22	02/01/24 19:31	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0019	1	02/01/24 10:22	02/01/24 19:31	7440-47-3	
Cobalt	**0.0026J**	mg/L	0.0050	0.00032	1	02/01/24 10:22	02/01/24 19:31	7440-48-4	
Lead	ND	mg/L	0.0010	0.00016	1	02/01/24 10:22	02/01/24 19:31	7439-92-1	
Lithium	**0.013J**	mg/L	0.030	0.0016	1	02/01/24 10:22	02/01/24 19:31	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00062	1	02/01/24 10:22	02/01/24 19:31	7439-98-7	
Selenium	ND	mg/L	0.0050	0.00096	1	02/01/24 10:22	02/01/24 19:31	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00038	1	02/01/24 10:22	02/01/24 19:31	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.00013	1	02/08/24 13:00	02/08/24 17:02	7439-97-6	
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville								
Alkalinity,Bicarbonate (CaCO3)	**47.1**	mg/L	5.0	5.0	1		02/05/24 15:54		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		02/05/24 15:54		
Alkalinity, Total as CaCO3	**47.1**	mg/L	5.0	5.0	1		02/05/24 15:54		
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Asheville								
Total Dissolved Solids	**307**	mg/L	25.0	25.0	1		02/01/24 11:53		
4500S2D Sulfide Water	Analytical Method: SM 4500-S2D-2011 Pace Analytical Services - Asheville								
Sulfide	ND	mg/L	0.10	0.022	1		02/01/24 06:26	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**15.2**	mg/L	1.0	0.60	1		02/02/24 00:19	16887-00-6	
Fluoride	**0.081J**	mg/L	0.10	0.050	1		02/02/24 00:19	16984-48-8	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Plant McD AP-1 Assessment
Pace Project No.: 92710958

Sample: MCD-B-105D **Lab ID: 92710958001** Collected: 01/30/24 14:10 Received: 01/31/24 09:28 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								
Sulfate	**249**	mg/L	5.0	2.5	5		02/01/24 13:59	14808-79-8	

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ANALYTICAL RESULTS

Project: Plant McD AP-1 Assessment
Pace Project No.: 92710958

Sample: MCD-B-112D **Lab ID: 92710958002** Collected: 02/01/24 11:47 Received: 02/02/24 14:17 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	**23.6**	mg/L	1.0	0.12	1	02/03/24 10:10	02/07/24 22:33	7440-70-2	
Magnesium	**7.0**	mg/L	0.050	0.012	1	02/03/24 10:10	02/07/24 22:33	7439-95-4	
Iron	**0.14**	mg/L	0.040	0.025	1	02/03/24 10:10	02/10/24 22:17	7439-89-6	
Sodium	**13.9**	mg/L	1.0	0.58	1	02/03/24 10:10	02/10/24 22:17	7440-23-5	
Potassium	**2.3J**	mg/L	2.5	0.76	5	02/03/24 10:10	02/18/24 20:20	7440-09-7	D3
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00054	1	02/03/24 09:04	02/06/24 18:22	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00084	1	02/03/24 09:04	02/06/24 18:22	7440-38-2	
Barium	**0.0028J**	mg/L	0.0050	0.00047	1	02/03/24 09:04	02/06/24 18:22	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000094	1	02/03/24 09:04	02/06/24 18:22	7440-41-7	
Boron	**0.26**	mg/L	0.040	0.012	1	02/03/24 09:04	02/06/24 18:22	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00010	1	02/03/24 09:04	02/06/24 18:22	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0019	1	02/03/24 09:04	02/06/24 18:22	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00032	1	02/03/24 09:04	02/06/24 18:22	7440-48-4	
Lead	ND	mg/L	0.0010	0.00016	1	02/03/24 09:04	02/06/24 18:22	7439-92-1	
Lithium	**0.0042J**	mg/L	0.030	0.0016	1	02/03/24 09:04	02/06/24 18:22	7439-93-2	
Molybdenum	**0.027**	mg/L	0.010	0.00062	1	02/03/24 09:04	02/06/24 18:22	7439-98-7	
Selenium	ND	mg/L	0.0050	0.00096	1	02/03/24 09:04	02/06/24 18:22	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00038	1	02/03/24 09:04	02/06/24 18:22	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	02/08/24 13:00	02/08/24 17:05	7439-97-6	
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville								
Alkalinity,Bicarbonate (CaCO3)	**108**	mg/L	5.0	5.0	1		02/06/24 18:10		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		02/06/24 18:10		
Alkalinity, Total as CaCO3	**108**	mg/L	5.0	5.0	1		02/06/24 18:10		
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Asheville								
Total Dissolved Solids	**159**	mg/L	25.0	25.0	1		02/04/24 12:51		
4500S2D Sulfide Water	Analytical Method: SM 4500-S2D-2011 Pace Analytical Services - Asheville								
Sulfide	ND	mg/L	0.10	0.022	1		02/08/24 06:16	18496-25-8	
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		02/04/24 00:54	16887-00-6	
Fluoride	**0.29**	mg/L	0.10	0.050	1		02/04/24 00:54	16984-48-8	

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ANALYTICAL RESULTS

Project: Plant McD AP-1 Assessment
Pace Project No.: 92710958

Sample: MCD-B-112D **Lab ID: 92710958002** Collected: 02/01/24 11:47 Received: 02/02/24 14:17 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								
Sulfate	**15.5**	mg/L	1.0	0.50	1		02/04/24 00:54	14808-79-8	

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QUALITY CONTROL DATA

Project: Plant McD AP-1 Assessment
Pace Project No.: 92710958

QC Batch: 829488
QC Batch Method: EPA 3010A
Analysis Method: EPA 6010D
Analysis Description: 6010D ATL
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92710958001

METHOD BLANK: 4287316 Matrix: Water
Associated Lab Samples: 92710958001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium	mg/L	ND	1.0	0.12	02/06/24 01:47	
Iron	mg/L	ND	0.040	0.025	02/06/24 01:47	
Magnesium	mg/L	ND	0.050	0.012	02/06/24 01:47	
Potassium	mg/L	ND	0.50	0.15	02/06/24 01:47	
Sodium	mg/L	ND	1.0	0.58	02/06/24 01:47	

LABORATORY CONTROL SAMPLE: 4287317

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium	mg/L	1	0.92J	92	80-120	
Iron	mg/L	1	0.98	98	80-120	
Magnesium	mg/L	1	0.99	99	80-120	
Potassium	mg/L	1	0.99	99	80-120	
Sodium	mg/L	1	1.1	110	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4287318 4287319

Parameter	Units	92710944002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Calcium	mg/L	140	1	1	137	137	-336	-322	75-125	0	20	M1
Iron	mg/L	ND	1	1	0.90	0.86	90	86	75-125	5	20	
Magnesium	mg/L	26.0	1	1	26.3	26.2	34	26	75-125	0	20	M1
Potassium	mg/L	6.6	1	1	7.5	7.5	86	90	75-125	0	20	
Sodium	mg/L	29.2	1	1	30.2	30.2	95	93	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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QUALITY CONTROL DATA

Project: Plant McD AP-1 Assessment
Pace Project No.: 92710958

QC Batch: 829906
QC Batch Method: EPA 3010A
Analysis Method: EPA 6010D
Analysis Description: 6010D ATL
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92710958002

METHOD BLANK: 4289495 Matrix: Water
Associated Lab Samples: 92710958002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium	mg/L	ND	1.0	0.12	02/07/24 21:23	
Iron	mg/L	ND	0.040	0.025	02/10/24 21:13	
Magnesium	mg/L	ND	0.050	0.012	02/07/24 21:23	
Potassium	mg/L	ND	0.50	0.15	02/07/24 21:23	
Sodium	mg/L	ND	1.0	0.58	02/07/24 21:23	

LABORATORY CONTROL SAMPLE: 4289496

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium	mg/L	1	0.97J	97	80-120	
Iron	mg/L	1	0.93	93	80-120	
Magnesium	mg/L	1	0.95	95	80-120	
Potassium	mg/L	1	1.1	115	80-120	
Sodium	mg/L	1	1.1	114	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4289497 4289498

Parameter	Units	92710944013 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Calcium	mg/L	64.5	1	1	61.3	62.9	-324	-166	75-125	3	20	M1
Iron	mg/L	0.029J	1	1	1.0	0.97	99	94	75-125	4	20	
Magnesium	mg/L	13.7	1	1	13.9	14.3	23	57	75-125	2	20	M1
Potassium	mg/L	5.7	1	1	7.4	6.5	168	85	75-125	12	20	M1
Sodium	mg/L	19.7	1	1	19.6	19.6	-7	-10	75-125	0	20	M1

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QUALITY CONTROL DATA

Project: Plant McD AP-1 Assessment
Pace Project No.: 92710958

QC Batch: 829343
QC Batch Method: EPA 3005A
Analysis Method: EPA 6020B
Analysis Description: 6020 MET
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92710958001

METHOD BLANK: 4286710 Matrix: Water
Associated Lab Samples: 92710958001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	ND	0.0030	0.00054	02/01/24 18:02	
Arsenic	mg/L	ND	0.0050	0.00084	02/01/24 18:02	
Barium	mg/L	ND	0.0050	0.00047	02/01/24 18:02	
Beryllium	mg/L	ND	0.00050	0.000094	02/01/24 18:02	
Boron	mg/L	ND	0.040	0.012	02/01/24 18:02	
Cadmium	mg/L	ND	0.00050	0.00010	02/01/24 18:02	
Chromium	mg/L	ND	0.0050	0.0019	02/01/24 18:02	
Cobalt	mg/L	ND	0.0050	0.00032	02/01/24 18:02	
Lead	mg/L	ND	0.0010	0.00016	02/01/24 18:02	
Lithium	mg/L	ND	0.030	0.0016	02/01/24 18:02	
Molybdenum	mg/L	ND	0.010	0.00062	02/01/24 18:02	
Selenium	mg/L	ND	0.0050	0.00096	02/01/24 18:02	
Thallium	mg/L	ND	0.0010	0.00038	02/01/24 18:02	

LABORATORY CONTROL SAMPLE: 4286711

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.1	0.10	100	80-120	
Arsenic	mg/L	0.1	0.097	97	80-120	
Barium	mg/L	0.1	0.099	99	80-120	
Beryllium	mg/L	0.1	0.098	98	80-120	
Boron	mg/L	1	0.98	98	80-120	
Cadmium	mg/L	0.1	0.10	102	80-120	
Chromium	mg/L	0.1	0.099	99	80-120	
Cobalt	mg/L	0.1	0.10	100	80-120	
Lead	mg/L	0.1	0.098	98	80-120	
Lithium	mg/L	0.1	0.10	101	80-120	
Molybdenum	mg/L	0.1	0.10	100	80-120	
Selenium	mg/L	0.1	0.097	97	80-120	
Thallium	mg/L	0.1	0.096	96	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4286712 4286713

Parameter	Units	92710878001 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	0.096	98	96	75-125	2	20	
Arsenic	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
Pace Project No.: 92710958

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4286712 4286713

Parameter	Units	92710878001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Barium	mg/L	0.020	0.1	0.1	0.12	0.11	98	93	75-125	5	20	
Beryllium	mg/L	0.0013	0.1	0.1	0.099	0.099	98	97	75-125	0	20	
Boron	mg/L	1.6	1	1	2.5	2.4	93	84	75-125	4	20	
Cadmium	mg/L	0.00046J	0.1	0.1	0.10	0.099	103	99	75-125	5	20	
Chromium	mg/L	ND	0.1	0.1	0.10	0.10	102	100	75-125	3	20	
Cobalt	mg/L	0.0022J	0.1	0.1	0.11	0.10	105	101	75-125	4	20	
Lead	mg/L	ND	0.1	0.1	0.096	0.093	96	93	75-125	4	20	
Lithium	mg/L	0.0047J	0.1	0.1	0.10	0.10	99	99	75-125	1	20	
Molybdenum	mg/L	ND	0.1	0.1	0.10	0.098	102	97	75-125	4	20	
Selenium	mg/L	0.0022J	0.1	0.1	0.10	0.096	99	94	75-125	6	20	
Thallium	mg/L	ND	0.1	0.1	0.097	0.091	96	91	75-125	6	20	

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QUALITY CONTROL DATA

Project: Plant McD AP-1 Assessment
Pace Project No.: 92710958

QC Batch: 829900
QC Batch Method: EPA 3005A
Analysis Method: EPA 6020B
Analysis Description: 6020 MET
Laboratory: Pace Analytical Services - Peachtree Corners, GA

Associated Lab Samples: 92710958002

METHOD BLANK: 4289478 Matrix: Water
Associated Lab Samples: 92710958002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	ND	0.0030	0.00054	02/06/24 16:40	
Arsenic	mg/L	ND	0.0050	0.00084	02/06/24 16:40	
Barium	mg/L	ND	0.0050	0.00047	02/06/24 16:40	
Beryllium	mg/L	ND	0.00050	0.000094	02/06/24 16:40	
Boron	mg/L	ND	0.040	0.012	02/06/24 16:40	
Cadmium	mg/L	ND	0.00050	0.00010	02/06/24 16:40	
Chromium	mg/L	ND	0.0050	0.0019	02/06/24 16:40	
Cobalt	mg/L	ND	0.0050	0.00032	02/06/24 16:40	
Lead	mg/L	ND	0.0010	0.00016	02/06/24 16:40	
Lithium	mg/L	ND	0.030	0.0016	02/06/24 16:40	
Molybdenum	mg/L	ND	0.010	0.00062	02/06/24 16:40	
Selenium	mg/L	ND	0.0050	0.00096	02/06/24 16:40	
Thallium	mg/L	ND	0.0010	0.00038	02/06/24 16:40	

LABORATORY CONTROL SAMPLE: 4289479

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.1	0.10	102	80-120	
Arsenic	mg/L	0.1	0.099	99	80-120	
Barium	mg/L	0.1	0.099	99	80-120	
Beryllium	mg/L	0.1	0.10	103	80-120	
Boron	mg/L	1	1.0	101	80-120	
Cadmium	mg/L	0.1	0.10	102	80-120	
Chromium	mg/L	0.1	0.098	98	80-120	
Cobalt	mg/L	0.1	0.10	101	80-120	
Lead	mg/L	0.1	0.099	99	80-120	
Lithium	mg/L	0.1	0.10	102	80-120	
Molybdenum	mg/L	0.1	0.10	100	80-120	
Selenium	mg/L	0.1	0.096	96	80-120	
Thallium	mg/L	0.1	0.10	101	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4289480 4289481

Parameter	Units	92710944012 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Antimony	mg/L	0.00062J	0.1	0.1	0.10	0.10	101	101	75-125	0	20	
Arsenic	mg/L	ND	0.1	0.1	0.10	0.10	104	101	75-125	3	20	

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QUALITY CONTROL DATA

Project: Plant McD AP-1 Assessment
Pace Project No.: 92710958

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4289480 4289481

Parameter	Units	92710944012 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Barium	mg/L	0.071	0.1	0.1	0.17	0.17	101	96	75-125	3	20	
Beryllium	mg/L	ND	0.1	0.1	0.089	0.090	89	90	75-125	1	20	
Boron	mg/L	1.3	1	1	2.2	2.2	91	85	75-125	3	20	
Cadmium	mg/L	ND	0.1	0.1	0.10	0.099	100	99	75-125	1	20	
Chromium	mg/L	ND	0.1	0.1	0.11	0.099	105	98	75-125	7	20	
Cobalt	mg/L	0.0026J	0.1	0.1	0.10	0.10	100	98	75-125	2	20	
Lead	mg/L	ND	0.1	0.1	0.096	0.096	96	96	75-125	1	20	
Lithium	mg/L	0.015J	0.1	0.1	0.10	0.11	89	90	75-125	1	20	
Molybdenum	mg/L	ND	0.1	0.1	0.098	0.098	98	97	75-125	1	20	
Selenium	mg/L	ND	0.1	0.1	0.10	0.10	103	101	75-125	2	20	
Thallium	mg/L	ND	0.1	0.1	0.099	0.098	99	98	75-125	1	20	

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QUALITY CONTROL DATA

Project: Plant McD AP-1 Assessment
Pace Project No.: 92710958

QC Batch: 831019
QC Batch Method: EPA 7470A
Analysis Method: EPA 7470A
Analysis Description: 7470 Mercury
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92710958001, 92710958002

METHOD BLANK: 4294943 Matrix: Water
Associated Lab Samples: 92710958001, 92710958002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	ND	0.00020	0.00013	02/08/24 15:57	

LABORATORY CONTROL SAMPLE: 4294944

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.0025	0.0026	105	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4294945 4294946

Parameter	Units	92710939001 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	0.0026	0.0027	102	105	75-125	3	20	

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QUALITY CONTROL DATA

Project: Plant McD AP-1 Assessment
Pace Project No.: 92710958

QC Batch: 830058
QC Batch Method: SM 2320B-2011
Analysis Method: SM 2320B-2011
Analysis Description: 2320B Alkalinity
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92710958001

METHOD BLANK: 4289999 Matrix: Water
Associated Lab Samples: 92710958001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Alkalinity, Total as CaCO3	mg/L	ND	5.0	5.0	02/05/24 15:37	
Alkalinity,Bicarbonate (CaCO3)	mg/L	ND	5.0	5.0	02/05/24 15:37	
Alkalinity,Carbonate (CaCO3)	mg/L	ND	5.0	5.0	02/05/24 15:37	

LABORATORY CONTROL SAMPLE: 4290000

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: 4290001

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	50	51.9	104	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4290002 4290003

Parameter	Units	92710958001 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	47.1	50	50	94.7	95.1	95	96	80-120	0	25	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4290004 4290005

Parameter	Units	92710968001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Alkalinity, Total as CaCO3	mg/L	66.5	50	50	117	119	102	105	80-120	1	25	

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QUALITY CONTROL DATA

Project: Plant McD AP-1 Assessment
Pace Project No.: 92710958

QC Batch: 830324
QC Batch Method: SM 2320B-2011
Analysis Method: SM 2320B-2011
Analysis Description: 2320B Alkalinity
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92710958002

METHOD BLANK: 4291303 Matrix: Water
Associated Lab Samples: 92710958002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Alkalinity, Total as CaCO3	mg/L	ND	5.0	5.0	02/06/24 16:22	
Alkalinity,Bicarbonate (CaCO3)	mg/L	ND	5.0	5.0	02/06/24 16:22	
Alkalinity,Carbonate (CaCO3)	mg/L	ND	5.0	5.0	02/06/24 16:22	

LABORATORY CONTROL SAMPLE: 4291304

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	50	51.4	103	80-120	

LABORATORY CONTROL SAMPLE: 4291305

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	50	51.1	102	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4291306 4291307

Parameter	Units	92710886015 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	41.3	39.7	83	79	80-120	4	25	M1

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4291308 4291309

Parameter	Units	92710886016 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Alkalinity, Total as CaCO3	mg/L	ND	50	50	51.1	50.9	100	100	80-120	0	25	

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QUALITY CONTROL DATA

Project: Plant McD AP-1 Assessment
Pace Project No.: 92710958

QC Batch: 829339
QC Batch Method: SM 2540C-2015
Analysis Method: SM 2540C-2015
Analysis Description: 2540C Total Dissolved Solids
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92710958001

METHOD BLANK: 4286695 Matrix: Water
Associated Lab Samples: 92710958001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	25.0	25.0	02/01/24 11:52	

LABORATORY CONTROL SAMPLE: 4286696

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	250	250	100	90-110	

SAMPLE DUPLICATE: 4286697

Parameter	Units	92711023001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	27.0	27.0	0	25	

SAMPLE DUPLICATE: 4286698

Parameter	Units	92710944003 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	154	136	12	25	

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QUALITY CONTROL DATA

Project: Plant McD AP-1 Assessment
Pace Project No.: 92710958

QC Batch: 829973
QC Batch Method: SM 2540C-2015
Analysis Method: SM 2540C-2015
Analysis Description: 2540C Total Dissolved Solids
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92710958002

METHOD BLANK: 4289665 Matrix: Water
Associated Lab Samples: 92710958002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	25.0	25.0	02/04/24 12:45	

LABORATORY CONTROL SAMPLE: 4289666

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	251	270	108	90-110	

SAMPLE DUPLICATE: 4289667

Parameter	Units	92711015015 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	445	445	0	25	

SAMPLE DUPLICATE: 4289668

Parameter	Units	92710944010 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	212	212	0	25	

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QUALITY CONTROL DATA

Project: Plant McD AP-1 Assessment
Pace Project No.: 92710958

QC Batch: 829293
QC Batch Method: SM 4500-S2D-2011
Analysis Method: SM 4500-S2D-2011
Analysis Description: 4500S2D Sulfide Water
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92710958001

METHOD BLANK: 4286594 Matrix: Water
Associated Lab Samples: 92710958001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Sulfide	mg/L	ND	0.10	0.022	02/01/24 06:20	

LABORATORY CONTROL SAMPLE: 4286595

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Sulfide	mg/L	0.5	0.51	101	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4286596 4286597

Parameter	Units	92710443001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Sulfide	mg/L	ND	0.5	0.5	0.48	0.49	96	97	80-120	1	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4286598 4286599

Parameter	Units	92710968002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Sulfide	mg/L	ND	0.5	0.5	0.52	0.52	103	103	80-120	0	10	

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QUALITY CONTROL DATA

Project: Plant McD AP-1 Assessment
Pace Project No.: 92710958

QC Batch: 830837
QC Batch Method: SM 4500-S2D-2011
Analysis Method: SM 4500-S2D-2011
Analysis Description: 4500S2D Sulfide Water
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92710958002

METHOD BLANK: 4294225 Matrix: Water
Associated Lab Samples: 92710958002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Sulfide	mg/L	ND	0.10	0.022	02/08/24 06:05	

LABORATORY CONTROL SAMPLE: 4294226

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Sulfide	mg/L	0.5	0.53	106	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4294227 4294228

Parameter	Units	92711015009 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Sulfide	mg/L	ND	0.5	0.5	0.51	0.53	102	107	80-120	5	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4294229 4294230

Parameter	Units	92710944006 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Sulfide	mg/L	ND	0.5	0.5	0.47	0.48	94	96	80-120	1	10	

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

REPORT OF LABORATORY ANALYSIS

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Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: Plant McD AP-1 Assessment
Pace Project No.: 92710958

QC Batch: 829251
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: 92710958001

METHOD BLANK: 4286390 Matrix: Water
Associated Lab Samples: 92710958001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.60	01/31/24 21:29	
Fluoride	mg/L	ND	0.10	0.050	01/31/24 21:29	
Sulfate	mg/L	ND	1.0	0.50	01/31/24 21:29	

LABORATORY CONTROL SAMPLE: 4286391

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	48.9	98	90-110	
Fluoride	mg/L	2.5	2.5	100	90-110	
Sulfate	mg/L	50	48.9	98	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4286392 4286393

Parameter	Units	92710726002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	36.6	50	50	78.9	80.2	85	87	90-110	2	10	M1
Fluoride	mg/L	0.90	2.5	2.5	2.7	2.8	73	76	90-110	3	10	M1
Sulfate	mg/L	178	50	50	226	228	96	99	90-110	1	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4286394 4286395

Parameter	Units	92710939001 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	52.6	53.3	88	90	90-110	1	10	M1
Fluoride	mg/L	0.078J	2.5	2.5	1.8	1.9	71	74	90-110	5	10	M1
Sulfate	mg/L	220	50	50	265	265	90	90	90-110	0	10	

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9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: Plant McD AP-1 Assessment
Pace Project No.: 92710958

QC Batch: 829909
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: 92710958002

METHOD BLANK: 4289509 Matrix: Water
Associated Lab Samples: 92710958002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.60	02/03/24 20:43	
Fluoride	mg/L	ND	0.10	0.050	02/03/24 20:43	
Sulfate	mg/L	ND	1.0	0.50	02/03/24 20:43	

LABORATORY CONTROL SAMPLE: 4289510

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	50.0	100	90-110	
Fluoride	mg/L	2.5	2.4	96	90-110	
Sulfate	mg/L	50	50.1	100	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4289511 4289512

Parameter	Units	92710944008 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	28.9	50	50	79.7	80.5	101	103	90-110	1	10	
Fluoride	mg/L	0.13	2.5	2.5	2.6	2.7	100	102	90-110	2	10	
Sulfate	mg/L	337	50	50	378	379	82	84	90-110	0	10	M1

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4289513 4289514

Parameter	Units	92710958002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	3.0	50	50	54.6	55.4	103	105	90-110	1	10	
Fluoride	mg/L	0.29	2.5	2.5	2.7	2.8	97	98	90-110	2	10	
Sulfate	mg/L	15.5	50	50	67.2	68.0	103	105	90-110	1	10	

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

REPORT OF LABORATORY ANALYSIS

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Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALIFIERS

Project: Plant McD AP-1 Assessment
Pace Project No.: 92710958

DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

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

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

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

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

Acid preservation may not be appropriate for 2 Chloroethylvinyl ether.

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

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

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

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

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

D3	Sample was diluted due to the presence of high levels of non-target analytes or other matrix interference.
M1	Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

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9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Plant McD AP-1 Assessment
Pace Project No.: 92710958

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92710958001	**MCD-B-105D**	EPA 3010A	829488	EPA 6010D	829578
92710958002	**MCD-B-112D**	EPA 3010A	829906	EPA 6010D	829935
92710958001	**MCD-B-105D**	EPA 3005A	829343	EPA 6020B	829504
92710958002	**MCD-B-112D**	EPA 3005A	829900	EPA 6020B	829945
92710958001	**MCD-B-105D**	EPA 7470A	831019	EPA 7470A	831089
92710958002	**MCD-B-112D**	EPA 7470A	831019	EPA 7470A	831089
92710958001	**MCD-B-105D**	SM 2320B-2011	830058		
92710958002	**MCD-B-112D**	SM 2320B-2011	830324		
92710958001	**MCD-B-105D**	SM 2540C-2015	829339		
92710958002	**MCD-B-112D**	SM 2540C-2015	829973		
92710958001	**MCD-B-105D**	SM 4500-S2D-2011	829293		
92710958002	**MCD-B-112D**	SM 4500-S2D-2011	830837		
92710958001	**MCD-B-105D**	EPA 300.0 Rev 2.1 1993	829251		
92710958002	**MCD-B-112D**	EPA 300.0 Rev 2.1 1993	829909		

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Pace ANALYTICAL SERVICES

DC#_Title: ENV-FRM-HUN1-0083 v03_Sample Condition Upon Receipt

Effective Date: 11/29/2023

Laboratory receiving samples:

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

Sample Condition Upon Receipt

Client Name: Georgia Power - Coal Combustion Res.

Project #:

WO# : 92710958

92710958

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

Custody Seal Present? ☐ Yes ☑ No **Seals Intact?** ☐ Yes ☐ No ☑ N/A

Date/Initials Person Examining Contents: JC 1/31/24

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: 2.2 **Correction Factor:** Add/Subtract (°C) -0.1

Temp should be above freezing to 6°C

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

Cooler Temp Corrected (°C): 1.9

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.
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 v03_Sample Condition Upon Receipt

Effective Date: 11/29/2023

***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#: 92710958

PM: BV Due Date: 02/14/24

CLIENT: 92-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✓				
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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.

1 Of 1

Section A	Section B	Section C
Client Information:	Required Project Information:	Invoice Information:
Georgia Power - Coal Combustion Residuals	Report To: Lauren Coker	Attention: scsinvoices@southernco.com
2480 Maner Road	Copy To: Golder	Company Name:
Atlanta, GA 30339		Address:
laucoker@southernco.com	Purchase Order #:	Pace Quote:
(470) 820-6176 Fax	Project Name: Plant McD AP-1 Assessment	Pace Project Manager: Bonnie Vang
Requested Due Date: 10 Day TAT	Project #: 31406440.McD23	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)

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, Fe	Cl, F, SO4	Radium 9513/9320	TDS	Alkalinity	Sulfide	Residual Chlorine (Y/N)	
															Y/N	N	N	N	N	N	N		92710958
MCD-8-105D	WG	G	1/30/24	14:10		7	3		3		1					X	X	X	X	X	X		001

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	SAMPLE CONDITIONS
Code = MCD-CCR-ASSMT-2024S1	MARK MANN / [illegible]	01/31/24	0840	Chase Sander Courier PW	1/31	
				Pace	1/31/24	01:28

Received on

Sample Condition

DC#_Title: ENV-FRM-HUN1-0083 v03_Sample Condition Upon Receipt

Effective Date: 11/29/2023

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

Sample Condition Upon Receipt

WO# : 92710958

PM: BV **Due Date: 02/14/24**

CLIENT: 92-GA Power

Client Name: GA Power Project #:

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

Custody Seal Present? ☑ Yes ☐ No Seals Intact? ☑ Yes ☐ No ☐ N/A

Date/Initials Person Examining Contents: 2/12/24 SC

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: 4.1 Correction Factor: Add/Subtract (°C) +0.1

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

Cooler Temp Corrected (°C): 4.2

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

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

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

Field Data Required? ☐ Yes ☐ No

COMMENTS/SAMPLE DISCREPANCY

Lot ID of split containers:

CLIENT NOTIFICATION/RESOLUTION

Person contacted: Date/Time:

Project Manager SCURF Review: Date:

Project Manager SRF Review: Date:

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#: 92710958

PM: BV Due Date: 02/14/24

CLIENT: 92-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)	SPST-125 mL Sterile Plastic (N/A – lab)	SP2T-250 mL Sterile Plastic (N/A – lab)	13PIN	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																													
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10																													
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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: 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	Pace Project Manager: Bonnie Wang
Requested Due Date: 10 Day TAT	Project #: 31406440.McD23	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 95130/9320	TDS	Alkalinity	Sulfide				Residual Chlorine (Y/N)	92710958
	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				
1	MCD-B-112D	WG	G	2/1/24	11:47		7	3		3		1					X	X	X	X	X	X				002
2																										
3																										
4																										
5																										
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ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	SAMPLE CONDITIONS
Task Code = MCD-CCR-ASSMT-2024S1	MARI MANN / [illegible] WSP	2/2/24	1417	[signature] Pace	2/2/24 1417	

DATE Signed:

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

Pace Analytical Services, LLC
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February 09, 2024

Lauren Hartley
Southern Co.
241 Ralph McGill Blvd
NE, Bin 10160
Atlanta, GA 30308

RE: Project: Plant McD Background
Pace Project No.: 92710968

Dear Lauren Hartley:

Enclosed are the analytical results for sample(s) received by the laboratory on January 31, 2024. 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,

Taylor M Cannon for
Bonnie Vang
bonnie.vang@pacelabs.com
704-977-0968
Project Manager

Enclosures

cc: Yong Cheng, WSP
Daniela Herrera, Golder
Andrea McClure, WSP
Laura Midkiff, Southern Co.
Dawn Prell, WSP USA E&I Inc - Atlanta

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CERTIFICATIONS

Project: Plant McD Background
Pace Project No.: 92710968

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 Background
Pace Project No.: 92710968

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92710968001	**MCD-DGWA-53**	Water	01/30/24 11:19	01/31/24 09:28
92710968002	**MCD-DGWA-71**	Water	01/30/24 12:59	01/31/24 09:28

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SAMPLE ANALYTE COUNT

Project: Plant McD Background
Pace Project No.: 92710968

Lab ID	Sample ID	Method	Analysts	Analytes Reported
92710968001	**MCD-DGWA-53**	EPA 6010D	AJM, DRB	5
		EPA 6020B	MT1	13
		EPA 7470A	VB	1
		SM 2320B-2011	YEG	3
		SM 2540C-2015	JAY	1
		SM 4500-S2D-2011	JP1	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92710968002	**MCD-DGWA-71**	EPA 6010D	AJM, DRB	5
		EPA 6020B	MT1	13
		EPA 7470A	VB	1
		SM 2320B-2011	YEG	3
		SM 2540C-2015	JAY	1
		SM 4500-S2D-2011	JP1	1
		EPA 300.0 Rev 2.1 1993	CDC	3

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

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ANALYTICAL RESULTS

Project: Plant McD Background
Pace Project No.: 92710968

Sample: MCD-DGWA-53 **Lab ID: 92710968001** Collected: 01/30/24 11:19 Received: 01/31/24 09:28 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	**10.1**	mg/L	0.040	0.025	1	02/01/24 15:40	02/06/24 03:05	7439-89-6	
Potassium	**3.6**	mg/L	0.50	0.15	1	02/01/24 15:40	02/06/24 03:05	7440-09-7	
Calcium	**13.7**	mg/L	1.0	0.12	1	02/01/24 15:40	02/06/24 03:05	7440-70-2	
Magnesium	**4.7**	mg/L	0.050	0.012	1	02/01/24 15:40	02/06/24 03:05	7439-95-4	
Sodium	**6.3**	mg/L	1.0	0.58	1	02/01/24 15:40	02/07/24 01:46	7440-23-5	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00054	1	02/01/24 10:22	02/01/24 19:35	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00084	1	02/01/24 10:22	02/01/24 19:35	7440-38-2	
Barium	**0.096**	mg/L	0.0050	0.00047	1	02/01/24 10:22	02/01/24 19:35	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000094	1	02/01/24 10:22	02/01/24 19:35	7440-41-7	
Boron	**0.065**	mg/L	0.040	0.012	1	02/01/24 10:22	02/01/24 19:35	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00010	1	02/01/24 10:22	02/01/24 19:35	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0019	1	02/01/24 10:22	02/01/24 19:35	7440-47-3	
Cobalt	**0.0083**	mg/L	0.0050	0.00032	1	02/01/24 10:22	02/01/24 19:35	7440-48-4	
Lead	ND	mg/L	0.0010	0.00016	1	02/01/24 10:22	02/01/24 19:35	7439-92-1	
Lithium	**0.0087J**	mg/L	0.030	0.0016	1	02/01/24 10:22	02/01/24 19:35	7439-93-2	
Molybdenum	**0.025**	mg/L	0.010	0.00062	1	02/01/24 10:22	02/01/24 19:35	7439-98-7	
Selenium	ND	mg/L	0.0050	0.00096	1	02/01/24 10:22	02/01/24 19:35	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00038	1	02/01/24 10:22	02/01/24 19:35	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.00013	1	02/08/24 13:00	02/08/24 16:44	7439-97-6	
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville								
Alkalinity,Bicarbonate (CaCO3)	**66.5**	mg/L	5.0	5.0	1		02/05/24 16:13		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		02/05/24 16:13		
Alkalinity, Total as CaCO3	**66.5**	mg/L	5.0	5.0	1		02/05/24 16:13		
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Asheville								
Total Dissolved Solids	**130**	mg/L	25.0	25.0	1		02/01/24 11:53		
4500S2D Sulfide Water	Analytical Method: SM 4500-S2D-2011 Pace Analytical Services - Asheville								
Sulfide	ND	mg/L	0.10	0.022	1		02/01/24 06:26	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**1.6**	mg/L	1.0	0.60	1		02/02/24 00:34	16887-00-6	
Fluoride	**0.070J**	mg/L	0.10	0.050	1		02/02/24 00:34	16984-48-8	

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ANALYTICAL RESULTS

Project: Plant McD Background
Pace Project No.: 92710968

Sample: MCD-DGWA-53 **Lab ID: 92710968001** Collected: 01/30/24 11:19 Received: 01/31/24 09:28 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								
Sulfate	**13.4**	mg/L	1.0	0.50	1		02/02/24 00:34	14808-79-8	

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ANALYTICAL RESULTS

Project: Plant McD Background
Pace Project No.: 92710968

Sample: MCD-DGWA-71 **Lab ID: 92710968002** Collected: 01/30/24 12:59 Received: 01/31/24 09:28 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								
Sodium	**7.8**	mg/L	1.0	0.58	1	02/01/24 15:40	02/07/24 01:51	7440-23-5	
Iron	ND	mg/L	0.040	0.025	1	02/01/24 15:40	02/06/24 03:10	7439-89-6	
Potassium	**0.81**	mg/L	0.50	0.15	1	02/01/24 15:40	02/06/24 03:10	7440-09-7	
Calcium	**6.1**	mg/L	1.0	0.12	1	02/01/24 15:40	02/06/24 03:10	7440-70-2	
Magnesium	**0.91**	mg/L	0.050	0.012	1	02/01/24 15:40	02/06/24 03:10	7439-95-4	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00054	1	02/01/24 10:22	02/01/24 19:39	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00084	1	02/01/24 10:22	02/01/24 19:39	7440-38-2	
Barium	**0.029**	mg/L	0.0050	0.00047	1	02/01/24 10:22	02/01/24 19:39	7440-39-3	
Beryllium	**0.000098J**	mg/L	0.00050	0.000094	1	02/01/24 10:22	02/01/24 19:39	7440-41-7	
Boron	**0.015J**	mg/L	0.040	0.012	1	02/01/24 10:22	02/01/24 19:39	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00010	1	02/01/24 10:22	02/01/24 19:39	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0019	1	02/01/24 10:22	02/01/24 19:39	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00032	1	02/01/24 10:22	02/01/24 19:39	7440-48-4	
Lead	ND	mg/L	0.0010	0.00016	1	02/01/24 10:22	02/01/24 19:39	7439-92-1	
Lithium	ND	mg/L	0.030	0.0016	1	02/01/24 10:22	02/01/24 19:39	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00062	1	02/01/24 10:22	02/01/24 19:39	7439-98-7	
Selenium	ND	mg/L	0.0050	0.00096	1	02/01/24 10:22	02/01/24 19:39	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00038	1	02/01/24 10:22	02/01/24 19:39	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.00013	1	02/08/24 13:00	02/08/24 16:52	7439-97-6	
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville								
Alkalinity,Bicarbonate (CaCO3)	**17.8**	mg/L	5.0	5.0	1		02/05/24 16:32		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		02/05/24 16:32		
Alkalinity, Total as CaCO3	**17.8**	mg/L	5.0	5.0	1		02/05/24 16:32		
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Asheville								
Total Dissolved Solids	**86.0**	mg/L	25.0	25.0	1		02/01/24 11:53		
4500S2D Sulfide Water	Analytical Method: SM 4500-S2D-2011 Pace Analytical Services - Asheville								
Sulfide	ND	mg/L	0.10	0.022	1		02/01/24 06:27	18496-25-8	
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		02/02/24 01:55	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		02/02/24 01:55	16984-48-8	

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ANALYTICAL RESULTS

Project: Plant McD Background
Pace Project No.: 92710968

Sample: MCD-DGWA-71 **Lab ID: 92710968002** Collected: 01/30/24 12:59 Received: 01/31/24 09:28 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								
Sulfate	**7.9**	mg/L	1.0	0.50	1		02/02/24 01:55	14808-79-8	

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QUALITY CONTROL DATA

Project: Plant McD Background
Pace Project No.: 92710968

QC Batch: 829488
QC Batch Method: EPA 3010A
Analysis Method: EPA 6010D
Analysis Description: 6010D ATL
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92710968001, 92710968002

METHOD BLANK: 4287316 Matrix: Water
Associated Lab Samples: 92710968001, 92710968002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium	mg/L	ND	1.0	0.12	02/06/24 01:47	
Iron	mg/L	ND	0.040	0.025	02/06/24 01:47	
Magnesium	mg/L	ND	0.050	0.012	02/06/24 01:47	
Potassium	mg/L	ND	0.50	0.15	02/06/24 01:47	
Sodium	mg/L	ND	1.0	0.58	02/06/24 01:47	

LABORATORY CONTROL SAMPLE: 4287317

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium	mg/L	1	0.92J	92	80-120	
Iron	mg/L	1	0.98	98	80-120	
Magnesium	mg/L	1	0.99	99	80-120	
Potassium	mg/L	1	0.99	99	80-120	
Sodium	mg/L	1	1.1	110	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4287318 4287319

Parameter	Units	92710944002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Calcium	mg/L	140	1	1	137	137	-336	-322	75-125	0	20	M1
Iron	mg/L	ND	1	1	0.90	0.86	90	86	75-125	5	20	
Magnesium	mg/L	26.0	1	1	26.3	26.2	34	26	75-125	0	20	M1
Potassium	mg/L	6.6	1	1	7.5	7.5	86	90	75-125	0	20	
Sodium	mg/L	29.2	1	1	30.2	30.2	95	93	75-125	0	20	

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QUALITY CONTROL DATA

Project: Plant McD Background
Pace Project No.: 92710968

QC Batch: 829343
QC Batch Method: EPA 3005A
Analysis Method: EPA 6020B
Analysis Description: 6020 MET
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92710968001, 92710968002

METHOD BLANK: 4286710 Matrix: Water
Associated Lab Samples: 92710968001, 92710968002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	ND	0.0030	0.00054	02/01/24 18:02	
Arsenic	mg/L	ND	0.0050	0.00084	02/01/24 18:02	
Barium	mg/L	ND	0.0050	0.00047	02/01/24 18:02	
Beryllium	mg/L	ND	0.00050	0.000094	02/01/24 18:02	
Boron	mg/L	ND	0.040	0.012	02/01/24 18:02	
Cadmium	mg/L	ND	0.00050	0.00010	02/01/24 18:02	
Chromium	mg/L	ND	0.0050	0.0019	02/01/24 18:02	
Cobalt	mg/L	ND	0.0050	0.00032	02/01/24 18:02	
Lead	mg/L	ND	0.0010	0.00016	02/01/24 18:02	
Lithium	mg/L	ND	0.030	0.0016	02/01/24 18:02	
Molybdenum	mg/L	ND	0.010	0.00062	02/01/24 18:02	
Selenium	mg/L	ND	0.0050	0.00096	02/01/24 18:02	
Thallium	mg/L	ND	0.0010	0.00038	02/01/24 18:02	

LABORATORY CONTROL SAMPLE: 4286711

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.1	0.10	100	80-120	
Arsenic	mg/L	0.1	0.097	97	80-120	
Barium	mg/L	0.1	0.099	99	80-120	
Beryllium	mg/L	0.1	0.098	98	80-120	
Boron	mg/L	1	0.98	98	80-120	
Cadmium	mg/L	0.1	0.10	102	80-120	
Chromium	mg/L	0.1	0.099	99	80-120	
Cobalt	mg/L	0.1	0.10	100	80-120	
Lead	mg/L	0.1	0.098	98	80-120	
Lithium	mg/L	0.1	0.10	101	80-120	
Molybdenum	mg/L	0.1	0.10	100	80-120	
Selenium	mg/L	0.1	0.097	97	80-120	
Thallium	mg/L	0.1	0.096	96	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4286712 4286713

Parameter	Units	92710878001 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	0.096	98	96	75-125	2	20	
Arsenic	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
Pace Project No.: 92710968

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4286712 4286713

Parameter	Units	92710878001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Barium	mg/L	0.020	0.1	0.1	0.12	0.11	98	93	75-125	5	20	
Beryllium	mg/L	0.0013	0.1	0.1	0.099	0.099	98	97	75-125	0	20	
Boron	mg/L	1.6	1	1	2.5	2.4	93	84	75-125	4	20	
Cadmium	mg/L	0.00046J	0.1	0.1	0.10	0.099	103	99	75-125	5	20	
Chromium	mg/L	ND	0.1	0.1	0.10	0.10	102	100	75-125	3	20	
Cobalt	mg/L	0.0022J	0.1	0.1	0.11	0.10	105	101	75-125	4	20	
Lead	mg/L	ND	0.1	0.1	0.096	0.093	96	93	75-125	4	20	
Lithium	mg/L	0.0047J	0.1	0.1	0.10	0.10	99	99	75-125	1	20	
Molybdenum	mg/L	ND	0.1	0.1	0.10	0.098	102	97	75-125	4	20	
Selenium	mg/L	0.0022J	0.1	0.1	0.10	0.096	99	94	75-125	6	20	
Thallium	mg/L	ND	0.1	0.1	0.097	0.091	96	91	75-125	6	20	

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QUALITY CONTROL DATA

Project: Plant McD Background
Pace Project No.: 92710968

QC Batch: 831019
QC Batch Method: EPA 7470A
Analysis Method: EPA 7470A
Analysis Description: 7470 Mercury
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92710968001, 92710968002

METHOD BLANK: 4294943 Matrix: Water
Associated Lab Samples: 92710968001, 92710968002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	ND	0.00020	0.00013	02/08/24 15:57	

LABORATORY CONTROL SAMPLE: 4294944

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.0025	0.0026	105	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4294945 4294946

Parameter	Units	92710939001 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	0.0026	0.0027	102	105	75-125	3	20	

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

REPORT OF LABORATORY ANALYSIS

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Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: Plant McD Background
Pace Project No.: 92710968

QC Batch: 830058
QC Batch Method: SM 2320B-2011
Analysis Method: SM 2320B-2011
Analysis Description: 2320B Alkalinity
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92710968001, 92710968002

METHOD BLANK: 4289999 Matrix: Water
Associated Lab Samples: 92710968001, 92710968002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Alkalinity, Total as CaCO3	mg/L	ND	5.0	5.0	02/05/24 15:37	
Alkalinity,Bicarbonate (CaCO3)	mg/L	ND	5.0	5.0	02/05/24 15:37	
Alkalinity,Carbonate (CaCO3)	mg/L	ND	5.0	5.0	02/05/24 15:37	

LABORATORY CONTROL SAMPLE: 4290000

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: 4290001

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	50	51.9	104	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4290002 4290003

Parameter	Units	92710958001 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	47.1	50	50	94.7	95.1	95	96	80-120	0	25	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4290004 4290005

Parameter	Units	92710968001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Alkalinity, Total as CaCO3	mg/L	66.5	50	50	117	119	102	105	80-120	1	25	

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QUALITY CONTROL DATA

Project: Plant McD Background
Pace Project No.: 92710968

QC Batch: 829339
QC Batch Method: SM 2540C-2015
Analysis Method: SM 2540C-2015
Analysis Description: 2540C Total Dissolved Solids
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92710968001, 92710968002

METHOD BLANK: 4286695 Matrix: Water
Associated Lab Samples: 92710968001, 92710968002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	25.0	25.0	02/01/24 11:52	

LABORATORY CONTROL SAMPLE: 4286696

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	250	250	100	90-110	

SAMPLE DUPLICATE: 4286697

Parameter	Units	92711023001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	27.0	27.0	0	25	

SAMPLE DUPLICATE: 4286698

Parameter	Units	92710944003 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	154	136	12	25	

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QUALITY CONTROL DATA

Project: Plant McD Background
Pace Project No.: 92710968

QC Batch: 829293
QC Batch Method: SM 4500-S2D-2011
Analysis Method: SM 4500-S2D-2011
Analysis Description: 4500S2D Sulfide Water
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92710968001, 92710968002

METHOD BLANK: 4286594 Matrix: Water
Associated Lab Samples: 92710968001, 92710968002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Sulfide	mg/L	ND	0.10	0.022	02/01/24 06:20	

LABORATORY CONTROL SAMPLE: 4286595

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Sulfide	mg/L	0.5	0.51	101	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4286596 4286597

Parameter	Units	92710443001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Sulfide	mg/L	ND	0.5	0.5	0.48	0.49	96	97	80-120	1	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4286598 4286599

Parameter	Units	92710968002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Sulfide	mg/L	ND	0.5	0.5	0.52	0.52	103	103	80-120	0	10	

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QUALITY CONTROL DATA

Project: Plant McD Background
Pace Project No.: 92710968

QC Batch: 829251
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: 92710968001, 92710968002

METHOD BLANK: 4286390 Matrix: Water
Associated Lab Samples: 92710968001, 92710968002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.60	01/31/24 21:29	
Fluoride	mg/L	ND	0.10	0.050	01/31/24 21:29	
Sulfate	mg/L	ND	1.0	0.50	01/31/24 21:29	

LABORATORY CONTROL SAMPLE: 4286391

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	48.9	98	90-110	
Fluoride	mg/L	2.5	2.5	100	90-110	
Sulfate	mg/L	50	48.9	98	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4286392 4286393

Parameter	Units	92710726002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	36.6	50	50	78.9	80.2	85	87	90-110	2	10	M1
Fluoride	mg/L	0.90	2.5	2.5	2.7	2.8	73	76	90-110	3	10	M1
Sulfate	mg/L	178	50	50	226	228	96	99	90-110	1	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4286394 4286395

Parameter	Units	92710939001 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	52.6	53.3	88	90	90-110	1	10	M1
Fluoride	mg/L	0.078J	2.5	2.5	1.8	1.9	71	74	90-110	5	10	M1
Sulfate	mg/L	220	50	50	265	265	90	90	90-110	0	10	

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REPORT OF LABORATORY ANALYSIS

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(704)875-9092

QUALIFIERS

Project: Plant McD Background
Pace Project No.: 92710968

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: Plant McD Background
Pace Project No.: 92710968

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92710968001	**MCD-DGWA-53**	EPA 3010A	829488	EPA 6010D	829578
92710968002	**MCD-DGWA-71**	EPA 3010A	829488	EPA 6010D	829578
92710968001	**MCD-DGWA-53**	EPA 3005A	829343	EPA 6020B	829504
92710968002	**MCD-DGWA-71**	EPA 3005A	829343	EPA 6020B	829504
92710968001	**MCD-DGWA-53**	EPA 7470A	831019	EPA 7470A	831089
92710968002	**MCD-DGWA-71**	EPA 7470A	831019	EPA 7470A	831089
92710968001	**MCD-DGWA-53**	SM 2320B-2011	830058		
92710968002	**MCD-DGWA-71**	SM 2320B-2011	830058		
92710968001	**MCD-DGWA-53**	SM 2540C-2015	829339		
92710968002	**MCD-DGWA-71**	SM 2540C-2015	829339		
92710968001	**MCD-DGWA-53**	SM 4500-S2D-2011	829293		
92710968002	**MCD-DGWA-71**	SM 4500-S2D-2011	829293		
92710968001	**MCD-DGWA-53**	EPA 300.0 Rev 2.1 1993	829251		
92710968002	**MCD-DGWA-71**	EPA 300.0 Rev 2.1 1993	829251		

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Pace ANALYTICAL SERVICES

DC#_Title: ENV-FRM-HUN1-0083 v03_Sample Condition Upon Receipt

Effective Date: 11/29/2023

Laboratory receiving samples:

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

Sample Condition Upon Receipt

Client Name: Georgia Power - Coal Combustion Res.

Project #:

WO# : 92710968

92710968

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

Custody Seal Present? ☐ Yes ☑ No **Seals Intact?** ☐ Yes ☐ No ☑ N/A

Date/Initials Person Examining Contents: JG 1/31/24

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: 2.3 **Correction Factor:** Add/Subtract (°C) -0.1

Temp should be above freezing to 6°C

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

Cooler Temp Corrected (°C): 2.2

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: 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# : 92710968

PM: BV Due Date: 02/14/24

CLIENT: 92-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)	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 ✓	1 ✓																	2 ✓				
2		2	1			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.

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	Copy To: WSP	Company Name:	
Atlanta, GA 30339		Address:	Regulatory Agency
Email: laucoker@southernco.com	Purchase Order #:	Pace Quote:	
Phone: (470) 620-8176 Fax	Project Name: Plant McD Background	Pace Project Manager: Bonnie Vang	State / Location
Requested Due Date: 10 Day TAT	Project #: 31406440.McD23	Pace Profile #:	GA

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	Sulfide				Residual Chlorine (Y/N)	
															Y/N	N	N	N	N	N	N					92716968
MCD-DGWA-53	WG	G	1/30/24	11:19		7	3		3		1					X	X	X	X	X	X					
MCD-DGWA-71	WG	G	1/30/24	12:59		7	3		3		1					X	X	X	X	X	X					

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
Code = MCD-CCR-ASSMT-2024S1	MARK MANN / WSP	01/31/24	0840	Courier Pace	1/31	
					1/31/24	0928

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

February 28, 2024

Lauren Hartley
Southern Co.
241 Ralph McGill Blvd
NE, Bin 10160
Atlanta, GA 30308

RE: Project: Plant McD AP-1 Well Netwo- RAD
Pace Project No.: 92710981

Dear Lauren Hartley:

Enclosed are the analytical results for sample(s) received by the laboratory between January 31, 2024 and February 02, 2024. 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
704-977-0968
Project Manager

Enclosures

cc: Yong Cheng, WSP
Daniela Herrera, WSP
Andrea McClure, WSP
Laura Midkiff, Southern Co.
Dawn Prell, WSP USA E&I Inc - Atlanta

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CERTIFICATIONS

Project: Plant McD AP-1 Well Netwo- RAD
Pace Project No.: 92710981

Pace Analytical Services Pennsylvania
1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
ANAB DOD-ELAP Rad Accreditation #: L2417
ANABISO/IEC 17025:2017 Rad Cert#: L24170
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California Certification #: 2950
Colorado Certification #: PA01547
Connecticut Certification #: PH-0694
EPA Region 4 DW Rad
Florida/TNI Certification #: E87683
Georgia Certification #: C040
Guam Certification
Hawaii Certification
Idaho Certification
Illinois Certification
Indiana Certification
Iowa Certification #: 391
Kansas Certification #: E-10358
Kentucky Certification #: KY90133
KY WW Permit #: KY0098221
KY WW Permit #: KY0000221
Louisiana DHH/TNI Certification #: LA010
Louisiana DEQ/TNI Certification #: 04086
Maine Certification #: 2023021
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 #: PA014572023-03
New Hampshire/TNI Certification #: 297622
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 #: PA200002-015
Pennsylvania/TNI Certification #: 65-00282
Puerto Rico Certification #: PA01457
Rhode Island Certification #: 65-00282
South Dakota Certification
Tennessee Certification #: TN02867
Texas/TNI Certification #: T104704188-22-18
Utah/TNI Certification #: PA014572223-14
USDA Soil Permit #: 525-23-67-77263
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

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SAMPLE SUMMARY

Project: Plant McD AP-1 Well Netwo- RAD
Pace Project No.: 92710981

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92710981001	**MCD-DGWC-38**	Water	01/30/24 14:47	01/31/24 09:28
92710981002	**MCD-DGWC-40**	Water	01/30/24 12:40	01/31/24 09:28
92710981003	**MCD-AP1-FD-1**	Water	01/30/24 00:00	01/31/24 09:28
92710981004	**MCD-DGWC-39**	Water	01/31/24 10:10	02/01/24 09:42
92710981005	**MCD-DGWC-68A**	Water	01/31/24 11:50	02/01/24 09:42
92710981006	**MCD-DGWC-121**	Water	01/31/24 15:02	02/01/24 09:42
92710981007	**MCD-DGWC-69**	Water	01/31/24 14:55	02/01/24 09:42
92710981008	**MCD-AP1-FB-1**	Water	01/31/24 15:30	02/01/24 09:42
92710981009	**MCD-DGWC-37**	Water	01/31/24 11:37	02/01/24 09:42
92710981010	**MCD-AP1-EB-1**	Water	01/31/24 10:30	02/01/24 09:42
92710981011	**MCD-DGWC-67**	Water	02/01/24 10:13	02/02/24 14:17

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SAMPLE ANALYTE COUNT

Project: Plant McD AP-1 Well Netwo- RAD
Pace Project No.: 92710981

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92710981001	**MCD-DGWC-38**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92710981002	**MCD-DGWC-40**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92710981003	**MCD-AP1-FD-1**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92710981004	**MCD-DGWC-39**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92710981005	**MCD-DGWC-68A**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92710981006	**MCD-DGWC-121**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92710981007	**MCD-DGWC-69**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92710981008	**MCD-AP1-FB-1**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92710981009	**MCD-DGWC-37**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92710981010	**MCD-AP1-EB-1**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92710981011	**MCD-DGWC-67**	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 McD AP-1 Well Netwo- RAD
Pace Project No.: 92710981

Sample: MCD-DGWC-38 **Lab ID: 92710981001** Collected: 01/30/24 14:47 Received: 01/31/24 09:28 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	**0.179U ± 0.130 (0.227) C:94% T:NA**	pCi/L	02/15/24 08:18	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.427U ± 0.385 (0.771) C:81% T:72%**	pCi/L	02/14/24 14:54	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.606U ± 0.515 (0.998)**	pCi/L	02/16/24 11:49	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant McD AP-1 Well Netwo- RAD
Pace Project No.: 92710981

Sample: MCD-DGWC-40 **Lab ID: 92710981002** Collected: 01/30/24 12:40 Received: 01/31/24 09:28 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	**0.0358U ± 0.0988 (0.238) C:95% T:NA**	pCi/L	02/15/24 08:19	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.498U ± 0.341 (0.635) C:84% T:76%**	pCi/L	02/14/24 14:54	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.534U ± 0.440 (0.873)**	pCi/L	02/16/24 11:49	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant McD AP-1 Well Netwo- RAD
Pace Project No.: 92710981

Sample: MCD-AP1-FD-1 **Lab ID: 92710981003** Collected: 01/30/24 00:00 Received: 01/31/24 09:28 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	**0.0300U ± 0.0889 (0.217) C:92% T:NA**	pCi/L	02/15/24 08:19	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.276U ± 0.324 (0.679) C:88% T:78%**	pCi/L	02/14/24 14:54	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.306U ± 0.413 (0.896)**	pCi/L	02/16/24 11:49	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant McD AP-1 Well Netwo- RAD
Pace Project No.: 92710981

Sample: MCD-DGWC-39 **Lab ID: 92710981004** Collected: 01/31/24 10:10 Received: 02/01/24 09:42 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	**-0.0225U ± 0.184 (0.502) C:87% T:NA**	pCi/L	02/16/24 08:25	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.156U ± 0.298 (0.655) C:83% T:84%**	pCi/L	02/14/24 11:48	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.156U ± 0.482 (1.16)**	pCi/L	02/16/24 15:41	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant McD AP-1 Well Netwo- RAD
Pace Project No.: 92710981

Sample: MCD-DGWC-68A **Lab ID: 92710981005** Collected: 01/31/24 11:50 Received: 02/01/24 09:42 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	**0.0231U ± 0.200 (0.515) C:79% T:NA**	pCi/L	02/16/24 09:21	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.0364U ± 0.291 (0.675) C:82% T:85%**	pCi/L	02/14/24 11:48	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.0595U ± 0.491 (1.19)**	pCi/L	02/16/24 15:41	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant McD AP-1 Well Netwo- RAD
Pace Project No.: 92710981

Sample: MCD-DGWC-121 **Lab ID: 92710981006** Collected: 01/31/24 15:02 Received: 02/01/24 09:42 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	**0.329U ± 0.246 (0.455) C:102% T:NA**	pCi/L	02/16/24 08:25	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.251U ± 0.325 (0.690) C:87% T:84%**	pCi/L	02/14/24 11:49	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.580U ± 0.571 (1.15)**	pCi/L	02/16/24 15:41	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant McD AP-1 Well Netwo- RAD
Pace Project No.: 92710981

Sample: MCD-DGWC-69 **Lab ID: 92710981007** Collected: 01/31/24 14:55 Received: 02/01/24 09:42 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	**0.517 ± 0.258 (0.333) C:94% T:NA**	pCi/L	02/16/24 08:25	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.0706U ± 0.292 (0.664) C:89% T:89%**	pCi/L	02/14/24 12:01	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.588U ± 0.550 (0.997)**	pCi/L	02/16/24 15:41	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant McD AP-1 Well Netwo- RAD
Pace Project No.: 92710981

Sample: MCD-AP1-FB-1 **Lab ID: 92710981008** Collected: 01/31/24 15:30 Received: 02/01/24 09:42 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	**0.0398U ± 0.117 (0.293) C:95% T:NA**	pCi/L	02/16/24 08:25	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.333U ± 0.306 (0.618) C:85% T:87%**	pCi/L	02/14/24 12:01	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.373U ± 0.423 (0.911)**	pCi/L	02/16/24 15:41	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant McD AP-1 Well Netwo- RAD
Pace Project No.: 92710981

Sample: MCD-DGWC-37 **Lab ID: 92710981009** Collected: 01/31/24 11:37 Received: 02/01/24 09:42 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	**0.140U ± 0.201 (0.436) C:87% T:NA**	pCi/L	02/16/24 08:25	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**-0.0373U ± 0.294 (0.700) C:84% T:83%**	pCi/L	02/14/24 12:01	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.140U ± 0.495 (1.14)**	pCi/L	02/16/24 15:41	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant McD AP-1 Well Netwo- RAD
Pace Project No.: 92710981

Sample: MCD-AP1-EB-1 **Lab ID: 92710981010** Collected: 01/31/24 10:30 Received: 02/01/24 09:42 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	**-0.0385U ± 0.125 (0.382) C:92% T:NA**	pCi/L	02/16/24 09:21	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**-0.415U ± 0.316 (0.811) C:84% T:89%**	pCi/L	02/14/24 11:49	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.000U ± 0.441 (1.19)**	pCi/L	02/16/24 15:41	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant McD AP-1 Well Netwo- RAD
Pace Project No.: 92710981

Sample: MCD-DGWC-67 **Lab ID: 92710981011** Collected: 02/01/24 10:13 Received: 02/02/24 14:17 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	**0.211U ± 0.214 (0.426) C:86% T:NA**	pCi/L	02/16/24 08:26	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.456U ± 0.461 (0.961) C:83% T:71%**	pCi/L	02/22/24 11:24	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.667U ± 0.675 (1.39)**	pCi/L	02/27/24 16:12	7440-14-4	

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QUALITY CONTROL - RADIOCHEMISTRY

Project: Plant McD AP-1 Well Netwo- RAD
Pace Project No.: 92710981

QC Batch: 646854
QC Batch Method: EPA 9315
Analysis Method: EPA 9315
Analysis Description: 9315 Total Radium
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92710981004, 92710981005, 92710981006, 92710981007, 92710981008, 92710981009, 92710981010, 92710981011

METHOD BLANK: 3151499
Matrix: Water
Associated Lab Samples: 92710981004, 92710981005, 92710981006, 92710981007, 92710981008, 92710981009, 92710981010, 92710981011

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	-0.00280 ± 0.138 (0.384) C:90% T:NA	pCi/L	02/16/24 08:25	

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QUALITY CONTROL - RADIOCHEMISTRY

Project: Plant McD AP-1 Well Netwo- RAD
Pace Project No.: 92710981

QC Batch: 647678
QC Batch Method: EPA 9320
Analysis Method: EPA 9320
Analysis Description: 9320 Radium 228
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92710981011

METHOD BLANK: 3156333 Matrix: Water
Associated Lab Samples: 92710981011

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.591 ± 0.314 (0.546) C:85% T:84%	pCi/L	02/22/24 11:23	

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QUALITY CONTROL - RADIOCHEMISTRY

Project: Plant McD AP-1 Well Netwo- RAD
Pace Project No.: 92710981

QC Batch:	646549	Analysis Method:	EPA 9320
QC Batch Method:	EPA 9320	Analysis Description:	9320 Radium 228
		Laboratory:	Pace Analytical Services - Greensburg

Associated Lab Samples: 92710981001, 92710981002, 92710981003

METHOD BLANK: 3149922 Matrix: Water

Associated Lab Samples: 92710981001, 92710981002, 92710981003

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.178 ± 0.315 (0.689) C:84% T:86%	pCi/L	02/14/24 14:52	

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QUALITY CONTROL - RADIOCHEMISTRY

Project: Plant McD AP-1 Well Netwo- RAD
Pace Project No.: 92710981

QC Batch: 646776 | Analysis Method: EPA 9320
QC Batch Method: EPA 9320 | Analysis Description: 9320 Radium 228
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92710981004, 92710981005, 92710981006, 92710981007, 92710981008, 92710981009, 92710981010

METHOD BLANK: 3151068 Matrix: Water
Associated Lab Samples: 92710981004, 92710981005, 92710981006, 92710981007, 92710981008, 92710981009, 92710981010

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.837 ± 0.399 (0.683) C:87% T:87%	pCi/L	02/14/24 11:46	

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QUALITY CONTROL - RADIOCHEMISTRY

Project: Plant McD AP-1 Well Netwo- RAD
Pace Project No.: 92710981

QC Batch:	646418	Analysis Method:	EPA 9315
QC Batch Method:	EPA 9315	Analysis Description:	9315 Total Radium
		Laboratory:	Pace Analytical Services - Greensburg

Associated Lab Samples: 92710981001, 92710981002, 92710981003

METHOD BLANK: 3149577 Matrix: Water

Associated Lab Samples: 92710981001, 92710981002, 92710981003

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.0659 ± 0.0944 (0.204) C:100% T:NA	pCi/L	02/15/24 08:16	

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QUALIFIERS

Project: Plant McD AP-1 Well Netwo- RAD
Pace Project No.: 92710981

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 Well Netwo- RAD
Pace Project No.: 92710981

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92710981001	**MCD-DGWC-38**	EPA 9315	646418		
92710981002	**MCD-DGWC-40**	EPA 9315	646418		
92710981003	**MCD-AP1-FD-1**	EPA 9315	646418		
92710981004	**MCD-DGWC-39**	EPA 9315	646854		
92710981005	**MCD-DGWC-68A**	EPA 9315	646854		
92710981006	**MCD-DGWC-121**	EPA 9315	646854		
92710981007	**MCD-DGWC-69**	EPA 9315	646854		
92710981008	**MCD-AP1-FB-1**	EPA 9315	646854		
92710981009	**MCD-DGWC-37**	EPA 9315	646854		
92710981010	**MCD-AP1-EB-1**	EPA 9315	646854		
92710981011	**MCD-DGWC-67**	EPA 9315	646854		
92710981001	**MCD-DGWC-38**	EPA 9320	646549		
92710981002	**MCD-DGWC-40**	EPA 9320	646549		
92710981003	**MCD-AP1-FD-1**	EPA 9320	646549		
92710981004	**MCD-DGWC-39**	EPA 9320	646776		
92710981005	**MCD-DGWC-68A**	EPA 9320	646776		
92710981006	**MCD-DGWC-121**	EPA 9320	646776		
92710981007	**MCD-DGWC-69**	EPA 9320	646776		
92710981008	**MCD-AP1-FB-1**	EPA 9320	646776		
92710981009	**MCD-DGWC-37**	EPA 9320	646776		
92710981010	**MCD-AP1-EB-1**	EPA 9320	646776		
92710981011	**MCD-DGWC-67**	EPA 9320	647678		
92710981001	**MCD-DGWC-38**	Total Radium Calculation	649312		
92710981002	**MCD-DGWC-40**	Total Radium Calculation	649312		
92710981003	**MCD-AP1-FD-1**	Total Radium Calculation	649312		
92710981004	**MCD-DGWC-39**	Total Radium Calculation	649393		
92710981005	**MCD-DGWC-68A**	Total Radium Calculation	649393		
92710981006	**MCD-DGWC-121**	Total Radium Calculation	649393		
92710981007	**MCD-DGWC-69**	Total Radium Calculation	649393		
92710981008	**MCD-AP1-FB-1**	Total Radium Calculation	649393		
92710981009	**MCD-DGWC-37**	Total Radium Calculation	649393		
92710981010	**MCD-AP1-EB-1**	Total Radium Calculation	649393		
92710981011	**MCD-DGWC-67**	Total Radium Calculation	651526		

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Pace ANALYTICAL SERVICES

DOC_TITLE: ENV-FRM-HUN1-0083 v03_Sample Condition Upon Receipt

Effective Date: 11/29/2023

Laboratory receiving samples:

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

Sample Condition Upon Receipt

Client Name: Georgia Power - Coal Combustion Res.

Project #: WO# : 92710981

92710981

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

Custody Seal Present? ☐ Yes ☒ No **Seals Intact?** ☐ Yes ☐ No ☒ N/A

Date/Initials Person Examining Contents: JC 1/31/2

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

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

Thermometer: ☒ IR Gun ID: 214

Type of Ice: ☒ Wet ☐ Blue ☐ None

Cooler Temp: 2.0 **Correction Factor:** Add/Subtract (°C) -0.1

Cooler Temp Corrected (°C): 1.9

Temp should be above freezing to 6°C

☐ Samples out of temp criteria. Samples on ice, cooling proces 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:

*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#: 92710981

PM: BV Due Date: 02/21/24

CLIENT: 92-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 ✓																	4 ✓				
2		2	1			1 ✓	1 ✓																	2 ✓				
3		2	1			1 ✓	1 ✓																	2 ✓				
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pH Adjustment Log for Preserved Samples

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

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina 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

n A red Client Information:	Section B Required Project Information:	Section C Invoice Information:
any: Georgia Power - Coal Combustion Residuals	Report To: Lauren Coker	Attention: scsinvoices@southernco.com
ss: 2480 Maner Road	Copy To: WSP	Company Name:
Atlanta, GA 30339		Address:
laucoker@southernco.com	Purchase Order #:	Pace Quote:
: (470) 620-6176 Fax	Project Name: Plant McD AP-1 Well Network	Pace Project Manager: Bonnie Vang
sted Due Date: 10 Day TAT	Project #: 31406440.McD23	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)

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 9513/9320	TDS	Alkalinity	Sulfide	Residual Chlorine (Y/N)	
																N	N	N	N	N	N		9Z710981
MCD-DGWC-38	WG	G	1/30/24	14:47		9	3		3		1					X	X	X	X	X	X		001 Extra Red
MCD-DGWC-40	WG	G	1/30/2024	12:40		7	3		3		1					X	X	X	X	X	X		002
MCD-AP1-FD-1	WG	G	1/30/24	--		7	3		3		1					X	X	X	X	X	X		003

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	SAMPLE CONDITIONS
Code = MCD-CCR-ASSMT-2024S1	MARK MANN [signature] WSP	1/31/24	0840	Chase Sandor Courier New	1/31	
				[signature] Pace	1/31/24	0928

Pace ANALYTICAL SERVICES

DC#_Title: ENV-FRM-HUNT-0083 v03_Sample Condition Upon Receipt

Effective Date: 11/29/2023

Laboratory receiving samples:

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

Sample Condition Upon Receipt

Client Name: Ga Power

Project #:

WO#: 92710981

PM: BV Due Date: 02/21/24

CLIENT: 92-GA Power

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

Custody Seal Present? ☑ Yes ☐ No **Seals Intact?** ☑ Yes ☐ No ☐ N/A

Date/Initials Person Examining Contents: 2/11/24 BV

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

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

Thermometer:

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

Cooler Temp: 1.1 **Correction Factor:** Add/Subtract (°C) 0.1

Cooler Temp Corrected (°C): 1.2

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? -Includes Date/Time/ID/Analysis Matrix: GW	☑ 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:** _____

WO#: 92710981

PM: BV Due Date: 02/21/24

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.

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)	DG94-40 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)	1SPIN	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	1																		X				
2		2	1			1	1																		X				
3		2	1			1	1																		X				
4		2	1			1	1																		X				
5		2	1			1	1																		X				
6		2	1			1	1																		X				
7		2	1			1	1																		X				
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 Atlanta, GA 30339	Copy To: WSP	Company Name:	Regulatory Agency
Email: laucoker@southernco.com	Purchase Order #:	Address:	
Phone: (470) 620-6176 Fax	Project Name: Plant McD AP-1 Well Network	Pace Quote:	
Requested Due Date: 10 Day TAT	Project #: 31406440.McD23	Pace Project Manager: Bonnie Vang	State / Location: GA
		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	App III/IV + Mg, Na, K, Fe	Cl, F, SO4	Radium 9513/9320	TDS	Alkalinity	Sulfide				Residual Chlorine (Y/N)	92710981
																Requested Analysis Filtered (Y/N)	N	N	N	N	N	N					
1	MCD-DGWC-39	WG	G	1/31/24	10:10		7	3		3		1					X	X	X	X	X	X					004
2	MCD-DGWC-68A	WG	G	1/31/24	11:50		7	3		3		1					X	X	X	X	X	X					005
3	MCD-DGWC-121	WG	G	1/31/24	15:02		7	3		3		1					X	X	X	X	X	X					006
4	MCD-DGWC-69	WG	G	1/31/24	14:55		7	3		3		1					X	X	X	X	X	X					007
5	MCD-AP1-FB-1	WQ	G	1/31/24	15:30		7	3		3		1					X	X	X	X	X	X					008
6	MCD-DGWC-37	WG	G	1/31/24	11:37		7	3		3		1					X	X	X	X	X	X					009
7	MCD-AP1-EB-1	WQ	G	1/31/24	10:30		7	3		3		1					X	X	X	X	X	X					010
8																											
9																											
10																											
11																											
12																											

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	SAMPLE CONDITIONS
Lab Code = MCD-CCR-ASSMT-2024S1	MARK MANN / WSP	02/01/24	835	Chase Sawler / Courier FedEx	2-1-24	
				TCC / CFYZ	2/1/24	

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DC#_Title: ENV-FRM-HUN1-0083 v03_Sample Condition Upon Receipt

Effective Date: 11/29/2023

Laboratory receiving samples:

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

Sample Condition Upon Receipt

Client Name: Ga Power

Project #: **WO# : 92710981**

PM: BV **Due Date: 02/21/24**

CLIENT: 92-GA Power

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

Custody Seal Present? ☑ Yes ☐ No **Seals Intact?** ☑ Yes ☐ No ☐ N/A

Date/Initials Person Examining Contents: 2/12/24 SC

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: 4.1 **Correction Factor:** Add/Subtract (°C) +0.1

Temp should be above freezing to 6°C

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

Cooler Temp Corrected (°C): 4.2

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

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

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

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

Field Data Required? ☐ Yes ☐ No

COMMENTS/SAMPLE DISCREPANCY

Lot ID of split containers:

CLIENT NOTIFICATION/RESOLUTION

Person contacted: Date/Time:

Project Manager SCURF Review: Date:

Project Manager SRF Review: Date:

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#: 92710981**

PM: BV Due Date: 02/21/24

CLIENT: 92-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	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.

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:	WSP	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 Well Network	Pace Project Manager:	Bonnie Vang
Requested Due Date:	10 Day TAT	Project #:	31406440.McD23	Pace Profile #:	

1 Of 1

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

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	Requested Analysis Filtered (Y/N): App III/IV + Mg, Na, K, Fe	Cl, F, SO4	Radium 9513/9320	TDS	Alkalinity	Sulfide	Residual Chlorine (Y/N)	
1	MCD-DGWC-67	WG	G	2/1/24	10:13		7	3		3		1				Y	N	N	N	N	N	N		127/0981 011
2																								
3																								
4																								
5																								
6																								
7																								
8																								
9																								
10																								
11																								
12																								

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	SAMPLE CONDITIONS
Task Code = MCD-CCR-ASSMT-2024S1	MARK MANN / MGP	2/2/24	1417	Pace	2/2/24	1417

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-228
Analyst:	VAL
Date:	2/7/2024
Worklist:	77504
Matrix:	WT

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	3149922
MB concentration:	0.178
M/B 2 Sigma CSU:	0.315
MB MDC:	0.689
MB Numerical Performance Indicator:	1.11
MB Status vs Numerical Indicator:	Pass
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	LCSD (Y or N)?	Y
	LCS77504	LCSD77504
Count Date:	2/14/2024	2/14/2024
Spike I.D.:	23-043	23-043
Decay Corrected Spike Concentration (pCi/mL):	37.865	37.865
Volume Used (mL):	0.10	0.10
Aliquot Volume (L, g, F):	0.817	0.818
Target Conc. (pCi/L, g, F):	4.632	4.630
Uncertainty (Calculated):	0.227	0.227
Result (pCi/L, g, F):	3.521	3.009
LCS/LCSD 2 Sigma CSU (pCi/L, g, F):	0.861	0.788
Numerical Performance Indicator:	-2.45	-3.87
Percent Recovery:	76.00%	64.99%
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.:	LCS77504	Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Duplicate Sample I.D.	LCSD77504	
Sample Result (pCi/L, g, F):	3.521	
Sample Result 2 Sigma CSU (pCi/L, g, F):	0.861	
Sample Duplicate Result (pCi/L, g, F):	3.009	
Sample Duplicate Result 2 Sigma CSU (pCi/L, g, F):	0.788	
Are sample and/or duplicate results below RL?	NO	
Duplicate Numerical Performance Indicator:	0.860	
(Based on the LCS/LCSD Percent Recoveries) Duplicate RPD:	15.62%	
Duplicate Status vs Numerical Indicator:	Pass	
Duplicate Status vs RPD:	Pass	
% RPD Limit:	36%	

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

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

Comments:

VAL
2/15/24

VAM 2/15/24

Quality Control Sample Performance Assessment

Pace Analytical™ www.pacelabs.com

Test:	Ra-228
Analyst:	JJS1
Date:	2/12/2024
Worklist:	77509
Matrix:	WT

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	3151068
MB concentration:	0.837
M/B 2 Sigma CSU:	0.399
MB MDC:	0.683
MB Numerical Performance Indicator:	4.11
MB Status vs Numerical Indicator:	Fail*
MB Status vs. MDC:	See Comment*

OK

Laboratory Control Sample Assessment	LCSD (Y or N)?	Y
	LCS77509	LCSD77509
Count Date:	2/14/2024	2/14/2024
Spike I.D.:	23-043	23-043
Decay Corrected Spike Concentration (pCi/mL):	37.865	37.865
Volume Used (mL):	0.10	0.10
Aliquot Volume (L, g, F):	0.816	0.816
Target Conc. (pCi/L, g, F):	4.640	4.640
Uncertainty (Calculated):	0.227	0.227
Result (pCi/L, g, F):	3.199	3.127
LCS/LCSD 2 Sigma CSU (pCi/L, g, F):	0.805	0.773
Numerical Performance Indicator:	-3.38	-3.68
Percent Recovery:	68.94%	67.39%
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.:	LCS77509	Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Duplicate Sample I.D.	LCSD77509	
Sample Result (pCi/L, g, F):	3.199	
Sample Result 2 Sigma CSU (pCi/L, g, F):	0.805	
Sample Duplicate Result (pCi/L, g, F):	3.127	
Sample Duplicate Result 2 Sigma CSU (pCi/L, g, F):	0.773	
Are sample and/or duplicate results below RL?	NO	
Duplicate Numerical Performance Indicator:	0.126	
(Based on the LCS/LCSD Percent Recoveries) Duplicate RPD:	2.28%	
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. OK VAL

VAL
2/15/24

VAM 2/15/24

Quality Control Sample Performance Assessment

Pace Analytical
www.pacelabs.com

Test:	Ra-228
Analyst:	VAL
Date:	2/15/2024
Worklist:	77574
Matrix:	WT

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	3156333
MB concentration:	0.591
M/B 2 Sigma CSU:	0.314
MB MDC:	0.546
MB Numerical Performance Indicator:	3.68
MB Status vs Numerical Indicator:	Fail*
MB Status vs. MDC:	See Comment*

OK

Laboratory Control Sample Assessment	LCSD (Y or N)?	Y
	LCS77574	LCSD77574
Count Date:	2/22/2024	2/22/2024
Spike I.D.:	23-043	23-043
Decay Corrected Spike Concentration (pCi/mL):	37.767	37.767
Volume Used (mL):	0.10	0.10
Aliquot Volume (L, g, F):	0.817	0.815
Target Conc. (pCi/L, g, F):	4.625	4.633
Uncertainty (Calculated):	0.227	0.227
Result (pCi/L, g, F):	4.048	3.902
LCS/LCSD 2 Sigma CSU (pCi/L, g, F):	0.942	0.852
Numerical Performance Indicator:	-1.17	-1.63
Percent Recovery:	87.53%	84.21%
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.:	LCS77574	Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Duplicate Sample I.D.	LCSD77574	
Sample Result (pCi/L, g, F):	4.048	
Sample Result 2 Sigma CSU (pCi/L, g, F):	0.942	
Sample Duplicate Result (pCi/L, g, F):	3.902	
Sample Duplicate Result 2 Sigma CSU (pCi/L, g, F):	0.852	
Are sample and/or duplicate results below RL?	NO	
Duplicate Numerical Performance Indicator:	0.226	
(Based on the LCS/LCSD Percent Recoveries) Duplicate RPD:	3.87%	
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.

VAM 2/23/24

VAL
2/23/24

Quality Control Sample Performance Assessment

Pace Analytical™
www.pacelabs.com

Test:	Ra-226
Analyst:	SLC
Date:	2/7/2024
Worklist:	77481
Matrix:	WT

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	3149577
MB concentration:	0.066
M/B 2 Sigma CSU:	0.094
MB MDC:	0.204
MB Numerical Performance Indicator:	1.37
MB Status vs Numerical Indicator:	Pass
MB Status vs. MDC:	N/A

Laboratory Control Sample Assessment	LCSD (Y or N)?	Y
	LCS77481	LCSD77481
Count Date:	2/15/2024	2/15/2024
Spike I.D.:	23-014	23-014
Decay Corrected Spike Concentration (pCi/mL):	25.026	25.026
Volume Used (mL):	0.10	0.10
Aliquot Volume (L, g, F):	0.501	0.503
Target Conc. (pCi/L, g, F):	4.991	4.972
Uncertainty (Calculated):	0.235	0.234
Result (pCi/L, g, F):	4.221	4.279
LCS/LCSD 2 Sigma CSU (pCi/L, g, F):	0.768	0.767
Numerical Performance Indicator:	-1.88	-1.69
Percent Recovery:	84.58%	86.07%
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.:	LCS77481	92710985001
Duplicate Sample I.D.	LCSD77481	92710985001DUP
Sample Result (pCi/L, g, F):	4.221	1.674
Sample Result 2 Sigma CSU (pCi/L, g, F):	0.768	0.406
Sample Duplicate Result (pCi/L, g, F):	4.279	0.978
Sample Duplicate Result 2 Sigma CSU (pCi/L, g, F):	0.767	0.287
Are sample and/or duplicate results below RL?	NO	See Below ##
Duplicate Numerical Performance Indicator:	-0.106	2.743
(Based on the LCS/LCSD Percent Recoveries) Duplicate RPD:	1.75%	52.50%
Duplicate Status vs Numerical Indicator:	Pass	Warning
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:

CT 2-16-24

VAM 2/15/24

Quality Control Sample Performance Assessment

Pace Analytical
www.pacelabs.com

Test:	Ra-226
Analyst:	SLC
Date:	2/14/2024
Worklist:	77520
Matrix:	WT

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	3151499
MB concentration:	-0.003
M/B 2 Sigma CSU:	0.138
MB MDC:	0.384
MB Numerical Performance Indicator:	-0.04
MB Status vs Numerical Indicator:	Pass
MB Status vs. MDC:	N/A

Laboratory Control Sample Assessment	LCSD (Y or N)?	Y
	LCS77520	LCSD77520
Count Date:	2/16/2024	2/16/2024
Spike I.D.:	23-014	23-014
Decay Corrected Spike Concentration (pCi/mL):	25.026	25.026
Volume Used (mL):	0.10	0.10
Aliquot Volume (L, g, F):	0.508	0.509
Target Conc. (pCi/L, g, F):	4.923	4.921
Uncertainty (Calculated):	0.231	0.231
Result (pCi/L, g, F):	4.510	4.847
LCS/LCSD 2 Sigma CSU (pCi/L, g, F):	0.937	0.980
Numerical Performance Indicator:	-0.84	-0.14
Percent Recovery:	91.61%	98.50%
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.:	LCS77520	92711021016
Duplicate Sample I.D.	LCSD77520	92711021016DUP
Sample Result (pCi/L, g, F):	4.510	0.228
Sample Result 2 Sigma CSU (pCi/L, g, F):	0.937	0.188
Sample Duplicate Result (pCi/L, g, F):	4.847	0.349
Sample Duplicate Result 2 Sigma CSU (pCi/L, g, F):	0.980	0.268
Are sample and/or duplicate results below RL?	NO	See Below ##
Duplicate Numerical Performance Indicator:	-0.487	-0.722
(Based on the LCS/LCSD Percent Recoveries) Duplicate RPD:	7.25%	41.77%
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 2-16-24

AM 2/16/24

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

February 22, 2024

Lauren Hartley
Southern Co.
241 Ralph McGill Blvd
NE, Bin 10160
Atlanta, GA 30308

RE: Project: Plant McD AP-1 Assessment- RAD
Pace Project No.: 92710985

Dear Lauren Hartley:

Enclosed are the analytical results for sample(s) received by the laboratory between January 31, 2024 and February 02, 2024. 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
704-977-0968
Project Manager

Enclosures

cc: Yong Cheng, WSP
Daniela Herrera, Golder
Andrea McClure, WSP
Laura Midkiff, Southern Co.
Dawn Prell, WSP USA E&I Inc - Atlanta

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Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

CERTIFICATIONS

Project: Plant McD AP-1 Assessment- RAD
Pace Project No.: 92710985

Pace Analytical Services Pennsylvania
1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
ANAB DOD-ELAP Rad Accreditation #: L2417
ANABISO/IEC 17025:2017 Rad Cert#: L24170
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California Certification #: 2950
Colorado Certification #: PA01547
Connecticut Certification #: PH-0694
EPA Region 4 DW Rad
Florida/TNI Certification #: E87683
Georgia Certification #: C040
Guam Certification
Hawaii Certification
Idaho Certification
Illinois Certification
Indiana Certification
Iowa Certification #: 391
Kansas Certification #: E-10358
Kentucky Certification #: KY90133
KY WW Permit #: KY0098221
KY WW Permit #: KY0000221
Louisiana DHH/TNI Certification #: LA010
Louisiana DEQ/TNI Certification #: 04086
Maine Certification #: 2023021
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 #: PA014572023-03
New Hampshire/TNI Certification #: 297622
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 #: PA200002-015
Pennsylvania/TNI Certification #: 65-00282
Puerto Rico Certification #: PA01457
Rhode Island Certification #: 65-00282
South Dakota Certification
Tennessee Certification #: TN02867
Texas/TNI Certification #: T104704188-22-18
Utah/TNI Certification #: PA014572223-14
USDA Soil Permit #: 525-23-67-77263
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

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9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

SAMPLE SUMMARY

Project: Plant McD AP-1 Assessment- RAD
Pace Project No.: 92710985

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92710985001	**MCD-B-105D**	Water	01/30/24 14:10	01/31/24 09:28
92710985002	**MCD-B-112D**	Water	02/01/24 11:47	02/02/24 14:17

REPORT OF LABORATORY ANALYSIS

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SAMPLE ANALYTE COUNT

Project: Plant McD AP-1 Assessment- RAD
Pace Project No.: 92710985

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92710985001	**MCD-B-105D**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92710985002	**MCD-B-112D**	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 McD AP-1 Assessment- RAD
Pace Project No.: 92710985

Sample: MCD-B-105D **Lab ID: 92710985001** Collected: 01/30/24 14:10 Received: 01/31/24 09:28 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	**1.67 ± 0.406 (0.255) C:82% T:NA**	pCi/L	02/15/24 08:19	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**4.71 ± 1.18 (1.11) C:80% T:64%**	pCi/L	02/14/24 14:55	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**6.38 ± 1.59 (1.37)**	pCi/L	02/16/24 11:49	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant McD AP-1 Assessment- RAD
Pace Project No.: 92710985

Sample: MCD-B-112D **Lab ID: 92710985002** Collected: 02/01/24 11:47 Received: 02/02/24 14:17 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	**0.469 ± 0.233 (0.318) C:94% T:NA**	pCi/L	02/19/24 09:02	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.782U ± 0.436 (0.795) C:81% T:83%**	pCi/L	02/20/24 14:36	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.25 ± 0.669 (1.11)**	pCi/L	02/21/24 10:14	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL - RADIOCHEMISTRY

Project: Plant McD AP-1 Assessment- RAD
Pace Project No.: 92710985

QC Batch: 646856
QC Batch Method: EPA 9315
Analysis Method: EPA 9315
Analysis Description: 9315 Total Radium
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92710985002

METHOD BLANK: 3151500 Matrix: Water
Associated Lab Samples: 92710985002

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.0973 ± 0.147 (0.324) C:100% T:NA	pCi/L	02/19/24 08:57	

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 McD AP-1 Assessment- RAD
Pace Project No.: 92710985

QC Batch: 646549
QC Batch Method: EPA 9320
Analysis Method: EPA 9320
Analysis Description: 9320 Radium 228
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92710985001

METHOD BLANK: 3149922
Matrix: Water
Associated Lab Samples: 92710985001

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.178 ± 0.315 (0.689) C:84% T:86%	pCi/L	02/14/24 14:52	

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- RAD
Pace Project No.: 92710985

QC Batch: 646986
QC Batch Method: EPA 9320
Analysis Method: EPA 9320
Analysis Description: 9320 Radium 228
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92710985002

METHOD BLANK: 3152359 Matrix: Water
Associated Lab Samples: 92710985002

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.305 ± 0.286 (0.582) C:86% T:87%	pCi/L	02/20/24 11:22	

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

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QUALITY CONTROL - RADIOCHEMISTRY

Project: Plant McD AP-1 Assessment- RAD
Pace Project No.: 92710985

QC Batch: 646418
QC Batch Method: EPA 9315
Analysis Method: EPA 9315
Analysis Description: 9315 Total Radium
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92710985001

METHOD BLANK: 3149577 Matrix: Water
Associated Lab Samples: 92710985001

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.0659 ± 0.0944 (0.204) C:100% T:NA	pCi/L	02/15/24 08:16	

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-1 Assessment- RAD
Pace Project No.: 92710985

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- RAD
Pace Project No.: 92710985

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92710985001	**MCD-B-105D**	EPA 9315	646418		
92710985002	**MCD-B-112D**	EPA 9315	646856		
92710985001	**MCD-B-105D**	EPA 9320	646549		
92710985002	**MCD-B-112D**	EPA 9320	646986		
92710985001	**MCD-B-105D**	Total Radium Calculation	649312		
92710985002	**MCD-B-112D**	Total Radium Calculation	650155		

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Pace ANALYTICAL SERVICES

DC#_Title: ENV-FRM-HUN1-0083 v03_Sample Condition Upon Receipt

Effective Date: 11/29/2023

Laboratory receiving samples:

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

Sample Condition Upon Receipt

Client Name: Georgia Power - Coal Combustion Res.

Project #:

WO# : 92710985

92710985

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

Custody Seal Present? ☐ Yes ☑ No **Seals Intact?** ☐ Yes ☐ No ☑ N/A

Date/Initials Person Examining Contents: JG 1/31/24

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: 2.2 **Correction Factor:** Add/Subtract (°C) -0.1

Temp should be above freezing to 6°C

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

Cooler Temp Corrected (°C): 1.9

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.
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 v03_Sample Condition Upon Receipt

Effective Date: 11/29/2023

***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#: 92710985**

PM: BV Due Date: 02/21/24

CLIENT: 92-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	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.

1 Of 1

Section A	Section B	Section C
Client Information:	Required Project Information:	Invoice Information:
Georgia Power - Coal Combustion Residuals	Report To: Lauren Coker	Attention: scsinvoices@southernco.com
2480 Maner Road	Copy To: Golder	Company Name:
Atlanta, GA 30339		Address:
laucoker@southernco.com	Purchase Order #:	Pace Quote:
(470) 620-6176 Fax	Project Name: Plant McD AP-1 Assessment	Pace Project Manager: Bonnie Vang
Requested Due Date: 10 Day TAT	Project #: 31406440.McD23	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

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, Fe	Cl, F, SO4	Radium 9613/9320	TDS	Alkalinity	Sulfide	Residual Chlorine (Y/N)	92710985
MCD-B-105D	WG	G	1/30/24	14:10		7	3		3		1					N X	N X	N X	N X	N X	N X		OU1

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	SAMPLE CONDITIONS
Code = MCD-CCR-ASSMT-2024S1	MARK MANN	01/31/24	0840	Chase Lemke Courier PW	1/31	
				Pace	1/31/24	01:28

Sample in C... Received on ... Cooler ... Custody Seal ...

DC#_Title: ENV-FRM-HUN1-0083 v03_Sample Condition Upon Receipt

Effective Date: 11/29/2023

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

Sample Condition Upon Receipt

Client Name: Ga Power

Project # WO#: 92710985

PM: BV Due Date: 02/21/24

CLIENT: 92-GA Power

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

Custody Seal Present? ☑ Yes ☐ No Seals Intact? ☑ Yes ☐ No ☐ N/A

Date/Initials Person Examining Contents: 2/2/24 SC

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: 4.1 Correction Factor: Add/Subtract (°C) +0.1

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

Cooler Temp Corrected (°C): 4.2

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

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

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

Field Data Required? ☐ Yes ☐ No

COMMENTS/SAMPLE DISCREPANCY

Lot ID of split containers:

CLIENT NOTIFICATION/RESOLUTION

Person contacted: Date/Time:

Project Manager SCURF Review: Date:

Project Manager SRF Review: Date:

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#:92710985

PM: BV Due Date: 02/21/24

CLIENT: 92-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	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.

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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	Pace Project Manager:	Bonnie Vang
Requested Due Date:	10 Day TAT	Project #:	31406440.McD23	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 - Ice	H2SO4	HNO3 + Ice	HCl	NaOH + Zn Acetate	Na2S2O3	Methanol	Other	Requested Analysis Filtered (Y/N): Analyses Test Y/N	App III/IV + Mg, Na, K, Fe	Cl, F, SO4	Radium 95139320	TDS	Alkalinity	Sulfide	Residual Chlorine (Y/N)	12710985
	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-B-112D	WG	G	2/1/24	11:47		7	3		3		1					X	X	X	X	X	X		002
2																							
3																							
4																							
5																							
6																							
7																							
8																							
9																							
10																							
11																							
12																							
13																							
14																							

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-2024S1	MARI MANN / Golder/WSP	2/2/24	1417	Pace	2/2/24	17			

DATE Signed:

Quality Control Sample Performance Assessment

Pace Analytical
www.pacelabs.com

Test:	Ra-228
Analyst:	VAL
Date:	2/13/2024
Worklist:	77526
Matrix:	WT

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	3152359
MB concentration:	0.305
M/B 2 Sigma CSU:	0.286
MB MDC:	0.582
MB Numerical Performance Indicator:	2.09
MB Status vs Numerical Indicator:	Warning
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	LCSD (Y or N)?	Y
	LCS77526	LCSD77526
Count Date:	2/20/2024	2/20/2024
Spike I.D.:	23-043	23-043
Decay Corrected Spike Concentration (pCi/mL):	37.792	37.792
Volume Used (mL):	0.10	0.10
Aliquot Volume (L, g, F):	0.817	0.815
Target Conc. (pCi/L, g, F):	4.624	4.636
Uncertainty (Calculated):	0.227	0.227
Result (pCi/L, g, F):	3.006	3.044
LCS/LCSD 2 Sigma CSU (pCi/L, g, F):	0.775	0.715
Numerical Performance Indicator:	-3.93	-4.16
Percent Recovery:	65.02%	65.67%
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.:	LCS77526	Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Duplicate Sample I.D.	LCSD77526	
Sample Result (pCi/L, g, F):	3.006	
Sample Result 2 Sigma CSU (pCi/L, g, F):	0.775	
Sample Duplicate Result (pCi/L, g, F):	3.044	
Sample Duplicate Result 2 Sigma CSU (pCi/L, g, F):	0.715	
Are sample and/or duplicate results below RL?	NO	
Duplicate Numerical Performance Indicator:	-0.071	
(Based on the LCS/LCSD Percent Recoveries) Duplicate RPD:	0.99%	
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
2/21/24

2/21/24

Quality Control Sample Performance Assessment

Pace Analytical
www.pacelabs.com

Test:	Ra-226
Analyst:	SLC
Date:	2/16/2024
Worklist:	77521
Matrix:	WT

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	3151500
MB concentration:	0.097
M/B 2 Sigma CSU:	0.147
MB MDC:	0.324
MB Numerical Performance Indicator:	1.29
MB Status vs Numerical Indicator:	Pass
MB Status vs. MDC:	N/A

Laboratory Control Sample Assessment	LCSD (Y or N)?	Y
	LCS77521	LCSD77521
Count Date:	2/19/2024	2/19/2024
Spike I.D.:	23-014	23-014
Decay Corrected Spike Concentration (pCi/mL):	25.026	25.026
Volume Used (mL):	0.10	0.10
Aliquot Volume (L, g, F):	0.510	0.509
Target Conc. (pCi/L, g, F):	4.904	4.915
Uncertainty (Calculated):	0.230	0.231
Result (pCi/L, g, F):	4.740	5.387
LCS/LCSD 2 Sigma CSU (pCi/L, g, F):	0.918	1.012
Numerical Performance Indicator:	-0.34	0.89
Percent Recovery:	96.65%	109.59%
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.:	LCS77521	92710985002
Duplicate Sample I.D.	LCSD77521	92710985002DUP
Sample Result (pCi/L, g, F):	4.740	0.469
Sample Result 2 Sigma CSU (pCi/L, g, F):	0.918	0.233
Sample Duplicate Result (pCi/L, g, F):	5.387	0.300
Sample Duplicate Result 2 Sigma CSU (pCi/L, g, F):	1.012	0.190
Are sample and/or duplicate results below RL?	NO	See Below ##
Duplicate Numerical Performance Indicator:	-0.928	1.101
(Based on the LCS/LCSD Percent Recoveries) Duplicate RPD:	12.55%	44.05%
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:

CT 2-20-24

LAM 2/20/24

Quality Control Sample Performance Assessment

Pace Analytical
www.pacelabs.com

Test:	Ra-228
Analyst:	VAL
Date:	2/7/2024
Worklist:	77504
Matrix:	WT

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	3149922
MB concentration:	0.178
M/B 2 Sigma CSU:	0.315
MB MDC:	0.689
MB Numerical Performance Indicator:	1.11
MB Status vs Numerical Indicator:	Pass
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	LCSD (Y or N)?	Y
	LCS77504	LCSD77504
Count Date:	2/14/2024	2/14/2024
Spike I.D.:	23-043	23-043
Decay Corrected Spike Concentration (pCi/mL):	37.865	37.865
Volume Used (mL):	0.10	0.10
Aliquot Volume (L, g, F):	0.817	0.818
Target Conc. (pCi/L, g, F):	4.632	4.630
Uncertainty (Calculated):	0.227	0.227
Result (pCi/L, g, F):	3.521	3.009
LCS/LCSD 2 Sigma CSU (pCi/L, g, F):	0.861	0.788
Numerical Performance Indicator:	-2.45	-3.87
Percent Recovery:	76.00%	64.99%
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.:	LCS77504	Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Duplicate Sample I.D.	LCSD77504	
Sample Result (pCi/L, g, F):	3.521	
Sample Result 2 Sigma CSU (pCi/L, g, F):	0.861	
Sample Duplicate Result (pCi/L, g, F):	3.009	
Sample Duplicate Result 2 Sigma CSU (pCi/L, g, F):	0.788	
Are sample and/or duplicate results below RL?	NO	
Duplicate Numerical Performance Indicator:	0.860	
(Based on the LCS/LCSD Percent Recoveries) Duplicate RPD:	15.62%	
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:

VAL
2/15/24

VAM 2/15/24

Quality Control Sample Performance Assessment

Pace Analytical™
www.pacelabs.com

Test:	Ra-226
Analyst:	SLC
Date:	2/7/2024
Worklist:	77481
Matrix:	WT

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	3149577
MB concentration:	0.066
M/B 2 Sigma CSU:	0.094
MB MDC:	0.204
MB Numerical Performance Indicator:	1.37
MB Status vs Numerical Indicator:	Pass
MB Status vs. MDC:	N/A

Laboratory Control Sample Assessment	LCSD (Y or N)?	Y
	LCS77481	LCSD77481
Count Date:	2/15/2024	2/15/2024
Spike I.D.:	23-014	23-014
Decay Corrected Spike Concentration (pCi/mL):	25.026	25.026
Volume Used (mL):	0.10	0.10
Aliquot Volume (L, g, F):	0.501	0.503
Target Conc. (pCi/L, g, F):	4.991	4.972
Uncertainty (Calculated):	0.235	0.234
Result (pCi/L, g, F):	4.221	4.279
LCS/LCSD 2 Sigma CSU (pCi/L, g, F):	0.768	0.767
Numerical Performance Indicator:	-1.88	-1.69
Percent Recovery:	84.58%	86.07%
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.:	LCS77481	92710985001
Duplicate Sample I.D.	LCSD77481	92710985001DUP
Sample Result (pCi/L, g, F):	4.221	1.674
Sample Result 2 Sigma CSU (pCi/L, g, F):	0.768	0.406
Sample Duplicate Result (pCi/L, g, F):	4.279	0.978
Sample Duplicate Result 2 Sigma CSU (pCi/L, g, F):	0.767	0.287
Are sample and/or duplicate results below RL?	NO	See Below ##
Duplicate Numerical Performance Indicator:	-0.106	2.743
(Based on the LCS/LCSD Percent Recoveries) Duplicate RPD:	1.75%	52.50%
Duplicate Status vs Numerical Indicator:	Pass	Warning
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:

CT 2-16-24

VAM 2/15/24

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

February 16, 2024

Lauren Hartley
Southern Co.
241 Ralph McGill Blvd
NE, Bin 10160
Atlanta, GA 30308

RE: Project: Plant McD Background- RAD
Pace Project No.: 92710986

Dear Lauren Hartley:

Enclosed are the analytical results for sample(s) received by the laboratory on January 31, 2024. 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
704-977-0968
Project Manager

Enclosures

cc: Yong Cheng, WSP
Daniela Herrera, Golder
Andrea McClure, WSP
Laura Midkiff, Southern Co.
Dawn Prell, WSP USA E&I Inc - Atlanta

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Huntersville, NC 28078
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CERTIFICATIONS

Project: Plant McD Background- RAD
Pace Project No.: 92710986

Pace Analytical Services Pennsylvania

1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
ANAB DOD-ELAP Rad Accreditation #: L2417
ANABISO/IEC 17025:2017 Rad Cert#: L24170
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California Certification #: 2950
Colorado Certification #: PA01547
Connecticut Certification #: PH-0694
EPA Region 4 DW Rad
Florida/TNI Certification #: E87683
Georgia Certification #: C040
Guam Certification
Hawaii Certification
Idaho Certification
Illinois Certification
Indiana Certification
Iowa Certification #: 391
Kansas Certification #: E-10358
Kentucky Certification #: KY90133
KY WW Permit #: KY0098221
KY WW Permit #: KY0000221
Louisiana DHH/TNI Certification #: LA010
Louisiana DEQ/TNI Certification #: 04086
Maine Certification #: 2023021
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 #: PA014572023-03
New Hampshire/TNI Certification #: 297622
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 #: PA200002-015
Pennsylvania/TNI Certification #: 65-00282
Puerto Rico Certification #: PA01457
Rhode Island Certification #: 65-00282
South Dakota Certification
Tennessee Certification #: TN02867
Texas/TNI Certification #: T104704188-22-18
Utah/TNI Certification #: PA014572223-14
USDA Soil Permit #: 525-23-67-77263
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

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SAMPLE SUMMARY

Project: Plant McD Background- RAD
Pace Project No.: 92710986

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92710986001	**MCD-DGWA-53**	Water	01/30/24 11:19	01/31/24 09:28
92710986002	**MCD-DGWA-71**	Water	01/30/24 12:59	01/31/24 09:28

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SAMPLE ANALYTE COUNT

Project: Plant McD Background- RAD
Pace Project No.: 92710986

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92710986001	**MCD-DGWA-53**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92710986002	**MCD-DGWA-71**	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 McD Background- RAD
Pace Project No.: 92710986

Sample: MCD-DGWA-53 **Lab ID: 92710986001** Collected: 01/30/24 11:19 Received: 01/31/24 09:28 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	**0.342 ± 0.0982 (0.0894) C:110% T:NA**	pCi/L	02/15/24 08:17	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.136U ± 0.292 (0.647) C:86% T:84%**	pCi/L	02/14/24 14:55	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.478U ± 0.390 (0.736)**	pCi/L	02/16/24 11:49	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant McD Background- RAD
Pace Project No.: 92710986

Sample: MCD-DGWA-71 **Lab ID: 92710986002** Collected: 01/30/24 12:59 Received: 01/31/24 09:28 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	**0.135U ± 0.110 (0.191) C:95% T:NA**	pCi/L	02/15/24 08:17	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.170U ± 0.291 (0.636) C:84% T:88%**	pCi/L	02/14/24 14:56	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.305U ± 0.401 (0.827)**	pCi/L	02/16/24 11:49	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL - RADIOCHEMISTRY

Project: Plant McD Background- RAD
Pace Project No.: 92710986

QC Batch: 646549
QC Batch Method: EPA 9320
Analysis Method: EPA 9320
Analysis Description: 9320 Radium 228
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92710986001, 92710986002

METHOD BLANK: 3149922
Matrix: Water
Associated Lab Samples: 92710986001, 92710986002

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.178 ± 0.315 (0.689) C:84% T:86%	pCi/L	02/14/24 14:52	

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- RAD
Pace Project No.: 92710986

QC Batch: 646418
QC Batch Method: EPA 9315
Analysis Method: EPA 9315
Analysis Description: 9315 Total Radium
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92710986001, 92710986002

METHOD BLANK: 3149577 Matrix: Water
Associated Lab Samples: 92710986001, 92710986002

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.0659 ± 0.0944 (0.204) C:100% T:NA	pCi/L	02/15/24 08:16	

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- RAD
Pace Project No.: 92710986

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
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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Plant McD Background- RAD
Pace Project No.: 92710986

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92710986001	**MCD-DGWA-53**	EPA 9315	646418		
92710986002	**MCD-DGWA-71**	EPA 9315	646418		
92710986001	**MCD-DGWA-53**	EPA 9320	646549		
92710986002	**MCD-DGWA-71**	EPA 9320	646549		
92710986001	**MCD-DGWA-53**	Total Radium Calculation	649312		
92710986002	**MCD-DGWA-71**	Total Radium Calculation	649312		

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Pace ANALYTICAL SERVICES

DC#_Title: ENV-FRM-HUN1-0083 v03_Sample Condition Upon Receipt

Effective Date: 11/29/2023

Laboratory receiving samples:

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

Sample Condition Upon Receipt

Client Name: Georgia Power - Coal Combustion Res.

Project #:

WO# : 92710986

92710986

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

Custody Seal Present? ☐ Yes ☑ No **Seals Intact?** ☐ Yes ☐ No ☑ N/A

Date/Initials Person Examining Contents: JG 1/31/24

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: 2.3 **Correction Factor:** Add/Subtract (°C) -0.1

Cooler Temp Corrected (°C): 2.2

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: 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

**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#: 92710986**

PM: BV Due Date: 02/21/24

CLIENT: 92-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)	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 ✓																		BP1N 2 ✓			
2		2	1			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.

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: WSP	Company Name:
Atlanta, GA 30339		Address:
laucoker@southernco.com	Purchase Order #:	Pace Quote:
(470) 620-6176 Fax	Project Name: Plant McD Background	Pace Project Manager: Bonnie Vang
Requested Due Date: 10 Day TAT	Project #: 31406440.McD23	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)

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 (N)	Cl, F, SO4 (N)	Radium 9513/9320 (N)	TDS (N)	Alkalinity (N)	Sulfide (N)	Residual Chlorine (Y/N)	92710986
MCD-DGWA-53	WG	G	1/30/24	11:19		7	3		3		1					X	X	X	X	X	X		001
MCD-DGWA-71	WG	G	1/30/24	12:59		7	3		3		1					X	X	X	X	X	X		002

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	SAMPLE CONDITIONS
Code = MCD-CCR-ASSMT-2024S1	MARK MANN / WSP	01/31/24	0840	Chris Sander Courier Mtr	1/31	
				[signature] / Pace	1/31/24	01:28

Quality Control Sample Performance Assessment

Pace Analytical
www.pacelabs.com

Test:	Ra-228
Analyst:	VAL
Date:	2/7/2024
Worklist:	77504
Matrix:	WT

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	3149922
MB concentration:	0.178
M/B 2 Sigma CSU:	0.315
MB MDC:	0.689
MB Numerical Performance Indicator:	1.11
MB Status vs Numerical Indicator:	Pass
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	LCSD (Y or N)?	Y
	LCS77504	LCSD77504
Count Date:	2/14/2024	2/14/2024
Spike I.D.:	23-043	23-043
Decay Corrected Spike Concentration (pCi/mL):	37.865	37.865
Volume Used (mL):	0.10	0.10
Aliquot Volume (L, g, F):	0.817	0.818
Target Conc. (pCi/L, g, F):	4.632	4.630
Uncertainty (Calculated):	0.227	0.227
Result (pCi/L, g, F):	3.521	3.009
LCS/LCSD 2 Sigma CSU (pCi/L, g, F):	0.861	0.788
Numerical Performance Indicator:	-2.45	-3.87
Percent Recovery:	76.00%	64.99%
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.:	LCS77504	Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Duplicate Sample I.D.	LCSD77504	
Sample Result (pCi/L, g, F):	3.521	
Sample Result 2 Sigma CSU (pCi/L, g, F):	0.861	
Sample Duplicate Result (pCi/L, g, F):	3.009	
Sample Duplicate Result 2 Sigma CSU (pCi/L, g, F):	0.788	
Are sample and/or duplicate results below RL?	NO	
Duplicate Numerical Performance Indicator:	0.860	
(Based on the LCS/LCSD Percent Recoveries) Duplicate RPD:	15.62%	
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:

VAL
2/15/24

VAM 2/15/24

Quality Control Sample Performance Assessment

Pace Analytical™ www.pacelabs.com

Test:	Ra-226
Analyst:	SLC
Date:	2/7/2024
Worklist:	77481
Matrix:	WT

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	3149577
MB concentration:	0.066
M/B 2 Sigma CSU:	0.094
MB MDC:	0.204
MB Numerical Performance Indicator:	1.37
MB Status vs Numerical Indicator:	Pass
MB Status vs. MDC:	N/A

Laboratory Control Sample Assessment	LCSD (Y or N)?	Y
	LCS77481	LCSD77481
Count Date:	2/15/2024	2/15/2024
Spike I.D.:	23-014	23-014
Decay Corrected Spike Concentration (pCi/mL):	25.026	25.026
Volume Used (mL):	0.10	0.10
Aliquot Volume (L, g, F):	0.501	0.503
Target Conc. (pCi/L, g, F):	4.991	4.972
Uncertainty (Calculated):	0.235	0.234
Result (pCi/L, g, F):	4.221	4.279
LCS/LCSD 2 Sigma CSU (pCi/L, g, F):	0.768	0.767
Numerical Performance Indicator:	-1.88	-1.69
Percent Recovery:	84.58%	86.07%
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.:	LCS77481	92710985001
Duplicate Sample I.D.	LCSD77481	92710985001DUP
Sample Result (pCi/L, g, F):	4.221	1.674
Sample Result 2 Sigma CSU (pCi/L, g, F):	0.768	0.406
Sample Duplicate Result (pCi/L, g, F):	4.279	0.978
Sample Duplicate Result 2 Sigma CSU (pCi/L, g, F):	0.767	0.287
Are sample and/or duplicate results below RL?	NO	See Below ##
Duplicate Numerical Performance Indicator:	-0.106	2.743
(Based on the LCS/LCSD Percent Recoveries) Duplicate RPD:	1.75%	52.50%
Duplicate Status vs Numerical Indicator:	Pass	Warning
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:

CT 2-16-24

VAM 2/15/24

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

February 19, 2024

Lauren Hartley
Southern Co.
241 Ralph McGill Blvd
NE, Bin 10160
Atlanta, GA 30308

RE: Project: Plant McD AP-1234 Assessment
Pace Project No.: 92711279

Dear Lauren Hartley:

Enclosed are the analytical results for sample(s) received by the laboratory between February 01, 2024 and February 02, 2024. 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,

Bonnie Vang
bonnie.vang@pacelabs.com
704-977-0968
Project Manager

Enclosures

cc: Yong Cheng, WSP
Daniela Herrera, Golder
Andrea McClure, WSP
Laura Midkiff, Southern Co.
Dawn Prell, WSP USA E&I Inc - Atlanta

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Huntersville, NC 28078
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CERTIFICATIONS

Project: Plant McD AP-1234 Assessment
Pace Project No.: 92711279

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-1234 Assessment
Pace Project No.: 92711279

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92711279001	**MCD-B-100**	Water	01/31/24 13:55	02/01/24 09:42
92711279002	**MCD-B-62**	Water	02/01/24 10:50	02/02/24 14:17

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SAMPLE ANALYTE COUNT

Project: Plant McD AP-1234 Assessment
Pace Project No.: 92711279

Lab ID	Sample ID	Method	Analysts	Analytes Reported
92711279001	**MCD-B-100**	EPA 6010D	AJM, DRB	5
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2320B-2011	SMS	3
		SM 2540C-2015	JAY	1
		SM 4500-S2D-2011	JP1	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92711279002	**MCD-B-62**	EPA 6010D	DRB	5
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2320B-2011	SMS	3
		SM 2540C-2015	JAY	1
		SM 4500-S2D-2011	JP1	1
		EPA 300.0 Rev 2.1 1993	JCM	3

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

REPORT OF LABORATORY ANALYSIS

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Huntersville, NC 28078
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ANALYTICAL RESULTS

Project: Plant McD AP-1234 Assessment
Pace Project No.: 92711279

Sample: MCD-B-100 **Lab ID: 92711279001** Collected: 01/31/24 13:55 Received: 02/01/24 09:42 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								
Sodium	**19.3**	mg/L	1.0	0.58	1	02/02/24 10:25	02/07/24 05:33	7440-23-5	
Calcium	**24.3**	mg/L	1.0	0.12	1	02/02/24 10:25	02/07/24 05:33	7440-70-2	
Magnesium	**25.4**	mg/L	0.050	0.012	1	02/02/24 10:25	02/07/24 05:33	7439-95-4	
Iron	**10.5**	mg/L	0.040	0.025	1	02/02/24 10:25	02/10/24 12:39	7439-89-6	
Potassium	**0.84**	mg/L	0.50	0.15	1	02/02/24 10:25	02/10/24 12:39	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	0.00054	1	02/02/24 09:55	02/02/24 18:43	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00084	1	02/02/24 09:55	02/02/24 18:43	7440-38-2	
Barium	**0.019**	mg/L	0.0050	0.00047	1	02/02/24 09:55	02/02/24 18:43	7440-39-3	
Beryllium	**0.00047J**	mg/L	0.00050	0.000094	1	02/02/24 09:55	02/02/24 18:43	7440-41-7	
Boron	**0.13**	mg/L	0.040	0.012	1	02/02/24 09:55	02/02/24 18:43	7440-42-8	BC
Cadmium	**0.00033J**	mg/L	0.00050	0.00010	1	02/02/24 09:55	02/02/24 18:43	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0019	1	02/02/24 09:55	02/02/24 18:43	7440-47-3	
Cobalt	**0.065**	mg/L	0.0050	0.00032	1	02/02/24 09:55	02/02/24 18:43	7440-48-4	
Lead	ND	mg/L	0.0010	0.00016	1	02/02/24 09:55	02/02/24 18:43	7439-92-1	
Lithium	ND	mg/L	0.030	0.0016	1	02/02/24 09:55	02/02/24 18:43	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00062	1	02/02/24 09:55	02/02/24 18:43	7439-98-7	
Selenium	ND	mg/L	0.0050	0.00096	1	02/02/24 09:55	02/02/24 18:43	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00038	1	02/02/24 09:55	02/02/24 18:43	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.00013	1	02/15/24 09:30	02/15/24 14:48	7439-97-6	
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville								
Alkalinity,Bicarbonate (CaCO3)	**28.8**	mg/L	5.0	5.0	1		02/06/24 12:27		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		02/06/24 12:27		
Alkalinity, Total as CaCO3	**28.8**	mg/L	5.0	5.0	1		02/06/24 12:27		
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Asheville								
Total Dissolved Solids	**582**	mg/L	25.0	25.0	1		02/04/24 13:00		
4500S2D Sulfide Water	Analytical Method: SM 4500-S2D-2011 Pace Analytical Services - Asheville								
Sulfide	ND	mg/L	0.10	0.022	1		02/03/24 06:23	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**7.5**	mg/L	1.0	0.60	1		02/02/24 07:40	16887-00-6	
Fluoride	**0.063J**	mg/L	0.10	0.050	1		02/02/24 07:40	16984-48-8	

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ANALYTICAL RESULTS

Project: Plant McD AP-1234 Assessment
Pace Project No.: 92711279

Sample: MCD-B-100 **Lab ID: 92711279001** Collected: 01/31/24 13:55 Received: 02/01/24 09:42 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								
Sulfate	**340**	mg/L	7.0	3.5	7		02/02/24 11:00	14808-79-8	

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ANALYTICAL RESULTS

Project: Plant McD AP-1234 Assessment
Pace Project No.: 92711279

Sample: MCD-B-62 **Lab ID: 92711279002** Collected: 02/01/24 10:50 Received: 02/02/24 14:17 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								
Potassium	**2.6**	mg/L	0.50	0.15	1	02/03/24 10:10	02/07/24 22:38	7440-09-7	
Calcium	**33.2**	mg/L	1.0	0.12	1	02/03/24 10:10	02/07/24 22:38	7440-70-2	
Magnesium	**4.7**	mg/L	0.050	0.012	1	02/03/24 10:10	02/07/24 22:38	7439-95-4	
Iron	**5.3**	mg/L	0.040	0.025	1	02/03/24 10:10	02/10/24 22:22	7439-89-6	
Sodium	**10.6**	mg/L	1.0	0.58	1	02/03/24 10:10	02/10/24 22:22	7440-23-5	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00054	1	02/03/24 09:04	02/06/24 18:26	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00084	1	02/03/24 09:04	02/06/24 18:26	7440-38-2	
Barium	**0.017**	mg/L	0.0050	0.00047	1	02/03/24 09:04	02/06/24 18:26	7440-39-3	
Beryllium	**0.00015J**	mg/L	0.00050	0.000094	1	02/03/24 09:04	02/06/24 18:26	7440-41-7	
Boron	**0.083**	mg/L	0.040	0.012	1	02/03/24 09:04	02/06/24 18:26	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00010	1	02/03/24 09:04	02/06/24 18:26	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0019	1	02/03/24 09:04	02/06/24 18:26	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00032	1	02/03/24 09:04	02/06/24 18:26	7440-48-4	
Lead	ND	mg/L	0.0010	0.00016	1	02/03/24 09:04	02/06/24 18:26	7439-92-1	
Lithium	**0.0094J**	mg/L	0.030	0.0016	1	02/03/24 09:04	02/06/24 18:26	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00062	1	02/03/24 09:04	02/06/24 18:26	7439-98-7	
Selenium	ND	mg/L	0.0050	0.00096	1	02/03/24 09:04	02/06/24 18:26	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00038	1	02/03/24 09:04	02/06/24 18:26	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	02/15/24 09:30	02/15/24 14:51	7439-97-6	
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville								
Alkalinity,Bicarbonate (CaCO3)	**86.5**	mg/L	5.0	5.0	1		02/06/24 18:19		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		02/06/24 18:19		
Alkalinity, Total as CaCO3	**86.5**	mg/L	5.0	5.0	1		02/06/24 18:19		
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Asheville								
Total Dissolved Solids	**205**	mg/L	25.0	25.0	1		02/04/24 12:51		
4500S2D Sulfide Water	Analytical Method: SM 4500-S2D-2011 Pace Analytical Services - Asheville								
Sulfide	ND	mg/L	0.10	0.022	1		02/08/24 06:16	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**5.6**	mg/L	1.0	0.60	1		02/04/24 01:39	16887-00-6	
Fluoride	**0.14**	mg/L	0.10	0.050	1		02/04/24 01:39	16984-48-8	

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ANALYTICAL RESULTS

Project: Plant McD AP-1234 Assessment
Pace Project No.: 92711279

Sample: MCD-B-62 **Lab ID: 92711279002** Collected: 02/01/24 10:50 Received: 02/02/24 14:17 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								
Sulfate	**49.4**	mg/L	1.0	0.50	1		02/04/24 01:39	14808-79-8	

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QUALITY CONTROL DATA

Project: Plant McD AP-1234 Assessment
Pace Project No.: 92711279

QC Batch: 829702
QC Batch Method: EPA 3010A
Analysis Method: EPA 6010D
Analysis Description: 6010D ATL
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92711279001

METHOD BLANK: 4288119 Matrix: Water
Associated Lab Samples: 92711279001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium	mg/L	ND	1.0	0.12	02/07/24 02:24	
Iron	mg/L	ND	0.040	0.025	02/07/24 02:24	
Magnesium	mg/L	ND	0.050	0.012	02/07/24 02:24	
Potassium	mg/L	ND	0.50	0.15	02/10/24 11:07	
Sodium	mg/L	ND	1.0	0.58	02/07/24 02:24	

LABORATORY CONTROL SAMPLE: 4288120

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium	mg/L	1	0.95J	95	80-120	
Iron	mg/L	1	1.1	109	80-120	
Magnesium	mg/L	1	0.98	98	80-120	
Potassium	mg/L	1	1.0	102	80-120	
Sodium	mg/L	1	0.95J	95	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4288121 4288122

Parameter	Units	92710939004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Calcium	mg/L	76.6	1	1	79.0	72.5	242	-409	75-125	9	20	M1
Iron	mg/L	11.3	1	1	13.1	12.7	176	140	75-125	3	20	M1
Magnesium	mg/L	19.7	1	1	21.1	19.2	144	-46	75-125	9	20	M1
Potassium	mg/L	2.3	1	1	3.5	3.4	125	109	75-125	4	20	
Sodium	mg/L	11.6	1	1	12.8	11.7	128	12	75-125	10	20	M1

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QUALITY CONTROL DATA

Project: Plant McD AP-1234 Assessment
Pace Project No.: 92711279

QC Batch: 829906
QC Batch Method: EPA 3010A
Analysis Method: EPA 6010D
Analysis Description: 6010D ATL
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92711279002

METHOD BLANK: 4289495 Matrix: Water
Associated Lab Samples: 92711279002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium	mg/L	ND	1.0	0.12	02/07/24 21:23	
Iron	mg/L	ND	0.040	0.025	02/10/24 21:13	
Magnesium	mg/L	ND	0.050	0.012	02/07/24 21:23	
Potassium	mg/L	ND	0.50	0.15	02/07/24 21:23	
Sodium	mg/L	ND	1.0	0.58	02/07/24 21:23	

LABORATORY CONTROL SAMPLE: 4289496

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium	mg/L	1	0.97J	97	80-120	
Iron	mg/L	1	0.93	93	80-120	
Magnesium	mg/L	1	0.95	95	80-120	
Potassium	mg/L	1	1.1	115	80-120	
Sodium	mg/L	1	1.1	114	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4289497 4289498

Parameter	Units	92710944013 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Calcium	mg/L	64.5	1	1	61.3	62.9	-324	-166	75-125	3	20	M1
Iron	mg/L	0.029J	1	1	1.0	0.97	99	94	75-125	4	20	
Magnesium	mg/L	13.7	1	1	13.9	14.3	23	57	75-125	2	20	M1
Potassium	mg/L	5.7	1	1	7.4	6.5	168	85	75-125	12	20	M1
Sodium	mg/L	19.7	1	1	19.6	19.6	-7	-10	75-125	0	20	M1

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QUALITY CONTROL DATA

Project: Plant McD AP-1234 Assessment
Pace Project No.: 92711279

QC Batch: 829689
QC Batch Method: EPA 3005A
Analysis Method: EPA 6020B
Analysis Description: 6020 MET
Laboratory: Pace Analytical Services - Peachtree Corners, GA

Associated Lab Samples: 92711279001

METHOD BLANK: 4288084 Matrix: Water
Associated Lab Samples: 92711279001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	ND	0.0030	0.00054	02/02/24 17:03	
Arsenic	mg/L	ND	0.0050	0.00084	02/02/24 17:03	
Barium	mg/L	ND	0.0050	0.00047	02/02/24 17:03	
Beryllium	mg/L	ND	0.00050	0.000094	02/02/24 17:03	
Boron	mg/L	ND	0.040	0.012	02/02/24 17:03	
Cadmium	mg/L	ND	0.00050	0.00010	02/02/24 17:03	
Chromium	mg/L	ND	0.0050	0.0019	02/02/24 17:03	
Cobalt	mg/L	ND	0.0050	0.00032	02/02/24 17:03	
Lead	mg/L	ND	0.0010	0.00016	02/02/24 17:03	
Lithium	mg/L	ND	0.030	0.0016	02/02/24 17:03	
Molybdenum	mg/L	ND	0.010	0.00062	02/02/24 17:03	
Selenium	mg/L	ND	0.0050	0.00096	02/02/24 17:03	
Thallium	mg/L	ND	0.0010	0.00038	02/02/24 17:03	

LABORATORY CONTROL SAMPLE: 4288085

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	0.11	106	80-120	
Barium	mg/L	0.1	0.10	104	80-120	
Beryllium	mg/L	0.1	0.11	105	80-120	
Boron	mg/L	1	1.1	106	80-120	
Cadmium	mg/L	0.1	0.10	103	80-120	
Chromium	mg/L	0.1	0.10	105	80-120	
Cobalt	mg/L	0.1	0.11	107	80-120	
Lead	mg/L	0.1	0.10	101	80-120	
Lithium	mg/L	0.1	0.10	104	80-120	
Molybdenum	mg/L	0.1	0.10	102	80-120	
Selenium	mg/L	0.1	0.11	108	80-120	
Thallium	mg/L	0.1	0.11	106	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4288086 4288087

Parameter	Units	92710878004 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	100	106	75-125	6	20	
Arsenic	mg/L	ND	0.1	0.1	0.11	0.11	107	111	75-125	4	20	

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QUALITY CONTROL DATA

Project: Plant McD AP-1234 Assessment
Pace Project No.: 92711279

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4288086 4288087

Parameter	Units	92710878004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Barium	mg/L	0.019	0.1	0.1	0.12	0.13	102	106	75-125	3	20	
Beryllium	mg/L	0.0011	0.1	0.1	0.091	0.096	90	95	75-125	5	20	
Boron	mg/L	1.2	1	1	2.1	2.2	83	94	75-125	5	20	
Cadmium	mg/L	0.00041J	0.1	0.1	0.099	0.11	99	105	75-125	6	20	
Chromium	mg/L	ND	0.1	0.1	0.099	0.10	98	103	75-125	5	20	
Cobalt	mg/L	0.00068J	0.1	0.1	0.10	0.10	100	103	75-125	3	20	
Lead	mg/L	ND	0.1	0.1	0.090	0.094	90	94	75-125	4	20	
Lithium	mg/L	0.0037J	0.1	0.1	0.095	0.10	91	96	75-125	5	20	
Molybdenum	mg/L	ND	0.1	0.1	0.097	0.10	97	102	75-125	5	20	
Selenium	mg/L	0.0016J	0.1	0.1	0.11	0.11	107	110	75-125	3	20	
Thallium	mg/L	ND	0.1	0.1	0.093	0.097	93	97	75-125	4	20	

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QUALITY CONTROL DATA

Project: Plant McD AP-1234 Assessment
Pace Project No.: 92711279

QC Batch: 829900
QC Batch Method: EPA 3005A
Analysis Method: EPA 6020B
Analysis Description: 6020 MET
Laboratory: Pace Analytical Services - Peachtree Corners, GA

Associated Lab Samples: 92711279002

METHOD BLANK: 4289478 Matrix: Water
Associated Lab Samples: 92711279002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	ND	0.0030	0.00054	02/06/24 16:40	
Arsenic	mg/L	ND	0.0050	0.00084	02/06/24 16:40	
Barium	mg/L	ND	0.0050	0.00047	02/06/24 16:40	
Beryllium	mg/L	ND	0.00050	0.000094	02/06/24 16:40	
Boron	mg/L	ND	0.040	0.012	02/06/24 16:40	
Cadmium	mg/L	ND	0.00050	0.00010	02/06/24 16:40	
Chromium	mg/L	ND	0.0050	0.0019	02/06/24 16:40	
Cobalt	mg/L	ND	0.0050	0.00032	02/06/24 16:40	
Lead	mg/L	ND	0.0010	0.00016	02/06/24 16:40	
Lithium	mg/L	ND	0.030	0.0016	02/06/24 16:40	
Molybdenum	mg/L	ND	0.010	0.00062	02/06/24 16:40	
Selenium	mg/L	ND	0.0050	0.00096	02/06/24 16:40	
Thallium	mg/L	ND	0.0010	0.00038	02/06/24 16:40	

LABORATORY CONTROL SAMPLE: 4289479

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.1	0.10	102	80-120	
Arsenic	mg/L	0.1	0.099	99	80-120	
Barium	mg/L	0.1	0.099	99	80-120	
Beryllium	mg/L	0.1	0.10	103	80-120	
Boron	mg/L	1	1.0	101	80-120	
Cadmium	mg/L	0.1	0.10	102	80-120	
Chromium	mg/L	0.1	0.098	98	80-120	
Cobalt	mg/L	0.1	0.10	101	80-120	
Lead	mg/L	0.1	0.099	99	80-120	
Lithium	mg/L	0.1	0.10	102	80-120	
Molybdenum	mg/L	0.1	0.10	100	80-120	
Selenium	mg/L	0.1	0.096	96	80-120	
Thallium	mg/L	0.1	0.10	101	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4289480 4289481

Parameter	Units	92710944012 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Antimony	mg/L	0.00062J	0.1	0.1	0.10	0.10	101	101	75-125	0	20	
Arsenic	mg/L	ND	0.1	0.1	0.10	0.10	104	101	75-125	3	20	

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Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: Plant McD AP-1234 Assessment
Pace Project No.: 92711279

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4289480 4289481

Parameter	Units	92710944012 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Barium	mg/L	0.071	0.1	0.1	0.17	0.17	101	96	75-125	3	20	
Beryllium	mg/L	ND	0.1	0.1	0.089	0.090	89	90	75-125	1	20	
Boron	mg/L	1.3	1	1	2.2	2.2	91	85	75-125	3	20	
Cadmium	mg/L	ND	0.1	0.1	0.10	0.099	100	99	75-125	1	20	
Chromium	mg/L	ND	0.1	0.1	0.11	0.099	105	98	75-125	7	20	
Cobalt	mg/L	0.0026J	0.1	0.1	0.10	0.10	100	98	75-125	2	20	
Lead	mg/L	ND	0.1	0.1	0.096	0.096	96	96	75-125	1	20	
Lithium	mg/L	0.015J	0.1	0.1	0.10	0.11	89	90	75-125	1	20	
Molybdenum	mg/L	ND	0.1	0.1	0.098	0.098	98	97	75-125	1	20	
Selenium	mg/L	ND	0.1	0.1	0.10	0.10	103	101	75-125	2	20	
Thallium	mg/L	ND	0.1	0.1	0.099	0.098	99	98	75-125	1	20	

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QUALITY CONTROL DATA

Project: Plant McD AP-1234 Assessment
Pace Project No.: 92711279

QC Batch: 832509
QC Batch Method: EPA 7470A
Analysis Method: EPA 7470A
Analysis Description: 7470 Mercury
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92711279001, 92711279002

METHOD BLANK: 4302153 Matrix: Water
Associated Lab Samples: 92711279001, 92711279002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	ND	0.00020	0.00013	02/15/24 13:28	

LABORATORY CONTROL SAMPLE: 4302154

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.0025	0.0023	94	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4302155 4302156

Parameter	Units	92710944001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	mg/L	0.00015J	0.0025	0.0025	0.0021	0.0023	76	86	75-125	11	20	

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QUALITY CONTROL DATA

Project: Plant McD AP-1234 Assessment
Pace Project No.: 92711279

QC Batch: 830244
QC Batch Method: SM 2320B-2011
Analysis Method: SM 2320B-2011
Analysis Description: 2320B Alkalinity
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92711279001

METHOD BLANK: 4290878 Matrix: Water
Associated Lab Samples: 92711279001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Alkalinity, Total as CaCO3	mg/L	ND	5.0	5.0	02/06/24 11:42	
Alkalinity,Bicarbonate (CaCO3)	mg/L	ND	5.0	5.0	02/06/24 11:42	
Alkalinity,Carbonate (CaCO3)	mg/L	ND	5.0	5.0	02/06/24 11:42	

LABORATORY CONTROL SAMPLE: 4290879

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: 4290880

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	50	51.7	103	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4290881 4290882

Parameter	Units	92711015015 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	157	50	50	201	198	87	82	80-120	1	25	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4290883 4290884

Parameter	Units	92711015019 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	50.7	50.7	100	100	80-120	0	25	

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QUALITY CONTROL DATA

Project: Plant McD AP-1234 Assessment
Pace Project No.: 92711279

QC Batch: 830324
QC Batch Method: SM 2320B-2011
Analysis Method: SM 2320B-2011
Analysis Description: 2320B Alkalinity
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92711279002

METHOD BLANK: 4291303 Matrix: Water
Associated Lab Samples: 92711279002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Alkalinity, Total as CaCO3	mg/L	ND	5.0	5.0	02/06/24 16:22	
Alkalinity,Bicarbonate (CaCO3)	mg/L	ND	5.0	5.0	02/06/24 16:22	
Alkalinity,Carbonate (CaCO3)	mg/L	ND	5.0	5.0	02/06/24 16:22	

LABORATORY CONTROL SAMPLE: 4291304

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	50	51.4	103	80-120	

LABORATORY CONTROL SAMPLE: 4291305

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	50	51.1	102	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4291306 4291307

Parameter	Units	92710886015 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	41.3	39.7	83	79	80-120	4	25	M1

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4291308 4291309

Parameter	Units	92710886016 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Alkalinity, Total as CaCO3	mg/L	ND	50	50	51.1	50.9	100	100	80-120	0	25	

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QUALITY CONTROL DATA

Project: Plant McD AP-1234 Assessment
Pace Project No.: 92711279

QC Batch: 829971
QC Batch Method: SM 2540C-2015
Analysis Method: SM 2540C-2015
Analysis Description: 2540C Total Dissolved Solids
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92711279001

METHOD BLANK: 4289656 Matrix: Water
Associated Lab Samples: 92711279001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	25.0	25.0	02/04/24 12:59	

LABORATORY CONTROL SAMPLE: 4289657

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	251	242	97	90-110	

SAMPLE DUPLICATE: 4289659

Parameter	Units	92710886003 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	503	535	6	25	

SAMPLE DUPLICATE: 4289660

Parameter	Units	92710939004 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	387	386	0	25	

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QUALITY CONTROL DATA

Project: Plant McD AP-1234 Assessment
Pace Project No.: 92711279

QC Batch: 829973
QC Batch Method: SM 2540C-2015
Analysis Method: SM 2540C-2015
Analysis Description: 2540C Total Dissolved Solids
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92711279002

METHOD BLANK: 4289665 Matrix: Water
Associated Lab Samples: 92711279002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	25.0	25.0	02/04/24 12:45	

LABORATORY CONTROL SAMPLE: 4289666

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	251	270	108	90-110	

SAMPLE DUPLICATE: 4289667

Parameter	Units	92711015015 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	445	445	0	25	

SAMPLE DUPLICATE: 4289668

Parameter	Units	92710944010 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	212	212	0	25	

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QUALITY CONTROL DATA

Project: Plant McD AP-1234 Assessment
Pace Project No.: 92711279

QC Batch: 829632
QC Batch Method: SM 4500-S2D-2011
Analysis Method: SM 4500-S2D-2011
Analysis Description: 4500S2D Sulfide Water
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92711279001

METHOD BLANK: 4287991 Matrix: Water
Associated Lab Samples: 92711279001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Sulfide	mg/L	ND	0.10	0.022	02/03/24 06:11	

LABORATORY CONTROL SAMPLE: 4287992

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Sulfide	mg/L	0.5	0.53	106	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4287993 4287994

Parameter	Units	92710944001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Sulfide	mg/L	ND	0.5	0.5	0.49	0.47	97	93	80-120	4	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4287995 4287996

Parameter	Units	92710886003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Sulfide	mg/L	ND	0.5	0.5	0.47	0.47	93	94	80-120	1	10	

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QUALITY CONTROL DATA

Project: Plant McD AP-1234 Assessment
Pace Project No.: 92711279

QC Batch: 830837
QC Batch Method: SM 4500-S2D-2011
Analysis Method: SM 4500-S2D-2011
Analysis Description: 4500S2D Sulfide Water
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92711279002

METHOD BLANK: 4294225 Matrix: Water
Associated Lab Samples: 92711279002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Sulfide	mg/L	ND	0.10	0.022	02/08/24 06:05	

LABORATORY CONTROL SAMPLE: 4294226

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Sulfide	mg/L	0.5	0.53	106	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4294227 4294228

Parameter	Units	92711015009 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Sulfide	mg/L	ND	0.5	0.5	0.51	0.53	102	107	80-120	5	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4294229 4294230

Parameter	Units	92710944006 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Sulfide	mg/L	ND	0.5	0.5	0.47	0.48	94	96	80-120	1	10	

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QUALITY CONTROL DATA

Project: Plant McD AP-1234 Assessment
Pace Project No.: 92711279

QC Batch: 829579
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: 92711279001

METHOD BLANK: 4287877 Matrix: Water
Associated Lab Samples: 92711279001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.60	02/01/24 23:04	
Fluoride	mg/L	ND	0.10	0.050	02/01/24 23:04	
Sulfate	mg/L	ND	1.0	0.50	02/01/24 23:04	

LABORATORY CONTROL SAMPLE: 4287878

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	50.5	101	90-110	
Fluoride	mg/L	2.5	2.4	97	90-110	
Sulfate	mg/L	50	50.6	101	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4287879 4287880

Parameter	Units	92711297001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	1.5	50	50	52.1	53.2	101	103	90-110	2	10	
Fluoride	mg/L	ND	2.5	2.5	2.4	2.4	94	96	90-110	2	10	
Sulfate	mg/L	1.4	50	50	52.0	53.1	101	103	90-110	2	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4287881 4287882

Parameter	Units	92710886004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	16.0	50	50	64.9	65.1	98	98	90-110	0	10	
Fluoride	mg/L	ND	2.5	2.5	2.4	2.4	94	94	90-110	0	10	
Sulfate	mg/L	224	50	50	266	266	85	85	90-110	0	10	M1

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QUALITY CONTROL DATA

Project: Plant McD AP-1234 Assessment
Pace Project No.: 92711279

QC Batch: 829909
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: 92711279002

METHOD BLANK: 4289509 Matrix: Water
Associated Lab Samples: 92711279002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.60	02/03/24 20:43	
Fluoride	mg/L	ND	0.10	0.050	02/03/24 20:43	
Sulfate	mg/L	ND	1.0	0.50	02/03/24 20:43	

LABORATORY CONTROL SAMPLE: 4289510

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	50.0	100	90-110	
Fluoride	mg/L	2.5	2.4	96	90-110	
Sulfate	mg/L	50	50.1	100	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4289511 4289512

Parameter	Units	92710944008 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	28.9	50	50	79.7	80.5	101	103	90-110	1	10	
Fluoride	mg/L	0.13	2.5	2.5	2.6	2.7	100	102	90-110	2	10	
Sulfate	mg/L	337	50	50	378	379	82	84	90-110	0	10	M1

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4289513 4289514

Parameter	Units	92710958002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	3.0	50	50	54.6	55.4	103	105	90-110	1	10	
Fluoride	mg/L	0.29	2.5	2.5	2.7	2.8	97	98	90-110	2	10	
Sulfate	mg/L	15.5	50	50	67.2	68.0	103	105	90-110	1	10	

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QUALIFIERS

Project: Plant McD AP-1234 Assessment
Pace Project No.: 92711279

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.
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-1234 Assessment
Pace Project No.: 92711279

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92711279001	**MCD-B-100**	EPA 3010A	829702	EPA 6010D	829783
92711279002	**MCD-B-62**	EPA 3010A	829906	EPA 6010D	829935
92711279001	**MCD-B-100**	EPA 3005A	829689	EPA 6020B	829819
92711279002	**MCD-B-62**	EPA 3005A	829900	EPA 6020B	829945
92711279001	**MCD-B-100**	EPA 7470A	832509	EPA 7470A	832596
92711279002	**MCD-B-62**	EPA 7470A	832509	EPA 7470A	832596
92711279001	**MCD-B-100**	SM 2320B-2011	830244		
92711279002	**MCD-B-62**	SM 2320B-2011	830324		
92711279001	**MCD-B-100**	SM 2540C-2015	829971		
92711279002	**MCD-B-62**	SM 2540C-2015	829973		
92711279001	**MCD-B-100**	SM 4500-S2D-2011	829632		
92711279002	**MCD-B-62**	SM 4500-S2D-2011	830837		
92711279001	**MCD-B-100**	EPA 300.0 Rev 2.1 1993	829579		
92711279002	**MCD-B-62**	EPA 300.0 Rev 2.1 1993	829909		

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Pace ANALYTICAL SERVICES

DC#_Title: ENV-FRM-HON-0083 v03_Sample Condition Upon Receipt

Effective Date: 11/29/2023

Laboratory receiving samples:

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

Sample Condition Upon Receipt

Client Name: Ga Power

Project #: WO# : 92711279

92711279

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

Custody Seal Present? ☑ Yes ☐ No **Seals Intact?** ☑ Yes ☐ No ☐ N/A

Date/Initials Person Examining Contents: 2/11/24 BL

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

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

Thermometer:

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

Cooler Temp: 1.1 **Correction Factor:** Add/Subtract (°C) 0.1

Temp should be above freezing to 6°C

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

Cooler Temp Corrected (°C): 1.2

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: Wa				
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#: 92711279

PM: BV Due Date: 02/15/24

CLIENT: 92-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)	BPHN	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																		X				
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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

ction A quired Client Information:	Section B Required Project Information:	Section C Invoice Information:
npany: Georgia Power - Coal Combustion Residuals	Report To: Lauren Coker	Attention: scsinvoices@southernco.com
lress: 2480 Maner Road	Copy To: WSP	Company Name:
Atlanta, GA 30339		Address:
all: laucoker@southernco.com	Purchase Order #:	Pace Quote:
ne: (470) 620-6176 Fax	Project Name: Plant McD AP-1234 Assessment	Pace Project Manager: Bonnie Vang
uested Due Date: 10 Day TAT	Project #: 31406440.McD23	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 + Mg, Na, K, Fe (N)	Cl, F, SO4 (N)	Radium 9513/9320 (N)	TDS (N)	Alkalinity (N)	Sulfide (N)				Residual Chlorine (Y/N)	92711279
1	MCD-B-100	WG	G	1/31/24	13:55		7	3		3		1					X	X	X	X	X	X					001
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ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	SAMPLE CONDITIONS
k Code = MCD-CCR-ASSMT-2024S1	MARK MANN / [signature] / WSP	02/01/24	835	[signature] Courier now	2-1-24	
				[signature] 0942	2/1/24	

MP in C | eived on | tody ed ler | ples

DC#_Title: ENV-FRM-HUN1-0083 v03_Sample Condition Upon Receipt

Effective Date: 11/29/2023

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

Sample Condition Upon Receipt

Client Name: Ga Power

Project #: **WO# : 92711279**

PM: BV **Due Date: 02/15/24**
CLIENT: 92-GA Power

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

Custody Seal Present? ☑ Yes ☐ No Seals Intact? ☑ Yes ☐ No ☐ N/A

Date/Initials Person Examining Contents: 2/2/24 SR

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: 6.1 Correction Factor: Add/Subtract (°C) +0.1

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

Cooler Temp Corrected (°C): 1.2

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

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

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

COMMENTS/SAMPLE DISCREPANCY

Field Data Required? ☐ Yes ☐ No

Lot ID of split containers:

CLIENT NOTIFICATION/RESOLUTION

Person contacted: _____ Date/Time: _____

Project Manager SCURF Review: _____ Date: _____

Project Manager SRF Review: _____ Date: _____

Pace ANALYTICAL SERVICES

DC#_Title: ENV-FRM-HUN1-0083 v03_Sample Condition Upon Receipt

Effective Date: 11/29/2023

*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#: 92711279**

PM: BV Due Date: 02/15/24

CLIENT: 92-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.

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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:		1 Of 1
Company:	Georgia Power - Coal Combustion Residuals	Report To:	Lauren Coker	Attention:	scsinvoices@southernco.com	
Address:	2480 Maner Road	Copy To:	WSP	Company Name:		
	Atlanta, GA 30339			Address:		Regulatory Agency
Email:	laucoker@southernco.com	Purchase Order #:		Pace Quote:		
Phone:	(470) 620-6176 Fax	Project Name:	Plant McD AP-1234 Assessment	Pace Project Manager:	Bonnie Vang	State / Location
Requested Due Date:	10 Day TAT	Project #:	31406440.McD23	Pace Profile #:		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	Requested Analysis Filtered (Y/N) Y/N	Analyses Test: App III/IV + Mg, Na, K, Fe	Cl, F, SO4	Radium 9513/9320	TDS	Alkalinity	Sulfide				Residual Chlorine (Y/N)	92711279
1	MCD-B-62	WG	G	2/1/24	10:50		7	3		3		1				N	N	N	N	N	N	N					002
2																											
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ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	SAMPLE CONDITIONS			
Task Code = MCD-CCR-ASSMT-2024S1	MARK MANN / WSP	02/02/24	1417	Pace	2/2/24	4.1°C			

DATE Signed:

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

February 28, 2024

Lauren Hartley
Southern Co.
241 Ralph McGill Blvd
NE, Bin 10160
Atlanta, GA 30308

RE: Project: Plant McD AP-1234 Assessme-RAD
Pace Project No.: 92711290

Dear Lauren Hartley:

Enclosed are the analytical results for sample(s) received by the laboratory between February 01, 2024 and February 02, 2024. 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
704-977-0968
Project Manager

Enclosures

cc: Yong Cheng, WSP
Daniela Herrera, WSP
Andrea McClure, WSP
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 McD AP-1234 Assessme-RAD
Pace Project No.: 92711290

Pace Analytical Services Pennsylvania
1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
ANAB DOD-ELAP Rad Accreditation #: L2417
ANABISO/IEC 17025:2017 Rad Cert#: L24170
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California Certification #: 2950
Colorado Certification #: PA01547
Connecticut Certification #: PH-0694
EPA Region 4 DW Rad
Florida/TNI Certification #: E87683
Georgia Certification #: C040
Guam Certification
Hawaii Certification
Idaho Certification
Illinois Certification
Indiana Certification
Iowa Certification #: 391
Kansas Certification #: E-10358
Kentucky Certification #: KY90133
KY WW Permit #: KY0098221
KY WW Permit #: KY0000221
Louisiana DHH/TNI Certification #: LA010
Louisiana DEQ/TNI Certification #: 04086
Maine Certification #: 2023021
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 #: PA014572023-03
New Hampshire/TNI Certification #: 297622
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 #: PA200002-015
Pennsylvania/TNI Certification #: 65-00282
Puerto Rico Certification #: PA01457
Rhode Island Certification #: 65-00282
South Dakota Certification
Tennessee Certification #: TN02867
Texas/TNI Certification #: T104704188-22-18
Utah/TNI Certification #: PA014572223-14
USDA Soil Permit #: 525-23-67-77263
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

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SAMPLE SUMMARY

Project: Plant McD AP-1234 Assessme-RAD
Pace Project No.: 92711290

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92711290001	**MCD-B-100**	Water	01/31/24 13:55	02/01/24 09:42
92711290002	**MCD-B-62**	Water	02/01/24 10:50	02/02/24 14:17

REPORT OF LABORATORY ANALYSIS

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SAMPLE ANALYTE COUNT

Project: Plant McD AP-1234 Assessme-RAD
Pace Project No.: 92711290

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92711290001	**MCD-B-100**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92711290002	**MCD-B-62**	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 McD AP-1234 Assessme-RAD
Pace Project No.: 92711290

Sample: MCD-B-100 **Lab ID: 92711290001** Collected: 01/31/24 13:55 Received: 02/01/24 09:42 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	**0.0563U ± 0.150 (0.361) C:81% T:NA**	pCi/L	02/20/24 08:53	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**-0.128U ± 0.312 (0.756) C:87% T:81%**	pCi/L	02/14/24 11:46	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.0563U ± 0.462 (1.12)**	pCi/L	02/21/24 11:22	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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Huntersville, NC 28078
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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant McD AP-1234 Assessme-RAD
Pace Project No.: 92711290

Sample: MCD-B-62 **Lab ID: 92711290002** Collected: 02/01/24 10:50 Received: 02/02/24 14:17 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	**0.814 ± 0.282 (0.270) C:83% T:NA**	pCi/L	02/21/24 09:10	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**1.27 ± 0.513 (0.801) C:79% T:78%**	pCi/L	02/20/24 14:36	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**2.08 ± 0.795 (1.07)**	pCi/L	02/21/24 11:22	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL - RADIOCHEMISTRY

Project: Plant McD AP-1234 Assessme-RAD
Pace Project No.: 92711290

QC Batch: 646986
QC Batch Method: EPA 9320
Analysis Method: EPA 9320
Analysis Description: 9320 Radium 228
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92711290002

METHOD BLANK: 3152359 Matrix: Water
Associated Lab Samples: 92711290002

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.305 ± 0.286 (0.582) C:86% T:87%	pCi/L	02/20/24 11:22	

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

REPORT OF LABORATORY ANALYSIS

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Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL - RADIOCHEMISTRY

Project: Plant McD AP-1234 Assessme-RAD
Pace Project No.: 92711290

QC Batch: 646776
QC Batch Method: EPA 9320
Analysis Method: EPA 9320
Analysis Description: 9320 Radium 228
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92711290001

METHOD BLANK: 3151068 Matrix: Water
Associated Lab Samples: 92711290001

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.837 ± 0.399 (0.683) C:87% T:87%	pCi/L	02/14/24 11:46	

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 Assessme-RAD
Pace Project No.: 92711290

QC Batch: 646793
QC Batch Method: EPA 9315
Analysis Method: EPA 9315
Analysis Description: 9315 Total Radium
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92711290001, 92711290002

METHOD BLANK: 3151195 Matrix: Water
Associated Lab Samples: 92711290001, 92711290002

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.000 ± 0.142 (0.386) C:68% T:NA	pCi/L	02/20/24 09:14	

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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Huntersville, NC 28078
(704)875-9092

QUALIFIERS

Project: Plant McD AP-1234 Assessme-RAD
Pace Project No.: 92711290

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
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Plant McD AP-1234 Assessme-RAD
Pace Project No.: 92711290

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92711290001	**MCD-B-100**	EPA 9315	646793		
92711290002	**MCD-B-62**	EPA 9315	646793		
92711290001	**MCD-B-100**	EPA 9320	646776		
92711290002	**MCD-B-62**	EPA 9320	646986		
92711290001	**MCD-B-100**	Total Radium Calculation	650184		
92711290002	**MCD-B-62**	Total Radium Calculation	650184		

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Pace ANALYTICAL SERVICES

DC#_Title: ENV-FRM-HON-0083 v03_Sample Condition Upon Receipt

Effective Date: 11/29/2023

Laboratory receiving samples:

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

Sample Condition Upon Receipt

Client Name: Ga Power

Project #:

WO# : 92711290

92711290

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

Custody Seal Present? ☑ Yes ☐ No **Seals Intact?** ☑ Yes ☐ No ☐ N/A

Date/Initials Person Examining Contents: 2/11/24 BG

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

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

Thermometer:

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

Cooler Temp: 1.1 **Correction Factor:** Add/Subtract (°C) 0.1

Cooler Temp Corrected (°C): 1.2

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: GW				
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

*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#:92711290

PM: BV Due Date: 02/22/24

CLIENT: 92-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)	BP/U	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																		X				
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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

1 Of 1

ction A quired Client Information:	Section B Required Project Information:	Section C Invoice Information:
npany: Georgia Power - Coal Combustion Residuals	Report To: Lauren Coker	Attention: scsinvoices@southernco.com
dress: 2480 Maner Road	Copy To: WSP	Company Name:
Atlanta, GA 30339		Address:
all: laucoker@southernco.com	Purchase Order #:	Pace Quote:
one: (470) 620-6176 Fax	Project Name: Plant McD AP-1234 Assessment	Pace Project Manager: Bonnie Vang
quested Due Date: 10 Day TAT	Project #: 31406440.McD23	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 + Mg, Na, K, Fe	Cl, F, SO4	Radium 9513/9320	TDS	Alkalinity	Sulfide	Residual Chlorine (Y/N)	92711290
								Preservatives									N	N	N	N	N	N		
1	MCD-B-100	WG	G	1/31/24	13:55		7	3		3		1					X	X	X	X	X	X		UU
2																								
3																								
4																								
5																								
6																								
7																								
8																								
9																								
0																								
1																								
2																								

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	SAMPLE CONDITIONS
k Code = MCD-CCR-ASSMT-2024S1	MARK MANN / [signature] / WSP	02/01/24	835	[signature] Courier now	2-1-24	
				[signature] 0942	2/1/24	

MP in C | eived on | tody ed ler | nples t

DC#_Title: ENV-FRM-HUN1-0083 v03_Sample Condition Upon Receipt

Effective Date: 11/29/2023

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

Sample Condition Upon Receipt

Client Name: Ga Power

Project # WO#: 92711290

PM: BV Due Date: 02/22/24

CLIENT: 92-GA Power

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

Custody Seal Present? ☑ Yes ☐ No Seals Intact? ☑ Yes ☐ No ☐ N/A

Date/Initials Person Examining Contents: 2/12/24 SR

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

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

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

Cooler Temp: 1.1 Correction Factor: Add/Subtract (°C) +0.1

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

Cooler Temp Corrected (°C): 1.2

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

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

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

COMMENTS/SAMPLE DISCREPANCY

Field Data Required? ☐ Yes ☐ No

Lot ID of split containers:

CLIENT NOTIFICATION/RESOLUTION

Person contacted: Date/Time:

Project Manager SCURF Review: Date:

Project Manager SRF Review: Date:

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

Exceptions: 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# : 92711290**

PM: BV Due Date: 02/22/24

CLIENT: 92-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)	13PM	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				
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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.

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:			1 Of 1
Company:	Georgia Power - Coal Combustion Residuals	Report To:	Lauren Coker	Attention:	scsinvoices@southernco.com		
Address:	2480 Maner Road	Copy To:	WSP	Company Name:			
	Atlanta GA 30339			Address:		Regulatory Agency	
Email:	laucoker@southernco.com	Purchase Order #:		Pace Quote:			
Phone: (470) 620-6175	Fax	Project Name:	Plant McD AP-1234 Assessment	Pace Project Manager:	Bonnie Vang	State / Location	
Requested Due Date:	10 Day TAT	Project #:	31406440.McD23	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	Requested Analysis Filtered (Y/N) Y/N	Analyses Test: App III/IV + Mg, Na, K, Fe	Cl, F, SO4	Radium 9513/9320	TDS	Alkalinity	Sulfide				Residual Chlorine (Y/N)	92711290
	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	MCD-B-62	WG	G	2/1/24	10:50		7	3		3		1					X	X	X	X	X	X					002
2																										
3																										
4																										
5																										
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ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	SAMPLE CONDITIONS
Task Code = MCD-CCR-ASSMT-2024S1	MARK MANN / WSP	02/02/24	1417	Pace	2/2/24	1417

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-228
Analyst: VAL
Date: 2/13/2024
Worklist: 77526
Matrix: WT

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	3152359
MB concentration:	0.305
M/B 2 Sigma CSU:	0.286
MB MDC:	0.582
MB Numerical Performance Indicator:	2.09
MB Status vs Numerical Indicator:	Warning
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	LCSD (Y or N)?	Y
	LCS77526	LCSD77526
Count Date:	2/20/2024	2/20/2024
Spike I.D.:	23-043	23-043
Decay Corrected Spike Concentration (pCi/mL):	37.792	37.792
Volume Used (mL):	0.10	0.10
Aliquot Volume (L, g, F):	0.817	0.815
Target Conc. (pCi/L, g, F):	4.624	4.636
Uncertainty (Calculated):	0.227	0.227
Result (pCi/L, g, F):	3.006	3.044
LCS/LCSD 2 Sigma CSU (pCi/L, g, F):	0.775	0.715
Numerical Performance Indicator:	-3.93	-4.16
Percent Recovery:	65.02%	65.67%
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.:	LCS77526	Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Duplicate Sample I.D.	LCSD77526	
Sample Result (pCi/L, g, F):	3.006	
Sample Result 2 Sigma CSU (pCi/L, g, F):	0.775	
Sample Duplicate Result (pCi/L, g, F):	3.044	
Sample Duplicate Result 2 Sigma CSU (pCi/L, g, F):	0.715	
Are sample and/or duplicate results below RL?	NO	
Duplicate Numerical Performance Indicator:	-0.071	
(Based on the LCS/LCSD Percent Recoveries) Duplicate RPD:	0.99%	
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
2/21/24

2/21/24

Quality Control Sample Performance Assessment

Pace Analytical™ www.pacelabs.com

Test:	Ra-226
Analyst:	SLC
Date:	2/16/2024
Worklist:	77513
Matrix:	WT

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	3151195
MB concentration:	0.000
M/B 2 Sigma CSU:	0.142
MB MDC:	0.386
MB Numerical Performance Indicator:	0.00
MB Status vs Numerical Indicator:	Pass
MB Status vs. MDC:	N/A

Laboratory Control Sample Assessment	LCSD (Y or N)?	Y
	LCS77513	LCSD77513
Count Date:	2/20/2024	2/20/2024
Spike I.D.:	23-014	23-014
Decay Corrected Spike Concentration (pCi/mL):	25.026	25.026
Volume Used (mL):	0.10	0.10
Aliquot Volume (L, g, F):	0.511	0.510
Target Conc. (pCi/L, g, F):	4.895	4.906
Uncertainty (Calculated):	0.230	0.231
Result (pCi/L, g, F):	5.435	4.831
LCS/LCSD 2 Sigma CSU (pCi/L, g, F):	1.011	0.914
Numerical Performance Indicator:	1.02	-0.16
Percent Recovery:	111.03%	98.48%
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.:	LCS77513	92710974019
Duplicate Sample I.D.	LCSD77513	92710974019DUP
Sample Result (pCi/L, g, F):	5.435	0.302
Sample Result 2 Sigma CSU (pCi/L, g, F):	1.011	0.173
Sample Duplicate Result (pCi/L, g, F):	4.831	0.392
Sample Duplicate Result 2 Sigma CSU (pCi/L, g, F):	0.914	0.216
Are sample and/or duplicate results below RL?	NO	See Below ##
Duplicate Numerical Performance Indicator:	0.868	-0.640
(Based on the LCS/LCSD Percent Recoveries) Duplicate RPD:	11.98%	26.04%
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:

2/21/24

VAM 2/21/24

Quality Control Sample Performance Assessment

Pace Analytical™ www.pacelabs.com

Test: Ra-228
Analyst: JJS1
Date: 2/12/2024
Worklist: 77509
Matrix: WT

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	3151068
MB concentration:	0.837
M/B 2 Sigma CSU:	0.399
MB MDC:	0.683
MB Numerical Performance Indicator:	4.11
MB Status vs Numerical Indicator:	Fail*
MB Status vs. MDC:	See Comment*

OK

Laboratory Control Sample Assessment	LCSD (Y or N)?	Y
	LCS77509	LCSD77509
Count Date:	2/14/2024	2/14/2024
Spike I.D.:	23-043	23-043
Decay Corrected Spike Concentration (pCi/mL):	37.865	37.865
Volume Used (mL):	0.10	0.10
Aliquot Volume (L, g, F):	0.816	0.816
Target Conc. (pCi/L, g, F):	4.640	4.640
Uncertainty (Calculated):	0.227	0.227
Result (pCi/L, g, F):	3.199	3.127
LCS/LCSD 2 Sigma CSU (pCi/L, g, F):	0.805	0.773
Numerical Performance Indicator:	-3.38	-3.68
Percent Recovery:	68.94%	67.39%
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.:	LCS77509	Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Duplicate Sample I.D.	LCSD77509	
Sample Result (pCi/L, g, F):	3.199	
Sample Result 2 Sigma CSU (pCi/L, g, F):	0.805	
Sample Duplicate Result (pCi/L, g, F):	3.127	
Sample Duplicate Result 2 Sigma CSU (pCi/L, g, F):	0.773	
Are sample and/or duplicate results below RL?	NO	
Duplicate Numerical Performance Indicator:	0.126	
(Based on the LCS/LCSD Percent Recoveries) Duplicate RPD:	2.28%	
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. OK VAL

VAL
2/15/24

VAM 2/15/24

Quality Control Sample Performance Assessment

Pace Analytical
www.pacelabs.com

Test:	Ra-228
Analyst:	VAL
Date:	2/13/2024
Worklist:	77526
Matrix:	WT

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	3152359
MB concentration:	0.305
M/B 2 Sigma CSU:	0.286
MB MDC:	0.582
MB Numerical Performance Indicator:	2.09
MB Status vs Numerical Indicator:	Warning
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	LCSD (Y or N)?	Y
	LCS77526	LCSD77526
Count Date:	2/20/2024	2/20/2024
Spike I.D.:	23-043	23-043
Decay Corrected Spike Concentration (pCi/mL):	37.792	37.792
Volume Used (mL):	0.10	0.10
Aliquot Volume (L, g, F):	0.817	0.815
Target Conc. (pCi/L, g, F):	4.624	4.636
Uncertainty (Calculated):	0.227	0.227
Result (pCi/L, g, F):	3.006	3.044
LCS/LCSD 2 Sigma CSU (pCi/L, g, F):	0.775	0.715
Numerical Performance Indicator:	-3.93	-4.16
Percent Recovery:	65.02%	65.67%
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.:	LCS77526	Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Duplicate Sample I.D.	LCSD77526	
Sample Result (pCi/L, g, F):	3.006	
Sample Result 2 Sigma CSU (pCi/L, g, F):	0.775	
Sample Duplicate Result (pCi/L, g, F):	3.044	
Sample Duplicate Result 2 Sigma CSU (pCi/L, g, F):	0.715	
Are sample and/or duplicate results below RL?	NO	
Duplicate Numerical Performance Indicator:	-0.071	
(Based on the LCS/LCSD Percent Recoveries) Duplicate RPD:	0.99%	
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
2/21/24

2/21/24

Quality Control Sample Performance Assessment

Pace Analytical™ www.pacelabs.com

Test:	Ra-226
Analyst:	SLC
Date:	2/16/2024
Worklist:	77513
Matrix:	WT

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	3151195
MB concentration:	0.000
M/B 2 Sigma CSU:	0.142
MB MDC:	0.386
MB Numerical Performance Indicator:	0.00
MB Status vs Numerical Indicator:	Pass
MB Status vs. MDC:	N/A

Laboratory Control Sample Assessment	LCSD (Y or N)?	Y
	LCS77513	LCSD77513
Count Date:	2/20/2024	2/20/2024
Spike I.D.:	23-014	23-014
Decay Corrected Spike Concentration (pCi/mL):	25.026	25.026
Volume Used (mL):	0.10	0.10
Aliquot Volume (L, g, F):	0.511	0.510
Target Conc. (pCi/L, g, F):	4.895	4.906
Uncertainty (Calculated):	0.230	0.231
Result (pCi/L, g, F):	5.435	4.831
LCS/LCSD 2 Sigma CSU (pCi/L, g, F):	1.011	0.914
Numerical Performance Indicator:	1.02	-0.16
Percent Recovery:	111.03%	98.48%
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.:	LCS77513	92710974019
Duplicate Sample I.D.	LCSD77513	92710974019DUP
Sample Result (pCi/L, g, F):	5.435	0.302
Sample Result 2 Sigma CSU (pCi/L, g, F):	1.011	0.173
Sample Duplicate Result (pCi/L, g, F):	4.831	0.392
Sample Duplicate Result 2 Sigma CSU (pCi/L, g, F):	0.914	0.216
Are sample and/or duplicate results below RL?	NO	See Below ##
Duplicate Numerical Performance Indicator:	0.868	-0.640
(Based on the LCS/LCSD Percent Recoveries) Duplicate RPD:	11.98%	26.04%
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:

2/21/24

VAM 2/21/24

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

February 14, 2024

Kelley Sharpe
ARCADIS - Atlanta
2839 Paces Ferry Rd
STE 900
Atlanta, GA 30339

RE: Project: Plant McDonough-CCR Ash Pond
Pace Project No.: 92711943

Dear Kelley Sharpe:

Enclosed are the analytical results for sample(s) received by the laboratory on February 06, 2024. 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
770-734-4205
Project Manager

Enclosures

cc: Joju Abraham, Georgia Power-CCR
Jordan Gamble, ARCADIS - Atlanta
Daniela Herrera, WSP USA E&I Inc - Atlanta
Ben Hodges, Georgia Power-CCR
Warren Johnson, ARCADIS - Atlanta
Allison Keefer, Southern Company
Laura Midkiff, Southern Company
Dawn Prell, WSP USA E&I Inc - Atlanta
Noelia Muskus Ruiz, Georgia Power
Tina Sullivan, ERM

REPORT OF LABORATORY ANALYSIS

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

CERTIFICATIONS

Project: Plant McDonough-CCR Ash Pond
Pace Project No.: 92711943

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 McDonough-CCR Ash Pond
Pace Project No.: 92711943

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92711943001	**MCD-UT01_US**	Water	02/06/24 14:10	02/06/24 15:40
92711943002	**MCD-UT02**	Water	02/06/24 14:00	02/06/24 15:40
92711943003	**MCD-UT03**	Water	02/06/24 13:50	02/06/24 15:40
92711943004	**MCD-UT01_DS**	Water	02/06/24 13:40	02/06/24 15:40
92711943005	**MCD-CR-0.1**	Water	02/06/24 12:45	02/06/24 15:40
92711943006	**MCD-CR+0.2**	Water	02/06/24 12:20	02/06/24 15:40
92711943007	**MCD-CR+0.4**	Water	02/06/24 12:10	02/06/24 15:40
92711943008	**MCD-DW_DS**	Water	02/06/24 12:25	02/06/24 15:40
92711943009	**MCD-DW_US**	Water	02/06/24 12:30	02/06/24 15:40
92711943010	**MCD-CR-0.2**	Water	02/06/24 12:40	02/06/24 15:40
92711943011	**MCD-CR-0.5**	Water	02/06/24 12:50	02/06/24 15:40

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SAMPLE ANALYTE COUNT

Project: Plant McDonough-CCR Ash Pond
Pace Project No.: 92711943

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92711943001	**MCD-UT01_US**	EPA 6010D	AJM	5	PASI-GA
		EPA 6020B	CW1	1	PASI-GA
		SM 2320B-2011	SMS	2	PASI-A
		SM 2540C-2015	JAY	1	PASI-A
		EPA 9056A	CDC	3	PASI-A
92711943002	**MCD-UT02**	EPA 6010D	AJM	5	PASI-GA
		EPA 6020B	CW1	1	PASI-GA
		SM 2320B-2011	SMS	2	PASI-A
		SM 2540C-2015	JAY	1	PASI-A
		EPA 9056A	CDC	3	PASI-A
92711943003	**MCD-UT03**	EPA 6010D	AJM	5	PASI-GA
		EPA 6020B	CW1	1	PASI-GA
		SM 2320B-2011	SMS	2	PASI-A
		SM 2540C-2015	JAY	1	PASI-A
		EPA 9056A	CDC	3	PASI-A
92711943004	**MCD-UT01_DS**	EPA 6010D	AJM	5	PASI-GA
		EPA 6020B	CW1	1	PASI-GA
		SM 2320B-2011	SMS	2	PASI-A
		SM 2540C-2015	JAY	1	PASI-A
		EPA 9056A	CDC	3	PASI-A
92711943005	**MCD-CR-0.1**	EPA 6010D	AJM	5	PASI-GA
		EPA 6020B	CW1	2	PASI-GA
		SM 2320B-2011	SMS	2	PASI-A
		SM 2540C-2015	JAY	1	PASI-A
		EPA 9056A	CDC	3	PASI-A
92711943006	**MCD-CR+0.2**	EPA 6010D	AJM	5	PASI-GA
		EPA 6020B	CW1	2	PASI-GA
		SM 2320B-2011	SMS	2	PASI-A
		SM 2540C-2015	JAY	1	PASI-A
		EPA 9056A	CDC	3	PASI-A
92711943007	**MCD-CR+0.4**	EPA 6010D	AJM	5	PASI-GA
		EPA 6020B	CW1	3	PASI-GA
		SM 2320B-2011	SMS	2	PASI-A
		SM 2540C-2015	JAY	1	PASI-A
		EPA 9056A	CDC	3	PASI-A
92711943008	**MCD-DW_DS**	EPA 6010D	AJM	5	PASI-GA
		EPA 6020B	CW1	2	PASI-GA

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SAMPLE ANALYTE COUNT

Project: Plant McDonough-CCR Ash Pond
Pace Project No.: 92711943

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		SM 2320B-2011	SMS	2	PASI-A
		SM 2540C-2015	JAY	1	PASI-A
		EPA 9056A	CDC	3	PASI-A
92711943009	**MCD-DW_US**	EPA 6010D	AJM	5	PASI-GA
		EPA 6020B	CW1	2	PASI-GA
		SM 2320B-2011	SMS	2	PASI-A
		SM 2540C-2015	JAY	1	PASI-A
		EPA 9056A	CDC	3	PASI-A
92711943010	**MCD-CR-0.2**	EPA 6010D	AJM	5	PASI-GA
		EPA 6020B	CW1	2	PASI-GA
		SM 2320B-2011	SMS	2	PASI-A
		SM 2540C-2015	JAY	1	PASI-A
		EPA 9056A	CDC	3	PASI-A
92711943011	**MCD-CR-0.5**	EPA 6010D	AJM	5	PASI-GA
		EPA 6020B	CW1	2	PASI-GA
		SM 2320B-2011	SMS	2	PASI-A
		SM 2540C-2015	JAY	1	PASI-A
		EPA 9056A	CDC	3	PASI-A

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

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ANALYTICAL RESULTS

Project: Plant McDonough-CCR Ash Pond
Pace Project No.: 92711943

Sample: MCD-UT01_US **Lab ID: 92711943001** Collected: 02/06/24 14:10 Received: 02/06/24 15:40 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							
Boron	**0.042**	mg/L	0.040	1	02/07/24 18:03	02/13/24 20:19	7440-42-8	
Potassium	**3.1**	mg/L	0.50	1	02/07/24 18:03	02/13/24 20:19	7440-09-7	
Sodium	**12.7**	mg/L	1.0	1	02/07/24 18:03	02/13/24 20:19	7440-23-5	M1
Calcium	**15.9**	mg/L	1.0	1	02/07/24 18:03	02/13/24 20:19	7440-70-2	M1
Magnesium	**3.0**	mg/L	0.050	1	02/07/24 18:03	02/13/24 20:19	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	02/07/24 17:19	02/08/24 17:07	7440-38-2	
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville							
Alkalinity,Bicarbonate (CaCO3)	**49.4**	mg/L	5.0	1		02/07/24 17:50		
Alkalinity, Total as CaCO3	**49.4**	mg/L	5.0	1		02/07/24 17:50		
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Asheville							
Total Dissolved Solids	**123**	mg/L	25.0	1		02/08/24 13:53		
9056 IC anions 28 Days	Analytical Method: EPA 9056A Pace Analytical Services - Asheville							
Chloride	**13.8**	mg/L	1.0	1		02/09/24 03:17	16887-00-6	
Fluoride	**0.16**	mg/L	0.10	1		02/09/24 03:17	16984-48-8	
Sulfate	**14.0**	mg/L	1.0	1		02/09/24 03:17	14808-79-8	

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ANALYTICAL RESULTS

Project: Plant McDonough-CCR Ash Pond
Pace Project No.: 92711943

Sample: MCD-UT02 **Lab ID: 92711943002** Collected: 02/06/24 14:00 Received: 02/06/24 15:40 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							
Boron	**0.054**	mg/L	0.040	1	02/07/24 18:03	02/13/24 20:39	7440-42-8	
Potassium	**3.1**	mg/L	0.50	1	02/07/24 18:03	02/13/24 20:39	7440-09-7	
Sodium	**12.6**	mg/L	1.0	1	02/07/24 18:03	02/13/24 20:39	7440-23-5	
Calcium	**16.0**	mg/L	1.0	1	02/07/24 18:03	02/13/24 20:39	7440-70-2	
Magnesium	**3.1**	mg/L	0.050	1	02/07/24 18:03	02/13/24 20:39	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	02/07/24 17:19	02/08/24 17:11	7440-38-2	
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville							
Alkalinity,Bicarbonate (CaCO3)	**50.9**	mg/L	5.0	1		02/07/24 17:57		
Alkalinity, Total as CaCO3	**50.9**	mg/L	5.0	1		02/07/24 17:57		
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Asheville							
Total Dissolved Solids	**125**	mg/L	25.0	1		02/08/24 13:53		
9056 IC anions 28 Days	Analytical Method: EPA 9056A Pace Analytical Services - Asheville							
Chloride	**13.7**	mg/L	1.0	1		02/09/24 04:02	16887-00-6	
Fluoride	**0.16**	mg/L	0.10	1		02/09/24 04:02	16984-48-8	
Sulfate	**14.8**	mg/L	1.0	1		02/09/24 04:02	14808-79-8	

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ANALYTICAL RESULTS

Project: Plant McDonough-CCR Ash Pond
Pace Project No.: 92711943

Sample: MCD-UT03 **Lab ID: 92711943003** Collected: 02/06/24 13:50 Received: 02/06/24 15:40 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							
Boron	**0.061**	mg/L	0.040	1	02/07/24 18:03	02/13/24 20:44	7440-42-8	
Potassium	**3.3**	mg/L	0.50	1	02/07/24 18:03	02/13/24 20:44	7440-09-7	
Sodium	**13.4**	mg/L	1.0	1	02/07/24 18:03	02/13/24 20:44	7440-23-5	
Calcium	**17.3**	mg/L	1.0	1	02/07/24 18:03	02/13/24 20:44	7440-70-2	
Magnesium	**3.3**	mg/L	0.050	1	02/07/24 18:03	02/13/24 20:44	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	02/07/24 17:19	02/08/24 17:15	7440-38-2	
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville							
Alkalinity,Bicarbonate (CaCO3)	**51.3**	mg/L	5.0	1		02/07/24 18:14		
Alkalinity, Total as CaCO3	**51.3**	mg/L	5.0	1		02/07/24 18:14		
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Asheville							
Total Dissolved Solids	**121**	mg/L	25.0	1		02/08/24 13:53		
9056 IC anions 28 Days	Analytical Method: EPA 9056A Pace Analytical Services - Asheville							
Chloride	**13.5**	mg/L	1.0	1		02/09/24 04:17	16887-00-6	
Fluoride	**0.16**	mg/L	0.10	1		02/09/24 04:17	16984-48-8	
Sulfate	**14.7**	mg/L	1.0	1		02/09/24 04:17	14808-79-8	

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ANALYTICAL RESULTS

Project: Plant McDonough-CCR Ash Pond
Pace Project No.: 92711943

Sample: MCD-UT01_DS **Lab ID: 92711943004** Collected: 02/06/24 13:40 Received: 02/06/24 15:40 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							
Boron	**0.095**	mg/L	0.040	1	02/07/24 18:03	02/13/24 20:48	7440-42-8	
Potassium	**3.3**	mg/L	0.50	1	02/07/24 18:03	02/13/24 20:48	7440-09-7	
Sodium	**13.4**	mg/L	1.0	1	02/07/24 18:03	02/13/24 20:48	7440-23-5	
Calcium	**17.7**	mg/L	1.0	1	02/07/24 18:03	02/13/24 20:48	7440-70-2	
Magnesium	**3.6**	mg/L	0.050	1	02/07/24 18:03	02/13/24 20:48	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	02/07/24 17:19	02/08/24 17:19	7440-38-2	
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville							
Alkalinity,Bicarbonate (CaCO3)	**52.5**	mg/L	5.0	1		02/07/24 18:21		
Alkalinity, Total as CaCO3	**52.5**	mg/L	5.0	1		02/07/24 18:21		
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Asheville							
Total Dissolved Solids	**115**	mg/L	25.0	1		02/08/24 13:53		
9056 IC anions 28 Days	Analytical Method: EPA 9056A Pace Analytical Services - Asheville							
Chloride	**13.4**	mg/L	1.0	1		02/09/24 04:31	16887-00-6	
Fluoride	**0.16**	mg/L	0.10	1		02/09/24 04:31	16984-48-8	
Sulfate	**15.7**	mg/L	1.0	1		02/09/24 04:31	14808-79-8	

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ANALYTICAL RESULTS

Project: Plant McDonough-CCR Ash Pond
Pace Project No.: 92711943

Sample: MCD-CR-0.1 **Lab ID: 92711943005** Collected: 02/06/24 12:45 Received: 02/06/24 15:40 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							
Boron	ND	mg/L	0.040	1	02/07/24 18:03	02/13/24 20:53	7440-42-8	
Potassium	**3.7**	mg/L	0.50	1	02/07/24 18:03	02/13/24 20:53	7440-09-7	
Sodium	**11.2**	mg/L	1.0	1	02/07/24 18:03	02/13/24 20:53	7440-23-5	
Calcium	**8.7**	mg/L	1.0	1	02/07/24 18:03	02/13/24 20:53	7440-70-2	
Magnesium	**2.4**	mg/L	0.050	1	02/07/24 18:03	02/13/24 20:53	7439-95-4	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA							
Cobalt	ND	mg/L	0.0050	1	02/07/24 17:19	02/08/24 17:23	7440-48-4	
Lithium	ND	mg/L	0.030	1	02/07/24 17:19	02/08/24 17:23	7439-93-2	
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville							
Alkalinity,Bicarbonate (CaCO3)	**32.0**	mg/L	5.0	1		02/07/24 18:28		
Alkalinity, Total as CaCO3	**32.0**	mg/L	5.0	1		02/07/24 18:28		
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Asheville							
Total Dissolved Solids	**86.0**	mg/L	25.0	1		02/08/24 13:54		
9056 IC anions 28 Days	Analytical Method: EPA 9056A Pace Analytical Services - Asheville							
Chloride	**12.4**	mg/L	1.0	1		02/09/24 04:46	16887-00-6	
Fluoride	**0.12**	mg/L	0.10	1		02/09/24 04:46	16984-48-8	
Sulfate	**7.8**	mg/L	1.0	1		02/09/24 04:46	14808-79-8	

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ANALYTICAL RESULTS

Project: Plant McDonough-CCR Ash Pond
Pace Project No.: 92711943

Sample: MCD-CR+0.2 **Lab ID: 92711943006** Collected: 02/06/24 12:20 Received: 02/06/24 15:40 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							
Boron	**0.044**	mg/L	0.040	1	02/07/24 18:03	02/13/24 21:08	7440-42-8	
Potassium	**3.7**	mg/L	0.50	1	02/07/24 18:03	02/13/24 21:08	7440-09-7	
Sodium	**11.4**	mg/L	1.0	1	02/07/24 18:03	02/13/24 21:08	7440-23-5	
Calcium	**8.9**	mg/L	1.0	1	02/07/24 18:03	02/13/24 21:08	7440-70-2	
Magnesium	**2.5**	mg/L	0.050	1	02/07/24 18:03	02/13/24 21:08	7439-95-4	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA							
Cobalt	ND	mg/L	0.0050	1	02/07/24 17:19	02/08/24 17:48	7440-48-4	
Lithium	ND	mg/L	0.030	1	02/07/24 17:19	02/08/24 17:48	7439-93-2	
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville							
Alkalinity,Bicarbonate (CaCO3)	**32.7**	mg/L	5.0	1		02/07/24 18:35		
Alkalinity, Total as CaCO3	**32.7**	mg/L	5.0	1		02/07/24 18:35		
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Asheville							
Total Dissolved Solids	**94.0**	mg/L	25.0	1		02/08/24 13:54		
9056 IC anions 28 Days	Analytical Method: EPA 9056A Pace Analytical Services - Asheville							
Chloride	**12.5**	mg/L	1.0	1		02/09/24 05:01	16887-00-6	
Fluoride	**0.12**	mg/L	0.10	1		02/09/24 05:01	16984-48-8	
Sulfate	**8.6**	mg/L	1.0	1		02/09/24 05:01	14808-79-8	

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ANALYTICAL RESULTS

Project: Plant McDonough-CCR Ash Pond
Pace Project No.: 92711943

Sample: MCD-CR+0.4 **Lab ID: 92711943007** Collected: 02/06/24 12:10 Received: 02/06/24 15:40 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							
Boron	**0.061**	mg/L	0.040	1	02/07/24 18:03	02/13/24 21:12	7440-42-8	
Potassium	**3.7**	mg/L	0.50	1	02/07/24 18:03	02/13/24 21:12	7440-09-7	
Sodium	**11.8**	mg/L	1.0	1	02/07/24 18:03	02/13/24 21:12	7440-23-5	
Calcium	**9.4**	mg/L	1.0	1	02/07/24 18:03	02/13/24 21:12	7440-70-2	
Magnesium	**2.7**	mg/L	0.050	1	02/07/24 18:03	02/13/24 21:12	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	02/07/24 17:19	02/08/24 17:52	7440-38-2	
Cobalt	ND	mg/L	0.0050	1	02/07/24 17:19	02/08/24 17:52	7440-48-4	
Lithium	ND	mg/L	0.030	1	02/07/24 17:19	02/08/24 17:52	7439-93-2	
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville							
Alkalinity,Bicarbonate (CaCO3)	**32.9**	mg/L	5.0	1		02/07/24 18:41		
Alkalinity, Total as CaCO3	**32.9**	mg/L	5.0	1		02/07/24 18:41		
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Asheville							
Total Dissolved Solids	**94.0**	mg/L	25.0	1		02/08/24 13:54		
9056 IC anions 28 Days	Analytical Method: EPA 9056A Pace Analytical Services - Asheville							
Chloride	**12.8**	mg/L	1.0	1		02/09/24 05:16	16887-00-6	
Fluoride	**0.13**	mg/L	0.10	1		02/09/24 05:16	16984-48-8	
Sulfate	**10.2**	mg/L	1.0	1		02/09/24 05:16	14808-79-8	

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ANALYTICAL RESULTS

Project: Plant McDonough-CCR Ash Pond
Pace Project No.: 92711943

Sample: MCD-DW_DS **Lab ID: 92711943008** Collected: 02/06/24 12:25 Received: 02/06/24 15:40 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							
Boron	ND	mg/L	0.040	1	02/07/24 18:03	02/13/24 21:17	7440-42-8	
Potassium	**3.6**	mg/L	0.50	1	02/07/24 18:03	02/13/24 21:17	7440-09-7	
Sodium	**11.0**	mg/L	1.0	1	02/07/24 18:03	02/13/24 21:17	7440-23-5	
Calcium	**8.4**	mg/L	1.0	1	02/07/24 18:03	02/13/24 21:17	7440-70-2	
Magnesium	**2.4**	mg/L	0.050	1	02/07/24 18:03	02/13/24 21:17	7439-95-4	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA							
Cobalt	ND	mg/L	0.0050	1	02/07/24 17:19	02/08/24 17:56	7440-48-4	
Lithium	ND	mg/L	0.030	1	02/07/24 17:19	02/08/24 17:56	7439-93-2	
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville							
Alkalinity,Bicarbonate (CaCO3)	**33.0**	mg/L	5.0	1		02/07/24 18:48		
Alkalinity, Total as CaCO3	**33.0**	mg/L	5.0	1		02/07/24 18:48		
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Asheville							
Total Dissolved Solids	**85.0**	mg/L	25.0	1		02/08/24 13:54		
9056 IC anions 28 Days	Analytical Method: EPA 9056A Pace Analytical Services - Asheville							
Chloride	**12.5**	mg/L	1.0	1		02/09/24 05:31	16887-00-6	
Fluoride	**0.12**	mg/L	0.10	1		02/09/24 05:31	16984-48-8	
Sulfate	**8.0**	mg/L	1.0	1		02/09/24 05:31	14808-79-8	

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ANALYTICAL RESULTS

Project: Plant McDonough-CCR Ash Pond
Pace Project No.: 92711943

Sample: MCD-DW_US **Lab ID: 92711943009** Collected: 02/06/24 12:30 Received: 02/06/24 15:40 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							
Boron	ND	mg/L	0.040	1	02/07/24 18:03	02/13/24 21:22	7440-42-8	
Potassium	**3.5**	mg/L	0.50	1	02/07/24 18:03	02/13/24 21:22	7440-09-7	
Sodium	**10.9**	mg/L	1.0	1	02/07/24 18:03	02/13/24 21:22	7440-23-5	
Calcium	**8.6**	mg/L	1.0	1	02/07/24 18:03	02/13/24 21:22	7440-70-2	
Magnesium	**2.4**	mg/L	0.050	1	02/07/24 18:03	02/13/24 21:22	7439-95-4	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA							
Cobalt	ND	mg/L	0.0050	1	02/07/24 17:19	02/08/24 18:01	7440-48-4	
Lithium	ND	mg/L	0.030	1	02/07/24 17:19	02/08/24 18:01	7439-93-2	
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville							
Alkalinity,Bicarbonate (CaCO3)	**31.9**	mg/L	5.0	1		02/07/24 18:54		
Alkalinity, Total as CaCO3	**31.9**	mg/L	5.0	1		02/07/24 18:54		
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Asheville							
Total Dissolved Solids	**90.0**	mg/L	25.0	1		02/08/24 13:54		
9056 IC anions 28 Days	Analytical Method: EPA 9056A Pace Analytical Services - Asheville							
Chloride	**12.4**	mg/L	1.0	1		02/09/24 06:15	16887-00-6	
Fluoride	**0.12**	mg/L	0.10	1		02/09/24 06:15	16984-48-8	
Sulfate	**7.9**	mg/L	1.0	1		02/09/24 06:15	14808-79-8	

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ANALYTICAL RESULTS

Project: Plant McDonough-CCR Ash Pond
Pace Project No.: 92711943

Sample: MCD-CR-0.2 **Lab ID: 92711943010** Collected: 02/06/24 12:40 Received: 02/06/24 15:40 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							
Boron	ND	mg/L	0.040	1	02/07/24 18:03	02/13/24 21:27	7440-42-8	
Potassium	**3.7**	mg/L	0.50	1	02/07/24 18:03	02/13/24 21:27	7440-09-7	
Sodium	**11.3**	mg/L	1.0	1	02/07/24 18:03	02/13/24 21:27	7440-23-5	
Calcium	**8.7**	mg/L	1.0	1	02/07/24 18:03	02/13/24 21:27	7440-70-2	
Magnesium	**2.5**	mg/L	0.050	1	02/07/24 18:03	02/13/24 21:27	7439-95-4	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA							
Cobalt	ND	mg/L	0.0050	1	02/07/24 17:19	02/08/24 18:05	7440-48-4	
Lithium	ND	mg/L	0.030	1	02/07/24 17:19	02/08/24 18:05	7439-93-2	
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville							
Alkalinity,Bicarbonate (CaCO3)	**32.6**	mg/L	5.0	1		02/07/24 19:00		
Alkalinity, Total as CaCO3	**32.6**	mg/L	5.0	1		02/07/24 19:00		
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Asheville							
Total Dissolved Solids	**84.0**	mg/L	25.0	1		02/08/24 13:54		
9056 IC anions 28 Days	Analytical Method: EPA 9056A Pace Analytical Services - Asheville							
Chloride	**12.5**	mg/L	1.0	1		02/09/24 06:30	16887-00-6	
Fluoride	**0.12**	mg/L	0.10	1		02/09/24 06:30	16984-48-8	
Sulfate	**7.9**	mg/L	1.0	1		02/09/24 06:30	14808-79-8	

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ANALYTICAL RESULTS

Project: Plant McDonough-CCR Ash Pond
Pace Project No.: 92711943

Sample: MCD-CR-0.5 **Lab ID: 92711943011** Collected: 02/06/24 12:50 Received: 02/06/24 15:40 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							
Boron	ND	mg/L	0.040	1	02/07/24 18:03	02/13/24 21:32	7440-42-8	
Potassium	**3.4**	mg/L	0.50	1	02/07/24 18:03	02/13/24 21:32	7440-09-7	
Sodium	**10.9**	mg/L	1.0	1	02/07/24 18:03	02/13/24 21:32	7440-23-5	
Calcium	**8.5**	mg/L	1.0	1	02/07/24 18:03	02/13/24 21:32	7440-70-2	
Magnesium	**2.4**	mg/L	0.050	1	02/07/24 18:03	02/13/24 21:32	7439-95-4	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA							
Cobalt	ND	mg/L	0.0050	1	02/07/24 17:19	02/08/24 18:09	7440-48-4	
Lithium	ND	mg/L	0.030	1	02/07/24 17:19	02/08/24 18:09	7439-93-2	
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville							
Alkalinity,Bicarbonate (CaCO3)	**32.4**	mg/L	5.0	1		02/07/24 19:07		
Alkalinity, Total as CaCO3	**32.4**	mg/L	5.0	1		02/07/24 19:07		
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Asheville							
Total Dissolved Solids	**87.0**	mg/L	25.0	1		02/08/24 13:54		
9056 IC anions 28 Days	Analytical Method: EPA 9056A Pace Analytical Services - Asheville							
Chloride	**12.6**	mg/L	1.0	1		02/09/24 06:45	16887-00-6	
Fluoride	**0.12**	mg/L	0.10	1		02/09/24 06:45	16984-48-8	
Sulfate	**7.9**	mg/L	1.0	1		02/09/24 06:45	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL DATA

Project: Plant McDonough-CCR Ash Pond
Pace Project No.: 92711943

QC Batch: 830775
QC Batch Method: EPA 3010A
Analysis Method: EPA 6010D
Analysis Description: 6010D ATL
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92711943001, 92711943002, 92711943003, 92711943004, 92711943005, 92711943006, 92711943007, 92711943008, 92711943009, 92711943010, 92711943011

METHOD BLANK: 4293889 Matrix: Water
Associated Lab Samples: 92711943001, 92711943002, 92711943003, 92711943004, 92711943005, 92711943006, 92711943007, 92711943008, 92711943009, 92711943010, 92711943011

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Boron	mg/L	ND	0.040	02/13/24 20:10	
Calcium	mg/L	ND	1.0	02/13/24 20:10	
Magnesium	mg/L	ND	0.050	02/13/24 20:10	
Potassium	mg/L	ND	0.50	02/13/24 20:10	
Sodium	mg/L	ND	1.0	02/13/24 20:10	

LABORATORY CONTROL SAMPLE: 4293890

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Boron	mg/L	1	0.99	99	80-120	
Calcium	mg/L	1	ND	100	80-120	
Magnesium	mg/L	1	1.0	102	80-120	
Potassium	mg/L	1	0.92	92	80-120	
Sodium	mg/L	1	.94J	94	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4293891 4293892

Parameter	Units	92711943001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Boron	mg/L	0.042	1	1	1.1	1.0	102	101	75-125	1	20	
Calcium	mg/L	15.9	1	1	17.3	17.1	140	120	75-125	1	20	M1
Magnesium	mg/L	3.0	1	1	4.1	4.1	111	108	75-125	1	20	
Potassium	mg/L	3.1	1	1	4.1	4.1	104	104	75-125	0	20	
Sodium	mg/L	12.7	1	1	14.1	14.0	136	121	75-125	1	20	M1

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QUALITY CONTROL DATA

Project: Plant McDonough-CCR Ash Pond
Pace Project No.: 92711943

QC Batch: 830758
QC Batch Method: EPA 3005A
Analysis Method: EPA 6020B
Analysis Description: 6020 MET
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92711943001, 92711943002, 92711943003, 92711943004, 92711943005, 92711943006, 92711943007, 92711943008, 92711943009, 92711943010, 92711943011

METHOD BLANK: 4293777 Matrix: Water
Associated Lab Samples: 92711943001, 92711943002, 92711943003, 92711943004, 92711943005, 92711943006, 92711943007, 92711943008, 92711943009, 92711943010, 92711943011

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Arsenic	mg/L	ND	0.0050	02/08/24 16:58	
Cobalt	mg/L	ND	0.0050	02/08/24 16:58	
Lithium	mg/L	ND	0.030	02/08/24 16:58	

LABORATORY CONTROL SAMPLE: 4293778

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Arsenic	mg/L	0.1	0.098	98	80-120	
Cobalt	mg/L	0.1	0.094	94	80-120	
Lithium	mg/L	0.1	0.099	99	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4293779 4293780

Parameter	Units	92711943005 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Arsenic	mg/L	ND	0.1	0.1	0.11	0.11	106	105	75-125	1	20	
Cobalt	mg/L	ND	0.1	0.1	0.11	0.11	109	106	75-125	3	20	
Lithium	mg/L	ND	0.1	0.1	0.11	0.11	107	107	75-125	0	20	

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QUALITY CONTROL DATA

Project: Plant McDonough-CCR Ash Pond
Pace Project No.: 92711943

QC Batch: 830623
QC Batch Method: SM 2320B-2011
Analysis Method: SM 2320B-2011
Analysis Description: 2320B Alkalinity
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92711943001, 92711943002, 92711943003, 92711943004, 92711943005, 92711943006, 92711943007, 92711943008, 92711943009, 92711943010, 92711943011

METHOD BLANK: 4293114 Matrix: Water
Associated Lab Samples: 92711943001, 92711943002, 92711943003, 92711943004, 92711943005, 92711943006, 92711943007, 92711943008, 92711943009, 92711943010, 92711943011

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Alkalinity, Total as CaCO3	mg/L	ND	5.0	02/07/24 16:43	
Alkalinity,Bicarbonate (CaCO3)	mg/L	ND	5.0	02/07/24 16:43	

LABORATORY CONTROL SAMPLE: 4293115

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	50	51.2	102	80-120	

LABORATORY CONTROL SAMPLE: 4293116

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: 4293117 4293118

Parameter	Units	92710886019 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	41.9	42.2	84	84	80-120	1	25	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4293286 4293287

Parameter	Units	92711669003 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	180	50	50	224	221	88	82	80-120	1	25	

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QUALITY CONTROL DATA

Project: Plant McDonough-CCR Ash Pond
Pace Project No.: 92711943

QC Batch: 830805
QC Batch Method: SM 2540C-2015
Analysis Method: SM 2540C-2015
Analysis Description: 2540C Total Dissolved Solids
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92711943001, 92711943002, 92711943003, 92711943004, 92711943005, 92711943006, 92711943007, 92711943008, 92711943009, 92711943010, 92711943011

METHOD BLANK: 4294133 Matrix: Water
Associated Lab Samples: 92711943001, 92711943002, 92711943003, 92711943004, 92711943005, 92711943006, 92711943007, 92711943008, 92711943009, 92711943010, 92711943011

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	25.0	02/08/24 13:52	

LABORATORY CONTROL SAMPLE: 4294134

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	250	250	100	90-110	

SAMPLE DUPLICATE: 4294135

Parameter	Units	92711928001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	38000	34700	9	25	1g

SAMPLE DUPLICATE: 4294136

Parameter	Units	92711943003 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	121	118	3	25	

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QUALITY CONTROL DATA

Project: Plant McDonough-CCR Ash Pond
Pace Project No.: 92711943

QC Batch: 831146
QC Batch Method: EPA 9056A
Analysis Method: EPA 9056A
Analysis Description: 9056 IC anions 28 Days
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92711943001, 92711943002, 92711943003, 92711943004, 92711943005, 92711943006, 92711943007, 92711943008, 92711943009, 92711943010, 92711943011

METHOD BLANK: 4295738 Matrix: Water
Associated Lab Samples: 92711943001, 92711943002, 92711943003, 92711943004, 92711943005, 92711943006, 92711943007, 92711943008, 92711943009, 92711943010, 92711943011

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	02/08/24 21:43	
Fluoride	mg/L	ND	0.10	02/08/24 21:43	
Sulfate	mg/L	ND	1.0	02/08/24 21:43	

LABORATORY CONTROL SAMPLE: 4295739

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	51.9	104	90-110	
Fluoride	mg/L	2.5	2.6	102	90-110	
Sulfate	mg/L	50	52.2	104	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4295740 4295741

Parameter	Units	92711943001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	13.8	50	50	64.8	64.8	102	102	90-110	0	10	
Fluoride	mg/L	0.16	2.5	2.5	2.6	2.6	96	96	90-110	0	10	
Sulfate	mg/L	14.0	50	50	65.3	65.4	103	103	90-110	0	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4295742 4295743

Parameter	Units	92711706005 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	47.4	50	50	98.3	98.9	102	103	90-110	1	10	
Fluoride	mg/L	0.050J	2.5	2.5	2.6	2.6	102	103	90-110	1	10	
Sulfate	mg/L	160	50	50	207	207	94	94	90-110	0	10	

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QUALIFIERS

Project: Plant McDonough-CCR Ash Pond
Pace Project No.: 92711943

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	Constant weight could not be achieved for this sample after four drying cycles. The final weight change was 0.0022g
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-CCR Ash Pond
Pace Project No.: 92711943

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92711943001	**MCD-UT01_US**	EPA 3010A	830775	EPA 6010D	830811
92711943002	**MCD-UT02**	EPA 3010A	830775	EPA 6010D	830811
92711943003	**MCD-UT03**	EPA 3010A	830775	EPA 6010D	830811
92711943004	**MCD-UT01_DS**	EPA 3010A	830775	EPA 6010D	830811
92711943005	**MCD-CR-0.1**	EPA 3010A	830775	EPA 6010D	830811
92711943006	**MCD-CR+0.2**	EPA 3010A	830775	EPA 6010D	830811
92711943007	**MCD-CR+0.4**	EPA 3010A	830775	EPA 6010D	830811
92711943008	**MCD-DW_DS**	EPA 3010A	830775	EPA 6010D	830811
92711943009	**MCD-DW_US**	EPA 3010A	830775	EPA 6010D	830811
92711943010	**MCD-CR-0.2**	EPA 3010A	830775	EPA 6010D	830811
92711943011	**MCD-CR-0.5**	EPA 3010A	830775	EPA 6010D	830811
92711943001	**MCD-UT01_US**	EPA 3005A	830758	EPA 6020B	830814
92711943002	**MCD-UT02**	EPA 3005A	830758	EPA 6020B	830814
92711943003	**MCD-UT03**	EPA 3005A	830758	EPA 6020B	830814
92711943004	**MCD-UT01_DS**	EPA 3005A	830758	EPA 6020B	830814
92711943005	**MCD-CR-0.1**	EPA 3005A	830758	EPA 6020B	830814
92711943006	**MCD-CR+0.2**	EPA 3005A	830758	EPA 6020B	830814
92711943007	**MCD-CR+0.4**	EPA 3005A	830758	EPA 6020B	830814
92711943008	**MCD-DW_DS**	EPA 3005A	830758	EPA 6020B	830814
92711943009	**MCD-DW_US**	EPA 3005A	830758	EPA 6020B	830814
92711943010	**MCD-CR-0.2**	EPA 3005A	830758	EPA 6020B	830814
92711943011	**MCD-CR-0.5**	EPA 3005A	830758	EPA 6020B	830814
92711943001	**MCD-UT01_US**	SM 2320B-2011	830623		
92711943002	**MCD-UT02**	SM 2320B-2011	830623		
92711943003	**MCD-UT03**	SM 2320B-2011	830623		
92711943004	**MCD-UT01_DS**	SM 2320B-2011	830623		
92711943005	**MCD-CR-0.1**	SM 2320B-2011	830623		
92711943006	**MCD-CR+0.2**	SM 2320B-2011	830623		
92711943007	**MCD-CR+0.4**	SM 2320B-2011	830623		
92711943008	**MCD-DW_DS**	SM 2320B-2011	830623		
92711943009	**MCD-DW_US**	SM 2320B-2011	830623		
92711943010	**MCD-CR-0.2**	SM 2320B-2011	830623		
92711943011	**MCD-CR-0.5**	SM 2320B-2011	830623		
92711943001	**MCD-UT01_US**	SM 2540C-2015	830805		
92711943002	**MCD-UT02**	SM 2540C-2015	830805		
92711943003	**MCD-UT03**	SM 2540C-2015	830805		
92711943004	**MCD-UT01_DS**	SM 2540C-2015	830805		
92711943005	**MCD-CR-0.1**	SM 2540C-2015	830805		
92711943006	**MCD-CR+0.2**	SM 2540C-2015	830805		
92711943007	**MCD-CR+0.4**	SM 2540C-2015	830805		
92711943008	**MCD-DW_DS**	SM 2540C-2015	830805		
92711943009	**MCD-DW_US**	SM 2540C-2015	830805		
92711943010	**MCD-CR-0.2**	SM 2540C-2015	830805		
92711943011	**MCD-CR-0.5**	SM 2540C-2015	830805		
92711943001	**MCD-UT01_US**	EPA 9056A	831146		
92711943002	**MCD-UT02**	EPA 9056A	831146		
92711943003	**MCD-UT03**	EPA 9056A	831146		

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Plant McDonough-CCR Ash Pond
Pace Project No.: 92711943

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92711943004	**MCD-UT01_DS**	EPA 9056A	831146		
92711943005	**MCD-CR-0.1**	EPA 9056A	831146		
92711943006	**MCD-CR+0.2**	EPA 9056A	831146		
92711943007	**MCD-CR+0.4**	EPA 9056A	831146		
92711943008	**MCD-DW_DS**	EPA 9056A	831146		
92711943009	**MCD-DW_US**	EPA 9056A	831146		
92711943010	**MCD-CR-0.2**	EPA 9056A	831146		
92711943011	**MCD-CR-0.5**	EPA 9056A	831146		

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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:	kelley.sharpe@arcadis.com
Phone:	(770)384-6584 Fax:
Requested Due Date:	

Section B
Required Project Information:

Report To:	Kelley Sharpe, Warren Johnson
Copy To:	Ben Hodges, Joju Abraham
Copy To:	
Purchase Order #:	GPC11066177
Project Name:	Plant McDonough/CCR-Ash Pond Closure
Project #:	

Section C
Invoice Information:

Attention:	
Company Name:	
Address:	
Pace Quote:	
Pace Project Manager:	maiya.parks@pacelabs.com,
Pace Profile #:	12896

WO# : 92711943

92711943

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	Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Analyses Test Y/N	Total/Bicarb Alkalinity	TDS	Cl, F, SO4	App. III Metals + Mg, Na, K	App. IV Metals - As, Co, Li	App. IV Metals - As	App. IV Metals - Co, Li	Residual Chlorine (Y/N)
1	MCD-UT01_US	WS	G	2/6	1410				3	X		X							X	X	X	X		X		
2	MCD-UT02	WS	G	2/6	1400				3	X		X							X	X	X	X		X		
3	MCD-UT03	WS	G	2/6	1350				3	X		X							X	X	X	X		X		
4	MCD-UT01_DS	WS	G	2/6	1340				3	X		X							X	X	X	X		X		
5	MCD-CR-0.1	WS	G	2/6	1245				3	X		X							X	X	X	X			X	
6	MCD-CR+0.2	WS	G	2/6	1220				3	X		X							X	X	X	X			X	
7	MCD-CR+0.4	WS	G	2/6	1210				3	X		X							X	X	X	X	X			
8	MCD-DW_DS	WS	G	2/6	1225				3	X		X							X	X	X	X			X	
9	MCD-DW_US	WS	G	2/6	1230				3	X		X							X	X	X	X			X	
10	MCD-CR-0.2	WS	G	2/6	1240				3	X		X							X	X	X	X			X	
11	MCD-CR-0.5	WS	G	2/6	1250				3	X		X							X	X	X	X			X	
12																										

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
MCD-CSURF-ASSMT-2024S1	Perry Studebaker/Arcadis	2/6/24	1540	[signature]	2/6	~~1450~~ 1540	C2H 2/6/24
6020: As, Co, Li							
6010: B, Ca, Mg, K, Na							

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Perry Studebaker

SIGNATURE of SAMPLER: [signature] DATE Signed: 2/6/24

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 v03_Sample Condition Upon Receipt

Effective Date: 11/29/2023

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

Sample Condition Upon Receipt

Client Name: Arcadis - Atlanta

Project #: WO#: 92711943

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

PM: MP Due Date: 02/14/24
CLIENT: GA-ArcadAtl

Custody Seal Present? ☑ Yes ☐ No **Seals Intact?** ☑ Yes ☐ No ☐ N/A

Date/Initials Person Examining Contents: 2/6/24 DW

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: 5.8 **Correction Factor:** Add/Subtract (°C) -0.1

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

Cooler Temp Corrected (°C): 5.7

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: WS				
Headspace in VOA Vials (>S-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#: 92711943

PM: MP Due Date: 02/14/24

CLIENT: GA-ArcadAtl

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																							
2			2			1																							
3			2			1																							
4			2			1																							
5			2			1																							
6			2			1																							
7			2			1																							
8			2			1																							
9			2			1																							
10			2			1																							
11			2			1																							
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

Laboratory Analytical Data
May 2024

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

June 05, 2024

Lauren Hartley
Southern Co.
241 Ralph McGill Blvd
NE, Bin 10160
Atlanta, GA 30308

RE: Project: Plant MCD-DGWC-121
Pace Project No.: 92732121

Dear Lauren Hartley:

Enclosed are the analytical results for sample(s) received by the laboratory on May 21, 2024. 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,

Bonnie Vang
bonnie.vang@pacelabs.com
704-977-0968
Project Manager

Enclosures

cc: Yong Cheng, WSP
Daniela Herrera, WSP
Andrea McClure, WSP
Laura Midkiff, Southern Co.
Dawn Prell, WSP USA E&I Inc - Atlanta

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Huntersville, NC 28078
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CERTIFICATIONS

Project: Plant MCD-DGWC-121
Pace Project No.: 92732121

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-DGWC-121
Pace Project No.: 92732121

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92732121001	**MCD-DGWC-121**	Water	05/20/24 13:21	05/21/24 11:39
92732121002	**MCD-AP1-FD-1**	Water	05/20/24 00:00	05/21/24 11:39
92732121003	**MCD-AP1-FB-1**	Water	05/20/24 13:30	05/21/24 11:39

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SAMPLE ANALYTE COUNT

Project: Plant MCD-DGWC-121
Pace Project No.: 92732121

Lab ID	Sample ID	Method	Analysts	Analytes Reported
92732121001	**MCD-DGWC-121**	EPA 6010D	DRB	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92732121002	**MCD-AP1-FD-1**	EPA 6010D	DRB	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92732121003	**MCD-AP1-FB-1**	EPA 6010D	DRB	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-GA = Pace Analytical Services - Peachtree Corners, GA

REPORT OF LABORATORY ANALYSIS

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Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: Plant MCD-DGWC-121
Pace Project No.: 92732121

Sample: MCD-DGWC-121 **Lab ID: 92732121001** Collected: 05/20/24 13:21 Received: 05/21/24 11:39 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	**43.4**	mg/L	1.0	0.12	1	05/23/24 14:53	05/24/24 12:26	7440-70-2	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	**0.00062J**	mg/L	0.0030	0.00054	1	05/23/24 14:39	05/24/24 12:59	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00084	1	05/23/24 14:39	05/24/24 12:59	7440-38-2	
Barium	**0.044**	mg/L	0.0050	0.00047	1	05/23/24 14:39	05/24/24 12:59	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000094	1	05/23/24 14:39	05/24/24 12:59	7440-41-7	
Boron	**1.7**	mg/L	0.040	0.012	1	05/23/24 14:39	05/24/24 12:59	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00010	1	05/23/24 14:39	05/24/24 12:59	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0019	1	05/23/24 14:39	05/24/24 12:59	7440-47-3	
Cobalt	**0.0013J**	mg/L	0.0050	0.00032	1	05/23/24 14:39	05/24/24 12:59	7440-48-4	
Lead	ND	mg/L	0.0010	0.00016	1	05/23/24 14:39	05/24/24 12:59	7439-92-1	
Lithium	**0.0050J**	mg/L	0.030	0.0016	1	05/23/24 14:39	05/24/24 12:59	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00062	1	05/23/24 14:39	05/24/24 12:59	7439-98-7	
Selenium	ND	mg/L	0.0050	0.00096	1	05/23/24 14:39	05/24/24 12:59	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00038	1	05/23/24 14:39	05/24/24 12:59	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.00013	1	05/28/24 12:00	05/28/24 15:11	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**291**	mg/L	25.0	25.0	1		05/23/24 15:07		
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		05/22/24 05:45	16887-00-6	
Fluoride	**0.062J**	mg/L	0.10	0.050	1		05/22/24 05:45	16984-48-8	
Sulfate	**88.0**	mg/L	1.0	0.50	1		05/22/24 05:45	14808-79-8	

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(704)875-9092

ANALYTICAL RESULTS

Project: Plant MCD-DGWC-121
Pace Project No.: 92732121

Sample: MCD-AP1-FD-1 **Lab ID: 92732121002** Collected: 05/20/24 00:00 Received: 05/21/24 11:39 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	**43.5**	mg/L	1.0	0.12	1	05/23/24 14:53	05/24/24 12:29	7440-70-2	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00054	1	05/23/24 14:39	05/24/24 13:02	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00084	1	05/23/24 14:39	05/24/24 13:02	7440-38-2	
Barium	**0.046**	mg/L	0.0050	0.00047	1	05/23/24 14:39	05/24/24 13:02	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000094	1	05/23/24 14:39	05/24/24 13:02	7440-41-7	
Boron	**1.8**	mg/L	0.040	0.012	1	05/23/24 14:39	05/24/24 13:02	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00010	1	05/23/24 14:39	05/24/24 13:02	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0019	1	05/23/24 14:39	05/24/24 13:02	7440-47-3	
Cobalt	**0.0013J**	mg/L	0.0050	0.00032	1	05/23/24 14:39	05/24/24 13:02	7440-48-4	
Lead	ND	mg/L	0.0010	0.00016	1	05/23/24 14:39	05/24/24 13:02	7439-92-1	
Lithium	**0.0049J**	mg/L	0.030	0.0016	1	05/23/24 14:39	05/24/24 13:02	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00062	1	05/23/24 14:39	05/24/24 13:02	7439-98-7	
Selenium	ND	mg/L	0.0050	0.00096	1	05/23/24 14:39	05/24/24 13:02	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00038	1	05/23/24 14:39	05/24/24 13:02	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.00013	1	05/28/24 12:00	05/28/24 15:22	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**313**	mg/L	25.0	25.0	1		05/23/24 15:07		
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		05/22/24 05:58	16887-00-6	M1
Fluoride	**0.061J**	mg/L	0.10	0.050	1		05/22/24 05:58	16984-48-8	
Sulfate	**88.0**	mg/L	1.0	0.50	1		05/22/24 05:58	14808-79-8	M1

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ANALYTICAL RESULTS

Project: Plant MCD-DGWC-121
Pace Project No.: 92732121

Sample: MCD-AP1-FB-1 **Lab ID: 92732121003** Collected: 05/20/24 13:30 Received: 05/21/24 11:39 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	05/23/24 14:53	05/24/24 12:35	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	0.00054	1	05/23/24 14:39	05/24/24 13:20	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00084	1	05/23/24 14:39	05/24/24 13:20	7440-38-2	
Barium	ND	mg/L	0.0050	0.00047	1	05/23/24 14:39	05/24/24 13:20	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000094	1	05/23/24 14:39	05/24/24 13:20	7440-41-7	
Boron	ND	mg/L	0.040	0.012	1	05/23/24 14:39	05/24/24 13:20	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00010	1	05/23/24 14:39	05/24/24 13:20	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0019	1	05/23/24 14:39	05/24/24 13:20	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00032	1	05/23/24 14:39	05/24/24 13:20	7440-48-4	
Lead	ND	mg/L	0.0010	0.00016	1	05/23/24 14:39	05/24/24 13:20	7439-92-1	
Lithium	ND	mg/L	0.030	0.0016	1	05/23/24 14:39	05/24/24 13:20	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00062	1	05/23/24 14:39	05/24/24 13:20	7439-98-7	
Selenium	ND	mg/L	0.0050	0.00096	1	05/23/24 14:39	05/24/24 13:20	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00038	1	05/23/24 14:39	05/24/24 13:20	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	05/28/24 12:00	05/28/24 15:24	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**61.0**	mg/L	25.0	25.0	1		05/23/24 15:08		
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		05/21/24 22:22	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		05/21/24 22:22	16984-48-8	
Sulfate	ND	mg/L	1.0	0.50	1		05/21/24 22:22	14808-79-8	

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QUALITY CONTROL DATA

Project: Plant MCD-DGWC-121
Pace Project No.: 92732121

QC Batch: 856824 | Analysis Method: EPA 6010D
QC Batch Method: EPA 3010A | Analysis Description: 6010D ATL
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92732121001, 92732121002, 92732121003

METHOD BLANK: 4420530 Matrix: Water
Associated Lab Samples: 92732121001, 92732121002, 92732121003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium	mg/L	ND	1.0	0.12	05/24/24 11:56	

LABORATORY CONTROL SAMPLE: 4420531

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium	mg/L	1	1.0	103	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4420532 4420533

Parameter	Units	92732137001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Calcium	mg/L	362000 ug/L	1	1	387	378	2520	1630	75-125	2	20	M1

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

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QUALITY CONTROL DATA

Project: Plant MCD-DGWC-121
Pace Project No.: 92732121

QC Batch: 856820
QC Batch Method: EPA 3005A
Analysis Method: EPA 6020B
Analysis Description: 6020 MET
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92732121001, 92732121002, 92732121003

METHOD BLANK: 4420490 Matrix: Water
Associated Lab Samples: 92732121001, 92732121002, 92732121003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	ND	0.0030	0.00054	05/24/24 12:33	
Arsenic	mg/L	ND	0.0050	0.00084	05/24/24 12:33	
Barium	mg/L	ND	0.0050	0.00047	05/24/24 12:33	
Beryllium	mg/L	ND	0.00050	0.000094	05/24/24 12:33	
Boron	mg/L	ND	0.040	0.012	05/24/24 12:33	
Cadmium	mg/L	ND	0.00050	0.00010	05/24/24 12:33	
Chromium	mg/L	ND	0.0050	0.0019	05/24/24 12:33	
Cobalt	mg/L	ND	0.0050	0.00032	05/24/24 12:33	
Lead	mg/L	ND	0.0010	0.00016	05/24/24 12:33	
Lithium	mg/L	ND	0.030	0.0016	05/24/24 12:33	
Molybdenum	mg/L	ND	0.010	0.00062	05/24/24 12:33	
Selenium	mg/L	ND	0.0050	0.00096	05/24/24 12:33	
Thallium	mg/L	ND	0.0010	0.00038	05/24/24 12:33	

LABORATORY CONTROL SAMPLE: 4420491

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.1	0.10	102	80-120	
Arsenic	mg/L	0.1	0.10	102	80-120	
Barium	mg/L	0.1	0.097	97	80-120	
Beryllium	mg/L	0.1	0.11	106	80-120	
Boron	mg/L	1	1.1	107	80-120	
Cadmium	mg/L	0.1	0.10	102	80-120	
Chromium	mg/L	0.1	0.10	104	80-120	
Cobalt	mg/L	0.1	0.10	102	80-120	
Lead	mg/L	0.1	0.10	103	80-120	
Lithium	mg/L	0.1	0.11	109	80-120	
Molybdenum	mg/L	0.1	0.10	102	80-120	
Selenium	mg/L	0.1	0.10	101	80-120	
Thallium	mg/L	0.1	0.098	98	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4420492 4420493

Parameter	Units	92728560003 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	102	103	75-125	1	20	
Arsenic	mg/L	ND	0.1	0.1	0.10	0.10	102	101	75-125	1	20	

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REPORT OF LABORATORY ANALYSIS

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9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: Plant MCD-DGWC-121
Pace Project No.: 92732121

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4420492 4420493

Parameter	Units	92728560003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Barium	mg/L	0.35	0.1	0.1	0.46	0.45	111	96	75-125	3	20	
Beryllium	mg/L	ND	0.1	0.1	0.090	0.092	90	91	75-125	2	20	
Boron	mg/L	0.12	1	1	1.0	1.1	93	94	75-125	1	20	
Cadmium	mg/L	ND	0.1	0.1	0.10	0.10	100	101	75-125	0	20	
Chromium	mg/L	ND	0.1	0.1	0.096	0.098	96	98	75-125	2	20	
Cobalt	mg/L	ND	0.1	0.1	0.10	0.10	96	97	75-125	1	20	
Lead	mg/L	ND	0.1	0.1	0.095	0.096	95	96	75-125	1	20	
Lithium	mg/L	ND	0.1	0.1	0.093	0.096	93	95	75-125	3	20	
Molybdenum	mg/L	ND	0.1	0.1	0.10	0.10	100	99	75-125	1	20	
Selenium	mg/L	ND	0.1	0.1	0.10	0.10	101	101	75-125	0	20	
Thallium	mg/L	ND	0.1	0.1	0.092	0.094	92	94	75-125	2	20	

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QUALITY CONTROL DATA

Project: Plant MCD-DGWC-121
Pace Project No.: 92732121

QC Batch: 857375 | Analysis Method: EPA 7470A
QC Batch Method: EPA 7470A | Analysis Description: 7470 Mercury
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92732121001, 92732121002, 92732121003

METHOD BLANK: 4422828 Matrix: Water
Associated Lab Samples: 92732121001, 92732121002, 92732121003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	ND	0.00020	0.00013	05/28/24 15:01	

LABORATORY CONTROL SAMPLE: 4422829

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: 4422830 4422831

Parameter	Units	92732121001 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	91	75-125	9	20	

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QUALITY CONTROL DATA

Project: Plant MCD-DGWC-121
Pace Project No.: 92732121

QC Batch: 856721 | 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: 92732121001, 92732121002, 92732121003

METHOD BLANK: 4420008 Matrix: Water
Associated Lab Samples: 92732121001, 92732121002, 92732121003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	25.0	25.0	05/23/24 15:00	

LABORATORY CONTROL SAMPLE: 4420009

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	395	99	80-120	

SAMPLE DUPLICATE: 4420011

Parameter	Units	92732387003 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	69.0	72.0	4	10	

SAMPLE DUPLICATE: 4420743

Parameter	Units	92732121003 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	61.0	ND		10	

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Huntersville, NC 28078
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QUALITY CONTROL DATA

Project: Plant MCD-DGWC-121
Pace Project No.: 92732121

QC Batch: 856238
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: 92732121001, 92732121002, 92732121003

METHOD BLANK: 4417658 Matrix: Water
Associated Lab Samples: 92732121001, 92732121002, 92732121003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.60	05/21/24 20:18	
Fluoride	mg/L	ND	0.10	0.050	05/21/24 20:18	
Sulfate	mg/L	ND	1.0	0.50	05/21/24 20:18	

LABORATORY CONTROL SAMPLE: 4417659

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	52.0	104	90-110	
Fluoride	mg/L	2.5	2.6	102	90-110	
Sulfate	mg/L	50	52.1	104	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4417660 4417661

Parameter	Units	92732137001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	533	50	50	569	579	73	92	90-110	2	10	M1
Fluoride	mg/L	0.74	2.5	2.5	2.3	2.4	64	66	90-110	2	10	M1
Sulfate	mg/L	357	50	50	398	404	81	95	90-110	2	10	M1

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4417662 4417663

Parameter	Units	92732121002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	4.5	50	50	58.4	60.2	108	111	90-110	3	10	M1
Fluoride	mg/L	0.061J	2.5	2.5	2.6	2.7	101	106	90-110	5	10	
Sulfate	mg/L	88.0	50	50	125	128	74	79	90-110	2	10	M1

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REPORT OF LABORATORY ANALYSIS

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Huntersville, NC 28078
(704)875-9092

QUALIFIERS

Project: Plant MCD-DGWC-121
Pace Project No.: 92732121

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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Huntersville, NC 28078
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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Plant MCD-DGWC-121
Pace Project No.: 92732121

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92732121001	**MCD-DGWC-121**	EPA 3010A	856824	EPA 6010D	856856
92732121002	**MCD-AP1-FD-1**	EPA 3010A	856824	EPA 6010D	856856
92732121003	**MCD-AP1-FB-1**	EPA 3010A	856824	EPA 6010D	856856
92732121001	**MCD-DGWC-121**	EPA 3005A	856820	EPA 6020B	856888
92732121002	**MCD-AP1-FD-1**	EPA 3005A	856820	EPA 6020B	856888
92732121003	**MCD-AP1-FB-1**	EPA 3005A	856820	EPA 6020B	856888
92732121001	**MCD-DGWC-121**	EPA 7470A	857375	EPA 7470A	857445
92732121002	**MCD-AP1-FD-1**	EPA 7470A	857375	EPA 7470A	857445
92732121003	**MCD-AP1-FB-1**	EPA 7470A	857375	EPA 7470A	857445
92732121001	**MCD-DGWC-121**	SM 2540C-2015	856721		
92732121002	**MCD-AP1-FD-1**	SM 2540C-2015	856721		
92732121003	**MCD-AP1-FB-1**	SM 2540C-2015	856721		
92732121001	**MCD-DGWC-121**	EPA 300.0 Rev 2.1 1993	856238		
92732121002	**MCD-AP1-FD-1**	EPA 300.0 Rev 2.1 1993	856238		
92732121003	**MCD-AP1-FB-1**	EPA 300.0 Rev 2.1 1993	856238		

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DC#_Title: ENV-FRM-HUN1-0083 v03_Sample Condition Upon Receipt

Effective Date: 12/01/2023

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

Sample Condition Upon Receipt

Client Name: GA Power

Project #: **WO# : 92732121**

92732121

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

Custody Seal Present? 5/21/24 ☑ Yes ☐ No Seals Intact? ☑ Yes ☐ No ☐ N/A

Date/Initials Person Examining Contents: 5/21 1045

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

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

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

Cooler Temp: 1.8 Correction Factor: Add/Subtract (°C) 0.0

Temp should be above freezing to 6°C

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

Cooler Temp Corrected (°C): 1.8

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

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

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

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

COMMENTS/SAMPLE DISCREPANCY

Field Data Required? ☐ Yes ☐ No

Lot ID of split containers:

CLIENT NOTIFICATION/RESOLUTION

Person contacted: Date/Time:

Project Manager SCURF Review: Date:

Project Manager SRF Review: Date:

Pace ANALYTICAL SERVICES

DC#_Title: ENV-FRM-HUN1-0083 v03_Sample Condition Upon Receipt

Effective Date: 12/01/2023

WO#: 92732121

PM: BV Due Date: 06/05/24

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. 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-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)	ISPIN	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																													
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® Location Requested (City/State):
Pace Analytical Charlotte
9800 Kincey Ave. Suite 100, Huntersville, NC 28078

CHAIN-OF-CUSTODY Analytical Request Document

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

LAB USE ONLY- Affix Workorder/Login Label Here

92732121

Scan QR Code for Instructions

Company Name:	Georgia Power- McDonough	Contact/Report To:	Lauren Hartley
Street Address:	241 Ralph McGill Blvd, Atlanta, GA 30308	Phone #:	(470)620-6176
		E-Mail:	laucoker@southernco.com
		Cc E-Mail:	
Customer Project #:			
Project Name:	Plant McDonough MCD-DGWC-121	Invoice To:	Account Payable
		Invoice E-Mail:	georgiapowerinvoices@southernco.com
Site Collection Info/Facility ID (as applicable):		Purchase Order # (if applicable):	GPC82474-0004
		Quote #:	

Time Zone Collected: [ ] AK [ ] PT [ ] MT [ ] CT [X] ET — County / State origin of sample(s): Georgia

Data Deliverables: [X] Level II [ ] Level III [ ] Level IV [ ] EQUIS [ ] Other

Regulatory Program (DW, RCRA, etc.) as applicable: Reportable [ ] Yes [ ] No

Rush (Pre-approval required): [ ] Same Day [ ] 1 Day [ ] 2 Day [ ] 3 Day [ ] Other _____

DW PWSID # or WW Permit # as applicable:

Date Results Requested:

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

Analysis:

* Matrix Codes (Insert in Matrix box below): Drinking Water (DW), Ground Water (GW), Waste Water (WW), Product (P), Soil/Solid (SS), Oil (OL), Wipe (WP), Tissue (TS), Bioassay (B), Vapor (V), Surface Water (SW), Sediment (SED), Sludge (SL), Caulk (CK), Leachate (LL), Biosolid (BS), Other (OT)

Specify Container Size **: 2 3 3 1

Identify Container Preservative Type***: 1 1 2 2

Analysis Requested

Customer Sample ID	Matrix *	Comp / Grab	Composite Start Date	Composite Start Time	Collected or Composite End Date	Collected or Composite End Time	# Cont.	Res. Chlorine Results	Res. Chlorine Units	2540C Total Dissolved Solids	300.0-Cl, F, SO4	App III/IV Metals	RAD 226/228	Sample Comment
MCD-DGWC-121	GW	G	5/20/24	1321						X	X	X		
MCD-DUP-1	GW			—						X	X	X		
MCD-FB-1	WQ			1330						X	X	X		
MCD-DGWC-121	GW			1321									X	
MCD-DUP-1	GW			—									X	
MCD-FB-1	WQ			1330									X	

**Container Size: (1) 1L, (2) 500mL, (3) 250mL, (4) 125mL, (5) 100mL, (6) 40mL vial, (7) EnCore, (8) TerraCore, (9) 90mL, (10) Other

*** Preservative Types: (1) None, (2) HNO3, (3) H2SO4, (4) HCl, (5) NaOH, (6) Zn Acetate, (7) NaHSO4, (8) Sod. Thiosulfate, (9) Ascorbic Acid, (10) MeOH, (11) Other

Lab Use Only:
Proj. Mgr: Bonnie Vang
AcctNum / Client ID:
Table #:
Profile / Template: 16474
Prelog / Bottle Ord. ID: EZ 3107414

Preservation non-conformance identified for sample.

Additional Instructions from Pace®:

Collected By: (Printed Name) Dana Bloomfield
Signature:

Customer Remarks / Special Conditions / Possible Hazards:

# Coolers:	Thermometer ID:	Correction Factor (°C):	Obs. Temp. (°C)	Corrected Temp. (°C)	On Ice:

Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:	Tracking Number:
WSP	5/21 1139		5/21/24 1139	
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:	Delivered by: [ ] In-Person [ ] Courier
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:	[ ] FedEX [ ] UPS [ ] Other
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:	Page: 1 of 1

Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace® Terms and Conditions found at https://www.pacelabs.com/resource-library/resource/pace-terms-and-conditions/

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

June 14, 2024

Lauren Hartley
Southern Co.
241 Ralph McGill Blvd
NE, Bin 10160
Atlanta, GA 30308

RE: Project: Plant MCD-DGWC-121- RADs
Pace Project No.: 92732123

Dear Lauren Hartley:

Enclosed are the analytical results for sample(s) received by the laboratory on May 21, 2024. 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
704-977-0968
Project Manager

Enclosures

cc: Yong Cheng, WSP
Daniela Herrera, WSP
Andrea McClure, WSP
Laura Midkiff, Southern Co.
Dawn Prell, WSP USA E&I Inc - Atlanta

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

CERTIFICATIONS

Project: Plant MCD-DGWC-121- RADs
Pace Project No.: 92732123

Pace Analytical Services Pennsylvania
1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
ANAB DOD-ELAP Rad Accreditation #: L2417
ANABISO/IEC 17025:2017 Rad Cert#: L24170
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California Certification #: 2950
Colorado Certification #: PA01547
Connecticut Certification #: PH-0694
EPA Region 4 DW Rad
Florida/TNI Certification #: E87683
Georgia Certification #: C040
Guam Certification
Hawaii Certification
Idaho Certification
Illinois Certification
Indiana Certification
Iowa Certification #: 391
Kansas Certification #: E-10358
Kentucky Certification #: KY90133
KY WW Permit #: KY0098221
KY WW Permit #: KY0000221
Louisiana DHH/TNI Certification #: LA010
Louisiana DEQ/TNI Certification #: 04086
Maine Certification #: 2023021
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 #: PA014572023-03
New Hampshire/TNI Certification #: 297622
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 #: PA200002-015
Pennsylvania/TNI Certification #: 65-00282
Puerto Rico Certification #: PA01457
Rhode Island Certification #: 65-00282
South Dakota Certification
Tennessee Certification #: TN02867
Texas/TNI Certification #: T104704188-22-18
Utah/TNI Certification #: PA014572223-14
USDA Soil Permit #: 525-23-67-77263
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

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Huntersville, NC 28078
(704)875-9092

SAMPLE SUMMARY

Project: Plant MCD-DGWC-121- RADs
Pace Project No.: 92732123

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92732123001	**MCD-DGWC-121**	Water	05/20/24 13:21	05/21/24 11:39
92732123002	**MCD-AP1-FD-1**	Water	05/20/24 00:00	05/21/24 11:39
92732123003	**MCD-AP1-FB-1**	Water	05/20/24 13:30	05/21/24 11:39

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SAMPLE ANALYTE COUNT

Project: Plant MCD-DGWC-121- RADs
Pace Project No.: 92732123

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92732123001	**MCD-DGWC-121**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92732123002	**MCD-AP1-FD-1**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92732123003	**MCD-AP1-FB-1**	EPA 9315	SLC	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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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant MCD-DGWC-121- RADs
Pace Project No.: 92732123

Sample: MCD-DGWC-121 **Lab ID: 92732123001** Collected: 05/20/24 13:21 Received: 05/21/24 11:39 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	**0.0100U ± 0.184 (0.481) C:69% T:NA**	pCi/L	06/13/24 08:21	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**1.04 ± 0.467 (0.755) C:72% T:86%**	pCi/L	06/10/24 16:01	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.05U ± 0.651 (1.24)**	pCi/L	06/13/24 15:20	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant MCD-DGWC-121- RADs
Pace Project No.: 92732123

Sample: MCD-AP1-FD-1 **Lab ID: 92732123002** Collected: 05/20/24 00:00 Received: 05/21/24 11:39 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	**0.0731U ± 0.183 (0.437) C:67% T:NA**	pCi/L	06/13/24 09:21	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.570U ± 0.391 (0.745) C:80% T:81%**	pCi/L	06/10/24 16:01	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.643U ± 0.574 (1.18)**	pCi/L	06/13/24 15:20	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant MCD-DGWC-121- RADs
Pace Project No.: 92732123

Sample: MCD-AP1-FB-1 **Lab ID: 92732123003** Collected: 05/20/24 13:30 Received: 05/21/24 11:39 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	**0.0783U ± 0.129 (0.287) C:97% T:NA**	pCi/L	06/13/24 08:24	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.445U ± 0.318 (0.604) C:82% T:89%**	pCi/L	06/10/24 16:02	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.523U ± 0.447 (0.891)**	pCi/L	06/13/24 15:20	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL - RADIOCHEMISTRY

Project: Plant MCD-DGWC-121- RADs
Pace Project No.: 92732123

QC Batch: 673747
QC Batch Method: EPA 9315
Analysis Method: EPA 9315
Analysis Description: 9315 Total Radium
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92732123001, 92732123002, 92732123003

METHOD BLANK: 3279884 Matrix: Water
Associated Lab Samples: 92732123001, 92732123002, 92732123003

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	-0.0120 ± 0.0918 (0.268) C:98% T:NA	pCi/L	06/13/24 08:20	

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 - RADIOCHEMISTRY

Project: Plant MCD-DGWC-121- RADs
Pace Project No.: 92732123

QC Batch: 671354
QC Batch Method: EPA 9320
Analysis Method: EPA 9320
Analysis Description: 9320 Radium 228
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92732123001, 92732123002, 92732123003

METHOD BLANK: 3269263 Matrix: Water
Associated Lab Samples: 92732123001, 92732123002, 92732123003

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.469 ± 0.404 (0.817) C:83% T:84%	pCi/L	06/10/24 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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QUALIFIERS

Project: Plant MCD-DGWC-121- RADs
Pace Project No.: 92732123

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-DGWC-121- RADs
Pace Project No.: 92732123

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92732123001	**MCD-DGWC-121**	EPA 9315	673747		
92732123002	**MCD-AP1-FD-1**	EPA 9315	673747		
92732123003	**MCD-AP1-FB-1**	EPA 9315	673747		
92732123001	**MCD-DGWC-121**	EPA 9320	671354		
92732123002	**MCD-AP1-FD-1**	EPA 9320	671354		
92732123003	**MCD-AP1-FB-1**	EPA 9320	671354		
92732123001	**MCD-DGWC-121**	Total Radium Calculation	675704		
92732123002	**MCD-AP1-FD-1**	Total Radium Calculation	675704		
92732123003	**MCD-AP1-FB-1**	Total Radium Calculation	675704		

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Pace

DC#_Title: ENV-FRM-HUN1-0083 v03_Sample Condition Upon Receipt

Effective Date: 12/01/2023

Laboratory receiving samples:

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

Sample Condition Upon Receipt

Client Name: GA Power

Project #:

WO# : 92732123

92732123

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

Custody Seal Present? ☒ Yes ☐ No 5/21 SR **Seals Intact?** ☒ Yes ☐ No ☐ N/A

Date/Initials Person Examining Contents: 5/21 1454

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

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

Thermometer:

☒ IR Gun ID: 230 **Type of Ice:** ☒ Wet ☐ Blue ☐ None

Cooler Temp: 1.8 **Correction Factor:** Add/Subtract (°C) 0.0

Temp should be above freezing to 6°C

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

Cooler Temp Corrected (°C): 1.8

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

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

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

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

COMMENTS/SAMPLE DISCREPANCY

Field Data Required? ☐ Yes ☐ No

Lot ID of split containers:

CLIENT NOTIFICATION/RESOLUTION

Person contacted: Date/Time:

Project Manager SCURF Review: Date:

Project Manager SRF Review: Date:

WO# : 92732123

PM: BV Due Date: 06/12/24

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)	SPIN	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			1																							
2		1	1			1																							
3		1	1			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® Location Requested (City/State):
Pace Analytical Charlotte
9800 Kincey Ave. Suite 100, Huntersville, NC 28078

CHAIN-OF-CUSTODY Analytical Request Document

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

LAB USE ONLY- Affix Workorder/Login Label Here

92732123

Scan QR Code for instructions

Company Name:	Georgia Power- McDonough	Contact/Report To:	Lauren Hartley
Street Address:	241 Ralph McGill Blvd, Atlanta, GA 30308	Phone #:	(470)620-6176
		E-Mail:	laucoker@southernco.com
		Cc E-Mail:	
Customer Project #:			
Project Name:	Plant McDonough MCD-DGWC-121	Invoice To:	Account Payable
		Invoice E-Mail:	georgiapowerinvoices@southernco.com
Site Collection Info/Facility ID (as applicable):		Purchase Order # (if applicable):	GPC82474-0004
		Quote #:	

Time Zone Collected: [ ] AK [ ] PT [ ] MT [ ] CT [X] ET

County / State origin of sample(s): Georgia

Data Deliverables: [X] Level II [ ] Level III [ ] Level IV [ ] EQUIS [ ] Other

Regulatory Program (DW, RCRA, etc.) as applicable: Reportable [ ] Yes [ ] No

Rush (Pre-approval required): [ ] Same Day [ ] 1 Day [ ] 2 Day [ ] 3 Day [ ] Other

DW PWSID # or WW Permit # as applicable:

Date Results Requested:

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

Analysis:

* Matrix Codes (Insert in Matrix box below): Drinking Water (DW), Ground Water (GW), Waste Water (WW), Product (P), Soil/Solid (SS), Oil (OL), Wipe (WP), Tissue (TS), Bioassay (B), Vapor (V), Surface Water (SW),Sediment (SED), Sludge (SL), Caulk (CK), Leachate (LL), Biosolid (BS), Other (OT)

Specify Container Size **: 2 3 3 1

Identify Container Preservative Type***: 1 1 2 2

Analysis Requested

Customer Sample ID	Matrix *	Comp / Grab	Composite Start Date	Composite Start Time	Collected or Composite End Date	Collected or Composite End Time	# Cont.	Res. Chlorine Results	Res. Chlorine Units	2540C Total Dissolved Solids	300.0-Cl, F, SO4	App III/IV Metals	RAD 226/228	Sample Comment
MCD-DGWC-121 GW	WT	G	5/20/24	1321						X	X	X		
MCD-DUP-1 GW	WT			—						X	X	X		
MCD-FB-1 WQ	WT			1330						X	X	X		
MCD-DGWC-121 GW	WT			1321									X	(01)
MCD-DUP-1 GW	WT			—									X	(02)
MCD-FB-1 WQ	WT			1330									X	(03)

**Container Size: (1) 1L, (2) 500mL, (3) 250mL, (4) 125mL, (5) 100mL, (6) 40mL vial, (7) EnCore, (8) TerraCore, (9) 90mL, (10) Other

*** Preservative Types: (1) None, (2) HNO3, (3) H2SO4, (4) HCl, (5) NaOH, (6) Zn Acetate, (7) NaHSO4, (8) Sod. Thiosulfate, (9) Ascorbic Acid, (10) MeOH, (11) Other

Lab Use Only: Proj. Mgr: Bonnie Vang; AcctNum / Client ID:; Table #:; Profile / Template: 16474; Prelog / Bottle Ord. ID: EZ 3107414

Preservation non-conformance identified for sample.

Additional Instructions from Pace®:

Collected By: (Printed Name) Dana Bloomfield

Signature:

Customer Remarks / Special Conditions / Possible Hazards:

Coolers: | Thermometer ID: | Correction Factor (°C): | Obs. Temp. (°C) | Corrected Temp. (°C) | On Ice:

Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:	Tracking Number:
WSP	5/21 1139	Pace	5/21/24 1139	
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:	Delivered by: [ ] In-Person [ ] Courier [ ] FedEx [ ] UPS [ ] Other
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:	
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:	Page: 1 of 1

Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace® Terms and Conditions found at https://www.pacelabs.com/resource-library/resource/pace-terms-and-conditions/

Quality Control Sample Performance Assessment

Pace Analytical™ www.pacelabs.com

Test:	Ra-228
Analyst:	JJS1
Date:	6/3/2024
Worklist:	79428
Matrix:	WT

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	3269263
MB concentration:	0.469
M/B 2 Sigma CSU:	0.404
MB MDC:	0.817
MB Numerical Performance Indicator:	2.27
MB Status vs Numerical Indicator:	Warning
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	LCSD (Y or N)?	Y
	LCS79428	LCSD79428
Count Date:	6/10/2024	6/10/2024
Spike I.D.:	23-043	23-043
Decay Corrected Spike Concentration (pCi/mL):	36.432	36.432
Volume Used (mL):	0.10	0.10
Aliquot Volume (L, g, F):	0.821	0.824
Target Conc. (pCi/L, g, F):	4.437	4.424
Uncertainty (Calculated):	0.217	0.217
Result (pCi/L, g, F):	4.141	3.853
LCS/LCSD 2 Sigma CSU (pCi/L, g, F):	0.943	0.887
Numerical Performance Indicator:	-0.60	-1.23
Percent Recovery:	93.34%	87.10%
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.:	LCS79428	Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Duplicate Sample I.D.	LCSD79428	
Sample Result (pCi/L, g, F):	4.141	
Sample Result 2 Sigma CSU (pCi/L, g, F):	0.943	
Sample Duplicate Result (pCi/L, g, F):	3.853	
Sample Duplicate Result 2 Sigma CSU (pCi/L, g, F):	0.887	
Are sample and/or duplicate results below RL?	NO	
Duplicate Numerical Performance Indicator:	0.436	
(Based on the LCS/LCSD Percent Recoveries) Duplicate RPD:	6.91%	
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
6/11/24

KET
6-11-24

Quality Control Sample Performance Assessment

Pace Analytical™
www.pacelabs.com

Test:	Ra-226
Analyst:	SLC
Date:	6/10/2024
Worklist:	79624
Matrix:	WT

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	3279884
MB concentration:	-0.012
M/B 2 Sigma CSU:	0.092
MB MDC:	0.268
MB Numerical Performance Indicator:	-0.26
MB Status vs Numerical Indicator:	Pass
MB Status vs. MDC:	N/A

Laboratory Control Sample Assessment	LCSD (Y or N)?	Y
	LCS79624	LCSD79624
Count Date:	6/13/2024	6/13/2024
Spike I.D.:	23-014	23-014
Decay Corrected Spike Concentration (pCi/mL):	25.023	25.023
Volume Used (mL):	0.10	0.10
Aliquot Volume (L, g, F):	0.504	0.506
Target Conc. (pCi/L, g, F):	4.965	4.944
Uncertainty (Calculated):	0.233	0.232
Result (pCi/L, g, F):	5.075	4.639
LCS/LCSD 2 Sigma CSU (pCi/L, g, F):	0.976	0.904
Numerical Performance Indicator:	0.21	-0.64
Percent Recovery:	102.21%	93.83%
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.:	LCS79624
Duplicate Sample I.D.	LCSD79624
Sample Result (pCi/L, g, F):	5.075
Sample Result 2 Sigma CSU (pCi/L, g, F):	0.976
Sample Duplicate Result (pCi/L, g, F):	4.639
Sample Duplicate Result 2 Sigma CSU (pCi/L, g, F):	0.904
Are sample and/or duplicate results below RL?	NO
Duplicate Numerical Performance Indicator:	0.643
(Based on the LCS/LCSD Percent Recoveries) Duplicate RPD:	8.55%
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.		
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 6-13-24

VAM 6/13/24

APPENDIX B

Data Validation Summary September 2023

Quality Control Review of Analytical Data- Ash Pond AP-1
Submitted by Pace Analytical Services, LLC
September - November 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 September 6 and November 7, 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), sulfide, and total 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 Sulfide (Standard Methods SM 4500-S2D).

Data were reviewed in accordance with the US EPA Region IV Data Validation Standard Operating Procedures for Contract Laboratory Program (CLP) Inorganic Data by Inductively Coupled Plasma – Atomic Emission Spectroscopy and Inductively Coupled Plasma – Mass Spectroscopy (September 2011, Rev. 2.0), US EPA Region IV Data Validation Standard Operating Procedures for CLP Mercury Data by Cold Vapor Atomic Absorption (September 2011, Rev. 2.0), the National Functional Guidelines for Inorganic Superfund Methods Data Review (November 2020), and US Department of Energy, Evaluation of Radiochemical Data Usability (April 1997). The review included an assessment of the results for completeness, precision (laboratory and field duplicates, matrix spike/matrix spike duplicates, laboratory control sample/ laboratory control sample 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.

Accuracy: Laboratory goals for accuracy were met with the exception of calcium, magnesium, potassium, and sodium as described in the qualification section below.

Detection Limits and Blanks: Project goals for detection limits were met with the exception of boron. 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%.

Representativeness: All holding time and sample preservation requirements were met in accordance with specific analytical methods except total dissolved solids, alkalinity, chloride, fluoride, and sulfate for surface water samples as described in the qualification section below.

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 calcium and sodium results from SDG 92686676 and calcium, magnesium, potassium, and sodium from SDG 92686941 had matrix spike duplicate (MSD) recoveries below the lower QC criteria. All corresponding sample results were greater than 4x the added spike concentration and therefore no qualification was required.

- Boron was detected in field and equipment blanks from SDG 92686677 but did not receive qualification due to the associated samples having a concentration 10x greater than the blank concentration.

- All results except metals from SDG 92687817 were qualified as estimated (J/UJ) due to arriving to the laboratory outside of temperature criteria.

WSP reviewed the data from samples collected at Plant McDonough CCR Ash Pond AP-1 between September 6 and November 7, 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.

TABLE 1

Sample Summary Table
SCS Plant McDonough

						Analyses								
SDGs	***Field Identification***	***Collection Date***	***Lab Identification***	***Matrix***	***QC Samples***	**Total Mercury (EPA 7470A)**	**Alkalinity (SM 2320B)**	**TDS (SM 2540C-2011)**	**Total Metals (EPA 6020B)**	**Anions (EPA 300.0)**	**Cations (EPA 6010D)**	**Sulfide (SM4500-S2D)**	**Radium-226 (EPA 9315)**	**Radium-228 (EPA 9320)**
92686676	MCD-DGWA-70A	9/7/2023	92686676001	WG	-	X	X	X	X	X	X	X	-	-
92686676	MCD-DGWA-71	9/7/2023	92686676002	WG	-	X	X	X	X	X	X	X	-	-
92686676	MCD-DGWA-53	9/7/2023	92686676003	WG	-	X	X	X	X	X	X	X	-	-
92686677	MCD-DGWC-37	9/6/2023	92686677001	WG	-	X	X	X	X	X	X	X	-	-
92686677	MCD-AP1-FD-1	9/6/2023	92686677002	WG	FD (MCD-DGWC-37)	X	X	X	X	X	X	X	-	-
92686677	MCD-DGWC-67	9/7/2023	92686677003	WG	-	X	X	X	X	X	X	X	-	-
92686677	MCD-DGWC-40	9/7/2023	92686677004	WG	-	X	X	X	X	X	X	X	-	-
92686677	MCD-DGWC-38	9/7/2023	92686677005	WG	-	X	X	X	X	X	X	X	-	-
92686677	MCD-DGWC-68A	9/7/2023	92686677006	WG	-	X	X	X	X	X	X	X	-	-
92686677	MCD-DGWC-39	9/7/2023	92686677007	WG	-	X	X	X	X	X	X	X	-	-
92686677	MCD-DGWC-69	9/7/2023	92686677008	WG	-	X	X	X	X	X	X	X	-	-
92686677	MCD-DGWC-121	9/8/2023	92686677009	WG	-	X	X	X	X	X	X	X	-	-
92686677	MCD-AP1-FB-1	9/8/2023	92686677010	WQ	FB (MCD-DGWC-67)	X	X	X	X	X	X	X	-	-
92686677	MCD-AP1-EB-1	9/8/2023	92686677011	WQ	EB (MCD-DGWC-40)	X	X	X	X	X	X	X	-	-
92686680	MCD-DGWC-37	9/6/2023	92686680001	WG	-	-	-	-	-	-	-	-	X	X
92686680	MCD-AP1-FD-1	9/6/2023	92686680002	WG	FD (MCD-DGWC-37)	-	-	-	-	-	-	-	X	X
92686680	MCD-DGWC-67	9/7/2023	92686680003	WG	-	-	-	-	-	-	-	-	X	X
92686680	MCD-DGWC-40	9/7/2023	92686680004	WG	-	-	-	-	-	-	-	-	X	X
92686680	MCD-DGWC-38	9/7/2023	92686680005	WG	-	-	-	-	-	-	-	-	X	X
92686680	MCD-DGWC-68A	9/7/2023	92686680006	WG	-	-	-	-	-	-	-	-	X	X
92686680	MCD-DGWC-39	9/7/2023	92686680007	WG	-	-	-	-	-	-	-	-	X	X
92686680	MCD-DGWC-69	9/7/2023	92686680008	WG	-	-	-	-	-	-	-	-	X	X
92686680	MCD-DGWC-121	9/8/2023	92686680009	WG	-	-	-	-	-	-	-	-	X	X
92686680	MCD-AP1-FB-1	9/8/2023	92686680010	WQ	FB (MCD-DGWC-67)	-	-	-	-	-	-	-	X	X
92686680	MCD-AP1-EB-1	9/8/2023	92686680011	WQ	EB (MCD-DGWC-40)	-	-	-	-	-	-	-	X	X
92686681	MCD-B-100	9/6/2023	92686681001	WG	-	X	X	X	X	X	X	X	-	-
92686681	MCD-B-62	9/7/2023	92686681002	WG	-	X	X	X	X	X	X	X	-	-
92686682	DGWC-39	9/7/2023	92686682001	WG	-	-	-	-	-	-	-	-	X	X
92686682	DGWC-40	9/7/2023	92686682002	WG	-	-	-	-	-	-	-	-	X	X
92686685	MCD-DGWA-70A	9/6/2023	92686685001	WG	-	-	-	-	-	-	-	-	X	X
92686685	MCD-DGWA-71	9/6/2023	92686685002	WG	-	-	-	-	-	-	-	-	X	X
92686685	MCD-DGWA-53	9/7/2023	92686685003	WG	-	-	-	-	-	-	-	-	X	X
92686941	MCD-B-105D	9/7/2023	92686941001	WG	-	X	X	X	X	X	X	X	-	-
92686941	MCD-B-112D	9/7/2023	92686941002	WG	-	X	X	X	X	X	X	X	-	-
92686975	MCD-B-105D	9/7/2023	92686975001	WG	-	-	-	-	-	-	-	-	X	X
92686975	MCD-B-112D	9/7/2023	92686975002	WG	-	-	-	-	-	-	-	-	X	X
92687817	MCD-UT01_US	9/13/2023	92687817001	WS	-	-	X	X	X	X	X	-	-	-

TABLE 1

Sample Summary Table
SCS Plant McDonough

						Analyses								
SDGs	***Field Identification***	***Collection Date***	***Lab Identification***	***Matrix***	***QC Samples***	**Total Mercury (EPA 7470A)**	**Alkalinity (SM 2320B)**	**TDS (SM 2540C-2011)**	**Total Metals (EPA 6020B)**	**Anions (EPA 300.0)**	**Cations (EPA 6010D)**	**Sulfide (SM4500-S2D)**	**Radium-226 (EPA 9315)**	**Radium-228 (EPA 9320)**
92687817	MCD-UT02	9/13/2023	92687817002	WS	-	-	X	X	X	X	X	-	-	-
92687817	MCD-UT03	9/13/2023	92687817003	WS	-	-	X	X	X	X	X	-	-	-
92687817	MCD-UT01_DS	9/13/2023	92687817004	WS	-	-	X	X	X	X	X	-	-	-
92687817	MCD-CR-0.1	9/12/2023	92687817005	WS	-	-	X	X	X	X	X	-	-	-
92687817	MCD-CR+0.2	9/12/2023	92687817006	WS	-	-	X	X	X	X	X	-	-	-
92687817	MCD-CR+0.4	9/12/2023	92687817007	WS	-	-	X	X	X	X	X	-	-	-
92687817	MCD-DW_DS	9/12/2023	92687817008	WS	-	-	X	X	X	X	X	-	-	-
92687817	MCD-DW_US	9/12/2023	92687817009	WS	-	-	X	X	X	X	X	-	-	-
92687817	MCD-CR-0.2	9/12/2023	92687817010	WS	-	-	X	X	X	X	X	-	-	-
92687817	MCD-CR-0.5	9/12/2023	92687817011	WS	-	-	X	X	X	X	X	-	-	-
92697332	MCD-DGWC-121	11/7/2023	92697332001	WG	-	X	-	X	X	X	X	-	-	-
92697332	MCD-AP-1-FD-1	11/7/2023	92697332002	WG	FD (MCD-DGWC-121)	X	-	X	X	X	X	-	-	-
92697332	MCD-AP-1-FB-1	11/7/2023	92697332003	WQ	FB (MCD-DGWC-121)	X	-	X	X	X	X	-	-	-
92697333	MCD-DGWC-121	11/7/2023	92697333001	WG	-	-	-	-	-	-	-	-	X	X
92697333	MCD-AP-1-FD-1	11/7/2023	92697333002	WG	FD (MCD-DGWC-121)	-	-	-	-	-	-	-	X	X
92697333	MCD-AP-1-FB-1	11/7/2023	92697333003	WQ	FB (MCD-DGWC-121)	-	-	-	-	-	-	-	X	X

Abbreviations:

SDG- Sample Delivery Group
QC - Quality Control
EPA - US Environmental Protection Agency
SM - Standard Method
WG - Groundwater
WQ - Water Quality control
FD - Field Duplicate
FB - Field Blank
EB - Equipment Blank
TDS - Total Dissolved Solids
WS - Surface Water

TABLE 2
Qualifier Summary Table
SCS Plant McDonough

SDG	Sample Name	Constituent	New Result	New RL or MDC	Qualifier	Reason
92687817	MCD-UT01_US	TDS	-	-	J	Cooler arrived outside of temperature limits
92687817	MCD-UT01_US	Alkalinity, bicarbonate	-	-	J	Cooler arrived outside of temperature limits
92687817	MCD-UT01_US	Alkalinity, total	-	-	J	Cooler arrived outside of temperature limits
92687817	MCD-UT01_US	Chloride	-	-	J	Cooler arrived outside of temperature limits
92687817	MCD-UT01_US	Fluoride	-	-	J	Cooler arrived outside of temperature limits
92687817	MCD-UT01_US	Sulfate	-	-	J	Cooler arrived outside of temperature limits
92687817	MCD-UT02	TDS	-	-	J	Cooler arrived outside of temperature limits
92687817	MCD-UT02	Alkalinity, bicarbonate	-	-	J	Cooler arrived outside of temperature limits
92687817	MCD-UT02	Alkalinity, total	-	-	J	Cooler arrived outside of temperature limits
92687817	MCD-UT02	Chloride	-	-	J	Cooler arrived outside of temperature limits
92687817	MCD-UT02	Fluoride	-	-	J	Cooler arrived outside of temperature limits
92687817	MCD-UT02	Sulfate	-	-	J	Cooler arrived outside of temperature limits
92687817	MCD-UT03	TDS	-	-	J	Cooler arrived outside of temperature limits
92687817	MCD-UT03	Alkalinity, bicarbonate	-	-	J	Cooler arrived outside of temperature limits
92687817	MCD-UT03	Alkalinity, total	-	-	J	Cooler arrived outside of temperature limits
92687817	MCD-UT03	Chloride	-	-	J	Cooler arrived outside of temperature limits
92687817	MCD-UT03	Fluoride	-	-	J	Cooler arrived outside of temperature limits
92687817	MCD-UT03	Sulfate	-	-	J	Cooler arrived outside of temperature limits
92687817	MCD-UT01_DS	TDS	-	-	J	Cooler arrived outside of temperature limits
92687817	MCD-UT01_DS	Alkalinity, bicarbonate	-	-	J	Cooler arrived outside of temperature limits
92687817	MCD-UT01_DS	Alkalinity, total	-	-	J	Cooler arrived outside of temperature limits
92687817	MCD-UT01_DS	Chloride	-	-	J	Cooler arrived outside of temperature limits
92687817	MCD-UT01_DS	Fluoride	-	-	J	Cooler arrived outside of temperature limits
92687817	MCD-UT01_DS	Sulfate	-	-	J	Cooler arrived outside of temperature limits
92687817	MCD-CR-0.1	TDS	-	-	J	Cooler arrived outside of temperature limits
92687817	MCD-CR-0.1	Alkalinity, bicarbonate	-	-	J	Cooler arrived outside of temperature limits
92687817	MCD-CR-0.1	Alkalinity, total	-	-	J	Cooler arrived outside of temperature limits
92687817	MCD-CR-0.1	Chloride	-	-	J	Cooler arrived outside of temperature limits
92687817	MCD-CR-0.1	Fluoride	-	-	J	Cooler arrived outside of temperature limits
92687817	MCD-CR-0.1	Sulfate	-	-	J	Cooler arrived outside of temperature limits
92687817	MCD-CR+0.2	TDS	-	-	J	Cooler arrived outside of temperature limits
92687817	MCD-CR+0.2	Alkalinity, bicarbonate	-	-	J	Cooler arrived outside of temperature limits
92687817	MCD-CR+0.2	Alkalinity, total	-	-	J	Cooler arrived outside of temperature limits
92687817	MCD-CR+0.2	Chloride	-	-	J	Cooler arrived outside of temperature limits
92687817	MCD-CR+0.2	Fluoride	-	-	J	Cooler arrived outside of temperature limits
92687817	MCD-CR+0.2	Sulfate	-	-	J	Cooler arrived outside of temperature limits
92687817	MCD-CR+0.4	Boron	-	-	J	Cooler arrived outside of temperature limits
92687817	MCD-CR+0.4	TDS	-	-	J	Cooler arrived outside of temperature limits
92687817	MCD-CR+0.4	Alkalinity, bicarbonate	-	-	J	Cooler arrived outside of temperature limits
92687817	MCD-CR+0.4	Alkalinity, total	-	-	J	Cooler arrived outside of temperature limits
92687817	MCD-CR+0.4	Chloride	-	-	J	Cooler arrived outside of temperature limits
92687817	MCD-CR+0.4	Fluoride	-	-	J	Cooler arrived outside of temperature limits
92687817	MCD-CR+0.4	Sulfate	-	-	J	Cooler arrived outside of temperature limits
92687817	MCD-DW_DS	TDS	-	-	J	Cooler arrived outside of temperature limits
92687817	MCD-DW_DS	Alkalinity, bicarbonate	-	-	J	Cooler arrived outside of temperature limits
92687817	MCD-DW_DS	Alkalinity, total	-	-	J	Cooler arrived outside of temperature limits
92687817	MCD-DW_DS	Chloride	-	-	J	Cooler arrived outside of temperature limits
92687817	MCD-DW_DS	Fluoride	-	-	J	Cooler arrived outside of temperature limits
92687817	MCD-DW_DS	Sulfate	-	-	J	Cooler arrived outside of temperature limits
92687817	MCD-DW_US	TDS	-	-	J	Cooler arrived outside of temperature limits
92687817	MCD-DW_US	Alkalinity, bicarbonate	-	-	J	Cooler arrived outside of temperature limits
92687817	MCD-DW_US	Alkalinity, total	-	-	J	Cooler arrived outside of temperature limits
92687817	MCD-DW_US	Chloride	-	-	J	Cooler arrived outside of temperature limits
92687817	MCD-DW_US	Fluoride	-	-	UJ	Cooler arrived outside of temperature limits
92687817	MCD-DW_US	Sulfate	-	-	J	Cooler arrived outside of temperature limits
92687817	MCD-CR-0.2	TDS	-	-	J	Cooler arrived outside of temperature limits

TABLE 2
Qualifier Summary Table
SCS Plant McDonough

SDG	*Sample Name*	*Constituent*	*New Result*	*New RL or MDC*	*Qualifier*	*Reason*
92687817	MCD-CR-0.2	Alkalinity, bicarbonate	-	-	J	Cooler arrived outside of temperature limits
92687817	MCD-CR-0.2	Alkalinity, total	-	-	J	Cooler arrived outside of temperature limits
92687817	MCD-CR-0.2	Chloride	-	-	J	Cooler arrived outside of temperature limits
92687817	MCD-CR-0.2	Fluoride	-	-	J	Cooler arrived outside of temperature limits
92687817	MCD-CR-0.2	Sulfate	-	-	J	Cooler arrived outside of temperature limits
92687817	MCD-CR-0.5	TDS	-	-	J	Cooler arrived outside of temperature limits
92687817	MCD-CR-0.5	Alkalinity, bicarbonate	-	-	J	Cooler arrived outside of temperature limits
92687817	MCD-CR-0.5	Alkalinity, total	-	-	J	Cooler arrived outside of temperature limits
92687817	MCD-CR-0.5	Chloride	-	-	J	Cooler arrived outside of temperature limits
92687817	MCD-CR-0.5	Fluoride	-	-	UJ	Cooler arrived outside of temperature limits
92687817	MCD-CR-0.5	Sulfate	-	-	J	Cooler arrived outside of temperature limits

Abbreviations:
RL : Reporting limit
MDC : Minimum detectable concentration
MDL: Method detection limit
SDG : Sample delivery group

Qualifier
U: Non-detect
UJ: Non-detect, estimated

APPENDIX B

Data Validation Summary January-May 2024

Quality Control Review of Analytical Data- Ash Pond AP-1
Submitted by Pace Analytical Services, LLC
January - May 2024

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 30 and May 20, 2024. 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 cations (magnesium, sodium, and potassium), alkalinity, sulfide, and total 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 (TDS) (Standard Methods 2540C), Radium-226 (USEPA Method 9315), Radium-228 (USEPA Method 9320), Alkalinity by Titration (Standard Methods 2320B), and Sulfide (Standard Methods SM 4500-S2D). Additional surface water samples were collected and analyzed for USEPA Method 6020B, 6010D, 300.0, and Standard Methods 2540C, and SM2320B.

Data were reviewed in accordance with the US EPA Region IV Data Validation Standard Operating Procedures for Contract Laboratory Program (CLP) Inorganic Data by Inductively Coupled Plasma – Atomic Emission Spectroscopy and Inductively Coupled Plasma – Mass Spectroscopy (September 2011, Rev. 2.0), US EPA Region IV Data Validation Standard Operating Procedures for CLP Mercury Data by Cold Vapor Atomic Absorption (September 2011, Rev. 2.0), the National Functional Guidelines for Inorganic Superfund Methods Data Review (November 2020), and US Department of Energy, Evaluation of Radiochemical Data Usability (April 1997). The review included an assessment of the results for completeness, precision (laboratory and field duplicates, matrix spike/matrix spike duplicates, laboratory control sample/ laboratory control sample 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.

Accuracy: Laboratory goals for accuracy were met with the exception of chloride and fluoride 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%.

Representativeness: All holding time and sample preservation 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 during the data validation process.

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 low.
U	The analyte was not detected above the method detection limit.

The data generated as part of this sampling event met the QC criteria established in the respective analytical methods and data validation guidelines except as specified below. Although these qualifications were applied to some data from 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 chloride and fluoride results from SDG 92710939 had MS/MSD recoveries below QC criteria. Associated samples were qualified as estimated, bias low (J-).

WSP reviewed the data from samples collected at Plant McDonough CCR Ash Pond AP-1 between January 30 and May 20, 2024, 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.

TABLE 1

Sample Summary Table
SCS Plant McDonough

						Analyses								
SDGs	***Field Identification***	***Collection Date***	***Lab Identification***	***Matrix***	***QC Samples***	**Total Mercury (EPA 7470A)**	**Alkalinity (SM 2320B)**	**TDS (SM 2540C-2011)**	**Total Metals (EPA 6020B)**	**Anions (EPA 300.0)**	**Cations (EPA 6010D)**	**Sulfide (SM4500-S2D)**	**Radium-226 (EPA 9315)**	**Radium-228 (EPA 9320)**
92710968	MCD-DGWA-53	1/30/2024	92710968001	WG	-	X	X	X	X	X	X	X	-	-
92710968	MCD-DGWA-71	1/30/2024	92710968002	WG	-	X	X	X	X	X	X	X	-	-
92710986	MCD-DGWA-53	1/30/2024	92710986001	WG	-	-	-	-	-	-	-	-	X	X
92710986	MCD-DGWA-71	1/30/2024	92710986002	WG	-	-	-	-	-	-	-	-	X	X
92710939	MCD-DGWC-38	1/30/2024	92710939001	WG	-	X	X	X	X	X	X	X	-	-
92710939	MCD-DGWC-40	1/30/2024	92710939002	WG	-	X	X	X	X	X	X	X	-	-
92710939	MCD-AP1-FD-1	1/30/2024	92710939003	WG	FD (MCD-DGWC-40)	X	X	X	X	X	X	X	-	-
92710939	MCD-DGWC-39	1/31/2024	92710939004	WG	-	X	X	X	X	X	X	X	-	-
92710939	MCD-DGWC-68A	1/31/2024	92710939005	WG	-	X	X	X	X	X	X	X	-	-
92710939	MCD-DGWC-121	1/31/2024	92710939006	WG	-	X	X	X	X	X	X	X	-	-
92710939	MCD-DGWC-69	1/31/2024	92710939007	WG	-	X	X	X	X	X	X	X	-	-
92710939	MCD-AP1-FB-1	1/31/2024	92710939008	WQ	FB (MCD-DGWC-121)	X	X	X	X	X	X	X	-	-
92710939	MCD-DGWC-37	1/31/2024	92710939009	WG	-	X	X	X	X	X	X	X	-	-
92710939	MCD-AP1-EB-1	1/31/2024	92710939010	WQ	EB (MCD-DGWC-68A)	X	X	X	X	X	X	X	-	-
92710939	MCD-DGWC-67	2/1/2024	92710939011	WG	-	X	X	X	X	X	X	X	-	-
92710981	MCD-DGWC-38	1/30/2024	92710981001	WG	-	-	-	-	-	-	-	-	X	X
92710981	MCD-DGWC-40	1/30/2024	92710981002	WG	-	-	-	-	-	-	-	-	X	X
92710981	MCD-AP1-FD-1	1/30/2024	92710981003	WG	FD (MCD-DGWC-40)	-	-	-	-	-	-	-	X	X
92710981	MCD-DGWC-39	1/31/2024	92710981004	WG	-	-	-	-	-	-	-	-	X	X
92710981	MCD-DGWC-68A	1/31/2024	92710981005	WG	-	-	-	-	-	-	-	-	X	X
92710981	MCD-DGWC-121	1/31/2024	92710981006	WG	-	-	-	-	-	-	-	-	X	X
92710981	MCD-DGWC-69	1/31/2024	92710981007	WG	-	-	-	-	-	-	-	-	X	X
92710981	MCD-AP1-FB-1	1/31/2024	92710981008	WQ	FB (MCD-DGWC-69)	-	-	-	-	-	-	-	X	X
92710981	MCD-DGWC-37	1/31/2024	92710981009	WG	-	-	-	-	-	-	-	-	X	X
92710981	MCD-AP1-EB-1	1/31/2024	92710981010	WQ	EB (MCD-DGWC-68A)	-	-	-	-	-	-	-	X	X
92710981	MCD-DGWC-67	2/1/2024	92710981011	WG	-	-	-	-	-	-	-	-	X	X
92710958	MCD-B-105D	1/30/2024	92710958001	WG	-	X	X	X	X	X	X	X	-	-
92710958	MCD-B-112D	2/1/2024	92710958002	WG	-	X	X	X	X	X	X	X	-	-
92710985	MCD-B-105D	1/30/2024	92710985001	WG	-	-	-	-	-	-	-	-	X	X
92710985	MCD-B-112D	2/1/2024	92710985002	WG	-	-	-	-	-	-	-	-	X	X
92711279	MCD-B-100	1/31/2024	92711279001	WG	-	X	X	X	X	X	X	X	-	-
92711279	MCD-B-62	2/1/2024	92711279002	WG	-	X	X	X	X	X	X	X	-	-
92711290	MCD-B-100	1/31/2024	92711290001	WG	-	-	-	-	-	-	-	-	X	X
92711290	MCD-B-62	2/1/2024	92711290002	WG	-	-	-	-	-	-	-	-	X	X
92711943	MCD-UT01_US	2/6/2024	92711943001	WS	-	-	X	X	X	X	X	-	-	-
92711943	MCD-UT02	2/6/2024	92711943002	WS	-	-	X	X	X	X	X	-	-	-

TABLE 1

Sample Summary Table
SCS Plant McDonough

						Analyses								
SDGs	***Field Identification***	***Collection Date***	***Lab Identification***	***Matrix***	***QC Samples***	**Total Mercury (EPA 7470A)**	**Alkalinity (SM 2320B)**	**TDS (SM 2540C-2011)**	**Total Metals (EPA 6020B)**	**Anions (EPA 300.0)**	**Cations (EPA 6010D)**	**Sulfide (SM4500-S2D)**	**Radium-226 (EPA 9315)**	**Radium-228 (EPA 9320)**
92711943	MCD-UT03	2/6/2024	92711943003	WS	-	-	X	X	X	X	X	-	-	-
92711943	MCD-UT01_DS	2/6/2024	92711943004	WS	-	-	X	X	X	X	X	-	-	-
92711943	MCD-CR-0.1	2/6/2024	92711943005	WS	-	-	X	X	X	X	X	-	-	-
92711943	MCD-CR+0.2	2/6/2024	92711943006	WS	-	-	X	X	X	X	X	-	-	-
92711943	MCD-CR+0.4	2/6/2024	92711943007	WS	-	-	X	X	X	X	X	-	-	-
92711943	MCD-DW_DS	2/6/2024	92711943008	WS	-	-	X	X	X	X	X	-	-	-
92711943	MCD-DW_US	2/6/2024	92711943009	WS	-	-	X	X	X	X	X	-	-	-
92711943	MCD-CR-0.2	2/6/2024	92711943010	WS	-	-	X	X	X	X	X	-	-	-
92711943	MCD-CR-0.5	2/6/2024	92711943011	WS	-	-	X	X	X	X	X	-	-	-
92732121	MCD-DGWC-121	5/20/2024	92732121001	WG	-	X	X	X	X	X	X	X	-	-
92732121	MCD-AP1-FD-1	5/20/2024	92732121002	WG	FD (MCD-DGWC-121)	X	X	X	X	X	X	X	-	-
92732121	MCD-AP1-FB-1	5/20/2024	92732121003	WQ	FB (MCD-DGWC-121)	X	X	X	X	X	X	X	-	-
92732123	MCD-DGWC-121	5/20/2024	92732123001	WG	-	-	-	-	-	-	-	-	X	X
92732123	MCD-AP1-FD-1	5/20/2024	92732123002	WG	FD (MCD-DGWC-121)	-	-	-	-	-	-	-	X	X
92732123	MCD-AP1-FB-1	5/20/2024	92732123003	WQ	FB (MCD-DGWC-121)	-	-	-	-	-	-	-	X	X

Abbreviations:

SDG- Sample Delivery Group
QC - Quality Control
EPA - US Environmental Protection Agency
SM - Standard Method
WG - Groundwater
WQ - Water Quality control
FD - Field Duplicate
FB - Field Blank
EB - Equipment Blank
TDS - Total Dissolved Solids
WS - Surface Water

TABLE 2
Qualifier Summary Table
SCS Plant McDonough

SDG	*Sample Name*	*Constituent*	*New Result*	*New RL or MDC*	*Qualifier*	*Reason*	*Reason Code*
92710939	MCD-DGWC-38	Chloride	-	-	J-	MS Percent Recovery outside control limit	MS1
92710939	MCD-DGWC-38	Fluoride	-	-	J-	MS/MSD Percent Recoveries outside control limit	MS1

Abbreviations:
RL : Reporting limit
MDC : Minimum detectable concentration
SDG : Sample delivery group

Qualifier
J- : The analyte was reported above the method detection limit; however, the concentration reported is an estimated value that may be biased low.

APPENDIX B

Laboratory Accreditation

June 13, 2023

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, 2023
Accreditation Expiration Date:	June 14, 2024

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

PEOPLE ADVANCING SCIENCE

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, 2023 – June 30, 2024

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,

Kyle Henderson
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 1470A, East Tower
Atlanta, Georgia 30334
404-463-1511

Ms. LeighAnn Miller, Laboratory Director
Pace Analytical Services, LLC - Pittsburgh
1638 Roseytown Road, Suites 2, 3 and 4
Greensburg, PA 15601

February 8, 2023

RE: Certification by Reciprocity
Pace Analytical Services, Inc. - Pittsburgh
Georgia ID #C040

Dear Ms. Miller:

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, 2024. 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, LLC - PITTSBURGH (GA LAB ID# C040)
1638 Roseytown Road, Suites 2,3 and 4, Greensburg, PA 15601
Effective April 1, 2023 - March 31, 2024

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 Table and Well Maintenance and Repair Documentation

APPENDIX C

Well Condition Inspection Table
September 2023

Site Name: Plant McDonough

Well Inspection

Date: 9/5/2023

Permit Number: _____

Field Conditions: _____

Well ID:	Location/Identification			
	Visible and accessible	Properly identified with correct well ID	Located in high traffic area; does the well require protection from traffic	Acceptable drainage around well (no standing water, not located in obvious drainage flow path)
DGWA-53	NO	YES	NO	YES
DGWA-70A	YES	YES	NO	YES
DGWA-71	YES	YES	NO	YES
DGWC-37	YES	YES	NO	YES
DGWC-38	YES	YES	NO	YES
DGWC-39	NO	YES	NO	YES
DGWC-40	YES	YES	NO	YES
DGWC-67	YES	YES	NO	YES
DGWC-68A	YES	YES	NO	YES
DGWC-69	YES	YES	NO	YES
DGWC-121	YES	YES	NO	YES
B-62	YES	YES	NO	YES
B-100	YES	YES	NO	YES
B-105D	YES	YES	NO	YES
B-112D	YES	YES	NO	YES
DGWC-2	YES	YES	NO	YES
DGWC-4	YES	YES	NO	YES
DGWC-5	YES	YES	NO	YES
DGWC-8	YES	YES	NO	YES
DGWC-9	YES	YES	NO	YES
DGWC-10	YES	YES	NO	YES
DGWC-11	YES	YES	NO	YES
DGWC-12	YES	YES	NO	YES
DGWC-13	YES	YES	NO	YES
DGWC-14	YES	YES	NO	YES
DGWC-15	YES	YES	NO	YES
DGWC-17	YES	YES	NO	YES
DGWC-19	YES	YES	NO	YES
DGWC-20	YES	YES	NO	YES
DGWC-21	YES	YES	NO	YES
DGWC-22	NO	YES	NO	YES
DGWC-23	YES	YES	NO	YES
DGWC-42	YES	YES	NO	YES
DGWC-47	NO	YES	NO	YES
DGWC-48	YES	YES	NO	NO
B-56	YES	YES	NO	YES
B-62	YES	YES	NO	YES
B-63	YES	NO	NO	YES

Site Name: Plant McDonough

Well Inspection

Date: 9/5/2023

Permit Number: _____

Field Conditions: _____

Well ID:	Location/Identification			
	Visible and accessible	Properly identified with correct well ID	Located in high traffic area; does the well require protection from traffic	Acceptable drainage around well (no standing water, not located in obvious drainage flow path)
B-66	YES	YES	NO	YES
B-77	YES	YES	NO	YES
B-82	YES	YES	NO	YES
B-83	YES	YES	NO	YES
B-88	YES	YES	NO	YES
B-92	NO	YES	YES	YES
B-93	NO	YES	YES	YES
B-97	YES	YES	YES	YES
B-98	NO	YES	YES	YES
B-100	YES	YES	NO	YES
B-101D	YES	YES	NO	YES
B-102D	YES	YES	NO	YES
B-104D	YES	YES	NO	NO
B-106D	YES	YES	NO	YES
B-107D	YES	YES	NO	YES
B-108D	YES	YES	NO	YES
B-111D	YES	YES	NO	YES
B-120D	YES	YES	NO	YES
B-122D	YES	YES	NO	YES
B-125D	YES	YES	NO	YES
B-3	YES	YES	NO	YES
B-6	YES	YES	NO	YES
B-7	YES	YES	NO	YES
B-16	YES	YES	NO	YES
B-18	YES	YES	NO	YES
B-24	YES	YES	NO	YES
B-25	YES	YES	NO	YES
B-26	YES	YES	NO	YES
B-28	YES	YES	NO	YES
B-29	YES	YES	NO	YES
B-31	YES	YES	NO	YES
B-41	NO	YES	NO	YES
B-50	YES	YES	NO	YES
B-51	YES	YES	NO	YES
B-52	YES	YES	NO	YES
B-54	YES	YES	NO	YES
B-55	YES	YES	NO	YES
B-57	YES	YES	NO	YES

Site Name: Plant McDonough

Well Inspection

Date: 9/5/2023

Permit Number: _____

Field Conditions: _____

Well ID:	Location/Identification			
	Visible and accessible	Properly identified with correct well ID	Located in high traffic area; does the well require protection from traffic	Acceptable drainage around well (no standing water, not located in obvious drainage flow path)
B-58	YES	YES	NO	YES
B-59	YES	YES	NO	YES
B-60	YES	YES	NO	YES
B-61	YES	YES	NO	YES
B-64	YES	YES	NO	YES
B-65	YES	YES	NO	YES
B-68	YES	YES	NO	YES
B-72	YES	YES	NO	YES
B-73	YES	YES	NO	YES
B-74	YES	YES	NO	YES
B-76	YES	YES	NO	YES
B-78	YES	YES	NO	YES
B-79	YES	YES	NO	YES
B-80	YES	YES	NO	YES
B-81	YES	YES	NO	YES
B-84	YES	YES	NO	YES
B-85	YES	YES	NO	YES
B-86	YES	YES	NO	YES
B-87	NO	YES	NO	YES
B-89	YES	YES	NO	YES
B-90	YES	YES	YES	YES
B-91	YES	YES	YES	YES
B-94	YES	YES	NO	YES
B-95	YES	YES	YES	YES
B-96	YES	YES	YES	YES
B-99	YES	YES	NO	YES
B-103D	YES	YES	NO	YES
B-109D	YES	YES	NO	YES
B-110D	YES	YES	NO	YES
B-113D	YES	YES	NO	YES
B-115D	YES	YES	NO	YES
B-116D	YES	YES	NO	YES
B-117D	YES	YES	NO	YES
B-118	YES	YES	NO	YES
B-119D	YES	YES	NO	YES
B-123D	YES	YES	NO	YES
AP-1-B-3	YES	YES	NO	YES

Well Inspection

Site Name: Plant McDonough

Date: 9/5/2023

Permit Number: _____

Field Conditions: _____

Well ID:	Location/Identification			
	Visible and accessible	Properly identified with correct well ID	Located in high traffic area; does the well require protection from traffic	Acceptable drainage around well (no standing water, not located in obvious drainage flow path)
AP-1-B-7	YES	YES	NO	YES
AP-1-B-8	YES	YES	NO	YES
DW-1	YES	YES	NO	YES
DW-2	YES	YES	NO	YES
DW-3	YES	YES	NO	YES
DW-4	YES	YES	NO	YES
WT-1	YES	YES	NO	YES
WT-2	YES	YES	NO	YES
WT-3	YES	YES	NO	YES
WT-4	YES	YES	NO	YES
WT-5	YES	YES	NO	YES
WT-6	YES	YES	NO	YES
WT-7	YES	YES	NO	YES
ET-1	YES	YES	NO	YES

Site Name: Plant McDonough

Well Inspection

Date: 9/5/2023

Permit Number: _____

Field Conditions: _____

Well ID:	Protective Casing				
	Free from apparent damage and able to be secured	No degradation or deterioration	Functioning weep hole	Annular space clear of debris and water, or filled with pea gravel/sand	Locked and is the lock in good condition
DGWA-53	YES	YES	YES	YES	YES
DGWA-70A	YES	YES	YES	YES	YES
DGWA-71	YES	YES	YES	YES	YES
DGWC-37	YES	YES	YES	YES	YES
DGWC-38	YES	YES	YES	YES	YES
DGWC-39	YES	YES	YES	YES	YES
DGWC-40	YES	YES	YES	YES	YES
DGWC-67	YES	YES	YES	YES	YES
DGWC-68A	YES	YES	YES	YES	YES
DGWC-69	YES	YES	YES	YES	YES
DGWC-121	YES	YES	YES	YES	YES
B-62	YES	YES	YES	YES	YES
B-100	YES	YES	YES	YES	YES
B-105D	YES	YES	YES	YES	YES
B-112D	YES	YES	YES	YES	YES
DGWC-2	YES	YES	YES	YES	YES
DGWC-4	YES	YES	YES	YES	YES
DGWC-5	YES	YES	YES	YES	YES
DGWC-8	YES	YES	YES	YES	YES
DGWC-9	YES	YES	YES	YES	YES
DGWC-10	YES	YES	YES	YES	YES
DGWC-11	YES	YES	YES	YES	YES
DGWC-12	YES	YES	YES	YES	YES
DGWC-13	YES	YES	YES	YES	YES
DGWC-14	YES	YES	YES	YES	YES
DGWC-15	YES	YES	YES	YES	YES
DGWC-17	YES	YES	YES	YES	YES
DGWC-19	YES	YES	YES	YES	YES
DGWC-20	YES	YES	YES	YES	YES
DGWC-21	YES	YES	YES	YES	YES
DGWC-22	YES	YES	YES	YES	YES
DGWC-23	YES	YES	YES	YES	YES
DGWC-42	YES	YES	YES	YES	YES
DGWC-47	YES	YES	YES	YES	YES
DGWC-48	YES	YES	YES	YES	YES
B-56	YES	YES	YES	YES	YES
B-62	YES	YES	YES	YES	YES
B-63	YES	YES	YES	YES	YES

Site Name: Plant McDonough

Well Inspection

Date: 9/5/2023

Permit Number: _____

Field Conditions: _____

Well ID:	Protective Casing				
	Free from apparent damage and able to be secured	No degradation or deterioration	Functioning weep hole	Annular space clear of debris and water, or filled with pea gravel/sand	Locked and is the lock in good condition
B-66	YES	YES	YES	YES	YES
B-77	YES	YES	YES	YES	YES
B-82	YES	YES	YES	YES	YES
B-83	YES	YES	YES	YES	YES
B-88	YES	YES	YES	YES	YES
B-92	YES	YES	YES	YES	YES
B-93	YES	YES	YES	YES	YES
B-97	YES	YES	YES	YES	YES
B-98	YES	YES	YES	YES	YES
B-100	YES	YES	YES	YES	YES
B-101D	YES	YES	YES	YES	YES
B-102D	YES	YES	YES	YES	YES
B-104D	YES	YES	YES	YES	YES
B-106D	YES	YES	YES	YES	YES
B-107D	YES	YES	YES	YES	YES
B-108D	YES	YES	YES	YES	YES
B-111D	YES	YES	YES	YES	YES
B-120D	YES	YES	YES	YES	YES
B-122D	YES	YES	YES	YES	YES
B-125D	YES	YES	YES	NO	YES
B-3	YES	YES	YES	YES	YES
B-6	YES	YES	YES	YES	YES
B-7	YES	YES	YES	YES	YES
B-16	YES	YES	YES	YES	YES
B-18	YES	YES	YES	YES	YES
B-24	YES	YES	YES	YES	YES
B-25	YES	YES	YES	YES	YES
B-26	YES	YES	YES	YES	YES
B-28	YES	YES	YES	YES	YES
B-29	YES	YES	YES	YES	YES
B-31	YES	YES	YES	YES	YES
B-41	YES	YES	YES	YES	YES
B-50	YES	YES	YES	YES	YES
B-51	YES	YES	YES	YES	YES
B-52	YES	YES	YES	YES	YES
B-54	YES	YES	YES	YES	YES
B-55	YES	YES	YES	YES	YES
B-57	YES	YES	YES	YES	YES

Site Name: Plant McDonough

Well Inspection

Date: 9/5/2023

Permit Number: _____

Field Conditions: _____

Well ID:	Protective Casing				
	Free from apparent damage and able to be secured	No degradation or deterioration	Functioning weep hole	Annular space clear of debris and water, or filled with pea gravel/sand	Locked and is the lock in good condition
B-58	YES	YES	YES	YES	YES
B-59	YES	YES	YES	YES	YES
B-60	YES	YES	YES	YES	YES
B-61	YES	YES	YES	YES	YES
B-64	YES	YES	YES	YES	YES
B-65	YES	YES	YES	YES	YES
B-68	YES	YES	YES	YES	YES
B-72	YES	YES	YES	YES	YES
B-73	YES	YES	YES	YES	YES
B-74	YES	YES	YES	YES	YES
B-76	YES	YES	YES	YES	YES
B-78	YES	YES	YES	YES	YES
B-79	YES	YES	YES	YES	YES
B-80	NO	YES	YES	YES	YES
B-81	YES	YES	YES	YES	YES
B-84	YES	YES	YES	YES	YES
B-85	YES	YES	YES	YES	YES
B-86	NO	YES	YES	YES	YES
B-87	YES	YES	YES	YES	YES
B-89	YES	YES	YES	YES	YES
B-90	YES	YES	YES	YES	YES
B-91	YES	YES	YES	YES	YES
B-94	YES	YES	YES	YES	YES
B-95	YES	YES	NO	YES	NO
B-96	YES	YES	NO	YES	NO
B-99	YES	YES	YES	YES	YES
B-103D	YES	YES	YES	YES	YES
B-109D	YES	YES	YES	YES	YES
B-110D	YES	YES	YES	YES	YES
B-113D	YES	YES	YES	YES	YES
B-115D	YES	YES	YES	YES	YES
B-116D	YES	YES	YES	YES	YES
B-117D	YES	YES	YES	YES	YES
B-118	YES	YES	YES	YES	YES
B-119D	YES	YES	YES	YES	YES
B-123D	YES	YES	YES	YES	YES
AP-1-B-3	YES	YES	YES	YES	YES

Site Name: Plant McDonough

Well Inspection

Date: 9/5/2023

Permit Number: _____

Field Conditions: _____

Well ID:	Protective Casing				
	Free from apparent damage and able to be secured	No degradation or deterioration	Functioning weep hole	Annular space clear of debris and water, or filled with pea gravel/sand	Locked and is the lock in good condition
AP-1-B-7	YES	YES	YES	YES	YES
AP-1-B-8	YES	YES	YES	YES	YES
DW-1	YES	YES	YES	YES	YES
DW-2	YES	YES	YES	YES	YES
DW-3	YES	YES	YES	YES	YES
DW-4	YES	YES	YES	YES	YES
WT-1	NO	NO	YES	YES	YES
WT-2	YES	YES	YES	YES	YES
WT-3	YES	YES	YES	YES	YES
WT-4	YES	YES	YES	YES	YES
WT-5	YES	YES	YES	YES	YES
WT-6	NO	NO	YES	YES	YES
WT-7	NO	NO	YES	YES	YES
ET-1	YES	YES	YES	YES	YES

Site Name: Plant McDonough

Well Inspection

Date: 9/5/2023

Permit Number: _____

Field Conditions: _____

Well ID:	Surface Pad			Internal Casing		
	Good condition (not cracked/ broken)	Sloped away from the protective casing	In complete contact with the ground surface and stable	Cap prevents entry of foreign material into the well	Free of kinks/bends, or any obstructions from foreign objects (such as bailers)	Properly vented for equilibration of air pressure
DGWA-53	YES	YES	YES	YES	YES	YES
DGWA-70A	YES	YES	YES	YES	YES	YES
DGWA-71	YES	YES	YES	YES	YES	YES
DGWC-37	YES	YES	YES	YES	YES	YES
DGWC-38	YES	YES	YES	YES	YES	YES
DGWC-39	YES	YES	YES	YES	YES	YES
DGWC-40	YES	YES	YES	YES	YES	YES
DGWC-67	YES	YES	YES	YES	YES	YES
DGWC-68A	YES	YES	NO	NO	YES	YES
DGWC-69	YES	YES	YES	YES	YES	YES
DGWC-121	YES	YES	YES	YES	YES	YES
B-62	YES	YES	YES	YES	YES	YES
B-100	YES	YES	YES	YES	YES	YES
B-105D	YES	YES	YES	YES	YES	YES
B-112D	YES	YES	YES	YES	YES	YES
DGWC-2	YES	YES	YES	YES	YES	YES
DGWC-4	YES	YES	YES	YES	YES	YES
DGWC-5	YES	YES	YES	YES	YES	YES
DGWC-8	YES	YES	YES	YES	YES	YES
DGWC-9	YES	YES	YES	YES	YES	YES
DGWC-10	YES	YES	YES	YES	YES	YES
DGWC-11	YES	YES	YES	YES	YES	YES
DGWC-12	YES	YES	YES	YES	YES	YES
DGWC-13	YES	YES	YES	YES	YES	YES
DGWC-14	YES	YES	YES	YES	YES	YES
DGWC-15	YES	YES	YES	YES	YES	YES
DGWC-17	YES	YES	YES	YES	YES	YES
DGWC-19	YES	YES	YES	YES	YES	YES
DGWC-20	YES	YES	YES	YES	YES	YES
DGWC-21	YES	YES	YES	YES	YES	YES
DGWC-22	YES	YES	YES	YES	YES	YES
DGWC-23	YES	YES	YES	YES	YES	YES
DGWC-42	YES	YES	YES	YES	YES	YES
DGWC-47	YES	YES	YES	YES	YES	YES
DGWC-48	YES	NO	YES	YES	YES	YES
B-56	YES	YES	YES	YES	YES	YES
B-62	YES	YES	YES	YES	YES	YES
B-63	YES	YES	YES	YES	YES	YES

Site Name: Plant McDonough

Well Inspection

Date: 9/5/2023

Permit Number: _____

Field Conditions: _____

Well ID:	Surface Pad			Internal Casing		
	Good condition (not cracked/ broken)	Sloped away from the protective casing	In complete contact with the ground surface and stable	Cap prevents entry of foreign material into the well	Free of kinks/bends, or any obstructions from foreign objects (such as bailers)	Properly vented for equilibration of air pressure
B-66	YES	YES	YES	YES	YES	YES
B-77	YES	YES	YES	YES	YES	YES
B-82	YES	YES	YES	YES	YES	YES
B-83	YES	YES	YES	YES	YES	YES
B-88	YES	YES	YES	YES	YES	YES
B-92	YES	YES	YES	YES	YES	YES
B-93	YES	YES	YES	YES	YES	YES
B-97	YES	YES	NO	NO	YES	YES
B-98	YES	YES	YES	YES	YES	YES
B-100	YES	YES	YES	YES	YES	YES
B-101D	YES	YES	YES	YES	YES	YES
B-102D	YES	YES	YES	YES	YES	YES
B-104D	YES	NO	YES	YES	YES	YES
B-106D	YES	YES	YES	YES	YES	YES
B-107D	YES	YES	YES	YES	YES	YES
B-108D	YES	YES	YES	YES	YES	YES
B-111D	YES	YES	YES	YES	YES	YES
B-120D	YES	YES	YES	YES	YES	YES
B-122D	YES	YES	YES	YES	YES	YES
B-125D	YES	YES	YES	YES	YES	YES
B-3	YES	YES	YES	YES	YES	YES
B-6	YES	YES	YES	YES	YES	YES
B-7	YES	YES	YES	YES	YES	YES
B-16	YES	YES	YES	YES	YES	YES
B-18	YES	YES	YES	YES	YES	YES
B-24	YES	YES	YES	YES	YES	YES
B-25	YES	YES	YES	YES	YES	YES
B-26	YES	YES	YES	YES	YES	YES
B-28	YES	YES	YES	YES	YES	YES
B-29	YES	YES	YES	YES	YES	YES
B-31	YES	YES	YES	YES	YES	YES
B-41	YES	YES	YES	YES	YES	YES
B-50	YES	YES	YES	YES	YES	YES
B-51	YES	YES	YES	YES	YES	YES
B-52	YES	YES	YES	YES	YES	YES
B-54	YES	YES	YES	YES	YES	YES
B-55	YES	YES	YES	YES	YES	YES
B-57	YES	YES	YES	YES	YES	YES

Well Inspection

Site Name: Plant McDonough

Date: 9/5/2023

Permit Number: _____

Field Conditions: _____

Well ID:	Surface Pad			Internal Casing		
	Good condition (not cracked/ broken)	Sloped away from the protective casing	In complete contact with the ground surface and stable	Cap prevents entry of foreign material into the well	Free of kinks/bends, or any obstructions from foreign objects (such as bailers)	Properly vented for equilibration of air pressure
B-58	YES	YES	YES	YES	YES	YES
B-59	YES	YES	YES	YES	YES	YES
B-60	YES	YES	YES	YES	YES	YES
B-61	YES	YES	YES	YES	YES	YES
B-64	YES	YES	YES	YES	YES	YES
B-65	YES	YES	YES	YES	YES	YES
B-68	YES	YES	YES	YES	YES	YES
B-72	YES	YES	NO	NO	YES	YES
B-73	YES	YES	YES	YES	YES	YES
B-74	YES	YES	NO	NO	YES	YES
B-76	YES	YES	YES	YES	YES	YES
B-78	YES	YES	YES	YES	YES	YES
B-79	YES	YES	YES	YES	YES	YES
B-80	YES	YES	YES	YES	YES	YES
B-81	YES	YES	YES	YES	YES	YES
B-84	YES	YES	YES	YES	YES	YES
B-85	YES	YES	YES	YES	YES	YES
B-86	YES	YES	YES	YES	YES	YES
B-87	YES	YES	YES	YES	YES	YES
B-89	YES	YES	YES	YES	YES	YES
B-90	YES	YES	YES	YES	YES	YES
B-91	YES	YES	YES	YES	YES	YES
B-94	YES	YES	YES	YES	YES	YES
B-95	YES	YES	YES	YES	YES	NO
B-96	YES	YES	YES	YES	YES	NO
B-99	YES	YES	YES	YES	YES	YES
B-103D	YES	YES	YES	YES	YES	YES
B-109D	YES	YES	YES	YES	YES	YES
B-110D	YES	YES	YES	YES	YES	YES
B-113D	YES	YES	YES	YES	YES	YES
B-115D	YES	YES	YES	YES	YES	YES
B-116D	YES	YES	YES	YES	YES	YES
B-117D	YES	YES	YES	YES	YES	YES
B-118	YES	YES	YES	YES	YES	YES
B-119D	YES	YES	YES	YES	YES	YES
B-123D	YES	YES	YES	YES	YES	YES
AP-1-B-3	YES	YES	YES	YES	YES	YES

Well Inspection

Site Name: Plant McDonough

Date: 9/5/2023

Permit Number: _____

Field Conditions: _____

Well ID:	Surface Pad			Internal Casing		
	Good condition (not cracked/ broken)	Sloped away from the protective casing	In complete contact with the ground surface and stable	Cap prevents entry of foreign material into the well	Free of kinks/bends, or any obstructions from foreign objects (such as bailers)	Properly vented for equilibration of air pressure
AP-1-B-7	YES	YES	YES	YES	YES	YES
AP-1-B-8	YES	YES	YES	YES	YES	YES
DW-1	YES	YES	YES	YES	YES	YES
DW-2	YES	YES	YES	YES	YES	YES
DW-3	YES	YES	YES	YES	YES	YES
DW-4	YES	YES	YES	YES	YES	YES
WT-1	NO	YES	NO	YES	YES	YES
WT-2	YES	YES	YES	YES	YES	YES
WT-3	YES	YES	YES	YES	YES	YES
WT-4	YES	YES	YES	YES	YES	YES
WT-5	YES	YES	YES	YES	YES	YES
WT-6	NO	YES	NO	YES	YES	YES
WT-7	NO	YES	NO	YES	YES	YES
ET-1	YES	YES	YES	YES	YES	YES

Site Name: Plant McDonough

Well Inspection

Date: 9/5/2023

Permit Number: _____

Field Conditions: _____

Well ID:	Corrective actions as needed, by date:
DGWA-53	Overgrown, clear brush around well
DGWA-70A	
DGWA-71	
DGWC-37	
DGWC-38	
DGWC-39	Overgrown, clear brush around well and clear path to well
DGWC-40	
DGWC-67	
DGWC-68A	Needs flat well cap to properly close well
DGWC-69	
DGWC-121	
B-62	
B-100	
B-105D	
B-112D	
DGWC-2	
DGWC-4	
DGWC-5	
DGWC-8	
DGWC-9	
DGWC-10	
DGWC-11	
DGWC-12	
DGWC-13	
DGWC-14	
DGWC-15	
DGWC-17	
DGWC-19	
DGWC-20	
DGWC-21	
DGWC-22	Clear ants from around well
DGWC-23	
DGWC-42	
DGWC-47	Clear ants from around well
DGWC-48	Standing water and mud on well pad from recent construction- flow path need diverting
B-56	
B-62	
B-63	Needs suitable identification

Site Name: Plant McDonough

Well Inspection

Date: 9/5/2023

Permit Number: _____

Field Conditions: _____

Well ID:	Corrective actions as needed, by date:
B-66	
B-77	
B-82	
B-83	
B-88	
B-92	Clear ants from around well
B-93	Overgrown, clear brush around well
B-97	Needs flat well cap to properly close well
B-98	Overgrown, clear brush around well
B-100	
B-101D	
B-102D	
B-104D	Standing water and mud on well pad from recent construction- flow path need diverting
B-106D	
B-107D	
B-108D	
B-111D	
B-120D	
B-122D	
B-125D	~2 ft of loose casing near top of well, needs to be filled with pea gravel
B-3	
B-6	
B-7	
B-16	
B-18	
B-24	
B-25	
B-26	
B-28	
B-29	
B-31	
B-41	Remove wasp nest from well
B-50	
B-51	
B-52	
B-54	
B-55	
B-57	

Site Name: Plant McDonough

Well Inspection

Date: 9/5/2023

Permit Number: _____

Field Conditions: _____

Well ID:	Corrective actions as needed, by date:
B-58	
B-59	
B-60	
B-61	
B-64	
B-65	
B-68	
B-72	Needs flat well cap to properly close well
B-73	
B-74	Needs flat well cap to properly close well
B-76	
B-78	
B-79	
B-80	Casing lid askew and tilted, needs to be replaced
B-81	
B-84	
B-85	
B-86	Missing bolt needs to be replaced
B-87	Overgrown, clear brush around well
B-89	
B-90	
B-91	
B-94	
B-95	Need new lock, weep hole to depressurize well
B-96	Needs lock bar, weep hole to depressurize well
B-99	
B-103D	
B-109D	
B-110D	
B-113D	
B-115D	
B-116D	
B-117D	
B-118	
B-119D	
B-123D	
AP-1-B-3	

Site Name: Plant McDonough

Well Inspection

Date: 9/5/2023

Permit Number: _____

Field Conditions: _____

Well ID:	Corrective actions as needed, by date:
AP-1-B-7	
AP-1-B-8	
DW-1	
DW-2	
DW-3	
DW-4	
WT-1	Staff gauge- gauge tilted and innacurate. Needs to be straightened or replaced
WT-2	
WT-3	
WT-4	
WT-5	
WT-6	Staff gauge- gauge destroyed by felled tree. Needs to be replaced
WT-7	Staff gauge- gauge tilted and innacurate. Needs to be straightened or replaced
ET-1	

APPENDIX C

Well Condition Inspection Table
January-February 2024

Site Name: Plant McDonough

Well Inspection

Date: 1/29/2024

Permit Number: _____

Field Conditions: _____

Well ID:	Location/Identification			
	Visible and accessible	Properly identified with correct well ID	Located in high traffic area; does the well require protection from traffic	Acceptable drainage around well (no standing water, not located in obvious drainage flow path)
DGWA-53	YES	YES	NO	YES
DGWA-70A	YES	YES	NO	YES
DGWA-71	YES	YES	NO	YES
DGWC-37	YES	YES	NO	YES
DGWC-38	YES	YES	NO	YES
DGWC-39	YES	YES	NO	YES
DGWC-40	YES	YES	NO	YES
DGWC-67	YES	YES	NO	YES
DGWC-68A	YES	YES	NO	YES
DGWC-69	YES	YES	NO	YES
DGWC-121	YES	YES	NO	YES
B-62	YES	YES	NO	YES
B-100	YES	YES	NO	YES
B-105D	YES	YES	NO	YES
B-112D	YES	YES	NO	YES
DGWC-2	YES	YES	NO	YES
DGWC-4	YES	YES	NO	YES
DGWC-5	YES	YES	NO	YES
DGWC-8	YES	YES	NO	YES
DGWC-9	YES	YES	NO	YES
DGWC-10	YES	YES	NO	YES
DGWC-11	YES	YES	NO	YES
DGWC-12	YES	YES	NO	YES
DGWC-13	YES	YES	NO	YES
DGWC-14	YES	YES	NO	YES
DGWC-15	YES	YES	NO	YES
DGWC-17	YES	YES	NO	YES
DGWC-19	YES	YES	NO	YES
DGWC-20	YES	YES	NO	YES
DGWC-21	YES	YES	NO	YES
DGWC-22	YES	YES	NO	YES
DGWC-23	YES	YES	NO	YES
DGWC-42	YES	YES	NO	YES
DGWC-47	YES	YES	NO	YES
DGWC-48	YES	YES	NO	NO
B-56	YES	YES	NO	YES
B-63	YES	NO	NO	YES
B-66	YES	YES	NO	YES

Site Name: Plant McDonough

Well Inspection

Date: 1/29/2024

Permit Number: _____

Field Conditions: _____

Well ID:	Location/Identification			
	Visible and accessible	Properly identified with correct well ID	Located in high traffic area; does the well require protection from traffic	Acceptable drainage around well (no standing water, not located in obvious drainage flow path)
B-77	YES	YES	NO	YES
B-82	YES	YES	NO	YES
B-83	YES	YES	NO	YES
B-88	YES	YES	NO	YES
B-92	YES	YES	YES	YES
B-93	YES	YES	YES	YES
B-97	YES	YES	YES	YES
B-98	YES	YES	YES	YES
B-101D	YES	YES	NO	YES
B-102D	YES	YES	NO	YES
B-104D	YES	YES	NO	YES
B-106D	YES	YES	NO	YES
B-107D	YES	YES	NO	YES
B-108D	YES	YES	NO	YES
B-111D	YES	YES	NO	YES
B-120D	YES	YES	NO	YES
B-122D	YES	YES	NO	YES
B-125D	YES	YES	YES	YES
B-3	YES	YES	NO	YES
B-6	YES	YES	NO	YES
B-7	YES	YES	NO	YES
B-16	YES	YES	NO	YES
B-18	YES	YES	NO	YES
B-24	YES	YES	NO	YES
B-25	YES	YES	NO	YES
B-26	YES	YES	NO	YES
B-28	YES	YES	NO	YES
B-29	YES	YES	NO	YES
B-31	YES	YES	NO	YES
B-41	YES	YES	NO	YES
B-50	YES	YES	NO	YES
B-51	YES	YES	NO	YES
B-52	YES	YES	NO	YES
B-54	YES	YES	NO	YES
B-55	YES	YES	NO	YES
B-57	YES	YES	NO	YES
B-58	YES	YES	NO	YES
B-59	YES	YES	NO	YES

Site Name: Plant McDonough

Well Inspection

Date: 1/29/2024

Permit Number: _____

Field Conditions: _____

Well ID:	Location/Identification			
	Visible and accessible	Properly identified with correct well ID	Located in high traffic area; does the well require protection from traffic	Acceptable drainage around well (no standing water, not located in obvious drainage flow path)
B-60	YES	YES	NO	YES
B-61	YES	YES	NO	YES
B-64	YES	YES	NO	YES
B-65	YES	YES	NO	YES
B-68	YES	YES	NO	YES
B-72	YES	YES	NO	YES
B-73	YES	YES	NO	YES
B-74	YES	YES	NO	YES
B-76	YES	YES	NO	YES
B-78	YES	YES	NO	YES
B-79	YES	YES	NO	YES
B-80	YES	YES	NO	YES
B-81	YES	YES	NO	YES
B-84	YES	YES	NO	YES
B-85	YES	YES	NO	YES
B-86	YES	YES	NO	YES
B-87	YES	YES	NO	YES
B-89	YES	YES	NO	YES
B-90	YES	YES	YES	YES
B-91	YES	YES	YES	YES
B-94	YES	YES	NO	YES
B-95	YES	YES	YES	YES
B-96	YES	YES	YES	YES
B-99	YES	YES	NO	YES
B-103D	YES	YES	NO	YES
B-109D	YES	YES	NO	YES
B-110D	YES	YES	NO	YES
B-113D	YES	YES	NO	YES
B-115D	YES	YES	NO	YES
B-116D	YES	YES	NO	YES
B-117D	YES	YES	NO	YES
B-118	YES	YES	NO	YES
B-119D	YES	YES	NO	YES
B-123D	YES	YES	NO	YES
AP-1-B-3	YES	YES	NO	YES
AP-1-B-7	YES	YES	NO	YES
AP-1-B-8	YES	YES	NO	YES

Site Name: Plant McDonough

Well Inspection

Date: 1/29/2024

Permit Number: _____

Field Conditions: _____

Well ID:	Location/Identification			
	Visible and accessible	Properly identified with correct well ID	Located in high traffic area; does the well require protection from traffic	Acceptable drainage around well (no standing water, not located in obvious drainage flow path)
DW-1	YES	YES	NO	YES
DW-2	YES	YES	NO	YES
DW-3	YES	YES	NO	YES
DW-4	YES	YES	NO	YES
WT-1	YES	YES	NO	YES
WT-2	YES	YES	NO	YES
WT-3	YES	YES	NO	YES
WT-4	YES	YES	NO	YES
WT-5	YES	YES	NO	YES
WT-6	YES	YES	NO	YES
WT-7	YES	YES	NO	YES
ET-1	YES	YES	NO	YES

Site Name: Plant McDonough

Well Inspection

Date: 1/29/2024

Permit Number: _____

Field Conditions: _____

Well ID:	Protective Casing				
	Free from apparent damage and able to be secured	No degradation or deterioration	Functioning weep hole	Annular space clear of debris and water, or filled with pea gravel/sand	Locked and is the lock in good condition
DGWA-53	YES	YES	YES	YES	YES
DGWA-70A	YES	YES	YES	YES	YES
DGWA-71	YES	YES	YES	YES	YES
DGWC-37	YES	YES	YES	YES	YES
DGWC-38	YES	YES	YES	YES	YES
DGWC-39	YES	YES	YES	YES	YES
DGWC-40	YES	YES	YES	YES	YES
DGWC-67	YES	YES	YES	YES	YES
DGWC-68A	YES	YES	YES	YES	YES
DGWC-69	YES	YES	YES	YES	YES
DGWC-121	YES	YES	YES	YES	YES
B-62	YES	YES	YES	YES	YES
B-100	YES	YES	YES	YES	YES
B-105D	YES	YES	YES	YES	YES
B-112D	YES	YES	YES	YES	YES
DGWC-2	YES	YES	YES	YES	YES
DGWC-4	YES	YES	YES	YES	YES
DGWC-5	YES	YES	YES	YES	YES
DGWC-8	YES	YES	YES	YES	YES
DGWC-9	YES	YES	YES	YES	YES
DGWC-10	YES	YES	YES	YES	YES
DGWC-11	YES	YES	YES	YES	YES
DGWC-12	YES	YES	YES	YES	YES
DGWC-13	YES	YES	YES	YES	YES
DGWC-14	YES	YES	YES	YES	YES
DGWC-15	YES	YES	YES	YES	YES
DGWC-17	YES	YES	YES	YES	YES
DGWC-19	YES	YES	YES	YES	YES
DGWC-20	YES	YES	YES	YES	YES
DGWC-21	YES	YES	YES	YES	YES
DGWC-22	YES	YES	YES	YES	YES
DGWC-23	YES	YES	YES	YES	YES
DGWC-42	YES	YES	YES	YES	YES
DGWC-47	YES	YES	YES	YES	YES
DGWC-48	YES	YES	YES	YES	YES
B-56	YES	YES	YES	YES	YES
B-63	YES	YES	YES	YES	YES
B-66	YES	YES	YES	YES	YES

Site Name: Plant McDonough

Well Inspection

Date: 1/29/2024

Permit Number: _____

Field Conditions: _____

Well ID:	Protective Casing				
	Free from apparent damage and able to be secured	No degradation or deterioration	Functioning weep hole	Annular space clear of debris and water, or filled with pea gravel/sand	Locked and is the lock in good condition
B-77	YES	YES	YES	YES	YES
B-82	YES	YES	YES	YES	YES
B-83	YES	YES	YES	YES	YES
B-88	YES	YES	YES	YES	YES
B-92	YES	YES	YES	YES	NO
B-93	YES	YES	YES	YES	YES
B-97	YES	YES	YES	YES	NO
B-98	YES	YES	YES	YES	YES
B-101D	YES	YES	YES	YES	YES
B-102D	YES	YES	YES	YES	YES
B-104D	YES	YES	YES	YES	YES
B-106D	YES	YES	YES	YES	YES
B-107D	YES	YES	YES	YES	YES
B-108D	YES	YES	YES	YES	YES
B-111D	YES	YES	YES	YES	YES
B-120D	YES	YES	YES	YES	YES
B-122D	YES	YES	YES	YES	YES
B-125D	YES	YES	YES	NO	YES
B-3	YES	YES	YES	YES	YES
B-6	YES	YES	YES	YES	YES
B-7	YES	YES	YES	YES	YES
B-16	YES	YES	YES	YES	YES
B-18	YES	YES	YES	YES	YES
B-24	YES	YES	YES	YES	YES
B-25	YES	YES	YES	YES	YES
B-26	YES	YES	YES	YES	YES
B-28	YES	YES	YES	YES	YES
B-29	YES	YES	YES	YES	YES
B-31	YES	YES	YES	YES	YES
B-41	YES	YES	YES	YES	YES
B-50	YES	YES	YES	YES	YES
B-51	YES	YES	YES	YES	YES
B-52	YES	YES	YES	YES	YES
B-54	YES	YES	YES	YES	YES
B-55	YES	YES	YES	YES	YES
B-57	YES	YES	YES	YES	YES
B-58	YES	YES	YES	YES	YES
B-59	YES	YES	YES	YES	YES

Site Name: Plant McDonough

Well Inspection

Date: 1/29/2024

Permit Number: _____

Field Conditions: _____

Well ID:	Protective Casing				
	Free from apparent damage and able to be secured	No degradation or deterioration	Functioning weep hole	Annular space clear of debris and water, or filled with pea gravel/sand	Locked and is the lock in good condition
B-60	YES	YES	YES	YES	YES
B-61	YES	YES	YES	YES	YES
B-64	YES	YES	YES	YES	YES
B-65	YES	YES	YES	YES	YES
B-68	YES	YES	YES	YES	YES
B-72	YES	YES	YES	YES	YES
B-73	YES	YES	YES	YES	YES
B-74	YES	YES	YES	YES	YES
B-76	YES	YES	YES	YES	YES
B-78	YES	YES	YES	YES	YES
B-79	YES	YES	YES	YES	YES
B-80	NO	YES	YES	YES	YES
B-81	YES	YES	YES	YES	YES
B-84	YES	YES	YES	YES	YES
B-85	YES	YES	YES	YES	YES
B-86	YES	YES	YES	YES	YES
B-87	YES	YES	YES	YES	YES
B-89	YES	YES	YES	YES	YES
B-90	YES	YES	YES	YES	YES
B-91	YES	YES	YES	YES	YES
B-94	YES	YES	YES	YES	YES
B-95	YES	YES	YES	YES	NO
B-96	YES	YES	YES	YES	NO
B-99	YES	YES	YES	YES	YES
B-103D	YES	YES	YES	YES	YES
B-109D	YES	YES	YES	YES	YES
B-110D	YES	YES	YES	YES	YES
B-113D	YES	YES	NA	NO	NA
B-115D	YES	YES	YES	YES	YES
B-116D	YES	YES	YES	YES	YES
B-117D	YES	YES	YES	YES	YES
B-118	YES	YES	YES	YES	YES
B-119D	YES	YES	YES	YES	YES
B-123D	YES	YES	YES	YES	YES
AP-1-B-3	YES	YES	YES	YES	YES
AP-1-B-7	YES	YES	YES	YES	YES
AP-1-B-8	YES	YES	YES	YES	YES

Site Name: Plant McDonough

Well Inspection

Date: 1/29/2024

Permit Number: _____

Field Conditions: _____

Well ID:	Protective Casing				
	Free from apparent damage and able to be secured	No degradation or deterioration	Functioning weep hole	Annular space clear of debris and water, or filled with pea gravel/sand	Locked and is the lock in good condition
DW-1	YES	YES	YES	YES	YES
DW-2	YES	YES	YES	YES	YES
DW-3	YES	YES	YES	YES	YES
DW-4	YES	YES	YES	YES	YES
WT-1	YES	YES	YES	YES	YES
WT-2	YES	YES	YES	YES	YES
WT-3	YES	YES	YES	YES	YES
WT-4	YES	YES	YES	YES	YES
WT-5	YES	YES	YES	YES	YES
WT-6	YES	YES	YES	YES	YES
WT-7	YES	YES	YES	YES	YES
ET-1	YES	YES	YES	YES	YES

Site Name: Plant McDonough

Well Inspection

Date: 1/29/2024

Permit Number: _____

Field Conditions: _____

Well ID:	Surface Pad			Internal Casing		
	Good condition (not cracked/ broken)	Sloped away from the protective casing	In complete contact with the ground surface and stable	Cap prevents entry of foreign material into the well	Free of kinks/bends, or any obstructions from foreign objects (such as bailers)	Properly vented for equilibration of air pressure
DGWA-53	YES	YES	YES	YES	YES	YES
DGWA-70A	NO	YES	YES	YES	YES	YES
DGWA-71	YES	YES	YES	YES	YES	YES
DGWC-37	NO	YES	YES	YES	YES	YES
DGWC-38	YES	YES	YES	YES	YES	YES
DGWC-39	YES	YES	YES	YES	YES	YES
DGWC-40	YES	YES	YES	YES	YES	YES
DGWC-67	YES	YES	YES	YES	YES	YES
DGWC-68A	YES	YES	YES	YES	YES	YES
DGWC-69	YES	YES	YES	YES	YES	YES
DGWC-121	YES	YES	YES	YES	YES	YES
B-62	YES	YES	YES	YES	YES	YES
B-100	YES	YES	YES	YES	YES	YES
B-105D	YES	YES	YES	YES	YES	YES
B-112D	YES	YES	YES	YES	YES	YES
DGWC-2	YES	YES	YES	YES	YES	YES
DGWC-4	YES	YES	YES	YES	YES	YES
DGWC-5	YES	YES	YES	YES	YES	YES
DGWC-8	YES	YES	YES	YES	YES	YES
DGWC-9	YES	YES	YES	YES	YES	YES
DGWC-10	YES	YES	YES	YES	YES	YES
DGWC-11	YES	YES	YES	YES	YES	YES
DGWC-12	YES	YES	YES	YES	YES	YES
DGWC-13	YES	YES	YES	YES	YES	YES
DGWC-14	YES	YES	YES	YES	YES	YES
DGWC-15	YES	YES	YES	YES	YES	YES
DGWC-17	YES	YES	YES	YES	YES	YES
DGWC-19	YES	YES	YES	YES	YES	YES
DGWC-20	YES	YES	YES	YES	YES	YES
DGWC-21	YES	YES	YES	YES	YES	YES
DGWC-22	YES	YES	YES	YES	YES	YES
DGWC-23	YES	YES	YES	YES	YES	YES
DGWC-42	YES	YES	YES	YES	YES	YES
DGWC-47	YES	YES	YES	YES	YES	YES
DGWC-48	NO	YES	YES	YES	YES	YES
B-56	YES	YES	YES	YES	YES	YES
B-63	YES	YES	YES	YES	YES	YES
B-66	YES	YES	YES	YES	YES	YES

Site Name: Plant McDonough

Well Inspection

Date: 1/29/2024

Permit Number: _____

Field Conditions: _____

Well ID:	Surface Pad			Internal Casing		
	Good condition (not cracked/ broken)	Sloped away from the protective casing	In complete contact with the ground surface and stable	Cap prevents entry of foreign material into the well	Free of kinks/bends, or any obstructions from foreign objects (such as bailers)	Properly vented for equilibration of air pressure
B-77	YES	YES	YES	YES	YES	YES
B-82	YES	YES	YES	YES	YES	YES
B-83	YES	YES	YES	YES	YES	YES
B-88	YES	YES	YES	YES	YES	YES
B-92	NO	YES	YES	YES	YES	YES
B-93	YES	YES	YES	YES	YES	YES
B-97	NO	YES	YES	YES	YES	YES
B-98	YES	YES	YES	YES	YES	YES
B-101D	YES	YES	YES	YES	YES	YES
B-102D	YES	YES	YES	YES	YES	YES
B-104D	YES	YES	YES	YES	YES	YES
B-106D	YES	YES	YES	YES	YES	YES
B-107D	YES	YES	YES	YES	YES	YES
B-108D	YES	YES	YES	YES	YES	YES
B-111D	YES	YES	YES	YES	YES	YES
B-120D	YES	YES	YES	YES	YES	YES
B-122D	YES	YES	YES	YES	YES	YES
B-125D	YES	YES	YES	YES	YES	YES
B-3	YES	YES	YES	YES	YES	YES
B-6	YES	YES	YES	YES	YES	YES
B-7	YES	YES	YES	YES	YES	YES
B-16	YES	YES	YES	YES	YES	YES
B-18	YES	YES	YES	YES	YES	YES
B-24	YES	YES	YES	YES	YES	YES
B-25	YES	YES	YES	YES	YES	YES
B-26	YES	YES	YES	YES	YES	YES
B-28	YES	YES	YES	YES	YES	YES
B-29	YES	YES	YES	YES	YES	YES
B-31	YES	YES	YES	YES	YES	YES
B-41	YES	YES	YES	YES	YES	YES
B-50	YES	YES	YES	YES	YES	YES
B-51	YES	YES	YES	YES	YES	YES
B-52	YES	YES	YES	YES	YES	YES
B-54	NO	YES	YES	YES	YES	YES
B-55	YES	YES	YES	YES	YES	YES
B-57	YES	YES	YES	YES	YES	YES
B-58	YES	YES	YES	YES	YES	YES
B-59	YES	YES	YES	YES	YES	YES

Site Name: Plant McDonough

Well Inspection

Date: 1/29/2024

Permit Number: _____

Field Conditions: _____

Well ID:	Surface Pad			Internal Casing		
	Good condition (not cracked/ broken)	Sloped away from the protective casing	In complete contact with the ground surface and stable	Cap prevents entry of foreign material into the well	Free of kinks/bends, or any obstructions from foreign objects (such as bailers)	Properly vented for equilibration of air pressure
B-60	YES	YES	YES	YES	YES	YES
B-61	YES	YES	YES	YES	YES	YES
B-64	YES	YES	YES	YES	YES	YES
B-65	YES	YES	YES	YES	YES	YES
B-68	YES	YES	YES	YES	YES	YES
B-72	YES	YES	YES	YES	YES	YES
B-73	YES	YES	YES	YES	YES	YES
B-74	YES	YES	YES	YES	YES	YES
B-76	YES	YES	YES	YES	YES	YES
B-78	YES	YES	YES	YES	YES	YES
B-79	YES	YES	YES	YES	YES	YES
B-80	YES	YES	YES	YES	YES	YES
B-81	YES	YES	YES	YES	YES	YES
B-84	YES	YES	YES	YES	YES	YES
B-85	YES	YES	YES	NO	YES	YES
B-86	YES	YES	YES	YES	YES	YES
B-87	YES	YES	YES	YES	YES	YES
B-89	YES	YES	YES	YES	YES	YES
B-90	YES	YES	YES	YES	YES	YES
B-91	YES	YES	YES	YES	YES	YES
B-94	YES	YES	YES	YES	YES	YES
B-95	YES	YES	YES	YES	YES	YES
B-96	YES	YES	YES	YES	YES	YES
B-99	YES	YES	YES	YES	YES	YES
B-103D	YES	YES	YES	YES	YES	YES
B-109D	YES	YES	YES	YES	YES	YES
B-110D	YES	YES	YES	YES	YES	YES
B-113D	YES	YES	YES	YES	YES	YES
B-115D	YES	YES	YES	YES	YES	YES
B-116D	YES	YES	YES	YES	YES	YES
B-117D	YES	YES	YES	YES	YES	YES
B-118	YES	YES	YES	YES	YES	YES
B-119D	YES	YES	YES	YES	YES	YES
B-123D	YES	YES	YES	YES	YES	YES
AP-1-B-3	YES	YES	YES	YES	YES	YES
AP-1-B-7	YES	YES	YES	YES	YES	YES
AP-1-B-8	YES	YES	YES	YES	YES	YES

Well Inspection

Site Name: Plant McDonough

Date: 1/29/2024

Permit Number: _____

Field Conditions: _____

Well ID:	Surface Pad			Internal Casing		
	Good condition (not cracked/ broken)	Sloped away from the protective casing	In complete contact with the ground surface and stable	Cap prevents entry of foreign material into the well	Free of kinks/bends, or any obstructions from foreign objects (such as bailers)	Properly vented for equilibration of air pressure
DW-1	YES	YES	YES	YES	YES	YES
DW-2	YES	YES	YES	YES	YES	YES
DW-3	YES	YES	YES	YES	YES	YES
DW-4	YES	YES	YES	YES	YES	YES
WT-1	YES	YES	YES	YES	YES	YES
WT-2	YES	YES	YES	YES	YES	YES
WT-3	YES	YES	YES	YES	YES	YES
WT-4	YES	YES	YES	YES	YES	YES
WT-5	YES	YES	YES	YES	YES	YES
WT-6	YES	YES	YES	YES	YES	YES
WT-7	YES	YES	YES	YES	YES	YES
ET-1	YES	YES	YES	YES	YES	YES

Site Name: Plant McDonough

Well Inspection

Date: 1/29/2024

Permit Number: _____

Field Conditions: _____

Well ID:	Corrective actions as needed, by date:
DGWA-53	
DGWA-70A	Ant mound around well pad
DGWA-71	
DGWC-37	Ant mound around well pad
DGWC-38	
DGWC-39	
DGWC-40	
DGWC-67	
DGWC-68A	
DGWC-69	
DGWC-121	
B-62	
B-100	
B-105D	
B-112D	
DGWC-2	
DGWC-4	
DGWC-5	
DGWC-8	
DGWC-9	
DGWC-10	
DGWC-11	
DGWC-12	
DGWC-13	
DGWC-14	
DGWC-15	
DGWC-17	
DGWC-19	
DGWC-20	
DGWC-21	
DGWC-22	
DGWC-23	
DGWC-42	
DGWC-47	
DGWC-48	Muck covering well pad
B-56	
B-63	
B-66	

Site Name: Plant McDonough

Well Inspection

Date: 1/29/2024

Permit Number: _____

Field Conditions: _____

Well ID:	Corrective actions as needed, by date:
B-77	
B-82	
B-83	
B-88	
B-92	No lock bar, needs replacement. ant mound next to well.
B-93	
B-97	No lock bar, needs replacement.
B-98	
B-101D	
B-102D	
B-104D	
B-106D	
B-107D	
B-108D	
B-111D	
B-120D	
B-122D	
B-125D	Top ~3 feet of casing loose- pea gravel needs to be added to annular space
B-3	
B-6	
B-7	
B-16	
B-18	
B-24	
B-25	
B-26	
B-28	
B-29	
B-31	
B-41	
B-50	
B-51	
B-52	
B-54	Gravel covering well pad
B-55	
B-57	
B-58	
B-59	

Site Name: Plant McDonough

Well Inspection

Date: 1/29/2024

Permit Number: _____

Field Conditions: _____

Well ID:	Corrective actions as needed, by date:
B-60	
B-61	
B-64	
B-65	
B-68	
B-72	
B-73	
B-74	
B-76	
B-78	
B-79	
B-80	Well casing lid damaged- difficult to close. Lid and hinge need replacement.
B-81	
B-84	
B-85	Well cap on ground, needs replacement
B-86	
B-87	
B-89	
B-90	
B-91	
B-94	
B-95	No lock bar, needs replacement.
B-96	Lock bar missing eye bolt, lock. Needs Replacement.
B-99	
B-103D	
B-109D	
B-110D	
B-113D	Water in flush mount annular space- bailed dry
B-115D	
B-116D	
B-117D	
B-118	
B-119D	
B-123D	
AP-1-B-3	
AP-1-B-7	
AP-1-B-8	

Well Inspection

Site Name: Plant McDonough

Date: 1/29/2024

Permit Number: _____

Field Conditions: _____

Well ID:	Corrective actions as needed, by date:
DW-1	
DW-2	
DW-3	
DW-4	
WT-1	
WT-2	
WT-3	
WT-4	
WT-5	
WT-6	
WT-7	
ET-1	

APPENDIX C

Well Maintenance and Repair Documentation

TECHNICAL MEMORANDUM

DATE July 31, 2024

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 February 8, 2024. 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, 2, 3/4 – Well Maintenance Summary

Well ID	Date Performed	Maintenance/Repair Performed
DGWA-70A	February 2024	Ant mound around well pad removed to improve access
DGWC-37	February 2024	Ant mound around well pad removed to improve access
DGWC-48	February 2024	Cleaned off pad to improve access
B-7	February 2024	Cleaned off pad to improve access
B-54	February 2024	Cleaned off pad to improve access
B-65	February 2024	Strap repaired
B-80	February 2024	Replaced lid with new hinge
B-89	February 2024	Strap repaired; smaller lock added
B-92	February 2024	Locking bar repaired; cleaned off pad
B-95	February 2024	Lock added
B-96	February 2024	Lock replaced; U-bolt in pad repaired; cleaned off pad
B-97	February 2024	Lock bar presented; no maintenance required

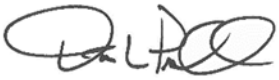
WSP USA Inc.
5170 Peachtree Road Building 100 Suite 300, Atlanta, Georgia, USA 30341 T: +1 770 496-1893 F: +1 770 934-9476

Well ID	Date Performed	Maintenance/Repair Performed
B-104D	February 2024	Cleaned off pad to improve access

WSP USA Inc.



Chris Tidwell
Senior Consultant, Geologist



Dawn L. Prell
Senior Consultant, Hydrogeologist

Attachments: Southern Company CFS
Plant McDonough Feb. 2024 Well O&M
(Feb. 8th)

Southern Company CFS
Plant McDonough Feb. 2024 Well O&M (Feb. 8th)

McDonough AP4:

B-80 – Hinge was bent causing lid to not close properly. Replaced lid with new hinge.





B-92 – Locking bar broken and repaired. Cleaned off pad.





Southern Company

Southern Company CFS
Plant McDonough Feb. 2024 Well O&M (Feb. 8th)

B-96 – U bolt in pad broken and repaired. Lock damaged by mower. Replaced lock. Cleaned pad.





B-95 – Lock missing. Added new lock.





Southern Company

Southern Company CFS
Plant McDonough Feb. 2024 Well O&M (Feb. 8th)

B-89 – Strap Broken and repaired. Smaller 2246 lock added.





B-65 - Strap Broken and repaired.




Southern Company

APPENDIX D

Piezometer Decommissioning and Abandonment Report (B-31 and B-74)

November 13, 2023 Project No.31406640.McD23

Ms. Lauren Hartley, Senior Geologist
Southern Company Services
241 Ralph McGill Boulevard NE
Atlanta, GA 30308
laucoker@southernco.com

SUBJECT: PIEZOMETER DECOMMISSIONING AND ABANDONMENT (B-31 AND B-74) REPORT GEORGIA POWER COMPANY - PLANT MCDONOUGH-ATKINSON, SMYRNA, GEORGIA

Dear Ms. Hartley:

WSP USA Inc. (WSP) is submitting this *Piezometer Decommissioning and Abandonment (B-31 and B-74) Report* to Southern Company Services, Inc. (SCS) and Georgia Power Company (Georgia Power), to document the decommissioning and abandonment of two piezometers at Plant McDonough-Atkinson in Smyrna, Georgia (Site). The two Site piezometers (B-31 and B-74) required abandonment to allow for a local infrastructure project (a watermain project along Maner road) in the area of Plant McDonough-Atkinson.

Piezometer abandonment activities were performed using industry-accepted practices and following the Manual for Groundwater Monitoring (1991) and Georgia Water Well Standards Act of 1985 [Official Code of Georgia Annotated (O.C.G.A.) 12-5-120, 1985] as guides. The decommissioning and abandonment of the piezometers was conducted under the oversight and direction of a Georgia Registered Professional Geologist (PG).

The field activities for the abandonment were performed on October 4, 2023. The field work consisted of the decommissioning and abandonment of two Site piezometers (B-31 and B-74). A summary of the activities is presented below. Figure 1 presents the former locations of the abandoned piezometers.

Piezometer Decommissioning and Abandonment Activities

On October 4th, Site piezometers B-31 and B-74 were abandoned by Southern Company Civil Field Services (CFS). CFS has a current and valid bond with the Water Wells Standards Advisory Council for the State of Georgia (Appendix A). An experienced WSP professional geologist registered to practice in the state of Georgia was present on site to oversee and record the piezometer decommissioning and abandonment.

Piezometer Decommissioning and Abandonment

Prior to piezometer decommissioning, WSP utilized a water level probe to confirm the total depth of the well. As piezometers B-31 and B-74 were located outside the footprint of the waste unit, decommissioning and abandonment procedures included removal of the piezometer's protective cover and concrete pad. The piezometers were then tremie-grouted from the bottom to 10' below top of casing with care taken to remove the column of water within the well. The initial grout mixture for B-74 was 17 lbs. AquaGuard bentonite powder and 4 gallons of potable water. The initial grout mixture for B-31 was 25 lbs AquaGuard bentonite powder and 7 gallons of water. The top 10 feet of the piezometers were then overdrilled, and the PVC pipe destroyed or removed. The driller then grouted the remaining borehole of each piezometer to the ground surface. The final grout mixture for B-74 was 38 lbs Quikrete non-shrink precision grout, 10 lbs AquaGuard bentonite powder, and 6.5 gallons of

water. The final grout mixture for B-31 was 38 lbs Quikrete non-shrink precision grout 10 lbs AquaGuard bentonite powder and 6.5 gallons of water.

A summary of piezometer decommissioning data is presented in Table 1, and the former locations of the abandoned piezometers are provided in Figure 1. The original construction logs and the abandonment logs for B-31 and B-74 documenting pipe removal and grouting details are included in Appendix B.

Certification

We appreciate the opportunity to assist Southern Company Services, Inc. and Georgia Power with this project. Should you have any questions or require additional information, please contact the undersigned at (770) 496-1893.

Sincerely,

WSP USA INC.

Dawn L. Prell, CPG
Senior Consultant, Hydrogeologist

I certify that I am a qualified ground-water scientist who has received a baccalaureate or post-graduate degree in the natural sciences or engineering and have sufficient training and experience in groundwater hydrology and related fields, as demonstrated by state registration and completion of accredited university courses, that enable me to make sound professional judgments regarding groundwater monitoring and contaminant fate and transport. I further certify that this report was prepared by myself or by a subordinate working under my direction. We certify that the information included is to the best of our knowledge and belief, true, accurate and complete. In preparing this report, we have relied on information provided by Southern Company Services and Georgia Power.



Christopher Tidwell, PG
Georgia Registered Professional Geologist No. 2377

Attachments:

	Figure 1:	Location of Piezometers Abandoned
	Table 1:	Summary of Piezometer Decommissioning Data
	Appendix A:	Cascade Drilling Bond
	Appendix B:	Piezometer Construction Diagrams/Abandonment Logs

Attachments

Figures &Tables



LEGEND

- AP-1 MONITORING WELL
- AP-2,3/4 MONITORING WELL
- UPGRADIENT WELL
- ASSESSMENT MONITORING WELLS
- PIEZOMETER
- TEMPORARY AEM WELL
- SURFACE WATER MONITORING LOCATION
- ABANDONED PIEZOMETER
- STAFF GAUGE
- 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
PIEZOMETER DECOMMISSIONING AND ABANDONMENT (B-31 AND B-74) REPORT

TITLE
LOCATION OF PIEZOMETERS ABANDONED

CONSULTANT

wsp

YYYY-MM-DD	2023-10-20
PREPARED	SEB
DESIGN	DLP
CHECKED	DP/RPK
REVIEWED/APPROVED	RNQ

PROJECT No. 166849622 | Rev. 0 | FIGURE 1

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

TABLE 1.
SUMMARY OF PIEZOMETER DECOMISSIONING DATA
Georgia Power Company - Plant McDonough-Atkinson
Atlanta, Georgia

Piezometer Identification	Date of Decommissioning	Time of Decommissioning	Total Depth (feet)	Well Diamerer (inches)	Volume of Well (cu ft)	Material Used to Decommission	Comments
B-31	10/4/2023	11:20	38.5	2	5.04	Grout Mixture	Surface features removed; Approximately 14 gallons of grout
B-74	10/4/2023	8:50	16.3	2	2.13	Grout Mixture	Surface features removed; Approximately 10 gallons of grout

Notes:
cu ft = cubic feet

Times listed for decomissioning are the starting times of decommissioning activities.

APPENDIX A

Cascade Drilling Bond

CONTINUATION CERTIFICATE

SAFECO Insurance Company of America , Surety upon

a certain Bond No. **4993104**

dated effective June 30, 1987
(MONTH-DAY-YEAR)

on behalf of Southern Company Services, Inc.
(PRINCIPAL)

and in favor of Georgia Department of Natural Resources, Environmental Protection Division
(OBLIGEE)

does hereby continue said bond in force for the further period

beginning on June 30, 2023
(MONTH-DAY-YEAR)

and ending on June 30, 2024
(MONTH-DAY-YEAR)

Amount of bond Fifteen Thousand Dollars and 00/100 ($15,000.00)

Description of bond Water Well Contractors & Drillers

Premium: $100.00

PROVIDED: That this continuation certificate does not create a new obligation and is executed upon the express condition and provision that the Surety's liability under said bond and this and all Continuation Certificates issued in connection therewith shall not be cumulative and that the said Surety's aggregate liability under said bond and this and all such Continuation Certificates on account of all defaults committed during the period (regardless of the number of years) said bond had been and shall be in force, shall not in any event exceed the amount of said bond as hereinbefore set forth.

Signed and dated on 05/22/2023
(MONTH-DAY-YEAR)

SAFECO Insurance Company of America

175 Berkeley Street, Boston, MA 02116

By
Attorney-in-Fact Jeffrey M. Wilson, Attorney-in-Fact

McGriff Insurance Services, LLC
Agent

2211 7th Avenue South, Birmingham, AL 35233
Address of Agent

(205) 252-9871
Telephone Number of Agent

S-0157/GE 8/08

XDP

This Power of Attorney limits the acts of those named herein, and they have no authority to bind the Company except in the manner and to the extent herein stated.

Liberty Mutual. SURETY

American States Insurance Company
First National Insurance Company of America
General Insurance Company of America
Safeco Insurance Company of America

Certificate No **8205019-016032**

POWER OF ATTORNEY

KNOWN ALL PERSONS BY THESE PRESENTS: That American States Insurance Company is a corporation duly organized under the laws of the State of Indiana, that First National Insurance Company of America, General Insurance Company of America, and Safeco Insurance Company of America are corporations duly organized under the laws of the State of New Hampshire (herein collectively called the "Companies"), pursuant to and by authority herein set forth, does hereby name, constitute and appoint, Alisa B. Ferris; Anna Childress; Jeffrey M. Wilson; Mark W. Edwards II; Richard H. Mitchell; Robert R. Freel; Sam Audia; William M. Smith

all of the city of Birmingham state of AL each individually if there be more than one named, its true and lawful attorney-in-fact to make, execute, seal, acknowledge and deliver, for and on its behalf as surety and as its act and deed, any and all undertakings, bonds, recognizances and other surety obligations, in pursuance of these presents and shall be as binding upon the Companies as if they have been duly signed by the president and attested by the secretary of the Companies in their own proper persons.

IN WITNESS WHEREOF, this Power of Attorney has been subscribed by an authorized officer or official of the Companies and the corporate seals of the Companies have been affixed thereto this 11th day of March, 2021.

American States Insurance Company
First National Insurance Company of America
General Insurance Company of America
Safeco Insurance Company of America

By: _____
David M. Carey, Assistant Secretary

State of PENNSYLVANIA
County of MONTGOMERY ss

On this 11th day of March, 2021 before me personally appeared David M. Carey, who acknowledged himself to be the Assistant Secretary of American States Insurance Company, First National Insurance Company of America, General Insurance Company of America, and Safeco Insurance Company of America, and that he, as such, being authorized so to do, execute the foregoing instrument for the purposes therein contained by signing on behalf of the corporations by himself as a duly authorized officer.

IN WITNESS WHEREOF, I have hereunto subscribed my name and affixed my notarial seal at King of Prussia, Pennsylvania, on the day and year first above written.

Commonwealth of Pennsylvania - Notary Seal
Teresa Pastella, Notary Public
Montgomery County
My commission expires March 28, 2025
Commission number 1126044
Member, Pennsylvania Association of Notaries

By: _____
Teresa Pastella, Notary Public

This Power of Attorney is made and executed pursuant to and by authority of the following By-law and Authorizations of American States Insurance Company, First National Insurance Company of America, General Insurance Company of America, and Safeco Insurance Company of America, which are now in full force and effect reading as follows:

ARTICLE IV – OFFICERS: Section 12. Power of Attorney.
Any officer or other official of the Corporation authorized for that purpose in writing by the Chairman or the President, and subject to such limitation as the Chairman or the President may prescribe, shall appoint such attorneys-in-fact, as may be necessary to act in behalf of the Corporation to make, execute, seal, acknowledge and deliver as surety any and all undertakings, bonds, recognizances and other surety obligations. Such attorney-in-fact, subject to the limitations set forth in their respective powers of attorney, shall have full power to bind the Corporation by their signature and executed, such instruments shall be as binding as if signed by the President and attested to by the Secretary. Any power or authority granted to any representative or attorney-in-fact under the provisions of this article may be revoked at any time by the Board, the Chairman, the President or by the officer or officers granting such power or authority.

Certificate of Designation – The President of the Company, acting pursuant to the Bylaws of the Company, authorizes David M. Carey, Assistant Secretary to appoint such attorneys-in-fact as may be necessary to act on behalf of the Company to make, execute, seal, acknowledge and deliver as surety any and all undertakings, bonds, recognizances and other surety obligations.

Authorization – By unanimous consent of the Company's Board of Directors, the Company consents that facsimile or mechanically reproduced signature of any assistant secretary of the Company, wherever appearing upon a certified copy of any power of attorney issued by the Company in connection with surety bonds, shall be valid and binding upon the Company with the same force and effect as though manually affixed.

I, Renee C. Llewellyn, the undersigned, Assistant Secretary, of American States Insurance Company, First National Insurance Company of America, General Insurance Company of America, and Safeco Insurance Company of America do hereby certify that the original power of attorney of which the foregoing is a full, true and correct copy of the Power of Attorney executed by said Companies, is in full force and effect and has not been revoked.

IN TESTIMONY WHEREOF, I have hereunto set my hand and affixed the seals of said Companies this 22nd day of May, 2023

By: _____
Renee C. Llewellyn, Assistant Secretary

Not valid for mortgage, note, loan, letter of credit, currency rate, interest rate or residual value guarantees.

For bond and/or Power of Attorney (POA) verification inquiries, please call 610-832-8240 or email HOSUR@libertymutual.com.

McGriff
SURETY DIVISION
2211 7TH AVENUE SOUTH, BIRMINGHAM, AL 35233
MEAGAN CARTER

LETTER OF TRANSMITTAL

To: Clementine Broaders
Southern Power Company

Date: 5/22/2023

We are sending you:

☐	Duplicate Original	☐	Consent of Surety	☐	Certificate of Insurance
☒	CC / VC	☐	Change Order	☐	Motor Fuel Bonds
☐	Invoice	☐	Financial/ Indemnity	☐	Bond

No. of Copies:	Description:
(1)	CC
	Bond No. 4993104
	**Please review and notify if you should have any questions, or if changes or amendments are needed. **

These are transmitted as checked below:

☐	Info and/or necessary action in remarks	☐	For your file	☒	As requested
☒	For your use	☐	Returned for corrections	☐	Please sign as indicated and return

REMARKS: UPS

If enclosures are not as noted, kindly notify at once.

Signed: Meagan Carter, *Senior Client Service Specialist – Surety*

CONTINUATION CERTIFICATE

SAFECO Insurance Company of America , Surety upon

a certain Bond No. **4993104**

dated effective June 30, 1987
(MONTH-DAY-YEAR)

on behalf of Southern Company Services, Inc.
(PRINCIPAL)

and in favor of Georgia Department of Natural Resources, Environmental Protection Division
(OBLIGEE)

does hereby continue said bond in force for the further period

beginning on June 30, 2024
(MONTH-DAY-YEAR)

and ending on June 30, 2025
(MONTH-DAY-YEAR)

Amount of bond Fifteen Thousand Dollars and 00/100 ($15,000.00)

Description of bond Water Well Contractors & Drillers

Premium: $100.00

PROVIDED: That this continuation certificate does not create a new obligation and is executed upon the express condition and provision that the Surety's liability under said bond and this and all Continuation Certificates issued in connection therewith shall not be cumulative and that the said Surety's aggregate liability under said bond and this and all such Continuation Certificates on account of all defaults committed during the period (regardless of the number of years) said bond had been and shall be in force, shall not in any event exceed the amount of said bond as hereinbefore set forth.

Signed and dated on 05/31/2023
(MONTH-DAY-YEAR)

SAFECO Insurance Company of America

175 Berkeley Street, Boston, MA 02116

By _____
Attorney-in-Fact Jeffrey M. Wilson, Attorney-in-Fact

McGriff Insurance Services, LLC
Agent

2211 7th Avenue South, Birmingham, AL 35233
Address of Agent

(205) 252-9871
Telephone Number of Agent

S-0157/GE 8/08

XDF

TRAVELERS

Travelers Casualty and Surety Company of America
Travelers Casualty and Surety Company
St. Paul Fire and Marine Insurance Company

POWER OF ATTORNEY

KNOW ALL MEN BY THESE PRESENTS: That Travelers Casualty and Surety Company of America, Travelers Casualty and Surety Company, and St. Paul Fire and Marine Insurance Company are corporations duly organized under the laws of the State of Connecticut (herein collectively called the "Companies"), and that the Companies do hereby make, constitute and appoint **Jeffrey M Wilson** of **BIRMINGHAM**, **Alabama**, their true and lawful Attorney(s)-in-Fact to sign, execute, seal and acknowledge any and all bonds, recognizances, conditional undertakings and other writings obligatory in the nature thereof on behalf of the Companies in their business of guaranteeing the fidelity of persons, guaranteeing the performance of contracts and executing or guaranteeing bonds and undertakings required or permitted in any actions or proceedings allowed by law.

IN WITNESS WHEREOF, the Companies have caused this instrument to be signed, and their corporate seals to be hereto affixed, this **21st** day of **April**, **2021**.

State of Connecticut

City of Hartford ss.

By: _____
Robert L. Raney, Senior Vice President

On this the **21st** day of **April**, **2021**, before me personally appeared **Robert L. Raney**, who acknowledged himself to be the Senior Vice President of each of the Companies, and that he, as such, being authorized so to do, executed the foregoing instrument for the purposes therein contained by signing on behalf of said Companies by himself as a duly authorized officer.

IN WITNESS WHEREOF, I hereunto set my hand and official seal.

My Commission expires the **30th** day of **June**, **2026**

_____
Anna P. Nowik, Notary Public

This Power of Attorney is granted under and by the authority of the following resolutions adopted by the Boards of Directors of each of the Companies, which resolutions are now in full force and effect, reading as follows:

RESOLVED, that the Chairman, the President, any Vice Chairman, any Executive Vice President, any Senior Vice President, any Vice President, any Second Vice President, the Treasurer, any Assistant Treasurer, the Corporate Secretary or any Assistant Secretary may appoint Attorneys-in-Fact and Agents to act for and on behalf of the Company and may give such appointee such authority as his or her certificate of authority may prescribe to sign with the Company's name and seal with the Company's seal bonds, recognizances, contracts of indemnity, and other writings obligatory in the nature of a bond, recognizance, or conditional undertaking, and any of said officers or the Board of Directors at any time may remove any such appointee and revoke the power given him or her; and it is

FURTHER RESOLVED, that the Chairman, the President, any Vice Chairman, any Executive Vice President, any Senior Vice President or any Vice President may delegate all or any part of the foregoing authority to one or more officers or employees of this Company, provided that each such delegation is in writing and a copy thereof is filed in the office of the Secretary; and it is

FURTHER RESOLVED, that any bond, recognizance, contract of indemnity, or writing obligatory in the nature of a bond, recognizance, or conditional undertaking shall be valid and binding upon the Company when (a) signed by the President, any Vice Chairman, any Executive Vice President, any Senior Vice President or any Vice President, any Second Vice President, the Treasurer, any Assistant Treasurer, the Corporate Secretary or any Assistant Secretary and duly attested and sealed with the Company's seal by a Secretary or Assistant Secretary; or (b) duly executed (under seal, if required) by one or more Attorneys-in-Fact and Agents pursuant to the power prescribed in his or her certificate or their certificates of authority or by one or more Company officers pursuant to a written delegation of authority; and it is

FURTHER RESOLVED, that the signature of each of the following officers: President, any Executive Vice President, any Senior Vice President, any Vice President, any Assistant Vice President, any Secretary, any Assistant Secretary, and the seal of the Company may be affixed by facsimile to any Power of Attorney or to any certificate relating thereto appointing Resident Vice Presidents, Resident Assistant Secretaries or Attorneys-in-Fact for purposes only of executing and attesting bonds and undertakings and other writings obligatory in the nature thereof, and any such Power of Attorney or certificate bearing such facsimile signature or facsimile seal shall be valid and binding upon the Company and any such power so executed and certified by such facsimile signature and facsimile seal shall be valid and binding on the Company in the future with respect to any bond or understanding to which it is attached.

I, **Kevin E. Hughes**, the undersigned, Assistant Secretary of each of the Companies, do hereby certify that the above and foregoing is a true and correct copy of the Power of Attorney executed by said Companies, which remains in full force and effect.

Dated this **31st** day of **May**, **2023**.

_____
Kevin E. Hughes, Assistant Secretary

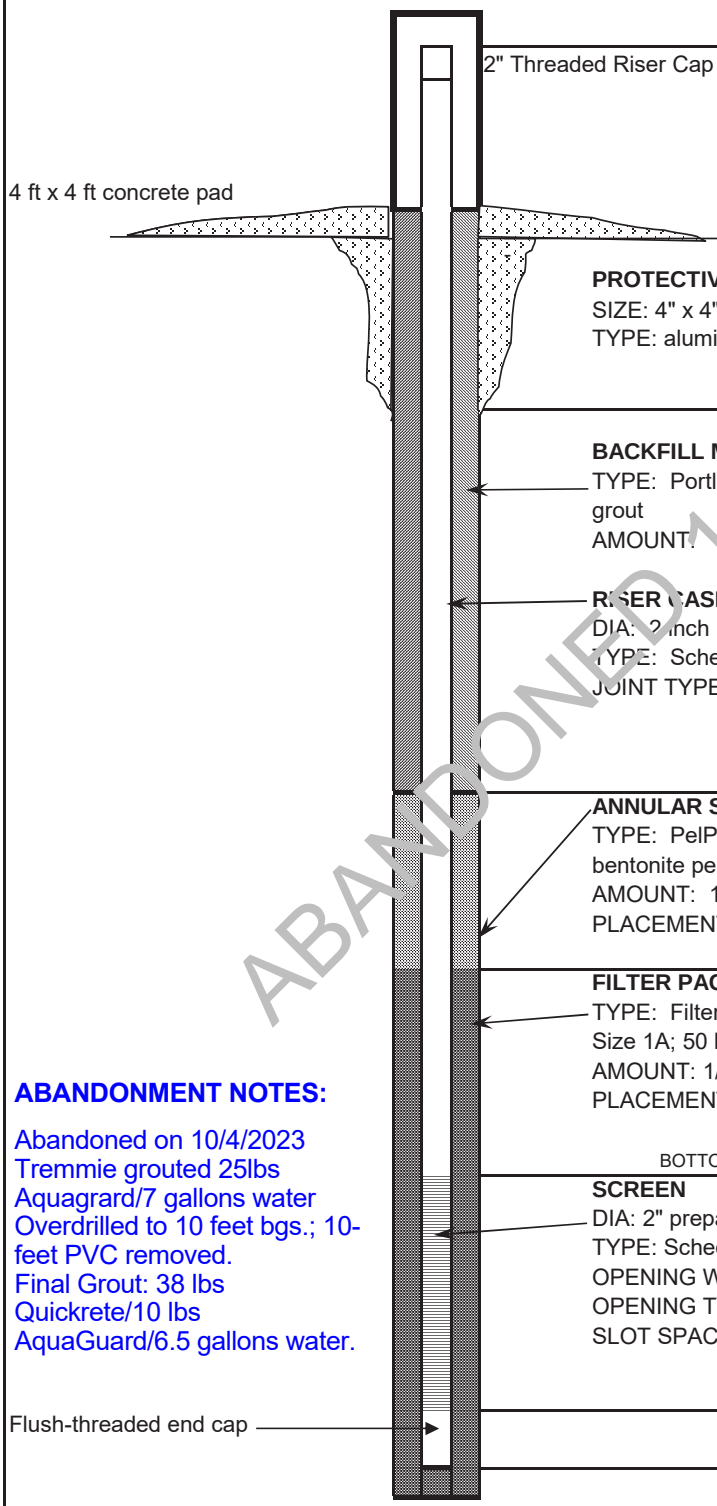
To verify the authenticity of this Power of Attorney, please call us at 1-800-421-3880.
Please refer to the above-named Attorney(s)-in-Fact and the details of the bond to which this Power of Attorney is attached.

APPENDIX B

Piezometer Construction Diagrams and Abandonment Logs

WELL CONSTRUCTION LOG — Southern Company Generation

PROJECT: Plant McDonough	DRILLING CO.: SCS Field Services	WELL NAME
Hydrogeologic Investigation	DRILLER: S. Denty	
LOCATION: Ash Pond 1	RIG TYPE: CME550	B-31
LOGGER: B. Gallagher	DRILLING METHODS: HS Auger/HQ Rock Core	
DATE CONSTRUCTED: 1/22/2013	N: 1392034.3 E:2200928.5	



	DEPTH FEET	ELEVATION FT, MSL
TOP OF RISER	-2.6	797.47
2" Threaded Riser Cap		
GROUND SURFACE	0.0	794.84
PROTECTIVE CASING SIZE: 4" x 4" TYPE: aluminum		
BOTTOM OF GROUT		
BACKFILL MATERIAL TYPE: Portland cement/bentonite grout AMOUNT: 5 bags cement 8 lbs bentonite		
RISER CASING DIA: 2 inch TYPE: Schedule 40 PVC JOINT TYPE: Flush Threaded		
TOP OF SEAL	25.7	769.1
ANNULAR SEAL TYPE: PelPlug TR-30 1/4" bentonite pellets; 5-gallon buckets AMOUNT: 1/4 bucket PLACEMENT: Poured		
TOP OF FILTER PACK	29.1	765.7
FILTER PACK TYPE: Filtersil #61 Size 1A; 50 lbs/bag AMOUNT: 1/2 Bags PLACEMENT: Tremie		
BOTTOM OF RISER / TOP OF SCREEN	34.7	760.1
SCREEN DIA: 2" prepack (3.45" OD) TYPE: Schedule 40 PVC OPENING WIDTH: 0.01 inch OPENING TYPE: Slotted SLOT SPACING: 0.1 inch		
BOTTOM OF SCREEN	44.7	750.1
BOTTOM OF CASING	45.1	749.7

ABANDONED 10/4/2023

ABANDONMENT NOTES:

Abandoned on 10/4/2023
Tremmie grouted 25lbs Aquagrard/7 gallons water
Overdrilled to 10 feet bgs.; 10-feet PVC removed.
Final Grout: 38 lbs Quickrete/10 lbs AquaGuard/6.5 gallons water.

HOLE DIA: 7 inch (auger)
3.8 inch (HQ core)

RECORD OF BOREHOLE B-74

SHEET 1 of 1

PROJECT: SCS-Plant McDonough
PROJECT NUMBER: 1779172
DRILLED DEPTH: 16.50 ft
LOCATION: ~50' West of B-68

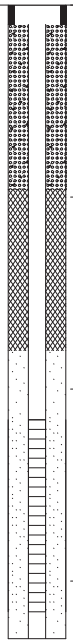
DRILL RIG: Geoprobe 7822DT
DATE STARTED: 4/24/17
DATE COMPLETED: 4/25/17

NORTHING: 1,391,279.9
EASTING: 2,200,666.1
GS ELEVATION: 759.18
TOC ELEVATION: 759.06 ft

DEPTH W.L.:3.3'
DATE W.L.:4/25/2017
TIME W.L.:09:37

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	759	0.00 - 4.00 CL, CLAY, with some silt, low plasticity; red brown, fill; cohesive, moist, w<PL, soft.	CL		755.2					
5	755	4.00 - 13.50 SP-SM, Poorly-graded SAND with Silt and trace gravel , fine to coarse, non-plastic; white to tan, deeply weathered, granitic; non-cohesive, moist, w<PL, loose/soft.	SP-SM		4.00	S1	DO	3-18-20	38	0.75 1.50
10	750				745.7					
15	745	13.50 - 16.50 SM, Silty SAND, non-plastic; white to light gray; non-cohesive, dry to moist, w<PL, dense.	SM		13.50	S2	DO	50/3	50/3	0.25 1.50
20	740	Boring completed at 16.50 ft			742.7					
25	735									
30	730									
35	725									
40	720									

MONITORING WELL/ PIEZOMETER DIAGRAM and NOTES



WELL CONSTRUCTION DETAILS

WELL CASING
Interval: 0' - 16.2
Material: Schedule 40 PVC
Diameter: 2"
Joint Type: Flush/Screw

SURFACE CASING
Interval:
Material:
Diameter:

WELL SCREEN
Interval: 10.8' - 15.8'
Material: Pre-pack Schedule 40 PVC
Diameter: 2"
Slot Size: 0.010"
End Cap: 15.8' - 16.2'

FILTER PACK
Interval: 9.0' - 16.5'
Type: FilterSil gravel pack

FILTER PACK SEAL
Interval: 4.8' - 9.0'
Type: Pel-Plug 3/8" Bentonite Pellets

ANNULUS SEAL
Interval: 0' - 4.8'
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

NOTES
N/A

ABANDONED 10/4/2023

ABANDONMENT NOTES:

Abandoned on 10/4/2023
Tremmie grouted 17lbs Aquagrard/4 gallons water Overdrilled to 10 feet bgs.; 10-feet PVC removed.
Final Grout: 38 lbs Quickrete/10 lbs AquaGuard/6.5 gallons water.

LOG SCALE: 1 in = 5 ft
DRILLING COMPANY: Southern Company Services
DRILLER: S. Milam

GA INSPECTOR: Michael Boatman PG
CHECKED BY: Rachel Kirkman, PG
DATE: 5/17/17

Golder Associates

APPENDIX E

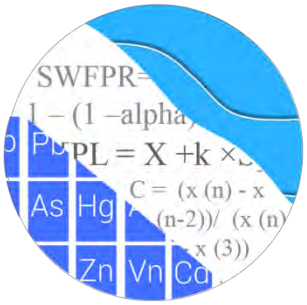
Statistical Analyses

APPENDIX E

Statistical Analyses September 2023

GROUNDWATER STATS CONSULTING

February 28, 2024



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 2023 Statistical Analysis

Dear Mr. Abraham,

Groundwater Stats Consulting, formerly the statistical consulting division of Sanitas Technologies, is pleased to provide the September 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 (CCR) 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. Per request of Georgia Power Company, both Appendix III and Appendix IV constituents among downgradient wells will be evaluated using interwell prediction limits and confidence intervals, respectively, 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 for parametric limits. 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 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 2023

Interwell Prediction Limits

Interwell prediction limits, combined with a 1-of-2 resample plan, were constructed using all historical upgradient well data through September 2023 (Figure D). Interwell prediction limits pool upgradient well data to establish a background limit for an individual constituent. The September 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, DGWC-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-40 and DGWC-67

- pH: DGWC-40 (lower limit)
- Sulfate: DGWC-37, DGWC-38, DGWC-39, DGWC-40, and DGWC-67
- TDS: DGWC-37, DGWC-38, DGWC-39, DGWC-40, DGWC-67, 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 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 DGWC-68A
- Chloride: DGWA-71 (upgradient) and DGWC-67

Decreasing trends:

- Boron: DGWA-53 (upgradient), DGWC-39, and DGWC-40
- Calcium: DGWA-53 (upgradient)
- Chloride: DGWA-53 (upgradient) and DGWC-40
- Sulfate: DGWA-71 (upgradient), DGWC-38, DGWC-39, and DGWC-40
- TDS: DGWA-53 (upgradient) and DGWC-39

Statistical Analysis of Appendix IV Parameters – September 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 and assessment 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 additional 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 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 226 + 228. 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).

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 is 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 95% confidence level to determine whether concentrations are statistically increasing, decreasing, or stable (Figure I). Although the trend tests for Assessment monitoring pairs were previously evaluated using 99% confidence, the 95% confidence level more rapidly identifies statistically significant trends. Additionally, the 95% confidence is recommended in cases with limited sample sizes and, particularly, for new assessment wells. Upgradient wells are included in the trend analyses to identify whether similar patterns exist upgradient of the site for the same constituents. When trends are present in upgradient wells, 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:

- Arsenic: DGWC-69
- Cobalt: DGWA-71 (upgradient)

Decreasing trends:

- Cobalt: DGWA-53 (upgradient)
- Molybdenum: DGWC-68A

Note that while the trend test identified a statistically significant increasing trend for cobalt in upgradient well DGWA-71, the slope is displayed as zero which represents the median slopes of all the possible pairwise slopes. The zero median slopes result from the large number of non-detects in the record, and the positive test statistics result from a few trace values being recorded in the earlier part of the record.

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 11/16/2023 4:50 PM View: AP 1 Confidence Intervals
Plant McDonough Client: Southern Company Data: McDonough AP

Antimony (mg/L)
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-40

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 11/16/2023, 4:17 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	9/6/2023	1.7	Yes	53	n/a	n/a	24.53	n/a	n/a	0.0006724	NP Inter (normality) 1 of 2
Boron (mg/L)	DGWC-38	0.13	n/a	9/7/2023	2.8	Yes	53	n/a	n/a	24.53	n/a	n/a	0.0006724	NP Inter (normality) 1 of 2
Boron (mg/L)	DGWC-39	0.13	n/a	9/7/2023	2.7	Yes	53	n/a	n/a	24.53	n/a	n/a	0.0006724	NP Inter (normality) 1 of 2
Boron (mg/L)	DGWC-40	0.13	n/a	9/7/2023	0.73	Yes	53	n/a	n/a	24.53	n/a	n/a	0.0006724	NP Inter (normality) 1 of 2
Boron (mg/L)	DGWC-67	0.13	n/a	9/7/2023	3.9	Yes	53	n/a	n/a	24.53	n/a	n/a	0.0006724	NP Inter (normality) 1 of 2
Boron (mg/L)	DGWC-68A	0.13	n/a	9/7/2023	1.8	Yes	53	n/a	n/a	24.53	n/a	n/a	0.0006724	NP Inter (normality) 1 of 2
Calcium (mg/L)	DGWC-37	40.3	n/a	9/6/2023	59.1	Yes	53	n/a	n/a	3.774	n/a	n/a	0.0006724	NP Inter (normality) 1 of 2
Calcium (mg/L)	DGWC-38	40.3	n/a	9/7/2023	86.5	Yes	53	n/a	n/a	3.774	n/a	n/a	0.0006724	NP Inter (normality) 1 of 2
Calcium (mg/L)	DGWC-39	40.3	n/a	9/7/2023	81.2	Yes	53	n/a	n/a	3.774	n/a	n/a	0.0006724	NP Inter (normality) 1 of 2
Calcium (mg/L)	DGWC-40	40.3	n/a	9/7/2023	41	Yes	53	n/a	n/a	3.774	n/a	n/a	0.0006724	NP Inter (normality) 1 of 2
Calcium (mg/L)	DGWC-67	40.3	n/a	9/7/2023	43.3	Yes	53	n/a	n/a	3.774	n/a	n/a	0.0006724	NP Inter (normality) 1 of 2
Calcium (mg/L)	DGWC-68A	40.3	n/a	9/7/2023	53.6	Yes	53	n/a	n/a	3.774	n/a	n/a	0.0006724	NP Inter (normality) 1 of 2
Chloride (mg/L)	DGWC-40	8.2	n/a	9/7/2023	13.6	Yes	55	n/a	n/a	0	n/a	n/a	0.0006289	NP Inter (normality) 1 of 2
Chloride (mg/L)	DGWC-67	8.2	n/a	9/7/2023	9.2	Yes	55	n/a	n/a	0	n/a	n/a	0.0006289	NP Inter (normality) 1 of 2
pH, Field (SU)	DGWC-40	6.69	5.43	9/7/2023	4.67	Yes	62	n/a	n/a	0	n/a	n/a	0.0009874	NP Inter (normality) 1 of 2
Sulfate (mg/L)	DGWC-37	49	n/a	9/6/2023	83.4	Yes	55	n/a	n/a	16.36	n/a	n/a	0.0006289	NP Inter (normality) 1 of 2
Sulfate (mg/L)	DGWC-38	49	n/a	9/7/2023	212	Yes	55	n/a	n/a	16.36	n/a	n/a	0.0006289	NP Inter (normality) 1 of 2
Sulfate (mg/L)	DGWC-39	49	n/a	9/7/2023	124	Yes	55	n/a	n/a	16.36	n/a	n/a	0.0006289	NP Inter (normality) 1 of 2
Sulfate (mg/L)	DGWC-40	49	n/a	9/7/2023	177	Yes	55	n/a	n/a	16.36	n/a	n/a	0.0006289	NP Inter (normality) 1 of 2
Sulfate (mg/L)	DGWC-67	49	n/a	9/7/2023	106	Yes	55	n/a	n/a	16.36	n/a	n/a	0.0006289	NP Inter (normality) 1 of 2
Total Dissolved Solids [TDS] (mg/L)	DGWC-37	238.1	n/a	9/6/2023	324	Yes	54	9.841	2.893	0	None	sqrt(x)	0.001075	Param Inter 1 of 2
Total Dissolved Solids [TDS] (mg/L)	DGWC-38	238.1	n/a	9/7/2023	526	Yes	54	9.841	2.893	0	None	sqrt(x)	0.001075	Param Inter 1 of 2
Total Dissolved Solids [TDS] (mg/L)	DGWC-39	238.1	n/a	9/7/2023	421	Yes	54	9.841	2.893	0	None	sqrt(x)	0.001075	Param Inter 1 of 2
Total Dissolved Solids [TDS] (mg/L)	DGWC-40	238.1	n/a	9/7/2023	359	Yes	54	9.841	2.893	0	None	sqrt(x)	0.001075	Param Inter 1 of 2
Total Dissolved Solids [TDS] (mg/L)	DGWC-67	238.1	n/a	9/7/2023	337	Yes	54	9.841	2.893	0	None	sqrt(x)	0.001075	Param Inter 1 of 2
Total Dissolved Solids [TDS] (mg/L)	DGWC-68A	238.1	n/a	9/7/2023	253	Yes	54	9.841	2.893	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 11/16/2023, 4:17 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**	**9/6/2023**	**1.7**	**Yes**	**53**	**n/a**	**n/a**	**24.53**	**n/a**	**n/a**	**0.0006724**	**NP Inter (normality) 1 of 2**
Boron (mg/L)	**DGWC-38**	**0.13**	**n/a**	**9/7/2023**	**2.8**	**Yes**	**53**	**n/a**	**n/a**	**24.53**	**n/a**	**n/a**	**0.0006724**	**NP Inter (normality) 1 of 2**
Boron (mg/L)	**DGWC-39**	**0.13**	**n/a**	**9/7/2023**	**2.7**	**Yes**	**53**	**n/a**	**n/a**	**24.53**	**n/a**	**n/a**	**0.0006724**	**NP Inter (normality) 1 of 2**
Boron (mg/L)	**DGWC-40**	**0.13**	**n/a**	**9/7/2023**	**0.73**	**Yes**	**53**	**n/a**	**n/a**	**24.53**	**n/a**	**n/a**	**0.0006724**	**NP Inter (normality) 1 of 2**
Boron (mg/L)	**DGWC-67**	**0.13**	**n/a**	**9/7/2023**	**3.9**	**Yes**	**53**	**n/a**	**n/a**	**24.53**	**n/a**	**n/a**	**0.0006724**	**NP Inter (normality) 1 of 2**
Boron (mg/L)	**DGWC-68A**	**0.13**	**n/a**	**9/7/2023**	**1.8**	**Yes**	**53**	**n/a**	**n/a**	**24.53**	**n/a**	**n/a**	**0.0006724**	**NP Inter (normality) 1 of 2**
Boron (mg/L)	DGWC-69	0.13	n/a	9/7/2023	0.052	No	53	n/a	n/a	24.53	n/a	n/a	0.0006724	NP Inter (normality) 1 of 2
Calcium (mg/L)	**DGWC-37**	**40.3**	**n/a**	**9/6/2023**	**59.1**	**Yes**	**53**	**n/a**	**n/a**	**3.774**	**n/a**	**n/a**	**0.0006724**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	**DGWC-38**	**40.3**	**n/a**	**9/7/2023**	**86.5**	**Yes**	**53**	**n/a**	**n/a**	**3.774**	**n/a**	**n/a**	**0.0006724**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	**DGWC-39**	**40.3**	**n/a**	**9/7/2023**	**81.2**	**Yes**	**53**	**n/a**	**n/a**	**3.774**	**n/a**	**n/a**	**0.0006724**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	**DGWC-40**	**40.3**	**n/a**	**9/7/2023**	**41**	**Yes**	**53**	**n/a**	**n/a**	**3.774**	**n/a**	**n/a**	**0.0006724**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	**DGWC-67**	**40.3**	**n/a**	**9/7/2023**	**43.3**	**Yes**	**53**	**n/a**	**n/a**	**3.774**	**n/a**	**n/a**	**0.0006724**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	**DGWC-68A**	**40.3**	**n/a**	**9/7/2023**	**53.6**	**Yes**	**53**	**n/a**	**n/a**	**3.774**	**n/a**	**n/a**	**0.0006724**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	DGWC-69	40.3	n/a	9/7/2023	8.1	No	53	n/a	n/a	3.774	n/a	n/a	0.0006724	NP Inter (normality) 1 of 2
Chloride (mg/L)	DGWC-37	8.2	n/a	9/6/2023	5.4	No	55	n/a	n/a	0	n/a	n/a	0.0006289	NP Inter (normality) 1 of 2
Chloride (mg/L)	DGWC-38	8.2	n/a	9/7/2023	8.2	No	55	n/a	n/a	0	n/a	n/a	0.0006289	NP Inter (normality) 1 of 2
Chloride (mg/L)	DGWC-39	8.2	n/a	9/7/2023	7.2	No	55	n/a	n/a	0	n/a	n/a	0.0006289	NP Inter (normality) 1 of 2
Chloride (mg/L)	**DGWC-40**	**8.2**	**n/a**	**9/7/2023**	**13.6**	**Yes**	**55**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0006289**	**NP Inter (normality) 1 of 2**
Chloride (mg/L)	**DGWC-67**	**8.2**	**n/a**	**9/7/2023**	**9.2**	**Yes**	**55**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0006289**	**NP Inter (normality) 1 of 2**
Chloride (mg/L)	DGWC-68A	8.2	n/a	9/7/2023	3.9	No	55	n/a	n/a	0	n/a	n/a	0.0006289	NP Inter (normality) 1 of 2
Chloride (mg/L)	DGWC-69	8.2	n/a	9/7/2023	5.1	No	55	n/a	n/a	0	n/a	n/a	0.0006289	NP Inter (normality) 1 of 2
Fluoride (mg/L)	DGWC-37	0.42	n/a	9/6/2023	0.053J	No	60	n/a	n/a	48.33	n/a	n/a	0.0005205	NP Inter (normality) 1 of 2
Fluoride (mg/L)	DGWC-38	0.42	n/a	9/7/2023	0.072J	No	60	n/a	n/a	48.33	n/a	n/a	0.0005205	NP Inter (normality) 1 of 2
Fluoride (mg/L)	DGWC-39	0.42	n/a	9/7/2023	0.092J	No	60	n/a	n/a	48.33	n/a	n/a	0.0005205	NP Inter (normality) 1 of 2
Fluoride (mg/L)	DGWC-40	0.42	n/a	9/7/2023	0.14	No	60	n/a	n/a	48.33	n/a	n/a	0.0005205	NP Inter (normality) 1 of 2
Fluoride (mg/L)	DGWC-67	0.42	n/a	9/7/2023	0.1ND	No	60	n/a	n/a	48.33	n/a	n/a	0.0005205	NP Inter (normality) 1 of 2
Fluoride (mg/L)	DGWC-68A	0.42	n/a	9/7/2023	0.096J	No	60	n/a	n/a	48.33	n/a	n/a	0.0005205	NP Inter (normality) 1 of 2
Fluoride (mg/L)	DGWC-69	0.42	n/a	9/7/2023	0.063J	No	60	n/a	n/a	48.33	n/a	n/a	0.0005205	NP Inter (normality) 1 of 2
pH, Field (SU)	DGWC-37	6.69	5.43	9/6/2023	6.26	No	62	n/a	n/a	0	n/a	n/a	0.0009874	NP Inter (normality) 1 of 2
pH, Field (SU)	DGWC-38	6.69	5.43	9/7/2023	6.07	No	62	n/a	n/a	0	n/a	n/a	0.0009874	NP Inter (normality) 1 of 2
pH, Field (SU)	DGWC-39	6.69	5.43	9/7/2023	6.55	No	62	n/a	n/a	0	n/a	n/a	0.0009874	NP Inter (normality) 1 of 2
pH, Field (SU)	**DGWC-40**	**6.69**	**5.43**	**9/7/2023**	**4.67**	**Yes**	**62**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0009874**	**NP Inter (normality) 1 of 2**
pH, Field (SU)	DGWC-67	6.69	5.43	9/7/2023	6.21	No	62	n/a	n/a	0	n/a	n/a	0.0009874	NP Inter (normality) 1 of 2
pH, Field (SU)	DGWC-68A	6.69	5.43	9/7/2023	6.6	No	62	n/a	n/a	0	n/a	n/a	0.0009874	NP Inter (normality) 1 of 2
pH, Field (SU)	DGWC-69	6.69	5.43	9/7/2023	6.16	No	62	n/a	n/a	0	n/a	n/a	0.0009874	NP Inter (normality) 1 of 2
Sulfate (mg/L)	**DGWC-37**	**49**	**n/a**	**9/6/2023**	**83.4**	**Yes**	**55**	**n/a**	**n/a**	**16.36**	**n/a**	**n/a**	**0.0006289**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	**DGWC-38**	**49**	**n/a**	**9/7/2023**	**212**	**Yes**	**55**	**n/a**	**n/a**	**16.36**	**n/a**	**n/a**	**0.0006289**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	**DGWC-39**	**49**	**n/a**	**9/7/2023**	**124**	**Yes**	**55**	**n/a**	**n/a**	**16.36**	**n/a**	**n/a**	**0.0006289**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	**DGWC-40**	**49**	**n/a**	**9/7/2023**	**177**	**Yes**	**55**	**n/a**	**n/a**	**16.36**	**n/a**	**n/a**	**0.0006289**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	**DGWC-67**	**49**	**n/a**	**9/7/2023**	**106**	**Yes**	**55**	**n/a**	**n/a**	**16.36**	**n/a**	**n/a**	**0.0006289**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	DGWC-68A	49	n/a	9/7/2023	34.2	No	55	n/a	n/a	16.36	n/a	n/a	0.0006289	NP Inter (normality) 1 of 2
Sulfate (mg/L)	DGWC-69	49	n/a	9/7/2023	6.9	No	55	n/a	n/a	16.36	n/a	n/a	0.0006289	NP Inter (normality) 1 of 2
Total Dissolved Solids [TDS] (mg/L)	**DGWC-37**	**238.1**	**n/a**	**9/6/2023**	**324**	**Yes**	**54**	**9.841**	**2.893**	**0**	**None**	**sqrt(x)**	**0.001075**	**Param Inter 1 of 2**
Total Dissolved Solids [TDS] (mg/L)	**DGWC-38**	**238.1**	**n/a**	**9/7/2023**	**526**	**Yes**	**54**	**9.841**	**2.893**	**0**	**None**	**sqrt(x)**	**0.001075**	**Param Inter 1 of 2**
Total Dissolved Solids [TDS] (mg/L)	**DGWC-39**	**238.1**	**n/a**	**9/7/2023**	**421**	**Yes**	**54**	**9.841**	**2.893**	**0**	**None**	**sqrt(x)**	**0.001075**	**Param Inter 1 of 2**
Total Dissolved Solids [TDS] (mg/L)	**DGWC-40**	**238.1**	**n/a**	**9/7/2023**	**359**	**Yes**	**54**	**9.841**	**2.893**	**0**	**None**	**sqrt(x)**	**0.001075**	**Param Inter 1 of 2**
Total Dissolved Solids [TDS] (mg/L)	**DGWC-67**	**238.1**	**n/a**	**9/7/2023**	**337**	**Yes**	**54**	**9.841**	**2.893**	**0**	**None**	**sqrt(x)**	**0.001075**	**Param Inter 1 of 2**
Total Dissolved Solids [TDS] (mg/L)	**DGWC-68A**	**238.1**	**n/a**	**9/7/2023**	**253**	**Yes**	**54**	**9.841**	**2.893**	**0**	**None**	**sqrt(x)**	**0.001075**	**Param Inter 1 of 2**
Total Dissolved Solids [TDS] (mg/L)	DGWC-69	238.1	n/a	9/7/2023	106	No	54	9.841	2.893	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 11/16/2023, 4:24 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Boron (mg/L)	**DGWA-53 (bg)**	**-0.003815**	**-70**	**-68**	**Yes**	**18**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	**DGWC-39**	**-0.1188**	**-83**	**-68**	**Yes**	**18**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	**DGWC-40**	**-0.02836**	**-82**	**-68**	**Yes**	**18**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	**DGWC-67**	**0.1043**	**79**	**68**	**Yes**	**18**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**DGWA-53 (bg)**	**-3.489**	**-105**	**-68**	**Yes**	**18**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**DGWC-67**	**0.8732**	**70**	**68**	**Yes**	**18**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**DGWC-68A**	**1.409**	**79**	**68**	**Yes**	**18**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	**DGWA-53 (bg)**	**-0.1444**	**-106**	**-74**	**Yes**	**19**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	**DGWA-71 (bg)**	**0.6112**	**69**	**68**	**Yes**	**18**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	**DGWC-40**	**-0.7275**	**-92**	**-68**	**Yes**	**18**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	**DGWC-67**	**0.5939**	**131**	**68**	**Yes**	**18**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**DGWA-71 (bg)**	**-0.7648**	**-99**	**-68**	**Yes**	**18**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**DGWC-38**	**-8.286**	**-81**	**-68**	**Yes**	**18**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**DGWC-39**	**-20.53**	**-108**	**-68**	**Yes**	**18**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**DGWC-40**	**-8.746**	**-85**	**-68**	**Yes**	**18**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Total Dissolved Solids [TDS] (mg/L)	**DGWA-53 (bg)**	**-19.82**	**-110**	**-68**	**Yes**	**18**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Total Dissolved Solids [TDS] (mg/L)	**DGWC-39**	**-17.23**	**-89**	**-68**	**Yes**	**18**	**0**	**n/a**	**n/a**	**0.01**	**NP**

Appendix III Trend Tests - All Results

Plant McDonough Client: Southern Company Data: McDonough AP Printed 11/16/2023, 4:24 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Boron (mg/L)	**DGWA-53 (bg)**	**-0.003815**	**-70**	**-68**	**Yes**	**18**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	DGWA-70A (bg)	0	12	68	No	18	50	n/a	n/a	0.01	NP
Boron (mg/L)	DGWA-71 (bg)	0.0006045	25	63	No	17	23.53	n/a	n/a	0.01	NP
Boron (mg/L)	DGWC-37	-0.03141	-33	-68	No	18	0	n/a	n/a	0.01	NP
Boron (mg/L)	DGWC-38	-0.05069	-59	-68	No	18	0	n/a	n/a	0.01	NP
Boron (mg/L)	**DGWC-39**	**-0.1188**	**-83**	**-68**	**Yes**	**18**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	**DGWC-40**	**-0.02836**	**-82**	**-68**	**Yes**	**18**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	**DGWC-67**	**0.1043**	**79**	**68**	**Yes**	**18**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	DGWC-68A	-0.02929	-32	-68	No	18	0	n/a	n/a	0.01	NP
Calcium (mg/L)	**DGWA-53 (bg)**	**-3.489**	**-105**	**-68**	**Yes**	**18**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	DGWA-70A (bg)	0.04315	15	68	No	18	5.556	n/a	n/a	0.01	NP
Calcium (mg/L)	DGWA-71 (bg)	-0.2966	-37	-63	No	17	5.882	n/a	n/a	0.01	NP
Calcium (mg/L)	DGWC-37	0.9165	43	68	No	18	0	n/a	n/a	0.01	NP
Calcium (mg/L)	DGWC-38	1.333	53	68	No	18	0	n/a	n/a	0.01	NP
Calcium (mg/L)	DGWC-39	-0.5609	-14	-68	No	18	0	n/a	n/a	0.01	NP
Calcium (mg/L)	DGWC-40	0.1995	15	68	No	18	0	n/a	n/a	0.01	NP
Calcium (mg/L)	**DGWC-67**	**0.8732**	**70**	**68**	**Yes**	**18**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**DGWC-68A**	**1.409**	**79**	**68**	**Yes**	**18**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	**DGWA-53 (bg)**	**-0.1444**	**-106**	**-74**	**Yes**	**19**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	DGWA-70A (bg)	-0.03406	-39	-68	No	18	0	n/a	n/a	0.01	NP
Chloride (mg/L)	**DGWA-71 (bg)**	**0.6112**	**69**	**68**	**Yes**	**18**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	**DGWC-40**	**-0.7275**	**-92**	**-68**	**Yes**	**18**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	**DGWC-67**	**0.5939**	**131**	**68**	**Yes**	**18**	**0**	**n/a**	**n/a**	**0.01**	**NP**
pH, Field (SU)	DGWA-53 (bg)	0.02783	39	87	No	21	0	n/a	n/a	0.01	NP
pH, Field (SU)	DGWA-70A (bg)	-0.02199	-46	-81	No	20	0	n/a	n/a	0.01	NP
pH, Field (SU)	DGWA-71 (bg)	0.004559	10	87	No	21	0	n/a	n/a	0.01	NP
pH, Field (SU)	DGWC-40	-0.02096	-56	-81	No	20	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	DGWA-53 (bg)	-0.3271	-19	-74	No	19	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	DGWA-70A (bg)	0	-25	-68	No	18	50	n/a	n/a	0.01	NP
Sulfate (mg/L)	**DGWA-71 (bg)**	**-0.7648**	**-99**	**-68**	**Yes**	**18**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	DGWC-37	-1.952	-51	-63	No	17	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	**DGWC-38**	**-8.286**	**-81**	**-68**	**Yes**	**18**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**DGWC-39**	**-20.53**	**-108**	**-68**	**Yes**	**18**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**DGWC-40**	**-8.746**	**-85**	**-68**	**Yes**	**18**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	DGWC-67	0	-5	-68	No	18	0	n/a	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	**DGWA-53 (bg)**	**-19.82**	**-110**	**-68**	**Yes**	**18**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Total Dissolved Solids [TDS] (mg/L)	DGWA-70A (bg)	0	0	68	No	18	0	n/a	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	DGWA-71 (bg)	-1.946	-37	-68	No	18	0	n/a	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	DGWC-37	1.283	10	68	No	18	0	n/a	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	DGWC-38	1.133	7	68	No	18	0	n/a	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	**DGWC-39**	**-17.23**	**-89**	**-68**	**Yes**	**18**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Total Dissolved Solids [TDS] (mg/L)	DGWC-40	-3.231	-27	-63	No	17	0	n/a	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	DGWC-67	0.3303	1	68	No	18	0	n/a	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	DGWC-68A	-4.867	-56	-68	No	18	0	n/a	n/a	0.01	NP

Upper Tolerance Limit Summary Table

Plant McDonough Client: Southern Company Data: McDonough AP Printed 11/16/2023, 4:29 PM

Constituent	Upper Lim.	Date	Observ.	Sig.	Bg N	%NDs	ND Adj.	Transform	Alpha	Method
Antimony (mg/L)	0.0045	n/a	n/a	n/a	56	82.14	n/a	n/a	0.05656	NP Inter(NDs)
Arsenic (mg/L)	0.0054	n/a	n/a	n/a	56	75	n/a	n/a	0.05656	NP Inter(NDs)
Barium (mg/L)	0.19	n/a	n/a	n/a	56	0	n/a	n/a	0.05656	NP Inter(normality)
Beryllium (mg/L)	0.0009	n/a	n/a	n/a	57	54.39	n/a	n/a	0.05373	NP Inter(NDs)
Cadmium (mg/L)	0.0005	n/a	n/a	n/a	56	92.86	n/a	n/a	0.05656	NP Inter(NDs)
Chromium (mg/L)	0.005	n/a	n/a	n/a	55	69.09	n/a	n/a	0.05954	NP Inter(NDs)
Cobalt (mg/L)	0.0322	n/a	n/a	n/a	56	42.86	n/a	n/a	0.05656	NP Inter(normality)
Combined Radium 226 + 228 (pCi/L)	4.866	n/a	n/a	n/a	58	0	None	x^(1/3)	0.05	Inter
Fluoride (mg/L)	0.42	n/a	n/a	n/a	60	48.33	n/a	n/a	0.04607	NP Inter(normality)
Lead (mg/L)	0.001	n/a	n/a	n/a	56	83.93	n/a	n/a	0.05656	NP Inter(NDs)
Lithium (mg/L)	0.03	n/a	n/a	n/a	56	35.71	n/a	n/a	0.05656	NP Inter(normality)
Mercury (mg/L)	0.0002	n/a	n/a	n/a	56	85.71	n/a	n/a	0.05656	NP Inter(NDs)
Molybdenum (mg/L)	0.0409	n/a	n/a	n/a	56	64.29	n/a	n/a	0.05656	NP Inter(NDs)
Selenium (mg/L)	0.005	n/a	n/a	n/a	56	100	n/a	n/a	0.05656	NP Inter(NDs)
Thallium (mg/L)	0.001	n/a	n/a	n/a	56	94.64	n/a	n/a	0.05656	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		0.0045	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		4.87	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 Data: McDonough AP Printed 11/22/2023, 12:06 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	%NDs	ND Adj.	Transform	Alpha	Method
Arsenic (mg/L)	**DGWC-69**	**0.03524**	**0.01402**	**0.01**	**Yes**	**21**	**0**	**None**	**ln(x)**	**0.01**	**Param.**
Cobalt (mg/L)	**DGWC-40**	**0.04415**	**0.03748**	**0.032**	**Yes**	**19**	**0**	**None**	**No**	**0.01**	**Param.**
Molybdenum (mg/L)	**DGWC-68A**	**0.2185**	**0.1943**	**0.1**	**Yes**	**19**	**0**	**None**	**ln(x)**	**0.01**	**Param.**

Confidence Intervals - All Results

Plant McDonough Data: McDonough AP Printed 11/22/2023, 12:06 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	%NDs	ND Adj.	Transform	Alpha	Method
Antimony (mg/L)	B-100	0.003	0.0013	0.006	No	8	75	None	No	0.004	NP (NDs)
Antimony (mg/L)	B-105D	0.0082	0.00069	0.006	No	7	57.14	None	No	0.008	NP (NDs)
Antimony (mg/L)	B-112D	0.003	0.00041	0.006	No	6	83.33	None	No	0.0155	NP (NDs)
Antimony (mg/L)	B-62	0.003	0.003	0.006	No	11	90.91	None	No	0.006	NP (NDs)
Antimony (mg/L)	DGWC-37	0.003	0.0014	0.006	No	18	94.44	None	No	0.01	NP (NDs)
Antimony (mg/L)	DGWC-40	0.003	0.00033	0.006	No	18	94.44	None	No	0.01	NP (NDs)
Antimony (mg/L)	DGWC-67	0.0039	0.0023	0.006	No	18	77.78	None	No	0.01	NP (NDs)
Antimony (mg/L)	DGWC-68A	0.003	0.0008	0.006	No	18	88.89	None	No	0.01	NP (NDs)
Antimony (mg/L)	DGWC-69	0.003	0.0019	0.006	No	19	84.21	None	No	0.01	NP (NDs)
Arsenic (mg/L)	B-105D	0.0051	0.0025	0.01	No	7	57.14	None	No	0.008	NP (NDs)
Arsenic (mg/L)	B-112D	0.005	0.00078	0.01	No	6	66.67	None	No	0.0155	NP (NDs)
Arsenic (mg/L)	B-62	0.005	0.005	0.01	No	11	90.91	None	No	0.006	NP (NDs)
Arsenic (mg/L)	DGWC-37	0.005	0.0019	0.01	No	19	94.74	None	No	0.01	NP (NDs)
Arsenic (mg/L)	DGWC-38	0.005	0.0005	0.01	No	19	94.74	None	No	0.01	NP (NDs)
Arsenic (mg/L)	DGWC-39	0.005	0.00075	0.01	No	19	57.89	None	No	0.01	NP (NDs)
Arsenic (mg/L)	DGWC-40	0.005	0.003	0.01	No	19	78.95	None	No	0.01	NP (NDs)
Arsenic (mg/L)	DGWC-67	0.005	0.0033	0.01	No	19	84.21	None	No	0.01	NP (NDs)
Arsenic (mg/L)	DGWC-68A	0.005	0.0016	0.01	No	19	94.74	None	No	0.01	NP (NDs)
Arsenic (mg/L)	**DGWC-69**	**0.03524**	**0.01402**	**0.01**	**Yes**	**21**	**0**	**None**	**ln(x)**	**0.01**	**Param.**
Barium (mg/L)	B-100	0.098	0.015	2	No	8	0	None	No	0.004	NP (normality)
Barium (mg/L)	B-105D	0.04061	0.03196	2	No	7	0	None	No	0.01	Param.
Barium (mg/L)	B-112D	0.026	0.0026	2	No	6	0	None	No	0.0155	NP (normality)
Barium (mg/L)	B-62	0.02504	0.01841	2	No	11	0	None	No	0.01	Param.
Barium (mg/L)	DGWC-37	0.1054	0.08679	2	No	19	0	None	No	0.01	Param.
Barium (mg/L)	DGWC-38	0.03322	0.03113	2	No	19	0	None	x^5	0.01	Param.
Barium (mg/L)	DGWC-39	0.09697	0.08608	2	No	19	0	None	No	0.01	Param.
Barium (mg/L)	DGWC-40	0.018	0.0163	2	No	19	0	None	No	0.01	NP (normality)
Barium (mg/L)	DGWC-67	0.1087	0.09352	2	No	19	0	None	No	0.01	Param.
Barium (mg/L)	DGWC-68A	0.098	0.086	2	No	19	0	None	No	0.01	NP (normality)
Barium (mg/L)	DGWC-69	0.09388	0.06299	2	No	20	0	None	No	0.01	Param.
Beryllium (mg/L)	B-100	0.0005753	0.0003347	0.004	No	8	12.5	None	No	0.01	Param.
Beryllium (mg/L)	B-62	0.0025	0.00009	0.004	No	12	16.67	None	No	0.01	NP (normality)
Beryllium (mg/L)	DGWC-37	0.0005	0.00007	0.004	No	19	57.89	None	No	0.01	NP (NDs)
Beryllium (mg/L)	DGWC-38	0.0005	0.000058	0.004	No	19	94.74	None	No	0.01	NP (NDs)
Beryllium (mg/L)	DGWC-40	0.0033	0.002843	0.004	No	19	5.263	None	x^3	0.01	Param.
Beryllium (mg/L)	DGWC-68A	0.0005	0.000084	0.004	No	19	89.47	None	No	0.01	NP (NDs)
Beryllium (mg/L)	DGWC-69	0.0005	0.000063	0.004	No	20	60	None	No	0.01	NP (NDs)
Cadmium (mg/L)	B-100	0.00059	0.00025	0.005	No	8	12.5	None	No	0.004	NP (normality)
Cadmium (mg/L)	DGWC-37	0.0005	0.0002	0.005	No	19	73.68	None	No	0.01	NP (NDs)
Cadmium (mg/L)	DGWC-38	0.0005	0.00017	0.005	No	19	21.05	None	No	0.01	NP (normality)
Cadmium (mg/L)	DGWC-40	0.0008391	0.0007101	0.005	No	19	10.53	None	x^2	0.01	Param.
Cadmium (mg/L)	DGWC-67	0.00053	0.00021	0.005	No	19	73.68	None	No	0.01	NP (NDs)
Cadmium (mg/L)	DGWC-68A	0.0002339	0.0001464	0.005	No	19	47.37	Kaplan-Meier	x^(1/3)	0.01	Param.
Cadmium (mg/L)	DGWC-69	0.0005	0.0002	0.005	No	20	80	None	No	0.01	NP (NDs)
Chromium (mg/L)	B-100	0.005	0.00057	0.1	No	8	75	None	No	0.004	NP (NDs)
Chromium (mg/L)	B-105D	0.005	0.0012	0.1	No	7	85.71	None	No	0.008	NP (NDs)
Chromium (mg/L)	B-112D	0.005	0.00085	0.1	No	6	66.67	None	No	0.0155	NP (NDs)
Chromium (mg/L)	B-62	0.005	0.005	0.1	No	11	90.91	None	No	0.006	NP (NDs)
Chromium (mg/L)	DGWC-37	0.005	0.0007	0.1	No	19	89.47	None	No	0.01	NP (NDs)
Chromium (mg/L)	DGWC-38	0.005	0.00092	0.1	No	19	84.21	None	No	0.01	NP (NDs)
Chromium (mg/L)	DGWC-40	0.005	0.0007	0.1	No	19	47.37	None	No	0.01	NP (normality)
Chromium (mg/L)	DGWC-67	0.005	0.0014	0.1	No	19	78.95	None	No	0.01	NP (NDs)
Chromium (mg/L)	DGWC-68A	0.005	0.0005	0.1	No	19	94.74	None	No	0.01	NP (NDs)
Chromium (mg/L)	DGWC-69	0.005	0.0013	0.1	No	20	75	None	No	0.01	NP (NDs)
Cobalt (mg/L)	B-100	0.07002	0.01754	0.032	No	10	10	None	sqrt(x)	0.01	Param.
Cobalt (mg/L)	B-105D	0.009078	0.00257	0.032	No	7	0	None	sqrt(x)	0.01	Param.
Cobalt (mg/L)	B-112D	0.005	0.0004	0.032	No	6	50	None	No	0.0155	NP (normality)
Cobalt (mg/L)	B-62	0.005	0.00031	0.032	No	12	83.33	None	No	0.01	NP (NDs)
Cobalt (mg/L)	DGWC-37	0.005	0.0005	0.032	No	19	84.21	None	No	0.01	NP (NDs)
Cobalt (mg/L)	DGWC-38	0.0017	0.0015	0.032	No	19	10.53	None	No	0.01	NP (normality)
Cobalt (mg/L)	DGWC-39	0.006636	0.005785	0.032	No	19	10.53	None	No	0.01	Param.
Cobalt (mg/L)	**DGWC-40**	**0.04415**	**0.03748**	**0.032**	**Yes**	**19**	**0**	**None**	**No**	**0.01**	**Param.**
Cobalt (mg/L)	DGWC-67	0.0041	0.0012	0.032	No	19	10.53	None	No	0.01	NP (normality)
Cobalt (mg/L)	DGWC-68A	0.005	0.0015	0.032	No	19	84.21	None	No	0.01	NP (NDs)
Cobalt (mg/L)	DGWC-69	0.005	0.0028	0.032	No	20	70	None	No	0.01	NP (NDs)
Combined Radium 226 + 228 (pCi/L)	B-100	1.134	0.3305	5	No	8	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	B-105D	5.526	0.832	5	No	6	0	None	sqrt(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	B-112D	1.76	0.241	5	No	5	0	None	No	0.031	NP (selected)

Confidence Intervals - All Results

Plant McDonough Data: McDonough AP Printed 11/22/2023, 12:06 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	%NDs	ND Adj.	Transform	Alpha	Method
Combined Radium 226 + 228 (pCi/L)	B-62	1.992	1.426	5	No	10	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	DGWC-37	1.069	0.5663	5	No	18	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	DGWC-38	0.9592	0.3387	5	No	18	0	None	sqrt(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	DGWC-39	1.245	0.6391	5	No	18	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	DGWC-40	1.473	0.6808	5	No	18	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	DGWC-67	0.9342	0.4769	5	No	18	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	DGWC-68A	1.336	0.6252	5	No	18	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	DGWC-69	1.765	1.158	5	No	19	0	None	No	0.01	Param.
Fluoride (mg/L)	B-100	0.1	0.052	4	No	8	75	None	No	0.004	NP (NDs)
Fluoride (mg/L)	B-105D	0.32	0.058	4	No	7	0	None	No	0.008	NP (normality)
Fluoride (mg/L)	B-112D	0.3415	0.2518	4	No	6	0	None	No	0.01	Param.
Fluoride (mg/L)	B-62	0.23	0.099	4	No	10	0	None	No	0.011	NP (normality)
Fluoride (mg/L)	DGWC-37	0.089	0.057	4	No	20	5	None	No	0.01	NP (normality)
Fluoride (mg/L)	DGWC-38	0.1456	0.07595	4	No	20	10	None	ln(x)	0.01	Param.
Fluoride (mg/L)	DGWC-39	0.15	0.086	4	No	20	5	None	No	0.01	NP (normality)
Fluoride (mg/L)	DGWC-40	0.258	0.132	4	No	20	5	None	ln(x)	0.01	Param.
Fluoride (mg/L)	DGWC-67	0.1	0.068	4	No	20	50	None	No	0.01	NP (normality)
Fluoride (mg/L)	DGWC-68A	0.15	0.082	4	No	20	5	None	No	0.01	NP (normality)
Fluoride (mg/L)	DGWC-69	0.155	0.0876	4	No	21	4.762	None	sqrt(x)	0.01	Param.
Lead (mg/L)	B-100	0.001	0.000088	0.015	No	8	62.5	None	No	0.004	NP (NDs)
Lead (mg/L)	B-105D	0.001	0.000052	0.015	No	7	85.71	None	No	0.008	NP (NDs)
Lead (mg/L)	B-112D	0.001	0.00014	0.015	No	6	83.33	None	No	0.0155	NP (NDs)
Lead (mg/L)	DGWC-37	0.0014	0.000061	0.015	No	19	89.47	None	No	0.01	NP (NDs)
Lead (mg/L)	DGWC-38	0.001	0.00014	0.015	No	19	73.68	None	No	0.01	NP (NDs)
Lead (mg/L)	DGWC-39	0.001	0.00022	0.015	No	19	89.47	None	No	0.01	NP (NDs)
Lead (mg/L)	DGWC-40	0.001	0.000081	0.015	No	19	57.89	None	No	0.01	NP (NDs)
Lead (mg/L)	DGWC-67	0.001	0.00025	0.015	No	19	78.95	None	No	0.01	NP (NDs)
Lead (mg/L)	DGWC-68A	0.001	0.00035	0.015	No	19	89.47	None	No	0.01	NP (NDs)
Lead (mg/L)	DGWC-69	0.001	0.0001	0.015	No	20	65	None	No	0.01	NP (NDs)
Lithium (mg/L)	B-100	0.015	0.0013	0.04	No	8	12.5	None	No	0.004	NP (normality)
Lithium (mg/L)	B-105D	0.015	0.013	0.04	No	7	0	None	No	0.008	NP (normality)
Lithium (mg/L)	B-112D	0.004555	0.003679	0.04	No	6	0	None	No	0.01	Param.
Lithium (mg/L)	B-62	0.0094	0.0078	0.04	No	11	9.091	None	No	0.006	NP (normality)
Lithium (mg/L)	DGWC-37	0.0029	0.0019	0.04	No	19	21.05	None	No	0.01	NP (normality)
Lithium (mg/L)	DGWC-38	0.0034	0.0028	0.04	No	19	5.263	None	No	0.01	NP (normality)
Lithium (mg/L)	DGWC-40	0.0027	0.0022	0.04	No	19	10.53	None	No	0.01	NP (normality)
Lithium (mg/L)	DGWC-67	0.005	0.0044	0.04	No	19	5.263	None	No	0.01	NP (normality)
Lithium (mg/L)	DGWC-68A	0.03	0.0016	0.04	No	19	89.47	None	No	0.01	NP (NDs)
Lithium (mg/L)	DGWC-69	0.0032	0.0023	0.04	No	20	5	None	No	0.01	NP (normality)
Mercury (mg/L)	B-100	0.0002	0.00011	0.002	No	7	85.71	None	No	0.008	NP (NDs)
Mercury (mg/L)	B-105D	0.0002	0.000087	0.002	No	6	66.67	None	No	0.0155	NP (NDs)
Mercury (mg/L)	DGWC-37	0.0002	0.000091	0.002	No	18	83.33	None	No	0.01	NP (NDs)
Mercury (mg/L)	DGWC-38	0.0002	0.000085	0.002	No	18	83.33	None	No	0.01	NP (NDs)
Mercury (mg/L)	DGWC-39	0.0002	0.000059	0.002	No	18	94.44	None	No	0.01	NP (NDs)
Mercury (mg/L)	DGWC-40	0.0002	0.00009	0.002	No	18	83.33	None	No	0.01	NP (NDs)
Mercury (mg/L)	DGWC-67	0.0002	0.00007	0.002	No	18	94.44	None	No	0.01	NP (NDs)
Mercury (mg/L)	DGWC-68A	0.0002	0.00007	0.002	No	18	94.44	None	No	0.01	NP (NDs)
Mercury (mg/L)	DGWC-69	0.0002	0.00007	0.002	No	19	94.74	None	No	0.01	NP (NDs)
Molybdenum (mg/L)	B-100	0.19	0.01	0.1	No	8	87.5	None	No	0.004	NP (NDs)
Molybdenum (mg/L)	B-105D	0.01	0.0011	0.1	No	7	85.71	None	No	0.008	NP (NDs)
Molybdenum (mg/L)	B-112D	0.03608	0.02559	0.1	No	6	0	None	No	0.01	Param.
Molybdenum (mg/L)	DGWC-38	0.01	0.001	0.1	No	19	36.84	None	No	0.01	NP (normality)
Molybdenum (mg/L)	DGWC-39	0.01	0.0016	0.1	No	19	94.74	None	No	0.01	NP (NDs)
Molybdenum (mg/L)	DGWC-67	0.01	0.0013	0.1	No	19	94.74	None	No	0.01	NP (NDs)
Molybdenum (mg/L)	**DGWC-68A**	**0.2185**	**0.1943**	**0.1**	**Yes**	**19**	**0**	**None**	**ln(x)**	**0.01**	**Param.**
Molybdenum (mg/L)	DGWC-69	0.011	0.0056	0.1	No	20	5	None	No	0.01	NP (normality)
Selenium (mg/L)	B-100	0.005	0.0019	0.05	No	8	87.5	None	No	0.004	NP (NDs)
Selenium (mg/L)	DGWC-38	0.005	0.0019	0.05	No	19	94.74	None	No	0.01	NP (NDs)
Selenium (mg/L)	DGWC-40	0.003057	0.001861	0.05	No	19	31.58	Kaplan-Meier	ln(x)	0.01	Param.
Selenium (mg/L)	DGWC-67	0.005	0.0027	0.05	No	19	94.74	Kaplan-Meier	No	0.01	NP (NDs)
Selenium (mg/L)	DGWC-68A	0.005	0.0017	0.05	No	19	94.74	Kaplan-Meier	No	0.01	NP (NDs)
Thallium (mg/L)	DGWC-38	0.001	0.00014	0.002	No	19	57.89	None	No	0.01	NP (NDs)
Thallium (mg/L)	DGWC-39	0.001	0.0001	0.002	No	19	73.68	None	No	0.01	NP (NDs)
Thallium (mg/L)	DGWC-40	0.001	0.00007	0.002	No	19	73.68	None	No	0.01	NP (NDs)
Thallium (mg/L)	DGWC-68A	0.001	0.00015	0.002	No	19	94.74	None	No	0.01	NP (NDs)

Appendix IV Trend Tests - Significant Results

Plant McDonough Client: Southern Company Data: McDonough AP Printed 11/21/2023, 4:51 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Arsenic (mg/L)	**DGWC-69**	**0.002458**	**67**	**66**	**Yes**	**21**	**0**	**n/a**	**n/a**	**0.05**	**NP**
Cobalt (mg/L)	**DGWA-53 (bg)**	**-0.003507**	**-107**	**-58**	**Yes**	**19**	**0**	**n/a**	**n/a**	**0.05**	**NP**
Cobalt (mg/L)	**DGWA-71 (bg)**	**0**	**55**	**53**	**Yes**	**18**	**72.22**	**n/a**	**n/a**	**0.05**	**NP**
Molybdenum (mg/L)	**DGWC-68A**	**-0.005078**	**-63**	**-58**	**Yes**	**19**	**0**	**n/a**	**n/a**	**0.05**	**NP**

Appendix IV Trend Tests - All Results

Plant McDonough Client: Southern Company Data: McDonough AP Printed 11/21/2023, 4:51 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Arsenic (mg/L)	DGWA-53 (bg)	0	6	58	No	19	57.89	n/a	n/a	0.05	NP
Arsenic (mg/L)	DGWA-70A (bg)	0	-25	-58	No	19	84.21	n/a	n/a	0.05	NP
Arsenic (mg/L)	DGWA-71 (bg)	0	26	53	No	18	83.33	n/a	n/a	0.05	NP
Arsenic (mg/L)	**DGWC-69**	**0.002458**	**67**	**66**	**Yes**	**21**	**0**	**n/a**	**n/a**	**0.05**	**NP**
Cobalt (mg/L)	**DGWA-53 (bg)**	**-0.003507**	**-107**	**-58**	**Yes**	**19**	**0**	**n/a**	**n/a**	**0.05**	**NP**
Cobalt (mg/L)	DGWA-70A (bg)	0	45	58	No	19	57.89	n/a	n/a	0.05	NP
Cobalt (mg/L)	**DGWA-71 (bg)**	**0**	**55**	**53**	**Yes**	**18**	**72.22**	**n/a**	**n/a**	**0.05**	**NP**
Cobalt (mg/L)	DGWC-40	0.00052	15	58	No	19	0	n/a	n/a	0.05	NP
Molybdenum (mg/L)	DGWA-53 (bg)	-0.001775	-56	-58	No	19	0	n/a	n/a	0.05	NP
Molybdenum (mg/L)	DGWA-70A (bg)	0	0	58	No	19	100	n/a	n/a	0.05	NP
Molybdenum (mg/L)	DGWA-71 (bg)	0	17	53	No	18	94.44	n/a	n/a	0.05	NP
Molybdenum (mg/L)	**DGWC-68A**	**-0.005078**	**-63**	**-58**	**Yes**	**19**	**0**	**n/a**	**n/a**	**0.05**	**NP**

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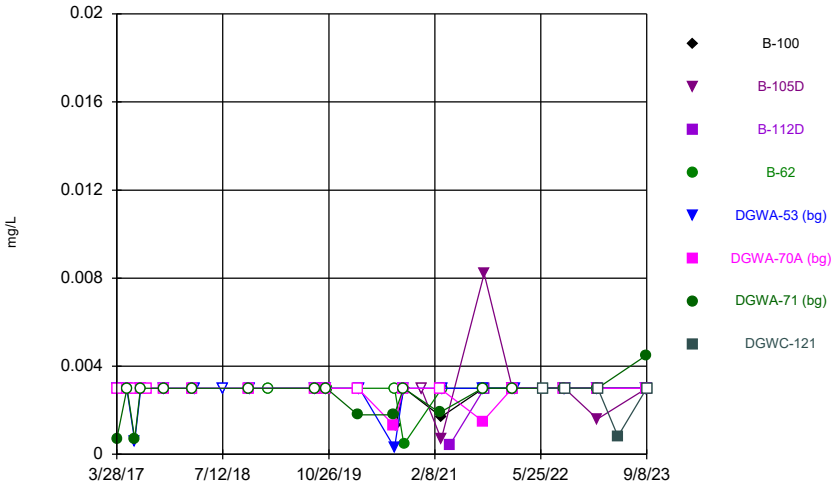
FIGURE A.

Sanitas™ v.10.0.10 Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

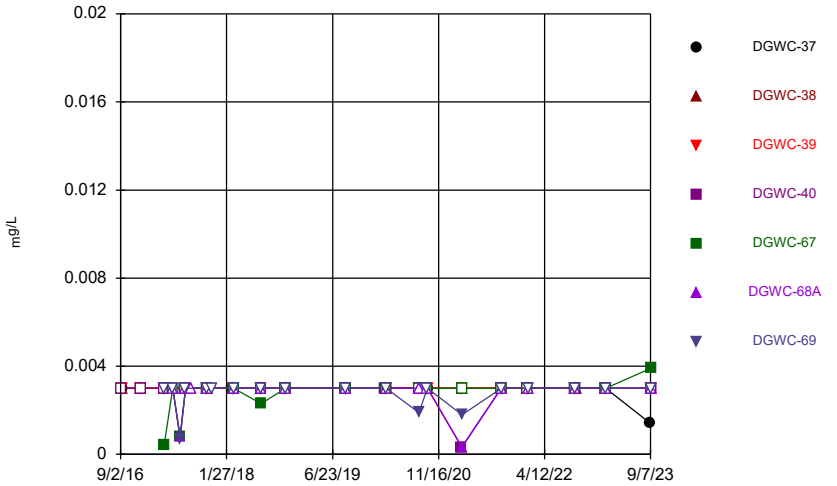
Time Series



Constituent: Antimony Analysis Run 11/16/2023 4:08 PM View: AP 1
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.10.0.10 Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

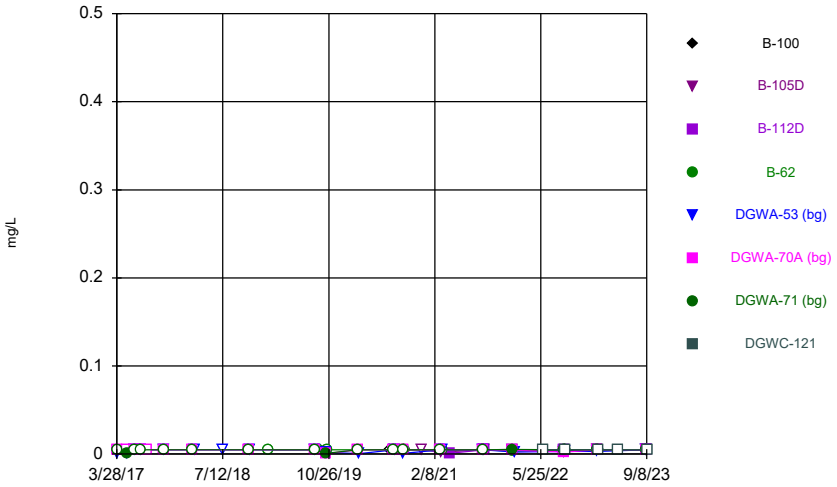
Time Series



Constituent: Antimony Analysis Run 11/16/2023 4:08 PM View: AP 1
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.10.0.10 Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

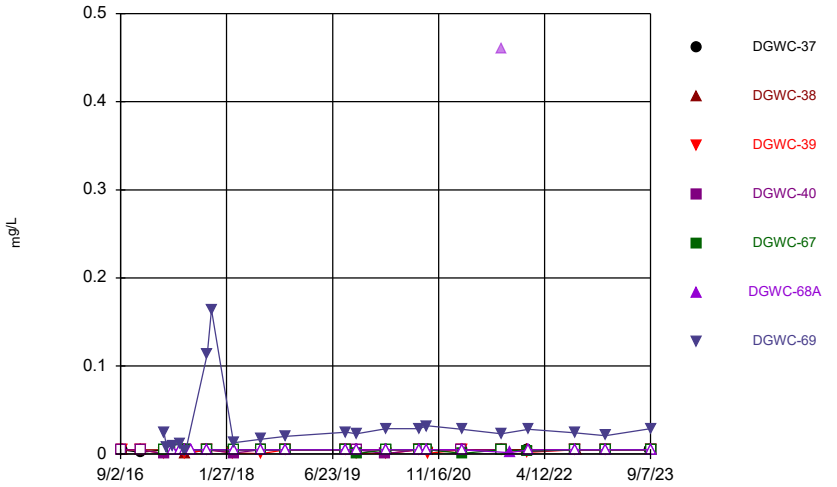
Time Series



Constituent: Arsenic Analysis Run 11/16/2023 4:08 PM View: AP 1
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.10.0.10 Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

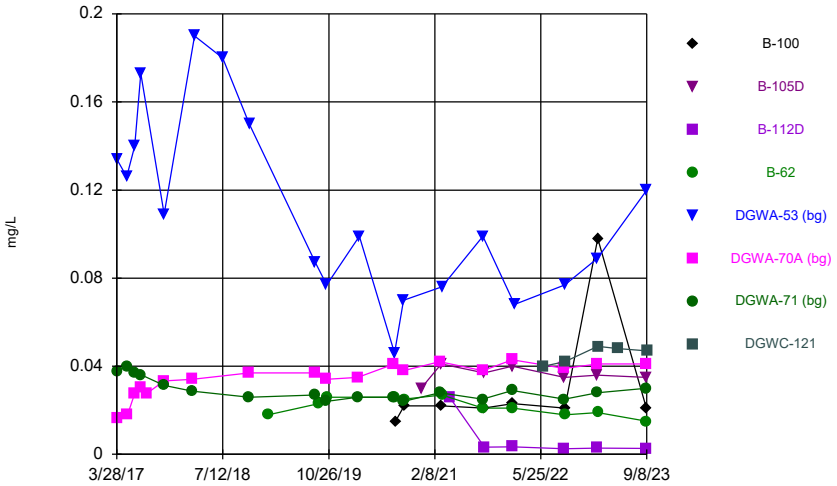
Time Series



Constituent: Arsenic Analysis Run 11/16/2023 4:08 PM View: AP 1
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.10.0.10 Sanitas software utilized by Groundwater Stats Consulting. UG

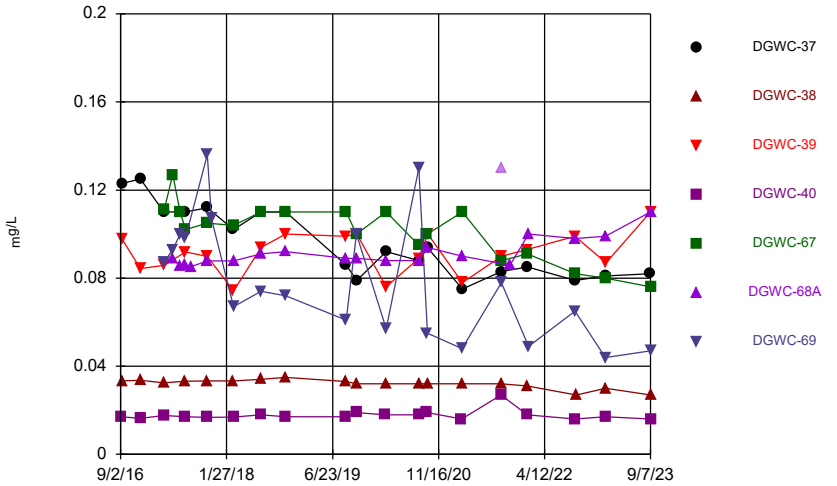
Time Series



Constituent: Barium Analysis Run 11/16/2023 4:08 PM View: AP 1
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.10.0.10 Sanitas software utilized by Groundwater Stats Consulting. UG

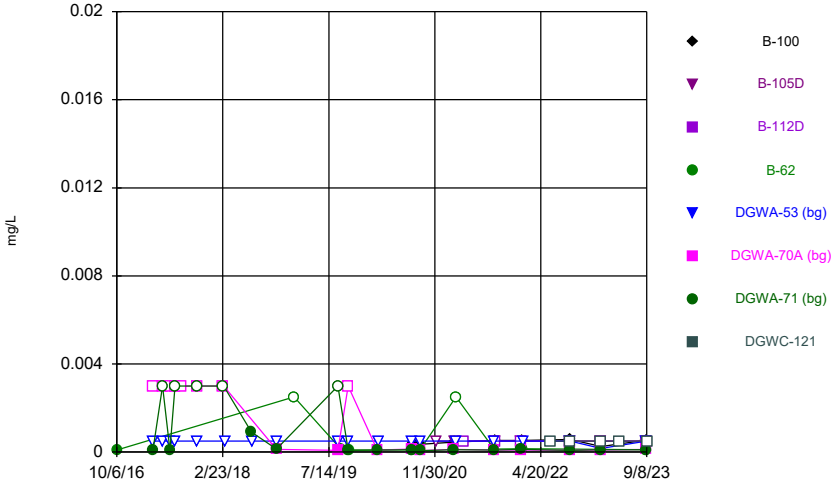
Time Series



Constituent: Barium Analysis Run 11/16/2023 4:08 PM View: AP 1
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.10.0.10 Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

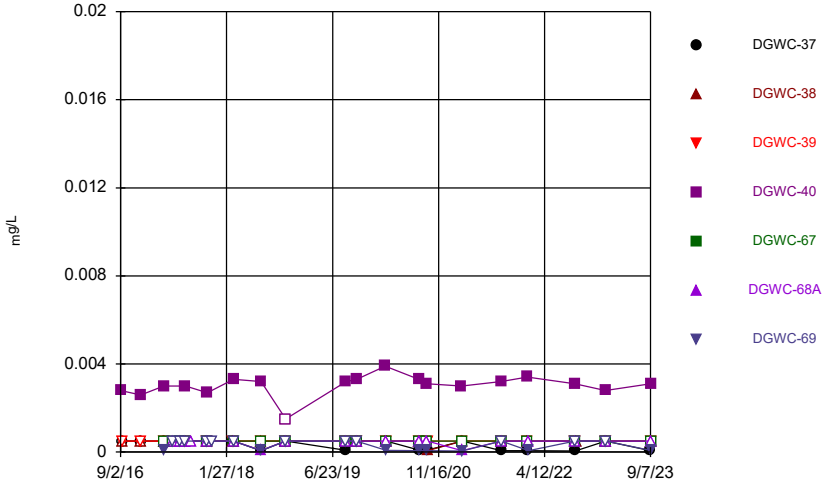
Time Series



Constituent: Beryllium Analysis Run 11/16/2023 4:08 PM View: AP 1
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.10.0.10 Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

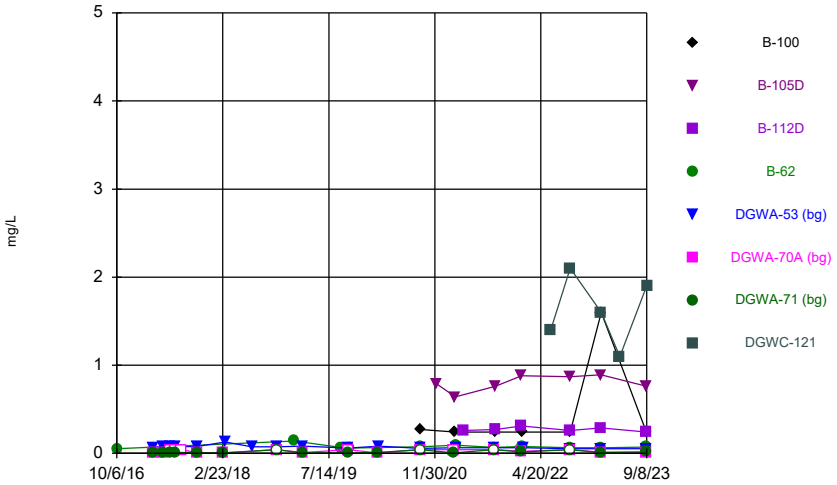
Time Series



Constituent: Beryllium Analysis Run 11/16/2023 4:08 PM View: AP 1
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.10.0.10 Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

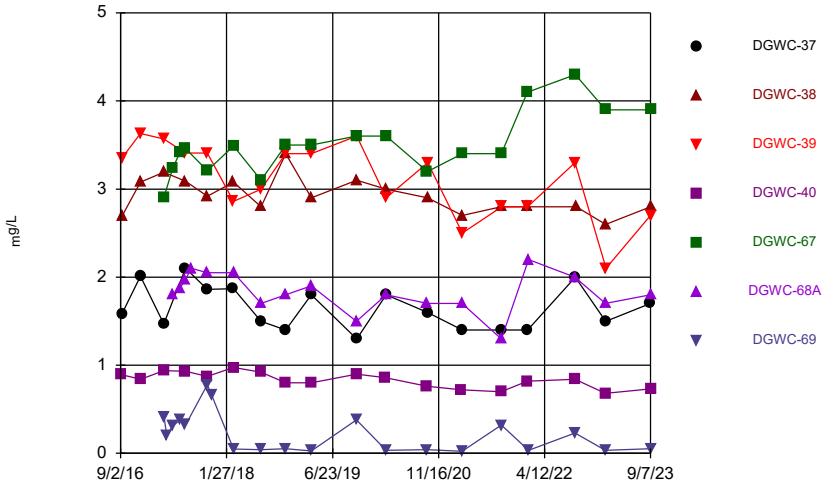
Time Series



Constituent: Boron Analysis Run 11/16/2023 4:08 PM View: AP 1
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.10.0.10 Sanitas software utilized by Groundwater Stats Consulting. UG

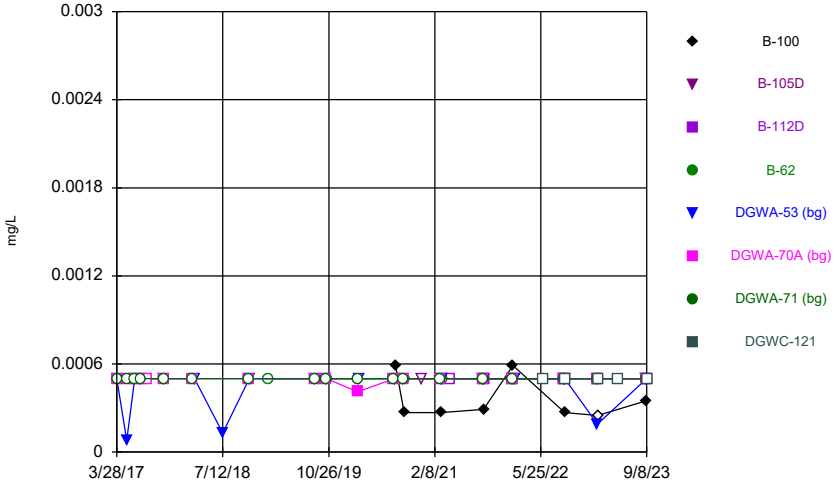
Time Series



Constituent: Boron Analysis Run 11/16/2023 4:09 PM View: AP 1
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.10.0.10 Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

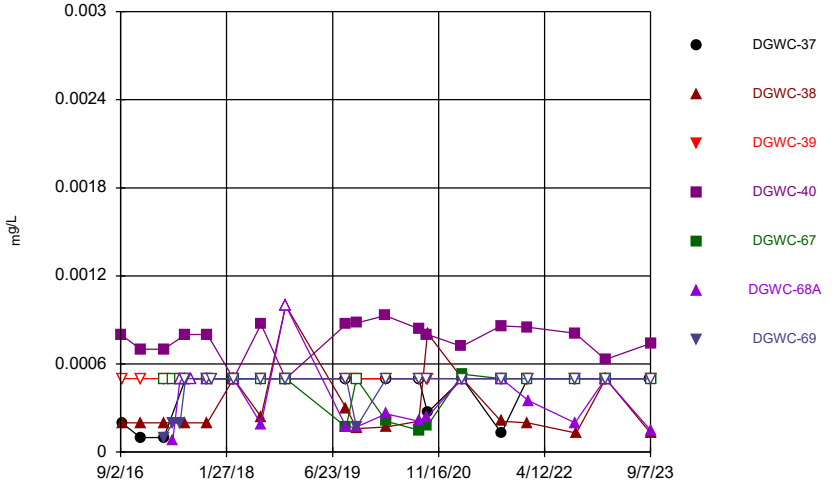
Time Series



Constituent: Cadmium Analysis Run 11/16/2023 4:09 PM View: AP 1
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.10.0.10 Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

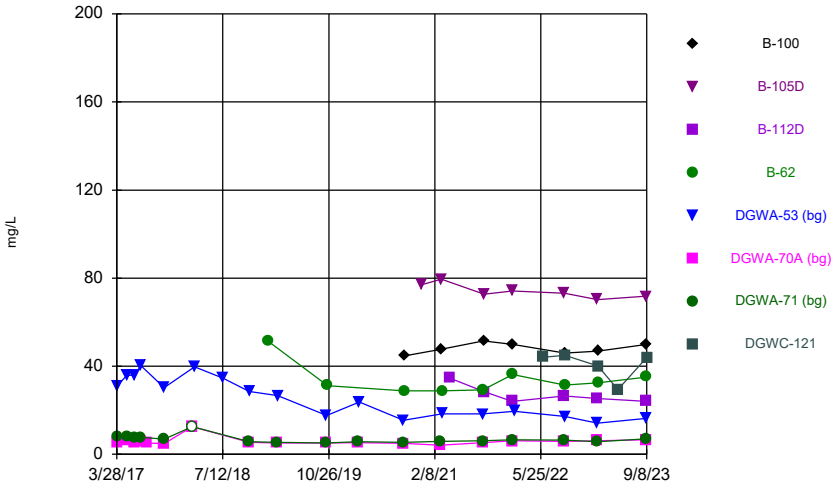
Time Series



Constituent: Cadmium Analysis Run 11/16/2023 4:09 PM View: AP 1
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.10.0.10 Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

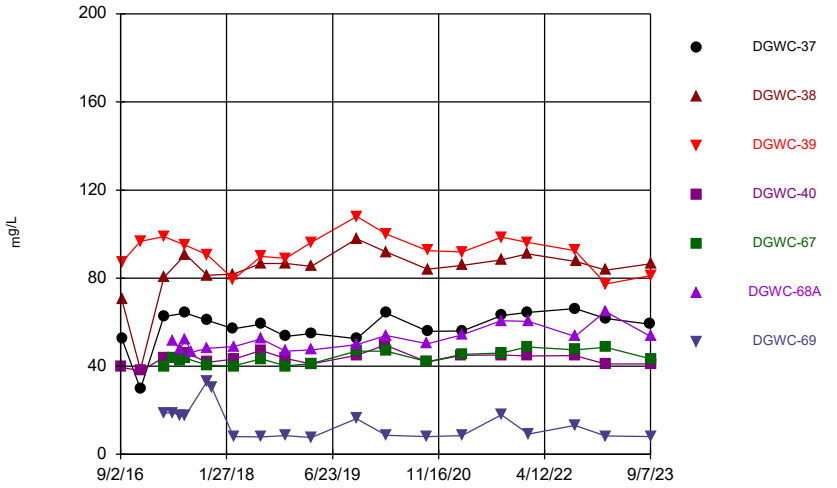
Time Series



Constituent: Calcium Analysis Run 11/16/2023 4:09 PM View: AP 1
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.10.0.10 Sanitas software utilized by Groundwater Stats Consulting. UG

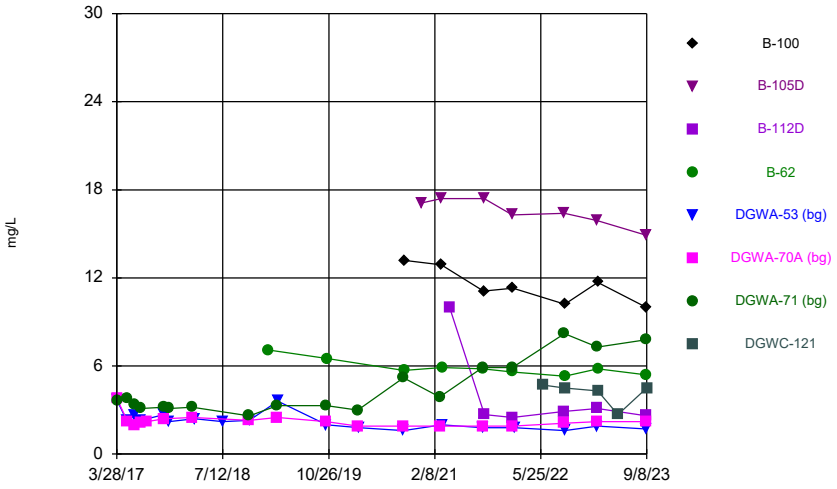
Time Series



Constituent: Calcium Analysis Run 11/16/2023 4:09 PM View: AP 1
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.10.0.10 Sanitas software utilized by Groundwater Stats Consulting. UG

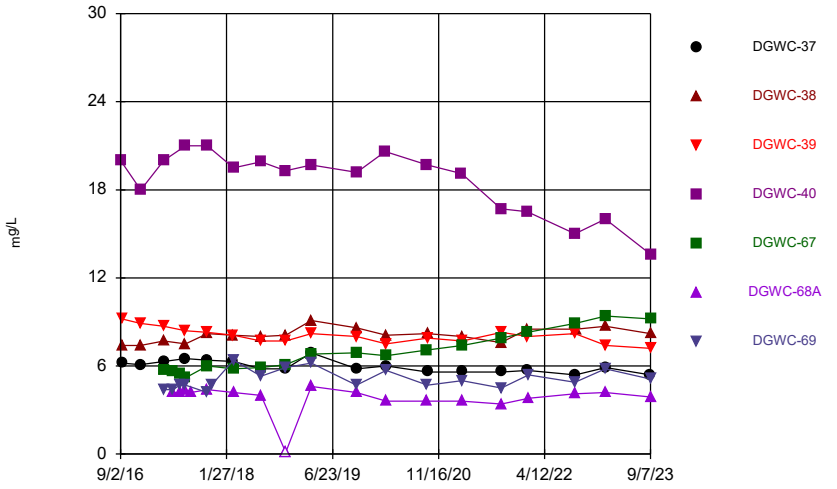
Time Series



Constituent: Chloride Analysis Run 11/16/2023 4:09 PM View: AP 1
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.10.0.10 Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

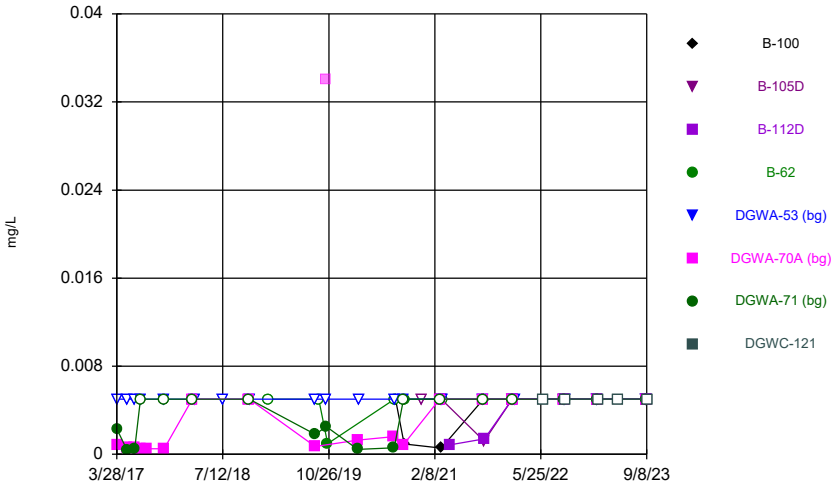
Time Series



Constituent: Chloride Analysis Run 11/16/2023 4:09 PM View: AP 1
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.10.0.10 Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

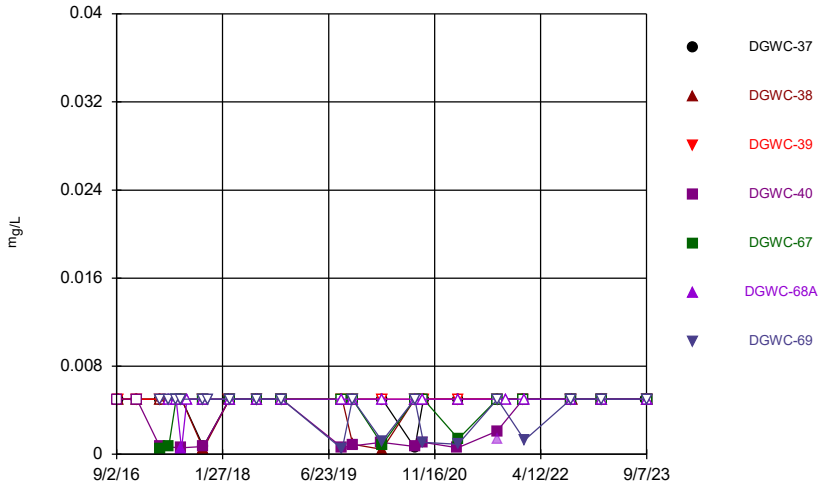
Time Series



Constituent: Chromium Analysis Run 11/16/2023 4:09 PM View: AP 1
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.10.0.10 Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

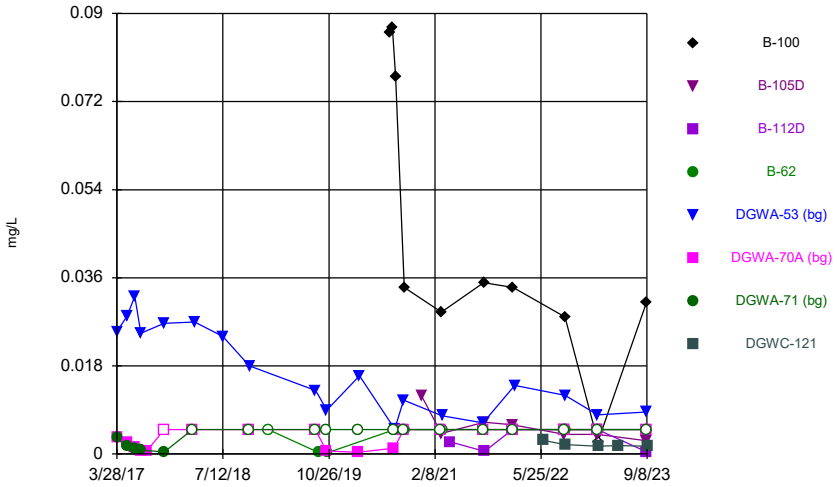
Time Series



Constituent: Chromium Analysis Run 11/16/2023 4:09 PM View: AP 1
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.10.0.10 Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

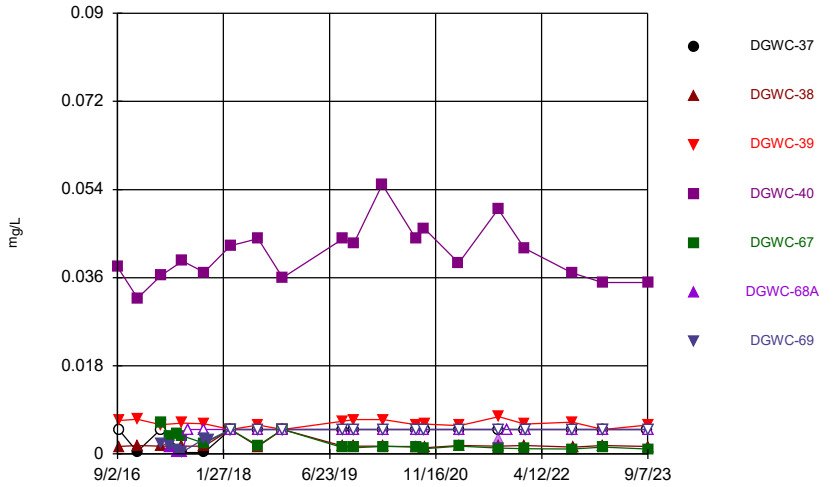
Time Series



Constituent: Cobalt Analysis Run 11/16/2023 4:09 PM View: AP 1
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.10.0.10 Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

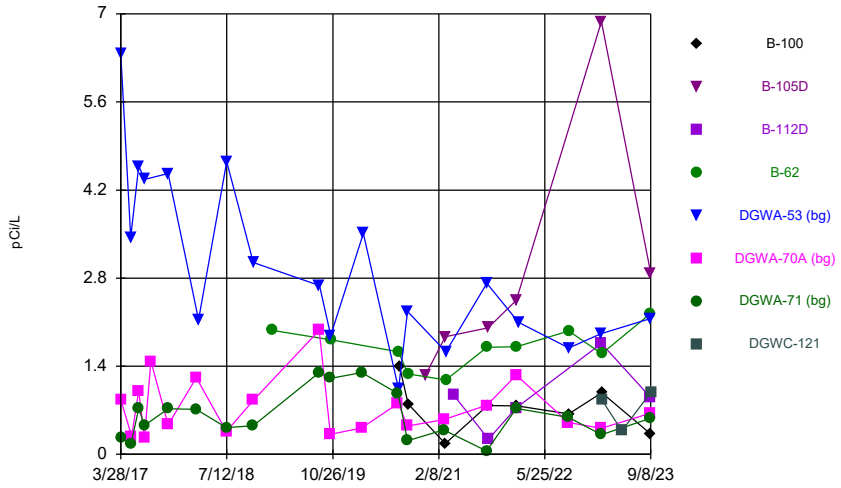
Time Series



Constituent: Cobalt Analysis Run 11/16/2023 4:09 PM View: AP 1
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.10.0.10 Sanitas software utilized by Groundwater Stats Consulting. UG

Time Series

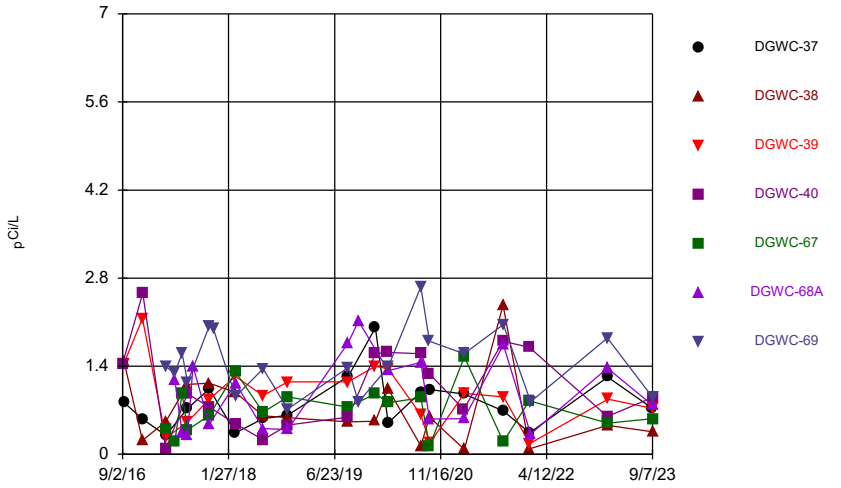


Constituent: Combined Radium 226 + 228 Analysis Run 11/16/2023 4:09 PM View: AP 1

Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.10.0.10 Sanitas software utilized by Groundwater Stats Consulting. UG

Time Series

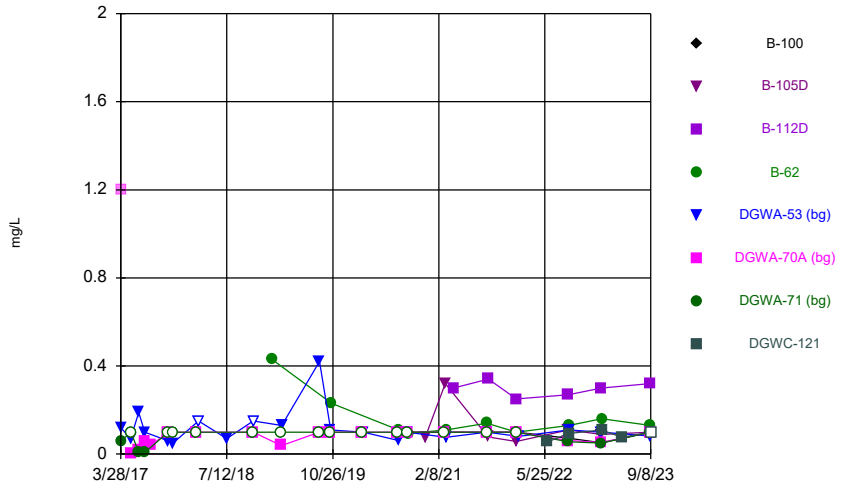


Constituent: Combined Radium 226 + 228 Analysis Run 11/16/2023 4:09 PM View: AP 1

Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.10.0.10 Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Time Series

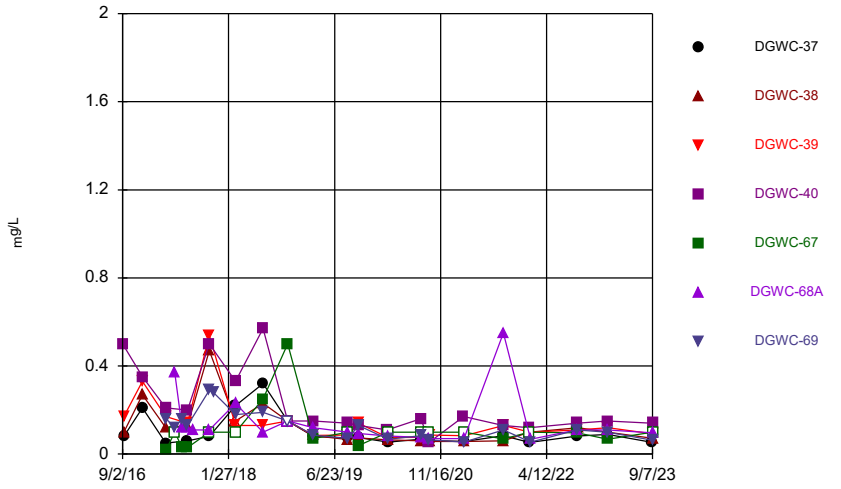


Constituent: Fluoride Analysis Run 11/16/2023 4:09 PM View: AP 1

Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.10.0.10 Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Time Series

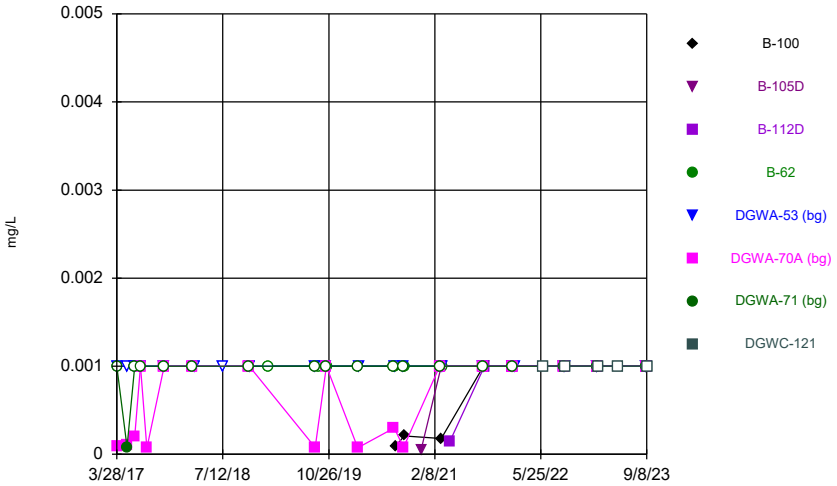


Constituent: Fluoride Analysis Run 11/16/2023 4:09 PM View: AP 1

Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.10.0.10 Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

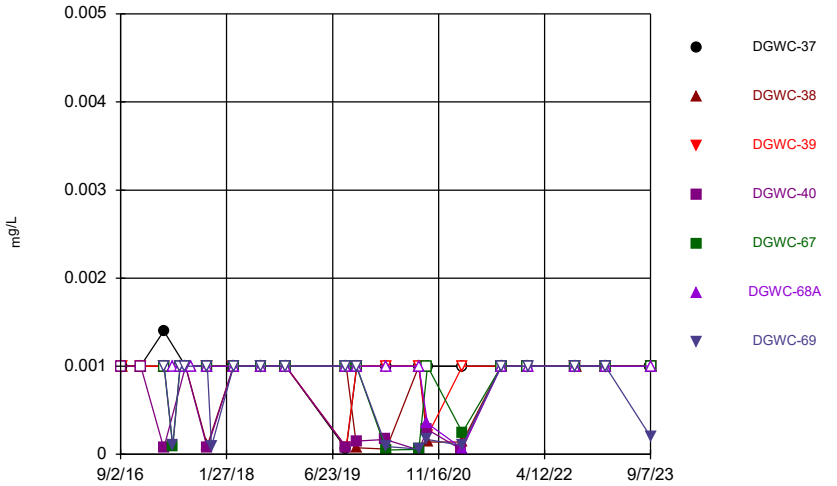
Time Series



Constituent: Lead Analysis Run 11/16/2023 4:09 PM View: AP 1
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.10.0.10 Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

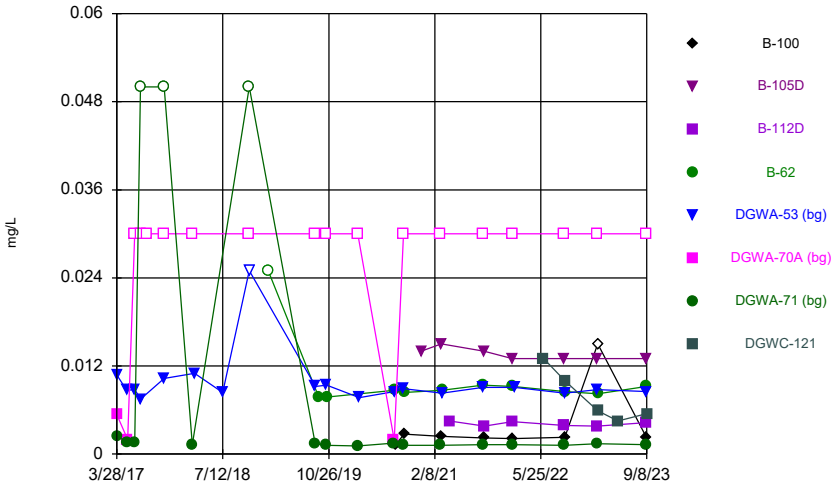
Time Series



Constituent: Lead Analysis Run 11/16/2023 4:09 PM View: AP 1
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.10.0.10 Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

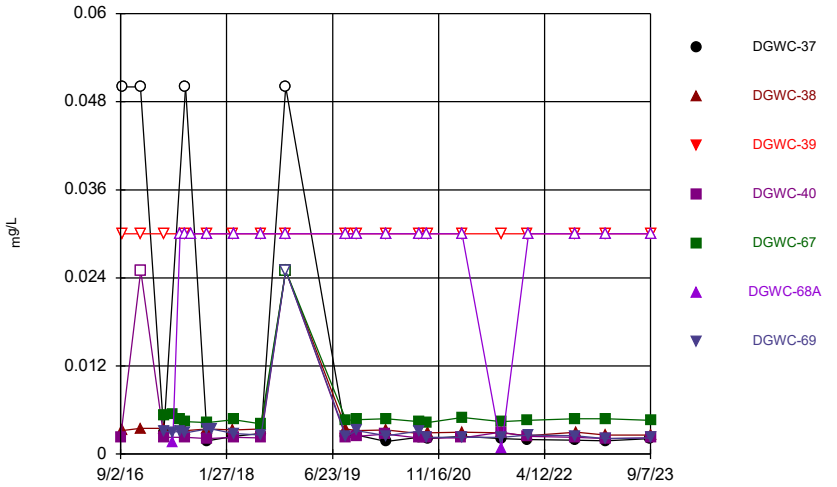
Time Series



Constituent: Lithium Analysis Run 11/16/2023 4:09 PM View: AP 1
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.10.0.10 Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

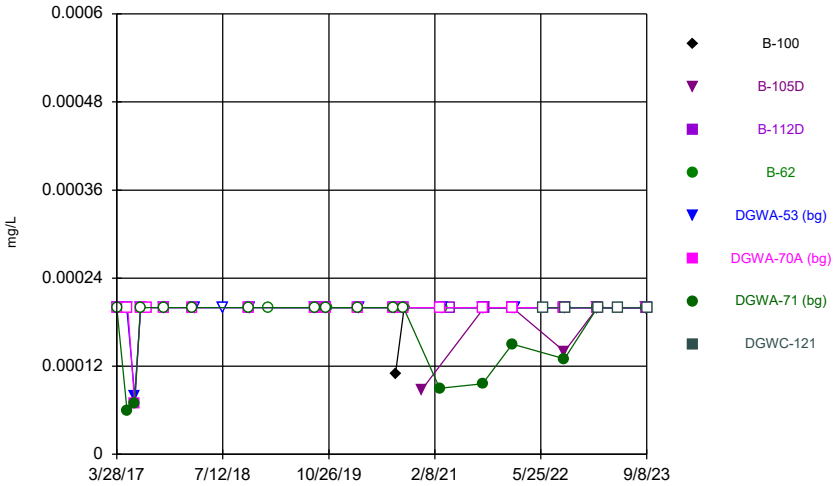
Time Series



Constituent: Lithium Analysis Run 11/16/2023 4:09 PM View: AP 1
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.10.0.10 Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

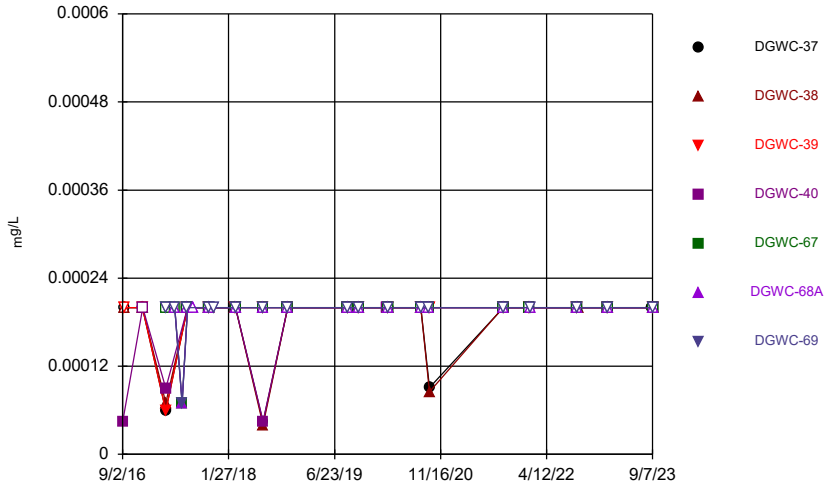
Time Series



Constituent: Mercury Analysis Run 11/16/2023 4:09 PM View: AP 1
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.10.0.10 Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

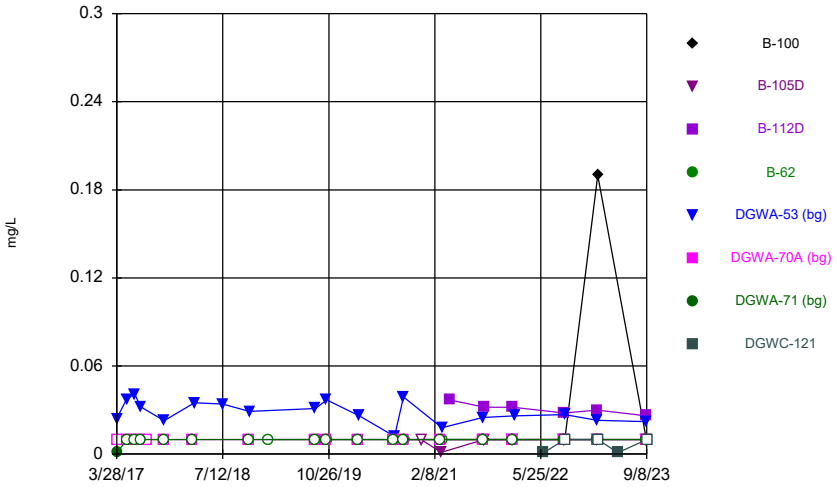
Time Series



Constituent: Mercury Analysis Run 11/16/2023 4:09 PM View: AP 1
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.10.0.10 Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

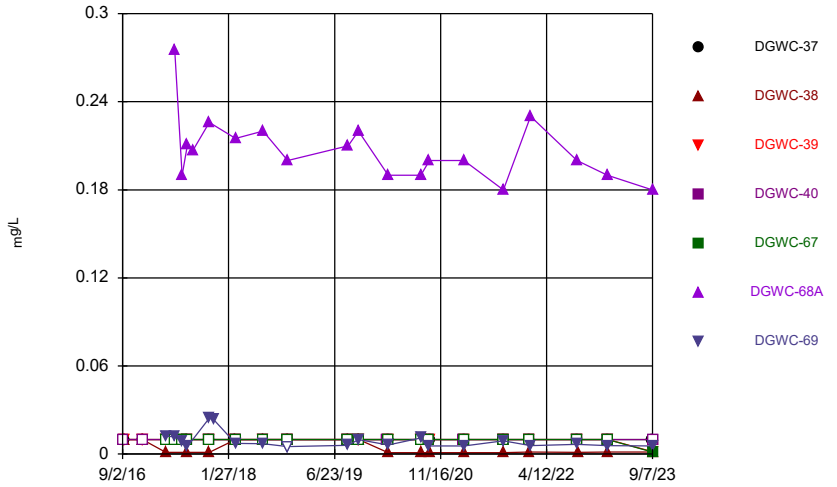
Time Series



Constituent: Molybdenum Analysis Run 11/16/2023 4:09 PM View: AP 1
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.10.0.10 Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

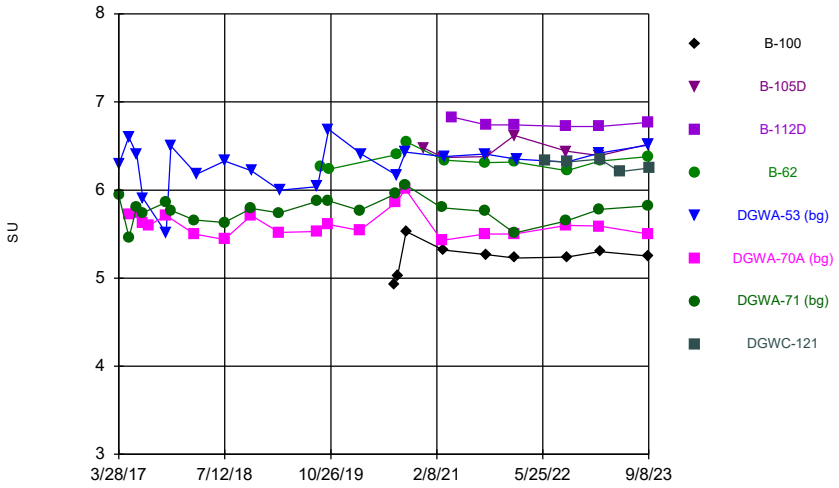
Time Series



Constituent: Molybdenum Analysis Run 11/16/2023 4:09 PM View: AP 1
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.10.0.10 Sanitas software utilized by Groundwater Stats Consulting. UG

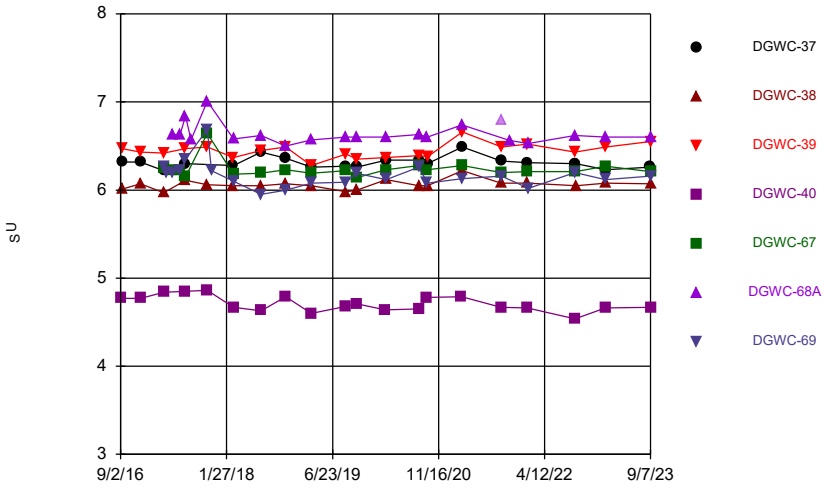
Time Series



Constituent: pH, Field Analysis Run 11/16/2023 4:09 PM View: AP 1
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.10.0.10 Sanitas software utilized by Groundwater Stats Consulting. UG

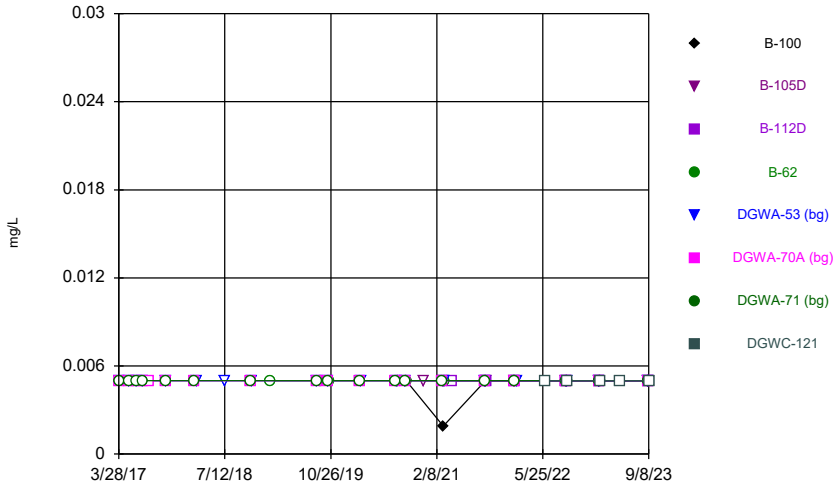
Time Series



Constituent: pH, Field Analysis Run 11/16/2023 4:09 PM View: AP 1
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.10.0.10 Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

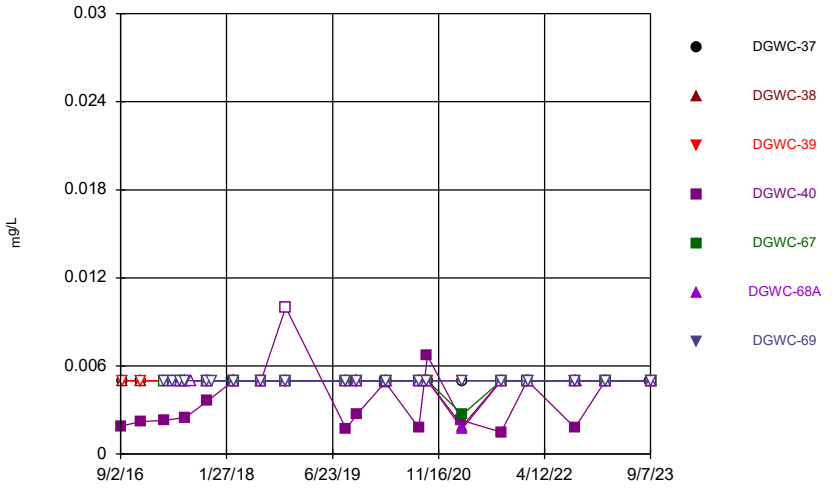
Time Series



Constituent: Selenium Analysis Run 11/16/2023 4:09 PM View: AP 1
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.10.0.10 Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

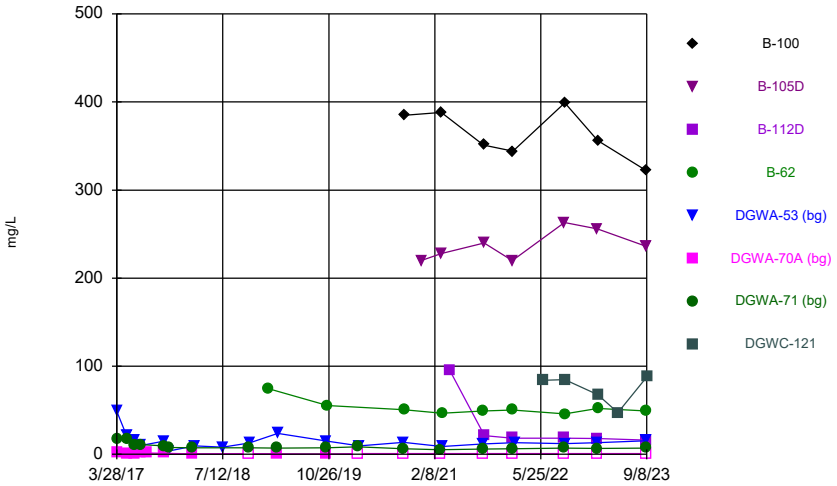
Time Series



Constituent: Selenium Analysis Run 11/16/2023 4:09 PM View: AP 1
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.10.0.10 Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

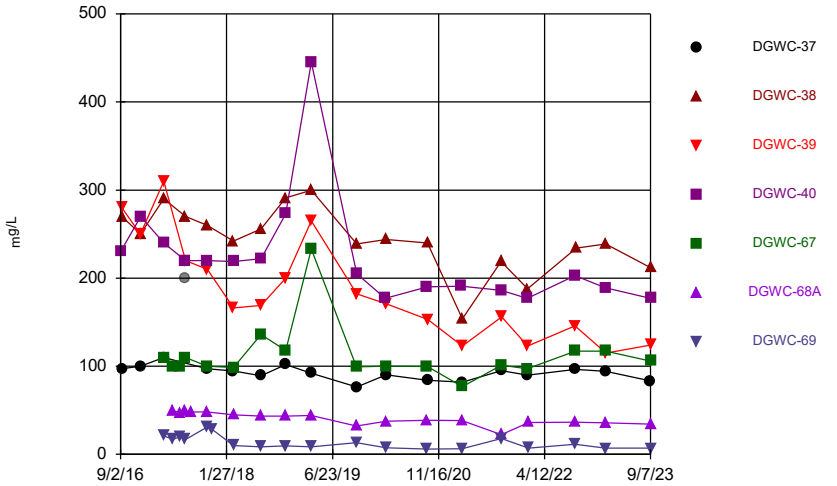
Time Series



Constituent: Sulfate Analysis Run 11/16/2023 4:09 PM View: AP 1
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.10.0.10 Sanitas software utilized by Groundwater Stats Consulting. UG

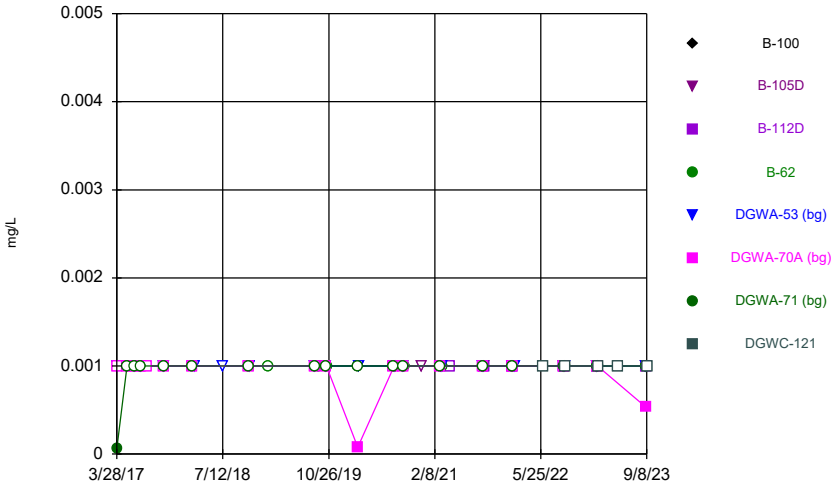
Time Series



Constituent: Sulfate Analysis Run 11/16/2023 4:09 PM View: AP 1
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.10.0.10 Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

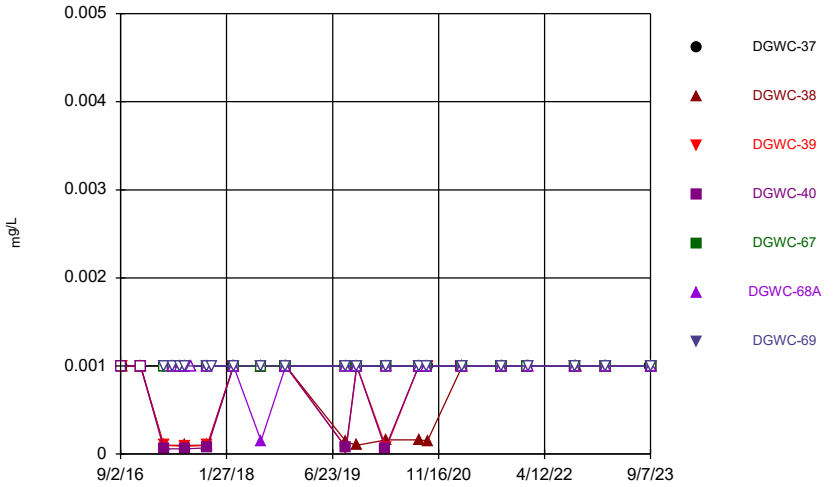
Time Series



Constituent: Thallium Analysis Run 11/16/2023 4:09 PM View: AP 1
Plant McDonough Client: Southern Company Data: McDonough AP

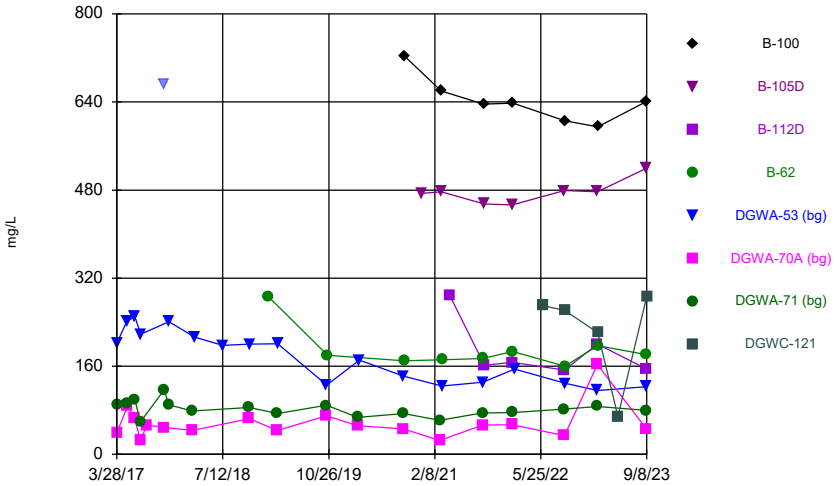
Sanitas™ v.10.0.10 Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Time Series



Constituent: Thallium Analysis Run 11/16/2023 4:09 PM View: AP 1
Plant McDonough Client: Southern Company Data: McDonough AP

Time Series

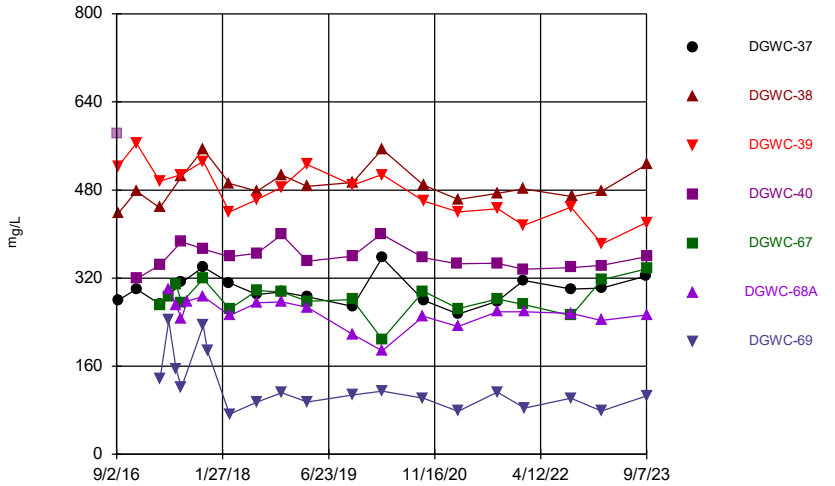


Constituent: Total Dissolved Solids [TDS] Analysis Run 11/16/2023 4:09 PM View: AP 1

Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.10.0.10 Sanitas software utilized by Groundwater Stats Consulting. UG

Time Series



Constituent: Total Dissolved Solids [TDS] Analysis Run 11/16/2023 4:09 PM View: AP 1

Plant McDonough Client: Southern Company Data: McDonough AP

Time Series

Constituent: Antimony (mg/L) Analysis Run 11/16/2023 4:10 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
5/2/2023								0.00082 (J)

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Antimony (mg/L) Analysis Run 11/16/2023 4:10 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
9/6/2023	<0.003					<0.003	0.0045	
9/7/2023		<0.003	<0.003	<0.003	<0.003			
9/8/2023								<0.003

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Antimony (mg/L) Analysis Run 11/16/2023 4:10 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				
9/6/2023	0.0014 (J)						
9/7/2023		<0.003	<0.003	<0.003	0.0039	<0.003	<0.003

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Arsenic (mg/L) Analysis Run 11/16/2023 4:10 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 11/16/2023 4:10 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
5/2/2023								<0.005
9/6/2023	<0.005					<0.005	<0.005	
9/7/2023		<0.005	<0.005	<0.005	<0.005			
9/8/2023								<0.005

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Arsenic (mg/L) Analysis Run 11/16/2023 4:10 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				
9/6/2023	<0.005						
9/7/2023		<0.005	<0.005	<0.005	<0.005	<0.005	0.029

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 11/16/2023 4:10 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
5/2/2023								0.048

Time Series

Constituent: Barium (mg/L) Analysis Run 11/16/2023 4:10 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
9/6/2023	0.021					0.041	0.03	
9/7/2023		0.035	0.0027 (J)	0.015	0.12			
9/8/2023								0.047

Time Series

Constituent: Barium (mg/L) Analysis Run 11/16/2023 4:10 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				
9/6/2023	0.082						
9/7/2023		0.027	0.11	0.016	0.076	0.11	0.047

Time Series

Constituent: Beryllium (mg/L) Analysis Run 11/16/2023 4:10 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 11/16/2023 4:10 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
5/2/2023								<0.0005
9/6/2023	0.00054					0.00012 (J)	0.00011 (J)	
9/7/2023		<0.0005	<0.0005	0.00011 (J)	<0.0005			
9/8/2023								<0.0005

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Beryllium (mg/L) Analysis Run 11/16/2023 4:10 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				
9/6/2023	5.8E-05 (J)						
9/7/2023		<0.0005	<0.0005	0.0031	<0.0005	<0.0005	7.8E-05 (J)

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 11/16/2023 4:10 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
5/2/2023								1.1
9/6/2023	0.24					0.012 (J)	0.015 (J)	
9/7/2023		0.76	0.24	0.071	0.052			

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 11/16/2023 4:10 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
9/8/2023								1.9

Time Series

Constituent: Boron (mg/L) Analysis Run 11/16/2023 4:10 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				
9/6/2023	1.7						
9/7/2023		2.8	2.7	0.73	3.9	1.8	0.052

Time Series

Constituent: Cadmium (mg/L) Analysis Run 11/16/2023 4:10 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
5/2/2023								<0.0005

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Cadmium (mg/L) Analysis Run 11/16/2023 4:10 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
9/6/2023	0.00035 (J)					<0.0005	<0.0005	
9/7/2023		<0.0005	<0.0005	<0.0005	<0.0005			
9/8/2023								<0.0005

Time Series

Constituent: Cadmium (mg/L) Analysis Run 11/16/2023 4:10 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				
9/6/2023	<0.0005						
9/7/2023		0.00013 (J)	<0.0005	0.00074	<0.0005	0.00015 (J)	<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 11/16/2023 4:10 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
5/2/2023								29.4
9/6/2023	49.9					6.6	7	
9/7/2023		71.8	24	35.1	16.3			
9/8/2023								43.9

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Calcium (mg/L) Analysis Run 11/16/2023 4:10 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				
9/6/2023	59.1						
9/7/2023		86.5	81.2	41	43.3	53.6	8.1

Time Series

Constituent: Chloride (mg/L) Analysis Run 11/16/2023 4:10 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
5/2/2023								2.7
9/6/2023	10					2.2	7.8	
9/7/2023		14.9	2.6	5.4	1.7			
9/8/2023								4.5

Time Series

Constituent: Chloride (mg/L) Analysis Run 11/16/2023 4:10 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				
9/6/2023	5.4						
9/7/2023		8.2	7.2	13.6	9.2	3.9	5.1

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Chromium (mg/L) Analysis Run 11/16/2023 4:10 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
5/2/2023								<0.005

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Chromium (mg/L) Analysis Run 11/16/2023 4:10 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
9/6/2023	<0.005					<0.005	<0.005	
9/7/2023		<0.005	<0.005	<0.005	<0.005			
9/8/2023								<0.005

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Chromium (mg/L) Analysis Run 11/16/2023 4:10 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				
9/6/2023	<0.005						
9/7/2023		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Cobalt (mg/L) Analysis Run 11/16/2023 4:10 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 11/16/2023 4:10 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)
5/2/2023								0.0017 (J)
9/6/2023	0.031					<0.005	<0.005	
9/7/2023		0.0027 (J)	0.0004 (J)	<0.005	0.0086			
9/8/2023								0.0016 (J)

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Cobalt (mg/L) Analysis Run 11/16/2023 4:10 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				
9/6/2023	<0.005						
9/7/2023		0.0015 (J)	0.0059	0.035	0.001 (J)	<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: Combined Radium 226 + 228 (pCi/L) Analysis Run 11/16/2023 4:10 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)
5/2/2023								0.374 (U)

Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 11/16/2023 4:10 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
9/6/2023	0.326 (U)					0.651 (U)	0.572 (U)	
9/7/2023		2.88	0.902	2.24	2.16			
9/8/2023								0.986 (U)

Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 11/16/2023 4:10 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)				
9/6/2023	0.732 (U)						
9/7/2023		0.358 (U)	0.728 (U)	0.902 (U)	0.565 (U)	0.782 (U)	0.91

Time Series

Constituent: Fluoride (mg/L) Analysis Run 11/16/2023 4:10 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 11/16/2023 4:10 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
5/2/2023								0.076 (J)
9/6/2023	<0.1					<0.1	<0.1	
9/7/2023		0.1	0.32	0.13	0.082 (J)			
9/8/2023								<0.1

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Fluoride (mg/L) Analysis Run 11/16/2023 4:10 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				
9/6/2023	0.053 (J)						
9/7/2023		0.072 (J)	0.092 (J)	0.14	<0.1	0.096 (J)	0.063 (J)

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 11/16/2023 4:10 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
5/2/2023								<0.001

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Lead (mg/L) Analysis Run 11/16/2023 4:10 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
9/6/2023	<0.001					<0.001	<0.001	
9/7/2023		<0.001	<0.001	<0.001	<0.001			
9/8/2023								<0.001

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Lead (mg/L) Analysis Run 11/16/2023 4:10 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				
9/6/2023	<0.001						
9/7/2023		<0.001	<0.001	<0.001	<0.001	<0.001	0.0002 (J)

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Lithium (mg/L) Analysis Run 11/16/2023 4:10 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)
5/2/2023								0.0045 (J)

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Lithium (mg/L) Analysis Run 11/16/2023 4:10 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
9/6/2023	0.0023 (J)					<0.03	0.0013 (J)	
9/7/2023		0.013 (J)	0.0043 (J)	0.0092 (J)	0.0085 (J)			
9/8/2023								0.0055 (J)

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Lithium (mg/L) Analysis Run 11/16/2023 4:10 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				
9/6/2023	0.0021 (J)						
9/7/2023		0.0026 (J)	<0.03	0.0022 (J)	0.0046 (J)	<0.03	0.0022 (J)

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Mercury (mg/L) Analysis Run 11/16/2023 4:10 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
5/2/2023								<0.0002
9/6/2023	<0.0002					<0.0002	<0.0002	

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Mercury (mg/L) Analysis Run 11/16/2023 4:10 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
9/7/2023		<0.0002	<0.0002	<0.0002	<0.0002			
9/8/2023								<0.0002

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Mercury (mg/L) Analysis Run 11/16/2023 4:10 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				
9/6/2023	<0.0002						
9/7/2023		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Molybdenum (mg/L) Analysis Run 11/16/2023 4:10 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
5/2/2023								0.00089 (J)

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Molybdenum (mg/L) Analysis Run 11/16/2023 4:10 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
9/6/2023	<0.01					<0.01	<0.01	
9/7/2023		<0.01	0.026	<0.01	0.022			
9/8/2023								<0.01

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Molybdenum (mg/L) Analysis Run 11/16/2023 4:10 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				
9/6/2023	<0.01						
9/7/2023		0.0013 (J)	0.0016 (J)	<0.01	0.0013 (J)	0.18	0.0056 (J)

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 11/16/2023 4:10 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 11/16/2023 4:10 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
5/2/2023								6.21
9/6/2023	5.25				6.51	5.5	5.82	
9/7/2023		6.52	6.77	6.38				
9/8/2023								6.25

Time Series

Constituent: pH, Field (SU) Analysis Run 11/16/2023 4:10 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				
9/6/2023	6.26						
9/7/2023		6.07	6.55	4.67	6.21	6.6	6.16

Time Series

Constituent: Selenium (mg/L) Analysis Run 11/16/2023 4:10 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
5/2/2023								<0.005

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Selenium (mg/L) Analysis Run 11/16/2023 4:10 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
9/6/2023	<0.005					<0.005	<0.005	
9/7/2023		<0.005	<0.005	<0.005	<0.005			
9/8/2023								<0.005

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Selenium (mg/L) Analysis Run 11/16/2023 4:10 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				
9/6/2023	<0.005						
9/7/2023		<0.005	<0.005	<0.005	<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: Sulfate (mg/L) Analysis Run 11/16/2023 4:10 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
5/2/2023								47.3
9/6/2023	322					<1	7.2	
9/7/2023		236	16.3	49.3	15.4			
9/8/2023								87.8

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 11/16/2023 4:10 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				
9/6/2023	83.4						
9/7/2023		212	124	177	106	34.2	6.9

Time Series

Constituent: Thallium (mg/L) Analysis Run 11/16/2023 4:10 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
5/2/2023								<0.001

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Thallium (mg/L) Analysis Run 11/16/2023 4:10 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
9/6/2023	<0.001					0.00053 (J)	<0.001	
9/7/2023		<0.001	<0.001	<0.001	<0.001			
9/8/2023								<0.001

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Thallium (mg/L) Analysis Run 11/16/2023 4:10 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				
9/6/2023	<0.001						
9/7/2023		<0.001	<0.001	<0.001	<0.001	<0.001	<0.001

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Total Dissolved Solids [TDS] (mg/L) Analysis Run 11/16/2023 4:10 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
5/2/2023								69
9/6/2023	641					46	80	
9/7/2023		520	155	181	123			
9/8/2023								286

Time Series

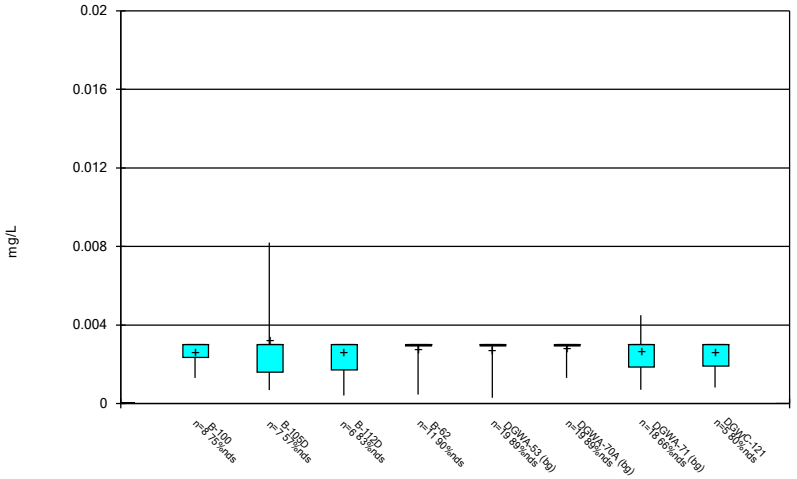
Constituent: Total Dissolved Solids [TDS] (mg/L) Analysis Run 11/16/2023 4:10 PM View: AP 1

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				
9/6/2023	324						
9/7/2023		526	421	359	337	253	106

FIGURE B.

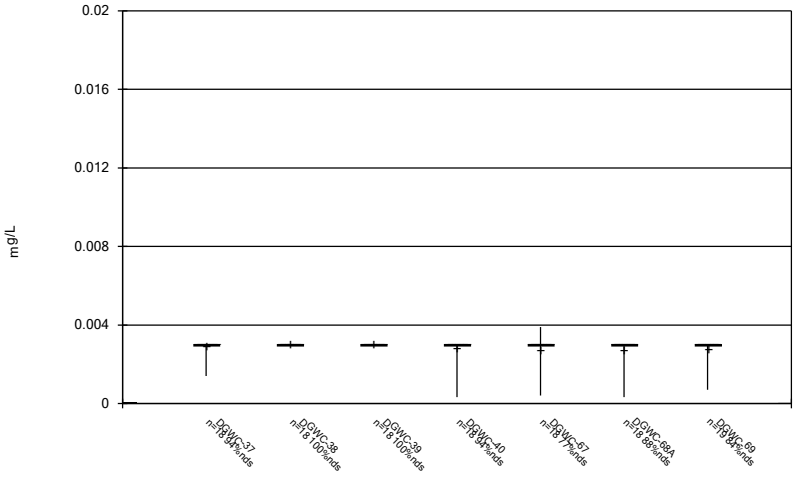
Box & Whiskers Plot



Constituent: Antimony Analysis Run 11/16/2023 4:11 PM View: AP 1
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.10.0.10 Sanitas software utilized by Groundwater Stats Consulting. UG

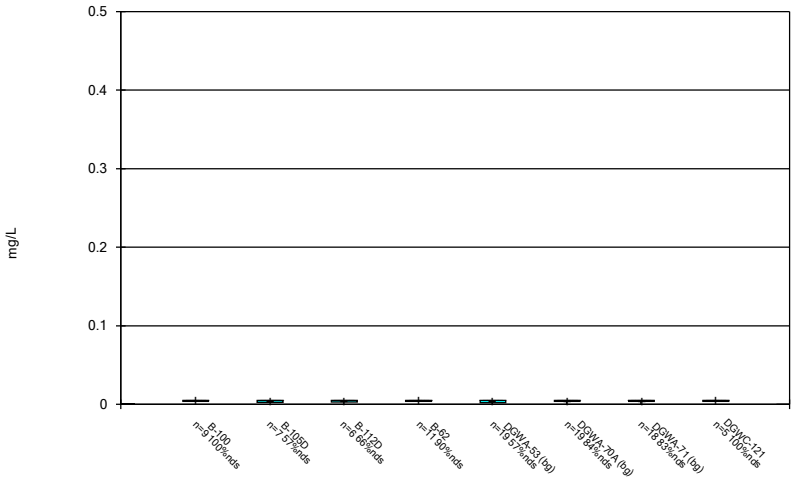
Box & Whiskers Plot



Constituent: Antimony Analysis Run 11/16/2023 4:11 PM View: AP 1
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.10.0.10 Sanitas software utilized by Groundwater Stats Consulting. UG

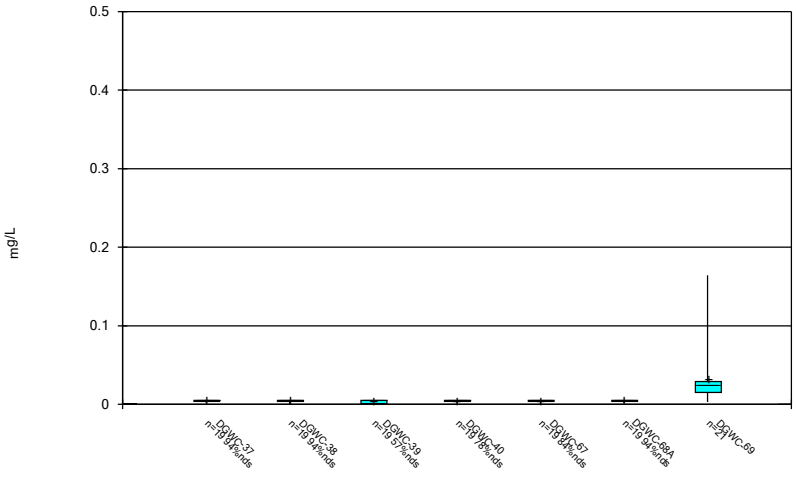
Box & Whiskers Plot



Constituent: Arsenic Analysis Run 11/16/2023 4:11 PM View: AP 1
Plant McDonough Client: Southern Company Data: McDonough AP

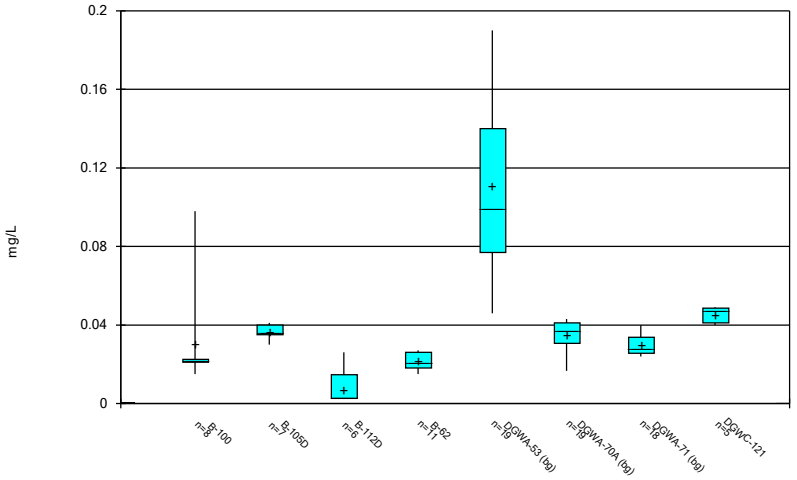
Sanitas™ v.10.0.10 Sanitas software utilized by Groundwater Stats Consulting. UG

Box & Whiskers Plot



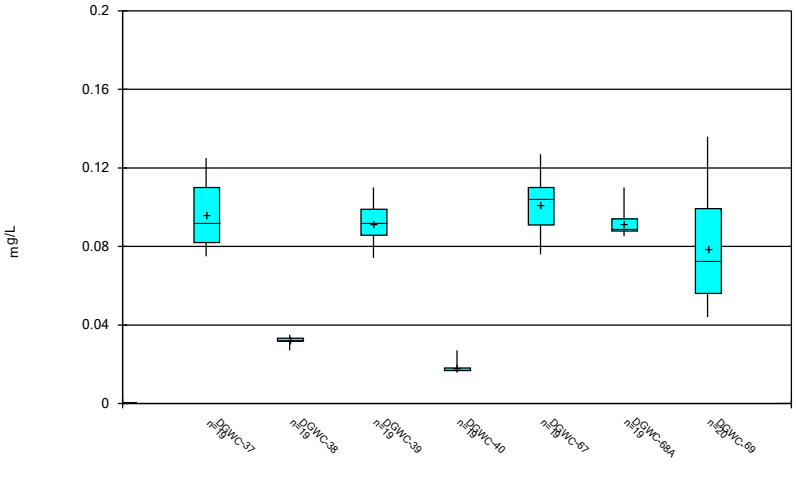
Constituent: Arsenic Analysis Run 11/16/2023 4:11 PM View: AP 1
Plant McDonough Client: Southern Company Data: McDonough AP

Box & Whiskers Plot



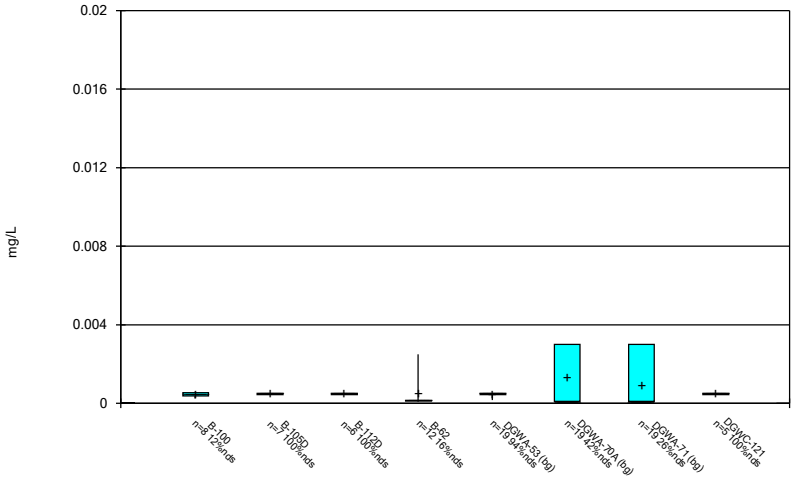
Constituent: Barium Analysis Run 11/16/2023 4:11 PM View: AP 1
Plant McDonough Client: Southern Company Data: McDonough AP

Box & Whiskers Plot



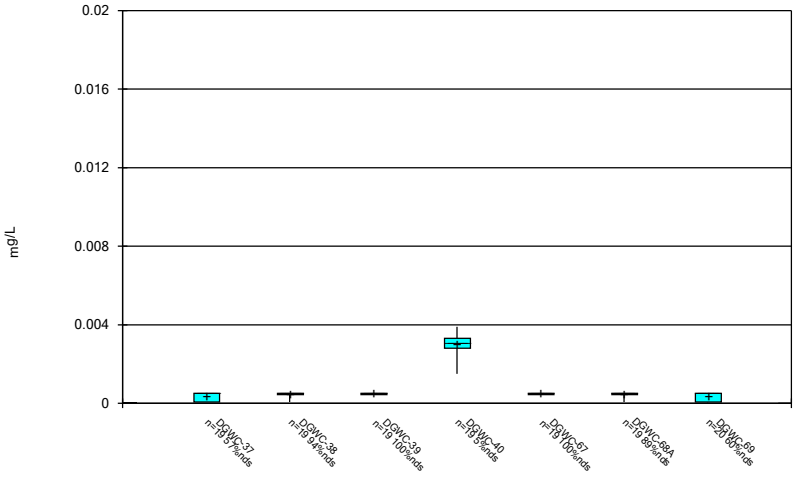
Constituent: Barium Analysis Run 11/16/2023 4:11 PM View: AP 1
Plant McDonough Client: Southern Company Data: McDonough AP

Box & Whiskers Plot



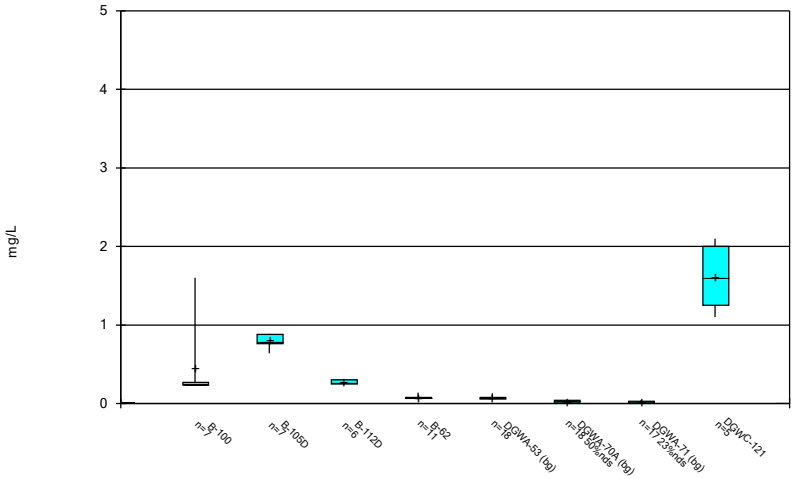
Constituent: Beryllium Analysis Run 11/16/2023 4:11 PM View: AP 1
Plant McDonough Client: Southern Company Data: McDonough AP

Box & Whiskers Plot



Constituent: Beryllium Analysis Run 11/16/2023 4:11 PM View: AP 1
Plant McDonough Client: Southern Company Data: McDonough AP

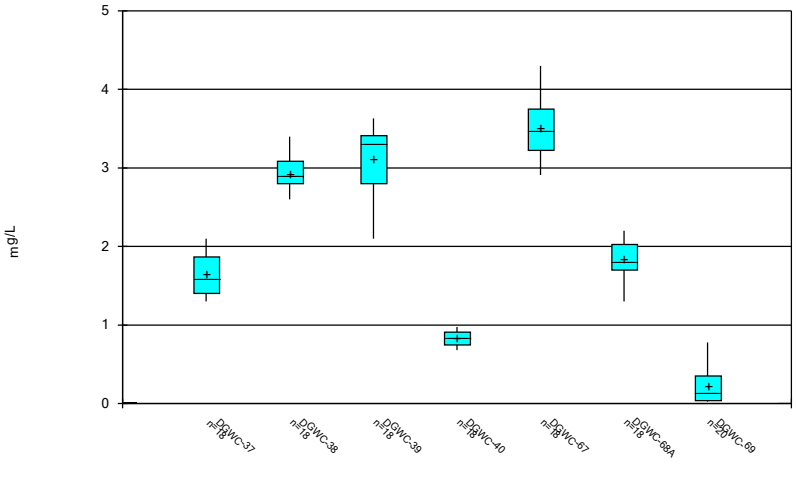
Box & Whiskers Plot



Constituent: Boron Analysis Run 11/16/2023 4:11 PM View: AP 1
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.10.0.10 Sanitas software utilized by Groundwater Stats Consulting. UG

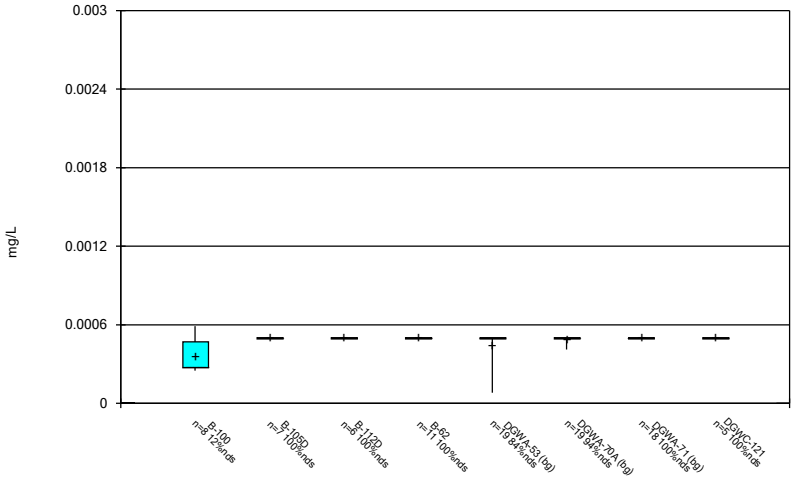
Box & Whiskers Plot



Constituent: Boron Analysis Run 11/16/2023 4:11 PM View: AP 1
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.10.0.10 Sanitas software utilized by Groundwater Stats Consulting. UG

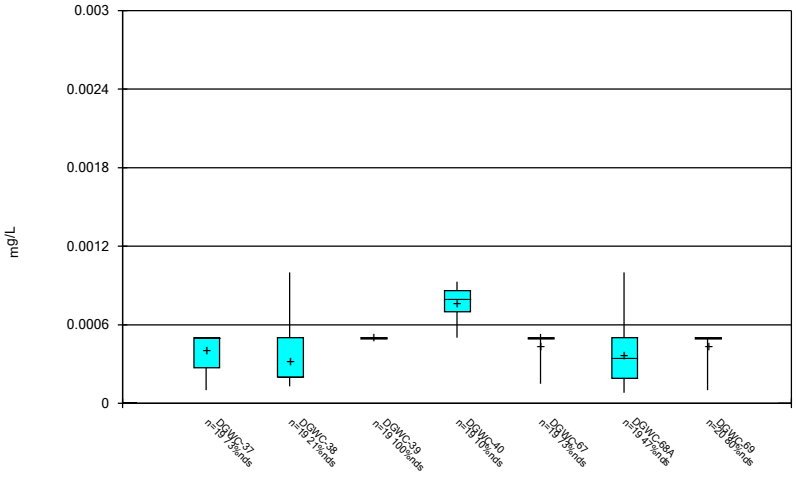
Box & Whiskers Plot



Constituent: Cadmium Analysis Run 11/16/2023 4:11 PM View: AP 1
Plant McDonough Client: Southern Company Data: McDonough AP

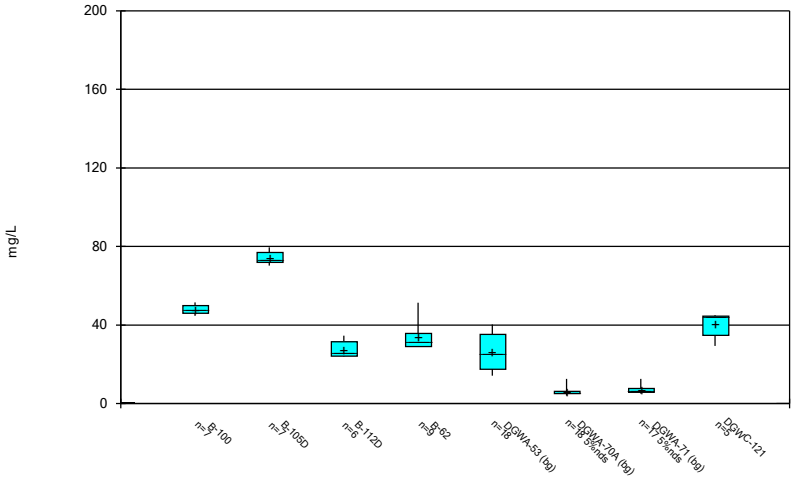
Sanitas™ v.10.0.10 Sanitas software utilized by Groundwater Stats Consulting. UG

Box & Whiskers Plot



Constituent: Cadmium Analysis Run 11/16/2023 4:11 PM View: AP 1
Plant McDonough Client: Southern Company Data: McDonough AP

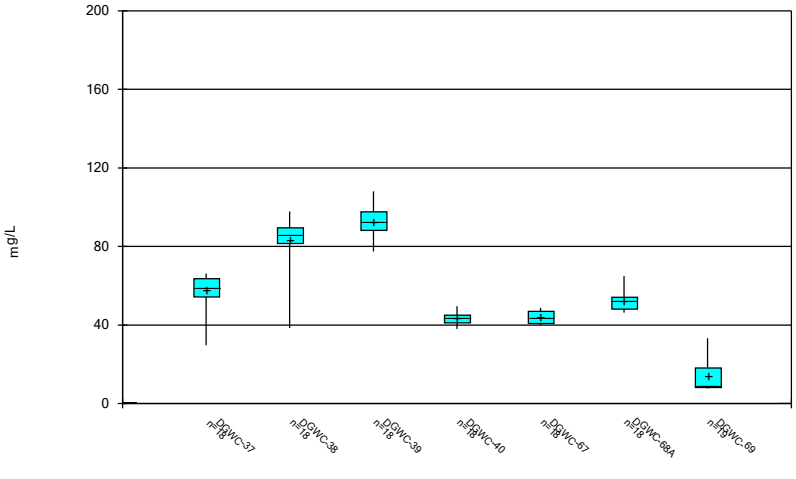
Box & Whiskers Plot



Constituent: Calcium Analysis Run 11/16/2023 4:11 PM View: AP 1
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.10.0.10 Sanitas software utilized by Groundwater Stats Consulting. UG

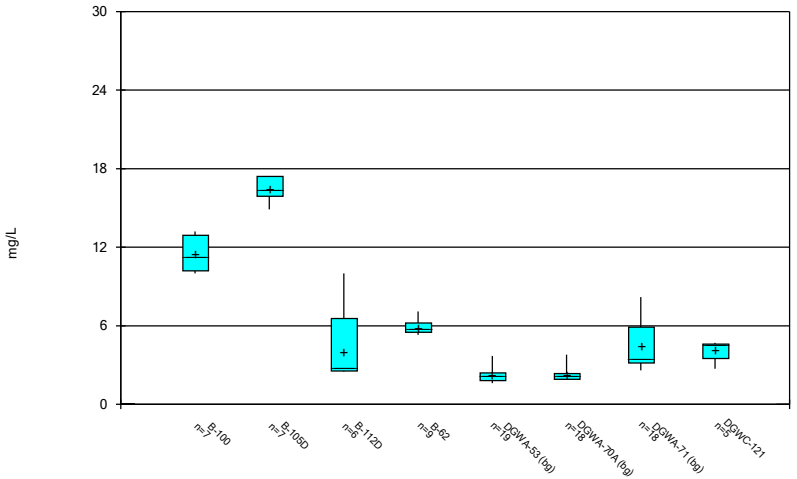
Box & Whiskers Plot



Constituent: Calcium Analysis Run 11/16/2023 4:11 PM View: AP 1
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.10.0.10 Sanitas software utilized by Groundwater Stats Consulting. UG

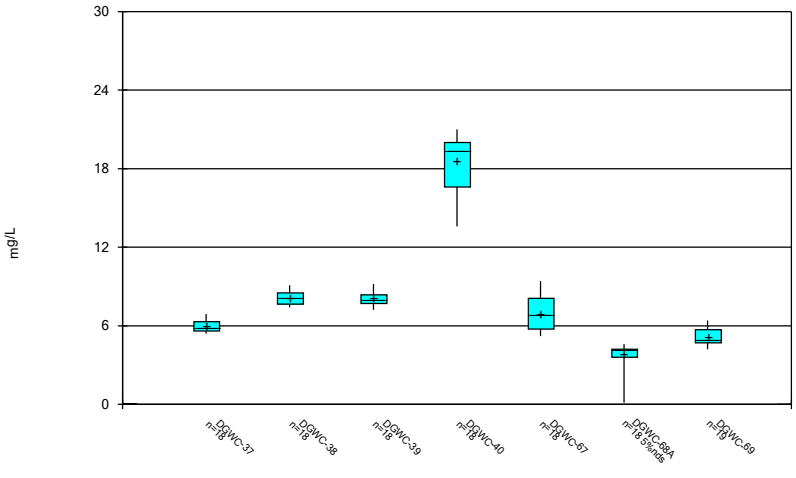
Box & Whiskers Plot



Constituent: Chloride Analysis Run 11/16/2023 4:11 PM View: AP 1
Plant McDonough Client: Southern Company Data: McDonough AP

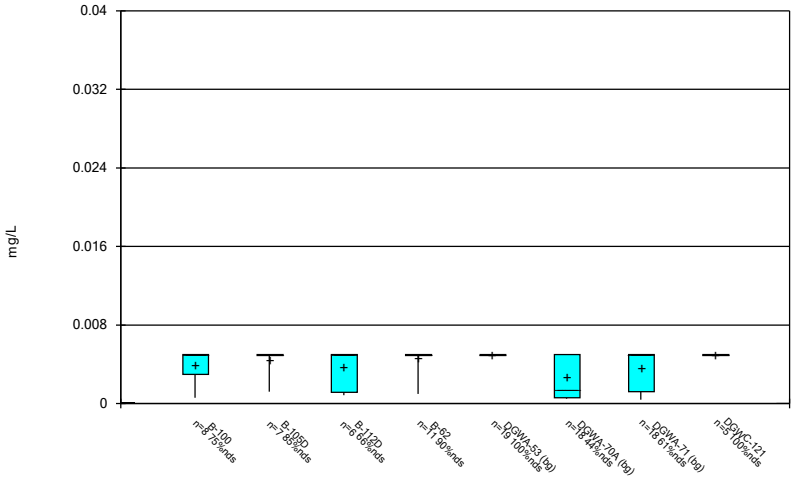
Sanitas™ v.10.0.10 Sanitas software utilized by Groundwater Stats Consulting. UG

Box & Whiskers Plot



Constituent: Chloride Analysis Run 11/16/2023 4:11 PM View: AP 1
Plant McDonough Client: Southern Company Data: McDonough AP

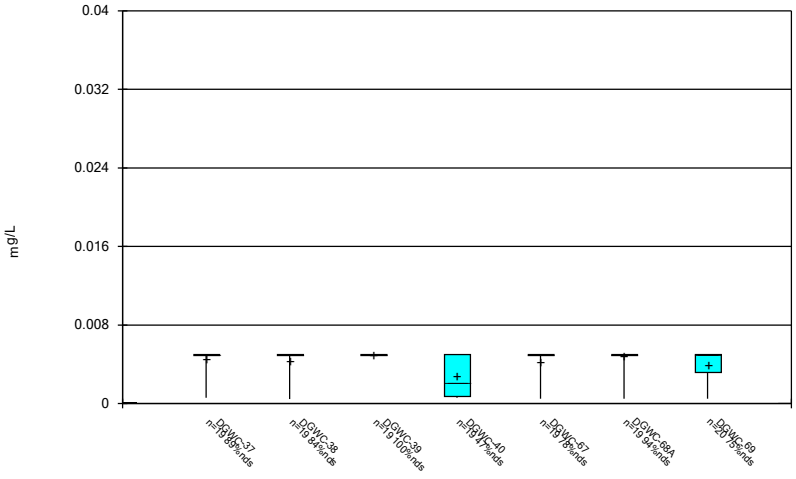
Box & Whiskers Plot



Constituent: Chromium Analysis Run 11/16/2023 4:11 PM View: AP 1
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.10.0.10 Sanitas software utilized by Groundwater Stats Consulting. UG

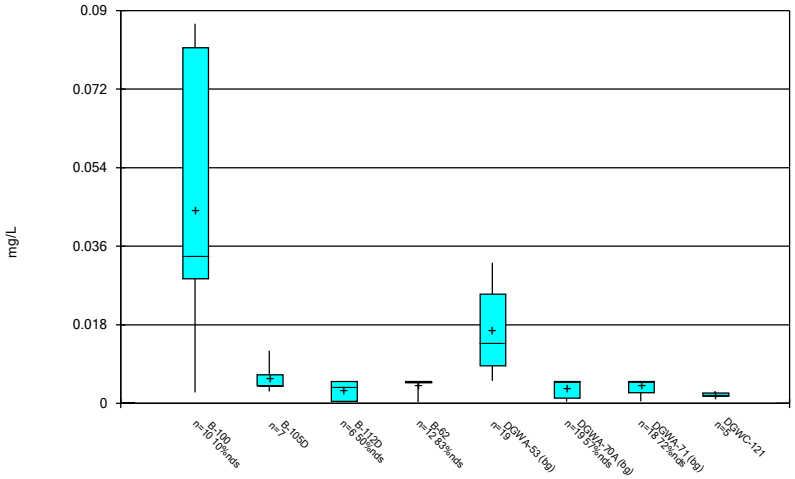
Box & Whiskers Plot



Constituent: Chromium Analysis Run 11/16/2023 4:11 PM View: AP 1
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.10.0.10 Sanitas software utilized by Groundwater Stats Consulting. UG

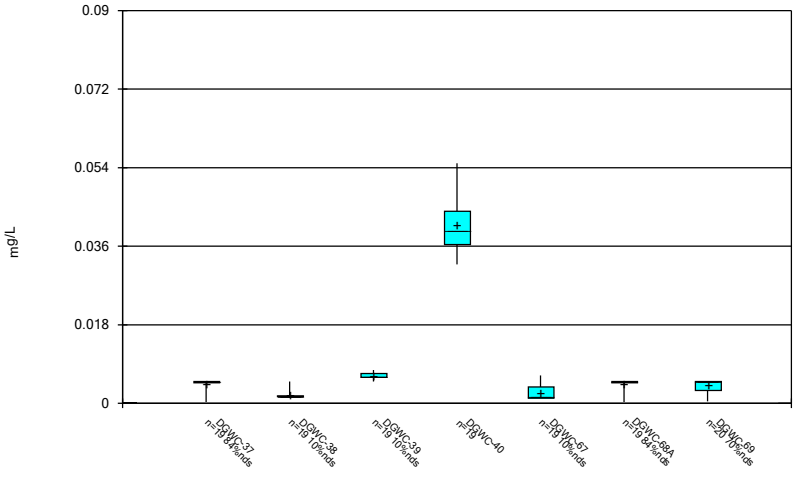
Box & Whiskers Plot



Constituent: Cobalt Analysis Run 11/16/2023 4:11 PM View: AP 1
Plant McDonough Client: Southern Company Data: McDonough AP

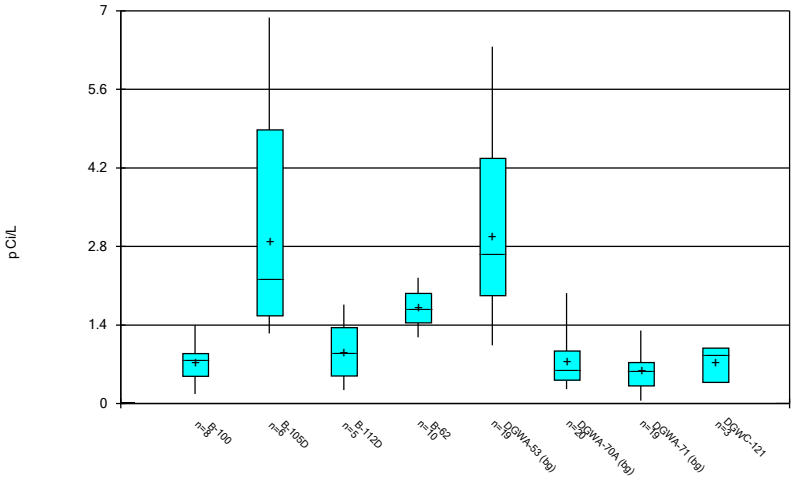
Sanitas™ v.10.0.10 Sanitas software utilized by Groundwater Stats Consulting. UG

Box & Whiskers Plot



Constituent: Cobalt Analysis Run 11/16/2023 4:11 PM View: AP 1
Plant McDonough Client: Southern Company Data: McDonough AP

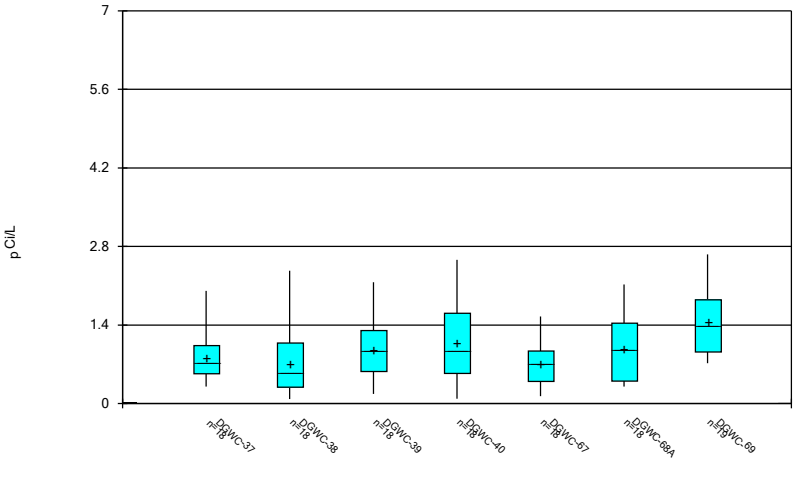
Box & Whiskers Plot



Constituent: Combined Radium 226 + 228 Analysis Run 11/16/2023 4:11 PM View: AP 1
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.10.0.10 Sanitas software utilized by Groundwater Stats Consulting. UG

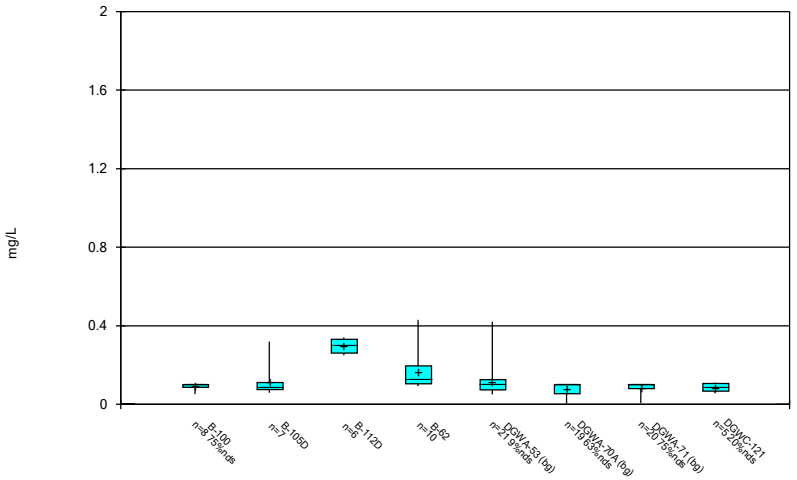
Box & Whiskers Plot



Constituent: Combined Radium 226 + 228 Analysis Run 11/16/2023 4:11 PM View: AP 1
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.10.0.10 Sanitas software utilized by Groundwater Stats Consulting. UG

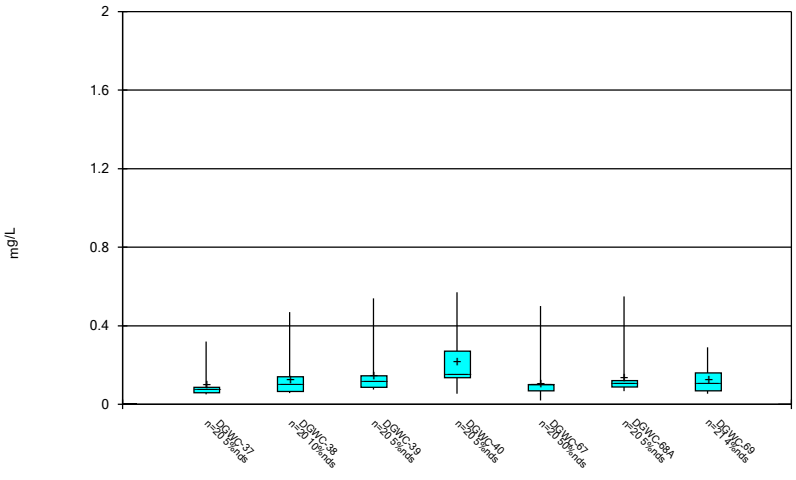
Box & Whiskers Plot



Constituent: Fluoride Analysis Run 11/16/2023 4:11 PM View: AP 1
Plant McDonough Client: Southern Company Data: McDonough AP

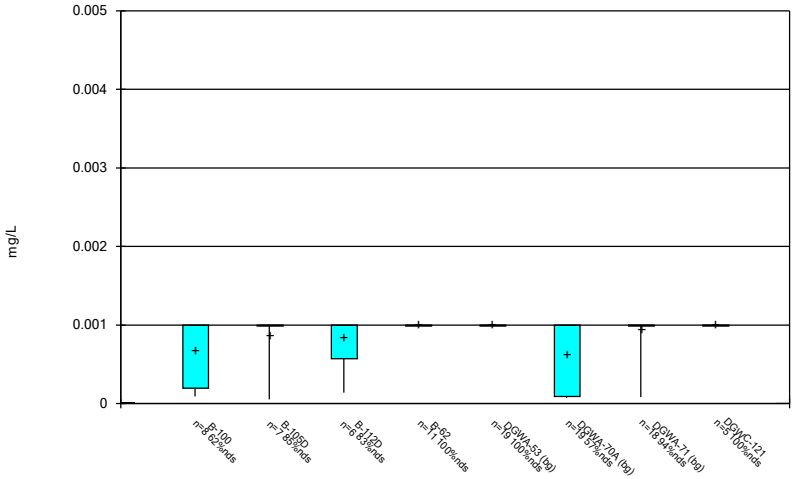
Sanitas™ v.10.0.10 Sanitas software utilized by Groundwater Stats Consulting. UG

Box & Whiskers Plot



Constituent: Fluoride Analysis Run 11/16/2023 4:11 PM View: AP 1
Plant McDonough Client: Southern Company Data: McDonough AP

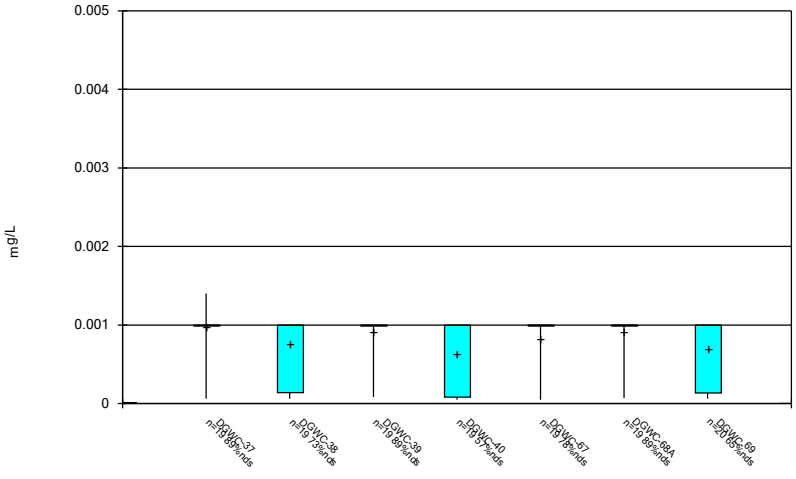
Box & Whiskers Plot



Constituent: Lead Analysis Run 11/16/2023 4:11 PM View: AP 1
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.10.0.10 Sanitas software utilized by Groundwater Stats Consulting. UG

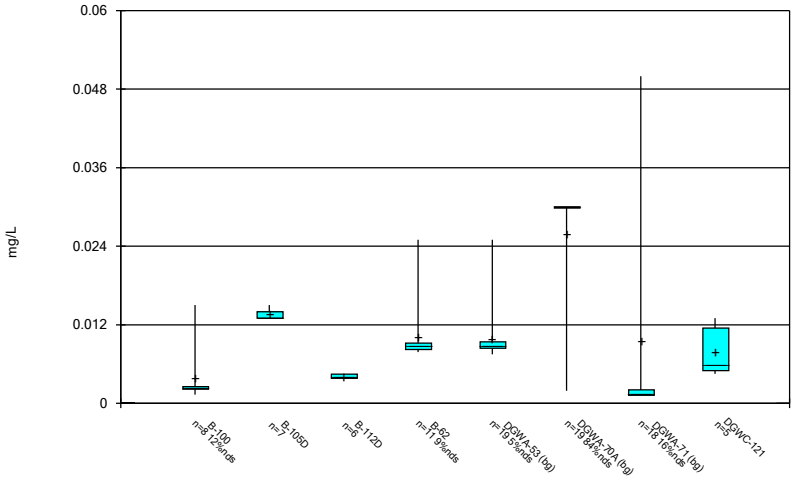
Box & Whiskers Plot



Constituent: Lead Analysis Run 11/16/2023 4:11 PM View: AP 1
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.10.0.10 Sanitas software utilized by Groundwater Stats Consulting. UG

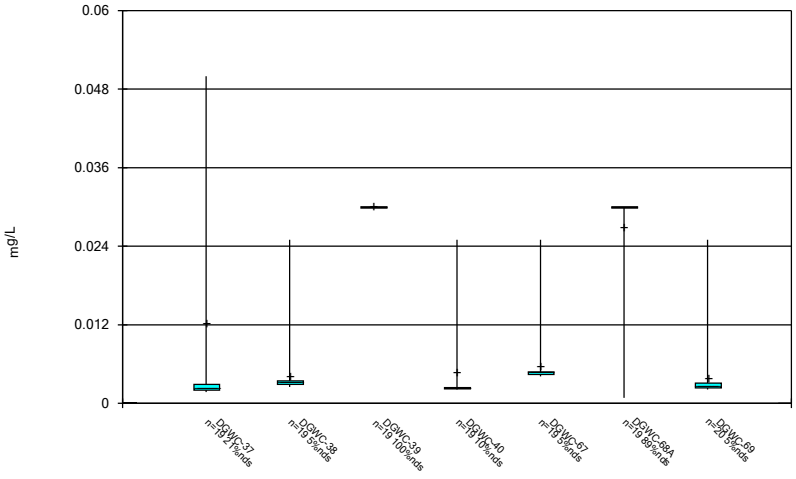
Box & Whiskers Plot



Constituent: Lithium Analysis Run 11/16/2023 4:11 PM View: AP 1
Plant McDonough Client: Southern Company Data: McDonough AP

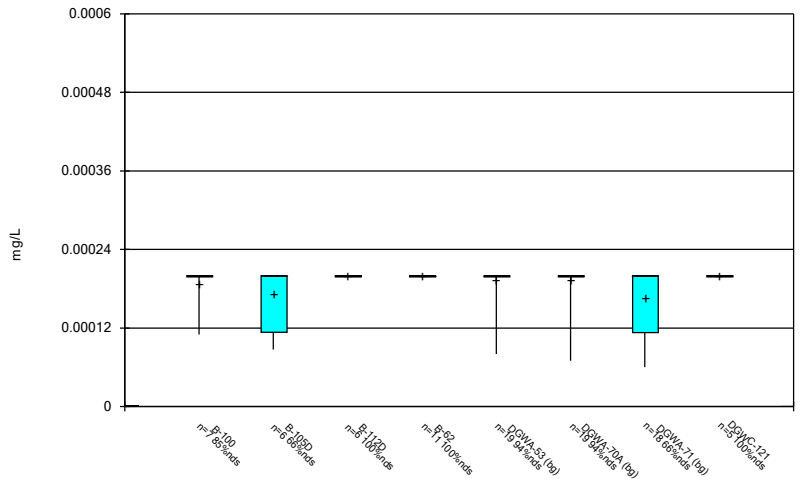
Sanitas™ v.10.0.10 Sanitas software utilized by Groundwater Stats Consulting. UG

Box & Whiskers Plot



Constituent: Lithium Analysis Run 11/16/2023 4:11 PM View: AP 1
Plant McDonough Client: Southern Company Data: McDonough AP

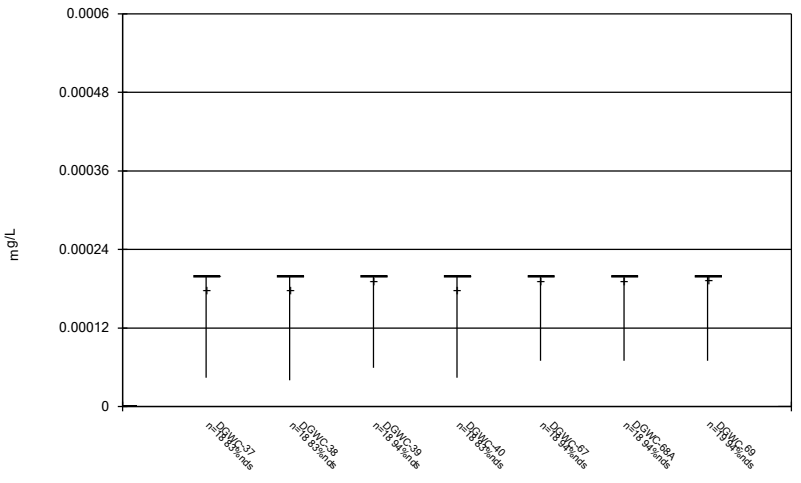
Box & Whiskers Plot



Constituent: Mercury Analysis Run 11/16/2023 4:11 PM View: AP 1
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.10.0.10 Sanitas software utilized by Groundwater Stats Consulting. UG

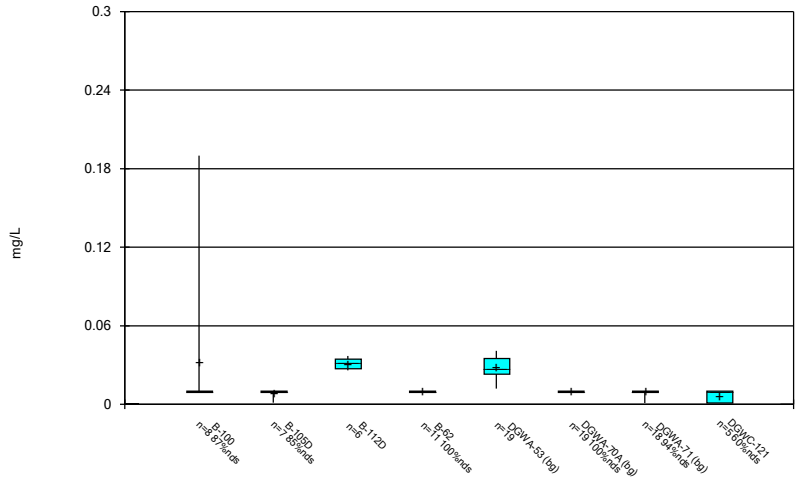
Box & Whiskers Plot



Constituent: Mercury Analysis Run 11/16/2023 4:11 PM View: AP 1
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.10.0.10 Sanitas software utilized by Groundwater Stats Consulting. UG

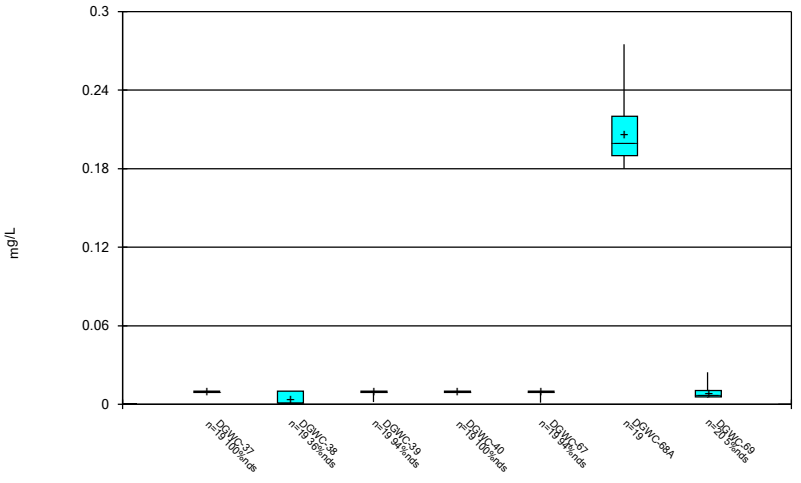
Box & Whiskers Plot



Constituent: Molybdenum Analysis Run 11/16/2023 4:11 PM View: AP 1
Plant McDonough Client: Southern Company Data: McDonough AP

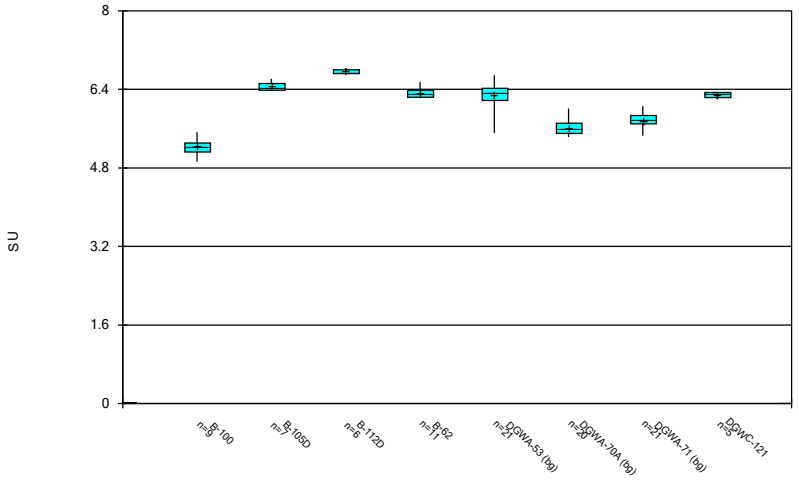
Sanitas™ v.10.0.10 Sanitas software utilized by Groundwater Stats Consulting. UG

Box & Whiskers Plot



Constituent: Molybdenum Analysis Run 11/16/2023 4:11 PM View: AP 1
Plant McDonough Client: Southern Company Data: McDonough AP

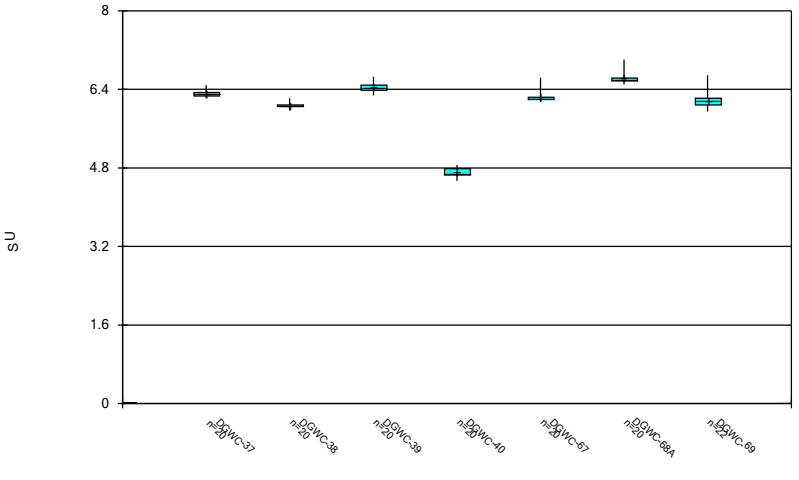
Box & Whiskers Plot



Constituent: pH, Field Analysis Run 11/16/2023 4:11 PM View: AP 1
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.10.0.10 Sanitas software utilized by Groundwater Stats Consulting. UG

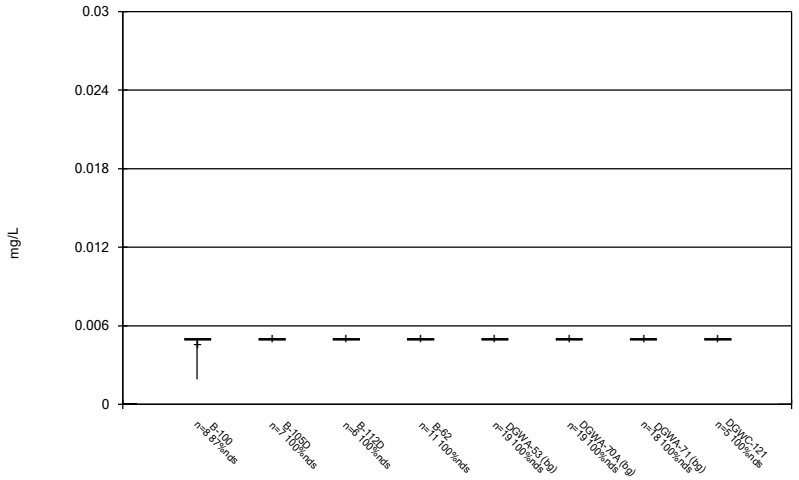
Box & Whiskers Plot



Constituent: pH, Field Analysis Run 11/16/2023 4:11 PM View: AP 1
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.10.0.10 Sanitas software utilized by Groundwater Stats Consulting. UG

Box & Whiskers Plot



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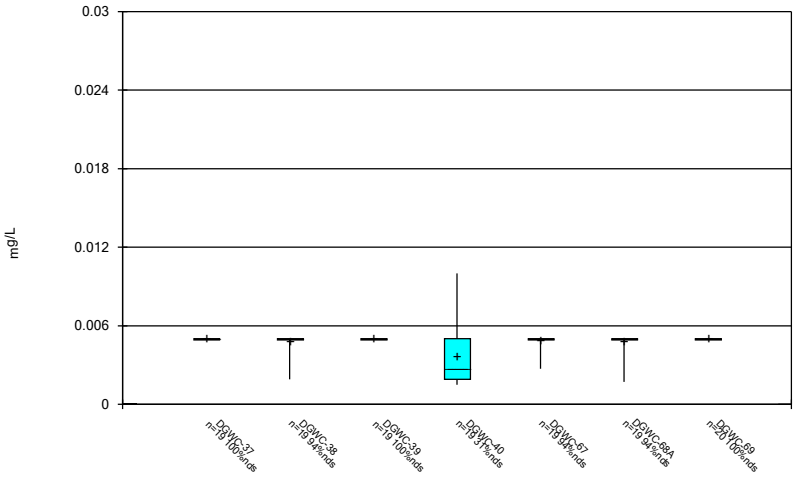
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.10.0.10 Sanitas software utilized by Groundwater Stats Consulting. UG

Box & Whiskers Plot



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Plant McDonough Client: Southern Company Data: McDonough AP

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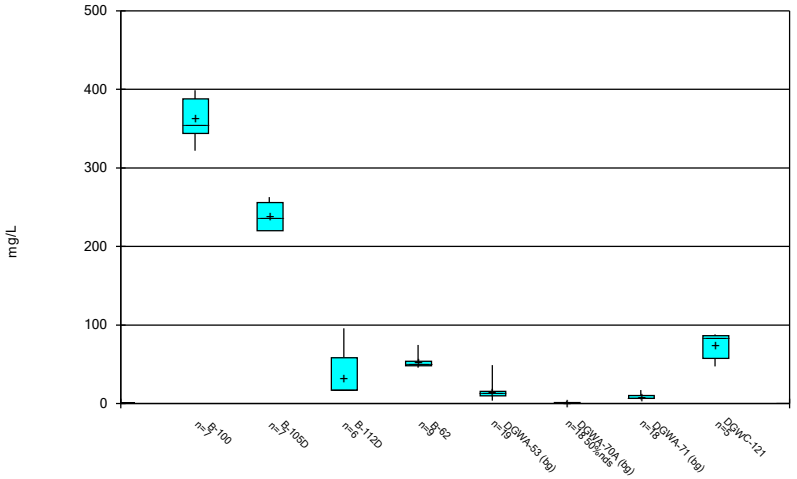
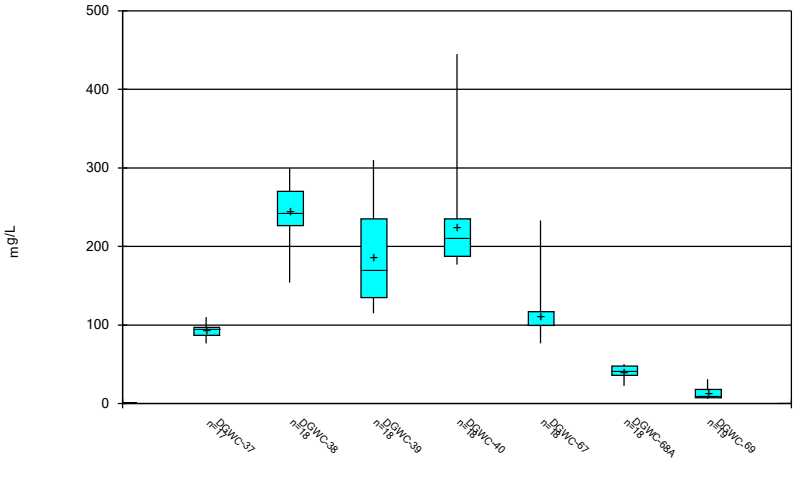


Constituent: Sulfate Analysis Run 11/16/2023 4:11 PM View: AP 1
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.10.0.10 Sanitas software utilized by Groundwater Stats Consulting. UG

Box & Whiskers Plot



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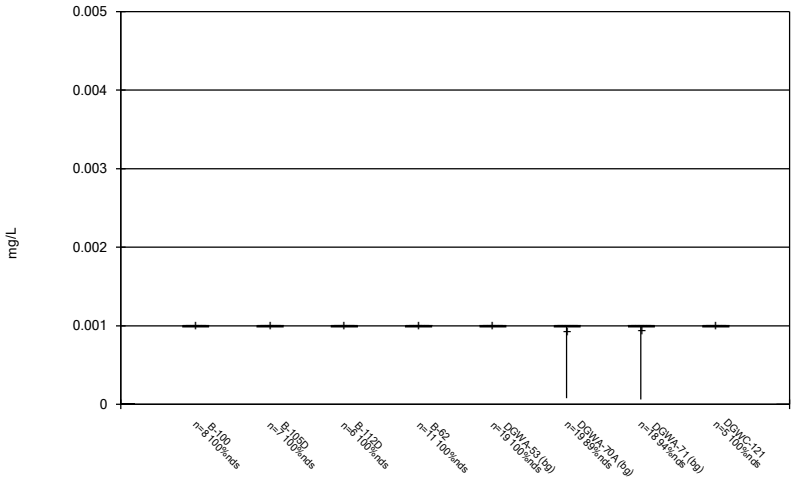
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.10.0.10 Sanitas software utilized by Groundwater Stats Consulting. UG

Box & Whiskers Plot



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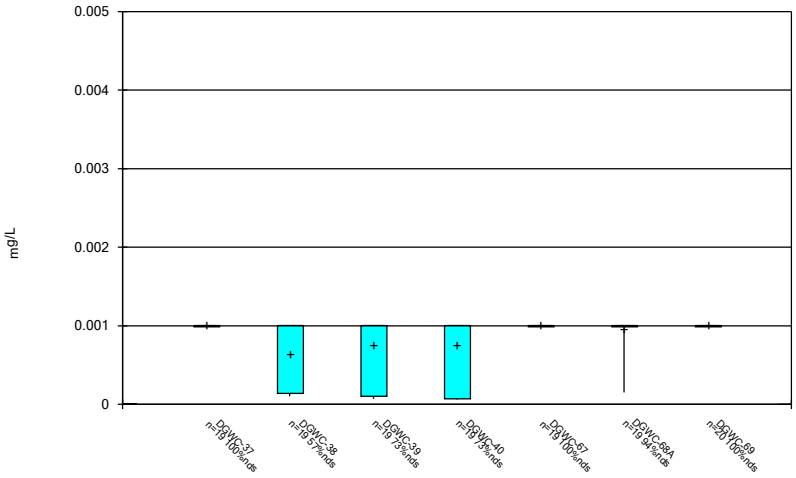
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.10.0.10 Sanitas software utilized by Groundwater Stats Consulting. UG

Box & Whiskers Plot



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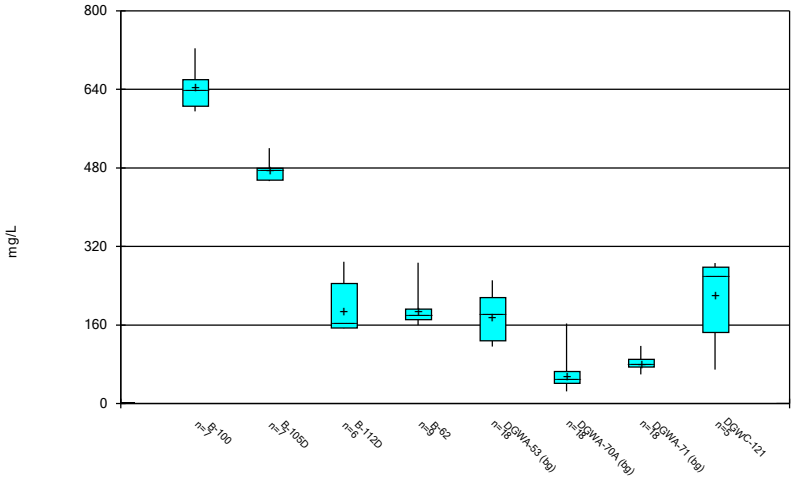
Plant McDonough Client: Southern Company Data: McDonough AP

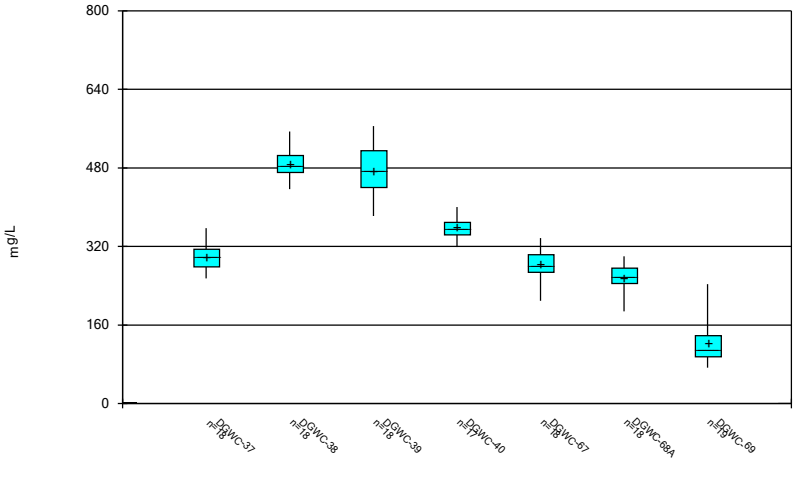
Box & Whiskers Plot



Constituent: Total Dissolved Solids [TDS] Analysis Run 11/16/2023 4:11 PM View: AP 1
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.10.0.10 Sanitas software utilized by Groundwater Stats Consulting. UG

Box & Whiskers Plot



Constituent: Total Dissolved Solids [TDS] Analysis Run 11/16/2023 4:11 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 11/16/2023, 4:12 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 [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 (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 11/16/2023, 4:17 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	9/6/2023	1.7	Yes	53	n/a	n/a	24.53	n/a	n/a	0.0006724	NP Inter (normality) 1 of 2
Boron (mg/L)	DGWC-38	0.13	n/a	9/7/2023	2.8	Yes	53	n/a	n/a	24.53	n/a	n/a	0.0006724	NP Inter (normality) 1 of 2
Boron (mg/L)	DGWC-39	0.13	n/a	9/7/2023	2.7	Yes	53	n/a	n/a	24.53	n/a	n/a	0.0006724	NP Inter (normality) 1 of 2
Boron (mg/L)	DGWC-40	0.13	n/a	9/7/2023	0.73	Yes	53	n/a	n/a	24.53	n/a	n/a	0.0006724	NP Inter (normality) 1 of 2
Boron (mg/L)	DGWC-67	0.13	n/a	9/7/2023	3.9	Yes	53	n/a	n/a	24.53	n/a	n/a	0.0006724	NP Inter (normality) 1 of 2
Boron (mg/L)	DGWC-68A	0.13	n/a	9/7/2023	1.8	Yes	53	n/a	n/a	24.53	n/a	n/a	0.0006724	NP Inter (normality) 1 of 2
Calcium (mg/L)	DGWC-37	40.3	n/a	9/6/2023	59.1	Yes	53	n/a	n/a	3.774	n/a	n/a	0.0006724	NP Inter (normality) 1 of 2
Calcium (mg/L)	DGWC-38	40.3	n/a	9/7/2023	86.5	Yes	53	n/a	n/a	3.774	n/a	n/a	0.0006724	NP Inter (normality) 1 of 2
Calcium (mg/L)	DGWC-39	40.3	n/a	9/7/2023	81.2	Yes	53	n/a	n/a	3.774	n/a	n/a	0.0006724	NP Inter (normality) 1 of 2
Calcium (mg/L)	DGWC-40	40.3	n/a	9/7/2023	41	Yes	53	n/a	n/a	3.774	n/a	n/a	0.0006724	NP Inter (normality) 1 of 2
Calcium (mg/L)	DGWC-67	40.3	n/a	9/7/2023	43.3	Yes	53	n/a	n/a	3.774	n/a	n/a	0.0006724	NP Inter (normality) 1 of 2
Calcium (mg/L)	DGWC-68A	40.3	n/a	9/7/2023	53.6	Yes	53	n/a	n/a	3.774	n/a	n/a	0.0006724	NP Inter (normality) 1 of 2
Chloride (mg/L)	DGWC-40	8.2	n/a	9/7/2023	13.6	Yes	55	n/a	n/a	0	n/a	n/a	0.0006289	NP Inter (normality) 1 of 2
Chloride (mg/L)	DGWC-67	8.2	n/a	9/7/2023	9.2	Yes	55	n/a	n/a	0	n/a	n/a	0.0006289	NP Inter (normality) 1 of 2
pH, Field (SU)	DGWC-40	6.69	5.43	9/7/2023	4.67	Yes	62	n/a	n/a	0	n/a	n/a	0.0009874	NP Inter (normality) 1 of 2
Sulfate (mg/L)	DGWC-37	49	n/a	9/6/2023	83.4	Yes	55	n/a	n/a	16.36	n/a	n/a	0.0006289	NP Inter (normality) 1 of 2
Sulfate (mg/L)	DGWC-38	49	n/a	9/7/2023	212	Yes	55	n/a	n/a	16.36	n/a	n/a	0.0006289	NP Inter (normality) 1 of 2
Sulfate (mg/L)	DGWC-39	49	n/a	9/7/2023	124	Yes	55	n/a	n/a	16.36	n/a	n/a	0.0006289	NP Inter (normality) 1 of 2
Sulfate (mg/L)	DGWC-40	49	n/a	9/7/2023	177	Yes	55	n/a	n/a	16.36	n/a	n/a	0.0006289	NP Inter (normality) 1 of 2
Sulfate (mg/L)	DGWC-67	49	n/a	9/7/2023	106	Yes	55	n/a	n/a	16.36	n/a	n/a	0.0006289	NP Inter (normality) 1 of 2
Total Dissolved Solids [TDS] (mg/L)	DGWC-37	238.1	n/a	9/6/2023	324	Yes	54	9.841	2.893	0	None	sqrt(x)	0.001075	Param Inter 1 of 2
Total Dissolved Solids [TDS] (mg/L)	DGWC-38	238.1	n/a	9/7/2023	526	Yes	54	9.841	2.893	0	None	sqrt(x)	0.001075	Param Inter 1 of 2
Total Dissolved Solids [TDS] (mg/L)	DGWC-39	238.1	n/a	9/7/2023	421	Yes	54	9.841	2.893	0	None	sqrt(x)	0.001075	Param Inter 1 of 2
Total Dissolved Solids [TDS] (mg/L)	DGWC-40	238.1	n/a	9/7/2023	359	Yes	54	9.841	2.893	0	None	sqrt(x)	0.001075	Param Inter 1 of 2
Total Dissolved Solids [TDS] (mg/L)	DGWC-67	238.1	n/a	9/7/2023	337	Yes	54	9.841	2.893	0	None	sqrt(x)	0.001075	Param Inter 1 of 2
Total Dissolved Solids [TDS] (mg/L)	DGWC-68A	238.1	n/a	9/7/2023	253	Yes	54	9.841	2.893	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 11/16/2023, 4:17 PM

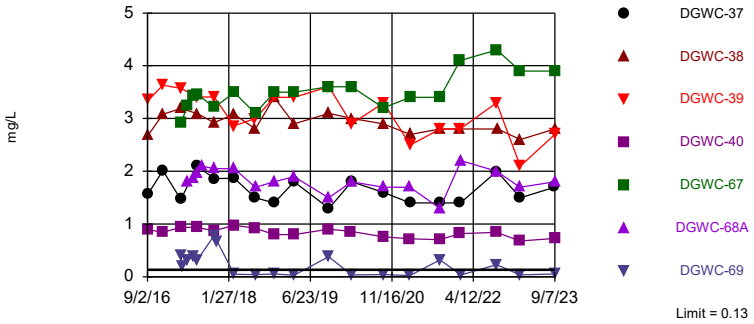
Constituent	Well	Upper Lim	Lower Lim	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Boron (mg/L)	**DGWC-37**	**0.13**	**n/a**	**9/6/2023**	**1.7**	**Yes**	**53**	**n/a**	**n/a**	**24.53**	**n/a**	**n/a**	**0.0006724**	**NP Inter (normality) 1 of 2**
Boron (mg/L)	**DGWC-38**	**0.13**	**n/a**	**9/7/2023**	**2.8**	**Yes**	**53**	**n/a**	**n/a**	**24.53**	**n/a**	**n/a**	**0.0006724**	**NP Inter (normality) 1 of 2**
Boron (mg/L)	**DGWC-39**	**0.13**	**n/a**	**9/7/2023**	**2.7**	**Yes**	**53**	**n/a**	**n/a**	**24.53**	**n/a**	**n/a**	**0.0006724**	**NP Inter (normality) 1 of 2**
Boron (mg/L)	**DGWC-40**	**0.13**	**n/a**	**9/7/2023**	**0.73**	**Yes**	**53**	**n/a**	**n/a**	**24.53**	**n/a**	**n/a**	**0.0006724**	**NP Inter (normality) 1 of 2**
Boron (mg/L)	**DGWC-67**	**0.13**	**n/a**	**9/7/2023**	**3.9**	**Yes**	**53**	**n/a**	**n/a**	**24.53**	**n/a**	**n/a**	**0.0006724**	**NP Inter (normality) 1 of 2**
Boron (mg/L)	**DGWC-68A**	**0.13**	**n/a**	**9/7/2023**	**1.8**	**Yes**	**53**	**n/a**	**n/a**	**24.53**	**n/a**	**n/a**	**0.0006724**	**NP Inter (normality) 1 of 2**
Boron (mg/L)	DGWC-69	0.13	n/a	9/7/2023	0.052	No	53	n/a	n/a	24.53	n/a	n/a	0.0006724	NP Inter (normality) 1 of 2
Calcium (mg/L)	**DGWC-37**	**40.3**	**n/a**	**9/6/2023**	**59.1**	**Yes**	**53**	**n/a**	**n/a**	**3.774**	**n/a**	**n/a**	**0.0006724**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	**DGWC-38**	**40.3**	**n/a**	**9/7/2023**	**86.5**	**Yes**	**53**	**n/a**	**n/a**	**3.774**	**n/a**	**n/a**	**0.0006724**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	**DGWC-39**	**40.3**	**n/a**	**9/7/2023**	**81.2**	**Yes**	**53**	**n/a**	**n/a**	**3.774**	**n/a**	**n/a**	**0.0006724**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	**DGWC-40**	**40.3**	**n/a**	**9/7/2023**	**41**	**Yes**	**53**	**n/a**	**n/a**	**3.774**	**n/a**	**n/a**	**0.0006724**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	**DGWC-67**	**40.3**	**n/a**	**9/7/2023**	**43.3**	**Yes**	**53**	**n/a**	**n/a**	**3.774**	**n/a**	**n/a**	**0.0006724**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	**DGWC-68A**	**40.3**	**n/a**	**9/7/2023**	**53.6**	**Yes**	**53**	**n/a**	**n/a**	**3.774**	**n/a**	**n/a**	**0.0006724**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	DGWC-69	40.3	n/a	9/7/2023	8.1	No	53	n/a	n/a	3.774	n/a	n/a	0.0006724	NP Inter (normality) 1 of 2
Chloride (mg/L)	DGWC-37	8.2	n/a	9/6/2023	5.4	No	55	n/a	n/a	0	n/a	n/a	0.0006289	NP Inter (normality) 1 of 2
Chloride (mg/L)	DGWC-38	8.2	n/a	9/7/2023	8.2	No	55	n/a	n/a	0	n/a	n/a	0.0006289	NP Inter (normality) 1 of 2
Chloride (mg/L)	DGWC-39	8.2	n/a	9/7/2023	7.2	No	55	n/a	n/a	0	n/a	n/a	0.0006289	NP Inter (normality) 1 of 2
Chloride (mg/L)	**DGWC-40**	**8.2**	**n/a**	**9/7/2023**	**13.6**	**Yes**	**55**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0006289**	**NP Inter (normality) 1 of 2**
Chloride (mg/L)	**DGWC-67**	**8.2**	**n/a**	**9/7/2023**	**9.2**	**Yes**	**55**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0006289**	**NP Inter (normality) 1 of 2**
Chloride (mg/L)	DGWC-68A	8.2	n/a	9/7/2023	3.9	No	55	n/a	n/a	0	n/a	n/a	0.0006289	NP Inter (normality) 1 of 2
Chloride (mg/L)	DGWC-69	8.2	n/a	9/7/2023	5.1	No	55	n/a	n/a	0	n/a	n/a	0.0006289	NP Inter (normality) 1 of 2
Fluoride (mg/L)	DGWC-37	0.42	n/a	9/6/2023	0.053J	No	60	n/a	n/a	48.33	n/a	n/a	0.0005205	NP Inter (normality) 1 of 2
Fluoride (mg/L)	DGWC-38	0.42	n/a	9/7/2023	0.072J	No	60	n/a	n/a	48.33	n/a	n/a	0.0005205	NP Inter (normality) 1 of 2
Fluoride (mg/L)	DGWC-39	0.42	n/a	9/7/2023	0.092J	No	60	n/a	n/a	48.33	n/a	n/a	0.0005205	NP Inter (normality) 1 of 2
Fluoride (mg/L)	DGWC-40	0.42	n/a	9/7/2023	0.14	No	60	n/a	n/a	48.33	n/a	n/a	0.0005205	NP Inter (normality) 1 of 2
Fluoride (mg/L)	DGWC-67	0.42	n/a	9/7/2023	0.1ND	No	60	n/a	n/a	48.33	n/a	n/a	0.0005205	NP Inter (normality) 1 of 2
Fluoride (mg/L)	DGWC-68A	0.42	n/a	9/7/2023	0.096J	No	60	n/a	n/a	48.33	n/a	n/a	0.0005205	NP Inter (normality) 1 of 2
Fluoride (mg/L)	DGWC-69	0.42	n/a	9/7/2023	0.063J	No	60	n/a	n/a	48.33	n/a	n/a	0.0005205	NP Inter (normality) 1 of 2
pH, Field (SU)	DGWC-37	6.69	5.43	9/6/2023	6.26	No	62	n/a	n/a	0	n/a	n/a	0.0009874	NP Inter (normality) 1 of 2
pH, Field (SU)	DGWC-38	6.69	5.43	9/7/2023	6.07	No	62	n/a	n/a	0	n/a	n/a	0.0009874	NP Inter (normality) 1 of 2
pH, Field (SU)	DGWC-39	6.69	5.43	9/7/2023	6.55	No	62	n/a	n/a	0	n/a	n/a	0.0009874	NP Inter (normality) 1 of 2
pH, Field (SU)	**DGWC-40**	**6.69**	**5.43**	**9/7/2023**	**4.67**	**Yes**	**62**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0009874**	**NP Inter (normality) 1 of 2**
pH, Field (SU)	DGWC-67	6.69	5.43	9/7/2023	6.21	No	62	n/a	n/a	0	n/a	n/a	0.0009874	NP Inter (normality) 1 of 2
pH, Field (SU)	DGWC-68A	6.69	5.43	9/7/2023	6.6	No	62	n/a	n/a	0	n/a	n/a	0.0009874	NP Inter (normality) 1 of 2
pH, Field (SU)	DGWC-69	6.69	5.43	9/7/2023	6.16	No	62	n/a	n/a	0	n/a	n/a	0.0009874	NP Inter (normality) 1 of 2
Sulfate (mg/L)	**DGWC-37**	**49**	**n/a**	**9/6/2023**	**83.4**	**Yes**	**55**	**n/a**	**n/a**	**16.36**	**n/a**	**n/a**	**0.0006289**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	**DGWC-38**	**49**	**n/a**	**9/7/2023**	**212**	**Yes**	**55**	**n/a**	**n/a**	**16.36**	**n/a**	**n/a**	**0.0006289**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	**DGWC-39**	**49**	**n/a**	**9/7/2023**	**124**	**Yes**	**55**	**n/a**	**n/a**	**16.36**	**n/a**	**n/a**	**0.0006289**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	**DGWC-40**	**49**	**n/a**	**9/7/2023**	**177**	**Yes**	**55**	**n/a**	**n/a**	**16.36**	**n/a**	**n/a**	**0.0006289**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	**DGWC-67**	**49**	**n/a**	**9/7/2023**	**106**	**Yes**	**55**	**n/a**	**n/a**	**16.36**	**n/a**	**n/a**	**0.0006289**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	DGWC-68A	49	n/a	9/7/2023	34.2	No	55	n/a	n/a	16.36	n/a	n/a	0.0006289	NP Inter (normality) 1 of 2
Sulfate (mg/L)	DGWC-69	49	n/a	9/7/2023	6.9	No	55	n/a	n/a	16.36	n/a	n/a	0.0006289	NP Inter (normality) 1 of 2
Total Dissolved Solids [TDS] (mg/L)	**DGWC-37**	**238.1**	**n/a**	**9/6/2023**	**324**	**Yes**	**54**	**9.841**	**2.893**	**0**	**None**	**sqrt(x)**	**0.001075**	**Param Inter 1 of 2**
Total Dissolved Solids [TDS] (mg/L)	**DGWC-38**	**238.1**	**n/a**	**9/7/2023**	**526**	**Yes**	**54**	**9.841**	**2.893**	**0**	**None**	**sqrt(x)**	**0.001075**	**Param Inter 1 of 2**
Total Dissolved Solids [TDS] (mg/L)	**DGWC-39**	**238.1**	**n/a**	**9/7/2023**	**421**	**Yes**	**54**	**9.841**	**2.893**	**0**	**None**	**sqrt(x)**	**0.001075**	**Param Inter 1 of 2**
Total Dissolved Solids [TDS] (mg/L)	**DGWC-40**	**238.1**	**n/a**	**9/7/2023**	**359**	**Yes**	**54**	**9.841**	**2.893**	**0**	**None**	**sqrt(x)**	**0.001075**	**Param Inter 1 of 2**
Total Dissolved Solids [TDS] (mg/L)	**DGWC-67**	**238.1**	**n/a**	**9/7/2023**	**337**	**Yes**	**54**	**9.841**	**2.893**	**0**	**None**	**sqrt(x)**	**0.001075**	**Param Inter 1 of 2**
Total Dissolved Solids [TDS] (mg/L)	**DGWC-68A**	**238.1**	**n/a**	**9/7/2023**	**253**	**Yes**	**54**	**9.841**	**2.893**	**0**	**None**	**sqrt(x)**	**0.001075**	**Param Inter 1 of 2**
Total Dissolved Solids [TDS] (mg/L)	DGWC-69	238.1	n/a	9/7/2023	106	No	54	9.841	2.893	0	None	sqrt(x)	0.001075	Param Inter 1 of 2

Sanitas™ v.10.0.10 Sanitas software utilized by Groundwater Stats Consulting. 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 53 background values. 24.53% NDs. Annual per-constituent alpha = 0.009372. Individual comparison alpha = 0.0006724 (1 of 2). Comparing 7 points to limit.

Constituent: Boron Analysis Run 11/16/2023 4:15 PM View: AP 1 Appendix III

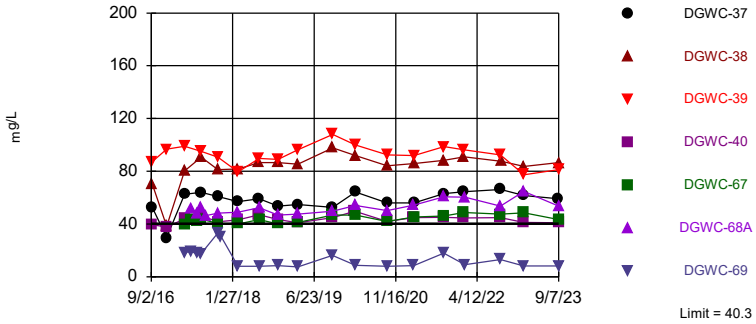
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.10.0.10 Sanitas software utilized by Groundwater Stats Consulting. 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 53 background values. 3.774% NDs. Annual per-constituent alpha = 0.009372. Individual comparison alpha = 0.0006724 (1 of 2). Comparing 7 points to limit.

Constituent: Calcium Analysis Run 11/16/2023 4:15 PM View: AP 1 Appendix III

Plant McDonough Client: Southern Company Data: McDonough AP

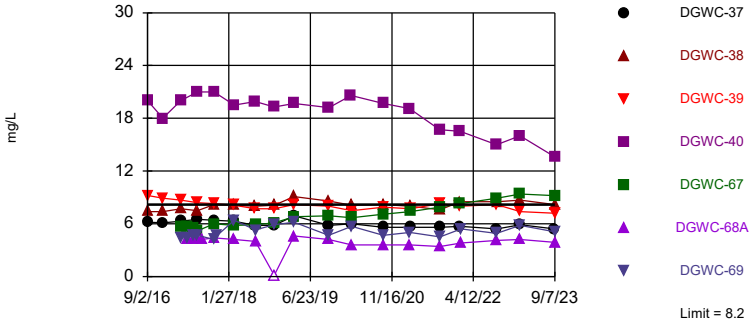
Sanitas™ v.10.0.10 Sanitas software utilized by Groundwater Stats Consulting. UG

Hollow symbols indicate censored values.

Exceeds Limit: 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 55 background values. Annual per-constituent alpha = 0.008769. Individual comparison alpha = 0.0006289 (1 of 2). Comparing 7 points to limit.

Constituent: Chloride Analysis Run 11/16/2023 4:15 PM View: AP 1 Appendix III

Plant McDonough Client: Southern Company Data: McDonough AP

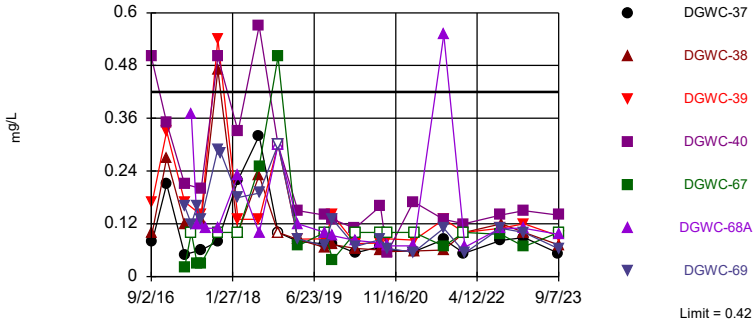
Sanitas™ v.10.0.10 Sanitas software utilized by Groundwater Stats Consulting. UG

Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Francia normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 60 background values. 48.33% NDs. Annual per-constituent alpha = 0.007263. Individual comparison alpha = 0.0005205 (1 of 2). Comparing 7 points to limit.

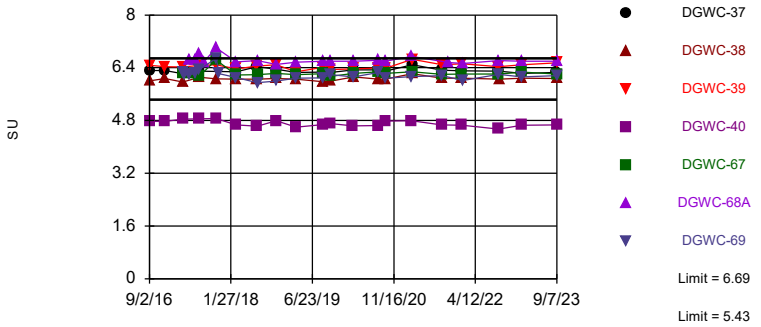
Constituent: Fluoride Analysis Run 11/16/2023 4:15 PM View: AP 1 Appendix III

Plant McDonough Client: Southern Company Data: McDonough AP

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 62 background values. Annual per-constituent alpha = 0.01378. Individual comparison alpha = 0.0009874 (1 of 2). Comparing 7 points to limit.

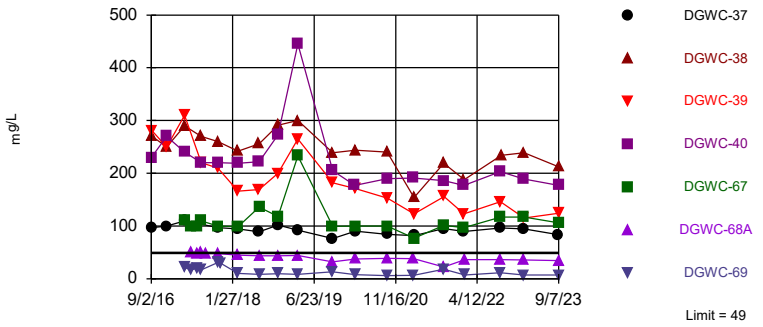
Constituent: pH, Field Analysis Run 11/16/2023 4:15 PM View: AP 1 Appendix III

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 Francia normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 55 background values. 16.36% NDs. Annual per-constituent alpha = 0.008769. Individual comparison alpha = 0.0006289 (1 of 2). Comparing 7 points to limit.

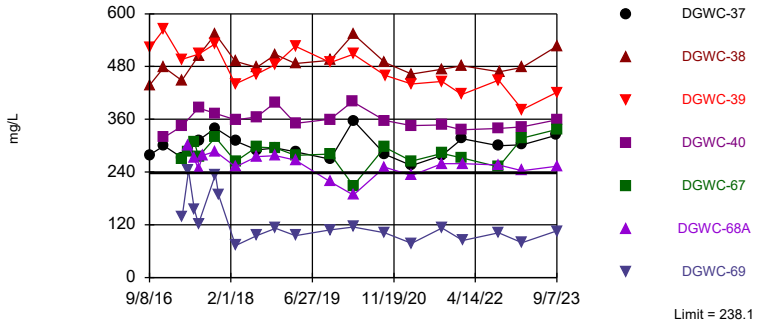
Constituent: Sulfate Analysis Run 11/16/2023 4:15 PM View: AP 1 Appendix III

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 Parametric



Background Data Summary (based on square root transformation): Mean=9.841, Std. Dev.=2.893, n=54. Normality test: Shapiro Francia @alpha = 0.01, calculated = 0.9587, critical = 0.939. Kappa = 1.933 (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 11/16/2023 4:15 PM View: AP 1 Appendix III

Plant McDonough Client: Southern Company Data: McDonough AP

Prediction Limit

Constituent: Boron (mg/L) Analysis Run 11/16/2023 4:17 PM View: AP 1 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	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								2.91	0.407
4/12/2017									0.207
5/11/2017							0.0805		
5/12/2017					0.0082 (J)			3.24	0.311
5/15/2017						0.0073 (J)			
6/15/2017						<0.04	0.0725		
6/16/2017					0.0085 (J)			3.42	0.381
7/11/2017					0.0077 (J)	<0.04			
7/12/2017							0.0735		
7/13/2017	0.933	3.41	3.09	2.1				3.46	0.323
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				3.21	0.779
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							3.49	0.0478
3/8/2018							0.13 (J)		
7/12/2018	0.92	3	2.8	1.5			0.076		
7/13/2018								3.1	0.043
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				3.5	0.054
3/12/2019					0.0068 (J)	0.0073 (J)			
3/13/2019	0.8	3.4	2.9	1.8			0.08	3.5	0.028 (J)
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)	3.6	0.035 (J)
9/22/2020					<0.04	<0.04	0.056 (J)		
9/23/2020	0.76							3.2	0.041 (J)
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				3.4	0.32

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 11/16/2023 4:17 PM View: AP 1 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
9/17/2021		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							
9/6/2023				1.7	0.015 (J)	0.012 (J)			
9/7/2023	0.73	2.7	2.8				0.052	3.9	0.052

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Boron (mg/L) Analysis Run 11/16/2023 4:17 PM View: AP 1 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 11/16/2023 4:17 PM View: AP 1 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	
9/6/2023	
9/7/2023	1.8

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 11/16/2023 4:17 PM View: AP 1 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 11/16/2023 4:17 PM View: AP 1 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							
9/6/2023				59.1	7	6.6			
9/7/2023	41	81.2	86.5				16.3	43.3	8.1

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 11/16/2023 4:17 PM View: AP 1 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 11/16/2023 4:17 PM View: AP 1 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	
9/6/2023	
9/7/2023	53.6

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 11/16/2023 4:17 PM View: AP 1 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	20								
9/8/2016		9.2	7.4	6.2					
12/7/2016		8.9	7.4	6.1					
12/8/2016	18								
3/28/2017					3.6	3.8	3.7		
3/30/2017	20	8.7	7.7	6.3					
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	8.4	7.5	6.5				4.7	5.2
8/8/2017						2.2			
10/24/2017					3.2	2.4	2.7		
10/26/2017	21	8.3	8.2	6.4				4.2	6
11/15/2017					3.1		2.2	4.7	
2/27/2018					3.2	2.5			
3/1/2018		8.1	8.1	6.3					
3/2/2018	19.5							6.4	5.8
3/8/2018							2.4		
7/12/2018	19.9	7.7	8	5.8			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	7.7	8.1	5.8				5.9	6.1
3/12/2019					3.3	2.5			
3/13/2019	19.7	8.2	9.1	6.9			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	8.6	5.8					
3/2/2020					3	1.9			
3/4/2020	20.6								
3/9/2020		7.5	8.1	6			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		7.7	8	5.6					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 11/16/2023 4:17 PM View: AP 1 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
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							
9/6/2023				5.4	7.8	2.2			
9/7/2023	13.6	7.2	8.2				1.7	5.1	9.2

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 11/16/2023 4:17 PM View: AP 1 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	

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 11/16/2023 4:17 PM View: AP 1 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	
9/6/2023	
9/7/2023	3.9

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 11/16/2023 4:17 PM View: AP 1 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 11/16/2023 4:17 PM View: AP 1 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							
9/6/2023				0.053 (J)	<0.1				
9/7/2023	0.14	0.092 (J)	0.072 (J)			0.082 (J)	<0.1	0.063 (J)	0.096 (J)

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 11/16/2023 4:17 PM View: AP 1 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

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 11/16/2023 4:17 PM View: AP 1 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	
9/6/2023	<0.1
9/7/2023	

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: pH, Field (SU) Analysis Run 11/16/2023 4:17 PM View: AP 1 Appendix III

Plant McDonough Client: Southern Company Data: McDonough AP

	DGWC-40	DGWC-39	DGWC-38	DGWC-37	DGWA-53 (bg)	DGWA-71 (bg)	DGWC-69	DGWC-67	DGWC-68A
9/2/2016	4.77								
9/8/2016		6.47	6.01	6.32					
12/7/2016		6.43	6.07	6.32					
12/8/2016	4.77								
3/28/2017					6.29	5.94			
3/30/2017	4.84	6.42	5.97	6.22					
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	6.47	6.11	6.3			6.35	6.15	6.84
8/8/2017									6.57
10/24/2017					5.51	5.86			
10/26/2017	4.86	6.49	6.06				6.69	6.64	7.01
11/15/2017					6.5	5.77	6.22		
2/27/2018						5.66			
3/1/2018		6.37	6.05	6.28					
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	6.45	6.05	6.43	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	6.49	6.07	6.36			6	6.23	6.5
3/12/2019						5.74			
3/13/2019	4.6	6.28	6.05	6.26	6		6.08	6.19	6.57
8/27/2019						5.87			
8/28/2019	4.68	6.41	5.98	6.27	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	6.35	6	6.26					
3/2/2020						5.77			
3/4/2020	4.64								
3/9/2020		6.37	6.12	6.34	6.41		6.12	6.23	6.6
8/11/2020						5.96			
8/13/2020	4.65	6.39	6.05	6.34	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			6.05	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		6.66	6.22	6.49				6.28	
3/12/2021					6.38				

Prediction Limit

Constituent: pH, Field (SU) Analysis Run 11/16/2023 4:17 PM View: AP 1 Appendix III

Plant McDonough Client: Southern Company Data: McDonough AP

	DGWC-40	DGWC-39	DGWC-38	DGWC-37	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			6.08	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						
1/31/2023						5.78			
2/1/2023	4.66				6.42		6.12		6.6
2/2/2023			6.08	6.23				6.27	
2/3/2023		6.49							
9/6/2023				6.26	6.51	5.82			
9/7/2023	4.67	6.55	6.07				6.16	6.21	6.6

Prediction Limit

Constituent: pH, Field (SU) Analysis Run 11/16/2023 4:17 PM View: AP 1 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 11/16/2023 4:17 PM View: AP 1 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	
9/6/2023	5.5
9/7/2023	

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 11/16/2023 4:17 PM View: AP 1 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 11/16/2023 4:17 PM View: AP 1 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							
9/6/2023				83.4	7.2	<1			
9/7/2023	177	124	212				15.4	106	6.9

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 11/16/2023 4:17 PM View: AP 1 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 11/16/2023 4:17 PM View: AP 1 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	
9/6/2023	
9/7/2023	34.2

Prediction Limit

Constituent: Total Dissolved Solids [TDS] (mg/L) Analysis Run 11/16/2023 4:17 PM View: AP 1 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 [TDS] (mg/L) Analysis Run 11/16/2023 4:17 PM View: AP 1 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								
9/6/2023			324		80	46			
9/7/2023	421	526		359			123	106	337

Prediction Limit

Constituent: Total Dissolved Solids [TDS] (mg/L) Analysis Run 11/16/2023 4:17 PM View: AP 1 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 [TDS] (mg/L) Analysis Run 11/16/2023 4:17 PM View: AP 1 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	
9/6/2023	
9/7/2023	253

FIGURE E.

Appendix III Trend Tests - Significant Results

Plant McDonough Client: Southern Company Data: McDonough AP Printed 11/16/2023, 4:24 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Boron (mg/L)	**DGWA-53 (bg)**	**-0.003815**	**-70**	**-68**	**Yes**	**18**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	**DGWC-39**	**-0.1188**	**-83**	**-68**	**Yes**	**18**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	**DGWC-40**	**-0.02836**	**-82**	**-68**	**Yes**	**18**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	**DGWC-67**	**0.1043**	**79**	**68**	**Yes**	**18**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**DGWA-53 (bg)**	**-3.489**	**-105**	**-68**	**Yes**	**18**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**DGWC-67**	**0.8732**	**70**	**68**	**Yes**	**18**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**DGWC-68A**	**1.409**	**79**	**68**	**Yes**	**18**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	**DGWA-53 (bg)**	**-0.1444**	**-106**	**-74**	**Yes**	**19**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	**DGWA-71 (bg)**	**0.6112**	**69**	**68**	**Yes**	**18**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	**DGWC-40**	**-0.7275**	**-92**	**-68**	**Yes**	**18**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	**DGWC-67**	**0.5939**	**131**	**68**	**Yes**	**18**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**DGWA-71 (bg)**	**-0.7648**	**-99**	**-68**	**Yes**	**18**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**DGWC-38**	**-8.286**	**-81**	**-68**	**Yes**	**18**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**DGWC-39**	**-20.53**	**-108**	**-68**	**Yes**	**18**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**DGWC-40**	**-8.746**	**-85**	**-68**	**Yes**	**18**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Total Dissolved Solids [TDS] (mg/L)	**DGWA-53 (bg)**	**-19.82**	**-110**	**-68**	**Yes**	**18**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Total Dissolved Solids [TDS] (mg/L)	**DGWC-39**	**-17.23**	**-89**	**-68**	**Yes**	**18**	**0**	**n/a**	**n/a**	**0.01**	**NP**

Appendix III Trend Tests - All Results

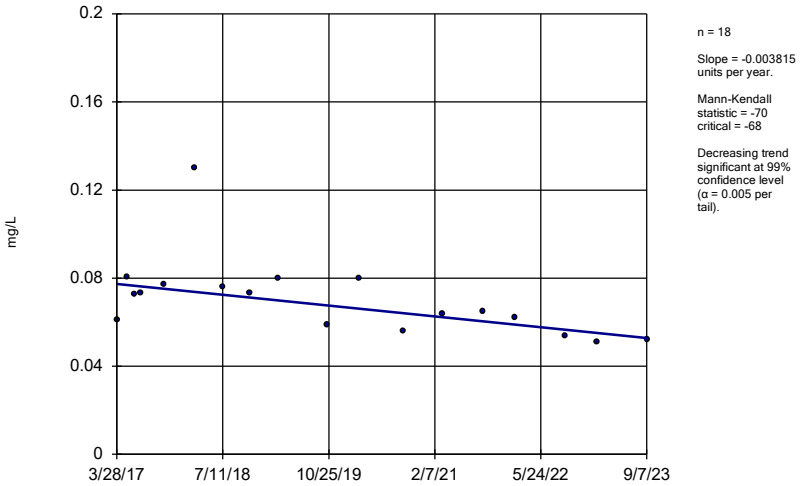
Plant McDonough Client: Southern Company Data: McDonough AP Printed 11/16/2023, 4:24 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Boron (mg/L)	**DGWA-53 (bg)**	**-0.003815**	**-70**	**-68**	**Yes**	**18**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	DGWA-70A (bg)	0	12	68	No	18	50	n/a	n/a	0.01	NP
Boron (mg/L)	DGWA-71 (bg)	0.0006045	25	63	No	17	23.53	n/a	n/a	0.01	NP
Boron (mg/L)	DGWC-37	-0.03141	-33	-68	No	18	0	n/a	n/a	0.01	NP
Boron (mg/L)	DGWC-38	-0.05069	-59	-68	No	18	0	n/a	n/a	0.01	NP
Boron (mg/L)	**DGWC-39**	**-0.1188**	**-83**	**-68**	**Yes**	**18**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	**DGWC-40**	**-0.02836**	**-82**	**-68**	**Yes**	**18**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	**DGWC-67**	**0.1043**	**79**	**68**	**Yes**	**18**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	DGWC-68A	-0.02929	-32	-68	No	18	0	n/a	n/a	0.01	NP
Calcium (mg/L)	**DGWA-53 (bg)**	**-3.489**	**-105**	**-68**	**Yes**	**18**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	DGWA-70A (bg)	0.04315	15	68	No	18	5.556	n/a	n/a	0.01	NP
Calcium (mg/L)	DGWA-71 (bg)	-0.2966	-37	-63	No	17	5.882	n/a	n/a	0.01	NP
Calcium (mg/L)	DGWC-37	0.9165	43	68	No	18	0	n/a	n/a	0.01	NP
Calcium (mg/L)	DGWC-38	1.333	53	68	No	18	0	n/a	n/a	0.01	NP
Calcium (mg/L)	DGWC-39	-0.5609	-14	-68	No	18	0	n/a	n/a	0.01	NP
Calcium (mg/L)	DGWC-40	0.1995	15	68	No	18	0	n/a	n/a	0.01	NP
Calcium (mg/L)	**DGWC-67**	**0.8732**	**70**	**68**	**Yes**	**18**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**DGWC-68A**	**1.409**	**79**	**68**	**Yes**	**18**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	**DGWA-53 (bg)**	**-0.1444**	**-106**	**-74**	**Yes**	**19**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	DGWA-70A (bg)	-0.03406	-39	-68	No	18	0	n/a	n/a	0.01	NP
Chloride (mg/L)	**DGWA-71 (bg)**	**0.6112**	**69**	**68**	**Yes**	**18**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	**DGWC-40**	**-0.7275**	**-92**	**-68**	**Yes**	**18**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	**DGWC-67**	**0.5939**	**131**	**68**	**Yes**	**18**	**0**	**n/a**	**n/a**	**0.01**	**NP**
pH, Field (SU)	DGWA-53 (bg)	0.02783	39	87	No	21	0	n/a	n/a	0.01	NP
pH, Field (SU)	DGWA-70A (bg)	-0.02199	-46	-81	No	20	0	n/a	n/a	0.01	NP
pH, Field (SU)	DGWA-71 (bg)	0.004559	10	87	No	21	0	n/a	n/a	0.01	NP
pH, Field (SU)	DGWC-40	-0.02096	-56	-81	No	20	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	DGWA-53 (bg)	-0.3271	-19	-74	No	19	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	DGWA-70A (bg)	0	-25	-68	No	18	50	n/a	n/a	0.01	NP
Sulfate (mg/L)	**DGWA-71 (bg)**	**-0.7648**	**-99**	**-68**	**Yes**	**18**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	DGWC-37	-1.952	-51	-63	No	17	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	**DGWC-38**	**-8.286**	**-81**	**-68**	**Yes**	**18**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**DGWC-39**	**-20.53**	**-108**	**-68**	**Yes**	**18**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**DGWC-40**	**-8.746**	**-85**	**-68**	**Yes**	**18**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	DGWC-67	0	-5	-68	No	18	0	n/a	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	**DGWA-53 (bg)**	**-19.82**	**-110**	**-68**	**Yes**	**18**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Total Dissolved Solids [TDS] (mg/L)	DGWA-70A (bg)	0	0	68	No	18	0	n/a	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	DGWA-71 (bg)	-1.946	-37	-68	No	18	0	n/a	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	DGWC-37	1.283	10	68	No	18	0	n/a	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	DGWC-38	1.133	7	68	No	18	0	n/a	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	**DGWC-39**	**-17.23**	**-89**	**-68**	**Yes**	**18**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Total Dissolved Solids [TDS] (mg/L)	DGWC-40	-3.231	-27	-63	No	17	0	n/a	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	DGWC-67	0.3303	1	68	No	18	0	n/a	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	DGWC-68A	-4.867	-56	-68	No	18	0	n/a	n/a	0.01	NP

Sanitas™ v.10.0.10 Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

DGWA-53 (bg)



n = 18

Slope = -0.003815 units per year.

Mann-Kendall statistic = -70
critical = -68

Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 11/16/2023 4:22 PM View: AP 1 Appendix III Trend Tests

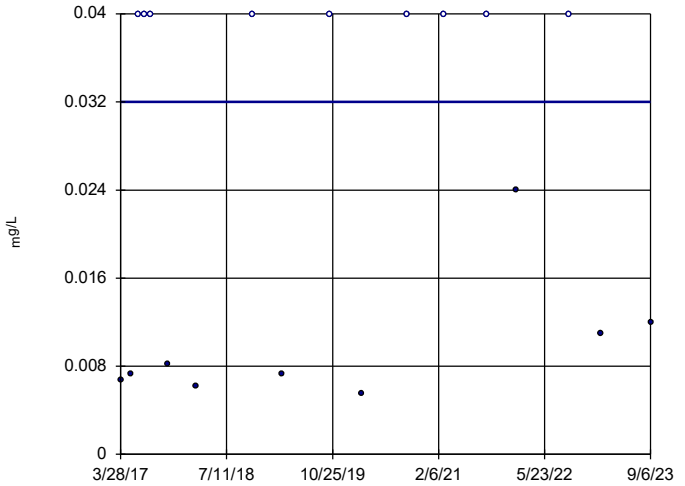
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.10.0.10 Sanitas software utilized by Groundwater Stats Consulting. UG

Hollow symbols indicate censored values.

Sen's Slope Estimator

DGWA-70A (bg)



n = 18

Slope = 0 units per year.

Mann-Kendall statistic = 12
critical = 68

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 11/16/2023 4:22 PM View: AP 1 Appendix III Trend Tests

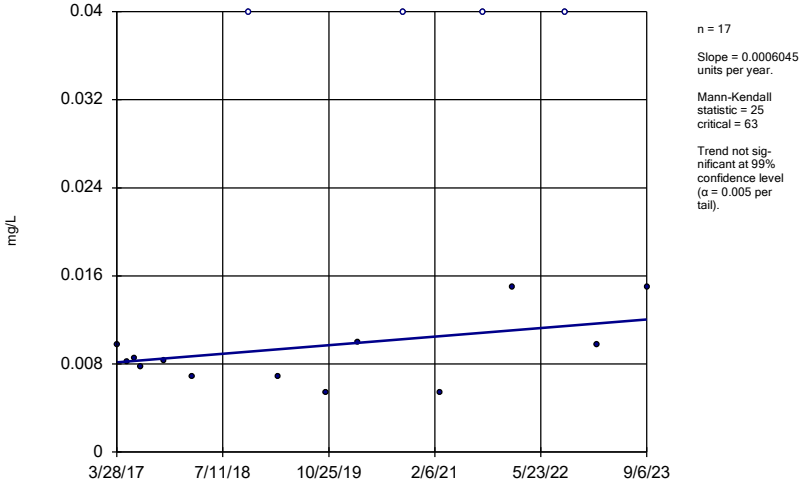
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.10.0.10 Sanitas software utilized by Groundwater Stats Consulting. UG

Hollow symbols indicate censored values.

Sen's Slope Estimator

DGWA-71 (bg)



n = 17

Slope = 0.0006045 units per year.

Mann-Kendall statistic = 25
critical = 63

Trend not significant at 99% confidence level (α = 0.005 per tail).

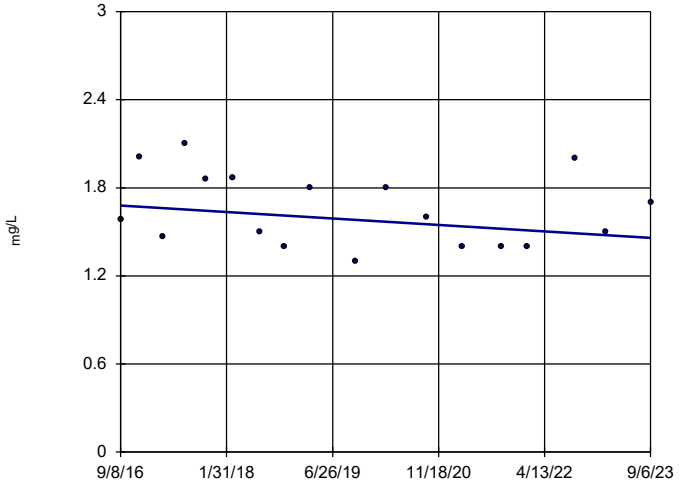
Constituent: Boron Analysis Run 11/16/2023 4:22 PM View: AP 1 Appendix III Trend Tests

Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.10.0.10 Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

DGWC-37



n = 18

Slope = -0.03141 units per year.

Mann-Kendall statistic = -33
critical = -68

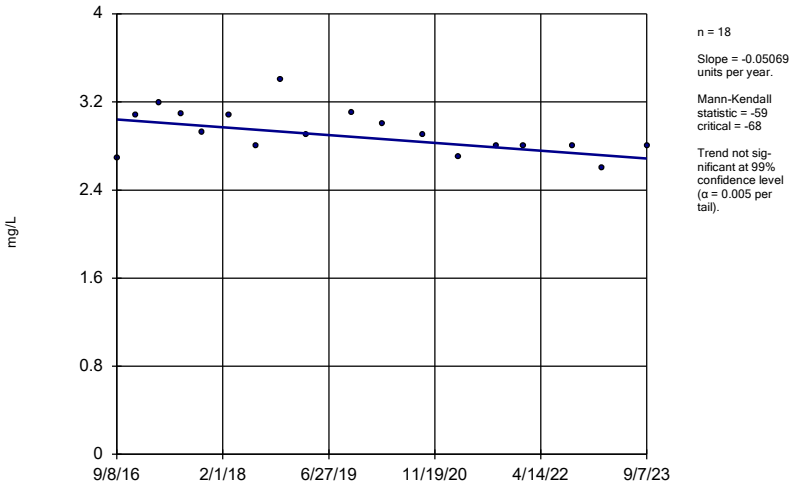
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 11/16/2023 4:22 PM View: AP 1 Appendix III Trend Tests

Plant McDonough Client: Southern Company Data: McDonough AP

Sen's Slope Estimator

DGWC-38



n = 18

Slope = -0.05069 units per year.

Mann-Kendall statistic = -59
critical = -68

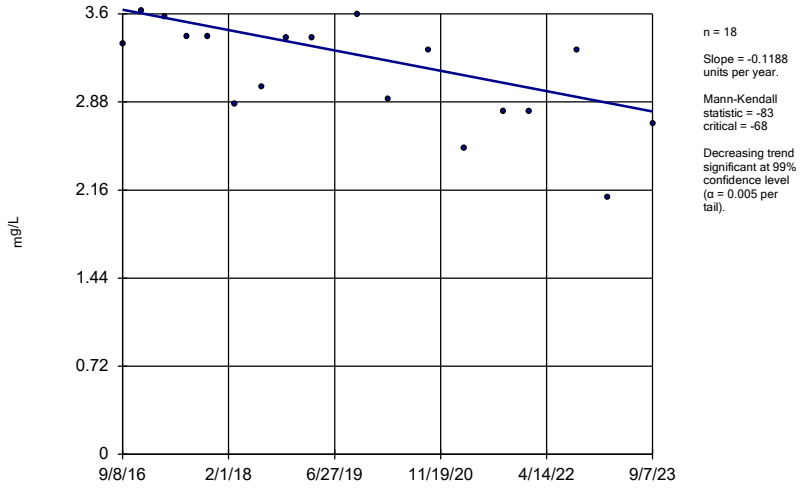
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 11/16/2023 4:22 PM View: AP 1 Appendix III Trend Tests
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.10.0.10 Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

DGWC-39



n = 18

Slope = -0.1188 units per year.

Mann-Kendall statistic = -83
critical = -68

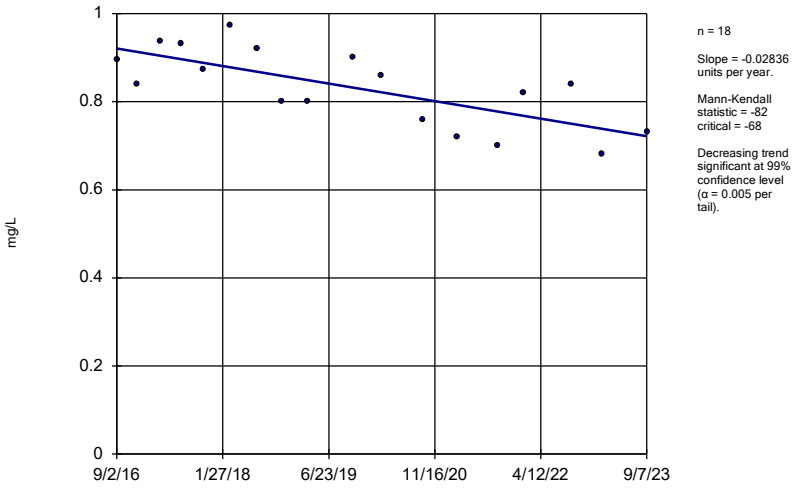
Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 11/16/2023 4:22 PM View: AP 1 Appendix III Trend Tests
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.10.0.10 Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

DGWC-40



n = 18

Slope = -0.02836 units per year.

Mann-Kendall statistic = -82
critical = -68

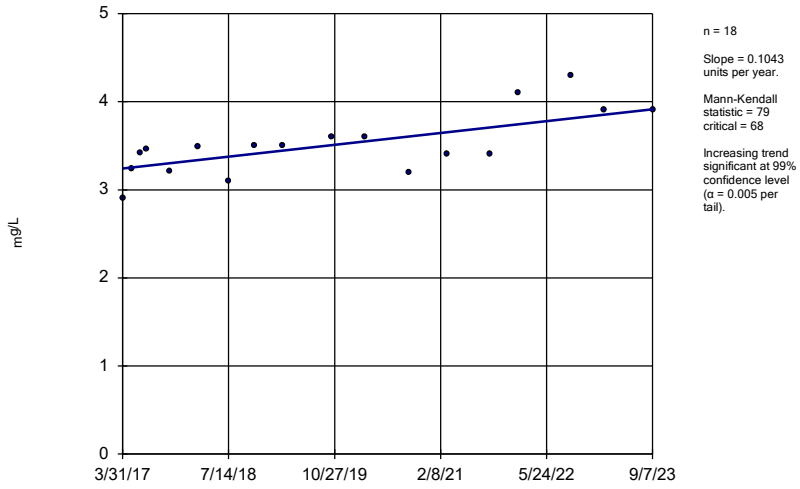
Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 11/16/2023 4:22 PM View: AP 1 Appendix III Trend Tests
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.10.0.10 Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

DGWC-67



n = 18

Slope = 0.1043 units per year.

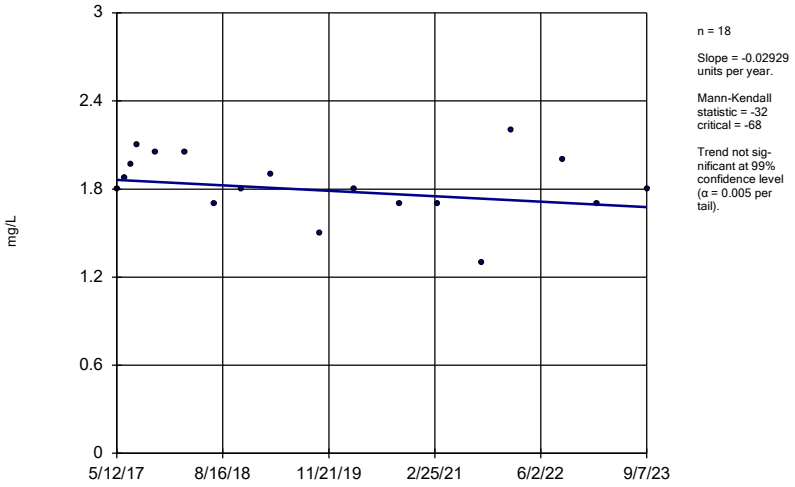
Mann-Kendall statistic = 79
critical = 68

Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 11/16/2023 4:22 PM View: AP 1 Appendix III Trend Tests
Plant McDonough Client: Southern Company Data: McDonough AP

Sen's Slope Estimator

DGWC-68A



n = 18

Slope = -0.02929 units per year.

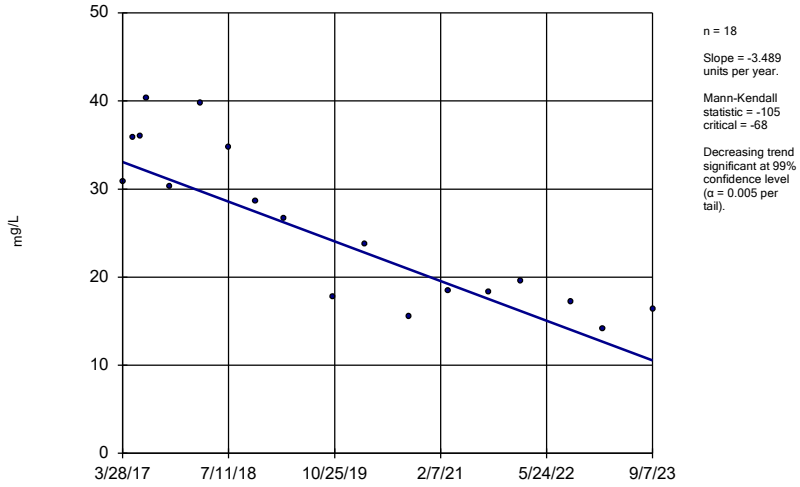
Mann-Kendall statistic = -32
critical = -68

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 11/16/2023 4:22 PM View: AP 1 Appendix III Trend Tests
Plant McDonough Client: Southern Company Data: McDonough AP

Sen's Slope Estimator

DGWA-53 (bg)



n = 18

Slope = -3.489 units per year.

Mann-Kendall statistic = -105
critical = -68

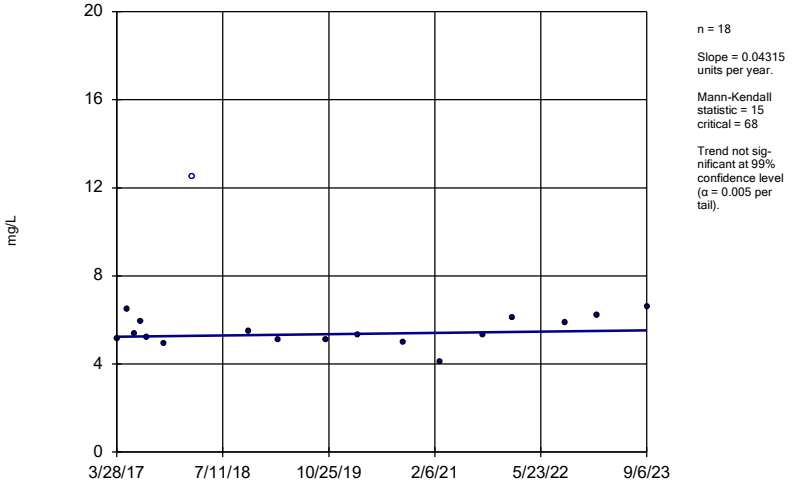
Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 11/16/2023 4:22 PM View: AP 1 Appendix III Trend Tests
Plant McDonough Client: Southern Company Data: McDonough AP

Hollow symbols indicate censored values.

Sen's Slope Estimator

DGWA-70A (bg)



n = 18

Slope = 0.04315 units per year.

Mann-Kendall statistic = 15
critical = 68

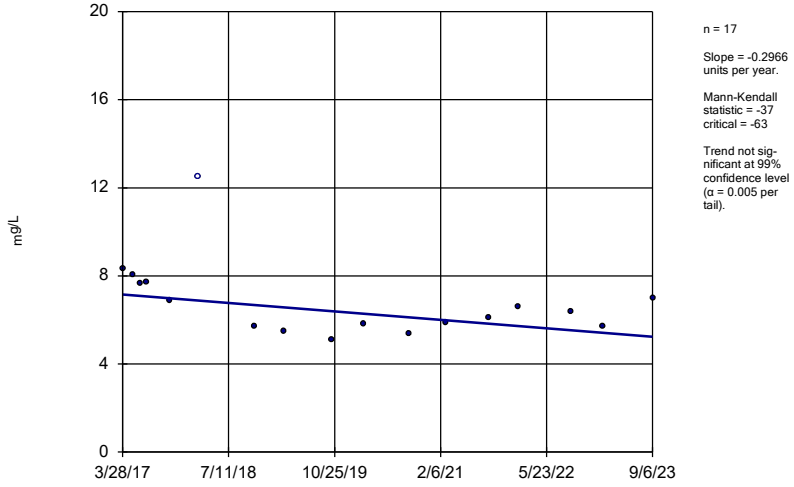
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 11/16/2023 4:22 PM View: AP 1 Appendix III Trend Tests
Plant McDonough Client: Southern Company Data: McDonough AP

Hollow symbols indicate censored values.

Sen's Slope Estimator

DGWA-71 (bg)



n = 17

Slope = -0.2966 units per year.

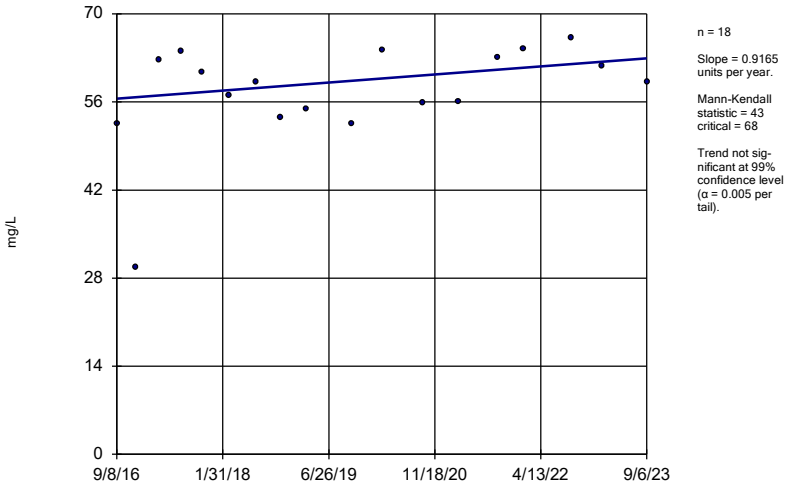
Mann-Kendall statistic = -37
critical = -63

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 11/16/2023 4:22 PM View: AP 1 Appendix III Trend Tests
Plant McDonough Client: Southern Company Data: McDonough AP

Sen's Slope Estimator

DGWC-37



n = 18

Slope = 0.9165 units per year.

Mann-Kendall statistic = 43 critical = 68

Trend not significant at 99% confidence level (α = 0.005 per tail).

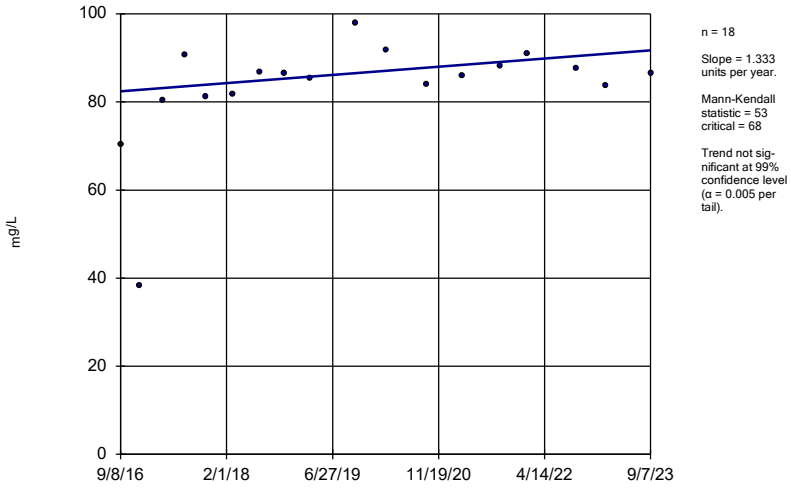
Constituent: Calcium Analysis Run 11/16/2023 4:22 PM View: AP 1 Appendix III Trend Tests

Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.10.0.10 Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

DGWC-38



n = 18

Slope = 1.333 units per year.

Mann-Kendall statistic = 53 critical = 68

Trend not significant at 99% confidence level (α = 0.005 per tail).

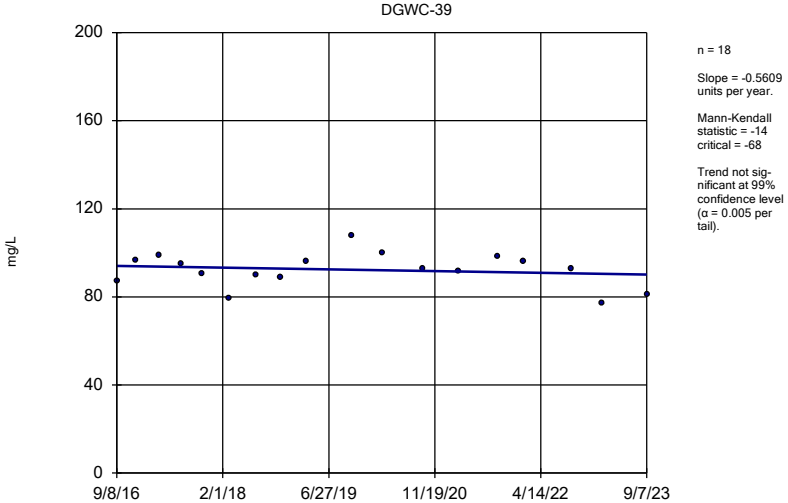
Constituent: Calcium Analysis Run 11/16/2023 4:22 PM View: AP 1 Appendix III Trend Tests

Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.10.0.10 Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

DGWC-39



n = 18

Slope = -0.5609 units per year.

Mann-Kendall statistic = -14 critical = -68

Trend not significant at 99% confidence level (α = 0.005 per tail).

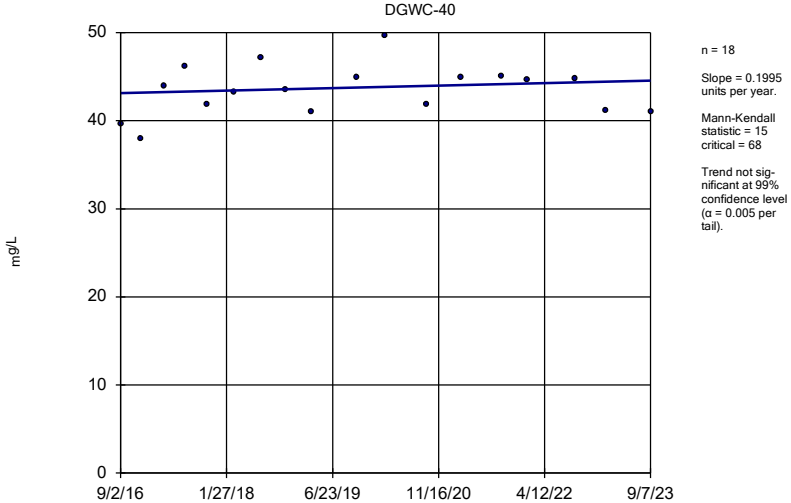
Constituent: Calcium Analysis Run 11/16/2023 4:22 PM View: AP 1 Appendix III Trend Tests

Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.10.0.10 Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

DGWC-40



n = 18

Slope = 0.1995 units per year.

Mann-Kendall statistic = 15 critical = 68

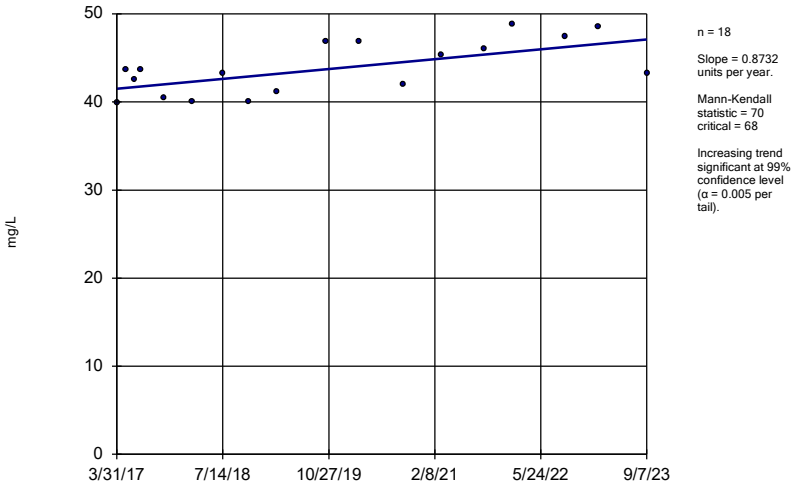
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 11/16/2023 4:22 PM View: AP 1 Appendix III Trend Tests

Plant McDonough Client: Southern Company Data: McDonough AP

Sen's Slope Estimator

DGWC-67



n = 18

Slope = 0.8732 units per year.

Mann-Kendall statistic = 70 critical = 68

Increasing trend significant at 99% confidence level (α = 0.005 per tail).

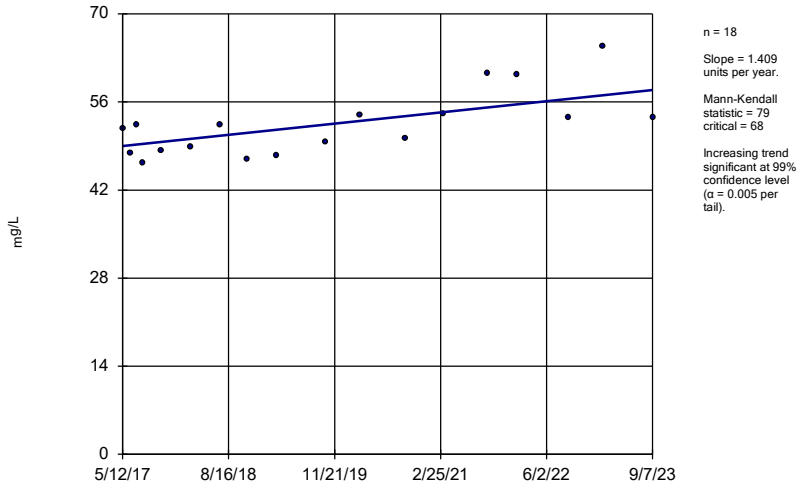
Constituent: Calcium Analysis Run 11/16/2023 4:22 PM View: AP 1 Appendix III Trend Tests

Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.10.0.10 Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

DGWC-68A



n = 18

Slope = 1.409 units per year.

Mann-Kendall statistic = 79 critical = 68

Increasing trend significant at 99% confidence level (α = 0.005 per tail).

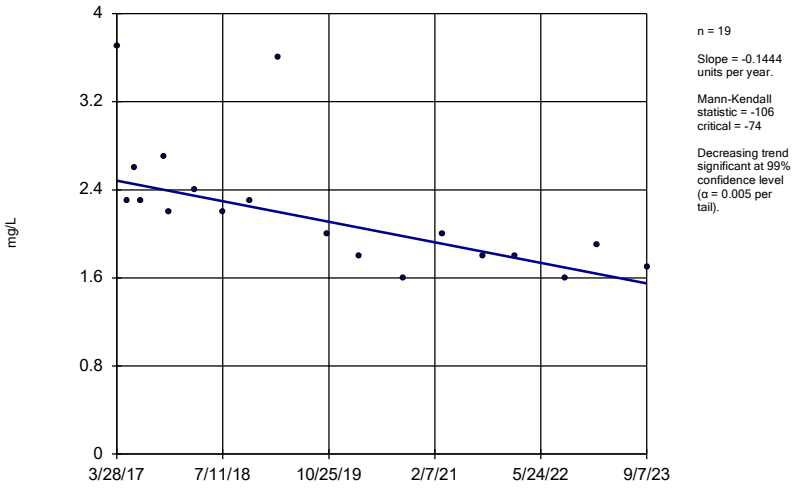
Constituent: Calcium Analysis Run 11/16/2023 4:22 PM View: AP 1 Appendix III Trend Tests

Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.10.0.10 Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

DGWA-53 (bg)



n = 19

Slope = -0.1444 units per year.

Mann-Kendall statistic = -106 critical = -74

Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

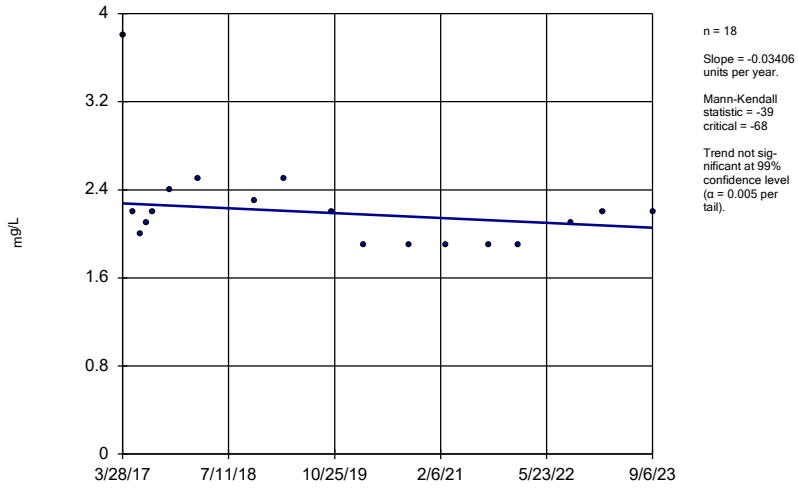
Constituent: Chloride Analysis Run 11/16/2023 4:22 PM View: AP 1 Appendix III Trend Tests

Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.10.0.10 Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

DGWA-70A (bg)



n = 18

Slope = -0.03406 units per year.

Mann-Kendall statistic = -39 critical = -68

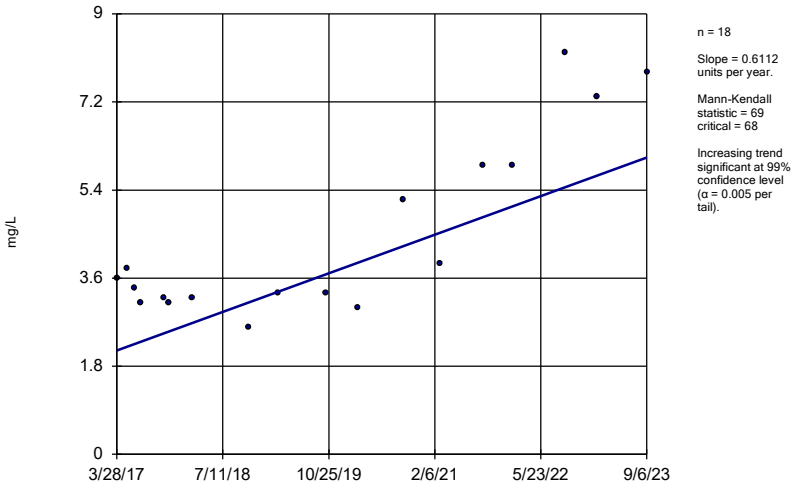
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride Analysis Run 11/16/2023 4:22 PM View: AP 1 Appendix III Trend Tests

Plant McDonough Client: Southern Company Data: McDonough AP

Sen's Slope Estimator

DGWA-71 (bg)



n = 18

Slope = 0.6112 units per year.

Mann-Kendall statistic = 69 critical = 68

Increasing trend significant at 99% confidence level (α = 0.005 per tail).

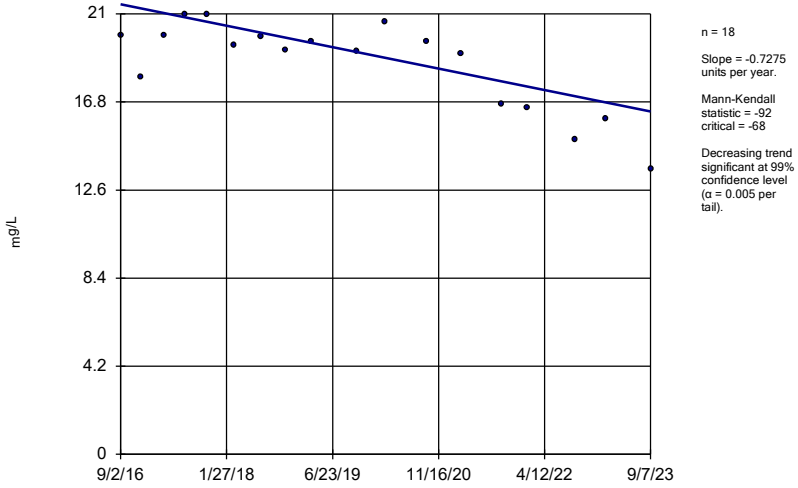
Constituent: Chloride Analysis Run 11/16/2023 4:22 PM View: AP 1 Appendix III Trend Tests

Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.10.0.10 Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

DGWC-40



n = 18

Slope = -0.7275 units per year.

Mann-Kendall statistic = -92 critical = -68

Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

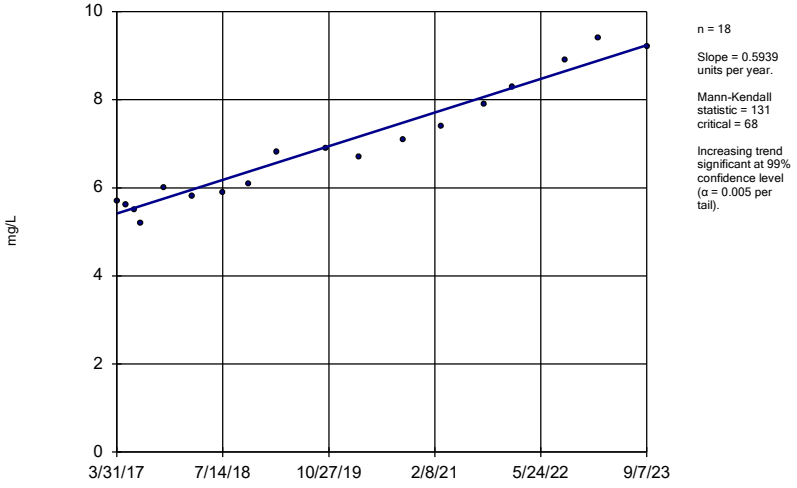
Constituent: Chloride Analysis Run 11/16/2023 4:22 PM View: AP 1 Appendix III Trend Tests

Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.10.0.10 Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

DGWC-67



n = 18

Slope = 0.5939 units per year.

Mann-Kendall statistic = 131 critical = 68

Increasing trend significant at 99% confidence level (α = 0.005 per tail).

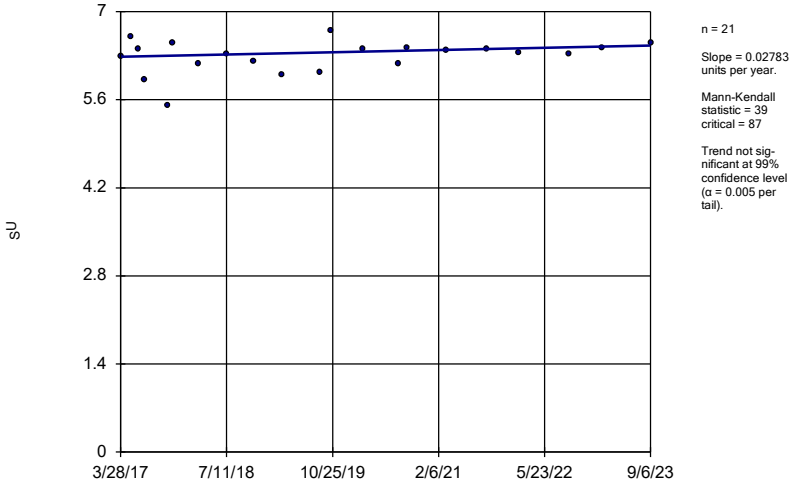
Constituent: Chloride Analysis Run 11/16/2023 4:22 PM View: AP 1 Appendix III Trend Tests

Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.10.0.10 Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

DGWA-53 (bg)



n = 21

Slope = 0.02783 units per year.

Mann-Kendall statistic = 39 critical = 87

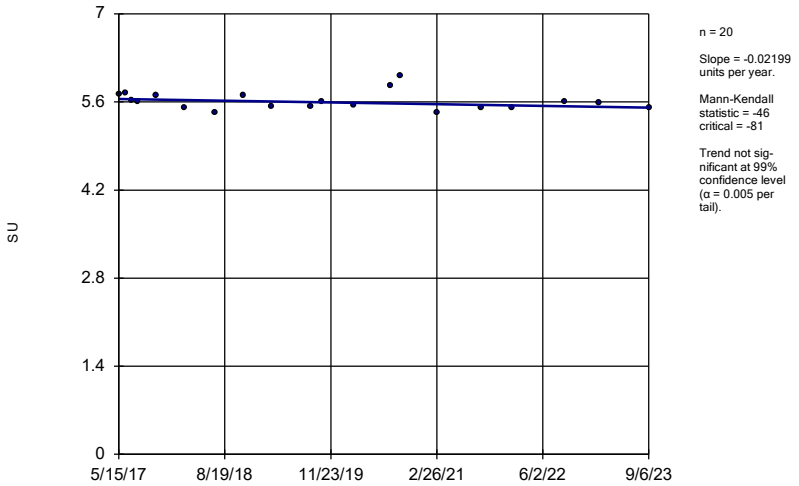
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: pH, Field Analysis Run 11/16/2023 4:22 PM View: AP 1 Appendix III Trend Tests

Plant McDonough Client: Southern Company Data: McDonough AP

Sen's Slope Estimator

DGWA-70A (bg)



n = 20

Slope = -0.02199 units per year.

Mann-Kendall statistic = -46
critical = -81

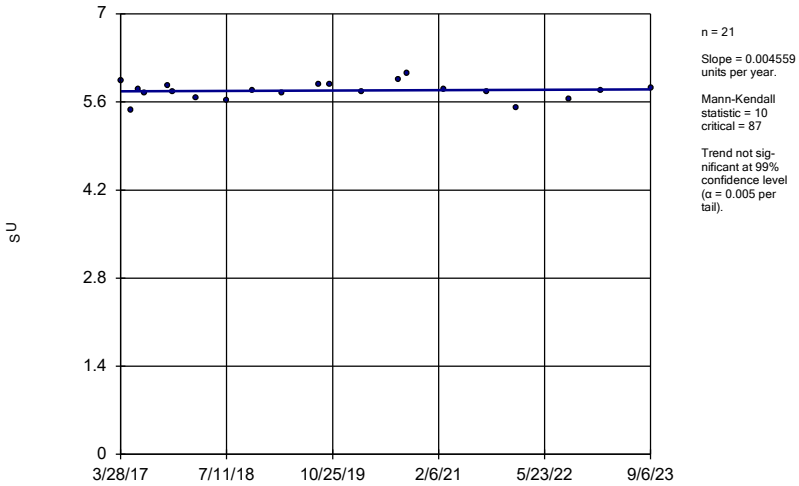
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: pH, Field Analysis Run 11/16/2023 4:22 PM View: AP 1 Appendix III Trend Tests
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.10.0.10 Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

DGWA-71 (bg)



n = 21

Slope = 0.004559 units per year.

Mann-Kendall statistic = 10
critical = 87

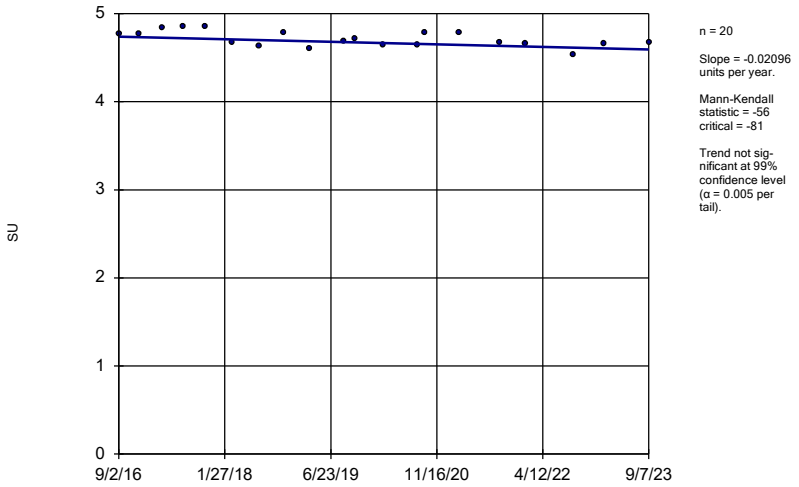
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: pH, Field Analysis Run 11/16/2023 4:22 PM View: AP 1 Appendix III Trend Tests
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.10.0.10 Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

DGWC-40



n = 20

Slope = -0.02096 units per year.

Mann-Kendall statistic = -56
critical = -81

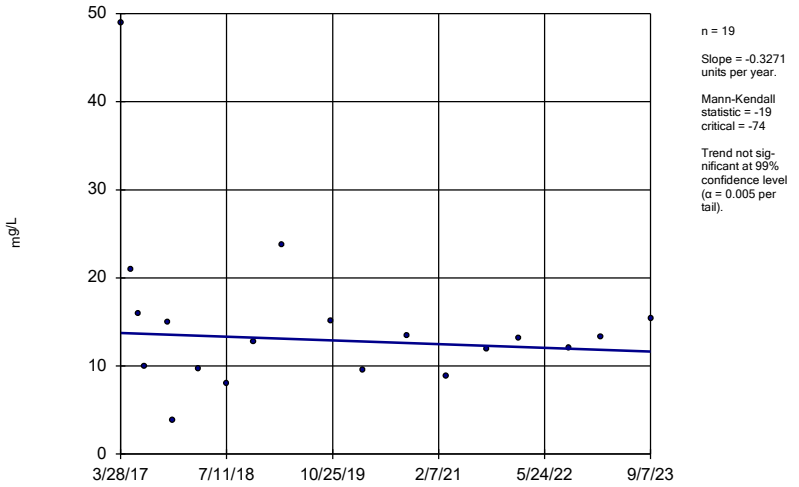
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: pH, Field Analysis Run 11/16/2023 4:22 PM View: AP 1 Appendix III Trend Tests
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.10.0.10 Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

DGWA-53 (bg)



n = 19

Slope = -0.3271 units per year.

Mann-Kendall statistic = -19
critical = -74

Trend not significant at 99% confidence level (α = 0.005 per tail).

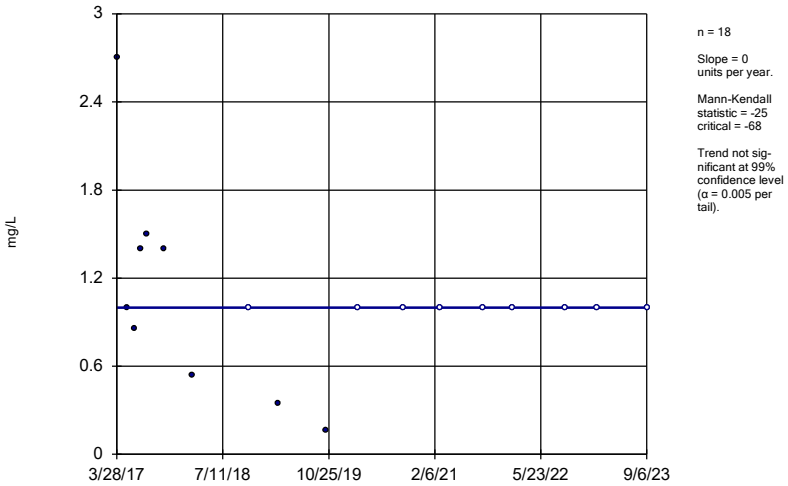
Constituent: Sulfate Analysis Run 11/16/2023 4:22 PM View: AP 1 Appendix III Trend Tests
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.10.0.10 Sanitas software utilized by Groundwater Stats Consulting. UG

Hollow symbols indicate censored values.

Sen's Slope Estimator

DGWA-70A (bg)



n = 18

Slope = 0 units per year.

Mann-Kendall statistic = -25 critical = -68

Trend not significant at 99% confidence level (α = 0.005 per tail).

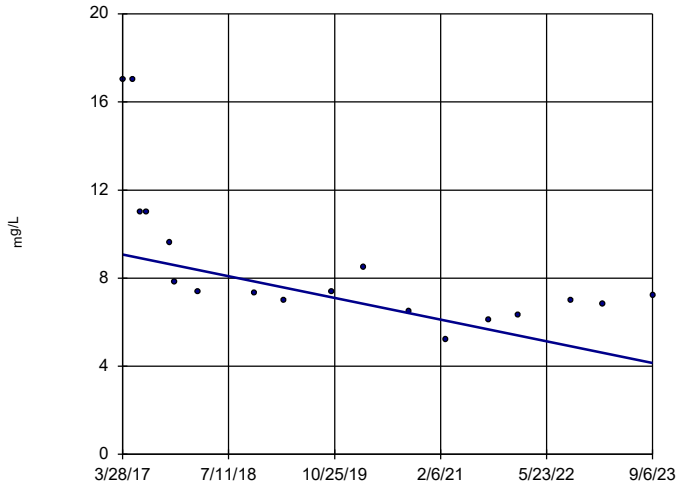
Constituent: Sulfate Analysis Run 11/16/2023 4:22 PM View: AP 1 Appendix III Trend Tests

Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.10.0.10 Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

DGWA-71 (bg)



n = 18

Slope = -0.7648 units per year.

Mann-Kendall statistic = -99 critical = -68

Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

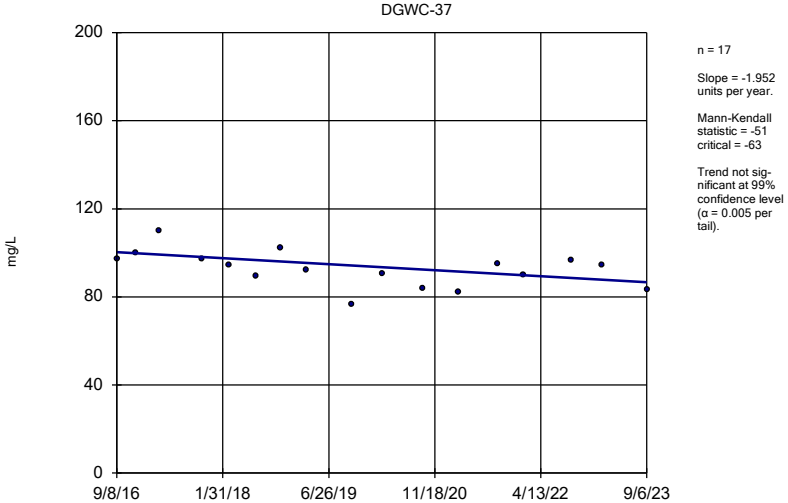
Constituent: Sulfate Analysis Run 11/16/2023 4:22 PM View: AP 1 Appendix III Trend Tests

Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.10.0.10 Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

DGWC-37



n = 17

Slope = -1.952 units per year.

Mann-Kendall statistic = -51 critical = -63

Trend not significant at 99% confidence level (α = 0.005 per tail).

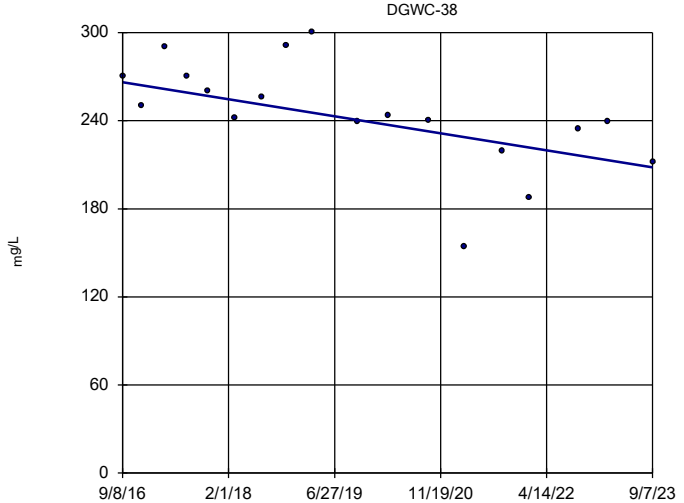
Constituent: Sulfate Analysis Run 11/16/2023 4:22 PM View: AP 1 Appendix III Trend Tests

Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.10.0.10 Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

DGWC-38



n = 18

Slope = -8.286 units per year.

Mann-Kendall statistic = -81 critical = -68

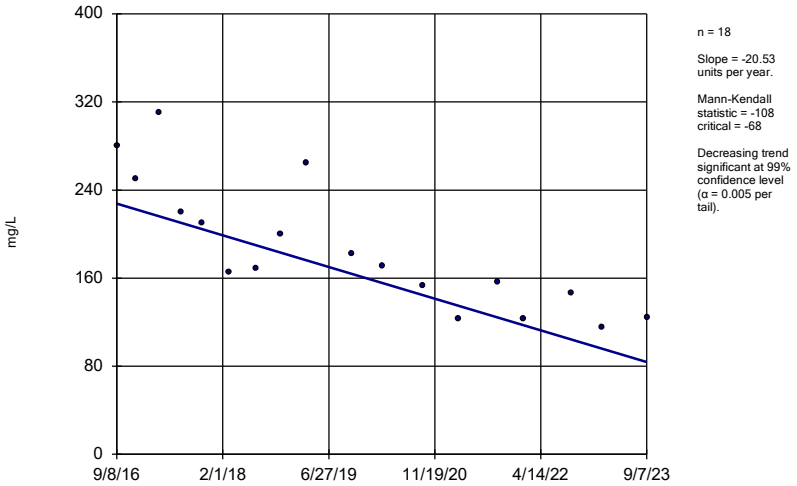
Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 11/16/2023 4:22 PM View: AP 1 Appendix III Trend Tests

Plant McDonough Client: Southern Company Data: McDonough AP

Sen's Slope Estimator

DGWC-39



n = 18

Slope = -20.53 units per year.

Mann-Kendall statistic = -108 critical = -68

Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

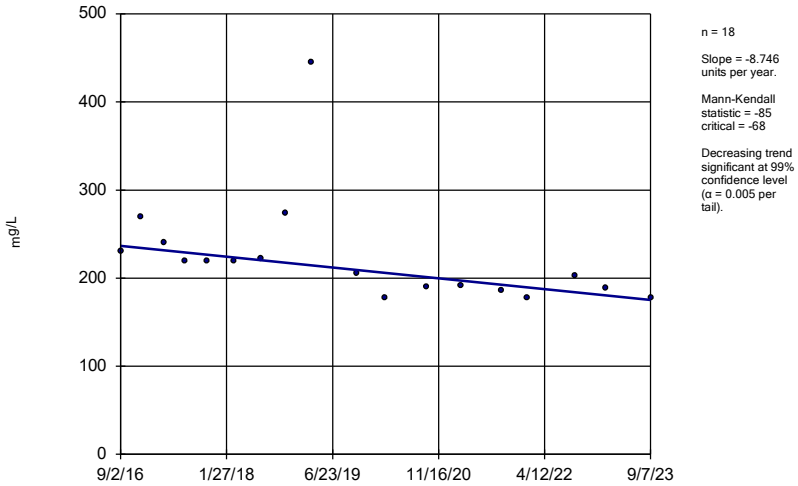
Constituent: Sulfate Analysis Run 11/16/2023 4:22 PM View: AP 1 Appendix III Trend Tests

Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.10.0.10 Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

DGWC-40



n = 18

Slope = -8.746 units per year.

Mann-Kendall statistic = -85 critical = -68

Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

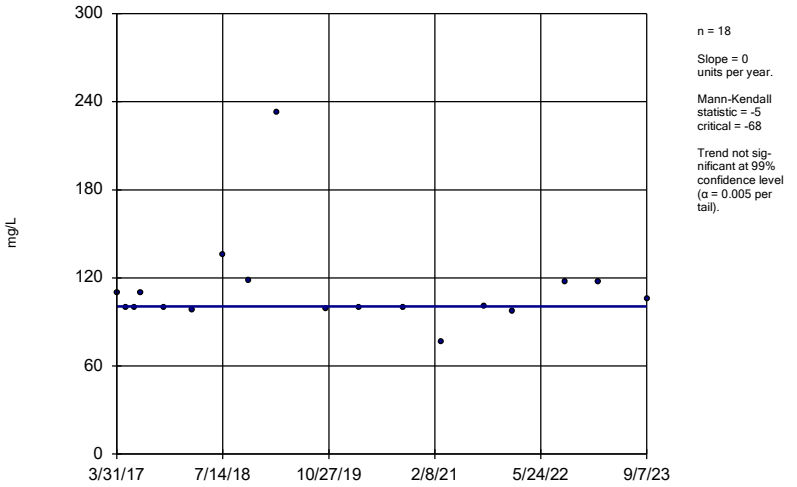
Constituent: Sulfate Analysis Run 11/16/2023 4:22 PM View: AP 1 Appendix III Trend Tests

Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.10.0.10 Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

DGWC-67



n = 18

Slope = 0 units per year.

Mann-Kendall statistic = -5 critical = -68

Trend not sig-nificant at 99% confidence level (α = 0.005 per tail).

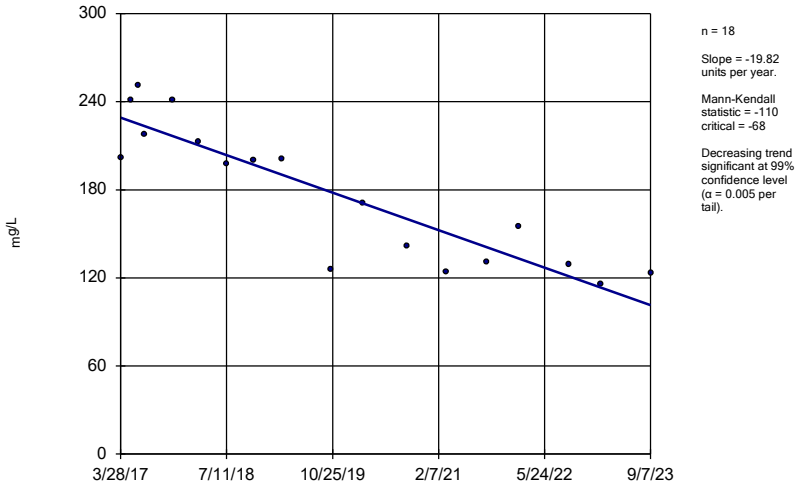
Constituent: Sulfate Analysis Run 11/16/2023 4:22 PM View: AP 1 Appendix III Trend Tests

Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.10.0.10 Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

DGWA-53 (bg)



n = 18

Slope = -19.82 units per year.

Mann-Kendall statistic = -110 critical = -68

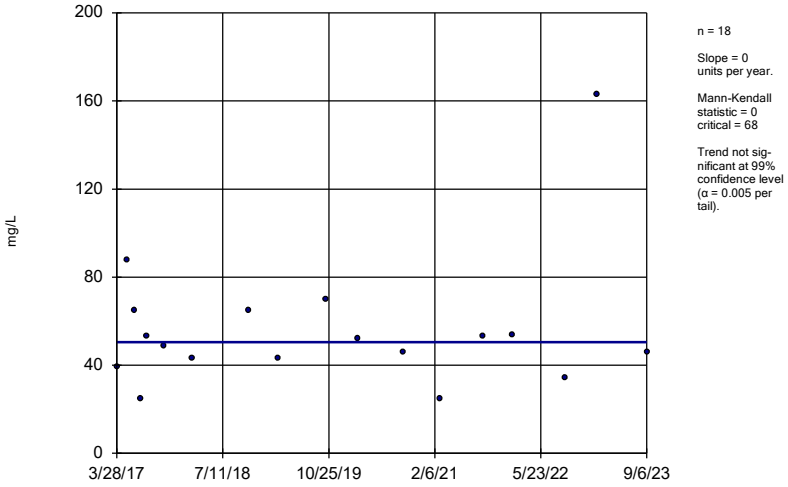
Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Total Dissolved Solids [TDS] Analysis Run 11/16/2023 4:22 PM View: AP 1 Appendix III Tren

Plant McDonough Client: Southern Company Data: McDonough AP

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).

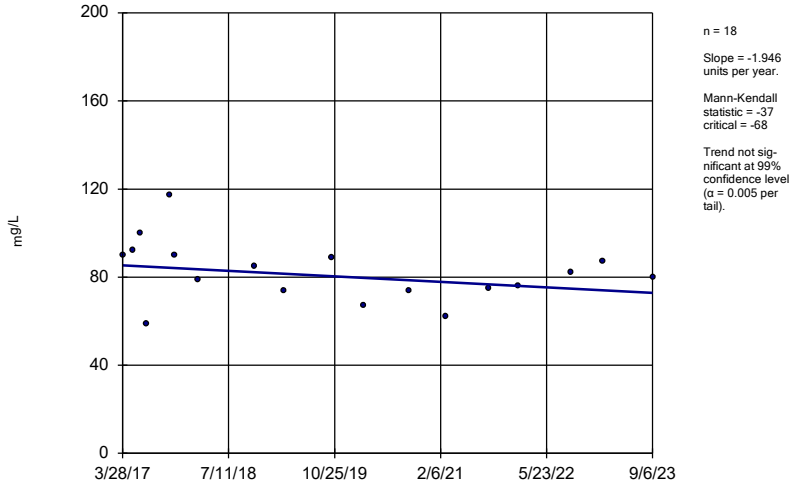
Constituent: Total Dissolved Solids [TDS] Analysis Run 11/16/2023 4:22 PM View: AP 1 Appendix III Tren

Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.10.0.10 Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

DGWA-71 (bg)



n = 18

Slope = -1.946 units per year.

Mann-Kendall statistic = -37 critical = -68

Trend not significant at 99% confidence level (α = 0.005 per tail).

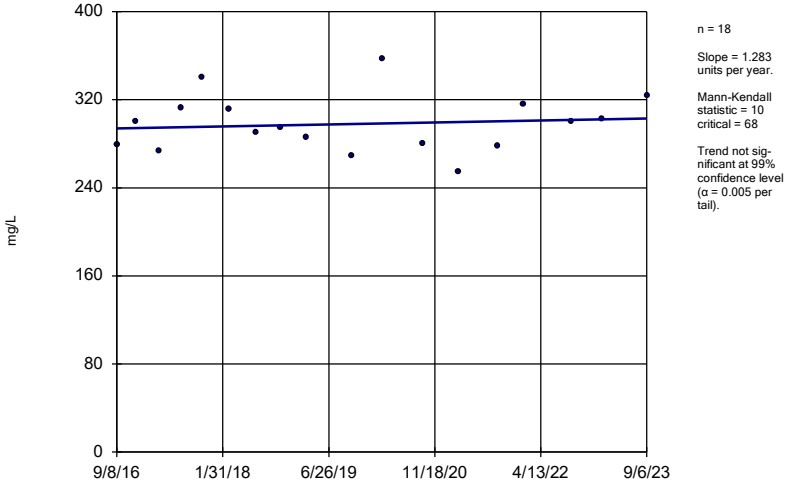
Constituent: Total Dissolved Solids [TDS] Analysis Run 11/16/2023 4:22 PM View: AP 1 Appendix III Tren

Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.10.0.10 Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

DGWC-37



n = 18

Slope = 1.283 units per year.

Mann-Kendall statistic = 10 critical = 68

Trend not significant at 99% confidence level (α = 0.005 per tail).

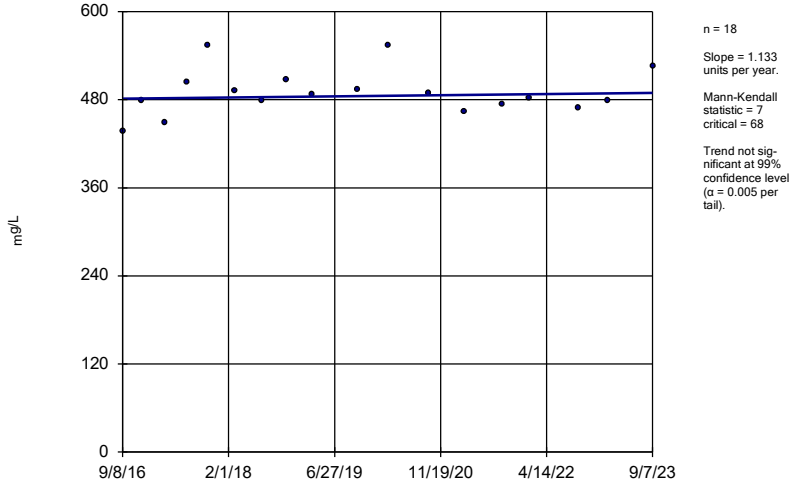
Constituent: Total Dissolved Solids [TDS] Analysis Run 11/16/2023 4:22 PM View: AP 1 Appendix III Tren

Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.10.0.10 Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

DGWC-38



n = 18

Slope = 1.133 units per year.

Mann-Kendall statistic = 7 critical = 68

Trend not significant at 99% confidence level (α = 0.005 per tail).

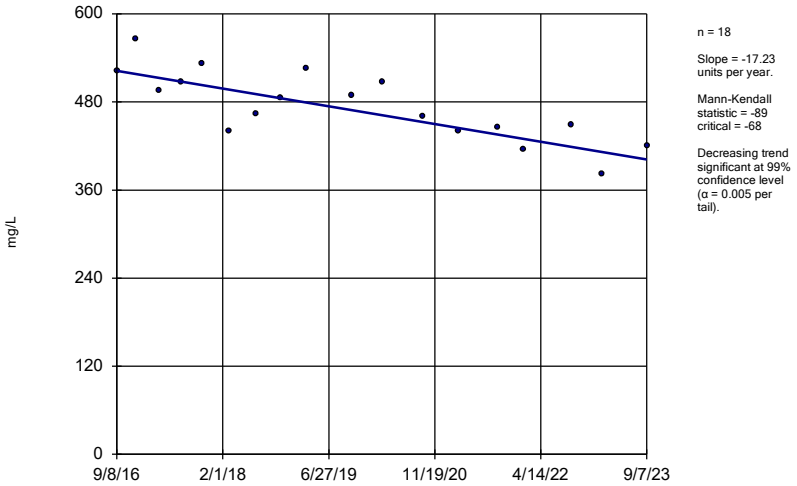
Constituent: Total Dissolved Solids [TDS] Analysis Run 11/16/2023 4:22 PM View: AP 1 Appendix III Tren

Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.10.0.10 Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

DGWC-39



n = 18

Slope = -17.23 units per year.

Mann-Kendall statistic = -89
critical = -68

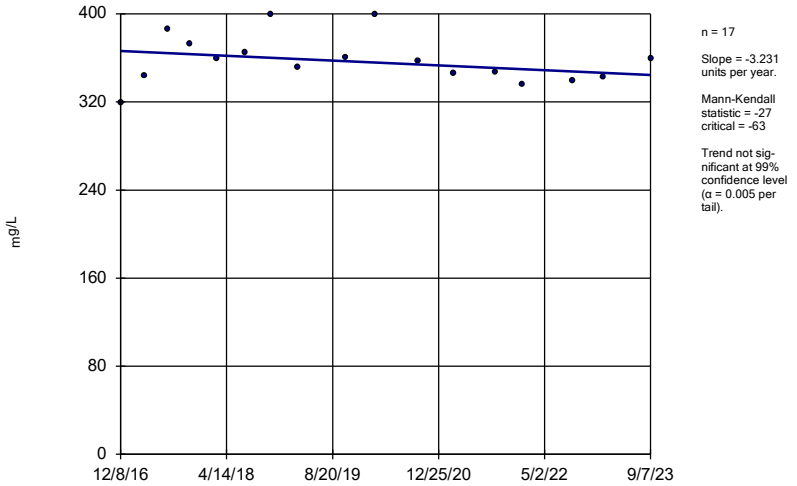
Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Total Dissolved Solids [TDS] Analysis Run 11/16/2023 4:23 PM View: AP 1 Appendix III Tren
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.10.0.10 Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

DGWC-40



n = 17

Slope = -3.231 units per year.

Mann-Kendall statistic = -27
critical = -63

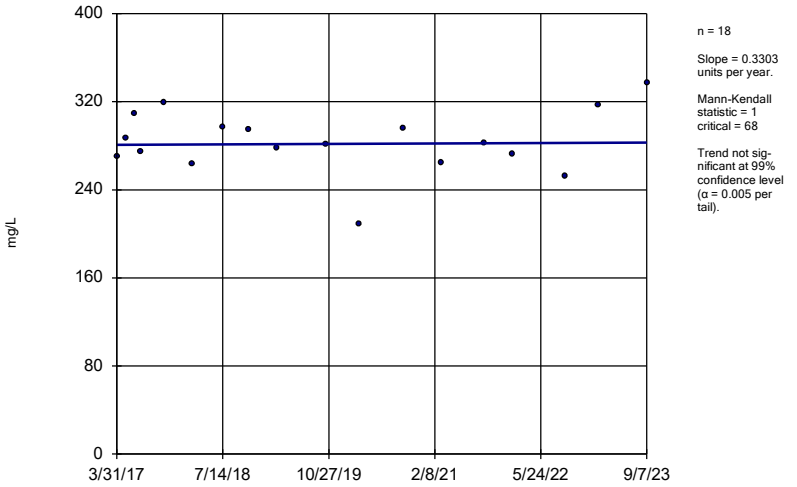
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Total Dissolved Solids [TDS] Analysis Run 11/16/2023 4:23 PM View: AP 1 Appendix III Tren
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.10.0.10 Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

DGWC-67



n = 18

Slope = 0.3303 units per year.

Mann-Kendall statistic = 1
critical = 68

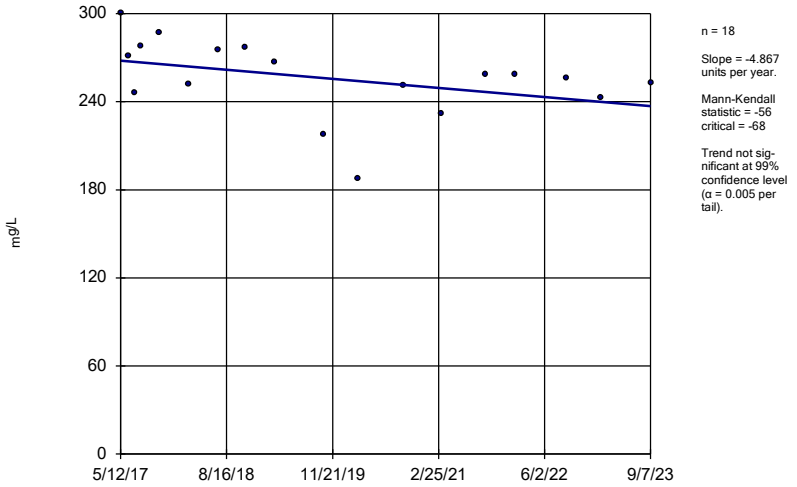
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Total Dissolved Solids [TDS] Analysis Run 11/16/2023 4:23 PM View: AP 1 Appendix III Tren
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.10.0.10 Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

DGWC-68A



n = 18

Slope = -4.867 units per year.

Mann-Kendall statistic = -56
critical = -68

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Total Dissolved Solids [TDS] Analysis Run 11/16/2023 4:23 PM View: AP 1 Appendix III Tren
Plant McDonough Client: Southern Company Data: McDonough AP

FIGURE F.

Upper Tolerance Limit Summary Table

Plant McDonough Client: Southern Company Data: McDonough AP Printed 11/16/2023, 4:29 PM

Constituent	Upper Lim.	Date	Observ.	Sig.	Bg N	%NDs	ND Adj.	Transform	Alpha	Method
Antimony (mg/L)	0.0045	n/a	n/a	n/a	56	82.14	n/a	n/a	0.05656	NP Inter(NDs)
Arsenic (mg/L)	0.0054	n/a	n/a	n/a	56	75	n/a	n/a	0.05656	NP Inter(NDs)
Barium (mg/L)	0.19	n/a	n/a	n/a	56	0	n/a	n/a	0.05656	NP Inter(normality)
Beryllium (mg/L)	0.0009	n/a	n/a	n/a	57	54.39	n/a	n/a	0.05373	NP Inter(NDs)
Cadmium (mg/L)	0.0005	n/a	n/a	n/a	56	92.86	n/a	n/a	0.05656	NP Inter(NDs)
Chromium (mg/L)	0.005	n/a	n/a	n/a	55	69.09	n/a	n/a	0.05954	NP Inter(NDs)
Cobalt (mg/L)	0.0322	n/a	n/a	n/a	56	42.86	n/a	n/a	0.05656	NP Inter(normality)
Combined Radium 226 + 228 (pCi/L)	4.866	n/a	n/a	n/a	58	0	None	x^(1/3)	0.05	Inter
Fluoride (mg/L)	0.42	n/a	n/a	n/a	60	48.33	n/a	n/a	0.04607	NP Inter(normality)
Lead (mg/L)	0.001	n/a	n/a	n/a	56	83.93	n/a	n/a	0.05656	NP Inter(NDs)
Lithium (mg/L)	0.03	n/a	n/a	n/a	56	35.71	n/a	n/a	0.05656	NP Inter(normality)
Mercury (mg/L)	0.0002	n/a	n/a	n/a	56	85.71	n/a	n/a	0.05656	NP Inter(NDs)
Molybdenum (mg/L)	0.0409	n/a	n/a	n/a	56	64.29	n/a	n/a	0.05656	NP Inter(NDs)
Selenium (mg/L)	0.005	n/a	n/a	n/a	56	100	n/a	n/a	0.05656	NP Inter(NDs)
Thallium (mg/L)	0.001	n/a	n/a	n/a	56	94.64	n/a	n/a	0.05656	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		0.0045	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		4.87	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 Data: McDonough AP Printed 11/22/2023, 12:06 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	%NDs	ND Adj.	Transform	Alpha	Method
Arsenic (mg/L)	**DGWC-69**	**0.03524**	**0.01402**	**0.01**	**Yes**	**21**	**0**	**None**	**ln(x)**	**0.01**	**Param.**
Cobalt (mg/L)	**DGWC-40**	**0.04415**	**0.03748**	**0.032**	**Yes**	**19**	**0**	**None**	**No**	**0.01**	**Param.**
Molybdenum (mg/L)	**DGWC-68A**	**0.2185**	**0.1943**	**0.1**	**Yes**	**19**	**0**	**None**	**ln(x)**	**0.01**	**Param.**

Confidence Intervals - All Results

Plant McDonough Data: McDonough AP Printed 11/22/2023, 12:06 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	%NDs	ND Adj.	Transform	Alpha	Method
Antimony (mg/L)	B-100	0.003	0.0013	0.006	No	8	75	None	No	0.004	NP (NDs)
Antimony (mg/L)	B-105D	0.0082	0.00069	0.006	No	7	57.14	None	No	0.008	NP (NDs)
Antimony (mg/L)	B-112D	0.003	0.00041	0.006	No	6	83.33	None	No	0.0155	NP (NDs)
Antimony (mg/L)	B-62	0.003	0.003	0.006	No	11	90.91	None	No	0.006	NP (NDs)
Antimony (mg/L)	DGWC-37	0.003	0.0014	0.006	No	18	94.44	None	No	0.01	NP (NDs)
Antimony (mg/L)	DGWC-40	0.003	0.00033	0.006	No	18	94.44	None	No	0.01	NP (NDs)
Antimony (mg/L)	DGWC-67	0.0039	0.0023	0.006	No	18	77.78	None	No	0.01	NP (NDs)
Antimony (mg/L)	DGWC-68A	0.003	0.0008	0.006	No	18	88.89	None	No	0.01	NP (NDs)
Antimony (mg/L)	DGWC-69	0.003	0.0019	0.006	No	19	84.21	None	No	0.01	NP (NDs)
Arsenic (mg/L)	B-105D	0.0051	0.0025	0.01	No	7	57.14	None	No	0.008	NP (NDs)
Arsenic (mg/L)	B-112D	0.005	0.00078	0.01	No	6	66.67	None	No	0.0155	NP (NDs)
Arsenic (mg/L)	B-62	0.005	0.005	0.01	No	11	90.91	None	No	0.006	NP (NDs)
Arsenic (mg/L)	DGWC-37	0.005	0.0019	0.01	No	19	94.74	None	No	0.01	NP (NDs)
Arsenic (mg/L)	DGWC-38	0.005	0.0005	0.01	No	19	94.74	None	No	0.01	NP (NDs)
Arsenic (mg/L)	DGWC-39	0.005	0.00075	0.01	No	19	57.89	None	No	0.01	NP (NDs)
Arsenic (mg/L)	DGWC-40	0.005	0.003	0.01	No	19	78.95	None	No	0.01	NP (NDs)
Arsenic (mg/L)	DGWC-67	0.005	0.0033	0.01	No	19	84.21	None	No	0.01	NP (NDs)
Arsenic (mg/L)	DGWC-68A	0.005	0.0016	0.01	No	19	94.74	None	No	0.01	NP (NDs)
Arsenic (mg/L)	**DGWC-69**	**0.03524**	**0.01402**	**0.01**	**Yes**	**21**	**0**	**None**	**ln(x)**	**0.01**	**Param.**
Barium (mg/L)	B-100	0.098	0.015	2	No	8	0	None	No	0.004	NP (normality)
Barium (mg/L)	B-105D	0.04061	0.03196	2	No	7	0	None	No	0.01	Param.
Barium (mg/L)	B-112D	0.026	0.0026	2	No	6	0	None	No	0.0155	NP (normality)
Barium (mg/L)	B-62	0.02504	0.01841	2	No	11	0	None	No	0.01	Param.
Barium (mg/L)	DGWC-37	0.1054	0.08679	2	No	19	0	None	No	0.01	Param.
Barium (mg/L)	DGWC-38	0.03322	0.03113	2	No	19	0	None	x^5	0.01	Param.
Barium (mg/L)	DGWC-39	0.09697	0.08608	2	No	19	0	None	No	0.01	Param.
Barium (mg/L)	DGWC-40	0.018	0.0163	2	No	19	0	None	No	0.01	NP (normality)
Barium (mg/L)	DGWC-67	0.1087	0.09352	2	No	19	0	None	No	0.01	Param.
Barium (mg/L)	DGWC-68A	0.098	0.086	2	No	19	0	None	No	0.01	NP (normality)
Barium (mg/L)	DGWC-69	0.09388	0.06299	2	No	20	0	None	No	0.01	Param.
Beryllium (mg/L)	B-100	0.0005753	0.0003347	0.004	No	8	12.5	None	No	0.01	Param.
Beryllium (mg/L)	B-62	0.0025	0.00009	0.004	No	12	16.67	None	No	0.01	NP (normality)
Beryllium (mg/L)	DGWC-37	0.0005	0.00007	0.004	No	19	57.89	None	No	0.01	NP (NDs)
Beryllium (mg/L)	DGWC-38	0.0005	0.000058	0.004	No	19	94.74	None	No	0.01	NP (NDs)
Beryllium (mg/L)	DGWC-40	0.0033	0.002843	0.004	No	19	5.263	None	x^3	0.01	Param.
Beryllium (mg/L)	DGWC-68A	0.0005	0.000084	0.004	No	19	89.47	None	No	0.01	NP (NDs)
Beryllium (mg/L)	DGWC-69	0.0005	0.000063	0.004	No	20	60	None	No	0.01	NP (NDs)
Cadmium (mg/L)	B-100	0.00059	0.00025	0.005	No	8	12.5	None	No	0.004	NP (normality)
Cadmium (mg/L)	DGWC-37	0.0005	0.0002	0.005	No	19	73.68	None	No	0.01	NP (NDs)
Cadmium (mg/L)	DGWC-38	0.0005	0.00017	0.005	No	19	21.05	None	No	0.01	NP (normality)
Cadmium (mg/L)	DGWC-40	0.0008391	0.0007101	0.005	No	19	10.53	None	x^2	0.01	Param.
Cadmium (mg/L)	DGWC-67	0.00053	0.00021	0.005	No	19	73.68	None	No	0.01	NP (NDs)
Cadmium (mg/L)	DGWC-68A	0.0002339	0.0001464	0.005	No	19	47.37	Kaplan-Meier	x^(1/3)	0.01	Param.
Cadmium (mg/L)	DGWC-69	0.0005	0.0002	0.005	No	20	80	None	No	0.01	NP (NDs)
Chromium (mg/L)	B-100	0.005	0.00057	0.1	No	8	75	None	No	0.004	NP (NDs)
Chromium (mg/L)	B-105D	0.005	0.0012	0.1	No	7	85.71	None	No	0.008	NP (NDs)
Chromium (mg/L)	B-112D	0.005	0.00085	0.1	No	6	66.67	None	No	0.0155	NP (NDs)
Chromium (mg/L)	B-62	0.005	0.005	0.1	No	11	90.91	None	No	0.006	NP (NDs)
Chromium (mg/L)	DGWC-37	0.005	0.0007	0.1	No	19	89.47	None	No	0.01	NP (NDs)
Chromium (mg/L)	DGWC-38	0.005	0.00092	0.1	No	19	84.21	None	No	0.01	NP (NDs)
Chromium (mg/L)	DGWC-40	0.005	0.0007	0.1	No	19	47.37	None	No	0.01	NP (normality)
Chromium (mg/L)	DGWC-67	0.005	0.0014	0.1	No	19	78.95	None	No	0.01	NP (NDs)
Chromium (mg/L)	DGWC-68A	0.005	0.0005	0.1	No	19	94.74	None	No	0.01	NP (NDs)
Chromium (mg/L)	DGWC-69	0.005	0.0013	0.1	No	20	75	None	No	0.01	NP (NDs)
Cobalt (mg/L)	B-100	0.07002	0.01754	0.032	No	10	10	None	sqrt(x)	0.01	Param.
Cobalt (mg/L)	B-105D	0.009078	0.00257	0.032	No	7	0	None	sqrt(x)	0.01	Param.
Cobalt (mg/L)	B-112D	0.005	0.0004	0.032	No	6	50	None	No	0.0155	NP (normality)
Cobalt (mg/L)	B-62	0.005	0.00031	0.032	No	12	83.33	None	No	0.01	NP (NDs)
Cobalt (mg/L)	DGWC-37	0.005	0.0005	0.032	No	19	84.21	None	No	0.01	NP (NDs)
Cobalt (mg/L)	DGWC-38	0.0017	0.0015	0.032	No	19	10.53	None	No	0.01	NP (normality)
Cobalt (mg/L)	DGWC-39	0.006636	0.005785	0.032	No	19	10.53	None	No	0.01	Param.
Cobalt (mg/L)	**DGWC-40**	**0.04415**	**0.03748**	**0.032**	**Yes**	**19**	**0**	**None**	**No**	**0.01**	**Param.**
Cobalt (mg/L)	DGWC-67	0.0041	0.0012	0.032	No	19	10.53	None	No	0.01	NP (normality)
Cobalt (mg/L)	DGWC-68A	0.005	0.0015	0.032	No	19	84.21	None	No	0.01	NP (NDs)
Cobalt (mg/L)	DGWC-69	0.005	0.0028	0.032	No	20	70	None	No	0.01	NP (NDs)
Combined Radium 226 + 228 (pCi/L)	B-100	1.134	0.3305	5	No	8	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	B-105D	5.526	0.832	5	No	6	0	None	sqrt(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	B-112D	1.76	0.241	5	No	5	0	None	No	0.031	NP (selected)

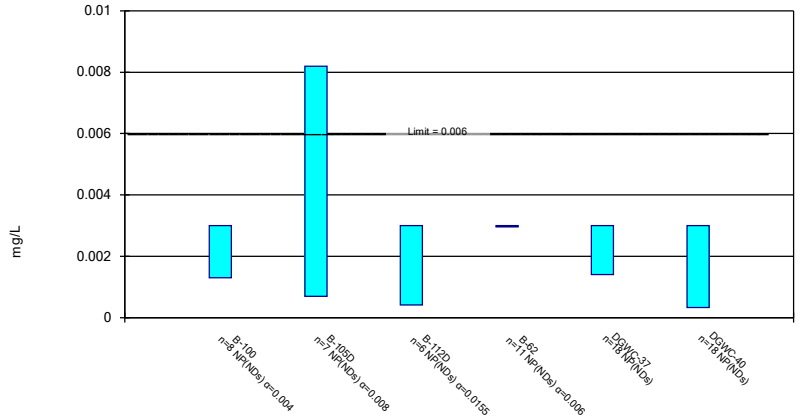
Confidence Intervals - All Results

Plant McDonough Data: McDonough AP Printed 11/22/2023, 12:06 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	%NDs	ND Adj.	Transform	Alpha	Method
Combined Radium 226 + 228 (pCi/L)	B-62	1.992	1.426	5	No	10	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	DGWC-37	1.069	0.5663	5	No	18	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	DGWC-38	0.9592	0.3387	5	No	18	0	None	sqrt(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	DGWC-39	1.245	0.6391	5	No	18	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	DGWC-40	1.473	0.6808	5	No	18	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	DGWC-67	0.9342	0.4769	5	No	18	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	DGWC-68A	1.336	0.6252	5	No	18	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	DGWC-69	1.765	1.158	5	No	19	0	None	No	0.01	Param.
Fluoride (mg/L)	B-100	0.1	0.052	4	No	8	75	None	No	0.004	NP (NDs)
Fluoride (mg/L)	B-105D	0.32	0.058	4	No	7	0	None	No	0.008	NP (normality)
Fluoride (mg/L)	B-112D	0.3415	0.2518	4	No	6	0	None	No	0.01	Param.
Fluoride (mg/L)	B-62	0.23	0.099	4	No	10	0	None	No	0.011	NP (normality)
Fluoride (mg/L)	DGWC-37	0.089	0.057	4	No	20	5	None	No	0.01	NP (normality)
Fluoride (mg/L)	DGWC-38	0.1456	0.07595	4	No	20	10	None	ln(x)	0.01	Param.
Fluoride (mg/L)	DGWC-39	0.15	0.086	4	No	20	5	None	No	0.01	NP (normality)
Fluoride (mg/L)	DGWC-40	0.258	0.132	4	No	20	5	None	ln(x)	0.01	Param.
Fluoride (mg/L)	DGWC-67	0.1	0.068	4	No	20	50	None	No	0.01	NP (normality)
Fluoride (mg/L)	DGWC-68A	0.15	0.082	4	No	20	5	None	No	0.01	NP (normality)
Fluoride (mg/L)	DGWC-69	0.155	0.0876	4	No	21	4.762	None	sqrt(x)	0.01	Param.
Lead (mg/L)	B-100	0.001	0.000088	0.015	No	8	62.5	None	No	0.004	NP (NDs)
Lead (mg/L)	B-105D	0.001	0.000052	0.015	No	7	85.71	None	No	0.008	NP (NDs)
Lead (mg/L)	B-112D	0.001	0.00014	0.015	No	6	83.33	None	No	0.0155	NP (NDs)
Lead (mg/L)	DGWC-37	0.0014	0.000061	0.015	No	19	89.47	None	No	0.01	NP (NDs)
Lead (mg/L)	DGWC-38	0.001	0.00014	0.015	No	19	73.68	None	No	0.01	NP (NDs)
Lead (mg/L)	DGWC-39	0.001	0.00022	0.015	No	19	89.47	None	No	0.01	NP (NDs)
Lead (mg/L)	DGWC-40	0.001	0.000081	0.015	No	19	57.89	None	No	0.01	NP (NDs)
Lead (mg/L)	DGWC-67	0.001	0.00025	0.015	No	19	78.95	None	No	0.01	NP (NDs)
Lead (mg/L)	DGWC-68A	0.001	0.00035	0.015	No	19	89.47	None	No	0.01	NP (NDs)
Lead (mg/L)	DGWC-69	0.001	0.0001	0.015	No	20	65	None	No	0.01	NP (NDs)
Lithium (mg/L)	B-100	0.015	0.0013	0.04	No	8	12.5	None	No	0.004	NP (normality)
Lithium (mg/L)	B-105D	0.015	0.013	0.04	No	7	0	None	No	0.008	NP (normality)
Lithium (mg/L)	B-112D	0.004555	0.003679	0.04	No	6	0	None	No	0.01	Param.
Lithium (mg/L)	B-62	0.0094	0.0078	0.04	No	11	9.091	None	No	0.006	NP (normality)
Lithium (mg/L)	DGWC-37	0.0029	0.0019	0.04	No	19	21.05	None	No	0.01	NP (normality)
Lithium (mg/L)	DGWC-38	0.0034	0.0028	0.04	No	19	5.263	None	No	0.01	NP (normality)
Lithium (mg/L)	DGWC-40	0.0027	0.0022	0.04	No	19	10.53	None	No	0.01	NP (normality)
Lithium (mg/L)	DGWC-67	0.005	0.0044	0.04	No	19	5.263	None	No	0.01	NP (normality)
Lithium (mg/L)	DGWC-68A	0.03	0.0016	0.04	No	19	89.47	None	No	0.01	NP (NDs)
Lithium (mg/L)	DGWC-69	0.0032	0.0023	0.04	No	20	5	None	No	0.01	NP (normality)
Mercury (mg/L)	B-100	0.0002	0.00011	0.002	No	7	85.71	None	No	0.008	NP (NDs)
Mercury (mg/L)	B-105D	0.0002	0.000087	0.002	No	6	66.67	None	No	0.0155	NP (NDs)
Mercury (mg/L)	DGWC-37	0.0002	0.000091	0.002	No	18	83.33	None	No	0.01	NP (NDs)
Mercury (mg/L)	DGWC-38	0.0002	0.000085	0.002	No	18	83.33	None	No	0.01	NP (NDs)
Mercury (mg/L)	DGWC-39	0.0002	0.000059	0.002	No	18	94.44	None	No	0.01	NP (NDs)
Mercury (mg/L)	DGWC-40	0.0002	0.00009	0.002	No	18	83.33	None	No	0.01	NP (NDs)
Mercury (mg/L)	DGWC-67	0.0002	0.00007	0.002	No	18	94.44	None	No	0.01	NP (NDs)
Mercury (mg/L)	DGWC-68A	0.0002	0.00007	0.002	No	18	94.44	None	No	0.01	NP (NDs)
Mercury (mg/L)	DGWC-69	0.0002	0.00007	0.002	No	19	94.74	None	No	0.01	NP (NDs)
Molybdenum (mg/L)	B-100	0.19	0.01	0.1	No	8	87.5	None	No	0.004	NP (NDs)
Molybdenum (mg/L)	B-105D	0.01	0.0011	0.1	No	7	85.71	None	No	0.008	NP (NDs)
Molybdenum (mg/L)	B-112D	0.03608	0.02559	0.1	No	6	0	None	No	0.01	Param.
Molybdenum (mg/L)	DGWC-38	0.01	0.001	0.1	No	19	36.84	None	No	0.01	NP (normality)
Molybdenum (mg/L)	DGWC-39	0.01	0.0016	0.1	No	19	94.74	None	No	0.01	NP (NDs)
Molybdenum (mg/L)	DGWC-67	0.01	0.0013	0.1	No	19	94.74	None	No	0.01	NP (NDs)
Molybdenum (mg/L)	**DGWC-68A**	**0.2185**	**0.1943**	**0.1**	**Yes**	**19**	**0**	**None**	**ln(x)**	**0.01**	**Param.**
Molybdenum (mg/L)	DGWC-69	0.011	0.0056	0.1	No	20	5	None	No	0.01	NP (normality)
Selenium (mg/L)	B-100	0.005	0.0019	0.05	No	8	87.5	None	No	0.004	NP (NDs)
Selenium (mg/L)	DGWC-38	0.005	0.0019	0.05	No	19	94.74	None	No	0.01	NP (NDs)
Selenium (mg/L)	DGWC-40	0.003057	0.001861	0.05	No	19	31.58	Kaplan-Meier	ln(x)	0.01	Param.
Selenium (mg/L)	DGWC-67	0.005	0.0027	0.05	No	19	94.74	Kaplan-Meier	No	0.01	NP (NDs)
Selenium (mg/L)	DGWC-68A	0.005	0.0017	0.05	No	19	94.74	Kaplan-Meier	No	0.01	NP (NDs)
Thallium (mg/L)	DGWC-38	0.001	0.00014	0.002	No	19	57.89	None	No	0.01	NP (NDs)
Thallium (mg/L)	DGWC-39	0.001	0.0001	0.002	No	19	73.68	None	No	0.01	NP (NDs)
Thallium (mg/L)	DGWC-40	0.001	0.00007	0.002	No	19	73.68	None	No	0.01	NP (NDs)
Thallium (mg/L)	DGWC-68A	0.001	0.00015	0.002	No	19	94.74	None	No	0.01	NP (NDs)

Non-Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted.

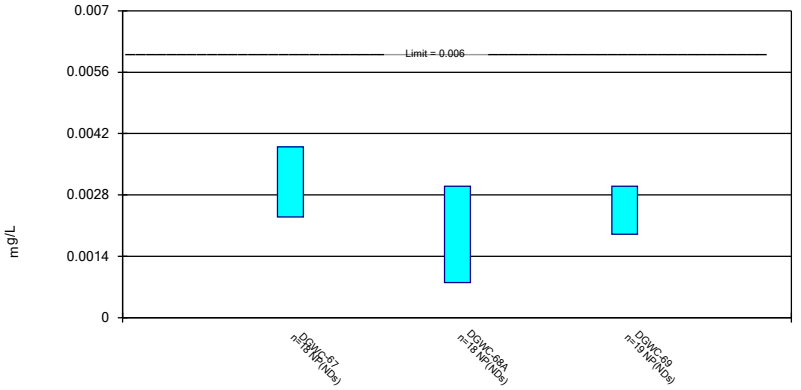


Constituent: Antimony Analysis Run 11/22/2023 12:03 PM View: AP 1 Confidence Intervals
Plant McDonough Data: McDonough AP

Sanitas™ v.10.0.10 Sanitas software utilized by Groundwater Stats Consulting. UG

Non-Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01.

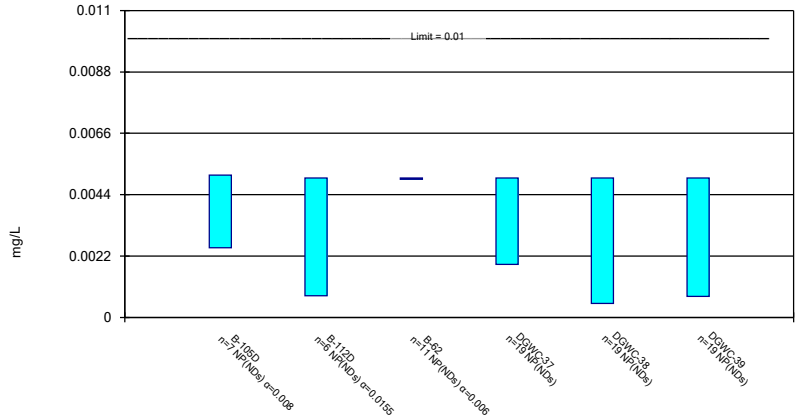


Constituent: Antimony Analysis Run 11/22/2023 12:03 PM View: AP 1 Confidence Intervals
Plant McDonough Data: McDonough AP

Sanitas™ v.10.0.10 Sanitas software utilized by Groundwater Stats Consulting. UG

Non-Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted.

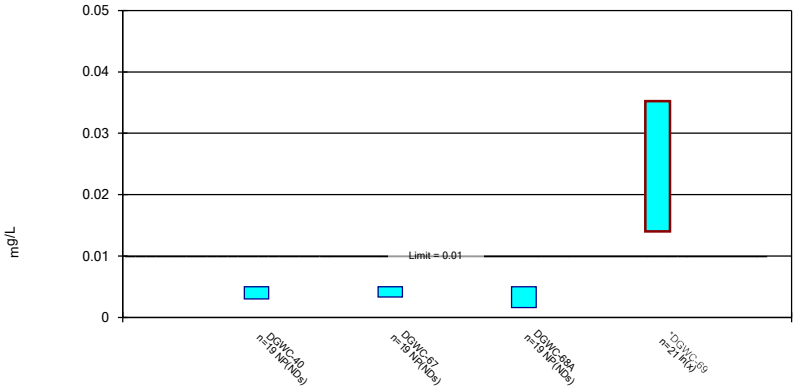


Constituent: Arsenic Analysis Run 11/22/2023 12:03 PM View: AP 1 Confidence Intervals
Plant McDonough Data: McDonough AP

Sanitas™ v.10.0.10 Sanitas software utilized by Groundwater Stats Consulting. UG

Parametric and Non-Parametric (NP) Confidence Interval

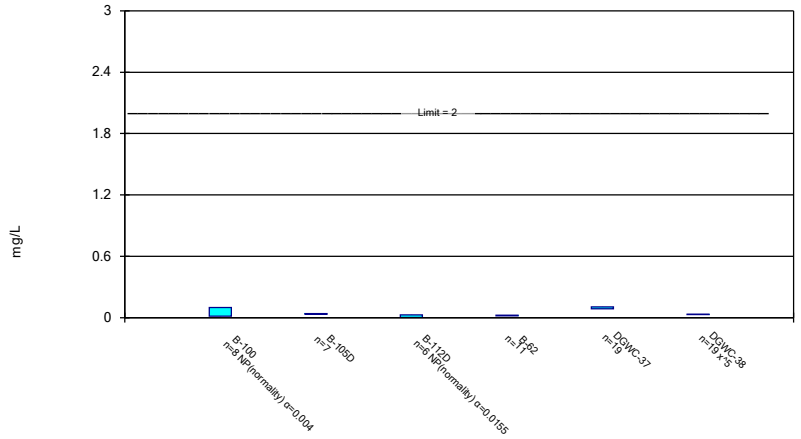
Compliance limit is exceeded.* Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Arsenic Analysis Run 11/22/2023 12:03 PM View: AP 1 Confidence Intervals
Plant McDonough 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.

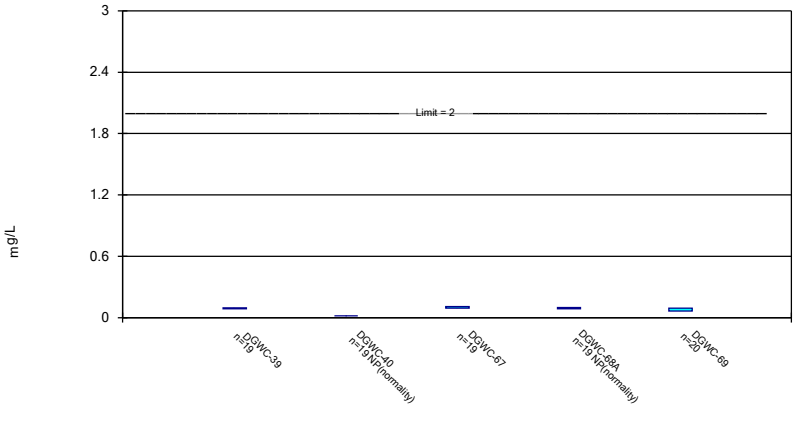


Constituent: Barium Analysis Run 11/22/2023 12:03 PM View: AP 1 Confidence Intervals
Plant McDonough Data: McDonough AP

Sanitas™ v.10.0.10 Sanitas software utilized by Groundwater Stats Consulting. UG

Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.

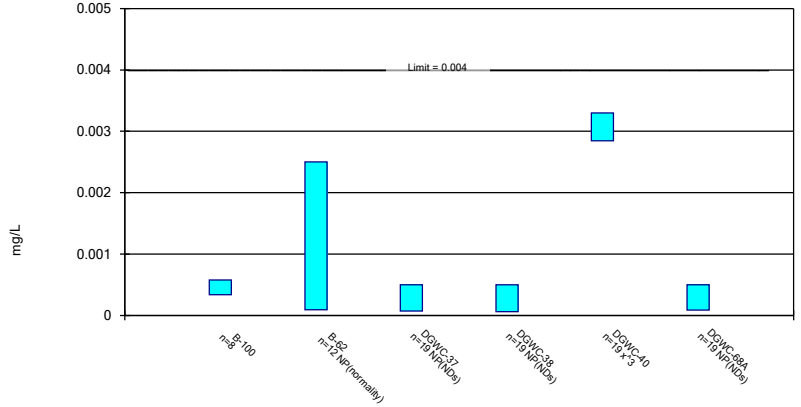


Constituent: Barium Analysis Run 11/22/2023 12:03 PM View: AP 1 Confidence Intervals
Plant McDonough Data: McDonough AP

Sanitas™ v.10.0.10 Sanitas software utilized by Groundwater Stats Consulting. UG

Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.

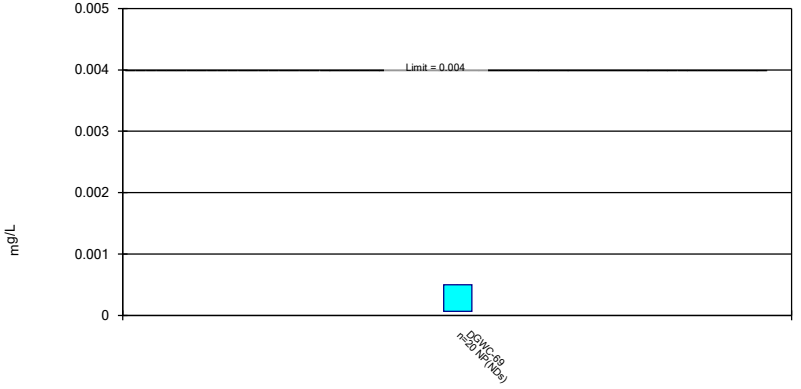


Constituent: Beryllium Analysis Run 11/22/2023 12:03 PM View: AP 1 Confidence Intervals
Plant McDonough Data: McDonough AP

Sanitas™ v.10.0.10 Sanitas software utilized by Groundwater Stats Consulting. UG

Non-Parametric Confidence Interval

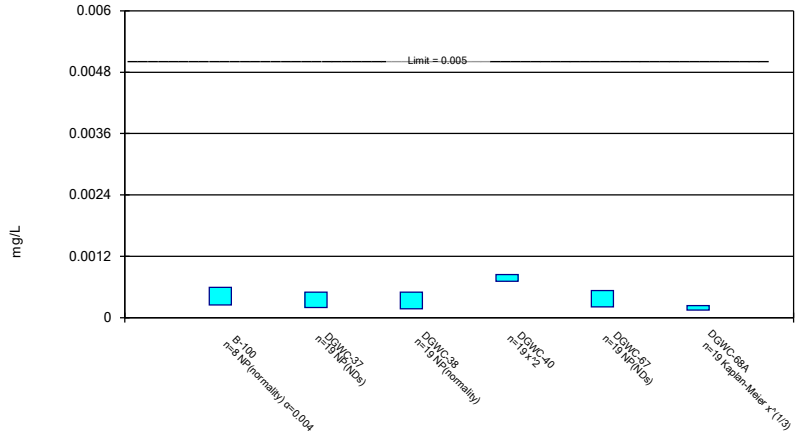
Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Beryllium Analysis Run 11/22/2023 12:03 PM View: AP 1 Confidence Intervals
Plant McDonough 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.

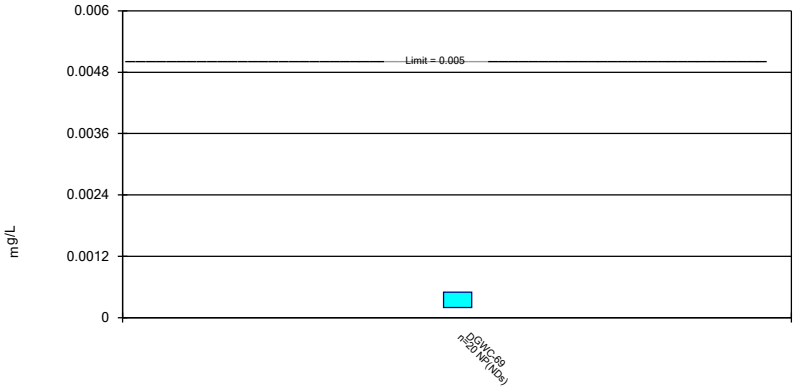


Constituent: Cadmium Analysis Run 11/22/2023 12:03 PM View: AP 1 Confidence Intervals
Plant McDonough Data: McDonough AP

Sanitas™ v.10.0.10 Sanitas software utilized by Groundwater Stats Consulting. UG

Non-Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01.

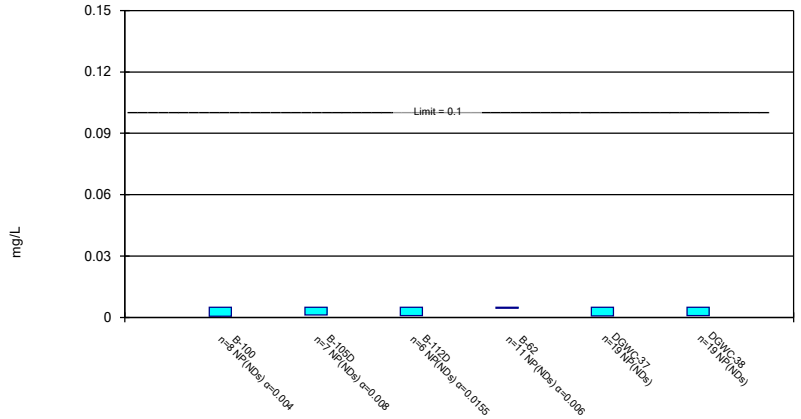


Constituent: Cadmium Analysis Run 11/22/2023 12:03 PM View: AP 1 Confidence Intervals
Plant McDonough Data: McDonough AP

Sanitas™ v.10.0.10 Sanitas software utilized by Groundwater Stats Consulting. UG

Non-Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted.

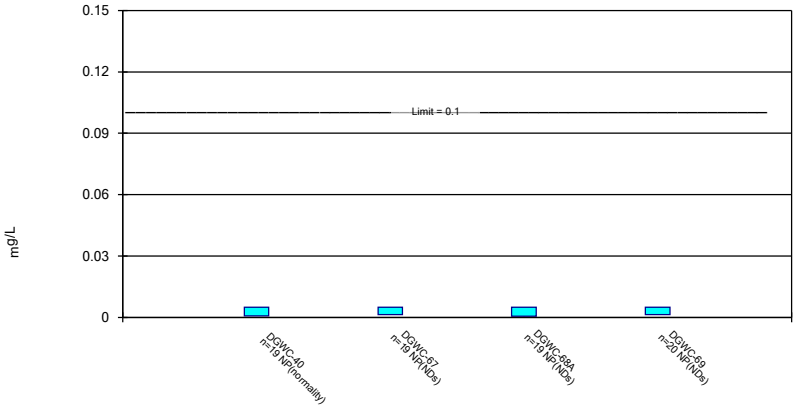


Constituent: Chromium Analysis Run 11/22/2023 12:03 PM View: AP 1 Confidence Intervals
Plant McDonough Data: McDonough AP

Sanitas™ v.10.0.10 Sanitas software utilized by Groundwater Stats Consulting. UG

Non-Parametric Confidence Interval

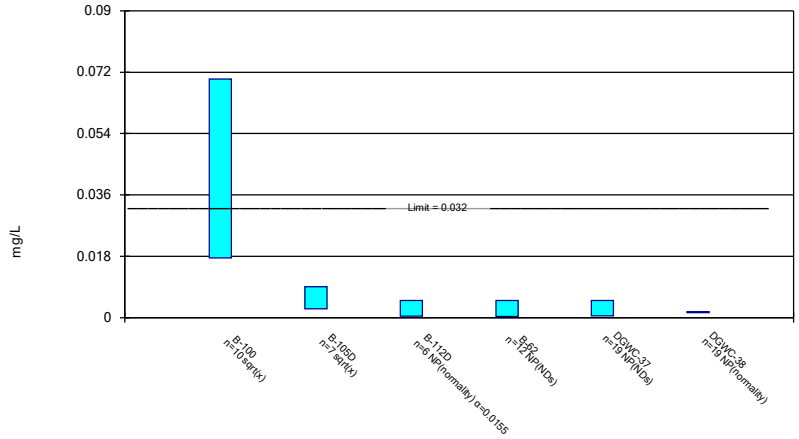
Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Chromium Analysis Run 11/22/2023 12:03 PM View: AP 1 Confidence Intervals
Plant McDonough 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.

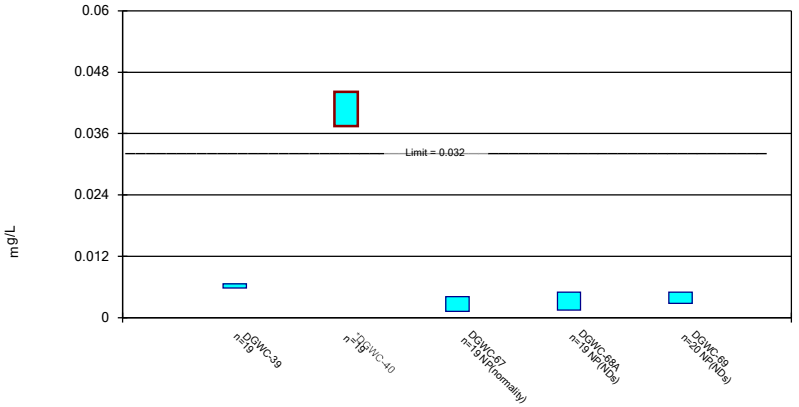


Constituent: Cobalt Analysis Run 11/22/2023 12:03 PM View: AP 1 Confidence Intervals
Plant McDonough Data: McDonough AP

Sanitas™ v.10.0.10 Sanitas software utilized by Groundwater Stats Consulting. UG

Parametric and Non-Parametric (NP) Confidence Interval

Compliance limit is exceeded.* Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.

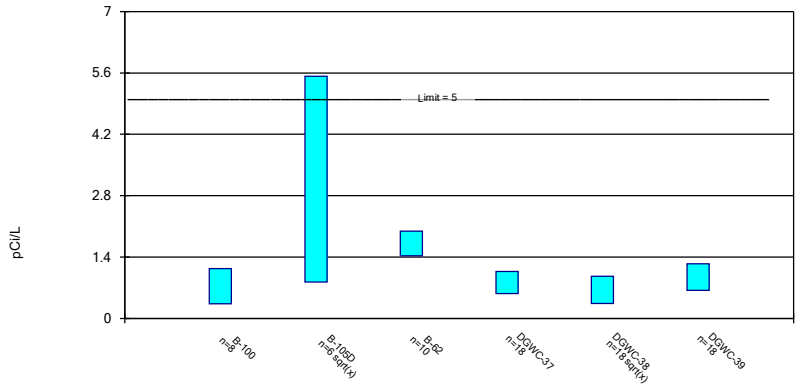


Constituent: Cobalt Analysis Run 11/22/2023 12:03 PM View: AP 1 Confidence Intervals
Plant McDonough Data: McDonough AP

Sanitas™ v.10.0.10 Sanitas software utilized by Groundwater Stats Consulting. UG

Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.

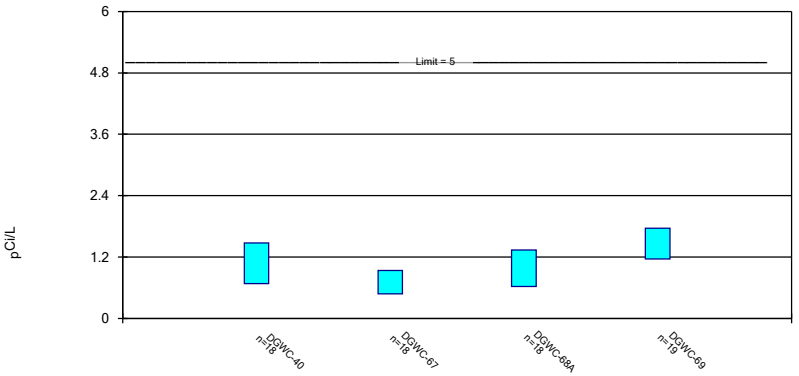


Constituent: Combined Radium 226 + 228 Analysis Run 11/22/2023 12:03 PM View: AP 1 Confidence Inte
Plant McDonough Data: McDonough AP

Sanitas™ v.10.0.10 Sanitas software utilized by Groundwater Stats Consulting. UG

Parametric Confidence Interval

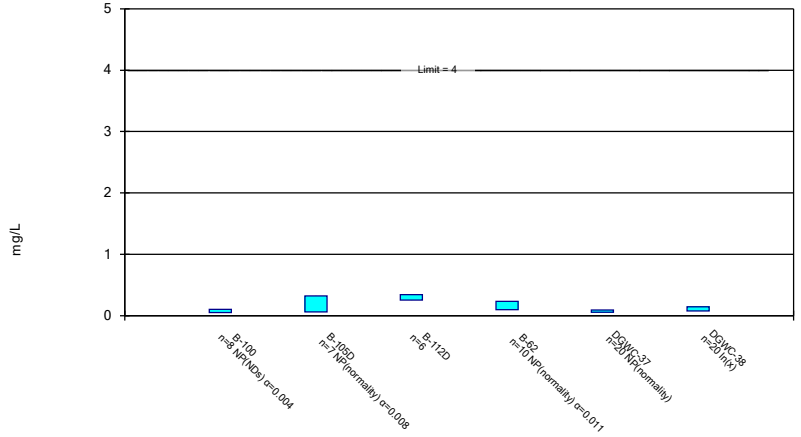
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Combined Radium 226 + 228 Analysis Run 11/22/2023 12:03 PM View: AP 1 Confidence Inte
Plant McDonough 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.

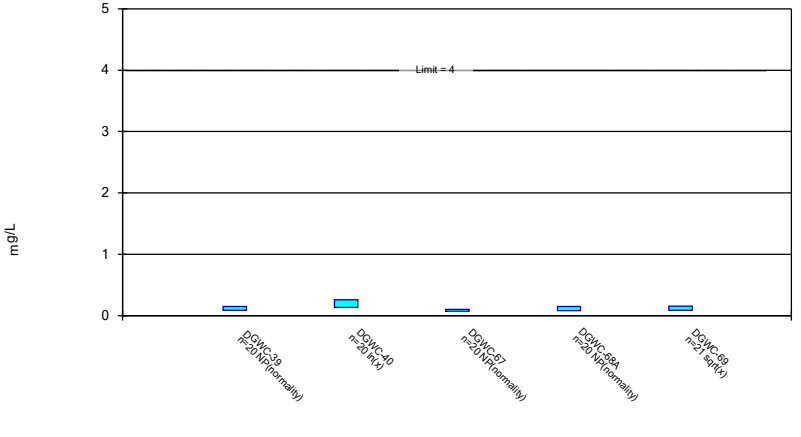


Constituent: Fluoride Analysis Run 11/22/2023 12:03 PM View: AP 1 Confidence Intervals
Plant McDonough Data: McDonough AP

Sanitas™ v.10.0.10 Sanitas software utilized by Groundwater Stats Consulting. UG

Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.

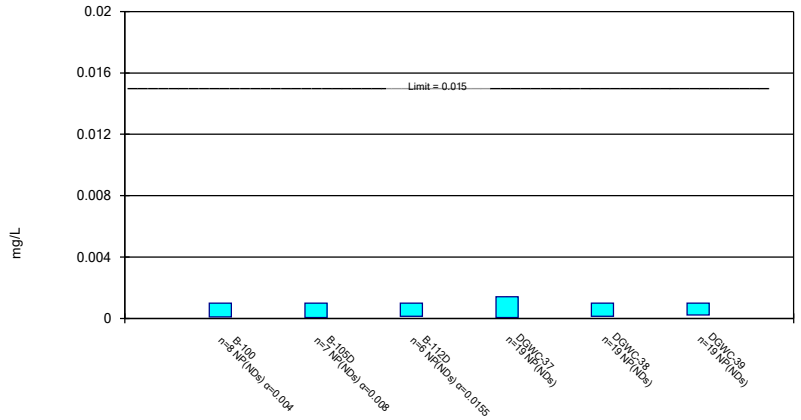


Constituent: Fluoride Analysis Run 11/22/2023 12:03 PM View: AP 1 Confidence Intervals
Plant McDonough Data: McDonough AP

Sanitas™ v.10.0.10 Sanitas software utilized by Groundwater Stats Consulting. UG

Non-Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted.

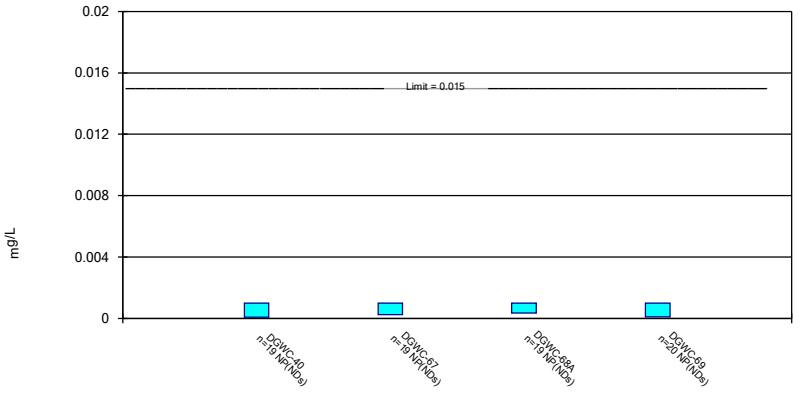


Constituent: Lead Analysis Run 11/22/2023 12:03 PM View: AP 1 Confidence Intervals
Plant McDonough Data: McDonough AP

Sanitas™ v.10.0.10 Sanitas software utilized by Groundwater Stats Consulting. UG

Non-Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01.

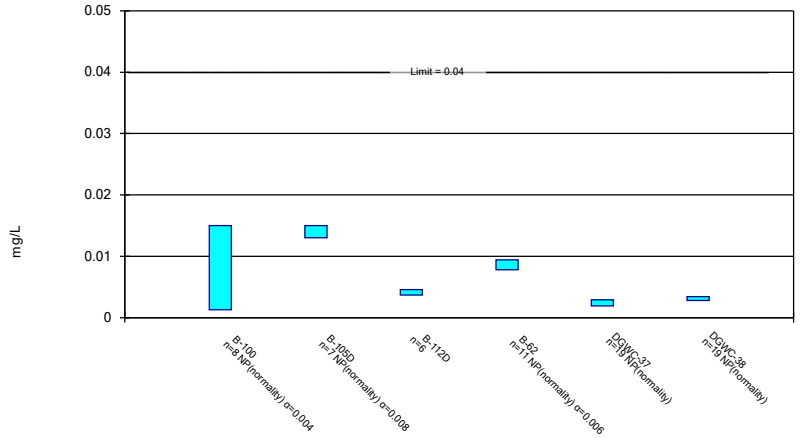


Constituent: Lead Analysis Run 11/22/2023 12:03 PM View: AP 1 Confidence Intervals
Plant McDonough Data: McDonough AP

Sanitas™ v.10.0.10 Sanitas software utilized by Groundwater Stats Consulting. UG

Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.

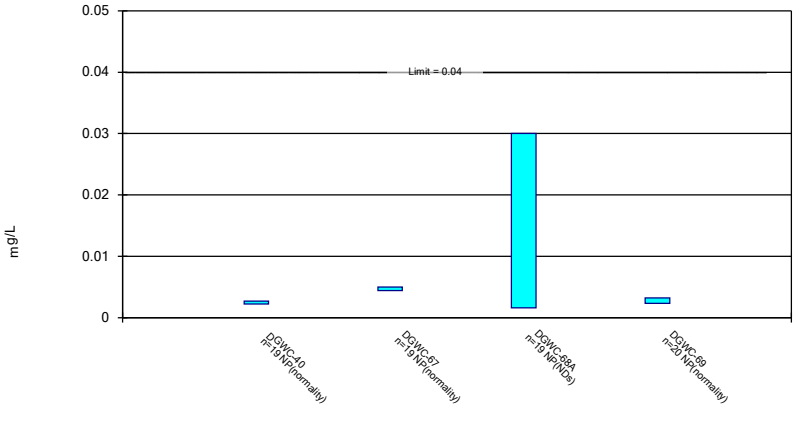


Constituent: Lithium Analysis Run 11/22/2023 12:03 PM View: AP 1 Confidence Intervals
Plant McDonough Data: McDonough AP

Sanitas™ v.10.0.10 Sanitas software utilized by Groundwater Stats Consulting. UG

Non-Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01.

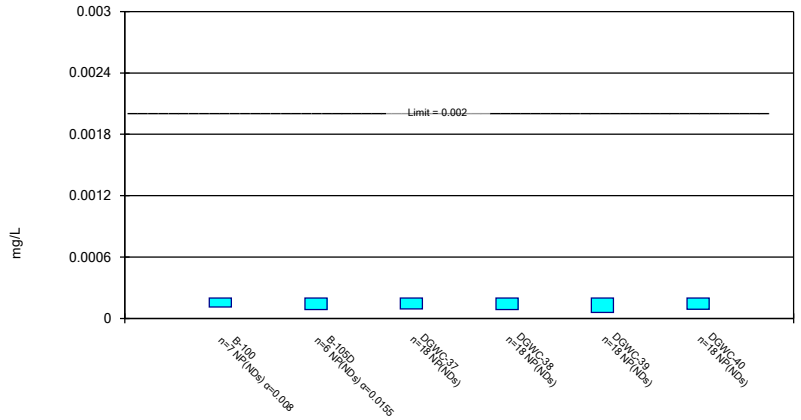


Constituent: Lithium Analysis Run 11/22/2023 12:03 PM View: AP 1 Confidence Intervals
Plant McDonough Data: McDonough AP

Sanitas™ v.10.0.10 Sanitas software utilized by Groundwater Stats Consulting. UG

Non-Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted.

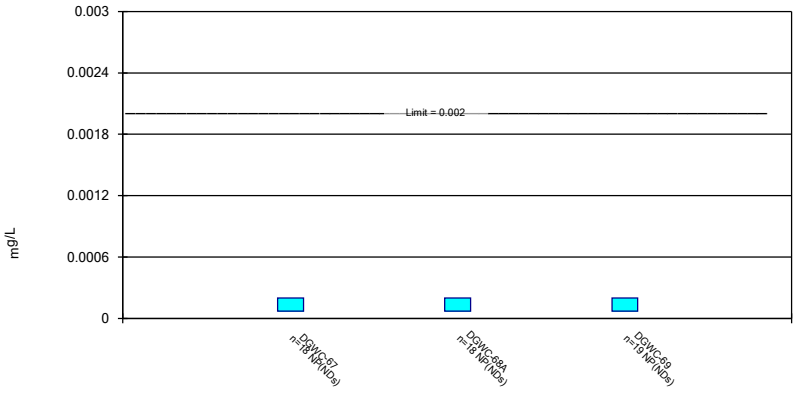


Constituent: Mercury Analysis Run 11/22/2023 12:03 PM View: AP 1 Confidence Intervals
Plant McDonough Data: McDonough AP

Sanitas™ v.10.0.10 Sanitas software utilized by Groundwater Stats Consulting. UG

Non-Parametric Confidence Interval

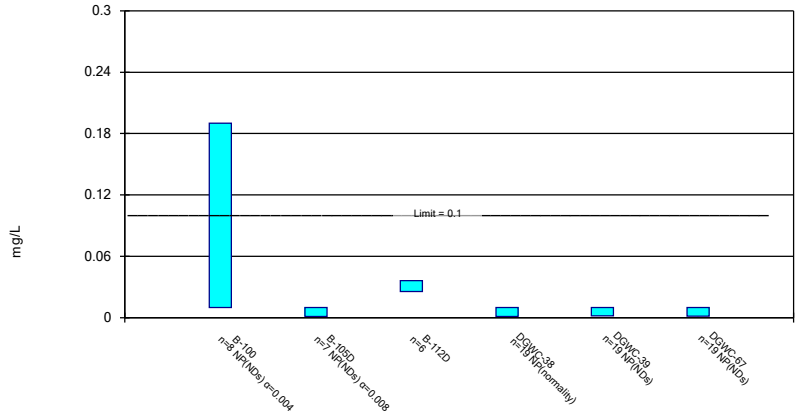
Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Mercury Analysis Run 11/22/2023 12:03 PM View: AP 1 Confidence Intervals
Plant McDonough 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.

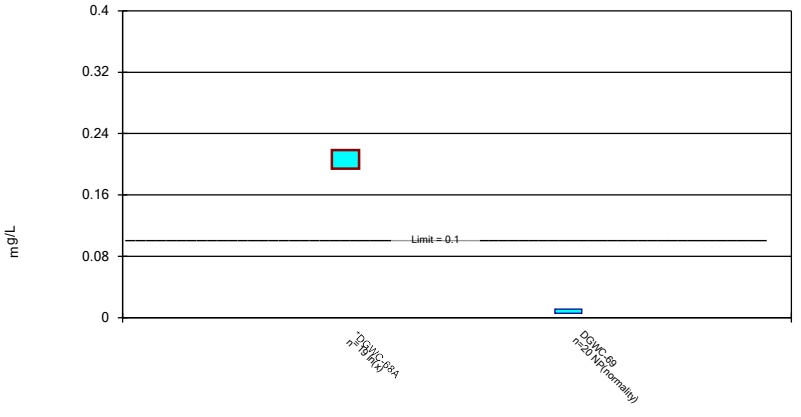


Constituent: Molybdenum Analysis Run 11/22/2023 12:03 PM View: AP 1 Confidence Intervals
Plant McDonough Data: McDonough AP

Sanitas™ v.10.0.10 Sanitas software utilized by Groundwater Stats Consulting. UG

Parametric and Non-Parametric (NP) Confidence Interval

Compliance limit is exceeded.* Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.

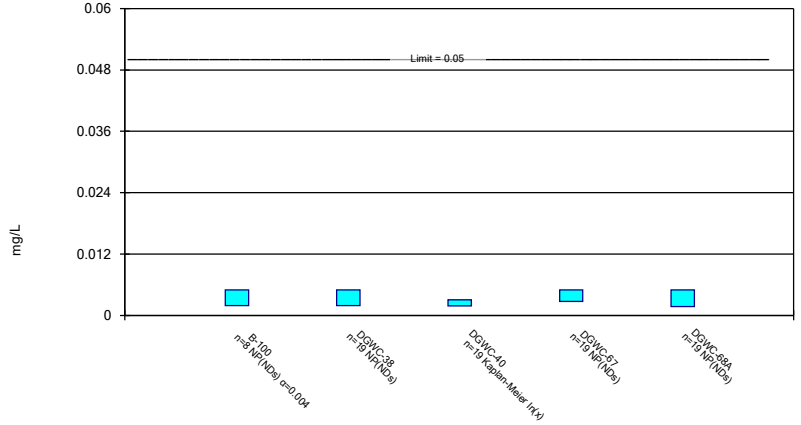


Constituent: Molybdenum Analysis Run 11/22/2023 12:03 PM View: AP 1 Confidence Intervals
Plant McDonough Data: McDonough AP

Sanitas™ v.10.0.10 Sanitas software utilized by Groundwater Stats Consulting. UG

Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.

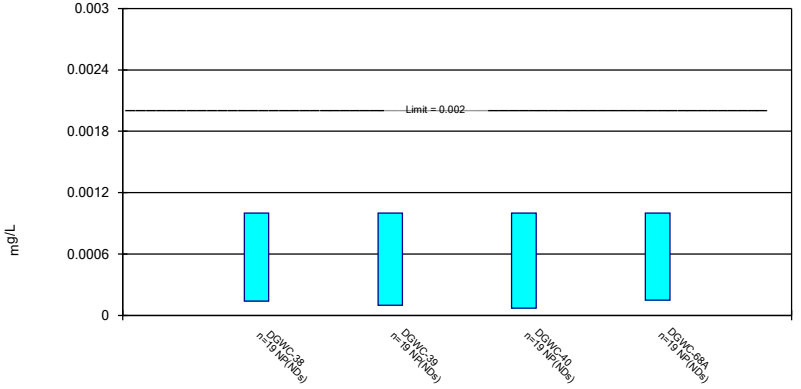


Constituent: Selenium Analysis Run 11/22/2023 12:03 PM View: AP 1 Confidence Intervals
Plant McDonough Data: McDonough AP

Sanitas™ v.10.0.10 Sanitas software utilized by Groundwater Stats Consulting. UG

Non-Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Thallium Analysis Run 11/22/2023 12:03 PM View: AP 1 Confidence Intervals
Plant McDonough Data: McDonough AP

Confidence Interval

Constituent: Antimony (mg/L) Analysis Run 11/22/2023 12:06 PM View: AP 1 Confidence Intervals

Plant McDonough Data: McDonough AP

	B-100	B-105D	B-112D	B-62	DGWC-37	DGWC-40
9/2/2016						<0.003
9/8/2016					<0.003	
12/7/2016					<0.003	
12/8/2016						<0.003
3/30/2017					<0.003	<0.003
7/13/2017					<0.003	<0.003
10/26/2017					<0.003	<0.003
3/1/2018					<0.003	
3/2/2018						<0.003
7/12/2018					<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		
3/4/2020						<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
9/24/2020				0.00046 (J)	<0.003	
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
1/20/2022				<0.003		
1/21/2022	<0.003				<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	
9/6/2023	<0.003				0.0014 (J)	
9/7/2023		<0.003	<0.003	<0.003		<0.003
Mean	0.002625	0.003213	0.002568	0.002769	0.002911	0.002852
Std. Dev.	0.0007025	0.002381	0.001057	0.0007658	0.0003771	0.0006293
Upper Lim.	0.003	0.0082	0.003	0.003	0.003	0.003
Lower Lim.	0.0013	0.00069	0.00041	0.003	0.0014	0.00033

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Antimony (mg/L) Analysis Run 11/22/2023 12:06 PM View: AP 1 Confidence Intervals

Plant McDonough Data: McDonough AP

	DGWC-67	DGWC-68A	DGWC-69
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
8/8/2017		<0.003	
10/26/2017	<0.003	<0.003	<0.003
11/15/2017			<0.003
3/2/2018	<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
8/28/2019	<0.003	<0.003	<0.003
3/9/2020	<0.003	<0.003	<0.003
8/13/2020	<0.003	<0.003	0.0019 (J)
9/23/2020	<0.003	<0.003	<0.003
3/10/2021		0.00032 (J)	0.0018 (J)
3/11/2021	<0.003		
9/16/2021	<0.003	<0.003	<0.003
1/19/2022	<0.003		
1/25/2022		<0.003	<0.003
9/7/2022		<0.003	<0.003
9/8/2022	<0.003		
2/1/2023		<0.003	<0.003
2/2/2023	<0.003		
9/7/2023	0.0039	<0.003	<0.003
Mean	0.002744	0.002729	0.002758
Std. Dev.	0.0008305	0.0007933	0.0006158
Upper Lim.	0.0039	0.003	0.003
Lower Lim.	0.0023	0.0008	0.0019

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Arsenic (mg/L) Analysis Run 11/22/2023 12:06 PM View: AP 1 Confidence Intervals

Plant McDonough 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
9/6/2023				<0.005		
9/7/2023	<0.005	<0.005	<0.005		<0.005	<0.005
Mean	0.004314	0.004297	0.004845	0.004837	0.004763	0.003273
Std. Dev.	0.001206	0.001723	0.0005126	0.0007112	0.001032	0.002101
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 11/22/2023 12:06 PM View: AP 1 Confidence Intervals

Plant McDonough 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		
9/7/2023	<0.005	<0.005	<0.005	0.029
Mean	0.004229	0.004448	0.004821	0.0321
Std. Dev.	0.001602	0.001409	0.00078	0.03726
Upper Lim.	0.005	0.005	0.005	0.03524
Lower Lim.	0.003	0.0033	0.0016	0.01402

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 11/22/2023 12:06 PM View: AP 1 Confidence Intervals

Plant McDonough 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
9/6/2023	0.021				0.082	
9/7/2023		0.035	0.0027 (J)	0.015		0.027
Mean	0.03038	0.03629	0.006783	0.02173	0.09611	0.03201
Std. Dev.	0.02743	0.003638	0.009419	0.003977	0.01592	0.002086
Upper Lim.	0.098	0.04061	0.026	0.02504	0.1054	0.03322
Lower Lim.	0.015	0.03196	0.0026	0.01841	0.08679	0.03113

Confidence Interval

Constituent: Barium (mg/L) Analysis Run 11/22/2023 12:06 PM View: AP 1 Confidence Intervals

Plant McDonough 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				
9/7/2023	0.11	0.016	0.076	0.11	0.047
Mean	0.09153	0.01778	0.1011	0.09133	0.07844
Std. Dev.	0.009297	0.00241	0.01296	0.006366	0.0272
Upper Lim.	0.09697	0.018	0.1087	0.098	0.09388
Lower Lim.	0.08608	0.0163	0.09352	0.086	0.06299

Confidence Interval

Constituent: Beryllium (mg/L) Analysis Run 11/22/2023 12:06 PM View: AP 1 Confidence Intervals

Plant McDonough 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		
9/6/2023	0.00054		5.8E-05 (J)			
9/7/2023		0.00011 (J)		<0.0005	0.0031	<0.0005
Mean	0.000455	0.0005148	0.0003198	0.0004767	0.003026	0.000455
Std. Dev.	0.0001135	0.0009275	0.0002173	0.0001014	0.0004689	0.0001348
Upper Lim.	0.0005753	0.0025	0.0005	0.0005	0.0033	0.0005

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 11/22/2023 12:06 PM View: AP 1 Confidence Intervals

Plant McDonough Data: McDonough AP

	B-100	B-62	DGWC-37	DGWC-38	DGWC-40	DGWC-68A
Lower Lim.	0.0003347	9E-05	7E-05	5.8E-05	0.002843	8.4E-05

Confidence Interval

Constituent: Beryllium (mg/L) Analysis Run 11/22/2023 12:06 PM View: AP 1 Confidence Intervals

Plant McDonough 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
9/7/2023	7.8E-05 (J)
Mean	0.0003257
Std. Dev.	0.0002191
Upper Lim.	0.0005
Lower Lim.	6.3E-05

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Cadmium (mg/L) Analysis Run 11/22/2023 12:06 PM View: AP 1 Confidence Intervals

Plant McDonough 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	
9/6/2023	0.00035 (J)	<0.0005				
9/7/2023			0.00013 (J)	0.00074	<0.0005	0.00015 (J)
Mean	0.00036	0.0004105	0.0003189	0.0007684	0.0004337	0.0003695
Std. Dev.	0.000145	0.0001577	0.0002401	0.0001204	0.0001365	0.0002187
Upper Lim.	0.00059	0.0005	0.0005	0.0008391	0.00053	0.0002339
Lower Lim.	0.00025	0.0002	0.00017	0.0007101	0.00021	0.0001464

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 11/22/2023 12:06 PM View: AP 1 Confidence Intervals

Plant McDonough 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
9/7/2023	<0.0005
Mean	0.0004335
Std. Dev.	0.0001377
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 11/22/2023 12:06 PM View: AP 1 Confidence Intervals

Plant McDonough 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
9/6/2023	<0.005				<0.005	
9/7/2023		<0.005	<0.005	<0.005		<0.005
Mean	0.003939	0.004457	0.003708	0.004635	0.004541	0.004308
Std. Dev.	0.001968	0.001436	0.002009	0.001212	0.001375	0.001643
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 11/22/2023 12:06 PM View: AP 1 Confidence Intervals

Plant McDonough 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		
9/7/2023	<0.005	<0.005	<0.005	<0.005
Mean	0.002843	0.004131	0.004763	0.003999
Std. Dev.	0.002128	0.001737	0.001032	0.001784
Upper Lim.	0.005	0.005	0.005	0.005
Lower Lim.	0.0007	0.0014	0.0005	0.0013

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Cobalt (mg/L) Analysis Run 11/22/2023 12:06 PM View: AP 1 Confidence Intervals

Plant McDonough 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)
9/6/2023	0.031				<0.005	
9/7/2023		0.0027 (J)	0.0004 (J)	<0.005		0.0015 (J)
Mean	0.04435	0.005629	0.003073	0.004217	0.004268	0.001926
Std. Dev.	0.02859	0.003093	0.002237	0.001828	0.001736	0.001089
Upper Lim.	0.07002	0.009078	0.005	0.005	0.005	0.0017
Lower Lim.	0.01754	0.00257	0.0004	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 11/22/2023 12:06 PM View: AP 1 Confidence Intervals

Plant McDonough 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				
9/7/2023	0.0059	0.035	0.001 (J)	<0.005	<0.005
Mean	0.006211	0.04081	0.002411	0.004332	0.00405
Std. Dev.	0.0007272	0.005696	0.001679	0.0016	0.001586
Upper Lim.	0.006636	0.04415	0.0041	0.005	0.005
Lower Lim.	0.005785	0.03748	0.0012	0.0015	0.0028

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 11/22/2023 12:06 PM View: AP 1 Confidence Intervals

Plant McDonough Data: McDonough AP

	B-100	B-105D	B-62	DGWC-37	DGWC-38	DGWC-39
9/8/2016				0.827 (U)	1.48	1.44
12/7/2016				0.56 (U)	0.22 (U)	2.16
3/30/2017				0.302 (U)	0.519 (U)	0.264 (U)
7/13/2017				0.731 (U)	1.11	0.517 (U)
10/26/2017				1.04 (U)	1.13 (U)	0.875 (U)
3/1/2018				0.344 (U)	0.985 (U)	1.24
7/12/2018				0.566 (U)	0.615 (U)	0.935 (U)
11/8/2018				0.623 (U)	0.58 (U)	1.15 (U)
1/30/2019			1.97 (U)			
8/28/2019				1.24 (U)	0.517 (U)	1.15 (U)
10/21/2019			1.82			
1/6/2020				2.01	0.527 (U)	1.4
3/9/2020				0.499 (U)	1.04	1.36
8/13/2020			1.63	0.99	0.132 (U)	0.626 (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)					0.181 (U)
12/9/2020		1.25 (U)				
3/8/2021	0.168 (U)	1.87				
3/11/2021				0.956 (U)	0.0784 (U)	0.969 (U)
3/12/2021			1.18 (U)			
9/9/2021			1.7			
9/13/2021	0.774 (U)					
9/15/2021		2.01			2.37	
9/16/2021				0.691 (U)		
9/17/2021						0.911 (U)
1/19/2022		2.45				
1/20/2022			1.71			0.172 (U)
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				
2/2/2023	0.981		1.6	1.23	0.462 (U)	
2/3/2023						0.878 (U)
9/6/2023	0.326 (U)			0.732 (U)		
9/7/2023		2.88	2.24		0.358 (U)	0.728 (U)
Mean	0.7325	2.89	1.709	0.8174	0.7113	0.942
Std. Dev.	0.3792	2.031	0.3175	0.4151	0.572	0.5006
Upper Lim.	1.134	5.526	1.992	1.069	0.9592	1.245
Lower Lim.	0.3305	0.832	1.426	0.5663	0.3387	0.6391

Confidence Interval

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 11/22/2023 12:06 PM View: AP 1 Confidence Intervals

Plant McDonough Data: McDonough AP

	DGWC-40	DGWC-67	DGWC-68A	DGWC-69
9/2/2016	1.44			
12/8/2016	2.56			
3/30/2017	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	0.963 (U)	0.387 (U)	0.304 (U)	1.14
8/8/2017			1.4	
10/26/2017	0.748 (U)	0.619 (U)	0.477 (U)	2.04
11/15/2017				1.99
3/2/2018	0.485 (U)	1.31	1.13	0.918 (U)
7/12/2018	0.231 (U)			
7/13/2018		0.667 (U)	0.407 (U)	1.36 (U)
11/8/2018	0.465 (U)	0.911 (U)	0.393 (U)	0.719 (U)
8/28/2019	0.592 (U)	0.751 (U)	1.77	1.38
10/16/2019			2.12	0.826 (U)
1/6/2020	1.6	0.965 (U)		
3/4/2020	1.62			
3/9/2020		0.819 (U)	1.33	1.39
8/13/2020	1.6	0.897 (U)	1.46	2.66
9/23/2020	1.28 (U)	0.131 (U)	0.563 (U)	1.8
3/8/2021	0.714 (U)			
3/10/2021			0.568 (U)	1.6
3/11/2021		1.55		
9/14/2021	1.8			
9/16/2021		0.201 (U)	1.74	2.06
1/19/2022	1.7	0.853 (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)		
9/7/2023	0.902 (U)	0.565 (U)	0.782 (U)	0.91
Mean	1.077	0.7056	0.9805	1.461
Std. Dev.	0.6551	0.3779	0.5872	0.5177
Upper Lim.	1.473	0.9342	1.336	1.765
Lower Lim.	0.6808	0.4769	0.6252	1.158

Confidence Interval

Constituent: Fluoride (mg/L) Analysis Run 11/22/2023 12:06 PM View: AP 1 Confidence Intervals

Plant McDonough 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
9/6/2023	<0.1				0.053 (J)	
9/7/2023		0.1	0.32	0.13		0.072 (J)
Mean	0.0905	0.1186	0.2967	0.1632	0.1	0.1267
Std. Dev.	0.01838	0.09044	0.03266	0.1017	0.07094	0.09899
Upper Lim.	0.1	0.32	0.3415	0.23	0.089	0.1456
Lower Lim.	0.052	0.058	0.2518	0.099	0.057	0.07595

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Fluoride (mg/L) Analysis Run 11/22/2023 12:06 PM View: AP 1 Confidence Intervals

Plant McDonough 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				
9/7/2023	0.092 (J)	0.14	<0.1	0.096 (J)	0.063 (J)
Mean	0.1472	0.2202	0.1086	0.1427	0.1264
Std. Dev.	0.1083	0.1477	0.1036	0.1178	0.06696
Upper Lim.	0.15	0.258	0.1	0.15	0.155
Lower Lim.	0.086	0.132	0.068	0.082	0.0876

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 11/22/2023 12:06 PM View: AP 1 Confidence Intervals
Plant McDonough 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
9/6/2023	<0.001			<0.001		
9/7/2023		<0.001	<0.001		<0.001	<0.001
Mean	0.0006848	0.0008646	0.0008567	0.0009716	0.0007639	0.0009105
Std. Dev.	0.0004364	0.0003583	0.0003511	0.0002388	0.0004062	0.000269
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 11/22/2023 12:06 PM View: AP 1 Confidence Intervals
Plant McDonough 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		
9/7/2023	<0.001	<0.001	<0.001	0.0002 (J)
Mean	0.0006276	0.0008128	0.0009167	0.0006905
Std. Dev.	0.0004514	0.0003745	0.000254	0.0004337
Upper Lim.	0.001	0.001	0.001	0.001
Lower Lim.	8.1E-05	0.00025	0.00035	0.0001

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Lithium (mg/L) Analysis Run 11/22/2023 12:06 PM View: AP 1 Confidence Intervals

Plant McDonough 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)
9/6/2023	0.0023 (J)				0.0021 (J)	
9/7/2023		0.013 (J)	0.0043 (J)	0.0092 (J)		0.0026 (J)
Mean	0.003787	0.01357	0.004117	0.01008	0.01228	0.004247
Std. Dev.	0.004548	0.0007868	0.0003189	0.004977	0.02001	0.005035
Upper Lim.	0.015	0.015	0.004555	0.0094	0.0029	0.0034
Lower Lim.	0.0013	0.013	0.003679	0.0078	0.0019	0.0028

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Lithium (mg/L) Analysis Run 11/22/2023 12:06 PM View: AP 1 Confidence Intervals

Plant McDonough 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)		
9/7/2023	0.0022 (J)	0.0046 (J)	<0.03	0.0022 (J)
Mean	0.0047	0.005732	0.02697	0.00384
Std. Dev.	0.007157	0.004677	0.009078	0.004997
Upper Lim.	0.0027	0.005	0.03	0.0032
Lower Lim.	0.0022	0.0044	0.0016	0.0023

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Mercury (mg/L) Analysis Run 11/22/2023 12:06 PM View: AP 1 Confidence Intervals

Plant McDonough 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	
9/6/2023	<0.0002		<0.0002			
9/7/2023		<0.0002		<0.0002	<0.0002	<0.0002
Mean	0.0001871	0.0001712	0.0001775	0.0001775	0.0001922	0.0001766
Std. Dev.	3.402E-05	4.771E-05	5.241E-05	5.236E-05	3.323E-05	5.456E-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 11/22/2023 12:06 PM View: AP 1 Confidence Intervals

Plant McDonough 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		
9/7/2023	<0.0002	<0.0002	<0.0002
Mean	0.0001928	0.0001928	0.0001932
Std. Dev.	3.064E-05	3.064E-05	2.982E-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 11/22/2023 12:06 PM View: AP 1 Confidence Intervals

Plant McDonough Data: McDonough AP

	B-100	B-105D	B-112D	DGWC-38	DGWC-39	DGWC-67
9/8/2016				<0.01	<0.01	
12/7/2016				<0.01	<0.01	
3/30/2017				0.0011 (J)	<0.01	
3/31/2017						<0.01
5/12/2017						<0.01
6/16/2017						<0.01
7/13/2017				0.0012 (J)	<0.01	<0.01
10/26/2017				0.0011 (J)	<0.01	<0.01
3/1/2018				<0.01	<0.01	
3/2/2018						<0.01
7/12/2018				<0.01	<0.01	
7/13/2018						<0.01
11/8/2018				<0.01	<0.01	<0.01
8/28/2019				<0.01	<0.01	<0.01
10/17/2019						<0.01
10/18/2019				<0.01	<0.01	
3/9/2020				0.001 (J)	<0.01	<0.01
8/13/2020				0.00098 (J)	<0.01	<0.01
8/17/2020	<0.01					
9/23/2020						<0.01
9/24/2020				0.001 (J)		
9/25/2020	<0.01				<0.01	
12/9/2020		<0.01				
3/8/2021	<0.01	0.0011 (J)				
3/11/2021				0.00092 (J)	<0.01	<0.01
4/15/2021			0.037			
9/13/2021	<0.01					
9/15/2021		<0.01		0.00099 (J)		
9/16/2021			0.032			<0.01
9/17/2021					<0.01	
1/19/2022		<0.01	0.032			<0.01
1/20/2022					<0.01	
1/21/2022	<0.01			0.0013 (J)		
9/7/2022		<0.01	0.028		<0.01	
9/8/2022	<0.01					<0.01
9/12/2022				0.0012 (J)		
2/1/2023		<0.01	0.03			
2/2/2023	0.19			0.0015 (J)		<0.01
2/3/2023					<0.01	
9/6/2023	<0.01					
9/7/2023		<0.01	0.026	0.0013 (J)	0.0016 (J)	0.0013 (J)
Mean	0.0325	0.008729	0.03083	0.004399	0.009558	0.009542
Std. Dev.	0.06364	0.003364	0.003817	0.004397	0.001927	0.001996
Upper Lim.	0.19	0.01	0.03608	0.01	0.01	0.01
Lower Lim.	0.01	0.0011	0.02559	0.001	0.0016	0.0013

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Molybdenum (mg/L) Analysis Run 11/22/2023 12:06 PM View: AP 1 Confidence Intervals

Plant McDonough Data: McDonough AP

	DGWC-68A	DGWC-69
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)
8/28/2019	0.21	0.0059 (J)
10/16/2019	0.22	0.01
3/9/2020	0.19	0.0062 (J)
8/13/2020	0.19	0.011
9/23/2020	0.2	0.0056 (J)
3/10/2021	0.2	0.0056 (J)
9/16/2021	0.18	0.009 (J)
1/25/2022	0.23	0.0057 (J)
9/7/2022	0.2	0.0067 (J)
2/1/2023	0.19	0.0058 (J)
9/7/2023	0.18	0.0056 (J)
Mean	0.2071	0.009125
Std. Dev.	0.02205	0.005584
Upper Lim.	0.2185	0.011
Lower Lim.	0.1943	0.0056

Substitution method for trace values of the form <PQL(J): PQL.

Confidence Interval

Constituent: Selenium (mg/L) Analysis Run 11/22/2023 12:06 PM View: AP 1 Confidence Intervals

Plant McDonough 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	
9/6/2023	<0.005				
9/7/2023		<0.005	<0.005	<0.005	<0.005
Mean	0.004612	0.004837	0.003732	0.004879	0.004826
Std. Dev.	0.001096	0.0007112	0.002192	0.0005277	0.0007571
Upper Lim.	0.005	0.005	0.003057	0.005	0.005
Lower Lim.	0.0019	0.0019	0.001861	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 11/22/2023 12:06 PM View: AP 1 Confidence Intervals

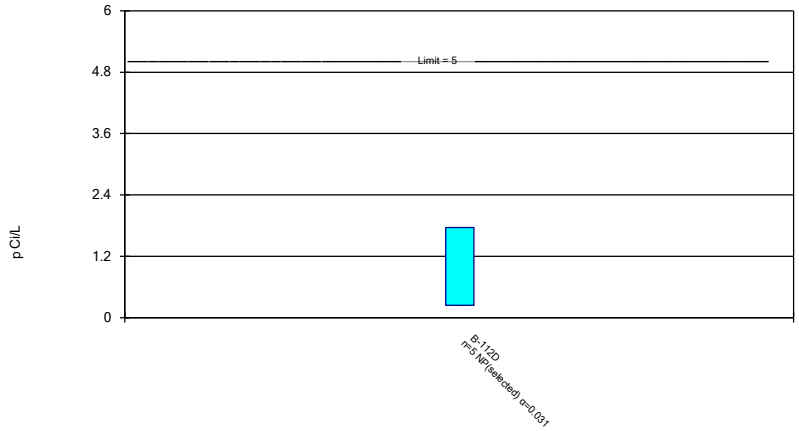
Plant McDonough Data: McDonough AP

	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		
9/7/2023	<0.001	<0.001	<0.001	<0.001
Mean	0.0006321	0.0007595	0.0007541	0.0009553
Std. Dev.	0.0004436	0.0004136	0.0004227	0.000195
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 11/22/2023 12:03 PM View: AP 1 Confidence Inte

Plant McDonough Data: McDonough AP

Confidence Interval

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 11/22/2023 12:06 PM View: AP 1 Confidence Intervals Nonparametric

Plant McDonough 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
9/7/2023	0.902
Mean	0.9172
Std. Dev.	0.5479
Upper Lim.	1.76
Lower Lim.	0.241

FIGURE I.

Appendix IV Trend Tests - Significant Results

Plant McDonough Client: Southern Company Data: McDonough AP Printed 11/21/2023, 4:51 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Arsenic (mg/L)	**DGWC-69**	**0.002458**	**67**	**66**	**Yes**	**21**	**0**	**n/a**	**n/a**	**0.05**	**NP**
Cobalt (mg/L)	**DGWA-53 (bg)**	**-0.003507**	**-107**	**-58**	**Yes**	**19**	**0**	**n/a**	**n/a**	**0.05**	**NP**
Cobalt (mg/L)	**DGWA-71 (bg)**	**0**	**55**	**53**	**Yes**	**18**	**72.22**	**n/a**	**n/a**	**0.05**	**NP**
Molybdenum (mg/L)	**DGWC-68A**	**-0.005078**	**-63**	**-58**	**Yes**	**19**	**0**	**n/a**	**n/a**	**0.05**	**NP**

Appendix IV Trend Tests - All Results

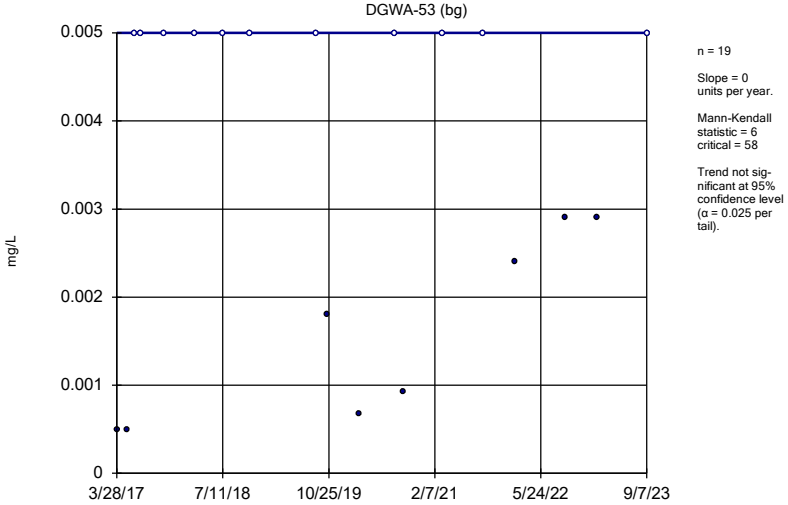
Plant McDonough Client: Southern Company Data: McDonough AP Printed 11/21/2023, 4:51 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Arsenic (mg/L)	DGWA-53 (bg)	0	6	58	No	19	57.89	n/a	n/a	0.05	NP
Arsenic (mg/L)	DGWA-70A (bg)	0	-25	-58	No	19	84.21	n/a	n/a	0.05	NP
Arsenic (mg/L)	DGWA-71 (bg)	0	26	53	No	18	83.33	n/a	n/a	0.05	NP
Arsenic (mg/L)	**DGWC-69**	**0.002458**	**67**	**66**	**Yes**	**21**	**0**	**n/a**	**n/a**	**0.05**	**NP**
Cobalt (mg/L)	**DGWA-53 (bg)**	**-0.003507**	**-107**	**-58**	**Yes**	**19**	**0**	**n/a**	**n/a**	**0.05**	**NP**
Cobalt (mg/L)	DGWA-70A (bg)	0	45	58	No	19	57.89	n/a	n/a	0.05	NP
Cobalt (mg/L)	**DGWA-71 (bg)**	**0**	**55**	**53**	**Yes**	**18**	**72.22**	**n/a**	**n/a**	**0.05**	**NP**
Cobalt (mg/L)	DGWC-40	0.00052	15	58	No	19	0	n/a	n/a	0.05	NP
Molybdenum (mg/L)	DGWA-53 (bg)	-0.001775	-56	-58	No	19	0	n/a	n/a	0.05	NP
Molybdenum (mg/L)	DGWA-70A (bg)	0	0	58	No	19	100	n/a	n/a	0.05	NP
Molybdenum (mg/L)	DGWA-71 (bg)	0	17	53	No	18	94.44	n/a	n/a	0.05	NP
Molybdenum (mg/L)	**DGWC-68A**	**-0.005078**	**-63**	**-58**	**Yes**	**19**	**0**	**n/a**	**n/a**	**0.05**	**NP**

Sanitas™ v.10.0.10 Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

DGWA-53 (bg)



n = 19

Slope = 0 units per year.

Mann-Kendall statistic = 6
critical = 58

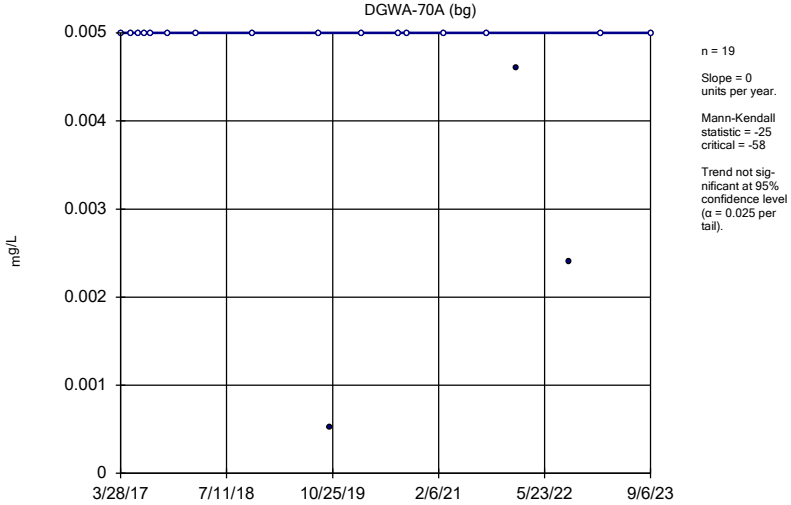
Trend not significant at 95% confidence level (α = 0.025 per tail).

Constituent: Arsenic Analysis Run 11/21/2023 4:50 PM View: AP 1 Appendix IV Trend Tests
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.10.0.10 Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

DGWA-70A (bg)



n = 19

Slope = 0 units per year.

Mann-Kendall statistic = -25
critical = -58

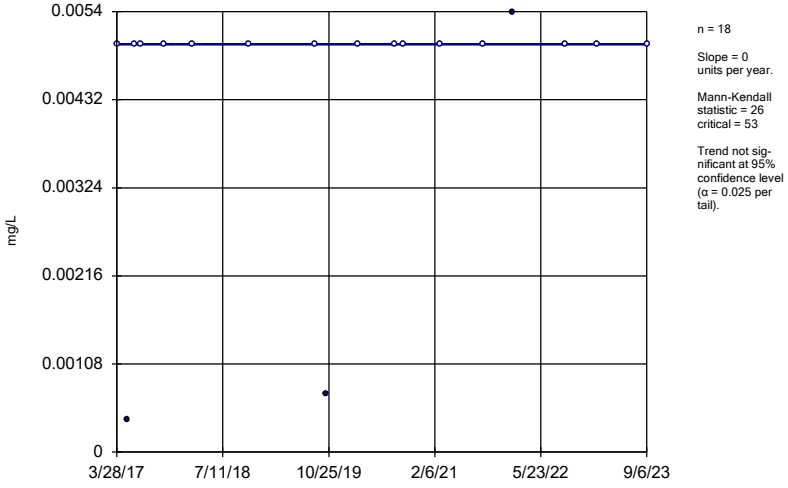
Trend not significant at 95% confidence level (α = 0.025 per tail).

Constituent: Arsenic Analysis Run 11/21/2023 4:50 PM View: AP 1 Appendix IV Trend Tests
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.10.0.10 Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

DGWA-71 (bg)



n = 18

Slope = 0 units per year.

Mann-Kendall statistic = 26
critical = 53

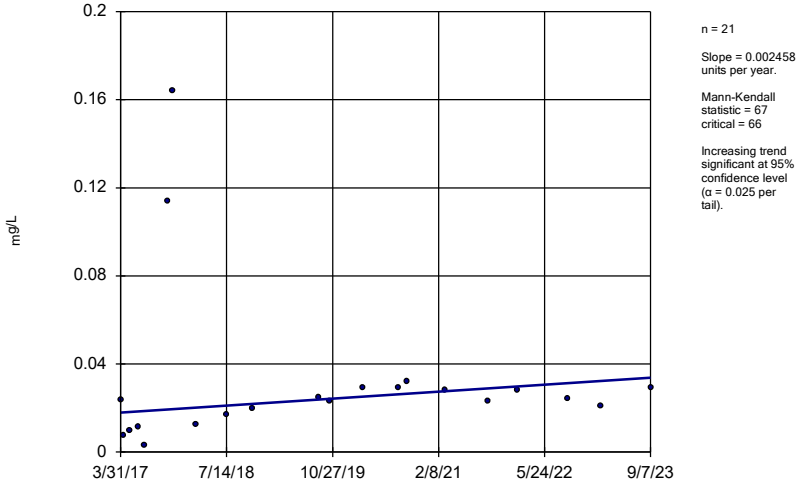
Trend not significant at 95% confidence level (α = 0.025 per tail).

Constituent: Arsenic Analysis Run 11/21/2023 4:50 PM View: AP 1 Appendix IV Trend Tests
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.10.0.10 Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

DGWC-69



n = 21

Slope = 0.002458 units per year.

Mann-Kendall statistic = 67
critical = 66

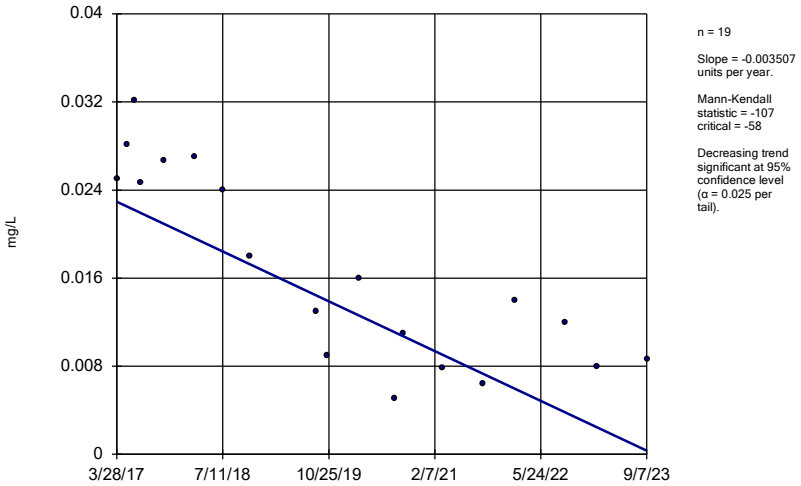
Increasing trend significant at 95% confidence level (α = 0.025 per tail).

Constituent: Arsenic Analysis Run 11/21/2023 4:50 PM View: AP 1 Appendix IV Trend Tests
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.10.0.10 Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

DGWA-53 (bg)



n = 19

Slope = -0.003507 units per year.

Mann-Kendall statistic = -107 critical = -58

Decreasing trend significant at 95% confidence level (α = 0.025 per tail).

Constituent: Cobalt Analysis Run 11/21/2023 4:50 PM View: AP 1 Appendix IV Trend Tests

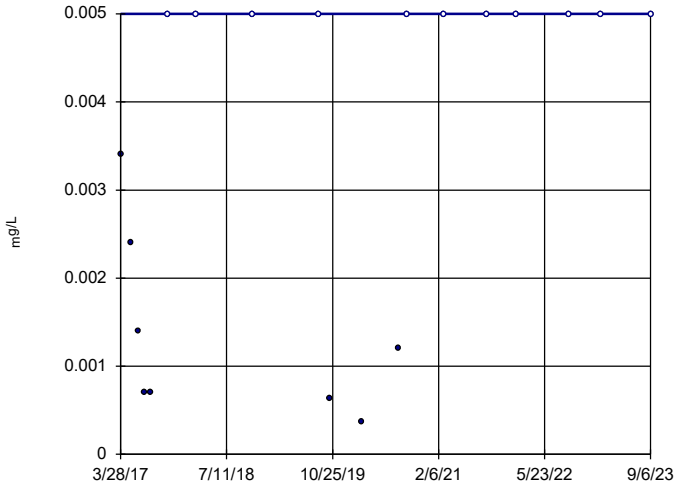
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.10.0.10 Sanitas software utilized by Groundwater Stats Consulting. UG

Hollow symbols indicate censored values.

Sen's Slope Estimator

DGWA-70A (bg)



n = 19

Slope = 0 units per year.

Mann-Kendall statistic = 45 critical = 58

Trend not significant at 95% confidence level (α = 0.025 per tail).

Constituent: Cobalt Analysis Run 11/21/2023 4:50 PM View: AP 1 Appendix IV Trend Tests

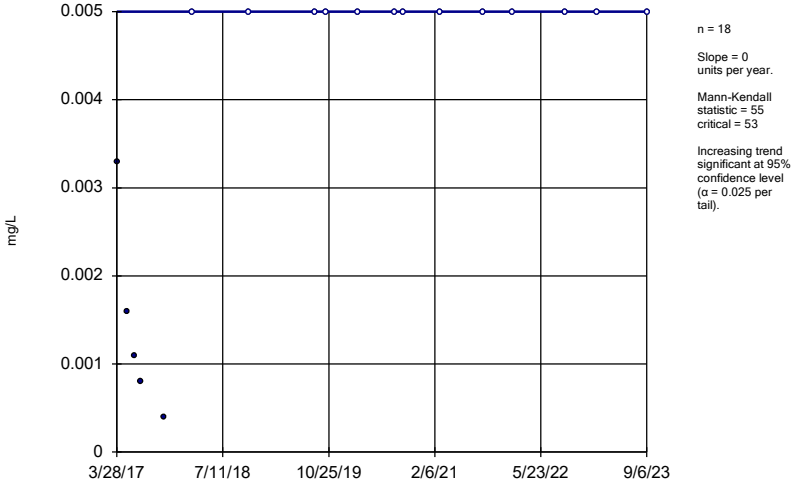
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.10.0.10 Sanitas software utilized by Groundwater Stats Consulting. UG

Hollow symbols indicate censored values.

Sen's Slope Estimator

DGWA-71 (bg)



n = 18

Slope = 0 units per year.

Mann-Kendall statistic = 55 critical = 53

Increasing trend significant at 95% confidence level (α = 0.025 per tail).

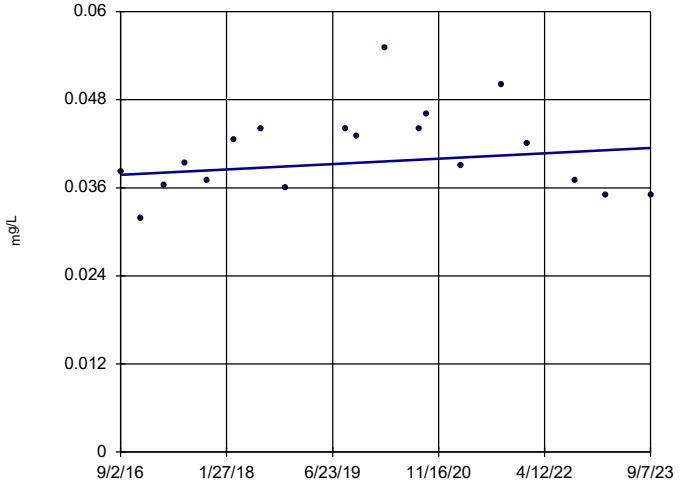
Constituent: Cobalt Analysis Run 11/21/2023 4:50 PM View: AP 1 Appendix IV Trend Tests

Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.10.0.10 Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

DGWC-40



n = 19

Slope = 0.00052 units per year.

Mann-Kendall statistic = 15 critical = 58

Trend not significant at 95% confidence level (α = 0.025 per tail).

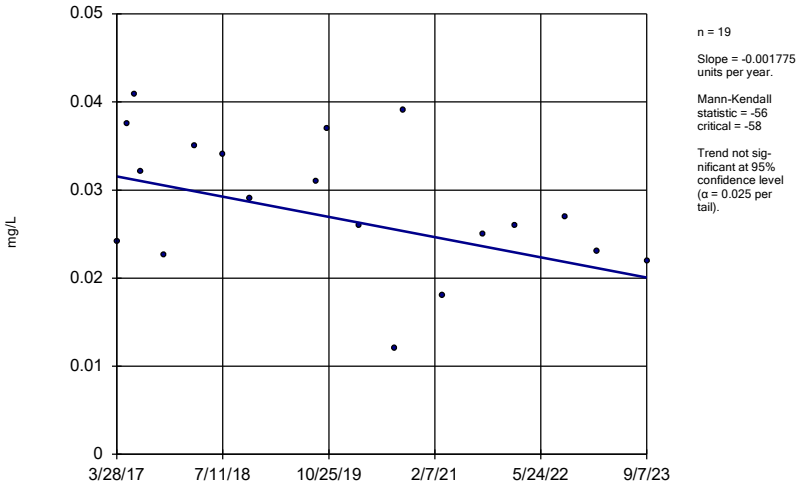
Constituent: Cobalt Analysis Run 11/21/2023 4:50 PM View: AP 1 Appendix IV Trend Tests

Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.10.0.10 Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

DGWA-53 (bg)



n = 19

Slope = -0.001775 units per year.

Mann-Kendall statistic = -56
critical = -58

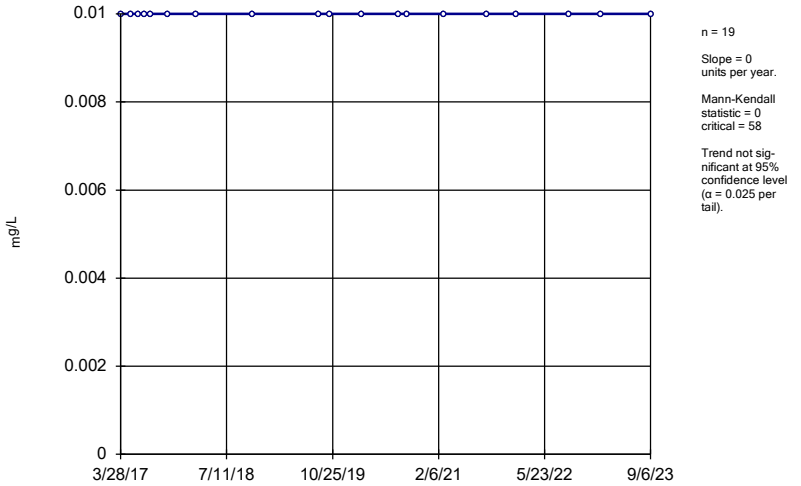
Trend not significant at 95% confidence level (α = 0.025 per tail).

Constituent: Molybdenum Analysis Run 11/21/2023 4:50 PM View: AP 1 Appendix IV Trend Tests
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.10.0.10 Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

DGWA-70A (bg)



n = 19

Slope = 0 units per year.

Mann-Kendall statistic = 0
critical = 58

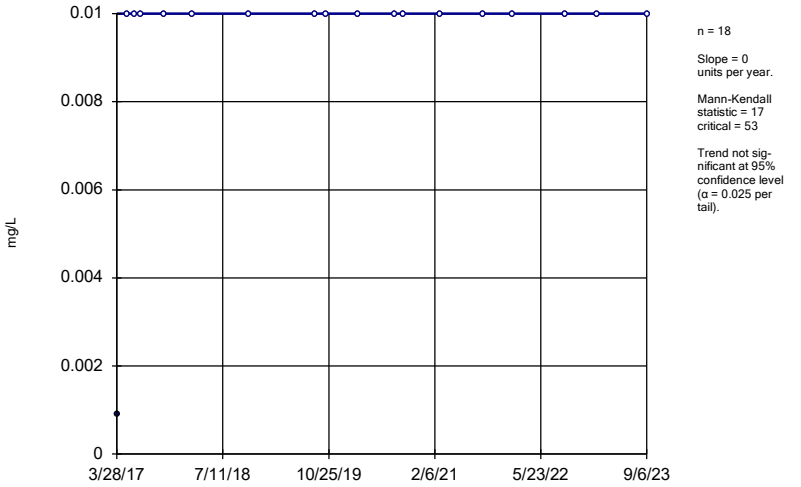
Trend not significant at 95% confidence level (α = 0.025 per tail).

Constituent: Molybdenum Analysis Run 11/21/2023 4:50 PM View: AP 1 Appendix IV Trend Tests
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.10.0.10 Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

DGWA-71 (bg)



n = 18

Slope = 0 units per year.

Mann-Kendall statistic = 17
critical = 53

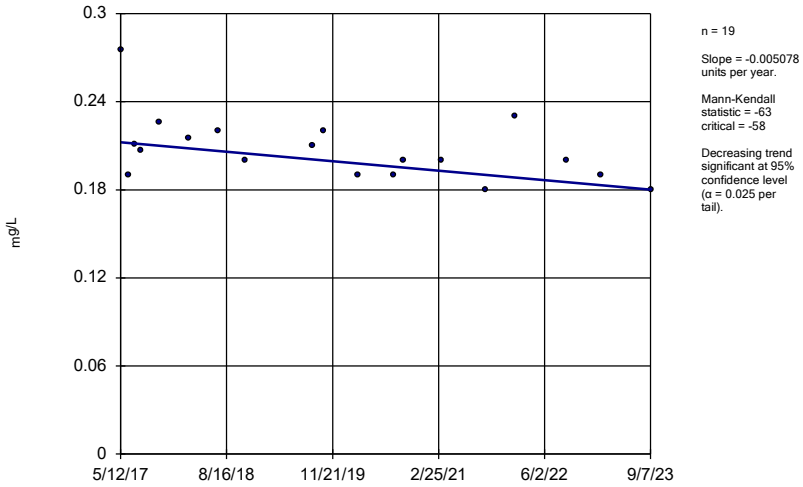
Trend not significant at 95% confidence level (α = 0.025 per tail).

Constituent: Molybdenum Analysis Run 11/21/2023 4:50 PM View: AP 1 Appendix IV Trend Tests
Plant McDonough Client: Southern Company Data: McDonough AP

Sanitas™ v.10.0.10 Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

DGWC-68A



n = 19

Slope = -0.005078 units per year.

Mann-Kendall statistic = -63
critical = -58

Decreasing trend significant at 95% confidence level (α = 0.025 per tail).

Constituent: Molybdenum Analysis Run 11/21/2023 4:50 PM View: AP 1 Appendix IV Trend Tests
Plant McDonough Client: Southern Company Data: McDonough AP

APPENDIX E

Statistical Analyses January-February 2024

GROUNDWATER STATS CONSULTING

July 31, 2024

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 2024 Statistical Analysis

Dear Mr. Abraham,

Groundwater Stats Consulting, formerly the statistical consulting division of Sanitas Technologies, is pleased to provide the January/February 2024 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 (CCR) 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. During this sampling event, well DGWA-70A was not sampled due to restricted access.

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. Upgradient well DGWA-70A was not sampled during this event due to restricted access, but the historical data from this upgradient well provides context for the groundwater quality upgradient of the facility. Therefore, this well is plotted on time series and box plots and is used in constructing statistical limits. Per request of Georgia Power Company, both Appendix III and Appendix IV constituents among downgradient wells will be evaluated using interwell prediction limits and confidence intervals, respectively, 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 for parametric limits. 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 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 2024

Interwell Prediction Limits

Interwell prediction limits, combined with a 1-of-2 resample plan, were constructed using all historical upgradient well data through February 2024 (Figure D). Interwell prediction limits pool upgradient well data to establish a background limit for an individual constituent. The January/February 2024 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, DGWC-38, DGWC-39, DGWC-40, DGWC-67, and DGWC-68A
- Calcium: DGWC-37, DGWC-38, DGWC-39, DGWC-67, and DGWC-68A
- Chloride: DGWC-38, DGWC-40, and DGWC-67
- pH: DGWC-40 (lower limit)
- Sulfate: DGWC-37, DGWC-38, DGWC-39, DGWC-40, and DGWC-67
- TDS: DGWC-37, DGWC-38, DGWC-39, DGWC-40, DGWC-67, 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 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-68A
- Chloride: DGWA-71 (upgradient), DGWC-38, and 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, and DGWC-40
- TDS: DGWA-53 (upgradient) and DGWC-39

Statistical Analysis of Appendix IV Parameters – January/February 2024

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 and assessment 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 additional values were flagged during this analysis and a complete list of flagged outliers follows this report (Figure C).

Trend Test Analysis

Earlier concentrations collected during baseline sampling for cobalt at upgradient well DGWA-53 were noted to be elevated compared to present-day groundwater quality conditions for this well. The Sen's Slope/Mann-Kendall trend test was used to determine whether concentrations have statistically significantly decreased at the 95% confidence level (Figure F). A statistically significant decreasing trend was identified; therefore, the earlier concentrations were truncated from the record in order to eliminate the significant trend (USEPA Unified Guidance, 2009, Chapter 5). The resulting statistical limit is representative of present-day groundwater quality conditions and is more conservative (i.e., lower) from a regulatory perspective. A list of the date ranges used for cobalt at upgradient well DGWA-53 follows this report.

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 2024 for Appendix IV constituents (Figure G). Parametric tolerance limits are calculated, with a target of 95% confidence and 95% coverage, when data follow a normal or transformed-normal distribution, such as for combined radium 226 + 228. When data contained greater than 50% non-detects or did not follow a normal or transformed-normal distribution, non-parametric tolerance limits were constructed using the highest background measurement. The confidence and coverage levels for nonparametric tolerance limits are dependent upon the number of background samples.

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 H).

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 with a minimum of 8 samples and assessment wells with a minimum of 4 samples (Figure I).

The Sanitas software was used to calculate 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.

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 95% confidence level to determine whether concentrations are statistically increasing, decreasing, or stable (Figure J). Although the trend tests for Assessment monitoring pairs were previously evaluated using 99% confidence, the 95% confidence level more rapidly identifies statistically significant trends. Additionally, the 95% confidence level is recommended in cases with limited sample sizes and, particularly, for new assessment wells. All available data for upgradient wells are included in the trend analyses to identify whether similar patterns exist upgradient of the site for the same constituents. When trends are present in upgradient wells, 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:
- Arsenic: DGWC-69
- Cobalt: DGWA-71 (upgradient)

Decreasing trends:
- Cobalt: DGWA-53 (upgradient)
- Molybdenum: DGWC-68A

Note that while the trend test identified a statistically significant increasing trend for cobalt in upgradient well DGWA-71, the slope is displayed as zero which represents the median slopes of all the possible pairwise slopes. The zero median slope results from the large number of non-detects in the record, and the positive test statistic results from a few recorded trace values in the earlier part of the record.

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 3/11/2024 4:47 PM View: AP 1 Confidence Intervals
Plant McDonough Client: Southern Company Data: McDonough AP

Antimony (mg/L)
DGWC-38

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-40

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

Sanitas™ v.10.0.16b Software licensed to . UG

Date Ranges

Date: 4/2/2024 1:06 PM

Plant McDonough Client: Southern Company Data: McDonough AP

Cobalt (mg/L)

DGWA-53 overall:7/12/2018-1/30/2024

Appendix III Interwell Prediction Limits - Significant Results

Plant McDonough Data: McDonough AP Printed 4/3/2024, 2:19 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	1/31/2024	1.9	Yes	57	n/a	n/a	22.81	n/a	n/a	0.0005839	NP Inter (normality) 1 of 2
Boron (mg/L)	DGWC-38	0.13	n/a	1/30/2024	2.9	Yes	57	n/a	n/a	22.81	n/a	n/a	0.0005839	NP Inter (normality) 1 of 2
Boron (mg/L)	DGWC-39	0.13	n/a	1/31/2024	2.3	Yes	57	n/a	n/a	22.81	n/a	n/a	0.0005839	NP Inter (normality) 1 of 2
Boron (mg/L)	DGWC-40	0.13	n/a	1/30/2024	0.73	Yes	57	n/a	n/a	22.81	n/a	n/a	0.0005839	NP Inter (normality) 1 of 2
Boron (mg/L)	DGWC-67	0.13	n/a	2/1/2024	3.9	Yes	57	n/a	n/a	22.81	n/a	n/a	0.0005839	NP Inter (normality) 1 of 2
Boron (mg/L)	DGWC-68A	0.13	n/a	1/31/2024	1.9	Yes	57	n/a	n/a	22.81	n/a	n/a	0.0005839	NP Inter (normality) 1 of 2
Calcium (mg/L)	DGWC-37	40.3	n/a	1/31/2024	60.1	Yes	57	n/a	n/a	3.509	n/a	n/a	0.0005839	NP Inter (normality) 1 of 2
Calcium (mg/L)	DGWC-38	40.3	n/a	1/30/2024	80.8	Yes	57	n/a	n/a	3.509	n/a	n/a	0.0005839	NP Inter (normality) 1 of 2
Calcium (mg/L)	DGWC-39	40.3	n/a	1/31/2024	76.6	Yes	57	n/a	n/a	3.509	n/a	n/a	0.0005839	NP Inter (normality) 1 of 2
Calcium (mg/L)	DGWC-67	40.3	n/a	2/1/2024	44.4	Yes	57	n/a	n/a	3.509	n/a	n/a	0.0005839	NP Inter (normality) 1 of 2
Calcium (mg/L)	DGWC-68A	40.3	n/a	1/31/2024	54.6	Yes	57	n/a	n/a	3.509	n/a	n/a	0.0005839	NP Inter (normality) 1 of 2
Chloride (mg/L)	DGWC-38	8.2	n/a	1/30/2024	8.5	Yes	59	n/a	n/a	0	n/a	n/a	0.0005408	NP Inter (normality) 1 of 2
Chloride (mg/L)	DGWC-40	8.2	n/a	1/30/2024	14.7	Yes	59	n/a	n/a	0	n/a	n/a	0.0005408	NP Inter (normality) 1 of 2
Chloride (mg/L)	DGWC-67	8.2	n/a	2/1/2024	9.8	Yes	59	n/a	n/a	0	n/a	n/a	0.0005408	NP Inter (normality) 1 of 2
pH, Field (SU)	DGWC-40	6.69	5.43	1/30/2024	4.64	Yes	64	n/a	n/a	0	n/a	n/a	0.0009317	NP Inter (normality) 1 of 2
Sulfate (mg/L)	DGWC-37	49	n/a	1/31/2024	98.4	Yes	59	n/a	n/a	15.25	n/a	n/a	0.0005408	NP Inter (normality) 1 of 2
Sulfate (mg/L)	DGWC-38	49	n/a	1/30/2024	220	Yes	59	n/a	n/a	15.25	n/a	n/a	0.0005408	NP Inter (normality) 1 of 2
Sulfate (mg/L)	DGWC-39	49	n/a	1/31/2024	106	Yes	59	n/a	n/a	15.25	n/a	n/a	0.0005408	NP Inter (normality) 1 of 2
Sulfate (mg/L)	DGWC-40	49	n/a	1/30/2024	179	Yes	59	n/a	n/a	15.25	n/a	n/a	0.0005408	NP Inter (normality) 1 of 2
Sulfate (mg/L)	DGWC-67	49	n/a	2/1/2024	111	Yes	59	n/a	n/a	15.25	n/a	n/a	0.0005408	NP Inter (normality) 1 of 2
Total Dissolved Solids [TDS] (mg/L)	DGWC-37	235.1	n/a	1/31/2024	310	Yes	58	9.835	2.801	0	None	sqrt(x)	0.0009403	Param Inter 1 of 2
Total Dissolved Solids [TDS] (mg/L)	DGWC-38	235.1	n/a	1/30/2024	492	Yes	58	9.835	2.801	0	None	sqrt(x)	0.0009403	Param Inter 1 of 2
Total Dissolved Solids [TDS] (mg/L)	DGWC-39	235.1	n/a	1/31/2024	387	Yes	58	9.835	2.801	0	None	sqrt(x)	0.0009403	Param Inter 1 of 2
Total Dissolved Solids [TDS] (mg/L)	DGWC-40	235.1	n/a	1/30/2024	348	Yes	58	9.835	2.801	0	None	sqrt(x)	0.0009403	Param Inter 1 of 2
Total Dissolved Solids [TDS] (mg/L)	DGWC-67	235.1	n/a	2/1/2024	313	Yes	58	9.835	2.801	0	None	sqrt(x)	0.0009403	Param Inter 1 of 2
Total Dissolved Solids [TDS] (mg/L)	DGWC-68A	235.1	n/a	1/31/2024	261	Yes	58	9.835	2.801	0	None	sqrt(x)	0.0009403	Param Inter 1 of 2

Appendix III Interwell Prediction Limits - All Results

Plant McDonough Data: McDonough AP Printed 4/3/2024, 2:19 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**	**1/31/2024**	**1.9**	**Yes**	**57**	**n/a**	**n/a**	**22.81**	**n/a**	**n/a**	**0.0005839**	**NP Inter (normality) 1 of 2**
Boron (mg/L)	**DGWC-38**	**0.13**	**n/a**	**1/30/2024**	**2.9**	**Yes**	**57**	**n/a**	**n/a**	**22.81**	**n/a**	**n/a**	**0.0005839**	**NP Inter (normality) 1 of 2**
Boron (mg/L)	**DGWC-39**	**0.13**	**n/a**	**1/31/2024**	**2.3**	**Yes**	**57**	**n/a**	**n/a**	**22.81**	**n/a**	**n/a**	**0.0005839**	**NP Inter (normality) 1 of 2**
Boron (mg/L)	**DGWC-40**	**0.13**	**n/a**	**1/30/2024**	**0.73**	**Yes**	**57**	**n/a**	**n/a**	**22.81**	**n/a**	**n/a**	**0.0005839**	**NP Inter (normality) 1 of 2**
Boron (mg/L)	**DGWC-67**	**0.13**	**n/a**	**2/1/2024**	**3.9**	**Yes**	**57**	**n/a**	**n/a**	**22.81**	**n/a**	**n/a**	**0.0005839**	**NP Inter (normality) 1 of 2**
Boron (mg/L)	**DGWC-68A**	**0.13**	**n/a**	**1/31/2024**	**1.9**	**Yes**	**57**	**n/a**	**n/a**	**22.81**	**n/a**	**n/a**	**0.0005839**	**NP Inter (normality) 1 of 2**
Boron (mg/L)	DGWC-69	0.13	n/a	1/31/2024	0.025J	No	57	n/a	n/a	22.81	n/a	n/a	0.0005839	NP Inter (normality) 1 of 2
Calcium (mg/L)	**DGWC-37**	**40.3**	**n/a**	**1/31/2024**	**60.1**	**Yes**	**57**	**n/a**	**n/a**	**3.509**	**n/a**	**n/a**	**0.0005839**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	**DGWC-38**	**40.3**	**n/a**	**1/30/2024**	**80.8**	**Yes**	**57**	**n/a**	**n/a**	**3.509**	**n/a**	**n/a**	**0.0005839**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	**DGWC-39**	**40.3**	**n/a**	**1/31/2024**	**76.6**	**Yes**	**57**	**n/a**	**n/a**	**3.509**	**n/a**	**n/a**	**0.0005839**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	DGWC-40	40.3	n/a	1/30/2024	38.2	No	57	n/a	n/a	3.509	n/a	n/a	0.0005839	NP Inter (normality) 1 of 2
Calcium (mg/L)	**DGWC-67**	**40.3**	**n/a**	**2/1/2024**	**44.4**	**Yes**	**57**	**n/a**	**n/a**	**3.509**	**n/a**	**n/a**	**0.0005839**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	**DGWC-68A**	**40.3**	**n/a**	**1/31/2024**	**54.6**	**Yes**	**57**	**n/a**	**n/a**	**3.509**	**n/a**	**n/a**	**0.0005839**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	DGWC-69	40.3	n/a	1/31/2024	8.8	No	57	n/a	n/a	3.509	n/a	n/a	0.0005839	NP Inter (normality) 1 of 2
Chloride (mg/L)	DGWC-37	8.2	n/a	1/31/2024	5.8	No	59	n/a	n/a	0	n/a	n/a	0.0005408	NP Inter (normality) 1 of 2
Chloride (mg/L)	**DGWC-38**	**8.2**	**n/a**	**1/30/2024**	**8.5**	**Yes**	**59**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0005408**	**NP Inter (normality) 1 of 2**
Chloride (mg/L)	DGWC-39	8.2	n/a	1/31/2024	6.8	No	59	n/a	n/a	0	n/a	n/a	0.0005408	NP Inter (normality) 1 of 2
Chloride (mg/L)	**DGWC-40**	**8.2**	**n/a**	**1/30/2024**	**14.7**	**Yes**	**59**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0005408**	**NP Inter (normality) 1 of 2**
Chloride (mg/L)	**DGWC-67**	**8.2**	**n/a**	**2/1/2024**	**9.8**	**Yes**	**59**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0005408**	**NP Inter (normality) 1 of 2**
Chloride (mg/L)	DGWC-68A	8.2	n/a	1/31/2024	3.9	No	59	n/a	n/a	0	n/a	n/a	0.0005408	NP Inter (normality) 1 of 2
Chloride (mg/L)	DGWC-69	8.2	n/a	1/31/2024	6	No	59	n/a	n/a	0	n/a	n/a	0.0005408	NP Inter (normality) 1 of 2
Fluoride (mg/L)	DGWC-37	0.42	n/a	1/31/2024	0.069J	No	64	n/a	n/a	48.44	n/a	n/a	0.0004659	NP Inter (normality) 1 of 2
Fluoride (mg/L)	DGWC-38	0.42	n/a	1/30/2024	0.078J	No	64	n/a	n/a	48.44	n/a	n/a	0.0004659	NP Inter (normality) 1 of 2
Fluoride (mg/L)	DGWC-39	0.42	n/a	1/31/2024	0.11	No	64	n/a	n/a	48.44	n/a	n/a	0.0004659	NP Inter (normality) 1 of 2
Fluoride (mg/L)	DGWC-40	0.42	n/a	1/30/2024	0.12	No	64	n/a	n/a	48.44	n/a	n/a	0.0004659	NP Inter (normality) 1 of 2
Fluoride (mg/L)	DGWC-67	0.42	n/a	2/1/2024	0.057J	No	64	n/a	n/a	48.44	n/a	n/a	0.0004659	NP Inter (normality) 1 of 2
Fluoride (mg/L)	DGWC-68A	0.42	n/a	1/31/2024	0.092J	No	64	n/a	n/a	48.44	n/a	n/a	0.0004659	NP Inter (normality) 1 of 2
Fluoride (mg/L)	DGWC-69	0.42	n/a	1/31/2024	0.086J	No	64	n/a	n/a	48.44	n/a	n/a	0.0004659	NP Inter (normality) 1 of 2
pH, Field (SU)	DGWC-37	6.69	5.43	1/31/2024	6.32	No	64	n/a	n/a	0	n/a	n/a	0.0009317	NP Inter (normality) 1 of 2
pH, Field (SU)	DGWC-38	6.69	5.43	1/30/2024	5.94	No	64	n/a	n/a	0	n/a	n/a	0.0009317	NP Inter (normality) 1 of 2
pH, Field (SU)	DGWC-39	6.69	5.43	1/31/2024	6.58	No	64	n/a	n/a	0	n/a	n/a	0.0009317	NP Inter (normality) 1 of 2
pH, Field (SU)	**DGWC-40**	**6.69**	**5.43**	**1/30/2024**	**4.64**	**Yes**	**64**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0009317**	**NP Inter (normality) 1 of 2**
pH, Field (SU)	DGWC-67	6.69	5.43	2/1/2024	6.27	No	64	n/a	n/a	0	n/a	n/a	0.0009317	NP Inter (normality) 1 of 2
pH, Field (SU)	DGWC-68A	6.69	5.43	1/31/2024	6.62	No	64	n/a	n/a	0	n/a	n/a	0.0009317	NP Inter (normality) 1 of 2
pH, Field (SU)	DGWC-69	6.69	5.43	1/31/2024	6.26	No	64	n/a	n/a	0	n/a	n/a	0.0009317	NP Inter (normality) 1 of 2
Sulfate (mg/L)	**DGWC-37**	**49**	**n/a**	**1/31/2024**	**98.4**	**Yes**	**59**	**n/a**	**n/a**	**15.25**	**n/a**	**n/a**	**0.0005408**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	**DGWC-38**	**49**	**n/a**	**1/30/2024**	**220**	**Yes**	**59**	**n/a**	**n/a**	**15.25**	**n/a**	**n/a**	**0.0005408**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	**DGWC-39**	**49**	**n/a**	**1/31/2024**	**106**	**Yes**	**59**	**n/a**	**n/a**	**15.25**	**n/a**	**n/a**	**0.0005408**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	**DGWC-40**	**49**	**n/a**	**1/30/2024**	**179**	**Yes**	**59**	**n/a**	**n/a**	**15.25**	**n/a**	**n/a**	**0.0005408**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	**DGWC-67**	**49**	**n/a**	**2/1/2024**	**111**	**Yes**	**59**	**n/a**	**n/a**	**15.25**	**n/a**	**n/a**	**0.0005408**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	DGWC-68A	49	n/a	1/31/2024	33.2	No	59	n/a	n/a	15.25	n/a	n/a	0.0005408	NP Inter (normality) 1 of 2
Sulfate (mg/L)	DGWC-69	49	n/a	1/31/2024	7.2	No	59	n/a	n/a	15.25	n/a	n/a	0.0005408	NP Inter (normality) 1 of 2
Total Dissolved Solids [TDS] (mg/L)	**DGWC-37**	**235.1**	**n/a**	**1/31/2024**	**310**	**Yes**	**58**	**9.835**	**2.801**	**0**	**None**	**sqrt(x)**	**0.0009403**	**Param Inter 1 of 2**
Total Dissolved Solids [TDS] (mg/L)	**DGWC-38**	**235.1**	**n/a**	**1/30/2024**	**492**	**Yes**	**58**	**9.835**	**2.801**	**0**	**None**	**sqrt(x)**	**0.0009403**	**Param Inter 1 of 2**
Total Dissolved Solids [TDS] (mg/L)	**DGWC-39**	**235.1**	**n/a**	**1/31/2024**	**387**	**Yes**	**58**	**9.835**	**2.801**	**0**	**None**	**sqrt(x)**	**0.0009403**	**Param Inter 1 of 2**
Total Dissolved Solids [TDS] (mg/L)	**DGWC-40**	**235.1**	**n/a**	**1/30/2024**	**348**	**Yes**	**58**	**9.835**	**2.801**	**0**	**None**	**sqrt(x)**	**0.0009403**	**Param Inter 1 of 2**
Total Dissolved Solids [TDS] (mg/L)	**DGWC-67**	**235.1**	**n/a**	**2/1/2024**	**313**	**Yes**	**58**	**9.835**	**2.801**	**0**	**None**	**sqrt(x)**	**0.0009403**	**Param Inter 1 of 2**
Total Dissolved Solids [TDS] (mg/L)	**DGWC-68A**	**235.1**	**n/a**	**1/31/2024**	**261**	**Yes**	**58**	**9.835**	**2.801**	**0**	**None**	**sqrt(x)**	**0.0009403**	**Param Inter 1 of 2**
Total Dissolved Solids [TDS] (mg/L)	DGWC-69	235.1	n/a	1/31/2024	82	No	58	9.835	2.801	0	None	sqrt(x)	0.0009403	Param Inter 1 of 2

Appendix III Trend Tests - Significant Results

Plant McDonough Data: McDonough AP Printed 4/3/2024, 2:24 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Alpha	Method
Boron (mg/L)	**DGWC-39**	**-0.135**	**-99**	**-74**	**Yes**	**19**	**0**	**n/a**	**0.01**	**NP**
Boron (mg/L)	**DGWC-40**	**-0.02833**	**-93**	**-74**	**Yes**	**19**	**0**	**n/a**	**0.01**	**NP**
Boron (mg/L)	**DGWC-67**	**0.1008**	**91**	**74**	**Yes**	**19**	**0**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**DGWA-53 (bg)**	**-3.309**	**-123**	**-74**	**Yes**	**19**	**0**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**DGWC-68A**	**1.246**	**91**	**74**	**Yes**	**19**	**0**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	**DGWA-53 (bg)**	**-0.1368**	**-123**	**-81**	**Yes**	**20**	**0**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	**DGWA-71 (bg)**	**0.6551**	**91**	**81**	**Yes**	**20**	**0**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	**DGWC-38**	**0.1217**	**78**	**74**	**Yes**	**19**	**0**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	**DGWC-40**	**-0.7804**	**-108**	**-74**	**Yes**	**19**	**0**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	**DGWC-67**	**0.6131**	**149**	**74**	**Yes**	**19**	**0**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**DGWA-71 (bg)**	**-0.5658**	**-103**	**-81**	**Yes**	**20**	**0**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**DGWC-38**	**-7.426**	**-91**	**-74**	**Yes**	**19**	**0**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**DGWC-39**	**-20.04**	**-126**	**-74**	**Yes**	**19**	**0**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**DGWC-40**	**-8.723**	**-97**	**-74**	**Yes**	**19**	**0**	**n/a**	**0.01**	**NP**
Total Dissolved Solids [TDS] (mg/L)	**DGWA-53 (bg)**	**-18.25**	**-118**	**-74**	**Yes**	**19**	**0**	**n/a**	**0.01**	**NP**
Total Dissolved Solids [TDS] (mg/L)	**DGWC-39**	**-17.74**	**-105**	**-74**	**Yes**	**19**	**0**	**n/a**	**0.01**	**NP**

Appendix III Trend Tests - All Results

Plant McDonough Data: McDonough AP Printed 4/3/2024, 2:24 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Alpha	Method
Boron (mg/L)	DGWA-53 (bg)	-0.003408	-71	-74	No	19	0	n/a	0.01	NP
Boron (mg/L)	DGWA-70A (bg)	0	18	74	No	19	47.37	n/a	0.01	NP
Boron (mg/L)	DGWA-71 (bg)	0.0007741	34	74	No	19	21.05	n/a	0.01	NP
Boron (mg/L)	DGWC-37	-0.01938	-21	-74	No	19	0	n/a	0.01	NP
Boron (mg/L)	DGWC-38	-0.0398	-59	-74	No	19	0	n/a	0.01	NP
Boron (mg/L)	**DGWC-39**	**-0.135**	**-99**	**-74**	**Yes**	**19**	**0**	**n/a**	**0.01**	**NP**
Boron (mg/L)	**DGWC-40**	**-0.02833**	**-93**	**-74**	**Yes**	**19**	**0**	**n/a**	**0.01**	**NP**
Boron (mg/L)	**DGWC-67**	**0.1008**	**91**	**74**	**Yes**	**19**	**0**	**n/a**	**0.01**	**NP**
Boron (mg/L)	DGWC-68A	-0.02227	-27	-74	No	19	0	n/a	0.01	NP
Calcium (mg/L)	**DGWA-53 (bg)**	**-3.309**	**-123**	**-74**	**Yes**	**19**	**0**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	DGWA-70A (bg)	0.05458	18	74	No	19	5.263	n/a	0.01	NP
Calcium (mg/L)	DGWA-71 (bg)	-0.2452	-41	-74	No	19	5.263	n/a	0.01	NP
Calcium (mg/L)	DGWC-37	0.8488	45	74	No	19	0	n/a	0.01	NP
Calcium (mg/L)	DGWC-38	1.089	41	74	No	19	0	n/a	0.01	NP
Calcium (mg/L)	DGWC-39	-1.104	-32	-74	No	19	0	n/a	0.01	NP
Calcium (mg/L)	DGWC-67	0.7449	74	74	No	19	0	n/a	0.01	NP
Calcium (mg/L)	**DGWC-68A**	**1.246**	**91**	**74**	**Yes**	**19**	**0**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	**DGWA-53 (bg)**	**-0.1368**	**-123**	**-81**	**Yes**	**20**	**0**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	DGWA-70A (bg)	-0.02694	-40	-74	No	19	0	n/a	0.01	NP
Chloride (mg/L)	**DGWA-71 (bg)**	**0.6551**	**91**	**81**	**Yes**	**20**	**0**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	**DGWC-38**	**0.1217**	**78**	**74**	**Yes**	**19**	**0**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	**DGWC-40**	**-0.7804**	**-108**	**-74**	**Yes**	**19**	**0**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	**DGWC-67**	**0.6131**	**149**	**74**	**Yes**	**19**	**0**	**n/a**	**0.01**	**NP**
pH, Field (SU)	DGWA-53 (bg)	0.02221	32	92	No	22	0	n/a	0.01	NP
pH, Field (SU)	DGWA-70A (bg)	-0.02199	-46	-81	No	20	0	n/a	0.01	NP
pH, Field (SU)	DGWA-71 (bg)	0.004314	12	92	No	22	0	n/a	0.01	NP
pH, Field (SU)	DGWC-40	-0.02027	-69	-87	No	21	0	n/a	0.01	NP
Sulfate (mg/L)	DGWA-53 (bg)	-0.2974	-16	-81	No	20	0	n/a	0.01	NP
Sulfate (mg/L)	DGWA-70A (bg)	0	-23	-74	No	19	47.37	n/a	0.01	NP
Sulfate (mg/L)	**DGWA-71 (bg)**	**-0.5658**	**-103**	**-81**	**Yes**	**20**	**0**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	DGWC-37	-1.408	-40	-68	No	18	0	n/a	0.01	NP
Sulfate (mg/L)	**DGWC-38**	**-7.426**	**-91**	**-74**	**Yes**	**19**	**0**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**DGWC-39**	**-20.04**	**-126**	**-74**	**Yes**	**19**	**0**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**DGWC-40**	**-8.723**	**-97**	**-74**	**Yes**	**19**	**0**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	DGWC-67	0	3	74	No	19	0	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	**DGWA-53 (bg)**	**-18.25**	**-118**	**-74**	**Yes**	**19**	**0**	**n/a**	**0.01**	**NP**
Total Dissolved Solids [TDS] (mg/L)	DGWA-70A (bg)	0	-4	-74	No	19	0	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	DGWA-71 (bg)	-1.554	-46	-81	No	20	0	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	DGWC-37	1.652	16	74	No	19	0	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	DGWC-38	1.133	12	74	No	19	0	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	**DGWC-39**	**-17.74**	**-105**	**-74**	**Yes**	**19**	**0**	**n/a**	**0.01**	**NP**
Total Dissolved Solids [TDS] (mg/L)	DGWC-40	-2.799	-30	-68	No	18	0	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	DGWC-67	1.59	13	74	No	19	0	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	DGWC-68A	-4.109	-52	-74	No	19	0	n/a	0.01	NP

Trend Test Summary - Cobalt DGWA-53

Plant McDonough Client: Southern Company Data: McDonough AP Printed 4/2/2024, 1:04 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Alpha	Method
Cobalt (mg/L)	**DGWA-53 (bg)**	**-0.003272**	**-118**	**-62**	**Yes**	**20**	**0**	**n/a**	**0.05**	**NP**

Upper Tolerance Limits Summary Table

Plant McDonough Data: McDonough AP Printed 4/8/2024, 9:06 AM

Constituent	Upper Lim.	Lower Lim.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Antimony (mg/L)	0.0045	n/a	60	n/a	n/a	83.33	n/a	n/a	0.04607	NP Inter(NDs)
Arsenic (mg/L)	0.0054	n/a	60	n/a	n/a	76.67	n/a	n/a	0.04607	NP Inter(NDs)
Barium (mg/L)	0.19	n/a	60	n/a	n/a	0	n/a	n/a	0.04607	NP Inter(normality)
Beryllium (mg/L)	0.0009	n/a	60	n/a	n/a	53.33	n/a	n/a	0.04607	NP Inter(NDs)
Cadmium (mg/L)	0.0005	n/a	60	n/a	n/a	93.33	n/a	n/a	0.04607	NP Inter(NDs)
Chromium (mg/L)	0.005	n/a	59	n/a	n/a	71.19	n/a	n/a	0.04849	NP Inter(NDs)
Cobalt (mg/L)	0.024	n/a	54	n/a	n/a	50	n/a	n/a	0.06267	NP Inter(normality)
Combined Radium 226 + 228 (pCi/L)	4.743	n/a	60	1.018	0.3282	0	None	x^(1/3)	0.05	Inter
Fluoride (mg/L)	0.42	n/a	64	n/a	n/a	48.44	n/a	n/a	0.03752	NP Inter(normality)
Lead (mg/L)	0.001	n/a	60	n/a	n/a	85	n/a	n/a	0.04607	NP Inter(NDs)
Lithium (mg/L)	0.03	n/a	60	n/a	n/a	36.67	n/a	n/a	0.04607	NP Inter(normality)
Mercury (mg/L)	0.0002	n/a	60	n/a	n/a	83.33	n/a	n/a	0.04607	NP Inter(NDs)
Molybdenum (mg/L)	0.0409	n/a	60	n/a	n/a	65	n/a	n/a	0.04607	NP Inter(NDs)
Selenium (mg/L)	0.005	n/a	60	n/a	n/a	100	n/a	n/a	0.04607	NP Inter(NDs)
Thallium (mg/L)	0.001	n/a	60	n/a	n/a	95	n/a	n/a	0.04607	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		0.0045	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	0.024	0.024
Combined Radium, Total (pCi/L)	5		4.74	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*

Appendix IV Confidence Intervals - Significant Results

Plant McDonough Data: McDonough AP Printed 4/2/2024, 3:13 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Arsenic (mg/L)	**DGWC-69**	**0.03469**	**0.01445**	**0.01**	**Yes**	**22**	**0.03183**	**0.03639**	**0**	**None**	**ln(x)**	**0.01**	**Param.**
Cobalt (mg/L)	**DGWC-40**	**0.04381**	**0.03743**	**0.024**	**Yes**	**20**	**0.04062**	**0.005609**	**0**	**None**	**No**	**0.01**	**Param.**
Molybdenum (mg/L)	**DGWC-68A**	**0.2182**	**0.1946**	**0.1**	**Yes**	**20**	**0.2067**	**0.02152**	**0**	**None**	**sqrt(x)**	**0.01**	**Param.**

Appendix IV Confidence Intervals - All Results

Plant McDonough Data: McDonough AP Printed 4/2/2024, 3:13 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	9	0.002667	0.000669	77.78	None	No	0.002	NP (NDs)
Antimony (mg/L)	B-105D	0.0082	0.00069	0.006	No	8	0.003186	0.002206	62.5	None	No	0.004	NP (NDs)
Antimony (mg/L)	B-112D	0.003	0.00041	0.006	No	7	0.00263	0.0009789	85.71	None	No	0.008	NP (NDs)
Antimony (mg/L)	B-62	0.003	0.00046	0.006	No	12	0.002788	0.0007332	91.67	None	No	0.01	NP (NDs)
Antimony (mg/L)	DGWC-37	0.003	0.0014	0.006	No	19	0.002916	0.0003671	94.74	None	No	0.01	NP (NDs)
Antimony (mg/L)	DGWC-39	0.003	0.00058	0.006	No	19	0.002873	0.0005552	94.74	None	No	0.01	NP (NDs)
Antimony (mg/L)	DGWC-40	0.003	0.00033	0.006	No	19	0.002859	0.0006125	94.74	None	No	0.01	NP (NDs)
Antimony (mg/L)	DGWC-67	0.0039	0.0023	0.006	No	19	0.002758	0.0008092	78.95	None	No	0.01	NP (NDs)
Antimony (mg/L)	DGWC-68A	0.003	0.0008	0.006	No	19	0.002743	0.0007735	89.47	None	No	0.01	NP (NDs)
Antimony (mg/L)	DGWC-69	0.003	0.0019	0.006	No	20	0.00277	0.0006018	85	None	No	0.01	NP (NDs)
Arsenic (mg/L)	B-105D	0.0051	0.0025	0.01	No	8	0.0044	0.001143	62.5	None	No	0.004	NP (NDs)
Arsenic (mg/L)	B-112D	0.005	0.00078	0.01	No	7	0.004397	0.001595	71.43	None	No	0.008	NP (NDs)
Arsenic (mg/L)	B-62	0.005	0.0033	0.01	No	12	0.004858	0.0004907	91.67	None	No	0.01	NP (NDs)
Arsenic (mg/L)	DGWC-37	0.005	0.0019	0.01	No	20	0.004845	0.0006932	95	None	No	0.01	NP (NDs)
Arsenic (mg/L)	DGWC-38	0.005	0.0005	0.01	No	20	0.004775	0.001006	95	None	No	0.01	NP (NDs)
Arsenic (mg/L)	DGWC-39	0.005	0.00087	0.01	No	20	0.003359	0.002081	60	None	No	0.01	NP (NDs)
Arsenic (mg/L)	DGWC-40	0.005	0.003	0.01	No	20	0.004267	0.001569	80	None	No	0.01	NP (NDs)
Arsenic (mg/L)	DGWC-67	0.005	0.0033	0.01	No	20	0.004476	0.001377	85	None	No	0.01	NP (NDs)
Arsenic (mg/L)	DGWC-68A	0.005	0.0016	0.01	No	20	0.00483	0.0007603	95	None	No	0.01	NP (NDs)
Arsenic (mg/L)	**DGWC-69**	**0.03469**	**0.01445**	**0.01**	**Yes**	**22**	**0.03183**	**0.03639**	**0**	**None**	**ln(x)**	**0.01**	**Param.**
Barium (mg/L)	B-100	0.098	0.015	2	No	9	0.02911	0.02594	0	None	No	0.002	NP (normality)
Barium (mg/L)	B-105D	0.04034	0.03291	2	No	8	0.03663	0.003503	0	None	No	0.01	Param.
Barium (mg/L)	B-112D	0.026	0.0026	2	No	7	0.006214	0.008729	0	None	No	0.008	NP (normality)
Barium (mg/L)	B-62	0.0245	0.01817	2	No	12	0.02133	0.00403	0	None	No	0.01	Param.
Barium (mg/L)	DGWC-37	0.1045	0.08671	2	No	20	0.0956	0.01566	0	None	No	0.01	Param.
Barium (mg/L)	DGWC-38	0.03312	0.03089	2	No	20	0.03196	0.002043	0	None	x^2	0.01	Param.
Barium (mg/L)	DGWC-39	0.0972	0.0867	2	No	20	0.09195	0.009245	0	None	No	0.01	Param.
Barium (mg/L)	DGWC-40	0.018	0.0168	2	No	20	0.01774	0.002352	0	None	No	0.01	NP (normality)
Barium (mg/L)	DGWC-67	0.1077	0.09211	2	No	20	0.0999	0.01371	0	None	No	0.01	Param.
Barium (mg/L)	DGWC-68A	0.098	0.0878	2	No	20	0.09226	0.007471	0	None	No	0.01	NP (normality)
Barium (mg/L)	DGWC-69	0.09206	0.06191	2	No	21	0.07699	0.02733	0	None	No	0.01	Param.
Beryllium (mg/L)	B-100	0.0005593	0.000354	0.004	No	9	0.0004567	0.0001063	11.11	None	No	0.01	Param.
Beryllium (mg/L)	B-62	0.0025	0.00009	0.004	No	13	0.0004868	0.0008937	15.38	None	No	0.01	NP (normality)
Beryllium (mg/L)	DGWC-37	0.0005	0.00007	0.004	No	20	0.0003289	0.0002153	60	None	No	0.01	NP (NDs)
Beryllium (mg/L)	DGWC-38	0.0005	0.000058	0.004	No	20	0.0004779	0.00009883	95	None	No	0.01	NP (NDs)
Beryllium (mg/L)	DGWC-40	0.003288	0.00283	0.004	No	20	0.003035	0.000458	5	None	x^2	0.01	Param.
Beryllium (mg/L)	DGWC-68A	0.0005	0.000084	0.004	No	20	0.0004573	0.0001316	90	None	No	0.01	NP (NDs)
Beryllium (mg/L)	DGWC-69	0.0005	0.000063	0.004	No	21	0.000334	0.0002169	61.9	None	No	0.01	NP (NDs)
Cadmium (mg/L)	B-100	0.00059	0.00025	0.005	No	9	0.0003567	0.000136	11.11	None	No	0.002	NP (normality)
Cadmium (mg/L)	DGWC-37	0.0005	0.00027	0.005	No	20	0.000415	0.0001548	75	None	No	0.01	NP (NDs)
Cadmium (mg/L)	DGWC-38	0.0005	0.00017	0.005	No	20	0.000315	0.0002343	20	None	No	0.01	NP (normality)
Cadmium (mg/L)	DGWC-40	0.0008332	0.0006998	0.005	No	20	0.0007665	0.0001175	10	None	No	0.01	Param.
Cadmium (mg/L)	DGWC-67	0.00053	0.00021	0.005	No	20	0.000437	0.0001337	75	None	No	0.01	NP (NDs)
Cadmium (mg/L)	DGWC-68A	0.0002305	0.000148	0.005	No	20	0.000364	0.0002143	45	Kaplan-Meier	sqrt(x)	0.01	Param.
Cadmium (mg/L)	DGWC-69	0.0005	0.0002	0.005	No	21	0.0004367	0.000135	80.95	Kaplan-Meier	No	0.01	NP (NDs)
Chromium (mg/L)	B-100	0.005	0.00057	0.1	No	9	0.004057	0.001874	77.78	None	No	0.002	NP (NDs)
Chromium (mg/L)	B-105D	0.005	0.0012	0.1	No	8	0.004525	0.001344	87.5	None	No	0.004	NP (NDs)
Chromium (mg/L)	B-112D	0.005	0.00085	0.1	No	7	0.003893	0.001897	71.43	None	No	0.008	NP (NDs)
Chromium (mg/L)	B-62	0.005	0.00098	0.1	No	12	0.004665	0.00116	91.67	None	No	0.01	NP (NDs)
Chromium (mg/L)	DGWC-37	0.005	0.0007	0.1	No	20	0.004564	0.001342	90	None	No	0.01	NP (NDs)
Chromium (mg/L)	DGWC-38	0.005	0.00092	0.1	No	20	0.004343	0.001607	85	None	No	0.01	NP (NDs)
Chromium (mg/L)	DGWC-40	0.005	0.0007	0.1	No	20	0.00295	0.002127	50	None	No	0.01	NP (normality)
Chromium (mg/L)	DGWC-67	0.005	0.0014	0.1	No	20	0.004174	0.001702	80	None	No	0.01	NP (NDs)
Chromium (mg/L)	DGWC-68A	0.005	0.0005	0.1	No	20	0.004775	0.001006	95	None	No	0.01	NP (NDs)
Chromium (mg/L)	DGWC-69	0.005	0.0013	0.1	No	21	0.004047	0.001752	76.19	None	No	0.01	NP (NDs)

Appendix IV Confidence Intervals - All Results

Plant McDonough Data: McDonough AP Printed 4/2/2024, 3:13 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Cobalt (mg/L)	B-100	0.06941	0.02304	0.024	No	11	0.04623	0.02782	9.091	None	No	0.01	Param.
Cobalt (mg/L)	B-105D	0.008174	0.002506	0.024	No	8	0.00525	0.003058	0	None	sqrt(x)	0.01	Param.
Cobalt (mg/L)	B-112D	0.005	0.0004	0.024	No	7	0.003349	0.002168	57.14	None	No	0.008	NP (NDs)
Cobalt (mg/L)	B-62	0.005	0.00031	0.024	No	13	0.004278	0.001763	84.62	None	No	0.01	NP (NDs)
Cobalt (mg/L)	DGWC-37	0.005	0.0005	0.024	No	20	0.004305	0.001698	85	None	No	0.01	NP (NDs)
Cobalt (mg/L)	DGWC-38	0.0017	0.0015	0.024	No	20	0.00193	0.00106	10	None	No	0.01	NP (normality)
Cobalt (mg/L)	DGWC-39	0.006595	0.005785	0.024	No	20	0.00619	0.0007137	10	None	No	0.01	Param.
Cobalt (mg/L)	**DGWC-40**	**0.04381**	**0.03743**	**0.024**	**Yes**	**20**	**0.04062**	**0.005609**	**0**	**None**	**No**	**0.01**	**Param.**
Cobalt (mg/L)	DGWC-67	0.0037	0.0011	0.024	No	20	0.002345	0.00166	10	None	No	0.01	NP (normality)
Cobalt (mg/L)	DGWC-68A	0.005	0.0015	0.024	No	20	0.004365	0.001565	85	None	No	0.01	NP (NDs)
Cobalt (mg/L)	DGWC-69	0.005	0.0028	0.024	No	21	0.004095	0.001559	71.43	None	No	0.01	NP (NDs)
Combined Radium 226 + 228 (pCi/L)	B-100	1.063	0.2516	5	No	9	0.6574	0.4203	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	B-105D	6.025	1.132	5	No	7	3.389	2.275	0	None	sqrt(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	B-112D	1.671	0.2741	5	No	6	0.9727	0.5085	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	B-62	2.011	1.475	5	No	11	1.743	0.3213	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	DGWC-37	1.035	0.5287	5	No	19	0.7818	0.4323	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	DGWC-38	0.936	0.3524	5	No	19	0.7058	0.5564	0	None	sqrt(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	DGWC-39	1.204	0.5968	5	No	19	0.9006	0.5188	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	DGWC-40	1.428	0.6687	5	No	19	1.048	0.6487	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	DGWC-67	0.9186	0.4884	5	No	19	0.7035	0.3673	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	DGWC-68A	1.288	0.5757	5	No	19	0.932	0.6086	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	DGWC-69	1.725	1.111	5	No	20	1.418	0.5404	0	None	No	0.01	Param.
Fluoride (mg/L)	B-100	0.1	0.052	4	No	9	0.08744	0.01949	66.67	None	No	0.002	NP (NDs)
Fluoride (mg/L)	B-105D	0.32	0.058	4	No	8	0.1139	0.08478	0	None	No	0.004	NP (normality)
Fluoride (mg/L)	B-112D	0.3313	0.2602	4	No	7	0.2957	0.02992	0	None	No	0.01	Param.
Fluoride (mg/L)	B-62	0.23	0.099	4	No	11	0.1611	0.09675	0	None	No	0.006	NP (normality)
Fluoride (mg/L)	DGWC-37	0.089	0.057	4	No	21	0.09852	0.06948	4.762	None	No	0.01	NP (normality)
Fluoride (mg/L)	DGWC-38	0.1413	0.07603	4	No	21	0.1244	0.09707	9.524	None	ln(x)	0.01	Param.
Fluoride (mg/L)	DGWC-39	0.15	0.086	4	No	21	0.1454	0.1059	4.762	None	No	0.01	NP (normality)
Fluoride (mg/L)	DGWC-40	0.2494	0.1311	4	No	21	0.2154	0.1456	4.762	None	ln(x)	0.01	Param.
Fluoride (mg/L)	DGWC-67	0.1	0.057	4	No	21	0.1061	0.1016	47.62	None	No	0.01	NP (normality)
Fluoride (mg/L)	DGWC-68A	0.12	0.082	4	No	21	0.1402	0.1154	4.762	None	No	0.01	NP (normality)
Fluoride (mg/L)	DGWC-69	0.1515	0.08745	4	No	22	0.1245	0.06591	4.545	None	sqrt(x)	0.01	Param.
Lead (mg/L)	B-100	0.001	0.000088	0.015	No	9	0.0007198	0.0004215	66.67	None	No	0.002	NP (NDs)
Lead (mg/L)	B-105D	0.001	0.000052	0.015	No	8	0.0008815	0.0003352	87.5	None	No	0.004	NP (NDs)
Lead (mg/L)	B-112D	0.001	0.00014	0.015	No	7	0.0008771	0.000325	85.71	None	No	0.008	NP (NDs)
Lead (mg/L)	DGWC-37	0.0014	0.000061	0.015	No	20	0.0009731	0.0002325	90	None	No	0.01	NP (NDs)
Lead (mg/L)	DGWC-38	0.001	0.00014	0.015	No	20	0.0007758	0.0003989	75	None	No	0.01	NP (NDs)
Lead (mg/L)	DGWC-39	0.001	0.00022	0.015	No	20	0.000915	0.0002626	90	None	No	0.01	NP (NDs)
Lead (mg/L)	DGWC-40	0.001	0.000081	0.015	No	20	0.0006462	0.0004472	60	None	No	0.01	NP (NDs)
Lead (mg/L)	DGWC-67	0.001	0.00025	0.015	No	20	0.0008222	0.0003669	80	None	No	0.01	NP (NDs)
Lead (mg/L)	DGWC-68A	0.001	0.00035	0.015	No	20	0.0009209	0.0002479	90	None	No	0.01	NP (NDs)
Lead (mg/L)	DGWC-69	0.001	0.0001	0.015	No	21	0.0007052	0.0004281	66.67	None	No	0.01	NP (NDs)
Lithium (mg/L)	B-100	0.03	0.0013	0.04	No	9	0.008367	0.01227	22.22	None	No	0.002	NP (normality)
Lithium (mg/L)	B-105D	0.015	0.013	0.04	No	8	0.0135	0.0007559	0	None	No	0.004	NP (normality)
Lithium (mg/L)	B-112D	0.004476	0.003781	0.04	No	7	0.004129	0.0002928	0	None	No	0.01	Param.
Lithium (mg/L)	B-62	0.0094	0.0078	0.04	No	12	0.01003	0.004749	8.333	None	No	0.01	NP (normality)
Lithium (mg/L)	DGWC-37	0.0029	0.002	0.04	No	20	0.00917	0.01234	25	None	No	0.01	NP (normality)
Lithium (mg/L)	DGWC-38	0.0034	0.0029	0.04	No	20	0.004185	0.004909	5	None	No	0.01	NP (normality)
Lithium (mg/L)	DGWC-40	0.0024	0.0022	0.04	No	20	0.00458	0.006987	10	None	No	0.01	NP (normality)
Lithium (mg/L)	DGWC-67	0.005	0.0044	0.04	No	20	0.00567	0.00456	5	None	No	0.01	NP (normality)
Lithium (mg/L)	DGWC-68A	0.03	0.0016	0.04	No	20	0.02712	0.008862	90	None	No	0.01	NP (NDs)
Lithium (mg/L)	DGWC-69	0.0031	0.0023	0.04	No	21	0.003757	0.004885	4.762	None	No	0.01	NP (normality)
Mercury (mg/L)	B-100	0.0002	0.00011	0.002	No	8	0.0001887	0.00003182	87.5	None	No	0.004	NP (NDs)
Mercury (mg/L)	B-105D	0.0002	0.000087	0.002	No	7	0.0001753	0.0000449	71.43	None	No	0.008	NP (NDs)

Appendix IV Confidence Intervals - All Results

Plant McDonough Data: McDonough AP Printed 4/2/2024, 3:13 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Mercury (mg/L)	DGWC-37	0.0002	0.000091	0.002	No	19	0.0001787	0.0000512	84.21	None	No	0.01	NP (NDs)
Mercury (mg/L)	DGWC-38	0.0002	0.000085	0.002	No	19	0.0001787	0.00005115	84.21	None	No	0.01	NP (NDs)
Mercury (mg/L)	DGWC-39	0.0002	0.000059	0.002	No	19	0.0001926	0.00003235	94.74	None	No	0.01	NP (NDs)
Mercury (mg/L)	DGWC-40	0.0002	0.00009	0.002	No	19	0.0001778	0.0000533	84.21	None	No	0.01	NP (NDs)
Mercury (mg/L)	DGWC-67	0.0002	0.00007	0.002	No	19	0.0001932	0.00002982	94.74	None	No	0.01	NP (NDs)
Mercury (mg/L)	DGWC-68A	0.0002	0.00007	0.002	No	19	0.0001932	0.00002982	94.74	None	No	0.01	NP (NDs)
Mercury (mg/L)	DGWC-69	0.0002	0.00007	0.002	No	20	0.0001935	0.00002907	95	None	No	0.01	NP (NDs)
Molybdenum (mg/L)	B-100	0.19	0.01	0.1	No	9	0.03	0.06	88.89	None	No	0.002	NP (NDs)
Molybdenum (mg/L)	B-105D	0.01	0.0011	0.1	No	8	0.008887	0.003147	87.5	None	No	0.004	NP (NDs)
Molybdenum (mg/L)	B-112D	0.03477	0.0258	0.1	No	7	0.03029	0.003773	0	None	No	0.01	Param.
Molybdenum (mg/L)	DGWC-38	0.01	0.001	0.1	No	20	0.004269	0.004319	35	None	No	0.01	NP (normality)
Molybdenum (mg/L)	DGWC-39	0.01	0.0016	0.1	No	20	0.00958	0.001878	95	None	No	0.01	NP (NDs)
Molybdenum (mg/L)	DGWC-67	0.01	0.0013	0.1	No	20	0.009565	0.001945	95	None	No	0.01	NP (NDs)
Molybdenum (mg/L)	**DGWC-68A**	**0.2182**	**0.1946**	**0.1**	**Yes**	**20**	**0.2067**	**0.02152**	**0**	**None**	**sqrt(x)**	**0.01**	**Param.**
Molybdenum (mg/L)	DGWC-69	0.011	0.0057	0.1	No	21	0.009005	0.00547	4.762	None	No	0.01	NP (normality)
Selenium (mg/L)	B-100	0.005	0.0019	0.05	No	9	0.004656	0.001033	88.89	None	No	0.002	NP (NDs)
Selenium (mg/L)	DGWC-38	0.005	0.0019	0.05	No	20	0.004845	0.0006932	95	None	No	0.01	NP (NDs)
Selenium (mg/L)	DGWC-40	0.003159	0.001849	0.05	No	20	0.00368	0.002146	30	Kaplan-Meier	sqrt(x)	0.01	Param.
Selenium (mg/L)	DGWC-67	0.005	0.0027	0.05	No	20	0.004885	0.0005143	95	Kaplan-Meier	No	0.01	NP (NDs)
Selenium (mg/L)	DGWC-68A	0.005	0.0017	0.05	No	20	0.004835	0.0007379	95	Kaplan-Meier	No	0.01	NP (NDs)
Thallium (mg/L)	DGWC-38	0.001	0.00014	0.002	No	20	0.0006505	0.0004395	60	None	No	0.01	NP (NDs)
Thallium (mg/L)	DGWC-39	0.001	0.0001	0.002	No	20	0.0007715	0.0004061	75	None	No	0.01	NP (NDs)
Thallium (mg/L)	DGWC-40	0.001	0.00007	0.002	No	20	0.0007664	0.0004151	75	None	No	0.01	NP (NDs)
Thallium (mg/L)	DGWC-68A	0.001	0.00015	0.002	No	20	0.0009575	0.0001901	95	None	No	0.01	NP (NDs)

Appendix IV Trend Tests - Significant Results

Plant McDonough Data: McDonough AP Printed 4/2/2024, 2:57 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Alpha	Method
Arsenic (mg/L)	**DGWC-69**	**0.002194**	**72**	**71**	**Yes**	**22**	**0**	**n/a**	**0.05**	**NP**
Cobalt (mg/L)	**DGWA-53 (bg)**	**-0.003272**	**-118**	**-62**	**Yes**	**20**	**0**	**n/a**	**0.05**	**NP**
Cobalt (mg/L)	**DGWA-71 (bg)**	**0**	**65**	**62**	**Yes**	**20**	**75**	**n/a**	**0.05**	**NP**
Molybdenum (mg/L)	**DGWC-68A**	**-0.004143**	**-66**	**-62**	**Yes**	**20**	**0**	**n/a**	**0.05**	**NP**

Appendix IV Trend Tests - All Results

Plant McDonough Data: McDonough AP Printed 4/2/2024, 2:57 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Alpha	Method
Arsenic (mg/L)	DGWA-53 (bg)	0	14	62	No	20	60	n/a	0.05	NP
Arsenic (mg/L)	DGWA-70A (bg)	0	-28	-62	No	20	85	n/a	0.05	NP
Arsenic (mg/L)	DGWA-71 (bg)	0	28	62	No	20	85	n/a	0.05	NP
Arsenic (mg/L)	**DGWC-69**	**0.002194**	**72**	**71**	**Yes**	**22**	**0**	**n/a**	**0.05**	**NP**
Cobalt (mg/L)	**DGWA-53 (bg)**	**-0.003272**	**-118**	**-62**	**Yes**	**20**	**0**	**n/a**	**0.05**	**NP**
Cobalt (mg/L)	DGWA-70A (bg)	0	47	62	No	20	60	n/a	0.05	NP
Cobalt (mg/L)	**DGWA-71 (bg)**	**0**	**65**	**62**	**Yes**	**20**	**75**	**n/a**	**0.05**	**NP**
Cobalt (mg/L)	DGWC-40	0.00009896	7	62	No	20	0	n/a	0.05	NP
Molybdenum (mg/L)	DGWA-53 (bg)	-0.001654	-62	-62	No	20	0	n/a	0.05	NP
Molybdenum (mg/L)	DGWA-70A (bg)	0	0	62	No	20	100	n/a	0.05	NP
Molybdenum (mg/L)	DGWA-71 (bg)	0	19	62	No	20	95	n/a	0.05	NP
Molybdenum (mg/L)	**DGWC-68A**	**-0.004143**	**-66**	**-62**	**Yes**	**20**	**0**	**n/a**	**0.05**	**NP**

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FIGURE A.

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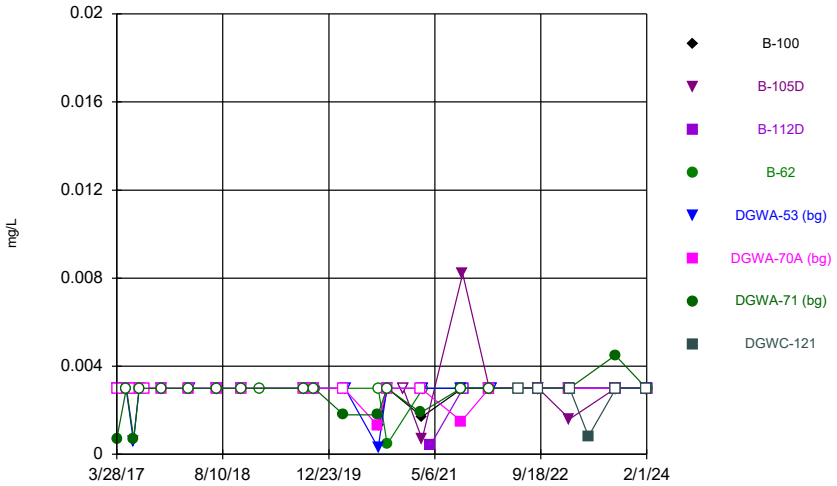
Time Series



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Plant McDonough Data: McDonough AP

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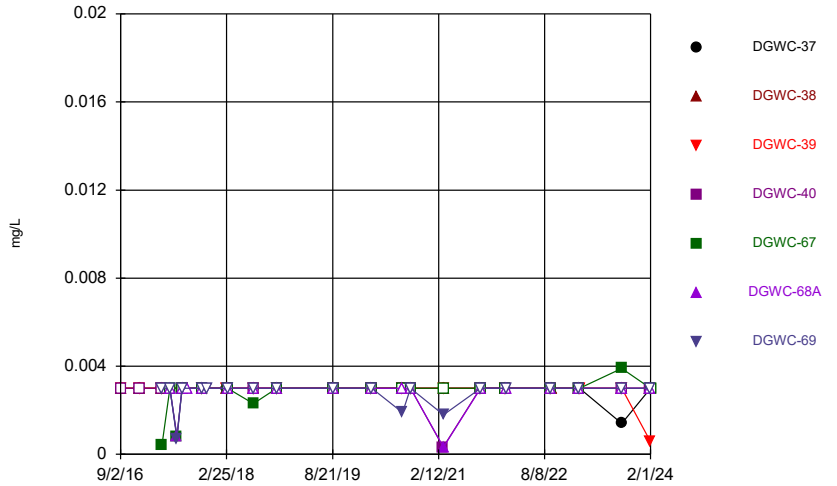
Time Series



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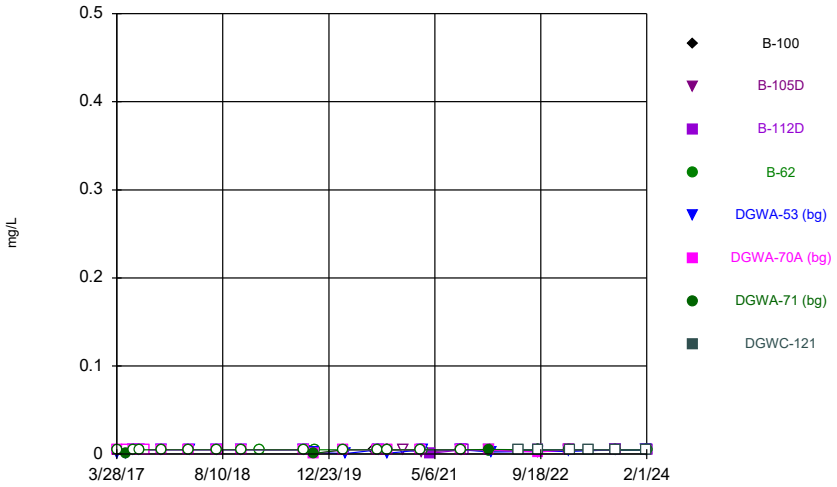

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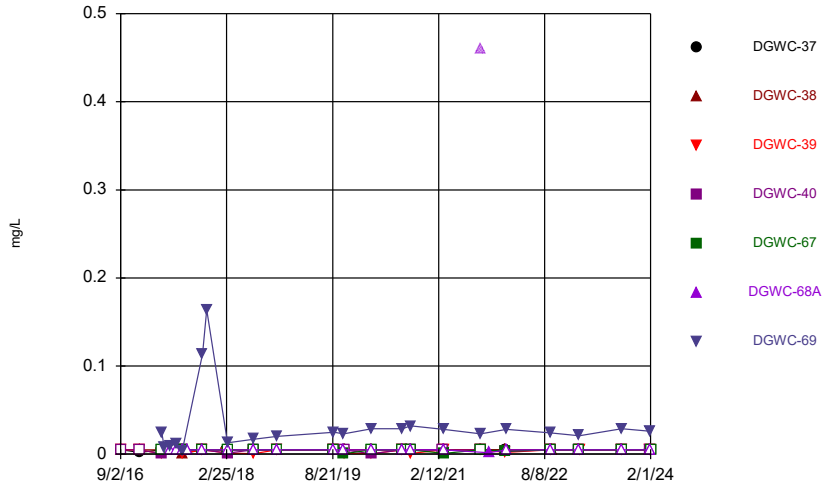

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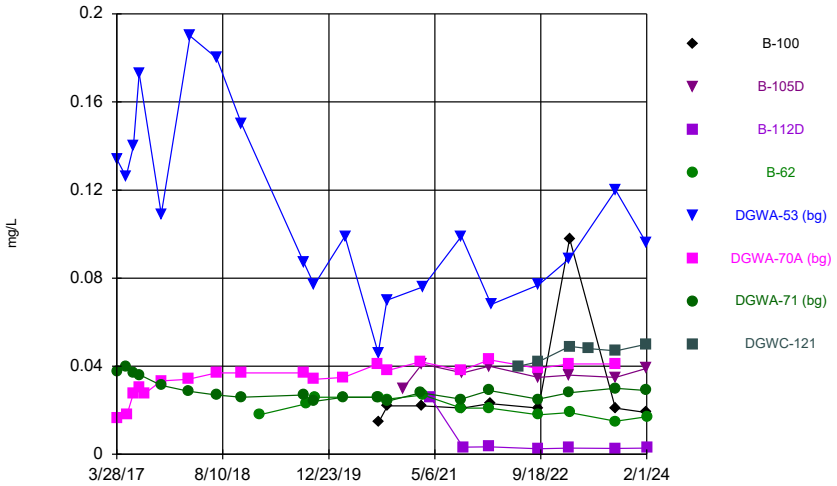

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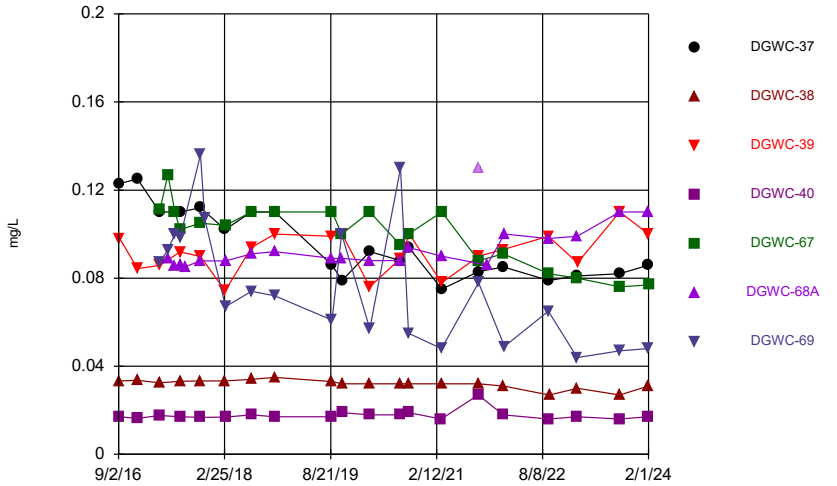
Time Series



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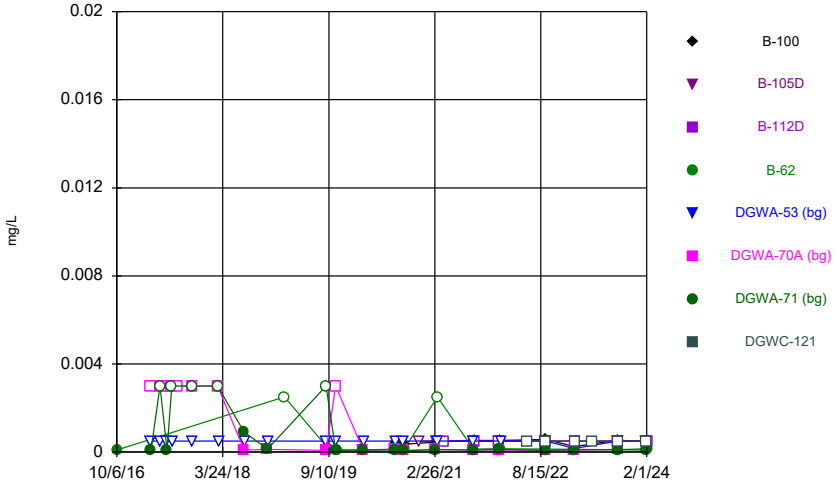

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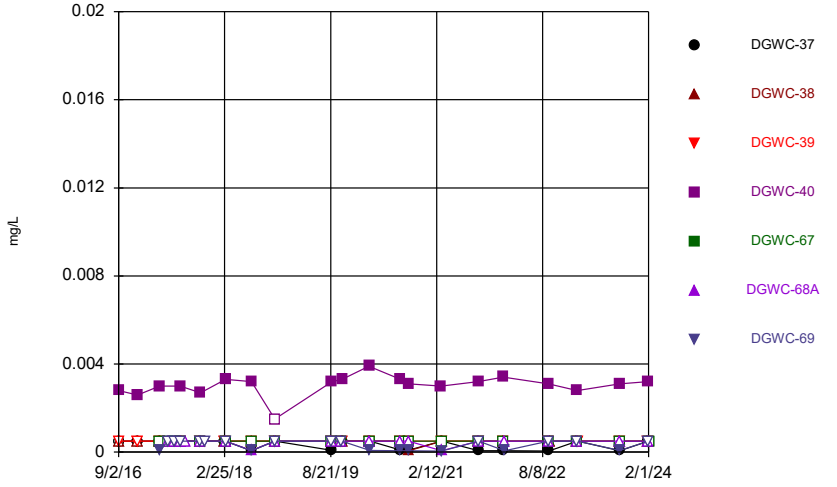

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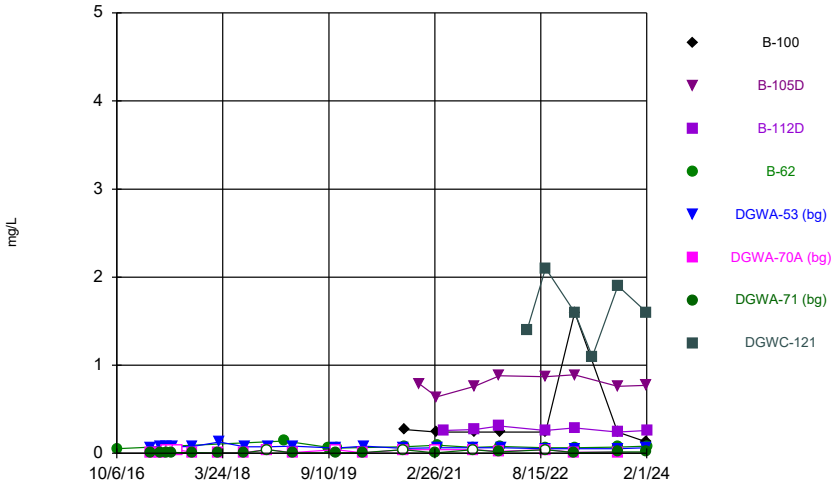

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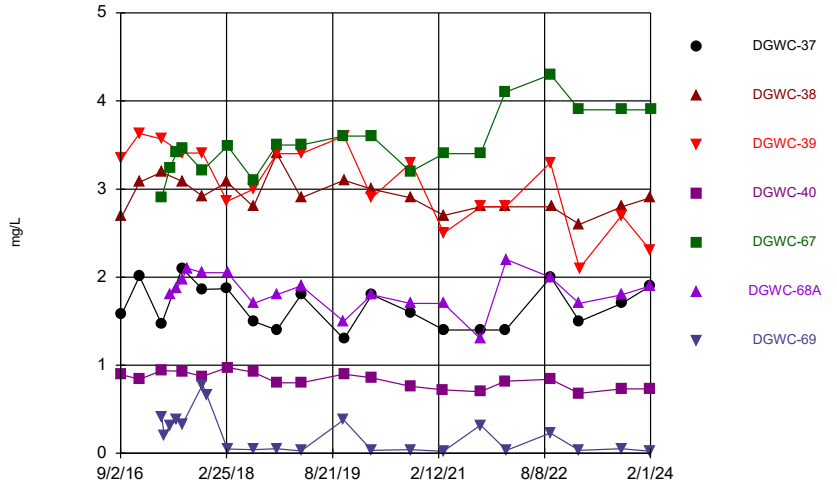
Time Series



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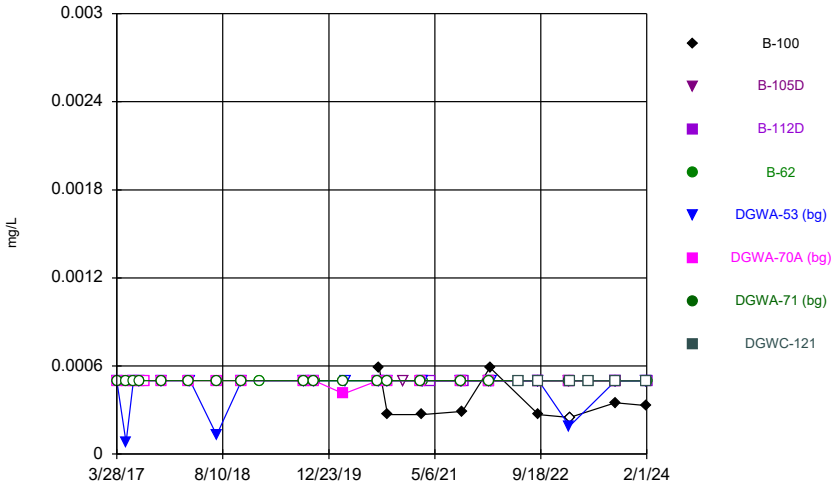

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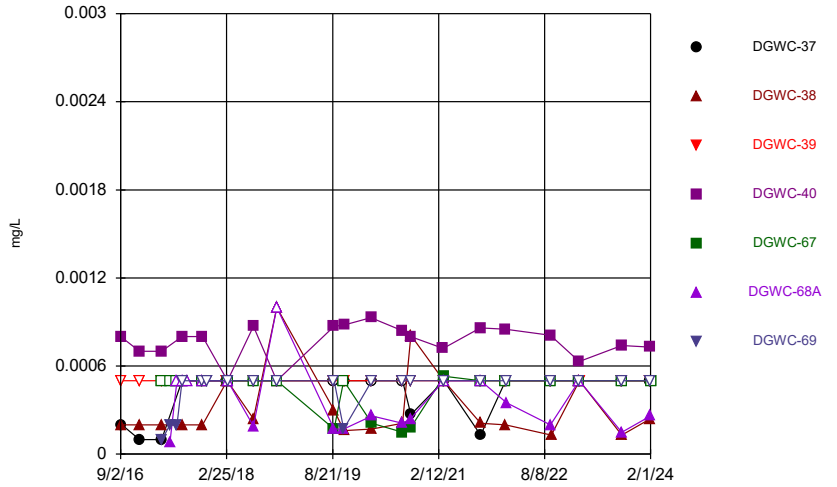
Time Series



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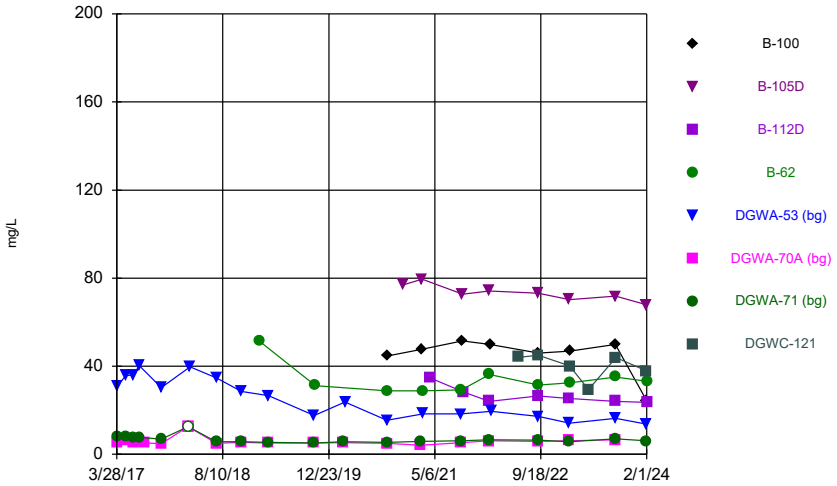

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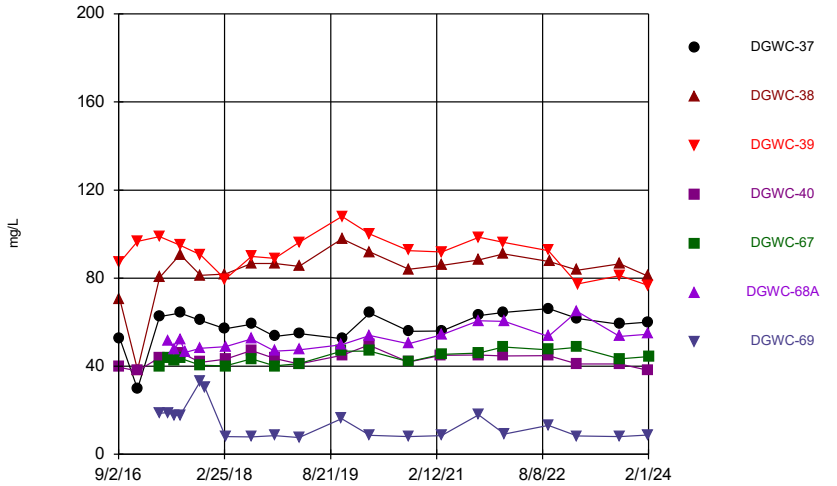

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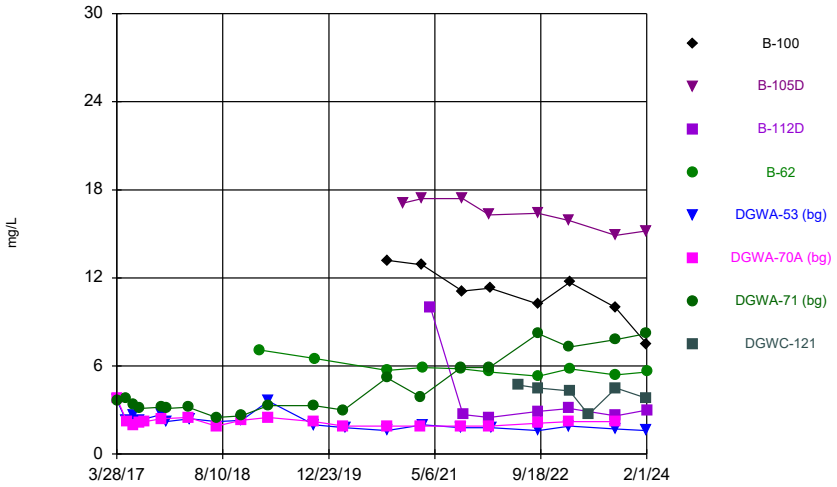

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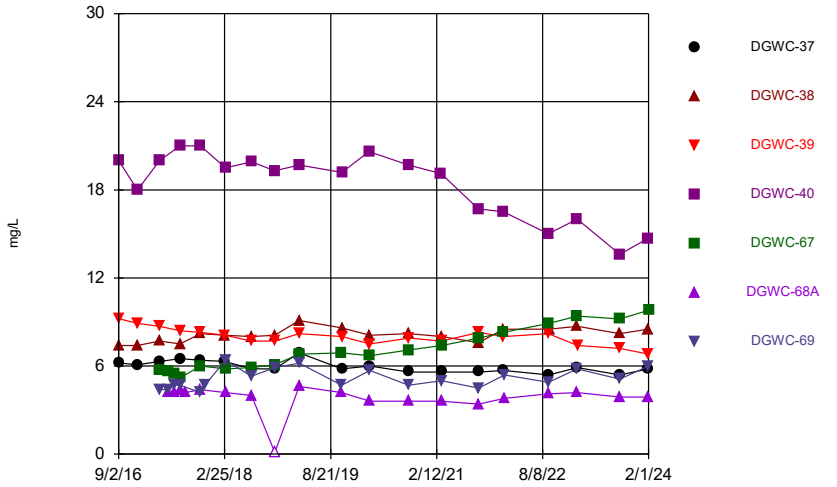

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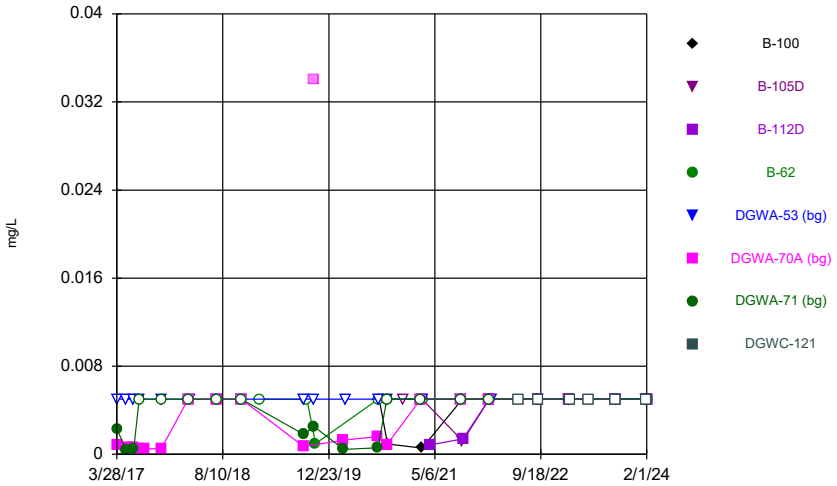

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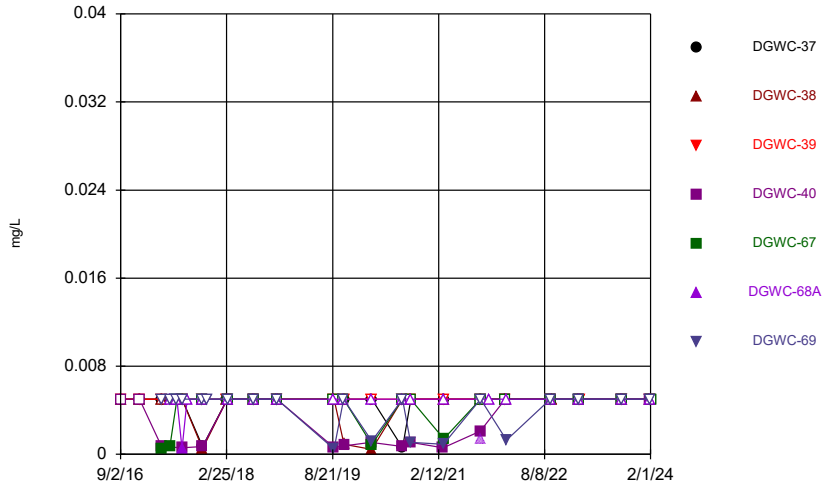

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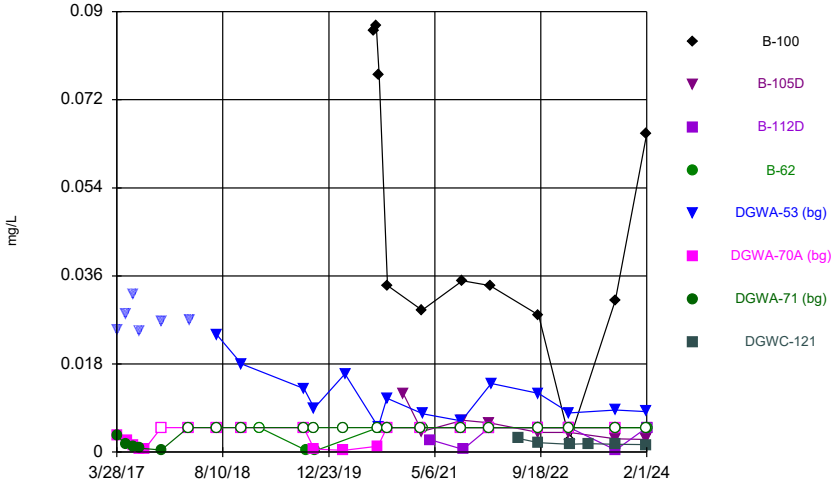

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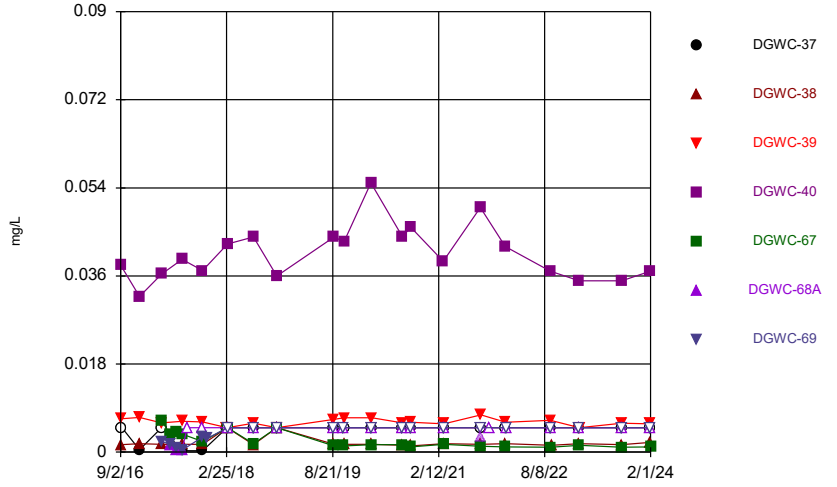

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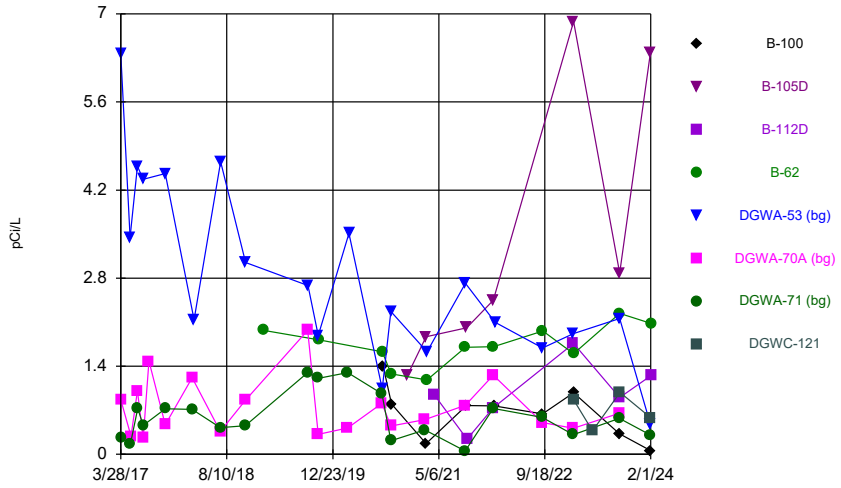

Constituent: Combined Radium 226 + 228 Analysis Run 4/8/2024 8:58 AM View: AP 1
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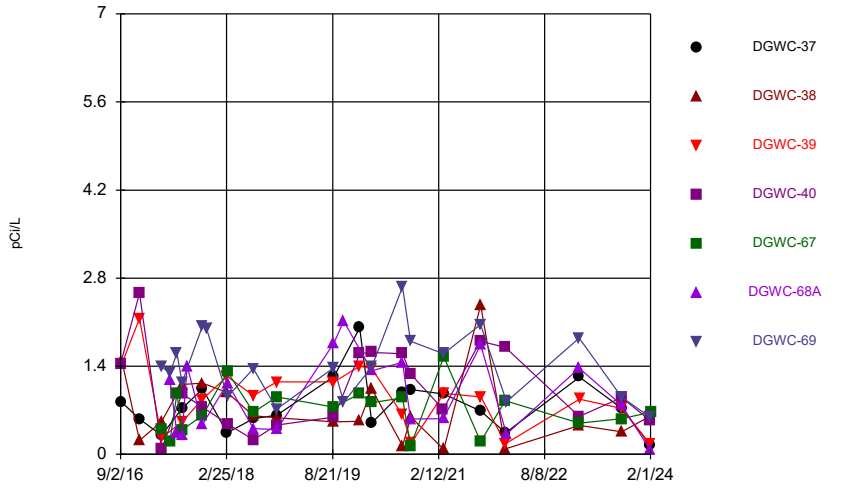
Time Series



Constituent: Combined Radium 226 + 228 Analysis Run 4/8/2024 8:58 AM View: AP 1
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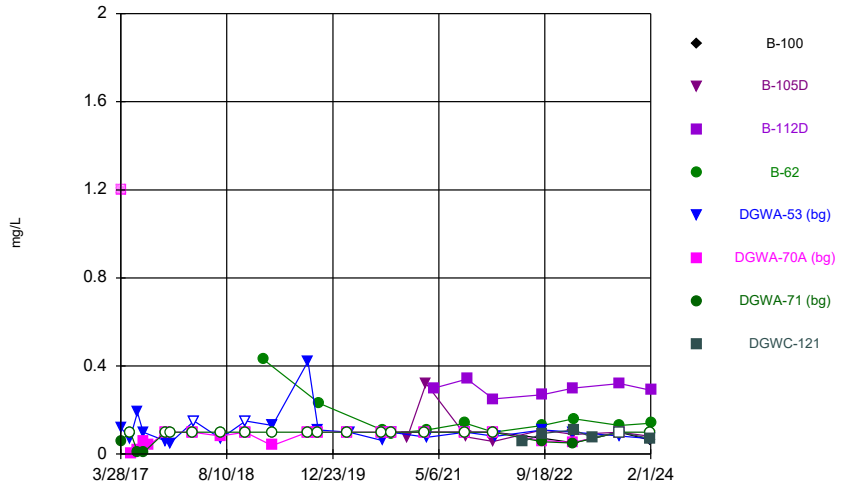

Constituent: Fluoride Analysis Run 4/8/2024 8:58 AM View: AP 1
Plant McDonough Data: McDonough AP

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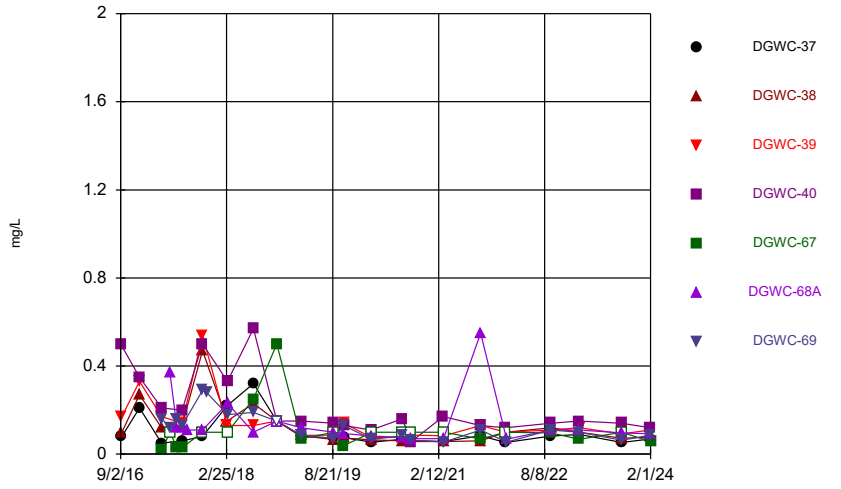
Hollow symbols indicate censored values.

Time Series



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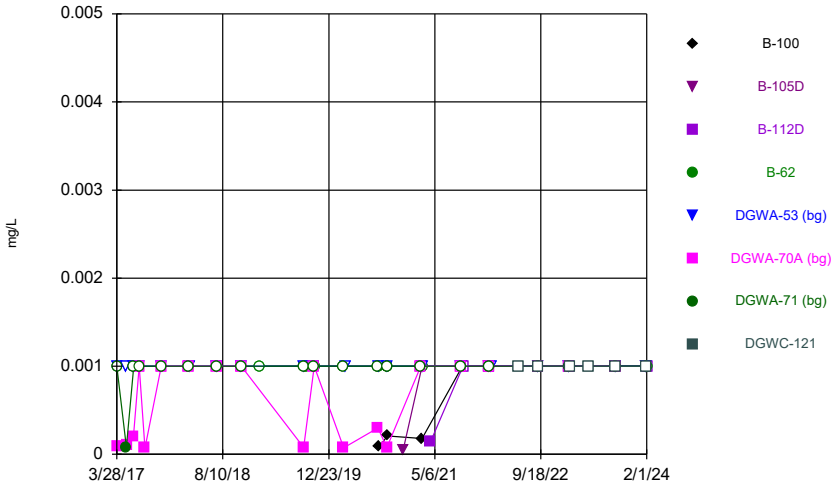

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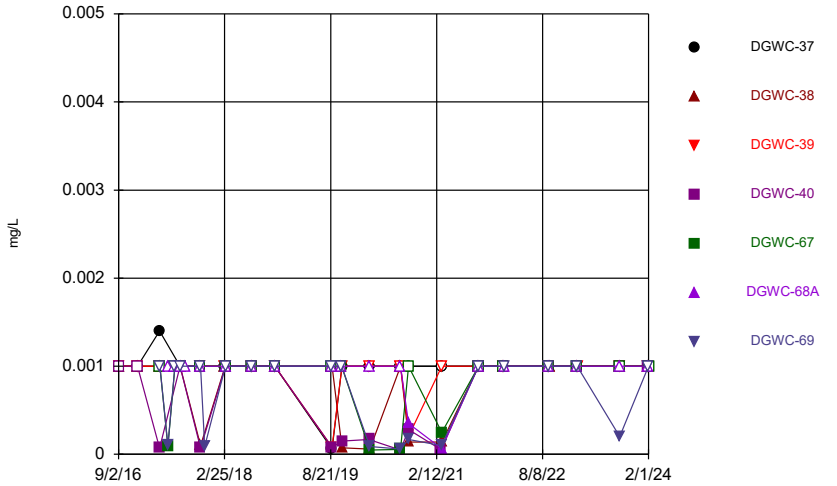

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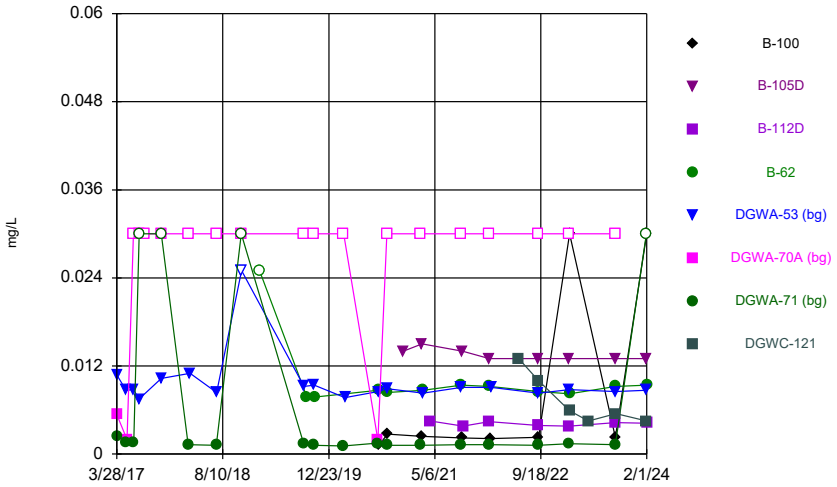

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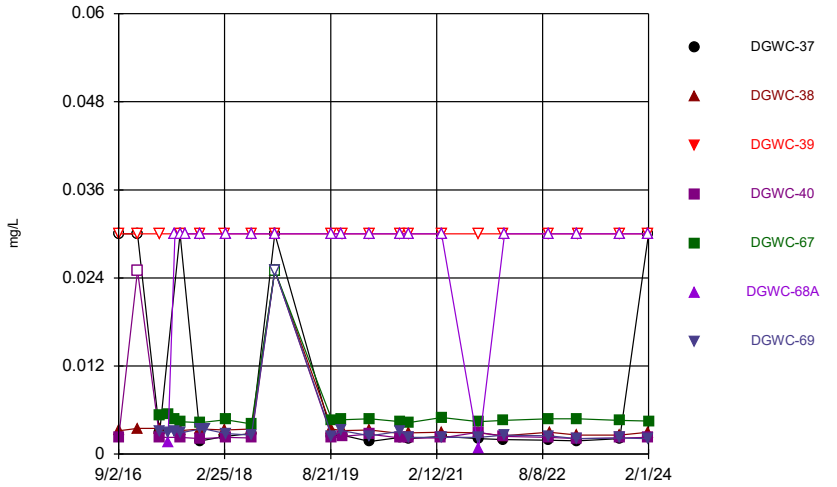

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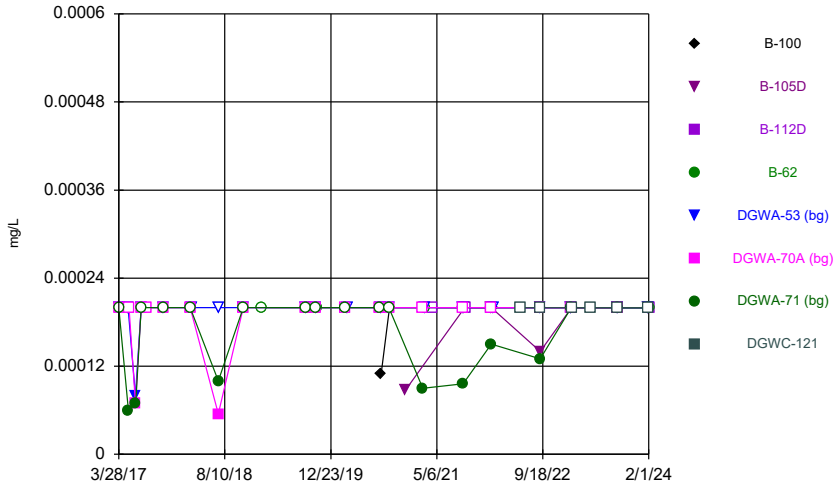

Constituent: Mercury Analysis Run 4/8/2024 8:58 AM View: AP 1
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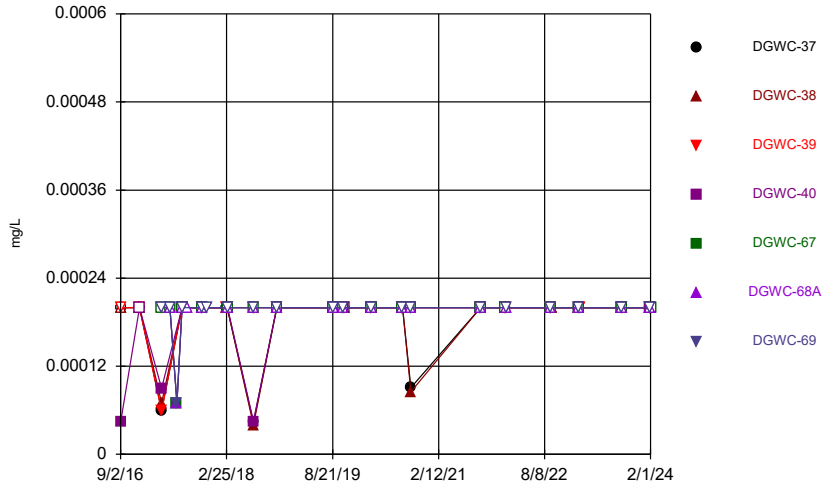
Time Series



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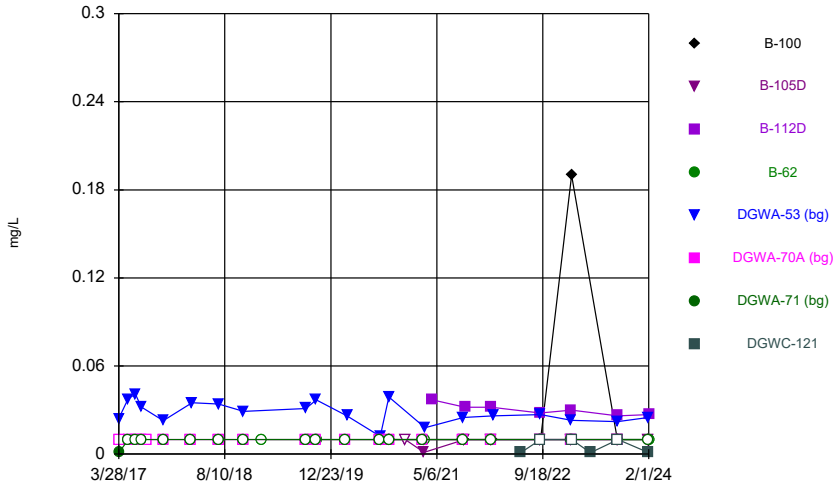

Constituent: Molybdenum Analysis Run 4/8/2024 8:58 AM View: AP 1
Plant McDonough Data: McDonough AP

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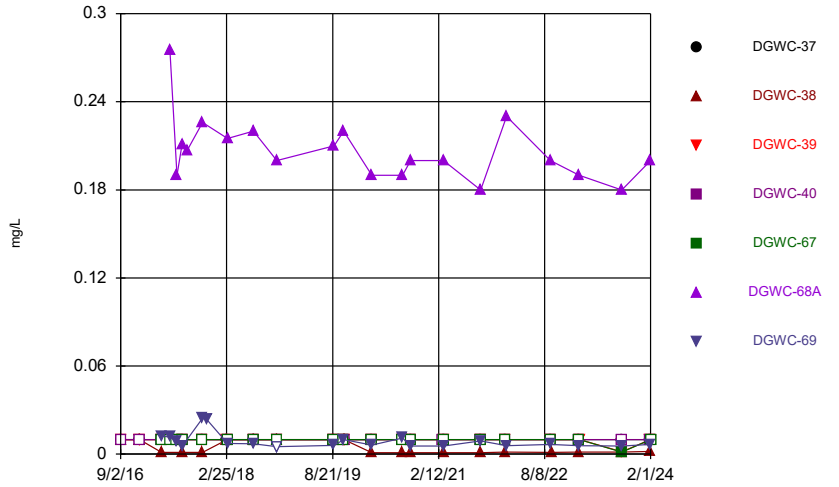
Hollow symbols indicate censored values.

Time Series



Constituent: Molybdenum Analysis Run 4/8/2024 8:58 AM View: AP 1
Plant McDonough Data: McDonough AP

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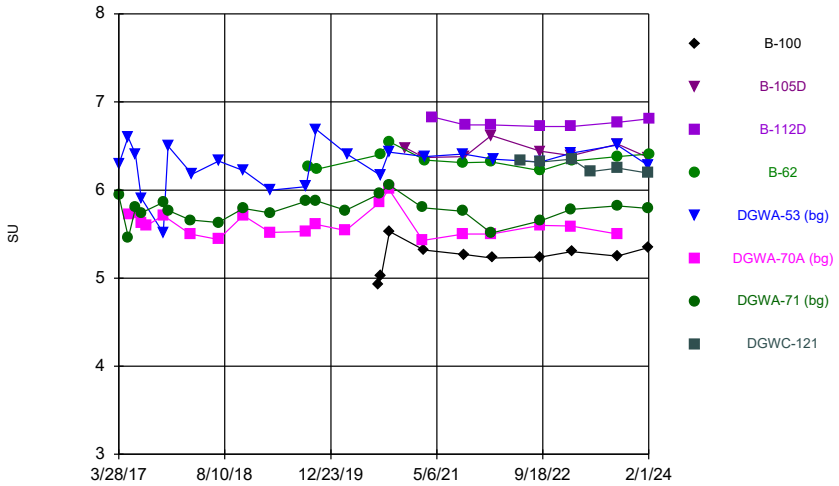
Time Series



Constituent: pH, Field Analysis Run 4/8/2024 8:58 AM View: AP 1
Plant McDonough Data: McDonough AP

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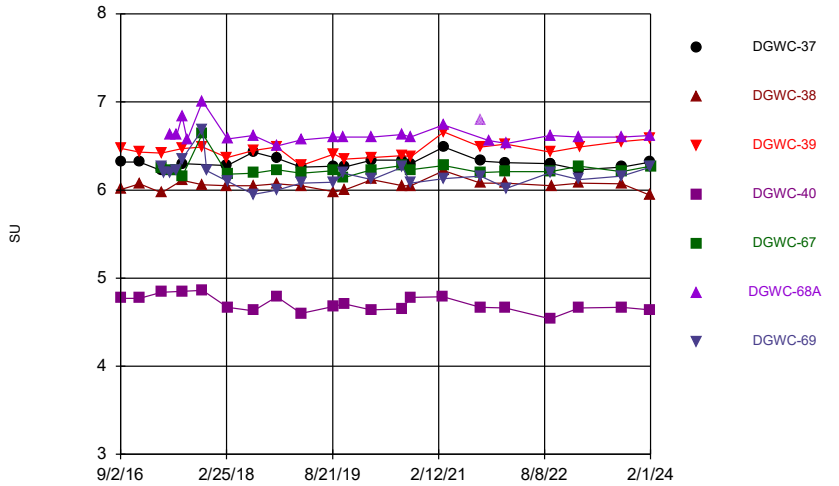
Time Series



Constituent: pH, Field Analysis Run 4/8/2024 8:58 AM View: AP 1
Plant McDonough Data: McDonough AP

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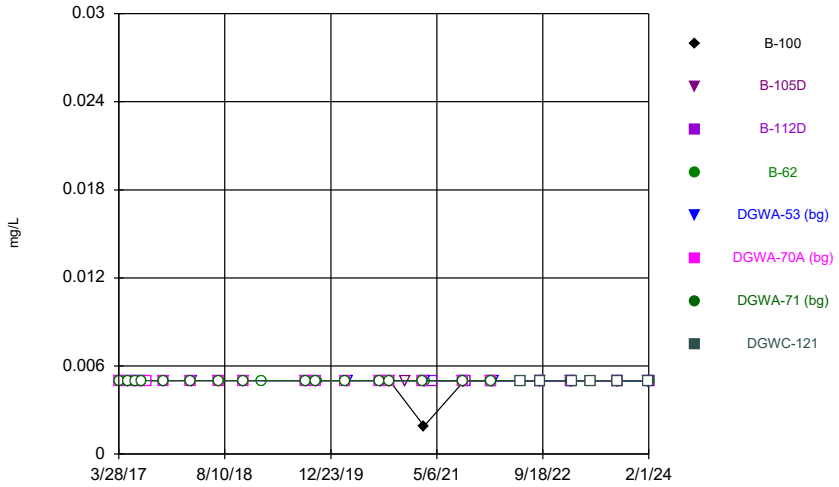
Hollow symbols indicate censored values.

Time Series



Constituent: Selenium Analysis Run 4/8/2024 8:58 AM View: AP 1
Plant McDonough Data: McDonough AP

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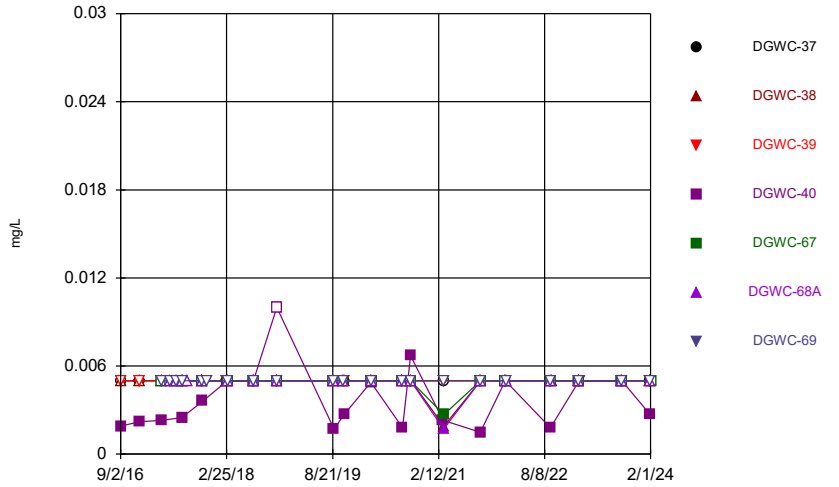
Hollow symbols indicate censored values.

Time Series



Constituent: Selenium Analysis Run 4/8/2024 8:58 AM View: AP 1
Plant McDonough Data: McDonough AP

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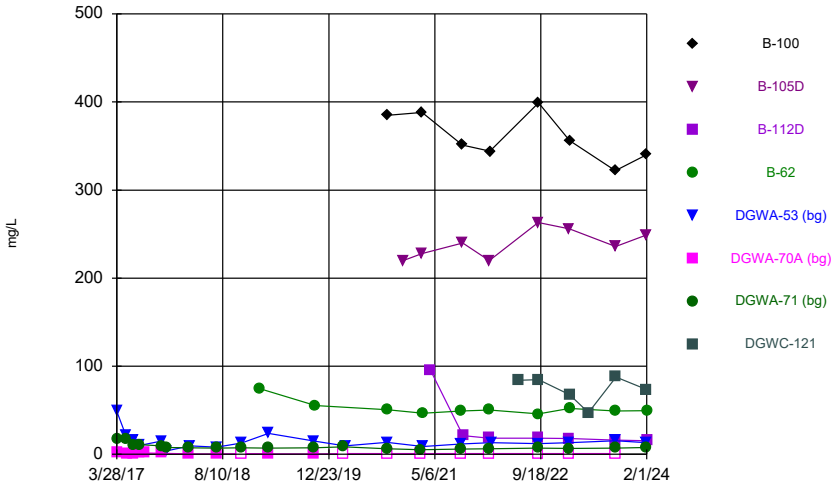
Hollow symbols indicate censored values.

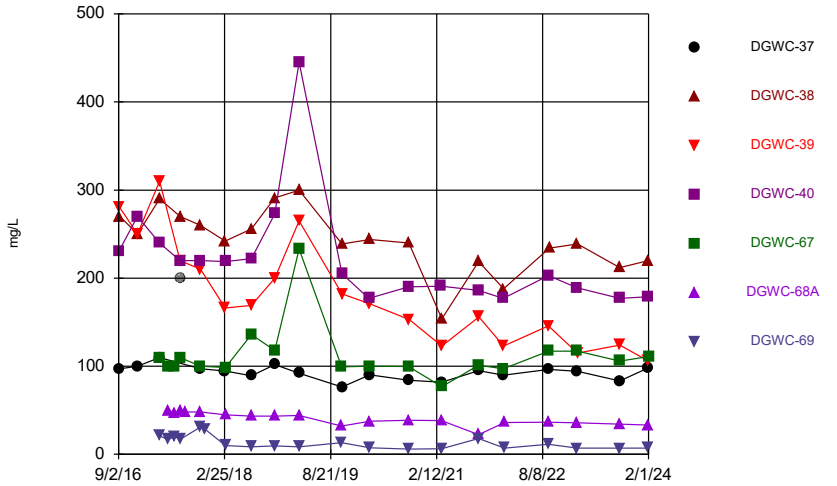
Time Series



Constituent: Sulfate Analysis Run 4/8/2024 8:58 AM View: AP 1
Plant McDonough Data: McDonough AP

Sanitas™ v.10.0.16b Software licensed to . UG

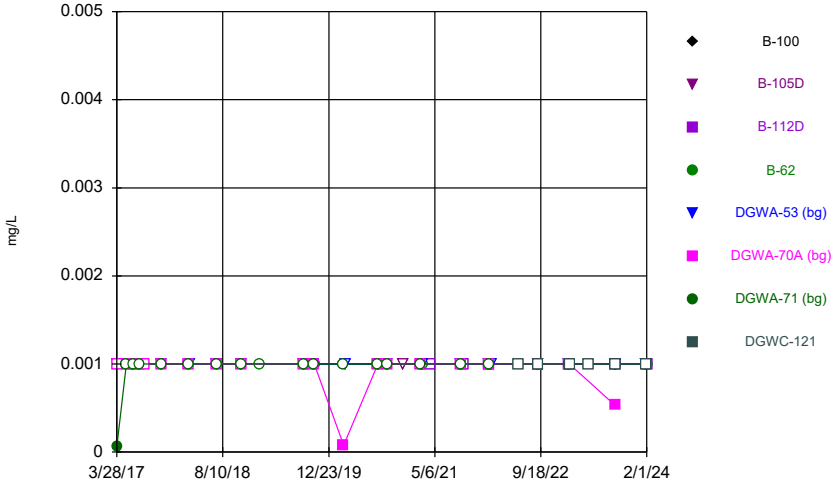
Time Series



Constituent: Sulfate Analysis Run 4/8/2024 8:58 AM View: AP 1
Plant McDonough Data: McDonough AP

Sanitas™ v.10.0.16b Software licensed to . UG
Hollow symbols indicate censored values.

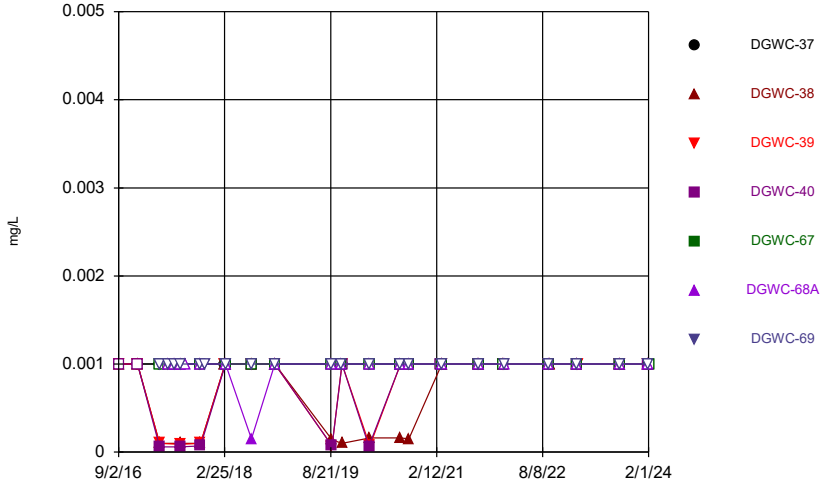
Time Series



Constituent: Thallium Analysis Run 4/8/2024 8:58 AM View: AP 1
Plant McDonough Data: McDonough AP

Sanitas™ v.10.0.16b Software licensed to . UG
Hollow symbols indicate censored values.

Time Series



Constituent: Thallium Analysis Run 4/8/2024 8:59 AM View: AP 1
Plant McDonough Data: McDonough AP

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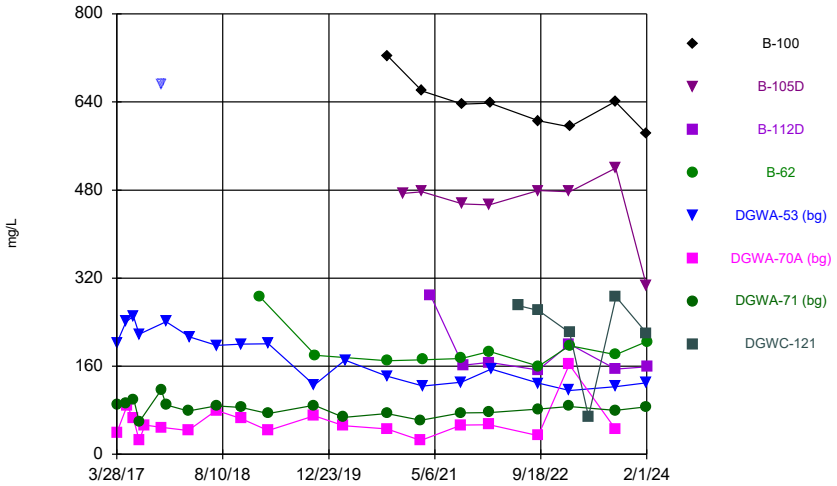
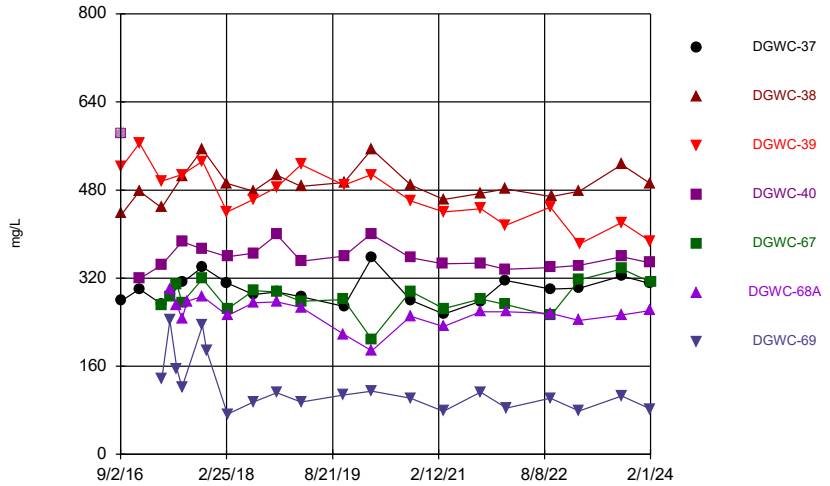
Time Series



Constituent: Total Dissolved Solids [TDS] Analysis Run 4/8/2024 8:59 AM View: AP 1
Plant McDonough Data: McDonough AP

Sanitas™ v.10.0.16b Software licensed to . UG

Time Series



Constituent: Total Dissolved Solids [TDS] Analysis Run 4/8/2024 8:59 AM View: AP 1
Plant McDonough Data: McDonough AP

Time Series

Constituent: Antimony (mg/L) Analysis Run 4/8/2024 9:00 AM View: AP 1

Plant McDonough 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			
7/10/2018						<0.003	<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 4/8/2024 9:00 AM View: AP 1

Plant McDonough Data: McDonough AP

	B-100	B-105D	B-112D	B-62	DGWA-53 (bg)	DGWA-70A (bg)	DGWA-71 (bg)	DGWC-121
5/2/2023								0.00082 (J)
9/6/2023	<0.003					<0.003	0.0045	
9/7/2023		<0.003	<0.003	<0.003	<0.003			
9/8/2023								<0.003
1/30/2024		<0.003			<0.003		<0.003	
1/31/2024	<0.003							<0.003
2/1/2024			<0.003	<0.003				

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Antimony (mg/L) Analysis Run 4/8/2024 9:00 AM View: AP 1

Plant McDonough 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				
9/6/2023	0.0014 (J)						
9/7/2023		<0.003	<0.003	<0.003	0.0039	<0.003	<0.003
1/30/2024		<0.003		<0.003			
1/31/2024	<0.003		0.00058 (J)			<0.003	<0.003
2/1/2024					<0.003		

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Arsenic (mg/L) Analysis Run 4/8/2024 9:00 AM View: AP 1

Plant McDonough 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			
7/10/2018						<0.005	<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)			

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 4/8/2024 9:00 AM View: AP 1

Plant McDonough 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	<0.005			<0.005				<0.005
5/2/2023								<0.005
9/6/2023	<0.005					<0.005	<0.005	
9/7/2023		<0.005	<0.005	<0.005	<0.005			
9/8/2023								<0.005
1/30/2024		<0.005			<0.005		<0.005	
1/31/2024	<0.005							<0.005
2/1/2024			<0.005	<0.005				

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Arsenic (mg/L) Analysis Run 4/8/2024 9:00 AM View: AP 1

Plant McDonough 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				
9/6/2023	<0.005						
9/7/2023		<0.005	<0.005	<0.005	<0.005	<0.005	0.029
1/30/2024		<0.005		<0.005			
1/31/2024	<0.005		<0.005			<0.005	0.026
2/1/2024					<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 4/8/2024 9:00 AM View: AP 1

Plant McDonough 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			
7/10/2018						0.037	0.027	
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 4/8/2024 9:00 AM View: AP 1

Plant McDonough Data: McDonough AP

	B-100	B-105D	B-112D	B-62	DGWA-53 (bg)	DGWA-70A (bg)	DGWA-71 (bg)	DGWC-121
5/2/2023								0.048
9/6/2023	0.021					0.041	0.03	
9/7/2023		0.035	0.0027 (J)	0.015	0.12			
9/8/2023								0.047
1/30/2024		0.039			0.096		0.029	
1/31/2024	0.019							0.05
2/1/2024			0.0028 (J)	0.017				

Time Series

Constituent: Barium (mg/L) Analysis Run 4/8/2024 9:00 AM View: AP 1

Plant McDonough 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				
9/6/2023	0.082						
9/7/2023		0.027	0.11	0.016	0.076	0.11	0.047
1/30/2024		0.031		0.017			
1/31/2024	0.086		0.1			0.11	0.048
2/1/2024					0.077		

Time Series

Constituent: Beryllium (mg/L) Analysis Run 4/8/2024 9:00 AM View: AP 1

Plant McDonough 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						9.5E-05 (J)	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 4/8/2024 9:00 AM View: AP 1

Plant McDonough 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
5/2/2023								<0.0005
9/6/2023	0.00054					0.00012 (J)	0.00011 (J)	
9/7/2023		<0.0005	<0.0005	0.00011 (J)	<0.0005			
9/8/2023								<0.0005
1/30/2024		<0.0005			<0.0005		9.8E-05 (J)	
1/31/2024	0.00047 (J)							<0.0005
2/1/2024			<0.0005	0.00015 (J)				

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Beryllium (mg/L) Analysis Run 4/8/2024 9:00 AM View: AP 1

Plant McDonough 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				
9/6/2023	5.8E-05 (J)						
9/7/2023		<0.0005	<0.0005	0.0031	<0.0005	<0.0005	7.8E-05 (J)
1/30/2024		<0.0005		0.0032			
1/31/2024	<0.0005		<0.0005			<0.0005	<0.0005
2/1/2024					<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 4/8/2024 9:00 AM View: AP 1

Plant McDonough 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)			
7/10/2018						0.0077 (J)	0.0059 (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
5/2/2023								1.1
9/6/2023	0.24					0.012 (J)	0.015 (J)	

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 4/8/2024 9:00 AM View: AP 1

Plant McDonough Data: McDonough AP

	B-100	B-105D	B-112D	B-62	DGWA-53 (bg)	DGWA-70A (bg)	DGWA-71 (bg)	DGWC-121
9/7/2023		0.76	0.24	0.071	0.052			
9/8/2023								1.9
1/30/2024		0.77			0.065		0.015 (J)	
1/31/2024	0.13							1.6
2/1/2024			0.26	0.083				

Time Series

Constituent: Boron (mg/L) Analysis Run 4/8/2024 9:00 AM View: AP 1

Plant McDonough 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				
9/6/2023	1.7						
9/7/2023		2.8	2.7	0.73	3.9	1.8	0.052
1/30/2024		2.9		0.73			
1/31/2024	1.9		2.3			1.9	0.025 (J)
2/1/2024					3.9		

Time Series

Constituent: Cadmium (mg/L) Analysis Run 4/8/2024 9:00 AM View: AP 1

Plant McDonough 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			
7/10/2018						<0.0005	<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 4/8/2024 9:00 AM View: AP 1

Plant McDonough Data: McDonough AP

	B-100	B-105D	B-112D	B-62	DGWA-53 (bg)	DGWA-70A (bg)	DGWA-71 (bg)	DGWC-121
5/2/2023								<0.0005
9/6/2023	0.00035 (J)					<0.0005	<0.0005	
9/7/2023		<0.0005	<0.0005	<0.0005	<0.0005			
9/8/2023								<0.0005
1/30/2024		<0.0005			<0.0005		<0.0005	
1/31/2024	0.00033 (J)							<0.0005
2/1/2024			<0.0005	<0.0005				

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Cadmium (mg/L) Analysis Run 4/8/2024 9:00 AM View: AP 1

Plant McDonough 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				
9/6/2023	<0.0005						
9/7/2023		0.00013 (J)	<0.0005	0.00074	<0.0005	0.00015 (J)	<0.0005
1/30/2024		0.00024 (J)		0.00073			
1/31/2024	<0.0005		<0.0005			0.00026 (J)	<0.0005
2/1/2024					<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 4/8/2024 9:00 AM View: AP 1

Plant McDonough 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			
7/10/2018						5	5.7	
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
5/2/2023								29.4
9/6/2023	49.9					6.6	7	
9/7/2023		71.8	24	35.1	16.3			
9/8/2023								43.9

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Calcium (mg/L) Analysis Run 4/8/2024 9:00 AM View: AP 1

Plant McDonough Data: McDonough AP

	B-100	B-105D	B-112D	B-62	DGWA-53 (bg)	DGWA-70A (bg)	DGWA-71 (bg)	DGWC-121
1/30/2024		67.9			13.7		6.1	
1/31/2024	24.3							37.8
2/1/2024			23.6	33.2				

Time Series

Constituent: Calcium (mg/L) Analysis Run 4/8/2024 9:00 AM View: AP 1

Plant McDonough 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				
9/6/2023	59.1						
9/7/2023		86.5	81.2	41	43.3	53.6	8.1
1/30/2024		80.8		38.2			
1/31/2024	60.1		76.6			54.6	8.8
2/1/2024					44.4		

Time Series

Constituent: Chloride (mg/L) Analysis Run 4/8/2024 9:00 AM View: AP 1

Plant McDonough 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			
7/10/2018						1.9	2.5	
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
5/2/2023								2.7
9/6/2023	10					2.2	7.8	
9/7/2023		14.9	2.6	5.4	1.7			

Time Series

Constituent: Chloride (mg/L) Analysis Run 4/8/2024 9:00 AM View: AP 1

Plant McDonough Data: McDonough AP

	B-100	B-105D	B-112D	B-62	DGWA-53 (bg)	DGWA-70A (bg)	DGWA-71 (bg)	DGWC-121
9/8/2023								4.5
1/30/2024		15.2			1.6		8.2	
1/31/2024	7.5							3.8
2/1/2024			3	5.6				

Time Series

Constituent: Chloride (mg/L) Analysis Run 4/8/2024 9:00 AM View: AP 1

Plant McDonough 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				
9/6/2023	5.4						
9/7/2023		8.2	7.2	13.6	9.2	3.9	5.1
1/30/2024		8.5		14.7			
1/31/2024	5.8		6.8			3.9	6
2/1/2024					9.8		

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Chromium (mg/L) Analysis Run 4/8/2024 9:00 AM View: AP 1

Plant McDonough 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			
7/10/2018						<0.005	<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 4/8/2024 9:00 AM View: AP 1

Plant McDonough Data: McDonough AP

	B-100	B-105D	B-112D	B-62	DGWA-53 (bg)	DGWA-70A (bg)	DGWA-71 (bg)	DGWC-121
5/2/2023								<0.005
9/6/2023	<0.005					<0.005	<0.005	
9/7/2023		<0.005	<0.005	<0.005	<0.005			
9/8/2023								<0.005
1/30/2024		<0.005			<0.005		<0.005	
1/31/2024	<0.005							<0.005
2/1/2024			<0.005	<0.005				

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Chromium (mg/L) Analysis Run 4/8/2024 9:00 AM View: AP 1

Plant McDonough 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				
9/6/2023	<0.005						
9/7/2023		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
1/30/2024		<0.005		<0.005			
1/31/2024	<0.005		<0.005			<0.005	<0.005
2/1/2024					<0.005		

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Cobalt (mg/L) Analysis Run 4/8/2024 9:00 AM View: AP 1

Plant McDonough 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			
7/10/2018						<0.005	<0.005	
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				

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Cobalt (mg/L) Analysis Run 4/8/2024 9:00 AM View: AP 1

Plant McDonough Data: McDonough AP

	B-100	B-105D	B-112D	B-62	DGWA-53 (bg)	DGWA-70A (bg)	DGWA-71 (bg)	DGWC-121
1/31/2023						<0.005	<0.005	
2/1/2023		0.004 (J)	<0.005		0.008			
2/2/2023	<0.005			<0.005				0.0016 (J)
5/2/2023								0.0017 (J)
9/6/2023	0.031					<0.005	<0.005	
9/7/2023		0.0027 (J)	0.0004 (J)	<0.005	0.0086			
9/8/2023								0.0016 (J)
1/30/2024		0.0026 (J)			0.0083		<0.005	
1/31/2024	0.065							0.0015 (J)
2/1/2024			<0.005	<0.005				

Time Series

Constituent: Cobalt (mg/L) Analysis Run 4/8/2024 9:00 AM View: AP 1

Plant McDonough 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				
9/6/2023	<0.005						
9/7/2023		0.0015 (J)	0.0059	0.035	0.001 (J)	<0.005	<0.005
1/30/2024		0.002 (J)		0.037			
1/31/2024	<0.005		0.0058			<0.005	<0.005
2/1/2024					0.0011 (J)		

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 4/8/2024 9:00 AM View: AP 1

Plant McDonough 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)
5/2/2023								0.374 (U)

Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 4/8/2024 9:00 AM View: AP 1

Plant McDonough Data: McDonough AP

	B-100	B-105D	B-112D	B-62	DGWA-53 (bg)	DGWA-70A (bg)	DGWA-71 (bg)	DGWC-121
9/6/2023	0.326 (U)					0.651 (U)	0.572 (U)	
9/7/2023		2.88	0.902	2.24	2.16			
9/8/2023								0.986 (U)
1/30/2024		6.38			0.478 (U)		0.305 (U)	
1/31/2024	0.0563 (U)							0.58 (U)
2/1/2024			1.25	2.08				

Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 4/8/2024 9:00 AM View: AP 1

Plant McDonough 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)				
9/6/2023	0.732 (U)						
9/7/2023		0.358 (U)	0.728 (U)	0.902 (U)	0.565 (U)	0.782 (U)	0.91
1/30/2024		0.606 (U)		0.534 (U)			
1/31/2024	0.14 (U)		0.156 (U)			0.0595 (U)	0.588 (U)
2/1/2024					0.667 (U)		

Time Series

Constituent: Fluoride (mg/L) Analysis Run 4/8/2024 9:00 AM View: AP 1

Plant McDonough 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			
7/10/2018						0.082 (J)	<0.1	
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)	

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Fluoride (mg/L) Analysis Run 4/8/2024 9:00 AM View: AP 1

Plant McDonough 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		0.089 (J)	0.3		0.1			
2/2/2023	0.052 (J)			0.16				0.11
5/2/2023								0.076 (J)
9/6/2023	<0.1					<0.1	<0.1	
9/7/2023		0.1	0.32	0.13	0.082 (J)			
9/8/2023								<0.1
1/30/2024		0.081 (J)			0.07 (J)		<0.1	
1/31/2024	0.063 (J)							0.07 (J)
2/1/2024			0.29	0.14				

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Fluoride (mg/L) Analysis Run 4/8/2024 9:00 AM View: AP 1

Plant McDonough 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				
9/6/2023	0.053 (J)						
9/7/2023		0.072 (J)	0.092 (J)	0.14	<0.1	0.096 (J)	0.063 (J)
1/30/2024		0.078 (J)		0.12			
1/31/2024	0.069 (J)		0.11			0.092 (J)	0.086 (J)
2/1/2024					0.057 (J)		

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 4/8/2024 9:00 AM View: AP 1

Plant McDonough 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			
7/10/2018						<0.001	<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 4/8/2024 9:00 AM View: AP 1

Plant McDonough Data: McDonough AP

	B-100	B-105D	B-112D	B-62	DGWA-53 (bg)	DGWA-70A (bg)	DGWA-71 (bg)	DGWC-121
5/2/2023								<0.001
9/6/2023	<0.001					<0.001	<0.001	
9/7/2023		<0.001	<0.001	<0.001	<0.001			
9/8/2023								<0.001
1/30/2024		<0.001			<0.001		<0.001	
1/31/2024	<0.001							<0.001
2/1/2024			<0.001	<0.001				

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Lead (mg/L) Analysis Run 4/8/2024 9:00 AM View: AP 1

Plant McDonough 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				
9/6/2023	<0.001						
9/7/2023		<0.001	<0.001	<0.001	<0.001	<0.001	0.0002 (J)
1/30/2024		<0.001		<0.001			
1/31/2024	<0.001		<0.001			<0.001	<0.001
2/1/2024					<0.001		

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Lithium (mg/L) Analysis Run 4/8/2024 9:00 AM View: AP 1

Plant McDonough 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	<0.03	
7/12/2017					0.0075 (J)			
8/8/2017						<0.03		
10/24/2017					0.0103 (J)	<0.03	<0.03	
2/27/2018						<0.03	0.0013 (J)	
3/8/2018					0.011 (J)			
7/10/2018						<0.03	0.0012 (J)	
7/12/2018					0.0084 (J)			
11/6/2018						<0.03	<0.03	
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 4/8/2024 9:00 AM View: AP 1

Plant McDonough Data: McDonough AP

	B-100	B-105D	B-112D	B-62	DGWA-53 (bg)	DGWA-70A (bg)	DGWA-71 (bg)	DGWC-121
5/2/2023								0.0045 (J)
9/6/2023	0.0023 (J)					<0.03	0.0013 (J)	
9/7/2023		0.013 (J)	0.0043 (J)	0.0092 (J)	0.0085 (J)			
9/8/2023								0.0055 (J)
1/30/2024		0.013 (J)			0.0087 (J)		<0.03	
1/31/2024	<0.03							0.0045 (J)
2/1/2024			0.0042 (J)	0.0094 (J)				

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Lithium (mg/L) Analysis Run 4/8/2024 9:00 AM View: AP 1

Plant McDonough 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	<0.03	0.0032 (J)	<0.03				
12/7/2016	<0.03	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	<0.03	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	<0.03	<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				
9/6/2023	0.0021 (J)						
9/7/2023		0.0026 (J)	<0.03	0.0022 (J)	0.0046 (J)	<0.03	0.0022 (J)
1/30/2024		0.003 (J)		0.0023 (J)			
1/31/2024	<0.03		<0.03			<0.03	0.0021 (J)
2/1/2024					0.0045 (J)		

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Mercury (mg/L) Analysis Run 4/8/2024 9:00 AM View: AP 1

Plant McDonough 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			
7/10/2018						5.5E-05 (J)	0.0001 (J)	
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
5/2/2023								<0.0002

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Mercury (mg/L) Analysis Run 4/8/2024 9:00 AM View: AP 1

Plant McDonough Data: McDonough AP

	B-100	B-105D	B-112D	B-62	DGWA-53 (bg)	DGWA-70A (bg)	DGWA-71 (bg)	DGWC-121
9/6/2023	<0.0002					<0.0002	<0.0002	
9/7/2023		<0.0002	<0.0002	<0.0002	<0.0002			
9/8/2023								<0.0002
1/30/2024		<0.0002			<0.0002		<0.0002	
1/31/2024	<0.0002							<0.0002
2/1/2024			<0.0002	<0.0002				

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Mercury (mg/L) Analysis Run 4/8/2024 9:00 AM View: AP 1

Plant McDonough 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				
9/6/2023	<0.0002						
9/7/2023		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
1/30/2024		<0.0002		<0.0002			
1/31/2024	<0.0002		<0.0002			<0.0002	<0.0002
2/1/2024					<0.0002		

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Molybdenum (mg/L) Analysis Run 4/8/2024 9:00 AM View: AP 1

Plant McDonough 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			
7/10/2018						<0.01	<0.01	
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 4/8/2024 9:00 AM View: AP 1

Plant McDonough Data: McDonough AP

	B-100	B-105D	B-112D	B-62	DGWA-53 (bg)	DGWA-70A (bg)	DGWA-71 (bg)	DGWC-121
5/2/2023								0.00089 (J)
9/6/2023	<0.01					<0.01	<0.01	
9/7/2023		<0.01	0.026	<0.01	0.022			
9/8/2023								<0.01
1/30/2024		<0.01			0.025		<0.01	
1/31/2024	<0.01							0.00092 (J)
2/1/2024			0.027	<0.01				

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Molybdenum (mg/L) Analysis Run 4/8/2024 9:00 AM View: AP 1

Plant McDonough 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				
9/6/2023	<0.01						
9/7/2023		0.0013 (J)	0.0016 (J)	<0.01	0.0013 (J)	0.18	0.0056 (J)
1/30/2024		0.0018 (J)		<0.01			
1/31/2024	<0.01		<0.01			0.2	0.0066 (J)
2/1/2024					<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 4/8/2024 9:00 AM View: AP 1

Plant McDonough 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 4/8/2024 9:00 AM View: AP 1

Plant McDonough 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
5/2/2023								6.21
9/6/2023	5.25				6.51	5.5	5.82	
9/7/2023		6.52	6.77	6.38				
9/8/2023								6.25
1/30/2024		6.37			6.28		5.79	
1/31/2024	5.35							6.19
2/1/2024			6.81	6.41				

Time Series

Constituent: pH, Field (SU) Analysis Run 4/8/2024 9:00 AM View: AP 1

Plant McDonough 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				
9/6/2023	6.26						
9/7/2023		6.07	6.55	4.67	6.21	6.6	6.16
1/30/2024		5.94		4.64			
1/31/2024	6.32		6.58			6.62	6.26

Time Series

Constituent: pH, Field (SU) Analysis Run 4/8/2024 9:00 AM View: AP 1

Plant McDonough Data: McDonough AP

	DGWC-37	DGWC-38	DGWC-39	DGWC-40	DGWC-67	DGWC-68A	DGWC-69
2/1/2024					6.27		

Time Series

Constituent: Selenium (mg/L) Analysis Run 4/8/2024 9:00 AM View: AP 1

Plant McDonough 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			
7/10/2018						<0.005	<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 4/8/2024 9:00 AM View: AP 1

Plant McDonough Data: McDonough AP

	B-100	B-105D	B-112D	B-62	DGWA-53 (bg)	DGWA-70A (bg)	DGWA-71 (bg)	DGWC-121
5/2/2023								<0.005
9/6/2023	<0.005					<0.005	<0.005	
9/7/2023		<0.005	<0.005	<0.005	<0.005			
9/8/2023								<0.005
1/30/2024		<0.005			<0.005		<0.005	
1/31/2024	<0.005							<0.005
2/1/2024			<0.005	<0.005				

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Selenium (mg/L) Analysis Run 4/8/2024 9:00 AM View: AP 1

Plant McDonough 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				
9/6/2023	<0.005						
9/7/2023		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
1/30/2024		<0.005		0.0027 (J)			
1/31/2024	<0.005		<0.005			<0.005	<0.005
2/1/2024					<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 4/8/2024 9:00 AM View: AP 1

Plant McDonough 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			
7/10/2018						0.25 (J)	7.2	
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
5/2/2023								47.3
9/6/2023	322					<1	7.2	
9/7/2023		236	16.3	49.3	15.4			

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 4/8/2024 9:00 AM View: AP 1

Plant McDonough Data: McDonough AP

	B-100	B-105D	B-112D	B-62	DGWA-53 (bg)	DGWA-70A (bg)	DGWA-71 (bg)	DGWC-121
9/8/2023								87.8
1/30/2024		249			13.4		7.9	
1/31/2024	340							73.7
2/1/2024			15.5	49.4				

Time Series

Constituent: Sulfate (mg/L) Analysis Run 4/8/2024 9:00 AM View: AP 1

Plant McDonough 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				
9/6/2023	83.4						
9/7/2023		212	124	177	106	34.2	6.9
1/30/2024		220		179			
1/31/2024	98.4		106			33.2	7.2
2/1/2024					111		

Time Series

Constituent: Thallium (mg/L) Analysis Run 4/8/2024 9:00 AM View: AP 1

Plant McDonough 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			
7/10/2018						<0.001	<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 4/8/2024 9:00 AM View: AP 1

Plant McDonough Data: McDonough AP

	B-100	B-105D	B-112D	B-62	DGWA-53 (bg)	DGWA-70A (bg)	DGWA-71 (bg)	DGWC-121
5/2/2023								<0.001
9/6/2023	<0.001					0.00053 (J)	<0.001	
9/7/2023		<0.001	<0.001	<0.001	<0.001			
9/8/2023								<0.001
1/30/2024		<0.001			<0.001		<0.001	
1/31/2024	<0.001							<0.001
2/1/2024			<0.001	<0.001				

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Thallium (mg/L) Analysis Run 4/8/2024 9:00 AM View: AP 1

Plant McDonough 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				
9/6/2023	<0.001						
9/7/2023		<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
1/30/2024		<0.001		<0.001			
1/31/2024	<0.001		<0.001			<0.001	<0.001
2/1/2024					<0.001		

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Total Dissolved Solids [TDS] (mg/L) Analysis Run 4/8/2024 9:00 AM View: AP 1

Plant McDonough 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			
7/10/2018						80	88	
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
5/2/2023								69
9/6/2023	641					46	80	
9/7/2023		520	155	181	123			

Time Series

Constituent: Total Dissolved Solids [TDS] (mg/L) Analysis Run 4/8/2024 9:00 AM View: AP 1

Plant McDonough Data: McDonough AP

	B-100	B-105D	B-112D	B-62	DGWA-53 (bg)	DGWA-70A (bg)	DGWA-71 (bg)	DGWC-121
9/8/2023								286
1/30/2024		307			130		86	
1/31/2024	582							220
2/1/2024			159	205				

Time Series

Constituent: Total Dissolved Solids [TDS] (mg/L) Analysis Run 4/8/2024 9:00 AM View: AP 1

Plant McDonough 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				
9/6/2023	324						
9/7/2023		526	421	359	337	253	106
1/30/2024		492		348			
1/31/2024	310		387			261	82
2/1/2024					313		

FIGURE B.

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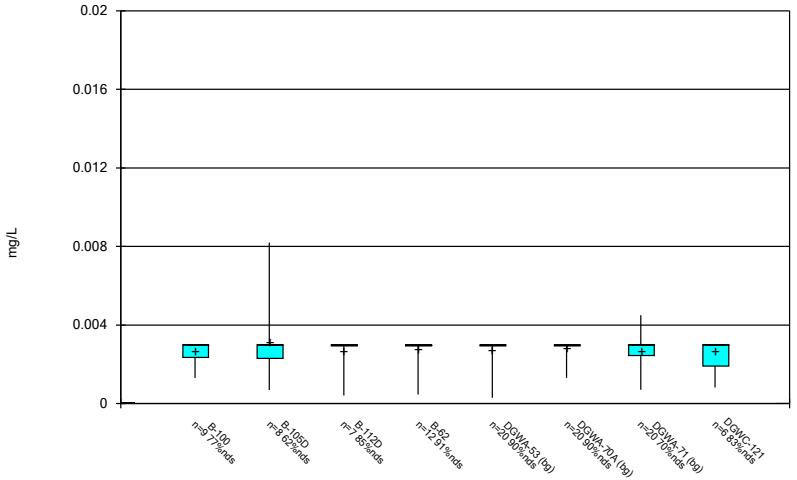
Box & Whiskers Plot



Constituent: Antimony Analysis Run 4/8/2024 9:03 AM View: AP 1
Plant McDonough Data: McDonough AP

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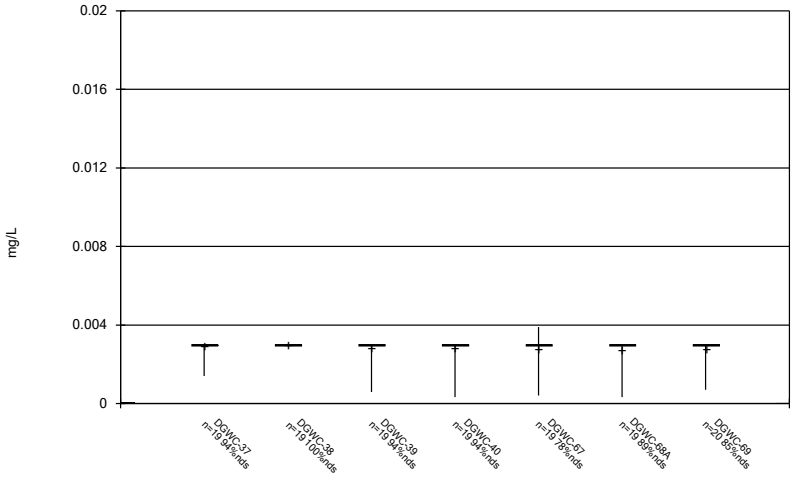
Box & Whiskers Plot



Constituent: Antimony Analysis Run 4/8/2024 9:03 AM View: AP 1
Plant McDonough Data: McDonough AP

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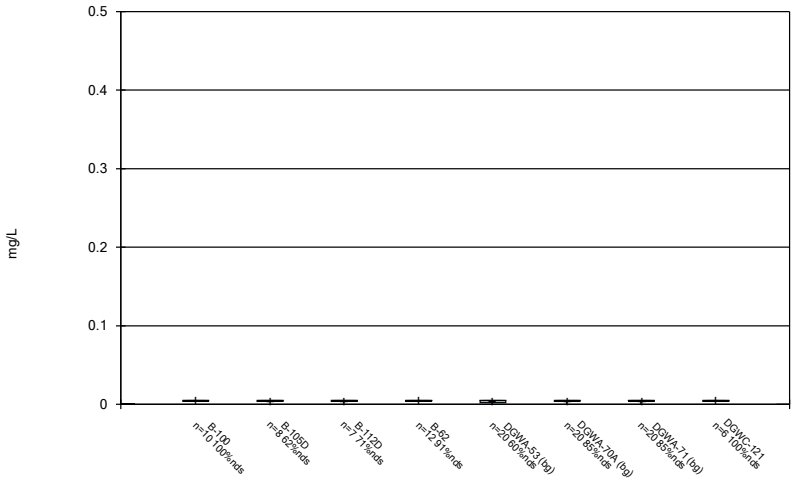
Box & Whiskers Plot



Constituent: Arsenic Analysis Run 4/8/2024 9:03 AM View: AP 1
Plant McDonough Data: McDonough AP

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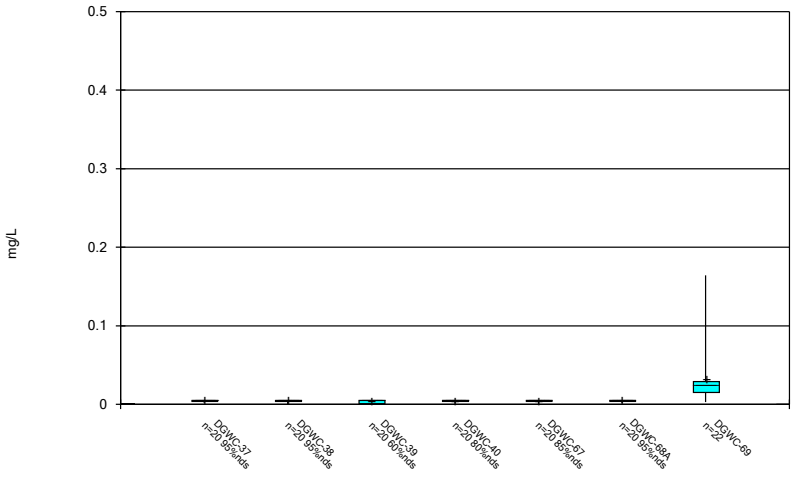
Box & Whiskers Plot



Constituent: Arsenic Analysis Run 4/8/2024 9:03 AM View: AP 1
Plant McDonough Data: McDonough AP

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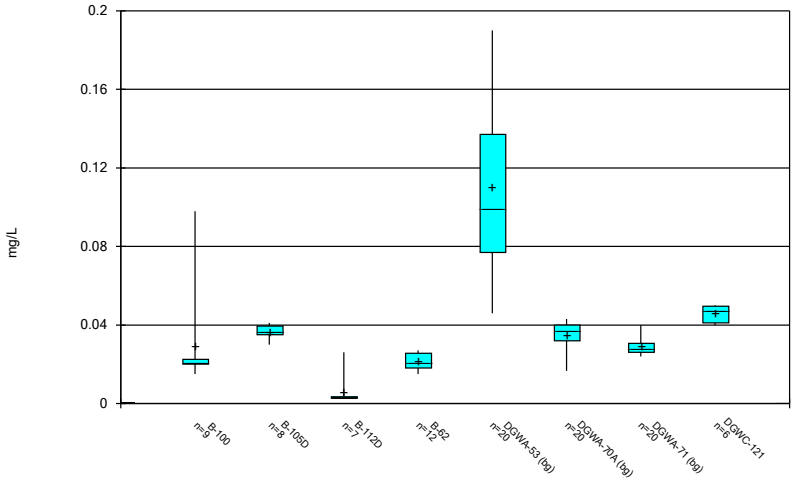
Box & Whiskers Plot



Constituent: Barium Analysis Run 4/8/2024 9:03 AM View: AP 1
Plant McDonough Data: McDonough AP

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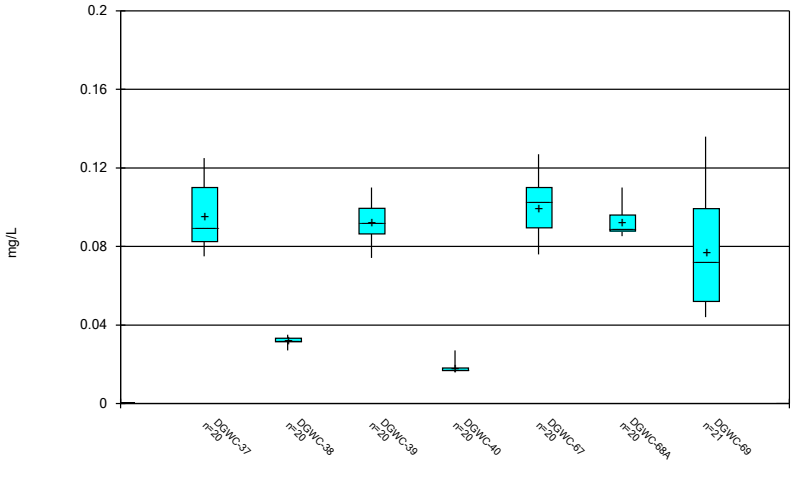
Box & Whiskers Plot



Constituent: Barium Analysis Run 4/8/2024 9:03 AM View: AP 1
Plant McDonough Data: McDonough AP

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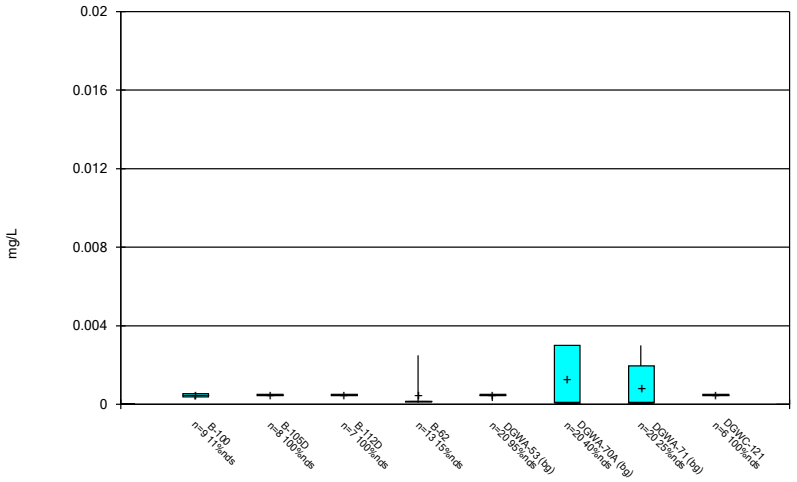
Box & Whiskers Plot



Constituent: Beryllium Analysis Run 4/8/2024 9:03 AM View: AP 1
Plant McDonough Data: McDonough AP

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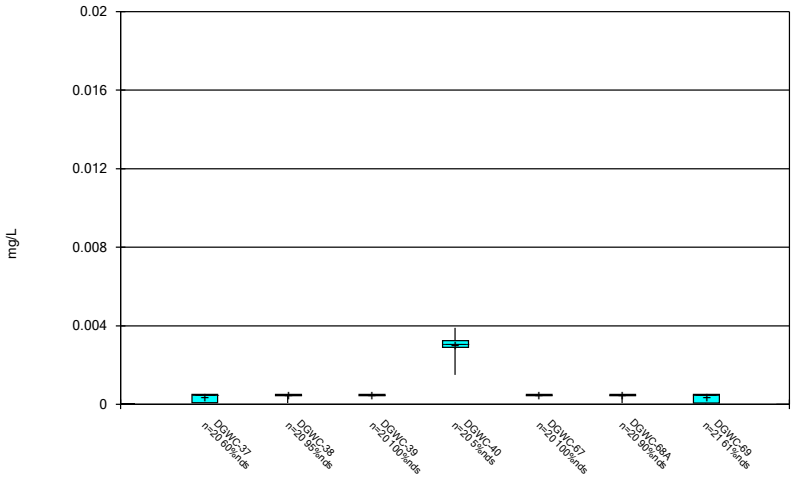
Box & Whiskers Plot



Constituent: Beryllium Analysis Run 4/8/2024 9:03 AM View: AP 1
Plant McDonough Data: McDonough AP

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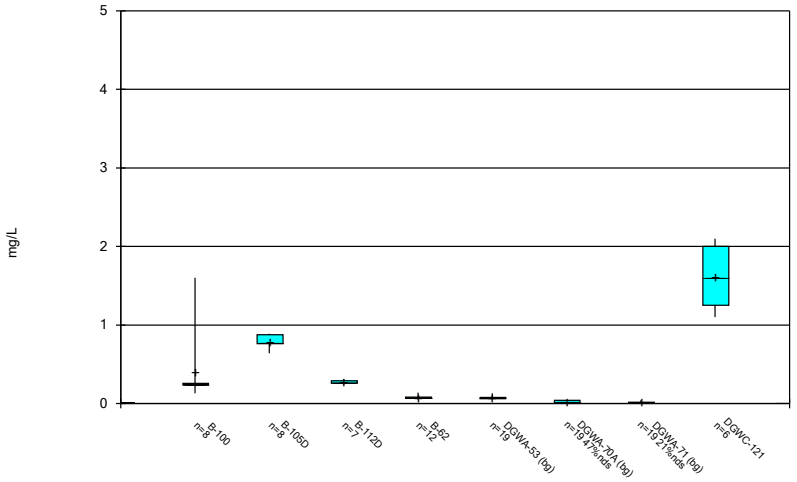
Box & Whiskers Plot



Constituent: Boron Analysis Run 4/8/2024 9:03 AM View: AP 1
Plant McDonough Data: McDonough AP

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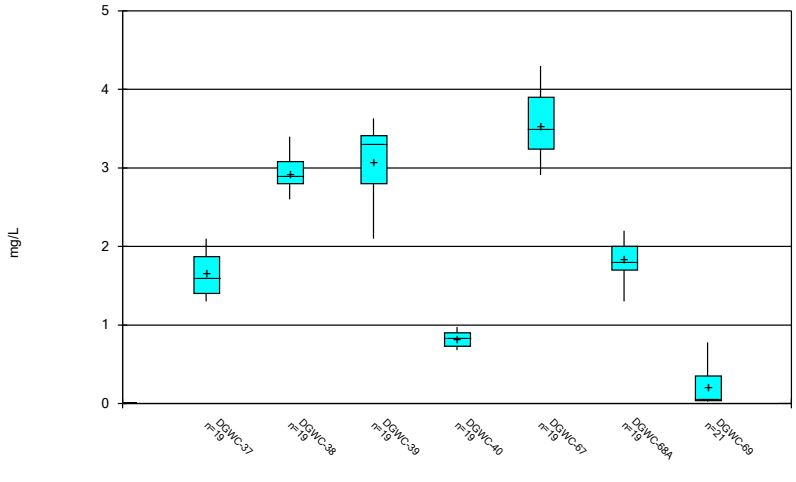
Box & Whiskers Plot



Constituent: Boron Analysis Run 4/8/2024 9:03 AM View: AP 1
Plant McDonough Data: McDonough AP

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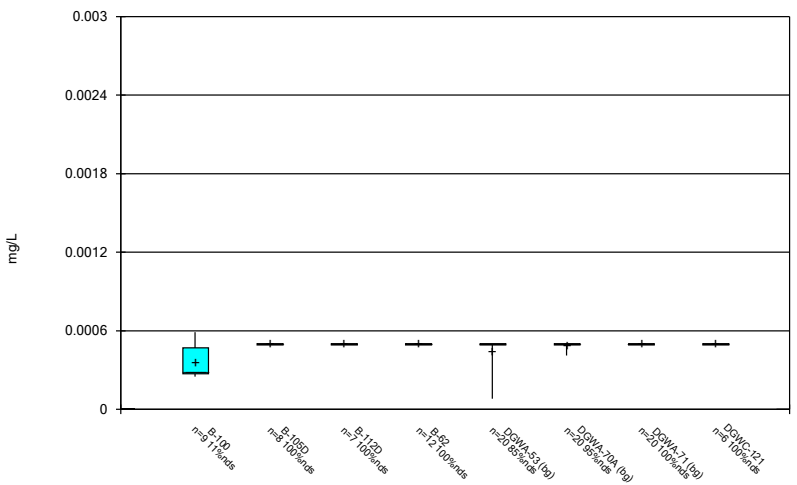
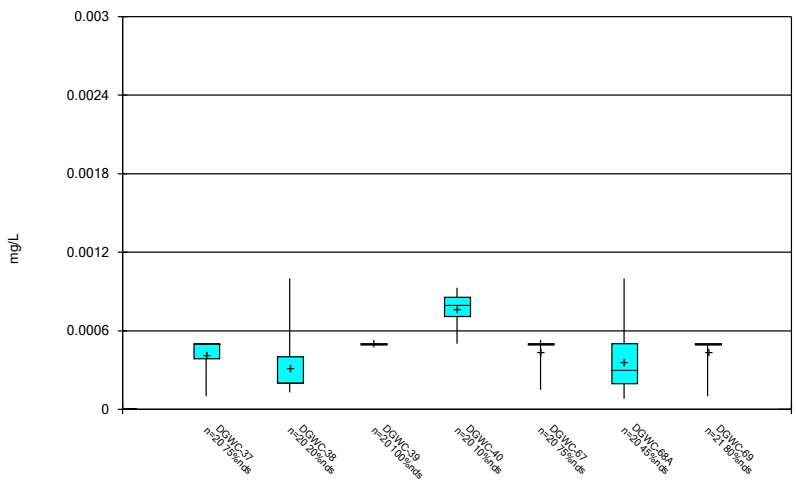
Box & Whiskers Plot



Constituent: Cadmium Analysis Run 4/8/2024 9:03 AM View: AP 1
Plant McDonough Data: McDonough AP

Sanitas™ v.10.0.16b Software licensed to . UG

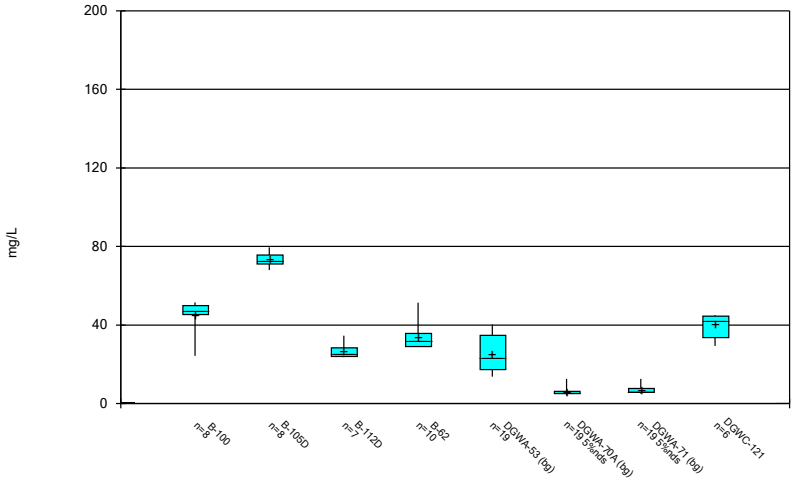
Box & Whiskers Plot



Constituent: Cadmium Analysis Run 4/8/2024 9:03 AM View: AP 1
Plant McDonough Data: McDonough AP

Sanitas™ v.10.0.16b Software licensed to . UG

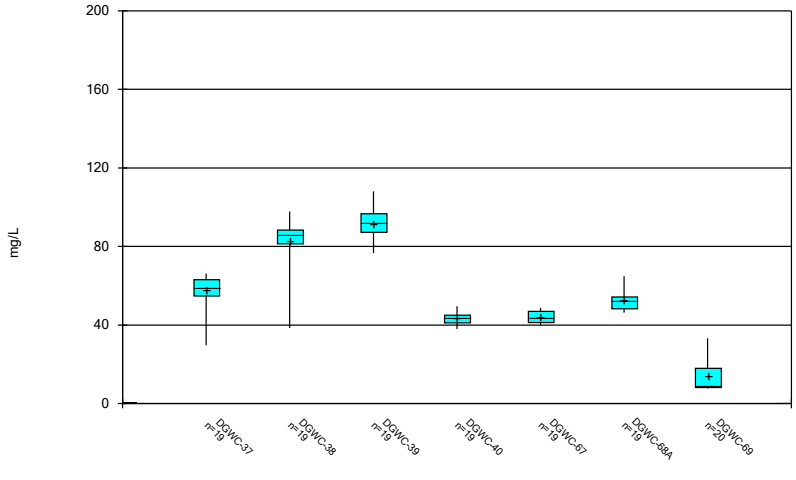
Box & Whiskers Plot



Constituent: Calcium Analysis Run 4/8/2024 9:03 AM View: AP 1
Plant McDonough Data: McDonough AP

Sanitas™ v.10.0.16b Software licensed to . UG

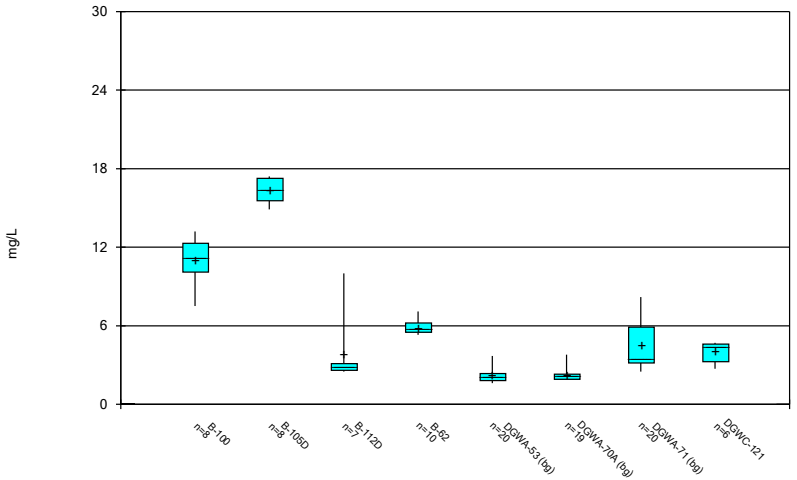
Box & Whiskers Plot



Constituent: Calcium Analysis Run 4/8/2024 9:03 AM View: AP 1
Plant McDonough Data: McDonough AP

Sanitas™ v.10.0.16b Software licensed to . UG

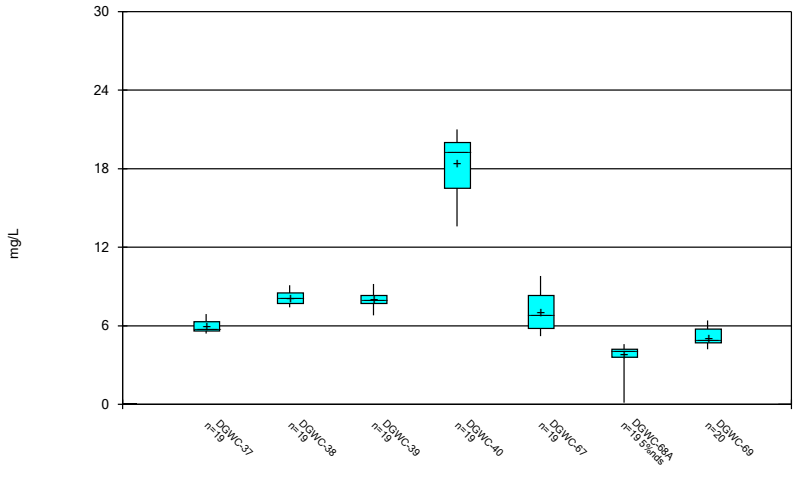
Box & Whiskers Plot



Constituent: Chloride Analysis Run 4/8/2024 9:03 AM View: AP 1
Plant McDonough Data: McDonough AP

Sanitas™ v.10.0.16b Software licensed to . UG

Box & Whiskers Plot



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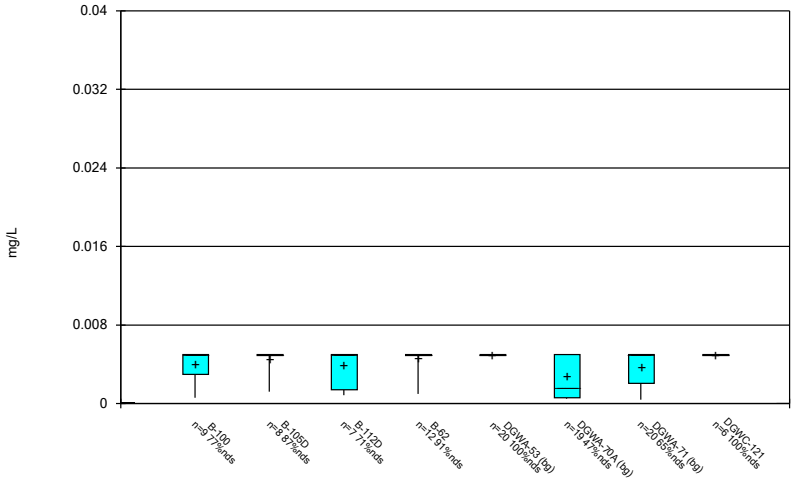
Plant McDonough Data: McDonough AP

Sanitas™ v.10.0.16b Software licensed to . UG

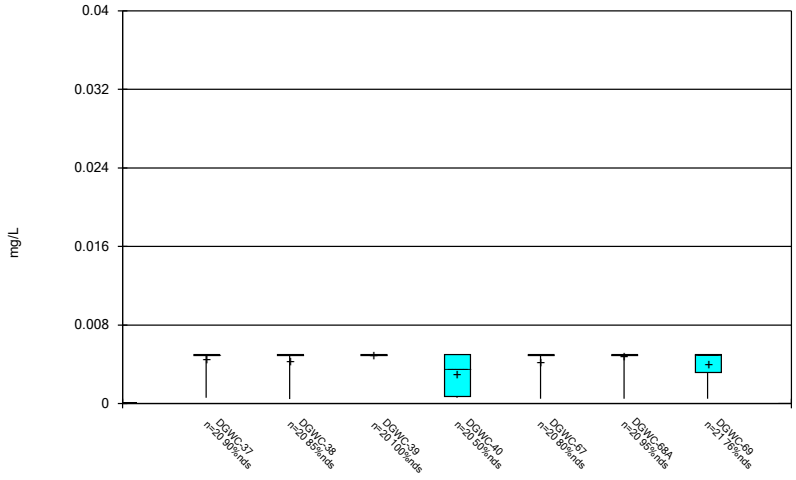
Box & Whiskers Plot



Constituent: Chromium Analysis Run 4/8/2024 9:03 AM View: AP 1
Plant McDonough Data: McDonough AP

Sanitas™ v.10.0.16b Software licensed to . UG

Box & Whiskers Plot



Constituent: Chromium Analysis Run 4/8/2024 9:03 AM View: AP 1
Plant McDonough Data: McDonough AP

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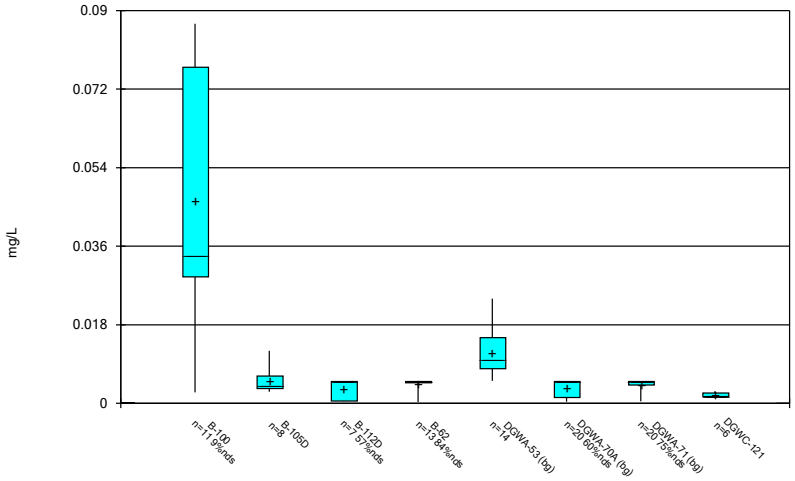
Box & Whiskers Plot



Constituent: Cobalt Analysis Run 4/8/2024 9:03 AM View: AP 1
Plant McDonough Data: McDonough AP

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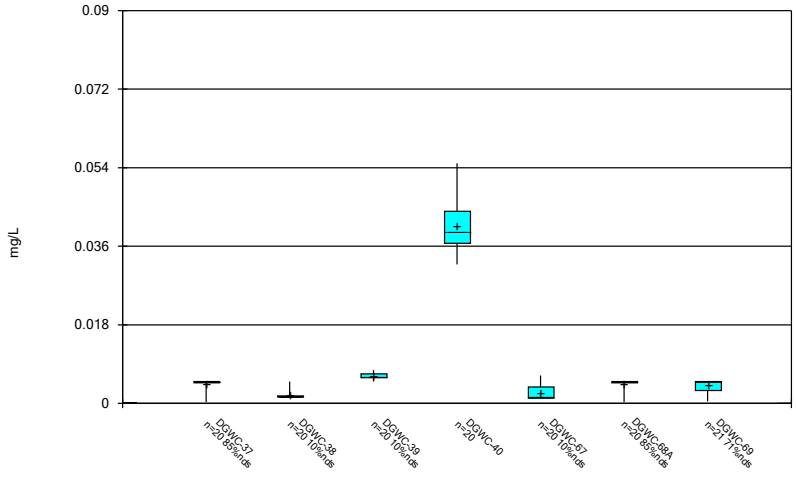
Box & Whiskers Plot



Constituent: Cobalt Analysis Run 4/8/2024 9:03 AM View: AP 1
Plant McDonough Data: McDonough AP

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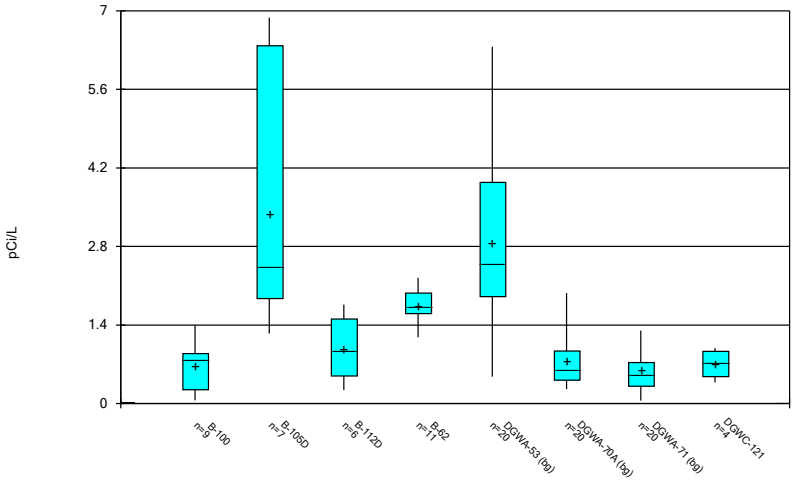
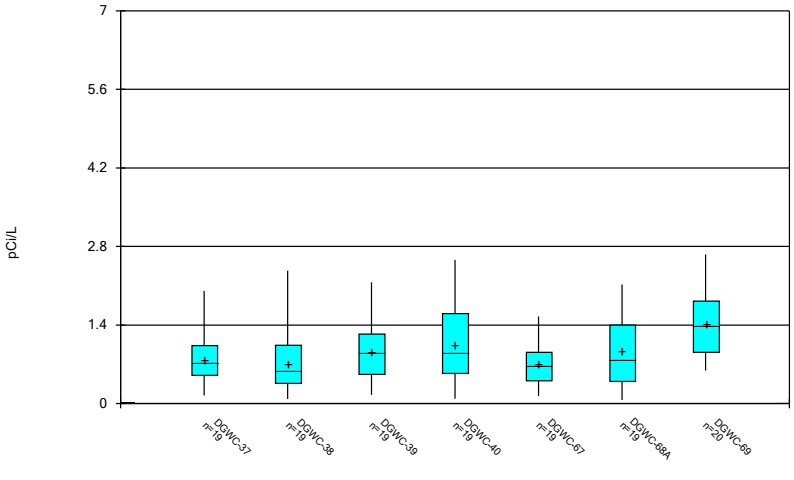
Box & Whiskers Plot



Constituent: Combined Radium 226 + 228 Analysis Run 4/8/2024 9:03 AM View: AP 1
Plant McDonough Data: McDonough AP

Sanitas™ v.10.0.16b Software licensed to . UG

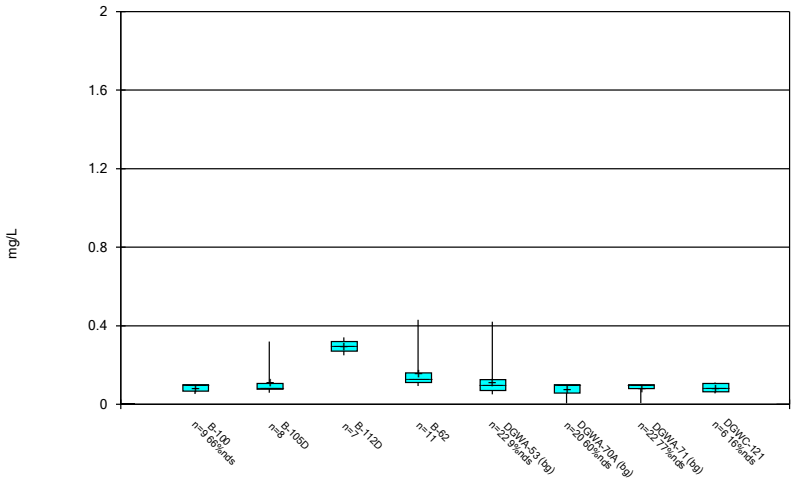
Box & Whiskers Plot



Constituent: Combined Radium 226 + 228 Analysis Run 4/8/2024 9:03 AM View: AP 1
Plant McDonough Data: McDonough AP

Sanitas™ v.10.0.16b Software licensed to . UG

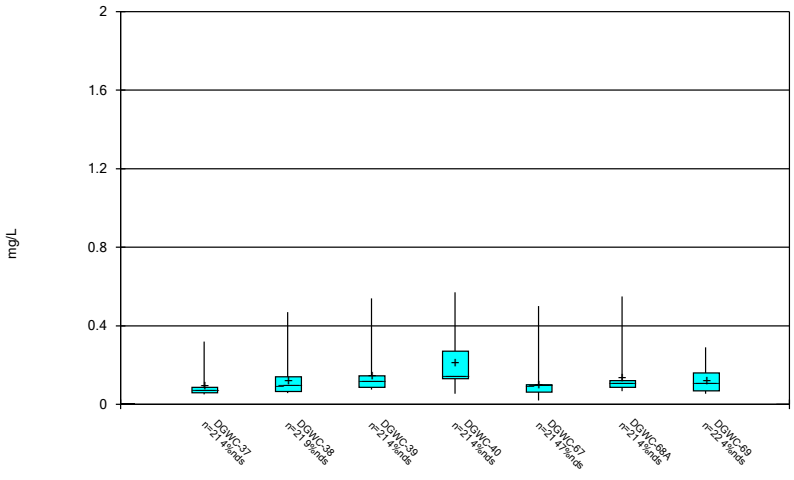
Box & Whiskers Plot



Constituent: Fluoride Analysis Run 4/8/2024 9:03 AM View: AP 1
Plant McDonough Data: McDonough AP

Sanitas™ v.10.0.16b Software licensed to . UG

Box & Whiskers Plot



Constituent: Fluoride Analysis Run 4/8/2024 9:03 AM View: AP 1
Plant McDonough Data: McDonough AP

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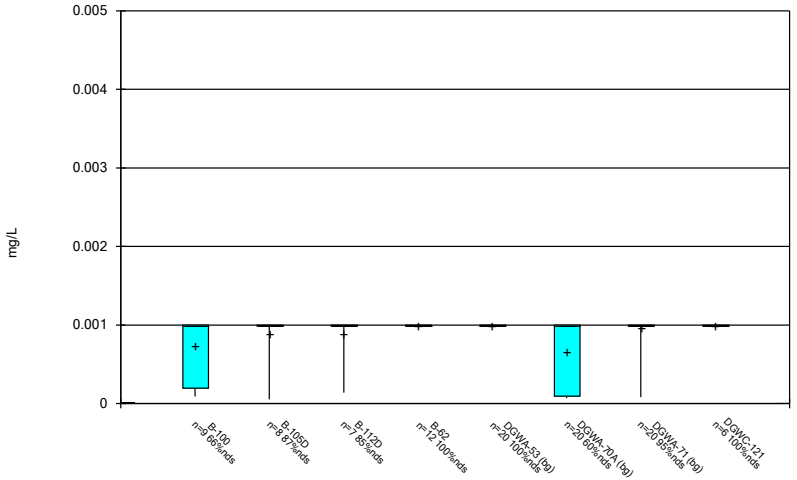
Box & Whiskers Plot



Constituent: Lead Analysis Run 4/8/2024 9:03 AM View: AP 1
Plant McDonough Data: McDonough AP

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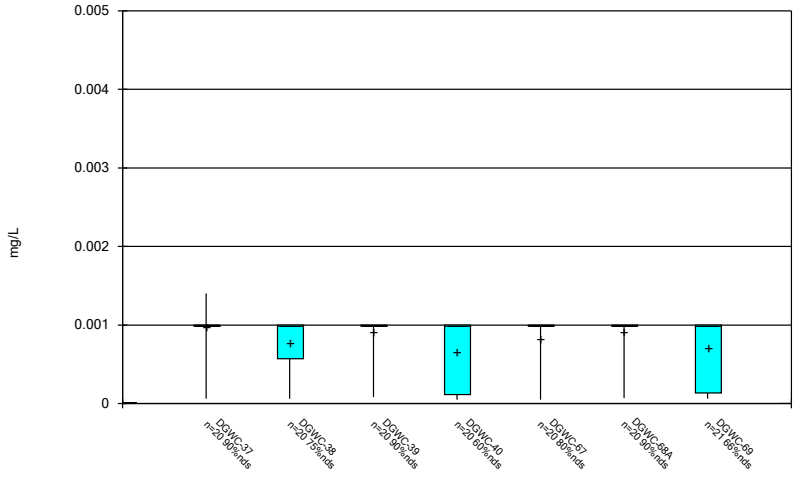
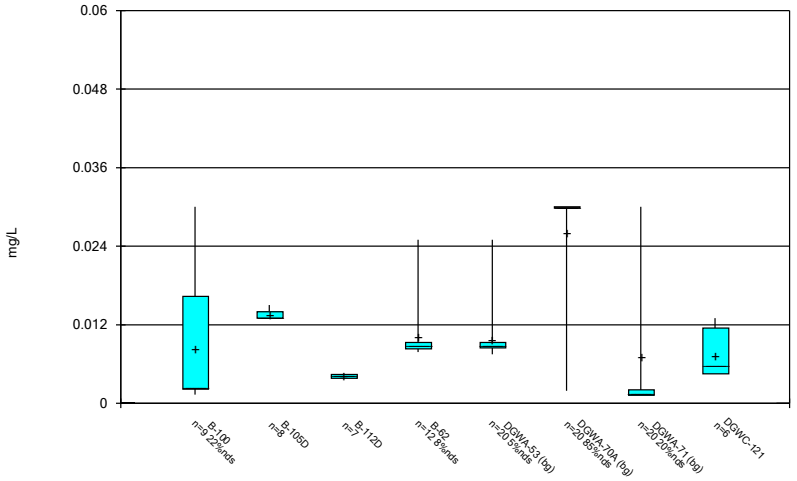
Box & Whiskers Plot



Constituent: Lead Analysis Run 4/8/2024 9:03 AM View: AP 1
Plant McDonough Data: McDonough AP

Sanitas™ v.10.0.16b Software licensed to . UG

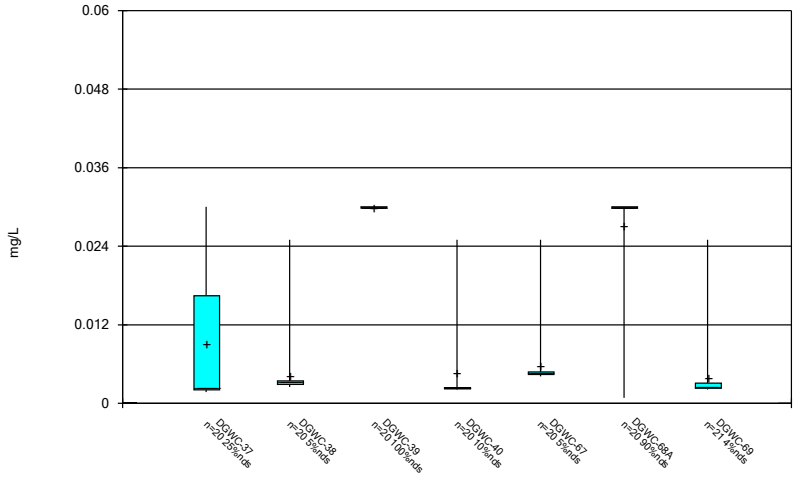
Box & Whiskers Plot



Constituent: Lithium Analysis Run 4/8/2024 9:03 AM View: AP 1
Plant McDonough Data: McDonough AP

Sanitas™ v.10.0.16b Software licensed to . UG

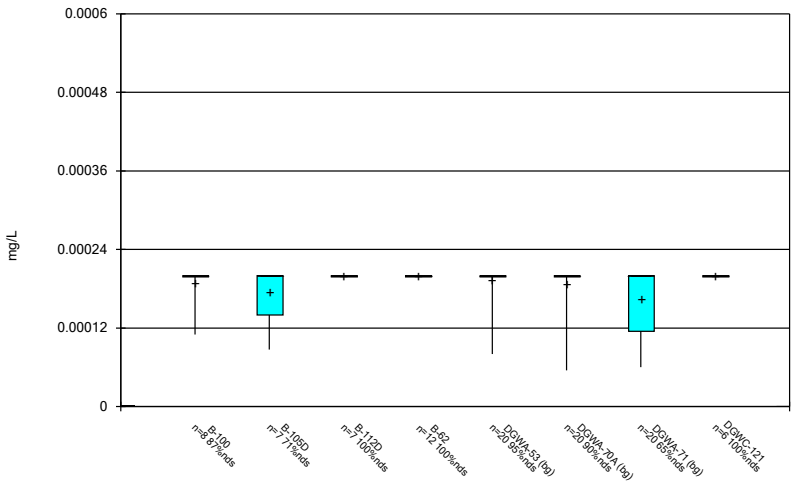
Box & Whiskers Plot



Constituent: Lithium Analysis Run 4/8/2024 9:03 AM View: AP 1
Plant McDonough Data: McDonough AP

Sanitas™ v.10.0.16b Software licensed to . UG

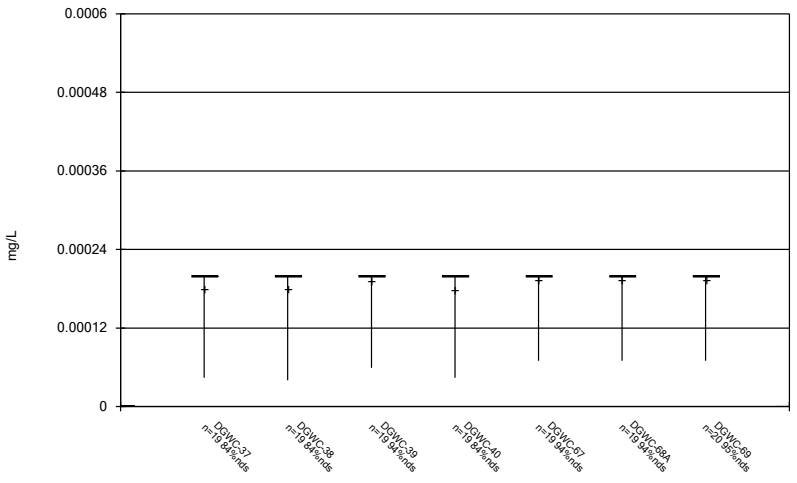
Box & Whiskers Plot



Constituent: Mercury Analysis Run 4/8/2024 9:03 AM View: AP 1
Plant McDonough Data: McDonough AP

Sanitas™ v.10.0.16b Software licensed to . UG

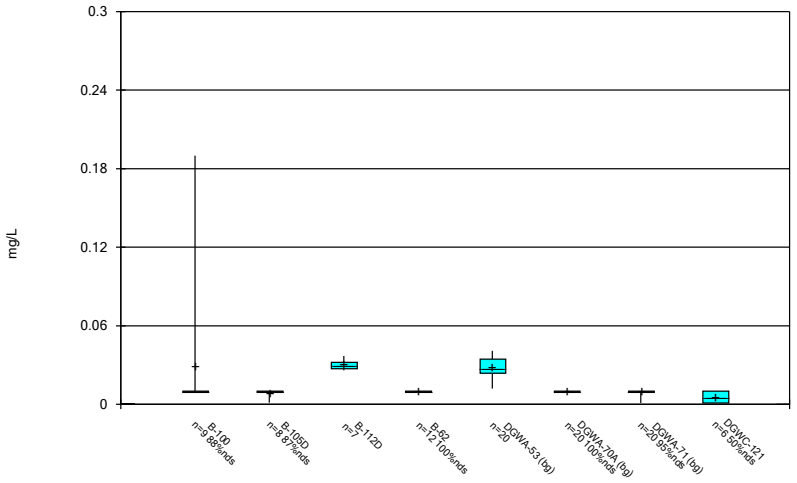
Box & Whiskers Plot



Constituent: Mercury Analysis Run 4/8/2024 9:03 AM View: AP 1
Plant McDonough Data: McDonough AP

Sanitas™ v.10.0.16b Software licensed to . UG

Box & Whiskers Plot



Constituent: Molybdenum Analysis Run 4/8/2024 9:03 AM View: AP 1
Plant McDonough Data: McDonough AP

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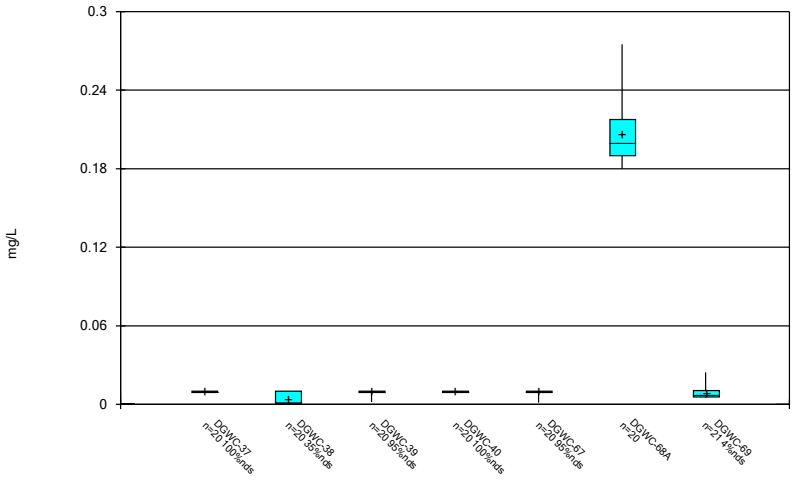
Box & Whiskers Plot



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Plant McDonough Data: McDonough AP

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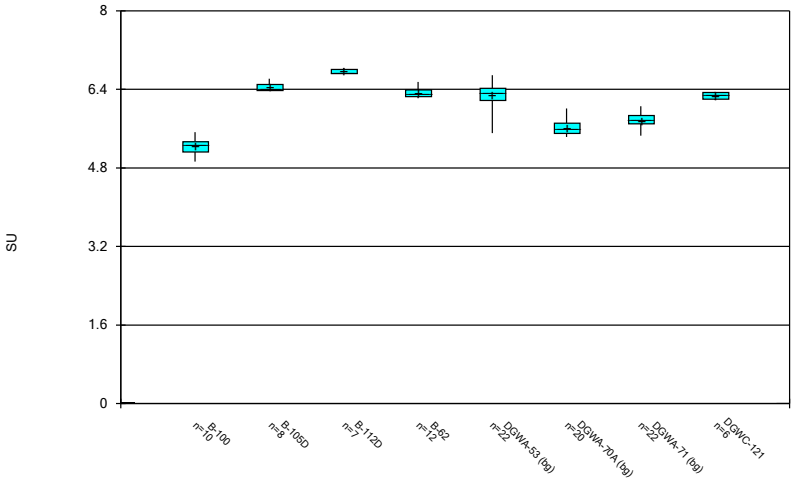
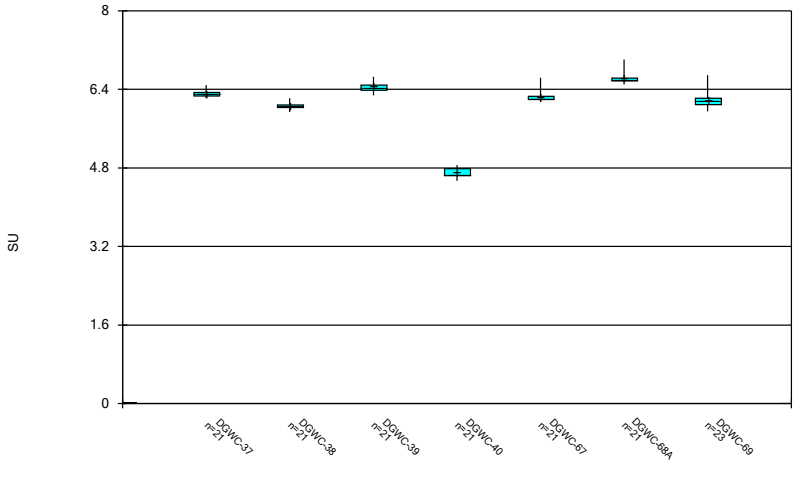
Box & Whiskers Plot



Constituent: pH, Field Analysis Run 4/8/2024 9:03 AM View: AP 1
Plant McDonough Data: McDonough AP

Sanitas™ v.10.0.16b Software licensed to . UG

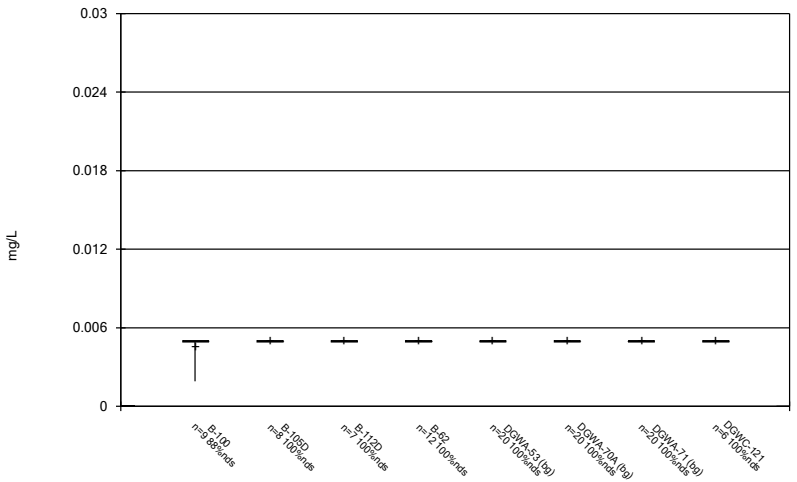
Box & Whiskers Plot



Constituent: pH, Field Analysis Run 4/8/2024 9:03 AM View: AP 1
Plant McDonough Data: McDonough AP

Sanitas™ v.10.0.16b Software licensed to . UG

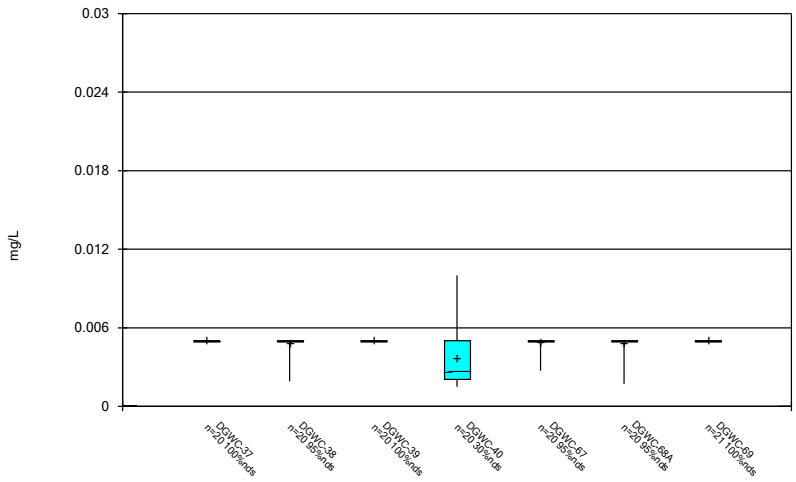
Box & Whiskers Plot



Constituent: Selenium Analysis Run 4/8/2024 9:03 AM View: AP 1
Plant McDonough Data: McDonough AP

Sanitas™ v.10.0.16b Software licensed to . UG

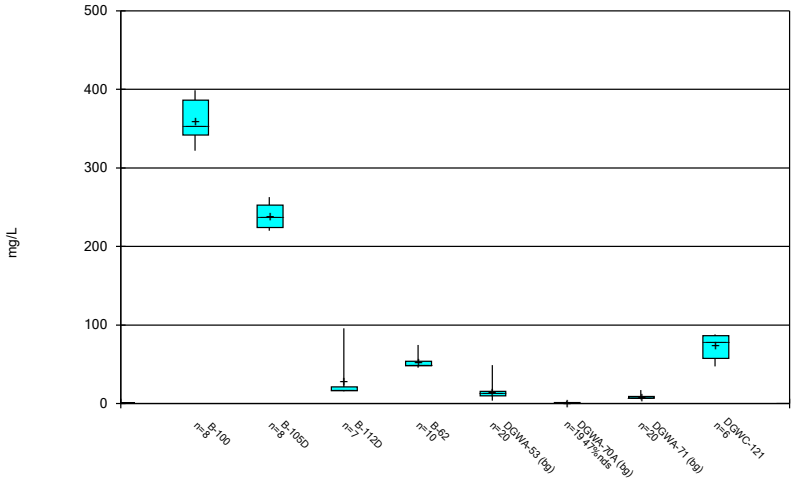
Box & Whiskers Plot



Constituent: Selenium Analysis Run 4/8/2024 9:03 AM View: AP 1
Plant McDonough Data: McDonough AP

Sanitas™ v.10.0.16b Software licensed to . UG

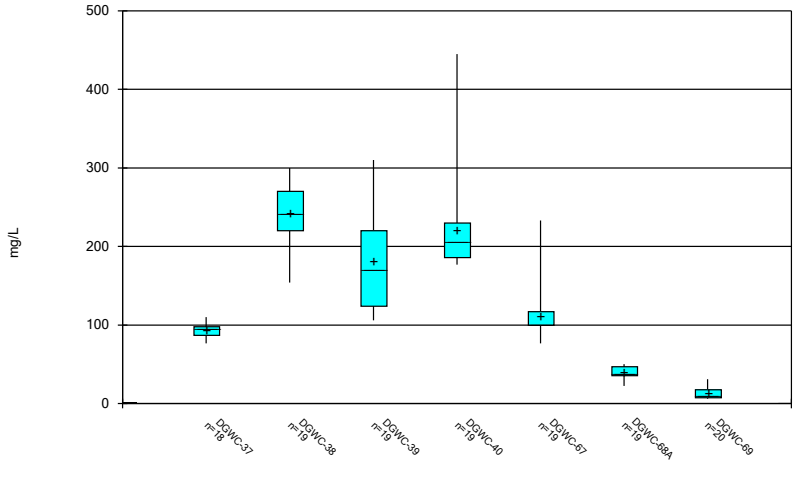
Box & Whiskers Plot



Constituent: Sulfate Analysis Run 4/8/2024 9:03 AM View: AP 1
Plant McDonough Data: McDonough AP

Sanitas™ v.10.0.16b Software licensed to . UG

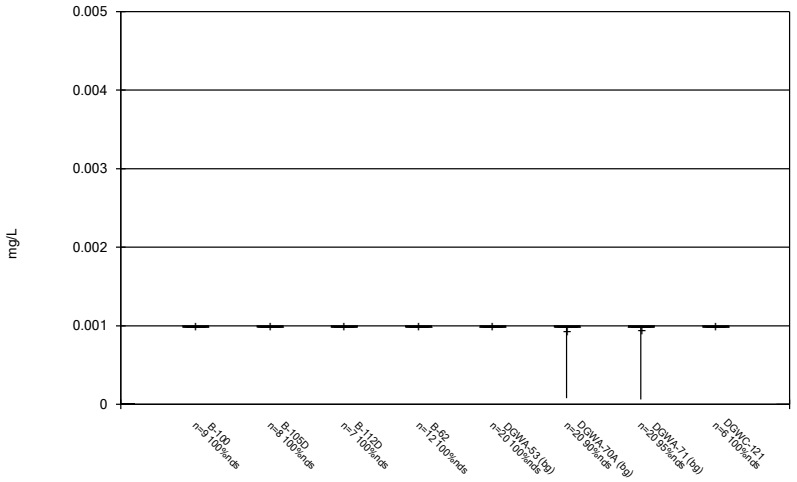
Box & Whiskers Plot



Constituent: Sulfate Analysis Run 4/8/2024 9:03 AM View: AP 1
Plant McDonough Data: McDonough AP

Sanitas™ v.10.0.16b Software licensed to . UG

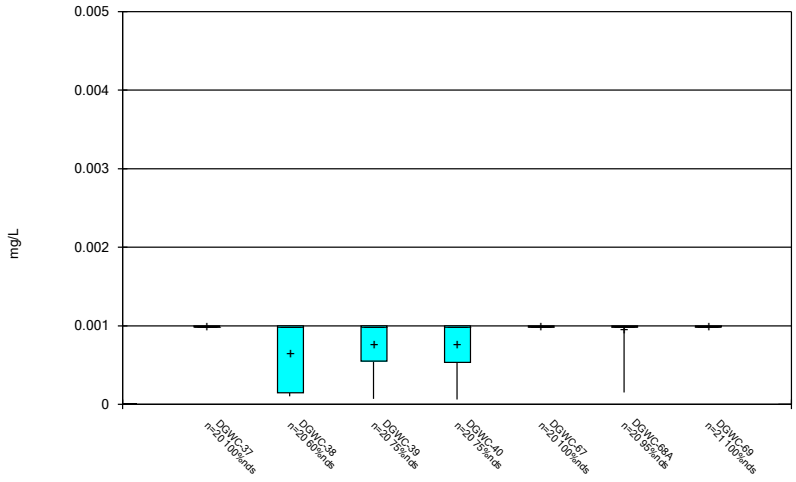
Box & Whiskers Plot



Constituent: Thallium Analysis Run 4/8/2024 9:03 AM View: AP 1
Plant McDonough Data: McDonough AP

Sanitas™ v.10.0.16b Software licensed to . UG

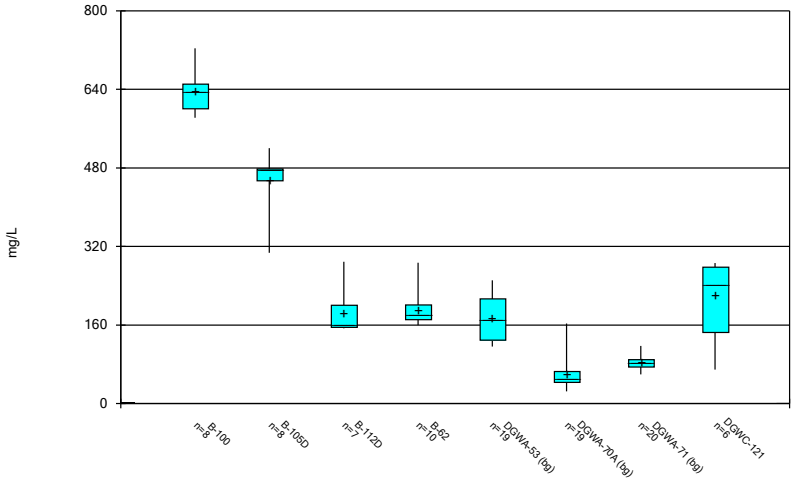
Box & Whiskers Plot



Constituent: Thallium Analysis Run 4/8/2024 9:03 AM View: AP 1
Plant McDonough Data: McDonough AP

Sanitas™ v.10.0.16b Software licensed to . UG

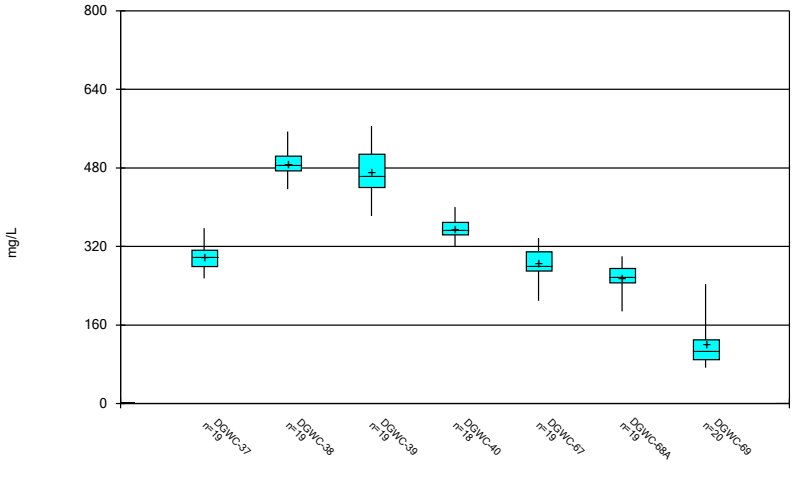
Box & Whiskers Plot



Constituent: Total Dissolved Solids [TDS] Analysis Run 4/8/2024 9:04 AM View: AP 1
Plant McDonough Data: McDonough AP

Sanitas™ v.10.0.16b Software licensed to . UG

Box & Whiskers Plot



Constituent: Total Dissolved Solids [TDS] Analysis Run 4/8/2024 9:04 AM View: AP 1
Plant McDonough Data: McDonough AP

FIGURE C.

Outlier Summary

Plant McDonough Client: Southern Company Data: McDonough AP Printed 3/11/2024, 4:25 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 [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 (Jo)	0.0032 (Jo)	6.79 (o)				

FIGURE D.

Appendix III Interwell Prediction Limits - Significant Results

Plant McDonough Data: McDonough AP Printed 4/3/2024, 2:19 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	1/31/2024	1.9	Yes	57	n/a	n/a	22.81	n/a	n/a	0.0005839	NP Inter (normality) 1 of 2
Boron (mg/L)	DGWC-38	0.13	n/a	1/30/2024	2.9	Yes	57	n/a	n/a	22.81	n/a	n/a	0.0005839	NP Inter (normality) 1 of 2
Boron (mg/L)	DGWC-39	0.13	n/a	1/31/2024	2.3	Yes	57	n/a	n/a	22.81	n/a	n/a	0.0005839	NP Inter (normality) 1 of 2
Boron (mg/L)	DGWC-40	0.13	n/a	1/30/2024	0.73	Yes	57	n/a	n/a	22.81	n/a	n/a	0.0005839	NP Inter (normality) 1 of 2
Boron (mg/L)	DGWC-67	0.13	n/a	2/1/2024	3.9	Yes	57	n/a	n/a	22.81	n/a	n/a	0.0005839	NP Inter (normality) 1 of 2
Boron (mg/L)	DGWC-68A	0.13	n/a	1/31/2024	1.9	Yes	57	n/a	n/a	22.81	n/a	n/a	0.0005839	NP Inter (normality) 1 of 2
Calcium (mg/L)	DGWC-37	40.3	n/a	1/31/2024	60.1	Yes	57	n/a	n/a	3.509	n/a	n/a	0.0005839	NP Inter (normality) 1 of 2
Calcium (mg/L)	DGWC-38	40.3	n/a	1/30/2024	80.8	Yes	57	n/a	n/a	3.509	n/a	n/a	0.0005839	NP Inter (normality) 1 of 2
Calcium (mg/L)	DGWC-39	40.3	n/a	1/31/2024	76.6	Yes	57	n/a	n/a	3.509	n/a	n/a	0.0005839	NP Inter (normality) 1 of 2
Calcium (mg/L)	DGWC-67	40.3	n/a	2/1/2024	44.4	Yes	57	n/a	n/a	3.509	n/a	n/a	0.0005839	NP Inter (normality) 1 of 2
Calcium (mg/L)	DGWC-68A	40.3	n/a	1/31/2024	54.6	Yes	57	n/a	n/a	3.509	n/a	n/a	0.0005839	NP Inter (normality) 1 of 2
Chloride (mg/L)	DGWC-38	8.2	n/a	1/30/2024	8.5	Yes	59	n/a	n/a	0	n/a	n/a	0.0005408	NP Inter (normality) 1 of 2
Chloride (mg/L)	DGWC-40	8.2	n/a	1/30/2024	14.7	Yes	59	n/a	n/a	0	n/a	n/a	0.0005408	NP Inter (normality) 1 of 2
Chloride (mg/L)	DGWC-67	8.2	n/a	2/1/2024	9.8	Yes	59	n/a	n/a	0	n/a	n/a	0.0005408	NP Inter (normality) 1 of 2
pH, Field (SU)	DGWC-40	6.69	5.43	1/30/2024	4.64	Yes	64	n/a	n/a	0	n/a	n/a	0.0009317	NP Inter (normality) 1 of 2
Sulfate (mg/L)	DGWC-37	49	n/a	1/31/2024	98.4	Yes	59	n/a	n/a	15.25	n/a	n/a	0.0005408	NP Inter (normality) 1 of 2
Sulfate (mg/L)	DGWC-38	49	n/a	1/30/2024	220	Yes	59	n/a	n/a	15.25	n/a	n/a	0.0005408	NP Inter (normality) 1 of 2
Sulfate (mg/L)	DGWC-39	49	n/a	1/31/2024	106	Yes	59	n/a	n/a	15.25	n/a	n/a	0.0005408	NP Inter (normality) 1 of 2
Sulfate (mg/L)	DGWC-40	49	n/a	1/30/2024	179	Yes	59	n/a	n/a	15.25	n/a	n/a	0.0005408	NP Inter (normality) 1 of 2
Sulfate (mg/L)	DGWC-67	49	n/a	2/1/2024	111	Yes	59	n/a	n/a	15.25	n/a	n/a	0.0005408	NP Inter (normality) 1 of 2
Total Dissolved Solids [TDS] (mg/L)	DGWC-37	235.1	n/a	1/31/2024	310	Yes	58	9.835	2.801	0	None	sqrt(x)	0.0009403	Param Inter 1 of 2
Total Dissolved Solids [TDS] (mg/L)	DGWC-38	235.1	n/a	1/30/2024	492	Yes	58	9.835	2.801	0	None	sqrt(x)	0.0009403	Param Inter 1 of 2
Total Dissolved Solids [TDS] (mg/L)	DGWC-39	235.1	n/a	1/31/2024	387	Yes	58	9.835	2.801	0	None	sqrt(x)	0.0009403	Param Inter 1 of 2
Total Dissolved Solids [TDS] (mg/L)	DGWC-40	235.1	n/a	1/30/2024	348	Yes	58	9.835	2.801	0	None	sqrt(x)	0.0009403	Param Inter 1 of 2
Total Dissolved Solids [TDS] (mg/L)	DGWC-67	235.1	n/a	2/1/2024	313	Yes	58	9.835	2.801	0	None	sqrt(x)	0.0009403	Param Inter 1 of 2
Total Dissolved Solids [TDS] (mg/L)	DGWC-68A	235.1	n/a	1/31/2024	261	Yes	58	9.835	2.801	0	None	sqrt(x)	0.0009403	Param Inter 1 of 2

Appendix III Interwell Prediction Limits - All Results

Plant McDonough Data: McDonough AP Printed 4/3/2024, 2:19 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**	**1/31/2024**	**1.9**	**Yes**	**57**	**n/a**	**n/a**	**22.81**	**n/a**	**n/a**	**0.0005839**	**NP Inter (normality) 1 of 2**
Boron (mg/L)	**DGWC-38**	**0.13**	**n/a**	**1/30/2024**	**2.9**	**Yes**	**57**	**n/a**	**n/a**	**22.81**	**n/a**	**n/a**	**0.0005839**	**NP Inter (normality) 1 of 2**
Boron (mg/L)	**DGWC-39**	**0.13**	**n/a**	**1/31/2024**	**2.3**	**Yes**	**57**	**n/a**	**n/a**	**22.81**	**n/a**	**n/a**	**0.0005839**	**NP Inter (normality) 1 of 2**
Boron (mg/L)	**DGWC-40**	**0.13**	**n/a**	**1/30/2024**	**0.73**	**Yes**	**57**	**n/a**	**n/a**	**22.81**	**n/a**	**n/a**	**0.0005839**	**NP Inter (normality) 1 of 2**
Boron (mg/L)	**DGWC-67**	**0.13**	**n/a**	**2/1/2024**	**3.9**	**Yes**	**57**	**n/a**	**n/a**	**22.81**	**n/a**	**n/a**	**0.0005839**	**NP Inter (normality) 1 of 2**
Boron (mg/L)	**DGWC-68A**	**0.13**	**n/a**	**1/31/2024**	**1.9**	**Yes**	**57**	**n/a**	**n/a**	**22.81**	**n/a**	**n/a**	**0.0005839**	**NP Inter (normality) 1 of 2**
Boron (mg/L)	DGWC-69	0.13	n/a	1/31/2024	0.025J	No	57	n/a	n/a	22.81	n/a	n/a	0.0005839	NP Inter (normality) 1 of 2
Calcium (mg/L)	**DGWC-37**	**40.3**	**n/a**	**1/31/2024**	**60.1**	**Yes**	**57**	**n/a**	**n/a**	**3.509**	**n/a**	**n/a**	**0.0005839**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	**DGWC-38**	**40.3**	**n/a**	**1/30/2024**	**80.8**	**Yes**	**57**	**n/a**	**n/a**	**3.509**	**n/a**	**n/a**	**0.0005839**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	**DGWC-39**	**40.3**	**n/a**	**1/31/2024**	**76.6**	**Yes**	**57**	**n/a**	**n/a**	**3.509**	**n/a**	**n/a**	**0.0005839**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	DGWC-40	40.3	n/a	1/30/2024	38.2	No	57	n/a	n/a	3.509	n/a	n/a	0.0005839	NP Inter (normality) 1 of 2
Calcium (mg/L)	**DGWC-67**	**40.3**	**n/a**	**2/1/2024**	**44.4**	**Yes**	**57**	**n/a**	**n/a**	**3.509**	**n/a**	**n/a**	**0.0005839**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	**DGWC-68A**	**40.3**	**n/a**	**1/31/2024**	**54.6**	**Yes**	**57**	**n/a**	**n/a**	**3.509**	**n/a**	**n/a**	**0.0005839**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	DGWC-69	40.3	n/a	1/31/2024	8.8	No	57	n/a	n/a	3.509	n/a	n/a	0.0005839	NP Inter (normality) 1 of 2
Chloride (mg/L)	DGWC-37	8.2	n/a	1/31/2024	5.8	No	59	n/a	n/a	0	n/a	n/a	0.0005408	NP Inter (normality) 1 of 2
Chloride (mg/L)	**DGWC-38**	**8.2**	**n/a**	**1/30/2024**	**8.5**	**Yes**	**59**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0005408**	**NP Inter (normality) 1 of 2**
Chloride (mg/L)	DGWC-39	8.2	n/a	1/31/2024	6.8	No	59	n/a	n/a	0	n/a	n/a	0.0005408	NP Inter (normality) 1 of 2
Chloride (mg/L)	**DGWC-40**	**8.2**	**n/a**	**1/30/2024**	**14.7**	**Yes**	**59**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0005408**	**NP Inter (normality) 1 of 2**
Chloride (mg/L)	**DGWC-67**	**8.2**	**n/a**	**2/1/2024**	**9.8**	**Yes**	**59**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0005408**	**NP Inter (normality) 1 of 2**
Chloride (mg/L)	DGWC-68A	8.2	n/a	1/31/2024	3.9	No	59	n/a	n/a	0	n/a	n/a	0.0005408	NP Inter (normality) 1 of 2
Chloride (mg/L)	DGWC-69	8.2	n/a	1/31/2024	6	No	59	n/a	n/a	0	n/a	n/a	0.0005408	NP Inter (normality) 1 of 2
Fluoride (mg/L)	DGWC-37	0.42	n/a	1/31/2024	0.069J	No	64	n/a	n/a	48.44	n/a	n/a	0.0004659	NP Inter (normality) 1 of 2
Fluoride (mg/L)	DGWC-38	0.42	n/a	1/30/2024	0.078J	No	64	n/a	n/a	48.44	n/a	n/a	0.0004659	NP Inter (normality) 1 of 2
Fluoride (mg/L)	DGWC-39	0.42	n/a	1/31/2024	0.11	No	64	n/a	n/a	48.44	n/a	n/a	0.0004659	NP Inter (normality) 1 of 2
Fluoride (mg/L)	DGWC-40	0.42	n/a	1/30/2024	0.12	No	64	n/a	n/a	48.44	n/a	n/a	0.0004659	NP Inter (normality) 1 of 2
Fluoride (mg/L)	DGWC-67	0.42	n/a	2/1/2024	0.057J	No	64	n/a	n/a	48.44	n/a	n/a	0.0004659	NP Inter (normality) 1 of 2
Fluoride (mg/L)	DGWC-68A	0.42	n/a	1/31/2024	0.092J	No	64	n/a	n/a	48.44	n/a	n/a	0.0004659	NP Inter (normality) 1 of 2
Fluoride (mg/L)	DGWC-69	0.42	n/a	1/31/2024	0.086J	No	64	n/a	n/a	48.44	n/a	n/a	0.0004659	NP Inter (normality) 1 of 2
pH, Field (SU)	DGWC-37	6.69	5.43	1/31/2024	6.32	No	64	n/a	n/a	0	n/a	n/a	0.0009317	NP Inter (normality) 1 of 2
pH, Field (SU)	DGWC-38	6.69	5.43	1/30/2024	5.94	No	64	n/a	n/a	0	n/a	n/a	0.0009317	NP Inter (normality) 1 of 2
pH, Field (SU)	DGWC-39	6.69	5.43	1/31/2024	6.58	No	64	n/a	n/a	0	n/a	n/a	0.0009317	NP Inter (normality) 1 of 2
pH, Field (SU)	**DGWC-40**	**6.69**	**5.43**	**1/30/2024**	**4.64**	**Yes**	**64**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0009317**	**NP Inter (normality) 1 of 2**
pH, Field (SU)	DGWC-67	6.69	5.43	2/1/2024	6.27	No	64	n/a	n/a	0	n/a	n/a	0.0009317	NP Inter (normality) 1 of 2
pH, Field (SU)	DGWC-68A	6.69	5.43	1/31/2024	6.62	No	64	n/a	n/a	0	n/a	n/a	0.0009317	NP Inter (normality) 1 of 2
pH, Field (SU)	DGWC-69	6.69	5.43	1/31/2024	6.26	No	64	n/a	n/a	0	n/a	n/a	0.0009317	NP Inter (normality) 1 of 2
Sulfate (mg/L)	**DGWC-37**	**49**	**n/a**	**1/31/2024**	**98.4**	**Yes**	**59**	**n/a**	**n/a**	**15.25**	**n/a**	**n/a**	**0.0005408**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	**DGWC-38**	**49**	**n/a**	**1/30/2024**	**220**	**Yes**	**59**	**n/a**	**n/a**	**15.25**	**n/a**	**n/a**	**0.0005408**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	**DGWC-39**	**49**	**n/a**	**1/31/2024**	**106**	**Yes**	**59**	**n/a**	**n/a**	**15.25**	**n/a**	**n/a**	**0.0005408**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	**DGWC-40**	**49**	**n/a**	**1/30/2024**	**179**	**Yes**	**59**	**n/a**	**n/a**	**15.25**	**n/a**	**n/a**	**0.0005408**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	**DGWC-67**	**49**	**n/a**	**2/1/2024**	**111**	**Yes**	**59**	**n/a**	**n/a**	**15.25**	**n/a**	**n/a**	**0.0005408**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	DGWC-68A	49	n/a	1/31/2024	33.2	No	59	n/a	n/a	15.25	n/a	n/a	0.0005408	NP Inter (normality) 1 of 2
Sulfate (mg/L)	DGWC-69	49	n/a	1/31/2024	7.2	No	59	n/a	n/a	15.25	n/a	n/a	0.0005408	NP Inter (normality) 1 of 2
Total Dissolved Solids [TDS] (mg/L)	**DGWC-37**	**235.1**	**n/a**	**1/31/2024**	**310**	**Yes**	**58**	**9.835**	**2.801**	**0**	**None**	**sqrt(x)**	**0.0009403**	**Param Inter 1 of 2**
Total Dissolved Solids [TDS] (mg/L)	**DGWC-38**	**235.1**	**n/a**	**1/30/2024**	**492**	**Yes**	**58**	**9.835**	**2.801**	**0**	**None**	**sqrt(x)**	**0.0009403**	**Param Inter 1 of 2**
Total Dissolved Solids [TDS] (mg/L)	**DGWC-39**	**235.1**	**n/a**	**1/31/2024**	**387**	**Yes**	**58**	**9.835**	**2.801**	**0**	**None**	**sqrt(x)**	**0.0009403**	**Param Inter 1 of 2**
Total Dissolved Solids [TDS] (mg/L)	**DGWC-40**	**235.1**	**n/a**	**1/30/2024**	**348**	**Yes**	**58**	**9.835**	**2.801**	**0**	**None**	**sqrt(x)**	**0.0009403**	**Param Inter 1 of 2**
Total Dissolved Solids [TDS] (mg/L)	**DGWC-67**	**235.1**	**n/a**	**2/1/2024**	**313**	**Yes**	**58**	**9.835**	**2.801**	**0**	**None**	**sqrt(x)**	**0.0009403**	**Param Inter 1 of 2**
Total Dissolved Solids [TDS] (mg/L)	**DGWC-68A**	**235.1**	**n/a**	**1/31/2024**	**261**	**Yes**	**58**	**9.835**	**2.801**	**0**	**None**	**sqrt(x)**	**0.0009403**	**Param Inter 1 of 2**
Total Dissolved Solids [TDS] (mg/L)	DGWC-69	235.1	n/a	1/31/2024	82	No	58	9.835	2.801	0	None	sqrt(x)	0.0009403	Param Inter 1 of 2

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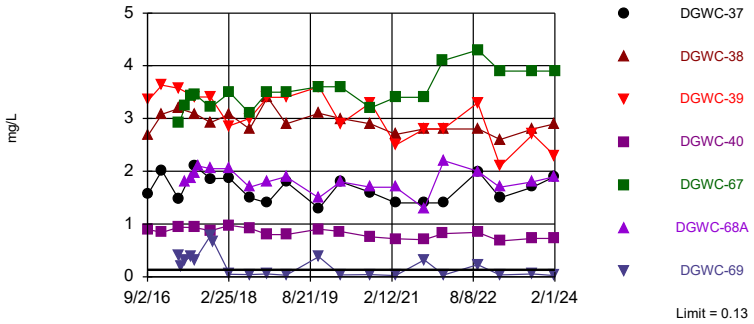
Exceeds Limit: DGWC-37, DGWC-38, DGWC-39, DGWC-40, DGWC-67, DGWC-68A

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 57 background values. 22.81% NDs. Annual per-constituent alpha = 0.009301. Individual comparison alpha = 0.0005839 (1 of 2). Comparing 7 points to limit. Assumes 1 future value.

Constituent: Boron Analysis Run 4/3/2024 2:18 PM View: AP 1 Appendix III

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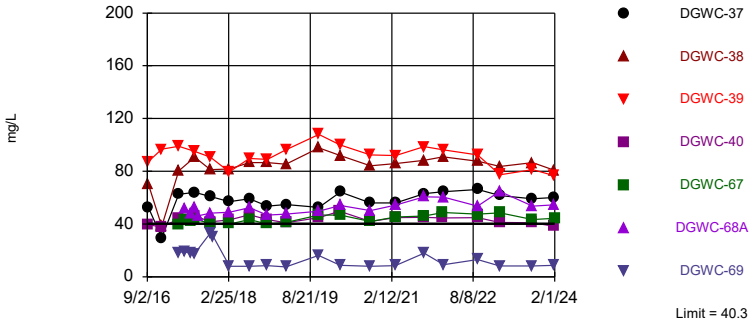
Exceeds Limit: DGWC-37, DGWC-38, DGWC-39, DGWC-67, DGWC-68A

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 57 background values. 3.509% NDs. Annual per-constituent alpha = 0.009301. Individual comparison alpha = 0.0005839 (1 of 2). Comparing 7 points to limit. Assumes 1 future value.

Constituent: Calcium Analysis Run 4/3/2024 2:18 PM View: AP 1 Appendix III

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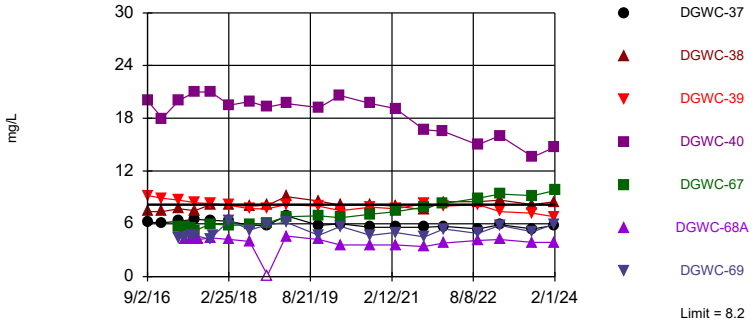
Hollow symbols indicate censored values.

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 59 background values. Annual per-constituent alpha = 0.008617. Individual comparison alpha = 0.0005408 (1 of 2). Comparing 7 points to limit. Assumes 1 future value.

Constituent: Chloride Analysis Run 4/3/2024 2:18 PM View: AP 1 Appendix III

Plant McDonough Data: McDonough AP

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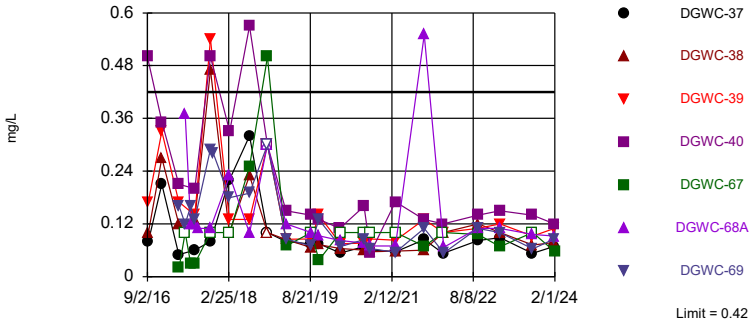
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Francia normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 64 background values. 48.44% NDs. Annual per-constituent alpha = 0.007428. Individual comparison alpha = 0.0004659 (1 of 2). Comparing 7 points to limit. Assumes 1 future value.

Constituent: Fluoride Analysis Run 4/3/2024 2:18 PM View: AP 1 Appendix III

Plant McDonough Data: McDonough AP

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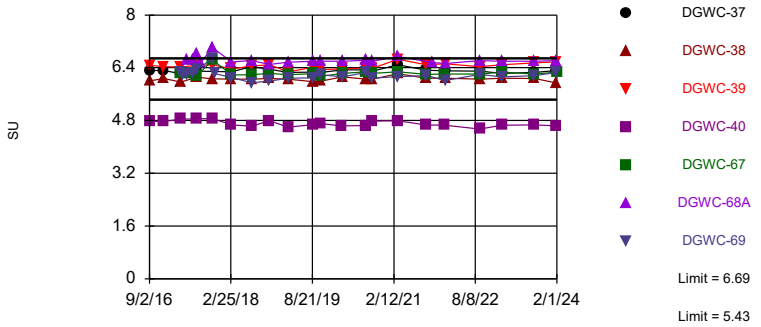
Exceeds Limits: DGWC-40

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 64 background values. Annual per-constituent alpha = 0.01486. Individual comparison alpha = 0.0009317 (1 of 2). Comparing 7 points to limit. Assumes 1 future value.

Constituent: pH, Field Analysis Run 4/3/2024 2:18 PM View: AP 1 Appendix III

Plant McDonough Data: McDonough AP

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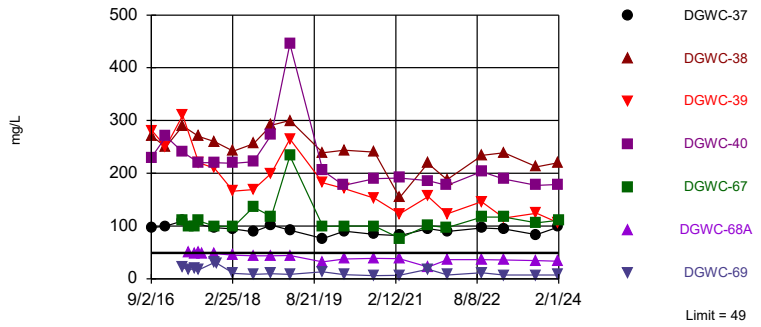
Exceeds Limit: DGWC-37, DGWC-38, DGWC-39, DGWC-40, DGWC-67

Prediction Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Francia normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 59 background values. 15.25% NDs. Annual per-constituent alpha = 0.008617. Individual comparison alpha = 0.0005408 (1 of 2). Comparing 7 points to limit. Assumes 1 future value.

Constituent: Sulfate Analysis Run 4/3/2024 2:18 PM View: AP 1 Appendix III

Plant McDonough Data: McDonough AP

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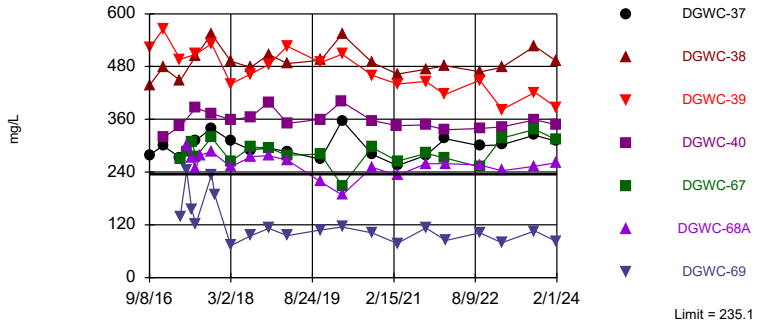
Exceeds Limit: DGWC-37, DGWC-38, DGWC-39, DGWC-40, DGWC-67, DGWC-68A

Prediction Limit

Interwell Parametric



Background Data Summary (based on square root transformation): Mean=9.835, Std. Dev.=2.801, n=58. Normality test: Shapiro Francia @alpha = 0.01, calculated = 0.9594, critical = 0.944. Kappa = 1.963 (c=7, w=8, 1 of 2, event alpha = 0.05132). Report alpha = 0.007498. Individual comparison alpha = 0.0009403. Comparing 7 points to limit. Assumes 1 future value.

Constituent: Total Dissolved Solids [TDS] Analysis Run 4/3/2024 2:18 PM View: AP 1 Appendix III

Plant McDonough Data: McDonough AP

Prediction Limit

Constituent: Boron (mg/L) Analysis Run 4/3/2024 2:19 PM View: AP 1 Appendix III

Plant McDonough 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)		
7/10/2018					0.0059 (J)	0.0077 (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						

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 4/3/2024 2:19 PM View: AP 1 Appendix III

Plant McDonough Data: McDonough AP

	DGWC-40	DGWC-39	DGWC-38	DGWC-37	DGWA-71 (bg)	DGWA-70A (bg)	DGWA-53 (bg)	DGWC-69	DGWC-67
9/16/2021				1.4				0.32	3.4
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							
9/6/2023				1.7	0.015 (J)	0.012 (J)			
9/7/2023	0.73	2.7	2.8				0.052	0.052	3.9
1/30/2024	0.73		2.9		0.015 (J)		0.065		
1/31/2024		2.3		1.9				0.025 (J)	
2/1/2024									3.9

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Boron (mg/L) Analysis Run 4/3/2024 2:19 PM View: AP 1 Appendix III

Plant McDonough 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	
7/10/2018	
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	

Prediction Limit

Constituent: Boron (mg/L) Analysis Run 4/3/2024 2:19 PM View: AP 1 Appendix III

Plant McDonough Data: McDonough AP

	DGWC-68A
9/16/2021	1.3
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	
9/6/2023	
9/7/2023	1.8
1/30/2024	
1/31/2024	1.9
2/1/2024	

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 4/3/2024 2:19 PM View: AP 1 Appendix III

Plant McDonough 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		
7/10/2018					5.7	5			
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

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 4/3/2024 2:19 PM View: AP 1 Appendix III

Plant McDonough 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		98.6							
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							
9/6/2023				59.1	7	6.6			
9/7/2023	41	81.2	86.5				16.3	8.1	43.3
1/30/2024	38.2		80.8		6.1		13.7		
1/31/2024		76.6		60.1				8.8	
2/1/2024									44.4

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 4/3/2024 2:19 PM View: AP 1 Appendix III

Plant McDonough 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	
7/10/2018	
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

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 4/3/2024 2:19 PM View: AP 1 Appendix III

Plant McDonough Data: McDonough AP

	DGWC-68A
9/17/2021	
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	
9/6/2023	
9/7/2023	53.6
1/30/2024	
1/31/2024	54.6
2/1/2024	

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 4/3/2024 2:19 PM View: AP 1 Appendix III

Plant McDonough 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	20								
9/8/2016		9.2	7.4	6.2					
12/7/2016		8.9	7.4	6.1					
12/8/2016	18								
3/28/2017					3.6	3.8	3.7		
3/30/2017	20	8.7	7.7	6.3					
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	8.4	7.5	6.5				4.7	5.2
8/8/2017						2.2			
10/24/2017					3.2	2.4	2.7		
10/26/2017	21	8.3	8.2	6.4				4.2	6
11/15/2017					3.1		2.2	4.7	
2/27/2018					3.2	2.5			
3/1/2018		8.1	8.1	6.3					
3/2/2018	19.5							6.4	5.8
3/8/2018							2.4		
7/10/2018					2.5	1.9			
7/12/2018	19.9	7.7	8	5.8			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	7.7	8.1	5.8				5.9	6.1
3/12/2019					3.3	2.5			
3/13/2019	19.7	8.2	9.1	6.9			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	8.6	5.8					
3/2/2020					3	1.9			
3/4/2020	20.6								
3/9/2020		7.5	8.1	6			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		7.7	8	5.6					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

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 4/3/2024 2:19 PM View: AP 1 Appendix III

Plant McDonough 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		8.3							
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							
9/6/2023				5.4	7.8	2.2			
9/7/2023	13.6	7.2	8.2				1.7	5.1	9.2
1/30/2024	14.7		8.5		8.2		1.6		
1/31/2024		6.8		5.8				6	
2/1/2024									9.8

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 4/3/2024 2:19 PM View: AP 1 Appendix III

Plant McDonough 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	
7/10/2018	
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

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 4/3/2024 2:19 PM View: AP 1 Appendix III

Plant McDonough Data: McDonough AP

	DGWC-68A
9/17/2021	
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	
9/6/2023	
9/7/2023	3.9
1/30/2024	
1/31/2024	3.9
2/1/2024	

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 4/3/2024 2:19 PM View: AP 1 Appendix III

Plant McDonough 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			
7/10/2018					<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				

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 4/3/2024 2:19 PM View: AP 1 Appendix III

Plant McDonough Data: McDonough AP

	DGWC-40	DGWC-39	DGWC-38	DGWC-37	DGWA-71 (bg)	DGWA-53 (bg)	DGWC-67	DGWC-69	DGWC-68A
9/9/2021						0.099 (J)			
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							
9/6/2023				0.053 (J)	<0.1				
9/7/2023	0.14	0.092 (J)	0.072 (J)			0.082 (J)	<0.1	0.063 (J)	0.096 (J)
1/30/2024	0.12		0.078 (J)		<0.1	0.07 (J)			
1/31/2024		0.11		0.069 (J)				0.086 (J)	0.092 (J)
2/1/2024							0.057 (J)		

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 4/3/2024 2:19 PM View: AP 1 Appendix III

Plant McDonough 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	
7/10/2018	0.082 (J)
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	

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 4/3/2024 2:19 PM View: AP 1 Appendix III

Plant McDonough Data: McDonough AP

	DGWA-70A (bg)
9/9/2021	<0.1
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	
9/6/2023	<0.1
9/7/2023	
1/30/2024	
1/31/2024	
2/1/2024	

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: pH, Field (SU) Analysis Run 4/3/2024 2:19 PM View: AP 1 Appendix III

Plant McDonough 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	4.77								
9/8/2016		6.47	6.01	6.32					
12/7/2016		6.43	6.07	6.32					
12/8/2016	4.77								
3/28/2017					5.94	6.29			
3/30/2017	4.84	6.42	5.97	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	6.47	6.11	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	6.49	6.06				6.64	6.69	7.01
11/15/2017					5.77	6.5		6.22	
2/27/2018					5.66				
3/1/2018		6.37	6.05	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	6.45	6.05	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	6.49	6.07	6.36			6.23	6	6.5
3/12/2019					5.74				
3/13/2019	4.6	6.28	6.05	6.26		6	6.19	6.08	6.57
8/27/2019					5.87				
8/28/2019	4.68	6.41	5.98	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	6.35	6	6.26					
3/2/2020					5.77				
3/4/2020	4.64								
3/9/2020		6.37	6.12	6.34		6.41	6.23	6.12	6.6
8/11/2020					5.96				
8/13/2020	4.65	6.39	6.05	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		6.66	6.22	6.49			6.28		
3/12/2021						6.38			

Prediction Limit

Constituent: pH, Field (SU) Analysis Run 4/3/2024 2:19 PM View: AP 1 Appendix III

Plant McDonough Data: McDonough AP

	DGWC-40	DGWC-39	DGWC-38	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						
1/31/2023					5.78				
2/1/2023	4.66					6.42		6.12	6.6
2/2/2023			6.08	6.23			6.27		
2/3/2023		6.49							
9/6/2023				6.26	5.82	6.51			
9/7/2023	4.67	6.55	6.07				6.21	6.16	6.6
1/30/2024	4.64		5.94		5.79	6.28			
1/31/2024		6.58		6.32				6.26	6.62
2/1/2024							6.27		

Prediction Limit

Constituent: pH, Field (SU) Analysis Run 4/3/2024 2:19 PM View: AP 1 Appendix III

Plant McDonough 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 4/3/2024 2:19 PM View: AP 1 Appendix III

Plant McDonough 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	
9/6/2023	5.5
9/7/2023	
1/30/2024	
1/31/2024	
2/1/2024	

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 4/3/2024 2:19 PM View: AP 1 Appendix III

Plant McDonough 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		
7/10/2018					7.2	0.25 (J)			
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

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 4/3/2024 2:19 PM View: AP 1 Appendix III

Plant McDonough Data: McDonough AP

	DGWC-40	DGWC-39	DGWC-38	DGWC-37	DGWA-71 (bg)	DGWA-70A (bg)	DGWA-53 (bg)	DGWC-67	DGWC-69
9/17/2021		156							
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							
9/6/2023				83.4	7.2	<1			
9/7/2023	177	124	212				15.4	106	6.9
1/30/2024	179		220		7.9		13.4		
1/31/2024		106		98.4					7.2
2/1/2024								111	

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 4/3/2024 2:19 PM View: AP 1 Appendix III

Plant McDonough 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	
7/10/2018	
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

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 4/3/2024 2:19 PM View: AP 1 Appendix III

Plant McDonough Data: McDonough AP

	DGWC-68A
9/17/2021	
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	
9/6/2023	
9/7/2023	34.2
1/30/2024	
1/31/2024	33.2
2/1/2024	

Prediction Limit

Constituent: Total Dissolved Solids [TDS] (mg/L) Analysis Run 4/3/2024 2:19 PM View: AP 1 Appendix III

Plant McDonough Data: McDonough AP

	DGWC-39	DGWC-38	DGWC-37	DGWC-40	DGWA-71 (bg)	DGWA-70A (bg)	DGWA-53 (bg)	DGWC-67	DGWC-69
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								270	138
5/11/2017							241		
5/12/2017					92			287	243
5/15/2017						88			
6/15/2017						65	251		
6/16/2017					100			309	155
7/11/2017					59	25			
7/12/2017							218		
7/13/2017	508	504	312	386				275	122
8/8/2017						53			
10/24/2017					117	49	671 (O)		
10/26/2017	532	554	340	373				319	234
11/15/2017					90		241		188
2/27/2018					79	43			
3/1/2018	440	492	311						
3/2/2018				359				264	73
3/8/2018							213		
7/10/2018					88	80			
7/12/2018	463	478	290	365			198		
7/13/2018								297	95
11/6/2018					85	65			
11/7/2018							200		
11/8/2018	485	507	295	399				295	112
3/12/2019					74	43			
3/13/2019	526	487	286	351			201	278	95
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	209	115
9/22/2020					74	46	142		
9/23/2020				357				296	102
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					282	113

Prediction Limit

Constituent: Total Dissolved Solids [TDS] (mg/L) Analysis Run 4/3/2024 2:19 PM View: AP 1 Appendix III

Plant McDonough Data: McDonough AP

	DGWC-39	DGWC-38	DGWC-37	DGWC-40	DGWA-71 (bg)	DGWA-70A (bg)	DGWA-53 (bg)	DGWC-67	DGWC-69
9/17/2021	446								
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								
9/6/2023			324		80	46			
9/7/2023	421	526		359			123	337	106
1/30/2024		492		348	86		130		
1/31/2024	387		310						82
2/1/2024								313	

Prediction Limit

Constituent: Total Dissolved Solids [TDS] (mg/L) Analysis Run 4/3/2024 2:19 PM View: AP 1 Appendix III

Plant McDonough 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	
7/10/2018	
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

Prediction Limit

Constituent: Total Dissolved Solids [TDS] (mg/L) Analysis Run 4/3/2024 2:19 PM View: AP 1 Appendix III

Plant McDonough Data: McDonough AP

	DGWC-68A
9/17/2021	
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	
9/6/2023	
9/7/2023	253
1/30/2024	
1/31/2024	261
2/1/2024	

FIGURE E.

Appendix III Trend Tests - Significant Results

Plant McDonough Data: McDonough AP Printed 4/3/2024, 2:24 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Alpha	Method
Boron (mg/L)	**DGWC-39**	**-0.135**	**-99**	**-74**	**Yes**	**19**	**0**	**n/a**	**0.01**	**NP**
Boron (mg/L)	**DGWC-40**	**-0.02833**	**-93**	**-74**	**Yes**	**19**	**0**	**n/a**	**0.01**	**NP**
Boron (mg/L)	**DGWC-67**	**0.1008**	**91**	**74**	**Yes**	**19**	**0**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**DGWA-53 (bg)**	**-3.309**	**-123**	**-74**	**Yes**	**19**	**0**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**DGWC-68A**	**1.246**	**91**	**74**	**Yes**	**19**	**0**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	**DGWA-53 (bg)**	**-0.1368**	**-123**	**-81**	**Yes**	**20**	**0**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	**DGWA-71 (bg)**	**0.6551**	**91**	**81**	**Yes**	**20**	**0**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	**DGWC-38**	**0.1217**	**78**	**74**	**Yes**	**19**	**0**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	**DGWC-40**	**-0.7804**	**-108**	**-74**	**Yes**	**19**	**0**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	**DGWC-67**	**0.6131**	**149**	**74**	**Yes**	**19**	**0**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**DGWA-71 (bg)**	**-0.5658**	**-103**	**-81**	**Yes**	**20**	**0**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**DGWC-38**	**-7.426**	**-91**	**-74**	**Yes**	**19**	**0**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**DGWC-39**	**-20.04**	**-126**	**-74**	**Yes**	**19**	**0**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**DGWC-40**	**-8.723**	**-97**	**-74**	**Yes**	**19**	**0**	**n/a**	**0.01**	**NP**
Total Dissolved Solids [TDS] (mg/L)	**DGWA-53 (bg)**	**-18.25**	**-118**	**-74**	**Yes**	**19**	**0**	**n/a**	**0.01**	**NP**
Total Dissolved Solids [TDS] (mg/L)	**DGWC-39**	**-17.74**	**-105**	**-74**	**Yes**	**19**	**0**	**n/a**	**0.01**	**NP**

Appendix III Trend Tests - All Results

Plant McDonough Data: McDonough AP Printed 4/3/2024, 2:24 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Alpha	Method
Boron (mg/L)	DGWA-53 (bg)	-0.003408	-71	-74	No	19	0	n/a	0.01	NP
Boron (mg/L)	DGWA-70A (bg)	0	18	74	No	19	47.37	n/a	0.01	NP
Boron (mg/L)	DGWA-71 (bg)	0.0007741	34	74	No	19	21.05	n/a	0.01	NP
Boron (mg/L)	DGWC-37	-0.01938	-21	-74	No	19	0	n/a	0.01	NP
Boron (mg/L)	DGWC-38	-0.0398	-59	-74	No	19	0	n/a	0.01	NP
Boron (mg/L)	**DGWC-39**	**-0.135**	**-99**	**-74**	**Yes**	**19**	**0**	**n/a**	**0.01**	**NP**
Boron (mg/L)	**DGWC-40**	**-0.02833**	**-93**	**-74**	**Yes**	**19**	**0**	**n/a**	**0.01**	**NP**
Boron (mg/L)	**DGWC-67**	**0.1008**	**91**	**74**	**Yes**	**19**	**0**	**n/a**	**0.01**	**NP**
Boron (mg/L)	DGWC-68A	-0.02227	-27	-74	No	19	0	n/a	0.01	NP
Calcium (mg/L)	**DGWA-53 (bg)**	**-3.309**	**-123**	**-74**	**Yes**	**19**	**0**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	DGWA-70A (bg)	0.05458	18	74	No	19	5.263	n/a	0.01	NP
Calcium (mg/L)	DGWA-71 (bg)	-0.2452	-41	-74	No	19	5.263	n/a	0.01	NP
Calcium (mg/L)	DGWC-37	0.8488	45	74	No	19	0	n/a	0.01	NP
Calcium (mg/L)	DGWC-38	1.089	41	74	No	19	0	n/a	0.01	NP
Calcium (mg/L)	DGWC-39	-1.104	-32	-74	No	19	0	n/a	0.01	NP
Calcium (mg/L)	DGWC-67	0.7449	74	74	No	19	0	n/a	0.01	NP
Calcium (mg/L)	**DGWC-68A**	**1.246**	**91**	**74**	**Yes**	**19**	**0**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	**DGWA-53 (bg)**	**-0.1368**	**-123**	**-81**	**Yes**	**20**	**0**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	DGWA-70A (bg)	-0.02694	-40	-74	No	19	0	n/a	0.01	NP
Chloride (mg/L)	**DGWA-71 (bg)**	**0.6551**	**91**	**81**	**Yes**	**20**	**0**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	**DGWC-38**	**0.1217**	**78**	**74**	**Yes**	**19**	**0**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	**DGWC-40**	**-0.7804**	**-108**	**-74**	**Yes**	**19**	**0**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	**DGWC-67**	**0.6131**	**149**	**74**	**Yes**	**19**	**0**	**n/a**	**0.01**	**NP**
pH, Field (SU)	DGWA-53 (bg)	0.02221	32	92	No	22	0	n/a	0.01	NP
pH, Field (SU)	DGWA-70A (bg)	-0.02199	-46	-81	No	20	0	n/a	0.01	NP
pH, Field (SU)	DGWA-71 (bg)	0.004314	12	92	No	22	0	n/a	0.01	NP
pH, Field (SU)	DGWC-40	-0.02027	-69	-87	No	21	0	n/a	0.01	NP
Sulfate (mg/L)	DGWA-53 (bg)	-0.2974	-16	-81	No	20	0	n/a	0.01	NP
Sulfate (mg/L)	DGWA-70A (bg)	0	-23	-74	No	19	47.37	n/a	0.01	NP
Sulfate (mg/L)	**DGWA-71 (bg)**	**-0.5658**	**-103**	**-81**	**Yes**	**20**	**0**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	DGWC-37	-1.408	-40	-68	No	18	0	n/a	0.01	NP
Sulfate (mg/L)	**DGWC-38**	**-7.426**	**-91**	**-74**	**Yes**	**19**	**0**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**DGWC-39**	**-20.04**	**-126**	**-74**	**Yes**	**19**	**0**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**DGWC-40**	**-8.723**	**-97**	**-74**	**Yes**	**19**	**0**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	DGWC-67	0	3	74	No	19	0	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	**DGWA-53 (bg)**	**-18.25**	**-118**	**-74**	**Yes**	**19**	**0**	**n/a**	**0.01**	**NP**
Total Dissolved Solids [TDS] (mg/L)	DGWA-70A (bg)	0	-4	-74	No	19	0	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	DGWA-71 (bg)	-1.554	-46	-81	No	20	0	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	DGWC-37	1.652	16	74	No	19	0	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	DGWC-38	1.133	12	74	No	19	0	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	**DGWC-39**	**-17.74**	**-105**	**-74**	**Yes**	**19**	**0**	**n/a**	**0.01**	**NP**
Total Dissolved Solids [TDS] (mg/L)	DGWC-40	-2.799	-30	-68	No	18	0	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	DGWC-67	1.59	13	74	No	19	0	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	DGWC-68A	-4.109	-52	-74	No	19	0	n/a	0.01	NP

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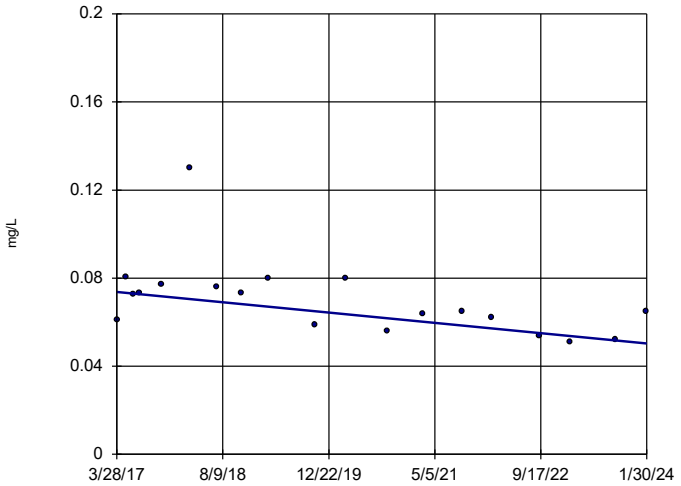
Sen's Slope Estimator

DGWA-53 (bg)



n = 19

Slope = -0.003408 units per year.

Mann-Kendall statistic = -71
critical = -74

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 4/3/2024 2:23 PM View: AP 1 Appendix III Trend Tests
Plant McDonough Data: McDonough AP

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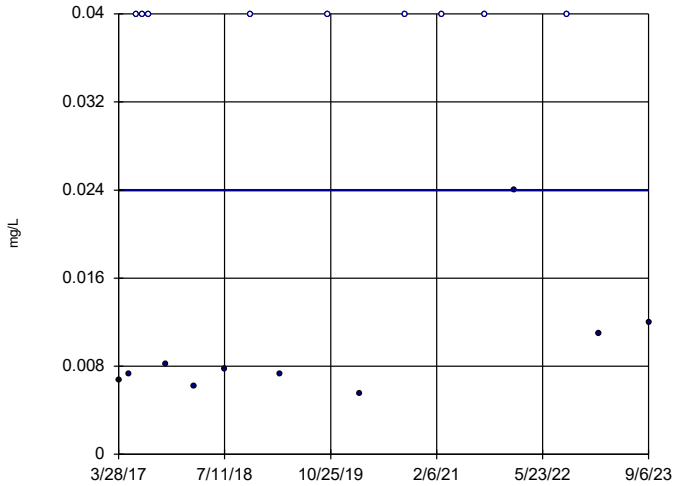
Sen's Slope Estimator

DGWA-70A (bg)



n = 19

Slope = 0 units per year.

Mann-Kendall statistic = 18
critical = 74

Trend not significant at 99% confidence level (α = 0.005 per tail).

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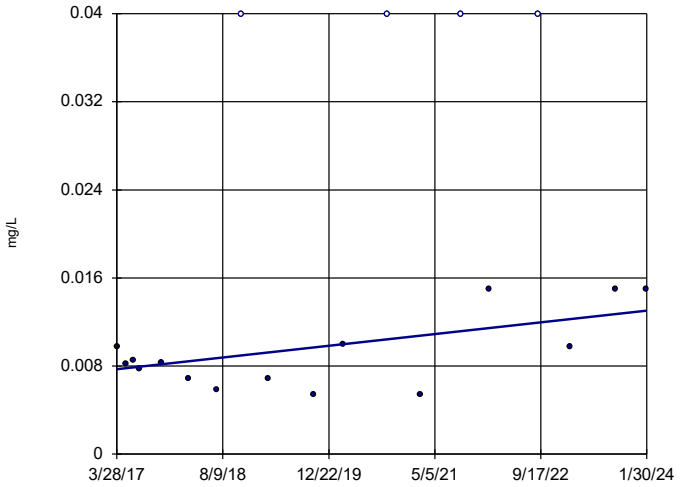
Sen's Slope Estimator

DGWA-71 (bg)



n = 19

Slope = 0.0007741 units per year.

Mann-Kendall statistic = 34
critical = 74

Trend not significant at 99% confidence level (α = 0.005 per tail).

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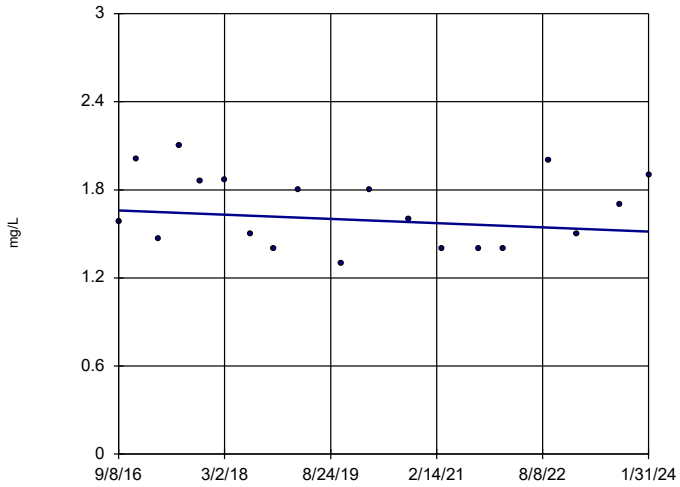
Sen's Slope Estimator

DGWC-37



n = 19

Slope = -0.01938 units per year.

Mann-Kendall statistic = -21
critical = -74

Trend not significant at 99% confidence level (α = 0.005 per tail).

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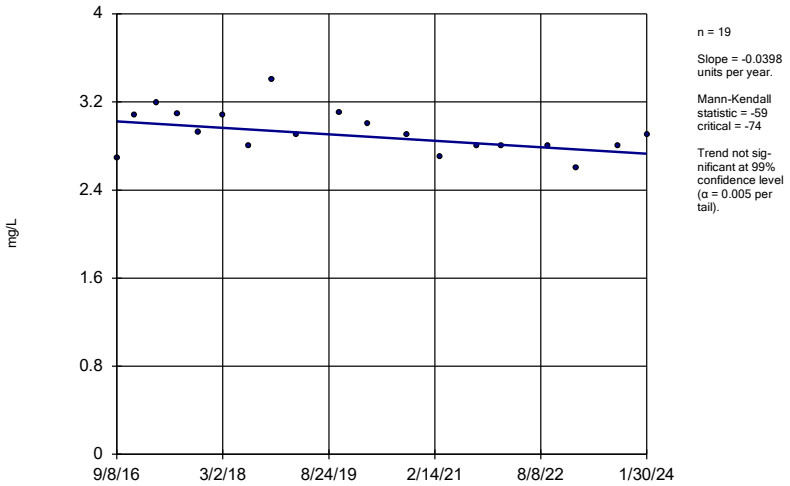
Sen's Slope Estimator

DGWC-38



n = 19

Slope = -0.0398 units per year.

Mann-Kendall statistic = -59
critical = -74

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 4/3/2024 2:23 PM View: AP 1 Appendix III Trend Tests
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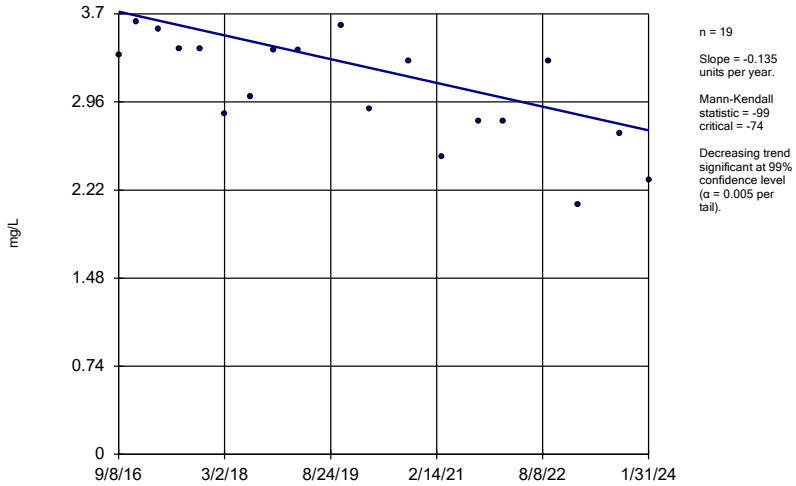
Sen's Slope Estimator

DGWC-39



n = 19

Slope = -0.135 units per year.

Mann-Kendall statistic = -99
critical = -74

Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 4/3/2024 2:23 PM View: AP 1 Appendix III Trend Tests
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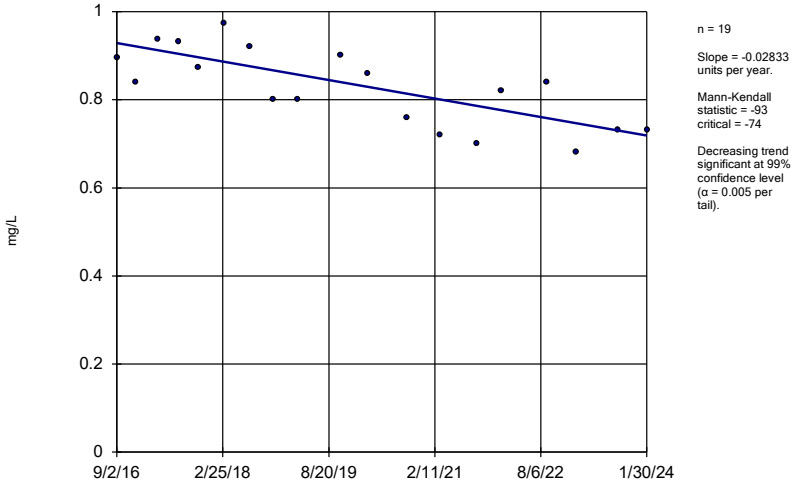
Sen's Slope Estimator

DGWC-40



n = 19

Slope = -0.02833 units per year.

Mann-Kendall statistic = -93
critical = -74

Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 4/3/2024 2:23 PM View: AP 1 Appendix III Trend Tests
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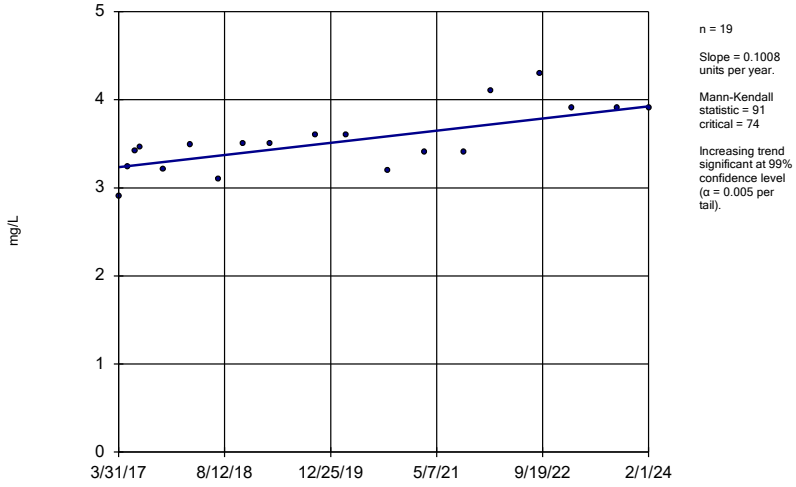
Sen's Slope Estimator

DGWC-67



n = 19

Slope = 0.1008 units per year.

Mann-Kendall statistic = 91
critical = 74

Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 4/3/2024 2:23 PM View: AP 1 Appendix III Trend Tests
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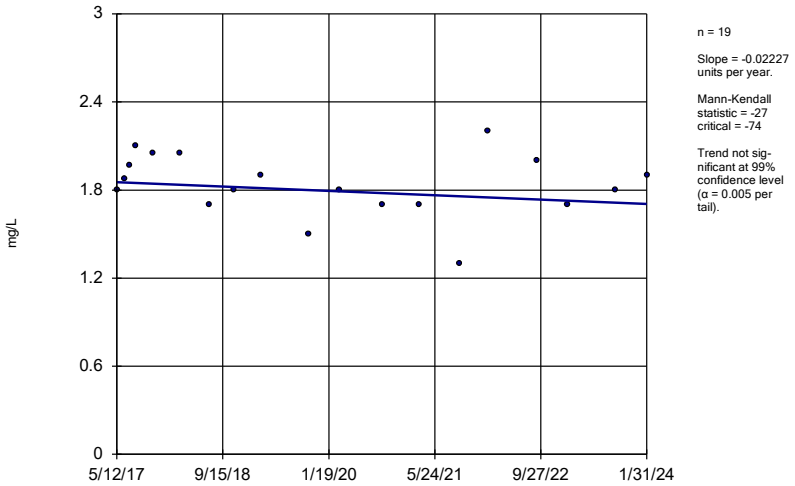
Sen's Slope Estimator

DGWC-68A



n = 19

Slope = -0.02227 units per year.

Mann-Kendall statistic = -27
critical = -74

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 4/3/2024 2:23 PM View: AP 1 Appendix III Trend Tests
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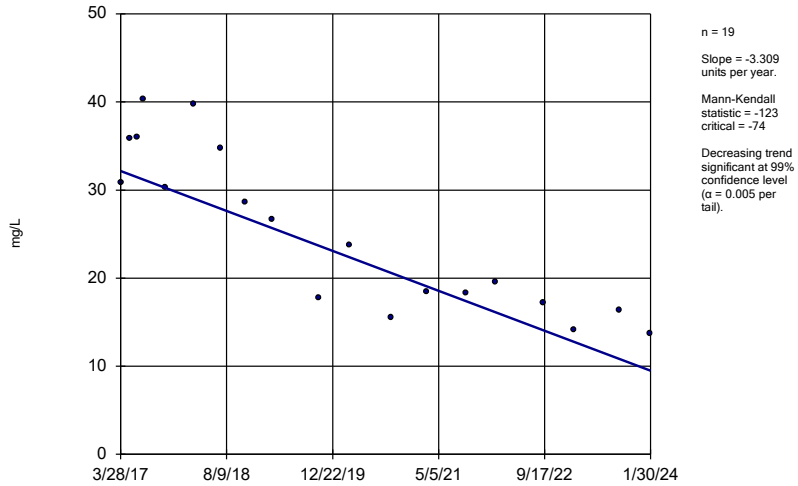
Sen's Slope Estimator

DGWA-53 (bg)



n = 19

Slope = -3.309 units per year.

Mann-Kendall statistic = -123
critical = -74

Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 4/3/2024 2:23 PM View: AP 1 Appendix III Trend Tests
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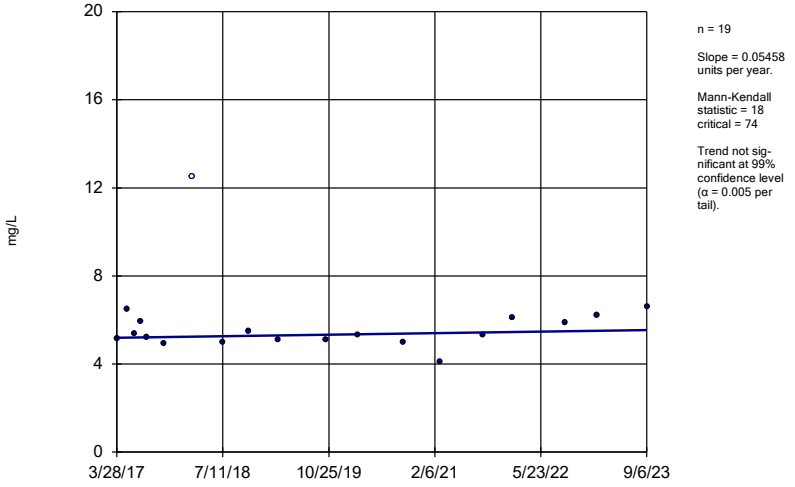
Sen's Slope Estimator

DGWA-70A (bg)



n = 19

Slope = 0.05458 units per year.

Mann-Kendall statistic = 18
critical = 74

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 4/3/2024 2:23 PM View: AP 1 Appendix III Trend Tests
Plant McDonough Data: McDonough AP

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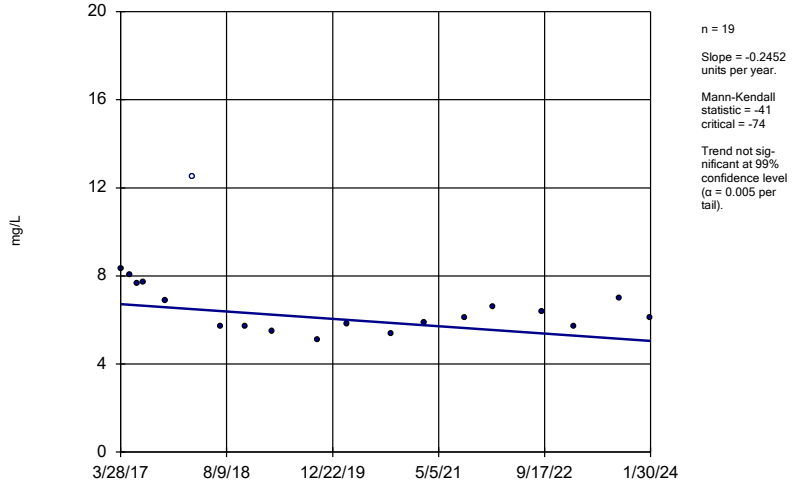
Hollow symbols indicate censored values.

Sen's Slope Estimator

DGWA-71 (bg)



n = 19

Slope = -0.2452 units per year.

Mann-Kendall statistic = -41
critical = -74

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 4/3/2024 2:23 PM View: AP 1 Appendix III Trend Tests
Plant McDonough Data: McDonough AP

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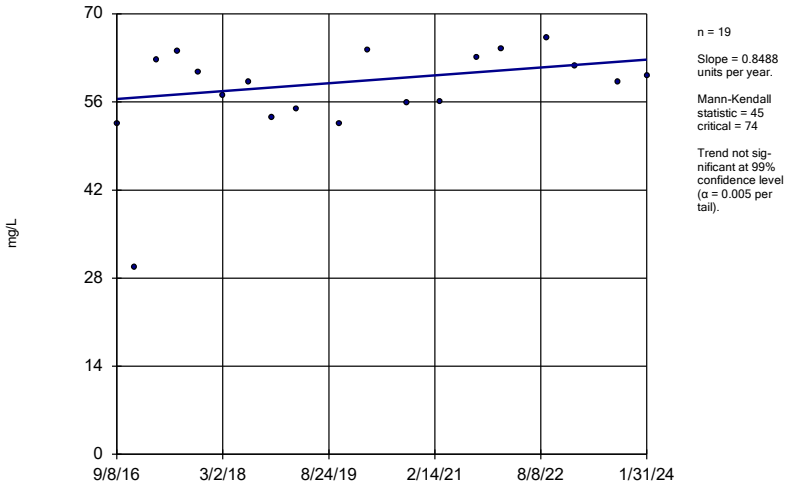
Sen's Slope Estimator

DGWC-37



n = 19

Slope = 0.8488 units per year.

Mann-Kendall statistic = 45 critical = 74

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 4/3/2024 2:23 PM View: AP 1 Appendix III Trend Tests
Plant McDonough Data: McDonough AP

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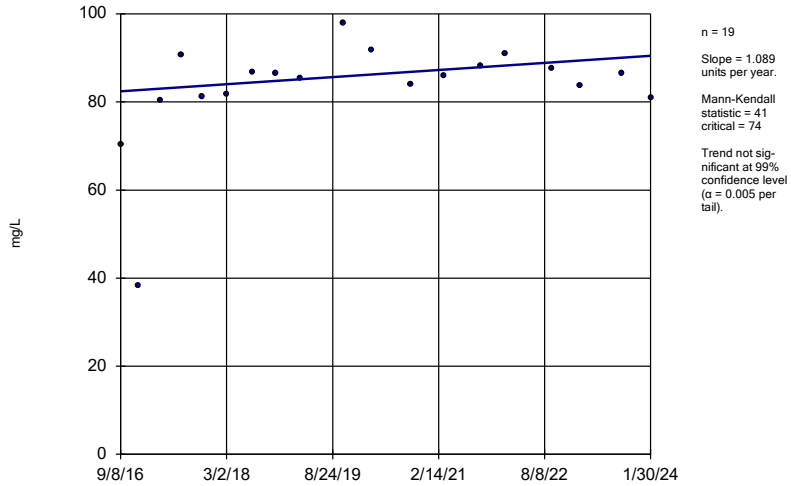
Sen's Slope Estimator

DGWC-38



n = 19

Slope = 1.089 units per year.

Mann-Kendall statistic = 41 critical = 74

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 4/3/2024 2:23 PM View: AP 1 Appendix III Trend Tests
Plant McDonough Data: McDonough AP

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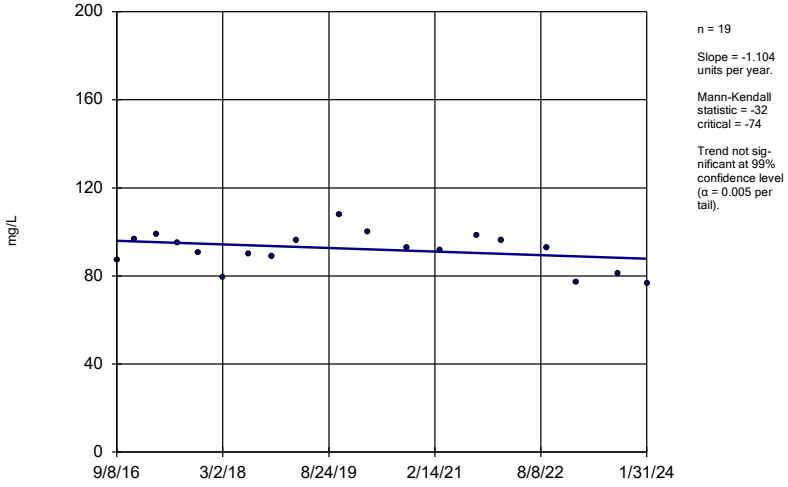
Sen's Slope Estimator

DGWC-39



n = 19

Slope = -1.104 units per year.

Mann-Kendall statistic = -32 critical = -74

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 4/3/2024 2:23 PM View: AP 1 Appendix III Trend Tests
Plant McDonough Data: McDonough AP

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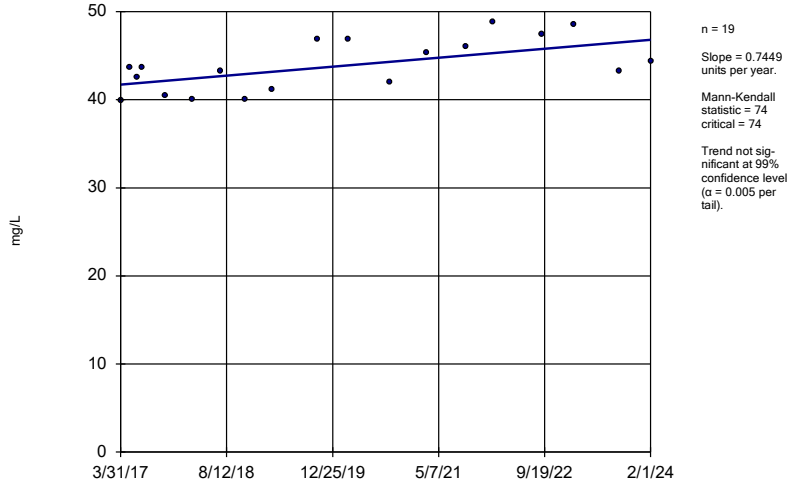
Sen's Slope Estimator

DGWC-67



n = 19

Slope = 0.7449 units per year.

Mann-Kendall statistic = 74 critical = 74

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 4/3/2024 2:23 PM View: AP 1 Appendix III Trend Tests
Plant McDonough Data: McDonough AP

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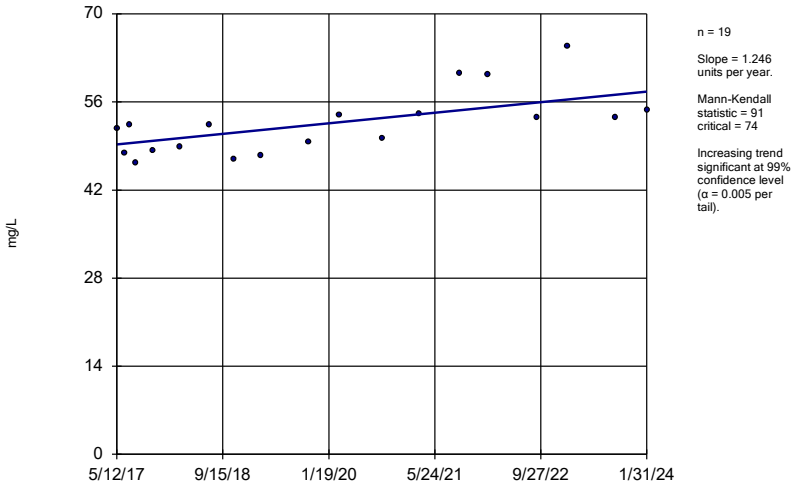
Sen's Slope Estimator

DGWC-68A



n = 19

Slope = 1.246 units per year.

Mann-Kendall statistic = 91 critical = 74

Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 4/3/2024 2:23 PM View: AP 1 Appendix III Trend Tests
Plant McDonough Data: McDonough AP

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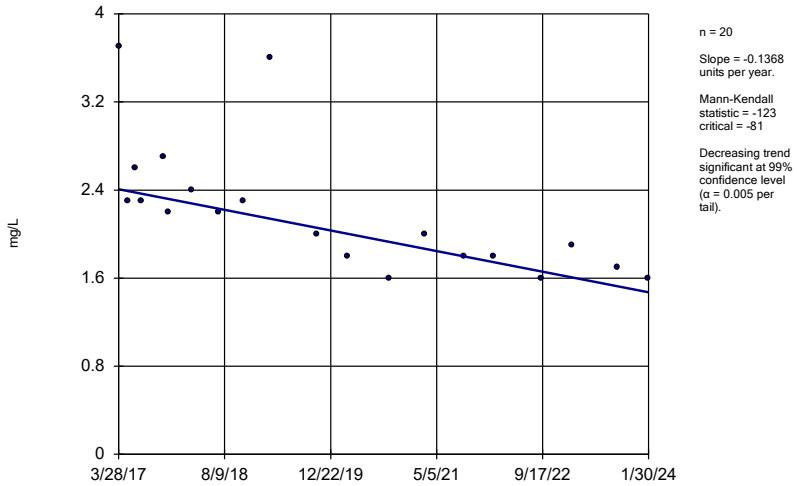
Sen's Slope Estimator

DGWA-53 (bg)



n = 20

Slope = -0.1368 units per year.

Mann-Kendall statistic = -123 critical = -81

Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride Analysis Run 4/3/2024 2:23 PM View: AP 1 Appendix III Trend Tests
Plant McDonough Data: McDonough AP

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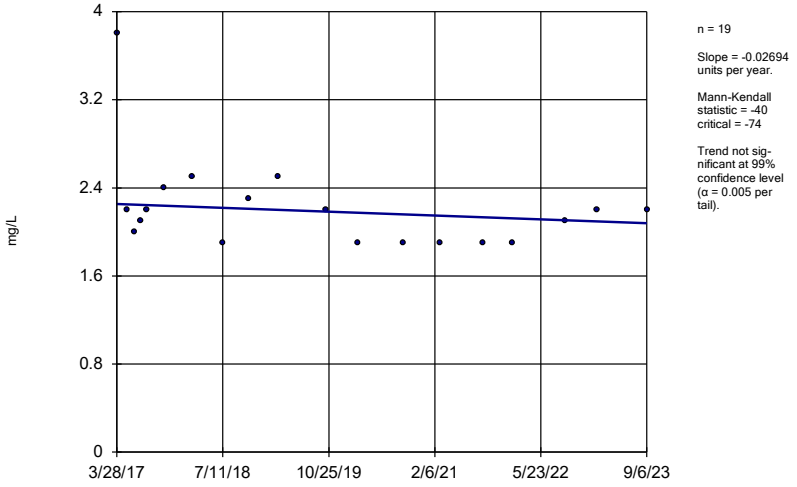
Sen's Slope Estimator

DGWA-70A (bg)



n = 19

Slope = -0.02694 units per year.

Mann-Kendall statistic = -40 critical = -74

Trend not sig-nificant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride Analysis Run 4/3/2024 2:23 PM View: AP 1 Appendix III Trend Tests
Plant McDonough Data: McDonough AP

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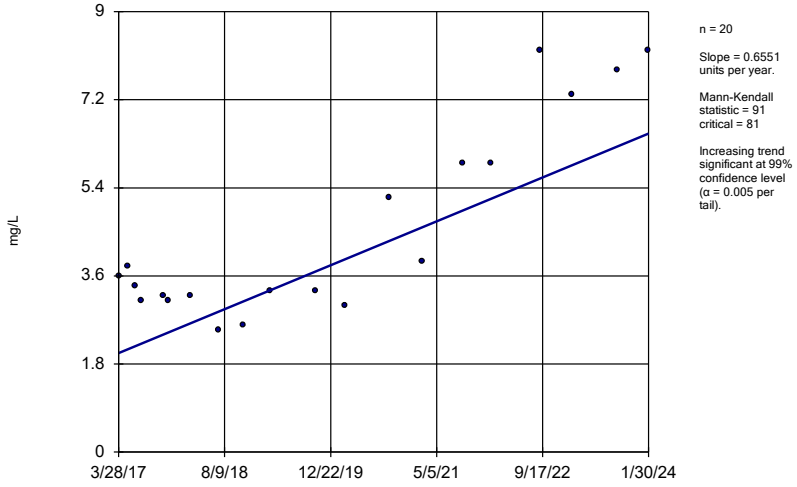
Sen's Slope Estimator

DGWA-71 (bg)



n = 20

Slope = 0.6551 units per year.

Mann-Kendall statistic = 91 critical = 81

Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride Analysis Run 4/3/2024 2:23 PM View: AP 1 Appendix III Trend Tests
Plant McDonough Data: McDonough AP

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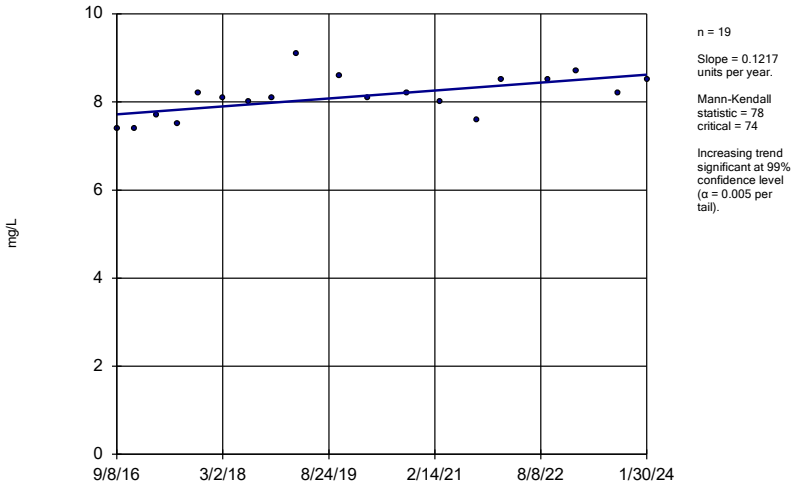
Sen's Slope Estimator

DGWC-38



n = 19

Slope = 0.1217 units per year.

Mann-Kendall statistic = 78 critical = 74

Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride Analysis Run 4/3/2024 2:23 PM View: AP 1 Appendix III Trend Tests
Plant McDonough Data: McDonough AP

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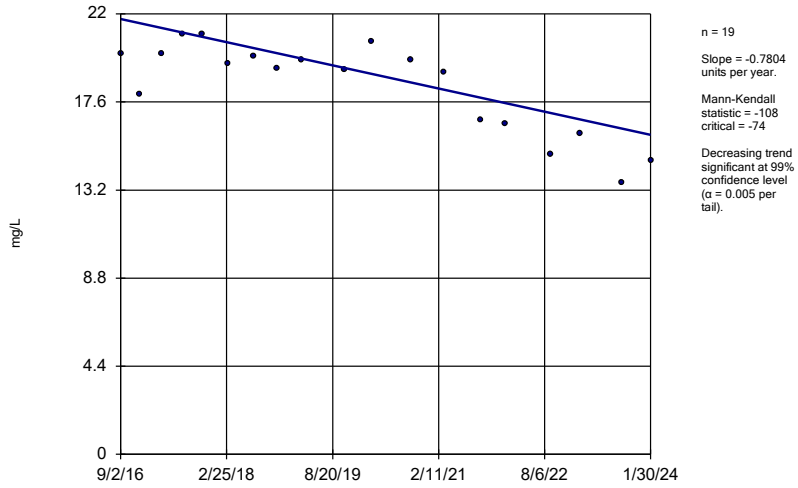
Sen's Slope Estimator

DGWC-40



n = 19

Slope = -0.7804 units per year.

Mann-Kendall statistic = -108 critical = -74

Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride Analysis Run 4/3/2024 2:23 PM View: AP 1 Appendix III Trend Tests
Plant McDonough Data: McDonough AP

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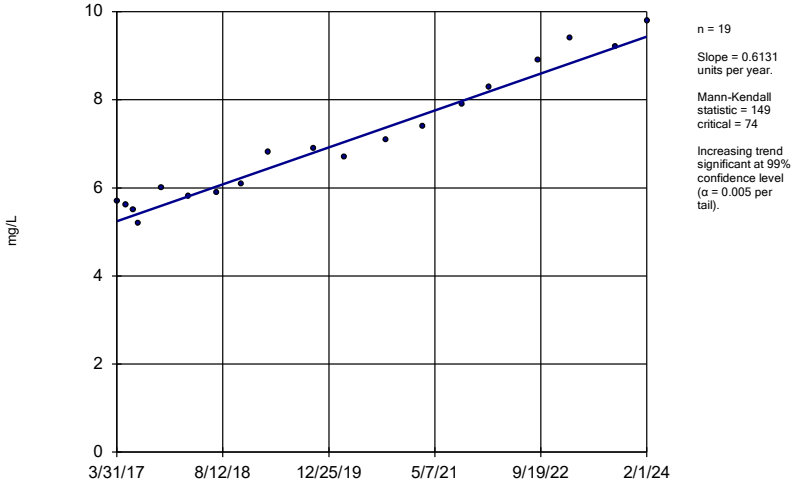
Sen's Slope Estimator

DGWC-67



n = 19

Slope = 0.6131 units per year.

Mann-Kendall statistic = 149 critical = 74

Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride Analysis Run 4/3/2024 2:23 PM View: AP 1 Appendix III Trend Tests
Plant McDonough Data: McDonough AP

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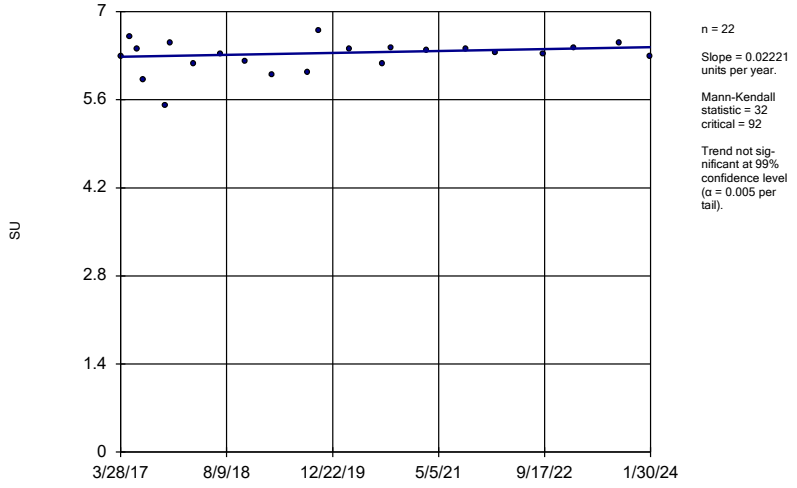
Sen's Slope Estimator

DGWA-53 (bg)



n = 22

Slope = 0.02221 units per year.

Mann-Kendall statistic = 32 critical = 92

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: pH, Field Analysis Run 4/3/2024 2:23 PM View: AP 1 Appendix III Trend Tests
Plant McDonough Data: McDonough AP

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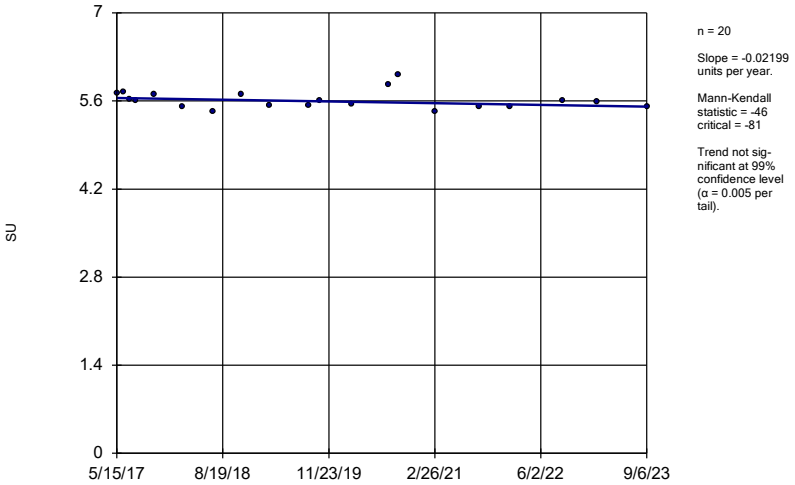
Sen's Slope Estimator

DGWA-70A (bg)



n = 20

Slope = -0.02199 units per year.

Mann-Kendall statistic = -46
critical = -81

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: pH, Field Analysis Run 4/3/2024 2:23 PM View: AP 1 Appendix III Trend Tests
Plant McDonough Data: McDonough AP

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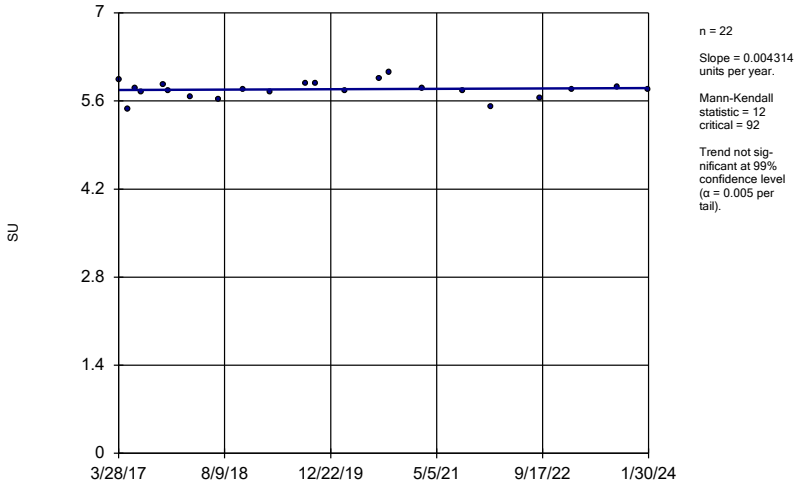
Sen's Slope Estimator

DGWA-71 (bg)



n = 22

Slope = 0.004314 units per year.

Mann-Kendall statistic = 12
critical = 92

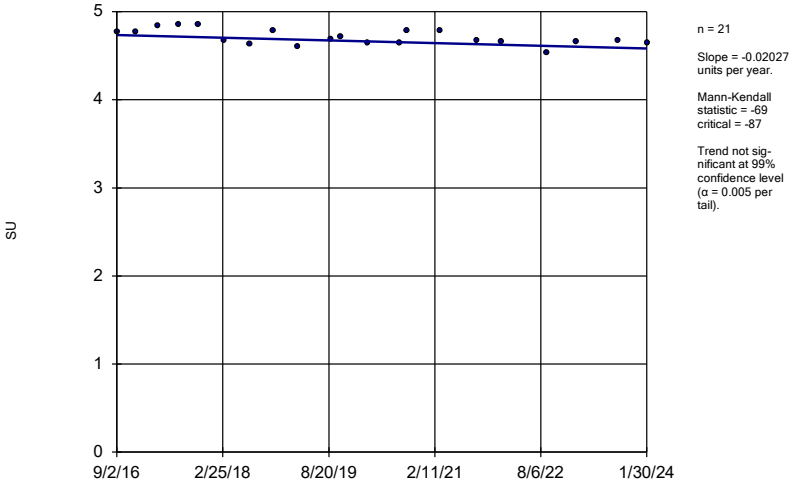
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: pH, Field Analysis Run 4/3/2024 2:23 PM View: AP 1 Appendix III Trend Tests
Plant McDonough Data: McDonough AP

Sanitas™ v.10.0.16b Software licensed to . UG

Sen's Slope Estimator

DGWC-40



n = 21

Slope = -0.02027 units per year.

Mann-Kendall statistic = -69
critical = -87

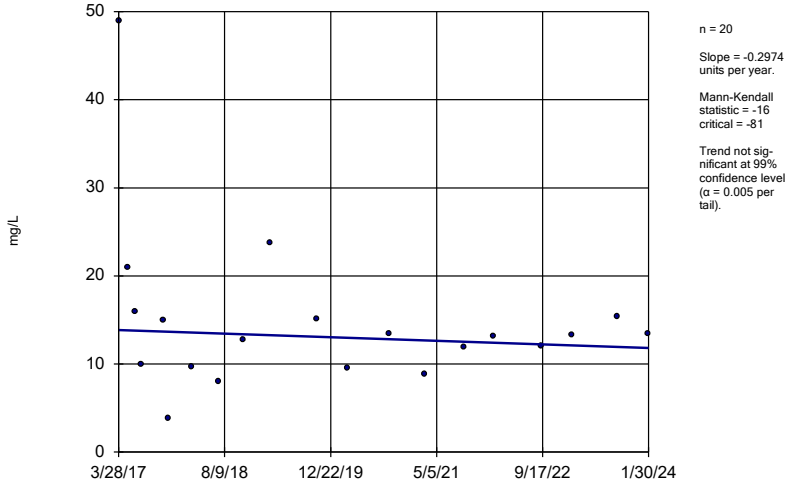
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: pH, Field Analysis Run 4/3/2024 2:23 PM View: AP 1 Appendix III Trend Tests
Plant McDonough Data: McDonough AP

Sanitas™ v.10.0.16b Software licensed to . UG

Sen's Slope Estimator

DGWA-53 (bg)



n = 20

Slope = -0.2974 units per year.

Mann-Kendall statistic = -16
critical = -81

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 4/3/2024 2:23 PM View: AP 1 Appendix III Trend Tests
Plant McDonough Data: McDonough AP

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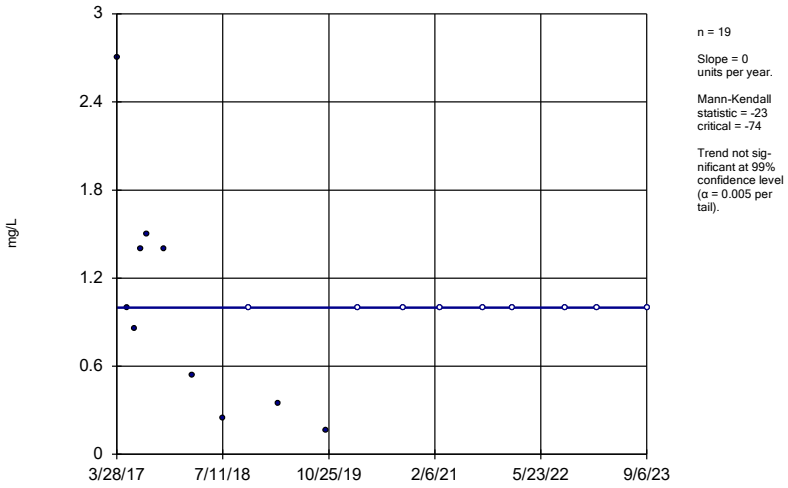
Hollow symbols indicate censored values.

Sen's Slope Estimator

DGWA-70A (bg)



n = 19

Slope = 0 units per year.

Mann-Kendall statistic = -23 critical = -74

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 4/3/2024 2:23 PM View: AP 1 Appendix III Trend Tests

Plant McDonough Data: McDonough AP

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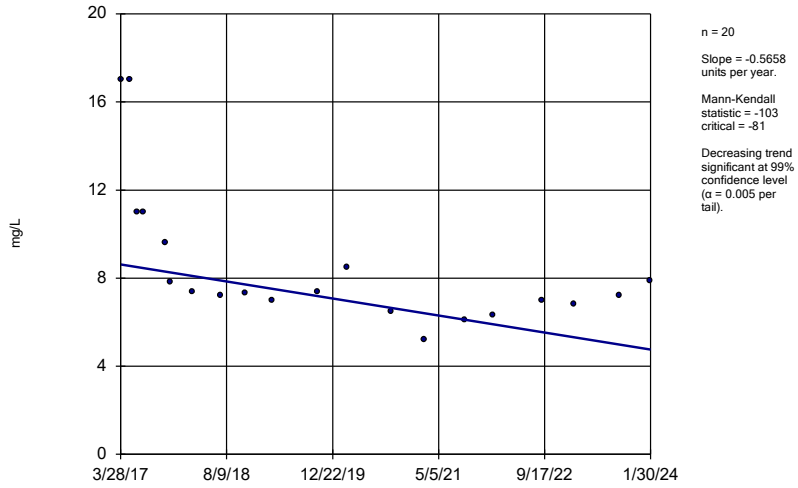
Sen's Slope Estimator

DGWA-71 (bg)



n = 20

Slope = -0.5658 units per year.

Mann-Kendall statistic = -103 critical = -81

Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 4/3/2024 2:23 PM View: AP 1 Appendix III Trend Tests

Plant McDonough Data: McDonough AP

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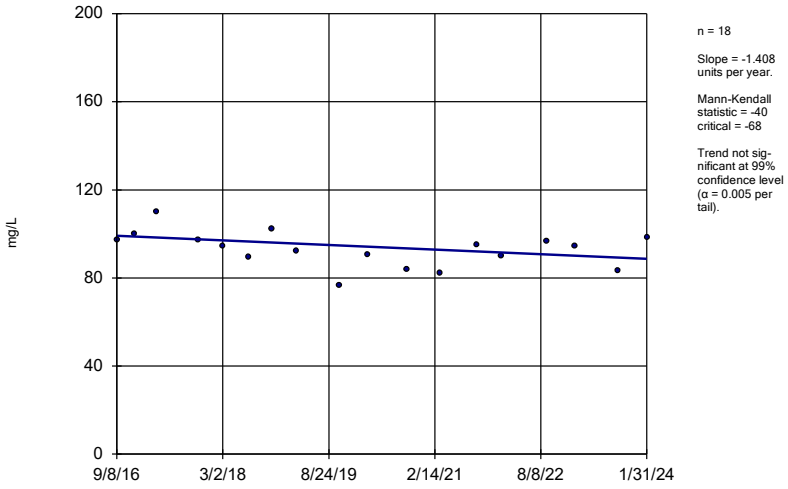
Sen's Slope Estimator

DGWC-37



n = 18

Slope = -1.408 units per year.

Mann-Kendall statistic = -40 critical = -68

Trend not significant at 99% confidence level (α = 0.005 per tail).

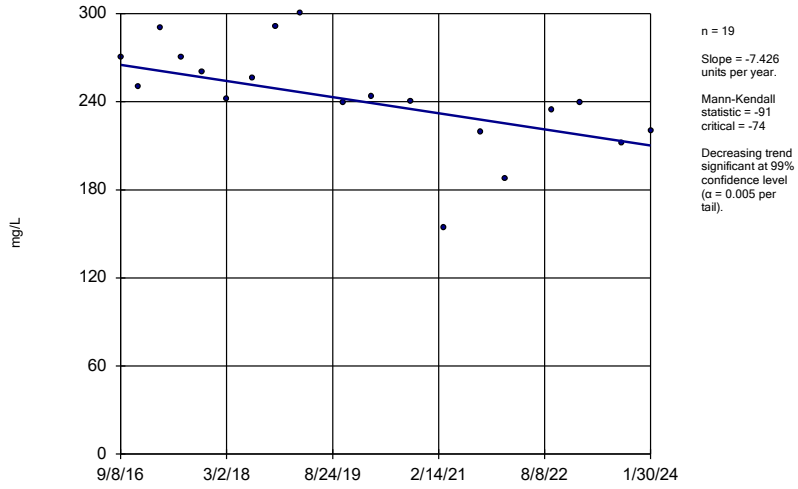
Constituent: Sulfate Analysis Run 4/3/2024 2:23 PM View: AP 1 Appendix III Trend Tests

Plant McDonough Data: McDonough AP

Sanitas™ v.10.0.16b Software licensed to . UG

Sen's Slope Estimator

DGWC-38



n = 19

Slope = -7.426 units per year.

Mann-Kendall statistic = -91 critical = -74

Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 4/3/2024 2:23 PM View: AP 1 Appendix III Trend Tests

Plant McDonough Data: McDonough AP

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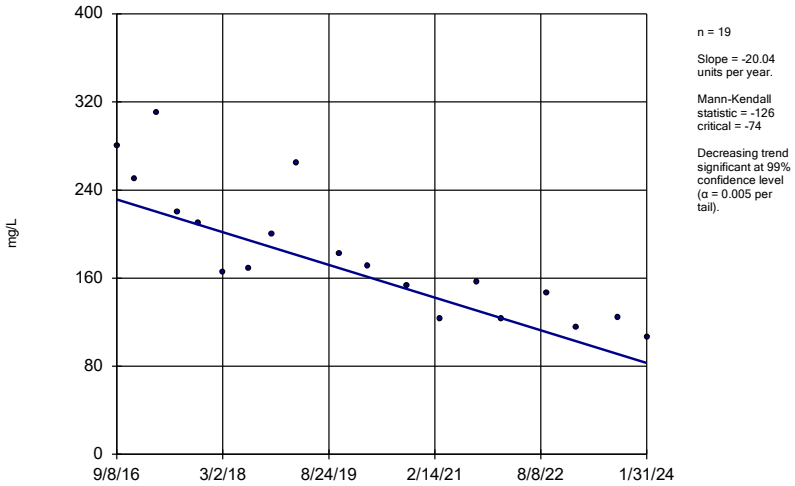
Sen's Slope Estimator

DGWC-39



n = 19

Slope = -20.04 units per year.

Mann-Kendall statistic = -126 critical = -74

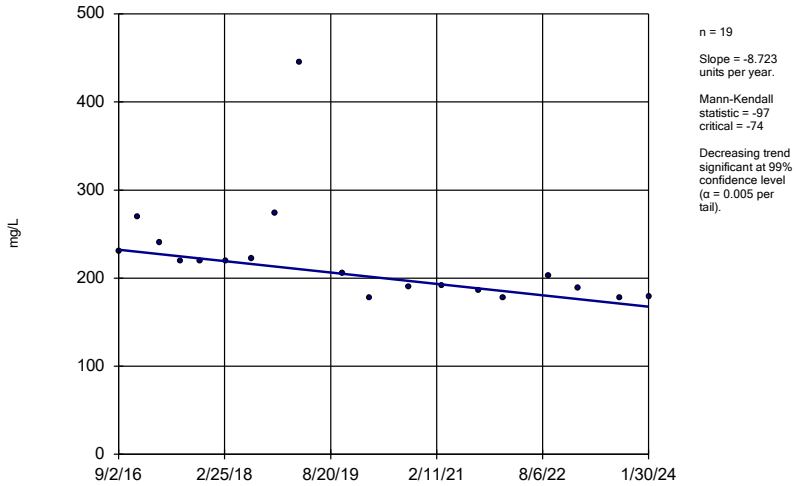
Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 4/3/2024 2:23 PM View: AP 1 Appendix III Trend Tests
Plant McDonough Data: McDonough AP

Sanitas™ v.10.0.16b Software licensed to . UG

Sen's Slope Estimator

DGWC-40



n = 19

Slope = -8.723 units per year.

Mann-Kendall statistic = -97 critical = -74

Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 4/3/2024 2:23 PM View: AP 1 Appendix III Trend Tests
Plant McDonough Data: McDonough AP

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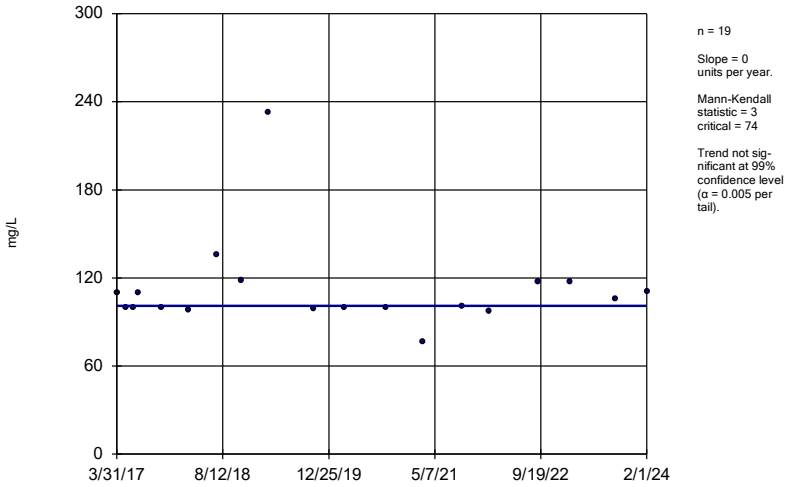
Sen's Slope Estimator

DGWC-67



n = 19

Slope = 0 units per year.

Mann-Kendall statistic = 3 critical = 74

Trend not sig-nificant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 4/3/2024 2:23 PM View: AP 1 Appendix III Trend Tests
Plant McDonough Data: McDonough AP

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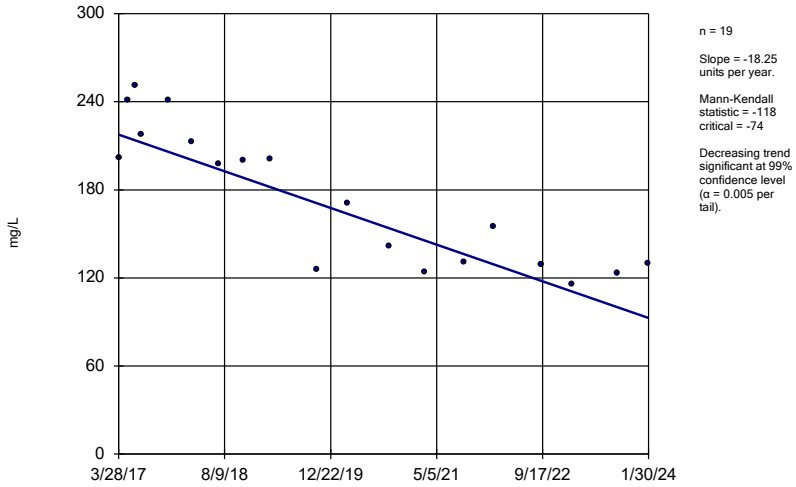
Sen's Slope Estimator

DGWA-53 (bg)



n = 19

Slope = -18.25 units per year.

Mann-Kendall statistic = -118 critical = -74

Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Total Dissolved Solids [TDS] Analysis Run 4/3/2024 2:23 PM View: AP 1 Appendix III Trend T
Plant McDonough Data: McDonough AP

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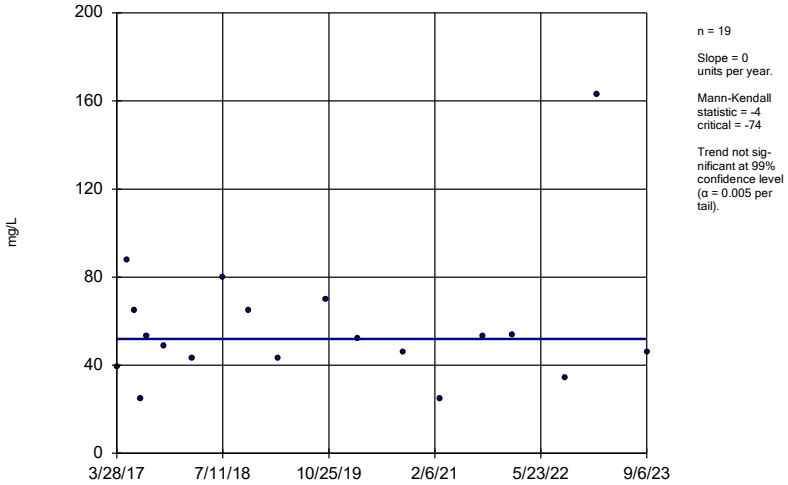
Sen's Slope Estimator

DGWA-70A (bg)



n = 19

Slope = 0 units per year.

Mann-Kendall statistic = -4 critical = -74

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Total Dissolved Solids [TDS] Analysis Run 4/3/2024 2:23 PM View: AP 1 Appendix III Trend T

Plant McDonough Data: McDonough AP

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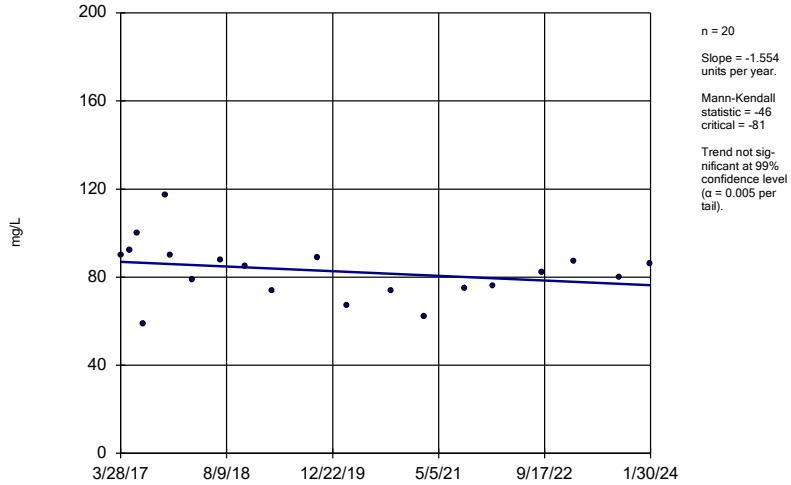
Sen's Slope Estimator

DGWA-71 (bg)



n = 20

Slope = -1.554 units per year.

Mann-Kendall statistic = -46 critical = -81

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Total Dissolved Solids [TDS] Analysis Run 4/3/2024 2:23 PM View: AP 1 Appendix III Trend T

Plant McDonough Data: McDonough AP

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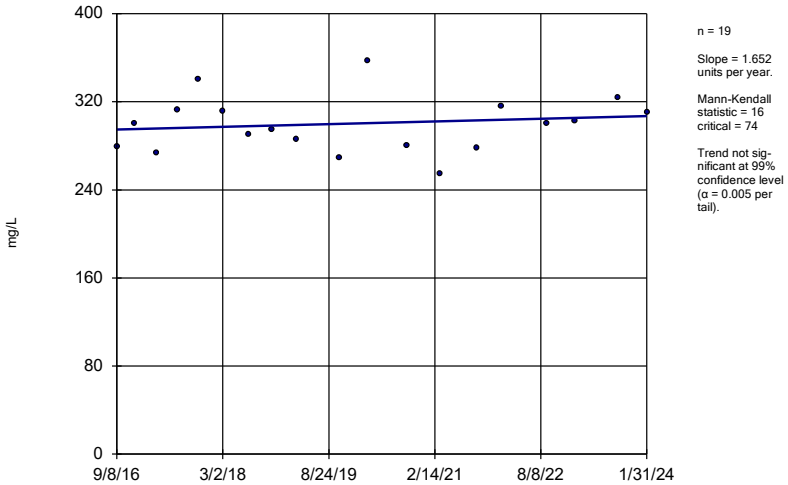
Sen's Slope Estimator

DGWC-37



n = 19

Slope = 1.652 units per year.

Mann-Kendall statistic = 16 critical = 74

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Total Dissolved Solids [TDS] Analysis Run 4/3/2024 2:23 PM View: AP 1 Appendix III Trend T

Plant McDonough Data: McDonough AP

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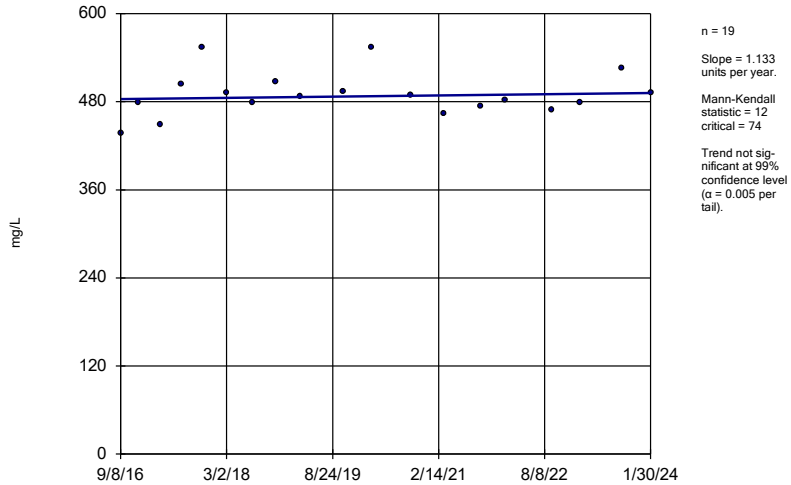
Sen's Slope Estimator

DGWC-38



n = 19

Slope = 1.133 units per year.

Mann-Kendall statistic = 12 critical = 74

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Total Dissolved Solids [TDS] Analysis Run 4/3/2024 2:23 PM View: AP 1 Appendix III Trend T

Plant McDonough Data: McDonough AP

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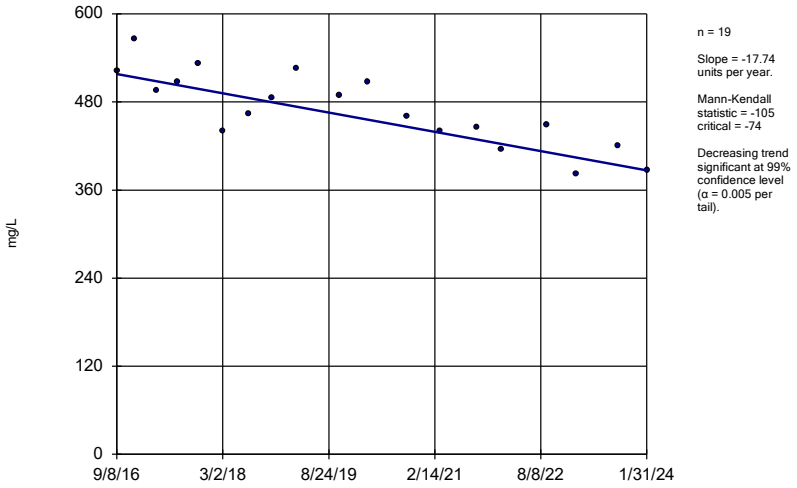
Sen's Slope Estimator

DGWC-39



n = 19

Slope = -17.74 units per year.

Mann-Kendall statistic = -105 critical = -74

Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Total Dissolved Solids [TDS] Analysis Run 4/3/2024 2:23 PM View: AP 1 Appendix III Trend T
Plant McDonough Data: McDonough AP

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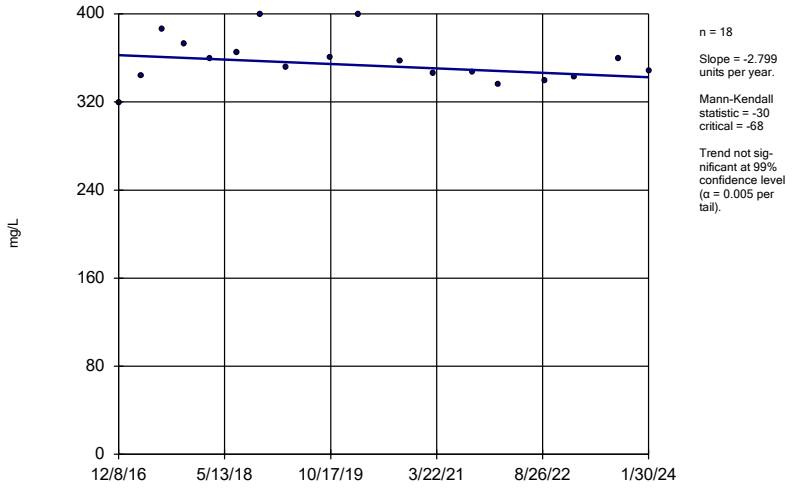
Sen's Slope Estimator

DGWC-40



n = 18

Slope = -2.799 units per year.

Mann-Kendall statistic = -30 critical = -68

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Total Dissolved Solids [TDS] Analysis Run 4/3/2024 2:23 PM View: AP 1 Appendix III Trend T
Plant McDonough Data: McDonough AP

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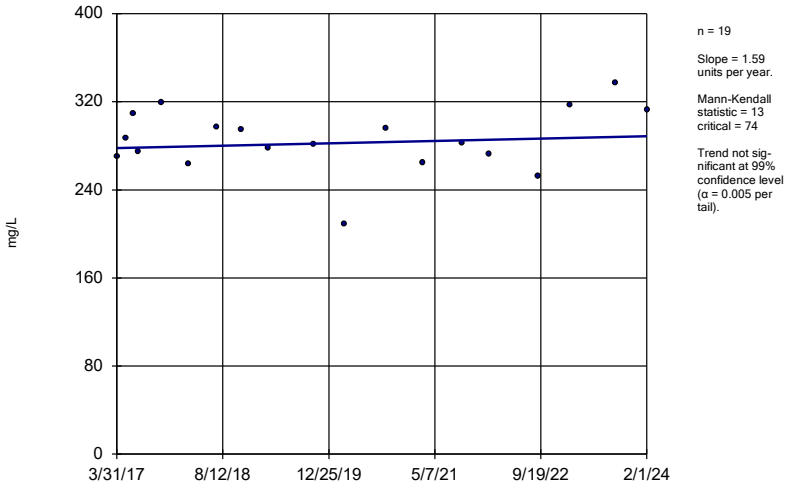
Sen's Slope Estimator

DGWC-67



n = 19

Slope = 1.59 units per year.

Mann-Kendall statistic = 13 critical = 74

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Total Dissolved Solids [TDS] Analysis Run 4/3/2024 2:23 PM View: AP 1 Appendix III Trend T
Plant McDonough Data: McDonough AP

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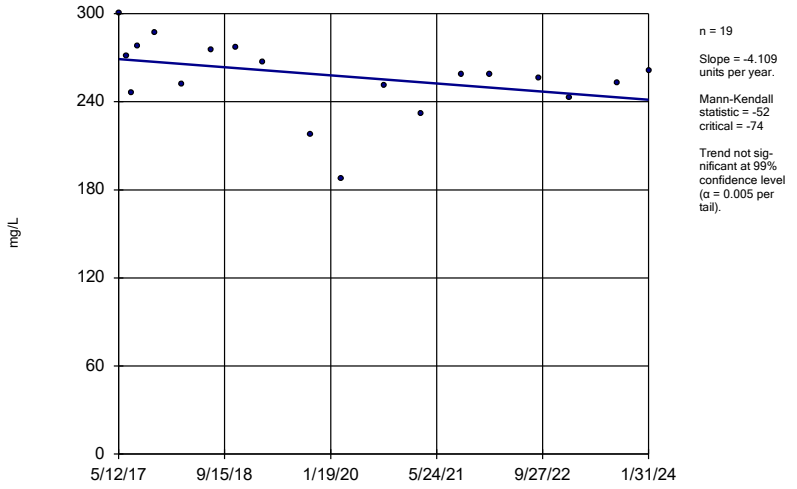
Sen's Slope Estimator

DGWC-68A



n = 19

Slope = -4.109 units per year.

Mann-Kendall statistic = -52 critical = -74

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Total Dissolved Solids [TDS] Analysis Run 4/3/2024 2:23 PM View: AP 1 Appendix III Trend T
Plant McDonough Data: McDonough AP

FIGURE F.

Trend Tests Summary - Cobalt DGWA-53

Plant McDonough Client: Southern Company Data: McDonough AP Printed 4/2/2024, 1:04 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Alpha	Method
Cobalt (mg/L)	**DGWA-53 (bg)**	**-0.003272**	**-118**	**-62**	**Yes**	**20**	**0**	**n/a**	**0.05**	**NP**

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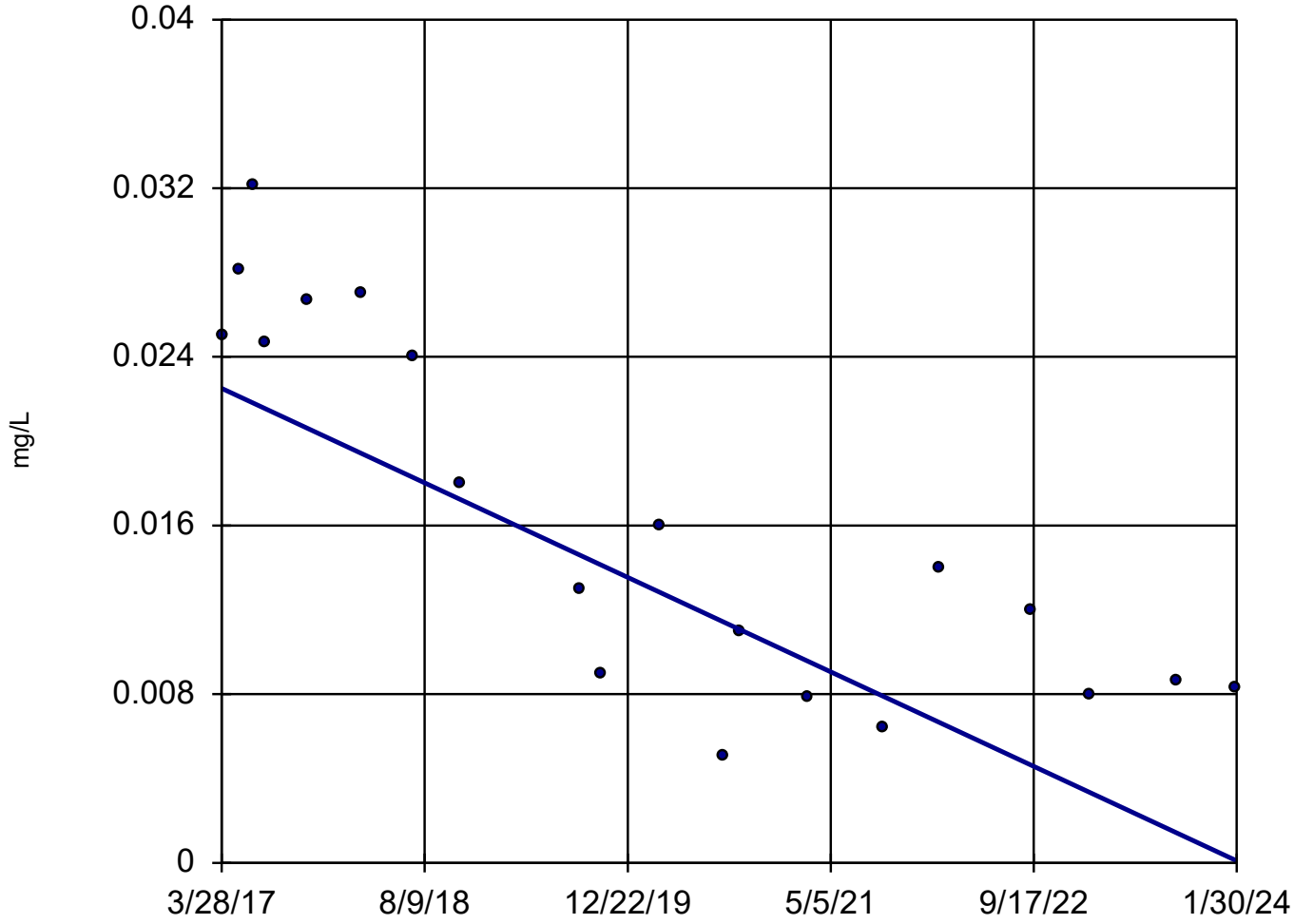
Sen's Slope Estimator

DGWA-53 (bg)



n = 20

Slope = -0.003272 units per year.

Mann-Kendall statistic = -118
critical = -62

Decreasing trend significant at 95% confidence level (α = 0.025 per tail).

Constituent: Cobalt Analysis Run 4/2/2024 1:04 PM

Plant McDonough Client: Southern Company Data: McDonough AP

FIGURE G.

Upper Tolerance Limits Summary Table

Plant McDonough Data: McDonough AP Printed 4/8/2024, 9:06 AM

Constituent	Upper Lim.	Lower Lim.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Antimony (mg/L)	0.0045	n/a	60	n/a	n/a	83.33	n/a	n/a	0.04607	NP Inter(NDs)
Arsenic (mg/L)	0.0054	n/a	60	n/a	n/a	76.67	n/a	n/a	0.04607	NP Inter(NDs)
Barium (mg/L)	0.19	n/a	60	n/a	n/a	0	n/a	n/a	0.04607	NP Inter(normality)
Beryllium (mg/L)	0.0009	n/a	60	n/a	n/a	53.33	n/a	n/a	0.04607	NP Inter(NDs)
Cadmium (mg/L)	0.0005	n/a	60	n/a	n/a	93.33	n/a	n/a	0.04607	NP Inter(NDs)
Chromium (mg/L)	0.005	n/a	59	n/a	n/a	71.19	n/a	n/a	0.04849	NP Inter(NDs)
Cobalt (mg/L)	0.024	n/a	54	n/a	n/a	50	n/a	n/a	0.06267	NP Inter(normality)
Combined Radium 226 + 228 (pCi/L)	4.743	n/a	60	1.018	0.3282	0	None	x^(1/3)	0.05	Inter
Fluoride (mg/L)	0.42	n/a	64	n/a	n/a	48.44	n/a	n/a	0.03752	NP Inter(normality)
Lead (mg/L)	0.001	n/a	60	n/a	n/a	85	n/a	n/a	0.04607	NP Inter(NDs)
Lithium (mg/L)	0.03	n/a	60	n/a	n/a	36.67	n/a	n/a	0.04607	NP Inter(normality)
Mercury (mg/L)	0.0002	n/a	60	n/a	n/a	83.33	n/a	n/a	0.04607	NP Inter(NDs)
Molybdenum (mg/L)	0.0409	n/a	60	n/a	n/a	65	n/a	n/a	0.04607	NP Inter(NDs)
Selenium (mg/L)	0.005	n/a	60	n/a	n/a	100	n/a	n/a	0.04607	NP Inter(NDs)
Thallium (mg/L)	0.001	n/a	60	n/a	n/a	95	n/a	n/a	0.04607	NP Inter(NDs)

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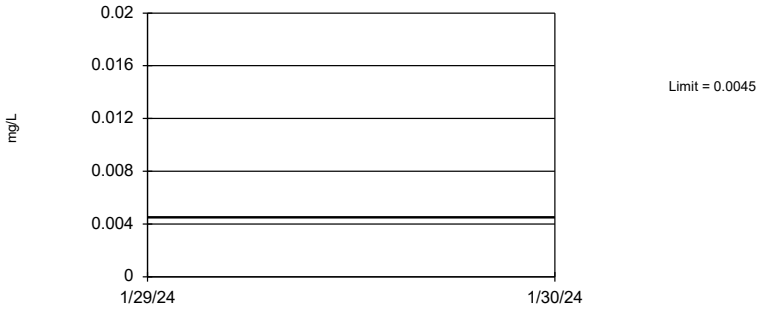
Tolerance Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 50%. Limit is highest of 60 background values. 83.33% NDs. 92.77% coverage at alpha=0.01; 95.12% coverage at alpha=0.05; 99.02% coverage at alpha=0.5. Report alpha = 0.04607.

Constituent: Antimony Analysis Run 4/8/2024 9:05 AM View: AP 1 UTLs

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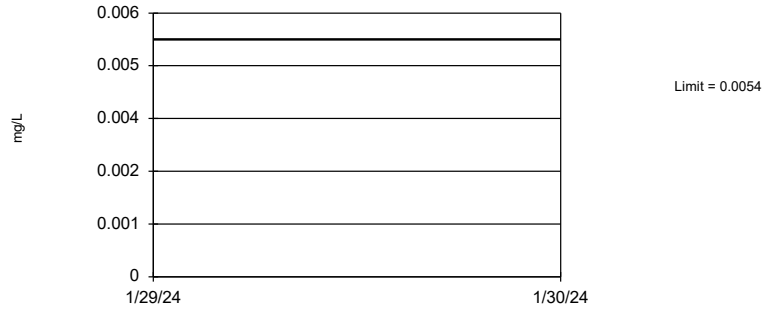
Tolerance Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 50%. Limit is highest of 60 background values. 76.67% NDs. 92.77% coverage at alpha=0.01; 95.12% coverage at alpha=0.05; 99.02% coverage at alpha=0.5. Report alpha = 0.04607.

Constituent: Arsenic Analysis Run 4/8/2024 9:05 AM View: AP 1 UTLs

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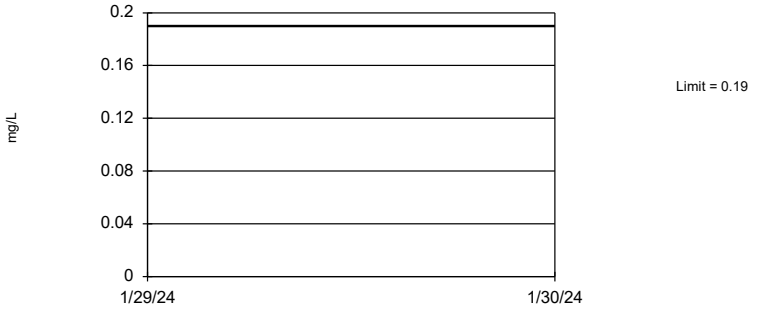
Tolerance Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric tolerance limit because the Shapiro Francia normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 60 background values. 92.77% coverage at alpha=0.01; 95.12% coverage at alpha=0.05; 99.02% coverage at alpha=0.5. Report alpha = 0.04607.

Constituent: Barium Analysis Run 4/8/2024 9:05 AM View: AP 1 UTLs

Plant McDonough Data: McDonough AP

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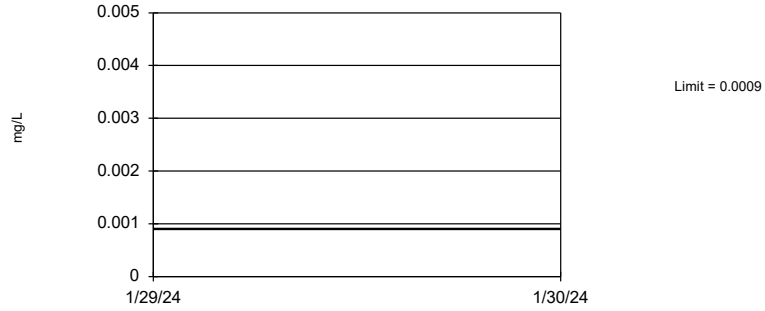
Tolerance Limit

Interwell Non-parametric



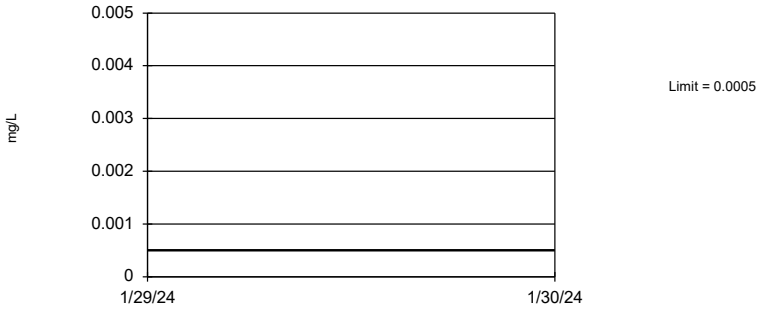
Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 50%. Limit is highest of 60 background values. 53.33% NDs. 92.77% coverage at alpha=0.01; 95.12% coverage at alpha=0.05; 99.02% coverage at alpha=0.5. Report alpha = 0.04607.

Constituent: Beryllium Analysis Run 4/8/2024 9:05 AM View: AP 1 UTLs

Plant McDonough Data: McDonough AP

Tolerance Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 50%. Limit is highest of 60 background values. 93.33% NDs. 92.77% coverage at alpha=0.01; 95.12% coverage at alpha=0.05; 99.02% coverage at alpha=0.5. Report alpha = 0.04607.

Constituent: Cadmium Analysis Run 4/8/2024 9:05 AM View: AP 1 UTLs
Plant McDonough Data: McDonough AP

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Tolerance Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 50%. Limit is highest of 59 background values. 71.19% NDs. 92.38% coverage at alpha=0.01; 95.12% coverage at alpha=0.05; 99.02% coverage at alpha=0.5. Report alpha = 0.04849.

Constituent: Chromium Analysis Run 4/8/2024 9:05 AM View: AP 1 UTLs
Plant McDonough Data: McDonough AP

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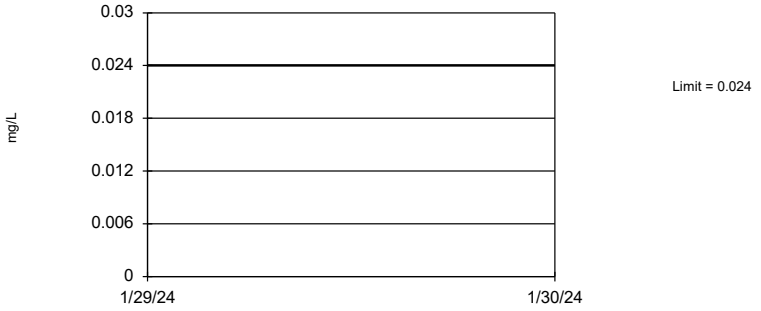
Tolerance Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric tolerance 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. 91.99% coverage at alpha=0.01; 94.73% coverage at alpha=0.05; 98.63% coverage at alpha=0.5. Report alpha = 0.06267.

Constituent: Cobalt Analysis Run 4/8/2024 9:05 AM View: AP 1 UTLs
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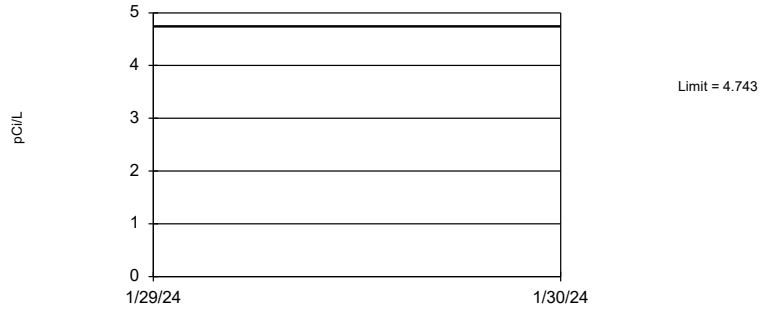
Tolerance Limit

Interwell Parametric



95% coverage. Background Data Summary (based on cube root transformation): Mean=1.018, Std. Dev.=0.3282, n=60. Normality test: Shapiro Francia @alpha = 0.01, calculated = 0.959, critical = 0.945. Report alpha = 0.05.

Constituent: Combined Radium 226 + 228 Analysis Run 4/8/2024 9:05 AM View: AP 1 UTLs
Plant McDonough Data: McDonough AP

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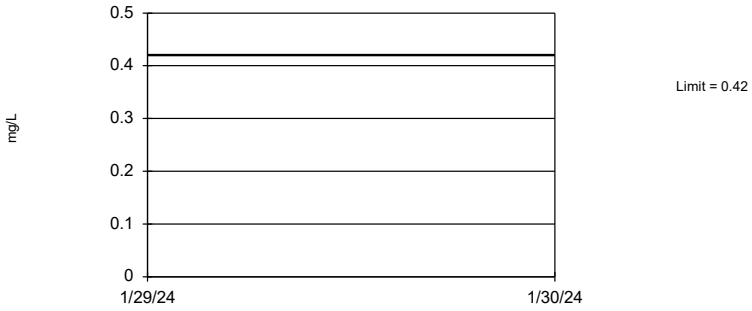
Tolerance Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric tolerance limit because the Shapiro Francia normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 64 background values. 48.44% NDs. 93.16% coverage at alpha=0.01; 95.51% coverage at alpha=0.05; 99.02% coverage at alpha=0.5. Report alpha = 0.03752.

Constituent: Fluoride Analysis Run 4/8/2024 9:05 AM View: AP 1 UTLs
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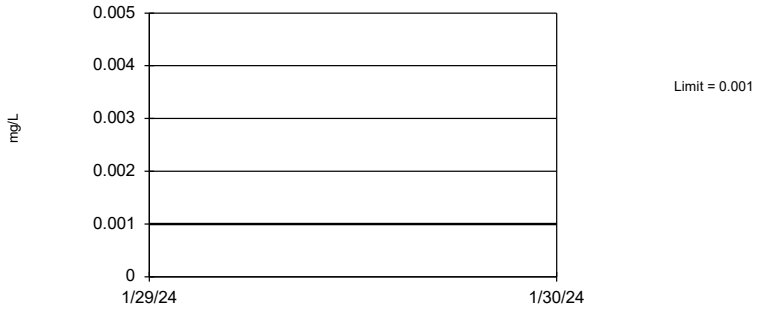
Tolerance Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 50%. Limit is highest of 60 background values. 85% NDs. 92.77% coverage at alpha=0.01; 95.12% coverage at alpha=0.05; 99.02% coverage at alpha=0.5. Report alpha = 0.04607.

Constituent: Lead Analysis Run 4/8/2024 9:05 AM View: AP 1 UTLs
Plant McDonough Data: McDonough AP

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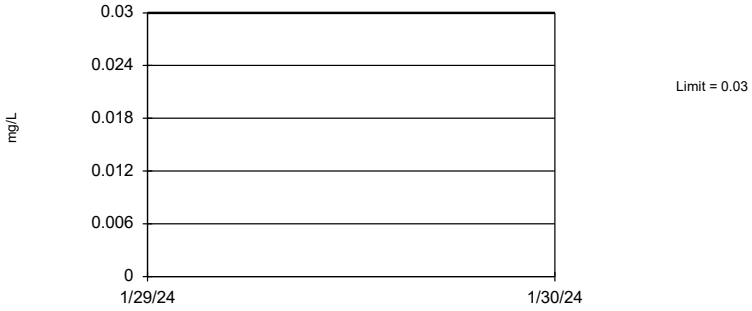
Tolerance Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric tolerance limit because the Shapiro Francia normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 60 background values. 36.67% NDs. 92.77% coverage at alpha=0.01; 95.12% coverage at alpha=0.05; 99.02% coverage at alpha=0.5. Report alpha = 0.04607.

Constituent: Lithium Analysis Run 4/8/2024 9:05 AM View: AP 1 UTLs
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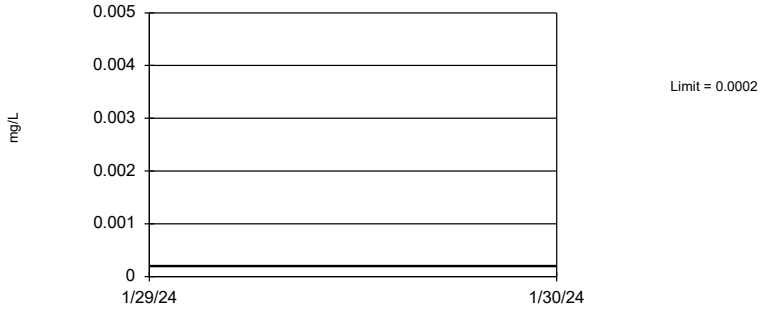
Tolerance Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 50%. Limit is highest of 60 background values. 83.33% NDs. 92.77% coverage at alpha=0.01; 95.12% coverage at alpha=0.05; 99.02% coverage at alpha=0.5. Report alpha = 0.04607.

Constituent: Mercury Analysis Run 4/8/2024 9:05 AM View: AP 1 UTLs
Plant McDonough Data: McDonough AP

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Tolerance Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 50%. Limit is highest of 60 background values. 65% NDs. 92.77% coverage at alpha=0.01; 95.12% coverage at alpha=0.05; 99.02% coverage at alpha=0.5. Report alpha = 0.04607.

Constituent: Molybdenum Analysis Run 4/8/2024 9:05 AM View: AP 1 UTLs
Plant McDonough Data: McDonough AP

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Tolerance Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 50%. All background values were censored; limit is most recent reporting limit. 92.77% coverage at alpha=0.01; 95.12% coverage at alpha=0.05; 99.02% coverage at alpha=0.5. Report alpha = 0.04607.

Constituent: Selenium Analysis Run 4/8/2024 9:05 AM View: AP 1 UTLs
Plant McDonough Data: McDonough AP

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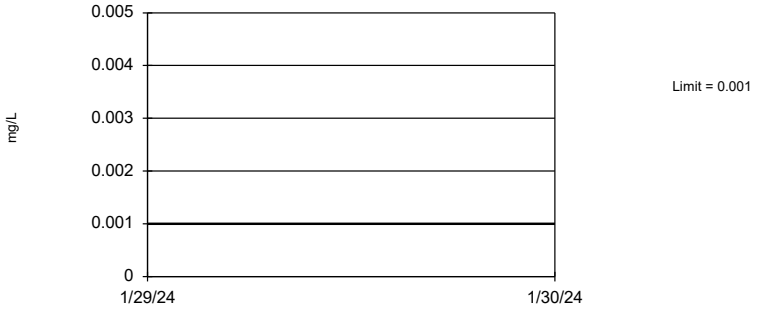
Tolerance Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 50%. Limit is highest of 60 background values. 95% NDs. 92.77% coverage at alpha=0.01; 95.12% coverage at alpha=0.05; 99.02% coverage at alpha=0.5. Report alpha = 0.04607.

Constituent: Thallium Analysis Run 4/8/2024 9:05 AM View: AP 1 UTLs
Plant McDonough Data: McDonough AP

FIGURE H.

PLANT MCDONOUGH ASH POND AP-1 GWPS TABLE				
Constituent Name	**MCL**	**CCR-Rule Specified**	**Background Limit**	**GWPS**
Antimony, Total (mg/L)	0.006		0.0045	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	0.024	0.024
Combined Radium, Total (pCi/L)	5		4.74	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 I.

Appendix IV Confidence Intervals - Significant Results

Plant McDonough Data: McDonough AP Printed 4/2/2024, 3:13 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Arsenic (mg/L)	**DGWC-69**	**0.03469**	**0.01445**	**0.01**	**Yes**	**22**	**0.03183**	**0.03639**	**0**	**None**	**ln(x)**	**0.01**	**Param.**
Cobalt (mg/L)	**DGWC-40**	**0.04381**	**0.03743**	**0.024**	**Yes**	**20**	**0.04062**	**0.005609**	**0**	**None**	**No**	**0.01**	**Param.**
Molybdenum (mg/L)	**DGWC-68A**	**0.2182**	**0.1946**	**0.1**	**Yes**	**20**	**0.2067**	**0.02152**	**0**	**None**	**sqrt(x)**	**0.01**	**Param.**

Appendix IV Confidence Intervals - All Results

Plant McDonough Data: McDonough AP Printed 4/2/2024, 3:13 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	9	0.002667	0.000669	77.78	None	No	0.002	NP (NDs)
Antimony (mg/L)	B-105D	0.0082	0.00069	0.006	No	8	0.003186	0.002206	62.5	None	No	0.004	NP (NDs)
Antimony (mg/L)	B-112D	0.003	0.00041	0.006	No	7	0.00263	0.0009789	85.71	None	No	0.008	NP (NDs)
Antimony (mg/L)	B-62	0.003	0.00046	0.006	No	12	0.002788	0.0007332	91.67	None	No	0.01	NP (NDs)
Antimony (mg/L)	DGWC-37	0.003	0.0014	0.006	No	19	0.002916	0.0003671	94.74	None	No	0.01	NP (NDs)
Antimony (mg/L)	DGWC-39	0.003	0.00058	0.006	No	19	0.002873	0.0005552	94.74	None	No	0.01	NP (NDs)
Antimony (mg/L)	DGWC-40	0.003	0.00033	0.006	No	19	0.002859	0.0006125	94.74	None	No	0.01	NP (NDs)
Antimony (mg/L)	DGWC-67	0.0039	0.0023	0.006	No	19	0.002758	0.0008092	78.95	None	No	0.01	NP (NDs)
Antimony (mg/L)	DGWC-68A	0.003	0.0008	0.006	No	19	0.002743	0.0007735	89.47	None	No	0.01	NP (NDs)
Antimony (mg/L)	DGWC-69	0.003	0.0019	0.006	No	20	0.00277	0.0006018	85	None	No	0.01	NP (NDs)
Arsenic (mg/L)	B-105D	0.0051	0.0025	0.01	No	8	0.0044	0.001143	62.5	None	No	0.004	NP (NDs)
Arsenic (mg/L)	B-112D	0.005	0.00078	0.01	No	7	0.004397	0.001595	71.43	None	No	0.008	NP (NDs)
Arsenic (mg/L)	B-62	0.005	0.0033	0.01	No	12	0.004858	0.0004907	91.67	None	No	0.01	NP (NDs)
Arsenic (mg/L)	DGWC-37	0.005	0.0019	0.01	No	20	0.004845	0.0006932	95	None	No	0.01	NP (NDs)
Arsenic (mg/L)	DGWC-38	0.005	0.0005	0.01	No	20	0.004775	0.001006	95	None	No	0.01	NP (NDs)
Arsenic (mg/L)	DGWC-39	0.005	0.00087	0.01	No	20	0.003359	0.002081	60	None	No	0.01	NP (NDs)
Arsenic (mg/L)	DGWC-40	0.005	0.003	0.01	No	20	0.004267	0.001569	80	None	No	0.01	NP (NDs)
Arsenic (mg/L)	DGWC-67	0.005	0.0033	0.01	No	20	0.004476	0.001377	85	None	No	0.01	NP (NDs)
Arsenic (mg/L)	DGWC-68A	0.005	0.0016	0.01	No	20	0.00483	0.0007603	95	None	No	0.01	NP (NDs)
Arsenic (mg/L)	**DGWC-69**	**0.03469**	**0.01445**	**0.01**	**Yes**	**22**	**0.03183**	**0.03639**	**0**	**None**	**ln(x)**	**0.01**	**Param.**
Barium (mg/L)	B-100	0.098	0.015	2	No	9	0.02911	0.02594	0	None	No	0.002	NP (normality)
Barium (mg/L)	B-105D	0.04034	0.03291	2	No	8	0.03663	0.003503	0	None	No	0.01	Param.
Barium (mg/L)	B-112D	0.026	0.0026	2	No	7	0.006214	0.008729	0	None	No	0.008	NP (normality)
Barium (mg/L)	B-62	0.0245	0.01817	2	No	12	0.02133	0.00403	0	None	No	0.01	Param.
Barium (mg/L)	DGWC-37	0.1045	0.08671	2	No	20	0.0956	0.01566	0	None	No	0.01	Param.
Barium (mg/L)	DGWC-38	0.03312	0.03089	2	No	20	0.03196	0.002043	0	None	x^2	0.01	Param.
Barium (mg/L)	DGWC-39	0.0972	0.0867	2	No	20	0.09195	0.009245	0	None	No	0.01	Param.
Barium (mg/L)	DGWC-40	0.018	0.0168	2	No	20	0.01774	0.002352	0	None	No	0.01	NP (normality)
Barium (mg/L)	DGWC-67	0.1077	0.09211	2	No	20	0.0999	0.01371	0	None	No	0.01	Param.
Barium (mg/L)	DGWC-68A	0.098	0.0878	2	No	20	0.09226	0.007471	0	None	No	0.01	NP (normality)
Barium (mg/L)	DGWC-69	0.09206	0.06191	2	No	21	0.07699	0.02733	0	None	No	0.01	Param.
Beryllium (mg/L)	B-100	0.0005593	0.000354	0.004	No	9	0.0004567	0.0001063	11.11	None	No	0.01	Param.
Beryllium (mg/L)	B-62	0.0025	0.00009	0.004	No	13	0.0004868	0.0008937	15.38	None	No	0.01	NP (normality)
Beryllium (mg/L)	DGWC-37	0.0005	0.00007	0.004	No	20	0.0003289	0.0002153	60	None	No	0.01	NP (NDs)
Beryllium (mg/L)	DGWC-38	0.0005	0.000058	0.004	No	20	0.0004779	0.00009883	95	None	No	0.01	NP (NDs)
Beryllium (mg/L)	DGWC-40	0.003288	0.00283	0.004	No	20	0.003035	0.000458	5	None	x^2	0.01	Param.
Beryllium (mg/L)	DGWC-68A	0.0005	0.000084	0.004	No	20	0.0004573	0.0001316	90	None	No	0.01	NP (NDs)
Beryllium (mg/L)	DGWC-69	0.0005	0.000063	0.004	No	21	0.000334	0.0002169	61.9	None	No	0.01	NP (NDs)
Cadmium (mg/L)	B-100	0.00059	0.00025	0.005	No	9	0.0003567	0.000136	11.11	None	No	0.002	NP (normality)
Cadmium (mg/L)	DGWC-37	0.0005	0.00027	0.005	No	20	0.000415	0.0001548	75	None	No	0.01	NP (NDs)
Cadmium (mg/L)	DGWC-38	0.0005	0.00017	0.005	No	20	0.000315	0.0002343	20	None	No	0.01	NP (normality)
Cadmium (mg/L)	DGWC-40	0.0008332	0.0006998	0.005	No	20	0.0007665	0.0001175	10	None	No	0.01	Param.
Cadmium (mg/L)	DGWC-67	0.00053	0.00021	0.005	No	20	0.000437	0.0001337	75	None	No	0.01	NP (NDs)
Cadmium (mg/L)	DGWC-68A	0.0002305	0.000148	0.005	No	20	0.000364	0.0002143	45	Kaplan-Meier	sqrt(x)	0.01	Param.
Cadmium (mg/L)	DGWC-69	0.0005	0.0002	0.005	No	21	0.0004367	0.000135	80.95	Kaplan-Meier	No	0.01	NP (NDs)
Chromium (mg/L)	B-100	0.005	0.00057	0.1	No	9	0.004057	0.001874	77.78	None	No	0.002	NP (NDs)
Chromium (mg/L)	B-105D	0.005	0.0012	0.1	No	8	0.004525	0.001344	87.5	None	No	0.004	NP (NDs)
Chromium (mg/L)	B-112D	0.005	0.00085	0.1	No	7	0.003893	0.001897	71.43	None	No	0.008	NP (NDs)
Chromium (mg/L)	B-62	0.005	0.00098	0.1	No	12	0.004665	0.00116	91.67	None	No	0.01	NP (NDs)
Chromium (mg/L)	DGWC-37	0.005	0.0007	0.1	No	20	0.004564	0.001342	90	None	No	0.01	NP (NDs)
Chromium (mg/L)	DGWC-38	0.005	0.00092	0.1	No	20	0.004343	0.001607	85	None	No	0.01	NP (NDs)
Chromium (mg/L)	DGWC-40	0.005	0.0007	0.1	No	20	0.00295	0.002127	50	None	No	0.01	NP (normality)
Chromium (mg/L)	DGWC-67	0.005	0.0014	0.1	No	20	0.004174	0.001702	80	None	No	0.01	NP (NDs)
Chromium (mg/L)	DGWC-68A	0.005	0.0005	0.1	No	20	0.004775	0.001006	95	None	No	0.01	NP (NDs)
Chromium (mg/L)	DGWC-69	0.005	0.0013	0.1	No	21	0.004047	0.001752	76.19	None	No	0.01	NP (NDs)

Appendix IV Confidence Intervals - All Results

Plant McDonough Data: McDonough AP Printed 4/2/2024, 3:13 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Cobalt (mg/L)	B-100	0.06941	0.02304	0.024	No	11	0.04623	0.02782	9.091	None	No	0.01	Param.
Cobalt (mg/L)	B-105D	0.008174	0.002506	0.024	No	8	0.00525	0.003058	0	None	sqrt(x)	0.01	Param.
Cobalt (mg/L)	B-112D	0.005	0.0004	0.024	No	7	0.003349	0.002168	57.14	None	No	0.008	NP (NDs)
Cobalt (mg/L)	B-62	0.005	0.00031	0.024	No	13	0.004278	0.001763	84.62	None	No	0.01	NP (NDs)
Cobalt (mg/L)	DGWC-37	0.005	0.0005	0.024	No	20	0.004305	0.001698	85	None	No	0.01	NP (NDs)
Cobalt (mg/L)	DGWC-38	0.0017	0.0015	0.024	No	20	0.00193	0.00106	10	None	No	0.01	NP (normality)
Cobalt (mg/L)	DGWC-39	0.006595	0.005785	0.024	No	20	0.00619	0.0007137	10	None	No	0.01	Param.
Cobalt (mg/L)	**DGWC-40**	**0.04381**	**0.03743**	**0.024**	**Yes**	**20**	**0.04062**	**0.005609**	**0**	**None**	**No**	**0.01**	**Param.**
Cobalt (mg/L)	DGWC-67	0.0037	0.0011	0.024	No	20	0.002345	0.00166	10	None	No	0.01	NP (normality)
Cobalt (mg/L)	DGWC-68A	0.005	0.0015	0.024	No	20	0.004365	0.001565	85	None	No	0.01	NP (NDs)
Cobalt (mg/L)	DGWC-69	0.005	0.0028	0.024	No	21	0.004095	0.001559	71.43	None	No	0.01	NP (NDs)
Combined Radium 226 + 228 (pCi/L)	B-100	1.063	0.2516	5	No	9	0.6574	0.4203	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	B-105D	6.025	1.132	5	No	7	3.389	2.275	0	None	sqrt(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	B-112D	1.671	0.2741	5	No	6	0.9727	0.5085	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	B-62	2.011	1.475	5	No	11	1.743	0.3213	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	DGWC-37	1.035	0.5287	5	No	19	0.7818	0.4323	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	DGWC-38	0.936	0.3524	5	No	19	0.7058	0.5564	0	None	sqrt(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	DGWC-39	1.204	0.5968	5	No	19	0.9006	0.5188	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	DGWC-40	1.428	0.6687	5	No	19	1.048	0.6487	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	DGWC-67	0.9186	0.4884	5	No	19	0.7035	0.3673	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	DGWC-68A	1.288	0.5757	5	No	19	0.932	0.6086	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	DGWC-69	1.725	1.111	5	No	20	1.418	0.5404	0	None	No	0.01	Param.
Fluoride (mg/L)	B-100	0.1	0.052	4	No	9	0.08744	0.01949	66.67	None	No	0.002	NP (NDs)
Fluoride (mg/L)	B-105D	0.32	0.058	4	No	8	0.1139	0.08478	0	None	No	0.004	NP (normality)
Fluoride (mg/L)	B-112D	0.3313	0.2602	4	No	7	0.2957	0.02992	0	None	No	0.01	Param.
Fluoride (mg/L)	B-62	0.23	0.099	4	No	11	0.1611	0.09675	0	None	No	0.006	NP (normality)
Fluoride (mg/L)	DGWC-37	0.089	0.057	4	No	21	0.09852	0.06948	4.762	None	No	0.01	NP (normality)
Fluoride (mg/L)	DGWC-38	0.1413	0.07603	4	No	21	0.1244	0.09707	9.524	None	ln(x)	0.01	Param.
Fluoride (mg/L)	DGWC-39	0.15	0.086	4	No	21	0.1454	0.1059	4.762	None	No	0.01	NP (normality)
Fluoride (mg/L)	DGWC-40	0.2494	0.1311	4	No	21	0.2154	0.1456	4.762	None	ln(x)	0.01	Param.
Fluoride (mg/L)	DGWC-67	0.1	0.057	4	No	21	0.1061	0.1016	47.62	None	No	0.01	NP (normality)
Fluoride (mg/L)	DGWC-68A	0.12	0.082	4	No	21	0.1402	0.1154	4.762	None	No	0.01	NP (normality)
Fluoride (mg/L)	DGWC-69	0.1515	0.08745	4	No	22	0.1245	0.06591	4.545	None	sqrt(x)	0.01	Param.
Lead (mg/L)	B-100	0.001	0.000088	0.015	No	9	0.0007198	0.0004215	66.67	None	No	0.002	NP (NDs)
Lead (mg/L)	B-105D	0.001	0.000052	0.015	No	8	0.0008815	0.0003352	87.5	None	No	0.004	NP (NDs)
Lead (mg/L)	B-112D	0.001	0.00014	0.015	No	7	0.0008771	0.000325	85.71	None	No	0.008	NP (NDs)
Lead (mg/L)	DGWC-37	0.0014	0.000061	0.015	No	20	0.0009731	0.0002325	90	None	No	0.01	NP (NDs)
Lead (mg/L)	DGWC-38	0.001	0.00014	0.015	No	20	0.0007758	0.0003989	75	None	No	0.01	NP (NDs)
Lead (mg/L)	DGWC-39	0.001	0.00022	0.015	No	20	0.000915	0.0002626	90	None	No	0.01	NP (NDs)
Lead (mg/L)	DGWC-40	0.001	0.000081	0.015	No	20	0.0006462	0.0004472	60	None	No	0.01	NP (NDs)
Lead (mg/L)	DGWC-67	0.001	0.00025	0.015	No	20	0.0008222	0.0003669	80	None	No	0.01	NP (NDs)
Lead (mg/L)	DGWC-68A	0.001	0.00035	0.015	No	20	0.0009209	0.0002479	90	None	No	0.01	NP (NDs)
Lead (mg/L)	DGWC-69	0.001	0.0001	0.015	No	21	0.0007052	0.0004281	66.67	None	No	0.01	NP (NDs)
Lithium (mg/L)	B-100	0.03	0.0013	0.04	No	9	0.008367	0.01227	22.22	None	No	0.002	NP (normality)
Lithium (mg/L)	B-105D	0.015	0.013	0.04	No	8	0.0135	0.0007559	0	None	No	0.004	NP (normality)
Lithium (mg/L)	B-112D	0.004476	0.003781	0.04	No	7	0.004129	0.0002928	0	None	No	0.01	Param.
Lithium (mg/L)	B-62	0.0094	0.0078	0.04	No	12	0.01003	0.004749	8.333	None	No	0.01	NP (normality)
Lithium (mg/L)	DGWC-37	0.0029	0.002	0.04	No	20	0.00917	0.01234	25	None	No	0.01	NP (normality)
Lithium (mg/L)	DGWC-38	0.0034	0.0029	0.04	No	20	0.004185	0.004909	5	None	No	0.01	NP (normality)
Lithium (mg/L)	DGWC-40	0.0024	0.0022	0.04	No	20	0.00458	0.006987	10	None	No	0.01	NP (normality)
Lithium (mg/L)	DGWC-67	0.005	0.0044	0.04	No	20	0.00567	0.00456	5	None	No	0.01	NP (normality)
Lithium (mg/L)	DGWC-68A	0.03	0.0016	0.04	No	20	0.02712	0.008862	90	None	No	0.01	NP (NDs)
Lithium (mg/L)	DGWC-69	0.0031	0.0023	0.04	No	21	0.003757	0.004885	4.762	None	No	0.01	NP (normality)
Mercury (mg/L)	B-100	0.0002	0.00011	0.002	No	8	0.0001887	0.00003182	87.5	None	No	0.004	NP (NDs)
Mercury (mg/L)	B-105D	0.0002	0.000087	0.002	No	7	0.0001753	0.0000449	71.43	None	No	0.008	NP (NDs)

Appendix IV Confidence Intervals - All Results

Plant McDonough Data: McDonough AP Printed 4/2/2024, 3:13 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Mercury (mg/L)	DGWC-37	0.0002	0.000091	0.002	No	19	0.0001787	0.0000512	84.21	None	No	0.01	NP (NDs)
Mercury (mg/L)	DGWC-38	0.0002	0.000085	0.002	No	19	0.0001787	0.00005115	84.21	None	No	0.01	NP (NDs)
Mercury (mg/L)	DGWC-39	0.0002	0.000059	0.002	No	19	0.0001926	0.00003235	94.74	None	No	0.01	NP (NDs)
Mercury (mg/L)	DGWC-40	0.0002	0.00009	0.002	No	19	0.0001778	0.0000533	84.21	None	No	0.01	NP (NDs)
Mercury (mg/L)	DGWC-67	0.0002	0.00007	0.002	No	19	0.0001932	0.00002982	94.74	None	No	0.01	NP (NDs)
Mercury (mg/L)	DGWC-68A	0.0002	0.00007	0.002	No	19	0.0001932	0.00002982	94.74	None	No	0.01	NP (NDs)
Mercury (mg/L)	DGWC-69	0.0002	0.00007	0.002	No	20	0.0001935	0.00002907	95	None	No	0.01	NP (NDs)
Molybdenum (mg/L)	B-100	0.19	0.01	0.1	No	9	0.03	0.06	88.89	None	No	0.002	NP (NDs)
Molybdenum (mg/L)	B-105D	0.01	0.0011	0.1	No	8	0.008887	0.003147	87.5	None	No	0.004	NP (NDs)
Molybdenum (mg/L)	B-112D	0.03477	0.0258	0.1	No	7	0.03029	0.003773	0	None	No	0.01	Param.
Molybdenum (mg/L)	DGWC-38	0.01	0.001	0.1	No	20	0.004269	0.004319	35	None	No	0.01	NP (normality)
Molybdenum (mg/L)	DGWC-39	0.01	0.0016	0.1	No	20	0.00958	0.001878	95	None	No	0.01	NP (NDs)
Molybdenum (mg/L)	DGWC-67	0.01	0.0013	0.1	No	20	0.009565	0.001945	95	None	No	0.01	NP (NDs)
Molybdenum (mg/L)	**DGWC-68A**	**0.2182**	**0.1946**	**0.1**	**Yes**	**20**	**0.2067**	**0.02152**	**0**	**None**	**sqrt(x)**	**0.01**	**Param.**
Molybdenum (mg/L)	DGWC-69	0.011	0.0057	0.1	No	21	0.009005	0.00547	4.762	None	No	0.01	NP (normality)
Selenium (mg/L)	B-100	0.005	0.0019	0.05	No	9	0.004656	0.001033	88.89	None	No	0.002	NP (NDs)
Selenium (mg/L)	DGWC-38	0.005	0.0019	0.05	No	20	0.004845	0.0006932	95	None	No	0.01	NP (NDs)
Selenium (mg/L)	DGWC-40	0.003159	0.001849	0.05	No	20	0.00368	0.002146	30	Kaplan-Meier	sqrt(x)	0.01	Param.
Selenium (mg/L)	DGWC-67	0.005	0.0027	0.05	No	20	0.004885	0.0005143	95	Kaplan-Meier	No	0.01	NP (NDs)
Selenium (mg/L)	DGWC-68A	0.005	0.0017	0.05	No	20	0.004835	0.0007379	95	Kaplan-Meier	No	0.01	NP (NDs)
Thallium (mg/L)	DGWC-38	0.001	0.00014	0.002	No	20	0.0006505	0.0004395	60	None	No	0.01	NP (NDs)
Thallium (mg/L)	DGWC-39	0.001	0.0001	0.002	No	20	0.0007715	0.0004061	75	None	No	0.01	NP (NDs)
Thallium (mg/L)	DGWC-40	0.001	0.00007	0.002	No	20	0.0007664	0.0004151	75	None	No	0.01	NP (NDs)
Thallium (mg/L)	DGWC-68A	0.001	0.00015	0.002	No	20	0.0009575	0.0001901	95	None	No	0.01	NP (NDs)

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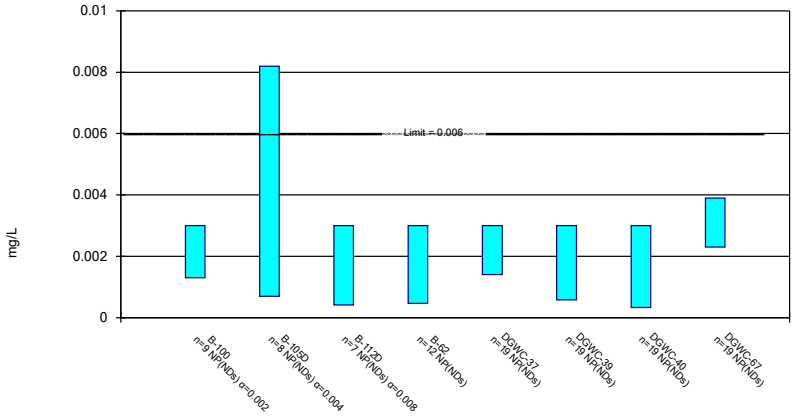
Non-Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted.



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Plant McDonough Data: McDonough AP

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Non-Parametric Confidence Interval

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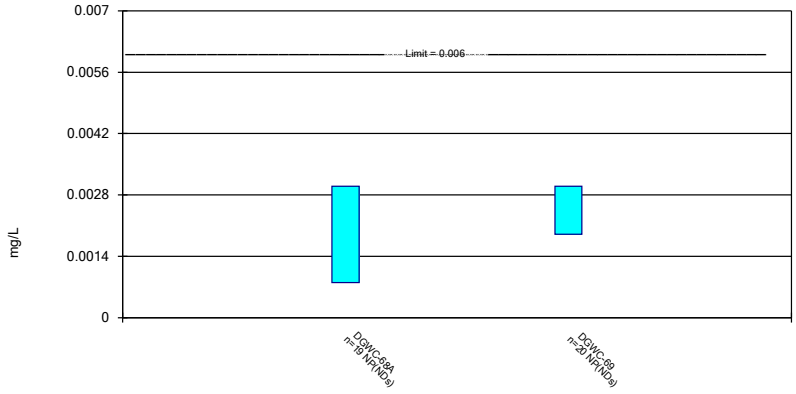

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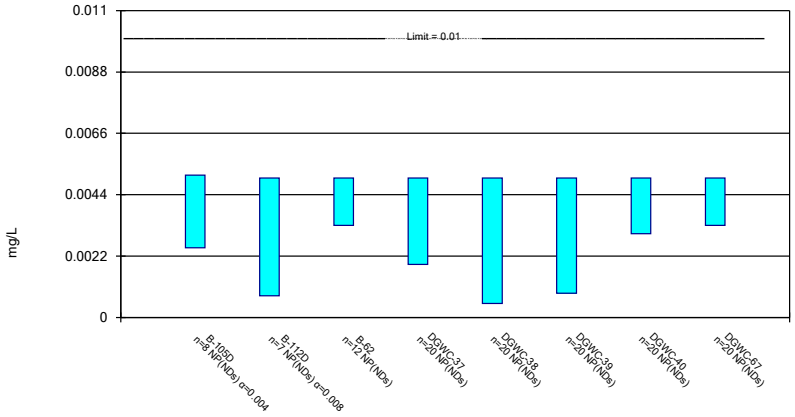

Constituent: Arsenic Analysis Run 4/2/2024 3:11 PM View: AP 1 Confidence Intervals
Plant McDonough Data: McDonough AP

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Parametric and Non-Parametric (NP) Confidence Interval

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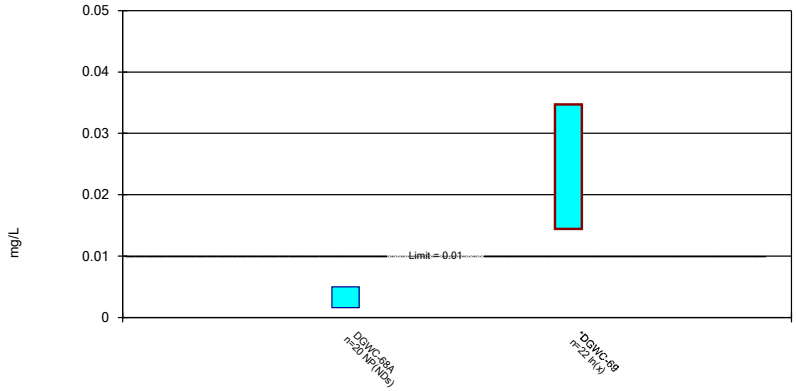

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Plant McDonough Data: McDonough AP

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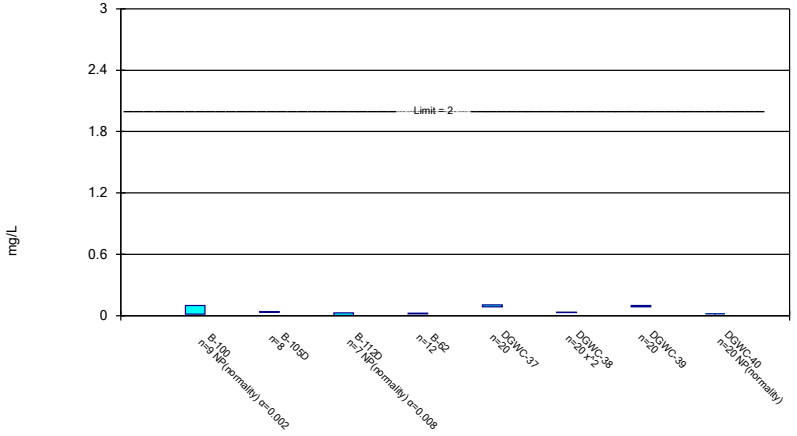

Constituent: Barium Analysis Run 4/2/2024 3:11 PM View: AP 1 Confidence Intervals
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Parametric and Non-Parametric (NP) Confidence Interval

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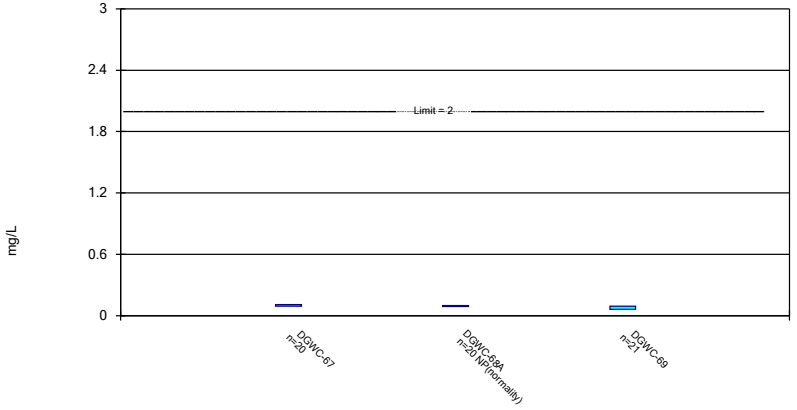

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Parametric and Non-Parametric (NP) Confidence Interval

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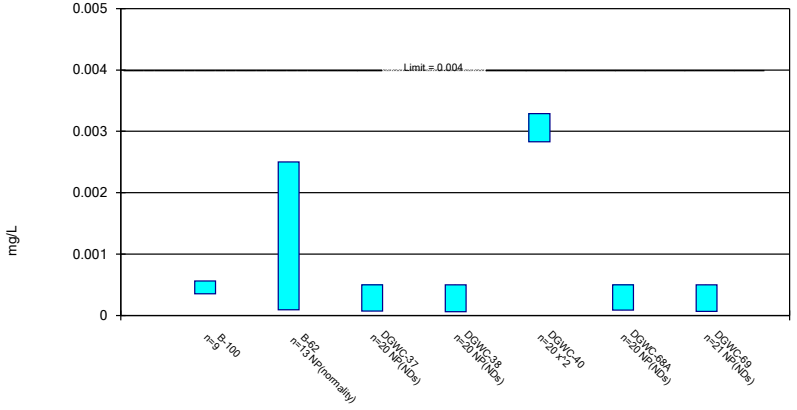

Constituent: Beryllium Analysis Run 4/2/2024 3:11 PM View: AP 1 Confidence Intervals
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Parametric and Non-Parametric (NP) Confidence Interval

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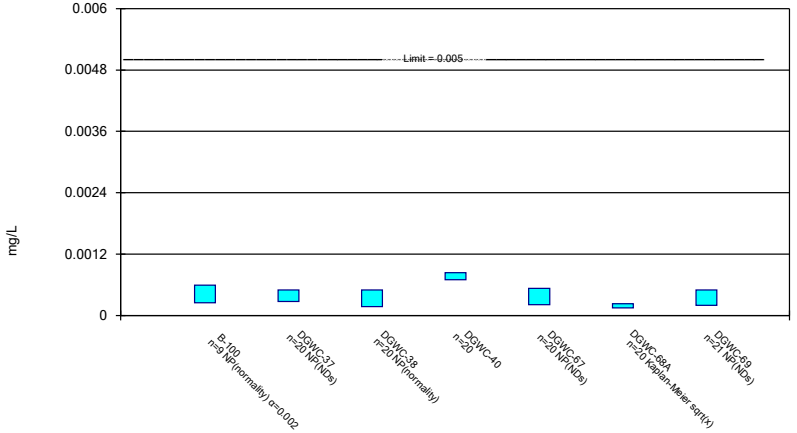

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Plant McDonough Data: McDonough AP

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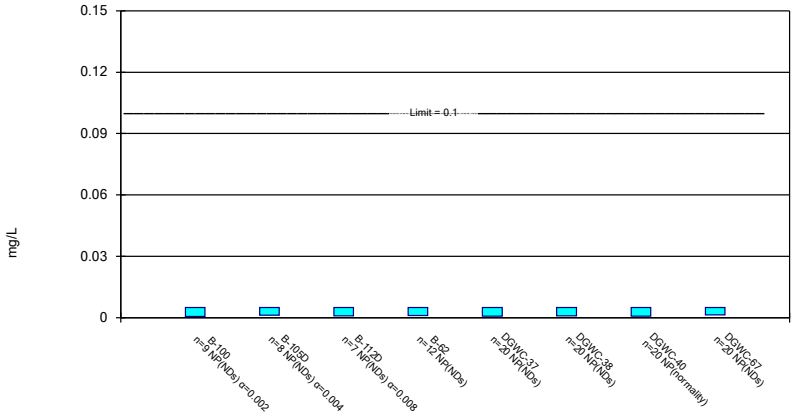
Non-Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted.



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Plant McDonough Data: McDonough AP

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Non-Parametric Confidence Interval

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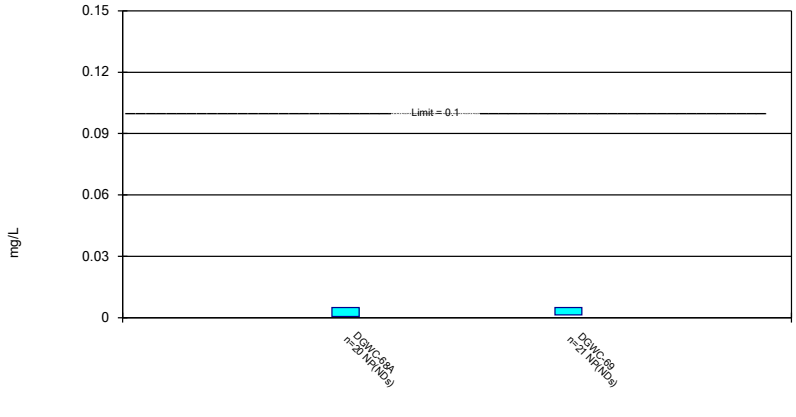

Constituent: Chromium Analysis Run 4/2/2024 3:12 PM View: AP 1 Confidence Intervals
Plant McDonough Data: McDonough AP

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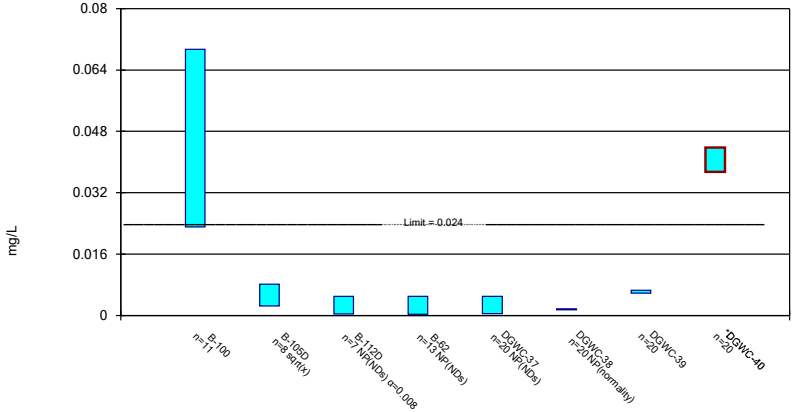
Parametric and Non-Parametric (NP) Confidence Interval

Compliance limit is exceeded.* Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Cobalt Analysis Run 4/2/2024 3:12 PM View: AP 1 Confidence Intervals
Plant McDonough Data: McDonough AP

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Non-Parametric Confidence Interval

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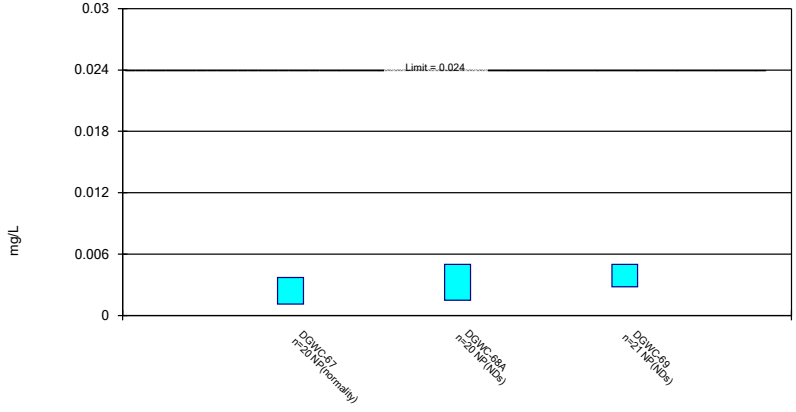

Constituent: Cobalt Analysis Run 4/2/2024 3:12 PM View: AP 1 Confidence Intervals
Plant McDonough Data: McDonough AP

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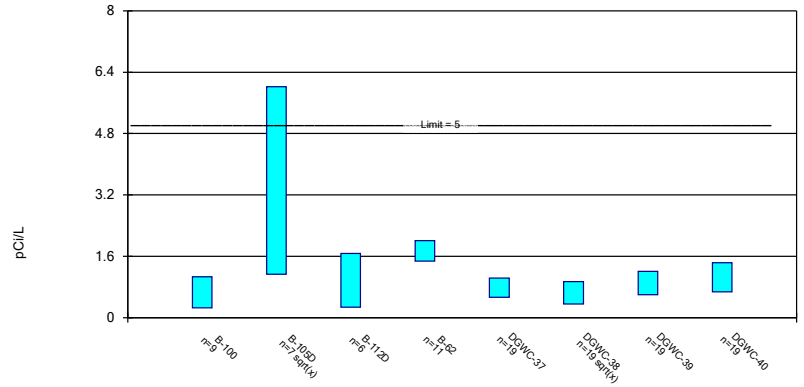
Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Combined Radium 226 + 228 Analysis Run 4/2/2024 3:12 PM View: AP 1 Confidence Interval
Plant McDonough Data: McDonough AP

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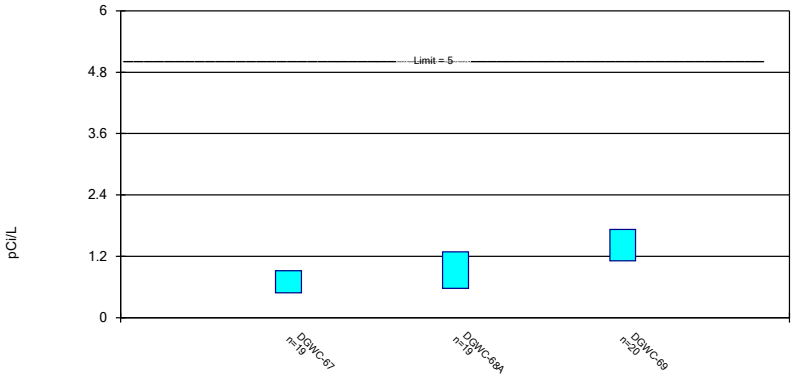
Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Combined Radium 226 + 228 Analysis Run 4/2/2024 3:12 PM View: AP 1 Confidence Interval
Plant McDonough Data: McDonough AP

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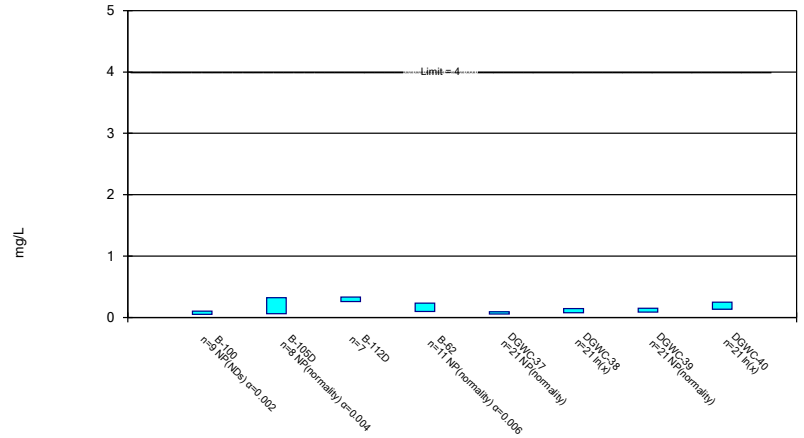
Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Fluoride Analysis Run 4/2/2024 3:12 PM View: AP 1 Confidence Intervals
Plant McDonough Data: McDonough AP

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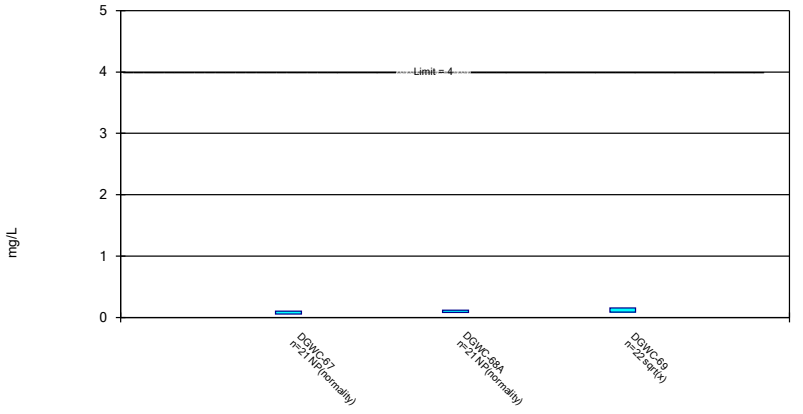
Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Fluoride Analysis Run 4/2/2024 3:12 PM View: AP 1 Confidence Intervals
Plant McDonough Data: McDonough AP

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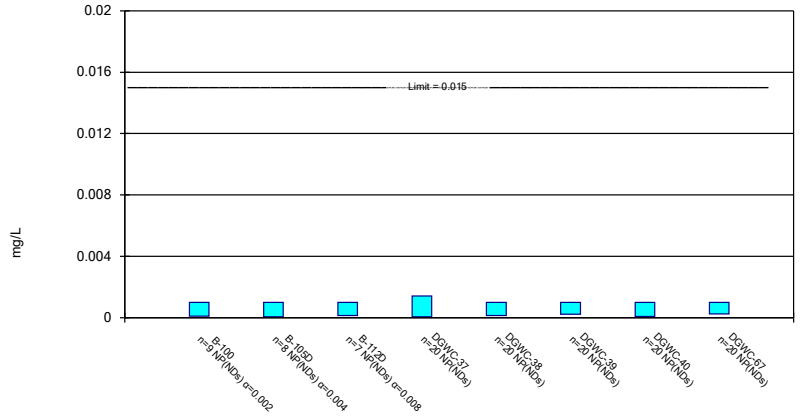
Non-Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted.



Constituent: Lead Analysis Run 4/2/2024 3:12 PM View: AP 1 Confidence Intervals
Plant McDonough Data: McDonough AP

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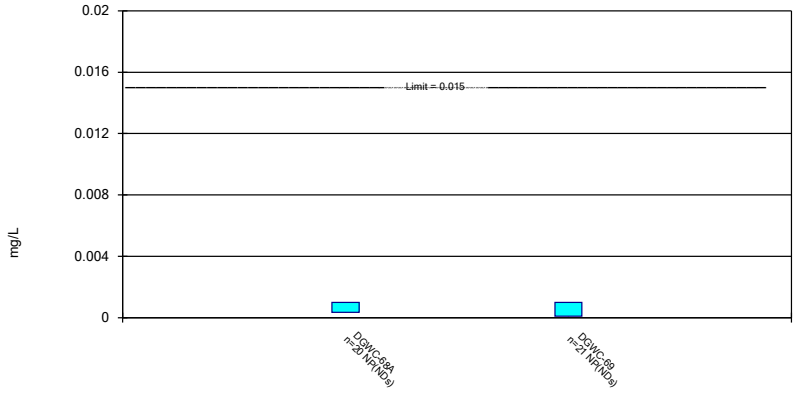
Non-Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Lead Analysis Run 4/2/2024 3:12 PM View: AP 1 Confidence Intervals
Plant McDonough Data: McDonough AP

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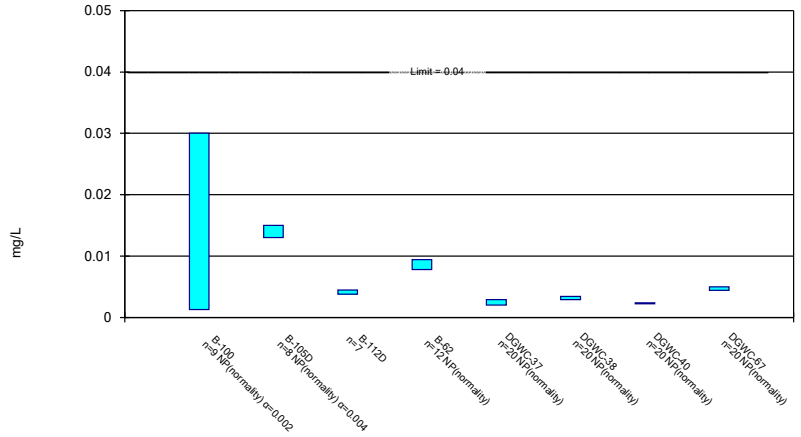
Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Lithium Analysis Run 4/2/2024 3:12 PM View: AP 1 Confidence Intervals
Plant McDonough Data: McDonough AP

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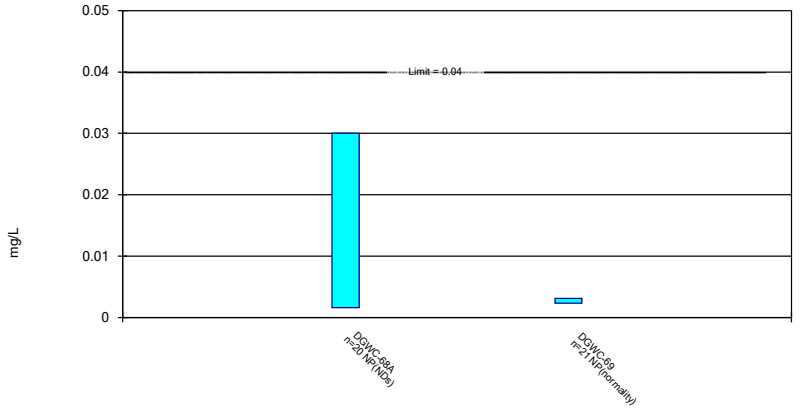
Non-Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Lithium Analysis Run 4/2/2024 3:12 PM View: AP 1 Confidence Intervals
Plant McDonough Data: McDonough AP

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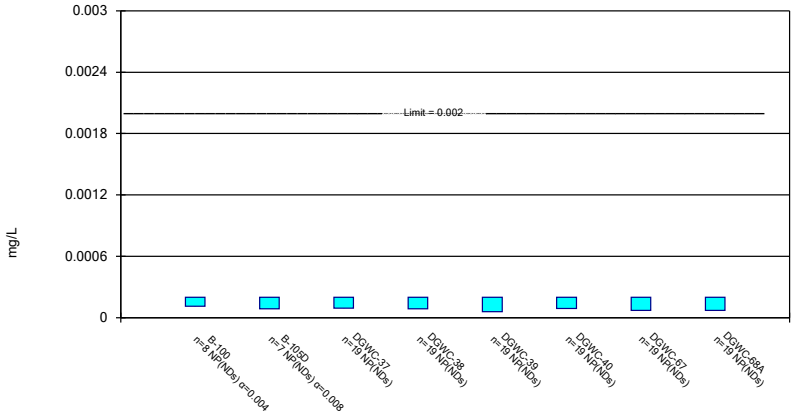
Non-Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted.



Constituent: Mercury Analysis Run 4/2/2024 3:12 PM View: AP 1 Confidence Intervals
Plant McDonough Data: McDonough AP

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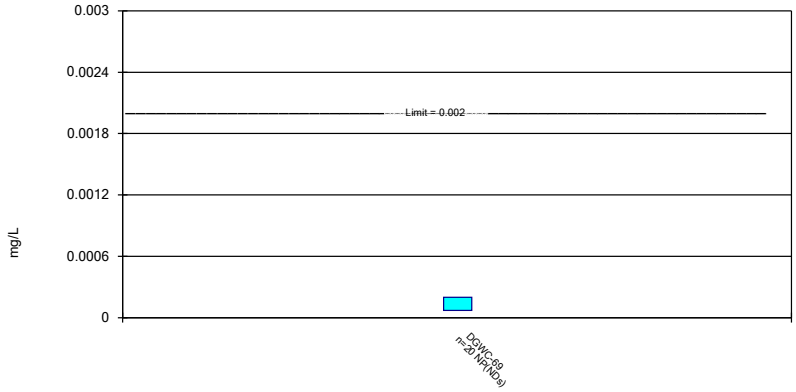
Non-Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Mercury Analysis Run 4/2/2024 3:12 PM View: AP 1 Confidence Intervals
Plant McDonough Data: McDonough AP

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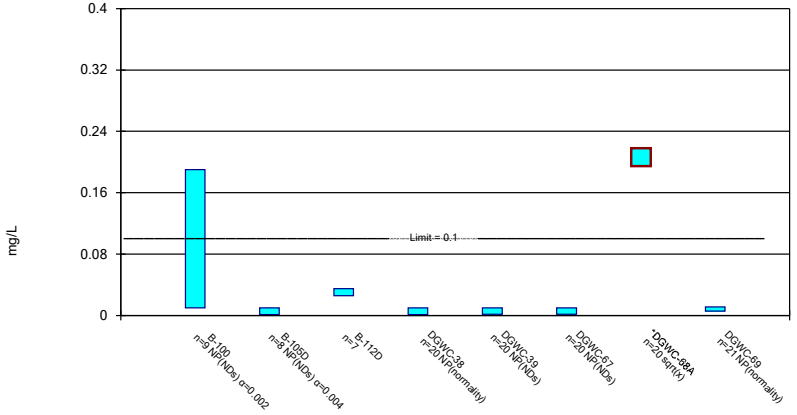
Parametric and Non-Parametric (NP) Confidence Interval

Compliance limit is exceeded.* Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Molybdenum Analysis Run 4/2/2024 3:12 PM View: AP 1 Confidence Intervals
Plant McDonough Data: McDonough AP

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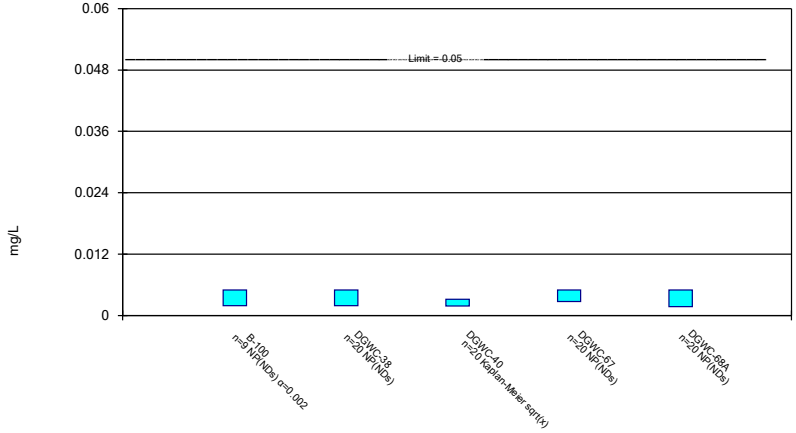
Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Selenium Analysis Run 4/2/2024 3:12 PM View: AP 1 Confidence Intervals
Plant McDonough Data: McDonough AP

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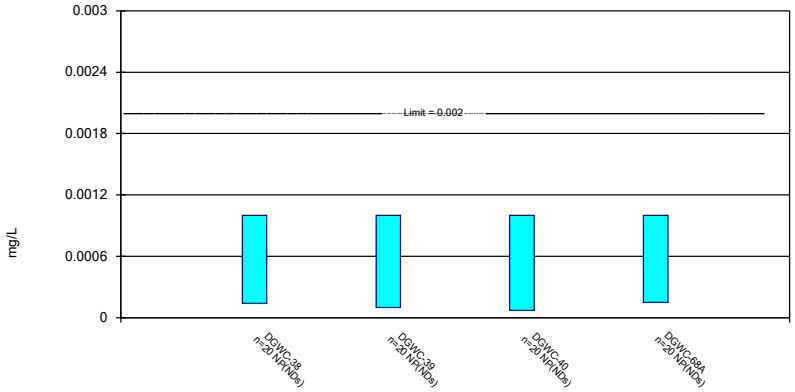
Non-Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Thallium Analysis Run 4/2/2024 3:12 PM View: AP 1 Confidence Intervals
Plant McDonough Data: McDonough AP

Confidence Interval

Constituent: Antimony (mg/L) Analysis Run 4/2/2024 3:13 PM View: AP 1 Confidence Intervals

Plant McDonough Data: McDonough AP

	B-100	B-105D	B-112D	B-62	DGWC-37	DGWC-39	DGWC-40	DGWC-67
9/2/2016							<0.003	
9/8/2016					<0.003	<0.003		
12/7/2016					<0.003	<0.003		
12/8/2016							<0.003	
3/30/2017					<0.003	<0.003	<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	<0.003	<0.003
10/26/2017					<0.003	<0.003	<0.003	<0.003
3/1/2018					<0.003	<0.003		
3/2/2018							<0.003	<0.003
7/12/2018					<0.003	<0.003	<0.003	
7/13/2018								0.0023 (J)
11/8/2018					<0.003	<0.003	<0.003	<0.003
1/30/2019				<0.003				
8/28/2019					<0.003	<0.003	<0.003	<0.003
9/11/2019				<0.003				
10/21/2019				<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	<0.003	<0.003
8/17/2020	0.0013 (J)							
9/23/2020							<0.003	<0.003
9/24/2020				0.00046 (J)	<0.003			
9/25/2020	<0.003					<0.003		
12/9/2020		<0.003						
3/8/2021	0.0017 (J)	0.00069 (J)					0.00033 (J)	
3/11/2021					<0.003	<0.003		<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			<0.003
9/17/2021						<0.003		
1/19/2022		<0.003	<0.003				<0.003	<0.003
1/20/2022				<0.003		<0.003		
1/21/2022	<0.003				<0.003			
9/7/2022		<0.003	<0.003			<0.003	<0.003	
9/8/2022	<0.003			<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			<0.003
2/3/2023						<0.003		
9/6/2023	<0.003				0.0014 (J)			
9/7/2023		<0.003	<0.003	<0.003		<0.003	<0.003	0.0039
1/30/2024		<0.003					<0.003	
1/31/2024	<0.003				<0.003	0.00058 (J)		
2/1/2024			<0.003	<0.003				<0.003
Mean	0.002667	0.003186	0.00263	0.002788	0.002916	0.002873	0.002859	0.002758
Std. Dev.	0.000669	0.002206	0.0009789	0.0007332	0.0003671	0.0005552	0.0006125	0.0008092

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Antimony (mg/L) Analysis Run 4/2/2024 3:13 PM View: AP 1 Confidence Intervals

Plant McDonough Data: McDonough AP

	B-100	B-105D	B-112D	B-62	DGWC-37	DGWC-39	DGWC-40	DGWC-67
Upper Lim.	0.003	0.0082	0.003	0.003	0.003	0.003	0.003	0.0039
Lower Lim.	0.0013	0.00069	0.00041	0.00046	0.0014	0.00058	0.00033	0.0023

Confidence Interval

Constituent: Antimony (mg/L) Analysis Run 4/2/2024 3:13 PM View: AP 1 Confidence Intervals

Plant McDonough 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
9/7/2023	<0.003	<0.003
1/31/2024	<0.003	<0.003
Mean	0.002743	0.00277
Std. Dev.	0.0007735	0.0006018
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 4/2/2024 3:13 PM View: AP 1 Confidence Intervals

Plant McDonough Data: McDonough AP

	B-105D	B-112D	B-62	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	
3/30/2017				<0.005	<0.005	0.0007 (J)	0.0006 (J)	
3/31/2017								<0.005
5/12/2017								<0.005
6/16/2017								<0.005
7/13/2017				<0.005	0.0005 (J)	0.0009 (J)	<0.005	<0.005
10/26/2017				<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
7/12/2018				<0.005	<0.005	0.00057 (J)	<0.005	
7/13/2018								<0.005
11/8/2018				<0.005	<0.005	<0.005	<0.005	<0.005
1/30/2019			<0.005					
8/28/2019				<0.005	<0.005	<0.005	<0.005	<0.005
9/11/2019			<0.005					
10/17/2019								0.00042 (J)
10/18/2019				<0.005	<0.005	0.00075 (J)	<0.005	
10/21/2019			<0.005					
3/4/2020							0.00065 (J)	
3/9/2020				<0.005	<0.005	0.00039 (J)		<0.005
8/13/2020			<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
9/23/2020							<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)						<0.005	
3/11/2021				<0.005	<0.005	<0.005		0.0008 (J)
3/12/2021			<0.005					
4/15/2021		0.00078 (J)						
9/9/2021			<0.005					
9/14/2021							<0.005	
9/15/2021	<0.005				<0.005			
9/16/2021		<0.005		<0.005				<0.005
9/17/2021						<0.005		
1/19/2022	0.0051	0.005					0.003 (J)	0.0033 (J)
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	<0.005	
9/8/2022			<0.005	<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			<0.005
2/3/2023						<0.005		
9/6/2023				<0.005				
9/7/2023	<0.005	<0.005	<0.005		<0.005	<0.005	<0.005	<0.005
1/30/2024	<0.005				<0.005		<0.005	
1/31/2024				<0.005		<0.005		
2/1/2024		<0.005	<0.005					<0.005
Mean	0.0044	0.004397	0.004858	0.004845	0.004775	0.003359	0.004267	0.004476

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Arsenic (mg/L) Analysis Run 4/2/2024 3:13 PM View: AP 1 Confidence Intervals
Plant McDonough Data: McDonough AP

	B-105D	B-112D	B-62	DGWC-37	DGWC-38	DGWC-39	DGWC-40	DGWC-67
Std. Dev.	0.001143	0.001595	0.0004907	0.0006932	0.001006	0.002081	0.001569	0.001377
Upper Lim.	0.0051	0.005	0.005	0.005	0.005	0.005	0.005	0.005
Lower Lim.	0.0025	0.00078	0.0033	0.0019	0.0005	0.00087	0.003	0.0033

Confidence Interval

Constituent: Arsenic (mg/L) Analysis Run 4/2/2024 3:13 PM View: AP 1 Confidence Intervals

Plant McDonough Data: McDonough AP

	DGWC-68A	DGWC-69
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
8/28/2019	<0.005	0.025
10/16/2019	<0.005	0.023
3/9/2020	<0.005	0.029
8/13/2020	<0.005	0.029
9/23/2020	<0.005	0.032
3/10/2021	<0.005	0.028
9/16/2021	0.46 (o)	0.023
10/27/2021	0.0016 (J)	
1/25/2022	<0.005	0.028
9/7/2022	<0.005	0.024
2/1/2023	<0.005	0.021
9/7/2023	<0.005	0.029
1/31/2024	<0.005	0.026
Mean	0.00483	0.03183
Std. Dev.	0.0007603	0.03639
Upper Lim.	0.005	0.03469
Lower Lim.	0.0016	0.01445

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 4/2/2024 3:13 PM View: AP 1 Confidence Intervals

Plant McDonough Data: McDonough AP

	B-100	B-105D	B-112D	B-62	DGWC-37	DGWC-38	DGWC-39	DGWC-40
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
7/13/2017					0.11	0.0332	0.0919	0.017
10/26/2017					0.112	0.0333	0.0899	0.0168
3/1/2018					0.102	0.0333	0.0742	
3/2/2018								0.0169
7/12/2018					0.11	0.034	0.094	0.018
11/8/2018					0.11	0.035	0.1	0.017
1/30/2019				0.018				
8/28/2019					0.086	0.033	0.099	0.017
9/11/2019				0.023				
10/18/2019					0.079	0.032	0.1	0.019
10/21/2019				0.026				
3/4/2020								0.018
3/9/2020					0.092	0.032	0.076	
8/13/2020				0.026	0.088	0.032	0.089	0.018
8/17/2020	0.015							
9/23/2020								0.019
9/24/2020				0.025	0.094	0.032		
9/25/2020	0.022						0.1	
12/9/2020		0.03						
3/8/2021	0.022	0.041						0.016
3/11/2021					0.075	0.032	0.078	
3/12/2021				0.027				
4/15/2021			0.026					
9/9/2021				0.021				
9/13/2021	0.021							
9/14/2021								0.027
9/15/2021		0.037				0.032		
9/16/2021			0.0032 (J)		0.083			
9/17/2021							0.09	
1/19/2022		0.04	0.0034 (J)					0.018
1/20/2022				0.021			0.093	
1/21/2022	0.023				0.085	0.031		
9/7/2022		0.035	0.0026 (J)				0.099	0.016
9/8/2022	0.021			0.018	0.079			
9/12/2022						0.027		
2/1/2023		0.036	0.0028 (J)					0.017
2/2/2023	0.098			0.019	0.081	0.03		
2/3/2023							0.087	
9/6/2023	0.021				0.082			
9/7/2023		0.035	0.0027 (J)	0.015		0.027	0.11	0.016
1/30/2024		0.039				0.031		0.017
1/31/2024	0.019				0.086		0.1	
2/1/2024			0.0028 (J)	0.017				
Mean	0.02911	0.03663	0.006214	0.02133	0.0956	0.03196	0.09195	0.01774
Std. Dev.	0.02594	0.003503	0.008729	0.00403	0.01566	0.002043	0.009245	0.002352
Upper Lim.	0.098	0.04034	0.026	0.0245	0.1045	0.03312	0.0972	0.018
Lower Lim.	0.015	0.03291	0.0026	0.01817	0.08671	0.03089	0.0867	0.0168

Confidence Interval

Constituent: Barium (mg/L) Analysis Run 4/2/2024 3:13 PM View: AP 1 Confidence Intervals

Plant McDonough Data: McDonough AP

	DGWC-67	DGWC-68A	DGWC-69
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	0.102	0.0859	0.0985
8/8/2017		0.0852	
10/26/2017	0.105	0.0878	0.136
11/15/2017			0.107
3/2/2018	0.104	0.0878	0.0671
7/13/2018	0.11	0.091	0.074
11/8/2018	0.11	0.092	0.072
8/28/2019	0.11	0.089	0.061
10/16/2019		0.089	0.1
10/17/2019	0.1		
3/9/2020	0.11	0.088	0.057
8/13/2020	0.095	0.088	0.13
9/23/2020	0.1	0.094	0.055
3/10/2021		0.09	0.048
3/11/2021	0.11		
9/16/2021	0.088	0.13 (o)	0.078
10/27/2021		0.086	
1/19/2022	0.091		
1/25/2022		0.1	0.049
9/7/2022		0.098	0.065
9/8/2022	0.082		
2/1/2023		0.099	0.044
2/2/2023	0.08		
9/7/2023	0.076	0.11	0.047
1/31/2024		0.11	0.048
2/1/2024	0.077		
Mean	0.0999	0.09226	0.07699
Std. Dev.	0.01371	0.007471	0.02733
Upper Lim.	0.1077	0.098	0.09206
Lower Lim.	0.09211	0.0878	0.06191

Confidence Interval

Constituent: Beryllium (mg/L) Analysis Run 4/2/2024 3:13 PM View: AP 1 Confidence Intervals

Plant McDonough Data: McDonough AP

	B-100	B-62	DGWC-37	DGWC-38	DGWC-40	DGWC-68A	DGWC-69
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		
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
1/30/2019		<0.0025					
8/28/2019			8.6E-05 (J)	<0.0005	0.0032	<0.0005	<0.0005
9/11/2019		0.00012 (J)					
10/16/2019						<0.0005	<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	7.5E-05 (J)
8/13/2020		0.00011 (J)	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		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)	5E-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	<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	5.9E-05 (J)
9/7/2022					0.0031	<0.0005	<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	<0.0005
2/2/2023	<0.0005	0.00012 (J)	<0.0005	<0.0005			
9/6/2023	0.00054		5.8E-05 (J)				
9/7/2023		0.00011 (J)		<0.0005	0.0031	<0.0005	7.8E-05 (J)
1/30/2024				<0.0005	0.0032		

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 4/2/2024 3:13 PM View: AP 1 Confidence Intervals

Plant McDonough Data: McDonough AP

	B-100	B-62	DGWC-37	DGWC-38	DGWC-40	DGWC-68A	DGWC-69
1/31/2024	0.00047 (J)		<0.0005			<0.0005	<0.0005
2/1/2024		0.00015 (J)					
Mean	0.0004567	0.0004868	0.0003289	0.0004779	0.003035	0.0004573	0.000334
Std. Dev.	0.0001063	0.0008937	0.0002153	9.883E-05	0.000458	0.0001316	0.0002169
Upper Lim.	0.0005593	0.0025	0.0005	0.0005	0.003288	0.0005	0.0005
Lower Lim.	0.000354	9E-05	7E-05	5.8E-05	0.00283	8.4E-05	6.3E-05

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Cadmium (mg/L) Analysis Run 4/2/2024 3:13 PM View: AP 1 Confidence Intervals

Plant McDonough Data: McDonough AP

	B-100	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				<0.001	<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
8/17/2020	0.00059 (J)						
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	0.00027 (J)						
3/8/2021	0.00027 (J)			0.00072			
3/10/2021						<0.0005	<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	<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)	<0.0005
9/7/2022				0.00081		0.0002 (J)	<0.0005
9/8/2022	0.00027 (J)	<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		<0.0005		
9/6/2023	0.00035 (J)	<0.0005					
9/7/2023			0.00013 (J)	0.00074	<0.0005	0.00015 (J)	<0.0005
1/30/2024			0.00024 (J)	0.00073			
1/31/2024	0.00033 (J)	<0.0005				0.00026 (J)	<0.0005
2/1/2024					<0.0005		
Mean	0.0003567	0.000415	0.000315	0.0007665	0.000437	0.000364	0.0004367
Std. Dev.	0.000136	0.0001548	0.0002343	0.0001175	0.0001337	0.0002143	0.000135
Upper Lim.	0.00059	0.0005	0.0005	0.0008332	0.00053	0.0002305	0.0005
Lower Lim.	0.00025	0.00027	0.00017	0.0006998	0.00021	0.000148	0.0002

ND substitution: RL or RL/2 if <15% NDs. Substitution method for trace values of the form <PQL(J): PQL.

Confidence Interval

Constituent: Chromium (mg/L) Analysis Run 4/2/2024 3:13 PM View: AP 1 Confidence Intervals

Plant McDonough Data: McDonough AP

	B-100	B-105D	B-112D	B-62	DGWC-37	DGWC-38	DGWC-40	DGWC-67
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)
5/12/2017								0.0007 (J)
6/16/2017								<0.005
7/13/2017					<0.005	<0.005	0.0006 (J)	<0.005
10/26/2017					0.0007 (J)	0.0005 (J)	0.0007 (J)	<0.005
3/1/2018					<0.005	<0.005		
3/2/2018							<0.005	<0.005
7/12/2018					<0.005	<0.005	<0.005	
7/13/2018								<0.005
11/8/2018					<0.005	<0.005	<0.005	<0.005
1/30/2019				<0.005				
8/28/2019					<0.005	<0.005	0.00061 (J)	<0.005
9/11/2019				<0.005				
10/17/2019								<0.005
10/18/2019					<0.005	0.00092 (J)	0.00078 (J)	
10/21/2019				0.00098 (J)				
3/4/2020							0.0011 (J)	
3/9/2020					<0.005	0.00044 (J)		0.00088 (J)
8/13/2020				<0.005	0.00058 (J)	<0.005	0.00072 (J)	<0.005
8/17/2020	<0.005							
9/23/2020							0.0011 (J)	<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					0.0006 (J)	
3/11/2021					<0.005	<0.005		0.0014 (J)
3/12/2021				<0.005				
4/15/2021			0.00085 (J)					
9/9/2021				<0.005				
9/13/2021	<0.005							
9/14/2021							0.0021 (J)	
9/15/2021		0.0012 (J)				<0.005		
9/16/2021			0.0014 (J)		<0.005			<0.005
1/19/2022		<0.005	<0.005				<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				<0.005	
9/8/2022	<0.005			<0.005	<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	<0.005		<0.005
9/6/2023	<0.005				<0.005			
9/7/2023		<0.005	<0.005	<0.005		<0.005	<0.005	<0.005
1/30/2024		<0.005				<0.005	<0.005	
1/31/2024	<0.005				<0.005			
2/1/2024			<0.005	<0.005				<0.005
Mean	0.004057	0.004525	0.003893	0.004665	0.004564	0.004343	0.00295	0.004174

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Chromium (mg/L) Analysis Run 4/2/2024 3:13 PM View: AP 1 Confidence Intervals

Plant McDonough Data: McDonough AP

	B-100	B-105D	B-112D	B-62	DGWC-37	DGWC-38	DGWC-40	DGWC-67
Std. Dev.	0.001874	0.001344	0.001897	0.00116	0.001342	0.001607	0.002127	0.001702
Upper Lim.	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005
Lower Lim.	0.00057	0.0012	0.00085	0.00098	0.0007	0.00092	0.0007	0.0014

Confidence Interval

Constituent: Chromium (mg/L) Analysis Run 4/2/2024 3:13 PM View: AP 1 Confidence Intervals

Plant McDonough Data: McDonough AP

	DGWC-68A	DGWC-69
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
8/28/2019	<0.005	0.00049 (J)
10/16/2019	<0.005	<0.005
3/9/2020	<0.005	0.0012 (J)
8/13/2020	<0.005	<0.005
9/23/2020	<0.005	0.0011 (J)
3/10/2021	<0.005	0.0009 (J)
9/16/2021	0.0014 (Jo)	<0.005
10/27/2021	<0.005	
1/25/2022	<0.005	0.0013 (J)
9/7/2022	<0.005	<0.005
2/1/2023	<0.005	<0.005
9/7/2023	<0.005	<0.005
1/31/2024	<0.005	<0.005
Mean	0.004775	0.004047
Std. Dev.	0.001006	0.001752
Upper Lim.	0.005	0.005
Lower Lim.	0.0005	0.0013

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Cobalt (mg/L) Analysis Run 4/2/2024 3:13 PM View: AP 1 Confidence Intervals

Plant McDonough Data: McDonough AP

	B-100	B-105D	B-112D	B-62	DGWC-37	DGWC-38	DGWC-39	DGWC-40
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
7/13/2017					0.0003 (J)	0.0016 (J)	0.0063 (J)	0.0394
10/26/2017					0.0003 (J)	0.0016 (J)	0.0062 (J)	0.0371
3/1/2018					<0.005	<0.01	<0.01	
3/2/2018								0.0425
7/12/2018					<0.005	0.0015 (J)	0.0059 (J)	0.044
11/8/2018					<0.005	<0.01 (J)	<0.01 (J)	0.036
1/30/2019				<0.005				
8/28/2019					<0.005	0.0016 (J)	0.0067	0.044
9/11/2019				0.0003 (J)				
10/18/2019					<0.005	0.0016 (J)	0.007	0.043
10/21/2019				0.00031 (J)				
3/4/2020								0.055
3/9/2020					<0.005	0.0016 (J)	0.007	
7/23/2020	0.086							
8/3/2020	0.087							
8/13/2020				<0.005	<0.005	0.0014 (J)	0.006	0.044
8/17/2020	0.077							
9/23/2020								0.046
9/24/2020				<0.005	<0.005	0.0013 (J)		
9/25/2020	0.034						0.0061	
12/9/2020		0.012						
3/8/2021	0.029	0.0042 (J)						0.039
3/11/2021					<0.005	0.0017 (J)	0.0058	
3/12/2021				<0.005				
4/15/2021			0.0025 (J)					
9/9/2021				<0.005				
9/13/2021	0.035							
9/14/2021								0.05
9/15/2021		0.0065				0.0016 (J)		
9/16/2021			0.00054 (J)		<0.005			
9/17/2021							0.0076	
1/19/2022		0.006	<0.005					0.042
1/20/2022				<0.005			0.0061	
1/21/2022	0.034				<0.005	0.0017 (J)		
9/7/2022		0.004 (J)	<0.005				0.0065	0.037
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					0.035
2/2/2023	<0.005			<0.005	<0.005	0.0017 (J)		
2/3/2023							0.005	
9/6/2023	0.031				<0.005			
9/7/2023		0.0027 (J)	0.0004 (J)	<0.005		0.0015 (J)	0.0059	0.035
1/30/2024		0.0026 (J)				0.002 (J)		0.037
1/31/2024	0.065				<0.005		0.0058	
2/1/2024			<0.005	<0.005				
Mean	0.04623	0.00525	0.003349	0.004278	0.004305	0.00193	0.00619	0.04062

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 4/2/2024 3:13 PM View: AP 1 Confidence Intervals

Plant McDonough Data: McDonough AP

	B-100	B-105D	B-112D	B-62	DGWC-37	DGWC-38	DGWC-39	DGWC-40
Std. Dev.	0.02782	0.003058	0.002168	0.001763	0.001698	0.00106	0.0007137	0.005609
Upper Lim.	0.06941	0.008174	0.005	0.005	0.005	0.0017	0.006595	0.04381
Lower Lim.	0.02304	0.002506	0.0004	0.00031	0.0005	0.0015	0.005785	0.03743

Confidence Interval

Constituent: Cobalt (mg/L) Analysis Run 4/2/2024 3:13 PM View: AP 1 Confidence Intervals

Plant McDonough Data: McDonough AP

	DGWC-67	DGWC-68A	DGWC-69
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	0.0037 (J)	0.0005 (J)	0.0004 (J)
8/8/2017		<0.005	
10/26/2017	0.0022 (J)	<0.005	0.0031 (J)
11/15/2017			0.0028 (J)
3/2/2018	<0.01	<0.005	<0.005
7/13/2018	0.0017 (J)	<0.005	<0.005
11/8/2018	<0.01 (J)	<0.005	<0.005
8/28/2019	0.0013 (J)	<0.005	<0.005
10/16/2019		<0.005	<0.005
10/17/2019	0.0013 (J)		
3/9/2020	0.0015 (J)	<0.005	<0.005
8/13/2020	0.0015 (J)	<0.005	<0.005
9/23/2020	0.0011 (J)	<0.005	<0.005
3/10/2021		<0.005	<0.005
3/11/2021	0.0016 (J)		
9/16/2021	0.0012 (J)	0.0032 (Jo)	<0.005
10/27/2021		<0.005	
1/19/2022	0.0011 (J)		
1/25/2022		<0.005	<0.005
9/7/2022		<0.005	<0.005
9/8/2022	0.001 (J)		
2/1/2023		<0.005	<0.005
2/2/2023	0.0014 (J)		
9/7/2023	0.001 (J)	<0.005	<0.005
1/31/2024		<0.005	<0.005
2/1/2024	0.0011 (J)		
Mean	0.002345	0.004365	0.004095
Std. Dev.	0.00166	0.001565	0.001559
Upper Lim.	0.0037	0.005	0.005
Lower Lim.	0.0011	0.0015	0.0028

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 4/2/2024 3:13 PM View: AP 1 Confidence Intervals

Plant McDonough Data: McDonough AP

	B-100	B-105D	B-112D	B-62	DGWC-37	DGWC-38	DGWC-39	DGWC-40
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)
7/13/2017					0.731 (U)	1.11	0.517 (U)	0.963 (U)
10/26/2017					1.04 (U)	1.13 (U)	0.875 (U)	0.748 (U)
3/1/2018					0.344 (U)	0.985 (U)	1.24	
3/2/2018								0.485 (U)
7/12/2018					0.566 (U)	0.615 (U)	0.935 (U)	0.231 (U)
11/8/2018					0.623 (U)	0.58 (U)	1.15 (U)	0.465 (U)
1/30/2019				1.97 (U)				
8/28/2019					1.24 (U)	0.517 (U)	1.15 (U)	0.592 (U)
10/21/2019				1.82				
1/6/2020					2.01	0.527 (U)	1.4	1.6
3/4/2020								1.62
3/9/2020					0.499 (U)	1.04	1.36	
8/13/2020				1.63	0.99	0.132 (U)	0.626 (U)	1.6
8/17/2020	1.4 (U)							
9/23/2020								1.28 (U)
9/24/2020				1.28 (U)	1.03 (U)	0.593 (U)		
9/25/2020	0.799 (U)						0.181 (U)	
12/9/2020		1.25 (U)						
3/8/2021	0.168 (U)	1.87						0.714 (U)
3/11/2021					0.956 (U)	0.0784 (U)	0.969 (U)	
3/12/2021				1.18 (U)				
4/15/2021			0.945 (U)					
9/9/2021				1.7				
9/13/2021	0.774 (U)							
9/14/2021								1.8
9/15/2021		2.01				2.37		
9/16/2021			0.241 (U)		0.691 (U)			
9/17/2021							0.911 (U)	
1/19/2022		2.45	0.738 (U)					1.7
1/20/2022				1.71			0.172 (U)	
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					0.603 (U)
2/2/2023	0.981			1.6	1.23	0.462 (U)		
2/3/2023							0.878 (U)	
9/6/2023	0.326 (U)				0.732 (U)			
9/7/2023		2.88	0.902	2.24		0.358 (U)	0.728 (U)	0.902 (U)
1/30/2024		6.38				0.606 (U)		0.534 (U)
1/31/2024	0.0563 (U)				0.14 (U)		0.156 (U)	
2/1/2024			1.25	2.08				
Mean	0.6574	3.389	0.9727	1.743	0.7818	0.7058	0.9006	1.048
Std. Dev.	0.4203	2.275	0.5085	0.3213	0.4323	0.5564	0.5188	0.6487
Upper Lim.	1.063	6.025	1.671	2.011	1.035	0.936	1.204	1.428
Lower Lim.	0.2516	1.132	0.2741	1.475	0.5287	0.3524	0.5968	0.6687

Confidence Interval

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 4/2/2024 3:13 PM View: AP 1 Confidence Intervals

Plant McDonough Data: McDonough AP

	DGWC-67	DGWC-68A	DGWC-69
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	0.387 (U)	0.304 (U)	1.14
8/8/2017		1.4	
10/26/2017	0.619 (U)	0.477 (U)	2.04
11/15/2017			1.99
3/2/2018	1.31	1.13	0.918 (U)
7/13/2018	0.667 (U)	0.407 (U)	1.36 (U)
11/8/2018	0.911 (U)	0.393 (U)	0.719 (U)
8/28/2019	0.751 (U)	1.77	1.38
10/16/2019		2.12	0.826 (U)
1/6/2020	0.965 (U)		
3/9/2020	0.819 (U)	1.33	1.39
8/13/2020	0.897 (U)	1.46	2.66
9/23/2020	0.131 (U)	0.563 (U)	1.8
3/10/2021		0.568 (U)	1.6
3/11/2021	1.55		
9/16/2021	0.201 (U)	1.74	2.06
1/19/2022	0.853 (U)		
1/25/2022		0.323 (U)	0.834 (U)
2/1/2023		1.37	1.85
2/2/2023	0.498 (U)		
9/7/2023	0.565 (U)	0.782 (U)	0.91
1/31/2024		0.0595 (U)	0.588 (U)
2/1/2024	0.667 (U)		
Mean	0.7035	0.932	1.418
Std. Dev.	0.3673	0.6086	0.5404
Upper Lim.	0.9186	1.288	1.725
Lower Lim.	0.4884	0.5757	1.111

Confidence Interval

Constituent: Fluoride (mg/L) Analysis Run 4/2/2024 3:13 PM View: AP 1 Confidence Intervals

Plant McDonough Data: McDonough AP

	B-100	B-105D	B-112D	B-62	DGWC-37	DGWC-38	DGWC-39	DGWC-40
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)
7/13/2017					0.06 (J)	0.13 (J)	0.14 (J)	0.2 (J)
10/26/2017					0.08 (J)	0.47	0.54	0.5
3/1/2018					0.22	<0.3	0.13	
3/2/2018								0.33
7/12/2018					0.32	0.23 (J)	0.13 (J)	0.57
11/8/2018					<0.3	<0.3	<0.3 (J)	<0.3 (J)
1/30/2019				0.43				
3/13/2019					0.08 (J)	0.084 (J)	0.085 (J)	0.15 (J)
8/28/2019					0.074 (J)	0.066 (J)	0.086 (J)	0.14
10/18/2019					0.075 (J)	0.073 (J)	0.14 (J)	0.13 (J)
10/21/2019				0.23 (J)				
3/4/2020								0.11 (J)
3/9/2020					0.054 (J)	0.064 (J)	0.075 (J)	
8/13/2020				0.11	0.068 (J)	0.06 (J)	0.076 (J)	0.16
8/17/2020	<0.1							
9/23/2020								0.054 (J)
9/24/2020				0.093 (J)	0.061 (J)	0.057 (J)		
9/25/2020	<0.1						0.086 (J)	
12/9/2020		0.075 (J)						
3/8/2021	<0.1	0.32						0.17
3/11/2021					0.057 (J)	0.058 (J)	0.083 (J)	
3/12/2021				0.11				
4/15/2021			0.3					
9/9/2021				0.14				
9/13/2021	<0.1							
9/14/2021								0.13
9/15/2021		0.078 (J)				0.06 (J)		
9/16/2021			0.34		0.084 (J)			
9/17/2021							0.13	
1/19/2022		0.058 (J)	0.25					0.12
1/20/2022				0.099 (J)			0.1	
1/21/2022	<0.1				0.053 (J)	0.1		
9/7/2022		0.11	0.27				0.11	0.14
9/8/2022	0.072 (J)			0.13	0.082 (J)			
9/12/2022						0.12		
2/1/2023		0.089 (J)	0.3					0.15
2/2/2023	0.052 (J)			0.16	0.089 (J)	0.1		
2/3/2023							0.12	
9/6/2023	<0.1				0.053 (J)			
9/7/2023		0.1	0.32	0.13		0.072 (J)	0.092 (J)	0.14
1/30/2024		0.081 (J)				0.078 (J)		0.12
1/31/2024	0.063 (J)				0.069 (J)		0.11	
2/1/2024			0.29	0.14				
Mean	0.08744	0.1139	0.2957	0.1611	0.09852	0.1244	0.1454	0.2154
Std. Dev.	0.01949	0.08478	0.02992	0.09675	0.06948	0.09707	0.1059	0.1456
Upper Lim.	0.1	0.32	0.3313	0.23	0.089	0.1413	0.15	0.2494
Lower Lim.	0.052	0.058	0.2602	0.099	0.057	0.07603	0.086	0.1311

ND substitution: RL or RL/2 if <15% NDs. Substitution method for trace values of the form <PQL(J): PQL.

Confidence Interval

Constituent: Fluoride (mg/L) Analysis Run 4/2/2024 3:13 PM View: AP 1 Confidence Intervals

Plant McDonough Data: McDonough AP

	DGWC-67	DGWC-68A	DGWC-69
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	0.03 (J)	0.12 (J)	0.13 (J)
8/8/2017		0.11 (J)	
10/26/2017	<0.1	0.11 (J)	0.29 (J)
11/15/2017			0.28 (J)
3/2/2018	<0.1	0.23	0.18
7/13/2018	0.25 (J)	0.099 (J)	0.19 (J)
11/8/2018	0.5	<0.3 (J)	<0.3 (J)
3/13/2019	0.07 (J)	0.12 (J)	0.086 (J)
8/28/2019	<0.1	0.1	0.07 (J)
10/16/2019		0.093 (J)	0.13 (J)
10/17/2019	0.038 (J)		
3/9/2020	<0.1	0.082 (J)	0.068 (J)
8/13/2020	<0.1	0.076 (J)	0.084 (J)
9/23/2020	<0.1	0.07 (J)	0.064 (J)
3/10/2021		0.07 (J)	0.055 (J)
3/11/2021	<0.1		
9/16/2021	0.069 (J)	0.55	0.11
1/19/2022	<0.1		
1/25/2022		0.067 (J)	0.054 (J)
9/7/2022		0.11	0.11
9/8/2022	0.096 (J)		
2/1/2023		0.11	0.1
2/2/2023	0.068 (J)		
9/7/2023	<0.1	0.096 (J)	0.063 (J)
1/31/2024		0.092 (J)	0.086 (J)
2/1/2024	0.057 (J)		
Mean	0.1061	0.1402	0.1245
Std. Dev.	0.1016	0.1154	0.06591
Upper Lim.	0.1	0.12	0.1515
Lower Lim.	0.057	0.082	0.08745

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 4/2/2024 3:13 PM View: AP 1 Confidence Intervals

Plant McDonough Data: McDonough AP

	B-100	B-105D	B-112D	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	
3/30/2017				0.0014 (J)	<0.001	<0.001	7E-05 (J)	
3/31/2017								<0.001
5/12/2017								9E-05 (J)
6/16/2017								<0.001
7/13/2017				<0.001	<0.001	<0.001	<0.001	<0.001
10/26/2017				<0.001	0.0001 (J)	<0.001	7E-05 (J)	<0.001
3/1/2018				<0.001	<0.001	<0.001		
3/2/2018							<0.001	<0.001
7/12/2018				<0.001	<0.001	<0.001	<0.001	
7/13/2018								<0.001
11/8/2018				<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
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)
8/13/2020				<0.001	<0.001	<0.001	4.9E-05 (J)	5.6E-05 (J)
8/17/2020	8.8E-05 (J)							
9/23/2020							0.00028 (J)	<0.001
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					5.4E-05 (J)	
3/11/2021				<0.001	0.00014 (J)	<0.001		0.00025 (J)
4/15/2021			0.00014 (J)					
9/13/2021	<0.001							
9/14/2021							<0.001	
9/15/2021		<0.001			<0.001			
9/16/2021			<0.001	<0.001				<0.001
9/17/2021						<0.001		
1/19/2022		<0.001	<0.001				<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	<0.001	
9/8/2022	<0.001			<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			<0.001
2/3/2023						<0.001		
9/6/2023	<0.001			<0.001				
9/7/2023		<0.001	<0.001		<0.001	<0.001	<0.001	<0.001
1/30/2024		<0.001			<0.001		<0.001	
1/31/2024	<0.001			<0.001		<0.001		
2/1/2024			<0.001					<0.001
Mean	0.0007198	0.0008815	0.0008771	0.0009731	0.0007758	0.000915	0.0006462	0.0008222
Std. Dev.	0.0004215	0.0003352	0.000325	0.0002325	0.0003989	0.0002626	0.0004472	0.0003669
Upper Lim.	0.001	0.001	0.001	0.0014	0.001	0.001	0.001	0.001
Lower Lim.	8.8E-05	5.2E-05	0.00014	6.1E-05	0.00014	0.00022	8.1E-05	0.00025

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Lead (mg/L) Analysis Run 4/2/2024 3:13 PM View: AP 1 Confidence Intervals

Plant McDonough Data: McDonough AP

	DGWC-68A	DGWC-69
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
8/28/2019	<0.001	<0.001
10/16/2019	<0.001	<0.001
3/9/2020	<0.001	9E-05 (J)
8/13/2020	<0.001	5.9E-05 (J)
9/23/2020	0.00035 (J)	0.00017 (J)
3/10/2021	6.7E-05 (J)	0.0001 (J)
9/16/2021	<0.001	<0.001
1/25/2022	<0.001	<0.001
9/7/2022	<0.001	<0.001
2/1/2023	<0.001	<0.001
9/7/2023	<0.001	0.0002 (J)
1/31/2024	<0.001	<0.001
Mean	0.0009209	0.0007052
Std. Dev.	0.0002479	0.0004281
Upper Lim.	0.001	0.001
Lower Lim.	0.00035	0.0001

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Lithium (mg/L) Analysis Run 4/2/2024 3:13 PM View: AP 1 Confidence Intervals

Plant McDonough Data: McDonough AP

	B-100	B-105D	B-112D	B-62	DGWC-37	DGWC-38	DGWC-40	DGWC-67
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							<0.05	
3/30/2017					0.0029 (J)	0.0035 (J)	0.0023 (J)	
3/31/2017								0.0052 (J)
5/12/2017								0.0054 (J)
6/16/2017								0.0048 (J)
7/13/2017					<0.03	0.0032 (J)	0.0023 (J)	0.0044 (J)
10/26/2017					0.0018 (J)	0.0034 (J)	0.0021 (J)	0.0043 (J)
3/1/2018					0.0024 (J)	0.0033 (J)		
3/2/2018							0.0023 (J)	0.0047 (J)
7/12/2018					0.0028 (J)	0.0034 (J)	0.0022 (J)	
7/13/2018								0.0041 (J)
11/8/2018					<0.03	<0.05	<0.05	<0.05
1/30/2019				<0.05				
8/28/2019					0.0025 (J)	0.0034 (J)	0.0022 (J)	0.0046 (J)
9/11/2019				0.0078 (J)				
10/17/2019								0.0047 (J)
10/18/2019					0.0026 (J)	0.0032 (J)	0.0024 (J)	
10/21/2019				0.0078 (J)				
3/4/2020							0.0027 (J)	
3/9/2020					0.0017 (J)	0.0033 (J)		0.0048 (J)
8/13/2020				0.0087 (J)	0.0023 (J)	0.0028 (J)	0.0022 (J)	0.0044 (J)
8/17/2020	0.0013 (J)							
9/23/2020							0.0022 (J)	0.0043 (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)					0.0022 (J)	
3/11/2021					0.0024 (J)	0.003 (J)		0.005 (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)							
9/14/2021							0.003 (J)	
9/15/2021		0.014 (J)				0.0029 (J)		
9/16/2021			0.0038 (J)		0.0021 (J)			0.0044 (J)
1/19/2022		0.013 (J)	0.0044 (J)				0.0024 (J)	0.0046 (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)				0.0023 (J)	
9/8/2022	0.0023 (J)			0.0085 (J)	0.0019 (J)			0.0048 (J)
9/12/2022						0.003 (J)		
2/1/2023		0.013 (J)	0.0038 (J)				0.0021 (J)	
2/2/2023	<0.03			0.0082 (J)	0.0018 (J)	0.0026 (J)		0.0048 (J)
9/6/2023	0.0023 (J)				0.0021 (J)			
9/7/2023		0.013 (J)	0.0043 (J)	0.0092 (J)		0.0026 (J)	0.0022 (J)	0.0046 (J)
1/30/2024		0.013 (J)				0.003 (J)	0.0023 (J)	
1/31/2024	<0.03				<0.03			
2/1/2024			0.0042 (J)	0.0094 (J)				0.0045 (J)
Mean	0.008367	0.0135	0.004129	0.01003	0.00917	0.004185	0.00458	0.00567

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Lithium (mg/L) Analysis Run 4/2/2024 3:13 PM View: AP 1 Confidence Intervals

Plant McDonough Data: McDonough AP

	B-100	B-105D	B-112D	B-62	DGWC-37	DGWC-38	DGWC-40	DGWC-67
Std. Dev.	0.01227	0.0007559	0.0002928	0.004749	0.01234	0.004909	0.006987	0.00456
Upper Lim.	0.03	0.015	0.004476	0.0094	0.0029	0.0034	0.0024	0.005
Lower Lim.	0.0013	0.013	0.003781	0.0078	0.002	0.0029	0.0022	0.0044

Confidence Interval

Constituent: Lithium (mg/L) Analysis Run 4/2/2024 3:13 PM View: AP 1 Confidence Intervals

Plant McDonough Data: McDonough AP

	DGWC-68A	DGWC-69
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	<0.05
8/28/2019	<0.03	0.0024 (J)
10/16/2019	<0.03	0.0032 (J)
3/9/2020	<0.03	0.0025 (J)
8/13/2020	<0.03	0.0031 (J)
9/23/2020	<0.03	0.0023 (J)
3/10/2021	<0.03	0.0023 (J)
9/16/2021	0.00082 (J)	0.0023 (J)
1/25/2022	<0.03	0.0026 (J)
9/7/2022	<0.03	0.0025 (J)
2/1/2023	<0.03	0.0021 (J)
9/7/2023	<0.03	0.0022 (J)
1/31/2024	<0.03	0.0021 (J)
Mean	0.02712	0.003757
Std. Dev.	0.008862	0.004885
Upper Lim.	0.03	0.0031
Lower Lim.	0.0016	0.0023

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Mercury (mg/L) Analysis Run 4/2/2024 3:13 PM View: AP 1 Confidence Intervals

Plant McDonough Data: McDonough AP

	B-100	B-105D	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
8/17/2020	0.00011 (J)							
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				<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				<0.0002	<0.0002
9/17/2021					<0.0002			
1/19/2022		<0.0002				<0.0002	<0.0002	
1/20/2022					<0.0002			
1/21/2022	<0.0002		<0.0002	<0.0002				
1/25/2022								<0.0002
9/7/2022		0.00014 (J)			<0.0002	<0.0002		<0.0002
9/8/2022	<0.0002		<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			<0.0002	
2/3/2023					<0.0002			
9/6/2023	<0.0002		<0.0002					
9/7/2023		<0.0002		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
1/30/2024		<0.0002		<0.0002		<0.0002		
1/31/2024	<0.0002		<0.0002		<0.0002			<0.0002
2/1/2024							<0.0002	
Mean	0.0001887	0.0001753	0.0001787	0.0001787	0.0001926	0.0001778	0.0001932	0.0001932
Std. Dev.	3.182E-05	4.49E-05	5.12E-05	5.115E-05	3.235E-05	5.33E-05	2.982E-05	2.982E-05
Upper Lim.	0.0002	0.0002	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	7E-05	7E-05

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Mercury (mg/L) Analysis Run 4/2/2024 3:13 PM View: AP 1 Confidence Intervals

Plant McDonough Data: McDonough AP

	DGWC-69
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
9/23/2020	<0.0002
9/16/2021	<0.0002
1/25/2022	<0.0002
9/7/2022	<0.0002
2/1/2023	<0.0002
9/7/2023	<0.0002
1/31/2024	<0.0002
Mean	0.0001935
Std. Dev.	2.907E-05
Upper Lim.	0.0002
Lower Lim.	7E-05

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Molybdenum (mg/L) Analysis Run 4/2/2024 3:13 PM View: AP 1 Confidence Intervals

Plant McDonough Data: McDonough AP

	B-100	B-105D	B-112D	DGWC-38	DGWC-39	DGWC-67	DGWC-68A	DGWC-69
9/8/2016				<0.01	<0.01			
12/7/2016				<0.01	<0.01			
3/30/2017				0.0011 (J)	<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				0.0012 (J)	<0.01	<0.01	0.211	0.0053 (J)
8/8/2017							0.207	
10/26/2017				0.0011 (J)	<0.01	<0.01	0.226	0.0244
11/15/2017								0.0237
3/1/2018				<0.01	<0.01			
3/2/2018						<0.01	0.215	0.0072 (J)
7/12/2018				<0.01	<0.01			
7/13/2018						<0.01	0.22	0.007 (J)
11/8/2018				<0.01	<0.01	<0.01	0.2	<0.01 (J)
8/28/2019				<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			
3/9/2020				0.001 (J)	<0.01	<0.01	0.19	0.0062 (J)
8/13/2020				0.00098 (J)	<0.01	<0.01	0.19	0.011
8/17/2020	<0.01							
9/23/2020						<0.01	0.2	0.0056 (J)
9/24/2020				0.001 (J)				
9/25/2020	<0.01				<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)	<0.01	<0.01		
4/15/2021			0.037					
9/13/2021	<0.01							
9/15/2021		<0.01		0.00099 (J)				
9/16/2021			0.032			<0.01	0.18	0.009 (J)
9/17/2021					<0.01			
1/19/2022		<0.01	0.032			<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	0.028		<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	0.03				0.19	0.0058 (J)
2/2/2023	0.19			0.0015 (J)		<0.01		
2/3/2023					<0.01			
9/6/2023	<0.01							
9/7/2023		<0.01	0.026	0.0013 (J)	0.0016 (J)	0.0013 (J)	0.18	0.0056 (J)
1/30/2024		<0.01		0.0018 (J)				
1/31/2024	<0.01				<0.01		0.2	0.0066 (J)
2/1/2024			0.027			<0.01		
Mean	0.03	0.008887	0.03029	0.004269	0.00958	0.009565	0.2067	0.009005
Std. Dev.	0.06	0.003147	0.003773	0.004319	0.001878	0.001945	0.02152	0.00547
Upper Lim.	0.19	0.01	0.03477	0.01	0.01	0.01	0.2182	0.011

ND substitution: RL or RL/2 if <15% NDs. Substitution method for trace values of the form <PQL(J): PQL.

Confidence Interval

Constituent: Molybdenum (mg/L) Analysis Run 4/2/2024 3:13 PM View: AP 1 Confidence Intervals

Plant McDonough Data: McDonough AP

	B-100	B-105D	B-112D	DGWC-38	DGWC-39	DGWC-67	DGWC-68A	DGWC-69
Lower Lim.	0.01	0.0011	0.0258	0.001	0.0016	0.0013	0.1946	0.0057

Confidence Interval

Constituent: Selenium (mg/L) Analysis Run 4/2/2024 3:13 PM View: AP 1 Confidence Intervals

Plant McDonough 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	
9/6/2023	<0.005				
9/7/2023		<0.005	<0.005	<0.005	<0.005
1/30/2024		<0.005	0.0027 (J)		
1/31/2024	<0.005				<0.005
2/1/2024				<0.005	
Mean	0.004656	0.004845	0.00368	0.004885	0.004835
Std. Dev.	0.001033	0.0006932	0.002146	0.0005143	0.0007379
Upper Lim.	0.005	0.005	0.003159	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 4/2/2024 3:13 PM View: AP 1 Confidence Intervals

Plant McDonough 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		
9/7/2023	<0.001	<0.001	<0.001	<0.001
1/30/2024	<0.001		<0.001	
1/31/2024		<0.001		<0.001
Mean	0.0006505	0.0007715	0.0007664	0.0009575
Std. Dev.	0.0004395	0.0004061	0.0004151	0.0001901
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.

FIGURE J.

Appendix IV Trend Tests - Significant Results

Plant McDonough Data: McDonough AP Printed 4/2/2024, 2:57 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Alpha	Method
Arsenic (mg/L)	**DGWC-69**	**0.002194**	**72**	**71**	**Yes**	**22**	**0**	**n/a**	**0.05**	**NP**
Cobalt (mg/L)	**DGWA-53 (bg)**	**-0.003272**	**-118**	**-62**	**Yes**	**20**	**0**	**n/a**	**0.05**	**NP**
Cobalt (mg/L)	**DGWA-71 (bg)**	**0**	**65**	**62**	**Yes**	**20**	**75**	**n/a**	**0.05**	**NP**
Molybdenum (mg/L)	**DGWC-68A**	**-0.004143**	**-66**	**-62**	**Yes**	**20**	**0**	**n/a**	**0.05**	**NP**

Appendix IV Trend Tests - All Results

Plant McDonough Data: McDonough AP Printed 4/2/2024, 2:57 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Alpha	Method
Arsenic (mg/L)	DGWA-53 (bg)	0	14	62	No	20	60	n/a	0.05	NP
Arsenic (mg/L)	DGWA-70A (bg)	0	-28	-62	No	20	85	n/a	0.05	NP
Arsenic (mg/L)	DGWA-71 (bg)	0	28	62	No	20	85	n/a	0.05	NP
Arsenic (mg/L)	**DGWC-69**	**0.002194**	**72**	**71**	**Yes**	**22**	**0**	**n/a**	**0.05**	**NP**
Cobalt (mg/L)	**DGWA-53 (bg)**	**-0.003272**	**-118**	**-62**	**Yes**	**20**	**0**	**n/a**	**0.05**	**NP**
Cobalt (mg/L)	DGWA-70A (bg)	0	47	62	No	20	60	n/a	0.05	NP
Cobalt (mg/L)	**DGWA-71 (bg)**	**0**	**65**	**62**	**Yes**	**20**	**75**	**n/a**	**0.05**	**NP**
Cobalt (mg/L)	DGWC-40	0.00009896	7	62	No	20	0	n/a	0.05	NP
Molybdenum (mg/L)	DGWA-53 (bg)	-0.001654	-62	-62	No	20	0	n/a	0.05	NP
Molybdenum (mg/L)	DGWA-70A (bg)	0	0	62	No	20	100	n/a	0.05	NP
Molybdenum (mg/L)	DGWA-71 (bg)	0	19	62	No	20	95	n/a	0.05	NP
Molybdenum (mg/L)	**DGWC-68A**	**-0.004143**	**-66**	**-62**	**Yes**	**20**	**0**	**n/a**	**0.05**	**NP**

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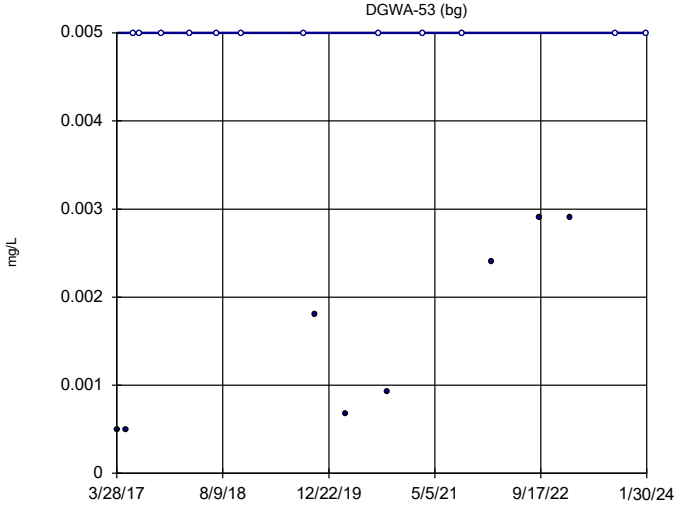
Hollow symbols indicate censored values.

Sen's Slope Estimator

DGWA-53 (bg)



n = 20

Slope = 0 units per year.

Mann-Kendall statistic = 14
critical = 62

Trend not significant at 95% confidence level (α = 0.025 per tail).

Constituent: Arsenic Analysis Run 4/2/2024 2:56 PM View: AP 1 Appendix IV Trend Tests
Plant McDonough Data: McDonough AP

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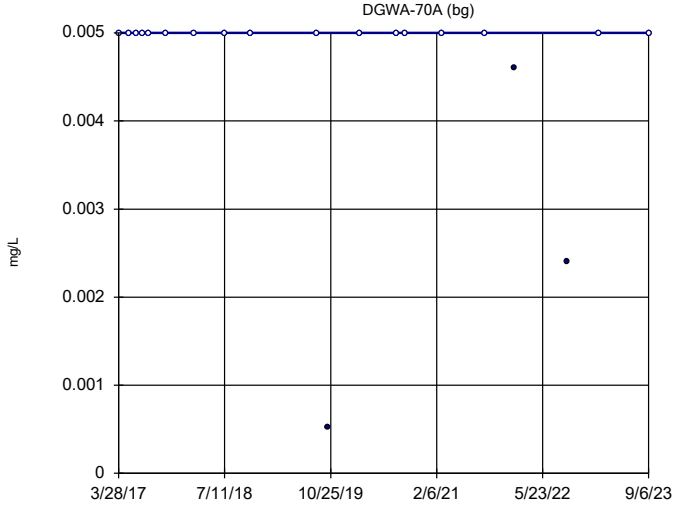
Hollow symbols indicate censored values.

Sen's Slope Estimator

DGWA-70A (bg)



n = 20

Slope = 0 units per year.

Mann-Kendall statistic = -28
critical = -62

Trend not significant at 95% confidence level (α = 0.025 per tail).

Constituent: Arsenic Analysis Run 4/2/2024 2:56 PM View: AP 1 Appendix IV Trend Tests
Plant McDonough Data: McDonough AP

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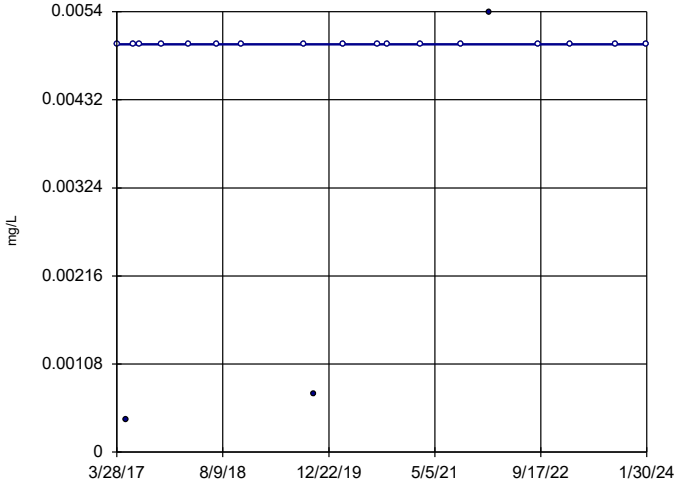
Hollow symbols indicate censored values.

Sen's Slope Estimator

DGWA-71 (bg)



n = 20

Slope = 0 units per year.

Mann-Kendall statistic = 28
critical = 62

Trend not significant at 95% confidence level (α = 0.025 per tail).

Constituent: Arsenic Analysis Run 4/2/2024 2:56 PM View: AP 1 Appendix IV Trend Tests
Plant McDonough Data: McDonough AP

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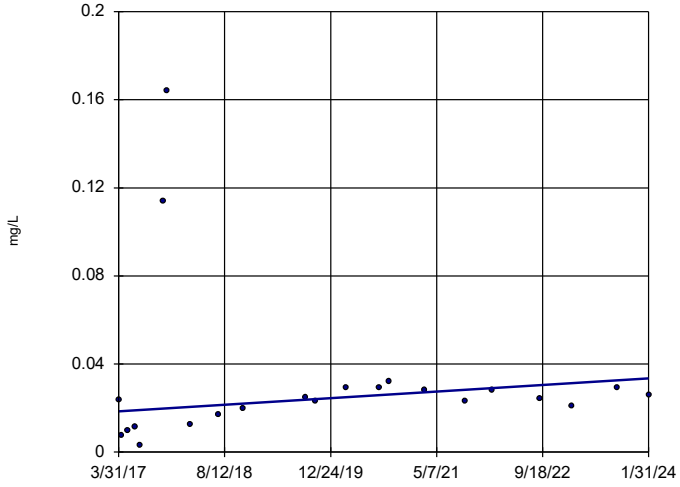
Sen's Slope Estimator

DGWC-69



n = 22

Slope = 0.002194 units per year.

Mann-Kendall statistic = 72
critical = 71

Increasing trend significant at 95% confidence level (α = 0.025 per tail).

Constituent: Arsenic Analysis Run 4/2/2024 2:56 PM View: AP 1 Appendix IV Trend Tests
Plant McDonough Data: McDonough AP

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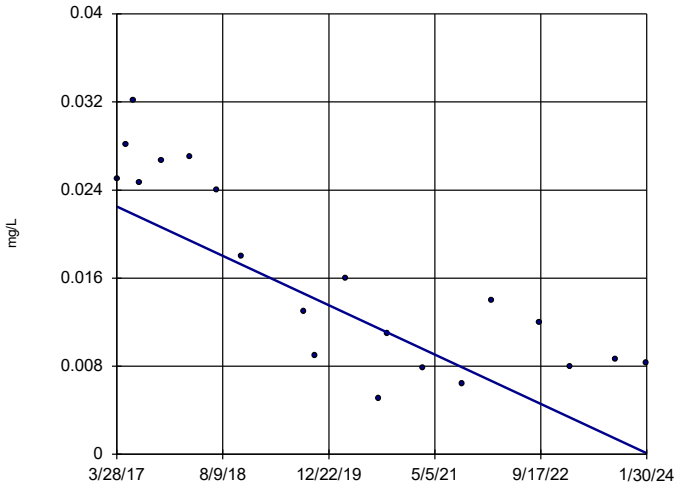
Sen's Slope Estimator

DGWA-53 (bg)



n = 20

Slope = -0.003272 units per year.

Mann-Kendall statistic = -118
critical = -62

Decreasing trend significant at 95% confidence level (α = 0.025 per tail).

Constituent: Cobalt Analysis Run 4/2/2024 2:56 PM View: AP 1 Appendix IV Trend Tests
Plant McDonough Data: McDonough AP

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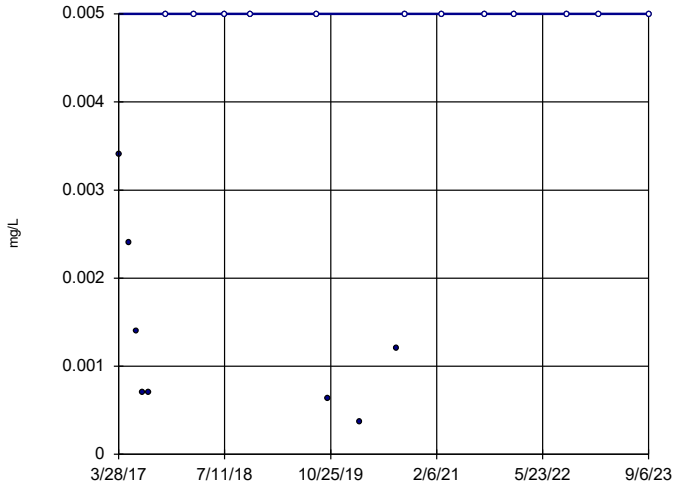
Hollow symbols indicate censored values.

Sen's Slope Estimator

DGWA-70A (bg)



n = 20

Slope = 0 units per year.

Mann-Kendall statistic = 47
critical = 62

Trend not significant at 95% confidence level (α = 0.025 per tail).

Constituent: Cobalt Analysis Run 4/2/2024 2:56 PM View: AP 1 Appendix IV Trend Tests
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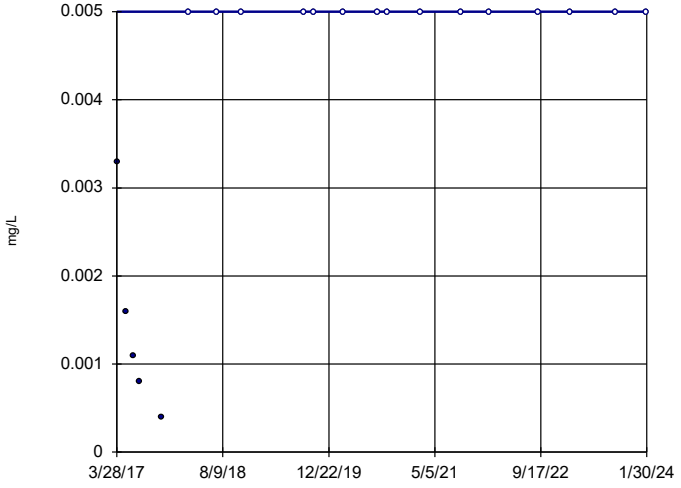
Hollow symbols indicate censored values.

Sen's Slope Estimator

DGWA-71 (bg)



n = 20

Slope = 0 units per year.

Mann-Kendall statistic = 65
critical = 62

Increasing trend significant at 95% confidence level (α = 0.025 per tail).

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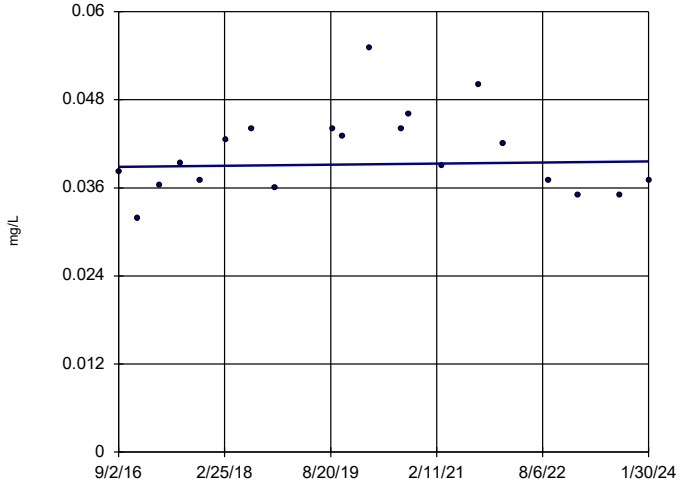
Sen's Slope Estimator

DGWC-40



n = 20

Slope = 0.00009896 units per year.

Mann-Kendall statistic = 7
critical = 62

Trend not significant at 95% confidence level (α = 0.025 per tail).

Constituent: Cobalt Analysis Run 4/2/2024 2:56 PM View: AP 1 Appendix IV Trend Tests
Plant McDonough Data: McDonough AP

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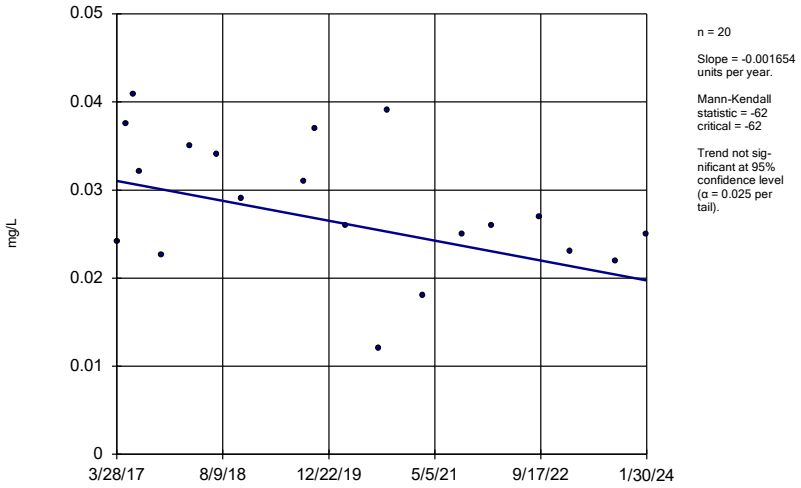
Sen's Slope Estimator

DGWA-53 (bg)



n = 20

Slope = -0.001654 units per year.

Mann-Kendall statistic = -62
critical = -62

Trend not significant at 95% confidence level (α = 0.025 per tail).

Constituent: Molybdenum Analysis Run 4/2/2024 2:56 PM View: AP 1 Appendix IV Trend Tests
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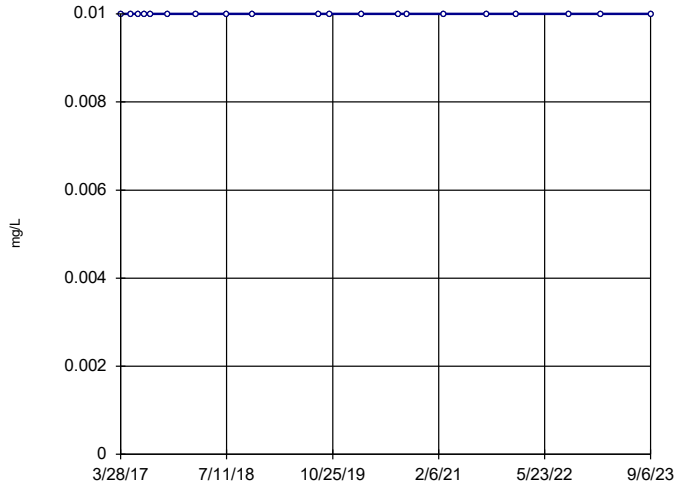
Sen's Slope Estimator

DGWA-70A (bg)



n = 20

Slope = 0 units per year.

Mann-Kendall statistic = 0
critical = 62

Trend not significant at 95% confidence level (α = 0.025 per tail).

Constituent: Molybdenum Analysis Run 4/2/2024 2:56 PM View: AP 1 Appendix IV Trend Tests
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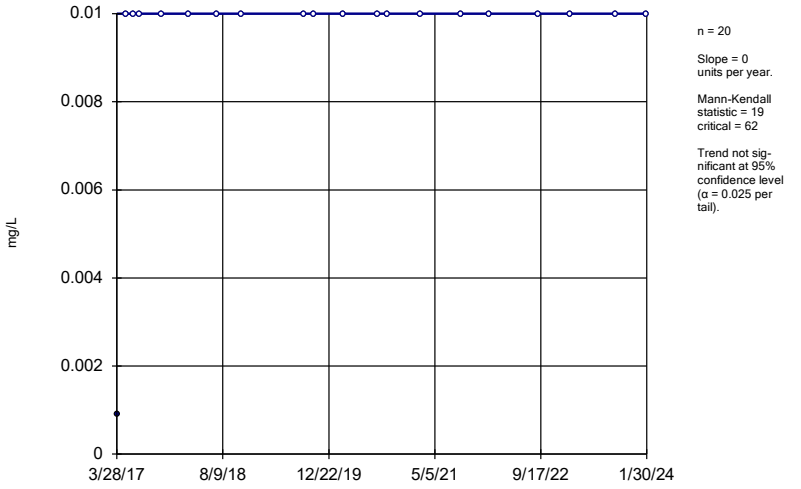
Hollow symbols indicate censored values.

Sen's Slope Estimator

DGWA-71 (bg)



n = 20

Slope = 0 units per year.

Mann-Kendall statistic = 19
critical = 62

Trend not significant at 95% confidence level (α = 0.025 per tail).

Constituent: Molybdenum Analysis Run 4/2/2024 2:56 PM View: AP 1 Appendix IV Trend Tests
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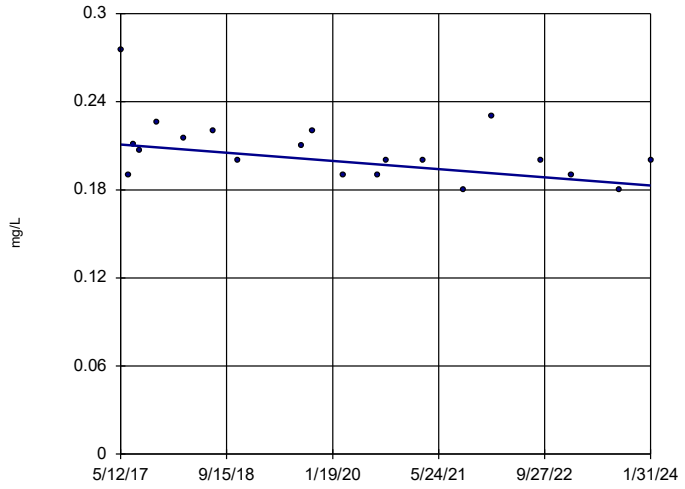
Sen's Slope Estimator

DGWC-68A



n = 20

Slope = -0.004143 units per year.

Mann-Kendall statistic = -66
critical = -62

Decreasing trend significant at 95% confidence level (α = 0.025 per tail).

Constituent: Molybdenum Analysis Run 4/2/2024 2:56 PM View: AP 1 Appendix IV Trend Tests
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