



**2022 SEMI-ANNUAL GROUNDWATER
MONITORING AND CORRECTIVE ACTION
REPORT**

Plant Arkwright
Ash Pond 3 Landfill and Monofill
Macon, Georgia

February 28, 2023

Prepared for:

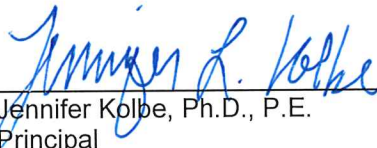


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**2022 Semi-Annual Groundwater Monitoring and Corrective Action Report
Plant Arkwright Ash Pond 3 Landfill and Monofill**


CERTIFICATION STATEMENT

This Semi-Annual Groundwater Monitoring and Corrective Action Report, Georgia Power Company – Plant Arkwright, Ash Pond 3 Landfill and Monofill, Macon, Georgia, has been prepared in accordance with the Georgia Environmental Protection Division Rules for Solid Waste Management 391-3-4-.10 and 391-3-4.14 under the supervision of a licensed professional engineer and a licensed professional geologist with Stantec Consulting Services Inc. I hereby certify that I am a qualified groundwater scientist, in accordance with the Georgia Rules of Solid Waste Management, and 40 CFR Part 258.50(g).


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Executive Summary

This summary of the *2022 Semi-Annual Groundwater Monitoring and Corrective Action Report* provides the status of groundwater monitoring and corrective action program from July 2022 through December 2022 at the Georgia Power Company (Georgia Power) former Plant Arkwright Ash Pond 3 (AP-3) Landfill and Monofill. This summary was prepared by Stantec Consulting Services Inc. (Stantec) on behalf of Georgia Power to meet the requirements listed in the Georgia Environmental Protection Division (GA EPD) Rules of Solid Waste Management 391-3-4-.10(6)(a)-(c) and 391-3-4-.14.

Plant Arkwright is located in Bibb County, Georgia, approximately 6 miles northwest of the city of Macon. The plant address is 5241 Arkwright Road, Macon, Georgia, 31210. The 46-acre AP-3 Landfill and Monofill are located between Arkwright Road to the west and Riverside Drive to the east. When in operation, the Plant Arkwright coal-fired power plant consisted of four 40-megawatt units. In the years before retirement, the plant was used primarily to provide peaking power and operated approximately 40 to 60 days per year. Plant Arkwright was retired in 2002, decommissioned in 2003, and closed in 2010.

The groundwater monitoring program for AP-3 is managed in accordance with Georgia Solid Waste Management Rules for Groundwater Monitoring and Corrective Action of a municipal solid waste landfill, Rule 391-3-4.14, per GA EPD Permit No. 011-025D(LI). AP-3 is also subject to the GA EPD Rules for Solid Waste Management 391-3-4-.10 for coal combustion residuals (CCR) management. Groundwater at AP-3 Landfill and Monofill is monitored using comprehensive groundwater monitoring systems that meet GA EPD monitoring requirements. Groundwater sampling and reporting for compliance to meet requirements of rule 391-3-4.10 began after the background groundwater conditions were established between August 2016 and October 2018 for AP-3 Landfill and Monofill wells, with the exception of upgradient well ARGWA-24, where sampling was initiated in December 2020. Based on statistical exceedance of Appendix III constituents in groundwater at AP-3 Landfill and Monofill, an assessment monitoring program was initiated on November 13, 2019, and assessment of corrective measures began on July 9, 2020. During the 2022 semi-annual reporting period, AP-3 Landfill and Monofill remained in assessment monitoring as corrective measures were evaluated.



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During the latter half of the 2022 reporting period, Stantec conducted one groundwater sampling event in August-September 2022. Samples were analyzed for the full suites of Appendix III¹ and Appendix IV² constituents, and Appendix I constituent, silver. Groundwater and surface water samples were respectively submitted to GEL Laboratories, LLC and Pace Analytical Services, LLC for analysis. Per the CCR Rule, groundwater results for the August-September 2022 data were evaluated in accordance with the certified statistical methods. Statistical analyses indicate statistically significant increases (SSIs) for Appendix III constituents above the statistical limits and statistically significant levels (SSLs) of Appendix IV constituents above the groundwater protection standards as summarized below. Cobalt is the only SSL identified in a single well at AP-3.

Appendix III Constituents	August/September 2022
Boron	ARGWC-8, ARGWC-18
pH	ARGWC-16, ARGWC-17
Appendix IV Constituents	August/September 2022
Cobalt	ARGWC-17

Based on review of the Appendix III and Appendix IV statistical results completed for the groundwater monitoring and corrective action program from August-September 2022 through January 2023, assessment monitoring will continue along with assessment of corrective measures. Georgia Power will continue routine groundwater monitoring and reporting at the Site. Reports will be provided to GA EPD semi-annually.

¹ Boron, calcium, chloride, fluoride, pH, sulfate, and total dissolved solids (TDS)

² Antimony, arsenic, barium, beryllium, cadmium, chromium, cobalt, fluoride, lead, lithium, mercury, molybdenum, selenium, thallium, and radium 226 + 228



Acronyms / Abbreviations

40 CFR	Title 40 Code of Federal Regulations
ACM	Assessment of Corrective Measures
AP-3	Ash Pond 3
CCR	Coal Combustion Residuals
CCR Rule	Coal Combustion Residuals Rule
DO	Dissolved Oxygen
GA EPD	Georgia Environmental Protection Division
GSC	Groundwater Stats Consulting
GWPS	Groundwater Protection Standard
MCL	Maximum Contaminant Level
mg/L	micrograms per liter
NELAP	National Environmental Laboratory Accreditation Program
NTU	Nephelometric Turbidity Units
ORP	Oxidation-Reduction Potential
PWR	Partially Weathered Rock
QA/QC	Quality Assurance/Quality Control
RSL	Regional Screening Level
Site	Former Plant Arkwright Ash Pond 3 Landfill and Monofill
SSI	Statistically Significant Increase
SSL	Statistically Significant Level
UPL	Upper Prediction Limit
US EPA	United States Environmental Protection Agency
UTL	Upper Tolerance Limit



1.0 Introduction

In accordance with the Georgia Environmental Protection Division (GA EPD) Rules of Solid Waste Management 391-3-4-.10(6)(a)-(c) and 391-3-4-.14, this *2022 Semi-Annual Groundwater Monitoring and Corrective Action Report* has been prepared to document the groundwater monitoring activities conducted at the Georgia Power Company (Georgia Power) former Plant Arkwright Ash Pond 3 (AP-3) Landfill and Monofill (the Site). To specify groundwater monitoring requirements, GA EPD Rule 391-3-4-.10(6)(a) incorporates by reference the United States Environmental Protection Agency (US EPA) coal combustion residuals (CCR) Rule Title 40 Code of Federal Regulations (40 CFR) § 257 Subpart D. For ease of reference, the US EPA CCR rules are cited within this report.

Groundwater monitoring and reporting for AP-3 Landfill and Monofill are performed in accordance with the monitoring requirements of 40 CFR § 257.90 through § 257.96. This semi-annual report documents the activities completed between July 2022 and December 2022. One semi-annual assessment monitoring event was conducted during this reporting period.

Due to statistically significant levels (SSLs) of selected constituents identified in the 2020 Annual Groundwater Monitoring and Corrective Action Report (Wood, 2020a), Georgia Power initiated an Assessment of Corrective Measures (ACM) for AP-3 Landfill and Monofill on July 09, 2020, pursuant to 40 CFR § 257.96(b). In accordance with 40 CFR § 257.96(b), an ACM Report was prepared and submitted to GA EPD in December 2020 (Wood, 2020b). Cobalt is the only constituent showing an SSL in Site groundwater. The SSL for cobalt in well ARGWC-17 is horizontally and vertically delineated near AP-3 Landfill and Monofill.

1.1 Site Description and Background

The Site is located in Bibb County, Georgia, approximately 6 miles northwest of the city of Macon (Figure 1). The physical address of the plant is 5241 Arkwright Road, Macon, Georgia, 31210. The CCR unit area comprises approximately 46 acres. The disposal facility was formally closed in 2010 with the issuance of a closure certificate by GA EPD. Post closure care has been performed in accordance with the GA EPD Permit No. 011-025D(LI) following closure. Figure 1 depicts the site location relative to the surrounding area.

Plant Arkwright was retired in 2002 and decommissioned in 2003. The AP-3 Landfill and Monofill was initially constructed as a surface impoundment prior to 1958 but did not receive CCR until the 1970s. The CCR unit was closed in 2010 in accordance with the solid waste landfill regulations specified by GA EPD 391-3-4.14, in effect at the time of its closure. Closure construction of AP-3 Landfill and Monofill utilized a geosynthetic clay liner overlain by 18 inches of cover soil. A Closure Certificate was issued by GA EPD for AP-3 Landfill and Monofill on August 19, 2010. The Closure Certificate initiated the post-closure care period for the CCR unit.

The AP-3 Landfill and Monofill is exempt from the requirements in 40 CFR Part 257 Subpart D – Standard for the Disposal of Coal Combustion Residuals in Landfills and Surface Impoundments in accordance



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with §257.50 (d) and (e), which states that the subpart does not apply to CCR landfills that have ceased receiving CCR prior to October 19, 2015 (US EPA, 2015). These CCR units are, however, subject to the requirements of relevant portions of GA EPD 391-3-4-.10. The CCR unit referred to as AP-3 Landfill and Monofill is defined as an inactive CCR Landfill per GA EPD Rule 391-3-4-.10(2)(a)(3).

Semi-annual groundwater monitoring at AP-3 Landfill and Monofill is performed for an approved list of analytes in accordance with the post-closure care period requirements of GA EPD Permit No: 011-025D(LI). The permit lists GA EPD 391-3-4-.10 Appendix I constituents as arsenic, barium, cadmium, chloride, lead, selenium, silver, and sulfate, and these constituents were analyzed during the September 2021 and February 2022 semi-annual events. A minor modification approved by GA EPD on August 9, 2017, added the US EPA CCR Rule Appendix III and IV sample constituents to the groundwater monitoring plan. The Appendix I constituents overlap with the Appendix III and IV constituents, with the exception of silver. Georgia Power is currently updating the permit application to include AP-3 Landfill and Monofill in the new on-site landfill permit application.

Georgia Power has elected to remove CCR material from AP-3 and place it in a new, lined landfill that will likely be constructed at the site. The closure of AP-3 Landfill and Monofill by the removal of CCR material provides significant source control that reduces the potential for migration of CCR constituents to groundwater.

1.2 Regional Geology & Hydrogeologic Setting

The geology and hydrogeology of Plant Arkwright are summarized below. The Site is located along the southern edge of the Washington Slope District (the District) within the Piedmont Physiographic Province (Clark and Zisa, 1976). The District is characterized by a gently undulating surface, which generally slopes to the south and southeast toward the Coastal Plain Physiographic Province located approximately 3.8 miles to the southeast of the Site.

Topography of the District ranges from approximately 700 feet above mean sea level in the areas of southern Atlanta and Athens to approximately 500 feet above mean sea level at its southern limit along the Georgia Fall Line. Streams follow the surface topography of the underlying crystalline rocks eastward toward the Ocmulgee River. Typically, relief throughout the District ranges between 50 and 100 feet. However, the greatest relief occurs along the Ocmulgee River where the elevation changes from 150-200 feet due to steep walled valleys. (Clark and Zisa, 1976). Ultimately, the area surface water flow is directed toward the Ocmulgee River.

Bedrock in the region is composed of moderate to high-grade metamorphic rocks, consisting of biotite-granite gneiss, schist, and amphibolite, and igneous rocks like granite. In the southernmost Piedmont, around the Site, bedrock is predominantly composed of biotite gneiss. Major geologic structures in the region include the Ocmulgee fault, located approximately 7 miles northwest of the Site which strikes mostly northeast – southwest. The top of bedrock surface is highly weathered and, where exposed, is generally soft and friable (LeGrand, 1962).



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1.2.1 SITE GEOLOGY

The general geology beneath Plant Arkwright consists of clays, silty and sandy clays, silty sands, sandy silts, and minor gravel at depth, underlain by a silty sand saprolite and bedrock. Historical borings advanced at the Site indicate bedrock occurs at depths ranging from approximately 14 feet to 63 feet below ground surface, and consists of weathered quartzofeldspathic gneiss, hornblende gneiss, and schist. Boring logs also indicate a relatively thin zone of partially weathered rock (PWR) above a more competent bedrock which ranges in thickness from 1 to 4 feet in the southern and eastern portions of the Site, and up to 14 feet in the northeastern portion of the Site.

1.2.2 SITE HYDROGEOLOGY

The uppermost aquifer at the Site consists of two hydrostratigraphic units: the water table (overburden) hydrostratigraphic unit and the underlying shallow fractured bedrock hydrostratigraphic unit. The water table (overburden) unit is composed of unconsolidated silty sands and sandy silts with clays and variable thicknesses of PWR mantling the bedrock surface, whereas the bedrock unit is a zone comprised of weathered and fractured bedrock.

The water table unit is hydraulically connected to the underlying bedrock through fractures in the partially weathered and fractured bedrock (Southern Company Services, 2005) and is considered to be under unconfined conditions. The monitoring well network for AP-3 Landfill and Monofill (Figure 2) monitors the uppermost aquifer at the Site

Slug testing data from the Site reflects a range of hydraulic conductivities from 10^{-6} to 10^{-3} centimeters per second in the water table hydrostratigraphic unit (Southern Company Services, 2005). Groundwater level gauging data from the Site indicates consistent water level elevations and the potentiometric surface map depicts groundwater generally flowing to the south and southeast across AP-3 Landfill and Monofill (Figure 3).

1.3 Groundwater Monitoring System

Pursuant to 40 CFR § 257.91, Georgia Power installed a groundwater monitoring system within the uppermost aquifer at AP-3 Landfill and Monofill. The monitoring system is designed to monitor groundwater passing the waste boundary of AP-3 Landfill and Monofill within the uppermost aquifer. Wells were located to serve as upgradient, or downgradient monitoring points based on the groundwater flow direction (Table 1). The monitoring well locations are depicted in Figure 2.



2.0 Groundwater Monitoring Activities

The following describes monitoring-related activities performed between July 2022 and December 2022. In accordance with 40 CFR § 257.93, Table 2 presents a summary of groundwater sampling event completed for AP-3 Landfill and Monofill during this monitoring period.

2.1 Monitoring Well Maintenance

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)). In August-September 2022, the monitoring wells were inspected. No needed corrective actions were identified, as documented in Appendix A.

2.2 Assessment Monitoring

Georgia Power implemented assessment monitoring in accordance with 40 CFR § 257.95 in November 2019. The second 2022 semi-annual assessment monitoring event was conducted from August 30 to September 8, 2022. Groundwater samples were collected from each well in the certified groundwater monitoring system and analyzed for the full suites of Appendix III and Appendix IV constituents, and the Appendix I constituent, silver. Laboratory and Field Data reports for the August-September 2022 monitoring event are included in Appendix B.

2.3 Additional Groundwater and Surface Water Sampling

Additional sampling was conducted during the reporting period in support of the assessment of corrective measures and to continue evaluating the nature and extent of impacts resulting from AP-3 Landfill and Monofill. This additional sampling is further discussed in Section 4.4.

Due to the close proximity of a tributary to Beaverdam Creek in the vicinity of AP-3 Landfill and Monofill, Georgia Power proactively collected surface water samples to further support the 2020 risk evaluation. Surface water samples were collected from six locations on August 16, 2022, along the tributary to Beaverdam Creek near AP-3 Landfill and Monofill, as shown on Figure 2. Surface water samples were collected in accordance with Region 4 US EPA Science and Ecosystem Support Division Operating Procedures for Surface Water Sampling (SESDPROC-201-R4, December 16, 2016). Sample bottles were placed in ice-packed coolers and submitted to Pace Analytical Services, LLC (Pace) of Peachtree Corners, Georgia following chain-of-custody protocol. The laboratory reports associated with the August 2022 sampling event are provided in Appendix B. Georgia Power will continue collecting the surface water samples semi-annually.



3.0 Sample Methodology & Analyses

The semi-annual monitoring event completed in August-September 2022 for AP-3 Landfill and Monofill includes sampling for the constituents listed in Appendix I (silver), Appendix III and Appendix IV. Groundwater analytical data and chain-of-custody records are located in Appendix B. The following sections describe methods used to conduct the groundwater monitoring activities at the Site.

3.1 Groundwater Elevation Measurements and Flow Direction

Prior to each sampling event, the static groundwater levels were measured in each monitoring well and piezometer at AP-3 Landfill and Monofill. The water level indicator was properly decontaminated between each monitoring well. Groundwater elevations are summarized in Table 3. The recorded water level data were used to determine the groundwater elevations in each well and develop a potentiometric surface elevation contour map (Figure 3). Review of Figure 3 indicates that the apparent groundwater flow direction in the uppermost aquifer is to the southeast in the northern portion of AP-3 Landfill and to the south in the southern portion of AP-3 Landfill, and to the south in the Monofill unit. This groundwater flow pattern is consistent with historical groundwater flow patterns.

3.2 Groundwater Gradient and Flow Velocity

The groundwater flow velocity at AP-3 Landfill and Monofill was calculated using a derivation of Darcy's Law. Specifically,

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

Where:

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

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

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

n_e = Effective porosity

The general groundwater flow velocities were calculated for AP-3 Landfill and Monofill based on hydraulic gradients, average hydraulic conductivity based on previous slug test data, and an estimated effective porosity of 0.20 (based on a review of several sources, including Driscoll, 1986; US EPA, 1989; Freeze and Cherry, 1979). The general groundwater flow velocity values based on August 30, 2022, groundwater elevations are presented above and in Table 4. The results for groundwater flow velocity were 0.116 feet/day (42.5 feet/year) across the northern/south axis of AP-3 and 0.227 feet/day (82.7 feet/year) between the Monofill and the southern embankment of AP-3. The observed groundwater flow velocities calculated for this monitoring event are also generally consistent with expected velocities in the regolith-upper bedrock aquifers of Georgia Piedmont.



3.3 Groundwater Sampling

Groundwater samples were collected in August-September 2022. Sampling procedures were conducted in accordance with US EPA Region 4 Laboratory Services and Applied Science Division operating procedures. Monitoring wells were purged and sampled using low-flow sampling procedures. Dedicated and/or non-dedicated low-flow pneumatic bladder or peristaltic pumps were used to purge and sample the wells. An In-Situ Aqua TROLL® 400 field instrument was used to monitor and record field water quality parameters (pH, conductivity, dissolved oxygen [DO], temperature, and oxidation-reduction potential (ORP) and a Hach 2100Q was used to measure turbidity during well purging to verify stabilization prior to sampling.

Groundwater samples were collected when the following field parameters stabilized for three (3) consecutive readings measured at 3-5 minute intervals:

- pH \pm 0.1 Standard Units.
- Specific conductance \pm 5%.
- \pm 10% for DO where DO > 0.5 milligrams per liter (mg/L). No criterion applies if DO < 0.5 mg/L.
- Turbidity measurements less than 5 Nephelometric Turbidity Units (NTU).
- Temperature – Record only, not used for stabilization criteria.
- ORP – Record only, not used for stabilization criteria.

Once stabilization was achieved, samples were collected into appropriately preserved laboratory-supplied sample containers. If turbidity readings are greater than 10 NTU at the time of sampling and after 3 hours of purging, a dissolved metals sample is also collected by filtering the water with a 0.45-micron water filter. Sample bottles were placed in ice-packed coolers and submitted to GEL Laboratories LLC (GEL) of Charleston, South Carolina following chain-of-custody protocol. Stabilization logs and Equipment Calibration forms are included in Appendix B.

3.4 Laboratory Analyses

The August-September 2022 groundwater samples were analyzed for Appendix III and Appendix IV constituents, as well as the Appendix I constituent, silver. The samples were analyzed for additional parameters³ to assist with remedy selection evaluation. Laboratory analyses of the groundwater were performed by GEL, which is accredited by the National Environmental Laboratory Accreditation Program (NELAP) and maintains the NELAP accreditation for the constituents analyzed for this project. Table 5 summarizes the groundwater analytical results, and the corresponding formal analytical reports are in Appendix B.

The August 2022 surface water samples were also analyzed for Appendix III and Appendix IV constituents, as well as silver. Laboratory analyses of the surface water samples were performed by Pace, which is also a NELAP accredited laboratory. Table 6 summarizes the surface water analytical results, and the corresponding formal analytical reports can be found in Appendix C.



3.5 Quality Assurance & Quality Control

During each sampling event, various quality assurance/quality control (QA/QC) samples were collected. Equipment blanks (where non-dedicated sampling equipment is used) were collected at a rate of one QA/QC sample per 10 groundwater samples to assess the adequacy of the decontamination process. Blind field duplicate samples were collected by filling additional containers at the same location during the sampling event at a rate of one QA/QC sample per 10 groundwater samples. Field blanks were also collected to evaluate ambient conditions at the sampling locations at a rate of one QA/QC sample per 10 groundwater samples.

Quality assurance and quality control of the groundwater data were assessed by performing a data quality evaluation of the laboratory results reported. A data quality evaluation was conducted on the data using laboratory precision and accuracy, and analytical method requirements (US EPA, 2002). The data quality evaluations are included in Appendix B.

The analytical results provided in Table 5 provide concentrations from the August-September 2022 assessment monitoring sampling event as reported by the laboratory. When values are followed by a “J” flag, this indicates that the value is an estimated analyte concentration detected between the method detection limit and the laboratory reporting limit. 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. Radium values followed by a “U” flag indicate that the constituent was not detected above the analytical minimum detectable concentration. The data are considered usable for meeting project objectives and the results are considered valid.



4.0 Statistical Analyses

Statistical analyses of Appendix I, Appendix III and Appendix IV constituents were performed on the August-September 2022 samples collected from the groundwater monitoring system pursuant to 40 CFR § 257.93(f) and following the statistical method for AP-3 Landfill and Monofill. In addition, pursuant to 40 CFR § 257.95(d)(2), Georgia Power established GWPS for the Appendix IV constituents and completed their own statistical analyses of the Appendix IV groundwater monitoring data resulting from the August-September 2022 assessment monitoring event. The August-September 2022 data was statistically analyzed by Groundwater Stats Consulting, LLC (GSC). The reports generated from the analyses are provided in Appendix C.

The following subsections provide an overview of the statistical methods used to evaluate the Appendix I, Appendix III and Appendix IV constituents and statistical analyses results.

4.1 Statistical Method

The statistical analysis method used at the Site was developed by GSC using methodology presented in the Statistical Analysis of Groundwater Data at RCRA Facilities, Unified Guidance, March 2009, EPA 530/R-09-007 (US EPA, 2009). Sanitas™ Statistical Software is a commercially available 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 Unified Guidance (US EPA, 2009) document. Interwell prediction limits were used for the analysis of Appendix I and Appendix III constituents. A comparison of confidence intervals to GWPS were also used to evaluate the six Appendix I (arsenic, barium, cadmium, lead, selenium, and silver) and Appendix IV constituents. Specific methodology information is described in the following paragraphs.

4.1.1 APPENDIX I AND APPENDIX III STATISTICAL METHOD

Interwell prediction limits were used for the analysis of the six Appendix I constituents (arsenic, barium, cadmium, lead, selenium, and silver) and the full suite of Appendix III constituents. A comparison of confidence intervals to GWPS were also used to evaluate the Appendix I constituents. When using the interwell method, upgradient well data are pooled to establish a background statistical limit (upper prediction limit or in the case of pH, prediction interval) for each constituent. The interwell prediction limit assumed 1-of-2 verification resample plan. Individual sample result(s) are then compared to the upper prediction limit (UPL) or prediction interval for pH to determine if a statistically significant increase (SSI) has occurred for the constituent/well pair. When an initial exceedance is identified, a second sample may be collected to verify the initial result.

Data from groundwater samples from downgradient wells collected in the August-September 2022 monitoring event were compared to the UPLs to evaluate whether concentrations exceed background statistical limits.



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If data from a sampling event initially exceeds the UPL, then a resample may be collected to verify the initial result. In 1-of-2 resampling, one independent resample is collected and evaluated within 90 days to determine whether the initial exceedance is verified. If the resample exceeds the UPL, or a resample is not collected, then the initial exceedance is verified, and an SSI is identified. If the resample result does not exceed the UPL, then an SSI is not declared.

4.1.2 APPENDIX IV STATISTICAL METHOD

The assessment monitoring program statistics for Appendix IV and Appendix I constituents were conducted in two parts. The first part was to establish the GWPS for each Appendix IV constituent. The second part was the calculation of confidence intervals for individual downgradient well/constituent pairs and then comparing them to the GWPS.

Upper Tolerance Limits (UTL) were calculated from pooled upgradient well data for Appendix IV constituents. Parametric UTLs were calculated when data followed a normal or transformed-normal distribution. When data contained greater than 50% non-detects or were not normal or transformed-normal distribution, non-parametric tolerance limits were used. When parametric UTLs were calculated, a 95% UTL with 95% coverage was calculated. When using non-parametric UTLs, the level of confidence cannot be pre-specified and is a function of the size of the data set. The level of confidence for the non-parametric UPLs is provided in the GSC, 2022 report (Appendix C). The background limits were used when determining the GWPS under 40 CFR § 257.95(h).

Table 7 summarizes the background limits established for each Appendix IV constituent and the GWPS established under GA EPD Rules.

To complete the statistical evaluation, 99% confidence intervals were constructed for each downgradient well/constituent pair and compared to the GWPS. In assessment monitoring, an SSL above background is identified only when the entire confidence interval is above a GWPS in the downgradient well/constituent pair.

4.2 Statistical Analyses Results – Appendix I and Appendix III

Based on review of the full Appendix I and Appendix III statistical analysis from the August-September 2022 sampling event, groundwater conditions have not returned to background concentrations and assessment monitoring shall continue to be conducted. Note that Appendix I constituent, silver, was not identified as an SSI during the semi-annual sampling event. The statistical analyses and comparisons to prediction limits are included in Appendix C. Additionally, tables contained in Appendix C summarize the various SSIs identified based on the statistical analyses performed on the recent groundwater analytical results.



4.3 Statistical Analyses Results - Appendix IV

Appendix C shows the individual well/constituent pairs with their respective confidence intervals in comparison to the respective constituent GWPS, which is based on site-specific background as required by GA EPD. Based on the statistical results presented in Appendix C, SSLs identified include:

- August-September 2022:
 - Cobalt: ARGWC-17



5.0 Nature and Extent

Georgia Power initiated an ACM for AP-3 Landfill and Monofill on July 09, 2020, pursuant to 40 CFR § 257.96(b). In accordance with 40 CFR § 257.96(b), an ACM Report was prepared and submitted to GA EPD in December 2020 (Wood, 2020b). As part of the evaluation of ACM for AP-3, additional wells were installed to delineate the horizontal and vertical extent of constituents showing SSLs at AP-3 Landfill and Monofill. Cobalt SSL in detection well ARGWC-17 is horizontally delineated by well ARGWC-16 and vertically delineated by well ARAMW-4. Further downgradient of ARGWC-16, cobalt continues to remain delineated to below GWPS in groundwater exiting the dike near well ARGWC-18. Thus, spatial and vertical delineation of cobalt in well ARGWC-17 is completed at the Site.



6.0 Monitoring Program Status

Pursuant to § 257.96(b), Georgia Power will continue to monitor the groundwater at AP-3 Landfill and Monofill in accordance with the assessment monitoring program regulations in § 257.95 while ACM efforts continue to be evaluated. Pursuant to § 257.95(g)(1)(iv), the assessment monitoring wells will continue to be sampled as part of the ongoing assessment groundwater monitoring program.

The ACM efforts completed during the reporting period covered by this groundwater monitoring and corrective action report are presented in the Semi-Annual Remedy Selection and Design Progress Report provided in Appendix D. The semi-annual progress report summarizes:

- the current conceptual site model applicable to evaluating groundwater corrective measures proposed in the ACM Report (Wood, 2020b)
- the analytical data obtained during the supplemental ACM-specific field investigation
- the status of evaluating applicable corrective measures, and
- the planned activities and anticipated schedule for the following semi-annual reporting period.

Georgia Power will include future Semi-Annual Remedy Selection and Design Progress Reports with each groundwater monitoring and corrective action report.

Pursuant to 40 CFR § 257.96(b), AP-3 Landfill and Monofill will remain in the assessment monitoring program and assessment of corrective measures will continue during the next reporting period.



7.0 Conclusions & Future Actions

The *2022 Semi-Annual Groundwater Monitoring and Corrective Action Report* was prepared to fulfill the requirements of GA EPD Rules for Solid Waste Management 391-3-4-.10. Review of analytical results and statistical analyses indicate an SSL of cobalt in well ARGWC-17, which is above the established GWPS. The horizontal extent of cobalt in monitoring well ARGWC-17 is delineated in downgradient wells ARGWC-16, and vertically delineated in ARAMW-4. Further downgradient of ARGWC-16, cobalt continues to remain delineated to below GWPS in groundwater exiting the dike near well ARGWC-18. Thus, spatial and vertical delineation of cobalt in well ARGWC-17 is completed at the Site.

Georgia Power will continue to monitor AP-3 Landfill and Monofill under the assessment monitoring program pursuant to 40 CFR §257.95 and evaluate the potential remedies presented in the remedy selection and progress Report (Appendix D). The next semi-annual sampling event is planned for February 2023. The February 2023 semi-annual assessment monitoring event will include sampling and analysis of all Appendix III and Appendix IV constituents, as well as permit specific Appendix I constituents. Additional groundwater monitoring in support of ACM efforts will occur in the interim as described in the remedy selection and progress report presented in Appendix D.



8.0 References

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TABLES



TABLE 1
SUMMARY OF MONITORING WELL CONSTRUCTION
Georgia Power Company - Plant Arkwright
Ash Pond 3 Landfill and Monofill
Macon, Georgia

Well	Installation Date	Northing ⁽¹⁾	Easting ⁽¹⁾	Top of Casing Elevation (feet NAVD88) ⁽²⁾⁽³⁾	Ground Surface Elevation (feet NAVD88) ⁽²⁾⁽³⁾	Top of Screen Elevation (feet NAVD88) ⁽⁴⁾	Screen Bottom Elevation (feet NAVD88) ⁽⁴⁾	Screen Length (feet)	Total Well Depth on Construction Log (ft below land surface)	Water Bearing Zone Screened	Hydraulic Location
Detection Monitoring Wells											
ARGWA-3	12/9/1992	1066899.39	2437431.05	388.33	386.53	356.2	346.2	10.0	40.5	Overburden	Upgradient
ARGWA-5	1/10/1994	1066885.12	2437209.22	376.15	373.51	353.8	343.8	10.0	30.0	Overburden	Upgradient
ARGWA-12	12/10/2008	1067003.79	2436788.45	372.72	369.27	349.2	339.2	10.0	30.3	Bedrock	Upgradient
ARGWA-13	12/11/2008	1065951.25	2438129.93	371.57	368.10	337.7	327.7	10.0	40.7	Bedrock	Upgradient
ARGWA-14	2/4/2009	1066023.70	2438384.80	388.25	384.94	339.3	329.3	10.0	56.0	Bedrock	Upgradient
ARGWA-24 ⁽⁵⁾	11/12/2020	1066895.28	2437012.63	373.75	370.85	355.9	345.9	10.0	25.3	Overburden	Upgradient
ARGWC-7	12/11/2003	1064410.59	2438355.19	352.42	348.97	314.2	304.2	10.0	46.5	Overburden	Downgradient
ARGWC-8	12/10/2003	1064521.98	2437572.92	355.53	352.19	322.6	312.6	10.0	40.5	Overburden	Downgradient
ARGWC-9	12/9/2003	1065139.64	2437297.96	367.07	363.44	338.6	328.6	10.0	36.5	Overburden	Downgradient
ARGWC-10	12/9/2003	1065419.44	2437192.51	370.67	367.56	342.6	332.6	10.0	41.5	Overburden	Downgradient
ARGWC-15	12/4/2008	1065475.43	2438360.90	375.64	371.76	342.1	332.1	10.0	40.0	Bedrock	Downgradient
ARGWC-16	12/15/2008	1065263.69	2438174.15	364.90	361.52	340.2	330.2	10.0	31.6	Bedrock	Downgradient
ARGWC-17	12/4/2008	1065458.82	2438009.52	368.24	365.04	344.5	334.5	10.0	30.9	Overburden	Downgradient
ARGWC-18	11/19/2008	1064482.45	2437961.15	355.20	351.92	314.1	304.1	10.0	48.1	Overburden	Downgradient
Assessment Monitoring Wells											
ARAMW-3	11/25/2019	1064530.73	2437569.81	355.39	352.20	298.2	288.2	10.0	64.0	Bedrock	Downgradient
ARAMW-4	11/15/2019	1065463.83	2438004.43	367.86	364.56	320.6	310.6	10.0	54.0	Bedrock	Downgradient
ARAMW-6	11/25/2019	1064439.35	2437606.99	337.46	334.23	314.2	304.2	10.0	30.0	Overburden	Downgradient

Notes:

1. Horizontal locations referenced to Georgia State Plane West, North American Datum (NAD) of 1983 surveyed in June 26, 2020.
2. Vertical elevations are feet referenced to North American Vertical Datum of 1988 (NAVD88).
3. Elevations updated with revised survey certified by Donaldson & Garrett Associates on June 26, 2020.
4. Screen elevations calculated using Ground Surface Elevation surveyed on June 26, 2020.
5. ARAMW-24 was surveyed by Donaldson & Garrett Associates and certified on December 18, 2020.

TABLE 2
GROUNDWATER SAMPLING EVENT SUMMARY
Georgia Power Company - Plant Arkwright
Ash Pond 3 Landfill and Monofill
Macon, Georgia

Well ID	Hydraulic Location	Summary of Sampling Event
		August 30-31 &, September 2, 2022
Purpose of Sampling Event		Assessment Monitoring
ASH POND 3 LANDFILL AND MONOFILL MONITORING WELL NETWORK		
ARGWA-3	Upgradient	X
ARGWA-5	Upgradient	X
ARGWA-12	Upgradient	X
ARGWA-13	Upgradient	X
ARGWA-14	Upgradient	X
ARGWA-24	Upgradient	X
ARGWC-7	Downgradient	X
ARGWC-8	Downgradient	X
ARGWC-9	Downgradient	X
ARGWC-10	Downgradient	X
ARGWC-15	Downgradient	X
ARGWC-16	Downgradient	X
ARGWC-17	Downgradient	X
ARGWC-18	Downgradient	X
ARAMW-3	Downgradient	X
ARAMW-4	Downgradient	X
ARAMW-6	Downgradient	X

Notes:

X - Well sampled during monitoring event

TABLE 3
SUMMARY OF GROUNDWATER ELEVATIONS
Georgia Power Company - Plant Arkwright
Ash Pond 3 Landfill and Monofill
Macon, Georgia

Well ID	Top of Casing Elevation (feet NAVD88) ⁽¹⁾⁽²⁾	Depth to Water (feet below TOC) ⁽¹⁾	Groundwater Elevation (feet NAVD88) ⁽²⁾
Measurement Date	8/30/2022		
ARGWA-3	388.33	35.08	353.25
ARGWA-5	376.15	23.06	353.09
ARGWC-7	352.42	24.23	328.19
ARGWC-8	355.53	26.23	329.30
ARGWC-9	367.07	21.72	345.35
ARGWC-10	370.67	21.14	349.53
ARGWA-12	372.72	15.49	357.23
ARGWA-13	371.57	24.66	346.91
ARGWA-14	388.25	41.19	347.06
ARGWC-15	375.64	29.14	346.50
ARGWC-16	364.90	20.66	344.24
ARGWC-17	368.24	22.18	346.06
ARGWC-18	355.20	28.98	326.22
ARGWA-24	373.75	20.33	353.42
ARAMW-3	355.39	25.74	329.65
ARAMW-4	367.86	21.84	346.02
ARAMW-6	337.46	13.00	324.46

Notes:

1. Groundwater elevations are feet referenced to North American Vertical Datum of 1988 (NAVD88)
2. Groundwater elevations were measured as depth to water from the top of casing (TOC).

TABLE 4
GROUNDWATER FLOW VELOCITY CALCULATIONS
Georgia Power Company - Plant Arkwright
Ash Pond 3 Landfill and Monofill
Macon, Georgia

Potentiometric Map Date	Location	Groundwater Elevations in Well Pairs (h ₁ , h ₂) (feet)		Change in Elevation (Δh) (feet)	Distance Measured (L) (feet)	Hydraulic Gradient (i) (feet/foot)	Average Hydraulic Conductivity (K) (feet/day)	Estimated Effective Porosity (n _e)	Calculated Groundwater Flow Velocity (V) (feet/day)	Calculated Groundwater Flow Velocity (V) (feet/year)
August 30, 2022	ARGWA-5 to ARGWC-18	353.09	326.22	26.87	2517	0.011	2.18	0.2	0.12	42.5
	ARAMW-4 to ARGWC-18	346.02	326.22	19.80	952	0.021	2.18	0.2	0.23	82.7

Notes:

1. 1. In-situ hydraulic conductivity was estimated using slug test data from the overburden wells at the Site and averaged 2.18 feet/day.
2. Effective porosity of 20% was selected for the silty sands/sandy silts overburden based on a review of several sources, including Driscoll, 1986; US EPA, 1989; Freeze and Cherry, 1979.

**TABLE 5
ANALYTICAL DATA SUMMARY - GROUNDWATER
Georgia Power Company - Plant Arkwright
Ash Pond 3 Landfill and Monofill
Macon, Georgia**

Substance	Well ID										
	ARGWA-3	ARGWA-5	ARGWA-12	ARGWA-13	ARGWA-14	ARGWA-24	ARGWC-7	ARGWC-8	ARGWC-9	ARGWC-10	
	8/31/2022	8/30/2022	8/30/2022	8/31/2022	8/31/2022	8/31/2022	8/31/2022	8/31/2022	8/31/2022	8/31/2022	
APPENDIX III	Boron	0.00589 J	0.00855 J	0.0214	0.933	0.0356	0.0151 J	0.0815	1.05	0.00885 J	0.00863 J
	Calcium	5.91	9.56 J	14.2	165	41.6	10.1	9.99	43.0	4.77	7.65
	Chloride	2.94 J	8.47	12.8 J	6.89	3.92	12.3	4.59	5.86	5.28 J	4.20
	Fluoride	0.184	0.155	0.167 J	0.135	0.155	0.164	<0.0330	0.172	0.147	<0.0330
	Sulfate	0.399 J	0.519	7.11 J	855	2.58	6.94	36.3	54.1	1.31	0.494
	TDS	65.0	81.0	139 J	1290	177	122	101	248	63.0	69.0
	pH	5.96	5.88	5.88 J	5.53	6.80	5.65	5.98	6.38	5.98	5.96
APPENDIX IV	Antimony	<0.00100	<0.00100	<0.00100 J	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
	Arsenic	<0.00200	<0.00200	<0.00200 J	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200
	Barium	0.0181	0.0446	0.0850 J	0.0262	0.0740	0.0412	0.0505	0.0571	0.0391	0.0345
	Beryllium	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200
	Cadmium	<0.000300	<0.000300	<0.000300	<0.000300	<0.000300	<0.000300	<0.000300	<0.000300	<0.000300	<0.000300
	Chromium	0.00358 J	<0.00300	<0.00300	<0.00300	<0.00300	<0.00300	0.00344 J	<0.00300	0.00766 J	0.00550 J
	Cobalt	<0.000300	<0.000300	0.000509 J	<0.000300	<0.000300	<0.000300	<0.000300	<0.000300	<0.000300	<0.000300
	Lead	<0.000500	<0.000500	<0.000500	<0.000500	<0.000500	<0.000500	<0.000500	<0.000500	<0.000500	<0.000500
	Lithium	<0.00300	<0.00300	0.00493 J	0.00609 J	0.00399 J	<0.00300	0.00308 J	0.00345 J	<0.00300	<0.00300
	Mercury	<0.0000670	<0.0000670 J	<0.0000670	<0.0000670	<0.0000670	<0.0000670	<0.0000670	<0.0000670	<0.0000670	<0.0000670
	Molybdenum	<0.000200	<0.000200	0.000274 J	<0.000200	0.000862 J	<0.000200	<0.000200	0.0437	<0.000200	<0.000200
	Radium	0.805 U	0.546 U	0.804 U	0.596 U	0.345 U	0.161 U	0.804 U	0.618 U	0.0403 U	0.500 U
	Selenium	<0.00150	<0.00150	<0.00150	0.0259	<0.00150	<0.00150	<0.00150	<0.00150	<0.00150	<0.00150
	Thallium	<0.000600	<0.000600	<0.000600 J	<0.000600	<0.000600	<0.000600	<0.000600	<0.000600	<0.000600	<0.000600
* Silver	<0.000300	<0.000300	<0.000300 J	<0.000300	<0.000300	<0.000300	<0.000300	<0.000300	<0.000300	<0.000300	
ADDITIONAL PARAMETERS	Total Alkalinity	41.4	46.2	68.4 J	68.2	157	56.8	30.8	158	23.8	49.4
	Bicarbonate Alkalinity	41.4	46.2	68.4 J	68.2	157	56.8	30.8	158	23.8	49.4
	Carbonate Alkalinity	<1.45	<1.45	<1.45 J	<1.45	<1.45	<1.45	<1.45	<1.45	<1.45	<1.45
	Aluminum	0.114	0.0267 J	0.0544 J	<0.0193	0.0344 J	<0.0193	<0.0193	0.157	0.0540	0.0861
	Iron	0.170	0.0611 J	0.0662 R	<0.0330	<0.0330	<0.0330	<0.0330	0.171	0.0621 J	0.112
	Magnesium	3.82	3.87	9.51	118	7.21	6.48	8.76	20.4	2.16	4.01
	Manganese	0.00355 J	0.00414 J	0.00160 J	0.00657	0.00674	0.00382 J	0.00110 J	0.355	0.00278 J	0.00358 J
	Potassium	1.09	1.26	2.45 J	3.98	3.47	0.809	1.01	1.76	1.84	0.756
Sodium	7.93	9.37	12.1	17.5	70.9	14.5	6.13	13.3	6.72	10.4	

Notes:

- Results for constituents are reported in milligrams per liter (mg/L). pH results reported in standard units (s.u.). Radium results are reported in picocuries per liter (pCi/L).
- < indicates the constituent was not detected above the analytical method detection limit (MDL).
- J indicates the constituent was detected at such low levels that the precision of the laboratory instrument could not produce a reliable value.
Therefore, the value displayed (value J) is qualified by the laboratory as an estimated number.
- TDS indicates total dissolved solids.
- U indicates the constituent was detected below the Minimum Detection Concentration (MDC) and the precision of the laboratory instruments could not produce a reliable value.
Therefore, the value followed by U is qualified by the laboratory as estimated.
- * - Georgia Appendix I constituent that is not also included in Appendix IV.
- J indicates the analyte was detected in an associated blank; estimated data with a high bias.

TABLE 5
ANALYTICAL DATA SUMMARY - GROUNDWATER
Georgia Power Company - Plant Arkwright
Ash Pond 3 Landfill and Monofill
Macon, Georgia

Substance		Well ID						
		ARGWC-15	ARGWC-16	ARGWC-17	ARGWC-18	ARAMW-3	ARAMW-4	ARAMW-6
		8/31/2022	8/31/2022	9/2/2022	9/2/2022	8/31/2022	9/2/2022	8/31/2022
APPENDIX III	Boron	0.0137 J	0.101	0.0555	2.53	0.950	0.477	0.607
	Calcium	25.0	42.4	23.7	52.4	27.4	240	26.4
	Chloride	3.01 J	5.67	2.74	6.52	5.59	4.58	5.10
	Fluoride	0.169	<0.0330	0.0820 J	0.141	0.127	0.0590 J	0.168
	Sulfate	5.64	243	151	198	53.0	1080	46.5
	TDS	125	375	240	444	218	1610	167
	pH	6.46	5.18	5.11	6.03	6.14	5.65	6.28
APPENDIX IV	Antimony	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
	Arsenic	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	0.00339 J	<0.00200
	Barium	0.0325	0.0383	0.0727	0.0369	0.0619	0.0374	0.0400
	Beryllium	<0.000200	<0.000200	0.000417 J	<0.000200	<0.000200	<0.000200	<0.000200
	Cadmium	<0.000300	<0.000300	<0.000300	<0.000300	<0.000300	<0.000300	<0.000300
	Chromium	<0.00300	<0.00300	<0.00300	<0.00300	<0.00300	<0.00300	<0.00300
	Cobalt	<0.000300	<0.000300	0.0516	0.00111	0.000465 J	0.00411	<0.000300
	Lead	<0.000500	<0.000500	<0.000500	<0.000500	<0.000500	<0.000500	<0.000500
	Lithium	<0.00300	<0.00300	<0.00300	0.00380 J	0.00404 J	0.0117	<0.00300
	Mercury	<0.0000670	<0.0000670	<0.0000670	<0.0000670	<0.0000670	<0.0000670	<0.0000670
	Molybdenum	0.00179	<0.000200	<0.000200	<0.000200	0.000869 J	0.000288 J	<0.000200
	Radium	0.510 U	0.493 U	1.75 U	2.67 U	1.02 U	0.947 U	0.871 U
	Selenium	<0.00150	0.00287 J	<0.00150	<0.00150	<0.00150	<0.00150	<0.00150
	Thallium	<0.000600	<0.000600	<0.000600	<0.000600	<0.000600	<0.000600	<0.000600
* Silver	<0.000300	<0.000300	<0.000300	<0.000300	<0.000300	<0.000300	<0.000300	
ADDITIONAL PARAMETERS	Total Alkalinity	109	19.0	14.2	111	103	50.6	90.4
	Bicarbonate Alkalinity	109	19.0	14.2	111	103	50.6	90.4
	Carbonate Alkalinity	<1.45	<1.45	<1.45	<1.45	<1.45	<1.45	<1.45
	Aluminum	<0.0193	<0.0193	0.0558	0.174	<0.0193	<0.0193	<0.0193
	Iron	<0.0330	<0.0330	0.171	1.37	0.671	4.42	<0.0330
	Magnesium	9.11	31.9	23.5	44.3	14.4	128	14.1
	Manganese	0.0200	0.327	1.55	0.889	0.114	0.872	0.00848
	Potassium	7.53	3.71	1.40	2.34	2.93	12.0	1.27
	Sodium	9.01	15.0	10.5	12.8	12.8	28.4	11.2

Notes:

- Results for constituents are reported in milligrams per liter (mg/L). pH results reported in standard units (s.u.). Radium results are reported in picocuries per liter (pCi/L).
- < indicates the constituent was not detected above the analytical method detection limit (MDL).
- J indicates the constituent was detected at such low levels that the precision of the laboratory instrument could not produce a reliable value.
Therefore, the value displayed (value J) is qualified by the laboratory as an estimated number.
- TDS indicates total dissolved solids.
- U indicates the constituent was detected below the Minimum Detection Concentration (MDC) and the precision of the laboratory instruments could not produce a reliable value
Therefore, the value followed by U is qualified by the laboratory as estimated.
- * - Georgia Appendix I constituent that is not also included in Appendix IV.
- J indicates the analyte was detected in an associated blank; estimated data with a high bias.

TABLE 6
ANALYTICAL DATA SUMMARY - SURFACE WATER
Georgia Power Company - Plant Arkwright
Ash Pond 3 Landfill and Monofill
Macon, Georgia

Substance		Surface Water Sample Location					
		BT-1.6	BT-1.3	BT-1.2	BT-1.1	BT-1.0	BC-0.8b
		8/16/2022	8/16/2022	8/16/2022	8/16/2022	8/16/2022	8/16/2022
APPENDIX III	Boron	<0.0086	<0.0086	<0.0086	<0.0086	0.044	0.410
	Calcium	10.1	10.4	11.9	14.0	10.1	14.2
	Chloride	5.9	9.7	9.1	7.9	7.5	3.9
	Fluoride	0.10	0.11	0.12	0.12	0.11	0.12
	Sulfate	1.6	3.7	4.0	2.5	3.7	38.1
	TDS	88.9	136	77.9	132	105	93.9
	pH	7.13	6.38	6.49	6.81	7.44	7.28
APP IV*	Cobalt	<0.00039	<0.00039	0.012	<0.00039	<0.00039	<0.00039
	Lithium	<0.00073	<0.00073	<0.00073	<0.00073	<0.00073	<0.00073
	Molybdenum	<0.00074	NA	NA	NA	NA	<0.00074
ADDITIONAL ANALYTES	Total Alkalinity	41.6	67.7	80.0	85.3	61.4	41.6
	Bicarbonate Alkalinity	41.6	67.7	80.0	85.3	61.4	41.6
	Magnesium	5.7	7.5	8.6	9.3	8.4	7.9
	Potassium	3.0	7.0	6.6	5.4	4.2	2.1
	Sodium	6.7	7.8	8.3	8.1	8.1	8.0

Notes:

1. Results for constituents are reported in milligrams per liter (mg/L). Radium results are reported in picocuries per liter (pCi/L).
2. < indicates the constituent was not detected above the analytical method detection limit (MDL).
3. J indicates the constituent was detected at such low levels that the precision of the laboratory instrument could not produce a reliable value.
Therefore, the value displayed (value J) is qualified by the laboratory as an estimated number.
4. TDS indicates total dissolved solids.
5. U indicates the constituent was detected below the Minimum Detection Concentration (MDC) and the precision of the laboratory instruments could not produce a reliable value. Therefore, the value followed by U is qualified by the laboratory as estimated.
6. NA indicates constituent was not analyzed
7. * - Targeted Appendix IV parameter

TABLE 7
SUMMARY OF GROUNDWATER PROTECTION STANDARDS
Georgia Power Company - Plant Arkwright
Ash Pond 3 Landfill and Monofill
Macon, Georgia

PLANT ARKWRIGHT AP-3 LANDFILL GWPS					
Constituent Name	UNITS	MCL	CCR-Rule Specified^[1]	Site Specific Background Limit^[2] August 2022	State GWPS August 2022
Antimony	mg/L	0.006		0.003	0.006
Arsenic	mg/L	0.01		0.005	0.01
Barium	mg/L	2		0.24	2
Beryllium	mg/L	0.004		0.0005	0.004
Cadmium	mg/L	0.005		0.0043	0.005
Chromium	mg/L	0.1		0.01	0.1
Cobalt	mg/L	n/a	0.006	0.0058	0.006
Combined Radium	pCi/L	5		1.03	5
Fluoride	mg/L	4		0.53	4
Lead	mg/L	n/a	0.015	0.013	0.015
Lithium	mg/L	n/a	0.04	0.01	0.04
Mercury	mg/L	0.002		0.0002	0.002
Molybdenum	mg/L	n/a	0.1	0.004	0.1
Selenium	mg/L	0.05		0.034	0.05
Silver	mg/L	n/a		0.0051	0.0051
Thallium	mg/L	0.002		0.002	0.002

Notes:

mg/L - milligrams per liter

pCi/L - picoCuries per liter

n/a - constituent does not have an established MCL

MCL - Maximum Contaminant Level

GWPS - Groundwater Protection Standard

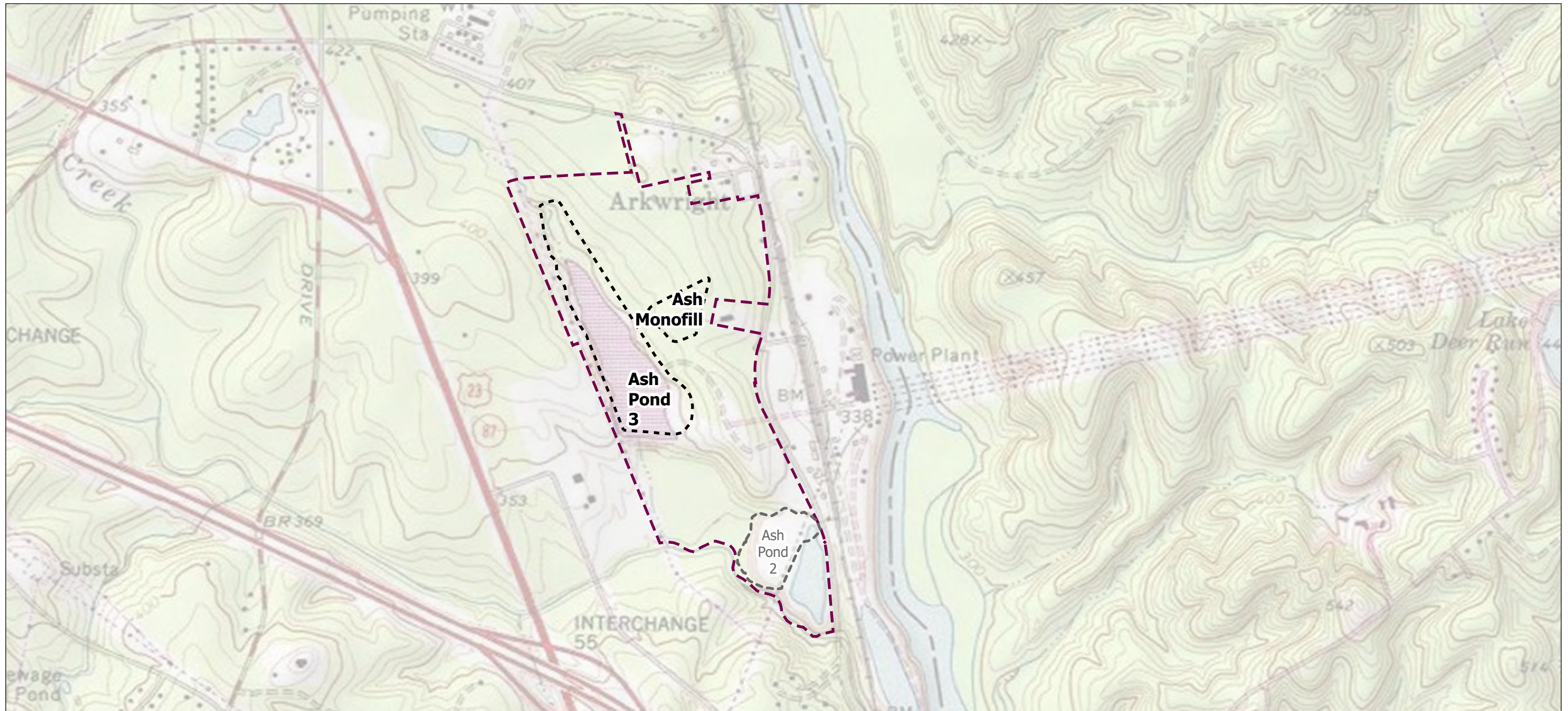
CCR - Coal Combustion Residuals

[1] GA EPD incorporated the US EPA GWPS into the current GA EPD Rules for Solid Waste Management 391-3-4-.10(6)(a) on February 22, 2022.

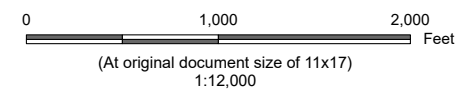
[2] The background limits are evaluated when determining the groundwater protection standard (GWPS) under 40 CFR § 257.95(h) and 391-3-4-.10(6)(a).

FIGURES





- Legend**
- Approximate Property Boundary
 - Ash Pond 2 Dry Ash Stockpile
 - Ash Pond 3 and Ash Monofill



Project Location
Macon, Georgia

Prepared by DMB on 2/2/2023
TR by BS on 2/2/2023
IR by MD on 2/2/2023

Client/Project
Georgia Power
Semi-annual Report
Plant Arkwright Ash Pond 3 Landfill and Monofill

175569434

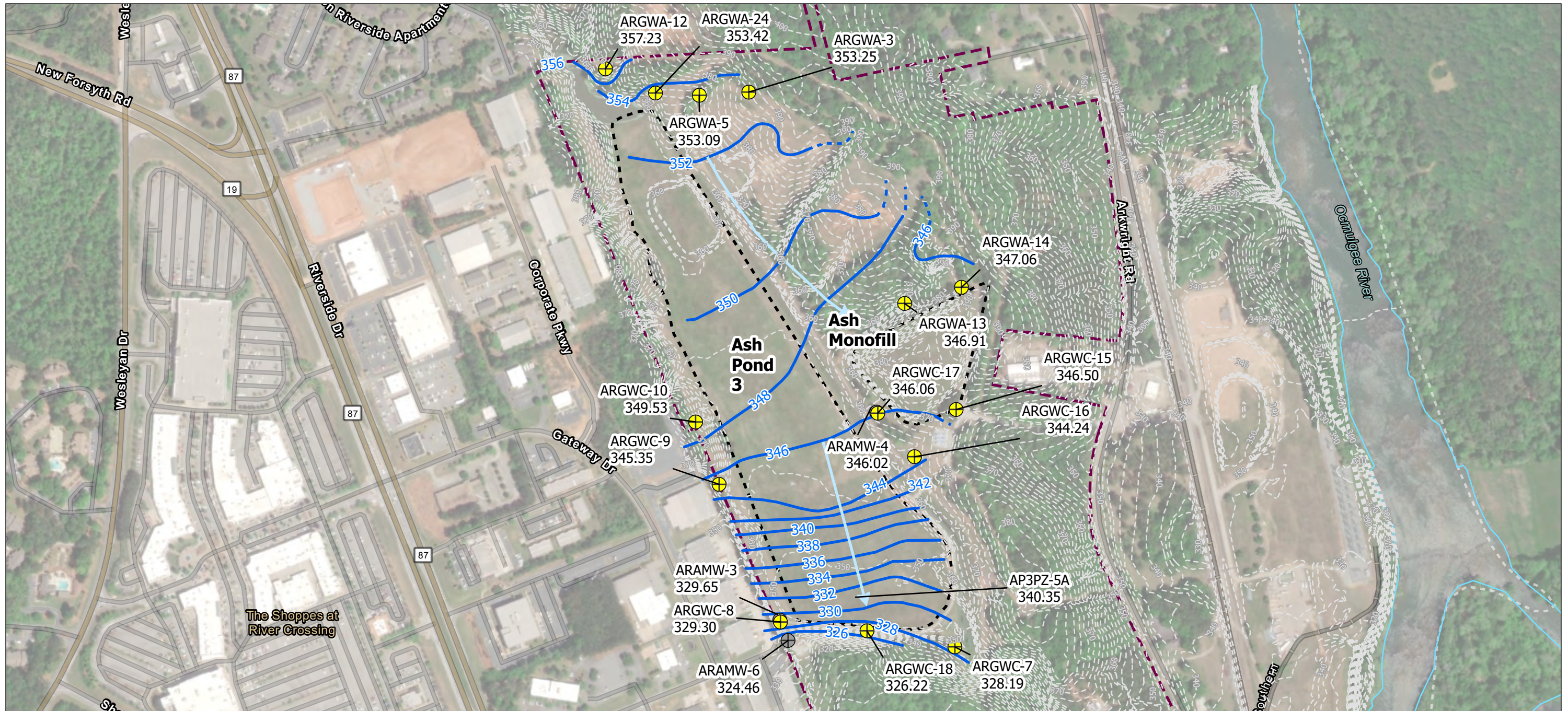
Figure No.

1

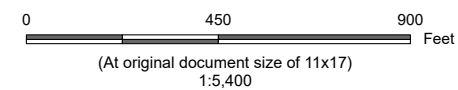
Title

Site Location Map

Notes
 1. Coordinate System: NAD 1983 StatePlane Georgia West FIPS 1002 Feet
 2. Data Sources: Tax Parcel and AP-3 Landfill Boundary provided by Southern Company Services and Wood Environment & Infrastructure Solutions
 3. Background: Copyright © 2013 National Geographic Society, i-cubed, Esri, HERE, Garmin, SafeGraph, FAO, METI/NASA, USGS, EPA, NPS



- Legend**
- Detection Monitoring Well
 - ⊕ Assessment Monitoring Well
 - Potentiometric Surface Contour Aug 2022 (ft NAVD88)
 - - - Inferred Potentiometric Surface Contour Aug 2022 (ft NAVD88)
 - Interpreted Groundwater Flow Direction
 - Ocmulgee River (Approximate)
 - - - Topographic Contour 2018 (2 ft interval)
 - - - Approximate Property Boundary
 - - - Ash Pond 3 and Ash Monofill Approximate Limits of Waste



Project Location
Macon, Georgia

Client/Project
Georgia Power
Semi-annual Report
Plant Arkwright Ash Pond 3 Landfill and Monofill

Figure No.
3

Title
**Potentiometric Surface Contour Map AP-3
Landfill and Monofill – August 30, 2022**

Prepared by DMB on 2/16/2023
TR by BS on 2/16/2023
IR by MD on 2/16/2023
175569434

Notes

1. Coordinate System: NAD 1983 StatePlane Georgia West FIPS 1002 Feet
2. Data Sources: Ash Pond Boundaries, Monitoring Wells, Property Boundary, Topography, and Beaverdam Creek provided by Southern Company Services and Wood Environment & Infrastructure Solutions; Contours, Flow Arrow, and Ocmulgee River provided by Stantec
3. Background: Esri Community Maps Contributors, © OpenStreetMap, Microsoft, Esri, HERE, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS, US Census Bureau, USDA, Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community, Esri, HERE, Garmin, SafeGraph, FAO, METI/NASA, USGS, EPA, NPS

353.25 Groundwater Elevation (ft NAVD88)
AP3PZ-5A and ARGWA-13 not included in contouring due to anomalous groundwater elevations

Appendix A Well Inspections



MONITORING WELL INSPECTION CHECKLIST



Project Name: Southern Company Arkwright
 Plant Name: Plant Arkwright
 Plant Address: 5001 Arkwright Road, Macon, GA 31210
 Project Number: 175569434
 Goal/Task: Gauging/Inspection

Date: 8/30/2022
 Monitoring Well No.: AP3PZ-1
 Priority Maintenance Item Identified: NA

Description	Yes	No	NA	Comments
Location/Identification				
Is the well visible and accessible?	X			
Is the well properly identified with the correct well ID?	X			
Is the well in a high traffic area and does the well require protection from traffic?		X		
Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	X			
Protective Casing				
Is the protective casing free from apparent damage and able to be secured?	X			
Is the casing free of degradation or deterioration?	X			
Does the casing have a functioning weep hole?		X		
Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?	X			
Is the well locked and is the lock in good condition?	X			
Surface pad				
Is the well pad in good condition (not cracked or broken)?			X	No pad visible
Is the well pad sloped away from the protective casing?			X	No pad visible
Is the well pad in complete contact with the protective casing?			X	No pad visible
Is the well pad in complete contact with the ground surface and stable?(Not undermined by erosion, animal burrows, and does not move when stepped on).			X	No pad visible
Is the pad surface clean (not covered with sediment or debris)?			X	No pad visible
Internal casing				
Does the cap prevent entry of foreign material into the well?	X			
Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?	X			
Is the well properly vented for equilibrium of air pressure?	X			
Is the survey point clearly marked on the inner casing?	X			
Is the depth of the well consistent with the original well log?			X	
Is the casing stable? (or does the pvc move easily when touched or can it be taken apart by hand due to lack of grout or use of slip couplings in construction)	X			
Sampling (Groundwater Wells Only)				
Does well recharge adequately when purged?			X	
If dedicated sampling equipment installed, is it in good condition and specified in the approved groundwater groundwater plant for the facility?			X	
Does the well require redevelopment (low-flow, turbid)?			X	

Comments: Include inspection details, including items requiring repair or maintenance.
 NA

Prepared By / Date: Bryan Pennell 8/30/22
 DL/SME Review By / Date Edgar Smith 9/22/22

MONITORING WELL INSPECTION CHECKLIST



Project Name: Southern Company Arkwright
 Plant Name: Plant Arkwright
 Plant Address: 5001 Arkwright Road, Macon, GA 31210
 Project Number: 175569434
 Goal/Task: Gauging/Inspection

Date: 8/30/2022
 Monitoring Well No.: AP3PZ-1A
 Priority Maintenance Item Identified: NA

	Description	Yes	No	NA	Comments
1	Location/Identification				
a	Is the well visible and accessible?	X			
b	Is the well properly identified with the correct well ID?	X			
c	Is the well in a high traffic area and does the well require protection from traffic?		X		
d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	X			
2	Protective Casing				
a	Is the protective casing free from apparent damage and able to be secured?	X			
b	Is the casing free of degradation or deterioration?	X			
c	Does the casing have a functioning weep hole?		X		
d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?	X			
e	Is the well locked and is the lock in good condition?	X			
3	Surface pad				
a	Is the well pad in good condition (not cracked or broken)?			X	No pad visible
b	Is the well pad sloped away from the protective casing?			X	No pad visible
c	Is the well pad in complete contact with the protective casing?			X	No pad visible
d	Is the well pad in complete contact with the ground surface and stable?(Not undermined by erosion, animal burrows, and does not move when stepped on).			X	No pad visible
e	Is the pad surface clean (not covered with sediment or debris)?			X	No pad visible
4	Internal casing				
a	Does the cap prevent entry of foreign material into the well?	X			
b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?	X			
c	Is the well properly vented for equilibrium of air pressure?	X			
d	Is the survey point clearly marked on the inner casing?	X			
e	Is the depth of the well consistent with the original well log?	X			
f	Is the casing stable? (or does the pvc move easily when touched or can it be taken apart by hand due to lack of grout or use of slip couplings in construction)	X			
5	Sampling (Groundwater Wells Only)				
a	Does well recharge adequately when purged?	X			
b	If dedicated sampling equipment installed, is it in good condition and specified in the approved groundwater groundwater plant for the facility?			X	
c	Does the well require redevelopment (low-flow, turbid)?		X		

Comments: Include inspection details, including items requiring repair or maintenance.
 None

Prepared By / Date: Bryan Pennell 8/30/22
 DL/SME Review By / Date Edgar Smith 9/22/22

MONITORING WELL INSPECTION CHECKLIST



Project Name: Southern Company Arkwright
 Plant Name: Plant Arkwright
 Plant Address: 5001 Arkwright Road, Macon, GA 31210
 Project Number: 175569434
 Goal/Task: Gauging/Inspection

Date: 8/30/2022
 Monitoring Well No.: AP3PZ-2
 Priority Maintenance Item Identified: NA

	Description	Yes	No	NA	Comments
1	Location/Identification				
a	Is the well visible and accessible?	X			
b	Is the well properly identified with the correct well ID?	X			
c	Is the well in a high traffic area and does the well require protection from traffic?		X		
d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	X			
2	Protective Casing				
a	Is the protective casing free from apparent damage and able to be secured?	X			
b	Is the casing free of degradation or deterioration?	X			
c	Does the casing have a functioning weep hole?		X		
d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?	X			
e	Is the well locked and is the lock in good condition?	X			
3	Surface pad				
a	Is the well pad in good condition (not cracked or broken)?			X	No pad visible
b	Is the well pad sloped away from the protective casing?			X	No pad visible
c	Is the well pad in complete contact with the protective casing?			X	No pad visible
d	Is the well pad in complete contact with the ground surface and stable?(Not undermined by erosion, animal burrows, and does not move when stepped on).			X	No pad visible
e	Is the pad surface clean (not covered with sediment or debris)?			X	No pad visible
4	Internal casing				
a	Does the cap prevent entry of foreign material into the well?	X			
b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?	X			
c	Is the well properly vented for equilibrium of air pressure?	X			
d	Is the survey point clearly marked on the inner casing?	X			
e	Is the depth of the well consistent with the original well log?	X			
f	Is the casing stable? (or does the pvc move easily when touched or can it be taken apart by hand due to lack of grout or use of slip couplings in construction)	X			
5	Sampling (Groundwater Wells Only)				
a	Does well recharge adequately when purged?			X	
b	If dedicated sampling equipment installed, is it in good condition and specified in the approved groundwater groundwater plant for the facility?			X	
c	Does the well require redevelopment (low-flow, turbid)?			X	

Comments: Include inspection details, including items requiring repair or maintenance.
 None

Prepared By / Date: Bryan Pennell 8/30/22
 DL/SME Review By / Date Edgar Smith 9/22/22

MONITORING WELL INSPECTION CHECKLIST



Project Name: Southern Company Arkwright
 Plant Name: Plant Arkwright
 Plant Address: 5001 Arkwright Road, Macon, GA 31210
 Project Number: 175569434
 Goal/Task: Gauging/Inspection

 Date: 8/30/2022
 Monitoring Well No.: AP3PZ-2A
 Priority Maintenance Item Identified: NA

	Description	Yes	No	NA	Comments
1	Location/Identification				
a	Is the well visible and accessible?	X			
b	Is the well properly identified with the correct well ID?	X			
c	Is the well in a high traffic area and does the well require protection from traffic?		X		
d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	X			
2	Protective Casing				
a	Is the protective casing free from apparent damage and able to be secured?	X			
b	Is the casing free of degradation or deterioration?	X			
c	Does the casing have a functioning weep hole?		X		
d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?	X			
e	Is the well locked and is the lock in good condition?	X			
3	Surface pad				
a	Is the well pad in good condition (not cracked or broken)?			X	No pad visible
b	Is the well pad sloped away from the protective casing?			X	No pad visible
c	Is the well pad in complete contact with the protective casing?			X	No pad visible
d	Is the well pad in complete contact with the ground surface and stable?(Not undermined by erosion, animal burrows, and does not move when stepped on).			X	No pad visible
e	Is the pad surface clean (not covered with sediment or debris)?			X	No pad visible
4	Internal casing				
a	Does the cap prevent entry of foreign material into the well?	X			
b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?	X			
c	Is the well properly vented for equilibrium of air pressure?	X			
d	Is the survey point clearly marked on the inner casing?	X			
e	Is the depth of the well consistent with the original well log?	X			
f	Is the casing stable? (or does the pvc move easily when touched or can it be taken apart by hand due to lack of grout or use of slip couplings in construction)	X			
5	Sampling (Groundwater Wells Only)				
a	Does well recharge adequately when purged?	X			
b	If dedicated sampling equipment installed, is it in good condition and specified in the approved groundwater groundwater plant for the facility?			X	
c	Does the well require redevelopment (low-flow, turbid)?			X	Turbid; No plans to resample at this time

Comments: Include inspection details, including items requiring repair or maintenance.

None

Prepared By / Date: Bryan Pennell 8/30/22

DL/SME Review By / Date Edgar Smith 9/22/22

MONITORING WELL INSPECTION CHECKLIST



Project Name: Southern Company Arkwright
 Plant Name: Plant Arkwright
 Plant Address: 5001 Arkwright Road, Macon, GA 31210
 Project Number: 175569434
 Goal/Task: Gauging

Date: 8/30/2022
 Monitoring Well No.: AP3PZ-3
 Priority Maintenance Item Identified: NA

	Description	Yes	No	NA	Comments
1	Location/Identification				
a	Is the well visible and accessible?	X			
b	Is the well properly identified with the correct well ID?	X			
c	Is the well in a high traffic area and does the well require protection from traffic?		X		
d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	X			
2	Protective Casing				
a	Is the protective casing free from apparent damage and able to be secured?	X			
b	Is the casing free of degradation or deterioration?	X			
c	Does the casing have a functioning weep hole?		X		
d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?	X			
e	Is the well locked and is the lock in good condition?	X			
3	Surface pad				
a	Is the well pad in good condition (not cracked or broken)?			X	
b	Is the well pad sloped away from the protective casing?			X	
c	Is the well pad in complete contact with the protective casing?			X	
d	Is the well pad in complete contact with the ground surface and stable?(Not undermined by erosion, animal burrows, and does not move when stepped on).			X	
e	Is the pad surface clean (not covered with sediment or debris)?			X	
4	Internal casing				
a	Does the cap prevent entry of foreign material into the well?	X			
b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?	X			
c	Is the well properly vented for equilibrium of air pressure?	X			
d	Is the survey point clearly marked on the inner casing?	X			
e	Is the depth of the well consistent with the original well log?		X		
f	Is the casing stable? (or does the pvc move easily when touched or can it be taken apart by hand due to lack of grout or use of slip couplings in construction)	X			
5	Sampling (Groundwater Wells Only)				
a	Does well recharge adequately when purged?			X	PZ location
b	If dedicated sampling equipment installed, is it in good condition and specified in the approved groundwater plant for the facility?			X	
c	Does the well require redevelopment (low-flow, turbid)?			X	

Comments: Include inspection details, including items requiring repair or maintenance.
 None

Prepared By / Date: Emily Scheiben 08/30/2022
 DL/SME Review By / Date Edgar Smith 9/22/22

MONITORING WELL INSPECTION CHECKLIST



Project Name: Southern Company Arkwright
 Plant Name: Plant Arkwright
 Plant Address: 5001 Arkwright Road, Macon, GA 31210
 Project Number: 175569434
 Goal/Task: Gauging/Inspection

Date: 8/30/2022
 Monitoring Well No.: AP3PZ-3A
 Priority Maintenance Item Identified: NA

	Description	Yes	No	NA	Comments
1	Location/Identification				
a	Is the well visible and accessible?	X			
b	Is the well properly identified with the correct well ID?	X			
c	Is the well in a high traffic area and does the well require protection from traffic?		X		
d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	X			
2	Protective Casing				
a	Is the protective casing free from apparent damage and able to be secured?	X			
b	Is the casing free of degradation or deterioration?	X			
c	Does the casing have a functioning weep hole?		X		
d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?	X			
e	Is the well locked and is the lock in good condition?	X			
3	Surface pad				
a	Is the well pad in good condition (not cracked or broken)?			X	PZ LOCATION, NO WELL PAD
b	Is the well pad sloped away from the protective casing?			X	
c	Is the well pad in complete contact with the protective casing?			X	
d	Is the well pad in complete contact with the ground surface and stable?(Not undermined by erosion, animal burrows, and does not move when stepped on).			X	
e	Is the pad surface clean (not covered with sediment or debris)?			X	
4	Internal casing				
a	Does the cap prevent entry of foreign material into the well?	X			
b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?	X			
c	Is the well properly vented for equilibrium of air pressure?	X			
d	Is the survey point clearly marked on the inner casing?	X			
e	Is the depth of the well consistent with the original well log?	X			
f	Is the casing stable? (or does the pvc move easily when touched or can it be taken apart by hand due to lack of grout or use of slip couplings in construction)	X			
5	Sampling (Groundwater Wells Only)				
a	Does well recharge adequately when purged?	X			
b	If dedicated sampling equipment installed, is it in good condition and specified in the approved groundwater groundwater plant for the facility?	X			
c	Does the well require redevelopment (low-flow, turbid)?		X		

Comments: Include inspection details, including items requiring repair or maintenance.
 None

Prepared By / Date: Emily Scheiben 08/30/2022
 DL/SME Review By / Date Edgar Smith 9/22/22

MONITORING WELL INSPECTION CHECKLIST



Project Name: Southern Company Arkwright
 Plant Name: Plant Arkwright
 Plant Address: 5001 Arkwright Road, Macon, GA 31210
 Project Number: 175569434
 Goal/Task: Gauging/Inspection

Date: 8/30/2022
 Monitoring Well No.: AP3PZ-4
 Priority Maintenance Item Identified: NA

	Description	Yes	No	NA	Comments
1	Location/Identification				
a	Is the well visible and accessible?	X			
b	Is the well properly identified with the correct well ID?	X			
c	Is the well in a high traffic area and does the well require protection from traffic?		X		
d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	X			
2	Protective Casing				
a	Is the protective casing free from apparent damage and able to be secured?	X			
b	Is the casing free of degradation or deterioration?	X			
c	Does the casing have a functioning weep hole?		X		
d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?	X			
e	Is the well locked and is the lock in good condition?	X			
3	Surface pad				
a	Is the well pad in good condition (not cracked or broken)?			X	PZ LOCATION, NO WELL PAD
b	Is the well pad sloped away from the protective casing?			X	
c	Is the well pad in complete contact with the protective casing?			X	
d	Is the well pad in complete contact with the ground surface and stable?(Not undermined by erosion, animal burrows, and does not move when stepped on).			X	
e	Is the pad surface clean (not covered with sediment or debris)?			X	
4	Internal casing				
a	Does the cap prevent entry of foreign material into the well?	X			
b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?	X			
c	Is the well properly vented for equilibrium of air pressure?	X			
d	Is the survey point clearly marked on the inner casing?	X			
e	Is the depth of the well consistent with the original well log?		X		
f	Is the casing stable? (or does the pvc move easily when touched or can it be taken apart by hand due to lack of grout or use of slip couplings in construction)	X			
5	Sampling (Groundwater Wells Only)				
a	Does well recharge adequately when purged?			x	PZ location
b	If dedicated sampling equipment installed, is it in good condition and specified in the approved groundwater plant for the facility?			x	
c	Does the well require redevelopment (low-flow, turbid)?			x	
Comments: Include inspection details, including items requiring repair or maintenance.					
None					
Prepared By / Date: <u>Emily Scheiben 08/30/2022</u>					
DL/SME Review By / Date <u>Edgar Smith 9/22/22</u>					

MONITORING WELL INSPECTION CHECKLIST



Project Name: Southern Company Arkwright
 Plant Name: Plant Arkwright
 Plant Address: 5001 Arkwright Road, Macon, GA 31210
 Project Number: 175569434
 Goal/Task: Gauging/Inspection

Date: 8/30/2022
 Monitoring Well No.: AP3PZ-4A
 Priority Maintenance Item Identified: NA

Description	Yes	No	NA	Comments
Location/Identification				
Is the well visible and accessible?	X			
Is the well properly identified with the correct well ID?	X			
Is the well in a high traffic area and does the well require protection from traffic?		X		
Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	X			
Protective Casing				
Is the protective casing free from apparent damage and able to be secured?	X			
Is the casing free of degradation or deterioration?	X			
Does the casing have a functioning weep hole?		X		
Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?	X			
Is the well locked and is the lock in good condition?	X			
Surface pad				
Is the well pad in good condition (not cracked or broken)?			X	PZ LOCATION, NO WELL PAD
Is the well pad sloped away from the protective casing?			X	
Is the well pad in complete contact with the protective casing?			X	
Is the well pad in complete contact with the ground surface and stable?(Not undermined by erosion, animal burrows, and does not move when stepped on).			X	
Is the pad surface clean (not covered with sediment or debris)?			X	
Internal casing				
Does the cap prevent entry of foreign material into the well?	X			
Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?	X			
Is the well properly vented for equilibrium of air pressure?	X			
Is the survey point clearly marked on the inner casing?	X			
Is the depth of the well consistent with the original well log?	X			
Is the casing stable? (or does the pvc move easily when touched or can it be taken apart by hand due to lack of grout or use of slip couplings in construction)	X			
Sampling (Groundwater Wells Only)				
Does well recharge adequately when purged?	X			
If dedicated sampling equipment installed, is it in good condition and specified in the approved groundwater plant for the facility?			X	
Does the well require redevelopment (low-flow, turbid)?		X		

Comments: Include inspection details, including items requiring repair or maintenance.
 None

Prepared By / Date: Emily Scheiben 08/30/2022
 DL/SME Review By / Date Edgar Smith 9/22/22

MONITORING WELL INSPECTION CHECKLIST



Project Name: Southern Company Arkwright
 Plant Name: Plant Arkwright
 Plant Address: 5001 Arkwright Road, Macon, GA 31210
 Project Number: 175569434
 Goal/Task: Gauging/Inspection

Date: 8/30/2022
 Monitoring Well No.: AP3PZ-5A
 Priority Maintenance Item Identified: NA

	Description	Yes	No	NA	Comments
1	Location/Identification				
a	Is the well visible and accessible?	X			
b	Is the well properly identified with the correct well ID?	X			
c	Is the well in a high traffic area and does the well require protection from traffic?		X		
d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	X			
2	Protective Casing				
a	Is the protective casing free from apparent damage and able to be secured?	X			
b	Is the casing free of degradation or deterioration?	X			
c	Does the casing have a functioning weep hole?		X		
d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?	X			
e	Is the well locked and is the lock in good condition?	X			
3	Surface pad				
a	Is the well pad in good condition (not cracked or broken)?			X	PZ LOCATION, NO WELL PAD
b	Is the well pad sloped away from the protective casing?			X	
c	Is the well pad in complete contact with the protective casing?			X	
d	Is the well pad in complete contact with the ground surface and stable?(Not undermined by erosion, animal burrows, and does not move when stepped on).			X	
e	Is the pad surface clean (not covered with sediment or debris)?			X	
4	Internal casing				
a	Does the cap prevent entry of foreign material into the well?	X			
b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?	X			
c	Is the well properly vented for equilibrium of air pressure?	X			
d	Is the survey point clearly marked on the inner casing?	X			
e	Is the depth of the well consistent with the original well log?	X			
f	Is the casing stable? (or does the pvc move easily when touched or can it be taken apart by hand due to lack of grout or use of slip couplings in construction)	X			
5	Sampling (Groundwater Wells Only)				
a	Does well recharge adequately when purged?	X			
b	If dedicated sampling equipment installed, is it in good condition and specified in the approved groundwater plant for the facility?			X	
c	Does the well require redevelopment (low-flow, turbid)?		X		

Comments: Include inspection details, including items requiring repair or maintenance.
 None

Prepared By / Date: Emily Scheiben 08/30/2022
 DL/SME Review By / Date Edgar Smith 9/22/22

MONITORING WELL INSPECTION CHECKLIST



Project Name: Southern Company Arkwright
 Plant Name: Plant Arkwright
 Plant Address: 5001 Arkwright Road, Macon, GA 31210
 Project Number: 175569434
 Goal/Task: Gauging/Inspection

Date: 8/30/2022
 Monitoring Well No.: ARAMW-3
 Priority Maintenance Item Identified: NA

	Description	Yes	No	NA	Comments
1	Location/Identification				
a	Is the well visible and accessible?	X			
b	Is the well properly identified with the correct well ID?	X			
c	Is the well in a high traffic area and does the well require protection from traffic?		X		
d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	X			
2	Protective Casing				
a	Is the protective casing free from apparent damage and able to be secured?	X			
b	Is the casing free of degradation or deterioration?	X			
c	Does the casing have a functioning weep hole?	X			
d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?	X			
e	Is the well locked and is the lock in good condition?	X			
3	Surface pad				
a	Is the well pad in good condition (not cracked or broken)?	X			
b	Is the well pad sloped away from the protective casing?	X			
c	Is the well pad in complete contact with the protective casing?	X			
d	Is the well pad in complete contact with the ground surface and stable?(Not undermined by erosion, animal burrows, and does not move when stepped on).	X			
e	Is the pad surface clean (not covered with sediment or debris)?	X			
4	Internal casing				
a	Does the cap prevent entry of foreign material into the well?	X			
b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?	X			
c	Is the well properly vented for equilibrium of air pressure?	X			
d	Is the survey point clearly marked on the inner casing?	X			
e	Is the depth of the well consistent with the original well log?	x			
f	Is the casing stable? (or does the pvc move easily when touched or can it be taken apart by hand due to lack of grout or use of slip couplings in construction)	X			
5	Sampling (Groundwater Wells Only)				
a	Does well recharge adequately when purged?	X			
b	If dedicated sampling equipment installed, is it in good condition and specified in the approved groundwater plant for the facility?			X	No dedicated pump
c	Does the well require redevelopment (low-flow, turbid)?		X		

Comments: Include inspection details, including items requiring repair or maintenance.
 None

Prepared By / Date: Emily Scheiben 08/30/2022
 DL/SME Review By / Date Edgar Smith 9/22/22

MONITORING WELL INSPECTION CHECKLIST



Project Name: Southern Company Arkwright
 Plant Name: Plant Arkwright
 Plant Address: 5001 Arkwright Road, Macon, GA 31210
 Project Number: 175569434
 Goal/Task: Gauging/Inspection

Date: 8/30/2022
 Monitoring Well No.: ARAMW-4
 Priority Maintenance Item Identified: NA

	Description	Yes	No	NA	Comments
1	Location/Identification				
a	Is the well visible and accessible?	X			
b	Is the well properly identified with the correct well ID?	X			
c	Is the well in a high traffic area and does the well require protection from traffic?		X		
d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	X			
2	Protective Casing				
a	Is the protective casing free from apparent damage and able to be secured?	X			
b	Is the casing free of degradation or deterioration?	X			
c	Does the casing have a functioning weep hole?	X			
d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?	X			
e	Is the well locked and is the lock in good condition?	X			
3	Surface pad				
a	Is the well pad in good condition (not cracked or broken)?	X			
b	Is the well pad sloped away from the protective casing?	X			
c	Is the well pad in complete contact with the protective casing?	X			
d	Is the well pad in complete contact with the ground surface and stable?(Not undermined by erosion, animal burrows, and does not move when stepped on).	X			
e	Is the pad surface clean (not covered with sediment or debris)?	X			
4	Internal casing				
a	Does the cap prevent entry of foreign material into the well?	X			
b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?	X			
c	Is the well properly vented for equilibrium of air pressure?	X			
d	Is the survey point clearly marked on the inner casing?	X			
d	Is the depth of the well consistent with the original well log?	X			
f	Is the casing stable? (or does the pvc move easily when touched or can it be taken apart by hand due to lack of grout or use of slip couplings in construction)	X			
5	Sampling (Groundwater Wells Only)				
a	Does well recharge adequately when purged?	X			
b	If dedicated sampling equipment installed, is it in good condition and specified in the approved groundwater plant for the facility?			X	No dedicated pump
c	Does the well require redevelopment (low-flow, turbid)?		X		

Comments: Include inspection details, including items requiring repair or maintenance.
 None

Prepared By / Date: Emily Scheiben 08/30/2022
 DL/SME Review By / Date Edgar Smith 9/22/22

MONITORING WELL INSPECTION CHECKLIST



Project Name: Southern Company Arkwright
 Plant Name: Plant Arkwright
 Plant Address: 5001 Arkwright Road, Macon, GA 31210
 Project Number: 175569434
 Goal/Task: Gauging/Inspection

Date: 8/30/2022
 Monitoring Well No.: ARAMW-6
 Priority Maintenance Item Identified: NA

	Description	Yes	No	NA	Comments
1	Location/Identification				
a	Is the well visible and accessible?	X			
b	Is the well properly identified with the correct well ID?	X			
c	Is the well in a high traffic area and does the well require protection from traffic?		X		
d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	X			
2	Protective Casing				
a	Is the protective casing free from apparent damage and able to be secured?	X			
b	Is the casing free of degradation or deterioration?	X			
c	Does the casing have a functioning weep hole?	X			
d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?	X			
e	Is the well locked and is the lock in good condition?	X			
3	Surface pad				
a	Is the well pad in good condition (not cracked or broken)?	X			
b	Is the well pad sloped away from the protective casing?	X			
c	Is the well pad in complete contact with the protective casing?	X			
d	Is the well pad in complete contact with the ground surface and stable?(Not undermined by erosion, animal burrows, and does not move when stepped on).	X			
e	Is the pad surface clean (not covered with sediment or debris)?	X			
4	Internal casing				
a	Does the cap prevent entry of foreign material into the well?	X			
b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?	X			
c	Is the well properly vented for equilibrium of air pressure?	X			
d	Is the survey point clearly marked on the inner casing?	X			
e	Is the depth of the well consistent with the original well log?	X			
f	Is the casing stable? (or does the pvc move easily when touched or can it be taken apart by hand due to lack of grout or use of slip couplings in construction)	X			
5	Sampling (Groundwater Wells Only)				
a	Does well recharge adequately when purged?	X			
b	If dedicated sampling equipment installed, is it in good condition and specified in the approved groundwater plant for the facility?			X	No dedicated pump
c	Does the well require redevelopment (low-flow, turbid)?		X		

Comments: Include inspection details, including items requiring repair or maintenance.
 None

Prepared By / Date: Emily Scheiben 08/30/2022
 DL/SME Review By / Date Edgar Smith 9/22/22

MONITORING WELL INSPECTION CHECKLIST



Project Name: Southern Company Arkwright
 Plant Name: Plant Arkwright
 Plant Address: 5001 Arkwright Road, Macon, GA 31210
 Project Number: 175569434
 Goal/Task: Gauging/Inspection

Date: 8/30/2022
 Monitoring Well No.: ARGWA-3
 Priority Maintenance Item Identified: NA

	Description	Yes	No	NA	Comments
1	Location/Identification				
a	Is the well visible and accessible?	X			
b	Is the well properly identified with the correct well ID?	X			
c	Is the well in a high traffic area and does the well require protection from traffic?		X		
d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	X			
2	Protective Casing				
a	Is the protective casing free from apparent damage and able to be secured?	X			
b	Is the casing free of degradation or deterioration?	X			
c	Does the casing have a functioning weep hole?	X			
d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?	X			
e	Is the well locked and is the lock in good condition?	X			
3	Surface pad				
a	Is the well pad in good condition (not cracked or broken)?	X			
b	Is the well pad sloped away from the protective casing?		X		Appears level
c	Is the well pad in complete contact with the protective casing?	X			
d	Is the well pad in complete contact with the ground surface and stable?(Not undermined by erosion, animal burrows, and does not move when stepped on).	X			
e	Is the pad surface clean (not covered with sediment or debris)?	X			
4	Internal casing				
a	Does the cap prevent entry of foreign material into the well?	X			
b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?	X			
c	Is the well properly vented for equilibrium of air pressure?		X		
d	Is the survey point clearly marked on the inner casing?	X			
e	Is the depth of the well consistent with the original well log?	X			
f	Is the casing stable? (or does the pvc move easily when touched or can it be taken apart by hand due to lack of grout or use of slip couplings in construction)	X			
5	Sampling (Groundwater Wells Only)				
a	Does well recharge adequately when purged?	X			
b	If dedicated sampling equipment installed, is it in good condition and specified in the approved groundwater groundwater plant for the facility?	X			
c	Does the well require redevelopment (low-flow, turbid)?		X		

Comments: Include inspection details, including items requiring repair or maintenance.
 None

Prepared By / Date: Bryan Pennell 8/30/22
 DL/SME Review By / Date Edgar Smith 9/22/22

MONITORING WELL INSPECTION CHECKLIST



Project Name: Southern Company Arkwright
 Plant Name: Plant Arkwright
 Plant Address: 5001 Arkwright Road, Macon, GA 31210
 Project Number: 175569434
 Goal/Task: Gauging/Inspection

Date: 8/30/2022
 Monitoring Well No.: ARGWA-5
 Priority Maintenance Item Identified: NA

	Description	Yes	No	NA	Comments
1	Location/Identification				
a	Is the well visible and accessible?	X			
b	Is the well properly identified with the correct well ID?	X			
c	Is the well in a high traffic area and does the well require protection from traffic?		X		
d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	X			
2	Protective Casing				
a	Is the protective casing free from apparent damage and able to be secured?	X			
b	Is the casing free of degradation or deterioration?	X			
c	Does the casing have a functioning weep hole?	X			
d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?	X			
e	Is the well locked and is the lock in good condition?	X			
3	Surface pad				
a	Is the well pad in good condition (not cracked or broken)?	X			
b	Is the well pad sloped away from the protective casing?		X		Appears level
c	Is the well pad in complete contact with the protective casing?	X			
d	Is the well pad in complete contact with the ground surface and stable?(Not undermined by erosion, animal burrows, and does not move when stepped on).	X			
e	Is the pad surface clean (not covered with sediment or debris)?	X			
4	Internal casing				
a	Does the cap prevent entry of foreign material into the well?	X			
b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?	X			
c	Is the well properly vented for equilibrium of air pressure?		X		
d	Is the survey point clearly marked on the inner casing?	X			
e	Is the depth of the well consistent with the original well log?	X			
f	Is the casing stable? (or does the pvc move easily when touched or can it be taken apart by hand due to lack of grout or use of slip couplings in construction)	X			
5	Sampling (Groundwater Wells Only)				
a	Does well recharge adequately when purged?	X			
b	If dedicated sampling equipment installed, is it in good condition as specified in the approved groundwater groundwater plant for the facility?	X			
c	Does the well require redevelopment (low-flow, turbid)?		X		

Comments: Include inspection details, including items requiring repair or maintenance.
 None

Prepared By / Date: Bryan Pennell 8/30/22
 DL/SME Review By / Date Edgar Smith 9/22/22

MONITORING WELL INSPECTION CHECKLIST



Project Name: Southern Company Arkwright
 Plant Name: Plant Arkwright
 Plant Address: 5001 Arkwright Road, Macon, GA 31210
 Project Number: 175569434
 Goal/Task: Gauging/Inspection

Date: 8/30/2022
 Monitoring Well No.: ARGWA-12
 Priority Maintenance Item Identified: NA

Description		Yes	No	NA	Comments
1	Location/Identification				
a	Is the well visible and accessible?	X			
b	Is the well properly identified with the correct well ID?	X			
c	Is the well in a high traffic area and does the well require protection from traffic?		X		
d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	X			
2	Protective Casing				
a	Is the protective casing free from apparent damage and able to be secured?	X			
b	Is the casing free of degradation or deterioration?	X			
c	Does the casing have a functioning weep hole?		X		
d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?	X			
e	Is the well locked and is the lock in good condition?	X			
3	Surface pad				
a	Is the well pad in good condition (not cracked or broken)?	X			
b	Is the well pad sloped away from the protective casing?		X		Appears level
c	Is the well pad in complete contact with the protective casing?	X			
d	Is the well pad in complete contact with the ground surface and stable?(Not undermined by erosion, animal burrows, and does not move when stepped on).	X			
e	Is the pad surface clean (not covered with sediment or debris)?	X			
4	Internal casing				
a	Does the cap prevent entry of foreign material into the well?	X			
b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?	X			
c	Is the well properly vented for equilibrium of air pressure?	X			
d	Is the survey point clearly marked on the inner casing?	X			
e	Is the depth of the well consistent with the original well log?	x			
f	Is the casing stable? (or does the pvc move easily when touched or can it be taken apart by hand due to lack of grout or use of slip couplings in construction)	X			
5	Sampling (Groundwater Wells Only)				
a	Does well recharge adequately when purged?	X			
b	If dedicated sampling equipment installed, is it in good condition as specified in the approved groundwater groundwater plant for the facility?	X			
c	Does the well require redevelopment (low-flow, turbid)?		X		
Comments: Include inspection details, including items requiring repair or maintenance.					
None					
Prepared By / Date: <u>Bryan Pennell 8/30/22</u>					
DL/SME Review By / Date <u>Edgar Smith 9/22/22</u>					

MONITORING WELL INSPECTION CHECKLIST



Project Name: Southern Company Arkwright
 Plant Name: Plant Arkwright
 Plant Address: 5001 Arkwright Road, Macon, GA 31210
 Project Number: 175569434
 Goal/Task: Gauging/Inspection

Date: 8/30/2022
 Monitoring Well No.: ARGWA-13
 Priority Maintenance Item Identified: NA

	Description	Yes	No	NA	Comments
1	Location/Identification				
a	Is the well visible and accessible?	X			
b	Is the well properly identified with the correct well ID?	X			
c	Is the well in a high traffic area and does the well require protection from traffic?		X		
d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	X			
2	Protective Casing				
a	Is the protective casing free from apparent damage and able to be secured?	X			
b	Is the casing free of degradation or deterioration?	X			
c	Does the casing have a functioning weep hole?	X			
d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?	X			
e	Is the well locked and is the lock in good condition?	X			
3	Surface pad				
a	Is the well pad in good condition (not cracked or broken)?	X			
b	Is the well pad sloped away from the protective casing?		X		Appears level
c	Is the well pad in complete contact with the protective casing?	X			
d	Is the well pad in complete contact with the ground surface and stable?(Not undermined by erosion, animal burrows, and does not move when stepped on).	X			
e	Is the pad surface clean (not covered with sediment or debris)?	X			
4	Internal casing				
a	Does the cap prevent entry of foreign material into the well?	X			
b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?	X			
c	Is the well properly vented for equilibrium of air pressure?	X			
d	Is the survey point clearly marked on the inner casing?	X			
e	Is the depth of the well consistent with the original well log?	X			
f	Is the casing stable? (or does the pvc move easily when touched or can it be taken apart by hand due to lack of grout or use of slip couplings in construction)	X			
5	Sampling (Groundwater Wells Only)				
a	Does well recharge adequately when purged?	X			
b	If dedicated sampling equipment installed, is it in good condition and specified in the approved groundwater groundwater plant for the facility?	X			
c	Does the well require redevelopment (low-flow, turbid)?		X		
Comments: Include inspection details, including items requiring repair or maintenance.					
None					
Prepared By / Date: <u>Bryan Pennell 8/30/22</u>					
DL/SME Review By / Date <u>Edgar Smith 9/22/22</u>					

MONITORING WELL INSPECTION CHECKLIST



Project Name: Southern Company Arkwright
 Plant Name: Plant Arkwright
 Plant Address: 5001 Arkwright Road, Macon, GA 31210
 Project Number: 175569434
 Goal/Task: Gauging/Inspection

Date: 8/30/2022
 Monitoring Well No.: ARGWA-14
 Priority Maintenance Item Identified: NA

	Description	Yes	No	NA	Comments
1	Location/Identification				
a	Is the well visible and accessible?	X			
b	Is the well properly identified with the correct well ID?	X			
c	Is the well in a high traffic area and does the well require protection from traffic?		X		
d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	X			
2	Protective Casing				
a	Is the protective casing free from apparent damage and able to be secured?	X			
b	Is the casing free of degradation or deterioration?	X			
c	Does the casing have a functioning weep hole?	X			
d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?	X			
e	Is the well locked and is the lock in good condition?	X			
3	Surface pad				
a	Is the well pad in good condition (not cracked or broken)?	X			
b	Is the well pad sloped away from the protective casing?		X		Appears level
c	Is the well pad in complete contact with the protective casing?	X			
d	Is the well pad in complete contact with the ground surface and stable?(Not undermined by erosion, animal burrows, and does not move when stepped on).	X			
e	Is the pad surface clean (not covered with sediment or debris)?	X			
4	Internal casing				
a	Does the cap prevent entry of foreign material into the well?	X			
b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?	X			
c	Is the well properly vented for equilibrium of air pressure?	X			
d	Is the survey point clearly marked on the inner casing?	X			
e	Is the depth of the well consistent with the original well log?	X			
f	Is the casing stable? (or does the pvc move easily when touched or can it be taken apart by hand due to lack of grout or use of slip couplings in construction)	X			
5	Sampling (Groundwater Wells Only)				
a	Does well recharge adequately when purged?		X		
b	If dedicated sampling equipment installed, is it in good condition and specified in the approved groundwater groundwater plant for the facility?	X			
c	Does the well require redevelopment (low-flow, turbid)?		X		

Comments: Include inspection details, including items requiring repair or maintenance.
 None

Prepared By / Date: Bryan Pennell 8/30/22
 DL/SME Review By / Date Edgar Smith 9/22/22

MONITORING WELL INSPECTION CHECKLIST



Project Name: Southern Company Arkwright
 Plant Name: Plant Arkwright
 Plant Address: 5001 Arkwright Road, Macon, GA 31210
 Project Number: 175569434
 Goal/Task: Gauging/Inspection

Date: 8/30/2022
 Monitoring Well No.: ARGWA-24
 Priority Maintenance Item Identified: NA

	Description	Yes	No	NA	Comments
1	Location/Identification				
a	Is the well visible and accessible?	X			
b	Is the well properly identified with the correct well ID?	X			
c	Is the well in a high traffic area and does the well require protection from traffic?		X		
d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	X			
2	Protective Casing				
a	Is the protective casing free from apparent damage and able to be secured?	X			
b	Is the casing free of degradation or deterioration?	X			
c	Does the casing have a functioning weep hole?	X			
d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?	X			
e	Is the well locked and is the lock in good condition?	X			
3	Surface pad				
a	Is the well pad in good condition (not cracked or broken)?	X			
b	Is the well pad sloped away from the protective casing?		X		Appears level
c	Is the well pad in complete contact with the protective casing?	X			
d	Is the well pad in complete contact with the ground surface and stable?(Not undermined by erosion, animal burrows, and does not move when stepped on).	X			
e	Is the pad surface clean (not covered with sediment or debris)?	X			
4	Internal casing				
a	Does the cap prevent entry of foreign material into the well?	X			
b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?	X			
c	Is the well properly vented for equilibrium of air pressure?	X			
d	Is the survey point clearly marked on the inner casing?	X			
e	Is the depth of the well consistent with the original well log?	X			
f	Is the casing stable? (or does the pvc move easily when touched or can it be taken apart by hand due to lack of grout or use of slip couplings in construction)	X			
5	Sampling (Groundwater Wells Only)				
a	Does well recharge adequately when purged?	X			
b	If dedicated sampling equipment installed, is it in good condition and specified in the approved groundwater groundwater plant for the facility?			X	
c	Does the well require redevelopment (low-flow, turbid)?		X		

Comments: Include inspection details, including items requiring repair or maintenance.
 None

Prepared By / Date: Bryan Pennell 8/30/22
 DL/SME Review By / Date Edgar Smith 9/22/22

MONITORING WELL INSPECTION CHECKLIST



Project Name: Southern Company Arkwright
 Plant Name: Plant Arkwright
 Plant Address: 5001 Arkwright Road, Macon, GA 31210
 Project Number: 175569434
 Goal/Task: Gauging/Inspection

Date: 8/30/2022
 Monitoring Well No.: ARGWC-7
 Priority Maintenance Item Identified: NA

	Description	Yes	No	NA	Comments
1	Location/Identification				
a	Is the well visible and accessible?	X			
b	Is the well properly identified with the correct well ID?	X			
c	Is the well in a high traffic area and does the well require protection from traffic?		X		
d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	X			
2	Protective Casing				
a	Is the protective casing free from apparent damage and able to be secured?	X			
b	Is the casing free of degradation or deterioration?	X			
c	Does the casing have a functioning weep hole?	X			
d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?	X			
e	Is the well locked and is the lock in good condition?	X			
3	Surface pad				
a	Is the well pad in good condition (not cracked or broken)?	X			
b	Is the well pad sloped away from the protective casing?	X			
c	Is the well pad in complete contact with the protective casing?	X			
d	Is the well pad in complete contact with the ground surface and stable?(Not undermined by erosion, animal burrows, and does not move when stepped on).	X			
e	Is the pad surface clean (not covered with sediment or debris)?	X			
4	Internal casing				
a	Does the cap prevent entry of foreign material into the well?	X			
b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?	X			
c	Is the well properly vented for equilibrium of air pressure?	X			
d	Is the survey point clearly marked on the inner casing?	X			
e	Is the depth of the well consistent with the original well log?				
f	Is the casing stable? (or does the pvc move easily when touched or can it be taken apart by hand due to lack of grout or use of slip couplings in construction)	X			
5	Sampling (Groundwater Wells Only)				
a	Does well recharge adequately when purged?	X			
b	If dedicated sampling equipment installed, is it in good condition and specified in the approved groundwater plant for the facility?	X			
c	Does the well require redevelopment (low-flow, turbid)?		X		

Comments: Include inspection details, including items requiring repair or maintenance.
 None

Prepared By / Date: Emily Scheiben 08/30/2022
 DL/SME Review By / Date Edgar Smith 9/22/22

MONITORING WELL INSPECTION CHECKLIST



Project Name: Southern Company Arkwright
 Plant Name: Plant Arkwright
 Plant Address: 5001 Arkwright Road, Macon, GA 31210
 Project Number: 175569434
 Goal/Task: Gauging/Inspection

Date: 8/30/2022
 Monitoring Well No.: ARGWC-8
 Priority Maintenance Item Identified: NA

	Description	Yes	No	NA	Comments
1	Location/Identification				
a	Is the well visible and accessible?	X			
b	Is the well properly identified with the correct well ID?	X			
c	Is the well in a high traffic area and does the well require protection from traffic?		X		
d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	X			
2	Protective Casing				
a	Is the protective casing free from apparent damage and able to be secured?	X			
b	Is the casing free of degradation or deterioration?	X			
c	Does the casing have a functioning weep hole?	X			
d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?	X			
e	Is the well locked and is the lock in good condition?	X			
3	Surface pad				
a	Is the well pad in good condition (not cracked or broken)?	X			
b	Is the well pad sloped away from the protective casing?	X			
c	Is the well pad in complete contact with the protective casing?	X			
d	Is the well pad in complete contact with the ground surface and stable?(Not undermined by erosion, animal burrows, and does not move when stepped on).	X			
e	Is the pad surface clean (not covered with sediment or debris)?	X			
4	Internal casing				
a	Does the cap prevent entry of foreign material into the well?	X			
b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?	X			
c	Is the well properly vented for equilibrium of air pressure?	X			
d	Is the survey point clearly marked on the inner casing?	X			
e	Is the depth of the well consistent with the original well log?	X			
f	Is the casing stable? (or does the pvc move easily when touched or can it be taken apart by hand due to lack of grout or use of slip couplings in construction)	X			
5	Sampling (Groundwater Wells Only)				
a	Does well recharge adequately when purged?	X			
b	If dedicated sampling equipment installed, is it in good condition and specified in the approved groundwater plant for the facility?	X			
c	Does the well require redevelopment (low-flow, turbid)?		X		

Comments: Include inspection details, including items requiring repair or maintenance.
 None

Prepared By / Date: Emily Scheiben 08/30/2022
 DL/SME Review By / Date Edgar Smith 9/22/22

MONITORING WELL INSPECTION CHECKLIST



Project Name: Southern Company Arkwright
 Plant Name: Plant Arkwright
 Plant Address: 5001 Arkwright Road, Macon, GA 31210
 Project Number: 175569434
 Goal/Task: Gauging/Equipment

Date: 8/30/2022
 Monitoring Well No.: ARGWC-9
 Priority Maintenance Item Identified: NA

	Description	Yes	No	NA	Comments
1	Location/Identification				
a	Is the well visible and accessible?	X			
b	Is the well properly identified with the correct well ID?	X			
c	Is the well in a high traffic area and does the well require protection from traffic?		X		
d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	X			
2	Protective Casing				
a	Is the protective casing free from apparent damage and able to be secured?	X			
b	Is the casing free of degradation or deterioration?	X			
c	Does the casing have a functioning weep hole?	X			
d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?	X			
e	Is the well locked and is the lock in good condition?	X			
3	Surface pad				
a	Is the well pad in good condition (not cracked or broken)?	X			
b	Is the well pad sloped away from the protective casing?	X			
c	Is the well pad in complete contact with the protective casing?	X			
d	Is the well pad in complete contact with the ground surface and stable?(Not undermined by erosion, animal burrows, and does not move when stepped on).	X			
e	Is the pad surface clean (not covered with sediment or debris)?	X			
4	Internal casing				
a	Does the cap prevent entry of foreign material into the well?	X			
b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?	X			
c	Is the well properly vented for equilibrium of air pressure?	X			
d	Is the survey point clearly marked on the inner casing?	X			
e	Is the depth of the well consistent with the original well log?	X			
f	Is the casing stable? (or does the pvc move easily when touched or can it be taken apart by hand due to lack of grout or use of slip couplings in construction)	X			
5	Sampling (Groundwater Wells Only)				
a	Does well recharge adequately when purged?	X			
b	If dedicated sampling equipment installed, is it in good condition and specified in the approved groundwater plant for the facility?	X			
c	Does the well require redevelopment (low-flow, turbid)?		X		

Comments: Include inspection details, including items requiring repair or maintenance.
 None

Prepared By / Date: Emily Scheiben 08/30/2022
 DL/SME Review By / Date Edgar Smith 9/22/22

MONITORING WELL INSPECTION CHECKLIST



Project Name: Southern Company Arkwright
 Plant Name: Plant Arkwright
 Plant Address: 5001 Arkwright Road, Macon, GA 31210
 Project Number: 175569434
 Goal/Task: Gauging/Inspection

Date: 8/30/2022
 Monitoring Well No.: ARGWC-10
 Priority Maintenance Item Identified: NA

	Description	Yes	No	NA	Comments
1	Location/Identification				
a	Is the well visible and accessible?	X			
b	Is the well properly identified with the correct well ID?	X			
c	Is the well in a high traffic area and does the well require protection from traffic?		X		
d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	X			
2	Protective Casing				
a	Is the protective casing free from apparent damage and able to be secured?	X			
b	Is the casing free of degradation or deterioration?	X			
c	Does the casing have a functioning weep hole?	X			
d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?	X			
e	Is the well locked and is the lock in good condition?	X			
3	Surface pad				
a	Is the well pad in good condition (not cracked or broken)?	X			
b	Is the well pad sloped away from the protective casing?	X			
c	Is the well pad in complete contact with the protective casing?	X			
d	Is the well pad in complete contact with the ground surface and stable?(Not undermined by erosion, animal burrows, and does not move when stepped on).	X			
e	Is the pad surface clean (not covered with sediment or debris)?	X			
4	Internal casing				
a	Does the cap prevent entry of foreign material into the well?	X			
b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?	X			
c	Is the well properly vented for equilibrium of air pressure?	X			
d	Is the survey point clearly marked on the inner casing?	X			
e	Is the depth of the well consistent with the original well log?	X			
f	Is the casing stable? (or does the pvc move easily when touched or can it be taken apart by hand due to lack of grout or use of slip couplings in construction)	X			
5	Sampling (Groundwater Wells Only)				
a	Does well recharge adequately when purged?	X			
b	If dedicated sampling equipment installed, is it in good condition and specified in the approved groundwater plant for the facility?	X			
c	Does the well require redevelopment (low-flow, turbid)?		X		

Comments: Include inspection details, including items requiring repair or maintenance.
 None

Prepared By / Date: Emily Scheiben 08/30/2022
 DL/SME Review By / Date Edgar Smith 9/22/22

MONITORING WELL INSPECTION CHECKLIST



Project Name: Southern Company Arkwright
 Plant Name: Plant Arkwright
 Plant Address: 5001 Arkwright Road, Macon, GA 31210
 Project Number: 175569434
 Goal/Task: Gauging/Inspection

Date: 8/30/2022
 Monitoring Well No.: ARGWC-15
 Priority Maintenance Item Identified: NA

	Description	Yes	No	NA	Comments
1	Location/Identification				
a	Is the well visible and accessible?	X			
b	Is the well properly identified with the correct well ID?	X			
c	Is the well in a high traffic area and does the well require protection from traffic?		X		
d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	X			
2	Protective Casing				
a	Is the protective casing free from apparent damage and able to be secured?	X			
b	Is the casing free of degradation or deterioration?	X			
c	Does the casing have a functioning weep hole?		X		
d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?	X			
e	Is the well locked and is the lock in good condition?	X			
3	Surface pad				
a	Is the well pad in good condition (not cracked or broken)?	X			
b	Is the well pad sloped away from the protective casing?	X			
c	Is the well pad in complete contact with the protective casing?	X			
d	Is the well pad in complete contact with the ground surface and stable?(Not undermined by erosion, animal burrows, and does not move when stepped on).	X			
e	Is the pad surface clean (not covered with sediment or debris)?	X			
4	Internal casing				
a	Does the cap prevent entry of foreign material into the well?	X			
b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?	X			
c	Is the well properly vented for equilibrium of air pressure?	X			
d	Is the survey point clearly marked on the inner casing?	X			
e	Is the depth of the well consistent with the original well log?	X			
f	Is the casing stable? (or does the pvc move easily when touched or can it be taken apart by hand due to lack of grout or use of slip couplings in construction)	X			
5	Sampling (Groundwater Wells Only)				
a	Does well recharge adequately when purged?	X			
b	If dedicated sampling equipment installed, is it in good condition and specified in the approved groundwater plant for the facility?	X			
c	Does the well require redevelopment (low-flow, turbid)?		X		

Comments: Include inspection details, including items requiring repair or maintenance.
 None

Prepared By / Date: Emily Scheiben 08/30/2022
 DL/SME Review By / Date Edgar Smith 9/22/22

MONITORING WELL INSPECTION CHECKLIST



Project Name: Southern Company Arkwright
 Plant Name: Plant Arkwright
 Plant Address: 5001 Arkwright Road, Macon, GA 31210
 Project Number: 175569434
 Goal/Task: Gauging/Inspection

Date: 8/30/2022
 Monitoring Well No.: ARGWC-16
 Priority Maintenance Item Identified: NA

	Description	Yes	No	NA	Comments
1	Location/Identification				
a	Is the well visible and accessible?	X			
b	Is the well properly identified with the correct well ID?	X			
c	Is the well in a high traffic area and does the well require protection from traffic?		X		
d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	X			
2	Protective Casing				
a	Is the protective casing free from apparent damage and able to be secured?	X			
b	Is the casing free of degradation or deterioration?	X			
c	Does the casing have a functioning weep hole?		X		
d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?	X			
e	Is the well locked and is the lock in good condition?	X			
3	Surface pad				
a	Is the well pad in good condition (not cracked or broken)?	X			
b	Is the well pad sloped away from the protective casing?	X			
c	Is the well pad in complete contact with the protective casing?	X			
d	Is the well pad in complete contact with the ground surface and stable?(Not undermined by erosion, animal burrows, and does not move when stepped on).	X			
e	Is the pad surface clean (not covered with sediment or debris)?	X			
4	Internal casing				
a	Does the cap prevent entry of foreign material into the well?	X			
b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?	X			
c	Is the well properly vented for equilibrium of air pressure?	X			
d	Is the survey point clearly marked on the inner casing?	X			
e	Is the depth of the well consistent with the original well log?	X			
f	Is the casing stable? (or does the pvc move easily when touched or can it be taken apart by hand due to lack of grout or use of slip couplings in construction)	X			
5	Sampling (Groundwater Wells Only)				
a	Does well recharge adequately when purged?	X			
b	If dedicated sampling equipment installed, is it in good condition and specified in the approved groundwater plant for the facility?	X			
c	Does the well require redevelopment (low-flow, turbid)?		X		

Comments: Include inspection details, including items requiring repair or maintenance.
 None

Prepared By / Date: Emily Scheiben 08/30/2022
 DL/SME Review By / Date Edgar Smith 9/22/22

MONITORING WELL INSPECTION CHECKLIST



Project Name: Southern Company Arkwright
 Plant Name: Plant Arkwright
 Plant Address: 5001 Arkwright Road, Macon, GA 31210
 Project Number: 175569434
 Goal/Task: Gauging/Inspection

Date: 8/30/2022
 Monitoring Well No.: ARGWC-17
 Priority Maintenance Item Identified: NA

	Description	Yes	No	NA	Comments
1	Location/Identification				
a	Is the well visible and accessible?	X			
b	Is the well properly identified with the correct well ID?	X			
c	Is the well in a high traffic area and does the well require protection from traffic?		X		
d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	X			
2	Protective Casing				
a	Is the protective casing free from apparent damage and able to be secured?	X			
b	Is the casing free of degradation or deterioration?	X			
c	Does the casing have a functioning weep hole?	X			
d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?	X			
e	Is the well locked and is the lock in good condition?	X			
3	Surface pad				
a	Is the well pad in good condition (not cracked or broken)?	X			
b	Is the well pad sloped away from the protective casing?	X			
c	Is the well pad in complete contact with the protective casing?	X			
d	Is the well pad in complete contact with the ground surface and stable?(Not undermined by erosion, animal burrows, and does not move when stepped on).	X			
e	Is the pad surface clean (not covered with sediment or debris)?	X			
4	Internal casing				
a	Does the cap prevent entry of foreign material into the well?	X			
b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?	X			
c	Is the well properly vented for equilibrium of air pressure?	X			
d	Is the survey point clearly marked on the inner casing?	X			
e	Is the depth of the well consistent with the original well log?	X			
f	Is the casing stable? (or does the pvc move easily when touched or can it be taken apart by hand due to lack of grout or use of slip couplings in construction)	X			
5	Sampling (Groundwater Wells Only)				
a	Does well recharge adequately when purged?	X			
b	If dedicated sampling equipment installed, is it in good condition and specified in the approved groundwater plant for the facility?	X			
c	Does the well require redevelopment (low-flow, turbid)?		X		

Comments: Include inspection details, including items requiring repair or maintenance.
 None

Prepared By / Date: Emily Scheiben 08/30/2022
 DL/SME Review By / Date Edgar Smith 9/22/22

MONITORING WELL INSPECTION CHECKLIST



Project Name: Southern Company Arkwright
 Plant Name: Plant Arkwright
 Plant Address: 5001 Arkwright Road, Macon, GA 31210
 Project Number: 175569434
 Goal/Task: Gauging/Inspection

Date: 8/30/2022
 Monitoring Well No.: ARGWC-18
 Priority Maintenance Item Identified: NA

	Description	Yes	No	NA	Comments
1	Location/Identification				
a	Is the well visible and accessible?	X			
b	Is the well properly identified with the correct well ID?	X			
c	Is the well in a high traffic area and does the well require protection from traffic?		X		
d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	X			
2	Protective Casing				
a	Is the protective casing free from apparent damage and able to be secured?	X			
b	Is the casing free of degradation or deterioration?	X			
c	Does the casing have a functioning weep hole?		X		
d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?	X			
e	Is the well locked and is the lock in good condition?	X			
3	Surface pad				
a	Is the well pad in good condition (not cracked or broken)?	X			
b	Is the well pad sloped away from the protective casing?	X			
c	Is the well pad in complete contact with the protective casing?	X			
d	Is the well pad in complete contact with the ground surface and stable?(Not undermined by erosion, animal burrows, and does not move when stepped on).	X			
e	Is the pad surface clean (not covered with sediment or debris)?	X			
4	Internal casing				
a	Does the cap prevent entry of foreign material into the well?	X			
b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?	X			
c	Is the well properly vented for equilibrium of air pressure?	X			
d	Is the survey point clearly marked on the inner casing?	X			
e	Is the depth of the well consistent with the original well log?	x			
f	Is the casing stable? (or does the pvc move easily when touched or can it be taken apart by hand due to lack of grout or use of slip couplings in construction)	X			
5	Sampling (Groundwater Wells Only)				
a	Does well recharge adequately when purged?	X			
b	If dedicated sampling equipment installed, is it in good condition and specified in the approved groundwater plant for the facility?	X			
c	Does the well require redevelopment (low-flow, turbid)?		x		

Comments: Include inspection details, including items requiring repair or maintenance.
 None

Prepared By / Date: Emily Scheiben 08/30/2022
 DL/SME Review By / Date Edgar Smith 9/22/22

MONITORING WELL INSPECTION CHECKLIST



Project Name: Southern Company Arkwright
 Plant Name: Plant Arkwright
 Plant Address: 5001 Arkwright Road, Macon, GA 31210
 Project Number: 175569434
 Goal/Task: Gauging/Inspection

Date: 8/30/2022
 Monitoring Well No.: CCRLF-1
 Priority Maintenance Item Identified: NA

	Description	Yes	No	NA	Comments
1	Location/Identification				
a	Is the well visible and accessible?	X			
b	Is the well properly identified with the correct well ID?	X			
c	Is the well in a high traffic area and does the well require protection from traffic?		X		
d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	X			
2	Protective Casing				
a	Is the protective casing free from apparent damage and able to be secured?	X			
b	Is the casing free of degradation or deterioration?	X			
c	Does the casing have a functioning weep hole?		X		
d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?	X			
e	Is the well locked and is the lock in good condition?	X			
3	Surface pad				
a	Is the well pad in good condition (not cracked or broken)?	X			
b	Is the well pad sloped away from the protective casing?		X		Appears level
c	Is the well pad in complete contact with the protective casing?	X			
d	Is the well pad in complete contact with the ground surface and stable?(Not undermined by erosion, animal burrows, and does not move when stepped on).	X			
e	Is the pad surface clean (not covered with sediment or debris)?	X			
4	Internal casing				
a	Does the cap prevent entry of foreign material into the well?	X			
b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?	X			
c	Is the well properly vented for equilibrium of air pressure?	X			
d	Is the survey point clearly marked on the inner casing?	X			
e	Is the depth of the well consistent with the original well log?	X			
f	Is the casing stable? (or does the pvc move easily when touched or can it be taken apart by hand due to lack of grout or use of slip couplings in construction)	X			
5	Sampling (Groundwater Wells Only)				
a	Does well recharge adequately when purged?			X	
b	If dedicated sampling equipment installed, is it in good condition and specified in the approved groundwater groundwater plant for the facility?			X	
c	Does the well require redevelopment (low-flow, turbid)?			X	

Comments: Include inspection details, including items requiring repair or maintenance.
 None

Prepared By / Date: Bryan Pennell 8/30/22
 DL/SME Review By / Date Edgar Smith 9/22/22

MONITORING WELL INSPECTION CHECKLIST



Project Name: Southern Company Arkwright
 Plant Name: Plant Arkwright
 Plant Address: 5001 Arkwright Road, Macon, GA 31210
 Project Number: 175569434
 Goal/Task: Gauging/Inspection

Date: 8/30/2022
 Monitoring Well No.: CCRLF-2
 Priority Maintenance Item Identified: NA

Description		Yes	No	NA	Comments
1	Location/Identification				
a	Is the well visible and accessible?	X			
b	Is the well properly identified with the correct well ID?	X			
c	Is the well in a high traffic area and does the well require protection from traffic?		X		
d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	X			
2	Protective Casing				
a	Is the protective casing free from apparent damage and able to be secured?	X			
b	Is the casing free of degradation or deterioration?	X			
c	Does the casing have a functioning weep hole?	X			
d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?	X			
e	Is the well locked and is the lock in good condition?	X			
3	Surface pad				
a	Is the well pad in good condition (not cracked or broken)?	X			
b	Is the well pad sloped away from the protective casing?		X		Appears level
c	Is the well pad in complete contact with the protective casing?	X			
d	Is the well pad in complete contact with the ground surface and stable?(Not undermined by erosion, animal burrows, and does not move when stepped on).	X			
e	Is the pad surface clean (not covered with sediment or debris)?	X			
4	Internal casing				
a	Does the cap prevent entry of foreign material into the well?	X			
b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?	X			
c	Is the well properly vented for equilibrium of air pressure?	X			
d	Is the survey point clearly marked on the inner casing?	X			
e	Is the depth of the well consistent with the original well log?	X			
f	Is the casing stable? (or does the pvc move easily when touched or can it be taken apart by hand due to lack of grout or use of slip couplings in construction)	X			
5	Sampling (Groundwater Wells Only)				
a	Does well recharge adequately when purged?			X	
b	If dedicated sampling equipment installed, is it in good condition and specified in the approved groundwater groundwater plant for the facility?			X	
c	Does the well require redevelopment (low-flow, turbid)?			X	

Comments: Include inspection details, including items requiring repair or maintenance.
 None

Prepared By / Date: Bryan Pennell 8/30/22
 DL/SME Review By / Date Edgar Smith 9/22/22

MONITORING WELL INSPECTION CHECKLIST



Project Name: Southern Company Arkwright
 Plant Name: Plant Arkwright
 Plant Address: 5001 Arkwright Road, Macon, GA 31210
 Project Number: 175569434
 Goal/Task: Gauging/Inspection

Date: 8/30/2022
 Monitoring Well No.: CCRLF-3
 Priority Maintenance Item Identified: NA

	Description	Yes	No	NA	Comments
1	Location/Identification				
a	Is the well visible and accessible?	X			
b	Is the well properly identified with the correct well ID?	X			
c	Is the well in a high traffic area and does the well require protection from traffic?		X		
d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	X			
2	Protective Casing				
a	Is the protective casing free from apparent damage and able to be secured?	X			
b	Is the casing free of degradation or deterioration?	X			
c	Does the casing have a functioning weep hole?	X			
d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?	X			
e	Is the well locked and is the lock in good condition?	X			
3	Surface pad				
a	Is the well pad in good condition (not cracked or broken)?	X			
b	Is the well pad sloped away from the protective casing?		X		Appears level
c	Is the well pad in complete contact with the protective casing?	X			
d	Is the well pad in complete contact with the ground surface and stable?(Not undermined by erosion, animal burrows, and does not move when stepped on).	X			
e	Is the pad surface clean (not covered with sediment or debris)?	X			
4	Internal casing				
a	Does the cap prevent entry of foreign material into the well?	X			
b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?	X			
c	Is the well properly vented for equilibrium of air pressure?	X			
d	Is the survey point clearly marked on the inner casing?	X			
e	Is the depth of the well consistent with the original well log?	X			
f	Is the casing stable? (or does the pvc move easily when touched or can it be taken apart by hand due to lack of grout or use of slip couplings in construction)	X			
5	Sampling (Groundwater Wells Only)				
a	Does well recharge adequately when purged?			X	
b	If dedicated sampling equipment installed, is it in good condition and specified in the approved groundwater groundwater plant for the facility?			X	
c	Does the well require redevelopment (low-flow, turbid)?			X	

Comments: Include inspection details, including items requiring repair or maintenance.
 None

Prepared By / Date: Bryan Pennell 8/30/22
 DL/SME Review By / Date Edgar Smith 9/22/22

MONITORING WELL INSPECTION CHECKLIST



Project Name: Southern Company Arkwright
 Plant Name: Plant Arkwright
 Plant Address: 5001 Arkwright Road, Macon, GA 31210
 Project Number: 175569434
 Goal/Task: Gauging/Inspection

Date: 8/30/2022
 Monitoring Well No.: CCRLF-4
 Priority Maintenance Item Identified: NA

	Description	Yes	No	NA	Comments
1	Location/Identification				
a	Is the well visible and accessible?	X			
b	Is the well properly identified with the correct well ID?	X			
c	Is the well in a high traffic area and does the well require protection from traffic?		X		
d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	X			
2	Protective Casing				
a	Is the protective casing free from apparent damage and able to be secured?	X			
b	Is the casing free of degradation or deterioration?	X			
c	Does the casing have a functioning weep hole?	X			
d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?	X			
e	Is the well locked and is the lock in good condition?	X			
3	Surface pad				
a	Is the well pad in good condition (not cracked or broken)?	X			
b	Is the well pad sloped away from the protective casing?		X		Appears level
c	Is the well pad in complete contact with the protective casing?	X			
d	Is the well pad in complete contact with the ground surface and stable?(Not undermined by erosion, animal burrows, and does not move when stepped on).	X			
e	Is the pad surface clean (not covered with sediment or debris)?	X			
4	Internal casing				
a	Does the cap prevent entry of foreign material into the well?	X			
b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?	X			
c	Is the well properly vented for equilibrium of air pressure?	X			
d	Is the survey point clearly marked on the inner casing?	X			
e	Is the depth of the well consistent with the original well log?	X			
f	Is the casing stable? (or does the pvc move easily when touched or can it be taken apart by hand due to lack of grout or use of slip couplings in construction)	X			
5	Sampling (Groundwater Wells Only)				
a	Does well recharge adequately when purged?			X	
b	If dedicated sampling equipment installed, is it in good condition and specified in the approved groundwater groundwater plant for the facility?			X	
c	Does the well require redevelopment (low-flow, turbid)?			X	

Comments: Include inspection details, including items requiring repair or maintenance.
 None

Prepared By / Date: Bryan Pennell 8/30/22
 DL/SME Review By / Date Edgar Smith 9/22/22

MONITORING WELL INSPECTION CHECKLIST



Project Name: Southern Company Arkwright
 Plant Name: Plant Arkwright
 Plant Address: 5001 Arkwright Road, Macon, GA 31210
 Project Number: 175569434
 Goal/Task: Gauging/Inspection

Date: 8/30/2022
 Monitoring Well No.: CCRLF-5
 Priority Maintenance Item Identified: Slight erosion under well pad

	Description	Yes	No	NA	Comments
1	Location/Identification				
a	Is the well visible and accessible?	X			
b	Is the well properly identified with the correct well ID?	X			
c	Is the well in a high traffic area and does the well require protection from traffic?		X		
d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	X			
2	Protective Casing				
a	Is the protective casing free from apparent damage and able to be secured?	X			
b	Is the casing free of degradation or deterioration?	X			
c	Does the casing have a functioning weep hole?	X			
d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?	X			
e	Is the well locked and is the lock in good condition?	X			
3	Surface pad				
a	Is the well pad in good condition (not cracked or broken)?	X			
b	Is the well pad sloped away from the protective casing?		X		Appears level
c	Is the well pad in complete contact with the protective casing?	X			
d	Is the well pad in complete contact with the ground surface and stable?(Not undermined by erosion, animal burrows, and does not move when stepped on).		X		Slight erosion under well pad
e	Is the pad surface clean (not covered with sediment or debris)?	X			
4	Internal casing				
a	Does the cap prevent entry of foreign material into the well?	X			
b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?	X			
c	Is the well properly vented for equilibrium of air pressure?	X			
d	Is the survey point clearly marked on the inner casing?	X			
e	Is the depth of the well consistent with the original well log?	X			
f	Is the casing stable? (or does the pvc move easily when touched or can it be taken apart by hand due to lack of grout or use of slip couplings in construction)	X			
5	Sampling (Groundwater Wells Only)				
a	Does well recharge adequately when purged?			X	
b	If dedicated sampling equipment installed, is it in good condition and specified in the approved groundwater groundwater plant for the facility?			X	
c	Does the well require redevelopment (low-flow, turbid)?			X	

Comments: Include inspection details, including items requiring repair or maintenance.
 None

Prepared By / Date: Bryan Pennell 8/30/22
 DL/SME Review By / Date Edgar Smith 9/22/22

Appendix B Field Sampling Data and Laboratory Analytical Reports



B.1 Field Sampling Data



Low-Flow Test Report:

Test Date / Time: 8/31/2022 3:13:29 PM

Project: Plant Arkwright AP-3

Operator Name: B. Pennell

Location Name: ARAMW-3 Latitude: 32.9258349731776 Longitude: -83.7071916460991 Well Diameter: 2 in Casing Type: PVC Screen Length: 10 ft Top of Screen: 57.87 ft Total Depth: 67.87 ft Initial Depth to Water: 25.76 ft	Pump Type: Peristaltic Pump Tubing Type: LDPE Tubing Inner Diameter: 0.17 in Tubing Length: 67.87 ft Pump Intake From TOC: 62.87 ft Estimated Total Volume Pumped: 5250 ml Flow Cell Volume: 90 ml Final Flow Rate: 150 ml/min Final Draw Down: 0.46 ft	Instrument Used: Aqua TROLL 400 Serial Number: 728623
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Test Notes:

Sample time: 1554

Weather Conditions:

Partly cloudy, 31 C

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	+/- 0.33	
8/31/2022 3:13 PM	00:00	6.15 pH	24.52 °C	304.73 µS/cm	0.69 mg/L	1.23 NTU	124.3 mV	25.76 ft	150.00 ml/min
8/31/2022 3:18 PM	05:00	6.11 pH	22.23 °C	311.35 µS/cm	0.35 mg/L	0.69 NTU	124.1 mV	26.20 ft	150.00 ml/min
8/31/2022 3:23 PM	10:00	6.11 pH	21.79 °C	312.05 µS/cm	0.26 mg/L	1.26 NTU	94.8 mV	26.21 ft	150.00 ml/min
8/31/2022 3:28 PM	15:00	6.11 pH	21.58 °C	312.34 µS/cm	0.21 mg/L	0.56 NTU	82.7 mV	26.22 ft	150.00 ml/min
8/31/2022 3:33 PM	20:00	6.13 pH	21.59 °C	313.02 µS/cm	0.20 mg/L	0.52 NTU	70.8 mV	26.22 ft	150.00 ml/min
8/31/2022 3:38 PM	25:00	6.13 pH	21.57 °C	313.09 µS/cm	0.18 mg/L	0.43 NTU	60.2 mV	26.22 ft	150.00 ml/min
8/31/2022 3:43 PM	30:00	6.12 pH	21.51 °C	313.98 µS/cm	0.17 mg/L	0.51 NTU	50.4 mV	26.22 ft	150.00 ml/min
8/31/2022 3:48 PM	35:00	6.14 pH	21.68 °C	315.45 µS/cm	0.18 mg/L	0.76 NTU	25.3 mV	26.22 ft	150.00 ml/min

Samples

Sample ID:	Description:
ARAMW-3	6 Poly containers collected at 1554

Low-Flow Test Report:

Test Date / Time: 9/2/2022 10:54:57 AM

Project: Plant Arkwright AP-3

Operator Name: E. Scheiben

Location Name: ARAMW-4 Latitude: 32.9284102316384 Longitude: -83.705764375627 Well Diameter: 2 in Casing Type: PVC Screen Length: 10 ft Top of Screen: 47.64 ft Initial Depth to Water: 22.1 ft	Pump Type: Peristaltic Tubing Type: LDPE Tubing Inner Diameter: 0.17 in Tubing Length: 34.5 ft Pump Intake From TOC: 52.63 ft Estimated Total Volume Pumped: 2625 ml Flow Cell Volume: 90 ml Final Flow Rate: 175 ml/min Final Draw Down: 0 ft	Instrument Used: Aqua TROLL 400 Serial Number: 728648
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Test Notes:

Weather Conditions:

Partly cloudy

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 0.2	+/- 5	+/- 10	+/- 0.3	
9/2/2022 10:54 AM	00:00	5.70 pH	21.83 °C	1,879.8 µS/cm	1.05 mg/L	2.20 NTU	12.5 mV	22.10 ft	175.00 ml/min
9/2/2022 10:59 AM	05:00	5.72 pH	20.55 °C	1,916.4 µS/cm	0.29 mg/L	1.28 NTU	0.8 mV	22.10 ft	175.00 ml/min
9/2/2022 11:04 AM	10:00	5.68 pH	20.34 °C	1,899.3 µS/cm	0.25 mg/L	2.51 NTU	-8.0 mV	22.10 ft	175.00 ml/min
9/2/2022 11:09 AM	15:00	5.65 pH	20.37 °C	1,904.7 µS/cm	0.22 mg/L	1.96 NTU	6.0 mV	22.10 ft	175.00 ml/min

Samples

Sample ID:	Description:
ARAMW-4	Collected at 1115
DUP-02	Collected at ARAMW-4

Low-Flow Test Report:

Test Date / Time: 8/31/2022 10:56:46 AM

Project: Plant Arkwright AP-3

Operator Name: B. Pennell

Location Name: ARAMW-6 Latitude: 32.9255687472323 Longitude: -83.7070437893271 Well Diameter: 2 in Casing Type: PVC Screen Length: 10 ft Top of Screen: 22.26 ft Total Depth: 32.26 ft Initial Depth to Water: 13.21 ft	Pump Type: Peristaltic Tubing Type: LDPE Tubing Inner Diameter: 0.17 in Tubing Length: 30.26 ft Pump Intake From TOC: 25.26 ft Estimated Total Volume Pumped: 4500 ml Flow Cell Volume: 90 ml Final Flow Rate: 100 ml/min Final Draw Down: 0.43 ft	Instrument Used: Aqua TROLL 400 Serial Number: 728623
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Test Notes:

Sample time: 1144

Weather Conditions:

Sunny, 26 C

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	+/- 0.33	
8/31/2022 10:56 AM	00:00	6.23 pH	24.98 °C	278.14 µS/cm	0.87 mg/L	3.44 NTU	255.1 mV	13.21 ft	100.00 ml/min
8/31/2022 11:01 AM	05:00	6.25 pH	23.63 °C	284.49 µS/cm	0.34 mg/L	2.01 NTU	234.2 mV	13.58 ft	100.00 ml/min
8/31/2022 11:06 AM	10:00	6.26 pH	23.48 °C	283.47 µS/cm	0.27 mg/L	1.29 NTU	186.7 mV	13.59 ft	100.00 ml/min
8/31/2022 11:11 AM	15:00	6.27 pH	23.60 °C	283.26 µS/cm	0.26 mg/L	1.19 NTU	175.3 mV	13.60 ft	100.00 ml/min
8/31/2022 11:16 AM	20:00	6.28 pH	22.95 °C	284.23 µS/cm	0.23 mg/L	0.78 NTU	168.3 mV	13.60 ft	100.00 ml/min
8/31/2022 11:21 AM	25:00	6.27 pH	22.94 °C	283.73 µS/cm	0.22 mg/L	0.99 NTU	162.8 mV	13.61 ft	100.00 ml/min
8/31/2022 11:26 AM	30:00	6.27 pH	22.74 °C	285.36 µS/cm	0.23 mg/L	1.06 NTU	191.4 mV	13.62 ft	100.00 ml/min
8/31/2022 11:31 AM	35:00	6.26 pH	22.75 °C	284.82 µS/cm	0.22 mg/L	0.84 NTU	158.7 mV	13.63 ft	100.00 ml/min
8/31/2022 11:36 AM	40:00	6.27 pH	22.76 °C	284.72 µS/cm	0.22 mg/L	0.75 NTU	154.6 mV	13.63 ft	100.00 ml/min
8/31/2022 11:41 AM	45:00	6.28 pH	22.71 °C	285.02 µS/cm	0.22 mg/L	0.76 NTU	152.8 mV	13.64 ft	100.00 ml/min

Samples

Sample ID:	Description:
ARAMW-6	6 poly containers collected at 1144

Created using VuSitu from In-Situ, Inc.

Low-Flow Test Report:

Test Date / Time: 8/31/2022 9:13:08 AM

Project: Plant Arkwright AP-3

Operator Name: E. Scheiben

Location Name: ARGWA-3 Latitude: 32.9323662634484 Longitude: -83.7075785547495 Well Diameter: 2 in Casing Type: PVC Screen Length: 10 ft Top of Screen: 30.5 ft Total Depth: 40.5 ft Initial Depth to Water: 35.21 ft	Pump Type: QED Bladder Pump Tubing Type: LDPE Tubing Inner Diameter: 0.17 in Tubing Length: 30 ft Pump Intake From TOC: 35.5 ft Estimated Total Volume Pumped: 4250 ml Flow Cell Volume: 90 ml Final Flow Rate: 100 ml/min Final Draw Down: 0.01 ft	Instrument Used: Aqua TROLL 400 Serial Number: 728648
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Test Notes:

Sample time: 0955

Weather Conditions:

Overcast

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 0.2	+/- 5	+/- 10	+/- 0.3	
8/31/2022 9:13 AM	00:00	6.19 pH	23.19 °C	120.58 µS/cm	6.06 mg/L	8.15 NTU	128.6 mV	35.21 ft	150.00 ml/min
8/31/2022 9:18 AM	05:00	5.94 pH	20.94 °C	88.18 µS/cm	6.00 mg/L	7.38 NTU	123.4 mV	35.22 ft	100.00 ml/min
8/31/2022 9:23 AM	10:00	5.94 pH	21.53 °C	88.86 µS/cm	6.08 mg/L	7.15 NTU	125.4 mV	35.22 ft	100.00 ml/min
8/31/2022 9:28 AM	15:00	5.95 pH	21.55 °C	88.61 µS/cm	6.08 mg/L	7.56 NTU	124.9 mV	35.22 ft	100.00 ml/min
8/31/2022 9:33 AM	20:00	5.94 pH	21.58 °C	88.39 µS/cm	6.08 mg/L	6.00 NTU	126.1 mV	35.22 ft	100.00 ml/min
8/31/2022 9:38 AM	25:00	5.95 pH	21.53 °C	88.13 µS/cm	6.06 mg/L	5.27 NTU	125.5 mV	35.22 ft	100.00 ml/min
8/31/2022 9:43 AM	30:00	5.95 pH	21.62 °C	87.85 µS/cm	6.05 mg/L	4.96 NTU	125.9 mV	35.22 ft	100.00 ml/min
8/31/2022 9:48 AM	35:00	5.95 pH	21.58 °C	87.71 µS/cm	6.05 mg/L	4.15 NTU	125.8 mV	35.22 ft	100.00 ml/min
8/31/2022 9:53 AM	40:00	5.96 pH	21.46 °C	87.78 µS/cm	6.04 mg/L	3.71 NTU	125.0 mV	35.22 ft	100.00 ml/min

Samples

Sample ID:	Description:
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ARGWA-3

Groundwater sample collected at 0955

Sample analyses: Appendix I, III & IV, Additional Analytes

Low-Flow Test Report:

Test Date / Time: 8/30/2022 3:41:33 PM

Project: Plant Arkwright AP-3

Operator Name: E. Scheiben

Location Name: ARGWA-5 Latitude: 32.9322590493831 Longitude: -83.7082950398326 Well Diameter: 2 in Casing Type: PVC Screen Length: 10 ft Top of Screen: 30.5 ft Total Depth: 40.5 ft Initial Depth to Water: 23.24 ft	Pump Type: Dedicated bladder QED Tubing Type: LDPE Tubing Inner Diameter: 0.17 in Tubing Length: 30 ft Pump Intake From TOC: 35.5 ft Estimated Total Volume Pumped: 10500 ml Flow Cell Volume: 90 ml Final Flow Rate: 420 ml/min Final Draw Down: 0 ft	Instrument Used: Aqua TROLL 400 Serial Number: 728648
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Test Notes:

Weather Conditions:

Partly cloudy

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 0.2	+/- 5	+/- 10	+/- 0.3	
8/30/2022 3:41 PM	00:00	5.97 pH	19.73 °C	125.65 µS/cm	5.36 mg/L	10.30 NTU	108.2 mV	23.24 ft	420.00 ml/min
8/30/2022 3:46 PM	05:00	5.92 pH	19.13 °C	122.98 µS/cm	4.91 mg/L	7.81 NTU	114.1 mV	23.24 ft	420.00 ml/min
8/30/2022 3:51 PM	10:00	5.91 pH	19.07 °C	123.10 µS/cm	4.56 mg/L	4.04 NTU	147.9 mV	23.24 ft	420.00 ml/min
8/30/2022 3:56 PM	15:00	5.90 pH	19.00 °C	121.73 µS/cm	4.39 mg/L	3.30 NTU	107.2 mV	23.24 ft	420.00 ml/min
8/30/2022 4:01 PM	20:00	5.88 pH	19.04 °C	120.93 µS/cm	4.35 mg/L	2.13 NTU	100.7 mV	23.24 ft	420.00 ml/min
8/30/2022 4:06 PM	25:00	5.88 pH	19.03 °C	120.10 µS/cm	4.37 mg/L	2.10 NTU	94.2 mV	23.24 ft	420.00 ml/min

Samples

Sample ID:	Description:
ARGWA-5	Groundwater sampled at 1610 <u>Sample analyses:</u> Appendix I, III & IV, Additional Analytes

Low-Flow Test Report:

Test Date / Time: 8/30/2022 3:41:25 PM

Project: Plant Arkwright AP-3

Operator Name: B. Pennell

Location Name: ARGWA-12 Latitude: 32.9326234641148 Longitude: -83.7096482142806 Well Diameter: 2 in Casing Type: PVC Screen Length: 10 ft Top of Screen: 25.2 ft Total Depth: 35.2 ft Initial Depth to Water: 14.45 ft	Pump Type: QED Bladder Pump Tubing Type: LDPE Tubing Inner Diameter: 0.17 in Pump Intake From TOC: 29.2 ft Estimated Total Volume Pumped: 6000 ml Flow Cell Volume: 90 ml Final Flow Rate: 200 ml/min Final Draw Down: 1.5 ft	Instrument Used: Aqua TROLL 400 Serial Number: 728623
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Test Notes:

Sample time: 1614

Weather Conditions:

Partly cloudy, 31C

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	+/- 0.33	
8/30/2022 3:41 PM	00:00	5.92 pH	21.24 °C	201.35 µS/cm	2.97 mg/L	15.50 NTU	146.8 mV	15.45 ft	200.00 ml/min
8/30/2022 3:46 PM	05:00	5.91 pH	20.73 °C	202.87 µS/cm	2.73 mg/L	10.50 NTU	124.5 mV	15.91 ft	200.00 ml/min
8/30/2022 3:51 PM	10:00	5.90 pH	20.62 °C	202.94 µS/cm	2.68 mg/L	6.03 NTU	120.7 mV	15.95 ft	200.00 ml/min
8/30/2022 3:56 PM	15:00	5.90 pH	20.53 °C	202.06 µS/cm	2.63 mg/L	5.32 NTU	120.1 mV	15.95 ft	200.00 ml/min
8/30/2022 4:01 PM	20:00	5.89 pH	20.52 °C	201.39 µS/cm	2.59 mg/L	4.18 NTU	120.3 mV	15.95 ft	200.00 ml/min
8/30/2022 4:06 PM	25:00	5.88 pH	20.47 °C	199.84 µS/cm	2.57 mg/L	4.15 NTU	120.7 mV	15.95 ft	200.00 ml/min
8/30/2022 4:11 PM	30:00	5.88 pH	20.50 °C	197.58 µS/cm	2.53 mg/L	4.04 NTU	120.8 mV	15.95 ft	200.00 ml/min

Samples

Sample ID:	Description:
ARGWA-12	Groundwater sample collected at 1614

Sample analyses: Appendix I, III & IV, Additional Analytes

Low-Flow Test Report:

Test Date / Time: 8/31/2022 10:07:57 AM

Project: Plant Arkwright AP-3

Operator Name: J. Meyer

Location Name: ARGWA-13 Well Diameter: 2 in Screen Length: 10 ft Top of Screen: 33.9 ft Total Depth: 43.9 ft Initial Depth to Water: 25.15 ft	Pump Intake From TOC: 38.3 ft Estimated Total Volume Pumped: 5535.833 ml Flow Cell Volume: 90 ml Final Flow Rate: 175 ml/min Final Draw Down: 0 ft	Casing Type: PVC Pump Type: QED Bladder Pump Tubing Type: LDPE Tubing Inner Diameter: 0.17 in Tubing Length: 44 ft Instrument Used: Aqua TROLL 400 Serial Number: 850724
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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	
8/31/2022 10:07 AM	00:00	5.75 pH	18.92 °C	1,727.2 µS/cm	1.84 mg/L	3.41 NTU	174.2 mV	25.15 ft	175.00 ml/min
8/31/2022 10:09 AM	01:38	5.74 pH	18.83 °C	1,730.3 µS/cm	1.58 mg/L	3.41 NTU	195.1 mV	25.15 ft	175.00 ml/min
8/31/2022 10:14 AM	06:38	5.74 pH	18.70 °C	1,680.1 µS/cm	1.66 mg/L	1.67 NTU	198.4 mV	25.15 ft	175.00 ml/min
8/31/2022 10:19 AM	11:38	5.72 pH	18.69 °C	1,705.7 µS/cm	1.25 mg/L	1.33 NTU	153.3 mV	25.15 ft	175.00 ml/min
8/31/2022 10:24 AM	16:38	5.70 pH	18.61 °C	1,636.2 µS/cm	1.05 mg/L	0.85 NTU	151.5 mV	25.15 ft	175.00 ml/min
8/31/2022 10:29 AM	21:38	5.69 pH	18.63 °C	1,641.8 µS/cm	0.94 mg/L	1.06 NTU	144.6 mV	25.15 ft	175.00 ml/min
8/31/2022 10:34 AM	26:38	5.69 pH	18.61 °C	1,627.5 µS/cm	0.91 mg/L	0.85 NTU	144.8 mV	25.15 ft	175.00 ml/min
8/31/2022 10:39 AM	31:38	5.69 pH	18.70 °C	1,636.9 µS/cm	0.91 mg/L	1.00 NTU	146.7 mV	25.15 ft	175.00 ml/min

Samples

Sample ID:	Description:
ARGWA-13	Groundwater sample collected at 1044

Sample analyses: Appendix I, III & IV, Additional Analytes

Low-Flow Test Report:

Test Date / Time: 8/30/2022 3:45:16 PM

Project: Plant Arkwright AP-3

Operator Name: J. Meyer

Location Name: ARGWA-14 Well Diameter: 2 in Screen Length: 10 ft Top of Screen: 49 ft Total Depth: 59 ft Initial Depth to Water: 41.18 ft	Pump Intake From TOC: 53 ft Estimated Total Volume Pumped: 4805 ml Flow Cell Volume: 90 ml Final Flow Rate: 100 ml/min Final Draw Down: -8.32 ft	Casing Type: PVC Pump Type: QED Bladder Pump Tubing Type: LDPE Tubing Inner Diameter: 0.17 in Tubing Length: 58 ft Instrument Used: Aqua TROLL 400 Serial Number: 850724
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Test Notes:

Water dropped below top of screen and well pumped to below intake depth.

Well will be allowed to recharge and sample the following day (8/31).

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 0.5	+/- 10 %	+/- 10	+/- 5	
8/30/2022 3:45 PM	00:00	6.80 pH	21.42 °C	510.94 µS/cm	6.03 mg/L	1.87 NTU	76.6 mV	44.45 ft	100.00 ml/min
8/30/2022 3:45 PM	00:25	6.80 pH	21.40 °C	514.86 µS/cm	6.05 mg/L	1.87 NTU	84.8 mV	44.45 ft	100.00 ml/min
8/30/2022 3:48 PM	03:25	6.78 pH	21.32 °C	492.63 µS/cm	6.09 mg/L	2.69 NTU	76.5 mV	45.04 ft	100.00 ml/min
8/30/2022 3:51 PM	06:03	6.76 pH	21.24 °C	472.11 µS/cm	6.13 mg/L	1.94 NTU	91.6 mV	45.35 ft	100.00 ml/min
8/30/2022 3:54 PM	09:03	6.75 pH	21.18 °C	443.76 µS/cm	6.17 mg/L	1.09 NTU	80.2 mV	45.89 ft	100.00 ml/min
8/30/2022 3:57 PM	12:03	6.73 pH	21.12 °C	422.31 µS/cm	6.21 mg/L	1.17 NTU	80.8 mV	46.30 ft	100.00 ml/min
8/30/2022 4:00 PM	15:03	6.71 pH	21.19 °C	401.02 µS/cm	6.22 mg/L	0.82 NTU	83.9 mV	46.81 ft	100.00 ml/min
8/30/2022 4:03 PM	18:03	6.69 pH	21.20 °C	380.54 µS/cm	6.17 mg/L	1.20 NTU	86.6 mV	47.25 ft	100.00 ml/min
8/30/2022 4:06 PM	21:03	6.68 pH	21.17 °C	364.95 µS/cm	6.10 mg/L	1.60 NTU	88.0 mV	47.70 ft	100.00 ml/min
8/30/2022 4:09 PM	24:03	6.67 pH	21.16 °C	350.44 µS/cm	5.98 mg/L	1.22 NTU	88.9 mV	48.21 ft	100.00 ml/min
8/30/2022 4:12 PM	27:03	6.66 pH	21.10 °C	338.36 µS/cm	5.89 mg/L	1.67 NTU	89.4 mV	48.60 ft	100.00 ml/min
8/30/2022 4:15 PM	30:03	6.67 pH	21.06 °C	328.89 µS/cm	5.79 mg/L	1.08 NTU	89.0 mV	48.60 ft	100.00 ml/min
8/30/2022 4:18 PM	33:03	6.68 pH	21.04 °C	321.30 µS/cm	5.75 mg/L	1.18 NTU	85.8 mV	48.60 ft	100.00 ml/min
8/30/2022 4:21 PM	36:03	6.69 pH	21.05 °C	330.40 µS/cm	5.76 mg/L	1.07 NTU	75.9 mV	48.60 ft	100.00 ml/min
8/30/2022 4:24 PM	39:03	6.72 pH	20.97 °C	391.83 µS/cm	5.78 mg/L	1.13 NTU	63.1 mV	48.70 ft	100.00 ml/min
8/30/2022 4:27 PM	42:03	6.76 pH	20.97 °C	447.58 µS/cm	5.78 mg/L	1.64 NTU	58.3 mV	49.00 ft	100.00 ml/min
8/30/2022 4:30 PM	45:03	6.78 pH	21.10 °C	493.41 µS/cm	5.77 mg/L	2.58 NTU	55.5 mV	49.50 ft	100.00 ml/min

8/30/2022 4:33 PM	48:03	6.80 pH	21.11 °C	511.13 µS/cm	5.78 mg/L	3.00 NTU	54.7 mV	49.50 ft	100.00 ml/min
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Samples

Sample ID:	Description:
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ARGWA-14 Groundwater sample collected on 8/31 at 1350; No stabilization parameters were taken due to limited groundwater recharge
Sample analyses: Appendix I, III & IV, Additional Analytes

Low-Flow Test Report:

Test Date / Time: 8/31/2022 9:11:55 AM

Project: Plant Arkwright AP-3

Operator Name: B. Pennell

Location Name: ARGWA-24 Latitude: 32.932335027868 Longitude: -83.7089391052723 Well Diameter: 2 in Casing Type: PVC Screen Length: 10 ft Top of Screen: 18.13 ft Total Depth: 28.13 ft Initial Depth to Water: 20.32 ft	Pump Type: Peristaltic Tubing Type: LDPE Tubing Inner Diameter: 0.17 in Tubing Length: 29.25 ft Pump Intake From TOC: 24.25 ft Estimated Total Volume Pumped: 4000 ml Flow Cell Volume: 90 ml Final Flow Rate: 200 ml/min Final Draw Down: 0.11 ft	Instrument Used: Aqua TROLL 400 Serial Number: 728623
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Test Notes:

Sample time: 0933

Weather Conditions:

Mostly sunny, 23 C

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	+/- 0.33	
8/31/2022 9:11 AM	00:00	5.77 pH	20.71 °C	162.12 µS/cm	1.54 mg/L	0.98 NTU	238.1 mV	20.32 ft	200.00 ml/min
8/31/2022 9:16 AM	05:00	5.67 pH	19.99 °C	167.63 µS/cm	1.58 mg/L	0.91 NTU	286.6 mV	20.43 ft	200.00 ml/min
8/31/2022 9:21 AM	10:00	5.66 pH	20.14 °C	166.22 µS/cm	1.62 mg/L	0.68 NTU	247.0 mV	20.43 ft	200.00 ml/min
8/31/2022 9:26 AM	15:00	5.65 pH	20.08 °C	166.27 µS/cm	1.63 mg/L	0.52 NTU	243.2 mV	20.43 ft	200.00 ml/min
8/31/2022 9:31 AM	20:00	5.65 pH	19.96 °C	166.12 µS/cm	1.67 mg/L	0.40 NTU	239.1 mV	20.43 ft	200.00 ml/min

Samples

Sample ID:	Description:
ARGWA-24	Groundwater sample collected at 0933

Low-Flow Test Report:

Test Date / Time: 8/31/2022 11:10:29 AM

Project: Plant Arkwright AP-3

Operator Name: E. Scheiben

Location Name: ARGWC-7 Latitude: 32.9323628866295 Longitude: -83.7075819075108 Well Diameter: 2 in Casing Type: PVC Screen Length: 10 ft Top of Screen: 40.2 ft Total Depth: 50.2 ft Initial Depth to Water: 24.49 ft	Pump Type: QED Bladder Pump Tubing Type: LDPE Tubing Inner Diameter: 0.17 in Tubing Length: 50.2 ft Pump Intake From TOC: 45.2 ft Estimated Total Volume Pumped: 2250 ml Flow Cell Volume: 90 ml Final Flow Rate: 150 ml/min Final Draw Down: 0 ft	Instrument Used: Aqua TROLL 400 Serial Number: 728648
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Test Notes:

Weather Conditions:

Partly cloudy

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 0.2	+/- 5	+/- 10	+/- 0.3	
8/31/2022 11:10 AM	00:00	5.90 pH	26.08 °C	139.04 µS/cm	2.75 mg/L	1.46 NTU	151.9 mV	24.49 ft	150.00 ml/min
8/31/2022 11:15 AM	05:00	5.80 pH	20.91 °C	149.83 µS/cm	2.67 mg/L	0.71 NTU	111.7 mV	24.49 ft	150.00 ml/min
8/31/2022 11:20 AM	10:00	5.80 pH	20.51 °C	151.20 µS/cm	2.69 mg/L	0.81 NTU	107.2 mV	24.49 ft	150.00 ml/min
8/31/2022 11:25 AM	15:00	5.80 pH	20.45 °C	151.09 µS/cm	2.71 mg/L	0.70 NTU	107.4 mV	24.49 ft	150.00 ml/min

Samples

Sample ID:	Description:
ARGWC-7	Groundwater sample collected at 1130

Sample analyses: Appendix I, III & IV, Additional Analytes

Low-Flow Test Report:

Test Date / Time: 8/31/2022 12:54:03 PM

Project: Plant Arkwright AP-3

Operator Name: B. Pennell

Location Name: ARGWC-8 Latitude: 32.925821746326 Longitude: -83.7071551010013 Well Diameter: 2 in Casing Type: PVC Screen Length: 10 ft Top of Screen: 33.22 ft Total Depth: 43.22 ft Initial Depth to Water: 26.25 ft	Pump Type: QED Bladder Pump Tubing Type: LDPE Tubing Inner Diameter: 0.17 in Pump Intake From TOC: 38.22 ft Estimated Total Volume Pumped: 14000 ml Flow Cell Volume: 90 ml Final Flow Rate: 200 ml/min Final Draw Down: 0.15 ft	Instrument Used: Aqua TROLL 400 Serial Number: 728623
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Test Notes:

Sample time: 1407

Weather Conditions:

Mostly sunny, 30 C

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	+/- 0.33	
8/31/2022 12:54 PM	00:00	6.46 pH	25.56 °C	407.69 µS/cm	1.39 mg/L	19.10 NTU	245.8 mV	26.25 ft	200.00 ml/min
8/31/2022 12:59 PM	05:00	6.40 pH	22.94 °C	428.11 µS/cm	0.91 mg/L	25.40 NTU	185.2 mV	26.40 ft	200.00 ml/min
8/31/2022 1:04 PM	10:00	6.39 pH	22.80 °C	426.84 µS/cm	0.55 mg/L	24.30 NTU	191.1 mV	26.40 ft	200.00 ml/min
8/31/2022 1:09 PM	15:00	6.39 pH	22.18 °C	426.85 µS/cm	0.39 mg/L	25.00 NTU	177.4 mV	26.40 ft	200.00 ml/min
8/31/2022 1:14 PM	20:00	6.39 pH	21.91 °C	425.44 µS/cm	0.33 mg/L	19.10 NTU	140.2 mV	26.40 ft	200.00 ml/min
8/31/2022 1:19 PM	25:00	6.39 pH	21.78 °C	426.40 µS/cm	0.30 mg/L	19.30 NTU	134.1 mV	26.40 ft	200.00 ml/min
8/31/2022 1:24 PM	30:00	6.39 pH	21.71 °C	425.84 µS/cm	0.27 mg/L	14.70 NTU	129.4 mV	26.40 ft	200.00 ml/min
8/31/2022 1:29 PM	35:00	6.39 pH	21.66 °C	426.38 µS/cm	0.25 mg/L	9.19 NTU	126.8 mV	26.40 ft	200.00 ml/min
8/31/2022 1:34 PM	40:00	6.38 pH	21.73 °C	426.72 µS/cm	0.24 mg/L	7.75 NTU	124.5 mV	26.40 ft	200.00 ml/min
8/31/2022 1:39 PM	45:00	6.39 pH	21.70 °C	426.89 µS/cm	0.23 mg/L	7.23 NTU	123.2 mV	26.40 ft	200.00 ml/min
8/31/2022 1:44 PM	50:00	6.38 pH	21.82 °C	426.43 µS/cm	0.21 mg/L	6.11 NTU	121.4 mV	26.40 ft	200.00 ml/min
8/31/2022 1:49 PM	55:00	6.38 pH	21.68 °C	425.40 µS/cm	0.22 mg/L	5.88 NTU	120.1 mV	26.40 ft	200.00 ml/min

8/31/2022 1:54 PM	01:00:00	6.38 pH	21.60 °C	425.27 µS/cm	0.22 mg/L	3.77 NTU	119.1 mV	26.40 ft	200.00 ml/min
8/31/2022 1:59 PM	01:05:00	6.38 pH	21.49 °C	426.01 µS/cm	0.22 mg/L	4.27 NTU	118.5 mV	26.40 ft	200.00 ml/min
8/31/2022 2:04 PM	01:10:00	6.38 pH	21.50 °C	426.86 µS/cm	0.22 mg/L	3.42 NTU	117.8 mV	26.40 ft	200.00 ml/min

Samples

Sample ID:	Description:
ARGWC-8	Groundwater sample collected at 1407

Sample analyses: Appendix I, III & IV, Additional Analytes

Low-Flow Test Report:

Test Date / Time: 8/31/2022 12:21:41 PM

Project: Plant Arkwright AP-3

Operator Name: E. Scheiben

Location Name: ARGWC-9 Latitude: 32.927546004531 Longitude: -83.7080419063568 Well Diameter: 2 in Casing Type: PVC Screen Length: 10 ft Top of Screen: 28.2 ft Total Depth: 38.2 ft Initial Depth to Water: 21.95 ft	Pump Type: QED Bladder Pump Tubing Type: LDPE Tubing Inner Diameter: 0.17 in Tubing Length: 38.2 ft Pump Intake From TOC: 33.2 ft Estimated Total Volume Pumped: 8597.333 ml Flow Cell Volume: 90 ml Final Flow Rate: 320 ml/min Final Draw Down: 0 ft	Instrument Used: Aqua TROLL 400 Serial Number: 728648
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Test Notes:

Weather Conditions:

Sunny

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 0.2	+/- 5	+/- 10	+/- 0.3	
8/31/2022 12:21 PM	00:00	6.21 pH	35.95 °C	0.00 µS/cm	6.67 mg/L	0.00 NTU	50.0 mV	21.95 ft	320.00 ml/min
8/31/2022 12:23 PM	01:52	6.33 pH	31.46 °C	64.65 µS/cm	5.34 mg/L	3.06 NTU	133.1 mV	21.95 ft	320.00 ml/min
8/31/2022 12:28 PM	06:52	6.01 pH	22.07 °C	71.12 µS/cm	6.87 mg/L	7.45 NTU	115.8 mV	21.95 ft	320.00 ml/min
8/31/2022 12:33 PM	11:52	6.02 pH	21.63 °C	71.69 µS/cm	6.87 mg/L	5.92 NTU	114.2 mV	21.95 ft	320.00 ml/min
8/31/2022 12:38 PM	16:52	6.01 pH	21.62 °C	71.64 µS/cm	6.85 mg/L	4.06 NTU	113.9 mV	21.95 ft	320.00 ml/min
8/31/2022 12:43 PM	21:52	6.01 pH	21.26 °C	71.92 µS/cm	6.83 mg/L	4.83 NTU	114.7 mV	21.95 ft	320.00 ml/min
8/31/2022 12:48 PM	26:52	5.98 pH	21.25 °C	72.22 µS/cm	6.89 mg/L	2.88 NTU	122.5 mV	21.95 ft	320.00 ml/min

Samples

Sample ID:	Description:
ARGWC-9	Groundwater sample collected at 1255

Sample analyses: Appendix I, III & IV, Additional Analytes

Low-Flow Test Report:

Test Date / Time: 8/31/2022 1:30:03 PM

Project: Plant Arkwright AP-3

Operator Name: E. Scheiben

Location Name: ARGWC-10 Latitude: 32.9283100481406 Longitude: -83.7084824591875 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: 22.31 ft	Pump Type: QED Bladder Pump Tubing Type: LDPE Tubing Inner Diameter: 0.17 in Tubing Length: 42.4 ft Pump Intake From TOC: 33.4 ft Estimated Total Volume Pumped: 22500 ml Flow Cell Volume: 90 ml Final Flow Rate: 300 ml/min Final Draw Down: 0 ft	Instrument Used: Aqua TROLL 400 Serial Number: 728648
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Test Notes:

Weather Conditions:

Sunny

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 0.2	+/- 5	+/- 10	+/- 0.3	
8/31/2022 1:30 PM	00:00	5.98 pH	26.23 °C	98.41 µS/cm	4.27 mg/L	55.60 NTU	160.2 mV	22.31 ft	300.00 ml/min
8/31/2022 1:35 PM	05:00	5.98 pH	21.05 °C	108.00 µS/cm	4.23 mg/L	58.60 NTU	116.1 mV	22.31 ft	300.00 ml/min
8/31/2022 1:40 PM	10:00	5.99 pH	20.90 °C	107.74 µS/cm	4.11 mg/L	51.80 NTU	113.2 mV	22.31 ft	300.00 ml/min
8/31/2022 1:45 PM	15:00	5.99 pH	20.71 °C	107.63 µS/cm	4.03 mg/L	40.20 NTU	112.2 mV	22.31 ft	300.00 ml/min
8/31/2022 1:50 PM	20:00	5.97 pH	20.60 °C	106.76 µS/cm	3.97 mg/L	25.20 NTU	112.6 mV	22.31 ft	300.00 ml/min
8/31/2022 1:55 PM	25:00	5.98 pH	20.46 °C	106.78 µS/cm	3.98 mg/L	18.80 NTU	156.0 mV	22.31 ft	300.00 ml/min
8/31/2022 2:00 PM	30:00	5.98 pH	20.57 °C	105.35 µS/cm	3.98 mg/L	19.10 NTU	112.7 mV	22.31 ft	300.00 ml/min
8/31/2022 2:05 PM	35:00	5.97 pH	20.50 °C	105.37 µS/cm	3.99 mg/L	15.70 NTU	155.7 mV	22.31 ft	300.00 ml/min
8/31/2022 2:10 PM	40:00	5.99 pH	20.45 °C	105.15 µS/cm	4.00 mg/L	8.95 NTU	111.7 mV	22.31 ft	300.00 ml/min
8/31/2022 2:15 PM	45:00	5.99 pH	20.30 °C	104.41 µS/cm	4.04 mg/L	8.23 NTU	110.4 mV	22.31 ft	300.00 ml/min
8/31/2022 2:20 PM	50:00	5.98 pH	20.42 °C	104.11 µS/cm	4.02 mg/L	8.04 NTU	111.7 mV	22.31 ft	300.00 ml/min
8/31/2022 2:25 PM	55:00	5.99 pH	20.32 °C	105.63 µS/cm	4.02 mg/L	7.13 NTU	155.8 mV	22.31 ft	300.00 ml/min

8/31/2022 2:30 PM	01:00:00	5.94 pH	20.24 °C	106.69 µS/cm	4.20 mg/L	7.09 NTU	159.8 mV	22.31 ft	300.00 ml/min
8/31/2022 2:35 PM	01:05:00	5.95 pH	20.35 °C	106.42 µS/cm	4.16 mg/L	4.47 NTU	158.2 mV	22.31 ft	300.00 ml/min
8/31/2022 2:40 PM	01:10:00	5.96 pH	20.37 °C	105.60 µS/cm	4.07 mg/L	4.07 NTU	112.8 mV	22.31 ft	300.00 ml/min
8/31/2022 2:45 PM	01:15:00	5.96 pH	20.32 °C	104.90 µS/cm	4.04 mg/L	3.94 NTU	112.2 mV	22.31 ft	300.00 ml/min

Samples

Sample ID:	Description:
ARGWC-10	Groundwater sample collected at 1450

Sample analyses: Appendix I, III & IV, Additional Analytes

Low-Flow Test Report:

Test Date / Time: 8/31/2022 12:21:18 PM

Project: Plant Arkwright AP-3

Operator Name: J. Meyer

Location Name: ARGWC-15 Well Diameter: 2 in Screen Length: 10 ft Top of Screen: 33.6 ft Total Depth: 43.6 ft Initial Depth to Water: 29.8 ft	Pump Intake From TOC: 38 ft Estimated Total Volume Pumped: 2691.667 ml Flow Cell Volume: 90 ml Final Flow Rate: 100 ml/min Final Draw Down: -1.7 ft	Casing Type: PVC Pump Type: QED Bladder Pump Tubing Type: LDPE Tubing Inner Diameter: 0.17 in Tubing Length: 49 ft Instrument Used: Aqua TROLL 400 Serial Number: 850724
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Test Notes:

Weather Conditions:

Sunny 86 F

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	
8/31/2022 12:21 PM	00:00	6.75 pH	23.42 °C	255.65 µS/cm	5.35 mg/L	6.61 NTU	91.4 mV	30.05 ft	100.00 ml/min
8/31/2022 12:23 PM	01:55	6.69 pH	22.31 °C	277.98 µS/cm	2.69 mg/L	6.61 NTU	120.8 mV	30.05 ft	100.00 ml/min
8/31/2022 12:28 PM	06:55	6.62 pH	21.53 °C	276.26 µS/cm	1.72 mg/L	3.09 NTU	99.3 mV	30.50 ft	100.00 ml/min
8/31/2022 12:33 PM	11:55	6.51 pH	21.77 °C	254.47 µS/cm	2.67 mg/L	2.82 NTU	104.5 mV	30.80 ft	100.00 ml/min
8/31/2022 12:38 PM	16:55	6.46 pH	21.87 °C	246.73 µS/cm	3.28 mg/L	2.69 NTU	108.2 mV	31.05 ft	100.00 ml/min
8/31/2022 12:43 PM	21:55	6.46 pH	21.64 °C	248.29 µS/cm	3.30 mg/L	3.46 NTU	108.1 mV	31.28 ft	100.00 ml/min
8/31/2022 12:48 PM	26:55	6.46 pH	21.56 °C	251.72 µS/cm	3.02 mg/L	2.84 NTU	132.2 mV	31.50 ft	100.00 ml/min

Samples

Sample ID:	Description:
ARGWC-15	

Low-Flow Test Report:

Test Date / Time: 8/31/2022 3:04:39 PM

Project: Plant Arkwright AP-3

Operator Name: J. Meyer

Location Name: ARGWC-16 Screen Length: 10 ft Top of Screen: 24.5 ft Total Depth: 34.7 ft Initial Depth to Water: 20.85 ft	Pump Intake From TOC: 29.5 ft Estimated Total Volume Pumped: 6750 ml Flow Cell Volume: 90 ml Final Flow Rate: 450 ml/min Final Draw Down: 0 ft	Casing Type: PVC Pump Type: QED Bladder Pump Tubing Type: LDPE Tubing Inner Diameter: 0.17 in Tubing Length: 30 ft Instrument Used: Aqua TROLL 400 Serial Number: 850724
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Test Notes:

Weather Conditions:

Sunny 89 F

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	
8/31/2022 3:04 PM	00:00	5.21 pH	20.25 °C	576.97 µS/cm	0.40 mg/L	3.57 NTU	216.6 mV	20.85 ft	450.00 ml/min
8/31/2022 3:09 PM	05:00	5.19 pH	19.99 °C	586.61 µS/cm	0.34 mg/L	2.20 NTU	216.2 mV	20.85 ft	450.00 ml/min
8/31/2022 3:14 PM	10:00	5.18 pH	19.97 °C	587.20 µS/cm	0.33 mg/L	1.66 NTU	223.7 mV	20.85 ft	450.00 ml/min
8/31/2022 3:19 PM	15:00	5.18 pH	20.01 °C	589.44 µS/cm	0.32 mg/L	2.83 NTU	217.2 mV	20.85 ft	450.00 ml/min

Samples

Sample ID:	Description:
ARGWC-16	Sample collected at 15:25
DUP-01	

Low-Flow Test Report:

Test Date / Time: 9/2/2022 9:49:18 AM

Project: Plant Arkwright AP-3

Operator Name: E. Scheiben

Location Name: ARGWC-17 Latitude: 32.9284141714365 Longitude: -83.7057459354401 Well Diameter: 2 in Casing Type: PVC Screen Length: 34.5 ft Top of Screen: 24.5 ft Total Depth: 34.5 ft Initial Depth to Water: 23.14 ft	Pump Type: Dedicated bladder, QED micro purge Tubing Type: LDPE Tubing Inner Diameter: 0.17 in Tubing Length: 34.5 ft Pump Intake From TOC: 29.5 ft Estimated Total Volume Pumped: 10500 ml Flow Cell Volume: 90 ml Final Flow Rate: 300 ml/min Final Draw Down: -0.13 ft	Instrument Used: Aqua TROLL 400 Serial Number: 728648
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Test Notes:

Weather Conditions:

Overcast

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 0.2	+/- 5	+/- 10	+/- 0.3	
9/2/2022 9:49 AM	00:00	5.53 pH	20.40 °C	467.31 µS/cm	1.72 mg/L	0.00 NTU	71.8 mV	23.14 ft	300.00 ml/min
9/2/2022 9:54 AM	05:00	5.24 pH	19.37 °C	380.61 µS/cm	2.10 mg/L	4.62 NTU	184.7 mV	23.14 ft	300.00 ml/min
9/2/2022 9:59 AM	10:00	5.14 pH	19.26 °C	374.71 µS/cm	1.15 mg/L	2.53 NTU	138.3 mV	23.01 ft	300.00 ml/min
9/2/2022 10:04 AM	15:00	5.11 pH	19.16 °C	377.12 µS/cm	0.58 mg/L	1.57 NTU	129.3 mV	23.01 ft	300.00 ml/min
9/2/2022 10:09 AM	20:00	5.11 pH	19.21 °C	380.56 µS/cm	0.50 mg/L	2.38 NTU	164.7 mV	23.01 ft	300.00 ml/min
9/2/2022 10:14 AM	25:00	5.11 pH	19.21 °C	382.44 µS/cm	0.46 mg/L	1.31 NTU	163.6 mV	23.01 ft	300.00 ml/min
9/2/2022 10:19 AM	30:00	5.11 pH	19.21 °C	383.29 µS/cm	0.39 mg/L	0.93 NTU	159.9 mV	23.01 ft	300.00 ml/min
9/2/2022 10:24 AM	35:00	5.11 pH	19.21 °C	382.80 µS/cm	0.38 mg/L	1.01 NTU	156.6 mV	23.01 ft	300.00 ml/min

Samples

Sample ID:	Description:
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ARGWC-17

Sample collected at 1030

Created using VuSitu from In-Situ, Inc.

Low-Flow Test Report:

Test Date / Time: 9/1/2022 10:00:41 AM

Project: Plant Arkwright AP-3

Operator Name: E. Scheiben

Location Name: ARGWC-18 Latitude: 32.9277595997073 Longitude: -83.7044732272625 Well Diameter: 2 in Casing Type: PVC Screen Length: 10 ft Top of Screen: 40.2 ft Total Depth: 50.65 ft Initial Depth to Water: 29.61 ft	Pump Type: Dedicated bladder, QED micro purge Tubing Type: LDPE Tubing Inner Diameter: 0.17 in Tubing Length: 50 ft Pump Intake From TOC: 45.65 ft Estimated Total Volume Pumped: 57250 ml Flow Cell Volume: 90 ml Final Flow Rate: 300 ml/min Final Draw Down: 0 ft	Instrument Used: Aqua TROLL 400 Serial Number: 728648
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Test Notes:

Weather Conditions:

Sunny

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 0.2	+/- 5	+/- 10	+/- 0.3	
9/1/2022 10:00 AM	00:00	6.26 pH	23.41 °C	411.32 µS/cm	0.88 mg/L	55.20 NTU	-20.3 mV	29.61 ft	300.00 ml/min
9/1/2022 10:05 AM	05:00	6.10 pH	21.62 °C	570.01 µS/cm	0.37 mg/L	56.70 NTU	27.8 mV	29.61 ft	300.00 ml/min
9/1/2022 10:10 AM	10:00	6.04 pH	21.31 °C	602.49 µS/cm	0.27 mg/L	56.80 NTU	41.1 mV	29.61 ft	300.00 ml/min
9/1/2022 10:15 AM	15:00	6.03 pH	20.92 °C	607.09 µS/cm	0.23 mg/L	51.60 NTU	43.3 mV	29.61 ft	300.00 ml/min
9/1/2022 10:20 AM	20:00	6.04 pH	20.86 °C	607.82 µS/cm	0.21 mg/L	48.30 NTU	41.7 mV	29.61 ft	300.00 ml/min
9/1/2022 10:22 AM	21:41	6.04 pH	20.87 °C	607.97 µS/cm	0.21 mg/L	0.00 NTU	42.6 mV	29.61 ft	300.00 ml/min
9/1/2022 10:27 AM	26:41	6.02 pH	20.83 °C	618.45 µS/cm	0.20 mg/L	45.70 NTU	46.1 mV	29.61 ft	300.00 ml/min
9/1/2022 10:32 AM	31:41	6.02 pH	20.77 °C	617.76 µS/cm	0.19 mg/L	42.40 NTU	52.1 mV	29.61 ft	300.00 ml/min
9/1/2022 10:37 AM	36:41	6.01 pH	20.86 °C	618.29 µS/cm	0.19 mg/L	42.50 NTU	48.8 mV	29.61 ft	300.00 ml/min
9/1/2022 10:42 AM	41:41	6.01 pH	20.83 °C	618.79 µS/cm	0.19 mg/L	25.60 NTU	48.9 mV	29.61 ft	300.00 ml/min
9/1/2022 10:47 AM	46:41	6.01 pH	20.82 °C	620.19 µS/cm	0.19 mg/L	23.20 NTU	49.8 mV	29.61 ft	300.00 ml/min
9/1/2022 10:50 AM	49:39	6.01 pH	20.91 °C	619.19 µS/cm	0.18 mg/L	0.00 NTU	50.7 mV	29.61 ft	300.00 ml/min

9/1/2022 10:55 AM	54:39	6.00 pH	20.91 °C	622.69 µS/cm	0.18 mg/L	21.00 NTU	56.1 mV	29.61 ft	300.00 ml/min
9/1/2022 11:00 AM	59:39	6.00 pH	20.91 °C	622.20 µS/cm	0.18 mg/L	17.60 NTU	56.8 mV	29.61 ft	300.00 ml/min
9/1/2022 11:05 AM	01:04:39	6.00 pH	20.96 °C	624.85 µS/cm	0.18 mg/L	17.90 NTU	57.7 mV	29.61 ft	300.00 ml/min
9/1/2022 11:10 AM	01:09:39	6.00 pH	20.95 °C	622.51 µS/cm	0.18 mg/L	17.60 NTU	58.0 mV	29.61 ft	300.00 ml/min
9/1/2022 11:15 AM	01:14:39	6.00 pH	20.96 °C	624.26 µS/cm	0.18 mg/L	14.10 NTU	59.1 mV	29.61 ft	300.00 ml/min
9/1/2022 11:20 AM	01:19:39	6.00 pH	21.01 °C	633.73 µS/cm	0.19 mg/L	13.10 NTU	59.7 mV	29.61 ft	300.00 ml/min
9/1/2022 11:25 AM	01:24:39	6.00 pH	21.04 °C	623.93 µS/cm	0.18 mg/L	14.30 NTU	59.0 mV	29.61 ft	300.00 ml/min
9/1/2022 11:30 AM	01:29:39	6.00 pH	21.00 °C	622.97 µS/cm	0.18 mg/L	14.10 NTU	53.2 mV	29.61 ft	300.00 ml/min
9/1/2022 11:31 AM	01:31:07	6.00 pH	21.09 °C	622.36 µS/cm	0.18 mg/L	0.00 NTU	53.7 mV	29.61 ft	300.00 ml/min
9/1/2022 11:36 AM	01:36:07	6.00 pH	21.08 °C	622.49 µS/cm	0.18 mg/L	12.00 NTU	53.4 mV	29.61 ft	300.00 ml/min
9/1/2022 11:41 AM	01:41:07	6.00 pH	21.10 °C	621.76 µS/cm	0.18 mg/L	13.50 NTU	53.4 mV	29.61 ft	300.00 ml/min
9/1/2022 11:46 AM	01:46:07	5.99 pH	21.06 °C	630.38 µS/cm	0.19 mg/L	11.80 NTU	61.4 mV	29.61 ft	300.00 ml/min
9/1/2022 11:51 AM	01:51:07	6.00 pH	21.09 °C	625.32 µS/cm	0.18 mg/L	10.30 NTU	61.3 mV	29.61 ft	300.00 ml/min
9/1/2022 11:56 AM	01:56:07	5.99 pH	21.13 °C	622.95 µS/cm	0.18 mg/L	11.50 NTU	54.8 mV	29.61 ft	300.00 ml/min
9/1/2022 12:01 PM	02:01:07	5.98 pH	21.09 °C	625.63 µS/cm	0.18 mg/L	8.93 NTU	62.2 mV	29.61 ft	300.00 ml/min
9/1/2022 12:06 PM	02:06:07	6.00 pH	21.09 °C	626.28 µS/cm	0.18 mg/L	11.60 NTU	62.1 mV	29.61 ft	300.00 ml/min
9/1/2022 12:11 PM	02:11:07	5.99 pH	21.17 °C	625.18 µS/cm	0.17 mg/L	10.30 NTU	62.8 mV	29.61 ft	300.00 ml/min
9/1/2022 12:16 PM	02:16:07	5.99 pH	21.17 °C	625.61 µS/cm	0.17 mg/L	9.18 NTU	63.6 mV	29.61 ft	300.00 ml/min
9/1/2022 12:21 PM	02:21:07	5.99 pH	21.21 °C	624.40 µS/cm	0.18 mg/L	9.32 NTU	56.4 mV	29.61 ft	300.00 ml/min
9/1/2022 12:26 PM	02:26:07	5.99 pH	21.19 °C	630.91 µS/cm	0.18 mg/L	9.93 NTU	64.5 mV	29.61 ft	300.00 ml/min
9/1/2022 12:31 PM	02:31:07	6.00 pH	21.17 °C	624.86 µS/cm	0.17 mg/L	7.99 NTU	65.3 mV	29.61 ft	300.00 ml/min
9/1/2022 12:36 PM	02:36:07	6.00 pH	21.08 °C	624.95 µS/cm	0.17 mg/L	8.26 NTU	65.3 mV	29.61 ft	300.00 ml/min
9/1/2022 12:41 PM	02:41:07	5.99 pH	21.19 °C	624.88 µS/cm	0.17 mg/L	7.82 NTU	65.3 mV	29.61 ft	300.00 ml/min
9/1/2022 12:46 PM	02:46:07	6.00 pH	21.09 °C	624.10 µS/cm	0.17 mg/L	7.81 NTU	57.3 mV	29.61 ft	300.00 ml/min
9/1/2022 12:51 PM	02:51:07	6.00 pH	21.13 °C	624.91 µS/cm	0.17 mg/L	7.58 NTU	64.7 mV	29.61 ft	300.00 ml/min
9/1/2022 12:56 PM	02:55:50	5.99 pH	21.10 °C	622.24 µS/cm	0.17 mg/L	8.43 NTU	57.5 mV	29.61 ft	300.00 ml/min
9/1/2022 1:01 PM	03:00:50	5.99 pH	21.18 °C	625.64 µS/cm	0.18 mg/L	6.96 NTU	57.6 mV	29.61 ft	300.00 ml/min
9/1/2022 1:06 PM	03:05:50	5.99 pH	21.19 °C	624.84 µS/cm	0.17 mg/L	7.01 NTU	57.4 mV	29.61 ft	300.00 ml/min
9/1/2022 1:11 PM	03:10:50	5.99 pH	21.14 °C	624.25 µS/cm	0.17 mg/L	6.53 NTU	56.7 mV	29.61 ft	300.00 ml/min

Samples

Sample ID:	Description:
ARGWC-18	Sample collected at 1325

Low-Flow Test Report:

Test Date / Time: 9/2/2022 8:30:36 AM

Project: Plant Arkwright AP-3

Operator Name: E. Scheiben

Location Name: ARGWC-18 Latitude: 32.9277595997073 Longitude: -83.7044732272625 Well Diameter: 2 in Casing Type: PVC Screen Length: 10 ft Top of Screen: 40.2 ft Total Depth: 50.65 ft Initial Depth to Water: 29.51 ft	Pump Type: Dedicated bladder, QED micro purge Tubing Type: LDPE Tubing Inner Diameter: 0.17 in Tubing Length: 50 ft Pump Intake From TOC: 45.65 ft Estimated Total Volume Pumped: 6000 ml Flow Cell Volume: 90 ml Final Flow Rate: 300 ml/min Final Draw Down: 0 ft	Instrument Used: Aqua TROLL 400 Serial Number: 728648
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Test Notes:

Weather Conditions:

Overcast, 22C

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 0.2	+/- 5	+/- 10	+/- 0.3	
9/2/2022 8:30 AM	00:00	6.30 pH	20.86 °C	527.83 µS/cm	1.86 mg/L	0.00 NTU	5.1 mV	29.51 ft	300.00 ml/min
9/2/2022 8:35 AM	05:00	6.10 pH	20.31 °C	623.42 µS/cm	0.64 mg/L	2.78 NTU	36.6 mV	29.51 ft	300.00 ml/min
9/2/2022 8:40 AM	10:00	6.06 pH	20.19 °C	641.32 µS/cm	0.34 mg/L	3.33 NTU	48.6 mV	29.51 ft	300.00 ml/min
9/2/2022 8:45 AM	15:00	6.04 pH	20.16 °C	646.50 µS/cm	0.25 mg/L	4.88 NTU	46.6 mV	29.51 ft	300.00 ml/min
9/2/2022 8:50 AM	20:00	6.03 pH	20.15 °C	649.08 µS/cm	0.23 mg/L	4.90 NTU	47.0 mV	29.51 ft	300.00 ml/min

Samples

Sample ID:	Description:
ARGWC-18	Second day of purging well; Sample collection on 09/02 at 0900

B.2 Calibration Data



EQUIPMENT CALIBRATION FORM

Project Name: Arkwright Groundwater Sampling
Plant Name: Plant Arkwright
Plant Address: 5001 Arkwright Road, Macon, GA 31210
Project Number: 175569434
Goal/Task: Groundwater Sampling

Date: 8/30/2022
Page 1 **of** 1

Morning (AM) Calibration			Calibrated By: John Myer		
Weather:	Sunny 87 F				
Time (24hr) Start:	14:15	Acceptance Criteria	Time (24hr) Finish:	14:50	
Temperature (°C):			Barometric Pressure (mbar):		
<i>NIST Thermometer:</i>	28.1	+/- 4°C	<i>Local Weather Station:</i>	1015.1	
<i>Aqua TROLL 400:</i>	31.8		<i>Aqua TROLL 400:</i>	1003.7	
Turbidity (NTUs):	20 NTU Standard	100 NTU Standard	800 NTU Standard	10 NTU Verification	Acceptance Criteria
	19.8	100	793	10.2	+/- 3 %
	Calibration Value	Post Calibration	<i>Acceptance Criteria</i>	Cal Sol Temp (°C)	Notes:
Specific Conductance 4,490 (µS/cm)	4490	4525	+/- 1 %	27.5	NA
pH 7 (SU)	7.00	7.00	+/- .1 (SU)	26.6	NA
pH 4 (SU)	4.00	4.00	+/- .1 (SU)	27.1	NA
pH 10 (SU)	10.00	10.01	+/- .1 (SU)	26.8	NA
D.O. (%)	N/A	100.2	95-105 %	27.6	NA
ORP (mV)	226.7	222.7	+/- 10 mV	26.9	NA

Afternoon (PM) Calibration Verification			Verification By: John Myer		
Weather:	Clear 76 F				
Time (24hr) Start:	22:30	Acceptance Criteria	Time (24hr) Finish:	23:10	
Temperature (°C):			Barometric Pressure (mbar):		
<i>NIST Thermometer:</i>	21.5	+/- 4°C	<i>Local Weather Station:</i>	1015.6	
<i>Aqua TROLL 400:</i>	22.0		<i>Aqua TROLL 400:</i>	1004.5	
Turbidity (NTUs):	20 NTU Standard	100 NTU Standard	800 NTU Standard	10 NTU Verification	Acceptance Criteria
	19.9	102	785	10.2	+/- 3 %
	Calibration Value	Verification	<i>Acceptance Criteria</i>	Cal Sol Temp (°C)	Notes:
Specific Conductance 4490 (µS/cm)	4490	4526.6	+/- 1 %	23.1	NA
pH 7 (SU)	7.00	7.01	+/- .1 (SU)	23.4	NA
pH 4 (SU)	4.00	4.02	+/- .1 (SU)	23.3	NA
pH 10 (SU)	10.00	10.05	+/- .1 (SU)	23.4	NA
D.O. (%)	N/A	96.1	95-105 %	22.5	NA
ORP (mV)	231.7	231.2	+/- 10 mV	23.0	NA

Calibration Standards Information					
Standard (@ 25°C)	Certified Value	Brand	Lot Number	Expiration Date	
AM pH 4 (SU)	4.00	AIR	21470032	4/30/2023	
AM pH 7 (SU)	7.00	AIR	21380102	4/30/2023	
AM pH 10 (SU)	10.00	AIR	20080056	4/30/2023	
PM pH 4 (SU)	4.00	AIR	21470032	4/30/2023	
PM pH 7 (SU)	7.00	AIR	21380102	4/30/2023	
PM pH 10 (SU)	10.00	AIR	20080056	4/30/2023	
Specific Conductance 4,490 (µS/cm)	4490	AIR	21470032	4/30/2023	
ORP (mV)	228.0	AIR	21140143	4/30/2023	
Turbidity - 20 NTU	20.0	Hach	A1168	5/31/2023	
Turbidity - 100 NTU	100	Hach	A1027	1/31/2023	
Turbidity - 800 NTU	800	Hach	A1103	4/30/2023	
Turbidity - 10 NTU	10.0	Hach	A1071	3/31/2023	

	Instruments			Calibrated Within Acceptance Criteria:
	Manufacturer	Model	Serial Number	
Water Quality Meter	InSitu	AquaTroll 400	850724	Yes
Turbidity Meter	Hach	2100Q	19010C073360	Yes
NIST Thermometer	Thomas Instruments	NIST Thermometer	221620133	Expiration Date: 6/28/2024

Explanations: NA

Prepared By: John Myer **Date:** 8/30/2022 **Signature:** *John Myer*
Review By: John Myer **Date:** 9/22/2022 **Signature:** *John Myer*

EQUIPMENT CALIBRATION FORM

Project Name: Arkwright Groundwater Sampling
Plant Name: Plant Arkwright
Plant Address: 5001 Arkwright Road, Macon, GA 31210
Project Number: 175569434
Goal/Task: Groundwater Sampling

Date: 8/30/2022
Page 1 **of** 1

Morning (AM) Calibration			Calibrated By: Emily Scheiben		
Weather:	Partly cloudy				
Time (24hr) Start:	14:07	<i>Acceptance Criteria</i>	Time (24hr) Finish:	14:52	
Temperature (°C):			Barometric Pressure (mbar):		
<i>NIST Thermometer:</i>	28.8	+/- 4°C	<i>Local Weather Station:</i>	1015.1	
<i>Aqua TROLL 400:</i>	28.5		<i>Aqua TROLL 400:</i>	1002.0	
Turbidity (NTUs):	<i>20 NTU Standard</i>	<i>100 NTU Standard</i>	<i>800 NTU Standard</i>	<i>10 NTU Verification</i>	<i>Acceptance Criteria</i>
	20.4	99.7	789	10.1	+/- 3 %
	Calibration Value	Post Calibration	<i>Acceptance Criteria</i>	Cal Sol Temp (°C)	Notes:
Specific Conductance 4,490 (µS/cm)	4490	4489.2	+/- 1 %	29.7	NA
pH 7 (SU)	7.00	6.98	+/- .1 (SU)	28.7	NA
pH 4 (SU)	4.00	4.02	+/- .1 (SU)	29.7	NA
pH 10 (SU)	10.00	9.94	+/- .1 (SU)	30.0	NA
D.O. (%)	N/A	100.0	95-105 %	29.3	NA
ORP (mV)	228.0	223.8	+/- 10 mV	29.2	NA

Afternoon (PM) Calibration Verification			Verification By: Emily Scheiben		
Weather:	Clear				
Time (24hr) Start:	21:45	<i>Acceptance Criteria</i>	Time (24hr) Finish:	22:05	
Temperature (°C):			Barometric Pressure (mbar):		
<i>NIST Thermometer:</i>	33.30	+/- 4°C	<i>Local Weather Station:</i>	1013.7	
<i>Aqua TROLL 400:</i>	32.48		<i>Aqua TROLL 400:</i>	1003.3	
Turbidity (NTUs):	<i>20 NTU Standard</i>	<i>100 NTU Standard</i>	<i>800 NTU Standard</i>	<i>10 NTU Verification</i>	<i>Acceptance Criteria</i>
	20.1	99	798	9.72	+/- 3 %
	Calibration Value	Verification	<i>Acceptance Criteria</i>	Cal Sol Temp (°C)	Notes:
Specific Conductance 4490 (µS/cm)	4490	4529.3	+/- 1 %	32.37	NA
pH 7 (SU)	7.00	6.98	+/- .1 (SU)	33.21	NA
pH 4 (SU)	4.00	4.05	+/- .1 (SU)	32.37	NA
pH 10 (SU)	10.00	9.95	+/- .1 (SU)	31.70	NA
D.O. (%)	N/A	97.2	95-105 %	31.68	NA
ORP (mV)	228	218.7	+/- 10 mV	31.18	NA

Calibration Standards Information					
Standard (@ 25°C)	Certified Value	Brand	Lot Number	Expiration Date	
AM pH 4 (SU)	4.00	AIR	21470032	4/1/2023	
AM pH 7 (SU)	7.00	AIR	21380102	4/1/2023	
AM pH 10 (SU)	10.00	AIR	20080056	4/1/2023	
PM pH 4 (SU)	4.00	AIR	21470032	4/1/2023	
PM pH 7 (SU)	7.00	AIR	21380102	4/1/2023	
PM pH 10 (SU)	10.00	AIR	20080056	4/1/2023	
Specific Conductance 4,490 (µS/cm)	4490	AIR	21470032	4/1/2023	
ORP (mV)	228.0	AIR	22200085	8/1/2023	
Turbidity - 20 NTU	20.0	Hach	A1168	5/1/2023 (JM 9/22/22)	
Turbidity - 100 NTU	100	Hach	A1027	1/1/2023 (JM 9/22/22)	
Turbidity - 800 NTU	800	Hach	A1103	4/1/2023 (JM 9/22/22)	
Turbidity - 10 NTU	10.0	Hach	A1071	3/1/2023 (JM 9/22/22)	

	Manufacturer	Model	Serial Number	Calibrated Within Acceptance Criteria:
Water Quality Meter	InSitu	AquaTroll 400	850033	yes
Turbidity Meter	Hach	2100Q	21030D000600	yes
NIST Thermometer	Thomas Instruments	NIST Thermometer	221620127	Expiration Date: 6/24/2024

Explanations: NA (JM 9/22/22)

Prepared By: Emily Scheiben **Date:** 8/30/2022 **Signature:**

Review By: John Myer **Date:** 9/22/2022 **Signature:**

EQUIPMENT CALIBRATION FORM

Project Name: Arkwright Groundwater Sampling
Plant Name: Plant Arkwright
Plant Address: 5001 Arkwright Road, Macon, GA 31210
Project Number: 175569434
Goal/Task: Groundwater Sampling

Date: 8/30/2022
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Morning (AM) Calibration			Calibrated By: Bryan Pennell		
Weather: Partly cloudy, 29 C					
Time (24hr) Start:	14:13	Acceptance Criteria	Time (24hr) Finish:	14:52	
Temperature (°C):			Barometric Pressure (mbar):		
NIST Thermometer:	27.7	+/- 4°C	Local Weather Station:	1015.1	
Aqua TROLL 400:	27.3		Aqua TROLL 400:	1003.5	
Turbidity (NTUs):	20 NTU Standard	100 NTU Standard	800 NTU Standard	10 NTU Verification	Acceptance Criteria
	20.6	98.9	786	9.73	+/- 3 %
	Calibration Value	Post Calibration	Acceptance Criteria	Cal Sol Temp (°C)	Notes:
Specific Conductance 4,490 (µS/cm)	4,490	4,493.30	+/- 1 %	27.3	NA
pH 7 (SU)	7.00	6.98	+/- .1 (SU)	27.1	NA
pH 4 (SU)	4.00	3.99	+/- .1 (SU)	27.0	NA
pH 10 (SU)	10.00	9.99	+/- .1 (SU)	26.9	NA
D.O. (%)	N/A	100.0	95-105 %	27.1	NA
ORP (mV)	226.4	226.0	+/- 10 mV	27.1	NA


Afternoon (PM) Calibration Verification			Verification By: Bryan Pennell		
Weather: Mostly sunny, 32 C					
Time (24hr) Start:	18:07	Acceptance Criteria	Time (24hr) Finish:	18:36	
Temperature (°C):			Barometric Pressure (mbar):		
NIST Thermometer:	29.2	+/- 4°C	Local Weather Station:	1012.8	
Aqua TROLL 400:	29.7		Aqua TROLL 400:	1003.5	
Turbidity (NTUs):	20 NTU Standard	100 NTU Standard	800 NTU Standard	10 NTU Verification	Acceptance Criteria
	20.4	98.2	796	10.2	+/- 3 %
	Calibration Value	Verification	Acceptance Criteria	Cal Sol Temp (°C)	Notes:
Specific Conductance 4490 (µS/cm)	4490	4506.5	+/- 1 %	29.7	NA
pH 7 (SU)	7.00	7.00	+/- .1 (SU)	28.2	NA
pH 4 (SU)	4.00	4.00	+/- .1 (SU)	29.7	NA
pH 10 (SU)	10.00	10.05	+/- .1 (SU)	27.3	NA
D.O. (%)	N/A	101.8	95-105 %	26.7	NA
ORP (mV)	222.8	222.8	+/- 10 mV	27.5	NA

Calibration Standards Information					
Standard (@ 25°C)	Certified Value	Brand	Lot Number	Expiration Date	
AM pH 4 (SU)	4.00	AIR	21470032	4/1/2023	
AM pH 7 (SU)	7.00	AIR	21380102	4/1/2023	
AM pH 10 (SU)	10.00	AIR	20080056	4/1/2023	
PM pH 4 (SU)	4.00	AIR	21470032	4/1/2023	
PM pH 7 (SU)	7.00	AIR	21380102	4/1/2023	
PM pH 10 (SU)	10.00	AIR	20080056	4/1/2023	
Specific Conductance 4,490 (µS/cm)	4490	AIR	21470032	4/1/2023	
ORP (mV)	228.0	AIR	21140143	4/1/2023	
Turbidity - 20 NTU	20.0	Hach	A1168	5/1/2023	
Turbidity - 100 NTU	100	Hach	A1027	1/1/2023	
Turbidity - 800 NTU	800	Hach	A1103	4/1/2023	
Turbidity - 10 NTU	10.0	Hach	A1071	3/1/2023	

	Manufacturer	Instruments Model	Serial Number	Calibrated Within Acceptance Criteria:
Water Quality Meter	InSitu	AquaTroll 400	728623	Y
Turbidity Meter	Hach	2100Q	15030C039370	Y
NIST Thermometer	Thomas Instruments	NIST Thermometer	221620123	Expiration Date: 6/28/2024

Explanations: NA

Prepared By: Bryan Pennell Date: 8/30/2022 Signature: 

Review By: John Myer Date: 9/22/2022 Signature: 

EQUIPMENT CALIBRATION FORM

Project Name: Arkwright Groundwater Sampling
Plant Name: Plant Arkwright
Plant Address: 5001 Arkwright Road, Macon, GA 31210
Project Number: 175569434
Goal/Task: Groundwater Sampling

Date: 8/31/2022
Page 1 **of** 1

Morning (AM) Calibration			Calibrated By: John Myer		
Weather:	Overcast 70 F				
Time (24hr) Start:	7:50	<i>Acceptance Criteria</i>	Time (24hr) Finish:	8:15	
Temperature (°C):			Barometric Pressure (mbar):		
<i>NIST Thermometer:</i>	22.4	+/- 4°C	<i>Local Weather Station:</i>	1015.6	
<i>Aqua TROLL 400:</i>	22.4		<i>Aqua TROLL 400:</i>	1004.6	
Turbidity (NTUs):	<i>20 NTU Standard</i>	<i>100 NTU Standard</i>	<i>800 NTU Standard</i>	<i>10 NTU Verification</i>	<i>Acceptance Criteria</i>
	19.4	99.8	802	10.3	+/- 3 %
	Calibration Value	Post Calibration	<i>Acceptance Criteria</i>	Cal Sol Temp (°C)	Notes:
Specific Conductance 4,490 (µS/cm)	4490	4490.3	+/- 1 %	22.5	NA
pH 7 (SU)	7.00	7.04	+/- .1 (SU)	22.6	NA
pH 4 (SU)	4.00	4.04	+/- .1 (SU)	22.7	NA
pH 10 (SU)	10.00	10.00	+/- .1 (SU)	22.7	NA
D.O. (%)	N/A	99.9	95-105 %	22.8	NA
ORP (mV)	232.1	232.8	+/- 10 mV	22.7	NA

Afternoon (PM) Calibration Verification			Verification By: John Myer		
Weather:	Clear 80 F				
Time (24hr) Start:	21:20	<i>Acceptance Criteria</i>	Time (24hr) Finish:	21:45	
Temperature (°C):			Barometric Pressure (mbar):		
<i>NIST Thermometer:</i>	23.4	+/- 4°C	<i>Local Weather Station:</i>	1014.2	
<i>Aqua TROLL 400:</i>	23.8		<i>Aqua TROLL 400:</i>	1003.4	
Turbidity (NTUs):	<i>20 NTU Standard</i>	<i>100 NTU Standard</i>	<i>800 NTU Standard</i>	<i>10 NTU Verification</i>	<i>Acceptance Criteria</i>
	20.6	100	812	10.3	+/- 3 %
	Calibration Value	Verification	<i>Acceptance Criteria</i>	Cal Sol Temp (°C)	Notes:
Specific Conductance 4490 (µS/cm)	4490	4509	+/- 1 %	24.6	NA
pH 7 (SU)	7.00	6.98	+/- .1 (SU)	23.5	NA
pH 4 (SU)	4.00	3.99	+/- .1 (SU)	24.3	NA
pH 10 (SU)	10.00	9.97	+/- .1 (SU)	23.9	NA
D.O. (%)	N/A	97.1	95-105 %	23.6	NA
ORP (mV)	228.0	227.8	+/- 10 mV	24.0	NA

Calibration Standards Information					
Standard (@ 25°C)	Certified Value	Brand	Lot Number	Expiration Date	
AM pH 4 (SU)	4.00	AIR	21470032	4/30/2023	
AM pH 7 (SU)	7.00	AIR	21380102	4/30/2023	
AM pH 10 (SU)	10.00	AIR	20080056	4/30/2023	
PM pH 4 (SU)	4.00	AIR	21470032	4/30/2023	
PM pH 7 (SU)	7.00	AIR	21380102	4/30/2023	
PM pH 10 (SU)	10.00	AIR	20080056	4/30/2023	
Specific Conductance 4,490 (µS/cm)	4490	AIR	21470032	4/30/2023	
ORP (mV)	228.0	AIR	21140143	4/30/2023	
Turbidity - 20 NTU	20.0	Hach	A1168	5/31/2023	
Turbidity - 100 NTU	100	Hach	A1027	1/31/2023	
Turbidity - 800 NTU	800	Hach	A1103	4/30/2023	
Turbidity - 10 NTU	10.0	Hach	A1071	3/31/2023	

	Instruments			Calibrated Within Acceptance Criteria:
	Manufacturer	Model	Serial Number	
Water Quality Meter	InSitu	AquaTroll 400	850724	Yes
Turbidity Meter	Hach	2100Q	19010C073360	Yes
NIST Thermometer	Thomas Instruments	NIST Thermometer	221620133	Expiration Date: 6/28/2024

Explanations: NA

Prepared By: John Myer **Date:** 8/31/2022 **Signature:** *John Myer*
Review By: John Myer **Date:** 9/22/2022 **Signature:** *John Myer*

EQUIPMENT CALIBRATION FORM

Project Name: Arkwright Groundwater Sampling
Plant Name: Plant Arkwright
Plant Address: 5001 Arkwright Road, Macon, GA 31210
Project Number: 175569434
Goal/Task: Groundwater Sampling

Date: 8/31/2022
Page 1 **of** 1

Morning (AM) Calibration			Calibrated By: Emily Scheiben		
Weather:	overcast				
Time (24hr) Start:	8:00	<i>Acceptance Criteria</i>	Time (24hr) Finish:	8:38	
Temperature (°C):			Barometric Pressure (mbar):		
<i>NIST Thermometer:</i>	24.0	+/- 4°C	<i>Local Weather Station:</i>	1015.0	
<i>Aqua TROLL 400:</i>	23.6		<i>Aqua TROLL 400:</i>	1003.1	
Turbidity (NTUs):	<i>20 NTU Standard</i>	<i>100 NTU Standard</i>	<i>800 NTU Standard</i>	<i>10 NTU Verification</i>	<i>Acceptance Criteria</i>
	20.6	100	795	10.3	+/- 3 %
	Calibration Value	Post Calibration	<i>Acceptance Criteria</i>	Cal Sol Temp (°C)	Notes:
Specific Conductance 4,490 (µS/cm)	4490	4486.5	+/- 1 %	23.7	NA
pH 7 (SU)	7.00	7.04	+/- .1 (SU)	24.0	NA
pH 4 (SU)	4.00	3.97	+/- .1 (SU)	23.7	NA
pH 10 (SU)	10.00	10.01	+/- .1 (SU)	24.0	NA
D.O. (%)	N/A	96.3	95-105 %	23.7	NA
ORP (mV)	228.0	228.4	+/- 10 mV	23.6	NA

Afternoon (PM) Calibration Verification			Verification By: Emily Scheiben		
Weather:	Sunny				
Time (24hr) Start:	15:55	<i>Acceptance Criteria</i>	Time (24hr) Finish:	16:15	
Temperature (°C):			Barometric Pressure (mbar):		
<i>NIST Thermometer:</i>	32.3	+/- 4°C	<i>Local Weather Station:</i>	1014.4	
<i>Aqua TROLL 400:</i>	33.5		<i>Aqua TROLL 400:</i>	1001.3	
Turbidity (NTUs):	<i>20 NTU Standard</i>	<i>100 NTU Standard</i>	<i>800 NTU Standard</i>	<i>10 NTU Verification</i>	<i>Acceptance Criteria</i>
	20.2	101	798	10.1	+/- 3 %
	Calibration Value	Verification	<i>Acceptance Criteria</i>	Cal Sol Temp (°C)	Notes:
Specific Conductance 4490 (µS/cm)	4490	4484.5	+/- 1 %	26.5	NA
pH 7 (SU)	7.00	7.08	+/- .1 (SU)	26.0	NA
pH 4 (SU)	4.00	4.08	+/- .1 (SU)	26.5	NA
pH 10 (SU)	10.00	9.98	+/- .1 (SU)	26.2	NA
D.O. (%)	N/A	98.1	95-105 %	27.5	NA
ORP (mV)	228.0	227.8	+/- 10 mV	26.7	NA

Calibration Standards Information					
Standard (@ 25°C)	Certified Value	Brand	Lot Number	Expiration Date	
AM pH 4 (SU)	4.00	AIR	21470032	4/1/2023	
AM pH 7 (SU)	7.00	AIR	21380102	4/1/2023	
AM pH 10 (SU)	10.00	AIR	20080056	4/1/2023	
PM pH 4 (SU)	4.00	AIR	21470032	4/1/2023	
PM pH 7 (SU)	7.00	AIR	21380102	4/1/2023	
PM pH 10 (SU)	10.00	AIR	20080056	4/1/2023	
Specific Conductance 4,490 (µS/cm)	4490	AIR	21470032	4/1/2023	
ORP (mV)	228.0	AIR	22200085	8/1/2023	
Turbidity - 20 NTU	20.0	Hach	A1168	5/1/2023 (JM 9/22/22)	
Turbidity - 100 NTU	100	Hach	A1027	1/1/2023 (JM 9/22/22)	
Turbidity - 800 NTU	800	Hach	A1103	4/1/2023 (JM 9/22/22)	
Turbidity - 10 NTU	10.0	Hach	A1071	3/1/2023 (JM 9/22/22)	

	Manufacturer	Model	Serial Number	Calibrated Within Acceptance Criteria:
Water Quality Meter	InSitu	AquaTroll 400	850033	yes
Turbidity Meter	Hach	2100Q	21030D000600	yes
NIST Thermometer	Thomas Instruments	NIST Thermometer	221620127	Expiration Date: 6/24/2024

Explanations: NA (JM 9/22/22)

Prepared By: Emily Scheiben **Date:** 8/31/2022 **Signature:**

Review By: John Myer **Date:** 9/22/2022 **Signature:**

EQUIPMENT CALIBRATION FORM

Project Name: Arkwright Groundwater Sampling
Plant Name: Plant Arkwright
Plant Address: 5001 Arkwright Road, Macon, GA 31210
Project Number: 175569434
Goal/Task: Groundwater Sampling

Date: 8/31/2022
Page 1 **of** 1


Morning (AM) Calibration			Calibrated By: Bryan Pennell		
Weather:	Mostly sunny, 22 C				
Time (24hr) Start:	7:40	<i>Acceptance Criteria</i>	Time (24hr) Finish:	8:10	
Temperature (°C):			Barometric Pressure (mbar):		
<i>NIST Thermometer:</i>	19.2	+/- 4°C	<i>Local Weather Station:</i>	1014.6	
<i>Aqua TROLL 400:</i>	20.1		<i>Aqua TROLL 400:</i>	1004.3	
Turbidity (NTUs):	20 NTU Standard	100 NTU Standard	800 NTU Standard	10 NTU Verification	<i>Acceptance Criteria</i>
	20.4	101	812	9.90	+/- 3 %
	Calibration Value	Post Calibration	<i>Acceptance Criteria</i>	Cal Sol Temp (°C)	Notes:
Specific Conductance 4,490 (µS/cm)	4,490	4,491.50	+/- 1 %	20.1	NA
pH 7 (SU)	7.00	6.97	+/- .1 (SU)	18.9	NA
pH 4 (SU)	4.00	3.99	+/- .1 (SU)	20.1	NA
pH 10 (SU)	10.00	9.99	+/- .1 (SU)	19.3	NA
D.O. (%)	N/A	104.1	95-105 %	20.0	NA
ORP (mV)	235.9	235.7	+/- 10 mV	19.8	NA

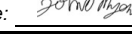
Afternoon (PM) Calibration Verification			Verification By: Bryan Pennell		
Weather:	Sunny, 32 C				
Time (24hr) Start:	18:50	<i>Acceptance Criteria</i>	Time (24hr) Finish:	19:32	
Temperature (°C):			Barometric Pressure (mbar):		
<i>NIST Thermometer:</i>	26.2	+/- 4°C	<i>Local Weather Station:</i>	1012.7	
<i>Aqua TROLL 400:</i>	25.1		<i>Aqua TROLL 400:</i>	1003.2	
Turbidity (NTUs):	20 NTU Standard	100 NTU Standard	800 NTU Standard	10 NTU Verification	<i>Acceptance Criteria</i>
	19.4	100	803	9.93	+/- 3 %
	Calibration Value	Verification	<i>Acceptance Criteria</i>	Cal Sol Temp (°C)	Notes:
Specific Conductance 4490 (µS/cm)	4,490	4,487.60	+/- 1 %	25.1	NA
pH 7 (SU)	7.00	7.01	+/- .1 (SU)	25.6	NA
pH 4 (SU)	4.00	4.01	+/- .1 (SU)	26.1	NA
pH 10 (SU)	10.00	10.00	+/- .1 (SU)	25.5	NA
D.O. (%)	N/A	100.4	95-105 %	25.5	NA
ORP (mV)	221.9	221.7	+/- 10 mV	25.5	NA

Calibration Standards Information					
Standard (@ 25°C)	Certified Value	Brand	Lot Number	Expiration Date	
AM pH 4 (SU)	4.00	AIR	21470032	4/1/2023	
AM pH 7 (SU)	7.00	AIR	21380102	4/1/2023	
AM pH 10 (SU)	10.00	AIR	20080056	4/1/2023	
PM pH 4 (SU)	4.00	AIR	21470032	4/1/2023	
PM pH 7 (SU)	7.00	AIR	21380102	4/1/2023	
PM pH 10 (SU)	10.00	AIR	20080056	4/1/2023	
Specific Conductance 4,490 (µS/cm)	4490	AIR	21470032	4/1/2023	
ORP (mV)	228.0	AIR	21140143	4/1/2023	
Turbidity - 20 NTU	20.0	Hach	A1168	5/1/2023	
Turbidity - 100 NTU	100	Hach	A1027	1/1/2023	
Turbidity - 800 NTU	800	Hach	A1103	4/1/2023	
Turbidity - 10 NTU	10.0	Hach	A1071	3/1/2023	

	Instruments			Calibrated Within Acceptance Criteria:
	Manufacturer	Model	Serial Number	
Water Quality Meter	InSitu	AquaTroll 400	728623	Y
Turbidity Meter	Hach	2100Q	20030C083517	Y
NIST Thermometer	Thomas Instruments	NIST Thermometer	221620123	Expiration Date: 6/28/2024

Explanations: NA

Prepared By: Bryan Pennell **Date:** 8/31/2022 **Signature:** 

Review By: John Myer **Date:** 9/22/2022 **Signature:** 

EQUIPMENT CALIBRATION FORM

Project Name: Arkwright Groundwater Sampling
Plant Name: Plant Arkwright
Plant Address: 5001 Arkwright Road, Macon, GA 31210
Project Number: 175569434
Goal/Task: Groundwater Sampling

Date: 9/1/2022
Page 1 **of** 1

Morning (AM) Calibration			Calibrated By: John Myer		
Weather:	Sunny 70 F				
Time (24hr) Start:	8:25	<i>Acceptance Criteria</i>	Time (24hr) Finish:	8:55	
Temperature (°C):			Barometric Pressure (mbar):		
<i>NIST Thermometer:</i>	21.7	+/- 4°C	<i>Local Weather Station:</i>	1016.3	
<i>Aqua TROLL 400:</i>	21.9		<i>Aqua TROLL 400:</i>	1005.3	
Turbidity (NTUs):	<i>20 NTU Standard</i>	<i>100 NTU Standard</i>	<i>800 NTU Standard</i>	<i>10 NTU Verification</i>	<i>Acceptance Criteria</i>
	20.0	101	798	10.3	+/- 3 %
	Calibration Value	Post Calibration	<i>Acceptance Criteria</i>	Cal Sol Temp (°C)	Notes:
Specific Conductance 4,490 (µS/cm)	4490	4484.3	+/- 1 %	22.1	NA
pH 7 (SU)	7.00	6.96	+/- .1 (SU)	22.3	NA
pH 4 (SU)	4.00	4.03	+/- .1 (SU)	22.5	NA
pH 10 (SU)	10.00	9.93	+/- .1 (SU)	22.5	NA
D.O. (%)	N/A	102.0	95-105 %	22.5	NA
ORP (mV)	232.5	231.4	+/- 10 mV	22.4	NA

Afternoon (PM) Calibration Verification			Verification By: John Myer		
Weather:	Clear 78 F				
Time (24hr) Start:	20:30	<i>Acceptance Criteria</i>	Time (24hr) Finish:	21:00	
Temperature (°C):			Barometric Pressure (mbar):		
<i>NIST Thermometer:</i>	23.3	+/- 4°C	<i>Local Weather Station:</i>	1014.9	
<i>Aqua TROLL 400:</i>	23.7		<i>Aqua TROLL 400:</i>	1005.3	
Turbidity (NTUs):	<i>20 NTU Standard</i>	<i>100 NTU Standard</i>	<i>800 NTU Standard</i>	<i>10 NTU Verification</i>	<i>Acceptance Criteria</i>
	20.1	102	797	10.3	+/- 3 %
	Calibration Value	Verification	<i>Acceptance Criteria</i>	Cal Sol Temp (°C)	Notes:
Specific Conductance 4490 (µS/cm)	4490	4505	+/- 1 %	24.8	NA
pH 7 (SU)	7.00	7.05	+/- .1 (SU)	25.1	NA
pH 4 (SU)	4.00	4.01	+/- .1 (SU)	24.8	NA
pH 10 (SU)	10.00	10.03	+/- .1 (SU)	25.4	NA
D.O. (%)	N/A	95.9	95-105 %	25.2	NA
ORP (mV)	228.0	226.1	+/- 10 mV	25.4	NA

Calibration Standards Information					
Standard (@ 25°C)	Certified Value	Brand	Lot Number	Expiration Date	
AM pH 4 (SU)	4.00	AIR	21470032	4/30/2023	
AM pH 7 (SU)	7.00	AIR	21380102	4/30/2023	
AM pH 10 (SU)	10.00	AIR	20080056	4/30/2023	
PM pH 4 (SU)	4.00	AIR	21470032	4/30/2023	
PM pH 7 (SU)	7.00	AIR	21380102	4/30/2023	
PM pH 10 (SU)	10.00	AIR	20080056	4/30/2023	
Specific Conductance 4,490 (µS/cm)	4490	AIR	21470032	4/30/2023	
ORP (mV)	228.0	AIR	21140143	4/30/2023	
Turbidity - 20 NTU	20.0	Hach	A1168	5/31/2023	
Turbidity - 100 NTU	100	Hach	A1027	1/31/2023	
Turbidity - 800 NTU	800	Hach	A1103	4/30/2023	
Turbidity - 10 NTU	10.0	Hach	A1071	3/31/2023	

	Instruments			Calibrated Within Acceptance Criteria:
	Manufacturer	Model	Serial Number	
Water Quality Meter	InSitu	AquaTroll 400	850724	
Turbidity Meter	Hach	2100Q	19010C073360	
NIST Thermometer	Thomas Instruments	NIST Thermometer	221620133	Expiration Date: 6/28/2024

Explanations: NA

Prepared By: John Myer **Date:** 9/1/2022 **Signature:** *John Myer*
Review By: John Myer **Date:** 9/22/2022 **Signature:** *John Myer*

EQUIPMENT CALIBRATION FORM

Project Name: Arkwright Groundwater Sampling
Plant Name: Plant Arkwright
Plant Address: 5001 Arkwright Road, Macon, GA 31210
Project Number: 175569434
Goal/Task: Groundwater Sampling

Date: 9/1/2022
Page 1 **of** 1

Morning (AM) Calibration			Calibrated By: Emily Scheiben		
Weather: Sunny, 23					
Time (24hr) Start:	8:15	Acceptance Criteria	Time (24hr) Finish:	8:55	
Temperature (°C):			Barometric Pressure (mbar):		
NIST Thermometer:	25.7	+/- 4°C	Local Weather Station:	1015.2	
Aqua TROLL 400:	24.7		Aqua TROLL 400:	1003.3	
Turbidity (NTUs):	20 NTU Standard	100 NTU Standard	800 NTU Standard	10 NTU Verification	Acceptance Criteria
	20.0	100	778	10.3	+/- 3 %
	Calibration Value	Post Calibration	Acceptance Criteria	Cal Sol Temp (°C)	Notes:
Specific Conductance 4,490 (µS/cm)	4490	4483.1	+/- 1 %	25.87	NA
pH 7 (SU)	7.00	6.98	+/- .1 (SU)	25.47	NA
pH 4 (SU)	4.00	4.04	+/- .1 (SU)	25.88	NA
pH 10 (SU)	10.00	9.97	+/- .1 (SU)	25.67	NA
D.O. (%)	N/A	97.0	95-105 %	25.87	NA
ORP (mV)	228.0	227.6	+/- 10 mV	25.96	NA

Afternoon (PM) Calibration Verification			Verification By: Emily Scheiben		
Weather: Overcast, 29					
Time (24hr) Start:	17:35	Acceptance Criteria	Time (24hr) Finish:	17:55	
Temperature (°C):			Barometric Pressure (mbar):		
NIST Thermometer:	24.4	+/- 4°C	Local Weather Station:	1015.1	
Aqua TROLL 400:	25.4		Aqua TROLL 400:	1003.8	
Turbidity (NTUs):	20 NTU Standard	100 NTU Standard	800 NTU Standard	10 NTU Verification	Acceptance Criteria
	19.8	100	783	10.3	+/- 3 %
	Calibration Value	Verification	Acceptance Criteria	Cal Sol Temp (°C)	Notes:
Specific Conductance 4490 (µS/cm)	4490	4472.4	+/- 1 %	25.19	NA
pH 7 (SU)	7.00	7.07	+/- .1 (SU)	25.31	NA
pH 4 (SU)	4.00	4.06	+/- .1 (SU)	26.12	NA
pH 10 (SU)	10.00	9.99	+/- .1 (SU)	25.26	NA
D.O. (%)	N/A	98.4	95-105 %	25.59	NA
ORP (mV)	228.0	229.8	+/- 10 mV	25.16	NA

Calibration Standards Information					
Standard (@ 25°C)	Certified Value	Brand	Lot Number	Expiration Date	
AM pH 4 (SU)	4.00	AIR	21470032	4/1/2023	
AM pH 7 (SU)	7.00	AIR	21380102	4/1/2023	
AM pH 10 (SU)	10.00	AIR	20080056	4/1/2023	
PM pH 4 (SU)	4.00	AIR	21470032	4/1/2023	
PM pH 7 (SU)	7.00	AIR	21380102	4/1/2023	
PM pH 10 (SU)	10.00	AIR	20080056	4/1/2023	
Specific Conductance 4,490 (µS/cm)	4490	AIR	21470032	4/1/2023	
ORP (mV)	228.0	AIR	22200085	8/1/2023	
Turbidity - 20 NTU	20.0	Hach	A1168	5/1/2023 (JM 9/22/22)	
Turbidity - 100 NTU	100	Hach	A1027	1/1/2023 (JM 9/22/22)	
Turbidity - 800 NTU	800	Hach	A1103	4/1/2023 (JM 9/22/22)	
Turbidity - 10 NTU	10.0	Hach	A1071	3/1/2023 (JM 9/22/22)	

	Manufacturer	Model	Serial Number	Calibrated Within Acceptance Criteria:
Water Quality Meter	InSitu	AquaTroll 400	850033	yes
Turbidity Meter	Hach	2100Q	21030D000600	yes
NIST Thermometer	Thomas Instruments	NIST Thermometer	221620127	Expiration Date: 6/24/2024

Explanations: NA (JM 9/22/22)

Prepared By: Emily Scheiben **Date:** 9/1/2022 **Signature:**

Review By: John Myer **Date:** 9/22/2022 **Signature:**

EQUIPMENT CALIBRATION FORM

Project Name: Arkwright Groundwater Sampling
Plant Name: Plant Arkwright
Plant Address: 5001 Arkwright Road, Macon, GA 31210
Project Number: 175569434
Goal/Task: Groundwater Sampling

Date: 9/1/2022
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Morning (AM) Calibration			Calibrated By: Bryan Pennell		
Weather:	Sunny, 21 C				
Time (24hr) Start:	8:10	<i>Acceptance Criteria</i>	Time (24hr) Finish:	8:40	
Temperature (°C):			Barometric Pressure (mbar):		
<i>NIST Thermometer:</i>	17.8	+/- 4°C	<i>Local Weather Station:</i>	1015.2	
<i>Aqua TROLL 400:</i>	17.9		<i>Aqua TROLL 400:</i>	1004.6	
Turbidity (NTUs):	<i>20 NTU Standard</i>	<i>100 NTU Standard</i>	<i>800 NTU Standard</i>	<i>10 NTU Verification</i>	<i>Acceptance Criteria</i>
	20.1	102	809	10.1	+/- 3 %
	Calibration Value	Post Calibration	<i>Acceptance Criteria</i>	Cal Sol Temp (°C)	Notes:
Specific Conductance 4,490 (µS/cm)	4,490	4,486.80	+/- 1 %	18.0	NA
pH 7 (SU)	7.00	7.01	+/- .1 (SU)	17.5	NA
pH 4 (SU)	4.00	3.98	+/- .1 (SU)	17.9	NA
pH 10 (SU)	10.00	10.02	+/- .1 (SU)	17.6	NA
D.O. (%)	N/A	104.2	95-105 %	18.7	NA
ORP (mV)	237.9	237.6	+/- 10 mV	18.3	NA

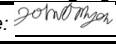
Afternoon (PM) Calibration Verification			Verification By: Bryan Pennell		
Weather:	Partly cloudy, 26 C				
Time (24hr) Start:	18:33	<i>Acceptance Criteria</i>	Time (24hr) Finish:	18:53	
Temperature (°C):			Barometric Pressure (mbar):		
<i>NIST Thermometer:</i>	22.2	+/- 4°C	<i>Local Weather Station:</i>	1014.8	
<i>Aqua TROLL 400:</i>	21.4		<i>Aqua TROLL 400:</i>	1005.2	
Turbidity (NTUs):	<i>20 NTU Standard</i>	<i>100 NTU Standard</i>	<i>800 NTU Standard</i>	<i>10 NTU Verification</i>	<i>Acceptance Criteria</i>
	20.3	98.5	798	10.3	+/- 3 %
	Calibration Value	Verification	<i>Acceptance Criteria</i>	Cal Sol Temp (°C)	Notes:
Specific Conductance 4490 (µS/cm)	4,490	4451.1	+/- 1 %	21.4	NA
pH 7 (SU)	7.00	7.03	+/- .1 (SU)	22.3	NA
pH 4 (SU)	4.00	4.01	+/- .1 (SU)	21.2	NA
pH 10 (SU)	10.00	10.03	+/- .1 (SU)	22.3	NA
D.O. (%)	N/A	101.9	95-105 %	22.5	NA
ORP (mV)	229.2	229.3	+/- 10 mV	23.1	NA

Calibration Standards Information					
Standard (@ 25°C)	Certified Value	Brand	Lot Number	Expiration Date	
AM pH 4 (SU)	4.00	AIR	21470032	4/1/2023	
AM pH 7 (SU)	7.00	AIR	21380102	4/1/2023	
AM pH 10 (SU)	10.00	AIR	20080056	4/1/2023	
PM pH 4 (SU)	4.00	AIR	21470032	4/1/2023	
PM pH 7 (SU)	7.00	AIR	21380102	4/1/2023	
PM pH 10 (SU)	10.00	AIR	20080056	4/1/2023	
Specific Conductance 4,490 (µS/cm)	4490	AIR	21470032	4/1/2023	
ORP (mV)	228.0	AIR	21140143	4/1/2023	
Turbidity - 20 NTU	20.0	Hach	A1168	5/1/2023	
Turbidity - 100 NTU	100	Hach	A1027	1/1/2023	
Turbidity - 800 NTU	800	Hach	A1103	4/1/2023	
Turbidity - 10 NTU	10.0	Hach	A1071	3/1/2023	

	Instruments			Calibrated Within
	Manufacturer	Model	Serial Number	Acceptance Criteria:
<i>Water Quality Meter</i>	InSitu	AquaTroll 400	728623	Y
<i>Turbidity Meter</i>	Hach	2100Q	20030C083517	Y
<i>NIST Thermometer</i>	Thomas Instruments	NIST Thermometer	221620123	Expiration Date: 6/28/2024

Explanations: NA

Prepared By: Bryan Pennell **Date:** 9/1/2022 **Signature:** 

Review By: John Myer **Date:** 9/22/2022 **Signature:** 

EQUIPMENT CALIBRATION FORM

Project Name: Arkwright Groundwater Sampling
Plant Name: Plant Arkwright
Plant Address: 5001 Arkwright Road, Macon, GA 31210
Project Number: 175569434
Goal/Task: Groundwater Sampling

Date: 9/2/2022
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Morning (AM) Calibration			Calibrated By: John Myer		
Weather:		Sunny 70 F			
Time (24hr) Start:	7:30	<i>Acceptance Criteria</i>	Time (24hr) Finish:	7:55	
Temperature (°C):			Barometric Pressure (mbar):		
<i>NIST Thermometer:</i>	21.6	+/- 4°C	<i>Local Weather Station:</i>	1017.7	
<i>Aqua TROLL 400:</i>	21.9		<i>Aqua TROLL 400:</i>	1007.8	
Turbidity (NTUs):	20 NTU Standard	100 NTU Standard	800 NTU Standard	10 NTU Verification	<i>Acceptance Criteria</i>
	20.4	102	814	10.3	+/- 3 %
	Calibration Value	Post Calibration	<i>Acceptance Criteria</i>	Cal Sol Temp (°C)	Notes:
Specific Conductance 4,490 (µS/cm)	4490	4471.5	+/- 1 %	22.4	NA
pH 7 (SU)	7.00	7.00	+/- .1 (SU)	22.9	NA
pH 4 (SU)	4.00	4.00	+/- .1 (SU)	22.9	NA
pH 10 (SU)	10.00	10.00	+/- .1 (SU)	22.9	NA
D.O. (%)	N/A	98.2	95-105 %	22.5	NA
ORP (mV)	232.4	230.8	+/- 10 mV	22.5	NA

Afternoon (PM) Calibration Verification			Verification By: John Myer		
Weather:		Sunny 85 F			
Time (24hr) Start:	16:35	<i>Acceptance Criteria</i>	Time (24hr) Finish:	16:55	
Temperature (°C):			Barometric Pressure (mbar):		
<i>NIST Thermometer:</i>	31.1	+/- 4°C	<i>Local Weather Station:</i>	1017.6	
<i>Aqua TROLL 400:</i>	30.0		<i>Aqua TROLL 400:</i>	1006.7	
Turbidity (NTUs):	20 NTU Standard	100 NTU Standard	800 NTU Standard	10 NTU Verification	<i>Acceptance Criteria</i>
	19.7	103	779	10.1	+/- 3 %
	Calibration Value	Verification	<i>Acceptance Criteria</i>	Cal Sol Temp (°C)	Notes:
Specific Conductance 4490 (µS/cm)	4490	4454	+/- 1 %	30.2	NA
pH 7 (SU)	7.00	6.98	+/- .1 (SU)	29.8	NA
pH 4 (SU)	4.00	3.97	+/- .1 (SU)	30.2	NA
pH 10 (SU)	10.00	9.92	+/- .1 (SU)	29.5	NA
D.O. (%)	N/A	98.2	95-105 %	29.9	NA
ORP (mV)	228.0	221.6	+/- 10 mV	29.4	NA

Calibration Standards Information					
Standard (@ 25°C)	Certified Value	Brand	Lot Number	Expiration Date	
AM pH 4 (SU)	4.00	AIR	21470032	4/30/2023	
AM pH 7 (SU)	7.00	AIR	21380102	4/30/2023	
AM pH 10 (SU)	10.00	AIR	20080056	4/30/2023	
PM pH 4 (SU)	4.00	AIR	21470032	4/30/2023	
PM pH 7 (SU)	7.00	AIR	21380102	4/30/2023	
PM pH 10 (SU)	10.00	AIR	20080056	4/30/2023	
Specific Conductance 4,490 (µS/cm)	4490	AIR	21470032	4/30/2023	
ORP (mV)	228.0	AIR	21140143	4/30/2023	
Turbidity - 20 NTU	20.0	Hach	A1168	5/31/2023	
Turbidity - 100 NTU	100	Hach	A1027	1/31/2023	
Turbidity - 800 NTU	800	Hach	A1103	4/30/2023	
Turbidity - 10 NTU	10.0	Hach	A1071	3/31/2023	

	Instruments			Calibrated Within Acceptance Criteria:
	Manufacturer	Model	Serial Number	
Water Quality Meter	InSitu	AquaTroll 400	850724	
Turbidity Meter	Hach	2100Q	19010C073360	
NIST Thermometer	Thomas Instruments	NIST Thermometer	221620133	Expiration Date: 6/28/2024

Explanations: NA

Prepared By: John Myer **Date:** 9/2/2022 **Signature:** *John Myer*
Review By: John Myer **Date:** 9/22/2022 **Signature:** *John Myer*

EQUIPMENT CALIBRATION FORM

Project Name: Arkwright Groundwater Sampling
Plant Name: Plant Arkwright
Plant Address: 5001 Arkwright Road, Macon, GA 31210
Project Number: 175569434
Goal/Task: Groundwater Sampling

Date: 9/2/2022
Page 1 **of** 1

Morning (AM) Calibration			Calibrated By: Emily Scheiben		
Weather:	Clear, 23 C				
Time (24hr) Start:	7:20	<i>Acceptance Criteria</i>	Time (24hr) Finish:	7:40	
Temperature (°C):			Barometric Pressure (mbar):		
<i>NIST Thermometer:</i>	24.4	+/- 4°C	<i>Local Weather Station:</i>	1017.7	
<i>Aqua TROLL 400:</i>	23.5		<i>Aqua TROLL 400:</i>	1006.2	
Turbidity (NTUs):	<i>20 NTU Standard</i>	<i>100 NTU Standard</i>	<i>800 NTU Standard</i>	<i>10 NTU Verification</i>	<i>Acceptance Criteria</i>
	20.4	98.3	787	10.2	+/- 3 %
	Calibration Value	Post Calibration	<i>Acceptance Criteria</i>	Cal Sol Temp (°C)	Notes:
Specific Conductance 4,490 (µS/cm)	4490	4496.4	+/- 1 %	23.4	NA
pH 7 (SU)	7.00	6.99	+/- .1 (SU)	23.4	NA
pH 4 (SU)	4.00	4.02	+/- .1 (SU)	23.5	NA
pH 10 (SU)	10.00	10.00	+/- .1 (SU)	23.5	NA
D.O. (%)	N/A	100.1	95-105 %	23.4	NA
ORP (mV)	228.0	227.7	+/- 10 mV	23.7	NA

Afternoon (PM) Calibration Verification			Verification By: Emily Scheiben		
Weather:	Overcast, 26 C				
Time (24hr) Start:	13:40	<i>Acceptance Criteria</i>	Time (24hr) Finish:	13:55	
Temperature (°C):			Barometric Pressure (mbar):		
<i>NIST Thermometer:</i>	26.1	+/- 4°C	<i>Local Weather Station:</i>	1018.9	
<i>Aqua TROLL 400:</i>	26.3		<i>Aqua TROLL 400:</i>	1006.3	
Turbidity (NTUs):	<i>20 NTU Standard</i>	<i>100 NTU Standard</i>	<i>800 NTU Standard</i>	<i>10 NTU Verification</i>	<i>Acceptance Criteria</i>
	20.6	99.5	803	10.3	+/- 3 %
	Calibration Value	Verification	<i>Acceptance Criteria</i>	Cal Sol Temp (°C)	Notes:
Specific Conductance 4490 (µS/cm)	4490	4464.1	+/- 1 %	27.3	NA
pH 7 (SU)	7.00	7.02	+/- .1 (SU)	26.6	NA
pH 4 (SU)	4.00	4.04	+/- .1 (SU)	27.1	NA
pH 10 (SU)	10.00	9.93	+/- .1 (SU)	26.4	NA
D.O. (%)	N/A	101.0	95-105 %	27.6	NA
ORP (mV)	228.0	225.8	+/- 10 mV	27.6	NA

Calibration Standards Information					
Standard (@ 25°C)	Certified Value	Brand	Lot Number	Expiration Date	
AM pH 4 (SU)	4.00	AIR	21470032	4/1/2023	
AM pH 7 (SU)	7.00	AIR	21380102	4/1/2023	
AM pH 10 (SU)	10.00	AIR	20080056	4/1/2023	
PM pH 4 (SU)	4.00	AIR	21470032	4/1/2023	
PM pH 7 (SU)	7.00	AIR	21380102	4/1/2023	
PM pH 10 (SU)	10.00	AIR	20080056	4/1/2023	
Specific Conductance 4,490 (µS/cm)	4490	AIR	21470032	4/1/2023	
ORP (mV)	228.0	AIR	22200085	8/1/2023	
Turbidity - 20 NTU	20.0	Hach	A1168	5/1/2023 (JM 9/22/22)	
Turbidity - 100 NTU	100	Hach	A1027	1/31/2023 (JM 9/22/22)	
Turbidity - 800 NTU	800	Hach	A1103	4/1/2023 (JM 9/22/22)	
Turbidity - 10 NTU	10.0	Hach	A1071	3/1/2023 (JM 9/22/22)	

	Instruments			Calibrated Within Acceptance Criteria:
	Manufacturer	Model	Serial Number	
Water Quality Meter	InSitu	AquaTroll 400	850033	yes
Turbidity Meter	Hach	2100Q	21030D000600	yes
NIST Thermometer	Thomas Instruments	NIST Thermometer	221620127	Expiration Date: 6/24/2024

Explanations: NA (JM 9/22/22)

Prepared By: Emily Scheiben **Date:** 9/2/2022 **Signature:**

Review By: John Myer **Date:** 9/22/2022 **Signature:**

EQUIPMENT CALIBRATION FORM

Project Name: Arkwright Groundwater Sampling
Plant Name: Plant Arkwright
Plant Address: 5001 Arkwright Road, Macon, GA 31210
Project Number: 175569434
Goal/Task: Groundwater Sampling

Date: 9/2/2022
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Morning (AM) Calibration			Calibrated By: Bryan Pennell		
Weather:		Mostly cloudy, 21 C			
Time (24hr) Start:	7:23	<i>Acceptance Criteria</i>	Time (24hr) Finish:	7:49	
Temperature (°C):			Barometric Pressure (mbar):		
<i>NIST Thermometer:</i>	16.5	+/- 4°C	<i>Local Weather Station:</i>	1017.7	
<i>Aqua TROLL 400:</i>	17.5		<i>Aqua TROLL 400:</i>	1007.1	
Turbidity (NTUs):	20 NTU Standard	100 NTU Standard	800 NTU Standard	10 NTU Verification	<i>Acceptance Criteria</i>
	20.3	102	790	10.2	+/- 3 %
	Calibration Value	Post Calibration	<i>Acceptance Criteria</i>	Cal Sol Temp (°C)	Notes:
Specific Conductance 4,490 (µS/cm)	4,490	4,492.21	+/- 1 %	17.4	NA
pH 7 (SU)	7.00	6.97	+/- .1 (SU)	16.1	NA
pH 4 (SU)	4.00	4.00	+/- .1 (SU)	17.5	NA
pH 10 (SU)	10.00	10.03	+/- .1 (SU)	16.6	NA
D.O. (%)	N/A	103.4	95-105 %	17.8	NA
ORP (mV)	239.1	238.7	+/- 10 mV	17.3	NA

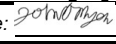
Afternoon (PM) Calibration Verification			Verification By: Bryan Pennell		
Weather:		Cloudy, 29 C			
Time (24hr) Start:	14:41	<i>Acceptance Criteria</i>	Time (24hr) Finish:	15:21	
Temperature (°C):			Barometric Pressure (mbar):		
<i>NIST Thermometer:</i>	23.4	+/- 4°C	<i>Local Weather Station:</i>	1018.7	
<i>Aqua TROLL 400:</i>	25.4		<i>Aqua TROLL 400:</i>	1006.9	
Turbidity (NTUs):	20 NTU Standard	100 NTU Standard	800 NTU Standard	10 NTU Verification	<i>Acceptance Criteria</i>
	20.1	98.5	782	9.98	+/- 3 %
	Calibration Value	Verification	<i>Acceptance Criteria</i>	Cal Sol Temp (°C)	Notes:
Specific Conductance 4490 (µS/cm)	4,490	4471.2	+/- 1 %	27.5	NA
pH 7 (SU)	7.00	6.99	+/- .1 (SU)	26.2	NA
pH 4 (SU)	4.00	4.03	+/- .1 (SU)	26.0	NA
pH 10 (SU)	10.00	10.00	+/- .1 (SU)	25.6	NA
D.O. (%)	N/A	103.3	95-105 %	26.2	NA
ORP (mV)	217.8	217.2	+/- 10 mV	27.2	NA

Calibration Standards Information					
Standard (@ 25°C)	Certified Value	Brand	Lot Number	Expiration Date	
AM pH 4 (SU)	4.00	AIR	21470032	4/1/2023	
AM pH 7 (SU)	7.00	AIR	21380102	4/1/2023	
AM pH 10 (SU)	10.00	AIR	20080056	4/1/2023	
PM pH 4 (SU)	4.00	AIR	21470032	4/1/2023	
PM pH 7 (SU)	7.00	AIR	21380102	4/1/2023	
PM pH 10 (SU)	10.00	AIR	20080056	4/1/2023	
Specific Conductance 4,490 (µS/cm)	4490	AIR	21470032	4/1/2023	
ORP (mV)	228.0	AIR	21140143	4/1/2023	
Turbidity - 20 NTU	20.0	Hach	A1168	5/1/2023	
Turbidity - 100 NTU	100	Hach	A1027	1/1/2023	
Turbidity - 800 NTU	800	Hach	A1103	4/1/2023	
Turbidity - 10 NTU	10.0	Hach	A1071	3/1/2023	

	Instruments			Calibrated Within Acceptance Criteria:
	Manufacturer	Model	Serial Number	
Water Quality Meter	InSitu	AquaTroll 400	728623	Y
Turbidity Meter	Hach	2100Q	20030C083517	Y
NIST Thermometer	Thomas Instruments	NIST Thermometer	221620123	Expiration Date: 6/28/2024

Explanations: NA

Prepared By: Bryan Pennell **Date:** 9/1/2022 **Signature:** 

Review By: John Myer **Date:** 9/22/2022 **Signature:** 

EQUIPMENT CALIBRATION FORM

Project Name: Arkwright Groundwater Sampling
Plant Name: Plant Arkwright
Plant Address: 5001 Arkwright Road, Macon, GA 31210
Project Number: 175569434
Goal/Task: Groundwater Sampling

Date: 9/6/2022
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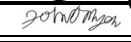
Morning (AM) Calibration			Calibrated By: Emily Scheiben		
Weather: Sunny			Time (24hr) Finish: 12:05		
Time (24hr) Start:	11:30	Acceptance Criteria	Barometric Pressure (mbar):		
Temperature (°C):			Local Weather Station:	1018.1	
NIST Thermometer:	25.6	+/- 4°C	Aqua TROLL 400:	1005.8	
Aqua TROLL 400:	25.4		800 NTU Standard	10 NTU Verification	Acceptance Criteria
Turbidity (NTUs):	20 NTU Standard	100 NTU Standard	797	10.3	+/- 3 %
	20.2	98.6			
	Calibration Value	Post Calibration	Acceptance Criteria	Cal Sol Temp (°C)	Notes:
Specific Conductance 4,490 (µS/cm)	4490	4510	+/- 1 %	25.4	NA
pH 7 (SU)	7.00	6.98	+/- .1 (SU)	25.6	NA
pH 4 (SU)	4.00	4.00	+/- .1 (SU)	25.4	NA
pH 10 (SU)	10.00	9.99	+/- .1 (SU)	25.4	NA
D.O. (%)	N/A	99.1	95-105 %	26.7	NA
ORP (mV)	228.0	227.5	+/- 10 mV	26.0	NA

Afternoon (PM) Calibration Verification			Verification By: Emily Scheiben		
Weather: partly cloudy			Time (24hr) Finish: 19:30		
Time (24hr) Start:	19:00	Acceptance Criteria	Barometric Pressure (mbar):		
Temperature (°C):			Local Weather Station:	1015.5	
NIST Thermometer:	29.0	+/- 4°C	Aqua TROLL 400:	1004.8	
Aqua TROLL 400:	29.3		800 NTU Standard	10 NTU Verification	Acceptance Criteria
Turbidity (NTUs):	20 NTU Standard	100 NTU Standard	788	10.2	+/- 3 %
	20.6	99.8			
	Calibration Value	Verification	Acceptance Criteria	Cal Sol Temp (°C)	Notes:
Specific Conductance 4490 (µS/cm)	4490	4522.8	+/- 1 %	29.3	NA
pH 7 (SU)	7.00	7.03	+/- .1 (SU)	29.2	NA
pH 4 (SU)	4.00	4.04	+/- .1 (SU)	29.3	NA
pH 10 (SU)	10.00	9.98	+/- .1 (SU)	29.0	NA
D.O. (%)	N/A	100.3	95-105 %	28.9	NA
ORP (mV)	228.0	219.8	+/- 10 mV	29.1	NA

Calibration Standards Information					
Standard (@ 25°C)	Certified Value	Brand	Lot Number	Expiration Date	
AM pH 4 (SU)	4.00	AIR	21470032	4/1/2023	
AM pH 7 (SU)	7.00	AIR	21380102	4/1/2023	
AM pH 10 (SU)	10.00	AIR	20080056	4/1/2023	
PM pH 4 (SU)	4.00	AIR	21470032	4/1/2023	
PM pH 7 (SU)	7.00	AIR	21380102	4/1/2023	
PM pH 10 (SU)	10.00	AIR	20080056	4/1/2023	
Specific Conductance 4,490 (µS/cm)	4490	AIR	21470032	4/1/2023	
ORP (mV)	228.0	AIR	22200085	8/1/2023	
Turbidity - 20 NTU	20.0	Hach	A1168	5/1/2023 (JM 9/22/22)	
Turbidity - 100 NTU	100	Hach	A1027	1/1/2023 (JM 9/22/22)	
Turbidity - 800 NTU	800	Hach	A1103	4/1/2023 (JM 9/22/22)	
Turbidity - 10 NTU	10.0	Hach	A1071	3/1/2023 (JM 9/22/22)	

	Manufacturer	Instruments Model	Serial Number	Calibrated Within Acceptance Criteria:
Water Quality Meter	InSitu	AquaTroll 400	850033	yes
Turbidity Meter	Hach	2100Q	19010C073360	yes
NIST Thermometer	Thomas Instruments	NIST Thermometer	221620127	Expiration Date: 6/24/2024

Explanations: NA (JM 9/22/2022)

Prepared By: Emily Scheiben **Date:** 9/6/2022 **Signature:** 
Review By: John Myer **Date:** 9/22/2022 **Signature:** 

EQUIPMENT CALIBRATION FORM

Project Name: Arkwright Groundwater Sampling
Plant Name: Plant Arkwright
Plant Address: 5001 Arkwright Road, Macon, GA 31210
Project Number: 175569434
Goal/Task: Groundwater Sampling

Date: 9/7/2022
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Morning (AM) Calibration			Calibrated By: John Myer		
Weather:	Overcast 73 F				
Time (24hr) Start:	7:40	<i>Acceptance Criteria</i>	Time (24hr) Finish:	8:05	
Temperature (°C):			Barometric Pressure (mbar):		
<i>NIST Thermometer:</i>	22.1	+/- 4°C	<i>Local Weather Station:</i>	1015.2	
<i>Aqua TROLL 400:</i>	21.1		<i>Aqua TROLL 400:</i>	1004.2	
Turbidity (NTUs):	<i>20 NTU Standard</i>	<i>100 NTU Standard</i>	<i>800 NTU Standard</i>	<i>10 NTU Verification</i>	<i>Acceptance Criteria</i>
	19.8	97.3	821	9.74	+/- 3 %
	Calibration Value	Post Calibration	<i>Acceptance Criteria</i>	Cal Sol Temp (°C)	Notes:
Specific Conductance 4,490 (µS/cm)	4490	4490	+/- 1 %	21.4	NA
pH 7 (SU)	7.00	7.02	+/- .1 (SU)	21.3	NA
pH 4 (SU)	4.00	4.00	+/- .1 (SU)	21.5	NA
pH 10 (SU)	10.00	10.05	+/- .1 (SU)	21.4	NA
D.O. (%)	N/A	98.7	95-105 %	22.0	NA
ORP (mV)	233.3	236.6	+/- 10 mV	21.7	NA

Afternoon (PM) Calibration Verification			Verification By: John Myer		
Weather:	Clear 78 F				
Time (24hr) Start:	22:00	<i>Acceptance Criteria</i>	Time (24hr) Finish:	22:35	
Temperature (°C):			Barometric Pressure (mbar):		
<i>NIST Thermometer:</i>	20.3	+/- 4°C	<i>Local Weather Station:</i>	1014.4	
<i>Aqua TROLL 400:</i>	18.9		<i>Aqua TROLL 400:</i>	999.9	
Turbidity (NTUs):	<i>20 NTU Standard</i>	<i>100 NTU Standard</i>	<i>800 NTU Standard</i>	<i>10 NTU Verification</i>	<i>Acceptance Criteria</i>
	19.9	103	800	10.3	+/- 3 %
	Calibration Value	Verification	<i>Acceptance Criteria</i>	Cal Sol Temp (°C)	Notes:
Specific Conductance 4490 (µS/cm)	4490	4508	+/- 1 %	20.1	NA
pH 7 (SU)	7.00	7.10	+/- .1 (SU)	20.7	NA
pH 4 (SU)	4.00	4.09	+/- .1 (SU)	20.4	NA
pH 10 (SU)	10.00	10.06	+/- .1 (SU)	20.8	NA
D.O. (%)	N/A	96.0	95-105 %	20.2	NA
ORP (mV)	228.0	231.2	+/- 10 mV	20.5	NA

Calibration Standards Information					
Standard (@ 25°C)	Certified Value	Brand	Lot Number	Expiration Date	
AM pH 4 (SU)	4.00	AIR	21470032	4/30/2023	
AM pH 7 (SU)	7.00	AIR	21380102	4/30/2023	
AM pH 10 (SU)	10.00	AIR	20080056	4/30/2023	
PM pH 4 (SU)	4.00	AIR	21470032	4/30/2023	
PM pH 7 (SU)	7.00	AIR	21380102	4/30/2023	
PM pH 10 (SU)	10.00	AIR	20080056	4/30/2023	
Specific Conductance 4,490 (µS/cm)	4490	AIR	21470032	4/30/2023	
ORP (mV)	228.0	AIR	21140143	4/30/2023	
Turbidity - 20 NTU	20.0	Hach	A2126	8/31/2023	
Turbidity - 100 NTU	100	Hach	A2026	4/30/2023	
Turbidity - 800 NTU	800	Hach	A2025	4/30/2023	
Turbidity - 10 NTU	10.0	Hach	A2026	4/30/2023	

	Instruments			Calibrated Within Acceptance Criteria:
	Manufacturer	Model	Serial Number	
Water Quality Meter	InSitu	AquaTroll 400	728623	
Turbidity Meter	Hach	2100Q	15030C039579	
NIST Thermometer	Thomas Instruments	NIST Thermometer	221620123	Expiration Date: 6/28/2024

Explanations: NA

Prepared By: John Myer **Date:** 9/7/2022 **Signature:** *John Myer*
Review By: John Myer **Date:** 9/22/2022 **Signature:** *John Myer*

EQUIPMENT CALIBRATION FORM

Project Name: Arkwright Groundwater Sampling
Plant Name: Plant Arkwright
Plant Address: 5001 Arkwright Road, Macon, GA 31210
Project Number: 175569434
Goal/Task: Groundwater Sampling

Date: 9/7/2022
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Morning (AM) Calibration			Calibrated By: Emily Scheiben		
Weather:	overcast				
Time (24hr) Start:	7:30	<i>Acceptance Criteria</i>	Time (24hr) Finish:	8:30	
Temperature (°C):			Barometric Pressure (mbar):		
<i>NIST Thermometer:</i>	24.5	+/- 4°C	<i>Local Weather Station:</i>	1014.7	
<i>Aqua TROLL 400:</i>	24.2		<i>Aqua TROLL 400:</i>	1002.7	
Turbidity (NTUs):	<i>20 NTU Standard</i>	<i>100 NTU Standard</i>	<i>800 NTU Standard</i>	<i>10 NTU Verification</i>	<i>Acceptance Criteria</i>
	19.5	98.6	786	9.89	+/- 3 %
	Calibration Value	Post Calibration	<i>Acceptance Criteria</i>	Cal Sol Temp (°C)	Notes:
Specific Conductance 4,490 (µS/cm)	4490	4496.7	+/- 1 %	24.2	NA
pH 7 (SU)	7.00	7.00	+/- .1 (SU)	24.3	NA
pH 4 (SU)	4.00	4.03	+/- .1 (SU)	24.2	NA
pH 10 (SU)	10.00	9.96	+/- .1 (SU)	24.3	NA
D.O. (%)	N/A	97.2	95-105 %	23.5	NA
ORP (mV)	228.0	230.2	+/- 10 mV	24.0	NA

Afternoon (PM) Calibration Verification			Verification By: Emily Scheiben		
Weather:	Partly cloudy				
Time (24hr) Start:	18:10	<i>Acceptance Criteria</i>	Time (24hr) Finish:	18:40	
Temperature (°C):			Barometric Pressure (mbar):		
<i>NIST Thermometer:</i>	29.1	+/- 4°C	<i>Local Weather Station:</i>	1010.2	
<i>Aqua TROLL 400:</i>	29.3		<i>Aqua TROLL 400:</i>	997.9	
Turbidity (NTUs):	<i>20 NTU Standard</i>	<i>100 NTU Standard</i>	<i>800 NTU Standard</i>	<i>10 NTU Verification</i>	<i>Acceptance Criteria</i>
	20.0	101	782	9.99	+/- 3 %
	Calibration Value	Verification	<i>Acceptance Criteria</i>	Cal Sol Temp (°C)	Notes:
Specific Conductance 4490 (µS/cm)	4490	4475.6	+/- 1 %	30.8	NA
pH 7 (SU)	7.00	7.03	+/- .1 (SU)	29.3	NA
pH 4 (SU)	4.00	4.04	+/- .1 (SU)	30.8	NA
pH 10 (SU)	10.00	9.99	+/- .1 (SU)	28.7	NA
D.O. (%)	N/A	95.5	95-105 %	29.3	NA
ORP (mV)	228.0	219.0	+/- 10 mV	29.2	NA

Calibration Standards Information					
Standard (@ 25°C)	Certified Value	Brand	Lot Number	Expiration Date	
AM pH 4 (SU)	4.00	AIR	21470032	4/1/2023	
AM pH 7 (SU)	7.00	AIR	21380102	4/1/2023	
AM pH 10 (SU)	10.00	AIR	20080056	4/1/2023	
PM pH 4 (SU)	4.00	AIR	21470032	4/1/2023	
PM pH 7 (SU)	7.00	AIR	21380102	4/1/2023	
PM pH 10 (SU)	10.00	AIR	20080056	4/1/2023	
Specific Conductance 4,490 (µS/cm)	4490	AIR	21470032	4/1/2023	
ORP (mV)	228.0	AIR	22200085	8/1/2023	
Turbidity - 20 NTU	20.0	Hach	A1168	5/1/2023 (JM 9/22/22)	
Turbidity - 100 NTU	100	Hach	A1027	1/1/2023 (JM 9/22/22)	
Turbidity - 800 NTU	800	Hach	A1103	4/1/2023 (JM 9/22/22)	
Turbidity - 10 NTU	10.0	Hach	A1071	3/1/2023 (JM 9/22/22)	

	Manufacturer	Model	Serial Number	Calibrated Within Acceptance Criteria:
Water Quality Meter	InSitu	AquaTroll 400	850033	yes
Turbidity Meter	Hach	2100Q	19010C073360	yes
NIST Thermometer	Thomas Instruments	NIST Thermometer	221620127	Expiration Date: 6/24/2024

Explanations: NA (JM 9/22/22)

Prepared By: Emily Scheiben **Date:** 9/7/2022 **Signature:**

Review By: John Myer **Date:** 9/22/2022 **Signature:**

EQUIPMENT CALIBRATION FORM

Project Name: Arkwright Groundwater Sampling
Plant Name: Plant Arkwright
Plant Address: 5001 Arkwright Road, Macon, GA 31210
Project Number: 175569434
Goal/Task: Groundwater Sampling

Date: 9/7/2022
Page 1 **of** 1

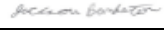
Morning (AM) Calibration			Calibrated By: Jackson Bankston		
Weather:	Overcast 75 F				
Time (24hr) Start:	11:30	<i>Acceptance Criteria</i>	Time (24hr) Finish:	12:00	
Temperature (°C):			Barometric Pressure (mbar):		
<i>NIST Thermometer:</i>	25.5	+/- 4°C	<i>Local Weather Station:</i>	1017.7	
<i>Aqua TROLL 400:</i>	26.2		<i>Aqua TROLL 400:</i>	1007.8	
Turbidity (NTUs):	<i>20 NTU Standard</i>	<i>100 NTU Standard</i>	<i>800 NTU Standard</i>	<i>10 NTU Verification</i>	<i>Acceptance Criteria</i>
	20.3	100	792	10.2	+/- 3 %
	Calibration Value	Post Calibration	<i>Acceptance Criteria</i>	Cal Sol Temp (°C)	Notes:
Specific Conductance 4,490 (µS/cm)	4490	4490	+/- 1 %	21.4	NA
pH 7 (SU)	7.00	7.01	+/- .1 (SU)	25.8	NA
pH 4 (SU)	4.00	4.00	+/- .1 (SU)	25.6	NA
pH 10 (SU)	10.00	10.00	+/- .1 (SU)	25.7	NA
D.O. (%)	N/A	104.2	95-105 %	28.1	NA
ORP (mV)	228.0	228.2	+/- 10 mV	26.0	NA


Afternoon (PM) Calibration Verification			Verification By: Jackson Bankston		
Weather:	Sunny 85 F				
Time (24hr) Start:	18:45	<i>Acceptance Criteria</i>	Time (24hr) Finish:	19:00	
Temperature (°C):			Barometric Pressure (mbar):		
<i>NIST Thermometer:</i>	25.4	+/- 4°C	<i>Local Weather Station:</i>	1017.6	
<i>Aqua TROLL 400:</i>	25.6		<i>Aqua TROLL 400:</i>	1006.7	
Turbidity (NTUs):	<i>20 NTU Standard</i>	<i>100 NTU Standard</i>	<i>800 NTU Standard</i>	<i>10 NTU Verification</i>	<i>Acceptance Criteria</i>
	20.6	100	812	10.2	+/- 3 %
	Calibration Value	Verification	<i>Acceptance Criteria</i>	Cal Sol Temp (°C)	Notes:
Specific Conductance 4490 (µS/cm)	4490	4470	+/- 1 %	25.2	NA
pH 7 (SU)	7.00	7.00	+/- .1 (SU)	24.9	NA
pH 4 (SU)	4.00	4.01	+/- .1 (SU)	25.2	NA
pH 10 (SU)	10.00	10.00	+/- .1 (SU)	25.2	NA
D.O. (%)	N/A	102.1	95-105 %	24.9	NA
ORP (mV)	228.0	226.9	+/- 10 mV	25.4	NA

Calibration Standards Information					
Standard (@ 25°C)	Certified Value	Brand	Lot Number	Expiration Date	
AM pH 4 (SU)	4.00	AIR	21470032	4/30/2023	
AM pH 7 (SU)	7.00	AIR	21380102	4/30/2023	
AM pH 10 (SU)	10.00	AIR	20080056	4/30/2023	
PM pH 4 (SU)	4.00	AIR	21470032	4/30/2023	
PM pH 7 (SU)	7.00	AIR	21380102	4/30/2023	
PM pH 10 (SU)	10.00	AIR	20080056	4/30/2023	
Specific Conductance 4,490 (µS/cm)	4490	AIR	21470032	4/30/2023	
ORP (mV)	228.0	AIR	21140143	4/30/2023	
Turbidity - 20 NTU	20.0	Hach	A1168	5/31/2023	
Turbidity - 100 NTU	100	Hach	A1027	1/31/2023	
Turbidity - 800 NTU	800	Hach	A1103	4/30/2023	
Turbidity - 10 NTU	10.0	Hach	A1071	3/31/2023	

	Instruments			Calibrated Within Acceptance Criteria:
	Manufacturer	Model	Serial Number	
Water Quality Meter	InSitu	AquaTroll 400	850724	
Turbidity Meter	Hach	2100Q	19010C073360	
NIST Thermometer	Thomas Instruments	NIST Thermometer	221620133	Expiration Date: 6/28/2024

Explanations: NA

Prepared By: Jackson Bankston **Date:** 9/7/2022 **Signature:** 

Review By: Edgar Smith **Date:** 9/15/2022 **Signature:** 

EQUIPMENT CALIBRATION FORM

Project Name: Arkwright Groundwater Sampling
Plant Name: Plant Arkwright
Plant Address: 5001 Arkwright Road, Macon, GA 31210
Project Number: 175569434
Goal/Task: Groundwater Sampling

Date: 9/8/2022
Page 1 **of** 1

Morning (AM) Calibration			Calibrated By: John Myer		
Weather:	Sunny 69 F				
Time (24hr) Start:	8:25	<i>Acceptance Criteria</i>	Time (24hr) Finish:	8:45	
Temperature (°C):			Barometric Pressure (mbar):		
<i>NIST Thermometer:</i>	20.4	+/- 4°C	<i>Local Weather Station:</i>	1009.8	
<i>Aqua TROLL 400:</i>	20.6		<i>Aqua TROLL 400:</i>	999.6	
Turbidity (NTUs):	<i>20 NTU Standard</i>	<i>100 NTU Standard</i>	<i>800 NTU Standard</i>	<i>10 NTU Verification</i>	<i>Acceptance Criteria</i>
	20.1	100	808	10.0	+/- 3 %
	Calibration Value	Post Calibration	<i>Acceptance Criteria</i>	Cal Sol Temp (°C)	Notes:
Specific Conductance 4,490 (µS/cm)	4490	4480	+/- 1 %	20.8	NA
pH 7 (SU)	7.00	7.02	+/- .1 (SU)	21.0	NA
pH 4 (SU)	4.00	4.00	+/- .1 (SU)	21.2	NA
pH 10 (SU)	10.00	10.06	+/- .1 (SU)	21.1	NA
D.O. (%)	N/A	100.6	95-105 %	21.1	NA
ORP (mV)	234.3	232.8	+/- 10 mV	21.0	NA

Afternoon (PM) Calibration Verification			Verification By: John Myer		
Weather:	Overcast 83 F				
Time (24hr) Start:	14:00	<i>Acceptance Criteria</i>	Time (24hr) Finish:	14:25	
Temperature (°C):			Barometric Pressure (mbar):		
<i>NIST Thermometer:</i>	34.5	+/- 4°C	<i>Local Weather Station:</i>	1009.8	
<i>Aqua TROLL 400:</i>	36.7		<i>Aqua TROLL 400:</i>	998.4	
Turbidity (NTUs):	<i>20 NTU Standard</i>	<i>100 NTU Standard</i>	<i>800 NTU Standard</i>	<i>10 NTU Verification</i>	<i>Acceptance Criteria</i>
	20.1	99.5	782	10.0	+/- 3 %
	Calibration Value	Verification	<i>Acceptance Criteria</i>	Cal Sol Temp (°C)	Notes:
Specific Conductance 4490 (µS/cm)	4490	4458	+/- 1 %	34.0	NA
pH 7 (SU)	7.00	7.05	+/- .1 (SU)	33.1	NA
pH 4 (SU)	4.00	4.09	+/- .1 (SU)	34.1	NA
pH 10 (SU)	10.00	10.02	+/- .1 (SU)	32.9	NA
D.O. (%)	N/A	98.7	95-105 %	32.1	NA
ORP (mV)	228.0	232.4	+/- 10 mV	33.4	NA

Calibration Standards Information					
Standard (@ 25°C)	Certified Value	Brand	Lot Number	Expiration Date	
AM pH 4 (SU)	4.00	AIR	21470032	4/30/2023	
AM pH 7 (SU)	7.00	AIR	21380102	4/30/2023	
AM pH 10 (SU)	10.00	AIR	20080056	4/30/2023	
PM pH 4 (SU)	4.00	AIR	21470032	4/30/2023	
PM pH 7 (SU)	7.00	AIR	21380102	4/30/2023	
PM pH 10 (SU)	10.00	AIR	20080056	4/30/2023	
Specific Conductance 4,490 (µS/cm)	4490	AIR	21470032	4/30/2023	
ORP (mV)	228.0	AIR	21140143	4/30/2023	
Turbidity - 20 NTU	20.0	Hach	A1168	5/31/2023	
Turbidity - 100 NTU	100	Hach	A1027	1/31/2023	
Turbidity - 800 NTU	800	Hach	A1103	4/30/2023	
Turbidity - 10 NTU	10.0	Hach	A1071	3/31/2023	

	Manufacturer	Instruments Model	Serial Number	Calibrated Within Acceptance Criteria:
Water Quality Meter	InSitu	AquaTroll 400	728623	
Turbidity Meter	Hach	2100Q	20030C083517	
NIST Thermometer	Thomas Instruments	NIST Thermometer	221620123	Expiration Date: 6/28/2024

Explanations: NA

Prepared By: John Myer **Date:** 9/8/2022 **Signature:** *John Myer*
Review By: John Myer **Date:** 9/22/2022 **Signature:** *John Myer*

EQUIPMENT CALIBRATION FORM

Project Name: Arkwright Groundwater Sampling
Plant Name: Plant Arkwright
Plant Address: 5001 Arkwright Road, Macon, GA 31210
Project Number: 175569434
Goal/Task: Groundwater Sampling

Date: 10/20/2022
Page 1 **of** 1

Morning (AM) Calibration			Calibrated By: Jackson Bankston		
Weather:	Clear 36 F				
Time (24hr) Start:	8:15	<i>Acceptance Criteria</i>	Time (24hr) Finish:	9:15	
Temperature (°C):			Barometric Pressure (mbar):		
<i>NIST Thermometer:</i>	2.6	+/- 4°C	<i>Local Weather Station:</i>	1020.7	
<i>Aqua TROLL 400:</i>	5.3		<i>Aqua TROLL 400:</i>	1009.9	
Turbidity (NTUs):	20 NTU Standard	100 NTU Standard	800 NTU Standard	10 NTU Verification	<i>Acceptance Criteria</i>
	20.6	99.4	815	9.91	+/- 3 %
	Calibration Value	Post Calibration	<i>Acceptance Criteria</i>	Cal Sol Temp (°C)	Notes:
Specific Conductance 4,490 (µS/cm)	4490	4492	+/- 1 %	10.0	NA
pH 7 (SU)	7.00	7.02	+/- .1 (SU)	9.7	NA
pH 4 (SU)	4.00	4.06	+/- .1 (SU)	9.2	NA
pH 10 (SU)	10.00	10.10	+/- .1 (SU)	9.7	NA
D.O. (%)	N/A	97.3	95-105 %	4.8	NA
ORP (mV)	250.8	250.4	+/- 10 mV	8.6	NA

Afternoon (PM) Calibration Verification			Verification By: Jackson Bankston		
Weather:	Clear 73 F				
Time (24hr) Start:	13:21	<i>Acceptance Criteria</i>	Time (24hr) Finish:	14:00	
Temperature (°C):			Barometric Pressure (mbar):		
<i>NIST Thermometer:</i>	21.7	+/- 4°C	<i>Local Weather Station:</i>	0.6	
<i>Aqua TROLL 400:</i>	21.5		<i>Aqua TROLL 400:</i>	1008.2	
Turbidity (NTUs):	20 NTU Standard	100 NTU Standard	800 NTU Standard	10 NTU Verification	<i>Acceptance Criteria</i>
	20.0	100	784	10.0	+/- 3 %
	Calibration Value	Verification	<i>Acceptance Criteria</i>	Cal Sol Temp (°C)	Notes:
Specific Conductance 4490 (µS/cm)	4490	4207	+/- 1 %	15.7	NA
pH 7 (SU)	7.00	7.01	+/- .1 (SU)	15.5	NA
pH 4 (SU)	4.00	4.03	+/- .1 (SU)	15.7	NA
pH 10 (SU)	10.00	10.03	+/- .1 (SU)	14.2	NA
D.O. (%)	N/A	100.3	95-105 %	21.3	NA
ORP (mV)	250.8	247.8	+/- 10 mV	19.4	NA

Calibration Standards Information					
Standard (@ 25°C)	Certified Value	Brand	Lot Number	Expiration Date	
AM pH 4 (SU)	4.00	AIR	21470032	4/30/2023	
AM pH 7 (SU)	7.00	AIR	21380102	4/30/2023	
AM pH 10 (SU)	10.00	AIR	20080056	4/30/2023	
PM pH 4 (SU)	4.00	AIR	21470032	4/30/2023	
PM pH 7 (SU)	7.00	AIR	21380102	4/30/2023	
PM pH 10 (SU)	10.00	AIR	20080056	4/30/2023	
Specific Conductance 4,490 (µS/cm)	4490	AIR	21470032	4/30/2023	
ORP (mV)	228.0	AIR	21140143	4/30/2023	
Turbidity - 20 NTU	20.0	Hach	A1168	6/30/2023	
Turbidity - 100 NTU	100	Hach	A1027	1/31/2023	
Turbidity - 800 NTU	800	Hach	A1103	4/30/2023	
Turbidity - 10 NTU	10.0	Hach	A1071	3/31/2023	

	Instruments			Calibrated Within Acceptance Criteria:
	Manufacturer	Model	Serial Number	
Water Quality Meter	InSitu	AquaTroll 400	851413	
Turbidity Meter	Hach	2100Q	13110C029655	
NIST Thermometer	Thomas Instruments	NIST Thermometer	221620127	Expiration Date: 6/28/2024

Explanations: Specific Conductivity drifted out of calibration by EOD.

Prepared By: Jackson Bankston **Date:** 10/20/2022 **Signature:** *Jackson Bankston*
Review By: Edgar Smith **Date:** 12/12/2022 **Signature:** *Edgar Smith*

B.3 Groundwater & Surface Water Laboratory Analytical Reports





September 22, 2022

Joju Abraham
Georgia Power Company, Southern Company
241 Ralph McGill Blvd NE, Bin 10160
Atlanta, Georgia 30308

Re: Arkwright CCR Groundwater Compliance AP-3 and AP3
Work Orders: 591798 and 592011

Dear Joju Abraham:

GEL Laboratories, LLC (GEL) appreciates the opportunity to provide the enclosed analytical results for the sample(s) we received on September 01, 2022 and September 03, 2022. This revised data report has been prepared and reviewed in accordance with GEL's standard operating procedures. The data package is being revised to correct the reporting units for Metals. The data package is being revised to correct the reporting units for Metals.

Test results for NELAP or ISO 17025 accredited tests are verified to meet the requirements of those standards, with any exceptions noted. The results reported relate only to the items tested and to the sample as received by the laboratory. These results may not be reproduced except as full reports without approval by the laboratory. Copies of GEL's accreditations and certifications can be found on our website at www.gel.com.

Our policy is to provide high quality, personalized analytical services to enable you to meet your analytical needs on time every time. We trust that you will find everything in order and to your satisfaction. If you have any questions, please do not hesitate to call me at (843) 556-8171, ext. 4504.

Sincerely,

Erin Trent
Project Manager

Purchase Order: GPC82177-0002
Enclosures



GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 – (843) 556-8171 – www.gel.com

**Certificate of Analysis Report
for**

GPCC001 Georgia Power Company

Client SDG: 592011 GEL Work Order: 592011

The Qualifiers in this report are defined as follows:

- * A quality control analyte recovery is outside of specified acceptance criteria
- ** Analyte is a Tracer compound
- ** Analyte is a surrogate compound
- J See case narrative for an explanation
- J Value is estimated
- U Analyte was analyzed for, but not detected above the MDL, MDA, MDC or LOD.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the Certificate of Analysis.

The designation ND, if present, appears in the result column when the analyte concentration is not detected above the limit as defined in the 'U' qualifier above.

This data report has been prepared and reviewed in accordance with GEL Laboratories LLC standard operating procedures. Please direct any questions to your Project Manager, Erin Trent.

Reviewed by _____



GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 – (843) 556-8171 – www.gel.com

**Certificate of Analysis Report
for**

GPCC001 Georgia Power Company

Client SDG: 591798 GEL Work Order: 591798

The Qualifiers in this report are defined as follows:

- * A quality control analyte recovery is outside of specified acceptance criteria
- ** Analyte is a Tracer compound
- ** Analyte is a surrogate compound
- E %difference of sample and SD is >10%. Sample concentration must meet flagging criteria
- J See case narrative for an explanation
- J Value is estimated
- U Analyte was analyzed for, but not detected above the MDL, MDA, MDC or LOD.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the Certificate of Analysis.

The designation ND, if present, appears in the result column when the analyte concentration is not detected above the limit as defined in the 'U' qualifier above.

This data report has been prepared and reviewed in accordance with GEL Laboratories LLC standard operating procedures. Please direct any questions to your Project Manager, Erin Trent.



Reviewed by _____

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

Report Date: September 22, 2022

Company : Georgia Power Company, Southern Company
Address : 241 Ralph McGill Blvd NE, Bin 10160

Atlanta, Georgia 30308

Contact: Joju Abraham
Project: Arkwright CCR Groundwater Compliance AP-3 and AP3

Client Sample ID: EB-02	Project: GPCC00100
Sample ID: 592011001	Client ID: GPCC001
Matrix: WQ	
Collect Date: 02-SEP-22 07:55	
Receive Date: 03-SEP-22	
Collector: Client	

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Ion Chromatography												
EPA 300.0 Anions Liquid "As Received"												
Chloride	U	ND	0.0670	0.200	mg/L		1	HXC1	09/06/22	1303	2312949	1
Fluoride	U	ND	0.0330	0.100	mg/L		1					
Sulfate	U	ND	0.133	0.400	mg/L		1					
Mercury Analysis-CVAA												
7470 Cold Vapor Mercury, Liquid "As Received"												
Mercury	U	ND	0.0000670	0.000200	mg/L	1.00	1	JP2	09/08/22	1141	2313270	2
Metals Analysis-ICP-MS												
SW846 3005A/6020B "As Received"												
Antimony	U	ND	0.00100	0.00300	mg/L	1.00	1	PRB	09/14/22	0129	2312499	3
Arsenic	U	ND	0.00200	0.00500	mg/L	1.00	1					
Barium	U	ND	0.000670	0.00400	mg/L	1.00	1					
Beryllium	U	ND	0.000200	0.000500	mg/L	1.00	1					
Cadmium	U	ND	0.000300	0.00100	mg/L	1.00	1					
Chromium	U	ND	0.00300	0.0100	mg/L	1.00	1					
Cobalt	U	ND	0.000300	0.00100	mg/L	1.00	1					
Lead	U	ND	0.000500	0.00200	mg/L	1.00	1					
Lithium	U	ND	0.00300	0.0100	mg/L	1.00	1					
Molybdenum	J	0.000200	0.000200	0.00100	mg/L	1.00	1					
Selenium	U	ND	0.00150	0.00500	mg/L	1.00	1					
Silver	U	ND	0.000300	0.00100	mg/L	1.00	1					
Thallium	U	ND	0.000600	0.00200	mg/L	1.00	1					
Boron	U	ND	0.00520	0.0150	mg/L	1.00	1	PRB	09/14/22	1639	2312499	4
Calcium	U	ND	0.0800	0.200	mg/L	1.00	1					
Solids Analysis												
SM2540C Dissolved Solids "As Received"												
Total Dissolved Solids	U	ND	2.38	10.0	mg/L			CH6	09/08/22	1531	2313725	5

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
SW846 3005A	ICP-MS 3005A PREP	CD3	09/06/22	1640	2312498
SW846 7470A Prep	EPA 7470A Mercury Prep Liquid	RM4	09/07/22	1248	2313268

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

Report Date: September 22, 2022

Company : Georgia Power Company, Southern Company
Address : 241 Ralph McGill Blvd NE, Bin 10160

Atlanta, Georgia 30308

Contact: Joju Abraham

Project: Arkwright CCR Groundwater Compliance AP-3 and AP3

Client Sample ID: ARGWC-18	Project: GPCC00100
Sample ID: 592011002	Client ID: GPCC001
Matrix: WG	
Collect Date: 02-SEP-22 09:00	
Receive Date: 03-SEP-22	
Collector: Client	

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Field Data												
Client collected Field pH "As Received"												
Field pH		6.03			SU			EOS1	09/02/22	0900	2312821	1
Ion Chromatography												
EPA 300.0 Anions Liquid "As Received"												
Chloride		6.52	0.0670	0.200	mg/L	1		HXC1	09/06/22	1333	2312949	2
Fluoride		0.141	0.0330	0.100	mg/L	1						
Sulfate		198	2.66	8.00	mg/L	20		HXC1	09/06/22	2350	2312949	3
Mercury Analysis-CVAA												
7470 Cold Vapor Mercury, Liquid "As Received"												
Mercury	U	ND	0.0000670	0.000200	mg/L	1.00	1	JP2	09/08/22	1146	2313270	4
Metals Analysis-ICP-MS												
SW846 3005A/6020B "As Received"												
Aluminum		0.174	0.0193	0.0500	mg/L	1.00	1	PRB	09/14/22	0133	2312499	5
Antimony	U	ND	0.00100	0.00300	mg/L	1.00	1					
Arsenic	U	ND	0.00200	0.00500	mg/L	1.00	1					
Barium		0.0369	0.000670	0.00400	mg/L	1.00	1					
Beryllium	U	ND	0.000200	0.000500	mg/L	1.00	1					
Cadmium	U	ND	0.000300	0.00100	mg/L	1.00	1					
Chromium	U	ND	0.00300	0.0100	mg/L	1.00	1					
Cobalt		0.00111	0.000300	0.00100	mg/L	1.00	1					
Iron		1.37	0.0330	0.100	mg/L	1.00	1					
Lead	U	ND	0.000500	0.00200	mg/L	1.00	1					
Lithium	J	0.00380	0.00300	0.0100	mg/L	1.00	1					
Molybdenum	U	ND	0.000200	0.00100	mg/L	1.00	1					
Potassium		2.34	0.0800	0.300	mg/L	1.00	1					
Selenium	U	ND	0.00150	0.00500	mg/L	1.00	1					
Silver	U	ND	0.000300	0.00100	mg/L	1.00	1					
Thallium	U	ND	0.000600	0.00200	mg/L	1.00	1					
Magnesium		44.3	0.0100	0.0300	mg/L	1.00	1	PRB	09/14/22	1703	2312499	6
Manganese		0.889	0.00100	0.00500	mg/L	1.00	1					
Sodium		12.8	0.0800	0.250	mg/L	1.00	1					
Boron		2.53	0.130	0.375	mg/L	1.00	25	PRB	09/14/22	1642	2312499	7
Calcium		52.4	2.00	5.00	mg/L	1.00	25					

Solids Analysis

SM2540C Dissolved Solids "As Received"

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

Report Date: September 22, 2022

Company : Georgia Power Company, Southern Company
Address : 241 Ralph McGill Blvd NE, Bin 10160

Atlanta, Georgia 30308

Contact: Joju Abraham
Project: Arkwright CCR Groundwater Compliance AP-3 and AP3

Client Sample ID: ARGWC-18 Project: GPCC00100
Sample ID: 592011002 Client ID: GPCC001

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Solids Analysis												
SM2540C Dissolved Solids "As Received"												
Total Dissolved Solids		444	2.38	10.0	mg/L			CH6	09/08/22	1531	2313725	8
Titration and Ion Analysis												
SM 2320B Total Alkalinity "As Received"												
Alkalinity, Total as CaCO3		111	1.45	4.00	mg/L			HH2	09/08/22	1129	2312490	9
Bicarbonate alkalinity (CaCO3)		111	1.45	4.00	mg/L							
Carbonate alkalinity (CaCO3)	U	ND	1.45	4.00	mg/L							

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
SW846 3005A	ICP-MS 3005A PREP	CD3	09/06/22	1640	2312498
SW846 7470A Prep	EPA 7470A Mercury Prep Liquid	RM4	09/07/22	1248	2313268

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	SM 4500-H B/SW846 9040C, SM 2550B	
2	EPA 300.0	
3	EPA 300.0	
4	SW846 7470A	
5	SW846 3005A/6020B	
6	SW846 3005A/6020B	
7	SW846 3005A/6020B	
8	SM 2540C	
9	SM 2320B	

Notes:

Column headers are defined as follows:

DF: Dilution Factor Lc/LC: Critical Level
DL: Detection Limit PF: Prep Factor
MDA: Minimum Detectable Activity RL: Reporting Limit
MDC: Minimum Detectable Concentration SQL: Sample Quantitation Limit

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Certificate of Analysis

Report Date: September 22, 2022

Company : Georgia Power Company, Southern Company
Address : 241 Ralph McGill Blvd NE, Bin 10160

Atlanta, Georgia 30308

Contact: Joju Abraham
Project: Arkwright CCR Groundwater Compliance AP-3 and AP3

Client Sample ID: ARGWC-17	Project: GPCC00100
Sample ID: 592011003	Client ID: GPCC001
Matrix: WG	
Collect Date: 02-SEP-22 10:30	
Receive Date: 03-SEP-22	
Collector: Client	

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Field Data												
Client collected Field pH "As Received"												
Field pH		5.11			SU			EOS1	09/02/22	1030	2312821	1
Ion Chromatography												
EPA 300.0 Anions Liquid "As Received"												
Chloride		2.74	0.0670	0.200	mg/L		1	HXC1	09/06/22	1404	2312949	2
Fluoride	J	0.0820	0.0330	0.100	mg/L		1					
Sulfate		151	1.33	4.00	mg/L		10	HXC1	09/07/22	0122	2312949	3
Mercury Analysis-CVAA												
7470 Cold Vapor Mercury, Liquid "As Received"												
Mercury	U	ND	0.0000670	0.000200	mg/L	1.00	1	JP2	09/08/22	1148	2313270	4
Metals Analysis-ICP-MS												
SW846 3005A/6020B "As Received"												
Aluminum		0.0558	0.0193	0.0500	mg/L	1.00	1	PRB	09/14/22	0158	2312499	5
Antimony	U	ND	0.00100	0.00300	mg/L	1.00	1					
Arsenic	U	ND	0.00200	0.00500	mg/L	1.00	1					
Barium		0.0727	0.000670	0.00400	mg/L	1.00	1					
Beryllium	J	0.000417	0.000200	0.000500	mg/L	1.00	1					
Cadmium	U	ND	0.000300	0.00100	mg/L	1.00	1					
Chromium	U	ND	0.00300	0.0100	mg/L	1.00	1					
Cobalt		0.0516	0.000300	0.00100	mg/L	1.00	1					
Iron		0.171	0.0330	0.100	mg/L	1.00	1					
Lead	U	ND	0.000500	0.00200	mg/L	1.00	1					
Lithium	U	ND	0.00300	0.0100	mg/L	1.00	1					
Molybdenum	U	ND	0.000200	0.00100	mg/L	1.00	1					
Potassium		1.40	0.0800	0.300	mg/L	1.00	1					
Selenium	U	ND	0.00150	0.00500	mg/L	1.00	1					
Silver	U	ND	0.000300	0.00100	mg/L	1.00	1					
Thallium	U	ND	0.000600	0.00200	mg/L	1.00	1					
Boron		0.0555	0.00520	0.0150	mg/L	1.00	1	PRB	09/14/22	1650	2312499	6
Calcium		23.7	0.0800	0.200	mg/L	1.00	1					
Magnesium		23.5	0.0100	0.0300	mg/L	1.00	1					
Sodium		10.5	0.0800	0.250	mg/L	1.00	1					
Manganese		1.55	0.0100	0.0500	mg/L	1.00	10	PRB	09/14/22	1652	2312499	7

Solids Analysis

SM2540C Dissolved Solids "As Received"

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Certificate of Analysis

Report Date: September 22, 2022

Company : Georgia Power Company, Southern Company
Address : 241 Ralph McGill Blvd NE, Bin 10160

Atlanta, Georgia 30308

Contact: Joju Abraham
Project: Arkwright CCR Groundwater Compliance AP-3 and AP3

Client Sample ID: ARGWC-17 Project: GPCC00100
Sample ID: 592011003 Client ID: GPCC001

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Solids Analysis												
SM2540C Dissolved Solids "As Received"												
Total Dissolved Solids		240	2.38	10.0	mg/L			CH6	09/08/22	1531	2313725	8
Titration and Ion Analysis												
SM 2320B Total Alkalinity "As Received"												
Alkalinity, Total as CaCO ₃		14.2	1.45	4.00	mg/L			HH2	09/08/22	1130	2312490	9
Bicarbonate alkalinity (CaCO ₃)		14.2	1.45	4.00	mg/L							
Carbonate alkalinity (CaCO ₃)	U	ND	1.45	4.00	mg/L							

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
SW846 3005A	ICP-MS 3005A PREP	CD3	09/06/22	1640	2312498
SW846 7470A Prep	EPA 7470A Mercury Prep Liquid	RM4	09/07/22	1248	2313268

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	SM 4500-H B/SW846 9040C, SM 2550B	
2	EPA 300.0	
3	EPA 300.0	
4	SW846 7470A	
5	SW846 3005A/6020B	
6	SW846 3005A/6020B	
7	SW846 3005A/6020B	
8	SM 2540C	
9	SM 2320B	

Notes:

Column headers are defined as follows:

DF: Dilution Factor
DL: Detection Limit
MDA: Minimum Detectable Activity
MDC: Minimum Detectable Concentration
Lc/LC: Critical Level
PF: Prep Factor
RL: Reporting Limit
SQL: Sample Quantitation Limit

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Certificate of Analysis

Report Date: September 22, 2022

Company : Georgia Power Company, Southern Company
Address : 241 Ralph McGill Blvd NE, Bin 10160

Atlanta, Georgia 30308

Contact: Joju Abraham
Project: Arkwright CCR Groundwater Compliance AP-3 and AP3

Client Sample ID: ARAMW-4	Project: GPCC00100
Sample ID: 592011004	Client ID: GPCC001
Matrix: WG	
Collect Date: 02-SEP-22 11:15	
Receive Date: 03-SEP-22	
Collector: Client	

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Field Data												
Client collected Field pH "As Received"												
Field pH		5.65			SU			EOS1	09/02/22	1115	2312821	1
Ion Chromatography												
EPA 300.0 Anions Liquid "As Received"												
Chloride		4.58	0.0670	0.200	mg/L		1	HXC1	09/06/22	1435	2312949	2
Fluoride	J	0.0590	0.0330	0.100	mg/L		1					
Sulfate		1080	13.3	40.0	mg/L		100	HXC1	09/07/22	0153	2312949	3
Mercury Analysis-CVAA												
7470 Cold Vapor Mercury, Liquid "As Received"												
Mercury	U	ND	0.0000670	0.000200	mg/L	1.00	1	JP2	09/08/22	1150	2313270	4
Metals Analysis-ICP-MS												
SW846 3005A/6020B "As Received"												
Aluminum	U	ND	0.0193	0.0500	mg/L	1.00	1	PRB	09/14/22	0202	2312499	5
Antimony	U	ND	0.00100	0.00300	mg/L	1.00	1					
Arsenic	J	0.00339	0.00200	0.00500	mg/L	1.00	1					
Barium		0.0374	0.000670	0.00400	mg/L	1.00	1					
Beryllium	U	ND	0.000200	0.000500	mg/L	1.00	1					
Cadmium	U	ND	0.000300	0.00100	mg/L	1.00	1					
Chromium	U	ND	0.00300	0.0100	mg/L	1.00	1					
Cobalt		0.00411	0.000300	0.00100	mg/L	1.00	1					
Iron		4.42	0.0330	0.100	mg/L	1.00	1					
Lead	U	ND	0.000500	0.00200	mg/L	1.00	1					
Lithium		0.0117	0.00300	0.0100	mg/L	1.00	1					
Molybdenum	J	0.000288	0.000200	0.00100	mg/L	1.00	1					
Potassium		12.0	0.0800	0.300	mg/L	1.00	1					
Selenium	U	ND	0.00150	0.00500	mg/L	1.00	1					
Silver	U	ND	0.000300	0.00100	mg/L	1.00	1					
Thallium	U	ND	0.000600	0.00200	mg/L	1.00	1					
Manganese		0.872	0.00100	0.00500	mg/L	1.00	1	PRB	09/14/22	1713	2312499	6
Sodium		28.4	0.0800	0.250	mg/L	1.00	1					
Boron		0.477	0.0520	0.150	mg/L	1.00	10	PRB	09/14/22	1658	2312499	7
Calcium		240	0.800	2.00	mg/L	1.00	10					
Magnesium		128	0.100	0.300	mg/L	1.00	10					

Solids Analysis

SM2540C Dissolved Solids "As Received"

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Certificate of Analysis

Report Date: September 22, 2022

Company : Georgia Power Company, Southern Company
 Address : 241 Ralph McGill Blvd NE, Bin 10160

Atlanta, Georgia 30308
 Contact: Joju Abraham
 Project: Arkwright CCR Groundwater Compliance AP-3 and AP3

Client Sample ID: ARAMW-4	Project: GPCC00100
Sample ID: 592011004	Client ID: GPCC001

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Solids Analysis												
SM2540C Dissolved Solids "As Received"												
Total Dissolved Solids		1610	2.38	10.0	mg/L			CH6	09/08/22	1531	2313725	8
Titration and Ion Analysis												
SM 2320B Total Alkalinity "As Received"												
Alkalinity, Total as CaCO3		50.6	1.45	4.00	mg/L			HH2	09/08/22	1132	2312490	9
Bicarbonate alkalinity (CaCO3)		50.6	1.45	4.00	mg/L							
Carbonate alkalinity (CaCO3)	U	ND	1.45	4.00	mg/L							

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
SW846 3005A	ICP-MS 3005A PREP	CD3	09/06/22	1640	2312498
SW846 7470A Prep	EPA 7470A Mercury Prep Liquid	RM4	09/07/22	1248	2313268

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	SM 4500-H B/SW846 9040C, SM 2550B	
2	EPA 300.0	
3	EPA 300.0	
4	SW846 7470A	
5	SW846 3005A/6020B	
6	SW846 3005A/6020B	
7	SW846 3005A/6020B	
8	SM 2540C	
9	SM 2320B	

Notes:

Column headers are defined as follows:

DF: Dilution Factor	Lc/LC: Critical Level
DL: Detection Limit	PF: Prep Factor
MDA: Minimum Detectable Activity	RL: Reporting Limit
MDC: Minimum Detectable Concentration	SQL: Sample Quantitation Limit

GEL LABORATORIES LLC

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Certificate of Analysis

Report Date: September 22, 2022

Company : Georgia Power Company, Southern Company
Address : 241 Ralph McGill Blvd NE, Bin 10160

Atlanta, Georgia 30308

Contact: Joju Abraham
Project: Arkwright CCR Groundwater Compliance AP-3 and AP3

Client Sample ID: DUP-02	Project: GPCC00100
Sample ID: 592011005	Client ID: GPCC001
Matrix: WG	
Collect Date: 02-SEP-22 12:00	
Receive Date: 03-SEP-22	
Collector: Client	

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Ion Chromatography												
EPA 300.0 Anions Liquid "As Received"												
Chloride		4.64	0.0670	0.200	mg/L		1	HXC1	09/06/22	1506	2312949	1
Fluoride	J	0.0555	0.0330	0.100	mg/L		1					
Sulfate		1080	13.3	40.0	mg/L		100	HXC1	09/07/22	0224	2312949	2
Mercury Analysis-CVAA												
7470 Cold Vapor Mercury, Liquid "As Received"												
Mercury	U	ND	0.0000670	0.000200	mg/L	1.00	1	JP2	09/08/22	1152	2313270	3
Metals Analysis-ICP-MS												
SW846 3005A/6020B "As Received"												
Antimony	U	ND	0.00100	0.00300	mg/L	1.00	1	PRB	09/14/22	0205	2312499	4
Arsenic	J	0.00307	0.00200	0.00500	mg/L	1.00	1					
Barium		0.0358	0.000670	0.00400	mg/L	1.00	1					
Beryllium	U	ND	0.000200	0.000500	mg/L	1.00	1					
Cadmium	U	ND	0.000300	0.00100	mg/L	1.00	1					
Chromium	U	ND	0.00300	0.0100	mg/L	1.00	1					
Cobalt		0.00392	0.000300	0.00100	mg/L	1.00	1					
Lead	U	ND	0.000500	0.00200	mg/L	1.00	1					
Lithium		0.0117	0.00300	0.0100	mg/L	1.00	1					
Molybdenum	J	0.000263	0.000200	0.00100	mg/L	1.00	1					
Selenium	U	ND	0.00150	0.00500	mg/L	1.00	1					
Silver	U	ND	0.000300	0.00100	mg/L	1.00	1					
Thallium	U	ND	0.000600	0.00200	mg/L	1.00	1					
Boron		0.471	0.0520	0.150	mg/L	1.00	10	PRB	09/14/22	1700	2312499	5
Calcium		230	0.800	2.00	mg/L	1.00	10					
Solids Analysis												
SM2540C Dissolved Solids "As Received"												
Total Dissolved Solids		1680	2.38	10.0	mg/L			CH6	09/08/22	1531	2313725	6

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
SW846 3005A	ICP-MS 3005A PREP	CD3	09/06/22	1640	2312498
SW846 7470A Prep	EPA 7470A Mercury Prep Liquid	RM4	09/07/22	1248	2313268

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Certificate of Analysis

Report Date: September 22, 2022

Company : Georgia Power Company, Southern Company
Address : 241 Ralph McGill Blvd NE, Bin 10160

Atlanta, Georgia 30308
Contact: Joju Abraham
Project: Arkwright CCR Groundwater Compliance AP-3 and AP3

Client Sample ID:	DUP-02	Project:	GPCC00100
Sample ID:	592011005	Client ID:	GPCC001

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time Batch	Method
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The following Analytical Methods were performed:

Method	Description	Analyst	Comments
1	EPA 300.0		
2	EPA 300.0		
3	SW846 7470A		
4	SW846 3005A/6020B		
5	SW846 3005A/6020B		
6	SM 2540C		

Notes:

Column headers are defined as follows:

DF: Dilution Factor

DL: Detection Limit

MDA: Minimum Detectable Activity

MDC: Minimum Detectable Concentration

Lc/LC: Critical Level

PF: Prep Factor

RL: Reporting Limit

SQL: Sample Quantitation Limit

GEL LABORATORIES LLC

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Certificate of Analysis

Report Date: September 22, 2022

Company : Georgia Power Company, Southern Company
 Address : 241 Ralph McGill Blvd NE, Bin 10160

Atlanta, Georgia 30308

Contact: Joju Abraham

Project: Arkwright CCR Groundwater Compliance AP-3 and AP3

Client Sample ID: ARGWA-5	Project: GPCC00100
Sample ID: 591798001	Client ID: GPCC001
Matrix: WG	
Collect Date: 30-AUG-22 16:10	
Receive Date: 01-SEP-22	
Collector: Client	

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Field Data												
Client collected Field pH "As Received"												
Field pH		5.88			SU			EOS1	08/30/22	1610	2311784	1
Ion Chromatography												
EPA 300.0 Anions Liquid "As Received"												
Chloride		8.47	0.0670	0.200	mg/L	1		JLD1	09/02/22	1051	2311964	2
Fluoride		0.155	0.0330	0.100	mg/L	1						
Sulfate		0.519	0.133	0.400	mg/L	1						
Mercury Analysis-CVAA												
7470 Cold Vapor Mercury, Liquid "As Received"												
Mercury	U	ND	0.0000670	0.000200	mg/L	1.00	1	JP2	09/06/22	1013	2312007	3
Metals Analysis-ICP-MS												
SW846 3005A/6020B "As Received"												
Aluminum	J	0.0267	0.0193	0.0500	mg/L	1.00	1	SKJ	09/13/22	2234	2311788	4
Antimony	U	ND	0.00100	0.00300	mg/L	1.00	1					
Arsenic	U	ND	0.00200	0.00500	mg/L	1.00	1					
Barium		0.0446	0.000670	0.00400	mg/L	1.00	1					
Cadmium	U	ND	0.000300	0.00100	mg/L	1.00	1					
Chromium	U	ND	0.00300	0.0100	mg/L	1.00	1					
Cobalt	U	ND	0.000300	0.00100	mg/L	1.00	1					
Iron	J	0.0611	0.0330	0.100	mg/L	1.00	1					
Lead	U	ND	0.000500	0.00200	mg/L	1.00	1					
Manganese	J	0.00414	0.00100	0.00500	mg/L	1.00	1					
Molybdenum	U	ND	0.000200	0.00100	mg/L	1.00	1					
Potassium		1.26	0.0800	0.300	mg/L	1.00	1					
Selenium	U	ND	0.00150	0.00500	mg/L	1.00	1					
Silver	U	ND	0.000300	0.00100	mg/L	1.00	1					
Thallium	U	ND	0.000600	0.00200	mg/L	1.00	1					
Beryllium	U	ND	0.000200	0.000500	mg/L	1.00	1	SKJ	09/15/22	1120	2311788	5
Calcium		9.56	0.0800	0.200	mg/L	1.00	1					
Lithium	U	ND	0.00300	0.0100	mg/L	1.00	1					
Magnesium		3.87	0.0100	0.0300	mg/L	1.00	1					
Sodium		9.37	0.0800	0.250	mg/L	1.00	1					
Boron	J	0.00855	0.00520	0.0150	mg/L	1.00	1	SKJ	09/15/22	1437	2311788	6
Solids Analysis												
SM2540C Dissolved Solids "As Received"												

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Certificate of Analysis

Report Date: September 22, 2022

Company : Georgia Power Company, Southern Company
Address : 241 Ralph McGill Blvd NE, Bin 10160

Atlanta, Georgia 30308

Contact: Joju Abraham
Project: Arkwright CCR Groundwater Compliance AP-3 and AP3

Client Sample ID: ARGWA-5	Project: GPCC00100
Sample ID: 591798001	Client ID: GPCC001

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Solids Analysis												
SM2540C Dissolved Solids "As Received"												
Total Dissolved Solids		81.0	2.38	10.0	mg/L			CH6	09/02/22	1422	2311940	7
Titration and Ion Analysis												
SM 2320B Total Alkalinity "As Received"												
Alkalinity, Total as CaCO3		46.2	1.45	4.00	mg/L			HH2	09/13/22	1427	2313370	8
Bicarbonate alkalinity (CaCO3)		46.2	1.45	4.00	mg/L							
Carbonate alkalinity (CaCO3)	U	ND	1.45	4.00	mg/L							

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
SW846 3005A	ICP-MS 3005A PREP	LG2	09/02/22	0905	2311787
SW846 7470A Prep	EPA 7470A Mercury Prep Liquid	RM4	09/02/22	1251	2312006

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	SM 4500-H B/SW846 9040C, SM 2550B	
2	EPA 300.0	
3	SW846 7470A	
4	SW846 3005A/6020B	
5	SW846 3005A/6020B	
6	SW846 3005A/6020B	
7	SM 2540C	
8	SM 2320B	

Notes:

Column headers are defined as follows:

DF: Dilution Factor	Lc/LC: Critical Level
DL: Detection Limit	PF: Prep Factor
MDA: Minimum Detectable Activity	RL: Reporting Limit
MDC: Minimum Detectable Concentration	SQL: Sample Quantitation Limit

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Certificate of Analysis

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Company : Georgia Power Company, Southern Company
Address : 241 Ralph McGill Blvd NE, Bin 10160

Atlanta, Georgia 30308

Contact: Joju Abraham

Project: Arkwright CCR Groundwater Compliance AP-3 and AP3

Client Sample ID: ARGWA-12 Project: GPCC00100
Sample ID: 591798002 Client ID: GPCC001
Matrix: WG
Collect Date: 30-AUG-22 16:14
Receive Date: 01-SEP-22
Collector: Client

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Field Data												
Client collected Field pH "As Received"												
Field pH		5.88			SU			EOS1	08/30/22	1614	2311784	1
Ion Chromatography												
EPA 300.0 Anions Liquid "As Received"												
Fluoride		0.167	0.0330	0.100	mg/L	1		JLD1	09/02/22	1122	2311964	2
Sulfate		7.11	0.133	0.400	mg/L	1						
Chloride		12.8	0.134	0.400	mg/L	2		JLD1	09/02/22	1802	2311964	3
Mercury Analysis-CVAA												
7470 Cold Vapor Mercury, Liquid "As Received"												
Mercury	U	ND	0.0000670	0.000200	mg/L	1.00	1	JP2	09/06/22	1014	2312007	4
Metals Analysis-ICP-MS												
SW846 3005A/6020B "As Received"												
Aluminum		0.0544	0.0193	0.0500	mg/L	1.00	1	SKJ	09/13/22	2252	2311788	5
Antimony	U	ND	0.00100	0.00300	mg/L	1.00	1					
Arsenic	U	ND	0.00200	0.00500	mg/L	1.00	1					
Barium		0.0850	0.000670	0.00400	mg/L	1.00	1					
Cadmium	U	ND	0.000300	0.00100	mg/L	1.00	1					
Chromium	U	ND	0.00300	0.0100	mg/L	1.00	1					
Cobalt	J	0.000509	0.000300	0.00100	mg/L	1.00	1					
Iron	J	0.0662	0.0330	0.100	mg/L	1.00	1					
Lead	U	ND	0.000500	0.00200	mg/L	1.00	1					
Manganese	J	0.00160	0.00100	0.00500	mg/L	1.00	1					
Molybdenum	J	0.000274	0.000200	0.00100	mg/L	1.00	1					
Potassium		2.45	0.0800	0.300	mg/L	1.00	1					
Selenium	U	ND	0.00150	0.00500	mg/L	1.00	1					
Silver	U	ND	0.000300	0.00100	mg/L	1.00	1					
Thallium	U	ND	0.000600	0.00200	mg/L	1.00	1					
Beryllium	U	ND	0.000200	0.000500	mg/L	1.00	1	SKJ	09/15/22	1133	2311788	6
Calcium		14.2	0.0800	0.200	mg/L	1.00	1					
Lithium	J	0.00493	0.00300	0.0100	mg/L	1.00	1					
Magnesium		9.51	0.0100	0.0300	mg/L	1.00	1					
Sodium		12.1	0.0800	0.250	mg/L	1.00	1					
Boron		0.0214	0.00520	0.0150	mg/L	1.00	1	SKJ	09/15/22	1448	2311788	7

Solids Analysis

SM2540C Dissolved Solids "As Received"

GEL LABORATORIES LLC

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Certificate of Analysis

Report Date: September 22, 2022

Company : Georgia Power Company, Southern Company
Address : 241 Ralph McGill Blvd NE, Bin 10160

Atlanta, Georgia 30308
Contact: Joju Abraham
Project: Arkwright CCR Groundwater Compliance AP-3 and AP3

Client Sample ID: ARGWA-12	Project: GPCC00100
Sample ID: 591798002	Client ID: GPCC001

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Solids Analysis												
SM2540C Dissolved Solids "As Received"												
Total Dissolved Solids		139	2.38	10.0	mg/L		CH6		09/06/22	1632	2312704	8
Titration and Ion Analysis												
SM 2320B Total Alkalinity "As Received"												
Alkalinity, Total as CaCO3		68.4	1.45	4.00	mg/L		HH2		09/13/22	1433	2313370	9
Bicarbonate alkalinity (CaCO3)		68.4	1.45	4.00	mg/L							
Carbonate alkalinity (CaCO3)	U	ND	1.45	4.00	mg/L							

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
SW846 3005A	ICP-MS 3005A PREP	LG2	09/02/22	0905	2311787
SW846 7470A Prep	EPA 7470A Mercury Prep Liquid	RM4	09/02/22	1251	2312006

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	SM 4500-H B/SW846 9040C, SM 2550B	
2	EPA 300.0	
3	EPA 300.0	
4	SW846 7470A	
5	SW846 3005A/6020B	
6	SW846 3005A/6020B	
7	SW846 3005A/6020B	
8	SM 2540C	
9	SM 2320B	

Notes:

Column headers are defined as follows:

DF: Dilution Factor	Lc/LC: Critical Level
DL: Detection Limit	PF: Prep Factor
MDA: Minimum Detectable Activity	RL: Reporting Limit
MDC: Minimum Detectable Concentration	SQL: Sample Quantitation Limit

GEL LABORATORIES LLC

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Certificate of Analysis

Report Date: September 22, 2022

Company : Georgia Power Company, Southern Company
Address : 241 Ralph McGill Blvd NE, Bin 10160

Atlanta, Georgia 30308

Contact: Joju Abraham
Project: Arkwright CCR Groundwater Compliance AP-3 and AP3

Client Sample ID: FB-01	Project: GPCC00100
Sample ID: 591798003	Client ID: GPCC001
Matrix: WQ	
Collect Date: 30-AUG-22 16:41	
Receive Date: 01-SEP-22	
Collector: Client	

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Ion Chromatography												
EPA 300.0 Anions Liquid "As Received"												
Chloride		0.203	0.0670	0.200	mg/L		1	JLD1	09/02/22	1152	2311964	1
Fluoride	U	ND	0.0330	0.100	mg/L		1					
Sulfate	U	ND	0.133	0.400	mg/L		1					
Mercury Analysis-CVAA												
7470 Cold Vapor Mercury, Liquid "As Received"												
Mercury	U	ND	0.0000670	0.000200	mg/L	1.00	1	JP2	09/06/22	1016	2312007	2
Metals Analysis-ICP-MS												
SW846 3005A/6020B "As Received"												
Antimony	U	ND	0.00100	0.00300	mg/L	1.00	1	SKJ	09/13/22	2303	2311788	3
Arsenic	U	ND	0.00200	0.00500	mg/L	1.00	1					
Barium	U	ND	0.000670	0.00400	mg/L	1.00	1					
Cadmium	U	ND	0.000300	0.00100	mg/L	1.00	1					
Chromium	U	ND	0.00300	0.0100	mg/L	1.00	1					
Cobalt	U	ND	0.000300	0.00100	mg/L	1.00	1					
Lead	U	ND	0.000500	0.00200	mg/L	1.00	1					
Molybdenum	U	ND	0.000200	0.00100	mg/L	1.00	1					
Selenium	U	ND	0.00150	0.00500	mg/L	1.00	1					
Silver	U	ND	0.000300	0.00100	mg/L	1.00	1					
Thallium	U	ND	0.000600	0.00200	mg/L	1.00	1					
Beryllium	U	ND	0.000200	0.000500	mg/L	1.00	1	SKJ	09/15/22	1141	2311788	4
Calcium	U	ND	0.0800	0.200	mg/L	1.00	1					
Lithium	U	ND	0.00300	0.0100	mg/L	1.00	1					
Boron	U	ND	0.00520	0.0150	mg/L	1.00	1	SKJ	09/15/22	1450	2311788	5
Solids Analysis												
SM2540C Dissolved Solids "As Received"												
Total Dissolved Solids	U	ND	2.38	10.0	mg/L			CH6	09/06/22	1632	2312704	6

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
SW846 3005A	ICP-MS 3005A PREP	LG2	09/02/22	0905	2311787
SW846 7470A Prep	EPA 7470A Mercury Prep Liquid	RM4	09/02/22	1251	2312006

GEL LABORATORIES LLC

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Certificate of Analysis

Report Date: September 22, 2022

Company : Georgia Power Company, Southern Company
Address : 241 Ralph McGill Blvd NE, Bin 10160

Atlanta, Georgia 30308
Contact: Joju Abraham
Project: Arkwright CCR Groundwater Compliance AP-3 and AP3

Client Sample ID: FB-01 Project: GPCC00100
Sample ID: 591798003 Client ID: GPCC001

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time Batch	Method
The following Analytical Methods were performed:											
Method	Description	Analyst Comments									
1	EPA 300.0										
2	SW846 7470A										
3	SW846 3005A/6020B										
4	SW846 3005A/6020B										
5	SW846 3005A/6020B										
6	SM 2540C										

Notes:

Column headers are defined as follows:

DF: Dilution Factor

DL: Detection Limit

MDA: Minimum Detectable Activity

MDC: Minimum Detectable Concentration

Lc/LC: Critical Level

PF: Prep Factor

RL: Reporting Limit

SQL: Sample Quantitation Limit

GEL LABORATORIES LLC

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Certificate of Analysis

Report Date: September 22, 2022

Company : Georgia Power Company, Southern Company
Address : 241 Ralph McGill Blvd NE, Bin 10160

Atlanta, Georgia 30308

Contact: Joju Abraham

Project: Arkwright CCR Groundwater Compliance AP-3 and AP3

Client Sample ID: ARGWA-24 Project: GPCC00100
Sample ID: 591798004 Client ID: GPCC001
Matrix: WG
Collect Date: 31-AUG-22 09:33
Receive Date: 01-SEP-22
Collector: Client

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Field Data												
Client collected Field pH "As Received"												
Field pH		5.65			SU			EOS1	08/31/22	0933	2311784	1
Ion Chromatography												
EPA 300.0 Anions Liquid "As Received"												
Fluoride		0.164	0.0330	0.100	mg/L	1		JLD1	09/02/22	1223	2311964	2
Sulfate		6.94	0.133	0.400	mg/L	1						
Chloride		12.3	0.134	0.400	mg/L	2		JLD1	09/02/22	1833	2311964	3
Mercury Analysis-CVAA												
7470 Cold Vapor Mercury, Liquid "As Received"												
Mercury	U	ND	0.0000670	0.000200	mg/L	1.00	1	JP2	09/06/22	1021	2312007	4
Metals Analysis-ICP-MS												
SW846 3005A/6020B "As Received"												
Aluminum	U	ND	0.0193	0.0500	mg/L	1.00	1	SKJ	09/13/22	2307	2311788	5
Antimony	U	ND	0.00100	0.00300	mg/L	1.00	1					
Arsenic	U	ND	0.00200	0.00500	mg/L	1.00	1					
Barium		0.0412	0.000670	0.00400	mg/L	1.00	1					
Cadmium	U	ND	0.000300	0.00100	mg/L	1.00	1					
Chromium	U	ND	0.00300	0.0100	mg/L	1.00	1					
Cobalt	U	ND	0.000300	0.00100	mg/L	1.00	1					
Iron	U	ND	0.0330	0.100	mg/L	1.00	1					
Lead	U	ND	0.000500	0.00200	mg/L	1.00	1					
Manganese	J	0.00382	0.00100	0.00500	mg/L	1.00	1					
Molybdenum	U	ND	0.000200	0.00100	mg/L	1.00	1					
Potassium		0.809	0.0800	0.300	mg/L	1.00	1					
Selenium	U	ND	0.00150	0.00500	mg/L	1.00	1					
Silver	U	ND	0.000300	0.00100	mg/L	1.00	1					
Thallium	U	ND	0.000600	0.00200	mg/L	1.00	1					
Beryllium	U	ND	0.000200	0.000500	mg/L	1.00	1	SKJ	09/15/22	1143	2311788	6
Calcium		10.1	0.0800	0.200	mg/L	1.00	1					
Lithium	U	ND	0.00300	0.0100	mg/L	1.00	1					
Magnesium		6.48	0.0100	0.0300	mg/L	1.00	1					
Sodium		14.5	0.0800	0.250	mg/L	1.00	1					
Boron		0.0151	0.00520	0.0150	mg/L	1.00	1	SKJ	09/15/22	1456	2311788	7

Solids Analysis

SM2540C Dissolved Solids "As Received"

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Certificate of Analysis

Report Date: September 22, 2022

Company : Georgia Power Company, Southern Company
Address : 241 Ralph McGill Blvd NE, Bin 10160

Atlanta, Georgia 30308

Contact: Joju Abraham
Project: Arkwright CCR Groundwater Compliance AP-3 and AP3

Client Sample ID: ARGWA-24 Project: GPCC00100
Sample ID: 591798004 Client ID: GPCC001

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Solids Analysis												
SM2540C Dissolved Solids "As Received"												
Total Dissolved Solids		122	2.38	10.0	mg/L			CH6	09/07/22	1020	2313272	8
Titration and Ion Analysis												
SM 2320B Total Alkalinity "As Received"												
Alkalinity, Total as CaCO ₃		56.8	1.45	4.00	mg/L			HH2	09/13/22	1436	2313370	9
Bicarbonate alkalinity (CaCO ₃)		56.8	1.45	4.00	mg/L							
Carbonate alkalinity (CaCO ₃)	U	ND	1.45	4.00	mg/L							

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
SW846 3005A	ICP-MS 3005A PREP	LG2	09/02/22	0905	2311787
SW846 7470A Prep	EPA 7470A Mercury Prep Liquid	RM4	09/02/22	1251	2312006

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	SM 4500-H B/SW846 9040C, SM 2550B	
2	EPA 300.0	
3	EPA 300.0	
4	SW846 7470A	
5	SW846 3005A/6020B	
6	SW846 3005A/6020B	
7	SW846 3005A/6020B	
8	SM 2540C	
9	SM 2320B	

Notes:

Column headers are defined as follows:

DF: Dilution Factor
DL: Detection Limit
MDA: Minimum Detectable Activity
MDC: Minimum Detectable Concentration
Lc/LC: Critical Level
PF: Prep Factor
RL: Reporting Limit
SQL: Sample Quantitation Limit

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Certificate of Analysis

Report Date: September 22, 2022

Company : Georgia Power Company, Southern Company
Address : 241 Ralph McGill Blvd NE, Bin 10160

Atlanta, Georgia 30308

Contact: Joju Abraham
Project: Arkwright CCR Groundwater Compliance AP-3 and AP3

Client Sample ID: ARGWA-3 Project: GPCC00100
Sample ID: 591798005 Client ID: GPCC001
Matrix: WG
Collect Date: 31-AUG-22 09:55
Receive Date: 01-SEP-22
Collector: Client

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Field Data												
Client collected Field pH "As Received"												
Field pH		5.96			SU			EOS1	08/31/22	0955	2311784	1
Ion Chromatography												
EPA 300.0 Anions Liquid "As Received"												
Chloride		2.94	0.0670	0.200	mg/L	1		JLD1	09/02/22	1254	2311964	2
Fluoride		0.184	0.0330	0.100	mg/L	1						
Sulfate	J	0.399	0.133	0.400	mg/L	1						
Mercury Analysis-CVAA												
7470 Cold Vapor Mercury, Liquid "As Received"												
Mercury	U	ND	0.0000670	0.000200	mg/L	1.00	1	JP2	09/06/22	1023	2312007	3
Metals Analysis-ICP-MS												
SW846 3005A/6020B "As Received"												
Aluminum		0.114	0.0193	0.0500	mg/L	1.00	1	SKJ	09/13/22	2310	2311788	4
Antimony	U	ND	0.00100	0.00300	mg/L	1.00	1					
Arsenic	U	ND	0.00200	0.00500	mg/L	1.00	1					
Barium		0.0181	0.000670	0.00400	mg/L	1.00	1					
Cadmium	U	ND	0.000300	0.00100	mg/L	1.00	1					
Chromium	J	0.00358	0.00300	0.0100	mg/L	1.00	1					
Cobalt	U	ND	0.000300	0.00100	mg/L	1.00	1					
Iron		0.170	0.0330	0.100	mg/L	1.00	1					
Lead	U	ND	0.000500	0.00200	mg/L	1.00	1					
Manganese	J	0.00355	0.00100	0.00500	mg/L	1.00	1					
Molybdenum	U	ND	0.000200	0.00100	mg/L	1.00	1					
Potassium		1.09	0.0800	0.300	mg/L	1.00	1					
Selenium	U	ND	0.00150	0.00500	mg/L	1.00	1					
Silver	U	ND	0.000300	0.00100	mg/L	1.00	1					
Thallium	U	ND	0.000600	0.00200	mg/L	1.00	1					
Beryllium	U	ND	0.000200	0.000500	mg/L	1.00	1	SKJ	09/15/22	1146	2311788	5
Calcium		5.91	0.0800	0.200	mg/L	1.00	1					
Lithium	U	ND	0.00300	0.0100	mg/L	1.00	1					
Magnesium		3.82	0.0100	0.0300	mg/L	1.00	1					
Sodium		7.93	0.0800	0.250	mg/L	1.00	1					
Boron	J	0.00589	0.00520	0.0150	mg/L	1.00	1	SKJ	09/15/22	1458	2311788	6
Solids Analysis												
SM2540C Dissolved Solids "As Received"												

GEL LABORATORIES LLC

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Certificate of Analysis

Report Date: September 22, 2022

Company : Georgia Power Company, Southern Company
Address : 241 Ralph McGill Blvd NE, Bin 10160

Atlanta, Georgia 30308

Contact: Joju Abraham
Project: Arkwright CCR Groundwater Compliance AP-3 and AP3

Client Sample ID: ARGWA-3 Project: GPCC00100
Sample ID: 591798005 Client ID: GPCC001

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Solids Analysis												
SM2540C Dissolved Solids "As Received"												
Total Dissolved Solids		65.0	2.38	10.0	mg/L			CH6	09/07/22	1020	2313272	7
Titration and Ion Analysis												
SM 2320B Total Alkalinity "As Received"												
Alkalinity, Total as CaCO3		41.4	1.45	4.00	mg/L			HH2	09/13/22	1437	2313370	8
Bicarbonate alkalinity (CaCO3)		41.4	1.45	4.00	mg/L							
Carbonate alkalinity (CaCO3)	U	ND	1.45	4.00	mg/L							

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
SW846 3005A	ICP-MS 3005A PREP	LG2	09/02/22	0905	2311787
SW846 7470A Prep	EPA 7470A Mercury Prep Liquid	RM4	09/02/22	1251	2312006

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	SM 4500-H B/SW846 9040C, SM 2550B	
2	EPA 300.0	
3	SW846 7470A	
4	SW846 3005A/6020B	
5	SW846 3005A/6020B	
6	SW846 3005A/6020B	
7	SM 2540C	
8	SM 2320B	

Notes:

Column headers are defined as follows:

DF: Dilution Factor

DL: Detection Limit

MDA: Minimum Detectable Activity

MDC: Minimum Detectable Concentration

Lc/LC: Critical Level

PF: Prep Factor

RL: Reporting Limit

SQL: Sample Quantitation Limit

GEL LABORATORIES LLC

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Certificate of Analysis

Report Date: September 22, 2022

Company : Georgia Power Company, Southern Company
Address : 241 Ralph McGill Blvd NE, Bin 10160

Atlanta, Georgia 30308

Contact: Joju Abraham
Project: Arkwright CCR Groundwater Compliance AP-3 and AP3

Client Sample ID: ARGWA-13	Project: GPCC00100
Sample ID: 591798006	Client ID: GPCC001
Matrix: WG	
Collect Date: 31-AUG-22 10:44	
Receive Date: 01-SEP-22	
Collector: Client	

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Field Data												
Client collected Field pH "As Received"												
Field pH		5.53			SU			EOS1	08/31/22	1044	2311784	1
Ion Chromatography												
EPA 300.0 Anions Liquid "As Received"												
Chloride		6.89	0.0670	0.200	mg/L	1		JLD1	09/02/22	1325	2311964	2
Fluoride		0.135	0.0330	0.100	mg/L	1						
Sulfate		855	13.3	40.0	mg/L	100		JLD1	09/02/22	1904	2311964	3
Mercury Analysis-CVAA												
7470 Cold Vapor Mercury, Liquid "As Received"												
Mercury	U	ND	0.0000670	0.000200	mg/L	1.00	1	JP2	09/06/22	1025	2312007	4
Metals Analysis-ICP-MS												
SW846 3005A/6020B "As Received"												
Aluminum	U	ND	0.0193	0.0500	mg/L	1.00	1	SKJ	09/13/22	2314	2311788	5
Antimony	U	ND	0.00100	0.00300	mg/L	1.00	1					
Arsenic	U	ND	0.00200	0.00500	mg/L	1.00	1					
Barium		0.0262	0.000670	0.00400	mg/L	1.00	1					
Cadmium	U	ND	0.000300	0.00100	mg/L	1.00	1					
Chromium	U	ND	0.00300	0.0100	mg/L	1.00	1					
Cobalt	U	ND	0.000300	0.00100	mg/L	1.00	1					
Iron	U	ND	0.0330	0.100	mg/L	1.00	1					
Lead	U	ND	0.000500	0.00200	mg/L	1.00	1					
Manganese		0.00657	0.00100	0.00500	mg/L	1.00	1					
Molybdenum	U	ND	0.000200	0.00100	mg/L	1.00	1					
Potassium		3.98	0.0800	0.300	mg/L	1.00	1					
Selenium		0.0259	0.00150	0.00500	mg/L	1.00	1					
Silver	U	ND	0.000300	0.00100	mg/L	1.00	1					
Thallium	U	ND	0.000600	0.00200	mg/L	1.00	1					
Beryllium	U	ND	0.000200	0.000500	mg/L	1.00	1	SKJ	09/15/22	1149	2311788	6
Lithium	J	0.00609	0.00300	0.0100	mg/L	1.00	1					
Sodium		17.5	0.0800	0.250	mg/L	1.00	1					
Boron		0.933	0.0520	0.150	mg/L	1.00	10	SKJ	09/15/22	1500	2311788	7
Calcium		165	0.800	2.00	mg/L	1.00	10	SKJ	09/15/22	1151	2311788	8
Magnesium		118	0.100	0.300	mg/L	1.00	10					

Solids Analysis

SM2540C Dissolved Solids "As Received"

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

Report Date: September 22, 2022

Company : Georgia Power Company, Southern Company
Address : 241 Ralph McGill Blvd NE, Bin 10160

Atlanta, Georgia 30308

Contact: Joju Abraham
Project: Arkwright CCR Groundwater Compliance AP-3 and AP3

Client Sample ID: ARGWA-13 Project: GPCC00100
Sample ID: 591798006 Client ID: GPCC001

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Solids Analysis												
SM2540C Dissolved Solids "As Received"												
Total Dissolved Solids		1290	2.38	10.0	mg/L			CH6	09/07/22	1020	2313272	9
Titration and Ion Analysis												
SM 2320B Total Alkalinity "As Received"												
Alkalinity, Total as CaCO3		68.2	1.45	4.00	mg/L			HH2	09/13/22	1439	2313370	10
Bicarbonate alkalinity (CaCO3)		68.2	1.45	4.00	mg/L							
Carbonate alkalinity (CaCO3)	U	ND	1.45	4.00	mg/L							

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
SW846 3005A	ICP-MS 3005A PREP	LG2	09/02/22	0905	2311787
SW846 7470A Prep	EPA 7470A Mercury Prep Liquid	RM4	09/02/22	1251	2312006

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	SM 4500-H B/SW846 9040C, SM 2550B	
2	EPA 300.0	
3	EPA 300.0	
4	SW846 7470A	
5	SW846 3005A/6020B	
6	SW846 3005A/6020B	
7	SW846 3005A/6020B	
8	SW846 3005A/6020B	
9	SM 2540C	
10	SM 2320B	

Notes:

Column headers are defined as follows:

DF: Dilution Factor

DL: Detection Limit

MDA: Minimum Detectable Activity

MDC: Minimum Detectable Concentration

Lc/LC: Critical Level

PF: Prep Factor

RL: Reporting Limit

SQL: Sample Quantitation Limit

GEL LABORATORIES LLC

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Certificate of Analysis

Report Date: September 22, 2022

Company : Georgia Power Company, Southern Company
Address : 241 Ralph McGill Blvd NE, Bin 10160

Atlanta, Georgia 30308

Contact: Joju Abraham

Project: Arkwright CCR Groundwater Compliance AP-3 and AP3

Client Sample ID: ARGWC-7	Project: GPCC00100
Sample ID: 591798007	Client ID: GPCC001
Matrix: WG	
Collect Date: 31-AUG-22 11:30	
Receive Date: 01-SEP-22	
Collector: Client	

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Field Data												
Client collected Field pH "As Received"												
Field pH		5.98			SU			EOS1	08/31/22	1130	2311784	1
Ion Chromatography												
EPA 300.0 Anions Liquid "As Received"												
Chloride		4.59	0.0670	0.200	mg/L		1	JLD1	09/02/22	1356	2311964	2
Fluoride	U	ND	0.0330	0.100	mg/L		1					
Sulfate		36.3	0.665	2.00	mg/L		5	JLD1	09/02/22	1935	2311964	3
Mercury Analysis-CVAA												
7470 Cold Vapor Mercury, Liquid "As Received"												
Mercury	U	ND	0.0000670	0.000200	mg/L	1.00	1	JP2	09/06/22	1026	2312007	4
Metals Analysis-ICP-MS												
SW846 3005A/6020B "As Received"												
Aluminum	U	ND	0.0193	0.0500	mg/L	1.00	1	SKJ	09/13/22	2317	2311788	5
Antimony	U	ND	0.00100	0.00300	mg/L	1.00	1					
Arsenic	U	ND	0.00200	0.00500	mg/L	1.00	1					
Barium		0.0505	0.000670	0.00400	mg/L	1.00	1					
Cadmium	U	ND	0.000300	0.00100	mg/L	1.00	1					
Chromium	J	0.00344	0.00300	0.0100	mg/L	1.00	1					
Cobalt	U	ND	0.000300	0.00100	mg/L	1.00	1					
Iron	U	ND	0.0330	0.100	mg/L	1.00	1					
Lead	U	ND	0.000500	0.00200	mg/L	1.00	1					
Manganese	J	0.00110	0.00100	0.00500	mg/L	1.00	1					
Molybdenum	U	ND	0.000200	0.00100	mg/L	1.00	1					
Potassium		1.01	0.0800	0.300	mg/L	1.00	1					
Selenium	U	ND	0.00150	0.00500	mg/L	1.00	1					
Silver	U	ND	0.000300	0.00100	mg/L	1.00	1					
Thallium	U	ND	0.000600	0.00200	mg/L	1.00	1					
Beryllium	U	ND	0.000200	0.000500	mg/L	1.00	1	SKJ	09/15/22	1154	2311788	6
Calcium		9.99	0.0800	0.200	mg/L	1.00	1					
Lithium	J	0.00308	0.00300	0.0100	mg/L	1.00	1					
Magnesium		8.76	0.0100	0.0300	mg/L	1.00	1					
Sodium		6.13	0.0800	0.250	mg/L	1.00	1					
Boron		0.0815	0.00520	0.0150	mg/L	1.00	1	SKJ	09/15/22	1503	2311788	7
Solids Analysis												
SM2540C Dissolved Solids "As Received"												

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Certificate of Analysis

Report Date: September 22, 2022

Company : Georgia Power Company, Southern Company
Address : 241 Ralph McGill Blvd NE, Bin 10160

Atlanta, Georgia 30308

Contact: Joju Abraham
Project: Arkwright CCR Groundwater Compliance AP-3 and AP3

Client Sample ID: ARGWC-7 Project: GPCC00100
Sample ID: 591798007 Client ID: GPCC001

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Solids Analysis												
SM2540C Dissolved Solids "As Received"												
Total Dissolved Solids		101	2.38	10.0	mg/L			CH6	09/07/22	1020	2313272	8
Titration and Ion Analysis												
SM 2320B Total Alkalinity "As Received"												
Alkalinity, Total as CaCO ₃		30.8	1.45	4.00	mg/L			HH2	09/13/22	1441	2313370	9
Bicarbonate alkalinity (CaCO ₃)		30.8	1.45	4.00	mg/L							
Carbonate alkalinity (CaCO ₃)	U	ND	1.45	4.00	mg/L							

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
SW846 3005A	ICP-MS 3005A PREP	LG2	09/02/22	0905	2311787
SW846 7470A Prep	EPA 7470A Mercury Prep Liquid	RM4	09/02/22	1251	2312006

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	SM 4500-H B/SW846 9040C, SM 2550B	
2	EPA 300.0	
3	EPA 300.0	
4	SW846 7470A	
5	SW846 3005A/6020B	
6	SW846 3005A/6020B	
7	SW846 3005A/6020B	
8	SM 2540C	
9	SM 2320B	

Notes:

Column headers are defined as follows:

DF: Dilution Factor

DL: Detection Limit

MDA: Minimum Detectable Activity

MDC: Minimum Detectable Concentration

Lc/LC: Critical Level

PF: Prep Factor

RL: Reporting Limit

SQL: Sample Quantitation Limit

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Certificate of Analysis

Report Date: September 22, 2022

Company : Georgia Power Company, Southern Company
Address : 241 Ralph McGill Blvd NE, Bin 10160

Atlanta, Georgia 30308

Contact: Joju Abraham

Project: Arkwright CCR Groundwater Compliance AP-3 and AP3

Client Sample ID: ARAMW-6 Project: GPCC00100
Sample ID: 591798008 Client ID: GPCC001
Matrix: WG
Collect Date: 31-AUG-22 11:44
Receive Date: 01-SEP-22
Collector: Client

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Field Data												
Client collected Field pH "As Received"												
Field pH		6.28			SU			EOS1	08/31/22	1144	2311784	1
Ion Chromatography												
EPA 300.0 Anions Liquid "As Received"												
Chloride		5.10	0.0670	0.200	mg/L	1		JLD1	09/02/22	1427	2311964	2
Fluoride		0.168	0.0330	0.100	mg/L	1						
Sulfate		46.5	0.665	2.00	mg/L	5		JLD1	09/02/22	2006	2311964	3
Mercury Analysis-CVAA												
7470 Cold Vapor Mercury, Liquid "As Received"												
Mercury	U	ND	0.0000670	0.000200	mg/L	1.00	1	JP2	09/06/22	1028	2312007	4
Metals Analysis-ICP-MS												
SW846 3005A/6020B "As Received"												
Aluminum	U	ND	0.0193	0.0500	mg/L	1.00	1	SKJ	09/13/22	2321	2311788	5
Antimony	U	ND	0.00100	0.00300	mg/L	1.00	1					
Arsenic	U	ND	0.00200	0.00500	mg/L	1.00	1					
Barium		0.0400	0.000670	0.00400	mg/L	1.00	1					
Cadmium	U	ND	0.000300	0.00100	mg/L	1.00	1					
Chromium	U	ND	0.00300	0.0100	mg/L	1.00	1					
Cobalt	U	ND	0.000300	0.00100	mg/L	1.00	1					
Iron	U	ND	0.0330	0.100	mg/L	1.00	1					
Lead	U	ND	0.000500	0.00200	mg/L	1.00	1					
Manganese		0.00848	0.00100	0.00500	mg/L	1.00	1					
Molybdenum	U	ND	0.000200	0.00100	mg/L	1.00	1					
Potassium		1.27	0.0800	0.300	mg/L	1.00	1					
Selenium	U	ND	0.00150	0.00500	mg/L	1.00	1					
Silver	U	ND	0.000300	0.00100	mg/L	1.00	1					
Thallium	U	ND	0.000600	0.00200	mg/L	1.00	1					
Beryllium	U	ND	0.000200	0.000500	mg/L	1.00	1	SKJ	09/15/22	1156	2311788	6
Calcium		26.4	0.0800	0.200	mg/L	1.00	1					
Lithium	U	ND	0.00300	0.0100	mg/L	1.00	1					
Magnesium		14.1	0.0100	0.0300	mg/L	1.00	1					
Sodium		11.2	0.0800	0.250	mg/L	1.00	1					
Boron		0.607	0.0260	0.0750	mg/L	1.00	5	SKJ	09/15/22	1505	2311788	7

Solids Analysis

SM2540C Dissolved Solids "As Received"

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Certificate of Analysis

Report Date: September 22, 2022

Company : Georgia Power Company, Southern Company
Address : 241 Ralph McGill Blvd NE, Bin 10160

Atlanta, Georgia 30308

Contact: Joju Abraham
Project: Arkwright CCR Groundwater Compliance AP-3 and AP3

Client Sample ID: ARAMW-6 Project: GPCC00100
Sample ID: 591798008 Client ID: GPCC001

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Solids Analysis												
SM2540C Dissolved Solids "As Received"												
Total Dissolved Solids		167	2.38	10.0	mg/L			CH6	09/07/22	1020	2313272	8
Titration and Ion Analysis												
SM 2320B Total Alkalinity "As Received"												
Alkalinity, Total as CaCO3		90.4	1.45	4.00	mg/L			HH2	09/13/22	1443	2313370	9
Bicarbonate alkalinity (CaCO3)		90.4	1.45	4.00	mg/L							
Carbonate alkalinity (CaCO3)	U	ND	1.45	4.00	mg/L							

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
SW846 3005A	ICP-MS 3005A PREP	LG2	09/02/22	0905	2311787
SW846 7470A Prep	EPA 7470A Mercury Prep Liquid	RM4	09/02/22	1251	2312006

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	SM 4500-H B/SW846 9040C, SM 2550B	
2	EPA 300.0	
3	EPA 300.0	
4	SW846 7470A	
5	SW846 3005A/6020B	
6	SW846 3005A/6020B	
7	SW846 3005A/6020B	
8	SM 2540C	
9	SM 2320B	

Notes:

Column headers are defined as follows:

DF: Dilution Factor
DL: Detection Limit
MDA: Minimum Detectable Activity
MDC: Minimum Detectable Concentration
Lc/LC: Critical Level
PF: Prep Factor
RL: Reporting Limit
SQL: Sample Quantitation Limit

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Certificate of Analysis

Report Date: September 22, 2022

Company : Georgia Power Company, Southern Company
Address : 241 Ralph McGill Blvd NE, Bin 10160

Atlanta, Georgia 30308

Contact: Joju Abraham

Project: Arkwright CCR Groundwater Compliance AP-3 and AP3

Client Sample ID: ARGWC-15 Project: GPCC00100
Sample ID: 591798009 Client ID: GPCC001
Matrix: WG
Collect Date: 31-AUG-22 12:50
Receive Date: 01-SEP-22
Collector: Client

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Field Data												
Client collected Field pH "As Received"												
Field pH		6.46			SU			EOS1	08/31/22	1250	2311784	1
Ion Chromatography												
EPA 300.0 Anions Liquid "As Received"												
Chloride		3.01	0.0670	0.200	mg/L	1		JLD1	09/02/22	1559	2311964	2
Fluoride		0.169	0.0330	0.100	mg/L	1						
Sulfate		5.64	0.133	0.400	mg/L	1						
Mercury Analysis-CVAA												
7470 Cold Vapor Mercury, Liquid "As Received"												
Mercury	U	ND	0.0000670	0.000200	mg/L	1.00	1	JP2	09/06/22	1030	2312007	3
Metals Analysis-ICP-MS												
SW846 3005A/6020B "As Received"												
Aluminum	U	ND	0.0193	0.0500	mg/L	1.00	1	SKJ	09/13/22	2325	2311788	4
Antimony	U	ND	0.00100	0.00300	mg/L	1.00	1					
Arsenic	U	ND	0.00200	0.00500	mg/L	1.00	1					
Barium		0.0325	0.000670	0.00400	mg/L	1.00	1					
Cadmium	U	ND	0.000300	0.00100	mg/L	1.00	1					
Chromium	U	ND	0.00300	0.0100	mg/L	1.00	1					
Cobalt	U	ND	0.000300	0.00100	mg/L	1.00	1					
Iron	U	ND	0.0330	0.100	mg/L	1.00	1					
Lead	U	ND	0.000500	0.00200	mg/L	1.00	1					
Manganese		0.0200	0.00100	0.00500	mg/L	1.00	1					
Molybdenum		0.00179	0.000200	0.00100	mg/L	1.00	1					
Potassium		7.53	0.0800	0.300	mg/L	1.00	1					
Selenium	U	ND	0.00150	0.00500	mg/L	1.00	1					
Silver	U	ND	0.000300	0.00100	mg/L	1.00	1					
Thallium	U	ND	0.000600	0.00200	mg/L	1.00	1					
Beryllium	U	ND	0.000200	0.000500	mg/L	1.00	1	SKJ	09/15/22	1207	2311788	5
Calcium		25.0	0.0800	0.200	mg/L	1.00	1					
Lithium	U	ND	0.00300	0.0100	mg/L	1.00	1					
Magnesium		9.11	0.0100	0.0300	mg/L	1.00	1					
Sodium		9.01	0.0800	0.250	mg/L	1.00	1					
Boron	J	0.0137	0.00520	0.0150	mg/L	1.00	1	SKJ	09/15/22	1507	2311788	6

Solids Analysis

SM2540C Dissolved Solids "As Received"

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Certificate of Analysis

Report Date: September 22, 2022

Company : Georgia Power Company, Southern Company
Address : 241 Ralph McGill Blvd NE, Bin 10160

Atlanta, Georgia 30308

Contact: Joju Abraham
Project: Arkwright CCR Groundwater Compliance AP-3 and AP3

Client Sample ID: ARGWC-15 Project: GPCC00100
Sample ID: 591798009 Client ID: GPCC001

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Solids Analysis												
SM2540C Dissolved Solids "As Received"												
Total Dissolved Solids		125	2.38	10.0	mg/L		CH6	09/07/22	1020	2313272		7
Titration and Ion Analysis												
SM 2320B Total Alkalinity "As Received"												
Alkalinity, Total as CaCO3		109	1.45	4.00	mg/L		HH2	09/13/22	1444	2313370		8
Bicarbonate alkalinity (CaCO3)		109	1.45	4.00	mg/L							
Carbonate alkalinity (CaCO3)	U	ND	1.45	4.00	mg/L							

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
SW846 3005A	ICP-MS 3005A PREP	LG2	09/02/22	0905	2311787
SW846 7470A Prep	EPA 7470A Mercury Prep Liquid	RM4	09/02/22	1251	2312006

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	SM 4500-H B/SW846 9040C, SM 2550B	
2	EPA 300.0	
3	SW846 7470A	
4	SW846 3005A/6020B	
5	SW846 3005A/6020B	
6	SW846 3005A/6020B	
7	SM 2540C	
8	SM 2320B	

Notes:

Column headers are defined as follows:

DF: Dilution Factor
DL: Detection Limit
MDA: Minimum Detectable Activity
MDC: Minimum Detectable Concentration
Lc/LC: Critical Level
PF: Prep Factor
RL: Reporting Limit
SQL: Sample Quantitation Limit

GEL LABORATORIES LLC

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Certificate of Analysis

Report Date: September 22, 2022

Company : Georgia Power Company, Southern Company
Address : 241 Ralph McGill Blvd NE, Bin 10160

Atlanta, Georgia 30308

Contact: Joju Abraham

Project: Arkwright CCR Groundwater Compliance AP-3 and AP3

Client Sample ID: ARGWC-9 Project: GPCC00100
Sample ID: 591798010 Client ID: GPCC001
Matrix: WG
Collect Date: 31-AUG-22 12:55
Receive Date: 01-SEP-22
Collector: Client

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Field Data												
Client collected Field pH "As Received"												
Field pH		5.98			SU			EOS1	08/31/22	1255	2311784	1
Ion Chromatography												
EPA 300.0 Anions Liquid "As Received"												
Chloride		5.28	0.0670	0.200	mg/L	1		JLD1	09/02/22	1630	2311964	2
Fluoride		0.147	0.0330	0.100	mg/L	1						
Sulfate		1.31	0.133	0.400	mg/L	1						
Mercury Analysis-CVAA												
7470 Cold Vapor Mercury, Liquid "As Received"												
Mercury	U	ND	0.0000670	0.000200	mg/L	1.00	1	JP2	09/06/22	1031	2312007	3
Metals Analysis-ICP-MS												
SW846 3005A/6020B "As Received"												
Aluminum		0.0540	0.0193	0.0500	mg/L	1.00	1	SKJ	09/13/22	2328	2311788	4
Antimony	U	ND	0.00100	0.00300	mg/L	1.00	1					
Arsenic	U	ND	0.00200	0.00500	mg/L	1.00	1					
Barium		0.0391	0.000670	0.00400	mg/L	1.00	1					
Cadmium	U	ND	0.000300	0.00100	mg/L	1.00	1					
Chromium	J	0.00766	0.00300	0.0100	mg/L	1.00	1					
Cobalt	U	ND	0.000300	0.00100	mg/L	1.00	1					
Iron	J	0.0621	0.0330	0.100	mg/L	1.00	1					
Lead	U	ND	0.000500	0.00200	mg/L	1.00	1					
Manganese	J	0.00278	0.00100	0.00500	mg/L	1.00	1					
Molybdenum	U	ND	0.000200	0.00100	mg/L	1.00	1					
Potassium		1.84	0.0800	0.300	mg/L	1.00	1					
Selenium	U	ND	0.00150	0.00500	mg/L	1.00	1					
Silver	U	ND	0.000300	0.00100	mg/L	1.00	1					
Thallium	U	ND	0.000600	0.00200	mg/L	1.00	1					
Beryllium	U	ND	0.000200	0.000500	mg/L	1.00	1	SKJ	09/15/22	1209	2311788	5
Calcium		4.77	0.0800	0.200	mg/L	1.00	1					
Lithium	U	ND	0.00300	0.0100	mg/L	1.00	1					
Magnesium		2.16	0.0100	0.0300	mg/L	1.00	1					
Sodium		6.72	0.0800	0.250	mg/L	1.00	1					
Boron	J	0.00885	0.00520	0.0150	mg/L	1.00	1	SKJ	09/15/22	1509	2311788	6
Solids Analysis												
SM2540C Dissolved Solids "As Received"												

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Certificate of Analysis

Report Date: September 22, 2022

Company : Georgia Power Company, Southern Company
Address : 241 Ralph McGill Blvd NE, Bin 10160

Atlanta, Georgia 30308

Contact: Joju Abraham
Project: Arkwright CCR Groundwater Compliance AP-3 and AP3

Client Sample ID: ARGWC-9 Project: GPCC00100
Sample ID: 591798010 Client ID: GPCC001

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Solids Analysis												
SM2540C Dissolved Solids "As Received"												
Total Dissolved Solids		63.0	2.38	10.0	mg/L			CH6	09/07/22	1020	2313272	7
Titration and Ion Analysis												
SM 2320B Total Alkalinity "As Received"												
Alkalinity, Total as CaCO ₃		23.8	1.45	4.00	mg/L			HH2	09/13/22	1447	2313370	8
Bicarbonate alkalinity (CaCO ₃)		23.8	1.45	4.00	mg/L							
Carbonate alkalinity (CaCO ₃)	U	ND	1.45	4.00	mg/L							

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
SW846 3005A	ICP-MS 3005A PREP	LG2	09/02/22	0905	2311787
SW846 7470A Prep	EPA 7470A Mercury Prep Liquid	RM4	09/02/22	1251	2312006

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	SM 4500-H B/SW846 9040C, SM 2550B	
2	EPA 300.0	
3	SW846 7470A	
4	SW846 3005A/6020B	
5	SW846 3005A/6020B	
6	SW846 3005A/6020B	
7	SM 2540C	
8	SM 2320B	

Notes:

Column headers are defined as follows:

DF: Dilution Factor
DL: Detection Limit
MDA: Minimum Detectable Activity
MDC: Minimum Detectable Concentration
Lc/LC: Critical Level
PF: Prep Factor
RL: Reporting Limit
SQL: Sample Quantitation Limit

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Certificate of Analysis

Report Date: September 22, 2022

Company : Georgia Power Company, Southern Company
Address : 241 Ralph McGill Blvd NE, Bin 10160

Atlanta, Georgia 30308

Contact: Joju Abraham
Project: Arkwright CCR Groundwater Compliance AP-3 and AP3

Client Sample ID: ARGWA-14	Project: GPCC00100
Sample ID: 591798011	Client ID: GPCC001
Matrix: WG	
Collect Date: 31-AUG-22 13:50	
Receive Date: 01-SEP-22	
Collector: Client	

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Field Data												
Client collected Field pH "As Received"												
Field pH		6.80			SU			EOS1	08/31/22	1350	2311784	1
Ion Chromatography												
EPA 300.0 Anions Liquid "As Received"												
Chloride		3.92	0.0670	0.200	mg/L		1	JLD1	09/02/22	1648	2311967	2
Fluoride		0.155	0.0330	0.100	mg/L		1					
Sulfate		2.58	0.133	0.400	mg/L		1					
Mercury Analysis-CVAA												
7470 Cold Vapor Mercury, Liquid "As Received"												
Mercury	U	ND	0.0000670	0.000200	mg/L	1.00	1	JP2	09/06/22	1033	2312007	3
Metals Analysis-ICP-MS												
SW846 3005A/6020B "As Received"												
Aluminum	J	0.0344	0.0193	0.0500	mg/L	1.00	1	SKJ	09/13/22	2339	2311788	4
Antimony	U	ND	0.00100	0.00300	mg/L	1.00	1					
Arsenic	U	ND	0.00200	0.00500	mg/L	1.00	1					
Barium		0.0740	0.000670	0.00400	mg/L	1.00	1					
Cadmium	U	ND	0.000300	0.00100	mg/L	1.00	1					
Chromium	U	ND	0.00300	0.0100	mg/L	1.00	1					
Cobalt	U	ND	0.000300	0.00100	mg/L	1.00	1					
Iron	U	ND	0.0330	0.100	mg/L	1.00	1					
Lead	U	ND	0.000500	0.00200	mg/L	1.00	1					
Manganese		0.00674	0.00100	0.00500	mg/L	1.00	1					
Molybdenum	J	0.000862	0.000200	0.00100	mg/L	1.00	1					
Potassium		3.47	0.0800	0.300	mg/L	1.00	1					
Selenium	U	ND	0.00150	0.00500	mg/L	1.00	1					
Silver	U	ND	0.000300	0.00100	mg/L	1.00	1					
Thallium	U	ND	0.000600	0.00200	mg/L	1.00	1					
Beryllium	U	ND	0.000200	0.000500	mg/L	1.00	1	SKJ	09/15/22	1212	2311788	5
Calcium		41.6	0.0800	0.200	mg/L	1.00	1					
Lithium	J	0.00399	0.00300	0.0100	mg/L	1.00	1					
Magnesium		7.21	0.0100	0.0300	mg/L	1.00	1					
Boron		0.0356	0.00520	0.0150	mg/L	1.00	1	SKJ	09/15/22	1511	2311788	6
Sodium		70.9	0.400	1.25	mg/L	1.00	5	SKJ	09/15/22	1215	2311788	7
Solids Analysis												
SM2540C Dissolved Solids "As Received"												

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Certificate of Analysis

Report Date: September 22, 2022

Company : Georgia Power Company, Southern Company
Address : 241 Ralph McGill Blvd NE, Bin 10160

Atlanta, Georgia 30308

Contact: Joju Abraham
Project: Arkwright CCR Groundwater Compliance AP-3 and AP3

Client Sample ID: ARGWA-14 Project: GPCC00100
Sample ID: 591798011 Client ID: GPCC001

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Solids Analysis												
SM2540C Dissolved Solids "As Received"												
Total Dissolved Solids		177	2.38	10.0	mg/L			CH6	09/07/22	1020	2313272	8
Titration and Ion Analysis												
SM 2320B Total Alkalinity "As Received"												
Alkalinity, Total as CaCO3		157	1.45	4.00	mg/L			HH2	09/13/22	1448	2313370	9
Bicarbonate alkalinity (CaCO3)		157	1.45	4.00	mg/L							
Carbonate alkalinity (CaCO3)	U	ND	1.45	4.00	mg/L							

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
SW846 3005A	ICP-MS 3005A PREP	LG2	09/02/22	0905	2311787
SW846 7470A Prep	EPA 7470A Mercury Prep Liquid	RM4	09/02/22	1251	2312006

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	SM 4500-H B/SW846 9040C, SM 2550B	
2	EPA 300.0	
3	SW846 7470A	
4	SW846 3005A/6020B	
5	SW846 3005A/6020B	
6	SW846 3005A/6020B	
7	SW846 3005A/6020B	
8	SM 2540C	
9	SM 2320B	

Notes:

Column headers are defined as follows:

DF: Dilution Factor Lc/LC: Critical Level
DL: Detection Limit PF: Prep Factor
MDA: Minimum Detectable Activity RL: Reporting Limit
MDC: Minimum Detectable Concentration SQL: Sample Quantitation Limit

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Certificate of Analysis

Report Date: September 22, 2022

Company : Georgia Power Company, Southern Company
Address : 241 Ralph McGill Blvd NE, Bin 10160

Atlanta, Georgia 30308

Contact: Joju Abraham
Project: Arkwright CCR Groundwater Compliance AP-3 and AP3

Client Sample ID: ARGWC-8 Project: GPCC00100
Sample ID: 591798012 Client ID: GPCC001
Matrix: WG
Collect Date: 31-AUG-22 14:07
Receive Date: 01-SEP-22
Collector: Client

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Field Data												
Client collected Field pH "As Received"												
Field pH		6.38			SU			EOS1	08/31/22	1407	2311784	1
Ion Chromatography												
EPA 300.0 Anions Liquid "As Received"												
Chloride		5.86	0.0670	0.200	mg/L	1		JLD1	09/02/22	1718	2311967	2
Fluoride		0.172	0.0330	0.100	mg/L	1						
Sulfate		54.1	1.33	4.00	mg/L	10		JLD1	09/03/22	0216	2311967	3
Mercury Analysis-CVAA												
7470 Cold Vapor Mercury, Liquid "As Received"												
Mercury	U	ND	0.0000670	0.000200	mg/L	1.00	1	JP2	09/06/22	1035	2312007	4
Metals Analysis-ICP-MS												
SW846 3005A/6020B "As Received"												
Aluminum		0.157	0.0193	0.0500	mg/L	1.00	1	SKJ	09/13/22	2343	2311788	5
Antimony	U	ND	0.00100	0.00300	mg/L	1.00	1					
Arsenic	U	ND	0.00200	0.00500	mg/L	1.00	1					
Barium		0.0571	0.000670	0.00400	mg/L	1.00	1					
Cadmium	U	ND	0.000300	0.00100	mg/L	1.00	1					
Chromium	U	ND	0.00300	0.0100	mg/L	1.00	1					
Cobalt	U	ND	0.000300	0.00100	mg/L	1.00	1					
Iron		0.171	0.0330	0.100	mg/L	1.00	1					
Lead	U	ND	0.000500	0.00200	mg/L	1.00	1					
Manganese		0.355	0.00100	0.00500	mg/L	1.00	1					
Molybdenum		0.0437	0.000200	0.00100	mg/L	1.00	1					
Potassium		1.76	0.0800	0.300	mg/L	1.00	1					
Selenium	U	ND	0.00150	0.00500	mg/L	1.00	1					
Silver	U	ND	0.000300	0.00100	mg/L	1.00	1					
Thallium	U	ND	0.000600	0.00200	mg/L	1.00	1					
Beryllium	U	ND	0.000200	0.000500	mg/L	1.00	1	SKJ	09/15/22	1217	2311788	6
Calcium		43.0	0.0800	0.200	mg/L	1.00	1					
Lithium	J	0.00345	0.00300	0.0100	mg/L	1.00	1					
Magnesium		20.4	0.0100	0.0300	mg/L	1.00	1					
Sodium		13.3	0.0800	0.250	mg/L	1.00	1					
Boron		1.05	0.0520	0.150	mg/L	1.00	10	SKJ	09/15/22	1517	2311788	7

Solids Analysis

SM2540C Dissolved Solids "As Received"

GEL LABORATORIES LLC

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Certificate of Analysis

Report Date: September 22, 2022

Company : Georgia Power Company, Southern Company
Address : 241 Ralph McGill Blvd NE, Bin 10160

Atlanta, Georgia 30308

Contact: Joju Abraham
Project: Arkwright CCR Groundwater Compliance AP-3 and AP3

Client Sample ID: ARGWC-8	Project: GPCC00100
Sample ID: 591798012	Client ID: GPCC001

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Solids Analysis												
SM2540C Dissolved Solids "As Received"												
Total Dissolved Solids		248	2.38	10.0	mg/L		CH6	09/07/22	1020	2313272		8
Titration and Ion Analysis												
SM 2320B Total Alkalinity "As Received"												
Alkalinity, Total as CaCO3		158	1.45	4.00	mg/L		HH2	09/13/22	1451	2313370		9
Bicarbonate alkalinity (CaCO3)		158	1.45	4.00	mg/L							
Carbonate alkalinity (CaCO3)	U	ND	1.45	4.00	mg/L							

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
SW846 3005A	ICP-MS 3005A PREP	LG2	09/02/22	0905	2311787
SW846 7470A Prep	EPA 7470A Mercury Prep Liquid	RM4	09/02/22	1251	2312006

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	SM 4500-H B/SW846 9040C, SM 2550B	
2	EPA 300.0	
3	EPA 300.0	
4	SW846 7470A	
5	SW846 3005A/6020B	
6	SW846 3005A/6020B	
7	SW846 3005A/6020B	
8	SM 2540C	
9	SM 2320B	

Notes:

Column headers are defined as follows:

DF: Dilution Factor	Lc/LC: Critical Level
DL: Detection Limit	PF: Prep Factor
MDA: Minimum Detectable Activity	RL: Reporting Limit
MDC: Minimum Detectable Concentration	SQL: Sample Quantitation Limit

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Certificate of Analysis

Report Date: September 22, 2022

Company : Georgia Power Company, Southern Company
Address : 241 Ralph McGill Blvd NE, Bin 10160

Atlanta, Georgia 30308

Contact: Joju Abraham
Project: Arkwright CCR Groundwater Compliance AP-3 and AP3

Client Sample ID: ARGWC-10 Project: GPCC00100
Sample ID: 591798013 Client ID: GPCC001
Matrix: WG
Collect Date: 31-AUG-22 14:50
Receive Date: 01-SEP-22
Collector: Client

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Field Data												
Client collected Field pH "As Received"												
Field pH		5.96			SU			EOS1	08/31/22	1450	2311784	1
Ion Chromatography												
EPA 300.0 Anions Liquid "As Received"												
Chloride		4.20	0.0670	0.200	mg/L		1	JLD1	09/02/22	1748	2311967	2
Fluoride	U	ND	0.0330	0.100	mg/L		1					
Sulfate		0.494	0.133	0.400	mg/L		1					
Mercury Analysis-CVAA												
7470 Cold Vapor Mercury, Liquid "As Received"												
Mercury	U	ND	0.0000670	0.000200	mg/L	1.00	1	JP2	09/06/22	1037	2312007	3
Metals Analysis-ICP-MS												
SW846 3005A/6020B "As Received"												
Aluminum		0.0861	0.0193	0.0500	mg/L	1.00	1	SKJ	09/13/22	2346	2311788	4
Antimony	U	ND	0.00100	0.00300	mg/L	1.00	1					
Arsenic	U	ND	0.00200	0.00500	mg/L	1.00	1					
Barium		0.0345	0.000670	0.00400	mg/L	1.00	1					
Cadmium	U	ND	0.000300	0.00100	mg/L	1.00	1					
Chromium	J	0.00550	0.00300	0.0100	mg/L	1.00	1					
Cobalt	U	ND	0.000300	0.00100	mg/L	1.00	1					
Iron		0.112	0.0330	0.100	mg/L	1.00	1					
Lead	U	ND	0.000500	0.00200	mg/L	1.00	1					
Manganese	J	0.00358	0.00100	0.00500	mg/L	1.00	1					
Molybdenum	U	ND	0.000200	0.00100	mg/L	1.00	1					
Potassium		0.756	0.0800	0.300	mg/L	1.00	1					
Selenium	U	ND	0.00150	0.00500	mg/L	1.00	1					
Silver	U	ND	0.000300	0.00100	mg/L	1.00	1					
Thallium	U	ND	0.000600	0.00200	mg/L	1.00	1					
Beryllium	U	ND	0.000200	0.000500	mg/L	1.00	1	SKJ	09/15/22	1222	2311788	5
Calcium		7.65	0.0800	0.200	mg/L	1.00	1					
Lithium	U	ND	0.00300	0.0100	mg/L	1.00	1					
Magnesium		4.01	0.0100	0.0300	mg/L	1.00	1					
Sodium		10.4	0.0800	0.250	mg/L	1.00	1					
Boron	J	0.00863	0.00520	0.0150	mg/L	1.00	1	SKJ	09/15/22	1519	2311788	6
Solids Analysis												
SM2540C Dissolved Solids "As Received"												

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Certificate of Analysis

Report Date: September 22, 2022

Company : Georgia Power Company, Southern Company
Address : 241 Ralph McGill Blvd NE, Bin 10160

Atlanta, Georgia 30308

Contact: Joju Abraham
Project: Arkwright CCR Groundwater Compliance AP-3 and AP3

Client Sample ID: ARGWC-10	Project: GPCC00100
Sample ID: 591798013	Client ID: GPCC001

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Solids Analysis												
SM2540C Dissolved Solids "As Received"												
Total Dissolved Solids		69.0	2.38	10.0	mg/L		CH6		09/07/22	1020	2313272	7
Titration and Ion Analysis												
SM 2320B Total Alkalinity "As Received"												
Alkalinity, Total as CaCO3		49.4	1.45	4.00	mg/L		HH2		09/13/22	1456	2313370	8
Bicarbonate alkalinity (CaCO3)		49.4	1.45	4.00	mg/L							
Carbonate alkalinity (CaCO3)	U	ND	1.45	4.00	mg/L							

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
SW846 3005A	ICP-MS 3005A PREP	LG2	09/02/22	0905	2311787
SW846 7470A Prep	EPA 7470A Mercury Prep Liquid	RM4	09/02/22	1251	2312006

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	SM 4500-H B/SW846 9040C, SM 2550B	
2	EPA 300.0	
3	SW846 7470A	
4	SW846 3005A/6020B	
5	SW846 3005A/6020B	
6	SW846 3005A/6020B	
7	SM 2540C	
8	SM 2320B	

Notes:

Column headers are defined as follows:

DF: Dilution Factor	Lc/LC: Critical Level
DL: Detection Limit	PF: Prep Factor
MDA: Minimum Detectable Activity	RL: Reporting Limit
MDC: Minimum Detectable Concentration	SQL: Sample Quantitation Limit

GEL LABORATORIES LLC

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Certificate of Analysis

Report Date: September 22, 2022

Company : Georgia Power Company, Southern Company
Address : 241 Ralph McGill Blvd NE, Bin 10160

Atlanta, Georgia 30308

Contact: Joju Abraham
Project: Arkwright CCR Groundwater Compliance AP-3 and AP3

Client Sample ID: FB-02	Project: GPCC00100
Sample ID: 591798014	Client ID: GPCC001
Matrix: WQ	
Collect Date: 31-AUG-22 15:10	
Receive Date: 01-SEP-22	
Collector: Client	

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Ion Chromatography												
EPA 300.0 Anions Liquid "As Received"												
Chloride	J	0.164	0.0670	0.200	mg/L		1	JLD1	09/02/22	1818	2311967	1
Fluoride	U	ND	0.0330	0.100	mg/L		1					
Sulfate	U	ND	0.133	0.400	mg/L		1					
Mercury Analysis-CVAA												
7470 Cold Vapor Mercury, Liquid "As Received"												
Mercury	U	ND	0.0000670	0.000200	mg/L	1.00	1	JP2	09/06/22	1042	2312007	2
Metals Analysis-ICP-MS												
SW846 3005A/6020B "As Received"												
Antimony	U	ND	0.00100	0.00300	mg/L	1.00	1	SKJ	09/13/22	2350	2311788	3
Arsenic	U	ND	0.00200	0.00500	mg/L	1.00	1					
Barium	U	ND	0.000670	0.00400	mg/L	1.00	1					
Cadmium	U	ND	0.000300	0.00100	mg/L	1.00	1					
Chromium	U	ND	0.00300	0.0100	mg/L	1.00	1					
Cobalt	U	ND	0.000300	0.00100	mg/L	1.00	1					
Lead	U	ND	0.000500	0.00200	mg/L	1.00	1					
Molybdenum	U	ND	0.000200	0.00100	mg/L	1.00	1					
Selenium	U	ND	0.00150	0.00500	mg/L	1.00	1					
Silver	U	ND	0.000300	0.00100	mg/L	1.00	1					
Thallium	U	ND	0.000600	0.00200	mg/L	1.00	1					
Beryllium	U	ND	0.000200	0.000500	mg/L	1.00	1	SKJ	09/15/22	1230	2311788	4
Calcium	U	ND	0.0800	0.200	mg/L	1.00	1					
Lithium	U	ND	0.00300	0.0100	mg/L	1.00	1					
Boron	U	ND	0.00520	0.0150	mg/L	1.00	1	SKJ	09/15/22	1522	2311788	5
Solids Analysis												
SM2540C Dissolved Solids "As Received"												
Total Dissolved Solids	U	ND	2.38	10.0	mg/L			CH6	09/07/22	1020	2313272	6

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
SW846 3005A	ICP-MS 3005A PREP	LG2	09/02/22	0905	2311787
SW846 7470A Prep	EPA 7470A Mercury Prep Liquid	RM4	09/02/22	1251	2312006

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Certificate of Analysis

Report Date: September 22, 2022

Company : Georgia Power Company, Southern Company
Address : 241 Ralph McGill Blvd NE, Bin 10160

Atlanta, Georgia 30308
Contact: Joju Abraham
Project: Arkwright CCR Groundwater Compliance AP-3 and AP3

Client Sample ID: FB-02 Project: GPCC00100
Sample ID: 591798014 Client ID: GPCC001

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time Batch	Method
The following Analytical Methods were performed:											
Method	Description	Analyst Comments									
1	EPA 300.0										
2	SW846 7470A										
3	SW846 3005A/6020B										
4	SW846 3005A/6020B										
5	SW846 3005A/6020B										
6	SM 2540C										

Notes:

Column headers are defined as follows:

DF: Dilution Factor

DL: Detection Limit

MDA: Minimum Detectable Activity

MDC: Minimum Detectable Concentration

Lc/LC: Critical Level

PF: Prep Factor

RL: Reporting Limit

SQL: Sample Quantitation Limit

GEL LABORATORIES LLC

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Certificate of Analysis

Report Date: September 22, 2022

Company : Georgia Power Company, Southern Company
Address : 241 Ralph McGill Blvd NE, Bin 10160

Atlanta, Georgia 30308

Contact: Joju Abraham

Project: Arkwright CCR Groundwater Compliance AP-3 and AP3

Client Sample ID: ARGWC-16	Project: GPCC00100
Sample ID: 591798015	Client ID: GPCC001
Matrix: WG	
Collect Date: 31-AUG-22 15:25	
Receive Date: 01-SEP-22	
Collector: Client	

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Field Data												
Client collected Field pH "As Received"												
Field pH		5.18			SU			EOS1	08/31/22	1525	2311784	1
Ion Chromatography												
EPA 300.0 Anions Liquid "As Received"												
Chloride		5.67	0.0670	0.200	mg/L		1	JLD1	09/02/22	1848	2311967	2
Fluoride	U	ND	0.0330	0.100	mg/L		1					
Sulfate		243	2.66	8.00	mg/L		20	JLD1	09/03/22	0346	2311967	3
Mercury Analysis-CVAA												
7470 Cold Vapor Mercury, Liquid "As Received"												
Mercury	U	ND	0.0000670	0.000200	mg/L	1.00	1	JP2	09/06/22	1044	2312007	4
Metals Analysis-ICP-MS												
SW846 3005A/6020B "As Received"												
Aluminum	U	ND	0.0193	0.0500	mg/L	1.00	1	SKJ	09/13/22	2353	2311788	5
Antimony	U	ND	0.00100	0.00300	mg/L	1.00	1					
Arsenic	U	ND	0.00200	0.00500	mg/L	1.00	1					
Barium		0.0383	0.000670	0.00400	mg/L	1.00	1					
Cadmium	U	ND	0.000300	0.00100	mg/L	1.00	1					
Chromium	U	ND	0.00300	0.0100	mg/L	1.00	1					
Cobalt	U	ND	0.000300	0.00100	mg/L	1.00	1					
Iron	U	ND	0.0330	0.100	mg/L	1.00	1					
Lead	U	ND	0.000500	0.00200	mg/L	1.00	1					
Manganese		0.327	0.00100	0.00500	mg/L	1.00	1					
Molybdenum	U	ND	0.000200	0.00100	mg/L	1.00	1					
Potassium		3.71	0.0800	0.300	mg/L	1.00	1					
Selenium	J	0.00287	0.00150	0.00500	mg/L	1.00	1					
Silver	U	ND	0.000300	0.00100	mg/L	1.00	1					
Thallium	U	ND	0.000600	0.00200	mg/L	1.00	1					
Beryllium	U	ND	0.000200	0.000500	mg/L	1.00	1	SKJ	09/15/22	1233	2311788	6
Calcium		42.4	0.0800	0.200	mg/L	1.00	1					
Lithium	U	ND	0.00300	0.0100	mg/L	1.00	1					
Magnesium		31.9	0.0100	0.0300	mg/L	1.00	1					
Sodium		15.0	0.0800	0.250	mg/L	1.00	1					
Boron		0.101	0.00520	0.0150	mg/L	1.00	1	SKJ	09/15/22	1524	2311788	7
Solids Analysis												
SM2540C Dissolved Solids "As Received"												

GEL LABORATORIES LLC

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Certificate of Analysis

Report Date: September 22, 2022

Company : Georgia Power Company, Southern Company
Address : 241 Ralph McGill Blvd NE, Bin 10160

Atlanta, Georgia 30308

Contact: Joju Abraham
Project: Arkwright CCR Groundwater Compliance AP-3 and AP3

Client Sample ID: ARGWC-16 Project: GPCC00100
Sample ID: 591798015 Client ID: GPCC001

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Solids Analysis												
SM2540C Dissolved Solids "As Received"												
Total Dissolved Solids		375	2.38	10.0	mg/L			CH6	09/07/22	1020	2313272	8
Titration and Ion Analysis												
SM 2320B Total Alkalinity "As Received"												
Alkalinity, Total as CaCO3		19.0	1.45	4.00	mg/L			HH2	09/13/22	1504	2313370	9
Bicarbonate alkalinity (CaCO3)		19.0	1.45	4.00	mg/L							
Carbonate alkalinity (CaCO3)	U	ND	1.45	4.00	mg/L							

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
SW846 3005A	ICP-MS 3005A PREP	LG2	09/02/22	0905	2311787
SW846 7470A Prep	EPA 7470A Mercury Prep Liquid	RM4	09/02/22	1251	2312006

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	SM 4500-H B/SW846 9040C, SM 2550B	
2	EPA 300.0	
3	EPA 300.0	
4	SW846 7470A	
5	SW846 3005A/6020B	
6	SW846 3005A/6020B	
7	SW846 3005A/6020B	
8	SM 2540C	
9	SM 2320B	

Notes:

Column headers are defined as follows:

DF: Dilution Factor
DL: Detection Limit
MDA: Minimum Detectable Activity
MDC: Minimum Detectable Concentration
Lc/LC: Critical Level
PF: Prep Factor
RL: Reporting Limit
SQL: Sample Quantitation Limit

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

Report Date: September 22, 2022

Company : Georgia Power Company, Southern Company
Address : 241 Ralph McGill Blvd NE, Bin 10160

Atlanta, Georgia 30308

Contact: Joju Abraham
Project: Arkwright CCR Groundwater Compliance AP-3 and AP3

Client Sample ID: DUP-01	Project: GPCC00100
Sample ID: 591798016	Client ID: GPCC001
Matrix: WQ	
Collect Date: 31-AUG-22 12:00	
Receive Date: 01-SEP-22	
Collector: Client	

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Ion Chromatography												
EPA 300.0 Anions Liquid "As Received"												
Chloride		5.74	0.0670	0.200	mg/L		1	JLD1	09/02/22	1918	2311967	1
Fluoride	U	ND	0.0330	0.100	mg/L		1					
Sulfate		242	2.66	8.00	mg/L		20	JLD1	09/03/22	0416	2311967	2
Mercury Analysis-CVAA												
7470 Cold Vapor Mercury, Liquid "As Received"												
Mercury	U	ND	0.0000670	0.000200	mg/L	1.00	1	JP2	09/06/22	1045	2312007	3
Metals Analysis-ICP-MS												
SW846 3005A/6020B "As Received"												
Antimony	U	ND	0.00100	0.00300	mg/L	1.00	1	SKJ	09/13/22	2357	2311788	4
Arsenic	U	ND	0.00200	0.00500	mg/L	1.00	1					
Barium		0.0397	0.000670	0.00400	mg/L	1.00	1					
Cadmium	U	ND	0.000300	0.00100	mg/L	1.00	1					
Chromium	U	ND	0.00300	0.0100	mg/L	1.00	1					
Cobalt	U	ND	0.000300	0.00100	mg/L	1.00	1					
Lead	U	ND	0.000500	0.00200	mg/L	1.00	1					
Molybdenum	U	ND	0.000200	0.00100	mg/L	1.00	1					
Selenium	J	0.00263	0.00150	0.00500	mg/L	1.00	1					
Silver	U	ND	0.000300	0.00100	mg/L	1.00	1					
Thallium	U	ND	0.000600	0.00200	mg/L	1.00	1					
Beryllium	U	ND	0.000200	0.000500	mg/L	1.00	1	SKJ	09/15/22	1235	2311788	5
Calcium		43.2	0.0800	0.200	mg/L	1.00	1					
Lithium	U	ND	0.00300	0.0100	mg/L	1.00	1					
Boron		0.110	0.00520	0.0150	mg/L	1.00	1	SKJ	09/15/22	1526	2311788	6
Solids Analysis												
SM2540C Dissolved Solids "As Received"												
Total Dissolved Solids		373	2.38	10.0	mg/L			CH6	09/07/22	1020	2313272	7

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
SW846 3005A	ICP-MS 3005A PREP	LG2	09/02/22	0905	2311787
SW846 7470A Prep	EPA 7470A Mercury Prep Liquid	RM4	09/02/22	1251	2312006

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Certificate of Analysis

Report Date: September 22, 2022

Company : Georgia Power Company, Southern Company
 Address : 241 Ralph McGill Blvd NE, Bin 10160

Atlanta, Georgia 30308

Contact: Joju Abraham
 Project: Arkwright CCR Groundwater Compliance AP-3 and AP3

Client Sample ID: ARAMW-3	Project: GPCC00100
Sample ID: 591798017	Client ID: GPCC001
Matrix: WG	
Collect Date: 31-AUG-22 15:54	
Receive Date: 01-SEP-22	
Collector: Client	

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Field Data												
Client collected Field pH "As Received"												
Field pH		6.14			SU			EOS1	08/31/22	1554	2311784	1
Ion Chromatography												
EPA 300.0 Anions Liquid "As Received"												
Chloride		5.59	0.0670	0.200	mg/L	1		JLD1	09/02/22	1948	2311967	2
Fluoride		0.127	0.0330	0.100	mg/L	1						
Sulfate		53.0	0.665	2.00	mg/L	5		JLD1	09/03/22	0446	2311967	3
Mercury Analysis-CVAA												
7470 Cold Vapor Mercury, Liquid "As Received"												
Mercury	U	ND	0.0000670	0.000200	mg/L	1.00	1	JP2	09/06/22	1047	2312007	4
Metals Analysis-ICP-MS												
SW846 3005A/6020B "As Received"												
Aluminum	U	ND	0.0193	0.0500	mg/L	1.00	1	SKJ	09/14/22	0001	2311788	5
Antimony	U	ND	0.00100	0.00300	mg/L	1.00	1					
Arsenic	U	ND	0.00200	0.00500	mg/L	1.00	1					
Barium		0.0619	0.000670	0.00400	mg/L	1.00	1					
Cadmium	U	ND	0.000300	0.00100	mg/L	1.00	1					
Chromium	U	ND	0.00300	0.0100	mg/L	1.00	1					
Cobalt	J	0.000465	0.000300	0.00100	mg/L	1.00	1					
Iron		0.671	0.0330	0.100	mg/L	1.00	1					
Lead	U	ND	0.000500	0.00200	mg/L	1.00	1					
Manganese		0.114	0.00100	0.00500	mg/L	1.00	1					
Molybdenum	J	0.000869	0.000200	0.00100	mg/L	1.00	1					
Potassium		2.93	0.0800	0.300	mg/L	1.00	1					
Selenium	U	ND	0.00150	0.00500	mg/L	1.00	1					
Silver	U	ND	0.000300	0.00100	mg/L	1.00	1					
Thallium	U	ND	0.000600	0.00200	mg/L	1.00	1					
Beryllium	U	ND	0.000200	0.000500	mg/L	1.00	1	SKJ	09/15/22	1238	2311788	6
Calcium		27.4	0.0800	0.200	mg/L	1.00	1					
Lithium	J	0.00404	0.00300	0.0100	mg/L	1.00	1					
Magnesium		14.4	0.0100	0.0300	mg/L	1.00	1					
Sodium		12.8	0.0800	0.250	mg/L	1.00	1					
Boron		0.950	0.0520	0.150	mg/L	1.00	10	SKJ	09/15/22	1528	2311788	7
Solids Analysis												
SM2540C Dissolved Solids "As Received"												

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Certificate of Analysis

Report Date: September 22, 2022

Company : Georgia Power Company, Southern Company
Address : 241 Ralph McGill Blvd NE, Bin 10160

Atlanta, Georgia 30308

Contact: Joju Abraham
Project: Arkwright CCR Groundwater Compliance AP-3 and AP3

Client Sample ID: ARAMW-3 Project: GPCC00100
Sample ID: 591798017 Client ID: GPCC001

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Solids Analysis												
SM2540C Dissolved Solids "As Received"												
Total Dissolved Solids		218	2.38	10.0	mg/L			CH6	09/07/22	1020	2313272	8
Titration and Ion Analysis												
SM 2320B Total Alkalinity "As Received"												
Alkalinity, Total as CaCO ₃		103	1.45	4.00	mg/L			HH2	09/13/22	1506	2313370	9
Bicarbonate alkalinity (CaCO ₃)		103	1.45	4.00	mg/L							
Carbonate alkalinity (CaCO ₃)	U	ND	1.45	4.00	mg/L							

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
SW846 3005A	ICP-MS 3005A PREP	LG2	09/02/22	0905	2311787
SW846 7470A Prep	EPA 7470A Mercury Prep Liquid	RM4	09/02/22	1251	2312006

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	SM 4500-H B/SW846 9040C, SM 2550B	
2	EPA 300.0	
3	EPA 300.0	
4	SW846 7470A	
5	SW846 3005A/6020B	
6	SW846 3005A/6020B	
7	SW846 3005A/6020B	
8	SM 2540C	
9	SM 2320B	

Notes:

Column headers are defined as follows:

DF: Dilution Factor
DL: Detection Limit
MDA: Minimum Detectable Activity
MDC: Minimum Detectable Concentration
Lc/LC: Critical Level
PF: Prep Factor
RL: Reporting Limit
SQL: Sample Quantitation Limit

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Certificate of Analysis

Report Date: September 22, 2022

Company : Georgia Power Company, Southern Company
Address : 241 Ralph McGill Blvd NE, Bin 10160

Atlanta, Georgia 30308

Contact: Joju Abraham
Project: Arkwright CCR Groundwater Compliance AP-3 and AP3

Client Sample ID: EB-01	Project: GPCC00100
Sample ID: 591798018	Client ID: GPCC001
Matrix: WQ	
Collect Date: 31-AUG-22 16:22	
Receive Date: 01-SEP-22	
Collector: Client	

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Ion Chromatography												
EPA 300.0 Anions Liquid "As Received"												
Chloride		0.319	0.0670	0.200	mg/L		1	JLD1	09/02/22	2217	2311967	1
Fluoride	U	ND	0.0330	0.100	mg/L		1					
Sulfate	U	ND	0.133	0.400	mg/L		1					
Mercury Analysis-CVAA												
7470 Cold Vapor Mercury, Liquid "As Received"												
Mercury	U	ND	0.0000670	0.000200	mg/L	1.00	1	JP2	09/06/22	1049	2312007	2
Metals Analysis-ICP-MS												
SW846 3005A/6020B "As Received"												
Antimony	U	ND	0.00100	0.00300	mg/L	1.00	1	SKJ	09/14/22	0004	2311788	3
Arsenic	U	ND	0.00200	0.00500	mg/L	1.00	1					
Barium	U	ND	0.000670	0.00400	mg/L	1.00	1					
Cadmium	U	ND	0.000300	0.00100	mg/L	1.00	1					
Chromium	U	ND	0.00300	0.0100	mg/L	1.00	1					
Cobalt	U	ND	0.000300	0.00100	mg/L	1.00	1					
Lead	U	ND	0.000500	0.00200	mg/L	1.00	1					
Molybdenum	U	ND	0.000200	0.00100	mg/L	1.00	1					
Selenium	U	ND	0.00150	0.00500	mg/L	1.00	1					
Silver	U	ND	0.000300	0.00100	mg/L	1.00	1					
Thallium	U	ND	0.000600	0.00200	mg/L	1.00	1					
Beryllium	U	ND	0.000200	0.000500	mg/L	1.00	1	SKJ	09/15/22	1243	2311788	4
Calcium	U	ND	0.0800	0.200	mg/L	1.00	1					
Lithium	U	ND	0.00300	0.0100	mg/L	1.00	1					
Boron	J	0.00548	0.00520	0.0150	mg/L	1.00	1	SKJ	09/15/22	1530	2311788	5
Solids Analysis												
SM2540C Dissolved Solids "As Received"												
Total Dissolved Solids	U	ND	2.38	10.0	mg/L			CH6	09/07/22	1020	2313272	6

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
SW846 3005A	ICP-MS 3005A PREP	LG2	09/02/22	0905	2311787
SW846 7470A Prep	EPA 7470A Mercury Prep Liquid	RM4	09/02/22	1251	2312006

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2040 Savage Road Charleston, SC 29407 - (843) 556-8171 - www.gel.com

QC Summary

Report Date: September 22, 2022

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Georgia Power Company, Southern Company
241 Ralph McGill Blvd NE, Bin 10160
Atlanta, Georgia

Contact: Joju Abraham

Workorder: 592011

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Ion Chromatography											
Batch	2312949										
QC1205184010	592013005	DUP									
Chloride		5.44		5.48	mg/L	0.689		(0%-20%)	HXC1	09/07/22	13:08
Fluoride		0.122		0.140	mg/L	14.2 ^		(+/-0.100)			
Sulfate		18.5		18.8	mg/L	1.13		(0%-20%)			
QC1205184011	592013001	DUP									
Chloride		6.27		6.19	mg/L	1.27		(0%-20%)		09/06/22	22:48
Fluoride		0.148		0.149	mg/L	0.875 ^		(+/-0.100)			
Sulfate		8.38		8.18	mg/L	2.39		(0%-20%)			
QC1205184009	LCS										
Chloride	5.00			4.74	mg/L		94.7	(90%-110%)		09/06/22	21:16
Fluoride	2.50			2.59	mg/L		104	(90%-110%)			
Sulfate	10.0			9.94	mg/L		99.4	(90%-110%)			
QC1205184008	MB										
Chloride			U	ND	mg/L					09/06/22	20:45
Fluoride			U	ND	mg/L						
Sulfate			U	ND	mg/L						
QC1205184012	592013005	PS									
Chloride	5.00	5.44		10.7	mg/L		105	(90%-110%)		09/07/22	13:38

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2040 Savage Road Charleston, SC 29407 - (843) 556-8171 - www.gel.com

QC Summary

Workorder: 592011

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Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Ion Chromatography											
Batch	2312949										
Fluoride	2.50	0.122		2.68	mg/L		102	(90%-110%)	HXC1	09/07/22	13:38
Sulfate	10.0	18.5		29.3	mg/L		108	(90%-110%)			
QC1205184013	592013001 PS										
Chloride	5.00	6.27		11.5	mg/L		104	(90%-110%)		09/06/22	23:19
Fluoride	2.50	0.148		2.62	mg/L		98.9	(90%-110%)			
Sulfate	10.0	8.38		18.4	mg/L		99.7	(90%-110%)			
Metals Analysis - ICPMS											
Batch	2312499										
QC1205183027	LCS										
Aluminum	2.00			2.15	mg/L		107	(80%-120%)	PRB	09/14/22	01:26
Antimony	0.0500			0.0496	mg/L		99.2	(80%-120%)			
Arsenic	0.0500			0.0490	mg/L		97.9	(80%-120%)			
Barium	0.0500			0.0512	mg/L		102	(80%-120%)			
Beryllium	0.0500			0.0517	mg/L		103	(80%-120%)			
Boron	0.100			0.115	mg/L		115	(80%-120%)		09/14/22	16:37
Cadmium	0.0500			0.0490	mg/L		98	(80%-120%)		09/14/22	01:26
Calcium	2.00			2.08	mg/L		104	(80%-120%)		09/14/22	16:37
Chromium	0.0500			0.0495	mg/L		98.9	(80%-120%)		09/14/22	01:26

GEL LABORATORIES LLC

2040 Savage Road Charleston, SC 29407 - (843) 556-8171 - www.gel.com

QC Summary

Workorder: 592011

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Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Metals Analysis - ICPMS											
Batch	2312499										
Cobalt	0.0500			0.0495	mg/L		99	(80%-120%)	PRB	09/14/22	01:26
Iron	2.00			2.00	mg/L		100	(80%-120%)			
Lead	0.0500			0.0496	mg/L		99.1	(80%-120%)			
Lithium	0.0500			0.0481	mg/L		96.2	(80%-120%)			
Magnesium	2.00			2.13	mg/L		107	(80%-120%)		09/14/22	16:37
Manganese	0.0500			0.0499	mg/L		99.8	(80%-120%)			
Molybdenum	0.0500			0.0491	mg/L		98.3	(80%-120%)		09/14/22	01:26
Potassium	2.00			2.01	mg/L		101	(80%-120%)			
Selenium	0.0500			0.0499	mg/L		99.9	(80%-120%)			
Silver	0.0500			0.0482	mg/L		96.4	(80%-120%)			
Sodium	2.00			2.09	mg/L		105	(80%-120%)		09/14/22	16:37
Thallium	0.0500			0.0476	mg/L		95.2	(80%-120%)		09/14/22	01:26
QC1205183026	MB										
Aluminum			U	ND	mg/L					09/14/22	01:22
Antimony			U	ND	mg/L						
Arsenic			U	ND	mg/L						

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QC Summary

Workorder: 592011

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Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Metals Analysis - ICPMS											
Batch	2312499										
Barium			U	ND	mg/L				PRB	09/14/22	01:22
Beryllium			U	ND	mg/L						
Boron			U	ND	mg/L					09/14/22	16:35
Cadmium			U	ND	mg/L					09/14/22	01:22
Calcium			U	ND	mg/L					09/14/22	16:35
Chromium			U	ND	mg/L					09/14/22	01:22
Cobalt			U	ND	mg/L						
Iron			U	ND	mg/L						
Lead			U	ND	mg/L						
Lithium			U	ND	mg/L						
Magnesium			J	0.0107	mg/L					09/14/22	16:35
Manganese			U	ND	mg/L						
Molybdenum			U	ND	mg/L					09/14/22	01:22
Potassium			U	ND	mg/L						
Selenium			U	ND	mg/L						

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QC Summary

Workorder: 592011

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Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Metals Analysis - ICPMS											
Batch	2312499										
Silver			U	ND	mg/L				PRB	09/14/22	01:22
Sodium			U	ND	mg/L					09/14/22	16:35
Thallium			U	ND	mg/L					09/14/22	01:22
QC1205183028 592011002 MS											
Aluminum	2.00			0.174	2.38	mg/L	110	(75%-125%)		09/14/22	01:36
Antimony	0.0500	U		ND	0.0515	mg/L	103	(75%-125%)			
Arsenic	0.0500	U		ND	0.0508	mg/L	99	(75%-125%)			
Barium	0.0500			0.0369	0.0884	mg/L	103	(75%-125%)			
Beryllium	0.0500	U		ND	0.0533	mg/L	107	(75%-125%)			
Boron	0.100			2.53	2.67	mg/L	N/A	(75%-125%)		09/14/22	16:44
Cadmium	0.0500	U		ND	0.0489	mg/L	97.7	(75%-125%)		09/14/22	01:36
Calcium	2.00			52.4	54.6	mg/L	N/A	(75%-125%)		09/14/22	16:44
Chromium	0.0500	U		ND	0.0512	mg/L	102	(75%-125%)		09/14/22	01:36
Cobalt	0.0500			0.00111	0.0502	mg/L	98.2	(75%-125%)			
Iron	2.00			1.37	3.42	mg/L	102	(75%-125%)			
Lead	0.0500	U		ND	0.0493	mg/L	98.4	(75%-125%)			

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QC Summary

Workorder: 592011

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Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Metals Analysis - ICPMS											
Batch	2312499										
Lithium	0.0500	J	0.00380	0.0521	mg/L		96.6	(75%-125%)	PRB	09/14/22	01:36
Magnesium	2.00		44.3	48.0	mg/L		N/A	(75%-125%)		09/14/22	17:05
Manganese	0.0500		0.889	0.939	mg/L		N/A	(75%-125%)			
Molybdenum	0.0500	U	ND	0.0507	mg/L		101	(75%-125%)		09/14/22	01:36
Potassium	2.00		2.34	4.44	mg/L		105	(75%-125%)			
Selenium	0.0500	U	ND	0.0498	mg/L		99.4	(75%-125%)			
Silver	0.0500	U	ND	0.0479	mg/L		95.8	(75%-125%)			
Sodium	2.00		12.8	15.3	mg/L		N/A	(75%-125%)		09/14/22	17:05
Thallium	0.0500	U	ND	0.0476	mg/L		95.2	(75%-125%)		09/14/22	01:36
QC1205183029 592011002 MSD											
Aluminum	2.00		0.174	2.35	mg/L	1.48	109	(0%-20%)		09/14/22	01:40
Antimony	0.0500	U	ND	0.0516	mg/L	0.204	103	(0%-20%)			
Arsenic	0.0500	U	ND	0.0506	mg/L	0.41	98.5	(0%-20%)			
Barium	0.0500		0.0369	0.0876	mg/L	0.922	101	(0%-20%)			
Beryllium	0.0500	U	ND	0.0512	mg/L	3.99	102	(0%-20%)			
Boron	0.100		2.53	2.59	mg/L	2.81	N/A	(0%-20%)		09/14/22	16:46

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QC Summary

Workorder: 592011

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Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Metals Analysis - ICPMS											
Batch	2312499										
Cadmium	0.0500	U	ND	0.0495	mg/L	1.2	98.9	(0%-20%)	PRB	09/14/22	01:40
Calcium	2.00		52.4	50.1	mg/L	8.65	N/A	(0%-20%)		09/14/22	16:46
Chromium	0.0500	U	ND	0.0497	mg/L	2.95	98.6	(0%-20%)		09/14/22	01:40
Cobalt	0.0500		0.00111	0.0496	mg/L	1.28	96.9	(0%-20%)			
Iron	2.00		1.37	3.31	mg/L	3.3	96.7	(0%-20%)			
Lead	0.0500	U	ND	0.0490	mg/L	0.554	97.8	(0%-20%)			
Lithium	0.0500	J	0.00380	0.0506	mg/L	2.86	93.7	(0%-20%)			
Magnesium	2.00		44.3	46.2	mg/L	3.95	N/A	(0%-20%)		09/14/22	17:07
Manganese	0.0500		0.889	0.944	mg/L	0.512	N/A	(0%-20%)			
Molybdenum	0.0500	U	ND	0.0510	mg/L	0.665	102	(0%-20%)		09/14/22	01:40
Potassium	2.00		2.34	4.30	mg/L	3.21	98.1	(0%-20%)			
Selenium	0.0500	U	ND	0.0485	mg/L	2.65	96.8	(0%-20%)			
Silver	0.0500	U	ND	0.0479	mg/L	0.125	95.7	(0%-20%)			
Sodium	2.00		12.8	15.0	mg/L	2.3	N/A	(0%-20%)		09/14/22	17:07
Thallium	0.0500	U	ND	0.0476	mg/L	0.16	95.1	(0%-20%)		09/14/22	01:40

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QC Summary

Workorder: 592011

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Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Metals Analysis - ICPMS											
Batch	2312499										
	QC1205183030 592011002 SDILT										
Aluminum		174	J	30.7	ug/L	12		(0%-20%)	PRB	09/14/22	01:47
Antimony	U	ND	U	ND	ug/L	N/A		(0%-20%)			
Arsenic	U	ND	U	ND	ug/L	N/A		(0%-20%)			
Barium		36.9		7.38	ug/L	.0624		(0%-20%)			
Beryllium	U	ND	U	ND	ug/L	N/A		(0%-20%)			
Boron		101		22.0	ug/L	8.6		(0%-20%)		09/14/22	16:48
Cadmium	U	ND	U	ND	ug/L	N/A		(0%-20%)		09/14/22	01:47
Calcium		2100		418	ug/L	.298		(0%-20%)		09/14/22	16:48
Chromium	U	ND	U	ND	ug/L	N/A		(0%-20%)		09/14/22	01:47
Cobalt		1.11	U	ND	ug/L	N/A		(0%-20%)			
Iron		1370		273	ug/L	.595		(0%-20%)			
Lead	U	ND	U	ND	ug/L	N/A		(0%-20%)			
Lithium	J	3.80	U	ND	ug/L	N/A		(0%-20%)			
Magnesium		44300		9080	ug/L	2.46		(0%-20%)		09/14/22	17:11
Manganese		889		177	ug/L	.362		(0%-20%)			

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QC Summary

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Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Metals Analysis - ICPMS											
Batch	2312499										
Molybdenum	U	ND	J	0.227	ug/L	N/A		(0%-20%)	PRB	09/14/22	01:47
Potassium		2340		459	ug/L	2.05		(0%-20%)			
Selenium	U	ND	U	ND	ug/L	N/A		(0%-20%)			
Silver	U	ND	U	ND	ug/L	N/A		(0%-20%)			
Sodium		12800		2500	ug/L	2.09		(0%-20%)		09/14/22	17:11
Thallium	U	ND	U	ND	ug/L	N/A		(0%-20%)		09/14/22	01:47
Metals Analysis-Mercury											
Batch	2313270										
QC1205184627	590916001	DUP									
Mercury	U	ND	U	ND	mg/L	N/A			JP2	09/08/22	10:49
QC1205184626	LCS										
Mercury	0.00200			0.00206	mg/L		103	(80%-120%)		09/08/22	10:46
QC1205184625	MB										
Mercury			U	ND	mg/L					09/08/22	10:44
QC1205184628	590916001	MS									
Mercury	0.00200	U	ND	0.00204	mg/L		102	(75%-125%)		09/08/22	10:51
QC1205184629	590916001	SDILT									
Mercury	U	ND	U	ND	ug/L	N/A		(0%-10%)		09/08/22	10:53
Solids Analysis											
Batch	2313725										
QC1205185485	592013008	DUP									
Total Dissolved Solids		664		664	mg/L	0		(0%-5%)	CH6	09/08/22	15:31

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QC Summary

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Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Solids Analysis											
Batch		2313725									
QC1205185484		LCS									
Total Dissolved Solids	300			304	mg/L		101	(95%-105%)	CH6	09/08/22	15:31
QC1205185483		MB									
Total Dissolved Solids			U	ND	mg/L					09/08/22	15:31
Titration and Ion Analysis											
Batch		2312490									
QC1205182984		591877005	DUP								
Alkalinity, Total as CaCO3			282	284	mg/L	0.707		(0%-20%)	HH2	09/08/22	11:20
Bicarbonate alkalinity (CaCO3)			282	284	mg/L	0.707		(0%-20%)			
Carbonate alkalinity (CaCO3)			U	ND	U	ND	mg/L	N/A			
QC1205182983		LCS									
Alkalinity, Total as CaCO3	100			104	mg/L		104	(90%-110%)		09/08/22	11:15
QC1205182985		591877005	MS								
Alkalinity, Total as CaCO3	100		282	383	mg/L		101	(80%-120%)		09/08/22	11:25

Notes:

The Qualifiers in this report are defined as follows:

- < Result is less than value reported
- > Result is greater than value reported
- B The target analyte was detected in the associated blank.
- E %difference of sample and SD is >10%. Sample concentration must meet flagging criteria
- E General Chemistry--Concentration of the target analyte exceeds the instrument calibration range
- FB Mercury was found present at quantifiable concentrations in field blanks received with these samples. Data associated with the blank are deemed invalid for reporting to regulatory agencies
- H Analytical holding time was exceeded
- J See case narrative for an explanation
- J Value is estimated
- N Metals--The Matrix spike sample recovery is not within specified control limits
- N/A RPD or %Recovery limits do not apply.

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QC Summary

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Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time	
N1												See case narrative
ND												Analyte concentration is not detected above the detection limit
NJ												Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
Q												One or more quality control criteria have not been met. Refer to the applicable narrative or DER.
R												Per section 9.3.4.1 of Method 1664 Revision B, due to matrix spike recovery issues, this result may not be reported or used for regulatory compliance purposes.
R												Sample results are rejected
U												Analyte was analyzed for, but not detected above the MDL, MDA, MDC or LOD.
X												Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
Y												Other specific qualifiers were required to properly define the results. Consult case narrative.
Z												Paint Filter Test--Particulates passed through the filter, however no free liquids were observed.
^												RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL. Qualifier Not Applicable for Radiochemistry.
d												5-day BOD--The 2:1 depletion requirement was not met for this sample
e												5-day BOD--Test replicates show more than 30% difference between high and low values. The data is qualified per the method and can be used for reporting purposes
h												Preparation or preservation holding time was exceeded

N/A indicates that spike recovery limits do not apply when sample concentration exceeds spike conc. by a factor of 4 or more or %RPD not applicable.

^ The Relative Percent Difference (RPD) obtained from the sample duplicate (DUP) is evaluated against the acceptance criteria when the sample is greater than five times (5X) the contract required detection limit (RL). In cases where the duplicate value is less than 5X the RL, a control limit of +/- the RL is used to evaluate the DUP result.

* Indicates that a Quality Control parameter was not within specifications.

For PS, PSD, and SDILT results, the values listed are the measured amounts, not final concentrations.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the QC Summary.

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QC Summary

Report Date: September 22, 2022

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Georgia Power Company, Southern Company
241 Ralph McGill Blvd NE, Bin 10160
Atlanta, Georgia

Contact: Joju Abraham

Workorder: 591798

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Ion Chromatography											
Batch	2311964										
QC1205181984	591798010	DUP									
Chloride		5.28		5.20	mg/L	1.52		(0%-20%)	JLD1	09/02/22	17:01
Fluoride		0.147		0.148	mg/L	0.813 ^		(+/-0.100)			
Sulfate		1.31		1.31	mg/L	0.0765 ^		(+/-0.400)			
QC1205181983	LCS										
Chloride	5.00			4.93	mg/L		98.5	(90%-110%)		09/02/22	10:20
Fluoride	2.50			2.41	mg/L		96.2	(90%-110%)			
Sulfate	10.0			10.1	mg/L		101	(90%-110%)			
QC1205181982	MB										
Chloride			U	ND	mg/L					09/02/22	09:50
Fluoride			U	ND	mg/L						
Sulfate			U	ND	mg/L						
QC1205181985	591798010	PS									
Chloride	5.00	5.28		10.9	mg/L		111 *	(90%-110%)		09/02/22	17:32
Fluoride	2.50	0.147		2.47	mg/L		93	(90%-110%)			
Sulfate	10.0	1.31		11.5	mg/L		102	(90%-110%)			

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QC Summary

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Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Ion Chromatography											
Batch	2311967										
QC1205181988	591783015	DUP									
Chloride		76.8		77.1	mg/L	0.39 ^		(+/-20.0)	JLD1	09/02/22	23:17
Fluoride	J	0.0428	U	ND	mg/L	200				09/02/22	11:20
Sulfate		403		407	mg/L	1.1		(0%-20%)		09/02/22	23:17
QC1205181990	591798017	DUP									
Chloride		5.59		5.46	mg/L	2.29		(0%-20%)		09/02/22	20:18
Fluoride		0.127		0.122	mg/L	3.38 ^		(+/-0.100)			
Sulfate		53.0		53.1	mg/L	0.0471		(0%-20%)		09/03/22	05:16
QC1205181987	LCS										
Chloride	5.00			4.81	mg/L		96.3	(90%-110%)		09/02/22	10:20
Fluoride	2.50			2.34	mg/L		93.6	(90%-110%)			
Sulfate	10.0			9.96	mg/L		99.6	(90%-110%)			
QC1205181986	MB										
Chloride			U	ND	mg/L					09/02/22	09:51
Fluoride			U	ND	mg/L						
Sulfate			U	ND	mg/L						
QC1205181989	591783015	PS									
Chloride	5.00	0.768		5.68	mg/L		98.2	(90%-110%)		09/02/22	23:47
Fluoride	2.50	J	0.0428	2.43	mg/L		95.6	(90%-110%)		09/02/22	11:50

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QC Summary

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Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Ion Chromatography											
Batch	2311967										
Sulfate	10.0	4.03		14.3	mg/L		103	(90%-110%)	JLD1	09/02/22	23:47
QC1205181991 591798017 PS											
Chloride	5.00	5.59		11.1	mg/L		109	(90%-110%)		09/02/22	21:47
Fluoride	2.50	0.127		2.42	mg/L		91.6	(90%-110%)			
Sulfate	10.0	10.6		21.6	mg/L		110	(90%-110%)		09/03/22	05:46
Metals Analysis - ICPMS											
Batch	2311788										
QC1205181664 LCS											
Aluminum	2.00			2.06	mg/L		103	(80%-120%)	SKJ	09/13/22	22:31
Antimony	0.0500			0.0504	mg/L		101	(80%-120%)			
Arsenic	0.0500			0.0506	mg/L		101	(80%-120%)			
Barium	0.0500			0.0518	mg/L		104	(80%-120%)			
Beryllium	0.0500			0.0581	mg/L		116	(80%-120%)		09/15/22	11:17
Boron	0.100			0.111	mg/L		111	(80%-120%)		09/15/22	14:35
Cadmium	0.0500			0.0532	mg/L		106	(80%-120%)		09/13/22	22:31
Calcium	2.00			2.19	mg/L		110	(80%-120%)		09/15/22	11:17
Chromium	0.0500			0.0534	mg/L		107	(80%-120%)		09/13/22	22:31
Cobalt	0.0500			0.0533	mg/L		107	(80%-120%)			

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QC Summary

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Parname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Metals Analysis - ICPMS											
Batch	2311788										
Iron	2.00			2.06	mg/L		103	(80%-120%)	SKJ	09/13/22	22:31
Lead	0.0500			0.0523	mg/L		105	(80%-120%)			
Lithium	0.0500			0.0571	mg/L		114	(80%-120%)		09/15/22	11:17
Magnesium	2.00			2.18	mg/L		109	(80%-120%)			
Manganese	0.0500			0.0499	mg/L		99.7	(80%-120%)		09/13/22	22:31
Molybdenum	0.0500			0.0533	mg/L		107	(80%-120%)			
Potassium	2.00			2.08	mg/L		104	(80%-120%)			
Selenium	0.0500			0.0491	mg/L		98.1	(80%-120%)			
Silver	0.0500			0.0531	mg/L		106	(80%-120%)			
Sodium	2.00			2.15	mg/L		108	(80%-120%)		09/15/22	11:17
Thallium	0.0500			0.0506	mg/L		101	(80%-120%)		09/13/22	22:31
QC1205181663	MB										
Aluminum			U	ND	mg/L					09/13/22	22:27
Antimony			U	ND	mg/L						
Arsenic			U	ND	mg/L						
Barium			U	ND	mg/L						

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QC Summary

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Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Metals Analysis - ICPMS											
Batch	2311788										
Beryllium			U	ND	mg/L				SKJ	09/15/22	11:15
Boron			U	ND	mg/L					09/15/22	14:33
Cadmium			U	ND	mg/L					09/13/22	22:27
Calcium			U	ND	mg/L					09/15/22	11:15
Chromium			U	ND	mg/L					09/13/22	22:27
Cobalt			U	ND	mg/L						
Iron			U	ND	mg/L						
Lead			U	ND	mg/L						
Lithium			U	ND	mg/L					09/15/22	11:15
Magnesium			U	ND	mg/L						
Manganese			U	ND	mg/L					09/13/22	22:27
Molybdenum			U	ND	mg/L						
Potassium			U	ND	mg/L						
Selenium			U	ND	mg/L						
Silver			U	ND	mg/L						

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QC Summary

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Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Metals Analysis - ICPMS											
Batch	2311788										
Sodium			U	ND	mg/L				SKJ	09/15/22	11:15
Thallium			U	ND	mg/L					09/13/22	22:27
QC1205181665 591798001 MS											
Aluminum	2.00	J	0.0267	2.16	mg/L		106	(75%-125%)		09/13/22	22:38
Antimony	0.0500	U	ND	0.0513	mg/L		102	(75%-125%)			
Arsenic	0.0500	U	ND	0.0500	mg/L		97.6	(75%-125%)			
Barium	0.0500		0.0446	0.0987	mg/L		108	(75%-125%)			
Beryllium	0.0500	U	ND	0.0565	mg/L		113	(75%-125%)		09/15/22	11:23
Boron	0.100	J	0.00855	0.116	mg/L		107	(75%-125%)		09/15/22	14:39
Cadmium	0.0500	U	ND	0.0519	mg/L		104	(75%-125%)		09/13/22	22:38
Calcium	2.00		9.56	11.5	mg/L		N/A	(75%-125%)		09/15/22	11:23
Chromium	0.0500	U	ND	0.0542	mg/L		107	(75%-125%)		09/13/22	22:38
Cobalt	0.0500	U	ND	0.0523	mg/L		104	(75%-125%)			
Iron	2.00	J	0.0611	2.14	mg/L		104	(75%-125%)			
Lead	0.0500	U	ND	0.0517	mg/L		103	(75%-125%)			
Lithium	0.0500	U	ND	0.0563	mg/L		111	(75%-125%)		09/15/22	11:23

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Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Metals Analysis - ICPMS											
Batch	2311788										
Magnesium	2.00	3.87		5.98	mg/L		105	(75%-125%)	SKJ	09/15/22	11:23
Manganese	0.0500	J	0.00414	0.0545	mg/L		101	(75%-125%)		09/13/22	22:38
Molybdenum	0.0500	U	ND	0.0547	mg/L		109	(75%-125%)			
Potassium	2.00		1.26	3.38	mg/L		106	(75%-125%)			
Selenium	0.0500	U	ND	0.0484	mg/L		96.6	(75%-125%)			
Silver	0.0500	U	ND	0.0536	mg/L		107	(75%-125%)			
Sodium	2.00		9.37	11.7	mg/L		N/A	(75%-125%)		09/15/22	11:23
Thallium	0.0500	U	ND	0.0504	mg/L		101	(75%-125%)		09/13/22	22:38
QC1205181666 591798001 MSD											
Aluminum	2.00	J	0.0267	2.10	mg/L	2.6	104	(0%-20%)		09/13/22	22:41
Antimony	0.0500	U	ND	0.0517	mg/L	0.901	103	(0%-20%)			
Arsenic	0.0500	U	ND	0.0499	mg/L	0.19	97.4	(0%-20%)			
Barium	0.0500		0.0446	0.0967	mg/L	2.04	104	(0%-20%)			
Beryllium	0.0500	U	ND	0.0575	mg/L	1.75	115	(0%-20%)		09/15/22	11:25
Boron	0.100	J	0.00855	0.120	mg/L	3.83	112	(0%-20%)		09/15/22	14:41
Cadmium	0.0500	U	ND	0.0529	mg/L	1.86	106	(0%-20%)		09/13/22	22:41

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QC Summary

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Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Metals Analysis - ICPMS											
Batch	2311788										
Calcium	2.00	9.56		11.4	mg/L	0.295	N/A	(0%-20%)	SKJ	09/15/22	11:25
Chromium	0.0500	U	ND	0.0521	mg/L	3.97	102	(0%-20%)		09/13/22	22:41
Cobalt	0.0500	U	ND	0.0512	mg/L	2.07	102	(0%-20%)			
Iron	2.00	J	0.0611	2.07	mg/L	3.47	100	(0%-20%)			
Lead	0.0500	U	ND	0.0512	mg/L	0.88	102	(0%-20%)			
Lithium	0.0500	U	ND	0.0579	mg/L	2.82	115	(0%-20%)		09/15/22	11:25
Magnesium	2.00		3.87	5.93	mg/L	0.863	103	(0%-20%)			
Manganese	0.0500	J	0.00414	0.0538	mg/L	1.34	99.3	(0%-20%)		09/13/22	22:41
Molybdenum	0.0500	U	ND	0.0553	mg/L	1.08	110	(0%-20%)			
Potassium	2.00		1.26	3.29	mg/L	2.7	101	(0%-20%)			
Selenium	0.0500	U	ND	0.0465	mg/L	3.98	92.8	(0%-20%)			
Silver	0.0500	U	ND	0.0535	mg/L	0.22	107	(0%-20%)			
Sodium	2.00		9.37	11.7	mg/L	0.168	N/A	(0%-20%)		09/15/22	11:25
Thallium	0.0500	U	ND	0.0499	mg/L	0.933	99.8	(0%-20%)		09/13/22	22:41
QC1205181667 591798001 SDILT											
Aluminum		J	26.7	U	ND	ug/L	N/A	(0%-20%)		09/13/22	22:49

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QC Summary

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Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Metals Analysis - ICPMS											
Batch	2311788										
Antimony	U	ND	U	ND	ug/L	N/A		(0%-20%)	SKJ	09/13/22	22:49
Arsenic	U	ND	U	ND	ug/L	N/A		(0%-20%)			
Barium		44.6		9.00	ug/L	.759		(0%-20%)			
Beryllium	U	ND	U	ND	ug/L	N/A		(0%-20%)		09/15/22	11:30
Boron	J	8.55	U	ND	ug/L	N/A		(0%-20%)		09/15/22	14:46
Cadmium	U	ND	U	ND	ug/L	N/A		(0%-20%)		09/13/22	22:49
Calcium		9560	E	2350	ug/L	23*		(0%-20%)		09/15/22	11:30
Chromium	U	ND	U	ND	ug/L	N/A		(0%-20%)		09/13/22	22:49
Cobalt	U	ND	U	ND	ug/L	N/A		(0%-20%)			
Iron	J	61.1	U	ND	ug/L	N/A		(0%-20%)			
Lead	U	ND	U	ND	ug/L	N/A		(0%-20%)			
Lithium	U	ND	U	ND	ug/L	N/A		(0%-20%)		09/15/22	11:30
Magnesium		3870		807	ug/L	4.19		(0%-20%)			
Manganese	J	4.14	U	ND	ug/L	N/A		(0%-20%)		09/13/22	22:49
Molybdenum	U	ND	U	ND	ug/L	N/A		(0%-20%)			

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QC Summary

Workorder: 591798

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Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Metals Analysis - ICPMS											
Batch	2311788										
Potassium		1260	J	249	ug/L	1.6		(0%-20%)	SKJ	09/13/22	22:49
Selenium	U	ND	U	ND	ug/L	N/A		(0%-20%)			
Silver	U	ND	U	ND	ug/L	N/A		(0%-20%)			
Sodium		9370		1920	ug/L	2.68		(0%-20%)		09/15/22	11:30
Thallium	U	ND	U	ND	ug/L	N/A		(0%-20%)		09/13/22	22:49
Metals Analysis-Mercury											
Batch	2312007										
QC1205182057	591393012	DUP									
Mercury	U	ND	U	ND	mg/L	N/A			JP2	09/06/22	10:04
QC1205182056	LCS										
Mercury	0.00200			0.00209	mg/L		104	(80%-120%)		09/06/22	10:01
QC1205182055	MB										
Mercury			U	ND	mg/L					09/06/22	09:56
QC1205182058	591393012	MS									
Mercury	0.00200	U	ND	0.00210	mg/L		105	(75%-125%)		09/06/22	10:06
QC1205182059	591393012	SDILT									
Mercury	U	ND	U	ND	ug/L	N/A		(0%-10%)		09/06/22	10:08
Solids Analysis											
Batch	2311940										
QC1205181932	591783004	DUP									
Total Dissolved Solids		1210		1210	mg/L	0.744		(0%-5%)	CH6	09/02/22	14:22

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QC Summary

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Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Solids Analysis											
Batch		2311940									
QC1205181933	591783018	DUP									
Total Dissolved Solids		2050		2090	mg/L	2.18		(0%-5%)	CH6	09/02/22	14:22
QC1205181931	LCS										
Total Dissolved Solids	300			303	mg/L		101	(95%-105%)		09/02/22	14:22
QC1205181930	MB										
Total Dissolved Solids			U	ND	mg/L					09/02/22	14:22
<hr/>											
Batch		2312704									
QC1205183471	591675011	DUP									
Total Dissolved Solids		299		302	mg/L	0.998		(0%-5%)	CH6	09/06/22	16:32
QC1205183469	LCS										
Total Dissolved Solids	300			302	mg/L		101	(95%-105%)		09/06/22	16:32
QC1205183468	MB										
Total Dissolved Solids			U	ND	mg/L					09/06/22	16:32
<hr/>											
Batch		2313272									
QC1205184643	591879001	DUP									
Total Dissolved Solids		173		169	mg/L	2.34		(0%-5%)	CH6	09/07/22	10:20
QC1205184641	LCS										
Total Dissolved Solids	300			301	mg/L		100	(95%-105%)		09/07/22	10:20
QC1205184640	MB										
Total Dissolved Solids			U	ND	mg/L					09/07/22	10:20
<hr/>											
Titration and Ion Analysis											
Batch		2313370									
QC1205184829	591798001	DUP									
Alkalinity, Total as CaCO3		46.2		45.8	mg/L	0.87		(0%-20%)	HH2	09/13/22	14:29

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QC Summary

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Parname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Titration and Ion Analysis											
Batch	2313370										
Bicarbonate alkalinity (CaCO3)		46.2		45.8	mg/L	0.87		(0%-20%)	HH2	09/13/22	14:29
Carbonate alkalinity (CaCO3)	U	ND	U	ND	mg/L	N/A					
QC1205184831 591798012 DUP											
Alkalinity, Total as CaCO3		158		159	mg/L	0.379		(0%-20%)		09/13/22	14:53
Bicarbonate alkalinity (CaCO3)		158		159	mg/L	0.379		(0%-20%)			
Carbonate alkalinity (CaCO3)	U	ND	U	ND	mg/L	N/A					
QC1205184828 LCS											
Alkalinity, Total as CaCO3	100			103	mg/L		103	(90%-110%)		09/13/22	14:24
QC1205184830 591798001 MS											
Alkalinity, Total as CaCO3	100	46.2		146	mg/L		100	(80%-120%)		09/13/22	14:30
QC1205184832 591798012 MS											
Alkalinity, Total as CaCO3	100	158		259	mg/L		101	(80%-120%)		09/13/22	14:54

Notes:

The Qualifiers in this report are defined as follows:

- < Result is less than value reported
- > Result is greater than value reported
- B The target analyte was detected in the associated blank.
- E %difference of sample and SD is >10%. Sample concentration must meet flagging criteria
- E General Chemistry--Concentration of the target analyte exceeds the instrument calibration range
- FB Mercury was found present at quantifiable concentrations in field blanks received with these samples. Data associated with the blank are deemed invalid for reporting to regulatory agencies
- H Analytical holding time was exceeded
- J See case narrative for an explanation
- J Value is estimated
- N Metals--The Matrix spike sample recovery is not within specified control limits
- N/A RPD or %Recovery limits do not apply.

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QC Summary

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Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
N1											
ND											
NJ											
Q											
R											
R											
U											
X											
Y											
Z											
^											
d											
e											
h											

N/A indicates that spike recovery limits do not apply when sample concentration exceeds spike conc. by a factor of 4 or more or %RPD not applicable.

^ The Relative Percent Difference (RPD) obtained from the sample duplicate (DUP) is evaluated against the acceptance criteria when the sample is greater than five times (5X) the contract required detection limit (RL). In cases where the duplicate value is less than 5X the RL, a control limit of +/- the RL is used to evaluate the DUP result.

* Indicates that a Quality Control parameter was not within specifications.

For PS, PSD, and SDILT results, the values listed are the measured amounts, not final concentrations.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the QC Summary.

**Technical Case Narrative
Georgia Power Company
SDG #: 592011**

Metals

Product: Determination of Metals by ICP-MS

Analytical Method: SW846 3005A/6020B

Analytical Procedure: GL-MA-E-014 REV# 35

Analytical Batch: 2312499

Preparation Method: SW846 3005A

Preparation Procedure: GL-MA-E-006 REV# 14

Preparation Batch: 2312498

The following samples were analyzed using the above methods and analytical procedure(s).

<u>GEL Sample ID#</u>	<u>Client Sample Identification</u>
592011001	EB-02
592011002	ARGWC-18
592011003	ARGWC-17
592011004	ARAMW-4
592011005	DUP-02
1205183026	Method Blank (MB)ICP-MS
1205183027	Laboratory Control Sample (LCS)
1205183030	592011002(ARGWC-18L) Serial Dilution (SD)
1205183028	592011002(ARGWC-18S) Matrix Spike (MS)
1205183029	592011002(ARGWC-18SD) Matrix Spike Duplicate (MSD)

The samples in this SDG were analyzed on an "as received" basis.

Data Summary:

All sample data provided in this report met the acceptance criteria specified in the analytical methods and procedures for initial calibration, continuing calibration, instrument controls and process controls where applicable, with the following exceptions.

Calibration Information

ICSA/ICSAB Statement

For the ICP-MS analysis, the ICSA solution contains analyte concentrations which are verified trace impurities indigenous to the purchased standard.

Technical Information

Sample Dilutions

Dilutions may be required for many reasons, including to minimize matrix interferences or to bring over range target analyte concentrations into the linear calibration range. Samples 592011002 (ARGWC-18), 592011003 (ARGWC-17), 592011004 (ARAMW-4) and 592011005 (DUP-02) were diluted to ensure that the analyte concentrations were within the linear calibration range of the instrument.

Analyte	592011			
	002	003	004	005
Boron	25X	1X	10X	10X
Calcium	25X	1X	10X	10X
Magnesium	1X	1X	10X	
Manganese	1X	10X	1X	

Product: Mercury Analysis Using the Perkin Elmer Automated Mercury Analyzer

Analytical Method: SW846 7470A

Analytical Procedure: GL-MA-E-010 REV# 38

Analytical Batch: 2313270

Preparation Method: SW846 7470A Prep

Preparation Procedure: GL-MA-E-010 REV# 38

Preparation Batch: 2313268

The following samples were analyzed using the above methods and analytical procedure(s).

<u>GEL Sample ID#</u>	<u>Client Sample Identification</u>
592011001	EB-02
592011002	ARGWC-18
592011003	ARGWC-17
592011004	ARAMW-4
592011005	DUP-02
1205184625	Method Blank (MB)CVAA
1205184626	Laboratory Control Sample (LCS)
1205184629	590916001(NonSDGL) Serial Dilution (SD)
1205184627	590916001(NonSDGD) Sample Duplicate (DUP)
1205184628	590916001(NonSDGS) Matrix Spike (MS)

The samples in this SDG were analyzed on an "as received" basis.

Data Summary:

There are no exceptions, anomalies or deviations from the specified methods. All sample data provided in this report met the acceptance criteria specified in the analytical methods and procedures for initial calibration, continuing calibration, instrument controls and process controls where applicable.

General Chemistry

Product: Ion Chromatography

Analytical Method: EPA 300.0

Analytical Procedure: GL-GC-E-086 REV# 30

Analytical Batch: 2312949

The following samples were analyzed using the above methods and analytical procedure(s).

<u>GEL Sample ID#</u>	<u>Client Sample Identification</u>
592011001	EB-02

592011002	ARGWC-18
592011003	ARGWC-17
592011004	ARAMW-4
592011005	DUP-02
1205184008	Method Blank (MB)
1205184009	Laboratory Control Sample (LCS)
1205184010	592013005(ARGWA-20) Sample Duplicate (DUP)
1205184011	592013001(ARGWA-19) Sample Duplicate (DUP)
1205184012	592013005(ARGWA-20) Post Spike (PS)
1205184013	592013001(ARGWA-19) Post Spike (PS)

The samples in this SDG were analyzed on an "as received" basis.

Data Summary:

All sample data provided in this report met the acceptance criteria specified in the analytical methods and procedures for initial calibration, continuing calibration, instrument controls and process controls where applicable, with the following exceptions.

Technical Information

Sample Dilutions

The following samples 592011002 (ARGWC-18), 592011003 (ARGWC-17), 592011004 (ARAMW-4) and 592011005 (DUP-02) were diluted because target analyte concentrations exceeded the calibration range. Dilutions may be required for many reasons, including to minimize matrix interferences or to bring over range target analyte concentrations into the linear calibration range.

Analyte	592011			
	002	003	004	005
Sulfate	20X	10X	100X	100X

Product: Solids, Total Dissolved

Analytical Method: SM 2540C

Analytical Procedure: GL-GC-E-001 REV# 19

Analytical Batch: 2313725

The following samples were analyzed using the above methods and analytical procedure(s).

<u>GEL Sample ID#</u>	<u>Client Sample Identification</u>
592011001	EB-02
592011002	ARGWC-18
592011003	ARGWC-17
592011004	ARAMW-4
592011005	DUP-02
1205185483	Method Blank (MB)
1205185484	Laboratory Control Sample (LCS)
1205185485	592013008(ARAMW-2) Sample Duplicate (DUP)

The samples in this SDG were analyzed on an "as received" basis.

Data Summary:

There are no exceptions, anomalies or deviations from the specified methods. All sample data provided in this report met the acceptance criteria specified in the analytical methods and procedures for initial calibration, continuing calibration, instrument controls and process controls where applicable.

Product: Alkalinity

Analytical Method: SM 2320B

Analytical Procedure: GL-GC-E-033 REV# 14

Analytical Batch: 2312490

The following samples were analyzed using the above methods and analytical procedure(s).

<u>GEL Sample ID#</u>	<u>Client Sample Identification</u>
592011002	ARGWC-18
592011003	ARGWC-17
592011004	ARAMW-4
1205182983	Laboratory Control Sample (LCS)
1205182984	591877005(NonSDG) Sample Duplicate (DUP)
1205182985	591877005(NonSDG) Matrix Spike (MS)

The samples in this SDG were analyzed on an "as received" basis.

Data Summary:

There are no exceptions, anomalies or deviations from the specified methods. All sample data provided in this report met the acceptance criteria specified in the analytical methods and procedures for initial calibration, continuing calibration, instrument controls and process controls where applicable.

Certification Statement

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

**Technical Case Narrative
Georgia Power Company
SDG #: 591798**

Metals

Product: Determination of Metals by ICP-MS

Analytical Method: SW846 3005A/6020B

Analytical Procedure: GL-MA-E-014 REV# 35

Analytical Batch: 2311788

Preparation Method: SW846 3005A

Preparation Procedure: GL-MA-E-006 REV# 14

Preparation Batch: 2311787

The following samples were analyzed using the above methods and analytical procedure(s).

<u>GEL Sample ID#</u>	<u>Client Sample Identification</u>
591798001	ARGWA-5
591798002	ARGWA-12
591798003	FB-01
591798004	ARGWA-24
591798005	ARGWA-3
591798006	ARGWA-13
591798007	ARGWC-7
591798008	ARAMW-6
591798009	ARGWC-15
591798010	ARGWC-9
591798011	ARGWA-14
591798012	ARGWC-8
591798013	ARGWC-10
591798014	FB-02
591798015	ARGWC-16
591798016	DUP-01
591798017	ARAMW-3
591798018	EB-01
1205181663	Method Blank (MB)ICP-MS
1205181664	Laboratory Control Sample (LCS)
1205181667	591798001(ARGWA-5L) Serial Dilution (SD)
1205181665	591798001(ARGWA-5S) Matrix Spike (MS)
1205181666	591798001(ARGWA-5SD) Matrix Spike Duplicate (MSD)

The samples in this SDG were analyzed on an "as received" basis.

Data Summary:

All sample data provided in this report met the acceptance criteria specified in the analytical methods and procedures for initial calibration, continuing calibration, instrument controls and process controls where applicable, with the following exceptions.

Calibration Information

ICSA/ICSAB Statement

For the ICP-MS analysis, the ICSA solution contains analyte concentrations which are verified trace impurities indigenous to the purchased standard.

Quality Control (QC) Information**Serial Dilution % Difference Statement**

The serial dilution is used to assess matrix suppression or enhancement. Raw element concentrations 25x the IDL/MDL for CVAA, 50X the IDL/MDL for ICP and 100X the IDL/MDL for ICP-MS analyses are applicable for serial dilution assessment. Not all the applicable analytes were within the established acceptance criteria. Matrix suppression may be suspected. The data has been qualified.

Sample	Analyte	Value
1205181667 (ARGWA-5SDILT)	Calcium	23 *(0%-20%)

Technical Information**Sample Dilutions**

Dilutions may be required for many reasons, including to minimize matrix interferences or to bring over range target analyte concentrations into the linear calibration range. Samples 591798006 (ARGWA-13), 591798008 (ARAMW-6), 591798011 (ARGWA-14), 591798012 (ARGWC-8) and 591798017 (ARAMW-3) were diluted to ensure that the analyte concentrations were within the linear calibration range of the instrument.

Analyte	591798				
	006	008	011	012	017
Boron	10X	5X	1X	10X	10X
Calcium	10X	1X	1X	1X	1X
Magnesium	10X	1X	1X	1X	1X
Sodium	1X	1X	5X	1X	1X

Product: Mercury Analysis Using the Perkin Elmer Automated Mercury Analyzer

Analytical Method: SW846 7470A

Analytical Procedure: GL-MA-E-010 REV# 38

Analytical Batch: 2312007

Preparation Method: SW846 7470A Prep

Preparation Procedure: GL-MA-E-010 REV# 38

Preparation Batch: 2312006

The following samples were analyzed using the above methods and analytical procedure(s).

<u>GEL Sample ID#</u>	<u>Client Sample Identification</u>
591798001	ARGWA-5
591798002	ARGWA-12
591798003	FB-01
591798004	ARGWA-24
591798005	ARGWA-3
591798006	ARGWA-13

591798007	ARGWC-7
591798008	ARAMW-6
591798009	ARGWC-15
591798010	ARGWC-9
591798011	ARGWA-14
591798012	ARGWC-8
591798013	ARGWC-10
591798014	FB-02
591798015	ARGWC-16
591798016	DUP-01
591798017	ARAMW-3
591798018	EB-01
1205182055	Method Blank (MB)CVAA
1205182056	Laboratory Control Sample (LCS)
1205182059	591393012(NonSDGL) Serial Dilution (SD)
1205182057	591393012(NonSDGD) Sample Duplicate (DUP)
1205182058	591393012(NonSDGS) Matrix Spike (MS)

The samples in this SDG were analyzed on an "as received" basis.

Data Summary:

There are no exceptions, anomalies or deviations from the specified methods. All sample data provided in this report met the acceptance criteria specified in the analytical methods and procedures for initial calibration, continuing calibration, instrument controls and process controls where applicable.

General Chemistry

Product: Ion Chromatography

Analytical Method: EPA 300.0

Analytical Procedure: GL-GC-E-086 REV# 30

Analytical Batch: 2311964

The following samples were analyzed using the above methods and analytical procedure(s).

<u>GEL Sample ID#</u>	<u>Client Sample Identification</u>
591798001	ARGWA-5
591798002	ARGWA-12
591798003	FB-01
591798004	ARGWA-24
591798005	ARGWA-3
591798006	ARGWA-13
591798007	ARGWC-7
591798008	ARAMW-6
591798009	ARGWC-15
591798010	ARGWC-9
1205181982	Method Blank (MB)
1205181983	Laboratory Control Sample (LCS)
1205181984	591798010(ARGWC-9) Sample Duplicate (DUP)
1205181985	591798010(ARGWC-9) Post Spike (PS)

The samples in this SDG were analyzed on an "as received" basis.

Data Summary:

All sample data provided in this report met the acceptance criteria specified in the analytical methods and procedures for initial calibration, continuing calibration, instrument controls and process controls where applicable, with the following exceptions.

Quality Control (QC) Information

Matrix Spike (MS)/Post Spike (PS) Recovery Statement

The percent recoveries (%R) obtained from the spike analyses are evaluated when the sample concentration is less than four times (4X) the spike concentration added. The matrix spike recovered outside of the established acceptance limits due to matrix interference and/or non-homogeneity.

Analyte	Sample	Value
Chloride	1205181985 (ARGWC-9PS)	111* (90%-110%)

Technical Information

Sample Dilutions

The following samples 591798002 (ARGWA-12), 591798004 (ARGWA-24), 591798006 (ARGWA-13), 591798007 (ARGWC-7) and 591798008 (ARAMW-6) were diluted because target analyte concentrations exceeded the calibration range. Dilutions may be required for many reasons, including to minimize matrix interferences or to bring over range target analyte concentrations into the linear calibration range.

Analyte	591798				
	002	004	006	007	008
Chloride	2X	2X	1X	1X	1X
Sulfate	1X	1X	100X	5X	5X

Product: Ion Chromatography

Analytical Method: EPA 300.0

Analytical Procedure: GL-GC-E-086 REV# 30

Analytical Batch: 2311967

The following samples were analyzed using the above methods and analytical procedure(s).

<u>GEL Sample ID#</u>	<u>Client Sample Identification</u>
591798011	ARGWA-14
591798012	ARGWC-8
591798013	ARGWC-10
591798014	FB-02
591798015	ARGWC-16
591798016	DUP-01
591798017	ARAMW-3
591798018	EB-01
1205181986	Method Blank (MB)
1205181987	Laboratory Control Sample (LCS)
1205181988	591783015(NonSDG) Sample Duplicate (DUP)
1205181989	591783015(NonSDG) Post Spike (PS)
1205181990	591798017(ARAMW-3) Sample Duplicate (DUP)

1205181991

591798017(ARAMW-3) Post Spike (PS)

The samples in this SDG were analyzed on an "as received" basis.

Data Summary:

All sample data provided in this report met the acceptance criteria specified in the analytical methods and procedures for initial calibration, continuing calibration, instrument controls and process controls where applicable, with the following exceptions.

Technical Information

Sample Dilutions

The following samples 1205181988 (Non SDG 591783015DUP), 1205181989 (Non SDG 591783015PS), 1205181990 (ARAMW-3DUP), 1205181991 (ARAMW-3PS), 591798012 (ARGWC-8), 591798015 (ARGWC-16), 591798016 (DUP-01) and 591798017 (ARAMW-3) were diluted because target analyte concentrations exceeded the calibration range. Dilutions may be required for many reasons, including to minimize matrix interferences or to bring over range target analyte concentrations into the linear calibration range.

Analyte	591798			
	012	015	016	017
Sulfate	10X	20X	20X	5X

Product: Solids, Total Dissolved

Analytical Method: SM 2540C

Analytical Procedure: GL-GC-E-001 REV# 19

Analytical Batch: 2311940

The following samples were analyzed using the above methods and analytical procedure(s).

GEL Sample ID#

Client Sample Identification

591798001	ARGWA-5
1205181930	Method Blank (MB)
1205181931	Laboratory Control Sample (LCS)
1205181932	591783004(NonSDG) Sample Duplicate (DUP)
1205181933	591783018(NonSDG) Sample Duplicate (DUP)

The samples in this SDG were analyzed on an "as received" basis.

Data Summary:

There are no exceptions, anomalies or deviations from the specified methods. All sample data provided in this report met the acceptance criteria specified in the analytical methods and procedures for initial calibration, continuing calibration, instrument controls and process controls where applicable.

Product: Solids, Total Dissolved

Analytical Method: SM 2540C

Analytical Procedure: GL-GC-E-001 REV# 19

Analytical Batch: 2312704

The following samples were analyzed using the above methods and analytical procedure(s).

<u>GEL Sample ID#</u>	<u>Client Sample Identification</u>
591798002	ARGWA-12
591798003	FB-01
1205183468	Method Blank (MB)
1205183469	Laboratory Control Sample (LCS)
1205183471	591675011(NonSDG) Sample Duplicate (DUP)

The samples in this SDG were analyzed on an "as received" basis.

Data Summary:

There are no exceptions, anomalies or deviations from the specified methods. All sample data provided in this report met the acceptance criteria specified in the analytical methods and procedures for initial calibration, continuing calibration, instrument controls and process controls where applicable.

Product: Solids, Total Dissolved

Analytical Method: SM 2540C

Analytical Procedure: GL-GC-E-001 REV# 19

Analytical Batch: 2313272

The following samples were analyzed using the above methods and analytical procedure(s).

<u>GEL Sample ID#</u>	<u>Client Sample Identification</u>
591798004	ARGWA-24
591798005	ARGWA-3
591798006	ARGWA-13
591798007	ARGWC-7
591798008	ARAMW-6
591798009	ARGWC-15
591798010	ARGWC-9
591798011	ARGWA-14
591798012	ARGWC-8
591798013	ARGWC-10
591798014	FB-02
591798015	ARGWC-16
591798016	DUP-01
591798017	ARAMW-3
591798018	EB-01
1205184640	Method Blank (MB)
1205184641	Laboratory Control Sample (LCS)
1205184643	591879001(NonSDG) Sample Duplicate (DUP)

The samples in this SDG were analyzed on an "as received" basis.

Data Summary:

There are no exceptions, anomalies or deviations from the specified methods. All sample data provided in this report met the acceptance criteria specified in the analytical methods and procedures for initial calibration, continuing calibration, instrument controls and process controls where applicable.

Product: Alkalinity

Analytical Method: SM 2320B

Analytical Procedure: GL-GC-E-033 REV# 14

Analytical Batch: 2313370

The following samples were analyzed using the above methods and analytical procedure(s).

<u>GEL Sample ID#</u>	<u>Client Sample Identification</u>
591798001	ARGWA-5
591798002	ARGWA-12
591798004	ARGWA-24
591798005	ARGWA-3
591798006	ARGWA-13
591798007	ARGWC-7
591798008	ARAMW-6
591798009	ARGWC-15
591798010	ARGWC-9
591798011	ARGWA-14
591798012	ARGWC-8
591798013	ARGWC-10
591798015	ARGWC-16
591798017	ARAMW-3
1205184828	Laboratory Control Sample (LCS)
1205184829	591798001(ARGWA-5) Sample Duplicate (DUP)
1205184830	591798001(ARGWA-5) Matrix Spike (MS)
1205184831	591798012(ARGWC-8) Sample Duplicate (DUP)
1205184832	591798012(ARGWC-8) Matrix Spike (MS)

The samples in this SDG were analyzed on an "as received" basis.

Data Summary:

There are no exceptions, anomalies or deviations from the specified methods. All sample data provided in this report met the acceptance criteria specified in the analytical methods and procedures for initial calibration, continuing calibration, instrument controls and process controls where applicable.

Certification Statement

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

GEL Laboratories, LLC
 2040 Savage Road
 Charleston, SC 29407
 Phone: (843) 556-8171
 Fax: (843) 766-1178

Client Name: Georgia Power
 Project/Site Name: Plant Arkwright AP-3
 Address: 241 Ralph McGill Blvd SE, Atlanta, GA 30308
 Collecting By: John Myer, Emily Scheiben,
 an Pennell

Send Results To: jabraham@southernco.com EDD@stantec.com
 brian.steele@stantec.com edgar.smith@stantec.com

Sample ID	*Date Collected (mm-dd-yy)	*Time Collected (Military) (hhmm)	QC Code (2)	Field Filtered (3)	Sample Matrix (4)	Radioactive (If yes, please supply isotopic info)	Hazards (7) Known or possible	Total number of containers	Metals App. III (6020B)	TDS (SM Method 2540C)	Metals App. IV (6020B) (Co only)	Ag (App. I) (6020B)	Alkalinity (300.0 R.1)	Metals Al, K, Mg, Na, Fe, Mn (6020B)	Metals App. IV (6020B)	Preservative Type (6)	Comments
EB-02	9/2/2022	755	EB	N	WQ			5	X	X	X	X	X	X	X	X	pH: NA
ARGWC-18	9/2/2022	900	N	N	WG			6	X	X	X	X	X	X	X	X	pH: 6.03
ARGWC-17	9/2/2022	1030	N	N	WG			6	X	X	X	X	X	X	X	X	pH: 5.11
ARAMW-4	9/2/2022	1115	N	N	WG			6	X	X	X	X	X	X	X	X	pH: 5.65
DUP-02	9/2/2022	NA	FD	N	WQ			5	X	X	X	X	X	X	X	X	pH: NA

Chain of Custody Signatures

Relinquished By (Signed)	Date	Time	Date	Time
<i>[Signature]</i>	9-2-2022	1800	9/3/22	855

TAT Requested: Normal: Rush: Specify: _____
 Fax Results: Yes No
 Select Deliverable: C of A QC Summary Level 1 Level 2 Level 3 Level 4
 Additional Remarks:
 For Lab Receiving Use Only: Custody Seal Intact? Yes No Cooler Temp: _____ °C
 Sample Collection Time Zone: Eastern Pacific Central Mountain Other:

For sample shipping and delivery details, see Sample Receipt & Review form (SRR.)

1) Chain of Custody Number = Client Determined
 2) QC Codes: N = Normal Sample, TB = Trip Blank, FD = Field Duplicate, EB = Equipment Blank, MS = Matrix Spike Sample, MSD = Matrix Spike Duplicate Sample, G = Grab, C = Composite
 3) Field Filtered: For liquid matrices, indicate with a - Y - for yes the sample was field filtered or - N - for sample was not field filtered.
 4) Matrix Codes: DW=Drinking Water, GW=Groundwater, SW=Surface Water, WW=Waste Water, W=Water, ML=Misc Liquid, SO=Soil, SD=Sediment, SL=Sludge, SS=Solid Waste, O=Oil, F=Filter, P=Wipe, U=Urine, F=Fecal, N=Nasal
 5) Sample Analysis Requested: Analytical method requested (i.e. 8260B, 6010B/7470A) and number of containers provided for each (i.e. 8260B - 3, 6010B/7470A - 1).
 6) Preservative Type: HA = Hydrochloric Acid, NI = Nitric Acid, SH = Sodium Hydroxide, SA = Sulfuric Acid, AA = Ascorbic Acid, HX = Hexane, ST = Sodium Thiosulfate, If no preservative is added = leave field blank
 7) **KNOWN OR POSSIBLE HAZARDS**
 Characteristic Hazards: Listed Waste
 FL = Flammable/ignitable
 CO = Corrosive
 RE = Reactive
 RCRA Metals: As = Arsenic Hg = Mercury
 Ba = Barium Se = Selenium
 Cd = Cadmium Ag = Silver
 Cr = Chromium MR = Misc. RCRA metals
 Pb = Lead
 TSCA Regulated
 PCB = Polychlorinated biphenyls
 Other: OT = Other / Unknown
 (i.e.: High/low pH, asbestos, beryllium, irritants, other misc. health hazards, etc.)
 Description:
 Please provide any additional details below regarding handling and/or disposal concerns. (i.e.: Origin of sample(s), type of site collected from, odd matrices, etc.)

SAMPLE RECEIPT & REVIEW FORM

Client: **STNT/GPCC** SDG/AR/COC/Work Order: **592013 / 592014 / 592011 / 592012**

Received By: **StacyBoone** Date Received: **9/3/22**

Carrier and Tracking Number

Circle Applicable:
 FedEx Express FedEx Ground UPS Field Services Courier Other
2775 4922 1277 1^c
2775 4922 1288 1^c **2775 4922 1255 1^c**

Suspected Hazard Information Yes No *If Net Counts > 100cpm on samples not marked "radioactive", contact the Radiation Safety Group for further investigation.

A) Shipped as a DOT Hazardous? Hazard Class Shipped: _____ UN#: _____
 IF UN2910, Is the Radioactive Shipment Survey Compliant? Yes ___ No ___

B) Did the client designate the samples are to be received as radioactive? COC notation or radioactive stickers on containers equal client designation.

C) Did the RSO classify the samples as radioactive? Maximum Net Counts Observed* (Observed Counts - Area Background Counts): **0** CPM / mR/Hr
 Classified as: **Rad 1 Rad 2 Rad 3**

D) Did the client designate samples are hazardous? COC notation or hazard labels on containers equal client designation.

E) Did the RSO identify possible hazards? If D or E is yes, select Hazards below.
 PCB's Flammable Foreign Soil RCRA Asbestos Beryllium Other: _____

Sample Receipt Criteria	Yes	NA	No	Comments/Qualifiers (Required for Non-Conforming Items)
1 Shipping containers received intact and sealed?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Circle Applicable: Seals broken Damaged container Leaking container Other (describe)
2 Chain of custody documents included with shipment?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Circle Applicable: Client contacted and provided COC COC created upon receipt
3 Samples requiring cold preservation within (0 ≤ 6 deg. C)?*	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Preservation Method: Wet Ice <input checked="" type="checkbox"/> Ice Packs <input type="checkbox"/> Dry ice <input type="checkbox"/> None <input type="checkbox"/> Other: _____ *all temperatures are recorded in Celsius TEMP: _____
4 Daily check performed and passed on IR temperature gun?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Temperature Device Serial #: JR4-22 Secondary Temperature Device Serial # (If Applicable): _____
5 Sample containers intact and sealed?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Circle Applicable: Seals broken Damaged container Leaking container Other (describe)
6 Samples requiring chemical preservation at proper pH?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Sample ID's and Containers Affected: _____ If Preservation added, Lot#: _____
7 Do any samples require Volatile Analysis?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	If Yes, are Encores or Soil Kits present for solids? Yes ___ No ___ NA ___ (If yes, take to VOA Freezer) Do liquid VOA vials contain acid preservation? Yes ___ No ___ NA ___ (If unknown, select No) Are liquid VOA vials free of headspace? Yes ___ No ___ NA ___ Sample ID's and containers affected: _____
8 Samples received within holding time?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	ID's and tests affected: _____
9 Sample ID's on COC match ID's on bottles?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	ID's and containers affected: _____
10 Date & time on COC match date & time on bottles?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Circle Applicable: No dates on containers No times on containers COC missing info Other (describe)
11 Number of containers received match number indicated on COC?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Circle Applicable: No container count on COC Other (describe)
12 Are sample containers identifiable as GEL provided by use of GEL labels?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
13 COC form is properly signed in relinquished/received sections?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Circle Applicable: Not relinquished Other (describe)

Comments (Use Continuation Form if needed):
2775 4922 1266 1^c **2775 4922 1244 1^c**

Page: 1 of 2
 Project # 175569434
 GEL Quote #: 591798
 GEL Laboratories, LLC
 2040 Savage Road
 Charleston, SC 29407
 Phone: (843) 556-8171
 Fax: (843) 766-1178

GEL Work Order Number: 591798
 GEL Project Manager: Erin Trent
 Phone # (937) 344-6533
 Fax #

Client Name: Georgia Power
 Project/Site Name: Plant Arkwright Ash Pond 3
 Address: 241 Ralph McGill Blvd SE, Atlanta, GA 30308
 Contacted By: John Myer, Emily Scheiben, Bryan brian.steele@stantec.com edgar.smith@stantec.com

Sample ID	*Date Collected (mm-dd-yy)	*Time Collected (Military) (hhmm)	QC Code (b)	Field Filtered (a)	Sample Matrix (c)	Total number of containers	Should this sample be considered:	Metals App. III, IV (6020B)	TDS (SM Method 2540C)	RAD 226-228 Cmbd	Mercury (7470B)	Anions (Cl, F, Sulfate) (300 Rev, 2.1.1993)	Metals App. IV (6020B) (C)	Ag (App. I) (6020B)	Alkalinity (300.0 R.1.)	Metals Al, K, Mg, Na, Fe, Mn (6020B)	Comments
ARGWA-5	08-30-22	1610	N	N	WG	6	(7) Known or possible	X	X	X	X	X	X	X	X	X	pH: 5.88
ARGWA-12	08-30-22	1614	N	N	WG	6		X	X	X	X	X	X	X	X	X	pH: 5.88
FB-01	08-30-22	1641	FB	N	WQ	5		X	X	X	X	X	X	X	X	X	NA
ARGWA-24	08-31-22	0933	N	N	WG	6		X	X	X	X	X	X	X	X	X	pH: 5.65
ARGWA-3	08-31-22	0955	N	N	WG	6		X	X	X	X	X	X	X	X	X	pH: 5.96
ARGWA-13	08-31-22	1044	N	N	WG	6		X	X	X	X	X	X	X	X	X	pH: 5.53
ARGWC-7	08-31-22	1130	N	N	WG	6		X	X	X	X	X	X	X	X	X	pH: 5.98
ARAMW-6	08-31-22	1144	N	N	WG	6		X	X	X	X	X	X	X	X	X	pH: 6.28
ARGWC-15	08-31-22	1250	N	N	WG	6		X	X	X	X	X	X	X	X	X	pH: 6.46
ARGWC-9	08-31-22	1255	N	N	WG	6		X	X	X	X	X	X	X	X	X	pH: 5.98

Chain of Custody Signatures
 Relinquished By (Signed) Date Time Received by (signed) Date Time
 1. [Signature] 9-1-22 0935 [Signature] 9/1/22 835
 2. [Signature] 9/1/22 109 [Signature] 9/1/22 1309
 3. [Signature] [Signature]
 For sample shipping and delivery details, see Sample Receipt & Review form (SRR.)

LAT Requested: Normal: Rush: Specify: _____ (Subject to Surcharge)
 Fax Results: Yes No
 Select Deliverable: C of A QC Summary Level 1 Level 2 Level 3 Level 4
 Additional Remarks:
 For Lab Receiving Use Only: Custody Seal Intact? Yes No Cooler Temp: _____ °C
 Sample Collection Time Zone: Eastern Pacific Central Mountain Other.

1.) Chain of Custody Number = Client Determined
 2.) QC Codes: N = Normal Sample, TB = Trip Blank, FD = Field Duplicate, EB = Equipment Blank, MS = Matrix Spike Sample, MSD = Matrix Spike Duplicate Sample, G = Grab, C = Composite
 3.) Field Filtered: For liquid matrices, indicates with a - Y - for the sample was field filtered or - N - for sample was not field filtered.
 4.) Matrix Codes: DW=Drinking Water, GW=Groundwater, SW=Surface Water, WW=Waste Water, W=Water, ML=Misc Liquid, SO=Soil, SD=Settlement, SL=Sludge, SS=Solid Waste, O=Oil, F=Filter, P=Wipe, U=Urine, F=Fecal, N=Nasal
 5.) Sample Analysis Requested: Analytical method requested (i.e. 8260B, 6010B/7470A) and number of containers provided for each (i.e. 8260B - 3, 6010B/7470A - 1).
 6.) Preservative Type: HA = Hydrochloric Acid, NI = Nitric Acid, SH = Sodium Hydroxide, SA = Sulfuric Acid, AA = Ascorbic Acid, HX = Hexane, ST = Sodium Thiosulfate, If no preservative is added = leave field blank
 7.) KNOWN OR POSSIBLE HAZARDS
 Characteristic Hazards: [Listed Waste] Other
 FL = Flammable/ignitable LW = Listed Waste
 CO = Corrosive (F, K, P and U-listed wastes.)
 RE = Reactive Waste code(s):
 RCRA Metals: [TSCA Regulated] biphenyis
 As = Arsenic Hg = Mercury
 Ba = Barium Se = Selenium
 Cd = Cadmium Ag = Silver
 Cr = Chromium MR = Misc. RCRA metals
 Pb = Lead
 Please provide any additional details below regarding handling and/or disposal concerns. (i.e.: Origin of sample(s), type of site collected from, odd matrices, etc.)

Client Name: Georgia Power
 Project/Site Name: Plant Arkwright, Ash Pond 3
 Address: 241 Ralph McGill Blvd SE, Atlanta, GA 30308
 Collected By: John Myer, Emily Scheiben, Bryan Pennell
 Send Results To: jbraham@southernco.com EDD@stantec.com
 brian.steele@stantec.com edgar.smith@stantec.com

Sample ID	*Date Collected (mm-dd-yy)	*Time Collected (Military) (hhmm)	QC Code (2)	Field Filtered (3)	Sample Matrix (6)	Total number of containers	Sample Analysis Requested (5) (Fill in the number of containers for each test)										Comments	
							Metals App III, IV (6020B)	TDS (SM Method 2540C)	RAD 226-228 Cmbd	Mercury (740B)	Anions (Cl, F, Sulfate) (300.0 Rev. 2.1 1993)	Metals (6020B) (Co only)	Ag (App. I) (6020B)	Alkalinity (300.0 R.2.1)	Metals Al, K, Mg, Na, Fe, Mn (6020B)	N		Preservative Type (6)
ARGWA-14	08-31-22	1350	N	N	WG	6	X	X	X	X	X	X	X	X	X	X	X	pH: 6.80
ARGWC-8	08-31-22	1407	N	N	WG	6	X	X	X	X	X	X	X	X	X	X	X	pH: 6.38
ARGWC-10	08-31-22	1450	N	N	WG	6	X	X	X	X	X	X	X	X	X	X	X	pH: 5.96
FB-02	08-31-22	1510	FB	N	WQ	5	X	X	X	X	X	X	X	X	X	X	X	NA
ARGWC-16	08-31-22	1525	N	N	WG	6	X	X	X	X	X	X	X	X	X	X	X	pH: 5.18
DUP-01	08-31-22	NA	FD	N	WG	5	X	X	X	X	X	X	X	X	X	X	X	NA
ARAMW-3	08-31-22	1554	N	N	WG	6	X	X	X	X	X	X	X	X	X	X	X	pH: 6.14
EB-01	08-31-22	1622	EB	N	WQ	5	X	X	X	X	X	X	X	X	X	X	X	NA

Should this sample be considered: (7) Known or possible Hazards (Info) (8) Radiolactive (if yes, please supply isotopic info)

TAT Requested: Normal: X Rush: Specify: (Subject to Surcharge)

Reinquished By (Signed) Date Time Received by (signed) Date Time

1. *[Signature]* 9-1-22 0835 *[Signature]* 9/1/22 8:38
 2. *[Signature]* 9-1-22 109 *[Signature]* 9/1/22 1309
 3. *[Signature]* 9-1-22 109 *[Signature]* 9/1/22 1309

Additional Remarks:
 For Lab Receiving Use Only: Custody Seal Intact? [] Yes [] No Cooler Temp: °C
 Sample Collection Time Zone: [X] Eastern [] Pacific [] Central [] Mountain [] Other:
 Select Deliverable: [] C of A [] QC Summary [] Level 1 [X] Level 2 [] Level 3 [] Level 4
 Fax Results: [] Yes [X] No

For sample shipping and delivery details, see Sample Receipt & Review form (SRR.)

1.) Chain of Custody Number = Client Determined

2.) QC Codes: N = Normal Sample, TB = Trip Blank, FD = Field Duplicate, EB = Equipment Blank, MS = Matrix Spike Sample, MSD = Matrix Spike Duplicate Sample, G = Grab, C = Composite

3.) Field Filtered: For liquid matrices, indicate with a - Y - for yes the sample was field filtered or - N - for sample was not field filtered.

4.) Matrix Codes: DW=Drinking Water, GW=Groundwater, SW=Surface Water, WW=Waste Water, W=Water, ML=Misc Liquid, SO=Soil, SD=Sediment, SL=Sludge, SS=Solid Waste, O=Oil, F=Filter, P=Wipe, U=Urine, F=Faecal, N=Nasal

5.) Sample Analysis Requested: Analytical method requested (i.e. 8260B, 6010B/7470A) and number of containers provided for each (i.e. 8260B - 3, 6010B/7470A - 1).

6.) Preservative Type: HA = Hydrochloric Acid, NI = Nitric Acid, SH = Sulfuric Acid, SA = Sulfamic Acid, AA = Ascorbic Acid, BX = Hexane, ST = Sodium Thiosulfate, if no preservative is added = leave field blank

7.) KNOWN OR POSSIBLE HAZARDS

Characteristic Hazards: [] Listed Waste
 FL = Flammable/ignitable
 LW = Listed Waste
 CO = Corrosive
 RE = Reactive
 (F,K,P and U-listed wastes.)
 Waste code(s):

Other: OT = Other / Unknown
 (i.e.: High/low pH, asbestos, beryllium, irritants, other misc. health hazards, etc.)
 Description:

RCRA Metals: As = Arsenic, Hg = Mercury, Ba = Barium, Se = Selenium, Cd = Cadmium, Ag = Silver, Cr = Chromium, MR = Misc. RCRA metals, PCB = Polychlorinated biphenyls, Pb = Lead

Please provide any additional details below regarding handling and/or disposal concerns: (i.e.: Origin of sample(s), type of site collected from, odd matrices, etc.)

SAMPLE RECEIPT & REVIEW FORM *ET*

Client: <i>GDC</i>		SDG/AR/COC/Work Order: <i>591798</i>		
Received By: <i>MVH</i>		Date Received: <i>09-01-22</i>		
Carrier and Tracking Number		Circle Applicable: FedEx Express FedEx Ground UPS Field Services Courier Other <i>Cooler 1-2°</i> <i>Cooler 4-3°</i> <i>Cooler 2-3°</i> <i>Cooler 5-2°</i> <i>Cooler 3-4°</i>		
Suspected Hazard Information	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	*If Net Counts > 100cpm on samples not marked "radioactive", contact the Radiation Safety Group for further investigation.		
A) Shipped as a DOT Hazardous?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Hazard Class Shipped: _____ UN#: _____ If UN2910, Is the Radioactive Shipment Survey Compliant? Yes ___ No ___		
B) Did the client designate the samples to be received as radioactive?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	COC notation or radioactive stickers on containers equal client designation.		
C) Did the RSO classify the samples as radioactive?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Maximum Net Counts Observed* (Observed Counts - Area Background Counts): <i>0</i> <i>CPM</i> /mR/Hr Classified as: Rad 1 Rad 2 Rad 3		
D) Did the client designate samples are hazardous?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	COC notation or hazard labels on containers equal client designation.		
E) Did the RSO identify possible hazards?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	If D or E is yes, select Hazards below. PCB's Flammable Foreign Soil RCRA Asbestos Beryllium Other: _____		
Sample Receipt Criteria	Yes	NA	No	Comments/Qualifiers (Required for Non-Conforming Items)
1 Shipping containers received intact and sealed?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Circle Applicable: Seals broken Damaged container Leaking container Other (describe)
2 Chain of custody documents included with shipment?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Circle Applicable: Client contacted and provided COC COC created upon receipt
3 Samples requiring cold preservation within (0 ≤ 6 deg. C)?*	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Preservation Method: <i>Wet Ice</i> Ice Packs Dry ice None Other: *all temperatures are recorded in Celsius TEMP: _____
4 Daily check performed and passed on IR temperature gun?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Temperature Device Serial #: <i>IR2-21</i> Secondary Temperature Device Serial # (If Applicable): _____
5 Sample containers intact and sealed?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Circle Applicable: Seals broken Damaged container Leaking container Other (describe)
6 Samples requiring chemical preservation at proper pH?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Sample ID's and Containers Affected: If Preservation added, Lot#: _____
7 Do any samples require Volatile Analysis?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	If Yes, are Encores or Soil Kits present for solids? Yes ___ No ___ NA ___ (If yes, take to VOA Freezer)
				Do liquid VOA vials contain acid preservation? Yes ___ No ___ NA ___ (If unknown, select No)
				Are liquid VOA vials free of headspace? Yes ___ No ___ NA ___
8 Samples received within holding time?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	ID's and tests affected: s
9 Sample ID's on COC match ID's on bottles?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	ID's and containers affected:
10 Date & time on COC match date & time on bottles?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Circle Applicable: No dates on containers No times on containers COC missing info Other (describe)
11 Number of containers received match number indicated on COC?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Circle Applicable: No container count on COC Other (describe)
12 Are sample containers identifiable as GEL provided by use of GEL labels?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
13 COC form is properly signed in relinquished/received sections?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Circle Applicable: Not relinquished Other (describe)
Comments (Use Continuation Form if needed):				

PM (or PMA) review: Initials *EM* Date *09/06/22* Page *1* of *1*

List of current GEL Certifications as of 22 September 2022

State	Certification
Alabama	42200
Alaska	17-018
Alaska Drinking Water	SC00012
Arkansas	88-0651
CLIA	42D0904046
California	2940
Colorado	SC00012
Connecticut	PH-0169
DoD ELAP/ ISO17025 A2LA	2567.01
Florida NELAP	E87156
Foreign Soils Permit	P330-15-00283, P330-15-00253
Georgia	SC00012
Georgia SDWA	967
Hawaii	SC00012
Idaho	SC00012
Illinois NELAP	200029
Indiana	C-SC-01
Kansas NELAP	E-10332
Kentucky SDWA	90129
Kentucky Wastewater	90129
Louisiana Drinking Water	LA024
Louisiana NELAP	03046 (AI33904)
Maine	2019020
Maryland	270
Massachusetts	M-SC012
Massachusetts PFAS Approv	Letter
Michigan	9976
Mississippi	SC00012
Nebraska	NE-OS-26-13
Nevada	SC000122023-3
New Hampshire NELAP	2054
New Jersey NELAP	SC002
New Mexico	SC00012
New York NELAP	11501
North Carolina	233
North Carolina SDWA	45709
North Dakota	R-158
Oklahoma	2022-137
Pennsylvania NELAP	68-00485
Puerto Rico	SC00012
S. Carolina Radiochem	10120002
Sanitation Districts of L	9255651
South Carolina Chemistry	10120001
Tennessee	TN 02934
Texas NELAP	T104704235-22-20
Utah NELAP	SC000122021-36
Vermont	VT87156
Virginia NELAP	460202
Washington	C780



December 08, 2022

Joju Abraham
Georgia Power Company, Southern Company
241 Ralph McGill Blvd NE, Bin 10160
Atlanta, Georgia 30308

Re: Arkwright CCR Groundwater Compliance AP3
Work Orders: 591802 and 592012

Dear Joju Abraham:

GEL Laboratories, LLC (GEL) appreciates the opportunity to provide the enclosed analytical results for the sample(s) we received on September 01, 2022 and September 03, 2022. This revised data report has been prepared and reviewed in accordance with GEL's standard operating procedures. The data package has been revised to report new MDC values for the Ra-226+228 Sum results.

Test results for NELAP or ISO 17025 accredited tests are verified to meet the requirements of those standards, with any exceptions noted. The results reported relate only to the items tested and to the sample as received by the laboratory. These results may not be reproduced except as full reports without approval by the laboratory. Copies of GEL's accreditations and certifications can be found on our website at www.gel.com.

Our policy is to provide high quality, personalized analytical services to enable you to meet your analytical needs on time every time. We trust that you will find everything in order and to your satisfaction. If you have any questions, please do not hesitate to call me at (843) 556-8171, ext. 4504.

Sincerely,

Edith Kent for
Erin Trent
Project Manager

Purchase Order: GPC82177-0002
Enclosures



GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 – (843) 556-8171 – www.gel.com

Certificate of Analysis Report for

GPCC001 Georgia Power Company

Client SDG: 591802 GEL Work Order: 591802

The Qualifiers in this report are defined as follows:

- * A quality control analyte recovery is outside of specified acceptance criteria
- ** Analyte is a Tracer compound
- ** Analyte is a surrogate compound
- U Analyte was analyzed for, but not detected above the MDL, MDA, MDC or LOD.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the Certificate of Analysis.

The designation ND, if present, appears in the result column when the analyte concentration is not detected above the limit as defined in the 'U' qualifier above.

This data report has been prepared and reviewed in accordance with GEL Laboratories LLC standard operating procedures. Please direct any questions to your Project Manager, Erin Trent.



Reviewed by _____

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 – (843) 556-8171 – www.gel.com

**Certificate of Analysis Report
for**

GPCC001 Georgia Power Company

Client SDG: 592012 GEL Work Order: 592012

The Qualifiers in this report are defined as follows:

- * A quality control analyte recovery is outside of specified acceptance criteria
- ** Analyte is a Tracer compound
- ** Analyte is a surrogate compound
- U Analyte was analyzed for, but not detected above the MDL, MDA, MDC or LOD.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the Certificate of Analysis.

The designation ND, if present, appears in the result column when the analyte concentration is not detected above the limit as defined in the 'U' qualifier above.

This data report has been prepared and reviewed in accordance with GEL Laboratories LLC standard operating procedures. Please direct any questions to your Project Manager, Erin Trent.



Reviewed by _____

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

Company : Georgia Power Company, Southern
Address : Company
241 Ralph McGill Blvd NE, Bin 10160

Atlanta, Georgia 30308

Report Date: December 7, 2022

Contact: Joju Abraham

Project: Arkwright CCR Groundwater ComplianceAP3

Client Sample ID: ARGWA-5
Sample ID: 591802001
Matrix: WG
Collect Date: 30-AUG-22
Receive Date: 01-SEP-22
Collector: Client

Project: GPCC00100
Client ID: GPCC001

Parameter	Qualifier	Result	Uncertainty	MDC	TPU	RL	Units	PF	DF	Analyst	Date	Time	Batch	Mtd.
Rad Gas Flow Proportional Counting														
<i>GFPC Ra228, Liquid "As Received"</i>														
Radium-228	U	-0.603	+/-1.04	2.09	+/-1.04	3.00	pCi/L			JE1	09/28/22	0844	2312612	1
<i>Radium-226+Radium-228 Calculation "See Parent Products"</i>														
Radium-226+228 Sum	U	0.546	+/-1.15	2.09	+/-1.15		pCi/L		1	TON1	09/30/22	1529	2312608	2
Rad Radium-226														
<i>Lucas Cell, Ra226, Liquid "As Received"</i>														
Radium-226	U	0.546	+/-0.472	0.736	+/-0.488	1.00	pCi/L			LXP1	09/29/22	0920	2312593	3

The following Analytical Methods were performed

Method	Description
1	EPA 904.0/SW846 9320 Modified
2	Calculation
3	EPA 903.1 Modified

Surrogate/Tracer Recovery	Test	Batch ID	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC Ra228, Liquid "As Received"	2312612	77.7	(15%-125%)

Notes:
The MDC is a sample specific MDC.
TPU and Counting Uncertainty are calculated at the 95% confidence level (1.96-sigma).

Column headers are defined as follows:

DF: Dilution Factor
DL: Detection Limit
Lc/LC: Critical Level
MDA: Minimum Detectable Activity
MDC: Minimum Detectable Concentration

Mtd.: Method
PF: Prep Factor
RL: Reporting Limit
TPU: Total Propagated Uncertainty

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Certificate of Analysis

Company : Georgia Power Company, Southern
Address : Company
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Atlanta, Georgia 30308

Report Date: December 7, 2022

Contact: Joju Abraham

Project: Arkwright CCR Groundwater ComplianceAP3

Client Sample ID: ARGWA-12

Project: GPCC00100

Sample ID: 591802002

Client ID: GPCC001

Matrix: WG

Collect Date: 30-AUG-22

Receive Date: 01-SEP-22

Collector: Client

Parameter	Qualifier	Result	Uncertainty	MDC	TPU	RL	Units	PF	DF	Analyst	Date	Time	Batch	Mtd.
Rad Gas Flow Proportional Counting														
<i>GFPC Ra228, Liquid "As Received"</i>														
Radium-228	U	0.274	+/-1.21	2.20	+/-1.22	3.00	pCi/L			JE1	09/28/22	0844	2312612	1
<i>Radium-226+Radium-228 Calculation "See Parent Products"</i>														
Radium-226+228 Sum	U	0.804	+/-1.30	2.20	+/-1.30		pCi/L		1	TON1	09/30/22	1529	2312608	2
Rad Radium-226														
<i>Lucas Cell, Ra226, Liquid "As Received"</i>														
Radium-226	U	0.530	+/-0.453	0.694	+/-0.470	1.00	pCi/L			LXP1	09/29/22	0920	2312593	3

The following Analytical Methods were performed

Method	Description
1	EPA 904.0/SW846 9320 Modified
2	Calculation
3	EPA 903.1 Modified

Surrogate/Tracer Recovery	Test	Batch ID	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC Ra228, Liquid "As Received"	2312612	75.7	(15%-125%)

Notes:
The MDC is a sample specific MDC.
TPU and Counting Uncertainty are calculated at the 95% confidence level (1.96-sigma).

Column headers are defined as follows:

DF: Dilution Factor	Mtd.: Method
DL: Detection Limit	PF: Prep Factor
Lc/LC: Critical Level	RL: Reporting Limit
MDA: Minimum Detectable Activity	TPU: Total Propagated Uncertainty
MDC: Minimum Detectable Concentration	

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Certificate of Analysis

Company : Georgia Power Company, Southern
 Address : Company
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Atlanta, Georgia 30308

Report Date: December 7, 2022

Contact: Joju Abraham

Project: Arkwright CCR Groundwater ComplianceAP3

Client Sample ID: FB-01
 Sample ID: 591802003
 Matrix: WQ
 Collect Date: 30-AUG-22
 Receive Date: 01-SEP-22
 Collector: Client

Project: GPCC00100
 Client ID: GPCC001

Parameter	Qualifier	Result	Uncertainty	MDC	TPU	RL	Units	PF	DF	Analyst	Date	Time	Batch	Mtd.
Rad Gas Flow Proportional Counting														
<i>GFPC Ra228, Liquid "As Received"</i>														
Radium-228	U	0.375	+/-0.962	1.74	+/-0.967	3.00	pCi/L			JE1	09/28/22	0843	2312612	1
<i>Radium-226+Radium-228 Calculation "See Parent Products"</i>														
Radium-226+228 Sum	U	1.41	+/-1.07	1.74	+/-1.09		pCi/L		1	TON1	09/30/22	1529	2312608	2
Rad Radium-226														
<i>Lucas Cell, Ra226, Liquid "As Received"</i>														
Radium-226		1.03	+/-0.463	0.476	+/-0.494	1.00	pCi/L			LXP1	09/29/22	0920	2312593	3

The following Analytical Methods were performed

Method	Description
1	EPA 904.0/SW846 9320 Modified
2	Calculation
3	EPA 903.1 Modified

Surrogate/Tracer Recovery	Test	Batch ID	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC Ra228, Liquid "As Received"	2312612	72.5	(15%-125%)

Notes:
 The MDC is a sample specific MDC.
 TPU and Counting Uncertainty are calculated at the 95% confidence level (1.96-sigma).

Column headers are defined as follows:

DF: Dilution Factor	Mtd.: Method
DL: Detection Limit	PF: Prep Factor
Lc/LC: Critical Level	RL: Reporting Limit
MDA: Minimum Detectable Activity	TPU: Total Propagated Uncertainty
MDC: Minimum Detectable Concentration	

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Atlanta, Georgia 30308

Report Date: December 7, 2022

Contact: Joju Abraham

Project: Arkwright CCR Groundwater ComplianceAP3

Client Sample ID: ARGWA-24

Project: GPCC00100

Sample ID: 591802004

Client ID: GPCC001

Matrix: WG

Collect Date: 31-AUG-22

Receive Date: 01-SEP-22

Collector: Client

Parameter	Qualifier	Result	Uncertainty	MDC	TPU	RL	Units	PF	DF	Analyst	Date	Time	Batch	Mtd.
Rad Gas Flow Proportional Counting														
<i>GFPC Ra228, Liquid "As Received"</i>														
Radium-228	U	-0.239	+/-1.03	2.00	+/-1.03	3.00	pCi/L			JE1	09/28/22	0843	2312612	1
<i>Radium-226+Radium-228 Calculation "See Parent Products"</i>														
Radium-226+228 Sum	U	0.161	+/-1.09	2.00	+/-1.09		pCi/L		1	TON1	09/30/22	1529	2312608	2
Rad Radium-226														
<i>Lucas Cell, Ra226, Liquid "As Received"</i>														
Radium-226	U	0.161	+/-0.334	0.615	+/-0.336	1.00	pCi/L			LXP1	09/29/22	0920	2312593	3

The following Analytical Methods were performed

Method	Description
1	EPA 904.0/SW846 9320 Modified
2	Calculation
3	EPA 903.1 Modified

Surrogate/Tracer Recovery	Test	Batch ID	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC Ra228, Liquid "As Received"	2312612	77.1	(15%-125%)

Notes:
 The MDC is a sample specific MDC.
 TPU and Counting Uncertainty are calculated at the 95% confidence level (1.96-sigma).

Column headers are defined as follows:

DF: Dilution Factor	Mtd.: Method
DL: Detection Limit	PF: Prep Factor
Lc/LC: Critical Level	RL: Reporting Limit
MDA: Minimum Detectable Activity	TPU: Total Propagated Uncertainty
MDC: Minimum Detectable Concentration	

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Atlanta, Georgia 30308

Report Date: December 7, 2022

Contact: Joju Abraham

Project: Arkwright CCR Groundwater ComplianceAP3

Client Sample ID: ARGWA-3

Project: GPCC00100

Sample ID: 591802005

Client ID: GPCC001

Matrix: WG

Collect Date: 31-AUG-22

Receive Date: 01-SEP-22

Collector: Client

Parameter	Qualifier	Result	Uncertainty	MDC	TPU	RL	Units	PF	DF	Analyst	Date	Time	Batch	Mtd.
Rad Gas Flow Proportional Counting														
<i>GFPC Ra228, Liquid "As Received"</i>														
Radium-228	U	0.199	+/-0.896	1.67	+/-0.897	3.00	pCi/L			JE1	09/28/22	0844	2312612	1
<i>Radium-226+Radium-228 Calculation "See Parent Products"</i>														
Radium-226+228 Sum	U	0.805	+/-0.997	1.67	+/-1.01		pCi/L		1	TON1	09/30/22	1529	2312608	2
Rad Radium-226														
<i>Lucas Cell, Ra226, Liquid "As Received"</i>														
Radium-226	U	0.606	+/-0.438	0.625	+/-0.457	1.00	pCi/L			LXP1	09/29/22	0920	2312593	3

The following Analytical Methods were performed

Method	Description
1	EPA 904.0/SW846 9320 Modified
2	Calculation
3	EPA 903.1 Modified

Surrogate/Tracer Recovery	Test	Batch ID	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC Ra228, Liquid "As Received"	2312612	71.2	(15%-125%)

Notes:
 The MDC is a sample specific MDC.
 TPU and Counting Uncertainty are calculated at the 95% confidence level (1.96-sigma).

Column headers are defined as follows:

DF: Dilution Factor	Mtd.: Method
DL: Detection Limit	PF: Prep Factor
Lc/LC: Critical Level	RL: Reporting Limit
MDA: Minimum Detectable Activity	TPU: Total Propagated Uncertainty
MDC: Minimum Detectable Concentration	

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Atlanta, Georgia 30308

Report Date: December 7, 2022

Contact: Joju Abraham

Project: Arkwright CCR Groundwater ComplianceAP3

Client Sample ID: ARGWA-13

Project: GPCC00100

Sample ID: 591802006

Client ID: GPCC001

Matrix: WG

Collect Date: 31-AUG-22

Receive Date: 01-SEP-22

Collector: Client

Parameter	Qualifier	Result	Uncertainty	MDC	TPU	RL	Units	PF	DF	Analyst	Date	Time	Batch	Mtd.
Rad Gas Flow Proportional Counting														
<i>GFPC Ra228, Liquid "As Received"</i>														
Radium-228	U	-0.0371	+/-1.22	2.25	+/-1.22	3.00	pCi/L			JE1	09/28/22	0844	2312612	1
<i>Radium-226+Radium-228 Calculation "See Parent Products"</i>														
Radium-226+228 Sum	U	0.596	+/-1.26	2.25	+/-1.27		pCi/L		1	TON1	09/30/22	1529	2312608	2
Rad Radium-226														
<i>Lucas Cell, Ra226, Liquid "As Received"</i>														
Radium-226		0.596	+/-0.326	0.357	+/-0.350	1.00	pCi/L			LXP1	09/29/22	0920	2312593	3

The following Analytical Methods were performed

Method	Description
1	EPA 904.0/SW846 9320 Modified
2	Calculation
3	EPA 903.1 Modified

Surrogate/Tracer Recovery	Test	Batch ID	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC Ra228, Liquid "As Received"	2312612	77.4	(15%-125%)

Notes:
The MDC is a sample specific MDC.
TPU and Counting Uncertainty are calculated at the 95% confidence level (1.96-sigma).

Column headers are defined as follows:

DF: Dilution Factor
DL: Detection Limit
Lc/LC: Critical Level
MDA: Minimum Detectable Activity
MDC: Minimum Detectable Concentration

Mtd.: Method
PF: Prep Factor
RL: Reporting Limit
TPU: Total Propagated Uncertainty

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Atlanta, Georgia 30308

Report Date: December 7, 2022

Contact: Joju Abraham

Project: Arkwright CCR Groundwater ComplianceAP3

Client Sample ID: ARGWC-7

Project: GPCC00100

Sample ID: 591802007

Client ID: GPCC001

Matrix: WG

Collect Date: 31-AUG-22

Receive Date: 01-SEP-22

Collector: Client

Parameter	Qualifier	Result	Uncertainty	MDC	TPU	RL	Units	PF	DF	Analyst	Date	Time	Batch	Mtd.
Rad Gas Flow Proportional Counting														
<i>GFPC Ra228, Liquid "As Received"</i>														
Radium-228	U	0.167	+/-1.05	1.94	+/-1.05	3.00	pCi/L			JE1	09/28/22	0844	2312612	1
<i>Radium-226+Radium-228 Calculation "See Parent Products"</i>														
Radium-226+228 Sum	U	0.804	+/-1.15	1.94	+/-1.15		pCi/L		1	TON1	09/30/22	1529	2312608	2
Rad Radium-226														
<i>Lucas Cell, Ra226, Liquid "As Received"</i>														
Radium-226	U	0.636	+/-0.460	0.656	+/-0.471	1.00	pCi/L			LXP1	09/29/22	0953	2312593	3

The following Analytical Methods were performed

Method	Description
1	EPA 904.0/SW846 9320 Modified
2	Calculation
3	EPA 903.1 Modified

Surrogate/Tracer Recovery	Test	Batch ID	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC Ra228, Liquid "As Received"	2312612	78.9	(15%-125%)

Notes:
 The MDC is a sample specific MDC.
 TPU and Counting Uncertainty are calculated at the 95% confidence level (1.96-sigma).

Column headers are defined as follows:

DF: Dilution Factor	Mtd.: Method
DL: Detection Limit	PF: Prep Factor
Lc/LC: Critical Level	RL: Reporting Limit
MDA: Minimum Detectable Activity	TPU: Total Propagated Uncertainty
MDC: Minimum Detectable Concentration	

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Certificate of Analysis

Company : Georgia Power Company, Southern
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241 Ralph McGill Blvd NE, Bin 10160

Atlanta, Georgia 30308

Report Date: December 7, 2022

Contact: Joju Abraham

Project: Arkwright CCR Groundwater ComplianceAP3

Client Sample ID: ARAMW-6

Project: GPCC00100

Sample ID: 591802008

Client ID: GPCC001

Matrix: WG

Collect Date: 31-AUG-22

Receive Date: 01-SEP-22

Collector: Client

Parameter	Qualifier	Result	Uncertainty	MDC	TPU	RL	Units	PF	DF	Analyst	Date	Time	Batch	Mtd.
Rad Gas Flow Proportional Counting														
<i>GFPC Ra228, Liquid "As Received"</i>														
Radium-228	U	0.535	+/-0.871	1.52	+/-0.881	3.00	pCi/L			JE1	09/28/22	0844	2312612	1
<i>Radium-226+Radium-228 Calculation "See Parent Products"</i>														
Radium-226+228 Sum	U	0.871	+/-0.952	1.52	+/-0.964		pCi/L		1	TON1	09/30/22	1529	2312608	2
Rad Radium-226														
<i>Lucas Cell, Ra226, Liquid "As Received"</i>														
Radium-226	U	0.336	+/-0.386	0.643	+/-0.392	1.00	pCi/L			LXP1	09/29/22	0953	2312593	3

The following Analytical Methods were performed

Method	Description
1	EPA 904.0/SW846 9320 Modified
2	Calculation
3	EPA 903.1 Modified

Surrogate/Tracer Recovery	Test	Batch ID	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC Ra228, Liquid "As Received"	2312612	86.8	(15%-125%)

Notes:
The MDC is a sample specific MDC.
TPU and Counting Uncertainty are calculated at the 95% confidence level (1.96-sigma).

Column headers are defined as follows:

DF: Dilution Factor
DL: Detection Limit
Lc/LC: Critical Level
MDA: Minimum Detectable Activity
MDC: Minimum Detectable Concentration

Mtd.: Method
PF: Prep Factor
RL: Reporting Limit
TPU: Total Propagated Uncertainty

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Certificate of Analysis

Company : Georgia Power Company, Southern
 Address : Company
 241 Ralph McGill Blvd NE, Bin 10160

Atlanta, Georgia 30308

Report Date: December 7, 2022

Contact: Joju Abraham
 Project: Arkwright CCR Groundwater ComplianceAP3

Client Sample ID: ARGWC-15
 Sample ID: 591802009
 Matrix: WG
 Collect Date: 31-AUG-22
 Receive Date: 01-SEP-22
 Collector: Client

Project: GPCC00100
 Client ID: GPCC001

Parameter	Qualifier	Result	Uncertainty	MDC	TPU	RL	Units	PF	DF	Analyst	Date	Time	Batch	Mtd.
Rad Gas Flow Proportional Counting														
<i>GFPC Ra228, Liquid "As Received"</i>														
Radium-228	U	0.296	+/-1.18	2.12	+/-1.18	3.00	pCi/L			JE1	09/28/22	0844	2312612	1
<i>Radium-226+Radium-228 Calculation "See Parent Products"</i>														
Radium-226+228 Sum	U	0.510	+/-1.22	2.12	+/-1.22		pCi/L		1	TON1	09/30/22	1529	2312608	2
Rad Radium-226														
<i>Lucas Cell, Ra226, Liquid "As Received"</i>														
Radium-226	U	0.214	+/-0.296	0.512	+/-0.298	1.00	pCi/L			LXP1	09/29/22	0953	2312593	3

The following Analytical Methods were performed

Method	Description
1	EPA 904.0/SW846 9320 Modified
2	Calculation
3	EPA 903.1 Modified

Surrogate/Tracer Recovery	Test	Batch ID	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC Ra228, Liquid "As Received"	2312612	79.4	(15%-125%)

Notes:
 The MDC is a sample specific MDC.
 TPU and Counting Uncertainty are calculated at the 95% confidence level (1.96-sigma).

Column headers are defined as follows:

DF: Dilution Factor	Mtd.: Method
DL: Detection Limit	PF: Prep Factor
Lc/LC: Critical Level	RL: Reporting Limit
MDA: Minimum Detectable Activity	TPU: Total Propagated Uncertainty
MDC: Minimum Detectable Concentration	

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Certificate of Analysis

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Atlanta, Georgia 30308

Report Date: December 7, 2022

Contact: Joju Abraham

Project: Arkwright CCR Groundwater ComplianceAP3

Client Sample ID: ARGWC-9

Project: GPCC00100

Sample ID: 591802010

Client ID: GPCC001

Matrix: WG

Collect Date: 31-AUG-22

Receive Date: 01-SEP-22

Collector: Client

Parameter	Qualifier	Result	Uncertainty	MDC	TPU	RL	Units	PF	DF	Analyst	Date	Time	Batch	Mtd.
Rad Gas Flow Proportional Counting														
<i>GFPC Ra228, Liquid "As Received"</i>														
Radium-228	U	-1.06	+/-0.969	2.03	+/-0.969	3.00	pCi/L			JE1	09/28/22	0844	2312612	1
<i>Radium-226+Radium-228 Calculation "See Parent Products"</i>														
Radium-226+228 Sum	U	0.0403	+/-1.02	2.03	+/-1.02		pCi/L		1	TON1	09/30/22	1529	2312608	2
Rad Radium-226														
<i>Lucas Cell, Ra226, Liquid "As Received"</i>														
Radium-226	U	0.0403	+/-0.306	0.617	+/-0.306	1.00	pCi/L			LXP1	09/29/22	0953	2312593	3

The following Analytical Methods were performed

Method	Description
1	EPA 904.0/SW846 9320 Modified
2	Calculation
3	EPA 903.1 Modified

Surrogate/Tracer Recovery	Test	Batch ID	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC Ra228, Liquid "As Received"	2312612	81.5	(15%-125%)

Notes:
 The MDC is a sample specific MDC.
 TPU and Counting Uncertainty are calculated at the 95% confidence level (1.96-sigma).

Column headers are defined as follows:

DF: Dilution Factor	Mtd.: Method
DL: Detection Limit	PF: Prep Factor
Lc/LC: Critical Level	RL: Reporting Limit
MDA: Minimum Detectable Activity	TPU: Total Propagated Uncertainty
MDC: Minimum Detectable Concentration	

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Atlanta, Georgia 30308

Report Date: December 7, 2022

Contact: Joju Abraham

Project: Arkwright CCR Groundwater ComplianceAP3

Client Sample ID: ARGWA-14
 Sample ID: 591802011
 Matrix: WG
 Collect Date: 31-AUG-22
 Receive Date: 01-SEP-22
 Collector: Client

Project: GPCC00100
 Client ID: GPCC001

Parameter	Qualifier	Result	Uncertainty	MDC	TPU	RL	Units	PF	DF	Analyst	Date	Time	Batch	Mtd.
Rad Gas Flow Proportional Counting														
<i>GFPC Ra228, Liquid "As Received"</i>														
Radium-228	U	-0.550	+/-1.16	2.22	+/-1.16	3.00	pCi/L			JE1	09/28/22	0844	2312612	1
<i>Radium-226+Radium-228 Calculation "See Parent Products"</i>														
Radium-226+228 Sum	U	0.345	+/-1.19	2.22	+/-1.19		pCi/L		1	TON1	09/30/22	1529	2312608	2
Rad Radium-226														
<i>Lucas Cell, Ra226, Liquid "As Received"</i>														
Radium-226		0.345	+/-0.268	0.330	+/-0.275	1.00	pCi/L			LXP1	09/29/22	0953	2312593	3

The following Analytical Methods were performed

Method	Description
1	EPA 904.0/SW846 9320 Modified
2	Calculation
3	EPA 903.1 Modified

Surrogate/Tracer Recovery	Test	Batch ID	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC Ra228, Liquid "As Received"	2312612	83.6	(15%-125%)

Notes:
 The MDC is a sample specific MDC.
 TPU and Counting Uncertainty are calculated at the 95% confidence level (1.96-sigma).

Column headers are defined as follows:

- | | |
|---------------------------------------|-----------------------------------|
| DF: Dilution Factor | Mtd.: Method |
| DL: Detection Limit | PF: Prep Factor |
| Lc/LC: Critical Level | RL: Reporting Limit |
| MDA: Minimum Detectable Activity | TPU: Total Propagated Uncertainty |
| MDC: Minimum Detectable Concentration | |

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Atlanta, Georgia 30308

Report Date: December 7, 2022

Contact: Joju Abraham

Project: Arkwright CCR Groundwater ComplianceAP3

Client Sample ID: ARGWC-8

Project: GPCC00100

Sample ID: 591802012

Client ID: GPCC001

Matrix: WG

Collect Date: 31-AUG-22

Receive Date: 01-SEP-22

Collector: Client

Parameter	Qualifier	Result	Uncertainty	MDC	TPU	RL	Units	PF	DF	Analyst	Date	Time	Batch	Mtd.
Rad Gas Flow Proportional Counting														
<i>GFPC Ra228, Liquid "As Received"</i>														
Radium-228	U	0.127	+/-0.785	1.48	+/-0.785	3.00	pCi/L			JE1	09/28/22	0844	2312612	1
<i>Radium-226+Radium-228 Calculation "See Parent Products"</i>														
Radium-226+228 Sum	U	0.618	+/-0.907	1.48	+/-0.912		pCi/L		1	TON1	09/30/22	1529	2312608	2
Rad Radium-226														
<i>Lucas Cell, Ra226, Liquid "As Received"</i>														
Radium-226	U	0.492	+/-0.455	0.722	+/-0.463	1.00	pCi/L			LXP1	09/29/22	0953	2312593	3

The following Analytical Methods were performed

Method	Description
1	EPA 904.0/SW846 9320 Modified
2	Calculation
3	EPA 903.1 Modified

Surrogate/Tracer Recovery	Test	Batch ID	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC Ra228, Liquid "As Received"	2312612	78.6	(15%-125%)

Notes:
 The MDC is a sample specific MDC.
 TPU and Counting Uncertainty are calculated at the 95% confidence level (1.96-sigma).

Column headers are defined as follows:

DF: Dilution Factor	Mtd.: Method
DL: Detection Limit	PF: Prep Factor
Lc/LC: Critical Level	RL: Reporting Limit
MDA: Minimum Detectable Activity	TPU: Total Propagated Uncertainty
MDC: Minimum Detectable Concentration	

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

Company : Georgia Power Company, Southern
Address : Company
241 Ralph McGill Blvd NE, Bin 10160

Atlanta, Georgia 30308

Report Date: December 7, 2022

Contact: Joju Abraham

Project: Arkwright CCR Groundwater ComplianceAP3

Client Sample ID: ARGWC-10

Project: GPCC00100

Sample ID: 591802013

Client ID: GPCC001

Matrix: WG

Collect Date: 31-AUG-22

Receive Date: 01-SEP-22

Collector: Client

Parameter	Qualifier	Result	Uncertainty	MDC	TPU	RL	Units	PF	DF	Analyst	Date	Time	Batch	Mtd.
Rad Gas Flow Proportional Counting														
<i>GFPC Ra228, Liquid "As Received"</i>														
Radium-228	U	0.500	+/-1.06	1.88	+/-1.07	3.00	pCi/L			JE1	09/28/22	0844	2312612	1
<i>Radium-226+Radium-228 Calculation "See Parent Products"</i>														
Radium-226+228 Sum	U	0.500	+/-1.11	1.88	+/-1.11		pCi/L		1	TON1	09/30/22	1529	2312608	2
Rad Radium-226														
<i>Lucas Cell, Ra226, Liquid "As Received"</i>														
Radium-226	U	-0.0903	+/-0.306	0.691	+/-0.307	1.00	pCi/L			LXP1	09/29/22	0953	2312593	3

The following Analytical Methods were performed

Method	Description
1	EPA 904.0/SW846 9320 Modified
2	Calculation
3	EPA 903.1 Modified

Surrogate/Tracer Recovery	Test	Batch ID	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC Ra228, Liquid "As Received"	2312612	79.9	(15%-125%)

Notes:
The MDC is a sample specific MDC.
TPU and Counting Uncertainty are calculated at the 95% confidence level (1.96-sigma).

Column headers are defined as follows:

DF: Dilution Factor	Mtd.: Method
DL: Detection Limit	PF: Prep Factor
Lc/LC: Critical Level	RL: Reporting Limit
MDA: Minimum Detectable Activity	TPU: Total Propagated Uncertainty
MDC: Minimum Detectable Concentration	

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Certificate of Analysis

Company : Georgia Power Company, Southern
 Address : Company
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Atlanta, Georgia 30308

Report Date: December 7, 2022

Contact: Joju Abraham

Project: Arkwright CCR Groundwater ComplianceAP3

Client Sample ID: FB-02
 Sample ID: 591802014
 Matrix: WQ
 Collect Date: 31-AUG-22
 Receive Date: 01-SEP-22
 Collector: Client

Project: GPCC00100
 Client ID: GPCC001

Parameter	Qualifier	Result	Uncertainty	MDC	TPU	RL	Units	PF	DF	Analyst	Date	Time	Batch	Mtd.
Rad Gas Flow Proportional Counting														
<i>GFPC Ra228, Liquid "As Received"</i>														
Radium-228	U	1.03	+/-1.39	2.37	+/-1.41	3.00	pCi/L			JE1	09/28/22	0844	2312612	1
<i>Radium-226+Radium-228 Calculation "See Parent Products"</i>														
Radium-226+228 Sum	U	1.40	+/-1.45	2.37	+/-1.47		pCi/L		1	TON1	09/30/22	1529	2312608	2
Rad Radium-226														
<i>Lucas Cell, Ra226, Liquid "As Received"</i>														
Radium-226	U	0.363	+/-0.398	0.653	+/-0.406	1.00	pCi/L			LXP1	09/29/22	1025	2312593	3

The following Analytical Methods were performed

Method	Description
1	EPA 904.0/SW846 9320 Modified
2	Calculation
3	EPA 903.1 Modified

Surrogate/Tracer Recovery	Test	Batch ID	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC Ra228, Liquid "As Received"	2312612	81.2	(15%-125%)

Notes:
 The MDC is a sample specific MDC.
 TPU and Counting Uncertainty are calculated at the 95% confidence level (1.96-sigma).

Column headers are defined as follows:

DF: Dilution Factor	Mtd.: Method
DL: Detection Limit	PF: Prep Factor
Lc/LC: Critical Level	RL: Reporting Limit
MDA: Minimum Detectable Activity	TPU: Total Propagated Uncertainty
MDC: Minimum Detectable Concentration	

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Certificate of Analysis

Company : Georgia Power Company, Southern
Address : Company
241 Ralph McGill Blvd NE, Bin 10160

Atlanta, Georgia 30308

Report Date: December 7, 2022

Contact: Joju Abraham

Project: Arkwright CCR Groundwater ComplianceAP3

Client Sample ID: ARGWC-16

Project: GPCC00100

Sample ID: 591802015

Client ID: GPCC001

Matrix: WG

Collect Date: 31-AUG-22

Receive Date: 01-SEP-22

Collector: Client

Parameter	Qualifier	Result	Uncertainty	MDC	TPU	RL	Units	PF	DF	Analyst	Date	Time	Batch	Mtd.
Rad Gas Flow Proportional Counting														
<i>GFPC Ra228, Liquid "As Received"</i>														
Radium-228	U	-0.688	+/-0.750	1.62	+/-0.750	3.00	pCi/L			JE1	09/28/22	0844	2312612	1
<i>Radium-226+Radium-228 Calculation "See Parent Products"</i>														
Radium-226+228 Sum	U	0.493	+/-0.816	1.62	+/-0.820		pCi/L		1	TON1	09/30/22	1529	2312608	2
Rad Radium-226														
<i>Lucas Cell, Ra226, Liquid "As Received"</i>														
Radium-226		0.493	+/-0.322	0.394	+/-0.331	1.00	pCi/L			LXP1	09/29/22	1025	2312593	3

The following Analytical Methods were performed

Method	Description
1	EPA 904.0/SW846 9320 Modified
2	Calculation
3	EPA 903.1 Modified

Surrogate/Tracer Recovery	Test	Batch ID	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC Ra228, Liquid "As Received"	2312612	82.8	(15%-125%)

Notes:
The MDC is a sample specific MDC.
TPU and Counting Uncertainty are calculated at the 95% confidence level (1.96-sigma).

Column headers are defined as follows:

DF: Dilution Factor	Mtd.: Method
DL: Detection Limit	PF: Prep Factor
Lc/LC: Critical Level	RL: Reporting Limit
MDA: Minimum Detectable Activity	TPU: Total Propagated Uncertainty
MDC: Minimum Detectable Concentration	

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Certificate of Analysis

Company : Georgia Power Company, Southern
 Address : Company
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Atlanta, Georgia 30308

Report Date: December 7, 2022

Contact: Joju Abraham

Project: Arkwright CCR Groundwater ComplianceAP3

Client Sample ID: DUP-01

Project: GPCC00100

Sample ID: 591802016

Client ID: GPCC001

Matrix: WG

Collect Date: 31-AUG-22

Receive Date: 01-SEP-22

Collector: Client

Parameter	Qualifier	Result	Uncertainty	MDC	TPU	RL	Units	PF	DF	Analyst	Date	Time	Batch	Mtd.
Rad Gas Flow Proportional Counting														
<i>GFPC Ra228, Liquid "As Received"</i>														
Radium-228	U	0.202	+/-0.905	1.68	+/-0.906	3.00	pCi/L			JE1	09/28/22	0844	2312612	1
<i>Radium-226+Radium-228 Calculation "See Parent Products"</i>														
Radium-226+228 Sum		2.00	+/-1.10	1.68	+/-1.13		pCi/L		1	TON1	09/30/22	1529	2312608	2
Rad Radium-226														
<i>Lucas Cell, Ra226, Liquid "As Received"</i>														
Radium-226		1.80	+/-0.625	0.537	+/-0.678	1.00	pCi/L			LXP1	09/29/22	1025	2312593	3

The following Analytical Methods were performed

Method	Description
1	EPA 904.0/SW846 9320 Modified
2	Calculation
3	EPA 903.1 Modified

Surrogate/Tracer Recovery	Test	Batch ID	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC Ra228, Liquid "As Received"	2312612	72.5	(15%-125%)

Notes:
 The MDC is a sample specific MDC.
 TPU and Counting Uncertainty are calculated at the 95% confidence level (1.96-sigma).

Column headers are defined as follows:

DF: Dilution Factor	Mtd.: Method
DL: Detection Limit	PF: Prep Factor
Lc/LC: Critical Level	RL: Reporting Limit
MDA: Minimum Detectable Activity	TPU: Total Propagated Uncertainty
MDC: Minimum Detectable Concentration	

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Certificate of Analysis

Company : Georgia Power Company, Southern
Address : Company
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Atlanta, Georgia 30308

Report Date: December 7, 2022

Contact: Joju Abraham

Project: Arkwright CCR Groundwater ComplianceAP3

Client Sample ID: ARAMW-3

Project: GPCC00100

Sample ID: 591802017

Client ID: GPCC001

Matrix: WG

Collect Date: 31-AUG-22

Receive Date: 01-SEP-22

Collector: Client

Parameter	Qualifier	Result	Uncertainty	MDC	TPU	RL	Units	PF	DF	Analyst	Date	Time	Batch	Mtd.
Rad Gas Flow Proportional Counting														
<i>GFPC Ra228, Liquid "As Received"</i>														
Radium-228	U	0.260	+/-0.940	1.70	+/-0.942	3.00	pCi/L			JE1	09/28/22	0844	2312612	1
<i>Radium-226+Radium-228 Calculation "See Parent Products"</i>														
Radium-226+228 Sum	U	1.02	+/-1.02	1.70	+/-1.04		pCi/L		1	TON1	09/30/22	1529	2312608	2
Rad Radium-226														
<i>Lucas Cell, Ra226, Liquid "As Received"</i>														
Radium-226		0.762	+/-0.406	0.468	+/-0.437	1.00	pCi/L			LXP1	09/29/22	1025	2312593	3

The following Analytical Methods were performed

Method	Description
1	EPA 904.0/SW846 9320 Modified
2	Calculation
3	EPA 903.1 Modified

Surrogate/Tracer Recovery	Test	Batch ID	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC Ra228, Liquid "As Received"	2312612	84.5	(15%-125%)

Notes:
The MDC is a sample specific MDC.
TPU and Counting Uncertainty are calculated at the 95% confidence level (1.96-sigma).

Column headers are defined as follows:

DF: Dilution Factor	Mtd.: Method
DL: Detection Limit	PF: Prep Factor
Lc/LC: Critical Level	RL: Reporting Limit
MDA: Minimum Detectable Activity	TPU: Total Propagated Uncertainty
MDC: Minimum Detectable Concentration	

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Atlanta, Georgia 30308

Report Date: December 7, 2022

Contact: Joju Abraham

Project: Arkwright CCR Groundwater ComplianceAP3

Client Sample ID: EB-01
 Sample ID: 591802018
 Matrix: WQ
 Collect Date: 31-AUG-22
 Receive Date: 01-SEP-22
 Collector: Client

Project: GPCC00100
 Client ID: GPCC001

Parameter	Qualifier	Result	Uncertainty	MDC	TPU	RL	Units	PF	DF	Analyst	Date	Time	Batch	Mtd.
Rad Gas Flow Proportional Counting														
<i>GFPC Ra228, Liquid "As Received"</i>														
Radium-228	U	0.801	+/-0.896	1.50	+/-0.918	3.00	pCi/L			JE1	09/28/22	0844	2312612	1
<i>Radium-226+Radium-228 Calculation "See Parent Products"</i>														
Radium-226+228 Sum	U	0.889	+/-0.928	1.50	+/-0.950		pCi/L		1	TON1	09/30/22	1529	2312608	2
Rad Radium-226														
<i>Lucas Cell, Ra226, Liquid "As Received"</i>														
Radium-226	U	0.0877	+/-0.243	0.485	+/-0.244	1.00	pCi/L			LXP1	09/29/22	1025	2312593	3

The following Analytical Methods were performed

Method	Description
1	EPA 904.0/SW846 9320 Modified
2	Calculation
3	EPA 903.1 Modified

Surrogate/Tracer Recovery	Test	Batch ID	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC Ra228, Liquid "As Received"	2312612	78.5	(15%-125%)

Notes:
 The MDC is a sample specific MDC.
 TPU and Counting Uncertainty are calculated at the 95% confidence level (1.96-sigma).

Column headers are defined as follows:

DF: Dilution Factor	Mtd.: Method
DL: Detection Limit	PF: Prep Factor
Lc/LC: Critical Level	RL: Reporting Limit
MDA: Minimum Detectable Activity	TPU: Total Propagated Uncertainty
MDC: Minimum Detectable Concentration	

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Company : Georgia Power Company, Southern
Address : Company
241 Ralph McGill Blvd NE, Bin 10160

Atlanta, Georgia 30308

Report Date: December 7, 2022

Contact: Joju Abraham

Project: Arkwright CCR Groundwater ComplianceAP3

Client Sample ID: EB-02
Sample ID: 592012001
Matrix: WQ
Collect Date: 02-SEP-22
Receive Date: 03-SEP-22
Collector: Client

Project: GPCC00100
Client ID: GPCC001

Parameter	Qualifier	Result	Uncertainty	MDC	TPU	RL	Units	PF	DF	Analyst	Date	Time	Batch	Mtd.
Rad Gas Flow Proportional Counting														
<i>GFPC Ra228, Liquid "As Received"</i>														
Radium-228	U	2.42	+/-1.71	2.62	+/-1.82	3.00	pCi/L			JE1	09/27/22	1103	2312613	1
<i>Radium-226+Radium-228 Calculation "See Parent Products"</i>														
Radium-226+228 Sum	U	2.61	+/-1.73	2.62	+/-1.84		pCi/L		1	NXL1	09/29/22	0912	2312609	2
Rad Radium-226														
<i>Lucas Cell, Ra226, Liquid "As Received"</i>														
Radium-226	U	0.191	+/-0.270	0.470	+/-0.272	1.00	pCi/L			LXP1	09/27/22	0927	2312594	3

The following Analytical Methods were performed

Method	Description
1	EPA 904.0/SW846 9320 Modified
2	Calculation
3	EPA 903.1 Modified

Surrogate/Tracer Recovery	Test	Batch ID	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC Ra228, Liquid "As Received"	2312613	43.8	(15%-125%)

Notes:
The MDC is a sample specific MDC.
TPU and Counting Uncertainty are calculated at the 95% confidence level (1.96-sigma).

Column headers are defined as follows:

DF: Dilution Factor
DL: Detection Limit
Lc/LC: Critical Level
MDA: Minimum Detectable Activity
MDC: Minimum Detectable Concentration

Mtd.: Method
PF: Prep Factor
RL: Reporting Limit
TPU: Total Propagated Uncertainty

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Certificate of Analysis

Company : Georgia Power Company, Southern
 Address : Company
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Atlanta, Georgia 30308

Report Date: December 7, 2022

Contact: Joju Abraham

Project: Arkwright CCR Groundwater ComplianceAP3

Client Sample ID: ARGWC-18

Project: GPCC00100

Sample ID: 592012002

Client ID: GPCC001

Matrix: WG

Collect Date: 02-SEP-22

Receive Date: 03-SEP-22

Collector: Client

Parameter	Qualifier	Result	Uncertainty	MDC	TPU	RL	Units	PF	DF	Analyst	Date	Time	Batch	Mtd.
Rad Gas Flow Proportional Counting														
<i>GFPC Ra228, Liquid "As Received"</i>														
Radium-228	U	1.82	+/-1.65	2.67	+/-1.71	3.00	pCi/L			JE1	09/27/22	1104	2312613	1
<i>Radium-226+Radium-228 Calculation "See Parent Products"</i>														
Radium-226+228 Sum	U	2.67	+/-1.69	2.67	+/-1.76		pCi/L		1	NXL1	09/29/22	0912	2312609	2
Rad Radium-226														
<i>Lucas Cell, Ra226, Liquid "As Received"</i>														
Radium-226		0.846	+/-0.358	0.406	+/-0.388	1.00	pCi/L			LXP1	09/27/22	0927	2312594	3

The following Analytical Methods were performed

Method	Description
1	EPA 904.0/SW846 9320 Modified
2	Calculation
3	EPA 903.1 Modified

Surrogate/Tracer Recovery	Test	Batch ID	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC Ra228, Liquid "As Received"	2312613	49.4	(15%-125%)

Notes:
 The MDC is a sample specific MDC.
 TPU and Counting Uncertainty are calculated at the 95% confidence level (1.96-sigma).

Column headers are defined as follows:

DF: Dilution Factor	Mtd.: Method
DL: Detection Limit	PF: Prep Factor
Lc/LC: Critical Level	RL: Reporting Limit
MDA: Minimum Detectable Activity	TPU: Total Propagated Uncertainty
MDC: Minimum Detectable Concentration	

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Certificate of Analysis

Company : Georgia Power Company, Southern
 Address : Company
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Atlanta, Georgia 30308

Report Date: December 7, 2022

Contact: Joju Abraham

Project: Arkwright CCR Groundwater ComplianceAP3

Client Sample ID: ARGWC-17

Project: GPCC00100

Sample ID: 592012003

Client ID: GPCC001

Matrix: WG

Collect Date: 02-SEP-22

Receive Date: 03-SEP-22

Collector: Client

Parameter	Qualifier	Result	Uncertainty	MDC	TPU	RL	Units	PF	DF	Analyst	Date	Time	Batch	Mtd.
Rad Gas Flow Proportional Counting														
<i>GFPC Ra228, Liquid "As Received"</i>														
Radium-228	U	1.44	+/-1.51	2.50	+/-1.56	3.00	pCi/L			JE1	09/27/22	1104	2312613	1
<i>Radium-226+Radium-228 Calculation "See Parent Products"</i>														
Radium-226+228 Sum	U	1.75	+/-1.53	2.50	+/-1.57		pCi/L		1	NXL1	09/29/22	0912	2312609	2
Rad Radium-226														
<i>Lucas Cell, Ra226, Liquid "As Received"</i>														
Radium-226		0.303	+/-0.219	0.257	+/-0.226	1.00	pCi/L			LXP1	09/27/22	0927	2312594	3

The following Analytical Methods were performed

Method	Description
1	EPA 904.0/SW846 9320 Modified
2	Calculation
3	EPA 903.1 Modified

Surrogate/Tracer Recovery	Test	Batch ID	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC Ra228, Liquid "As Received"	2312613	47.1	(15%-125%)

Notes:
 The MDC is a sample specific MDC.
 TPU and Counting Uncertainty are calculated at the 95% confidence level (1.96-sigma).

Column headers are defined as follows:

DF: Dilution Factor	Mtd.: Method
DL: Detection Limit	PF: Prep Factor
Lc/LC: Critical Level	RL: Reporting Limit
MDA: Minimum Detectable Activity	TPU: Total Propagated Uncertainty
MDC: Minimum Detectable Concentration	

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Certificate of Analysis

Company : Georgia Power Company, Southern
 Address : Company
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Atlanta, Georgia 30308

Report Date: December 7, 2022

Contact: Joju Abraham

Project: Arkwright CCR Groundwater ComplianceAP3

Client Sample ID: ARAMW-4

Project: GPCC00100

Sample ID: 592012004

Client ID: GPCC001

Matrix: WG

Collect Date: 02-SEP-22

Receive Date: 03-SEP-22

Collector: Client

Parameter	Qualifier	Result	Uncertainty	MDC	TPU	RL	Units	PF	DF	Analyst	Date	Time	Batch	Mtd.
Rad Gas Flow Proportional Counting														
<i>GFPC Ra228, Liquid "As Received"</i>														
Radium-228	U	0.493	+/-1.46	2.65	+/-1.47	3.00	pCi/L			JE1	09/27/22	1104	2312613	1
<i>Radium-226+Radium-228 Calculation "See Parent Products"</i>														
Radium-226+228 Sum	U	0.947	+/-1.49	2.65	+/-1.50		pCi/L		1	NXL1	09/29/22	0912	2312609	2
Rad Radium-226														
<i>Lucas Cell, Ra226, Liquid "As Received"</i>														
Radium-226		0.455	+/-0.278	0.290	+/-0.286	1.00	pCi/L			LXP1	09/27/22	0927	2312594	3

The following Analytical Methods were performed

Method	Description
1	EPA 904.0/SW846 9320 Modified
2	Calculation
3	EPA 903.1 Modified

Surrogate/Tracer Recovery	Test	Batch ID	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC Ra228, Liquid "As Received"	2312613	52.5	(15%-125%)

Notes:
 The MDC is a sample specific MDC.
 TPU and Counting Uncertainty are calculated at the 95% confidence level (1.96-sigma).

Column headers are defined as follows:

DF: Dilution Factor	Mtd.: Method
DL: Detection Limit	PF: Prep Factor
Lc/LC: Critical Level	RL: Reporting Limit
MDA: Minimum Detectable Activity	TPU: Total Propagated Uncertainty
MDC: Minimum Detectable Concentration	

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Certificate of Analysis

Company : Georgia Power Company, Southern
Address : Company
241 Ralph McGill Blvd NE, Bin 10160

Atlanta, Georgia 30308

Report Date: December 7, 2022

Contact: Joju Abraham

Project: Arkwright CCR Groundwater ComplianceAP3

Client Sample ID: DUP-02

Project: GPCC00100

Sample ID: 592012005

Client ID: GPCC001

Matrix: WG

Collect Date: 02-SEP-22

Receive Date: 03-SEP-22

Collector: Client

Parameter	Qualifier	Result	Uncertainty	MDC	TPU	RL	Units	PF	DF	Analyst	Date	Time	Batch	Mtd.
Rad Gas Flow Proportional Counting														
<i>GFPC Ra228, Liquid "As Received"</i>														
Radium-228	U	1.25	+/-1.48	2.49	+/-1.51	3.00	pCi/L			JE1	09/27/22	1104	2312613	1
<i>Radium-226+Radium-228 Calculation "See Parent Products"</i>														
Radium-226+228 Sum	U	2.23	+/-1.52	2.49	+/-1.57		pCi/L		1	NXL1	09/29/22	0912	2312609	2
Rad Radium-226														
<i>Lucas Cell, Ra226, Liquid "As Received"</i>														
Radium-226		0.983	+/-0.358	0.320	+/-0.415	1.00	pCi/L			LXP1	09/27/22	0927	2312594	3

The following Analytical Methods were performed

Method	Description
1	EPA 904.0/SW846 9320 Modified
2	Calculation
3	EPA 903.1 Modified

Surrogate/Tracer Recovery	Test	Batch ID	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC Ra228, Liquid "As Received"	2312613	49.2	(15%-125%)

Notes:

The MDC is a sample specific MDC.

TPU and Counting Uncertainty are calculated at the 95% confidence level (1.96-sigma).

Column headers are defined as follows:

DF: Dilution Factor

DL: Detection Limit

Lc/LC: Critical Level

MDA: Minimum Detectable Activity

MDC: Minimum Detectable Concentration

Mtd.: Method

PF: Prep Factor

RL: Reporting Limit

TPU: Total Propagated Uncertainty

GEL LABORATORIES LLC

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QC Summary

Report Date: December 7, 2022
Page 1 of 2

Client : Georgia Power Company, Southern Company
241 Ralph McGill Blvd NE, Bin 10160

Atlanta, Georgia

Contact: Joju Abraham

Workorder: 591802

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Rad Gas Flow											
Batch	2312612										
QC1205183296	591785022 DUP										
Radium-228	U	1.60	U	0.401	pCi/L	0		N/A	JE1	09/28/22	08:44
	Uncert:	+/-1.13		+/-0.867							
	TPU:	+/-1.20		+/-0.872							
QC1205183297	LCS										
Radium-228	44.2			46.6	pCi/L		105	(75%-125%)	JE1	09/28/22	08:44
	Uncert:			+/-3.47							
	TPU:			+/-12.2							
QC1205183295	MB										
Radium-228			U	0.547	pCi/L				JE1	09/28/22	09:30
	Uncert:			+/-1.42							
	TPU:			+/-1.42							
Rad Ra-226											
Batch	2312593										
QC1205183263	591785022 DUP										
Radium-226		1.28		0.966	pCi/L	28.2		(0% - 100%)	LXP1	09/29/22	10:25
	Uncert:	+/-0.492		+/-0.394							
	TPU:	+/-0.535		+/-0.440							
QC1205183265	LCS										
Radium-226	26.6			20.7	pCi/L		77.9	(75%-125%)	LXP1	09/29/22	10:57
	Uncert:			+/-1.84							
	TPU:			+/-3.78							
QC1205183262	MB										
Radium-226			U	0.306	pCi/L				LXP1	09/29/22	10:25
	Uncert:			+/-0.353							
	TPU:			+/-0.356							
QC1205183264	591785022 MS										
Radium-226	133	1.28		119	pCi/L		88.3	(75%-125%)	LXP1	09/29/22	10:57
	Uncert:	+/-0.492		+/-10.4							
	TPU:	+/-0.535		+/-20.6							

Notes:

TPU and Counting Uncertainty are calculated at the 95% confidence level (1.96-sigma).

The Qualifiers in this report are defined as follows:

- ** Analyte is a Tracer compound
- < Result is less than value reported
- > Result is greater than value reported
- BD Results are either below the MDC or tracer recovery is low
- FA Failed analysis.
- H Analytical holding time was exceeded

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QC Summary

Workorder: 591802

Page 2 of 2

Parmname	NOM	Sample Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
J										
J										
K										
L										
M										
M										
N/A										
N1										
ND										
NJ										
Q										
R										
U										
UI										
UJ										
UL										
X										
Y										
^										
h										

N/A indicates that spike recovery limits do not apply when sample concentration exceeds spike conc. by a factor of 4 or more or %RPD not applicable.

** Indicates analyte is a surrogate/tracer compound.

^ The Relative Percent Difference (RPD) obtained from the sample duplicate (DUP) is evaluated against the acceptance criteria when the sample is greater than five times (5X) the contract required detection limit (RL). In cases where either the sample or duplicate value is less than 5X the RL, a control limit of +/- the RL is used to evaluate the DUP result.

For PS, PSD, and SDILT results, the values listed are the measured amounts, not final concentrations.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the QC Summary.

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QC Summary

Report Date: December 7, 2022
Page 1 of 2

Client : Georgia Power Company, Southern Company
241 Ralph McGill Blvd NE, Bin 10160

Atlanta, Georgia

Contact: Joju Abraham

Workorder: 592012

Parmname	NOM	Sample Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Rad Gas Flow									
Batch	2312613								
QC1205183299	592012002 DUP								
Radium-228	U	1.82	2.73	pCi/L	40		(0% - 100%)	JE1	09/27/22 11:03
	Uncert:	+/-1.65	+/-1.67						
	TPU:	+/-1.71	+/-1.81						
QC1205183300	LCS								
Radium-228	44.0		48.9	pCi/L		111	(75%-125%)	JE1	09/27/22 11:03
	Uncert:		+/-4.42						
	TPU:		+/-13.1						
QC1205183298	MB								
Radium-228		U	0.603	pCi/L				JE1	09/27/22 11:03
	Uncert:		+/-1.41						
	TPU:		+/-1.42						
Rad Ra-226									
Batch	2312594								
QC1205183267	592012002 DUP								
Radium-226		0.846	1.23	pCi/L	36.9*		(0%-20%)	LXP1	09/27/22 10:36
	Uncert:	+/-0.358	+/-0.395						
	TPU:	+/-0.388	+/-0.470						
QC1205183269	LCS								
Radium-226	26.5		23.8	pCi/L		89.9	(75%-125%)	LXP1	09/27/22 10:36
	Uncert:		+/-1.66						
	TPU:		+/-5.12						
QC1205183266	MB								
Radium-226		U	0.256	pCi/L				LXP1	09/27/22 10:36
	Uncert:		+/-0.266						
	TPU:		+/-0.270						
QC1205183268	592012002 MS								
Radium-226	134	0.846	103	pCi/L		76.4	(75%-125%)	LXP1	09/27/22 10:36
	Uncert:	+/-0.358	+/-8.30						
	TPU:	+/-0.388	+/-18.1						

Notes:

TPU and Counting Uncertainty are calculated at the 95% confidence level (1.96-sigma).

The Qualifiers in this report are defined as follows:

- ** Analyte is a Tracer compound
- < Result is less than value reported
- > Result is greater than value reported
- BD Results are either below the MDC or tracer recovery is low
- FA Failed analysis.
- H Analytical holding time was exceeded

GEL LABORATORIES LLC

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QC Summary

Workorder: 592012

Page 2 of 2

Parmname	NOM	Sample Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
J										
J										
K										
L										
M										
M										
N/A										
N1										
ND										
NJ										
Q										
R										
U										
UI										
UJ										
UL										
X										
Y										
^										
h										

N/A indicates that spike recovery limits do not apply when sample concentration exceeds spike conc. by a factor of 4 or more or %RPD not applicable.

** Indicates analyte is a surrogate/tracer compound.

^ The Relative Percent Difference (RPD) obtained from the sample duplicate (DUP) is evaluated against the acceptance criteria when the sample is greater than five times (5X) the contract required detection limit (RL). In cases where either the sample or duplicate value is less than 5X the RL, a control limit of +/- the RL is used to evaluate the DUP result.

For PS, PSD, and SDILT results, the values listed are the measured amounts, not final concentrations.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the QC Summary.

**Radiochemistry
Technical Case Narrative
Georgia Power Company
SDG #: 591802**

Product: Radium-226+Radium-228 Calculation

Analytical Method: Calculation

Analytical Procedure: GL-RAD-D-003 REV# 45

Analytical Batch: 2312608

The following samples were analyzed using the above methods and analytical procedure(s).

<u>GEL Sample ID#</u>	<u>Client Sample Identification</u>
591802001	ARGWA-5
591802002	ARGWA-12
591802003	FB-01
591802004	ARGWA-24
591802005	ARGWA-3
591802006	ARGWA-13
591802007	ARGWC-7
591802008	ARAMW-6
591802009	ARGWC-15
591802010	ARGWC-9
591802011	ARGWA-14
591802012	ARGWC-8
591802013	ARGWC-10
591802014	FB-02
591802015	ARGWC-16
591802016	DUP-01
591802017	ARAMW-3
591802018	EB-01

Data Summary:

There are no exceptions, anomalies or deviations from the specified methods. All sample data provided in this report met the acceptance criteria specified in the analytical methods and procedures for initial calibration, continuing calibration, instrument controls and process controls where applicable.

Product: GFPC Ra228, Liquid

Analytical Method: EPA 904.0/SW846 9320 Modified

Analytical Procedure: GL-RAD-A-063 REV# 5

Analytical Batch: 2312612

The following samples were analyzed using the above methods and analytical procedure(s).

<u>GEL Sample ID#</u>	<u>Client Sample Identification</u>
591802001	ARGWA-5
591802002	ARGWA-12

591802003	FB-01
591802004	ARGWA-24
591802005	ARGWA-3
591802006	ARGWA-13
591802007	ARGWC-7
591802008	ARAMW-6
591802009	ARGWC-15
591802010	ARGWC-9
591802011	ARGWA-14
591802012	ARGWC-8
591802013	ARGWC-10
591802014	FB-02
591802015	ARGWC-16
591802016	DUP-01
591802017	ARAMW-3
591802018	EB-01
1205183295	Method Blank (MB)
1205183296	591785022(NonSDG) Sample Duplicate (DUP)
1205183297	Laboratory Control Sample (LCS)

The samples in this SDG were analyzed on an "as received" basis.

Data Summary:

There are no exceptions, anomalies or deviations from the specified methods. All sample data provided in this report met the acceptance criteria specified in the analytical methods and procedures for initial calibration, continuing calibration, instrument controls and process controls where applicable.

Product: Lucas Cell, Ra226, Liquid

Analytical Method: EPA 903.1 Modified

Analytical Procedure: GL-RAD-A-008 REV# 15

Analytical Batch: 2312593

The following samples were analyzed using the above methods and analytical procedure(s).

<u>GEL Sample ID#</u>	<u>Client Sample Identification</u>
591802001	ARGWA-5
591802002	ARGWA-12
591802003	FB-01
591802004	ARGWA-24
591802005	ARGWA-3
591802006	ARGWA-13
591802007	ARGWC-7
591802008	ARAMW-6
591802009	ARGWC-15
591802010	ARGWC-9
591802011	ARGWA-14
591802012	ARGWC-8
591802013	ARGWC-10
591802014	FB-02
591802015	ARGWC-16
591802016	DUP-01

591802017	ARAMW-3
591802018	EB-01
1205183262	Method Blank (MB)
1205183263	591785022(NonSDG) Sample Duplicate (DUP)
1205183264	591785022(NonSDG) Matrix Spike (MS)
1205183265	Laboratory Control Sample (LCS)

The samples in this SDG were analyzed on an "as received" basis.

Data Summary:

All sample data provided in this report met the acceptance criteria specified in the analytical methods and procedures for initial calibration, continuing calibration, instrument controls and process controls where applicable, with the following exceptions.

Miscellaneous Information

Additional Comments

The matrix spike, 1205183264 (Non SDG 591785022MS), aliquot was reduced to conserve sample volume.

Certification Statement

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

**Radiochemistry
Technical Case Narrative
Georgia Power Company
SDG #: 592012**

Product: Radium-226+Radium-228 Calculation

Analytical Method: Calculation

Analytical Procedure: GL-RAD-D-003 REV# 45

Analytical Batch: 2312609

The following samples were analyzed using the above methods and analytical procedure(s).

<u>GEL Sample ID#</u>	<u>Client Sample Identification</u>
592012001	EB-02
592012002	ARGWC-18
592012003	ARGWC-17
592012004	ARAMW-4
592012005	DUP-02

Data Summary:

There are no exceptions, anomalies or deviations from the specified methods. All sample data provided in this report met the acceptance criteria specified in the analytical methods and procedures for initial calibration, continuing calibration, instrument controls and process controls where applicable.

Product: GFPC Ra228, Liquid

Analytical Method: EPA 904.0/SW846 9320 Modified

Analytical Procedure: GL-RAD-A-063 REV# 5

Analytical Batch: 2312613

The following samples were analyzed using the above methods and analytical procedure(s).

<u>GEL Sample ID#</u>	<u>Client Sample Identification</u>
592012001	EB-02
592012002	ARGWC-18
592012003	ARGWC-17
592012004	ARAMW-4
592012005	DUP-02
1205183298	Method Blank (MB)
1205183299	592012002(ARGWC-18) Sample Duplicate (DUP)
1205183300	Laboratory Control Sample (LCS)

The samples in this SDG were analyzed on an "as received" basis.

Data Summary:

There are no exceptions, anomalies or deviations from the specified methods. All sample data provided in this report met the acceptance criteria specified in the analytical methods and procedures for initial calibration, continuing calibration, instrument controls and process controls where applicable.

Product: Lucas Cell, Ra226, Liquid

Analytical Method: EPA 903.1 Modified

Analytical Procedure: GL-RAD-A-008 REV# 15

Analytical Batch: 2312594

The following samples were analyzed using the above methods and analytical procedure(s).

<u>GEL Sample ID#</u>	<u>Client Sample Identification</u>
592012001	EB-02
592012002	ARGWC-18
592012003	ARGWC-17
592012004	ARAMW-4
592012005	DUP-02
1205183266	Method Blank (MB)
1205183267	592012002(ARGWC-18) Sample Duplicate (DUP)
1205183268	592012002(ARGWC-18) Matrix Spike (MS)
1205183269	Laboratory Control Sample (LCS)

The samples in this SDG were analyzed on an "as received" basis.

Data Summary:

All sample data provided in this report met the acceptance criteria specified in the analytical methods and procedures for initial calibration, continuing calibration, instrument controls and process controls where applicable, with the following exceptions.

Quality Control (QC) Information

Duplication Criteria between QC Sample and Duplicate Sample

The Sample and the Duplicate, (See Below), did not meet the relative percent difference requirement; however, they do meet the relative error ratio requirement with the value listed below.

Sample	Analyte	Value
1205183267 (ARGWC-18DUP)	Radium-226	RPD 36.9* (0.00%-20.00%) RER 1.23 (0-3)

Miscellaneous Information

Additional Comments

The matrix spike, 1205183268 (ARGWC-18MS), aliquot was reduced to conserve sample volume.

Certification Statement

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

SAMPLE RECEIPT & REVIEW FORM *ET*

Client: <i>GPOC</i>		SDG/AR/COC/Work Order: <i>591798</i>			
Received By: <i>MVH</i>		Date Received: <i>09-01-22</i>			
Carrier and Tracking Number		Circle Applicable: FedEx Express FedEx Ground UPS Field Services Courier Other <i>COOLER 1-2°</i> <i>COOLER 4-3°</i> <i>COOLER 2-3°</i> <i>COOLER 5-2°</i> <i>COOLER 3-4°</i>			
Suspected Hazard Information		*If Net Counts > 100cpm on samples not marked "radioactive", contact the Radiation Safety Group for further investigation.			
A) Shipped as a DOT Hazardous?		Hazard Class Shipped: _____ UN#: _____ If UN2910, Is the Radioactive Shipment Survey Compliant? Yes ___ No ___			
B) Did the client designate the samples are to be received as radioactive?		COC notation or radioactive stickers on containers equal client designation.			
C) Did the RSO classify the samples as radioactive?		Maximum Net Counts Observed* (Observed Counts - Area Background Counts): <i>0</i> <i>CPM/mR/Hr</i> Classified as: Rad 1 Rad 2 Rad 3			
D) Did the client designate samples are hazardous?		COC notation or hazard labels on containers equal client designation.			
E) Did the RSO identify possible hazards?		If D or B is yes, select Hazards below. PCB's Flammable Foreign Soil RCRA Asbestos Beryllium Other:			
Sample Receipt Criteria		Yes	NA	No	Comments/Qualifiers (Required for Non-Conforming Items)
1	Shipping containers received intact and sealed?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Circle Applicable: Seals broken Damaged container Leaking container Other (describe)
2	Chain of custody documents included with shipment?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Circle Applicable: Client contacted and provided COC COC created upon receipt
3	Samples requiring cold preservation within (0 ≤ 6 deg. C)?*	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Preservation Method: <i>Wet Ice</i> Ice Packs Dry ice None Other: *all temperatures are recorded in Celsius TEMP: _____
4	Daily check performed and passed on IR temperature gun?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Temperature Device Serial #: <i>IR2-21</i> Secondary Temperature Device Serial # (If Applicable):
5	Sample containers intact and sealed?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Circle Applicable: Seals broken Damaged container Leaking container Other (describe)
6	Samples requiring chemical preservation at proper pH?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Sample ID's and Containers Affected: If Preservation added, Lot#:
7	Do any samples require Volatile Analysis?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	If Yes, are Encores or Soil Kits present for solids? Yes ___ No ___ NA ___ (If yes, take to VOA Freezer) Do liquid VOA vials contain acid preservation? Yes ___ No ___ NA ___ (If unknown, select No) Are liquid VOA vials free of headspace? Yes ___ No ___ NA ___ Sample ID's and containers affected:
8	Samples received within holding time?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	ID's and tests affected:
9	Sample ID's on COC match ID's on bottles?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	ID's and containers affected:
10	Date & time on COC match date & time on bottles?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Circle Applicable: No dates on containers No times on containers COC missing info Other (describe)
11	Number of containers received match number indicated on COC?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Circle Applicable: No container count on COC Other (describe)
12	Are sample containers identifiable as GEL provided by use of GEL labels?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
13	COC form is properly signed in relinquished/received sections?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Circle Applicable: Not relinquished Other (describe)
Comments (Use Continuation Form if needed):					

PM (or PMA) review: Initials *GML* Date *09/06/22* Page *1* of *1*

SAMPLE RECEIPT & REVIEW FORM

Client: **STNT/GPCC** SDG/AR/COC/Work Order: **592013 / 592014 / 592011 / 592012**
 Received By: **StacyBoone** Date Received: **9/3/22**

Carrier and Tracking Number
 FedEx Express FedEx Ground UPS Field Services Courier Other
2775 4922 1277 1^c
2775 4922 1288 1^c **2775 4922 1255 1^c**

Suspected Hazard Information	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	*If Net Counts > 100cpm on samples not marked "radioactive", contact the Radiation Safety Group for further investigation.
A) Shipped as a DOT Hazardous?	<input checked="" type="checkbox"/>	Hazard Class Shipped: _____ UN#: _____ If UN2910, Is the Radioactive Shipment Survey Compliant? Yes ___ No ___
B) Did the client designate the samples are to be received as radioactive?	<input checked="" type="checkbox"/>	COC notation or radioactive stickers on containers equal client designation.
C) Did the RSO classify the samples as radioactive?	<input checked="" type="checkbox"/>	Maximum Net Counts Observed* (Observed Counts - Area Background Counts): 8 CPM / mR/Hr Classified as: Rad 1 Rad 2 Rad 3
D) Did the client designate samples are hazardous?	<input checked="" type="checkbox"/>	COC notation or hazard labels on containers equal client designation.
E) Did the RSO identify possible hazards?	<input checked="" type="checkbox"/>	If D or E is yes, select Hazards below. PCB's Flammable Foreign Soil RCRA Asbestos Beryllium Other:

Sample Receipt Criteria	Yes	NA	No	Comments/Qualifiers (Required for Non-Conforming Items)
1 Shipping containers received intact and sealed?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Circle Applicable: Seals broken Damaged container Leaking container Other (describe)
2 Chain of custody documents included with shipment?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Circle Applicable: Client contacted and provided COC COC created upon receipt
3 Samples requiring cold preservation within (0 ≤ 6 deg. C)?*	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Preservation Method: Wet Ice Ice Packs Dry ice None Other: *all temperatures are recorded in Celsius TEMP: _____
4 Daily check performed and passed on IR temperature gun?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Temperature Device Serial #: IR4-22 Secondary Temperature Device Serial # (If Applicable):
5 Sample containers intact and sealed?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Circle Applicable: Seals broken Damaged container Leaking container Other (describe)
6 Samples requiring chemical preservation at proper pH?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Sample ID's and Containers Affected: If Preservation added, Lot#:
7 Do any samples require Volatile Analysis?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	If Yes, are Encores or Soil Kits present for solids? Yes ___ No ___ NA ___ (If yes, take to VOA Freezer)
				Do liquid VOA vials contain acid preservation? Yes ___ No ___ NA ___ (If unknown, select No)
				Are liquid VOA vials free of headspace? Yes ___ No ___ NA ___ Sample ID's and containers affected:
8 Samples received within holding time?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	ID's and tests affected:
9 Sample ID's on COC match ID's on bottles?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	ID's and containers affected:
10 Date & time on COC match date & time on bottles?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Circle Applicable: No dates on containers No times on containers COC missing info Other (describe)
11 Number of containers received match number indicated on COC?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Circle Applicable: No container count on COC Other (describe)
12 Are sample containers identifiable as GEL provided by use of GEL labels?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
13 COC form is properly signed in relinquished/received sections?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Circle Applicable: Not relinquished Other (describe)

Comments (Use Continuation Form if needed):
2775 4922 1266 1^c **2775 4922 1244 1^c**

List of current GEL Certifications as of 07 December 2022

State	Certification
Alabama	42200
Alaska	17-018
Alaska Drinking Water	SC00012
Arkansas	88-0651
CLIA	42D0904046
California	2940
Colorado	SC00012
Connecticut	PH-0169
DoD ELAP/ ISO17025 A2LA	2567.01
Florida NELAP	E87156
Foreign Soils Permit	P330-15-00283, P330-15-00253
Georgia	SC00012
Georgia SDWA	967
Hawaii	SC00012
Idaho	SC00012
Illinois NELAP	200029
Indiana	C-SC-01
Kansas NELAP	E-10332
Kentucky SDWA	90129
Kentucky Wastewater	90129
Louisiana Drinking Water	LA024
Louisiana NELAP	03046 (AI33904)
Maine	2019020
Maryland	270
Massachusetts	M-SC012
Massachusetts PFAS Approv	Letter
Michigan	9976
Mississippi	SC00012
Nebraska	NE-OS-26-13
Nevada	SC000122023-3
New Hampshire NELAP	2054
New Jersey NELAP	SC002
New Mexico	SC00012
New York NELAP	11501
North Carolina	233
North Carolina SDWA	45709
North Dakota	R-158
Oklahoma	2022-160
Pennsylvania NELAP	68-00485
Puerto Rico	SC00012
S. Carolina Radiochem	10120002
Sanitation Districts of L	9255651
South Carolina Chemistry	10120001
Tennessee	TN 02934
Texas NELAP	T104704235-22-20
Utah NELAP	SC000122022-37
Vermont	VT87156
Virginia NELAP	460202
Washington	C780



November 04, 2022

Joju Abraham
Georgia Power Company, Southern Company
241 Ralph McGill Blvd NE, Bin 10160
Atlanta, Georgia 30308

Re: Arkwright CCR Groundwater Compliance AP2
Work Order: 597789

Dear Joju Abraham:

GEL Laboratories, LLC (GEL) appreciates the opportunity to provide the enclosed analytical results for the sample(s) we received on October 21, 2022. This original data report has been prepared and reviewed in accordance with GEL's standard operating procedures.

Test results for NELAP or ISO 17025 accredited tests are verified to meet the requirements of those standards, with any exceptions noted. The results reported relate only to the items tested and to the sample as received by the laboratory. These results may not be reproduced except as full reports without approval by the laboratory. Copies of GEL's accreditations and certifications can be found on our website at www.gel.com.

Our policy is to provide high quality, personalized analytical services to enable you to meet your analytical needs on time every time. We trust that you will find everything in order and to your satisfaction. If you have any questions, please do not hesitate to call me at (843) 556-8171, ext. 4504.

Sincerely,

Anna Johnson for
Erin Trent
Project Manager

Purchase Order: GPC82177-0002
Enclosures



GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 – (843) 556-8171 – www.gel.com

**Certificate of Analysis Report
for**

GPCC001 Georgia Power Company

Client SDG: 597789 GEL Work Order: 597789

The Qualifiers in this report are defined as follows:

- * A quality control analyte recovery is outside of specified acceptance criteria
- ** Analyte is a Tracer compound
- ** Analyte is a surrogate compound
- J See case narrative for an explanation
- J Value is estimated
- U Analyte was analyzed for, but not detected above the MDL, MDA, MDC or LOD.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the Certificate of Analysis.

The designation ND, if present, appears in the result column when the analyte concentration is not detected above the limit as defined in the 'U' qualifier above.

This data report has been prepared and reviewed in accordance with GEL Laboratories LLC standard operating procedures. Please direct any questions to your Project Manager, Erin Trent.

Reviewed by _____



GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

Report Date: November 4, 2022

Company : Georgia Power Company, Southern Company
Address : 241 Ralph McGill Blvd NE, Bin 10160

Atlanta, Georgia 30308

Contact: Joju Abraham
Project: Arkwright CCR Groundwater ComplianceAP2

Client Sample ID: ARAMW-9 Project: GPCC00100
Sample ID: 597789001 Client ID: GPCC001
Matrix: WG
Collect Date: 20-OCT-22 11:35
Receive Date: 21-OCT-22
Collector: Client

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Field Data												
Client collected Field pH "As Received"												
Field pH		7.80			SU			EOS1	10/20/22	1135	2332196	1
Ion Chromatography												
EPA 300.0 Anions Liquid "As Received"												
Fluoride		0.839	0.0330	0.100	mg/L	1		JLD1	10/25/22	1718	2333476	2
Chloride		50.9	3.35	10.0	mg/L	50		JLD1	10/25/22	2316	2333476	3
Sulfate		474	6.65	20.0	mg/L	50						
Mercury Analysis-CVAA												
7470 Cold Vapor Mercury, Liquid "As Received"												
Mercury	U	ND	0.0000670	0.000200	mg/L	1.00	1	JP2	10/25/22	1045	2332720	4
Metals Analysis-ICP-MS												
SW846 3005A/6020B "As Received"												
Aluminum		0.143	0.0193	0.0500	mg/L	1.00	1	SKJ	10/27/22	2035	2332625	5
Chromium	U	ND	0.00300	0.0100	mg/L	1.00	1					
Cobalt	U	ND	0.000300	0.00100	mg/L	1.00	1					
Iron		1.01	0.0330	0.100	mg/L	1.00	1					
Manganese		0.220	0.00100	0.00500	mg/L	1.00	1					
Potassium		10.6	0.0800	0.300	mg/L	1.00	1					
Selenium	U	ND	0.00150	0.00500	mg/L	1.00	1					
Antimony	U	ND	0.00100	0.00300	mg/L	1.00	1	SKJ	10/28/22	1604	2332625	6
Barium		0.0305	0.000670	0.00400	mg/L	1.00	1					
Cadmium	U	ND	0.000300	0.00100	mg/L	1.00	1					
Lead	U	ND	0.000500	0.00200	mg/L	1.00	1					
Molybdenum		0.0205	0.000200	0.00100	mg/L	1.00	1					
Silver	U	ND	0.000300	0.00100	mg/L	1.00	1					
Thallium	U	ND	0.000600	0.00200	mg/L	1.00	1					
Beryllium	U	ND	0.000200	0.000500	mg/L	1.00	1	BAJ	11/01/22	1240	2332625	7
Lithium	J	0.00631	0.00300	0.0100	mg/L	1.00	1					
Arsenic	J	0.00265	0.00200	0.00500	mg/L	1.00	1	SKJ	11/03/22	2117	2336686	8
Calcium		140	0.400	1.00	mg/L	1.00	5	SKJ	10/27/22	2006	2332625	9
Magnesium		10.6	0.0500	0.150	mg/L	1.00	5					
Sodium		154	0.400	1.25	mg/L	1.00	5					
Boron		0.0500	0.00520	0.0150	mg/L	1.00	1	SKJ	11/04/22	1013	2336686	10

Solids Analysis

SM2540C Dissolved Solids "As Received"

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Certificate of Analysis

Report Date: November 4, 2022

Company : Georgia Power Company, Southern Company
Address : 241 Ralph McGill Blvd NE, Bin 10160

Atlanta, Georgia 30308
Contact: Joju Abraham
Project: Arkwright CCR Groundwater ComplianceAP2

Client Sample ID: ARAMW-9 Project: GPCC00100
Sample ID: 597789001 Client ID: GPCC001

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Solids Analysis												
SM2540C Dissolved Solids "As Received"												
Total Dissolved Solids		896	2.38	10.0	mg/L			CH6	10/25/22	1050	2333174	11
Titration and Ion Analysis												
SM 2320B Total Alkalinity "As Received"												
Alkalinity, Total as CaCO3		78.2	1.45	4.00	mg/L			HH2	11/01/22	1328	2335652	12
Bicarbonate alkalinity (CaCO3)		78.2	1.45	4.00	mg/L							
Carbonate alkalinity (CaCO3)	U	ND	1.45	4.00	mg/L							

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
SW846 3005A	ICP-MS 3005A PREP	CD3	11/01/22	1615	2336684
SW846 3005A	ICP-MS 3005A PREP	EM2	10/24/22	1545	2332624
SW846 7470A Prep	EPA 7470A Mercury Prep Liquid	RM4	10/24/22	1418	2332711

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	SM 4500-H B/SW846 9040C, SM 2550B	
2	EPA 300.0	
3	EPA 300.0	
4	SW846 7470A	
5	SW846 3005A/6020B	
6	SW846 3005A/6020B	
7	SW846 3005A/6020B	
8	SW846 3005A/6020B	
9	SW846 3005A/6020B	
10	SW846 3005A/6020B	
11	SM 2540C	
12	SM 2320B	

Notes:

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Certificate of Analysis

Report Date: November 4, 2022

Company : Georgia Power Company, Southern Company
Address : 241 Ralph McGill Blvd NE, Bin 10160

Atlanta, Georgia 30308
Contact: Joju Abraham
Project: Arkwright CCR Groundwater ComplianceAP2

Client Sample ID: ARAMW-9
Sample ID: 597789001

Project: GPCC00100
Client ID: GPCC001

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time Batch	Method
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Column headers are defined as follows:

DF: Dilution Factor

DL: Detection Limit

MDA: Minimum Detectable Activity

MDC: Minimum Detectable Concentration

Lc/LC: Critical Level

PF: Prep Factor

RL: Reporting Limit

SQL: Sample Quantitation Limit

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Certificate of Analysis

Report Date: November 4, 2022

Company : Georgia Power Company, Southern Company
Address : 241 Ralph McGill Blvd NE, Bin 10160

Atlanta, Georgia 30308

Contact: Joju Abraham
Project: Arkwright CCR Groundwater Compliance AP2

Client Sample ID: FB-01	Project: GPCC00100
Sample ID: 597789002	Client ID: GPCC001
Matrix: WQ	
Collect Date: 20-OCT-22 11:45	
Receive Date: 21-OCT-22	
Collector: Client	

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Ion Chromatography												
EPA 300.0 Anions Liquid "As Received"												
Chloride	U	ND	0.0670	0.200	mg/L		1	JLD1	10/25/22	1748	2333476	1
Fluoride	U	ND	0.0330	0.100	mg/L		1					
Sulfate	U	ND	0.133	0.400	mg/L		1					
Mercury Analysis-CVAA												
7470 Cold Vapor Mercury, Liquid "As Received"												
Mercury	U	ND	0.0000670	0.000200	mg/L	1.00	1	JP2	10/25/22	1047	2332720	2
Metals Analysis-ICP-MS												
SW846 3005A/6020B "As Received"												
Calcium	J	0.119	0.0800	0.200	mg/L	1.00	1	SKJ	10/27/22	2021	2332625	3
Chromium	U	ND	0.00300	0.0100	mg/L	1.00	1					
Cobalt	U	ND	0.000300	0.00100	mg/L	1.00	1					
Selenium	U	ND	0.00150	0.00500	mg/L	1.00	1					
Antimony	U	ND	0.00100	0.00300	mg/L	1.00	1	SKJ	10/28/22	1552	2332625	4
Barium	U	ND	0.000670	0.00400	mg/L	1.00	1					
Cadmium	U	ND	0.000300	0.00100	mg/L	1.00	1					
Lead	U	ND	0.000500	0.00200	mg/L	1.00	1					
Molybdenum	U	ND	0.000200	0.00100	mg/L	1.00	1					
Silver	U	ND	0.000300	0.00100	mg/L	1.00	1					
Thallium	U	ND	0.000600	0.00200	mg/L	1.00	1					
Beryllium	U	ND	0.000200	0.000500	mg/L	1.00	1	BAJ	11/01/22	1247	2332625	5
Lithium	U	ND	0.00300	0.0100	mg/L	1.00	1					
Arsenic	U	ND	0.00200	0.00500	mg/L	1.00	1	SKJ	11/03/22	2124	2336686	6
Boron	U	ND	0.00520	0.0150	mg/L	1.00	1	SKJ	11/04/22	1019	2336686	7
Solids Analysis												
SM2540C Dissolved Solids "As Received"												
Total Dissolved Solids	U	ND	2.38	10.0	mg/L			CH6	10/25/22	1050	2333174	8

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
SW846 3005A	ICP-MS 3005A PREP	CD3	11/01/22	1615	2336684
SW846 3005A	ICP-MS 3005A PREP	EM2	10/24/22	1545	2332624
SW846 7470A Prep	EPA 7470A Mercury Prep Liquid	RM4	10/24/22	1418	2332711

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Certificate of Analysis

Report Date: November 4, 2022

Company : Georgia Power Company, Southern Company
Address : 241 Ralph McGill Blvd NE, Bin 10160

Atlanta, Georgia 30308

Contact: Joju Abraham
Project: Arkwright CCR Groundwater Compliance AP2

Client Sample ID: EB-01	Project: GPCC00100
Sample ID: 597789003	Client ID: GPCC001
Matrix: WQ	
Collect Date: 20-OCT-22 12:00	
Receive Date: 21-OCT-22	
Collector: Client	

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Ion Chromatography												
EPA 300.0 Anions Liquid "As Received"												
Chloride	U	ND	0.0670	0.200	mg/L		1	JLD1	10/25/22	1818	2333476	1
Fluoride	U	ND	0.0330	0.100	mg/L		1					
Sulfate	U	ND	0.133	0.400	mg/L		1					
Mercury Analysis-CVAA												
7470 Cold Vapor Mercury, Liquid "As Received"												
Mercury	U	ND	0.0000670	0.000200	mg/L	1.00	1	JP2	10/25/22	1048	2332720	2
Metals Analysis-ICP-MS												
SW846 3005A/6020B "As Received"												
Calcium	U	ND	0.0800	0.200	mg/L	1.00	1	SKJ	10/27/22	2024	2332625	3
Chromium	U	ND	0.00300	0.0100	mg/L	1.00	1					
Cobalt	U	ND	0.000300	0.00100	mg/L	1.00	1					
Selenium	U	ND	0.00150	0.00500	mg/L	1.00	1					
Antimony	U	ND	0.00100	0.00300	mg/L	1.00	1	SKJ	10/28/22	1555	2332625	4
Barium	U	ND	0.000670	0.00400	mg/L	1.00	1					
Cadmium	U	ND	0.000300	0.00100	mg/L	1.00	1					
Lead	U	ND	0.000500	0.00200	mg/L	1.00	1					
Molybdenum	U	ND	0.000200	0.00100	mg/L	1.00	1					
Silver	U	ND	0.000300	0.00100	mg/L	1.00	1					
Thallium	U	ND	0.000600	0.00200	mg/L	1.00	1					
Beryllium	U	ND	0.000200	0.000500	mg/L	1.00	1	BAJ	11/01/22	1249	2332625	5
Lithium	U	ND	0.00300	0.0100	mg/L	1.00	1					
Arsenic	U	ND	0.00200	0.00500	mg/L	1.00	1	SKJ	11/03/22	2136	2336686	6
Boron	U	ND	0.00520	0.0150	mg/L	1.00	1	SKJ	11/04/22	1028	2336686	7
Solids Analysis												
SM2540C Dissolved Solids "As Received"												
Total Dissolved Solids	U	ND	2.38	10.0	mg/L			CH6	10/25/22	1050	2333174	8

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
SW846 3005A	ICP-MS 3005A PREP	CD3	11/01/22	1615	2336684
SW846 3005A	ICP-MS 3005A PREP	EM2	10/24/22	1545	2332624
SW846 7470A Prep	EPA 7470A Mercury Prep Liquid	RM4	10/24/22	1418	2332711

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2040 Savage Road Charleston, SC 29407 - (843) 556-8171 - www.gel.com

QC Summary

Report Date: November 4, 2022

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Georgia Power Company, Southern Company
241 Ralph McGill Blvd NE, Bin 10160
Atlanta, Georgia

Contact: Joju Abraham

Workorder: 597789

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Ion Chromatography											
Batch	2333476										
QC1205226713	595440008	DUP									
Chloride		19.6		19.6	mg/L	0.145		(0%-20%)	JLD1	10/25/22	21:47
Fluoride		0.349		0.361	mg/L	3.46 ^		(+/-0.100)		10/25/22	15:48
Sulfate		30.2		30.2	mg/L	0.00993		(0%-20%)		10/25/22	21:47
QC1205226712	LCS										
Chloride	5.00			4.59	mg/L		91.9	(90%-110%)		10/25/22	14:48
Fluoride	2.50			2.46	mg/L		98.3	(90%-110%)			
Sulfate	10.0			9.54	mg/L		95.4	(90%-110%)			
QC1205226711	MB										
Chloride			U	ND	mg/L					10/25/22	14:19
Fluoride			U	ND	mg/L						
Sulfate			U	ND	mg/L						
QC1205226714	595440008	PS									
Chloride	5.00	3.93		9.13	mg/L		104	(90%-110%)		10/25/22	22:17
Fluoride	2.50	0.349		2.83	mg/L		99.1	(90%-110%)		10/25/22	16:18
Sulfate	10.0	6.04		16.2	mg/L		102	(90%-110%)		10/25/22	22:17

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QC Summary

Workorder: 597789

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Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Metals Analysis - ICPMS											
Batch	2332625										
QC1205224854	LCS										
Aluminum	2.00			2.07	mg/L		104	(80%-120%)	SKJ	10/27/22	20:03
Antimony	0.0500			0.0544	mg/L		109	(80%-120%)		10/28/22	15:49
Barium	0.0500			0.0535	mg/L		107	(80%-120%)			
Beryllium	0.0500			0.0595	mg/L		119	(80%-120%)	BAJ	11/01/22	12:38
Cadmium	0.0500			0.0552	mg/L		110	(80%-120%)	SKJ	10/28/22	15:49
Calcium	2.00			2.16	mg/L		108	(80%-120%)		10/27/22	20:03
Chromium	0.0500			0.0542	mg/L		108	(80%-120%)			
Cobalt	0.0500			0.0547	mg/L		109	(80%-120%)			
Iron	2.00			2.18	mg/L		109	(80%-120%)			
Lead	0.0500			0.0561	mg/L		112	(80%-120%)		10/28/22	15:49
Lithium	0.0500			0.0553	mg/L		111	(80%-120%)	BAJ	11/01/22	12:38
Magnesium	2.00			2.12	mg/L		106	(80%-120%)	SKJ	10/27/22	20:03
Manganese	0.0500			0.0532	mg/L		106	(80%-120%)			
Molybdenum	0.0500			0.0554	mg/L		111	(80%-120%)		10/28/22	15:49
Potassium	2.00			2.06	mg/L		103	(80%-120%)		10/27/22	20:03

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QC Summary

Workorder: 597789

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Parname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Metals Analysis - ICPMS											
Batch	2332625										
Selenium	0.0500			0.0510	mg/L		102	(80%-120%)	SKJ	10/27/22	20:03
Silver	0.0500			0.0540	mg/L		108	(80%-120%)		10/28/22	15:49
Sodium	2.00			2.09	mg/L		104	(80%-120%)		10/27/22	20:03
Thallium	0.0500			0.0548	mg/L		110	(80%-120%)		10/28/22	15:49
QC1205224853	MB										
Aluminum			U	ND	mg/L					10/27/22	19:59
Antimony			U	ND	mg/L					10/28/22	15:45
Barium			U	ND	mg/L						
Beryllium			U	ND	mg/L				BAJ	11/01/22	12:36
Cadmium			U	ND	mg/L				SKJ	10/28/22	15:45
Calcium			U	ND	mg/L					10/27/22	19:59
Chromium			U	ND	mg/L						
Cobalt			U	ND	mg/L						
Iron			U	ND	mg/L						
Lead			U	ND	mg/L					10/28/22	15:45
Lithium			U	ND	mg/L				BAJ	11/01/22	12:36

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QC Summary

Workorder: 597789

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Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Metals Analysis - ICPMS											
Batch	2332625										
Magnesium			U	ND	mg/L				SKJ	10/27/22	19:59
Manganese			U	ND	mg/L						
Molybdenum			U	ND	mg/L					10/28/22	15:45
Potassium			U	ND	mg/L					10/27/22	19:59
Selenium			U	ND	mg/L						
Silver			U	ND	mg/L					10/28/22	15:45
Sodium			U	ND	mg/L					10/27/22	19:59
Thallium			U	ND	mg/L					10/28/22	15:45
QC1205224855 597789001 MS											
Aluminum	2.00			0.143	2.36	mg/L		111 (75%-125%)		10/27/22	20:39
Antimony	0.0500	U		ND	0.0531	mg/L		105 (75%-125%)		10/28/22	16:07
Barium	0.0500			0.0305	0.0846	mg/L		108 (75%-125%)			
Beryllium	0.0500	U		ND	0.0534	mg/L		107 (75%-125%)	BAJ	11/01/22	12:42
Cadmium	0.0500	U		ND	0.0531	mg/L		106 (75%-125%)	SKJ	10/28/22	16:07
Calcium	2.00			140	136	mg/L		N/A (75%-125%)		10/27/22	20:10
Chromium	0.0500	U		ND	0.0552	mg/L		108 (75%-125%)		10/27/22	20:39

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QC Summary

Workorder: 597789

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Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Metals Analysis - ICPMS											
Batch	2332625										
Cobalt	0.0500	U	ND	0.0551	mg/L		110	(75%-125%)	SKJ	10/27/22	20:39
Iron	2.00		1.01	3.20	mg/L		110	(75%-125%)			
Lead	0.0500	U	ND	0.0515	mg/L		103	(75%-125%)		10/28/22	16:07
Lithium	0.0500	J	0.00631	0.0584	mg/L		104	(75%-125%)	BAJ	11/01/22	12:42
Magnesium	2.00		10.6	12.4	mg/L		N/A	(75%-125%)	SKJ	10/27/22	20:10
Manganese	0.0500		0.220	0.272	mg/L		N/A	(75%-125%)		10/27/22	20:39
Molybdenum	0.0500		0.0205	0.0761	mg/L		111	(75%-125%)		10/28/22	16:07
Potassium	2.00		10.6	12.4	mg/L		N/A	(75%-125%)		10/27/22	20:39
Selenium	0.0500	U	ND	0.0515	mg/L		103	(75%-125%)			
Silver	0.0500	U	ND	0.0507	mg/L		101	(75%-125%)		10/28/22	16:07
Sodium	2.00		154	152	mg/L		N/A	(75%-125%)		10/27/22	20:10
Thallium	0.0500	U	ND	0.0510	mg/L		102	(75%-125%)		10/28/22	16:07
QC1205224856 597789001 MSD											
Aluminum	2.00		0.143	2.33	mg/L	1.21	109	(0%-20%)		10/27/22	20:42
Antimony	0.0500	U	ND	0.0541	mg/L	1.87	107	(0%-20%)		10/28/22	16:10
Barium	0.0500		0.0305	0.0836	mg/L	1.12	106	(0%-20%)			

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QC Summary

Workorder: 597789

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Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Metals Analysis - ICPMS											
Batch	2332625										
Beryllium	0.0500	U	ND	0.0507	mg/L	5.28	101	(0%-20%)	BAJ	11/01/22	12:44
Cadmium	0.0500	U	ND	0.0511	mg/L	3.83	102	(0%-20%)	SKJ	10/28/22	16:10
Calcium	2.00		140	137	mg/L	0.656	N/A	(0%-20%)		10/27/22	20:14
Chromium	0.0500	U	ND	0.0534	mg/L	3.35	104	(0%-20%)		10/27/22	20:42
Cobalt	0.0500	U	ND	0.0533	mg/L	3.26	106	(0%-20%)			
Iron	2.00		1.01	3.20	mg/L	0.00359	110	(0%-20%)			
Lead	0.0500	U	ND	0.0504	mg/L	2.3	101	(0%-20%)		10/28/22	16:10
Lithium	0.0500	J	0.00631	0.0556	mg/L	4.91	98.6	(0%-20%)	BAJ	11/01/22	12:44
Magnesium	2.00		10.6	12.6	mg/L	1.98	N/A	(0%-20%)	SKJ	10/27/22	20:14
Manganese	0.0500		0.220	0.269	mg/L	1.14	N/A	(0%-20%)		10/27/22	20:42
Molybdenum	0.0500		0.0205	0.0759	mg/L	0.233	111	(0%-20%)		10/28/22	16:10
Potassium	2.00		10.6	12.3	mg/L	1.04	N/A	(0%-20%)		10/27/22	20:42
Selenium	0.0500	U	ND	0.0508	mg/L	1.28	102	(0%-20%)			
Silver	0.0500	U	ND	0.0498	mg/L	1.95	99.5	(0%-20%)		10/28/22	16:10
Sodium	2.00		154	154	mg/L	0.689	N/A	(0%-20%)		10/27/22	20:14

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QC Summary

Workorder: 597789

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Parname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Metals Analysis - ICPMS											
Batch	2332625										
Thallium	0.0500	U	ND	0.0499	mg/L	2.27	99.7	(0%-20%)	SKJ	10/28/22	16:10
QC1205224857 597789001 SDILT											
Aluminum			143	J	31.2	ug/L	9.48	(0%-20%)		10/27/22	20:50
Antimony		U	ND	U	ND	ug/L	N/A	(0%-20%)		10/28/22	16:16
Barium			30.5		5.76	ug/L	5.58	(0%-20%)			
Beryllium		U	ND	U	ND	ug/L	N/A	(0%-20%)	BAJ	11/01/22	12:46
Cadmium		U	ND	U	ND	ug/L	N/A	(0%-20%)	SKJ	10/28/22	16:16
Calcium			28100		5470	ug/L	2.6	(0%-20%)		10/27/22	20:17
Chromium		U	ND	U	ND	ug/L	N/A	(0%-20%)		10/27/22	20:50
Cobalt		U	ND	U	ND	ug/L	N/A	(0%-20%)			
Iron			1010		208	ug/L	3.21	(0%-20%)			
Lead		U	ND	U	ND	ug/L	N/A	(0%-20%)		10/28/22	16:16
Lithium		J	6.31	U	ND	ug/L	N/A	(0%-20%)	BAJ	11/01/22	12:46
Magnesium			2110		425	ug/L	.642	(0%-20%)	SKJ	10/27/22	20:17
Manganese			220		44.7	ug/L	1.74	(0%-20%)		10/27/22	20:50
Molybdenum			20.5		3.60	ug/L	12.2	(0%-20%)		10/28/22	16:16

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QC Summary

Workorder: 597789

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Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Metals Analysis - ICPMS											
Batch	2332625										
Potassium		10600		2020	ug/L	4.57		(0%-20%)	SKJ	10/27/22	20:50
Selenium	U	ND	U	ND	ug/L	N/A		(0%-20%)			
Silver	U	ND	U	ND	ug/L	N/A		(0%-20%)		10/28/22	16:16
Sodium		30800		6050	ug/L	1.86		(0%-20%)		10/27/22	20:17
Thallium	U	ND	U	ND	ug/L	N/A		(0%-20%)		10/28/22	16:16
<hr/>											
Batch	2336686										
QC1205233292	LCS										
Arsenic	0.0500			0.0522	mg/L		104	(80%-120%)	SKJ	11/03/22	21:15
Boron	0.100			0.119	mg/L		119	(80%-120%)		11/04/22	10:11
QC1205233291	MB										
Arsenic			U	ND	mg/L					11/03/22	21:13
Boron			U	ND	mg/L					11/04/22	10:09
QC1205233293	597789002 MS										
Arsenic	0.0500	U	ND	0.0511	mg/L		99.4	(75%-125%)		11/03/22	21:27
Boron	0.100	U	ND	0.124	mg/L		122	(75%-125%)		11/04/22	10:21
QC1205233294	597789002 MSD										
Arsenic	0.0500	U	ND	0.0483	mg/L	5.51	94	(0%-20%)		11/03/22	21:29
Boron	0.100	U	ND	0.112	mg/L	10	111	(0%-20%)		11/04/22	10:23

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QC Summary

Workorder: 597789

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Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Metals Analysis - ICPMS											
Batch 2336686											
QC1205233295 597789002 SDILT											
Arsenic	U	ND	U	ND	ug/L	N/A		(0%-20%)	SKJ	11/03/22	21:34
Boron	U	ND	U	ND	ug/L	N/A		(0%-20%)		11/04/22	10:27
Metals Analysis-Mercury											
Batch 2332720											
QC1205225092 596794003 DUP											
Mercury	U	ND	U	ND	mg/L	N/A			JP2	10/25/22	10:22
QC1205225091 LCS											
Mercury	0.00200			0.00175	mg/L		87.6	(80%-120%)		10/25/22	10:59
QC1205225090 MB											
Mercury			U	ND	mg/L					10/25/22	10:17
QC1205225093 596794003 MS											
Mercury	0.00200	U	ND	0.00179	mg/L		89.7	(75%-125%)		10/25/22	11:01
QC1205225094 596794003 SDILT											
Mercury	U	ND	U	ND	ug/L	N/A		(0%-10%)		10/25/22	10:26
Solids Analysis											
Batch 2333174											
QC1205226089 597715001 DUP											
Total Dissolved Solids		351		339	mg/L	3.48		(0%-5%)	CH6	10/25/22	10:50
QC1205226088 LCS											
Total Dissolved Solids	300			301	mg/L		100	(95%-105%)		10/25/22	10:50
QC1205226087 MB											
Total Dissolved Solids			U	ND	mg/L					10/25/22	10:50

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QC Summary

Workorder: 597789

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Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Titration and Ion Analysis											
Batch	2335652										
QC1205231052	598204005	DUP									
Alkalinity, Total as CaCO3		20.2		20.4	mg/L	0.985		(0%-20%)	HH2	11/01/22	13:46
QC1205231049	LCS										
Alkalinity, Total as CaCO3	100			102	mg/L			(90%-110%)		11/01/22	13:22
QC1205231053	598204005	MS									
Alkalinity, Total as CaCO3	100	20.2		122	mg/L			(80%-120%)		11/01/22	13:49

Notes:

The Qualifiers in this report are defined as follows:

- < Result is less than value reported
- > Result is greater than value reported
- B The target analyte was detected in the associated blank.
- E %difference of sample and SD is >10%. Sample concentration must meet flagging criteria
- E General Chemistry--Concentration of the target analyte exceeds the instrument calibration range
- FB Mercury was found present at quantifiable concentrations in field blanks received with these samples. Data associated with the blank are deemed invalid for reporting to regulatory agencies
- H Analytical holding time was exceeded
- J See case narrative for an explanation
- J Value is estimated
- N Metals--The Matrix spike sample recovery is not within specified control limits
- N/A RPD or %Recovery limits do not apply.
- N1 See case narrative
- ND Analyte concentration is not detected above the detection limit
- NJ Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
- Q One or more quality control criteria have not been met. Refer to the applicable narrative or DER.
- R Per section 9.3.4.1 of Method 1664 Revision B, due to matrix spike recovery issues, this result may not be reported or used for regulatory compliance purposes.
- R Sample results are rejected
- U Analyte was analyzed for, but not detected above the MDL, MDA, MDC or LOD.
- X Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
- Y Other specific qualifiers were required to properly define the results. Consult case narrative.
- Z Paint Filter Test--Particulates passed through the filter, however no free liquids were observed.
- ^ RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL. Qualifier Not Applicable for Radiochemistry.

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QC Summary

Workorder: 597789

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Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
d		5-day BOD--The 2:1 depletion requirement was not met for this sample									
e		5-day BOD--Test replicates show more than 30% difference between high and low values. The data is qualified per the method and can be used for reporting purposes									
h		Preparation or preservation holding time was exceeded									

N/A indicates that spike recovery limits do not apply when sample concentration exceeds spike conc. by a factor of 4 or more or %RPD not applicable.

^ The Relative Percent Difference (RPD) obtained from the sample duplicate (DUP) is evaluated against the acceptance criteria when the sample is greater than five times (5X) the contract required detection limit (RL). In cases where the duplicate value is less than 5X the RL, a control limit of +/- the RL is used to evaluate the DUP result.

* Indicates that a Quality Control parameter was not within specifications.

For PS, PSD, and SDILT results, the values listed are the measured amounts, not final concentrations.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the QC Summary.

**Technical Case Narrative
Georgia Power Company
SDG #: 597789**

Metals

Product: Determination of Metals by ICP-MS

Analytical Method: SW846 3005A/6020B

Analytical Procedure: GL-MA-E-014 REV# 35

Analytical Batch: 2332625

Preparation Method: SW846 3005A

Preparation Procedure: GL-MA-E-006 REV# 14

Preparation Batch: 2332624

The following samples were analyzed using the above methods and analytical procedure(s).

<u>GEL Sample ID#</u>	<u>Client Sample Identification</u>
597789001	ARAMW-9
597789002	FB-01
597789003	EB-01
1205224853	Method Blank (MB) ICP-MS
1205224854	Laboratory Control Sample (LCS)
1205224857	597789001(ARAMW-9L) Serial Dilution (SD)
1205224855	597789001(ARAMW-9S) Matrix Spike (MS)
1205224856	597789001(ARAMW-9SD) Matrix Spike Duplicate (MSD)

The samples in this SDG were analyzed on an "as received" basis.

Data Summary:

All sample data provided in this report met the acceptance criteria specified in the analytical methods and procedures for initial calibration, continuing calibration, instrument controls and process controls where applicable, with the following exceptions.

Calibration Information

ICSA/ICSAB Statement

For the ICP-MS analysis, the ICSA solution contains analyte concentrations which are verified trace impurities indigenous to the purchased standard.

Technical Information

Sample Dilutions

Dilutions may be required for many reasons, including to minimize matrix interferences or to bring over range target analyte concentrations into the linear calibration range. Sample 597789001 (ARAMW-9) was diluted to ensure that the analyte concentration was within the linear calibration range of the instrument.

Analyte	597789
	001

Calcium	5X
Magnesium	5X
Sodium	5X

Product: Determination of Metals by ICP-MS

Analytical Method: SW846 3005A/6020B

Analytical Procedure: GL-MA-E-014 REV# 35

Analytical Batch: 2336686

Preparation Method: SW846 3005A

Preparation Procedure: GL-MA-E-006 REV# 14

Preparation Batch: 2336684

The following samples were analyzed using the above methods and analytical procedure(s).

<u>GEL Sample ID#</u>	<u>Client Sample Identification</u>
597789001	ARAMW-9
597789002	FB-01
597789003	EB-01
1205233291	Method Blank (MB) ICP-MS
1205233292	Laboratory Control Sample (LCS)
1205233295	597789002(FB-01L) Serial Dilution (SD)
1205233293	597789002(FB-01S) Matrix Spike (MS)
1205233294	597789002(FB-01SD) Matrix Spike Duplicate (MSD)

The samples in this SDG were analyzed on an "as received" basis.

Data Summary:

All sample data provided in this report met the acceptance criteria specified in the analytical methods and procedures for initial calibration, continuing calibration, instrument controls and process controls where applicable, with the following exceptions.

Calibration Information

ICSA/ICSAB Statement

For the ICP-MS analysis, the ICSA solution contains analyte concentrations which are verified trace impurities indigenous to the purchased standard.

Product: Mercury Analysis Using the Perkin Elmer Automated Mercury Analyzer

Analytical Method: SW846 7470A

Analytical Procedure: GL-MA-E-010 REV# 38

Analytical Batch: 2332720

Preparation Method: SW846 7470A Prep

Preparation Procedure: GL-MA-E-010 REV# 38

Preparation Batch: 2332711

The following samples were analyzed using the above methods and analytical procedure(s).

<u>GEL Sample ID#</u>	<u>Client Sample Identification</u>
597789001	ARAMW-9
597789002	FB-01
597789003	EB-01
1205225090	Method Blank (MB)CVAA
1205225091	Laboratory Control Sample (LCS)
1205225094	596794003(NonSDGL) Serial Dilution (SD)
1205225092	596794003(NonSDGD) Sample Duplicate (DUP)
1205225093	596794003(NonSDGS) Matrix Spike (MS)

The samples in this SDG were analyzed on an "as received" basis.

Data Summary:

There are no exceptions, anomalies or deviations from the specified methods. All sample data provided in this report met the acceptance criteria specified in the analytical methods and procedures for initial calibration, continuing calibration, instrument controls and process controls where applicable.

General Chemistry

Product: Ion Chromatography

Analytical Method: EPA 300.0

Analytical Procedure: GL-GC-E-086 REV# 30

Analytical Batch: 2333476

The following samples were analyzed using the above methods and analytical procedure(s).

<u>GEL Sample ID#</u>	<u>Client Sample Identification</u>
597789001	ARAMW-9
597789002	FB-01
597789003	EB-01
1205226711	Method Blank (MB)
1205226712	Laboratory Control Sample (LCS)
1205226713	595440008(NonSDG) Sample Duplicate (DUP)
1205226714	595440008(NonSDG) Post Spike (PS)

The samples in this SDG were analyzed on an "as received" basis.

Data Summary:

All sample data provided in this report met the acceptance criteria specified in the analytical methods and procedures for initial calibration, continuing calibration, instrument controls and process controls where applicable, with the following exceptions.

Technical Information

Sample Dilutions

The following samples 1205226713 (Non SDG 595440008DUP), 1205226714 (Non SDG 595440008PS) and 597789001 (ARAMW-9) were diluted because target analyte concentrations exceeded the calibration range.

Dilutions may be required for many reasons, including to minimize matrix interferences or to bring over range target analyte concentrations into the linear calibration range.

Analyte	597789
	001
Chloride	50X
Sulfate	50X

Product: Solids, Total Dissolved

Analytical Method: SM 2540C

Analytical Procedure: GL-GC-E-001 REV# 19

Analytical Batch: 2333174

The following samples were analyzed using the above methods and analytical procedure(s).

<u>GEL Sample ID#</u>	<u>Client Sample Identification</u>
597789001	ARAMW-9
597789002	FB-01
597789003	EB-01
1205226087	Method Blank (MB)
1205226088	Laboratory Control Sample (LCS)
1205226089	597715001(NonSDG) Sample Duplicate (DUP)

The samples in this SDG were analyzed on an "as received" basis.

Data Summary:

There are no exceptions, anomalies or deviations from the specified methods. All sample data provided in this report met the acceptance criteria specified in the analytical methods and procedures for initial calibration, continuing calibration, instrument controls and process controls where applicable.

Product: Alkalinity

Analytical Method: SM 2320B

Analytical Procedure: GL-GC-E-033 REV# 14

Analytical Batch: 2335652

The following samples were analyzed using the above methods and analytical procedure(s).

<u>GEL Sample ID#</u>	<u>Client Sample Identification</u>
597789001	ARAMW-9
1205231049	Laboratory Control Sample (LCS)
1205231052	598204005(NonSDG) Sample Duplicate (DUP)
1205231053	598204005(NonSDG) Matrix Spike (MS)

The samples in this SDG were analyzed on an "as received" basis.

Data Summary:

There are no exceptions, anomalies or deviations from the specified methods. All sample data provided in this report met the acceptance criteria specified in the analytical methods and procedures for initial calibration, continuing calibration, instrument controls and process controls where applicable.

Certification Statement

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

Page: 1 of 1
 Project # 175569434
 GEL Quote #: 597788
 POC Number (1): 597794
 I Cooler
 ICO Number:
 Client Name: Georgia Power
 Project/Site Name: Plant Arkwright AP-2
 Address: 241 Ralph McGill Blvd SE, Atlanta, GA 30308
 Collected By: John Myer, Jackson Bankston
 Send Results To: jbraham@southernco.com EDD@stantec.com
 brian.steele@stantec.com edgar.smith@stantec.com
 * For composites - indicate start and stop date/time

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 Phone: (843) 556-8171
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GEL
 Laboratory LLC
 Chemistry | Radiochemistry | Radiobiology | Specialty Analytics
Chain of Custody and Analytical Request
 GEL Project Manager: Erin Trent
 Phone # (937) 344-6533
 Fax #
 Should this sample be considered:
 (F) Radioactive (if yes, please supply isotopic info)
 (7) Known or possible Hazards

Sample ID	*Date Collected (mm-dd-yy)	*Time Collected (Military) (hhmm)	QC Code (1)	Field Filtered (2)	Sample Matrix (3)	Total number of containers	Metals App. III, IV (6020B)	TDS (SM Method 2540C)	RAD 226-228 Cmbd	Anions (Cl, F, Sulfate) (300.0 Rev. 2.1 1993)	Alkalinity (300.0 R2.1)	Mercury (7470B)	Metals Al, K, Mg, Na, Fe, Mn (6020B)	Comments
ARAMW-9	10/20/22	1135	N	N	WG	7	X	X	X	X	X	X	X	pH: 7.80
FB-01	10/20/22	1145	FB	N	WQ	6	X	X	X	X		X		NA
EB-01	10/20/22	1200	EB	N	WQ	6	X	X	X	X		X		NA

Chain of Custody Signatures
 Relinquished By (Signed) _____ Date _____ Time _____
 Received by (signed) _____ Date _____ Time _____
 1. *John Myer* 10/20/22 12:00
 2. *Erin Trent* 10/21/22 9:55
 3. _____
 TAT Requested: Normal: Rush: _____ Specify: _____ (Subject to Surcharge)
 Fax Results: Yes No
 Select Deliverable: C of A QC Summary Level 1 Level 2 Level 3 Level 4
 Additional Remarks:
 For Lab Receiving Use Only: Custody Seal Intact? Yes No Cooler Temp: _____ °C
 Sample Collection Time Zone: Eastern Pacific Central Mountain Other

For sample shipping and delivery details, see Sample Receipt & Review form (SRR.)
 1.) Chain of Custody Number = Client Determined
 2.) QC Codes: N = Normal Sample, TB = Trip Blank, FD = Field Duplicate, EB = Equipment Blank, MS = Matrix Spike Sample, MSD = Matrix Spike Duplicate Sample, G = Grab, C = Composite
 3.) Field Filtered: For liquid matrices, indicate with a - Y - for yes the sample was field filtered or - N - for sample was not field filtered.
 4.) Matrix Codes: DW=Drinking Water, GW=Groundwater, SW=Surface Water, WW=Waste Water, W=Water, ML=Misc Liquid, SO=Soil, SD=Sludge, SS=Solid Waste, O=Oil, F=Filter, P=Wipe, U=Urine, F=Faecal, N=Nasal
 5.) Sample Analysis Requested: Analytical method requested (i.e. 8260B, 6010B/7470A) and number of containers provided for each (i.e. 8260B - 3, 6010B/7470A - 1).
 6.) Preservative Type: HA = Hydrochloric Acid, NI = Nitric Acid, SH = Sodium Hydroxide, SA = Sulfuric Acid, AA = Ascorbic Acid, HX = Hexane, ST = Sodium Thiosulfate, If no preservative is added = leave field blank
 7.) **KNOWN OR POSSIBLE HAZARDS**
 Characteristic Hazards
 FL = Flammable/Ignitable
 CO = Corrosive
 RE = Reactive
 Listed Waste
 LW = Listed Waste
 (F, K, P and U-listed wastes.)
 Waste code(s):
 TSCA Regulated
 PCB = Polychlorinated biphenyls
 RCRA Metals
 As = Arsenic Hg = Mercury
 Ba = Barium Se = Selenium
 Cd = Cadmium Ag = Silver
 Cr = Chromium MR = Misc. RCRA metals
 Pb = Lead
 Other
 OT = Other / Unknown
 (i.e.: High/low pH, asbestos, beryllium, irritants, other misc. health hazards, etc.)
 Description:
 Please provide any additional details below regarding handling and/or disposal concerns. (i.e.: Origin of sample(s), type of site collected from, odd matrices, etc.)

SAMPLE RECEIPT & REVIEW FORM

Client: GCC SDG/AR/COC/Work Order: 597789 | 847794
 Received By: Stacy L Boon Date Received: October 21, 2022 Circle Applicable:
 Carrier and Tracking Number: 2794 0020 9481
 FedEx Express FedEx Ground UPS Field Services Courier Other

Suspected Hazard Information: Yes No
 *If Net Counts > 100cpm on samples not marked "radioactive", contact the Radiation Safety Group for further investigation.
 A) Shipped as a DOT Hazardous? Yes No
 Hazard Class Shipped: _____ UN#: _____
 If UN2910, Is the Radioactive Shipment Survey Compliant? Yes ___ No ___
 B) Did the client designate the samples are to be received as radioactive? Yes No
 COC notation or radioactive stickers on containers equal client designation.
 C) Did the RSO classify the samples as radioactive? Yes No
 Maximum Net Counts Observed* (Observed Counts - Area Background Counts): 0 CPM / mR/Hr
 Classified as: Rad 1 Rad 2 Rad 3
 D) Did the client designate samples are hazardous? Yes No
 COC notation or hazard labels on containers equal client designation.
 E) Did the RSO identify possible hazards? Yes No
 If D or E is yes, select Hazards below.
 PCB's Flammable Foreign Soil RCRA Asbestos Beryllium Other:

Sample Receipt Criteria	Yes	NA	No	Comments/Qualifiers (Required for Non-Conforming Items)
1 Shipping containers received intact and sealed?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Circle Applicable: Seals broken Damaged container Leaking container Other (describe)
2 Chain of custody documents included with shipment?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Circle Applicable: Client contacted and provided COC COC created upon receipt
3 Samples requiring cold preservation within (0 ≤ 6 deg. C)?*	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Preservation Method: <u>Wet Ice</u> Ice Packs Dry ice None Other: <u>TEMP: 1°C</u> *all temperatures are recorded in Celsius
4 Daily check performed and passed on IR temperature gun?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Temperature Device Serial #: <u>TR4-22</u> Secondary Temperature Device Serial # (If Applicable): _____
5 Sample containers intact and sealed?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Circle Applicable: Seals broken Damaged container Leaking container Other (describe)
6 Samples requiring chemical preservation at proper pH?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Sample ID's and Containers Affected: If Preservation added, Lot#: _____ If Yes, are Encores or Soil Kits present for solids? Yes ___ No ___ NA ___ (If yes, take to VOA Freezer) Do liquid VOA vials contain acid preservation? Yes ___ No ___ NA ___ (If unknown, select No) Are liquid VOA vials free of headspace? Yes ___ No ___ NA ___
7 Do any samples require Volatile Analysis?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Sample ID's and containers affected: ID's and tests affected: _____
8 Samples received within holding time?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	ID's and containers affected: _____
9 Sample ID's on COC match ID's on bottles?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Circle Applicable: No dates on containers No times on containers COC missing info Other (describe)
10 Date & time on COC match date & time on bottles?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Circle Applicable: No container count on COC Other (describe)
11 Number of containers received match number indicated on COC?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Circle Applicable: No container count on COC Other (describe)
12 Are sample containers identifiable as GEL provided by use of GEL labels?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Circle Applicable: Not relinquished Other (describe)
13 COC form is properly signed in relinquished/received sections?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Circle Applicable: Not relinquished Other (describe)

Comments (Use Continuation Form if needed): SO

List of current GEL Certifications as of 04 November 2022

State	Certification
Alabama	42200
Alaska	17-018
Alaska Drinking Water	SC00012
Arkansas	88-0651
CLIA	42D0904046
California	2940
Colorado	SC00012
Connecticut	PH-0169
DoD ELAP/ ISO17025 A2LA	2567.01
Florida NELAP	E87156
Foreign Soils Permit	P330-15-00283, P330-15-00253
Georgia	SC00012
Georgia SDWA	967
Hawaii	SC00012
Idaho	SC00012
Illinois NELAP	200029
Indiana	C-SC-01
Kansas NELAP	E-10332
Kentucky SDWA	90129
Kentucky Wastewater	90129
Louisiana Drinking Water	LA024
Louisiana NELAP	03046 (AI33904)
Maine	2019020
Maryland	270
Massachusetts	M-SC012
Massachusetts PFAS Approv	Letter
Michigan	9976
Mississippi	SC00012
Nebraska	NE-OS-26-13
Nevada	SC000122023-3
New Hampshire NELAP	2054
New Jersey NELAP	SC002
New Mexico	SC00012
New York NELAP	11501
North Carolina	233
North Carolina SDWA	45709
North Dakota	R-158
Oklahoma	2022-160
Pennsylvania NELAP	68-00485
Puerto Rico	SC00012
S. Carolina Radiochem	10120002
Sanitation Districts of L	9255651
South Carolina Chemistry	10120001
Tennessee	TN 02934
Texas NELAP	T104704235-22-20
Utah NELAP	SC000122022-37
Vermont	VT87156
Virginia NELAP	460202
Washington	C780



November 16, 2022

Joju Abraham
Georgia Power Company, Southern Company
241 Ralph McGill Blvd NE, Bin 10160
Atlanta, Georgia 30308

Re: Arkwright CCR Groundwater Compliance AP2
Work Order: 597794

Dear Joju Abraham:

GEL Laboratories, LLC (GEL) appreciates the opportunity to provide the enclosed analytical results for the sample(s) we received on October 21, 2022. This original data report has been prepared and reviewed in accordance with GEL's standard operating procedures.

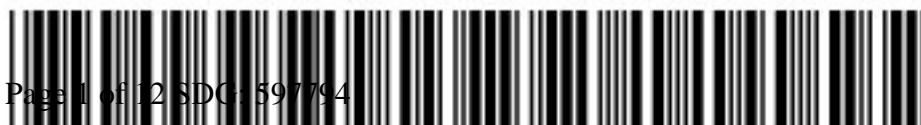
Test results for NELAP or ISO 17025 accredited tests are verified to meet the requirements of those standards, with any exceptions noted. The results reported relate only to the items tested and to the sample as received by the laboratory. These results may not be reproduced except as full reports without approval by the laboratory. Copies of GEL's accreditations and certifications can be found on our website at www.gel.com.

Our policy is to provide high quality, personalized analytical services to enable you to meet your analytical needs on time every time. We trust that you will find everything in order and to your satisfaction. If you have any questions, please do not hesitate to call me at (843) 556-8171, ext. 4504.

Sincerely,

Anna Johnson for
Erin Trent
Project Manager

Purchase Order: GPC82177-0002
Enclosures



GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 – (843) 556-8171 – www.gel.com

Certificate of Analysis Report for

GPCC001 Georgia Power Company

Client SDG: 597794 GEL Work Order: 597794

The Qualifiers in this report are defined as follows:

- * A quality control analyte recovery is outside of specified acceptance criteria
- ** Analyte is a Tracer compound
- ** Analyte is a surrogate compound
- U Analyte was analyzed for, but not detected above the MDL, MDA, MDC or LOD.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the Certificate of Analysis.

The designation ND, if present, appears in the result column when the analyte concentration is not detected above the limit as defined in the 'U' qualifier above.

This data report has been prepared and reviewed in accordance with GEL Laboratories LLC standard operating procedures. Please direct any questions to your Project Manager, Erin Trent.

Reviewed by _____



GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

Company : Georgia Power Company, Southern
 Address : Company
 241 Ralph McGill Blvd NE, Bin 10160

Atlanta, Georgia 30308

Report Date: November 16, 2022

Contact: Joju Abraham

Project: Arkwright CCR Groundwater ComplianceAP2

Client Sample ID: ARAMW-9
 Sample ID: 597794001
 Matrix: WG
 Collect Date: 20-OCT-22
 Receive Date: 21-OCT-22
 Collector: Client

Project: GPCC00100
 Client ID: GPCC001

Parameter	Qualifier	Result	Uncertainty	MDC	TPU	RL	Units	PF	DF	Analyst	Date	Time	Batch	Mtd.
Rad Gas Flow Proportional Counting														
<i>GFPC Ra228, Liquid "As Received"</i>														
Radium-228	U	1.41	+/-1.20	1.95	+/-1.25	3.00	pCi/L			JE1	10/28/22	0911	2332505	1
<i>Radium-226+Radium-228 Calculation "See Parent Products"</i>														
Radium-226+228 Sum		8.42	+/-1.68	1.95	+/-2.03		pCi/L		1	NXL1	11/16/22	0840	2332506	2
Rad Radium-226														
<i>Lucas Cell, Ra226, Liquid "As Received"</i>														
Radium-226		7.01	+/-1.18	0.687	+/-1.60	1.00	pCi/L			LXP1	10/31/22	0828	2332497	3

The following Analytical Methods were performed

Method	Description
1	EPA 904.0/SW846 9320 Modified
2	Calculation
3	EPA 903.1 Modified

Surrogate/Tracer Recovery	Test	Batch ID	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC Ra228, Liquid "As Received"	2332505	91.7	(15%-125%)

Notes:
 The MDC is a sample specific MDC.
 TPU and Counting Uncertainty are calculated at the 95% confidence level (1.96-sigma).

Column headers are defined as follows:

- | | |
|---------------------------------------|-----------------------------------|
| DF: Dilution Factor | Mtd.: Method |
| DL: Detection Limit | PF: Prep Factor |
| Lc/LC: Critical Level | RL: Reporting Limit |
| MDA: Minimum Detectable Activity | TPU: Total Propagated Uncertainty |
| MDC: Minimum Detectable Concentration | |

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

Company : Georgia Power Company, Southern
 Address : Company
 241 Ralph McGill Blvd NE, Bin 10160

Atlanta, Georgia 30308

Report Date: November 16, 2022

Contact: Joju Abraham

Project: Arkwright CCR Groundwater ComplianceAP2

Client Sample ID: FB-01
 Sample ID: 597794002
 Matrix: WQ
 Collect Date: 20-OCT-22
 Receive Date: 21-OCT-22
 Collector: Client

Project: GPCC00100
 Client ID: GPCC001

Parameter	Qualifier	Result	Uncertainty	MDC	TPU	RL	Units	PF	DF	Analyst	Date	Time	Batch	Mtd.
Rad Gas Flow Proportional Counting														
<i>GFPC Ra228, Liquid "As Received"</i>														
Radium-228	U	0.796	+/-0.999	1.69	+/-1.02	3.00	pCi/L			JE1	10/28/22	0911	2332505	1
<i>Radium-226+Radium-228 Calculation "See Parent Products"</i>														
Radium-226+228 Sum	U	1.08	+/-1.03	1.69	+/-1.05		pCi/L		1	NXL1	11/16/22	0840	2332506	2
Rad Radium-226														
<i>Lucas Cell, Ra226, Liquid "As Received"</i>														
Radium-226	U	0.282	+/-0.261	0.385	+/-0.267	1.00	pCi/L			LXP1	10/31/22	0828	2332497	3

The following Analytical Methods were performed

Method	Description
1	EPA 904.0/SW846 9320 Modified
2	Calculation
3	EPA 903.1 Modified

Surrogate/Tracer Recovery	Test	Batch ID	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC Ra228, Liquid "As Received"	2332505	90.8	(15%-125%)

Notes:
 The MDC is a sample specific MDC.
 TPU and Counting Uncertainty are calculated at the 95% confidence level (1.96-sigma).

Column headers are defined as follows:

DF: Dilution Factor	Mtd.: Method
DL: Detection Limit	PF: Prep Factor
Lc/LC: Critical Level	RL: Reporting Limit
MDA: Minimum Detectable Activity	TPU: Total Propagated Uncertainty
MDC: Minimum Detectable Concentration	

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

Company : Georgia Power Company, Southern
 Address : Company
 241 Ralph McGill Blvd NE, Bin 10160

Atlanta, Georgia 30308

Report Date: November 16, 2022

Contact: Joju Abraham

Project: Arkwright CCR Groundwater ComplianceAP2

Client Sample ID: EB-01
 Sample ID: 597794003
 Matrix: WQ
 Collect Date: 20-OCT-22
 Receive Date: 21-OCT-22
 Collector: Client

Project: GPCC00100
 Client ID: GPCC001

Parameter	Qualifier	Result	Uncertainty	MDC	TPU	RL	Units	PF	DF	Analyst	Date	Time	Batch	Mtd.
Rad Gas Flow Proportional Counting														
<i>GFPC Ra228, Liquid "As Received"</i>														
Radium-228	U	0.351	+/-0.839	1.50	+/-0.844	3.00	pCi/L			JE1	10/28/22	0911	2332505	1
<i>Radium-226+Radium-228 Calculation "See Parent Products"</i>														
Radium-226+228 Sum	U	0.787	+/-0.898	1.50	+/-0.907		pCi/L		1	NXL1	11/16/22	0840	2332506	2
Rad Radium-226														
<i>Lucas Cell, Ra226, Liquid "As Received"</i>														
Radium-226	U	0.436	+/-0.320	0.438	+/-0.332	1.00	pCi/L			LXP1	10/31/22	0828	2332497	3

The following Analytical Methods were performed

Method	Description
1	EPA 904.0/SW846 9320 Modified
2	Calculation
3	EPA 903.1 Modified

Surrogate/Tracer Recovery	Test	Batch ID	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC Ra228, Liquid "As Received"	2332505	91.9	(15%-125%)

Notes:
 The MDC is a sample specific MDC.
 TPU and Counting Uncertainty are calculated at the 95% confidence level (1.96-sigma).

Column headers are defined as follows:

DF: Dilution Factor	Mtd.: Method
DL: Detection Limit	PF: Prep Factor
Lc/LC: Critical Level	RL: Reporting Limit
MDA: Minimum Detectable Activity	TPU: Total Propagated Uncertainty
MDC: Minimum Detectable Concentration	

**Radiochemistry
Technical Case Narrative
Georgia Power Company
SDG #: 597794**

Product: Radium-226+Radium-228 Calculation

Analytical Method: Calculation

Analytical Procedure: GL-RAD-D-003 REV# 45

Analytical Batch: 2332506

The following samples were analyzed using the above methods and analytical procedure(s).

<u>GEL Sample ID#</u>	<u>Client Sample Identification</u>
597794001	ARAMW-9
597794002	FB-01
597794003	EB-01

Data Summary:

There are no exceptions, anomalies or deviations from the specified methods. All sample data provided in this report met the acceptance criteria specified in the analytical methods and procedures for initial calibration, continuing calibration, instrument controls and process controls where applicable.

Product: GFPC Ra228, Liquid

Analytical Method: EPA 904.0/SW846 9320 Modified

Analytical Procedure: GL-RAD-A-063 REV# 5

Analytical Batch: 2332505

The following samples were analyzed using the above methods and analytical procedure(s).

<u>GEL Sample ID#</u>	<u>Client Sample Identification</u>
597794001	ARAMW-9
597794002	FB-01
597794003	EB-01
1205224559	Method Blank (MB)
1205224560	597794002(FB-01) Sample Duplicate (DUP)
1205224561	Laboratory Control Sample (LCS)

The samples in this SDG were analyzed on an "as received" basis.

Data Summary:

All sample data provided in this report met the acceptance criteria specified in the analytical methods and procedures for initial calibration, continuing calibration, instrument controls and process controls where applicable, with the following exceptions.

Quality Control (QC) Information

Duplication Criteria between QC Sample and Duplicate Sample

The Sample and the Duplicate, (See Below), did not meet the relative percent difference requirement; however, they do meet the relative error ratio requirement with the value listed below.

Sample	Analyte	Value
1205224560 (FB-01DUP)	Radium-228	RPD 127* (0.0%-100.0%) RER 2.67 (0-3)

Product: Lucas Cell, Ra226, Liquid

Analytical Method: EPA 903.1 Modified

Analytical Procedure: GL-RAD-A-008 REV# 15

Analytical Batch: 2332497

The following samples were analyzed using the above methods and analytical procedure(s).

<u>GEL Sample ID#</u>	<u>Client Sample Identification</u>
597794001	ARAMW-9
597794002	FB-01
597794003	EB-01
1205224536	Method Blank (MB)
1205224537	597794002(FB-01) Sample Duplicate (DUP)
1205224538	597794002(FB-01) Matrix Spike (MS)
1205224539	Laboratory Control Sample (LCS)

The samples in this SDG were analyzed on an "as received" basis.

Data Summary:

All sample data provided in this report met the acceptance criteria specified in the analytical methods and procedures for initial calibration, continuing calibration, instrument controls and process controls where applicable, with the following exceptions.

Miscellaneous Information

Additional Comments

The matrix spike, 1205224538 (FB-01MS), aliquot was reduced to conserve sample volume.

Certification Statement

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

QC Summary

Report Date: November 16, 2022
Page 1 of 2

Client : Georgia Power Company, Southern Company
241 Ralph McGill Blvd NE, Bin 10160

Atlanta, Georgia

Contact: Joju Abraham

Workorder: 597794

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Rad Gas Flow											
Batch	2332505										
QC1205224560	597794002 DUP										
Radium-228	U	0.796		3.55	pCi/L	127*		(0% - 100%)	JE1	10/28/22	09:11
	Uncert:	+/-0.999		+/-1.50							
	TPU:	+/-1.02		+/-1.74							
QC1205224561	LCS										
Radium-228	65.5			63.9	pCi/L		97.5	(75%-125%)	JE1	10/28/22	09:11
	Uncert:			+/-4.22							
	TPU:			+/-16.5							
QC1205224559	MB										
Radium-228			U	0.165	pCi/L				JE1	10/28/22	09:11
	Uncert:			+/-0.613							
	TPU:			+/-0.614							
Rad Ra-226											
Batch	2332497										
QC1205224537	597794002 DUP										
Radium-226	U	0.282	U	0.325	pCi/L	0			N/A LXP1	10/31/22	08:28
	Uncert:	+/-0.261		+/-0.353							
	TPU:	+/-0.267		+/-0.360							
QC1205224539	LCS										
Radium-226	26.5			21.6	pCi/L		81.8	(75%-125%)	LXP1	10/31/22	09:01
	Uncert:			+/-1.83							
	TPU:			+/-3.81							
QC1205224536	MB										
Radium-226			U	0.269	pCi/L				LXP1	10/31/22	08:28
	Uncert:			+/-0.329							
	TPU:			+/-0.334							
QC1205224538	597794002 MS										
Radium-226	133 U	0.282		107	pCi/L		80.7	(75%-125%)	LXP1	10/31/22	09:01
	Uncert:	+/-0.261		+/-9.57							
	TPU:	+/-0.267		+/-25.9							

Notes:

TPU and Counting Uncertainty are calculated at the 95% confidence level (1.96-sigma).

The Qualifiers in this report are defined as follows:

- ** Analyte is a Tracer compound
- < Result is less than value reported
- > Result is greater than value reported
- BD Results are either below the MDC or tracer recovery is low
- FA Failed analysis.
- H Analytical holding time was exceeded

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

QC Summary

Workorder: 597794

Page 2 of 2

Parmname	NOM	Sample Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
J										
J										
K										
L										
M										
M										
N/A										
N1										
ND										
NJ										
Q										
R										
U										
UI										
UJ										
UL										
X										
Y										
^										
h										

N/A indicates that spike recovery limits do not apply when sample concentration exceeds spike conc. by a factor of 4 or more or %RPD not applicable.

** Indicates analyte is a surrogate/tracer compound.

^ The Relative Percent Difference (RPD) obtained from the sample duplicate (DUP) is evaluated against the acceptance criteria when the sample is greater than five times (5X) the contract required detection limit (RL). In cases where either the sample or duplicate value is less than 5X the RL, a control limit of +/- the RL is used to evaluate the DUP result.

For PS, PSD, and SDILT results, the values listed are the measured amounts, not final concentrations.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the QC Summary.

SAMPLE RECEIPT & REVIEW FORM

Client: GPC		SDG/AR/COC/Work Order: 597784 547794			
Received By: Stacy L Boon		Date Received: October 21, 2022			
Carrier and Tracking Number		Circle Applicable: <input type="checkbox"/> FedEx Express <input type="checkbox"/> FedEx Ground <input type="checkbox"/> UPS <input type="checkbox"/> Field Services <input type="checkbox"/> Courier <input type="checkbox"/> Other 2794 0020 9481			
Suspected Hazard Information		*If Net Counts > 100cpm on samples not marked "radioactive", contact the Radiation Safety Group for further investigation. Hazard Class Shipped: _____ UN#: _____ If UN2910, Is the Radioactive Shipment Survey Compliant? Yes ___ No ___			
A) Shipped as a DOT Hazardous?		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No			
B) Did the client designate the samples are to be received as radioactive?		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No			
C) Did the RSO classify the samples as radioactive?		Maximum Net Counts Observed* (Observed Counts - Area Background Counts): <u> </u> CPM / mR/hr Classified as: Rad 1 Rad 2 Rad 3			
D) Did the client designate samples are hazardous?		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No			
E) Did the RSO identify possible hazards?		If D or E is yes, select Hazards below. <input type="checkbox"/> PCB's <input type="checkbox"/> Flammable <input type="checkbox"/> Foreign Soil <input type="checkbox"/> RCRA <input type="checkbox"/> Asbestos <input type="checkbox"/> Beryllium Other: _____			
Sample Receipt Criteria		Yes	NA	No	Comments/Qualifiers (Required for Non-Conforming Items)
1	Shipping containers received intact and sealed?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Circle Applicable: Seals broken Damaged container Leaking container Other (describe)
2	Chain of custody documents included with shipment?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Circle Applicable: Client contacted and provided COC COC created upon receipt
3	Samples requiring cold preservation within (0 ≤ deg. C)?*	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Preservation Method: <u>Wet Ice</u> Ice Packs Dry ice None Other: *all temperatures are recorded in Celsius TEMP: <u>1°C</u>
4	Daily check performed and passed on IR temperature gun?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Temperature Device Serial #: <u>TR4-22</u> Secondary Temperature Device Serial # (If Applicable): _____
5	Sample containers intact and sealed?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Circle Applicable: Seals broken Damaged container Leaking container Other (describe)
6	Samples requiring chemical preservation at proper pH?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Sample ID's and Containers Affected: If Preservation added, Lot#: _____ If Yes, are Encores or Soil Kits present for solids? Yes ___ No ___ NA ___ (If yes, take to VOA Freezer)
7	Do any samples require Volatile Analysis?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Do liquid VOA vials contain acid preservation? Yes ___ No ___ NA ___ Are liquid VOA vials free of headspace? Yes ___ No ___ NA ___ Sample ID's and containers affected: _____
8	Samples received within holding time?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	ID's and tests affected: _____
9	Sample ID's on COC match ID's on bottles?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	ID's and containers affected: _____
10	Date & time on COC match date & time on bottles?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Circle Applicable: No dates on containers No times on containers COC missing info Other (describe)
11	Number of containers received match number indicated on COC?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Circle Applicable: No container count on COC Other (describe)
12	Are sample containers identifiable as GEL provided by use of GEL labels?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Circle Applicable: Not relinquished Other (describe)
13	COC form is properly signed in relinquished/received sections?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

Comments (Use Continuation Form if needed):

List of current GEL Certifications as of 16 November 2022

State	Certification
Alabama	42200
Alaska	17-018
Alaska Drinking Water	SC00012
Arkansas	88-0651
CLIA	42D0904046
California	2940
Colorado	SC00012
Connecticut	PH-0169
DoD ELAP/ ISO17025 A2LA	2567.01
Florida NELAP	E87156
Foreign Soils Permit	P330-15-00283, P330-15-00253
Georgia	SC00012
Georgia SDWA	967
Hawaii	SC00012
Idaho	SC00012
Illinois NELAP	200029
Indiana	C-SC-01
Kansas NELAP	E-10332
Kentucky SDWA	90129
Kentucky Wastewater	90129
Louisiana Drinking Water	LA024
Louisiana NELAP	03046 (AI33904)
Maine	2019020
Maryland	270
Massachusetts	M-SC012
Massachusetts PFAS Approv	Letter
Michigan	9976
Mississippi	SC00012
Nebraska	NE-OS-26-13
Nevada	SC000122023-3
New Hampshire NELAP	2054
New Jersey NELAP	SC002
New Mexico	SC00012
New York NELAP	11501
North Carolina	233
North Carolina SDWA	45709
North Dakota	R-158
Oklahoma	2022-160
Pennsylvania NELAP	68-00485
Puerto Rico	SC00012
S. Carolina Radiochem	10120002
Sanitation Districts of L	9255651
South Carolina Chemistry	10120001
Tennessee	TN 02934
Texas NELAP	T104704235-22-20
Utah NELAP	SC000122022-37
Vermont	VT87156
Virginia NELAP	460202
Washington	C780

August 26, 2022

Kelley Sharpe
ARCADIS - Atlanta
2839 Paces Ferry Rd
STE 900
Atlanta, GA 30339

RE: Project: Plant Arkwright-CCR Ash Pond
Pace Project No.: 92621116

Dear Kelley Sharpe:

Enclosed are the analytical results for sample(s) received by the laboratory on August 17, 2022. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

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

- Pace Analytical Services - Asheville
- Pace Analytical Services - Green Bay
- Pace Analytical Services - Peachtree Corners, GA

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

Sincerely,



Maiya Parks
maiya.parks@pacelabs.com
(770)734-4200
Project Manager

Enclosures

cc: Joju Abraham, Georgia Power-CCR
Ben Hodges, Georgia Power
Warren Johnson, ARCADIS - Atlanta
Laura Midkiff, Georgia Power



REPORT OF LABORATORY ANALYSIS

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

CERTIFICATIONS

Project: Plant Arkwright-CCR Ash Pond

Pace Project No.: 92621116

Pace Analytical Services Green Bay

1241 Bellevue Street, Green Bay, WI 54302

Florida/NELAP Certification #: E87948

Illinois Certification #: 200050

Kentucky UST Certification #: 82

Louisiana Certification #: 04168

Minnesota Certification #: 055-999-334

New York Certification #: 12064

North Dakota Certification #: R-150

Virginia VELAP ID: 460263

South Carolina Certification #: 83006001

Texas Certification #: T104704529-14-1

Wisconsin Certification #: 405132750

Wisconsin DATCP Certification #: 105-444

USDA Soil Permit #: P330-16-00157

Federal Fish & Wildlife Permit #: LE51774A-0

Pace Analytical Services Asheville

2225 Riverside Drive, Asheville, NC 28804

Florida/NELAP Certification #: E87648

North Carolina Drinking Water Certification #: 37712

North Carolina Wastewater Certification #: 40

South Carolina Laboratory ID: 99030

South Carolina Certification #: 99030001

Virginia/VELAP Certification #: 460222

Pace Analytical Services Peachtree Corners

110 Technology Pkwy, Peachtree Corners, GA 30092

Florida DOH Certification #: E87315

Georgia DW Inorganics Certification #: 812

North Carolina Certification #: 381

South Carolina Certification #: 98011001

REPORT OF LABORATORY ANALYSIS

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SAMPLE SUMMARY

Project: Plant Arkwright-CCR Ash Pond
Pace Project No.: 92621116

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92621116001	BT-1.6	Water	08/16/22 14:00	08/17/22 13:00
92621116002	BT-1.1	Water	08/16/22 14:45	08/17/22 13:00
92621116003	BT-1.2	Water	08/16/22 14:30	08/17/22 13:00
92621116004	BT-1.3	Water	08/16/22 14:14	08/17/22 13:00
92621116005	BT-1.0	Water	08/16/22 14:55	08/17/22 13:00
92621116006	BC-0.8b	Water	08/16/22 15:35	08/17/22 13:00

REPORT OF LABORATORY ANALYSIS

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SAMPLE ANALYTE COUNT

Project: Plant Arkwright-CCR Ash Pond
Pace Project No.: 92621116

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92621116001	BT-1.6	EPA 6010D	KH	4	PASI-GA
		EPA 6020B	CW1	4	PASI-GA
		SM 2540C-2015	BTS	1	PASI-GA
		SM 2320B	TMK	2	PASI-G
92621116002	BT-1.1	EPA 300.0 Rev 2.1 1993	CDC	3	PASI-A
		EPA 6010D	KH	4	PASI-GA
		EPA 6020B	CW1	3	PASI-GA
		SM 2540C-2015	BTS	1	PASI-GA
92621116003	BT-1.2	SM 2320B	TMK	2	PASI-G
		EPA 300.0 Rev 2.1 1993	CDC	3	PASI-A
		EPA 6010D	KH	4	PASI-GA
		EPA 6020B	CW1	3	PASI-GA
92621116004	BT-1.3	SM 2540C-2015	BTS	1	PASI-GA
		SM 2320B	TMK	2	PASI-G
		EPA 300.0 Rev 2.1 1993	CDC	3	PASI-A
		EPA 6010D	KH	4	PASI-GA
92621116005	BT-1.0	EPA 6020B	CW1	3	PASI-GA
		SM 2540C-2015	BTS	1	PASI-GA
		SM 2320B	TMK	2	PASI-G
		EPA 300.0 Rev 2.1 1993	CDC	3	PASI-A
92621116006	BC-0.8b	EPA 6010D	KH	4	PASI-GA
		EPA 6020B	CW1	4	PASI-GA
		SM 2540C-2015	BTS	1	PASI-GA
		SM 2320B	TMK	2	PASI-G
		EPA 300.0 Rev 2.1 1993	CDC	3	PASI-A

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

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Plant Arkwright-CCR Ash Pond
Pace Project No.: 92621116

Sample: BT-1.6		Lab ID: 92621116001		Collected: 08/16/22 14:00	Received: 08/17/22 13:00	Matrix: Water		
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010D ATL ICP		Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA						
Potassium	3.0	mg/L	0.20	1	08/19/22 15:44	08/19/22 23:49	7440-09-7	
Sodium	6.7	mg/L	1.0	1	08/19/22 15:44	08/19/22 23:49	7440-23-5	
Calcium	10.1	mg/L	1.0	1	08/19/22 15:44	08/19/22 23:49	7440-70-2	
Magnesium	5.7	mg/L	0.050	1	08/19/22 15:44	08/19/22 23:49	7439-95-4	
6020 MET ICPMS		Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA						
Boron	ND	mg/L	0.040	1	08/22/22 15:10	08/23/22 17:04	7440-42-8	
Cobalt	ND	mg/L	0.0050	1	08/22/22 15:10	08/23/22 17:04	7440-48-4	
Lithium	ND	mg/L	0.030	1	08/22/22 15:10	08/23/22 17:04	7439-93-2	
Molybdenum	ND	mg/L	0.010	1	08/22/22 15:10	08/23/22 17:04	7439-98-7	
2540C Total Dissolved Solids		Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA						
Total Dissolved Solids	88.9	mg/L	25.0	1		08/19/22 08:47		
2320B Alkalinity		Analytical Method: SM 2320B Pace Analytical Services - Green Bay						
Alkalinity, Total as CaCO ₃	41.6	mg/L	10.0	1		08/25/22 21:42		
Alkalinity, Bicarbonate (CaCO ₃)	41.6	mg/L	10.0	1		08/25/22 21:42		
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville						
Chloride	5.9	mg/L	1.0	1		08/19/22 21:31	16887-00-6	
Fluoride	0.10	mg/L	0.10	1		08/19/22 21:31	16984-48-8	
Sulfate	1.6	mg/L	1.0	1		08/19/22 21:31	14808-79-8	

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ANALYTICAL RESULTS

Project: Plant Arkwright-CCR Ash Pond
Pace Project No.: 92621116

Sample: BT-1.1	Lab ID: 92621116002	Collected: 08/16/22 14:45	Received: 08/17/22 13:00	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010D ATL ICP								
Analytical Method: EPA 6010D Preparation Method: EPA 3010A								
Pace Analytical Services - Peachtree Corners, GA								
Potassium	5.4	mg/L	0.20	1	08/19/22 15:44	08/19/22 23:53	7440-09-7	
Sodium	8.1	mg/L	1.0	1	08/19/22 15:44	08/19/22 23:53	7440-23-5	
Calcium	14.0	mg/L	1.0	1	08/19/22 15:44	08/19/22 23:53	7440-70-2	
Magnesium	9.3	mg/L	0.050	1	08/19/22 15:44	08/19/22 23:53	7439-95-4	
6020 MET ICPMS								
Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Pace Analytical Services - Peachtree Corners, GA								
Boron	ND	mg/L	0.040	1	08/22/22 15:10	08/23/22 17:10	7440-42-8	
Cobalt	ND	mg/L	0.0050	1	08/22/22 15:10	08/23/22 17:10	7440-48-4	
Lithium	ND	mg/L	0.030	1	08/22/22 15:10	08/23/22 17:10	7439-93-2	
2540C Total Dissolved Solids								
Analytical Method: SM 2540C-2015								
Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	132	mg/L	25.0	1		08/19/22 08:47		
2320B Alkalinity								
Analytical Method: SM 2320B								
Pace Analytical Services - Green Bay								
Alkalinity, Total as CaCO ₃	85.3	mg/L	10.0	1		08/25/22 21:48		
Alkalinity, Bicarbonate (CaCO ₃)	85.3	mg/L	10.0	1		08/25/22 21:48		
300.0 IC Anions 28 Days								
Analytical Method: EPA 300.0 Rev 2.1 1993								
Pace Analytical Services - Asheville								
Chloride	7.9	mg/L	1.0	1		08/19/22 21:46	16887-00-6	
Fluoride	0.12	mg/L	0.10	1		08/19/22 21:46	16984-48-8	
Sulfate	2.5	mg/L	1.0	1		08/19/22 21:46	14808-79-8	

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ANALYTICAL RESULTS

Project: Plant Arkwright-CCR Ash Pond
Pace Project No.: 92621116

Sample: BT-1.2	Lab ID: 92621116003	Collected: 08/16/22 14:30	Received: 08/17/22 13:00	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010D ATL ICP								
Analytical Method: EPA 6010D Preparation Method: EPA 3010A								
Pace Analytical Services - Peachtree Corners, GA								
Potassium	6.6	mg/L	0.20	1	08/19/22 15:44	08/19/22 23:58	7440-09-7	
Sodium	8.3	mg/L	1.0	1	08/19/22 15:44	08/19/22 23:58	7440-23-5	
Calcium	11.9	mg/L	1.0	1	08/19/22 15:44	08/19/22 23:58	7440-70-2	
Magnesium	8.6	mg/L	0.050	1	08/19/22 15:44	08/19/22 23:58	7439-95-4	
6020 MET ICPMS								
Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Pace Analytical Services - Peachtree Corners, GA								
Boron	ND	mg/L	0.040	1	08/22/22 15:10	08/23/22 17:16	7440-42-8	
Cobalt	0.012	mg/L	0.0050	1	08/22/22 15:10	08/23/22 17:16	7440-48-4	
Lithium	ND	mg/L	0.030	1	08/22/22 15:10	08/23/22 17:16	7439-93-2	
2540C Total Dissolved Solids								
Analytical Method: SM 2540C-2015								
Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	77.9	mg/L	25.0	1		08/19/22 08:47		
2320B Alkalinity								
Analytical Method: SM 2320B								
Pace Analytical Services - Green Bay								
Alkalinity, Total as CaCO ₃	80.0	mg/L	10.0	1		08/25/22 21:54		
Alkalinity, Bicarbonate (CaCO ₃)	80.0	mg/L	10.0	1		08/25/22 21:54		
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		08/19/22 22:00	16887-00-6	
Fluoride	0.12	mg/L	0.10	1		08/19/22 22:00	16984-48-8	
Sulfate	4.0	mg/L	1.0	1		08/19/22 22:00	14808-79-8	

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ANALYTICAL RESULTS

Project: Plant Arkwright-CCR Ash Pond
Pace Project No.: 92621116

Sample: BT-1.3	Lab ID: 92621116004	Collected: 08/16/22 14:14		Received: 08/17/22 13:00		Matrix: Water		
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010D ATL ICP								
Analytical Method: EPA 6010D Preparation Method: EPA 3010A								
Pace Analytical Services - Peachtree Corners, GA								
Potassium	7.0	mg/L	0.20	1	08/19/22 15:44	08/20/22 00:03	7440-09-7	
Sodium	7.8	mg/L	1.0	1	08/19/22 15:44	08/20/22 00:03	7440-23-5	
Calcium	10.4	mg/L	1.0	1	08/19/22 15:44	08/20/22 00:03	7440-70-2	
Magnesium	7.5	mg/L	0.050	1	08/19/22 15:44	08/20/22 00:03	7439-95-4	
6020 MET ICPMS								
Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Pace Analytical Services - Peachtree Corners, GA								
Boron	ND	mg/L	0.040	1	08/22/22 15:10	08/23/22 17:22	7440-42-8	
Cobalt	ND	mg/L	0.0050	1	08/22/22 15:10	08/23/22 17:22	7440-48-4	
Lithium	ND	mg/L	0.030	1	08/22/22 15:10	08/23/22 17:22	7439-93-2	
2540C Total Dissolved Solids								
Analytical Method: SM 2540C-2015								
Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	136	mg/L	25.0	1		08/19/22 08:47		
2320B Alkalinity								
Analytical Method: SM 2320B								
Pace Analytical Services - Green Bay								
Alkalinity, Total as CaCO ₃	67.7	mg/L	10.0	1		08/25/22 22:00		
Alkalinity, Bicarbonate (CaCO ₃)	67.7	mg/L	10.0	1		08/25/22 22:00		
300.0 IC Anions 28 Days								
Analytical Method: EPA 300.0 Rev 2.1 1993								
Pace Analytical Services - Asheville								
Chloride	9.7	mg/L	1.0	1		08/19/22 22:15	16887-00-6	
Fluoride	0.11	mg/L	0.10	1		08/19/22 22:15	16984-48-8	
Sulfate	3.7	mg/L	1.0	1		08/19/22 22:15	14808-79-8	

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ANALYTICAL RESULTS

Project: Plant Arkwright-CCR Ash Pond
Pace Project No.: 92621116

Sample: BT-1.0	Lab ID: 92621116005	Collected: 08/16/22 14:55	Received: 08/17/22 13:00	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010D ATL ICP								
Analytical Method: EPA 6010D Preparation Method: EPA 3010A								
Pace Analytical Services - Peachtree Corners, GA								
Potassium	4.2	mg/L	0.20	1	08/19/22 15:44	08/20/22 00:08	7440-09-7	
Sodium	8.1	mg/L	1.0	1	08/19/22 15:44	08/20/22 00:08	7440-23-5	
Calcium	10.1	mg/L	1.0	1	08/19/22 15:44	08/20/22 00:08	7440-70-2	
Magnesium	8.4	mg/L	0.050	1	08/19/22 15:44	08/20/22 00:08	7439-95-4	
6020 MET ICPMS								
Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Pace Analytical Services - Peachtree Corners, GA								
Boron	0.044	mg/L	0.040	1	08/22/22 15:10	08/23/22 17:28	7440-42-8	
Cobalt	ND	mg/L	0.0050	1	08/22/22 15:10	08/23/22 17:28	7440-48-4	
Lithium	ND	mg/L	0.030	1	08/22/22 15:10	08/23/22 17:28	7439-93-2	
2540C Total Dissolved Solids								
Analytical Method: SM 2540C-2015								
Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	105	mg/L	25.0	1		08/19/22 08:47		
2320B Alkalinity								
Analytical Method: SM 2320B								
Pace Analytical Services - Green Bay								
Alkalinity, Total as CaCO ₃	61.4	mg/L	10.0	1		08/25/22 22:06		
Alkalinity, Bicarbonate (CaCO ₃)	61.4	mg/L	10.0	1		08/25/22 22:06		
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	1		08/19/22 22:29	16887-00-6	
Fluoride	0.11	mg/L	0.10	1		08/19/22 22:29	16984-48-8	
Sulfate	3.7	mg/L	1.0	1		08/19/22 22:29	14808-79-8	

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ANALYTICAL RESULTS

Project: Plant Arkwright-CCR Ash Pond
Pace Project No.: 92621116

Sample: BC-0.8b	Lab ID: 92621116006	Collected: 08/16/22 15:35	Received: 08/17/22 13:00	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010D ATL ICP								
Analytical Method: EPA 6010D Preparation Method: EPA 3010A								
Pace Analytical Services - Peachtree Corners, GA								
Potassium	2.1	mg/L	0.20	1	08/19/22 15:44	08/20/22 00:12	7440-09-7	
Sodium	8.0	mg/L	1.0	1	08/19/22 15:44	08/20/22 00:12	7440-23-5	
Calcium	14.2	mg/L	1.0	1	08/19/22 15:44	08/20/22 00:12	7440-70-2	
Magnesium	7.9	mg/L	0.050	1	08/19/22 15:44	08/20/22 00:12	7439-95-4	
6020 MET ICPMS								
Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Pace Analytical Services - Peachtree Corners, GA								
Boron	0.41	mg/L	0.040	1	08/22/22 15:10	08/23/22 17:34	7440-42-8	
Cobalt	ND	mg/L	0.0050	1	08/22/22 15:10	08/23/22 17:34	7440-48-4	
Lithium	ND	mg/L	0.030	1	08/22/22 15:10	08/23/22 17:34	7439-93-2	
Molybdenum	ND	mg/L	0.010	1	08/22/22 15:10	08/23/22 17:34	7439-98-7	
2540C Total Dissolved Solids								
Analytical Method: SM 2540C-2015								
Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	93.9	mg/L	25.0	1		08/19/22 08:47		
2320B Alkalinity								
Analytical Method: SM 2320B								
Pace Analytical Services - Green Bay								
Alkalinity, Total as CaCO ₃	41.6	mg/L	10.0	1		08/25/22 22:12		
Alkalinity, Bicarbonate (CaCO ₃)	41.6	mg/L	10.0	1		08/25/22 22:12		
300.0 IC Anions 28 Days								
Analytical Method: EPA 300.0 Rev 2.1 1993								
Pace Analytical Services - Asheville								
Chloride	3.9	mg/L	1.0	1		08/20/22 09:46	16887-00-6	
Fluoride	0.12	mg/L	0.10	1		08/20/22 09:46	16984-48-8	
Sulfate	38.1	mg/L	1.0	1		08/20/22 09:46	14808-79-8	

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QUALITY CONTROL DATA

Project: Plant Arkwright-CCR Ash Pond
Pace Project No.: 92621116

QC Batch: 718462 Analysis Method: EPA 6010D
QC Batch Method: EPA 3010A Analysis Description: 6010D ATL
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92621116001, 92621116002, 92621116003, 92621116004, 92621116005, 92621116006

METHOD BLANK: 3745239 Matrix: Water
Associated Lab Samples: 92621116001, 92621116002, 92621116003, 92621116004, 92621116005, 92621116006

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Calcium	mg/L	ND	1.0	08/19/22 22:26	
Magnesium	mg/L	ND	0.050	08/19/22 22:26	
Potassium	mg/L	ND	0.20	08/19/22 22:26	
Sodium	mg/L	ND	1.0	08/19/22 22:26	

LABORATORY CONTROL SAMPLE: 3745240

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium	mg/L	1	1.0	103	80-120	
Magnesium	mg/L	1	1.0	105	80-120	
Potassium	mg/L	1	1.1	112	80-120	
Sodium	mg/L	1	.98J	98	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3745241 3745242

Parameter	Units	MS		MSD		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		92618822019 Result	Spike Conc.	Spike Conc.	Result						
Calcium	mg/L	585	1	1	578	584	-696	-94	75-125	1	20 M1
Magnesium	mg/L	54.4	1	1	54.7	53.9	22	-53	75-125	1	20 M1
Potassium	mg/L	11.9	1	1	12.9	12.7	102	84	75-125	1	20
Sodium	mg/L	11.7	1	1	12.7	12.5	94	80	75-125	1	20

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QUALITY CONTROL DATA

Project: Plant Arkwright-CCR Ash Pond
Pace Project No.: 92621116

QC Batch: 718742 Analysis Method: EPA 6020B
QC Batch Method: EPA 3005A Analysis Description: 6020 MET
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92621116001, 92621116002, 92621116003, 92621116004, 92621116005, 92621116006

METHOD BLANK: 3746438 Matrix: Water
Associated Lab Samples: 92621116001, 92621116002, 92621116003, 92621116004, 92621116005, 92621116006

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Boron	mg/L	ND	0.040	08/23/22 14:54	
Cobalt	mg/L	ND	0.0050	08/23/22 14:54	
Lithium	mg/L	ND	0.030	08/23/22 14:54	
Molybdenum	mg/L	ND	0.010	08/23/22 14:54	

LABORATORY CONTROL SAMPLE: 3746439

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Boron	mg/L	1	0.98	98	80-120	
Cobalt	mg/L	0.1	0.10	101	80-120	
Lithium	mg/L	0.1	0.096	96	80-120	
Molybdenum	mg/L	0.1	0.10	105	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3746747 3746748

Parameter	Units	92620540002 Result	MS		MSD		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
			Spike Conc.	MS Result	Spike Conc.	MSD Result						
Boron	mg/L	6870 ug/L	1	7.9	1	7.8	100	95	75-125	1	20	
Cobalt	mg/L	26.1 ug/L	0.1	0.12	0.1	0.12	96	97	75-125	0	20	
Lithium	mg/L	ND	0.1	0.10	0.1	0.11	96	98	75-125	2	20	
Molybdenum	mg/L	ND	0.1	0.10	0.1	0.10	102	102	75-125	0	20	

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QUALITY CONTROL DATA

Project: Plant Arkwright-CCR Ash Pond
Pace Project No.: 92621116

QC Batch: 718207 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: 92621116001, 92621116002, 92621116003, 92621116004, 92621116005, 92621116006

METHOD BLANK: 3744034 Matrix: Water
Associated Lab Samples: 92621116001, 92621116002, 92621116003, 92621116004, 92621116005, 92621116006

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	25.0	08/19/22 08:45	

LABORATORY CONTROL SAMPLE: 3744035

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

SAMPLE DUPLICATE: 3744037

Parameter	Units	92621116005 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	105	108	3	25	

SAMPLE DUPLICATE: 3744488

Parameter	Units	92621107001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	56.9	62.9	10	25	

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QUALITY CONTROL DATA

Project: Plant Arkwright-CCR Ash Pond

Pace Project No.: 92621116

QC Batch: 424462

Analysis Method: SM 2320B

QC Batch Method: SM 2320B

Analysis Description: 2320B Alkalinity

Laboratory: Pace Analytical Services - Green Bay

Associated Lab Samples: 92621116001, 92621116002, 92621116003, 92621116004, 92621116005, 92621116006

METHOD BLANK: 2444373

Matrix: Water

Associated Lab Samples: 92621116001, 92621116002, 92621116003, 92621116004, 92621116005, 92621116006

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Alkalinity, Total as CaCO ₃	mg/L	ND	10.0	08/25/22 20:22	

LABORATORY CONTROL SAMPLE: 2444374

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO ₃	mg/L	200	207	103	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2444375 2444376

Parameter	Units	2444375		2444376		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual	
		92621107001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result							MSD Result
Alkalinity, Total as CaCO ₃	mg/L	30.2	200	200	237	238	104	104	80-120	0	20	

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

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Plant Arkwright-CCR Ash Pond
Pace Project No.: 92621116

QC Batch: 718269 Analysis Method: EPA 300.0 Rev 2.1 1993
QC Batch Method: EPA 300.0 Rev 2.1 1993 Analysis Description: 300.0 IC Anions
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92621116001, 92621116002, 92621116003, 92621116004, 92621116005, 92621116006

METHOD BLANK: 3744375 Matrix: Water
Associated Lab Samples: 92621116001, 92621116002, 92621116003, 92621116004, 92621116005, 92621116006

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	08/19/22 18:52	
Fluoride	mg/L	ND	0.10	08/19/22 18:52	
Sulfate	mg/L	ND	1.0	08/19/22 18:52	

LABORATORY CONTROL SAMPLE: 3744376

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	50.4	101	90-110	
Fluoride	mg/L	2.5	2.4	95	90-110	
Sulfate	mg/L	50	50.2	100	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3744377 3744378

Parameter	Units	92621107001		MSD		MS		MSD		% Rec Limits	RPD	Max RPD	Qual
		Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec					
Chloride	mg/L	7.8	50	50	58.8	59.0	102	102	90-110	0	10		
Fluoride	mg/L	0.12	2.5	2.5	2.5	2.5	94	96	90-110	2	10		
Sulfate	mg/L	5.1	50	50	56.2	56.4	102	102	90-110	0	10		

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3744379 3744380

Parameter	Units	92621116006		MSD		MS		MSD		% Rec Limits	RPD	Max RPD	Qual
		Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec					
Chloride	mg/L	3.9	50	50	54.7	55.0	102	102	90-110	1	10		
Fluoride	mg/L	0.12	2.5	2.5	2.4	2.4	92	93	90-110	1	10		
Sulfate	mg/L	38.1	50	50	88.9	89.2	102	102	90-110	0	10		

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

REPORT OF LABORATORY ANALYSIS

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QUALIFIERS

Project: Plant Arkwright-CCR Ash Pond
Pace Project No.: 92621116

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.

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Plant Arkwright-CCR Ash Pond
Pace Project No.: 92621116

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92621116001	BT-1.6	EPA 3010A	718462	EPA 6010D	718518
92621116002	BT-1.1	EPA 3010A	718462	EPA 6010D	718518
92621116003	BT-1.2	EPA 3010A	718462	EPA 6010D	718518
92621116004	BT-1.3	EPA 3010A	718462	EPA 6010D	718518
92621116005	BT-1.0	EPA 3010A	718462	EPA 6010D	718518
92621116006	BC-0.8b	EPA 3010A	718462	EPA 6010D	718518
92621116001	BT-1.6	EPA 3005A	718742	EPA 6020B	718842
92621116002	BT-1.1	EPA 3005A	718742	EPA 6020B	718842
92621116003	BT-1.2	EPA 3005A	718742	EPA 6020B	718842
92621116004	BT-1.3	EPA 3005A	718742	EPA 6020B	718842
92621116005	BT-1.0	EPA 3005A	718742	EPA 6020B	718842
92621116006	BC-0.8b	EPA 3005A	718742	EPA 6020B	718842
92621116001	BT-1.6	SM 2540C-2015	718207		
92621116002	BT-1.1	SM 2540C-2015	718207		
92621116003	BT-1.2	SM 2540C-2015	718207		
92621116004	BT-1.3	SM 2540C-2015	718207		
92621116005	BT-1.0	SM 2540C-2015	718207		
92621116006	BC-0.8b	SM 2540C-2015	718207		
92621116001	BT-1.6	SM 2320B	424462		
92621116002	BT-1.1	SM 2320B	424462		
92621116003	BT-1.2	SM 2320B	424462		
92621116004	BT-1.3	SM 2320B	424462		
92621116005	BT-1.0	SM 2320B	424462		
92621116006	BC-0.8b	SM 2320B	424462		
92621116001	BT-1.6	EPA 300.0 Rev 2.1 1993	718269		
92621116002	BT-1.1	EPA 300.0 Rev 2.1 1993	718269		
92621116003	BT-1.2	EPA 300.0 Rev 2.1 1993	718269		
92621116004	BT-1.3	EPA 300.0 Rev 2.1 1993	718269		
92621116005	BT-1.0	EPA 300.0 Rev 2.1 1993	718269		
92621116006	BC-0.8b	EPA 300.0 Rev 2.1 1993	718269		

REPORT OF LABORATORY ANALYSIS

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

Effective Date: 05/12/2022

Laboratory receiving samples:

Asheville Eden Greenwood Huntersville Raleigh Mechanicsville Atlanta Kernersville

Sample Condition Upon Receipt

Client Name:

Project #

WO#: 92621116

Courier: Fed Ex UPS USPS Client Pace Other: _____

PM: MP Due Date: 08/24/22
CLIENT: GA-ArcadAtI

Custody Seal Present? Yes No Seals Intact? Yes No

Date/Initials Person Examining Contents: 8/17/22 [Signature]

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:

4.8

Correction Factor:

0.0

Add/Subtract (°C)

Temp should be above freezing to 6°C

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

Cooler Temp Corrected (°C):

4.8

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

COMMENTS/SAMPLE DISCREPANCY

Field Data Required? Yes No

Lot ID of split containers:

CLIENT NOTIFICATION/RESOLUTION

Person contacted: _____ Date/Time: _____

Project Manager SCURF Review: _____

Date: _____

Project Manager SRF Review: _____

Date: _____



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

Effective Date: 05/12/2022

WO# : 92621116

PM: MP

Due Date: 08/24/22

CLIENT: GA-ArcadAt.I

*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-)	WGFW-Wide-mouthed Glass jar Unpreserved	AG1U-1 liter Amber Unpreserved (N/A) (Cl-)	AG1H-1 liter Amber HCl (pH < 2)	AG3U-250 mL Amber Unpreserved (N/A) (Cl-)	AG1S-1 liter Amber H2SO4 (pH < 2)	AG3S-250 mL Amber H2SO4 (pH < 2)	DG94-250 mL Amber NH4Cl (N/A)(Cl-)	DG9H-40 mL VOA HCl (N/A)	VG9T-40 mL VOA Na2S2O3 (N/A)	VG9U-40 mL VOA Unpreserved (N/A)	DG9S-40 mL VOA H3PO4 (N/A)	DG9S-40 mL VOA H2SO4 (N/A)	V/GK (3 vials per kit)-VPH/Gas kit (N/A)	SP5T-125 mL Sterile Plastic (N/A - lab)	SP2T-250 mL Sterile Plastic (N/A - lab)	BP3R-250 mL Plastic (NH2)2SO4 (9.3-9.7)	AG0U-100 mL Amber Unpreserved (N/A) (Cl-)	V5GU-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																													
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.

B.4 Data Quality Evaluation



DATA USABILITY SUMMARY

Steven Elliott (Stantec) reviewed three data packages from GEL Laboratories (GEL) for the analysis of water samples collected from August 30 to September 7, 2022, at the Georgia Power Arkwright Plant site. Samples were collected according to the Field Sampling Plan – Plant Arkwright (Amec Foster Wheeler, 2016).

Intended Use of Data: To delineate concentrations of constituents of concern in site groundwater.

Analyses requested included:

- SW-846 6020B – Metals by inductively coupled plasma - mass spectrometry (ICP/MS)
- SW-846 7470A – Mercury by manual cold-vapor
- EPA 300 Rev 2.1 – Chloride, fluoride, and sulfate by ion chromatography
- SM 2540C - 2015 – Total dissolved solids (TDS)
- SM 2320B – Total Alkalinity, Bicarbonate, Carbonate

Data were reviewed and validated as described in the field sampling plan and the *National Functional Guidelines for Inorganic Superfund Methods Data Review* (November 2020). The results of the review/validation are discussed in this Data Usability Summary (DUS) and the associated Laboratory Data Review Checklists.

DATA REVIEW/VALIDATION RESULTS

Introduction

Forty (40) groundwater samples, ten (10) field blanks, and five (5) field duplicate samples were analyzed for one or more of the analyses listed above. Table 1 lists the field identifications cross-referenced to laboratory identifications. Table 2 is a summary of qualified data. Tables 3a through 3e summarize field duplicate results.

Analytical Results

The data packages contain a minimum of one quality control batch per analytical method analyzed. The quality control batch identifies the laboratory QC samples that correspond to the designated field samples. Not detected results are reported as less than the value of the method detection limit (MDL).

Preservation and Holding Times

The samples were evaluated for agreement with the chain-of-custody forms. The samples were received in the appropriate containers with the paperwork filled out properly. The laboratory sample condition upon receipt forms indicates all samples were received at temperatures ranging from 2°C to 4°C. All samples were analyzed within the technical holding time. No data were qualified.

Calibrations

Case narratives indicate Initial and continuing calibration verification data were within method acceptance criteria.

Blanks

Laboratory Method Blanks. No contamination was detected in any of the laboratory method blanks with the following exceptions:

SDG 591798 & 592011

- Magnesium was detected in the method blank in batch 2312499 at a concentration of 0.0107 mg/L. All associated sample results were reported as either not detected or detected at concentrations greater than 10 times the blank and therefore no qualification was necessary.

SDG 592013 & 592398

- Magnesium was detected in the method blank in batch 2312858 at a concentration of 0.0253 mg/L. All associated sample results were reported as either not detected or detected at concentrations greater than 10 times the blank and therefore no qualification was necessary.

Field Blanks. Field blanks were analyzed for the full suite of sample analyses and all analytes were not detected with the following exceptions:

SDG 591798 & 592011

- Molybdenum was detected in the equipment blank EB-02 (09/02/2022) at a concentration below the laboratory Reporting Limit (RL). No qualification was required for associated sample results reported as greater than 10 times the blank concentration. Two samples (ARAMW-4 and DUP-02) had a reported value less than 10 times the blank concentration and have been qualified as estimated with a high bias (“J+”).
- Chloride was detected in the equipment blank EB-01 at a concentration above the laboratory RL and in the field blank FB-02 (both collected 08/31/2022) at a concentration below the RL. No qualification was required for associated sample results reported as greater than 10 times the blank concentration. Two samples (ARGWA-3 and ARGWC-15) had reported values less than 10 times the blank concentration and have been qualified as estimated with a high bias (“J+”).
- Boron was detected in the equipment blank EB-01 (08/31/2022) at concentrations below the RL. No qualification was required for associated sample results reported as greater than 10 times the blank concentration. Six samples (ARGWA-24, ARGWA-3, ARGWC-15, ARGWC9, ARGWA-14, and ARGWC-10) had a reported value less than 10 times the blank concentration and have been qualified as estimated with a high bias (“J+”).

SDG 592013 & 592398

- Chloride was detected in the equipment blank EB-01 (09/02/2022) at a concentration above the RL. Associated sample results were reported as detected greater than 10 times the blank concentration and therefore no qualification was necessary.

SDG 592388 & 592528

- Chloride was detected in the blanks EB-01 and EB-02 at a concentration below the RL and FB-01 and FB-02 (all collected 09/07/2022) at a concentration above the RL. No qualification was required for associated sample results reported as greater than 10 times the blank concentration. Four samples (AP1GWA-1, AP1GWA-2, AP1PZ-1, and AP1PZ-1) had a reported value less than 10 times the blank concentration and have been qualified as estimated with a high bias (“J+”).
- Molybdenum was detected in the equipment blank EB-01 (09/07/2022) at a concentration below the RL. No qualification was required for associated sample results reported as not detected or as greater than 10 times the blank concentration. Four samples (AP1PZ-1, AP1PZ-9, AP1PZ-3, and AP1PZ-6) had a reported value less than 10 times the blank concentration and have been qualified as estimated with a high bias (“J+”).

- Sulfate and barium were detected in the equipment blank EB-02 (09/07/2022) at a concentration below the RL and calcium was detected at a concentration above the RL. No qualification was required for associated sample results for barium and calcium reported as greater than 10 times the blank concentration. One sample (AP1GWA-2) had a reported value less than 10 times the blank concentration and has been qualified as estimated with a high bias (“J+”).

Laboratory Control Samples

Laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) recoveries met the laboratory acceptance criteria for all analyses.

Matrix Spike/Matrix Spike Duplicates

Site-specific MS/MSD precision and accuracy results were within the laboratory acceptance criteria with the following exceptions:

SDG 591798 & 592011

- Chloride had a high percent recovery in the post spike sample in ARGWC-9 while the MS/MSD was not reported. Chloride has been qualified as estimated (“J”) in this sample.
- Calcium had a high RPD in the serial dilution sample in ARGWA-5 while the MS/MSD had a sample concentration greater than four times the spike concentration. Calcium has been qualified as estimated (“J”) in this sample.
- Calcium, boron, magnesium, manganese, and sodium sample concentrations in sample ARGWC-18 were greater than four times the spike concentration and therefore not appropriate for evaluation.

SDG 592013 & 592398

- Barium and boron had MS/MSD percent recoveries of less than 30% in sample AP1GWA-1. Barium and boron have been qualified as rejected (“R”) in this sample.

SDG 592388 & 592528

- The same QC batch from SDG 592013 & 592398 including the sample AP1GWA-1 MS/MSD results was reported in this SDG. The same qualifications apply for this sample.

Laboratory Duplicates

Appropriate analytical duplicates were analyzed and RPDs were within the laboratory acceptance criteria.

Field Precision

Five sets of field duplicate samples were collected for this sampling event (see Tables 3a – 3e for sample/duplicate identification and precision calculations). The calculated RPDs between sample and duplicate were within the QAPP acceptance criteria of 25% for all analytes detected above five times the RL. For results reported less than five times the RL, with a difference between sample and duplicate less than two times the RL are also considered acceptable (qualified “A*”). All field duplicate precision was considered acceptable.

Summary

The groundwater analytical data are usable for the purpose of determining current concentrations of COCs in this medium at the affected property. A summary of qualified data is presented in Table 2 below.

References:

Amec Foster Wheeler, 2016. Arkwright Field Sampling Plan. October.

United State Environmental Protection Agency (USEPA), 2020. National Functional Guidelines for Superfund Inorganic Methods Data Review. November.

Stantec
 Georgia Power – Arkwright (AP-1, AP-2, AP-3)
 Analytical Report Nos. 591798-592011, 592013-592398, 592388-592528
 September 2022

Table 1 – Cross-Reference between Laboratory and Field Identifications

Field Identification	Laboratory Identification	SDG	Sample Date
EB-02	592011001	592011	09/02/2022
ARGWC-18	592011002	592011	09/02/2022
ARGWC-17	592011003	592011	09/02/2022
ARAMW-4	592011004	592011	09/02/2022
DUP-02	592011005	592011	09/02/2022
ARGWA-5	591798001	591798	08/30/2022
ARGWA-12	591798002	591798	08/30/2022
FB-01	591798003	591798	08/30/2022
ARGWA-24	591798004	591798	08/31/2022
ARGWA-3	591798005	591798	08/31/2022
ARGWA-13	591798006	591798	08/31/2022
ARGWC-7	591798007	591798	08/31/2022
ARAMW-6	591798008	591798	08/31/2022
ARGWC-15	591798009	591798	08/31/2022
ARGWC-9	591798010	591798	08/31/2022
ARGWA-14	591798011	591798	08/31/2022
ARGWC-8	591798012	591798	08/31/2022
ARGWC-10	591798013	591798	08/31/2022
FB-02	591798014	591798	08/31/2022
ARGWC-16	591798015	591798	08/31/2022
DUP-01	591798016	591798	08/31/2022
ARAMW-3	591798017	591798	08/31/2022
EB-01	591798018	591798	08/31/2022
ARGWC-22	592398001	592398	09/06/2022
ARGWC-23	592398002	592398	09/06/2022
DUP-01	592398003	592398	09/06/2022
ARAMW-7	592398004	592398	09/07/2022
ARGWA-19	592013001	592013	09/01/2022
ARGWC-21	592013002	592013	09/01/2022
ARAMW-1	592013003	592013	09/02/2022
FB-01	592013004	592013	09/02/2022
ARGWA-20	592013005	592013	09/02/2022
EB-01	592013006	592013	09/02/2022
ARAMW-8	592013007	592013	09/02/2022
ARAMW-2	592013008	592013	09/02/2022
ARGWA-20	592013009	592013	09/02/2022
AP1PZ-11	592528001	592528	09/08/2022
DUP-02	592528002	592528	09/08/2022
AP1PZ-2	592528003	592528	09/08/2022
AP1PZ-5	592528004	592528	09/08/2022
EB-01	592388001	592388	09/07/2022
AP1GWA-1	592388002	592388	09/07/2022

Stantec
 Georgia Power – Arkwright (AP-1, AP-2, AP-3)
 Analytical Report Nos. 591798-592011, 592013-592398, 592388-592528
 September 2022

Table 1 – Cross-Reference between Laboratory and Field Identifications

Field Identification	Laboratory Identification	SDG	Sample Date
AP1GWA-2	592388003	592388	09/07/2022
FB-01	592388004	592388	09/07/2022
AP1PZ-1	592388005	592388	09/07/2022
AP1PZ-7	592388006	592388	09/07/2022
AP1PZ-10	592388007	592388	09/07/2022
FB-02	592388008	592388	09/07/2022
AP1PZ-4	592388009	592388	09/07/2022
DUP-01	592388010	592388	09/07/2022
AP1PZ-9	592388011	592388	09/07/2022
AP1PZ-8	592388012	592388	09/07/2022
EB-02	592388013	592388	09/07/2022
AP1PZ-3	592388014	592388	09/07/2022
AP1PZ-6	592388015	592388	09/07/2022

Stantec
 Georgia Power – Arkwright (AP-1, AP-2, AP-3)
 Analytical Report Nos. 591798-592011, 592013-592398, 592388-592528
 September 2022

Table 2 – Qualified Analytical Data

Field Identification	Analyte	Qualification	Reason for Qualification
ARAMW-4	Molybdenum	J+	Field blank contamination
DUP-02	Molybdenum	J+	Field blank contamination
ARGWA-3	Chloride	J+	Field blank contamination
ARGWC-15	Chloride	J+	Field blank contamination
ARGWA-24	Boron	J+	Field blank contamination
ARGWA-3	Boron	J+	Field blank contamination
ARGWC-15	Boron	J+	Field blank contamination
ARGWC-9	Boron	J+	Field blank contamination
ARGWC-10	Boron	J+	Field blank contamination
AP1GWA-1	Chloride	J+	Field blank contamination
AP1GWA-2	Chloride	J+	Field blank contamination
AP1PZ-1	Chloride	J+	Field blank contamination
AP1PZ-8	Chloride	J+	Field blank contamination
AP1PZ-1	Molybdenum	J+	Field blank contamination
AP1PZ-9	Molybdenum	J+	Field blank contamination
AP1PZ-3	Molybdenum	J+	Field blank contamination
AP1PZ-6	Molybdenum	J+	Field blank contamination
AP1GWA-2	Sulfate	J+	Field blank contamination
ARGWC-9	Chloride	J	High PS recovery
ARGWA-5	Calcium	J	High SD RPD
AP1GWA-1	Barium	R	MS/MSD recoveries <30%
AP1GWA-1	Boron	R	MS/MSD recoveries <30%

J – Estimated data; the reported quantitation limit or sample concentration is approximated due to exceedance of one or more QC requirements.

J+ – The analyte was detected in an associated blank; estimated data with a high bias.

R – Rejected data due to one or more QC requirements.

UJ – The analyte was analyzed for but was detected at a level below the associated blank contamination. The associated value is an estimate and may be inaccurate or imprecise.

Stantec
 Georgia Power – Arkwright (AP-1, AP-2, AP-3)
 Analytical Report Nos. 591798-592011, 592013-592398, 592388-592528
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Table 3a – Field Precision

Field Identification	Analyte	Sample Result (mg/L)	Duplicate Result (mg/L)	RPD ^a	Qualified
ARGWC-16 / DUP-01 (083122, 591798)	Barium	0.0383	0.0397	-3.59	A
	Potassium	3.71	NA	NC	NQ
	Selenium	0.00287 J	NA	NC	NQ
	Boron	0.101	0.11	-8.53	A
	Calcium	42.4	43.2	-1.87	A
	Magnesium	31.9	NA	NC	NQ
	Manganese	0.327	NA	NC	NQ
	Sodium	15	NA	NC	NQ
	Chloride	5.67	5.74	-1.23	A
	Sulfate	243	242	0.41	A
	TDS	375	373	0.53	A
	Alkalinity	19	NA	NC	NQ
	Bicarbonate	19	NA	NC	NQ

^a RPD = ((SR - DR)*200)/(SR + DR)

A - Acceptable Data.

A* - Acceptable data where results were less than 5X the RDL and the difference between sample and duplicate was less than 2X the RDL.

J – Estimated detected.

NA – Not analyzed

NC – Not calculated

NQ – Not qualified

Stantec
 Georgia Power – Arkwright (AP-1, AP-2, AP-3)
 Analytical Report Nos. 591798-592011, 592013-592398, 592388-592528
 September 2022

Table 3b – Field Precision

Field Identification	Analyte	Sample Result (mg/L)	Duplicate Result (mg/L)	RPD ^a	Qualified
ARAMW-4 / DUP-02 (090222, 592011)	Arsenic	0.00339 J	0.00307 J	NC	A*
	Barium	0.0374	0.0358	4.37	A
	Cobalt	0.00411	0.00392	NC	A*
	Lithium	0.0117	0.0117	NC	A*
	Molybdenum	0.000288 J	0.000263 J	NC	A*
	Boron	0.477	0.471	NC	A*
	Calcium	240	230	4.26	A
	Magnesium	128	NA	NC	NQ
	Chloride	4.58	4.64	-1.30	A
	Fluoride	0.0590 J	0.0555 J	NC	A*
	Sulfate	1080	1080	0.00	A

^a RPD = ((SR - DR)*200)/(SR + DR)

A - Acceptable Data.

A* - Acceptable data where results were less than 5X the RDL and the difference between sample and duplicate was less than 2X the RDL.

J – Estimated detected.

NA – Not analyzed

NC – Not calculated

NQ – Not qualified

Stantec
 Georgia Power – Arkwright (AP-1, AP-2, AP-3)
 Analytical Report Nos. 591798-592011, 592013-592398, 592388-592528
 September 2022

Table 3c – Field Precision

Field Identification	Analyte	Sample Result (mg/L)	Duplicate Result (mg/L)	RPD ^a	Qualified
ARGWC-23/ DUP-01 (090622, 592388)	Barium	0.0939	0.0899	4.35	A
	Cobalt	0.000588 J	0.000587 J	NC	A*
	Lithium	0.0578	0.0573	0.87	A
	Magnesium	11.6	NA	NC	NQ
	Manganese	0.417	NA	NC	NQ
	Molybdenum	0.067	0.0677	1.04	A
	Boron	0.458	0.426	7.24	A
	Calcium	65.2	68.4	4.79	A
	TDS	305	294	3.67	A
	Alkalinity	180	NA	NC	NQ
	Bicarbonate	180	NA	NC	NQ
	Chloride	3.73	3.66	1.89	A
	Fluoride	0.362	0.358	NC	A*
	Sulfate	65.3	66.9	2.42	A

^a RPD = ((SR - DR)*200)/(SR + DR)

A - Acceptable Data.

A* - Acceptable data where results were less than 5X the RDL and the difference between sample and duplicate was less than 2X the RDL.

J – Estimated detected.

NA – Not analyzed

NC – Not calculated

NQ – Not qualified

Stantec
 Georgia Power – Arkwright (AP-1, AP-2, AP-3)
 Analytical Report Nos. 591798-592011, 592013-592398, 592388-592528
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Table 3d – Field Precision

Field Identification	Analyte	Sample Result (mg/L)	Duplicate Result (mg/L)	RPD ^a	Qualified
AP1PZ-4 / DUP-01 (090622, 592398)	Barium	0.0426	0.043	-0.93	A
	Cobalt	0.000335 J	0.000327 J	NC	A*
	Lithium	0.00652 J	0.00664 J	NC	A*
	Molybdenum	0.00233	0.0023	1.30	A
	Boron	3.72	3.68	1.08	A
	Calcium	370	381	-2.93	A
	TDS	2210	2230	-0.90	A
	Chloride	5.1	5.13	-0.59	A
	Fluoride	0.249	0.243	NC	A*
	Sulfate	1420	1430	-0.70	A

^a RPD = ((SR - DR)*200)/(SR + DR)

A - Acceptable Data.

A* - Acceptable data where results were less than 5X the RDL and the difference between sample and duplicate was less than 2X the RDL.

J – Estimated detected.

NA – Not analyzed

NC – Not calculated

NQ – Not qualified

Stantec
 Georgia Power – Arkwright (AP-1, AP-2, AP-3)
 Analytical Report Nos. 591798-592011, 592013-592398, 592388-592528
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Table 3e – Field Precision

Field Identification	Analyte	Sample Result (mg/L)	Duplicate Result (mg/L)	RPD ^a	Qualified
AP1PZ-11/ DUP-02 (090822, 592528)	Barium	0.0221	0.0216	2.29	A
	Molybdenum	0.00136	0.00116	NC	A*
	Boron	0.163	0.158	3.12	A
	Calcium	27.3	26.7	2.22	A
	TDS	198	199	-0.50	A
	Chloride	1.45	1.41	2.80	A
	Fluoride	0.173	0.176	NC	A*
	Sulfate	52.3	52.9	-1.14	A

^a RPD = ((SR - DR)*200)/(SR + DR)

A - Acceptable Data.

A* - Acceptable data where results were less than 5X the RDL and the difference between sample and duplicate was less than 2X the RDL.

J – Estimated detected.

NA – Not analyzed

NC – Not calculated

NQ – Not qualified

DATA USABILITY SUMMARY

Steven Elliott (Stantec) reviewed three data packages from GEL Laboratories (GEL) for the analysis of water samples collected from August 30 to September 7, 2022, at the Georgia Power Arkwright Plant site. Samples were collected according to the Field Sampling Plan – Plant Arkwright (Amec Foster Wheeler, 2016).

Intended Use of Data: To delineate concentrations of constituents of concern in site groundwater.

Analyses requested included:

- EPA Method 904 – Radium 228 by Gas Flow Proportional Counting
- EPA Method 903.1 Mod – Radium 226

Data were reviewed and validated as described in the field sampling plan and the *National Functional Guidelines for Inorganic Superfund Methods Data Review* (November 2020). The results of the review/validation are discussed in this Data Usability Summary (DUS) and the associated Laboratory Data Review Checklists.

DATA REVIEW/VALIDATION RESULTS

Introduction

Forty (40) groundwater samples, ten (10) field blanks, and five (5) field duplicate samples were analyzed for one or more of the analyses listed above. Table 1 lists the field identifications cross-referenced to laboratory identifications. Table 2 is a summary of qualified data. Tables 3a through 3h summarize field duplicate results.

Analytical Results

The data packages contain a minimum of one quality control batch per analytical method analyzed. The quality control batch identifies the laboratory QC samples that correspond to the designated field samples. Not detected results are reported as less than the value of the method detection limit (MDL).

Preservation and Holding Times

The samples were evaluated for agreement with the chain-of-custody forms. The samples were received in the appropriate containers with the paperwork filled out properly. The laboratory sample condition upon receipt forms indicates all samples were received at temperatures ranging from 1.9°C to 3.2°C. All samples were analyzed within the technical holding time. No data were qualified.

Calibrations

Case narratives indicate Initial and continuing calibration verification data were within method acceptance criteria.

Blanks

Laboratory Method Blanks. No contamination was detected in any of the laboratory method blanks.

Field Blanks. Field blanks were analyzed for the full suite of sample analyses and all analytes were not detected with the following exceptions:

SDG 591802 & 592012

- Radium 226 was detected in the field blank FB-01 (08/30/2022) at a concentration above the laboratory Reporting Limit (RL). No qualification was required for associated sample results reported as not detected (“U”).

SDG 592014 & 592399

- Radium 226 was detected in the equipment blank EB-01 and field blank FB-01 (09/02/2022) at concentrations below the RL. Associated sample results were reported as detected greater than 10 times the blank concentration and therefore no qualification was necessary. Four samples (ARAMW-1, ARGWA-20, ARAMW-8, and ARAMW-2) had a reported value less than 10 times the blank concentration and have been qualified as estimated with a high bias (“J+”).

SDG 592396 & 592534

- Radium 226 was detected in the blanks EB-02 (09/07/2022) at a concentration below the RL. No qualification was required for associated sample results reported as not detected. Seven samples (AP1GWA-1, AP1GWA-2, AP1PZ-4, AP1PZ-9, AP1PZ-8, AP1PZ-3, and AP1PZ-6) had a reported value less than 10 times the blank concentration and have been qualified as estimated with a high bias (“J+”).

Laboratory Control Samples

Laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) recoveries met the laboratory acceptance criteria for all analyses.

Matrix Spike/Matrix Spike Duplicates

Site-specific MS/MSD precision and accuracy results were within the laboratory acceptance criteria.

Laboratory Duplicates

Appropriate analytical duplicates were analyzed and RPDs were within the laboratory acceptance criteria with the following exceptions.

SDG 592396 & 592534

- Radium 226 had a high laboratory duplicate RPD in sample AP1GWA-1 and has been qualified as estimated (“J”).

Field Precision

Five sets of field duplicate samples were collected for this sampling event (see Tables 3a – 3e for sample/duplicate identification and precision calculations). The calculated RPDs between sample and duplicate were within the QAPP acceptance criteria of 25% for all analytes detected above five times the RL. For results reported less than five times the RL, with a difference between sample and duplicate less than two times the RL are also considered acceptable (qualified “A*”). All field duplicate precision was considered acceptable.

Summary

The groundwater analytical data are usable for the purpose of determining current concentrations of COCs in this medium at the affected property. A summary of qualified data is presented in Table 2 below.

References:

Amec Foster Wheeler, 2016. Arkwright Field Sampling Plan. October.

United State Environmental Protection Agency (USEPA), 2020. National Functional Guidelines for Superfund Inorganic Methods Data Review. November.

Stantec
 Georgia Power – Arkwright (AP-1, AP-2, AP-3)
 Analytical Report Nos. 591802-592012, 592014-592399, 592534-592396
 October 2022

Table 1 – Cross-Reference between Laboratory and Field Identifications

Field Identification	Laboratory Identification	SDG	Sample Date
EB-02	592012001	592012	09/02/2022
ARGWC-18	592012002	592012	09/02/2022
ARGWC-17	592012003	592012	09/02/2022
ARAMW-4	592012004	592012	09/02/2022
DUP-02	592012005	592012	09/02/2022
ARGWA-5	591802001	591802	08/30/2022
ARGWA-12	591802002	591802	08/30/2022
FB-01	591802003	591802	08/30/2022
ARGWA-24	591802004	591802	08/31/2022
ARGWA-3	591802005	591802	08/31/2022
ARGWA-13	591802006	591802	08/31/2022
ARGWC-7	591802007	591802	08/31/2022
ARAMW-6	591802008	591802	08/31/2022
ARGWC-15	591802009	591802	08/31/2022
ARGWC-9	591802010	591802	08/31/2022
ARGWA-14	591802011	591802	08/31/2022
ARGWC-8	591802012	591802	08/31/2022
ARGWC-10	591802013	591802	08/31/2022
FB-02	591802014	591802	08/31/2022
ARGWC-16	591802015	591802	08/31/2022
DUP-01	591802016	591802	08/31/2022
ARAMW-3	591802017	591802	08/31/2022
EB-01	591802018	591802	08/31/2022
ARGWC-22	592399001	592399	09/06/2022
ARGWC-23	592399002	592399	09/06/2022
DUP-01	592399003	592399	09/06/2022
ARAMW-7	592399004	592399	09/07/2022
ARGWA-19	592014001	592014	09/01/2022
ARGWC-21	592014002	592014	09/01/2022
ARAMW-1	592014003	592014	09/02/2022
FB-01	592014004	592014	09/02/2022
ARGWA-20	592014005	592014	09/02/2022
EB-01	592014006	592014	09/02/2022
ARAMW-8	592014007	592014	09/02/2022
ARAMW-2	592014008	592014	09/02/2022
AP1PZ-11	592534001	592534	09/08/2022
DUP-02	592534002	592534	09/08/2022
AP1PZ-2	592534003	592534	09/08/2022
AP1PZ-5	592534004	592534	09/08/2022
EB-01	592396001	592396	09/07/2022
AP1GWA-1	592396002	592396	09/07/2022
AP1GWA-2	592396003	592396	09/07/2022

Stantec
 Georgia Power – Arkwright (AP-1, AP-2, AP-3)
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 October 2022

Table 1 – Cross-Reference between Laboratory and Field Identifications

Field Identification	Laboratory Identification	SDG	Sample Date
FB-01	592396004	592396	09/07/2022
AP1PZ-1	592396005	592396	09/07/2022
AP1PZ-7	592396006	592396	09/07/2022
AP1PZ-10	592396007	592396	09/07/2022
FB-02	592396008	592396	09/07/2022
AP1PZ-4	592396009	592396	09/07/2022
DUP-01	592396010	592396	09/07/2022
AP1PZ-9	592396011	592396	09/07/2022
AP1PZ-8	592396012	592396	09/07/2022
EB-02	592396013	592396	09/07/2022
AP1PZ-3	592396014	592396	09/07/2022
AP1PZ-6	592396015	592396	09/07/2022

Table 2 – Qualified Analytical Data

Field Identification	Analyte	Qualification	Reason for Qualification
ARAMW-1	Radium 226	J+	Field blank contamination
ARGWA-20	Radium 226	J+	Field blank contamination
ARAMW-8	Radium 226	J+	Field blank contamination
ARAMW-2	Radium 226	J+	Field blank contamination
AP1GWA-1	Radium 226	J+	Field blank contamination, Lab Duplicate RPD
AP1GWA-2	Radium 226	J+	Field blank contamination
AP1PZ-4	Radium 226	J+	Field blank contamination
AP1PZ-9	Radium 226	J+	Field blank contamination
AP1PZ-8	Radium 226	J+	Field blank contamination
AP1PZ-3	Radium 226	J+	Field blank contamination
AP1PZ-6	Radium 226	J+	Field blank contamination

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Table 3a – Field Precision

Field Identification	Analyte	Sample Result (mg/L)	Duplicate Result (mg/L)	RPD ^a	Qualified
ARGWC-16 / DUP-01 (083122, 591802)	Radium 228	-0.688 U	0.202 U	NC	A*
	Radium 226	0.493	1.8	NC	A*
	Radium 226+228	0.493	2	NC	A*

^a RPD = ((SR - DR)*200)/(SR + DR)

A - Acceptable Data.

A* - Acceptable data where results were less than 5X the RDL and the difference between sample and duplicate was less than 2X the RDL.

J – Estimated detected.

NA – Not analyzed

NC – Not calculated

NQ – Not qualified

Table 3b – Field Precision

Field Identification	Analyte	Sample Result (mg/L)	Duplicate Result (mg/L)	RPD ^a	Qualified
ARAMW-4 / DUP-02 (090222, 592012)	Radium 228	0.493 U	1.25 U	NC	A*
	Radium 226	0.455	0.983	NC	A*
	Radium 226+228	0.947	2.23	NC	A*

^a RPD = ((SR - DR)*200)/(SR + DR)

A - Acceptable Data.

A* - Acceptable data where results were less than 5X the RDL and the difference between sample and duplicate was less than 2X the RDL.

J – Estimated detected.

NA – Not analyzed

NC – Not calculated

NQ – Not qualified

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Table 3c – Field Precision

Field Identification	Analyte	Sample Result (mg/L)	Duplicate Result (mg/L)	RPD ^a	Qualified
ARGWC-23/ DUP-01 (090622, 592399)	Radium 228	1.57 U	0.272 U	NC	A*
	Radium 226	0.79	0.363 U	NC	A*
	Radium 226+228	2.36	0.635	NC	A*

^a RPD = ((SR - DR)*200)/(SR + DR)

A - Acceptable Data.

A* - Acceptable data where results were less than 5X the RDL and the difference between sample and duplicate was less than 2X the RDL.

J – Estimated detected.

NA – Not analyzed

NC – Not calculated

NQ – Not qualified

Table 3d – Field Precision

Field Identification	Analyte	Sample Result (mg/L)	Duplicate Result (mg/L)	RPD ^a	Qualified
AP1PZ-4 / DUP-01 (090622, 592396)	Radium 228	1.73 U	-0.991 U	NC	A*
	Radium 226	0.59	0.374 U	NC	A*
	Radium 226+228	2.32	0.374	NC	A*

^a RPD = ((SR - DR)*200)/(SR + DR)

A - Acceptable Data.

A* - Acceptable data where results were less than 5X the RDL and the difference between sample and duplicate was less than 2X the RDL.

J – Estimated detected.

NA – Not analyzed

NC – Not calculated

NQ – Not qualified

Stantec
 Georgia Power – Arkwright (AP-1, AP-2, AP-3)
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Table 3e – Field Precision

Field Identification	Analyte	Sample Result (mg/L)	Duplicate Result (mg/L)	RPD ^a	Qualified
AP1PZ-11/ DUP-02 (090822, 592534)	Radium 228	0.891 U	-0.177 U	NC	A*
	Radium 226	0.166 U	0.613	NC	A*
	Radium 226+228	1.06	0.613	NC	A*

^a RPD = ((SR - DR)*200)/(SR + DR)

A - Acceptable Data.

A* - Acceptable data where results were less than 5X the RDL and the difference between sample and duplicate was less than 2X the RDL.

J – Estimated detected.

NA – Not analyzed

NC – Not calculated

NQ – Not qualified

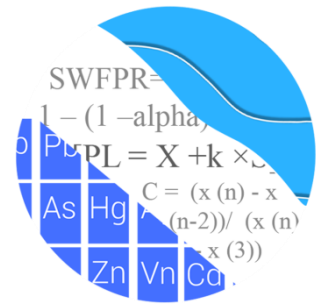
Appendix C Statistical Analyses



GROUNDWATER STATS CONSULTING

February 28, 2023

Southern Company Services
Attn: Mr. Joju Abraham
241 Ralph McGill Blvd NE, Bin 10160
Atlanta, Georgia 30308-3374



Re: Plant Arkwright #3 Ash Pond
August/September 2022 Semi-Annual Statistical Analysis

Dear Mr. Abraham,

Groundwater Stats Consulting, formerly the statistical consulting division of Sanitas Technologies, is pleased to provide the August/September 2022 Semi-Annual Groundwater statistical analysis of data for Georgia Power Company's Plant Arkwright #3 Ash Pond. The analysis complies with the Georgia Environmental Protection Division (EPD) Rules for Solid Waste Management Chapter 391-3-4-.10 and follows the United States Environmental Protection Agency (USEPA) Unified Guidance (2009).

Semi-annual sampling is conducted for USEPA's Coal Combustion Residuals (CCR) Appendix III and IV parameters in addition to Appendix I parameters in accordance with the Georgia Department of Natural Resources, Environmental Protection Division groundwater monitoring regulations. The monitoring well network, as provided by Southern Company Services, consists of the following:

- **Upgradient wells:** ARGWA-3, ARGWA-5, ARGWA-12, ARGWA-13, ARGWA-14, and ARGWA-24
- **Downgradient wells:** ARGWC-7, ARGWC-8, ARGWC-9, ARGWC-10, ARGWC-15, ARGWC-16, ARGWC-17, and ARGWC-18
- **Assessment wells:** ARAMW-3, ARAMW-4, and ARAMW-6

Note that upgradient well ARGWA-24 was first sampled during December 2020 and has a maximum of 5 sampling events; therefore, data from this well are pooled with neighboring upgradient wells and included in the calculation of interwell statistical limits.

For the assessment wells, sampling began in 2020 and when a minimum of 4 samples is available, confidence intervals are used to evaluate the Appendix IV constituents.

Data were sent electronically to Groundwater Stats Consulting, and the statistical analysis was reviewed by Kristina Rayner, Founder and Senior Statistician of Groundwater Stats Consulting.

The CCR and Georgia EPD programs monitor the constituents listed below. The terms “parameters” and “constituents” are used interchangeably.

- **Georgia Appendix I:** arsenic, barium, cadmium, lead, selenium, and silver
- **CCR Appendix III:** boron, calcium, chloride, fluoride, pH, sulfate, and TDS
- **CCR Appendix IV:** antimony, arsenic, barium, beryllium, cadmium, chromium, cobalt, combined radium 226 + 228, fluoride, lithium, lead, mercury, molybdenum, selenium, and thallium

Data for Appendix III constituents were analyzed using prediction limits; data for Appendix I constituents were analyzed using prediction limits and confidence intervals; and data for Appendix IV were analyzed using confidence intervals. Note that when there are no detections present in downgradient wells for a given constituent, statistical analyses are not required. Summaries of well/constituent pairs containing 100% non-detects since 2016 for Appendix I and IV constituents follow this letter. Note that Minimum Detectable Concentrations (MDCs) were not provided for the September 2022 combined radium 226 + 228 observations at the time of this report.

Time series plots for all well/constituent pairs are provided and are particularly useful for screening parameters detected in downgradient wells which require statistical analyses (Figure A). Additionally, a separate section of box plots is included for all constituents at upgradient and downgradient wells (Figure B). The time series plots are used to initially screen for suspected outliers and trends, while the box plots provide visual representation of variation within individual wells and between all wells. Values in background which have been flagged as outliers may be seen in a lighter font and as a disconnected symbol on the graphs. A summary of flagged outliers follows this report (Figure C).

Based on the previous screening, described below, data at all wells for constituents detected in downgradient wells were evaluated for the following: 1) outliers; 2) trends; 3) most appropriate statistical method 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 the parameters listed above comply

with the USEPA Unified Guidance and the Georgia Environmental Protection Division Rules for Solid Waste Management Chapter 391-3-4-.10. 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. Power curves were based on the following:

Georgia Appendix I Constituents:

- Semi-Annual Sampling
- Interwell Prediction Limits with 1-of-2 resample plan (all parameters)
- # Constituents: 6
- # Downgradient wells: 8

CCR Appendix III Constituents:

- Semi-Annual Sampling
- Interwell Prediction Limits with 1-of-2 resample plan (all parameters)
- # Constituents: 7
- # Downgradient wells: 8

The distribution of data is tested using the Shapiro-Wilk/Shapiro-Francia test for normality. Parametric prediction limits (or tolerance limits or confidence intervals, as applicable) 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 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 following approaches are used for handling non-detects (USEPA, 2009).

- No statistical analyses are required on wells and analytes containing 100% non-detects (USEPA Unified Guidance, 2009, Chapter 6).
- When data contain <15% non-detects in background, simple substitution of one-half the reporting limit is utilized in the statistical analysis. The reporting limit utilized for non-detects is the most recent practical quantification limit (PQL) as reported by the laboratory.
- When data contain between 15-50% non-detects, the Kaplan-Meier non-detect adjustment is applied to the background data. This technique adjusts the mean and standard deviation of the historical concentrations to account for concentrations below the reporting limit.

- Nonparametric prediction limits are used on data containing greater than 50% non-detects.

Natural systems continuously evolve due to physical changes made to the environment. Examples include capping a landfill, paving areas near a well, or lining a drainage channel to prevent erosion. Periodic updating of background statistical limits is necessary to accommodate these types of changes. In the interwell case, prediction limits are updated with upgradient well data during each event after careful screening for any new outliers. In some cases, the earlier portion of data are deselected prior to construction of limits to provide sensitive limits that will rapidly detect changes in groundwater quality. Even though the data are excluded from the calculation, the values will continue to be reported and shown in tables and graphs.

Summary of Background Screening - Conducted in 2019

Outlier Analysis

Time series plots were 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 and parameters were 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. Several values were flagged as outliers as a result of the Tukey's tests. In some cases, high values not identified by this test were flagged as outliers so that resulting prediction limits will be lower and capable of detecting future changes at these wells. Outliers were flagged in downgradient wells, though there are no intrawell statistical analyses in the current report. For the analysis of the Appendix IV constituents, this improves the estimate of downgradient confidence intervals.

A summary of flagged values is included in Figure C. When the most recent values are identified as outliers in upgradient wells, those values are not flagged in the database at that time (except in cases where they would cause background limits to be elevated) as they may represent a possible trend in an upgradient well. 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. Due to changing reporting limits, when non-detects are replaced with the most recent reporting limit, previously flagged "J" values (or estimated values) are sometimes flagged as outliers if they are much higher than current reporting limits.

Additionally, when any values are flagged in the database as outliers, the measurements 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.

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 Testing

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, which tests for statistically significant increasing or decreasing trends, was used to evaluate data at all upgradient wells and downgradient wells with detections.

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 from 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.

Several statistically significant increasing and decreasing trends were noted for constituents in both upgradient and downgradient wells, and the results of these trend tests were included with the previous screening. Although data since 2014 for selenium at upgradient well ARGWA-13 have consistently been detections above the reporting limit while earlier data are primarily non-detect values, the measurements across the record represent natural variability in groundwater quality upgradient of the facility. Therefore, all concentrations for this well/constituent pair are used in constructing statistical limits.

Determination of Spatial Variation

The Analysis of Variance (ANOVA) was used to statistically evaluate differences in average concentrations among upgradient wells for constituents detected in downgradient wells. The ANOVA 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 significant differences among upgradient well data for several constituents. While data were further tested for intrawell eligibility during the screening, interwell methods are used for all Appendix I and Appendix III constituents in accordance with Georgia EPD requirements.

Prediction Limits Appendix I & III Parameters – August/September 2022

All Appendix I and III parameters were analyzed using interwell prediction limits. Upgradient well data were re-assessed using time series for potential outliers during this analysis. No new values were flagged and a summary of flagged outliers follows this report (Figure C).

Appendix I & III Interwell Prediction Limits

Note that the interwell limit for sulfate is high relative to concentrations in downgradient wells and is a result of the reported concentrations in upgradient well ARGWA-13 which reflect natural variation in groundwater quality at the site. Since this limit will not be sensitive to changes in sulfate concentrations in downgradient wells, trend tests were performed as a secondary measure to identify whether concentrations are changing over time at each well. The results are discussed below in the trend test section.

Interwell prediction limits, combined with a 1-of-2 resample plan, were constructed using all historical upgradient well data through September 2022 for Appendix I and III constituents (Figures D & E, respectively). Interwell prediction limits pool upgradient well data to establish a background limit for an individual constituent. The August/September 2022 sample from each downgradient well is compared to the background limits 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. Summary tables, along with complete results of the interwell prediction limits for Appendix I and III constituents, follow this letter. No exceedances were noted for the Appendix I constituents. The following exceedances were identified for the Appendix III constituents:

Appendix III constituents:

- Boron: ARGWC-8 and ARGWC-18
- pH (lower limit): ARGWC-16 and ARGWC-17

Trend Test Evaluation – Appendix III

When prediction limit exceedances are identified in downgradient wells, data are further evaluated using the Sen's Slope/Mann Kendall trend test to determine whether concentrations are statistically increasing, decreasing, or stable (Figure F). Upgradient well data are included in the trend analyses for all parameters found to exceed their prediction limit in downgradient wells to identify whether similar patterns exist upgradient of the site. Upgradient trends are an indication of natural variability in groundwater quality unrelated to practices at the site.

Additionally, trend tests for sulfate were included to monitor concentrations at each well. Note that samples for sulfate were collected prior to 2016 and all data were evaluated in the trend analyses. Both a summary table and graphical display of trend tests results follows this letter. Statistically significant trends were identified for the following well/constituent pairs:

Increasing trends:

- Boron: ARGWA-13 (upgradient)
- Sulfate: ARGWA-13 (upgradient), ARGWC-16, and ARGWC-9

Decreasing trends:

- pH: ARGWC-17
- Sulfate: ARGWA-5, ARGWA-14, (both upgradient), ARGWC-7, and ARGWC-8

Confidence Interval Analysis of Appendix I & IV Parameters – August/September 2022

For Appendix I and IV parameters, confidence intervals for each downgradient well/constituent pair were compared against corresponding Groundwater Protection Standards (GWPS). GWPS were developed as described below. Downgradient and assessment well/constituent pairs that contain 100% non-detects since 2016 do not require analysis. Data from upgradient wells for Appendix I and IV parameters are reassessed for outliers during each analysis. No new outliers were flagged during this analysis and a summary of flagged outliers follows this report (Figure C).

Interwell Upper Tolerance Limits

First, interwell tolerance limits were used to calculate site-specific background limits from all available pooled upgradient well data through September 2022 for Appendix I and IV constituents (Figure G). Parametric tolerance limits are used when data follow a normal or transformed-normal distribution. When data contained greater than 50% non-detects or did not follow a normal or transformed-normal distribution, non-parametric tolerance limits were used.

Groundwater Protection Standards

The background limits were then used when determining the groundwater protection standard (GWPS) under 40 CFR §257.95(h) and Georgia EPD Rule 391-3-4-.10(6)(a). On July 30, 2018, US EPA revised the Federal CCR rule updating GWPS for cobalt, lead, lithium, and molybdenum as described above in 40 CFR §257.95(h)(2). Effective on February 22, 2022, Georgia EPD incorporated the updated GWPS into the current Georgia EPD Rules for Solid Waste Management 391-3-4-.10(6)(a). In accordance with the updated Rules, the GWPS is:

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

Following Georgia EPD Rule requirements and the Federal CCR requirements, GWPS were established for statistical comparison of Appendix I and IV constituents for this sample event (Figure H).

Confidence Intervals

To complete the statistical comparison to GWPS, confidence intervals were constructed using data from June 2016 through September 2022 for each of the Appendix I and Appendix IV constituents in accordance with the state requirements in each downgradient well and assessment wells with a minimum of 4 samples (Figure I). The Sanitas software was used to calculate the tolerance limits and the confidence intervals. The confidence intervals were compared to the GWPS established using the rules mentioned above. Only when the entire confidence interval is above a GWPS is the downgradient well/constituent pair considered to exceed its respective standard. If there is an exceedance of the GWPS, a statistically significant level (SSL) exceedance is identified. Summaries and graphical results of the confidence intervals analyses follow this letter. Exceedances were noted for the following well/constituent pairs:

- Cobalt: ARGWC-17

Trend Test Evaluation – Appendix I & IV

Data at wells with confidence interval exceedances are further evaluated using the Sen's Slope/Mann Kendall trend test to determine whether concentrations are statistically increasing, decreasing, or stable (Figure J). Upgradient wells are included in the trend analyses to identify whether similar patterns exist upgradient of the site for the same constituents. When trends are present in upgradient trends, it is an indication of natural variability in groundwater quality unrelated to practices at the site. A summary of the Appendix I & IV trend test results follows this letter and no statistically significant trends were identified.

Thank you for the opportunity to assist you in the statistical analysis of groundwater quality for Plant Arkwright #3 Ash Pond. If you have any questions or comments, please feel free to contact us.

For Groundwater Stats Consulting,



Andrew T. Collins
Project Manager



Kristina L. Rayner
Senior Statistician

100% Non-Detects: Appendix I & IV Downgradient and Assessment

Analysis Run 11/5/2022 2:03 PM View: Appendix I & IV
Plant Arkwright Client: Southern Company Data: Arkwright No 3

Antimony (mg/L)

ARAMW-3, ARAMW-4, ARAMW-6, ARGWC-15, ARGWC-16, ARGWC-17, ARGWC-18, ARGWC-8

Arsenic (mg/L)

ARAMW-6

Beryllium (mg/L)

ARAMW-3, ARAMW-4, ARAMW-6, ARGWC-10, ARGWC-15

Cadmium (mg/L)

ARAMW-3, ARAMW-6, ARGWC-10, ARGWC-15, ARGWC-18, ARGWC-7, ARGWC-8, ARGWC-9

Chromium (mg/L)

ARAMW-3, ARAMW-4, ARAMW-6, ARGWC-18

Lead (mg/L)

ARAMW-3, ARAMW-4, ARAMW-6, ARGWC-7

Lithium (mg/L)

ARAMW-6

Mercury (mg/L)

ARAMW-3, ARAMW-4, ARAMW-6, ARGWC-17, ARGWC-9

Molybdenum (mg/L)

ARGWC-10, ARGWC-16, ARGWC-17, ARGWC-18, ARGWC-7, ARGWC-9

Selenium (mg/L)

ARAMW-6, ARGWC-18, ARGWC-8

Silver (mg/L)

ARAMW-3, ARAMW-4, ARAMW-6, ARGWC-10, ARGWC-17, ARGWC-18, ARGWC-7, ARGWC-8, ARGWC-9

Thallium (mg/L)

ARAMW-3, ARGWC-10, ARGWC-7, ARGWC-8, ARGWC-9

Appendix I Interwell Prediction Limits - All Results (No Significant)

Plant Arkwright Client: Southern Company Data: Arkwright No 3 Printed 11/5/2022, 1:42 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Arsenic (mg/L)	ARGWC-10	0.005	n/a	8/31/2022	0.005ND	No	211	n/a	n/a	81.04	n/a	n/a	0.00004917	NP Inter (NDs) 1 of 2
Arsenic (mg/L)	ARGWC-15	0.005	n/a	8/31/2022	0.005ND	No	211	n/a	n/a	81.04	n/a	n/a	0.00004917	NP Inter (NDs) 1 of 2
Arsenic (mg/L)	ARGWC-16	0.005	n/a	8/31/2022	0.005ND	No	211	n/a	n/a	81.04	n/a	n/a	0.00004917	NP Inter (NDs) 1 of 2
Arsenic (mg/L)	ARGWC-17	0.005	n/a	9/2/2022	0.005ND	No	211	n/a	n/a	81.04	n/a	n/a	0.00004917	NP Inter (NDs) 1 of 2
Arsenic (mg/L)	ARGWC-18	0.005	n/a	9/2/2022	0.005ND	No	211	n/a	n/a	81.04	n/a	n/a	0.00004917	NP Inter (NDs) 1 of 2
Arsenic (mg/L)	ARGWC-7	0.005	n/a	8/31/2022	0.005ND	No	211	n/a	n/a	81.04	n/a	n/a	0.00004917	NP Inter (NDs) 1 of 2
Arsenic (mg/L)	ARGWC-8	0.005	n/a	8/31/2022	0.005ND	No	211	n/a	n/a	81.04	n/a	n/a	0.00004917	NP Inter (NDs) 1 of 2
Arsenic (mg/L)	ARGWC-9	0.005	n/a	8/31/2022	0.005ND	No	211	n/a	n/a	81.04	n/a	n/a	0.00004917	NP Inter (NDs) 1 of 2
Barium (mg/L)	ARGWC-10	0.24	n/a	8/31/2022	0.0345	No	208	n/a	n/a	0	n/a	n/a	0.00004917	NP Inter (normality) 1 of 2
Barium (mg/L)	ARGWC-15	0.24	n/a	8/31/2022	0.0325	No	208	n/a	n/a	0	n/a	n/a	0.00004917	NP Inter (normality) 1 of 2
Barium (mg/L)	ARGWC-16	0.24	n/a	8/31/2022	0.0383	No	208	n/a	n/a	0	n/a	n/a	0.00004917	NP Inter (normality) 1 of 2
Barium (mg/L)	ARGWC-17	0.24	n/a	9/2/2022	0.0727	No	208	n/a	n/a	0	n/a	n/a	0.00004917	NP Inter (normality) 1 of 2
Barium (mg/L)	ARGWC-18	0.24	n/a	9/2/2022	0.0369	No	208	n/a	n/a	0	n/a	n/a	0.00004917	NP Inter (normality) 1 of 2
Barium (mg/L)	ARGWC-7	0.24	n/a	8/31/2022	0.0505	No	208	n/a	n/a	0	n/a	n/a	0.00004917	NP Inter (normality) 1 of 2
Barium (mg/L)	ARGWC-8	0.24	n/a	8/31/2022	0.0571	No	208	n/a	n/a	0	n/a	n/a	0.00004917	NP Inter (normality) 1 of 2
Barium (mg/L)	ARGWC-9	0.24	n/a	8/31/2022	0.0391	No	208	n/a	n/a	0	n/a	n/a	0.00004917	NP Inter (normality) 1 of 2
Cadmium (mg/L)	ARGWC-10	0.0043	n/a	8/31/2022	0.001ND	No	203	n/a	n/a	94.58	n/a	n/a	0.00004917	NP Inter (NDs) 1 of 2
Cadmium (mg/L)	ARGWC-15	0.0043	n/a	8/31/2022	0.001ND	No	203	n/a	n/a	94.58	n/a	n/a	0.00004917	NP Inter (NDs) 1 of 2
Cadmium (mg/L)	ARGWC-16	0.0043	n/a	8/31/2022	0.001ND	No	203	n/a	n/a	94.58	n/a	n/a	0.00004917	NP Inter (NDs) 1 of 2
Cadmium (mg/L)	ARGWC-17	0.0043	n/a	9/2/2022	0.001ND	No	203	n/a	n/a	94.58	n/a	n/a	0.00004917	NP Inter (NDs) 1 of 2
Cadmium (mg/L)	ARGWC-18	0.0043	n/a	9/2/2022	0.001ND	No	203	n/a	n/a	94.58	n/a	n/a	0.00004917	NP Inter (NDs) 1 of 2
Cadmium (mg/L)	ARGWC-7	0.0043	n/a	8/31/2022	0.001ND	No	203	n/a	n/a	94.58	n/a	n/a	0.00004917	NP Inter (NDs) 1 of 2
Cadmium (mg/L)	ARGWC-8	0.0043	n/a	8/31/2022	0.001ND	No	203	n/a	n/a	94.58	n/a	n/a	0.00004917	NP Inter (NDs) 1 of 2
Cadmium (mg/L)	ARGWC-9	0.0043	n/a	8/31/2022	0.001ND	No	203	n/a	n/a	94.58	n/a	n/a	0.00004917	NP Inter (NDs) 1 of 2
Lead (mg/L)	ARGWC-10	0.013	n/a	8/31/2022	0.002ND	No	209	n/a	n/a	89.47	n/a	n/a	0.00004917	NP Inter (NDs) 1 of 2
Lead (mg/L)	ARGWC-15	0.013	n/a	8/31/2022	0.002ND	No	209	n/a	n/a	89.47	n/a	n/a	0.00004917	NP Inter (NDs) 1 of 2
Lead (mg/L)	ARGWC-16	0.013	n/a	8/31/2022	0.002ND	No	209	n/a	n/a	89.47	n/a	n/a	0.00004917	NP Inter (NDs) 1 of 2
Lead (mg/L)	ARGWC-17	0.013	n/a	9/2/2022	0.002ND	No	209	n/a	n/a	89.47	n/a	n/a	0.00004917	NP Inter (NDs) 1 of 2
Lead (mg/L)	ARGWC-18	0.013	n/a	9/2/2022	0.002ND	No	209	n/a	n/a	89.47	n/a	n/a	0.00004917	NP Inter (NDs) 1 of 2
Lead (mg/L)	ARGWC-7	0.013	n/a	8/31/2022	0.002ND	No	209	n/a	n/a	89.47	n/a	n/a	0.00004917	NP Inter (NDs) 1 of 2
Lead (mg/L)	ARGWC-8	0.013	n/a	8/31/2022	0.002ND	No	209	n/a	n/a	89.47	n/a	n/a	0.00004917	NP Inter (NDs) 1 of 2
Lead (mg/L)	ARGWC-9	0.013	n/a	8/31/2022	0.002ND	No	209	n/a	n/a	89.47	n/a	n/a	0.00004917	NP Inter (NDs) 1 of 2
Selenium (mg/L)	ARGWC-10	0.034	n/a	8/31/2022	0.005ND	No	211	n/a	n/a	82.46	n/a	n/a	0.00004917	NP Inter (NDs) 1 of 2
Selenium (mg/L)	ARGWC-15	0.034	n/a	8/31/2022	0.005ND	No	211	n/a	n/a	82.46	n/a	n/a	0.00004917	NP Inter (NDs) 1 of 2
Selenium (mg/L)	ARGWC-16	0.034	n/a	8/31/2022	0.00287J	No	211	n/a	n/a	82.46	n/a	n/a	0.00004917	NP Inter (NDs) 1 of 2
Selenium (mg/L)	ARGWC-17	0.034	n/a	9/2/2022	0.005ND	No	211	n/a	n/a	82.46	n/a	n/a	0.00004917	NP Inter (NDs) 1 of 2
Selenium (mg/L)	ARGWC-18	0.034	n/a	9/2/2022	0.005ND	No	211	n/a	n/a	82.46	n/a	n/a	0.00004917	NP Inter (NDs) 1 of 2
Selenium (mg/L)	ARGWC-7	0.034	n/a	8/31/2022	0.005ND	No	211	n/a	n/a	82.46	n/a	n/a	0.00004917	NP Inter (NDs) 1 of 2
Selenium (mg/L)	ARGWC-8	0.034	n/a	8/31/2022	0.005ND	No	211	n/a	n/a	82.46	n/a	n/a	0.00004917	NP Inter (NDs) 1 of 2
Selenium (mg/L)	ARGWC-9	0.034	n/a	8/31/2022	0.005ND	No	211	n/a	n/a	82.46	n/a	n/a	0.00004917	NP Inter (NDs) 1 of 2
Silver (mg/L)	ARGWC-10	0.0051	n/a	8/31/2022	0.001ND	No	179	n/a	n/a	94.41	n/a	n/a	0.00006137	NP Inter (NDs) 1 of 2
Silver (mg/L)	ARGWC-15	0.0051	n/a	8/31/2022	0.001ND	No	179	n/a	n/a	94.41	n/a	n/a	0.00006137	NP Inter (NDs) 1 of 2
Silver (mg/L)	ARGWC-16	0.0051	n/a	8/31/2022	0.001ND	No	179	n/a	n/a	94.41	n/a	n/a	0.00006137	NP Inter (NDs) 1 of 2
Silver (mg/L)	ARGWC-17	0.0051	n/a	9/2/2022	0.001ND	No	179	n/a	n/a	94.41	n/a	n/a	0.00006137	NP Inter (NDs) 1 of 2
Silver (mg/L)	ARGWC-18	0.0051	n/a	9/2/2022	0.001ND	No	179	n/a	n/a	94.41	n/a	n/a	0.00006137	NP Inter (NDs) 1 of 2
Silver (mg/L)	ARGWC-7	0.0051	n/a	8/31/2022	0.001ND	No	179	n/a	n/a	94.41	n/a	n/a	0.00006137	NP Inter (NDs) 1 of 2
Silver (mg/L)	ARGWC-8	0.0051	n/a	8/31/2022	0.001ND	No	179	n/a	n/a	94.41	n/a	n/a	0.00006137	NP Inter (NDs) 1 of 2
Silver (mg/L)	ARGWC-9	0.0051	n/a	8/31/2022	0.001ND	No	179	n/a	n/a	94.41	n/a	n/a	0.00006137	NP Inter (NDs) 1 of 2

Appendix III Interwell Prediction Limits - Significant Results

Plant Arkwright Client: Southern Company Data: Arkwright No 3 Printed 11/5/2022, 3:51 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)	ARGWC-18	0.96	n/a	9/2/2022	2.53	Yes	90	n/a	n/a	52.22	n/a	n/a	0.0002368	NP Inter (NDs) 1 of 2
Boron (mg/L)	ARGWC-8	0.96	n/a	8/31/2022	1.05	Yes	90	n/a	n/a	52.22	n/a	n/a	0.0002368	NP Inter (NDs) 1 of 2
pH (SU)	ARGWC-16	7.04	5.53	8/31/2022	5.18	Yes	99	n/a	n/a	0	n/a	n/a	0.0003943	NP Inter (normality) 1 of 2
pH (SU)	ARGWC-17	7.04	5.53	9/2/2022	5.11	Yes	99	n/a	n/a	0	n/a	n/a	0.0003943	NP Inter (normality) 1 of 2

Appendix III Interwell Prediction Limits - All Results

Plant Arkwright Client: Southern Company Data: Arkwright No 3 Printed 11/5/2022, 3:51 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)	ARGWC-10	0.96	n/a	8/31/2022	0.00863	No	90	n/a	n/a	52.22	n/a	n/a	0.0002368	NP Inter (NDs) 1 of 2
Boron (mg/L)	ARGWC-15	0.96	n/a	8/31/2022	0.0137	No	90	n/a	n/a	52.22	n/a	n/a	0.0002368	NP Inter (NDs) 1 of 2
Boron (mg/L)	ARGWC-16	0.96	n/a	8/31/2022	0.101	No	90	n/a	n/a	52.22	n/a	n/a	0.0002368	NP Inter (NDs) 1 of 2
Boron (mg/L)	ARGWC-17	0.96	n/a	9/2/2022	0.0555	No	90	n/a	n/a	52.22	n/a	n/a	0.0002368	NP Inter (NDs) 1 of 2
Boron (mg/L)	ARGWC-18	0.96	n/a	9/2/2022	2.53	Yes	90	n/a	n/a	52.22	n/a	n/a	0.0002368	NP Inter (NDs) 1 of 2
Boron (mg/L)	ARGWC-7	0.96	n/a	8/31/2022	0.0815	No	90	n/a	n/a	52.22	n/a	n/a	0.0002368	NP Inter (NDs) 1 of 2
Boron (mg/L)	ARGWC-8	0.96	n/a	8/31/2022	1.05	Yes	90	n/a	n/a	52.22	n/a	n/a	0.0002368	NP Inter (NDs) 1 of 2
Boron (mg/L)	ARGWC-9	0.96	n/a	8/31/2022	0.00885	No	90	n/a	n/a	52.22	n/a	n/a	0.0002368	NP Inter (NDs) 1 of 2
Calcium (mg/L)	ARGWC-10	190	n/a	8/31/2022	7.65	No	90	n/a	n/a	0	n/a	n/a	0.0002368	NP Inter (normality) 1 of 2
Calcium (mg/L)	ARGWC-15	190	n/a	8/31/2022	25	No	90	n/a	n/a	0	n/a	n/a	0.0002368	NP Inter (normality) 1 of 2
Calcium (mg/L)	ARGWC-16	190	n/a	8/31/2022	42.4	No	90	n/a	n/a	0	n/a	n/a	0.0002368	NP Inter (normality) 1 of 2
Calcium (mg/L)	ARGWC-17	190	n/a	9/2/2022	23.7	No	90	n/a	n/a	0	n/a	n/a	0.0002368	NP Inter (normality) 1 of 2
Calcium (mg/L)	ARGWC-18	190	n/a	9/2/2022	52.4	No	90	n/a	n/a	0	n/a	n/a	0.0002368	NP Inter (normality) 1 of 2
Calcium (mg/L)	ARGWC-7	190	n/a	8/31/2022	9.99	No	90	n/a	n/a	0	n/a	n/a	0.0002368	NP Inter (normality) 1 of 2
Calcium (mg/L)	ARGWC-8	190	n/a	8/31/2022	43	No	90	n/a	n/a	0	n/a	n/a	0.0002368	NP Inter (normality) 1 of 2
Calcium (mg/L)	ARGWC-9	190	n/a	8/31/2022	4.77	No	90	n/a	n/a	0	n/a	n/a	0.0002368	NP Inter (normality) 1 of 2
Chloride (mg/L)	ARGWC-10	15.1	n/a	8/31/2022	4.2	No	198	n/a	n/a	0.5051	n/a	n/a	0.00005031	NP Inter (normality) 1 of 2
Chloride (mg/L)	ARGWC-15	15.1	n/a	8/31/2022	3.01	No	198	n/a	n/a	0.5051	n/a	n/a	0.00005031	NP Inter (normality) 1 of 2
Chloride (mg/L)	ARGWC-16	15.1	n/a	8/31/2022	5.67	No	198	n/a	n/a	0.5051	n/a	n/a	0.00005031	NP Inter (normality) 1 of 2
Chloride (mg/L)	ARGWC-17	15.1	n/a	9/2/2022	2.74	No	198	n/a	n/a	0.5051	n/a	n/a	0.00005031	NP Inter (normality) 1 of 2
Chloride (mg/L)	ARGWC-18	15.1	n/a	9/2/2022	6.52	No	198	n/a	n/a	0.5051	n/a	n/a	0.00005031	NP Inter (normality) 1 of 2
Chloride (mg/L)	ARGWC-7	15.1	n/a	8/31/2022	4.59	No	198	n/a	n/a	0.5051	n/a	n/a	0.00005031	NP Inter (normality) 1 of 2
Chloride (mg/L)	ARGWC-8	15.1	n/a	8/31/2022	5.86	No	198	n/a	n/a	0.5051	n/a	n/a	0.00005031	NP Inter (normality) 1 of 2
Chloride (mg/L)	ARGWC-9	15.1	n/a	8/31/2022	5.28J	No	198	n/a	n/a	0.5051	n/a	n/a	0.00005031	NP Inter (normality) 1 of 2
Fluoride (mg/L)	ARGWC-10	0.53	n/a	8/31/2022	0.1ND	No	100	n/a	n/a	32	n/a	n/a	0.0001928	NP Inter (normality) 1 of 2
Fluoride (mg/L)	ARGWC-15	0.53	n/a	8/31/2022	0.169	No	100	n/a	n/a	32	n/a	n/a	0.0001928	NP Inter (normality) 1 of 2
Fluoride (mg/L)	ARGWC-16	0.53	n/a	8/31/2022	0.1ND	No	100	n/a	n/a	32	n/a	n/a	0.0001928	NP Inter (normality) 1 of 2
Fluoride (mg/L)	ARGWC-17	0.53	n/a	9/2/2022	0.082J	No	100	n/a	n/a	32	n/a	n/a	0.0001928	NP Inter (normality) 1 of 2
Fluoride (mg/L)	ARGWC-18	0.53	n/a	9/2/2022	0.141	No	100	n/a	n/a	32	n/a	n/a	0.0001928	NP Inter (normality) 1 of 2
Fluoride (mg/L)	ARGWC-7	0.53	n/a	8/31/2022	0.1ND	No	100	n/a	n/a	32	n/a	n/a	0.0001928	NP Inter (normality) 1 of 2
Fluoride (mg/L)	ARGWC-8	0.53	n/a	8/31/2022	0.172	No	100	n/a	n/a	32	n/a	n/a	0.0001928	NP Inter (normality) 1 of 2
Fluoride (mg/L)	ARGWC-9	0.53	n/a	8/31/2022	0.147	No	100	n/a	n/a	32	n/a	n/a	0.0001928	NP Inter (normality) 1 of 2
pH (SU)	ARGWC-10	7.04	5.53	8/31/2022	5.96	No	99	n/a	n/a	0	n/a	n/a	0.0003943	NP Inter (normality) 1 of 2
pH (SU)	ARGWC-15	7.04	5.53	8/31/2022	6.46	No	99	n/a	n/a	0	n/a	n/a	0.0003943	NP Inter (normality) 1 of 2
pH (SU)	ARGWC-16	7.04	5.53	8/31/2022	5.18	Yes	99	n/a	n/a	0	n/a	n/a	0.0003943	NP Inter (normality) 1 of 2
pH (SU)	ARGWC-17	7.04	5.53	9/2/2022	5.11	Yes	99	n/a	n/a	0	n/a	n/a	0.0003943	NP Inter (normality) 1 of 2
pH (SU)	ARGWC-18	7.04	5.53	9/2/2022	6.03	No	99	n/a	n/a	0	n/a	n/a	0.0003943	NP Inter (normality) 1 of 2
pH (SU)	ARGWC-7	7.04	5.53	8/31/2022	5.98	No	99	n/a	n/a	0	n/a	n/a	0.0003943	NP Inter (normality) 1 of 2
pH (SU)	ARGWC-8	7.04	5.53	8/31/2022	6.38	No	99	n/a	n/a	0	n/a	n/a	0.0003943	NP Inter (normality) 1 of 2
pH (SU)	ARGWC-9	7.04	5.53	8/31/2022	5.98	No	99	n/a	n/a	0	n/a	n/a	0.0003943	NP Inter (normality) 1 of 2
Sulfate (mg/L)	ARGWC-10	950	n/a	8/31/2022	0.494	No	206	n/a	n/a	17.48	n/a	n/a	0.00004917	NP Inter (normality) 1 of 2
Sulfate (mg/L)	ARGWC-15	950	n/a	8/31/2022	5.64	No	206	n/a	n/a	17.48	n/a	n/a	0.00004917	NP Inter (normality) 1 of 2
Sulfate (mg/L)	ARGWC-16	950	n/a	8/31/2022	243	No	206	n/a	n/a	17.48	n/a	n/a	0.00004917	NP Inter (normality) 1 of 2
Sulfate (mg/L)	ARGWC-17	950	n/a	9/2/2022	151	No	206	n/a	n/a	17.48	n/a	n/a	0.00004917	NP Inter (normality) 1 of 2
Sulfate (mg/L)	ARGWC-18	950	n/a	9/2/2022	198	No	206	n/a	n/a	17.48	n/a	n/a	0.00004917	NP Inter (normality) 1 of 2
Sulfate (mg/L)	ARGWC-7	950	n/a	8/31/2022	36.3	No	206	n/a	n/a	17.48	n/a	n/a	0.00004917	NP Inter (normality) 1 of 2
Sulfate (mg/L)	ARGWC-8	950	n/a	8/31/2022	54.1	No	206	n/a	n/a	17.48	n/a	n/a	0.00004917	NP Inter (normality) 1 of 2
Sulfate (mg/L)	ARGWC-9	950	n/a	8/31/2022	1.31	No	206	n/a	n/a	17.48	n/a	n/a	0.00004917	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	ARGWC-10	1500	n/a	8/31/2022	69	No	85	n/a	n/a	0	n/a	n/a	0.0002674	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	ARGWC-15	1500	n/a	8/31/2022	125	No	85	n/a	n/a	0	n/a	n/a	0.0002674	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	ARGWC-16	1500	n/a	8/31/2022	375	No	85	n/a	n/a	0	n/a	n/a	0.0002674	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	ARGWC-17	1500	n/a	9/2/2022	240	No	85	n/a	n/a	0	n/a	n/a	0.0002674	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	ARGWC-18	1500	n/a	9/2/2022	444	No	85	n/a	n/a	0	n/a	n/a	0.0002674	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	ARGWC-7	1500	n/a	8/31/2022	101	No	85	n/a	n/a	0	n/a	n/a	0.0002674	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	ARGWC-8	1500	n/a	8/31/2022	248	No	85	n/a	n/a	0	n/a	n/a	0.0002674	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	ARGWC-9	1500	n/a	8/31/2022	63	No	85	n/a	n/a	0	n/a	n/a	0.0002674	NP Inter (normality) 1 of 2

Appendix III Trend Tests - Significant Results

Plant Arkwright Client: Southern Company Data: Arkwright No 3 Printed 11/5/2022, 4:09 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Boron (mg/L)	ARGWA-13 (bg)	0.07802	79	63	Yes	17	0	n/a	n/a	0.01	NP
pH (SU)	ARGWC-17	-0.06226	-80	-74	Yes	19	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	ARGWA-13 (bg)	51.62	281	161	Yes	32	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	ARGWA-14 (bg)	-17.6	-315	-146	Yes	30	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	ARGWA-5 (bg)	-0.001691	-2.696	-2.58	Yes	54	33.33	n/a	n/a	0.01	NP
Sulfate (mg/L)	ARGWC-16	11.24	276	161	Yes	32	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	ARGWC-7	-6.543	-614	-214	Yes	39	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	ARGWC-8	-4.377	-436	-161	Yes	32	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	ARGWC-9	0.07128	224	152	Yes	31	6.452	n/a	n/a	0.01	NP

Appendix III Trend Tests - All Results

Plant Arkwright Client: Southern Company Data: Arkwright No 3 Printed 11/5/2022, 4:09 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Boron (mg/L)	ARGWA-12 (bg)	0	33	63	No	17	52.94	n/a	n/a	0.01	NP
Boron (mg/L)	ARGWA-13 (bg)	0.07802	79	63	Yes	17	0	n/a	n/a	0.01	NP
Boron (mg/L)	ARGWA-14 (bg)	0.002946	32	63	No	17	23.53	n/a	n/a	0.01	NP
Boron (mg/L)	ARGWA-24 (bg)	0	-4	-12	No	5	80	n/a	n/a	0.01	NP
Boron (mg/L)	ARGWA-3 (bg)	0	-3	-63	No	17	88.24	n/a	n/a	0.01	NP
Boron (mg/L)	ARGWA-5 (bg)	0	-1	-63	No	17	88.24	n/a	n/a	0.01	NP
Boron (mg/L)	ARGWC-18	0.01391	17	63	No	17	0	n/a	n/a	0.01	NP
Boron (mg/L)	ARGWC-8	-0.03567	-50	-63	No	17	0	n/a	n/a	0.01	NP
pH (SU)	ARGWA-12 (bg)	-0.00899	-22	-68	No	18	0	n/a	n/a	0.01	NP
pH (SU)	ARGWA-13 (bg)	-0.002328	-4	-68	No	18	0	n/a	n/a	0.01	NP
pH (SU)	ARGWA-14 (bg)	0	0	68	No	18	0	n/a	n/a	0.01	NP
pH (SU)	ARGWA-24 (bg)	-0.07169	-6	-12	No	5	0	n/a	n/a	0.01	NP
pH (SU)	ARGWA-3 (bg)	0.004931	14	81	No	20	0	n/a	n/a	0.01	NP
pH (SU)	ARGWA-5 (bg)	0	0	81	No	20	0	n/a	n/a	0.01	NP
pH (SU)	ARGWC-16	-0.01053	-24	-81	No	20	0	n/a	n/a	0.01	NP
pH (SU)	ARGWC-17	-0.06226	-80	-74	Yes	19	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	ARGWA-12 (bg)	0	4	161	No	32	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	ARGWA-13 (bg)	51.62	281	161	Yes	32	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	ARGWA-14 (bg)	-17.6	-315	-146	Yes	30	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	ARGWA-24 (bg)	-0.4594	-3	-12	No	5	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	ARGWA-3 (bg)	0	-1.167	-2.58	No	53	33.96	n/a	n/a	0.01	NP
Sulfate (mg/L)	ARGWA-5 (bg)	-0.001691	-2.696	-2.58	Yes	54	33.33	n/a	n/a	0.01	NP
Sulfate (mg/L)	ARGWC-10	0	56	161	No	32	46.88	n/a	n/a	0.01	NP
Sulfate (mg/L)	ARGWC-15	0.1766	99	161	No	32	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	ARGWC-16	11.24	276	161	Yes	32	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	ARGWC-17	-4.669	-128	-146	No	30	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	ARGWC-18	0.4057	83	161	No	32	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	ARGWC-7	-6.543	-614	-214	Yes	39	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	ARGWC-8	-4.377	-436	-161	Yes	32	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	ARGWC-9	0.07128	224	152	Yes	31	6.452	n/a	n/a	0.01	NP

Upper Tolerance Limit Summary Table

Plant Arkwright Client: Southern Company Data: Arkwright No 3 Printed 11/5/2022, 2:00 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig. Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Antimony (mg/L)	n/a	0.003	n/a	n/a	n/a	n/a 80	n/a	n/a	97.5	n/a	n/a	0.01652	NP Inter(NDs)
Arsenic (mg/L)	n/a	0.005	n/a	n/a	n/a	n/a 211	n/a	n/a	81.04	n/a	n/a	NaN	NP Inter(NDs)
Barium (mg/L)	n/a	0.24	n/a	n/a	n/a	n/a 208	n/a	n/a	0	n/a	n/a	NaN	NP Inter(normality)
Beryllium (mg/L)	n/a	0.0005	n/a	n/a	n/a	n/a 90	n/a	n/a	96.67	n/a	n/a	0.009888	NP Inter(NDs)
Cadmium (mg/L)	n/a	0.0043	n/a	n/a	n/a	n/a 203	n/a	n/a	94.58	n/a	n/a	NaN	NP Inter(NDs)
Chromium (mg/L)	n/a	0.01	n/a	n/a	n/a	n/a 90	n/a	n/a	63.33	n/a	n/a	0.009888	NP Inter(NDs)
Cobalt (mg/L)	n/a	0.0058	n/a	n/a	n/a	n/a 95	n/a	n/a	81.05	n/a	n/a	0.007651	NP Inter(NDs)
Combined Radium 226 + 228 (pCi/L)	n/a	1.032	n/a	n/a	n/a	n/a 90	0.4061	0.3219	0	None	No	0.05	Inter
Fluoride (mg/L)	n/a	0.53	n/a	n/a	n/a	n/a 100	n/a	n/a	32	n/a	n/a	0.005921	NP Inter(normality)
Lead (mg/L)	n/a	0.013	n/a	n/a	n/a	n/a 209	n/a	n/a	89.47	n/a	n/a	NaN	NP Inter(NDs)
Lithium (mg/L)	n/a	0.01	n/a	n/a	n/a	n/a 94	n/a	n/a	46.81	n/a	n/a	0.008054	NP Inter(normality)
Mercury (mg/L)	n/a	0.0002	n/a	n/a	n/a	n/a 75	n/a	n/a	96	n/a	n/a	0.02134	NP Inter(NDs)
Molybdenum (mg/L)	n/a	0.004	n/a	n/a	n/a	n/a 95	n/a	n/a	90.53	n/a	n/a	0.007651	NP Inter(NDs)
Selenium (mg/L)	n/a	0.034	n/a	n/a	n/a	n/a 211	n/a	n/a	82.46	n/a	n/a	NaN	NP Inter(NDs)
Silver (mg/L)	n/a	0.0051	n/a	n/a	n/a	n/a 179	n/a	n/a	94.41	n/a	n/a	NaN	NP Inter(NDs)
Thallium (mg/L)	n/a	0.002	n/a	n/a	n/a	n/a 90	n/a	n/a	92.22	n/a	n/a	0.009888	NP Inter(NDs)

PLANT ARKWRIGHT LF #3 GWPS				
Constituent Name	MCL	CCR-Rule Specified Level	Background Limit	GWPS
Antimony, Total (mg/L)	0.006		0.003	0.006
Arsenic, Total (mg/L)	0.01		0.005	0.01
Barium, Total (mg/L)	2		0.24	2
Beryllium, Total (mg/L)	0.004		0.0005	0.004
Cadmium, Total (mg/L)	0.005		0.0043	0.005
Chromium, Total (mg/L)	0.1		0.01	0.1
Cobalt, Total (mg/L)	n/a	0.006	0.0058	0.006
Combined Radium, Total (pCi/L)	5		1.03	5
Fluoride, Total (mg/L)	4		0.53	4
Lead, Total (mg/L)	n/a	0.015	0.013	0.015
Lithium, Total (mg/L)	n/a	0.04	0.01	0.04
Mercury, Total (mg/L)	0.002		0.0002	0.002
Molybdenum, Total (mg/L)	n/a	0.1	0.004	0.1
Selenium, Total (mg/L)	0.05		0.034	0.05
Silver, Total (mg/L)	n/a		0.0051	0.0051
Thallium, Total (mg/L)	0.002		0.002	0.002

**MCL = Maximum Contaminant Level*

**GWPS = Groundwater Protection Standard*

**CCR = Coal Combustion Residuals*

Confidence Intervals - Significant Results

Plant Arkwright Client: Southern Company Data: Arkwright No 3 Printed 11/5/2022, 2:09 PM

<u>Constituent</u>	<u>Well</u>	<u>Upper Lim.</u>	<u>Lower Lim.</u>	<u>Compliance</u>	<u>Sig.</u>	<u>N</u>	<u>Mean</u>	<u>Std. Dev.</u>	<u>%NDs</u>	<u>ND Adj.</u>	<u>Transform</u>	<u>Alpha</u>	<u>Method</u>
Cobalt (mg/L)	ARGWC-17	0.03095	0.01971	0.006	Yes	18	0.02533	0.009286	0	None	No	0.01	Param.

Confidence Intervals - All Results

Plant Arkwright Client: Southern Company Data: Arkwright No 3 Printed 11/5/2022, 2:09 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Antimony (mg/L)	ARGWC-10	0.003	0.00094	0.006	No	15	0.002863	0.0005319	93.33	None	No	0.01	NP (NDs)
Antimony (mg/L)	ARGWC-7	0.003	0.0013	0.006	No	15	0.002887	0.0004389	93.33	None	No	0.01	NP (NDs)
Antimony (mg/L)	ARGWC-9	0.003	0.00048	0.006	No	15	0.002832	0.0006507	93.33	None	No	0.01	NP (NDs)
Arsenic (mg/L)	ARAMW-3	0.005	0.00034	0.01	No	6	0.004223	0.001902	83.33	None	No	0.0155	NP (NDs)
Arsenic (mg/L)	ARAMW-4	0.005	0.00034	0.01	No	6	0.002412	0.002323	33.33	None	No	0.0155	NP (normality)
Arsenic (mg/L)	ARGWC-10	0.005	0.0019	0.01	No	19	0.004389	0.00147	84.21	None	No	0.01	NP (NDs)
Arsenic (mg/L)	ARGWC-15	0.005	0.00062	0.01	No	19	0.004525	0.001423	89.47	None	No	0.01	NP (NDs)
Arsenic (mg/L)	ARGWC-16	0.005	0.001	0.01	No	19	0.004082	0.001831	78.95	None	No	0.01	NP (NDs)
Arsenic (mg/L)	ARGWC-17	0.005	0.00084	0.01	No	19	0.003657	0.002044	68.42	None	No	0.01	NP (NDs)
Arsenic (mg/L)	ARGWC-18	0.005	0.0016	0.01	No	19	0.004105	0.001797	78.95	None	No	0.01	NP (NDs)
Arsenic (mg/L)	ARGWC-7	0.005	0.0015	0.01	No	19	0.004594	0.001223	89.47	None	No	0.01	NP (NDs)
Arsenic (mg/L)	ARGWC-8	0.005	0.0014	0.01	No	19	0.004111	0.001778	78.95	None	No	0.01	NP (NDs)
Arsenic (mg/L)	ARGWC-9	0.005	0.0011	0.01	No	19	0.004558	0.001326	89.47	None	No	0.01	NP (NDs)
Barium (mg/L)	ARAMW-3	0.094	0.0619	2	No	6	0.07465	0.01471	0	None	No	0.0155	NP (normality)
Barium (mg/L)	ARAMW-4	0.053	0.036	2	No	6	0.04307	0.007967	0	None	No	0.0155	NP (normality)
Barium (mg/L)	ARAMW-6	0.04748	0.03685	2	No	6	0.04217	0.003869	0	None	No	0.01	Param.
Barium (mg/L)	ARGWC-10	0.03333	0.03058	2	No	19	0.03195	0.002345	0	None	No	0.01	Param.
Barium (mg/L)	ARGWC-15	0.038	0.029	2	No	19	0.03402	0.0106	0	None	No	0.01	NP (normality)
Barium (mg/L)	ARGWC-16	0.05326	0.04421	2	No	19	0.04874	0.007725	0	None	No	0.01	Param.
Barium (mg/L)	ARGWC-17	0.05459	0.04481	2	No	19	0.04991	0.00868	0	None	sqrt(x)	0.01	Param.
Barium (mg/L)	ARGWC-18	0.04016	0.03571	2	No	19	0.03794	0.0038	0	None	No	0.01	Param.
Barium (mg/L)	ARGWC-7	0.04303	0.03604	2	No	19	0.03954	0.005972	0	None	No	0.01	Param.
Barium (mg/L)	ARGWC-8	0.051	0.0443	2	No	19	0.04765	0.00572	0	None	No	0.01	Param.
Barium (mg/L)	ARGWC-9	0.0473	0.04202	2	No	19	0.04466	0.004509	0	None	No	0.01	Param.
Beryllium (mg/L)	ARGWC-16	0.0005	0.00027	0.004	No	17	0.0004865	0.00005578	94.12	None	No	0.01	NP (NDs)
Beryllium (mg/L)	ARGWC-17	0.0004671	0.0002824	0.004	No	17	0.0004345	0.0001326	41.18	Kaplan-Meier	sqrt(x)	0.01	Param.
Beryllium (mg/L)	ARGWC-18	0.0005	0.00034	0.004	No	17	0.0004906	0.00003881	94.12	Kaplan-Meier	No	0.01	NP (NDs)
Beryllium (mg/L)	ARGWC-7	0.0005	0.00041	0.004	No	17	0.0004712	0.0000981	88.24	Kaplan-Meier	No	0.01	NP (NDs)
Beryllium (mg/L)	ARGWC-8	0.0005	0.00047	0.004	No	17	0.0004982	0.000007276	94.12	Kaplan-Meier	No	0.01	NP (NDs)
Beryllium (mg/L)	ARGWC-9	0.0005	0.00037	0.004	No	17	0.0004924	0.00003153	94.12	Kaplan-Meier	No	0.01	NP (NDs)
Cadmium (mg/L)	ARAMW-4	0.001	0.00023	0.005	No	5	0.000846	0.0003444	80	None	No	0.031	NP (NDs)
Cadmium (mg/L)	ARGWC-16	0.001	0.0001	0.005	No	18	0.00095	0.0002121	94.44	None	No	0.01	NP (NDs)
Cadmium (mg/L)	ARGWC-17	0.001	0.0003	0.005	No	18	0.0008172	0.0003538	77.78	None	No	0.01	NP (NDs)
Chromium (mg/L)	ARGWC-10	0.005408	0.004492	0.1	No	17	0.004971	0.0007776	0	None	x^(1/3)	0.01	Param.
Chromium (mg/L)	ARGWC-15	0.01	0.0087	0.1	No	17	0.009006	0.002587	82.35	None	No	0.01	NP (NDs)
Chromium (mg/L)	ARGWC-16	0.0023	0.0016	0.1	No	17	0.002376	0.001999	5.882	None	No	0.01	NP (normality)
Chromium (mg/L)	ARGWC-17	0.01	0.0021	0.1	No	17	0.008529	0.003278	82.35	None	No	0.01	NP (NDs)
Chromium (mg/L)	ARGWC-7	0.003781	0.003106	0.1	No	17	0.003444	0.0005385	0	None	No	0.01	Param.
Chromium (mg/L)	ARGWC-8	0.01	0.0017	0.1	No	17	0.009012	0.00279	88.24	None	No	0.01	NP (NDs)
Chromium (mg/L)	ARGWC-9	0.0109	0.0071	0.1	No	17	0.008915	0.001584	0	None	No	0.01	NP (normality)
Cobalt (mg/L)	ARAMW-3	0.0011	0.00044	0.006	No	7	0.0006021	0.000225	0	None	No	0.008	NP (normality)
Cobalt (mg/L)	ARAMW-4	0.005677	0.00415	0.006	No	8	0.004914	0.0007204	0	None	No	0.01	Param.
Cobalt (mg/L)	ARAMW-6	0.002659	0.00005058	0.006	No	7	0.001601	0.001571	28.57	Kaplan-Meier	sqrt(x)	0.01	Param.
Cobalt (mg/L)	ARGWC-10	0.001	0.00019	0.006	No	18	0.0008133	0.0003595	77.78	Kaplan-Meier	No	0.01	NP (NDs)
Cobalt (mg/L)	ARGWC-15	0.0036	0.0003	0.006	No	18	0.003217	0.00716	38.89	None	No	0.01	NP (normality)
Cobalt (mg/L)	ARGWC-16	0.001	0.00026	0.006	No	18	0.0008639	0.000314	83.33	None	No	0.01	NP (NDs)
Cobalt (mg/L)	ARGWC-17	0.03095	0.01971	0.006	Yes	18	0.02533	0.009286	0	None	No	0.01	Param.
Cobalt (mg/L)	ARGWC-18	0.001507	0.00116	0.006	No	18	0.001334	0.0002868	0	None	No	0.01	Param.
Cobalt (mg/L)	ARGWC-7	0.001	0.00034	0.006	No	18	0.0009126	0.0002582	88.89	None	No	0.01	NP (NDs)
Cobalt (mg/L)	ARGWC-8	0.001	0.00021	0.006	No	18	0.0006572	0.0003989	55.56	None	No	0.01	NP (NDs)
Cobalt (mg/L)	ARGWC-9	0.001	0.00021	0.006	No	18	0.0008606	0.0003212	83.33	None	No	0.01	NP (NDs)
Combined Radium 226 + 228 (pCi/L)	ARAMW-3	1.076	-0.01517	5	No	6	0.5305	0.3972	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	ARAMW-4	0.9781	0.3326	5	No	6	0.6553	0.2349	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	ARAMW-6	1.173	-0.1038	5	No	6	0.5346	0.4647	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	ARGWC-10	0.3136	0.03647	5	No	17	0.175	0.2212	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	ARGWC-15	0.669	0.387	5	No	17	0.7389	0.6588	0	None	No	0.01	NP (normality)
Combined Radium 226 + 228 (pCi/L)	ARGWC-16	0.568	0.0598	5	No	17	0.4006	0.3941	0	None	No	0.01	NP (normality)
Combined Radium 226 + 228 (pCi/L)	ARGWC-17	0.675	0.107	5	No	17	0.4475	0.5036	0	None	No	0.01	NP (normality)
Combined Radium 226 + 228 (pCi/L)	ARGWC-18	0.641	0.191	5	No	17	0.5475	0.5945	0	None	No	0.01	NP (normality)
Combined Radium 226 + 228 (pCi/L)	ARGWC-7	0.5326	0.2322	5	No	17	0.3824	0.2397	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	ARGWC-8	0.4421	0.1963	5	No	17	0.3192	0.1961	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	ARGWC-9	0.4566	0.1551	5	No	17	0.3059	0.2405	0	None	No	0.01	Param.
Fluoride (mg/L)	ARAMW-3	0.155	0.0627	4	No	7	0.1089	0.03886	14.29	None	No	0.01	Param.
Fluoride (mg/L)	ARAMW-4	0.07825	0.02346	4	No	7	0.04929	0.02552	14.29	None	sqrt(x)	0.01	Param.

Confidence Intervals - All Results

Plant Arkwright Client: Southern Company Data: Arkwright No 3 Printed 11/5/2022, 2:09 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Fluoride (mg/L)	ARAMW-6	0.1433	0.04926	4	No	7	0.09629	0.03959	0	None	No	0.01	Param.
Fluoride (mg/L)	ARGWC-10	0.1	0.048	4	No	19	0.07737	0.02602	47.37	None	No	0.01	NP (normality)
Fluoride (mg/L)	ARGWC-15	0.1292	0.07566	4	No	19	0.1229	0.06664	21.05	Kaplan-Meier	ln(x)	0.01	Param.
Fluoride (mg/L)	ARGWC-16	0.1	0.033	4	No	19	0.07295	0.03151	52.63	Kaplan-Meier	No	0.01	NP (NDs)
Fluoride (mg/L)	ARGWC-17	0.1	0.031	4	No	19	0.07832	0.02973	57.89	None	No	0.01	NP (NDs)
Fluoride (mg/L)	ARGWC-18	0.1135	0.08073	4	No	18	0.09711	0.02707	5.556	None	No	0.01	Param.
Fluoride (mg/L)	ARGWC-7	0.1	0.033	4	No	19	0.07789	0.03189	63.16	None	No	0.01	NP (NDs)
Fluoride (mg/L)	ARGWC-8	0.1553	0.1125	4	No	18	0.1339	0.03538	0	None	No	0.01	Param.
Fluoride (mg/L)	ARGWC-9	0.07382	0.03583	4	No	19	0.08437	0.04316	47.37	Kaplan-Meier	sqrt(x)	0.01	Param.
Lead (mg/L)	ARGWC-10	0.031	0.00013	0.015	No	19	0.003428	0.006691	89.47	None	No	0.01	NP (NDs)
Lead (mg/L)	ARGWC-15	0.0056	0.0016	0.015	No	19	0.002058	0.0009459	78.95	None	No	0.01	NP (NDs)
Lead (mg/L)	ARGWC-16	0.002	0.00021	0.015	No	19	0.001906	0.0004107	94.74	None	No	0.01	NP (NDs)
Lead (mg/L)	ARGWC-17	0.002	0.00022	0.015	No	19	0.001906	0.0004084	94.74	None	No	0.01	NP (NDs)
Lead (mg/L)	ARGWC-18	0.002	0.00031	0.015	No	19	0.001631	0.0007344	78.95	None	No	0.01	NP (NDs)
Lead (mg/L)	ARGWC-8	0.002	0.00024	0.015	No	19	0.001812	0.0005629	89.47	None	No	0.01	NP (NDs)
Lead (mg/L)	ARGWC-9	0.002	0.00016	0.015	No	19	0.001903	0.0004221	94.74	None	No	0.01	NP (NDs)
Lithium (mg/L)	ARAMW-3	0.01	0.00404	0.04	No	7	0.005334	0.002112	14.29	None	No	0.008	NP (normality)
Lithium (mg/L)	ARAMW-4	0.01395	0.01168	0.04	No	7	0.01281	0.0009529	0	None	No	0.01	Param.
Lithium (mg/L)	ARGWC-10	0.01	0.0055	0.04	No	18	0.008294	0.003402	77.78	None	No	0.01	NP (NDs)
Lithium (mg/L)	ARGWC-15	0.01	0.004	0.04	No	18	0.007772	0.003286	66.67	None	No	0.01	NP (NDs)
Lithium (mg/L)	ARGWC-16	0.01	0.0076	0.04	No	18	0.008572	0.002983	77.78	None	No	0.01	NP (NDs)
Lithium (mg/L)	ARGWC-17	0.01	0.0071	0.04	No	18	0.008456	0.003187	77.78	None	No	0.01	NP (NDs)
Lithium (mg/L)	ARGWC-18	0.0062	0.0037	0.04	No	18	0.005472	0.002697	11.11	None	No	0.01	NP (normality)
Lithium (mg/L)	ARGWC-7	0.01	0.0031	0.04	No	18	0.006704	0.003295	44.44	None	No	0.01	NP (normality)
Lithium (mg/L)	ARGWC-8	0.01	0.0035	0.04	No	18	0.006014	0.003068	33.33	None	No	0.01	NP (normality)
Lithium (mg/L)	ARGWC-9	0.01	0.0061	0.04	No	18	0.009783	0.0009192	94.44	None	No	0.01	NP (NDs)
Mercury (mg/L)	ARGWC-10	0.0002	0.000077	0.002	No	14	0.0001912	0.00003287	92.86	None	No	0.01	NP (NDs)
Mercury (mg/L)	ARGWC-15	0.0002	0.000071	0.002	No	14	0.0001908	0.00003448	92.86	None	No	0.01	NP (NDs)
Mercury (mg/L)	ARGWC-16	0.0002	0.000088	0.002	No	14	0.0001529	0.00005718	57.14	None	No	0.01	NP (NDs)
Mercury (mg/L)	ARGWC-18	0.0002	0.000074	0.002	No	14	0.000191	0.00003367	92.86	None	No	0.01	NP (NDs)
Mercury (mg/L)	ARGWC-7	0.0002	0.00007	0.002	No	14	0.0001907	0.00003474	92.86	None	No	0.01	NP (NDs)
Mercury (mg/L)	ARGWC-8	0.0002	0.000081	0.002	No	14	0.0001915	0.0000318	92.86	None	No	0.01	NP (NDs)
Molybdenum (mg/L)	ARAMW-3	0.006365	0.001115	0.1	No	8	0.00374	0.002477	0	None	No	0.01	Param.
Molybdenum (mg/L)	ARAMW-4	0.001	0.000288	0.1	No	7	0.0008297	0.0002649	57.14	None	No	0.008	NP (NDs)
Molybdenum (mg/L)	ARAMW-6	0.001	0.00065	0.1	No	8	0.0009563	0.0001237	87.5	None	No	0.004	NP (NDs)
Molybdenum (mg/L)	ARGWC-15	0.0017	0.00097	0.1	No	18	0.001232	0.0003598	33.33	None	No	0.01	NP (normality)
Molybdenum (mg/L)	ARGWC-8	0.04354	0.03817	0.1	No	18	0.04086	0.004444	0	None	No	0.01	Param.
Selenium (mg/L)	ARAMW-3	0.005	0.0024	0.05	No	6	0.004567	0.001061	83.33	None	No	0.0155	NP (NDs)
Selenium (mg/L)	ARAMW-4	0.005	0.0011	0.05	No	6	0.00435	0.001592	83.33	None	No	0.0155	NP (NDs)
Selenium (mg/L)	ARGWC-10	0.005	0.0017	0.05	No	19	0.004826	0.0007571	94.74	None	No	0.01	NP (NDs)
Selenium (mg/L)	ARGWC-15	0.005	0.0005	0.05	No	19	0.004281	0.001706	84.21	None	No	0.01	NP (NDs)
Selenium (mg/L)	ARGWC-16	0.002412	0.001277	0.05	No	19	0.001924	0.001061	5.263	None	sqrt(x)	0.01	Param.
Selenium (mg/L)	ARGWC-17	0.005	0.00076	0.05	No	19	0.004777	0.0009727	94.74	None	No	0.01	NP (NDs)
Selenium (mg/L)	ARGWC-7	0.005	0.0028	0.05	No	19	0.004636	0.001167	89.47	None	No	0.01	NP (NDs)
Selenium (mg/L)	ARGWC-9	0.005	0.00029	0.05	No	19	0.004502	0.001493	89.47	None	No	0.01	NP (NDs)
Silver (mg/L)	ARGWC-15	0.001	0.00037	0.0051	No	14	0.0008964	0.0002659	85.71	None	No	0.01	NP (NDs)
Silver (mg/L)	ARGWC-16	0.001	0.00026	0.0051	No	14	0.0009471	0.0001978	92.86	None	No	0.01	NP (NDs)
Thallium (mg/L)	ARAMW-4	0.002	0.00022	0.002	No	6	0.001703	0.0007267	83.33	None	No	0.0155	NP (NDs)
Thallium (mg/L)	ARAMW-6	0.002	0.00018	0.002	No	6	0.001697	0.000743	83.33	None	No	0.0155	NP (NDs)
Thallium (mg/L)	ARGWC-15	0.002	0.000095	0.002	No	17	0.001888	0.000462	94.12	None	No	0.01	NP (NDs)
Thallium (mg/L)	ARGWC-16	0.002	0.00027	0.002	No	17	0.001692	0.0006851	82.35	None	No	0.01	NP (NDs)
Thallium (mg/L)	ARGWC-17	0.002	0.00063	0.002	No	17	0.001919	0.0003323	94.12	None	No	0.01	NP (NDs)
Thallium (mg/L)	ARGWC-18	0.002	0.00028	0.002	No	17	0.001899	0.0004172	94.12	None	No	0.01	NP (NDs)

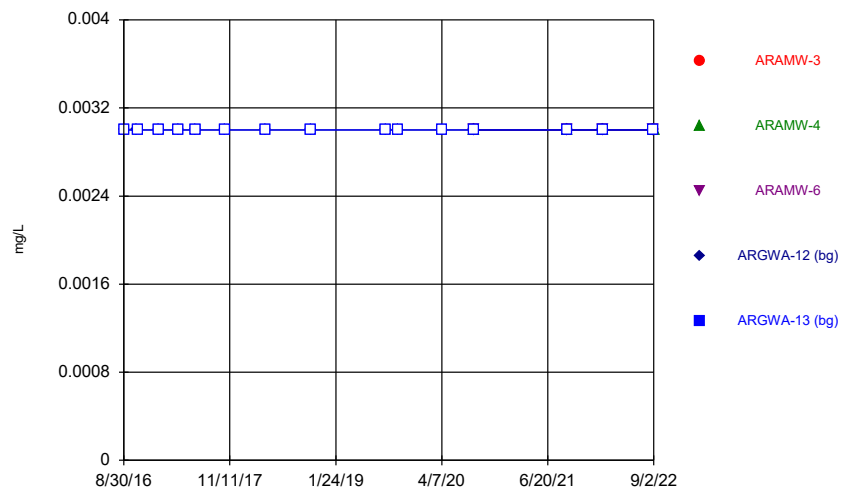
Appendix IV Trend Tests - All Results (No Significant)

Plant Arkwright Client: Southern Company Data: Arkwright No 3 Printed 11/5/2022, 2:14 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Cobalt (mg/L)	ARGWA-12 (bg)	-0.0002711	-55	-68	No	18	55.56	n/a	n/a	0.01	NP
Cobalt (mg/L)	ARGWA-13 (bg)	0	-1	-68	No	18	88.89	n/a	n/a	0.01	NP
Cobalt (mg/L)	ARGWA-14 (bg)	0	1	68	No	18	94.44	n/a	n/a	0.01	NP
Cobalt (mg/L)	ARGWA-24 (bg)	-0.0005968	-1	-12	No	5	40	n/a	n/a	0.01	NP
Cobalt (mg/L)	ARGWA-3 (bg)	0	-5	-68	No	18	88.89	n/a	n/a	0.01	NP
Cobalt (mg/L)	ARGWA-5 (bg)	0	-1	-68	No	18	88.89	n/a	n/a	0.01	NP
Cobalt (mg/L)	ARGWC-17	0.002054	45	68	No	18	0	n/a	n/a	0.01	NP

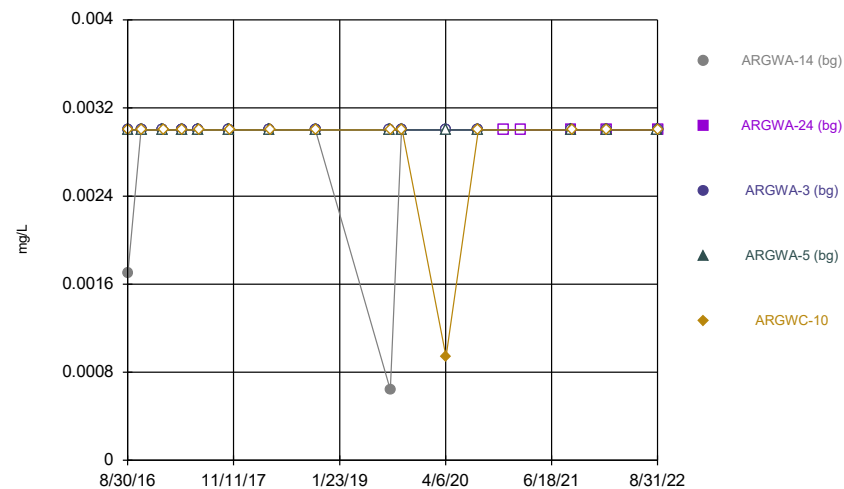
FIGURE A.

Time Series



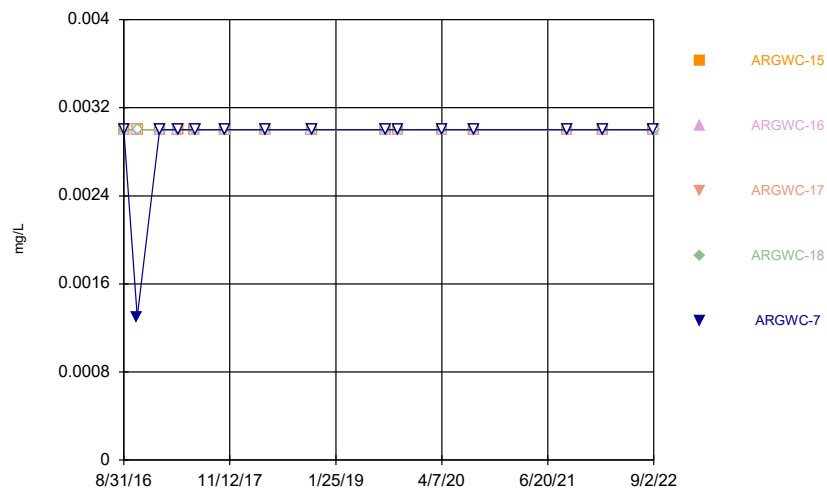
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 Plant Arkwright Client: Southern Company Data: Arkwright No 3

Time Series



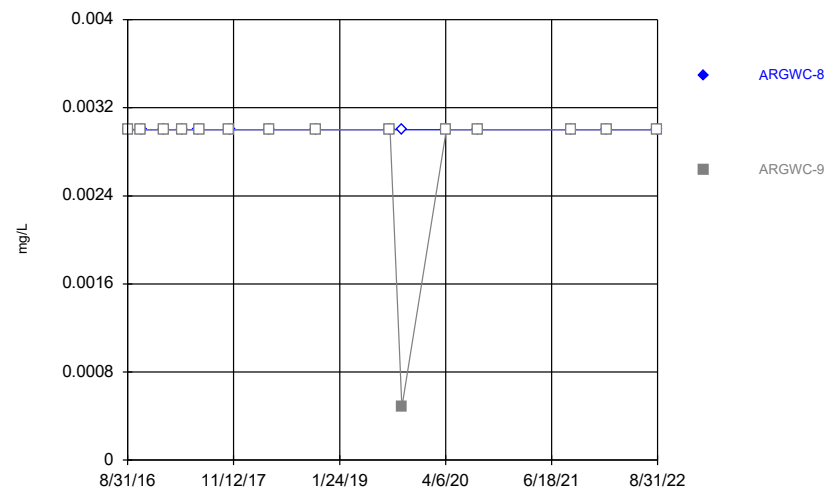
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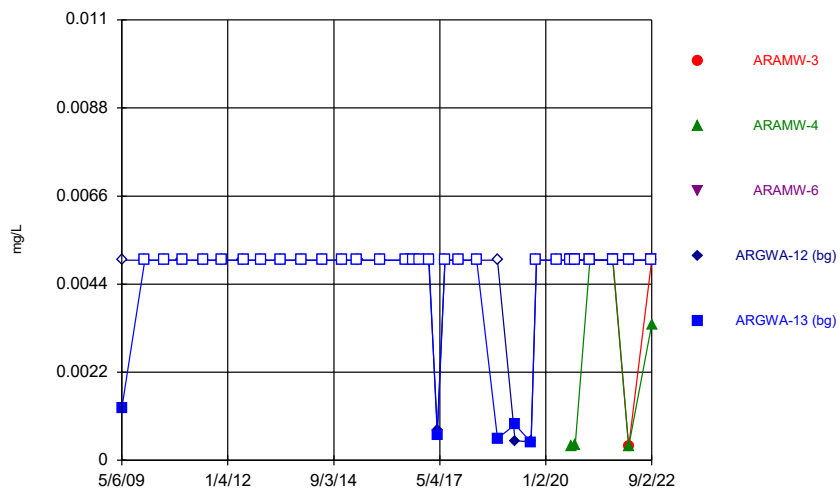
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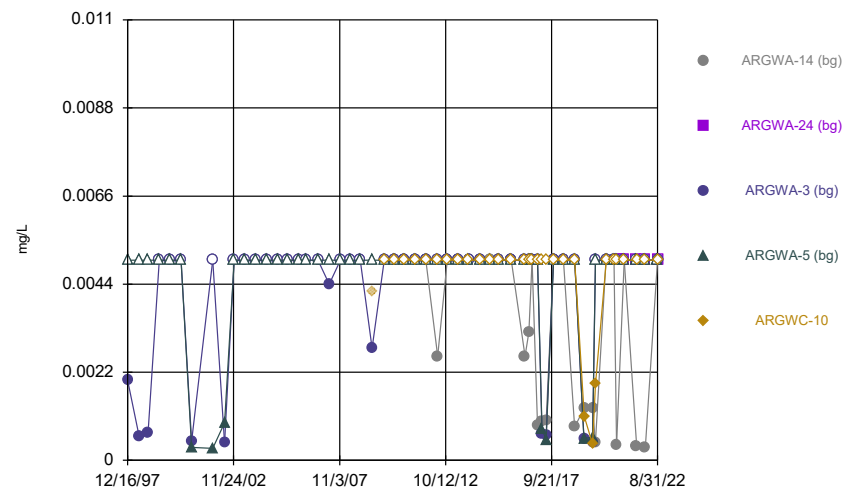
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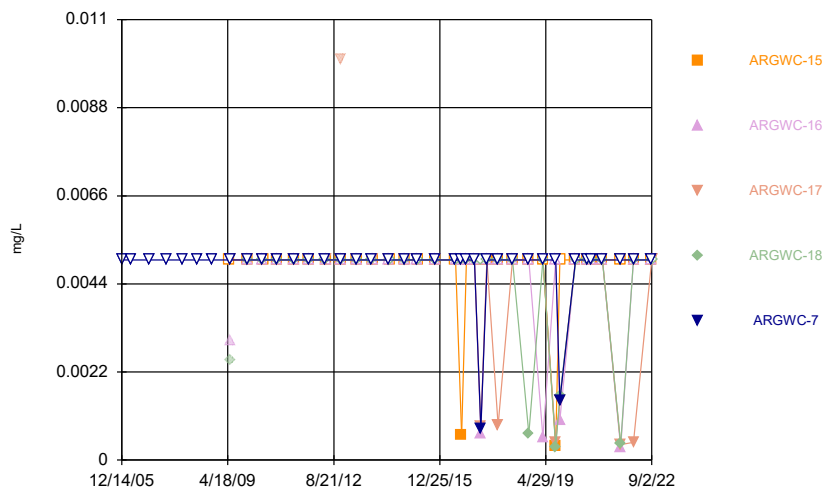
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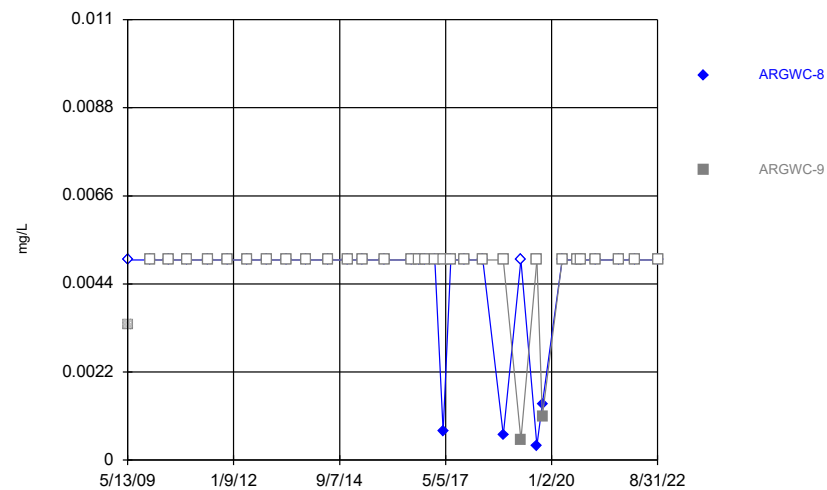
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Time Series



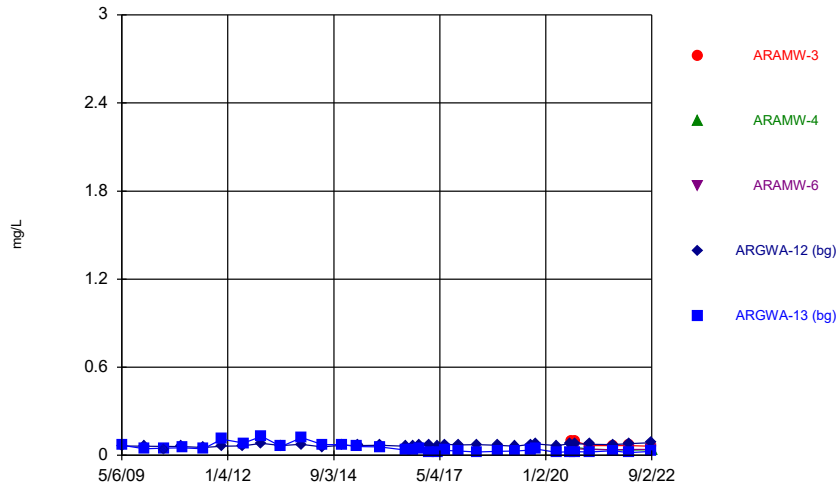
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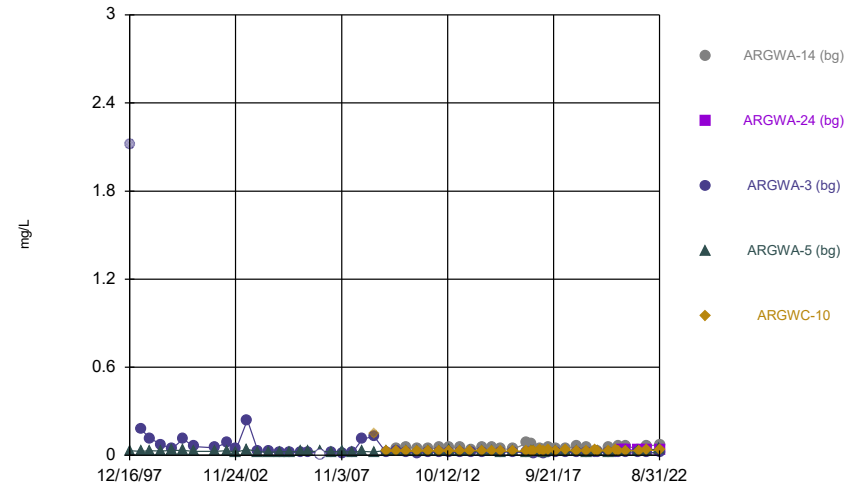
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Time Series



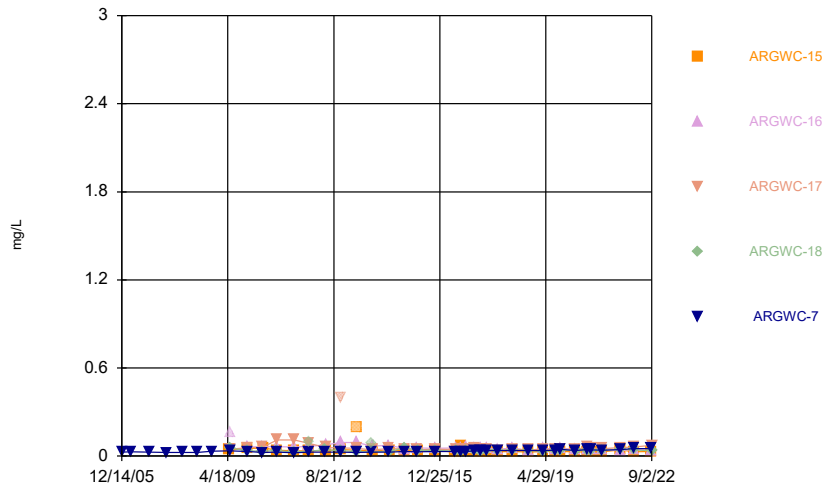
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Time Series



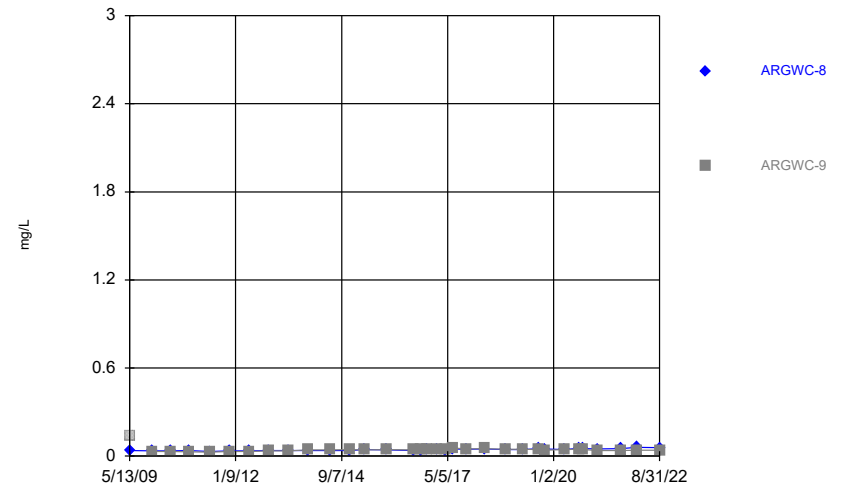
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Time Series



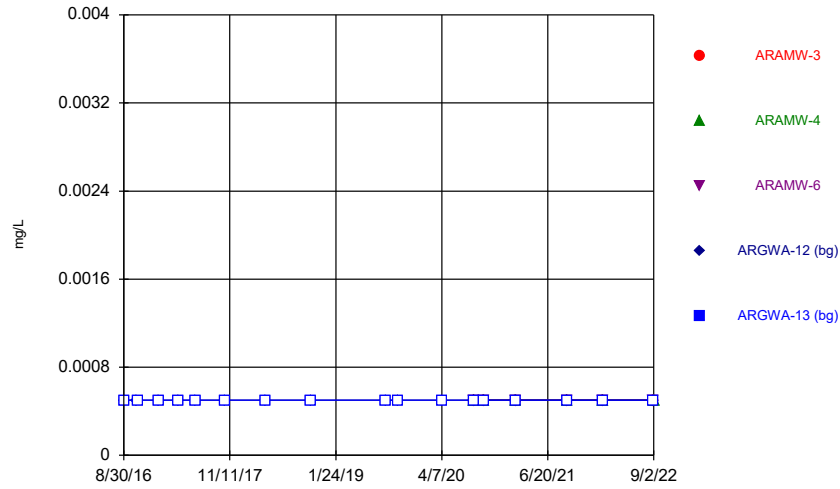
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Time Series



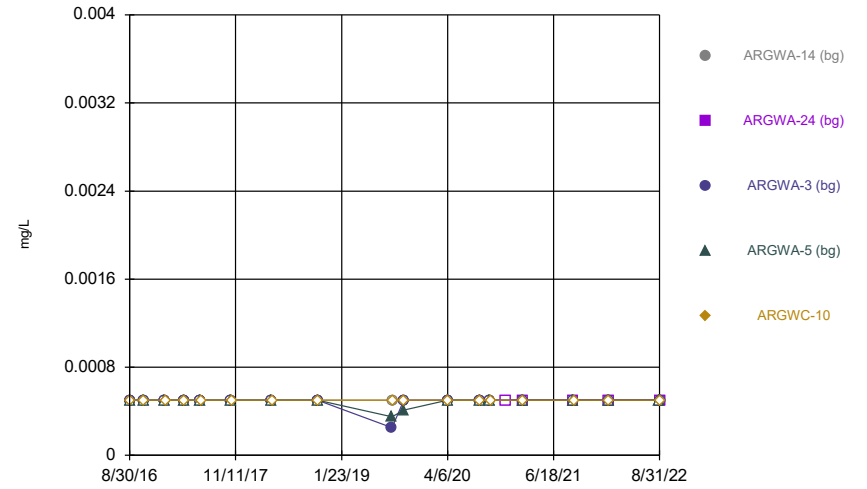
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Plant Arkwright Client: Southern Company Data: Arkwright No 3

Time Series



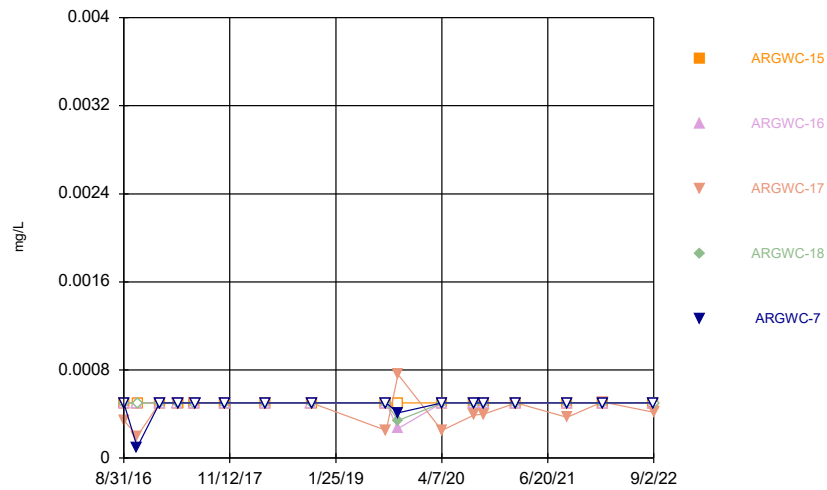
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Plant Arkwright Client: Southern Company Data: Arkwright No 3

Time Series



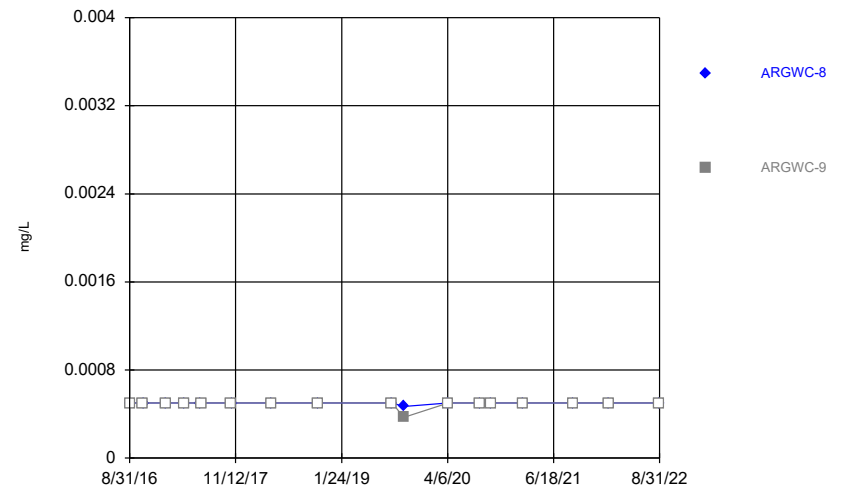
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Time Series



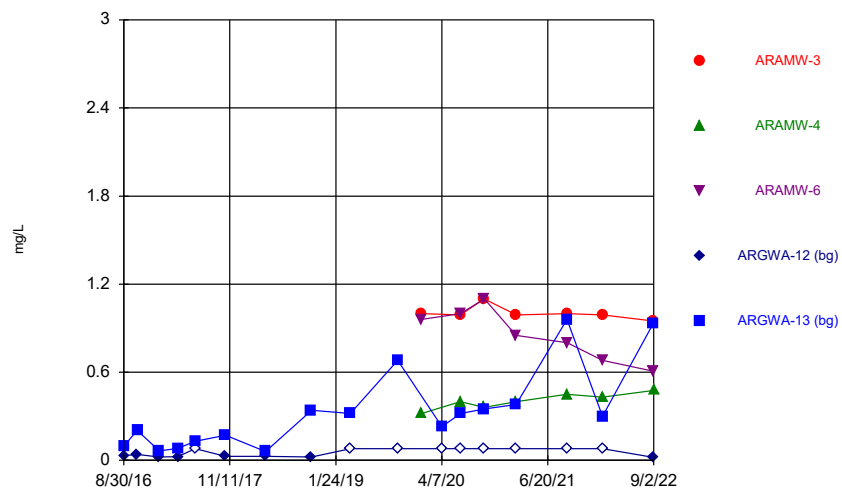
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Time Series



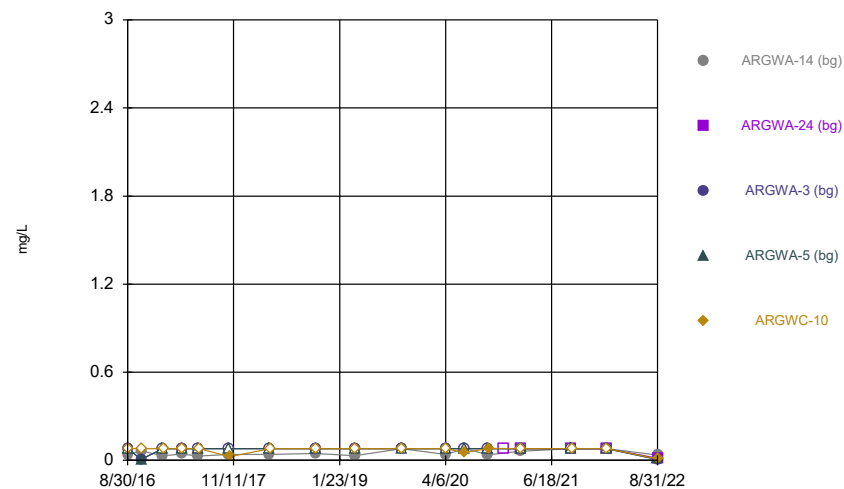
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Time Series



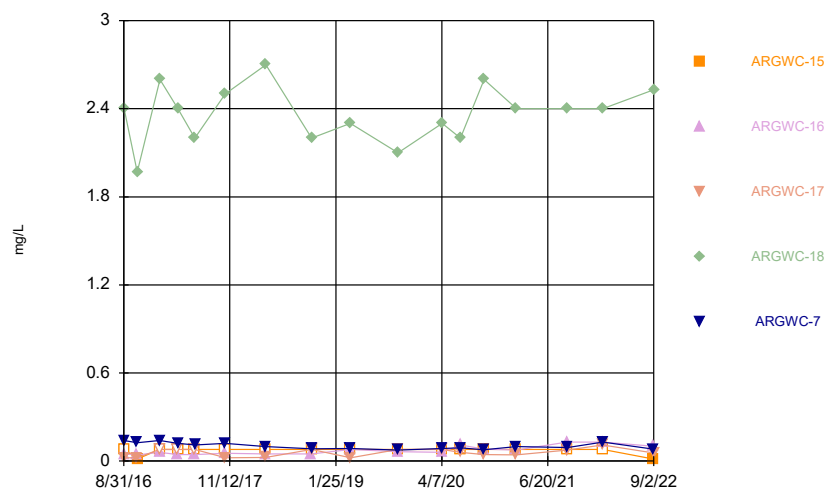
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Time Series



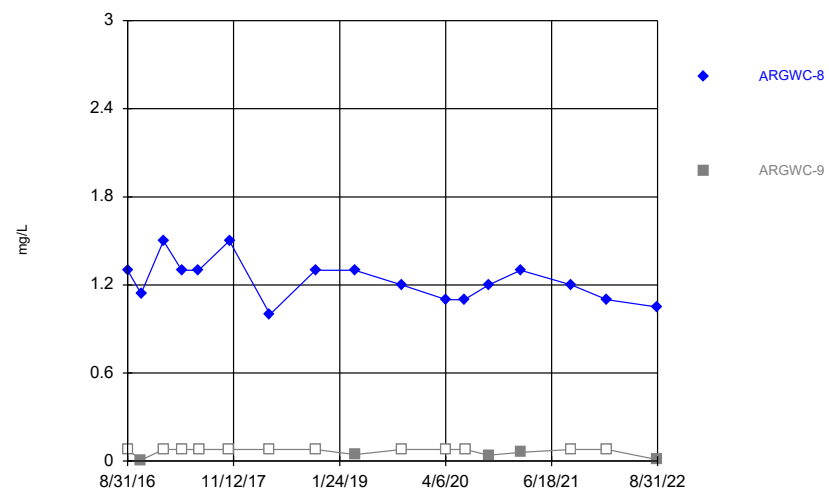
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Time Series



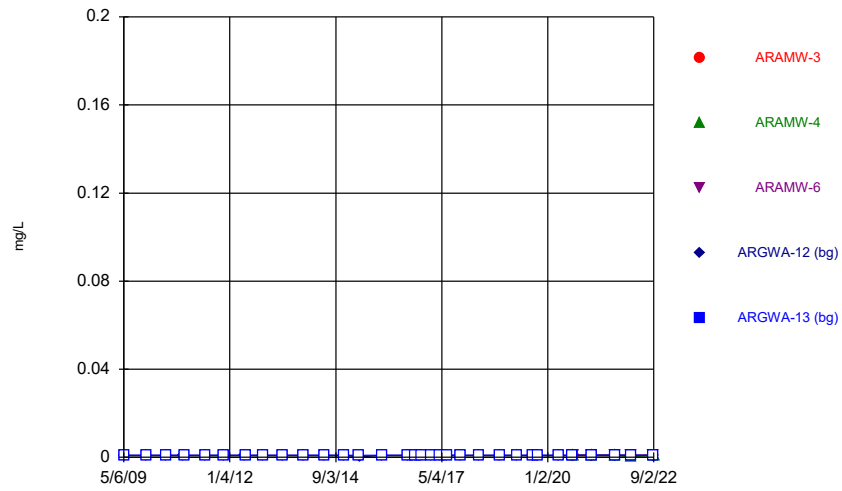
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Time Series



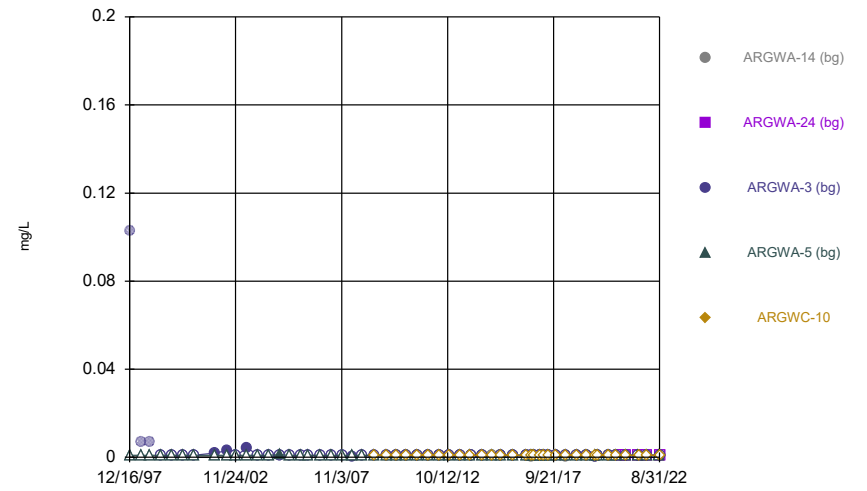
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Time Series



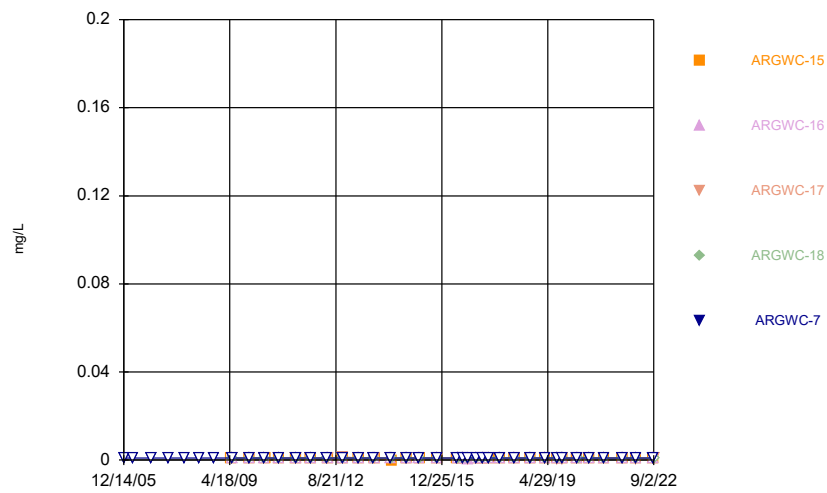
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Time Series



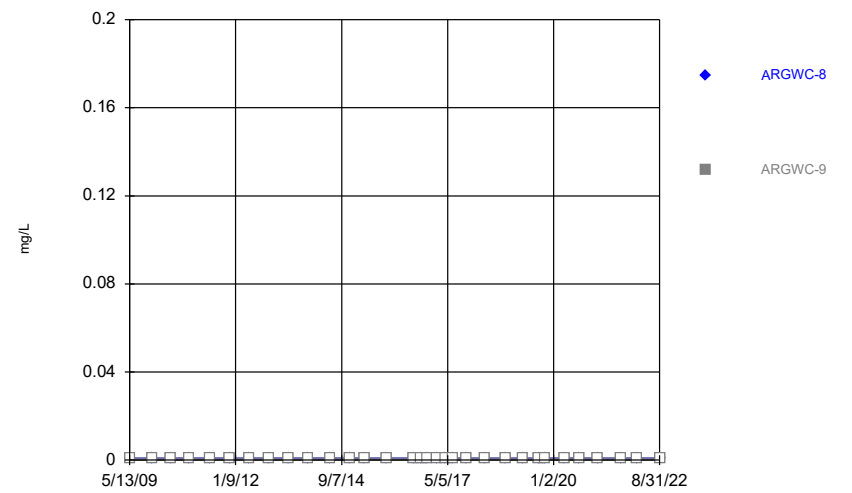
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Time Series



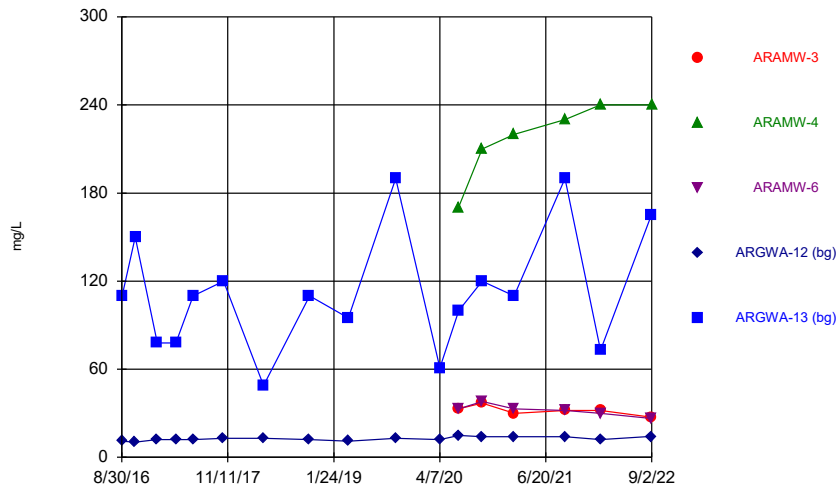
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Time Series



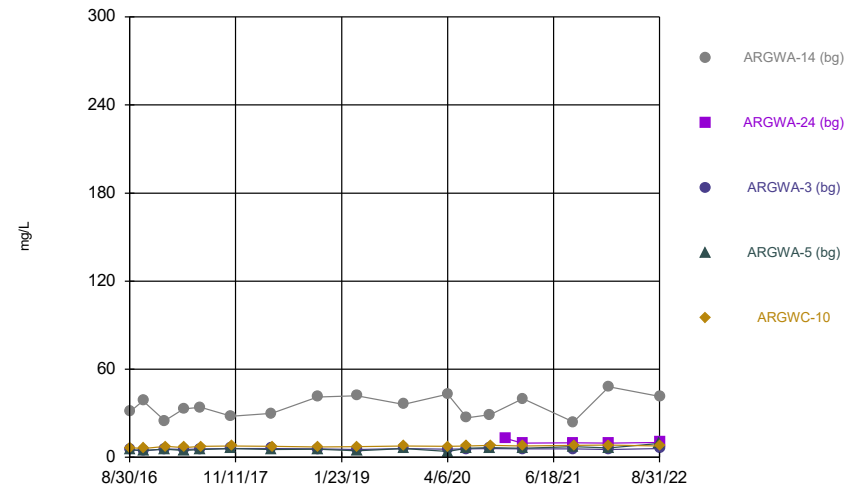
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Time Series



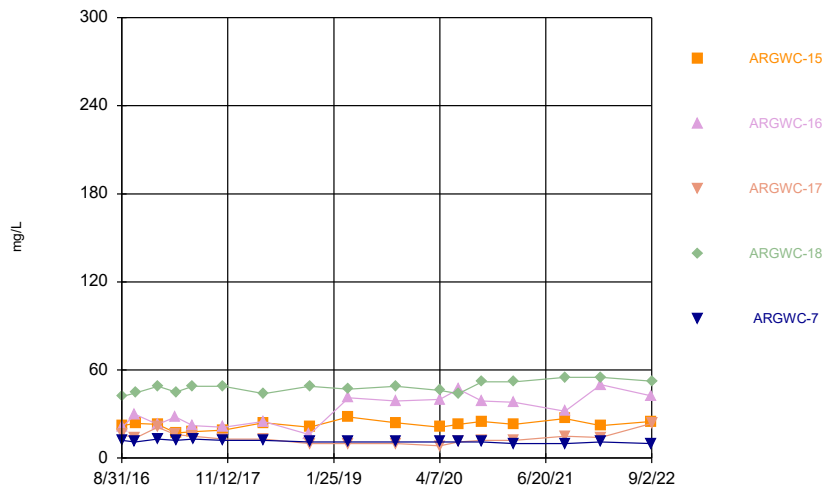
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Time Series



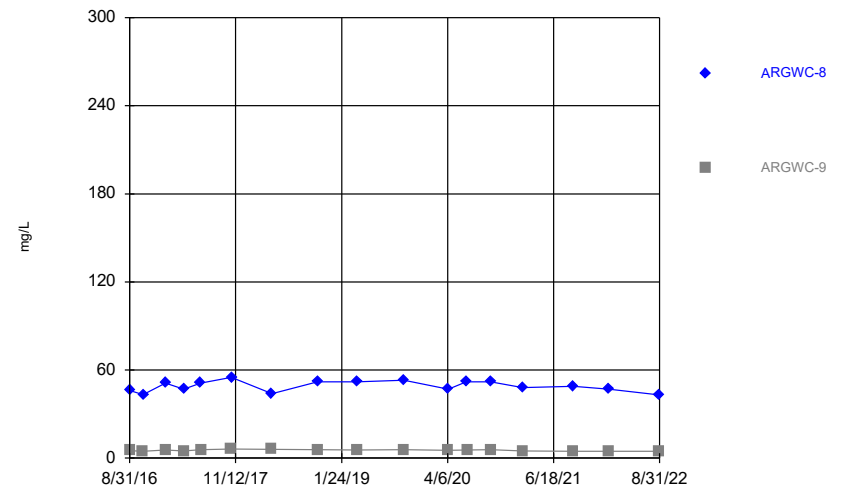
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Time Series



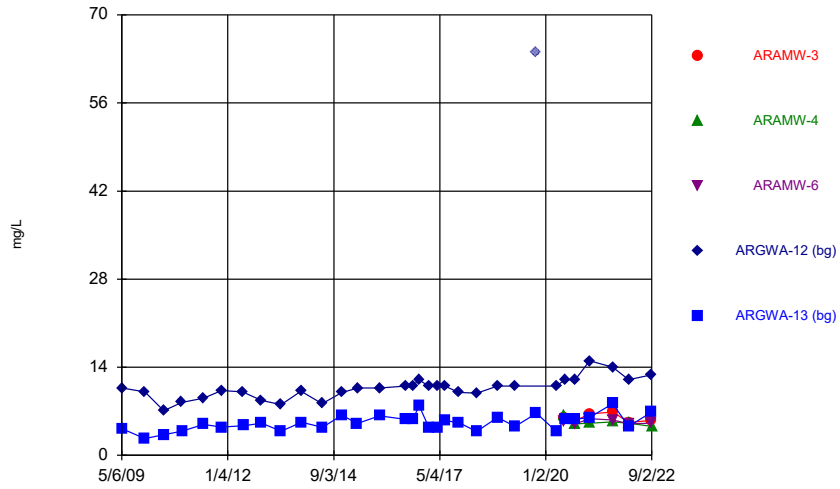
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Time Series



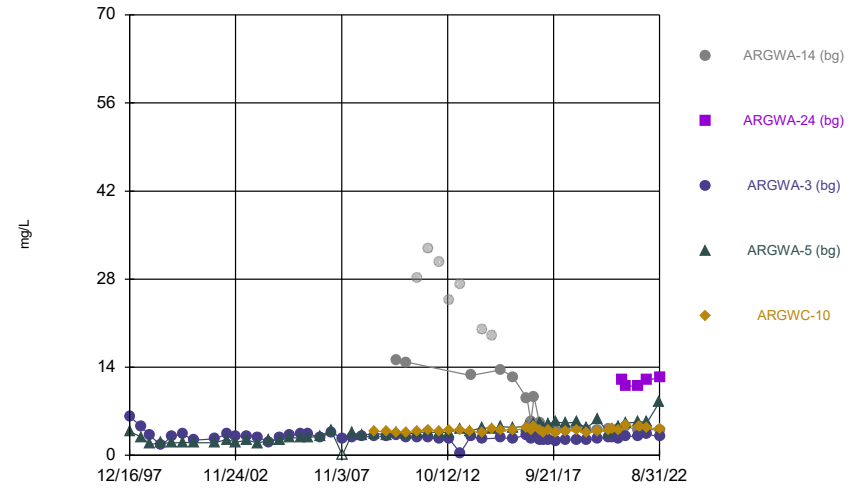
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Time Series



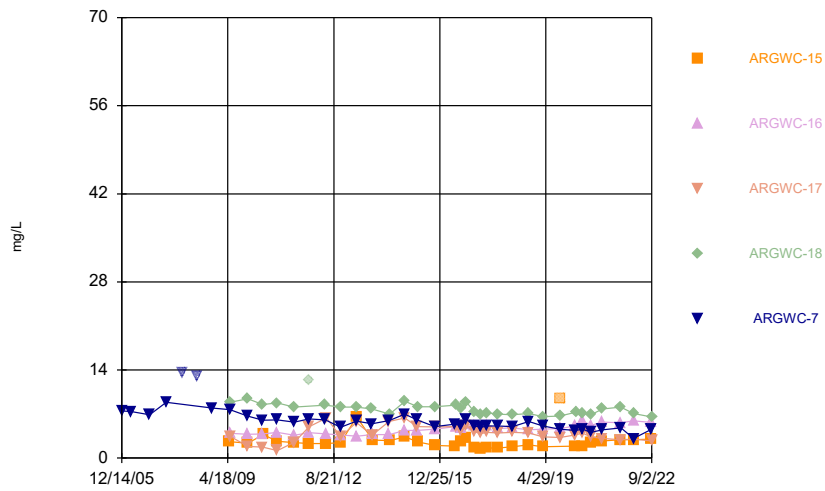
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 Plant Arkwright Client: Southern Company Data: Arkwright No 3

Time Series



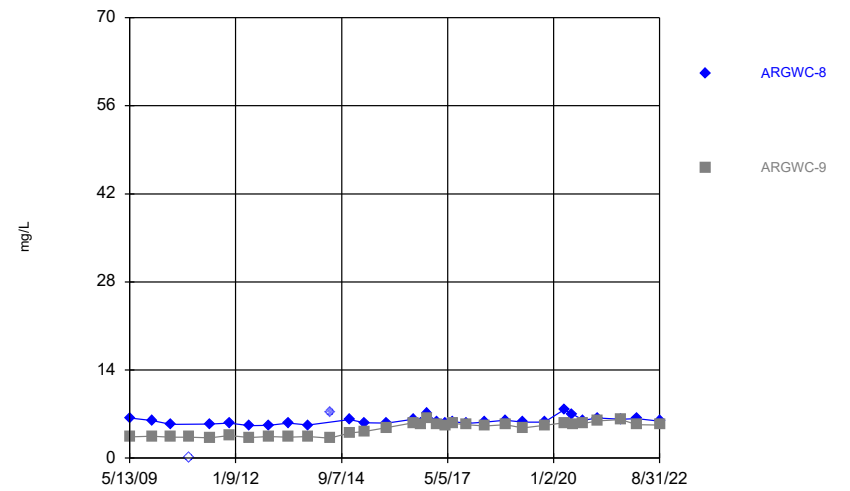
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Time Series



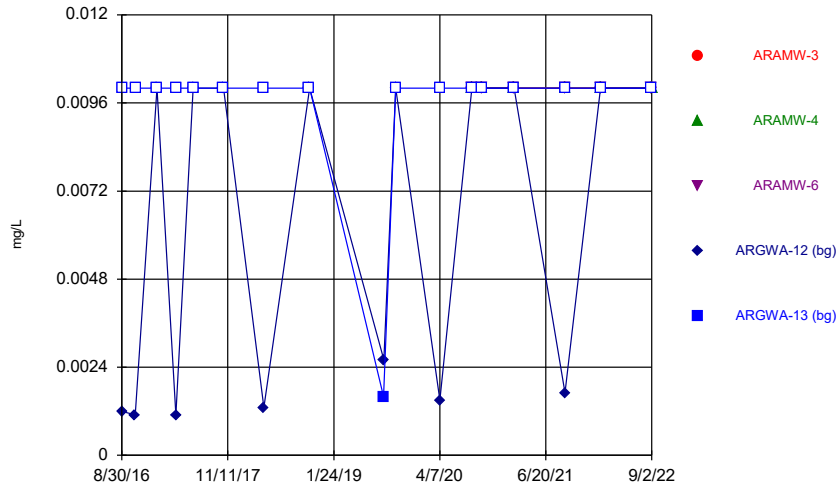
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Time Series



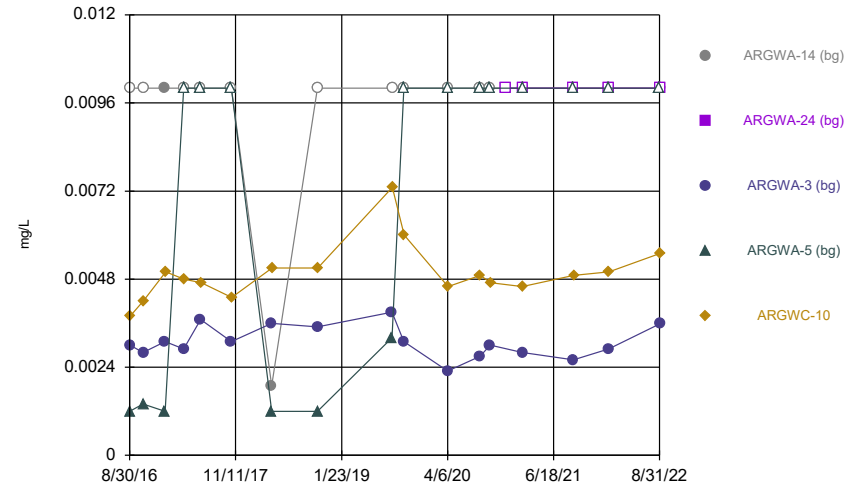
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Time Series



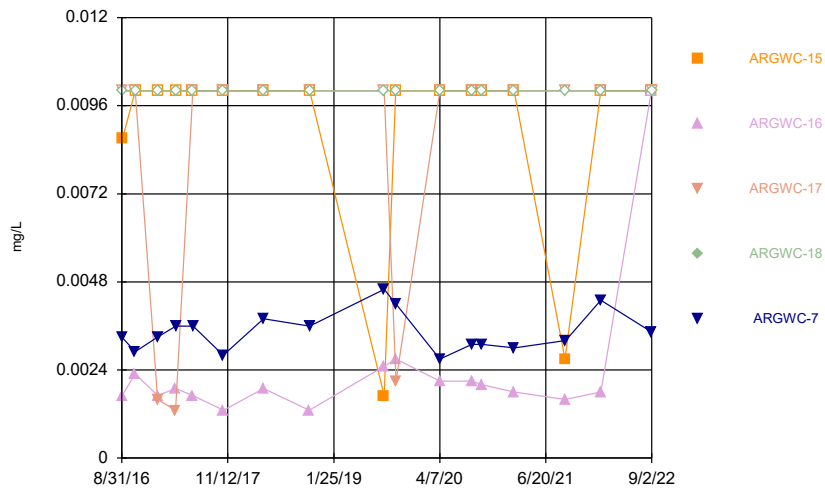
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Plant Arkwright Client: Southern Company Data: Arkwright No 3

Time Series



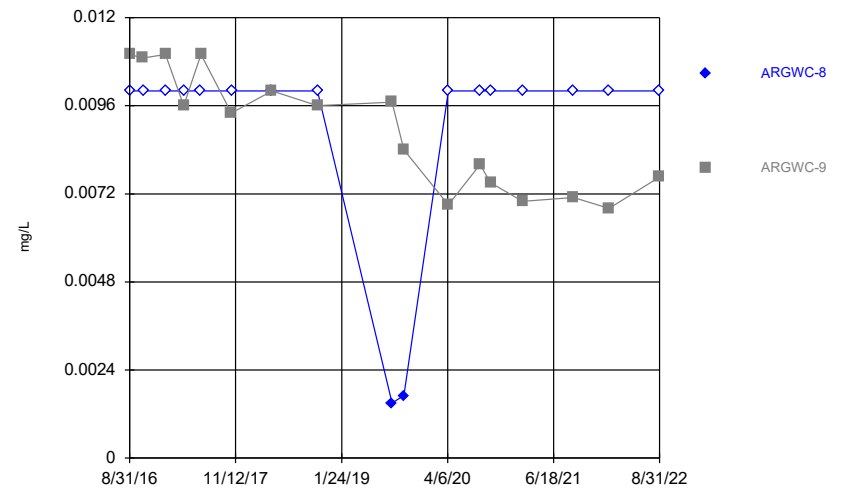
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Time Series



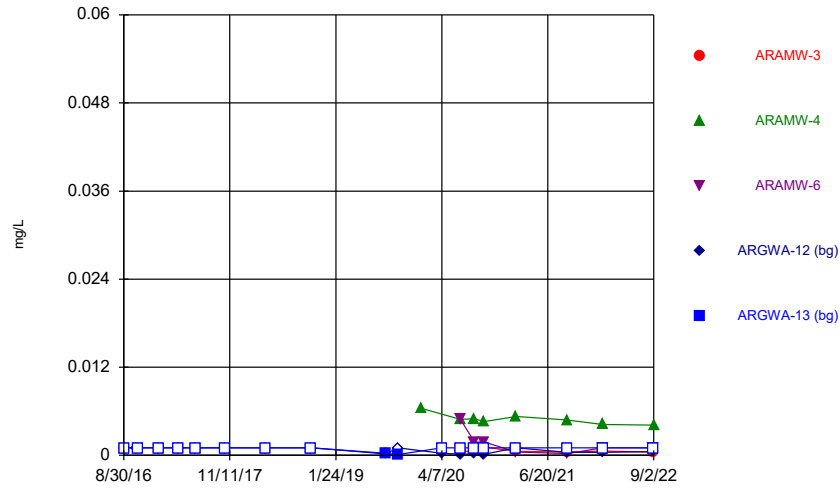
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Time Series



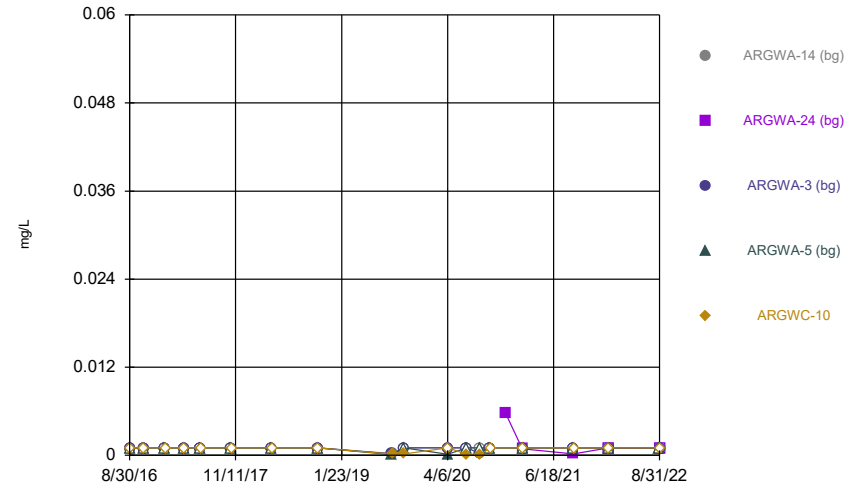
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Time Series



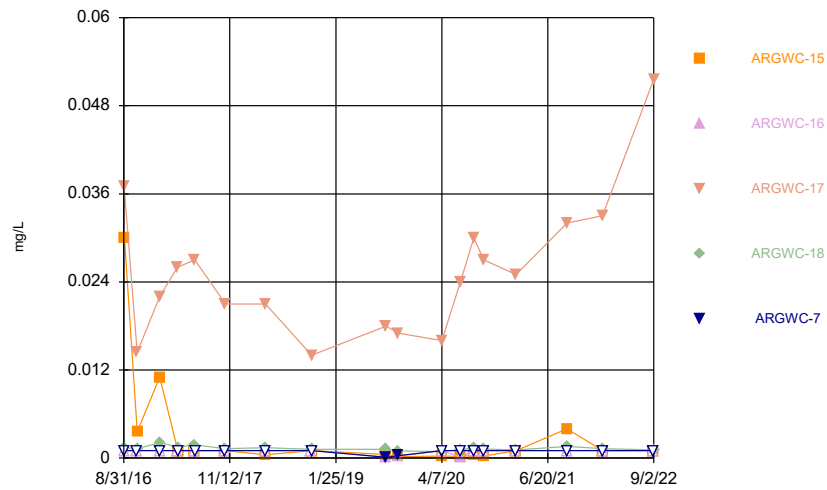
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Time Series



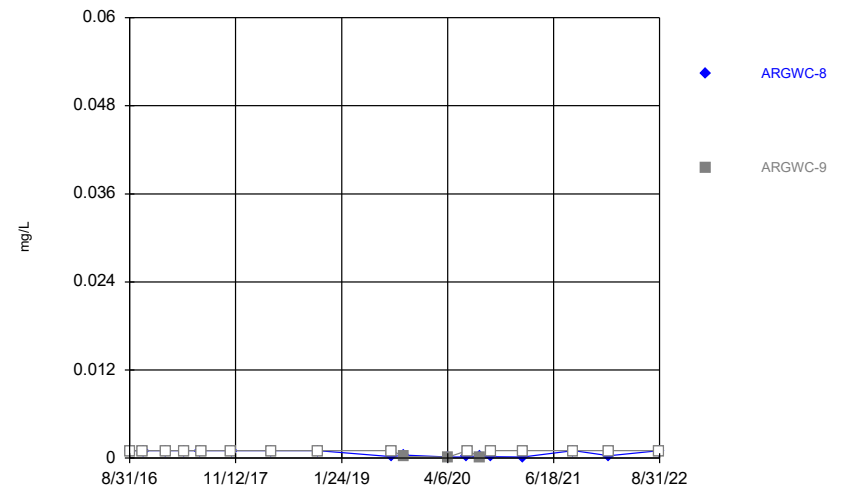
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Time Series



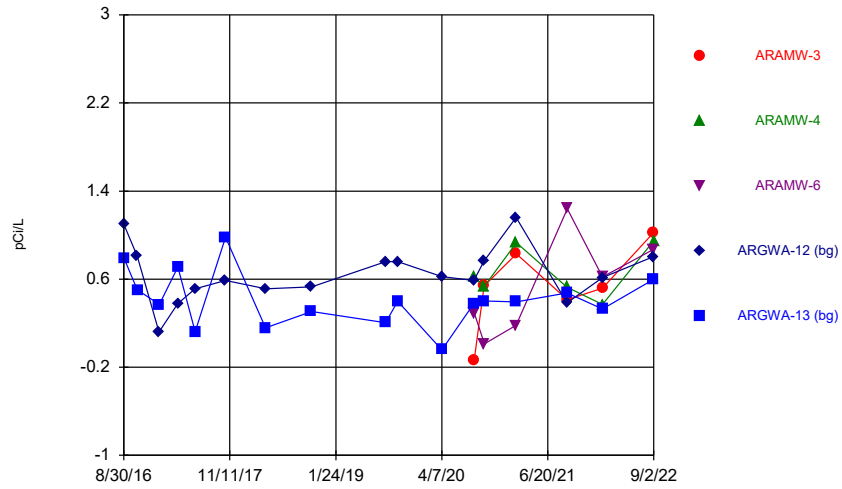
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Time Series



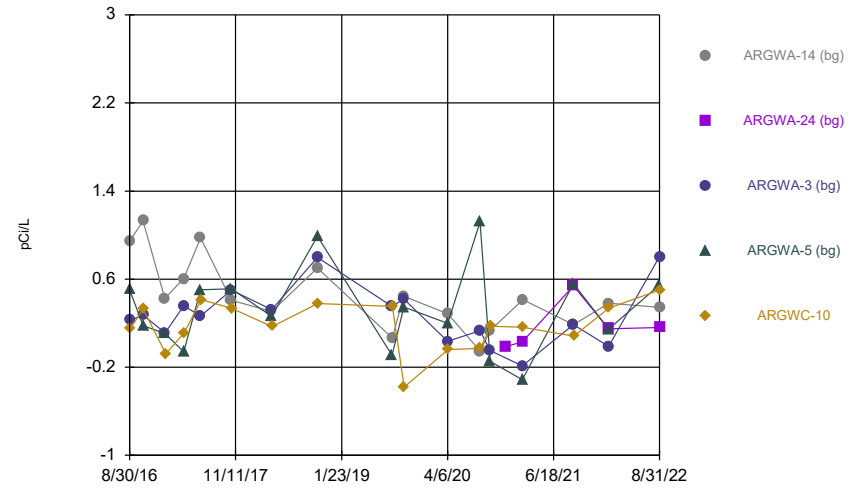
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Time Series



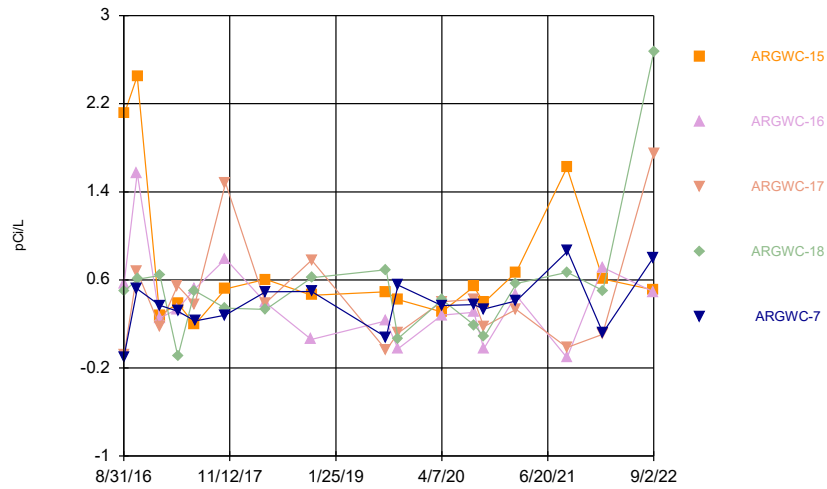
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Plant Arkwright Client: Southern Company Data: Arkwright No 3

Time Series



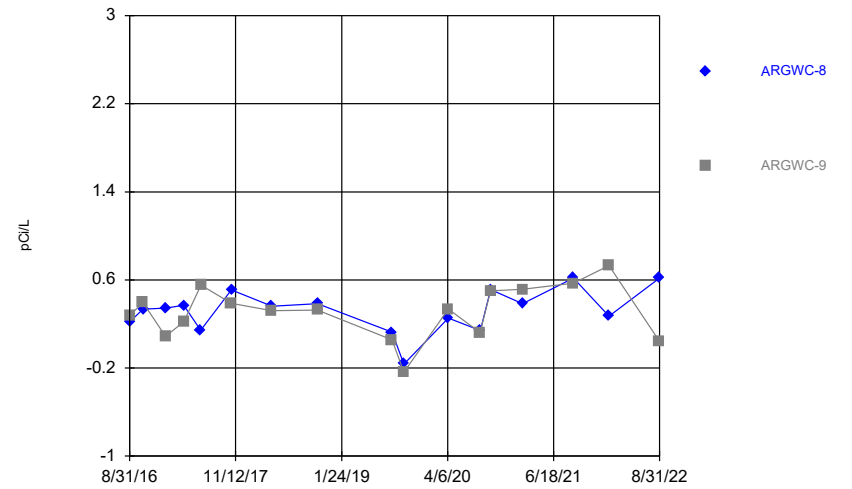
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Plant Arkwright Client: Southern Company Data: Arkwright No 3

Time Series



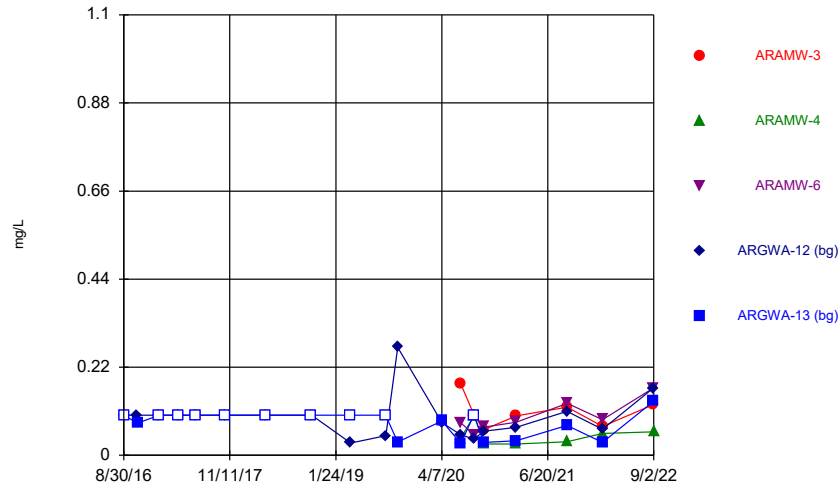
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Time Series



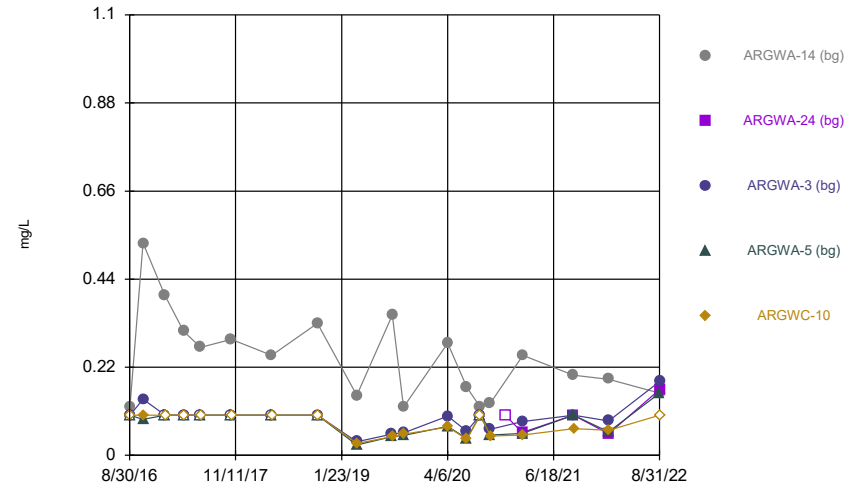
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Time Series



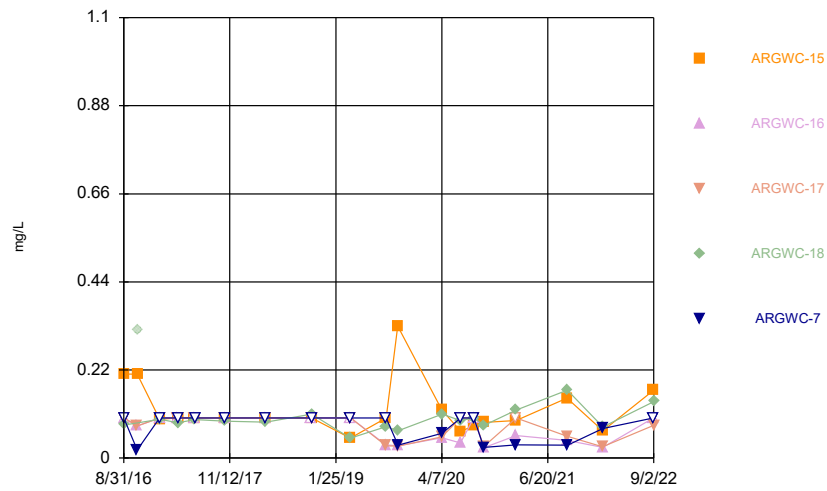
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Time Series



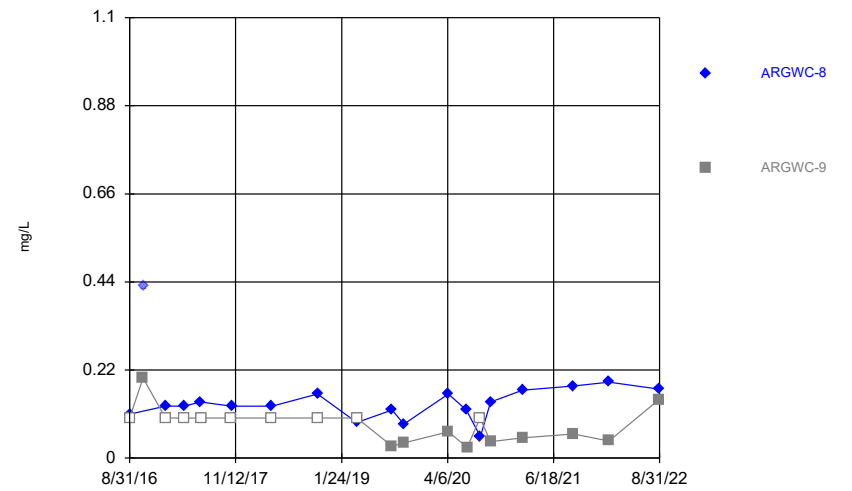
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Time Series



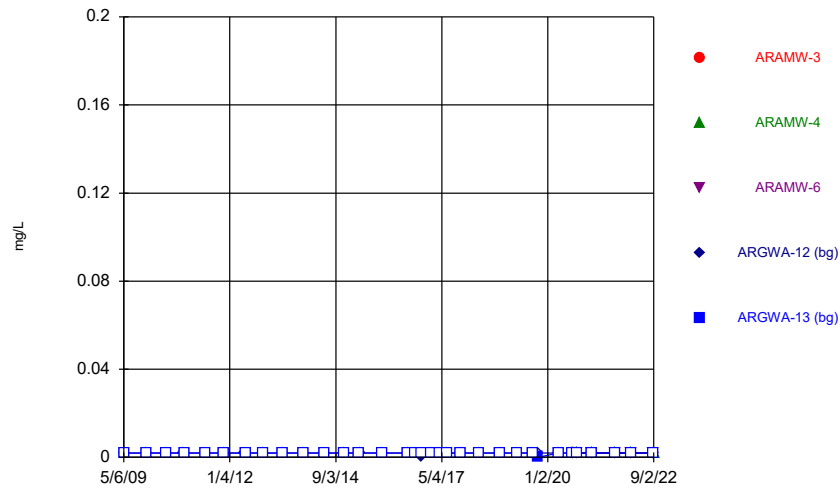
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Time Series



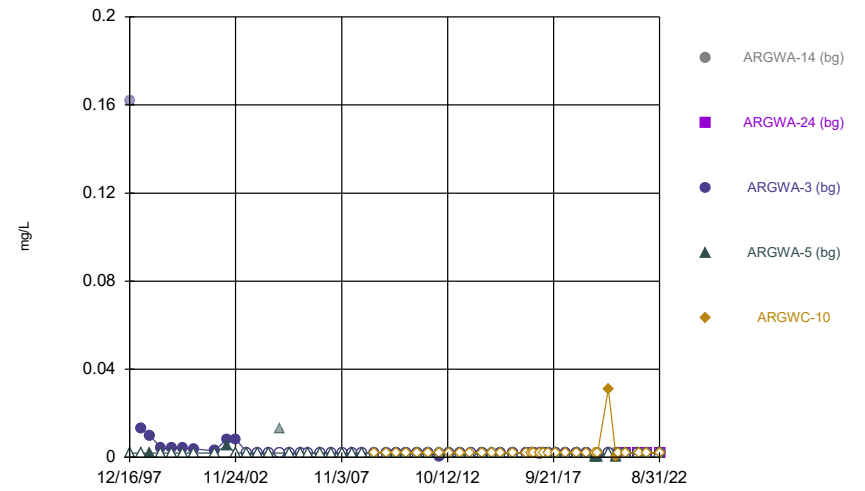
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Time Series



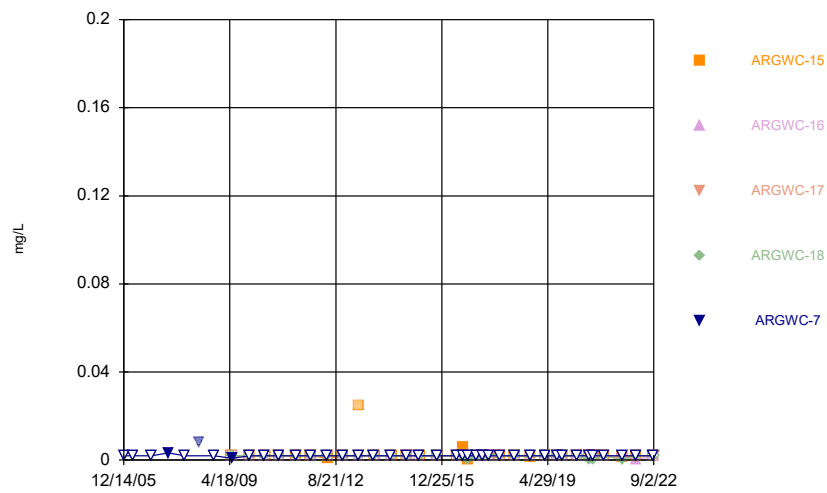
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Time Series



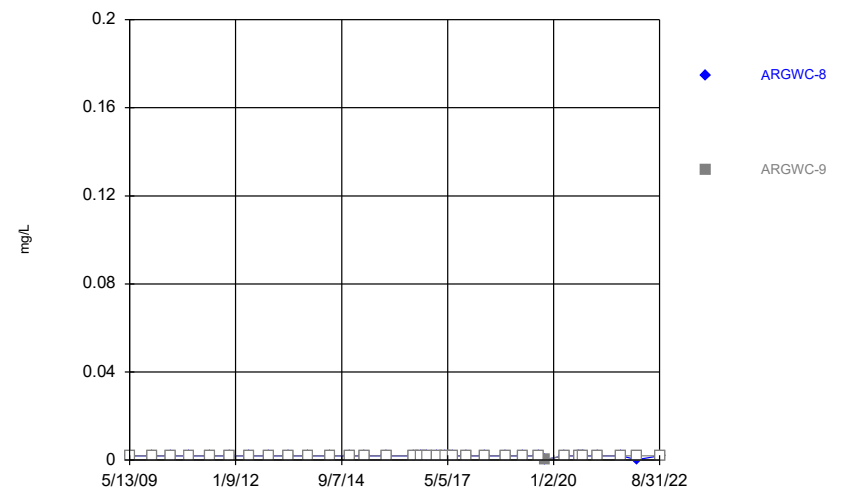
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Time Series



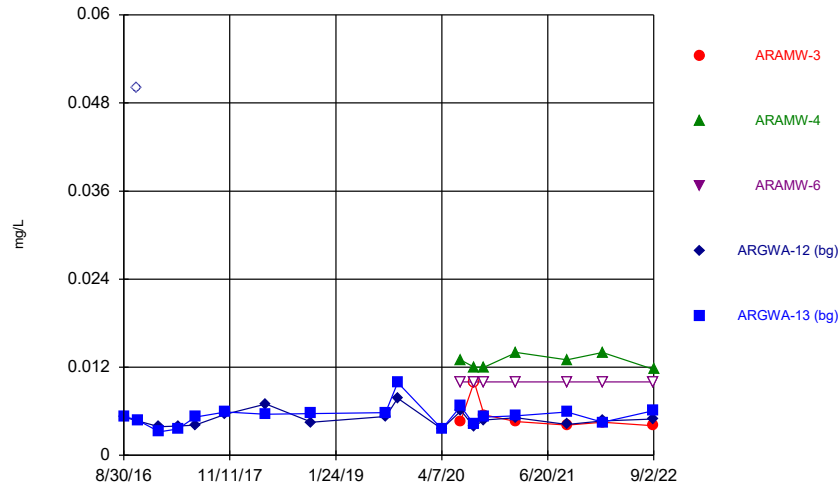
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Time Series



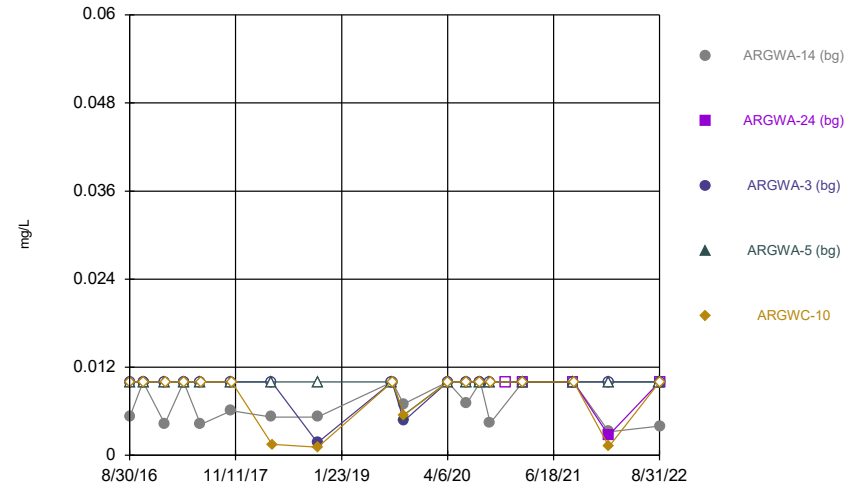
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Time Series



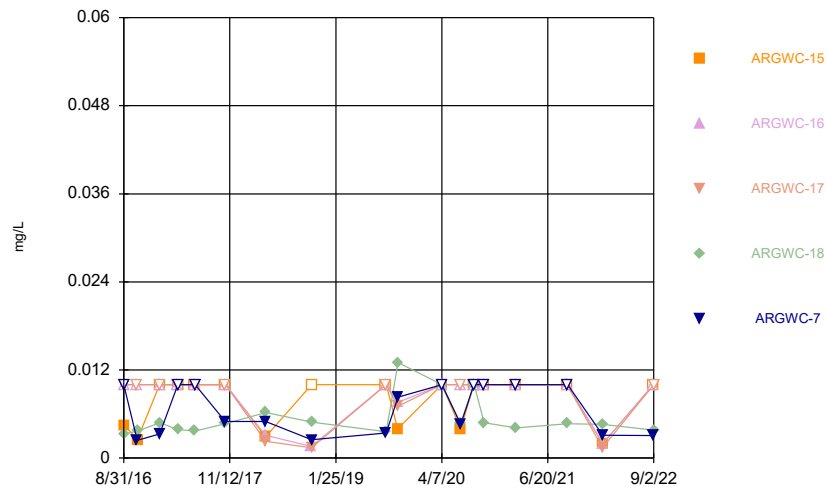
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Time Series



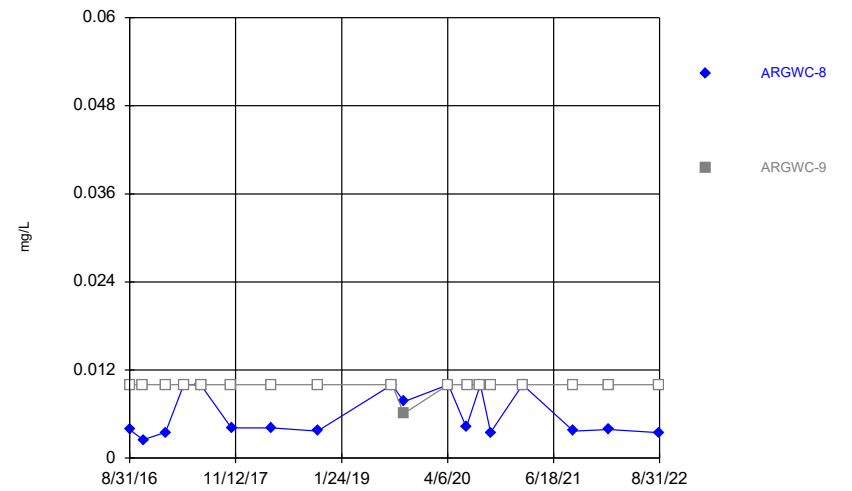
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Time Series



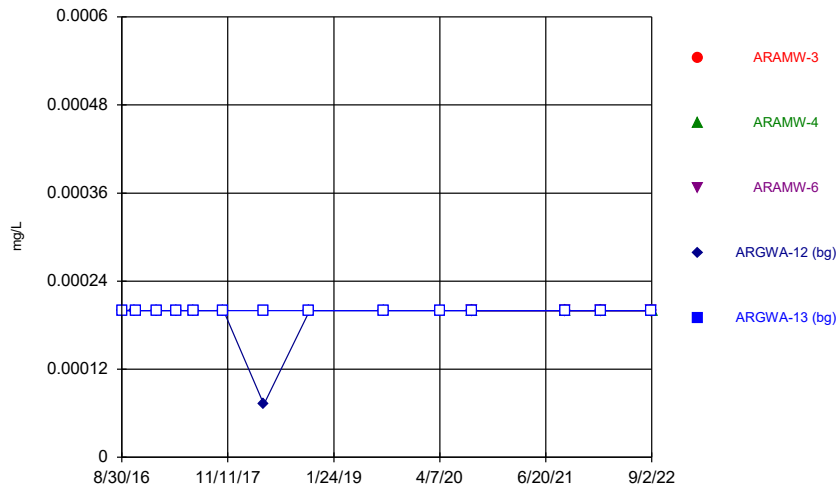
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Time Series



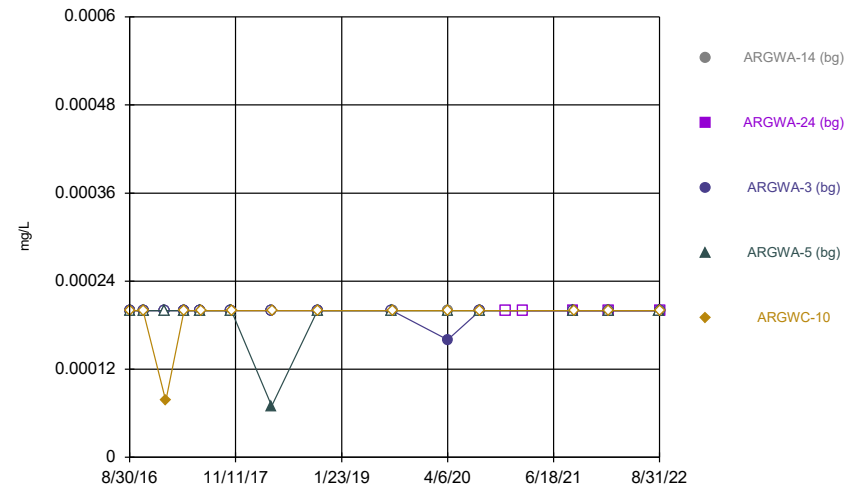
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Time Series



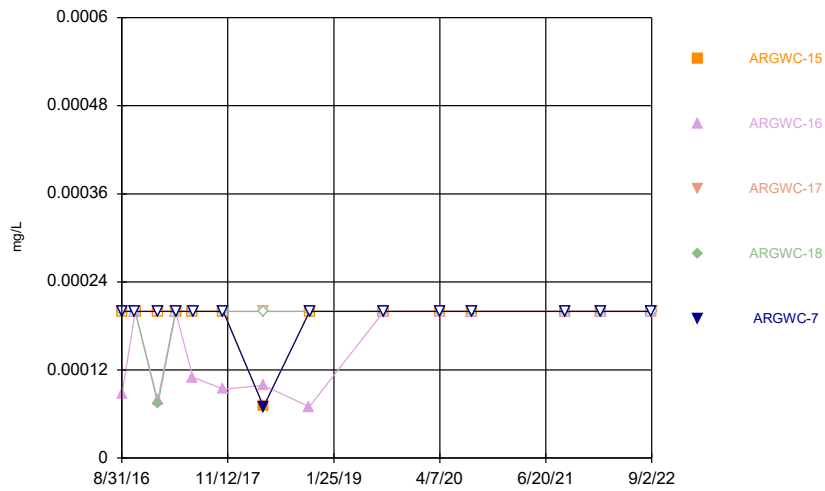
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Time Series



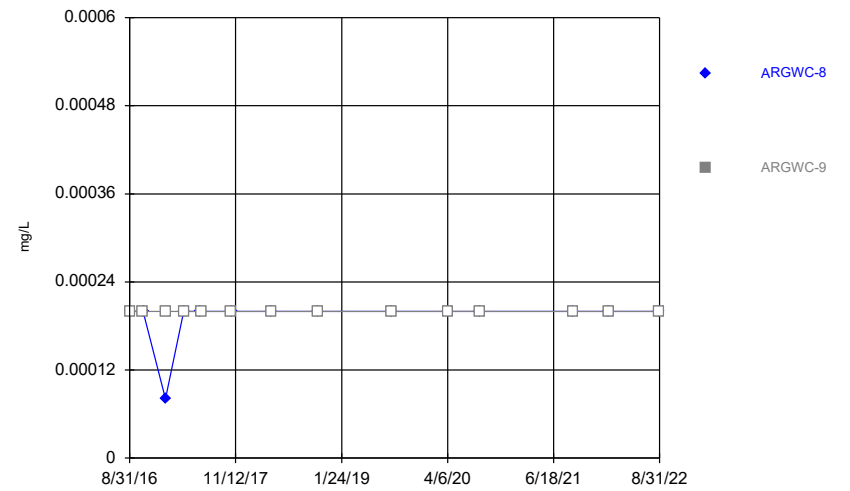
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Time Series



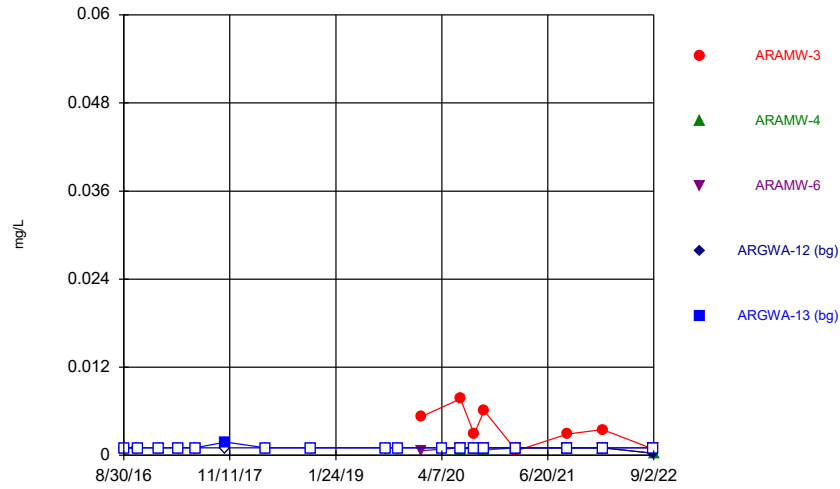
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Time Series



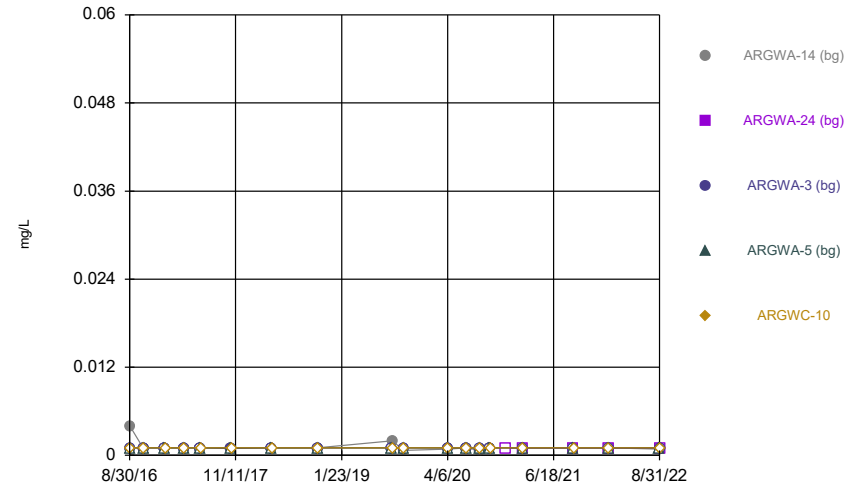
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Time Series



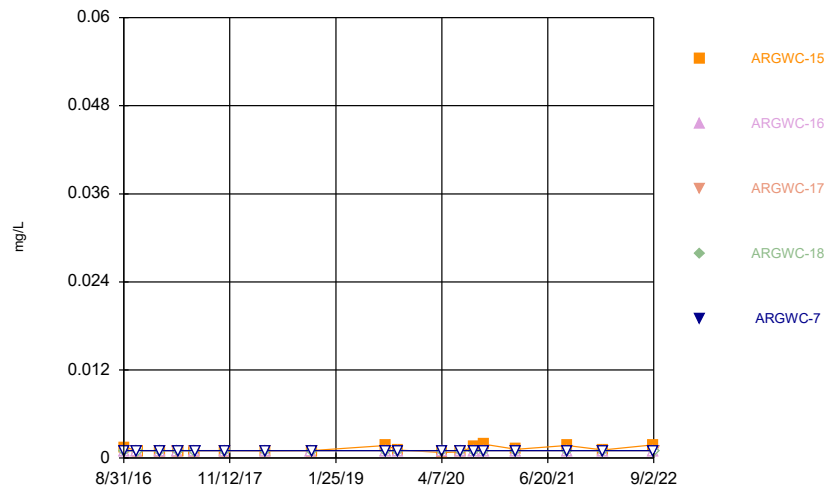
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Plant Arkwright Client: Southern Company Data: Arkwright No 3

Time Series



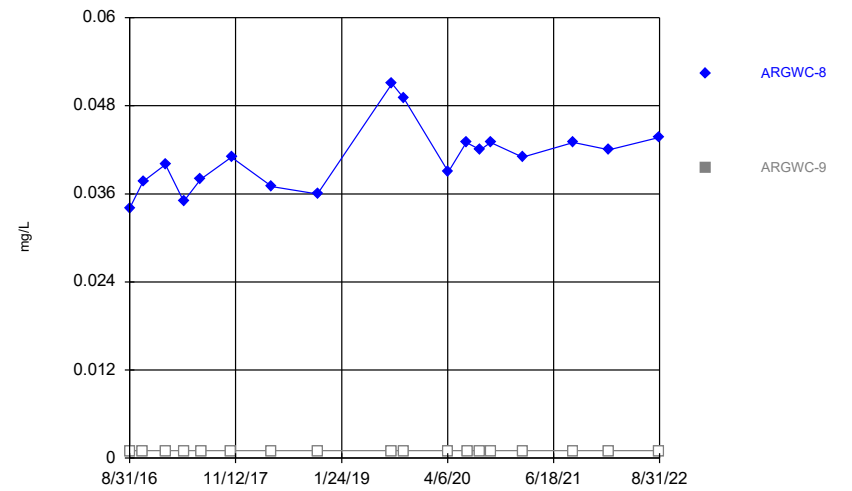
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Plant Arkwright Client: Southern Company Data: Arkwright No 3

Time Series



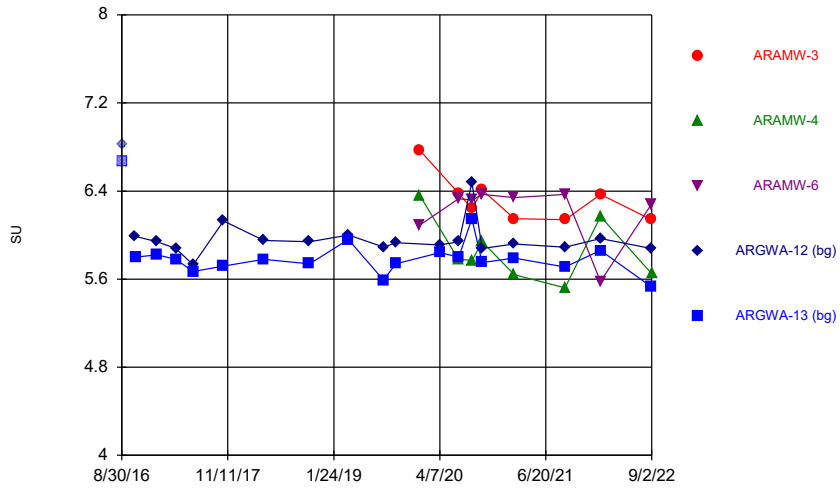
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Time Series



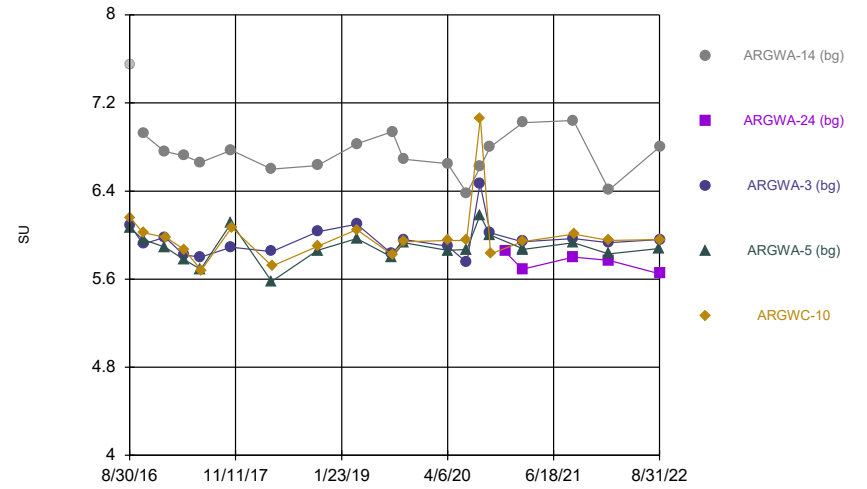
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Time Series



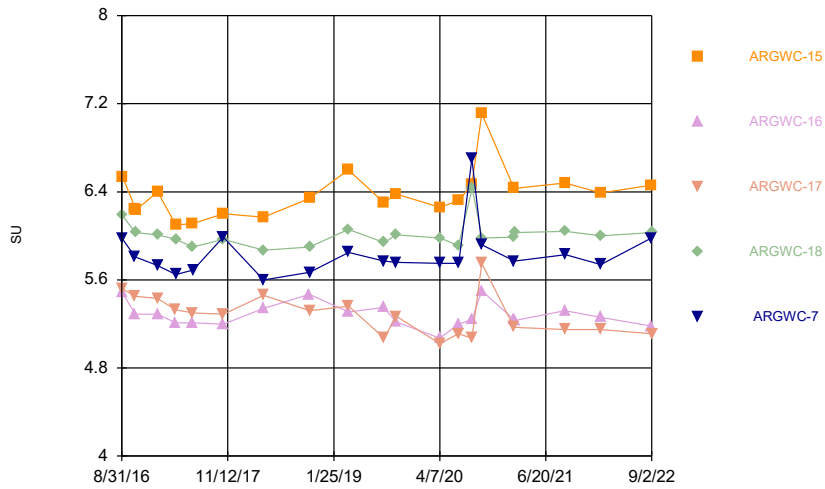
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Time Series



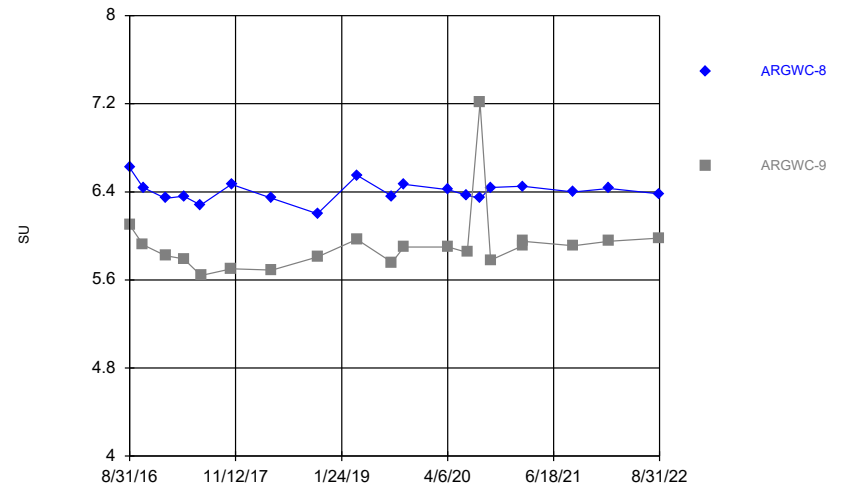
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Time Series



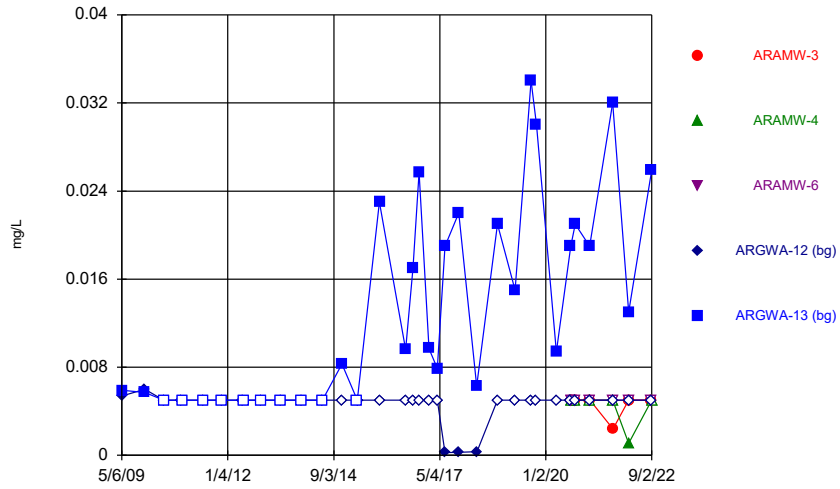
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Time Series



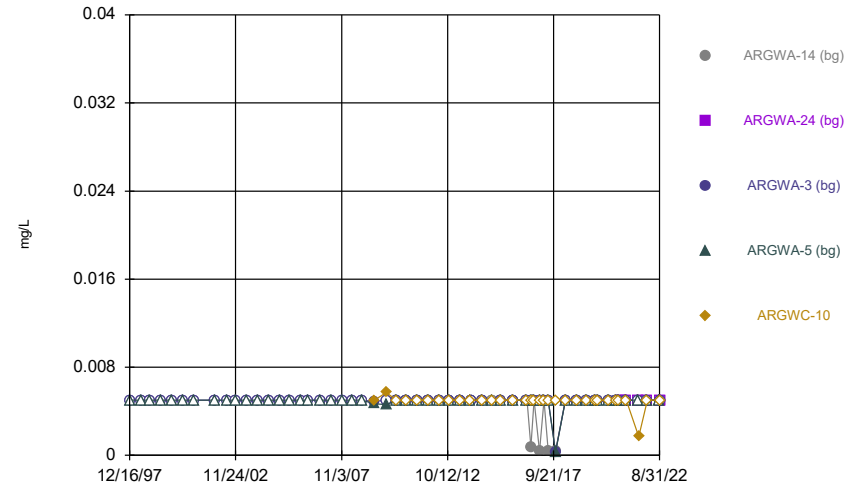
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Time Series



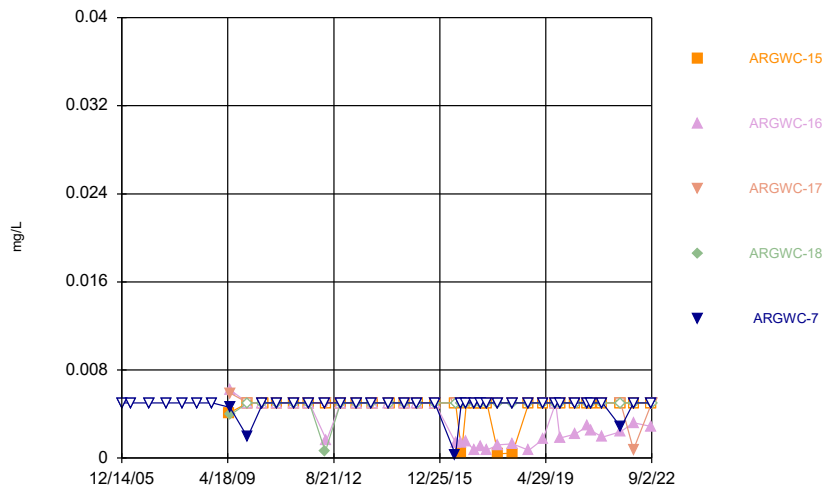
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Time Series



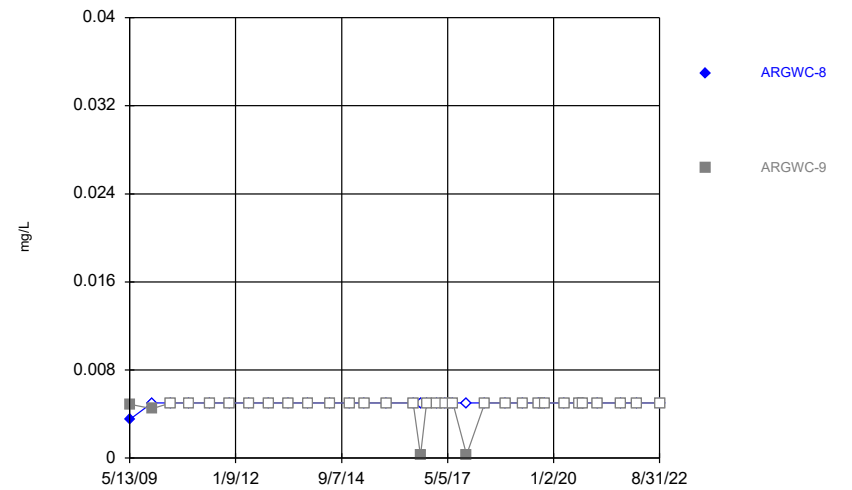
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Time Series



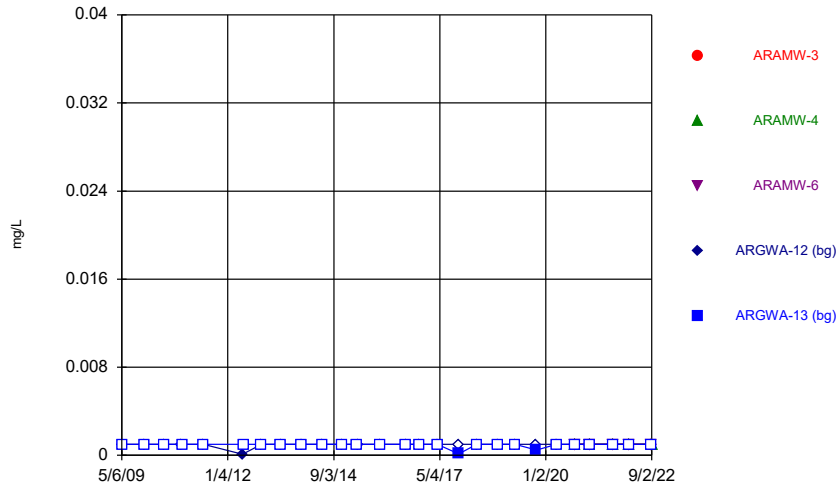
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Time Series



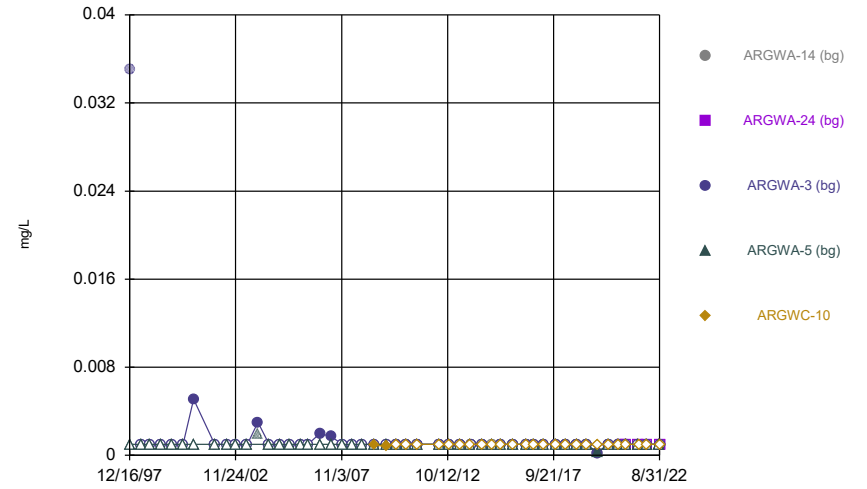
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Time Series



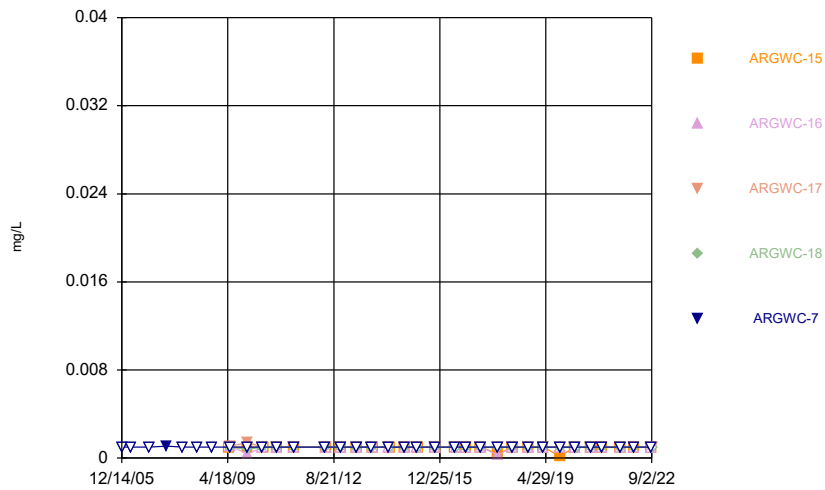
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Time Series



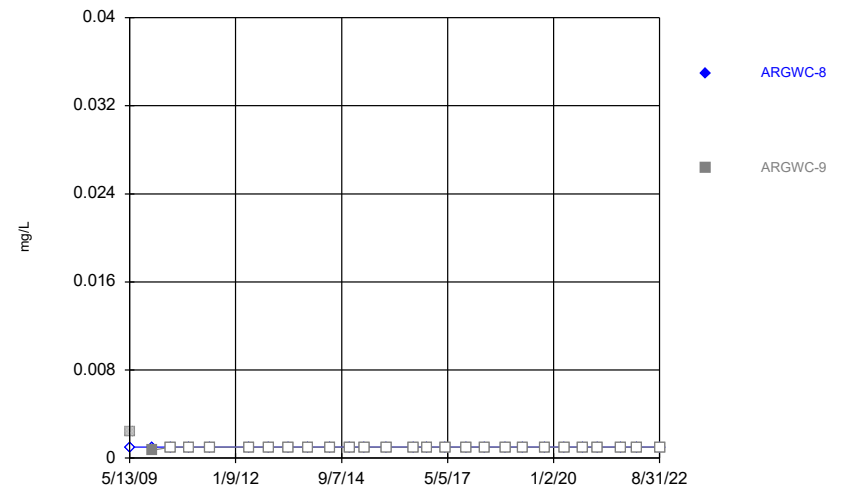
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Time Series



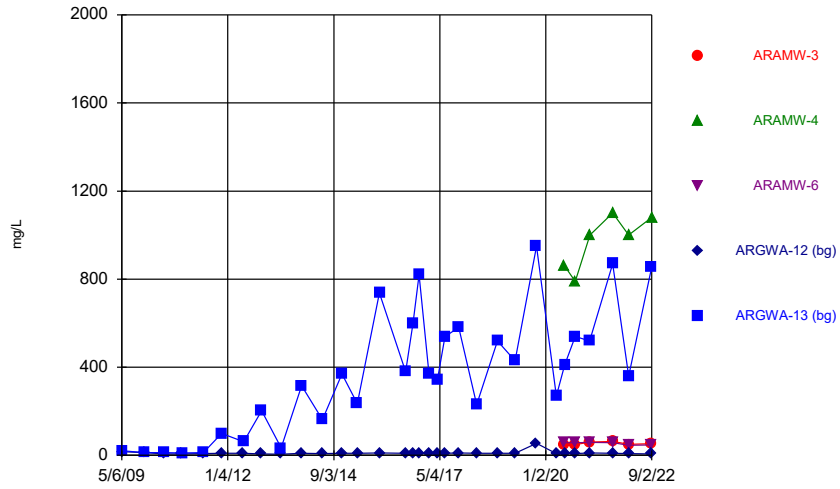
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Time Series



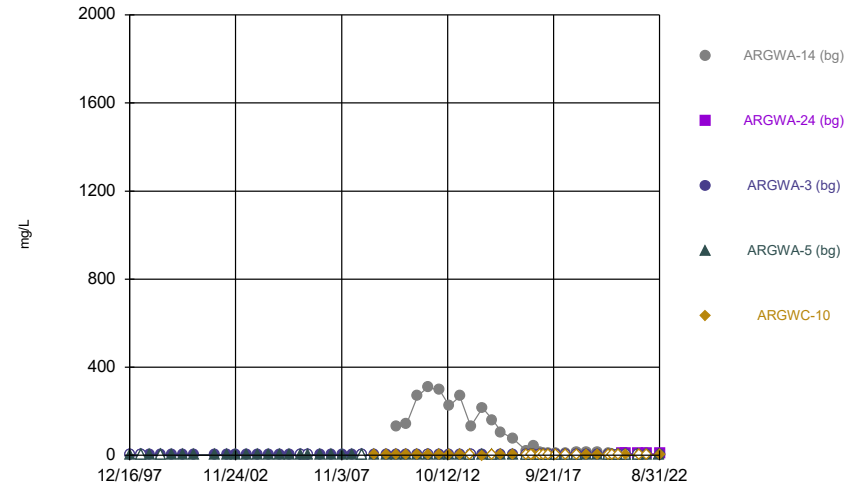
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Time Series



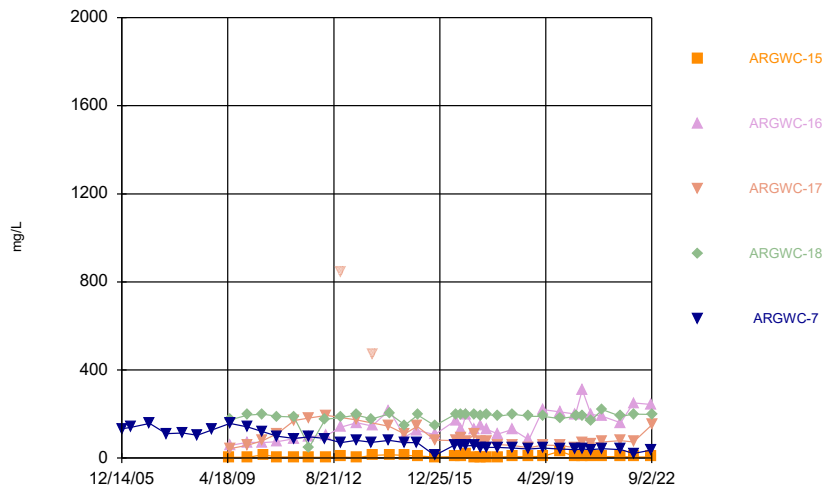
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Time Series



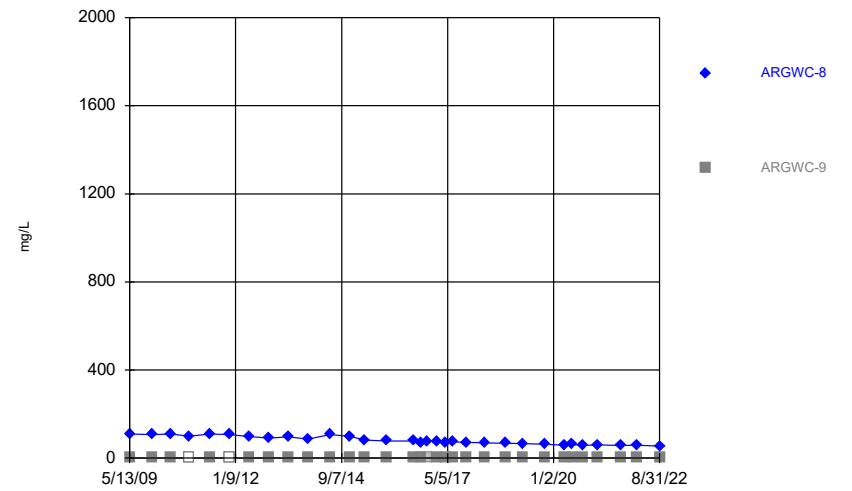
Constituent: Sulfate Analysis Run 11/5/2022 1:30 PM
Plant Arkwright Client: Southern Company Data: Arkwright No 3

Time Series



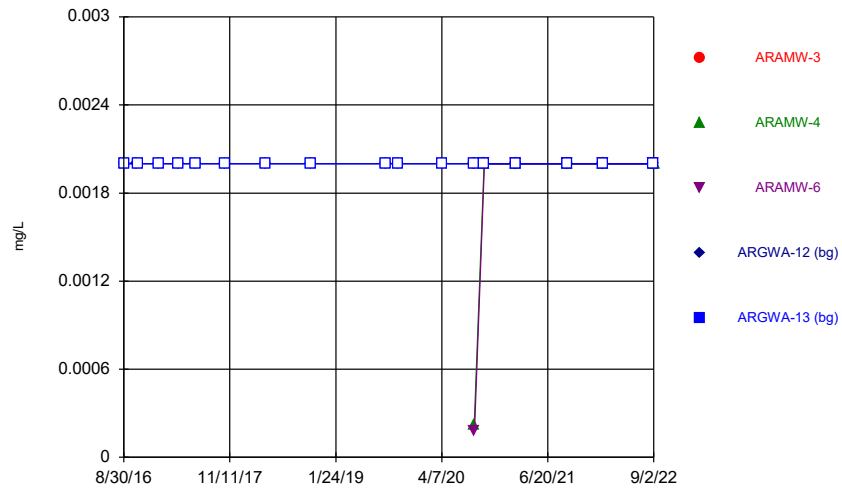
Constituent: Sulfate Analysis Run 11/5/2022 1:30 PM
Plant Arkwright Client: Southern Company Data: Arkwright No 3

Time Series



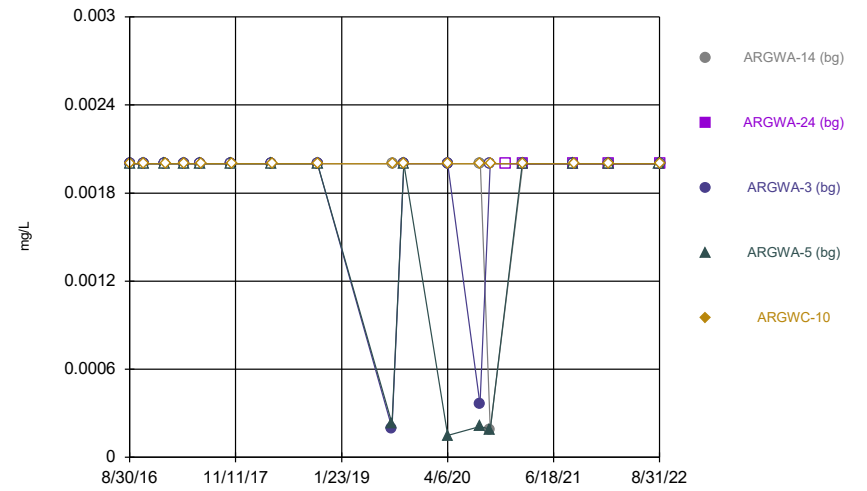
Constituent: Sulfate Analysis Run 11/5/2022 1:30 PM
Plant Arkwright Client: Southern Company Data: Arkwright No 3

Time Series



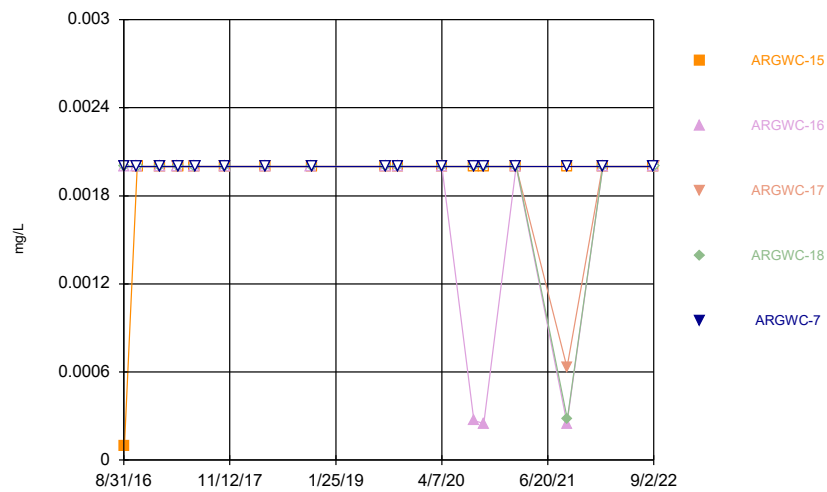
Constituent: Thallium Analysis Run 11/5/2022 1:30 PM
Plant Arkwright Client: Southern Company Data: Arkwright No 3

Time Series



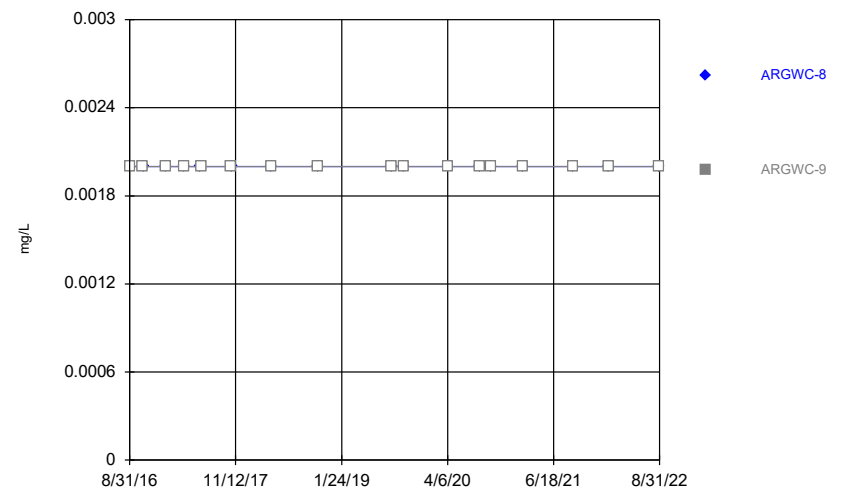
Constituent: Thallium Analysis Run 11/5/2022 1:30 PM
Plant Arkwright Client: Southern Company Data: Arkwright No 3

Time Series



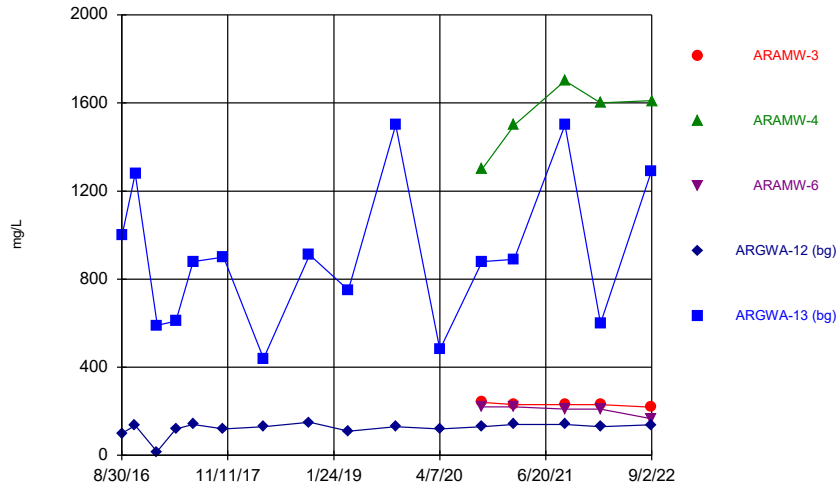
Constituent: Thallium Analysis Run 11/5/2022 1:30 PM
Plant Arkwright Client: Southern Company Data: Arkwright No 3

Time Series



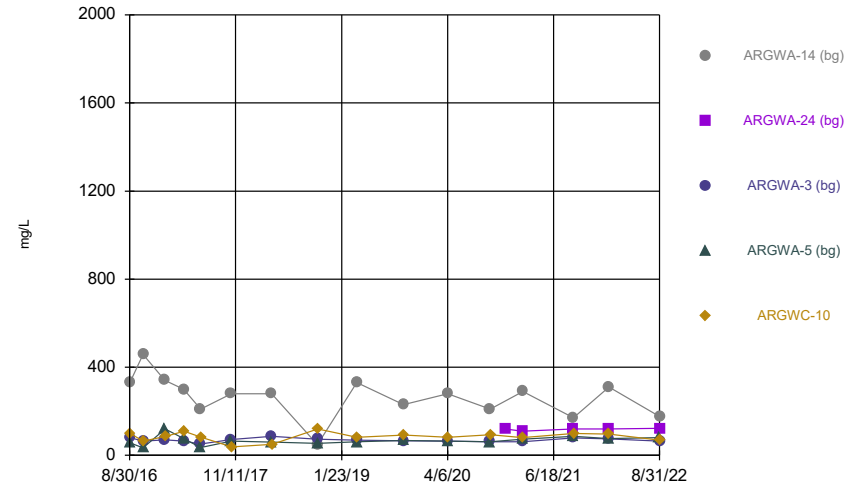
Constituent: Thallium Analysis Run 11/5/2022 1:30 PM
Plant Arkwright Client: Southern Company Data: Arkwright No 3

Time Series



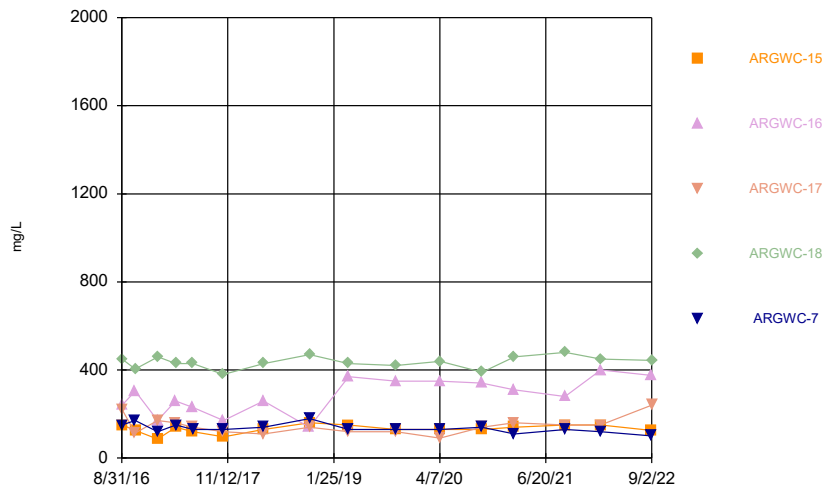
Constituent: Total Dissolved Solids Analysis Run 11/5/2022 1:30 PM
Plant Arkwright Client: Southern Company Data: Arkwright No 3

Time Series



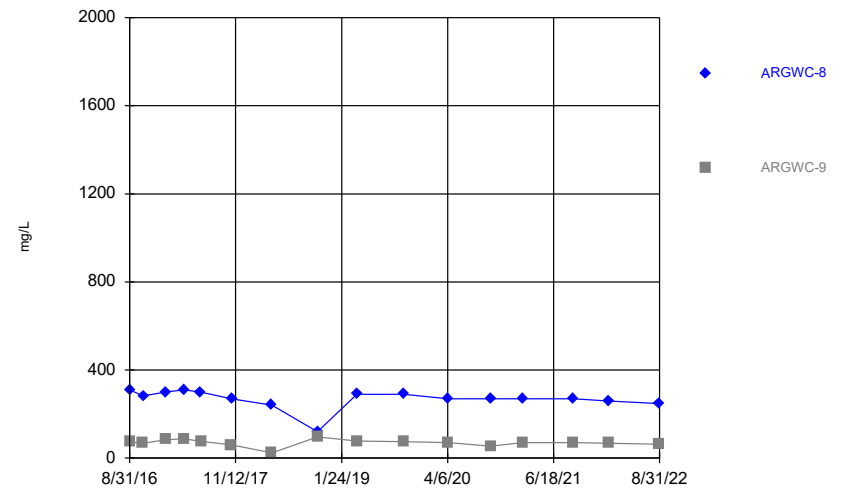
Constituent: Total Dissolved Solids Analysis Run 11/5/2022 1:30 PM
Plant Arkwright Client: Southern Company Data: Arkwright No 3

Time Series



Constituent: Total Dissolved Solids Analysis Run 11/5/2022 1:30 PM
Plant Arkwright Client: Southern Company Data: Arkwright No 3

Time Series



Constituent: Total Dissolved Solids Analysis Run 11/5/2022 1:30 PM
Plant Arkwright Client: Southern Company Data: Arkwright No 3

Time Series

Constituent: Antimony (mg/L) Analysis Run 11/5/2022 1:32 PM
Plant Arkwright Client: Southern Company Data: Arkwright No 3

	ARAMW-3	ARAMW-4	ARAMW-6	ARGWA-12 (bg)	ARGWA-13 (bg)
8/30/2016				<0.003	
8/31/2016					<0.003
10/24/2016				<0.003	
10/25/2016					<0.003
1/23/2017				<0.003	
1/24/2017					<0.003
4/11/2017				<0.003	<0.003
6/21/2017				<0.003	<0.003
10/25/2017				<0.003	<0.003
4/9/2018					<0.003
4/10/2018				<0.003	
10/16/2018				<0.003	<0.003
8/19/2019					<0.003
8/20/2019				<0.003	
10/8/2019				<0.003	<0.003
4/7/2020				<0.003	<0.003
8/18/2020				<0.003	<0.003
8/20/2020	<0.003	<0.003			
8/21/2020			<0.003		
9/7/2021				<0.003	<0.003
9/8/2021		<0.003			
9/9/2021	<0.003		<0.003		
2/1/2022				<0.003	<0.003
2/2/2022	<0.003	<0.003	<0.003		
8/30/2022				<0.003	
8/31/2022	<0.003		<0.003		<0.003
9/2/2022		<0.003			

Time Series

Constituent: Antimony (mg/L) Analysis Run 11/5/2022 1:32 PM
Plant Arkwright Client: Southern Company Data: Arkwright No 3

	ARGWA-14 (bg)	ARGWA-24 (bg)	ARGWA-3 (bg)	ARGWA-5 (bg)	ARGWC-10
8/30/2016				<0.003	
8/31/2016	0.0017 (J)		<0.003		
9/1/2016					<0.003
10/25/2016	<0.003		<0.003	<0.003	<0.003
1/23/2017	<0.003				
1/24/2017			<0.003	<0.003	
1/27/2017					<0.003
4/11/2017	<0.003		<0.003	<0.003	
4/12/2017					<0.003
6/20/2017	<0.003		<0.003	<0.003	
6/22/2017					<0.003
10/25/2017	<0.003		<0.003	<0.003	
10/26/2017					<0.003
4/9/2018	<0.003				
4/10/2018			<0.003	<0.003	
4/11/2018					<0.003
10/16/2018	<0.003		<0.003	<0.003	
10/17/2018					<0.003
8/20/2019			<0.003	<0.003	
8/21/2019	0.00064 (J)				<0.003
10/7/2019	<0.003				
10/8/2019			<0.003	<0.003	
10/9/2019					<0.003
4/6/2020	<0.003				
4/7/2020			<0.003	<0.003	
4/8/2020					0.00094 (J)
8/18/2020			<0.003	<0.003	
8/19/2020	<0.003				<0.003
12/1/2020		<0.003			
2/9/2021		<0.003			
9/8/2021	<0.003	<0.003	<0.003	<0.003	
9/10/2021					<0.003
2/1/2022		<0.003	<0.003	<0.003	
2/2/2022	<0.003				<0.003
8/30/2022				<0.003	
8/31/2022	<0.003	<0.003	<0.003		<0.003

Time Series

Constituent: Antimony (mg/L) Analysis Run 11/5/2022 1:32 PM
Plant Arkwright Client: Southern Company Data: Arkwright No 3

	ARGWC-15	ARGWC-16	ARGWC-17	ARGWC-18	ARGWC-7
8/31/2016					<0.003
9/1/2016		<0.003	<0.003	<0.003	
9/2/2016	<0.003				
10/25/2016		<0.003	<0.003		0.0013 (J)
10/26/2016	<0.003			<0.003	
1/26/2017	<0.003	<0.003	<0.003		<0.003
1/27/2017				<0.003	
4/11/2017		<0.003	<0.003		
4/12/2017	<0.003			<0.003	<0.003
6/21/2017	<0.003	<0.003	<0.003	<0.003	
6/22/2017					<0.003
10/25/2017				<0.003	<0.003
10/26/2017	<0.003	<0.003	<0.003		
4/10/2018	<0.003	<0.003	<0.003		<0.003
4/11/2018				<0.003	
10/16/2018		<0.003			
10/17/2018	<0.003		<0.003	<0.003	<0.003
8/20/2019		<0.003			
8/21/2019	<0.003		<0.003	<0.003	<0.003
10/8/2019	<0.003				
10/9/2019		<0.003	<0.003	<0.003	<0.003
4/8/2020	<0.003	<0.003	<0.003		<0.003
4/9/2020				<0.003	
8/18/2020			<0.003		<0.003
8/19/2020	<0.003	<0.003			
8/20/2020				<0.003	
9/8/2021	<0.003	<0.003	<0.003		
9/9/2021				<0.003	
9/10/2021					<0.003
2/2/2022			<0.003		
2/3/2022	<0.003	<0.003		<0.003	<0.003
8/31/2022	<0.003	<0.003			<0.003
9/2/2022			<0.003	<0.003	

Time Series

Constituent: Antimony (mg/L) Analysis Run 11/5/2022 1:32 PM
Plant Arkwright Client: Southern Company Data: Arkwright No 3

	ARGWC-8	ARGWC-9
8/31/2016	<0.003	<0.003
10/25/2016		<0.003
10/26/2016	<0.003	
1/26/2017	<0.003	<0.003
4/12/2017	<0.003	<0.003
6/21/2017	<0.003	
6/22/2017		<0.003
10/25/2017		<0.003
10/26/2017	<0.003	
4/11/2018	<0.003	<0.003
10/17/2018	<0.003	<0.003
8/21/2019	<0.003	<0.003
10/9/2019	<0.003	0.00048 (J)
4/9/2020	<0.003	<0.003
8/19/2020		<0.003
8/20/2020	<0.003	
9/9/2021	<0.003	<0.003
2/2/2022	<0.003	<0.003
8/31/2022	<0.003	<0.003

Time Series

Constituent: Arsenic (mg/L) Analysis Run 11/5/2022 1:32 PM
 Plant Arkwright Client: Southern Company Data: Arkwright No 3

	ARAMW-3	ARAMW-4	ARAMW-6	ARGWA-12 (bg)	ARGWA-13 (bg)
5/6/2009				<0.005	
5/7/2009					0.0013
12/3/2009				<0.005	<0.005
5/25/2010				<0.005	<0.005
11/9/2010				<0.005	
11/10/2010					<0.005
5/24/2011				<0.005	
5/25/2011					<0.005
11/10/2011				<0.005	<0.005
5/18/2012				<0.005	
5/30/2012					<0.005
11/9/2012				<0.005	<0.005
5/8/2013				<0.005	
5/9/2013					<0.005
11/6/2013				<0.005	
11/11/2013					<0.005
5/20/2014				<0.005	
5/21/2014					<0.005
11/18/2014				<0.005	<0.005
4/7/2015					<0.005
4/14/2015				<0.005	
10/28/2015					<0.005
10/29/2015				<0.005	
6/23/2016				<0.005	<0.005
8/30/2016				<0.005	
8/31/2016					<0.005
10/24/2016				<0.005	
10/25/2016					<0.005
1/23/2017				<0.005	
1/24/2017					<0.005
4/11/2017				0.00076 (J)	0.00063 (J)
6/21/2017				<0.005	<0.005
10/25/2017				<0.005	<0.005
4/9/2018					<0.005
4/10/2018				<0.005	
10/16/2018				<0.005	0.00055 (J)
3/26/2019					0.00089 (J)
3/27/2019				0.00049 (J)	
8/19/2019					0.00045 (J)
8/20/2019				0.00046 (J)	
10/8/2019				<0.005	<0.005
4/7/2020				<0.005	<0.005
8/18/2020				<0.005	<0.005
8/20/2020	<0.005	0.00034 (J)			
8/21/2020			<0.005		
9/29/2020				<0.005	<0.005
9/30/2020	<0.005	0.00039 (J)			
10/1/2020			<0.005		
2/9/2021			<0.005	<0.005	<0.005
2/10/2021	<0.005	<0.005			
9/7/2021				<0.005	<0.005
9/8/2021		<0.005			

Time Series

Constituent: Arsenic (mg/L) Analysis Run 11/5/2022 1:32 PM
Plant Arkwright Client: Southern Company Data: Arkwright No 3

	ARAMW-3	ARAMW-4	ARAMW-6	ARGWA-12 (bg)	ARGWA-13 (bg)
9/9/2021	<0.005		<0.005		
2/1/2022				<0.005	<0.005
2/2/2022	0.00034 (J)	0.00035 (J)	<0.005		
8/30/2022				<0.005	
8/31/2022	<0.005		<0.005		<0.005
9/2/2022		0.00339 (J)			

Time Series

Constituent: Arsenic (mg/L) Analysis Run 11/5/2022 1:32 PM
 Plant Arkwright Client: Southern Company Data: Arkwright No 3

	ARGWA-14 (bg)	ARGWA-24 (bg)	ARGWA-3 (bg)	ARGWA-5 (bg)	ARGWC-10
12/16/1997			0.002	<0.005	
6/30/1998			0.0006	<0.005	
12/2/1998			0.0007	<0.005	
6/8/1999			<0.005	<0.005	
12/7/1999			<0.005	<0.005	
6/15/2000			<0.005	<0.005	
12/12/2000			0.000475	0.00032	
12/5/2001			<0.005	0.0003	
6/26/2002			0.000431	0.000939	
12/3/2002			<0.005	<0.005	
6/11/2003			<0.005	<0.005	
12/10/2003			<0.005	<0.005	
6/15/2004			<0.005	<0.005	
12/14/2004			<0.005	<0.005	
6/2/2005			<0.005	<0.005	
12/14/2005			<0.005	<0.005	
4/5/2006			<0.005	<0.005	
10/30/2006			<0.005	<0.005	
5/10/2007			0.0044	<0.005	
11/17/2007			<0.005	<0.005	
5/3/2008			<0.005	<0.005	
10/22/2008			<0.005	<0.005	
5/6/2009				<0.005	
5/7/2009			0.0028		
5/13/2009					0.0042 (o)
12/1/2009				<0.005	
12/3/2009					<0.005
12/4/2009			<0.005		
5/25/2010				<0.005	
5/26/2010					<0.005
6/1/2010			<0.005		
6/2/2010	<0.005				
11/9/2010				<0.005	<0.005
11/10/2010	<0.005		<0.005		
5/19/2011	<0.005				<0.005
5/24/2011				<0.005	
5/25/2011			<0.005		
11/9/2011	<0.005				
11/10/2011				<0.005	
11/11/2011					<0.005
11/12/2011			<0.005		
5/17/2012					<0.005
5/18/2012				<0.005	
5/30/2012	0.0026 (J)				
5/31/2012			<0.005		
11/9/2012				<0.005	<0.005
11/11/2012	<0.005		<0.005		
5/7/2013					<0.005
5/8/2013				<0.005	
5/9/2013	<0.005				
5/13/2013			<0.005		
11/6/2013				<0.005	<0.005

Time Series

Constituent: Arsenic (mg/L) Analysis Run 11/5/2022 1:32 PM
 Plant Arkwright Client: Southern Company Data: Arkwright No 3

	ARGWA-14 (bg)	ARGWA-24 (bg)	ARGWA-3 (bg)	ARGWA-5 (bg)	ARGWC-10
11/11/2013	<0.005				
11/12/2013			<0.005		
5/20/2014				<0.005	<0.005
5/29/2014	0.005 (J)		<0.005		
11/17/2014				<0.005	
11/18/2014					<0.005
11/19/2014	<0.005				
4/7/2015				<0.005	<0.005
4/14/2015	<0.005		<0.005		
10/28/2015				<0.005	<0.005
11/3/2015			<0.005		
11/4/2015	<0.005				
6/23/2016	0.0026		<0.005	<0.005	<0.005
8/30/2016				<0.005	
8/31/2016	0.0032		<0.005		
9/1/2016					<0.005
10/25/2016	<0.005		<0.005	<0.005	<0.005
1/23/2017	0.00088 (J)				
1/24/2017			<0.005	<0.005	
1/27/2017					<0.005
4/11/2017	0.00095 (J)		0.00067 (J)	0.00077 (J)	
4/12/2017					<0.005
6/20/2017	0.00099 (J)		0.00064 (J)	0.00052 (J)	
6/22/2017					<0.005
10/25/2017	<0.005		<0.005	<0.005	
10/26/2017					<0.005
4/9/2018	<0.005				
4/10/2018			<0.005	<0.005	
4/11/2018					<0.005
10/16/2018	0.00083 (J)		<0.005	<0.005	
10/17/2018					<0.005
3/27/2019	0.0013		0.00055 (J)	0.00055 (J)	
3/28/2019					0.0011 (J)
8/20/2019			0.00045 (J)	0.00058 (J)	
8/21/2019	0.0013				0.0004 (J)
10/7/2019	0.00045 (J)				
10/8/2019			<0.005	<0.005	
10/9/2019					0.0019
4/6/2020	<0.005				
4/7/2020			<0.005	<0.005	
4/8/2020					<0.005
8/18/2020			<0.005	<0.005	
8/19/2020	<0.005				<0.005
9/29/2020	0.00038 (J)		<0.005	<0.005	
10/1/2020					<0.005
12/1/2020		<0.005			
2/9/2021		<0.005	<0.005	<0.005	<0.005
2/11/2021	<0.005				
9/8/2021	0.00034 (J)	<0.005	<0.005	<0.005	
9/10/2021					<0.005
2/1/2022		<0.005	<0.005	<0.005	
2/2/2022	0.00033 (J)				<0.005

Time Series

Constituent: Arsenic (mg/L) Analysis Run 11/5/2022 1:32 PM
Plant Arkwright Client: Southern Company Data: Arkwright No 3

	ARGWA-14 (bg)	ARGWA-24 (bg)	ARGWA-3 (bg)	ARGWA-5 (bg)	ARGWC-10
8/30/2022				<0.005	
8/31/2022	<0.005	<0.005	<0.005		<0.005

Time Series

Constituent: Arsenic (mg/L) Analysis Run 11/5/2022 1:32 PM
 Plant Arkwright Client: Southern Company Data: Arkwright No 3

	ARGWC-15	ARGWC-16	ARGWC-17	ARGWC-18	ARGWC-7
12/14/2005					<0.005
4/5/2006					<0.005
10/30/2006					<0.005
5/10/2007					<0.005
11/17/2007					<0.005
5/2/2008					<0.005
10/22/2008					<0.005
5/5/2009	<0.005				
5/12/2009		0.003 (o)	<0.005	0.0025 (o)	
5/14/2009					<0.005
12/1/2009					<0.005
12/4/2009	<0.005		<0.005	<0.005	
12/5/2009		<0.005			
5/25/2010			<0.005	<0.005	
5/26/2010		<0.005			<0.005
6/1/2010	<0.005				
11/9/2010		<0.005	<0.005		
11/10/2010	<0.005			<0.005	<0.005
5/19/2011				<0.005	
5/24/2011		<0.005	<0.005		
5/25/2011	<0.005				<0.005
11/9/2011	<0.005				
11/11/2011					<0.005
11/12/2011		<0.005	<0.005	<0.005	
5/17/2012				<0.005	<0.005
5/30/2012		<0.005	<0.005		
5/31/2012	<0.005				
11/9/2012		<0.005	0.01 (o)		<0.005
11/10/2012	<0.005			<0.005	
5/7/2013				<0.005	
5/8/2013			<0.005		<0.005
5/13/2013	<0.005	<0.005			
11/5/2013				<0.005	<0.005
11/6/2013		<0.005	<0.005		
11/12/2013	<0.005				
5/20/2014			<0.005		
5/21/2014		<0.005			<0.005
5/28/2014	<0.005			<0.005	
11/17/2014		<0.005	<0.005		<0.005
11/19/2014				<0.005	
11/20/2014	<0.005				
4/7/2015		<0.005	<0.005		<0.005
4/14/2015	<0.005				
4/15/2015				<0.005	
10/28/2015		<0.005	<0.005		<0.005
10/29/2015				<0.005	
11/3/2015	<0.005				
6/23/2016	<0.005				<0.005
6/24/2016		<0.005	<0.005	<0.005	
8/31/2016					<0.005
9/1/2016		<0.005	<0.005	<0.005	
9/2/2016	0.00062 (J)				

Time Series

Constituent: Arsenic (mg/L) Analysis Run 11/5/2022 1:32 PM
 Plant Arkwright Client: Southern Company Data: Arkwright No 3

	ARGWC-15	ARGWC-16	ARGWC-17	ARGWC-18	ARGWC-7
10/25/2016		<0.005	<0.005		<0.005
10/26/2016	<0.005			<0.005	
1/26/2017	<0.005	<0.005	<0.005		<0.005
1/27/2017				<0.005	
4/11/2017		0.00067 (J)	0.00084 (J)		
4/12/2017	<0.005			<0.005	0.00078 (J)
6/21/2017	<0.005	<0.005	<0.005	<0.005	
6/22/2017					<0.005
10/25/2017				<0.005	<0.005
10/26/2017	<0.005	<0.005	0.00087 (J)		
4/10/2018	<0.005	<0.005	<0.005		<0.005
4/11/2018				<0.005	
10/16/2018		<0.005			
10/17/2018	<0.005		<0.005	0.00066 (J)	<0.005
3/27/2019	<0.005			<0.005	
3/28/2019		0.00057 (J)	<0.005		<0.005
8/20/2019		<0.005			
8/21/2019	0.00036 (J)		0.00044 (J)	0.00033 (J)	<0.005
10/8/2019	<0.005				
10/9/2019		0.001	0.0015	0.0016	0.0015
4/8/2020	<0.005	<0.005	<0.005		<0.005
4/9/2020				<0.005	
8/18/2020			<0.005		<0.005
8/19/2020	<0.005	<0.005			
8/20/2020				<0.005	
9/29/2020	<0.005	<0.005	<0.005		<0.005
9/30/2020				<0.005	
2/9/2021	<0.005	<0.005	<0.005		
2/10/2021				<0.005	<0.005
9/8/2021	<0.005	0.00031 (J)	0.00039 (J)		
9/9/2021				0.0004 (J)	
9/10/2021					<0.005
2/2/2022			0.00044 (J)		
2/3/2022	<0.005	<0.005		<0.005	<0.005
8/31/2022	<0.005	<0.005			<0.005
9/2/2022			<0.005	<0.005	

Time Series

Constituent: Arsenic (mg/L) Analysis Run 11/5/2022 1:32 PM
Plant Arkwright Client: Southern Company Data: Arkwright No 3

	ARGWC-8	ARGWC-9
5/13/2009		0.0034 (o)
5/14/2009	<0.005	
12/3/2009	<0.005	<0.005
5/26/2010	<0.005	<0.005
11/9/2010	<0.005	<0.005
5/18/2011	<0.005	
5/19/2011		<0.005
11/11/2011	<0.005	<0.005
5/17/2012	<0.005	<0.005
11/9/2012	<0.005	<0.005
5/7/2013	<0.005	<0.005
11/5/2013	<0.005	
11/6/2013		<0.005
5/21/2014	<0.005	<0.005
11/18/2014	<0.005	<0.005
4/7/2015	<0.005	<0.005
10/28/2015	<0.005	<0.005
6/23/2016	<0.005	<0.005
8/31/2016	<0.005	<0.005
10/25/2016		<0.005
10/26/2016	<0.005	
1/26/2017	<0.005	<0.005
4/12/2017	0.00072 (J)	<0.005
6/21/2017	<0.005	
6/22/2017		<0.005
10/25/2017		<0.005
10/26/2017	<0.005	
4/11/2018	<0.005	<0.005
10/17/2018	0.00063 (J)	<0.005
3/28/2019	<0.005	0.00051 (J)
8/21/2019	0.00036 (J)	<0.005
10/9/2019	0.0014	0.0011
4/9/2020	<0.005	<0.005
8/19/2020		<0.005
8/20/2020	<0.005	
10/1/2020	<0.005	<0.005
2/10/2021	<0.005	<0.005
9/9/2021	<0.005	<0.005
2/2/2022	<0.005	<0.005
8/31/2022	<0.005	<0.005

Time Series

Constituent: Barium (mg/L) Analysis Run 11/5/2022 1:32 PM
 Plant Arkwright Client: Southern Company Data: Arkwright No 3

	ARAMW-3	ARAMW-4	ARAMW-6	ARGWA-12 (bg)	ARGWA-13 (bg)
5/6/2009				0.065	
5/7/2009					0.068
12/3/2009				0.062	0.044
5/25/2010				0.038 (o)	0.049
11/9/2010				0.059	
11/10/2010					0.052
5/24/2011				0.054	
5/25/2011					0.045
11/10/2011				0.063	0.11
5/18/2012				0.0646	
5/30/2012					0.0831
11/9/2012				0.081	0.13
5/8/2013				0.066	
5/9/2013					0.059
11/6/2013				0.074	
11/11/2013					0.12
5/20/2014				0.057	
5/21/2014					0.073
11/18/2014				0.069	0.072
4/7/2015					0.06
4/14/2015				0.067	
10/28/2015					0.057
10/29/2015				0.069	
6/23/2016				0.063	0.036
8/30/2016				0.062	
8/31/2016					0.041
10/24/2016				0.0674	
10/25/2016					0.0429
1/23/2017				0.069	
1/24/2017					0.025
4/11/2017				0.064	0.024
6/21/2017				0.074	0.034
10/25/2017				0.07	0.03
4/9/2018					0.023
4/10/2018				0.073	
10/16/2018				0.069	0.028
3/26/2019					0.029
3/27/2019				0.063	
8/19/2019					0.035
8/20/2019				0.075	
10/8/2019				0.078	0.042
4/7/2020				0.066	0.021
8/18/2020				0.079	0.025
8/20/2020	0.093	0.053			
8/21/2020			0.049		
9/29/2020				0.079	0.024
9/30/2020	0.094	0.053			
10/1/2020			0.044		
2/9/2021			0.041	0.076	0.022
2/10/2021	0.066	0.042			
9/7/2021				0.073	0.031
9/8/2021		0.037			

Time Series

Constituent: Barium (mg/L) Analysis Run 11/5/2022 1:32 PM
Plant Arkwright Client: Southern Company Data: Arkwright No 3

	ARAMW-3	ARAMW-4	ARAMW-6	ARGWA-12 (bg)	ARGWA-13 (bg)
9/9/2021	0.066		0.038		
2/1/2022				0.079	0.018
2/2/2022	0.067	0.036	0.041		
8/30/2022				0.085	
8/31/2022	0.0619		0.04		0.0262
9/2/2022		0.0374			

Time Series

Constituent: Barium (mg/L) Analysis Run 11/5/2022 1:32 PM
 Plant Arkwright Client: Southern Company Data: Arkwright No 3

	ARGWA-14 (bg)	ARGWA-24 (bg)	ARGWA-3 (bg)	ARGWA-5 (bg)	ARGWC-10
12/16/1997			2.12 (o)	0.032	
6/30/1998			0.177	0.028	
12/2/1998			0.115	0.032	
6/8/1999			0.074	0.0287	
12/7/1999			0.043	0.034	
6/15/2000			0.113	0.034	
12/12/2000			0.059	0.027	
12/5/2001			0.052	0.027	
6/26/2002			0.087	0.032	
12/3/2002			0.043	0.023	
6/11/2003			0.24	0.04	
12/10/2003			0.03	0.024	
6/15/2004			0.028	0.021	
12/14/2004			0.017	0.025	
6/2/2005			0.019	0.025	
12/14/2005			0.02	0.026	
4/5/2006			0.019	0.027	
10/30/2006			<0.001 (o)	0.027	
5/10/2007			0.017	0.024	
11/17/2007			0.015	0.026	
5/3/2008			0.017	0.022	
10/22/2008			0.11	0.027	
5/6/2009				0.023	
5/7/2009			0.13		
5/13/2009					0.15 (o)
12/1/2009				0.033	
12/3/2009					0.03
12/4/2009			0.019		
5/25/2010				0.03	
5/26/2010					0.029
6/1/2010			0.027		
6/2/2010	0.046				
11/9/2010				0.033	0.029
11/10/2010	0.057		0.025		
5/19/2011	0.048				0.027
5/24/2011				0.027	
5/25/2011			0.015		
11/9/2011	0.045				
11/10/2011				0.032	
11/11/2011					0.031
11/12/2011			0.021		
5/17/2012					0.0299
5/18/2012				0.0311	
5/30/2012	0.0519				
5/31/2012			0.0222		
11/9/2012				0.034	0.03
11/11/2012	0.051		0.022		
5/7/2013					0.028
5/8/2013				0.026	
5/9/2013	0.056				
5/13/2013			0.019		
11/6/2013				0.028	0.033

Time Series

Constituent: Barium (mg/L) Analysis Run 11/5/2022 1:32 PM
 Plant Arkwright Client: Southern Company Data: Arkwright No 3

	ARGWA-14 (bg)	ARGWA-24 (bg)	ARGWA-3 (bg)	ARGWA-5 (bg)	ARGWC-10
11/11/2013	0.041				
11/12/2013			0.025		
5/20/2014				0.027	0.029
5/29/2014	0.051		0.024		
11/17/2014				0.029	
11/18/2014					0.029
11/19/2014	0.051				
4/7/2015				0.024	0.028
4/14/2015	0.043		0.022		
10/28/2015				0.028	0.029
11/3/2015			0.022		
11/4/2015	0.042				
6/23/2016	0.084		0.019	0.025	0.028
8/30/2016				0.026	
8/31/2016	0.076		0.018		
9/1/2016					0.027
10/25/2016	0.039		0.016	0.0293	0.0296
1/23/2017	0.044				
1/24/2017			0.017	0.028	
1/27/2017					0.035
4/11/2017	0.038		0.016	0.024	
4/12/2017					0.031
6/20/2017	0.057		0.02	0.027	
6/22/2017					0.035
10/25/2017	0.05		0.019	0.03	
10/26/2017					0.032
4/9/2018	0.049				
4/10/2018			0.019	0.028	
4/11/2018					0.034
10/16/2018	0.06		0.018	0.027	
10/17/2018					0.031
3/27/2019	0.054		0.019	0.024	
3/28/2019					0.031
8/20/2019			0.02	0.029	
8/21/2019	0.031				0.035
10/7/2019	0.033				
10/8/2019			0.02	0.03	
10/9/2019					0.031
4/6/2020	0.051				
4/7/2020			0.018	0.02	
4/8/2020					0.031
8/18/2020			0.021	0.031	
8/19/2020	0.041				0.034
9/29/2020	0.062		0.019	0.03	
10/1/2020					0.032
12/1/2020		0.038			
2/9/2021		0.036	0.017	0.028	0.031
2/11/2021	0.066				
9/8/2021	0.037	0.039	0.018	0.033	
9/10/2021					0.031
2/1/2022		0.04	0.018	0.033	
2/2/2022	0.062				0.034

Time Series

Constituent: Barium (mg/L) Analysis Run 11/5/2022 1:32 PM
Plant Arkwright Client: Southern Company Data: Arkwright No 3

	ARGWA-14 (bg)	ARGWA-24 (bg)	ARGWA-3 (bg)	ARGWA-5 (bg)	ARGWC-10
8/30/2022				0.0446	
8/31/2022	0.074	0.0412	0.0181		0.0345

Time Series

Constituent: Barium (mg/L) Analysis Run 11/5/2022 1:32 PM
 Plant Arkwright Client: Southern Company Data: Arkwright No 3

	ARGWC-15	ARGWC-16	ARGWC-17	ARGWC-18	ARGWC-7
12/14/2005					0.027
4/5/2006					0.029
10/30/2006					0.028
5/10/2007					0.025
11/17/2007					0.026
5/2/2008					0.026
10/22/2008					0.033
5/5/2009	0.042				
5/12/2009		0.16 (o)	0.048	0.055	
5/14/2009					0.035
12/1/2009					0.031
12/4/2009	0.051		0.055	0.036	
12/5/2009		0.062			
5/25/2010			0.063	0.033	
5/26/2010		0.065			0.025
6/1/2010	0.055				
11/9/2010		0.065	0.11		
11/10/2010	0.041			0.038	0.027
5/19/2011				0.028	
5/24/2011		0.062	0.11		
5/25/2011	0.035				0.022
11/9/2011	0.035				
11/11/2011					0.027
11/12/2011		0.067	0.086	0.092 (o)	
5/17/2012				0.0427	0.0265
5/30/2012		0.0767	0.0586		
5/31/2012	0.0372				
11/9/2012		0.093	0.4 (o)		0.028
11/10/2012	0.044			0.038	
5/7/2013				0.03	
5/8/2013			0.054		0.026
5/13/2013	0.2 (o)	0.093			
11/5/2013				0.087 (o)	0.027
11/6/2013		0.068	0.043		
11/12/2013	0.035				
5/20/2014			0.051		
5/21/2014		0.072			0.028
5/28/2014	0.038			0.032	
11/17/2014		0.05	0.049		0.031
11/19/2014				0.058	
11/20/2014	0.037				
4/7/2015		0.055	0.043		0.029
4/14/2015	0.035				
4/15/2015				0.039	
10/28/2015		0.054	0.047		0.032
10/29/2015				0.04	
11/3/2015	0.038				
6/23/2016	0.028				0.031
6/24/2016		0.056	0.044	0.034	
8/31/2016					0.03
9/1/2016		0.051	0.046	0.033	
9/2/2016	0.074				

Time Series

Constituent: Barium (mg/L) Analysis Run 11/5/2022 1:32 PM
Plant Arkwright Client: Southern Company Data: Arkwright No 3

	ARGWC-15	ARGWC-16	ARGWC-17	ARGWC-18	ARGWC-7
10/25/2016		0.0637	0.0436		0.0317
10/26/2016	0.0408			0.0339	
1/26/2017	0.038	0.055	0.051		0.035
1/27/2017				0.037	
4/11/2017		0.055	0.043		
4/12/2017	0.03			0.032	0.034
6/21/2017	0.028	0.054	0.043	0.036	
6/22/2017					0.038
10/25/2017				0.041	0.038
10/26/2017	0.029	0.046	0.038		
4/10/2018	0.032	0.056	0.046		0.038
4/11/2018				0.04	
10/16/2018		0.039			
10/17/2018	0.028		0.043	0.039	0.038
3/27/2019	0.032			0.033	
3/28/2019		0.054	0.045		0.038
8/20/2019		0.046			
8/21/2019	0.033		0.05	0.036	0.041
10/8/2019	0.031				
10/9/2019		0.057	0.049	0.039	0.046
4/8/2020	0.03	0.042	0.045		0.039
4/9/2020				0.041	
8/18/2020			0.062		0.044
8/19/2020	0.028	0.045			
8/20/2020				0.041	
9/29/2020	0.03	0.042	0.056		0.042
9/30/2020				0.041	
2/9/2021	0.029	0.044	0.051		
2/10/2021				0.038	0.041
9/8/2021	0.043	0.035	0.058		
9/9/2021				0.046	
9/10/2021					0.045
2/2/2022			0.062		
2/3/2022	0.03	0.047		0.043	0.051
8/31/2022	0.0325	0.0383			0.0505
9/2/2022			0.0727	0.0369	

Time Series

Constituent: Barium (mg/L) Analysis Run 11/5/2022 1:32 PM
Plant Arkwright Client: Southern Company Data: Arkwright No 3

	ARGWC-8	ARGWC-9
5/13/2009		0.14 (o)
5/14/2009	0.039	
12/3/2009	0.036	0.032
5/26/2010	0.036	0.031
11/9/2010	0.038	0.03
5/18/2011	0.032	
5/19/2011		0.028
11/11/2011	0.036	0.032
5/17/2012	0.0353	0.0319
11/9/2012	0.038	0.036
5/7/2013	0.037	0.035
11/5/2013	0.037	
11/6/2013		0.043
5/21/2014	0.037	0.042
11/18/2014	0.038	0.044
4/7/2015	0.045	0.043
10/28/2015	0.042	0.045
6/23/2016	0.039	0.043
8/31/2016	0.037	0.042
10/25/2016		0.0455
10/26/2016	0.0423	
1/26/2017	0.046	0.048
4/12/2017	0.041	0.045
6/21/2017	0.049	
6/22/2017		0.055
10/25/2017		0.049
10/26/2017	0.046	
4/11/2018	0.048	0.052
10/17/2018	0.045	0.046
3/28/2019	0.045	0.047
8/21/2019	0.052	0.045
10/9/2019	0.049	0.041
4/9/2020	0.045	0.044
8/19/2020		0.046
8/20/2020	0.053	
10/1/2020	0.052	0.045
2/10/2021	0.049	0.038
9/9/2021	0.051	0.038
2/2/2022	0.059	0.04
8/31/2022	0.0571	0.0391

Time Series

Constituent: Beryllium (mg/L) Analysis Run 11/5/2022 1:32 PM
Plant Arkwright Client: Southern Company Data: Arkwright No 3

	ARAMW-3	ARAMW-4	ARAMW-6	ARGWA-12 (bg)	ARGWA-13 (bg)
8/30/2016				<0.0005	
8/31/2016					<0.0005
10/24/2016				<0.0005	
10/25/2016					<0.0005
1/23/2017				<0.0005	
1/24/2017					<0.0005
4/11/2017				<0.0005	<0.0005
6/21/2017				<0.0005	<0.0005
10/25/2017				<0.0005	<0.0005
4/9/2018					<0.0005
4/10/2018				<0.0005	
10/16/2018				<0.0005	<0.0005
8/19/2019					<0.0005
8/20/2019				<0.0005	
10/8/2019				<0.0005	<0.0005
4/7/2020				<0.0005	<0.0005
8/18/2020				<0.0005	<0.0005
8/20/2020	<0.0005	<0.0005			
8/21/2020			<0.0005		
9/29/2020				<0.0005	<0.0005
9/30/2020	<0.0005	<0.0005			
10/1/2020			<0.0005		
2/9/2021			<0.0005	<0.0005	<0.0005
2/10/2021	<0.0005	<0.0005			
9/7/2021				<0.0005	<0.0005
9/8/2021		<0.0005			
9/9/2021	<0.0005		<0.0005		
2/1/2022				<0.0005	<0.0005
2/2/2022	<0.0005	<0.0005	<0.0005		
8/30/2022				<0.0005	
8/31/2022	<0.0005		<0.0005		<0.0005
9/2/2022		<0.0005			

Time Series

Constituent: Beryllium (mg/L) Analysis Run 11/5/2022 1:32 PM
Plant Arkwright Client: Southern Company Data: Arkwright No 3

	ARGWA-14 (bg)	ARGWA-24 (bg)	ARGWA-3 (bg)	ARGWA-5 (bg)	ARGWC-10
8/30/2016				<0.0005	
8/31/2016	<0.0005		<0.0005		
9/1/2016					<0.0005
10/25/2016	<0.0005		<0.0005	<0.0005	<0.0005
1/23/2017	<0.0005				
1/24/2017			<0.0005	<0.0005	
1/27/2017					<0.0005
4/11/2017	<0.0005		<0.0005	<0.0005	
4/12/2017					<0.0005
6/20/2017	<0.0005		<0.0005	<0.0005	
6/22/2017					<0.0005
10/25/2017	<0.0005		<0.0005	<0.0005	
10/26/2017					<0.0005
4/9/2018	<0.0005				
4/10/2018			<0.0005	<0.0005	
4/11/2018					<0.0005
10/16/2018	<0.0005		<0.0005	<0.0005	
10/17/2018					<0.0005
8/20/2019			0.00025 (J)	0.00035 (J)	
8/21/2019	<0.0005				<0.0005
10/7/2019	<0.0005				
10/8/2019			<0.0005	0.00041 (J)	
10/9/2019					<0.0005
4/6/2020	<0.0005				
4/7/2020			<0.0005	<0.0005	
4/8/2020					<0.0005
8/18/2020			<0.0005	<0.0005	
8/19/2020	<0.0005				<0.0005
9/29/2020	<0.0005		<0.0005	<0.0005	
10/1/2020					<0.0005
12/1/2020		<0.0005			
2/9/2021		<0.0005	<0.0005	<0.0005	<0.0005
2/11/2021	<0.0005				
9/8/2021	<0.0005	<0.0005	<0.0005	<0.0005	
9/10/2021					<0.0005
2/1/2022		<0.0005	<0.0005	<0.0005	
2/2/2022	<0.0005				<0.0005
8/30/2022				<0.0005	
8/31/2022	<0.0005	<0.0005	<0.0005		<0.0005

Time Series

Constituent: Beryllium (mg/L) Analysis Run 11/5/2022 1:32 PM
Plant Arkwright Client: Southern Company Data: Arkwright No 3

	ARGWC-15	ARGWC-16	ARGWC-17	ARGWC-18	ARGWC-7
8/31/2016					<0.0005
9/1/2016		<0.0005	0.00034 (J)	<0.0005	
9/2/2016	<0.0005				
10/25/2016		<0.0005	0.0002 (J)		0.0001 (J)
10/26/2016	<0.0005			<0.0005	
1/26/2017	<0.0005	<0.0005	<0.0005		<0.0005
1/27/2017				<0.0005	
4/11/2017		<0.0005	<0.0005		
4/12/2017	<0.0005			<0.0005	<0.0005
6/21/2017	<0.0005	<0.0005	<0.0005	<0.0005	
6/22/2017					<0.0005
10/25/2017				<0.0005	<0.0005
10/26/2017	<0.0005	<0.0005	<0.0005		
4/10/2018	<0.0005	<0.0005	<0.0005		<0.0005
4/11/2018				<0.0005	
10/16/2018		<0.0005			
10/17/2018	<0.0005		<0.0005	<0.0005	<0.0005
8/20/2019		<0.0005			
8/21/2019	<0.0005		0.00025 (J)	<0.0005	<0.0005
10/8/2019	<0.0005				
10/9/2019		0.00027 (J)	0.00076 (J)	0.00034 (J)	0.00041 (J)
4/8/2020	<0.0005	<0.0005	0.00025 (J)		<0.0005
4/9/2020				<0.0005	
8/18/2020			0.00039 (J)		<0.0005
8/19/2020	<0.0005	<0.0005			
8/20/2020				<0.0005	
9/29/2020	<0.0005	<0.0005	0.0004 (J)		<0.0005
9/30/2020				<0.0005	
2/9/2021	<0.0005	<0.0005	<0.0005		
2/10/2021				<0.0005	<0.0005
9/8/2021	<0.0005	<0.0005	0.00037 (J)		
9/9/2021				<0.0005	
9/10/2021					<0.0005
2/2/2022			0.00051 (J)		
2/3/2022	<0.0005	<0.0005		<0.0005	<0.0005
8/31/2022	<0.0005	<0.0005			<0.0005
9/2/2022			0.000417 (J)	<0.0005	

Time Series

Constituent: Beryllium (mg/L) Analysis Run 11/5/2022 1:32 PM
Plant Arkwright Client: Southern Company Data: Arkwright No 3

	ARGWC-8	ARGWC-9
8/31/2016	<0.0005	<0.0005
10/25/2016		<0.0005
10/26/2016	<0.0005	
1/26/2017	<0.0005	<0.0005
4/12/2017	<0.0005	<0.0005
6/21/2017	<0.0005	
6/22/2017		<0.0005
10/25/2017		<0.0005
10/26/2017	<0.0005	
4/11/2018	<0.0005	<0.0005
10/17/2018	<0.0005	<0.0005
8/21/2019	<0.0005	<0.0005
10/9/2019	0.00047 (J)	0.00037 (J)
4/9/2020	<0.0005	<0.0005
8/19/2020		<0.0005
8/20/2020	<0.0005	
10/1/2020	<0.0005	<0.0005
2/10/2021	<0.0005	<0.0005
9/9/2021	<0.0005	<0.0005
2/2/2022	<0.0005	<0.0005
8/31/2022	<0.0005	<0.0005

Time Series

Constituent: Boron (mg/L) Analysis Run 11/5/2022 1:32 PM
Plant Arkwright Client: Southern Company Data: Arkwright No 3

	ARAMW-3	ARAMW-4	ARAMW-6	ARGWA-12 (bg)	ARGWA-13 (bg)
8/30/2016				0.032 (J)	
8/31/2016					0.1
10/24/2016				0.0406 (J)	
10/25/2016					0.204
1/23/2017				0.023 (J)	
1/24/2017					0.064
4/11/2017				0.025 (J)	0.081
6/21/2017				<0.08	0.13
10/25/2017				0.028 (J)	0.17
4/9/2018					0.059
4/10/2018				0.027 (J)	
10/16/2018				0.023 (J)	0.34
3/26/2019					0.32
3/27/2019				<0.08	
10/8/2019				<0.08	0.68
1/15/2020	1	0.32	0.96		
4/7/2020				<0.08	0.23
6/24/2020	0.99	0.4	1		
6/25/2020					0.32
6/26/2020				<0.08	
9/29/2020				<0.08	0.35
9/30/2020	1.1	0.36			
10/1/2020			1.1		
2/9/2021			0.85	<0.08	0.38
2/10/2021	0.99	0.4			
9/7/2021				<0.08	0.96
9/8/2021		0.45			
9/9/2021	1		0.8		
2/1/2022				<0.08	0.3
2/2/2022	0.99	0.43	0.68		
8/30/2022				0.0214	
8/31/2022	0.95		0.607		0.933
9/2/2022		0.477			

Time Series

Constituent: Boron (mg/L) Analysis Run 11/5/2022 1:32 PM
Plant Arkwright Client: Southern Company Data: Arkwright No 3

	ARGWA-14 (bg)	ARGWA-24 (bg)	ARGWA-3 (bg)	ARGWA-5 (bg)	ARGWC-10
8/30/2016				<0.08	
8/31/2016	0.04 (J)		<0.08		
9/1/2016					<0.08
10/25/2016	0.065 (J)		0.0068 (J)	0.0073 (J)	<0.08
1/23/2017	0.031 (J)				
1/24/2017			<0.08	<0.08	
1/27/2017					<0.08
4/11/2017	0.043 (J)		<0.08	<0.08	
4/12/2017					<0.08
6/20/2017	0.029 (J)		<0.08	<0.08	
6/22/2017					<0.08
10/25/2017	0.041 (J)		<0.08	<0.08	
10/26/2017					0.026 (J)
4/9/2018	0.04 (J)				
4/10/2018			<0.08	<0.08	
4/11/2018					<0.08
10/16/2018	0.046 (J)		<0.08	<0.08	
10/17/2018					<0.08
3/27/2019	0.032 (J)		<0.08	<0.08	
3/28/2019					<0.08
10/7/2019	<0.08				
10/8/2019			<0.08	<0.08	
10/9/2019					<0.08
4/6/2020	0.041 (J)				
4/7/2020			<0.08	<0.08	
4/8/2020					<0.08
6/23/2020					0.053 (J)
6/25/2020	<0.08		<0.08	<0.08	
9/29/2020	0.039 (J)		<0.08	<0.08	
10/1/2020					0.082
12/1/2020		<0.08			
2/9/2021		<0.08	<0.08	<0.08	<0.08
2/11/2021	0.062 (J)				
9/8/2021	<0.08	<0.08	<0.08	<0.08	
9/10/2021					<0.08
2/1/2022		<0.08	<0.08	<0.08	
2/2/2022	<0.08				<0.08
8/30/2022				0.00855	
8/31/2022	0.0356	0.0151	0.00589		0.00863

Time Series

Constituent: Boron (mg/L) Analysis Run 11/5/2022 1:32 PM
Plant Arkwright Client: Southern Company Data: Arkwright No 3

	ARGWC-15	ARGWC-16	ARGWC-17	ARGWC-18	ARGWC-7
8/31/2016					0.14
9/1/2016		0.049 (J)	0.022 (J)	2.4	
9/2/2016	<0.08				
10/25/2016		0.042 (J)	0.0219 (J)		0.126
10/26/2016	0.0138 (J)			1.97	
1/26/2017	<0.08	0.059	<0.08		0.14
1/27/2017				2.6	
4/11/2017		0.045 (J)	<0.08		
4/12/2017	<0.08			2.4	0.12
6/21/2017	<0.08	0.045 (J)	<0.08	2.2	
6/22/2017					0.11
10/25/2017				2.5	0.12
10/26/2017	<0.08	0.054	0.023 (J)		
4/10/2018	<0.08	0.048 (J)	0.026 (J)		0.1
4/11/2018				2.7	
10/16/2018		0.048 (J)			
10/17/2018	<0.08		<0.08	2.2	0.084
3/27/2019	<0.08			2.3	
3/28/2019		0.08	0.022 (J)		0.087
10/8/2019	<0.08				
10/9/2019		0.065 (J)	<0.08	2.1	0.076 (J)
4/8/2020	<0.08	0.059 (J)	<0.08		0.086
4/9/2020				2.3	
6/24/2020		0.11	0.059 (J)	2.2	
6/25/2020	<0.08				0.091
9/29/2020	<0.08	0.081	0.045 (J)		0.078 (J)
9/30/2020				2.6	
2/9/2021	<0.08	0.076 (J)	0.042 (J)		
2/10/2021				2.4	0.1
9/8/2021	<0.08	0.13	0.074 (J)		
9/9/2021				2.4	
9/10/2021					0.093
2/2/2022			0.11		
2/3/2022	<0.08	0.13		2.4	0.13
8/31/2022	0.0137	0.101			0.0815
9/2/2022			0.0555	2.53	

Time Series

Constituent: Boron (mg/L) Analysis Run 11/5/2022 1:32 PM
Plant Arkwright Client: Southern Company Data: Arkwright No 3

	ARGWC-8	ARGWC-9
8/31/2016	1.3	<0.08
10/25/2016		0.0071 (J)
10/26/2016	1.14	
1/26/2017	1.5	<0.08
4/12/2017	1.3	<0.08
6/21/2017	1.3	
6/22/2017		<0.08
10/25/2017		<0.08
10/26/2017	1.5	
4/11/2018	1	<0.08
10/17/2018	1.3	<0.08
3/28/2019	1.3	0.044 (J)
10/9/2019	1.2	<0.08
4/9/2020	1.1	<0.08
6/23/2020	1.1	
6/26/2020		<0.08
10/1/2020	1.2	0.041 (J)
2/10/2021	1.3	0.06 (J)
9/9/2021	1.2	<0.08
2/2/2022	1.1	<0.08
8/31/2022	1.05	0.00885

Time Series

Constituent: Cadmium (mg/L) Analysis Run 11/5/2022 1:32 PM
Plant Arkwright Client: Southern Company Data: Arkwright No 3

	ARAMW-3	ARAMW-4	ARAMW-6	ARGWA-12 (bg)	ARGWA-13 (bg)
5/6/2009				<0.001	
5/7/2009					<0.001
12/3/2009				<0.001	<0.001
5/25/2010				<0.001	<0.001
11/9/2010				<0.001	
11/10/2010					<0.001
5/24/2011				<0.001	
5/25/2011					<0.001
11/10/2011				<0.001	<0.001
5/18/2012				<0.001	
5/30/2012					<0.001
11/9/2012				<0.001	<0.001
5/8/2013				<0.001	
5/9/2013					<0.001
11/6/2013				<0.001	
11/11/2013					<0.001
5/20/2014				<0.001	
5/21/2014					<0.001
11/18/2014				<0.001	<0.001
4/7/2015					<0.001
4/14/2015				0.00026	
10/28/2015					<0.001
10/29/2015				<0.001	
6/23/2016				<0.001	<0.001
8/30/2016				<0.001	
8/31/2016					<0.001
10/24/2016				<0.001	
10/25/2016					<0.001
1/23/2017				<0.001	
1/24/2017					<0.001
4/11/2017				<0.001	<0.001
6/21/2017				<0.001	<0.001
10/25/2017				<0.001	<0.001
4/9/2018					<0.001
4/10/2018				<0.001	
10/16/2018				<0.001	<0.001
3/26/2019					<0.001
3/27/2019				<0.001	
8/19/2019					<0.001
8/20/2019				<0.001	
10/8/2019				<0.001	<0.001
4/7/2020				<0.001	<0.001
8/18/2020				<0.001	<0.001
8/20/2020	<0.001	<0.001			
8/21/2020			<0.001		
2/9/2021			<0.001	<0.001	<0.001
2/10/2021	<0.001	<0.001			
9/7/2021				<0.001	<0.001
9/8/2021		<0.001			
9/9/2021	<0.001		<0.001		
2/1/2022				<0.001	<0.001
2/2/2022	<0.001	0.00023 (J)	<0.001		

Time Series

Constituent: Cadmium (mg/L) Analysis Run 11/5/2022 1:32 PM
Plant Arkwright Client: Southern Company Data: Arkwright No 3

	ARAMW-3	ARAMW-4	ARAMW-6	ARGWA-12 (bg)	ARGWA-13 (bg)
8/30/2022				<0.001	
8/31/2022	<0.001		<0.001		<0.001
9/2/2022		<0.001			

Time Series

Constituent: Cadmium (mg/L) Analysis Run 11/5/2022 1:32 PM
Plant Arkwright Client: Southern Company Data: Arkwright No 3

	ARGWA-14 (bg)	ARGWA-24 (bg)	ARGWA-3 (bg)	ARGWA-5 (bg)	ARGWC-10
12/16/1997			0.103 (o)	<0.001	
6/30/1998			0.007 (o)	<0.001	
12/2/1998			0.007 (o)	<0.001	
6/8/1999			<0.001	<0.001	
12/7/1999			<0.001	<0.001	
6/15/2000			<0.001	<0.001	
12/12/2000			<0.001	<0.001	
12/5/2001			0.002	<0.001	
6/26/2002			0.003	<0.001	
12/3/2002			<0.001	<0.001	
6/11/2003			0.0043	<0.001	
12/10/2003			<0.001	<0.001	
6/15/2004			<0.001	<0.001	
12/14/2004			<0.001	0.0012	
6/2/2005			<0.001	<0.001	
12/14/2005			<0.001	<0.001	
4/5/2006			<0.001	<0.001	
10/30/2006			<0.001	<0.001	
5/10/2007			<0.001	<0.001	
11/17/2007			<0.001	<0.001	
5/3/2008			0.00033	<0.001	
10/22/2008			<0.001	<0.001	
5/6/2009				<0.001	
5/7/2009			<0.001		
5/13/2009					<0.001
12/1/2009				<0.001	
12/3/2009					<0.001
12/4/2009			<0.001		
5/25/2010				<0.001	
5/26/2010					<0.001
6/1/2010			<0.001		
6/2/2010	<0.001				
11/9/2010				<0.001	<0.001
11/10/2010	<0.001		<0.001		
5/19/2011	<0.001				<0.001
5/24/2011				<0.001	
5/25/2011			<0.001		
11/9/2011	<0.001				
11/10/2011				<0.001	
11/11/2011					<0.001
11/12/2011			<0.001		
5/17/2012					<0.001
5/18/2012				<0.001	
5/30/2012	<0.001				
5/31/2012			<0.001		
11/9/2012				<0.001	<0.001
11/11/2012	<0.001		<0.001		
5/7/2013					<0.001
5/8/2013				<0.001	
5/9/2013	<0.001				
5/13/2013			<0.001		
11/6/2013				<0.001	<0.001

Time Series

Constituent: Cadmium (mg/L) Analysis Run 11/5/2022 1:32 PM
 Plant Arkwright Client: Southern Company Data: Arkwright No 3

	ARGWA-14 (bg)	ARGWA-24 (bg)	ARGWA-3 (bg)	ARGWA-5 (bg)	ARGWC-10
11/11/2013	<0.001				
11/12/2013			<0.001		
5/20/2014				<0.001	<0.001
5/29/2014	<0.001		<0.001		
11/17/2014				<0.001	
11/18/2014					<0.001
11/19/2014	<0.001				
4/7/2015				<0.001	<0.001
4/14/2015	<0.001		<0.001		
10/28/2015				<0.001	<0.001
11/3/2015			<0.001		
11/4/2015	<0.001				
6/23/2016	<0.001		<0.001	<0.001	<0.001
8/30/2016				<0.001	
8/31/2016	0.00039 (J)		<0.001		
9/1/2016					<0.001
10/25/2016	<0.001		<0.001	<0.001	<0.001
1/23/2017	<0.001				
1/24/2017			<0.001	<0.001	
1/27/2017					<0.001
4/11/2017	<0.001		<0.001	<0.001	
4/12/2017					<0.001
6/20/2017	<0.001		<0.001	<0.001	
6/22/2017					<0.001
10/25/2017	<0.001		<0.001	<0.001	
10/26/2017					<0.001
4/9/2018	0.00052 (J)				
4/10/2018			<0.001	<0.001	
4/11/2018					<0.001
10/16/2018	0.00071 (J)		<0.001	<0.001	
10/17/2018					<0.001
3/27/2019	<0.001		<0.001	<0.001	
3/28/2019					<0.001
8/20/2019			0.00014 (J)	<0.001	
8/21/2019	0.00015 (J)				<0.001
10/7/2019	<0.001				
10/8/2019			<0.001	<0.001	
10/9/2019					<0.001
4/6/2020	<0.001				
4/7/2020			<0.001	<0.001	
4/8/2020					<0.001
8/18/2020			<0.001	<0.001	
8/19/2020	<0.001				<0.001
12/1/2020		<0.001			
2/9/2021		<0.001	<0.001	<0.001	<0.001
2/11/2021	<0.001				
9/8/2021	<0.001	<0.001	<0.001	<0.001	
9/10/2021					<0.001
2/1/2022		<0.001	<0.001	<0.001	
2/2/2022	<0.001				<0.001
8/30/2022				<0.001	
8/31/2022	<0.001	<0.001	<0.001		<0.001

Time Series

Constituent: Cadmium (mg/L) Analysis Run 11/5/2022 1:32 PM
Plant Arkwright Client: Southern Company Data: Arkwright No 3

	ARGWC-15	ARGWC-16	ARGWC-17	ARGWC-18	ARGWC-7
12/14/2005					<0.001
4/5/2006					<0.001
10/30/2006					<0.001
5/10/2007					<0.001
11/17/2007					<0.001
5/2/2008					<0.001
10/22/2008					<0.001
5/5/2009	<0.001				
5/12/2009		<0.001	<0.001	<0.001	
5/14/2009					<0.001
12/1/2009					<0.001
12/4/2009	<0.001		<0.001	<0.001	
12/5/2009		<0.001			
5/25/2010			<0.001	<0.001	
5/26/2010		<0.001			<0.001
6/1/2010	<0.001				
11/9/2010		<0.001	<0.001		
11/10/2010	<0.001			<0.001	<0.001
5/19/2011				<0.001	
5/24/2011		<0.001	<0.001		
5/25/2011	<0.001				<0.001
11/9/2011	<0.001				
11/11/2011					<0.001
11/12/2011		<0.001	<0.001	<0.001	
5/17/2012				<0.001	<0.001
5/30/2012		<0.001	<0.001		
5/31/2012	<0.001				
11/9/2012		<0.001	0.0015		<0.001
11/10/2012	<0.001			<0.001	
5/7/2013				<0.001	
5/8/2013			<0.001		<0.001
5/13/2013	<0.001	<0.001			
11/5/2013				<0.001	<0.001
11/6/2013		<0.001	<0.001		
11/12/2013	<0.001				
5/20/2014			<0.001		
5/21/2014		<0.001			<0.001
5/28/2014	0			<0.001	
11/17/2014		<0.001	<0.001		<0.001
11/19/2014				<0.001	
11/20/2014	<0.001				
4/7/2015		<0.001	<0.001		<0.001
4/14/2015	<0.001				
4/15/2015				<0.001	
10/28/2015		<0.001	<0.001		<0.001
10/29/2015				<0.001	
11/3/2015	<0.001				
6/23/2016	<0.001				<0.001
6/24/2016		<0.001	<0.001	<0.001	
8/31/2016					<0.001
9/1/2016		<0.001	<0.001	<0.001	
9/2/2016	<0.001				

Time Series

Constituent: Cadmium (mg/L) Analysis Run 11/5/2022 1:32 PM
Plant Arkwright Client: Southern Company Data: Arkwright No 3

	ARGWC-15	ARGWC-16	ARGWC-17	ARGWC-18	ARGWC-7
10/25/2016		0.0001 (J)	0.0001 (J)		<0.001
10/26/2016	<0.001			<0.001	
1/26/2017	<0.001	<0.001	<0.001		<0.001
1/27/2017				<0.001	
4/11/2017		<0.001	<0.001		
4/12/2017	<0.001			<0.001	<0.001
6/21/2017	<0.001	<0.001	<0.001	<0.001	
6/22/2017					<0.001
10/25/2017				<0.001	<0.001
10/26/2017	<0.001	<0.001	<0.001		
4/10/2018	<0.001	<0.001	<0.001		<0.001
4/11/2018				<0.001	
10/16/2018		<0.001			
10/17/2018	<0.001		<0.001	<0.001	<0.001
3/27/2019	<0.001			<0.001	
3/28/2019		<0.001	<0.001		<0.001
8/20/2019		<0.001			
8/21/2019	<0.001		0.00013 (J)	<0.001	<0.001
10/8/2019	<0.001				
10/9/2019		<0.001	0.00018 (J)	<0.001	<0.001
4/8/2020	<0.001	<0.001	<0.001		<0.001
4/9/2020				<0.001	
8/18/2020			<0.001		<0.001
8/19/2020	<0.001	<0.001			
8/20/2020				<0.001	
2/9/2021	<0.001	<0.001	<0.001		
2/10/2021				<0.001	<0.001
9/8/2021	<0.001	<0.001	<0.001		
9/9/2021				<0.001	
9/10/2021					<0.001
2/2/2022			0.0003 (J)		
2/3/2022	<0.001	<0.001		<0.001	<0.001
8/31/2022	<0.001	<0.001			<0.001
9/2/2022			<0.001	<0.001	

Time Series

Constituent: Cadmium (mg/L) Analysis Run 11/5/2022 1:32 PM
Plant Arkwright Client: Southern Company Data: Arkwright No 3

	ARGWC-8	ARGWC-9
5/13/2009		<0.001
5/14/2009	<0.001	
12/3/2009	<0.001	<0.001
5/26/2010	<0.001	<0.001
11/9/2010	<0.001	<0.001
5/18/2011	<0.001	
5/19/2011		<0.001
11/11/2011	<0.001	<0.001
5/17/2012	<0.001	<0.001
11/9/2012	<0.001	<0.001
5/7/2013	<0.001	<0.001
11/5/2013	<0.001	
11/6/2013		<0.001
5/21/2014	<0.001	<0.001
11/18/2014	<0.001	<0.001
4/7/2015	<0.001	<0.001
10/28/2015	<0.001	<0.001
6/23/2016	<0.001	<0.001
8/31/2016	<0.001	<0.001
10/25/2016		<0.001
10/26/2016	<0.001	
1/26/2017	<0.001	<0.001
4/12/2017	<0.001	<0.001
6/21/2017	<0.001	
6/22/2017		<0.001
10/25/2017		<0.001
10/26/2017	<0.001	
4/11/2018	<0.001	<0.001
10/17/2018	<0.001	<0.001
3/28/2019	<0.001	<0.001
8/21/2019	<0.001	<0.001
10/9/2019	<0.001	<0.001
4/9/2020	<0.001	<0.001
8/19/2020		<0.001
8/20/2020	<0.001	
2/10/2021	<0.001	<0.001
9/9/2021	<0.001	<0.001
2/2/2022	<0.001	<0.001
8/31/2022	<0.001	<0.001

Time Series

Constituent: Calcium (mg/L) Analysis Run 11/5/2022 1:32 PM
Plant Arkwright Client: Southern Company Data: Arkwright No 3

	ARAMW-3	ARAMW-4	ARAMW-6	ARGWA-12 (bg)	ARGWA-13 (bg)
8/30/2016				11	
8/31/2016					110
10/24/2016				10.4	
10/25/2016					150
1/23/2017				12	
1/24/2017					78
4/11/2017				12	78
6/21/2017				12	110
10/25/2017				13	120
4/9/2018					49
4/10/2018				13	
10/16/2018				12	110
3/26/2019					95
3/27/2019				11	
10/8/2019				13	190
4/7/2020				12	61
6/24/2020	33	170	33		
6/25/2020					100
6/26/2020				15	
9/29/2020				14	120
9/30/2020	37	210			
10/1/2020			38		
2/9/2021			33	14	110
2/10/2021	30	220			
9/7/2021				14	190
9/8/2021		230			
9/9/2021	32		32		
2/1/2022				12	73
2/2/2022	32	240	30		
8/30/2022				14.2	
8/31/2022	27.4		26.4		165
9/2/2022		240			

Time Series

Constituent: Calcium (mg/L) Analysis Run 11/5/2022 1:32 PM
Plant Arkwright Client: Southern Company Data: Arkwright No 3

	ARGWA-14 (bg)	ARGWA-24 (bg)	ARGWA-3 (bg)	ARGWA-5 (bg)	ARGWC-10
8/30/2016				5.1	
8/31/2016	31		5.4		
9/1/2016					6.6
10/25/2016	38.5		4.47	4.76	5.89
1/23/2017	25				
1/24/2017			5.8	5.6	
1/27/2017					7.4
4/11/2017	33		5.3	4.7	
4/12/2017					6.7
6/20/2017	34		5.8	5.4	
6/22/2017					7.5
10/25/2017	28		5.9	6	
10/26/2017					7.8
4/9/2018	30				
4/10/2018			5.9	5.3	
4/11/2018					7.4
10/16/2018	41		5.8	5.6	
10/17/2018					7.1
3/27/2019	42		5.4	4.5	
3/28/2019					7.3
10/7/2019	36				
10/8/2019			6	5.9	
10/9/2019					7.7
4/6/2020	43				
4/7/2020			5.5	4	
4/8/2020					7.5
6/23/2020					7.7
6/25/2020	27		5.7	6.1	
9/29/2020	29		5.9	6.6	
10/1/2020					8.1
12/1/2020		13			
2/9/2021		9.7	5.8	6.2	7.7
2/11/2021	40				
9/8/2021	24	10	5.8	7.3	
9/10/2021					8.1
2/1/2022		9.6	5.4	6.5	
2/2/2022	48				8.3
8/30/2022				9.56 (J)	
8/31/2022	41.6	10.1	5.91		7.65

Time Series

Constituent: Calcium (mg/L) Analysis Run 11/5/2022 1:32 PM
Plant Arkwright Client: Southern Company Data: Arkwright No 3

	ARGWC-15	ARGWC-16	ARGWC-17	ARGWC-18	ARGWC-7
8/31/2016					12
9/1/2016		21	16	42	
9/2/2016	22				
10/25/2016		29.8	13.5		10.9
10/26/2016	23.7			44.3	
1/26/2017	23	23	21		13
1/27/2017				49	
4/11/2017		28	16		
4/12/2017	17			45	12
6/21/2017	18	22	15	49	
6/22/2017					13
10/25/2017				49	12
10/26/2017	19	21	13		
4/10/2018	24	25	13		12
4/11/2018				44	
10/16/2018		16			
10/17/2018	21		10	49	11
3/27/2019	28			47	
3/28/2019		41	10		11
10/8/2019	24				
10/9/2019		39	10	49	11
4/8/2020	21	40	8.3		11
4/9/2020				46	
6/24/2020		47	11	44	
6/25/2020	23				11
9/29/2020	25	39	12		11
9/30/2020				52	
2/9/2021	23	38	12		
2/10/2021				52	9.9
9/8/2021	27	32	15		
9/9/2021				55	
9/10/2021					10
2/2/2022			14		
2/3/2022	22	50		55	11
8/31/2022	25	42.4			9.99
9/2/2022			23.7	52.4	

Time Series

Constituent: Calcium (mg/L) Analysis Run 11/5/2022 1:32 PM
Plant Arkwright Client: Southern Company Data: Arkwright No 3

	ARGWC-8	ARGWC-9
8/31/2016	46	5.2
10/25/2016		4.64
10/26/2016	43.3	
1/26/2017	51	5.5
4/12/2017	47	4.9
6/21/2017	51	
6/22/2017		5.8
10/25/2017		6.1
10/26/2017	55	
4/11/2018	44	6
10/17/2018	52	5.8
3/28/2019	52	5.6
10/9/2019	53	5.7
4/9/2020	47	5.3
6/23/2020	52	
6/26/2020		5.6
10/1/2020	52	5.7
2/10/2021	48	4.8
9/9/2021	49	4.7
2/2/2022	47	4.7
8/31/2022	43	4.77

Time Series

Constituent: Chloride (mg/L) Analysis Run 11/5/2022 1:32 PM
Plant Arkwright Client: Southern Company Data: Arkwright No 3

	ARAMW-3	ARAMW-4	ARAMW-6	ARGWA-12 (bg)	ARGWA-13 (bg)
5/6/2009				10.7	
5/7/2009					4.24
12/3/2009				10.1	2.66
5/25/2010				7.11	3.29
11/9/2010				8.4	
11/10/2010					3.82
5/24/2011				9.07	
5/25/2011					4.92
11/10/2011				10.3	4.48
5/18/2012				10.1	
5/30/2012					4.72
11/9/2012				8.73	5.1
5/8/2013				8.06	
5/9/2013					3.85
11/6/2013				10.2	
11/11/2013					5.26
5/20/2014				8.2	
5/21/2014					4.47
11/18/2014				10	6.4
4/7/2015					5.04
4/14/2015				10.7	
10/28/2015					6.3
10/29/2015				10.7	
6/23/2016				11	5.7
8/30/2016				11	
8/31/2016					5.7
10/24/2016				12	
10/25/2016					7.9
1/23/2017				11	
1/24/2017					4.4
4/11/2017				11	4.3
6/21/2017				11	5.5
10/25/2017				10	5.2
4/9/2018					3.8
4/10/2018				9.9	
10/16/2018				11	6
3/26/2019					4.6
3/27/2019				11	
10/8/2019				64 (o)	6.7
4/7/2020				11	3.8
6/24/2020	5.9	6.4	5.4		
6/25/2020					5.8
6/26/2020				12	
9/29/2020				12	5.7
9/30/2020	5.5	5			
10/1/2020			5		
2/9/2021			5.8	15	6
2/10/2021	6.6	5.1			
9/7/2021				14	8.2
9/8/2021		5.3			
9/9/2021	6.9		5.6		
2/1/2022				12	4.6

Time Series

Constituent: Chloride (mg/L) Analysis Run 11/5/2022 1:32 PM
Plant Arkwright Client: Southern Company Data: Arkwright No 3

	ARAMW-3	ARAMW-4	ARAMW-6	ARGWA-12 (bg)	ARGWA-13 (bg)
2/2/2022	5.2	5.1	5		
8/30/2022				12.8 (J)	
8/31/2022	5.59		5.1		6.89
9/2/2022		4.58			

Time Series

Constituent: Chloride (mg/L) Analysis Run 11/5/2022 1:32 PM
 Plant Arkwright Client: Southern Company Data: Arkwright No 3

	ARGWA-14 (bg)	ARGWA-24 (bg)	ARGWA-3 (bg)	ARGWA-5 (bg)	ARGWC-10
12/16/1997			6.2	3.8	
6/30/1998			4.6	2.9	
12/2/1998			3.13	1.76	
6/8/1999			1.56	1.97	
12/7/1999			3.05	1.98	
6/15/2000			3.35	2.08	
12/12/2000			2.42	2.02	
12/5/2001			2.62	2.03	
6/26/2002			3.4	2.52	
12/3/2002			3.04	2.12	
6/11/2003			3.02	2.43	
12/10/2003			2.9	1.93	
6/15/2004			2.05	2.42	
12/14/2004			2.78	2.44	
6/2/2005			3.15	2.79	
12/14/2005			3.38	2.77	
4/5/2006			3.49	2.8	
10/30/2006			2.84	3.09	
5/10/2007			3.68	3.93	
11/17/2007			2.69	<0.021	
5/3/2008			2.85	3.52	
10/22/2008			2.99	3.15	
5/6/2009				3.49	
5/7/2009			2.96		
5/13/2009					3.85
12/1/2009				3.26	
12/3/2009					3.73
12/4/2009			2.97		
5/25/2010				3.62	
5/26/2010					3.7
6/1/2010			3.23		
6/2/2010	15.1				
11/9/2010				3.38	3.6
11/10/2010	14.8		2.86		
5/19/2011	28.2 (o)				3.79
5/24/2011				3.62	
5/25/2011			2.86		
11/9/2011	32.8 (o)				
11/10/2011				3.74	
11/11/2011					4.07
11/12/2011			2.83		
5/17/2012					3.84
5/18/2012				3.6	
5/30/2012	30.8 (o)				
5/31/2012			2.68		
11/9/2012				3.66	3.99
11/11/2012	24.6 (o)		2.63		
5/7/2013					3.94
5/8/2013				4.16	
5/9/2013	27.2 (o)				
5/13/2013			0.364		
11/6/2013				3.87	3.89

Time Series

Constituent: Chloride (mg/L) Analysis Run 11/5/2022 1:32 PM
 Plant Arkwright Client: Southern Company Data: Arkwright No 3

	ARGWA-14 (bg)	ARGWA-24 (bg)	ARGWA-3 (bg)	ARGWA-5 (bg)	ARGWC-10
11/11/2013	12.7				
11/12/2013			2.95		
5/20/2014				4.4	3.54
5/29/2014	20 (o)		2.64		
11/17/2014				4.2	
11/18/2014					4.2
11/19/2014	19 (o)				
4/7/2015				4.53	4.09
4/14/2015	13.6		2.78		
10/28/2015				4.47	3.98
11/3/2015			2.66		
11/4/2015	12.4				
6/23/2016	9		3.3	4.6	4.3
8/30/2016				4.3	
8/31/2016	5.4		2.7		
9/1/2016					4
10/25/2016	9.3		3.1	5	4.6
1/23/2017	5.1				
1/24/2017			2.5	5.1	
1/27/2017					3.9
4/11/2017	4.1		2.4	4.4	
4/12/2017					3.7
6/20/2017	4.1		2.5	5	
6/22/2017					3.9
10/25/2017	3.8		2.3	5.3	
10/26/2017					3.7
4/9/2018	3.9				
4/10/2018			2.4	5.1	
4/11/2018					3.8
10/16/2018	4.3		2.5	5.3	
10/17/2018					4
3/27/2019	4		2.5	4.3	
3/28/2019					3.7
10/7/2019	4				
10/8/2019			2.6	5.7	
10/9/2019					3.8
4/6/2020	4.2				
4/7/2020			2.9	3.7	
4/8/2020					3.9
6/23/2020					4.2
6/25/2020	4		2.8	4.2	
9/29/2020	4.1		2.7	4.6	
10/1/2020					3.9
12/1/2020		12			
2/9/2021		11	3	5.1	4.7
2/11/2021	4.6				
9/8/2021	4	11	3	5.3	
9/10/2021					4.6
2/1/2022		12	3.4	5.3	
2/2/2022	4.2				4.4
8/30/2022				8.47	
8/31/2022	3.92	12.3	2.94		4.2

Time Series

Constituent: Chloride (mg/L) Analysis Run 11/5/2022 1:32 PM
Plant Arkwright Client: Southern Company Data: Arkwright No 3

	ARGWC-15	ARGWC-16	ARGWC-17	ARGWC-18	ARGWC-7
12/14/2005					7.52
4/5/2006					7.38
10/30/2006					6.9
5/10/2007					8.88
11/17/2007					13.5 (o)
5/2/2008					12.9 (o)
10/22/2008					7.97
5/5/2009	2.61				
5/12/2009		3.96	3.5	8.89	
5/14/2009					7.68
12/1/2009					6.66
12/4/2009	2.37		1.85	9.43	
12/5/2009		3.81			
5/25/2010			1.74	8.49	
5/26/2010		3.85			6
6/1/2010	3.71				
11/9/2010		4.08	1.18		
11/10/2010	2.69			8.77	6.07
5/19/2011				8.11	
5/24/2011		3.63	2.51		
5/25/2011	2.44				5.7
11/9/2011	2.3				
11/11/2011					6.23
11/12/2011		4.03	4.99	12.3 (o)	
5/17/2012				8.4	6.06
5/30/2012		3.82	6.4		
5/31/2012	2.29				
11/9/2012		3.69	3.37		4.9
11/10/2012	2.46			8.13	
5/7/2013				8.11	
5/8/2013			5.67		5.85
5/13/2013	6.55	3.5			
11/5/2013				7.82	5.44
11/6/2013		3.74	3.62		
11/12/2013	2.86				
5/20/2014			5.82		
5/21/2014		3.74			5.96
5/28/2014	2.75			6.99	
11/17/2014		4.4	6.4		7
11/19/2014				9	
11/20/2014	3.4				
4/7/2015		4.38	5.02		6.08
4/14/2015	2.56				
4/15/2015				8.14	
10/28/2015		4.62	4.98		5.02
10/29/2015				8.17	
11/3/2015	2.01				
6/23/2016	1.9				5.4
6/24/2016		5	5	8.4	
8/31/2016					5.1
9/1/2016		4.8	4.4	7.8	
9/2/2016	2.7				

Time Series

Constituent: Chloride (mg/L) Analysis Run 11/5/2022 1:32 PM
Plant Arkwright Client: Southern Company Data: Arkwright No 3

	ARGWC-15	ARGWC-16	ARGWC-17	ARGWC-18	ARGWC-7
10/25/2016		5.4	5.1		6.2
10/26/2016	3.3			8.9	
1/26/2017	1.6	5.2	4.2		5.1
1/27/2017				7.3	
4/11/2017		4.8	3.9		
4/12/2017	1.5			7	4.9
6/21/2017	1.6	5.2	4.1	7.2	
6/22/2017					5.1
10/25/2017				7	5.1
10/26/2017	1.6	4.7	4		
4/10/2018	1.8	4.8	4.1		5
4/11/2018				6.9	
10/16/2018		4.5			
10/17/2018	2.1		4	7.1	5.8
3/27/2019	1.8			6.6	
3/28/2019		4.6	3.4		5.1
10/8/2019	9.4 (o)				
10/9/2019		4.7	3.3	6.7	4.6
4/8/2020	1.9	5.1	3.7		4.4
4/9/2020				7.3	
6/24/2020		5.9	4	7.2	
6/25/2020	1.9				4.6
9/29/2020	2.5	5.2	3.4		4.1
9/30/2020				6.9	
2/9/2021	2.7	5.7	3.1		
2/10/2021				7.8	4.5
9/8/2021	2.9	5.6	2.9		
9/9/2021				8.1	
9/10/2021					4.8
2/2/2022			3		
2/3/2022	2.9	5.9		7.1	3.1
8/31/2022	3.01	5.67			4.59
9/2/2022			2.74	6.52	

Time Series

Constituent: Chloride (mg/L) Analysis Run 11/5/2022 1:32 PM
Plant Arkwright Client: Southern Company Data: Arkwright No 3

	ARGWC-8	ARGWC-9
5/13/2009		3.37
5/14/2009	6.38	
12/3/2009	5.96	3.49
5/26/2010	5.37	3.35
11/9/2010	<0.071 (o)	3.34
5/18/2011	5.4	
5/19/2011		3.25
11/11/2011	5.58	3.57
5/17/2012	5.15	3.27
11/9/2012	5.2	3.45
5/7/2013	5.56	3.35
11/5/2013	5.24	
11/6/2013		3.45
5/21/2014	7.34 (o)	3.18
11/18/2014	6.1	4
4/7/2015	5.62	4.22
10/28/2015	5.58	4.87
6/23/2016	6.2	5.6
8/31/2016	5.6	5.4
10/25/2016		6.4
10/26/2016	7.1	
1/26/2017	5.8	5.3
4/12/2017	5.6	5.2
6/21/2017	5.8	
6/22/2017		5.5
10/25/2017		5.3
10/26/2017	5.5	
4/11/2018	5.7	5.1
10/17/2018	6	5.3
3/28/2019	5.7	4.8
10/9/2019	5.7	5.2
4/9/2020	7.7	5.6
6/23/2020	7	
6/26/2020		5.4
10/1/2020	6	5.5
2/10/2021	6.4	5.9
9/9/2021	6.2	6.1
2/2/2022	6.3	5.3
8/31/2022	5.86	5.28 (J)

Time Series

Constituent: Chromium (mg/L) Analysis Run 11/5/2022 1:32 PM
Plant Arkwright Client: Southern Company Data: Arkwright No 3

	ARAMW-3	ARAMW-4	ARAMW-6	ARGWA-12 (bg)	ARGWA-13 (bg)
8/30/2016				0.0012 (J)	
8/31/2016					<0.01
10/24/2016				0.0011 (J)	
10/25/2016					<0.01
1/23/2017				<0.01	
1/24/2017					<0.01
4/11/2017				0.0011 (J)	<0.01
6/21/2017				<0.01	<0.01
10/25/2017				<0.01	<0.01
4/9/2018					<0.01
4/10/2018				0.0013 (J)	
10/16/2018				<0.01	<0.01
8/19/2019					0.0016 (J)
8/20/2019				0.0026	
10/8/2019				<0.01	<0.01
4/7/2020				0.0015 (J)	<0.01
8/18/2020				<0.01	<0.01
8/20/2020	<0.01	<0.01			
8/21/2020			<0.01		
9/29/2020				<0.01	<0.01
9/30/2020	<0.01	<0.01			
10/1/2020			<0.01		
2/9/2021			<0.01	<0.01	<0.01
2/10/2021	<0.01	<0.01			
9/7/2021				0.0017 (J)	<0.01
9/8/2021		<0.01			
9/9/2021	<0.01		<0.01		
2/1/2022				<0.01	<0.01
2/2/2022	<0.01	<0.01	<0.01		
8/30/2022				<0.01	
8/31/2022	<0.01		<0.01		<0.01
9/2/2022		<0.01			

Time Series

Constituent: Chromium (mg/L) Analysis Run 11/5/2022 1:32 PM
Plant Arkwright Client: Southern Company Data: Arkwright No 3

	ARGWA-14 (bg)	ARGWA-24 (bg)	ARGWA-3 (bg)	ARGWA-5 (bg)	ARGWC-10
8/30/2016				0.0012 (J)	
8/31/2016	<0.01		0.003		
9/1/2016					0.0038
10/25/2016	<0.01		0.0028 (J)	0.0014 (J)	0.0042 (J)
1/23/2017	0.01				
1/24/2017			0.0031	0.0012 (J)	
1/27/2017					0.005
4/11/2017	<0.01		0.0029	<0.01	
4/12/2017					0.0048
6/20/2017	<0.01		0.0037	<0.01	
6/22/2017					0.0047
10/25/2017	<0.01		0.0031	<0.01	
10/26/2017					0.0043
4/9/2018	0.0019 (J)				
4/10/2018			0.0036	0.0012 (J)	
4/11/2018					0.0051
10/16/2018	<0.01		0.0035	0.0012 (J)	
10/17/2018					0.0051
8/20/2019			0.0039	0.0032	
8/21/2019	<0.01				0.0073
10/7/2019	<0.01				
10/8/2019			0.0031	<0.01	
10/9/2019					0.006
4/6/2020	<0.01				
4/7/2020			0.0023	<0.01	
4/8/2020					0.0046
8/18/2020			0.0027	<0.01	
8/19/2020	<0.01				0.0049
9/29/2020	<0.01		0.003	<0.01	
10/1/2020					0.0047
12/1/2020		<0.01			
2/9/2021		<0.01	0.0028	<0.01	0.0046
2/11/2021	<0.01				
9/8/2021	<0.01	<0.01	0.0026	<0.01	
9/10/2021					0.0049
2/1/2022		<0.01	0.0029	<0.01	
2/2/2022	<0.01				0.005
8/30/2022				<0.01	
8/31/2022	<0.01	<0.01	0.00358 (J)		0.0055 (J)

Time Series

Constituent: Chromium (mg/L) Analysis Run 11/5/2022 1:32 PM
Plant Arkwright Client: Southern Company Data: Arkwright No 3

	ARGWC-15	ARGWC-16	ARGWC-17	ARGWC-18	ARGWC-7
8/31/2016					0.0033
9/1/2016		0.0017 (J)	<0.01	<0.01	
9/2/2016	0.0087				
10/25/2016		0.0023 (J)	<0.01		0.0029 (J)
10/26/2016	<0.01			<0.01	
1/26/2017	<0.01	0.0017 (J)	0.0016 (J)		0.0033
1/27/2017				<0.01	
4/11/2017		0.0019 (J)	0.0013 (J)		
4/12/2017	<0.01			<0.01	0.0036
6/21/2017	<0.01	0.0017 (J)	<0.01	<0.01	
6/22/2017					0.0036
10/25/2017				<0.01	0.0028
10/26/2017	<0.01	0.0013 (J)	<0.01		
4/10/2018	<0.01	0.0019 (J)	<0.01		0.0038
4/11/2018				<0.01	
10/16/2018		0.0013 (J)			
10/17/2018	<0.01		<0.01	<0.01	0.0036
8/20/2019		0.0025			
8/21/2019	0.0017 (J)		<0.01	<0.01	0.0046
10/8/2019	<0.01				
10/9/2019		0.0027	0.0021	<0.01	0.0042
4/8/2020	<0.01	0.0021	<0.01		0.0027
4/9/2020				<0.01	
8/18/2020			<0.01		0.0031
8/19/2020	<0.01	0.0021			
8/20/2020				<0.01	
9/29/2020	<0.01	0.002	<0.01		0.0031
9/30/2020				<0.01	
2/9/2021	<0.01	0.0018 (J)	<0.01		
2/10/2021				<0.01	0.003
9/8/2021	0.0027	0.0016 (J)	<0.01		
9/9/2021				<0.01	
9/10/2021					0.0032
2/2/2022			<0.01		
2/3/2022	<0.01	0.0018 (J)		<0.01	0.0043
8/31/2022	<0.01	<0.01			0.00344 (J)
9/2/2022			<0.01	<0.01	

Time Series

Constituent: Chromium (mg/L) Analysis Run 11/5/2022 1:32 PM
Plant Arkwright Client: Southern Company Data: Arkwright No 3

	ARGWC-8	ARGWC-9
8/31/2016	<0.01	0.011
10/25/2016		0.0109
10/26/2016	<0.01	
1/26/2017	<0.01	0.011
4/12/2017	<0.01	0.0096
6/21/2017	<0.01	
6/22/2017		0.011
10/25/2017		0.0094
10/26/2017	<0.01	
4/11/2018	<0.01	0.01
10/17/2018	<0.01	0.0096
8/21/2019	0.0015 (J)	0.0097
10/9/2019	0.0017 (J)	0.0084
4/9/2020	<0.01	0.0069
8/19/2020		0.008
8/20/2020	<0.01	
10/1/2020	<0.01	0.0075
2/10/2021	<0.01	0.007
9/9/2021	<0.01	0.0071
2/2/2022	<0.01	0.0068
8/31/2022	<0.01	0.00766 (J)

Time Series

Constituent: Cobalt (mg/L) Analysis Run 11/5/2022 1:32 PM
 Plant Arkwright Client: Southern Company Data: Arkwright No 3

	ARAMW-3	ARAMW-4	ARAMW-6	ARGWA-12 (bg)	ARGWA-13 (bg)
8/30/2016				<0.001	
8/31/2016					<0.001
10/24/2016				<0.001	
10/25/2016					<0.001
1/23/2017				<0.001	
1/24/2017					<0.001
4/11/2017				<0.001	<0.001
6/21/2017				<0.001	<0.001
10/25/2017				<0.001	<0.001
4/9/2018					<0.001
4/10/2018				<0.001	
10/16/2018				<0.001	<0.001
8/19/2019					0.00029 (J)
8/20/2019				0.00019 (J)	
10/8/2019				<0.001	0.00011 (J)
1/15/2020		0.0064			
4/7/2020				0.00029 (J)	<0.001
6/24/2020	0.00053 (J)	0.0049	0.0049		
6/25/2020					<0.001
6/26/2020				0.00013 (J)	
8/18/2020				0.00019 (J)	<0.001
8/20/2020	0.00056 (J)	0.005			
8/21/2020			0.0018 (J)		
9/29/2020				0.00016 (J)	<0.001
9/30/2020	0.0011 (J)	0.0046			
10/1/2020			0.0018 (J)		
2/9/2021			0.00047 (J)	<0.001	<0.001
2/10/2021	0.00055 (J)	0.0053			
9/7/2021				0.00043 (J)	<0.001
9/8/2021		0.0048			
9/9/2021	0.00044 (J)		0.00024 (J)		
2/1/2022				0.00041 (J)	<0.001
2/2/2022	0.00057 (J)	0.0042	<0.001		
8/30/2022				0.000509 (J)	
8/31/2022	0.000465 (J)		<0.001		<0.001
9/2/2022		0.00411			

Time Series

Constituent: Cobalt (mg/L) Analysis Run 11/5/2022 1:32 PM
 Plant Arkwright Client: Southern Company Data: Arkwright No 3

	ARGWA-14 (bg)	ARGWA-24 (bg)	ARGWA-3 (bg)	ARGWA-5 (bg)	ARGWC-10
8/30/2016				<0.001	
8/31/2016	<0.001		<0.001		
9/1/2016					<0.001
10/25/2016	<0.001		<0.001	<0.001	<0.001
1/23/2017	<0.001				
1/24/2017			<0.001	<0.001	
1/27/2017					<0.001
4/11/2017	<0.001		<0.001	<0.001	
4/12/2017					<0.001
6/20/2017	<0.001		<0.001	<0.001	
6/22/2017					<0.001
10/25/2017	<0.001		<0.001	<0.001	
10/26/2017					<0.001
4/9/2018	<0.001				
4/10/2018			<0.001	<0.001	
4/11/2018					<0.001
10/16/2018	<0.001		<0.001	<0.001	
10/17/2018					<0.001
8/20/2019			0.00018 (J)	0.00012 (J)	
8/21/2019	0.00022 (J)				0.00017 (J)
10/7/2019	<0.001				
10/8/2019			<0.001	<0.001	
10/9/2019					0.00019 (J)
4/6/2020	<0.001				
4/7/2020			<0.001	0.00014 (J)	
4/8/2020					<0.001
6/23/2020					0.00013 (J)
6/25/2020	<0.001		<0.001	<0.001	
8/18/2020			0.00022 (J)	<0.001	
8/19/2020	<0.001				0.00015 (J)
9/29/2020	<0.001		<0.001	<0.001	
10/1/2020					<0.001
12/1/2020		0.0058			
2/9/2021		0.00088 (J)	<0.001	<0.001	<0.001
2/11/2021	<0.001				
9/8/2021	<0.001	0.00019 (J)	<0.001	<0.001	
9/10/2021					<0.001
2/1/2022		<0.001	<0.001	<0.001	
2/2/2022	<0.001				<0.001
8/30/2022				<0.001	
8/31/2022	<0.001	<0.001	<0.001		<0.001

Time Series

Constituent: Cobalt (mg/L) Analysis Run 11/5/2022 1:32 PM
 Plant Arkwright Client: Southern Company Data: Arkwright No 3

	ARGWC-15	ARGWC-16	ARGWC-17	ARGWC-18	ARGWC-7
8/31/2016					<0.001
9/1/2016		<0.001	0.037	0.0014 (J)	
9/2/2016	0.03				
10/25/2016		<0.001	0.0144		<0.001
10/26/2016	0.0036 (J)			0.0013 (J)	
1/26/2017	0.011	<0.001	0.022		<0.001
1/27/2017				0.0021 (J)	
4/11/2017		<0.001	0.026		
4/12/2017	<0.001			0.0015 (J)	<0.001
6/21/2017	<0.001	<0.001	0.027	0.0018 (J)	
6/22/2017					<0.001
10/25/2017				0.0013 (J)	<0.001
10/26/2017	<0.001	<0.001	0.021		
4/10/2018	0.00045 (J)	<0.001	0.021		<0.001
4/11/2018				0.0014 (J)	
10/16/2018		<0.001			
10/17/2018	<0.001		0.014	0.0012 (J)	<0.001
8/20/2019		0.00016 (J)			
8/21/2019	0.00048 (J)		0.018	0.0012	8.6E-05 (J)
10/8/2019	0.00019 (J)				
10/9/2019		0.00026 (J)	0.017	0.00099	0.00034 (J)
4/8/2020	0.00026 (J)	<0.001	0.016		<0.001
4/9/2020				0.00091 (J)	
6/24/2020		0.00013 (J)	0.024	0.00115 (JD)	
6/25/2020	0.00022 (J)				<0.001
8/18/2020			0.03		<0.001
8/19/2020	0.0004 (J)	<0.001			
8/20/2020				0.0014 (JD)	
9/29/2020	0.0003 (J)	<0.001	0.027		<0.001
9/30/2020				0.00125 (JD)	
2/9/2021	<0.001	<0.001	0.025		
2/10/2021				0.0011 (J)	<0.001
9/8/2021	0.004	<0.001	0.032		
9/9/2021				0.0016 (J)	
9/10/2021					<0.001
2/2/2022			0.033		
2/3/2022	<0.001	<0.001		0.0013 (J)	<0.001
8/31/2022	<0.001	<0.001			<0.001
9/2/2022			0.0516	0.00111	

Time Series

Constituent: Cobalt (mg/L) Analysis Run 11/5/2022 1:32 PM
Plant Arkwright Client: Southern Company Data: Arkwright No 3

	ARGWC-8	ARGWC-9
8/31/2016	<0.001	<0.001
10/25/2016		<0.001
10/26/2016	<0.001	
1/26/2017	<0.001	<0.001
4/12/2017	<0.001	<0.001
6/21/2017	<0.001	
6/22/2017		<0.001
10/25/2017		<0.001
10/26/2017	<0.001	
4/11/2018	<0.001	<0.001
10/17/2018	<0.001	<0.001
8/21/2019	0.00021 (J)	<0.001
10/9/2019	0.00041 (J)	0.00021 (J)
4/9/2020	0.00013 (J)	0.00015 (J)
6/23/2020	0.00017 (J)	
6/26/2020		<0.001
8/19/2020		0.00013 (J)
8/20/2020	0.00023 (J)	
10/1/2020	0.00021 (J)	<0.001
2/10/2021	0.00015 (J)	<0.001
9/9/2021	<0.001	<0.001
2/2/2022	0.00032 (J)	<0.001
8/31/2022	<0.001	<0.001

Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 11/5/2022 1:32 PM

Plant Arkwright Client: Southern Company Data: Arkwright No 3

	ARAMW-3	ARAMW-4	ARAMW-6	ARGWA-12 (bg)	ARGWA-13 (bg)
8/30/2016				1.1	
8/31/2016					0.788
10/24/2016				0.808 (U)	
10/25/2016					0.503 (U)
1/23/2017				0.121 (U)	
1/24/2017					0.369
4/11/2017				0.378 (U)	0.71
6/21/2017				0.511	0.124 (U)
10/25/2017				0.587	0.981
4/9/2018					0.157 (U)
4/10/2018				0.513	
10/16/2018				0.53	0.305 (U)
8/19/2019					0.204 (U)
8/20/2019				0.759	
10/8/2019				0.76	0.398 (U)
4/7/2020				0.622	-0.0414 (U)
8/18/2020				0.587	0.38 (U)
8/20/2020	-0.137 (U)	0.624 (U)			
8/21/2020			0.285 (U)		
9/29/2020				0.765	0.403 (U)
9/30/2020	0.539 (U)	0.532			
10/1/2020			0.0114 (U)		
2/9/2021			0.18 (U)	1.16	0.394 (U)
2/10/2021	0.83	0.932			
9/7/2021				0.385	0.475
9/8/2021		0.528			
9/9/2021	0.413 (U)		1.24		
2/1/2022				0.615	0.328 (U)
2/2/2022	0.518 (U)	0.369 (U)	0.62		
8/30/2022				0.804	
8/31/2022	1.02		0.871		0.596
9/2/2022		0.947			

Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 11/5/2022 1:32 PM

Plant Arkwright Client: Southern Company Data: Arkwright No 3

	ARGWA-14 (bg)	ARGWA-24 (bg)	ARGWA-3 (bg)	ARGWA-5 (bg)	ARGWC-10
8/30/2016				0.505 (U)	
8/31/2016	0.949 (U)		0.226 (U)		
9/1/2016					0.153 (U)
10/25/2016	1.13		0.273 (U)	0.177 (U)	0.328 (U)
1/23/2017	0.426				
1/24/2017			0.11 (U)	0.107 (U)	
1/27/2017					-0.0761 (U)
4/11/2017	0.604		0.358 (U)	-0.0587 (U)	
4/12/2017					0.112 (U)
6/20/2017	0.974		0.265 (U)	0.503	
6/22/2017					0.414
10/25/2017	0.409 (U)		0.5	0.512	
10/26/2017					0.334 (U)
4/9/2018	0.306 (U)				
4/10/2018			0.323	0.262 (U)	
4/11/2018					0.17 (U)
10/16/2018	0.701		0.798	0.989	
10/17/2018					0.38 (U)
8/20/2019			0.352 (U)	-0.0925 (U)	
8/21/2019	0.0663 (U)				0.352 (U)
10/7/2019	0.447 (U)				
10/8/2019			0.419 (U)	0.348 (U)	
10/9/2019					-0.38 (U)
4/6/2020	0.286 (U)				
4/7/2020			0.0354 (U)	0.198 (U)	
4/8/2020					-0.0401 (U)
8/18/2020			0.132 (U)	1.12	
8/19/2020	-0.0549 (U)				-0.0271 (U)
9/29/2020	0.134 (U)		-0.0479 (U)	-0.146 (U)	
10/1/2020					0.172 (U)
12/1/2020		-0.0123 (U)			
2/9/2021		0.0311 (U)	-0.187 (U)	-0.312 (U)	0.163 (U)
2/11/2021	0.413 (U)				
9/8/2021	0.188 (U)	0.539	0.188 (U)	0.558	
9/10/2021					0.0831 (U)
2/1/2022		0.149 (U)	-0.0119 (U)	0.147 (U)	
2/2/2022	0.381 (U)				0.338 (U)
8/30/2022				0.546	
8/31/2022	0.345	0.161	0.805		0.5

Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 11/5/2022 1:32 PM

Plant Arkwright Client: Southern Company Data: Arkwright No 3

	ARGWC-15	ARGWC-16	ARGWC-17	ARGWC-18	ARGWC-7
8/31/2016					-0.106 (U)
9/1/2016		0.568	-0.081 (U)	0.495 (U)	
9/2/2016	2.11				
10/25/2016		1.57	0.675 (U)		0.518 (U)
10/26/2016	2.45			0.606 (U)	
1/26/2017	0.276 (U)	0.255 (U)	0.18 (U)		0.37
1/27/2017				0.641	
4/11/2017		0.334 (U)	0.547		
4/12/2017	0.387 (U)			-0.0936 (U)	0.316 (U)
6/21/2017	0.194 (U)	0.518	0.38	0.5	
6/22/2017					0.229 (U)
10/25/2017				0.345 (U)	0.281 (U)
10/26/2017	0.519	0.79	1.48		
4/10/2018	0.604	0.394	0.39		0.492
4/11/2018				0.331 (U)	
10/16/2018		0.0598 (U)			
10/17/2018	0.46 (U)		0.781	0.62	0.495 (U)
8/20/2019		0.227 (U)			
8/21/2019	0.491		-0.0366 (U)	0.693	0.0805 (U)
10/8/2019	0.421 (U)				
10/9/2019		-0.0245 (U)	0.118 (U)	0.0684 (U)	0.552
4/8/2020	0.309 (U)	0.28 (U)	0.402 (U)		0.366 (U)
4/9/2020				0.419 (U)	
8/18/2020			0.423		0.376 (U)
8/19/2020	0.538	0.306 (U)			
8/20/2020				0.191 (U)	
9/29/2020	0.394 (U)	-0.0246 (U)	0.175 (U)		0.334 (U)
9/30/2020				0.0811 (U)	
2/9/2021	0.669	0.46	0.332 (U)		
2/10/2021				0.568	0.412
9/8/2021	1.62	-0.108 (U)	-0.015 (U)		
9/9/2021				0.669	
9/10/2021					0.861
2/2/2022			0.107 (U)		
2/3/2022	0.609	0.712		0.503	0.12 (U)
8/31/2022	0.51	0.493			0.804
9/2/2022			1.75	2.67	

Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 11/5/2022 1:32 PM

Plant Arkwright Client: Southern Company Data: Arkwright No 3

	ARGWC-8	ARGWC-9
8/31/2016	0.218 (U)	0.279 (U)
10/25/2016		0.393 (U)
10/26/2016	0.335 (U)	
1/26/2017	0.345 (U)	0.0879 (U)
4/12/2017	0.37 (U)	0.219 (U)
6/21/2017	0.144 (U)	
6/22/2017		0.552
10/25/2017		0.388 (U)
10/26/2017	0.51	
4/11/2018	0.362	0.322
10/17/2018	0.385 (U)	0.327 (U)
8/21/2019	0.125 (U)	0.0554 (U)
10/9/2019	-0.164 (U)	-0.238 (U)
4/9/2020	0.255 (U)	0.334 (U)
8/19/2020		0.124 (U)
8/20/2020	0.14 (U)	
10/1/2020	0.512 (U)	0.501
2/10/2021	0.384	0.515
9/9/2021	0.616	0.57
2/2/2022	0.271 (U)	0.73 (U)
8/31/2022	0.618	0.0403

Time Series

Constituent: Fluoride (mg/L) Analysis Run 11/5/2022 1:32 PM
Plant Arkwright Client: Southern Company Data: Arkwright No 3

	ARAMW-3	ARAMW-4	ARAMW-6	ARGWA-12 (bg)	ARGWA-13 (bg)
8/30/2016				<0.1	
8/31/2016					<0.1
10/24/2016				0.1 (J)	
10/25/2016					0.08 (J)
1/23/2017				<0.1	
1/24/2017					<0.1
4/11/2017				<0.1	<0.1
6/21/2017				<0.1	<0.1
10/25/2017				<0.1	<0.1
4/9/2018					<0.1
4/10/2018				<0.1	
10/16/2018				0.1 (J)	<0.1
3/26/2019					<0.1
3/27/2019				0.031 (J)	
8/19/2019					<0.1
8/20/2019				0.049 (J)	
10/8/2019				0.27 (J)	0.033 (J)
4/7/2020				0.082 (J)	0.086 (J)
6/24/2020	0.18	0.041 (J)	0.082 (J)		
6/25/2020					0.03 (J)
6/26/2020				0.051 (J)	
8/18/2020				0.041 (J)	<0.1
8/20/2020	<0.1	<0.1			
8/21/2020			0.051 (J)		
9/29/2020				0.06 (J)	0.032 (J)
9/30/2020	0.064 (J)	0.028 (J)			
10/1/2020			0.071 (J)		
2/9/2021			0.083 (J)	0.07 (J)	0.036 (J)
2/10/2021	0.099 (J)	0.028 (J)			
9/7/2021				0.11	0.075 (J)
9/8/2021		0.034 (J)			
9/9/2021	0.12		0.13		
2/1/2022				0.065 (J)	0.032 (J)
2/2/2022	0.072 (J)	0.055 (J)	0.089 (J)		
8/30/2022				0.167	
8/31/2022	0.127		0.168		0.135
9/2/2022		0.059 (J)			

Time Series

Constituent: Fluoride (mg/L) Analysis Run 11/5/2022 1:32 PM
Plant Arkwright Client: Southern Company Data: Arkwright No 3

	ARGWA-14 (bg)	ARGWA-24 (bg)	ARGWA-3 (bg)	ARGWA-5 (bg)	ARGWC-10
8/30/2016				<0.1	
8/31/2016	0.12 (J)		<0.1		
9/1/2016					<0.1
10/25/2016	0.53		0.14 (J)	0.09 (J)	0.1 (J)
1/23/2017	0.4				
1/24/2017			<0.1	<0.1	
1/27/2017					<0.1
4/11/2017	0.31		<0.1	<0.1	
4/12/2017					<0.1
6/20/2017	0.27		<0.1	<0.1	
6/22/2017					<0.1
10/25/2017	0.29		<0.1	<0.1	
10/26/2017					<0.1
4/9/2018	0.25				
4/10/2018			<0.1	<0.1	
4/11/2018					<0.1
10/16/2018	0.33		0.1 (J)	<0.1	
10/17/2018					<0.1
3/27/2019	0.15 (J)		0.034 (J)	0.026 (J)	
3/28/2019					0.03 (J)
8/20/2019			0.053 (J)	0.047 (J)	
8/21/2019	0.35				0.047 (J)
10/7/2019	0.12 (J)				
10/8/2019			0.056 (J)	0.05 (J)	
10/9/2019					0.053 (J)
4/6/2020	0.28				
4/7/2020			0.098 (J)	0.072 (J)	
4/8/2020					0.071 (J)
6/23/2020					0.04 (J)
6/25/2020	0.17		0.06 (J)	0.042 (J)	
8/18/2020			<0.1	<0.1	
8/19/2020	0.12				<0.1
9/29/2020	0.13		0.065 (J)	0.051 (J)	
10/1/2020					0.048 (J)
12/1/2020		<0.1			
2/9/2021		0.057 (J)	0.084 (J)	0.055 (J)	0.051 (J)
2/11/2021	0.25				
9/8/2021	0.2	0.1	0.1	0.1	
9/10/2021					0.067 (J)
2/1/2022		0.054 (J)	0.086 (J)	0.059 (J)	
2/2/2022	0.19				0.063 (J)
8/30/2022				0.155	
8/31/2022	0.155	0.164	0.184		<0.1

Time Series

Constituent: Fluoride (mg/L) Analysis Run 11/5/2022 1:32 PM
 Plant Arkwright Client: Southern Company Data: Arkwright No 3

	ARGWC-15	ARGWC-16	ARGWC-17	ARGWC-18	ARGWC-7
8/31/2016					<0.1
9/1/2016		<0.1	<0.1	0.083 (J)	
9/2/2016	0.21				
10/25/2016		0.08 (J)	0.08 (J)		0.02 (J)
10/26/2016	0.21 (J)			0.32 (o)	
1/26/2017	0.097 (J)	<0.1	<0.1		<0.1
1/27/2017				0.097 (J)	
4/11/2017		<0.1	<0.1		
4/12/2017	<0.1			0.088 (J)	<0.1
6/21/2017	<0.1	<0.1	<0.1	0.096 (J)	
6/22/2017					<0.1
10/25/2017				0.092 (J)	<0.1
10/26/2017	<0.1	<0.1	<0.1		
4/10/2018	<0.1	<0.1	<0.1		<0.1
4/11/2018				0.09 (J)	
10/16/2018		<0.1			
10/17/2018	0.1 (J)		<0.1	0.11 (J)	<0.1
3/27/2019	0.05 (J)			0.05 (J)	
3/28/2019		<0.1	<0.1		<0.1
8/20/2019		0.033 (J)			
8/21/2019	0.1 (J)		0.031 (J)	0.079 (J)	<0.1
10/8/2019	0.33 (J)				
10/9/2019		0.031 (J)	0.03 (J)	0.068 (J)	0.032 (J)
4/8/2020	0.12	0.051 (J)	0.053 (J)		0.062 (J)
4/9/2020				0.11	
6/24/2020		0.038 (J)	<0.1	0.094 (J)	
6/25/2020	0.067 (J)				<0.1
8/18/2020			<0.1		<0.1
8/19/2020	0.081 (J)	<0.1			
8/20/2020				<0.1	
9/29/2020	0.089 (J)	0.026 (J)	0.029 (J)		0.027 (J)
9/30/2020				0.082 (J)	
2/9/2021	0.094 (J)	0.056 (J)	<0.1		
2/10/2021				0.12	0.033 (J)
9/8/2021	0.15	0.044 (J)	0.055 (J)		
9/9/2021				0.17	
9/10/2021					0.032 (J)
2/2/2022			0.028 (J)		
2/3/2022	0.068 (J)	0.027 (J)		0.078 (J)	0.074 (J)
8/31/2022	0.169	<0.1			<0.1
9/2/2022			0.082 (J)	0.141	

Time Series

Constituent: Fluoride (mg/L) Analysis Run 11/5/2022 1:32 PM
Plant Arkwright Client: Southern Company Data: Arkwright No 3

	ARGWC-8	ARGWC-9
8/31/2016	0.11 (J)	<0.1
10/25/2016		0.2 (J)
10/26/2016	0.43 (o)	
1/26/2017	0.13 (J)	<0.1
4/12/2017	0.13 (J)	<0.1
6/21/2017	0.14 (J)	
6/22/2017		<0.1
10/25/2017		<0.1
10/26/2017	0.13 (J)	
4/11/2018	0.13 (J)	<0.1
10/17/2018	0.16 (J)	<0.1
3/28/2019	0.089 (J)	<0.1
8/21/2019	0.12 (J)	0.03 (J)
10/9/2019	0.085 (J)	0.038 (J)
4/9/2020	0.16	0.066 (J)
6/23/2020	0.12	
6/26/2020		0.027 (J)
8/19/2020		<0.1
8/20/2020	0.054 (J)	
10/1/2020	0.14	0.041 (J)
2/10/2021	0.17	0.051 (J)
9/9/2021	0.18	0.06 (J)
2/2/2022	0.19	0.043 (J)
8/31/2022	0.172	0.147

Time Series

Constituent: Lead (mg/L) Analysis Run 11/5/2022 1:32 PM
Plant Arkwright Client: Southern Company Data: Arkwright No 3

	ARAMW-3	ARAMW-4	ARAMW-6	ARGWA-12 (bg)	ARGWA-13 (bg)
5/6/2009				<0.002	
5/7/2009					<0.002
12/3/2009				<0.002	<0.002
5/25/2010				<0.002	<0.002
11/9/2010				<0.002	
11/10/2010					<0.002
5/24/2011				<0.002	
5/25/2011					<0.002
11/10/2011				<0.002	<0.002
5/18/2012				<0.002	
5/30/2012					<0.002
11/9/2012				<0.002	<0.002
5/8/2013				<0.002	
5/9/2013					<0.002
11/6/2013				<0.002	
11/11/2013					<0.002
5/20/2014				<0.002	
5/21/2014					<0.002
11/18/2014				<0.002	<0.002
4/7/2015					<0.002
4/14/2015				<0.002	
10/28/2015					<0.002
10/29/2015				<0.002	
6/23/2016				<0.002	<0.002
8/30/2016				<0.002	
8/31/2016					<0.002
10/24/2016				0.0002 (J)	
10/25/2016					<0.002
1/23/2017				<0.002	
1/24/2017					<0.002
4/11/2017				<0.002	<0.002
6/21/2017				<0.002	<0.002
10/25/2017				<0.002	<0.002
4/9/2018					<0.002
4/10/2018				<0.002	
10/16/2018				<0.002	<0.002
3/26/2019					<0.002
3/27/2019				<0.002	
8/19/2019					<0.002
8/20/2019				<0.002	
10/8/2019				<0.002	0.00013 (J)
4/7/2020				<0.002	<0.002
8/18/2020				<0.002	<0.002
8/20/2020	<0.002	<0.002			
8/21/2020			<0.002		
9/29/2020				<0.002	<0.002
9/30/2020	<0.002	<0.002			
10/1/2020			<0.002		
2/9/2021			<0.002	<0.002	<0.002
2/10/2021	<0.002	<0.002			
9/7/2021				<0.002	<0.002
9/8/2021		<0.002			

Time Series

Constituent: Lead (mg/L) Analysis Run 11/5/2022 1:32 PM
Plant Arkwright Client: Southern Company Data: Arkwright No 3

	ARAMW-3	ARAMW-4	ARAMW-6	ARGWA-12 (bg)	ARGWA-13 (bg)
9/9/2021	<0.002		<0.002		
2/1/2022				<0.002	<0.002
2/2/2022	<0.002	<0.002	<0.002		
8/30/2022				<0.002	
8/31/2022	<0.002		<0.002		<0.002
9/2/2022		<0.002			

Time Series

Constituent: Lead (mg/L) Analysis Run 11/5/2022 1:32 PM
Plant Arkwright Client: Southern Company Data: Arkwright No 3

	ARGWA-14 (bg)	ARGWA-24 (bg)	ARGWA-3 (bg)	ARGWA-5 (bg)	ARGWC-10
12/16/1997			0.162 (o)	<0.002	
6/30/1998			0.013	<0.002	
12/2/1998			0.01	0.002	
6/8/1999			0.004	<0.002	
12/7/1999			0.004	<0.002	
6/15/2000			0.004	<0.002	
12/12/2000			0.00378	<0.002	
12/5/2001			0.003	<0.002	
6/26/2002			0.00815	0.00539	
12/3/2002			0.008	<0.002	
6/11/2003			<0.002	<0.002	
12/10/2003			<0.002	<0.002	
6/15/2004			<0.002	<0.002	
12/14/2004			<0.002	0.013 (o)	
6/2/2005			<0.002	<0.002	
12/14/2005			<0.002	<0.002	
4/5/2006			<0.002	<0.002	
10/30/2006			<0.002	<0.002	
5/10/2007			<0.002	<0.002	
11/17/2007			<0.002	<0.002	
5/3/2008			<0.002	<0.002	
10/22/2008			<0.002	<0.002	
5/6/2009				<0.002	
5/7/2009			<0.002		
5/13/2009					<0.002
12/1/2009				<0.002	
12/3/2009					<0.002
12/4/2009			<0.002		
5/25/2010				<0.002	
5/26/2010					<0.002
6/1/2010			<0.002		
6/2/2010	<0.002				
11/9/2010				<0.002	<0.002
11/10/2010	<0.002		<0.002		
5/19/2011	<0.002				<0.002
5/24/2011				<0.002	
5/25/2011			<0.002		
11/9/2011	<0.002				
11/10/2011				<0.002	
11/11/2011					<0.002
11/12/2011			<0.002		
5/17/2012					<0.002
5/18/2012				<0.002	
5/30/2012	<0.002				
5/31/2012			0.0005 (J)		
11/9/2012				<0.002	<0.002
11/11/2012	<0.002		<0.002		
5/7/2013					<0.002
5/8/2013				<0.002	
5/9/2013	<0.002				
5/13/2013			<0.002		
11/6/2013				<0.002	<0.002

Time Series

Constituent: Lead (mg/L) Analysis Run 11/5/2022 1:32 PM
 Plant Arkwright Client: Southern Company Data: Arkwright No 3

	ARGWA-14 (bg)	ARGWA-24 (bg)	ARGWA-3 (bg)	ARGWA-5 (bg)	ARGWC-10
11/11/2013	<0.002				
11/12/2013			<0.002		
5/20/2014				<0.002	<0.002
5/29/2014	<0.002		<0.002		
11/17/2014				<0.002	
11/18/2014					<0.002
11/19/2014	<0.002				
4/7/2015				<0.002	<0.002
4/14/2015	<0.002		<0.002		
10/28/2015				<0.002	<0.002
11/3/2015			<0.002		
11/4/2015	<0.002				
6/23/2016	<0.002		<0.002	<0.002	<0.002
8/30/2016				<0.002	
8/31/2016	<0.002		<0.002		
9/1/2016					<0.002
10/25/2016	<0.002		<0.002	<0.002	<0.002
1/23/2017	0.0013				
1/24/2017			<0.002	<0.002	
1/27/2017					<0.002
4/11/2017	<0.002		<0.002	<0.002	
4/12/2017					<0.002
6/20/2017	<0.002		<0.002	<0.002	
6/22/2017					<0.002
10/25/2017	<0.002		<0.002	<0.002	
10/26/2017					<0.002
4/9/2018	<0.002				
4/10/2018			<0.002	<0.002	
4/11/2018					<0.002
10/16/2018	<0.002		<0.002	<0.002	
10/17/2018					<0.002
3/27/2019	<0.002		<0.002	<0.002	
3/28/2019					<0.002
8/20/2019			0.00014 (J)	0.00014 (J)	
8/21/2019	0.00019 (J)				<0.002
10/7/2019	<0.002				
10/8/2019			0.001	0.00016 (J)	
10/9/2019					<0.002
4/6/2020	<0.002				
4/7/2020			<0.002	<0.002	
4/8/2020					0.031
8/18/2020			0.00019 (J)	0.00013 (J)	
8/19/2020	<0.002				0.00013 (J)
9/29/2020	<0.002		<0.002	<0.002	
10/1/2020					<0.002
12/1/2020		<0.002			
2/9/2021		<0.002	<0.002	<0.002	<0.002
2/11/2021	<0.002				
9/8/2021	<0.002	<0.002	<0.002	<0.002	
9/10/2021					<0.002
2/1/2022		<0.002	<0.002	<0.002	
2/2/2022	<0.002				<0.002

Time Series

Constituent: Lead (mg/L) Analysis Run 11/5/2022 1:32 PM
Plant Arkwright Client: Southern Company Data: Arkwright No 3

	ARGWA-14 (bg)	ARGWA-24 (bg)	ARGWA-3 (bg)	ARGWA-5 (bg)	ARGWC-10
8/30/2022				<0.002	
8/31/2022	<0.002	<0.002	<0.002		<0.002

Time Series

Constituent: Lead (mg/L) Analysis Run 11/5/2022 1:32 PM
Plant Arkwright Client: Southern Company Data: Arkwright No 3

	ARGWC-15	ARGWC-16	ARGWC-17	ARGWC-18	ARGWC-7
12/14/2005					<0.002
4/5/2006					<0.002
10/30/2006					<0.002
5/10/2007					0.0032
11/17/2007					<0.002
5/2/2008					0.008 (o)
10/22/2008					<0.002
5/5/2009	<0.002				
5/12/2009		<0.002	<0.002	<0.002	
5/14/2009					0.00083
12/1/2009					<0.002
12/4/2009	<0.002		<0.002	<0.002	
12/5/2009		<0.002			
5/25/2010			<0.002	<0.002	
5/26/2010		<0.002			<0.002
6/1/2010	<0.002				
11/9/2010		<0.002	<0.002		
11/10/2010	<0.002			<0.002	<0.002
5/19/2011				<0.002	
5/24/2011		<0.002	<0.002		
5/25/2011	<0.002				<0.002
11/9/2011	<0.002				
11/11/2011					<0.002
11/12/2011		<0.002	<0.002	<0.002	
5/17/2012				<0.002	<0.002
5/30/2012		<0.002	<0.002		
5/31/2012	0.0008 (J)				
11/9/2012		<0.002	<0.002		<0.002
11/10/2012	<0.002			<0.002	
5/7/2013				<0.002	
5/8/2013			<0.002		<0.002
5/13/2013	0.025 (o)	<0.002			
11/5/2013				<0.002	<0.002
11/6/2013		<0.002	<0.002		
11/12/2013	<0.002				
5/20/2014			<0.002		
5/21/2014		<0.002			<0.002
5/28/2014	<0.002			<0.002	
11/17/2014		<0.002	<0.002		<0.002
11/19/2014				<0.002	
11/20/2014	<0.002				
4/7/2015		<0.002	<0.002		<0.002
4/14/2015	<0.002				
4/15/2015				<0.002	
10/28/2015		<0.002	<0.002		<0.002
10/29/2015				<0.002	
11/3/2015	<0.002				
6/23/2016	<0.002				<0.002
6/24/2016		<0.002	<0.002	<0.002	
8/31/2016					<0.002
9/1/2016		<0.002	<0.002	<0.002	
9/2/2016	0.0056				

Time Series

Constituent: Lead (mg/L) Analysis Run 11/5/2022 1:32 PM
Plant Arkwright Client: Southern Company Data: Arkwright No 3

	ARGWC-15	ARGWC-16	ARGWC-17	ARGWC-18	ARGWC-7
10/25/2016		<0.002	<0.002		<0.002
10/26/2016	0.0003 (J)			0.0002 (J)	
1/26/2017	<0.002	<0.002	<0.002		<0.002
1/27/2017				<0.002	
4/11/2017		<0.002	<0.002		
4/12/2017	<0.002			<0.002	<0.002
6/21/2017	<0.002	<0.002	<0.002	<0.002	
6/22/2017					<0.002
10/25/2017				<0.002	<0.002
10/26/2017	<0.002	<0.002	<0.002		
4/10/2018	<0.002	<0.002	<0.002		<0.002
4/11/2018				<0.002	
10/16/2018		<0.002			
10/17/2018	0.0016		<0.002	<0.002	<0.002
3/27/2019	<0.002			<0.002	
3/28/2019		<0.002	<0.002		<0.002
8/20/2019		<0.002			
8/21/2019	<0.002		<0.002	<0.002	<0.002
10/8/2019	<0.002				
10/9/2019		<0.002	<0.002	<0.002	<0.002
4/8/2020	<0.002	<0.002	<0.002		<0.002
4/9/2020				<0.002	
8/18/2020			<0.002		<0.002
8/19/2020	<0.002	<0.002			
8/20/2020				0.00028 (J)	
9/29/2020	<0.002	<0.002	<0.002		<0.002
9/30/2020				0.0002 (J)	
2/9/2021	<0.002	<0.002	<0.002		
2/10/2021				<0.002	<0.002
9/8/2021	0.0016	<0.002	0.00022 (J)		
9/9/2021				0.00031 (J)	
9/10/2021					<0.002
2/2/2022			<0.002		
2/3/2022	<0.002	0.00021 (J)		<0.002	<0.002
8/31/2022	<0.002	<0.002			<0.002
9/2/2022			<0.002	<0.002	

Time Series

Constituent: Lead (mg/L) Analysis Run 11/5/2022 1:32 PM
Plant Arkwright Client: Southern Company Data: Arkwright No 3

	ARGWC-8	ARGWC-9
5/13/2009		<0.002
5/14/2009	<0.002	
12/3/2009	<0.002	<0.002
5/26/2010	<0.002	<0.002
11/9/2010	<0.002	<0.002
5/18/2011	<0.002	
5/19/2011		<0.002
11/11/2011	<0.002	<0.002
5/17/2012	<0.002	<0.002
11/9/2012	<0.002	<0.002
5/7/2013	<0.002	<0.002
11/5/2013	<0.002	
11/6/2013		<0.002
5/21/2014	<0.002	<0.002
11/18/2014	<0.002	<0.002
4/7/2015	<0.002	<0.002
10/28/2015	<0.002	<0.002
6/23/2016	<0.002	<0.002
8/31/2016	<0.002	<0.002
10/25/2016		<0.002
10/26/2016	<0.002	
1/26/2017	<0.002	<0.002
4/12/2017	<0.002	<0.002
6/21/2017	<0.002	
6/22/2017		<0.002
10/25/2017		<0.002
10/26/2017	<0.002	
4/11/2018	<0.002	<0.002
10/17/2018	<0.002	<0.002
3/28/2019	<0.002	<0.002
8/21/2019	<0.002	<0.002
10/9/2019	0.00019 (J)	0.00016 (J)
4/9/2020	<0.002	<0.002
8/19/2020		<0.002
8/20/2020	<0.002	
10/1/2020	<0.002	<0.002
2/10/2021	<0.002	<0.002
9/9/2021	<0.002	<0.002
2/2/2022	0.00024 (J)	<0.002
8/31/2022	<0.002	<0.002

Time Series

Constituent: Lithium (mg/L) Analysis Run 11/5/2022 1:32 PM
Plant Arkwright Client: Southern Company Data: Arkwright No 3

	ARAMW-3	ARAMW-4	ARAMW-6	ARGWA-12 (bg)	ARGWA-13 (bg)
8/30/2016				0.0052	
8/31/2016					0.0053
10/24/2016				<0.05 (o)	
10/25/2016					0.0048 (J)
1/23/2017				0.0039 (J)	
1/24/2017					0.0032 (J)
4/11/2017				0.004 (J)	0.0036 (J)
6/21/2017				0.0041 (J)	0.0052
10/25/2017				0.0056	0.0059
4/9/2018					0.0056
4/10/2018				0.007	
10/16/2018				0.0045 (J)	0.0057
8/19/2019					0.0058
8/20/2019				0.0053	
10/8/2019				0.0078	0.0099
4/7/2020				0.0036 (J)	0.0036 (J)
6/24/2020	0.0046 (J)	0.013	<0.01		
6/25/2020					0.0067
6/26/2020				0.0061	
8/18/2020				0.0039 (J)	0.0042 (J)
8/20/2020	<0.01	0.012			
8/21/2020			<0.01		
9/29/2020				0.0048 (J)	0.0052
9/30/2020	0.0055	0.012			
10/1/2020			<0.01		
2/9/2021			<0.01	0.0051	0.0054
2/10/2021	0.0046 (J)	0.014			
9/7/2021				0.0042 (J)	0.0059
9/8/2021		0.013			
9/9/2021	0.0041 (J)		<0.01		
2/1/2022				0.0047 (J)	0.0045 (J)
2/2/2022	0.0045 (J)	0.014	<0.01		
8/30/2022				0.00493 (J)	
8/31/2022	0.00404 (J)		<0.01		0.00609 (J)
9/2/2022		0.0117			

Time Series

Constituent: Lithium (mg/L) Analysis Run 11/5/2022 1:32 PM
Plant Arkwright Client: Southern Company Data: Arkwright No 3

	ARGWA-14 (bg)	ARGWA-24 (bg)	ARGWA-3 (bg)	ARGWA-5 (bg)	ARGWC-10
8/30/2016				<0.01	
8/31/2016	0.0053		<0.01		
9/1/2016					<0.01
10/25/2016	<0.01		<0.01	<0.01	<0.01
1/23/2017	0.0043 (J)				
1/24/2017			<0.01	<0.01	
1/27/2017					<0.01
4/11/2017	<0.01		<0.01	<0.01	
4/12/2017					<0.01
6/20/2017	0.0042 (J)		<0.01	<0.01	
6/22/2017					<0.01
10/25/2017	0.0061		<0.01	<0.01	
10/26/2017					<0.01
4/9/2018	0.0052				
4/10/2018			<0.01	<0.01	
4/11/2018					0.0015 (J)
10/16/2018	0.0052		0.0017 (J)	<0.01	
10/17/2018					0.0011 (J)
8/20/2019			<0.01	<0.01	
8/21/2019	<0.01				<0.01
10/7/2019	0.007				
10/8/2019			0.0047 (J)	0.0055	
10/9/2019					0.0055
4/6/2020	<0.01				
4/7/2020			<0.01	<0.01	
4/8/2020					<0.01
6/23/2020					<0.01
6/25/2020	0.0071		<0.01	<0.01	
8/18/2020			<0.01	<0.01	
8/19/2020	<0.01				<0.01
9/29/2020	0.0044 (J)		<0.01	<0.01	
10/1/2020					<0.01
12/1/2020		<0.01			
2/9/2021		<0.01	<0.01	<0.01	<0.01
2/11/2021	<0.01				
9/8/2021	<0.01	<0.01	<0.01	<0.01	
9/10/2021					<0.01
2/1/2022		0.0027 (J)	<0.01	<0.01	
2/2/2022	0.0032 (J)				0.0012 (J)
8/30/2022				<0.01	
8/31/2022	0.00399 (J)	<0.01	<0.01		<0.01

Time Series

Constituent: Lithium (mg/L) Analysis Run 11/5/2022 1:32 PM
Plant Arkwright Client: Southern Company Data: Arkwright No 3

	ARGWC-15	ARGWC-16	ARGWC-17	ARGWC-18	ARGWC-7
8/31/2016					<0.01
9/1/2016		<0.01	<0.01	0.0033 (J)	
9/2/2016	0.0045 (J)				
10/25/2016		<0.01	<0.01		0.0024 (J)
10/26/2016	0.0025 (J)			0.0037 (J)	
1/26/2017	<0.01	<0.01	<0.01		0.0033 (J)
1/27/2017				0.0048 (J)	
4/11/2017		<0.01	<0.01		
4/12/2017	<0.01			0.0039 (J)	<0.01
6/21/2017	<0.01	<0.01	<0.01	0.0037 (J)	
6/22/2017					<0.01
10/25/2017				0.0047 (J)	0.005
10/26/2017	<0.01	<0.01	<0.01		
4/10/2018	0.0029 (J)	0.0031 (J)	0.0023 (J)		0.005
4/11/2018				0.0062	
10/16/2018		0.0016 (J)			
10/17/2018	<0.01		0.0014 (J)	0.0049 (J)	0.0025 (J)
8/20/2019		<0.01			
8/21/2019	<0.01		<0.01	0.0036 (J)	0.0034 (J)
10/8/2019	0.004 (J)				
10/9/2019		0.0076	0.0071	0.013	0.0083
4/8/2020	<0.01	<0.01	<0.01		<0.01
4/9/2020				<0.01	
6/24/2020		<0.01	<0.01	0.0047 (J)	
6/25/2020	0.004 (J)				0.0046 (J)
8/18/2020			<0.01		<0.01
8/19/2020	<0.01	<0.01			
8/20/2020				<0.01	
9/29/2020	<0.01	<0.01	<0.01		<0.01
9/30/2020				0.0048 (J)	
2/9/2021	<0.01	<0.01	<0.01		
2/10/2021				0.0041 (J)	<0.01
9/8/2021	<0.01	<0.01	<0.01		
9/9/2021				0.0047 (J)	
9/10/2021					<0.01
2/2/2022			0.0014 (J)		
2/3/2022	0.002 (J)	0.002 (J)		0.0046 (J)	0.0031 (J)
8/31/2022	<0.01	<0.01			0.00308 (J)
9/2/2022			<0.01	0.0038 (J)	

Time Series

Constituent: Lithium (mg/L) Analysis Run 11/5/2022 1:32 PM
Plant Arkwright Client: Southern Company Data: Arkwright No 3

	ARGWC-8	ARGWC-9
8/31/2016	0.0039 (J)	<0.01
10/25/2016		<0.01
10/26/2016	0.0025 (J)	
1/26/2017	0.0035 (J)	<0.01
4/12/2017	<0.01	<0.01
6/21/2017	<0.01	
6/22/2017		<0.01
10/25/2017		<0.01
10/26/2017	0.0041 (J)	
4/11/2018	0.0041 (J)	<0.01
10/17/2018	0.0037 (J)	<0.01
8/21/2019	<0.01	<0.01
10/9/2019	0.0077	0.0061
4/9/2020	<0.01	<0.01
6/23/2020	0.0042 (J)	
6/26/2020		<0.01
8/19/2020		<0.01
8/20/2020	<0.01	
10/1/2020	0.0035 (J)	<0.01
2/10/2021	<0.01	<0.01
9/9/2021	0.0037 (J)	<0.01
2/2/2022	0.0039 (J)	<0.01
8/31/2022	0.00345 (J)	<0.01

Time Series

Constituent: Mercury (mg/L) Analysis Run 11/5/2022 1:32 PM
Plant Arkwright Client: Southern Company Data: Arkwright No 3

	ARAMW-3	ARAMW-4	ARAMW-6	ARGWA-12 (bg)	ARGWA-13 (bg)
8/30/2016				<0.0002	
8/31/2016					<0.0002
10/24/2016				<0.0002	
10/25/2016					<0.0002
1/23/2017				<0.0002	
1/24/2017					<0.0002
4/11/2017				<0.0002	<0.0002
6/21/2017				<0.0002	<0.0002
10/25/2017				<0.0002	<0.0002
4/9/2018					<0.0002
4/10/2018				7.2E-05 (J)	
10/16/2018				<0.0002	<0.0002
8/19/2019					<0.0002
8/20/2019				<0.0002	
4/7/2020				<0.0002	<0.0002
8/18/2020				<0.0002	<0.0002
8/20/2020	<0.0002	<0.0002			
8/21/2020			<0.0002		
9/7/2021				<0.0002	<0.0002
9/8/2021		<0.0002			
9/9/2021	<0.0002		<0.0002		
2/1/2022				<0.0002	<0.0002
2/2/2022	<0.0002	<0.0002	<0.0002		
8/30/2022				<0.0002	
8/31/2022	<0.0002		<0.0002		<0.0002
9/2/2022		<0.0002			

Time Series

Constituent: Mercury (mg/L) Analysis Run 11/5/2022 1:32 PM
Plant Arkwright Client: Southern Company Data: Arkwright No 3

	ARGWA-14 (bg)	ARGWA-24 (bg)	ARGWA-3 (bg)	ARGWA-5 (bg)	ARGWC-10
8/30/2016				<0.0002	
8/31/2016	<0.0002		<0.0002		
9/1/2016					<0.0002
10/25/2016	<0.0002		<0.0002	<0.0002	<0.0002
1/23/2017	<0.0002				
1/24/2017			<0.0002	<0.0002	
1/27/2017					7.7E-05 (J)
4/11/2017	<0.0002		<0.0002	<0.0002	
4/12/2017					<0.0002
6/20/2017	<0.0002		<0.0002	<0.0002	
6/22/2017					<0.0002
10/25/2017	<0.0002		<0.0002	<0.0002	
10/26/2017					<0.0002
4/9/2018	<0.0002				
4/10/2018			<0.0002	7E-05 (J)	
4/11/2018					<0.0002
10/16/2018	<0.0002		<0.0002	<0.0002	
10/17/2018					<0.0002
8/20/2019			<0.0002	<0.0002	
8/21/2019	<0.0002				<0.0002
4/6/2020	<0.0002				
4/7/2020			0.00016 (J)	<0.0002	
4/8/2020					<0.0002
8/18/2020			<0.0002	<0.0002	
8/19/2020	<0.0002				<0.0002
12/1/2020		<0.0002			
2/9/2021		<0.0002			
9/8/2021	<0.0002	<0.0002	<0.0002	<0.0002	
9/10/2021					<0.0002
2/1/2022		<0.0002	<0.0002	<0.0002	
2/2/2022	<0.0002				<0.0002
8/30/2022				<0.0002	
8/31/2022	<0.0002	<0.0002	<0.0002		<0.0002

Time Series

Constituent: Mercury (mg/L) Analysis Run 11/5/2022 1:32 PM
Plant Arkwright Client: Southern Company Data: Arkwright No 3

	ARGWC-15	ARGWC-16	ARGWC-17	ARGWC-18	ARGWC-7
8/31/2016					<0.0002
9/1/2016		8.8E-05 (J)	<0.0002	<0.0002	
9/2/2016	<0.0002				
10/25/2016		<0.0002	<0.0002		<0.0002
10/26/2016	<0.0002			<0.0002	
1/26/2017	<0.0002	7.9E-05 (J)	<0.0002		<0.0002
1/27/2017				7.4E-05 (J)	
4/11/2017		<0.0002	<0.0002		
4/12/2017	<0.0002			<0.0002	<0.0002
6/21/2017	<0.0002	0.00011 (J)	<0.0002	<0.0002	
6/22/2017					<0.0002
10/25/2017				<0.0002	<0.0002
10/26/2017	<0.0002	9.4E-05 (J)	<0.0002		
4/10/2018	7.1E-05 (J)	9.9E-05 (J)	<0.0002		7E-05 (J)
4/11/2018				<0.0002	
10/16/2018		7E-05 (J)			
10/17/2018	<0.0002		<0.0002	<0.0002	<0.0002
8/20/2019		<0.0002			
8/21/2019	<0.0002		<0.0002	<0.0002	<0.0002
4/8/2020	<0.0002	<0.0002	<0.0002		<0.0002
4/9/2020				<0.0002	
8/18/2020			<0.0002		<0.0002
8/19/2020	<0.0002	<0.0002			
8/20/2020				<0.0002	
9/8/2021	<0.0002	<0.0002	<0.0002		
9/9/2021				<0.0002	
9/10/2021					<0.0002
2/2/2022			<0.0002		
2/3/2022	<0.0002	<0.0002		<0.0002	<0.0002
8/31/2022	<0.0002	<0.0002			<0.0002
9/2/2022			<0.0002	<0.0002	

Time Series

Constituent: Mercury (mg/L) Analysis Run 11/5/2022 1:32 PM
Plant Arkwright Client: Southern Company Data: Arkwright No 3

	ARGWC-8	ARGWC-9
8/31/2016	<0.0002	<0.0002
10/25/2016		<0.0002
10/26/2016	<0.0002	
1/26/2017	8.1E-05 (J)	<0.0002
4/12/2017	<0.0002	<0.0002
6/21/2017	<0.0002	
6/22/2017		<0.0002
10/25/2017		<0.0002
10/26/2017	<0.0002	
4/11/2018	<0.0002	<0.0002
10/17/2018	<0.0002	<0.0002
8/21/2019	<0.0002	<0.0002
4/9/2020	<0.0002	<0.0002
8/19/2020		<0.0002
8/20/2020	<0.0002	
9/9/2021	<0.0002	<0.0002
2/2/2022	<0.0002	<0.0002
8/31/2022	<0.0002	<0.0002

Time Series

Constituent: Molybdenum (mg/L) Analysis Run 11/5/2022 1:32 PM

Plant Arkwright Client: Southern Company Data: Arkwright No 3

	ARAMW-3	ARAMW-4	ARAMW-6	ARGWA-12 (bg)	ARGWA-13 (bg)
8/30/2016				<0.001	
8/31/2016					<0.001
10/24/2016				<0.001	
10/25/2016					<0.001
1/23/2017				<0.001	
1/24/2017					<0.001
4/11/2017				<0.001	<0.001
6/21/2017				<0.001	<0.001
10/25/2017				<0.001	0.0018 (J)
4/9/2018					<0.001
4/10/2018				<0.001	
10/16/2018				<0.001	<0.001
8/19/2019					<0.001
8/20/2019				<0.001	
10/8/2019				<0.001	<0.001
1/15/2020	0.0053		0.00065 (J)		
4/7/2020				<0.001	<0.001
6/24/2020	0.0077 (J)	0.00079 (J)	<0.001		
6/25/2020					<0.001
6/26/2020				<0.001	
8/18/2020				<0.001	<0.001
8/20/2020	0.0029 (J)	<0.001			
8/21/2020			<0.001		
9/29/2020				<0.001	<0.001
9/30/2020	0.0061 (J)	0.00073 (J)			
10/1/2020			<0.001		
2/9/2021			<0.001	<0.001	<0.001
2/10/2021	0.00065 (J)	<0.001			
9/7/2021				<0.001	<0.001
9/8/2021		<0.001			
9/9/2021	0.0029 (J)		<0.001		
2/1/2022				<0.001	<0.001
2/2/2022	0.0035 (J)	<0.001	<0.001		
8/30/2022				0.000274	
8/31/2022	0.000869 (J)		<0.001		<0.001
9/2/2022		0.000288			

Time Series

Constituent: Molybdenum (mg/L) Analysis Run 11/5/2022 1:32 PM

Plant Arkwright Client: Southern Company Data: Arkwright No 3

	ARGWA-14 (bg)	ARGWA-24 (bg)	ARGWA-3 (bg)	ARGWA-5 (bg)	ARGWC-10
8/30/2016				<0.001	
8/31/2016	0.004 (J)		<0.001		
9/1/2016					<0.001
10/25/2016	<0.001		<0.001	<0.001	<0.001
1/23/2017	<0.001				
1/24/2017			<0.001	<0.001	
1/27/2017					<0.001
4/11/2017	<0.001		<0.001	<0.001	
4/12/2017					<0.001
6/20/2017	<0.001		<0.001	<0.001	
6/22/2017					<0.001
10/25/2017	<0.001		0.00093 (J)	<0.001	
10/26/2017					<0.001
4/9/2018	<0.001				
4/10/2018			<0.001	<0.001	
4/11/2018					<0.001
10/16/2018	<0.001		<0.001	<0.001	
10/17/2018					<0.001
8/20/2019			<0.001	<0.001	
8/21/2019	0.002 (J)				<0.001
10/7/2019	0.00067 (J)				
10/8/2019			<0.001	<0.001	
10/9/2019					<0.001
4/6/2020	0.00084 (J)				
4/7/2020			<0.001	<0.001	
4/8/2020					<0.001
6/23/2020					<0.001
6/25/2020	<0.001		<0.001	<0.001	
8/18/2020			<0.001	<0.001	
8/19/2020	0.00065 (J)				<0.001
9/29/2020	<0.001		<0.001	<0.001	
10/1/2020					<0.001
12/1/2020		<0.001			
2/9/2021		<0.001	<0.001	<0.001	<0.001
2/11/2021	<0.001				
9/8/2021	<0.001	<0.001	<0.001	<0.001	
9/10/2021					<0.001
2/1/2022		<0.001	<0.001	<0.001	
2/2/2022	<0.001				<0.001
8/30/2022				<0.001	
8/31/2022	0.000862 (J)	<0.001	<0.001		<0.001

Time Series

Constituent: Molybdenum (mg/L) Analysis Run 11/5/2022 1:32 PM

Plant Arkwright Client: Southern Company Data: Arkwright No 3

	ARGWC-15	ARGWC-16	ARGWC-17	ARGWC-18	ARGWC-7
8/31/2016					<0.001
9/1/2016		<0.001	<0.001	<0.001	
9/2/2016	0.0015 (J)				
10/25/2016		<0.001	<0.001		<0.001
10/26/2016	<0.001			<0.001	
1/26/2017	<0.001	<0.001	<0.001		<0.001
1/27/2017				<0.001	
4/11/2017		<0.001	<0.001		
4/12/2017	<0.001			<0.001	<0.001
6/21/2017	<0.001	<0.001	<0.001	<0.001	
6/22/2017					<0.001
10/25/2017				<0.001	<0.001
10/26/2017	<0.001	<0.001	<0.001		
4/10/2018	0.00097 (J)	<0.001	<0.001		<0.001
4/11/2018				<0.001	
10/16/2018		<0.001			
10/17/2018	<0.001		<0.001	<0.001	<0.001
8/20/2019		<0.001			
8/21/2019	0.0017 (J)		<0.001	<0.001	<0.001
10/8/2019	0.0011 (J)				
10/9/2019		<0.001	<0.001	<0.001	<0.001
4/8/2020	0.00075 (J)	<0.001	<0.001		<0.001
4/9/2020				<0.001	
6/24/2020		<0.001	<0.001	<0.001	
6/25/2020	0.00086 (J)				<0.001
8/18/2020			<0.001		<0.001
8/19/2020	0.0016 (J)	<0.001			
8/20/2020				<0.001	
9/29/2020	0.0019 (J)	<0.001	<0.001		<0.001
9/30/2020				<0.001	
2/9/2021	0.0012 (J)	<0.001	<0.001		
2/10/2021				<0.001	<0.001
9/8/2021	0.0017 (J)	<0.001	<0.001		
9/9/2021				<0.001	
9/10/2021					<0.001
2/2/2022			<0.001		
2/3/2022	0.0011 (J)	<0.001		<0.001	<0.001
8/31/2022	0.00179	<0.001			<0.001
9/2/2022			<0.001	<0.001	

Time Series

Constituent: Molybdenum (mg/L) Analysis Run 11/5/2022 1:32 PM

Plant Arkwright Client: Southern Company Data: Arkwright No 3

	ARGWC-8	ARGWC-9
8/31/2016	0.034	<0.001
10/25/2016		<0.001
10/26/2016	0.0377	
1/26/2017	0.04	<0.001
4/12/2017	0.035	<0.001
6/21/2017	0.038	
6/22/2017		<0.001
10/25/2017		<0.001
10/26/2017	0.041	
4/11/2018	0.037	<0.001
10/17/2018	0.036	<0.001
8/21/2019	0.051	<0.001
10/9/2019	0.049	<0.001
4/9/2020	0.039	<0.001
6/23/2020	0.043	
6/26/2020		<0.001
8/19/2020		<0.001
8/20/2020	0.042	
10/1/2020	0.043	<0.001
2/10/2021	0.041	<0.001
9/9/2021	0.043	<0.001
2/2/2022	0.042	<0.001
8/31/2022	0.0437	<0.001

Time Series

Constituent: pH (SU) Analysis Run 11/5/2022 1:32 PM
Plant Arkwright Client: Southern Company Data: Arkwright No 3

	ARAMW-3	ARAMW-4	ARAMW-6	ARGWA-12 (bg)	ARGWA-13 (bg)
8/30/2016				6.82 (o)	
8/31/2016					6.67 (o)
10/24/2016				5.99	
10/25/2016					5.8
1/23/2017				5.94	
1/24/2017					5.82
4/11/2017				5.88	5.78
6/21/2017				5.73	5.67
10/25/2017				6.13	5.72
4/9/2018					5.78
4/10/2018				5.95	
10/16/2018				5.94	5.74
3/26/2019					5.96
3/27/2019				6	
8/19/2019					5.59
8/20/2019				5.89	
10/8/2019				5.93	5.74
1/15/2020	6.77	6.36	6.09		
4/7/2020				5.91	5.84
6/24/2020	6.38	5.78	6.33		
6/25/2020					5.8
6/26/2020				5.94	
8/18/2020				6.48	6.15
8/20/2020	6.24	5.77			
8/21/2020			6.32		
9/29/2020				5.88	5.75
9/30/2020	6.41	5.94			
10/1/2020			6.37		
2/9/2021			6.34	5.92	5.79
2/10/2021	6.15	5.64			
9/7/2021				5.89	5.71
9/8/2021		5.52			
9/9/2021	6.14		6.37		
2/1/2022				5.97	5.86
2/2/2022	6.37	6.17	5.58		
8/30/2022				5.88	
8/31/2022	6.14		6.28		5.53
9/2/2022		5.65			

Time Series

Constituent: pH (SU) Analysis Run 11/5/2022 1:32 PM
Plant Arkwright Client: Southern Company Data: Arkwright No 3

	ARGWA-14 (bg)	ARGWA-24 (bg)	ARGWA-3 (bg)	ARGWA-5 (bg)	ARGWC-10
8/30/2016				6.07	
8/31/2016	7.55 (o)		6.09		6.16
10/25/2016	6.92		5.92	5.96	6.02
1/23/2017	6.76				
1/24/2017			5.98	5.89	
1/27/2017					5.98
4/11/2017	6.72		5.82	5.78	
4/12/2017					5.87
6/20/2017	6.66		5.8	5.69	
6/22/2017					5.68
10/25/2017	6.77		5.89	6.11	
10/26/2017					6.07
4/9/2018	6.6				
4/10/2018			5.85	5.58	
4/11/2018					5.72
10/16/2018	6.63		6.03	5.86	
10/17/2018					5.9
3/27/2019	6.83		6.1	5.97	
3/28/2019					6.05
8/20/2019			5.83	5.8	
8/21/2019	6.94				5.82
10/7/2019	6.69				
10/8/2019			5.96	5.93	
10/9/2019					5.94
4/6/2020	6.65				
4/7/2020			5.9	5.86	
4/8/2020					5.95
6/23/2020					5.95
6/25/2020	6.38		5.75	5.87	
8/18/2020			6.47	6.18	
8/19/2020	6.62				7.06
9/29/2020	6.8		6.02	6	
10/1/2020					5.83
12/1/2020		5.85			
2/9/2021		5.69	5.94	5.88	5.94
2/11/2021	7.02		5.94	5.87	
9/8/2021	7.04	5.8	5.97	5.93	
9/10/2021					6.01
2/1/2022		5.77	5.93	5.83	
2/2/2022	6.41				5.95
8/30/2022				5.88	
8/31/2022	6.8	5.65	5.96		5.96

Time Series

Constituent: pH (SU) Analysis Run 11/5/2022 1:32 PM
Plant Arkwright Client: Southern Company Data: Arkwright No 3

	ARGWC-15	ARGWC-16	ARGWC-17	ARGWC-18	ARGWC-7
8/31/2016					5.98
9/1/2016		5.49	5.52	6.19	
9/2/2016	6.54				
10/25/2016	6.25	5.29	5.45		5.81
10/26/2016	6.23			6.03	
1/26/2017	6.4	5.29	5.43		5.73
1/27/2017				6.01	
4/11/2017		5.21	5.33		
4/12/2017	6.1			5.97	5.65
6/21/2017	6.11	5.21	5.3	5.9	
6/22/2017					5.69
10/25/2017				5.97	5.99
10/26/2017	6.2	5.2	5.29		
4/10/2018	6.17	5.34	5.46		5.6
4/11/2018				5.87	
10/16/2018		5.47			
10/17/2018	6.34		5.32	5.9	5.67
3/27/2019	6.6			6.06	
3/28/2019		5.31	5.36		5.85
8/20/2019		5.35			
8/21/2019	6.3		5.07	5.94	5.77
10/8/2019	6.38				
10/9/2019		5.22	5.27	6.01	5.76
4/8/2020	6.26	5.07	5.02		5.75
4/9/2020				5.98	
6/24/2020		5.2	5.11	5.91	
6/25/2020	6.32				5.75
8/18/2020			5.07		6.7
8/19/2020	6.47	5.24			
8/20/2020				6.43	
9/29/2020	7.11	5.5	5.75		5.92
9/30/2020				5.98	
2/9/2021	6.43	5.24	5.17		
2/10/2021				5.99	5.77
2/11/2021		5.23		6.03	
9/8/2021	6.48	5.32	5.15		
9/9/2021				6.04	
9/10/2021					5.83
2/2/2022			5.15		
2/3/2022	6.39	5.26		6	5.74
8/31/2022	6.46	5.18			5.98
9/2/2022			5.11	6.03	

Time Series

Constituent: pH (SU) Analysis Run 11/5/2022 1:32 PM
Plant Arkwright Client: Southern Company Data: Arkwright No 3

	ARGWC-8	ARGWC-9
8/31/2016	6.62	6.1
10/25/2016		5.92
10/26/2016	6.44	
1/26/2017	6.34	5.82
4/12/2017	6.36	5.79
6/21/2017	6.28	
6/22/2017		5.64
10/25/2017		5.7
10/26/2017	6.47	
4/11/2018	6.34	5.69
10/17/2018	6.2	5.81
3/28/2019		5.97
3/29/2019	6.55	
8/21/2019	6.36	5.76
10/9/2019	6.47	5.9
4/9/2020	6.42	5.9
6/23/2020	6.37	
6/26/2020		5.85
8/19/2020		7.21
8/20/2020	6.34	
10/1/2020	6.44	5.78
2/10/2021	6.45	5.91
2/11/2021		5.95
9/9/2021	6.4	5.91
2/2/2022	6.43	5.95
8/31/2022	6.38	5.98

Time Series

Constituent: Selenium (mg/L) Analysis Run 11/5/2022 1:32 PM
 Plant Arkwright Client: Southern Company Data: Arkwright No 3

	ARAMW-3	ARAMW-4	ARAMW-6	ARGWA-12 (bg)	ARGWA-13 (bg)
5/6/2009				0.0054	
5/7/2009					0.0059
12/3/2009				0.006	0.0057
5/25/2010				<0.005	<0.005
11/9/2010				<0.005	
11/10/2010					<0.005
5/24/2011				<0.005	
5/25/2011					<0.005
11/10/2011				<0.005	<0.005
5/18/2012				<0.005	
5/30/2012					<0.005
11/9/2012				<0.005	<0.005
5/8/2013				<0.005	
5/9/2013					<0.005
11/6/2013				<0.005	
11/11/2013					<0.005
5/20/2014				<0.005	
5/21/2014					<0.005
11/18/2014				<0.005	0.0083
4/7/2015					<0.005
4/14/2015				<0.005	
10/28/2015					0.023
10/29/2015				<0.005	
6/23/2016				<0.005	0.0096
8/30/2016				<0.005	
8/31/2016					0.017
10/24/2016				<0.005	
10/25/2016					0.0257
1/23/2017				<0.005	
1/24/2017					0.0097
4/11/2017				<0.005	0.0079
6/21/2017				0.00025 (J)	0.019
10/25/2017				0.00027 (J)	0.022
4/9/2018					0.0063
4/10/2018				0.00033 (J)	
10/16/2018				<0.005	0.021
3/26/2019					0.015
3/27/2019				<0.005	
8/19/2019					0.034
8/20/2019				<0.005	
10/8/2019				<0.005	0.03
4/7/2020				<0.005	0.0094
8/18/2020				<0.005	0.019
8/20/2020	<0.005	<0.005			
8/21/2020			<0.005		
9/29/2020				<0.005	0.021
9/30/2020	<0.005	<0.005			
10/1/2020			<0.005		
2/9/2021			<0.005	<0.005	0.019
2/10/2021	<0.005	<0.005			
9/7/2021				<0.005	0.032
9/8/2021		<0.005			

Time Series

Constituent: Selenium (mg/L) Analysis Run 11/5/2022 1:32 PM
Plant Arkwright Client: Southern Company Data: Arkwright No 3

	ARAMW-3	ARAMW-4	ARAMW-6	ARGWA-12 (bg)	ARGWA-13 (bg)
9/9/2021	0.0024 (J)		<0.005		
2/1/2022				<0.005	0.013
2/2/2022	<0.005	0.0011 (J)	<0.005		
8/30/2022				<0.005	
8/31/2022	<0.005		<0.005		0.0259
9/2/2022		<0.005			

Time Series

Constituent: Selenium (mg/L) Analysis Run 11/5/2022 1:32 PM
Plant Arkwright Client: Southern Company Data: Arkwright No 3

	ARGWA-14 (bg)	ARGWA-24 (bg)	ARGWA-3 (bg)	ARGWA-5 (bg)	ARGWC-10
12/16/1997			<0.005	<0.005	
6/30/1998			<0.005	<0.005	
12/2/1998			<0.005	<0.005	
6/8/1999			<0.005	<0.005	
12/7/1999			<0.005	<0.005	
6/15/2000			<0.005	<0.005	
12/12/2000			<0.005	<0.005	
12/5/2001			<0.005	<0.005	
6/26/2002			<0.005	<0.005	
12/3/2002			<0.005	<0.005	
6/11/2003			<0.005	<0.005	
12/10/2003			<0.005	<0.005	
6/15/2004			<0.005	<0.005	
12/14/2004			<0.005	<0.005	
6/2/2005			<0.005	<0.005	
12/14/2005			<0.005	<0.005	
4/5/2006			<0.005	<0.005	
10/30/2006			<0.005	<0.005	
5/10/2007			<0.005	<0.005	
11/17/2007			<0.005	<0.005	
5/3/2008			<0.005	<0.005	
10/22/2008			<0.005	<0.005	
5/6/2009				0.0047	
5/7/2009			0.0049		
5/13/2009					0.005
12/1/2009				0.0046	
12/3/2009					0.0057
12/4/2009			<0.005		
5/25/2010				<0.005	
5/26/2010					<0.005
6/1/2010			<0.005		
6/2/2010	<0.005				
11/9/2010				<0.005	<0.005
11/10/2010	<0.005		<0.005		
5/19/2011	<0.005				<0.005
5/24/2011				<0.005	
5/25/2011			<0.005		
11/9/2011	<0.005				
11/10/2011				<0.005	
11/11/2011					<0.005
11/12/2011			<0.005		
5/17/2012					<0.005
5/18/2012				<0.005	
5/30/2012	<0.005				
5/31/2012			<0.005		
11/9/2012				<0.005	<0.005
11/11/2012	<0.005		<0.005		
5/7/2013					<0.005
5/8/2013				<0.005	
5/9/2013	<0.005				
5/13/2013			<0.005		
11/6/2013				<0.005	<0.005

Time Series

Constituent: Selenium (mg/L) Analysis Run 11/5/2022 1:32 PM
 Plant Arkwright Client: Southern Company Data: Arkwright No 3

	ARGWA-14 (bg)	ARGWA-24 (bg)	ARGWA-3 (bg)	ARGWA-5 (bg)	ARGWC-10
11/11/2013	<0.005				
11/12/2013			<0.005		
5/20/2014				<0.005	<0.005
5/29/2014	<0.005		<0.005		
11/17/2014				<0.005	
11/18/2014					<0.005
11/19/2014	<0.005				
4/7/2015				<0.005	<0.005
4/14/2015	<0.005		<0.005		
10/28/2015				<0.005	<0.005
11/3/2015			<0.005		
11/4/2015	<0.005				
6/23/2016	<0.005		<0.005	<0.005	<0.005
8/30/2016				<0.005	
8/31/2016	0.00077 (J)		<0.005		
9/1/2016					<0.005
10/25/2016	<0.005		<0.005	<0.005	<0.005
1/23/2017	0.00037 (J)				
1/24/2017			<0.005	<0.005	
1/27/2017					<0.005
4/11/2017	<0.005		<0.005	<0.005	
4/12/2017					<0.005
6/20/2017	0.00044 (J)		<0.005	<0.005	
6/22/2017					<0.005
10/25/2017	0.00038 (J)		0.00032 (J)	0.00027 (J)	
10/26/2017					<0.005
4/9/2018	<0.005				
4/10/2018			<0.005	<0.005	
4/11/2018					<0.005
10/16/2018	<0.005		<0.005	<0.005	
10/17/2018					<0.005
3/27/2019	<0.005		<0.005	<0.005	
3/28/2019					<0.005
8/20/2019			<0.005	<0.005	
8/21/2019	<0.005				<0.005
10/7/2019	<0.005				
10/8/2019			<0.005	<0.005	
10/9/2019					<0.005
4/6/2020	<0.005				
4/7/2020			<0.005	<0.005	
4/8/2020					<0.005
8/18/2020			<0.005	<0.005	
8/19/2020	<0.005				<0.005
9/29/2020	<0.005		<0.005	<0.005	
10/1/2020					<0.005
12/1/2020		<0.005			
2/9/2021		<0.005	<0.005	<0.005	<0.005
2/11/2021	<0.005				
9/8/2021	<0.005	<0.005	<0.005	<0.005	
9/10/2021					0.0017 (J)
2/1/2022		<0.005	<0.005	<0.005	
2/2/2022	<0.005				<0.005

Time Series

Constituent: Selenium (mg/L) Analysis Run 11/5/2022 1:32 PM
Plant Arkwright Client: Southern Company Data: Arkwright No 3

	ARGWA-14 (bg)	ARGWA-24 (bg)	ARGWA-3 (bg)	ARGWA-5 (bg)	ARGWC-10
8/30/2022				<0.005	
8/31/2022	<0.005	<0.005	<0.005		<0.005

Time Series

Constituent: Selenium (mg/L) Analysis Run 11/5/2022 1:32 PM
Plant Arkwright Client: Southern Company Data: Arkwright No 3

	ARGWC-15	ARGWC-16	ARGWC-17	ARGWC-18	ARGWC-7
12/14/2005					<0.005
4/5/2006					<0.005
10/30/2006					<0.005
5/10/2007					<0.005
11/17/2007					<0.005
5/2/2008					<0.005
10/22/2008					<0.005
5/5/2009	0.0041				
5/12/2009		0.0062	0.0059	0.0039	
5/14/2009					0.0046
12/1/2009					0.0019
12/4/2009	<0.005		<0.005	<0.005	
12/5/2009		<0.005			
5/25/2010			<0.005	<0.005	
5/26/2010		<0.005			<0.005
6/1/2010	<0.005				
11/9/2010		<0.005	<0.005		
11/10/2010	<0.005			<0.005	<0.005
5/19/2011				<0.005	
5/24/2011		<0.005	<0.005		
5/25/2011	<0.005				<0.005
11/9/2011	<0.005				
11/11/2011					<0.005
11/12/2011		<0.005	<0.005	<0.005	
5/17/2012				0.0006 (J)	<0.005
5/30/2012		0.0016 (J)	<0.005		
5/31/2012	<0.005				
11/9/2012		<0.005	<0.005		<0.005
11/10/2012	<0.005			<0.005	
5/7/2013				<0.005	
5/8/2013			<0.005		<0.005
5/13/2013	<0.005	<0.005			
11/5/2013				<0.005	<0.005
11/6/2013		<0.005	<0.005		
11/12/2013	<0.005				
5/20/2014			<0.005		
5/21/2014		<0.005			<0.005
5/28/2014	<0.005			<0.005	
11/17/2014		<0.005	<0.005		<0.005
11/19/2014				<0.005	
11/20/2014	<0.005				
4/7/2015		<0.005	<0.005		<0.005
4/14/2015	<0.005				
4/15/2015				<0.005	
10/28/2015		<0.005	<0.005		<0.005
10/29/2015				<0.005	
11/3/2015	<0.005				
6/23/2016	<0.005				0.00029 (J)
6/24/2016		0.0014	<0.005	<0.005	
8/31/2016					<0.005
9/1/2016		0.0014	<0.005	<0.005	
9/2/2016	0.0005 (J)				

Time Series

Constituent: Selenium (mg/L) Analysis Run 11/5/2022 1:32 PM
Plant Arkwright Client: Southern Company Data: Arkwright No 3

	ARGWC-15	ARGWC-16	ARGWC-17	ARGWC-18	ARGWC-7
10/25/2016		0.0015 (J)	<0.005		<0.005
10/26/2016	<0.005			<0.005	
1/26/2017	<0.005	0.00071 (J)	<0.005		<0.005
1/27/2017				<0.005	
4/11/2017		0.0011 (J)	<0.005		
4/12/2017	<0.005			<0.005	<0.005
6/21/2017	<0.005	0.00075 (J)	<0.005	<0.005	
6/22/2017					<0.005
10/25/2017				<0.005	<0.005
10/26/2017	0.0004 (J)	0.0012 (J)	<0.005		
4/10/2018	0.00044 (J)	0.0013	<0.005		<0.005
4/11/2018				<0.005	
10/16/2018		0.00072 (J)			
10/17/2018	<0.005		<0.005	<0.005	<0.005
3/27/2019	<0.005			<0.005	
3/28/2019		0.0017	<0.005		<0.005
8/20/2019		<0.005			
8/21/2019	<0.005		<0.005	<0.005	<0.005
10/8/2019	<0.005				
10/9/2019		0.0018 (J)	<0.005	<0.005	<0.005
4/8/2020	<0.005	0.0022 (J)	<0.005		<0.005
4/9/2020				<0.005	
8/18/2020			<0.005		<0.005
8/19/2020	<0.005	0.0029 (J)			
8/20/2020				<0.005	
9/29/2020	<0.005	0.0025 (J)	<0.005		<0.005
9/30/2020				<0.005	
2/9/2021	<0.005	0.0019 (J)	<0.005		
2/10/2021				<0.005	<0.005
9/8/2021	<0.005	0.0024 (J)	<0.005		
9/9/2021				<0.005	
9/10/2021					0.0028 (J)
2/2/2022			0.00076 (J)		
2/3/2022	<0.005	0.0032 (J)		<0.005	<0.005
8/31/2022	<0.005	0.00287 (J)			<0.005
9/2/2022			<0.005	<0.005	

Time Series

Constituent: Selenium (mg/L) Analysis Run 11/5/2022 1:32 PM
Plant Arkwright Client: Southern Company Data: Arkwright No 3

	ARGWC-8	ARGWC-9
5/13/2009		0.0049
5/14/2009	0.0035	
12/3/2009	<0.005	0.0045
5/26/2010	<0.005	<0.005
11/9/2010	<0.005	<0.005
5/18/2011	<0.005	
5/19/2011		<0.005
11/11/2011	<0.005	<0.005
5/17/2012	<0.005	<0.005
11/9/2012	<0.005	<0.005
5/7/2013	<0.005	<0.005
11/5/2013	<0.005	
11/6/2013		<0.005
5/21/2014	<0.005	<0.005
11/18/2014	<0.005	<0.005
4/7/2015	<0.005	<0.005
10/28/2015	<0.005	<0.005
6/23/2016	<0.005	<0.005
8/31/2016	<0.005	0.00024 (J)
10/25/2016		<0.005
10/26/2016	<0.005	
1/26/2017	<0.005	<0.005
4/12/2017	<0.005	<0.005
6/21/2017	<0.005	
6/22/2017		<0.005
10/25/2017		0.00029 (J)
10/26/2017	<0.005	
4/11/2018	<0.005	<0.005
10/17/2018	<0.005	<0.005
3/28/2019	<0.005	<0.005
8/21/2019	<0.005	<0.005
10/9/2019	<0.005	<0.005
4/9/2020	<0.005	<0.005
8/19/2020		<0.005
8/20/2020	<0.005	
10/1/2020	<0.005	<0.005
2/10/2021	<0.005	<0.005
9/9/2021	<0.005	<0.005
2/2/2022	<0.005	<0.005
8/31/2022	<0.005	<0.005

Time Series

Constituent: Silver (mg/L) Analysis Run 11/5/2022 1:33 PM
Plant Arkwright Client: Southern Company Data: Arkwright No 3

	ARAMW-3	ARAMW-4	ARAMW-6	ARGWA-12 (bg)	ARGWA-13 (bg)
5/6/2009				<0.001	
5/7/2009					<0.001
12/3/2009				<0.001	<0.001
5/25/2010				<0.001	<0.001
11/9/2010				<0.001	
11/10/2010					<0.001
5/24/2011				<0.001	
5/25/2011					<0.001
5/18/2012				0.0001 (J)	
5/30/2012					<0.001
11/9/2012				<0.001	<0.001
5/8/2013				<0.001	
5/9/2013					<0.001
11/6/2013				<0.001	
11/11/2013					<0.001
5/20/2014				<0.001	
5/21/2014					<0.001
11/18/2014				<0.001	<0.001
4/7/2015					<0.001
4/14/2015				<0.001	
10/28/2015					<0.001
10/29/2015				<0.001	
6/23/2016				<0.001	<0.001
10/24/2016				<0.001	
10/25/2016					<0.001
4/11/2017				<0.001	<0.001
10/25/2017				<0.001	0.00013 (J)
4/9/2018					<0.001
4/10/2018				<0.001	
10/16/2018				<0.001	<0.001
3/26/2019					<0.001
3/27/2019				<0.001	
10/8/2019				<0.001	0.00047 (J)
4/7/2020				<0.001	<0.001
9/29/2020				<0.001	<0.001
9/30/2020	<0.001	<0.001			
10/1/2020			<0.001		
2/9/2021			<0.001	<0.001	<0.001
2/10/2021	<0.001	<0.001			
9/7/2021				<0.001	<0.001
9/8/2021		<0.001			
9/9/2021	<0.001		<0.001		
2/1/2022				<0.001	<0.001
2/2/2022	<0.001	<0.001	<0.001		
8/30/2022				<0.001	
8/31/2022	<0.001		<0.001		<0.001
9/2/2022		<0.001			

Time Series

Constituent: Silver (mg/L) Analysis Run 11/5/2022 1:33 PM
 Plant Arkwright Client: Southern Company Data: Arkwright No 3

	ARGWA-14 (bg)	ARGWA-24 (bg)	ARGWA-3 (bg)	ARGWA-5 (bg)	ARGWC-10
12/16/1997			0.035 (o)	<0.001	
6/30/1998			<0.001	<0.001	
12/2/1998			<0.001	<0.001	
6/8/1999			<0.001	<0.001	
12/7/1999			<0.001	<0.001	
6/15/2000			<0.001	<0.001	
12/12/2000			0.0051	<0.001	
12/5/2001			<0.001	<0.001	
6/26/2002			<0.001	<0.001	
12/3/2002			<0.001	<0.001	
6/11/2003			<0.001	<0.001	
12/10/2003			0.003	0.002 (o)	
6/15/2004			<0.001	<0.001	
12/14/2004			<0.001	<0.001	
6/2/2005			<0.001	<0.001	
12/14/2005			<0.001	<0.001	
4/5/2006			<0.001	<0.001	
10/30/2006			0.002	<0.001	
5/10/2007			0.0017	<0.001	
11/17/2007			<0.001	<0.001	
5/3/2008			<0.001	<0.001	
10/22/2008			<0.001	<0.001	
5/6/2009				<0.001	
5/7/2009			<0.001		
5/13/2009					0.0009
12/1/2009				<0.001	
12/3/2009					0.00083
12/4/2009			<0.001		
5/25/2010				<0.001	
5/26/2010					<0.001
6/1/2010			<0.001		
6/2/2010	<0.001				
11/9/2010				<0.001	<0.001
11/10/2010	<0.001		<0.001		
5/19/2011	<0.001				<0.001
5/24/2011				<0.001	
5/25/2011			<0.001		
5/17/2012					<0.001
5/18/2012				<0.001	
5/30/2012	<0.001				
5/31/2012			<0.001		
11/9/2012				<0.001	<0.001
11/11/2012	<0.001		<0.001		
5/7/2013					<0.001
5/8/2013				<0.001	
5/9/2013	<0.001				
5/13/2013			<0.001		
11/6/2013				<0.001	<0.001
11/11/2013	<0.001				
11/12/2013			<0.001		
5/20/2014				<0.001	<0.001
5/29/2014	<0.001		<0.001		

Time Series

Constituent: Silver (mg/L) Analysis Run 11/5/2022 1:33 PM
Plant Arkwright Client: Southern Company Data: Arkwright No 3

	ARGWA-14 (bg)	ARGWA-24 (bg)	ARGWA-3 (bg)	ARGWA-5 (bg)	ARGWC-10
11/17/2014				<0.001	
11/18/2014					<0.001
11/19/2014	<0.001				
4/7/2015				<0.001	<0.001
4/14/2015	<0.001		<0.001		
10/28/2015				<0.001	<0.001
11/3/2015			<0.001		
11/4/2015	<0.001				
6/23/2016	<0.001		<0.001	<0.001	<0.001
10/25/2016	<0.001		<0.001	<0.001	<0.001
4/11/2017	<0.001		<0.001	<0.001	
4/12/2017					<0.001
10/25/2017	<0.001		<0.001	<0.001	
10/26/2017					<0.001
4/9/2018	<0.001				
4/10/2018			<0.001	<0.001	
4/11/2018					<0.001
10/16/2018	<0.001		<0.001	<0.001	
10/17/2018					<0.001
3/27/2019	<0.001		<0.001	<0.001	
3/28/2019					<0.001
10/7/2019	0.00022 (J)				
10/8/2019			0.00019 (J)	0.0003 (J)	
10/9/2019					<0.001
4/6/2020	<0.001				
4/7/2020			<0.001	<0.001	
4/8/2020					<0.001
9/29/2020	<0.001		<0.001	<0.001	
10/1/2020					<0.001
12/1/2020		<0.001 (D)			
2/9/2021		<0.001	<0.001	<0.001	<0.001
2/11/2021	<0.001				
9/8/2021	<0.001	<0.001	<0.001	<0.001	
9/10/2021					<0.001
2/1/2022		<0.001	<0.001	<0.001	
2/2/2022	<0.001				<0.001
8/30/2022				<0.001	
8/31/2022	<0.001	<0.001	<0.001		<0.001

Time Series

Constituent: Silver (mg/L) Analysis Run 11/5/2022 1:33 PM
Plant Arkwright Client: Southern Company Data: Arkwright No 3

	ARGWC-15	ARGWC-16	ARGWC-17	ARGWC-18	ARGWC-7
12/14/2005					<0.001
4/5/2006					<0.001
10/30/2006					<0.001
5/10/2007					0.0011
11/17/2007					<0.001
5/2/2008					<0.001
10/22/2008					<0.001
5/5/2009	<0.001				
5/12/2009		0.0011	0.0011	<0.001	
5/14/2009					<0.001
12/1/2009					<0.001
12/4/2009	0.00098		0.0014	0.0008	
12/5/2009		0.0004			
5/25/2010			<0.001	<0.001	
5/26/2010		<0.001			<0.001
6/1/2010	<0.001				
11/9/2010		<0.001	<0.001		
11/10/2010	<0.001			<0.001	<0.001
5/19/2011				<0.001	
5/24/2011		<0.001	<0.001		
5/25/2011	<0.001				<0.001
5/17/2012				<0.001	<0.001
5/30/2012		<0.001	<0.001		
5/31/2012	<0.001				
11/9/2012		<0.001	<0.001		<0.001
11/10/2012	<0.001			<0.001	
5/7/2013				<0.001	
5/8/2013			<0.001		<0.001
5/13/2013	<0.001	<0.001			
11/5/2013				<0.001	<0.001
11/6/2013		<0.001	<0.001		
11/12/2013	<0.001				
5/20/2014			<0.001		
5/21/2014		<0.001			<0.001
5/28/2014	<0.001			<0.001	
11/17/2014		<0.001	<0.001		<0.001
11/19/2014				<0.001	
11/20/2014	<0.001				
4/7/2015		<0.001	<0.001		<0.001
4/14/2015	<0.001				
4/15/2015				<0.001	
10/28/2015		<0.001	<0.001		<0.001
10/29/2015				<0.001	
11/3/2015	<0.001				
6/23/2016	<0.001				<0.001
6/24/2016		<0.001	<0.001	<0.001	
10/25/2016		<0.001	<0.001		<0.001
10/26/2016	<0.001			<0.001	
4/11/2017		<0.001	<0.001		
4/12/2017	<0.001			<0.001	<0.001
10/25/2017				<0.001	<0.001
10/26/2017	0.00037 (J)	0.00026 (J)	<0.001		

Time Series

Constituent: Silver (mg/L) Analysis Run 11/5/2022 1:33 PM
Plant Arkwright Client: Southern Company Data: Arkwright No 3

	ARGWC-15	ARGWC-16	ARGWC-17	ARGWC-18	ARGWC-7
4/10/2018	<0.001	<0.001	<0.001		<0.001
4/11/2018				<0.001	
10/16/2018		<0.001			
10/17/2018	<0.001		<0.001	<0.001	<0.001
3/27/2019	<0.001			<0.001	
3/28/2019		<0.001	<0.001		<0.001
10/8/2019	0.00018 (J)				
10/9/2019		<0.001	<0.001	<0.001	<0.001
4/8/2020	<0.001	<0.001	<0.001		<0.001
4/9/2020				<0.001	
9/29/2020	<0.001	<0.001	<0.001		<0.001
9/30/2020				<0.001	
2/9/2021	<0.001	<0.001	<0.001		
2/10/2021				<0.001	<0.001
9/8/2021	<0.001	<0.001	<0.001		
9/9/2021				<0.001	
9/10/2021					<0.001
2/2/2022			<0.001		
2/3/2022	<0.001	<0.001		<0.001	<0.001
8/31/2022	<0.001	<0.001			<0.001
9/2/2022			<0.001	<0.001	

Time Series

Constituent: Silver (mg/L) Analysis Run 11/5/2022 1:33 PM
Plant Arkwright Client: Southern Company Data: Arkwright No 3

	ARGWC-8	ARGWC-9
5/13/2009		0.0024 (o)
5/14/2009	<0.001	
12/3/2009	<0.001	0.0007
5/26/2010	<0.001	<0.001
11/9/2010	<0.001	<0.001
5/18/2011	<0.001	
5/19/2011		<0.001
5/17/2012	<0.001	<0.001
11/9/2012	<0.001	<0.001
5/7/2013	<0.001	<0.001
11/5/2013	<0.001	
11/6/2013		<0.001
5/21/2014	<0.001	<0.001
11/18/2014	<0.001	<0.001
4/7/2015	<0.001	<0.001
10/28/2015	<0.001	<0.001
6/23/2016	<0.001	<0.001
10/25/2016		<0.001
10/26/2016	<0.001	
4/12/2017	<0.001	<0.001
10/25/2017		<0.001
10/26/2017	<0.001	
4/11/2018	<0.001	<0.001
10/17/2018	<0.001	<0.001
3/28/2019	<0.001	<0.001
10/9/2019	<0.001	<0.001
4/9/2020	<0.001	<0.001
10/1/2020	<0.001	<0.001
2/10/2021	<0.001	<0.001
9/9/2021	<0.001	<0.001
2/2/2022	<0.001	<0.001
8/31/2022	<0.001	<0.001

Time Series

Constituent: Sulfate (mg/L) Analysis Run 11/5/2022 1:33 PM
Plant Arkwright Client: Southern Company Data: Arkwright No 3

	ARAMW-3	ARAMW-4	ARAMW-6	ARGWA-12 (bg)	ARGWA-13 (bg)
5/6/2009				16.6	
5/7/2009					21.4
12/3/2009				12.3	11.6
5/25/2010				6.44	12.3
11/9/2010				6.83	
11/10/2010					10.6
5/24/2011				8.55	
5/25/2011					11.9
11/10/2011				9.74	100
5/18/2012				8.72	
5/30/2012					61.3
11/9/2012				5.9	202
5/8/2013				5.66	
5/9/2013					33.4
11/6/2013				9.04	
11/11/2013					316
5/20/2014				7.25	
5/21/2014					162
11/18/2014				10	370
4/7/2015					235
4/14/2015				9.61	
10/28/2015					737
10/29/2015				10.2	
6/23/2016				9.8	380
8/30/2016				9.5	
8/31/2016					600
10/24/2016				11	
10/25/2016					820
1/23/2017				11	
1/24/2017					370
4/11/2017				9.1	340
6/21/2017				10	540
10/25/2017				11	580
4/9/2018					230
4/10/2018				9.5	
10/16/2018				10	520
3/26/2019					430
3/27/2019				9.1	
10/8/2019				55	950
4/7/2020				8	270
6/24/2020	45	860	58		
6/25/2020					410
6/26/2020				9	
9/29/2020				8.3	540
9/30/2020	49	790			
10/1/2020			58		
2/9/2021			59	11	520
2/10/2021	60	1000			
9/7/2021				9	870
9/8/2021		1100			
9/9/2021	63		58		
2/1/2022				7.8	360

Time Series

Constituent: Sulfate (mg/L) Analysis Run 11/5/2022 1:33 PM
Plant Arkwright Client: Southern Company Data: Arkwright No 3

	ARAMW-3	ARAMW-4	ARAMW-6	ARGWA-12 (bg)	ARGWA-13 (bg)
2/2/2022	50	1000	46		
8/30/2022				7.11	
8/31/2022	53		46.5		855
9/2/2022		1080			

Time Series

Constituent: Sulfate (mg/L) Analysis Run 11/5/2022 1:33 PM
 Plant Arkwright Client: Southern Company Data: Arkwright No 3

	ARGWA-14 (bg)	ARGWA-24 (bg)	ARGWA-3 (bg)	ARGWA-5 (bg)	ARGWC-10
12/16/1997			<1	2	
6/30/1998			<1	<1	
12/2/1998			0.654	0.709	
6/8/1999			1.46	<1	
12/7/1999			0.399	0.531	
6/15/2000			0.601	0.733	
12/12/2000			0.45	0.621	
12/5/2001			0.094	0.274	
6/26/2002			4.95	0.505	
12/3/2002			0.911	0.515	
6/11/2003			1.85	0.508	
12/10/2003			0.77	0.578	
6/15/2004			1.3	1.23	
12/14/2004			1.02	1.22	
6/2/2005			0.834	0.908	
12/14/2005			<1	0.825	
4/5/2006			<1	1.06	
10/30/2006			0.865	0.996	
5/10/2007			1.03	1.01	
11/17/2007			0.818	1.72	
5/3/2008			0.941	1.2	
10/22/2008			<1	<1	
5/6/2009				0.807	
5/7/2009			0.46		
5/13/2009					0.984
12/1/2009				0.644	
12/3/2009					0.544
12/4/2009			1.06		
5/25/2010				0.509	
5/26/2010					0.37
6/1/2010			5.56		
6/2/2010	129				
11/9/2010				0.348	0.299
11/10/2010	140		0.241		
5/19/2011	269				0.502
5/24/2011				0.532	
5/25/2011			0.383		
11/9/2011	308				
11/10/2011				0.209	
11/11/2011					0.172
11/12/2011			<1		
5/17/2012					0.438
5/18/2012				0.471	
5/30/2012	296				
5/31/2012			0.426		
11/9/2012				0.589	0.537
11/11/2012	225		0.455 (J)		
5/7/2013					0.437
5/8/2013				0.504	
5/9/2013	268				
5/13/2013			2.61		
11/6/2013				<1	<1

Time Series

Constituent: Sulfate (mg/L) Analysis Run 11/5/2022 1:33 PM
 Plant Arkwright Client: Southern Company Data: Arkwright No 3

	ARGWA-14 (bg)	ARGWA-24 (bg)	ARGWA-3 (bg)	ARGWA-5 (bg)	ARGWC-10
11/11/2013	132				
11/12/2013			<1		
5/20/2014				0.5 (J)	0
5/29/2014	216		1.41		
11/17/2014				<1	
11/18/2014					<1
11/19/2014	160				
4/7/2015				0.469	0.464
4/14/2015	105		0.377		
10/28/2015				0.28	0.293
11/3/2015			0.215		
11/4/2015	74.4				
6/23/2016	18		<1	<1	<1
8/30/2016				<1	
8/31/2016	19		<1		
9/1/2016					<1
10/25/2016	42		0.3 (J)	0.4 (J)	0.38 (J)
1/23/2017	12				
1/24/2017			<1	<1	
1/27/2017					<1
4/11/2017	7.1		<1	<1	
4/12/2017					<1
6/20/2017	8.5		<1	<1	
6/22/2017					<1
10/25/2017	9.1		<1	<1	
10/26/2017					<1
4/9/2018	11				
4/10/2018			<1	<1	
4/11/2018					<1
10/16/2018	14		<1	<1	
10/17/2018					<1
3/27/2019	15		0.38 (J)	0.55 (J)	
3/28/2019					0.38 (J)
10/7/2019	12				
10/8/2019			0.7 (J)	0.7 (J)	
10/9/2019					0.59 (J)
4/6/2020	10				
4/7/2020			0.67 (J)	<1	
4/8/2020					<1
6/23/2020					<1
6/25/2020	3.3		1.6	<1	
9/29/2020	4.1		<1	<1	
10/1/2020					<1
12/1/2020		7.5			
2/9/2021		8.5	<1	<1	1.3
2/11/2021	10				
9/8/2021	3	6.8	<1	<1	
9/10/2021					<1
2/1/2022		6.8	1.4	0.77 (J)	
2/2/2022	8.6				<1
8/30/2022				0.519	
8/31/2022	2.58	6.94	0.399 (J)		0.494

Time Series

Constituent: Sulfate (mg/L) Analysis Run 11/5/2022 1:33 PM
 Plant Arkwright Client: Southern Company Data: Arkwright No 3

	ARGWC-15	ARGWC-16	ARGWC-17	ARGWC-18	ARGWC-7
12/14/2005					133
4/5/2006					140
10/30/2006					157
5/10/2007					111
11/17/2007					114
5/2/2008					104
10/22/2008					129
5/5/2009	2.89				
5/12/2009		57.9	42.6	173	
5/14/2009					157
12/1/2009					142
12/4/2009	3.13		58.4	195	
12/5/2009		72.1			
5/25/2010			79.4	199	
5/26/2010		70.3			120
6/1/2010	14.5				
11/9/2010		74.8	111		
11/10/2010	5.04			189	100
5/19/2011				186	
5/24/2011		87.2	171		
5/25/2011	4.57				88.8
11/9/2011	4.15				
11/11/2011					96.6
11/12/2011		97.9	182	49.9	
5/17/2012				177	88.9
5/30/2012		103	194		
5/31/2012	4.05				
11/9/2012		140	842 (o)		70.1
11/10/2012	5.68			184	
5/7/2013				195	
5/8/2013			173		80.5
5/13/2013	2.45	160			
11/5/2013				178	71.6
11/6/2013		146	471 (o)		
11/12/2013	11.8				
5/20/2014			145		
5/21/2014		217			80.4
5/28/2014	14.6			201	
11/17/2014		97	110		71
11/19/2014				150	
11/20/2014	12				
4/7/2015		125	145		70.6
4/14/2015	8.71				
4/15/2015				195	
10/28/2015		106	82.7		12.2
10/29/2015				147	
11/3/2015	5.14				
6/23/2016	6.9				61
6/24/2016		170	79	200	
8/31/2016					57
9/1/2016		130	94	200	
9/2/2016	6.1				

Time Series

Constituent: Sulfate (mg/L) Analysis Run 11/5/2022 1:33 PM
Plant Arkwright Client: Southern Company Data: Arkwright No 3

	ARGWC-15	ARGWC-16	ARGWC-17	ARGWC-18	ARGWC-7
10/25/2016		200	73		56
10/26/2016	22			200	
1/26/2017	5.1	130	110		57
1/27/2017				200	
4/11/2017		150	77		
4/12/2017	4			190	47
6/21/2017	4.6	130	75	200	
6/22/2017					49
10/25/2017				190	49
10/26/2017	5.4	110	61		
4/10/2018	6.7	130	58		46
4/11/2018				200	
10/16/2018		84			
10/17/2018	6.8		47	190	42
3/27/2019	7.2			190	
3/28/2019		220	59		45
10/8/2019	31				
10/9/2019		210	57	180	42
4/8/2020	5.9	200	47		39
4/9/2020				190	
6/24/2020		310	67	190	
6/25/2020	5.6				42
9/29/2020	7.7	200	66		38
9/30/2020				170	
2/9/2021	7.1	190	73		
2/10/2021				220	43
9/8/2021	6.2	160	79		
9/9/2021				190	
9/10/2021					39
2/2/2022			74		
2/3/2022	5.6	250		200	21
8/31/2022	5.64	243			36.3
9/2/2022			151	198	

Time Series

Constituent: Sulfate (mg/L) Analysis Run 11/5/2022 1:33 PM
Plant Arkwright Client: Southern Company Data: Arkwright No 3

	ARGWC-8	ARGWC-9
5/13/2009		0.938
5/14/2009	109	
12/3/2009	107	0.422
5/26/2010	109	0.262
11/9/2010	100	<1
5/18/2011	110	
5/19/2011		0.359
11/11/2011	107	<1
5/17/2012	98	0.398
11/9/2012	90.4	0.545
5/7/2013	96.2	0.797
11/5/2013	86.9	
11/6/2013		0.86
5/21/2014	106	1.02
11/18/2014	99	1.2
4/7/2015	82.3	1.14
10/28/2015	78	1.02
6/23/2016	78	1
8/31/2016	72	1.1
10/25/2016		4.7 (o)
10/26/2016	77	
1/26/2017	75	1.1
4/12/2017	69	0.9 (J)
6/21/2017	73	
6/22/2017		0.99 (J)
10/25/2017		0.95 (J)
10/26/2017	72	
4/11/2018	69	0.9 (J)
10/17/2018	67	0.95 (J)
3/28/2019	66	1
10/9/2019	63	1.5
4/9/2020	59	1.1
6/23/2020	62	
6/26/2020		0.94 (J)
10/1/2020	57	0.82 (J)
2/10/2021	60	1.7
9/9/2021	58	1.2
2/2/2022	59	1.4
8/31/2022	54.1	1.31

Time Series

Constituent: Thallium (mg/L) Analysis Run 11/5/2022 1:33 PM
Plant Arkwright Client: Southern Company Data: Arkwright No 3

	ARAMW-3	ARAMW-4	ARAMW-6	ARGWA-12 (bg)	ARGWA-13 (bg)
8/30/2016				<0.002	
8/31/2016					<0.002
10/24/2016				<0.002	
10/25/2016					<0.002
1/23/2017				<0.002	
1/24/2017					<0.002
4/11/2017				<0.002	<0.002
6/21/2017				<0.002	<0.002
10/25/2017				<0.002	<0.002
4/9/2018					<0.002
4/10/2018				<0.002	
10/16/2018				<0.002	<0.002
8/19/2019					<0.002
8/20/2019				<0.002	
10/8/2019				<0.002	<0.002
4/7/2020				<0.002	<0.002
8/18/2020				<0.002	<0.002
8/20/2020	<0.002	0.00022 (J)			
8/21/2020			0.00018 (J)		
9/29/2020				<0.002	<0.002
9/30/2020	<0.002	<0.002			
10/1/2020			<0.002		
2/9/2021			<0.002	<0.002	<0.002
2/10/2021	<0.002	<0.002			
9/7/2021				<0.002	<0.002
9/8/2021		<0.002			
9/9/2021	<0.002		<0.002		
2/1/2022				<0.002	<0.002
2/2/2022	<0.002	<0.002	<0.002		
8/30/2022				<0.002	
8/31/2022	<0.002		<0.002		<0.002
9/2/2022		<0.002			

Time Series

Constituent: Thallium (mg/L) Analysis Run 11/5/2022 1:33 PM
Plant Arkwright Client: Southern Company Data: Arkwright No 3

	ARGWA-14 (bg)	ARGWA-24 (bg)	ARGWA-3 (bg)	ARGWA-5 (bg)	ARGWC-10
8/30/2016				<0.002	
8/31/2016	<0.002		<0.002		
9/1/2016					<0.002
10/25/2016	<0.002		<0.002	<0.002	<0.002
1/23/2017	<0.002				
1/24/2017			<0.002	<0.002	
1/27/2017					<0.002
4/11/2017	<0.002		<0.002	<0.002	
4/12/2017					<0.002
6/20/2017	<0.002		<0.002	<0.002	
6/22/2017					<0.002
10/25/2017	<0.002		<0.002	<0.002	
10/26/2017					<0.002
4/9/2018	<0.002				
4/10/2018			<0.002	<0.002	
4/11/2018					<0.002
10/16/2018	<0.002		<0.002	<0.002	
10/17/2018					<0.002
8/20/2019			0.0002 (J)	0.00023 (J)	
8/21/2019	<0.002				<0.002
10/7/2019	<0.002				
10/8/2019			<0.002	<0.002	
10/9/2019					<0.002
4/6/2020	<0.002				
4/7/2020			<0.002	0.00015 (J)	
4/8/2020					<0.002
8/18/2020			0.00036 (J)	0.00021 (J)	
8/19/2020	<0.002				<0.002
9/29/2020	0.00019 (J)		<0.002	0.00019 (J)	
10/1/2020					<0.002
12/1/2020		<0.002			
2/9/2021		<0.002	<0.002	<0.002	<0.002
2/11/2021	<0.002				
9/8/2021	<0.002	<0.002	<0.002	<0.002	
9/10/2021					<0.002
2/1/2022		<0.002	<0.002	<0.002	
2/2/2022	<0.002				<0.002
8/30/2022				<0.002	
8/31/2022	<0.002	<0.002	<0.002		<0.002

Time Series

Constituent: Thallium (mg/L) Analysis Run 11/5/2022 1:33 PM
Plant Arkwright Client: Southern Company Data: Arkwright No 3

	ARGWC-15	ARGWC-16	ARGWC-17	ARGWC-18	ARGWC-7
8/31/2016					<0.002
9/1/2016		<0.002	<0.002	<0.002	
9/2/2016	9.5E-05 (J)				
10/25/2016		<0.002	<0.002		<0.002
10/26/2016	<0.002			<0.002	
1/26/2017	<0.002	<0.002	<0.002		<0.002
1/27/2017				<0.002	
4/11/2017		<0.002	<0.002		
4/12/2017	<0.002			<0.002	<0.002
6/21/2017	<0.002	<0.002	<0.002	<0.002	
6/22/2017					<0.002
10/25/2017				<0.002	<0.002
10/26/2017	<0.002	<0.002	<0.002		
4/10/2018	<0.002	<0.002	<0.002		<0.002
4/11/2018				<0.002	
10/16/2018		<0.002			
10/17/2018	<0.002		<0.002	<0.002	<0.002
8/20/2019		<0.002			
8/21/2019	<0.002		<0.002	<0.002	<0.002
10/8/2019	<0.002				
10/9/2019		<0.002	<0.002	<0.002	<0.002
4/8/2020	<0.002	<0.002	<0.002		<0.002
4/9/2020				<0.002	
8/18/2020			<0.002		<0.002
8/19/2020	<0.002	0.00027 (J)			
8/20/2020				<0.002	
9/29/2020	<0.002	0.00025 (J)	<0.002		<0.002
9/30/2020				<0.002	
2/9/2021	<0.002	<0.002	<0.002		
2/10/2021				<0.002	<0.002
9/8/2021	<0.002	0.00025 (J)	0.00063 (J)		
9/9/2021				0.00028 (J)	
9/10/2021					<0.002
2/2/2022			<0.002		
2/3/2022	<0.002	<0.002		<0.002	<0.002
8/31/2022	<0.002	<0.002			<0.002
9/2/2022			<0.002	<0.002	

Time Series

Constituent: Thallium (mg/L) Analysis Run 11/5/2022 1:33 PM
Plant Arkwright Client: Southern Company Data: Arkwright No 3

	ARGWC-8	ARGWC-9
8/31/2016	<0.002	<0.002
10/25/2016		<0.002
10/26/2016	<0.002	
1/26/2017	<0.002	<0.002
4/12/2017	<0.002	<0.002
6/21/2017	<0.002	
6/22/2017		<0.002
10/25/2017		<0.002
10/26/2017	<0.002	
4/11/2018	<0.002	<0.002
10/17/2018	<0.002	<0.002
8/21/2019	<0.002	<0.002
10/9/2019	<0.002	<0.002
4/9/2020	<0.002	<0.002
8/19/2020		<0.002
8/20/2020	<0.002	
10/1/2020	<0.002	<0.002
2/10/2021	<0.002	<0.002
9/9/2021	<0.002	<0.002
2/2/2022	<0.002	<0.002
8/31/2022	<0.002	<0.002

Time Series

Constituent: Total Dissolved Solids (mg/L) Analysis Run 11/5/2022 1:33 PM

Plant Arkwright Client: Southern Company Data: Arkwright No 3

	ARAMW-3	ARAMW-4	ARAMW-6	ARGWA-12 (bg)	ARGWA-13 (bg)
8/30/2016				100	
8/31/2016					1000
10/24/2016				136	
10/25/2016					1280
1/23/2017				16	
1/24/2017					590
4/11/2017				120	610
6/21/2017				140	880
10/25/2017				120	900
4/9/2018					440
4/10/2018				130	
10/16/2018				150	910
3/26/2019					750
3/27/2019				110	
10/8/2019				130	1500
4/7/2020				120	480
9/29/2020				130	880
9/30/2020	240	1300			
10/1/2020			220		
2/9/2021			220	140	890
2/10/2021	230	1500			
9/7/2021				140	1500
9/8/2021		1700			
9/9/2021	230		210		
2/1/2022				130	600
2/2/2022	230	1600	210		
8/30/2022				139	
8/31/2022	218		167		1290
9/2/2022		1610			

Time Series

Constituent: Total Dissolved Solids (mg/L) Analysis Run 11/5/2022 1:33 PM

Plant Arkwright Client: Southern Company Data: Arkwright No 3

	ARGWA-14 (bg)	ARGWA-24 (bg)	ARGWA-3 (bg)	ARGWA-5 (bg)	ARGWC-10
8/30/2016				58	
8/31/2016	330		80		
9/1/2016					100
10/25/2016	459		65	34	65
1/23/2017	340				
1/24/2017			70	120	
1/27/2017					86
4/11/2017	300		64	76	
4/12/2017					110
6/20/2017	210		52	36	
6/22/2017					82
10/25/2017	280		72	64	
10/26/2017					38
4/9/2018	280				
4/10/2018			86	60	
4/11/2018					50
10/16/2018	48		74	54	
10/17/2018					120
3/27/2019	330		69	61	
3/28/2019					82
10/7/2019	230				
10/8/2019			66	68	
10/9/2019					92
4/6/2020	280				
4/7/2020			64	65	
4/8/2020					82
9/29/2020	210		62	61	
10/1/2020					93
12/1/2020		120			
2/9/2021		110	62	73	81
2/11/2021	290				
9/8/2021	170	120	79	86	
9/10/2021					100
2/1/2022		120	75	76	
2/2/2022	310				96
8/30/2022				81	
8/31/2022	177	122	65		69

Time Series

Constituent: Total Dissolved Solids (mg/L) Analysis Run 11/5/2022 1:33 PM

Plant Arkwright Client: Southern Company Data: Arkwright No 3

	ARGWC-15	ARGWC-16	ARGWC-17	ARGWC-18	ARGWC-7
8/31/2016					150
9/1/2016		240	220	450	
9/2/2016	150				
10/25/2016		304	114		171
10/26/2016	125			404	
1/26/2017	86	170	170		120
1/27/2017				460	
4/11/2017		260	160		
4/12/2017	140			430	150
6/21/2017	120	230	140	430	
6/22/2017					130
10/25/2017				380	130
10/26/2017	96	170	120		
4/10/2018	130	260	110		140
4/11/2018				430	
10/16/2018		140			
10/17/2018	160		140	470	180
3/27/2019	150			430	
3/28/2019		370	120		130
10/8/2019	130				
10/9/2019		350	120	420	130
4/8/2020	130	350	91		130
4/9/2020				440	
9/29/2020	130	340	140		140
9/30/2020				390	
2/9/2021	140	310	160 (D)		
2/10/2021				460	110
9/8/2021	150	280	150		
9/9/2021				480	
9/10/2021					130
2/2/2022			150		
2/3/2022	150	400		450	120
8/31/2022	125	375			101
9/2/2022			240	444	

Time Series

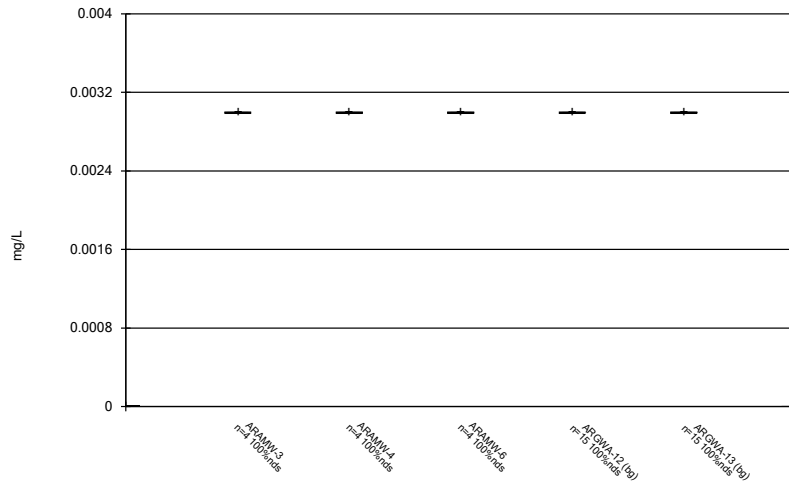
Constituent: Total Dissolved Solids (mg/L) Analysis Run 11/5/2022 1:33 PM

Plant Arkwright Client: Southern Company Data: Arkwright No 3

	ARGWC-8	ARGWC-9
8/31/2016	310	74
10/25/2016		67
10/26/2016	283	
1/26/2017	300	84
4/12/2017	310	88
6/21/2017	300	
6/22/2017		76
10/25/2017		60
10/26/2017	270	
4/11/2018	240	24
10/17/2018	120	96
3/28/2019	290	77
10/9/2019	290	75
4/9/2020	270	70
10/1/2020	270	55
2/10/2021	270	71
9/9/2021	270	70
2/2/2022	260	67
8/31/2022	248	63

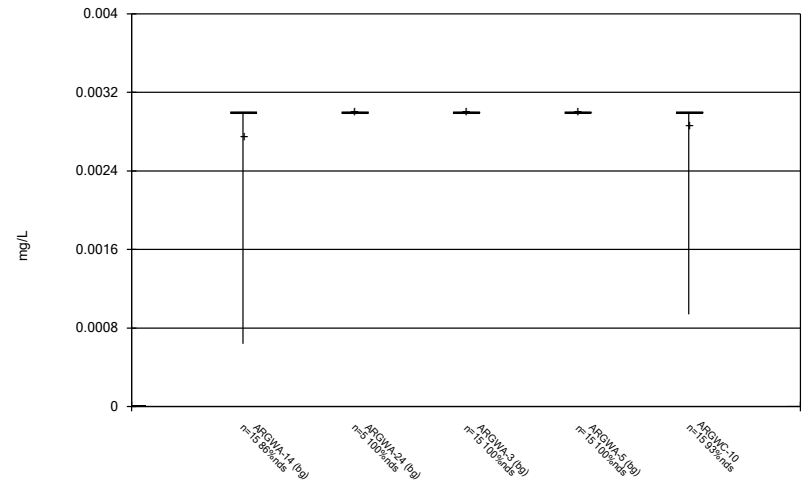
FIGURE B.

Box & Whiskers Plot



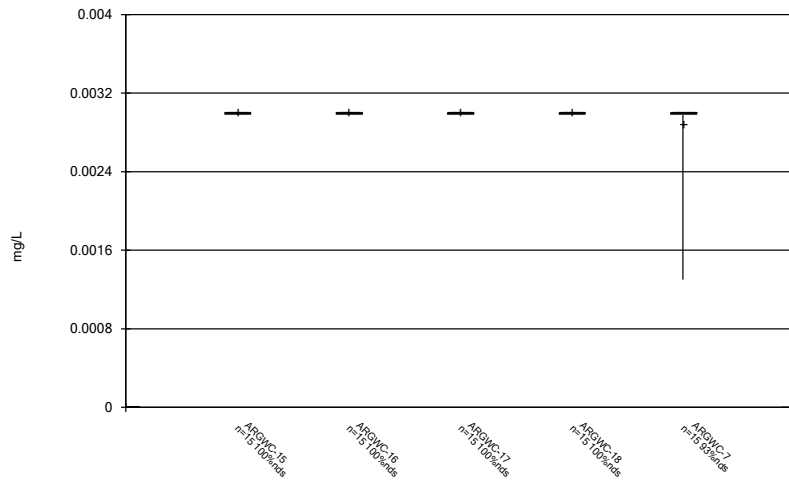
Constituent: Antimony Analysis Run 11/5/2022 1:33 PM
Plant Arkwright Client: Southern Company Data: Arkwright No 3

Box & Whiskers Plot



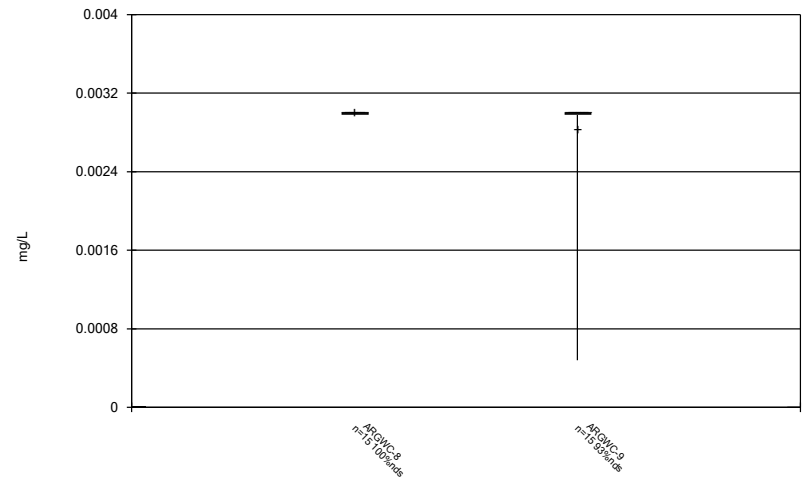
Constituent: Antimony Analysis Run 11/5/2022 1:33 PM
Plant Arkwright Client: Southern Company Data: Arkwright No 3

Box & Whiskers Plot



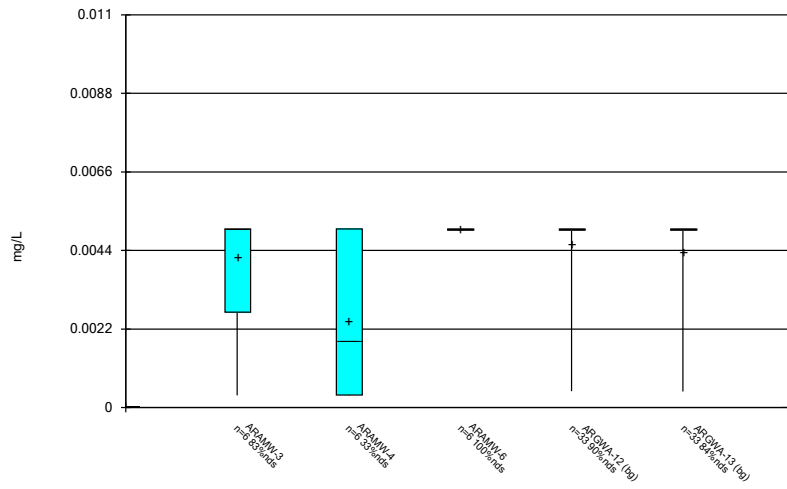
Constituent: Antimony Analysis Run 11/5/2022 1:33 PM
Plant Arkwright Client: Southern Company Data: Arkwright No 3

Box & Whiskers Plot



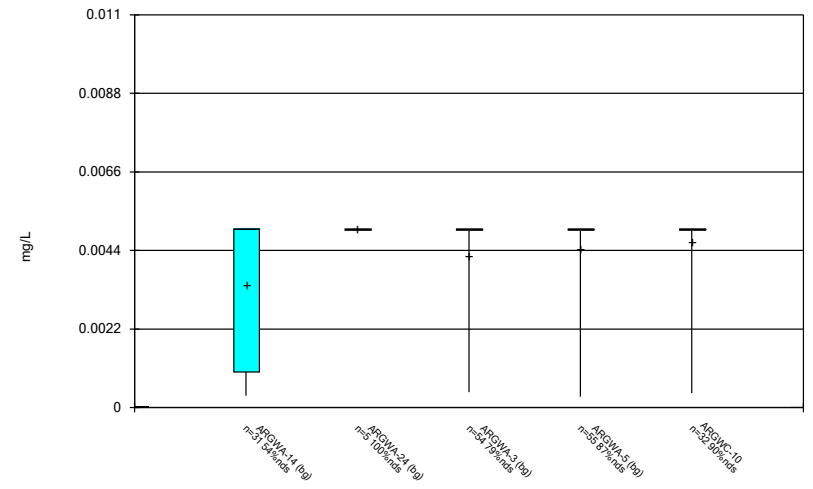
Constituent: Antimony Analysis Run 11/5/2022 1:33 PM
Plant Arkwright Client: Southern Company Data: Arkwright No 3

Box & Whiskers Plot



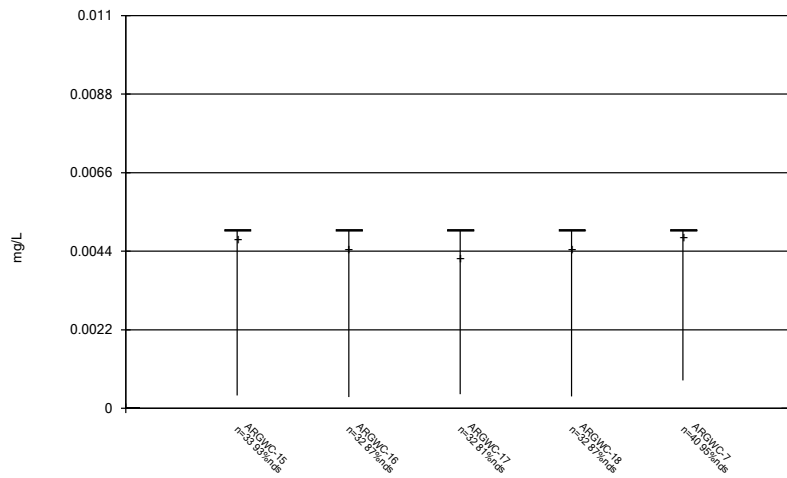
Constituent: Arsenic Analysis Run 11/5/2022 1:33 PM
Plant Arkwright Client: Southern Company Data: Arkwright No 3

Box & Whiskers Plot



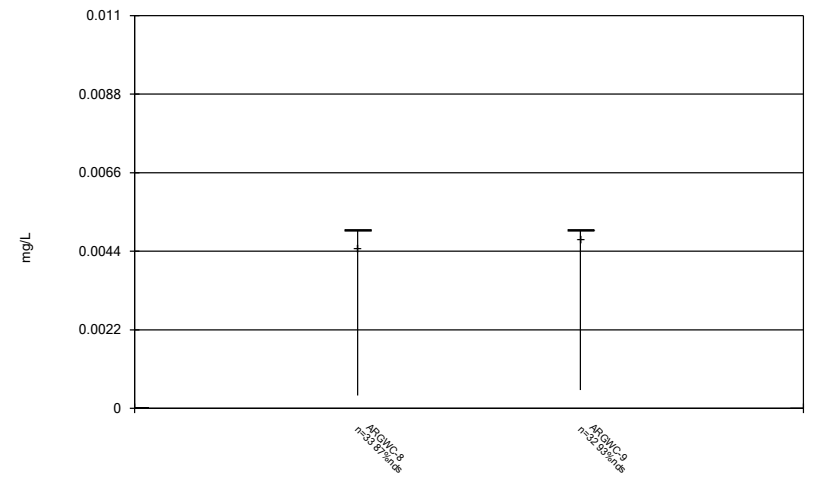
Constituent: Arsenic Analysis Run 11/5/2022 1:33 PM
Plant Arkwright Client: Southern Company Data: Arkwright No 3

Box & Whiskers Plot



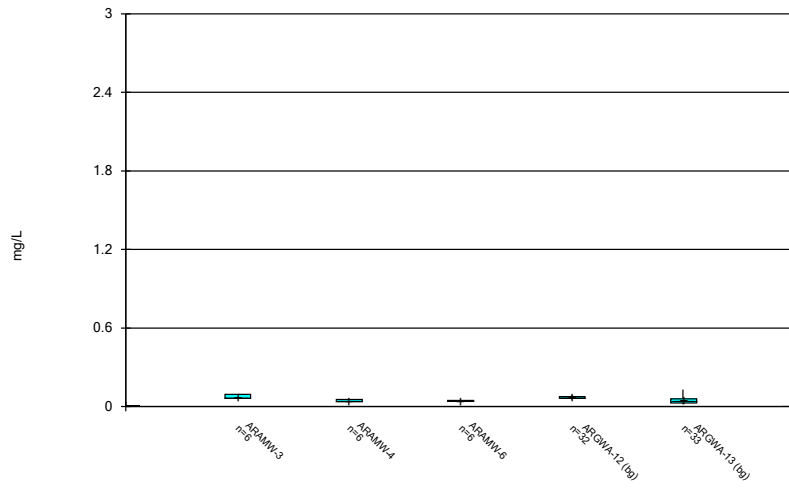
Constituent: Arsenic Analysis Run 11/5/2022 1:33 PM
Plant Arkwright Client: Southern Company Data: Arkwright No 3

Box & Whiskers Plot



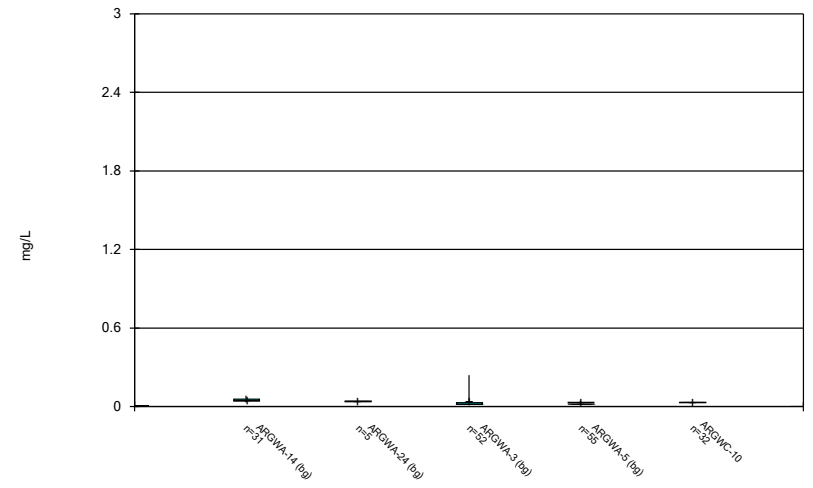
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Plant Arkwright Client: Southern Company Data: Arkwright No 3

Box & Whiskers Plot



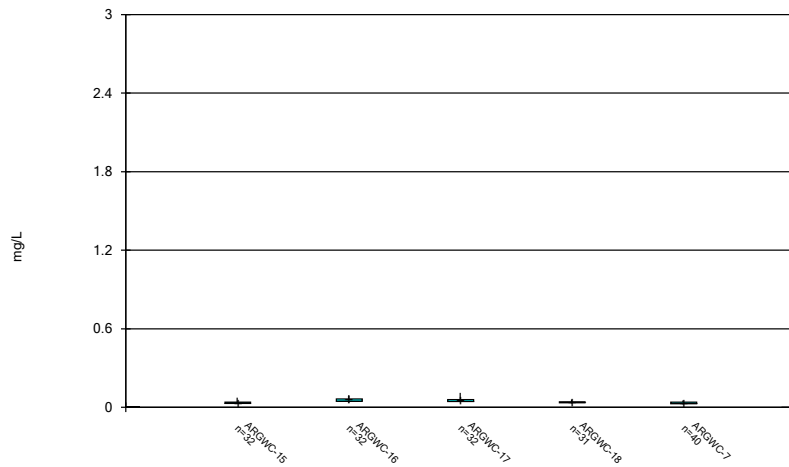
Constituent: Barium Analysis Run 11/5/2022 1:33 PM
 Plant Arkwright Client: Southern Company Data: Arkwright No 3

Box & Whiskers Plot



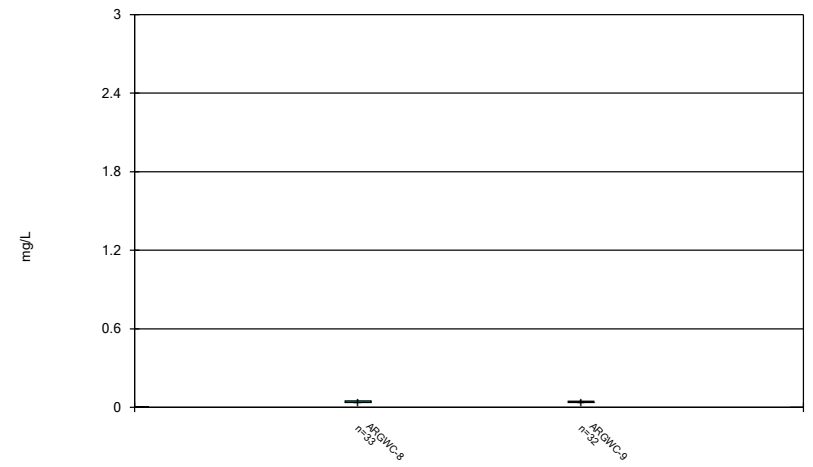
Constituent: Barium Analysis Run 11/5/2022 1:33 PM
 Plant Arkwright Client: Southern Company Data: Arkwright No 3

Box & Whiskers Plot



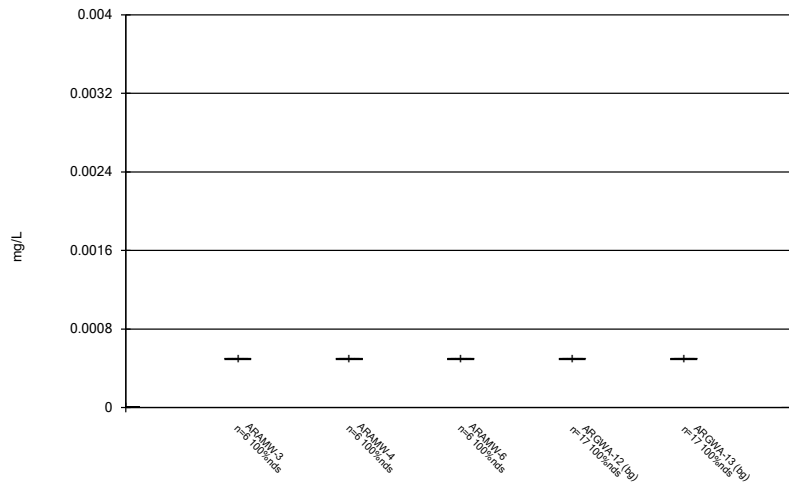
Constituent: Barium Analysis Run 11/5/2022 1:33 PM
 Plant Arkwright Client: Southern Company Data: Arkwright No 3

Box & Whiskers Plot



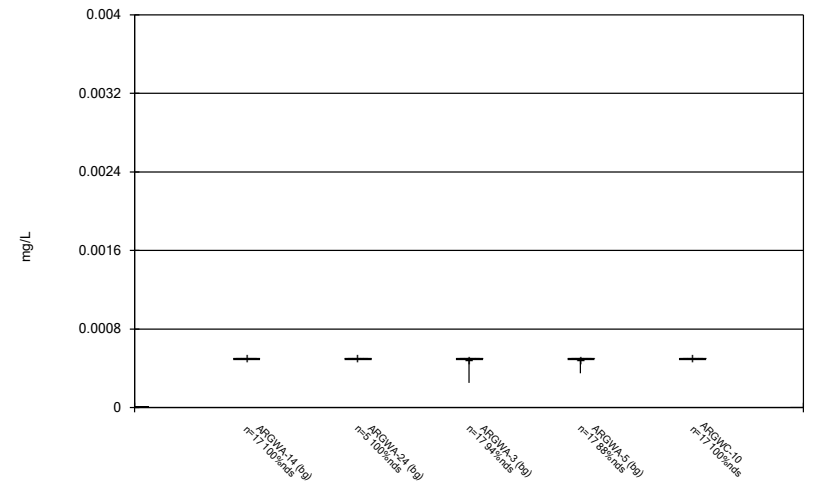
Constituent: Barium Analysis Run 11/5/2022 1:33 PM
 Plant Arkwright Client: Southern Company Data: Arkwright No 3

Box & Whiskers Plot



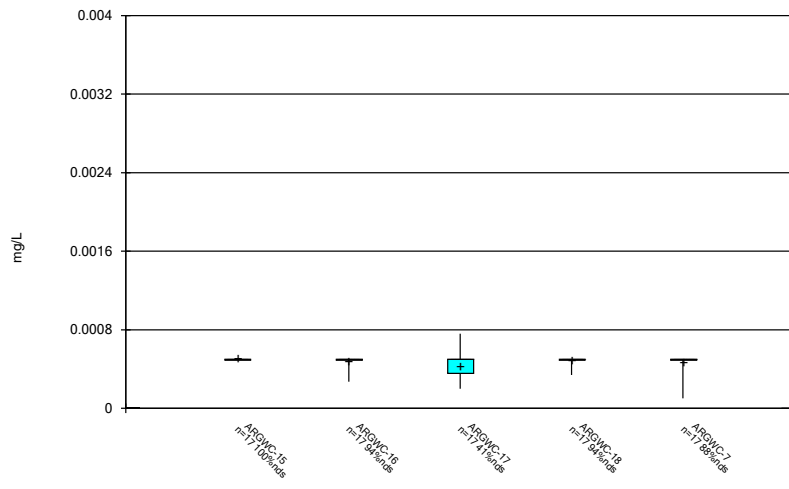
Constituent: Beryllium Analysis Run 11/5/2022 1:33 PM
Plant Arkwright Client: Southern Company Data: Arkwright No 3

Box & Whiskers Plot



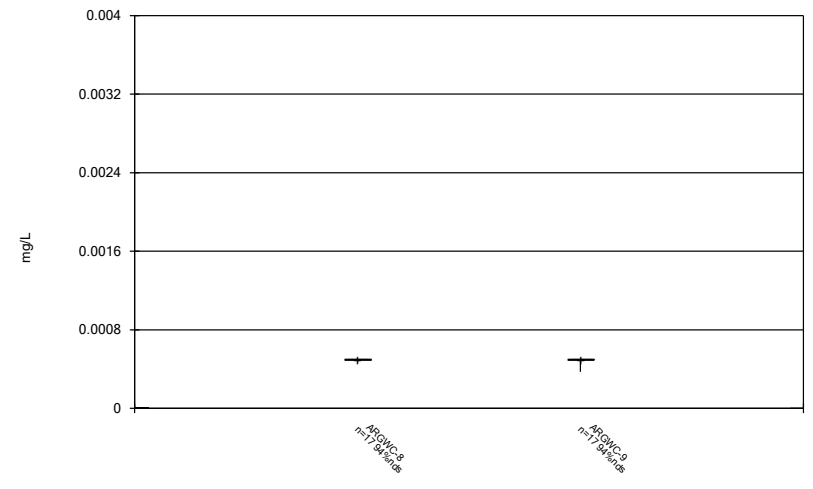
Constituent: Beryllium Analysis Run 11/5/2022 1:33 PM
Plant Arkwright Client: Southern Company Data: Arkwright No 3

Box & Whiskers Plot



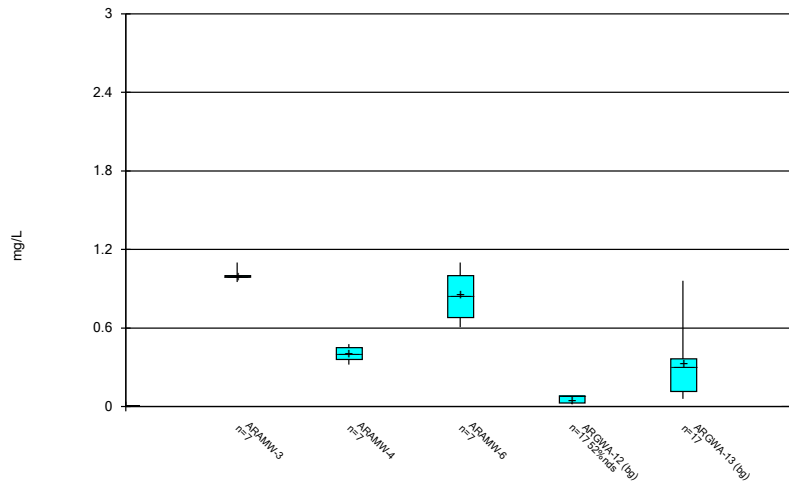
Constituent: Beryllium Analysis Run 11/5/2022 1:33 PM
Plant Arkwright Client: Southern Company Data: Arkwright No 3

Box & Whiskers Plot



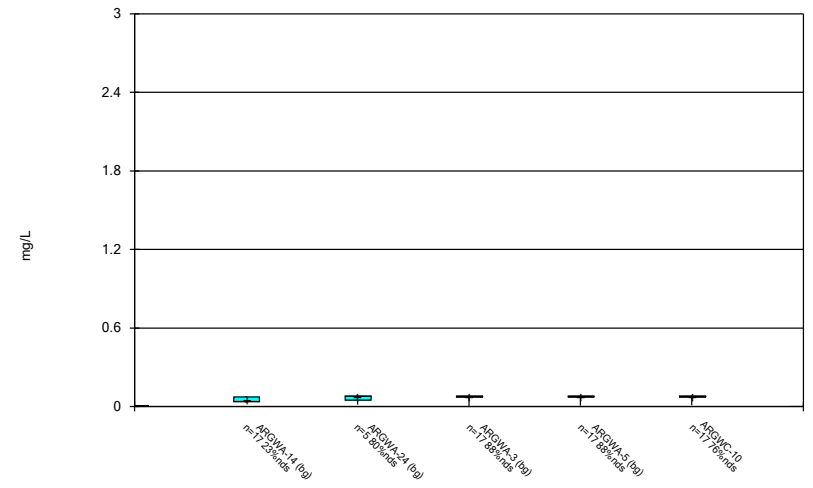
Constituent: Beryllium Analysis Run 11/5/2022 1:33 PM
Plant Arkwright Client: Southern Company Data: Arkwright No 3

Box & Whiskers Plot



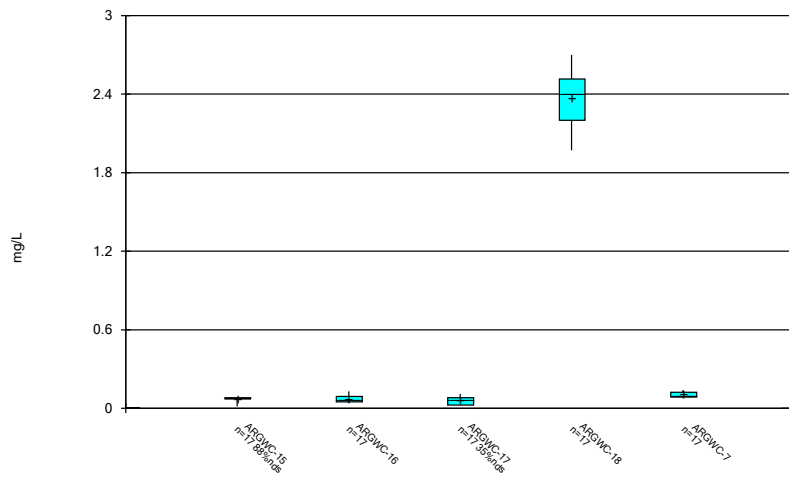
Constituent: Boron Analysis Run 11/5/2022 1:34 PM
Plant Arkwright Client: Southern Company Data: Arkwright No 3

Box & Whiskers Plot



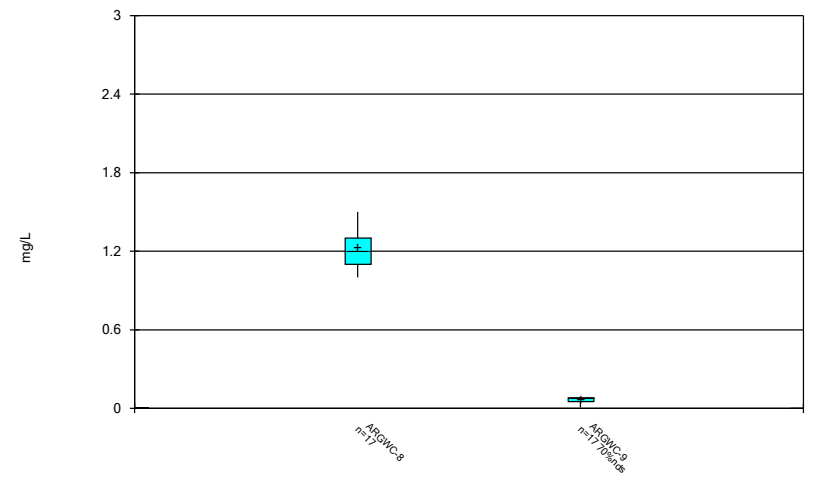
Constituent: Boron Analysis Run 11/5/2022 1:34 PM
Plant Arkwright Client: Southern Company Data: Arkwright No 3

Box & Whiskers Plot



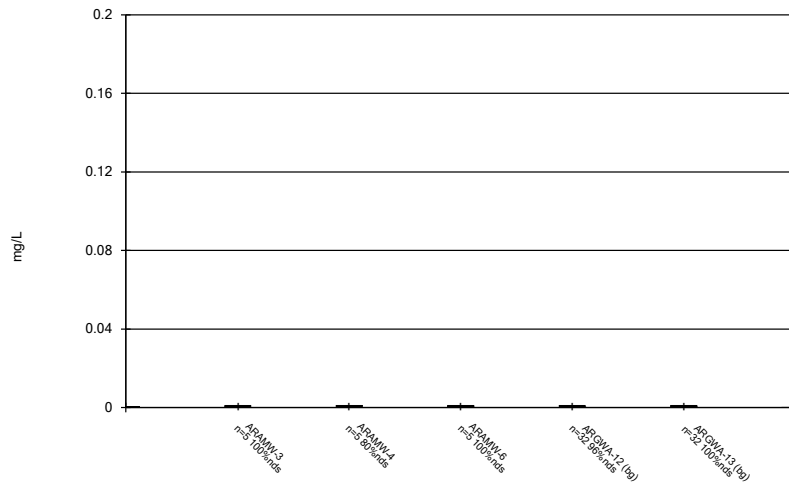
Constituent: Boron Analysis Run 11/5/2022 1:34 PM
Plant Arkwright Client: Southern Company Data: Arkwright No 3

Box & Whiskers Plot



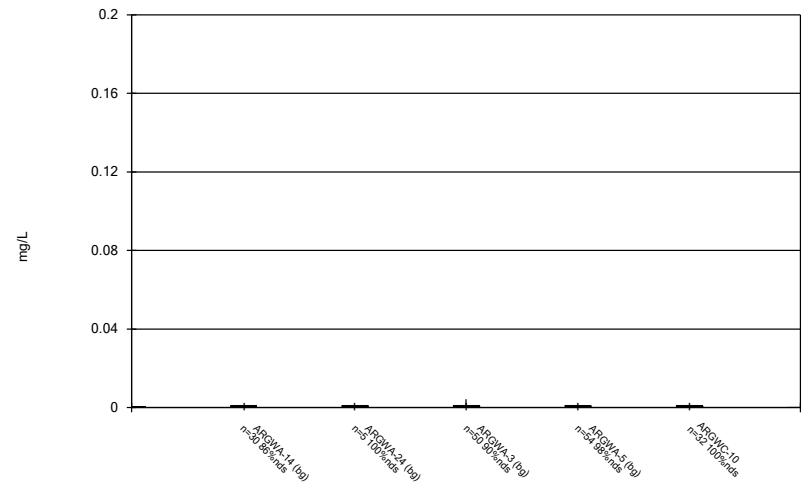
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Plant Arkwright Client: Southern Company Data: Arkwright No 3

Box & Whiskers Plot



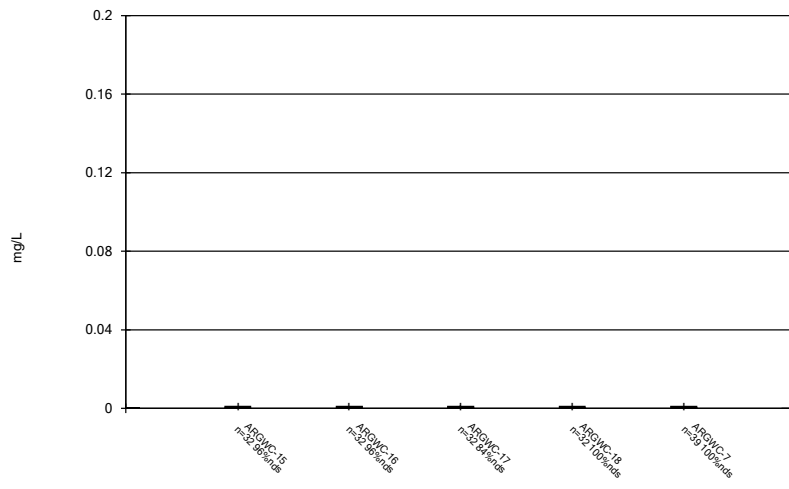
Constituent: Cadmium Analysis Run 11/5/2022 1:34 PM
Plant Arkwright Client: Southern Company Data: Arkwright No 3

Box & Whiskers Plot



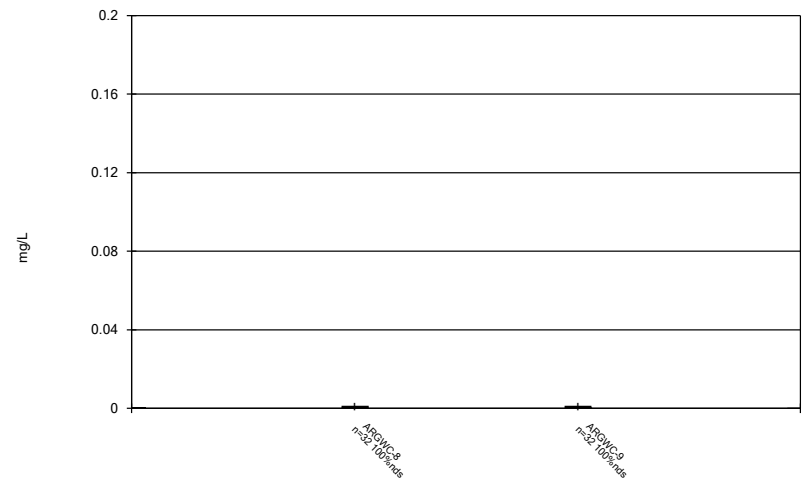
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Plant Arkwright Client: Southern Company Data: Arkwright No 3

Box & Whiskers Plot



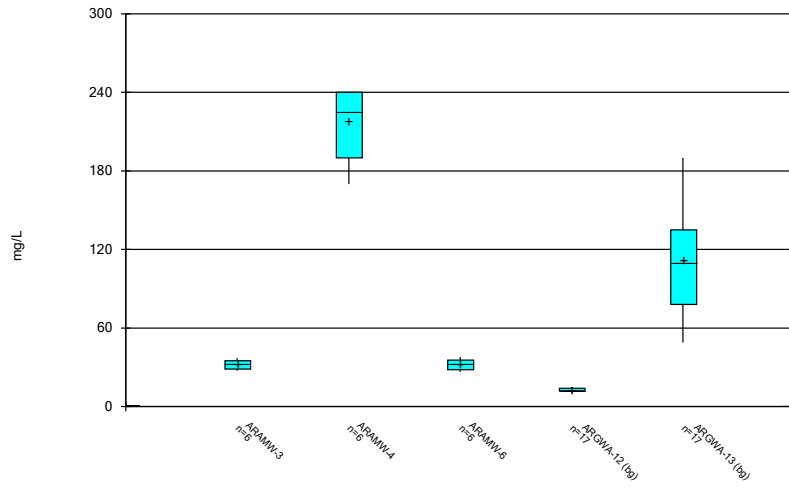
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Plant Arkwright Client: Southern Company Data: Arkwright No 3

Box & Whiskers Plot



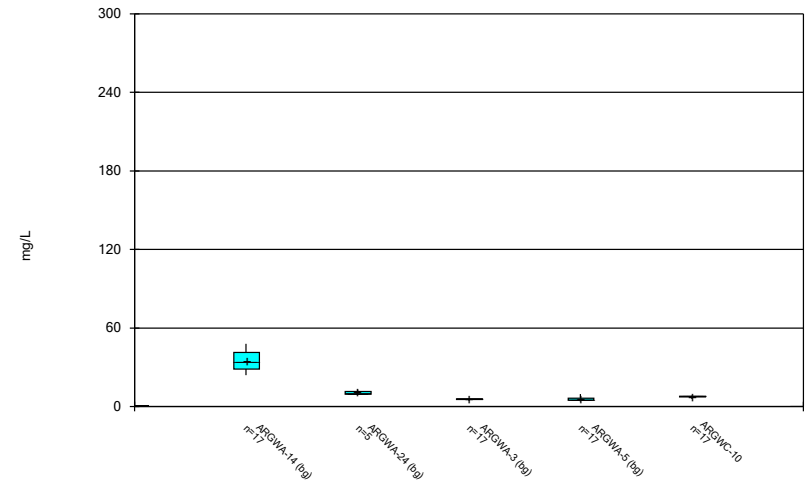
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Plant Arkwright Client: Southern Company Data: Arkwright No 3

Box & Whiskers Plot



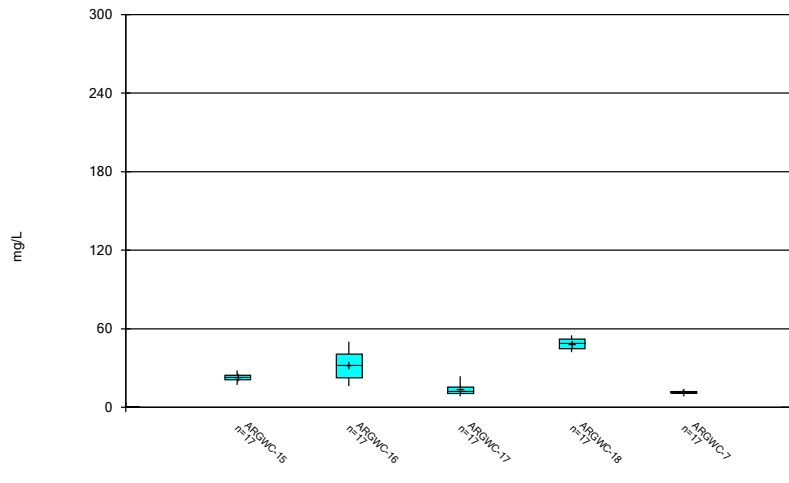
Constituent: Calcium Analysis Run 11/5/2022 1:34 PM
 Plant Arkwright Client: Southern Company Data: Arkwright No 3

Box & Whiskers Plot



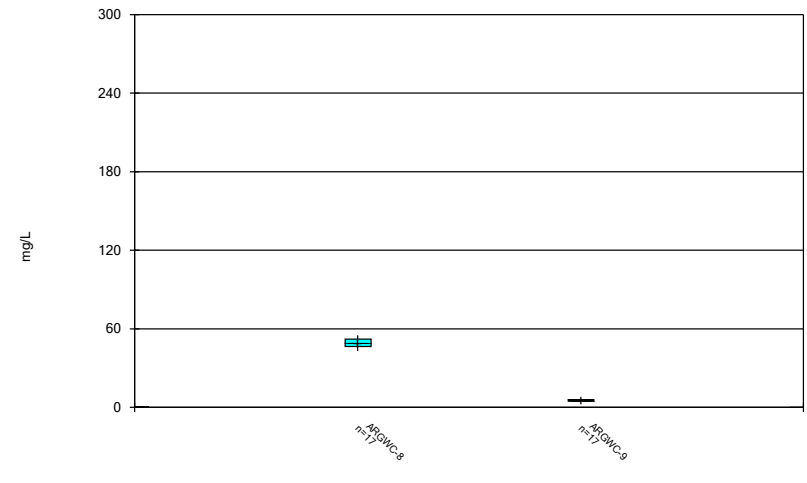
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 Plant Arkwright Client: Southern Company Data: Arkwright No 3

Box & Whiskers Plot



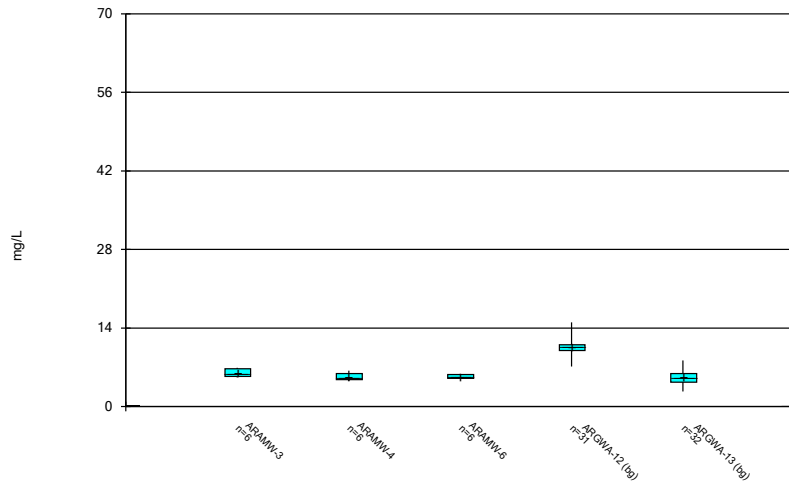
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 Plant Arkwright Client: Southern Company Data: Arkwright No 3

Box & Whiskers Plot



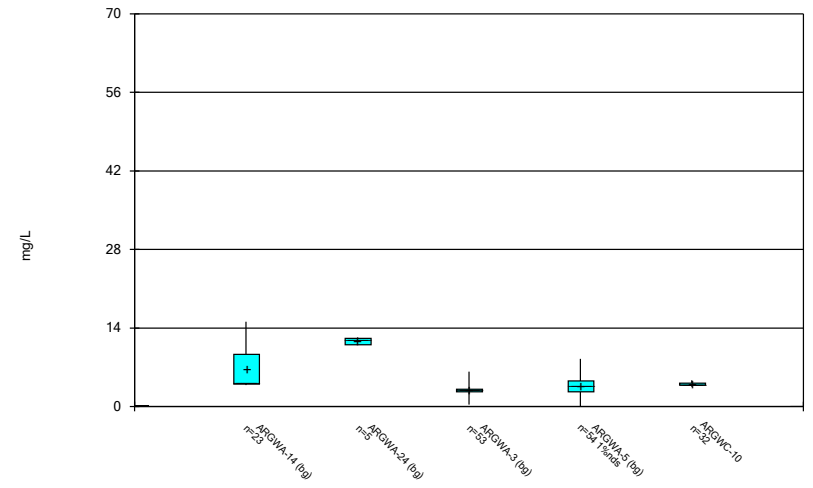
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 Plant Arkwright Client: Southern Company Data: Arkwright No 3

Box & Whiskers Plot



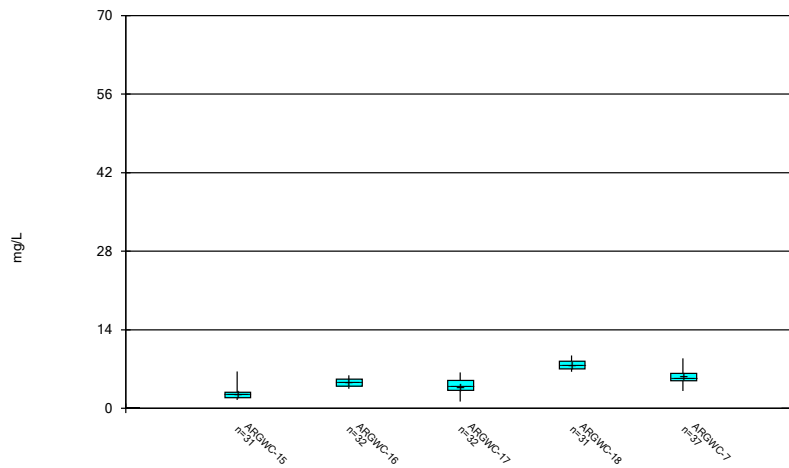
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 Plant Arkwright Client: Southern Company Data: Arkwright No 3

Box & Whiskers Plot



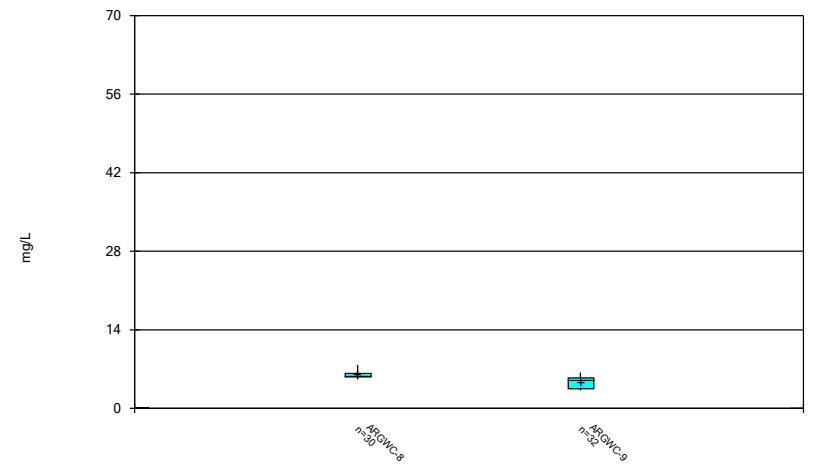
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 Plant Arkwright Client: Southern Company Data: Arkwright No 3

Box & Whiskers Plot



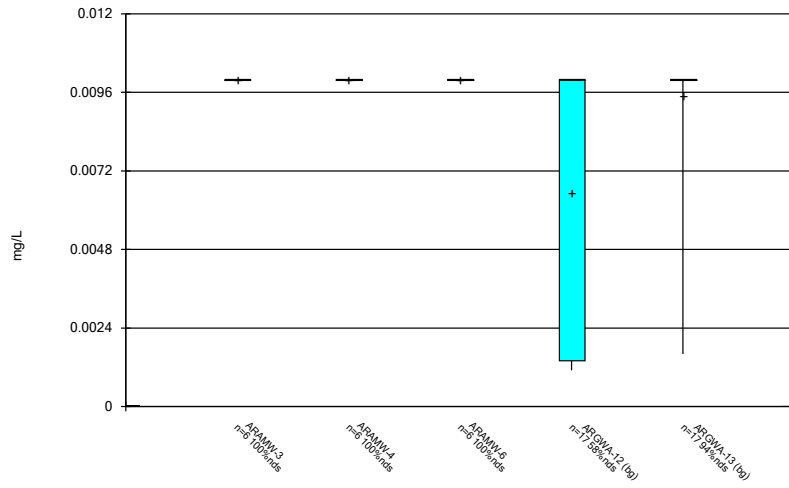
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 Plant Arkwright Client: Southern Company Data: Arkwright No 3

Box & Whiskers Plot



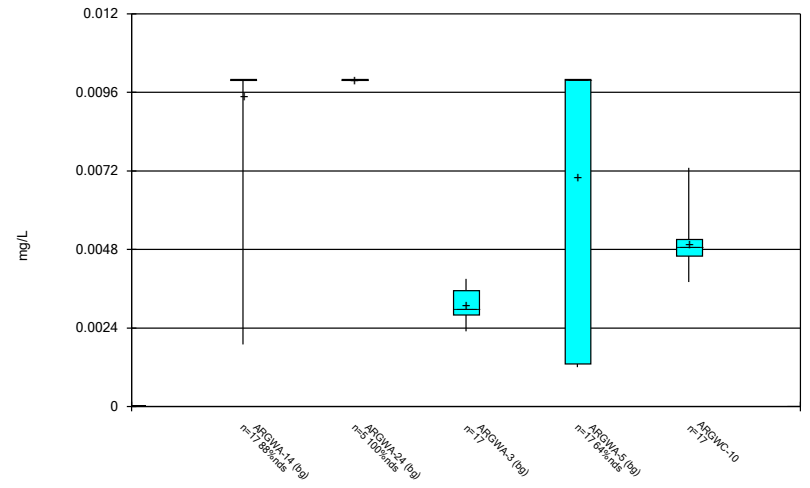
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Box & Whiskers Plot



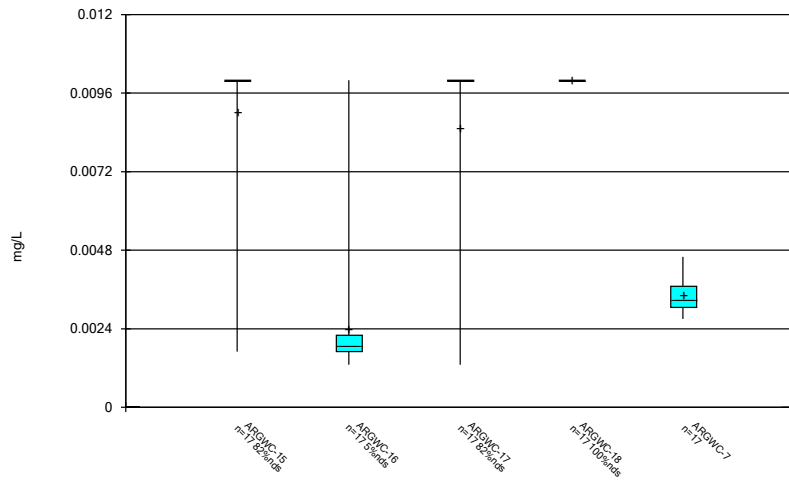
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Box & Whiskers Plot



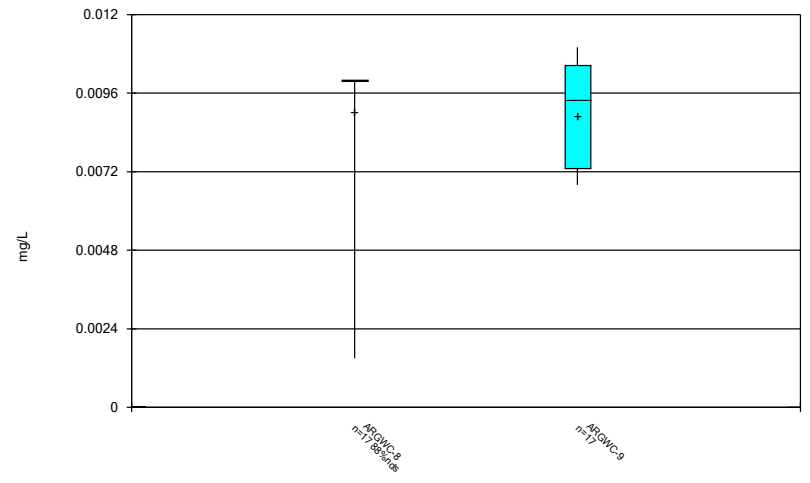
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Box & Whiskers Plot



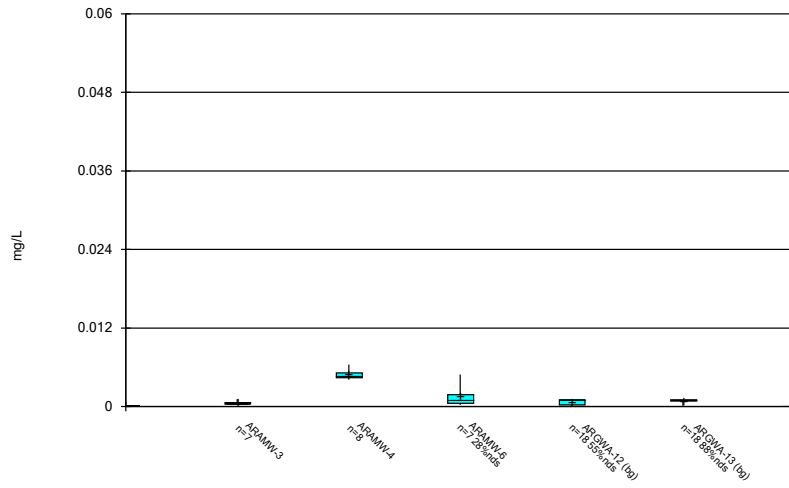
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Box & Whiskers Plot



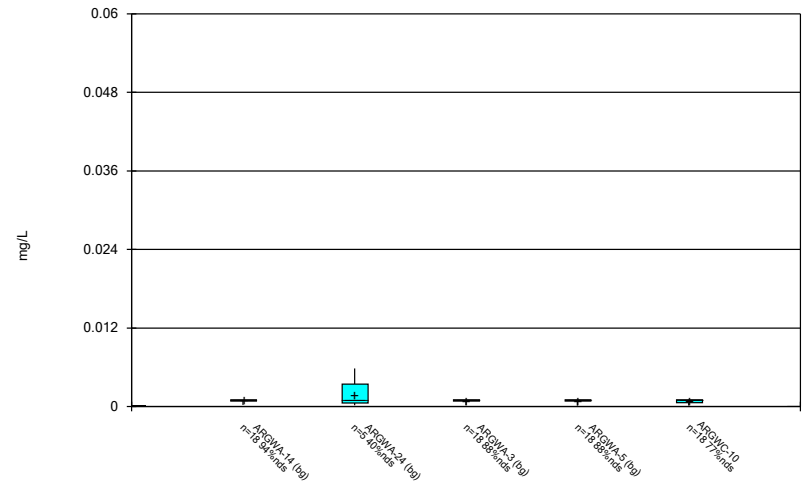
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 Plant Arkwright Client: Southern Company Data: Arkwright No 3

Box & Whiskers Plot



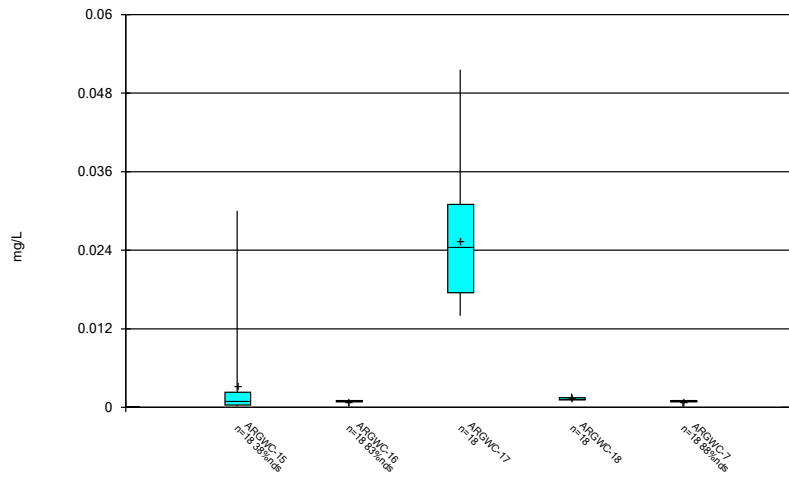
Constituent: Cobalt Analysis Run 11/5/2022 1:34 PM
 Plant Arkwright Client: Southern Company Data: Arkwright No 3

Box & Whiskers Plot



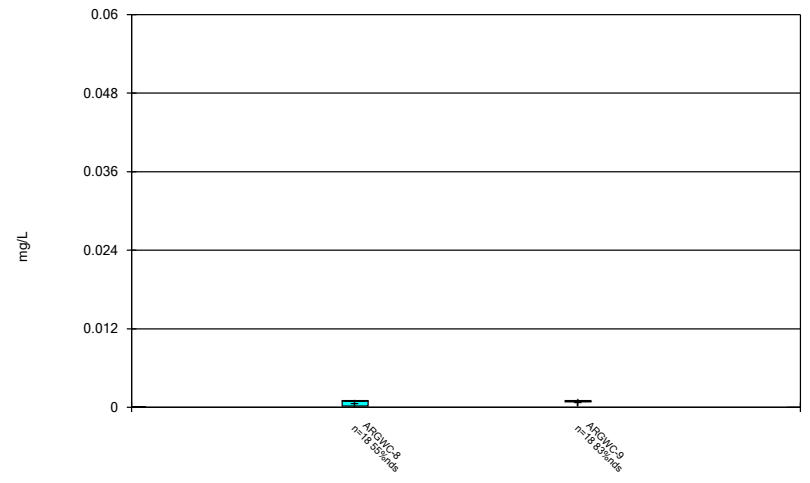
Constituent: Cobalt Analysis Run 11/5/2022 1:34 PM
 Plant Arkwright Client: Southern Company Data: Arkwright No 3

Box & Whiskers Plot



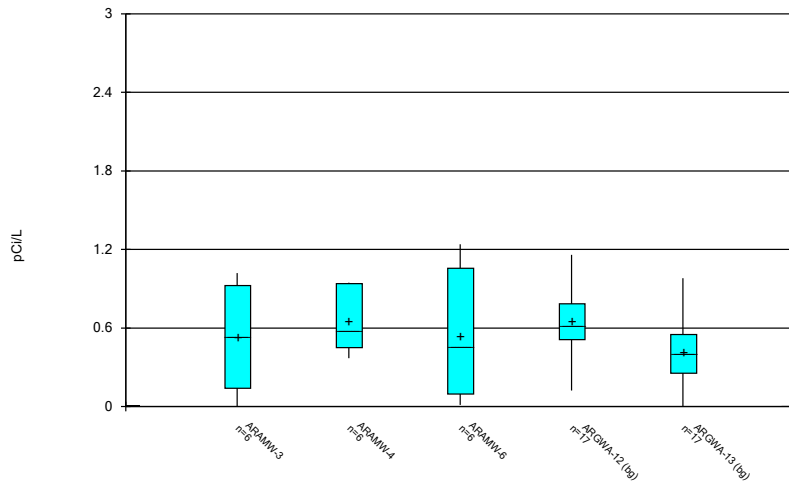
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 Plant Arkwright Client: Southern Company Data: Arkwright No 3

Box & Whiskers Plot



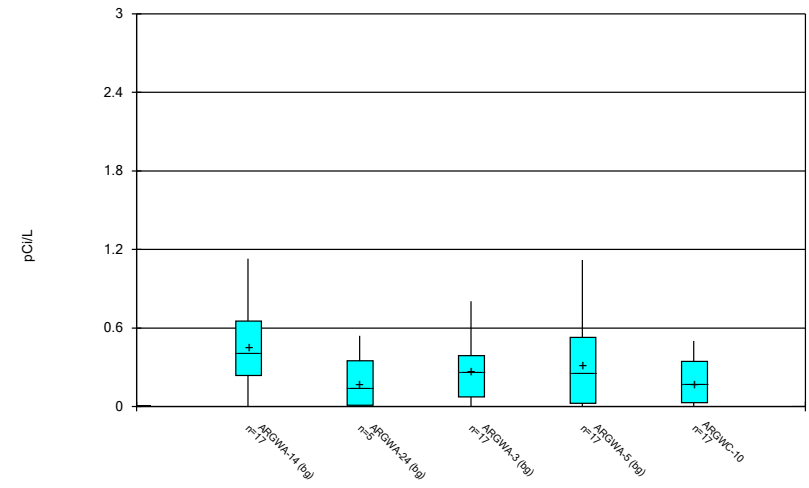
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 Plant Arkwright Client: Southern Company Data: Arkwright No 3

Box & Whiskers Plot



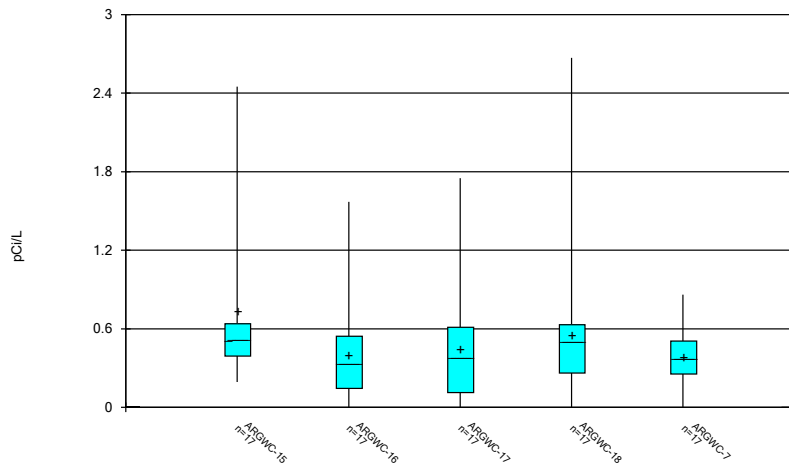
Constituent: Combined Radium 226 + 228 Analysis Run 11/5/2022 1:34 PM
 Plant Arkwright Client: Southern Company Data: Arkwright No 3

Box & Whiskers Plot



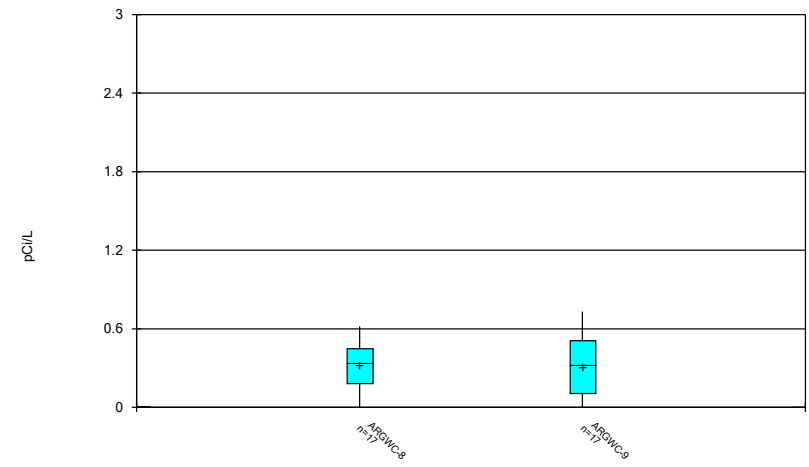
Constituent: Combined Radium 226 + 228 Analysis Run 11/5/2022 1:34 PM
 Plant Arkwright Client: Southern Company Data: Arkwright No 3

Box & Whiskers Plot



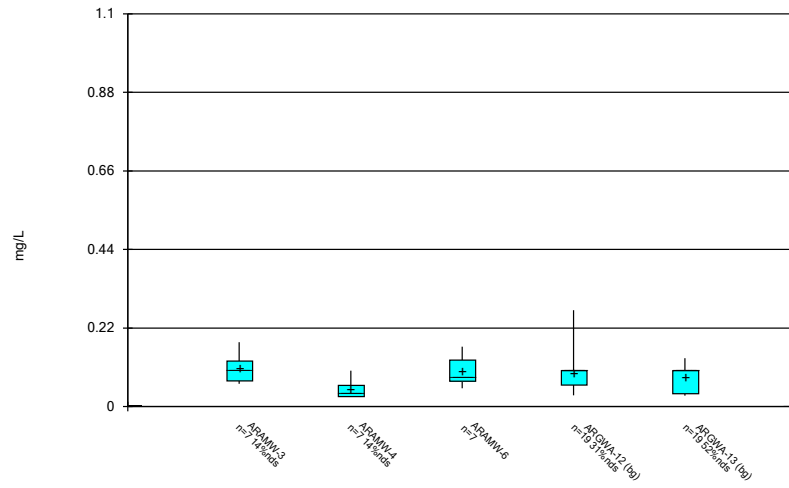
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 Plant Arkwright Client: Southern Company Data: Arkwright No 3

Box & Whiskers Plot



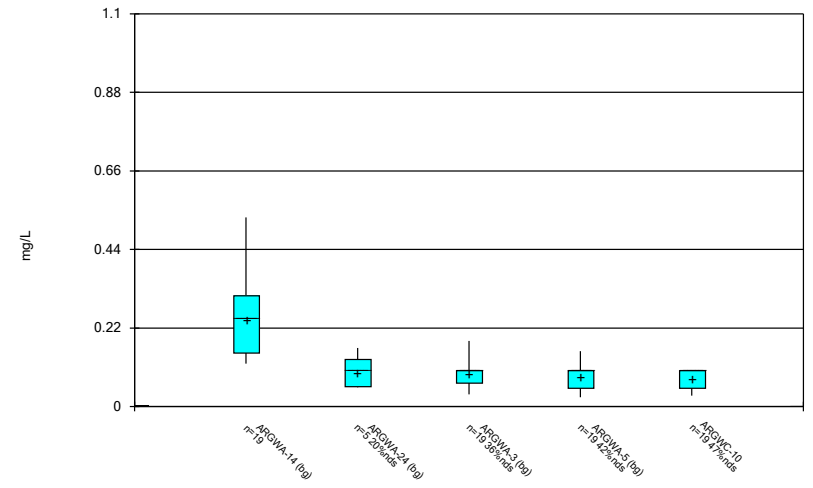
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 Plant Arkwright Client: Southern Company Data: Arkwright No 3

Box & Whiskers Plot



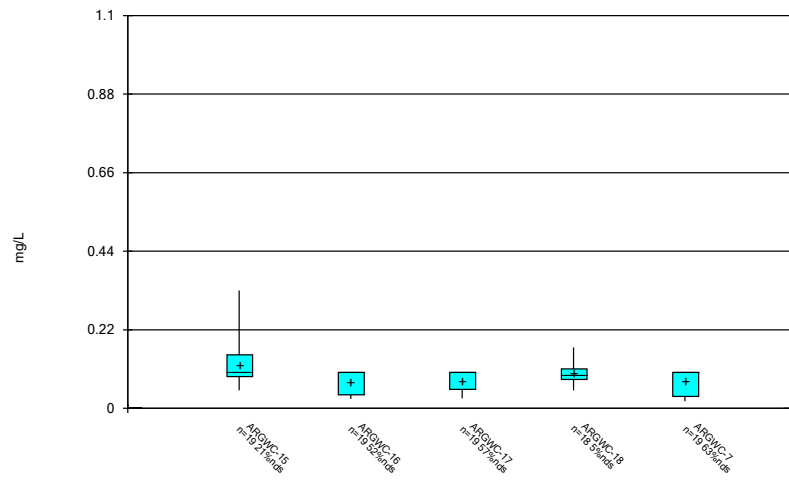
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Box & Whiskers Plot



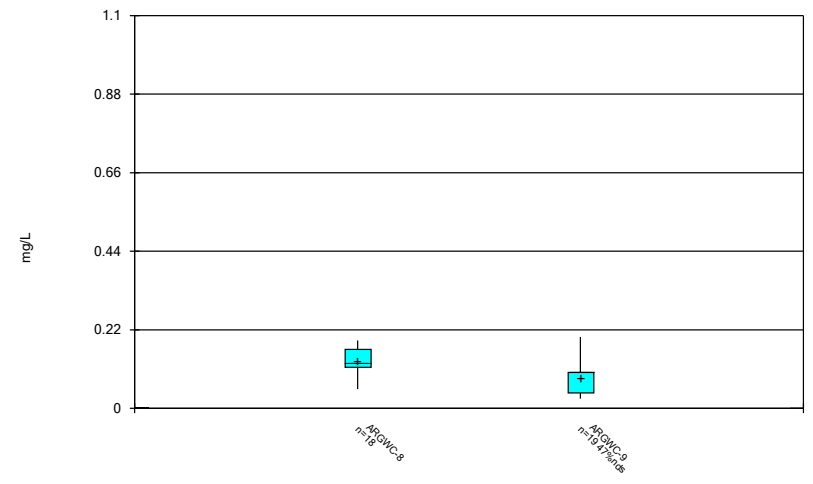
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Box & Whiskers Plot



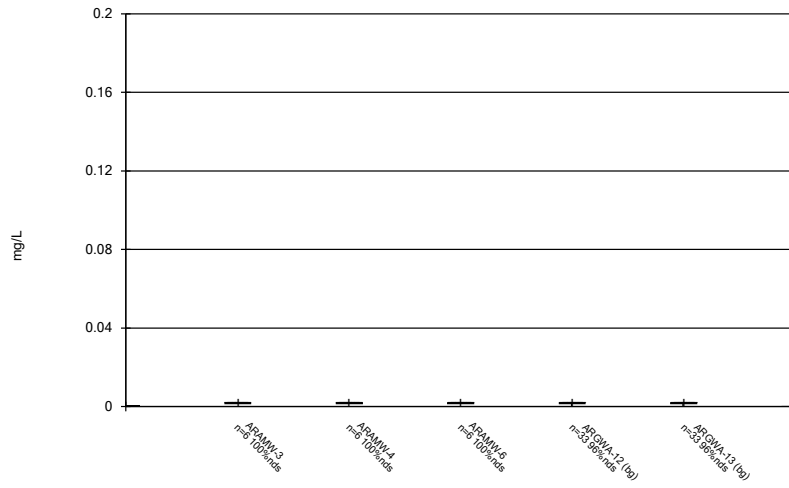
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Box & Whiskers Plot



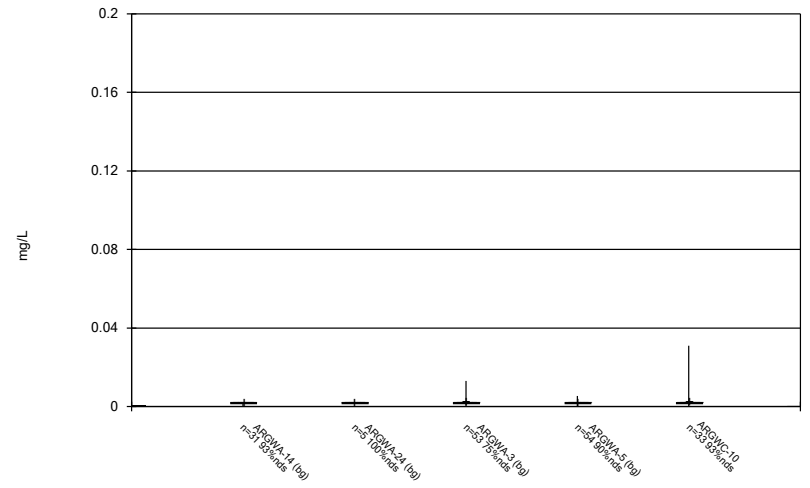
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Box & Whiskers Plot



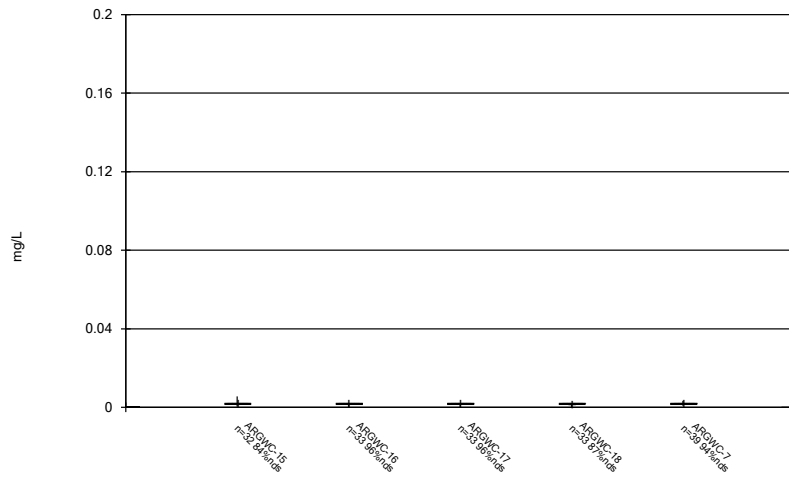
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Plant Arkwright Client: Southern Company Data: Arkwright No 3

Box & Whiskers Plot



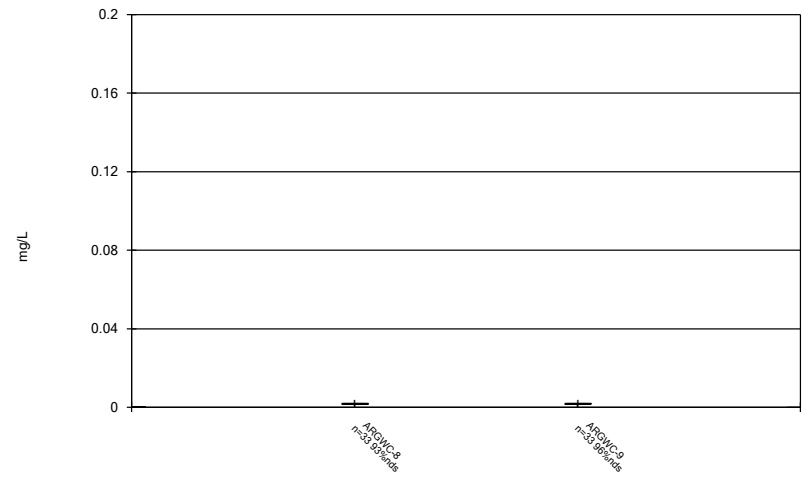
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Plant Arkwright Client: Southern Company Data: Arkwright No 3

Box & Whiskers Plot



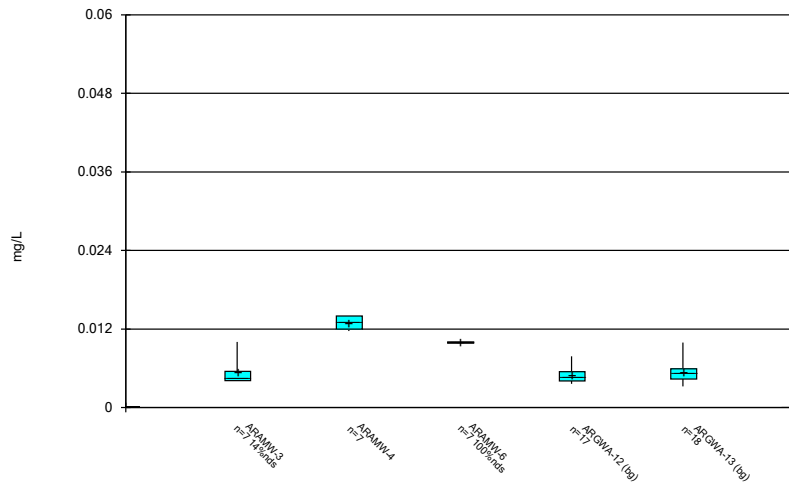
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Box & Whiskers Plot



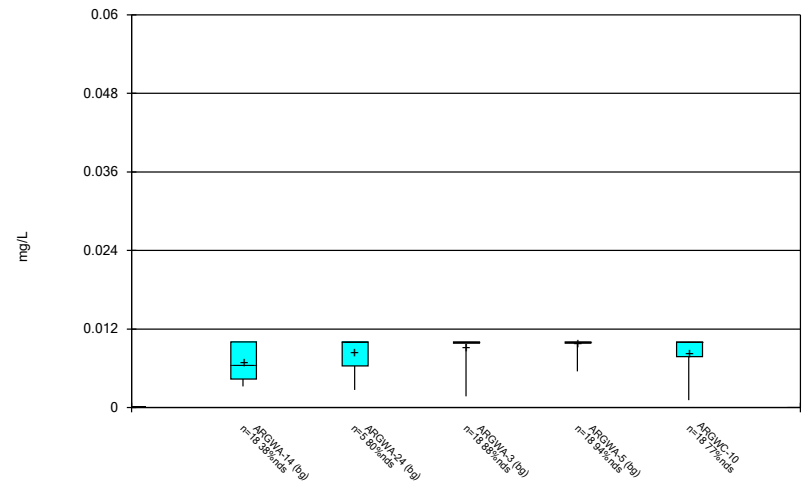
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Plant Arkwright Client: Southern Company Data: Arkwright No 3

Box & Whiskers Plot



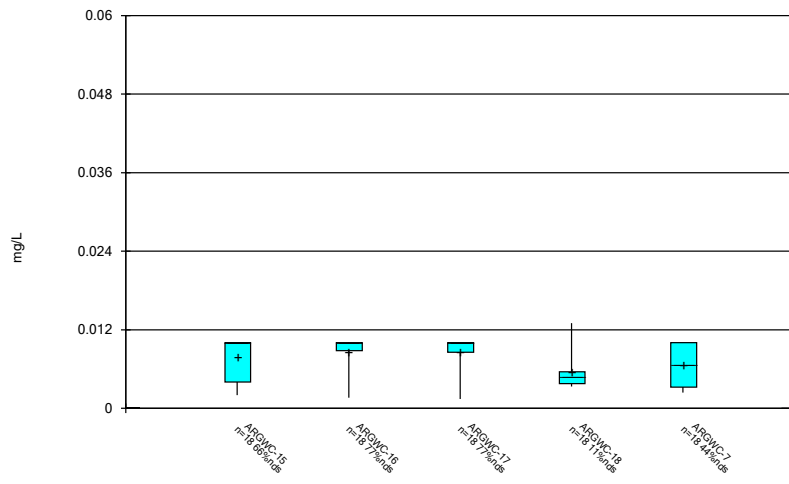
Constituent: Lithium Analysis Run 11/5/2022 1:34 PM
Plant Arkwright Client: Southern Company Data: Arkwright No 3

Box & Whiskers Plot



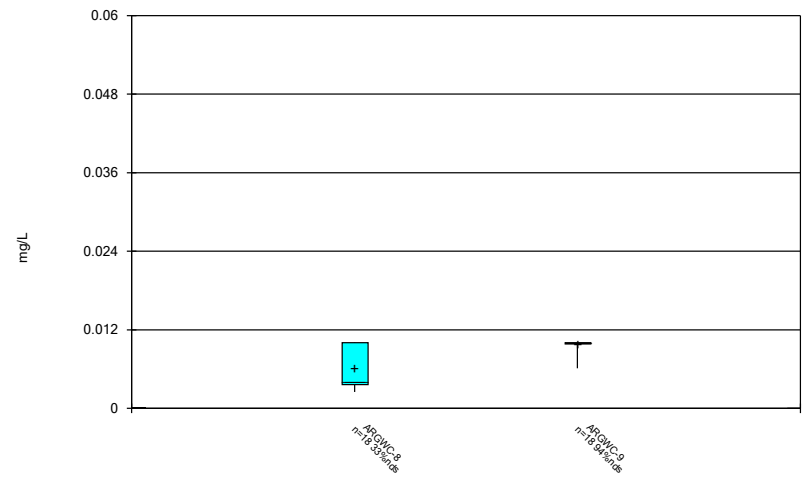
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Plant Arkwright Client: Southern Company Data: Arkwright No 3

Box & Whiskers Plot



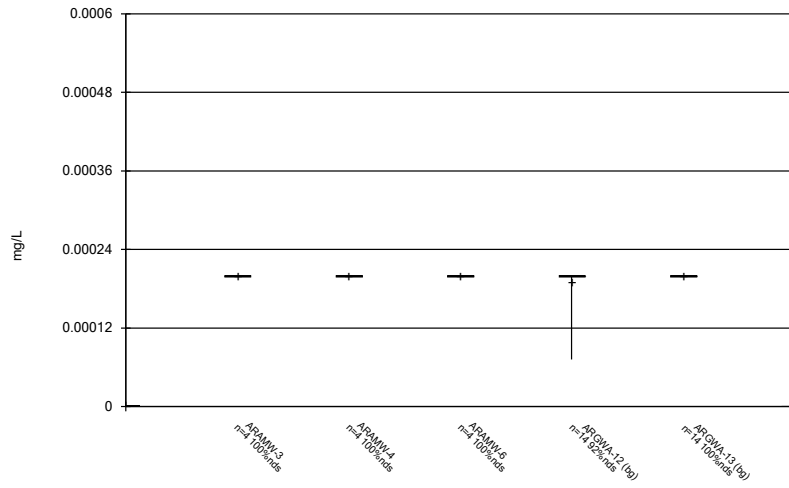
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Plant Arkwright Client: Southern Company Data: Arkwright No 3

Box & Whiskers Plot



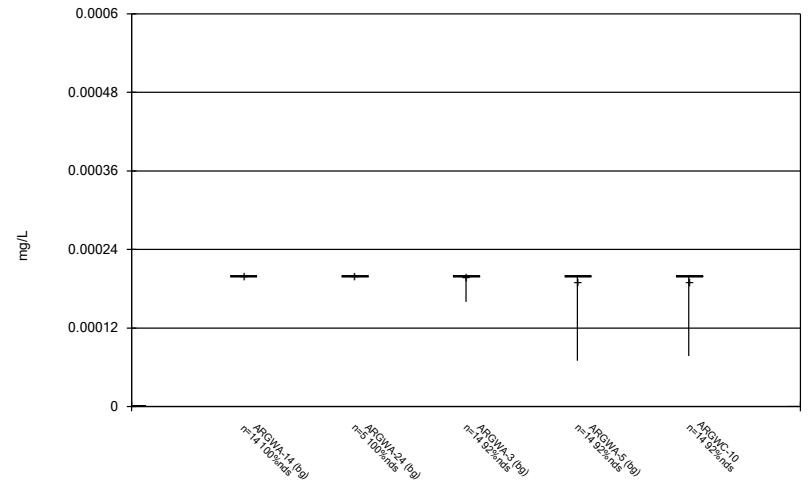
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Plant Arkwright Client: Southern Company Data: Arkwright No 3

Box & Whiskers Plot



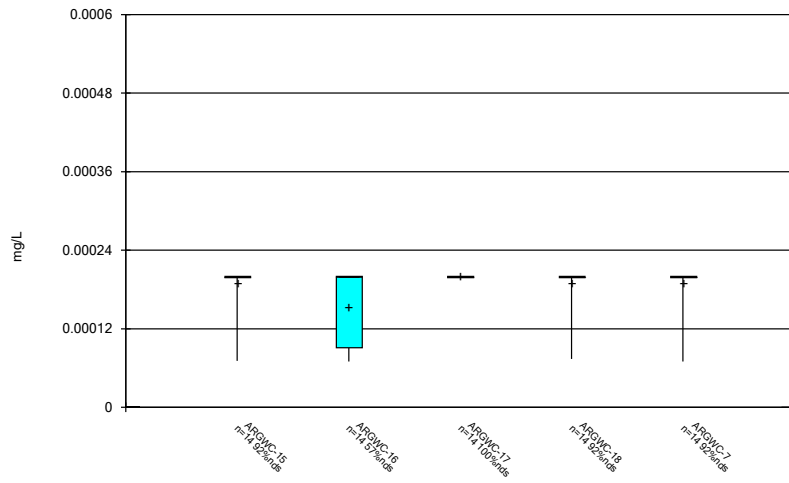
Constituent: Mercury Analysis Run 11/5/2022 1:34 PM
 Plant Arkwright Client: Southern Company Data: Arkwright No 3

Box & Whiskers Plot



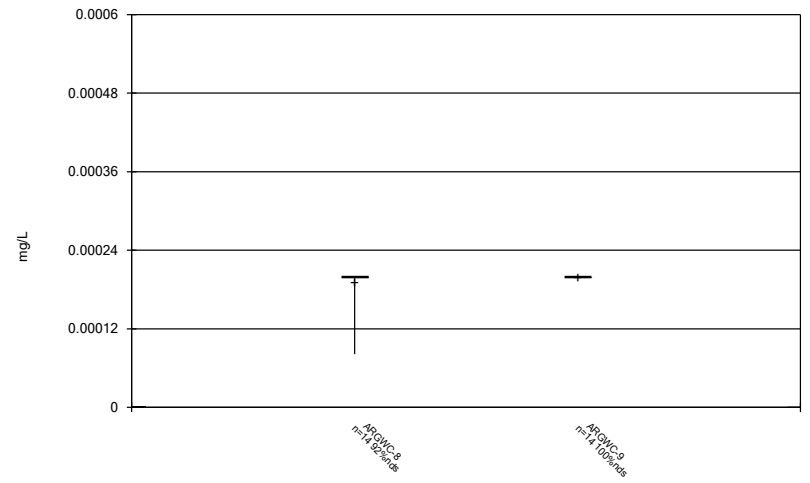
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 Plant Arkwright Client: Southern Company Data: Arkwright No 3

Box & Whiskers Plot



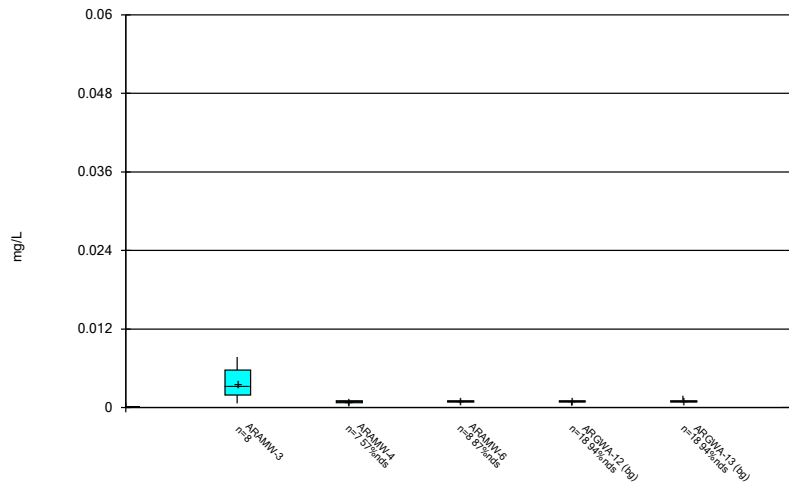
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 Plant Arkwright Client: Southern Company Data: Arkwright No 3

Box & Whiskers Plot



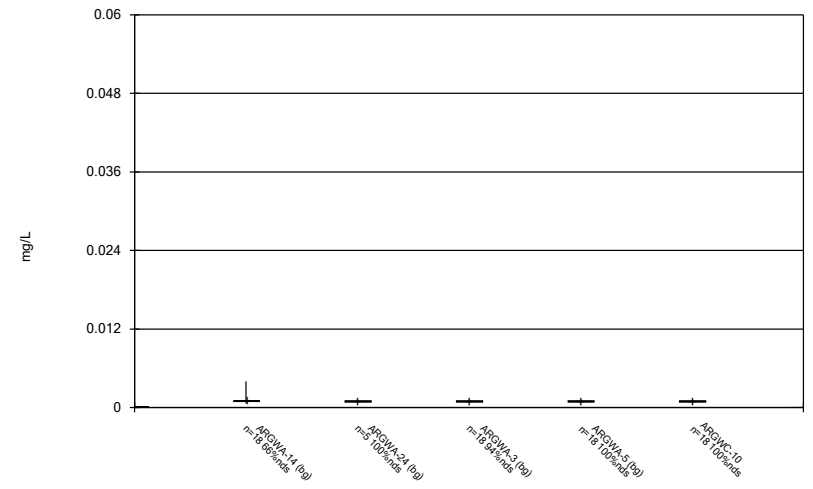
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Box & Whiskers Plot



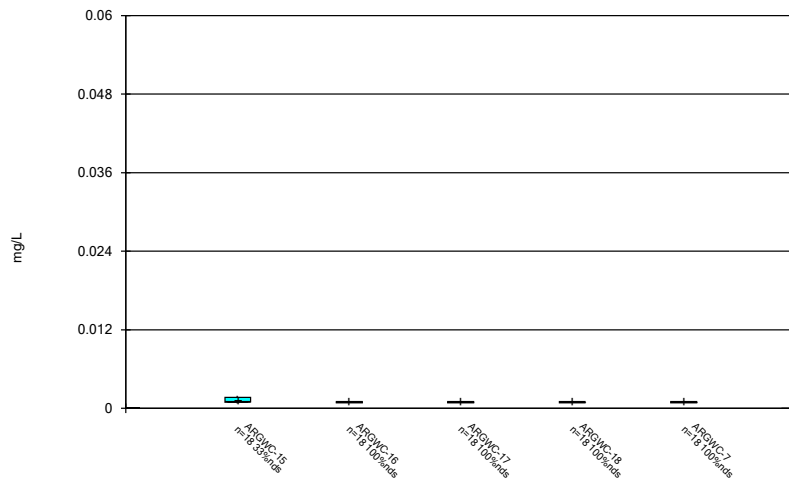
Constituent: Molybdenum Analysis Run 11/5/2022 1:34 PM
Plant Arkwright Client: Southern Company Data: Arkwright No 3

Box & Whiskers Plot



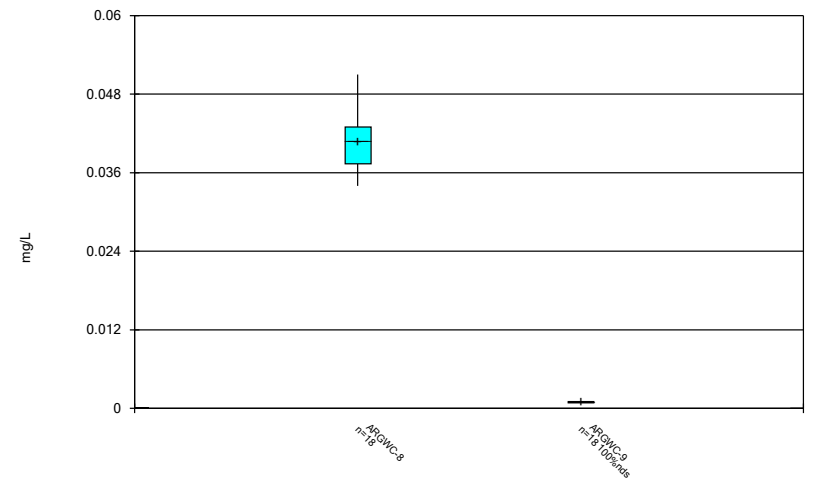
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Plant Arkwright Client: Southern Company Data: Arkwright No 3

Box & Whiskers Plot



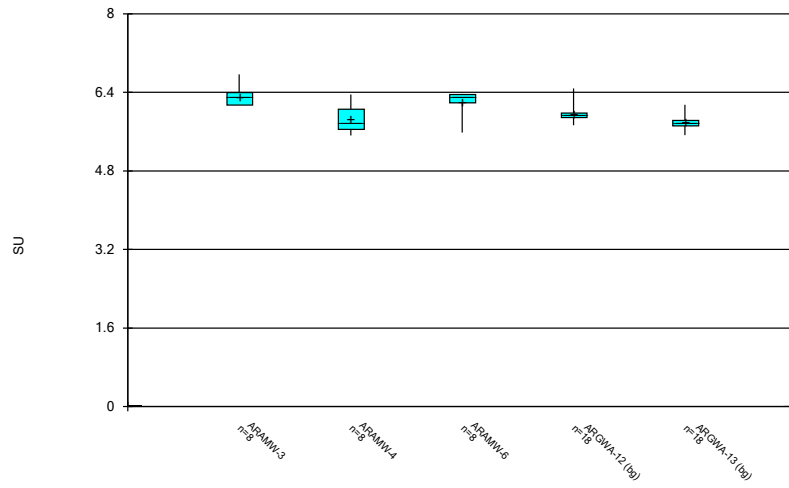
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Plant Arkwright Client: Southern Company Data: Arkwright No 3

Box & Whiskers Plot



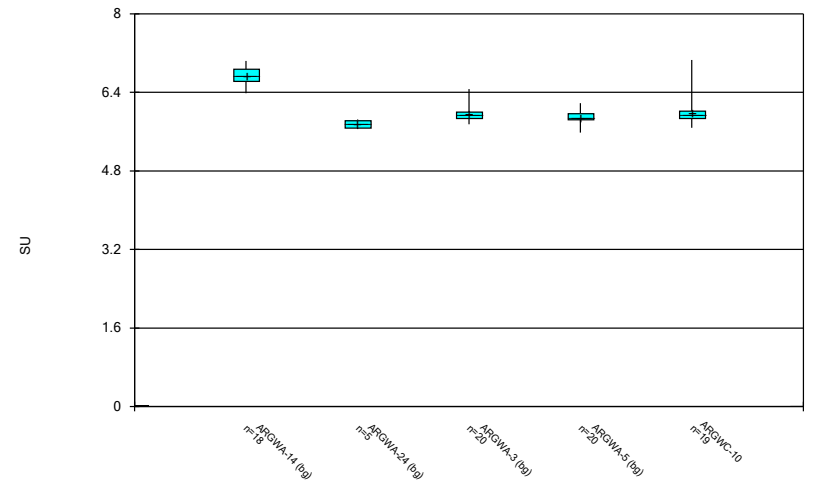
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Plant Arkwright Client: Southern Company Data: Arkwright No 3

Box & Whiskers Plot



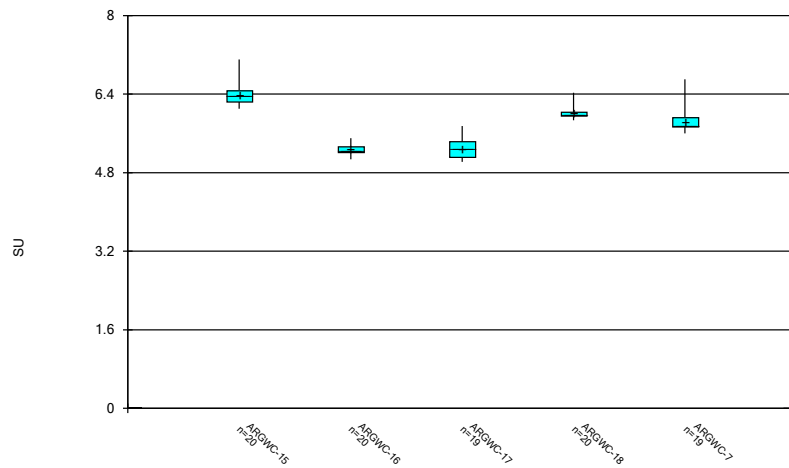
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 Plant Arkwright Client: Southern Company Data: Arkwright No 3

Box & Whiskers Plot



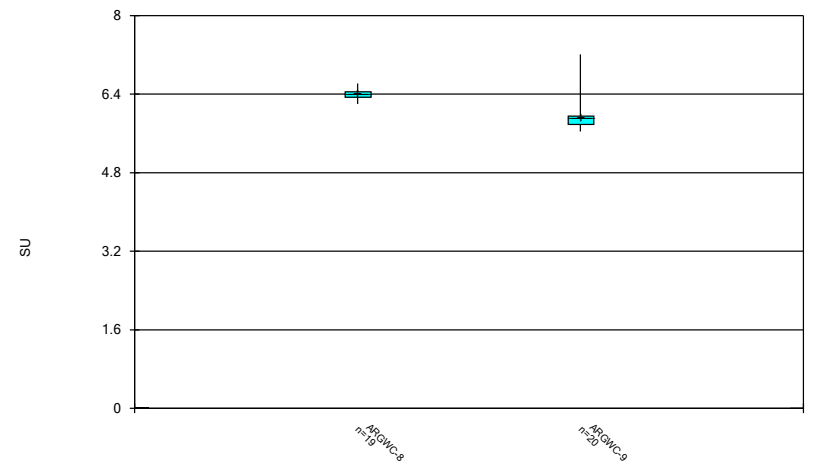
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 Plant Arkwright Client: Southern Company Data: Arkwright No 3

Box & Whiskers Plot



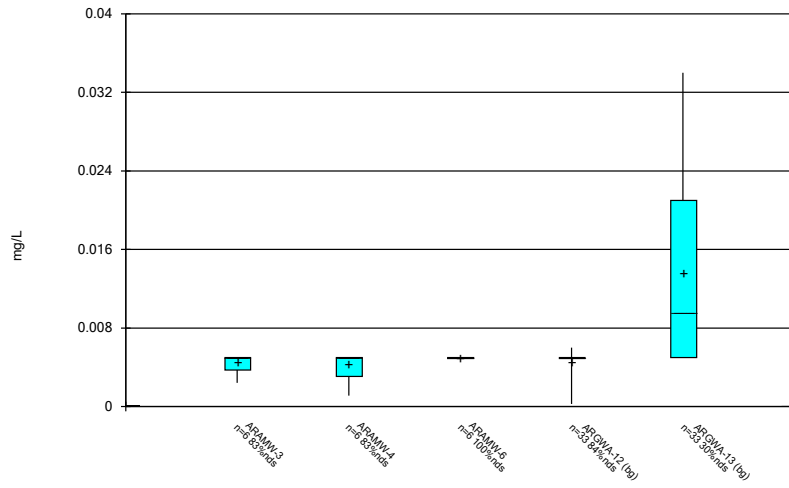
Constituent: pH Analysis Run 11/5/2022 1:34 PM
 Plant Arkwright Client: Southern Company Data: Arkwright No 3

Box & Whiskers Plot



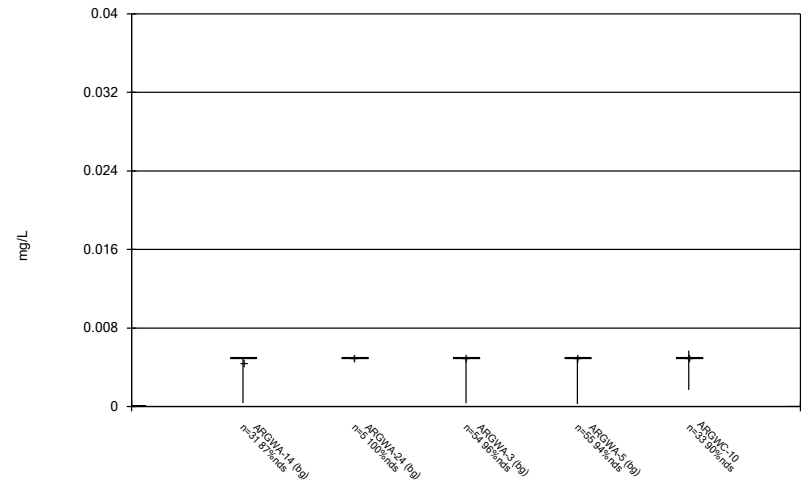
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 Plant Arkwright Client: Southern Company Data: Arkwright No 3

Box & Whiskers Plot



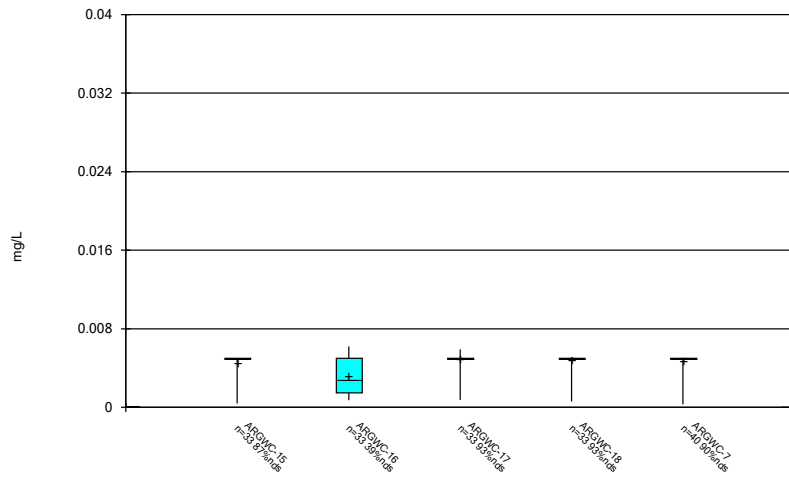
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 Plant Arkwright Client: Southern Company Data: Arkwright No 3

Box & Whiskers Plot



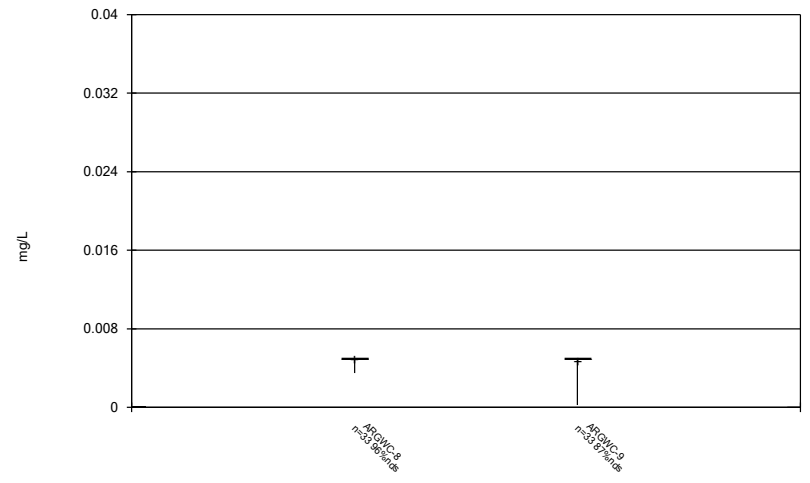
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 Plant Arkwright Client: Southern Company Data: Arkwright No 3

Box & Whiskers Plot



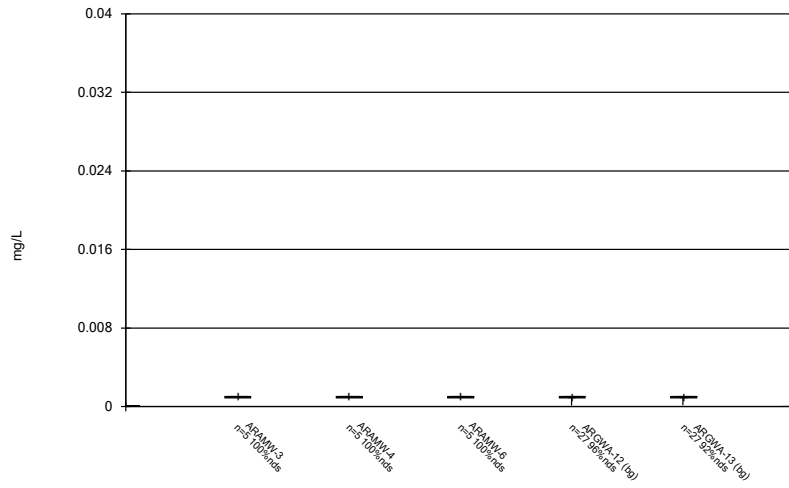
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 Plant Arkwright Client: Southern Company Data: Arkwright No 3

Box & Whiskers Plot



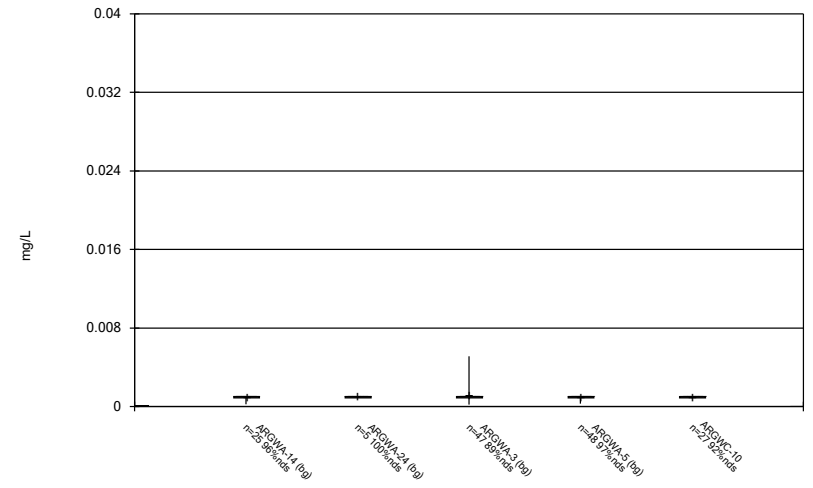
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 Plant Arkwright Client: Southern Company Data: Arkwright No 3

Box & Whiskers Plot



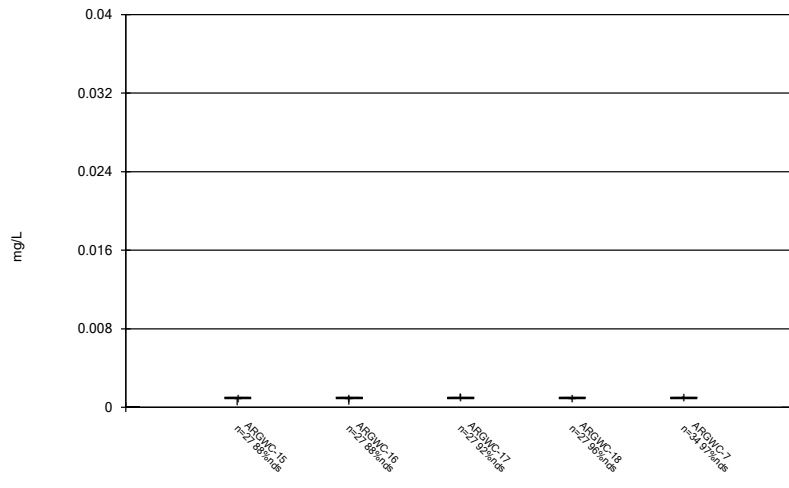
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 Plant Arkwright Client: Southern Company Data: Arkwright No 3

Box & Whiskers Plot



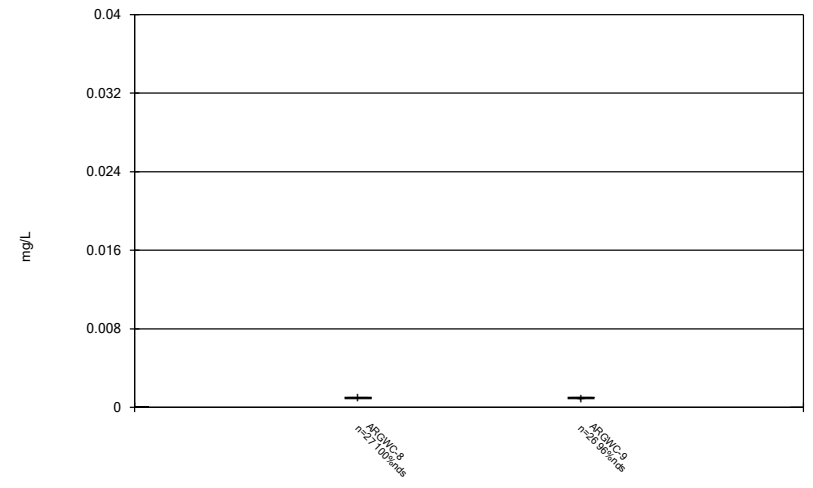
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 Plant Arkwright Client: Southern Company Data: Arkwright No 3

Box & Whiskers Plot



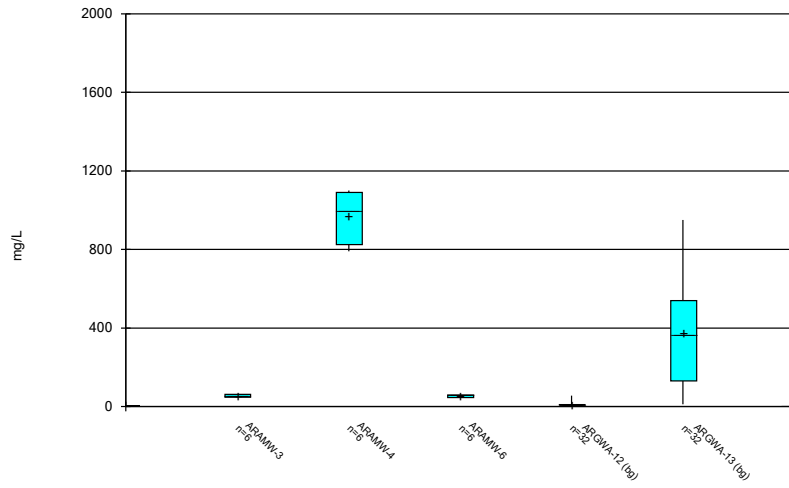
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 Plant Arkwright Client: Southern Company Data: Arkwright No 3

Box & Whiskers Plot



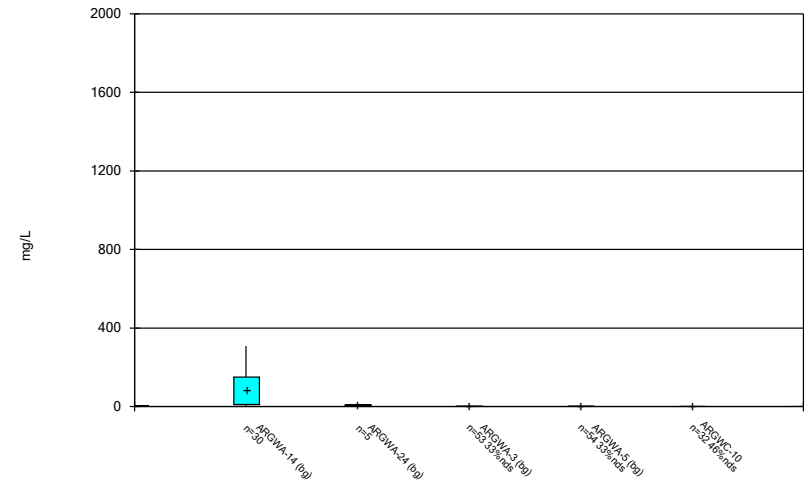
Constituent: Silver Analysis Run 11/5/2022 1:34 PM
 Plant Arkwright Client: Southern Company Data: Arkwright No 3

Box & Whiskers Plot



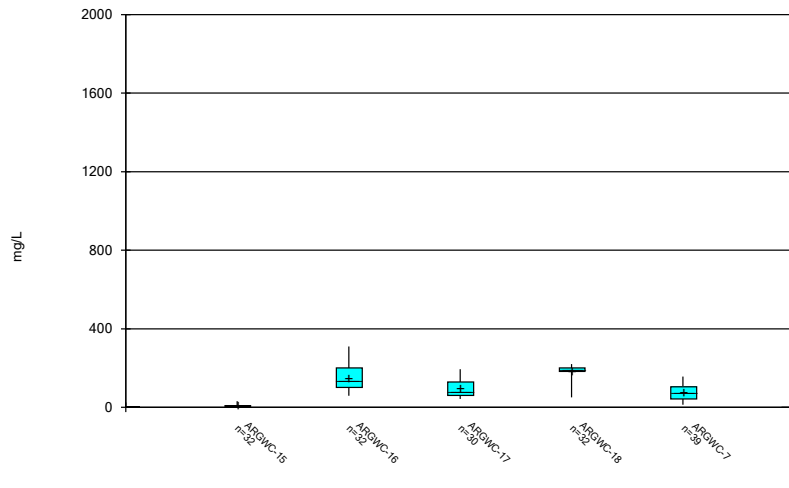
Constituent: Sulfate Analysis Run 11/5/2022 1:34 PM
 Plant Arkwright Client: Southern Company Data: Arkwright No 3

Box & Whiskers Plot



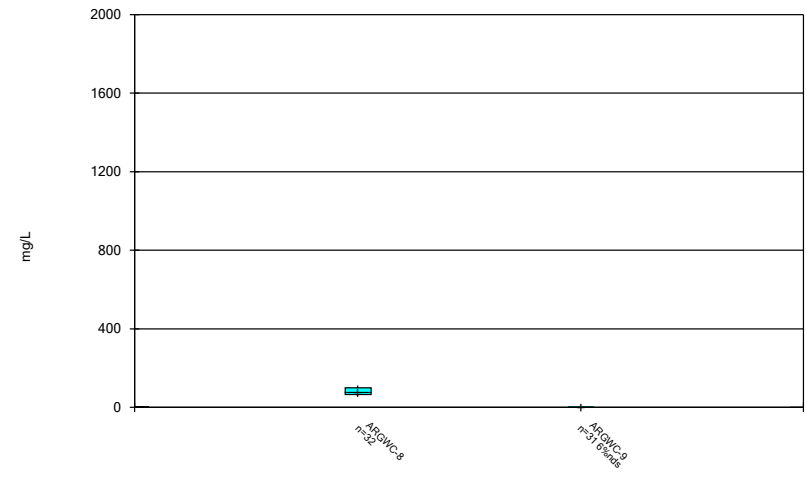
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 Plant Arkwright Client: Southern Company Data: Arkwright No 3

Box & Whiskers Plot



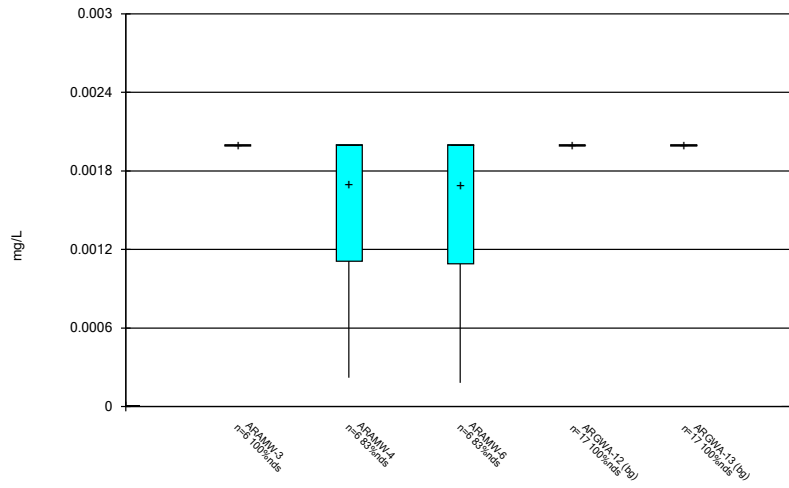
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 Plant Arkwright Client: Southern Company Data: Arkwright No 3

Box & Whiskers Plot



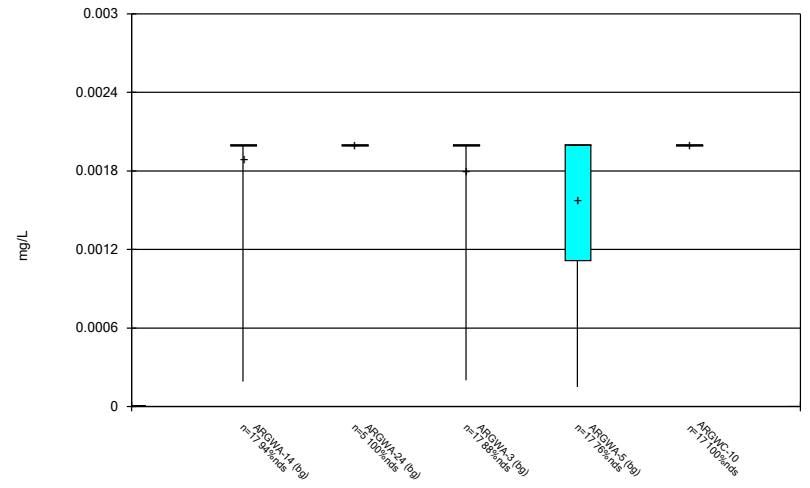
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Box & Whiskers Plot



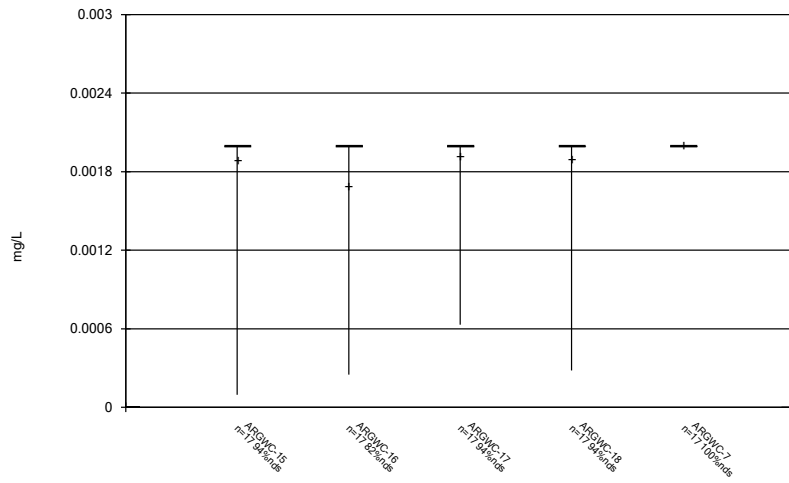
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Box & Whiskers Plot



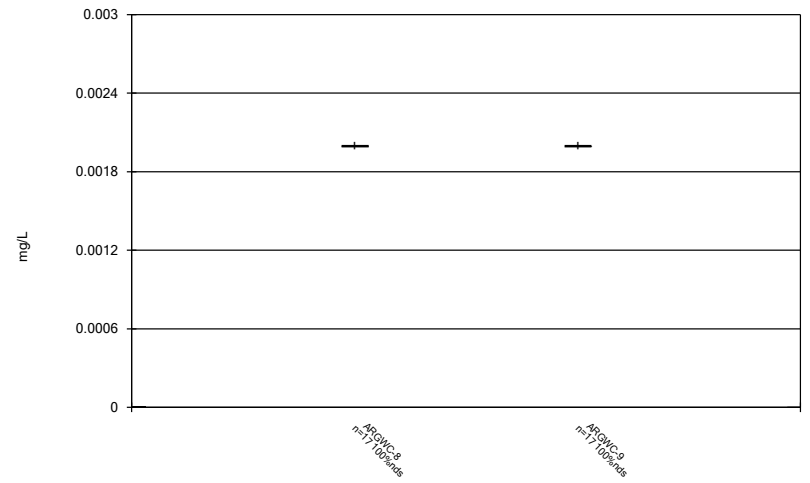
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 Plant Arkwright Client: Southern Company Data: Arkwright No 3

Box & Whiskers Plot



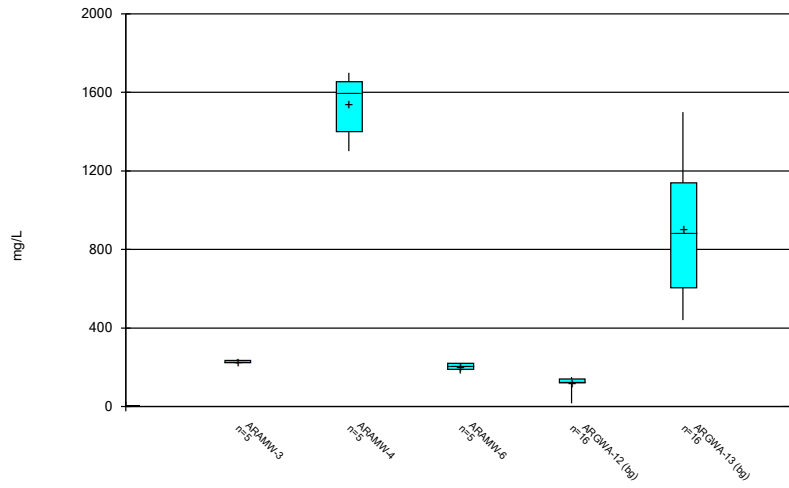
Constituent: Thallium Analysis Run 11/5/2022 1:35 PM
 Plant Arkwright Client: Southern Company Data: Arkwright No 3

Box & Whiskers Plot



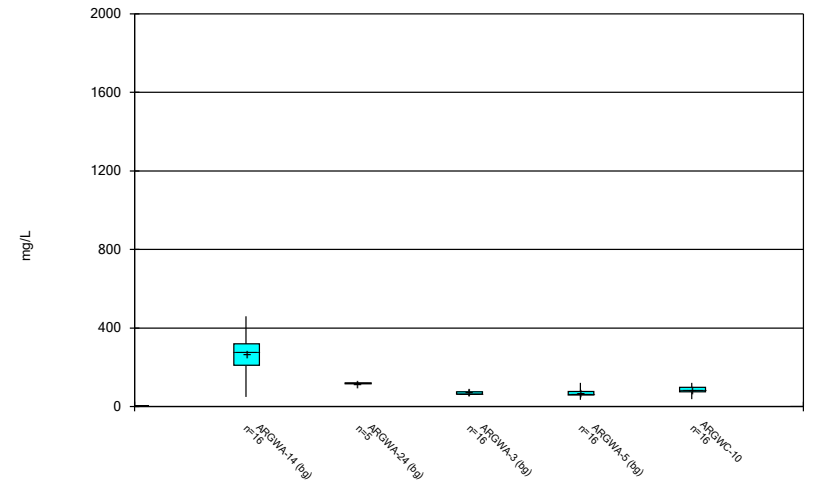
Constituent: Thallium Analysis Run 11/5/2022 1:35 PM
 Plant Arkwright Client: Southern Company Data: Arkwright No 3

Box & Whiskers Plot



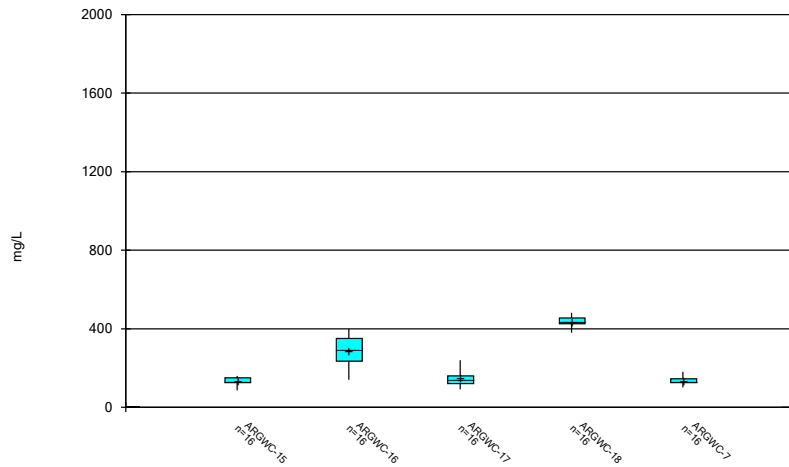
Constituent: Total Dissolved Solids Analysis Run 11/5/2022 1:35 PM
 Plant Arkwright Client: Southern Company Data: Arkwright No 3

Box & Whiskers Plot



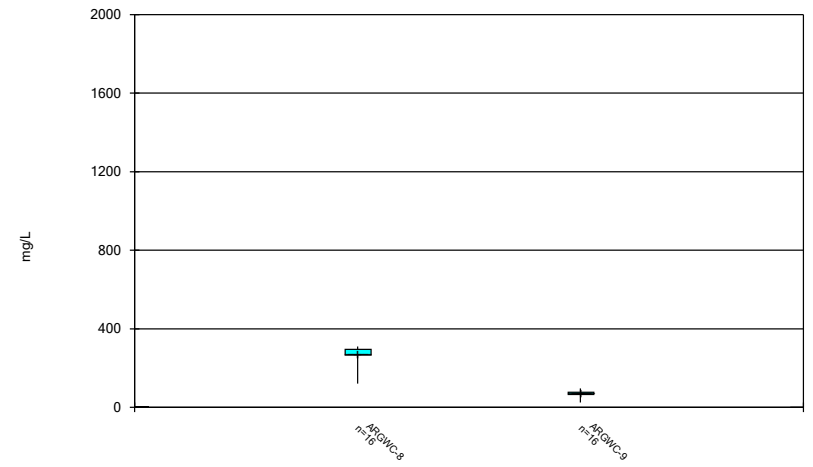
Constituent: Total Dissolved Solids Analysis Run 11/5/2022 1:35 PM
 Plant Arkwright Client: Southern Company Data: Arkwright No 3

Box & Whiskers Plot



Constituent: Total Dissolved Solids Analysis Run 11/5/2022 1:35 PM
 Plant Arkwright Client: Southern Company Data: Arkwright No 3

Box & Whiskers Plot



Constituent: Total Dissolved Solids Analysis Run 11/5/2022 1:35 PM
 Plant Arkwright Client: Southern Company Data: Arkwright No 3

FIGURE C.

Outlier Summary

Plant Arkwright Client: Southern Company Data: Arkwright No 3 Printed 11/5/2022, 1:36 PM

Date	ARGWC-17 Barium (mg/L)	ARGWC-18 Barium (mg/L)	ARGWC-9 Barium (mg/L)	ARGWA-3 Barium (mg/L)	ARGWA-12 Cadmium (mg/L)	ARGWA-14 Chloride (mg/L)	ARGWC-15 Chloride (mg/L)	ARGWC-18 Chloride (mg/L)	ARGWC-7 Chloride (mg/L)	ARGWC-8 Chloride (mg/L)
12/16/1997				0.103 (o)						
6/30/1998				0.007 (o)						
12/2/1998				0.007 (o)						
12/10/2003										
12/14/2004										
10/30/2006										
11/17/2007									13.5 (o)	
5/2/2008									12.9 (o)	
5/12/2009										
5/13/2009			0.14 (o)							
5/25/2010										
11/9/2010									<0.071 (o)	
5/19/2011					28.2 (o)					
11/9/2011					32.8 (o)					
11/12/2011	0.092 (o)						12.3 (o)			
5/30/2012					30.8 (o)					
11/9/2012	0.4 (o)									
11/11/2012					24.6 (o)					
5/9/2013					27.2 (o)					
5/13/2013										
11/5/2013	0.087 (o)									
11/6/2013										
5/21/2014									7.34 (o)	
5/29/2014					20 (o)					
11/19/2014					19 (o)					
8/30/2016										
8/31/2016										
10/24/2016										
10/25/2016										
10/26/2016										
10/8/2019				64 (o)		9.4 (o)				

Outlier Summary

Plant Arkwright Client: Southern Company Data: Arkwright No 3 Printed 11/5/2022, 1:36 PM

	ARGWA-3 Silver (mg/L)	ARGWA-5 Silver (mg/L)	ARGWC-9 Silver (mg/L)	ARGWC-17 Sulfate (mg/L)	ARGWC-9 Sulfate (mg/L)
12/16/1997	0.035 (o)				
6/30/1998					
12/2/1998					
12/10/2003		0.002 (o)			
12/14/2004					
10/30/2006					
11/17/2007					
5/2/2008					
5/12/2009					
5/13/2009			0.0024 (o)		
5/25/2010					
11/9/2010					
5/19/2011					
11/9/2011					
11/12/2011					
5/30/2012					
11/9/2012				842 (o)	
11/11/2012					
5/9/2013					
5/13/2013					
11/5/2013					
11/6/2013				471 (o)	
5/21/2014					
5/29/2014					
11/19/2014					
8/30/2016					
8/31/2016					
10/24/2016					
10/25/2016					4.7 (o)
10/26/2016					
10/8/2019					

FIGURE D.

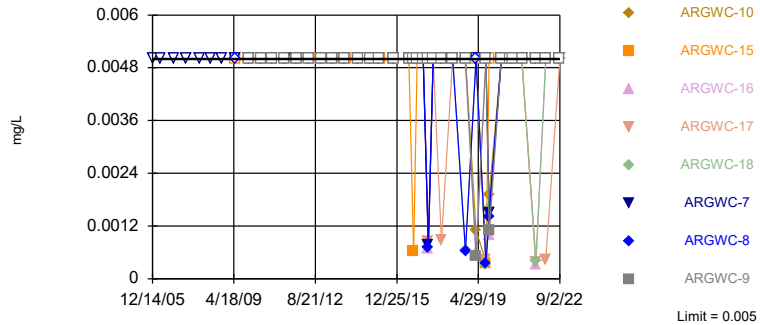
Appendix I Interwell Prediction Limits - All Results (No Significant)

Plant Arkwright Client: Southern Company Data: Arkwright No 3 Printed 11/5/2022, 1:42 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Arsenic (mg/L)	ARGWC-10	0.005	n/a	8/31/2022	0.005ND	No	211	n/a	n/a	81.04	n/a	n/a	0.00004917	NP Inter (NDs) 1 of 2
Arsenic (mg/L)	ARGWC-15	0.005	n/a	8/31/2022	0.005ND	No	211	n/a	n/a	81.04	n/a	n/a	0.00004917	NP Inter (NDs) 1 of 2
Arsenic (mg/L)	ARGWC-16	0.005	n/a	8/31/2022	0.005ND	No	211	n/a	n/a	81.04	n/a	n/a	0.00004917	NP Inter (NDs) 1 of 2
Arsenic (mg/L)	ARGWC-17	0.005	n/a	9/2/2022	0.005ND	No	211	n/a	n/a	81.04	n/a	n/a	0.00004917	NP Inter (NDs) 1 of 2
Arsenic (mg/L)	ARGWC-18	0.005	n/a	9/2/2022	0.005ND	No	211	n/a	n/a	81.04	n/a	n/a	0.00004917	NP Inter (NDs) 1 of 2
Arsenic (mg/L)	ARGWC-7	0.005	n/a	8/31/2022	0.005ND	No	211	n/a	n/a	81.04	n/a	n/a	0.00004917	NP Inter (NDs) 1 of 2
Arsenic (mg/L)	ARGWC-8	0.005	n/a	8/31/2022	0.005ND	No	211	n/a	n/a	81.04	n/a	n/a	0.00004917	NP Inter (NDs) 1 of 2
Arsenic (mg/L)	ARGWC-9	0.005	n/a	8/31/2022	0.005ND	No	211	n/a	n/a	81.04	n/a	n/a	0.00004917	NP Inter (NDs) 1 of 2
Barium (mg/L)	ARGWC-10	0.24	n/a	8/31/2022	0.0345	No	208	n/a	n/a	0	n/a	n/a	0.00004917	NP Inter (normality) 1 of 2
Barium (mg/L)	ARGWC-15	0.24	n/a	8/31/2022	0.0325	No	208	n/a	n/a	0	n/a	n/a	0.00004917	NP Inter (normality) 1 of 2
Barium (mg/L)	ARGWC-16	0.24	n/a	8/31/2022	0.0383	No	208	n/a	n/a	0	n/a	n/a	0.00004917	NP Inter (normality) 1 of 2
Barium (mg/L)	ARGWC-17	0.24	n/a	9/2/2022	0.0727	No	208	n/a	n/a	0	n/a	n/a	0.00004917	NP Inter (normality) 1 of 2
Barium (mg/L)	ARGWC-18	0.24	n/a	9/2/2022	0.0369	No	208	n/a	n/a	0	n/a	n/a	0.00004917	NP Inter (normality) 1 of 2
Barium (mg/L)	ARGWC-7	0.24	n/a	8/31/2022	0.0505	No	208	n/a	n/a	0	n/a	n/a	0.00004917	NP Inter (normality) 1 of 2
Barium (mg/L)	ARGWC-8	0.24	n/a	8/31/2022	0.0571	No	208	n/a	n/a	0	n/a	n/a	0.00004917	NP Inter (normality) 1 of 2
Barium (mg/L)	ARGWC-9	0.24	n/a	8/31/2022	0.0391	No	208	n/a	n/a	0	n/a	n/a	0.00004917	NP Inter (normality) 1 of 2
Cadmium (mg/L)	ARGWC-10	0.0043	n/a	8/31/2022	0.001ND	No	203	n/a	n/a	94.58	n/a	n/a	0.00004917	NP Inter (NDs) 1 of 2
Cadmium (mg/L)	ARGWC-15	0.0043	n/a	8/31/2022	0.001ND	No	203	n/a	n/a	94.58	n/a	n/a	0.00004917	NP Inter (NDs) 1 of 2
Cadmium (mg/L)	ARGWC-16	0.0043	n/a	8/31/2022	0.001ND	No	203	n/a	n/a	94.58	n/a	n/a	0.00004917	NP Inter (NDs) 1 of 2
Cadmium (mg/L)	ARGWC-17	0.0043	n/a	9/2/2022	0.001ND	No	203	n/a	n/a	94.58	n/a	n/a	0.00004917	NP Inter (NDs) 1 of 2
Cadmium (mg/L)	ARGWC-18	0.0043	n/a	9/2/2022	0.001ND	No	203	n/a	n/a	94.58	n/a	n/a	0.00004917	NP Inter (NDs) 1 of 2
Cadmium (mg/L)	ARGWC-7	0.0043	n/a	8/31/2022	0.001ND	No	203	n/a	n/a	94.58	n/a	n/a	0.00004917	NP Inter (NDs) 1 of 2
Cadmium (mg/L)	ARGWC-8	0.0043	n/a	8/31/2022	0.001ND	No	203	n/a	n/a	94.58	n/a	n/a	0.00004917	NP Inter (NDs) 1 of 2
Cadmium (mg/L)	ARGWC-9	0.0043	n/a	8/31/2022	0.001ND	No	203	n/a	n/a	94.58	n/a	n/a	0.00004917	NP Inter (NDs) 1 of 2
Lead (mg/L)	ARGWC-10	0.013	n/a	8/31/2022	0.002ND	No	209	n/a	n/a	89.47	n/a	n/a	0.00004917	NP Inter (NDs) 1 of 2
Lead (mg/L)	ARGWC-15	0.013	n/a	8/31/2022	0.002ND	No	209	n/a	n/a	89.47	n/a	n/a	0.00004917	NP Inter (NDs) 1 of 2
Lead (mg/L)	ARGWC-16	0.013	n/a	8/31/2022	0.002ND	No	209	n/a	n/a	89.47	n/a	n/a	0.00004917	NP Inter (NDs) 1 of 2
Lead (mg/L)	ARGWC-17	0.013	n/a	9/2/2022	0.002ND	No	209	n/a	n/a	89.47	n/a	n/a	0.00004917	NP Inter (NDs) 1 of 2
Lead (mg/L)	ARGWC-18	0.013	n/a	9/2/2022	0.002ND	No	209	n/a	n/a	89.47	n/a	n/a	0.00004917	NP Inter (NDs) 1 of 2
Lead (mg/L)	ARGWC-7	0.013	n/a	8/31/2022	0.002ND	No	209	n/a	n/a	89.47	n/a	n/a	0.00004917	NP Inter (NDs) 1 of 2
Lead (mg/L)	ARGWC-8	0.013	n/a	8/31/2022	0.002ND	No	209	n/a	n/a	89.47	n/a	n/a	0.00004917	NP Inter (NDs) 1 of 2
Lead (mg/L)	ARGWC-9	0.013	n/a	8/31/2022	0.002ND	No	209	n/a	n/a	89.47	n/a	n/a	0.00004917	NP Inter (NDs) 1 of 2
Selenium (mg/L)	ARGWC-10	0.034	n/a	8/31/2022	0.005ND	No	211	n/a	n/a	82.46	n/a	n/a	0.00004917	NP Inter (NDs) 1 of 2
Selenium (mg/L)	ARGWC-15	0.034	n/a	8/31/2022	0.005ND	No	211	n/a	n/a	82.46	n/a	n/a	0.00004917	NP Inter (NDs) 1 of 2
Selenium (mg/L)	ARGWC-16	0.034	n/a	8/31/2022	0.00287J	No	211	n/a	n/a	82.46	n/a	n/a	0.00004917	NP Inter (NDs) 1 of 2
Selenium (mg/L)	ARGWC-17	0.034	n/a	9/2/2022	0.005ND	No	211	n/a	n/a	82.46	n/a	n/a	0.00004917	NP Inter (NDs) 1 of 2
Selenium (mg/L)	ARGWC-18	0.034	n/a	9/2/2022	0.005ND	No	211	n/a	n/a	82.46	n/a	n/a	0.00004917	NP Inter (NDs) 1 of 2
Selenium (mg/L)	ARGWC-7	0.034	n/a	8/31/2022	0.005ND	No	211	n/a	n/a	82.46	n/a	n/a	0.00004917	NP Inter (NDs) 1 of 2
Selenium (mg/L)	ARGWC-8	0.034	n/a	8/31/2022	0.005ND	No	211	n/a	n/a	82.46	n/a	n/a	0.00004917	NP Inter (NDs) 1 of 2
Selenium (mg/L)	ARGWC-9	0.034	n/a	8/31/2022	0.005ND	No	211	n/a	n/a	82.46	n/a	n/a	0.00004917	NP Inter (NDs) 1 of 2
Silver (mg/L)	ARGWC-10	0.0051	n/a	8/31/2022	0.001ND	No	179	n/a	n/a	94.41	n/a	n/a	0.00006137	NP Inter (NDs) 1 of 2
Silver (mg/L)	ARGWC-15	0.0051	n/a	8/31/2022	0.001ND	No	179	n/a	n/a	94.41	n/a	n/a	0.00006137	NP Inter (NDs) 1 of 2
Silver (mg/L)	ARGWC-16	0.0051	n/a	8/31/2022	0.001ND	No	179	n/a	n/a	94.41	n/a	n/a	0.00006137	NP Inter (NDs) 1 of 2
Silver (mg/L)	ARGWC-17	0.0051	n/a	9/2/2022	0.001ND	No	179	n/a	n/a	94.41	n/a	n/a	0.00006137	NP Inter (NDs) 1 of 2
Silver (mg/L)	ARGWC-18	0.0051	n/a	9/2/2022	0.001ND	No	179	n/a	n/a	94.41	n/a	n/a	0.00006137	NP Inter (NDs) 1 of 2
Silver (mg/L)	ARGWC-7	0.0051	n/a	8/31/2022	0.001ND	No	179	n/a	n/a	94.41	n/a	n/a	0.00006137	NP Inter (NDs) 1 of 2
Silver (mg/L)	ARGWC-8	0.0051	n/a	8/31/2022	0.001ND	No	179	n/a	n/a	94.41	n/a	n/a	0.00006137	NP Inter (NDs) 1 of 2
Silver (mg/L)	ARGWC-9	0.0051	n/a	8/31/2022	0.001ND	No	179	n/a	n/a	94.41	n/a	n/a	0.00006137	NP Inter (NDs) 1 of 2

Within Limit

Prediction Limit
Interwell Non-parametric

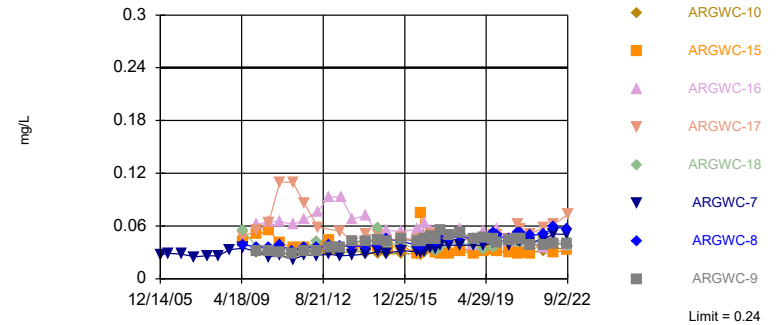


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 211 background values. 81.04% NDs. Annual per-constituent alpha = 0.0007864. Individual comparison alpha = 0.00004917 (1 of 2). Comparing 8 points to limit.

Constituent: Arsenic Analysis Run 11/5/2022 1:39 PM View: Appendix I
Plant Arkwright Client: Southern Company Data: Arkwright No 3

Within Limit

Prediction Limit
Interwell Non-parametric

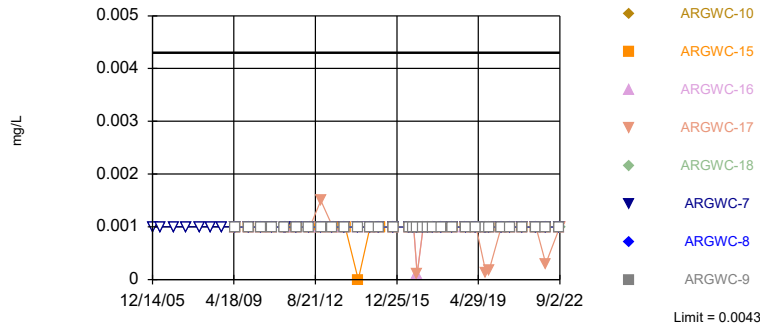


Non-parametric test used in lieu of parametric prediction limit because the Chi Squared normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 208 background values. Annual per-constituent alpha = 0.0007864. Individual comparison alpha = 0.00004917 (1 of 2). Comparing 8 points to limit.

Constituent: Barium Analysis Run 11/5/2022 1:39 PM View: Appendix I
Plant Arkwright Client: Southern Company Data: Arkwright No 3

Within Limit

Prediction Limit
Interwell Non-parametric

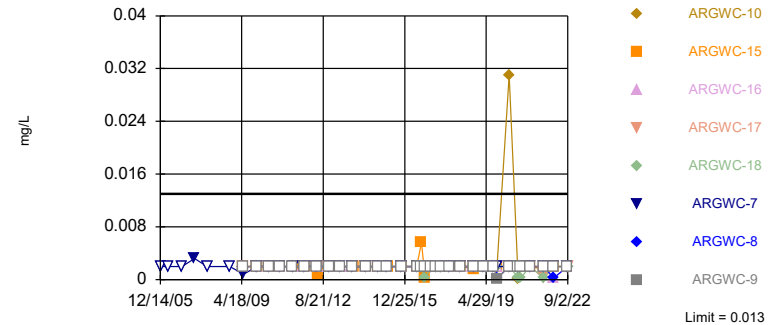


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 203 background values. 94.58% NDs. Annual per-constituent alpha = 0.0007864. Individual comparison alpha = 0.00004917 (1 of 2). Comparing 8 points to limit.

Constituent: Cadmium Analysis Run 11/5/2022 1:39 PM View: Appendix I
Plant Arkwright Client: Southern Company Data: Arkwright No 3

Within Limit

Prediction Limit
Interwell Non-parametric

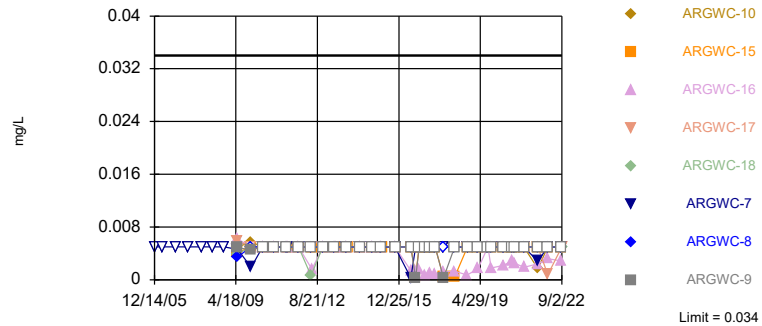


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 209 background values. 89.47% NDs. Annual per-constituent alpha = 0.0007864. Individual comparison alpha = 0.00004917 (1 of 2). Comparing 8 points to limit.

Constituent: Lead Analysis Run 11/5/2022 1:39 PM View: Appendix I
Plant Arkwright Client: Southern Company Data: Arkwright No 3

Within Limit

Prediction Limit
 Interwell Non-parametric

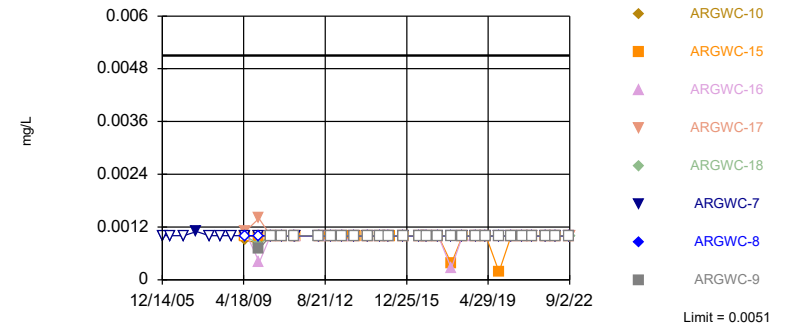


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 211 background values. 82.46% NDs. Annual per-constituent alpha = 0.0007864. Individual comparison alpha = 0.00004917 (1 of 2). Comparing 8 points to limit.

Constituent: Selenium Analysis Run 11/5/2022 1:39 PM View: Appendix I
 Plant Arkwright Client: Southern Company Data: Arkwright No 3

Within Limit

Prediction Limit
 Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 179 background values. 94.41% NDs. Annual per-constituent alpha = 0.0009814. Individual comparison alpha = 0.00006137 (1 of 2). Comparing 8 points to limit.

Constituent: Silver Analysis Run 11/5/2022 1:39 PM View: Appendix I
 Plant Arkwright Client: Southern Company Data: Arkwright No 3

Prediction Limit

Constituent: Arsenic (mg/L) Analysis Run 11/5/2022 1:42 PM View: Appendix I

Plant Arkwright Client: Southern Company Data: Arkwright No 3

	ARGWA-5 (bg)	ARGWA-3 (bg)	ARGWC-7	ARGWC-15	ARGWA-12 (bg)	ARGWA-13 (bg)	ARGWC-17	ARGWC-8	ARGWC-10
12/16/1997	<0.005	0.002							
6/30/1998	<0.005	0.0006							
12/2/1998	<0.005	0.0007							
6/8/1999	<0.005	<0.005							
12/7/1999	<0.005	<0.005							
6/15/2000	<0.005	<0.005							
12/12/2000	0.00032	0.000475							
12/5/2001	0.0003	<0.005							
6/26/2002	0.000939	0.000431							
12/3/2002	<0.005	<0.005							
6/11/2003	<0.005	<0.005							
12/10/2003	<0.005	<0.005							
6/15/2004	<0.005	<0.005							
12/14/2004	<0.005	<0.005							
6/2/2005	<0.005	<0.005							
12/14/2005	<0.005	<0.005	<0.005						
4/5/2006	<0.005	<0.005	<0.005						
10/30/2006	<0.005	<0.005	<0.005						
5/10/2007	<0.005	0.0044	<0.005						
11/17/2007	<0.005	<0.005	<0.005						
5/2/2008			<0.005						
5/3/2008	<0.005	<0.005							
10/22/2008	<0.005	<0.005	<0.005						
5/5/2009				<0.005					
5/6/2009	<0.005				<0.005				
5/7/2009		0.0028				0.0013			
5/12/2009							<0.005		
5/13/2009									0.0042 (o)
5/14/2009			<0.005					<0.005	
12/1/2009	<0.005		<0.005						
12/3/2009					<0.005	<0.005		<0.005	<0.005
12/4/2009		<0.005		<0.005			<0.005		
12/5/2009									
5/25/2010	<0.005				<0.005	<0.005	<0.005		
5/26/2010			<0.005					<0.005	<0.005
6/1/2010		<0.005		<0.005					
6/2/2010									
11/9/2010	<0.005				<0.005		<0.005	<0.005	<0.005
11/10/2010		<0.005	<0.005	<0.005		<0.005			
5/18/2011								<0.005	
5/19/2011									<0.005
5/24/2011	<0.005				<0.005		<0.005		
5/25/2011		<0.005	<0.005	<0.005		<0.005			
11/9/2011				<0.005					
11/10/2011	<0.005				<0.005	<0.005			
11/11/2011			<0.005					<0.005	<0.005
11/12/2011		<0.005					<0.005		
5/17/2012			<0.005					<0.005	<0.005
5/18/2012	<0.005				<0.005				
5/30/2012						<0.005	<0.005		
5/31/2012		<0.005		<0.005					
11/9/2012	<0.005		<0.005		<0.005	<0.005	0.01 (o)	<0.005	<0.005

Prediction Limit

Constituent: Arsenic (mg/L) Analysis Run 11/5/2022 1:42 PM View: Appendix I
 Plant Arkwright Client: Southern Company Data: Arkwright No 3

	ARGWA-5 (bg)	ARGWA-3 (bg)	ARGWC-7	ARGWC-15	ARGWA-12 (bg)	ARGWA-13 (bg)	ARGWC-17	ARGWC-8	ARGWC-10
11/10/2012				<0.005					
11/11/2012		<0.005							
5/7/2013								<0.005	<0.005
5/8/2013	<0.005		<0.005		<0.005		<0.005		
5/9/2013						<0.005			
5/13/2013		<0.005		<0.005					
11/5/2013			<0.005					<0.005	
11/6/2013	<0.005				<0.005		<0.005		<0.005
11/11/2013						<0.005			
11/12/2013		<0.005		<0.005					
5/20/2014	<0.005				<0.005		<0.005		<0.005
5/21/2014			<0.005			<0.005		<0.005	
5/28/2014				<0.005					
5/29/2014		<0.005							
11/17/2014	<0.005		<0.005				<0.005		
11/18/2014					<0.005	<0.005		<0.005	<0.005
11/19/2014									
11/20/2014				<0.005					
4/7/2015	<0.005		<0.005			<0.005	<0.005	<0.005	<0.005
4/14/2015		<0.005		<0.005	<0.005				
4/15/2015									
10/28/2015	<0.005		<0.005			<0.005	<0.005	<0.005	<0.005
10/29/2015					<0.005				
11/3/2015		<0.005		<0.005					
11/4/2015									
6/23/2016	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005		<0.005	<0.005
6/24/2016							<0.005		
8/30/2016	<0.005				<0.005				
8/31/2016		<0.005	<0.005			<0.005		<0.005	
9/1/2016							<0.005		<0.005
9/2/2016				0.00062 (J)					
10/24/2016					<0.005				
10/25/2016	<0.005	<0.005	<0.005			<0.005	<0.005		<0.005
10/26/2016				<0.005				<0.005	
1/23/2017					<0.005				
1/24/2017	<0.005	<0.005				<0.005			
1/26/2017			<0.005	<0.005			<0.005	<0.005	
1/27/2017									<0.005
4/11/2017	0.00077 (J)	0.00067 (J)			0.00076 (J)	0.00063 (J)	0.00084 (J)		
4/12/2017			0.00078 (J)	<0.005				0.00072 (J)	<0.005
6/20/2017	0.00052 (J)	0.00064 (J)							
6/21/2017				<0.005	<0.005	<0.005	<0.005	<0.005	
6/22/2017			<0.005						<0.005
10/25/2017	<0.005	<0.005	<0.005		<0.005	<0.005			
10/26/2017				<0.005			0.00087 (J)	<0.005	<0.005
4/9/2018						<0.005			
4/10/2018	<0.005	<0.005	<0.005	<0.005	<0.005		<0.005		
4/11/2018								<0.005	<0.005
10/16/2018	<0.005	<0.005			<0.005	0.00055 (J)			
10/17/2018			<0.005	<0.005			<0.005	0.00063 (J)	<0.005
3/26/2019						0.00089 (J)			
3/27/2019	0.00055 (J)	0.00055 (J)		<0.005	0.00049 (J)				

Prediction Limit

Constituent: Arsenic (mg/L) Analysis Run 11/5/2022 1:42 PM View: Appendix I
 Plant Arkwright Client: Southern Company Data: Arkwright No 3

	ARGWA-5 (bg)	ARGWA-3 (bg)	ARGWC-7	ARGWC-15	ARGWA-12 (bg)	ARGWA-13 (bg)	ARGWC-17	ARGWC-8	ARGWC-10
3/28/2019			<0.005				<0.005	<0.005	0.0011 (J)
8/19/2019						0.00045 (J)			
8/20/2019	0.00058 (J)	0.00045 (J)			0.00046 (J)				
8/21/2019			<0.005	0.00036 (J)			0.00044 (J)	0.00036 (J)	0.0004 (J)
10/7/2019									
10/8/2019	<0.005	<0.005		<0.005	<0.005	<0.005			
10/9/2019			0.0015				0.0015	0.0014	0.0019
4/6/2020									
4/7/2020	<0.005	<0.005			<0.005	<0.005			
4/8/2020			<0.005	<0.005			<0.005		<0.005
4/9/2020								<0.005	
8/18/2020	<0.005	<0.005	<0.005		<0.005	<0.005	<0.005		
8/19/2020				<0.005					<0.005
8/20/2020								<0.005	
9/29/2020	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005		
9/30/2020									
10/1/2020								<0.005	<0.005
12/1/2020									
2/9/2021	<0.005	<0.005		<0.005	<0.005	<0.005	<0.005		<0.005
2/10/2021			<0.005					<0.005	
2/11/2021									
9/7/2021					<0.005	<0.005			
9/8/2021	<0.005	<0.005		<0.005			0.00039 (J)		
9/9/2021								<0.005	
9/10/2021			<0.005						<0.005
2/1/2022	<0.005	<0.005			<0.005	<0.005			
2/2/2022							0.00044 (J)	<0.005	<0.005
2/3/2022			<0.005	<0.005					
8/30/2022	<0.005				<0.005				
8/31/2022		<0.005	<0.005	<0.005		<0.005		<0.005	<0.005
9/2/2022							<0.005		

Prediction Limit

Constituent: Arsenic (mg/L) Analysis Run 11/5/2022 1:42 PM View: Appendix I
 Plant Arkwright Client: Southern Company Data: Arkwright No 3

	ARGWC-9	ARGWC-18	ARGWC-16	ARGWA-14 (bg)	ARGWA-24 (bg)
12/16/1997					
6/30/1998					
12/2/1998					
6/8/1999					
12/7/1999					
6/15/2000					
12/12/2000					
12/5/2001					
6/26/2002					
12/3/2002					
6/11/2003					
12/10/2003					
6/15/2004					
12/14/2004					
6/2/2005					
12/14/2005					
4/5/2006					
10/30/2006					
5/10/2007					
11/17/2007					
5/2/2008					
5/3/2008					
10/22/2008					
5/5/2009					
5/6/2009					
5/7/2009					
5/12/2009		0.0025 (o)	0.003 (o)		
5/13/2009	0.0034 (o)				
5/14/2009					
12/1/2009					
12/3/2009	<0.005				
12/4/2009		<0.005			
12/5/2009			<0.005		
5/25/2010		<0.005			
5/26/2010	<0.005		<0.005		
6/1/2010					
6/2/2010				<0.005	
11/9/2010	<0.005		<0.005		
11/10/2010		<0.005		<0.005	
5/18/2011					
5/19/2011	<0.005	<0.005		<0.005	
5/24/2011			<0.005		
5/25/2011					
11/9/2011				<0.005	
11/10/2011					
11/11/2011	<0.005				
11/12/2011		<0.005	<0.005		
5/17/2012	<0.005	<0.005			
5/18/2012					
5/30/2012			<0.005	0.0026 (J)	
5/31/2012					
11/9/2012	<0.005		<0.005		

Prediction Limit

Constituent: Arsenic (mg/L) Analysis Run 11/5/2022 1:42 PM View: Appendix I
 Plant Arkwright Client: Southern Company Data: Arkwright No 3

	ARGWC-9	ARGWC-18	ARGWC-16	ARGWA-14 (bg)	ARGWA-24 (bg)
11/10/2012		<0.005			
11/11/2012				<0.005	
5/7/2013	<0.005	<0.005			
5/8/2013					
5/9/2013				<0.005	
5/13/2013			<0.005		
11/5/2013		<0.005			
11/6/2013	<0.005		<0.005		
11/11/2013				<0.005	
11/12/2013					
5/20/2014					
5/21/2014	<0.005		<0.005		
5/28/2014		<0.005			
5/29/2014				0.005 (J)	
11/17/2014			<0.005		
11/18/2014	<0.005				
11/19/2014		<0.005		<0.005	
11/20/2014					
4/7/2015	<0.005		<0.005		
4/14/2015				<0.005	
4/15/2015		<0.005			
10/28/2015	<0.005		<0.005		
10/29/2015		<0.005			
11/3/2015					
11/4/2015				<0.005	
6/23/2016	<0.005			0.0026	
6/24/2016		<0.005	<0.005		
8/30/2016					
8/31/2016	<0.005			0.0032	
9/1/2016		<0.005	<0.005		
9/2/2016					
10/24/2016					
10/25/2016	<0.005		<0.005	<0.005	
10/26/2016		<0.005			
1/23/2017				0.00088 (J)	
1/24/2017					
1/26/2017	<0.005		<0.005		
1/27/2017		<0.005			
4/11/2017			0.00067 (J)	0.00095 (J)	
4/12/2017	<0.005	<0.005			
6/20/2017				0.00099 (J)	
6/21/2017		<0.005	<0.005		
6/22/2017	<0.005				
10/25/2017	<0.005	<0.005		<0.005	
10/26/2017			<0.005		
4/9/2018				<0.005	
4/10/2018			<0.005		
4/11/2018	<0.005	<0.005			
10/16/2018			<0.005	0.00083 (J)	
10/17/2018	<0.005	0.00066 (J)			
3/26/2019					
3/27/2019		<0.005		0.0013	

Prediction Limit

Constituent: Arsenic (mg/L) Analysis Run 11/5/2022 1:42 PM View: Appendix I
Plant Arkwright Client: Southern Company Data: Arkwright No 3

	ARGWC-9	ARGWC-18	ARGWC-16	ARGWA-14 (bg)	ARGWA-24 (bg)
3/28/2019	0.00051 (J)		0.00057 (J)		
8/19/2019					
8/20/2019			<0.005		
8/21/2019	<0.005	0.00033 (J)		0.0013	
10/7/2019				0.00045 (J)	
10/8/2019					
10/9/2019	0.0011	0.0016	0.001		
4/6/2020				<0.005	
4/7/2020					
4/8/2020			<0.005		
4/9/2020	<0.005	<0.005			
8/18/2020					
8/19/2020	<0.005		<0.005	<0.005	
8/20/2020		<0.005			
9/29/2020			<0.005	0.00038 (J)	
9/30/2020		<0.005			
10/1/2020	<0.005				
12/1/2020					<0.005
2/9/2021			<0.005		<0.005
2/10/2021	<0.005	<0.005			
2/11/2021				<0.005	
9/7/2021					
9/8/2021			0.00031 (J)	0.00034 (J)	<0.005
9/9/2021	<0.005	0.0004 (J)			
9/10/2021					
2/1/2022					<0.005
2/2/2022	<0.005			0.00033 (J)	
2/3/2022		<0.005	<0.005		
8/30/2022					
8/31/2022	<0.005		<0.005	<0.005	<0.005
9/2/2022		<0.005			

Prediction Limit

Constituent: Barium (mg/L) Analysis Run 11/5/2022 1:42 PM View: Appendix I

Plant Arkwright Client: Southern Company Data: Arkwright No 3

	ARGWA-5 (bg)	ARGWA-3 (bg)	ARGWC-7	ARGWC-15	ARGWA-12 (bg)	ARGWA-13 (bg)	ARGWC-18	ARGWC-17	ARGWC-8
12/16/1997	0.032	2.12 (o)							
6/30/1998	0.028	0.177							
12/2/1998	0.032	0.115							
6/8/1999	0.0287	0.074							
12/7/1999	0.034	0.043							
6/15/2000	0.034	0.113							
12/12/2000	0.027	0.059							
12/5/2001	0.027	0.052							
6/26/2002	0.032	0.087							
12/3/2002	0.023	0.043							
6/11/2003	0.04	0.24							
12/10/2003	0.024	0.03							
6/15/2004	0.021	0.028							
12/14/2004	0.025	0.017							
6/2/2005	0.025	0.019							
12/14/2005	0.026	0.02	0.027						
4/5/2006	0.027	0.019	0.029						
10/30/2006	0.027	<0.001 (o)	0.028						
5/10/2007	0.024	0.017	0.025						
11/17/2007	0.026	0.015	0.026						
5/2/2008			0.026						
5/3/2008	0.022	0.017							
10/22/2008	0.027	0.11	0.033						
5/5/2009				0.042					
5/6/2009	0.023				0.065				
5/7/2009		0.13				0.068			
5/12/2009							0.055	0.048	
5/13/2009									
5/14/2009			0.035						0.039
12/1/2009	0.033		0.031						
12/3/2009					0.062	0.044			0.036
12/4/2009		0.019		0.051			0.036	0.055	
12/5/2009									
5/25/2010	0.03				0.038 (o)	0.049	0.033	0.063	
5/26/2010			0.025						0.036
6/1/2010		0.027		0.055					
6/2/2010									
11/9/2010	0.033				0.059			0.11	0.038
11/10/2010		0.025	0.027	0.041		0.052	0.038		
5/18/2011									0.032
5/19/2011							0.028		
5/24/2011	0.027				0.054			0.11	
5/25/2011		0.015	0.022	0.035		0.045			
11/9/2011				0.035					
11/10/2011	0.032				0.063	0.11			
11/11/2011			0.027						0.036
11/12/2011		0.021					0.092 (o)	0.086	
5/17/2012			0.0265				0.0427		0.0353
5/18/2012	0.0311				0.0646				
5/30/2012						0.0831		0.0586	
5/31/2012		0.0222		0.0372					
11/9/2012	0.034		0.028		0.081	0.13		0.4 (o)	0.038

Prediction Limit

Constituent: Barium (mg/L) Analysis Run 11/5/2022 1:42 PM View: Appendix I
 Plant Arkwright Client: Southern Company Data: Arkwright No 3

	ARGWA-5 (bg)	ARGWA-3 (bg)	ARGWC-7	ARGWC-15	ARGWA-12 (bg)	ARGWA-13 (bg)	ARGWC-18	ARGWC-17	ARGWC-8
11/10/2012				0.044			0.038		
11/11/2012		0.022							
5/7/2013							0.03		0.037
5/8/2013	0.026		0.026		0.066			0.054	
5/9/2013						0.059			
5/13/2013		0.019		0.2 (o)					
11/5/2013			0.027				0.087 (o)		0.037
11/6/2013	0.028				0.074			0.043	
11/11/2013						0.12			
11/12/2013		0.025		0.035					
5/20/2014	0.027				0.057			0.051	
5/21/2014			0.028			0.073			0.037
5/28/2014				0.038			0.032		
5/29/2014		0.024							
11/17/2014	0.029		0.031					0.049	
11/18/2014					0.069	0.072			0.038
11/19/2014							0.058		
11/20/2014				0.037					
4/7/2015	0.024		0.029			0.06		0.043	0.045
4/14/2015		0.022		0.035	0.067				
4/15/2015							0.039		
10/28/2015	0.028		0.032			0.057		0.047	0.042
10/29/2015					0.069		0.04		
11/3/2015		0.022		0.038					
11/4/2015									
6/23/2016	0.025	0.019	0.031	0.028	0.063	0.036			0.039
6/24/2016							0.034	0.044	
8/30/2016	0.026				0.062				
8/31/2016		0.018	0.03			0.041			0.037
9/1/2016							0.033	0.046	
9/2/2016				0.074					
10/24/2016					0.0674				
10/25/2016	0.0293	0.016	0.0317			0.0429		0.0436	
10/26/2016				0.0408			0.0339		0.0423
1/23/2017					0.069				
1/24/2017	0.028	0.017				0.025			
1/26/2017			0.035	0.038				0.051	0.046
1/27/2017							0.037		
4/11/2017	0.024	0.016			0.064	0.024		0.043	
4/12/2017			0.034	0.03			0.032		0.041
6/20/2017	0.027	0.02							
6/21/2017				0.028	0.074	0.034	0.036	0.043	0.049
6/22/2017			0.038						
10/25/2017	0.03	0.019	0.038		0.07	0.03	0.041		
10/26/2017				0.029				0.038	0.046
4/9/2018						0.023			
4/10/2018	0.028	0.019	0.038	0.032	0.073			0.046	
4/11/2018							0.04		0.048
10/16/2018	0.027	0.018			0.069	0.028			
10/17/2018			0.038	0.028			0.039	0.043	0.045
3/26/2019						0.029			
3/27/2019	0.024	0.019		0.032	0.063		0.033		

Prediction Limit

Constituent: Barium (mg/L) Analysis Run 11/5/2022 1:42 PM View: Appendix I
 Plant Arkwright Client: Southern Company Data: Arkwright No 3

	ARGWA-5 (bg)	ARGWA-3 (bg)	ARGWC-7	ARGWC-15	ARGWA-12 (bg)	ARGWA-13 (bg)	ARGWC-18	ARGWC-17	ARGWC-8
3/28/2019			0.038					0.045	0.045
8/19/2019						0.035			
8/20/2019	0.029	0.02			0.075				
8/21/2019			0.041	0.033			0.036	0.05	0.052
10/7/2019									
10/8/2019	0.03	0.02		0.031	0.078	0.042			
10/9/2019			0.046				0.039	0.049	0.049
4/6/2020									
4/7/2020	0.02	0.018			0.066	0.021			
4/8/2020			0.039	0.03				0.045	
4/9/2020							0.041		0.045
8/18/2020	0.031	0.021	0.044		0.079	0.025		0.062	
8/19/2020				0.028					
8/20/2020							0.041		0.053
9/29/2020	0.03	0.019	0.042	0.03	0.079	0.024		0.056	
9/30/2020							0.041		
10/1/2020									0.052
12/1/2020									
2/9/2021	0.028	0.017		0.029	0.076	0.022		0.051	
2/10/2021			0.041				0.038		0.049
2/11/2021									
9/7/2021					0.073	0.031			
9/8/2021	0.033	0.018		0.043				0.058	
9/9/2021							0.046		0.051
9/10/2021			0.045						
2/1/2022	0.033	0.018			0.079	0.018			
2/2/2022								0.062	0.059
2/3/2022			0.051	0.03			0.043		
8/30/2022	0.0446				0.085				
8/31/2022		0.0181	0.0505	0.0325		0.0262			0.0571
9/2/2022							0.0369	0.0727	

Prediction Limit

Constituent: Barium (mg/L) Analysis Run 11/5/2022 1:42 PM View: Appendix I
 Plant Arkwright Client: Southern Company Data: Arkwright No 3

	ARGWC-9	ARGWC-10	ARGWC-16	ARGWA-14 (bg)	ARGWA-24 (bg)
12/16/1997					
6/30/1998					
12/2/1998					
6/8/1999					
12/7/1999					
6/15/2000					
12/12/2000					
12/5/2001					
6/26/2002					
12/3/2002					
6/11/2003					
12/10/2003					
6/15/2004					
12/14/2004					
6/2/2005					
12/14/2005					
4/5/2006					
10/30/2006					
5/10/2007					
11/17/2007					
5/2/2008					
5/3/2008					
10/22/2008					
5/5/2009					
5/6/2009					
5/7/2009					
5/12/2009			0.16 (o)		
5/13/2009	0.14 (o)	0.15 (o)			
5/14/2009					
12/1/2009					
12/3/2009	0.032	0.03			
12/4/2009					
12/5/2009			0.062		
5/25/2010					
5/26/2010	0.031	0.029	0.065		
6/1/2010					
6/2/2010				0.046	
11/9/2010	0.03	0.029	0.065		
11/10/2010				0.057	
5/18/2011					
5/19/2011	0.028	0.027		0.048	
5/24/2011			0.062		
5/25/2011					
11/9/2011				0.045	
11/10/2011					
11/11/2011	0.032	0.031			
11/12/2011			0.067		
5/17/2012	0.0319	0.0299			
5/18/2012					
5/30/2012			0.0767	0.0519	
5/31/2012					
11/9/2012	0.036	0.03	0.093		

Prediction Limit

Constituent: Barium (mg/L) Analysis Run 11/5/2022 1:42 PM View: Appendix I
 Plant Arkwright Client: Southern Company Data: Arkwright No 3

	ARGWC-9	ARGWC-10	ARGWC-16	ARGWA-14 (bg)	ARGWA-24 (bg)
11/10/2012					
11/11/2012				0.051	
5/7/2013	0.035	0.028			
5/8/2013					
5/9/2013				0.056	
5/13/2013			0.093		
11/5/2013					
11/6/2013	0.043	0.033	0.068		
11/11/2013				0.041	
11/12/2013					
5/20/2014		0.029			
5/21/2014	0.042		0.072		
5/28/2014					
5/29/2014				0.051	
11/17/2014			0.05		
11/18/2014	0.044	0.029			
11/19/2014				0.051	
11/20/2014					
4/7/2015	0.043	0.028	0.055		
4/14/2015				0.043	
4/15/2015					
10/28/2015	0.045	0.029	0.054		
10/29/2015					
11/3/2015					
11/4/2015				0.042	
6/23/2016	0.043	0.028		0.084	
6/24/2016			0.056		
8/30/2016					
8/31/2016	0.042			0.076	
9/1/2016		0.027	0.051		
9/2/2016					
10/24/2016					
10/25/2016	0.0455	0.0296	0.0637	0.039	
10/26/2016					
1/23/2017				0.044	
1/24/2017					
1/26/2017	0.048		0.055		
1/27/2017		0.035			
4/11/2017			0.055	0.038	
4/12/2017	0.045	0.031			
6/20/2017				0.057	
6/21/2017			0.054		
6/22/2017	0.055	0.035			
10/25/2017	0.049			0.05	
10/26/2017		0.032	0.046		
4/9/2018				0.049	
4/10/2018			0.056		
4/11/2018	0.052	0.034			
10/16/2018			0.039	0.06	
10/17/2018	0.046	0.031			
3/26/2019					
3/27/2019				0.054	

Prediction Limit

Constituent: Barium (mg/L) Analysis Run 11/5/2022 1:42 PM View: Appendix I
Plant Arkwright Client: Southern Company Data: Arkwright No 3

	ARGWC-9	ARGWC-10	ARGWC-16	ARGWA-14 (bg)	ARGWA-24 (bg)
3/28/2019	0.047	0.031	0.054		
8/19/2019					
8/20/2019			0.046		
8/21/2019	0.045	0.035		0.031	
10/7/2019				0.033	
10/8/2019					
10/9/2019	0.041	0.031	0.057		
4/6/2020				0.051	
4/7/2020					
4/8/2020		0.031	0.042		
4/9/2020	0.044				
8/18/2020					
8/19/2020	0.046	0.034	0.045	0.041	
8/20/2020					
9/29/2020			0.042	0.062	
9/30/2020					
10/1/2020	0.045	0.032			
12/1/2020					0.038
2/9/2021		0.031	0.044		0.036
2/10/2021	0.038				
2/11/2021				0.066	
9/7/2021					
9/8/2021			0.035	0.037	0.039
9/9/2021	0.038				
9/10/2021		0.031			
2/1/2022					0.04
2/2/2022	0.04	0.034		0.062	
2/3/2022			0.047		
8/30/2022					
8/31/2022	0.0391	0.0345	0.0383	0.074	0.0412
9/2/2022					

Prediction Limit

Constituent: Cadmium (mg/L) Analysis Run 11/5/2022 1:42 PM View: Appendix I

Plant Arkwright Client: Southern Company Data: Arkwright No 3

	ARGWA-5 (bg)	ARGWA-3 (bg)	ARGWC-7	ARGWC-15	ARGWA-12 (bg)	ARGWA-13 (bg)	ARGWC-17	ARGWC-18	ARGWC-16
12/16/1997	<0.001	0.103 (o)							
6/30/1998	<0.001	0.007 (o)							
12/2/1998	<0.001	0.007 (o)							
6/8/1999	<0.001	<0.001							
12/7/1999	<0.001	<0.001							
6/15/2000	<0.001	<0.001							
12/12/2000	<0.001	<0.001							
12/5/2001	<0.001	0.002							
6/26/2002	<0.001	0.003							
12/3/2002	<0.001	<0.001							
6/11/2003	<0.001	0.0043							
12/10/2003	<0.001	<0.001							
6/15/2004	<0.001	<0.001							
12/14/2004	0.0012	<0.001							
6/2/2005	<0.001	<0.001							
12/14/2005	<0.001	<0.001	<0.001						
4/5/2006	<0.001	<0.001	<0.001						
10/30/2006	<0.001	<0.001	<0.001						
5/10/2007	<0.001	<0.001	<0.001						
11/17/2007	<0.001	<0.001	<0.001						
5/2/2008			<0.001						
5/3/2008	<0.001	0.00033							
10/22/2008	<0.001	<0.001	<0.001						
5/5/2009				<0.001					
5/6/2009	<0.001				<0.001				
5/7/2009		<0.001				<0.001			
5/12/2009							<0.001	<0.001	<0.001
5/13/2009									
5/14/2009			<0.001						
12/1/2009	<0.001		<0.001						
12/3/2009					<0.001	<0.001			
12/4/2009		<0.001		<0.001			<0.001	<0.001	
12/5/2009									<0.001
5/25/2010	<0.001				<0.001	<0.001	<0.001	<0.001	
5/26/2010			<0.001						<0.001
6/1/2010		<0.001		<0.001					
6/2/2010									
11/9/2010	<0.001				<0.001		<0.001		<0.001
11/10/2010		<0.001	<0.001	<0.001		<0.001		<0.001	
5/18/2011									
5/19/2011								<0.001	
5/24/2011	<0.001				<0.001		<0.001		<0.001
5/25/2011		<0.001	<0.001	<0.001		<0.001			
11/9/2011				<0.001					
11/10/2011	<0.001				<0.001	<0.001			
11/11/2011			<0.001						
11/12/2011		<0.001					<0.001	<0.001	<0.001
5/17/2012			<0.001					<0.001	
5/18/2012	<0.001				<0.001				
5/30/2012						<0.001	<0.001		<0.001
5/31/2012		<0.001		<0.001					
11/9/2012	<0.001		<0.001		<0.001	<0.001	0.0015		<0.001

Prediction Limit

Constituent: Cadmium (mg/L) Analysis Run 11/5/2022 1:42 PM View: Appendix I
 Plant Arkwright Client: Southern Company Data: Arkwright No 3

	ARGWA-5 (bg)	ARGWA-3 (bg)	ARGWC-7	ARGWC-15	ARGWA-12 (bg)	ARGWA-13 (bg)	ARGWC-17	ARGWC-18	ARGWC-16
11/10/2012				<0.001				<0.001	
11/11/2012		<0.001							
5/7/2013								<0.001	
5/8/2013	<0.001		<0.001		<0.001		<0.001		
5/9/2013						<0.001			
5/13/2013		<0.001		<0.001					<0.001
11/5/2013			<0.001					<0.001	
11/6/2013	<0.001				<0.001		<0.001		<0.001
11/11/2013						<0.001			
11/12/2013		<0.001		<0.001					
5/20/2014	<0.001				<0.001		<0.001		
5/21/2014			<0.001			<0.001			<0.001
5/28/2014				0				<0.001	
5/29/2014		<0.001							
11/17/2014	<0.001		<0.001				<0.001		<0.001
11/18/2014					<0.001	<0.001			
11/19/2014								<0.001	
11/20/2014				<0.001					
4/7/2015	<0.001		<0.001			<0.001	<0.001		<0.001
4/14/2015		<0.001		<0.001	0.00026				
4/15/2015								<0.001	
10/28/2015	<0.001		<0.001			<0.001	<0.001		<0.001
10/29/2015					<0.001			<0.001	
11/3/2015		<0.001		<0.001					
11/4/2015									
6/23/2016	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001		<0.001	<0.001
6/24/2016							<0.001	<0.001	<0.001
8/30/2016	<0.001				<0.001				
8/31/2016		<0.001	<0.001			<0.001			
9/1/2016							<0.001	<0.001	<0.001
9/2/2016				<0.001					
10/24/2016					<0.001				
10/25/2016	<0.001	<0.001	<0.001			<0.001	0.0001 (J)		0.0001 (J)
10/26/2016				<0.001				<0.001	
1/23/2017					<0.001				
1/24/2017	<0.001	<0.001				<0.001			
1/26/2017			<0.001	<0.001			<0.001		<0.001
1/27/2017								<0.001	
4/11/2017	<0.001	<0.001			<0.001	<0.001	<0.001		<0.001
4/12/2017			<0.001	<0.001				<0.001	
6/20/2017	<0.001	<0.001							
6/21/2017				<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
6/22/2017			<0.001						
10/25/2017	<0.001	<0.001	<0.001		<0.001	<0.001		<0.001	
10/26/2017				<0.001			<0.001		<0.001
4/9/2018						<0.001			
4/10/2018	<0.001	<0.001	<0.001	<0.001	<0.001		<0.001		<0.001
4/11/2018								<0.001	
10/16/2018	<0.001	<0.001			<0.001	<0.001			<0.001
10/17/2018			<0.001	<0.001			<0.001	<0.001	
3/26/2019						<0.001			
3/27/2019	<0.001	<0.001		<0.001	<0.001			<0.001	

Prediction Limit

Constituent: Cadmium (mg/L) Analysis Run 11/5/2022 1:42 PM View: Appendix I
Plant Arkwright Client: Southern Company Data: Arkwright No 3

	ARGWA-5 (bg)	ARGWA-3 (bg)	ARGWC-7	ARGWC-15	ARGWA-12 (bg)	ARGWA-13 (bg)	ARGWC-17	ARGWC-18	ARGWC-16
3/28/2019			<0.001				<0.001		<0.001
8/19/2019						<0.001			
8/20/2019	<0.001	0.00014 (J)			<0.001				<0.001
8/21/2019			<0.001	<0.001			0.00013 (J)	<0.001	
10/7/2019									
10/8/2019	<0.001	<0.001		<0.001	<0.001	<0.001			
10/9/2019			<0.001				0.00018 (J)	<0.001	<0.001
4/6/2020									
4/7/2020	<0.001	<0.001			<0.001	<0.001			
4/8/2020			<0.001	<0.001			<0.001		<0.001
4/9/2020								<0.001	
8/18/2020	<0.001	<0.001	<0.001		<0.001	<0.001	<0.001		
8/19/2020				<0.001					<0.001
8/20/2020								<0.001	
12/1/2020									
2/9/2021	<0.001	<0.001		<0.001	<0.001	<0.001	<0.001		<0.001
2/10/2021			<0.001					<0.001	
2/11/2021									
9/7/2021					<0.001	<0.001			
9/8/2021	<0.001	<0.001		<0.001			<0.001		<0.001
9/9/2021								<0.001	
9/10/2021			<0.001						
2/1/2022	<0.001	<0.001			<0.001	<0.001			
2/2/2022							0.0003 (J)		
2/3/2022			<0.001	<0.001				<0.001	<0.001
8/30/2022	<0.001				<0.001				
8/31/2022		<0.001	<0.001	<0.001		<0.001			<0.001
9/2/2022							<0.001	<0.001	

Prediction Limit

Constituent: Cadmium (mg/L) Analysis Run 11/5/2022 1:42 PM View: Appendix I
Plant Arkwright Client: Southern Company Data: Arkwright No 3

	ARGWC-9	ARGWC-10	ARGWC-8	ARGWA-14 (bg)	ARGWA-24 (bg)
12/16/1997					
6/30/1998					
12/2/1998					
6/8/1999					
12/7/1999					
6/15/2000					
12/12/2000					
12/5/2001					
6/26/2002					
12/3/2002					
6/11/2003					
12/10/2003					
6/15/2004					
12/14/2004					
6/2/2005					
12/14/2005					
4/5/2006					
10/30/2006					
5/10/2007					
11/17/2007					
5/2/2008					
5/3/2008					
10/22/2008					
5/5/2009					
5/6/2009					
5/7/2009					
5/12/2009					
5/13/2009	<0.001	<0.001			
5/14/2009			<0.001		
12/1/2009					
12/3/2009	<0.001	<0.001	<0.001		
12/4/2009					
12/5/2009					
5/25/2010					
5/26/2010	<0.001	<0.001	<0.001		
6/1/2010					
6/2/2010				<0.001	
11/9/2010	<0.001	<0.001	<0.001		
11/10/2010				<0.001	
5/18/2011			<0.001		
5/19/2011	<0.001	<0.001		<0.001	
5/24/2011					
5/25/2011					
11/9/2011				<0.001	
11/10/2011					
11/11/2011	<0.001	<0.001	<0.001		
11/12/2011					
5/17/2012	<0.001	<0.001	<0.001		
5/18/2012					
5/30/2012				<0.001	
5/31/2012					
11/9/2012	<0.001	<0.001	<0.001		

Prediction Limit

Constituent: Cadmium (mg/L) Analysis Run 11/5/2022 1:42 PM View: Appendix I
 Plant Arkwright Client: Southern Company Data: Arkwright No 3

	ARGWC-9	ARGWC-10	ARGWC-8	ARGWA-14 (bg)	ARGWA-24 (bg)
11/10/2012					
11/11/2012				<0.001	
5/7/2013	<0.001	<0.001	<0.001		
5/8/2013					
5/9/2013				<0.001	
5/13/2013					
11/5/2013			<0.001		
11/6/2013	<0.001	<0.001			
11/11/2013				<0.001	
11/12/2013					
5/20/2014		<0.001			
5/21/2014	<0.001		<0.001		
5/28/2014					
5/29/2014				<0.001	
11/17/2014					
11/18/2014	<0.001	<0.001	<0.001		
11/19/2014				<0.001	
11/20/2014					
4/7/2015	<0.001	<0.001	<0.001		
4/14/2015				<0.001	
4/15/2015					
10/28/2015	<0.001	<0.001	<0.001		
10/29/2015					
11/3/2015					
11/4/2015				<0.001	
6/23/2016	<0.001	<0.001	<0.001	<0.001	
6/24/2016					
8/30/2016					
8/31/2016	<0.001		<0.001	0.00039 (J)	
9/1/2016		<0.001			
9/2/2016					
10/24/2016					
10/25/2016	<0.001	<0.001		<0.001	
10/26/2016			<0.001		
1/23/2017				<0.001	
1/24/2017					
1/26/2017	<0.001		<0.001		
1/27/2017		<0.001			
4/11/2017				<0.001	
4/12/2017	<0.001	<0.001	<0.001		
6/20/2017				<0.001	
6/21/2017			<0.001		
6/22/2017	<0.001	<0.001			
10/25/2017	<0.001			<0.001	
10/26/2017		<0.001	<0.001		
4/9/2018				0.00052 (J)	
4/10/2018					
4/11/2018	<0.001	<0.001	<0.001		
10/16/2018				0.00071 (J)	
10/17/2018	<0.001	<0.001	<0.001		
3/26/2019					
3/27/2019				<0.001	

Prediction Limit

Constituent: Cadmium (mg/L) Analysis Run 11/5/2022 1:42 PM View: Appendix I
Plant Arkwright Client: Southern Company Data: Arkwright No 3

	ARGWC-9	ARGWC-10	ARGWC-8	ARGWA-14 (bg)	ARGWA-24 (bg)
3/28/2019	<0.001	<0.001	<0.001		
8/19/2019					
8/20/2019					
8/21/2019	<0.001	<0.001	<0.001	0.00015 (J)	
10/7/2019				<0.001	
10/8/2019					
10/9/2019	<0.001	<0.001	<0.001		
4/6/2020				<0.001	
4/7/2020					
4/8/2020		<0.001			
4/9/2020	<0.001		<0.001		
8/18/2020					
8/19/2020	<0.001	<0.001		<0.001	
8/20/2020			<0.001		
12/1/2020					<0.001
2/9/2021		<0.001			<0.001
2/10/2021	<0.001		<0.001		
2/11/2021				<0.001	
9/7/2021					
9/8/2021				<0.001	<0.001
9/9/2021	<0.001		<0.001		
9/10/2021		<0.001			
2/1/2022					<0.001
2/2/2022	<0.001	<0.001	<0.001	<0.001	
2/3/2022					
8/30/2022					
8/31/2022	<0.001	<0.001	<0.001	<0.001	<0.001
9/2/2022					

Prediction Limit

Constituent: Lead (mg/L) Analysis Run 11/5/2022 1:42 PM View: Appendix I

Plant Arkwright Client: Southern Company Data: Arkwright No 3

	ARGWA-5 (bg)	ARGWA-3 (bg)	ARGWC-7	ARGWC-15	ARGWA-12 (bg)	ARGWA-13 (bg)	ARGWC-18	ARGWC-17	ARGWC-16
12/16/1997	<0.002	0.162 (o)							
6/30/1998	<0.002	0.013							
12/2/1998	0.002	0.01							
6/8/1999	<0.002	0.004							
12/7/1999	<0.002	0.004							
6/15/2000	<0.002	0.004							
12/12/2000	<0.002	0.00378							
12/5/2001	<0.002	0.003							
6/26/2002	0.00539	0.00815							
12/3/2002	<0.002	0.008							
6/11/2003	<0.002	<0.002							
12/10/2003	<0.002	<0.002							
6/15/2004	<0.002	<0.002							
12/14/2004	0.013 (o)	<0.002							
6/2/2005	<0.002	<0.002							
12/14/2005	<0.002	<0.002	<0.002						
4/5/2006	<0.002	<0.002	<0.002						
10/30/2006	<0.002	<0.002	<0.002						
5/10/2007	<0.002	<0.002	0.0032						
11/17/2007	<0.002	<0.002	<0.002						
5/2/2008			0.008 (o)						
5/3/2008	<0.002	<0.002							
10/22/2008	<0.002	<0.002	<0.002						
5/5/2009				<0.002					
5/6/2009	<0.002				<0.002				
5/7/2009		<0.002				<0.002			
5/12/2009							<0.002	<0.002	<0.002
5/13/2009									
5/14/2009			0.00083						
12/1/2009	<0.002		<0.002						
12/3/2009					<0.002	<0.002			
12/4/2009		<0.002		<0.002			<0.002	<0.002	
12/5/2009									<0.002
5/25/2010	<0.002				<0.002	<0.002	<0.002	<0.002	
5/26/2010			<0.002						<0.002
6/1/2010		<0.002		<0.002					
6/2/2010									
11/9/2010	<0.002				<0.002			<0.002	<0.002
11/10/2010		<0.002	<0.002	<0.002		<0.002	<0.002		
5/18/2011									
5/19/2011							<0.002		
5/24/2011	<0.002				<0.002			<0.002	<0.002
5/25/2011		<0.002	<0.002	<0.002		<0.002			
11/9/2011				<0.002					
11/10/2011	<0.002				<0.002	<0.002			
11/11/2011			<0.002						
11/12/2011		<0.002					<0.002	<0.002	<0.002
5/17/2012			<0.002				<0.002		
5/18/2012	<0.002				<0.002				
5/30/2012						<0.002		<0.002	<0.002
5/31/2012		0.0005 (J)		0.0008 (J)					
11/9/2012	<0.002		<0.002		<0.002	<0.002		<0.002	<0.002

Prediction Limit

Constituent: Lead (mg/L) Analysis Run 11/5/2022 1:42 PM View: Appendix I
 Plant Arkwright Client: Southern Company Data: Arkwright No 3

	ARGWA-5 (bg)	ARGWA-3 (bg)	ARGWC-7	ARGWC-15	ARGWA-12 (bg)	ARGWA-13 (bg)	ARGWC-18	ARGWC-17	ARGWC-16
11/10/2012				<0.002			<0.002		
11/11/2012		<0.002							
5/7/2013							<0.002		
5/8/2013	<0.002		<0.002		<0.002			<0.002	
5/9/2013						<0.002			
5/13/2013		<0.002		0.025 (o)					<0.002
11/5/2013			<0.002				<0.002		
11/6/2013	<0.002				<0.002			<0.002	<0.002
11/11/2013						<0.002			
11/12/2013		<0.002		<0.002					
5/20/2014	<0.002				<0.002			<0.002	
5/21/2014			<0.002			<0.002			<0.002
5/28/2014				<0.002			<0.002		
5/29/2014		<0.002							
11/17/2014	<0.002		<0.002					<0.002	<0.002
11/18/2014					<0.002	<0.002			
11/19/2014							<0.002		
11/20/2014				<0.002					
4/7/2015	<0.002		<0.002			<0.002		<0.002	<0.002
4/14/2015		<0.002		<0.002	<0.002				
4/15/2015							<0.002		
10/28/2015	<0.002		<0.002			<0.002		<0.002	<0.002
10/29/2015					<0.002		<0.002		
11/3/2015		<0.002		<0.002					
11/4/2015									
6/23/2016	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002		<0.002	<0.002
6/24/2016							<0.002	<0.002	<0.002
8/30/2016	<0.002				<0.002				
8/31/2016		<0.002	<0.002			<0.002			
9/1/2016							<0.002	<0.002	<0.002
9/2/2016				0.0056					
10/24/2016					0.0002 (J)				
10/25/2016	<0.002	<0.002	<0.002			<0.002		<0.002	<0.002
10/26/2016				0.0003 (J)			0.0002 (J)		
1/23/2017					<0.002				
1/24/2017	<0.002	<0.002				<0.002			
1/26/2017			<0.002	<0.002				<0.002	<0.002
1/27/2017							<0.002		
4/11/2017	<0.002	<0.002			<0.002	<0.002		<0.002	<0.002
4/12/2017			<0.002	<0.002			<0.002		
6/20/2017	<0.002	<0.002							
6/21/2017				<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
6/22/2017			<0.002						
10/25/2017	<0.002	<0.002	<0.002		<0.002	<0.002	<0.002		
10/26/2017				<0.002				<0.002	<0.002
4/9/2018						<0.002			
4/10/2018	<0.002	<0.002	<0.002	<0.002	<0.002			<0.002	<0.002
4/11/2018							<0.002		
10/16/2018	<0.002	<0.002			<0.002	<0.002			<0.002
10/17/2018			<0.002	0.0016			<0.002	<0.002	
3/26/2019						<0.002			
3/27/2019	<0.002	<0.002		<0.002	<0.002		<0.002		

Prediction Limit

Constituent: Lead (mg/L) Analysis Run 11/5/2022 1:42 PM View: Appendix I

Plant Arkwright Client: Southern Company Data: Arkwright No 3

	ARGWA-5 (bg)	ARGWA-3 (bg)	ARGWC-7	ARGWC-15	ARGWA-12 (bg)	ARGWA-13 (bg)	ARGWC-18	ARGWC-17	ARGWC-16
3/28/2019			<0.002					<0.002	<0.002
8/19/2019						<0.002			
8/20/2019	0.00014 (J)	0.00014 (J)			<0.002				<0.002
8/21/2019			<0.002	<0.002			<0.002	<0.002	
10/7/2019									
10/8/2019	0.00016 (J)	0.001		<0.002	<0.002	0.00013 (J)			
10/9/2019			<0.002				<0.002	<0.002	<0.002
4/6/2020									
4/7/2020	<0.002	<0.002			<0.002	<0.002			
4/8/2020			<0.002	<0.002				<0.002	<0.002
4/9/2020							<0.002		
8/18/2020	0.00013 (J)	0.00019 (J)	<0.002		<0.002	<0.002		<0.002	
8/19/2020				<0.002					<0.002
8/20/2020							0.00028 (J)		
9/29/2020	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002		<0.002	<0.002
9/30/2020							0.0002 (J)		
10/1/2020									
12/1/2020									
2/9/2021	<0.002	<0.002		<0.002	<0.002	<0.002		<0.002	<0.002
2/10/2021			<0.002				<0.002		
2/11/2021									
9/7/2021					<0.002	<0.002			
9/8/2021	<0.002	<0.002		0.0016				0.00022 (J)	<0.002
9/9/2021							0.00031 (J)		
9/10/2021			<0.002						
2/1/2022	<0.002	<0.002			<0.002	<0.002			
2/2/2022								<0.002	
2/3/2022			<0.002	<0.002			<0.002		0.00021 (J)
8/30/2022	<0.002				<0.002				
8/31/2022		<0.002	<0.002	<0.002		<0.002			<0.002
9/2/2022							<0.002	<0.002	

Prediction Limit

Constituent: Lead (mg/L) Analysis Run 11/5/2022 1:42 PM View: Appendix I
Plant Arkwright Client: Southern Company Data: Arkwright No 3

	ARGWC-9	ARGWC-10	ARGWC-8	ARGWA-14 (bg)	ARGWA-24 (bg)
12/16/1997					
6/30/1998					
12/2/1998					
6/8/1999					
12/7/1999					
6/15/2000					
12/12/2000					
12/5/2001					
6/26/2002					
12/3/2002					
6/11/2003					
12/10/2003					
6/15/2004					
12/14/2004					
6/2/2005					
12/14/2005					
4/5/2006					
10/30/2006					
5/10/2007					
11/17/2007					
5/2/2008					
5/3/2008					
10/22/2008					
5/5/2009					
5/6/2009					
5/7/2009					
5/12/2009					
5/13/2009	<0.002	<0.002			
5/14/2009			<0.002		
12/1/2009					
12/3/2009	<0.002	<0.002	<0.002		
12/4/2009					
12/5/2009					
5/25/2010					
5/26/2010	<0.002	<0.002	<0.002		
6/1/2010					
6/2/2010				<0.002	
11/9/2010	<0.002	<0.002	<0.002		
11/10/2010				<0.002	
5/18/2011			<0.002		
5/19/2011	<0.002	<0.002		<0.002	
5/24/2011					
5/25/2011					
11/9/2011				<0.002	
11/10/2011					
11/11/2011	<0.002	<0.002	<0.002		
11/12/2011					
5/17/2012	<0.002	<0.002	<0.002		
5/18/2012					
5/30/2012				<0.002	
5/31/2012					
11/9/2012	<0.002	<0.002	<0.002		

Prediction Limit

Constituent: Lead (mg/L) Analysis Run 11/5/2022 1:42 PM View: Appendix I
Plant Arkwright Client: Southern Company Data: Arkwright No 3

	ARGWC-9	ARGWC-10	ARGWC-8	ARGWA-14 (bg)	ARGWA-24 (bg)
11/10/2012					
11/11/2012				<0.002	
5/7/2013	<0.002	<0.002	<0.002		
5/8/2013					
5/9/2013				<0.002	
5/13/2013					
11/5/2013			<0.002		
11/6/2013	<0.002	<0.002			
11/11/2013				<0.002	
11/12/2013					
5/20/2014		<0.002			
5/21/2014	<0.002		<0.002		
5/28/2014					
5/29/2014				<0.002	
11/17/2014					
11/18/2014	<0.002	<0.002	<0.002		
11/19/2014				<0.002	
11/20/2014					
4/7/2015	<0.002	<0.002	<0.002		
4/14/2015				<0.002	
4/15/2015					
10/28/2015	<0.002	<0.002	<0.002		
10/29/2015					
11/3/2015					
11/4/2015				<0.002	
6/23/2016	<0.002	<0.002	<0.002	<0.002	
6/24/2016					
8/30/2016					
8/31/2016	<0.002		<0.002	<0.002	
9/1/2016		<0.002			
9/2/2016					
10/24/2016					
10/25/2016	<0.002	<0.002		<0.002	
10/26/2016			<0.002		
1/23/2017				0.0013	
1/24/2017					
1/26/2017	<0.002		<0.002		
1/27/2017		<0.002			
4/11/2017				<0.002	
4/12/2017	<0.002	<0.002	<0.002		
6/20/2017				<0.002	
6/21/2017			<0.002		
6/22/2017	<0.002	<0.002			
10/25/2017	<0.002			<0.002	
10/26/2017		<0.002	<0.002		
4/9/2018				<0.002	
4/10/2018					
4/11/2018	<0.002	<0.002	<0.002		
10/16/2018				<0.002	
10/17/2018	<0.002	<0.002	<0.002		
3/26/2019					
3/27/2019				<0.002	

Prediction Limit

Constituent: Lead (mg/L) Analysis Run 11/5/2022 1:42 PM View: Appendix I
Plant Arkwright Client: Southern Company Data: Arkwright No 3

	ARGWC-9	ARGWC-10	ARGWC-8	ARGWA-14 (bg)	ARGWA-24 (bg)
3/28/2019	<0.002	<0.002	<0.002		
8/19/2019					
8/20/2019					
8/21/2019	<0.002	<0.002	<0.002	0.00019 (J)	
10/7/2019				<0.002	
10/8/2019					
10/9/2019	0.00016 (J)	<0.002	0.00019 (J)		
4/6/2020				<0.002	
4/7/2020					
4/8/2020		0.031			
4/9/2020	<0.002		<0.002		
8/18/2020					
8/19/2020	<0.002	0.00013 (J)		<0.002	
8/20/2020			<0.002		
9/29/2020				<0.002	
9/30/2020					
10/1/2020	<0.002	<0.002	<0.002		
12/1/2020					<0.002
2/9/2021		<0.002			<0.002
2/10/2021	<0.002		<0.002		
2/11/2021				<0.002	
9/7/2021					
9/8/2021				<0.002	<0.002
9/9/2021	<0.002		<0.002		
9/10/2021		<0.002			
2/1/2022					<0.002
2/2/2022	<0.002	<0.002	0.00024 (J)	<0.002	
2/3/2022					
8/30/2022					
8/31/2022	<0.002	<0.002	<0.002	<0.002	<0.002
9/2/2022					

Prediction Limit

Constituent: Selenium (mg/L) Analysis Run 11/5/2022 1:42 PM View: Appendix I

Plant Arkwright Client: Southern Company Data: Arkwright No 3

	ARGWA-3 (bg)	ARGWA-5 (bg)	ARGWC-7	ARGWC-15	ARGWA-12 (bg)	ARGWA-13 (bg)	ARGWC-16	ARGWC-17	ARGWC-18
12/16/1997	<0.005	<0.005							
6/30/1998	<0.005	<0.005							
12/2/1998	<0.005	<0.005							
6/8/1999	<0.005	<0.005							
12/7/1999	<0.005	<0.005							
6/15/2000	<0.005	<0.005							
12/12/2000	<0.005	<0.005							
12/5/2001	<0.005	<0.005							
6/26/2002	<0.005	<0.005							
12/3/2002	<0.005	<0.005							
6/11/2003	<0.005	<0.005							
12/10/2003	<0.005	<0.005							
6/15/2004	<0.005	<0.005							
12/14/2004	<0.005	<0.005							
6/2/2005	<0.005	<0.005							
12/14/2005	<0.005	<0.005	<0.005						
4/5/2006	<0.005	<0.005	<0.005						
10/30/2006	<0.005	<0.005	<0.005						
5/10/2007	<0.005	<0.005	<0.005						
11/17/2007	<0.005	<0.005	<0.005						
5/2/2008			<0.005						
5/3/2008	<0.005	<0.005							
10/22/2008	<0.005	<0.005	<0.005						
5/5/2009				0.0041					
5/6/2009		0.0047			0.0054				
5/7/2009	0.0049					0.0059			
5/12/2009							0.0062	0.0059	0.0039
5/13/2009									
5/14/2009			0.0046						
12/1/2009		0.0046	0.0019						
12/3/2009					0.006	0.0057			
12/4/2009	<0.005			<0.005				<0.005	<0.005
12/5/2009							<0.005		
5/25/2010		<0.005			<0.005	<0.005		<0.005	<0.005
5/26/2010			<0.005				<0.005		
6/1/2010	<0.005			<0.005					
6/2/2010									
11/9/2010		<0.005			<0.005		<0.005	<0.005	
11/10/2010	<0.005		<0.005	<0.005		<0.005			<0.005
5/18/2011									
5/19/2011									<0.005
5/24/2011		<0.005			<0.005		<0.005	<0.005	
5/25/2011	<0.005		<0.005	<0.005		<0.005			
11/9/2011				<0.005					
11/10/2011		<0.005			<0.005	<0.005			
11/11/2011			<0.005						
11/12/2011	<0.005						<0.005	<0.005	<0.005
5/17/2012			<0.005						0.0006 (J)
5/18/2012		<0.005			<0.005				
5/30/2012						<0.005	0.0016 (J)	<0.005	
5/31/2012	<0.005			<0.005					
11/9/2012		<0.005	<0.005		<0.005	<0.005	<0.005	<0.005	

Prediction Limit

Constituent: Selenium (mg/L) Analysis Run 11/5/2022 1:42 PM View: Appendix I
 Plant Arkwright Client: Southern Company Data: Arkwright No 3

	ARGWA-3 (bg)	ARGWA-5 (bg)	ARGWC-7	ARGWC-15	ARGWA-12 (bg)	ARGWA-13 (bg)	ARGWC-16	ARGWC-17	ARGWC-18
11/10/2012				<0.005					<0.005
11/11/2012	<0.005								
5/7/2013									<0.005
5/8/2013		<0.005	<0.005		<0.005			<0.005	
5/9/2013						<0.005			
5/13/2013	<0.005			<0.005			<0.005		
11/5/2013			<0.005						<0.005
11/6/2013		<0.005			<0.005		<0.005	<0.005	
11/11/2013						<0.005			
11/12/2013	<0.005			<0.005					
5/20/2014		<0.005			<0.005			<0.005	
5/21/2014			<0.005			<0.005	<0.005		
5/28/2014				<0.005					<0.005
5/29/2014	<0.005								
11/17/2014		<0.005	<0.005				<0.005	<0.005	
11/18/2014					<0.005	0.0083			
11/19/2014									<0.005
11/20/2014				<0.005					
4/7/2015		<0.005	<0.005			<0.005	<0.005	<0.005	
4/14/2015	<0.005			<0.005	<0.005				
4/15/2015									<0.005
10/28/2015		<0.005	<0.005			0.023	<0.005	<0.005	
10/29/2015					<0.005				<0.005
11/3/2015	<0.005			<0.005					
11/4/2015									
6/23/2016	<0.005	<0.005	0.00029 (J)	<0.005	<0.005	0.0096			
6/24/2016							0.0014	<0.005	<0.005
8/30/2016		<0.005			<0.005				
8/31/2016	<0.005		<0.005			0.017			
9/1/2016							0.0014	<0.005	<0.005
9/2/2016				0.0005 (J)					
10/24/2016					<0.005				
10/25/2016	<0.005	<0.005	<0.005			0.0257	0.0015 (J)	<0.005	
10/26/2016				<0.005					<0.005
1/23/2017					<0.005				
1/24/2017	<0.005	<0.005				0.0097			
1/26/2017			<0.005	<0.005			0.00071 (J)	<0.005	
1/27/2017									<0.005
4/11/2017	<0.005	<0.005			<0.005	0.0079	0.0011 (J)	<0.005	
4/12/2017			<0.005	<0.005					<0.005
6/20/2017	<0.005	<0.005							
6/21/2017				<0.005	0.00025 (J)	0.019	0.00075 (J)	<0.005	<0.005
6/22/2017			<0.005						
10/25/2017	0.00032 (J)	0.00027 (J)	<0.005		0.00027 (J)	0.022			<0.005
10/26/2017				0.0004 (J)			0.0012 (J)	<0.005	
4/9/2018						0.0063			
4/10/2018	<0.005	<0.005	<0.005	0.00044 (J)	0.00033 (J)		0.0013	<0.005	
4/11/2018									<0.005
10/16/2018	<0.005	<0.005			<0.005	0.021	0.00072 (J)		
10/17/2018			<0.005	<0.005				<0.005	<0.005
3/26/2019						0.015			
3/27/2019	<0.005	<0.005		<0.005	<0.005				<0.005

Prediction Limit

Constituent: Selenium (mg/L) Analysis Run 11/5/2022 1:42 PM View: Appendix I
 Plant Arkwright Client: Southern Company Data: Arkwright No 3

	ARGWA-3 (bg)	ARGWA-5 (bg)	ARGWC-7	ARGWC-15	ARGWA-12 (bg)	ARGWA-13 (bg)	ARGWC-16	ARGWC-17	ARGWC-18
3/28/2019			<0.005				0.0017	<0.005	
8/19/2019						0.034			
8/20/2019	<0.005	<0.005			<0.005		<0.005		
8/21/2019			<0.005	<0.005				<0.005	<0.005
10/7/2019									
10/8/2019	<0.005	<0.005		<0.005	<0.005	0.03			
10/9/2019			<0.005				0.0018 (J)	<0.005	<0.005
4/6/2020									
4/7/2020	<0.005	<0.005			<0.005	0.0094			
4/8/2020			<0.005	<0.005			0.0022 (J)	<0.005	
4/9/2020									<0.005
8/18/2020	<0.005	<0.005	<0.005		<0.005	0.019		<0.005	
8/19/2020				<0.005			0.0029 (J)		
8/20/2020									<0.005
9/29/2020	<0.005	<0.005	<0.005	<0.005	<0.005	0.021	0.0025 (J)	<0.005	
9/30/2020									<0.005
10/1/2020									
12/1/2020									
2/9/2021	<0.005	<0.005		<0.005	<0.005	0.019	0.0019 (J)	<0.005	
2/10/2021			<0.005						<0.005
2/11/2021									
9/7/2021					<0.005	0.032			
9/8/2021	<0.005	<0.005		<0.005			0.0024 (J)	<0.005	
9/9/2021									<0.005
9/10/2021			0.0028 (J)						
2/1/2022	<0.005	<0.005			<0.005	0.013			
2/2/2022								0.00076 (J)	
2/3/2022			<0.005	<0.005			0.0032 (J)		<0.005
8/30/2022		<0.005			<0.005				
8/31/2022	<0.005		<0.005	<0.005		0.0259	0.00287 (J)		
9/2/2022								<0.005	<0.005

Prediction Limit

Constituent: Selenium (mg/L) Analysis Run 11/5/2022 1:42 PM View: Appendix I
Plant Arkwright Client: Southern Company Data: Arkwright No 3

	ARGWC-10	ARGWC-9	ARGWC-8	ARGWA-14 (bg)	ARGWA-24 (bg)
12/16/1997					
6/30/1998					
12/2/1998					
6/8/1999					
12/7/1999					
6/15/2000					
12/12/2000					
12/5/2001					
6/26/2002					
12/3/2002					
6/11/2003					
12/10/2003					
6/15/2004					
12/14/2004					
6/2/2005					
12/14/2005					
4/5/2006					
10/30/2006					
5/10/2007					
11/17/2007					
5/2/2008					
5/3/2008					
10/22/2008					
5/5/2009					
5/6/2009					
5/7/2009					
5/12/2009					
5/13/2009	0.005	0.0049			
5/14/2009			0.0035		
12/1/2009					
12/3/2009	0.0057	0.0045	<0.005		
12/4/2009					
12/5/2009					
5/25/2010					
5/26/2010	<0.005	<0.005	<0.005		
6/1/2010					
6/2/2010				<0.005	
11/9/2010	<0.005	<0.005	<0.005		
11/10/2010				<0.005	
5/18/2011			<0.005		
5/19/2011	<0.005	<0.005		<0.005	
5/24/2011					
5/25/2011					
11/9/2011				<0.005	
11/10/2011					
11/11/2011	<0.005	<0.005	<0.005		
11/12/2011					
5/17/2012	<0.005	<0.005	<0.005		
5/18/2012					
5/30/2012				<0.005	
5/31/2012					
11/9/2012	<0.005	<0.005	<0.005		

Prediction Limit

Constituent: Selenium (mg/L) Analysis Run 11/5/2022 1:42 PM View: Appendix I
Plant Arkwright Client: Southern Company Data: Arkwright No 3

	ARGWC-10	ARGWC-9	ARGWC-8	ARGWA-14 (bg)	ARGWA-24 (bg)
11/10/2012					
11/11/2012				<0.005	
5/7/2013	<0.005	<0.005	<0.005		
5/8/2013					
5/9/2013				<0.005	
5/13/2013					
11/5/2013			<0.005		
11/6/2013	<0.005	<0.005			
11/11/2013				<0.005	
11/12/2013					
5/20/2014	<0.005				
5/21/2014		<0.005	<0.005		
5/28/2014					
5/29/2014				<0.005	
11/17/2014					
11/18/2014	<0.005	<0.005	<0.005		
11/19/2014				<0.005	
11/20/2014					
4/7/2015	<0.005	<0.005	<0.005		
4/14/2015				<0.005	
4/15/2015					
10/28/2015	<0.005	<0.005	<0.005		
10/29/2015					
11/3/2015					
11/4/2015				<0.005	
6/23/2016	<0.005	<0.005	<0.005	<0.005	
6/24/2016					
8/30/2016					
8/31/2016		0.00024 (J)	<0.005	0.00077 (J)	
9/1/2016	<0.005				
9/2/2016					
10/24/2016					
10/25/2016	<0.005	<0.005		<0.005	
10/26/2016			<0.005		
1/23/2017				0.00037 (J)	
1/24/2017					
1/26/2017		<0.005	<0.005		
1/27/2017	<0.005				
4/11/2017				<0.005	
4/12/2017	<0.005	<0.005	<0.005		
6/20/2017				0.00044 (J)	
6/21/2017			<0.005		
6/22/2017	<0.005	<0.005			
10/25/2017		0.00029 (J)		0.00038 (J)	
10/26/2017	<0.005		<0.005		
4/9/2018				<0.005	
4/10/2018					
4/11/2018	<0.005	<0.005	<0.005		
10/16/2018				<0.005	
10/17/2018	<0.005	<0.005	<0.005		
3/26/2019					
3/27/2019				<0.005	

Prediction Limit

Constituent: Selenium (mg/L) Analysis Run 11/5/2022 1:42 PM View: Appendix I
Plant Arkwright Client: Southern Company Data: Arkwright No 3

	ARGWC-10	ARGWC-9	ARGWC-8	ARGWA-14 (bg)	ARGWA-24 (bg)
3/28/2019	<0.005	<0.005	<0.005		
8/19/2019					
8/20/2019					
8/21/2019	<0.005	<0.005	<0.005	<0.005	
10/7/2019				<0.005	
10/8/2019					
10/9/2019	<0.005	<0.005	<0.005		
4/6/2020				<0.005	
4/7/2020					
4/8/2020	<0.005				
4/9/2020		<0.005	<0.005		
8/18/2020					
8/19/2020	<0.005	<0.005		<0.005	
8/20/2020			<0.005		
9/29/2020				<0.005	
9/30/2020					
10/1/2020	<0.005	<0.005	<0.005		
12/1/2020					<0.005
2/9/2021	<0.005				<0.005
2/10/2021		<0.005	<0.005		
2/11/2021				<0.005	
9/7/2021					
9/8/2021				<0.005	<0.005
9/9/2021		<0.005	<0.005		
9/10/2021	0.0017 (J)				
2/1/2022					<0.005
2/2/2022	<0.005	<0.005	<0.005	<0.005	
2/3/2022					
8/30/2022					
8/31/2022	<0.005	<0.005	<0.005	<0.005	<0.005
9/2/2022					

Prediction Limit

Constituent: Silver (mg/L) Analysis Run 11/5/2022 1:42 PM View: Appendix I

Plant Arkwright Client: Southern Company Data: Arkwright No 3

	ARGWA-5 (bg)	ARGWA-3 (bg)	ARGWC-7	ARGWC-15	ARGWA-12 (bg)	ARGWA-13 (bg)	ARGWC-18	ARGWC-17	ARGWC-16
12/16/1997	<0.001	0.035 (o)							
6/30/1998	<0.001	<0.001							
12/2/1998	<0.001	<0.001							
6/8/1999	<0.001	<0.001							
12/7/1999	<0.001	<0.001							
6/15/2000	<0.001	<0.001							
12/12/2000	<0.001	0.0051							
12/5/2001	<0.001	<0.001							
6/26/2002	<0.001	<0.001							
12/3/2002	<0.001	<0.001							
6/11/2003	<0.001	<0.001							
12/10/2003	0.002 (o)	0.003							
6/15/2004	<0.001	<0.001							
12/14/2004	<0.001	<0.001							
6/2/2005	<0.001	<0.001							
12/14/2005	<0.001	<0.001	<0.001						
4/5/2006	<0.001	<0.001	<0.001						
10/30/2006	<0.001	0.002	<0.001						
5/10/2007	<0.001	0.0017	0.0011						
11/17/2007	<0.001	<0.001	<0.001						
5/2/2008			<0.001						
5/3/2008	<0.001	<0.001							
10/22/2008	<0.001	<0.001	<0.001						
5/5/2009				<0.001					
5/6/2009	<0.001				<0.001				
5/7/2009		<0.001				<0.001			
5/12/2009							<0.001	0.0011	0.0011
5/13/2009									
5/14/2009			<0.001						
12/1/2009	<0.001		<0.001						
12/3/2009					<0.001	<0.001			
12/4/2009		<0.001		0.00098			0.0008	0.0014	
12/5/2009									0.0004
5/25/2010	<0.001				<0.001	<0.001	<0.001	<0.001	
5/26/2010			<0.001						<0.001
6/1/2010		<0.001		<0.001					
6/2/2010									
11/9/2010	<0.001				<0.001			<0.001	<0.001
11/10/2010		<0.001	<0.001	<0.001		<0.001	<0.001		
5/18/2011									
5/19/2011							<0.001		
5/24/2011	<0.001				<0.001			<0.001	<0.001
5/25/2011		<0.001	<0.001	<0.001		<0.001			
5/17/2012			<0.001				<0.001		
5/18/2012	<0.001				0.0001 (J)				
5/30/2012						<0.001		<0.001	<0.001
5/31/2012		<0.001		<0.001					
11/9/2012	<0.001		<0.001		<0.001	<0.001		<0.001	<0.001
11/10/2012				<0.001			<0.001		
11/11/2012		<0.001							
5/7/2013							<0.001		
5/8/2013	<0.001		<0.001		<0.001			<0.001	

Prediction Limit

Constituent: Silver (mg/L) Analysis Run 11/5/2022 1:42 PM View: Appendix I
Plant Arkwright Client: Southern Company Data: Arkwright No 3

	ARGWA-5 (bg)	ARGWA-3 (bg)	ARGWC-7	ARGWC-15	ARGWA-12 (bg)	ARGWA-13 (bg)	ARGWC-18	ARGWC-17	ARGWC-16
9/7/2021					<0.001	<0.001			
9/8/2021	<0.001	<0.001		<0.001				<0.001	<0.001
9/9/2021							<0.001		
9/10/2021			<0.001						
2/1/2022	<0.001	<0.001			<0.001	<0.001			
2/2/2022								<0.001	
2/3/2022			<0.001	<0.001			<0.001		<0.001
8/30/2022	<0.001				<0.001				
8/31/2022		<0.001	<0.001	<0.001		<0.001			<0.001
9/2/2022							<0.001	<0.001	

Prediction Limit

Constituent: Silver (mg/L) Analysis Run 11/5/2022 1:42 PM View: Appendix I
Plant Arkwright Client: Southern Company Data: Arkwright No 3

	ARGWC-10	ARGWC-8	ARGWC-9	ARGWA-14 (bg)	ARGWA-24 (bg)
12/16/1997					
6/30/1998					
12/2/1998					
6/8/1999					
12/7/1999					
6/15/2000					
12/12/2000					
12/5/2001					
6/26/2002					
12/3/2002					
6/11/2003					
12/10/2003					
6/15/2004					
12/14/2004					
6/2/2005					
12/14/2005					
4/5/2006					
10/30/2006					
5/10/2007					
11/17/2007					
5/2/2008					
5/3/2008					
10/22/2008					
5/5/2009					
5/6/2009					
5/7/2009					
5/12/2009					
5/13/2009	0.0009		0.0024 (o)		
5/14/2009		<0.001			
12/1/2009					
12/3/2009	0.00083	<0.001	0.0007		
12/4/2009					
12/5/2009					
5/25/2010					
5/26/2010	<0.001	<0.001	<0.001		
6/1/2010					
6/2/2010				<0.001	
11/9/2010	<0.001	<0.001	<0.001		
11/10/2010				<0.001	
5/18/2011		<0.001			
5/19/2011	<0.001		<0.001	<0.001	
5/24/2011					
5/25/2011					
5/17/2012	<0.001	<0.001	<0.001		
5/18/2012					
5/30/2012				<0.001	
5/31/2012					
11/9/2012	<0.001	<0.001	<0.001		
11/10/2012					
11/11/2012				<0.001	
5/7/2013	<0.001	<0.001	<0.001		
5/8/2013					

Prediction Limit

Constituent: Silver (mg/L) Analysis Run 11/5/2022 1:42 PM View: Appendix I
 Plant Arkwright Client: Southern Company Data: Arkwright No 3

	ARGWC-10	ARGWC-8	ARGWC-9	ARGWA-14 (bg)	ARGWA-24 (bg)
5/9/2013				<0.001	
5/13/2013					
11/5/2013		<0.001			
11/6/2013	<0.001		<0.001		
11/11/2013				<0.001	
11/12/2013					
5/20/2014	<0.001				
5/21/2014		<0.001	<0.001		
5/28/2014					
5/29/2014				<0.001	
11/17/2014					
11/18/2014	<0.001	<0.001	<0.001		
11/19/2014				<0.001	
11/20/2014					
4/7/2015	<0.001	<0.001	<0.001		
4/14/2015				<0.001	
4/15/2015					
10/28/2015	<0.001	<0.001	<0.001		
10/29/2015					
11/3/2015					
11/4/2015				<0.001	
6/23/2016	<0.001	<0.001	<0.001	<0.001	
6/24/2016					
10/24/2016					
10/25/2016	<0.001		<0.001	<0.001	
10/26/2016		<0.001			
4/11/2017				<0.001	
4/12/2017	<0.001	<0.001	<0.001		
10/25/2017			<0.001	<0.001	
10/26/2017	<0.001	<0.001			
4/9/2018				<0.001	
4/10/2018					
4/11/2018	<0.001	<0.001	<0.001		
10/16/2018				<0.001	
10/17/2018	<0.001	<0.001	<0.001		
3/26/2019					
3/27/2019				<0.001	
3/28/2019	<0.001	<0.001	<0.001		
10/7/2019				0.00022 (J)	
10/8/2019					
10/9/2019	<0.001	<0.001	<0.001		
4/6/2020				<0.001	
4/7/2020					
4/8/2020	<0.001				
4/9/2020		<0.001	<0.001		
9/29/2020				<0.001	
9/30/2020					
10/1/2020	<0.001	<0.001	<0.001		
12/1/2020					<0.001 (D)
2/9/2021	<0.001				<0.001
2/10/2021		<0.001	<0.001		
2/11/2021				<0.001	

Prediction Limit

Constituent: Silver (mg/L) Analysis Run 11/5/2022 1:42 PM View: Appendix I
Plant Arkwright Client: Southern Company Data: Arkwright No 3

	ARGWC-10	ARGWC-8	ARGWC-9	ARGWA-14 (bg)	ARGWA-24 (bg)
9/7/2021					
9/8/2021				<0.001	<0.001
9/9/2021		<0.001	<0.001		
9/10/2021	<0.001				
2/1/2022					<0.001
2/2/2022	<0.001	<0.001	<0.001	<0.001	
2/3/2022					
8/30/2022					
8/31/2022	<0.001	<0.001	<0.001	<0.001	<0.001
9/2/2022					

FIGURE E.

Appendix III Interwell Prediction Limits - Significant Results

Plant Arkwright Client: Southern Company Data: Arkwright No 3 Printed 11/5/2022, 3:51 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)	ARGWC-18	0.96	n/a	9/2/2022	2.53	Yes	90	n/a	n/a	52.22	n/a	n/a	0.0002368	NP Inter (NDs) 1 of 2
Boron (mg/L)	ARGWC-8	0.96	n/a	8/31/2022	1.05	Yes	90	n/a	n/a	52.22	n/a	n/a	0.0002368	NP Inter (NDs) 1 of 2
pH (SU)	ARGWC-16	7.04	5.53	8/31/2022	5.18	Yes	99	n/a	n/a	0	n/a	n/a	0.0003943	NP Inter (normality) 1 of 2
pH (SU)	ARGWC-17	7.04	5.53	9/2/2022	5.11	Yes	99	n/a	n/a	0	n/a	n/a	0.0003943	NP Inter (normality) 1 of 2

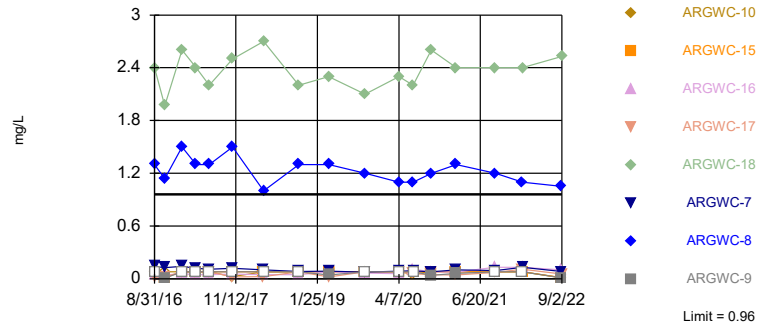
Appendix III Interwell Prediction Limits - All Results

Plant Arkwright Client: Southern Company Data: Arkwright No 3 Printed 11/5/2022, 3:51 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)	ARGWC-10	0.96	n/a	8/31/2022	0.00863	No	90	n/a	n/a	52.22	n/a	n/a	0.0002368	NP Inter (NDs) 1 of 2
Boron (mg/L)	ARGWC-15	0.96	n/a	8/31/2022	0.0137	No	90	n/a	n/a	52.22	n/a	n/a	0.0002368	NP Inter (NDs) 1 of 2
Boron (mg/L)	ARGWC-16	0.96	n/a	8/31/2022	0.101	No	90	n/a	n/a	52.22	n/a	n/a	0.0002368	NP Inter (NDs) 1 of 2
Boron (mg/L)	ARGWC-17	0.96	n/a	9/2/2022	0.0555	No	90	n/a	n/a	52.22	n/a	n/a	0.0002368	NP Inter (NDs) 1 of 2
Boron (mg/L)	ARGWC-18	0.96	n/a	9/2/2022	2.53	Yes	90	n/a	n/a	52.22	n/a	n/a	0.0002368	NP Inter (NDs) 1 of 2
Boron (mg/L)	ARGWC-7	0.96	n/a	8/31/2022	0.0815	No	90	n/a	n/a	52.22	n/a	n/a	0.0002368	NP Inter (NDs) 1 of 2
Boron (mg/L)	ARGWC-8	0.96	n/a	8/31/2022	1.05	Yes	90	n/a	n/a	52.22	n/a	n/a	0.0002368	NP Inter (NDs) 1 of 2
Boron (mg/L)	ARGWC-9	0.96	n/a	8/31/2022	0.00885	No	90	n/a	n/a	52.22	n/a	n/a	0.0002368	NP Inter (NDs) 1 of 2
Calcium (mg/L)	ARGWC-10	190	n/a	8/31/2022	7.65	No	90	n/a	n/a	0	n/a	n/a	0.0002368	NP Inter (normality) 1 of 2
Calcium (mg/L)	ARGWC-15	190	n/a	8/31/2022	25	No	90	n/a	n/a	0	n/a	n/a	0.0002368	NP Inter (normality) 1 of 2
Calcium (mg/L)	ARGWC-16	190	n/a	8/31/2022	42.4	No	90	n/a	n/a	0	n/a	n/a	0.0002368	NP Inter (normality) 1 of 2
Calcium (mg/L)	ARGWC-17	190	n/a	9/2/2022	23.7	No	90	n/a	n/a	0	n/a	n/a	0.0002368	NP Inter (normality) 1 of 2
Calcium (mg/L)	ARGWC-18	190	n/a	9/2/2022	52.4	No	90	n/a	n/a	0	n/a	n/a	0.0002368	NP Inter (normality) 1 of 2
Calcium (mg/L)	ARGWC-7	190	n/a	8/31/2022	9.99	No	90	n/a	n/a	0	n/a	n/a	0.0002368	NP Inter (normality) 1 of 2
Calcium (mg/L)	ARGWC-8	190	n/a	8/31/2022	43	No	90	n/a	n/a	0	n/a	n/a	0.0002368	NP Inter (normality) 1 of 2
Calcium (mg/L)	ARGWC-9	190	n/a	8/31/2022	4.77	No	90	n/a	n/a	0	n/a	n/a	0.0002368	NP Inter (normality) 1 of 2
Chloride (mg/L)	ARGWC-10	15.1	n/a	8/31/2022	4.2	No	198	n/a	n/a	0.5051	n/a	n/a	0.00005031	NP Inter (normality) 1 of 2
Chloride (mg/L)	ARGWC-15	15.1	n/a	8/31/2022	3.01	No	198	n/a	n/a	0.5051	n/a	n/a	0.00005031	NP Inter (normality) 1 of 2
Chloride (mg/L)	ARGWC-16	15.1	n/a	8/31/2022	5.67	No	198	n/a	n/a	0.5051	n/a	n/a	0.00005031	NP Inter (normality) 1 of 2
Chloride (mg/L)	ARGWC-17	15.1	n/a	9/2/2022	2.74	No	198	n/a	n/a	0.5051	n/a	n/a	0.00005031	NP Inter (normality) 1 of 2
Chloride (mg/L)	ARGWC-18	15.1	n/a	9/2/2022	6.52	No	198	n/a	n/a	0.5051	n/a	n/a	0.00005031	NP Inter (normality) 1 of 2
Chloride (mg/L)	ARGWC-7	15.1	n/a	8/31/2022	4.59	No	198	n/a	n/a	0.5051	n/a	n/a	0.00005031	NP Inter (normality) 1 of 2
Chloride (mg/L)	ARGWC-8	15.1	n/a	8/31/2022	5.86	No	198	n/a	n/a	0.5051	n/a	n/a	0.00005031	NP Inter (normality) 1 of 2
Chloride (mg/L)	ARGWC-9	15.1	n/a	8/31/2022	5.28J	No	198	n/a	n/a	0.5051	n/a	n/a	0.00005031	NP Inter (normality) 1 of 2
Fluoride (mg/L)	ARGWC-10	0.53	n/a	8/31/2022	0.1ND	No	100	n/a	n/a	32	n/a	n/a	0.0001928	NP Inter (normality) 1 of 2
Fluoride (mg/L)	ARGWC-15	0.53	n/a	8/31/2022	0.169	No	100	n/a	n/a	32	n/a	n/a	0.0001928	NP Inter (normality) 1 of 2
Fluoride (mg/L)	ARGWC-16	0.53	n/a	8/31/2022	0.1ND	No	100	n/a	n/a	32	n/a	n/a	0.0001928	NP Inter (normality) 1 of 2
Fluoride (mg/L)	ARGWC-17	0.53	n/a	9/2/2022	0.082J	No	100	n/a	n/a	32	n/a	n/a	0.0001928	NP Inter (normality) 1 of 2
Fluoride (mg/L)	ARGWC-18	0.53	n/a	9/2/2022	0.141	No	100	n/a	n/a	32	n/a	n/a	0.0001928	NP Inter (normality) 1 of 2
Fluoride (mg/L)	ARGWC-7	0.53	n/a	8/31/2022	0.1ND	No	100	n/a	n/a	32	n/a	n/a	0.0001928	NP Inter (normality) 1 of 2
Fluoride (mg/L)	ARGWC-8	0.53	n/a	8/31/2022	0.172	No	100	n/a	n/a	32	n/a	n/a	0.0001928	NP Inter (normality) 1 of 2
Fluoride (mg/L)	ARGWC-9	0.53	n/a	8/31/2022	0.147	No	100	n/a	n/a	32	n/a	n/a	0.0001928	NP Inter (normality) 1 of 2
pH (SU)	ARGWC-10	7.04	5.53	8/31/2022	5.96	No	99	n/a	n/a	0	n/a	n/a	0.0003943	NP Inter (normality) 1 of 2
pH (SU)	ARGWC-15	7.04	5.53	8/31/2022	6.46	No	99	n/a	n/a	0	n/a	n/a	0.0003943	NP Inter (normality) 1 of 2
pH (SU)	ARGWC-16	7.04	5.53	8/31/2022	5.18	Yes	99	n/a	n/a	0	n/a	n/a	0.0003943	NP Inter (normality) 1 of 2
pH (SU)	ARGWC-17	7.04	5.53	9/2/2022	5.11	Yes	99	n/a	n/a	0	n/a	n/a	0.0003943	NP Inter (normality) 1 of 2
pH (SU)	ARGWC-18	7.04	5.53	9/2/2022	6.03	No	99	n/a	n/a	0	n/a	n/a	0.0003943	NP Inter (normality) 1 of 2
pH (SU)	ARGWC-7	7.04	5.53	8/31/2022	5.98	No	99	n/a	n/a	0	n/a	n/a	0.0003943	NP Inter (normality) 1 of 2
pH (SU)	ARGWC-8	7.04	5.53	8/31/2022	6.38	No	99	n/a	n/a	0	n/a	n/a	0.0003943	NP Inter (normality) 1 of 2
pH (SU)	ARGWC-9	7.04	5.53	8/31/2022	5.98	No	99	n/a	n/a	0	n/a	n/a	0.0003943	NP Inter (normality) 1 of 2
Sulfate (mg/L)	ARGWC-10	950	n/a	8/31/2022	0.494	No	206	n/a	n/a	17.48	n/a	n/a	0.00004917	NP Inter (normality) 1 of 2
Sulfate (mg/L)	ARGWC-15	950	n/a	8/31/2022	5.64	No	206	n/a	n/a	17.48	n/a	n/a	0.00004917	NP Inter (normality) 1 of 2
Sulfate (mg/L)	ARGWC-16	950	n/a	8/31/2022	243	No	206	n/a	n/a	17.48	n/a	n/a	0.00004917	NP Inter (normality) 1 of 2
Sulfate (mg/L)	ARGWC-17	950	n/a	9/2/2022	151	No	206	n/a	n/a	17.48	n/a	n/a	0.00004917	NP Inter (normality) 1 of 2
Sulfate (mg/L)	ARGWC-18	950	n/a	9/2/2022	198	No	206	n/a	n/a	17.48	n/a	n/a	0.00004917	NP Inter (normality) 1 of 2
Sulfate (mg/L)	ARGWC-7	950	n/a	8/31/2022	36.3	No	206	n/a	n/a	17.48	n/a	n/a	0.00004917	NP Inter (normality) 1 of 2
Sulfate (mg/L)	ARGWC-8	950	n/a	8/31/2022	54.1	No	206	n/a	n/a	17.48	n/a	n/a	0.00004917	NP Inter (normality) 1 of 2
Sulfate (mg/L)	ARGWC-9	950	n/a	8/31/2022	1.31	No	206	n/a	n/a	17.48	n/a	n/a	0.00004917	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	ARGWC-10	1500	n/a	8/31/2022	69	No	85	n/a	n/a	0	n/a	n/a	0.0002674	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	ARGWC-15	1500	n/a	8/31/2022	125	No	85	n/a	n/a	0	n/a	n/a	0.0002674	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	ARGWC-16	1500	n/a	8/31/2022	375	No	85	n/a	n/a	0	n/a	n/a	0.0002674	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	ARGWC-17	1500	n/a	9/2/2022	240	No	85	n/a	n/a	0	n/a	n/a	0.0002674	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	ARGWC-18	1500	n/a	9/2/2022	444	No	85	n/a	n/a	0	n/a	n/a	0.0002674	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	ARGWC-7	1500	n/a	8/31/2022	101	No	85	n/a	n/a	0	n/a	n/a	0.0002674	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	ARGWC-8	1500	n/a	8/31/2022	248	No	85	n/a	n/a	0	n/a	n/a	0.0002674	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	ARGWC-9	1500	n/a	8/31/2022	63	No	85	n/a	n/a	0	n/a	n/a	0.0002674	NP Inter (normality) 1 of 2

Exceeds Limit: ARGWC-18, ARGWC-8

Prediction Limit
Interwell Non-parametric

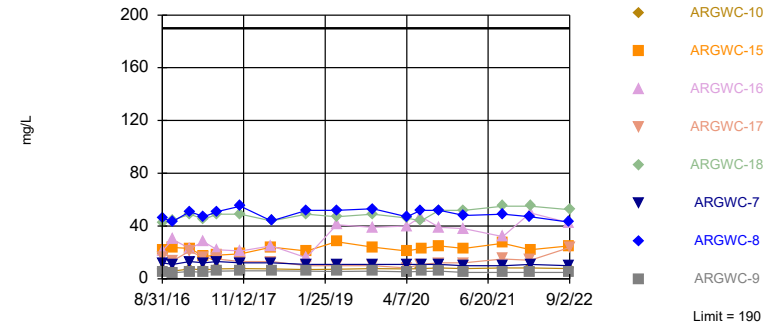


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 90 background values. 52.22% NDs. Annual per-constituent alpha = 0.003783. Individual comparison alpha = 0.0002368 (1 of 2). Comparing 8 points to limit.

Constituent: Boron Analysis Run 11/5/2022 3:47 PM View: Appendix III
Plant Arkwright Client: Southern Company Data: Arkwright No 3

Within Limit

Prediction Limit
Interwell Non-parametric

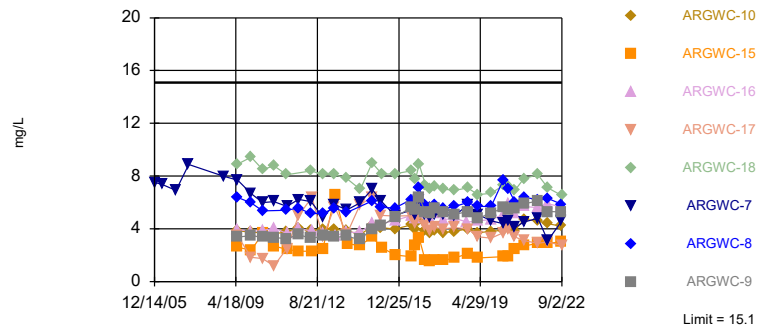


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Francia normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 90 background values. Annual per-constituent alpha = 0.003783. Individual comparison alpha = 0.0002368 (1 of 2). Comparing 8 points to limit.

Constituent: Calcium Analysis Run 11/5/2022 3:47 PM View: Appendix III
Plant Arkwright Client: Southern Company Data: Arkwright No 3

Within Limit

Prediction Limit
Interwell Non-parametric

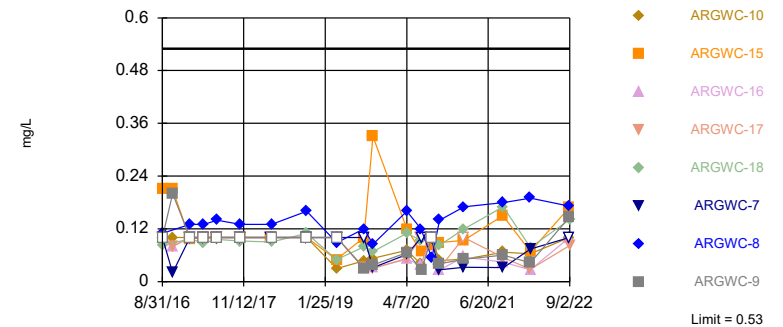


Non-parametric test used in lieu of parametric prediction limit because the Chi Squared normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 198 background values. 0.5051% NDs. Annual per-constituent alpha = 0.0008047. Individual comparison alpha = 0.00005031 (1 of 2). Comparing 8 points to limit.

Constituent: Chloride Analysis Run 11/5/2022 3:47 PM View: Appendix III
Plant Arkwright Client: Southern Company Data: Arkwright No 3

Within Limit

Prediction Limit
Interwell Non-parametric

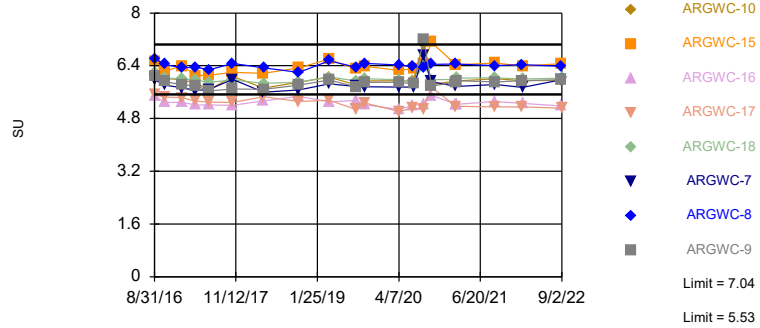


Non-parametric test used in lieu of parametric prediction limit because the Chi Squared normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 100 background values. 32% NDs. Annual per-constituent alpha = 0.00308. Individual comparison alpha = 0.0001928 (1 of 2). Comparing 8 points to limit.

Constituent: Fluoride Analysis Run 11/5/2022 3:47 PM View: Appendix III
Plant Arkwright Client: Southern Company Data: Arkwright No 3

Exceeds Limits: ARGWC-16, ARGWC-17

Prediction Limit
Interwell Non-parametric

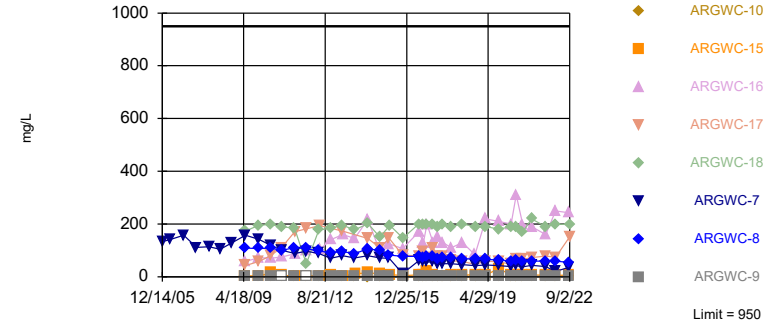


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Francia normality test showed the data to be non-normal at the 0.01 alpha level. Limits are highest and lowest of 99 background values. Annual per-constituent alpha = 0.0063. Individual comparison alpha = 0.0003943 (1 of 2). Comparing 8 points to limit.

Constituent: pH Analysis Run 11/5/2022 3:47 PM View: Appendix III
Plant Arkwright Client: Southern Company Data: Arkwright No 3

Within Limit

Prediction Limit
Interwell Non-parametric

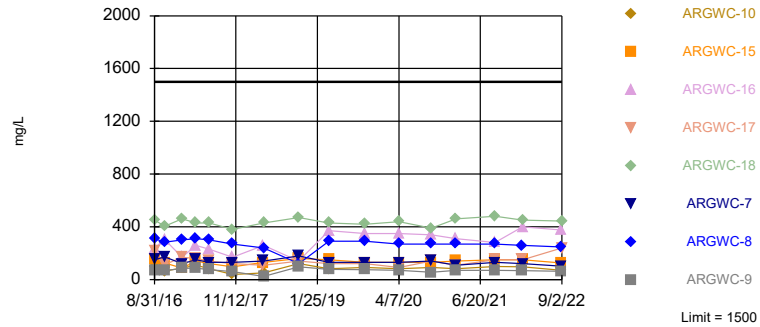


Non-parametric test used in lieu of parametric prediction limit because the Chi Squared normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 206 background values. 17.48% NDs. Annual per-constituent alpha = 0.0007864. Individual comparison alpha = 0.00004917 (1 of 2). Comparing 8 points to limit.

Constituent: Sulfate Analysis Run 11/5/2022 3:47 PM View: Appendix III
Plant Arkwright Client: Southern Company Data: Arkwright No 3

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 85 background values. Annual per-constituent alpha = 0.004269. Individual comparison alpha = 0.0002674 (1 of 2). Comparing 8 points to limit.

Constituent: Total Dissolved Solids Analysis Run 11/5/2022 3:47 PM View: Appendix III
Plant Arkwright Client: Southern Company Data: Arkwright No 3

Prediction Limit

Constituent: Boron (mg/L) Analysis Run 11/5/2022 3:51 PM View: Appendix III

Plant Arkwright Client: Southern Company Data: Arkwright No 3

	ARGWA-12 (bg)	ARGWA-5 (bg)	ARGWA-14 (bg)	ARGWC-7	ARGWC-8	ARGWA-3 (bg)	ARGWA-13 (bg)	ARGWC-9	ARGWC-17
8/30/2016	0.032 (J)	<0.08							
8/31/2016			0.04 (J)	0.14	1.3	<0.08	0.1	<0.08	
9/1/2016									0.022 (J)
9/2/2016									
10/24/2016	0.0406 (J)								
10/25/2016		0.0073 (J)	0.065 (J)	0.126		0.0068 (J)	0.204	0.0071 (J)	0.0219 (J)
10/26/2016					1.14				
1/23/2017	0.023 (J)		0.031 (J)						
1/24/2017		<0.08				<0.08	0.064		
1/26/2017				0.14	1.5			<0.08	<0.08
1/27/2017									
4/11/2017	0.025 (J)	<0.08	0.043 (J)			<0.08	0.081		<0.08
4/12/2017				0.12	1.3			<0.08	
6/20/2017		<0.08	0.029 (J)			<0.08			
6/21/2017	<0.08				1.3		0.13		<0.08
6/22/2017				0.11				<0.08	
10/25/2017	0.028 (J)	<0.08	0.041 (J)	0.12		<0.08	0.17	<0.08	
10/26/2017					1.5				0.023 (J)
4/9/2018			0.04 (J)				0.059		
4/10/2018	0.027 (J)	<0.08		0.1		<0.08			0.026 (J)
4/11/2018					1			<0.08	
10/16/2018	0.023 (J)	<0.08	0.046 (J)			<0.08	0.34		
10/17/2018				0.084	1.3			<0.08	<0.08
3/26/2019							0.32		
3/27/2019	<0.08	<0.08	0.032 (J)			<0.08			
3/28/2019				0.087	1.3			0.044 (J)	0.022 (J)
10/7/2019			<0.08						
10/8/2019	<0.08	<0.08				<0.08	0.68		
10/9/2019				0.076 (J)	1.2			<0.08	<0.08
4/6/2020			0.041 (J)						
4/7/2020	<0.08	<0.08				<0.08	0.23		
4/8/2020				0.086					<0.08
4/9/2020					1.1			<0.08	
6/23/2020					1.1				
6/24/2020									0.059 (J)
6/25/2020		<0.08	<0.08	0.091		<0.08	0.32		
6/26/2020	<0.08							<0.08	
9/29/2020	<0.08	<0.08	0.039 (J)	0.078 (J)		<0.08	0.35		0.045 (J)
9/30/2020									
10/1/2020					1.2			0.041 (J)	
12/1/2020									
2/9/2021	<0.08	<0.08				<0.08	0.38		0.042 (J)
2/10/2021				0.1	1.3			0.06 (J)	
2/11/2021			0.062 (J)						
9/7/2021	<0.08						0.96		
9/8/2021		<0.08	<0.08			<0.08			0.074 (J)
9/9/2021					1.2			<0.08	
9/10/2021				0.093					
2/1/2022	<0.08	<0.08				<0.08	0.3		
2/2/2022			<0.08		1.1			<0.08	0.11
2/3/2022				0.13					
8/30/2022	0.0214	0.00855							

Prediction Limit

Constituent: Boron (mg/L) Analysis Run 11/5/2022 3:51 PM View: Appendix III
 Plant Arkwright Client: Southern Company Data: Arkwright No 3

	ARGWC-16	ARGWC-18	ARGWC-10	ARGWC-15	ARGWA-24 (bg)
8/30/2016					
8/31/2016					
9/1/2016	0.049 (J)	2.4	<0.08		
9/2/2016				<0.08	
10/24/2016					
10/25/2016	0.042 (J)		<0.08		
10/26/2016		1.97		0.0138 (J)	
1/23/2017					
1/24/2017					
1/26/2017	0.059			<0.08	
1/27/2017		2.6	<0.08		
4/11/2017	0.045 (J)				
4/12/2017		2.4	<0.08	<0.08	
6/20/2017					
6/21/2017	0.045 (J)	2.2		<0.08	
6/22/2017			<0.08		
10/25/2017		2.5			
10/26/2017	0.054		0.026 (J)	<0.08	
4/9/2018					
4/10/2018	0.048 (J)			<0.08	
4/11/2018		2.7	<0.08		
10/16/2018	0.048 (J)				
10/17/2018		2.2	<0.08	<0.08	
3/26/2019					
3/27/2019		2.3		<0.08	
3/28/2019	0.08		<0.08		
10/7/2019					
10/8/2019				<0.08	
10/9/2019	0.065 (J)	2.1	<0.08		
4/6/2020					
4/7/2020					
4/8/2020	0.059 (J)		<0.08	<0.08	
4/9/2020		2.3			
6/23/2020			0.053 (J)		
6/24/2020	0.11	2.2			
6/25/2020				<0.08	
6/26/2020					
9/29/2020	0.081			<0.08	
9/30/2020		2.6			
10/1/2020			0.082		
12/1/2020					<0.08
2/9/2021	0.076 (J)		<0.08	<0.08	<0.08
2/10/2021		2.4			
2/11/2021					
9/7/2021					
9/8/2021	0.13			<0.08	<0.08
9/9/2021		2.4			
9/10/2021			<0.08		
2/1/2022					<0.08
2/2/2022			<0.08		
2/3/2022	0.13	2.4		<0.08	
8/30/2022					

Prediction Limit

Constituent: Boron (mg/L) Analysis Run 11/5/2022 3:51 PM View: Appendix III
Plant Arkwright Client: Southern Company Data: Arkwright No 3

	ARGWC-16	ARGWC-18	ARGWC-10	ARGWC-15	ARGWA-24 (bg)
8/31/2022	0.101		0.00863	0.0137	0.0151
9/2/2022		2.53			

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 11/5/2022 3:51 PM View: Appendix III

Plant Arkwright Client: Southern Company Data: Arkwright No 3

	ARGWA-12 (bg)	ARGWA-5 (bg)	ARGWA-14 (bg)	ARGWC-7	ARGWC-8	ARGWA-3 (bg)	ARGWA-13 (bg)	ARGWC-9	ARGWC-17
8/30/2016	11	5.1							
8/31/2016			31	12	46	5.4	110	5.2	
9/1/2016									16
9/2/2016									
10/24/2016	10.4								
10/25/2016		4.76	38.5	10.9		4.47	150	4.64	13.5
10/26/2016					43.3				
1/23/2017	12		25						
1/24/2017		5.6				5.8	78		
1/26/2017				13	51			5.5	21
1/27/2017									
4/11/2017	12	4.7	33			5.3	78		16
4/12/2017				12	47			4.9	
6/20/2017		5.4	34			5.8			
6/21/2017	12				51		110		15
6/22/2017				13				5.8	
10/25/2017	13	6	28	12		5.9	120	6.1	
10/26/2017					55				13
4/9/2018			30				49		
4/10/2018	13	5.3		12		5.9			13
4/11/2018					44			6	
10/16/2018	12	5.6	41			5.8	110		
10/17/2018				11	52			5.8	10
3/26/2019							95		
3/27/2019	11	4.5	42			5.4			
3/28/2019				11	52			5.6	10
10/7/2019			36						
10/8/2019	13	5.9				6	190		
10/9/2019				11	53			5.7	10
4/6/2020			43						
4/7/2020	12	4				5.5	61		
4/8/2020				11					8.3
4/9/2020					47			5.3	
6/23/2020					52				
6/24/2020									11
6/25/2020		6.1	27	11		5.7	100		
6/26/2020	15							5.6	
9/29/2020	14	6.6	29	11		5.9	120		12
9/30/2020									
10/1/2020					52			5.7	
12/1/2020									
2/9/2021	14	6.2				5.8	110		12
2/10/2021				9.9	48			4.8	
2/11/2021			40						
9/7/2021	14						190		
9/8/2021		7.3	24			5.8			15
9/9/2021					49			4.7	
9/10/2021				10					
2/1/2022	12	6.5				5.4	73		
2/2/2022			48		47			4.7	14
2/3/2022				11					
8/30/2022	14.2	9.56 (J)							

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 11/5/2022 3:51 PM View: Appendix III
 Plant Arkwright Client: Southern Company Data: Arkwright No 3

	ARGWC-16	ARGWC-18	ARGWC-10	ARGWC-15	ARGWA-24 (bg)
8/30/2016					
8/31/2016					
9/1/2016	21	42	6.6		
9/2/2016				22	
10/24/2016					
10/25/2016	29.8		5.89		
10/26/2016		44.3		23.7	
1/23/2017					
1/24/2017					
1/26/2017	23			23	
1/27/2017		49	7.4		
4/11/2017	28				
4/12/2017		45	6.7	17	
6/20/2017					
6/21/2017	22	49		18	
6/22/2017			7.5		
10/25/2017		49			
10/26/2017	21		7.8	19	
4/9/2018					
4/10/2018	25			24	
4/11/2018		44	7.4		
10/16/2018	16				
10/17/2018		49	7.1	21	
3/26/2019					
3/27/2019		47		28	
3/28/2019	41		7.3		
10/7/2019					
10/8/2019				24	
10/9/2019	39	49	7.7		
4/6/2020					
4/7/2020					
4/8/2020	40		7.5	21	
4/9/2020		46			
6/23/2020			7.7		
6/24/2020	47	44			
6/25/2020				23	
6/26/2020					
9/29/2020	39			25	
9/30/2020		52			
10/1/2020			8.1		
12/1/2020					13
2/9/2021	38		7.7	23	9.7
2/10/2021		52			
2/11/2021					
9/7/2021					
9/8/2021	32			27	10
9/9/2021		55			
9/10/2021			8.1		
2/1/2022					9.6
2/2/2022			8.3		
2/3/2022	50	55		22	
8/30/2022					

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 11/5/2022 3:51 PM View: Appendix III
Plant Arkwright Client: Southern Company Data: Arkwright No 3

	ARGWC-16	ARGWC-18	ARGWC-10	ARGWC-15	ARGWA-24 (bg)
8/31/2022	42.4		7.65	25	10.1
9/2/2022		52.4			

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 11/5/2022 3:51 PM View: Appendix III

Plant Arkwright Client: Southern Company Data: Arkwright No 3

	ARGWA-3 (bg)	ARGWA-5 (bg)	ARGWC-7	ARGWC-15	ARGWA-12 (bg)	ARGWA-13 (bg)	ARGWC-17	ARGWC-16	ARGWC-18
12/16/1997	6.2	3.8							
6/30/1998	4.6	2.9							
12/2/1998	3.13	1.76							
6/8/1999	1.56	1.97							
12/7/1999	3.05	1.98							
6/15/2000	3.35	2.08							
12/12/2000	2.42	2.02							
12/5/2001	2.62	2.03							
6/26/2002	3.4	2.52							
12/3/2002	3.04	2.12							
6/11/2003	3.02	2.43							
12/10/2003	2.9	1.93							
6/15/2004	2.05	2.42							
12/14/2004	2.78	2.44							
6/2/2005	3.15	2.79							
12/14/2005	3.38	2.77	7.52						
4/5/2006	3.49	2.8	7.38						
10/30/2006	2.84	3.09	6.9						
5/10/2007	3.68	3.93	8.88						
11/17/2007	2.69	<0.021	13.5 (o)						
5/2/2008			12.9 (o)						
5/3/2008	2.85	3.52							
10/22/2008	2.99	3.15	7.97						
5/5/2009				2.61					
5/6/2009		3.49			10.7				
5/7/2009	2.96					4.24			
5/12/2009							3.5	3.96	8.89
5/13/2009									
5/14/2009			7.68						
12/1/2009		3.26	6.66						
12/3/2009					10.1	2.66			
12/4/2009	2.97			2.37			1.85		9.43
12/5/2009								3.81	
5/25/2010		3.62			7.11	3.29	1.74		8.49
5/26/2010			6					3.85	
6/1/2010	3.23			3.71					
6/2/2010									
11/9/2010		3.38			8.4		1.18	4.08	
11/10/2010	2.86		6.07	2.69		3.82			8.77
5/18/2011									
5/19/2011									8.11
5/24/2011		3.62			9.07		2.51	3.63	
5/25/2011	2.86		5.7	2.44		4.92			
11/9/2011				2.3					
11/10/2011		3.74			10.3	4.48			
11/11/2011			6.23						
11/12/2011	2.83						4.99	4.03	12.3 (o)
5/17/2012			6.06						8.4
5/18/2012		3.6			10.1				
5/30/2012						4.72	6.4	3.82	
5/31/2012	2.68			2.29					
11/9/2012		3.66	4.9		8.73	5.1	3.37	3.69	

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 11/5/2022 3:51 PM View: Appendix III
 Plant Arkwright Client: Southern Company Data: Arkwright No 3

	ARGWA-3 (bg)	ARGWA-5 (bg)	ARGWC-7	ARGWC-15	ARGWA-12 (bg)	ARGWA-13 (bg)	ARGWC-17	ARGWC-16	ARGWC-18
11/10/2012				2.46					8.13
11/11/2012	2.63								
5/7/2013									8.11
5/8/2013		4.16	5.85		8.06		5.67		
5/9/2013						3.85			
5/13/2013	0.364			6.55				3.5	
11/5/2013			5.44						7.82
11/6/2013		3.87			10.2		3.62	3.74	
11/11/2013						5.26			
11/12/2013	2.95			2.86					
5/20/2014		4.4			8.2		5.82		
5/21/2014			5.96			4.47		3.74	
5/28/2014				2.75					6.99
5/29/2014	2.64								
11/17/2014		4.2	7				6.4	4.4	
11/18/2014					10	6.4			
11/19/2014									9
11/20/2014				3.4					
4/7/2015		4.53	6.08			5.04	5.02	4.38	
4/14/2015	2.78			2.56	10.7				
4/15/2015									8.14
10/28/2015		4.47	5.02			6.3	4.98	4.62	
10/29/2015					10.7				8.17
11/3/2015	2.66			2.01					
11/4/2015									
6/23/2016	3.3	4.6	5.4	1.9	11	5.7			
6/24/2016							5	5	8.4
8/30/2016		4.3			11				
8/31/2016	2.7		5.1			5.7			
9/1/2016							4.4	4.8	7.8
9/2/2016				2.7					
10/24/2016					12				
10/25/2016	3.1	5	6.2			7.9	5.1	5.4	
10/26/2016				3.3					8.9
1/23/2017					11				
1/24/2017	2.5	5.1				4.4			
1/26/2017			5.1	1.6			4.2	5.2	
1/27/2017									7.3
4/11/2017	2.4	4.4			11	4.3	3.9	4.8	
4/12/2017			4.9	1.5					7
6/20/2017	2.5	5							
6/21/2017				1.6	11	5.5	4.1	5.2	7.2
6/22/2017			5.1						
10/25/2017	2.3	5.3	5.1		10	5.2			7
10/26/2017				1.6			4	4.7	
4/9/2018						3.8			
4/10/2018	2.4	5.1	5	1.8	9.9		4.1	4.8	
4/11/2018									6.9
10/16/2018	2.5	5.3			11	6		4.5	
10/17/2018			5.8	2.1			4		7.1
3/26/2019						4.6			
3/27/2019	2.5	4.3		1.8	11				6.6

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 11/5/2022 3:51 PM View: Appendix III
 Plant Arkwright Client: Southern Company Data: Arkwright No 3

	ARGWA-3 (bg)	ARGWA-5 (bg)	ARGWC-7	ARGWC-15	ARGWA-12 (bg)	ARGWA-13 (bg)	ARGWC-17	ARGWC-16	ARGWC-18
3/28/2019			5.1				3.4	4.6	
10/7/2019									
10/8/2019	2.6	5.7		9.4 (o)	64 (o)	6.7			
10/9/2019			4.6				3.3	4.7	6.7
4/6/2020									
4/7/2020	2.9	3.7			11	3.8			
4/8/2020			4.4	1.9			3.7	5.1	
4/9/2020									7.3
6/23/2020									
6/24/2020							4	5.9	7.2
6/25/2020	2.8	4.2	4.6	1.9		5.8			
6/26/2020					12				
9/29/2020	2.7	4.6	4.1	2.5	12	5.7	3.4	5.2	
9/30/2020									6.9
10/1/2020									
12/1/2020									
2/9/2021	3	5.1		2.7	15	6	3.1	5.7	
2/10/2021			4.5						7.8
2/11/2021									
9/7/2021					14	8.2			
9/8/2021	3	5.3		2.9			2.9	5.6	
9/9/2021									8.1
9/10/2021			4.8						
2/1/2022	3.4	5.3			12	4.6			
2/2/2022							3		
2/3/2022			3.1	2.9				5.9	7.1
8/30/2022		8.47			12.8 (J)				
8/31/2022	2.94		4.59	3.01		6.89		5.67	
9/2/2022							2.74		6.52

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 11/5/2022 3:51 PM View: Appendix III
Plant Arkwright Client: Southern Company Data: Arkwright No 3

	ARGWC-9	ARGWC-10	ARGWC-8	ARGWA-14 (bg)	ARGWA-24 (bg)
12/16/1997					
6/30/1998					
12/2/1998					
6/8/1999					
12/7/1999					
6/15/2000					
12/12/2000					
12/5/2001					
6/26/2002					
12/3/2002					
6/11/2003					
12/10/2003					
6/15/2004					
12/14/2004					
6/2/2005					
12/14/2005					
4/5/2006					
10/30/2006					
5/10/2007					
11/17/2007					
5/2/2008					
5/3/2008					
10/22/2008					
5/5/2009					
5/6/2009					
5/7/2009					
5/12/2009					
5/13/2009	3.37	3.85			
5/14/2009			6.38		
12/1/2009					
12/3/2009	3.49	3.73	5.96		
12/4/2009					
12/5/2009					
5/25/2010					
5/26/2010	3.35	3.7	5.37		
6/1/2010					
6/2/2010				15.1	
11/9/2010	3.34	3.6	<0.071 (o)		
11/10/2010				14.8	
5/18/2011			5.4		
5/19/2011	3.25	3.79		28.2 (o)	
5/24/2011					
5/25/2011					
11/9/2011				32.8 (o)	
11/10/2011					
11/11/2011	3.57	4.07	5.58		
11/12/2011					
5/17/2012	3.27	3.84	5.15		
5/18/2012					
5/30/2012				30.8 (o)	
5/31/2012					
11/9/2012	3.45	3.99	5.2		

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 11/5/2022 3:51 PM View: Appendix III

Plant Arkwright Client: Southern Company Data: Arkwright No 3

	ARGWC-9	ARGWC-10	ARGWC-8	ARGWA-14 (bg)	ARGWA-24 (bg)
11/10/2012					
11/11/2012				24.6 (o)	
5/7/2013	3.35	3.94	5.56		
5/8/2013					
5/9/2013				27.2 (o)	
5/13/2013					
11/5/2013			5.24		
11/6/2013	3.45	3.89			
11/11/2013				12.7	
11/12/2013					
5/20/2014		3.54			
5/21/2014	3.18		7.34 (o)		
5/28/2014					
5/29/2014				20 (o)	
11/17/2014					
11/18/2014	4	4.2	6.1		
11/19/2014				19 (o)	
11/20/2014					
4/7/2015	4.22	4.09	5.62		
4/14/2015				13.6	
4/15/2015					
10/28/2015	4.87	3.98	5.58		
10/29/2015					
11/3/2015					
11/4/2015				12.4	
6/23/2016	5.6	4.3	6.2	9	
6/24/2016					
8/30/2016					
8/31/2016	5.4		5.6	5.4	
9/1/2016		4			
9/2/2016					
10/24/2016					
10/25/2016	6.4	4.6		9.3	
10/26/2016			7.1		
1/23/2017				5.1	
1/24/2017					
1/26/2017	5.3		5.8		
1/27/2017		3.9			
4/11/2017				4.1	
4/12/2017	5.2	3.7	5.6		
6/20/2017				4.1	
6/21/2017			5.8		
6/22/2017	5.5	3.9			
10/25/2017	5.3			3.8	
10/26/2017		3.7	5.5		
4/9/2018				3.9	
4/10/2018					
4/11/2018	5.1	3.8	5.7		
10/16/2018				4.3	
10/17/2018	5.3	4	6		
3/26/2019					
3/27/2019				4	

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 11/5/2022 3:51 PM View: Appendix III
Plant Arkwright Client: Southern Company Data: Arkwright No 3

	ARGWC-9	ARGWC-10	ARGWC-8	ARGWA-14 (bg)	ARGWA-24 (bg)
3/28/2019	4.8	3.7	5.7		
10/7/2019				4	
10/8/2019					
10/9/2019	5.2	3.8	5.7		
4/6/2020				4.2	
4/7/2020					
4/8/2020		3.9			
4/9/2020	5.6		7.7		
6/23/2020		4.2	7		
6/24/2020					
6/25/2020				4	
6/26/2020	5.4				
9/29/2020				4.1	
9/30/2020					
10/1/2020	5.5	3.9	6		
12/1/2020					12
2/9/2021		4.7			11
2/10/2021	5.9		6.4		
2/11/2021				4.6	
9/7/2021					
9/8/2021				4	11
9/9/2021	6.1		6.2		
9/10/2021		4.6			
2/1/2022					12
2/2/2022	5.3	4.4	6.3	4.2	
2/3/2022					
8/30/2022					
8/31/2022	5.28 (J)	4.2	5.86	3.92	12.3
9/2/2022					

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 11/5/2022 3:51 PM View: Appendix III

Plant Arkwright Client: Southern Company Data: Arkwright No 3

	ARGWA-12 (bg)	ARGWA-5 (bg)	ARGWA-14 (bg)	ARGWA-13 (bg)	ARGWA-3 (bg)	ARGWC-8	ARGWC-7	ARGWC-9	ARGWC-18
8/30/2016	<0.1	<0.1							
8/31/2016			0.12 (J)	<0.1	<0.1	0.11 (J)	<0.1	<0.1	
9/1/2016									0.083 (J)
9/2/2016									
10/24/2016	0.1 (J)								
10/25/2016		0.09 (J)	0.53	0.08 (J)	0.14 (J)		0.02 (J)	0.2 (J)	
10/26/2016						0.43 (o)			0.32 (o)
1/23/2017	<0.1		0.4						
1/24/2017		<0.1		<0.1	<0.1				
1/26/2017						0.13 (J)	<0.1	<0.1	
1/27/2017									0.097 (J)
4/11/2017	<0.1	<0.1	0.31	<0.1	<0.1				
4/12/2017						0.13 (J)	<0.1	<0.1	0.088 (J)
6/20/2017		<0.1	0.27		<0.1				
6/21/2017	<0.1			<0.1		0.14 (J)			0.096 (J)
6/22/2017							<0.1	<0.1	
10/25/2017	<0.1	<0.1	0.29	<0.1	<0.1		<0.1	<0.1	0.092 (J)
10/26/2017						0.13 (J)			
4/9/2018			0.25	<0.1					
4/10/2018	<0.1	<0.1			<0.1		<0.1		
4/11/2018						0.13 (J)		<0.1	0.09 (J)
10/16/2018	0.1 (J)	<0.1	0.33	<0.1	0.1 (J)				
10/17/2018						0.16 (J)	<0.1	<0.1	0.11 (J)
3/26/2019				<0.1					
3/27/2019	0.031 (J)	0.026 (J)	0.15 (J)		0.034 (J)				0.05 (J)
3/28/2019						0.089 (J)	<0.1	<0.1	
8/19/2019				<0.1					
8/20/2019	0.049 (J)	0.047 (J)			0.053 (J)				
8/21/2019			0.35			0.12 (J)	<0.1	0.03 (J)	0.079 (J)
10/7/2019			0.12 (J)						
10/8/2019	0.27 (J)	0.05 (J)		0.033 (J)	0.056 (J)				
10/9/2019						0.085 (J)	0.032 (J)	0.038 (J)	0.068 (J)
4/6/2020			0.28						
4/7/2020	0.082 (J)	0.072 (J)		0.086 (J)	0.098 (J)				
4/8/2020							0.062 (J)		
4/9/2020						0.16		0.066 (J)	0.11
6/23/2020						0.12			
6/24/2020									0.094 (J)
6/25/2020		0.042 (J)	0.17	0.03 (J)	0.06 (J)		<0.1		
6/26/2020	0.051 (J)							0.027 (J)	
8/18/2020	0.041 (J)	<0.1		<0.1	<0.1		<0.1		
8/19/2020			0.12					<0.1	
8/20/2020						0.054 (J)			<0.1
9/29/2020	0.06 (J)	0.051 (J)	0.13	0.032 (J)	0.065 (J)		0.027 (J)		
9/30/2020									0.082 (J)
10/1/2020						0.14		0.041 (J)	
12/1/2020									
2/9/2021	0.07 (J)	0.055 (J)		0.036 (J)	0.084 (J)				
2/10/2021						0.17	0.033 (J)	0.051 (J)	0.12
2/11/2021			0.25						
9/7/2021	0.11			0.075 (J)					
9/8/2021		0.1	0.2		0.1				

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 11/5/2022 3:51 PM View: Appendix III
 Plant Arkwright Client: Southern Company Data: Arkwright No 3

	ARGWC-17	ARGWC-10	ARGWC-16	ARGWC-15	ARGWA-24 (bg)
8/30/2016					
8/31/2016					
9/1/2016	<0.1	<0.1	<0.1		
9/2/2016				0.21	
10/24/2016					
10/25/2016	0.08 (J)	0.1 (J)	0.08 (J)		
10/26/2016				0.21 (J)	
1/23/2017					
1/24/2017					
1/26/2017	<0.1		<0.1	0.097 (J)	
1/27/2017		<0.1			
4/11/2017	<0.1		<0.1		
4/12/2017		<0.1		<0.1	
6/20/2017					
6/21/2017	<0.1		<0.1	<0.1	
6/22/2017		<0.1			
10/25/2017					
10/26/2017	<0.1	<0.1	<0.1	<0.1	
4/9/2018					
4/10/2018	<0.1		<0.1	<0.1	
4/11/2018		<0.1			
10/16/2018			<0.1		
10/17/2018	<0.1	<0.1		0.1 (J)	
3/26/2019					
3/27/2019				0.05 (J)	
3/28/2019	<0.1	0.03 (J)	<0.1		
8/19/2019					
8/20/2019			0.033 (J)		
8/21/2019	0.031 (J)	0.047 (J)		0.1 (J)	
10/7/2019					
10/8/2019				0.33 (J)	
10/9/2019	0.03 (J)	0.053 (J)	0.031 (J)		
4/6/2020					
4/7/2020					
4/8/2020	0.053 (J)	0.071 (J)	0.051 (J)	0.12	
4/9/2020					
6/23/2020		0.04 (J)			
6/24/2020	<0.1		0.038 (J)		
6/25/2020				0.067 (J)	
6/26/2020					
8/18/2020	<0.1				
8/19/2020		<0.1	<0.1	0.081 (J)	
8/20/2020					
9/29/2020	0.029 (J)		0.026 (J)	0.089 (J)	
9/30/2020					
10/1/2020		0.048 (J)			
12/1/2020					<0.1
2/9/2021	<0.1	0.051 (J)	0.056 (J)	0.094 (J)	0.057 (J)
2/10/2021					
2/11/2021					
9/7/2021					
9/8/2021	0.055 (J)		0.044 (J)	0.15	0.1

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 11/5/2022 3:51 PM View: Appendix III
Plant Arkwright Client: Southern Company Data: Arkwright No 3

	ARGWC-17	ARGWC-10	ARGWC-16	ARGWC-15	ARGWA-24 (bg)
9/9/2021					
9/10/2021		0.067 (J)			
2/1/2022					0.054 (J)
2/2/2022	0.028 (J)	0.063 (J)			
2/3/2022			0.027 (J)	0.068 (J)	
8/30/2022					
8/31/2022		<0.1	<0.1	0.169	0.164
9/2/2022	0.082 (J)				

Prediction Limit

Constituent: pH (SU) Analysis Run 11/5/2022 3:51 PM View: Appendix III
Plant Arkwright Client: Southern Company Data: Arkwright No 3

	ARGWA-5 (bg)	ARGWC-7	ARGWA-3 (bg)	ARGWC-8	ARGWC-10	ARGWC-9	ARGWC-18	ARGWC-17	ARGWC-16
9/8/2021	5.93		5.97					5.15	5.32
9/9/2021				6.4		5.91	6.04		
9/10/2021		5.83			6.01				
2/1/2022	5.83		5.93						
2/2/2022				6.43	5.95	5.95		5.15	
2/3/2022		5.74					6		5.26
8/30/2022	5.88								
8/31/2022		5.98	5.96	6.38	5.96	5.98			5.18
9/2/2022							6.03	5.11	

Prediction Limit

Constituent: pH (SU) Analysis Run 11/5/2022 3:51 PM View: Appendix III
 Plant Arkwright Client: Southern Company Data: Arkwright No 3

	ARGWC-15	ARGWA-12 (bg)	ARGWA-14 (bg)	ARGWA-13 (bg)	ARGWA-24 (bg)
8/30/2016		6.82 (o)			
8/31/2016			7.55 (o)	6.67 (o)	
9/1/2016					
9/2/2016	6.54				
10/24/2016		5.99			
10/25/2016	6.25		6.92	5.8	
10/26/2016	6.23				
1/23/2017		5.94	6.76		
1/24/2017				5.82	
1/26/2017	6.4				
1/27/2017					
4/11/2017		5.88	6.72	5.78	
4/12/2017	6.1				
6/20/2017			6.66		
6/21/2017	6.11	5.73		5.67	
6/22/2017					
10/25/2017		6.13	6.77	5.72	
10/26/2017	6.2				
4/9/2018			6.6	5.78	
4/10/2018	6.17	5.95			
4/11/2018					
10/16/2018		5.94	6.63	5.74	
10/17/2018	6.34				
3/26/2019				5.96	
3/27/2019	6.6	6	6.83		
3/28/2019					
3/29/2019					
8/19/2019				5.59	
8/20/2019		5.89			
8/21/2019	6.3		6.94		
10/7/2019			6.69		
10/8/2019	6.38	5.93		5.74	
10/9/2019					
4/6/2020			6.65		
4/7/2020		5.91		5.84	
4/8/2020	6.26				
4/9/2020					
6/23/2020					
6/24/2020					
6/25/2020	6.32		6.38	5.8	
6/26/2020		5.94			
8/18/2020		6.48		6.15	
8/19/2020	6.47		6.62		
8/20/2020					
9/29/2020	7.11	5.88	6.8	5.75	
9/30/2020					
10/1/2020					
12/1/2020					5.85
2/9/2021	6.43	5.92		5.79	5.69
2/10/2021					
2/11/2021			7.02		
9/7/2021		5.89		5.71	

Prediction Limit

Constituent: pH (SU) Analysis Run 11/5/2022 3:51 PM View: Appendix III
Plant Arkwright Client: Southern Company Data: Arkwright No 3

	ARGWC-15	ARGWA-12 (bg)	ARGWA-14 (bg)	ARGWA-13 (bg)	ARGWA-24 (bg)
9/8/2021	6.48		7.04		5.8
9/9/2021					
9/10/2021					
2/1/2022		5.97		5.86	5.77
2/2/2022			6.41		
2/3/2022	6.39				
8/30/2022		5.88			
8/31/2022	6.46		6.8	5.53	5.65
9/2/2022					

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 11/5/2022 3:51 PM View: Appendix III

Plant Arkwright Client: Southern Company Data: Arkwright No 3

	ARGWA-3 (bg)	ARGWA-5 (bg)	ARGWC-7	ARGWC-15	ARGWA-12 (bg)	ARGWA-13 (bg)	ARGWC-16	ARGWC-17	ARGWC-18
12/16/1997	<1	2							
6/30/1998	<1	<1							
12/2/1998	0.654	0.709							
6/8/1999	1.46	<1							
12/7/1999	0.399	0.531							
6/15/2000	0.601	0.733							
12/12/2000	0.45	0.621							
12/5/2001	0.094	0.274							
6/26/2002	4.95	0.505							
12/3/2002	0.911	0.515							
6/11/2003	1.85	0.508							
12/10/2003	0.77	0.578							
6/15/2004	1.3	1.23							
12/14/2004	1.02	1.22							
6/2/2005	0.834	0.908							
12/14/2005	<1	0.825	133						
4/5/2006	<1	1.06	140						
10/30/2006	0.865	0.996	157						
5/10/2007	1.03	1.01	111						
11/17/2007	0.818	1.72	114						
5/2/2008			104						
5/3/2008	0.941	1.2							
10/22/2008	<1	<1	129						
5/5/2009				2.89					
5/6/2009		0.807			16.6				
5/7/2009	0.46					21.4			
5/12/2009							57.9	42.6	173
5/13/2009									
5/14/2009			157						
12/1/2009		0.644	142						
12/3/2009					12.3	11.6			
12/4/2009	1.06			3.13				58.4	195
12/5/2009							72.1		
5/25/2010		0.509			6.44	12.3		79.4	199
5/26/2010			120				70.3		
6/1/2010	5.56			14.5					
6/2/2010									
11/9/2010		0.348			6.83		74.8	111	
11/10/2010	0.241		100	5.04		10.6			189
5/18/2011									
5/19/2011									186
5/24/2011		0.532			8.55		87.2	171	
5/25/2011	0.383		88.8	4.57		11.9			
11/9/2011				4.15					
11/10/2011		0.209			9.74	100			
11/11/2011			96.6						
11/12/2011	<1						97.9	182	49.9
5/17/2012			88.9						177
5/18/2012		0.471			8.72				
5/30/2012						61.3	103	194	
5/31/2012	0.426			4.05					
11/9/2012		0.589	70.1		5.9	202	140	842 (o)	

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 11/5/2022 3:51 PM View: Appendix III
 Plant Arkwright Client: Southern Company Data: Arkwright No 3

	ARGWA-3 (bg)	ARGWA-5 (bg)	ARGWC-7	ARGWC-15	ARGWA-12 (bg)	ARGWA-13 (bg)	ARGWC-16	ARGWC-17	ARGWC-18
11/10/2012				5.68					184
11/11/2012	0.455 (J)								
5/7/2013									195
5/8/2013		0.504	80.5		5.66			173	
5/9/2013						33.4			
5/13/2013	2.61			2.45			160		
11/5/2013			71.6						178
11/6/2013		<1			9.04		146	471 (o)	
11/11/2013						316			
11/12/2013	<1			11.8					
5/20/2014		0.5 (J)			7.25			145	
5/21/2014			80.4			162	217		
5/28/2014				14.6					201
5/29/2014	1.41								
11/17/2014		<1	71				97	110	
11/18/2014					10	370			
11/19/2014									150
11/20/2014				12					
4/7/2015		0.469	70.6			235	125	145	
4/14/2015	0.377			8.71	9.61				
4/15/2015									195
10/28/2015		0.28	12.2			737	106	82.7	
10/29/2015					10.2				147
11/3/2015	0.215			5.14					
11/4/2015									
6/23/2016	<1	<1	61	6.9	9.8	380			
6/24/2016							170	79	200
8/30/2016		<1			9.5				
8/31/2016	<1		57			600			
9/1/2016							130	94	200
9/2/2016				6.1					
10/24/2016					11				
10/25/2016	0.3 (J)	0.4 (J)	56			820	200	73	
10/26/2016				22					200
1/23/2017					11				
1/24/2017	<1	<1				370			
1/26/2017			57	5.1			130	110	
1/27/2017									200
4/11/2017	<1	<1			9.1	340	150	77	
4/12/2017			47	4					190
6/20/2017	<1	<1							
6/21/2017				4.6	10	540	130	75	200
6/22/2017			49						
10/25/2017	<1	<1	49		11	580			190
10/26/2017				5.4			110	61	
4/9/2018						230			
4/10/2018	<1	<1	46	6.7	9.5		130	58	
4/11/2018									200
10/16/2018	<1	<1			10	520	84		
10/17/2018			42	6.8				47	190
3/26/2019						430			
3/27/2019	0.38 (J)	0.55 (J)		7.2	9.1				190

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 11/5/2022 3:51 PM View: Appendix III
 Plant Arkwright Client: Southern Company Data: Arkwright No 3

	ARGWA-3 (bg)	ARGWA-5 (bg)	ARGWC-7	ARGWC-15	ARGWA-12 (bg)	ARGWA-13 (bg)	ARGWC-16	ARGWC-17	ARGWC-18
3/28/2019			45				220	59	
10/7/2019									
10/8/2019	0.7 (J)	0.7 (J)		31	55	950			
10/9/2019			42				210	57	180
4/6/2020									
4/7/2020	0.67 (J)	<1			8	270			
4/8/2020			39	5.9			200	47	
4/9/2020									190
6/23/2020									
6/24/2020							310	67	190
6/25/2020	1.6	<1	42	5.6		410			
6/26/2020					9				
9/29/2020	<1	<1	38	7.7	8.3	540	200	66	
9/30/2020									170
10/1/2020									
12/1/2020									
2/9/2021	<1	<1		7.1	11	520	190	73	
2/10/2021			43						220
2/11/2021									
9/7/2021					9	870			
9/8/2021	<1	<1		6.2			160	79	
9/9/2021									190
9/10/2021			39						
2/1/2022	1.4	0.77 (J)			7.8	360			
2/2/2022								74	
2/3/2022			21	5.6			250		200
8/30/2022		0.519			7.11				
8/31/2022	0.399 (J)		36.3	5.64		855	243		
9/2/2022								151	198

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 11/5/2022 3:51 PM View: Appendix III
 Plant Arkwright Client: Southern Company Data: Arkwright No 3

	ARGWC-10	ARGWC-9	ARGWC-8	ARGWA-14 (bg)	ARGWA-24 (bg)
12/16/1997					
6/30/1998					
12/2/1998					
6/8/1999					
12/7/1999					
6/15/2000					
12/12/2000					
12/5/2001					
6/26/2002					
12/3/2002					
6/11/2003					
12/10/2003					
6/15/2004					
12/14/2004					
6/2/2005					
12/14/2005					
4/5/2006					
10/30/2006					
5/10/2007					
11/17/2007					
5/2/2008					
5/3/2008					
10/22/2008					
5/5/2009					
5/6/2009					
5/7/2009					
5/12/2009					
5/13/2009	0.984	0.938			
5/14/2009			109		
12/1/2009					
12/3/2009	0.544	0.422	107		
12/4/2009					
12/5/2009					
5/25/2010					
5/26/2010	0.37	0.262	109		
6/1/2010					
6/2/2010				129	
11/9/2010	0.299	<1	100		
11/10/2010				140	
5/18/2011			110		
5/19/2011	0.502	0.359		269	
5/24/2011					
5/25/2011					
11/9/2011				308	
11/10/2011					
11/11/2011	0.172	<1	107		
11/12/2011					
5/17/2012	0.438	0.398	98		
5/18/2012					
5/30/2012				296	
5/31/2012					
11/9/2012	0.537	0.545	90.4		

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 11/5/2022 3:51 PM View: Appendix III
 Plant Arkwright Client: Southern Company Data: Arkwright No 3

	ARGWC-10	ARGWC-9	ARGWC-8	ARGWA-14 (bg)	ARGWA-24 (bg)
11/10/2012					
11/11/2012				225	
5/7/2013	0.437	0.797	96.2		
5/8/2013					
5/9/2013				268	
5/13/2013					
11/5/2013			86.9		
11/6/2013	<1	0.86			
11/11/2013				132	
11/12/2013					
5/20/2014	0				
5/21/2014		1.02	106		
5/28/2014					
5/29/2014				216	
11/17/2014					
11/18/2014	<1	1.2	99		
11/19/2014				160	
11/20/2014					
4/7/2015	0.464	1.14	82.3		
4/14/2015				105	
4/15/2015					
10/28/2015	0.293	1.02	78		
10/29/2015					
11/3/2015					
11/4/2015				74.4	
6/23/2016	<1	1	78	18	
6/24/2016					
8/30/2016					
8/31/2016		1.1	72	19	
9/1/2016	<1				
9/2/2016					
10/24/2016					
10/25/2016	0.38 (J)	4.7 (o)		42	
10/26/2016			77		
1/23/2017				12	
1/24/2017					
1/26/2017		1.1	75		
1/27/2017	<1				
4/11/2017				7.1	
4/12/2017	<1	0.9 (J)	69		
6/20/2017				8.5	
6/21/2017			73		
6/22/2017	<1	0.99 (J)			
10/25/2017		0.95 (J)		9.1	
10/26/2017	<1		72		
4/9/2018				11	
4/10/2018					
4/11/2018	<1	0.9 (J)	69		
10/16/2018				14	
10/17/2018	<1	0.95 (J)	67		
3/26/2019					
3/27/2019				15	

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 11/5/2022 3:51 PM View: Appendix III
Plant Arkwright Client: Southern Company Data: Arkwright No 3

	ARGWC-10	ARGWC-9	ARGWC-8	ARGWA-14 (bg)	ARGWA-24 (bg)
3/28/2019	0.38 (J)	1	66		
10/7/2019				12	
10/8/2019					
10/9/2019	0.59 (J)	1.5	63		
4/6/2020				10	
4/7/2020					
4/8/2020	<1				
4/9/2020		1.1	59		
6/23/2020	<1		62		
6/24/2020					
6/25/2020				3.3	
6/26/2020		0.94 (J)			
9/29/2020				4.1	
9/30/2020					
10/1/2020	<1	0.82 (J)	57		
12/1/2020					7.5
2/9/2021	1.3				8.5
2/10/2021		1.7	60		
2/11/2021				10	
9/7/2021					
9/8/2021				3	6.8
9/9/2021		1.2	58		
9/10/2021	<1				
2/1/2022					6.8
2/2/2022	<1	1.4	59	8.6	
2/3/2022					
8/30/2022					
8/31/2022	0.494	1.31	54.1	2.58	6.94
9/2/2022					

Prediction Limit

Constituent: Total Dissolved Solids (mg/L) Analysis Run 11/5/2022 3:51 PM View: Appendix III
 Plant Arkwright Client: Southern Company Data: Arkwright No 3

	ARGWC-17	ARGWC-18	ARGWC-10	ARGWC-15	ARGWA-24 (bg)
8/30/2016					
8/31/2016					
9/1/2016	220	450	100		
9/2/2016				150	
10/24/2016					
10/25/2016	114		65		
10/26/2016		404		125	
1/23/2017					
1/24/2017					
1/26/2017	170			86	
1/27/2017		460	86		
4/11/2017	160				
4/12/2017		430	110	140	
6/20/2017					
6/21/2017	140	430		120	
6/22/2017			82		
10/25/2017		380			
10/26/2017	120		38	96	
4/9/2018					
4/10/2018	110			130	
4/11/2018		430	50		
10/16/2018					
10/17/2018	140	470	120	160	
3/26/2019					
3/27/2019		430		150	
3/28/2019	120		82		
10/7/2019					
10/8/2019				130	
10/9/2019	120	420	92		
4/6/2020					
4/7/2020					
4/8/2020	91		82	130	
4/9/2020		440			
9/29/2020	140			130	
9/30/2020		390			
10/1/2020			93		
12/1/2020					120
2/9/2021	110 (D)		81	140	110
2/10/2021		460			
2/11/2021					
9/7/2021					
9/8/2021	150			150	120
9/9/2021		480			
9/10/2021			100		
2/1/2022					120
2/2/2022	150		96		
2/3/2022		450		150	
8/30/2022					
8/31/2022			69	125	122
9/2/2022	240	444			

FIGURE F.

Appendix III Trend Tests - Significant Results

Plant Arkwright Client: Southern Company Data: Arkwright No 3 Printed 11/5/2022, 4:09 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Boron (mg/L)	ARGWA-13 (bg)	0.07802	79	63	Yes	17	0	n/a	n/a	0.01	NP
pH (SU)	ARGWC-17	-0.06226	-80	-74	Yes	19	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	ARGWA-13 (bg)	51.62	281	161	Yes	32	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	ARGWA-14 (bg)	-17.6	-315	-146	Yes	30	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	ARGWA-5 (bg)	-0.001691	-2.696	-2.58	Yes	54	33.33	n/a	n/a	0.01	NP
Sulfate (mg/L)	ARGWC-16	11.24	276	161	Yes	32	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	ARGWC-7	-6.543	-614	-214	Yes	39	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	ARGWC-8	-4.377	-436	-161	Yes	32	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	ARGWC-9	0.07128	224	152	Yes	31	6.452	n/a	n/a	0.01	NP

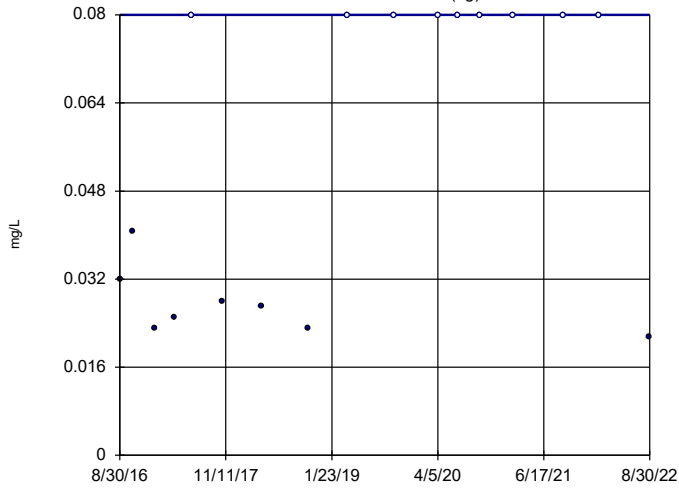
Appendix III Trend Tests - All Results

Plant Arkwright Client: Southern Company Data: Arkwright No 3 Printed 11/5/2022, 4:09 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Boron (mg/L)	ARGWA-12 (bg)	0	33	63	No	17	52.94	n/a	n/a	0.01	NP
Boron (mg/L)	ARGWA-13 (bg)	0.07802	79	63	Yes	17	0	n/a	n/a	0.01	NP
Boron (mg/L)	ARGWA-14 (bg)	0.002946	32	63	No	17	23.53	n/a	n/a	0.01	NP
Boron (mg/L)	ARGWA-24 (bg)	0	-4	-12	No	5	80	n/a	n/a	0.01	NP
Boron (mg/L)	ARGWA-3 (bg)	0	-3	-63	No	17	88.24	n/a	n/a	0.01	NP
Boron (mg/L)	ARGWA-5 (bg)	0	-1	-63	No	17	88.24	n/a	n/a	0.01	NP
Boron (mg/L)	ARGWC-18	0.01391	17	63	No	17	0	n/a	n/a	0.01	NP
Boron (mg/L)	ARGWC-8	-0.03567	-50	-63	No	17	0	n/a	n/a	0.01	NP
pH (SU)	ARGWA-12 (bg)	-0.00899	-22	-68	No	18	0	n/a	n/a	0.01	NP
pH (SU)	ARGWA-13 (bg)	-0.002328	-4	-68	No	18	0	n/a	n/a	0.01	NP
pH (SU)	ARGWA-14 (bg)	0	0	68	No	18	0	n/a	n/a	0.01	NP
pH (SU)	ARGWA-24 (bg)	-0.07169	-6	-12	No	5	0	n/a	n/a	0.01	NP
pH (SU)	ARGWA-3 (bg)	0.004931	14	81	No	20	0	n/a	n/a	0.01	NP
pH (SU)	ARGWA-5 (bg)	0	0	81	No	20	0	n/a	n/a	0.01	NP
pH (SU)	ARGWC-16	-0.01053	-24	-81	No	20	0	n/a	n/a	0.01	NP
pH (SU)	ARGWC-17	-0.06226	-80	-74	Yes	19	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	ARGWA-12 (bg)	0	4	161	No	32	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	ARGWA-13 (bg)	51.62	281	161	Yes	32	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	ARGWA-14 (bg)	-17.6	-315	-146	Yes	30	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	ARGWA-24 (bg)	-0.4594	-3	-12	No	5	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	ARGWA-3 (bg)	0	-1.167	-2.58	No	53	33.96	n/a	n/a	0.01	NP
Sulfate (mg/L)	ARGWA-5 (bg)	-0.001691	-2.696	-2.58	Yes	54	33.33	n/a	n/a	0.01	NP
Sulfate (mg/L)	ARGWC-10	0	56	161	No	32	46.88	n/a	n/a	0.01	NP
Sulfate (mg/L)	ARGWC-15	0.1766	99	161	No	32	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	ARGWC-16	11.24	276	161	Yes	32	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	ARGWC-17	-4.669	-128	-146	No	30	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	ARGWC-18	0.4057	83	161	No	32	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	ARGWC-7	-6.543	-614	-214	Yes	39	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	ARGWC-8	-4.377	-436	-161	Yes	32	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	ARGWC-9	0.07128	224	152	Yes	31	6.452	n/a	n/a	0.01	NP

Sen's Slope Estimator

ARGWA-12 (bg)

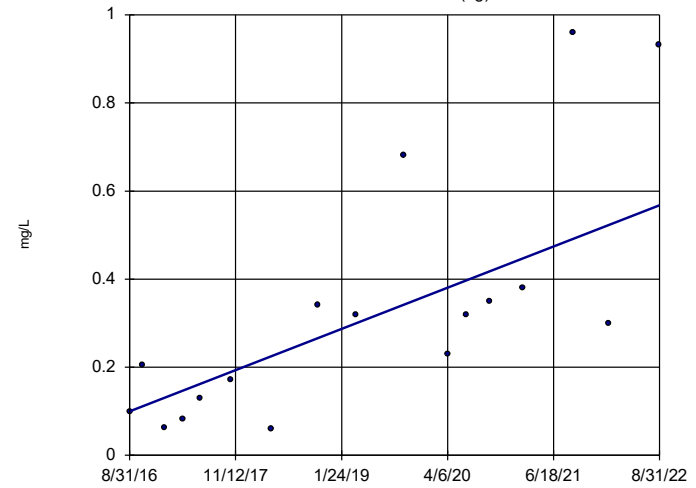


n = 17
Slope = 0
units per year.
Mann-Kendall
statistic = 33
critical = 63
Trend not sig-
nificant at 99%
confidence level
($\alpha = 0.005$ per
tail).

Constituent: Boron Analysis Run 11/5/2022 4:07 PM View: Appendix III - Trend Tests
Plant Arkwright Client: Southern Company Data: Arkwright No 3

Sen's Slope Estimator

ARGWA-13 (bg)

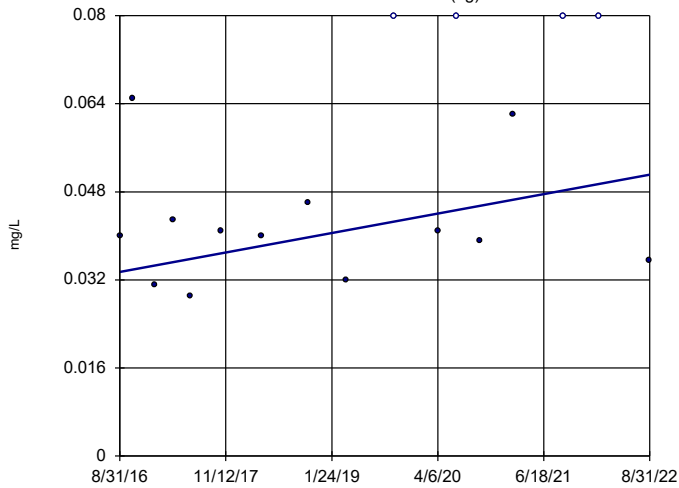


n = 17
Slope = 0.07802
units per year.
Mann-Kendall
statistic = 79
critical = 63
Increasing trend
significant at 99%
confidence level
($\alpha = 0.005$ per
tail).

Constituent: Boron Analysis Run 11/5/2022 4:07 PM View: Appendix III - Trend Tests
Plant Arkwright Client: Southern Company Data: Arkwright No 3

Sen's Slope Estimator

ARGWA-14 (bg)

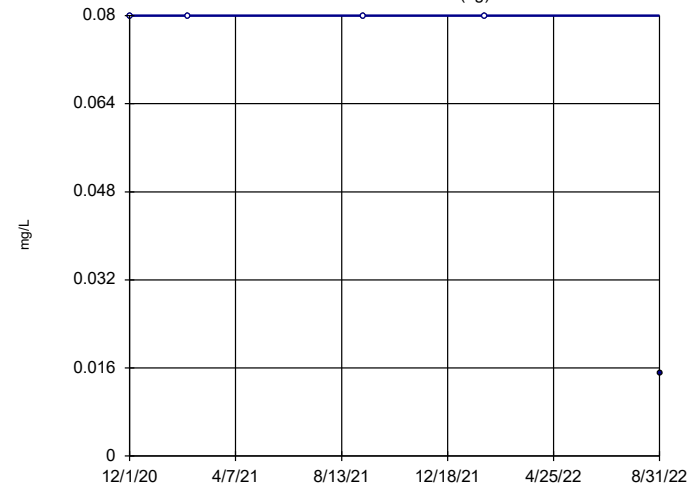


n = 17
Slope = 0.002946
units per year.
Mann-Kendall
statistic = 32
critical = 63
Trend not sig-
nificant at 99%
confidence level
($\alpha = 0.005$ per
tail).

Constituent: Boron Analysis Run 11/5/2022 4:07 PM View: Appendix III - Trend Tests
Plant Arkwright Client: Southern Company Data: Arkwright No 3

Sen's Slope Estimator

ARGWA-24 (bg)

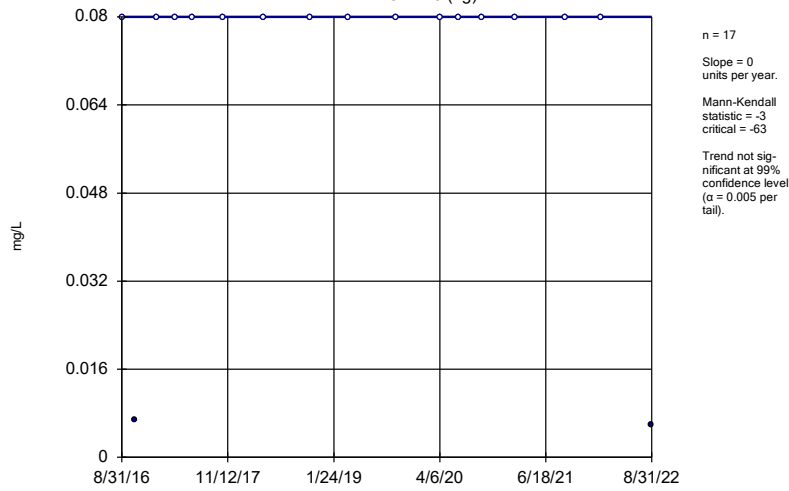


n = 5
Slope = 0
units per year.
Mann-Kendall
statistic = -4
critical = -12
Trend not sig-
nificant at 99%
confidence level
($\alpha = 0.005$ per
tail).

Constituent: Boron Analysis Run 11/5/2022 4:07 PM View: Appendix III - Trend Tests
Plant Arkwright Client: Southern Company Data: Arkwright No 3

Sen's Slope Estimator

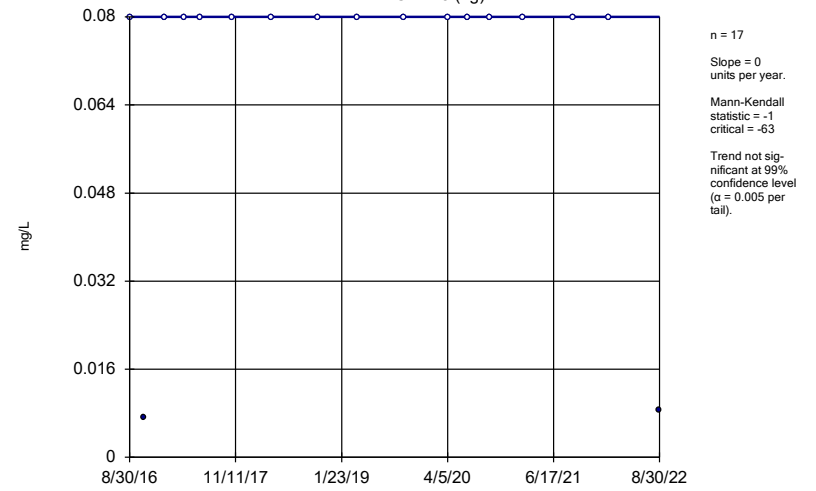
ARGWA-3 (bg)



Constituent: Boron Analysis Run 11/5/2022 4:07 PM View: Appendix III - Trend Tests
Plant Arkwright Client: Southern Company Data: Arkwright No 3

Sen's Slope Estimator

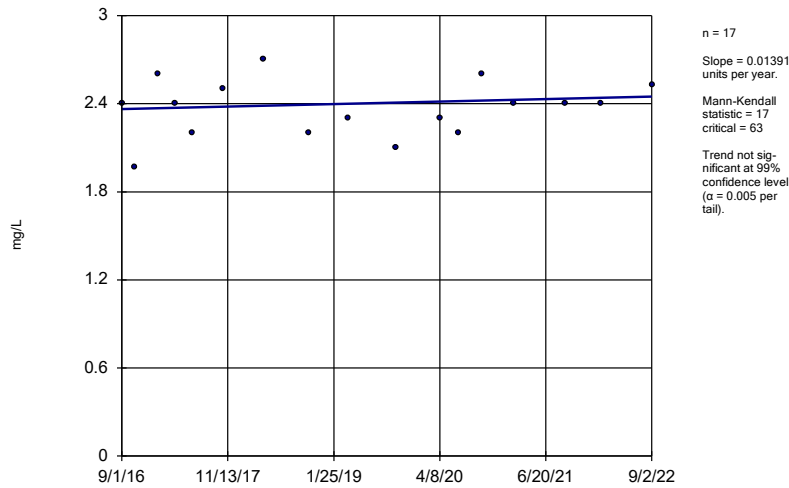
ARGWA-5 (bg)



Constituent: Boron Analysis Run 11/5/2022 4:07 PM View: Appendix III - Trend Tests
Plant Arkwright Client: Southern Company Data: Arkwright No 3

Sen's Slope Estimator

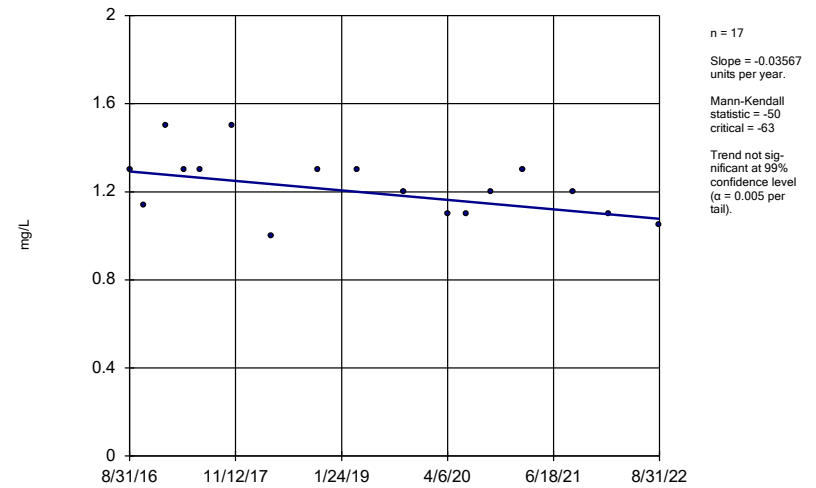
ARGWC-18



Constituent: Boron Analysis Run 11/5/2022 4:07 PM View: Appendix III - Trend Tests
Plant Arkwright Client: Southern Company Data: Arkwright No 3

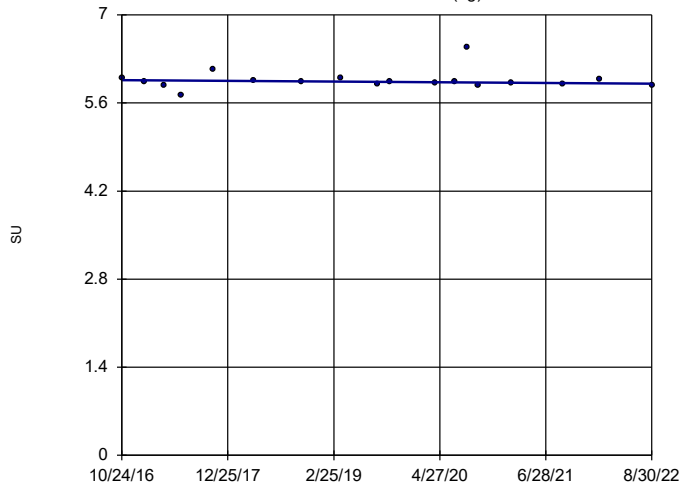
Sen's Slope Estimator

ARGWC-8



Constituent: Boron Analysis Run 11/5/2022 4:07 PM View: Appendix III - Trend Tests
Plant Arkwright Client: Southern Company Data: Arkwright No 3

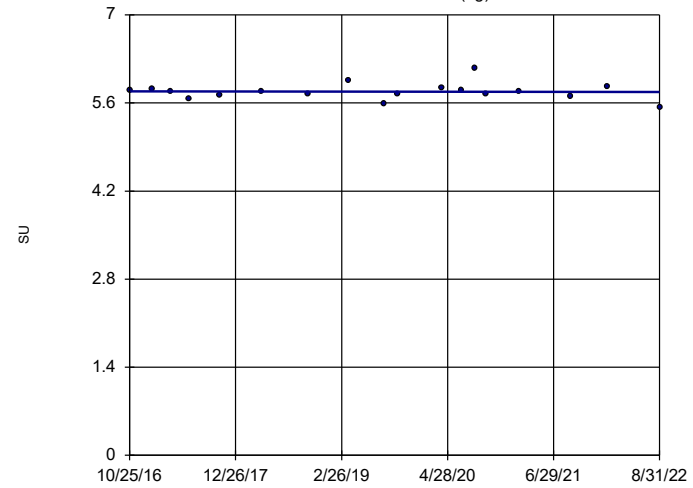
Sen's Slope Estimator ARGWA-12 (bg)



n = 18
 Slope = -0.00899
 units per year.
 Mann-Kendall
 statistic = -22
 critical = -68
 Trend not sig-
 nificant at 99%
 confidence level
 (α = 0.005 per
 tail).

Constituent: pH Analysis Run 11/5/2022 4:07 PM View: Appendix III - Trend Tests
 Plant Arkwright Client: Southern Company Data: Arkwright No 3

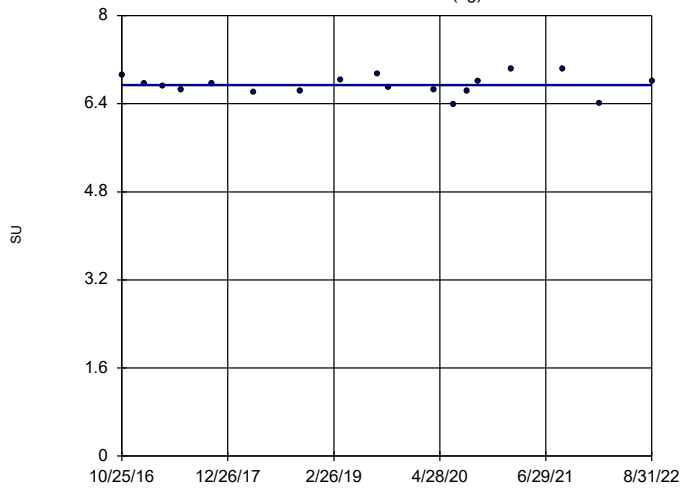
Sen's Slope Estimator ARGWA-13 (bg)



n = 18
 Slope = -0.002328
 units per year.
 Mann-Kendall
 statistic = -4
 critical = -68
 Trend not sig-
 nificant at 99%
 confidence level
 (α = 0.005 per
 tail).

Constituent: pH Analysis Run 11/5/2022 4:07 PM View: Appendix III - Trend Tests
 Plant Arkwright Client: Southern Company Data: Arkwright No 3

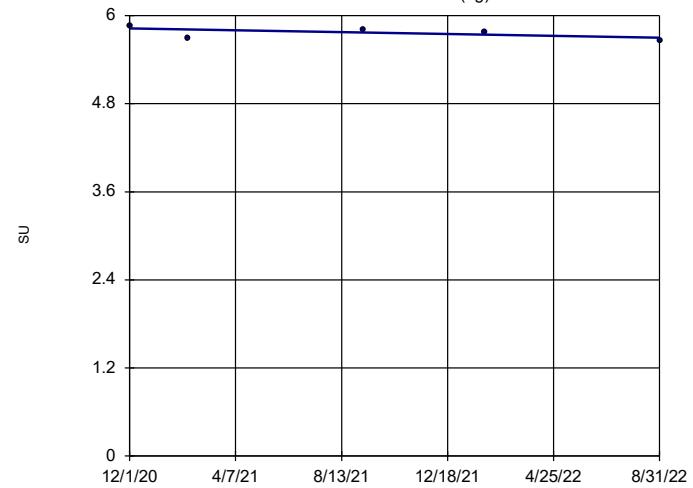
Sen's Slope Estimator ARGWA-14 (bg)



n = 18
 Slope = 0
 units per year.
 Mann-Kendall
 statistic = 0
 critical = 68
 Trend not sig-
 nificant at 99%
 confidence level
 (α = 0.005 per
 tail).

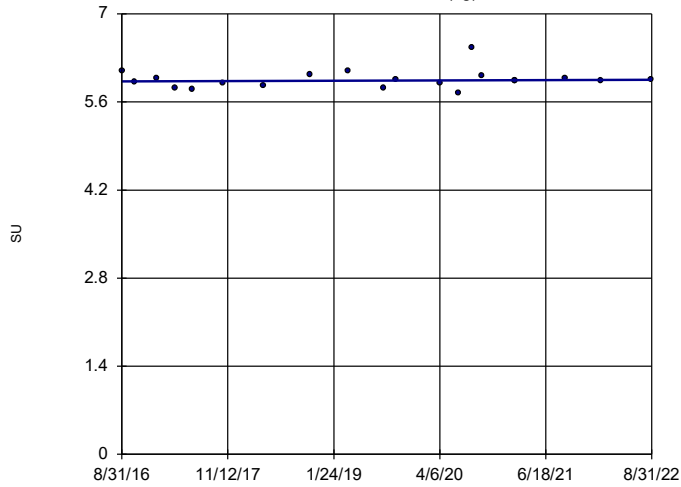
Constituent: pH Analysis Run 11/5/2022 4:07 PM View: Appendix III - Trend Tests
 Plant Arkwright Client: Southern Company Data: Arkwright No 3

Sen's Slope Estimator ARGWA-24 (bg)



Sen's Slope Estimator

ARGWA-3 (bg)

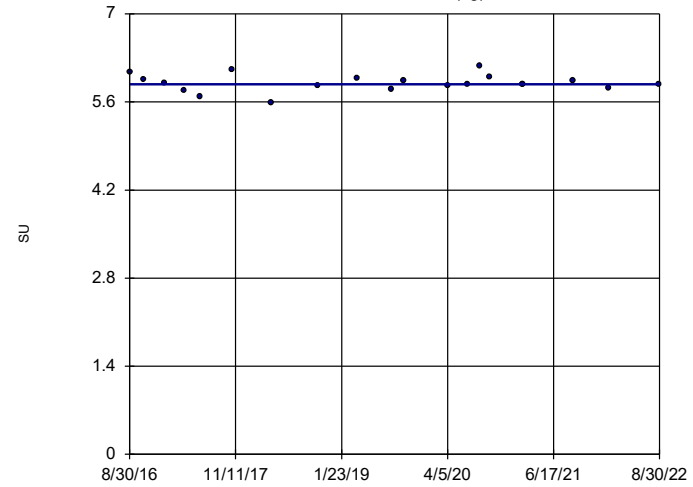


n = 20
 Slope = 0.004931
 units per year.
 Mann-Kendall
 statistic = 14
 critical = 81
 Trend not sig-
 nificant at 99%
 confidence level
 (α = 0.005 per
 tail).

Constituent: pH Analysis Run 11/5/2022 4:07 PM View: Appendix III - Trend Tests
 Plant Arkwright Client: Southern Company Data: Arkwright No 3

Sen's Slope Estimator

ARGWA-5 (bg)

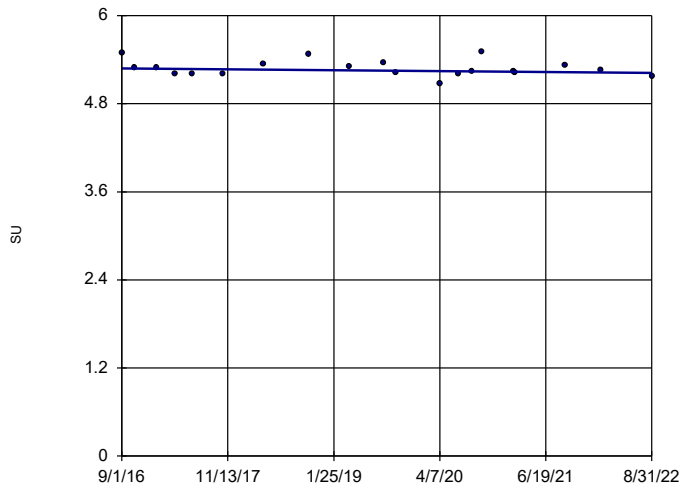


n = 20
 Slope = 0
 units per year.
 Mann-Kendall
 statistic = 0
 critical = 81
 Trend not sig-
 nificant at 99%
 confidence level
 (α = 0.005 per
 tail).

Constituent: pH Analysis Run 11/5/2022 4:07 PM View: Appendix III - Trend Tests
 Plant Arkwright Client: Southern Company Data: Arkwright No 3

Sen's Slope Estimator

ARGWC-16

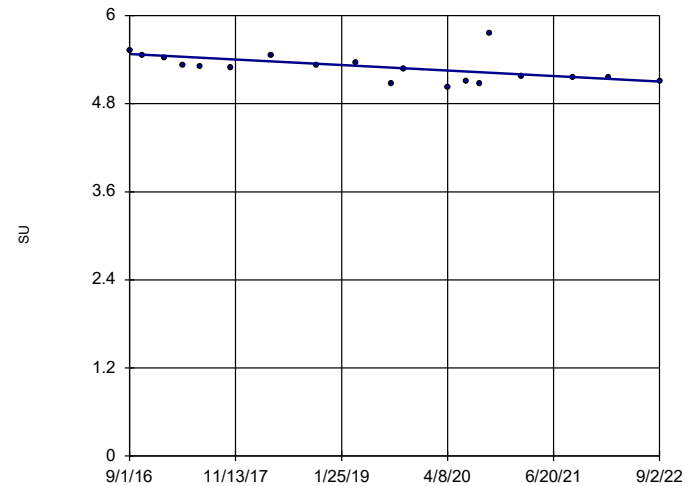


n = 20
 Slope = -0.01053
 units per year.
 Mann-Kendall
 statistic = -24
 critical = -81
 Trend not sig-
 nificant at 99%
 confidence level
 (α = 0.005 per
 tail).

Constituent: pH Analysis Run 11/5/2022 4:07 PM View: Appendix III - Trend Tests
 Plant Arkwright Client: Southern Company Data: Arkwright No 3

Sen's Slope Estimator

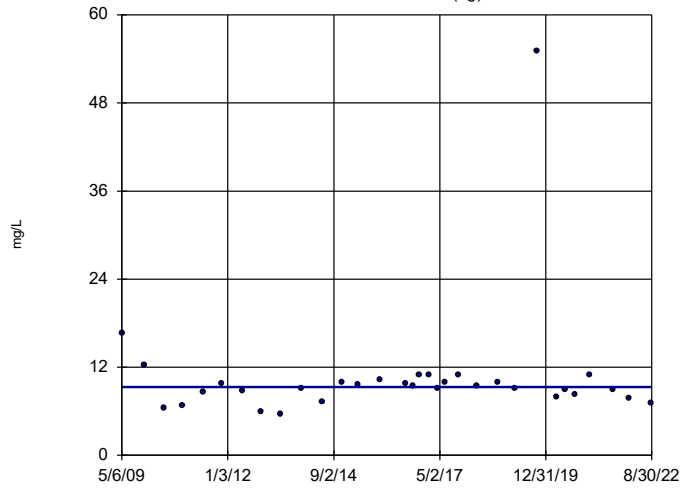
ARGWC-17



n = 19
 Slope = -0.06226
 units per year.
 Mann-Kendall
 statistic = -80
 critical = -74
 Decreasing trend
 significant at 99%
 confidence level
 (α = 0.005 per
 tail).

Constituent: pH Analysis Run 11/5/2022 4:07 PM View: Appendix III - Trend Tests
 Plant Arkwright Client: Southern Company Data: Arkwright No 3

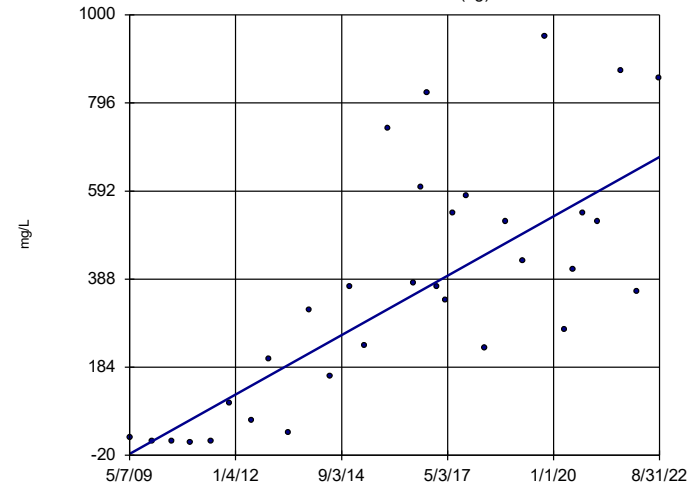
Sen's Slope Estimator ARGWA-12 (bg)



n = 32
 Slope = 0
 units per year.
 Mann-Kendall
 statistic = 4
 critical = 161
 Trend not sig-
 nificant at 99%
 confidence level
 ($\alpha = 0.005$ per
 tail).

Constituent: Sulfate Analysis Run 11/5/2022 4:07 PM View: Appendix III - Trend Tests
 Plant Arkwright Client: Southern Company Data: Arkwright No 3

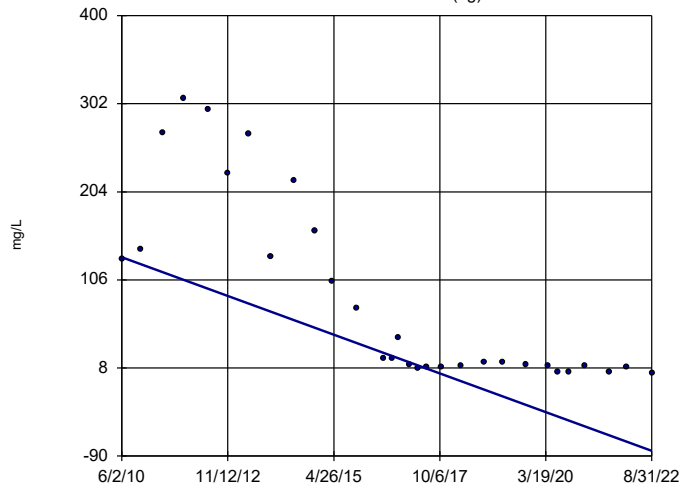
Sen's Slope Estimator ARGWA-13 (bg)



n = 32
 Slope = 51.62
 units per year.
 Mann-Kendall
 statistic = 281
 critical = 161
 Increasing trend
 significant at 99%
 confidence level
 ($\alpha = 0.005$ per
 tail).

Constituent: Sulfate Analysis Run 11/5/2022 4:07 PM View: Appendix III - Trend Tests
 Plant Arkwright Client: Southern Company Data: Arkwright No 3

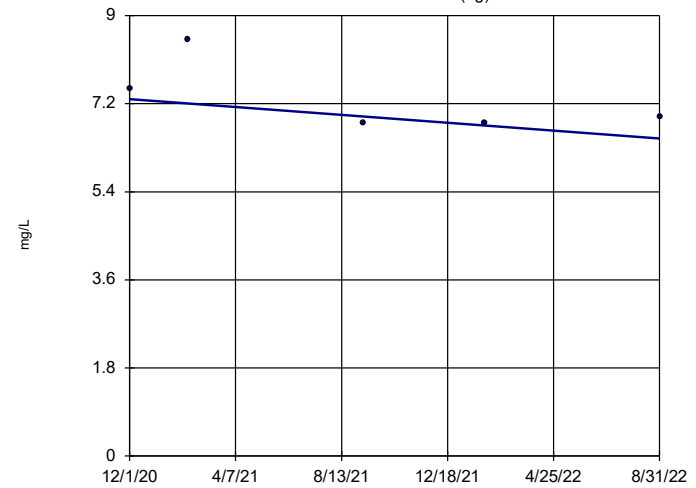
Sen's Slope Estimator ARGWA-14 (bg)



n = 30
 Slope = -17.6
 units per year.
 Mann-Kendall
 statistic = -315
 critical = -146
 Decreasing trend
 significant at 99%
 confidence level
 ($\alpha = 0.005$ per
 tail).

Constituent: Sulfate Analysis Run 11/5/2022 4:07 PM View: Appendix III - Trend Tests
 Plant Arkwright Client: Southern Company Data: Arkwright No 3

Sen's Slope Estimator ARGWA-24 (bg)

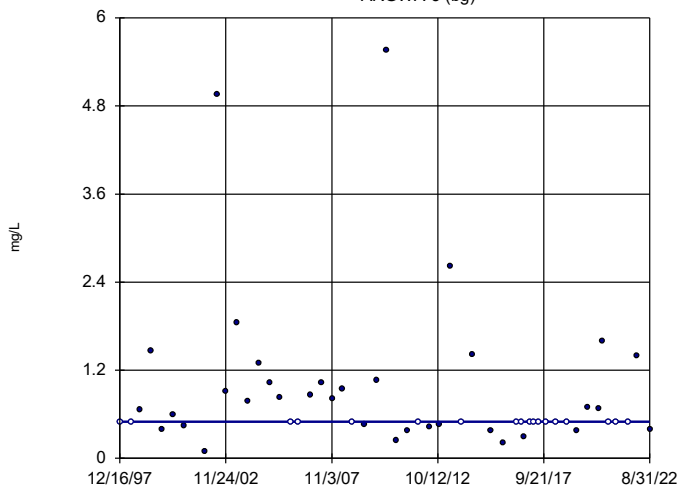


n = 5
 Slope = -0.4594
 units per year.
 Mann-Kendall
 statistic = -3
 critical = -12
 Trend not sig-
 nificant at 99%
 confidence level
 ($\alpha = 0.005$ per
 tail).

Constituent: Sulfate Analysis Run 11/5/2022 4:07 PM View: Appendix III - Trend Tests
 Plant Arkwright Client: Southern Company Data: Arkwright No 3

Sen's Slope Estimator

ARGWA-3 (bg)

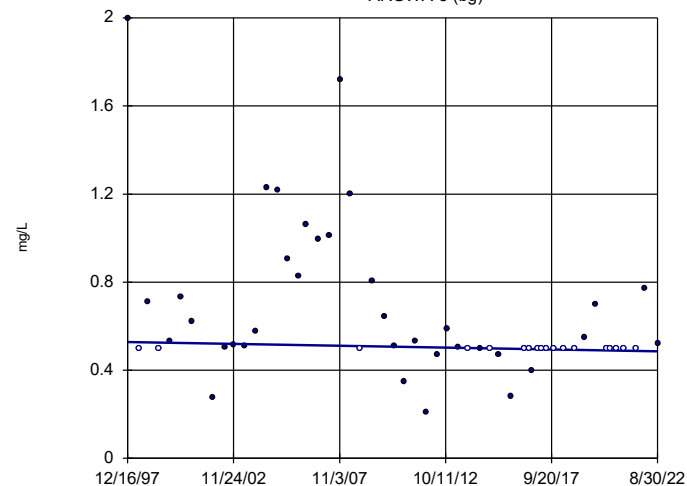


n = 53
Slope = 0
units per year.
Mann-Kendall
normal approx. =
-1.167
critical = -2.58
Trend not sig-
nificant at 99%
confidence level
($\alpha = 0.005$ per
tail).

Constituent: Sulfate Analysis Run 11/5/2022 4:07 PM View: Appendix III - Trend Tests
Plant Arkwright Client: Southern Company Data: Arkwright No 3

Sen's Slope Estimator

ARGWA-5 (bg)

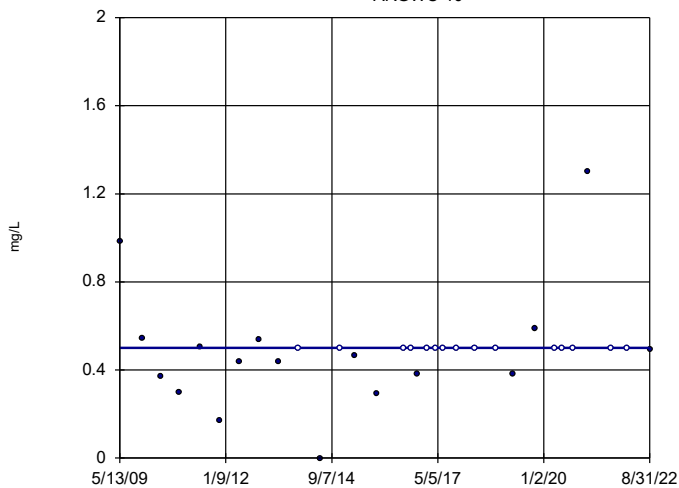


n = 54
Slope = -0.001691
units per year.
Mann-Kendall
normal approx. =
-2.696
critical = -2.58
Decreasing trend
significant at 99%
confidence level
($\alpha = 0.005$ per
tail).

Constituent: Sulfate Analysis Run 11/5/2022 4:07 PM View: Appendix III - Trend Tests
Plant Arkwright Client: Southern Company Data: Arkwright No 3

Sen's Slope Estimator

ARGWC-10

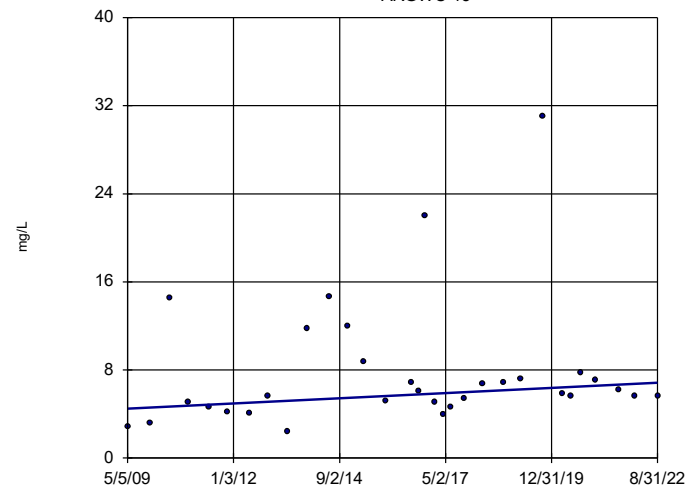


n = 32
Slope = 0
units per year.
Mann-Kendall
statistic = 56
critical = 161
Trend not sig-
nificant at 99%
confidence level
($\alpha = 0.005$ per
tail).

Constituent: Sulfate Analysis Run 11/5/2022 4:07 PM View: Appendix III - Trend Tests
Plant Arkwright Client: Southern Company Data: Arkwright No 3

Sen's Slope Estimator

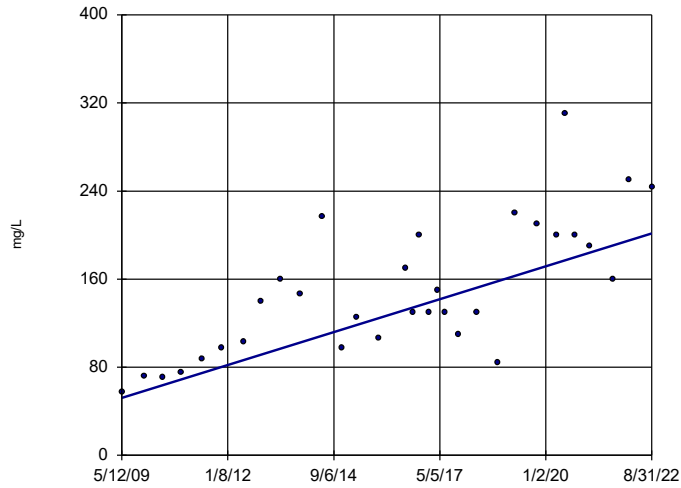
ARGWC-15



n = 32
Slope = 0.1766
units per year.
Mann-Kendall
statistic = 99
critical = 161
Trend not sig-
nificant at 99%
confidence level
($\alpha = 0.005$ per
tail).

Constituent: Sulfate Analysis Run 11/5/2022 4:07 PM View: Appendix III - Trend Tests
Plant Arkwright Client: Southern Company Data: Arkwright No 3

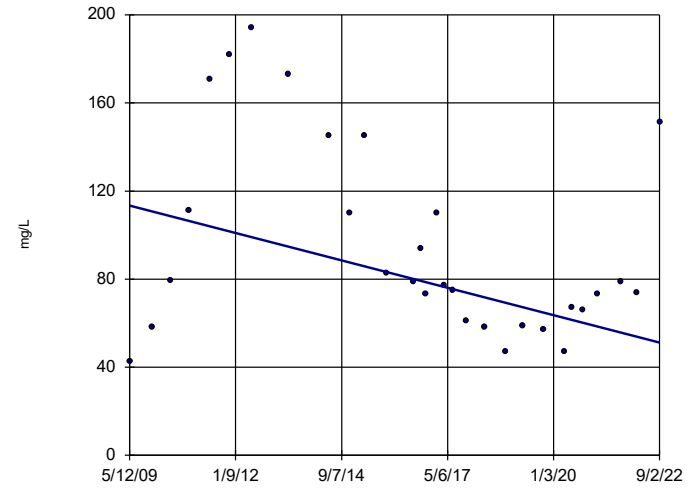
Sen's Slope Estimator ARGWC-16



n = 32
 Slope = 11.24
 units per year.
 Mann-Kendall
 statistic = 276
 critical = 161
 Increasing trend
 significant at 99%
 confidence level
 ($\alpha = 0.005$ per
 tail).

Constituent: Sulfate Analysis Run 11/5/2022 4:07 PM View: Appendix III - Trend Tests
 Plant Arkwright Client: Southern Company Data: Arkwright No 3

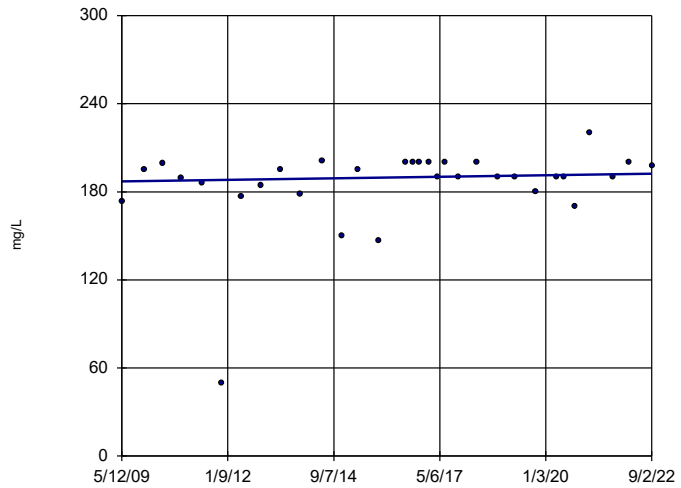
Sen's Slope Estimator ARGWC-17



n = 30
 Slope = -4.669
 units per year.
 Mann-Kendall
 statistic = -128
 critical = -146
 Trend not sig-
 nificant at 99%
 confidence level
 ($\alpha = 0.005$ per
 tail).

Constituent: Sulfate Analysis Run 11/5/2022 4:07 PM View: Appendix III - Trend Tests
 Plant Arkwright Client: Southern Company Data: Arkwright No 3

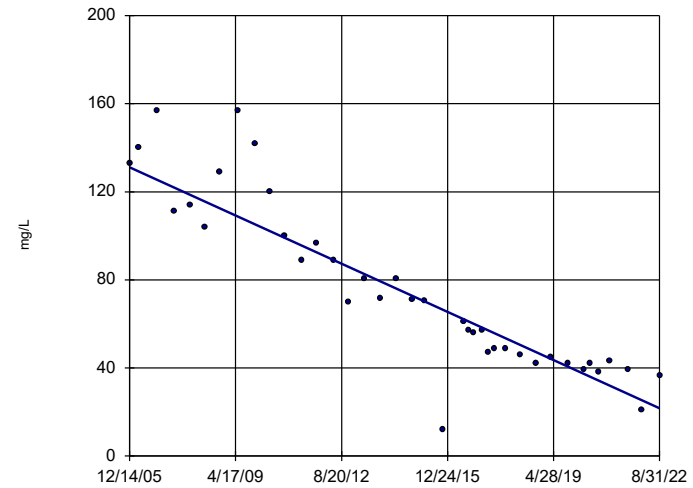
Sen's Slope Estimator ARGWC-18



n = 32
 Slope = 0.4057
 units per year.
 Mann-Kendall
 statistic = 83
 critical = 161
 Trend not sig-
 nificant at 99%
 confidence level
 ($\alpha = 0.005$ per
 tail).

Constituent: Sulfate Analysis Run 11/5/2022 4:07 PM View: Appendix III - Trend Tests
 Plant Arkwright Client: Southern Company Data: Arkwright No 3

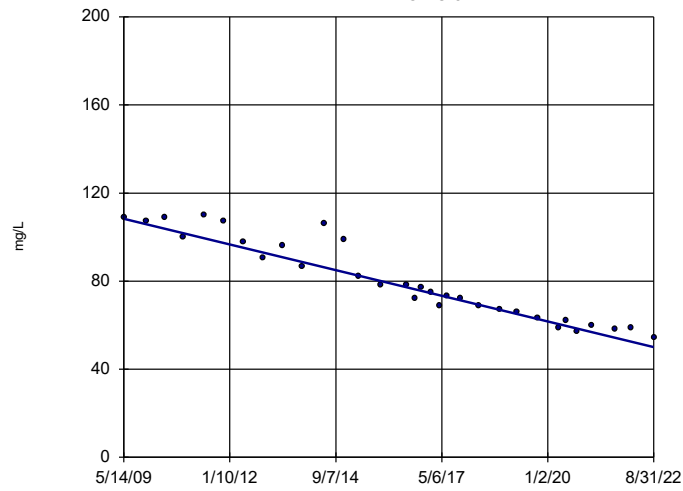
Sen's Slope Estimator ARGWC-7



n = 39
 Slope = -6.543
 units per year.
 Mann-Kendall
 statistic = -614
 critical = -214
 Decreasing trend
 significant at 99%
 confidence level
 ($\alpha = 0.005$ per
 tail).

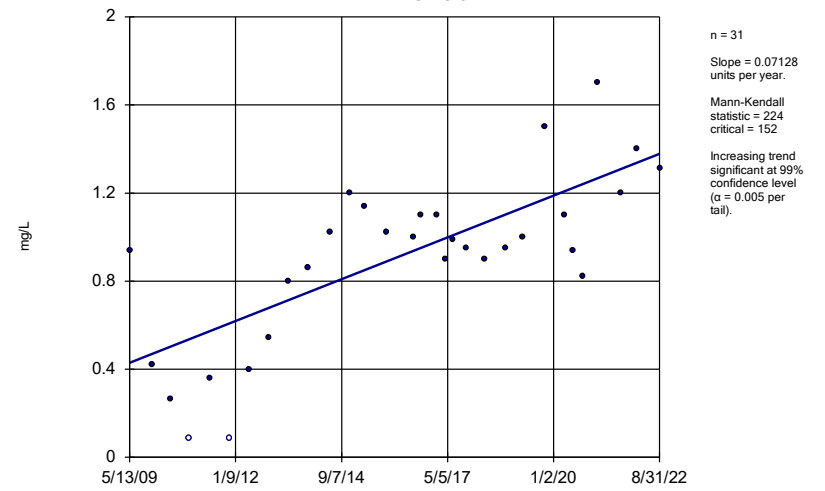
Constituent: Sulfate Analysis Run 11/5/2022 4:07 PM View: Appendix III - Trend Tests
 Plant Arkwright Client: Southern Company Data: Arkwright No 3

Sen's Slope Estimator ARGWC-8



Constituent: Sulfate Analysis Run 11/5/2022 4:07 PM View: Appendix III - Trend Tests
Plant Arkwright Client: Southern Company Data: Arkwright No 3

Sen's Slope Estimator ARGWC-9



Constituent: Sulfate Analysis Run 11/5/2022 4:07 PM View: Appendix III - Trend Tests
Plant Arkwright Client: Southern Company Data: Arkwright No 3

FIGURE G.

Upper Tolerance Limit Summary Table

Plant Arkwright Client: Southern Company Data: Arkwright No 3 Printed 11/5/2022, 2:00 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Antimony (mg/L)	n/a	0.003	n/a	n/a	n/a	n/a	80	n/a	n/a	97.5	n/a	n/a	0.01652	NP Inter(NDs)
Arsenic (mg/L)	n/a	0.005	n/a	n/a	n/a	n/a	211	n/a	n/a	81.04	n/a	n/a	NaN	NP Inter(NDs)
Barium (mg/L)	n/a	0.24	n/a	n/a	n/a	n/a	208	n/a	n/a	0	n/a	n/a	NaN	NP Inter(normality)
Beryllium (mg/L)	n/a	0.0005	n/a	n/a	n/a	n/a	90	n/a	n/a	96.67	n/a	n/a	0.009888	NP Inter(NDs)
Cadmium (mg/L)	n/a	0.0043	n/a	n/a	n/a	n/a	203	n/a	n/a	94.58	n/a	n/a	NaN	NP Inter(NDs)
Chromium (mg/L)	n/a	0.01	n/a	n/a	n/a	n/a	90	n/a	n/a	63.33	n/a	n/a	0.009888	NP Inter(NDs)
Cobalt (mg/L)	n/a	0.0058	n/a	n/a	n/a	n/a	95	n/a	n/a	81.05	n/a	n/a	0.007651	NP Inter(NDs)
Combined Radium 226 + 228 (pCi/L)	n/a	1.032	n/a	n/a	n/a	n/a	90	0.4061	0.3219	0	None	No	0.05	Inter
Fluoride (mg/L)	n/a	0.53	n/a	n/a	n/a	n/a	100	n/a	n/a	32	n/a	n/a	0.005921	NP Inter(normality)
Lead (mg/L)	n/a	0.013	n/a	n/a	n/a	n/a	209	n/a	n/a	89.47	n/a	n/a	NaN	NP Inter(NDs)
Lithium (mg/L)	n/a	0.01	n/a	n/a	n/a	n/a	94	n/a	n/a	46.81	n/a	n/a	0.008054	NP Inter(normality)
Mercury (mg/L)	n/a	0.0002	n/a	n/a	n/a	n/a	75	n/a	n/a	96	n/a	n/a	0.02134	NP Inter(NDs)
Molybdenum (mg/L)	n/a	0.004	n/a	n/a	n/a	n/a	95	n/a	n/a	90.53	n/a	n/a	0.007651	NP Inter(NDs)
Selenium (mg/L)	n/a	0.034	n/a	n/a	n/a	n/a	211	n/a	n/a	82.46	n/a	n/a	NaN	NP Inter(NDs)
Silver (mg/L)	n/a	0.0051	n/a	n/a	n/a	n/a	179	n/a	n/a	94.41	n/a	n/a	NaN	NP Inter(NDs)
Thallium (mg/L)	n/a	0.002	n/a	n/a	n/a	n/a	90	n/a	n/a	92.22	n/a	n/a	0.009888	NP Inter(NDs)

FIGURE H.

PLANT ARKWRIGHT LF #3 GWPS				
Constituent Name	MCL	CCR-Rule Specified Level	Background Limit	GWPS
Antimony, Total (mg/L)	0.006		0.003	0.006
Arsenic, Total (mg/L)	0.01		0.005	0.01
Barium, Total (mg/L)	2		0.24	2
Beryllium, Total (mg/L)	0.004		0.0005	0.004
Cadmium, Total (mg/L)	0.005		0.0043	0.005
Chromium, Total (mg/L)	0.1		0.01	0.1
Cobalt, Total (mg/L)	n/a	0.006	0.0058	0.006
Combined Radium, Total (pCi/L)	5		1.03	5
Fluoride, Total (mg/L)	4		0.53	4
Lead, Total (mg/L)	n/a	0.015	0.013	0.015
Lithium, Total (mg/L)	n/a	0.04	0.01	0.04
Mercury, Total (mg/L)	0.002		0.0002	0.002
Molybdenum, Total (mg/L)	n/a	0.1	0.004	0.1
Selenium, Total (mg/L)	0.05		0.034	0.05
Silver, Total (mg/L)	n/a		0.0051	0.0051
Thallium, Total (mg/L)	0.002		0.002	0.002

**MCL = Maximum Contaminant Level*

**GWPS = Groundwater Protection Standard*

**CCR = Coal Combustion Residuals*

FIGURE I.

Confidence Intervals - Significant Results

Plant Arkwright Client: Southern Company Data: Arkwright No 3 Printed 11/5/2022, 2:09 PM

<u>Constituent</u>	<u>Well</u>	<u>Upper Lim.</u>	<u>Lower Lim.</u>	<u>Compliance</u>	<u>Sig.</u>	<u>N</u>	<u>Mean</u>	<u>Std. Dev.</u>	<u>%NDs</u>	<u>ND Adj.</u>	<u>Transform</u>	<u>Alpha</u>	<u>Method</u>
Cobalt (mg/L)	ARGWC-17	0.03095	0.01971	0.006	Yes	18	0.02533	0.009286	0	None	No	0.01	Param.

Confidence Intervals - All Results

Plant Arkwright Client: Southern Company Data: Arkwright No 3 Printed 11/5/2022, 2:09 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Antimony (mg/L)	ARGWC-10	0.003	0.00094	0.006	No	15	0.002863	0.0005319	93.33	None	No	0.01	NP (NDs)
Antimony (mg/L)	ARGWC-7	0.003	0.0013	0.006	No	15	0.002887	0.0004389	93.33	None	No	0.01	NP (NDs)
Antimony (mg/L)	ARGWC-9	0.003	0.00048	0.006	No	15	0.002832	0.0006507	93.33	None	No	0.01	NP (NDs)
Arsenic (mg/L)	ARAMW-3	0.005	0.00034	0.01	No	6	0.004223	0.001902	83.33	None	No	0.0155	NP (NDs)
Arsenic (mg/L)	ARAMW-4	0.005	0.00034	0.01	No	6	0.002412	0.002323	33.33	None	No	0.0155	NP (normality)
Arsenic (mg/L)	ARGWC-10	0.005	0.0019	0.01	No	19	0.004389	0.00147	84.21	None	No	0.01	NP (NDs)
Arsenic (mg/L)	ARGWC-15	0.005	0.00062	0.01	No	19	0.004525	0.001423	89.47	None	No	0.01	NP (NDs)
Arsenic (mg/L)	ARGWC-16	0.005	0.001	0.01	No	19	0.004082	0.001831	78.95	None	No	0.01	NP (NDs)
Arsenic (mg/L)	ARGWC-17	0.005	0.00084	0.01	No	19	0.003657	0.002044	68.42	None	No	0.01	NP (NDs)
Arsenic (mg/L)	ARGWC-18	0.005	0.0016	0.01	No	19	0.004105	0.001797	78.95	None	No	0.01	NP (NDs)
Arsenic (mg/L)	ARGWC-7	0.005	0.0015	0.01	No	19	0.004594	0.001223	89.47	None	No	0.01	NP (NDs)
Arsenic (mg/L)	ARGWC-8	0.005	0.0014	0.01	No	19	0.004111	0.001778	78.95	None	No	0.01	NP (NDs)
Arsenic (mg/L)	ARGWC-9	0.005	0.0011	0.01	No	19	0.004558	0.001326	89.47	None	No	0.01	NP (NDs)
Barium (mg/L)	ARAMW-3	0.094	0.0619	2	No	6	0.07465	0.01471	0	None	No	0.0155	NP (normality)
Barium (mg/L)	ARAMW-4	0.053	0.036	2	No	6	0.04307	0.007967	0	None	No	0.0155	NP (normality)
Barium (mg/L)	ARAMW-6	0.04748	0.03685	2	No	6	0.04217	0.003869	0	None	No	0.01	Param.
Barium (mg/L)	ARGWC-10	0.03333	0.03058	2	No	19	0.03195	0.002345	0	None	No	0.01	Param.
Barium (mg/L)	ARGWC-15	0.038	0.029	2	No	19	0.03402	0.0106	0	None	No	0.01	NP (normality)
Barium (mg/L)	ARGWC-16	0.05326	0.04421	2	No	19	0.04874	0.007725	0	None	No	0.01	Param.
Barium (mg/L)	ARGWC-17	0.05459	0.04481	2	No	19	0.04991	0.00868	0	None	sqrt(x)	0.01	Param.
Barium (mg/L)	ARGWC-18	0.04016	0.03571	2	No	19	0.03794	0.0038	0	None	No	0.01	Param.
Barium (mg/L)	ARGWC-7	0.04303	0.03604	2	No	19	0.03954	0.005972	0	None	No	0.01	Param.
Barium (mg/L)	ARGWC-8	0.051	0.0443	2	No	19	0.04765	0.00572	0	None	No	0.01	Param.
Barium (mg/L)	ARGWC-9	0.0473	0.04202	2	No	19	0.04466	0.004509	0	None	No	0.01	Param.
Beryllium (mg/L)	ARGWC-16	0.0005	0.00027	0.004	No	17	0.0004865	0.00005578	94.12	None	No	0.01	NP (NDs)
Beryllium (mg/L)	ARGWC-17	0.0004671	0.0002824	0.004	No	17	0.0004345	0.0001326	41.18	Kaplan-Meier	sqrt(x)	0.01	Param.
Beryllium (mg/L)	ARGWC-18	0.0005	0.00034	0.004	No	17	0.0004906	0.00003881	94.12	Kaplan-Meier	No	0.01	NP (NDs)
Beryllium (mg/L)	ARGWC-7	0.0005	0.00041	0.004	No	17	0.0004712	0.0000981	88.24	Kaplan-Meier	No	0.01	NP (NDs)
Beryllium (mg/L)	ARGWC-8	0.0005	0.00047	0.004	No	17	0.0004982	0.000007276	94.12	Kaplan-Meier	No	0.01	NP (NDs)
Beryllium (mg/L)	ARGWC-9	0.0005	0.00037	0.004	No	17	0.0004924	0.00003153	94.12	Kaplan-Meier	No	0.01	NP (NDs)
Cadmium (mg/L)	ARAMW-4	0.001	0.00023	0.005	No	5	0.000846	0.0003444	80	None	No	0.031	NP (NDs)
Cadmium (mg/L)	ARGWC-16	0.001	0.0001	0.005	No	18	0.00095	0.0002121	94.44	None	No	0.01	NP (NDs)
Cadmium (mg/L)	ARGWC-17	0.001	0.0003	0.005	No	18	0.0008172	0.0003538	77.78	None	No	0.01	NP (NDs)
Chromium (mg/L)	ARGWC-10	0.005408	0.004492	0.1	No	17	0.004971	0.0007776	0	None	x^(1/3)	0.01	Param.
Chromium (mg/L)	ARGWC-15	0.01	0.0087	0.1	No	17	0.009006	0.002587	82.35	None	No	0.01	NP (NDs)
Chromium (mg/L)	ARGWC-16	0.0023	0.0016	0.1	No	17	0.002376	0.001999	5.882	None	No	0.01	NP (normality)
Chromium (mg/L)	ARGWC-17	0.01	0.0021	0.1	No	17	0.008529	0.003278	82.35	None	No	0.01	NP (NDs)
Chromium (mg/L)	ARGWC-7	0.003781	0.003106	0.1	No	17	0.003444	0.0005385	0	None	No	0.01	Param.
Chromium (mg/L)	ARGWC-8	0.01	0.0017	0.1	No	17	0.009012	0.00279	88.24	None	No	0.01	NP (NDs)
Chromium (mg/L)	ARGWC-9	0.0109	0.0071	0.1	No	17	0.008915	0.001584	0	None	No	0.01	NP (normality)
Cobalt (mg/L)	ARAMW-3	0.0011	0.00044	0.006	No	7	0.0006021	0.000225	0	None	No	0.008	NP (normality)
Cobalt (mg/L)	ARAMW-4	0.005677	0.00415	0.006	No	8	0.004914	0.0007204	0	None	No	0.01	Param.
Cobalt (mg/L)	ARAMW-6	0.002659	0.00005058	0.006	No	7	0.001601	0.001571	28.57	Kaplan-Meier	sqrt(x)	0.01	Param.
Cobalt (mg/L)	ARGWC-10	0.001	0.00019	0.006	No	18	0.0008133	0.0003595	77.78	Kaplan-Meier	No	0.01	NP (NDs)
Cobalt (mg/L)	ARGWC-15	0.0036	0.0003	0.006	No	18	0.003217	0.00716	38.89	None	No	0.01	NP (normality)
Cobalt (mg/L)	ARGWC-16	0.001	0.00026	0.006	No	18	0.0008639	0.000314	83.33	None	No	0.01	NP (NDs)
Cobalt (mg/L)	ARGWC-17	0.03095	0.01971	0.006	Yes	18	0.02533	0.009286	0	None	No	0.01	Param.
Cobalt (mg/L)	ARGWC-18	0.001507	0.00116	0.006	No	18	0.001334	0.0002868	0	None	No	0.01	Param.
Cobalt (mg/L)	ARGWC-7	0.001	0.00034	0.006	No	18	0.0009126	0.0002582	88.89	None	No	0.01	NP (NDs)
Cobalt (mg/L)	ARGWC-8	0.001	0.00021	0.006	No	18	0.0006572	0.0003989	55.56	None	No	0.01	NP (NDs)
Cobalt (mg/L)	ARGWC-9	0.001	0.00021	0.006	No	18	0.0008606	0.0003212	83.33	None	No	0.01	NP (NDs)
Combined Radium 226 + 228 (pCi/L)	ARAMW-3	1.076	-0.01517	5	No	6	0.5305	0.3972	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	ARAMW-4	0.9781	0.3326	5	No	6	0.6553	0.2349	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	ARAMW-6	1.173	-0.1038	5	No	6	0.5346	0.4647	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	ARGWC-10	0.3136	0.03647	5	No	17	0.175	0.2212	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	ARGWC-15	0.669	0.387	5	No	17	0.7389	0.6588	0	None	No	0.01	NP (normality)
Combined Radium 226 + 228 (pCi/L)	ARGWC-16	0.568	0.0598	5	No	17	0.4006	0.3941	0	None	No	0.01	NP (normality)
Combined Radium 226 + 228 (pCi/L)	ARGWC-17	0.675	0.107	5	No	17	0.4475	0.5036	0	None	No	0.01	NP (normality)
Combined Radium 226 + 228 (pCi/L)	ARGWC-18	0.641	0.191	5	No	17	0.5475	0.5945	0	None	No	0.01	NP (normality)
Combined Radium 226 + 228 (pCi/L)	ARGWC-7	0.5326	0.2322	5	No	17	0.3824	0.2397	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	ARGWC-8	0.4421	0.1963	5	No	17	0.3192	0.1961	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	ARGWC-9	0.4566	0.1551	5	No	17	0.3059	0.2405	0	None	No	0.01	Param.
Fluoride (mg/L)	ARAMW-3	0.155	0.0627	4	No	7	0.1089	0.03886	14.29	None	No	0.01	Param.
Fluoride (mg/L)	ARAMW-4	0.07825	0.02346	4	No	7	0.04929	0.02552	14.29	None	sqrt(x)	0.01	Param.

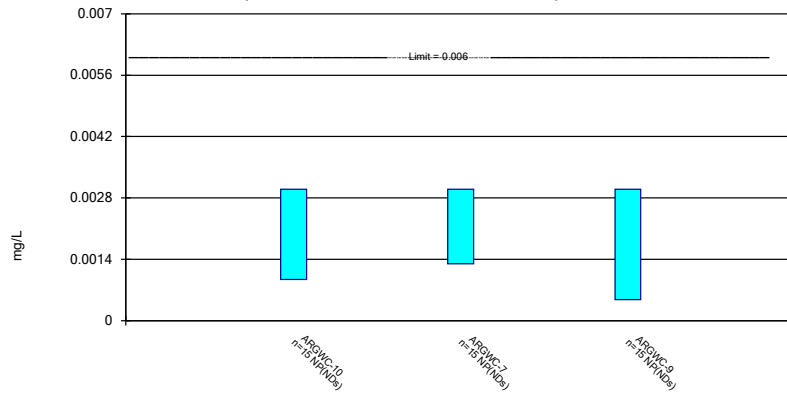
Confidence Intervals - All Results

Plant Arkwright Client: Southern Company Data: Arkwright No 3 Printed 11/5/2022, 2:09 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Fluoride (mg/L)	ARAMW-6	0.1433	0.04926	4	No	7	0.09629	0.03959	0	None	No	0.01	Param.
Fluoride (mg/L)	ARGWC-10	0.1	0.048	4	No	19	0.07737	0.02602	47.37	None	No	0.01	NP (normality)
Fluoride (mg/L)	ARGWC-15	0.1292	0.07566	4	No	19	0.1229	0.06664	21.05	Kaplan-Meier	ln(x)	0.01	Param.
Fluoride (mg/L)	ARGWC-16	0.1	0.033	4	No	19	0.07295	0.03151	52.63	Kaplan-Meier	No	0.01	NP (NDs)
Fluoride (mg/L)	ARGWC-17	0.1	0.031	4	No	19	0.07832	0.02973	57.89	None	No	0.01	NP (NDs)
Fluoride (mg/L)	ARGWC-18	0.1135	0.08073	4	No	18	0.09711	0.02707	5.556	None	No	0.01	Param.
Fluoride (mg/L)	ARGWC-7	0.1	0.033	4	No	19	0.07789	0.03189	63.16	None	No	0.01	NP (NDs)
Fluoride (mg/L)	ARGWC-8	0.1553	0.1125	4	No	18	0.1339	0.03538	0	None	No	0.01	Param.
Fluoride (mg/L)	ARGWC-9	0.07382	0.03583	4	No	19	0.08437	0.04316	47.37	Kaplan-Meier	sqrt(x)	0.01	Param.
Lead (mg/L)	ARGWC-10	0.031	0.00013	0.015	No	19	0.003428	0.006691	89.47	None	No	0.01	NP (NDs)
Lead (mg/L)	ARGWC-15	0.0056	0.0016	0.015	No	19	0.002058	0.0009459	78.95	None	No	0.01	NP (NDs)
Lead (mg/L)	ARGWC-16	0.002	0.00021	0.015	No	19	0.001906	0.0004107	94.74	None	No	0.01	NP (NDs)
Lead (mg/L)	ARGWC-17	0.002	0.00022	0.015	No	19	0.001906	0.0004084	94.74	None	No	0.01	NP (NDs)
Lead (mg/L)	ARGWC-18	0.002	0.00031	0.015	No	19	0.001631	0.0007344	78.95	None	No	0.01	NP (NDs)
Lead (mg/L)	ARGWC-8	0.002	0.00024	0.015	No	19	0.001812	0.0005629	89.47	None	No	0.01	NP (NDs)
Lead (mg/L)	ARGWC-9	0.002	0.00016	0.015	No	19	0.001903	0.0004221	94.74	None	No	0.01	NP (NDs)
Lithium (mg/L)	ARAMW-3	0.01	0.00404	0.04	No	7	0.005334	0.002112	14.29	None	No	0.008	NP (normality)
Lithium (mg/L)	ARAMW-4	0.01395	0.01168	0.04	No	7	0.01281	0.0009529	0	None	No	0.01	Param.
Lithium (mg/L)	ARGWC-10	0.01	0.0055	0.04	No	18	0.008294	0.003402	77.78	None	No	0.01	NP (NDs)
Lithium (mg/L)	ARGWC-15	0.01	0.004	0.04	No	18	0.007772	0.003286	66.67	None	No	0.01	NP (NDs)
Lithium (mg/L)	ARGWC-16	0.01	0.0076	0.04	No	18	0.008572	0.002983	77.78	None	No	0.01	NP (NDs)
Lithium (mg/L)	ARGWC-17	0.01	0.0071	0.04	No	18	0.008456	0.003187	77.78	None	No	0.01	NP (NDs)
Lithium (mg/L)	ARGWC-18	0.0062	0.0037	0.04	No	18	0.005472	0.002697	11.11	None	No	0.01	NP (normality)
Lithium (mg/L)	ARGWC-7	0.01	0.0031	0.04	No	18	0.006704	0.003295	44.44	None	No	0.01	NP (normality)
Lithium (mg/L)	ARGWC-8	0.01	0.0035	0.04	No	18	0.006014	0.003068	33.33	None	No	0.01	NP (normality)
Lithium (mg/L)	ARGWC-9	0.01	0.0061	0.04	No	18	0.009783	0.0009192	94.44	None	No	0.01	NP (NDs)
Mercury (mg/L)	ARGWC-10	0.0002	0.000077	0.002	No	14	0.0001912	0.00003287	92.86	None	No	0.01	NP (NDs)
Mercury (mg/L)	ARGWC-15	0.0002	0.000071	0.002	No	14	0.0001908	0.00003448	92.86	None	No	0.01	NP (NDs)
Mercury (mg/L)	ARGWC-16	0.0002	0.000088	0.002	No	14	0.0001529	0.00005718	57.14	None	No	0.01	NP (NDs)
Mercury (mg/L)	ARGWC-18	0.0002	0.000074	0.002	No	14	0.000191	0.00003367	92.86	None	No	0.01	NP (NDs)
Mercury (mg/L)	ARGWC-7	0.0002	0.00007	0.002	No	14	0.0001907	0.00003474	92.86	None	No	0.01	NP (NDs)
Mercury (mg/L)	ARGWC-8	0.0002	0.000081	0.002	No	14	0.0001915	0.0000318	92.86	None	No	0.01	NP (NDs)
Molybdenum (mg/L)	ARAMW-3	0.006365	0.001115	0.1	No	8	0.00374	0.002477	0	None	No	0.01	Param.
Molybdenum (mg/L)	ARAMW-4	0.001	0.000288	0.1	No	7	0.0008297	0.0002649	57.14	None	No	0.008	NP (NDs)
Molybdenum (mg/L)	ARAMW-6	0.001	0.00065	0.1	No	8	0.0009563	0.0001237	87.5	None	No	0.004	NP (NDs)
Molybdenum (mg/L)	ARGWC-15	0.0017	0.00097	0.1	No	18	0.001232	0.0003598	33.33	None	No	0.01	NP (normality)
Molybdenum (mg/L)	ARGWC-8	0.04354	0.03817	0.1	No	18	0.04086	0.004444	0	None	No	0.01	Param.
Selenium (mg/L)	ARAMW-3	0.005	0.0024	0.05	No	6	0.004567	0.001061	83.33	None	No	0.0155	NP (NDs)
Selenium (mg/L)	ARAMW-4	0.005	0.0011	0.05	No	6	0.00435	0.001592	83.33	None	No	0.0155	NP (NDs)
Selenium (mg/L)	ARGWC-10	0.005	0.0017	0.05	No	19	0.004826	0.0007571	94.74	None	No	0.01	NP (NDs)
Selenium (mg/L)	ARGWC-15	0.005	0.0005	0.05	No	19	0.004281	0.001706	84.21	None	No	0.01	NP (NDs)
Selenium (mg/L)	ARGWC-16	0.002412	0.001277	0.05	No	19	0.001924	0.001061	5.263	None	sqrt(x)	0.01	Param.
Selenium (mg/L)	ARGWC-17	0.005	0.00076	0.05	No	19	0.004777	0.0009727	94.74	None	No	0.01	NP (NDs)
Selenium (mg/L)	ARGWC-7	0.005	0.0028	0.05	No	19	0.004636	0.001167	89.47	None	No	0.01	NP (NDs)
Selenium (mg/L)	ARGWC-9	0.005	0.00029	0.05	No	19	0.004502	0.001493	89.47	None	No	0.01	NP (NDs)
Silver (mg/L)	ARGWC-15	0.001	0.00037	0.0051	No	14	0.0008964	0.0002659	85.71	None	No	0.01	NP (NDs)
Silver (mg/L)	ARGWC-16	0.001	0.00026	0.0051	No	14	0.0009471	0.0001978	92.86	None	No	0.01	NP (NDs)
Thallium (mg/L)	ARAMW-4	0.002	0.00022	0.002	No	6	0.001703	0.0007267	83.33	None	No	0.0155	NP (NDs)
Thallium (mg/L)	ARAMW-6	0.002	0.00018	0.002	No	6	0.001697	0.000743	83.33	None	No	0.0155	NP (NDs)
Thallium (mg/L)	ARGWC-15	0.002	0.000095	0.002	No	17	0.001888	0.000462	94.12	None	No	0.01	NP (NDs)
Thallium (mg/L)	ARGWC-16	0.002	0.00027	0.002	No	17	0.001692	0.0006851	82.35	None	No	0.01	NP (NDs)
Thallium (mg/L)	ARGWC-17	0.002	0.00063	0.002	No	17	0.001919	0.0003323	94.12	None	No	0.01	NP (NDs)
Thallium (mg/L)	ARGWC-18	0.002	0.00028	0.002	No	17	0.001899	0.0004172	94.12	None	No	0.01	NP (NDs)

Non-Parametric Confidence Interval

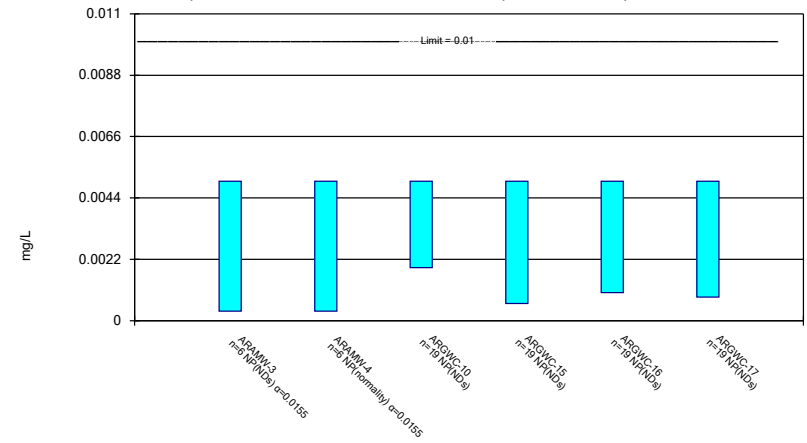
Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Antimony Analysis Run 11/5/2022 2:06 PM View: Appendix I & IV
 Plant Arkwright Client: Southern Company Data: Arkwright No 3

Non-Parametric Confidence Interval

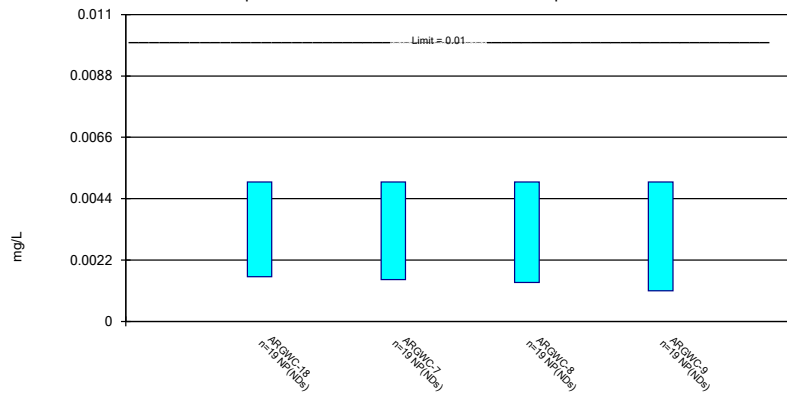
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted.



Constituent: Arsenic Analysis Run 11/5/2022 2:06 PM View: Appendix I & IV
 Plant Arkwright Client: Southern Company Data: Arkwright No 3

Non-Parametric Confidence Interval

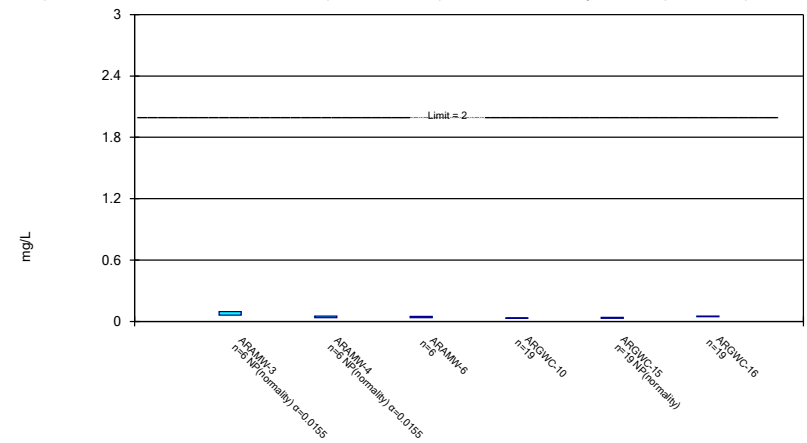
Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Arsenic Analysis Run 11/5/2022 2:06 PM View: Appendix I & IV
 Plant Arkwright Client: Southern Company Data: Arkwright No 3

Parametric and Non-Parametric (NP) Confidence Interval

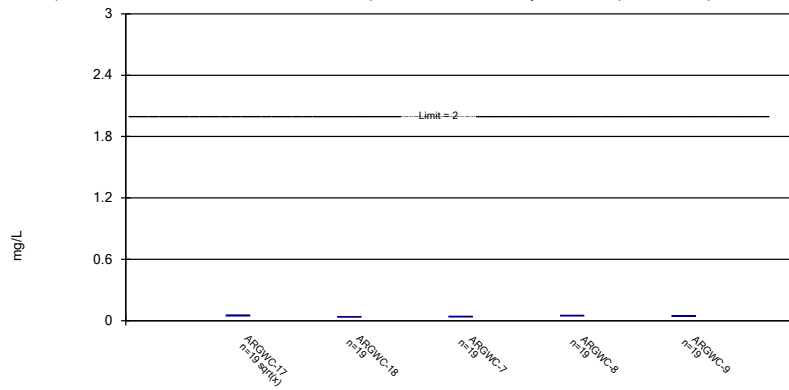
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Barium Analysis Run 11/5/2022 2:06 PM View: Appendix I & IV
 Plant Arkwright Client: Southern Company Data: Arkwright No 3

Parametric Confidence Interval

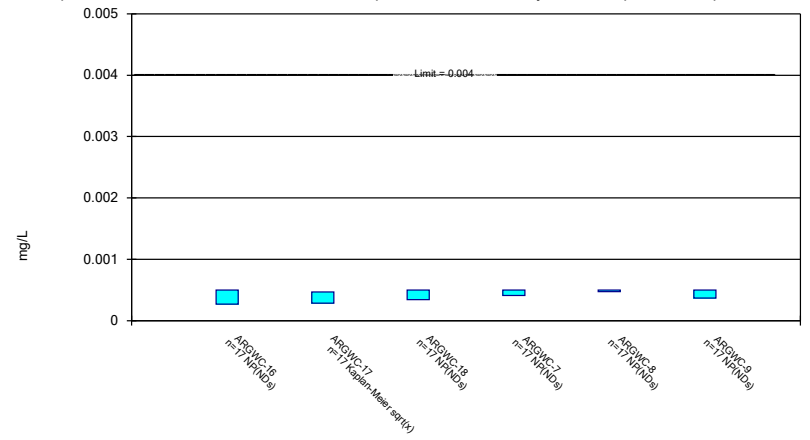
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Barium Analysis Run 11/5/2022 2:06 PM View: Appendix I & IV
 Plant Arkwright Client: Southern Company Data: Arkwright No 3

Parametric and Non-Parametric (NP) Confidence Interval

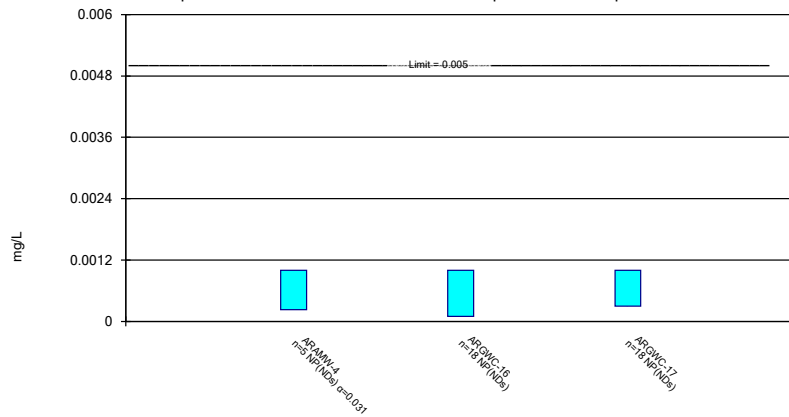
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Beryllium Analysis Run 11/5/2022 2:06 PM View: Appendix I & IV
 Plant Arkwright Client: Southern Company Data: Arkwright No 3

Non-Parametric Confidence Interval

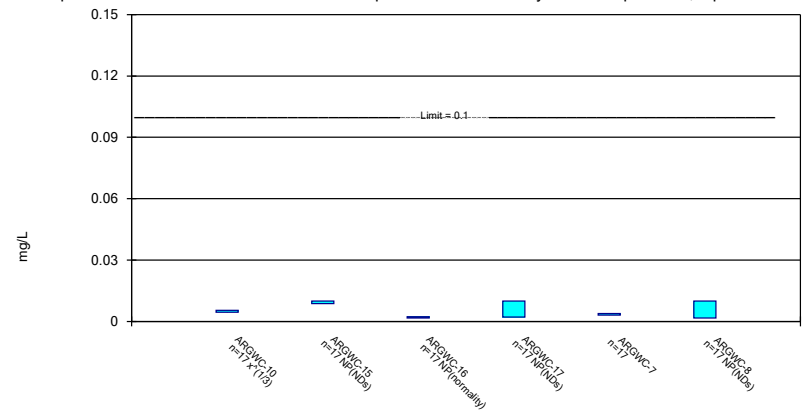
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted.



Constituent: Cadmium Analysis Run 11/5/2022 2:06 PM View: Appendix I & IV
 Plant Arkwright Client: Southern Company Data: Arkwright No 3

Parametric and Non-Parametric (NP) Confidence Interval

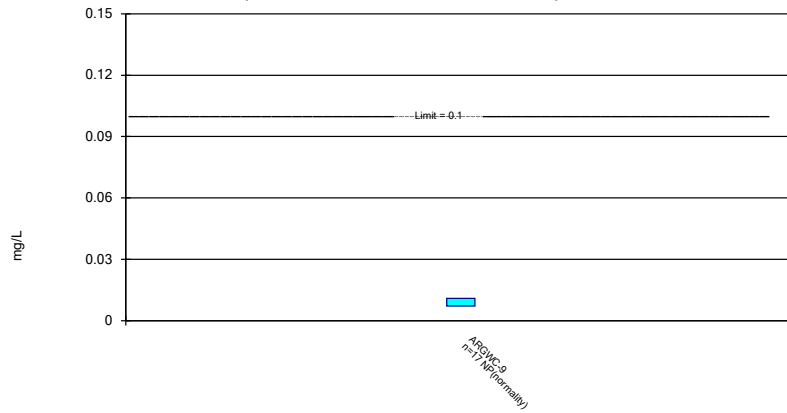
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Chromium Analysis Run 11/5/2022 2:06 PM View: Appendix I & IV
 Plant Arkwright Client: Southern Company Data: Arkwright No 3

Non-Parametric Confidence Interval

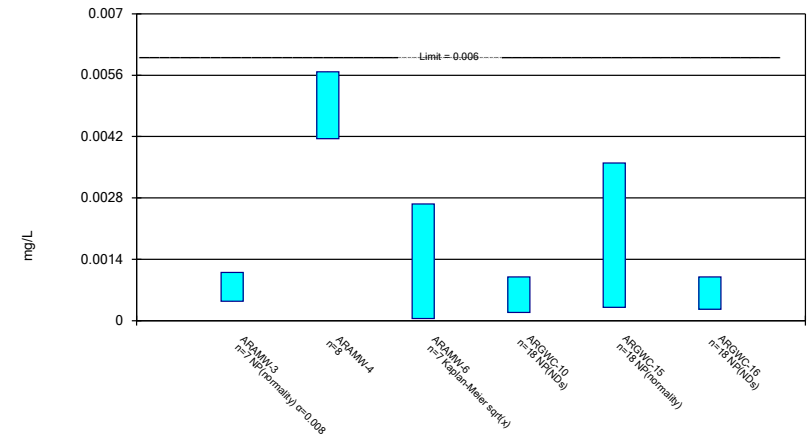
Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Chromium Analysis Run 11/5/2022 2:06 PM View: Appendix I & IV
 Plant Arkwright Client: Southern Company Data: Arkwright No 3

Parametric and Non-Parametric (NP) Confidence Interval

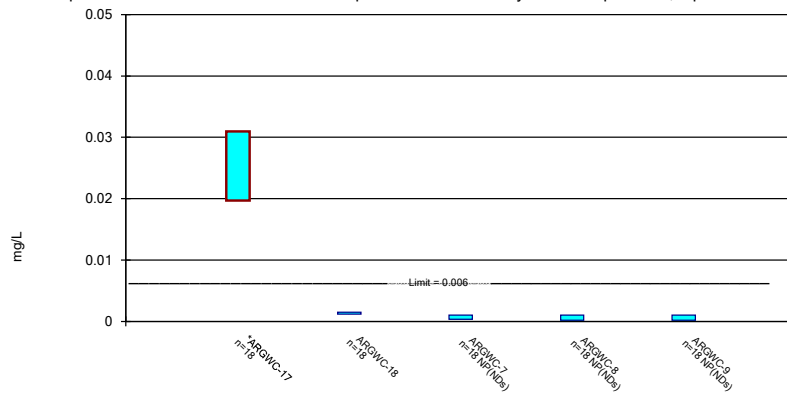
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Cobalt Analysis Run 11/5/2022 2:07 PM View: Appendix I & IV
 Plant Arkwright Client: Southern Company Data: Arkwright No 3

Parametric and Non-Parametric (NP) Confidence Interval

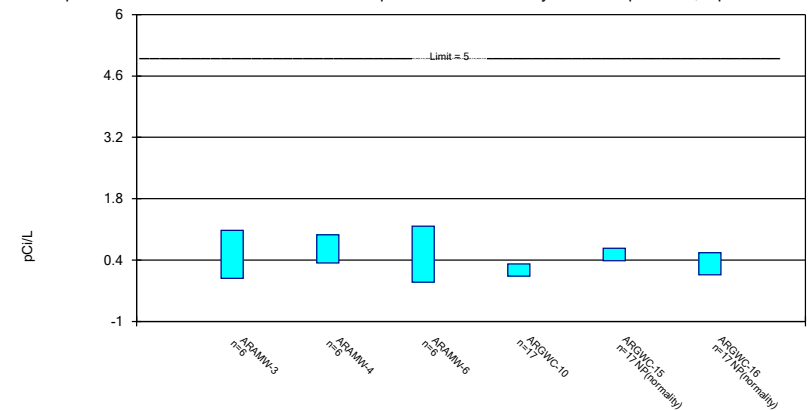
Compliance limit is exceeded.* Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Cobalt Analysis Run 11/5/2022 2:07 PM View: Appendix I & IV
 Plant Arkwright Client: Southern Company Data: Arkwright No 3

Parametric and Non-Parametric (NP) Confidence Interval

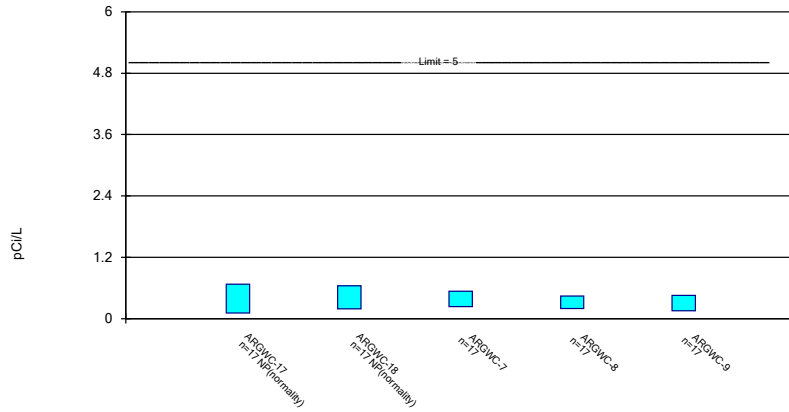
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Combined Radium 226 + 228 Analysis Run 11/5/2022 2:07 PM View: Appendix I & IV
 Plant Arkwright Client: Southern Company Data: Arkwright No 3

Parametric and Non-Parametric (NP) Confidence Interval

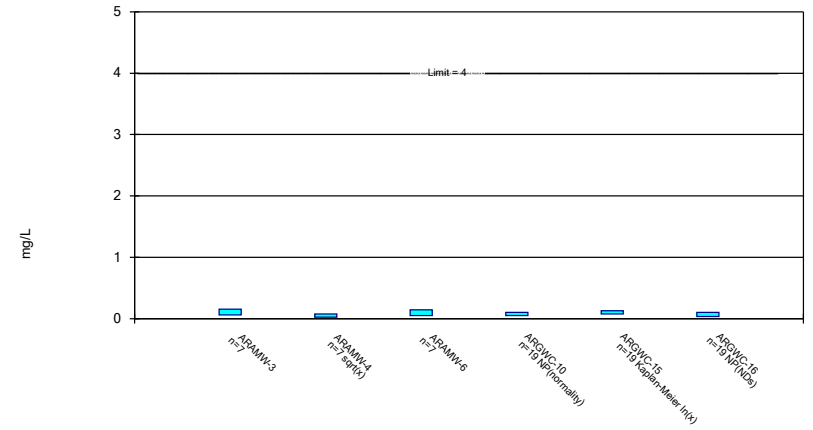
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Combined Radium 226 + 228 Analysis Run 11/5/2022 2:07 PM View: Appendix I & IV
 Plant Arkwright Client: Southern Company Data: Arkwright No 3

Parametric and Non-Parametric (NP) Confidence Interval

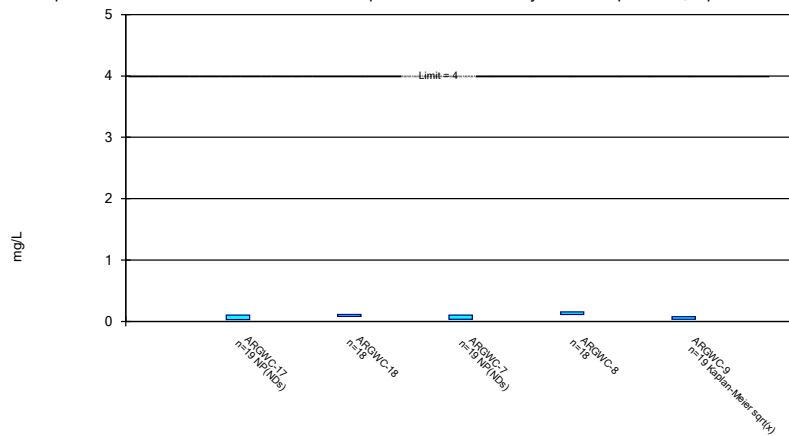
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Fluoride Analysis Run 11/5/2022 2:07 PM View: Appendix I & IV
 Plant Arkwright Client: Southern Company Data: Arkwright No 3

Parametric and Non-Parametric (NP) Confidence Interval

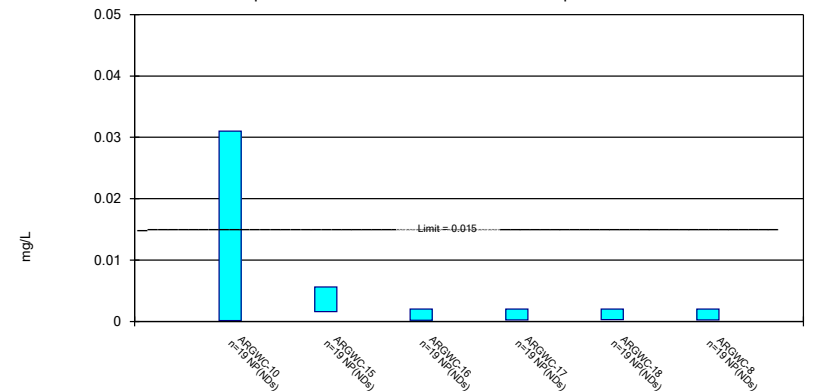
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Fluoride Analysis Run 11/5/2022 2:07 PM View: Appendix I & IV
 Plant Arkwright Client: Southern Company Data: Arkwright No 3

Non-Parametric Confidence Interval

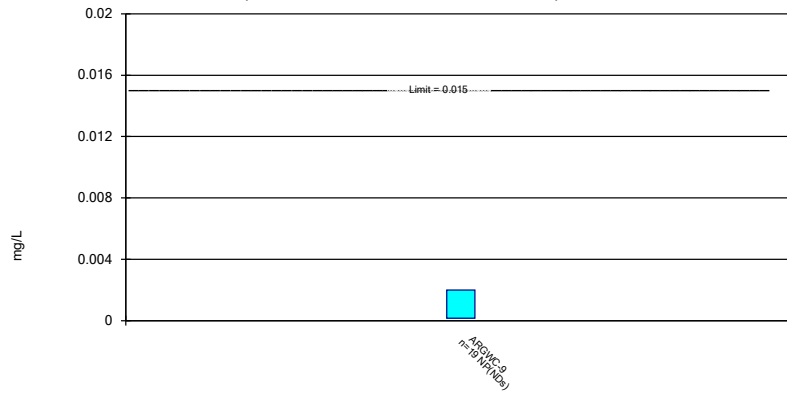
Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Lead Analysis Run 11/5/2022 2:07 PM View: Appendix I & IV
 Plant Arkwright Client: Southern Company Data: Arkwright No 3

Non-Parametric Confidence Interval

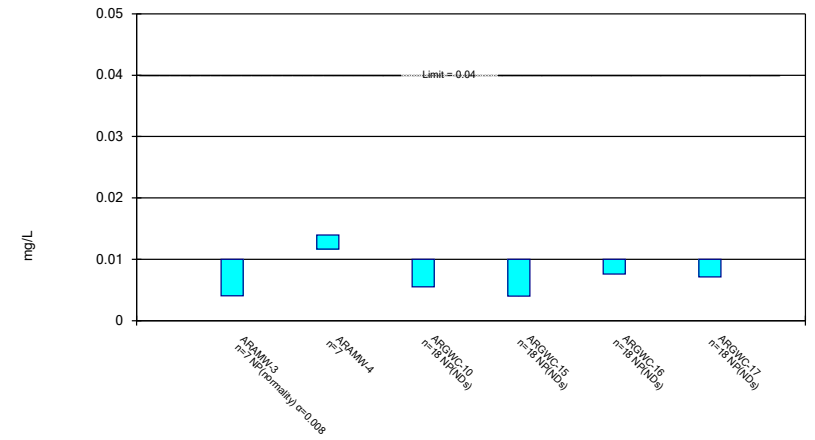
Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Lead Analysis Run 11/5/2022 2:07 PM View: Appendix I & IV
 Plant Arkwright Client: Southern Company Data: Arkwright No 3

Parametric and Non-Parametric (NP) Confidence Interval

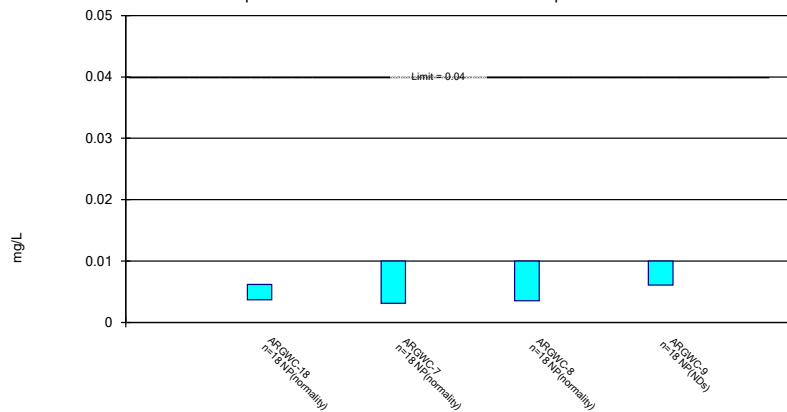
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Lithium Analysis Run 11/5/2022 2:07 PM View: Appendix I & IV
 Plant Arkwright Client: Southern Company Data: Arkwright No 3

Non-Parametric Confidence Interval

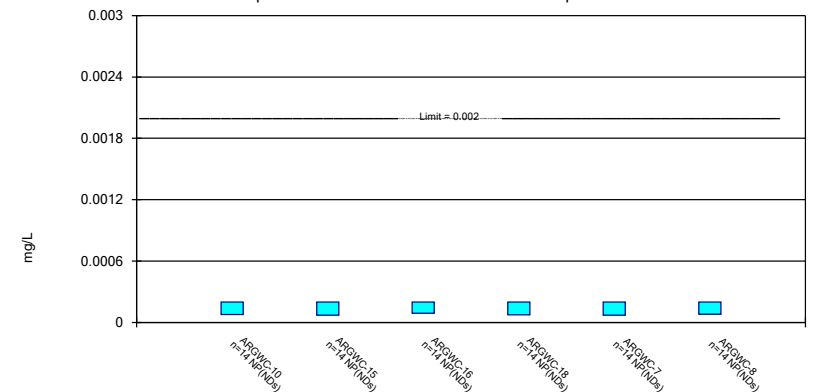
Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Lithium Analysis Run 11/5/2022 2:07 PM View: Appendix I & IV
 Plant Arkwright Client: Southern Company Data: Arkwright No 3

Non-Parametric Confidence Interval

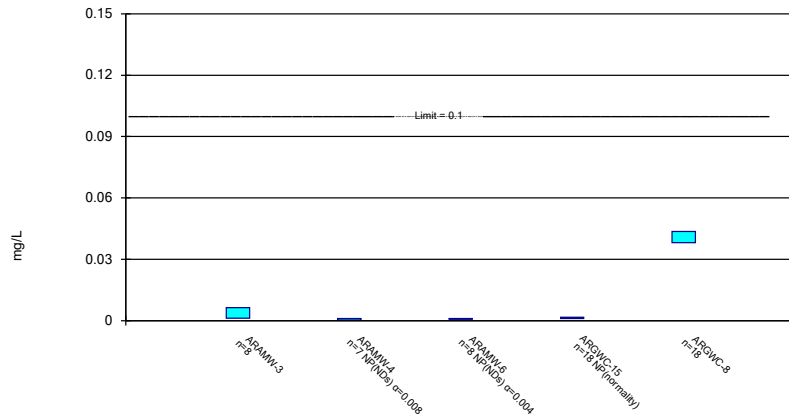
Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Mercury Analysis Run 11/5/2022 2:07 PM View: Appendix I & IV
 Plant Arkwright Client: Southern Company Data: Arkwright No 3

Parametric and Non-Parametric (NP) Confidence Interval

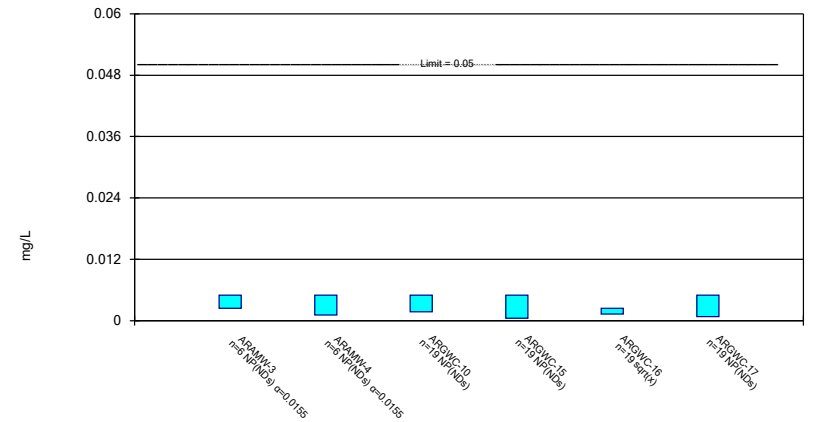
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Molybdenum Analysis Run 11/5/2022 2:07 PM View: Appendix I & IV
 Plant Arkwright Client: Southern Company Data: Arkwright No 3

Parametric and Non-Parametric (NP) Confidence Interval

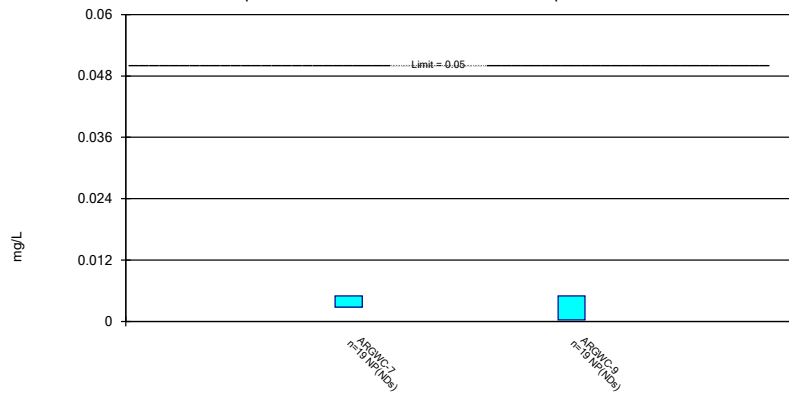
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Selenium Analysis Run 11/5/2022 2:07 PM View: Appendix I & IV
 Plant Arkwright Client: Southern Company Data: Arkwright No 3

Non-Parametric Confidence Interval

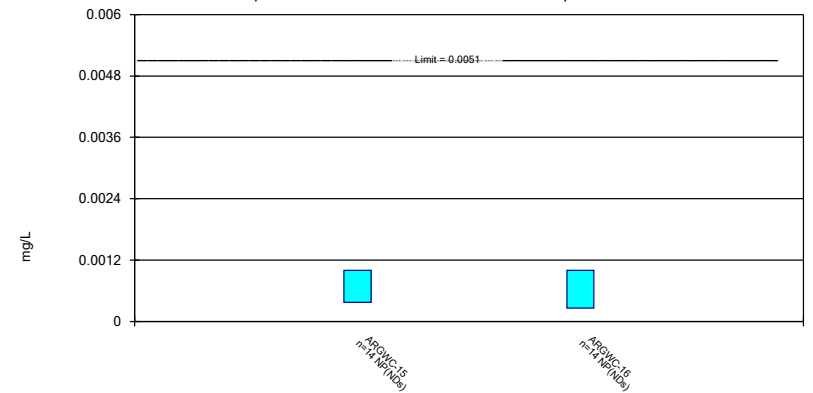
Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Selenium Analysis Run 11/5/2022 2:07 PM View: Appendix I & IV
 Plant Arkwright Client: Southern Company Data: Arkwright No 3

Non-Parametric Confidence Interval

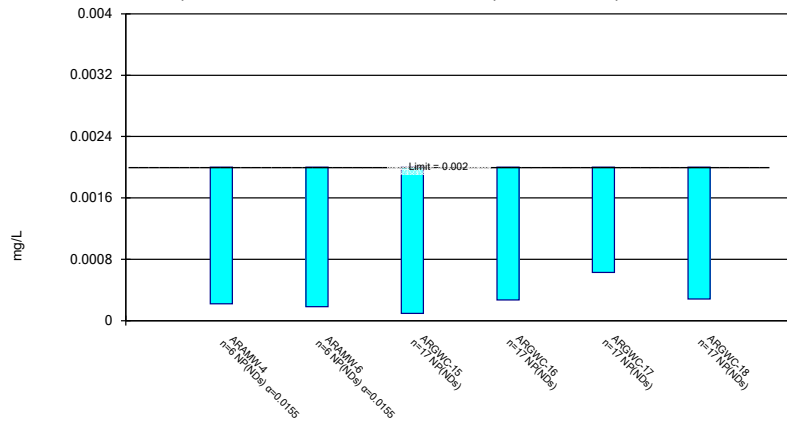
Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Silver Analysis Run 11/5/2022 2:07 PM View: Appendix I & IV
 Plant Arkwright Client: Southern Company Data: Arkwright No 3

Non-Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted.



Constituent: Thallium Analysis Run 11/5/2022 2:07 PM View: Appendix I & IV
Plant Arkwright Client: Southern Company Data: Arkwright No 3

Confidence Interval

Constituent: Antimony (mg/L) Analysis Run 11/5/2022 2:09 PM View: Appendix I & IV
Plant Arkwright Client: Southern Company Data: Arkwright No 3

	ARGWC-10	ARGWC-7	ARGWC-9
8/31/2016		<0.003	<0.003
9/1/2016	<0.003		
10/25/2016	<0.003	0.0013 (J)	<0.003
1/26/2017		<0.003	<0.003
1/27/2017	<0.003		
4/12/2017	<0.003	<0.003	<0.003
6/22/2017	<0.003	<0.003	<0.003
10/25/2017		<0.003	<0.003
10/26/2017	<0.003		
4/10/2018		<0.003	
4/11/2018	<0.003		<0.003
10/17/2018	<0.003	<0.003	<0.003
8/21/2019	<0.003	<0.003	<0.003
10/9/2019	<0.003	<0.003	0.00048 (J)
4/8/2020	0.00094 (J)	<0.003	
4/9/2020			<0.003
8/18/2020		<0.003	
8/19/2020	<0.003		<0.003
9/9/2021			<0.003
9/10/2021	<0.003	<0.003	
2/2/2022	<0.003		<0.003
2/3/2022		<0.003	
8/31/2022	<0.003	<0.003	<0.003
Mean	0.002863	0.002887	0.002832
Std. Dev.	0.0005319	0.0004389	0.0006507
Upper Lim.	0.003	0.003	0.003
Lower Lim.	0.00094	0.0013	0.00048

Confidence Interval

Constituent: Arsenic (mg/L) Analysis Run 11/5/2022 2:09 PM View: Appendix I & IV

Plant Arkwright Client: Southern Company Data: Arkwright No 3

	ARAMW-3	ARAMW-4	ARGWC-10	ARGWC-15	ARGWC-16	ARGWC-17
6/23/2016			<0.005	<0.005		
6/24/2016					<0.005	<0.005
9/1/2016			<0.005		<0.005	<0.005
9/2/2016				0.00062 (J)		
10/25/2016			<0.005		<0.005	<0.005
10/26/2016				<0.005		
1/26/2017				<0.005	<0.005	<0.005
1/27/2017			<0.005			
4/11/2017					0.00067 (J)	0.00084 (J)
4/12/2017			<0.005	<0.005		
6/21/2017				<0.005	<0.005	<0.005
6/22/2017			<0.005			
10/26/2017			<0.005	<0.005	<0.005	0.00087 (J)
4/10/2018				<0.005	<0.005	<0.005
4/11/2018			<0.005			
10/16/2018					<0.005	
10/17/2018			<0.005	<0.005		<0.005
3/27/2019				<0.005		
3/28/2019			0.0011 (J)		0.00057 (J)	<0.005
8/20/2019					<0.005	
8/21/2019			0.0004 (J)	0.00036 (J)		0.00044 (J)
10/8/2019				<0.005		
10/9/2019			0.0019		0.001	0.0015
4/8/2020			<0.005	<0.005	<0.005	<0.005
8/18/2020						<0.005
8/19/2020			<0.005	<0.005	<0.005	
8/20/2020	<0.005	0.00034 (J)				
9/29/2020				<0.005	<0.005	<0.005
9/30/2020	<0.005	0.00039 (J)				
10/1/2020			<0.005			
2/9/2021			<0.005	<0.005	<0.005	<0.005
2/10/2021	<0.005	<0.005				
9/8/2021		<0.005		<0.005	0.00031 (J)	0.00039 (J)
9/9/2021	<0.005					
9/10/2021			<0.005			
2/2/2022	0.00034 (J)	0.00035 (J)	<0.005			0.00044 (J)
2/3/2022				<0.005	<0.005	
8/31/2022	<0.005		<0.005	<0.005	<0.005	
9/2/2022		0.00339 (J)				<0.005
Mean	0.004223	0.002412	0.004389	0.004525	0.004082	0.003657
Std. Dev.	0.001902	0.002323	0.00147	0.001423	0.001831	0.002044
Upper Lim.	0.005	0.005	0.005	0.005	0.005	0.005
Lower Lim.	0.00034	0.00034	0.0019	0.00062	0.001	0.00084

Confidence Interval

Constituent: Arsenic (mg/L) Analysis Run 11/5/2022 2:09 PM View: Appendix I & IV
 Plant Arkwright Client: Southern Company Data: Arkwright No 3

	ARGWC-18	ARGWC-7	ARGWC-8	ARGWC-9
6/23/2016		<0.005	<0.005	<0.005
6/24/2016	<0.005			
8/31/2016		<0.005	<0.005	<0.005
9/1/2016	<0.005			
10/25/2016		<0.005		<0.005
10/26/2016	<0.005		<0.005	
1/26/2017		<0.005	<0.005	<0.005
1/27/2017	<0.005			
4/12/2017	<0.005	0.00078 (J)	0.00072 (J)	<0.005
6/21/2017	<0.005		<0.005	
6/22/2017		<0.005		<0.005
10/25/2017	<0.005	<0.005		<0.005
10/26/2017			<0.005	
4/10/2018		<0.005		
4/11/2018	<0.005		<0.005	<0.005
10/17/2018	0.00066 (J)	<0.005	0.00063 (J)	<0.005
3/27/2019	<0.005			
3/28/2019		<0.005	<0.005	0.00051 (J)
8/21/2019	0.00033 (J)	<0.005	0.00036 (J)	<0.005
10/9/2019	0.0016	0.0015	0.0014	0.0011
4/8/2020		<0.005		
4/9/2020	<0.005		<0.005	<0.005
8/18/2020		<0.005		
8/19/2020				<0.005
8/20/2020	<0.005		<0.005	
9/29/2020		<0.005		
9/30/2020	<0.005			
10/1/2020			<0.005	<0.005
2/10/2021	<0.005	<0.005	<0.005	<0.005
9/9/2021	0.0004 (J)		<0.005	<0.005
9/10/2021		<0.005		
2/2/2022			<0.005	<0.005
2/3/2022	<0.005	<0.005		
8/31/2022		<0.005	<0.005	<0.005
9/2/2022	<0.005			
Mean	0.004105	0.004594	0.004111	0.004558
Std. Dev.	0.001797	0.001223	0.001778	0.001326
Upper Lim.	0.005	0.005	0.005	0.005
Lower Lim.	0.0016	0.0015	0.0014	0.0011

Confidence Interval

Constituent: Barium (mg/L) Analysis Run 11/5/2022 2:09 PM View: Appendix I & IV

Plant Arkwright Client: Southern Company Data: Arkwright No 3

	ARAMW-3	ARAMW-4	ARAMW-6	ARGWC-10	ARGWC-15	ARGWC-16
6/23/2016				0.028	0.028	
6/24/2016						0.056
9/1/2016				0.027		0.051
9/2/2016					0.074	
10/25/2016				0.0296		0.0637
10/26/2016					0.0408	
1/26/2017					0.038	0.055
1/27/2017				0.035		
4/11/2017						0.055
4/12/2017				0.031	0.03	
6/21/2017					0.028	0.054
6/22/2017				0.035		
10/26/2017				0.032	0.029	0.046
4/10/2018					0.032	0.056
4/11/2018				0.034		
10/16/2018						0.039
10/17/2018				0.031	0.028	
3/27/2019					0.032	
3/28/2019				0.031		0.054
8/20/2019						0.046
8/21/2019				0.035	0.033	
10/8/2019					0.031	
10/9/2019				0.031		0.057
4/8/2020				0.031	0.03	0.042
8/19/2020				0.034	0.028	0.045
8/20/2020	0.093	0.053				
8/21/2020			0.049			
9/29/2020					0.03	0.042
9/30/2020	0.094	0.053				
10/1/2020			0.044	0.032		
2/9/2021			0.041	0.031	0.029	0.044
2/10/2021	0.066	0.042				
9/8/2021		0.037			0.043	0.035
9/9/2021	0.066		0.038			
9/10/2021				0.031		
2/2/2022	0.067	0.036	0.041	0.034		
2/3/2022					0.03	0.047
8/31/2022	0.0619		0.04	0.0345	0.0325	0.0383
9/2/2022		0.0374				
Mean	0.07465	0.04307	0.04217	0.03195	0.03402	0.04874
Std. Dev.	0.01471	0.007967	0.003869	0.002345	0.0106	0.007725
Upper Lim.	0.094	0.053	0.04748	0.03333	0.038	0.05326
Lower Lim.	0.0619	0.036	0.03685	0.03058	0.029	0.04421

Confidence Interval

Constituent: Barium (mg/L) Analysis Run 11/5/2022 2:09 PM View: Appendix I & IV

Plant Arkwright Client: Southern Company Data: Arkwright No 3

	ARGWC-17	ARGWC-18	ARGWC-7	ARGWC-8	ARGWC-9
6/23/2016			0.031	0.039	0.043
6/24/2016	0.044	0.034			
8/31/2016			0.03	0.037	0.042
9/1/2016	0.046	0.033			
10/25/2016	0.0436		0.0317		0.0455
10/26/2016		0.0339		0.0423	
1/26/2017	0.051		0.035	0.046	0.048
1/27/2017		0.037			
4/11/2017	0.043				
4/12/2017		0.032	0.034	0.041	0.045
6/21/2017	0.043	0.036		0.049	
6/22/2017			0.038		0.055
10/25/2017		0.041	0.038		0.049
10/26/2017	0.038			0.046	
4/10/2018	0.046		0.038		
4/11/2018		0.04		0.048	0.052
10/17/2018	0.043	0.039	0.038	0.045	0.046
3/27/2019		0.033			
3/28/2019	0.045		0.038	0.045	0.047
8/21/2019	0.05	0.036	0.041	0.052	0.045
10/9/2019	0.049	0.039	0.046	0.049	0.041
4/8/2020	0.045		0.039		
4/9/2020		0.041		0.045	0.044
8/18/2020	0.062		0.044		
8/19/2020					0.046
8/20/2020		0.041		0.053	
9/29/2020	0.056		0.042		
9/30/2020		0.041			
10/1/2020				0.052	0.045
2/9/2021	0.051				
2/10/2021		0.038	0.041	0.049	0.038
9/8/2021	0.058				
9/9/2021		0.046		0.051	0.038
9/10/2021			0.045		
2/2/2022	0.062			0.059	0.04
2/3/2022		0.043	0.051		
8/31/2022			0.0505	0.0571	0.0391
9/2/2022	0.0727	0.0369			
Mean	0.04991	0.03794	0.03954	0.04765	0.04466
Std. Dev.	0.00868	0.0038	0.005972	0.00572	0.004509
Upper Lim.	0.05459	0.04016	0.04303	0.051	0.0473
Lower Lim.	0.04481	0.03571	0.03604	0.0443	0.04202

Confidence Interval

Constituent: Beryllium (mg/L) Analysis Run 11/5/2022 2:09 PM View: Appendix I & IV
 Plant Arkwright Client: Southern Company Data: Arkwright No 3

	ARGWC-16	ARGWC-17	ARGWC-18	ARGWC-7	ARGWC-8	ARGWC-9
8/31/2016				<0.0005	<0.0005	<0.0005
9/1/2016	<0.0005	0.00034 (J)	<0.0005			
10/25/2016	<0.0005	0.0002 (J)		0.0001 (J)		<0.0005
10/26/2016			<0.0005		<0.0005	
1/26/2017	<0.0005	<0.0005		<0.0005	<0.0005	<0.0005
1/27/2017			<0.0005			
4/11/2017	<0.0005	<0.0005				
4/12/2017			<0.0005	<0.0005	<0.0005	<0.0005
6/21/2017	<0.0005	<0.0005	<0.0005		<0.0005	
6/22/2017				<0.0005		<0.0005
10/25/2017			<0.0005	<0.0005		<0.0005
10/26/2017	<0.0005	<0.0005			<0.0005	
4/10/2018	<0.0005	<0.0005		<0.0005		
4/11/2018			<0.0005		<0.0005	<0.0005
10/16/2018	<0.0005					
10/17/2018		<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
8/20/2019	<0.0005					
8/21/2019		0.00025 (J)	<0.0005	<0.0005	<0.0005	<0.0005
10/9/2019	0.00027 (J)	0.00076 (J)	0.00034 (J)	0.00041 (J)	0.00047 (J)	0.00037 (J)
4/8/2020	<0.0005	0.00025 (J)		<0.0005		
4/9/2020			<0.0005		<0.0005	<0.0005
8/18/2020		0.00039 (J)		<0.0005		
8/19/2020	<0.0005					<0.0005
8/20/2020			<0.0005		<0.0005	
9/29/2020	<0.0005	0.0004 (J)		<0.0005		
9/30/2020			<0.0005			
10/1/2020					<0.0005	<0.0005
2/9/2021	<0.0005	<0.0005				
2/10/2021			<0.0005	<0.0005	<0.0005	<0.0005
9/8/2021	<0.0005	0.00037 (J)				
9/9/2021			<0.0005		<0.0005	<0.0005
9/10/2021				<0.0005		
2/2/2022		0.00051 (J)			<0.0005	<0.0005
2/3/2022	<0.0005		<0.0005	<0.0005		
8/31/2022	<0.0005			<0.0005	<0.0005	<0.0005
9/2/2022		0.000417 (J)	<0.0005			
Mean	0.0004865	0.0004345	0.0004906	0.0004712	0.0004982	0.0004924
Std. Dev.	5.578E-05	0.0001326	3.881E-05	9.81E-05	7.276E-06	3.153E-05
Upper Lim.	0.0005	0.0004671	0.0005	0.0005	0.0005	0.0005
Lower Lim.	0.00027	0.0002824	0.00034	0.00041	0.00047	0.00037

Confidence Interval

Constituent: Cadmium (mg/L) Analysis Run 11/5/2022 2:09 PM View: Appendix I & IV
Plant Arkwright Client: Southern Company Data: Arkwright No 3

	ARAMW-4	ARGWC-16	ARGWC-17
6/24/2016		<0.001	<0.001
9/1/2016		<0.001	<0.001
10/25/2016		0.0001 (J)	0.0001 (J)
1/26/2017		<0.001	<0.001
4/11/2017		<0.001	<0.001
6/21/2017		<0.001	<0.001
10/26/2017		<0.001	<0.001
4/10/2018		<0.001	<0.001
10/16/2018		<0.001	
10/17/2018			<0.001
3/28/2019		<0.001	<0.001
8/20/2019		<0.001	
8/21/2019			0.00013 (J)
10/9/2019		<0.001	0.00018 (J)
4/8/2020		<0.001	<0.001
8/18/2020			<0.001
8/19/2020		<0.001	
8/20/2020	<0.001		
2/9/2021		<0.001	<0.001
2/10/2021	<0.001		
9/8/2021	<0.001	<0.001	<0.001
2/2/2022	0.00023 (J)		0.0003 (J)
2/3/2022		<0.001	
8/31/2022		<0.001	
9/2/2022	<0.001		<0.001
Mean	0.000846	0.00095	0.0008172
Std. Dev.	0.0003444	0.0002121	0.0003538
Upper Lim.	0.001	0.001	0.001
Lower Lim.	0.00023	0.0001	0.0003

Confidence Interval

Constituent: Chromium (mg/L) Analysis Run 11/5/2022 2:09 PM View: Appendix I & IV

Plant Arkwright Client: Southern Company Data: Arkwright No 3

	ARGWC-10	ARGWC-15	ARGWC-16	ARGWC-17	ARGWC-7	ARGWC-8
8/31/2016					0.0033	<0.01
9/1/2016	0.0038		0.0017 (J)	<0.01		
9/2/2016		0.0087				
10/25/2016	0.0042 (J)		0.0023 (J)	<0.01	0.0029 (J)	
10/26/2016		<0.01				<0.01
1/26/2017		<0.01	0.0017 (J)	0.0016 (J)	0.0033	<0.01
1/27/2017	0.005					
4/11/2017			0.0019 (J)	0.0013 (J)		
4/12/2017	0.0048	<0.01			0.0036	<0.01
6/21/2017		<0.01	0.0017 (J)	<0.01		<0.01
6/22/2017	0.0047				0.0036	
10/25/2017					0.0028	
10/26/2017	0.0043	<0.01	0.0013 (J)	<0.01		<0.01
4/10/2018		<0.01	0.0019 (J)	<0.01	0.0038	
4/11/2018	0.0051					<0.01
10/16/2018			0.0013 (J)			
10/17/2018	0.0051	<0.01		<0.01	0.0036	<0.01
8/20/2019			0.0025			
8/21/2019	0.0073	0.0017 (J)		<0.01	0.0046	0.0015 (J)
10/8/2019		<0.01				
10/9/2019	0.006		0.0027	0.0021	0.0042	0.0017 (J)
4/8/2020	0.0046	<0.01	0.0021	<0.01	0.0027	
4/9/2020						<0.01
8/18/2020				<0.01	0.0031	
8/19/2020	0.0049	<0.01	0.0021			
8/20/2020						<0.01
9/29/2020		<0.01	0.002	<0.01	0.0031	
10/1/2020	0.0047					<0.01
2/9/2021	0.0046	<0.01	0.0018 (J)	<0.01		
2/10/2021					0.003	<0.01
9/8/2021		0.0027	0.0016 (J)	<0.01		
9/9/2021						<0.01
9/10/2021	0.0049				0.0032	
2/2/2022	0.005			<0.01		<0.01
2/3/2022		<0.01	0.0018 (J)		0.0043	
8/31/2022	0.0055 (J)	<0.01	<0.01		0.00344 (J)	<0.01
9/2/2022				<0.01		
Mean	0.004971	0.009006	0.002376	0.008529	0.003444	0.009012
Std. Dev.	0.0007776	0.002587	0.001999	0.003278	0.0005385	0.00279
Upper Lim.	0.005408	0.01	0.0023	0.01	0.003781	0.01
Lower Lim.	0.004492	0.0087	0.0016	0.0021	0.003106	0.0017

Confidence Interval

Constituent: Chromium (mg/L) Analysis Run 11/5/2022 2:09 PM View: Appendix I & IV
Plant Arkwright Client: Southern Company Data: Arkwright No 3

	ARGWC-9
8/31/2016	0.011
10/25/2016	0.0109
1/26/2017	0.011
4/12/2017	0.0096
6/22/2017	0.011
10/25/2017	0.0094
4/11/2018	0.01
10/17/2018	0.0096
8/21/2019	0.0097
10/9/2019	0.0084
4/9/2020	0.0069
8/19/2020	0.008
10/1/2020	0.0075
2/10/2021	0.007
9/9/2021	0.0071
2/2/2022	0.0068
8/31/2022	0.00766 (J)
Mean	0.008915
Std. Dev.	0.001584
Upper Lim.	0.0109
Lower Lim.	0.0071

Confidence Interval

Constituent: Cobalt (mg/L) Analysis Run 11/5/2022 2:09 PM View: Appendix I & IV
 Plant Arkwright Client: Southern Company Data: Arkwright No 3

	ARAMW-3	ARAMW-4	ARAMW-6	ARGWC-10	ARGWC-15	ARGWC-16
9/1/2016				<0.001		<0.001
9/2/2016					0.03	
10/25/2016				<0.001		<0.001
10/26/2016					0.0036 (J)	
1/26/2017					0.011	<0.001
1/27/2017				<0.001		
4/11/2017						<0.001
4/12/2017				<0.001	<0.001	
6/21/2017					<0.001	<0.001
6/22/2017				<0.001		
10/26/2017				<0.001	<0.001	<0.001
4/10/2018					0.00045 (J)	<0.001
4/11/2018				<0.001		
10/16/2018						<0.001
10/17/2018				<0.001	<0.001	
8/20/2019						0.00016 (J)
8/21/2019				0.00017 (J)	0.00048 (J)	
10/8/2019					0.00019 (J)	
10/9/2019				0.00019 (J)		0.00026 (J)
1/15/2020		0.0064				
4/8/2020				<0.001	0.00026 (J)	<0.001
6/23/2020				0.00013 (J)		
6/24/2020	0.00053 (J)	0.0049	0.0049			0.00013 (J)
6/25/2020					0.00022 (J)	
8/19/2020				0.00015 (J)	0.0004 (J)	<0.001
8/20/2020	0.00056 (J)	0.005				
8/21/2020			0.0018 (J)			
9/29/2020					0.0003 (J)	<0.001
9/30/2020	0.0011 (J)	0.0046				
10/1/2020			0.0018 (J)	<0.001		
2/9/2021			0.00047 (J)	<0.001	<0.001	<0.001
2/10/2021	0.00055 (J)	0.0053				
9/8/2021		0.0048			0.004	<0.001
9/9/2021	0.00044 (J)		0.00024 (J)			
9/10/2021				<0.001		
2/2/2022	0.00057 (J)	0.0042	<0.001	<0.001		
2/3/2022					<0.001	<0.001
8/31/2022	0.000465 (J)		<0.001	<0.001	<0.001	<0.001
9/2/2022		0.00411				
Mean	0.0006021	0.004914	0.001601	0.0008133	0.003217	0.0008639
Std. Dev.	0.000225	0.0007204	0.001571	0.0003595	0.00716	0.000314
Upper Lim.	0.0011	0.005677	0.002659	0.001	0.0036	0.001
Lower Lim.	0.00044	0.00415	5.058E-05	0.00019	0.0003	0.00026

Confidence Interval

Constituent: Cobalt (mg/L) Analysis Run 11/5/2022 2:09 PM View: Appendix I & IV
 Plant Arkwright Client: Southern Company Data: Arkwright No 3

	ARGWC-17	ARGWC-18	ARGWC-7	ARGWC-8	ARGWC-9
8/31/2016			<0.001	<0.001	<0.001
9/1/2016	0.037	0.0014 (J)			
10/25/2016	0.0144		<0.001		<0.001
10/26/2016		0.0013 (J)		<0.001	
1/26/2017	0.022		<0.001	<0.001	<0.001
1/27/2017		0.0021 (J)			
4/11/2017	0.026				
4/12/2017		0.0015 (J)	<0.001	<0.001	<0.001
6/21/2017	0.027	0.0018 (J)		<0.001	
6/22/2017			<0.001		<0.001
10/25/2017		0.0013 (J)	<0.001		<0.001
10/26/2017	0.021			<0.001	
4/10/2018	0.021		<0.001		
4/11/2018		0.0014 (J)		<0.001	<0.001
10/17/2018	0.014	0.0012 (J)	<0.001	<0.001	<0.001
8/21/2019	0.018	0.0012	8.6E-05 (J)	0.00021 (J)	<0.001
10/9/2019	0.017	0.00099	0.00034 (J)	0.00041 (J)	0.00021 (J)
4/8/2020	0.016		<0.001		
4/9/2020		0.00091 (J)		0.00013 (J)	0.00015 (J)
6/23/2020				0.00017 (J)	
6/24/2020	0.024	0.00115 (JD)			
6/25/2020			<0.001		
6/26/2020					<0.001
8/18/2020	0.03		<0.001		
8/19/2020					0.00013 (J)
8/20/2020		0.0014 (JD)		0.00023 (J)	
9/29/2020	0.027		<0.001		
9/30/2020		0.00125 (JD)			
10/1/2020				0.00021 (J)	<0.001
2/9/2021	0.025				
2/10/2021		0.0011 (J)	<0.001	0.00015 (J)	<0.001
9/8/2021	0.032				
9/9/2021		0.0016 (J)		<0.001	<0.001
9/10/2021			<0.001		
2/2/2022	0.033			0.00032 (J)	<0.001
2/3/2022		0.0013 (J)	<0.001		
8/31/2022			<0.001	<0.001	<0.001
9/2/2022	0.0516	0.00111			
Mean	0.02533	0.001334	0.0009126	0.0006572	0.0008606
Std. Dev.	0.009286	0.0002868	0.0002582	0.0003989	0.0003212
Upper Lim.	0.03095	0.001507	0.001	0.001	0.001
Lower Lim.	0.01971	0.00116	0.00034	0.00021	0.00021

Confidence Interval

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 11/5/2022 2:09 PM View: Appendix I & IV

Plant Arkwright Client: Southern Company Data: Arkwright No 3

	ARAMW-3	ARAMW-4	ARAMW-6	ARGWC-10	ARGWC-15	ARGWC-16
9/1/2016				0.153 (U)		0.568
9/2/2016					2.11	
10/25/2016				0.328 (U)		1.57
10/26/2016					2.45	
1/26/2017					0.276 (U)	0.255 (U)
1/27/2017				-0.0761 (U)		
4/11/2017						0.334 (U)
4/12/2017				0.112 (U)	0.387 (U)	
6/21/2017					0.194 (U)	0.518
6/22/2017				0.414		
10/26/2017				0.334 (U)	0.519	0.79
4/10/2018					0.604	0.394
4/11/2018				0.17 (U)		
10/16/2018						0.0598 (U)
10/17/2018				0.38 (U)	0.46 (U)	
8/20/2019						0.227 (U)
8/21/2019				0.352 (U)	0.491	
10/8/2019					0.421 (U)	
10/9/2019				-0.38 (U)		-0.0245 (U)
4/8/2020				-0.0401 (U)	0.309 (U)	0.28 (U)
8/19/2020				-0.0271 (U)	0.538	0.306 (U)
8/20/2020	-0.137 (U)	0.624 (U)				
8/21/2020			0.285 (U)			
9/29/2020					0.394 (U)	-0.0246 (U)
9/30/2020	0.539 (U)	0.532				
10/1/2020			0.0114 (U)	0.172 (U)		
2/9/2021			0.18 (U)	0.163 (U)	0.669	0.46
2/10/2021	0.83	0.932				
9/8/2021		0.528			1.62	-0.108 (U)
9/9/2021	0.413 (U)		1.24			
9/10/2021				0.0831 (U)		
2/2/2022	0.518 (U)	0.369 (U)	0.62	0.338 (U)		
2/3/2022					0.609	0.712
8/31/2022	1.02		0.871	0.5	0.51	0.493
9/2/2022		0.947				
Mean	0.5305	0.6553	0.5346	0.175	0.7389	0.4006
Std. Dev.	0.3972	0.2349	0.4647	0.2212	0.6588	0.3941
Upper Lim.	1.076	0.9781	1.173	0.3136	0.669	0.568
Lower Lim.	-0.01517	0.3326	-0.1038	0.03647	0.387	0.0598

Confidence Interval

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 11/5/2022 2:09 PM View: Appendix I & IV

Plant Arkwright Client: Southern Company Data: Arkwright No 3

	ARGWC-17	ARGWC-18	ARGWC-7	ARGWC-8	ARGWC-9
8/31/2016			-0.106 (U)	0.218 (U)	0.279 (U)
9/1/2016	-0.081 (U)	0.495 (U)			
10/25/2016	0.675 (U)		0.518 (U)		0.393 (U)
10/26/2016		0.606 (U)		0.335 (U)	
1/26/2017	0.18 (U)		0.37	0.345 (U)	0.0879 (U)
1/27/2017		0.641			
4/11/2017	0.547				
4/12/2017		-0.0936 (U)	0.316 (U)	0.37 (U)	0.219 (U)
6/21/2017	0.38	0.5		0.144 (U)	
6/22/2017			0.229 (U)		0.552
10/25/2017		0.345 (U)	0.281 (U)		0.388 (U)
10/26/2017	1.48			0.51	
4/10/2018	0.39		0.492		
4/11/2018		0.331 (U)		0.362	0.322
10/17/2018	0.781	0.62	0.495 (U)	0.385 (U)	0.327 (U)
8/21/2019	-0.0366 (U)	0.693	0.0805 (U)	0.125 (U)	0.0554 (U)
10/9/2019	0.118 (U)	0.0684 (U)	0.552	-0.164 (U)	-0.238 (U)
4/8/2020	0.402 (U)		0.366 (U)		
4/9/2020		0.419 (U)		0.255 (U)	0.334 (U)
8/18/2020	0.423		0.376 (U)		
8/19/2020					0.124 (U)
8/20/2020		0.191 (U)		0.14 (U)	
9/29/2020	0.175 (U)		0.334 (U)		
9/30/2020		0.0811 (U)			
10/1/2020				0.512 (U)	0.501
2/9/2021	0.332 (U)				
2/10/2021		0.568	0.412	0.384	0.515
9/8/2021	-0.015 (U)				
9/9/2021		0.669		0.616	0.57
9/10/2021			0.861		
2/2/2022	0.107 (U)			0.271 (U)	0.73 (U)
2/3/2022		0.503	0.12 (U)		
8/31/2022			0.804	0.618	0.0403
9/2/2022	1.75	2.67			
Mean	0.4475	0.5475	0.3824	0.3192	0.3059
Std. Dev.	0.5036	0.5945	0.2397	0.1961	0.2405
Upper Lim.	0.675	0.641	0.5326	0.4421	0.4566
Lower Lim.	0.107	0.191	0.2322	0.1963	0.1551

Confidence Interval

Constituent: Fluoride (mg/L) Analysis Run 11/5/2022 2:09 PM View: Appendix I & IV
 Plant Arkwright Client: Southern Company Data: Arkwright No 3

	ARAMW-3	ARAMW-4	ARAMW-6	ARGWC-10	ARGWC-15	ARGWC-16
9/1/2016				<0.1		<0.1
9/2/2016					0.21	
10/25/2016				0.1 (J)		0.08 (J)
10/26/2016					0.21 (J)	
1/26/2017					0.097 (J)	<0.1
1/27/2017				<0.1		
4/11/2017						<0.1
4/12/2017				<0.1	<0.1	
6/21/2017					<0.1	<0.1
6/22/2017				<0.1		
10/26/2017				<0.1	<0.1	<0.1
4/10/2018					<0.1	<0.1
4/11/2018				<0.1		
10/16/2018						<0.1
10/17/2018				<0.1	0.1 (J)	
3/27/2019					0.05 (J)	
3/28/2019				0.03 (J)		<0.1
8/20/2019						0.033 (J)
8/21/2019				0.047 (J)	0.1 (J)	
10/8/2019					0.33 (J)	
10/9/2019				0.053 (J)		0.031 (J)
4/8/2020				0.071 (J)	0.12	0.051 (J)
6/23/2020				0.04 (J)		
6/24/2020	0.18	0.041 (J)	0.082 (J)			0.038 (J)
6/25/2020					0.067 (J)	
8/19/2020				<0.1	0.081 (J)	<0.1
8/20/2020	<0.1	<0.1				
8/21/2020			0.051 (J)			
9/29/2020					0.089 (J)	0.026 (J)
9/30/2020	0.064 (J)	0.028 (J)				
10/1/2020			0.071 (J)	0.048 (J)		
2/9/2021			0.083 (J)	0.051 (J)	0.094 (J)	0.056 (J)
2/10/2021	0.099 (J)	0.028 (J)				
9/8/2021		0.034 (J)			0.15	0.044 (J)
9/9/2021	0.12		0.13			
9/10/2021				0.067 (J)		
2/2/2022	0.072 (J)	0.055 (J)	0.089 (J)	0.063 (J)		
2/3/2022					0.068 (J)	0.027 (J)
8/31/2022	0.127		0.168	<0.1	0.169	<0.1
9/2/2022		0.059 (J)				
Mean	0.1089	0.04929	0.09629	0.07737	0.1229	0.07295
Std. Dev.	0.03886	0.02552	0.03959	0.02602	0.06664	0.03151
Upper Lim.	0.155	0.07825	0.1433	0.1	0.1292	0.1
Lower Lim.	0.0627	0.02346	0.04926	0.048	0.07566	0.033

Confidence Interval

Constituent: Fluoride (mg/L) Analysis Run 11/5/2022 2:09 PM View: Appendix I & IV
 Plant Arkwright Client: Southern Company Data: Arkwright No 3

	ARGWC-17	ARGWC-18	ARGWC-7	ARGWC-8	ARGWC-9
8/31/2016			<0.1	0.11 (J)	<0.1
9/1/2016	<0.1	0.083 (J)			
10/25/2016	0.08 (J)		0.02 (J)		0.2 (J)
10/26/2016		0.32 (o)		0.43 (o)	
1/26/2017	<0.1		<0.1	0.13 (J)	<0.1
1/27/2017		0.097 (J)			
4/11/2017	<0.1				
4/12/2017		0.088 (J)	<0.1	0.13 (J)	<0.1
6/21/2017	<0.1	0.096 (J)		0.14 (J)	
6/22/2017			<0.1		<0.1
10/25/2017		0.092 (J)	<0.1		<0.1
10/26/2017	<0.1			0.13 (J)	
4/10/2018	<0.1		<0.1		
4/11/2018		0.09 (J)		0.13 (J)	<0.1
10/17/2018	<0.1	0.11 (J)	<0.1	0.16 (J)	<0.1
3/27/2019		0.05 (J)			
3/28/2019	<0.1		<0.1	0.089 (J)	<0.1
8/21/2019	0.031 (J)	0.079 (J)	<0.1	0.12 (J)	0.03 (J)
10/9/2019	0.03 (J)	0.068 (J)	0.032 (J)	0.085 (J)	0.038 (J)
4/8/2020	0.053 (J)		0.062 (J)		
4/9/2020		0.11		0.16	0.066 (J)
6/23/2020				0.12	
6/24/2020	<0.1	0.094 (J)			
6/25/2020			<0.1		
6/26/2020					0.027 (J)
8/18/2020	<0.1		<0.1		
8/19/2020					<0.1
8/20/2020		<0.1		0.054 (J)	
9/29/2020	0.029 (J)		0.027 (J)		
9/30/2020		0.082 (J)			
10/1/2020				0.14	0.041 (J)
2/9/2021	<0.1				
2/10/2021		0.12	0.033 (J)	0.17	0.051 (J)
9/8/2021	0.055 (J)				
9/9/2021		0.17		0.18	0.06 (J)
9/10/2021			0.032 (J)		
2/2/2022	0.028 (J)			0.19	0.043 (J)
2/3/2022		0.078 (J)	0.074 (J)		
8/31/2022			<0.1	0.172	0.147
9/2/2022	0.082 (J)	0.141			
Mean	0.07832	0.09711	0.07789	0.1339	0.08437
Std. Dev.	0.02973	0.02707	0.03189	0.03538	0.04316
Upper Lim.	0.1	0.1135	0.1	0.1553	0.07382
Lower Lim.	0.031	0.08073	0.033	0.1125	0.03583

Confidence Interval

Constituent: Lead (mg/L) Analysis Run 11/5/2022 2:09 PM View: Appendix I & IV
 Plant Arkwright Client: Southern Company Data: Arkwright No 3

	ARGWC-10	ARGWC-15	ARGWC-16	ARGWC-17	ARGWC-18	ARGWC-8
6/23/2016	<0.002	<0.002				<0.002
6/24/2016			<0.002	<0.002	<0.002	
8/31/2016						<0.002
9/1/2016	<0.002		<0.002	<0.002	<0.002	
9/2/2016		0.0056				
10/25/2016	<0.002		<0.002	<0.002		
10/26/2016		0.0003 (J)			0.0002 (J)	<0.002
1/26/2017		<0.002	<0.002	<0.002		<0.002
1/27/2017	<0.002				<0.002	
4/11/2017			<0.002	<0.002		
4/12/2017	<0.002	<0.002			<0.002	<0.002
6/21/2017		<0.002	<0.002	<0.002	<0.002	<0.002
6/22/2017	<0.002					
10/25/2017					<0.002	
10/26/2017	<0.002	<0.002	<0.002	<0.002		<0.002
4/10/2018		<0.002	<0.002	<0.002		
4/11/2018	<0.002				<0.002	<0.002
10/16/2018			<0.002			
10/17/2018	<0.002	0.0016		<0.002	<0.002	<0.002
3/27/2019		<0.002			<0.002	
3/28/2019	<0.002		<0.002	<0.002		<0.002
8/20/2019			<0.002			
8/21/2019	<0.002	<0.002		<0.002	<0.002	<0.002
10/8/2019		<0.002				
10/9/2019	<0.002		<0.002	<0.002	<0.002	0.00019 (J)
4/8/2020	0.031	<0.002	<0.002	<0.002		
4/9/2020					<0.002	<0.002
8/18/2020				<0.002		
8/19/2020	0.00013 (J)	<0.002	<0.002			
8/20/2020					0.00028 (J)	<0.002
9/29/2020		<0.002	<0.002	<0.002		
9/30/2020					0.0002 (J)	
10/1/2020	<0.002					<0.002
2/9/2021	<0.002	<0.002	<0.002	<0.002		
2/10/2021					<0.002	<0.002
9/8/2021		0.0016	<0.002	0.00022 (J)		
9/9/2021					0.00031 (J)	<0.002
9/10/2021	<0.002					
2/2/2022	<0.002			<0.002		0.00024 (J)
2/3/2022		<0.002	0.00021 (J)		<0.002	
8/31/2022	<0.002	<0.002	<0.002			<0.002
9/2/2022				<0.002	<0.002	
Mean	0.003428	0.002058	0.001906	0.001906	0.001631	0.001812
Std. Dev.	0.006691	0.0009459	0.0004107	0.0004084	0.0007344	0.0005629
Upper Lim.	0.031	0.0056	0.002	0.002	0.002	0.002
Lower Lim.	0.00013	0.0016	0.00021	0.00022	0.00031	0.00024

Confidence Interval

Constituent: Lead (mg/L) Analysis Run 11/5/2022 2:09 PM View: Appendix I & IV
Plant Arkwright Client: Southern Company Data: Arkwright No 3

	ARGWC-9
6/23/2016	<0.002
8/31/2016	<0.002
10/25/2016	<0.002
1/26/2017	<0.002
4/12/2017	<0.002
6/22/2017	<0.002
10/25/2017	<0.002
4/11/2018	<0.002
10/17/2018	<0.002
3/28/2019	<0.002
8/21/2019	<0.002
10/9/2019	0.00016 (J)
4/9/2020	<0.002
8/19/2020	<0.002
10/1/2020	<0.002
2/10/2021	<0.002
9/9/2021	<0.002
2/2/2022	<0.002
8/31/2022	<0.002
Mean	0.001903
Std. Dev.	0.0004221
Upper Lim.	0.002
Lower Lim.	0.00016

Confidence Interval

Constituent: Lithium (mg/L) Analysis Run 11/5/2022 2:09 PM View: Appendix I & IV

Plant Arkwright Client: Southern Company Data: Arkwright No 3

	ARAMW-3	ARAMW-4	ARGWC-10	ARGWC-15	ARGWC-16	ARGWC-17
9/1/2016			<0.01		<0.01	<0.01
9/2/2016				0.0045 (J)		
10/25/2016			<0.01		<0.01	<0.01
10/26/2016				0.0025 (J)		
1/26/2017				<0.01	<0.01	<0.01
1/27/2017			<0.01			
4/11/2017					<0.01	<0.01
4/12/2017			<0.01	<0.01		
6/21/2017				<0.01	<0.01	<0.01
6/22/2017			<0.01			
10/26/2017			<0.01	<0.01	<0.01	<0.01
4/10/2018				0.0029 (J)	0.0031 (J)	0.0023 (J)
4/11/2018			0.0015 (J)			
10/16/2018					0.0016 (J)	
10/17/2018			0.0011 (J)	<0.01		0.0014 (J)
8/20/2019					<0.01	
8/21/2019			<0.01	<0.01		<0.01
10/8/2019				0.004 (J)		
10/9/2019			0.0055		0.0076	0.0071
4/8/2020			<0.01	<0.01	<0.01	<0.01
6/23/2020			<0.01			
6/24/2020	0.0046 (J)	0.013			<0.01	<0.01
6/25/2020				0.004 (J)		
8/18/2020						<0.01
8/19/2020			<0.01	<0.01	<0.01	
8/20/2020	<0.01	0.012				
9/29/2020				<0.01	<0.01	<0.01
9/30/2020	0.0055	0.012				
10/1/2020			<0.01			
2/9/2021			<0.01	<0.01	<0.01	<0.01
2/10/2021	0.0046 (J)	0.014				
9/8/2021		0.013		<0.01	<0.01	<0.01
9/9/2021	0.0041 (J)					
9/10/2021			<0.01			
2/2/2022	0.0045 (J)	0.014	0.0012 (J)			0.0014 (J)
2/3/2022				0.002 (J)	0.002 (J)	
8/31/2022	0.00404 (J)		<0.01	<0.01	<0.01	
9/2/2022		0.0117				<0.01
Mean	0.005334	0.01281	0.008294	0.007772	0.008572	0.008456
Std. Dev.	0.002112	0.0009529	0.003402	0.003286	0.002983	0.003187
Upper Lim.	0.01	0.01395	0.01	0.01	0.01	0.01
Lower Lim.	0.00404	0.01168	0.0055	0.004	0.0076	0.0071

Confidence Interval

Constituent: Lithium (mg/L) Analysis Run 11/5/2022 2:09 PM View: Appendix I & IV
 Plant Arkwright Client: Southern Company Data: Arkwright No 3

	ARGWC-18	ARGWC-7	ARGWC-8	ARGWC-9
8/31/2016		<0.01	0.0039 (J)	<0.01
9/1/2016	0.0033 (J)			
10/25/2016		0.0024 (J)		<0.01
10/26/2016	0.0037 (J)		0.0025 (J)	
1/26/2017		0.0033 (J)	0.0035 (J)	<0.01
1/27/2017	0.0048 (J)			
4/12/2017	0.0039 (J)	<0.01	<0.01	<0.01
6/21/2017	0.0037 (J)		<0.01	
6/22/2017		<0.01		<0.01
10/25/2017	0.0047 (J)	0.005		<0.01
10/26/2017			0.0041 (J)	
4/10/2018		0.005		
4/11/2018	0.0062		0.0041 (J)	<0.01
10/17/2018	0.0049 (J)	0.0025 (J)	0.0037 (J)	<0.01
8/21/2019	0.0036 (J)	0.0034 (J)	<0.01	<0.01
10/9/2019	0.013	0.0083	0.0077	0.0061
4/8/2020		<0.01		
4/9/2020	<0.01		<0.01	<0.01
6/23/2020			0.0042 (J)	
6/24/2020	0.0047 (J)			
6/25/2020		0.0046 (J)		
6/26/2020				<0.01
8/18/2020		<0.01		
8/19/2020				<0.01
8/20/2020	<0.01		<0.01	
9/29/2020		<0.01		
9/30/2020	0.0048 (J)			
10/1/2020			0.0035 (J)	<0.01
2/10/2021	0.0041 (J)	<0.01	<0.01	<0.01
9/9/2021	0.0047 (J)		0.0037 (J)	<0.01
9/10/2021		<0.01		
2/2/2022			0.0039 (J)	<0.01
2/3/2022	0.0046 (J)	0.0031 (J)		
8/31/2022		0.00308 (J)	0.00345 (J)	<0.01
9/2/2022	0.0038 (J)			
Mean	0.005472	0.006704	0.006014	0.009783
Std. Dev.	0.002697	0.003295	0.003068	0.0009192
Upper Lim.	0.0062	0.01	0.01	0.01
Lower Lim.	0.0037	0.0031	0.0035	0.0061

Confidence Interval

Constituent: Mercury (mg/L) Analysis Run 11/5/2022 2:09 PM View: Appendix I & IV
 Plant Arkwright Client: Southern Company Data: Arkwright No 3

	ARGWC-10	ARGWC-15	ARGWC-16	ARGWC-18	ARGWC-7	ARGWC-8
8/31/2016					<0.0002	<0.0002
9/1/2016	<0.0002		8.8E-05 (J)	<0.0002		
9/2/2016		<0.0002				
10/25/2016	<0.0002		<0.0002		<0.0002	
10/26/2016		<0.0002		<0.0002		<0.0002
1/26/2017		<0.0002	7.9E-05 (J)		<0.0002	8.1E-05 (J)
1/27/2017	7.7E-05 (J)			7.4E-05 (J)		
4/11/2017			<0.0002			
4/12/2017	<0.0002	<0.0002		<0.0002	<0.0002	<0.0002
6/21/2017		<0.0002	0.00011 (J)	<0.0002		<0.0002
6/22/2017	<0.0002				<0.0002	
10/25/2017				<0.0002	<0.0002	
10/26/2017	<0.0002	<0.0002	9.4E-05 (J)			<0.0002
4/10/2018		7.1E-05 (J)	9.9E-05 (J)		7E-05 (J)	
4/11/2018	<0.0002			<0.0002		<0.0002
10/16/2018			7E-05 (J)			
10/17/2018	<0.0002	<0.0002		<0.0002	<0.0002	<0.0002
8/20/2019			<0.0002			
8/21/2019	<0.0002	<0.0002		<0.0002	<0.0002	<0.0002
4/8/2020	<0.0002	<0.0002	<0.0002		<0.0002	
4/9/2020				<0.0002		<0.0002
8/18/2020					<0.0002	
8/19/2020	<0.0002	<0.0002	<0.0002			
8/20/2020				<0.0002		<0.0002
9/8/2021		<0.0002	<0.0002			
9/9/2021				<0.0002		<0.0002
9/10/2021	<0.0002				<0.0002	
2/2/2022	<0.0002					<0.0002
2/3/2022		<0.0002	<0.0002	<0.0002	<0.0002	
8/31/2022	<0.0002	<0.0002	<0.0002		<0.0002	<0.0002
9/2/2022				<0.0002		
Mean	0.0001912	0.0001908	0.0001529	0.000191	0.0001907	0.0001915
Std. Dev.	3.287E-05	3.448E-05	5.718E-05	3.367E-05	3.474E-05	3.18E-05
Upper Lim.	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002
Lower Lim.	7.7E-05	7.1E-05	8.8E-05	7.4E-05	7E-05	8.1E-05

Confidence Interval

Constituent: Molybdenum (mg/L) Analysis Run 11/5/2022 2:09 PM View: Appendix I & IV
 Plant Arkwright Client: Southern Company Data: Arkwright No 3

	ARAMW-3	ARAMW-4	ARAMW-6	ARGWC-15	ARGWC-8
8/31/2016					0.034
9/2/2016				0.0015 (J)	
10/26/2016				<0.001	0.0377
1/26/2017				<0.001	0.04
4/12/2017				<0.001	0.035
6/21/2017				<0.001	0.038
10/26/2017				<0.001	0.041
4/10/2018				0.00097 (J)	
4/11/2018					0.037
10/17/2018				<0.001	0.036
8/21/2019				0.0017 (J)	0.051
10/8/2019				0.0011 (J)	
10/9/2019					0.049
1/15/2020	0.0053		0.00065 (J)		
4/8/2020				0.00075 (J)	
4/9/2020					0.039
6/23/2020					0.043
6/24/2020	0.0077 (J)	0.00079 (J)	<0.001		
6/25/2020				0.00086 (J)	
8/19/2020				0.0016 (J)	
8/20/2020	0.0029 (J)	<0.001			0.042
8/21/2020			<0.001		
9/29/2020				0.0019 (J)	
9/30/2020	0.0061 (J)	0.00073 (J)			
10/1/2020			<0.001		0.043
2/9/2021			<0.001	0.0012 (J)	
2/10/2021	0.00065 (J)	<0.001			0.041
9/8/2021		<0.001		0.0017 (J)	
9/9/2021	0.0029 (J)		<0.001		0.043
2/2/2022	0.0035 (J)	<0.001	<0.001		0.042
2/3/2022				0.0011 (J)	
8/31/2022	0.000869 (J)		<0.001	0.00179	0.0437
9/2/2022		0.000288			
Mean	0.00374	0.0008297	0.0009563	0.001232	0.04086
Std. Dev.	0.002477	0.0002649	0.0001237	0.0003598	0.004444
Upper Lim.	0.006365	0.001	0.001	0.0017	0.04354
Lower Lim.	0.001115	0.000288	0.00065	0.00097	0.03817

Confidence Interval

Constituent: Selenium (mg/L) Analysis Run 11/5/2022 2:09 PM View: Appendix I & IV

Plant Arkwright Client: Southern Company Data: Arkwright No 3

	ARAMW-3	ARAMW-4	ARGWC-10	ARGWC-15	ARGWC-16	ARGWC-17
6/23/2016			<0.005	<0.005		
6/24/2016					0.0014	<0.005
9/1/2016			<0.005		0.0014	<0.005
9/2/2016				0.0005 (J)		
10/25/2016			<0.005		0.0015 (J)	<0.005
10/26/2016				<0.005		
1/26/2017				<0.005	0.00071 (J)	<0.005
1/27/2017			<0.005			
4/11/2017					0.0011 (J)	<0.005
4/12/2017			<0.005	<0.005		
6/21/2017				<0.005	0.00075 (J)	<0.005
6/22/2017			<0.005			
10/26/2017			<0.005	0.0004 (J)	0.0012 (J)	<0.005
4/10/2018				0.00044 (J)	0.0013	<0.005
4/11/2018			<0.005			
10/16/2018					0.00072 (J)	
10/17/2018			<0.005	<0.005		<0.005
3/27/2019				<0.005		
3/28/2019			<0.005		0.0017	<0.005
8/20/2019					<0.005	
8/21/2019			<0.005	<0.005		<0.005
10/8/2019				<0.005		
10/9/2019			<0.005		0.0018 (J)	<0.005
4/8/2020			<0.005	<0.005	0.0022 (J)	<0.005
8/18/2020						<0.005
8/19/2020			<0.005	<0.005	0.0029 (J)	
8/20/2020	<0.005	<0.005				
9/29/2020				<0.005	0.0025 (J)	<0.005
9/30/2020	<0.005	<0.005				
10/1/2020			<0.005			
2/9/2021			<0.005	<0.005	0.0019 (J)	<0.005
2/10/2021	<0.005	<0.005				
9/8/2021		<0.005		<0.005	0.0024 (J)	<0.005
9/9/2021	0.0024 (J)					
9/10/2021			0.0017 (J)			
2/2/2022	<0.005	0.0011 (J)	<0.005			0.00076 (J)
2/3/2022				<0.005	0.0032 (J)	
8/31/2022	<0.005		<0.005	<0.005	0.00287 (J)	
9/2/2022		<0.005				<0.005
Mean	0.004567	0.00435	0.004826	0.004281	0.001924	0.004777
Std. Dev.	0.001061	0.001592	0.0007571	0.001706	0.001061	0.0009727
Upper Lim.	0.005	0.005	0.005	0.005	0.002412	0.005
Lower Lim.	0.0024	0.0011	0.0017	0.0005	0.001277	0.00076

Confidence Interval

Constituent: Selenium (mg/L) Analysis Run 11/5/2022 2:09 PM View: Appendix I & IV

Plant Arkwright Client: Southern Company Data: Arkwright No 3

	ARGWC-7	ARGWC-9
6/23/2016	0.00029 (J)	<0.005
8/31/2016	<0.005	0.00024 (J)
10/25/2016	<0.005	<0.005
1/26/2017	<0.005	<0.005
4/12/2017	<0.005	<0.005
6/22/2017	<0.005	<0.005
10/25/2017	<0.005	0.00029 (J)
4/10/2018	<0.005	
4/11/2018		<0.005
10/17/2018	<0.005	<0.005
3/28/2019	<0.005	<0.005
8/21/2019	<0.005	<0.005
10/9/2019	<0.005	<0.005
4/8/2020	<0.005	
4/9/2020		<0.005
8/18/2020	<0.005	
8/19/2020		<0.005
9/29/2020	<0.005	
10/1/2020		<0.005
2/10/2021	<0.005	<0.005
9/9/2021		<0.005
9/10/2021	0.0028 (J)	
2/2/2022		<0.005
2/3/2022	<0.005	
8/31/2022	<0.005	<0.005
Mean	0.004636	0.004502
Std. Dev.	0.001167	0.001493
Upper Lim.	0.005	0.005
Lower Lim.	0.0028	0.00029

Confidence Interval

Constituent: Silver (mg/L) Analysis Run 11/5/2022 2:09 PM View: Appendix I & IV
Plant Arkwright Client: Southern Company Data: Arkwright No 3

	ARGWC-15	ARGWC-16
6/23/2016	<0.001	
6/24/2016		<0.001
10/25/2016		<0.001
10/26/2016	<0.001	
4/11/2017		<0.001
4/12/2017	<0.001	
10/26/2017	0.00037 (J)	0.00026 (J)
4/10/2018	<0.001	<0.001
10/16/2018		<0.001
10/17/2018	<0.001	
3/27/2019	<0.001	
3/28/2019		<0.001
10/8/2019	0.00018 (J)	
10/9/2019		<0.001
4/8/2020	<0.001	<0.001
9/29/2020	<0.001	<0.001
2/9/2021	<0.001	<0.001
9/8/2021	<0.001	<0.001
2/3/2022	<0.001	<0.001
8/31/2022	<0.001	<0.001
Mean	0.0008964	0.0009471
Std. Dev.	0.0002659	0.0001978
Upper Lim.	0.001	0.001
Lower Lim.	0.00037	0.00026

Confidence Interval

Constituent: Thallium (mg/L) Analysis Run 11/5/2022 2:09 PM View: Appendix I & IV

Plant Arkwright Client: Southern Company Data: Arkwright No 3

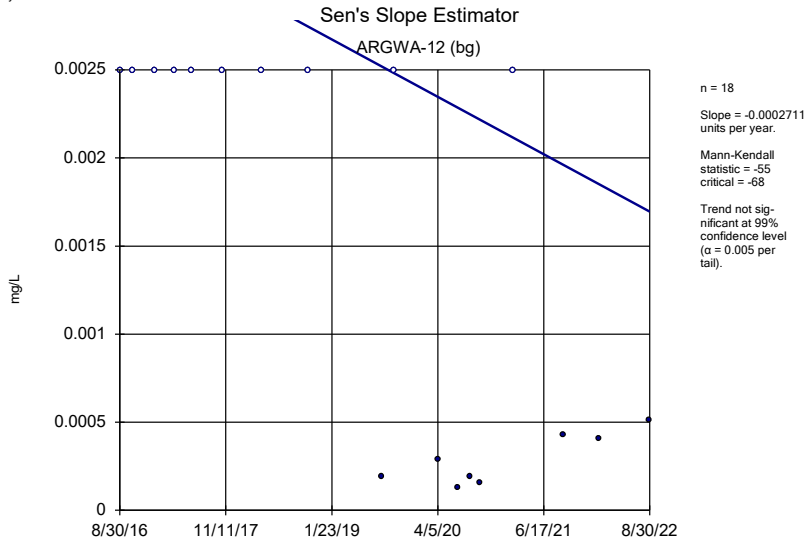
	ARAMW-4	ARAMW-6	ARGWC-15	ARGWC-16	ARGWC-17	ARGWC-18
9/1/2016				<0.002	<0.002	<0.002
9/2/2016			9.5E-05 (J)			
10/25/2016				<0.002	<0.002	
10/26/2016			<0.002			<0.002
1/26/2017			<0.002	<0.002	<0.002	
1/27/2017						<0.002
4/11/2017				<0.002	<0.002	
4/12/2017			<0.002			<0.002
6/21/2017			<0.002	<0.002	<0.002	<0.002
10/25/2017						<0.002
10/26/2017			<0.002	<0.002	<0.002	
4/10/2018			<0.002	<0.002	<0.002	
4/11/2018						<0.002
10/16/2018				<0.002		
10/17/2018			<0.002		<0.002	<0.002
8/20/2019				<0.002		
8/21/2019			<0.002		<0.002	<0.002
10/8/2019			<0.002			
10/9/2019				<0.002	<0.002	<0.002
4/8/2020			<0.002	<0.002	<0.002	
4/9/2020						<0.002
8/18/2020					<0.002	
8/19/2020			<0.002	0.00027 (J)		
8/20/2020	0.00022 (J)					<0.002
8/21/2020		0.00018 (J)				
9/29/2020			<0.002	0.00025 (J)	<0.002	
9/30/2020	<0.002					<0.002
10/1/2020		<0.002				
2/9/2021		<0.002	<0.002	<0.002	<0.002	
2/10/2021	<0.002					<0.002
9/8/2021	<0.002		<0.002	0.00025 (J)	0.00063 (J)	
9/9/2021		<0.002				0.00028 (J)
2/2/2022	<0.002	<0.002			<0.002	
2/3/2022			<0.002	<0.002		<0.002
8/31/2022		<0.002	<0.002	<0.002		
9/2/2022	<0.002				<0.002	<0.002
Mean	0.001703	0.001697	0.001888	0.001692	0.001919	0.001899
Std. Dev.	0.0007267	0.000743	0.000462	0.0006851	0.0003323	0.0004172
Upper Lim.	0.002	0.002	0.002	0.002	0.002	0.002
Lower Lim.	0.00022	0.00018	9.5E-05	0.00027	0.00063	0.00028

FIGURE J.

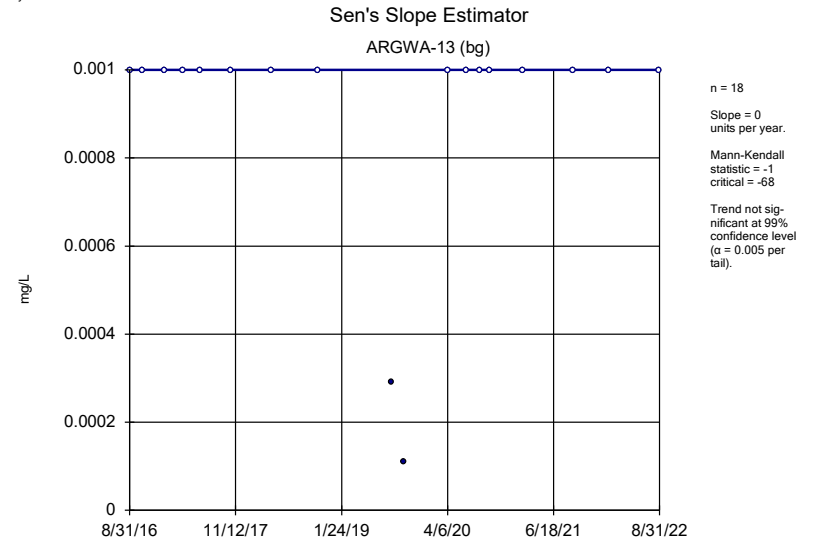
Appendix IV Trend Tests - All Results (No Significant)

Plant Arkwright Client: Southern Company Data: Arkwright No 3 Printed 11/5/2022, 2:14 PM

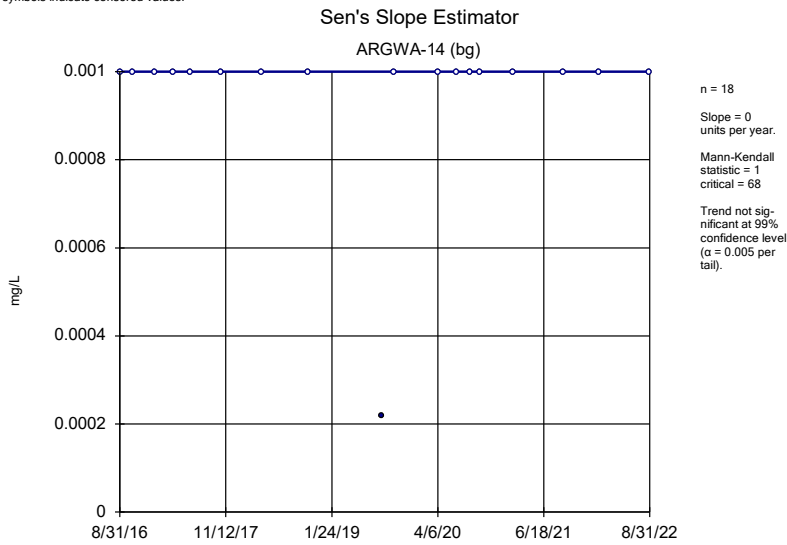
Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Cobalt (mg/L)	ARGWA-12 (bg)	-0.0002711	-55	-68	No	18	55.56	n/a	n/a	0.01	NP
Cobalt (mg/L)	ARGWA-13 (bg)	0	-1	-68	No	18	88.89	n/a	n/a	0.01	NP
Cobalt (mg/L)	ARGWA-14 (bg)	0	1	68	No	18	94.44	n/a	n/a	0.01	NP
Cobalt (mg/L)	ARGWA-24 (bg)	-0.0005968	-1	-12	No	5	40	n/a	n/a	0.01	NP
Cobalt (mg/L)	ARGWA-3 (bg)	0	-5	-68	No	18	88.89	n/a	n/a	0.01	NP
Cobalt (mg/L)	ARGWA-5 (bg)	0	-1	-68	No	18	88.89	n/a	n/a	0.01	NP
Cobalt (mg/L)	ARGWC-17	0.002054	45	68	No	18	0	n/a	n/a	0.01	NP



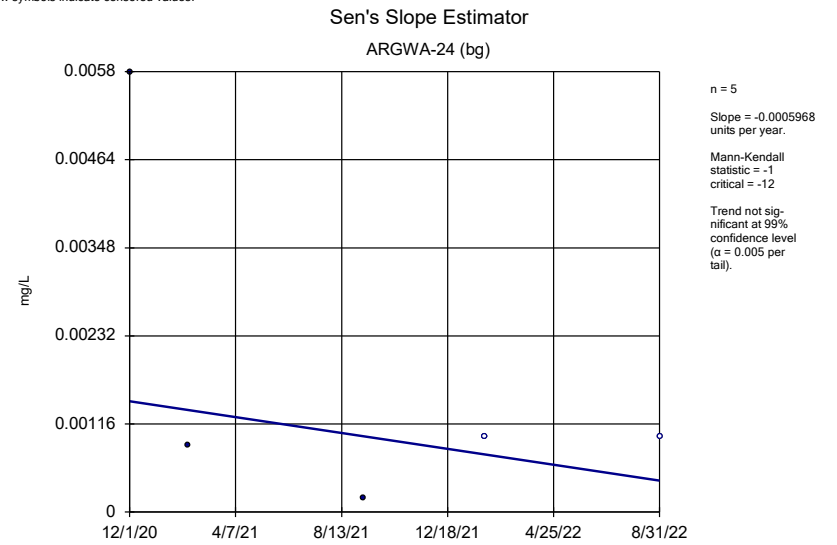
Constituent: Cobalt Analysis Run 11/5/2022 2:13 PM View: Appendix IV - Trend Tests
Plant Arkwright Client: Southern Company Data: Arkwright No 3



Constituent: Cobalt Analysis Run 11/5/2022 2:13 PM View: Appendix IV - Trend Tests
Plant Arkwright Client: Southern Company Data: Arkwright No 3



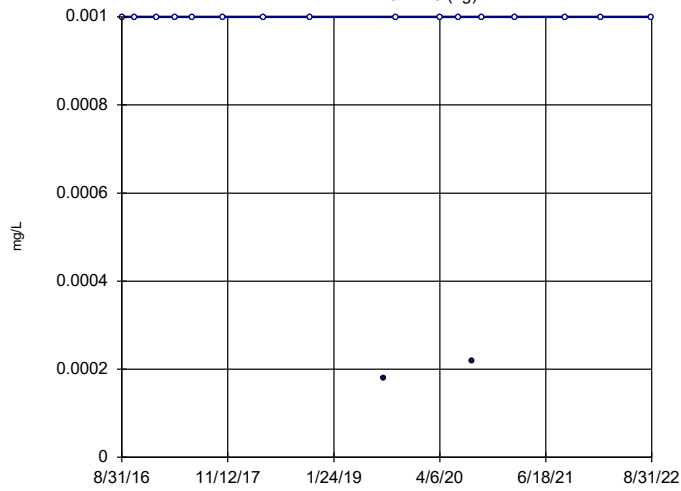
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Plant Arkwright Client: Southern Company Data: Arkwright No 3



Constituent: Cobalt Analysis Run 11/5/2022 2:13 PM View: Appendix IV - Trend Tests
Plant Arkwright Client: Southern Company Data: Arkwright No 3

Sen's Slope Estimator

ARGWA-3 (bg)

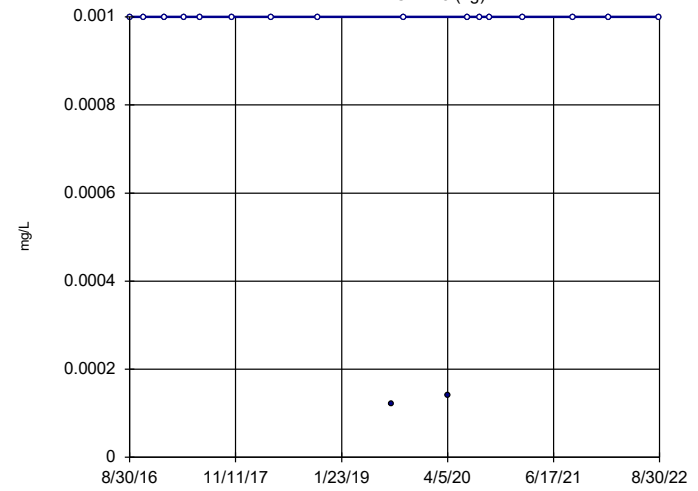


n = 18
Slope = 0
units per year.
Mann-Kendall
statistic = -5
critical = -68
Trend not sig-
nificant at 99%
confidence level
($\alpha = 0.005$ per
tail).

Constituent: Cobalt Analysis Run 11/5/2022 2:13 PM View: Appendix IV - Trend Tests
Plant Arkwright Client: Southern Company Data: Arkwright No 3

Sen's Slope Estimator

ARGWA-5 (bg)

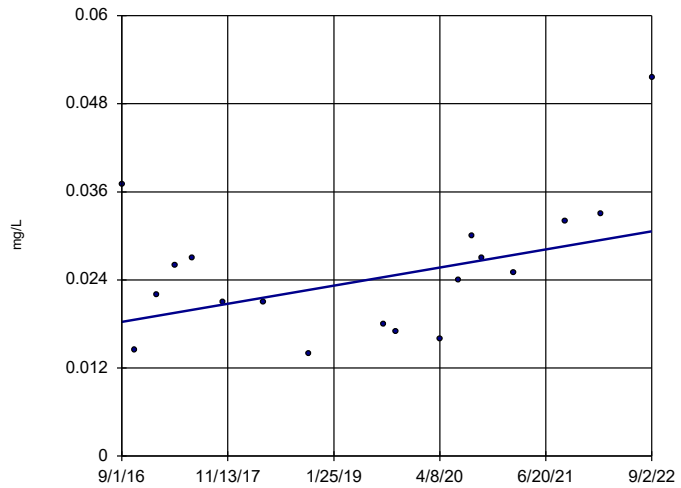


n = 18
Slope = 0
units per year.
Mann-Kendall
statistic = -1
critical = -68
Trend not sig-
nificant at 99%
confidence level
($\alpha = 0.005$ per
tail).

Constituent: Cobalt Analysis Run 11/5/2022 2:13 PM View: Appendix IV - Trend Tests
Plant Arkwright Client: Southern Company Data: Arkwright No 3

Sen's Slope Estimator

ARGWC-17



n = 18
Slope = 0.002054
units per year.
Mann-Kendall
statistic = 45
critical = 68
Trend not sig-
nificant at 99%
confidence level
($\alpha = 0.005$ per
tail).

Constituent: Cobalt Analysis Run 11/5/2022 2:13 PM View: Appendix IV - Trend Tests
Plant Arkwright Client: Southern Company Data: Arkwright No 3

**Appendix D
Semi-Annual Remedy Selection
and Design Progress Report**





**SEMI-ANNUAL REMEDY SELECTION AND
DESIGN PROGRESS REPORT**

Plant Arkwright
Ash Pond 3 Landfill and Monofill
Macon, Georgia

February 28, 2023

Prepared for:

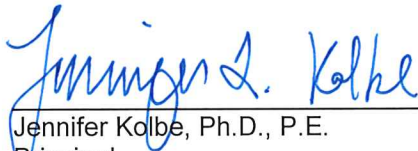


Prepared by:
Stantec Consulting Services Inc.
10745 Westside Way, Suite 250
Alpharetta, Georgia 30009-7640

**Semi-Annual Remedy Selection and Design Progress Report
Plant Arkwright AP Pond 3 Landfill and Monofill**

CERTIFICATION STATEMENT


This Semi-Annual Remedy Selection and Design Progress Report, Georgia Power Company – Plant Arkwright, Ash Pond 3 Landfill and Monofill, Macon, Georgia, has been prepared in accordance with the Georgia Environmental Protection Division Rules for Solid Waste Management 391-3-4-.10(6)(a). This report describes the progress made during the second semi-annual period of 2022 in selecting and designing a remedy previously documented in the Assessment of Corrective Measures Report – Plant Arkwright, Ash Pond 3 Landfill and Monofill, this report was prepared under the supervision of a licensed professional engineer and a licensed professional geologist with Stantec Consulting Services Inc. I hereby certify that I am a qualified groundwater scientist, in accordance with the Georgia Rules of Solid Waste Management, and 40 CFR Part 258.50(g).



Jennifer Kolbe, Ph.D., P.E.
Principal



2/28/2023
Date



Brian Steele, P.G.
Senior Geologist



2/28/23
Date



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Semi-Annual Remedy Selection and Design Progress Report Plant Arkwright AP Pond 3 Landfill and Monofill

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**Semi-Annual Remedy Selection and Design Progress Report
Plant Arkwright AP Pond 3 Landfill and Monofill**

Acronyms / Abbreviations

ACM	Assessment of Corrective Measures
AP-3	Ash Pond 3
bgs	Below ground surface
CCR	Coal Combustion Residuals
CCR Rule	Coal Combustion Residuals Rule
40 CFR	40 Code of Federal Regulations
CSM	Conceptual Site Model
DPT	Direct Push Technology
GA EPD	Georgia Environmental Protection Division
Georgia Power	Georgia Power Company
GWPS	Groundwater Protection Standard
mg/L	milligrams per liter
MNA	Monitored Natural Attenuation
PRB	Permeable Reactive Barrier
SEP	Sequential Extraction Procedure
SSL	Statistically Significant Level
TSI	Terra Systems, Inc.
US EPA	United States Environmental Protection Agency
XRD	X-Ray Diffraction
XRF	X-Ray Fluorescence



1 Introduction

1.1 Purpose

This Semi-Annual Remedy Selection and Design Progress Report (the Semi-Annual Progress Report) was prepared for the Georgia Power Company (Georgia Power) Plant Arkwright Ash Pond 3 (AP-3) Landfill and Monofill (Site) in accordance with the Georgia Environmental Protection Division (GA EPD) Rules for Solid Waste Management 391-3-4-.10(6)(a). To specify groundwater monitoring requirements for coal combustion residuals (CCR) management units, GA EPD Rule 391-3-4-.10(6)(a) incorporates by reference the United States Environmental Protection Agency (US EPA) rule Title 40 Code of Federal Regulations (40 CFR) § 257 Subpart D (CCR Rule). For ease of reference, the US EPA CCR Rule is cited within this report. This semi-annual progress report describes the progress made during the period of July to December 2022 in selecting and designing a remedy and updates the progress since the Semi-Annual Progress Report submitted in July 2022 (Stantec, 2022).

The purpose of this semi-annual progress report is to document the process of selecting corrective measures for groundwater as provided in the Assessment of Corrective Measures (ACM) Report, Georgia Power Company – Plant Arkwright Ash Pond 3 Landfill and Monofill (Wood, 2020a). This process is typically iterative and may be composed of multiple steps to analyze the effectiveness of corrective measures to improve groundwater quality. Once potential corrective measures are identified, they are further evaluated using the criteria outlined in 40 CFR § 257.96(c). Additional details are provided within the ACM Report and the cited state and federal regulations. Pursuant to 40 CFR § 257.96(a), semi-annual progress reports have been regularly submitted to document the efforts of evaluating and progressing towards selecting a groundwater corrective measure (Wood, 2021a, 2021b, and 2022a; Stantec 2022).

1.2 Site-Background and Overview of Ash Pond Closure

Plant Arkwright is located in Bibb County, Georgia approximately 6 miles northwest of the city of Macon (Figure 1). Georgia Power officially closed the AP-3 Landfill and Monofill in 2010 with GA EPD's approval and in accordance with the solid waste landfill regulations specified by GA EPD Rule 391-3-4, in effect at the time of its closure. The CCR management unit referred to as the AP-3 Landfill and Monofill is defined as an inactive CCR Landfill per GA EPD Rule 391-3-4-.10(2)(a)(3).

The AP-3 Landfill and Monofill is exempt from the requirements in the CCR Rule – Standard for the Disposal of Coal Combustion Residuals in Landfills and Surface Impoundments, §257.50 (d) and (e), which states that the subpart does not apply to CCR landfills that have ceased receiving CCR material prior to October 19, 2015. These CCR units are, however, subject to the requirements of relevant portions of GA EPD 391-3-4-.10.



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Georgia Power has elected to remove CCR material from AP-3 Landfill and Monofill and will place it in a new, lined landfill that will be constructed at Plant Arkwright. Georgia Power intends to replace the previously submitted permit application to GA EPD to reflect this change, pending the approval of the proposed landfill permit. The removal of CCR material from the AP-3 Landfill and Monofill will provide source control that substantially eliminates the potential for migration of CCR constituents to groundwater. Corrective measures discussed in this report are being evaluated to address statistically significant levels (SSLs) of certain CCR Rule Appendix IV constituents in groundwater at the CCR management unit boundary.

1.3 Regulatory Program Status and Nature and Extent

Georgia Power initiated an Assessment of Corrective Measures (ACM) for AP-3 Landfill and Monofill on July 09, 2020, pursuant to 40 CFR § 257.96(b). An ACM Report was prepared and submitted to GA EPD in December 2020 (Wood, 2020a).

Statistical analysis of the August 2022 semi-annual assessment monitoring groundwater data identified the following SSLs at concentrations exceeding or equal to the state or federal GWPS. Details are provided in the 2022 Semi-Annual Groundwater Monitoring and Corrective Action Report (Stantec, 2023).

AP-3 Landfill and Monofill:

- Cobalt: ARGWC-17

The extent of the cobalt SSL in monitoring well ARGWC-17 is horizontally delineated in downgradient wells ARGWC-16 and vertically delineated in ARAMW-4. The groundwater data from compliance and horizontal delineation monitoring wells sampled during the August 2022 semi-annual assessment monitoring event were used to generate the cobalt iso-concentration map presented on Figure 4. Groundwater sampling results and surface water sampling results are provided in Table 5 and Table 6 respectively of the 2022 Annual Groundwater Monitoring and Corrective Action Report (Stantec, 2023).

Based on GA EPD guidance, wells with SSLs were further evaluated by Groundwater Stats Consulting using the Sen's Slope/Mann Kendall trend test (Appendix A). The full report generated from the statistical analyses is provided in Appendix C of the 2022 Semi-Annual Groundwater Monitoring and Corrective Action Report (Stantec, 2023).

Time series plots for cobalt included in Appendix C of the 2022 Semi-Annual Groundwater Monitoring and Corrective Action Report (Stantec, 2023) do not show significant trends for cobalt in well ARGWC-17 (Appendix A).

Georgia Power continues to monitor the groundwater at the AP-3 Landfill and Monofill during the ACM phase in accordance with the GA EPD CCR Rule assessment monitoring program.



1.4 Corrective Measures Evaluated

As discussed in the 2020 ACM Report (Wood 2020a), the following corrective measures were considered potentially feasible for use at AP-3 Landfill and Monofill. A comparative screening of the corrective measures is provided in Table 2.

1. Geochemical Manipulation (In-Situ Injection)
2. Hydraulic Containment (Pump and Treat)
3. Monitored Natural Attenuation (MNA)
4. Permeable Reactive Barrier (PRB)
5. Phytoremediation/TreeWell®
6. Subsurface Vertical Barrier Walls

Subsurface vertical barrier wall corrective measure has since been removed from consideration based on data evaluations presented in the February 2021 semi-annual progress report (Wood, 2021a).

Georgia Power proactively initiated adaptive site management as outlined in the ACM Report (Wood, 2020a) to support the groundwater remedy selection process and address potential changes in site conditions as appropriate during the ash pond closure. The adaptive site management approach will take existing site conditions, including natural attenuation mechanisms, into account.

Characterization activities to evaluate natural attenuation mechanisms at the Site included collection of data to evaluate the existing and long-term effectiveness of these processes in the aquifer and reduce uncertainty for decision making at each screening step as listed in the US EPA guidelines for MNA of inorganic constituents (US EPA, 1999, 2007, 2015). The 1999 MNA guidance originally introduced the “tiered approach” with three tiers of site-specific information, or lines of evidence, to evaluate use of MNA at certain sites (US EPA, 1999). In 2007, the US EPA issued MNA technical guidance specific to inorganic contaminants (US EPA, 2007) that contained four “tiers.” The 2015 MNA guidance retains these four “tiers,” but describes them as “phases” as discussed below (US EPA, 2015). This 2015 MNA document for inorganic contaminants expands on and is designed to be a companion to the 1999 and 2007 MNA guidance.

- Phase I: Demonstration that the groundwater plume is not expanding.
- Phase II: Determination that the mechanism and rate of the attenuation process are sufficient.
- Phase III: Determination that the capacity of the aquifer is sufficient to attenuate the mass of contaminant within the plume and the stability of the immobilized contaminant is sufficient to resist re-mobilization.



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- Phase IV: Design of a performance monitoring program based on an understanding of the mechanism of the attenuation process, and establishment of contingency remedies tailored to site-specific characteristics.

Georgia Power will address Phase IV during the development of the future corrective action monitoring plan, after the final remedy selection report is submitted.

The data collection approach and the data interpretation presented within this semi-annual progress report are informed by this phased MNA guidance. The characterization data collected under this approach are also used to refine the conceptual site model (CSM) and evaluate other retained potential corrective measures.

1.5 Risk Evaluation

In addition to the assessment monitoring program at the Site, Georgia Power conducted a human health and ecological risk evaluation in December 2020 to evaluate cobalt and molybdenum SSLs in groundwater at AP-3 Landfill and Monofill. The risk evaluation provides one of many lines of evidence that will be assessed and factored into the remedy selection process, which will be completed in accordance with 40 CFR § 257.97. Based on this risk evaluation, concentrations of constituents detected in groundwater at AP-3 Landfill and Monofill between August 2016 and March 2020 are not expected to pose a risk to human health or the environment (Wood, 2020c). Cobalt data collected since March 2020 are consistent with data used in the risk evaluation; therefore, the conclusions provided in the 2020 Risk Evaluation Report (Wood, 2020c) are supported by current conditions.

As requested by GA EPD to identify potential users of groundwater in the area, an updated well survey of potential groundwater wells within a two-mile radius of AP-3 Landfill and Monofill was conducted and consisted of reviewing federal, state, county records, and online sources. The findings from this survey are presented in Appendix B and are consistent with the previous well survey conducted in 2022 (Wood, 2022).



2 Summary of Work Completed

The following sections summarize the field investigations and data evaluations completed in support of remedy selection since the issuance of the Semi-Annual Remedy Selection and Design Progress Report – Georgia Power Company Plant Arkwright Ash Pond 3 Landfill and Monofill in July 2022 (Stantec, 2022). The routine assessment monitoring event conducted in August 2022, including groundwater gauging and sampling and surface water sampling in Beaverdam Creek, is discussed in the 2022 Semi-Annual Groundwater Monitoring and Corrective Action Report (Stantec, 2023).

2.1 Groundwater Sampling

In September 2022, groundwater samples were collected from detection and assessment monitoring wells and analyzed for Appendix I (silver), Appendix III and Appendix IV constituents. Additional parameters (aluminum, bicarbonate and carbonate alkalinity, iron, manganese, magnesium, potassium, and sodium) were also analyzed in support of evaluating the geochemical composition of the groundwater in the overburden and bedrock for the purpose of evaluating potential attenuation mechanisms. Results of this sampling event are provided in the 2022 Semi-Annual Groundwater Monitoring and Corrective Action Report (Stantec, 2023). Statistical analysis of the Appendix IV data from new assessment well ARAMW-9, which was installed in October 2022, will occur after four sampling events have been completed to construct the confidence intervals required to evaluate and confirm potential SSLs. Georgia Power will continue to monitor the assessment wells and adaptively manage the Site as new data become available.

2.2 Porewater Sampling

In September 2022, porewater samples were collected from AP-3 piezometers (AP3PZ-1A, AP3PZ-2A, AP3PZ-3A, AP3PZ-4A, and AP3PZ-5A) and analyzed for Appendix III and cobalt. Additional parameters (aluminum, bicarbonate and carbonate alkalinity, iron, manganese, magnesium, potassium, and sodium) were also analyzed in support of evaluating the geochemical composition of the porewater for the purpose of evaluating potential attenuation mechanisms.

A porewater sample was attempted to be collected from AP-3 Monofill piezometer STN-B37 after its installation during a geotechnical exploration drilling program in September 2022. However, due to insignificant porewater (<0.5 ft of water column), no samples were collected. The piezometer was installed approximately 0.2 feet above the bottom of the CCR material and screened 2.4-ft in the CCR; the location is shown on Figure 2. Groundwater levels in this piezometer will be measured in future events and a sampling will be attempted if there is sufficient saturation for collection of representative porewater samples.

2.3 Soil Sampling and Geochemical Characterization

Samples for geochemical characterization were collected from borings directly adjacent to wells ARGWC-17 and ARGWC-24 using a direct-push technology (DPT) rig in September and October 2022. One



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sample was collected from the screened interval depth of ARGWC-24 (15 to 23.9 feet below ground surface (bgs) and was analyzed for total metal concentrations, whole-rock chemistry, and mineralogical composition (by X-ray diffraction [XRD]). Also, a sequential extraction procedure (SEP) was used for the analysis of selected metals for evaluation of operationally-defined metal phases in the aquifer solids. One additional sample was collected from ARGWC-17 (20.0 feet bgs to 30.0 feet bgs) and analyzed for total metals and SEP. The samples were collected in the field using DPT sleeves that were cut using a hand saw in the field into two (2) feet sections and capped on both ends of the sleeves, preserved on ice, and shipped to SGS Canada Inc.

The purpose of the XRD and SEP evaluations is to identify geochemically reactive minerals in the soil material and to evaluate attenuation mechanisms at the Site. SEP results were not received from the laboratory at the time of this report and will be included in the subsequent annual report.

2.4 Groundwater and Soil Sampling for Treatability Testing

Site soil and groundwater were collected in the vicinity of the ARGWC-17 monitoring well location to support evaluation of *in situ* treatment technologies for cobalt in groundwater in this general area of the Site.

Stantec collected 20 gallons of groundwater from monitoring well ARGWC-17 to support this testing.. The groundwater for treatability testing was collected in mass volume Cubitainers®, using the low-flow sampling technique with a flow rate of 500 milliliters per minute. Low-flow Sampling procedures were conducted in accordance with US EPA Region 4 Laboratory Services and Applied Science Division operating procedures.

Prior to sample collection, the well was purged until three well volumes were removed. Once the well had recharged sufficiently to collect the required volume, field parameters were recorded using a flow-through cell prior to filling of the first container. The flow-through cell was detached once recording of field parameter readings was complete. Then, new tubing was attached to the end of the dedicated tubing and placed at the bottom of the sample container to fill the container from the bottom up. Groundwater was pumped into each 2.5-gallon container at a flow rate that limited aeration of the groundwater. The container was filled completely to eliminate headspace and allowed to overflow slightly prior to capping. The containers were labeled with the well ID, date, and numbered sequentially. Containers were placed on ice within 15 minutes of filling and submitted for baseline geochemical characterization and treatability testing at Terra Systems, Inc. (TSI).

Soil samples from ARGWC-17, as described in Section 2.3, were collected for treatability testing. A total mass of 40 pounds of soil was composited and submitted for baseline geochemical characterization and treatability testing at TSI.

Treatability testing is currently underway at the TSI contract laboratory and results will be reported in a subsequent annual report.



3 Summary of Results

3.1 Groundwater and Porewater Analysis

The groundwater and porewater analytical data described in Section 2.1 and 2.2 from the AP-3 Landfill and Monofill is summarized in Table 3. The laboratory reports for the groundwater samples collected in August-September 2022 are provided in the 2022 Semi-Annual Groundwater Monitoring and Corrective Action Report (Stantec, 2023). The laboratory reports for the porewater samples collected in September 2022 are included in Appendix C.

The concentrations of major cations and anions are presented as Stiff and Piper diagrams to characterize the chemical composition of groundwater at AP-3 Landfill and Monofill. Stiff diagrams for the groundwater results are presented in Figures 6 through 8 and the porewater results are included in Figure 9. The Piper diagram from the August-September 2022 sampling event is presented in Figure 10. These diagrams represent the chemical composition of groundwater and porewater based on the ionic strengths of major cations and anions.

The chemical composition of groundwater at the Site is represented over a broad range, from a calcium-bicarbonate type water to calcium-sulfate type water as shown on Figure 10, which shows samples collected from August-September 2022 sampling event. Overall, the upgradient water reflects a calcium-bicarbonate type water, whereas the downgradient water range from a mixed-type to calcium-sulfate type water. Monitoring well ARGCWA-14 is similar to the other upgradient wells with a slightly higher sodium content, whereas upgradient monitoring well ARGWCA-13 is reflective of a calcium-sulfate type water that is more aligned with the water type of the downgradient wells.

The AP-3 porewater shows a mixed-type water, reflecting higher ionic concentrations than upgradient water but significantly lower concentrations than several downgradient wells, including well ARGWC-17 that shows an SSL for cobalt. Wells showing the calcium-sulfate type water are located across the surface water separating AP-3 and closer to the Monofill, as well as upgradient well ARAMWC-13. Thus, detection well ARGWC-17 and assessment wells ARGWC-16 and ARAMW-4 show a unique chemical signature compared with AP-3 groundwater and porewater.

The chemical composition of groundwater collected from the February 2022 sampling event is similar to the August-September 2022 event, indicating there is no major seasonal change in groundwater types observed from the 2022 Piper diagrams.

The Stiff diagrams supports the water types reflected in the Piper diagrams. In summary, the chemical composition of downgradient water from AP-3 is shows a mixed-type water, comparable to the pore water signature, but is notably different from the downgradient groundwater from the Monofill. Detection well ARGWC-17 and assessment wells reflect groundwater flow from the Monofill.



3.2 Geochemical Characterization Results

Geochemical characterization results are presented in Table 4. Summary of results are discussed below. Laboratory results are included in Appendix D.

3.2.1 TOTAL METALS RESULTS

Soil samples collected from both the upgradient and downgradient well locations ARGWA-24 and ARGWC-17 were analyzed for total metals. Total metals results indicate considerable concentrations of iron and aluminum. Iron concentrations range from 35,000 mg/kg at the upgradient location to 51,000 mg/kg at the downgradient location, while, aluminum concentrations range from 15,000 mg/kg to 20,000 mg/kg, respectively. These parameters are measured in higher concentrations at the downgradient well location, ARGWC-17. Occurrence of iron and aluminum at relatively high concentrations indicate the availability of favorable elements that promote attenuation for metals to the aquifer solids.

Total arsenic and cobalt concentrations are roughly two to three times higher at the downgradient well location ARGWC-17 relative to upgradient well ARGWA-24. Total arsenic concentration of 13 mg/kg and cobalt of 48 mg/kg near well ARGWC-17 are significantly higher average concentrations of arsenic (2 mg/kg) and cobalt (25 mg/kg) in the earth's crust (Smith and Huyck, 1999). This suggests natural occurrences of arsenic and cobalt in the aquifer solids at the downgradient location near to well ARGWC-17.

3.2.2 XRF RESULTS

Whole-rock analysis by XRF on the overburden sample from well ARGWA-24 reflect an overburden composition in the background area. Results indicate that the sample composition is primarily silica (53 percent). Aluminum and iron (18 and 10 percent, respectively) are the next dominant oxides. The chemical composition shows the overburden soil onsite tend to be relatively rich in aluminum and iron with moderate amounts of calcium.

3.2.3 XRD RESULTS

The upgradient soil sample collected adjacent to ARGWA-24 was analyzed by XRD. The mineralogy of the of the sample analyzed is predominantly feldspar (albite and microcline), amphibole (actinolite), muscovite, secondary clay minerals (kaolinite and stilpnomelane), and quartz. The roughly 16 percent clay minerals may provide for cation exchange capacity and complexation. The 38.6 percent feldspars are generally weatherable to secondary clay minerals. Thus, the mineralogical composition supports favorable abundance of secondary clays for the occurrence and attenuation of metals in the aquifer solids.



4 Updated Conceptual Site Model

Georgia Power has elected to remove CCR material from the AP-3 Landfill and Monofill, then place it in a new, lined landfill that will be constructed at Plant Arkwright. The closure of AP-3 Landfill and Monofill by removal of CCR material provides a source control that substantially eliminates the potential for migration of CCR constituents to groundwater. The following bullets summarize the current understanding of the CSM within the context of selecting an appropriate groundwater corrective measure for the AP-3 Landfill and Monofill.

- Groundwater level monitoring data collected in 2020 through August 2022 from the Site monitoring wells and delineation piezometers show stable groundwater level trends. The potentiometric surface contour maps reflect groundwater generally flowing across AP-3 Landfill and Monofill toward the south in the direction of Beaverdam Creek, which is consistent with previous observations. New stream flow elevation data from the area near AP-3 and the Monofill suggests that groundwater flows from AP-3 and the Monofill towards the surface water feature separating AP-3 and Monofill but may be in near-equilibrium with reference to hydraulic heads on either side of the stream at some reaches.
- Cobalt is the only CCR Rule Appendix IV constituent having an SSL in groundwater at the Site at a single well location (ARGWC-17) and is horizontally delineated in downgradient well ARGWC-16 and vertically delineated in ARAMW-4.
- The SEP previously conducted for select saturated soil samples suggests that the presence of site-specific CCR-related constituents in saturated soils appear to be predominantly associated with the non-crystalline mineral phase of the saturated soils, and with the recalcitrant acid/sulfide and residual fractions. Greater concentrations of total cobalt associated with site soils in the downgradient area relative to the upgradient area provides some evidence of attenuation of these metals/metalloids by the site soils. However, the occurrence of cobalt in the residual and acid/sulfide phases suggest availability of a natural source for cobalt. Additional data are needed to constrain the sources and the attenuation mechanism and capacity in the aquifer solids.



5 Updated Evaluation of Corrective Measures

As discussed during the February 2022 progress report (Wood, 2022), one of the six potential corrective measures for groundwater remediation (i.e., subsurface barrier wall) was eliminated from further evaluation. The other five potential corrective measures were retained for further evaluation. Data collected during the past six months related to remedy selection reported in the current progress report have not resulted in the elimination of additional corrective measures. Therefore, the following corrective measures will be retained for further evaluation.

5.1 Geochemical Approaches (*In Situ* Injection)

In situ injections of reagents are a remediation technology for inorganic constituents such as cobalt. Cobalt can be precipitated or immobilized under different combinations of pH and conditions. To understand the geochemical processes that would effectively immobilize target constituents in groundwater, site-specific bench-scale and pilot-scale treatability studies are currently being conducted to evaluate the viability of various treatment reagents to enhance or create conditions suitable for the precipitation or sorption of cobalt without mobilizing other naturally occurring constituents.

5.2 Hydraulic Containment (Pump and Treat)

Hydraulic containment refers to the use of groundwater extraction to induce a hydraulic gradient for hydraulic capture or control of the migration of impacted groundwater downgradient of the Ash Pond 3 and Monofill. This approach uses extraction wells or trenches to capture groundwater, which may subsequently require above-ground treatment and permitted discharge to a receiving water body or sewer system, reinjection into the aquifer, or reuse at the Site. Groundwater pump and treat is often relatively slow as a means to restore groundwater quality over a long-term period, but can be effective as an interim measure, or combined with another measure, to provide hydraulic containment to limit constituent migration toward a potential receptor.

Groundwater extraction for hydraulic control can often effectively address the variety of inorganic constituents encountered at CCR sites. Therefore, pump and treat is a potentially viable corrective measure for cobalt in groundwater at the AP-3 Landfill and Monofill and will be retained for further evaluation.

5.3 Monitored Natural Attenuation

The US EPA defines MNA as the reliance on natural attenuation processes to achieve site-specific remediation objectives within a timeframe equal to more active methods. Under certain circumstances (e.g., through sorption or mineral precipitation), MNA effectively reduces the dissolved concentrations of inorganic constituents in groundwater.

Cobalt is present as a divalent cation (Co^{2+}) under typical groundwater conditions and is responsive to the natural attenuation mechanisms of adsorption, precipitation, and cation exchange. Cobalt readily adsorbs



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to hydroxide minerals such as ferrihydrite when groundwater pH conditions are neutral to alkaline and when sufficient adsorbent is available.

MNA is a potentially viable corrective measure, coupled with closure by removal of CCR material from AP-3 Landfill and Monofill. MNA is a viable stand-alone option or can be used in combination with one or more of other options retained in this evaluation.

5.4 Permeable Reactive Barriers

PRBs typically involve the installation of a permeable subsurface wall constructed with reactive media for the removal of constituents as groundwater passes through. PRBs can be installed in downgradient locations using conventional excavation methods, one-pass trenching method, or through injection of a solid slurry. Reactive media is emplaced within the treatment zone to create a permeable barrier that treats dissolved constituents as they passively flow through the PRB with the groundwater (e.g., ITRC, 2011). These systems can either be constructed as continuous “walls” or as “funnel-and-gate” systems where (impermeable) slurry walls create a “funnel” that directs groundwater to permeable “treatment gates” filled with reactive materials. PRBs are typically keyed into an underlying low-permeability unit such as a clay layer.

PRBs can present a viable alternative for in-situ treatment of cobalt and molybdenum. The technology typically includes reactive media such as ZVI, biologically active media (to induce oxidizing or reducing conditions), or clays, apatite, zeolites, and/or peat moss (to promote ionic exchange and/or sorption). PRBs have proven to be effective in passively treating several inorganic constituents found at CCR sites, including cobalt (Ludwig et al. 2002). Careful testing is required to select the appropriate treatment media.

The installation depths of a PRB are generally limited to about 90 ft below ground surface (bgs). The installation of a PRB generally requires more space than extraction wells for a P&T system, but a PRB does not require above-ground treatment components. Therefore, the overall treatment footprint is likely to be smaller compared to a P&T system.

Additional subsurface investigations, reactive media testing, and compatibility testing of groundwater with the components of a PRB are needed to evaluate the feasibility of installing a PRB at the former CCR Unit. Pending these evaluations, the technology is currently considered to be a potentially viable corrective measure to address cobalt in groundwater at the AP-3 Landfill and Monofill and will be retained for further evaluation.

5.5 Phytoremediation

Phytoremediation uses trees or other plants to uptake or immobilize constituents or achieve hydraulic control without the need for a groundwater treatment system and infrastructure. However, the effectiveness of groundwater remediation using traditional phytoremediation approaches is limited by compacted soil conditions that impede root penetration; or target groundwater that is too deep for root access. Given depth of the screened interval for ARGWC-17 which exhibits SSLs of cobalt (20 to 30 feet



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bgs), traditional plantings of phytoremediation are not expected to be successful. However, more recently, an engineered approach to phytoremediation, the TreeWell® system (which is a proprietary system developed by Applied Natural Sciences), has been shown to overcome these constraints (e.g., Gatliff et al., 2016).

By installing a cased “well” for tree planting using large diameter auger technology, extraction of deeper groundwater zones (i.e., in excess of 50 feet bgs) can be achieved since the surface of the “well” is sealed and only groundwater from a targeted zone is allowed into the cased-off borehole. This type of system mirrors a traditional mechanical extraction system using the trees as pumps. Also, the advantage of the system includes no above-ground water management needs and limited long-term operations and maintenance requirements following the establishment of the tree system.

The use of engineered (proprietary) TreeWell® phytoremediation technologies are likely feasible at the AP-3 Landfill and Monofill, based on the site-specific hydrogeology (i.e., relatively slow groundwater velocities observed in the uppermost aquifer) and low levels of cobalt. Additionally, there will be an appropriate amount of physical space for the installation of a phytoremediation system between the Monofill and the AP-3 Landfill in the area of ARGWC-17 following closure of AP-3. Thus, phytoremediation may be technically feasible as a remedial technology for cobalt and lithium, and this technology will be retained until data indicates it is not a feasible technology.

Continued groundwater monitoring and updates to the statistical analyses will further refine the CSM and allow for the continued evaluation of an appropriate groundwater corrective measure at the Site.

5.6 Summary of Corrective Measures Evaluated

Based on the data collected to date, five of the six potential measures being evaluated for the AP-3 Landfill and Monofill will be retained for further evaluation. These include: geochemical approaches (*in situ* injection), hydraulic containment (pump and treat), monitored natural attenuation, and phytoremediation. The corrective measure subsurface vertical barrier walls have been removed from consideration.

Given that groundwater conditions continue to change and are likely to also be affected by closure and construction activities at AP-3 Landfill and Monofill, an adaptive site management approach will continue to be used to address groundwater conditions as a consequence of closure activities. Continued groundwater monitoring and updates to the statistical analyses will further refine the CSM and allow for the continued evaluation of an appropriate groundwater corrective measure at the Site.



6 Planned Activities and Anticipated Schedule

The proposed closure by removal approach provides a source control measure that substantially eliminates the migration of CCR constituents to groundwater. During the closure-construction activities, temporary changes in site conditions may occur that should be considered as part of remedy selection. Georgia Power has initiated activities as outlined in the ACM Report (Wood, 2020a) to support the groundwater remedy selection process and address potential changes in site conditions, as appropriate. The adaptive site management approach toward remedy selection may be adjusted over the Site's life cycle as new Site information and technologies become available. To this end, Georgia Power will continue its data collection efforts as necessary in support of efforts to refine the CSM and to assess the feasibility of the corrective measures retained for further evaluation. Once sufficient data are available, a remedy at the Site will be implemented in accordance with 40 CFR § 257.97(a).

Supplementary data collection and evaluation activities proposed to be completed during the next semi-annual reporting period are presented in Table 5 and summarized below.

- Evaluate water level elevations in the tributary to Beaverdam Creek in relation to groundwater elevations in the nearby wells. Evaluate water level elevations near AP-3 Landfill and Monofill for groundwater gradients near the stream separating the two CCR units. The data will be used to evaluate the connection between surface water and groundwater at AP-3 Landfill and Monofill, to support corrective measures of pump and treat and in-situ injections.
- Evaluate existing aquifer characterization data for factors controlling the solubility, mobility, and attenuation of cobalt in groundwater at the Site. Review the SEP and treatability data pending from the lab, compile and incorporate existing groundwater and aquifer solids data to develop a geochemical conceptual site model for evaluation of aquifer characteristics for solubility, mobility, and attenuation. The geochemical CSM will guide the future development of transport model for cobalt for the assessment of corrective measures and selection of a remedy for cobalt in groundwater at the Site.

Georgia Power will continue to prepare semi-annual progress reports to document AP-3 Landfill and Monofill conditions, results associated with additional data collection, and the progress in selecting and designing a groundwater remedy in accordance with 40 CFR § 257.97(a). Georgia Power will include future semi-annual progress reports in routine groundwater monitoring and corrective action reports.



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**Semi-Annual Remedy Selection and Design Progress Report
Plant Arkwright AP Pond 3 Landfill and Monofill
7 References**

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Plant Arkwright Ash Pond 2 Dry Ash Stockpile, February 28, 2022.



TABLES



TABLE 1
SUMMARY OF MONITORING WELL CONSTRUCTION AND GROUNDWATER ELEVATIONS
 Georgia Power Company - Plant Arkwright
 Ash Pond 3 Landfill and Monofill
 Macon, Georgia

Well	Installation Date	Northing ⁽¹⁾	Easting ⁽¹⁾	Top of Casing Elevation (feet NAVD88) ⁽²⁾⁽³⁾	Ground Surface Elevation (feet NAVD88) ⁽²⁾⁽³⁾	Top of Screen Elevation (feet NAVD88) ⁽⁴⁾	Screen Bottom Elevation (feet NAVD88) ⁽⁴⁾	Screen Length (feet)	Total Well Depth on Construction Log (ft below land surface)	Water Bearing Zone Screened	Hydraulic Location	Depth to Water	Groundwater Elevation
												(feet below TOC)	(feet NAVD88) ⁽²⁾
Detection Monitoring Wells													
ARGWA-3	12/9/1992	1066899.39	2437431.05	388.33	386.53	356.2	346.2	10.0	40.5	Overburden	Upgradient	35.08	353.25
ARGWA-5	1/10/1994	1066885.12	2437209.22	376.15	373.51	353.8	343.8	10.0	30.0	Overburden	Upgradient	23.06	353.09
ARGWA-12	12/10/2008	1067003.79	2436788.45	372.72	369.27	349.2	339.2	10.0	30.3	Bedrock	Upgradient	15.49	357.23
ARGWA-13	12/11/2008	1065951.25	2438129.93	371.57	368.10	337.7	327.7	10.0	40.7	Bedrock	Upgradient	24.66	346.91
ARGWA-14	2/4/2009	1066023.70	2438384.80	388.25	384.94	339.3	329.3	10.0	56.0	Bedrock	Upgradient	41.19	347.06
ARGWA-24 ⁽⁵⁾	11/12/2020	1066895.28	2437012.63	373.75	370.85	355.9	345.9	10.0	25.3	Overburden	Upgradient	20.33	353.42
ARGWC-7	12/11/2003	1064410.59	2438355.19	352.42	348.97	314.2	304.2	10.0	46.5	Overburden	Downgradient	24.23	328.19
ARGWC-8	12/10/2003	1064521.98	2437572.92	355.53	352.19	322.6	312.6	10.0	40.5	Overburden	Downgradient	26.23	329.30
ARGWC-9	12/9/2003	1065139.64	2437297.96	367.07	363.44	338.6	328.6	10.0	36.5	Overburden	Downgradient	21.72	345.35
ARGWC-10	12/9/2003	1065419.44	2437192.51	370.67	367.56	342.6	332.6	10.0	41.5	Overburden	Downgradient	21.14	349.53
ARGWC-15	12/4/2008	1065475.43	2438360.90	375.64	371.76	342.1	332.1	10.0	40.0	Bedrock	Downgradient	29.14	346.50
ARGWC-16	12/15/2008	1065263.69	2438174.15	364.90	361.52	340.2	330.2	10.0	31.6	Bedrock	Downgradient	20.66	344.24
ARGWC-17	12/4/2008	1065458.82	2438009.52	368.24	365.04	344.5	334.5	10.0	30.9	Overburden	Downgradient	22.18	346.06
ARGWC-18	11/19/2008	1064482.45	2437961.15	355.20	351.92	314.1	304.1	10.0	48.1	Overburden	Downgradient	28.98	326.22
Assessment Monitoring Wells													
ARAMW-3	11/25/2019	1064530.73	2437569.81	355.39	352.20	298.2	288.2	10.0	64.0	Bedrock	Downgradient	25.74	329.65
ARAMW-4	11/15/2019	1065463.83	2438004.43	367.86	364.56	320.6	310.6	10.0	54.0	Bedrock	Downgradient	21.84	346.02
ARAMW-6	11/25/2019	1064439.35	2437606.99	337.46	334.23	314.2	304.2	10.0	30.0	Overburden	Downgradient	13.00	324.46

Notes:

1. Horizontal locations referenced to Georgia State Plane West, North American Datum (NAD) of 1983 surveyed in June 26, 2020.
2. Vertical elevations are feet referenced to North American Vertical Datum of 1988 (NAVD88).
3. Elevations updated with revised survey certified by Donaldson & Garrett Associates on June 26, 2020.
4. Screen elevations calculated using ground surface elevation surveyed on June 26, 2020.
5. ARAMW-24 was surveyed by Donaldson & Garrett Associates and certified on December 18, 2020.
6. TOC = Top of Casing

**TABLE 2
EVALUATION OF REMEDIAL TECHNOLOGIES
Plant Arkwright
Ash Pond 3 Landfill and Monofill
Macon, GA**

Corrective Measure	Regulatory Citation for Criteria:		GA EPD Rule 391-3-4.10(6)	
	Description	Performance	Performance	Reliability
Geochemical Approaches (In-Situ Injection)	Use of an injection well network, or other means of introducing reagents or air into the subsurface, to provide suitable reagents for either anaerobic or aerobic attenuation of Cobalt (Co). Under anaerobic conditions, Co would be attenuated within sparingly soluble sulfide minerals. Under aerobic conditions, soluble iron or manganese and oxygen (either via air sparging or through a chemical oxidant) would be injected to promote the formation of iron or manganese (oxy-) hydroxides for subsequent sorption of Co onto these mineral phases. If sufficient iron is present in groundwater, the use of air sparging alone may be considered to precipitate iron (oxy-) hydroxides for sorption. In-situ chemical oxidation (ISCO) or in-situ chemical reduction (ISCR) can be used to chemically alter the redox environment in the subsurface to affect the mobility of certain inorganic compounds, including Co. However, the main attenuation mechanism for Co is sorption, which is more dependent on pH than redox.	The effective immobilization of Co has been shown under aerobic and anaerobic conditions; however, the anaerobic approach (involving the injection of an electron donor together with iron or manganese and sulfur) requires careful study and testing. While aerobic approaches are somewhat less complex, additional aquifer characterization is needed to further evaluate these options.		Reliability dependent on permeability of the subsurface and the amount and distribution of secondary iron or manganese (oxy-) hydroxides (for aerobic approach), or electron donors and soluble iron or manganese and sulfur that can be consistently distributed (for anaerobic approach). Reliable technology if injected materials can be distributed throughout the impacted aquifer. Bench- and/or pilot-scale treatability testing programs are needed to understand the biogeochemical processes that would effectively reduce migration of Co in groundwater.
Hydraulic Containment (Pump and Treat)	Pump and Treat (P&T) refers to the use of groundwater extraction to induce a hydraulic gradient for hydraulic capture or control the migration of impacted groundwater. This approach uses extraction wells or trenches to capture groundwater, which may subsequently require above-ground treatment and permitted discharge to a receiving water feature, reinjection into the groundwater, or reuse (e.g., land application, CCR conditioning, etc.). It is applicable to a variable mix of inorganic constituents, including dissolved Co.	P&T is effective at providing hydraulic control, but it is unclear whether full groundwater remediation can be achieved without further understanding attenuation mechanisms at the Site. At the AP-3 Landfill and Monofill, implementation of the corrective measure is contingent on completing additional assessment activities (i.e. high-resolution site characterization, additional pump tests, flow modeling, and capture zone analysis). This is needed to refine the constituent distribution in the subsurface to target specific zones for pumping for improved mass recovery efficiency/ effectiveness and to further evaluate the potential remedy performance.		Generally reliable for hydraulic containment, but uncertainty exists whether groundwater remediation goals can be achieved within a reasonable time frame without further understanding attenuation mechanisms.
Monitored Natural Attenuation (MNA)	MNA relies on natural attenuation processes to achieve site-specific remediation objectives within a reasonable time frame relative to more active methods. Under certain conditions (e.g., through sorption, mineral precipitation or oxidation- reduction reactions), MNA effectively reduces the dissolved concentrations of inorganic constituents in groundwater. Attenuation mechanisms for inorganic constituents at CCR sites, including Co at AP-3 Landfill and Monofill, are either physical (e.g. dilution, dispersion, flushing, and related processes) or chemical (e.g., sorption or oxidation reduction reactions). The chemical attenuation processes include precipitation and sorption reactions such as adsorption on the surfaces of soil minerals, absorption into the matrix of soil minerals, or partitioning into organic matter. Further, oxidation-reduction (redox) reactions, via abiotic or biotic processes, can transform the valence states of some inorganic constituents to less soluble and thus less mobile forms. For Co, the main attenuation processes include sorption to iron and manganese oxides and formation of sparingly soluble sulfide minerals.	Physical and chemical MNA mechanisms for Co, including dilution, dispersion, sorption, and oxidation reduction reactions can be effective at achieving groundwater protection standards (GWPS) within a reasonable time frame. Attenuation processes for Co may already be occurring at the site as evidenced by data from some wells. Source control will improve the mass balance such that the buffer capacity of the aquifer is unlikely to be exhausted, and the attenuation processes already at work for Co at AP-3 Landfill and Monofill will further enhance ongoing MNA.		Reliable as long as the aquifer conditions that result in Co attenuation remain favorable and/or are being enhanced and sufficient attenuation capacity is present. MNA is reliable and can either be used as a stand-alone corrective measure for groundwater impacted by dissolved Co or in combination with a second technology.
Permeable Reactive Barrier (PRB)	Permeable reactive barrier (PRB) technology typically involves the installation of a permeable subsurface wall constructed with reactive media for the removal of constituents as groundwater passes through. Solid carbon (bio-barrier) has been considered for the concurrent removal of Co. The carbon could be composed of peat moss, mulch or another carbon source. Exact placement of the PRB is contingent on finalization of the nature and extent characterization. While the relatively shallow groundwater in the residuum and fractured bedrock is connected to the groundwater in more competent bedrock, the higher permeability/conductivity of the PRB is not expected to impede groundwater flow. PRBs can also be constructed as "funnel and gate" systems, where a barrier wall directs groundwater to a smaller "treatment gate" filled with reactive media.	PRBs have been shown to effectively address Co in groundwater if the right mix of reactive materials (e.g., carbon) is selected for concurrent removal/immobilization of these constituents. The approach is expected to achieve GWPS for Co as impacted groundwater passes through the reactive barrier.		Reliable groundwater corrective measure, but loss of reactivity over time may require re-installation depending on the duration of the remedy. Additional data collection, including conducting a bench and/or pilot study, is needed to better characterize current attenuation mechanisms and/or select the appropriate reactive media mix for a PRB wall.

**TABLE 2
EVALUATION OF REMEDIAL TECHNOLOGIES
Plant Arkwright
Ash Pond 3 Landfill and Monofill
Macon, GA**

Corrective Measure	Regulatory Citation for Criteria:		GA EPD Rule 391-3-4.10(6)	
	Description	Performance	Reliability	
Phytoremediation / TreeWell®	Phytoremediation uses trees and other plants to degrade or immobilize constituents or achieve hydraulic control without the need for an above-ground water treatment system and infrastructure. Within the context of the AP-3 Landfill and Monofill, this corrective measure would likely use an engineered (proprietary) TreeWell® phytoremediation system along the point of compliance or downgradient edge of the impacted groundwater for hydraulic control. The system promotes root development to the targeted groundwater zone (depth), allowing for hydraulic control of impacted groundwater. In addition, immobilization of Co within the root zone as well as incidental uptake of dissolved Co with groundwater is expected to occur concurrent with hydraulic control.	Once established (typically at the end of the third growing season), a TreeWell® system is effective for providing hydraulic containment of groundwater, and potential reduction of Co concentrations through immobilization and/or uptake and sequestration in the tree biomass; however, the main purpose is to provide hydraulic control. Given the site-specific hydrogeology and reported Co groundwater concentrations surrounding the AP-3 Landfill and Monofill, the approach is currently considered to be applicable in this setting. However, additional aquifer testing and/or groundwater flow modeling may be needed to confirm suitability for the area downgradient of the AP-3 Landfill and Monofill.	Engineered phytoremediation is a proven technology where hydrogeologic factors are taken into account (e.g., hydraulic conductivity, flow velocity, depth to impacted groundwater zone, etc.). This is considered an active remedial approach through the use of trees as the "pumps" driving the system. Careful design will be needed to select the proper species, which will include consideration of groundwater chemistry, plant uptake of constituents, and groundwater flow modeling to evaluate the required number and placement of TreeWell® units.	
Subsurface Vertical Barrier Walls	This approach involves placing a barrier to groundwater flow in the subsurface, frequently around a source area, to prevent future migration of dissolved constituents in groundwater from beneath the source to downgradient areas. In general, barrier walls are designed to provide containment; localized treatment achieved through the sorption or chemical precipitation reactions from construction of the walls are incidental to the design objective. Barrier walls can also be used in downgradient applications; to limit discharge to a surface water feature or to reduce aquifer recharge from an adjacent surface water feature when groundwater extraction wells are placed near one. A variety of barrier materials can be used, including cement and/or bentonite slurries, geomembrane composite materials, or driven materials such as steel or vinyl sheet pile. Groundwater extraction from upgradient of the barrier is required to avoid groundwater mounding behind the barrier.	Barrier walls are a proven technology for seepage control and/or groundwater cutoff at impoundments. Slurry walls are limited by the depth of installation, which is approximately 90 ft bgs. However, site-specific geologic and technology-specific considerations may limit this depth to shallower installations. Within the context of AP-3 Landfill and Monofill, a barrier wall might be used in conjunction with a "funnel and gate" system for a PRB rather than a stand-alone technology. As such, groundwater with Co above GWPS could either be directed to "treatment gates" for passive treatment (in a PRB) or migration of impacted groundwater could be minimized via barrier wall installation.	Generally reliable as a barrier to groundwater flow; however, treatment of downgradient groundwater is incidental and not the primary objective.	

**TABLE 2
EVALUATION OF REMEDIAL TECHNOLOGIES
Plant Arkwright
Ash Pond 3 Landfill and Monofill
Macon, GA**

Corrective Measure	GA EPD Rule 391-3-4.10(6)		
	Ease of Implementation	Potential Impacts	Time Requirement to Begin/Complete
Geochemical Approaches (In-Situ Injection)	Moderate. Installation of injection well network or other injection infrastructure would be required. Alternative installation approaches may be considered, such as along the downgradient edge of impacted groundwater, which would function similar to a PRB application. Potential for clogging of aquifer matrix and/or injection well infrastructure. Chemical distribution during injections (i.e., radius of influence) needs to be evaluated.	Minimal impacts are expected if remedy works as designed, based on a thorough pre-design investigation, geochemical modeling, and bench/pilot study results. Redox-altering processes have the potential to mobilize naturally-occurring constituents as an unintended consequence if not properly studied and implemented.	Installation of the injection network can be accomplished relatively quickly (1 to 2 months). However, a thorough pre-design investigation, geochemical modeling, and/or bench- and/or pilot-testing will be required to obtain design parameters prior to design and construction of the corrective measure, which may take up to 24 months. Once installed, the time required to achieve GWPS within the treatment area may be relatively quick but depends on the attenuation process kinetics of each targeted constituent. The time for complete distribution of the injected materials throughout the treatment area is also variable.
Hydraulic Containment (Pump and Treat)	Moderate. Proven approach, and supplemental installation of extraction wells/trenches is fairly straightforward. The extracted groundwater may potentially require an above-ground treatment system. A variety of sorption and precipitation approaches exist for ex-situ treatment of Co. Operation and maintenance (O&M) requirements are expected to include upkeep of infrastructure components (pumps, pipes, tanks, instrumentation and controls, above-ground treatment system) and handling of treatment residuals.	Moderate. The main potential impacts are related to the presence and operation of an on-site above-ground water treatment facility and related infrastructure to convey and treat extracted groundwater. Pumping activity may unintentionally alter the geochemistry within the hydraulic capture zone. Also nearby surface water will need to be taken into account for hydraulic and geochemical impacts to pumping groundwater.	Installation of extraction wells and/or trenches can be accomplished relatively quickly (1 to 2 months). However, additional aquifer testing, system design and installation, and permit approval may be required, which may take up to 24 months. The initiation of the approach would be contingent on the start-up of the wastewater treatment infrastructure. Hydraulic containment can be achieved relatively quickly after startup of the extraction system, but uncertainty exists with respect to the time to achieve GWPS without additional data collection to better understand attenuation mechanisms for Co.
Monitored Natural Attenuation (MNA)	Reasonably implementable with respect to infrastructure, but moderate to complex with respect to documentation. Proven approach, but additional data are needed to show that the existing attenuation capacity is sufficient to meet site objectives within a reasonable timeframe. A monitoring well network already exists to implement future groundwater monitoring efforts.	None. MNA relies on the natural processes active in the aquifer matrix to reduce constituent concentrations without disturbing the surface or the subsurface.	The infrastructure to initiate MNA is already in place. Demonstrating attenuation mechanisms and capacity can be time-consuming and can take up to 24 months. MNA is expected to be successful within a reasonable time frame.
Permeable Reactive Barrier	Moderate to difficult. Trenching would be required to install a mix of reactive materials in the subsurface. Continuous trenching may be the most feasible construction method. Site-specific geology (i.e., partially weathered bedrock layer) poses a possible constructability challenge when attempting to key PRB material into competent bedrock. Installation methods and materials are readily available. Once installed, treatment will be passive and O&M requirements are minimal if replacement of the PRB is not necessary.	Minimal impacts are expected following the construction of the remedy.	Installation of a PRB can be accomplished relatively quickly (6 to 12 months), depending on the final location and configuration. However, bench- and/or pilot-testing would be required to obtain design parameters prior to design and construction of the remedy, which may take up to 24 months. Once installed, the time to achieve GWPS downgradient of the PRB is anticipated to be relatively quick.
Phytoremediation / TreeWell®	Reasonably implementable to moderate. Engineered approach has been proven effective, and specific depth zones can be targeted. Trees are installed as "tree wells" in a large diameter boring to get the roots deep enough to intercept impacted groundwater flow paths. Area must be clear of above- and below- ground structures (i.e., power lines). The system, once established (approximately three growing seasons), is a self-maintaining, sustainable remedial system that has no external energy requirements and little maintenance (i.e., efforts normally associated with landscaping).	Minimal impacts are expected. In fact, there are several positive impacts expected, including enhanced aesthetics, wildlife habitat, and limited energy consumption.	The design phase will require some groundwater modeling for optimal placement of the TreeWell® units, which may take up to 6 months. Depending on the number of required units, the installation effort is expected to last several weeks. Hydraulic capture/control is expected approximately three years after planting and system performance is expected to further improve over time.
Subsurface Vertical Barrier Walls	Moderate to difficult. Trenching will be required to fill in the various slurry mixes; alternatively, sheet pile installations can be accomplished without excavation of trenches. The application of barrier walls is limited by the depth of installation, which similar to PRBs, should be keyed into a low permeability layer such as a thick clay layer or bedrock. Installation methods and materials are readily available. Once installed, above-ground infrastructure to pump and treat groundwater will be required. O&M requirements are expected to include upkeep of infrastructure components (pumps, pipes, tanks, instrumentation and controls, above-ground treatment system) and handling of treatment residuals.	Minimal impacts are expected following the construction of the remedy. Short- term impacts during the construction of the remedy can be mitigated through appropriate planning and health and safety measures. Changes to groundwater flow patterns due to installation of the barrier wall are expected, which can affect other aspects of groundwater corrective action. Pumping activity may unintentionally alter the geochemistry within the hydraulic capture zone that may result in the mobilization of other constituents that may require treatment.	Installation of a barrier wall can be accomplished relatively quickly (6 to 12 months), depending on the final location and configuration. However, some design phase and additional aquifer and compatibility testing will be required, which may take up to 24 months. Once installed, preventing migration of constituents dissolved in groundwater is anticipated to be relatively quick. Since this approach does not treat the downgradient area of impacted groundwater but prevents migration from a source area, it will likely have to be maintained long- term and coupled with other approaches.

**TABLE 2
EVALUATION OF REMEDIAL TECHNOLOGIES
Plant Arkwright
Ash Pond 3 Landfill and Monofill
Macon, GA**

Corrective Measure	GA EPD Rule 391-3-4.10(6)		Relative Costs	Retention Evaluation
	Institutional Requirements	Other Env or Public Health Requirements		
Geochemical Approaches (In-Situ Injection)	An underground injection control (UIC) permit (for in-situ injections) would be required to implement this corrective measure. No other institutional requirements are expected at this time.	None expected at this point. Potential mobilization of redox-sensitive constituents exists during implementation of an anaerobic attenuation approach. Following installation, the remedy is passive.	Medium (depending on expanse of injection network required and injectate volume required per derived design parameters)	Retained for further analysis; may be used as a stand-alone corrective measure or in conjunction with other potential groundwater corrective measures.
Hydraulic Containment (Pump and Treat)	Depending on the effluent management strategy, an NPDES permit may be required, or obtaining an underground injection control (UIC) permit may be needed if groundwater reinjection is chosen. No other institutional requirements are expected at this time.	Above-ground treatment components may need to be present for an extended period of time, generating residuals requiring management and disposal.	Medium to high (depending on remedy duration, complexity of above-ground treatment system, and volume of water processed)	Retained for further analysis; may be used as a stand-alone corrective measure or in conjunction with other potential groundwater corrective measures.
Monitored Natural Attenuation (MNA)	No institutional requirements are expected at this time	Little to no physical disruption to remediation areas and no adverse construction-related impacts are expected on the surrounding community.	Low to medium	Retained for further analysis; may be used as a stand-alone corrective measure or in conjunction with other potential groundwater corrective measures.
Permeable Reactive Barrier	No institutional requirements are expected at this time	None expected at this point. Following installation, the remedy is passive.	Medium to high (for installation) - minimal O&M requirements if replacement is not necessary	Retained for further analysis; may be used as a stand-alone corrective measure or in conjunction with other potential groundwater corrective measures.
Phytoremediation / TreeWell®	No institutional requirements are expected at this time	None expected at this point. Innovative and green technology may be positively received by various stakeholders. Following installation, the remedy is passive and does not require external energy.	Medium (for installation) - minimal O&M requirements	Retained for further analysis; may be used as a stand-alone corrective measure or in conjunction with other potential groundwater corrective measures.
Subsurface Vertical Barrier Walls	No institutional requirements are expected at this time	Due to the need for groundwater extraction associated with barrier walls, above-ground treatment components may need to be present for an extended period of time, generating residuals requiring management and disposal.	Medium to high (depending on length and depth of wall, remedy duration and complexity of above-ground treatment system)	Not retained for further analysis; removal of the source material limits the use of subsurface vertical barrier walls as a remedial alternative.

TABLE 3
ANALYTICAL DATA SUMMARY
Georgia Power Company - Plant Arkwright
Ash Pond 3 Landfill and Monofill
Macon, Georgia

Substance	Well ID								
	ARGWA-3	ARGWA-5	ARGWA-12	ARGWA-13	ARGWA-14	ARGWA-24	ARGWC-7	ARGWC-8	
	8/31/2022	8/30/2022	8/30/2022	8/31/2022	8/31/2022	8/31/2022	8/31/2022	8/31/2022	
APPENDIX III	Boron	0.00589 J	0.00855 J	0.0214	0.933	0.0356	0.0151 J	0.0815	1.05
	Calcium	5.91	9.56 J	14.2	165	41.6	10.1	9.99	43.0
	Chloride	2.94 J	8.47	12.8 J	6.89	3.92	12.3	4.59	5.86
	Fluoride	0.184	0.155	0.167 J	0.135	0.155	0.164	<0.0330	0.172
	Sulfate	0.399 J	0.519	7.11 J	855	2.58	6.94	36.3	54.1
	TDS	65.0	81.0	139 J	1290	177	122	101	248
	pH	5.96	5.88	5.88 J	5.53	6.80	5.65	5.98	6.38
	Antimony	<0.00100	<0.00100	<0.00100 J	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
APPENDIX IV	Arsenic	<0.00200	<0.00200	<0.00200 J	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200
	Barium	0.0181	0.0446	0.0850 J	0.0262	0.0740	0.0412	0.0505	0.0571
	Beryllium	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200
	Cadmium	<0.000300	<0.000300	<0.000300	<0.000300	<0.000300	<0.000300	<0.000300	<0.000300
	Chromium	0.00358 J	<0.00300	<0.00300	<0.00300	<0.00300	<0.00300	0.00344 J	<0.00300
	Cobalt	<0.000300	<0.000300	0.000509 J	<0.000300	<0.000300	<0.000300	<0.000300	<0.000300
	Lead	<0.000500	<0.000500	<0.000500	<0.000500	<0.000500	<0.000500	<0.000500	<0.000500
	Lithium	<0.00300	<0.00300	0.00493 J	0.00609 J	0.00399 J	<0.00300	0.00308 J	0.00345 J
	Mercury	<0.0000670	<0.0000670 J	<0.0000670	<0.0000670	<0.0000670	<0.0000670	<0.0000670	<0.0000670
	Molybdenum	<0.000200	<0.000200	0.000274 J	<0.000200	0.000862 J	<0.000200	<0.000200	0.0437
	Radium	0.805 U	0.546 U	0.804 U	0.596 U	0.345 U	0.161 U	0.804 U	0.618 U
	Selenium	<0.00150	<0.00150	<0.00150	0.0259	<0.00150	<0.00150	<0.00150	<0.00150
	Thallium	<0.000600	<0.000600	<0.000600 J	<0.000600	<0.000600	<0.000600	<0.000600	<0.000600
	Silver	<0.000300	<0.000300	<0.000300 J	<0.000300	<0.000300	<0.000300	<0.000300	<0.000300
	ADDITIONAL PARAMETERS	Total Alkalinity	41.4	46.2	68.4 J	68.2	157	56.8	30.8
Bicarbonate Alkalinity		41.4	46.2	68.4 J	68.2	157	56.8	30.8	158
Carbonate Alkalinity		<1.45	<1.45	<1.45 J	<1.45	<1.45	<1.45	<1.45	<1.45
Aluminum		0.114	0.0267 J	0.0544 J	<0.0193	0.0344 J	<0.0193	<0.0193	0.157
Iron		0.170	0.0611 J	0.0662	<0.0330	<0.0330	<0.0330	<0.0330	0.171
Magnesium		3.82	3.87	9.51	118	7.21	6.48	8.76	20.4
Manganese		0.00355 J	0.00414 J	0.00160 J	0.00657	0.00674	0.00382 J	0.00110 J	0.355
Potassium		1.09	1.26	2.45 J	3.98	3.47	0.809	1.01	1.76
Sodium		7.93	9.37	12.1	17.5	70.9	14.5	6.13	13.3
pH, Field		5.96	5.88	5.88	5.69	6.80	5.65	5.80	6.38
Temperature		21.46	19.03	20.50	18.70	21.11	19.96	20.45	21.50
Specific Conductance		87.78	120.10	197.58	1636.93	511.13	166.12	151.09	426.86
RDO Concentration		6.04	4.37	2.53	0.91	5.78	1.67	2.71	0.22
Turbidity		3.71	2.10	4.04	1.00	3.00	0.40	0.70	3.42
Oxidation Reduction Potential		125.0	94.2	120.8	146.7	54.7	239.1	107.4	117.8

Notes:

- Results for constituents are reported in milligrams per liter (mg/L). pH results reported in standard units (s.u.). Radium results are reported in picocuries per liter (pCi/L). Temperature reported in (deg C). Specific Conductance reported in microsiemens per centimeter (uS/cm). Turbidity reported in (NTU). ORP reported in millivolts (mV).
- < indicates the constituent was not detected above the analytical method detection limit (MDL).
- J indicates the constituent was detected at such low levels that the precision of the laboratory instrument could not produce a reliable value.
Therefore, the value displayed (value J) is qualified by the laboratory as an estimated number.
- TDS indicates total dissolved solids.
- U indicates the constituent was detected below the Minimum Detection Concentration (MDC) and the precision of the laboratory instruments could not produce a reliable value.
Therefore, the value followed by U is qualified by the laboratory as estimated.
- NA indicates constituent was not analyzed
- * - Georgia Appendix I constituent that is not also included in Appendix IV.

**TABLE 3
ANALYTICAL DATA SUMMARY
Georgia Power Company - Plant Arkwright
Ash Pond 3 Landfill and Monofill
Macon, Georgia**

Substance	Well ID									
	ARGWC-9	ARGWC-10	ARGWC-15	ARGWC-16	ARGWC-17	ARGWC-18	ARAMW-3	ARAMW-4	ARAMW-6	
	8/31/2022	8/31/2022	8/31/2022	8/31/2022	9/2/2022	9/2/2022	8/31/2022	9/2/2022	8/31/2022	
APPENDIX III	Boron	0.00885 J	0.00863 J	0.0137 J	0.101	0.0555	2.53	0.950	0.477	0.607
	Calcium	4.77	7.65	25.0	42.4	23.7	52.4	27.4	240	26.4
	Chloride	5.28 J	4.20	3.01 J	5.67	2.74	6.52	5.59	4.58	5.10
	Fluoride	0.147	<0.0330	0.169	<0.0330	0.0820 J	0.141	0.127	0.0590 J	0.168
	Sulfate	1.31	0.494	5.64	243	151	198	53.0	1080	46.5
	TDS	63.0	69.0	125	375	240	444	218	1610	167
	pH	5.98	5.96	6.46	5.18	5.11	6.03	6.14	5.65	6.28
APPENDIX IV	Antimony	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
	Arsenic	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	0.00339 J	<0.00200
	Barium	0.0391	0.0345	0.0325	0.0383	0.0727	0.0369	0.0619	0.0374	0.0400
	Beryllium	<0.000200	<0.000200	<0.000200	<0.000200	0.000417 J	<0.000200	<0.000200	<0.000200	<0.000200
	Cadmium	<0.000300	<0.000300	<0.000300	<0.000300	<0.000300	<0.000300	<0.000300	<0.000300	<0.000300
	Chromium	0.00766 J	0.00550 J	<0.00300	<0.00300	<0.00300	<0.00300	<0.00300	<0.00300	<0.00300
	Cobalt	<0.000300	<0.000300	<0.000300	<0.000300	0.0516	0.00111	0.000465 J	0.00411	<0.000300
	Lead	<0.000500	<0.000500	<0.000500	<0.000500	<0.000500	<0.000500	<0.000500	<0.000500	<0.000500
	Lithium	<0.00300	<0.00300	<0.00300	<0.00300	<0.00300	0.00380 J	0.00404 J	0.0117	<0.00300
	Mercury	<0.0000670	<0.0000670	<0.0000670	<0.0000670	<0.0000670	<0.0000670	<0.0000670	<0.0000670	<0.0000670
	Molybdenum	<0.000200	<0.000200	0.00179	<0.000200	<0.000200	<0.000200	0.000869 J	0.000288 J	<0.000200
	Radium	0.0403 U	0.500 U	0.510 U	0.493 U	1.75 U	2.67 U	1.02 U	0.947 U	0.871 U
	Selenium	<0.00150	<0.00150	<0.00150	0.00287 J	<0.00150	<0.00150	<0.00150	<0.00150	<0.00150
	Thallium	<0.000600	<0.000600	<0.000600	<0.000600	<0.000600	<0.000600	<0.000600	<0.000600	<0.000600
	Silver	<0.000300	<0.000300	<0.000300	<0.000300	<0.000300	<0.000300	<0.000300	<0.000300	<0.000300
* ADDITIONAL PARAMETERS	Total Alkalinity	23.8	49.4	109	19.0	14.2	111	103	50.6	90.4
	Bicarbonate Alkalinity	23.8	49.4	109	19.0	14.2	111	103	50.6	90.4
	Carbonate Alkalinity	<1.45	<1.45	<1.45	<1.45	<1.45	<1.45	<1.45	<1.45	<1.45
	Aluminum	0.0540	0.0861	<0.0193	<0.0193	0.0558	0.174	<0.0193	<0.0193	<0.0193
	Iron	0.0621 J	0.112	<0.0330	<0.0330	0.171	1.37	0.671	4.42	<0.0330
	Magnesium	2.16	4.01	9.11	31.9	23.5	44.3	14.4	128	14.1
	Manganese	0.00278 J	0.00358 J	0.0200	0.327	1.55	0.889	0.114	0.872	0.00848
	Potassium	1.84	0.756	7.53	3.71	1.40	2.34	2.93	12.0	1.27
	Sodium	6.72	10.4	9.01	15.0	10.5	12.8	12.8	28.4	11.2
	pH, Field	5.98	5.96	6.46	5.18	5.11	5.99	6.14	5.65	6.28
	Temperature	21.25	20.32	21.56	20.01	19.21	21.14	21.68	20.37	22.71
	Specific Conductance	72.22	104.90	251.72	589.44	382.80	624.25	315.45	1904.68	285.02
	RDO Concentration	6.89	4.04	3.02	0.32	0.38	0.17	0.18	0.22	0.22
	Turbidity	2.88	3.94	2.84	2.83	1.01	6.53	0.76	1.96	0.76
	Oxidation Reduction Potential	122.5	112.2	132.2	217.2	156.6	56.7	25.3	6.0	152.8

Notes:

- Results for constituents are reported in milligrams per liter (mg/L), pH results reported in standard units (s.u.). Radium results are reported in picocuries per liter (pCi/L). Temperature reported in (deg C). Specific Conductance reported in microsiemens per centimeter (uS/cm). Turbidity reported in (NTU). ORP reported in millivolts (mV).
- < indicates the constituent was not detected above the analytical method detection limit (MDL).
- J indicates the constituent was detected at such low levels that the precision of the laboratory instrument could not produce a reliable value.
Therefore, the value displayed (value J) is qualified by the laboratory as an estimated number.
- TDS indicates total dissolved solids.
- U indicates the constituent was detected below the Minimum Detection Concentration (MDC) and the precision of the laboratory instruments could not produce a reliable value.
Therefore, the value followed by U is qualified by the laboratory as estimated.
- NA indicates constituent was not analyzed
- * - Georgia Appendix I constituent that is not also included in Appendix IV.

**TABLE 3
ANALYTICAL DATA SUMMARY
Georgia Power Company - Plant Arkwright
Ash Pond 3 Landfill and Monofill
Macon, Georgia**

	Substance	Well ID				
		AP3PZ-1A	AP3PZ-2A	AP3PZ-3A	AP3PZ-4A	AP3PZ-5A
		9/27/2022	9/27/2022	9/27/2022	9/28/2022	9/28/2022
APPENDIX III	Boron	0.413	0.577	1.84	2.48	3.07
	Calcium	87.3	96.7	246	224	557
	Chloride	5.20	5.16	8.21	7.38	8.42
	Fluoride	0.281	0.382	0.709	0.558	0.293
	Sulfate	144	190	265	174	1100
	TDS	415	520	896	751	2250
	pH	6.15	6.78	6.98	7.14	7.35
APPENDIX IV	Antimony	NA	NA	NA	NA	NA
	Arsenic	NA	NA	NA	NA	NA
	Barium	NA	NA	NA	NA	NA
	Beryllium	NA	NA	NA	NA	NA
	Cadmium	NA	NA	NA	NA	NA
	Chromium	NA	NA	NA	NA	NA
	Cobalt	0.0199	<0.000300	0.00116	0.00119	0.0102
	Lead	NA	NA	NA	NA	NA
	Lithium	NA	NA	NA	NA	NA
	Mercury	NA	NA	NA	NA	NA
	Molybdenum	NA	NA	NA	NA	NA
	Radium	NA	NA	NA	NA	NA
	Selenium	NA	NA	NA	NA	NA
	Thallium	NA	NA	NA	NA	NA
*	Silver	NA	NA	NA	NA	NA
ADDITIONAL PARAMETERS	Total Alkalinity	154	192	452	429	536
	Bicarbonate Alkalinity	154	192	452	429	536
	Carbonate Alkalinity	<1.45	<1.45	<1.45	<1.45	<1.45
	Aluminum	<0.0193	<0.0193	0.0428 J	0.0279 J	0.0324 J
	Iron	19.9	52.5	22.8	12.3	22.9
	Magnesium	19.2	28.6	41.5	33.1	104
	Manganese	2.22	3.16	1.46	0.469	2.67
	Potassium	17.0	14.8	25.1	18.5	26.4
	Sodium	15.0	16.4	18.0	12.1	29.8
	pH, Field	6.15	6.78	6.98	7.14	7.35
	Temperature	23.34	22.35	21.60	21.29	20.86
	Specific Conductance	609.75	845.41	1287.95	1157.78	2746.88
	RDO Concentration	0.11	0.08	0.03	0.17	0.10
	Turbidity	4.17	19.10	4.63	4.58	3.70
Oxidation Reduction Potential	2.8	-132.7	-146.5	-162.6	-175.0	

Notes:

- Results for constituents are reported in milligrams per liter (mg/L), pH results reported in standard units (s.u.). Radium results are reported in picocuries per liter (pCi/L). Temperature reported in (deg C). Specific Conductance reported in microsiemens per centimeter (uS/cm). Turbidity reported in (NTU). ORP reported in millivolts (mV).
- < indicates the constituent was not detected above the analytical method detection limit (MDL).
- J indicates the constituent was detected at such low levels that the precision of the laboratory instrument could not produce a reliable value.
Therefore, the value displayed (value J) is qualified by the laboratory as an estimated number.
- TDS indicates total dissolved solids.
- U indicates the constituent was detected below the Minimum Detection Concentration (MDC) and the precision of the laboratory instruments could not produce a reliable value.
Therefore, the value followed by U is qualified by the laboratory as estimated.
- NA indicates constituent was not analyzed
- * - Georgia Appendix I constituent that is not also included in Appendix IV.

TABLE 4
GEOCHEMICAL CHARACTERIZATION RESULTS
Georgia Power Company - Plant Arkwright
Ash Pond 3 Landfill and Monofill
Macon, Georgia

Sample ID	ARK-SO-GWC-124SB-A-15.0/23.9-20221018	ARK-SO-GWC-17SB-A/E-20.0/30.0-20220913
Date	10/18/2022	9/13/2022
Location	ARGWA-24	ARGWC-17
Depth (ft-bgs)	15.0-23.9	20.0-30.0
X-Ray Diffraction, Rietveld Quantitative Analysis (wt%)		
Quartz	16.2	NA
Albite	30.1	NA
Microcline	8.5	NA
Actinolite	14.4	NA
Kaolinite	13.4	NA
Stilpnomelane	2.7	NA
Vermiculite	0.3	NA
Gypsum	1.8	NA
Hydroxylapatite	0.6	NA
Muscovite	11.0	NA
Lizardite	1.0	NA
X-Ray Fluorescence (%)		
Silica as SiO ₂	53.20	NA
Aluminum as Al ₂ O ₃	17.90	NA
Iron as Fe ₂ O ₃	9.96	NA
Magnesium as MgO	2.51	NA
Calcium as CaO	4.60	NA
Sodium as Na ₂ O	2.80	NA
Potassium as K ₂ O	1.20	NA
Titanium as TiO ₂	1.50	NA
Phosphorous as P ₂ O ₅	0.33	NA
Manganese as MnO	0.16	NA
Chromium as Cr ₂ O ₃	0.02	NA
Vanadium as V ₂ O ₅	0.04	NA
Loss On Ignition	5.53	NA
Total Metals (µg/g)		
Mercury	< 0.05	< 0.05
Arsenic	4.1	13.0
Aluminum	15000	20000
Boron	< 1	< 1
Barium	170	210
Beryllium	0.45	2.60
Cadmium	0.05	0.13
Cobalt	17	48
Chromium	14	12
Iron	35000	51000
Lithium	6	7
Manganese	690	1400
Molybdenum	0.3	0.5
Lead	5.9	12.0
Antimony	< 6	< 6
Selenium	< 0.7	< 0.7
Thallium	0.11	0.20

Notes:

1. Results are presented in feet below ground surface (ft-bgs); weight percent (wt%); percent (%); micrograms per gram (µg/g).
2. Loss On Ignition refers to mineral water, carbonates, and hydroxides.
3. < indicates the constituent was not detected above the analytical method detection limit

TABLE 5
PROPOSED ACM SUPPLEMENTARY DATA ANALYSES AND COLLECTION TASKS
FOR FIRST SEMI-ANNUAL PERIOD 2023
Plant Arkwright
Ash Pond 3 Landfill and Monofill
Macon, GA

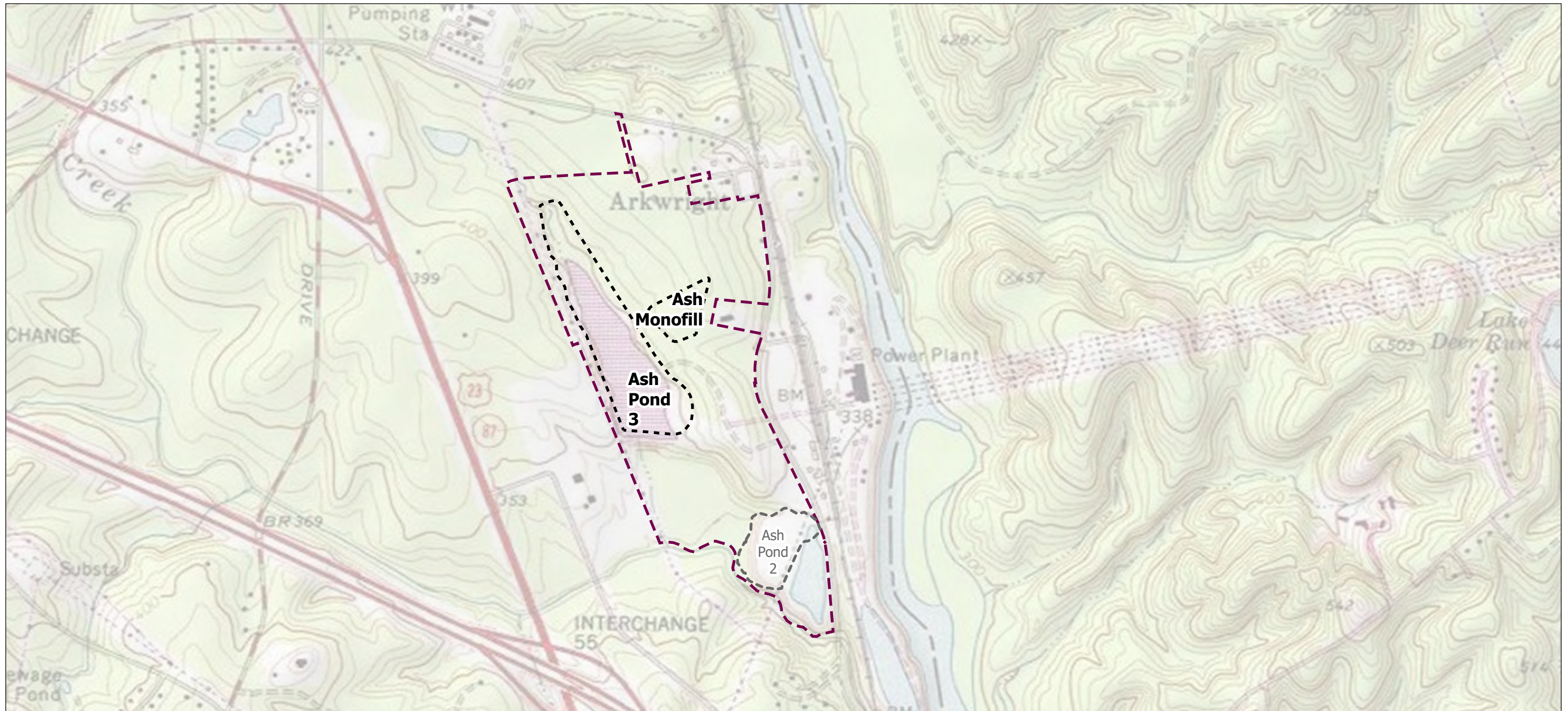
Data Collection/Evaluation	Applicable CMs (1)	Applicability/Rationale	Field Component	Parameters of Interest (POI)
Groundwater Sampling	1, 3, 4, 5	Evaluation of: (i) attenuation mechanisms and rates and aquifer capacity for attenuation (ii) in-situ conditions to establish phytoremediation measures downgradient of the unit	Collect groundwater samples from existing well network currently sampled under the assessment monitoring program	In addition to routine App III/IV parameters: major cations (i.e., magnesium, sodium, potassium, iron, manganese, and bicarbonate concentrations) for geochemical evaluations.
Evaluate water level elevations in the tributary to Beaverdam Creek in relation to groundwater elevations in the nearby wells	1, 2, 3, 4, 5	Collect continuous and long-term groundwater elevation data and measure surface water elevation data at staff gauges to support the development of a groundwater model for the Site.	Measure water levels using transducers in groundwater monitoring wells and staff gauge(s) in the tributary to Beaverdam Creek	Groundwater and Surface Water Elevations
Geochemical Conceptual Site Model	1, 3	Evaluate the aquifer characterization data reported for factors controlling the solubility, mobility, and attenuation of target constituents showing SSLs in groundwater at the Site.	Not Applicable (Desktop Study)	Compile existing Site geologic and laboratory data for soil and groundwater.

Note:

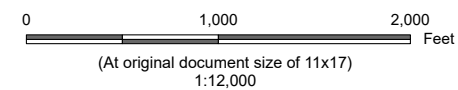
- (1) Corrective Measure (CM) Codes:
1 – Geochemical Approaches (In-Situ Injection)
2 – Hydraulic Containment (Pump and Treat)
3 – Monitored Natural Attenuation (MNA)
4 – Permeable Reactive Barrier (PRB)
5 – Phytoremediation (TreeWells®)

FIGURES





- Legend**
- Approximate Property Boundary
 - Ash Pond 2 Dry Ash Stockpile
 - Ash Pond 3 and Ash Monofill



Project Location
Macon, Georgia

Prepared by DMB on 2/6/2023
TR by BS on 2/6/2023
IR by RB on 2/6/2023

Client/Project
Georgia Power
Semi-Annual Remedy Selection and Design Progress Report
Plant Arkwright Ash Pond 3 Landfill and Monofill

175569434

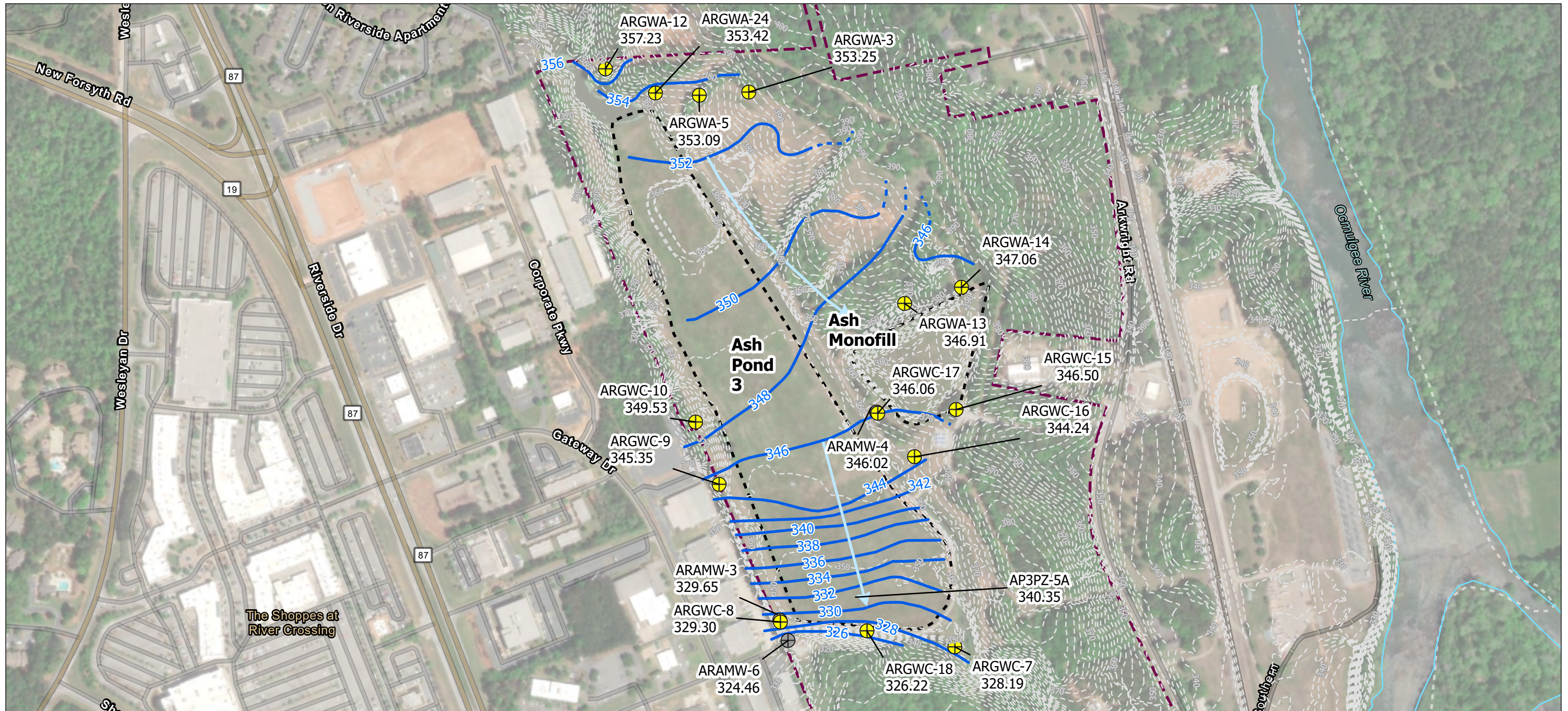
Figure No.

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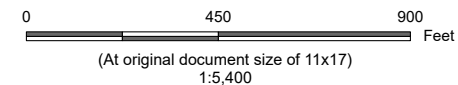
Title



Site Location Map

Notes
 1. Coordinate System: NAD 1983 StatePlane Georgia West FIPS 1002 Feet
 2. Data Sources: Site Boundary and Ash Pond Boundaries provided by Southern Company Services and Wood Environment & Infrastructure Solutions
 3. Background: Copyright © 2013 National Geographic Society, i-cubed, Esri, HERE, Garmin, SafeGraph, FAO, METI/NASA, USGS, EPA, NPS



- Legend**
- Detection Monitoring Well
 - Assessment Monitoring Well
 - Potentiometric Surface Contour Aug 2022 (ft NAVD88)
 - Inferred Potentiometric Surface Contour Aug 2022 (ft NAVD88)
 - Interpreted Groundwater Flow Direction
 - Ocmulgee River (Approximate)
 - Topographic Contour 2018 (2 ft interval)
 - Approximate Property Boundary
 - Ash Pond 3 and Ash Monofill Approximate Limits of Waste
- 353.25 Groundwater Elevation (ft NAVD88)
 AP3PZ-5A and ARGWA-13 not included in contouring due to anomalous groundwater elevations



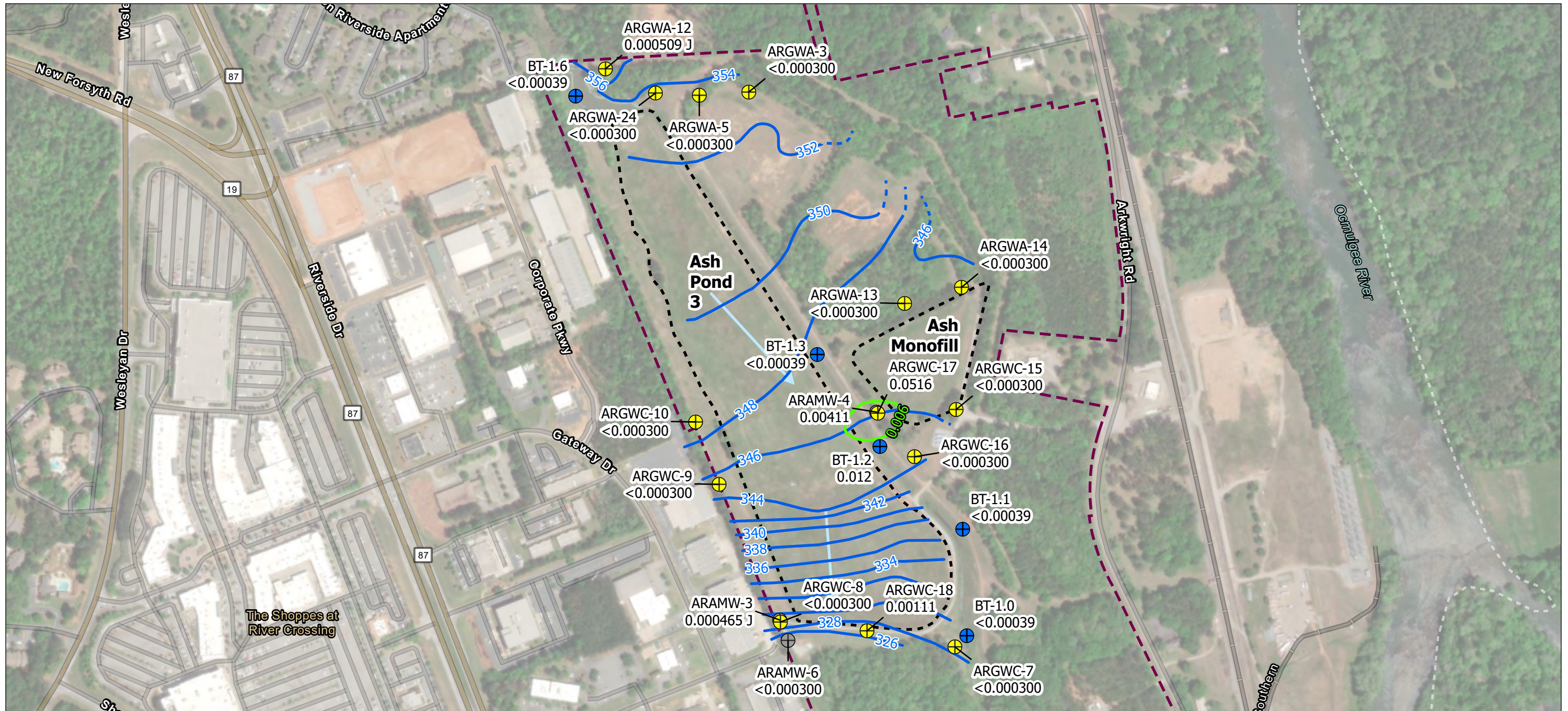
Project Location
Macon, Georgia

Client/Project
Georgia Power
Semi-Annual Remedy Selection and Design Progress Report
Plant Arkwright Ash Pond 3 Landfill and Monofill

Figure No.
3

Title
**Potentiometric Surface Contour Map AP-3
Landfill and Monofill – August 30, 2022**

Prepared by DMB on 2/16/2023
 TR by MP on 2/16/2023
 IR by MD on 2/16/2023
 175569434



- Legend**
- ⊕ Detection Monitoring Well
 - ⊕ Assessment Monitoring Well
 - ⊕ Surface Water Sampling Location
 - Cobalt Concentration Contour Aug/Sept 2022 (mg/L)
 - Potentiometric Surface Contour Aug 2022 (ft NAVD88)
 - - - Inferred Potentiometric Surface Contour Aug 2022 (ft NAVD88)
 - Interpreted Groundwater Flow Direction
 - - - Approximate Property Boundary
 - - - Ash Pond 3 and Ash Monofill Approximate Limits of Waste
- 0.00041 Cobalt Concentration milligrams per Liter (mg/L)

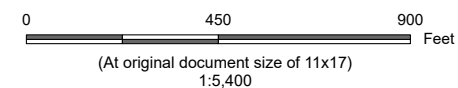
Isoconcentration Notes:

Cobalt concentration data from groundwater and surface water samples collected during the August - September 2022 monitoring event.

J indicates the constituent was detected between the analytical method detection limit and the laboratory reporting limit. The value followed by J is qualified by the laboratory as estimated.

GWPS - Groundwater Protection Standard

Analyte	Units	GWPS
Cobalt	mg/L	0.006



Project Location
Macon, Georgia

Prepared by DMB on 2/6/2023
TR by BS on 2/6/2023
IR by RB on 2/6/2023

Client/Project
Georgia Power
Semi-Annual Remedy Selection and Design Progress Report
Plant Arkwright Ash Pond 3 Landfill and Monofill

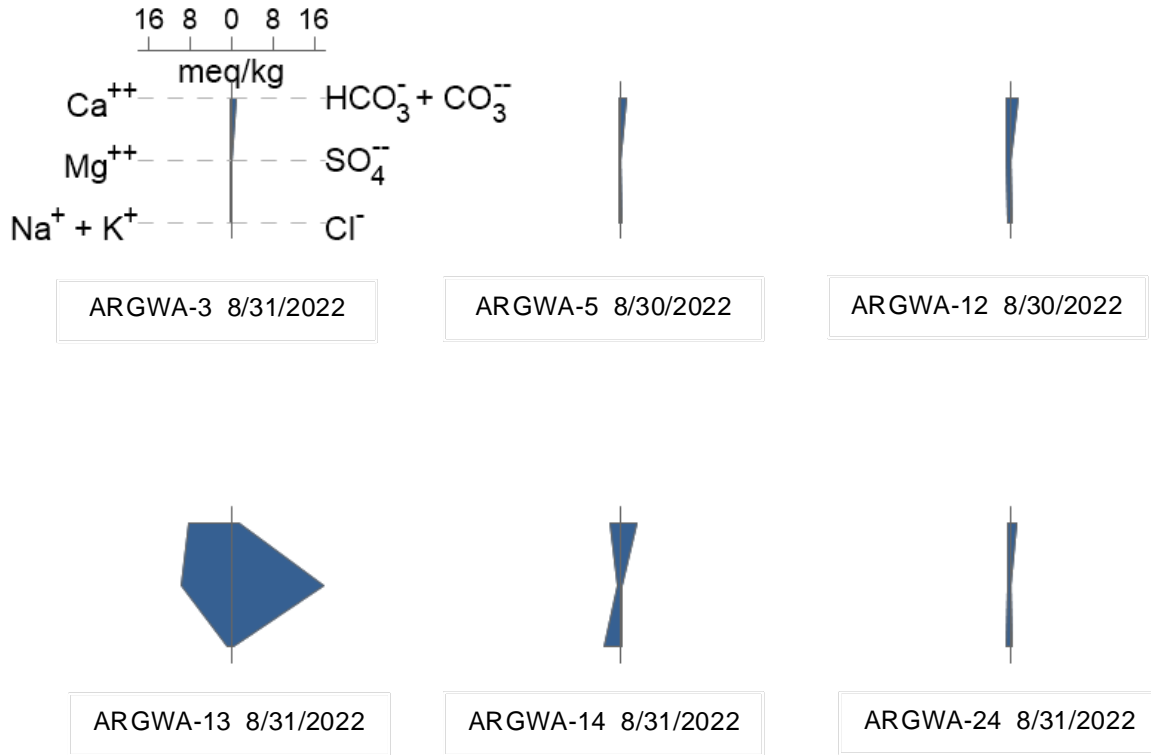
Figure No.

4

Title

Isoconcentration Map for Cobalt - August - September 2022

Arkwright AP-3 Landfill and Monofill August 2022



- Notes**
1. % meq/kg - Percent milliequivalent per kilogram
 2. Ca⁺⁺ - Calcium
 3. Cl⁻ - Chloride
 4. CO₃⁻ - Carbonate
 5. HCO₃⁻ - Bicarbonate
 6. K⁺ - Potassium
 7. Mg⁺⁺ - Magnesium
 8. Na⁺ - Sodium
 9. SO₄⁻ - Sulfate

Notes

1. Coordinate System:
2. Data Sources:
3. Background Location Map: Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community



Project Location
Macon, Georgia

Prepared by DMB on 2023-02-06
TR by BS on 2023-02-06
IR Review by RB on 2023-02-06

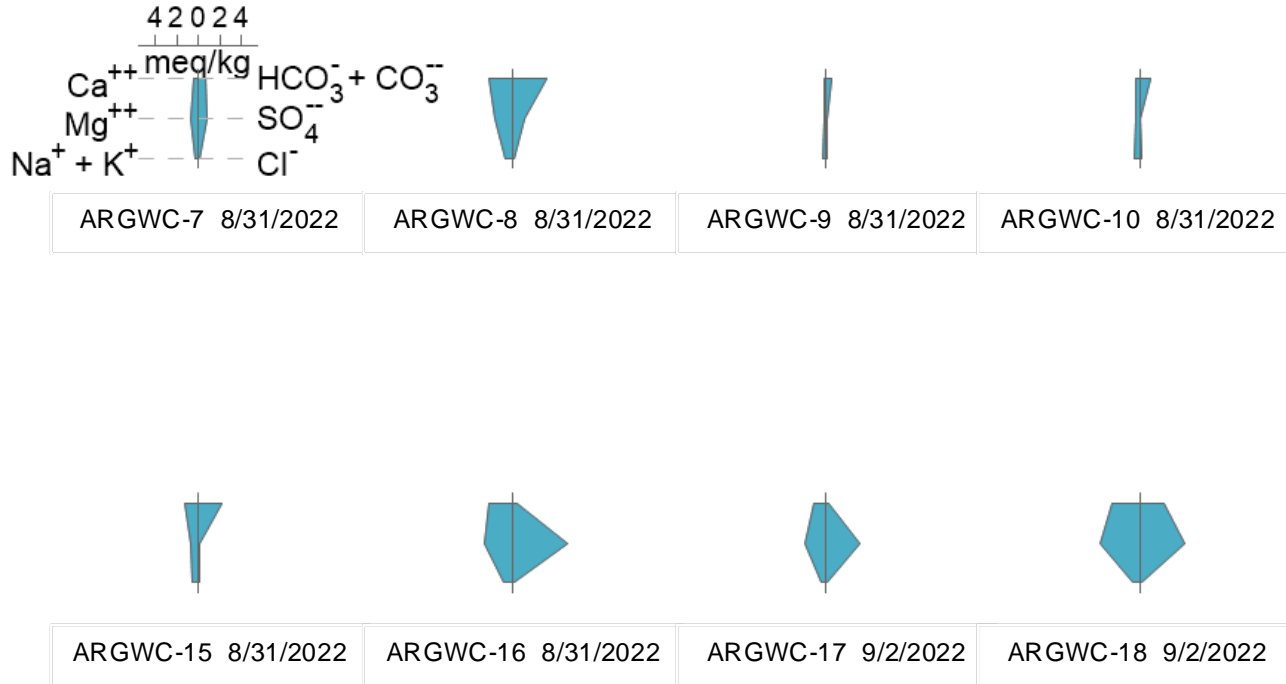
Client/Project
Georgia Power 175569434

Semi-Annual Remedy Selection and Design Progress
Report - Plant Arkwright Ash Pond 3 Landfill and Monofill

Figure No.
5

Title
**Arkwright AP-3 Stiff Diagrams -
Upgradient Detection Monitoring
Wells**

Arkwright AP-3 Landfill and Monofill August-September 2022



Notes

1. % meq/kg - Percent milliequivalent per kilogram
2. Ca⁺⁺ - Calcium
3. Cl⁻ - Chloride
4. CO₃⁻⁻ - Carbonate
5. HCO₃⁻ - Bicarbonate
6. K⁺ - Potassium
7. Mg⁺⁺ - Magnesium
8. Na⁺ - Sodium
9. SO₄⁻⁻ - Sulfate

Notes

1. Coordinate System:
2. Data Sources:
3. Background Location Map: Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community



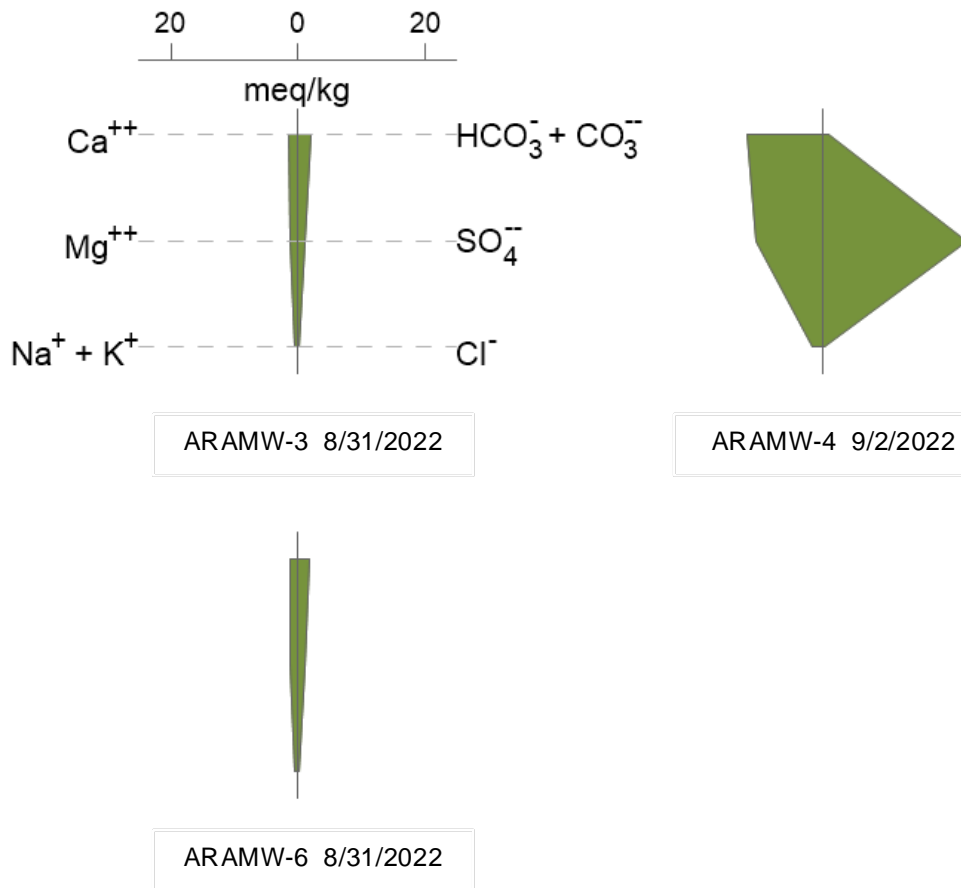
Project Location
Macon, Georgia Prepared by DMB on 2023-02-06
TR by BS on 2023-02-06
IR Review by RB on 2023-02-06

Client/Project
Georgia Power
Semi-Annual Remedy Selection and Design Progress
Report - Plant Arkwright Ash Pond 3 Landfill and Monofill 175569434

Figure No.
6

**Arkwright AP-3 Stiff Diagrams –
Detection Monitoring Wells**

Arkwright AP-3 Landfill and Monofill August-September 2022



Notes

1. % meq/kg - Percent milliequivalent per kilogram
2. Ca⁺⁺ - Calcium
3. Cl⁻ - Chloride
4. CO₃⁻⁻ - Carbonate
5. HCO₃⁻ - Bicarbonate
6. K⁺ - Potassium
7. Mg⁺⁺ - Magnesium
8. Na⁺ - Sodium
9. SO₄⁻⁻ - Sulfate

Notes

1. Coordinate System:
2. Data Sources:
3. Background Location Map: Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community



Project Location
Macon, Georgia

Prepared by DMB on 2023-02-06
TR by BS on 2023-02-06
IR Review by RB on 2023-02-06

Client/Project
Georgia Power

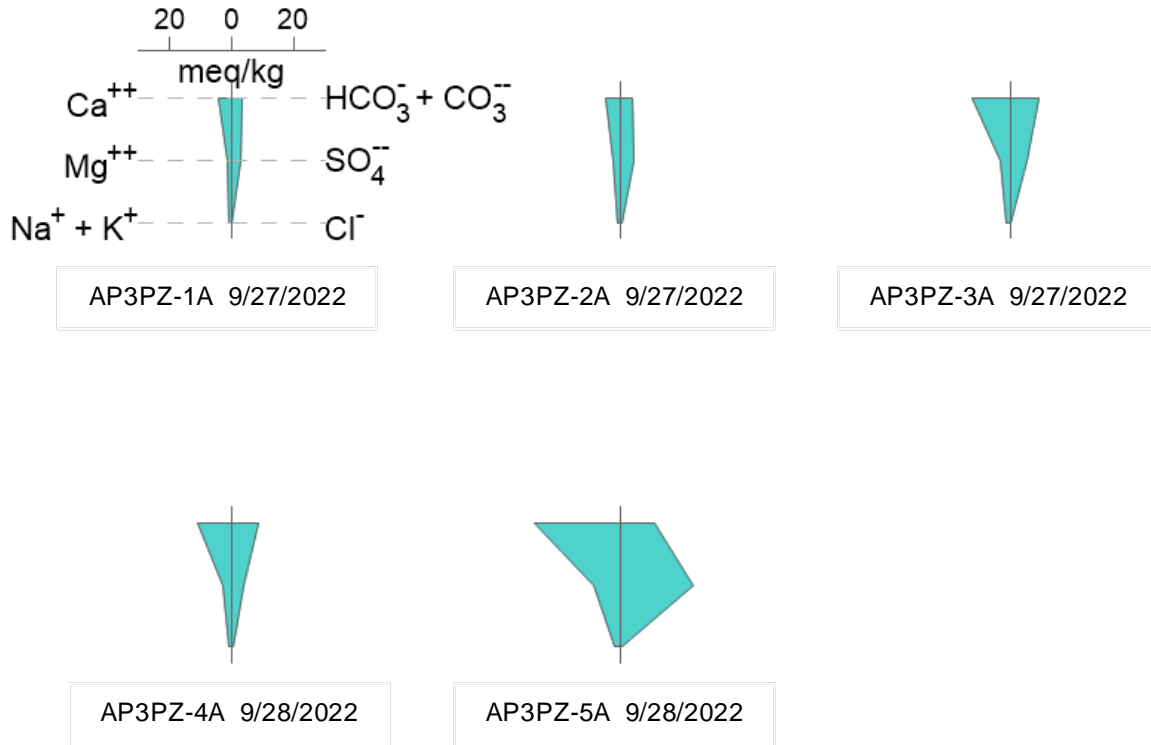
175569434

Semi-Annual Remedy Selection and Design Progress
Report - Plant Arkwright Ash Pond 3 Landfill and Monofill

Figure No.
7

**Arkwright AP-3 Stiff Diagrams –
Assessment Monitoring Wells**

Arkwright AP-3 Landfill and Monofill September 2022



- Notes**
1. % meq/kg - Percent milliequivalent per kilogram
 2. Ca⁺⁺ - Calcium
 3. Cl⁻ - Chloride
 4. CO₃⁻⁻ - Carbonate
 5. HCO₃⁻ - Bicarbonate
 6. K⁺ - Potassium
 7. Mg⁺⁺ - Magnesium
 8. Na⁺ - Sodium
 9. SO₄⁻⁻ - Sulfate

Notes

1. Coordinate System:
2. Data Sources:
3. Background Location Map: Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community



Project Location
Macon, Georgia

Prepared by DMB on 2023-02-06
TR by BS on 2023-02-06
IR Review by RB on 2023-02-06

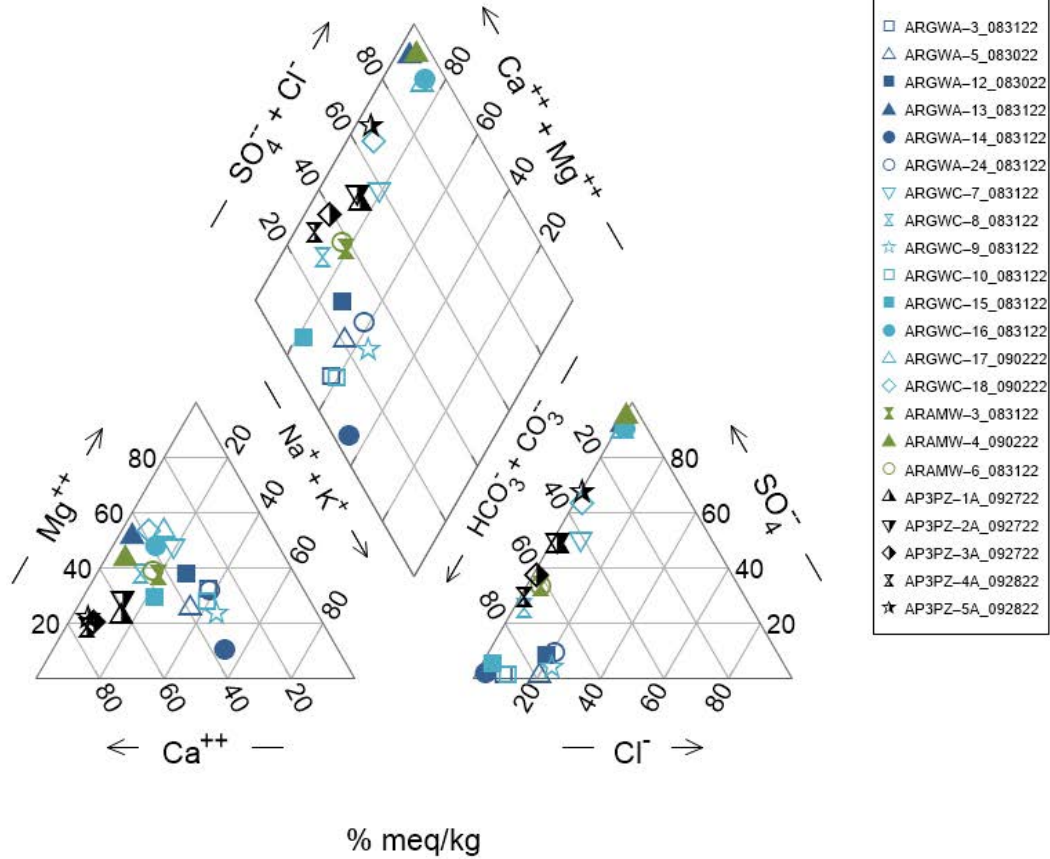
Client/Project
Georgia Power 175569434

Semi-Annual Remedy Selection and Design Progress
Report - Plant Arkwright Ash Pond 3 Landfill and Monofill

Figure No.
8

Title
**Arkwright AP-3 Stiff Diagrams –
Porewater Piezometers**

Arkwright AP-3 Landfill and Monofill Groundwater and Pore Water, September 2022



Notes
 1. Coordinate System:
 2. Data Sources:
 3. Background Location Map: Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community

- Notes**
 1. % meq/kg - Percent milliequivalent per kilogram
 2. Ca⁺⁺ - Calcium
 3. Cl⁻ - Chloride
 4. CO₃⁻ - Carbonate
 5. HCO₃⁻ - Bicarbonate
 6. K⁺ - Potassium
 7. Mg⁺⁺ - Magnesium
 8. Na⁺ - Sodium
 9. SO₄⁻ - Sulfate

- Legend**
 Upgradient Detection Monitoring Well
 Downgradient Detection Monitoring Well
 Assessment Monitoring Well
 Porewater Piezometer



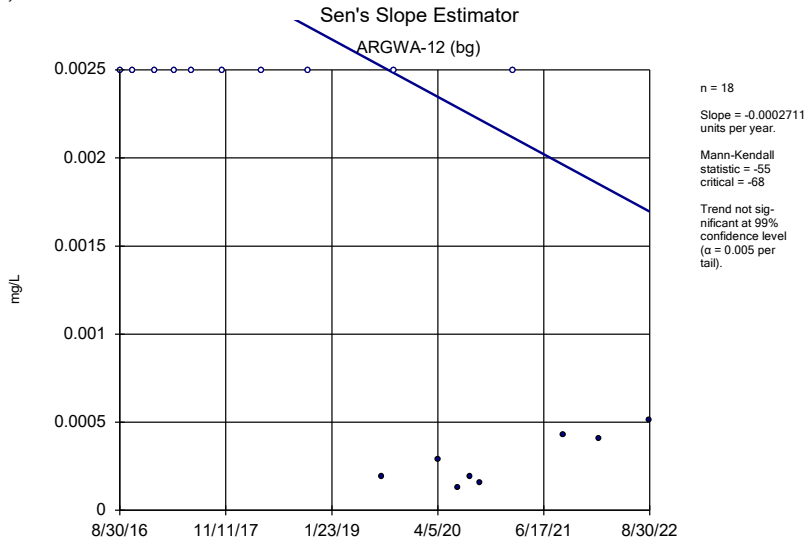
Project Location: Macon, Georgia
 Prepared by DMB on 2023-02-06
 TR by BS on 2023-02-06
 IR Review by RB on 2023-02-06

Client/Project: Georgia Power
 Semi-Annual Remedy Selection and Design Progress Report - Plant Arkwright Ash Pond 3 Landfill and Monofill
 Figure No. 9

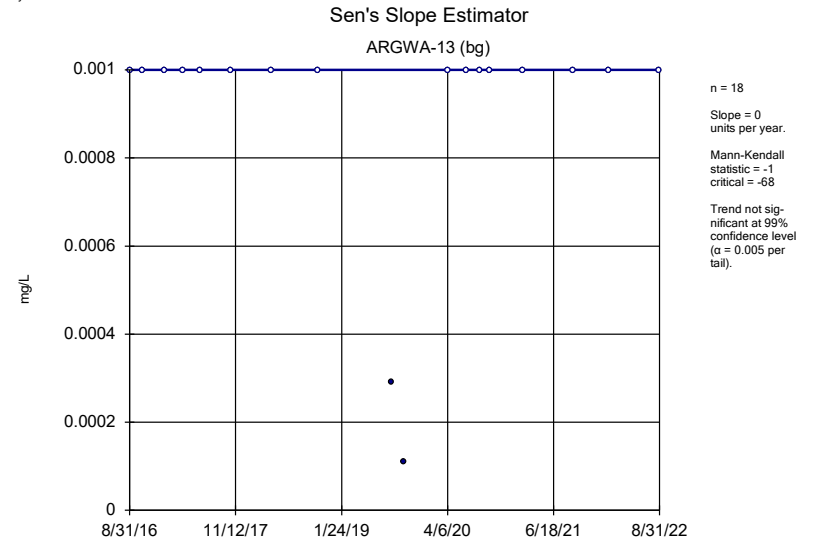
Title:
**Arkwright AP-3 Piper Diagram
 September 2022**

APPENDIX A STATISTICAL TREND TEST EVALUATION

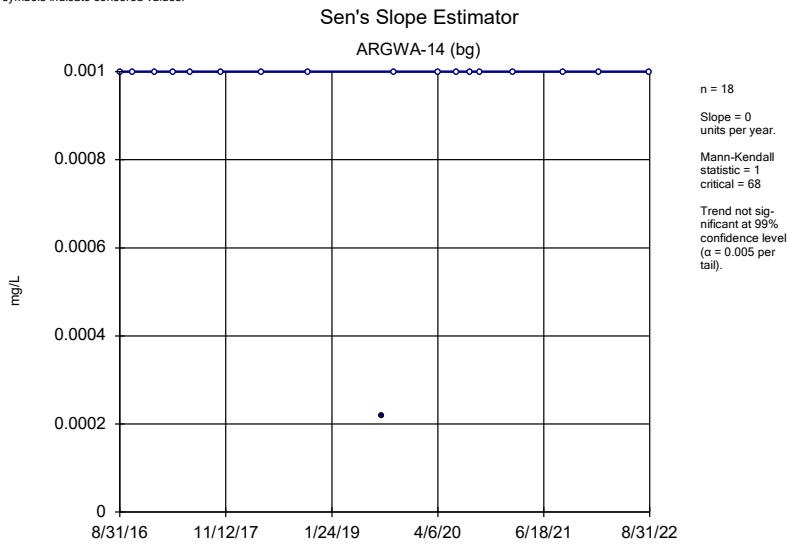




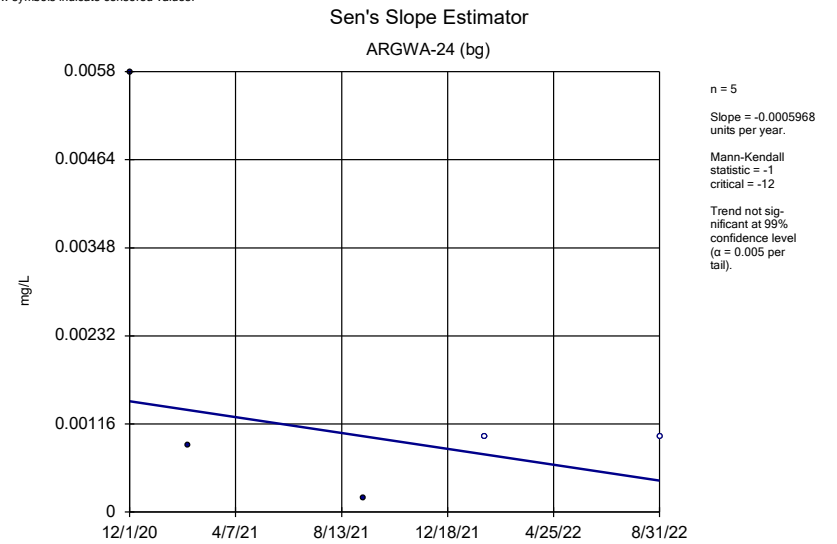
Constituent: Cobalt Analysis Run 11/5/2022 2:13 PM View: Appendix IV - Trend Tests
Plant Arkwright Client: Southern Company Data: Arkwright No 3



Constituent: Cobalt Analysis Run 11/5/2022 2:13 PM View: Appendix IV - Trend Tests
Plant Arkwright Client: Southern Company Data: Arkwright No 3



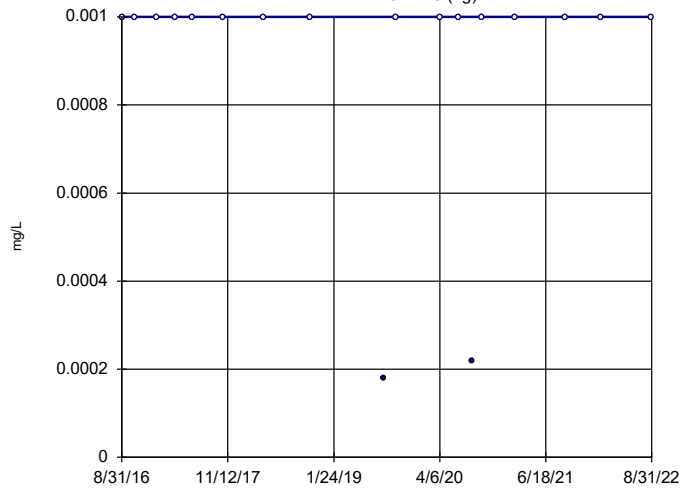
Constituent: Cobalt Analysis Run 11/5/2022 2:13 PM View: Appendix IV - Trend Tests
Plant Arkwright Client: Southern Company Data: Arkwright No 3



Constituent: Cobalt Analysis Run 11/5/2022 2:13 PM View: Appendix IV - Trend Tests
Plant Arkwright Client: Southern Company Data: Arkwright No 3

Sen's Slope Estimator

ARGWA-3 (bg)

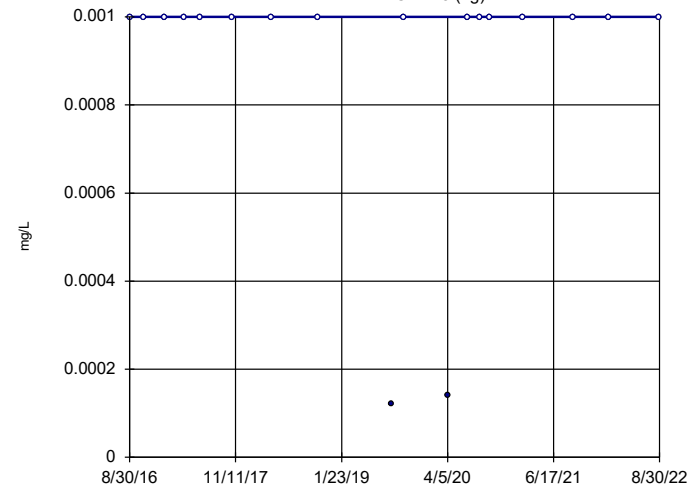


n = 18
Slope = 0
units per year.
Mann-Kendall
statistic = -5
critical = -68
Trend not sig-
nificant at 99%
confidence level
($\alpha = 0.005$ per
tail).

Constituent: Cobalt Analysis Run 11/5/2022 2:13 PM View: Appendix IV - Trend Tests
Plant Arkwright Client: Southern Company Data: Arkwright No 3

Sen's Slope Estimator

ARGWA-5 (bg)

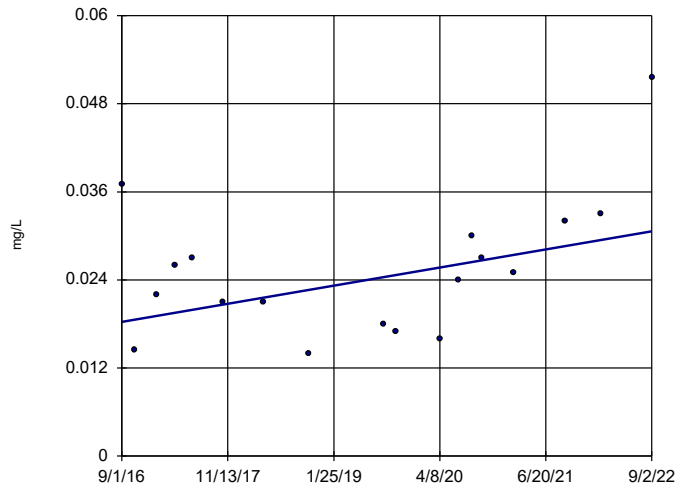


n = 18
Slope = 0
units per year.
Mann-Kendall
statistic = -1
critical = -68
Trend not sig-
nificant at 99%
confidence level
($\alpha = 0.005$ per
tail).

Constituent: Cobalt Analysis Run 11/5/2022 2:13 PM View: Appendix IV - Trend Tests
Plant Arkwright Client: Southern Company Data: Arkwright No 3

Sen's Slope Estimator

ARGWC-17



n = 18
Slope = 0.002054
units per year.
Mann-Kendall
statistic = 45
critical = 68
Trend not sig-
nificant at 99%
confidence level
($\alpha = 0.005$ per
tail).

Constituent: Cobalt Analysis Run 11/5/2022 2:13 PM View: Appendix IV - Trend Tests
Plant Arkwright Client: Southern Company Data: Arkwright No 3

APPENDIX B UPDATED AREA WELL SURVEY





**APPENDIX B – UPDATED AREA WELL
SURVEY**

Plant Arkwright
Ash Pond 3 Landfill and Monofill
Macon, Georgia

February 28, 2023

Prepared for:



Prepared by:
Stantec Consulting Services Inc.
10745 Westside Way, Suite 250
Alpharetta, Georgia 30009-7640

1 Introduction

Plant Arkwright is located in Bibb County, Georgia approximately 6 miles northwest of the city of Macon. Georgia Power Company officially closed the AP-3 Landfill and Monofill in 2010 with the approval of the Georgia Environmental Protection Division (GA EPD) and in accordance with the solid waste landfill regulations specified by GA EPD Rule 391-3-4.14, in effect at the time of its closure. The CCR management unit referred to as the AP-3 Landfill and Monofill is defined as an inactive CCR Landfill per GA EPD Rule 391-3-4-.10(2)(a)(3).

As requested by GA EPD, an updated well survey of potential groundwater wells within a two-mile radius of the AP-3 Landfill and Monofill boundary was conducted and consisted of reviewing federal, state, and county records and online sources. The findings from this survey are consistent with the previous well survey conducted in 2020 and 2021 (Wood, 2022).

1.1 Findings

This section summarizes the sources used for identifying groundwater wells within the two-mile radius from the AP-3 Landfill and Monofill boundary.

1.1.1 FEDERAL SOURCES

1.1.1.1 United States Geological Survey

The United States Geological Survey maintains an inventory of both qualitative and quantitative water data through the National Water Information System. An EDR radius check report was reviewed, confirming there are no new listings within the designated two-mile radius.

1.1.1.2 Safe Drinking Water Information System

The United States Environmental Protection Agency (US EPA) maintains a database of listings of public water systems but does not have well location information. The US EPA Safe Drinking Water Information System information was used to help identify suppliers of public water in the vicinity of the facility. This database was used to determine that the Macon Water Authority and Monroe and Jones County municipal water systems primarily supply water within the designated two-mile radius. Michael Gillis of the Georgia Department of Natural Resources (DNR) confirmed on December 1, 2022 that there are no GA EPD permitted drinking water wells within the designated two-mile radius.



**Appendix B – Updated Area Well Survey
Plant Arkwright AP-3 Landfill and Monofill**

1.1.2 STATE SOURCES

1.1.2.1 Georgia Environmental Protection Division

1.1.2.1.1 Drinking Water Branch

Records concerning industrial and municipal wells are maintained by GA EPD and made available through a Georgia Open Records Act (GORA) request. Michael Gillis of Georgia DNR responded on December 1, 2022 that there are no GA EPD permitted drinking water wells within the designated two-mile radius.

1.1.2.1.2 Hazardous Site Inventory (HSI) Files

The GA EPD maintains the Hazardous Site Inventory (HSI) records for sites undergoing state-led corrective action. These files typically contain groundwater data and well surveys. A review of the GA EPD interactive online map shows no HSI sites within a two-mile radius of the facility.

1.1.2.1.3 Hazardous Site Response Act (HSRA) Notifications

GA EPD maintains non-HSI Hazardous Site Response Act (HSRA) notification reports submitted after releases of reportable substances. A GORA request was submitted on November 30, 2022. A response was received on December 16, 2022 from Andria Moody with Georgia DNR, and no new or additional wells were identified in the HSRA notification reports.

1.1.2.1.4 Agricultural and Environmental Services Laboratory Records

The University of Georgia's Agricultural and Environmental Services Laboratory tests drinking water samples submitted by private individuals to their local county extension service. Maps of these sampling results can be viewed online. No new or additional wells were identified.

1.1.2.2 County and Local Sources

1.1.2.2.1 Health Department Records

The Macon-Bibb, Monroe and Jones County Health Departments maintain records of known private wells, and septic system permits, which indicate whether a private or public water supply is used at the address. The health departments were contacted for these records on 12/2/2022. Macon-Bibb County responded on 12/9/2022 and Jones County responded on 12/12/2022. No new or additional wells were identified. No response has been received from Monroe County.

1.1.2.2.2 Water Authority Records

Online GIS data for Macon-Bibb County, Monroe County and Jones County Water Authority was accessed and no new or additional wells were identified.



**Appendix B – Updated Area Well Survey
Plant Arkwright AP-3 Landfill and Monofill**

1.1.3 WINDSHIELD SURVEYS

A windshield survey of the area was conducted on November 15, 2019. During the survey, wells were visually identified and compiled into a GIS database. The majority of the wells were located near residences. The windshield survey could not be conducted in the area across the Ocmulgee River in Jones County, as the entire area is part of a gated community. A follow-up windshield survey was completed by Wood in 2021 within a 1-mile radius of the site (Wood, 2022).



2 References

Wood Environment & Infrastructure Solutions, Inc., 2022. Semi-Annual Remedy Selection and Design Progress Report – Georgia Power Company Plant Arkwright AP-3 Landfill and Monofill, February 28, 2022.



Plant Arkwright
Arkwright Road
Macon, GA 31210

Inquiry Number: 7186862.1s
November 22, 2022

The EDR GeoCheck® Report



6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

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Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

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GEOCHECK® - PHYSICAL SETTING SOURCE REPORT

TARGET PROPERTY ADDRESS

PLANT ARKWRIGHT
ARKWRIGHT ROAD
MACON, GA 31210

TARGET PROPERTY COORDINATES

Latitude (North):	32.924128 - 32° 55' 26.86"
Longitude (West):	83.703417 - 83° 42' 12.30"
Universal Transverse Mercator:	Zone 17
UTM X (Meters):	247197.9
UTM Y (Meters):	3645928.0
Elevation:	317 ft. above sea level

USGS TOPOGRAPHIC MAP

Target Property Map:	32083-H6 MACON NW, GA
Version Date:	1985

EDR's GeoCheck Physical Setting Source Addendum is provided to assist the environmental professional in forming an opinion about the impact of potential contaminant migration.

Assessment of the impact of contaminant migration generally has two principle investigative components:

1. Groundwater flow direction, and
2. Groundwater flow velocity.

Groundwater flow direction may be impacted by surface topography, hydrology, hydrogeology, characteristics of the soil, and nearby wells. Groundwater flow velocity is generally impacted by the nature of the geologic strata.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW DIRECTION INFORMATION

Groundwater flow direction for a particular site is best determined by a qualified environmental professional using site-specific well data. If such data is not reasonably ascertainable, it may be necessary to rely on other sources of information, such as surface topographic information, hydrologic information, hydrogeologic data collected on nearby properties, and regional groundwater flow information (from deep aquifers).

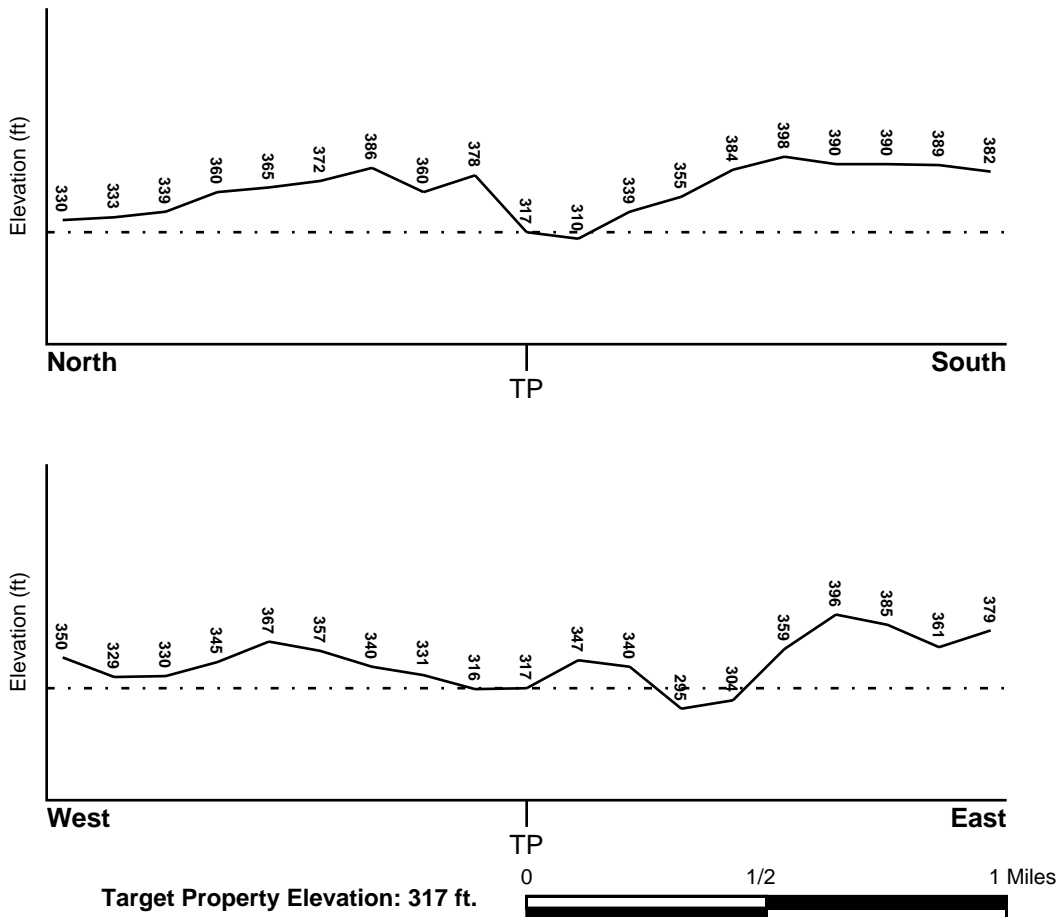
TOPOGRAPHIC INFORMATION

Surface topography may be indicative of the direction of surficial groundwater flow. This information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

TARGET PROPERTY TOPOGRAPHY

General Topographic Gradient: General South

SURROUNDING TOPOGRAPHY: ELEVATION PROFILES



Source: Topography has been determined from the USGS 7.5' Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

HYDROLOGIC INFORMATION

Surface water can act as a hydrologic barrier to groundwater flow. Such hydrologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Refer to the Physical Setting Source Map following this summary for hydrologic information (major waterways and bodies of water).

FEMA FLOOD ZONE

<u>Flood Plain Panel at Target Property</u>	<u>FEMA Source Type</u>
13207C0275D	FEMA FIRM Flood data
<u>Additional Panels in search area:</u>	<u>FEMA Source Type</u>
Not Reported	

NATIONAL WETLAND INVENTORY

<u>NWI Quad at Target Property</u>	<u>NWI Electronic Data Coverage</u>
MACON NW	YES - refer to the Overview Map and Detail Map

HYDROGEOLOGIC INFORMATION

Hydrogeologic information obtained by installation of wells on a specific site can often be an indicator of groundwater flow direction in the immediate area. Such hydrogeologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

AQUIFLOW®

Search Radius: 1.000 Mile.

EDR has developed the AQUIFLOW Information System to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted by environmental professionals to regulatory authorities at select sites and has extracted the date of the report, groundwater flow direction as determined hydrogeologically, and the depth to water table.

<u>MAP ID</u>	<u>LOCATION FROM TP</u>	<u>GENERAL DIRECTION GROUNDWATER FLOW</u>
Not Reported		

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW VELOCITY INFORMATION

Groundwater flow velocity information for a particular site is best determined by a qualified environmental professional using site specific geologic and soil strata data. If such data are not reasonably ascertainable, it may be necessary to rely on other sources of information, including geologic age identification, rock stratigraphic unit and soil characteristics data collected on nearby properties and regional soil information. In general, contaminant plumes move more quickly through sandy-gravelly types of soils than silty-clayey types of soils.

GEOLOGIC INFORMATION IN GENERAL AREA OF TARGET PROPERTY

Geologic information can be used by the environmental professional in forming an opinion about the relative speed at which contaminant migration may be occurring.

ROCK STRATIGRAPHIC UNIT

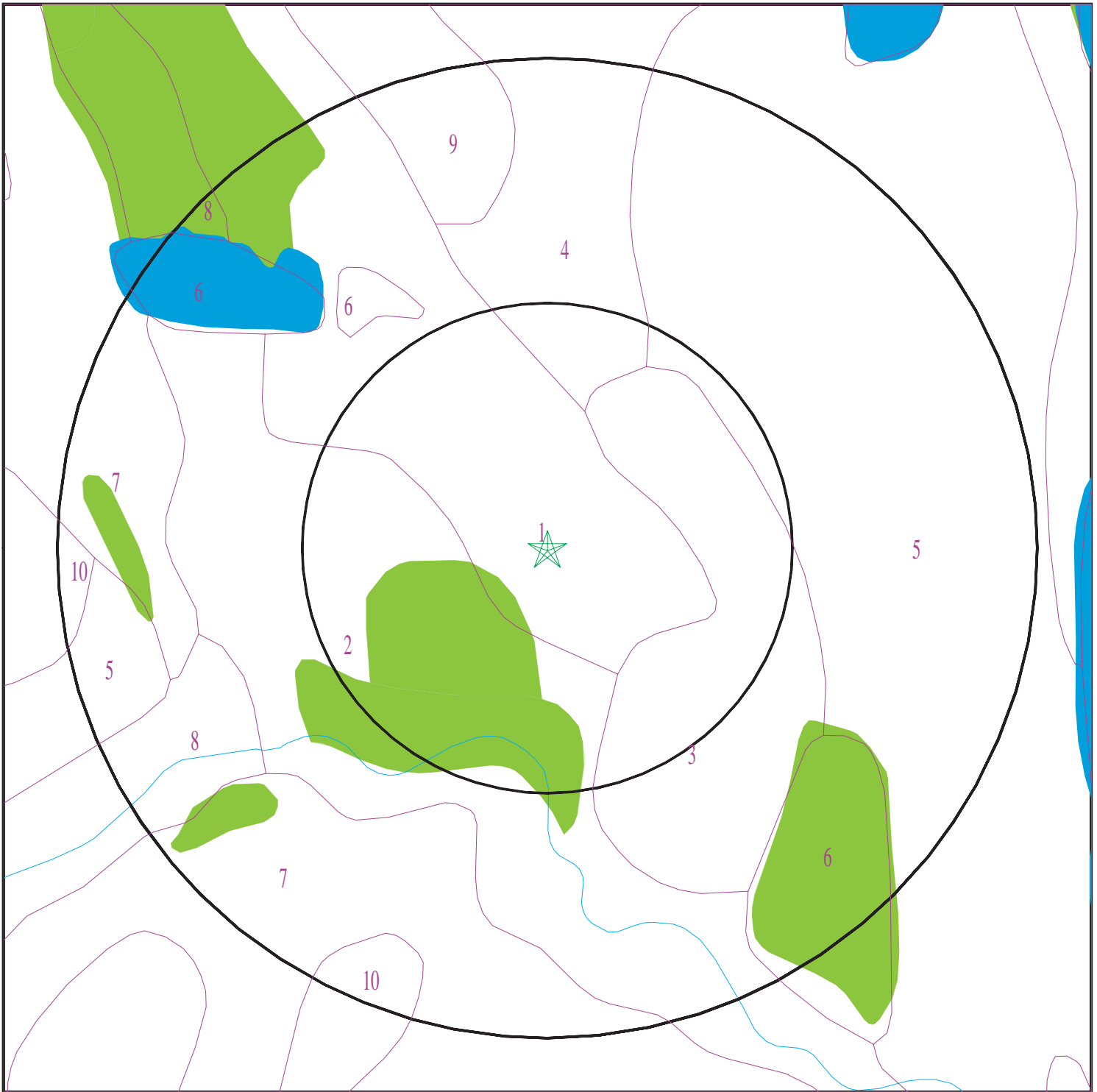
Era: Paleozoic
System: Pennsylvanian
Series: Felsic paragneiss and schist
Code: mm1 (*decoded above as Era, System & Series*)

GEOLOGIC AGE IDENTIFICATION

Category: Metamorphic Rocks

Geologic Age and Rock Stratigraphic Unit Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - a digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

SSURGO SOIL MAP - 7186862.1s



- ★ Target Property
- SSURGO Soil
- Water



SITE NAME: Plant Arkwright
ADDRESS: Arkwright Road
Macon GA 31210
LAT/LONG: 32.924128 / 83.703417

CLIENT: Wenck
CONTACT: Edgar Smith
INQUIRY #: 7186862.1s
DATE: November 22, 2022 5:37 pm

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

DOMINANT SOIL COMPOSITION IN GENERAL AREA OF TARGET PROPERTY

The U.S. Department of Agriculture's (USDA) Soil Conservation Service (SCS) leads the National Cooperative Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. The following information is based on Soil Conservation Service SSURGO data.

Soil Map ID: 1

Soil Component Name: Cecil

Soil Surface Texture: clay loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
1	51 inches	64 inches	clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Elastic silt.	Max: 14 Min: 4	Max: 5.5 Min: 4.5
2	0 inches	5 inches	sandy loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Elastic silt.	Max: 14 Min: 4	Max: 5.5 Min: 4.5
3	5 inches	51 inches	clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Elastic silt.	Max: 14 Min: 4	Max: 5.5 Min: 4.5

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Soil Map ID: 2

Soil Component Name: Chewacla

Soil Surface Texture: loam

Hydrologic Group: Class C - Slow infiltration rates. Soils with layers impeding downward movement of water, or soils with moderately fine or fine textures.

Soil Drainage Class: Somewhat poorly drained

Hydric Status: Partially hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 31 inches

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
1	59 inches	70 inches	loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt.	Max: 14 Min: 4	Max: 6.5 Min: 4.5
2	0 inches	18 inches	silt loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt.	Max: 14 Min: 4	Max: 6.5 Min: 4.5
3	18 inches	59 inches	silt loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt.	Max: 14 Min: 4	Max: 6.5 Min: 4.5

Soil Map ID: 3

Soil Component Name: Pits

Soil Surface Texture: loam

Hydrologic Group: Class C - Slow infiltration rates. Soils with layers impeding downward movement of water, or soils with moderately fine or fine textures.

Soil Drainage Class:

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Hydric Status: Unknown

Corrosion Potential - Uncoated Steel: Not Reported

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

No Layer Information available.

Soil Map ID: 4

Soil Component Name: Davidson

Soil Surface Texture: clay loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
1	0 inches	5 inches	clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay	Max: 14 Min: 4	Max: 6.5 Min: 4.5
2	5 inches	64 inches	clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay	Max: 14 Min: 4	Max: 6.5 Min: 4.5
3	64 inches	68 inches	clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay	Max: 14 Min: 4	Max: 6.5 Min: 4.5

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Soil Map ID: 5

Soil Component Name: Cecil

Soil Surface Texture: clay loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
1	51 inches	64 inches	clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Elastic silt.	Max: 14 Min: 4	Max: 5.5 Min: 4.5
2	0 inches	5 inches	sandy loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Elastic silt.	Max: 14 Min: 4	Max: 5.5 Min: 4.5
3	5 inches	51 inches	clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Elastic silt.	Max: 14 Min: 4	Max: 5.5 Min: 4.5

Soil Map ID: 6

Soil Component Name: Water

Soil Surface Texture: clay loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class:

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Hydric Status: Unknown

Corrosion Potential - Uncoated Steel: Not Reported

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

No Layer Information available.

Soil Map ID: 7

Soil Component Name: Vance

Soil Surface Texture: loam

Hydrologic Group: Class C - Slow infiltration rates. Soils with layers impeding downward movement of water, or soils with moderately fine or fine textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
1	44 inches	59 inches	loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Fat Clay.	Max: 1.4 Min: 0.42	Max: 5.5 Min: 4.5
2	0 inches	3 inches	sandy clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Fat Clay.	Max: 1.4 Min: 0.42	Max: 5.5 Min: 4.5
3	3 inches	44 inches	clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Fat Clay.	Max: 1.4 Min: 0.42	Max: 5.5 Min: 4.5

GEOCHECK[®] - PHYSICAL SETTING SOURCE SUMMARY

Soil Map ID: 8

Soil Component Name: Congaree

Soil Surface Texture: loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 99 inches

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
1	25 inches	64 inches	loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt.	Max: 14 Min: 4	Max: 7.3 Min: 4.5
2	0 inches	18 inches	silt loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt.	Max: 14 Min: 4	Max: 7.3 Min: 4.5
3	18 inches	25 inches	silt loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt.	Max: 14 Min: 4	Max: 7.3 Min: 4.5

Soil Map ID: 9

Soil Component Name: Davidson

Soil Surface Texture: clay loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Well drained

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
1	0 inches	5 inches	clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay	Max: 14 Min: 4	Max: 6.5 Min: 4.5
2	5 inches	64 inches	clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay	Max: 14 Min: 4	Max: 6.5 Min: 4.5
3	64 inches	68 inches	clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay	Max: 14 Min: 4	Max: 6.5 Min: 4.5

Soil Map ID: 10

Soil Component Name: Cecil

Soil Surface Texture: clay loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
1	51 inches	64 inches	clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Elastic silt.	Max: 14 Min: 4	Max: 5.5 Min: 4.5
2	0 inches	5 inches	sandy loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Elastic silt.	Max: 14 Min: 4	Max: 5.5 Min: 4.5
3	5 inches	51 inches	clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Elastic silt.	Max: 14 Min: 4	Max: 5.5 Min: 4.5

LOCAL / REGIONAL WATER AGENCY RECORDS

EDR Local/Regional Water Agency records provide water well information to assist the environmental professional in assessing sources that may impact ground water flow direction, and in forming an opinion about the impact of contaminant migration on nearby drinking water wells.

WELL SEARCH DISTANCE INFORMATION

<u>DATABASE</u>	<u>SEARCH DISTANCE (miles)</u>
Federal USGS	2.000
Federal FRDS PWS	2.000
State Database	2.000

FEDERAL USGS WELL INFORMATION

<u>MAP ID</u>	<u>WELL ID</u>	<u>LOCATION FROM TP</u>
A1	USGS40000261390	1 - 2 Miles NNW

FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

<u>MAP ID</u>	<u>WELL ID</u>	<u>LOCATION FROM TP</u>

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

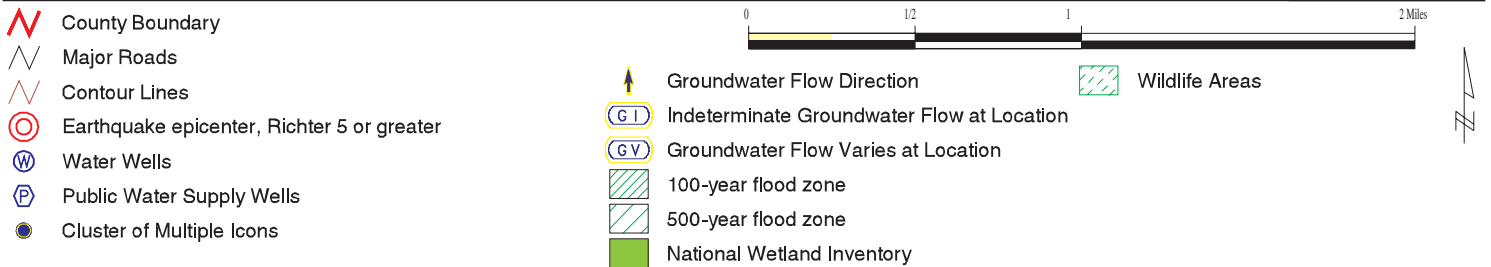
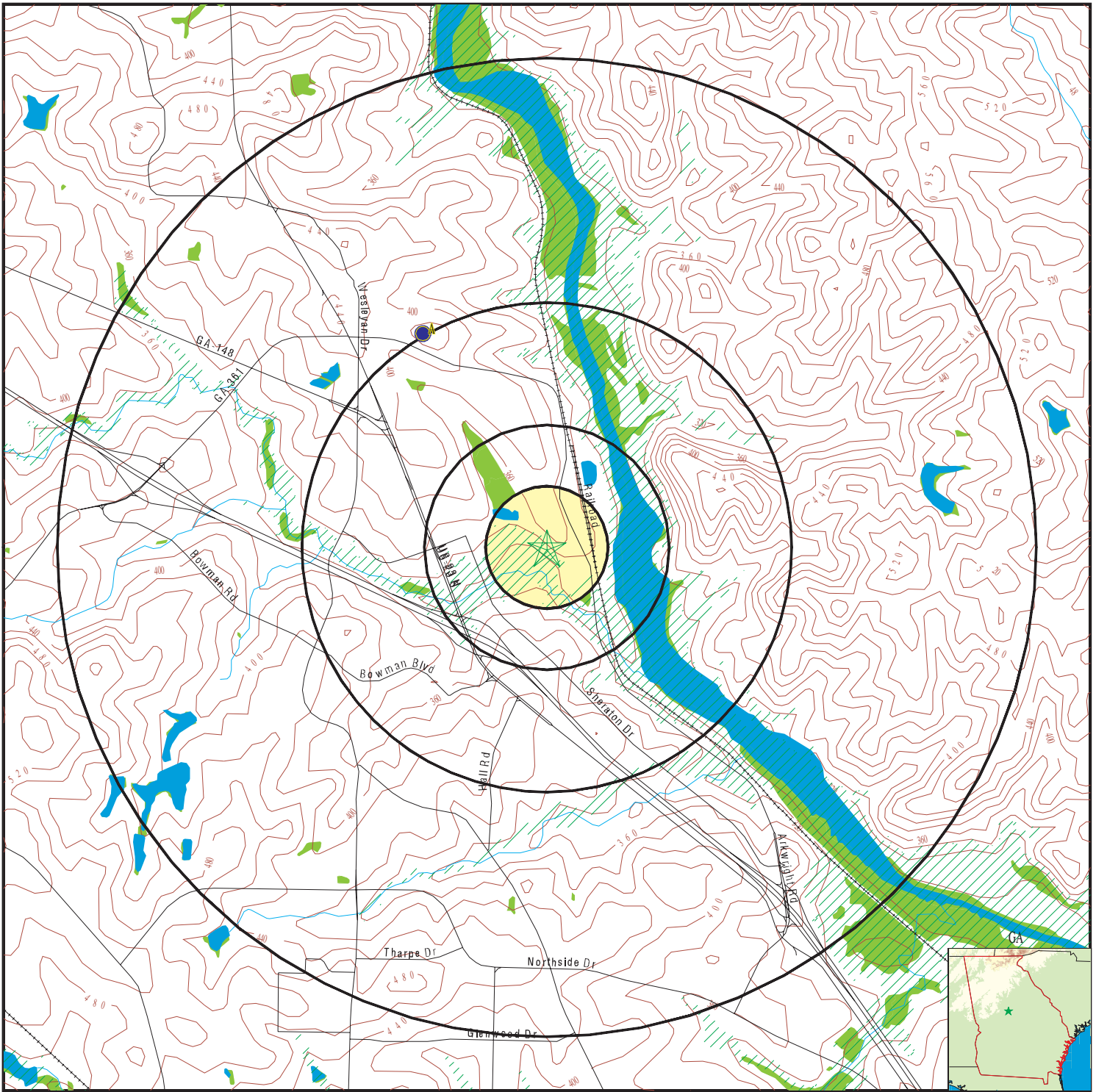
MAP ID	WELL ID	LOCATION FROM TP
<u>No PWS System Found</u>	<u></u>	<u></u>

Note: PWS System location is not always the same as well location.

STATE DATABASE WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
<u>A2</u>	<u>0000000364</u>	<u>1 - 2 Miles NNW</u>

PHYSICAL SETTING SOURCE MAP - 7186862.1s



<p>SITE NAME: Plant Arkwright ADDRESS: Arkwright Road Macon GA 31210 LAT/LONG: 32.924128 / 83.703417</p>	<p>CLIENT: Wenck CONTACT: Edgar Smith INQUIRY #: 7186862.1s DATE: November 22, 2022 5:37 pm</p>
---	--

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
 Direction
 Distance
 Elevation

Database EDR ID Number

A1
NNW
1 - 2 Miles
Higher

FED USGS USGS40000261390

Organization ID:	USGS-GA	Organization Name:	USGS Georgia Water Science Center
Monitor Location:	16X005	Type:	Well
Description:	SOUTHERN NATURAL GAS 1	HUC:	03070103
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Piedmont and Blue Ridge crystalline-rock aquifers		
Formation Type:	Crystalline Rocks	Aquifer Type:	Confined multiple aquifer
Construction Date:	Not Reported	Well Depth:	600
Well Depth Units:	ft	Well Hole Depth:	Not Reported
Well Hole Depth Units:	Not Reported		

A2
NNW
1 - 2 Miles
Higher

GA WELLS 000000364

County code:	021	Well num:	16X005
Remarks:	SOUTHERN NATURAL GAS 1	Lat:	325612
Lon:	0834244	Latlon datum:	NAD27
Alt:	416.00	Alt datum:	NGVD29
Depth:	600	Depth to casing:	Not Reported
Casing dia:	Not Reported	Casing matl:	Not Reported
Depth to top:	Not Reported	Depth to bot:	Not Reported
Opening type:	Not Reported	Constr date:	Not Reported
Discharge:	Not Reported	Prim use:	Not Reported
Aquifer code:	400GNSS	Edr id:	000000364

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS RADON

AREA RADON INFORMATION

Federal EPA Radon Zone for BIBB County: 3

- Note: Zone 1 indoor average level > 4 pCi/L.
 : Zone 2 indoor average level >= 2 pCi/L and <= 4 pCi/L.
 : Zone 3 indoor average level < 2 pCi/L.

Federal Area Radon Information for Zip Code: 31210

Number of sites tested: 5

Area	Average Activity	% <4 pCi/L	% 4-20 pCi/L	% >20 pCi/L
Living Area - 1st Floor	1.300 pCi/L	100%	0%	0%
Living Area - 2nd Floor	Not Reported	Not Reported	Not Reported	Not Reported
Basement	1.520 pCi/L	100%	0%	0%

PHYSICAL SETTING SOURCE RECORDS SEARCHED

TOPOGRAPHIC INFORMATION

USGS 7.5' Digital Elevation Model (DEM)

Source: United States Geologic Survey

EDR acquired the USGS 7.5' Digital Elevation Model in 2002 and updated it in 2006. The 7.5 minute DEM corresponds to the USGS 1:24,000- and 1:25,000-scale topographic quadrangle maps. The DEM provides elevation data with consistent elevation units and projection.

HYDROLOGIC INFORMATION

Flood Zone Data: This data was obtained from the Federal Emergency Management Agency (FEMA). It depicts 100-year and 500-year flood zones as defined by FEMA. It includes the National Flood Hazard Layer (NFHL) which incorporates Flood Insurance Rate Map (FIRM) data and Q3 data from FEMA in areas not covered by NFHL.

Source: FEMA

Telephone: 877-336-2627

Date of Government Version: 2003, 2015

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005, 2010 and 2015 from the U.S. Fish and Wildlife Service.

State Wetlands Data: Wetlands Inventory

Source: Georgia GIS Clearinghouse

Telephone: 706-542-1581

HYDROGEOLOGIC INFORMATION

AQUIFLOW^R Information System

Source: EDR proprietary database of groundwater flow information

EDR has developed the AQUIFLOW Information System (AIS) to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted to regulatory authorities at select sites and has extracted the date of the report, hydrogeologically determined groundwater flow direction and depth to water table information.

GEOLOGIC INFORMATION

Geologic Age and Rock Stratigraphic Unit

Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - A digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

STATSGO: State Soil Geographic Database

Source: Department of Agriculture, Natural Resources Conservation Service (NRCS)

The U.S. Department of Agriculture's (USDA) Natural Resources Conservation Service (NRCS) leads the national Conservation Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps.

SSURGO: Soil Survey Geographic Database

Source: Department of Agriculture, Natural Resources Conservation Service (NRCS)

Telephone: 800-672-5559

SSURGO is the most detailed level of mapping done by the Natural Resources Conservation Service, mapping scales generally range from 1:12,000 to 1:63,360. Field mapping methods using national standards are used to construct the soil maps in the Soil Survey Geographic (SSURGO) database. SSURGO digitizing duplicates the original soil survey maps. This level of mapping is designed for use by landowners, townships and county natural resource planning and management.

PHYSICAL SETTING SOURCE RECORDS SEARCHED

LOCAL / REGIONAL WATER AGENCY RECORDS

FEDERAL WATER WELLS

PWS: Public Water Systems

Source: EPA/Office of Drinking Water

Telephone: 202-564-3750

Public Water System data from the Federal Reporting Data System. A PWS is any water system which provides water to at least 25 people for at least 60 days annually. PWSs provide water from wells, rivers and other sources.

PWS ENF: Public Water Systems Violation and Enforcement Data

Source: EPA/Office of Drinking Water

Telephone: 202-564-3750

Violation and Enforcement data for Public Water Systems from the Safe Drinking Water Information System (SDWIS) after August 1995. Prior to August 1995, the data came from the Federal Reporting Data System (FRDS).

USGS Water Wells: USGS National Water Inventory System (NWIS)

This database contains descriptive information on sites where the USGS collects or has collected data on surface water and/or groundwater. The groundwater data includes information on wells, springs, and other sources of groundwater.

STATE RECORDS

Georgia Public Supply Wells

Source: Georgia Department of Community Affairs

Telephone: 404-894-0127

USGS Georgia Water Wells

Source: USGS, Georgia District Office

Telephone: 770-903-9100

OTHER STATE DATABASE INFORMATION

DNR Managed Lands

Source: Department of Natural Resources

Telephone: 706-557-3032

This dataset provides 1:24,000-scale data depicting boundaries of land parcels making up the public lands managed by the Georgia Department of Natural Resources (GDNR). It includes polygon representations of State Parks, State Historic Parks, State Conservation Parks, State Historic Sites, Wildlife Management Areas, Public Fishing Areas, Fish Hatcheries, Natural Areas and other specially-designated areas. The data were collected and located by the Georgia Department of Natural Resources. Boundaries were digitized from survey plats or other information.

RADON

Area Radon Information

Source: USGS

Telephone: 703-356-4020

The National Radon Database has been developed by the U.S. Environmental Protection Agency (USEPA) and is a compilation of the EPA/State Residential Radon Survey and the National Residential Radon Survey. The study covers the years 1986 - 1992. Where necessary data has been supplemented by information collected at private sources such as universities and research institutions.

EPA Radon Zones

Source: EPA

Telephone: 703-356-4020

Sections 307 & 309 of IRAA directed EPA to list and identify areas of U.S. with the potential for elevated indoor radon levels.

OTHER

Airport Landing Facilities: Private and public use landing facilities

Source: Federal Aviation Administration, 800-457-6656

Epicenters: World earthquake epicenters, Richter 5 or greater

Source: Department of Commerce, National Oceanic and Atmospheric Administration

Earthquake Fault Lines: The fault lines displayed on EDR's Topographic map are digitized quaternary faultlines, prepared in 1975 by the United State Geological Survey

PHYSICAL SETTING SOURCE RECORDS SEARCHED

STREET AND ADDRESS INFORMATION

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APPENDIX C POREWATER LABORATORY RESULTS





October 13, 2022

Joju Abraham
Georgia Power Company, Southern Company
241 Ralph McGill Blvd NE, Bin 10160
Atlanta, Georgia 30308

Re: Arkwright CCR Groundwater Compliance AP3IWPZ
Work Order: 594905

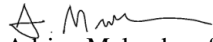
Dear Joju Abraham:

GEL Laboratories, LLC (GEL) appreciates the opportunity to provide the enclosed analytical results for the sample(s) we received on September 29, 2022. This original data report has been prepared and reviewed in accordance with GEL's standard operating procedures.

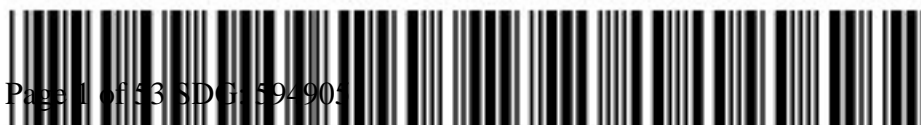
Test results for NELAP or ISO 17025 accredited tests are verified to meet the requirements of those standards, with any exceptions noted. The results reported relate only to the items tested and to the sample as received by the laboratory. These results may not be reproduced except as full reports without approval by the laboratory. Copies of GEL's accreditations and certifications can be found on our website at www.gel.com.

Our policy is to provide high quality, personalized analytical services to enable you to meet your analytical needs on time every time. We trust that you will find everything in order and to your satisfaction. If you have any questions, please do not hesitate to call me at (843) 556-8171, ext. 4504.

Sincerely,


Adrian Melendrez for
Erin Trent
Project Manager

Purchase Order: GPC82177-0002
Enclosures



GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 – (843) 556–8171 – www.gel.com

**Certificate of Analysis Report
for**

GPCC001 Georgia Power Company

Client SDG: 594905 GEL Work Order: 594905

The Qualifiers in this report are defined as follows:

- * A quality control analyte recovery is outside of specified acceptance criteria
- ** Analyte is a Tracer compound
- ** Analyte is a surrogate compound
- J See case narrative for an explanation
- J Value is estimated
- U Analyte was analyzed for, but not detected above the MDL, MDA, MDC or LOD.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the Certificate of Analysis.

The designation ND, if present, appears in the result column when the analyte concentration is not detected above the limit as defined in the 'U' qualifier above.

This data report has been prepared and reviewed in accordance with GEL Laboratories LLC standard operating procedures. Please direct any questions to your Project Manager, Erin Trent.

Reviewed by _____



GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 – (843) 556-8171 – www.gel.com

**Certificate of Analysis Report
for**

**GPCC001 Georgia Power Company
Client SDG: 594905 GEL Work Order: 594905**

The Qualifiers in this report are defined as follows:

- * A quality control analyte recovery is outside of specified acceptance criteria
- ** Analyte is a Tracer compound
- ** Analyte is a surrogate compound
- J See case narrative for an explanation
- J Value is estimated
- U Analyte was analyzed for, but not detected above the MDL, MDA, MDC or LOD.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the Certificate of Analysis.

The designation ND, if present, appears in the result column when the analyte concentration is not detected above the limit as defined in the 'U' qualifier above.

This data report has been prepared and reviewed in accordance with GEL Laboratories LLC standard operating procedures. Please direct any questions to your Project Manager, Erin Trent.

Reviewed by _____



GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

Report Date: October 13, 2022

Company : Georgia Power Company, Southern Company
 Address : 241 Ralph McGill Blvd NE, Bin 10160

Atlanta, Georgia 30308

Contact: Joju Abraham
 Project: Arkwright CCR Groundwater Compliance AP3IWPZ

Client Sample ID: AP3PZ-1A	Project: GPCC00100
Sample ID: 594905001	Client ID: GPCC001
Matrix: WG	
Collect Date: 27-SEP-22 13:25	
Receive Date: 29-SEP-22	
Collector: Client	

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Field Data												
Client collected Field pH "As Received"												
Field pH		6.15			SU			EOS1	09/27/22	1325	2323157	1
Ion Chromatography												
EPA 300.0 Anions Liquid "As Received"												
Chloride		5.20	0.0670	0.200	mg/L		1	HXC1	10/04/22	1600	2324534	2
Fluoride		0.281	0.0330	0.100	mg/L		1					
Sulfate		144	1.33	4.00	mg/L		10	HXC1	10/05/22	0357	2324534	3
Metals Analysis-ICP-MS												
SW846 3005A/6020B "As Received"												
Cobalt		0.0199	0.000300	0.00100	mg/L	1.00	1	PRB	10/07/22	1837	2323201	4
Boron		0.413	0.0260	0.0750	mg/L	1.00	5	PRB	10/08/22	0753	2323201	5
Calcium		87.3	0.400	1.00	mg/L	1.00	5					
Solids Analysis												
SM2540C Dissolved Solids "As Received"												
Total Dissolved Solids		415	2.38	10.0	mg/L			CH6	10/03/22	1444	2323652	6
Titration and Ion Analysis												
SM 2320B Total Alkalinity "As Received"												
Alkalinity, Total as CaCO3		154	1.45	4.00	mg/L			HH2	10/04/22	1410	2323388	7
Bicarbonate alkalinity (CaCO3)		154	1.45	4.00	mg/L							
Carbonate alkalinity (CaCO3)	U	ND	1.45	4.00	mg/L							

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
SW846 3005A	ICP-MS 3005A PREP	LG2	10/01/22	1115	2323200

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	SM 4500-H B/SW846 9040C, SM 2550B	
2	EPA 300.0	
3	EPA 300.0	
4	SW846 3005A/6020B	
5	SW846 3005A/6020B	
6	SM 2540C	
7	SM 2320B	

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Certificate of Analysis

Report Date: October 13, 2022

Company : Georgia Power Company, Southern Company
Address : 241 Ralph McGill Blvd NE, Bin 10160

Atlanta, Georgia 30308
Contact: Joju Abraham
Project: Arkwright CCR Groundwater Compliance AP3IWPZ

Client Sample ID: AP3PZ-1A
Sample ID: 594905001

Project: GPCC00100
Client ID: GPCC001

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
-----------	-----------	--------	----	----	-------	----	----	---------	------	------	-------	--------

Notes:

Column headers are defined as follows:

DF: Dilution Factor

DL: Detection Limit

MDA: Minimum Detectable Activity

MDC: Minimum Detectable Concentration

Lc/LC: Critical Level

PF: Prep Factor

RL: Reporting Limit

SQL: Sample Quantitation Limit

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Certificate of Analysis

Report Date: October 13, 2022

Company : Georgia Power Company, Southern Company
Address : 241 Ralph McGill Blvd NE, Bin 10160

Atlanta, Georgia 30308

Contact: Joju Abraham
Project: Arkwright CCR Groundwater Compliance AP3IWPZ

Client Sample ID: FB-01	Project: GPCC00100
Sample ID: 594905002	Client ID: GPCC001
Matrix: WQ	
Collect Date: 27-SEP-22 13:45	
Receive Date: 29-SEP-22	
Collector: Client	

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Field Data												
Client collected Field pH "As Received"												
Ion Chromatography												
EPA 300.0 Anions Liquid "As Received"												
Chloride	U	ND	0.0670	0.200	mg/L		1	HXC1	10/04/22	1630	2324534	2
Fluoride	U	ND	0.0330	0.100	mg/L		1					
Sulfate	U	ND	0.133	0.400	mg/L		1					
Metals Analysis-ICP-MS												
SW846 3005A/6020B "As Received"												
Cobalt	U	ND	0.000300	0.00100	mg/L	1.00	1	PRB	10/07/22	1902	2323201	3
Boron	U	ND	0.00520	0.0150	mg/L	1.00	1	PRB	10/08/22	0808	2323201	4
Calcium	U	ND	0.0800	0.200	mg/L	1.00	1					
Solids Analysis												
SM2540C Dissolved Solids "As Received"												
Total Dissolved Solids	U	ND	2.38	10.0	mg/L			CH6	10/03/22	1444	2323652	5

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
SW846 3005A	ICP-MS 3005A PREP	LG2	10/01/22	1115	2323200

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	SM 4500-H B/SW846 9040C, SM 2550B	
2	EPA 300.0	
3	SW846 3005A/6020B	
4	SW846 3005A/6020B	
5	SM 2540C	

Notes:

Column headers are defined as follows:

DF: Dilution Factor	Lc/LC: Critical Level
DL: Detection Limit	PF: Prep Factor
MDA: Minimum Detectable Activity	RL: Reporting Limit
MDC: Minimum Detectable Concentration	SQL: Sample Quantitation Limit

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

Report Date: October 13, 2022

Company : Georgia Power Company, Southern Company
Address : 241 Ralph McGill Blvd NE, Bin 10160

Atlanta, Georgia 30308

Contact: Joju Abraham
Project: Arkwright CCR Groundwater Compliance AP3IWPZ

Client Sample ID: AP3PZ-2A	Project: GPCC00100
Sample ID: 594905003	Client ID: GPCC001
Matrix: WG	
Collect Date: 27-SEP-22 15:10	
Receive Date: 29-SEP-22	
Collector: Client	

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Field Data												
Client collected Field pH "As Received"												
Field pH		6.78			SU			EOS1	09/27/22	1510	2323157	1
Ion Chromatography												
EPA 300.0 Anions Liquid "As Received"												
Chloride		5.16	0.0670	0.200	mg/L		1	HXC1	10/04/22	1700	2324534	2
Fluoride		0.382	0.0330	0.100	mg/L		1					
Sulfate		190	2.66	8.00	mg/L		20	HXC1	10/05/22	0527	2324534	3
Metals Analysis-ICP-MS												
SW846 3005A/6020B "As Received"												
Cobalt	U	ND	0.000300	0.00100	mg/L	1.00	1	PRB	10/07/22	1906	2323201	4
Boron		0.577	0.0260	0.0750	mg/L	1.00	5	PRB	10/08/22	0810	2323201	5
Calcium		96.7	0.400	1.00	mg/L	1.00	5					
Solids Analysis												
SM2540C Dissolved Solids "As Received"												
Total Dissolved Solids		520	2.38	10.0	mg/L			CH6	10/03/22	1444	2323652	6
Titration and Ion Analysis												
SM 2320B Total Alkalinity "As Received"												
Alkalinity, Total as CaCO3		192	1.45	4.00	mg/L			HH2	10/04/22	1412	2323388	7
Bicarbonate alkalinity (CaCO3)		192	1.45	4.00	mg/L							
Carbonate alkalinity (CaCO3)	U	ND	1.45	4.00	mg/L							

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
SW846 3005A	ICP-MS 3005A PREP	LG2	10/01/22	1115	2323200

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	SM 4500-H B/SW846 9040C, SM 2550B	
2	EPA 300.0	
3	EPA 300.0	
4	SW846 3005A/6020B	
5	SW846 3005A/6020B	
6	SM 2540C	
7	SM 2320B	

GEL LABORATORIES LLC

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Certificate of Analysis

Report Date: October 13, 2022

Company : Georgia Power Company, Southern Company
Address : 241 Ralph McGill Blvd NE, Bin 10160

Atlanta, Georgia 30308
Contact: Joju Abraham
Project: Arkwright CCR Groundwater Compliance AP3IWPZ

Client Sample ID:	AP3PZ-2A	Project:	GPCC00100
Sample ID:	594905003	Client ID:	GPCC001

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
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Notes:

Column headers are defined as follows:

DF: Dilution Factor	Lc/LC: Critical Level
DL: Detection Limit	PF: Prep Factor
MDA: Minimum Detectable Activity	RL: Reporting Limit
MDC: Minimum Detectable Concentration	SQL: Sample Quantitation Limit

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Certificate of Analysis

Report Date: October 13, 2022

Company : Georgia Power Company, Southern Company
 Address : 241 Ralph McGill Blvd NE, Bin 10160

Atlanta, Georgia 30308

Contact: Joju Abraham
 Project: Arkwright CCR Groundwater Compliance AP3IWPZ

Client Sample ID: EB-01	Project: GPCC00100
Sample ID: 594905004	Client ID: GPCC001
Matrix: WQ	
Collect Date: 27-SEP-22 15:55	
Receive Date: 29-SEP-22	
Collector: Client	

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Field Data												
Client collected Field pH "As Received"												
Ion Chromatography												
EPA 300.0 Anions Liquid "As Received"												
Chloride	U	ND	0.0670	0.200	mg/L		1	HXC1	10/04/22	1730	2324534	2
Fluoride	U	ND	0.0330	0.100	mg/L		1					
Sulfate	U	ND	0.133	0.400	mg/L		1					
Metals Analysis-ICP-MS												
SW846 3005A/6020B "As Received"												
Cobalt	U	ND	0.000300	0.00100	mg/L	1.00	1	PRB	10/07/22	1910	2323201	3
Boron	U	ND	0.00520	0.0150	mg/L	1.00	1	PRB	10/08/22	0813	2323201	4
Calcium	U	ND	0.0800	0.200	mg/L	1.00	1					
Solids Analysis												
SM2540C Dissolved Solids "As Received"												
Total Dissolved Solids	U	ND	2.38	10.0	mg/L			CH6	10/03/22	1444	2323652	5

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
SW846 3005A	ICP-MS 3005A PREP	LG2	10/01/22	1115	2323200

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	SM 4500-H B/SW846 9040C, SM 2550B	
2	EPA 300.0	
3	SW846 3005A/6020B	
4	SW846 3005A/6020B	
5	SM 2540C	

Notes:

Column headers are defined as follows:

DF: Dilution Factor	Lc/LC: Critical Level
DL: Detection Limit	PF: Prep Factor
MDA: Minimum Detectable Activity	RL: Reporting Limit
MDC: Minimum Detectable Concentration	SQL: Sample Quantitation Limit

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Certificate of Analysis

Report Date: October 13, 2022

Company : Georgia Power Company, Southern Company
Address : 241 Ralph McGill Blvd NE, Bin 10160

Atlanta, Georgia 30308

Contact: Joju Abraham
Project: Arkwright CCR Groundwater Compliance AP3IWPZ

Client Sample ID: AP3PZ-3A	Project: GPCC00100
Sample ID: 594905005	Client ID: GPCC001
Matrix: WG	
Collect Date: 27-SEP-22 17:30	
Receive Date: 29-SEP-22	
Collector: Client	

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Field Data												
Client collected Field pH "As Received"												
Field pH		6.98			SU			EOS1	09/27/22	1730	2323157	1
Ion Chromatography												
EPA 300.0 Anions Liquid "As Received"												
Chloride		8.21	0.0670	0.200	mg/L		1	HXC1	10/04/22	1800	2324534	2
Fluoride		0.709	0.0330	0.100	mg/L		1					
Sulfate		265	2.66	8.00	mg/L		20	HXC1	10/05/22	0556	2324534	3
Metals Analysis-ICP-MS												
SW846 3005A/6020B "As Received"												
Cobalt		0.00116	0.000300	0.00100	mg/L	1.00	1	PRB	10/07/22	1913	2323201	4
Boron		1.84	0.104	0.300	mg/L	1.00	20	PRB	10/08/22	0815	2323201	5
Calcium		246	1.60	4.00	mg/L	1.00	20					
Solids Analysis												
SM2540C Dissolved Solids "As Received"												
Total Dissolved Solids		896	2.38	10.0	mg/L			CH6	10/03/22	1444	2323652	6
Titration and Ion Analysis												
SM 2320B Total Alkalinity "As Received"												
Alkalinity, Total as CaCO3		452	1.45	4.00	mg/L			HH2	10/04/22	1414	2323388	7
Bicarbonate alkalinity (CaCO3)		452	1.45	4.00	mg/L							
Carbonate alkalinity (CaCO3)	U	ND	1.45	4.00	mg/L							

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
SW846 3005A	ICP-MS 3005A PREP	LG2	10/01/22	1115	2323200

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	SM 4500-H B/SW846 9040C, SM 2550B	
2	EPA 300.0	
3	EPA 300.0	
4	SW846 3005A/6020B	
5	SW846 3005A/6020B	
6	SM 2540C	
7	SM 2320B	

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Certificate of Analysis

Report Date: October 13, 2022

Company : Georgia Power Company, Southern Company
Address : 241 Ralph McGill Blvd NE, Bin 10160

Atlanta, Georgia 30308
Contact: Joju Abraham
Project: Arkwright CCR Groundwater Compliance AP3IWPZ

Client Sample ID:	AP3PZ-3A	Project:	GPCC00100
Sample ID:	594905005	Client ID:	GPCC001

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time Batch	Method
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Notes:

Column headers are defined as follows:

DF: Dilution Factor	Lc/LC: Critical Level
DL: Detection Limit	PF: Prep Factor
MDA: Minimum Detectable Activity	RL: Reporting Limit
MDC: Minimum Detectable Concentration	SQL: Sample Quantitation Limit

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Report Date: October 13, 2022

Company : Georgia Power Company, Southern Company
Address : 241 Ralph McGill Blvd NE, Bin 10160

Atlanta, Georgia 30308

Contact: Joju Abraham
Project: Arkwright CCR Groundwater Compliance AP3IWPZ

Client Sample ID: AP3PZ-5A	Project: GPCC00100
Sample ID: 594905006	Client ID: GPCC001
Matrix: WG	
Collect Date: 28-SEP-22 11:50	
Receive Date: 29-SEP-22	
Collector: Client	

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Field Data												
Client collected Field pH "As Received"												
Field pH		7.35			SU			EOS1	09/28/22	1150	2323157	1
Ion Chromatography												
EPA 300.0 Anions Liquid "As Received"												
Chloride		8.42	0.0670	0.200	mg/L		1	HXC1	10/04/22	1929	2324534	2
Fluoride		0.293	0.0330	0.100	mg/L		1					
Sulfate		1100	13.3	40.0	mg/L		100	HXC1	10/05/22	0726	2324534	3
Metals Analysis-ICP-MS												
SW846 3005A/6020B "As Received"												
Cobalt		0.0102	0.000300	0.00100	mg/L	1.00	1	PRB	10/07/22	1917	2323201	4
Boron		3.07	0.104	0.300	mg/L	1.00	20	PRB	10/08/22	0817	2323201	5
Calcium		557	1.60	4.00	mg/L	1.00	20					
Solids Analysis												
SM2540C Dissolved Solids "As Received"												
Total Dissolved Solids		2250	2.38	10.0	mg/L			CH6	10/03/22	1444	2323652	6
Titration and Ion Analysis												
SM 2320B Total Alkalinity "As Received"												
Alkalinity, Total as CaCO3		536	1.45	4.00	mg/L			HH2	10/04/22	1416	2323388	7
Bicarbonate alkalinity (CaCO3)		536	1.45	4.00	mg/L							
Carbonate alkalinity (CaCO3)	U	ND	1.45	4.00	mg/L							

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
SW846 3005A	ICP-MS 3005A PREP	LG2	10/01/22	1115	2323200

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	SM 4500-H B/SW846 9040C, SM 2550B	
2	EPA 300.0	
3	EPA 300.0	
4	SW846 3005A/6020B	
5	SW846 3005A/6020B	
6	SM 2540C	
7	SM 2320B	

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Company : Georgia Power Company, Southern Company
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Atlanta, Georgia 30308
Contact: Joju Abraham
Project: Arkwright CCR Groundwater Compliance AP3IWPZ

Client Sample ID:	AP3PZ-5A	Project:	GPCC00100
Sample ID:	594905006	Client ID:	GPCC001

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time Batch	Method
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Notes:

Column headers are defined as follows:

DF: Dilution Factor	Lc/LC: Critical Level
DL: Detection Limit	PF: Prep Factor
MDA: Minimum Detectable Activity	RL: Reporting Limit
MDC: Minimum Detectable Concentration	SQL: Sample Quantitation Limit

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Report Date: October 13, 2022

Company : Georgia Power Company, Southern Company
Address : 241 Ralph McGill Blvd NE, Bin 10160

Atlanta, Georgia 30308

Contact: Joju Abraham
Project: Arkwright CCR Groundwater Compliance AP3IWPZ

Client Sample ID: DUP-01	Project: GPCC00100
Sample ID: 594905007	Client ID: GPCC001
Matrix: WG	
Collect Date: 28-SEP-22 12:00	
Receive Date: 29-SEP-22	
Collector: Client	

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Field Data												
Client collected Field pH "As Received"												
Ion Chromatography												
EPA 300.0 Anions Liquid "As Received"												
Chloride		8.45	0.0670	0.200	mg/L		1	HXC1	10/04/22	1959	2324534	2
Fluoride		0.290	0.0330	0.100	mg/L		1					
Sulfate		1100	13.3	40.0	mg/L		100	HXC1	10/05/22	0756	2324534	3
Metals Analysis-ICP-MS												
SW846 3005A/6020B "As Received"												
Cobalt		0.00999	0.000300	0.00100	mg/L	1.00	1	PRB	10/07/22	1920	2323201	4
Boron		3.10	0.104	0.300	mg/L	1.00	20	PRB	10/08/22	0819	2323201	5
Calcium		556	1.60	4.00	mg/L	1.00	20					
Solids Analysis												
SM2540C Dissolved Solids "As Received"												
Total Dissolved Solids		2260	2.38	10.0	mg/L			CH6	10/03/22	1444	2323652	6

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
SW846 3005A	ICP-MS 3005A PREP	LG2	10/01/22	1115	2323200

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	SM 4500-H B/SW846 9040C, SM 2550B	
2	EPA 300.0	
3	EPA 300.0	
4	SW846 3005A/6020B	
5	SW846 3005A/6020B	
6	SM 2540C	

Notes:

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Company : Georgia Power Company, Southern Company
Address : 241 Ralph McGill Blvd NE, Bin 10160

Atlanta, Georgia 30308
Contact: Joju Abraham
Project: Arkwright CCR Groundwater Compliance AP3IWPZ

Client Sample ID:	DUP-01	Project:	GPCC00100
Sample ID:	594905007	Client ID:	GPCC001

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
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Column headers are defined as follows:

DF: Dilution Factor	Lc/LC: Critical Level
DL: Detection Limit	PF: Prep Factor
MDA: Minimum Detectable Activity	RL: Reporting Limit
MDC: Minimum Detectable Concentration	SQL: Sample Quantitation Limit

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Certificate of Analysis

Report Date: October 13, 2022

Company : Georgia Power Company, Southern Company
Address : 241 Ralph McGill Blvd NE, Bin 10160

Atlanta, Georgia 30308

Contact: Joju Abraham
Project: Arkwright CCR Groundwater Compliance AP3IWPZ

Client Sample ID: AP3PZ-4A	Project: GPCC00100
Sample ID: 594905008	Client ID: GPCC001
Matrix: WG	
Collect Date: 28-SEP-22 13:25	
Receive Date: 29-SEP-22	
Collector: Client	

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Field Data												
Client collected Field pH "As Received"												
Field pH		7.14			SU			EOS1	09/28/22	1325	2323157	1
Ion Chromatography												
EPA 300.0 Anions Liquid "As Received"												
Chloride		7.38	0.0670	0.200	mg/L		1	HXC1	10/04/22	2029	2324534	2
Fluoride		0.558	0.0330	0.100	mg/L		1					
Sulfate		174	2.66	8.00	mg/L		20	HXC1	10/05/22	0826	2324534	3
Metals Analysis-ICP-MS												
SW846 3005A/6020B "As Received"												
Cobalt		0.00119	0.000300	0.00100	mg/L	1.00	1	PRB	10/07/22	1924	2323201	4
Boron		2.48	0.104	0.300	mg/L	1.00	20	PRB	10/08/22	0821	2323201	5
Calcium		224	1.60	4.00	mg/L	1.00	20					
Solids Analysis												
SM2540C Dissolved Solids "As Received"												
Total Dissolved Solids		751	2.38	10.0	mg/L			CH6	10/03/22	1444	2323652	6
Titration and Ion Analysis												
SM 2320B Total Alkalinity "As Received"												
Alkalinity, Total as CaCO3		429	1.45	4.00	mg/L			HH2	10/04/22	1419	2323388	7
Bicarbonate alkalinity (CaCO3)		429	1.45	4.00	mg/L							
Carbonate alkalinity (CaCO3)	U	ND	1.45	4.00	mg/L							

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
SW846 3005A	ICP-MS 3005A PREP	LG2	10/01/22	1115	2323200

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	SM 4500-H B/SW846 9040C, SM 2550B	
2	EPA 300.0	
3	EPA 300.0	
4	SW846 3005A/6020B	
5	SW846 3005A/6020B	
6	SM 2540C	
7	SM 2320B	

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Company : Georgia Power Company, Southern Company
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Atlanta, Georgia 30308
Contact: Joju Abraham
Project: Arkwright CCR Groundwater Compliance AP3IWPZ

Client Sample ID: AP3PZ-4A
Sample ID: 594905008

Project: GPCC00100
Client ID: GPCC001

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
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Notes:

Column headers are defined as follows:

DF: Dilution Factor

DL: Detection Limit

MDA: Minimum Detectable Activity

MDC: Minimum Detectable Concentration

Lc/LC: Critical Level

PF: Prep Factor

RL: Reporting Limit

SQL: Sample Quantitation Limit

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Certificate of Analysis

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Company : Georgia Power Company, Southern Company
Address : 241 Ralph McGill Blvd NE, Bin 10160

Atlanta, Georgia 30308

Contact: Joju Abraham
Project: Arkwright CCR Groundwater Compliance AP3IWPZ

Client Sample ID: AP3PZ-1A	Project: GPCC00100
Sample ID: 594905001	Client ID: GPCC001
Matrix: WG	
Collect Date: 27-SEP-22 13:25	
Receive Date: 29-SEP-22	
Collector: Client	

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Field Data												
Client collected Field pH "As Received"												
Field pH		6.15			SU			EOS1	09/27/22	1325	2323157	1
Ion Chromatography												
EPA 300.0 Anions Liquid "As Received"												
Chloride		5.20	0.0670	0.200	mg/L		1	HXC1	10/04/22	1600	2324534	2
Fluoride		0.281	0.0330	0.100	mg/L		1					
Sulfate		144	1.33	4.00	mg/L		10	HXC1	10/05/22	0357	2324534	3
Metals Analysis-ICP-MS												
SW846 3005A/6020B "As Received"												
Cobalt		0.0199	0.000300	0.00100	mg/L	1.00	1	PRB	10/07/22	1837	2323201	4
Boron		0.413	0.0260	0.0750	mg/L	1.00	5	PRB	10/08/22	0753	2323201	5
Calcium		87.3	0.400	1.00	mg/L	1.00	5					
Solids Analysis												
SM2540C Dissolved Solids "As Received"												
Total Dissolved Solids		415	2.38	10.0	mg/L			CH6	10/03/22	1444	2323652	6
Titration and Ion Analysis												
SM 2320B Total Alkalinity "As Received"												
Alkalinity, Total as CaCO3		154	1.45	4.00	mg/L			HH2	10/04/22	1410	2323388	7
Bicarbonate alkalinity (CaCO3)		154	1.45	4.00	mg/L							
Carbonate alkalinity (CaCO3)	U	ND	1.45	4.00	mg/L							

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
SW846 3005A	ICP-MS 3005A PREP	LG2	10/01/22	1115	2323200

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	SM 4500-H B/SW846 9040C, SM 2550B	
2	EPA 300.0	
3	EPA 300.0	
4	SW846 3005A/6020B	
5	SW846 3005A/6020B	
6	SM 2540C	
7	SM 2320B	

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Company : Georgia Power Company, Southern Company
Address : 241 Ralph McGill Blvd NE, Bin 10160

Atlanta, Georgia 30308
Contact: Joju Abraham
Project: Arkwright CCR Groundwater Compliance AP3IWPZ

Client Sample ID:	AP3PZ-1A	Project:	GPCC00100
Sample ID:	594905001	Client ID:	GPCC001

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time Batch	Method
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Notes:

Column headers are defined as follows:

DF: Dilution Factor	Lc/LC: Critical Level
DL: Detection Limit	PF: Prep Factor
MDA: Minimum Detectable Activity	RL: Reporting Limit
MDC: Minimum Detectable Concentration	SQL: Sample Quantitation Limit

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Certificate of Analysis

Report Date: October 13, 2022

Company : Georgia Power Company, Southern Company
Address : 241 Ralph McGill Blvd NE, Bin 10160

Atlanta, Georgia 30308

Contact: Joju Abraham
Project: Arkwright CCR Groundwater Compliance AP3IWPZ

Client Sample ID: FB-01	Project: GPCC00100
Sample ID: 594905002	Client ID: GPCC001
Matrix: WQ	
Collect Date: 27-SEP-22 13:45	
Receive Date: 29-SEP-22	
Collector: Client	

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Field Data												
Client collected Field pH "As Received"												
Ion Chromatography												
EPA 300.0 Anions Liquid "As Received"												
Chloride	U	ND	0.0670	0.200	mg/L		1	HXC1	10/04/22	1630	2324534	2
Fluoride	U	ND	0.0330	0.100	mg/L		1					
Sulfate	U	ND	0.133	0.400	mg/L		1					
Metals Analysis-ICP-MS												
SW846 3005A/6020B "As Received"												
Cobalt	U	ND	0.000300	0.00100	mg/L	1.00	1	PRB	10/07/22	1902	2323201	3
Boron	U	ND	0.00520	0.0150	mg/L	1.00	1	PRB	10/08/22	0808	2323201	4
Calcium	U	ND	0.0800	0.200	mg/L	1.00	1					
Solids Analysis												
SM2540C Dissolved Solids "As Received"												
Total Dissolved Solids	U	ND	2.38	10.0	mg/L			CH6	10/03/22	1444	2323652	5

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
SW846 3005A	ICP-MS 3005A PREP	LG2	10/01/22	1115	2323200

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	SM 4500-H B/SW846 9040C, SM 2550B	
2	EPA 300.0	
3	SW846 3005A/6020B	
4	SW846 3005A/6020B	
5	SM 2540C	

Notes:

Column headers are defined as follows:

- | | |
|---------------------------------------|--------------------------------|
| DF: Dilution Factor | Lc/LC: Critical Level |
| DL: Detection Limit | PF: Prep Factor |
| MDA: Minimum Detectable Activity | RL: Reporting Limit |
| MDC: Minimum Detectable Concentration | SQL: Sample Quantitation Limit |

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Company : Georgia Power Company, Southern Company
Address : 241 Ralph McGill Blvd NE, Bin 10160

Atlanta, Georgia 30308

Contact: Joju Abraham
Project: Arkwright CCR Groundwater Compliance AP3IWPZ

Client Sample ID: AP3PZ-2A	Project: GPCC00100
Sample ID: 594905003	Client ID: GPCC001
Matrix: WG	
Collect Date: 27-SEP-22 15:10	
Receive Date: 29-SEP-22	
Collector: Client	

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Field Data												
Client collected Field pH "As Received"												
Field pH		6.78			SU			EOS1	09/27/22	1510	2323157	1
Ion Chromatography												
EPA 300.0 Anions Liquid "As Received"												
Chloride		5.16	0.0670	0.200	mg/L		1	HXC1	10/04/22	1700	2324534	2
Fluoride		0.382	0.0330	0.100	mg/L		1					
Sulfate		190	2.66	8.00	mg/L		20	HXC1	10/05/22	0527	2324534	3
Metals Analysis-ICP-MS												
SW846 3005A/6020B "As Received"												
Cobalt	U	ND	0.000300	0.00100	mg/L	1.00	1	PRB	10/07/22	1906	2323201	4
Boron		0.577	0.0260	0.0750	mg/L	1.00	5	PRB	10/08/22	0810	2323201	5
Calcium		96.7	0.400	1.00	mg/L	1.00	5					
Solids Analysis												
SM2540C Dissolved Solids "As Received"												
Total Dissolved Solids		520	2.38	10.0	mg/L			CH6	10/03/22	1444	2323652	6
Titration and Ion Analysis												
SM 2320B Total Alkalinity "As Received"												
Alkalinity, Total as CaCO3		192	1.45	4.00	mg/L			HH2	10/04/22	1412	2323388	7
Bicarbonate alkalinity (CaCO3)		192	1.45	4.00	mg/L							
Carbonate alkalinity (CaCO3)	U	ND	1.45	4.00	mg/L							

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
SW846 3005A	ICP-MS 3005A PREP	LG2	10/01/22	1115	2323200

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	SM 4500-H B/SW846 9040C, SM 2550B	
2	EPA 300.0	
3	EPA 300.0	
4	SW846 3005A/6020B	
5	SW846 3005A/6020B	
6	SM 2540C	
7	SM 2320B	

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Certificate of Analysis

Report Date: October 13, 2022

Company : Georgia Power Company, Southern Company
Address : 241 Ralph McGill Blvd NE, Bin 10160

Atlanta, Georgia 30308
Contact: Joju Abraham
Project: Arkwright CCR Groundwater Compliance AP3IWPZ

Client Sample ID:	AP3PZ-2A	Project:	GPCC00100
Sample ID:	594905003	Client ID:	GPCC001

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time Batch	Method
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Notes:

Column headers are defined as follows:

DF: Dilution Factor	Lc/LC: Critical Level
DL: Detection Limit	PF: Prep Factor
MDA: Minimum Detectable Activity	RL: Reporting Limit
MDC: Minimum Detectable Concentration	SQL: Sample Quantitation Limit

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Certificate of Analysis

Report Date: October 13, 2022

Company : Georgia Power Company, Southern Company
Address : 241 Ralph McGill Blvd NE, Bin 10160

Atlanta, Georgia 30308

Contact: Joju Abraham
Project: Arkwright CCR Groundwater Compliance AP3IWPZ

Client Sample ID: EB-01	Project: GPCC00100
Sample ID: 594905004	Client ID: GPCC001
Matrix: WQ	
Collect Date: 27-SEP-22 15:55	
Receive Date: 29-SEP-22	
Collector: Client	

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Field Data												
Client collected Field pH "As Received"												
Ion Chromatography												
EPA 300.0 Anions Liquid "As Received"												
Chloride	U	ND	0.0670	0.200	mg/L		1	HXC1	10/04/22	1730	2324534	2
Fluoride	U	ND	0.0330	0.100	mg/L		1					
Sulfate	U	ND	0.133	0.400	mg/L		1					
Metals Analysis-ICP-MS												
SW846 3005A/6020B "As Received"												
Cobalt	U	ND	0.000300	0.00100	mg/L	1.00	1	PRB	10/07/22	1910	2323201	3
Boron	U	ND	0.00520	0.0150	mg/L	1.00	1	PRB	10/08/22	0813	2323201	4
Calcium	U	ND	0.0800	0.200	mg/L	1.00	1					
Solids Analysis												
SM2540C Dissolved Solids "As Received"												
Total Dissolved Solids	U	ND	2.38	10.0	mg/L			CH6	10/03/22	1444	2323652	5

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
SW846 3005A	ICP-MS 3005A PREP	LG2	10/01/22	1115	2323200

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	SM 4500-H B/SW846 9040C, SM 2550B	
2	EPA 300.0	
3	SW846 3005A/6020B	
4	SW846 3005A/6020B	
5	SM 2540C	

Notes:

Column headers are defined as follows:

DF: Dilution Factor	Lc/LC: Critical Level
DL: Detection Limit	PF: Prep Factor
MDA: Minimum Detectable Activity	RL: Reporting Limit
MDC: Minimum Detectable Concentration	SQL: Sample Quantitation Limit

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Certificate of Analysis

Report Date: October 13, 2022

Company : Georgia Power Company, Southern Company
Address : 241 Ralph McGill Blvd NE, Bin 10160

Atlanta, Georgia 30308

Contact: Joju Abraham
Project: Arkwright CCR Groundwater Compliance AP3IWPZ

Client Sample ID: AP3PZ-3A	Project: GPCC00100
Sample ID: 594905005	Client ID: GPCC001
Matrix: WG	
Collect Date: 27-SEP-22 17:30	
Receive Date: 29-SEP-22	
Collector: Client	

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Field Data												
Client collected Field pH "As Received"												
Field pH		6.98			SU			EOS1	09/27/22	1730	2323157	1
Ion Chromatography												
EPA 300.0 Anions Liquid "As Received"												
Chloride		8.21	0.0670	0.200	mg/L		1	HXC1	10/04/22	1800	2324534	2
Fluoride		0.709	0.0330	0.100	mg/L		1					
Sulfate		265	2.66	8.00	mg/L		20	HXC1	10/05/22	0556	2324534	3
Metals Analysis-ICP-MS												
SW846 3005A/6020B "As Received"												
Cobalt		0.00116	0.000300	0.00100	mg/L	1.00	1	PRB	10/07/22	1913	2323201	4
Boron		1.84	0.104	0.300	mg/L	1.00	20	PRB	10/08/22	0815	2323201	5
Calcium		246	1.60	4.00	mg/L	1.00	20					
Solids Analysis												
SM2540C Dissolved Solids "As Received"												
Total Dissolved Solids		896	2.38	10.0	mg/L			CH6	10/03/22	1444	2323652	6
Titration and Ion Analysis												
SM 2320B Total Alkalinity "As Received"												
Alkalinity, Total as CaCO3		452	1.45	4.00	mg/L			HH2	10/04/22	1414	2323388	7
Bicarbonate alkalinity (CaCO3)		452	1.45	4.00	mg/L							
Carbonate alkalinity (CaCO3)	U	ND	1.45	4.00	mg/L							

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
SW846 3005A	ICP-MS 3005A PREP	LG2	10/01/22	1115	2323200

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	SM 4500-H B/SW846 9040C, SM 2550B	
2	EPA 300.0	
3	EPA 300.0	
4	SW846 3005A/6020B	
5	SW846 3005A/6020B	
6	SM 2540C	
7	SM 2320B	

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Certificate of Analysis

Report Date: October 13, 2022

Company : Georgia Power Company, Southern Company
Address : 241 Ralph McGill Blvd NE, Bin 10160

Atlanta, Georgia 30308
Contact: Joju Abraham
Project: Arkwright CCR Groundwater Compliance AP3IWPZ

Client Sample ID: AP3PZ-3A
Sample ID: 594905005

Project: GPCC00100
Client ID: GPCC001

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
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Notes:

Column headers are defined as follows:

DF: Dilution Factor

DL: Detection Limit

MDA: Minimum Detectable Activity

MDC: Minimum Detectable Concentration

Lc/LC: Critical Level

PF: Prep Factor

RL: Reporting Limit

SQL: Sample Quantitation Limit

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Certificate of Analysis

Report Date: October 13, 2022

Company : Georgia Power Company, Southern Company
 Address : 241 Ralph McGill Blvd NE, Bin 10160

Atlanta, Georgia 30308

Contact: Joju Abraham
 Project: Arkwright CCR Groundwater Compliance AP3IWPZ

Client Sample ID: AP3PZ-5A	Project: GPCC00100
Sample ID: 594905006	Client ID: GPCC001
Matrix: WG	
Collect Date: 28-SEP-22 11:50	
Receive Date: 29-SEP-22	
Collector: Client	

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Field Data												
Client collected Field pH "As Received"												
Field pH		7.35			SU			EOS1	09/28/22	1150	2323157	1
Ion Chromatography												
EPA 300.0 Anions Liquid "As Received"												
Chloride		8.42	0.0670	0.200	mg/L		1	HXC1	10/04/22	1929	2324534	2
Fluoride		0.293	0.0330	0.100	mg/L		1					
Sulfate		1100	13.3	40.0	mg/L		100	HXC1	10/05/22	0726	2324534	3
Metals Analysis-ICP-MS												
SW846 3005A/6020B "As Received"												
Cobalt		0.0102	0.000300	0.00100	mg/L	1.00	1	PRB	10/07/22	1917	2323201	4
Boron		3.07	0.104	0.300	mg/L	1.00	20	PRB	10/08/22	0817	2323201	5
Calcium		557	1.60	4.00	mg/L	1.00	20					
Solids Analysis												
SM2540C Dissolved Solids "As Received"												
Total Dissolved Solids		2250	2.38	10.0	mg/L			CH6	10/03/22	1444	2323652	6
Titration and Ion Analysis												
SM 2320B Total Alkalinity "As Received"												
Alkalinity, Total as CaCO3		536	1.45	4.00	mg/L			HH2	10/04/22	1416	2323388	7
Bicarbonate alkalinity (CaCO3)		536	1.45	4.00	mg/L							
Carbonate alkalinity (CaCO3)	U	ND	1.45	4.00	mg/L							

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
SW846 3005A	ICP-MS 3005A PREP	LG2	10/01/22	1115	2323200

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	SM 4500-H B/SW846 9040C, SM 2550B	
2	EPA 300.0	
3	EPA 300.0	
4	SW846 3005A/6020B	
5	SW846 3005A/6020B	
6	SM 2540C	
7	SM 2320B	

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Certificate of Analysis

Report Date: October 13, 2022

Company : Georgia Power Company, Southern Company
Address : 241 Ralph McGill Blvd NE, Bin 10160

Atlanta, Georgia 30308
Contact: Joju Abraham
Project: Arkwright CCR Groundwater Compliance AP3IWPZ

Client Sample ID:	AP3PZ-5A	Project:	GPCC00100
Sample ID:	594905006	Client ID:	GPCC001

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time Batch	Method
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Notes:

Column headers are defined as follows:

DF: Dilution Factor	Lc/LC: Critical Level
DL: Detection Limit	PF: Prep Factor
MDA: Minimum Detectable Activity	RL: Reporting Limit
MDC: Minimum Detectable Concentration	SQL: Sample Quantitation Limit

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Certificate of Analysis

Report Date: October 13, 2022

Company : Georgia Power Company, Southern Company
 Address : 241 Ralph McGill Blvd NE, Bin 10160

Atlanta, Georgia 30308

Contact: Joju Abraham
 Project: Arkwright CCR Groundwater Compliance AP3IWPZ

Client Sample ID: DUP-01	Project: GPCC00100
Sample ID: 594905007	Client ID: GPCC001
Matrix: WG	
Collect Date: 28-SEP-22 12:00	
Receive Date: 29-SEP-22	
Collector: Client	

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Field Data												
Client collected Field pH "As Received"												
Ion Chromatography												
EPA 300.0 Anions Liquid "As Received"												
Chloride		8.45	0.0670	0.200	mg/L		1	HXC1	10/04/22	1959	2324534	2
Fluoride		0.290	0.0330	0.100	mg/L		1					
Sulfate		1100	13.3	40.0	mg/L		100	HXC1	10/05/22	0756	2324534	3
Metals Analysis-ICP-MS												
SW846 3005A/6020B "As Received"												
Cobalt		0.00999	0.000300	0.00100	mg/L	1.00	1	PRB	10/07/22	1920	2323201	4
Boron		3.10	0.104	0.300	mg/L	1.00	20	PRB	10/08/22	0819	2323201	5
Calcium		556	1.60	4.00	mg/L	1.00	20					
Solids Analysis												
SM2540C Dissolved Solids "As Received"												
Total Dissolved Solids		2260	2.38	10.0	mg/L			CH6	10/03/22	1444	2323652	6

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
SW846 3005A	ICP-MS 3005A PREP	LG2	10/01/22	1115	2323200

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	SM 4500-H B/SW846 9040C, SM 2550B	
2	EPA 300.0	
3	EPA 300.0	
4	SW846 3005A/6020B	
5	SW846 3005A/6020B	
6	SM 2540C	

Notes:

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Certificate of Analysis

Report Date: October 13, 2022

Company : Georgia Power Company, Southern Company
Address : 241 Ralph McGill Blvd NE, Bin 10160

Atlanta, Georgia 30308
Contact: Joju Abraham
Project: Arkwright CCR Groundwater Compliance AP3IWPZ

Client Sample ID: DUP-01	Project: GPCC00100
Sample ID: 594905007	Client ID: GPCC001

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time Batch	Method
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Column headers are defined as follows:

DF: Dilution Factor	Lc/LC: Critical Level
DL: Detection Limit	PF: Prep Factor
MDA: Minimum Detectable Activity	RL: Reporting Limit
MDC: Minimum Detectable Concentration	SQL: Sample Quantitation Limit

GEL LABORATORIES LLC

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Certificate of Analysis

Report Date: October 13, 2022

Company : Georgia Power Company, Southern Company
Address : 241 Ralph McGill Blvd NE, Bin 10160

Atlanta, Georgia 30308

Contact: Joju Abraham
Project: Arkwright CCR Groundwater Compliance AP3IWPZ

Client Sample ID: AP3PZ-4A	Project: GPCC00100
Sample ID: 594905008	Client ID: GPCC001
Matrix: WG	
Collect Date: 28-SEP-22 13:25	
Receive Date: 29-SEP-22	
Collector: Client	

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Field Data												
Client collected Field pH "As Received"												
Field pH		7.14			SU			EOS1	09/28/22	1325	2323157	1
Ion Chromatography												
EPA 300.0 Anions Liquid "As Received"												
Chloride		7.38	0.0670	0.200	mg/L		1	HXC1	10/04/22	2029	2324534	2
Fluoride		0.558	0.0330	0.100	mg/L		1					
Sulfate		174	2.66	8.00	mg/L		20	HXC1	10/05/22	0826	2324534	3
Metals Analysis-ICP-MS												
SW846 3005A/6020B "As Received"												
Cobalt		0.00119	0.000300	0.00100	mg/L	1.00	1	PRB	10/07/22	1924	2323201	4
Boron		2.48	0.104	0.300	mg/L	1.00	20	PRB	10/08/22	0821	2323201	5
Calcium		224	1.60	4.00	mg/L	1.00	20					
Solids Analysis												
SM2540C Dissolved Solids "As Received"												
Total Dissolved Solids		751	2.38	10.0	mg/L			CH6	10/03/22	1444	2323652	6
Titration and Ion Analysis												
SM 2320B Total Alkalinity "As Received"												
Alkalinity, Total as CaCO3		429	1.45	4.00	mg/L			HH2	10/04/22	1419	2323388	7
Bicarbonate alkalinity (CaCO3)		429	1.45	4.00	mg/L							
Carbonate alkalinity (CaCO3)	U	ND	1.45	4.00	mg/L							

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
SW846 3005A	ICP-MS 3005A PREP	LG2	10/01/22	1115	2323200

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	SM 4500-H B/SW846 9040C, SM 2550B	
2	EPA 300.0	
3	EPA 300.0	
4	SW846 3005A/6020B	
5	SW846 3005A/6020B	
6	SM 2540C	
7	SM 2320B	

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Certificate of Analysis

Report Date: October 13, 2022

Company : Georgia Power Company, Southern Company
Address : 241 Ralph McGill Blvd NE, Bin 10160

Atlanta, Georgia 30308
Contact: Joju Abraham
Project: Arkwright CCR Groundwater Compliance AP3IWPZ

Client Sample ID:	AP3PZ-4A	Project:	GPCC00100
Sample ID:	594905008	Client ID:	GPCC001

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time Batch	Method
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Notes:

Column headers are defined as follows:

DF: Dilution Factor	Lc/LC: Critical Level
DL: Detection Limit	PF: Prep Factor
MDA: Minimum Detectable Activity	RL: Reporting Limit
MDC: Minimum Detectable Concentration	SQL: Sample Quantitation Limit

GEL LABORATORIES LLC

2040 Savage Road Charleston, SC 29407 - (843) 556-8171 - www.gel.com

QC Summary

Report Date: October 13, 2022

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Georgia Power Company, Southern Company
241 Ralph McGill Blvd NE, Bin 10160
Atlanta, Georgia

Contact: Joju Abraham

Workorder: 594905

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Ion Chromatography											
Batch	2324534										
QC1205207372	594905001	DUP									
Chloride		5.20		5.24	mg/L	0.793		(0%-20%)	HXC1	10/04/22	22:58
Fluoride		0.281		0.287	mg/L	2.18 ^		(+/-0.100)			
Sulfate		144		143	mg/L	0.476		(0%-20%)		10/05/22	04:27
QC1205207371	LCS										
Chloride	5.00			4.70	mg/L		94	(90%-110%)		10/04/22	21:29
Fluoride	2.50			2.46	mg/L		98.3	(90%-110%)			
Sulfate	10.0			9.69	mg/L		96.9	(90%-110%)			
QC1205207370	MB										
Chloride			U	ND	mg/L					10/04/22	20:59
Fluoride			U	ND	mg/L						
Sulfate			U	ND	mg/L						
QC1205207374	594905001	PS									
Chloride	5.00	5.20		10.5	mg/L		105	(90%-110%)		10/04/22	23:28
Fluoride	2.50	0.281		2.68	mg/L		96	(90%-110%)			
Sulfate	10.0	14.4		25.1	mg/L		107	(90%-110%)		10/05/22	04:57

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QC Summary

Workorder: 594905

Page 2 of 4

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Metals Analysis - ICPMS											
Batch	2323201										
QC1205204567	LCS										
Boron	0.100			0.104	mg/L		104	(80%-120%)	PRB	10/08/22	07:51
Calcium	2.00			1.94	mg/L		97	(80%-120%)			
Cobalt	0.0500			0.0495	mg/L		99	(80%-120%)		10/07/22	18:33
QC1205204566	MB										
Boron			U	ND	mg/L					10/08/22	07:48
Calcium			U	ND	mg/L						
Cobalt			U	ND	mg/L					10/07/22	18:30
QC1205204568	594905001 MS										
Boron	0.100	0.413		0.519	mg/L		N/A	(75%-125%)		10/08/22	07:55
Calcium	2.00	87.3		88.7	mg/L		N/A	(75%-125%)			
Cobalt	0.0500	0.0199		0.0709	mg/L		102	(75%-125%)		10/07/22	18:41
QC1205204569	594905001 MSD										
Boron	0.100	0.413		0.506	mg/L	2.63	N/A	(0%-20%)		10/08/22	07:57
Calcium	2.00	87.3		88.0	mg/L	0.868	N/A	(0%-20%)			
Cobalt	0.0500	0.0199		0.0716	mg/L	0.876	103	(0%-20%)		10/07/22	18:44
QC1205204570	594905001 SDILT										
Boron		82.7		19.7	ug/L	19.3		(0%-20%)		10/08/22	08:02
Calcium		17500		3400	ug/L	2.64		(0%-20%)			

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QC Summary

Workorder: 594905

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Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Metals Analysis - ICPMS											
Batch	2323201										
Cobalt		19.9		3.98	ug/L	.0553		(0%-20%)	PRB	10/07/22	18:51
Solids Analysis											
Batch	2323652										
QC1205205711	594853001	DUP									
Total Dissolved Solids		220		210	mg/L	4.65		(0%-5%)	CH6	10/03/22	14:44
QC1205205709	LCS										
Total Dissolved Solids	300			303	mg/L		101	(95%-105%)		10/03/22	14:44
QC1205205708	MB										
Total Dissolved Solids			U	ND	mg/L					10/03/22	14:44
Titration and Ion Analysis											
Batch	2323388										
QC1205204949	593969003	DUP									
Alkalinity, Total as CaCO3		136		136	mg/L	0.294		(0%-20%)	HH2	10/04/22	13:38
Bicarbonate alkalinity (CaCO3)		135		135	mg/L	0.296		(0%-20%)			
QC1205204946	LCS										
Alkalinity, Total as CaCO3	100			102	mg/L		102	(90%-110%)		10/04/22	13:32
QC1205204945	MB										
Alkalinity, Total as CaCO3			J	2.00	mg/L					10/04/22	13:31
Bicarbonate alkalinity (CaCO3)			J	2.00	mg/L						
Carbonate alkalinity (CaCO3)			U	ND	mg/L						
QC1205204950	593969003	MS									
Alkalinity, Total as CaCO3	100	136		239	mg/L		103	(80%-120%)		10/04/22	13:39

Notes:

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QC Summary

Workorder: 594905

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Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
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The Qualifiers in this report are defined as follows:

- < Result is less than value reported
- > Result is greater than value reported
- B The target analyte was detected in the associated blank.
- E %difference of sample and SD is >10%. Sample concentration must meet flagging criteria
- E General Chemistry--Concentration of the target analyte exceeds the instrument calibration range
- FB Mercury was found present at quantifiable concentrations in field blanks received with these samples. Data associated with the blank are deemed invalid for reporting to regulatory agencies
- H Analytical holding time was exceeded
- J See case narrative for an explanation
- J Value is estimated
- N Metals--The Matrix spike sample recovery is not within specified control limits
- N/A RPD or %Recovery limits do not apply.
- NI See case narrative
- ND Analyte concentration is not detected above the detection limit
- NJ Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
- Q One or more quality control criteria have not been met. Refer to the applicable narrative or DER.
- R Per section 9.3.4.1 of Method 1664 Revision B, due to matrix spike recovery issues, this result may not be reported or used for regulatory compliance purposes.
- R Sample results are rejected
- U Analyte was analyzed for, but not detected above the MDL, MDA, MDC or LOD.
- X Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
- Y Other specific qualifiers were required to properly define the results. Consult case narrative.
- Z Paint Filter Test--Particulates passed through the filter, however no free liquids were observed.
- ^ RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL. Qualifier Not Applicable for Radiochemistry.
- d 5-day BOD--The 2:1 depletion requirement was not met for this sample
- e 5-day BOD--Test replicates show more than 30% difference between high and low values. The data is qualified per the method and can be used for reporting purposes
- h Preparation or preservation holding time was exceeded

N/A indicates that spike recovery limits do not apply when sample concentration exceeds spike conc. by a factor of 4 or more or %RPD not applicable.

^ The Relative Percent Difference (RPD) obtained from the sample duplicate (DUP) is evaluated against the acceptance criteria when the sample is greater than five times (5X) the contract required detection limit (RL). In cases where the duplicate value is less than 5X the RL, a control limit of +/- the RL is used to evaluate the DUP result.

* Indicates that a Quality Control parameter was not within specifications.

For PS, PSD, and SDILT results, the values listed are the measured amounts, not final concentrations.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the QC Summary.

GEL LABORATORIES LLC

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QC Summary

Report Date: October 13, 2022

Page 1 of 4

Georgia Power Company, Southern Company
241 Ralph McGill Blvd NE, Bin 10160
Atlanta, Georgia

Contact: Joju Abraham

Workorder: 594905

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Ion Chromatography											
Batch	2324534										
QC1205207372	594905001	DUP									
Chloride		5.20		5.24	mg/L	0.793		(0%-20%)	HXC1	10/04/22	22:58
Fluoride		0.281		0.287	mg/L	2.18 ^		(+/-0.100)			
Sulfate		144		143	mg/L	0.476		(0%-20%)		10/05/22	04:27
QC1205207371	LCS										
Chloride	5.00			4.70	mg/L		94	(90%-110%)		10/04/22	21:29
Fluoride	2.50			2.46	mg/L		98.3	(90%-110%)			
Sulfate	10.0			9.69	mg/L		96.9	(90%-110%)			
QC1205207370	MB										
Chloride			U	ND	mg/L					10/04/22	20:59
Fluoride			U	ND	mg/L						
Sulfate			U	ND	mg/L						
QC1205207374	594905001	PS									
Chloride	5.00	5.20		10.5	mg/L		105	(90%-110%)		10/04/22	23:28
Fluoride	2.50	0.281		2.68	mg/L		96	(90%-110%)			
Sulfate	10.0	14.4		25.1	mg/L		107	(90%-110%)		10/05/22	04:57

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QC Summary

Workorder: 594905

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Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Metals Analysis - ICPMS											
Batch	2323201										
QC1205204567	LCS										
Boron	0.100			0.104	mg/L		104	(80%-120%)	PRB	10/08/22	07:51
Calcium	2.00			1.94	mg/L		97	(80%-120%)			
Cobalt	0.0500			0.0495	mg/L		99	(80%-120%)		10/07/22	18:33
QC1205204566	MB										
Boron			U	ND	mg/L					10/08/22	07:48
Calcium			U	ND	mg/L						
Cobalt			U	ND	mg/L					10/07/22	18:30
QC1205204568	594905001 MS										
Boron	0.100	0.413		0.519	mg/L		N/A	(75%-125%)		10/08/22	07:55
Calcium	2.00	87.3		88.7	mg/L		N/A	(75%-125%)			
Cobalt	0.0500	0.0199		0.0709	mg/L		102	(75%-125%)		10/07/22	18:41
QC1205204569	594905001 MSD										
Boron	0.100	0.413		0.506	mg/L	2.63	N/A	(0%-20%)		10/08/22	07:57
Calcium	2.00	87.3		88.0	mg/L	0.868	N/A	(0%-20%)			
Cobalt	0.0500	0.0199		0.0716	mg/L	0.876	103	(0%-20%)		10/07/22	18:44
QC1205204570	594905001 SDILT										
Boron		82.7		19.7	ug/L	19.3		(0%-20%)		10/08/22	08:02
Calcium		17500		3400	ug/L	2.64		(0%-20%)			

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QC Summary

Workorder: 594905

Page 3 of 4

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Metals Analysis - ICPMS											
Batch	2323201										
Cobalt		19.9		3.98	ug/L	.0553		(0%-20%)	PRB	10/07/22	18:51
Solids Analysis											
Batch	2323652										
QC1205205711	594853001	DUP									
Total Dissolved Solids		220		210	mg/L	4.65		(0%-5%)	CH6	10/03/22	14:44
QC1205205709	LCS										
Total Dissolved Solids	300			303	mg/L		101	(95%-105%)		10/03/22	14:44
QC1205205708	MB										
Total Dissolved Solids			U	ND	mg/L					10/03/22	14:44
Titration and Ion Analysis											
Batch	2323388										
QC1205204949	593969003	DUP									
Alkalinity, Total as CaCO3		136		136	mg/L	0.294		(0%-20%)	HH2	10/04/22	13:38
Bicarbonate alkalinity (CaCO3)		135		135	mg/L	0.296		(0%-20%)			
QC1205204946	LCS										
Alkalinity, Total as CaCO3	100			102	mg/L		102	(90%-110%)		10/04/22	13:32
QC1205204945	MB										
Alkalinity, Total as CaCO3			J	2.00	mg/L					10/04/22	13:31
Bicarbonate alkalinity (CaCO3)			J	2.00	mg/L						
Carbonate alkalinity (CaCO3)			U	ND	mg/L						
QC1205204950	593969003	MS									
Alkalinity, Total as CaCO3	100	136		239	mg/L		103	(80%-120%)		10/04/22	13:39

Notes:

GEL LABORATORIES LLC

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QC Summary

Workorder: 594905

Page 4 of 4

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
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The Qualifiers in this report are defined as follows:

- < Result is less than value reported
- > Result is greater than value reported
- B The target analyte was detected in the associated blank.
- E %difference of sample and SD is >10%. Sample concentration must meet flagging criteria
- E General Chemistry--Concentration of the target analyte exceeds the instrument calibration range
- FB Mercury was found present at quantifiable concentrations in field blanks received with these samples. Data associated with the blank are deemed invalid for reporting to regulatory agencies
- H Analytical holding time was exceeded
- J See case narrative for an explanation
- J Value is estimated
- N Metals--The Matrix spike sample recovery is not within specified control limits
- N/A RPD or %Recovery limits do not apply.
- NI See case narrative
- ND Analyte concentration is not detected above the detection limit
- NJ Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
- Q One or more quality control criteria have not been met. Refer to the applicable narrative or DER.
- R Per section 9.3.4.1 of Method 1664 Revision B, due to matrix spike recovery issues, this result may not be reported or used for regulatory compliance purposes.
- R Sample results are rejected
- U Analyte was analyzed for, but not detected above the MDL, MDA, MDC or LOD.
- X Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
- Y Other specific qualifiers were required to properly define the results. Consult case narrative.
- Z Paint Filter Test--Particulates passed through the filter, however no free liquids were observed.
- ^ RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL. Qualifier Not Applicable for Radiochemistry.
- d 5-day BOD--The 2:1 depletion requirement was not met for this sample
- e 5-day BOD--Test replicates show more than 30% difference between high and low values. The data is qualified per the method and can be used for reporting purposes
- h Preparation or preservation holding time was exceeded

N/A indicates that spike recovery limits do not apply when sample concentration exceeds spike conc. by a factor of 4 or more or %RPD not applicable.

^ The Relative Percent Difference (RPD) obtained from the sample duplicate (DUP) is evaluated against the acceptance criteria when the sample is greater than five times (5X) the contract required detection limit (RL). In cases where the duplicate value is less than 5X the RL, a control limit of +/- the RL is used to evaluate the DUP result.

* Indicates that a Quality Control parameter was not within specifications.

For PS, PSD, and SDILT results, the values listed are the measured amounts, not final concentrations.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the QC Summary.

**Technical Case Narrative
Georgia Power Company
SDG #: 594905**

Metals

Product: Determination of Metals by ICP-MS

Analytical Method: SW846 3005A/6020B

Analytical Procedure: GL-MA-E-014 REV# 35

Analytical Batch: 2323201

Preparation Method: SW846 3005A

Preparation Procedure: GL-MA-E-006 REV# 14

Preparation Batch: 2323200

The following samples were analyzed using the above methods and analytical procedure(s).

<u>GEL Sample ID#</u>	<u>Client Sample Identification</u>
594905001	AP3PZ-1A
594905002	FB-01
594905003	AP3PZ-2A
594905004	EB-01
594905005	AP3PZ-3A
594905006	AP3PZ-5A
594905007	DUP-01
594905008	AP3PZ-4A
1205204566	Method Blank (MB)ICP-MS
1205204567	Laboratory Control Sample (LCS)
1205204570	594905001(AP3PZ-1AL) Serial Dilution (SD)
1205204568	594905001(AP3PZ-1AS) Matrix Spike (MS)
1205204569	594905001(AP3PZ-1ASD) Matrix Spike Duplicate (MSD)

The samples in this SDG were analyzed on an "as received" basis.

Data Summary:

All sample data provided in this report met the acceptance criteria specified in the analytical methods and procedures for initial calibration, continuing calibration, instrument controls and process controls where applicable, with the following exceptions.

Calibration Information

CRDL/PQL Requirements

The CRDL standard recoveries for SW846 6020A/6020B met the advisory control limits with the exception of calcium. Client sample concentrations were less than the MDL or greater than two times the CRDL; therefore the data were not adversely affected.

ICSA/ICSAB Statement

For the ICP-MS analysis, the ICSA solution contains analyte concentrations which are verified trace impurities indigenous to the purchased standard.

Technical Information

Sample Dilutions

Dilutions may be required for many reasons, including to minimize matrix interferences or to bring over range target analyte concentrations into the linear calibration range. Samples 594905001 (AP3PZ-1A), 594905003 (AP3PZ-2A), 594905005 (AP3PZ-3A), 594905006 (AP3PZ-5A), 594905007 (DUP-01) and 594905008 (AP3PZ-4A) were diluted to ensure that the analyte concentrations were within the linear calibration range of the instrument.

Analyte	594905					
	001	003	005	006	007	008
Boron	5X	5X	20X	20X	20X	20X
Calcium	5X	5X	20X	20X	20X	20X

General Chemistry

Product: Ion Chromatography

Analytical Method: EPA 300.0

Analytical Procedure: GL-GC-E-086 REV# 30

Analytical Batch: 2324534

The following samples were analyzed using the above methods and analytical procedure(s).

<u>GEL Sample ID#</u>	<u>Client Sample Identification</u>
594905001	AP3PZ-1A
594905002	FB-01
594905003	AP3PZ-2A
594905004	EB-01
594905005	AP3PZ-3A
594905006	AP3PZ-5A
594905007	DUP-01
594905008	AP3PZ-4A
1205207370	Method Blank (MB)
1205207371	Laboratory Control Sample (LCS)
1205207372	594905001(AP3PZ-1A) Sample Duplicate (DUP)
1205207374	594905001(AP3PZ-1A) Post Spike (PS)

The samples in this SDG were analyzed on an "as received" basis.

Data Summary:

All sample data provided in this report met the acceptance criteria specified in the analytical methods and procedures for initial calibration, continuing calibration, instrument controls and process controls where applicable, with the following exceptions.

Technical Information

Sample Dilutions

The following samples 1205207372 (AP3PZ-1ADUP), 1205207374 (AP3PZ-1APS), 594905001 (AP3PZ-1A), 594905003 (AP3PZ-2A), 594905005 (AP3PZ-3A), 594905006 (AP3PZ-5A), 594905007 (DUP-01) and 594905008 (AP3PZ-4A) were diluted because target analyte concentrations exceeded the calibration range. Dilutions may be required for many reasons, including to minimize matrix interferences or to bring over range

target analyte concentrations into the linear calibration range.

Analyte	594905					
	001	003	005	006	007	008
Sulfate	10X	20X	20X	100X	100X	20X

Product: Solids, Total Dissolved

Analytical Method: SM 2540C

Analytical Procedure: GL-GC-E-001 REV# 19

Analytical Batch: 2323652

The following samples were analyzed using the above methods and analytical procedure(s).

<u>GEL Sample ID#</u>	<u>Client Sample Identification</u>
594905001	AP3PZ-1A
594905002	FB-01
594905003	AP3PZ-2A
594905004	EB-01
594905005	AP3PZ-3A
594905006	AP3PZ-5A
594905007	DUP-01
594905008	AP3PZ-4A
1205205708	Method Blank (MB)
1205205709	Laboratory Control Sample (LCS)
1205205711	594853001(NonSDG) Sample Duplicate (DUP)

The samples in this SDG were analyzed on an "as received" basis.

Data Summary:

There are no exceptions, anomalies or deviations from the specified methods. All sample data provided in this report met the acceptance criteria specified in the analytical methods and procedures for initial calibration, continuing calibration, instrument controls and process controls where applicable.

Product: Alkalinity

Analytical Method: SM 2320B

Analytical Procedure: GL-GC-E-033 REV# 14

Analytical Batch: 2323388

The following samples were analyzed using the above methods and analytical procedure(s).

<u>GEL Sample ID#</u>	<u>Client Sample Identification</u>
594905001	AP3PZ-1A
594905003	AP3PZ-2A
594905005	AP3PZ-3A
594905006	AP3PZ-5A
594905008	AP3PZ-4A
1205204945	Method Blank (MB)
1205204946	Laboratory Control Sample (LCS)
1205204949	593969003(NonSDG) Sample Duplicate (DUP)
1205204950	593969003(NonSDG) Matrix Spike (MS)

The samples in this SDG were analyzed on an "as received" basis.

Data Summary:

All sample data provided in this report met the acceptance criteria specified in the analytical methods and procedures for initial calibration, continuing calibration, instrument controls and process controls where applicable, with the following exceptions.

Quality Control (QC) Information

Method Blank (MB) Statement

The MB analyzed with this SDG met the acceptance criteria per GEL's reporting limits. Client requested limits are less than GEL's limits and since they are less than levels we can detect, the data will be qualified.

Sample	Analyte	Value
1205204945 (MB)	Alkalinity, Total as CaCO ₃ and Bicarbonate alkalinity (CaCO ₃)	2 between (1.45 - 4)

Certification Statement

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

**Technical Case Narrative
Georgia Power Company
SDG #: 594905**

Metals

Product: Determination of Metals by ICP-MS

Analytical Method: SW846 3005A/6020B

Analytical Procedure: GL-MA-E-014 REV# 35

Analytical Batch: 2323201

Preparation Method: SW846 3005A

Preparation Procedure: GL-MA-E-006 REV# 14

Preparation Batch: 2323200

The following samples were analyzed using the above methods and analytical procedure(s).

<u>GEL Sample ID#</u>	<u>Client Sample Identification</u>
594905001	AP3PZ-1A
594905002	FB-01
594905003	AP3PZ-2A
594905004	EB-01
594905005	AP3PZ-3A
594905006	AP3PZ-5A
594905007	DUP-01
594905008	AP3PZ-4A
1205204566	Method Blank (MB)ICP-MS
1205204567	Laboratory Control Sample (LCS)
1205204570	594905001(AP3PZ-1AL) Serial Dilution (SD)
1205204568	594905001(AP3PZ-1AS) Matrix Spike (MS)
1205204569	594905001(AP3PZ-1ASD) Matrix Spike Duplicate (MSD)

The samples in this SDG were analyzed on an "as received" basis.

Data Summary:

All sample data provided in this report met the acceptance criteria specified in the analytical methods and procedures for initial calibration, continuing calibration, instrument controls and process controls where applicable, with the following exceptions.

Calibration Information

CRDL/PQL Requirements

The CRDL standard recoveries for SW846 6020A/6020B met the advisory control limits with the exception of calcium. Client sample concentrations were less than the MDL or greater than two times the CRDL; therefore the data were not adversely affected.

ICSA/ICSAB Statement

For the ICP-MS analysis, the ICSA solution contains analyte concentrations which are verified trace impurities indigenous to the purchased standard.

Technical Information

Sample Dilutions

Dilutions may be required for many reasons, including to minimize matrix interferences or to bring over range target analyte concentrations into the linear calibration range. Samples 594905001 (AP3PZ-1A), 594905003 (AP3PZ-2A), 594905005 (AP3PZ-3A), 594905006 (AP3PZ-5A), 594905007 (DUP-01) and 594905008 (AP3PZ-4A) were diluted to ensure that the analyte concentrations were within the linear calibration range of the instrument.

Analyte	594905					
	001	003	005	006	007	008
Boron	5X	5X	20X	20X	20X	20X
Calcium	5X	5X	20X	20X	20X	20X

General Chemistry

Product: Ion Chromatography

Analytical Method: EPA 300.0

Analytical Procedure: GL-GC-E-086 REV# 30

Analytical Batch: 2324534

The following samples were analyzed using the above methods and analytical procedure(s).

<u>GEL Sample ID#</u>	<u>Client Sample Identification</u>
594905001	AP3PZ-1A
594905002	FB-01
594905003	AP3PZ-2A
594905004	EB-01
594905005	AP3PZ-3A
594905006	AP3PZ-5A
594905007	DUP-01
594905008	AP3PZ-4A
1205207370	Method Blank (MB)
1205207371	Laboratory Control Sample (LCS)
1205207372	594905001(AP3PZ-1A) Sample Duplicate (DUP)
1205207374	594905001(AP3PZ-1A) Post Spike (PS)

The samples in this SDG were analyzed on an "as received" basis.

Data Summary:

All sample data provided in this report met the acceptance criteria specified in the analytical methods and procedures for initial calibration, continuing calibration, instrument controls and process controls where applicable, with the following exceptions.

Technical Information

Sample Dilutions

The following samples 1205207372 (AP3PZ-1ADUP), 1205207374 (AP3PZ-1APS), 594905001 (AP3PZ-1A), 594905003 (AP3PZ-2A), 594905005 (AP3PZ-3A), 594905006 (AP3PZ-5A), 594905007 (DUP-01) and 594905008 (AP3PZ-4A) were diluted because target analyte concentrations exceeded the calibration range. Dilutions may be required for many reasons, including to minimize matrix interferences or to bring over range

target analyte concentrations into the linear calibration range.

Analyte	594905					
	001	003	005	006	007	008
Sulfate	10X	20X	20X	100X	100X	20X

Product: Solids, Total Dissolved

Analytical Method: SM 2540C

Analytical Procedure: GL-GC-E-001 REV# 19

Analytical Batch: 2323652

The following samples were analyzed using the above methods and analytical procedure(s).

<u>GEL Sample ID#</u>	<u>Client Sample Identification</u>
594905001	AP3PZ-1A
594905002	FB-01
594905003	AP3PZ-2A
594905004	EB-01
594905005	AP3PZ-3A
594905006	AP3PZ-5A
594905007	DUP-01
594905008	AP3PZ-4A
1205205708	Method Blank (MB)
1205205709	Laboratory Control Sample (LCS)
1205205711	594853001(NonSDG) Sample Duplicate (DUP)

The samples in this SDG were analyzed on an "as received" basis.

Data Summary:

There are no exceptions, anomalies or deviations from the specified methods. All sample data provided in this report met the acceptance criteria specified in the analytical methods and procedures for initial calibration, continuing calibration, instrument controls and process controls where applicable.

Product: Alkalinity

Analytical Method: SM 2320B

Analytical Procedure: GL-GC-E-033 REV# 14

Analytical Batch: 2323388

The following samples were analyzed using the above methods and analytical procedure(s).

<u>GEL Sample ID#</u>	<u>Client Sample Identification</u>
594905001	AP3PZ-1A
594905003	AP3PZ-2A
594905005	AP3PZ-3A
594905006	AP3PZ-5A
594905008	AP3PZ-4A
1205204945	Method Blank (MB)
1205204946	Laboratory Control Sample (LCS)
1205204949	593969003(NonSDG) Sample Duplicate (DUP)
1205204950	593969003(NonSDG) Matrix Spike (MS)

The samples in this SDG were analyzed on an "as received" basis.

Data Summary:

All sample data provided in this report met the acceptance criteria specified in the analytical methods and procedures for initial calibration, continuing calibration, instrument controls and process controls where applicable, with the following exceptions.

Quality Control (QC) Information

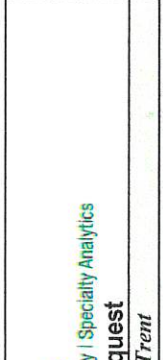
Method Blank (MB) Statement

The MB analyzed with this SDG met the acceptance criteria per GEL's reporting limits. Client requested limits are less than GEL's limits and since they are less than levels we can detect, the data will be qualified.

Sample	Analyte	Value
1205204945 (MB)	Alkalinity, Total as CaCO ₃ and Bicarbonate alkalinity (CaCO ₃)	2 between (1.45 - 4)

Certification Statement

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.



GEL Laboratories, LLC
 2040 Savage Road
 Charleston, SC 29407
 Phone: (843) 556-8171
 Fax: (843) 766-1178

GEL Work Order Number: _____ **Phone # (937) 344-6533**

Project/Site Name: Plant Arkwright AP-3 IWPZ **Fax #** _____

Address: 241 Ralph McGill Blvd SE, Atlanta, GA 30308
Collected By: John Myer, Dylan Ripley
 Send Results To: jabraham@southemco.com EDD@stantec.com
 brian.steele@stantec.com edgar.smith@stantec.com

Sample ID
 * For composites - indicate start and stop date/time

Sample ID	*Date Collected (mm-dd-yy)	*Time Collected (Military) (hhmm)	QC Code (b)	Field Filtered (b)	Sample Matrix (b)	Should this sample be considered: (f) Yes, please supply isotopic info) (7) Known or possible Hazards	Total number of containers	Metals App. III (6020B)	TDS (SM Method 2540C)	RAD 226-228 Cmbd	Mercury (7470B)	Anions (Cl, F, Sulfate) (300.0 Rev. 2.1 1993)	Metals App. IV (6020B) (Co only)	Ag (App. I) (6020B)	Alkalinity (300.0 R2.1)	Preservative Type (6)	Comments	
AP3PZ-1A	09-27-22	1325	N	N	WG		4	X	X			X	X	X	X	X	pH: 6.15	
FB-01	09-27-22	1345	FB	N	WQ		3	X	X			X	X	X	X	X	NA	
AP3PZ-2A	09-27-22	1510	N	Y	WG		4	X	X			X	X	X	X	X	pH: 6.78	
EB-01	09-27-22	1555	EB	N	WQ		3	X	X			X	X	X	X	X	NA	
AP3PZ-3A	09-27-22	1730	N	N	WG		4	X	X			X	X	X	X	X	pH: 6.98	
AP3PZ-5A	09-28-22	1150	N	N	WG		4	X	X			X	X	X	X	X	pH: 7.35	
DUP-01	09-28-22	NA	FD	N	WQ		3	X	X			X	X	X	X	X	AP3PZ-5A	
AP3PZ-4A	09-28-22	1325	N	N	WG		4	X	X			X	X	X	X	X	pH: 7.14	

Chain of Custody Signatures

Relinquished By (Signed)	Date	Time	Received by (signed)	Date	Time
<i>[Signature]</i>	9/28/22	18:30	<i>[Signature]</i>	9/28/22	17:30
<i>[Signature]</i>	9/29/22	9:20			

TAT Requested: Normal: Rush: Specify: _____ (Subject to Surcharge)

For Lab Receiving Use Only: Custody Seal Intact? Yes No **Cooler Temp:** _____ °C

Sample Collection Time Zone: Eastern Pacific Central Mountain Other:

For sample shipping and delivery details, see Sample Receipt & Review form (SRR).

- Chain of Custody Number = Client Determined
- QC Codes: N = Normal Sample, TB = Trip Blank, FD = Field Duplicate, EB = Equipment Blank, MS = Matrix Spike Sample, MSD = Matrix Spike Duplicate Sample, G = Grab, C = Composite
- Field Filtered: For liquid matrices, indicate with a - Y - for yes the sample was field filtered or - N - for sample was not field filtered.
- Matrix Codes: DW=Drinking Water, GW=Groundwater, SW=Surface Water, WW=Waste Water, W=Water, ML=Misc Liquid, SO=Soil, SD=Sediment, SL=Sludge, SS=Solid Waste, O=Oil, F=Filter, P=Wipe, U=Urine, F=Faecal, N=Nasal
- Sample Analysis Requested: Analytical method requested (i.e. 8260B, 6010B/7470A) and number of containers provided for each (i.e. 8260B - 3, 6010B/7470A - 1).
- Preservative Type: HA = Hydrochloric Acid, NI = Nitric Acid, SH = Sulfuric Acid, AA = Ascorbic Acid, HX = Hexane, ST = Sodium Thiosulfate, If no preservative is added = leave field blank
- KNOWN OR POSSIBLE HAZARDS**
 - RCRA Metals**
As = Arsenic Hg= Mercury
Ba = Barium Se= Selenium
Cd = Cadmium Ag= Silver
Cr = Chromium MIR= Misc. RCRA metals
Pb = Lead biphemyls
 - Characteristic Hazards**
FL = Flammable/Ignitable
CO = Corrosive
RE = Reactive
 - Listed Waste**
LW= Listed Waste
(F,K,P and U-listed wastes.)
Waste code(s): _____
 - TSCA Regulated**
PCB = Polychlorinated biphenyls
 - Other**
OT= Other / Unknown
(i.e.: High/low pH, asbestos, beryllium, irritants, other misc. health hazards, etc.)
Description: _____

Please provide any additional details below regarding handling and/or disposal concerns. (i.e.: Origin of sample(s), type of site collected from, odd matrices, etc.)



GEL Work Order Number: **GEL Project Manager: Erin Trent**
 Phone # (937) 344-6533 Fax # _____
 Project/Site Name: Plant Arkwright AP-3 IWPZ
 Address: 241 Ralph McGill Blvd SE, Atlanta, GA 30308
 Collect By: John Myer, Dylan Ripley
 Send Results To: jabraham@southemco.com EDD@stantec.com
 brian.steele@stantec.com edgar.smith@stantec.com

594905

Sample ID	*Date Collected (mm-dd-yy)	*Time Collected (Military) (hhmm)	QC Code (b)	Field Filtered (b)	Sample Matrix (e)	Should this sample be considered:		Sample Analysis Requested (5) (Fill in the number of containers for each test)							Comments	
						Yes, please supply isotopic info)	(7) Known or possible Hazards	Metals App. III (6020B)	TDS (SM Method 2540C)	RAD 226-228 Cmbd	Mercury (7470B)	Anions (Cl, F, Sulfate) (300.0 Rev. 2.1 1993)	Metals App. IV (6020B) (Co only)	Ag (App. I) (6020B)		Alkalinity (300.0 R2.1)
AP3PZ-1A	09-27-22	1325	N	N	WG			X	X				X	X		pH: 6.15
FB-01	09-27-22	1345	FB	N	WQ			X	X				X	X		NA
AP3PZ-2A	09-27-22	1510	N	Y	WG			X	X				X	X		pH: 6.78
EB-01	09-27-22	1555	EB	N	WQ			X	X				X	X		NA
AP3PZ-3A	09-27-22	1730	N	N	WG			X	X				X	X		pH: 6.98
AP3PZ-5A	09-28-22	1150	N	N	WG			X	X				X	X		pH: 7.35
DUP-01	09-28-22	NA	FD	N	WQ			X	X				X	X		AP3PZ-5A
AP3PZ-4A	09-28-22	1325	N	N	WG			X	X				X	X		pH: 7.14

Chain of Custody Signatures

Relinquished By (Signed)	Date	Time	Received by (signed)	Date	Time
<i>[Signature]</i>	9/28/22	18:30	<i>[Signature]</i>	9/28/22	17:30
<i>[Signature]</i>	9/29/22	9:20			

TAT Requested: Normal: Rush: Specify: _____ (Subject to Surcharge)

Relinquished By (Signed) _____ Date _____ Time _____
 Received by (signed) _____ Date _____ Time _____

Fax Results: Yes No

Select Deliverable: C of A QC Summary Level 1 Level 2 Level 3 Level 4

Additional Remarks: _____

For Lab Receiving Use Only: Custody Seal Intact? Yes No Cooler Temp: _____ °C

Sample Collection Time Zone: Eastern Pacific Central Mountain Other: _____

1.) Chain of Custody Number = Client Determined

2.) QC Codes: N = Normal Sample, TB = Trip Blank, FD = Field Duplicate, EB = Equipment Blank, MS = Matrix Spike Sample, MSD = Matrix Spike Duplicate Sample, G = Grab, C = Composite

3.) Field Filtered: For liquid matrices, indicate with a - Y - for yes the sample was field filtered or - N - for sample was not field filtered.

4.) Matrix Codes: DW=Drinking Water, GW=Groundwater, SW=Surface Water, WW=Waste Water, W=Water, ML=Misc Liquid, SO=Soil, SD=Sediment, SL=Sludge, SS=Solid Waste, O=Oil, F=Filter, P=Wipe, U=Urine, F=Faecal, N=Nasal

5.) Sample Analysis Requested: Analytical method requested (i.e. 8260B, 6010B/7470A) and number of containers provided for each (i.e. 8260B - 3, 6010B/7470A - 1).

6.) Preservative Type: HA = Hydrochloric Acid, NI = Nitric Acid, SH = Sodium Hydroxide, SA = Sulfuric Acid, AA = Ascorbic Acid, HX = Hexane, ST = Sodium Thiosulfate, If no preservative is added = leave field blank

7.) **KNOWN OR POSSIBLE HAZARDS**

RCRA Metals	Characteristic Hazards	Listed Waste	Other
As = Arsenic Ba = Barium Cd = Cadmium Cr = Chromium Pb = Lead	FL = Flammable/Ignitable CO = Corrosive RE = Reactive	LW = Listed Waste F, K, P and U-listed wastes. Waste code(s): _____	OT = Other / Unknown (i.e.: High/low pH, asbestos, beryllium, irritants, other misc. health hazards, etc.) Description: _____

Please provide any additional details below regarding handling and/or disposal concerns. (i.e.: Origin of sample(s), type of site collected from, odd matrices, etc.)

List of current GEL Certifications as of 13 October 2022

State	Certification
Alabama	42200
Alaska	17-018
Alaska Drinking Water	SC00012
Arkansas	88-0651
CLIA	42D0904046
California	2940
Colorado	SC00012
Connecticut	PH-0169
DoD ELAP/ ISO17025 A2LA	2567.01
Florida NELAP	E87156
Foreign Soils Permit	P330-15-00283, P330-15-00253
Georgia	SC00012
Georgia SDWA	967
Hawaii	SC00012
Idaho	SC00012
Illinois NELAP	200029
Indiana	C-SC-01
Kansas NELAP	E-10332
Kentucky SDWA	90129
Kentucky Wastewater	90129
Louisiana Drinking Water	LA024
Louisiana NELAP	03046 (AI33904)
Maine	2019020
Maryland	270
Massachusetts	M-SC012
Massachusetts PFAS Approv	Letter
Michigan	9976
Mississippi	SC00012
Nebraska	NE-OS-26-13
Nevada	SC000122023-3
New Hampshire NELAP	2054
New Jersey NELAP	SC002
New Mexico	SC00012
New York NELAP	11501
North Carolina	233
North Carolina SDWA	45709
North Dakota	R-158
Oklahoma	2022-137
Pennsylvania NELAP	68-00485
Puerto Rico	SC00012
S. Carolina Radiochem	10120002
Sanitation Districts of L	9255651
South Carolina Chemistry	10120001
Tennessee	TN 02934
Texas NELAP	T104704235-22-20
Utah NELAP	SC000122021-36
Vermont	VT87156
Virginia NELAP	460202
Washington	C780

List of current GEL Certifications as of 13 October 2022

State	Certification
Alabama	42200
Alaska	17-018
Alaska Drinking Water	SC00012
Arkansas	88-0651
CLIA	42D0904046
California	2940
Colorado	SC00012
Connecticut	PH-0169
DoD ELAP/ ISO17025 A2LA	2567.01
Florida NELAP	E87156
Foreign Soils Permit	P330-15-00283, P330-15-00253
Georgia	SC00012
Georgia SDWA	967
Hawaii	SC00012
Idaho	SC00012
Illinois NELAP	200029
Indiana	C-SC-01
Kansas NELAP	E-10332
Kentucky SDWA	90129
Kentucky Wastewater	90129
Louisiana Drinking Water	LA024
Louisiana NELAP	03046 (AI33904)
Maine	2019020
Maryland	270
Massachusetts	M-SC012
Massachusetts PFAS Approv	Letter
Michigan	9976
Mississippi	SC00012
Nebraska	NE-OS-26-13
Nevada	SC000122023-3
New Hampshire NELAP	2054
New Jersey NELAP	SC002
New Mexico	SC00012
New York NELAP	11501
North Carolina	233
North Carolina SDWA	45709
North Dakota	R-158
Oklahoma	2022-137
Pennsylvania NELAP	68-00485
Puerto Rico	SC00012
S. Carolina Radiochem	10120002
Sanitation Districts of L	9255651
South Carolina Chemistry	10120001
Tennessee	TN 02934
Texas NELAP	T104704235-22-20
Utah NELAP	SC000122021-36
Vermont	VT87156
Virginia NELAP	460202
Washington	C780



November 15, 2022

Joju Abraham
Georgia Power Company, Southern Company
241 Ralph McGill Blvd NE, Bin 10160
Atlanta, Georgia 30308

Re: Arkwright CCR Groundwater Compliance Reanalysis: additional metals needed
Work Order: 599922


Dear Joju Abraham:

GEL Laboratories, LLC (GEL) appreciates the opportunity to provide the enclosed analytical results for the sample(s) we received on September 29, 2022. This original data report has been prepared and reviewed in accordance with GEL's standard operating procedures.

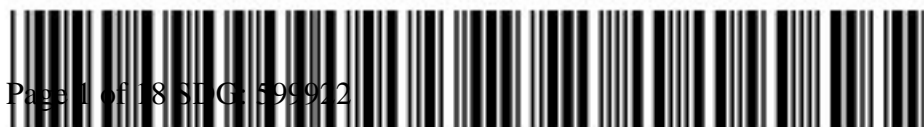
Test results for NELAP or ISO 17025 accredited tests are verified to meet the requirements of those standards, with any exceptions noted. The results reported relate only to the items tested and to the sample as received by the laboratory. These results may not be reproduced except as full reports without approval by the laboratory. Copies of GEL's accreditations and certifications can be found on our website at www.gel.com.

Our policy is to provide high quality, personalized analytical services to enable you to meet your analytical needs on time every time. We trust that you will find everything in order and to your satisfaction. If you have any questions, please do not hesitate to call me at (843) 556-8171, ext. 4504.

Sincerely,


Adrian Melendrez for
Erin Trent
Project Manager

Purchase Order: GPC82177-0002
Enclosures



GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 – (843) 556-8171 – www.gel.com

Certificate of Analysis Report for

GPCC001 Georgia Power Company

Client SDG: 599922 GEL Work Order: 599922

The Qualifiers in this report are defined as follows:

- * A quality control analyte recovery is outside of specified acceptance criteria
- ** Analyte is a Tracer compound
- ** Analyte is a surrogate compound
- J See case narrative for an explanation
- J Value is estimated
- U Analyte was analyzed for, but not detected above the MDL, MDA, MDC or LOD.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the Certificate of Analysis.

The designation ND, if present, appears in the result column when the analyte concentration is not detected above the limit as defined in the 'U' qualifier above.

This data report has been prepared and reviewed in accordance with GEL Laboratories LLC standard operating procedures. Please direct any questions to your Project Manager, Erin Trent.

Reviewed by _____



GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

Report Date: November 15, 2022

Company : Georgia Power Company, Southern Company
Address : 241 Ralph McGill Blvd NE, Bin 10160

Atlanta, Georgia 30308

Contact: Joju Abraham

Project: Arkwright CCR Groundwater Compliance Reanalysis: additional metals needed

Client Sample ID:	AP3PZ-1A	Project:	GPCC00100
Sample ID:	599922001	Client ID:	GPCC001
Matrix:	WG		
Collect Date:	27-SEP-22 13:25		
Receive Date:	29-SEP-22		
Collector:	Client		

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Metals Analysis-ICP-MS												
SW846 3005A/6020B "As Received"												
Aluminum	U	ND	0.0193	0.0500	mg/L	1.00	1	SKJ	11/15/22	0729	2339723	1
Iron		19.9	0.0330	0.100	mg/L	1.00	1					
Magnesium		19.2	0.0100	0.0300	mg/L	1.00	1					
Potassium		17.0	0.0800	0.300	mg/L	1.00	1					
Sodium		15.0	0.0800	0.250	mg/L	1.00	1					
Manganese		2.22	0.0200	0.100	mg/L	1.00	20	SKJ	11/14/22	2029	2339723	2

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
SW846 3005A	ICP-MS 3005A PREP	EM2	11/08/22	1600	2339721

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	SW846 3005A/6020B	
2	SW846 3005A/6020B	

Notes:

Column headers are defined as follows:

DF: Dilution Factor

DL: Detection Limit

MDA: Minimum Detectable Activity

MDC: Minimum Detectable Concentration

Lc/LC: Critical Level

PF: Prep Factor

RL: Reporting Limit

SQL: Sample Quantitation Limit

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

Report Date: November 15, 2022

Company : Georgia Power Company, Southern Company
 Address : 241 Ralph McGill Blvd NE, Bin 10160

Atlanta, Georgia 30308

Contact: Joju Abraham

Project: Arkwright CCR Groundwater Compliance Reanalysis: additional metals needed

Client Sample ID: FB-01	Project: GPCC00100
Sample ID: 599922002	Client ID: GPCC001
Matrix: WQ	
Collect Date: 27-SEP-22 13:45	
Receive Date: 29-SEP-22	
Collector: Client	

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Metals Analysis-ICP-MS												
SW846 3005A/6020B "As Received"												
Aluminum	U	ND	0.0193	0.0500	mg/L	1.00	1	SKJ	11/15/22	0731	2339723	1
Iron	U	ND	0.0330	0.100	mg/L	1.00	1					
Magnesium	U	ND	0.0100	0.0300	mg/L	1.00	1					
Manganese	U	ND	0.00100	0.00500	mg/L	1.00	1					
Potassium	U	ND	0.0800	0.300	mg/L	1.00	1					
Sodium	U	ND	0.0800	0.250	mg/L	1.00	1					

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
SW846 3005A	ICP-MS 3005A PREP	EM2	11/08/22	1600	2339721

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	SW846 3005A/6020B	

Notes:

Column headers are defined as follows:

DF: Dilution Factor	Lc/LC: Critical Level
DL: Detection Limit	PF: Prep Factor
MDA: Minimum Detectable Activity	RL: Reporting Limit
MDC: Minimum Detectable Concentration	SQL: Sample Quantitation Limit

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

Report Date: November 15, 2022

Company : Georgia Power Company, Southern Company
Address : 241 Ralph McGill Blvd NE, Bin 10160

Atlanta, Georgia 30308

Contact: Joju Abraham

Project: Arkwright CCR Groundwater Compliance Reanalysis: additional metals needed

Client Sample ID: AP3PZ-2A Project: GPCC00100
Sample ID: 599922003 Client ID: GPCC001
Matrix: WG
Collect Date: 27-SEP-22 15:10
Receive Date: 29-SEP-22
Collector: Client

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Metals Analysis-ICP-MS												
SW846 3005A/6020B "As Received"												
Aluminum	U	ND	0.0193	0.0500	mg/L	1.00	1	SKJ	11/15/22	0737	2339723	1
Magnesium		28.6	0.0100	0.0300	mg/L	1.00	1					
Potassium		14.8	0.0800	0.300	mg/L	1.00	1					
Sodium		16.4	0.0800	0.250	mg/L	1.00	1					
Iron		52.5	0.660	2.00	mg/L	1.00	20	SKJ	11/14/22	2031	2339723	2
Manganese		3.16	0.0200	0.100	mg/L	1.00	20					

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
SW846 3005A	ICP-MS 3005A PREP	EM2	11/08/22	1600	2339721

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	SW846 3005A/6020B	
2	SW846 3005A/6020B	

Notes:

Column headers are defined as follows:

DF: Dilution Factor

DL: Detection Limit

MDA: Minimum Detectable Activity

MDC: Minimum Detectable Concentration

Lc/LC: Critical Level

PF: Prep Factor

RL: Reporting Limit

SQL: Sample Quantitation Limit

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

Report Date: November 15, 2022

Company : Georgia Power Company, Southern Company
 Address : 241 Ralph McGill Blvd NE, Bin 10160

Atlanta, Georgia 30308

Contact: Joju Abraham

Project: Arkwright CCR Groundwater Compliance Reanalysis: additional metals needed

Client Sample ID: EB-01	Project: GPCC00100
Sample ID: 599922004	Client ID: GPCC001
Matrix: WQ	
Collect Date: 27-SEP-22 15:55	
Receive Date: 29-SEP-22	
Collector: Client	

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Metals Analysis-ICP-MS												
SW846 3005A/6020B "As Received"												
Aluminum	U	ND	0.0193	0.0500	mg/L	1.00	1	SKJ	11/15/22	0748	2339723	1
Iron	U	ND	0.0330	0.100	mg/L	1.00	1					
Magnesium	U	ND	0.0100	0.0300	mg/L	1.00	1					
Manganese	U	ND	0.00100	0.00500	mg/L	1.00	1					
Potassium	U	ND	0.0800	0.300	mg/L	1.00	1					
Sodium	U	ND	0.0800	0.250	mg/L	1.00	1					

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
SW846 3005A	ICP-MS 3005A PREP	EM2	11/08/22	1600	2339721

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	SW846 3005A/6020B	

Notes:

Column headers are defined as follows:

- | | |
|---------------------------------------|--------------------------------|
| DF: Dilution Factor | Lc/LC: Critical Level |
| DL: Detection Limit | PF: Prep Factor |
| MDA: Minimum Detectable Activity | RL: Reporting Limit |
| MDC: Minimum Detectable Concentration | SQL: Sample Quantitation Limit |

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

Report Date: November 15, 2022

Company : Georgia Power Company, Southern Company
Address : 241 Ralph McGill Blvd NE, Bin 10160

Atlanta, Georgia 30308

Contact: Joju Abraham

Project: Arkwright CCR Groundwater Compliance Reanalysis: additional metals needed

Client Sample ID: AP3PZ-3A Project: GPCC00100
Sample ID: 599922005 Client ID: GPCC001
Matrix: WG
Collect Date: 27-SEP-22 17:30
Receive Date: 29-SEP-22
Collector: Client

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Metals Analysis-ICP-MS												
SW846 3005A/6020B "As Received"												
Aluminum	J	0.0428	0.0193	0.0500	mg/L	1.00	1	SKJ	11/15/22	0757	2339723	1
Iron		22.8	0.0330	0.100	mg/L	1.00	1					
Magnesium		41.5	0.0100	0.0300	mg/L	1.00	1					
Potassium		25.1	0.0800	0.300	mg/L	1.00	1					
Sodium		18.0	0.0800	0.250	mg/L	1.00	1					
Manganese		1.46	0.0200	0.100	mg/L	1.00	20	SKJ	11/14/22	2046	2339723	2

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
SW846 3005A	ICP-MS 3005A PREP	EM2	11/08/22	1600	2339721

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	SW846 3005A/6020B	
2	SW846 3005A/6020B	

Notes:

Column headers are defined as follows:

DF: Dilution Factor

DL: Detection Limit

MDA: Minimum Detectable Activity

MDC: Minimum Detectable Concentration

Lc/LC: Critical Level

PF: Prep Factor

RL: Reporting Limit

SQL: Sample Quantitation Limit

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

Report Date: November 15, 2022

Company : Georgia Power Company, Southern Company
Address : 241 Ralph McGill Blvd NE, Bin 10160

Atlanta, Georgia 30308

Contact: Joju Abraham

Project: Arkwright CCR Groundwater Compliance Reanalysis: additional metals needed

Client Sample ID:	AP3PZ-5A	Project:	GPCC00100
Sample ID:	599922006	Client ID:	GPCC001
Matrix:	WG		
Collect Date:	28-SEP-22 11:50		
Receive Date:	29-SEP-22		
Collector:	Client		

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Metals Analysis-ICP-MS												
SW846 3005A/6020B "As Received"												
Aluminum	J	0.0324	0.0193	0.0500	mg/L	1.00	1	SKJ	11/15/22	0759	2339723	1
Iron		22.9	0.0330	0.100	mg/L	1.00	1					
Potassium		26.4	0.0800	0.300	mg/L	1.00	1					
Sodium		29.8	0.0800	0.250	mg/L	1.00	1					
Magnesium		104	0.200	0.600	mg/L	1.00	20	SKJ	11/15/22	0720	2339723	2
Manganese		2.67	0.0200	0.100	mg/L	1.00	20					

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
SW846 3005A	ICP-MS 3005A PREP	EM2	11/08/22	1600	2339721

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	SW846 3005A/6020B	
2	SW846 3005A/6020B	

Notes:

Column headers are defined as follows:

DF: Dilution Factor

DL: Detection Limit

MDA: Minimum Detectable Activity

MDC: Minimum Detectable Concentration

Lc/LC: Critical Level

PF: Prep Factor

RL: Reporting Limit

SQL: Sample Quantitation Limit

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

Report Date: November 15, 2022

Company : Georgia Power Company, Southern Company
Address : 241 Ralph McGill Blvd NE, Bin 10160

Atlanta, Georgia 30308

Contact: Joju Abraham

Project: Arkwright CCR Groundwater Compliance Reanalysis: additional metals needed

Client Sample ID:	DUP-01	Project:	GPCC00100
Sample ID:	599922007	Client ID:	GPCC001
Matrix:	WG		
Collect Date:	28-SEP-22 12:00		
Receive Date:	29-SEP-22		
Collector:	Client		

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Metals Analysis-ICP-MS												
SW846 3005A/6020B "As Received"												
Aluminum	J	0.0312	0.0193	0.0500	mg/L	1.00	1	SKJ	11/15/22	0801	2339723	1
Iron		23.2	0.0330	0.100	mg/L	1.00	1					
Potassium		27.0	0.0800	0.300	mg/L	1.00	1					
Sodium		30.7	0.0800	0.250	mg/L	1.00	1					
Magnesium		107	0.200	0.600	mg/L	1.00	20	SKJ	11/15/22	0722	2339723	2
Manganese		2.66	0.0200	0.100	mg/L	1.00	20					

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
SW846 3005A	ICP-MS 3005A PREP	EM2	11/08/22	1600	2339721

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	SW846 3005A/6020B	
2	SW846 3005A/6020B	

Notes:

Column headers are defined as follows:

DF: Dilution Factor

DL: Detection Limit

MDA: Minimum Detectable Activity

MDC: Minimum Detectable Concentration

Lc/LC: Critical Level

PF: Prep Factor

RL: Reporting Limit

SQL: Sample Quantitation Limit

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

Report Date: November 15, 2022

Company : Georgia Power Company, Southern Company
 Address : 241 Ralph McGill Blvd NE, Bin 10160

Atlanta, Georgia 30308

Contact: Joju Abraham

Project: Arkwright CCR Groundwater Compliance Reanalysis: additional metals needed

Client Sample ID: AP3PZ-4A	Project: GPCC00100
Sample ID: 599922008	Client ID: GPCC001
Matrix: WG	
Collect Date: 28-SEP-22 13:25	
Receive Date: 29-SEP-22	
Collector: Client	

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Metals Analysis-ICP-MS												
SW846 3005A/6020B "As Received"												
Aluminum	J	0.0279	0.0193	0.0500	mg/L	1.00	1	SKJ	11/15/22	0750	2339723	1
Iron		12.3	0.0330	0.100	mg/L	1.00	1					
Magnesium		33.1	0.0100	0.0300	mg/L	1.00	1					
Manganese		0.469	0.00100	0.00500	mg/L	1.00	1					
Potassium		18.5	0.0800	0.300	mg/L	1.00	1					
Sodium		12.1	0.0800	0.250	mg/L	1.00	1					

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
SW846 3005A	ICP-MS 3005A PREP	EM2	11/08/22	1600	2339721

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	SW846 3005A/6020B	

Notes:

Column headers are defined as follows:

- | | |
|---------------------------------------|--------------------------------|
| DF: Dilution Factor | Lc/LC: Critical Level |
| DL: Detection Limit | PF: Prep Factor |
| MDA: Minimum Detectable Activity | RL: Reporting Limit |
| MDC: Minimum Detectable Concentration | SQL: Sample Quantitation Limit |

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QC Summary

Report Date: November 15, 2022

Page 1 of 3

Georgia Power Company, Southern Company
241 Ralph McGill Blvd NE, Bin 10160
Atlanta, Georgia

Contact: Joju Abraham

Workorder: 599922

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Metals Analysis - ICPMS											
Batch	2339723										
QC1205239476	LCS										
Aluminum	2.00			2.12	mg/L		106	(80%-120%)	SKJ	11/15/22	07:18
Iron	2.00			2.27	mg/L		114	(80%-120%)			
Magnesium	2.00			2.30	mg/L		115	(80%-120%)			
Manganese	0.0500			0.0556	mg/L		111	(80%-120%)			
Potassium	2.00			2.16	mg/L		108	(80%-120%)			
Sodium	2.00			2.26	mg/L		113	(80%-120%)			
QC1205239475	MB										
Aluminum			U	ND	mg/L					11/15/22	07:16
Iron			U	ND	mg/L						
Magnesium			U	ND	mg/L						
Manganese			U	ND	mg/L						
Potassium			U	ND	mg/L						
Sodium			U	ND	mg/L						
QC1205239477	599922003	MS									
Aluminum	2.00	U	ND	2.14	mg/L		107	(75%-125%)		11/15/22	07:39

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QC Summary

Workorder: 599922

Page 2 of 3

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Metals Analysis - ICPMS											
Batch	2339723										
Iron	2.00	52.5		55.5	mg/L		N/A	(75%-125%)	SKJ	11/14/22	20:33
Magnesium	2.00	28.6		31.1	mg/L		N/A	(75%-125%)		11/15/22	07:39
Manganese	0.0500	3.16		3.22	mg/L		N/A	(75%-125%)		11/14/22	20:33
Potassium	2.00	14.8		16.9	mg/L		N/A	(75%-125%)		11/15/22	07:39
Sodium	2.00	16.4		18.9	mg/L		N/A	(75%-125%)			
QC1205239478 599922003 MSD											
Aluminum	2.00	U	ND	2.20	mg/L	2.61	110	(0%-20%)		11/15/22	07:42
Iron	2.00	52.5		54.4	mg/L	2.02	N/A	(0%-20%)		11/14/22	20:35
Magnesium	2.00	28.6		32.1	mg/L	3.07	N/A	(0%-20%)		11/15/22	07:42
Manganese	0.0500	3.16		3.17	mg/L	1.34	N/A	(0%-20%)		11/14/22	20:35
Potassium	2.00	14.8		17.7	mg/L	4.55	N/A	(0%-20%)		11/15/22	07:42
Sodium	2.00	16.4		19.0	mg/L	0.637	N/A	(0%-20%)			
QC1205239479 599922003 SDILT											
Aluminum		U	ND	U	ND	ug/L	N/A	(0%-20%)		11/15/22	07:46
Iron		2630		551	ug/L	4.88		(0%-20%)		11/14/22	20:39
Magnesium		28600		6070	ug/L	6.11		(0%-20%)		11/15/22	07:46
Manganese		158		31.8	ug/L	.419		(0%-20%)		11/14/22	20:39

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QC Summary

Workorder: 599922

Page 3 of 3

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Metals Analysis - ICPMS											
Batch	2339723										
Potassium		14800		3020	ug/L	1.98		(0%-20%)	SKJ	11/15/22	07:46
Sodium		16400		3280	ug/L	.0347		(0%-20%)			

Notes:

The Qualifiers in this report are defined as follows:

- < Result is less than value reported
- > Result is greater than value reported
- E %difference of sample and SD is >10%. Sample concentration must meet flagging criteria
- FB Mercury was found present at quantifiable concentrations in field blanks received with these samples. Data associated with the blank are deemed invalid for reporting to regulatory agencies
- H Analytical holding time was exceeded
- J See case narrative for an explanation
- J Value is estimated
- N Metals--The Matrix spike sample recovery is not within specified control limits
- N/A RPD or %Recovery limits do not apply.
- N1 See case narrative
- ND Analyte concentration is not detected above the detection limit
- NJ Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
- Q One or more quality control criteria have not been met. Refer to the applicable narrative or DER.
- R Sample results are rejected
- U Analyte was analyzed for, but not detected above the MDL, MDA, MDC or LOD.
- X Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
- Y Other specific qualifiers were required to properly define the results. Consult case narrative.
- ^ RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL. Qualifier Not Applicable for Radiochemistry.
- h Preparation or preservation holding time was exceeded

N/A indicates that spike recovery limits do not apply when sample concentration exceeds spike conc. by a factor of 4 or more or %RPD not applicable.

^ The Relative Percent Difference (RPD) obtained from the sample duplicate (DUP) is evaluated against the acceptance criteria when the sample is greater than five times (5X) the contract required detection limit (RL). In cases where the duplicate value is less than 5X the RL, a control limit of +/- the RL is used to evaluate the DUP result.

* Indicates that a Quality Control parameter was not within specifications.

For PS, PSD, and SDILT results, the values listed are the measured amounts, not final concentrations.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the QC Summary.

Metals
Technical Case Narrative
Georgia Power Company
SDG #: 599922

Product: Determination of Metals by ICP-MS

Analytical Method: SW846 3005A/6020B

Analytical Procedure: GL-MA-E-014 REV# 35

Analytical Batch: 2339723

Preparation Method: SW846 3005A

Preparation Procedure: GL-MA-E-006 REV# 14

Preparation Batch: 2339721

The following samples were analyzed using the above methods and analytical procedure(s).

<u>GEL Sample ID#</u>	<u>Client Sample Identification</u>
599922001	AP3PZ-1A
599922002	FB-01
599922003	AP3PZ-2A
599922004	EB-01
599922005	AP3PZ-3A
599922006	AP3PZ-5A
599922007	DUP-01
599922008	AP3PZ-4A
1205239475	Method Blank (MB)ICP-MS
1205239476	Laboratory Control Sample (LCS)
1205239479	599922003(AP3PZ-2AL) Serial Dilution (SD)
1205239477	599922003(AP3PZ-2AS) Matrix Spike (MS)
1205239478	599922003(AP3PZ-2ASD) Matrix Spike Duplicate (MSD)

The samples in this SDG were analyzed on an "as received" basis.

Data Summary:

All sample data provided in this report met the acceptance criteria specified in the analytical methods and procedures for initial calibration, continuing calibration, instrument controls and process controls where applicable, with the following exceptions.

Calibration Information

ICSA/ICSAB Statement

For the ICP-MS analysis, the ICSA solution contains analyte concentrations which are verified trace impurities indigenous to the purchased standard.

Technical Information

Sample Dilutions

Dilutions may be required for many reasons, including to minimize matrix interferences or to bring over range target analyte concentrations into the linear calibration range. Samples 599922001 (AP3PZ-1A), 599922003 (AP3PZ-2A), 599922005 (AP3PZ-3A), 599922006 (AP3PZ-5A) and 599922007 (DUP-01) were diluted to ensure that the analyte concentrations were within the linear calibration range of the instrument.

Analyte	599922				
	001	003	005	006	007
Iron	1X	20X	1X	1X	1X
Magnesium	1X	1X	1X	20X	20X
Manganese	20X	20X	20X	20X	20X

Certification Statement

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

Sample ID	*Date Collected (mm-dd-yy)	*Time Collected (Military) (hhmm)	QC Code (b)	Field Filtered (b)	Sample Matrix (c)	Should this sample be considered:		Sample Analysis Requested (5) (Fill in the number of containers for each test)							Comments	
						Yes, please supply isotopic info)	(7) Known or possible Hazards	Metals App. III (6020B)	TDS (SM Method 2540C)	RAD 226-228 Cmbd	Mercury (7470B)	Anions (Cl, F, Sulfate) (300.0 Rev. 2.1 1993)	Metals App. IV (6020B) (Co only)	Ag (App. I) (6020B)		Alkalinity (300.0 R2.1)
AP3PZ-1A	09-27-22	1325	N	N	WG			X	X				X		X	pH: 6.15
FB-01	09-27-22	1345	FB	N	WQ			X	X				X		X	NA
AP3PZ-2A	09-27-22	1510	N	Y	WG			X	X				X		X	pH: 6.78
EB-01	09-27-22	1555	EB	N	WQ			X	X				X		X	NA
AP3PZ-3A	09-27-22	1730	N	N	WG			X	X				X		X	pH: 6.98
AP3PZ-5A	09-28-22	1150	N	N	WG			X	X				X		X	pH: 7.35
DUP-01	09-28-22	NA	FD	N	WQ			X	X				X		X	AP3PZ-5A
AP3PZ-4A	09-28-22	1325	N	N	WG			X	X				X		X	pH: 7.14

Chain of Custody Signatures

Relinquished By (Signed)	Date	Time	Received by (signed)	Date	Time
<i>[Signature]</i>	9/28/22	18:30	<i>[Signature]</i>	9/28/22	17:30
<i>[Signature]</i>	9/29/22	9:20			

TAT Requested: Normal: Rush: Specify: _____ (Subject to Surcharge)

Fax Results: Yes No

Select Deliverable: C of A QC Summary Level 1 Level 2 Level 3 Level 4

Additional Remarks:

For Lab Receiving Use Only: Custody Seal Intact? Yes No Cooler Temp: _____ °C

Sample Collection Time Zone: Eastern Pacific Central Mountain Other:

1.) Chain of Custody Number = Client Determined

2.) QC Codes: N = Normal Sample, TB = Trip Blank, FD = Field Duplicate, EB = Equipment Blank, MS = Matrix Spike Sample, MSD = Matrix Spike Duplicate Sample, G = Grab, C = Composite

3.) Field Filtered: For liquid matrices, indicate with a - Y - for yes the sample was field filtered or - N - for sample was not field filtered.

4.) Matrix Codes: DW=Drinking Water, GW=Groundwater, SW=Surface Water, WW=Waste Water, W=Water, ML=Misc Liquid, SO=Soil, SD=Sediment, SL=Sludge, SS=Solid Waste, O=Oil, F=Filter, P=Wipe, U=Urine, F=Faecal, N=Nasal

5.) Sample Analysis Requested: Analytical method requested (i.e. 8260B, 6010B/7470A) and number of containers provided for each (i.e. 8260B - 3, 6010B/7470A - 1).

6.) Preservative Type: HA = Hydrochloric Acid, NI = Nitric Acid, SH = Sodium Hydroxide, SA = Sulfuric Acid, AA = Ascorbic Acid, HX = Hexane, ST = Sodium Thiosulfate, If no preservative is added = leave field blank

7.) **KNOWN OR POSSIBLE HAZARDS**

RCRA Metals	Characteristic Hazards	Listed Waste	Other
As = Arsenic Ba = Barium Cd = Cadmium Cr = Chromium Pb = Lead	FL = Flammable/Ignitable CO = Corrosive RE = Reactive	LW = Listed Waste (F, K, P and U-listed wastes.) Waste code(s):	OT = Other / Unknown (i.e.: High/low pH, asbestos, beryllium, irritants, other misc. health hazards, etc.) Description:

Please provide any additional details below regarding handling and/or disposal concerns. (i.e.: Origin of sample(s), type of site collected from, odd matrices, etc.)

List of current GEL Certifications as of 15 November 2022

State	Certification
Alabama	42200
Alaska	17-018
Alaska Drinking Water	SC00012
Arkansas	88-0651
CLIA	42D0904046
California	2940
Colorado	SC00012
Connecticut	PH-0169
DoD ELAP/ ISO17025 A2LA	2567.01
Florida NELAP	E87156
Foreign Soils Permit	P330-15-00283, P330-15-00253
Georgia	SC00012
Georgia SDWA	967
Hawaii	SC00012
Idaho	SC00012
Illinois NELAP	200029
Indiana	C-SC-01
Kansas NELAP	E-10332
Kentucky SDWA	90129
Kentucky Wastewater	90129
Louisiana Drinking Water	LA024
Louisiana NELAP	03046 (AI33904)
Maine	2019020
Maryland	270
Massachusetts	M-SC012
Massachusetts PFAS Approv	Letter
Michigan	9976
Mississippi	SC00012
Nebraska	NE-OS-26-13
Nevada	SC000122023-3
New Hampshire NELAP	2054
New Jersey NELAP	SC002
New Mexico	SC00012
New York NELAP	11501
North Carolina	233
North Carolina SDWA	45709
North Dakota	R-158
Oklahoma	2022-160
Pennsylvania NELAP	68-00485
Puerto Rico	SC00012
S. Carolina Radiochem	10120002
Sanitation Districts of L	9255651
South Carolina Chemistry	10120001
Tennessee	TN 02934
Texas NELAP	T104704235-22-20
Utah NELAP	SC000122022-37
Vermont	VT87156
Virginia NELAP	460202
Washington	C780

**APPENDIX D
GEOCHEMICAL LABORATORY
RESULTS**





Quantitative X-Ray Diffraction by Rietveld Refinement

Report Prepared for: Environmental Services

Project Number/ LIMS No. Custom XRD/MI4504-NOV22

Sample Receipt: November 2, 2022

Sample Analysis: November 4, 2022

Reporting Date: December 16, 2022

Instrument: BRUKER AXS D8 Advance Diffractometer

Test Conditions: Co radiation, 35 kV, 40 mA; Detector: LYNXEYE
Regular Scanning: Step: 0.02°, Step time: 0.75s, 2θ range: 6-80°

Interpretations: PDF2/PDF4 powder diffraction databases issued by the International Center for Diffraction Data (ICDD). DiffracPlus Eva and Topas software.

Detection Limit: 0.5-2%. Strongly dependent on crystallinity.

Contents:

- 1) Method Summary
- 2) Quantitative XRD Results
- 3) XRD Pattern(s)

Kim Gibbs, H.B.Sc., P.Geol.
Senior Mineralogist

Huyun Zhou, Ph.D., P.Geol.
Senior Mineralogist

ACCREDITATION: SGS Natural Resources Lakefield is accredited to the requirements of ISO/IEC 17025 for specific tests as listed on our scope of accreditation, including geochemical, mineralogical and trade mineral tests. To view a list of the accredited methods, please visit the following website and search SGS Canada Inc. - Minerals: <https://www.scc.ca/en/search/palcan>.



Method Summary

The Rietveld Method of Mineral Identification by XRD (ME-LR-MIN-MET-MN-D05) method used by SGS Natural Resources is accredited to the requirements of ISO/IEC 17025.

Mineral Identification and Interpretation:

Mineral identification and interpretation involves matching the diffraction pattern of an unknown material to patterns of single-phase reference materials. The reference patterns are compiled by the Joint Committee on Powder Diffraction Standards - International Center for Diffraction Data (JCPDS-ICDD) database and released on software as Powder Diffraction Files (PDF).

Interpretations do not reflect the presence of non-crystalline and/or amorphous compounds, except when internal standards have been added by request. Mineral proportions may be strongly influenced by crystallinity, crystal structure and preferred orientations. Mineral or compound identification and quantitative analysis results should be accompanied by supporting chemical assay data or other additional tests.

Quantitative Rietveld Analysis:

Quantitative Rietveld Analysis is performed by using Topas 4.2 (Bruker AXS), a graphics based profile analysis program built around a non-linear least squares fitting system, to determine the amount of different phases present in a multicomponent sample. Whole pattern analyses are predicated by the fact that the X-ray diffraction pattern is a total sum of both instrumental and specimen factors. Unlike other peak intensity-based methods, the Rietveld method uses a least squares approach to refine a theoretical line profile until it matches the obtained experimental patterns.

Rietveld refinement is completed with a set of minerals specifically identified for the sample. Zero values indicate that the mineral was included in the refinement calculations, but the calculated concentration was less than 0.05wt%. Minerals not identified by the analyst are not included in refinement calculations for specific samples and are indicated with a dash.

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WARNING: The sample(s) to which the findings recorded herein (the "Findings") relate was(were) drawn and / or provided by the Client or by a third party acting at the Client's direction. The Findings constitute no warranty of the sample's representativeness of any goods and strictly relate to the sample(s). The Company accepts no liability with regard to the origin or source from which the sample(s) is/are said to be extracted.

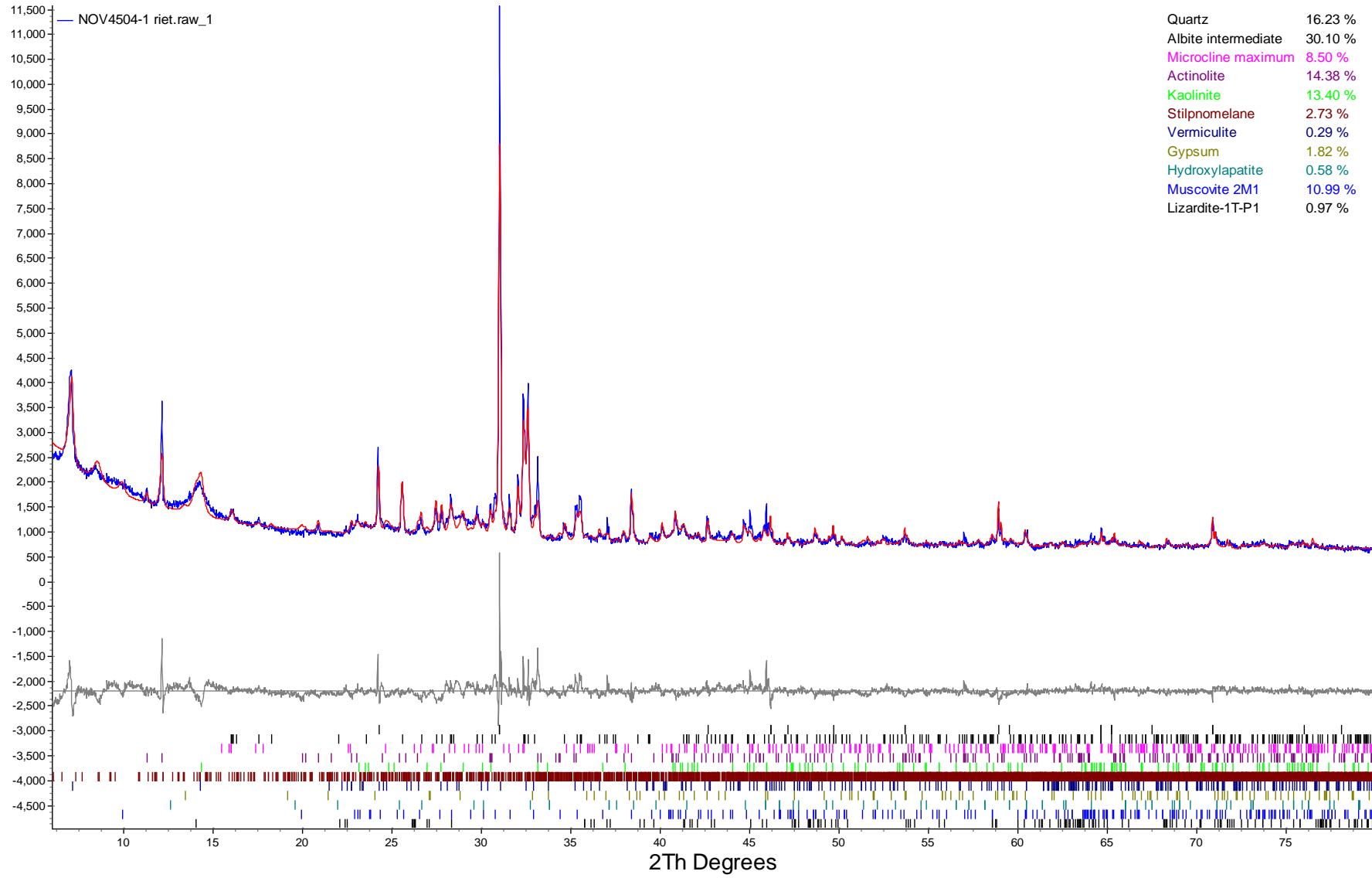
Summary of Rietveld Quantitative Analysis X-Ray Diffraction Results

Mineral/Compound	ARK-SO-GWC-124SB-A-15.0/23.9-20221018
	NOV4504-01 (wt %)
Quartz	16.2
Albite	30.1
Microcline	8.5
Actinolite	14.4
Kaolinite	13.4
Stilpnomelane	2.7
Vermiculite	0.3
Gypsum	1.8
Hydroxylapatite	0.6
Muscovite	11.0
Lizardite	1.0
TOTAL	100

The weight percent quantities indicated have been normalized to a sum of 100%. The quantity of amorphous material has not been determined.

Mineral/Compound	Formula
Quartz	SiO ₂
Albite	NaAlSi ₃ O ₈
Microcline	KAlSi ₃ O ₈
Actinolite	Ca ₂ (Mg,Fe) ₅ Si ₈ O ₂₂ (OH) ₂
Kaolinite	Al ₂ Si ₂ O ₅ (OH) ₄
Stilpnomelane	K(Fe ²⁺ ,Mg,Fe ³⁺) ₈ (Si,Al) ₁₂ (O,OH) ₂₇ ·n(H ₂ O)
Vermiculite	(Mg,Al) ₃ (Si,Al) ₄ O ₁₀ (OH) ₂ ·4H ₂ O
Gypsum	CaSO ₄ ·2H ₂ O
Hydroxylapatite	Ca ₅ (PO ₄) ₃ (OH)
Muscovite	KAl ₂ (AlSi ₃ O ₁₀)(OH) ₂
Lizardite	Mg ₃ Si ₂ O ₅ (OH) ₄

ARK-SO-GWC-124SB-A-15.0/23.9-20221018



SGS Canada Inc.

P.O. Box 4300 - 185 Concession St.
 Lakefield - Ontario - KOL 2H0
 Phone: 705-652-2000 FAX: 705-652-6365

Stantec Consulting Ltd.

Attn : Shannon Zahuranec

3052 Beaumont Centre Circle
 Lexington, Kentucky
 40513, USA

Phone: 859-422-3122
 Fax:

29-November-2022

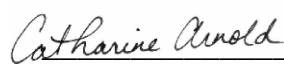

Date Rec. : 27 October 2022
LR Report: CA19328-OCT22
Reference: Arkwright Plant/175569434

Copy: #1

CERTIFICATE OF ANALYSIS

Final Report

Analysis	1: Analysis Start Date	2: Analysis Start Time Completed	3: Analysis Date Completed	4: Analysis Time	5: ARK-SO-GWC-17SARK-SO-GWC-124S B-A/E-20.0/30.0-202B-A-15.0/23.9-20221 20913	6: ARK-SO-GWC-124S 18-Oct-22 13:45 018
Sample Date & Time					13-Sep-22 15:30	18-Oct-22 13:45
Prep-Env AR [Prep]	01-Nov-22	13:02	04-Nov-22	16:55	1	1
Hg MS [ug/g]	03-Nov-22	19:56	04-Nov-22	16:55	< 0.05	< 0.05
As [µg/g]	03-Nov-22	19:56	04-Nov-22	16:55	13	4.1
Al [µg/g]	03-Nov-22	19:56	04-Nov-22	16:55	20000	15000
B [µg/g]	03-Nov-22	19:56	07-Nov-22	12:15	< 1	< 1
Ba [µg/g]	03-Nov-22	19:56	04-Nov-22	16:55	210	170
Be [µg/g]	03-Nov-22	19:56	04-Nov-22	16:55	2.6	0.45
Cd [µg/g]	03-Nov-22	19:56	04-Nov-22	16:55	0.13	0.05
Co [µg/g]	03-Nov-22	19:56	04-Nov-22	16:55	48	17
Cr [µg/g]	03-Nov-22	19:56	04-Nov-22	16:55	12	14
Fe [µg/g]	03-Nov-22	19:56	07-Nov-22	12:15	51000	35000
Li [µg/g]	03-Nov-22	19:56	04-Nov-22	16:56	7	6
Mn [µg/g]	03-Nov-22	19:56	04-Nov-22	16:56	1400	690
Mo [µg/g]	03-Nov-22	19:56	04-Nov-22	16:56	0.5	0.3
Pb [µg/g]	03-Nov-22	19:56	04-Nov-22	16:56	12	5.9
Sb [µg/g]	03-Nov-22	19:56	04-Nov-22	16:56	< 6	< 6
Se [µg/g]	03-Nov-22	19:56	04-Nov-22	16:56	< 0.7	< 0.7
Tl [µg/g]	03-Nov-22	19:56	04-Nov-22	16:56	0.20	0.11



Catharine Arnold, B.Sc., C.Chem
 Project Specialist,
 Environment, Health & Safety

SGS Canada Inc.

P.O. Box 4300 - 185 Concession St.
 Lakefield - Ontario - KOL 2H0
 Phone: 705-652-2000 FAX: 705-652-6365

29-November-2022

Stantec Consulting Ltd.

Attn : Shannon Zahuranec

3052 Beaumont Centre Circle
 Lexington, Kentucky
 40513, USA

Date Rec. : 27 October 2022
LR Report: CA19329-OCT22
Reference: Arkwright Plant/175569434

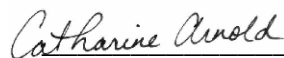
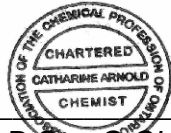
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Phone: 859-422-3122
 Fax:

CERTIFICATE OF ANALYSIS

Final Report

Analysis	1: Analysis Start Date	2: Analysis Start Time	3: Analysis Completed Date	4: Analysis Completed Time	6: Analysis Completed Date
	Analysis ARK-SO-GWC-1245 B-A-15.0/23.9-20221 018				
Sample Date & Time					18-Oct-22 13:45
SiO2 [%]	01-Nov-22	03:31	02-Nov-22	13:50	53.2
Al2O3 [%]	01-Nov-22	03:31	02-Nov-22	13:50	17.9
Fe2O3 [%]	01-Nov-22	03:31	02-Nov-22	13:50	9.96
MgO [%]	01-Nov-22	03:31	02-Nov-22	13:50	2.51
CaO [%]	01-Nov-22	03:31	02-Nov-22	13:50	4.60
Na2O [%]	01-Nov-22	03:31	02-Nov-22	13:50	2.80
K2O [%]	01-Nov-22	03:31	02-Nov-22	13:50	1.20
TiO2 [%]	01-Nov-22	03:31	02-Nov-22	13:50	1.50
P2O5 [%]	01-Nov-22	03:31	02-Nov-22	13:50	0.33
MnO [%]	01-Nov-22	03:31	02-Nov-22	13:50	0.16
Cr2O3 [%]	01-Nov-22	03:31	02-Nov-22	13:50	0.02
V2O5 [%]	01-Nov-22	03:31	02-Nov-22	13:50	0.04
LOI [%]	01-Nov-22	03:31	02-Nov-22	13:50	5.53
Sum [%]	01-Nov-22	03:31	02-Nov-22	13:50	99.7



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