



**2023 SEMI-ANNUAL GROUNDWATER
MONITORING AND CORRECTIVE ACTION
REPORT**

Plant Arkwright
Ash Pond 2 Dry Ash Stockpile
Macon, Georgia

February 28, 2024

Prepared for:



Prepared by:
Stantec Consulting Services Inc.
10745 Westside Way, Suite 250
Alpharetta, Georgia 30009-7640

**2023 Semi-Annual Groundwater Monitoring and Corrective Action Report
Plant Arkwright Ash Pond 2 Dry Ash Stockpile**

CERTIFICATION STATEMENT

This 2023 Semi-Annual Groundwater Monitoring and Corrective Action Report, Plant Arkwright, Ash Pond 2 Dry Ash Stockpile 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 by a qualified groundwater scientist or engineer 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 391-3-4-.01.



Jennifer Kolbe, Ph.D., P.E.
Principal



2/28/2024
Date



Katie Ross, P.G.
Senior Principal



2/28/2024
Date



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Executive Summary

This summary of the *2023 Semi-Annual Groundwater Monitoring and Corrective Action Report* provides the status of the groundwater monitoring and corrective action program from July 2023 through December 2023 at the Georgia Power Company (Georgia Power) former Plant Arkwright Ash Pond 2 Dry Ash Stockpile (AP-2 DAS). This summary was prepared by Stantec Consulting Services Inc. (Stantec) on behalf of Georgia Power to meet the requirements listed in 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 six miles northwest of the city of Macon. The plant address is 5241 Arkwright Road, Macon, Georgia, 31210. The 11-acre AP-2 DAS is located between Arkwright Road to the north and Beaverdam Creek to the south. When in operation, the coal-fired Plant Arkwright 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 and decommissioned in 2003. Georgia Power officially closed the AP-2 DAS in 2010, with GA EPD's approval and in accordance with the solid waste landfill regulations in effect at the time of its closure.



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The groundwater monitoring program for AP-2 DAS 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. 011-031D(LI). AP-2 DAS is also subject to the GA EPD Rules for Solid Waste Management 391-3-4-.10 for coal combustion residuals (CCR) management. Georgia Power submitted a CCR permit application to GA EPD in 2018 proposing closure by removal of AP-2 DAS to a lined landfill. Groundwater at AP-2 DAS is monitored using a comprehensive groundwater monitoring system that meets the GA EPD requirements. Groundwater sampling and reporting for compliance to meet requirements of Rule 391-3-4.10 began after baseline upgradient groundwater conditions were established between August 2016 and October 2018. Based on groundwater conditions at AP-2 DAS, an assessment monitoring program was initiated on November 13, 2019, and assessment of corrective measures began on July 9, 2020. During the 2023 semi-annual reporting period, AP-2 DAS remained in assessment monitoring as corrective measures were evaluated.

During the 2023 semi-annual reporting period, Stantec conducted one groundwater sampling event in August 2023. Samples were analyzed for the full suites of Appendix III¹ and Appendix IV² constituents listed in Title 40, Code of Federal Regulations Part 257 (CCR Rule) and Appendix I constituent (silver).

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



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Per the CCR Rule, groundwater results for the August 2023 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 and lithium are the only SSLs identified in a single well, ARAMW-7, at AP-2 DAS.

Appendix III Constituents	August 2023
Boron	ARGWC-21, ARGWC-22, ARGWC-23
Calcium	ARGWC-21, ARGWC-22, ARGWC-23
Fluoride	ARGWC-21, ARGWC-23
pH	ARGWC-21, ARGWC-23
Sulfate	ARGWC-21, ARGWC-22, ARGWC-23
TDS	ARGWC-21, ARGWC-22, ARGWC-23
Appendix IV Constituents	August 2023
Cobalt	ARAMW-7
Lithium	ARAMW-7

Based on review of the CCR Rule Appendix III and Appendix IV statistical results completed for the groundwater monitoring and corrective action program from July 2023 through December 2023, assessment monitoring will continue along with assessment of corrective measures. Georgia Power will continue routine groundwater monitoring and reporting at AP-2 DAS. Reports will be submitted to GA EPD semi-annually. A Draft Remedy Selection Report, which summarizes the evaluation and proposed selection of a corrective measure, or measures, will be submitted under separate cover to GA EPD on February 28, 2024 in lieu of the Semi-annual Remedy Selection and Design Progress Report.



Acronyms / Abbreviations

40 CFR	Title 40 Code of Federal Regulations
ACM	Assessment of Corrective Measures
AP-2	Ash Pond 2
AP-2 DAS	Ash Pond 2 Dry Ash Stockpile
CCR	Coal Combustion Residuals
CCR Rule	40 CFR § 257 Subpart D
District	Washington Slope District
DO	Dissolved Oxygen
GA EPD	Georgia Environmental Protection Division
GEL	GEL Laboratories LLC
Georgia Power	Georgia Power Company
GSC	Groundwater Stats Consulting LLC
GWPS	Groundwater Protection Standards
MCL	Maximum Contaminant Level
mg/L	Milligrams per Liter
NELAP	National Environmental Laboratory Accreditation Program
NTU	Nephelometric Turbidity Units
ORP	Oxidation-Reduction Potential
Pace	Pace Analytical Services LLC
PWR	Partially Weathered Rock
QA/QC	Quality Assurance/Quality Control
Site	Former Plant Arkwright Ash Pond 2 Dry Ash Stockpile
SSI	Statistically Significant Increase
SSL	Statistically Significant Level
Stantec	Stantec Consulting Services, Inc.
TDS	Total Dissolved Solids
UPL	Upper Prediction Limit
US EPA	United States Environmental Protection Agency
UTL	Upper Tolerance Limit



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1.0 Introduction**

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 *2023 Semi-Annual Groundwater Monitoring and Corrective Action Report* has been prepared to document groundwater monitoring activities conducted at the Georgia Power Company (Georgia Power) former Plant Arkwright Ash Pond 2 (AP-2) Dry Ash Stockpile (AP-2 DAS) Site (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) Title 40 Code of Federal Regulations (40 CFR) § 257 Subpart D - Standards for the Disposal of Coal Combustion Residuals (CCR) in Landfills and Surface Impoundments (CCR Rule). For ease of reference, the applicable CCR Rule references are cited within this report.

Groundwater monitoring and reporting for Plant Arkwright AP-2 DAS 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 2023 and December 2023. One semi-annual assessment monitoring event was conducted during this reporting period in August 2023.

Due to statistically significant levels (SSL) of certain CCR Rule Appendix IV 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-2 DAS on July 9, 2020, pursuant to 40 CFR § 257.96(b), and an ACM Report for cobalt was prepared and submitted to GA EPD in December 2020 (Wood, 2020b). Based on statistical analyses on the recent semi-annual sampling event, vertical assessment well ARAMW-7 is the only well showing SSLs for cobalt and lithium at AP-2. Well ARAMW-7 is a vertical delineation for shallow well ARGWC-22. ARGWC-22 does not show an SSL for cobalt and lithium.

Cobalt and lithium are horizontally delineated by surface water with both being below method detection limits, well below the Groundwater Protection Standard (GWPS). Vertical delineation for cobalt and lithium was completed with the installation of monitoring well ARAMW-9 during the previous reporting period.

1.1 Site Description and Background

Plant Arkwright is located in Bibb County, Georgia, approximately six miles northwest of the city of Macon (Figure 1). The physical address of the plant is 5241 Arkwright Road, Macon, Georgia 31210. The 11-acre AP-2 DAS is located between Arkwright Road to the north and Beaverdam Creek to the south. When in operation, the coal-fired Plant Arkwright 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 and decommissioned in 2003.

AP-2 was in operation in the 1950s. Soil was placed over AP-2 as a closure measure and the CCR unit was estimated to be closed in-place in the late 1970s to early 1980s. Georgia Power officially closed AP-2 DAS in 2010 by removing ash from the former AP-2, located directly east of AP-2 DAS, 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. A Closure Certificate was issued by GA EPD for AP-2 DAS on June 30,



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2010. The Closure Certificate initiated the post-closure care period for the CCR unit, which has been performed in accordance with the GA EPD Permit No. 011-031D(LI) following closure.

AP-2 DAS is exempt from the requirements in the CCR Rule in accordance with 40 CFR §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-2 DAS is defined as an inactive CCR Landfill per GA EPD Rule 391-3-4-.10(2)(a)(3).

Semi-annual groundwater monitoring at AP-2 DAS is performed for an approved list of analytes in accordance with the post-closure care period requirements of GA EPD Permit #: 011-031D(LI). The permit lists GA EPD 391-3-4-.10 Appendix I constituents as arsenic, barium, cadmium, chloride, lead, selenium, silver, and sulfate. A minor modification approved by GA EPD on August 9, 2017, added the CCR Rule Appendix III and IV constituents to the groundwater monitoring plan. The GA EPD Appendix I constituents overlap with the CCR Rule Appendix III and IV constituents, with the exception of silver.

Georgia Power has elected to remove CCR material from AP-2 DAS and place it in a lined landfill. The closure of AP-2 DAS 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 the Plant Arkwright site are summarized below. The Plant Arkwright 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 to 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 seven 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).

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



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1.0 Introduction

advanced at the Site indicate bedrock occurs at depths ranging from approximately 14 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 one to four 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-2 DAS (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 show stable water level trends and the potentiometric surface maps depict groundwater generally flowing to the south across AP-2 DAS (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-2 DAS. The monitoring system is designed to monitor groundwater passing the waste boundary of AP-2 DAS 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 August 2023 and January 2024. Samples were collected from each of the wells in the monitoring network depicted in Figure 2. In accordance with 40 CFR § 257.93, Table 2 presents a summary of the groundwater sampling events completed for AP-2 DAS during this monitoring period.

2.1 Monitoring Well Installation and Maintenance

Monitoring wells are inspected semi-annually to determine if 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 2023, the monitoring wells were inspected. No needed corrective actions were identified, as documented in Appendix A.

Assessment monitoring wells ARGWA-20, ARGWC-21, ARGWC-22, ARGWC-23, ARAMW-1, ARAMW-2, ARAMW-7, ARAMW-8, and ARAMW-9 were redeveloped between July 25, 2023 and July 27, 2023. Eight of the wells, all located along the northern bank of Beaver Dam Creek, were redeveloped due to recent flooding that led to the inundation of well protective casings. One well, ARGWA-20 located on the upgradient area of AP-2 DAS, was redeveloped due to increases in turbidity noted during recent quarterly sampling events. Field logs recording the redevelopment of the assessment monitoring wells are provided in Appendix B.

2.2 Assessment Monitoring

Georgia Power implemented assessment monitoring in accordance with 40 CFR § 257.95 in November 2019. During the 2023 semi-annual reporting period, a semi-annual assessment monitoring event at AP-2 DAS was conducted from August 8 to 10, 2023. Groundwater samples were collected from each well in the certified groundwater monitoring system and analyzed for the full suites of CCR Rule Appendix III and Appendix IV constituents and the GA EPD Appendix I constituent, silver. Laboratory and field data reports for the August 2023 monitoring event are included in Appendix B.

2.3 Surface Water Sampling

Due to the close proximity of Beaverdam Creek in the downgradient direction of ARAMW-7, further well installation was infeasible. Instead, five surface water samples were collected on August 10, 2023, from locations along Beaverdam Creek near AP-2 DAS, as shown in 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).

Surface water samples were analyzed for the full suites of 40 CFR Part 257 Appendix III and targeted SSL Appendix IV constituents. Surface water samples were also submitted for analysis of total alkalinity, bicarbonate alkalinity, magnesium, potassium, and sodium.

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



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2.0 Groundwater Monitoring Activities**

with the August 2023 sampling event are provided in Appendix B. Georgia Power will continue collecting surface water samples semi-annually.



3.0 Sample Methodology & Analyses

The semi-annual groundwater sampling event completed in August 2023 for AP-2 DAS included sampling for the constituents listed in CCR Rule Appendix III and Appendix IV, with the addition of silver, which is a constituent in GA EPD Appendix I. 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 AP-2 DAS.

3.1 Groundwater Elevation Measurements and Flow Direction

Prior to each sampling event, the static groundwater levels were measured in each monitoring well at AP-2 DAS. 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 the figure indicates that the apparent groundwater flow direction in the uppermost aquifer is to the south in the direction of Beaverdam Creek. This groundwater flow pattern is consistent with historical groundwater flow patterns.

3.2 Groundwater Gradient and Flow Velocity

The groundwater flow velocity at AP-2 DAS was calculated using a derivation of Darcy's Law. Specifically,

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

Where:

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

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

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

$$n_e = \text{Effective porosity (unitless)}$$

The general groundwater flow velocities were calculated for AP-2 DAS 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 7, 2023, groundwater elevations are presented in Table 4. The results for groundwater flow velocity through the central portion of AP-2 DAS was 0.100 feet/day (36.6 feet/year) in August. Groundwater flow velocity through the eastern portion was 0.087 feet/day (31.9 feet/year) in August. The observed groundwater flow velocities calculated for this monitoring event are also generally consistent with expected velocities in the regolith-upper bedrock aquifers of the Georgia Piedmont.



3.3 Groundwater Sampling

Groundwater samples were collected in August 2023. Sampling procedures were conducted in accordance with US EPA Region 4 *Science and Ecosystem Support Division Operating Procedures for Groundwater Sampling* (SESDPROC-301-R4, April 26, 2017). Monitoring wells were purged and sampled using low-flow sampling procedures. Dedicated 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 stabilization criteria were met for three (3) consecutive readings measured at five-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. Turbidity readings greater than 10 NTUs at the time of sampling and after three hours of purging were measured in one well (ARGWA-20) during the sampling event covered by this report. A dissolved metals sample was collected from this well using a 0.45-micron water filter. Sample bottles were placed in ice-packed coolers and submitted to GEL Laboratories LLC (GEL) in Charleston, South Carolina following chain-of-custody protocols. Stabilization logs and Equipment Calibration forms are included in Appendix B.

3.4 Laboratory Analyses

The groundwater samples were analyzed for CCR Rule Appendix III and Appendix IV constituents, as well as the GA EPD 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.

³ Total alkalinity, bicarbonate alkalinity, carbonate alkalinity, total iron, manganese, total magnesium, potassium, and sodium



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3.0 Sample Methodology & Analyses**

The August 2023 surface water samples were also analyzed for CCR Rule Appendix III and Appendix IV constituents. 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 B.

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 was 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.

QA/QC 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 Tables 5 and 6 provide concentrations from the August 2023 groundwater assessment monitoring and surface water sampling events 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.



4.0 Statistical Analyses

Statistical analyses of GA EPD Appendix I (silver) and CCR Rule Appendix III and Appendix IV constituents were performed on samples collected from the groundwater monitoring system pursuant to 40 CFR § 257.93(f) and following the statistical method for AP-2 DAS. In addition, pursuant to 40 CFR § 257.95(d)(2), GWPS were established for the Appendix IV constituents from the assessment monitoring event. The groundwater data were statistically analyzed by Groundwater Stats Consulting, LLC (GSC). The reports generated from the analyses are provided in Appendix C.

The following sections provide an overview of the statistical methods used to evaluate the GA EPD Appendix I and CCR Rule Appendix III and Appendix IV constituents and statistical analyses results.

4.1 Statistical Method

The statistical analysis method used at AP-2 DAS 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) (Unified Guidance). 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. Specific methodology information is described in the following paragraphs.

4.2 Appendix I and Appendix III Statistical Method

Interwell prediction limits were used for the analysis of the six GA EPD Appendix I constituents (arsenic, barium, cadmium, lead, selenium, and silver) and the full suite of CCR Rule Appendix III constituents. A comparison of confidence intervals to GWPS was also used to evaluate the GA EPD Appendix I constituents. When using the interwell method, upgradient well data are pooled to establish a background statistical limit (upper prediction limit [UPL] or in the case of pH, prediction interval) for each constituent. Individual sample results are then compared to the UPL, or prediction interval for pH, to determine if an SSI has occurred for the constituent/well pair. When an initial SSI is identified, a second sample may be collected to verify the initial result.

The interwell prediction limit assumed a 1-of-2 verification resample plan. If data from a sampling event initially indicate an SSI, 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 SSI is verified. If the resample concentration is above the UPL or a resample is not collected, then the initial SSI is verified. If the resample concentration is less than the UPL, then an SSI is not declared.

Data from groundwater samples from downgradient wells collected in the August 2023 monitoring event were compared to the UPLs to evaluate whether SSIs exist. No resampling was conducted for the 2023 semi-annual monitoring period.



4.3 Appendix IV Statistical Method

The assessment monitoring program statistics for CCR Rule Appendix IV and GA EPD Appendix I constituents were conducted in two parts. The first part was to establish the GWPS for each CCR Rule Appendix IV and GA EPD Appendix I constituent (silver). 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 (UTLs) 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 a normal or transformed-normal distribution, non-parametric tolerance limits were used. When parametric methods were appropriate, a 95% UTL with 95% coverage was calculated. When non-parametric UTLs were appropriate, the level of confidence could not be pre-specified and was a function of the size of the data set. The level of confidence for the non-parametric UTLs were provided in the GSC2023 reports (Appendix C). The background limits were evaluated when determining the GWPS under 40 CFR § 257.95(h).

On July 30, 2018, US EPA revised the CCR Rule providing a GWPS for cobalt (0.006 mg/L), lead (0.015 mg/L), lithium (0.040 mg/L), and molybdenum (0.100 mg/L). On February 22, 2022, GA EPD updated the Rules for Solid Waste Management 391-3-4-.10(6) to incorporate the updated Federal GWPS where a maximum contaminant level (MCL) had not been established. Statistical evaluations have been updated since the Spring 2022 event to reflect these changes.

As described in 40 CFR § 257.95(h) (1-3), the GWPS is:

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

Table 7 summarizes the background limits established for each CCR Rule Appendix IV and GA EPD Appendix I (silver) 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.



4.4 Statistical Analyses Results – Appendix I and Appendix III

Based on review of the GA EPD CCR Rule Appendix III statistical analysis from the August 2023 sampling event, groundwater conditions have not returned to background concentrations and assessment monitoring will continue. Note that GA EPD 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.

4.5 Statistical Analyses Results – Appendix IV

The August 2023 GWPS are based on MCLs, the GA EPD adopted federal GWPS (cobalt, molybdenum, lithium, and lead), and site-specific background concentrations, as required by GA EPD. Appendix C shows the individual well/constituent pairs for CCR Rule Appendix IV constituents and GA EPD constituent (silver) with their respective confidence intervals in comparison to the respective constituent GWPS. Based on the statistical results presented in Appendix C, the identified SSLs and monitoring events include:

- August 2023:
 - Lithium: ARAMW-7
 - Cobalt: ARAMW-7



5.0 Nature and Extent

Based on statistical analysis of Appendix IV groundwater data, the cobalt and lithium SSLs identified in the compliance well ARAMW-7 are horizontally and vertically delineated to levels below GWPS by Beaverdam Creek and ARAMW-9, respectively. Due to the presence of Beaverdam Creek in the downgradient direction of ARAMW-7 and the topography in this area, installation of additional wells to horizontally characterize this area is infeasible. Based on cobalt and lithium data collected from Beaverdam Creek to date, horizontal delineation is complete. The lateral extent of the cobalt and lithium SSLs is limited to an area less than approximately 100 feet wide.



6.0 Monitoring Program Status

Pursuant to 40 CFR § 257.96(b), Georgia Power will continue to monitor the groundwater at AP-2 DAS in accordance with the assessment monitoring program regulations in 40 CFR § 257.95 while ACM efforts continue to be evaluated. Pursuant to 40 CFR § 257.95(g)(1)(iv), the assessment monitoring wells will continue to be sampled as part of the ongoing groundwater monitoring program.



7.0 Conclusions & Future Actions

The *2023 Semi-Annual Groundwater Monitoring and Corrective Action Report* was prepared to fulfill the requirements of US EPA's 40 CFR §257.95 and GA EPD Rules for Solid Waste Management 391-3-4-.10. Review of analytical results and statistical analyses indicate SSLs of cobalt and lithium in well ARAMW-7, which are above the established GWPS. Horizontal delineation of cobalt and lithium SSLs is considered complete by surface water sampling in Beaverdam Creek, and vertical delineation has been achieved by installation and sampling of well ARAMW-9. Thus, horizontal and vertical delineation of the cobalt and lithium SSLs in well ARAMW-7 is completed at AP-2 DAS.

Georgia Power will continue to monitor AP-2 DAS under the assessment monitoring program pursuant to 40 CFR §257.95. A Draft Remedy Selection Report, which includes additional data collected in support of ACM efforts and summarizes the evaluation and selection of a proposed corrective measure, or measures, will be submitted to GA EPD under separate cover on February 28, 2024. The next semi-annual sampling event is planned for January 2024 and will include sampling and analysis of CCR Rule Appendix III and Appendix IV constituents, as well as permit-specific GA EPD Appendix I constituents. Progress made regarding the remedy selection and evaluation will be included in the next groundwater monitoring report.



8.0 References

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- Wood Environment & Infrastructure Solutions, Inc., 2020b. *Assessment of Corrective Measures* – Georgia Power Company Plant Arkwright Ash Pond 2 Dry Ash Stockpile, December 4, 2020.
- Wood Environment & Infrastructure Solutions, Inc., 2021a. *Semi-Annual Remedy Selection and Design Progress Report* – Georgia Power Company Plant Arkwright Ash Pond 2 Dry Ash Stockpile, July 30, 2021.



TABLES



TABLE 1
SUMMARY OF MONITORING WELL CONSTRUCTION
Georgia Power Company - Plant Arkwright
Ash Pond 2 Dry Ash Stockpile
Macon, Georgia

Well	Installation Date	Northing ⁽¹⁾	Eastings ⁽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 (feet below land surface)	Groundwater Zone Screened	Hydraulic Location
Detection Monitoring Wells											
ARGWA-19	12/16/2008	1063774.45	2439488.71	343.30	339.86	300.18	290.18	10.0	49.98	Bedrock	Upgradient
ARGWA-20	12/4/2008	1063732.73	2439088.01	331.28	327.73	303.18	293.18	10.0	34.85	Overburden	Upgradient
ARGWC-21	12/2/2008	1062941.24	2439112.52	309.15	305.97	291.70	281.70	10.0	24.57	Overburden	Downgradient
ARGWC-22	11/19/2019	1063039.36	2438925.04	309.95	307.01	292.01	282.01	10.0	25.00	Overburden	Downgradient
ARGWC-23	11/20/2019	1062884.38	2439202.38	307.70	304.29	289.29	279.29	10.0	25.00	Overburden	Downgradient
Assessment Monitoring Wells											
ARAMW-1	11/20/2019	1062938.38	2439120.01	308.51	305.07	271.07	261.07	10.0	44.00	Bedrock	Downgradient
ARAMW-2	11/20/2019	1062925.96	2439114.97	308.27	305.12	293.12	283.12	10.0	22.00	Overburden	Downgradient
ARAMW-7 ⁽⁵⁾	11/14/2020	1063049.07	2438913.27	309.81	307.13	269.43	259.43	10.0	48.00	Bedrock	Downgradient
ARAMW-8 ⁽⁵⁾	11/13/2020	1062895.98	2439197.40	307.36	304.53	267.83	257.83	10.0	47.00	Bedrock	Downgradient
ARAMW-9 ⁽⁶⁾	10/7/2022	1063022.92	2438935.47	309.28	306.31	213.91	203.91	10.0	102.90	Bedrock	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-7 and ARAMW-8 were surveyed by Donaldson & Garrett Associates and certified on December 18, 2020.
6. ARAMW-9 was surveyed by Metro Engineering & Surveying CO., Inc. on November 22, 2022.

TABLE 2
GROUNDWATER SAMPLING EVENT SUMMARY
Georgia Power Company - Plant Arkwright
Ash Pond 2 Dry Ash Stockpile
Macon, Georgia

Well ID	Hydraulic Location	Summary of Sampling	Status of Monitoring Well
		August 8 - 10, 2023	
ASH POND 2 DRY ASH STOCKPILE MONITORING WELL NETWORK			
ARGWA-19	Upgradient	X	Assessment Monitoring
ARGWA-20	Upgradient	X	Assessment Monitoring
ARGWC-21	Downgradient	X	Assessment Monitoring
ARGWC-22	Downgradient	X	Assessment Monitoring
ARGWC-23	Downgradient	X	Assessment Monitoring
ARAMW-1	Delineation Piezometer	X	Assessment Monitoring
ARAMW-2	Delineation Piezometer	X	Assessment Monitoring
ARAMW-7	Delineation Piezometer	X	Assessment Monitoring
ARAMW-8	Delineation Piezometer	X	Assessment Monitoring
ARAMW-9	Delineation Piezometer	X	Assessment Monitoring

Notes:

X - Indicates well sampled during monitoring event

TABLE 3
SUMMARY OF GROUNDWATER ELEVATIONS
Georgia Power Company - Plant Arkwright
Ash Pond 2 Dry Ash Stockpile
Macon, Georgia

Well ID	Top of Casing Elevation (feet NAVD88) ⁽¹⁾⁽²⁾	Depth to Water (feet below TOC) ⁽²⁾	Groundwater Elevation (feet NAVD88) ⁽¹⁾
Measurement Date	8/7/2023		
ARGWA-19	343.30	27.77	315.53
ARGWA-20	331.28	15.03	316.25
ARGWC-21	309.15	14.37	294.78
ARGWC-22	309.95	14.15	295.80
ARGWC-23	307.70	12.19	295.51
ARAMW-1	308.51	13.58	294.93
ARAMW-2	308.27	13.71	294.56
ARAMW-7	309.81	13.20	296.61
ARAMW-8	307.36	11.84	295.52
ARAMW-9	309.28	15.50	293.78

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 2 Dry Ash Stockpile
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 7, 2023	ARGWA-20 to ARGWC-21	316.25	294.78	21.47	792	0.027	0.74	0.2	0.100	36.6
	ARGWA-19 to ARAMW-1	315.53	294.93	20.60	907	0.023	0.77	0.2	0.087	31.9

Notes:

1. 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.
2. Hydraulic conductivity (K) for the ARGWA-20 to ARGWC-21 well pair is the geometric mean value determined via slug testing three overburden wells in the AP-2 groundwater monitoring system
3. Hydraulic conductivity (K) for the ARGWA-19 to ARAMW-1 well pair is the geometric mean value determined via slug testing three bedrock wells in the AP-2 groundwater monitoring system

**TABLE 5
ANALYTICAL DATA SUMMARY - GROUNDWATER
Georgia Power Company - Plant Arkwright
Ash Pond 2 Dry Ash Stockpile
Macon, Georgia**

Substance	ARGWA-19	ARGWA-20	ARGWC-21	ARGWC-22	ARGWC-23	ARAMW-1	ARAMW-2	ARAMW-7	ARAMW-8	ARAMW-9
	8/8/2023	8/10/2023	8/9/2023	8/8/2023	8/8/2023	8/8/2023	8/8/2023	8/8/2023	8/9/2023	8/8/2023
Boron	0.0199	0.0714	1.12	3.06	0.379	1.13	1.07	2.25	0.770	0.0666
Calcium	8.51	11.0	82.9	196	66.6	83.4	87.1	279	78.6	146
Chloride	6.37	6.50	3.35	6.79	3.60	3.61	3.35	5.50	5.13	36.1
Fluoride	< 0.0330	< 0.0330	0.203	< 0.0660	0.283	0.118	0.0571 J	< 0.0330	0.261	0.837
Sulfate	8.29	18.5	214	719	69.8	223	243	1060	114	477
TDS	62.0	105	520	1220	294	524	548	1620	436	852
pH	5.81	5.55	6.6	5.61	6.33	6.38	6.01	5.47	8.71	8.13
Antimony	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100	0.00134 J	0.00158 J
Arsenic	< 0.00200	< 0.00200	< 0.00200	< 0.00200	< 0.00200	< 0.00200	0.0120	< 0.00200	< 0.00200	< 0.00200
Barium	0.0337	0.107	0.0474	0.0255	0.0936	0.0510	0.0753	0.0244	0.122	0.0207
Beryllium	< 0.000200	0.000275 J	< 0.000200	< 0.000200	< 0.000200	< 0.000200	< 0.000200	0.000272 J	< 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	< 0.00300	0.00684 J	< 0.00300	< 0.00300	< 0.00300	< 0.00300	< 0.00300	< 0.00300	< 0.00300	< 0.00300
Cobalt	< 0.000300	0.000814 J	0.000813 J	0.00184	0.000440 J	0.000350 J	0.00223	0.0605	0.00364	< 0.000300
Lead	< 0.000500	< 0.000500	< 0.000500	< 0.000500	< 0.000500	< 0.000500	< 0.000500	< 0.000500	< 0.000500	< 0.000500
Lithium	0.00382 J	< 0.00300	0.0131	0.0280	0.0517	0.00909 J	0.0193	0.0577	0.00637 J	0.00907 J
Mercury	< 0.0000670	< 0.0000670	< 0.0000670	< 0.0000670	< 0.0000670	< 0.0000670	< 0.0000670	< 0.0000670	< 0.0000670	< 0.0000670
Molybdenum	0.000421 J	< 0.000200	< 0.000200	0.000514 J	0.0618	0.00667	0.00110	< 0.000200	0.203	0.0109
Radium	1.80	1.80	2.69	1.22 U	0.363 U	1.16 U	1.86	4.83	0.193 U	3.92
Selenium	< 0.00150	< 0.00150	< 0.00150	< 0.00150	< 0.00150	< 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	< 0.000600
Silver*	< 0.000300	< 0.000300	< 0.000300	< 0.000300	< 0.000300	< 0.000300	< 0.000300	< 0.000300	< 0.000300	< 0.000300
Total Alkalinity	37.0	43.8	162	117	175	184	180	55.3	245	91.1
Bicarbonate Alkalinity	37.0	43.8	162	117	175	184	180	55.3	245	91.1
Carbonate Alkalinity	< 0.725	< 0.725	< 0.725	< 0.725	< 0.725	< 0.725	< 0.725	< 0.725	< 0.725	< 0.725
Aluminum	< 0.0193	1.52	0.0254 J	0.0513	< 0.0193	0.0342 J	0.0505	0.0265 J	< 0.0193	0.0354 J
Iron	< 0.0330	1.90	0.719	2.73	0.0491 J	0.239	6.78	4.04	0.515	0.580
Manganese	< 0.00100	0.0285	0.348	12.4	0.278	0.145	0.943	14.3	0.279	0.172
Magnesium	3.36	6.28	41.8	85.0	10.5	35.7	35.7	73.8	32.1	10.5
Potassium	2.08	1.86	6.43	5.10	1.68	5.37	7.58	8.74	7.34	7.85
Sodium	9.51	11.5	21.0	29.2	13.3	19.3	18.8	26.1	18.1	107

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. * - Georgia Appendix I constituent that is not also included in Appendix IV.
7. NA indicates constituent was not analyzed

TABLE 6
ANALYTICAL DATA SUMMARY - SURFACE WATER
Georgia Power Company - Plant Arkwright
Ash Pond 2 Dry Ash Stockpile
Macon, Georgia

Substance		Surface Water Sample Location				
		BC-0.8a	BC-0.5.7	BC-0.5.6	BC-0.5.5	BC-BR
		8/10/2023	8/10/2023	8/10/2023	8/10/2023	8/10/2023
APPENDIX III	Boron	<0.04	<0.04	<0.04	<0.04	<0.04
	Calcium	8.2	8.5	8.4	8.6	8.8
	Chloride	6.7	7.2	7.3	7.9	7.7
	Fluoride	<0.1	<0.1	<0.1	<0.1	<0.1
	Sulfate	2.6	3.8	4.4	4.4	4.4
	TDS	81.0	86.0	90.0	87.0	87.0
	pH	6.97	7.03	7.08	7.04	7.05
APP IV*	Cobalt	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
	Lithium	<0.03	<0.03	<0.03	<0.03	<0.03
	Molybdenum	<0.01	<0.01	<0.01	<0.01	<0.01
ADDITIONAL ANALYTES	Total Alkalinity	44.3	45.7	45.9	45.2	45.8
	Bicarbonate Alkalinity	44.3	45.7	45.9	45.2	45.8
	Magnesium	3.7	3.8	3.8	3.8	4.0
	Potassium	2.5	2.5	2.4	2.4	2.6
	Sodium	7.4	7.6	7.4	7.5	7.9

Notes:

1. Results for constituents are reported in milligrams per liter (mg/L).
2. < indicates the constituent was not detected above the analytical reporting limit (RL).
3. TDS indicates total dissolved solids.
4. * - Targeted Appendix IV parameters

TABLE 7
SUMMARY OF GROUNDWATER PROTECTION STANDARDS
Georgia Power Company - Plant Arkwright
Ash Pond 2 Dry Ash Stockpile
Macon, Georgia

PLANT ARKWRIGHT AP-2 DAS GWPS					
Constituent Name	UNITS	MCL	CCR-Rule Specified^[1]	Site Specific Background Limit^[2] August 2023	State GWPS August 2023
Antimony	mg/L	0.006		0.003	0.006
Arsenic	mg/L	0.01		0.005	0.01
Barium	mg/L	2		0.1	2
Beryllium	mg/L	0.004		0.0005	0.004
Cadmium	mg/L	0.005		0.001	0.005
Chromium	mg/L	0.1		0.01	0.1
Cobalt	mg/L	n/a	0.006	0.001	0.006
Combined Radium	pCi/L	5		2.33	5
Fluoride	mg/L	4		0.15	4
Lead	mg/L	n/a	0.015	0.002	0.015
Lithium	mg/L	n/a	0.04	0.013	0.04
Mercury	mg/L	0.002		0.0002	0.002
Molybdenum	mg/L	n/a	0.1	0.001	0.1
Selenium	mg/L	0.05		0.005	0.05
Silver	mg/L	n/a		0.001	0.001
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

GA EPD = Georgia Environmental Protection Division

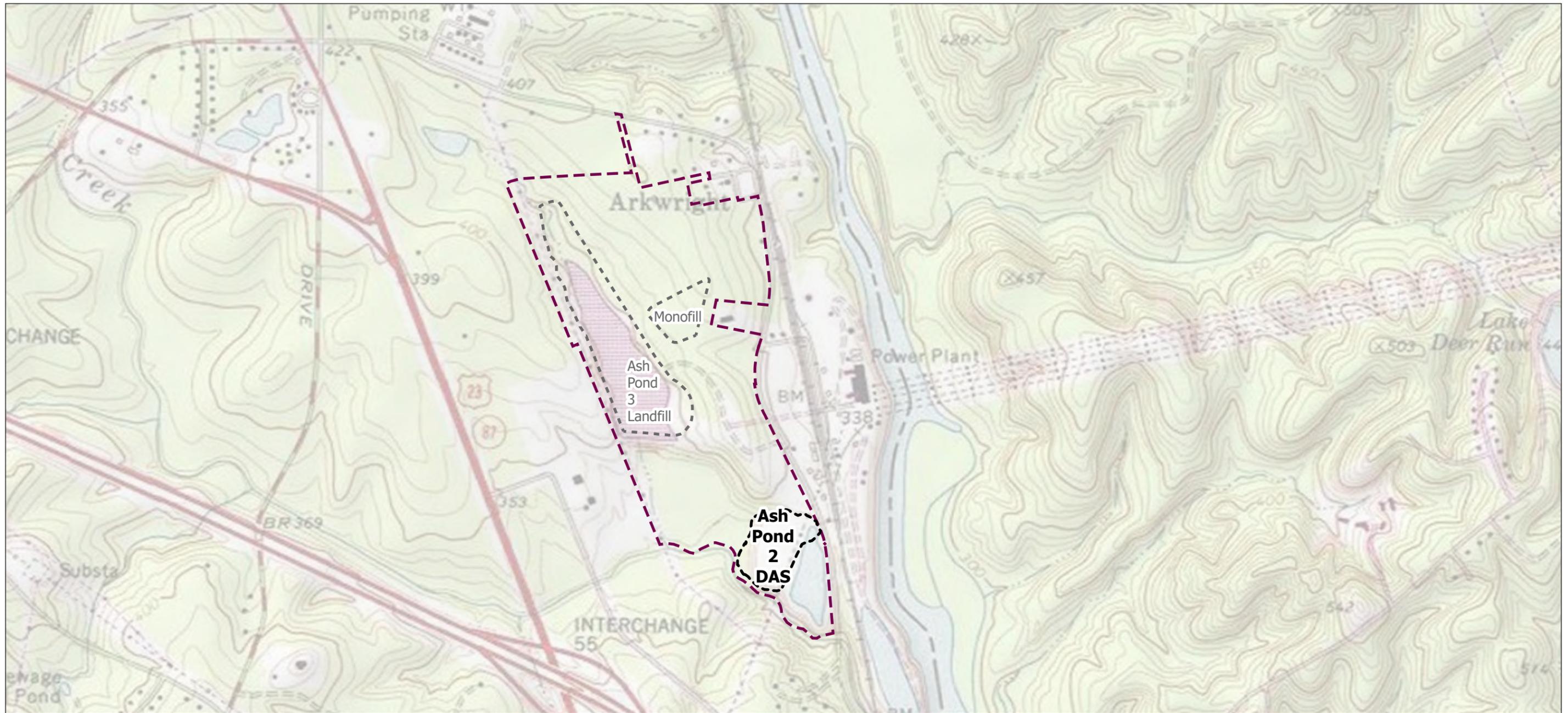
AP-2 DAS = Ash Pond 2 Dry Ash Stockpile

[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.

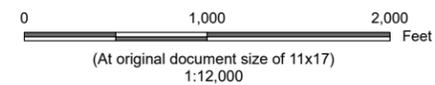
[2] The background limits are evaluated when determining the GWPS under 40 CFR § 257.95(h) and 391-3-4-.10(6)(a).

FIGURES





- Legend**
- Approximate Property Boundary
 - Ash Pond 2 Dry Ash Stockpile (DAS) (approximate location)
 - Ash Pond 3 Landfill and Monofill (approximate location)



Project Location
Macon, Georgia

Prepared by DMB on 12/5/2023
TR by CS on 12/5/2023
IR by JK on 12/5/2023

Client/Project
Georgia Power
2023 Semi-Annual Groundwater Monitoring and Corrective Action
Report - Plant Arkwright Ash Pond 2 Dry Ash Stockpile

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-2 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
 - Surface Water Sampling Location
 - Beaverdam Creek/Ocmulgee River (Approximate)
 - Approximate Property Boundary
 - Ash Pond 2 Dry Ash Stockpile (DAS) (approximate location)
 - Limit of Client Imagery (dated 7/13/2023)



Project Location
Macon, Georgia

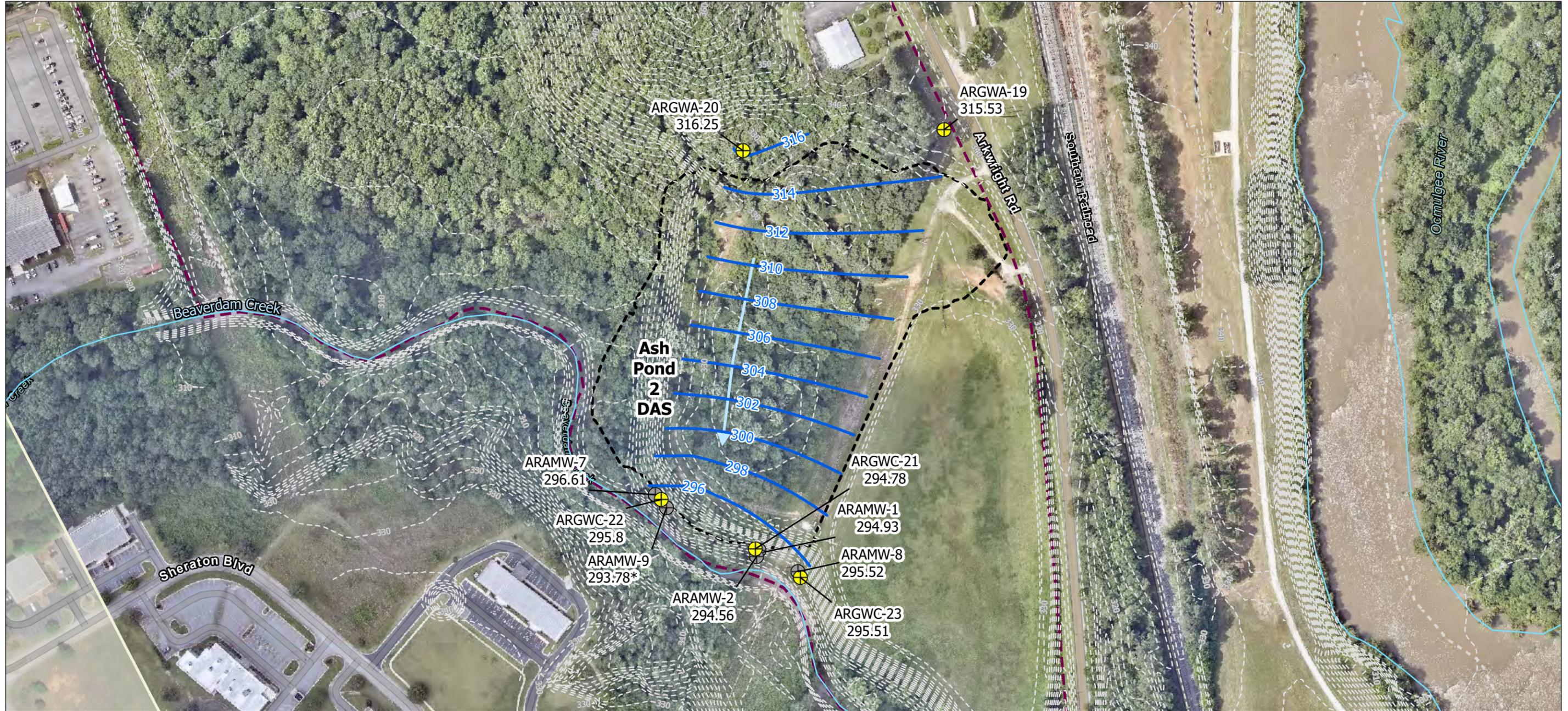
Prepared by DMB on 2/27/2024
TR by CS on 2/27/2024
IR by JK on 2/27/2024

Client/Project
Georgia Power
2023 Semi-Annual Groundwater Monitoring and Corrective Action Report - Plant Arkwright Ash Pond 2 Dry Ash Stockpile
175569434

Figure No.

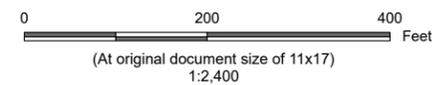
2

Title
Detection Monitoring Network Well, Assessment Monitoring Well, and Sampling Locations Map



- Legend**
- Detection Monitoring Well
 - Assessment Monitoring Well
 - Potentiometric Surface Contour Aug 2023 (ft NAVD88)
 - Interpreted Groundwater Flow Direction
 - Topographic Contour 2018 (2 ft interval)
 - Beaverdam Creek/Ocmulgee River (Approximate)
 - Approximate Property Boundary
 - Ash Pond 2 Dry Ash Stockpile (DAS) (approximate location)
 - Limit of Client Imagery (dated 7/13/2023)

295.51 Groundwater Elevation (ft NAVD88)
 An "*" indicates groundwater elevation for ARAMW-9 was not used in contouring.



Project Location
 Macon, Georgia

Prepared by DMB on 1/8/2024
 TR by CS on 1/8/2024
 IR by JK on 1/8/2024

Client/Project
 Georgia Power
 2023 Semi-Annual Groundwater Monitoring and Corrective Action
 Report - Plant Arkwright Ash Pond 2 Dry Ash Stockpile

Figure No.
3

Title
**Potentiometric Surface Contour
 Map AP-2 DAS – August 7, 2023**

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: Hydrogeological investigation
 Date: 8/7/2023
 Monitoring Well No.: ARAMW-1
 Priority Maintenance Item Identified: N/A

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 plan for the facility?	X			
c	Does the well require redevelopment (low-flow, turbid)?		X		

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

N/A

Prepared By / Date: John Myer 8/8/2023

DL/SME Review By / Date: Calli Provenza 8/16/2023

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: Hydrogeological investigation
 Date: 8/11/2023
 Monitoring Well No.: ARAMW-2
 Priority Maintenance Item Identified: N/A

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 plan for the facility?			x	
c	Does the well require redevelopment (low-flow, turbid)?		x		

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

N/A

Prepared By / Date: Houston Lynn 8/11/2023
 DL/SME Review By / Date: Calli Provenza 8/14/2023

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: Hydrogeological investigation
 Date: 8/11/2023
 Monitoring Well No.: ARAMW-7
 Priority Maintenance Item Identified: N/A

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 plan for the facility?			x	
c	Does the well require redevelopment (low-flow, turbid)?		x		
Comments: Include inspection details, including items requiring repair or maintenance.					
N/A					
Prepared By / Date: <u>Houston Lynn 8/11/2023</u>					
DL/SME Review By / Date: <u>Calli Provenza 8/14/2023</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: Hydrogeological investigation
 Date: 8/9/2023
 Monitoring Well No.: ARAMW-8
 Priority Maintenance Item Identified: N/A

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

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

N/A

Prepared By / Date: Dylan Ripley/8-9-2023

DL/SME Review By / Date: Calli Provenza 8/10/2023

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: Hydrogeological investigation
 Date: 8/7/2023
 Monitoring Well No.: ARAMW-9
 Priority Maintenance Item Identified: N/A

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 plan for the facility?	X			
c	Does the well require redevelopment (low-flow, turbid)?	X			

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

N/A

Prepared By / Date: John Myer 8/8/2023

DL/SME Review By / Date: Calli Provenza 8/16/2023

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: Hydrogeological investigation

 Date: 8/7/2023
 Monitoring Well No.: ARGWA-19
 Priority Maintenance Item Identified: N/A

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 plan for the facility?	X			
c	Does the well require redevelopment (low-flow, turbid)?		X		

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

Prepared By / Date: Dylan Quintal 8/8/2023
 DL/SME Review By / Date: Calli Provenza 8/16/2023

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: Hydrogeological investigation
 Date: 8/7/2023
 Monitoring Well No.: ARGWA-20
 Priority Maintenance Item Identified: N/A

	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 plan for the facility?	X			
c	Does the well require redevelopment (low-flow, turbid)?		X		

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

N/A

Prepared By / Date: Dylan Quintal 8/8/2023

DL/SME Review By / Date: Calli Provenza 8/16/2023

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: Hydrogeological investigation
 Date: 8/7/2023
 Monitoring Well No.: ARGWC-21
 Priority Maintenance Item Identified: N/A

	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 plan for the facility?	X			
c	Does the well require redevelopment (low-flow, turbid)?		X		

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

N/A

Prepared By / Date: John Myer 8/9/2023

DL/SME Review By / Date: Calli Provenza 8/16/2023

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: Hydrogeological investigation
 Date: 8/11/2023
 Monitoring Well No.: ARGWC-22
 Priority Maintenance Item Identified: N/A

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 plan for the facility?			x	
c	Does the well require redevelopment (low-flow, turbid)?		x		

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

N/A

Prepared By / Date: Houston Lynn 8/11/2023
 DL/SME Review By / Date: Calli Provenza 8/14/2023

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: Hydrogeological investigation
 Date: 8/11/2023
 Monitoring Well No.: ARGWC-23
 Priority Maintenance Item Identified: N/A

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 plan for the facility?			x	
c	Does the well require redevelopment (low-flow, turbid)?		x		

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

N/A

Prepared By / Date: Houston Lynn 8/11/2023
 DL/SME Review By / Date: Calli Provenza 8/14/2023

Appendix B

Field Sampling Data and Analytical Data Reports



B.1 Well Redevelopment Logs



Low-Flow Test Report:

Test Date / Time: 7/25/2023 4:32:14 PM

Project: Arkwright

Operator Name: C. Powlus

Location Name: Arkwright, AP-2, ARAMW-1 Latitude: 32.9213805080727 Longitude: -83.7021031603217 Well Diameter: 2 in Casing Type: PVC Screen Length: 10 ft Top of Screen: 34.9 ft Total Depth: 45.15 ft Initial Depth to Water: 15.22 ft	Pump Type: Reclaimer Tubing Type: LDPE Tubing Inner Diameter: 0.17 in Tubing Length: 33 ft Pump Intake From TOC: 40 ft Estimated Total Volume Pumped: 16625 ml Flow Cell Volume: 90 ml Final Flow Rate: 250 ml/min Final Draw Down: -0.82 ft	Instrument Used: Aqua TROLL 400 Serial Number: 884187
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Test Notes:

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 10 %	+/- 10 %	+/- 10	+/- 0.33	
7/25/2023 4:32 PM	00:00	6.09 pH	20.89 °C	764.67 µS/cm	1.31 mg/L	13.60 NTU	82.3 mV	15.22 ft	250.00 ml/min
7/25/2023 4:38 PM	06:30	6.11 pH	23.35 °C	766.22 µS/cm	2.74 mg/L	12.00 NTU	83.4 mV	14.75 ft	250.00 ml/min
7/25/2023 4:42 PM	10:30	6.28 pH	22.17 °C	732.16 µS/cm	4.23 mg/L	10.30 NTU	59.1 mV	14.43 ft	250.00 ml/min
7/25/2023 4:46 PM	14:30	6.07 pH	20.76 °C	748.55 µS/cm	1.59 mg/L	9.73 NTU	81.5 mV	14.34 ft	250.00 ml/min
7/25/2023 4:50 PM	18:30	6.06 pH	19.83 °C	758.31 µS/cm	1.16 mg/L	8.76 NTU	81.6 mV	14.33 ft	250.00 ml/min
7/25/2023 4:54 PM	22:30	6.05 pH	19.96 °C	758.86 µS/cm	1.11 mg/L	33.70 NTU	80.8 mV	14.30 ft	250.00 ml/min
7/25/2023 4:58 PM	26:30	6.05 pH	19.69 °C	757.14 µS/cm	0.98 mg/L	99.00 NTU	76.1 mV	14.40 ft	250.00 ml/min
7/25/2023 5:02 PM	30:30	6.03 pH	19.60 °C	754.55 µS/cm	0.83 mg/L	9.64 NTU	79.7 mV	14.40 ft	250.00 ml/min
7/25/2023 5:06 PM	34:30	6.02 pH	19.61 °C	754.09 µS/cm	0.75 mg/L	9.41 NTU	80.6 mV	14.40 ft	250.00 ml/min
7/25/2023 5:10 PM	38:30	6.01 pH	19.62 °C	756.02 µS/cm	0.64 mg/L	9.46 NTU	81.2 mV	14.40 ft	250.00 ml/min
7/25/2023 5:14 PM	42:30	5.99 pH	19.95 °C	757.16 µS/cm	0.59 mg/L	33.70 NTU	81.2 mV	14.40 ft	250.00 ml/min
7/25/2023 5:18 PM	46:30	5.98 pH	19.64 °C	755.61 µS/cm	0.56 mg/L	38.40 NTU	75.6 mV	14.40 ft	250.00 ml/min
7/25/2023 5:22 PM	50:30	5.96 pH	19.60 °C	751.40 µS/cm	0.47 mg/L	35.60 NTU	79.6 mV	14.40 ft	250.00 ml/min
7/25/2023 5:26 PM	54:30	5.95 pH	19.55 °C	750.79 µS/cm	0.37 mg/L	12.30 NTU	81.0 mV	14.40 ft	250.00 ml/min

7/25/2023 5:30 PM	58:30	5.94 pH	19.51 °C	752.17 µS/cm	0.35 mg/L	4.47 NTU	81.0 mV	14.40 ft	250.00 ml/min
7/25/2023 5:34 PM	01:02:30	5.93 pH	19.57 °C	753.52 µS/cm	0.30 mg/L	4.67 NTU	80.8 mV	14.40 ft	250.00 ml/min
7/25/2023 5:38 PM	01:06:30	5.92 pH	19.62 °C	753.40 µS/cm	0.30 mg/L	4.77 NTU	81.7 mV	14.40 ft	250.00 ml/min

Samples

Sample ID:	Description:
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Low-Flow Test Report:

Test Date / Time: 7/26/2023 10:57:50 AM

Project: Arkwright

Operator Name: C. Powlus

Location Name: Arkwright, AP-2, AWGWA-20 Latitude: 32.9235858171567 Longitude: -83.7022553756833 Well Diameter: 2 in Casing Type: PVC Screen Length: 10 ft Top of Screen: 27.7 ft Total Depth: 37.7 ft Initial Depth to Water: 19.03 ft	Pump Type: Reclaimer Tubing Type: LDPE Tubing Inner Diameter: 0.17 in Tubing Length: 33 ft Pump Intake From TOC: 32.7 ft Estimated Total Volume Pumped: 129408.336 ml Flow Cell Volume: 90 ml Final Flow Rate: 500 ml/min Final Draw Down: 1.42 ft	Instrument Used: Aqua TROLL 400 Serial Number: 884187
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Test Notes:

Weather Conditions:

Hot

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	
7/26/2023 10:57 AM	00:00	5.83 pH	19.07 °C	151.93 µS/cm	5.44 mg/L		158.8 mV	19.65 ft	500.00 ml/min
7/26/2023 11:02 AM	05:00	5.73 pH	18.98 °C	149.97 µS/cm	5.55 mg/L	178.00 NTU	140.7 mV	19.74 ft	500.00 ml/min
7/26/2023 11:07 AM	10:00	5.70 pH	18.89 °C	149.60 µS/cm	5.63 mg/L	90.30 NTU	138.0 mV	19.84 ft	500.00 ml/min
7/26/2023 11:12 AM	15:00	5.68 pH	18.83 °C	152.04 µS/cm	5.49 mg/L	323.00 NTU	176.7 mV	19.98 ft	500.00 ml/min
7/26/2023 11:17 AM	20:00	5.67 pH	18.89 °C	151.26 µS/cm	5.50 mg/L	297.00 NTU	175.2 mV	20.18 ft	500.00 ml/min
7/26/2023 11:22 AM	25:00	5.64 pH	18.90 °C	151.15 µS/cm	5.49 mg/L	186.00 NTU	175.3 mV	20.20 ft	500.00 ml/min
7/26/2023 11:27 AM	30:00	5.62 pH	18.84 °C	151.70 µS/cm	5.61 mg/L	138.00 NTU	174.8 mV	20.22 ft	500.00 ml/min
7/26/2023 11:32 AM	35:00	5.61 pH	18.89 °C	152.16 µS/cm	5.62 mg/L	98.40 NTU	131.0 mV	20.25 ft	500.00 ml/min
7/26/2023 11:37 AM	40:00	5.59 pH	18.84 °C	152.27 µS/cm	5.66 mg/L	72.30 NTU	129.8 mV	20.28 ft	500.00 ml/min
7/26/2023 11:42 AM	45:00	5.56 pH	18.98 °C	152.45 µS/cm	5.65 mg/L	67.20 NTU	134.4 mV	20.32 ft	500.00 ml/min
7/26/2023 11:47 AM	50:00	5.56 pH	18.89 °C	152.53 µS/cm	5.62 mg/L	52.90 NTU	121.7 mV	20.36 ft	500.00 ml/min
7/26/2023 12:02 PM	01:04:12	5.51 pH	18.98 °C	152.28 µS/cm	5.61 mg/L	46.00 NTU	182.6 mV	20.40 ft	500.00 ml/min

7/26/2023 12:07 PM	01:09:12	5.50 pH	19.11 °C	152.95 µS/cm	5.60 mg/L	102.50 NTU	137.2 mV	20.47 ft	500.00 ml/min
7/26/2023 12:12 PM	01:14:12	5.48 pH	19.17 °C	150.94 µS/cm	5.48 mg/L	76.90 NTU	178.2 mV	20.54 ft	500.00 ml/min
7/26/2023 12:17 PM	01:19:12	5.49 pH	19.09 °C	152.24 µS/cm	5.51 mg/L	56.10 NTU	133.9 mV	20.60 ft	500.00 ml/min
7/26/2023 12:22 PM	01:24:12	5.49 pH	19.06 °C	152.47 µS/cm	5.54 mg/L	43.20 NTU	174.0 mV	20.70 ft	500.00 ml/min
7/26/2023 12:27 PM	01:29:12	5.48 pH	19.09 °C	152.78 µS/cm	5.56 mg/L	21.40 NTU	133.5 mV	20.80 ft	500.00 ml/min
7/26/2023 12:32 PM	01:34:12	5.49 pH	19.15 °C	152.45 µS/cm	5.60 mg/L	14.50 NTU	132.3 mV	20.90 ft	500.00 ml/min
7/26/2023 12:37 PM	01:39:12	5.49 pH	19.24 °C	153.41 µS/cm	5.60 mg/L	18.80 NTU	134.2 mV	20.96 ft	500.00 ml/min
7/26/2023 12:42 PM	01:44:12	5.42 pH	19.02 °C	145.69 µS/cm	5.54 mg/L	318.00 NTU	173.5 mV	21.02 ft	500.00 ml/min
7/26/2023 12:43 PM	01:45:40	5.44 pH	19.02 °C	148.50 µS/cm	5.48 mg/L	552.00 NTU	146.4 mV	21.04 ft	500.00 ml/min
7/26/2023 12:48 PM	01:50:53	5.46 pH	19.03 °C	151.06 µS/cm	5.50 mg/L	314.00 NTU	149.6 mV	21.06 ft	500.00 ml/min
7/26/2023 12:53 PM	01:55:53	5.48 pH	19.12 °C	151.98 µS/cm	5.52 mg/L	264.00 NTU	171.7 mV	21.08 ft	500.00 ml/min
7/26/2023 12:58 PM	02:00:53	5.49 pH	19.10 °C	153.09 µS/cm	5.51 mg/L	135.00 NTU	130.3 mV	21.10 ft	500.00 ml/min
7/26/2023 1:03 PM	02:05:53	5.50 pH	19.20 °C	153.00 µS/cm	5.50 mg/L	84.30 NTU	129.7 mV	21.15 ft	500.00 ml/min
7/26/2023 1:08 PM	02:10:53	5.50 pH	19.17 °C	152.30 µS/cm	5.49 mg/L	63.20 NTU	129.2 mV	21.10 ft	500.00 ml/min
7/26/2023 1:13 PM	02:15:53	5.50 pH	19.05 °C	152.50 µS/cm	5.47 mg/L	54.10 NTU	133.3 mV	21.05 ft	500.00 ml/min
7/26/2023 1:18 PM	02:20:53	5.49 pH	18.98 °C	151.18 µS/cm	5.46 mg/L	49.80 NTU	128.8 mV	21.00 ft	500.00 ml/min
7/26/2023 1:23 PM	02:25:53	5.52 pH	18.97 °C	152.79 µS/cm	5.58 mg/L	44.10 NTU	129.3 mV	20.70 ft	500.00 ml/min
7/26/2023 1:28 PM	02:30:53	5.52 pH	18.93 °C	152.09 µS/cm	5.49 mg/L	43.20 NTU	128.0 mV	20.65 ft	500.00 ml/min
7/26/2023 1:33 PM	02:35:53	5.52 pH	19.12 °C	152.78 µS/cm	5.52 mg/L	35.70 NTU	127.9 mV	20.60 ft	500.00 ml/min
7/26/2023 1:38 PM	02:40:53	5.53 pH	19.15 °C	152.30 µS/cm	5.53 mg/L	31.20 NTU	119.4 mV	20.55 ft	500.00 ml/min
7/26/2023 1:43 PM	02:45:53	5.53 pH	19.28 °C	152.35 µS/cm	5.56 mg/L	26.60 NTU	165.6 mV	20.50 ft	500.00 ml/min
7/26/2023 2:11 PM	03:13:49	5.59 pH	19.15 °C	152.77 µS/cm	5.50 mg/L	15.70 NTU	188.4 mV	20.45 ft	500.00 ml/min
7/26/2023 2:16 PM	03:18:49	5.59 pH	19.06 °C	152.59 µS/cm	5.49 mg/L	12.50 NTU	142.4 mV	20.45 ft	500.00 ml/min
7/26/2023 2:21 PM	03:23:49	5.60 pH	19.28 °C	153.09 µS/cm	5.48 mg/L	10.10 NTU	134.6 mV	20.45 ft	500.00 ml/min
7/26/2023 2:26 PM	03:28:49	5.61 pH	19.20 °C	152.84 µS/cm	5.53 mg/L	8.83 NTU	132.5 mV	20.45 ft	500.00 ml/min
7/26/2023 2:31 PM	03:33:49	5.61 pH	19.11 °C	151.88 µS/cm	5.52 mg/L	7.90 NTU	131.7 mV	20.45 ft	500.00 ml/min
7/26/2023 2:36 PM	03:38:49	5.62 pH	19.29 °C	152.98 µS/cm	5.53 mg/L	7.50 NTU	130.8 mV	20.45 ft	500.00 ml/min
7/26/2023 2:41 PM	03:43:49	5.63 pH	19.33 °C	153.21 µS/cm	5.52 mg/L	7.23 NTU	130.3 mV	20.45 ft	500.00 ml/min
7/26/2023 2:46 PM	03:48:49	5.64 pH	19.37 °C	153.25 µS/cm	5.52 mg/L	6.11 NTU	129.7 mV	20.45 ft	500.00 ml/min

7/26/2023 2:51 PM	03:53:49	5.66 pH	19.50 °C	153.62 µS/cm	5.48 mg/L	6.02 NTU	124.6 mV	20.45 ft	500.00 ml/min
7/26/2023 2:56 PM	03:58:49	5.66 pH	19.42 °C	153.38 µS/cm	5.48 mg/L	5.76 NTU	127.5 mV	20.45 ft	500.00 ml/min
7/26/2023 3:01 PM	04:03:49	5.66 pH	19.33 °C	153.02 µS/cm	5.50 mg/L	5.17 NTU	128.6 mV	20.45 ft	500.00 ml/min
7/26/2023 3:06 PM	04:08:49	5.67 pH	19.53 °C	153.85 µS/cm	5.51 mg/L	4.92 NTU	124.3 mV	20.45 ft	500.00 ml/min
7/26/2023 3:11 PM	04:13:49	5.68 pH	19.51 °C	153.28 µS/cm	5.50 mg/L	3.85 NTU	123.9 mV	20.45 ft	500.00 ml/min
7/26/2023 3:16 PM	04:18:49	5.68 pH	19.79 °C	153.59 µS/cm	5.49 mg/L	3.16 NTU	124.8 mV	20.45 ft	500.00 ml/min

Samples

Sample ID:	Description:
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Low-Flow Test Report:

Test Date / Time: 7/24/2023 3:05:52 PM

Project: Arkwright

Operator Name: Dylan Quintal

Location Name: Arkwright, AP-2, ARGWC-22 Latitude: 32.9217536921101 Longitude: -83.7028370797634 Well Diameter: 2 in Casing Type: PVC Screen Length: 10 ft Top of Screen: 17.71 ft Total Depth: 27.71 ft Initial Depth to Water: 14.26 ft	Pump Type: Reclaimer Tubing Type: LDPE Pump Intake From TOC: 22.71 ft Estimated Total Volume Pumped: 47519.168 ml Flow Cell Volume: 90 ml Final Flow Rate: 200 ml/min Final Draw Down: 0.35 ft	Instrument Used: Aqua TROLL 400 Serial Number: 966090
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Test Notes:

Weather Conditions:

Sunny, 92F

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	
7/24/2023 3:05 PM	00:00	5.69 pH	19.02 °C	1,341.4 µS/cm	0.74 mg/L		53.5 mV	14.26 ft	450.00 ml/min
7/24/2023 3:06 PM	00:27	5.70 pH	19.02 °C	1,366.0 µS/cm	0.76 mg/L		55.1 mV	14.26 ft	450.00 ml/min
7/24/2023 3:06 PM	00:59	5.70 pH	19.01 °C	1,371.4 µS/cm	0.77 mg/L		49.4 mV	14.26 ft	450.00 ml/min
7/24/2023 3:11 PM	05:59	5.72 pH	19.37 °C	1,377.9 µS/cm	0.71 mg/L		46.9 mV	14.26 ft	450.00 ml/min
7/24/2023 3:16 PM	10:59	5.77 pH	18.97 °C	1,359.4 µS/cm	0.59 mg/L		38.5 mV	14.26 ft	450.00 ml/min
7/24/2023 3:21 PM	15:59	5.70 pH	18.87 °C	1,390.7 µS/cm	0.26 mg/L		47.7 mV	14.26 ft	450.00 ml/min
7/24/2023 3:26 PM	20:59	5.71 pH	18.96 °C	1,377.7 µS/cm	0.52 mg/L		48.1 mV	14.26 ft	450.00 ml/min
7/24/2023 3:31 PM	25:59	5.70 pH	18.82 °C	1,384.9 µS/cm	0.49 mg/L		51.3 mV	14.26 ft	450.00 ml/min
7/24/2023 3:36 PM	30:59	5.74 pH	18.82 °C	1,377.3 µS/cm	0.88 mg/L		49.1 mV	14.26 ft	450.00 ml/min
7/24/2023 3:41 PM	35:59	5.76 pH	18.95 °C	1,379.4 µS/cm	0.67 mg/L		42.8 mV	14.26 ft	450.00 ml/min
7/24/2023 3:46 PM	40:59	5.73 pH	19.14 °C	1,392.4 µS/cm	0.51 mg/L		44.2 mV	14.26 ft	450.00 ml/min
7/24/2023 3:51 PM	45:59	5.70 pH	18.82 °C	1,405.2 µS/cm	0.56 mg/L		49.0 mV	14.26 ft	450.00 ml/min

7/24/2023 3:56 PM	50:59	5.73 pH	18.75 °C	1,402.5 µS/cm	0.63 mg/L		47.1 mV	14.26 ft	450.00 ml/min
7/24/2023 4:01 PM	55:59	5.73 pH	18.60 °C	1,396.1 µS/cm	0.93 mg/L		45.9 mV	14.26 ft	450.00 ml/min
7/24/2023 4:06 PM	01:00:59	5.73 pH	18.45 °C	1,406.1 µS/cm	0.41 mg/L		45.5 mV	14.26 ft	450.00 ml/min
7/24/2023 4:11 PM	01:05:59	5.75 pH	18.37 °C	1,395.2 µS/cm	0.58 mg/L		42.4 mV	14.26 ft	450.00 ml/min
7/24/2023 4:16 PM	01:10:59	5.80 pH	18.68 °C	1,394.8 µS/cm	4.09 mg/L		43.2 mV	14.26 ft	450.00 ml/min
7/24/2023 4:21 PM	01:15:59	6.42 pH	18.26 °C	942.96 µS/cm	6.21 mg/L		12.7 mV	14.26 ft	450.00 ml/min
7/24/2023 4:26 PM	01:20:59	5.75 pH	18.49 °C	1,394.3 µS/cm	0.48 mg/L		52.3 mV	14.26 ft	450.00 ml/min
7/24/2023 4:31 PM	01:25:59	5.81 pH	18.74 °C	1,397.3 µS/cm	3.15 mg/L		44.6 mV	14.26 ft	450.00 ml/min
7/24/2023 4:36 PM	01:30:59	5.74 pH	19.60 °C	1,402.8 µS/cm	1.60 mg/L		52.9 mV	14.26 ft	450.00 ml/min
7/24/2023 4:41 PM	01:35:59	5.70 pH	20.47 °C	1,415.6 µS/cm	1.44 mg/L	13.60 NTU	53.7 mV	14.26 ft	200.00 ml/min
7/24/2023 4:46 PM	01:40:59	5.70 pH	20.43 °C	1,418.0 µS/cm	1.34 mg/L	11.50 NTU	54.2 mV	14.26 ft	200.00 ml/min
7/24/2023 4:51 PM	01:45:59	5.70 pH	20.63 °C	1,420.0 µS/cm	1.25 mg/L	9.74 NTU	53.1 mV	14.26 ft	200.00 ml/min
7/24/2023 4:56 PM	01:50:59	5.70 pH	20.57 °C	1,416.9 µS/cm	1.19 mg/L	9.85 NTU	53.0 mV	14.26 ft	200.00 ml/min
7/24/2023 5:01 PM	01:55:59	5.70 pH	20.63 °C	1,415.7 µS/cm	1.15 mg/L	8.84 NTU	52.6 mV	14.26 ft	200.00 ml/min
7/24/2023 5:03 PM	01:57:37	5.70 pH	20.60 °C	1,410.9 µS/cm	1.12 mg/L	8.55 NTU	55.4 mV	14.26 ft	200.00 ml/min

Samples

Sample ID:	Description:
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Low-Flow Test Report:

Test Date / Time: 7/24/2023 4:54:13 PM

Project: Arkwright

Operator Name: A. Shoredits

Location Name: Arkwright, AP2-ARAMW-7 Well Diameter: 2 in Casing Type: PVC Screen Length: 10 ft Top of Screen: 40.3 ft Total Depth: 50.78 ft Initial Depth to Water: 13.35 ft	Pump Type: Reclaimer Tubing Type: LDPE Pump Intake From TOC: 45 ft Estimated Total Volume Pumped: 8750 ml Flow Cell Volume: 90 ml Final Flow Rate: 350 ml/min Final Draw Down: 0.69 ft	Instrument Used: Aqua TROLL 400 Serial Number: 843593
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Test Notes:

Parameters taken post purging around 70-72 Liters and lowering purge rate from 650 ml/min to 350 ml/min.

Weather Conditions:

Sunny, 33 degrees C

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 10	+/- 5 %	+/- 0.2	+/- 10	+/- 20	+/- 0.3	
7/24/2023 4:54 PM	00:00	5.50 pH	20.05 °C	1,723.6 µS/cm	0.16 mg/L	20.30 NTU	37.9 mV	14.04 ft	350.00 ml/min
7/24/2023 4:59 PM	05:00	5.50 pH	20.09 °C	1,731.6 µS/cm	0.10 mg/L	14.30 NTU	37.7 mV	14.01 ft	350.00 ml/min
7/24/2023 5:04 PM	10:00	5.49 pH	20.14 °C	1,731.1 µS/cm	0.09 mg/L	10.20 NTU	37.7 mV	13.96 ft	350.00 ml/min
7/24/2023 5:09 PM	15:00	5.50 pH	20.13 °C	1,737.7 µS/cm	0.08 mg/L	8.49 NTU	37.1 mV	13.97 ft	350.00 ml/min
7/24/2023 5:14 PM	20:00	5.49 pH	20.08 °C	1,735.2 µS/cm	0.09 mg/L	8.91 NTU	37.2 mV	13.97 ft	350.00 ml/min
7/24/2023 5:19 PM	25:00	5.49 pH	20.13 °C	1,739.6 µS/cm	0.11 mg/L	7.92 NTU	36.8 mV	13.94 ft	350.00 ml/min

Samples

Sample ID:	Description:
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Low-Flow Test Report:

Test Date / Time: 7/25/2023 1:10:56 PM

Project: Arkwright

Operator Name: B. Pennell

Location Name: Arkwright, AP-2, ARAMW-2 Latitude: 32.9214114660844 Longitude: -83.7021614983678 Well Diameter: 2 in Casing Type: PVC Screen Length: 10 ft Top of Screen: 14.82 ft Total Depth: 24.78 ft Initial Depth to Water: 13.84 ft	Pump Type: Reclaimer Pump Tubing Type: LDPE Tubing Inner Diameter: 0.375 in Tubing Length: 30 ft Pump Intake From TOC: 20 ft Estimated Total Volume Pumped: 130500 ml Flow Cell Volume: 90 ml Final Flow Rate: 450 ml/min Final Draw Down: 0.06 ft	Instrument Used: Aqua TROLL 400 Serial Number: 850751
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Test Notes:

Well redevelopment

Controller settings: CPM4 ID: 98, PSI: 18

Weather Conditions:

Mostly sunny, 33 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	
7/25/2023 1:10 PM	00:00	6.04 pH	22.50 °C	711.14 µS/cm	1.31 mg/L	1,000.00 NTU	37.4 mV	13.90 ft	450.00 ml/min
7/25/2023 1:15 PM	05:00	6.02 pH	21.33 °C	729.00 µS/cm	1.00 mg/L	964.00 NTU	19.3 mV	13.90 ft	450.00 ml/min
7/25/2023 1:20 PM	10:00	6.01 pH	20.94 °C	729.79 µS/cm	0.56 mg/L	1,000.00 NTU	19.2 mV	13.90 ft	450.00 ml/min
7/25/2023 1:25 PM	15:00	6.00 pH	21.30 °C	739.78 µS/cm	0.34 mg/L	932.00 NTU	18.4 mV	13.90 ft	450.00 ml/min
7/25/2023 1:30 PM	20:00	6.02 pH	21.36 °C	757.24 µS/cm	0.66 mg/L	1,000.00 NTU	5.7 mV	13.90 ft	450.00 ml/min
7/25/2023 1:35 PM	25:00	6.02 pH	21.24 °C	765.20 µS/cm	0.55 mg/L	962.00 NTU	6.9 mV	13.90 ft	450.00 ml/min
7/25/2023 1:40 PM	30:00	6.02 pH	20.98 °C	775.65 µS/cm	0.40 mg/L	852.00 NTU	-3.7 mV	13.90 ft	450.00 ml/min
7/25/2023 1:45 PM	35:00	6.01 pH	21.25 °C	776.68 µS/cm	0.16 mg/L	570.00 NTU	-1.5 mV	13.90 ft	450.00 ml/min
7/25/2023 1:50 PM	40:00	6.02 pH	21.03 °C	791.03 µS/cm	0.23 mg/L	291.00 NTU	-6.1 mV	13.90 ft	450.00 ml/min
7/25/2023 1:55 PM	45:00	6.02 pH	21.31 °C	788.75 µS/cm	0.17 mg/L	866.00 NTU	-4.3 mV	13.90 ft	450.00 ml/min
7/25/2023 2:00 PM	50:00	6.03 pH	21.22 °C	801.13 µS/cm	0.11 mg/L	545.00 NTU	-10.3 mV	13.90 ft	450.00 ml/min

7/25/2023 2:05 PM	55:00	6.04 pH	21.06 °C	813.02 µS/cm	0.15 mg/L	312.00 NTU	-16.3 mV	13.90 ft	450.00 ml/min
7/25/2023 2:10 PM	01:00:00	6.04 pH	21.09 °C	818.16 µS/cm	0.16 mg/L	213.00 NTU	-15.8 mV	13.90 ft	450.00 ml/min
7/25/2023 2:15 PM	01:05:00	6.04 pH	20.93 °C	821.60 µS/cm	0.30 mg/L	149.00 NTU	-13.2 mV	13.90 ft	450.00 ml/min
7/25/2023 2:20 PM	01:10:00	6.05 pH	20.86 °C	825.60 µS/cm	0.24 mg/L	115.00 NTU	-13.1 mV	13.90 ft	450.00 ml/min
7/25/2023 2:25 PM	01:15:00	6.04 pH	20.73 °C	821.86 µS/cm	0.29 mg/L	1,000.00 NTU	-12.1 mV	13.90 ft	450.00 ml/min
7/25/2023 2:30 PM	01:20:00	6.05 pH	20.53 °C	828.85 µS/cm	0.27 mg/L	1,000.00 NTU	-2.4 mV	13.90 ft	450.00 ml/min
7/25/2023 2:35 PM	01:25:00	6.06 pH	20.43 °C	834.89 µS/cm	0.40 mg/L	407.00 NTU	-13.2 mV	13.90 ft	450.00 ml/min
7/25/2023 2:40 PM	01:30:00	6.07 pH	20.45 °C	867.78 µS/cm	0.37 mg/L	151.00 NTU	-14.6 mV	13.90 ft	450.00 ml/min
7/25/2023 2:45 PM	01:35:00	6.08 pH	20.40 °C	876.95 µS/cm	0.35 mg/L	1,000.00 NTU	-15.7 mV	13.90 ft	450.00 ml/min
7/25/2023 2:50 PM	01:40:00	6.07 pH	20.34 °C	873.75 µS/cm	0.30 mg/L	730.00 NTU	-15.2 mV	13.90 ft	450.00 ml/min
7/25/2023 2:55 PM	01:45:00	6.08 pH	20.26 °C	887.32 µS/cm	0.35 mg/L	246.00 NTU	-18.5 mV	13.90 ft	450.00 ml/min
7/25/2023 3:00 PM	01:50:00	6.08 pH	20.37 °C	896.32 µS/cm	0.38 mg/L	1,000.00 NTU	-18.4 mV	13.90 ft	450.00 ml/min
7/25/2023 3:05 PM	01:55:00	6.07 pH	20.21 °C	881.12 µS/cm	0.28 mg/L	540.00 NTU	-16.2 mV	13.90 ft	450.00 ml/min
7/25/2023 3:10 PM	02:00:00	6.08 pH	20.17 °C	889.67 µS/cm	0.35 mg/L	143.00 NTU	-7.5 mV	13.90 ft	450.00 ml/min
7/25/2023 3:15 PM	02:05:00	6.09 pH	20.16 °C	906.31 µS/cm	0.33 mg/L	130.00 NTU	-19.4 mV	13.90 ft	450.00 ml/min
7/25/2023 3:20 PM	02:10:00	6.09 pH	20.19 °C	906.05 µS/cm	0.41 mg/L	79.20 NTU	-7.2 mV	13.90 ft	450.00 ml/min
7/25/2023 3:25 PM	02:15:00	6.09 pH	20.17 °C	908.66 µS/cm	0.34 mg/L	44.20 NTU	-17.9 mV	13.90 ft	450.00 ml/min
7/25/2023 3:30 PM	02:20:00	6.08 pH	20.18 °C	878.42 µS/cm	0.29 mg/L	1,000.00 NTU	-15.9 mV	13.90 ft	450.00 ml/min
7/25/2023 3:35 PM	02:25:00	6.08 pH	20.15 °C	892.56 µS/cm	0.26 mg/L	1,000.00 NTU	-16.9 mV	13.90 ft	450.00 ml/min
7/25/2023 3:40 PM	02:30:00	6.09 pH	20.17 °C	902.51 µS/cm	0.40 mg/L	342.00 NTU	-19.3 mV	13.90 ft	450.00 ml/min
7/25/2023 3:45 PM	02:35:00	6.10 pH	20.22 °C	917.52 µS/cm	0.41 mg/L	158.00 NTU	-19.1 mV	13.90 ft	450.00 ml/min
7/25/2023 3:50 PM	02:40:00	6.10 pH	20.13 °C	919.29 µS/cm	0.35 mg/L	61.50 NTU	-18.9 mV	13.90 ft	450.00 ml/min
7/25/2023 3:55 PM	02:45:00	6.10 pH	20.22 °C	925.31 µS/cm	0.35 mg/L	43.30 NTU	-18.9 mV	13.90 ft	450.00 ml/min
7/25/2023 4:00 PM	02:50:00	6.10 pH	20.13 °C	933.30 µS/cm	0.35 mg/L	27.60 NTU	-7.7 mV	13.90 ft	450.00 ml/min
7/25/2023 4:05 PM	02:55:00	6.09 pH	20.13 °C	906.81 µS/cm	0.22 mg/L	1,000.00 NTU	-4.9 mV	13.90 ft	450.00 ml/min
7/25/2023 4:10 PM	03:00:00	6.10 pH	20.08 °C	946.82 µS/cm	0.38 mg/L	184.00 NTU	-20.0 mV	13.90 ft	450.00 ml/min
7/25/2023 4:15 PM	03:05:00	6.11 pH	20.14 °C	951.92 µS/cm	0.35 mg/L	79.20 NTU	-20.5 mV	13.90 ft	450.00 ml/min
7/25/2023 4:20 PM	03:10:00	6.11 pH	20.03 °C	949.91 µS/cm	0.33 mg/L	39.30 NTU	-20.8 mV	13.90 ft	450.00 ml/min
7/25/2023 4:25 PM	03:15:00	6.11 pH	20.08 °C	950.94 µS/cm	0.40 mg/L	1,000.00 NTU	-19.9 mV	13.90 ft	450.00 ml/min

7/25/2023 4:30 PM	03:20:00	6.11 pH	20.04 °C	971.00 µS/cm	0.38 mg/L	250.00 NTU	-21.7 mV	13.90 ft	450.00 ml/min
7/25/2023 4:35 PM	03:25:00	6.11 pH	20.13 °C	965.70 µS/cm	0.37 mg/L	112.00 NTU	-20.4 mV	13.90 ft	450.00 ml/min
7/25/2023 4:40 PM	03:30:00	6.11 pH	20.10 °C	962.53 µS/cm	0.34 mg/L	70.00 NTU	-8.9 mV	13.90 ft	450.00 ml/min
7/25/2023 4:45 PM	03:35:00	6.11 pH	20.08 °C	959.52 µS/cm	0.35 mg/L	57.40 NTU	-20.3 mV	13.90 ft	450.00 ml/min
7/25/2023 4:50 PM	03:40:00	6.11 pH	20.07 °C	960.44 µS/cm	0.30 mg/L	40.80 NTU	-20.4 mV	13.90 ft	450.00 ml/min
7/25/2023 4:55 PM	03:45:00	6.09 pH	20.13 °C	884.75 µS/cm	0.16 mg/L	1,000.00 NTU	-14.6 mV	13.90 ft	450.00 ml/min
7/25/2023 5:00 PM	03:50:00	6.10 pH	20.05 °C	945.76 µS/cm	0.34 mg/L	445.00 NTU	-19.7 mV	13.90 ft	450.00 ml/min
7/25/2023 5:05 PM	03:55:00	6.11 pH	20.08 °C	961.43 µS/cm	0.39 mg/L	119.00 NTU	-8.7 mV	13.90 ft	450.00 ml/min
7/25/2023 5:10 PM	04:00:00	6.11 pH	20.05 °C	962.94 µS/cm	0.34 mg/L	58.60 NTU	-9.1 mV	13.90 ft	450.00 ml/min
7/25/2023 5:15 PM	04:05:00	6.12 pH	20.06 °C	966.30 µS/cm	0.33 mg/L	34.70 NTU	-20.1 mV	13.90 ft	450.00 ml/min
7/25/2023 5:20 PM	04:10:00	6.11 pH	20.07 °C	962.76 µS/cm	0.33 mg/L	24.60 NTU	-8.4 mV	13.90 ft	450.00 ml/min
7/25/2023 5:25 PM	04:15:00	6.11 pH	20.03 °C	965.27 µS/cm	0.35 mg/L	18.30 NTU	-18.6 mV	13.90 ft	450.00 ml/min
7/25/2023 5:30 PM	04:20:00	6.12 pH	20.01 °C	964.42 µS/cm	0.36 mg/L	14.90 NTU	-18.6 mV	13.90 ft	450.00 ml/min
7/25/2023 5:35 PM	04:25:00	6.11 pH	19.95 °C	965.67 µS/cm	0.32 mg/L	13.20 NTU	-17.9 mV	13.90 ft	450.00 ml/min
7/25/2023 5:40 PM	04:30:00	6.11 pH	19.96 °C	970.45 µS/cm	0.33 mg/L	12.70 NTU	-18.5 mV	13.90 ft	450.00 ml/min
7/25/2023 5:45 PM	04:35:00	6.11 pH	19.99 °C	965.66 µS/cm	0.33 mg/L	9.83 NTU	-7.3 mV	13.90 ft	450.00 ml/min
7/25/2023 5:50 PM	04:40:00	6.12 pH	19.95 °C	965.61 µS/cm	0.35 mg/L	8.83 NTU	-17.6 mV	13.90 ft	450.00 ml/min
7/25/2023 5:55 PM	04:45:00	6.11 pH	19.97 °C	961.53 µS/cm	0.34 mg/L	8.66 NTU	-17.1 mV	13.90 ft	450.00 ml/min
7/25/2023 6:00 PM	04:50:00	6.11 pH	19.91 °C	965.11 µS/cm	0.30 mg/L	8.20 NTU	-6.3 mV	13.90 ft	450.00 ml/min

Samples

Sample ID:	Description:
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Low-Flow Test Report:

Test Date / Time: 7/25/2023 2:21:09 PM

Project: Arkwright

Operator Name: C. Powlus

Location Name: Arkwright, AP-2, ARGWC-23 Latitude: 32.9213146519027 Longitude: -83.7018463388085 Well Diameter: 2 in Casing Type: PVC Screen Length: 10 ft Top of Screen: 18.05 ft Total Depth: 28.05 ft Initial Depth to Water: 14.55 ft	Pump Type: Reclaimer Tubing Type: LDPE Tubing Inner Diameter: 0.17 in Tubing Length: 33 ft Pump Intake From TOC: 23 ft Estimated Total Volume Pumped: 6500 ml Flow Cell Volume: 90 ml Final Flow Rate: 125 ml/min Final Draw Down: 0 ft	Instrument Used: Aqua TROLL 400 Serial Number: 884187
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Test Notes:

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 10 %	+/- 10 %	+/- 10	+/- 0.33	
7/25/2023 2:21 PM	00:00	6.32 pH	23.86 °C	484.36 µS/cm	1.29 mg/L	96.50 NTU	94.4 mV	14.55 ft	125.00 ml/min
7/25/2023 2:25 PM	04:00	6.29 pH	23.76 °C	486.20 µS/cm	1.56 mg/L	193.00 NTU	94.6 mV	14.55 ft	125.00 ml/min
7/25/2023 2:29 PM	08:00	6.27 pH	23.62 °C	485.95 µS/cm	1.55 mg/L	157.00 NTU	98.7 mV	14.55 ft	125.00 ml/min
7/25/2023 2:33 PM	12:00	6.25 pH	23.48 °C	486.02 µS/cm	1.65 mg/L	138.00 NTU	101.5 mV	14.55 ft	125.00 ml/min
7/25/2023 2:37 PM	16:00	6.22 pH	23.55 °C	486.73 µS/cm	1.62 mg/L	121.00 NTU	102.8 mV	14.55 ft	125.00 ml/min
7/25/2023 2:41 PM	20:00	6.20 pH	23.60 °C	486.68 µS/cm	1.57 mg/L	99.00 NTU	102.1 mV	14.55 ft	125.00 ml/min
7/25/2023 2:45 PM	24:00	6.17 pH	23.47 °C	486.31 µS/cm	1.68 mg/L	23.80 NTU	102.5 mV	14.55 ft	125.00 ml/min
7/25/2023 2:49 PM	28:00	6.15 pH	23.38 °C	485.97 µS/cm	1.63 mg/L	16.50 NTU	101.9 mV	14.55 ft	125.00 ml/min
7/25/2023 2:53 PM	32:00	6.13 pH	23.37 °C	486.58 µS/cm	1.58 mg/L	11.40 NTU	101.8 mV	14.55 ft	125.00 ml/min
7/25/2023 2:57 PM	36:00	6.11 pH	23.23 °C	486.15 µS/cm	1.57 mg/L	10.10 NTU	101.3 mV	14.55 ft	125.00 ml/min
7/25/2023 3:01 PM	40:00	6.09 pH	23.35 °C	486.42 µS/cm	1.54 mg/L	9.70 NTU	101.7 mV	14.55 ft	125.00 ml/min
7/25/2023 3:05 PM	44:00	6.08 pH	23.21 °C	485.41 µS/cm	1.47 mg/L	8.04 NTU	101.1 mV	14.55 ft	125.00 ml/min
7/25/2023 3:09 PM	48:00	6.07 pH	22.93 °C	486.76 µS/cm	1.41 mg/L	8.05 NTU	100.2 mV	14.55 ft	125.00 ml/min
7/25/2023 3:13 PM	52:00	6.06 pH	23.37 °C	486.20 µS/cm	1.36 mg/L	7.64 NTU	100.5 mV	14.55 ft	125.00 ml/min

Samples

Sample ID:	Description:
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Created using VuSitu from In-Situ, Inc.

Low-Flow Test Report:

Test Date / Time: 7/25/2023 5:20:23 PM

Project: Arkwright

Operator Name: Dylan Quintal

Location Name: Arkwright, AP-2, ARAMW-8 Latitude: 32.92135039436 Longitude: -83.7019157409668 Well Diameter: 2 in Casing Type: PVC Screen Length: 10 ft Top of Screen: 39.54 ft Total Depth: 49.54 ft Initial Depth to Water: 12.15 ft	Pump Type: Reclaimer Tubing Type: LDPE Pump Intake From TOC: 44.54 ft Estimated Total Volume Pumped: 6250 ml Flow Cell Volume: 90 ml Final Flow Rate: 210 ml/min Final Draw Down: 30.35 ft	Instrument Used: Aqua TROLL 400 Serial Number: 966090
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Test Notes:

Pumped 2.5 well volumes before beginning of low-flow testing, i.e. ~15 gallons

Weather Conditions:

Sunny, 94F

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	
7/25/2023 5:20 PM	00:00	6.64 pH	23.33 °C	702.18 µS/cm	5.95 mg/L	58.40 NTU	39.7 mV	42.50 ft	250.00 ml/min
7/25/2023 5:25 PM	05:00	6.58 pH	23.64 °C	696.31 µS/cm	5.89 mg/L	14.80 NTU	46.1 mV	42.50 ft	250.00 ml/min
7/25/2023 5:30 PM	10:00	6.58 pH	23.91 °C	699.41 µS/cm	5.62 mg/L	10.90 NTU	43.3 mV	42.50 ft	250.00 ml/min
7/25/2023 5:35 PM	15:00	6.58 pH	23.87 °C	700.62 µS/cm	5.52 mg/L	9.57 NTU	42.2 mV	42.50 ft	250.00 ml/min
7/25/2023 5:40 PM	20:00	6.58 pH	24.10 °C	703.32 µS/cm	5.33 mg/L	9.43 NTU	39.9 mV	42.50 ft	250.00 ml/min
7/25/2023 5:45 PM	25:00	6.57 pH	24.06 °C	702.49 µS/cm	5.31 mg/L	7.52 NTU	40.1 mV	42.50 ft	250.00 ml/min

Samples

Sample ID:	Description:
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Low-Flow Test Report:

Test Date / Time: 7/26/2023 3:40:03 PM

Project: Arkwright

Operator Name: Dylan Quintal

Location Name: Arkwright, AP-2, ARGWC-21 Latitude: 32.9214266636498 Longitude: -83.7021735683084 Well Diameter: 2 in Casing Type: PVC Screen Length: 10 ft Top of Screen: 17.29 m Total Depth: 27.29 ft Initial Depth to Water: 14.48 ft	Pump Type: Reclaimer Tubing Type: LDPE Pump Intake From TOC: 22.79 ft Estimated Total Volume Pumped: 17875 ml Flow Cell Volume: 90 ml Final Flow Rate: 275 ml/min Final Draw Down: 4.37 ft	Instrument Used: Aqua TROLL 400 Serial Number: 883546
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Test Notes:

Setting ID: 95

Pressure: 24 psi

Purged ~17.5 gallons of water before beginning of low-flow testing.

Weather Conditions:

Sunny, 96F

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	
7/26/2023 3:40 PM	00:00	6.16 pH	21.43 °C	815.85 µS/cm	2.44 mg/L	34.90 NTU	73.7 mV	18.60 ft	275.00 ml/min
7/26/2023 3:45 PM	05:00	6.13 pH	21.71 °C	850.60 µS/cm	2.25 mg/L	23.50 NTU	74.4 mV	18.60 ft	275.00 ml/min
7/26/2023 3:50 PM	10:00	6.12 pH	21.68 °C	853.46 µS/cm	2.15 mg/L	22.40 NTU	74.2 mV	18.60 ft	275.00 ml/min
7/26/2023 3:55 PM	15:00	6.11 pH	21.53 °C	855.20 µS/cm	2.04 mg/L	18.20 NTU	73.9 mV	18.60 ft	275.00 ml/min
7/26/2023 4:00 PM	20:00	6.10 pH	21.31 °C	845.27 µS/cm	1.83 mg/L	16.60 NTU	73.6 mV	18.60 ft	275.00 ml/min
7/26/2023 4:05 PM	25:00	6.09 pH	21.24 °C	859.15 µS/cm	1.80 mg/L	12.50 NTU	73.6 mV	18.60 ft	275.00 ml/min
7/26/2023 4:10 PM	30:00	6.09 pH	21.19 °C	847.58 µS/cm	1.70 mg/L	11.00 NTU	74.1 mV	18.60 ft	275.00 ml/min
7/26/2023 4:15 PM	35:00	6.09 pH	20.95 °C	851.21 µS/cm	1.62 mg/L	9.84 NTU	74.0 mV	18.60 ft	275.00 ml/min
7/26/2023 4:20 PM	40:00	6.08 pH	21.00 °C	843.56 µS/cm	1.51 mg/L	7.62 NTU	73.9 mV	18.60 ft	275.00 ml/min
7/26/2023 4:25 PM	45:00	6.09 pH	21.26 °C	850.14 µS/cm	1.47 mg/L	6.84 NTU	74.3 mV	18.60 ft	275.00 ml/min
7/26/2023 4:30 PM	50:00	6.09 pH	21.11 °C	845.00 µS/cm	1.25 mg/L	5.26 NTU	73.4 mV	18.60 ft	275.00 ml/min

7/26/2023 4:35 PM	55:00	6.08 pH	21.02 °C	853.44 µS/cm	1.23 mg/L	3.91 NTU	73.3 mV	18.60 ft	275.00 ml/min
7/26/2023 4:40 PM	01:00:00	6.08 pH	21.04 °C	849.30 µS/cm	1.13 mg/L	4.77 NTU	73.2 mV	18.85 ft	275.00 ml/min
7/26/2023 4:45 PM	01:05:00	6.08 pH	20.99 °C	844.06 µS/cm	1.05 mg/L	3.92 NTU	72.8 mV	18.85 ft	275.00 ml/min

Samples

Sample ID:	Description:
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Low-Flow Test Report:

Test Date / Time: 7/26/2023 10:40:44 AM

Project: Arkwright

Operator Name: A. Shoredits

Location Name: Arkwright, AP2-ARAMW-9 Well Diameter: 2 in Casing Type: PVC Screen Length: 10 ft Top of Screen: 95 ft Total Depth: 105.48 ft Initial Depth to Water: 77.3 ft	Pump Type: Reclaimer Tubing Type: LDPE Pump Intake From TOC: 100 ft Estimated Total Volume Pumped: 5400 ml Flow Cell Volume: 90 ml Final Flow Rate: 100 ml/min Final Draw Down: 17.42 ft	Instrument Used: Aqua TROLL 400 Serial Number: 843593
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Test Notes:

Well redevelopment final stabilization purge not completed due to excessive drawdown to the top of well screen elevation

Weather Conditions:

Sunny, 32 degrees C

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 10	+/- 5 %	+/- 0.2	+/- 10	+/- 20	+/- 0.3	
7/26/2023 10:40 AM	00:00	7.84 pH	21.20 °C	1,042.7 µS/cm	7.46 mg/L	263.00 NTU	-18.3 mV	88.72 ft	140.00 ml/min
7/26/2023 10:45 AM	05:00	7.84 pH	21.51 °C	1,034.3 µS/cm	5.93 mg/L	144.00 NTU	-43.3 mV	90.53 ft	140.00 ml/min
7/26/2023 10:50 AM	10:00	7.84 pH	21.77 °C	1,033.5 µS/cm	4.71 mg/L	120.00 NTU	-23.8 mV	90.68 ft	100.00 ml/min
7/26/2023 10:55 AM	15:00	7.83 pH	22.05 °C	1,020.5 µS/cm	3.78 mg/L	102.00 NTU	-55.1 mV	91.34 ft	100.00 ml/min
7/26/2023 11:00 AM	20:00	7.83 pH	22.44 °C	1,006.0 µS/cm	3.47 mg/L	81.10 NTU	-27.3 mV	91.65 ft	100.00 ml/min
7/26/2023 11:05 AM	25:00	7.82 pH	22.46 °C	996.69 µS/cm	3.19 mg/L	56.20 NTU	-25.8 mV	92.20 ft	100.00 ml/min
7/26/2023 11:10 AM	30:00	7.81 pH	22.62 °C	986.09 µS/cm	2.96 mg/L	38.80 NTU	-49.3 mV	92.78 ft	100.00 ml/min
7/26/2023 11:15 AM	35:00	7.79 pH	22.72 °C	980.05 µS/cm	2.80 mg/L	34.20 NTU	-24.8 mV	93.27 ft	100.00 ml/min
7/26/2023 11:20 AM	40:00	7.79 pH	22.89 °C	975.52 µS/cm	2.76 mg/L	77.50 NTU	-23.5 mV	93.71 ft	100.00 ml/min
7/26/2023 11:25 AM	45:00	7.79 pH	22.97 °C	971.20 µS/cm	2.96 mg/L	38.10 NTU	-47.4 mV	94.42 ft	100.00 ml/min
7/26/2023 11:30 AM	50:00	7.78 pH	23.19 °C	971.26 µS/cm	2.87 mg/L	29.10 NTU	-21.5 mV	94.72 ft	100.00 ml/min

Samples

Sample ID:	Description:
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Created using VuSitu from In-Situ, Inc.

Low-Flow Test Report:

Test Date / Time: 7/26/2023 4:47:43 PM

Project: Arkwright

Operator Name: A. Shoredits

Location Name: Arkwright, AP2-ARAMW-9 Well Diameter: 2 in Casing Type: PVC Screen Length: 10 ft Top of Screen: 95 ft Total Depth: 105.48 ft Initial Depth to Water: 90.52 ft	Pump Type: Reclaimer Tubing Type: LDPE Pump Intake From TOC: 100 ft Estimated Total Volume Pumped: 3300 ml Flow Cell Volume: 90 ml Final Flow Rate: 100 ml/min Final Draw Down: 5.28 ft	Instrument Used: Aqua TROLL 400 Serial Number: 843593
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Test Notes:

2nd Purge effort; Recharge rate is approximately 9.1 ml/min (1 ft/68 mins)

Weather Conditions:

Sunny, 33 degrees C

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 10	+/- 5 %	+/- 0.2	+/- 10	+/- 20	+/- 0.3	
7/26/2023 4:47 PM	00:00	7.54 pH	33.14 °C	927.76 µS/cm	2.17 mg/L	80.80 NTU	47.2 mV	90.52 ft	140.00 ml/min
7/26/2023 4:52 PM	05:00	7.70 pH	30.43 °C	941.84 µS/cm	3.21 mg/L	74.60 NTU	47.1 mV	91.43 ft	140.00 ml/min
7/26/2023 4:57 PM	10:00	7.80 pH	24.66 °C	927.56 µS/cm	3.66 mg/L	43.10 NTU	47.3 mV	92.67 ft	140.00 ml/min
7/26/2023 5:02 PM	15:00	7.77 pH	22.83 °C	945.32 µS/cm	3.59 mg/L	36.60 NTU	46.0 mV	93.37 ft	140.00 ml/min
7/26/2023 5:07 PM	20:00	6.61 pH	23.31 °C	2.71 µS/cm	8.46 mg/L	44.40 NTU	110.0 mV	95.80 ft	100.00 ml/min
7/26/2023 5:12 PM	25:00	7.75 pH	21.01 °C	934.33 µS/cm	3.13 mg/L	38.00 NTU	34.0 mV	95.80 ft	100.00 ml/min

Samples

Sample ID:	Description:
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Low-Flow Test Report:

Test Date / Time: 7/27/2023 10:56:01 AM

Project: Arkwright

Operator Name: B. Pennell

Location Name: Arkwright, AP-2, ARAMW-9 Latitude: 32.921641680777 Longitude: -83.7028266862035 Well Diameter: 2 in Casing Type: PVC Screen Length: 10 ft Top of Screen: 95 ft Total Depth: 105.48 ft Initial Depth to Water: 82.83 ft	Pump Type: Reclaimer Pump Tubing Type: LDPE Tubing Inner Diameter: 0.375 in Tubing Length: 30 ft Pump Intake From TOC: 100 ft Estimated Total Volume Pumped: 8750 ml Flow Cell Volume: 90 ml Final Flow Rate: 125 ml/min Final Draw Down: 17.08 ft	Instrument Used: Aqua TROLL 400 Serial Number: 850751
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Test Notes:

Well redevelopment

MP50 settings:

CPM1 ID: 5

PSI: 56

Initial depth to water was prior to filling tubing and flow through cell. Encountered an issue with the MP50 and solenoid valve did not close causing pump to discharge a large amount of water creating drawdown. Replaced MP50 and did not use external air compressor to redevelop well.

Weather Conditions:

Mostly sunny, 26C

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	
7/27/2023 10:56 AM	00:00	7.62 pH	23.88 °C	1,065.9 µS/cm	6.90 mg/L	23.30 NTU	20.5 mV	82.83 ft	125.00 ml/min
7/27/2023 11:01 AM	05:00	7.62 pH	23.89 °C	1,020.7 µS/cm	4.22 mg/L	25.50 NTU	-11.7 mV	97.30 ft	125.00 ml/min
7/27/2023 11:06 AM	10:00	7.64 pH	22.63 °C	1,064.9 µS/cm	3.13 mg/L	22.10 NTU	-23.3 mV	97.61 ft	125.00 ml/min
7/27/2023 11:11 AM	15:00	7.68 pH	22.22 °C	1,143.0 µS/cm	2.61 mg/L	19.70 NTU	-52.4 mV	97.84 ft	125.00 ml/min
7/27/2023 11:16 AM	20:00	7.73 pH	22.19 °C	1,222.2 µS/cm	2.25 mg/L	17.20 NTU	-66.2 mV	97.99 ft	125.00 ml/min
7/27/2023 11:21 AM	25:00	7.80 pH	22.23 °C	1,286.6 µS/cm	1.90 mg/L	14.10 NTU	-59.9 mV	98.24 ft	125.00 ml/min
7/27/2023 11:26 AM	30:00	7.84 pH	22.40 °C	1,324.0 µS/cm	1.66 mg/L	12.40 NTU	-92.4 mV	98.45 ft	125.00 ml/min

7/27/2023 11:31 AM	35:00	7.86 pH	22.43 °C	1,332.8 µS/cm	1.46 mg/L	10.40 NTU	-97.5 mV	98.71 ft	125.00 ml/min
7/27/2023 11:36 AM	40:00	7.87 pH	22.43 °C	1,304.0 µS/cm	1.25 mg/L	9.52 NTU	-80.1 mV	98.93 ft	125.00 ml/min
7/27/2023 11:41 AM	45:00	7.87 pH	22.59 °C	1,294.8 µS/cm	1.14 mg/L	6.75 NTU	-109.0 mV	99.17 ft	125.00 ml/min
7/27/2023 11:46 AM	50:00	7.88 pH	22.61 °C	1,271.2 µS/cm	1.04 mg/L	5.91 NTU	-93.7 mV	99.40 ft	125.00 ml/min
7/27/2023 11:51 AM	55:00	7.89 pH	22.54 °C	1,250.5 µS/cm	0.97 mg/L	5.35 NTU	-121.4 mV	99.51 ft	125.00 ml/min
7/27/2023 11:56 AM	01:00:00	7.89 pH	22.90 °C	1,221.6 µS/cm	0.89 mg/L	4.37 NTU	-104.1 mV	99.73 ft	125.00 ml/min
7/27/2023 12:01 PM	01:05:00	7.90 pH	22.73 °C	1,191.0 µS/cm	0.82 mg/L	4.79 NTU	-107.0 mV	99.87 ft	125.00 ml/min
7/27/2023 12:06 PM	01:10:00	7.90 pH	23.06 °C	1,171.4 µS/cm	0.81 mg/L	4.37 NTU	-111.5 mV	99.91 ft	125.00 ml/min

Samples

Sample ID:	Description:
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B.2 Field Sampling Data



Low-Flow Test Report:

Test Date / Time: 8/8/2023 9:39:09 AM

Project: Arkwright

Operator Name: Houston Lynn

Location Name: ARGWC-22 Latitude: 32.9216042498225 Longitude: -83.7027717009187 Well Diameter: 2 in Casing Type: PVC Screen Length: 10 ft Top of Screen: 17.71 ft Total Depth: 27.71 ft Initial Depth to Water: 13.85 ft	Pump Type: Peristaltic Tubing Type: Poly Pump Intake From TOC: 22.7 ft Estimated Total Volume Pumped: 2400 ml Flow Cell Volume: 90 ml Final Flow Rate: 160 ml/min Final Draw Down: 0.01 ft	Instrument Used: Aqua TROLL 400 Serial Number: 966105
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Test Notes:

Weather Conditions:

Clear 81

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	
8/8/2023 9:39 AM	00:00	5.57 pH	20.52 °C	1,465.7 µS/cm	0.34 mg/L	3.91 NTU	106.4 mV	13.85 ft	160.00 ml/min
8/8/2023 9:44 AM	05:00	5.59 pH	20.21 °C	1,472.6 µS/cm	0.25 mg/L	4.69 NTU	79.1 mV	13.85 ft	160.00 ml/min
8/8/2023 9:49 AM	10:00	5.59 pH	20.04 °C	1,460.6 µS/cm	0.22 mg/L	3.63 NTU	67.6 mV	13.86 ft	160.00 ml/min
8/8/2023 9:54 AM	15:00	5.61 pH	20.17 °C	1,457.2 µS/cm	0.20 mg/L	2.93 NTU	60.5 mV	13.86 ft	160.00 ml/min

Samples

Sample ID:	Description:
ARK-ARGWC-22	9 bottles collected Sample time 9:55 Sulfide test results: 0.0

Low-Flow Test Report:

Test Date / Time: 8/8/2023 9:39:09 AM

Project: Arkwright

Operator Name: Houston Lynn

Location Name: ARGWC-22 Latitude: 32.9216042498225 Longitude: -83.7027717009187 Well Diameter: 2 in Casing Type: PVC Screen Length: 10 ft Top of Screen: 17.71 ft Total Depth: 27.71 ft Initial Depth to Water: 13.85 ft	Pump Type: Peristaltic Tubing Type: Poly Pump Intake From TOC: 22.7 ft Estimated Total Volume Pumped: 2400 ml Flow Cell Volume: 90 ml Final Flow Rate: 160 ml/min Final Draw Down: 0.01 ft	Instrument Used: Aqua TROLL 400 Serial Number: 966105
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Test Notes:

Weather Conditions:

Clear 81

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	
8/8/2023 9:39 AM	00:00	5.57 pH	20.52 °C	1,465.7 µS/cm	0.34 mg/L	3.91 NTU	106.4 mV	13.85 ft	160.00 ml/min
8/8/2023 9:44 AM	05:00	5.59 pH	20.21 °C	1,472.6 µS/cm	0.25 mg/L	4.69 NTU	79.1 mV	13.85 ft	160.00 ml/min
8/8/2023 9:49 AM	10:00	5.59 pH	20.04 °C	1,460.6 µS/cm	0.22 mg/L	3.63 NTU	67.6 mV	13.86 ft	160.00 ml/min
8/8/2023 9:54 AM	15:00	5.61 pH	20.17 °C	1,457.2 µS/cm	0.20 mg/L	2.93 NTU	60.5 mV	13.86 ft	160.00 ml/min

Samples

Sample ID:	Description:
ARK-ARGWC-22	9 bottles collected Sample time 9:55 Sulfide test results: 0.0

Low-Flow Test Report:

Test Date / Time: 8/8/2023 10:31:35 AM

Project: Arkwright

Operator Name: John Myer

Location Name: AP2-ARAMW-9 Well Diameter: 2 in Casing Type: PVC Screen Length: 10 ft Top of Screen: 94.5 ft Total Depth: 105.55 ft Initial Depth to Water: 11.27 ft	Pump Type: Non-Dedicated Bladder Pump Tubing Type: Poly Pump Intake From TOC: 98 ft Estimated Total Volume Pumped: 12000 ml Flow Cell Volume: 90 ml Final Flow Rate: 100 ml/min Final Draw Down: 23.83 ft	Instrument Used: Aqua TROLL 400 Serial Number: 883546
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Test Notes:

Sulfide: 0.0 mg/L

Weather Conditions:

Sunny 81 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	
8/8/2023 10:31 AM	00:00	7.20 pH	22.89 °C	1,222.5 µS/cm	3.38 mg/L	25.00 NTU	-73.5 mV	12.15 ft	100.00 ml/min
8/8/2023 10:36 AM	05:00	7.68 pH	20.91 °C	1,237.0 µS/cm	1.94 mg/L	62.10 NTU	-115.9 mV	12.70 ft	100.00 ml/min
8/8/2023 10:41 AM	10:00	7.89 pH	20.54 °C	1,228.3 µS/cm	1.96 mg/L	51.70 NTU	-116.3 mV	13.50 ft	100.00 ml/min
8/8/2023 10:46 AM	15:00	7.98 pH	20.21 °C	1,229.7 µS/cm	1.92 mg/L	47.40 NTU	-118.9 mV	14.25 ft	100.00 ml/min
8/8/2023 10:51 AM	20:00	8.04 pH	19.97 °C	1,240.9 µS/cm	3.33 mg/L	23.70 NTU	-125.0 mV	15.15 ft	100.00 ml/min
8/8/2023 10:56 AM	25:00	8.08 pH	19.85 °C	1,224.0 µS/cm	1.05 mg/L	9.47 NTU	-114.8 mV	16.10 ft	100.00 ml/min
8/8/2023 11:01 AM	30:00	8.11 pH	19.81 °C	1,240.5 µS/cm	1.56 mg/L	5.05 NTU	-159.9 mV	16.90 ft	100.00 ml/min
8/8/2023 11:06 AM	35:00	8.12 pH	19.83 °C	1,229.8 µS/cm	0.71 mg/L	5.06 NTU	-136.1 mV	17.80 ft	100.00 ml/min
8/8/2023 11:11 AM	40:00	8.14 pH	19.75 °C	1,243.7 µS/cm	1.95 mg/L	3.60 NTU	-131.0 mV	18.95 ft	100.00 ml/min
8/8/2023 11:16 AM	45:00	8.15 pH	19.74 °C	1,219.0 µS/cm	2.86 mg/L	4.28 NTU	-130.4 mV	19.90 ft	100.00 ml/min
8/8/2023 11:21 AM	50:00	8.15 pH	19.70 °C	1,227.3 µS/cm	2.86 mg/L	4.67 NTU	-126.2 mV	20.70 ft	100.00 ml/min
8/8/2023 11:26 AM	55:00	8.15 pH	19.74 °C	1,209.5 µS/cm	0.53 mg/L	2.69 NTU	-111.6 mV	21.80 ft	100.00 ml/min
8/8/2023 11:31 AM	01:00:00	8.15 pH	19.64 °C	1,205.6 µS/cm	0.33 mg/L	3.23 NTU	-128.7 mV	22.85 ft	100.00 ml/min

8/8/2023 11:36 AM	01:05:00	8.15 pH	19.61 °C	1,203.6 µS/cm	0.28 mg/L	3.49 NTU	-144.4 mV	23.90 ft	100.00 ml/min
8/8/2023 11:41 AM	01:10:00	8.15 pH	19.66 °C	1,204.6 µS/cm	2.75 mg/L	3.92 NTU	-122.3 mV	24.90 ft	100.00 ml/min
8/8/2023 11:46 AM	01:15:00	8.15 pH	19.61 °C	1,212.8 µS/cm	1.15 mg/L	4.34 NTU	-150.2 mV	25.90 ft	100.00 ml/min
8/8/2023 11:51 AM	01:20:00	8.14 pH	19.66 °C	1,204.4 µS/cm	0.31 mg/L	3.41 NTU	-118.8 mV	26.90 ft	100.00 ml/min
8/8/2023 11:56 AM	01:25:00	8.15 pH	19.61 °C	1,206.2 µS/cm	0.69 mg/L	3.63 NTU	-123.0 mV	27.95 ft	100.00 ml/min
8/8/2023 12:01 PM	01:30:00	8.15 pH	19.66 °C	1,198.3 µS/cm	0.66 mg/L	4.09 NTU	-122.7 mV	29.05 ft	100.00 ml/min
8/8/2023 12:06 PM	01:35:00	8.14 pH	19.69 °C	1,196.3 µS/cm	0.37 mg/L	4.26 NTU	-123.0 mV	30.05 ft	100.00 ml/min
8/8/2023 12:11 PM	01:40:00	8.14 pH	19.78 °C	1,202.2 µS/cm	0.17 mg/L	3.49 NTU	-121.7 mV	31.05 ft	100.00 ml/min
8/8/2023 12:16 PM	01:45:00	8.13 pH	19.67 °C	1,200.1 µS/cm	0.75 mg/L	3.89 NTU	-119.4 mV	32.10 ft	100.00 ml/min
8/8/2023 12:21 PM	01:50:00	8.14 pH	19.66 °C	1,201.8 µS/cm	0.20 mg/L	3.82 NTU	-115.6 mV	33.15 ft	100.00 ml/min
8/8/2023 12:26 PM	01:55:00	8.14 pH	19.74 °C	1,198.3 µS/cm	0.30 mg/L	4.90 NTU	-118.6 mV	34.15 ft	100.00 ml/min
8/8/2023 12:31 PM	02:00:00	8.13 pH	19.81 °C	1,195.4 µS/cm	0.17 mg/L	3.95 NTU	-117.0 mV	35.10 ft	100.00 ml/min

Samples

Sample ID:	Description:
ARK-ARAMW-9	9 bottles collected at 1235

Low-Flow Test Report:

Test Date / Time: 8/8/2023 11:33:06 AM

Project: Arkwright (2)

Operator Name: Houston Lynn

Location Name: ARKWRIGHT ARAMW-7 Latitude: 32.9217413089547 Longitude: -83.7028719484806 Well Diameter: 2 in Casing Type: PVC Screen Length: 10 ft Top of Screen: 40.4 ft Total Depth: 50.4 ft Initial Depth to Water: 13.1 ft	Pump Type: Peristaltic Tubing Type: Poly Pump Intake From TOC: 45.4 ft Estimated Total Volume Pumped: 2400 ml Flow Cell Volume: 90 ml Final Flow Rate: 160 ml/min Final Draw Down: 0.04 ft	Instrument Used: Aqua TROLL 400 Serial Number: 966105
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Test Notes:

Sulfide test results: 0.0

Weather Conditions:

Clear 81 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	
8/8/2023 11:33 AM	00:00	5.44 pH	21.33 °C	1,713.4 µS/cm	0.29 mg/L	6.96 NTU	54.8 mV	13.10 ft	160.00 ml/min
8/8/2023 11:38 AM	05:00	5.44 pH	20.97 °C	1,765.7 µS/cm	0.21 mg/L	3.66 NTU	45.9 mV	13.12 ft	160.00 ml/min
8/8/2023 11:43 AM	10:00	5.47 pH	20.95 °C	1,779.5 µS/cm	0.16 mg/L	4.03 NTU	41.9 mV	13.14 ft	160.00 ml/min
8/8/2023 11:48 AM	15:00	5.47 pH	21.10 °C	1,769.6 µS/cm	0.16 mg/L	3.31 NTU	38.5 mV	13.14 ft	160.00 ml/min

Samples

Sample ID:	Description:
Arkwright ARAMA-7	9 bottles collected Sample time 1150
Field Blank 20230808	7 bottles collected Collection time: 1230

Low-Flow Test Report:

Test Date / Time: 8/8/2023 2:33:45 PM

Project: Arkwright (3)

Operator Name: Houston Lynn

Location Name: ARAMW-02 Latitude: 32.9214404540309 Longitude: -83.7021591514349 Well Diameter: 2 in Casing Type: PVC Screen Length: 10 ft Top of Screen: 15.2 ft Total Depth: 25.2 ft Initial Depth to Water: 13.21 ft	Pump Type: Peristaltic Tubing Type: Poly Pump Intake From TOC: 45.4 ft Estimated Total Volume Pumped: 4000 ml Flow Cell Volume: 90 ml Final Flow Rate: 160 ml/min Final Draw Down: 0.2 ft	Instrument Used: Aqua TROLL 400 Serial Number: 966105
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Test Notes:

Sulfide test results: 0.0

Weather Conditions:

Sunny 90 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	
8/8/2023 2:33 PM	00:00	6.03 pH	28.10 °C	708.15 µS/cm	0.32 mg/L	57.50 NTU	44.6 mV	13.21 ft	160.00 ml/min
8/8/2023 2:38 PM	05:00	6.02 pH	24.88 °C	754.97 µS/cm	0.20 mg/L	18.30 NTU	42.6 mV	13.21 ft	160.00 ml/min
8/8/2023 2:43 PM	10:00	6.02 pH	24.37 °C	764.39 µS/cm	0.16 mg/L	12.70 NTU	35.4 mV	13.21 ft	160.00 ml/min
8/8/2023 2:48 PM	15:00	6.02 pH	24.15 °C	769.14 µS/cm	0.15 mg/L	4.62 NTU	31.1 mV	13.21 ft	160.00 ml/min
8/8/2023 2:53 PM	20:00	6.01 pH	24.33 °C	775.72 µS/cm	0.14 mg/L	4.86 NTU	28.8 mV	13.21 ft	160.00 ml/min
8/8/2023 2:58 PM	25:00	6.01 pH	24.01 °C	771.26 µS/cm	0.13 mg/L	4.46 NTU	28.2 mV	13.21 ft	160.00 ml/min

Samples

Sample ID:	Description:
ARK-ARAMW-2	9 bottles Sample time 15:05

Low-Flow Test Report:

Test Date / Time: 8/8/2023 3:29:57 PM

Project: Arkwright

Operator Name: John Myer

Location Name: AP2-ARAMW-1 Well Diameter: 2 in Casing Type: PVC Screen Length: 10 ft Top of Screen: 34.9 ft Total Depth: 47.4 ft Initial Depth to Water: 13.2 ft	Pump Type: Peristaltic Pump Tubing Type: Poly Pump Intake From TOC: 42.4 ft Estimated Total Volume Pumped: 6250 ml Flow Cell Volume: 90 ml Final Flow Rate: 250 ml/min Final Draw Down: 0.3 ft	Instrument Used: Aqua TROLL 400 Serial Number: 883546
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Test Notes:

Sulfide: 0.0 mg/L

Weather Conditions:

Partly Cloudy 91 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	
8/8/2023 3:29 PM	00:00	6.60 pH	22.26 °C	794.54 µS/cm	2.03 mg/L	3.90 NTU	62.9 mV	13.50 ft	250.00 ml/min
8/8/2023 3:34 PM	05:00	6.51 pH	22.16 °C	810.10 µS/cm	0.10 mg/L	2.98 NTU	65.1 mV	13.50 ft	250.00 ml/min
8/8/2023 3:39 PM	10:00	6.44 pH	21.59 °C	810.39 µS/cm	2.16 mg/L	1.81 NTU	61.6 mV	13.50 ft	250.00 ml/min
8/8/2023 3:44 PM	15:00	6.40 pH	21.58 °C	808.42 µS/cm	0.07 mg/L	2.24 NTU	62.1 mV	13.50 ft	250.00 ml/min
8/8/2023 3:49 PM	20:00	6.40 pH	21.27 °C	805.58 µS/cm	0.06 mg/L	1.50 NTU	60.6 mV	13.50 ft	250.00 ml/min
8/8/2023 3:54 PM	25:00	6.38 pH	21.26 °C	798.89 µS/cm	0.06 mg/L	1.38 NTU	59.7 mV	13.50 ft	250.00 ml/min

Samples

Sample ID:	Description:
ARK-ARAMW-1	9 bottles collected at 1600

Low-Flow Test Report:

Test Date / Time: 8/8/2023 4:33:18 PM

Project: Arkwright (5)

Operator Name: Houston Lynn

Location Name: Arkwright ARGWC-23 Latitude: 32.9212786279941 Longitude: -83.7018627673388 Well Diameter: 2 in Casing Type: PVC Screen Length: 10 ft Top of Screen: 19.4 ft Total Depth: 28.4 ft Initial Depth to Water: 13.21 ft	Pump Type: Peristaltic Tubing Type: Poly Pump Intake From TOC: 23.4 ft Estimated Total Volume Pumped: 2900 ml Flow Cell Volume: 90 ml Final Flow Rate: 140 ml/min Final Draw Down: 0.34 ft	Instrument Used: Aqua TROLL 400 Serial Number: 966105
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Test Notes:

Sulfide results: 0.0

Weather Conditions:

Cloudy 90 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	
8/8/2023 4:33 PM	00:00	6.35 pH	29.76 °C	447.95 µS/cm	0.70 mg/L	10.30 NTU	96.1 mV	13.40 ft	160.00 ml/min
8/8/2023 4:38 PM	05:00	6.33 pH	24.51 °C	477.84 µS/cm	0.23 mg/L	7.68 NTU	99.9 mV	13.55 ft	140.00 ml/min
8/8/2023 4:43 PM	10:00	6.33 pH	23.92 °C	479.87 µS/cm	0.17 mg/L	2.47 NTU	69.6 mV	13.55 ft	140.00 ml/min
8/8/2023 4:48 PM	15:00	6.33 pH	23.84 °C	481.33 µS/cm	0.14 mg/L	2.29 NTU	63.5 mV	13.55 ft	140.00 ml/min
8/8/2023 4:53 PM	20:00	6.33 pH	23.70 °C	480.84 µS/cm	0.13 mg/L	2.11 NTU	60.2 mV	13.55 ft	140.00 ml/min

Samples

Sample ID:	Description:
ARK-ARGWC-23	9 bottles 1655 sample time

Low-Flow Test Report:

Test Date / Time: 8/9/2023 8:53:45 AM

Project: Arkwright

Operator Name: Dylan Ripley

Location Name: Arkwright ARAMW-8 Latitude: 32.9213107117884 Longitude: -83.7019040063024 Well Diameter: 2 in Casing Type: PVC Screen Length: 10 ft Top of Screen: 39.54 ft Total Depth: 49.54 ft Initial Depth to Water: 12.5 ft	Pump Type: Peristaltic Tubing Type: LDPE Pump Intake From TOC: 44.5 ft Estimated Total Volume Pumped: 13765 ml Flow Cell Volume: 90 ml Final Flow Rate: 100 ml/min Final Draw Down: 14.25 ft	Instrument Used: Aqua TROLL 400 Serial Number: 883561
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Test Notes:

Sulfides = 0.0 mg/L

Weather Conditions:

Sunny and clear

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 10 %	+/- 10	+/- 10	+/- 0.3	
8/9/2023 8:53 AM	00:00	6.80 pH	22.22 °C	590.44 µS/cm	3.96 mg/L	2.41 NTU	293.6 mV	14.71 ft	100.00 ml/min
8/9/2023 8:58 AM	05:00	7.04 pH	22.35 °C	604.36 µS/cm	2.78 mg/L	2.49 NTU	343.6 mV	16.54 ft	100.00 ml/min
8/9/2023 9:03 AM	10:00	7.07 pH	22.79 °C	560.82 µS/cm	2.31 mg/L	28.60 NTU	354.0 mV	16.62 ft	100.00 ml/min
8/9/2023 9:08 AM	15:00	7.07 pH	22.67 °C	556.63 µS/cm	2.54 mg/L	6.74 NTU	378.8 mV	18.12 ft	100.00 ml/min
8/9/2023 9:13 AM	20:00	7.17 pH	22.76 °C	533.78 µS/cm	2.06 mg/L	5.78 NTU	485.4 mV	18.34 ft	100.00 ml/min
8/9/2023 9:16 AM	22:39	7.22 pH	22.89 °C	527.01 µS/cm	1.85 mg/L	10.80 NTU	490.8 mV	19.24 ft	100.00 ml/min
8/9/2023 9:21 AM	27:39	7.32 pH	23.07 °C	516.06 µS/cm	2.92 mg/L	3.66 NTU	487.9 mV	19.60 ft	100.00 ml/min
8/9/2023 9:26 AM	32:39	7.30 pH	23.17 °C	525.71 µS/cm	2.48 mg/L	4.64 NTU	375.9 mV	20.23 ft	100.00 ml/min
8/9/2023 9:31 AM	37:39	7.36 pH	23.05 °C	520.83 µS/cm	1.66 mg/L	5.74 NTU	475.0 mV	20.83 ft	100.00 ml/min
8/9/2023 9:36 AM	42:39	7.48 pH	23.26 °C	525.55 µS/cm	3.34 mg/L	3.29 NTU	419.7 mV	21.36 ft	100.00 ml/min
8/9/2023 9:41 AM	47:39	7.57 pH	23.34 °C	524.87 µS/cm	1.75 mg/L	4.54 NTU	246.1 mV	21.92 ft	100.00 ml/min
8/9/2023 9:46 AM	52:39	7.63 pH	23.34 °C	529.48 µS/cm	1.87 mg/L	3.58 NTU	144.5 mV	22.53 ft	100.00 ml/min

8/9/2023 9:51 AM	57:39	7.85 pH	23.48 °C	584.84 µS/cm	2.73 mg/L	4.74 NTU	93.9 mV	22.85 ft	100.00 ml/min
8/9/2023 9:56 AM	01:02:39	7.92 pH	23.38 °C	563.44 µS/cm	1.63 mg/L	2.61 NTU	77.9 mV	23.25 ft	100.00 ml/min
8/9/2023 10:01 AM	01:07:39	7.97 pH	23.47 °C	535.56 µS/cm	2.19 mg/L	2.64 NTU	67.3 mV	23.68 ft	100.00 ml/min
8/9/2023 10:06 AM	01:12:39	8.08 pH	23.66 °C	579.57 µS/cm	2.24 mg/L	3.13 NTU	49.3 mV	24.04 ft	100.00 ml/min
8/9/2023 10:11 AM	01:17:39	8.22 pH	23.66 °C	557.05 µS/cm	1.97 mg/L	3.91 NTU	30.0 mV	24.35 ft	100.00 ml/min
8/9/2023 10:16 AM	01:22:39	8.25 pH	23.61 °C	543.96 µS/cm	2.89 mg/L	2.29 NTU	23.5 mV	24.63 ft	100.00 ml/min
8/9/2023 10:21 AM	01:27:39	8.34 pH	23.57 °C	516.70 µS/cm	2.37 mg/L	1.85 NTU	14.4 mV	24.97 ft	100.00 ml/min
8/9/2023 10:26 AM	01:32:39	8.40 pH	23.70 °C	532.26 µS/cm	2.42 mg/L	1.56 NTU	3.4 mV	25.19 ft	100.00 ml/min
8/9/2023 10:31 AM	01:37:39	8.43 pH	23.75 °C	545.01 µS/cm	3.86 mg/L	1.35 NTU	18.7 mV	25.60 ft	100.00 ml/min
8/9/2023 10:36 AM	01:42:39	8.51 pH	23.52 °C	541.84 µS/cm	2.65 mg/L	1.28 NTU	-8.1 mV	25.68 ft	100.00 ml/min
8/9/2023 10:41 AM	01:47:39	8.58 pH	23.64 °C	557.58 µS/cm	2.71 mg/L	1.01 NTU	-19.5 mV	25.88 ft	100.00 ml/min
8/9/2023 10:46 AM	01:52:39	8.66 pH	23.59 °C	554.76 µS/cm	1.17 mg/L	2.49 NTU	-15.4 mV	26.10 ft	100.00 ml/min
8/9/2023 10:51 AM	01:57:39	8.70 pH	23.45 °C	543.14 µS/cm	2.52 mg/L	1.28 NTU	-25.9 mV	26.19 ft	100.00 ml/min
8/9/2023 10:56 AM	02:02:39	8.70 pH	23.22 °C	554.86 µS/cm	1.36 mg/L	1.47 NTU	-29.7 mV	26.36 ft	100.00 ml/min
8/9/2023 11:01 AM	02:07:39	8.66 pH	22.90 °C	555.29 µS/cm	1.71 mg/L	1.21 NTU	-11.9 mV	26.51 ft	100.00 ml/min
8/9/2023 11:06 AM	02:12:39	8.68 pH	22.89 °C	567.10 µS/cm	1.80 mg/L	1.80 NTU	-9.8 mV	26.63 ft	100.00 ml/min
8/9/2023 11:11 AM	02:17:39	8.71 pH	23.04 °C	554.68 µS/cm	1.65 mg/L	4.19 NTU	-37.6 mV	26.75 ft	100.00 ml/min

Samples

Sample ID:	Description:
ARK-ARAMW-8	9 bottles collected at 1115

Low-Flow Test Report:

Test Date / Time: 8/9/2023 10:13:02 AM

Project: Arkwright (2)

Operator Name: John Myer

Location Name: AP2-ARGWC21 Well Diameter: 2 in Casing Type: PVC Screen Length: 10 ft Top of Screen: 17.4 ft Total Depth: 27.4 ft Initial Depth to Water: 14.15 ft	Pump Type: Dedicated Bladder Pump Tubing Type: LDPE Pump Intake From TOC: 22.4 ft Estimated Total Volume Pumped: 1500 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: 883546
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Test Notes:

Sulfide: 0.0 mg/L

Weather Conditions:

Sunny 77F

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	
8/9/2023 10:13 AM	00:00	6.66 pH	21.58 °C	728.67 µS/cm	0.52 mg/L	4.52 NTU	64.6 mV	14.50 ft	100.00 ml/min
8/9/2023 10:18 AM	05:00	6.67 pH	20.41 °C	735.03 µS/cm	0.34 mg/L	3.78 NTU	58.4 mV	14.58 ft	100.00 ml/min
8/9/2023 10:23 AM	10:00	6.63 pH	20.28 °C	735.41 µS/cm	0.25 mg/L	3.84 NTU	56.2 mV	14.58 ft	100.00 ml/min
8/9/2023 10:28 AM	15:00	6.60 pH	20.28 °C	735.67 µS/cm	0.19 mg/L	2.81 NTU	56.6 mV	14.58 ft	100.00 ml/min

Samples

Sample ID:	Description:
ARK-ARGWC-21	9 bottles at 1035
ARK-AP2-EB-01	7 bottles collected at 1110

Low-Flow Test Report:

Test Date / Time: 8/8/2023 9:30:44 AM

Project: Arkwright

Operator Name: Dylan Quintal

Location Name: Arkwright, AP-2, ARGWA-19 Latitude: 32.9237420103943 Longitude: -83.7009420990944 Well Diameter: 2 in Casing Type: PVC Screen Length: 10 ft Top of Screen: 43.1 ft Total Depth: 53.1 ft Initial Depth to Water: 27.68 ft	Pump Type: Dedicated QED Bladder Tubing Type: HDPE Pump Intake From TOC: 47.74 ft Estimated Total Volume Pumped: 12893.333 ml Flow Cell Volume: 90 ml Final Flow Rate: 400 ml/min Final Draw Down: 0.02 ft	Instrument Used: Aqua TROLL 400 Serial Number: 843593
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Test Notes:

Hydrogen Sulfide Test Result: 0.0 mg/L

Weather Conditions:

Sunny, 80F

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	
8/8/2023 9:30 AM	00:00	5.82 pH	20.97 °C	128.99 µS/cm	3.38 mg/L	1.30 NTU	130.7 mV	27.68 ft	400.00 ml/min
8/8/2023 9:35 AM	05:00	5.80 pH	20.92 °C	127.56 µS/cm	3.27 mg/L	1.21 NTU	152.8 mV	27.70 ft	400.00 ml/min
8/8/2023 9:39 AM	08:28	5.81 pH	20.88 °C	127.23 µS/cm	3.24 mg/L	1.06 NTU	149.9 mV	27.70 ft	400.00 ml/min
8/8/2023 9:44 AM	13:28	5.80 pH	20.88 °C	127.60 µS/cm	3.22 mg/L	1.03 NTU	117.3 mV	27.70 ft	400.00 ml/min
8/8/2023 9:49 AM	18:28	5.81 pH	20.93 °C	127.83 µS/cm	3.21 mg/L	0.81 NTU	116.7 mV	27.70 ft	400.00 ml/min
8/8/2023 9:50 AM	19:28	5.81 pH	20.93 °C	127.55 µS/cm	3.21 mg/L	0.71 NTU	139.8 mV	27.70 ft	400.00 ml/min
8/8/2023 9:50 AM	20:01	5.81 pH	20.97 °C	127.61 µS/cm	3.21 mg/L	0.73 NTU	143.1 mV	27.70 ft	400.00 ml/min
8/8/2023 9:55 AM	24:18	5.79 pH	21.02 °C	128.68 µS/cm	3.17 mg/L	0.66 NTU	108.0 mV	27.70 ft	400.00 ml/min
8/8/2023 10:00 AM	29:18	5.80 pH	20.94 °C	127.75 µS/cm	3.16 mg/L	0.65 NTU	117.4 mV	27.70 ft	400.00 ml/min
8/8/2023 10:02 AM	32:14	5.81 pH	20.93 °C	127.54 µS/cm	3.17 mg/L	0.69 NTU	149.0 mV	27.70 ft	400.00 ml/min

Samples

Sample ID:	Description:
ARK-ARGWA-19	Sample time: 1015 9 bottles
ARK-AP2-FD-03	Sample time: NA 7 bottles

Created using VuSitu from In-Situ, Inc.

Low-Flow Test Report:

Test Date / Time: 8/8/2023 12:55:45 PM

Project: Arkwright

Operator Name: Dylan Quintal

Location Name: Arkwright, AP-2, ARGWA-20 Latitude: 32.9236207144085 Longitude: -83.7023596465588 Well Diameter: 2 in Casing Type: PVC Screen Length: 10 ft Top of Screen: 27.7 ft Total Depth: 37.7 ft Initial Depth to Water: 14.94 ft	Pump Type: Dedicated QED Bladder Tubing Type: HDPE Pump Intake From TOC: 32.7 ft Estimated Total Volume Pumped: 36000 ml Flow Cell Volume: 90 ml Final Flow Rate: 200 ml/min Final Draw Down: 0.16 ft	Instrument Used: Aqua TROLL 400 Serial Number: 843593
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Test Notes:

Hydrogen Sulfide Test Result: NA. Purging stopped without sampling due to high turbidity. This low-flow test report represents

part 1/4 for ARGWA-20.

Weather Conditions:

Partly cloudy, 89F

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	
8/8/2023 12:55 PM	00:00	5.50 pH	19.88 °C	148.89 µS/cm	5.30 mg/L	183.00 NTU	139.2 mV	14.94 ft	200.00 ml/min
8/8/2023 1:00 PM	05:00	5.49 pH	19.77 °C	149.85 µS/cm	5.31 mg/L	169.00 NTU	132.1 mV	14.94 ft	200.00 ml/min
8/8/2023 1:05 PM	10:00	5.47 pH	19.95 °C	150.60 µS/cm	5.31 mg/L	142.00 NTU	170.7 mV	14.94 ft	200.00 ml/min
8/8/2023 1:10 PM	15:00	5.46 pH	19.94 °C	150.63 µS/cm	5.28 mg/L	151.00 NTU	171.8 mV	14.94 ft	200.00 ml/min
8/8/2023 1:15 PM	20:00	5.46 pH	19.98 °C	151.24 µS/cm	5.25 mg/L	146.00 NTU	174.1 mV	14.94 ft	200.00 ml/min
8/8/2023 1:20 PM	25:00	5.46 pH	19.85 °C	152.51 µS/cm	5.25 mg/L	105.00 NTU	171.7 mV	14.94 ft	200.00 ml/min
8/8/2023 1:25 PM	30:00	5.46 pH	19.68 °C	152.65 µS/cm	5.27 mg/L	115.00 NTU	171.6 mV	14.94 ft	200.00 ml/min
8/8/2023 1:30 PM	35:00	5.47 pH	19.90 °C	152.20 µS/cm	5.22 mg/L	117.00 NTU	171.4 mV	14.94 ft	200.00 ml/min
8/8/2023 1:35 PM	40:00	5.48 pH	19.93 °C	152.71 µS/cm	5.21 mg/L	123.00 NTU	170.9 mV	14.94 ft	200.00 ml/min
8/8/2023 1:40 PM	45:00	5.49 pH	20.04 °C	151.92 µS/cm	5.17 mg/L	107.00 NTU	170.4 mV	14.94 ft	200.00 ml/min
8/8/2023 1:45 PM	50:00	5.50 pH	19.95 °C	152.23 µS/cm	5.17 mg/L	104.00 NTU	170.0 mV	14.94 ft	200.00 ml/min
8/8/2023 1:50 PM	55:00	5.52 pH	19.99 °C	152.96 µS/cm	5.19 mg/L	88.60 NTU	169.5 mV	14.94 ft	200.00 ml/min

8/8/2023 1:55 PM	01:00:00	5.52 pH	20.01 °C	152.11 µS/cm	5.18 mg/L	93.00 NTU	169.1 mV	14.94 ft	200.00 ml/min
8/8/2023 2:00 PM	01:05:00	5.54 pH	20.08 °C	151.54 µS/cm	5.16 mg/L	88.30 NTU	168.5 mV	14.94 ft	200.00 ml/min
8/8/2023 2:05 PM	01:10:00	5.55 pH	20.19 °C	152.52 µS/cm	5.17 mg/L	87.90 NTU	168.4 mV	14.94 ft	200.00 ml/min
8/8/2023 2:10 PM	01:15:00	5.55 pH	20.11 °C	152.80 µS/cm	5.17 mg/L	89.50 NTU	129.0 mV	14.94 ft	200.00 ml/min
8/8/2023 2:15 PM	01:20:00	5.56 pH	20.10 °C	153.62 µS/cm	5.19 mg/L	74.40 NTU	127.9 mV	14.94 ft	200.00 ml/min
8/8/2023 2:20 PM	01:25:00	5.56 pH	19.91 °C	153.41 µS/cm	5.22 mg/L	71.60 NTU	127.5 mV	14.94 ft	200.00 ml/min
8/8/2023 2:25 PM	01:30:00	5.56 pH	19.86 °C	154.05 µS/cm	5.23 mg/L	78.60 NTU	168.6 mV	14.94 ft	200.00 ml/min
8/8/2023 2:30 PM	01:35:00	5.58 pH	20.09 °C	153.46 µS/cm	5.21 mg/L	74.00 NTU	128.3 mV	14.94 ft	200.00 ml/min
8/8/2023 2:35 PM	01:40:00	5.58 pH	19.99 °C	153.83 µS/cm	5.22 mg/L	76.00 NTU	127.1 mV	14.94 ft	200.00 ml/min
8/8/2023 2:40 PM	01:45:00	5.58 pH	20.03 °C	153.08 µS/cm	5.23 mg/L	64.70 NTU	126.8 mV	14.94 ft	200.00 ml/min
8/8/2023 2:45 PM	01:50:00	5.58 pH	19.95 °C	154.50 µS/cm	5.25 mg/L	60.00 NTU	126.6 mV	14.94 ft	200.00 ml/min
8/8/2023 2:50 PM	01:55:00	5.58 pH	20.04 °C	155.90 µS/cm	5.25 mg/L	59.50 NTU	167.3 mV	14.94 ft	200.00 ml/min
8/8/2023 2:55 PM	02:00:00	5.56 pH	19.91 °C	158.53 µS/cm	5.52 mg/L	53.90 NTU	166.1 mV	14.94 ft	200.00 ml/min
8/8/2023 3:00 PM	02:05:00	5.57 pH	19.98 °C	157.95 µS/cm	5.49 mg/L	55.50 NTU	166.0 mV	14.94 ft	200.00 ml/min
8/8/2023 3:05 PM	02:10:00	5.58 pH	19.95 °C	158.04 µS/cm	5.46 mg/L	53.70 NTU	165.7 mV	14.94 ft	200.00 ml/min
8/8/2023 3:10 PM	02:15:00	5.58 pH	19.81 °C	157.85 µS/cm	5.43 mg/L	61.90 NTU	126.4 mV	14.94 ft	200.00 ml/min
8/8/2023 3:15 PM	02:20:00	5.59 pH	19.81 °C	158.53 µS/cm	5.40 mg/L	62.40 NTU	124.9 mV	14.94 ft	200.00 ml/min
8/8/2023 3:20 PM	02:25:00	5.59 pH	19.73 °C	157.90 µS/cm	5.42 mg/L	61.90 NTU	123.8 mV	14.94 ft	200.00 ml/min
8/8/2023 3:25 PM	02:30:00	5.59 pH	19.86 °C	157.96 µS/cm	5.42 mg/L	57.30 NTU	162.1 mV	14.94 ft	200.00 ml/min
8/8/2023 3:30 PM	02:35:00	5.60 pH	19.77 °C	158.34 µS/cm	5.41 mg/L	63.40 NTU	124.9 mV	14.94 ft	200.00 ml/min
8/8/2023 3:35 PM	02:40:00	5.60 pH	19.86 °C	158.10 µS/cm	5.39 mg/L	59.80 NTU	161.6 mV	14.94 ft	200.00 ml/min
8/8/2023 3:40 PM	02:45:00	5.61 pH	20.06 °C	157.59 µS/cm	5.35 mg/L	58.40 NTU	163.1 mV	14.94 ft	200.00 ml/min
8/8/2023 3:45 PM	02:50:00	5.61 pH	19.92 °C	157.17 µS/cm	5.34 mg/L	51.10 NTU	163.3 mV	14.94 ft	200.00 ml/min
8/8/2023 3:50 PM	02:55:00	5.61 pH	19.82 °C	157.69 µS/cm	5.36 mg/L	44.30 NTU	162.9 mV	14.94 ft	200.00 ml/min
8/8/2023 3:55 PM	03:00:00	5.61 pH	19.72 °C	157.25 µS/cm	5.35 mg/L	47.50 NTU	162.5 mV	14.94 ft	200.00 ml/min

Samples

Sample ID:	Description:
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Low-Flow Test Report:

Test Date / Time: 8/8/2023 5:30:03 PM

Project: Arkwright

Operator Name: Dylan Quintal

Location Name: Arkwright, AP-2, ARGWA-20 Latitude: 32.9236207144085 Longitude: -83.7023596465588 Well Diameter: 2 in Casing Type: PVC Screen Length: 10 ft Top of Screen: 27.7 ft Total Depth: 37.7 ft Initial Depth to Water: 14.99 ft	Pump Type: Dedicated QED Bladder Tubing Type: HDPE Pump Intake From TOC: 32.7 ft Estimated Total Volume Pumped: 2500 ml Flow Cell Volume: 90 ml Final Flow Rate: 100 ml/min Final Draw Down: 0 ft	Instrument Used: Aqua TROLL 400 Serial Number: 843593
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Test Notes:

Hydrogen Sulfide Test Result: NA. No samples collected due to high turbidity. This low-flow test report represents part 2/4 for ARGWA-20.

Weather Conditions:

Rainy, 91F

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	
8/8/2023 5:30 PM	00:00	5.71 pH	22.45 °C	160.86 µS/cm	5.61 mg/L	33.20 NTU	119.7 mV	14.99 ft	100.00 ml/min
8/8/2023 5:35 PM	05:00	5.68 pH	21.31 °C	159.24 µS/cm	5.53 mg/L	32.50 NTU	126.1 mV	14.99 ft	100.00 ml/min
8/8/2023 5:40 PM	10:00	5.67 pH	20.88 °C	158.46 µS/cm	5.49 mg/L	24.00 NTU	160.7 mV	14.99 ft	100.00 ml/min
8/8/2023 5:45 PM	15:00	5.67 pH	20.75 °C	158.38 µS/cm	5.42 mg/L	29.00 NTU	160.7 mV	14.99 ft	100.00 ml/min
8/8/2023 5:50 PM	20:00	5.63 pH	20.83 °C	160.33 µS/cm	5.38 mg/L	29.70 NTU	125.4 mV	14.99 ft	100.00 ml/min
8/8/2023 5:55 PM	25:00	5.63 pH	20.84 °C	160.00 µS/cm	5.34 mg/L	26.10 NTU	119.8 mV	14.99 ft	100.00 ml/min

Samples

Sample ID:	Description:
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Low-Flow Test Report:

Test Date / Time: 8/9/2023 10:03:04 AM

Project: Arkwright

Operator Name: Dylan Quintal

Location Name: Arkwright, AP-2, ARGWA-20 Latitude: 32.9236207144085 Longitude: -83.7023596465588 Well Diameter: 2 in Casing Type: PVC Screen Length: 10 ft Top of Screen: 27.7 ft Total Depth: 37.7 ft Initial Depth to Water: 15.01 ft	Pump Type: Dedicated QED Bladder Tubing Type: LDPE Pump Intake From TOC: 32.7 ft Estimated Total Volume Pumped: 7223.333 ml Flow Cell Volume: 90 ml Final Flow Rate: 100 ml/min Final Draw Down: 0 ft	Instrument Used: Aqua TROLL 400 Serial Number: 843593
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Test Notes:

Hydrogen sulfide test result: NA. No samples taken due to high turbidity. This low-flow test report represents part 3/4 for ARGWA-20.

Weather Conditions:

Sunny, 80F

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	
8/9/2023 10:03 AM	00:00	5.60 pH	20.61 °C	159.87 µS/cm	5.48 mg/L	29.50 NTU	129.5 mV	15.01 ft	100.00 ml/min
8/9/2023 10:06 AM	03:00	5.58 pH	19.90 °C	159.21 µS/cm	5.47 mg/L	28.50 NTU	116.2 mV	15.01 ft	100.00 ml/min
8/9/2023 10:09 AM	06:00	5.56 pH	19.59 °C	159.21 µS/cm	5.52 mg/L	29.90 NTU	114.1 mV	15.01 ft	100.00 ml/min
8/9/2023 10:12 AM	09:00	5.56 pH	19.74 °C	159.84 µS/cm	5.54 mg/L	28.20 NTU	114.4 mV	15.01 ft	100.00 ml/min
8/9/2023 10:15 AM	12:00	5.56 pH	19.80 °C	159.62 µS/cm	5.53 mg/L	27.50 NTU	113.8 mV	15.01 ft	100.00 ml/min
8/9/2023 10:18 AM	15:00	5.56 pH	19.78 °C	158.93 µS/cm	5.52 mg/L	26.90 NTU	114.3 mV	15.01 ft	100.00 ml/min
8/9/2023 10:21 AM	18:00	5.55 pH	19.71 °C	159.13 µS/cm	5.51 mg/L	29.60 NTU	113.7 mV	15.01 ft	100.00 ml/min
8/9/2023 10:24 AM	21:00	5.56 pH	19.63 °C	158.49 µS/cm	5.49 mg/L	25.90 NTU	114.2 mV	15.01 ft	100.00 ml/min
8/9/2023 10:27 AM	24:00	5.56 pH	19.62 °C	159.16 µS/cm	5.52 mg/L	31.00 NTU	113.4 mV	15.01 ft	100.00 ml/min
8/9/2023 10:30 AM	27:00	5.58 pH	19.77 °C	159.83 µS/cm	5.50 mg/L	27.00 NTU	113.8 mV	15.01 ft	100.00 ml/min
8/9/2023 10:33 AM	30:00	5.58 pH	19.72 °C	160.11 µS/cm	5.52 mg/L	26.30 NTU	112.8 mV	15.01 ft	100.00 ml/min
8/9/2023 10:36 AM	33:00	5.59 pH	19.68 °C	159.24 µS/cm	5.49 mg/L	29.50 NTU	113.7 mV	15.01 ft	100.00 ml/min

8/9/2023 10:39 AM	36:00	5.59 pH	19.70 °C	160.00 µS/cm	5.50 mg/L	29.00 NTU	112.6 mV	15.01 ft	100.00 ml/min
8/9/2023 10:40 AM	37:14	5.59 pH	19.71 °C	159.49 µS/cm	5.50 mg/L	27.80 NTU	139.3 mV	15.01 ft	100.00 ml/min
8/9/2023 10:45 AM	42:14	5.59 pH	19.86 °C	159.85 µS/cm	5.53 mg/L	26.10 NTU	150.3 mV	15.01 ft	100.00 ml/min
8/9/2023 10:50 AM	47:14	5.59 pH	19.86 °C	160.52 µS/cm	5.52 mg/L	28.90 NTU	112.3 mV	15.01 ft	100.00 ml/min
8/9/2023 10:55 AM	52:14	5.60 pH	19.81 °C	160.24 µS/cm	5.52 mg/L	28.00 NTU	114.9 mV	15.01 ft	100.00 ml/min
8/9/2023 11:00 AM	57:14	5.60 pH	19.85 °C	159.51 µS/cm	5.50 mg/L	31.50 NTU	149.6 mV	15.01 ft	100.00 ml/min
8/9/2023 11:05 AM	01:02:14	5.60 pH	19.81 °C	160.15 µS/cm	5.53 mg/L	30.30 NTU	150.8 mV	15.01 ft	100.00 ml/min
8/9/2023 11:10 AM	01:07:14	5.61 pH	19.87 °C	160.10 µS/cm	5.52 mg/L	31.80 NTU	150.7 mV	15.01 ft	100.00 ml/min
8/9/2023 11:15 AM	01:12:14	5.61 pH	19.98 °C	160.12 µS/cm	5.52 mg/L	27.10 NTU	150.9 mV	15.01 ft	100.00 ml/min

Samples

Sample ID:	Description:
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Low-Flow Test Report:

Test Date / Time: 8/10/2023 9:00:14 AM

Project: Arkwright

Operator Name: Dylan Quintal

Location Name: Arkwright, AP-2, ARGWA-20 Latitude: 32.9236207144085 Longitude: -83.7023596465588 Well Diameter: 2 in Casing Type: PVC Screen Length: 10 ft Top of Screen: 27.7 ft Total Depth: 37.7 ft Initial Depth to Water: 14.97 ft	Pump Type: Dedicated QED Bladder Tubing Type: LDPE Pump Intake From TOC: 32.7 ft Estimated Total Volume Pumped: 1500 ml Flow Cell Volume: 90 ml Final Flow Rate: 100 ml/min Final Draw Down: 0 ft	Instrument Used: Aqua TROLL 400 Serial Number: 843593
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Test Notes:

Hydrogen sulfide test result: 0.0 mg/L. This low-flow test report represents part 4/4 for ARGWA-20.

Weather Conditions:

Hydrogen sulfide test result:

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	
8/10/2023 9:00 AM	00:00	5.53 pH	20.48 °C	156.11 µS/cm	5.43 mg/L	14.50 NTU	159.9 mV	14.97 ft	100.00 ml/min
8/10/2023 9:05 AM	05:00	5.53 pH	20.51 °C	153.93 µS/cm	5.48 mg/L	19.70 NTU	206.4 mV	14.97 ft	100.00 ml/min
8/10/2023 9:10 AM	10:00	5.53 pH	20.44 °C	154.10 µS/cm	5.48 mg/L	18.60 NTU	207.2 mV	14.97 ft	100.00 ml/min
8/10/2023 9:15 AM	15:00	5.55 pH	20.39 °C	156.32 µS/cm	5.46 mg/L	21.50 NTU	205.3 mV	14.97 ft	100.00 ml/min

Samples

Sample ID:	Description:
ARK-ARGWA-20	10 bottles, Sample time: 0925

B.3 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: 8/7/2023

Page 1 **of** 1

Morning (AM) Calibration			Calibrated By: Dylan Quintal		
Weather:		Sunny, 95F			
Time (24hr) Start:	14:00	<i>Acceptance Criteria</i>	Time (24hr) Finish:	14:45	
Temperature (°C):			Barometric Pressure (mbar):		
<i>NIST Thermometer:</i>	31.5	+/- 4°C	<i>Local Weather Station:</i>	1014.2	
<i>Aqua TROLL 400:</i>	31.8		<i>Aqua TROLL 400:</i>	1003.7	
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>
	19.9	98.6	796	9.90	+/- 3 %
	Calibration Value	Post Calibration	<i>Acceptance Criteria</i>	Cal Sol Temp (°C)	Notes:
Specific Conductance 4,490 (µS/cm)	4490	4490.3	+/- 1 %	32.7	NA
pH 7 (SU)	7.00	6.97	+/- .1 (SU)	33.3	NA
pH 4 (SU)	4.00	4.02	+/- .1 (SU)	33.4	NA
pH 10 (SU)	10.00	9.92	+/- .1 (SU)	32.9	NA
D.O. (%)	N/A	100.8	95-105 %	32.7	NA
ORP (mV)	228.0	228.3	+/- 10 mV	32.8	NA

Afternoon (PM) Calibration Verification			Verification By: Dylan Quintal		
Weather:		Partly cloudy, 94F			
Time (24hr) Start:	18:20	<i>Acceptance Criteria</i>	Time (24hr) Finish:	18:50	
Temperature (°C):			Barometric Pressure (mbar):		
<i>NIST Thermometer:</i>	36.1	+/- 4°C	<i>Local Weather Station:</i>	1012.5	
<i>Aqua TROLL 400:</i>	35.5		<i>Aqua TROLL 400:</i>	1001.4	
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>
	19.8	99	819	9.95	+/- 3 %
	Calibration Value	Verification	<i>Acceptance Criteria</i>	Cal Sol Temp (°C)	Notes:
Specific Conductance 4490 (µS/cm)	4490	4491.7	+/- 1 %	35.3	NA
pH 7 (SU)	7.00	6.95	+/- .1 (SU)	37.5	NA
pH 4 (SU)	4.00	3.97	+/- .1 (SU)	35.3	NA
pH 10 (SU)	10.00	9.90	+/- .1 (SU)	37.4	NA
D.O. (%)	N/A	102.0	95-105 %	35.3	NA
ORP (mV)	228.0	224.5	+/- 10 mV	37.3	NA

Calibration Standards Information				
Standard (@ 25°C)	Certified Value	Brand	Lot Number	Expiration Date
AM pH 4 (SU)	4.00	AIR	22250153	11/1/2023
AM pH 7 (SU)	7.00	AIR	2216893	11/1/2023
AM pH 10 (SU)	10.00	AIR	21320202	12/1/2023
PM pH 4 (SU)	4.00	AIR	22250153	11/1/2023
PM pH 7 (SU)	7.00	AIR	2216893	11/1/2023
PM pH 10 (SU)	10.00	AIR	21320202	12/1/2023
Specific Conductance 4,490 (µS/cm)	4490	AIR	22250153	11/1/2023
ORP (mV)	228.0	AIR	21390144	11/1/2023
Turbidity - 20 NTU	20.0	Hach	A2231	Dec-23
Turbidity - 100 NTU	100	Hach	A2239	1-Dec
Turbidity - 800 NTU	800	Hach	A2231	Dec-23
Turbidity - 10 NTU	10.0	Hach	A2264	Jan-24

	Manufacturer	Model	Serial Number	Calibrated Within Acceptance Criteria:
Water Quality Meter	InSitu	AquaTroll 400	843593	Yes
Turbidity Meter	Hach	2100Q	22090D000337	Yes
NIST Thermometer	Thomas Instruments	NIST Thermometer	221620123	Expiration Date: 6/28/2024

Explanations: Noelia Gangi from GPC auditing calibration and sampling.

Prepared By: Dylan Quintal **Date:** 8/7/2023 **Signature:** *Dylan Quintal*
Review By: Calli Provenza **Date:** 8/8/2023 **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: 8/7/2023

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Morning (AM) Calibration			Calibrated By: Zach Levy		
Weather:		Partly Cloudy 98 F			
Time (24hr) Start:	13:46	<i>Acceptance Criteria</i>	Time (24hr) Finish:	14:38	
Temperature (°C):			Barometric Pressure (mBar):		
<i>NIST Thermometer:</i>	29.0	+/- 4°C	<i>Local Weather Station:</i>	1014.560	
<i>Aqua TROLL 400:</i>	28.9		<i>Aqua TROLL 400:</i>	1001.8	
Turbidity (NTUs):	20 NTU Standard	100 NTU Standard	800 NTU Standard	10 NTU Verification	<i>Acceptance Criteria</i>
	20.0	99.3	784	10.2	+/- 3 %
	Calibration Value	Post Calibration	<i>Acceptance Criteria</i>	Cal Sol Temp (°C)	Notes:
Specific Conductance 4,490 (µS/cm)	4492.6	4486.5	+/- 1 %	29.0	NA
pH 7 (SU)	7.00	7.04	+/- .1 (SU)	29.7	NA
pH 4 (SU)	4.00	4.06	+/- .1 (SU)	30.9	NA
pH 10 (SU)	10.00	9.95	+/- .1 (SU)	29.4	NA
D.O. (%)	N/A	100.2	95-105 %	30.2	NA
ORP (mV)	228.0	227.8	+/- 10 mV	29.8	NA

Afternoon (PM) Calibration Verification			Verification By: John Myer		
Weather:		Mostly Cloudy 94 F			
Time (24hr) Start:	18:26	<i>Acceptance Criteria</i>	Time (24hr) Finish:	18:45	
Temperature (°C):			Barometric Pressure (mBar):		
<i>NIST Thermometer:</i>	33.0	+/- 4°C	<i>Local Weather Station:</i>	1001.4	
	34.5		<i>Aqua TROLL 400:</i>	999.7	
Turbidity (NTUs):	20 NTU Standard	100 NTU Standard	800 NTU Standard	10 NTU Verification	<i>Acceptance Criteria</i>
	20.5	101	817	10.2	+/- 3 %
	Calibration Value	Verification	<i>Acceptance Criteria</i>	Cal Sol Temp (°C)	Notes:
Specific Conductance 4490 (µS/cm)	4490	4455	+/- 1 %	37.7	NA
pH 7 (SU)	7.00	7.06	+/- .1 (SU)	35.2	NA
pH 4 (SU)	4.00	4.02	+/- .1 (SU)	36.6	NA
pH 10 (SU)	10.00	9.97	+/- .1 (SU)	34.3	NA
D.O. (%)	NA	100.4	95-105 %	40.7	NA
ORP (mV)	228.0	218.8	+/- 10 mV	32.7	NA

Calibration Standards Information					
Standard (@ 25°C)	Certified Value	Brand	Lot Number	Expiration Date	
AM pH 4 (SU)	4.00	AIR	22250153	11/30/2023	
AM pH 7 (SU)	7.00	AIR	22140169	8/31/2023	
AM pH 10 (SU)	10.00	AIR	22110130	8/31/2023	
PM pH 4 (SU)	4.00	AIR	22250153	11/30/2023	
PM pH 7 (SU)	7.00	AIR	22140169	8/31/2023	
PM pH 10 (SU)	10.00	AIR	22140169	8/31/2023	
Specific Conductance 4,490 (µS/cm)	4490	AIR	22250153	11/30/2023	
ORP (mV)	228.0	AIR	22200085	8/31/2023	
Turbidity - 20 NTU	20.0	Hach	A3187	10/31/2024	
Turbidity - 100 NTU	100	Hach	A3186	10/31/2024	
Turbidity - 800 NTU	800	Hach	A3166	9/30/2024	
Turbidity - 10 NTU	10.0	Hach	A3173	9/30/2024	

	Manufacturer	Model	Serial Number	Calibrated Within Acceptance Criteria:
Water Quality Meter	InSitu	AquaTroll 400	728541	Y
Turbidity Meter	Hach	2100Q	2306D000342	Y
NIST Thermometer	Thomas Instruments	NIST Thermometer	221620123	Expiration Date: 6/28/2024
Explanations:	NA			

Prepared By: Zach Levy/John Myer **Date:** 8/7/2023 **Signature:** *John Myer* *Zachary Levy*
Review By: Calli Provenza **Date:** 8/8/2023 **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: 8/7/2023

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Morning (AM) Calibration			Calibrated By: Dylan Ripley		
Weather:		Sunny Partly Cloudy			
Time (24hr) Start:	13:50	<i>Acceptance Criteria</i>	Time (24hr) Finish:	14:40	
Temperature (°C):			Barometric Pressure (mbar):		
<i>NIST Thermometer:</i>	30.1	+/- 4°C	<i>Local Weather Station:</i>	1014.6	
<i>Aqua TROLL 400:</i>	33.0		<i>Aqua TROLL 400:</i>	1003.0	
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>
	20.0	99.7	793	9.83	+/- 3 %
	Calibration Value	Post Calibration	<i>Acceptance Criteria</i>	Cal Sol Temp (°C)	Notes:
Specific Conductance 4,490 (µS/cm)	4490	4476.2	+/- 1 %	30.5	NA
pH 7 (SU)	7.00	6.98	+/- .1 (SU)	32.7	NA
pH 4 (SU)	4.00	4.02	+/- .1 (SU)	33.4	NA
pH 10 (SU)	10.00	9.91	+/- .1 (SU)	32.6	NA
D.O. (%)	N/A	102.8	95-105 %	33.0	NA
ORP (mV)	228.0	228.1	+/- 10 mV	34.3	NA

Afternoon (PM) Calibration Verification			Verification By: Dylan Ripley		
Weather:		Partly Cloudy/Scattered T-storms			
Time (24hr) Start:	18:20	<i>Acceptance Criteria</i>	Time (24hr) Finish:	18:42	
Temperature (°C):			Barometric Pressure (mbar):		
<i>NIST Thermometer:</i>	31.1	+/- 4°C	<i>Local Weather Station:</i>	1012.9	
<i>Aqua TROLL 400:</i>	30.8		<i>Aqua TROLL 400:</i>	1000.8	
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>
	19.9	101	805	9.96	+/- 3 %
	Calibration Value	Verification	<i>Acceptance Criteria</i>	Cal Sol Temp (°C)	Notes:
Specific Conductance 4490 (µS/cm)	4490	4489.6	+/- 1 %	27.6	NA
pH 7 (SU)	7.00	7.05	+/- .1 (SU)	30.5	NA
pH 4 (SU)	4.00	4.10	+/- .1 (SU)	27.6	NA
pH 10 (SU)	10.00	10.01	+/- .1 (SU)	31.6	NA
D.O. (%)	N/A	101.6	95-105 %	32.8	NA
ORP (mV)	228.0	230.8	+/- 10 mV	32.1	NA

Calibration Standards Information				
Standard (@ 25°C)	Certified Value	Brand	Lot Number	Expiration Date
AM pH 4 (SU)	4.00	AIR	22250153	11/1/2023
AM pH 7 (SU)	7.00	AIR	2216893	11/1/2023
AM pH 10 (SU)	10.00	AIR	21320202	12/1/2023
PM pH 4 (SU)	4.00	AIR	22250153	11/1/2023
PM pH 7 (SU)	7.00	AIR	2216893	11/1/2023
PM pH 10 (SU)	10.00	AIR	21320202	12/1/2023
Specific Conductance 4,490 (µS/cm)	4490	AIR	22250153	11/1/2023
ORP (mV)	228.0	AIR	21390144	11/1/2023
Turbidity - 20 NTU	20.0	Hach	A2231	23-Dec
Turbidity - 100 NTU	100	Hach	A2239	23-Dec
Turbidity - 800 NTU	800	Hach	A2231	23-Dec
Turbidity - 10 NTU	10.0	Hach	A2264	24-Jan

	Manufacturer	Model	Serial Number	Calibrated Within Acceptance Criteria:
Water Quality Meter	InSitu	AquaTroll 400	883561	Yes
Turbidity Meter	Hach	2100Q	22070D000463	Yes
NIST Thermometer	Thomas Instruments	NIST Thermometer	221620123	Expiration Date: 6/28/2024

Explanations: NA

Prepared By: Dylan Ripley **Date:** 8/7/2023 **Signature:** 

Review By: Calli Provenza **Date:** 8/8/2023 **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: 8/7/2023

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Morning (AM) Calibration			Calibrated By: Houston Lynn		
Weather:		Mostly Sunny 94 F			
Time (24hr) Start:	14:00	<i>Acceptance Criteria</i>	Time (24hr) Finish:	15:00	
Temperature (°C):			Barometric Pressure (mbar):		
<i>NIST Thermometer:</i>	33.2	+/- 4°C	<i>Local Weather Station:</i>	1014.2	
<i>Aqua TROLL 400:</i>	33.1		<i>Aqua TROLL 400:</i>	1002.9	
Turbidity (NTUs):	20 NTU Standard	100 NTU Standard	800 NTU Standard	10 NTU Verification	<i>Acceptance Criteria</i>
	19.9	97	781	10.2	+/- 3 %
	Calibration Value	Post Calibration	<i>Acceptance Criteria</i>	Cal Sol Temp (°C)	Notes:
Specific Conductance 4,490 (µS/cm)	4490	4498.2	+/- 1 %	32.0	NA
pH 7 (SU)	7.00	6.95	+/- .1 (SU)	33.0	NA
pH 4 (SU)	4.00	4.02	+/- .1 (SU)	32.0	NA
pH 10 (SU)	10.00	10.00	+/- .1 (SU)	33.0	NA
D.O. (%)	N/A	100.8	95-105 %	33.2	NA
ORP (mV)	228.0	227.6	+/- 10 mV	32.7	NA

Afternoon (PM) Calibration Verification			Verification By: Houston Lynn		
Weather:		Partly cloudy 94 F			
Time (24hr) Start:	18:22	<i>Acceptance Criteria</i>	Time (24hr) Finish:	18:45	
Temperature (°C):			Barometric Pressure (mbar):		
<i>NIST Thermometer:</i>	35.3	+/- 4°C	<i>Local Weather Station:</i>	1001.4	
	35.6		<i>Aqua TROLL 400:</i>	1001.0	
Turbidity (NTUs):	20 NTU Standard	100 NTU Standard	800 NTU Standard	10 NTU Verification	<i>Acceptance Criteria</i>
	20.1	98.7	788	10.1	+/- 3 %
	Calibration Value	Verification	<i>Acceptance Criteria</i>	Cal Sol Temp (°C)	Notes:
Specific Conductance 4490 (µS/cm)	4578	4566.8	+/- 1 %	38.7	NA
pH 7 (SU)	7.00	6.94	+/- .1 (SU)	37.0	NA
pH 4 (SU)	4.00	4.03	+/- .1 (SU)	38.6	NA
pH 10 (SU)	10.00	9.95	+/- .1 (SU)	37.5	NA
D.O. (%)	N/A	97.1	95-105 %	34.8	NA
ORP (mV)	228.0	220.8	+/- 10 mV	35.2	NA

Calibration Standards Information					
Standard (@ 25°C)	Certified Value	Brand	Lot Number	Expiration Date	
AM pH 4 (SU)	4.00	AIR	22250153	11/1/2023	
AM pH 7 (SU)	7.00	AIR	2216893	11/1/2023	
AM pH 10 (SU)	10.00	AIR	22110130	4/1/2024	
PM pH 4 (SU)	4.00	AIR	22250153	11/1/2023	
PM pH 7 (SU)	7.00	AIR	2216893	11/1/2023	
PM pH 10 (SU)	10.00	AIR	22110130	4/1/2024	
Specific Conductance 4,490 (µS/cm)	4490	AIR	22250153	11/1/2023	
ORP (mV)	228.0	AIR	21390144	11/1/2023	
Turbidity - 20 NTU	20.0	Hach	A2231	23-Dec	
Turbidity - 100 NTU	100	Hach	A2239	23-Dec	
Turbidity - 800 NTU	800	Hach	A2231	31-Dec	
Turbidity - 10 NTU	10.0	Hach	A2264	24-Jan	

	Manufacturer	Instruments Model	Serial Number	Calibrated Within Acceptance Criteria:
Water Quality Meter	InSitu	AquaTroll 400	SN:966105	Y
Turbidity Meter	Hach	2100Q	S/N12050C017705	Y
NIST Thermometer	Thomas Instruments	NIST Thermometer	22160123	Expiration Date: 6.28.2024

Explanations: NA

Prepared By: Houston Lynn **Date:** 8/7/2023 **Signature:** *Houston Lynn*
Review By: Calli Provenza **Date:** 8/8/2023 **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: 8/8/2023

Page 1 **of** 1

Morning (AM) Calibration			Calibrated By: Houston Lynn		
Weather:			Sunny 69 F		
Time (24hr) Start:	7:00	Acceptance Criteria	Time (24hr) Finish:	7:26	
Temperature (°C):			Barometric Pressure (mbar):		
NIST Thermometer:	23.9	+/- 4°C	Local Weather Station:	1004.6	
Aqua TROLL 400:	23.6		Aqua TROLL 400:	1003.2	
Turbidity (NTUs):	20 NTU Standard	100 NTU Standard	800 NTU Standard	10 NTU Verification	Acceptance Criteria
	20.5	101	801	10.3	+/- 3 %
	Calibration Value	Post Calibration	Acceptance Criteria	Cal Sol Temp (°C)	Notes:
Specific Conductance 4,490 (µS/cm)	4490	4481.7	+/- 1 %	24.8	NA
pH 7 (SU)	7.00	7.00	+/- .1 (SU)	24.5	NA
pH 4 (SU)	4.00	4.03	+/- .1 (SU)	24.8	NA
pH 10 (SU)	10.00	10.00	+/- .1 (SU)	24.3	NA
D.O. (%)	N/A	99.6	95-105 %	23.5	NA
ORP (mV)	228.0	227.8	+/- 10 mV	24.1	NA

Afternoon (PM) Calibration Verification			Verification By: Houston Lynn		
Weather:			Cloudy 82 F		
Time (24hr) Start:	12:47	Acceptance Criteria	Time (24hr) Finish:	13:02	
Temperature (°C):			Barometric Pressure (mbar):		
NIST Thermometer:	30.4	+/- 4°C	Local Weather Station:	1003.6	
	29.7		Aqua TROLL 400:	1002.7	
Turbidity (NTUs):	20 NTU Standard	100 NTU Standard	800 NTU Standard	10 NTU Verification	Acceptance Criteria
	20.1	99.5	789	10.2	+/- 3 %
	Calibration Value	Verification	Acceptance Criteria	Cal Sol Temp (°C)	Notes:
Specific Conductance 4490 (µS/cm)	4490	4509.7	+/- 1 %	29.8	NA
pH 7 (SU)	7.00	7.00	+/- .1 (SU)	29.0	NA
pH 4 (SU)	4.00	4.05	+/- .1 (SU)	29.8	NA
pH 10 (SU)	10.00	9.93	+/- .1 (SU)	28.4	NA
D.O. (%)	N/A	103.4	95-105 %	27.7	NA
ORP (mV)	228.0	229.6	+/- 10 mV	28.2	NA

Calibration Standards Information					
Standard (@ 25°C)	Certified Value	Brand	Lot Number	Expiration Date	
AM pH 4 (SU)	4.00	AIR	22250153	11/1/2023	
AM pH 7 (SU)	7.00	AIR	2216893	11/1/2023	
AM pH 10 (SU)	10.00	AIR	22110130	4/1/2024	
PM pH 4 (SU)	4.00	AIR	22250153	11/1/2023	
PM pH 7 (SU)	7.00	AIR	2216893	11/1/2023	
PM pH 10 (SU)	10.00	AIR	22110130	4/1/2024	
Specific Conductance 4,490 (µS/cm)	4490	AIR	22250153	11/1/2023	
ORP (mV)	228.0	AIR	21390144	11/1/2023	
Turbidity - 20 NTU	20.0	Hach	A2231	23-Dec	
Turbidity - 100 NTU	100	Hach	A2239	23-Dec	
Turbidity - 800 NTU	800	Hach	A2231	31-Dec	
Turbidity - 10 NTU	10.0	Hach	A2264	24-Jan	

	Manufacturer	Instruments Model	Serial Number	Calibrated Within Acceptance Criteria:
Water Quality Meter	InSitu	AquaTroll 400	SN:966105	Y
Turbidity Meter	Hach	2100Q	S/N12050C017705	Y
NIST Thermometer	Thomas Instruments	NIST Thermometer	22160123	Expiration Date: 6.28.2024

Explanations: N/A

Prepared By: Houston Lynn **Date:** 8/8/2023 **Signature:** *Houston Lynn*
Review By: Calli Provenza **Date:** 8/10/2023 **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: 8/8/2023

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Morning (AM) Calibration			Calibrated By: Zach Levy		
Weather:	Clear				
Time (24hr) Start:	7:35	<i>Acceptance Criteria</i>	Time (24hr) Finish:	8:05	
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>	23.2		<i>Aqua TROLL 400:</i>	1004.1	
Turbidity (NTUs):	20 NTU Standard	100 NTU Standard	800 NTU Standard	10 NTU Verification	<i>Acceptance Criteria</i>
	20.1	100	807	10.2	+/- 3 %
	Calibration Value	Post Calibration	<i>Acceptance Criteria</i>	Cal Sol Temp (°C)	Notes:
Specific Conductance 4,490 (µS/cm)	4490	4494.9	+/- 1 %	24.7	NA
pH 7 (SU)	7.00	6.99	+/- .1 (SU)	25.0	NA
pH 4 (SU)	4.00	4.09	+/- .1 (SU)	24.8	NA
pH 10 (SU)	10.00	10.03	+/- .1 (SU)	25.0	NA
D.O. (%)	N/A	100.0	95-105 %	24.2	NA
ORP (mV)	228.0	227.8	+/- 10 mV	24.8	NA

Afternoon (PM) Calibration Verification			Verification By: John Myer		
Weather:	Sunny 91 F				
Time (24hr) Start:	13:55	<i>Acceptance Criteria</i>	Time (24hr) Finish:	14:20	
Temperature (°C):			Barometric Pressure (mbar):		
<i>NIST Thermometer:</i>	34.2	+/- 4°C	<i>Local Weather Station:</i>	1003.4	
	35.5		<i>Aqua TROLL 400:</i>	1005.7	
Turbidity (NTUs):	20 NTU Standard	100 NTU Standard	800 NTU Standard	10 NTU Verification	<i>Acceptance Criteria</i>
	20.2	100	787	10.1	+/- 3 %
	Calibration Value	Verification	<i>Acceptance Criteria</i>	Cal Sol Temp (°C)	Notes:
Specific Conductance 4490 (µS/cm)	4490	4495	+/- 1 %	30.5	NA
pH 7 (SU)	7.00	6.99	+/- .1 (SU)	29.4	NA
pH 4 (SU)	4.00	4.01	+/- .1 (SU)	28.9	NA
pH 10 (SU)	10.00	9.95	+/- .1 (SU)	28.6	NA
D.O. (%)	N/A	97.2	95-105 %	32.0	NA
ORP (mV)	228.0	220.0	+/- 10 mV	28.4	NA

Calibration Standards Information					
Standard (@ 25°C)	Certified Value	Brand	Lot Number	Expiration Date	
AM pH 4 (SU)	4.00	AIR	22250153	11/30/2023	
AM pH 7 (SU)	7.00	AIR	2216893	11/30/2023	
AM pH 10 (SU)	10.00	AIR	22110130	4/30/2024	
PM pH 4 (SU)	4.00	AIR	22250153	11/30/2023	
PM pH 7 (SU)	7.00	AIR	2216893	11/30/2023	
PM pH 10 (SU)	10.00	AIR	22110130	4/30/2024	
Specific Conductance 4,490 (µS/cm)	4490	AIR	22250153	11/30/2023	
ORP (mV)	228.0	AIR	21390144	11/30/2023	
Turbidity - 20 NTU	20.0	Hach	A3187	10/31/2024	
Turbidity - 100 NTU	100	Hach	A3186	10/31/2024	
Turbidity - 800 NTU	800	Hach	A3166	9/30/2024	
Turbidity - 10 NTU	10.0	Hach	A3173	9/30/2024	

	Manufacturer	Model	Serial Number	Calibrated Within Acceptance Criteria:
Water Quality Meter	InSitu	AquaTroll 400	883546	Y
Turbidity Meter	Hach	2100Q	23060D000344	Y
NIST Thermometer	Thomas Instruments	NIST Thermometer	221620123	Expiration Date: 6/28/2024
Explanations:	NA			

Prepared By: Zach Levy/John Myer **Date:** 8/8/2023 **Signature:** *John Myer* *Zachary Levy*

Review By: Calli Provenza **Date:** 8/9/2023 **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: 8/9/2023

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Morning (AM) Calibration			Calibrated By: Dylan Ripley		
Weather:		Sunny and clear			
Time (24hr) Start:	6:55	<i>Acceptance Criteria</i>	Time (24hr) Finish:	7:46	
Temperature (°C):			Barometric Pressure (mbar):		
<i>NIST Thermometer:</i>	25.5	+/- 4°C	<i>Local Weather Station:</i>	1015.2	
<i>Aqua TROLL 400:</i>	23.3		<i>Aqua TROLL 400:</i>	1003.0	
Turbidity (NTUs):	20 NTU Standard	100 NTU Standard	800 NTU Standard	10 NTU Verification	<i>Acceptance Criteria</i>
	20.1	102	805	9.81	+/- 3 %
	Calibration Value	Post Calibration	<i>Acceptance Criteria</i>	Cal Sol Temp (°C)	Notes:
Specific Conductance 4,490 (µS/cm)	4490	4475.9	+/- 1 %	23.3	NA
pH 7 (SU)	7.00	7.10	+/- .1 (SU)	24.4	NA
pH 4 (SU)	4.00	4.10	+/- .1 (SU)	24.4	NA
pH 10 (SU)	10.00	10.10	+/- .1 (SU)	24.6	NA
D.O. (%)	N/A	97.4	95-105 %	24.3	NA
ORP (mV)	228.0	231.2	+/- 10 mV	24.3	NA

Afternoon (PM) Calibration Verification			Verification By: Dylan Ripley		
Weather:		Sunny and Clear			
Time (24hr) Start:	13:20	<i>Acceptance Criteria</i>	Time (24hr) Finish:	14:45	
Temperature (°C):			Barometric Pressure (mbar):		
<i>NIST Thermometer:</i>	28.9	+/- 4°C	<i>Local Weather Station:</i>	1014.6	
<i>Aqua TROLL 400:</i>	28.7		<i>Aqua TROLL 400:</i>	1002.1	
Turbidity (NTUs):	20 NTU Standard	100 NTU Standard	800 NTU Standard	10 NTU Verification	<i>Acceptance Criteria</i>
	19.4	98.8	802	10.1	+/- 3 %
	Calibration Value	Verification	<i>Acceptance Criteria</i>	Cal Sol Temp (°C)	Notes:
Specific Conductance 4490 (µS/cm)	4490	4486.2	+/- 1 %	26.7	NA
pH 7 (SU)	7.00	6.98	+/- .1 (SU)	29.0	NA
pH 4 (SU)	4.00	4.02	+/- .1 (SU)	28.7	NA
pH 10 (SU)	10.00	9.99	+/- .1 (SU)	29.4	NA
D.O. (%)	N/A	99.9	95-105 %	30.9	NA
ORP (mV)	228.0	227.7	+/- 10 mV	29.0	NA

Calibration Standards Information				
Standard (@ 25°C)	Certified Value	Brand	Lot Number	Expiration Date
AM pH 4 (SU)	4.00	AIR	22250153	11/1/2023
AM pH 7 (SU)	7.00	AIR	2216893	11/1/2023
AM pH 10 (SU)	10.00	AIR	21320202	12/1/2023
PM pH 4 (SU)	4.00	AIR	22250153	11/1/2023
PM pH 7 (SU)	7.00	AIR	2216893	11/1/2023
PM pH 10 (SU)	10.00	AIR	21320202	12/1/2023
Specific Conductance 4,490 (µS/cm)	4490	AIR	22250153	11/1/2023
ORP (mV)	228.0	AIR	21390144	11/1/2023
Turbidity - 20 NTU	20.0	Hach	A2231	23-Dec
Turbidity - 100 NTU	100	Hach	A2239	23-Dec
Turbidity - 800 NTU	800	Hach	A2231	23-Dec
Turbidity - 10 NTU	10.0	Hach	A2264	24-Jan

	Manufacturer	Model	Serial Number	Calibrated Within Acceptance Criteria:
Water Quality Meter	InSitu	AquaTroll 400	883561	Yes
Turbidity Meter	Hach	2100Q	22070D000463	Yes
NIST Thermometer	Thomas Instruments	NIST Thermometer	221620193	Expiration Date: 6/28/2024
Explanations:	NA			

Prepared By: Dylan Ripley **Date:** 8/9/2023 **Signature:** 

Review By: Calli Provenza **Date:** 8/10/2023 **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: 8/7/2023

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Morning (AM) Calibration			Calibrated By: Houston Lynn		
Weather:		Mostly Sunny 75 F			
Time (24hr) Start:	7:00	<i>Acceptance Criteria</i>	Time (24hr) Finish:	7:36	
Temperature (°C):			Barometric Pressure (mbar):		
<i>NIST Thermometer:</i>	25.9	+/- 4°C	<i>Local Weather Station:</i>	1015.8	
<i>Aqua TROLL 400:</i>	25.7		<i>Aqua TROLL 400:</i>	1003.0	
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>
	19.7	102	794	10.1	+/- 3 %
	Calibration Value	Post Calibration	<i>Acceptance Criteria</i>	Cal Sol Temp (°C)	Notes:
Specific Conductance 4,490 (µS/cm)	4490	4495.1	+/- 1 %	26.0	NA
pH 7 (SU)	7.00	7.03	+/- .1 (SU)	26.0	NA
pH 4 (SU)	4.00	4.00	+/- .1 (SU)	26.0	NA
pH 10 (SU)	10.00	10.01	+/- .1 (SU)	26.0	NA
D.O. (%)	N/A	100.8	95-105 %	24.7	NA
ORP (mV)	228.0	227.6	+/- 10 mV	25.6	NA

Afternoon (PM) Calibration Verification			Verification By: Houston Lynn		
Weather:		Partly cloudy 90 F			
Time (24hr) Start:	13:16	<i>Acceptance Criteria</i>	Time (24hr) Finish:	13:32	
Temperature (°C):			Barometric Pressure (mbar):		
<i>NIST Thermometer:</i>	32.6	+/- 4°C	<i>Local Weather Station:</i>	1004.8	
	32.3		<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>
	19.6	97.6	789	10.2	+/- 3 %
	Calibration Value	Verification	<i>Acceptance Criteria</i>	Cal Sol Temp (°C)	Notes:
Specific Conductance 4490 (µS/cm)	4490	4466.9	+/- 1 %	32.2	NA
pH 7 (SU)	7.00	7.01	+/- .1 (SU)	30.3	NA
pH 4 (SU)	4.00	4.05	+/- .1 (SU)	32.2	NA
pH 10 (SU)	10.00	9.95	+/- .1 (SU)	30.6	NA
D.O. (%)	N/A	104.9	95-105 %	30.8	NA
ORP (mV)	228.0	220.8	+/- 10 mV	30.5	NA

Calibration Standards Information					
Standard (@ 25°C)	Certified Value	Brand	Lot Number	Expiration Date	
AM pH 4 (SU)	4.00	AIR	22250153	11/1/2023	
AM pH 7 (SU)	7.00	AIR	2216893	11/1/2023	
AM pH 10 (SU)	10.00	AIR	22110130	4/1/2024	
PM pH 4 (SU)	4.00	AIR	22250153	11/1/2023	
PM pH 7 (SU)	7.00	AIR	2216893	11/1/2023	
PM pH 10 (SU)	10.00	AIR	22110130	4/1/2024	
Specific Conductance 4,490 (µS/cm)	4490	AIR	22250153	11/1/2023	
ORP (mV)	228.0	AIR	21390144	11/1/2023	
Turbidity - 20 NTU	20.0	Hach	A2231	23-Dec	
Turbidity - 100 NTU	100	Hach	A2239	23-Dec	
Turbidity - 800 NTU	800	Hach	A2231	31-Dec	
Turbidity - 10 NTU	10.0	Hach	A2264	24-Jan	

	Manufacturer	Instruments Model	Serial Number	Calibrated Within Acceptance Criteria:
<i>Water Quality Meter</i>	InSitu	AquaTroll 400	SN:966105	Y
<i>Turbidity Meter</i>	Hach	2100Q	S/N12050C017705	Y
<i>NIST Thermometer</i>	Thomas Instruments	NIST Thermometer	22160123	Expiration Date: 6.28.2024

Explanations: None

Prepared By: Houston Lynn **Date:** 8/9/2023 **Signature:** *Houston Lynn*
Review By: Calli Provenza **Date:** 8/9/2023 **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: 8/9/2023

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Morning (AM) Calibration			Calibrated By: Zach Levy		
Weather:	Clear				
Time (24hr) Start:	7:20	<i>Acceptance Criteria</i>	Time (24hr) Finish:	7:55	
Temperature (°C):			Barometric Pressure (mbar):		
<i>NIST Thermometer:</i>	23.6	+/- 4°C	<i>Local Weather Station:</i>	1015.6	
<i>Aqua TROLL 400:</i>	22.5		<i>Aqua TROLL 400:</i>	1004.2	
Turbidity (NTUs):	20 NTU Standard	100 NTU Standard	800 NTU Standard	10 NTU Verification	<i>Acceptance Criteria</i>
	20.0	99.9	793	10.2	+/- 3 %
	Calibration Value	Post Calibration	<i>Acceptance Criteria</i>	Cal Sol Temp (°C)	Notes:
Specific Conductance 4,490 (µS/cm)	4490	4490.9	+/- 1 %	23.0	NA
pH 7 (SU)	7.00	7.03	+/- .1 (SU)	23.3	NA
pH 4 (SU)	4.00	4.05	+/- .1 (SU)	23.1	NA
pH 10 (SU)	10.00	10.01	+/- .1 (SU)	23.3	NA
D.O. (%)	N/A	100.0	95-105 %	22.9	NA
ORP (mV)	228.0	227.8	+/- 10 mV	23.2	NA

Afternoon (PM) Calibration Verification			Verification By: John Myer		
Weather:	Sunny 91 F				
Time (24hr) Start:	15:45	<i>Acceptance Criteria</i>	Time (24hr) Finish:	16:15	
Temperature (°C):			Barometric Pressure (mbar):		
<i>NIST Thermometer:</i>	34.7	+/- 4°C	<i>Local Weather Station:</i>	1001.6	
	34.2		<i>Aqua TROLL 400:</i>	1001.7	
Turbidity (NTUs):	20 NTU Standard	100 NTU Standard	800 NTU Standard	10 NTU Verification	<i>Acceptance Criteria</i>
	20.0	103	803	10.2	+/- 3 %
	Calibration Value	Verification	<i>Acceptance Criteria</i>	Cal Sol Temp (°C)	Notes:
Specific Conductance 4490 (µS/cm)	4490	4454	+/- 1 %	34.1	NA
pH 7 (SU)	7.00	6.99	+/- .1 (SU)	31.4	NA
pH 4 (SU)	4.00	4.01	+/- .1 (SU)	31.1	NA
pH 10 (SU)	10.00	9.95	+/- .1 (SU)	31.2	NA
D.O. (%)	N/A	99.0	95-105 %	35.4	NA
ORP (mV)	228.0	220.5	+/- 10 mV	31.9	NA

Calibration Standards Information					
Standard (@ 25°C)	Certified Value	Brand	Lot Number	Expiration Date	
AM pH 4 (SU)	4.00	AIR	22250153	11/30/2023	
AM pH 7 (SU)	7.00	AIR	2216893	11/30/2023	
AM pH 10 (SU)	10.00	AIR	22110130	4/30/2024	
PM pH 4 (SU)	4.00	AIR	22250153	11/30/2023	
PM pH 7 (SU)	7.00	AIR	2216893	11/30/2023	
PM pH 10 (SU)	10.00	AIR	22110130	4/30/2024	
Specific Conductance 4,490 (µS/cm)	4490	AIR	22250153	11/30/2023	
ORP (mV)	228.0	AIR	21390144	11/30/2023	
Turbidity - 20 NTU	20.0	Hach	A3187	10/31/2024	
Turbidity - 100 NTU	100	Hach	A3186	10/31/2024	
Turbidity - 800 NTU	800	Hach	A3166	9/30/2024	
Turbidity - 10 NTU	10.0	Hach	A3173	9/30/2024	

	Manufacturer	Model	Serial Number	Calibrated Within Acceptance Criteria:
<i>Water Quality Meter</i>	InSitu	AquaTroll 400	883546	Y
<i>Turbidity Meter</i>	Hach	2100Q	23060D000344	Y
<i>NIST Thermometer</i>	Thomas Instruments	NIST Thermometer	221620123	Expiration Date: 6/28/2024
Explanations:	NA			

Prepared By: John Myer **Date:** 8/9/2023 **Signature:** *John Myer* *Zachary Levy*
Review By: Calli Provenza **Date:** 8/10/2023 **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: 8/9/2023

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Morning (AM) Calibration			Calibrated By: Dylan Quintal		
Weather:		Clear, 70F			
Time (24hr) Start:	7:20	<i>Acceptance Criteria</i>	Time (24hr) Finish:	8:00	
Temperature (°C):			Barometric Pressure (mbar):		
<i>NIST Thermometer:</i>	23.5	+/- 4°C	<i>Local Weather Station:</i>	1015.2	
<i>Aqua TROLL 400:</i>	22.3		<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>
	20.1	100	809	10.2	+/- 3 %
	Calibration Value	Post Calibration	<i>Acceptance Criteria</i>	Cal Sol Temp (°C)	Notes:
Specific Conductance 4,490 (µS/cm)	4490	4491	+/- 1 %	23.2	NA
pH 7 (SU)	7.00	7.01	+/- .1 (SU)	22.8	NA
pH 4 (SU)	4.00	3.97	+/- .1 (SU)	23.1	NA
pH 10 (SU)	10.00	9.99	+/- .1 (SU)	23.0	NA
D.O. (%)	N/A	99.9	95-105 %	22.5	NA
ORP (mV)	228.0	227.8	+/- 10 mV	23.1	NA

Afternoon (PM) Calibration Verification			Verification By: Dylan Quintal		
Weather:		Partly cloudy, 84F			
Time (24hr) Start:	11:55	<i>Acceptance Criteria</i>	Time (24hr) Finish:	12:15	
Temperature (°C):			Barometric Pressure (mbar):		
<i>NIST Thermometer:</i>	24.7	+/- 4°C	<i>Local Weather Station:</i>	1015.2	
	24.7		<i>Aqua TROLL 400:</i>	1005.3	
Turbidity (NTUs):	20 NTU Standard	100 NTU Standard	800 NTU Standard	10 NTU Verification	<i>Acceptance Criteria</i>
	20.1	102	800	9.96	+/- 3 %
	Calibration Value	Verification	<i>Acceptance Criteria</i>	Cal Sol Temp (°C)	Notes:
Specific Conductance 4490 (µS/cm)	4490	4487.5	+/- 1 %	24.6	NA
pH 7 (SU)	7.00	6.99	+/- .1 (SU)	24.6	NA
pH 4 (SU)	4.00	3.98	+/- .1 (SU)	24.7	NA
pH 10 (SU)	10.00	9.99	+/- .1 (SU)	24.6	NA
D.O. (%)	N/A	99.4	95-105 %	25.1	NA
ORP (mV)	228.0	225.7	+/- 10 mV	24.6	NA

Calibration Standards Information				
Standard (@ 25°C)	Certified Value	Brand	Lot Number	Expiration Date
AM pH 4 (SU)	4.00	AIR	22250153	11/1/2023
AM pH 7 (SU)	7.00	AIR	2216893	11/1/2023
AM pH 10 (SU)	10.00	AIR	21320202	12/1/2023
PM pH 4 (SU)	4.00	AIR	22250153	11/1/2023
PM pH 7 (SU)	7.00	AIR	2216893	11/1/2023
PM pH 10 (SU)	10.00	AIR	21320202	12/1/2023
Specific Conductance 4,490 (µS/cm)	4490	AIR	22250153	11/1/2023
ORP (mV)	228.0	AIR	21390144	11/1/2023
Turbidity - 20 NTU	20.0	Hach	A2231	Dec-23
Turbidity - 100 NTU	100	Hach	A2239	Dec-23
Turbidity - 800 NTU	800	Hach	A2231	Dec-23
Turbidity - 10 NTU	10.0	Hach	A2264	Jan-24

	Manufacturer	Instruments Model	Serial Number	Calibrated Within Acceptance Criteria:
Water Quality Meter	InSitu	AquaTroll 400	843593	Yes
Turbidity Meter	Hach	2100Q	22090D000337	Yes
NIST Thermometer	Thomas Instruments	NIST Thermometer	221620123	Expiration Date: 6/28/2024

Explanations: Hach recalibrated at noon due to readings slightly out of criteria.

Prepared By: Dylan Quintal Date: 8/9/2023 Signature: Dylan Quintal
 Review By: Calli Provenza Date: 8/14/2023 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: 8/10/2023

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Morning (AM) Calibration			Calibrated By: John Myer		
Weather:		Overcast 74 F			
Time (24hr) Start:	6:40	<i>Acceptance Criteria</i>	Time (24hr) Finish:	7:10	
Temperature (°C):			Barometric Pressure (mbar):		
<i>NIST Thermometer:</i>	29.1	+/- 4°C	<i>Local Weather Station:</i>	1001.5	
<i>Aqua TROLL 400:</i>	28.4		<i>Aqua TROLL 400:</i>	999.7	
Turbidity (NTUs):	20 NTU Standard	100 NTU Standard	800 NTU Standard	10 NTU Verification	<i>Acceptance Criteria</i>
	20.0	98.6	801	10.1	+/- 3 %
	Calibration Value	Post Calibration	<i>Acceptance Criteria</i>	Cal Sol Temp (°C)	Notes:
Specific Conductance 4,490 (µS/cm)	4490	4470.5	+/- 1 %	26.4	NA
pH 7 (SU)	7.00	7.00	+/- .1 (SU)	26.8	NA
pH 4 (SU)	4.00	4.00	+/- .1 (SU)	27.0	NA
pH 10 (SU)	10.00	10.01	+/- .1 (SU)	27.5	NA
D.O. (%)	N/A	100.1	95-105 %	25.6	NA
ORP (mV)	228.0	227.2	+/- 10 mV	26.4	NA

Afternoon (PM) Calibration Verification			Verification By: John Myer		
Weather:		Sunny 86 F			
Time (24hr) Start:	13:10	<i>Acceptance Criteria</i>	Time (24hr) Finish:	13:45	
Temperature (°C):			Barometric Pressure (mbar):		
<i>NIST Thermometer:</i>	34.1	+/- 4°C	<i>Local Weather Station:</i>	1000.6	
	34.4		<i>Aqua TROLL 400:</i>	1000.9	
Turbidity (NTUs):	20 NTU Standard	100 NTU Standard	800 NTU Standard	10 NTU Verification	<i>Acceptance Criteria</i>
	20.0	101	790	10.3	+/- 3 %
	Calibration Value	Verification	<i>Acceptance Criteria</i>	Cal Sol Temp (°C)	Notes:
Specific Conductance 4490 (µS/cm)	4490	4446	+/- 1 %	31.9	NA
pH 7 (SU)	7.00	6.99	+/- .1 (SU)	29.7	NA
pH 4 (SU)	4.00	4.01	+/- .1 (SU)	29.7	NA
pH 10 (SU)	10.00	9.95	+/- .1 (SU)	30.3	NA
D.O. (%)	N/A	98.7	95-105 %	30.4	NA
ORP (mV)	228.0	223.5	+/- 10 mV	30.1	NA

Calibration Standards Information				
Standard (@ 25°C)	Certified Value	Brand	Lot Number	Expiration Date
AM pH 4 (SU)	4.00	AIR	22250153	11/30/2023
AM pH 7 (SU)	7.00	AIR	2216893	11/30/2023
AM pH 10 (SU)	10.00	AIR	22110130	4/30/2024
PM pH 4 (SU)	4.00	AIR	22250153	11/30/2023
PM pH 7 (SU)	7.00	AIR	2216893	11/30/2023
PM pH 10 (SU)	10.00	AIR	22110130	4/30/2024
Specific Conductance 4,490 (µS/cm)	4490	AIR	22250153	11/30/2023
ORP (mV)	228.0	AIR	21390144	11/30/2023
Turbidity - 20 NTU	20.0	Hach	A3187	10/31/2024
Turbidity - 100 NTU	100	Hach	A3186	10/31/2024
Turbidity - 800 NTU	800	Hach	A3166	9/30/2024
Turbidity - 10 NTU	10.0	Hach	A3173	9/30/2024

Instruments				Calibrated Within
	Manufacturer	Model	Serial Number	Acceptance Criteria:
Water Quality Meter	InSitu	AquaTroll 400	883546	Y
Turbidity Meter	Hach	2100Q	23060D000344	Y
NIST Thermometer	Thomas Instruments	NIST Thermometer	221620123	Expiration Date: 6/28/2024
Explanations:	NA			

Prepared By: John Myer **Date:** 8/10/2023 **Signature:** *John Myer*
Review By: Calli Provenza **Date:** 8/15/2023 **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: 8/10/2023

Page 1 **of** 1

Morning (AM) Calibration			Calibrated By: Dylan Ripley		
Weather:		sunny partly cloudy			
Time (24hr) Start:	7:08	<i>Acceptance Criteria</i>	Time (24hr) Finish:	8:13	
Temperature (°C):			+/- 4°C	Barometric Pressure (mbar):	
<i>NIST Thermometer:</i>	26.0	<i>Local Weather Station:</i>		1011.9	
<i>Aqua TROLL 400:</i>	25.8	<i>800 NTU Standard</i>	<i>Aqua TROLL 400:</i>	998.8	
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>
	20.1	100	799	9.77	+/- 3 %
	Calibration Value	Post Calibration	<i>Acceptance Criteria</i>	Cal Sol Temp (°C)	Notes:
Specific Conductance 4,490 (µS/cm)	4490	4483.8	+/- 1 %	25.9	NA
pH 7 (SU)	7.00	7.02	+/- .1 (SU)	25.7	NA
pH 4 (SU)	4.00	4.02	+/- .1 (SU)	25.8	NA
pH 10 (SU)	10.00	10.01	+/- .1 (SU)	25.9	NA
D.O. (%)	N/A	99.9	95-105 %	26.0	NA
ORP (mV)	228.0	227.6	+/- 10 mV	25.9	NA

Afternoon (PM) Calibration Verification			Verification By: Dylan Ripley		
Weather:		Sunny partly cloudy			
Time (24hr) Start:	14:45	<i>Acceptance Criteria</i>	Time (24hr) Finish:	15:02	
Temperature (°C):			+/- 4°C	Barometric Pressure (mbar):	
<i>NIST Thermometer:</i>	24.5	<i>Local Weather Station:</i>		1011.5	
<i>Aqua TROLL 400:</i>	26.4	<i>800 NTU Standard</i>	<i>Aqua TROLL 400:</i>	998.3	
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	99.8	791	9.77	+/- 3 %
	Calibration Value	Verification	<i>Acceptance Criteria</i>	Cal Sol Temp (°C)	Notes:
Specific Conductance 4490 (µS/cm)	4490	4481.5	+/- 1 %	26.4	NA
pH 7 (SU)	7.00	7.08	+/- .1 (SU)	27.0	NA
pH 4 (SU)	4.00	4.10	+/- .1 (SU)	26.4	NA
pH 10 (SU)	10.00	10.02	+/- .1 (SU)	27.1	NA
D.O. (%)	N/A	99.8	95-105 %	27.3	NA
ORP (mV)	228.0	226.5	+/- 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	22250153	11/1/2023
AM pH 7 (SU)	7.00	AIR	2216893	11/1/2023
AM pH 10 (SU)	10.00	AIR	21320202	12/1/2023
PM pH 4 (SU)	4.00	AIR	22250153	11/1/2023
PM pH 7 (SU)	7.00	AIR	2216893	11/1/2023
PM pH 10 (SU)	10.00	AIR	21320202	12/1/2023
Specific Conductance 4,490 (µS/cm)	4490	AIR	22250153	11/1/2023
ORP (mV)	228.0	AIR	21390144	11/1/2023
Turbidity - 20 NTU	20.0	Hach	A2231	23-Dec
Turbidity - 100 NTU	100	Hach	A2239	23-Dec
Turbidity - 800 NTU	800	Hach	A2231	23-Dec
Turbidity - 10 NTU	10.0	Hach	A2264	24-Jan

	Manufacturer	Model	Serial Number	Calibrated Within Acceptance Criteria:
Water Quality Meter	InSitu	AquaTroll 400	728541	Yes
Turbidity Meter	Hach	2100Q	22070D000463	Yes
NIST Thermometer	Thomas Instruments	NIST Thermometer	221620193	Expiration Date: 6/28/2024
Explanations:	NA			

Prepared By: Dylan Ripley **Date:** 8/10/2023 **Signature:**

Review By: Calli Provenza **Date:** 8/14/2023 **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: 8/10/2023

Page 1 **of** 1

Morning (AM) Calibration			Calibrated By: Dylan Quintal		
Weather:		Partly cloudy, 75F			
Time (24hr) Start:	7:00	<i>Acceptance Criteria</i>	Time (24hr) Finish:	7:40	
Temperature (°C):			Barometric Pressure (mbar):		
<i>NIST Thermometer:</i>	26.1	+/- 4°C	<i>Local Weather Station:</i>	1011.5	
<i>Aqua TROLL 400:</i>	25.6		<i>Aqua TROLL 400:</i>	1000.9	
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>
	20.5	97.9	785	10.2	+/- 3 %
	Calibration Value	Post Calibration	<i>Acceptance Criteria</i>	Cal Sol Temp (°C)	Notes:
Specific Conductance 4,490 (µS/cm)	4490	4482.5	+/- 1 %	26.6	NA
pH 7 (SU)	7.00	7.00	+/- .1 (SU)	26.0	NA
pH 4 (SU)	4.00	3.99	+/- .1 (SU)	26.6	NA
pH 10 (SU)	10.00	9.98	+/- .1 (SU)	26.3	NA
D.O. (%)	N/A	100.0	95-105 %	25.7	NA
ORP (mV)	228.0	227.9	+/- 10 mV	26.2	NA

Afternoon (PM) Calibration Verification			Verification By: Dylan Quintal		
Weather:		Partly cloudy, 87F			
Time (24hr) Start:	14:00	<i>Acceptance Criteria</i>	Time (24hr) Finish:	14:20	
Temperature (°C):			Barometric Pressure (mbar):		
<i>NIST Thermometer:</i>	30.1	+/- 4°C	<i>Local Weather Station:</i>	1012.2	
	30.6		<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>
	20.3	101	789	9.89	+/- 3 %
	Calibration Value	Verification	<i>Acceptance Criteria</i>	Cal Sol Temp (°C)	Notes:
Specific Conductance 4490 (µS/cm)	4490	4516.7	+/- 1 %	32.3	NA
pH 7 (SU)	7.00	7.03	+/- .1 (SU)	31.9	NA
pH 4 (SU)	4.00	4.07	+/- .1 (SU)	32.4	NA
pH 10 (SU)	10.00	9.91	+/- .1 (SU)	31.4	NA
D.O. (%)	N/A	101.6	95-105 %	33.6	NA
ORP (mV)	228.0	218.5	+/- 10 mV	31.2	NA

Calibration Standards Information				
Standard (@ 25°C)	Certified Value	Brand	Lot Number	Expiration Date
AM pH 4 (SU)	4.00	AIR	22250153	11/1/2023
AM pH 7 (SU)	7.00	AIR	2216893	11/1/2023
AM pH 10 (SU)	10.00	AIR	21320202	12/1/2023
PM pH 4 (SU)	4.00	AIR	22250153	11/1/2023
PM pH 7 (SU)	7.00	AIR	2216893	11/1/2023
PM pH 10 (SU)	10.00	AIR	21320202	12/1/2023
Specific Conductance 4,490 (µS/cm)	4490	AIR	22250153	11/1/2023
ORP (mV)	228.0	AIR	21390144	11/1/2023
Turbidity - 20 NTU	20.0	Hach	A2231	Dec-23
Turbidity - 100 NTU	100	Hach	A2239	Dec-23
Turbidity - 800 NTU	800	Hach	A2231	Dec-23
Turbidity - 10 NTU	10.0	Hach	A2264	Jan-23

	Manufacturer	Instruments Model	Serial Number	Calibrated Within Acceptance Criteria:
Water Quality Meter	InSitu	AquaTroll 400	843593	Yes
Turbidity Meter	Hach	2100Q	22090D000337	Yes
NIST Thermometer	Thomas Instruments	NIST Thermometer	221620123	Expiration Date: 6/28/2024

Explanations: Midday calibration performed after sampling first two wells and before third.

Prepared By: Dylan Quintal **Date:** 8/10/2023 **Signature:**

Review By: Calli Provenza **Date:** 8/14/2023 **Signature:** _____

B.4 Groundwater and Surface Water Laboratory Analytical Reports



September 06, 2023

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

Re: Arkwright CCR Groundwater Compliance AP2
Work Orders: 632699 and 633126

Dear Joju Abraham:

GEL Laboratories, LLC (GEL) appreciates the opportunity to provide the enclosed analytical results for the sample(s) we received on August 09, 2023 and August 11, 2023. This revised data report has been prepared and reviewed in accordance with GEL's standard operating procedures. The data package is being revised to report Total and Dissolved metals for the applicable samples. The data package is being revised to report Total and Dissolved metals for the applicable samples.

The samples were delivered with proper chain of custody documentation and signatures. All sample containers arrived without any visible signs of tampering or breakage. There are no additional comments concerning sample receipt. The laboratory received the following sample(s):

<u>Laboratory ID</u>	<u>Client ID</u>	<u>Matrix</u>	<u>Date Collected</u>	<u>Date Recieved</u>
632699001	ARK-ARGWA-19	Ground Water	08/08/23 10:15	09/08/23 12:45
632699002	ARK-AP2-FD-01	Water	08/08/23 12:00	09/08/23 12:45
632699003	ARK-ARGWC-22	Ground Water	08/08/23 09:55	09/08/23 12:45
632699004	ARK-ARAMW-7	Ground Water	08/08/23 11:50	09/08/23 12:45
632699005	ARK-AP2-FB-01	Water	08/08/23 12:30	09/08/23 12:45
632699006	ARK-ARAMW-9	Ground Water	08/08/23 12:35	09/08/23 12:45
632699007	ARK-ARAMW-2	Ground Water	08/08/23 15:05	09/08/23 12:45
632699008	ARK-ARAMW-1	Ground Water	08/08/23 16:00	09/08/23 12:45
632699009	ARK-ARGWC-23	Ground Water	08/08/23 16:55	09/08/23 12:45
632699010	ARK-ARGWA-19	Ground Water	08/08/23 10:15	09/08/23 12:45
632699011	ARK-ARGWC-22	Ground Water	08/08/23 09:55	09/08/23 12:45
632699012	ARK-ARAMW-7	Ground Water	08/08/23 11:50	09/08/23 12:45
632699013	ARK-ARAMW-9	Ground Water	08/08/23 12:35	09/08/23 12:45
632699014	ARK-ARAMW-2	Ground Water	08/08/23 15:05	09/08/23 12:45

632699015	ARK-ARAMW-1	Ground Water	08/08/23 16:00	09/08/23 12:45
632699016	ARK-ARGWC-23	Ground Water	08/08/23 16:55	09/08/23 12:45
633126001	ARK-ARGWC-21	Ground Water	09/08/23 10:35	11/08/23 14:00
633126002	ARK-AP2-EB-01	Water	09/08/23 11:10	11/08/23 14:00
633126003	ARK-ARAMW-8	Ground Water	09/08/23 11:15	11/08/23 14:00
633126004	ARK-ARGWA-20	Ground Water	10/08/23 09:25	11/08/23 14:00
633126005	ARK-STN-TW22	Ground Water	10/08/23 12:55	11/08/23 14:00
633126006	ARK-ARGWC-21	Ground Water	09/08/23 10:35	11/08/23 14:00
633126007	ARK-AP2-EB-01	Water	09/08/23 11:10	11/08/23 14:00
633126008	ARK-ARAMW-8	Ground Water	09/08/23 11:15	11/08/23 14:00
633126009	ARK-ARGWA-20	Ground Water	10/08/23 09:25	11/08/23 14:00
633126010	ARK-STN-TW22	Ground Water	10/08/23 12:55	11/08/23 14:00
633126011	ARK-ARGWC-21	Ground Water	09/08/23 10:35	11/08/23 14:00
633126012	ARK-ARAMW-8	Ground Water	09/08/23 11:15	11/08/23 14:00
633126013	ARK-ARGWA-20	Ground Water	10/08/23 09:25	11/08/23 14:00
633126014	ARK-STN-TW22	Ground Water	10/08/23 12:55	11/08/23 14:00

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.

Prep Methods and Prep Dates

<u>Method</u>	<u>Run Date ID</u>
SW846 3005A	10-AUG-2023
SW846 3005A	14-AUG-2023
SW846 3005A	30-AUG-2023
SW846 7470A Prep	10-AUG-2023
SW846 7470A Prep	14-AUG-2023
SW846 7470A Prep	30-AUG-2023

Analysis Methods and Analysis Dates

<u>Method</u>	<u>Run Date ID</u>
EPA 300.0	09-AUG-2023
EPA 300.0	10-AUG-2023
EPA 300.0	12-AUG-2023
EPA 300.0	13-AUG-2023
EPA 300.0	14-AUG-2023

EPA 300.0	15-AUG-2023
EPA 353.2 Low Level	11-AUG-2023
EPA 353.2 Low Level	14-AUG-2023
SM 2320B	11-AUG-2023
SM 2320B	14-AUG-2023
SM 2540C	10-AUG-2023
SM 2540C	16-AUG-2023
SW846 3005A/6020B	01-SEP-2023
SW846 3005A/6020B	17-AUG-2023
SW846 3005A/6020B	18-AUG-2023
SW846 3005A/6020B	19-AUG-2023
SW846 3005A/6020B	31-AUG-2023
SW846 7470A	11-AUG-2023
SW846 7470A	15-AUG-2023
SW846 7470A	31-AUG-2023

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,

A handwritten signature in black ink that reads "Erin J. Trent". The signature is written in a cursive style with a large, stylized "E" and "T".

Erin Trent
Project Manager

Purchase Order: GPC82177-0005
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: 632699 GEL Work Order: 632699

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
- B Either presence of analyte detected in the associated blank, or MDL/IDL < sample value < PQL
- J Value is estimated
- N/A RPD or %Recovery limits do not apply.
- 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: 633126 GEL Work Order: 633126

The Qualifiers in this report are defined as follows:

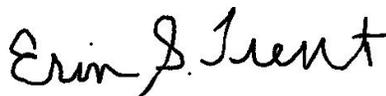
- * A quality control analyte recovery is outside of specified acceptance criteria
- ** Analyte is a Tracer compound
- ** Analyte is a surrogate compound
- B Either presence of analyte detected in the associated blank, or MDL/IDL < sample value < PQL
- J Value is estimated
- N/A RPD or %Recovery limits do not apply.
- 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 6, 2023

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: ARK-ARGWA-19 Project: GPCC00100
Sample ID: 632699001 Client ID: GPCC001
Matrix: WG
Collect Date: 08-AUG-23 10:15
Receive Date: 09-AUG-23
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		6.37	0.0670	0.200	mg/L		1	LXA2	08/09/23	2255	2473965	1
Fluoride	U	ND	0.0330	0.100	mg/L		1					
Sulfate		8.29	0.133	0.400	mg/L		1					
Mercury Analysis-CVAA												
7470 Cold Vapor Mercury, Liquid "As Received"												
Mercury	U	ND	0.000670	0.000200	mg/L	1.00	1	JP2	08/11/23	1025	2474015	2
Metals Analysis-ICP-MS												
SW846 3005A/6020B "As Received"												
Aluminum	U	ND	0.0193	0.0500	mg/L	1.00	1	PRB	08/19/23	0313	2474005	3
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		0.0337	0.000670	0.00400	mg/L	1.00	1					
Beryllium	U	ND	0.000200	0.000500	mg/L	1.00	1					
Boron		0.0199	0.00520	0.0150	mg/L	1.00	1					
Cadmium	U	ND	0.000300	0.00100	mg/L	1.00	1					
Calcium		8.51	0.0800	0.200	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					
Lithium	J	0.00382	0.00300	0.0100	mg/L	1.00	1					
Magnesium		3.36	0.0100	0.0300	mg/L	1.00	1					
Manganese	U	ND	0.00100	0.00500	mg/L	1.00	1					
Molybdenum	J	0.000421	0.000200	0.00100	mg/L	1.00	1					
Potassium		2.08	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					
Sodium		9.51	0.0800	0.250	mg/L	1.00	1					
Thallium	U	ND	0.000600	0.00200	mg/L	1.00	1					

Nutrient Analysis

EPA 353.2 Nitrogen, Nitrate/Nitrite "As Received"

Nitrogen, Nitrate/Nitrite 1.83 0.0350 0.100 mg/L 5 AXH3 08/11/23 1135 2473982 4

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 6, 2023

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: ARK-ARGWA-19 Project: GPCC00100
Sample ID: 632699001 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		62.0	2.38	10.0	mg/L			CH6	08/10/23	1435	2474115	5
Titration and Ion Analysis												
SM 2320B Total Alkalinity "As Received"												
Alkalinity, Total as CaCO3		37.0	0.725	2.00	mg/L			HH2	08/11/23	0956	2474137	6
Bicarbonate alkalinity (CaCO3)		37.0	0.725	2.00	mg/L							
Carbonate alkalinity (CaCO3)	U	ND	0.725	2.00	mg/L							

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
SW846 7470A Prep	EPA 7470A Mercury Prep Liquid	EK1	08/10/23	1245	2474012
SW846 3005A	ICP-MS 3005A PREP	JD2	08/10/23	0815	2474004

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 300.0	
2	SW846 7470A	
3	SW846 3005A/6020B	
4	EPA 353.2 Low Level	
5	SM 2540C	
6	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

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

Certificate of Analysis

Report Date: September 6, 2023

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: ARK-AP2-FD-01 Project: GPCC00100
Sample ID: 632699002 Client ID: GPCC001
Matrix: WG
Collect Date: 08-AUG-23 12:00
Receive Date: 09-AUG-23
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		6.27	0.0670	0.200	mg/L		1	LXA2	08/09/23	2326	2473965	1
Fluoride	U	ND	0.0330	0.100	mg/L		1					
Sulfate		8.34	0.133	0.400	mg/L		1					
Mercury Analysis-CVAA												
7470 Cold Vapor Mercury, Liquid "As Received"												
Mercury	U	ND	0.000670	0.000200	mg/L	1.00	1	JP2	08/11/23	1026	2474015	2
Metals Analysis-ICP-MS												
SW846 3005A/6020B "As Received"												
Antimony	U	ND	0.00100	0.00300	mg/L	1.00	1	PRB	08/19/23	0338	2474005	3
Arsenic	U	ND	0.00200	0.00500	mg/L	1.00	1					
Barium		0.0334	0.000670	0.00400	mg/L	1.00	1					
Beryllium	U	ND	0.000200	0.000500	mg/L	1.00	1					
Boron		0.0183	0.00520	0.0150	mg/L	1.00	1					
Cadmium	U	ND	0.000300	0.00100	mg/L	1.00	1					
Calcium		8.36	0.0800	0.200	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	J	0.00368	0.00300	0.0100	mg/L	1.00	1					
Molybdenum	J	0.000361	0.000200	0.00100	mg/L	1.00	1					
Selenium	U	ND	0.00150	0.00500	mg/L	1.00	1					
Thallium	U	ND	0.000600	0.00200	mg/L	1.00	1					
Nutrient Analysis												
EPA 353.2 Nitrogen, Nitrate/Nitrite "As Received"												
Nitrogen, Nitrate/Nitrite		1.89	0.0350	0.100	mg/L		5	AXH3	08/11/23	1138	2473982	4
Solids Analysis												
SM2540C Dissolved Solids "As Received"												
Total Dissolved Solids		67.0	2.38	10.0	mg/L			CH6	08/10/23	1435	2474115	5

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
SW846 3005A	ICP-MS 3005A PREP	JD2	08/10/23	0815	2474004
SW846 7470A Prep	EPA 7470A Mercury Prep Liquid	EK1	08/10/23	1245	2474012

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Certificate of Analysis

Report Date: September 6, 2023

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: ARK-ARGWC-22 Project: GPCC00100
Sample ID: 632699003 Client ID: GPCC001
Matrix: WG
Collect Date: 08-AUG-23 09:55
Receive Date: 09-AUG-23
Collector: Client

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Ion Chromatography												
EPA 300.0 Anions Liquid "As Received"												
Sulfate		719	13.3	40.0	mg/L		100	LXA2	08/09/23	2357	2473965	1
Fluoride	U	ND	0.0660	0.200	mg/L		2	LXA2	08/15/23	1906	2473965	2
Chloride		6.79	0.670	2.00	mg/L		10	LXA2	08/10/23	1241	2473965	3
Mercury Analysis-CVAA												
7470 Cold Vapor Mercury, Liquid "As Received"												
Mercury	U	ND	0.0000670	0.000200	mg/L	1.00	1	JP2	08/11/23	1028	2474015	4
Metals Analysis-ICP-MS												
SW846 3005A/6020B Dissolved Fe & Mn "As Received"												
Manganese		13.1	0.0200	0.100	mg/L	1.00	20	PRB	08/19/23	0810	2474005	5
Iron		3.67	0.0330	0.100	mg/L	1.00	1	PRB	08/19/23	0341	2474005	6
Nutrient Analysis												
EPA 353.2 Nitrogen, Nitrate/Nitrite "As Received"												
Nitrogen, Nitrate/Nitrite	U	ND	0.00700	0.0200	mg/L		1	AXH3	08/11/23	1139	2473982	7
Solids Analysis												
SM2540C Dissolved Solids "As Received"												
Total Dissolved Solids		1220	4.76	20.0	mg/L			CH6	08/10/23	1435	2474115	8
Titration and Ion Analysis												
SM 2320B Total Alkalinity "As Received"												
Alkalinity, Total as CaCO3		117	0.725	2.00	mg/L			HH2	08/11/23	1001	2474137	9
Bicarbonate alkalinity (CaCO3)		117	0.725	2.00	mg/L							
Carbonate alkalinity (CaCO3)	U	ND	0.725	2.00	mg/L							

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
SW846 7470A Prep	EPA 7470A Mercury Prep Liquid	EK1	08/10/23	1245	2474012
SW846 3005A	ICP-MS 3005A PREP	JD2	08/10/23	0815	2474004

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Certificate of Analysis

Report Date: September 6, 2023

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: ARK-ARAMW-7 Project: GPCC00100
Sample ID: 632699004 Client ID: GPCC001
Matrix: WG
Collect Date: 08-AUG-23 11:50
Receive Date: 09-AUG-23
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		5.50	0.0670	0.200	mg/L		1	LXA2	08/10/23	0028	2473965	1
Fluoride	U	ND	0.0330	0.100	mg/L		1					
Sulfate		1060	13.3	40.0	mg/L		100	LXA2	08/10/23	1311	2473965	2
Mercury Analysis-CVAA												
7470 Cold Vapor Mercury, Liquid "As Received"												
Mercury	U	ND	0.0000670	0.000200	mg/L	1.00	1	JP2	08/11/23	1029	2474015	3
Metals Analysis-ICP-MS												
SW846 3005A/6020B "As Received"												
Aluminum	J	0.0265	0.0193	0.0500	mg/L	1.00	1	PRB	08/19/23	0345	2474005	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		0.0244	0.000670	0.00400	mg/L	1.00	1					
Beryllium	J	0.000272	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		0.0605	0.000300	0.00100	mg/L	1.00	1					
Iron		4.04	0.0330	0.100	mg/L	1.00	1					
Lead	U	ND	0.000500	0.00200	mg/L	1.00	1					
Lithium		0.0577	0.00300	0.0100	mg/L	1.00	1					
Molybdenum	U	ND	0.000200	0.00100	mg/L	1.00	1					
Potassium		8.74	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					
Sodium		26.1	0.0800	0.250	mg/L	1.00	1					
Thallium	U	ND	0.000600	0.00200	mg/L	1.00	1					
Boron		2.25	0.104	0.300	mg/L	1.00	20	PRB	08/19/23	0814	2474005	5
Calcium		279	1.60	4.00	mg/L	1.00	20					
Magnesium		73.8	0.200	0.600	mg/L	1.00	20					
Manganese		14.3	0.0200	0.100	mg/L	1.00	20					

Nutrient Analysis

EPA 353.2 Nitrogen, Nitrate/Nitrite "As Received"

Nitrogen, Nitrate/Nitrite U ND 0.00700 0.0200 mg/L 1 AXH3 08/11/23 1141 2473982 6

Solids Analysis

SM2540C Dissolved Solids "As Received"

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Report Date: September 6, 2023

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: ARK-ARAMW-7 Project: GPCC00100
Sample ID: 632699004 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		1620	4.76	20.0	mg/L			CH6	08/10/23	1435	2474115	7
Titration and Ion Analysis												
SM 2320B Total Alkalinity "As Received"												
Alkalinity, Total as CaCO3		55.3	0.725	2.00	mg/L			HH2	08/11/23	1004	2474137	8
Bicarbonate alkalinity (CaCO3)		55.3	0.725	2.00	mg/L							
Carbonate alkalinity (CaCO3)	U	ND	0.725	2.00	mg/L							

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
SW846 3005A	ICP-MS 3005A PREP	JD2	08/10/23	0815	2474004
SW846 7470A Prep	EPA 7470A Mercury Prep Liquid	EK1	08/10/23	1245	2474012

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	EPA 353.2 Low Level	
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

Report Date: September 6, 2023

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: ARK-AP2-FB-01	Project: GPCC00100
Sample ID: 632699005	Client ID: GPCC001
Matrix: WQ	
Collect Date: 08-AUG-23 12:30	
Receive Date: 09-AUG-23	
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	LXA2	08/10/23	0059	2473965	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	08/11/23	1031	2474015	2
Metals Analysis-ICP-MS												
SW846 3005A/6020B "As Received"												
Antimony	U	ND	0.00100	0.00300	mg/L	1.00	1	PRB	08/19/23	0349	2474005	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					
Boron		0.0397	0.00520	0.0150	mg/L	1.00	1					
Cadmium	U	ND	0.000300	0.00100	mg/L	1.00	1					
Calcium	U	ND	0.0800	0.200	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	U	ND	0.000200	0.00100	mg/L	1.00	1					
Selenium	U	ND	0.00150	0.00500	mg/L	1.00	1					
Thallium	U	ND	0.000600	0.00200	mg/L	1.00	1					
Nutrient Analysis												
EPA 353.2 Nitrogen, Nitrate/Nitrite "As Received"												
Nitrogen, Nitrate/Nitrite	U	ND	0.00700	0.0200	mg/L		1	AXH3	08/11/23	1142	2473982	4
Solids Analysis												
SM2540C Dissolved Solids "As Received"												
Total Dissolved Solids	U	ND	2.38	10.0	mg/L			CH6	08/10/23	1435	2474115	5

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
SW846 3005A	ICP-MS 3005A PREP	JD2	08/10/23	0815	2474004
SW846 7470A Prep	EPA 7470A Mercury Prep Liquid	EK1	08/10/23	1245	2474012

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Certificate of Analysis

Report Date: September 6, 2023

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: ARK-AP2-FB-01
Sample ID: 632699005

Project: GPCC00100
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	EPA 353.2 Low Level										
5	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

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Certificate of Analysis

Report Date: September 6, 2023

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: ARK-ARAMW-9	Project: GPCC00100
Sample ID: 632699006	Client ID: GPCC001
Matrix: WG	
Collect Date: 08-AUG-23 12:35	
Receive Date: 09-AUG-23	
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		36.1	3.35	10.0	mg/L		50	LXA2	08/10/23	1342	2473965	1
Sulfate		477	6.65	20.0	mg/L		50					
Fluoride		0.837	0.0330	0.100	mg/L		1	LXA2	08/10/23	0130	2473965	2
Mercury Analysis-CVAA												
7470 Cold Vapor Mercury, Liquid "As Received"												
Mercury	U	ND	0.0000670	0.000200	mg/L	1.00	1	JP2	08/11/23	1036	2474015	3
Mercury	U	ND	0.0000670	0.000200	mg/L	1.00	1	AXS5	08/31/23	1151	2484083	4
Metals Analysis-ICP-MS												
SW846 3005A/6020B Dissolved Fe & Mn "As Received"												
Iron		0.412	0.0330	0.100	mg/L	1.00	1	PRB	08/19/23	0352	2474005	6
Manganese		0.159	0.00100	0.00500	mg/L	1.00	1					
Nutrient Analysis												
EPA 353.2 Nitrogen, Nitrate/Nitrite "As Received"												
Nitrogen, Nitrate/Nitrite	U	ND	0.00700	0.0200	mg/L		1	AXH3	08/11/23	1143	2473982	7
Solids Analysis												
SM2540C Dissolved Solids "As Received"												
Total Dissolved Solids		852	4.76	20.0	mg/L			CH6	08/10/23	1435	2474115	8
Titration and Ion Analysis												
SM 2320B Total Alkalinity "As Received"												
Alkalinity, Total as CaCO3		91.1	0.725	2.00	mg/L			HH2	08/11/23	1007	2474137	9
Bicarbonate alkalinity (CaCO3)		91.1	0.725	2.00	mg/L							
Carbonate alkalinity (CaCO3)	U	ND	0.725	2.00	mg/L							

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
SW846 7470A Prep	EPA 7470A Mercury Prep Liquid	EK1	08/30/23	1115	2484082
SW846 3005A	ICP-MS 3005A PREP	JD2	08/10/23	0815	2474004
SW846 7470A Prep	EPA 7470A Mercury Prep Liquid	EK1	08/10/23	1245	2474012

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Certificate of Analysis

Report Date: September 6, 2023

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: ARK-ARAMW-2	Project: GPCC00100
Sample ID: 632699007	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		548	2.38	10.0	mg/L		CH6	08/10/23	1435	2474115		8
Titration and Ion Analysis												
SM 2320B Total Alkalinity "As Received"												
Alkalinity, Total as CaCO3		180	0.725	2.00	mg/L		HH2	08/11/23	1009	2474137		9
Bicarbonate alkalinity (CaCO3)		180	0.725	2.00	mg/L							
Carbonate alkalinity (CaCO3)	U	ND	0.725	2.00	mg/L							

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
SW846 7470A Prep	EPA 7470A Mercury Prep Liquid	EK1	08/10/23	1245	2474012
SW846 3005A	ICP-MS 3005A PREP	JD2	08/10/23	0815	2474004
SW846 7470A Prep	EPA 7470A Mercury Prep Liquid	EK1	08/30/23	1115	2484082

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 300.0	
2	EPA 300.0	
3	SW846 7470A	
4	SW846 7470A	
5	SW846 3005A/6020B	
6	SW846 3005A/6020B	
7	EPA 353.2 Low Level	
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 6, 2023

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: ARK-ARAMW-1 Project: GPCC00100
Sample ID: 632699008 Client ID: GPCC001
Matrix: WG
Collect Date: 08-AUG-23 16:00
Receive Date: 09-AUG-23
Collector: Client

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Ion Chromatography												
EPA 300.0 Anions Liquid "As Received"												
Sulfate		223	6.65	20.0	mg/L		50	LXA2	08/10/23	1444	2473965	1
Chloride		3.61	0.0670	0.200	mg/L		1	LXA2	08/10/23	0231	2473965	2
Fluoride		0.118	0.0330	0.100	mg/L		1					
Mercury Analysis-CVAA												
7470 Cold Vapor Mercury, Liquid "As Received"												
Mercury	U	ND	0.000670	0.000200	mg/L	1.00	1	JP2	08/11/23	1039	2474015	3
Metals Analysis-ICP-MS												
SW846 3005A/6020B "As Received"												
Aluminum	J	0.0342	0.0193	0.0500	mg/L	1.00	1	PRB	08/19/23	0359	2474005	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		0.0510	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	J	0.000350	0.000300	0.00100	mg/L	1.00	1					
Iron		0.239	0.0330	0.100	mg/L	1.00	1					
Lead	U	ND	0.000500	0.00200	mg/L	1.00	1					
Lithium	J	0.00909	0.00300	0.0100	mg/L	1.00	1					
Magnesium		35.7	0.0100	0.0300	mg/L	1.00	1					
Manganese		0.145	0.00100	0.00500	mg/L	1.00	1					
Molybdenum		0.00667	0.000200	0.00100	mg/L	1.00	1					
Potassium		5.37	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					
Sodium		19.3	0.0800	0.250	mg/L	1.00	1					
Thallium	U	ND	0.000600	0.00200	mg/L	1.00	1					
Boron		1.13	0.104	0.300	mg/L	1.00	20	PRB	08/19/23	0828	2474005	5
Calcium		83.4	1.60	4.00	mg/L	1.00	20					

Nutrient Analysis

EPA 353.2 Nitrogen, Nitrate/Nitrite "As Received"

Nitrogen, Nitrate/Nitrite U ND 0.00700 0.0200 mg/L 1 AXH3 08/11/23 1207 2473982 6

Solids Analysis

SM2540C Dissolved Solids "As Received"

GEL LABORATORIES LLC

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Certificate of Analysis

Report Date: September 6, 2023

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: ARK-ARAMW-1 Project: GPCC00100
Sample ID: 632699008 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		524	2.38	10.0	mg/L			CH6	08/10/23	1435	2474115	7
Titration and Ion Analysis												
SM 2320B Total Alkalinity "As Received"												
Alkalinity, Total as CaCO3		184	0.725	2.00	mg/L			HH2	08/11/23	1011	2474137	8
Bicarbonate alkalinity (CaCO3)		184	0.725	2.00	mg/L							
Carbonate alkalinity (CaCO3)	U	ND	0.725	2.00	mg/L							

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
SW846 7470A Prep	EPA 7470A Mercury Prep Liquid	EK1	08/10/23	1245	2474012
SW846 3005A	ICP-MS 3005A PREP	JD2	08/10/23	0815	2474004

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	EPA 353.2 Low Level	
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

Report Date: September 6, 2023

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: ARK-ARGWC-23 Project: GPCC00100
Sample ID: 632699009 Client ID: GPCC001
Matrix: WG
Collect Date: 08-AUG-23 16:55
Receive Date: 09-AUG-23
Collector: Client

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Ion Chromatography												
EPA 300.0 Anions Liquid "As Received"												
Sulfate		69.8	0.665	2.00	mg/L		5	LXA2	08/10/23	1515	2473965	1
Chloride		3.60	0.0670	0.200	mg/L		1	LXA2	08/10/23	0302	2473965	2
Fluoride		0.283	0.0330	0.100	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	08/11/23	1041	2474015	3
Metals Analysis-ICP-MS												
SW846 3005A/6020B "As Received"												
Aluminum	U	ND	0.0193	0.0500	mg/L	1.00	1	PRB	08/19/23	0403	2474005	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		0.0936	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	J	0.000440	0.000300	0.00100	mg/L	1.00	1					
Iron	J	0.0491	0.0330	0.100	mg/L	1.00	1					
Lead	U	ND	0.000500	0.00200	mg/L	1.00	1					
Lithium		0.0517	0.00300	0.0100	mg/L	1.00	1					
Magnesium		10.5	0.0100	0.0300	mg/L	1.00	1					
Manganese		0.278	0.00100	0.00500	mg/L	1.00	1					
Molybdenum		0.0618	0.000200	0.00100	mg/L	1.00	1					
Potassium		1.68	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					
Sodium		13.3	0.0800	0.250	mg/L	1.00	1					
Thallium	U	ND	0.000600	0.00200	mg/L	1.00	1					
Boron		0.379	0.0520	0.150	mg/L	1.00	10	PRB	08/19/23	0832	2474005	5
Calcium		66.6	0.800	2.00	mg/L	1.00	10					

Nutrient Analysis

EPA 353.2 Nitrogen, Nitrate/Nitrite "As Received"

Nitrogen, Nitrate/Nitrite 1.33 0.0350 0.100 mg/L 5 AXH3 08/11/23 1208 2473982 6

Solids Analysis

SM2540C Dissolved Solids "As Received"

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Report Date: September 6, 2023

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: ARK-ARGWC-23 Project: GPCC00100
Sample ID: 632699009 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		294	2.38	10.0	mg/L			CH6	08/10/23	1435	2474115	7
Titration and Ion Analysis												
SM 2320B Total Alkalinity "As Received"												
Alkalinity, Total as CaCO3		175	0.725	2.00	mg/L			HH2	08/11/23	1013	2474137	8
Bicarbonate alkalinity (CaCO3)		175	0.725	2.00	mg/L							
Carbonate alkalinity (CaCO3)	U	ND	0.725	2.00	mg/L							

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
SW846 3005A	ICP-MS 3005A PREP	JD2	08/10/23	0815	2474004
SW846 7470A Prep	EPA 7470A Mercury Prep Liquid	EK1	08/10/23	1245	2474012

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	EPA 353.2 Low Level	
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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Report Date: September 6, 2023

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: ARK-ARGWC-22 Project: GPCC00100
Sample ID: 632699011 Client ID: GPCC001
Matrix: WG
Collect Date: 08-AUG-23 09:55
Receive Date: 09-AUG-23
Collector: Client

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Mercury Analysis-CVAA												
7470 Cold Vapor Mercury, Liquid "As Received"												
Mercury	U	ND	0.0000670	0.000200	mg/L	1.00	1	AXS5	08/31/23	1209	2484083	1
Metals Analysis-ICP-MS												
SW846 3005A/6020B "As Received"												
Antimony	U	ND	0.00100	0.00300	mg/L	1.00	1	PRB	08/31/23	0149	2484159	2
Beryllium	U	ND	0.000200	0.000500	mg/L	1.00	1					
Aluminum		0.0513	0.0193	0.0500	mg/L	1.00	1	PRB	08/31/23	1332	2484159	3
Arsenic	U	ND	0.00200	0.00500	mg/L	1.00	1					
Barium		0.0255	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		0.00184	0.000300	0.00100	mg/L	1.00	1					
Iron		2.73	0.0330	0.100	mg/L	1.00	1					
Lead	U	ND	0.000500	0.00200	mg/L	1.00	1					
Lithium		0.0280	0.00300	0.0100	mg/L	1.00	1					
Potassium		5.10	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					
Sodium		29.2	0.0800	0.250	mg/L	1.00	1					
Thallium	U	ND	0.000600	0.00200	mg/L	1.00	1					
Molybdenum	J	0.000514	0.000200	0.00100	mg/L	1.00	1	PRB	09/01/23	1136	2484159	4
Boron		3.06	0.130	0.375	mg/L	1.00	25	PRB	08/31/23	1336	2484159	5
Calcium		196	2.00	5.00	mg/L	1.00	25					
Magnesium		85.0	0.250	0.750	mg/L	1.00	25					
Manganese		12.4	0.0250	0.125	mg/L	1.00	25					

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
SW846 3005A	ICP-MS 3005A PREP	JD2	08/30/23	0750	2484158
SW846 7470A Prep	EPA 7470A Mercury Prep Liquid	EK1	08/30/23	1115	2484082

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Report Date: September 6, 2023

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: ARK-ARGWC-22
Sample ID: 632699011

Project: GPCC00100
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	SW846 7470A										
2	SW846 3005A/6020B										
3	SW846 3005A/6020B										
4	SW846 3005A/6020B										
5	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

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Report Date: September 6, 2023

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:	ARK-ARAMW-7	Project:	GPCC00100
Sample ID:	632699012	Client ID:	GPCC001
Matrix:	WG		
Collect Date:	08-AUG-23 11:50		
Receive Date:	09-AUG-23		
Collector:	Client		

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Metals Analysis-ICP-MS												
SW846 3005A/6020B Dissolved Fe & Mn "As Received"												
Manganese		14.9	0.0500	0.250	mg/L	1.00	50	PRB	08/31/23	1343	2484159	1
Iron		4.46	0.0330	0.100	mg/L	1.00	1	PRB	08/31/23	1339	2484159	2

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
SW846 3005A	ICP-MS 3005A PREP	JD2	08/30/23	0750	2484158

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	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: September 6, 2023

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: ARK-ARAMW-9	Project: GPCC00100
Sample ID: 632699013	Client ID: GPCC001
Matrix: WG	
Collect Date: 08-AUG-23 12:35	
Receive Date: 09-AUG-23	
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	0.0354	0.0193	0.0500	mg/L	1.00	1	PRB	08/31/23	1347	2484159	1
Arsenic	U	ND	0.00200	0.00500	mg/L	1.00	1					
Barium		0.0207	0.000670	0.00400	mg/L	1.00	1					
Boron		0.0666	0.00520	0.0150	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		0.580	0.0330	0.100	mg/L	1.00	1					
Lead	U	ND	0.000500	0.00200	mg/L	1.00	1					
Lithium	J	0.00907	0.00300	0.0100	mg/L	1.00	1					
Magnesium		10.5	0.0100	0.0300	mg/L	1.00	1					
Manganese		0.172	0.00100	0.00500	mg/L	1.00	1					
Potassium		7.85	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					
Antimony	J	0.00158	0.00100	0.00300	mg/L	1.00	1	PRB	08/31/23	0157	2484159	2
Beryllium	U	ND	0.000200	0.000500	mg/L	1.00	1					
Calcium		146	0.800	2.00	mg/L	1.00	10	PRB	08/31/23	1350	2484159	3
Sodium		107	0.800	2.50	mg/L	1.00	10					
Molybdenum		0.0109	0.000200	0.00100	mg/L	1.00	1	PRB	09/01/23	1138	2484159	4

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
SW846 3005A	ICP-MS 3005A PREP	JD2	08/30/23	0750	2484158

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	SW846 3005A/6020B	
2	SW846 3005A/6020B	
3	SW846 3005A/6020B	
4	SW846 3005A/6020B	

Notes:

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Certificate of Analysis

Report Date: September 6, 2023

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: ARK-ARAMW-9
Sample ID: 632699013

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	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 6, 2023

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: ARK-ARAMW-1 Project: GPCC00100
Sample ID: 632699015 Client ID: GPCC001
Matrix: WG
Collect Date: 08-AUG-23 16:00
Receive Date: 09-AUG-23
Collector: Client

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Metals Analysis-ICP-MS												
SW846 3005A/6020B Dissolved Fe & Mn "As Received"												
Iron		0.167	0.0330	0.100	mg/L	1.00	1	PRB	08/31/23	1408	2484159	1
Manganese		0.144	0.00100	0.00500	mg/L	1.00	1					

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
SW846 3005A	ICP-MS 3005A PREP	JD2	08/30/23	0750	2484158

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	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

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Report Date: September 6, 2023

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: ARK-ARGWC-21 Project: GPCC00100
Sample ID: 633126001 Client ID: GPCC001
Matrix: WG
Collect Date: 09-AUG-23 10:35
Receive Date: 11-AUG-23
Collector: Client

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Ion Chromatography												
EPA 300.0 Anions Liquid "As Received"												
Sulfate		214	3.33	10.0	mg/L		25	JLD1	08/14/23	1308	2475685	1
Chloride		3.35	0.0670	0.200	mg/L		1	JLD1	08/12/23	2354	2475685	2
Fluoride		0.203	0.0330	0.100	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	08/15/23	1258	2475854	3
Mercury	U	ND	0.0000670	0.000200	mg/L	1.00	1	AXS5	08/31/23	1210	2484083	4
Metals Analysis-ICP-MS												
SW846 3005A/6020B Dissolved Fe & Mn "As Received"												
Iron		0.808	0.0330	0.100	mg/L	1.00	1	PRB	08/17/23	1309	2475579	6
Manganese		0.351	0.00100	0.00500	mg/L	1.00	1	PRB	08/18/23	1231	2475579	7
Solids Analysis												
SM2540C Dissolved Solids "As Received"												
Total Dissolved Solids		520	2.38	10.0	mg/L			CH6	08/16/23	1558	2477178	9
Titration and Ion Analysis												
SM 2320B Total Alkalinity "As Received"												
Alkalinity, Total as CaCO3		162	0.725	2.00	mg/L			JW2	08/14/23	1656	2476209	10
Bicarbonate alkalinity (CaCO3)		162	0.725	2.00	mg/L							
Carbonate alkalinity (CaCO3)	U	ND	0.725	2.00	mg/L							

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
SW846 7470A Prep	EPA 7470A Mercury Prep Liquid	EK1	08/14/23	1200	2475853
SW846 3005A	ICP-MS 3005A PREP	EM2	08/14/23	1525	2475578
SW846 7470A Prep	EPA 7470A Mercury Prep Liquid	EK1	08/30/23	1115	2484082

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Certificate of Analysis

Report Date: September 6, 2023

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: ARK-ARGWC-21
Sample ID: 633126001

Project: GPCC00100
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 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	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: September 6, 2023

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: ARK-AP2-EB-01 Project: GPCC00100
Sample ID: 633126002 Client ID: GPCC001
Matrix: WQ
Collect Date: 09-AUG-23 11:10
Receive Date: 11-AUG-23
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	0.165	0.0670	0.200	mg/L		1	JLD1	08/13/23	0026	2475685	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	08/15/23	1300	2475854	2
Metals Analysis-ICP-MS												
SW846 3005A/6020B "As Received"												
Arsenic	U	ND	0.00200	0.00500	mg/L	1.00	1	PRB	08/17/23	1357	2475579	3
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					
Calcium	U	ND	0.0800	0.200	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	U	ND	0.000200	0.00100	mg/L	1.00	1					
Selenium	U	ND	0.00150	0.00500	mg/L	1.00	1					
Thallium	U	ND	0.000600	0.00200	mg/L	1.00	1					
Antimony	U	ND	0.00100	0.00300	mg/L	1.00	1	PRB	08/18/23	1306	2475579	4
Boron	U	ND	0.00520	0.0150	mg/L	1.00	1					
Solids Analysis												
SM2540C Dissolved Solids "As Received"												
Total Dissolved Solids	U	ND	2.38	10.0	mg/L			CH6	08/16/23	1558	2477178	5

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
SW846 7470A Prep	EPA 7470A Mercury Prep Liquid	EK1	08/14/23	1200	2475853
SW846 3005A	ICP-MS 3005A PREP	EM2	08/14/23	1525	2475578

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Certificate of Analysis

Report Date: September 6, 2023

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: ARK-AP2-EB-01
Sample ID: 633126002

Project: GPCC00100
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	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

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Certificate of Analysis

Report Date: September 6, 2023

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: ARK-ARAMW-8 Project: GPCC00100
Sample ID: 633126003 Client ID: GPCC001
Matrix: WG
Collect Date: 09-AUG-23 11:15
Receive Date: 11-AUG-23
Collector: Client

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Ion Chromatography												
EPA 300.0 Anions Liquid "As Received"												
Sulfate		114	1.33	4.00	mg/L		10	JLD1	08/14/23	1339	2475685	1
Chloride		5.13	0.0670	0.200	mg/L		1	JLD1	08/13/23	0057	2475685	2
Fluoride		0.261	0.0330	0.100	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	AXS5	08/31/23	1212	2484083	3
Mercury	U	ND	0.0000670	0.000200	mg/L	1.00	1	JP2	08/15/23	1301	2475854	4
Metals Analysis-ICP-MS												
SW846 3005A/6020B "As Received"												
Antimony	J	0.00134	0.00100	0.00300	mg/L	1.00	1	PRB	08/18/23	1318	2475579	5
Manganese		0.279	0.00100	0.00500	mg/L	1.00	1					
Aluminum	U	ND	0.0193	0.0500	mg/L	1.00	1	PRB	08/17/23	1404	2475579	6
Arsenic	U	ND	0.00200	0.00500	mg/L	1.00	1					
Barium		0.122	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		0.00364	0.000300	0.00100	mg/L	1.00	1					
Iron		0.515	0.0330	0.100	mg/L	1.00	1					
Lead	U	ND	0.000500	0.00200	mg/L	1.00	1					
Lithium	J	0.00637	0.00300	0.0100	mg/L	1.00	1					
Magnesium		32.1	0.0100	0.0300	mg/L	1.00	1					
Molybdenum		0.203	0.000200	0.00100	mg/L	1.00	1					
Potassium		7.34	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					
Sodium		18.1	0.0800	0.250	mg/L	1.00	1					
Thallium	U	ND	0.000600	0.00200	mg/L	1.00	1					
Calcium		78.6	0.800	2.00	mg/L	1.00	10	PRB	08/17/23	1408	2475579	7
Boron		0.770	0.0520	0.150	mg/L	1.00	10	PRB	08/18/23	1321	2475579	8
Solids Analysis												
SM2540C Dissolved Solids "As Received"												
Total Dissolved Solids		436	2.38	10.0	mg/L			CH6	08/16/23	1558	2477178	9
Titration and Ion 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 ComplianceAP2

Client Sample ID: ARK-ARAMW-8 Project: GPCC00100
Sample ID: 633126003 Client ID: GPCC001

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Titration and Ion Analysis												
SM 2320B Total Alkalinity "As Received"												
Alkalinity, Total as CaCO ₃		245	0.725	2.00	mg/L			JW2	08/14/23	1702	2476209	10
Bicarbonate alkalinity (CaCO ₃)		245	0.725	2.00	mg/L							
Carbonate alkalinity (CaCO ₃)	U	ND	0.725	2.00	mg/L							

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
SW846 3005A	ICP-MS 3005A PREP	EM2	08/14/23	1525	2475578
SW846 7470A Prep	EPA 7470A Mercury Prep Liquid	EK1	08/14/23	1200	2475853
SW846 7470A Prep	EPA 7470A Mercury Prep Liquid	EK1	08/30/23	1115	2484082

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 300.0	
2	EPA 300.0	
3	SW846 7470A	
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

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Certificate of Analysis

Report Date: September 6, 2023

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: ARK-ARGWA-20 Project: GPCC00100
Sample ID: 633126004 Client ID: GPCC001
Matrix: WG
Collect Date: 10-AUG-23 09:25
Receive Date: 11-AUG-23
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		6.50	0.0670	0.200	mg/L		1	JLD1	08/13/23	0128	2475685	1
Fluoride	U	ND	0.0330	0.100	mg/L		1					
Sulfate		18.5	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	08/15/23	1303	2475854	2
Mercury	U	ND	0.0000670	0.000200	mg/L	1.00	1	AXS5	08/31/23	1214	2484083	3
Metals Analysis-ICP-MS												
SW846 3005A/6020B Dissolved Fe & Mn "As Received"												
Iron	J	0.0509	0.0330	0.100	mg/L	1.00	1	PRB	08/17/23	1411	2475579	4
Manganese	J	0.00319	0.00100	0.00500	mg/L	1.00	1	PRB	08/18/23	1324	2475579	5
Solids Analysis												
SM2540C Dissolved Solids "As Received"												
Total Dissolved Solids		105	2.38	10.0	mg/L			CH6	08/16/23	1558	2477178	6
Titration and Ion Analysis												
SM 2320B Total Alkalinity "As Received"												
Alkalinity, Total as CaCO3		43.8	0.725	2.00	mg/L			JW2	08/14/23	1705	2476209	7
Bicarbonate alkalinity (CaCO3)		43.8	0.725	2.00	mg/L							
Carbonate alkalinity (CaCO3)	U	ND	0.725	2.00	mg/L							

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
SW846 7470A Prep	EPA 7470A Mercury Prep Liquid	EK1	08/14/23	1200	2475853
SW846 3005A	ICP-MS 3005A PREP	EM2	08/14/23	1525	2475578
SW846 7470A Prep	EPA 7470A Mercury Prep Liquid	EK1	08/30/23	1115	2484082

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Certificate of Analysis

Report Date: September 6, 2023

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: ARK-ARGWA-20
Sample ID: 633126004

Project: GPCC00100
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 7470A										
4	SW846 3005A/6020B										
5	SW846 3005A/6020B										
6	SM 2540C										
7	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 6, 2023

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: ARK-STN-TW22	Project: GPCC00100
Sample ID: 633126005	Client ID: GPCC001
Matrix: WG	
Collect Date: 10-AUG-23 12:55	
Receive Date: 11-AUG-23	
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		4.92	0.0670	0.200	mg/L		1	JLD1	08/13/23	0200	2475685	1
Fluoride		0.123	0.0330	0.100	mg/L		1					
Sulfate		1040	13.3	40.0	mg/L		100	JLD1	08/14/23	1410	2475685	2
Mercury Analysis-CVAA												
7470 Cold Vapor Mercury, Liquid "As Received"												
Mercury	U	ND	0.0000670	0.000200	mg/L	1.00	1	JP2	08/15/23	1305	2475854	3
Mercury	U	ND	0.0000670	0.000200	mg/L	1.00	1	AXS5	08/31/23	1215	2484083	4
Metals Analysis-ICP-MS												
SW846 3005A/6020B - 4 metals "As Received"												
Calcium		374	0.800	2.00	mg/L	1.00	10	PRB	08/17/23	1422	2475579	5
Boron		5.65	0.520	1.50	mg/L	1.00	100	PRB	08/18/23	1335	2475579	6
Manganese		11.5	0.100	0.500	mg/L	1.00	100					
Aluminum		0.591	0.0193	0.0500	mg/L	1.00	1	PRB	08/17/23	1419	2475579	7
Arsenic		0.172	0.00200	0.00500	mg/L	1.00	1					
Cobalt		0.0238	0.000300	0.00100	mg/L	1.00	1					
Iron		38.2	0.0330	0.100	mg/L	1.00	1					
Lithium		0.247	0.00300	0.0100	mg/L	1.00	1					
Magnesium		33.5	0.0100	0.0300	mg/L	1.00	1					
Molybdenum		0.00367	0.000200	0.00100	mg/L	1.00	1					
Potassium		48.6	0.0800	0.300	mg/L	1.00	1					
Sodium		19.8	0.0800	0.250	mg/L	1.00	1					
Titration and Ion Analysis												
SM 2320B Total Alkalinity "As Received"												
Alkalinity, Total as CaCO3		170	0.725	2.00	mg/L			JW2	08/14/23	1707	2476209	8
Bicarbonate alkalinity (CaCO3)		170	0.725	2.00	mg/L							
Carbonate alkalinity (CaCO3)	U	ND	0.725	2.00	mg/L							

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
SW846 7470A Prep	EPA 7470A Mercury Prep Liquid	EK1	08/30/23	1115	2484082
SW846 7470A Prep	EPA 7470A Mercury Prep Liquid	EK1	08/14/23	1200	2475853
SW846 3005A	ICP-MS 3005A PREP	EM2	08/14/23	1525	2475578

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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 ComplianceAP2

Client Sample ID: ARK-STN-TW22
Sample ID: 633126005

Project: GPCC00100
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	EPA 300.0											
3	SW846 7470A											
4	SW846 7470A											
5	SW846 3005A/6020B											
6	SW846 3005A/6020B											
7	SW846 3005A/6020B											
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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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:	ARK-ARGWC-21	Project:	GPCC00100
Sample ID:	633126006	Client ID:	GPCC001
Matrix:	WG		
Collect Date:	09-AUG-23 10:35		
Receive Date:	11-AUG-23		
Collector:	Client		

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Nutrient Analysis												
EPA 353.2 Nitrogen, Nitrate/Nitrite "As Received"												
Nitrogen, Nitrate/Nitrite	U	ND	0.00700	0.0200	mg/L		1	AXH3	08/14/23	0754	2475768	1

The following Analytical Methods were performed:

Method	Description	Analyst	Comments
1	EPA 353.2 Low Level		

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 ComplianceAP2

Client Sample ID:	ARK-ARAMW-8	Project:	GPCC00100
Sample ID:	633126008	Client ID:	GPCC001
Matrix:	WG		
Collect Date:	09-AUG-23 11:15		
Receive Date:	11-AUG-23		
Collector:	Client		

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Nutrient Analysis												
EPA 353.2 Nitrogen, Nitrate/Nitrite "As Received"												
Nitrogen, Nitrate/Nitrite	U	ND	0.00700	0.0200	mg/L		1	AXH3	08/14/23	0757	2475768	1

The following Analytical Methods were performed:

Method	Description	Analyst	Comments
1	EPA 353.2 Low Level		

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

Contact: Atlanta, Georgia 30308
Joju Abraham
Project: Arkwright CCR Groundwater ComplianceAP2

Client Sample ID:	ARK-ARGWA-20	Project:	GPCC00100
Sample ID:	633126009	Client ID:	GPCC001
Matrix:	WG		
Collect Date:	10-AUG-23 09:25		
Receive Date:	11-AUG-23		
Collector:	Client		

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Nutrient Analysis												
EPA 353.2 Nitrogen, Nitrate/Nitrite "As Received"												
Nitrogen, Nitrate/Nitrite		0.759	0.00700	0.0200	mg/L		1	AXH3	08/14/23	0758	2475768	1

The following Analytical Methods were performed:

Method	Description	Analyst	Comments
1	EPA 353.2 Low Level		

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 ComplianceAP2

Client Sample ID:	ARK-STN-TW22	Project:	GPCC00100
Sample ID:	633126010	Client ID:	GPCC001
Matrix:	WG		
Collect Date:	10-AUG-23 12:55		
Receive Date:	11-AUG-23		
Collector:	Client		

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Nutrient Analysis												
EPA 353.2 Nitrogen, Nitrate/Nitrite "As Received"												
Nitrogen, Nitrate/Nitrite		0.0715	0.00700	0.0200	mg/L		1	AXH3	08/14/23	0759	2475768	1

The following Analytical Methods were performed:

Method	Description	Analyst	Comments
1	EPA 353.2 Low Level		

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: September 6, 2023

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: ARK-ARGWC-21 Project: GPCC00100
Sample ID: 633126011 Client ID: GPCC001
Matrix: WG
Collect Date: 09-AUG-23 10:35
Receive Date: 11-AUG-23
Collector: Client

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Mercury Analysis-CVAA												
7470 Cold Vapor Mercury, Liquid "As Received"												
Mercury	U	ND	0.0000670	0.000200	mg/L	1.00	1	AXS5	08/31/23	1217	2484083	1
Metals Analysis-ICP-MS												
SW846 3005A/6020B "As Received"												
Boron		1.12	0.0520	0.150	mg/L	1.00	10	PRB	08/31/23	1445	2484159	2
Calcium		82.9	0.800	2.00	mg/L	1.00	10					
Antimony	U	ND	0.00100	0.00300	mg/L	1.00	1	PRB	08/31/23	0218	2484159	3
Beryllium	U	ND	0.000200	0.000500	mg/L	1.00	1					
Molybdenum	U	ND	0.000200	0.00100	mg/L	1.00	1	PRB	09/01/23	1140	2484159	4
Aluminum	J	0.0254	0.0193	0.0500	mg/L	1.00	1	PRB	08/31/23	1427	2484159	5
Arsenic	U	ND	0.00200	0.00500	mg/L	1.00	1					
Barium		0.0474	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	0.000813	0.000300	0.00100	mg/L	1.00	1					
Iron		0.719	0.0330	0.100	mg/L	1.00	1					
Lead	U	ND	0.000500	0.00200	mg/L	1.00	1					
Lithium		0.0131	0.00300	0.0100	mg/L	1.00	1					
Magnesium		41.8	0.0100	0.0300	mg/L	1.00	1					
Manganese		0.348	0.00100	0.00500	mg/L	1.00	1					
Potassium		6.43	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					
Sodium		21.0	0.0800	0.250	mg/L	1.00	1					
Thallium	U	ND	0.000600	0.00200	mg/L	1.00	1					

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
SW846 3005A	ICP-MS 3005A PREP	JD2	08/30/23	0750	2484158
SW846 7470A Prep	EPA 7470A Mercury Prep Liquid	EK1	08/30/23	1115	2484082

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

Certificate of Analysis

Report Date: September 6, 2023

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: ARK-ARGWC-21
Sample ID: 633126011

Project: GPCC00100
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	SW846 7470A										
2	SW846 3005A/6020B										
3	SW846 3005A/6020B										
4	SW846 3005A/6020B										
5	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

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Certificate of Analysis

Report Date: September 6, 2023

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: ARK-ARAMW-8 Project: GPCC00100
Sample ID: 633126012 Client ID: GPCC001
Matrix: WG
Collect Date: 09-AUG-23 11:15
Receive Date: 11-AUG-23
Collector: Client

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Metals Analysis-ICP-MS												
SW846 3005A/6020B Dissolved Fe & Mn "As Received"												
Iron		0.511	0.0330	0.100	mg/L	1.00	1	PRB	08/31/23	1510	2484159	1
Manganese		0.277	0.00100	0.00500	mg/L	1.00	1					

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
SW846 3005A	ICP-MS 3005A PREP	JD2	08/30/23	0750	2484158

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	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

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Certificate of Analysis

Report Date: September 6, 2023

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: ARK-ARGWA-20 Project: GPCC00100
Sample ID: 633126013 Client ID: GPCC001
Matrix: WG
Collect Date: 10-AUG-23 09:25
Receive Date: 11-AUG-23
Collector: Client

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Mercury Analysis-CVAA												
7470 Cold Vapor Mercury, Liquid "As Received"												
Mercury	U	ND	0.0000670	0.000200	mg/L	1.00	1	AXS5	08/31/23	1218	2484083	1
Metals Analysis-ICP-MS												
SW846 3005A/6020B "As Received"												
Aluminum		1.52	0.0193	0.0500	mg/L	1.00	1	PRB	08/31/23	1514	2484159	2
Arsenic	U	ND	0.00200	0.00500	mg/L	1.00	1					
Barium		0.107	0.000670	0.00400	mg/L	1.00	1					
Boron		0.0714	0.00520	0.0150	mg/L	1.00	1					
Cadmium	U	ND	0.000300	0.00100	mg/L	1.00	1					
Calcium		11.0	0.0800	0.200	mg/L	1.00	1					
Chromium	J	0.00684	0.00300	0.0100	mg/L	1.00	1					
Cobalt	J	0.000814	0.000300	0.00100	mg/L	1.00	1					
Iron		1.90	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					
Magnesium		6.28	0.0100	0.0300	mg/L	1.00	1					
Manganese		0.0285	0.00100	0.00500	mg/L	1.00	1					
Potassium		1.86	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					
Sodium		11.5	0.0800	0.250	mg/L	1.00	1					
Thallium	U	ND	0.000600	0.00200	mg/L	1.00	1					
Molybdenum	U	ND	0.000200	0.00100	mg/L	1.00	1	PRB	09/01/23	1150	2484159	3
Antimony	U	ND	0.00100	0.00300	mg/L	1.00	1	PRB	08/31/23	0240	2484159	4
Beryllium	J	0.000275	0.000200	0.000500	mg/L	1.00	1					

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
SW846 7470A Prep	EPA 7470A Mercury Prep Liquid	EK1	08/30/23	1115	2484082
SW846 3005A	ICP-MS 3005A PREP	JD2	08/30/23	0750	2484158

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	SW846 7470A	
2	SW846 3005A/6020B	
3	SW846 3005A/6020B	
4	SW846 3005A/6020B	

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Report Date: September 6, 2023

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: ARK-ARGWA-20
Sample ID: 633126013

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	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 6, 2023

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: ARK-STN-TW22 Project: GPCC00100
Sample ID: 633126014 Client ID: GPCC001
Matrix: WG
Collect Date: 10-AUG-23 12:55
Receive Date: 11-AUG-23
Collector: Client

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Metals Analysis-ICP-MS												
SW846 3005A/6020B Dissolved Fe & Mn "As Received"												
Manganese		10.6	0.0500	0.250	mg/L	1.00	50	PRB	08/31/23	1521	2484159	1
Iron		16.6	0.0330	0.100	mg/L	1.00	1	PRB	08/31/23	1517	2484159	2

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
SW846 3005A	ICP-MS 3005A PREP	JD2	08/30/23	0750	2484158

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 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: September 6, 2023

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

Contact: Joju Abraham

Workorder: 632699

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Ion Chromatography											
Batch	2473965										
QC1205483950	632604002	DUP									
Chloride		1.97		1.96	mg/L	0.311		(0%-20%)	LXA2	08/10/23	03:33
Fluoride		0.229		0.229	mg/L	0.0437	^	(+/-0.100)			
Sulfate		2.17		2.16	mg/L	0.481		(0%-20%)			
QC1205483949	LCS										
Chloride	5.00			4.87	mg/L		97.5	(90%-110%)		08/09/23	16:34
Fluoride	2.50			2.62	mg/L		105	(90%-110%)			
Sulfate	10.0			9.91	mg/L		99.1	(90%-110%)			
QC1205483948	MB										
Chloride			U	ND	mg/L					08/09/23	16:04
Fluoride			U	ND	mg/L						
Sulfate			U	ND	mg/L						
QC1205483951	632604002	PS									
Chloride	5.00	1.97		7.21	mg/L		105	(90%-110%)		08/10/23	05:06
Fluoride	2.50	0.229		2.95	mg/L		109	(90%-110%)			
Sulfate	10.0	2.17		12.3	mg/L		102	(90%-110%)			

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QC Summary

Workorder: 632699

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Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Metals Analysis - ICPMS											
Batch	2474005										
QC1205484018	LCS										
Aluminum	2.00			1.92	mg/L		95.8	(80%-120%)	PRB	08/19/23	03:09
Antimony	0.0500			0.0466	mg/L		93.1	(80%-120%)			
Arsenic	0.0500			0.0482	mg/L		96.4	(80%-120%)			
Barium	0.0500			0.0542	mg/L		108	(80%-120%)			
Beryllium	0.0500			0.0493	mg/L		98.6	(80%-120%)			
Boron	0.100			0.0965	mg/L		96.5	(80%-120%)			
Cadmium	0.0500			0.0488	mg/L		97.6	(80%-120%)			
Calcium	2.00			2.08	mg/L		104	(80%-120%)			
Chromium	0.0500			0.0472	mg/L		94.4	(80%-120%)			
Cobalt	0.0500			0.0471	mg/L		94.3	(80%-120%)			
Iron	2.00			1.83	mg/L		91.7	(80%-120%)			
Lead	0.0500			0.0492	mg/L		98.4	(80%-120%)			
Lithium	0.0500			0.0464	mg/L		92.8	(80%-120%)			
Magnesium	2.00			1.94	mg/L		97	(80%-120%)			
Manganese	0.0500			0.0468	mg/L		93.6	(80%-120%)			

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QC Summary

Workorder: 632699

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Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Metals Analysis - ICPMS											
Batch	2474005										
Molybdenum	0.0500			0.0495	mg/L		99	(80%-120%)	PRB	08/19/23	03:09
Potassium	2.00			2.00	mg/L		99.8	(80%-120%)			
Selenium	0.0500			0.0488	mg/L		97.6	(80%-120%)			
Silver	0.0500			0.0494	mg/L		98.8	(80%-120%)			
Sodium	2.00			1.93	mg/L		96.3	(80%-120%)			
Thallium	0.0500			0.0485	mg/L		96.9	(80%-120%)			
QC1205484017	MB										
Aluminum			U	ND	mg/L					08/19/23	03:05
Antimony			U	ND	mg/L						
Arsenic			U	ND	mg/L						
Barium			U	ND	mg/L						
Beryllium			U	ND	mg/L						
Boron			U	ND	mg/L						
Cadmium			U	ND	mg/L						
Calcium			U	ND	mg/L						
Chromium			U	ND	mg/L						

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QC Summary

Workorder: 632699

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Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Metals Analysis - ICPMS											
Batch	2474005										
Cobalt			U	ND	mg/L				PRB	08/19/23	03:05
Iron			U	ND	mg/L						
Lead			U	ND	mg/L						
Lithium			U	ND	mg/L						
Magnesium			U	ND	mg/L						
Manganese			U	ND	mg/L						
Molybdenum			U	ND	mg/L						
Potassium			U	ND	mg/L						
Selenium			U	ND	mg/L						
Silver			U	ND	mg/L						
Sodium			U	ND	mg/L						
Thallium			U	ND	mg/L						
QC1205484019 632699001 MS											
Aluminum	2.00	U	ND	1.90	mg/L		94.8	(75%-125%)		08/19/23	03:16
Antimony	0.0500	U	ND	0.0485	mg/L		97	(75%-125%)			
Arsenic	0.0500	U	ND	0.0483	mg/L		94.6	(75%-125%)			

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QC Summary

Workorder: 632699

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Parname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Metals Analysis - ICPMS											
Batch	2474005										
Barium	0.0500	0.0337		0.0860	mg/L		105	(75%-125%)	PRB	08/19/23	03:16
Beryllium	0.0500	U	ND	0.0503	mg/L		101	(75%-125%)			
Boron	0.100	0.0199		0.115	mg/L		95.4	(75%-125%)			
Cadmium	0.0500	U	ND	0.0494	mg/L		98.7	(75%-125%)			
Calcium	2.00	8.51		10.4	mg/L		N/A	(75%-125%)			
Chromium	0.0500	U	ND	0.0491	mg/L		95.6	(75%-125%)			
Cobalt	0.0500	U	ND	0.0473	mg/L		94.5	(75%-125%)			
Iron	2.00	U	ND	1.84	mg/L		91.8	(75%-125%)			
Lead	0.0500	U	ND	0.0489	mg/L		97.9	(75%-125%)			
Lithium	0.0500	J	0.00382	0.0508	mg/L		93.9	(75%-125%)			
Magnesium	2.00	3.36		5.23	mg/L		93.4	(75%-125%)			
Manganese	0.0500	U	ND	0.0478	mg/L		95.6	(75%-125%)			
Molybdenum	0.0500	J	0.000421	0.0511	mg/L		101	(75%-125%)			
Potassium	2.00	2.08		4.03	mg/L		97.4	(75%-125%)			
Selenium	0.0500	U	ND	0.0495	mg/L		98.3	(75%-125%)			

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QC Summary

Workorder: 632699

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Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Metals Analysis - ICPMS											
Batch	2474005										
Silver	0.0500	U	ND	0.0497	mg/L		99.3	(75%-125%)	PRB	08/19/23	03:16
Sodium	2.00		9.51	11.3	mg/L		N/A	(75%-125%)			
Thallium	0.0500	U	ND	0.0474	mg/L		94.7	(75%-125%)			
QC1205484020	632699001	MSD									
Aluminum	2.00	U	ND	1.88	mg/L	0.976	93.9	(0%-20%)		08/19/23	03:20
Antimony	0.0500	U	ND	0.0482	mg/L	0.707	96.3	(0%-20%)			
Arsenic	0.0500	U	ND	0.0490	mg/L	1.39	96	(0%-20%)			
Barium	0.0500		0.0337	0.0864	mg/L	0.392	105	(0%-20%)			
Beryllium	0.0500	U	ND	0.0510	mg/L	1.31	102	(0%-20%)			
Boron	0.100		0.0199	0.117	mg/L	1.5	97.2	(0%-20%)			
Cadmium	0.0500	U	ND	0.0481	mg/L	2.66	96.1	(0%-20%)			
Calcium	2.00		8.51	10.3	mg/L	0.681	N/A	(0%-20%)			
Chromium	0.0500	U	ND	0.0485	mg/L	1.1	94.6	(0%-20%)			
Cobalt	0.0500	U	ND	0.0479	mg/L	1.16	95.6	(0%-20%)			
Iron	2.00	U	ND	1.85	mg/L	0.502	92.3	(0%-20%)			
Lead	0.0500	U	ND	0.0486	mg/L	0.749	97.1	(0%-20%)			

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QC Summary

Workorder: 632699

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Parname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Metals Analysis - ICPMS											
Batch	2474005										
Lithium	0.0500	J	0.00382	0.0510	mg/L	0.45	94.4	(0%-20%)	PRB	08/19/23	03:20
Magnesium	2.00		3.36	5.17	mg/L	1.16	90.4	(0%-20%)			
Manganese	0.0500	U	ND	0.0475	mg/L	0.646	95	(0%-20%)			
Molybdenum	0.0500	J	0.000421	0.0512	mg/L	0.186	102	(0%-20%)			
Potassium	2.00		2.08	3.99	mg/L	0.917	95.6	(0%-20%)			
Selenium	0.0500	U	ND	0.0505	mg/L	1.95	100	(0%-20%)			
Silver	0.0500	U	ND	0.0495	mg/L	0.347	99	(0%-20%)			
Sodium	2.00		9.51	11.2	mg/L	0.99	N/A	(0%-20%)			
Thallium	0.0500	U	ND	0.0478	mg/L	0.879	95.5	(0%-20%)			
QC1205484021 632699001 SDILT											
Aluminum		U	ND	U	ND	ug/L	N/A	(0%-20%)		08/19/23	03:27
Antimony		U	ND	U	ND	ug/L	N/A	(0%-20%)			
Arsenic		U	ND	U	ND	ug/L	N/A	(0%-20%)			
Barium			33.7	6.29	ug/L	6.57		(0%-20%)			
Beryllium		U	ND	U	ND	ug/L	N/A	(0%-20%)			
Boron			19.9	U	ND	ug/L	N/A	(0%-20%)			

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QC Summary

Workorder: 632699

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Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Metals Analysis - ICPMS											
Batch	2474005										
Cadmium	U	ND	U	ND	ug/L	N/A		(0%-20%)	PRB	08/19/23	03:27
Calcium		8510		1720	ug/L	.997		(0%-20%)			
Chromium	U	ND	U	ND	ug/L	N/A		(0%-20%)			
Cobalt	U	ND	U	ND	ug/L	N/A		(0%-20%)			
Iron	U	ND	U	ND	ug/L	N/A		(0%-20%)			
Lead	U	ND	U	ND	ug/L	N/A		(0%-20%)			
Lithium	J	3.82	U	ND	ug/L	N/A		(0%-20%)			
Magnesium		3360		663	ug/L	1.22		(0%-20%)			
Manganese	U	ND	U	ND	ug/L	N/A		(0%-20%)			
Molybdenum	J	0.421	U	ND	ug/L	N/A		(0%-20%)			
Potassium		2080		395	ug/L	5.08		(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		9510		1890	ug/L	.846		(0%-20%)			
Thallium	U	ND	U	ND	ug/L	N/A		(0%-20%)			

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QC Summary

Workorder: 632699

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Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Metals Analysis - ICPMS											
Batch	2484159										
QC1205501936	LCS										
Aluminum	2.00			2.15	mg/L		108	(80%-120%)	PRB	08/31/23	13:25
Antimony	0.0500			0.0493	mg/L		98.6	(80%-120%)		08/31/23	01:42
Arsenic	0.0500			0.0493	mg/L		98.5	(80%-120%)		08/31/23	13:25
Barium	0.0500			0.0538	mg/L		108	(80%-120%)			
Beryllium	0.0500			0.0584	mg/L		117	(80%-120%)		08/31/23	01:42
Boron	0.100			0.112	mg/L		112	(80%-120%)		08/31/23	13:25
Cadmium	0.0500			0.0516	mg/L		103	(80%-120%)			
Calcium	2.00			2.12	mg/L		106	(80%-120%)			
Chromium	0.0500			0.0499	mg/L		99.8	(80%-120%)			
Cobalt	0.0500			0.0492	mg/L		98.3	(80%-120%)			
Iron	2.00			1.99	mg/L		99.5	(80%-120%)			
Lead	0.0500			0.0520	mg/L		104	(80%-120%)			
Lithium	0.0500			0.0542	mg/L		108	(80%-120%)			
Magnesium	2.00			2.22	mg/L		111	(80%-120%)			
Manganese	0.0500			0.0498	mg/L		99.7	(80%-120%)			

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QC Summary

Workorder: 632699

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Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Metals Analysis - ICPMS											
Batch	2484159										
Molybdenum	0.0500			0.0502	mg/L		100	(80%-120%)	PRB	09/01/23	11:34
Potassium	2.00			2.16	mg/L		108	(80%-120%)		08/31/23	13:25
Selenium	0.0500			0.0479	mg/L		95.9	(80%-120%)			
Silver	0.0500			0.0532	mg/L		106	(80%-120%)			
Sodium	2.00			2.21	mg/L		111	(80%-120%)			
Thallium	0.0500			0.0509	mg/L		102	(80%-120%)			
QC1205501935	MB										
Aluminum			J	0.0210	mg/L					08/31/23	13:21
Antimony			U	ND	mg/L					08/31/23	01:39
Arsenic			U	ND	mg/L					08/31/23	13:21
Barium			U	ND	mg/L						
Beryllium			U	ND	mg/L					08/31/23	01:39
Boron			U	ND	mg/L					08/31/23	13:21
Cadmium			U	ND	mg/L						
Calcium			U	ND	mg/L						
Chromium			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	2484159										
Cobalt			U	ND	mg/L				PRB	08/31/23	13:21
Iron			U	ND	mg/L						
Lead			U	ND	mg/L						
Lithium			U	ND	mg/L						
Magnesium			U	ND	mg/L						
Manganese			U	ND	mg/L						
Molybdenum			U	ND	mg/L					09/01/23	11:32
Potassium			U	ND	mg/L					08/31/23	13:21
Selenium			U	ND	mg/L						
Silver			U	ND	mg/L						
Sodium			U	ND	mg/L						
Thallium			U	ND	mg/L						
QC1205501937 633126011 MS											
Aluminum	2.00	J	0.0254	2.19	mg/L		108	(75%-125%)		08/31/23	14:30
Antimony	0.0500	U	ND	0.0521	mg/L		104	(75%-125%)		08/31/23	02:22
Arsenic	0.0500	U	ND	0.0535	mg/L		105	(75%-125%)		08/31/23	14:30

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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	2484159										
Barium	0.0500	0.0474		0.105	mg/L		115	(75%-125%)	PRB	08/31/23	14:30
Beryllium	0.0500	U	ND	0.0583	mg/L		116	(75%-125%)		08/31/23	02:22
Boron	0.100	1.12		1.23	mg/L		N/A	(75%-125%)		08/31/23	14:48
Cadmium	0.0500	U	ND	0.0527	mg/L		105	(75%-125%)		08/31/23	14:30
Calcium	2.00	82.9		85.7	mg/L		N/A	(75%-125%)		08/31/23	14:48
Chromium	0.0500	U	ND	0.0515	mg/L		103	(75%-125%)		08/31/23	14:30
Cobalt	0.0500	J	0.000813	0.0499	mg/L		98.2	(75%-125%)			
Iron	2.00	0.719		2.76	mg/L		102	(75%-125%)			
Lead	0.0500	U	ND	0.0534	mg/L		107	(75%-125%)			
Lithium	0.0500	0.0131		0.0679	mg/L		110	(75%-125%)			
Magnesium	2.00	41.8		44.1	mg/L		N/A	(75%-125%)			
Manganese	0.0500	0.348		0.395	mg/L		N/A	(75%-125%)			
Molybdenum	0.0500	U	ND	0.0530	mg/L		106	(75%-125%)		09/01/23	11:42
Potassium	2.00	6.43		8.64	mg/L		110	(75%-125%)		08/31/23	14:30
Selenium	0.0500	U	ND	0.0509	mg/L		101	(75%-125%)			

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Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Metals Analysis - ICPMS											
Batch	2484159										
Silver	0.0500	U	ND	0.0531	mg/L		106	(75%-125%)	PRB	08/31/23	14:30
Sodium	2.00		21.0	23.1	mg/L		N/A	(75%-125%)			
Thallium	0.0500	U	ND	0.0521	mg/L		104	(75%-125%)			
QC1205501938	633126011	MSD									
Aluminum	2.00	J	0.0254	2.20	mg/L	0.569	109	(0%-20%)		08/31/23	14:34
Antimony	0.0500	U	ND	0.0517	mg/L	0.72	103	(0%-20%)		08/31/23	02:25
Arsenic	0.0500	U	ND	0.0533	mg/L	0.384	105	(0%-20%)		08/31/23	14:34
Barium	0.0500		0.0474	0.106	mg/L	0.7	117	(0%-20%)			
Beryllium	0.0500	U	ND	0.0577	mg/L	0.926	115	(0%-20%)		08/31/23	02:25
Boron	0.100		1.12	1.22	mg/L	0.643	N/A	(0%-20%)		08/31/23	14:52
Cadmium	0.0500	U	ND	0.0523	mg/L	0.743	105	(0%-20%)		08/31/23	14:34
Calcium	2.00		82.9	86.8	mg/L	1.29	N/A	(0%-20%)		08/31/23	14:52
Chromium	0.0500	U	ND	0.0507	mg/L	1.53	101	(0%-20%)		08/31/23	14:34
Cobalt	0.0500	J	0.000813	0.0509	mg/L	2.03	100	(0%-20%)			
Iron	2.00		0.719	2.72	mg/L	1.43	100	(0%-20%)			
Lead	0.0500	U	ND	0.0519	mg/L	2.76	104	(0%-20%)			

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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	2484159										
Lithium	0.0500	0.0131		0.0673	mg/L	0.9	108	(0%-20%)	PRB	08/31/23	14:34
Magnesium	2.00	41.8		44.2	mg/L	0.204	N/A	(0%-20%)			
Manganese	0.0500	0.348		0.400	mg/L	1.2	N/A	(0%-20%)			
Molybdenum	0.0500	U	ND	0.0529	mg/L	0.157	106	(0%-20%)		09/01/23	11:44
Potassium	2.00	6.43		8.86	mg/L	2.54	122	(0%-20%)		08/31/23	14:34
Selenium	0.0500	U	ND	0.0511	mg/L	0.292	102	(0%-20%)			
Silver	0.0500	U	ND	0.0523	mg/L	1.45	105	(0%-20%)			
Sodium	2.00	21.0		23.5	mg/L	1.93	N/A	(0%-20%)			
Thallium	0.0500	U	ND	0.0516	mg/L	0.922	103	(0%-20%)			
QC1205501939 633126011 SDILT											
Aluminum		J	25.4	U	ND	ug/L	N/A	(0%-20%)		08/31/23	14:41
Antimony		U	ND	U	ND	ug/L	N/A	(0%-20%)		08/31/23	02:33
Arsenic		U	ND	U	ND	ug/L	N/A	(0%-20%)		08/31/23	14:41
Barium			47.4		9.66	ug/L	1.79	(0%-20%)			
Beryllium		U	ND	U	ND	ug/L	N/A	(0%-20%)		08/31/23	02:33
Boron			112		24.6	ug/L	9.94	(0%-20%)		08/31/23	14:59

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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	2484159										
Cadmium	U	ND	U	ND	ug/L	N/A		(0%-20%)	PRB	08/31/23	14:41
Calcium		8290		1690	ug/L	2.04		(0%-20%)		08/31/23	14:59
Chromium	U	ND	U	ND	ug/L	N/A		(0%-20%)		08/31/23	14:41
Cobalt	J	0.813	U	ND	ug/L	N/A		(0%-20%)			
Iron		719		147	ug/L	2.29		(0%-20%)			
Lead	U	ND	U	ND	ug/L	N/A		(0%-20%)			
Lithium		13.1	U	ND	ug/L	N/A		(0%-20%)			
Magnesium		41800		7980	ug/L	4.56		(0%-20%)			
Manganese		348		71.4	ug/L	2.63		(0%-20%)			
Molybdenum	U	ND	U	ND	ug/L	N/A		(0%-20%)		09/01/23	11:48
Potassium		6430		1270	ug/L	1.12		(0%-20%)		08/31/23	14:41
Selenium	U	ND	U	ND	ug/L	N/A		(0%-20%)			
Silver	U	ND	U	ND	ug/L	N/A		(0%-20%)			
Sodium		21000		3960	ug/L	5.91		(0%-20%)			
Thallium	U	ND	U	ND	ug/L	N/A		(0%-20%)			

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Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Metals Analysis-Mercury											
Batch 2474015											
QC1205484047	632582001	DUP									
Mercury			U	ND	U	ND	mg/L	N/A		JP2	08/11/23 09:58
QC1205484046	LCS										
Mercury	0.00200					0.00199	mg/L	99.6 (80%-120%)			08/11/23 09:52
QC1205484045	MB										
Mercury				U		ND	mg/L				08/11/23 09:50
QC1205484048	632582001	MS									
Mercury	0.00200	U		ND		0.00195	mg/L	97.3 (75%-125%)			08/11/23 10:00
QC1205484049	632582001	SDILT									
Mercury			U	ND	U	ND	ug/L	N/A (0%-10%)			08/11/23 10:02
Batch 2484083											
QC1205501815	632699006	DUP									
Mercury			U	ND	U	ND	mg/L	N/A		AXS5	08/31/23 11:52
QC1205501814	LCS										
Mercury	0.00200					0.00202	mg/L	101 (80%-120%)			08/31/23 11:49
QC1205501813	MB										
Mercury				U		ND	mg/L				08/31/23 11:47
QC1205501816	632699006	MS									
Mercury	0.00200	U		ND		0.00202	mg/L	101 (75%-125%)			08/31/23 11:54
QC1205501817	632699006	SDILT									
Mercury			U	ND	U	ND	ug/L	N/A (0%-10%)			08/31/23 11:55

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Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Nutrient Analysis											
Batch	2473982										
QC1205485196	632699001	DUP									
Nitrogen, Nitrate/Nitrite		1.83		1.79	mg/L	1.94		(0%-20%)	AXH3	08/11/23	11:36
QC1205483979	LCS										
Nitrogen, Nitrate/Nitrite	1.00			1.03	mg/L		103	(90%-110%)		08/11/23	11:23
QC1205483978	MB										
Nitrogen, Nitrate/Nitrite			U	ND	mg/L					08/11/23	11:22
QC1205485195	632699001	PS									
Nitrogen, Nitrate/Nitrite	1.00	0.365		1.34	mg/L		97.5	(90%-110%)		08/11/23	11:37
Solids Analysis											
Batch	2474115										
QC1205484191	632609002	DUP									
Total Dissolved Solids		266		263	mg/L	1.13		(0%-5%)	CH6	08/10/23	14:35
QC1205484188	LCS										
Total Dissolved Solids	300			303	mg/L		101	(95%-105%)		08/10/23	14:35
QC1205484187	MB										
Total Dissolved Solids			U	ND	mg/L					08/10/23	14:35
Titration and Ion Analysis											
Batch	2474137										
QC1205484237	632699001	DUP									
Alkalinity, Total as CaCO3		37.0		36.8	mg/L	0.542		(0%-20%)	HH2	08/11/23	09:58
Bicarbonate alkalinity (CaCO3)		37.0		36.8	mg/L	0.542		(0%-20%)			
Carbonate alkalinity (CaCO3)			U	ND	mg/L	N/A					
QC1205484236	LCS										
Alkalinity, Total as CaCO3	50.0			52.4	mg/L		105	(90%-110%)		08/11/23	09:54

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Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Titration and Ion Analysis											
Batch	2474137										
QC1205484238	632699001	MS									
Alkalinity, Total as CaCO3	50.0	37.0		87.6	mg/L		101	(80%-120%)	HH2	08/11/23	10:00

Notes:

The Qualifiers in this report are defined as follows:

- U Analyte was analyzed for, but not detected above the MDL, MDA, MDC or LOD.
- J Value is estimated
- X Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
- N Metals--The Matrix spike sample recovery is not within specified control limits
- H Analytical holding time was exceeded
- < Result is less than value reported
- > Result is greater than value reported
- h Preparation or preservation holding time was exceeded
- R Sample results are rejected
- Z Paint Filter Test--Particulates passed through the filter, however no free liquids were observed.
- d 5-day BOD--The 2:1 depletion requirement was not met for this sample
- ^ RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL. Qualifier Not Applicable for Radiochemistry.
- N/A RPD or %Recovery limits do not apply.
- ND Analyte concentration is not detected above the detection limit
- E %difference of sample and SD is >10%. Sample concentration must meet flagging criteria
- NJ Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
- E General Chemistry--Concentration of the target analyte exceeds the instrument calibration range
- Q One or more quality control criteria have not been met. Refer to the applicable narrative or DER.
- 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
- NI See case narrative
- Y Other specific qualifiers were required to properly define the results. Consult case narrative.
- 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.
- B The target analyte was detected in the associated blank.
- 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
- J See case narrative for an explanation

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Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
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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 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.

* 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 6, 2023

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

Contact: Joju Abraham

Workorder: 633126

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Ion Chromatography											
Batch	2475685										
QC1205486797	632744003	DUP									
Chloride		50.6		50.7	mg/L	0.111		(0%-20%)	JLD1	08/14/23	12:05
Fluoride		1.06		1.04	mg/L	2.03		(0%-20%)		08/12/23	19:12
Sulfate		53.6		53.8	mg/L	0.277		(0%-20%)		08/14/23	12:05
QC1205486796	LCS										
Chloride	5.00			4.86	mg/L		97.2	(90%-110%)		08/12/23	18:10
Fluoride	2.50			2.59	mg/L		104	(90%-110%)			
Sulfate	10.0			9.93	mg/L		99.3	(90%-110%)			
QC1205486795	MB										
Chloride			U	ND	mg/L					08/12/23	17:37
Fluoride			U	ND	mg/L						
Sulfate			U	ND	mg/L						
QC1205486798	632744003	PS									
Chloride	5.00	5.06		10.5	mg/L		109	(90%-110%)		08/14/23	12:36
Fluoride	2.50	1.06		3.62	mg/L		102	(90%-110%)		08/12/23	19:43
Sulfate	10.0	5.36		15.6	mg/L		102	(90%-110%)		08/14/23	12:36

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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	2475579										
QC1205486562	LCS										
Aluminum	2.00			2.04	mg/L		102	(80%-120%)	PRB	08/17/23	13:04
Antimony	0.0500			0.0506	mg/L		101	(80%-120%)		08/18/23	12:28
Arsenic	0.0500			0.0495	mg/L		99	(80%-120%)		08/17/23	13:04
Barium	0.0500			0.0510	mg/L		102	(80%-120%)			
Beryllium	0.0500			0.0545	mg/L		109	(80%-120%)			
Boron	0.100			0.112	mg/L		112	(80%-120%)		08/18/23	12:28
Cadmium	0.0500			0.0510	mg/L		102	(80%-120%)		08/17/23	13:04
Calcium	2.00			2.08	mg/L		104	(80%-120%)			
Chromium	0.0500			0.0505	mg/L		101	(80%-120%)			
Cobalt	0.0500			0.0502	mg/L		100	(80%-120%)			
Iron	2.00			1.99	mg/L		99.4	(80%-120%)			
Lead	0.0500			0.0509	mg/L		102	(80%-120%)			
Lithium	0.0500			0.0509	mg/L		102	(80%-120%)			
Magnesium	2.00			2.09	mg/L		104	(80%-120%)			
Manganese	0.0500			0.0513	mg/L		103	(80%-120%)		08/18/23	12:28

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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	2475579										
Molybdenum	0.0500			0.0529	mg/L		106	(80%-120%)	PRB	08/17/23	13:04
Potassium	2.00			2.07	mg/L		103	(80%-120%)			
Selenium	0.0500			0.0487	mg/L		97.4	(80%-120%)			
Silver	0.0500			0.0519	mg/L		104	(80%-120%)			
Sodium	2.00			2.22	mg/L		111	(80%-120%)			
Thallium	0.0500			0.0495	mg/L		98.9	(80%-120%)			
QC1205486561	MB										
Aluminum			U	ND	mg/L					08/17/23	13:00
Antimony			U	ND	mg/L					08/18/23	12:26
Arsenic			U	ND	mg/L					08/17/23	13:00
Barium			U	ND	mg/L						
Beryllium			U	ND	mg/L						
Boron			U	ND	mg/L					08/18/23	12:26
Cadmium			U	ND	mg/L					08/17/23	13:00
Calcium			U	ND	mg/L						
Chromium			U	ND	mg/L						

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Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Metals Analysis - ICPMS											
Batch	2475579										
Cobalt			U	ND	mg/L				PRB	08/17/23	13:00
Iron			U	ND	mg/L						
Lead			U	ND	mg/L						
Lithium			U	ND	mg/L						
Magnesium			U	ND	mg/L						
Manganese			U	ND	mg/L					08/18/23	12:26
Molybdenum			U	ND	mg/L					08/17/23	13:00
Potassium			U	ND	mg/L						
Selenium			U	ND	mg/L						
Silver			U	ND	mg/L						
Sodium			U	ND	mg/L						
Thallium			U	ND	mg/L						
QC1205486563 633126001 MS											
Aluminum	2.00	U	ND	2.04	mg/L		102	(75%-125%)		08/17/23	13:12
Antimony	0.0500	U	ND	0.0524	mg/L		104	(75%-125%)		08/18/23	12:34
Arsenic	0.0500	U	ND	0.0520	mg/L		101	(75%-125%)		08/17/23	13:12

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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	2475579										
Barium	0.0500	0.0444		0.0929	mg/L		96.9	(75%-125%)	PRB	08/17/23	13:12
Beryllium	0.0500	U	ND	0.0552	mg/L		110	(75%-125%)			
Boron	0.100	1.18		1.23	mg/L		N/A	(75%-125%)		08/18/23	12:55
Cadmium	0.0500	U	ND	0.0518	mg/L		104	(75%-125%)		08/17/23	13:12
Calcium	2.00	80.2		81.5	mg/L		N/A	(75%-125%)		08/17/23	13:39
Chromium	0.0500	U	ND	0.0501	mg/L		99.8	(75%-125%)		08/17/23	13:12
Cobalt	0.0500	J	0.000889	0.0495	mg/L		97.3	(75%-125%)			
Iron	2.00	0.808		2.77	mg/L		98	(75%-125%)			
Lead	0.0500	U	ND	0.0490	mg/L		98.1	(75%-125%)			
Lithium	0.0500	0.0121		0.0638	mg/L		103	(75%-125%)			
Magnesium	2.00	36.0		39.4	mg/L		N/A	(75%-125%)			
Manganese	0.0500	0.351		0.408	mg/L		N/A	(75%-125%)		08/18/23	12:34
Molybdenum	0.0500	U	ND	0.0552	mg/L		110	(75%-125%)		08/17/23	13:12
Potassium	2.00	5.91		7.87	mg/L		98.2	(75%-125%)			
Selenium	0.0500	U	ND	0.0506	mg/L		100	(75%-125%)			

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Parname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Metals Analysis - ICPMS											
Batch	2475579										
Silver	0.0500	U	ND	0.0515	mg/L		103	(75%-125%)	PRB	08/17/23	13:12
Sodium	2.00		19.3	21.8	mg/L		N/A	(75%-125%)			
Thallium	0.0500	U	ND	0.0483	mg/L		96.6	(75%-125%)			
QC1205486564	633126001 MSD										
Aluminum	2.00	U	ND	2.03	mg/L	0.793	101	(0%-20%)		08/17/23	13:16
Antimony	0.0500	U	ND	0.0530	mg/L	1.03	105	(0%-20%)		08/18/23	12:37
Arsenic	0.0500	U	ND	0.0520	mg/L	0.0384	101	(0%-20%)		08/17/23	13:16
Barium	0.0500		0.0444	0.0939	mg/L	1.06	98.9	(0%-20%)			
Beryllium	0.0500	U	ND	0.0548	mg/L	0.695	110	(0%-20%)			
Boron	0.100		1.18	1.21	mg/L	1.71	N/A	(0%-20%)		08/18/23	12:58
Cadmium	0.0500	U	ND	0.0521	mg/L	0.408	104	(0%-20%)		08/17/23	13:16
Calcium	2.00		80.2	79.9	mg/L	2.03	N/A	(0%-20%)		08/17/23	13:42
Chromium	0.0500	U	ND	0.0492	mg/L	1.79	98	(0%-20%)		08/17/23	13:16
Cobalt	0.0500	J	0.000889	0.0485	mg/L	2.17	95.1	(0%-20%)			
Iron	2.00		0.808	2.69	mg/L	2.84	94.2	(0%-20%)			
Lead	0.0500	U	ND	0.0495	mg/L	1.02	99.1	(0%-20%)			

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Parname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Metals Analysis - ICPMS											
Batch	2475579										
Lithium	0.0500	0.0121		0.0623	mg/L	2.34	100	(0%-20%)	PRB	08/17/23	13:16
Magnesium	2.00	36.0		37.8	mg/L	4.16	N/A	(0%-20%)			
Manganese	0.0500	0.351		0.397	mg/L	2.92	N/A	(0%-20%)		08/18/23	12:37
Molybdenum	0.0500	U	ND	0.0548	mg/L	0.849	109	(0%-20%)		08/17/23	13:16
Potassium	2.00	5.91		7.81	mg/L	0.806	95.1	(0%-20%)			
Selenium	0.0500	U	ND	0.0489	mg/L	3.33	97	(0%-20%)			
Silver	0.0500	U	ND	0.0518	mg/L	0.589	103	(0%-20%)			
Sodium	2.00	19.3		21.0	mg/L	3.46	N/A	(0%-20%)			
Thallium	0.0500	U	ND	0.0486	mg/L	0.679	97.3	(0%-20%)			
QC1205486565 633126001 SDILT											
Aluminum		U	ND	U	ND	ug/L	N/A	(0%-20%)		08/17/23	13:24
Antimony		U	ND	U	ND	ug/L	N/A	(0%-20%)		08/18/23	12:43
Arsenic		U	ND	U	ND	ug/L	N/A	(0%-20%)		08/17/23	13:24
Barium			44.4		8.42	ug/L	5.22	(0%-20%)			
Beryllium		U	ND	U	ND	ug/L	N/A	(0%-20%)			
Boron			118		24.8	ug/L	4.96	(0%-20%)		08/18/23	13:01

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Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Metals Analysis - ICPMS											
Batch	2475579										
Cadmium	U	ND	U	ND	ug/L	N/A		(0%-20%)	PRB	08/17/23	13:24
Calcium		8020		1650	ug/L	2.53		(0%-20%)		08/17/23	13:46
Chromium	U	ND	U	ND	ug/L	N/A		(0%-20%)		08/17/23	13:24
Cobalt	J	0.889	U	ND	ug/L	N/A		(0%-20%)			
Iron		808		165	ug/L	1.85		(0%-20%)			
Lead	U	ND	U	ND	ug/L	N/A		(0%-20%)			
Lithium		12.1	U	ND	ug/L	N/A		(0%-20%)			
Magnesium		36000		7510	ug/L	4.38		(0%-20%)			
Manganese		351		71.9	ug/L	2.48		(0%-20%)		08/18/23	12:43
Molybdenum	U	ND	U	ND	ug/L	N/A		(0%-20%)		08/17/23	13:24
Potassium		5910		1150	ug/L	2.42		(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		19300		3960	ug/L	2.69		(0%-20%)			
Thallium	U	ND	U	ND	ug/L	N/A		(0%-20%)			

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Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Metals Analysis - ICPMS											
Batch	2484159										
QC1205501936	LCS										
Aluminum	2.00			2.15	mg/L		108	(80%-120%)	PRB	08/31/23	13:25
Antimony	0.0500			0.0493	mg/L		98.6	(80%-120%)		08/31/23	01:42
Arsenic	0.0500			0.0493	mg/L		98.5	(80%-120%)		08/31/23	13:25
Barium	0.0500			0.0538	mg/L		108	(80%-120%)			
Beryllium	0.0500			0.0584	mg/L		117	(80%-120%)		08/31/23	01:42
Boron	0.100			0.112	mg/L		112	(80%-120%)		08/31/23	13:25
Cadmium	0.0500			0.0516	mg/L		103	(80%-120%)			
Calcium	2.00			2.12	mg/L		106	(80%-120%)			
Chromium	0.0500			0.0499	mg/L		99.8	(80%-120%)			
Cobalt	0.0500			0.0492	mg/L		98.3	(80%-120%)			
Iron	2.00			1.99	mg/L		99.5	(80%-120%)			
Lead	0.0500			0.0520	mg/L		104	(80%-120%)			
Lithium	0.0500			0.0542	mg/L		108	(80%-120%)			
Magnesium	2.00			2.22	mg/L		111	(80%-120%)			
Manganese	0.0500			0.0498	mg/L		99.7	(80%-120%)			

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Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Metals Analysis - ICPMS											
Batch	2484159										
Molybdenum	0.0500			0.0502	mg/L		100	(80%-120%)	PRB	09/01/23	11:34
Potassium	2.00			2.16	mg/L		108	(80%-120%)		08/31/23	13:25
Selenium	0.0500			0.0479	mg/L		95.9	(80%-120%)			
Silver	0.0500			0.0532	mg/L		106	(80%-120%)			
Sodium	2.00			2.21	mg/L		111	(80%-120%)			
Thallium	0.0500			0.0509	mg/L		102	(80%-120%)			
QC1205501935	MB										
Aluminum			J	0.0210	mg/L					08/31/23	13:21
Antimony			U	ND	mg/L					08/31/23	01:39
Arsenic			U	ND	mg/L					08/31/23	13:21
Barium			U	ND	mg/L						
Beryllium			U	ND	mg/L					08/31/23	01:39
Boron			U	ND	mg/L					08/31/23	13:21
Cadmium			U	ND	mg/L						
Calcium			U	ND	mg/L						
Chromium			U	ND	mg/L						

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Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Metals Analysis - ICPMS											
Batch	2484159										
Cobalt			U	ND	mg/L				PRB	08/31/23	13:21
Iron			U	ND	mg/L						
Lead			U	ND	mg/L						
Lithium			U	ND	mg/L						
Magnesium			U	ND	mg/L						
Manganese			U	ND	mg/L						
Molybdenum			U	ND	mg/L					09/01/23	11:32
Potassium			U	ND	mg/L					08/31/23	13:21
Selenium			U	ND	mg/L						
Silver			U	ND	mg/L						
Sodium			U	ND	mg/L						
Thallium			U	ND	mg/L						
QC1205501937 633126011 MS											
Aluminum	2.00	J	0.0254	2.19	mg/L		108	(75%-125%)		08/31/23	14:30
Antimony	0.0500	U	ND	0.0521	mg/L		104	(75%-125%)		08/31/23	02:22
Arsenic	0.0500	U	ND	0.0535	mg/L		105	(75%-125%)		08/31/23	14:30

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Parname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Metals Analysis - ICPMS											
Batch	2484159										
Barium	0.0500	0.0474		0.105	mg/L		115	(75%-125%)	PRB	08/31/23	14:30
Beryllium	0.0500	U	ND	0.0583	mg/L		116	(75%-125%)		08/31/23	02:22
Boron	0.100	1.12		1.23	mg/L		N/A	(75%-125%)		08/31/23	14:48
Cadmium	0.0500	U	ND	0.0527	mg/L		105	(75%-125%)		08/31/23	14:30
Calcium	2.00	82.9		85.7	mg/L		N/A	(75%-125%)		08/31/23	14:48
Chromium	0.0500	U	ND	0.0515	mg/L		103	(75%-125%)		08/31/23	14:30
Cobalt	0.0500	J	0.000813	0.0499	mg/L		98.2	(75%-125%)			
Iron	2.00	0.719		2.76	mg/L		102	(75%-125%)			
Lead	0.0500	U	ND	0.0534	mg/L		107	(75%-125%)			
Lithium	0.0500	0.0131		0.0679	mg/L		110	(75%-125%)			
Magnesium	2.00	41.8		44.1	mg/L		N/A	(75%-125%)			
Manganese	0.0500	0.348		0.395	mg/L		N/A	(75%-125%)			
Molybdenum	0.0500	U	ND	0.0530	mg/L		106	(75%-125%)		09/01/23	11:42
Potassium	2.00	6.43		8.64	mg/L		110	(75%-125%)		08/31/23	14:30
Selenium	0.0500	U	ND	0.0509	mg/L		101	(75%-125%)			

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Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Metals Analysis - ICPMS											
Batch	2484159										
Silver	0.0500	U	ND	0.0531	mg/L		106	(75%-125%)	PRB	08/31/23	14:30
Sodium	2.00		21.0	23.1	mg/L		N/A	(75%-125%)			
Thallium	0.0500	U	ND	0.0521	mg/L		104	(75%-125%)			
QC1205501938 633126011 MSD											
Aluminum	2.00	J	0.0254	2.20	mg/L	0.569	109	(0%-20%)		08/31/23	14:34
Antimony	0.0500	U	ND	0.0517	mg/L	0.72	103	(0%-20%)		08/31/23	02:25
Arsenic	0.0500	U	ND	0.0533	mg/L	0.384	105	(0%-20%)		08/31/23	14:34
Barium	0.0500		0.0474	0.106	mg/L	0.7	117	(0%-20%)			
Beryllium	0.0500	U	ND	0.0577	mg/L	0.926	115	(0%-20%)		08/31/23	02:25
Boron	0.100		1.12	1.22	mg/L	0.643	N/A	(0%-20%)		08/31/23	14:52
Cadmium	0.0500	U	ND	0.0523	mg/L	0.743	105	(0%-20%)		08/31/23	14:34
Calcium	2.00		82.9	86.8	mg/L	1.29	N/A	(0%-20%)		08/31/23	14:52
Chromium	0.0500	U	ND	0.0507	mg/L	1.53	101	(0%-20%)		08/31/23	14:34
Cobalt	0.0500	J	0.000813	0.0509	mg/L	2.03	100	(0%-20%)			
Iron	2.00		0.719	2.72	mg/L	1.43	100	(0%-20%)			
Lead	0.0500	U	ND	0.0519	mg/L	2.76	104	(0%-20%)			

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Parname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Metals Analysis - ICPMS											
Batch	2484159										
Lithium	0.0500	0.0131		0.0673	mg/L	0.9	108	(0%-20%)	PRB	08/31/23	14:34
Magnesium	2.00	41.8		44.2	mg/L	0.204	N/A	(0%-20%)			
Manganese	0.0500	0.348		0.400	mg/L	1.2	N/A	(0%-20%)			
Molybdenum	0.0500	U	ND	0.0529	mg/L	0.157	106	(0%-20%)		09/01/23	11:44
Potassium	2.00	6.43		8.86	mg/L	2.54	122	(0%-20%)		08/31/23	14:34
Selenium	0.0500	U	ND	0.0511	mg/L	0.292	102	(0%-20%)			
Silver	0.0500	U	ND	0.0523	mg/L	1.45	105	(0%-20%)			
Sodium	2.00	21.0		23.5	mg/L	1.93	N/A	(0%-20%)			
Thallium	0.0500	U	ND	0.0516	mg/L	0.922	103	(0%-20%)			
QC1205501939 633126011 SDILT											
Aluminum		J	25.4	U	ND	ug/L	N/A	(0%-20%)		08/31/23	14:41
Antimony		U	ND	U	ND	ug/L	N/A	(0%-20%)		08/31/23	02:33
Arsenic		U	ND	U	ND	ug/L	N/A	(0%-20%)		08/31/23	14:41
Barium			47.4		9.66	ug/L	1.79	(0%-20%)			
Beryllium		U	ND	U	ND	ug/L	N/A	(0%-20%)		08/31/23	02:33
Boron			112		24.6	ug/L	9.94	(0%-20%)		08/31/23	14:59

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Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Metals Analysis - ICPMS											
Batch	2484159										
Cadmium	U	ND	U	ND	ug/L	N/A		(0%-20%)	PRB	08/31/23	14:41
Calcium		8290		1690	ug/L	2.04		(0%-20%)		08/31/23	14:59
Chromium	U	ND	U	ND	ug/L	N/A		(0%-20%)		08/31/23	14:41
Cobalt	J	0.813	U	ND	ug/L	N/A		(0%-20%)			
Iron		719		147	ug/L	2.29		(0%-20%)			
Lead	U	ND	U	ND	ug/L	N/A		(0%-20%)			
Lithium		13.1	U	ND	ug/L	N/A		(0%-20%)			
Magnesium		41800		7980	ug/L	4.56		(0%-20%)			
Manganese		348		71.4	ug/L	2.63		(0%-20%)			
Molybdenum	U	ND	U	ND	ug/L	N/A		(0%-20%)		09/01/23	11:48
Potassium		6430		1270	ug/L	1.12		(0%-20%)		08/31/23	14:41
Selenium	U	ND	U	ND	ug/L	N/A		(0%-20%)			
Silver	U	ND	U	ND	ug/L	N/A		(0%-20%)			
Sodium		21000		3960	ug/L	5.91		(0%-20%)			
Thallium	U	ND	U	ND	ug/L	N/A		(0%-20%)			

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Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Metals Analysis-Mercury											
Batch	2475854										
QC1205487211	632954001	DUP									
Mercury		U	ND	U	ND	mg/L	N/A		JP2	08/15/23	12:27
QC1205487204	LCS										
Mercury	0.00200				0.00199	mg/L	99.6	(80%-120%)		08/15/23	12:02
QC1205487203	MB										
Mercury			U		ND	mg/L				08/15/23	12:01
QC1205487212	632954001	MS									
Mercury	0.00200	U	ND		0.00200	mg/L	100	(75%-125%)		08/15/23	12:29
QC1205487213	632954001	SDILT									
Mercury		U	ND	U	ND	ug/L	N/A	(0%-10%)		08/15/23	12:30
Batch	2484083										
QC1205501815	632699006	DUP									
Mercury		U	ND	U	ND	mg/L	N/A		AXS5	08/31/23	11:52
QC1205501814	LCS										
Mercury	0.00200				0.00202	mg/L	101	(80%-120%)		08/31/23	11:49
QC1205501813	MB										
Mercury			U		ND	mg/L				08/31/23	11:47
QC1205501816	632699006	MS									
Mercury	0.00200	U	ND		0.00202	mg/L	101	(75%-125%)		08/31/23	11:54
QC1205501817	632699006	SDILT									
Mercury		U	ND	U	ND	ug/L	N/A	(0%-10%)		08/31/23	11:55

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Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Nutrient Analysis											
Batch	2475768										
QC1205487034	633126010	DUP									
Nitrogen, Nitrate/Nitrite		0.0715		0.0710	mg/L	0.702 ^		(+/-0.0200)	AXH3	08/14/23	08:00
QC1205487031	LCS										
Nitrogen, Nitrate/Nitrite	1.00			1.01	mg/L		101	(90%-110%)		08/14/23	07:39
QC1205487030	MB										
Nitrogen, Nitrate/Nitrite			U	ND	mg/L					08/14/23	07:38
QC1205487035	633126010	PS									
Nitrogen, Nitrate/Nitrite	1.00	0.0715		0.855	mg/L		78.4*	(90%-110%)		08/14/23	08:01
Solids Analysis											
Batch	2477178										
QC1205489455	633255002	DUP									
Total Dissolved Solids		136		137	mg/L	0.733		(0%-5%)	CH6	08/16/23	15:58
QC1205489454	LCS										
Total Dissolved Solids	300			301	mg/L		100	(95%-105%)		08/16/23	15:58
QC1205489453	MB										
Total Dissolved Solids			U	ND	mg/L					08/16/23	15:58
Titration and Ion Analysis											
Batch	2476209										
QC1205487866	633099001	DUP									
Alkalinity, Total as CaCO3		52.6		52.7	mg/L	0.19		(0%-20%)	JW2	08/14/23	15:56
Bicarbonate alkalinity (CaCO3)		52.6		52.7	mg/L	0.19		(0%-20%)			
Carbonate alkalinity (CaCO3)	U	ND	U	ND	mg/L	N/A					
QC1205487868	633099016	DUP									
Alkalinity, Total as CaCO3		259		259	mg/L	0.154		(0%-20%)		08/14/23	16:35

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Paramname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Titration and Ion Analysis											
Batch	2476209										
Bicarbonate alkalinity (CaCO3)		259		259	mg/L	0.154		(0%-20%)	JW2	08/14/23	16:35
Carbonate alkalinity (CaCO3)	U	ND	U	ND	mg/L	N/A					
QC1205487865 LCS											
Alkalinity, Total as CaCO3	50.0			50.6	mg/L		101	(90%-110%)		08/14/23	15:48
QC1205487867 633099001 MS											
Alkalinity, Total as CaCO3	50.0	52.6		104	mg/L		103	(80%-120%)		08/14/23	15:57
QC1205487869 633099016 MS											
Alkalinity, Total as CaCO3	50.0	259		311	mg/L		N/A	(80%-120%)		08/14/23	16:38

Notes:

The Qualifiers in this report are defined as follows:

- U Analyte was analyzed for, but not detected above the MDL, MDA, MDC or LOD.
- J Value is estimated
- X Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
- N Metals--The Matrix spike sample recovery is not within specified control limits
- H Analytical holding time was exceeded
- < Result is less than value reported
- > Result is greater than value reported
- h Preparation or preservation holding time was exceeded
- R Sample results are rejected
- Z Paint Filter Test--Particulates passed through the filter, however no free liquids were observed.
- d 5-day BOD--The 2:1 depletion requirement was not met for this sample
- ^ RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL. Qualifier Not Applicable for Radiochemistry.
- N/A RPD or %Recovery limits do not apply.
- ND Analyte concentration is not detected above the detection limit
- E %difference of sample and SD is >10%. Sample concentration must meet flagging criteria
- NJ Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
- E General Chemistry--Concentration of the target analyte exceeds the instrument calibration range
- Q One or more quality control criteria have not been met. Refer to the applicable narrative or DER.

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QC Summary

Workorder: 633126

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Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
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									
N1		See case narrative									
Y		Other specific qualifiers were required to properly define the results. Consult case narrative.									
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.									
B		The target analyte was detected in the associated blank.									
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									
J		See case narrative for an explanation									

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 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.

* 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 #: 632699**

Metals

Product: Determination of Metals by ICP-MS

Analytical Method: SW846 3005A/6020B

Analytical Procedure: GL-MA-E-014 REV# 36

Analytical Batch: 2474005

Preparation Method: SW846 3005A

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

Preparation Batch: 2474004

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

<u>GEL Sample ID#</u>	<u>Client Sample Identification</u>
632699001	ARK-ARGWA-19
632699002	ARK-AP2-FD-01
632699003	ARK-ARGWC-22
632699004	ARK-ARAMW-7
632699005	ARK-AP2-FB-01
632699006	ARK-ARAMW-9
632699007	ARK-ARAMW-2
632699008	ARK-ARAMW-1
632699009	ARK-ARGWC-23
1205484017	Method Blank (MB)ICP-MS
1205484018	Laboratory Control Sample (LCS)
1205484021	632699001(ARK-ARGWA-19L) Serial Dilution (SD)
1205484019	632699001(ARK-ARGWA-19S) Matrix Spike (MS)
1205484020	632699001(ARK-ARGWA-19SD) 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 6020B met the advisory control limits with the exception of magnesium and 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 632699003 (ARK-ARGWC-22), 632699004 (ARK-ARAMW-7), 632699006 (ARK-ARAMW-9), 632699007 (ARK-ARAMW-2), 632699008 (ARK-ARAMW-1) and 632699009 (ARK-ARGWC-23) were diluted to ensure that the analyte concentrations were within the linear calibration range of the instrument.

Analyte	632699					
	003	004	006	007	008	009
Boron	20X	20X		20X	20X	10X
Calcium	20X	20X	10X	20X	20X	10X
Magnesium	20X	20X		1X	1X	1X
Manganese	20X	20X	1X	1X	1X	1X
Sodium		1X	10X	1X	1X	1X

Product: Determination of Metals by ICP-MS

Analytical Method: SW846 3005A/6020B

Analytical Procedure: GL-MA-E-014 REV# 36

Analytical Batch: 2484159

Preparation Method: SW846 3005A

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

Preparation Batch: 2484158

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

GEL Sample ID#

Client Sample Identification

632699010	ARK-ARGWA-19
632699011	ARK-ARGWC-22
632699012	ARK-ARAMW-7
632699013	ARK-ARAMW-9
632699014	ARK-ARAMW-2
632699015	ARK-ARAMW-1
632699016	ARK-ARGWC-23
1205501935	Method Blank (MB)ICP-MS
1205501936	Laboratory Control Sample (LCS)
1205501939	633126011(ARK-ARGWC-21L) Serial Dilution (SD)
1205501937	633126011(ARK-ARGWC-21S) Matrix Spike (MS)
1205501938	633126011(ARK-ARGWC-21SD) 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 632699011 (ARK-ARGWC-22), 632699012 (ARK-ARAMW-7), 632699013 (ARK-ARAMW-9) and 632699014 (ARK-ARAMW-2) were diluted to ensure that the analyte concentrations were within the linear calibration range of the instrument.

Analyte	632699			
	011	012	013	014
Boron	25X		1X	
Calcium	25X		10X	
Magnesium	25X		1X	
Manganese	25X	50X	1X	10X
Sodium	1X		10X	

Product: Mercury Analysis Using the Perkin Elmer Automated Mercury Analyzer

Analytical Method: SW846 7470A

Analytical Procedure: GL-MA-E-010 REV# 39

Analytical Batch: 2474015

Preparation Method: SW846 7470A Prep

Preparation Procedure: GL-MA-E-010 REV# 39

Preparation Batch: 2474012

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

<u>GEL Sample ID#</u>	<u>Client Sample Identification</u>
632699001	ARK-ARGWA-19
632699002	ARK-AP2-FD-01
632699003	ARK-ARGWC-22
632699004	ARK-ARAMW-7
632699005	ARK-AP2-FB-01
632699006	ARK-ARAMW-9
632699007	ARK-ARAMW-2
632699008	ARK-ARAMW-1
632699009	ARK-ARGWC-23
1205484045	Method Blank (MB)CVAA
1205484046	Laboratory Control Sample (LCS)
1205484049	632582001(NonSDGL) Serial Dilution (SD)
1205484047	632582001(NonSDGD) Sample Duplicate (DUP)
1205484048	632582001(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.

Product: Mercury Analysis Using the Perkin Elmer Automated Mercury Analyzer

Analytical Method: SW846 7470A

Analytical Procedure: GL-MA-E-010 REV# 40

Analytical Batch: 2484083

Preparation Method: SW846 7470A Prep

Preparation Procedure: GL-MA-E-010 REV# 40

Preparation Batch: 2484082

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

<u>GEL Sample ID#</u>	<u>Client Sample Identification</u>
632699006	ARK-ARAMW-9
632699007	ARK-ARAMW-2
632699011	ARK-ARGWC-22
1205501813	Method Blank (MB)CVAA
1205501814	Laboratory Control Sample (LCS)
1205501817	632699006(ARK-ARAMW-9L) Serial Dilution (SD)
1205501815	632699006(ARK-ARAMW-9D) Sample Duplicate (DUP)
1205501816	632699006(ARK-ARAMW-9S) 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# 32

Analytical Batch: 2473965

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

<u>GEL Sample ID#</u>	<u>Client Sample Identification</u>
632699001	ARK-ARGWA-19
632699002	ARK-AP2-FD-01
632699003	ARK-ARGWC-22
632699004	ARK-ARAMW-7
632699005	ARK-AP2-FB-01
632699006	ARK-ARAMW-9

632699007	ARK-ARAMW-2
632699008	ARK-ARAMW-1
632699009	ARK-ARGWC-23
1205483948	Method Blank (MB)
1205483949	Laboratory Control Sample (LCS)
1205483950	632604002(NonSDG) Sample Duplicate (DUP)
1205483951	632604002(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 632699003 (ARK-ARGWC-22), 632699004 (ARK-ARAMW-7), 632699006 (ARK-ARAMW-9), 632699007 (ARK-ARAMW-2), 632699008 (ARK-ARAMW-1) and 632699009 (ARK-ARGWC-23) were diluted because target analyte concentrations exceeded the calibration range. Sample 632699003 (ARK-ARGWC-22) was diluted to minimize matrix effects on instrument performance. Sample 632699003 (ARK-ARGWC-22) was diluted based on historical data. 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	632699					
	003	004	006	007	008	009
Chloride	10X	1X	50X	1X	1X	1X
Fluoride	2X	1X	1X	1X	1X	1X
Sulfate	100X	100X	50X	50X	50X	5X

Product: Nitrate/Nitrite Cad Redux Low Level

Analytical Method: EPA 353.2 Low Level

Analytical Procedure: GL-GC-E-128 REV# 14

Analytical Batch: 2473982

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

<u>GEL Sample ID#</u>	<u>Client Sample Identification</u>
632699001	ARK-ARGWA-19
632699002	ARK-AP2-FD-01
632699003	ARK-ARGWC-22
632699004	ARK-ARAMW-7
632699005	ARK-AP2-FB-01
632699006	ARK-ARAMW-9
632699007	ARK-ARAMW-2
632699008	ARK-ARAMW-1
632699009	ARK-ARGWC-23
1205483978	Method Blank (MB)

1205483979	Laboratory Control Sample (LCS)
1205485195	632699001(ARK-ARGWA-19) Post Spike (PS)
1205485196	632699001(ARK-ARGWA-19) Sample Duplicate (DUP)

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 1205485195 (ARK-ARGWA-19PS), 1205485196 (ARK-ARGWA-19DUP), 632699001 (ARK-ARGWA-19), 632699002 (ARK-AP2-FD-01) and 632699009 (ARK-ARGWC-23) 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	632699		
	001	002	009
Nitrogen, Nitrate/Nitrite	5X	5X	5X

Sample Re-analysis

Samples 632699008 (ARK-ARAMW-1) and 632699009 (ARK-ARGWC-23) were re-analyzed due to instrument failure. The results from the reanalysis are reported.

Product: Solids, Total Dissolved

Analytical Method: SM 2540C

Analytical Procedure: GL-GC-E-001 REV# 21

Analytical Batch: 2474115

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

<u>GEL Sample ID#</u>	<u>Client Sample Identification</u>
632699001	ARK-ARGWA-19
632699002	ARK-AP2-FD-01
632699003	ARK-ARGWC-22
632699004	ARK-ARAMW-7
632699005	ARK-AP2-FB-01
632699006	ARK-ARAMW-9
632699007	ARK-ARAMW-2
632699008	ARK-ARAMW-1
632699009	ARK-ARGWC-23
1205484187	Method Blank (MB)
1205484188	Laboratory Control Sample (LCS)
1205484191	632609002(NonSDG) Sample Duplicate (DUP)

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

A reduced aliquot was used due to matrix interference. 632699003 (ARK-ARGWC-22), 632699004 (ARK-ARAMW-7) and 632699006 (ARK-ARAMW-9).

Product: Alkalinity

Analytical Method: SM 2320B

Analytical Procedure: GL-GC-E-033 REV# 15

Analytical Batch: 2474137

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

<u>GEL Sample ID#</u>	<u>Client Sample Identification</u>
632699001	ARK-ARGWA-19
632699003	ARK-ARGWC-22
632699004	ARK-ARAMW-7
632699006	ARK-ARAMW-9
632699007	ARK-ARAMW-2
632699008	ARK-ARAMW-1
632699009	ARK-ARGWC-23
1205484236	Laboratory Control Sample (LCS)
1205484237	632699001(ARK-ARGWA-19) Sample Duplicate (DUP)
1205484238	632699001(ARK-ARGWA-19) 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 #: 633126**

Metals

Product: Determination of Metals by ICP-MS

Analytical Method: SW846 3005A/6020B

Analytical Procedure: GL-MA-E-014 REV# 36

Analytical Batch: 2475579

Preparation Method: SW846 3005A

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

Preparation Batch: 2475578

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

<u>GEL Sample ID#</u>	<u>Client Sample Identification</u>
633126001	ARK-ARGWC-21
633126002	ARK-AP2-EB-01
633126003	ARK-ARAMW-8
633126004	ARK-ARGWA-20
633126005	ARK-STN-TW22
1205486561	Method Blank (MB) ICP-MS
1205486562	Laboratory Control Sample (LCS)
1205486565	633126001(ARK-ARGWC-21L) Serial Dilution (SD)
1205486563	633126001(ARK-ARGWC-21S) Matrix Spike (MS)
1205486564	633126001(ARK-ARGWC-21SD) 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 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 633126001 (ARK-ARGWC-21),

633126003 (ARK-ARAMW-8) and 633126005 (ARK-STN-TW22) were diluted to ensure that the analyte concentrations were within the linear calibration range of the instrument.

Analyte	633126		
	001	003	005
Boron	10X	10X	100X
Calcium	10X	10X	10X
Manganese	1X	1X	100X

Product: Determination of Metals by ICP-MS

Analytical Method: SW846 3005A/6020B

Analytical Procedure: GL-MA-E-014 REV# 36

Analytical Batch: 2484159

Preparation Method: SW846 3005A

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

Preparation Batch: 2484158

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

<u>GEL Sample ID#</u>	<u>Client Sample Identification</u>
633126011	ARK-ARGWC-21
633126012	ARK-ARAMW-8
633126013	ARK-ARGWA-20
633126014	ARK-STN-TW22
1205501935	Method Blank (MB)ICP-MS
1205501936	Laboratory Control Sample (LCS)
1205501939	633126011(ARK-ARGWC-21L) Serial Dilution (SD)
1205501937	633126011(ARK-ARGWC-21S) Matrix Spike (MS)
1205501938	633126011(ARK-ARGWC-21SD) 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 633126011 (ARK-ARGWC-21) and

633126014 (ARK-STN-TW22) were diluted to ensure that the analyte concentrations were within the linear calibration range of the instrument.

Analyte	633126	
	011	014
Boron	10X	
Calcium	10X	
Manganese	1X	50X

Product: Mercury Analysis Using the Perkin Elmer Automated Mercury Analyzer

Analytical Method: SW846 7470A

Analytical Procedure: GL-MA-E-010 REV# 39

Analytical Batch: 2475854

Preparation Method: SW846 7470A Prep

Preparation Procedure: GL-MA-E-010 REV# 39

Preparation Batch: 2475853

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

<u>GEL Sample ID#</u>	<u>Client Sample Identification</u>
633126001	ARK-ARGWC-21
633126002	ARK-AP2-EB-01
633126003	ARK-ARAMW-8
633126004	ARK-ARGWA-20
633126005	ARK-STN-TW22
1205487203	Method Blank (MB)CVAA
1205487204	Laboratory Control Sample (LCS)
1205487213	632954001(NonSDGL) Serial Dilution (SD)
1205487211	632954001(NonSDGD) Sample Duplicate (DUP)
1205487212	632954001(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.

Product: Mercury Analysis Using the Perkin Elmer Automated Mercury Analyzer

Analytical Method: SW846 7470A

Analytical Procedure: GL-MA-E-010 REV# 40

Analytical Batch: 2484083

Preparation Method: SW846 7470A Prep

Preparation Procedure: GL-MA-E-010 REV# 40

Preparation Batch: 2484082

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

<u>GEL Sample ID#</u>	<u>Client Sample Identification</u>
633126001	ARK-ARGWC-21
633126003	ARK-ARAMW-8
633126004	ARK-ARGWA-20
633126005	ARK-STN-TW22
633126011	ARK-ARGWC-21
633126013	ARK-ARGWA-20
1205501813	Method Blank (MB)CVAA
1205501814	Laboratory Control Sample (LCS)
1205501817	632699006(ARK-ARAMW-9L) Serial Dilution (SD)
1205501815	632699006(ARK-ARAMW-9D) Sample Duplicate (DUP)
1205501816	632699006(ARK-ARAMW-9S) 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# 32

Analytical Batch: 2475685

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

<u>GEL Sample ID#</u>	<u>Client Sample Identification</u>
633126001	ARK-ARGWC-21
633126002	ARK-AP2-EB-01
633126003	ARK-ARAMW-8
633126004	ARK-ARGWA-20
633126005	ARK-STN-TW22
1205486795	Method Blank (MB)
1205486796	Laboratory Control Sample (LCS)
1205486797	632744003(NonSDG) Sample Duplicate (DUP)
1205486798	632744003(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 1205486797 (Non SDG 632744003DUP), 1205486798 (Non SDG 632744003PS), 633126001 (ARK-ARGWC-21), 633126003 (ARK-ARAMW-8) and 633126005 (ARK-STN-TW22) 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	633126		
	001	003	005
Sulfate	25X	10X	100X

Product: Nitrate/Nitrite Cad Redux Low Level**Analytical Method:** EPA 353.2 Low Level**Analytical Procedure:** GL-GC-E-128 REV# 14**Analytical Batch:** 2475768

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

GEL Sample ID#	Client Sample Identification
633126006	ARK-ARGWC-21
633126007	ARK-AP2-EB-01
633126008	ARK-ARAMW-8
633126009	ARK-ARGWA-20
633126010	ARK-STN-TW22
1205487030	Method Blank (MB)
1205487031	Laboratory Control Sample (LCS)
1205487034	633126010(ARK-STN-TW22) Sample Duplicate (DUP)
1205487035	633126010(ARK-STN-TW22) 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
Nitrogen, Nitrate/Nitrite	1205487035 (ARK-STN-TW22PS)	78.4* (90%-110%)

Product: Solids, Total Dissolved

Analytical Method: SM 2540C

Analytical Procedure: GL-GC-E-001 REV# 21

Analytical Batch: 2477178

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

<u>GEL Sample ID#</u>	<u>Client Sample Identification</u>
633126001	ARK-ARGWC-21
633126002	ARK-AP2-EB-01
633126003	ARK-ARAMW-8
633126004	ARK-ARGWA-20
1205489453	Method Blank (MB)
1205489454	Laboratory Control Sample (LCS)
1205489455	633255002(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# 15

Analytical Batch: 2476209

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

<u>GEL Sample ID#</u>	<u>Client Sample Identification</u>
633126001	ARK-ARGWC-21
633126003	ARK-ARAMW-8
633126004	ARK-ARGWA-20
633126005	ARK-STN-TW22
1205487865	Laboratory Control Sample (LCS)
1205487866	633099001(ARK-ARGWA-24) Sample Duplicate (DUP)
1205487867	633099001(ARK-ARGWA-24) Matrix Spike (MS)
1205487868	633099016(ARK-ARGWA-14) Sample Duplicate (DUP)
1205487869	633099016(ARK-ARGWA-14) 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.

SAMPLE RECEIPT & REVIEW FORM

632702
632699

Client: <u>GPCC</u>		SDG/AR/COC/Work Order: <u>632-699, 632-702</u>			
Received By: <u>EG</u>		Date Received: <u>8/9/23 1245</u>			
Carrier and Tracking Number		Circle Applicable: FedEx Express FedEx Ground UPS Field Services Courier <u>Other</u>			
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): <u>60</u> <u>CPM</u> / 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 ≤ deg. C)?*	<input checked="" type="checkbox"/>	<input 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>5</u>
4	Daily check performed and passed on IR temperature gun?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Temperature Device Serial #: <u>IR5-23</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: <u>nitrate containers preserved with sulfuric</u> If Preservation added, Lot#: <u>3858525-A</u>
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 AT Date 8/10/23 Page 1 of 1

GEL Laboratories, LLC
 2040 Savage Road
 Charleston, SC 29407
 Phone: (843) 556-8171
 Fax: (843) 766-1178

633126
 2
 9F2
 Cooler

Sample ID	*Date Collected (mm-dd-yy)	*Time Collected (Military) (hhmm)	QC Code (1)	Field Filtered (2)	Sample Matrix (6)	Radiactive (If yes, please supply isotopic info.)	Should this sample be considered: (7) Known or possible Hazards	Sample Analysis Requested (5) (Fill in the number of containers for each test)													
								Ag (App. I) (6020B)	Metals App. III (6020B)	Alkalinity (300.0 R2)	TDS (SM Method 2540C)	Anions (Cl, F, Sulfate) (300 Rev. 2.1 1993)	Metals App. IV (6020B)	RAD 226-228 Cmbd (6020B)	F2+ / Mn2+ (EPA Method 6020B) (Filtered)	Mercury (7470B)	Metals Al, K, Mg Na, Fe, Mn (6020B)	Preservative Type (6)			
ARK-ARGWC-21	08-09-23	1035	N	Y	WG			9	X	X	X	X	X	X	X	X	X	X	X	X	See Nitrate/Nitrite COC for their times
ARK-AP2-EB-01	08-09-23	1110	FB	N	WQ			7	X	X	X	X	X	X	X	X	X	X	X	X	
ARK-ARAMW-8	08-09-23	1115	N	Y	WG			9	X	X	X	X	X	X	X	X	X	X	X	X	
ARK-ARGWA-20	08-10-23	0925	N	Y	WG			10	X	X	X	X	X	X	X	X	X	X	X	X	
ARK-STNTW-22	08-10-23	1255	N	Y	WG			6	X	X	X	X	X	X	X	X	X	X	X	X	Add. anion collected at 0825 8/11/23

Chain of Custody Signatures

Relinquished By (Signed) _____ Date _____ Received by (signed) _____ Print Name _____ Date _____
 John Myer 8/11/23 Anthony Ward 8/11/23
 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=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: FL = Flammable/Ignitable, CO = Corrosive, RE = Reactive
 Listed Waste: LW = Listed Waste (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:
 TSCA Regulated: Ag = Silver, Cd = Cadmium, Cr = Chromium, MR = Misc. RCRA metals, PCB = Polychlorinated biphenyls
 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.)
 Originally Nitrate by N were originally collected in unpreserved bottles; Later preserved Nitrate/Nitrite bottles were sent and collected from wells on 8/10/2023

SAMPLE RECEIPT & REVIEW FORM

Client: <u>GPCC</u>		SDG/AR/COC/Work Order: <u>633099, 633107, 633126, 633128</u>		
Received By: <u>Anna Johnson</u>		Date Received: <u>8/11/23</u>		
Carrier and Tracking Number		Circle Applicable: FedEx Express FedEx Ground UPS Field Services <u>Courier</u> Other <u>cooler 1 - 0.6°C</u> <u>cooler 3 - 2.6°C</u> <u>cooler 2 - 1.9°C</u> <u>cooler 4 - 0.0°C</u>		
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?	<input checked="" type="checkbox"/>	<input 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"/>	<input 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"/>	<input type="checkbox"/>	Maximum Net Counts Observed* (Observed Counts - Area Background Counts): _____ CPM / mR/Hr Classified as: <u>Rad 1</u> <u>Rad 2</u> <u>Rad 3</u>	
D) Did the client designate samples are hazardous?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	COC notation or hazard labels on containers equal client designation.	
E) Did the RSO identify possible hazards?	<input checked="" type="checkbox"/>	<input 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 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 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 #: <u>IR2-21</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#: _____
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) Missing 2 containers for ARB-ARBWA-1A <u>AD 8/15/23</u>
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): <u>cooler 5 - 3.1°C</u> <u>cooler 7 - 2.5°C</u> <u>cooler 6 - 3.6°C</u> <u>cooler 8 - 3.4°C</u> <u>cooler 9 - 1.9°C</u> <u>cooler 10 - 0.9°C</u>				

PM (or PMA) review: Initials EST Date 8/15/23 Page 1 of 1

Page 1 of 1
 1401-401-SDG-052099 Rev 1

Page: 1 of 1
 Project # 175569434
 GEL Quote #:
 COC Number (1): 3 Coolers
 PO Number:

GEL Laboratories LLC
 Chemistry | Radiochemistry | Radioassay | Specialty Analytics
Chain of Custody and Analytical Request
 GEL Work Order Number: _____ GEL Project Manager: Erin Trent

GEL Laboratories, LLC
 2040 Savage Road
 Charleston, SC 29407
 Phone: (843) 556-8171
 Fax: (843) 766-1178

Client Name: Georgia Power Phone # (937-344-6533)

Project/Site Name: Plant Arkwright Ash Pond 2 Fax: _____

Address: 241 Ralph McGill Blvd SE, Atlanta, GA 30308

Collected By: John Myer, Dylan Quintal, Houston Lynn
 Send Results To: jabram@southernco.com EDD@stantec.com edgar.smith@stantec.com

Sample Analysis Requested (5) (Fill in the number of containers for each test)

Should this sample be considered:	Total number of containers	NI	NI			NI	NI	NI	NI	NI									← Preservative Type (6)	Comments (task code: ARK-CCR-ASSMT-2023S) A.S. 8/15/23
		Ag (App. I) (6020B)	Metals App. III (6020B)	Alkalinity (300.0 R2.1)	TDS (SM Method 2540C)	Anions (Cl, F, Sulfate) (300.0 Rev. 2.1 1993)	Metals App. IV (6020B)	RAD 226-228 Cmbd	Fe2+ / Mn2+ (EPA Method 6020B) (Field Filtered)	Nitrate as N (EPA Method 353.2)	Mercury (7470B)	Metals Al, K, Mg, Na, Fe, Mn (6020B)								
	9	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
	7		X		X	X	X		X	X		X	X							
	9	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
	9	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
	7		X		X	X	X		X	X		X	X							
	9	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
	9	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
	9	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
	9	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		

Sample ID	Date Collected (mm-dd-yy)	Time Collected (Military) (hhmm)	QC Code (2)	Field Filtered (3)	Sample Matrix (4)	Radiactive (if yes, please supply isotopic info.)	(7) Known or possible hazards
ARK-ARGWA-19	08-08-23	1015	N	Y	WG		
ARK-AP2-FD-01	08-08-23	NA	FD	N	WQ		
ARK-ARGWC-22	08-08-23	0955	N	Y	WG		
ARK-ARAMW-7	08-08-23	1150	N	Y	WG		
ARK-AP2-FB-01	08-08-23	1230	FB	N	WQ		
ARK-ARAMW-9	08-08-23	1235	N	Y	WG		
ARK-ARAMW-2	08-08-23	1505	N	Y	WG		
ARK-ARAMW-1	08-08-23	1600	N	Y	WG		
ARK-ARGWC-23	08-08-23	1655	N	Y	WG		

Chain of Custody Signatures

TAT Requested: Normal: _____ Rush: _____ Specify: _____ (Subject to Surcharge)

Relinquished By (Signed)	Print Name	Date	Received by (signed)	Print Name	Date
1	Zachary Myer	8/19/23	1	[Signature]	8/19/23 8:27
2			2		
3			3		

Fax Results: [] Yes [X] No
 Select Deliverable: [] C of A [] QC Summary [] Level 1 [X] Level 2 [] Level 3 [] Level 4
 Additional Remarks:
 For Lab Receiving Use Only: Custody Seal Intact? [] Yes [] No Cooler Temp: _____ °C

> For sample shipping and delivery details, see Sample Receipt & Review form (SRR) Sample Collection Time Zone: [X] Eastern [] Pacific [] Central [] Mountain [] Other.

- 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=Focal, 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, SB = Sodium Hydroxide, SA = Sulfuric Acid, AA = Ascorbic Acid, HX = Hexane, ST = Sodium Thiosulfate, If no preservative is added = leave field blank

KNOWN OR POSSIBLE HAZARDS	Characteristic Hazards	Listed Waste	Other	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.)
RCRA Metals As = Arsenic Ba = Barium Cd = Cadmium Cr = Chromium Pb = Lead	Hg = Mercury Se = Selenium Ag = Silver MR = Misc. RCRA metals	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:	
	TSCA Regulated PCB = Polychlorinated biphenyls			

Page: _____ of _____
 Project # 175569434
 GEL Quote #:
 COC Number (1): 3 Coolers
 PO Number:

GEL Laboratories LLC
 Chemistry | Radiochemistry | Radiobioassay | Specialty Analytics
 Cooler 3 of 3
 Chain of Custody and Analytical Request
 GEL Work Order Number: _____ GEL Project Manager: Erin Trent

2040 Savage Road
 Charleston, SC 29407
 Phone: (843) 556-8171
 Fax: (843) 766-1178

Client Name: Georgia Power Phone # (937-344-6533) Sample Analysis Requested (5) (Fill in the number of containers for each test)

Project/Site Name: Plant Arkwright Ash Pond 2 Fax: _____ Should this sample be considered: _____

Address: 241 Ralph McGill Blvd SE, Atlanta, GA 30308
 Collected By: John Myer; Dylan Quintal, Houston Lynn Send Results To: jabraham@southernco.com EDD@stantec.com edgar.smith@stantec.com

Sample ID <i>* For composites - Indicate start and stop date/time</i>	*Date Collected (mm-dd-yy)	*Time Collected (Military (hhmm))	QC Code (9)	Field Filtered (9)	Sample Matrix (6)	Radioactive (if yes, please supply isotopic info.)	(7) Known or possible hazards	Total number of containers	Ag (App. I) (6020B)	Metals App. III (6020B)	Alkalinity (300.0 R2.1)	TDS (SM Method 2540C)	Anions (Cl, F, Sulfate) (300.0 Rev. 2.1 1993)	Metals App. IV (6020B)	RAD 226-228 Comb	Fe2+ / Mn2+ (EPA Method 6020B) (Field Filtered)	Nitrate as N (EPA Method 353.2)	Mercury (7470B)	Metals Al, K, Mg, Na, Fe, Mn (6020B)	← Preservative Type (6)	Comments (task_code: ARK-CCR-ASSMT-2023S1)2 A.S. 8/15/23
									NI	NI	NI	NI	NI	NI	NI	NI	NI	NI			
ARK-ARGWA-19	08-08-23	1015	N	Y	WG			9	X	X	X	X	X	X	X	X	X	X	X		
ARK-AP2-FD-01	08-08-23	NA	FD	N	WQ			7		X		X	X	X	X		X	X			
ARK-ARGWC-22	08-08-23	0955	N	Y	WG			9	X	X	X	X	X	X	X	X	X	X	X		
ARK-ARAMW-7	08-08-23	1150	N	Y	WG			9	X	X	X	X	X	X	X	X	X	X	X		
ARK-AP2-FB-01	08-08-23	1230	FB	N	WQ			7		X		X	X	X			X	X			
ARK-ARAMW-9	08-08-23	1235	N	Y	WG			9	X	X	X	X	X	X	X	X	X	X	X		
ARK-ARAMW-2	08-08-23	1505	N	Y	WG			9	X	X	X	X	X	X	X	X	X	X	X		
ARK-ARAMW-1	08-08-23	1600	N	Y	WG			9	X	X	X	X	X	X	X	X	X	X	X		
ARK-ARGWC-23	08-08-23	1655	N	Y	WG			9	X	X	X	X	X	X	X	X	X	X	X		

Chain of Custody Signatures TAT Requested: Normal: ___ Rush: ___ Specify: ___ (Subject to Surcharge)

Relinquished By (Signed)	Print Name	Date	Received by (signed)	Print Name	Date	Fax Results: [] Yes [X] No
1 Zachary Levy	Zach Levy	8/19/23	[Signature]	[Signature]	8/19/23 8:25	Select Deliverable: [] C of A [] QC Summary [] Level 1 [X] Level 2 [] Level 3 [] Level 4
2						Additional Remarks:
3						For Lab Receiving Use Only: Custody Seal Intact? [] Yes [] No Cooler Temp: ___ °C

> For sample shipping and delivery details, see Sample Receipt & Review form (SRR.) Sample Collection Time Zone: [X] Eastern [] Pacific [] Central [] Mountain [] Other:

- 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=Fecal, 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 = 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):	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.)
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			

GEL Quote #: 11209439
 COC Number (1): 2 Coolers
 PO Number:
 Client Name: Georgia Power

GEL Laboratories LLC
 Chemistry | Radiochemistry | Radioassay | Specialty Analytics
Chain of Custody and Analytical Request
 GEL Work Order Number:
 GEL Project Manager: Erin Trent

GEL Laboratories, LLC
 2040 Savage Road
 Charleston, SC 29407
 Phone: (843) 556-8171
 Fax: (843) 766-1178
 Cooler
 1 of 2

Project Site Name: Plant Arkwright Ash Pond 2
 Address: 241 Ralph McGill Blvd SE, Atlanta, GA 30308
 Collected By: John Myer, Dylan Quintal, Dylan Ripley, Houston Lynn
 Send Results To: jabraham@southernco.com EDD@stantec.com
 edgar.smith@stantec.com

Phone #: (937-344-6533)
 Fax:
 Sample Analysis Requested (5) (Fill in the number of containers for each test)

Sample ID <i>* For composites - indicate start and stop date/time</i>	Date Collected (mm-dd-yy)	Time Collected (Military)	QC Code (a)	Field Filtered (c)	Sample Matrix (d)	Radioactive (if yes, please supply isotopic info.)	(7) Known or possible hazards	Total number of containers	Sample Analysis Requested (5)												← Preservative Type (6)	Comments (task_code: ARK-CCR-ASSMT-2023S) A.S. 8/15/23
									As (App 1) (602013)	Metals App. III (60201)	Alkalinity (300.0 R2.1)	TDS (SM Method 2540C)	Anions (Cl, F, Sulfate) (300.0 Rev 2.1 1993)	Metals App. IV (602013)	KAD 236-228 Cmbul	Fe2+ / Mn2+ (HPLC Method 602013) (Field filtered)	Mercury (747013)	Metals Al, K, Mg, Na, I/g, Mn (602013)				
ARK-ARGWC-21	08-09-23	1035	N	Y	WG			9	X	X	X	X	X	X	X	X		X	X			See Nitrate/Nitrite COC for their times
ARK-AP2-EB-01	08-09-23	1110	FB	N	WQ			7	X		X	X	X	X	X			X				
ARK-ARAMW-8	08-09-23	1115	N	Y	WG			9	X	X	X	X	X	X	X	X		X	X			
ARK-ARGWA-20	08-10-23	0925	N	Y	WG			10	X	X	X	X	X	X	X	X		X	X			
ARK-STNTW-22	08-10-23	1255	N	Y	WG			6	X	X	X	X	X					X	X			Add anion collected at 0825 8/11/23

Chain of Custody Signatures

Relinquished By (Signed)	Print Name	Date	Received by (signed)	Print Name	Date
<i>[Signature]</i>	John Myer	8/11/23	<i>[Signature]</i>	Anthony Ward	8/11/23

TAT Requested: Normal: Rush: Specify: (Subject to Surchage)

Fax Results: Yes No

Select Deliverable: C of A OC Summary Level 1 Level 2 Level 3 Level 4

Additional Remarks:

For Lab Receiving Use Only: Custody Seal Intact? Yes No Cooler Temp: °C

> For sample shipping and delivery details, see Sample Receipt & Review form (SRR.)

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=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, EX = 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:
Hg = Mercury Se = Selenium Ag = Silver MR = Misc. RCRA metals	TSCA Regulated PCB = Polychlorinated biphenyls		

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.)

Originally Nitrate by N were originally collected in unpreserved bottles; Later preserved Nitrate/Nitrite bottles were sent and collected from wells on 8/10/2023

GEL Quote # _____
 COC Number (1) 2 Coolers
 PO Number _____
 Client Name Georgia Power

GEL Laboratories LLC
 Chemistry | Radiochemistry | Radiotoxicity | Specialty Analytics
Chain of Custody and Analytical Request
 GEL Work Order Number: _____
 GEL Project Manager: Erin Trent
 Phone = (937-344-6533)
 Fax _____

GEL Laboratories, LLC
 2040 Savage Road
 Charleston, SC 29407
 Phone (843) 556-8171
 Fax (843) 766-1178
COOLER
1 OF 2

Project Site Name: Plant Arkwright Ash Pond 2
 Address: 241 Ralph McGill Blvd SE, Atlanta, GA 30308
 Collected By: John Myer, Dylan Quintal, Dylan Ripley, Houston Lynn

Send Results To: jabraham@southernco.com EDD@stantec.com edgar.smith@stantec.com

Sample ID <small>* For composites - indicate start and stop date/time</small>	Date Collected <small>(mm-dd-yy)</small>	Time Collected <small>(Military)</small> <small>(Roman)</small>	QC Code ²⁾	Field Filtered ³⁾	Sample Matrix ⁴⁾	Should this sample be considered: (if radioactive (if please supply isotopic info)) (7) Known or possible hazards	Total number of containers	Sample Analysis Requested ⁵⁾ (Fill in the number of containers for each test)											Preservative Type (6)	Comments <small>(task_code: ARK-CCR-ASSMT-2023S¹⁾)</small> <u>A.S. 8/15/23</u>		
								Ag (App I) (6020B)	Metals App III (6020B)	Alkalinity (300.0 (2,1))	TDS (SM Method 2540C)	Anions (Cl, F, Sulfate) (100.0 Rev 2.1.93)	Metals App IV (6020B)	KAP 226-228 Cmbal	Fe2 / Mn2 (ISPA Method (6020B) (field filtered))	Mercury (7470B)	Metals Al, K, Mg, Na, Fe, Mn (6020B)					
ARK-ARGWC-21	08-09-23	1035	N	Y	WG			9	X	X	X	X	X	X	X	X	X	X	X	X	X	See Nitrate/Nitrite COC for their times
ARK-AP2-EB-01	08-09-23	1110	FB	N	WQ			7	X		X	X	X	X	X							
ARK-ARAMW-8	08-09-23	1115	N	Y	WG			9	X	X	X	X	X	X	X	X	X	X	X	X	X	
ARK-ARGWA-20	08-10-23	0925	N	Y	WG			10	X	X	X	X	X	X	X	X	X	X	X	X	X	
ARK-STNTW-22	08-10-23	1255	N	Y	WG			6	X	X	X	X	X	X								Add anion collected at 0825 8/11/23 + only App. III metals <u>As, Co, Li, Mo</u>

Chain of Custody Signatures
 TAT Requested: Normal: _____ Rush: _____ Specify: _____ (Subject to Surchage)

Relinquished By (Signed)	Print Name	Date	Received by (signed)	Print Name	Date	Fax Results	Level 1	Level 2	Level 3	Level 4
<u>[Signature]</u>	<u>Anthony Ward</u>	<u>8/11/23</u>	<u>[Signature]</u>	<u>Anthony Ward</u>	<u>8/11/23</u>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
							<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
							<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

> For sample shipping and delivery details, see Sample Receipt & Review form (SRR)
 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 = Geo, 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=Soilcore, 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, EDX = Hexose, ST = Sodium Thiosulfate. If no preservative is added = leave field blank

7) KNOWN OR POSSIBLE HAZARDS	Characteristic Hazards	Listed Waste	Other
RCRA Metals As = Arsenic Hg = Mercury Ba = Barium Se = Selenium Cd = Cadmium Ag = Silver Cr = Chromium MR = Misc. RCRA metals Pb = Lead	FL = Flammable/Ignitable CO = Corrosive RE = Reactive TSCA Regulated PCB = Polychlorinated biphenyls	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.)
 Originally Nitrate by N were originally collected in un-preserved bottles; Later preserved Nitrate/Nitrite bottles were sent and collected from wells on 8/10/2023

List of current GEL Certifications as of 06 September 2023

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	SC000122023-4
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

September 08, 2023

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

Re: Arkwright CCR Groundwater Compliance AP2-R
Work Orders: 632702 and 633128

Dear Joju Abraham:

GEL Laboratories, LLC (GEL) appreciates the opportunity to provide the enclosed analytical results for the sample(s) we received on August 09, 2023 and August 11, 2023. This original data report has been prepared and reviewed in accordance with GEL's standard operating procedures.

The samples were delivered with proper chain of custody documentation and signatures. All sample containers arrived without any visible signs of tampering or breakage. There are no additional comments concerning sample receipt. The laboratory received the following sample(s):

<u>Laboratory ID</u>	<u>Client ID</u>	<u>Matrix</u>	<u>Date Collected</u>	<u>Date Received</u>
632702001	ARK-ARGWA-19	Ground Water	08/08/23 10:15	09/08/23 12:45
632702002	ARK-AP2-FD-01	Water	08/08/23 12:00	09/08/23 12:45
632702003	ARK-ARGWC-22	Ground Water	08/08/23 09:55	09/08/23 12:45
632702004	ARK-ARAMW-7	Ground Water	08/08/23 11:50	09/08/23 12:45
632702005	ARK-AP2-FB-01	Water	08/08/23 12:30	09/08/23 12:45
632702006	ARK-ARAMW-9	Ground Water	08/08/23 12:35	09/08/23 12:45
632702007	ARK-ARAMW-2	Ground Water	08/08/23 15:05	09/08/23 12:45
632702008	ARK-ARAMW-1	Ground Water	08/08/23 16:00	09/08/23 12:45
632702009	ARK-ARGWC-23	Ground Water	08/08/23 16:55	09/08/23 12:45
633128001	ARK-ARGWC-21	Ground Water	09/08/23 10:35	11/08/23 14:00
633128002	ARK-AP2-EB-01	Water	09/08/23 11:10	11/08/23 14:00
633128003	ARK-ARAMW-8	Ground Water	09/08/23 11:15	11/08/23 14:00
633128004	ARK-ARGWA-20	Ground Water	10/08/23 09:25	11/08/23 14:00

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.



Prep Methods and Prep Dates

Not Applicable

Analysis Methods and Analysis Dates

<u>Method</u>	<u>Run Date ID</u>
Calculation	06-SEP-2023
Calculation	08-SEP-2023
EPA 903.1 Modified	05-SEP-2023
EPA 903.1 Modified	08-SEP-2023
EPA 904.0/SW846 9320 Modified	23-AUG-2023
EPA 904.0/SW846 9320 Modified	29-AUG-2023

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,

A handwritten signature in black ink that reads "Erin J. Trent". The signature is written in a cursive style with a large, stylized initial "E".

Erin Trent
Project Manager

Purchase Order: GPC82177-0005
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: 632702 GEL Work Order: 632702

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: 633128 GEL Work Order: 633128

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: September 8, 2023

Contact: Joju Abraham

Project: Arkwright CCR Groundwater Compliance AP2-R

Client Sample ID: ARK-ARGWA-19
 Sample ID: 632702001
 Matrix: WG
 Collect Date: 08-AUG-23
 Receive Date: 09-AUG-23
 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	0.700	+/-0.734	1.21	+/-0.755	3.00	pCi/L			JE1	08/29/23	1024	2474962	1
<i>Radium-226+Radium-228 Calculation "See Parent Products"</i>														
Radium-226+228 Sum		1.80	+/-0.894	1.21	+/-0.931		pCi/L			NXL1	09/08/23	1226	2475371	2
Rad Radium-226														
<i>Lucas Cell, Ra226, Liquid "As Received"</i>														
Radium-226		1.10	+/-0.511	0.609	+/-0.543	1.00	pCi/L			LXP1	09/08/23	1035	2474958	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"	2474962	80.3	(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: September 8, 2023

Contact: Joju Abraham

Project: Arkwright CCR Groundwater Compliance AP2-R

Client Sample ID: ARK-AP2-FD-01

Project: GPCC00100

Sample ID: 632702002

Client ID: GPCC001

Matrix: WG

Collect Date: 08-AUG-23

Receive Date: 09-AUG-23

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	-1.78	+/-1.01	2.19	+/-1.01	3.00	pCi/L			JE1	08/29/23	1024	2474962	1
<i>Radium-226+Radium-228 Calculation "See Parent Products"</i>														
Radium-226+228 Sum	U	0.0513	+/-1.06	2.19	+/-1.06		pCi/L			NXL1	09/08/23	1226	2475371	2
Rad Radium-226														
<i>Lucas Cell, Ra226, Liquid "As Received"</i>														
Radium-226	U	0.0513	+/-0.334	0.688	+/-0.334	1.00	pCi/L			LXP1	09/08/23	1035	2474958	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"	2474962	78.8	(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: September 8, 2023

Contact: Joju Abraham

Project: Arkwright CCR Groundwater ComplianceAP2-R

Client Sample ID: ARK-ARGWC-22

Project: GPCC00100

Sample ID: 632702003

Client ID: GPCC001

Matrix: WG

Collect Date: 08-AUG-23

Receive Date: 09-AUG-23

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	1.13	+/-1.04	1.69	+/-1.08	3.00	pCi/L			JE1	08/29/23	1024	2474962	1
<i>Radium-226+Radium-228 Calculation "See Parent Products"</i>														
Radium-226+228 Sum	U	1.22	+/-1.08	1.69	+/-1.12		pCi/L			NXL1	09/08/23	1226	2475371	2
Rad Radium-226														
<i>Lucas Cell, Ra226, Liquid "As Received"</i>														
Radium-226	U	0.0892	+/-0.303	0.598	+/-0.304	1.00	pCi/L			LXP1	09/08/23	1035	2474958	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"	2474962	76.5	(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	

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: September 8, 2023

Contact: Joju Abraham

Project: Arkwright CCR Groundwater Compliance AP2-R

Client Sample ID: ARK-ARAMW-7

Project: GPCC00100

Sample ID: 632702004

Client ID: GPCC001

Matrix: WG

Collect Date: 08-AUG-23

Receive Date: 09-AUG-23

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		4.31	+/-1.46	1.85	+/-1.82	3.00	pCi/L			JE1	08/29/23	1024	2474962	1
<i>Radium-226+Radium-228 Calculation "See Parent Products"</i>														
Radium-226+228 Sum		4.83	+/-1.50	1.85	+/-1.86		pCi/L			NXL1	09/08/23	1226	2475371	2
Rad Radium-226														
<i>Lucas Cell, Ra226, Liquid "As Received"</i>														
Radium-226		0.520	+/-0.353	0.398	+/-0.362	1.00	pCi/L			LXP1	09/08/23	1035	2474958	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"	2474962	74.8	(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: September 8, 2023

Contact: Joju Abraham

Project: Arkwright CCR Groundwater Compliance AP2-R

Client Sample ID: ARK-AP2-FB-01

Project: GPCC00100

Sample ID: 632702005

Client ID: GPCC001

Matrix: WQ

Collect Date: 08-AUG-23

Receive Date: 09-AUG-23

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	1.02	+/-0.927	1.50	+/-0.963	3.00	pCi/L			JE1	08/29/23	1024	2474962	1
<i>Radium-226+Radium-228 Calculation "See Parent Products"</i>														
Radium-226+228 Sum		1.76	+/-0.991	1.50	+/-1.04		pCi/L			NXL1	09/08/23	1226	2475371	2
Rad Radium-226														
<i>Lucas Cell, Ra226, Liquid "As Received"</i>														
Radium-226		0.743	+/-0.351	0.299	+/-0.387	1.00	pCi/L			LXP1	09/08/23	1035	2474958	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"	2474962	76.8	(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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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: September 8, 2023

Contact: Joju Abraham

Project: Arkwright CCR Groundwater Compliance AP2-R

Client Sample ID: ARK-ARAMW-9

Project: GPCC00100

Sample ID: 632702006

Client ID: GPCC001

Matrix: WG

Collect Date: 08-AUG-23

Receive Date: 09-AUG-23

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		3.39	+/-1.15	1.38	+/-1.43	3.00	pCi/L			JE1	08/29/23	1024	2474962	1
<i>Radium-226+Radium-228 Calculation "See Parent Products"</i>														
Radium-226+228 Sum		3.92	+/-1.21	1.38	+/-1.49		pCi/L			NXL1	09/08/23	1226	2475371	2
Rad Radium-226														
<i>Lucas Cell, Ra226, Liquid "As Received"</i>														
Radium-226	U	0.533	+/-0.402	0.590	+/-0.415	1.00	pCi/L			LXP1	09/08/23	1035	2474958	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"	2474962	81.3	(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: September 8, 2023

Contact: Joju Abraham

Project: Arkwright CCR Groundwater Compliance AP2-R

Client Sample ID: ARK-ARAMW-2

Project: GPCC00100

Sample ID: 632702007

Client ID: GPCC001

Matrix: WG

Collect Date: 08-AUG-23

Receive Date: 09-AUG-23

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	1.11	+/-0.957	1.55	+/-0.998	3.00	pCi/L			JE1	08/29/23	1024	2474962	1
<i>Radium-226+Radium-228 Calculation "See Parent Products"</i>														
Radium-226+228 Sum		1.86	+/-1.08	1.55	+/-1.13		pCi/L			NXL1	09/08/23	1226	2475371	2
Rad Radium-226														
<i>Lucas Cell, Ra226, Liquid "As Received"</i>														
Radium-226		0.747	+/-0.501	0.715	+/-0.529	1.00	pCi/L			LXP1	09/08/23	1035	2474958	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"	2474962	90	(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: September 8, 2023

Contact: Joju Abraham

Project: Arkwright CCR Groundwater Compliance AP2-R

Client Sample ID: ARK-ARAMW-1

Project: GPCC00100

Sample ID: 632702008

Client ID: GPCC001

Matrix: WG

Collect Date: 08-AUG-23

Receive Date: 09-AUG-23

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	0.725	+/-1.06	1.82	+/-1.08	3.00	pCi/L			JE1	08/29/23	1021	2474962	1
<i>Radium-226+Radium-228 Calculation "See Parent Products"</i>														
Radium-226+228 Sum	U	1.16	+/-1.13	1.82	+/-1.15		pCi/L			NXL1	09/08/23	1226	2475371	2
Rad Radium-226														
<i>Lucas Cell, Ra226, Liquid "As Received"</i>														
Radium-226	U	0.434	+/-0.398	0.601	+/-0.404	1.00	pCi/L			LXP1	09/08/23	1035	2474958	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"	2474962	90.1	(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

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: September 8, 2023

Contact: Joju Abraham

Project: Arkwright CCR Groundwater ComplianceAP2-R

Client Sample ID: ARK-ARGWC-23

Project: GPCC00100

Sample ID: 632702009

Client ID: GPCC001

Matrix: WG

Collect Date: 08-AUG-23

Receive Date: 09-AUG-23

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	-0.0472	+/-0.745	1.44	+/-0.745	3.00	pCi/L			JE1	08/29/23	1021	2474962	1
<i>Radium-226+Radium-228 Calculation "See Parent Products"</i>														
Radium-226+228 Sum	U	0.363	+/-0.842	1.44	+/-0.844		pCi/L			NXL1	09/08/23	1226	2475371	2
Rad Radium-226														
<i>Lucas Cell, Ra226, Liquid "As Received"</i>														
Radium-226	U	0.363	+/-0.394	0.639	+/-0.398	1.00	pCi/L			LXP1	09/08/23	1107	2474958	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"	2474962	82	(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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Atlanta, Georgia 30308

Report Date: September 6, 2023

Contact: Joju Abraham

Project: Arkwright CCR Groundwater Compliance AP2-R

Client Sample ID: ARK-ARGWC-21
 Sample ID: 633128001
 Matrix: WG
 Collect Date: 09-AUG-23
 Receive Date: 11-AUG-23
 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		2.34	+/-1.09	1.47	+/-1.24	3.00	pCi/L			JE1	08/23/23	0928	2477579	1
<i>Radium-226+Radium-228 Calculation "See Parent Products"</i>														
Radium-226+228 Sum		2.69	+/-1.17	1.47	+/-1.32		pCi/L		1	LXB3	09/06/23	1109	2476923	2
Rad Radium-226														
<i>Lucas Cell, Ra226, Liquid "As Received"</i>														
Radium-226	U	0.352	+/-0.440	0.733	+/-0.443	1.00	pCi/L			LXP1	09/05/23	0804	2477571	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"	2477579	82.3	(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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 Address : Company
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Atlanta, Georgia 30308

Report Date: September 6, 2023

Contact: Joju Abraham

Project: Arkwright CCR Groundwater Compliance AP2-R

Client Sample ID: ARK-AP2-EB-01

Project: GPCC00100

Sample ID: 633128002

Client ID: GPCC001

Matrix: WQ

Collect Date: 09-AUG-23

Receive Date: 11-AUG-23

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	0.774	+/-0.989	1.68	+/-1.01	3.00	pCi/L			JE1	08/23/23	0928	2477579	1
<i>Radium-226+Radium-228 Calculation "See Parent Products"</i>														
Radium-226+228 Sum	U	1.14	+/-1.05	1.68	+/-1.08		pCi/L		1	LXB3	09/06/23	1109	2476923	2
Rad Radium-226														
<i>Lucas Cell, Ra226, Liquid "As Received"</i>														
Radium-226	U	0.365	+/-0.365	0.514	+/-0.373	1.00	pCi/L			LXP1	09/05/23	0804	2477571	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"	2477579	78.2	(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: September 6, 2023

Contact: Joju Abraham

Project: Arkwright CCR Groundwater Compliance AP2-R

Client Sample ID: ARK-ARAMW-8

Project: GPCC00100

Sample ID: 633128003

Client ID: GPCC001

Matrix: WG

Collect Date: 09-AUG-23

Receive Date: 11-AUG-23

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	0.193	+/-0.595	1.11	+/-0.597	3.00	pCi/L			JE1	08/23/23	0928	2477579	1
<i>Radium-226+Radium-228 Calculation "See Parent Products"</i>														
Radium-226+228 Sum	U	0.193	+/-0.662	1.11	+/-0.664		pCi/L		1	LXB3	09/06/23	1109	2476923	2
Rad Radium-226														
<i>Lucas Cell, Ra226, Liquid "As Received"</i>														
Radium-226	U	-0.0413	+/-0.292	0.773	+/-0.292	1.00	pCi/L			LXP1	09/05/23	0804	2477571	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"	2477579	85.8	(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
 241 Ralph McGill Blvd NE, Bin 10160

Atlanta, Georgia 30308

Report Date: September 6, 2023

Contact: Joju Abraham

Project: Arkwright CCR Groundwater ComplianceAP2-R

Client Sample ID: ARK-ARGWA-20

Project: GPCC00100

Sample ID: 633128004

Client ID: GPCC001

Matrix: WG

Collect Date: 10-AUG-23

Receive Date: 11-AUG-23

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	1.12	+/-0.916	1.46	+/-0.961	3.00	pCi/L			JE1	08/23/23	0928	2477579	1
<i>Radium-226+Radium-228 Calculation "See Parent Products"</i>														
Radium-226+228 Sum		1.80	+/-1.03	1.46	+/-1.08		pCi/L		1	LXB3	09/06/23	1109	2476923	2
Rad Radium-226														
<i>Lucas Cell, Ra226, Liquid "As Received"</i>														
Radium-226		0.675	+/-0.477	0.587	+/-0.497	1.00	pCi/L			LXP1	09/05/23	0804	2477571	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"	2477579	84.2	(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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QC Summary

Report Date: September 8, 2023

Page 1 of 2

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

Atlanta, Georgia

Contact: Joju Abraham

Workorder: 632702

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Rad Gas Flow											
Batch	2474962										
QC1205485681	632629005 DUP										
Radium-228	U	0.769	U	1.06	pCi/L	0		N/A	JE1	08/29/23	10:23
	Uncert:	+/-0.800		+/-0.926							
	TPU:	+/-0.823		+/-0.964							
QC1205485682	LCS										
Radium-228	78.5			74.0	pCi/L		94.3	(75%-125%)	JE1	08/29/23	10:21
	Uncert:			+/-4.13							
	TPU:			+/-19.3							
QC1205485680	MB										
Radium-228			U	1.14	pCi/L				JE1	08/29/23	10:23
	Uncert:			+/-0.949							
	TPU:			+/-0.992							
Rad Ra-226											
Batch	2474958										
QC1205485669	632629005 DUP										
Radium-226		0.529		1.71	pCi/L	105*		(0% - 100%)	LXP1	09/08/23	11:07
	Uncert:	+/-0.365		+/-0.662							
	TPU:	+/-0.375		+/-0.732							
QC1205485671	LCS										
Radium-226	26.2			25.2	pCi/L		96	(75%-125%)	LXP1	09/08/23	11:07
	Uncert:			+/-1.98							
	TPU:			+/-5.66							
QC1205485668	MB										
Radium-226			U	0.302	pCi/L				LXP1	09/08/23	11:07
	Uncert:			+/-0.349							
	TPU:			+/-0.355							
QC1205485670	632629005 MS										
Radium-226	133	0.529		150	pCi/L		112	(75%-125%)	LXP1	09/08/23	11:07
	Uncert:	+/-0.365		+/-11.4							
	TPU:	+/-0.375		+/-34.4							

Notes:

TPU and Counting Uncertainty are calculated at the 95% confidence level (1.96-sigma).

The Qualifiers in this report are defined as follows:

- U Analyte was analyzed for, but not detected above the MDL, MDA, MDC or LOD.
- J Value is estimated
- X Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
- H Analytical holding time was exceeded
- < Result is less than value reported
- > Result is greater than value reported

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QC Summary

Workorder: 632702

Page 2 of 2

Parmname	NOM	Sample Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
UI		Gamma Spectroscopy--Uncertain identification								
BD		Results are either below the MDC or tracer recovery is low								
h		Preparation or preservation holding time was exceeded								
R		Sample results are rejected								
^		RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL. Qualifier Not Applicable for Radiochemistry.								
N/A		RPD or %Recovery limits do not apply.								
ND		Analyte concentration is not detected above the detection limit								
M		M if above MDC and less than LLD								
NJ		Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier								
FA		Failed analysis.								
UJ		Gamma Spectroscopy--Uncertain identification								
Q		One or more quality control criteria have not been met. Refer to the applicable narrative or DER.								
K		Analyte present. Reported value may be biased high. Actual value is expected to be lower.								
UL		Not considered detected. The associated number is the reported concentration, which may be inaccurate due to a low bias.								
L		Analyte present. Reported value may be biased low. Actual value is expected to be higher.								
N1		See case narrative								
Y		Other specific qualifiers were required to properly define the results. Consult case narrative.								
**		Analyte is a Tracer compound								
M		REMP Result > MDC/CL and < RDL								
J		See case narrative for an explanation								

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: September 6, 2023

Page 1 of 2

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

Atlanta, Georgia

Contact: Joju Abraham

Workorder: 633128

Parmname	NOM	Sample Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Rad Gas Flow									
Batch	2477579								
QC1205490061	633107021 DUP								
Radium-228	U	-2.75	1.33	pCi/L	56.5		(0% - 100%)	JE1	08/23/2309:27
	Uncert:	+/-1.01	+/-0.836						
	TPU:	+/-1.01	+/-0.903						
QC1205490062	LCS								
Radium-228	74.3		74.9	pCi/L		101	(75%-125%)	JE1	08/23/2309:27
	Uncert:		+/-4.28						
	TPU:		+/-19.5						
QC1205490060	MB								
Radium-228			2.75	pCi/L				JE1	08/23/2309:27
	Uncert:		+/-1.14						
	TPU:		+/-1.34						
Rad Ra-226									
Batch	2477571								
QC1205490047	633189001 DUP								
Radium-226		0.622	0.706	pCi/L	12.5		(0% - 100%)	LXP1	09/05/2309:12
	Uncert:	+/-0.467	+/-0.498						
	TPU:	+/-0.483	+/-0.525						
QC1205490049	LCS								
Radium-226	26.2		27.7	pCi/L		106	(75%-125%)	LXP1	09/05/2309:12
	Uncert:		+/-2.77						
	TPU:		+/-5.70						
QC1205490046	MB								
Radium-226			U 0.220	pCi/L				LXP1	09/05/2309:12
	Uncert:		+/-0.394						
	TPU:		+/-0.397						
QC1205490048	633189001 MS								
Radium-226	119	0.622	109	pCi/L		91.6	(75%-125%)	LXP1	09/05/2309:12
	Uncert:	+/-0.467	+/-12.8						
	TPU:	+/-0.483	+/-23.8						

Notes:

TPU and Counting Uncertainty are calculated at the 95% confidence level (1.96-sigma).

The Qualifiers in this report are defined as follows:

- U Analyte was analyzed for, but not detected above the MDL, MDA, MDC or LOD.
- J Value is estimated
- X Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
- H Analytical holding time was exceeded
- < Result is less than value reported
- > Result is greater than value reported

GEL LABORATORIES LLC

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

QC Summary

Workorder: 633128

Page 2 of 2

Parmname	NOM	Sample Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
UI		Gamma Spectroscopy--Uncertain identification								
BD		Results are either below the MDC or tracer recovery is low								
h		Preparation or preservation holding time was exceeded								
R		Sample results are rejected								
^		RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL. Qualifier Not Applicable for Radiochemistry.								
N/A		RPD or %Recovery limits do not apply.								
ND		Analyte concentration is not detected above the detection limit								
M		M if above MDC and less than LLD								
NJ		Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier								
FA		Failed analysis.								
UJ		Gamma Spectroscopy--Uncertain identification								
Q		One or more quality control criteria have not been met. Refer to the applicable narrative or DER.								
K		Analyte present. Reported value may be biased high. Actual value is expected to be lower.								
UL		Not considered detected. The associated number is the reported concentration, which may be inaccurate due to a low bias.								
L		Analyte present. Reported value may be biased low. Actual value is expected to be higher.								
N1		See case narrative								
Y		Other specific qualifiers were required to properly define the results. Consult case narrative.								
**		Analyte is a Tracer compound								
M		REMP Result > MDC/CL and < RDL								
J		See case narrative for an explanation								

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 #: 632702**

Product: Radium-226+Radium-228 Calculation

Analytical Method: Calculation

Analytical Procedure: GL-RAD-D-003 REV# 45

Analytical Batch: 2475371

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

<u>GEL Sample ID#</u>	<u>Client Sample Identification</u>
632702001	ARK-ARGWA-19
632702002	ARK-AP2-FD-01
632702003	ARK-ARGWC-22
632702004	ARK-ARAMW-7
632702005	ARK-AP2-FB-01
632702006	ARK-ARAMW-9
632702007	ARK-ARAMW-2
632702008	ARK-ARAMW-1
632702009	ARK-ARGWC-23

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: GFPC Ra228, Liquid

Analytical Method: EPA 904.0/SW846 9320 Modified

Analytical Procedure: GL-RAD-A-063 REV# 5

Analytical Batch: 2474962

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

<u>GEL Sample ID#</u>	<u>Client Sample Identification</u>
632702001	ARK-ARGWA-19
632702002	ARK-AP2-FD-01
632702003	ARK-ARGWC-22
632702004	ARK-ARAMW-7
632702005	ARK-AP2-FB-01
632702006	ARK-ARAMW-9
632702007	ARK-ARAMW-2
632702008	ARK-ARAMW-1
632702009	ARK-ARGWC-23
1205485680	Method Blank (MB)

1205485681 632629005(NonSDG) Sample Duplicate (DUP)
1205485682 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.

Technical Information

Negative > 3 sigma TPU

Sample result was more negative than the three sigma TPU. The background control chart was examined and the detector was determined to be fully functional.

Sample	Analyte	Value
632702002 (ARK-AP2-FD-01)	Radium-228	Negative Result > 3 sigma value

Product: Lucas Cell, Ra226, Liquid

Analytical Method: EPA 903.1 Modified

Analytical Procedure: GL-RAD-A-008 REV# 15

Analytical Batch: 2474958

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

<u>GEL Sample ID#</u>	<u>Client Sample Identification</u>
632702001	ARK-ARGWA-19
632702002	ARK-AP2-FD-01
632702003	ARK-ARGWC-22
632702004	ARK-ARAMW-7
632702005	ARK-AP2-FB-01
632702006	ARK-ARAMW-9
632702007	ARK-ARAMW-2
632702008	ARK-ARAMW-1
632702009	ARK-ARGWC-23
1205485668	Method Blank (MB)
1205485669	632629005(NonSDG) Sample Duplicate (DUP)
1205485670	632629005(NonSDG) Matrix Spike (MS)
1205485671	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
1205485669 (Non SDG 632629005DUP)	Radium-226	RPD 105* (0.0%-100.0%) RER 2.8 (0-3)

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 #: 633128**

Product: Radium-226+Radium-228 Calculation

Analytical Method: Calculation

Analytical Procedure: GL-RAD-D-003 REV# 45

Analytical Batch: 2476923

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

<u>GEL Sample ID#</u>	<u>Client Sample Identification</u>
633128001	ARK-ARGWC-21
633128002	ARK-AP2-EB-01
633128003	ARK-ARAMW-8
633128004	ARK-ARGWA-20

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: GFPC Ra228, Liquid

Analytical Method: EPA 904.0/SW846 9320 Modified

Analytical Procedure: GL-RAD-A-063 REV# 5

Analytical Batch: 2477579

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

<u>GEL Sample ID#</u>	<u>Client Sample Identification</u>
633128001	ARK-ARGWC-21
633128002	ARK-AP2-EB-01
633128003	ARK-ARAMW-8
633128004	ARK-ARGWA-20
1205490060	Method Blank (MB)
1205490061	633107021(ARK-ARGWC-16) Sample Duplicate (DUP)
1205490062	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

Method Blank Criteria

The blank result (See Below) is greater than the MDC but less than the required detection limit.

Sample	Analyte	Value
1205490060 (MB)	Radium-228	Result: 2.75 pCi/L > MDA: 1.51 pCi/L <= RDL: 3.00 pCi/L

Product: Lucas Cell, Ra226, Liquid

Analytical Method: EPA 903.1 Modified

Analytical Procedure: GL-RAD-A-008 REV# 15

Analytical Batch: 2477571

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

<u>GEL Sample ID#</u>	<u>Client Sample Identification</u>
633128001	ARK-ARGWC-21
633128002	ARK-AP2-EB-01
633128003	ARK-ARAMW-8
633128004	ARK-ARGWA-20
1205490046	Method Blank (MB)
1205490047	633189001(NonSDG) Sample Duplicate (DUP)
1205490048	633189001(NonSDG) Matrix Spike (MS)
1205490049	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, 1205490048 (Non SDG 633189001MS), 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.



Project/Site Name: Plant Arkwright Ash Pond 2
 Address: 241 Ralph McGill Blvd SE, Atlanta, GA 30308
 Contacted By: John Myer; Dylan Quintal, Houston Lynn
 Send Results To: jabraham@southemco.com EDD@stantec.com
 edgar.smith@stantec.com

Chain of Custody and Analytical Request
 Cooler 3 of 3
 GEL Work Order Number: 6032702
 GEL Project Manager: Erin Trent

Sample ID	*Date Collected (mm-dd-yy)	*Time Collected (Military) (hh:mm)	QC Code (6)	Field Filtered (6)	Sample Matrix (6)	Should this sample be considered:		Total number of containers	Sample Analysis Requested (6) (Fill in the number of containers for each test)										Comments (task_code: ARK-CCR-ASSMT-2023S1)							
						(7) Known or possible Hazards	Radiactive (if isotopic info) Yes, please supply		Ag (App. I) (6020B)	Metals App. III (6020B)	Alkalinity (300.0 R2.1)	TDS (SM Method 2540C)	Anions (Cl, F, Sulfate) (300.0 Rev. 2.1 1993)	Metals App. IV (6020B)	RAD 226-228 Cmbd	F2+/Mn2+ (EPA Method 6020B) (Field Filtered)	Nitrate as N (EPA Method 353.2)	Mercury (7470B)		Metals Al, K, Mg, Na, Fe, Mn (6020B)	Preservative Type (6)					
ARK-ARGWA-19	08-08-23	1015	N	Y	WG			9	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
ARK-AP2-FD-01	08-08-23	NA	FD	N	WQ			7	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
ARK-ARGWC-22	08-08-23	0955	N	Y	WG			9	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
ARK-ARAMW-7	08-08-23	1150	N	Y	WG			9	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
ARK-AP2-FB-01	08-08-23	1230	FB	N	WQ			7	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
ARK-ARAMW-9	08-08-23	1235	N	Y	WG			9	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
ARK-ARAMW-2	08-08-23	1505	N	Y	WG			9	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
ARK-ARAMW-1	08-08-23	1600	N	Y	WG			9	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
ARK-ARGWC-23	08-08-23	1655	N	Y	WG			9	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		

Chain of Custody Signatures

Relinquished By (Signed) _____ Print Name _____ Date _____ Received by (signed) _____ Print Name _____ Date _____

1. *John Myer* 8/19/23
 2. *Edgar Smith* 8/19/23
 3. *Erin Trent* 8/19/23

TAT Requested: Normal: _____ Rush: _____ Specify: _____ (Subject to Surcharge)

Fax Results: [] Yes [X] No

Select Deliverable: [] C of A [] QC Summary [] Level 1 [X] 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: [X] Eastern [] Pacific [] 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: _____
 FL = Flammable/Ignitable
 CO = Corrosive
 RE = Reactive

Listed Waste: _____
 LW = Listed Waste
 (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
 Pb = Lead

TSCA Regulated: _____
 PCB = Polychlorinated biphenyls

SAMPLE RECEIPT & REVIEW FORM

632702
632699

Client: <u>GPCC</u>		SDG/AR/COC/Work Order: <u>632-699, 632-702</u>			
Received By: <u>EG</u>		Date Received: <u>8/9/23 12:45</u>			
Carrier and Tracking Number		Circle Applicable: FedEx Express FedEx Ground UPS Field Services Courier <u>Other</u>			
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): <u>6</u> <u>CPM</u> / 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: <u>Wet Ice</u> Ice Packs Dry ice None Other: _____ *all temperatures are recorded in Celsius TEMP: <u>5</u>
4	Daily check performed and passed on IR temperature gun?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Temperature Device Serial #: <u>IR5-23</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: <u>nitrate containers preserved with sulfuric</u> If Preservation added, Lot#: <u>3858525-A</u>
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 AT Date 8/10/23 Page 1 of 1

Client Name: Georgia Power
 Project/Site Name: Plant Arkwright, Ash Pond 2
 Address: 241 Ralph McGill Blvd SE, Atlanta, GA 30308
 Collected By: John Myer, Dylan Quintal, Dylan Reay, Houston Lynn
 Send Results To: jabraham@southernco.com EDD@stantec.com
 edgar.smith@stantec.com

Phone # (937-344-6533)
 Fax:

Sample ID	*Date Collected (mm-dd-yy)	*Time Collected (Military) (hhmm)	QC Code (b)	Field Filtered (b)	Sample Matrix (b)	Radionuclide (if isotopic info)	Should this sample be considered: (7) Known or possible Hazards	Sample Analysis Requested (6) (Fill in the number of containers for each test)										Preservative Type (6)	Comments (task_code: ARK-CCR-ASSMT-2023S1)					
								Ag (App. I) (6020B)	Metals App. III (6020B)	Alkalinity (300.0 R. I.)	TDS (SM Method 2540C)	Anions (Cl, F, Sulfate) (300.0 Rev. 2.1 1993)	Metals App. IV (6020B)	Method 6020B (Field Filtered)	RAID 226-228 Cmbd	F2+ / M2+ (EPA)	Mercury (7470B)			Metals Al, K, Mg, Na, Fe, Mn (6020B)				
ARK-ARGWC-21	08-09-23	1035	N	Y	WG			9	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	See Nitrate/Nitrite COC for their times
ARK-AP2-EB-01	08-09-23	1110	FB	N	WQ			7	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
ARK-ARAMW-8	08-09-23	1115	N	Y	WG			9	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
ARK-ARGWA-20	08-10-23	0925	N	Y	WG			10	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
ARK-STNTW-22	08-10-23	1255	N	Y	WG			6	X	X	X	X	X	X	X	X	X	X	X	X	X	X	Add. anion collected at 0825 8/11/23	

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 Signatures

Relinquished By (Signed)	Print Name	Date	Received by (signed)	Print Name	Date
<i>John Myer</i>	John Myer	8/11/23	<i>Anthony Ward</i>	Anthony Ward	8/11/23
<i>Erin Trent</i>	Erin Trent	8/11/23	<i>Erin Trent</i>	Erin Trent	8/11/23

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 = 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	As = Arsenic	Hg = Mercury	Ba = Barium	Se = Selenium	Cd = Cadmium	Ag = Silver	Cr = Chromium	MR = Misc. RCRA metals	Pb = Lead

Characteristic Hazards	Listed Waste	Other
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.)

Originally Nitrate by N were originally collected in unpreserved bottles; Later preserved Nitrate/Nitrite bottles were sent and collected from wells on 8/10/2023

Sample ID	*Date Collected (mm-dd-yy)	*Time Collected (Military) (hh:mm)	QC Code (3)	Field Filtered (6)	Sample Matrix (6)	Should this sample be considered: (7) Known or isotopic info. Yes, please supply	Sample Analysis Requested (6) (Fill in the number of containers for each test)						Total number of containers	Comments (task_code: ARK-CCR-ASSMT-2023S1)	
							Ag (App. I) (6020B)	Metals App. III (6020B)	Alkalinity (300.0 R.1)	TDS (SM Method) (2540C)	Anions (Cl, F, Sulfate) (300.0 Rev. 2.1 1993)	Metals App. IV (6020B)			RAD 226-228 Cmbd
ARK-ARGWC-21	08-09-23	1035	N	Y	WG		9	X	X	X	X	X	X	X	See Nitrate/Nitrite COC for their times
ARK-AP2-EB-01	08-09-23	1110	FB	N	WQ		7	X	X	X	X	X	X	X	
ARK-ARAMW-8	08-09-23	1115	N	Y	WG		9	X	X	X	X	X	X	X	
ARK-ARGWA-20	08-10-23	0925	N	Y	WG		10	X	X	X	X	X	X	X	
ARK-STINTW-22	08-10-23	1255	N	Y	WG		6	X	X	X	X	X	X	X	Add. anion collected at 0825 8/11/23

Chain of Custody Signatures
 Relinquished By (Signed) _____ Date _____ Print Name _____ Date _____
 Received by (signed) _____ Date _____ Print Name _____ Date _____
 1. *John Myer 8/11/23* Date: 8/11/23 Print Name: John Myer Date: 8/11/23
 2. *Dylan Quintal 8/11/23* Date: 8/11/23 Print Name: Dylan Quintal Date: 8/11/23
 3. _____ Date: _____ Print Name: _____ Date: _____
> 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=Urinate, F=Feecal, 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)
 Other: OT = Other / Unknown (i.e.: High/low pH, asbestos, beryllium, irritants, other misc. health hazards, etc.)
 Description: _____
 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
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.)
 Originally Nitrate by N were originally collected in unpreserved bottles; Later preserved Nitrate/Nitrite bottles were sent and collected from wells on 8/10/2023

Page: 1 of 1
Project # 175569434
GEL Quote #:
COC Number (1): 3 Coolers
PO Number:
Client Name: Georgia Power
Project/Site Name: Plant Arkwright Ash Pond 2
Address: 241 Ralph McGill Blvd SE, Atlanta, GA 30308
Collected By: John Myer, Dylan Quintal, Houston Lynn
05/27/22

Page: 1 of 1
Project # 175569434
GEL Quote #:
COC Number (1): 3 Coolers
PO Number:

GEL Laboratories LLC
Chemistry | Radiochemistry | Radioassay | Specialty Analytics
Chain of Custody and Analytical Request

Cooler 1 of 3

GEL Work Order Number: _____ **GEL Project Manager:** Erin Trent

GEL Laboratories, LLC
2040 Savage Road
Charleston, SC 29407
Phone: (843) 556-8171
Fax: (843) 766-1178

Client Name: Georgia Power Phone # (937-344-6533)

Project/Site Name: Plant Arkwright Ash Pond 2 Fax: _____

Address: 241 Ralph McGill Blvd SE, Atlanta, GA 30308

Collected By: John Myer, Dylan Quintal, Houston Lynn
Send Results To: jabram@southernco.com EDD@stantec.com
edgar.smith@stantec.com

Sample Analysis Requested (5) (Fill in the number of containers for each test)

Should this sample be considered:	Total number of containers	NI	NI				NI	NI	NI	NI	NI			← Preservative Type (6)
		Ag (App. I) (6020B)	Metals App. III (6020B)	Alkalinity (300.0 R2.1)	TDS (SM Method 2540C)	Anions (Cl, F, Sulfate) (300.0 Rev. 2.1 1993)	Metals App. IV (6020B)	RAD 226-228 Cmbd	Fe2+ / Mn2+ (EPA Method 6020B) (Field Filtered)	Nitrate as N (EPA Method 353.2)	Mercury (7470B)	Metals Al, K, Mg, Na, Fe, Mn (6020B)		
	9	X	X	X	X	X	X	X	X	X	X	X	X	
	7		X		X	X	X		X	X				
	9	X	X	X	X	X	X	X	X	X	X	X	X	
	9	X	X	X	X	X	X	X	X	X	X	X	X	
	7		X		X	X	X		X	X				
	9	X	X	X	X	X	X	X	X	X	X	X	X	
	9	X	X	X	X	X	X	X	X	X	X	X	X	
	9	X	X	X	X	X	X	X	X	X	X	X	X	
	9	X	X	X	X	X	X	X	X	X	X	X	X	

Comments
(task code: ARK-CCR-ASSMT-2023S~~X~~)
A.S. 8/11/23

Chain of Custody Signatures

Relinquished By (Signed)	Print Name	Date	Received by (signed)	Print Name	Date
<i>Zachary Myer</i>	Zachary Myer	8/19/23	<i>[Signature]</i>	[Signature]	8/19/23 8:27

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

> For sample shipping and delivery details, see Sample Receipt & Review form (SRR.) Sample Collection Time Zone: Eastern Pacific Central Mountain Other.

- 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=Focal, 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, SB = Sodium Hydroxide, SA = Sulfuric Acid, AA = Ascorbic Acid, HX = Hexane, ST = Sodium Thiosulfate, If no preservative is added = leave field blank

KNOWN OR POSSIBLE HAZARDS	Characteristic Hazards	Listed Waste	Other
RCRA Metals As = Arsenic Ba = Barium Cd = Cadmium Cr = Chromium Pb = Lead	Hg = Mercury Se = Selenium Ag = Silver MR = Misc. RCRA metals	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: _____
	TSCA Regulated PCB = Polychlorinated biphenyls		

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.)

Page: _____ of _____
 Project # 175569434
 GEL Quote #:
 COC Number (1): 3 Coolers
 PO Number:

GEL Laboratories LLC
 Chemistry | Radiochemistry | Radiobioassay | Specialty Analytics
 Cooler 3 of 3
 Chain of Custody and Analytical Request
 GEL Work Order Number: _____ GEL Project Manager: Erin Trent

2040 Savage Road
 Charleston, SC 29407
 Phone: (843) 556-8171
 Fax: (843) 766-1178

Client Name: Georgia Power Phone # (937-344-6533) Sample Analysis Requested (5) (Fill in the number of containers for each test)

Project/Site Name: Plant Arkwright Ash Pond 2 Fax: _____ Should this sample be considered: _____

Address: 241 Ralph McGill Blvd SE, Atlanta, GA 30308
 Collected By: John Myer; Dylan Quintal, Houston Lynn Send Results To: jabraham@southernco.com EDD@stantec.com edgar.smith@stantec.com

Sample ID <i>* For composites - Indicate start and stop date/time</i>	*Date Collected (mm-dd-yy)	*Time Collected (Military (hhmm))	QC Code (9)	Field Filtered (9)	Sample Matrix (6)	Radioactive (if yes, please supply isotopic info.)	(7) Known or possible hazards	Total number of containers	Ag (App. I) (6020B)	Metals App. III (6020B)	Alkalinity (300.0 R2.1)	TDS (SM Method 2540C)	Anions (Cl, F, Sulfate) (300.0 Rev. 2.1 1993)	Metals App. IV (6020B)	RAD 226-228 Comb	Fe2+ / Mn2+ (EPA Method 6020B) (Field Filtered)	Nitrate as N (EPA Method 353.2)	Mercury (7470B)	Metals Al, K, Mg, Na, Fe, Mn (6020B)	← Preservative Type (6)	Comments (task_code: ARK-CCR-ASSMT-2023S1)2 A.S. 8/15/23
									NI	NI			NI	NI	NI		NI	NI			
ARK-ARGWA-19	08-08-23	1015	N	Y	WG			9	X	X	X	X	X	X	X	X	X	X	X		
ARK-AP2-FD-01	08-08-23	NA	FD	N	WQ			7		X		X	X	X	X		X	X			
ARK-ARGWC-22	08-08-23	0955	N	Y	WG			9	X	X	X	X	X	X	X	X	X	X	X		
ARK-ARAMW-7	08-08-23	1150	N	Y	WG			9	X	X	X	X	X	X	X	X	X	X	X		
ARK-AP2-FB-01	08-08-23	1230	FB	N	WQ			7		X		X	X	X			X	X			
ARK-ARAMW-9	08-08-23	1235	N	Y	WG			9	X	X	X	X	X	X	X	X	X	X	X		
ARK-ARAMW-2	08-08-23	1505	N	Y	WG			9	X	X	X	X	X	X	X	X	X	X	X		
ARK-ARAMW-1	08-08-23	1600	N	Y	WG			9	X	X	X	X	X	X	X	X	X	X	X		
ARK-ARGWC-23	08-08-23	1655	N	Y	WG			9	X	X	X	X	X	X	X	X	X	X	X		

Chain of Custody Signatures TAT Requested: Normal: ___ Rush: ___ Specify: ___ (Subject to Surcharge)

Relinquished By (Signed)	Print Name	Date	Received by (signed)	Print Name	Date	Fax Results: [] Yes [X] No
1 Zachary Levy	Zach Levy	8/19/23	[Signature]	[Signature]	8/19/23 8:20	Select Deliverable: [] C of A [] QC Summary [] Level 1 [X] Level 2 [] Level 3 [] Level 4
2						Additional Remarks:
3						For Lab Receiving Use Only: Custody Seal Intact? [] Yes [] No Cooler Temp: ___ °C

> For sample shipping and delivery details, see Sample Receipt & Review form (SRR.) Sample Collection Time Zone: [X] Eastern [] Pacific [] Central [] Mountain [] Other:

- 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=Fecal, 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 = 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	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.)
RCRA Metals As = Arsenic Hg= Mercury Ba = Barium Se= Selenium Cd = Cadmium Ag= Silver Cr = Chromium MR= Misc. RCRA metals Pb = Lead	FL = Flammable/Ignitable CO = Corrosive RE = Reactive TSCA Regulated PCB = Polychlorinated biphenyls	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:	

GEL Quote #: 11309439
 COC Number (1): 2 Coolers
 PO Number:
 Client Name: Georgia Power

GEL Laboratories LLC
 Chemistry | Radiochemistry | Radiobiology | Specialty Analytics
 Chain of Custody and Analytical Request
 GEL Work Order Number:
 GEL Project Manager: Erin Trent

GEL Laboratories, LLC
 2040 Savage Road
 Charleston, SC 29407
 Phone: (843) 556-8171
 Fax: (843) 766-1178
 COOLER
 1 OF 2

Project Site Name: Plant Arkwright Ash Pond 2		Sample Analysis Requested (5) (Fill in the number of containers for each test)											← Preservative Type (6)					
Address: 241 Ralph McGill Blvd SE, Atlanta, GA 30308		Should this sample be considered:	NI	NI	NI			NI	NI	NI								
Collected By: John Myer, Dylan Quintal, Dylan Ripley, Houston Lynn		Send Results To: jbraham@southernco.com EDD@stantec.com edgar.smith@stantec.com	Radioactive (if yes, please supply isotopic info.)	Total number of containers	As (App 1) (602013)	Metals App. III (60201)	Alkalinity (300.0 R2.1)	TDS (SM Method 2540C)	Anions (Cl, F, Sulfate) (300.0 Rev 2.1 1993)	Metals App. IV (602013)	RAD 236-228 Cmbat	Fe2+ / Mn2+ (HPLC Method 602013) (Field filtered)	Mercury (747013)	Metals Al, K, Mg, Na, I/g, Mn (602013)				Comments (task code: ARK-CCR-ASSMT-2023S) A.S. 8/15/23
Sample ID	Date Collected (mm-dd-yy)	Time Collected (Military (hh:mm))	QC Code (a)	Field Filtered (c)	Sample Matrix (d)													
ARK-ARGWC-21	08-09-23	1035	N	Y	WG			9	X	X	X	X	X	X	X	X	X	See Nitrate/Nitrite COC for their times
ARK-AP2-EB-01	08-09-23	1110	FB	N	WQ			7	X		X	X	X					
ARK-ARAMW-8	08-09-23	1115	N	Y	WG			9	X	X	X	X	X	X	X	X	X	
ARK-ARGWA-20	08-10-23	0925	N	Y	WG			10	X	X	X	X	X	X	X	X	X	
ARK-STNTW-22	08-10-23	1255	N	Y	WG			6	X	X	X	X						Add anion collected at 0825 8/11/23

Chain of Custody Signatures TAT Requested: Normal: Rush: Specify: (Subject to Surcharge)

Relinquished By (Signed)	Print Name	Date	Received by (signed)	Print Name	Date	Fax Results	Level 1	Level 2	Level 3	Level 4
<i>[Signature]</i>	John Myer	8/11/23	<i>[Signature]</i>	Anthony Ward	8/11/23	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

For Lab Receiving Use Only: Custody Seal Intact? Yes No Cooler Temp: °C
 Sample Collection Time Zone: Eastern Pacific Central Mountain Other

- 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=Fecal, 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 = Sodium Hydroxide, SA = Sulfuric Acid, AA = Ascorbic Acid, EX = Hexane, ST = Sodium Thiosulfate. If no preservative is added = leave field blank

KNOWN OR POSSIBLE HAZARDS	Characteristic Hazards	Listed Waste	Other
RCRA Metals As = Arsenic Hg = Mercury Ba = Barium Se = Selenium Cd = Cadmium Ag = Silver Cr = Chromium MR = Misc. RCRA metals Pb = Lead	FL = Flammable/ignitable CO = Corrosive RE = Reactive TSCA Regulated PCB = Polychlorinated biphenyls	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.)

 Originally Nitrate by N were originally collected in unpreserved bottles; Later preserved Nitrate/Nitrite bottles were sent and collected from wells on 8/10/2023

List of current GEL Certifications as of 08 September 2023

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	SC000122023-4
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 24, 2023

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

Re: Arkwright CCR Groundwater Compliance AP2
 Work Orders: 633126 and 632699

Dear Joju Abraham:

GEL Laboratories, LLC (GEL) appreciates the opportunity to provide the enclosed analytical results for the sample(s) we received on August 09, 2023 and August 11, 2023. This original data report has been prepared and reviewed in accordance with GEL's standard operating procedures.

The samples were delivered with proper chain of custody documentation and signatures. All sample containers arrived without any visible signs of tampering or breakage. There are no additional comments concerning sample receipt. The laboratory received the following sample(s):

<u>Laboratory ID</u>	<u>Client ID</u>	<u>Matrix</u>	<u>Date Collected</u>	<u>Date Received</u>
632699001	ARK-ARGWA-19	Ground Water	08/08/23 10:15	09/08/23 12:45
632699002	ARK-AP2-FD-01	Water	08/08/23 12:00	09/08/23 12:45
632699003	ARK-ARGWC-22	Ground Water	08/08/23 09:55	09/08/23 12:45
632699004	ARK-ARAMW-7	Ground Water	08/08/23 11:50	09/08/23 12:45
632699005	ARK-AP2-FB-01	Water	08/08/23 12:30	09/08/23 12:45
632699006	ARK-ARAMW-9	Ground Water	08/08/23 12:35	09/08/23 12:45
632699007	ARK-ARAMW-2	Ground Water	08/08/23 15:05	09/08/23 12:45
632699008	ARK-ARAMW-1	Ground Water	08/08/23 16:00	09/08/23 12:45
632699009	ARK-ARGWC-23	Ground Water	08/08/23 16:55	09/08/23 12:45
633126001	ARK-ARGWC-21	Ground Water	09/08/23 10:35	11/08/23 14:00
633126002	ARK-AP2-EB-01	Water	09/08/23 11:10	11/08/23 14:00
633126003	ARK-ARAMW-8	Ground Water	09/08/23 11:15	11/08/23 14:00
633126004	ARK-ARGWA-20	Ground Water	10/08/23 09:25	11/08/23 14:00
633126005	ARK-STNTW-22	Ground Water	10/08/23 12:55	11/08/23 14:00
633126006	ARK-ARGWC-21	Ground Water	09/08/23 10:35	11/08/23 14:00
633126007	ARK-AP2-EB-01	Water	09/08/23 11:10	11/08/23 14:00

633126008	ARK-ARAMW-8	Ground Water	09/08/23 11:15	11/08/23 14:00
633126009	ARK-ARGWA-20	Ground Water	10/08/23 09:25	11/08/23 14:00
633126010	ARK-STNTW-22	Ground Water	10/08/23 12:55	11/08/23 14:00

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.

Prep Methods and Prep Dates

<u>Method</u>	<u>Run Date ID</u>
SW846 3005A	10-AUG-2023
SW846 3005A	14-AUG-2023
SW846 7470A Prep	10-AUG-2023
SW846 7470A Prep	14-AUG-2023

Analysis Methods and Analysis Dates

<u>Method</u>	<u>Run Date ID</u>
EPA 300.0	09-AUG-2023
EPA 300.0	10-AUG-2023
EPA 300.0	12-AUG-2023
EPA 300.0	13-AUG-2023
EPA 300.0	14-AUG-2023
EPA 300.0	15-AUG-2023
EPA 353.2 Low Level	11-AUG-2023
EPA 353.2 Low Level	14-AUG-2023
SM 2320B	11-AUG-2023
SM 2320B	14-AUG-2023
SM 2540C	10-AUG-2023
SM 2540C	16-AUG-2023
SW846 3005A/6020B	17-AUG-2023
SW846 3005A/6020B	18-AUG-2023
SW846 3005A/6020B	19-AUG-2023
SW846 7470A	11-AUG-2023
SW846 7470A	15-AUG-2023

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,

A handwritten signature in black ink that reads "Anna Johnson". The signature is written in a cursive, slightly slanted style.

Anna Johnson for
Erin Trent
Project Manager

Purchase Order: GPC82177-0005
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: 632699 GEL Work Order: 632699

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
- B Either presence of analyte detected in the associated blank, or MDL/IDL < sample value < PQL
- J Value is estimated
- N/A RPD or %Recovery limits do not apply.
- 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: 633126 GEL Work Order: 633126

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
- B Either presence of analyte detected in the associated blank, or MDL/IDL < sample value < PQL
- J Value is estimated
- N/A RPD or %Recovery limits do not apply.
- 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: August 21, 2023

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: ARK-ARGWA-19 Project: GPCC00100
Sample ID: 632699001 Client ID: GPCC001
Matrix: WG
Collect Date: 08-AUG-23 10:15
Receive Date: 09-AUG-23
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		6.37	0.0670	0.200	mg/L		1	LXA2	08/09/23	2255	2473965	1
Fluoride	U	ND	0.0330	0.100	mg/L		1					
Sulfate		8.29	0.133	0.400	mg/L		1					
Mercury Analysis-CVAA												
7470 Cold Vapor Mercury, Liquid "As Received"												
Mercury	U	ND	0.000670	0.000200	mg/L	1.00	1	JP2	08/11/23	1025	2474015	2
Metals Analysis-ICP-MS												
SW846 3005A/6020B "As Received"												
Aluminum	U	ND	0.0193	0.0500	mg/L	1.00	1	PRB	08/19/23	0313	2474005	3
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		0.0337	0.000670	0.00400	mg/L	1.00	1					
Beryllium	U	ND	0.000200	0.000500	mg/L	1.00	1					
Boron		0.0199	0.00520	0.0150	mg/L	1.00	1					
Cadmium	U	ND	0.000300	0.00100	mg/L	1.00	1					
Calcium		8.51	0.0800	0.200	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					
Lithium	J	0.00382	0.00300	0.0100	mg/L	1.00	1					
Magnesium		3.36	0.0100	0.0300	mg/L	1.00	1					
Manganese	U	ND	0.00100	0.00500	mg/L	1.00	1					
Molybdenum	J	0.000421	0.000200	0.00100	mg/L	1.00	1					
Potassium		2.08	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					
Sodium		9.51	0.0800	0.250	mg/L	1.00	1					
Thallium	U	ND	0.000600	0.00200	mg/L	1.00	1					

Nutrient Analysis

EPA 353.2 Nitrogen, Nitrate/Nitrite "As Received"

Nitrogen, Nitrate/Nitrite 1.83 0.0350 0.100 mg/L 5 AXH3 08/11/23 1135 2473982 4

Solids Analysis

SM2540C Dissolved Solids "As Received"

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Certificate of Analysis

Report Date: August 21, 2023

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: ARK-ARGWA-19 Project: GPCC00100
Sample ID: 632699001 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		62.0	2.38	10.0	mg/L			CH6	08/10/23	1435	2474115	5
Titration and Ion Analysis												
SM 2320B Total Alkalinity "As Received"												
Alkalinity, Total as CaCO3		37.0	0.725	2.00	mg/L			HH2	08/11/23	0956	2474137	6
Bicarbonate alkalinity (CaCO3)		37.0	0.725	2.00	mg/L							
Carbonate alkalinity (CaCO3)	U	ND	0.725	2.00	mg/L							

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
SW846 7470A Prep	EPA 7470A Mercury Prep Liquid	EK1	08/10/23	1245	2474012
SW846 3005A	ICP-MS 3005A PREP	JD2	08/10/23	0815	2474004

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 300.0	
2	SW846 7470A	
3	SW846 3005A/6020B	
4	EPA 353.2 Low Level	
5	SM 2540C	
6	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: August 21, 2023

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: ARK-AP2-FD-01 Project: GPCC00100
Sample ID: 632699002 Client ID: GPCC001
Matrix: WG
Collect Date: 08-AUG-23 12:00
Receive Date: 09-AUG-23
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		6.27	0.0670	0.200	mg/L		1	LXA2	08/09/23	2326	2473965	1
Fluoride	U	ND	0.0330	0.100	mg/L		1					
Sulfate		8.34	0.133	0.400	mg/L		1					
Mercury Analysis-CVAA												
7470 Cold Vapor Mercury, Liquid "As Received"												
Mercury	U	ND	0.000670	0.000200	mg/L	1.00	1	JP2	08/11/23	1026	2474015	2
Metals Analysis-ICP-MS												
SW846 3005A/6020B "As Received"												
Antimony	U	ND	0.00100	0.00300	mg/L	1.00	1	PRB	08/19/23	0338	2474005	3
Arsenic	U	ND	0.00200	0.00500	mg/L	1.00	1					
Barium		0.0334	0.000670	0.00400	mg/L	1.00	1					
Beryllium	U	ND	0.000200	0.000500	mg/L	1.00	1					
Boron		0.0183	0.00520	0.0150	mg/L	1.00	1					
Cadmium	U	ND	0.000300	0.00100	mg/L	1.00	1					
Calcium		8.36	0.0800	0.200	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	J	0.00368	0.00300	0.0100	mg/L	1.00	1					
Molybdenum	J	0.000361	0.000200	0.00100	mg/L	1.00	1					
Selenium	U	ND	0.00150	0.00500	mg/L	1.00	1					
Thallium	U	ND	0.000600	0.00200	mg/L	1.00	1					
Nutrient Analysis												
EPA 353.2 Nitrogen, Nitrate/Nitrite "As Received"												
Nitrogen, Nitrate/Nitrite		1.89	0.0350	0.100	mg/L		5	AXH3	08/11/23	1138	2473982	4
Solids Analysis												
SM2540C Dissolved Solids "As Received"												
Total Dissolved Solids		67.0	2.38	10.0	mg/L			CH6	08/10/23	1435	2474115	5

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
SW846 3005A	ICP-MS 3005A PREP	JD2	08/10/23	0815	2474004
SW846 7470A Prep	EPA 7470A Mercury Prep Liquid	EK1	08/10/23	1245	2474012

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Certificate of Analysis

Report Date: August 21, 2023

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: ARK-AP2-FD-01
Sample ID: 632699002

Project: GPCC00100
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	EPA 353.2 Low Level										
5	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

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Certificate of Analysis

Report Date: August 21, 2023

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: ARK-ARGWC-22	Project: GPCC00100
Sample ID: 632699003	Client ID: GPCC001
Matrix: WG	
Collect Date: 08-AUG-23 09:55	
Receive Date: 09-AUG-23	
Collector: Client	

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Ion Chromatography												
EPA 300.0 Anions Liquid "As Received"												
Sulfate		719	13.3	40.0	mg/L		100	LXA2	08/09/23	2357	2473965	1
Fluoride	U	ND	0.0660	0.200	mg/L		2	LXA2	08/15/23	1906	2473965	2
Chloride		6.79	0.670	2.00	mg/L		10	LXA2	08/10/23	1241	2473965	3
Mercury Analysis-CVAA												
7470 Cold Vapor Mercury, Liquid "As Received"												
Mercury	U	ND	0.0000670	0.000200	mg/L	1.00	1	JP2	08/11/23	1028	2474015	4
Metals Analysis-ICP-MS												
SW846 3005A/6020B "As Received"												
Boron		2.46	0.104	0.300	mg/L	1.00	20	PRB	08/19/23	0810	2474005	5
Calcium		180	1.60	4.00	mg/L	1.00	20					
Magnesium		76.5	0.200	0.600	mg/L	1.00	20					
Manganese		13.1	0.0200	0.100	mg/L	1.00	20					
Aluminum	U	ND	0.0193	0.0500	mg/L	1.00	1	PRB	08/19/23	0341	2474005	6
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		0.0249	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		0.00191	0.000300	0.00100	mg/L	1.00	1					
Iron		3.67	0.0330	0.100	mg/L	1.00	1					
Lead	U	ND	0.000500	0.00200	mg/L	1.00	1					
Lithium		0.0214	0.00300	0.0100	mg/L	1.00	1					
Molybdenum	J	0.000452	0.000200	0.00100	mg/L	1.00	1					
Potassium		4.44	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					
Sodium		24.6	0.0800	0.250	mg/L	1.00	1					
Thallium	U	ND	0.000600	0.00200	mg/L	1.00	1					

Nutrient Analysis

EPA 353.2 Nitrogen, Nitrate/Nitrite "As Received"

Nitrogen, Nitrate/Nitrite	U	ND	0.00700	0.0200	mg/L		1	AXH3	08/11/23	1139	2473982	7
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Solids Analysis

SM2540C Dissolved Solids "As Received"

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Certificate of Analysis

Report Date: August 21, 2023

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: ARK-ARGWC-22 Project: GPCC00100
Sample ID: 632699003 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		1220	4.76	20.0	mg/L			CH6	08/10/23	1435	2474115	8
Titration and Ion Analysis												
SM 2320B Total Alkalinity "As Received"												
Alkalinity, Total as CaCO3		117	0.725	2.00	mg/L			HH2	08/11/23	1001	2474137	9
Bicarbonate alkalinity (CaCO3)		117	0.725	2.00	mg/L							
Carbonate alkalinity (CaCO3)	U	ND	0.725	2.00	mg/L							

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
SW846 7470A Prep	EPA 7470A Mercury Prep Liquid	EK1	08/10/23	1245	2474012
SW846 3005A	ICP-MS 3005A PREP	JD2	08/10/23	0815	2474004

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 300.0	
2	EPA 300.0	
3	EPA 300.0	
4	SW846 7470A	
5	SW846 3005A/6020B	
6	SW846 3005A/6020B	
7	EPA 353.2 Low Level	
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: August 21, 2023

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: ARK-ARAMW-7	Project: GPCC00100
Sample ID: 632699004	Client ID: GPCC001
Matrix: WG	
Collect Date: 08-AUG-23 11:50	
Receive Date: 09-AUG-23	
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		5.50	0.0670	0.200	mg/L		1	LXA2	08/10/23	0028	2473965	1
Fluoride	U	ND	0.0330	0.100	mg/L		1					
Sulfate		1060	13.3	40.0	mg/L		100	LXA2	08/10/23	1311	2473965	2
Mercury Analysis-CVAA												
7470 Cold Vapor Mercury, Liquid "As Received"												
Mercury	U	ND	0.0000670	0.000200	mg/L	1.00	1	JP2	08/11/23	1029	2474015	3
Metals Analysis-ICP-MS												
SW846 3005A/6020B "As Received"												
Aluminum	J	0.0265	0.0193	0.0500	mg/L	1.00	1	PRB	08/19/23	0345	2474005	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		0.0244	0.000670	0.00400	mg/L	1.00	1					
Beryllium	J	0.000272	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		0.0605	0.000300	0.00100	mg/L	1.00	1					
Iron		4.04	0.0330	0.100	mg/L	1.00	1					
Lead	U	ND	0.000500	0.00200	mg/L	1.00	1					
Lithium		0.0577	0.00300	0.0100	mg/L	1.00	1					
Molybdenum	U	ND	0.000200	0.00100	mg/L	1.00	1					
Potassium		8.74	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					
Sodium		26.1	0.0800	0.250	mg/L	1.00	1					
Thallium	U	ND	0.000600	0.00200	mg/L	1.00	1					
Boron		2.25	0.104	0.300	mg/L	1.00	20	PRB	08/19/23	0814	2474005	5
Calcium		279	1.60	4.00	mg/L	1.00	20					
Magnesium		73.8	0.200	0.600	mg/L	1.00	20					
Manganese		14.3	0.0200	0.100	mg/L	1.00	20					

Nutrient Analysis

EPA 353.2 Nitrogen, Nitrate/Nitrite "As Received"

Nitrogen, Nitrate/Nitrite	U	ND	0.00700	0.0200	mg/L	1	AXH3	08/11/23	1141	2473982	6
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Solids Analysis

SM2540C Dissolved Solids "As Received"

GEL LABORATORIES LLC

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Certificate of Analysis

Report Date: August 21, 2023

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: ARK-ARAMW-7 Project: GPCC00100
Sample ID: 632699004 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		1620	4.76	20.0	mg/L			CH6	08/10/23	1435	2474115	7
Titration and Ion Analysis												
SM 2320B Total Alkalinity "As Received"												
Alkalinity, Total as CaCO3		55.3	0.725	2.00	mg/L			HH2	08/11/23	1004	2474137	8
Bicarbonate alkalinity (CaCO3)		55.3	0.725	2.00	mg/L							
Carbonate alkalinity (CaCO3)	U	ND	0.725	2.00	mg/L							

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
SW846 3005A	ICP-MS 3005A PREP	JD2	08/10/23	0815	2474004
SW846 7470A Prep	EPA 7470A Mercury Prep Liquid	EK1	08/10/23	1245	2474012

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	EPA 353.2 Low Level	
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

Report Date: August 21, 2023

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: ARK-AP2-FB-01	Project: GPCC00100
Sample ID: 632699005	Client ID: GPCC001
Matrix: WQ	
Collect Date: 08-AUG-23 12:30	
Receive Date: 09-AUG-23	
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	LXA2	08/10/23	0059	2473965	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	08/11/23	1031	2474015	2
Metals Analysis-ICP-MS												
SW846 3005A/6020B "As Received"												
Antimony	U	ND	0.00100	0.00300	mg/L	1.00	1	PRB	08/19/23	0349	2474005	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					
Boron		0.0397	0.00520	0.0150	mg/L	1.00	1					
Cadmium	U	ND	0.000300	0.00100	mg/L	1.00	1					
Calcium	U	ND	0.0800	0.200	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	U	ND	0.000200	0.00100	mg/L	1.00	1					
Selenium	U	ND	0.00150	0.00500	mg/L	1.00	1					
Thallium	U	ND	0.000600	0.00200	mg/L	1.00	1					
Nutrient Analysis												
EPA 353.2 Nitrogen, Nitrate/Nitrite "As Received"												
Nitrogen, Nitrate/Nitrite	U	ND	0.00700	0.0200	mg/L		1	AXH3	08/11/23	1142	2473982	4
Solids Analysis												
SM2540C Dissolved Solids "As Received"												
Total Dissolved Solids	U	ND	2.38	10.0	mg/L			CH6	08/10/23	1435	2474115	5

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
SW846 3005A	ICP-MS 3005A PREP	JD2	08/10/23	0815	2474004
SW846 7470A Prep	EPA 7470A Mercury Prep Liquid	EK1	08/10/23	1245	2474012

GEL LABORATORIES LLC

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Certificate of Analysis

Report Date: August 21, 2023

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: ARK-AP2-FB-01 Project: GPCC00100
Sample ID: 632699005 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	EPA 353.2 Low Level											
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: August 21, 2023

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: ARK-ARAMW-9	Project: GPCC00100
Sample ID: 632699006	Client ID: GPCC001
Matrix: WG	
Collect Date: 08-AUG-23 12:35	
Receive Date: 09-AUG-23	
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		36.1	3.35	10.0	mg/L		50	LXA2	08/10/23	1342	2473965	1
Sulfate		477	6.65	20.0	mg/L		50					
Fluoride		0.837	0.0330	0.100	mg/L		1	LXA2	08/10/23	0130	2473965	2
Mercury Analysis-CVAA												
7470 Cold Vapor Mercury, Liquid "As Received"												
Mercury	U	ND	0.0000670	0.000200	mg/L	1.00	1	JP2	08/11/23	1036	2474015	3
Metals Analysis-ICP-MS												
SW846 3005A/6020B "As Received"												
Aluminum	U	ND	0.0193	0.0500	mg/L	1.00	1	PRB	08/19/23	0352	2474005	4
Antimony	J	0.00156	0.00100	0.00300	mg/L	1.00	1					
Arsenic	U	ND	0.00200	0.00500	mg/L	1.00	1					
Barium		0.0142	0.000670	0.00400	mg/L	1.00	1					
Beryllium	U	ND	0.000200	0.000500	mg/L	1.00	1					
Boron		0.0631	0.00520	0.0150	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		0.412	0.0330	0.100	mg/L	1.00	1					
Lead	U	ND	0.000500	0.00200	mg/L	1.00	1					
Lithium	J	0.00829	0.00300	0.0100	mg/L	1.00	1					
Magnesium		9.49	0.0100	0.0300	mg/L	1.00	1					
Manganese		0.159	0.00100	0.00500	mg/L	1.00	1					
Molybdenum		0.0106	0.000200	0.00100	mg/L	1.00	1					
Potassium		7.18	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					
Calcium		139	0.800	2.00	mg/L	1.00	10	PRB	08/19/23	0821	2474005	5
Sodium		95.7	0.800	2.50	mg/L	1.00	10					

Nutrient Analysis

EPA 353.2 Nitrogen, Nitrate/Nitrite "As Received"

Nitrogen, Nitrate/Nitrite	U	ND	0.00700	0.0200	mg/L	1	AXH3	08/11/23	1143	2473982	6
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Solids Analysis

SM2540C Dissolved Solids "As Received"

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Certificate of Analysis

Report Date: August 21, 2023

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: ARK-ARAMW-9 Project: GPCC00100
Sample ID: 632699006 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		852	4.76	20.0	mg/L			CH6	08/10/23	1435	2474115	7
Titration and Ion Analysis												
SM 2320B Total Alkalinity "As Received"												
Alkalinity, Total as CaCO3		91.1	0.725	2.00	mg/L			HH2	08/11/23	1007	2474137	8
Bicarbonate alkalinity (CaCO3)		91.1	0.725	2.00	mg/L							
Carbonate alkalinity (CaCO3)	U	ND	0.725	2.00	mg/L							

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
SW846 3005A	ICP-MS 3005A PREP	JD2	08/10/23	0815	2474004
SW846 7470A Prep	EPA 7470A Mercury Prep Liquid	EK1	08/10/23	1245	2474012

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	EPA 353.2 Low Level	
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

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

Certificate of Analysis

Report Date: August 21, 2023

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: ARK-ARAMW-2	Project: GPCC00100
Sample ID: 632699007	Client ID: GPCC001
Matrix: WG	
Collect Date: 08-AUG-23 15:05	
Receive Date: 09-AUG-23	
Collector: Client	

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Ion Chromatography												
EPA 300.0 Anions Liquid "As Received"												
Sulfate		243	6.65	20.0	mg/L		50	LXA2	08/10/23	1413	2473965	1
Chloride		3.35	0.0670	0.200	mg/L		1	LXA2	08/10/23	0200	2473965	2
Fluoride	J	0.0571	0.0330	0.100	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	08/11/23	1038	2474015	3
Metals Analysis-ICP-MS												
SW846 3005A/6020B "As Received"												
Boron		1.07	0.104	0.300	mg/L	1.00	20	PRB	08/19/23	0825	2474005	4
Calcium		87.1	1.60	4.00	mg/L	1.00	20					
Aluminum		0.0505	0.0193	0.0500	mg/L	1.00	1	PRB	08/19/23	0356	2474005	5
Antimony	U	ND	0.00100	0.00300	mg/L	1.00	1					
Arsenic		0.0120	0.00200	0.00500	mg/L	1.00	1					
Barium		0.0753	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		0.00223	0.000300	0.00100	mg/L	1.00	1					
Iron		6.78	0.0330	0.100	mg/L	1.00	1					
Lead	U	ND	0.000500	0.00200	mg/L	1.00	1					
Lithium		0.0193	0.00300	0.0100	mg/L	1.00	1					
Magnesium		35.7	0.0100	0.0300	mg/L	1.00	1					
Manganese		0.943	0.00100	0.00500	mg/L	1.00	1					
Molybdenum		0.00110	0.000200	0.00100	mg/L	1.00	1					
Potassium		7.58	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					
Sodium		18.8	0.0800	0.250	mg/L	1.00	1					
Thallium	U	ND	0.000600	0.00200	mg/L	1.00	1					
Nutrient Analysis												
EPA 353.2 Nitrogen, Nitrate/Nitrite "As Received"												
Nitrogen, Nitrate/Nitrite	U	ND	0.00700	0.0200	mg/L		1	AXH3	08/11/23	1144	2473982	6
Solids Analysis												
SM2540C Dissolved Solids "As Received"												

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Certificate of Analysis

Report Date: August 21, 2023

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: ARK-ARAMW-2 Project: GPCC00100
Sample ID: 632699007 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		548	2.38	10.0	mg/L			CH6	08/10/23	1435	2474115	7
Titration and Ion Analysis												
SM 2320B Total Alkalinity "As Received"												
Alkalinity, Total as CaCO3		180	0.725	2.00	mg/L			HH2	08/11/23	1009	2474137	8
Bicarbonate alkalinity (CaCO3)		180	0.725	2.00	mg/L							
Carbonate alkalinity (CaCO3)	U	ND	0.725	2.00	mg/L							

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
SW846 7470A Prep	EPA 7470A Mercury Prep Liquid	EK1	08/10/23	1245	2474012
SW846 3005A	ICP-MS 3005A PREP	JD2	08/10/23	0815	2474004

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	EPA 353.2 Low Level	
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

Report Date: August 21, 2023

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: ARK-ARAMW-1	Project: GPCC00100
Sample ID: 632699008	Client ID: GPCC001
Matrix: WG	
Collect Date: 08-AUG-23 16:00	
Receive Date: 09-AUG-23	
Collector: Client	

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Ion Chromatography												
EPA 300.0 Anions Liquid "As Received"												
Sulfate		223	6.65	20.0	mg/L		50	LXA2	08/10/23	1444	2473965	1
Chloride		3.61	0.0670	0.200	mg/L		1	LXA2	08/10/23	0231	2473965	2
Fluoride		0.118	0.0330	0.100	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	08/11/23	1039	2474015	3
Metals Analysis-ICP-MS												
SW846 3005A/6020B "As Received"												
Aluminum	J	0.0342	0.0193	0.0500	mg/L	1.00	1	PRB	08/19/23	0359	2474005	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		0.0510	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	J	0.000350	0.000300	0.00100	mg/L	1.00	1					
Iron		0.239	0.0330	0.100	mg/L	1.00	1					
Lead	U	ND	0.000500	0.00200	mg/L	1.00	1					
Lithium	J	0.00909	0.00300	0.0100	mg/L	1.00	1					
Magnesium		35.7	0.0100	0.0300	mg/L	1.00	1					
Manganese		0.145	0.00100	0.00500	mg/L	1.00	1					
Molybdenum		0.00667	0.000200	0.00100	mg/L	1.00	1					
Potassium		5.37	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					
Sodium		19.3	0.0800	0.250	mg/L	1.00	1					
Thallium	U	ND	0.000600	0.00200	mg/L	1.00	1					
Boron		1.13	0.104	0.300	mg/L	1.00	20	PRB	08/19/23	0828	2474005	5
Calcium		83.4	1.60	4.00	mg/L	1.00	20					

Nutrient Analysis

EPA 353.2 Nitrogen, Nitrate/Nitrite "As Received"

Nitrogen, Nitrate/Nitrite	U	ND	0.00700	0.0200	mg/L		1	AXH3	08/11/23	1207	2473982	6
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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: August 21, 2023

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: ARK-ARAMW-1	Project: GPCC00100
Sample ID: 632699008	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		524	2.38	10.0	mg/L		CH6	08/10/23	1435	2474115		7
Titration and Ion Analysis												
SM 2320B Total Alkalinity "As Received"												
Alkalinity, Total as CaCO3		184	0.725	2.00	mg/L		HH2	08/11/23	1011	2474137		8
Bicarbonate alkalinity (CaCO3)		184	0.725	2.00	mg/L							
Carbonate alkalinity (CaCO3)	U	ND	0.725	2.00	mg/L							

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
SW846 7470A Prep	EPA 7470A Mercury Prep Liquid	EK1	08/10/23	1245	2474012
SW846 3005A	ICP-MS 3005A PREP	JD2	08/10/23	0815	2474004

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	EPA 353.2 Low Level	
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

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

Certificate of Analysis

Report Date: August 21, 2023

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: ARK-ARGWC-23	Project: GPCC00100
Sample ID: 632699009	Client ID: GPCC001
Matrix: WG	
Collect Date: 08-AUG-23 16:55	
Receive Date: 09-AUG-23	
Collector: Client	

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Ion Chromatography												
EPA 300.0 Anions Liquid "As Received"												
Sulfate		69.8	0.665	2.00	mg/L		5	LXA2	08/10/23	1515	2473965	1
Chloride		3.60	0.0670	0.200	mg/L		1	LXA2	08/10/23	0302	2473965	2
Fluoride		0.283	0.0330	0.100	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	08/11/23	1041	2474015	3
Metals Analysis-ICP-MS												
SW846 3005A/6020B "As Received"												
Aluminum	U	ND	0.0193	0.0500	mg/L	1.00	1	PRB	08/19/23	0403	2474005	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		0.0936	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	J	0.000440	0.000300	0.00100	mg/L	1.00	1					
Iron	J	0.0491	0.0330	0.100	mg/L	1.00	1					
Lead	U	ND	0.000500	0.00200	mg/L	1.00	1					
Lithium		0.0517	0.00300	0.0100	mg/L	1.00	1					
Magnesium		10.5	0.0100	0.0300	mg/L	1.00	1					
Manganese		0.278	0.00100	0.00500	mg/L	1.00	1					
Molybdenum		0.0618	0.000200	0.00100	mg/L	1.00	1					
Potassium		1.68	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					
Sodium		13.3	0.0800	0.250	mg/L	1.00	1					
Thallium	U	ND	0.000600	0.00200	mg/L	1.00	1					
Boron		0.379	0.0520	0.150	mg/L	1.00	10	PRB	08/19/23	0832	2474005	5
Calcium		66.6	0.800	2.00	mg/L	1.00	10					

Nutrient Analysis

EPA 353.2 Nitrogen, Nitrate/Nitrite "As Received"

Nitrogen, Nitrate/Nitrite		1.33	0.0350	0.100	mg/L		5	AXH3	08/11/23	1208	2473982	6
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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: August 21, 2023

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: ARK-ARGWC-23 Project: GPCC00100
Sample ID: 632699009 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		294	2.38	10.0	mg/L			CH6	08/10/23	1435	2474115	7
Titration and Ion Analysis												
SM 2320B Total Alkalinity "As Received"												
Alkalinity, Total as CaCO3		175	0.725	2.00	mg/L			HH2	08/11/23	1013	2474137	8
Bicarbonate alkalinity (CaCO3)		175	0.725	2.00	mg/L							
Carbonate alkalinity (CaCO3)	U	ND	0.725	2.00	mg/L							

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
SW846 3005A	ICP-MS 3005A PREP	JD2	08/10/23	0815	2474004
SW846 7470A Prep	EPA 7470A Mercury Prep Liquid	EK1	08/10/23	1245	2474012

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	EPA 353.2 Low Level	
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

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

Certificate of Analysis

Report Date: August 24, 2023

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: ARK-ARGWC-21 Project: GPCC00100
Sample ID: 633126001 Client ID: GPCC001
Matrix: WG
Collect Date: 09-AUG-23 10:35
Receive Date: 11-AUG-23
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		3.35	0.0670	0.200	mg/L		1	JLD1	08/12/23	2354	2475685	1
Fluoride		0.203	0.0330	0.100	mg/L		1					
Sulfate		214	3.33	10.0	mg/L		25	JLD1	08/14/23	1308	2475685	2
Mercury Analysis-CVAA												
7470 Cold Vapor Mercury, Liquid "As Received"												
Mercury	U	ND	0.0000670	0.000200	mg/L	1.00	1	JP2	08/15/23	1258	2475854	3
Metals Analysis-ICP-MS												
SW846 3005A/6020B "As Received"												
Boron		1.18	0.0520	0.150	mg/L	1.00	10	PRB	08/18/23	1246	2475579	4
Antimony	U	ND	0.00100	0.00300	mg/L	1.00	1	PRB	08/18/23	1231	2475579	5
Manganese		0.351	0.00100	0.00500	mg/L	1.00	1					
Aluminum	U	ND	0.0193	0.0500	mg/L	1.00	1	PRB	08/17/23	1309	2475579	6
Arsenic	U	ND	0.00200	0.00500	mg/L	1.00	1					
Barium		0.0444	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	J	0.000889	0.000300	0.00100	mg/L	1.00	1					
Iron		0.808	0.0330	0.100	mg/L	1.00	1					
Lead	U	ND	0.000500	0.00200	mg/L	1.00	1					
Lithium		0.0121	0.00300	0.0100	mg/L	1.00	1					
Magnesium		36.0	0.0100	0.0300	mg/L	1.00	1					
Molybdenum	U	ND	0.000200	0.00100	mg/L	1.00	1					
Potassium		5.91	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					
Sodium		19.3	0.0800	0.250	mg/L	1.00	1					
Thallium	U	ND	0.000600	0.00200	mg/L	1.00	1					
Calcium		80.2	0.800	2.00	mg/L	1.00	10	PRB	08/17/23	1328	2475579	7
Solids Analysis												
SM2540C Dissolved Solids "As Received"												
Total Dissolved Solids		520	2.38	10.0	mg/L			CH6	08/16/23	1558	2477178	8
Titration and Ion Analysis												
SM 2320B Total Alkalinity "As Received"												

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Certificate of Analysis

Report Date: August 24, 2023

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: ARK-ARGWC-21 Project: GPCC00100
Sample ID: 633126001 Client ID: GPCC001

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Titration and Ion Analysis												
SM 2320B Total Alkalinity "As Received"												
Alkalinity, Total as CaCO3		162	0.725	2.00	mg/L			JW2	08/14/23	1656	2476209	9
Bicarbonate alkalinity (CaCO3)		162	0.725	2.00	mg/L							
Carbonate alkalinity (CaCO3)	U	ND	0.725	2.00	mg/L							

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
SW846 7470A Prep	EPA 7470A Mercury Prep Liquid	EK1	08/14/23	1200	2475853
SW846 3005A	ICP-MS 3005A PREP	EM2	08/14/23	1525	2475578

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	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: August 24, 2023

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: ARK-AP2-EB-01	Project: GPCC00100
Sample ID: 633126002	Client ID: GPCC001
Matrix: WQ	
Collect Date: 09-AUG-23 11:10	
Receive Date: 11-AUG-23	
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	0.165	0.0670	0.200	mg/L		1	JLD1	08/13/23	0026	2475685	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	08/15/23	1300	2475854	2
Metals Analysis-ICP-MS												
SW846 3005A/6020B "As Received"												
Arsenic	U	ND	0.00200	0.00500	mg/L	1.00	1	PRB	08/17/23	1357	2475579	3
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					
Calcium	U	ND	0.0800	0.200	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	U	ND	0.000200	0.00100	mg/L	1.00	1					
Selenium	U	ND	0.00150	0.00500	mg/L	1.00	1					
Thallium	U	ND	0.000600	0.00200	mg/L	1.00	1					
Antimony	U	ND	0.00100	0.00300	mg/L	1.00	1	PRB	08/18/23	1306	2475579	4
Boron	U	ND	0.00520	0.0150	mg/L	1.00	1					
Solids Analysis												
SM2540C Dissolved Solids "As Received"												
Total Dissolved Solids	U	ND	2.38	10.0	mg/L			CH6	08/16/23	1558	2477178	5

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
SW846 7470A Prep	EPA 7470A Mercury Prep Liquid	EK1	08/14/23	1200	2475853
SW846 3005A	ICP-MS 3005A PREP	EM2	08/14/23	1525	2475578

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Certificate of Analysis

Report Date: August 24, 2023

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: ARK-AP2-EB-01
Sample ID: 633126002

Project: GPCC00100
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	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

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Certificate of Analysis

Report Date: August 24, 2023

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: ARK-ARAMW-8 Project: GPCC00100
Sample ID: 633126003 Client ID: GPCC001
Matrix: WG
Collect Date: 09-AUG-23 11:15
Receive Date: 11-AUG-23
Collector: Client

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Ion Chromatography												
EPA 300.0 Anions Liquid "As Received"												
Sulfate		114	1.33	4.00	mg/L		10	JLD1	08/14/23	1339	2475685	1
Chloride		5.13	0.0670	0.200	mg/L		1	JLD1	08/13/23	0057	2475685	2
Fluoride		0.261	0.0330	0.100	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	08/15/23	1301	2475854	3
Metals Analysis-ICP-MS												
SW846 3005A/6020B "As Received"												
Antimony	J	0.00134	0.00100	0.00300	mg/L	1.00	1	PRB	08/18/23	1318	2475579	4
Manganese		0.279	0.00100	0.00500	mg/L	1.00	1					
Aluminum	U	ND	0.0193	0.0500	mg/L	1.00	1	PRB	08/17/23	1404	2475579	5
Arsenic	U	ND	0.00200	0.00500	mg/L	1.00	1					
Barium		0.122	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		0.00364	0.000300	0.00100	mg/L	1.00	1					
Iron		0.515	0.0330	0.100	mg/L	1.00	1					
Lead	U	ND	0.000500	0.00200	mg/L	1.00	1					
Lithium	J	0.00637	0.00300	0.0100	mg/L	1.00	1					
Magnesium		32.1	0.0100	0.0300	mg/L	1.00	1					
Molybdenum		0.203	0.000200	0.00100	mg/L	1.00	1					
Potassium		7.34	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					
Sodium		18.1	0.0800	0.250	mg/L	1.00	1					
Thallium	U	ND	0.000600	0.00200	mg/L	1.00	1					
Calcium		78.6	0.800	2.00	mg/L	1.00	10	PRB	08/17/23	1408	2475579	6
Boron		0.770	0.0520	0.150	mg/L	1.00	10	PRB	08/18/23	1321	2475579	7

Solids Analysis

SM2540C Dissolved Solids "As Received"

Total Dissolved Solids 436 2.38 10.0 mg/L CH6 08/16/23 1558 2477178 8

Titration and Ion Analysis

SM 2320B Total Alkalinity "As Received"

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Certificate of Analysis

Report Date: August 24, 2023

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: ARK-ARAMW-8 Project: GPCC00100
Sample ID: 633126003 Client ID: GPCC001

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Titration and Ion Analysis												
SM 2320B Total Alkalinity "As Received"												
Alkalinity, Total as CaCO3		245	0.725	2.00	mg/L			JW2	08/14/23	1702	2476209	9
Bicarbonate alkalinity (CaCO3)		245	0.725	2.00	mg/L							
Carbonate alkalinity (CaCO3)	U	ND	0.725	2.00	mg/L							

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
SW846 3005A	ICP-MS 3005A PREP	EM2	08/14/23	1525	2475578
SW846 7470A Prep	EPA 7470A Mercury Prep Liquid	EK1	08/14/23	1200	2475853

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	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: August 24, 2023

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: ARK-ARGWA-20	Project: GPCC00100
Sample ID: 633126004	Client ID: GPCC001
Matrix: WG	
Collect Date: 10-AUG-23 09:25	
Receive Date: 11-AUG-23	
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		6.50	0.0670	0.200	mg/L		1	JLD1	08/13/23	0128	2475685	1
Fluoride	U	ND	0.0330	0.100	mg/L		1					
Sulfate		18.5	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	08/15/23	1303	2475854	2
Metals Analysis-ICP-MS												
SW846 3005A/6020B "As Received"												
Aluminum		0.0502	0.0193	0.0500	mg/L	1.00	1	PRB	08/17/23	1411	2475579	3
Arsenic	U	ND	0.00200	0.00500	mg/L	1.00	1					
Barium		0.0885	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					
Calcium		10.7	0.0800	0.200	mg/L	1.00	1					
Chromium	J	0.00622	0.00300	0.0100	mg/L	1.00	1					
Cobalt	U	ND	0.000300	0.00100	mg/L	1.00	1					
Iron	J	0.0509	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					
Magnesium		5.75	0.0100	0.0300	mg/L	1.00	1					
Molybdenum	U	ND	0.000200	0.00100	mg/L	1.00	1					
Potassium		1.53	0.0800	0.300	mg/L	1.00	1					
Selenium	J	0.00220	0.00150	0.00500	mg/L	1.00	1					
Silver	U	ND	0.000300	0.00100	mg/L	1.00	1					
Sodium		11.1	0.0800	0.250	mg/L	1.00	1					
Thallium	U	ND	0.000600	0.00200	mg/L	1.00	1					
Antimony	U	ND	0.00100	0.00300	mg/L	1.00	1	PRB	08/18/23	1324	2475579	4
Boron		0.0799	0.00520	0.0150	mg/L	1.00	1					
Manganese	J	0.00319	0.00100	0.00500	mg/L	1.00	1					
Solids Analysis												
SM2540C Dissolved Solids "As Received"												
Total Dissolved Solids		105	2.38	10.0	mg/L			CH6	08/16/23	1558	2477178	5
Titration and Ion Analysis												
SM 2320B Total Alkalinity "As Received"												

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Certificate of Analysis

Report Date: August 24, 2023

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: ARK-ARGWA-20 Project: GPCC00100
Sample ID: 633126004 Client ID: GPCC001

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Titration and Ion Analysis												
SM 2320B Total Alkalinity "As Received"												
Alkalinity, Total as CaCO ₃		43.8	0.725	2.00	mg/L			JW2	08/14/23	1705	2476209	6
Bicarbonate alkalinity (CaCO ₃)		43.8	0.725	2.00	mg/L							
Carbonate alkalinity (CaCO ₃)	U	ND	0.725	2.00	mg/L							

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
SW846 7470A Prep	EPA 7470A Mercury Prep Liquid	EK1	08/14/23	1200	2475853
SW846 3005A	ICP-MS 3005A PREP	EM2	08/14/23	1525	2475578

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	SM 2540C	
6	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: August 24, 2023

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: ARK-STNTW-22 Project: GPCC00100
Sample ID: 633126005 Client ID: GPCC001
Matrix: WG
Collect Date: 10-AUG-23 12:55
Receive Date: 11-AUG-23
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		4.92	0.0670	0.200	mg/L		1	JLD1	08/13/23	0200	2475685	1
Fluoride		0.123	0.0330	0.100	mg/L		1					
Sulfate		1040	13.3	40.0	mg/L		100	JLD1	08/14/23	1410	2475685	2
Mercury Analysis-CVAA												
7470 Cold Vapor Mercury, Liquid "As Received"												
Mercury	U	ND	0.0000670	0.000200	mg/L	1.00	1	JP2	08/15/23	1305	2475854	3
Metals Analysis-ICP-MS												
SW846 3005A/6020B - 4 metals "As Received"												
Boron		5.65	0.520	1.50	mg/L	1.00	100	PRB	08/18/23	1335	2475579	4
Manganese		11.5	0.100	0.500	mg/L	1.00	100					
Calcium		374	0.800	2.00	mg/L	1.00	10	PRB	08/17/23	1422	2475579	5
Aluminum		0.591	0.0193	0.0500	mg/L	1.00	1	PRB	08/17/23	1419	2475579	6
Arsenic		0.172	0.00200	0.00500	mg/L	1.00	1					
Cobalt		0.0238	0.000300	0.00100	mg/L	1.00	1					
Iron		38.2	0.0330	0.100	mg/L	1.00	1					
Lithium		0.247	0.00300	0.0100	mg/L	1.00	1					
Magnesium		33.5	0.0100	0.0300	mg/L	1.00	1					
Molybdenum		0.00367	0.000200	0.00100	mg/L	1.00	1					
Potassium		48.6	0.0800	0.300	mg/L	1.00	1					
Sodium		19.8	0.0800	0.250	mg/L	1.00	1					
Titration and Ion Analysis												
SM 2320B Total Alkalinity "As Received"												
Alkalinity, Total as CaCO3		170	0.725	2.00	mg/L			JW2	08/14/23	1707	2476209	7
Bicarbonate alkalinity (CaCO3)		170	0.725	2.00	mg/L							
Carbonate alkalinity (CaCO3)	U	ND	0.725	2.00	mg/L							

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
SW846 7470A Prep	EPA 7470A Mercury Prep Liquid	EK1	08/14/23	1200	2475853
SW846 3005A	ICP-MS 3005A PREP	EM2	08/14/23	1525	2475578

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Certificate of Analysis

Report Date: August 24, 2023

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: ARK-STNTW-22
Sample ID: 633126005

Project: GPCC00100
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	EPA 300.0										
3	SW846 7470A										
4	SW846 3005A/6020B										
5	SW846 3005A/6020B										
6	SW846 3005A/6020B										
7	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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Report Date: August 24, 2023

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:	ARK-ARGWC-21	Project:	GPCC00100
Sample ID:	633126006	Client ID:	GPCC001
Matrix:	WG		
Collect Date:	09-AUG-23 10:35		
Receive Date:	11-AUG-23		
Collector:	Client		

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Nutrient Analysis												
EPA 353.2 Nitrogen, Nitrate/Nitrite "As Received"												
Nitrogen, Nitrate/Nitrite	U	ND	0.00700	0.0200	mg/L		1	AXH3	08/14/23	0754	2475768	1

The following Analytical Methods were performed:

Method	Description	Analyst	Comments
1	EPA 353.2 Low Level		

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 ComplianceAP2

Client Sample ID:	ARK-AP2-EB-01	Project:	GPCC00100
Sample ID:	633126007	Client ID:	GPCC001
Matrix:	WQ		
Collect Date:	09-AUG-23 11:10		
Receive Date:	11-AUG-23		
Collector:	Client		

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Nutrient Analysis												
EPA 353.2 Nitrogen, Nitrate/Nitrite "As Received"												
Nitrogen, Nitrate/Nitrite	U	ND	0.00700	0.0200	mg/L		1	AXH3	08/14/23	0755	2475768	1

The following Analytical Methods were performed:

Method	Description	Analyst	Comments
1	EPA 353.2 Low Level		

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: August 24, 2023

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:	ARK-ARAMW-8	Project:	GPCC00100
Sample ID:	633126008	Client ID:	GPCC001
Matrix:	WG		
Collect Date:	09-AUG-23 11:15		
Receive Date:	11-AUG-23		
Collector:	Client		

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Nutrient Analysis												
EPA 353.2 Nitrogen, Nitrate/Nitrite "As Received"												
Nitrogen, Nitrate/Nitrite	U	ND	0.00700	0.0200	mg/L		1	AXH3	08/14/23	0757	2475768	1

The following Analytical Methods were performed:

Method	Description	Analyst	Comments
1	EPA 353.2 Low Level		

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: August 24, 2023

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: ARK-ARGWA-20	Project: GPCC00100
Sample ID: 633126009	Client ID: GPCC001
Matrix: WG	
Collect Date: 10-AUG-23 09:25	
Receive Date: 11-AUG-23	
Collector: Client	

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Nutrient Analysis												
EPA 353.2 Nitrogen, Nitrate/Nitrite "As Received"												
Nitrogen, Nitrate/Nitrite		0.759	0.00700	0.0200	mg/L		1	AXH3	08/14/23	0758	2475768	1

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 353.2 Low Level	

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: August 24, 2023

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:	ARK-STNTW-22	Project:	GPCC00100
Sample ID:	633126010	Client ID:	GPCC001
Matrix:	WG		
Collect Date:	10-AUG-23 12:55		
Receive Date:	11-AUG-23		
Collector:	Client		

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Nutrient Analysis												
EPA 353.2 Nitrogen, Nitrate/Nitrite "As Received"												
Nitrogen, Nitrate/Nitrite		0.0715	0.00700	0.0200	mg/L		1	AXH3	08/14/23	0759	2475768	1

The following Analytical Methods were performed:

Method	Description	Analyst	Comments
1	EPA 353.2 Low Level		

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: August 24, 2023

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

Contact: Joju Abraham

Workorder: 633126

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Ion Chromatography											
Batch	2475685										
QC1205486797	632744003	DUP									
Chloride		50.6		50.7	mg/L	0.111		(0%-20%)	JLD1	08/14/23	12:05
Fluoride		1.06		1.04	mg/L	2.03		(0%-20%)		08/12/23	19:12
Sulfate		53.6		53.8	mg/L	0.277		(0%-20%)		08/14/23	12:05
QC1205486796	LCS										
Chloride	5.00			4.86	mg/L		97.2	(90%-110%)		08/12/23	18:10
Fluoride	2.50			2.59	mg/L		104	(90%-110%)			
Sulfate	10.0			9.93	mg/L		99.3	(90%-110%)			
QC1205486795	MB										
Chloride			U	ND	mg/L					08/12/23	17:37
Fluoride			U	ND	mg/L						
Sulfate			U	ND	mg/L						
QC1205486798	632744003	PS									
Chloride	5.00	5.06		10.5	mg/L		109	(90%-110%)		08/14/23	12:36
Fluoride	2.50	1.06		3.62	mg/L		102	(90%-110%)		08/12/23	19:43
Sulfate	10.0	5.36		15.6	mg/L		102	(90%-110%)		08/14/23	12:36

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QC Summary

Workorder: 633126

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Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Metals Analysis - ICPMS											
Batch	2475579										
QC1205486562	LCS										
Aluminum	2.00			2.04	mg/L		102	(80%-120%)	PRB	08/17/23	13:04
Antimony	0.0500			0.0506	mg/L		101	(80%-120%)		08/18/23	12:28
Arsenic	0.0500			0.0495	mg/L		99	(80%-120%)		08/17/23	13:04
Barium	0.0500			0.0510	mg/L		102	(80%-120%)			
Beryllium	0.0500			0.0545	mg/L		109	(80%-120%)			
Boron	0.100			0.112	mg/L		112	(80%-120%)		08/18/23	12:28
Cadmium	0.0500			0.0510	mg/L		102	(80%-120%)		08/17/23	13:04
Calcium	2.00			2.08	mg/L		104	(80%-120%)			
Chromium	0.0500			0.0505	mg/L		101	(80%-120%)			
Cobalt	0.0500			0.0502	mg/L		100	(80%-120%)			
Iron	2.00			1.99	mg/L		99.4	(80%-120%)			
Lead	0.0500			0.0509	mg/L		102	(80%-120%)			
Lithium	0.0500			0.0509	mg/L		102	(80%-120%)			
Magnesium	2.00			2.09	mg/L		104	(80%-120%)			
Manganese	0.0500			0.0513	mg/L		103	(80%-120%)		08/18/23	12:28

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QC Summary

Workorder: 633126

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Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Metals Analysis - ICPMS											
Batch	2475579										
Molybdenum	0.0500			0.0529	mg/L		106	(80%-120%)	PRB	08/17/23	13:04
Potassium	2.00			2.07	mg/L		103	(80%-120%)			
Selenium	0.0500			0.0487	mg/L		97.4	(80%-120%)			
Silver	0.0500			0.0519	mg/L		104	(80%-120%)			
Sodium	2.00			2.22	mg/L		111	(80%-120%)			
Thallium	0.0500			0.0495	mg/L		98.9	(80%-120%)			
QC1205486561	MB										
Aluminum			U	ND	mg/L					08/17/23	13:00
Antimony			U	ND	mg/L					08/18/23	12:26
Arsenic			U	ND	mg/L					08/17/23	13:00
Barium			U	ND	mg/L						
Beryllium			U	ND	mg/L						
Boron			U	ND	mg/L					08/18/23	12:26
Cadmium			U	ND	mg/L					08/17/23	13:00
Calcium			U	ND	mg/L						
Chromium			U	ND	mg/L						

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QC Summary

Workorder: 633126

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Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Metals Analysis - ICPMS											
Batch	2475579										
Cobalt			U	ND	mg/L				PRB	08/17/23	13:00
Iron			U	ND	mg/L						
Lead			U	ND	mg/L						
Lithium			U	ND	mg/L						
Magnesium			U	ND	mg/L						
Manganese			U	ND	mg/L					08/18/23	12:26
Molybdenum			U	ND	mg/L					08/17/23	13:00
Potassium			U	ND	mg/L						
Selenium			U	ND	mg/L						
Silver			U	ND	mg/L						
Sodium			U	ND	mg/L						
Thallium			U	ND	mg/L						
QC1205486563 633126001 MS											
Aluminum	2.00	U	ND	2.04	mg/L		102	(75%-125%)		08/17/23	13:12
Antimony	0.0500	U	ND	0.0524	mg/L		104	(75%-125%)		08/18/23	12:34
Arsenic	0.0500	U	ND	0.0520	mg/L		101	(75%-125%)		08/17/23	13:12

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QC Summary

Workorder: 633126

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Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Metals Analysis - ICPMS											
Batch	2475579										
Barium	0.0500	0.0444		0.0929	mg/L		96.9	(75%-125%)	PRB	08/17/23	13:12
Beryllium	0.0500	U	ND	0.0552	mg/L		110	(75%-125%)			
Boron	0.100	1.18		1.23	mg/L		N/A	(75%-125%)		08/18/23	12:55
Cadmium	0.0500	U	ND	0.0518	mg/L		104	(75%-125%)		08/17/23	13:12
Calcium	2.00	80.2		81.5	mg/L		N/A	(75%-125%)		08/17/23	13:39
Chromium	0.0500	U	ND	0.0501	mg/L		99.8	(75%-125%)		08/17/23	13:12
Cobalt	0.0500	J	0.000889	0.0495	mg/L		97.3	(75%-125%)			
Iron	2.00	0.808		2.77	mg/L		98	(75%-125%)			
Lead	0.0500	U	ND	0.0490	mg/L		98.1	(75%-125%)			
Lithium	0.0500	0.0121		0.0638	mg/L		103	(75%-125%)			
Magnesium	2.00	36.0		39.4	mg/L		N/A	(75%-125%)			
Manganese	0.0500	0.351		0.408	mg/L		N/A	(75%-125%)		08/18/23	12:34
Molybdenum	0.0500	U	ND	0.0552	mg/L		110	(75%-125%)		08/17/23	13:12
Potassium	2.00	5.91		7.87	mg/L		98.2	(75%-125%)			
Selenium	0.0500	U	ND	0.0506	mg/L		100	(75%-125%)			

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QC Summary

Workorder: 633126

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Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Metals Analysis - ICPMS											
Batch	2475579										
Silver	0.0500	U	ND	0.0515	mg/L		103	(75%-125%)	PRB	08/17/23	13:12
Sodium	2.00		19.3	21.8	mg/L		N/A	(75%-125%)			
Thallium	0.0500	U	ND	0.0483	mg/L		96.6	(75%-125%)			
QC1205486564	633126001 MSD										
Aluminum	2.00	U	ND	2.03	mg/L	0.793	101	(0%-20%)		08/17/23	13:16
Antimony	0.0500	U	ND	0.0530	mg/L	1.03	105	(0%-20%)		08/18/23	12:37
Arsenic	0.0500	U	ND	0.0520	mg/L	0.0384	101	(0%-20%)		08/17/23	13:16
Barium	0.0500		0.0444	0.0939	mg/L	1.06	98.9	(0%-20%)			
Beryllium	0.0500	U	ND	0.0548	mg/L	0.695	110	(0%-20%)			
Boron	0.100		1.18	1.21	mg/L	1.71	N/A	(0%-20%)		08/18/23	12:58
Cadmium	0.0500	U	ND	0.0521	mg/L	0.408	104	(0%-20%)		08/17/23	13:16
Calcium	2.00		80.2	79.9	mg/L	2.03	N/A	(0%-20%)		08/17/23	13:42
Chromium	0.0500	U	ND	0.0492	mg/L	1.79	98	(0%-20%)		08/17/23	13:16
Cobalt	0.0500	J	0.000889	0.0485	mg/L	2.17	95.1	(0%-20%)			
Iron	2.00		0.808	2.69	mg/L	2.84	94.2	(0%-20%)			
Lead	0.0500	U	ND	0.0495	mg/L	1.02	99.1	(0%-20%)			

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QC Summary

Workorder: 633126

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Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Metals Analysis - ICPMS											
Batch	2475579										
Lithium	0.0500	0.0121		0.0623	mg/L	2.34	100	(0%-20%)	PRB	08/17/23	13:16
Magnesium	2.00	36.0		37.8	mg/L	4.16	N/A	(0%-20%)			
Manganese	0.0500	0.351		0.397	mg/L	2.92	N/A	(0%-20%)		08/18/23	12:37
Molybdenum	0.0500	U	ND	0.0548	mg/L	0.849	109	(0%-20%)		08/17/23	13:16
Potassium	2.00	5.91		7.81	mg/L	0.806	95.1	(0%-20%)			
Selenium	0.0500	U	ND	0.0489	mg/L	3.33	97	(0%-20%)			
Silver	0.0500	U	ND	0.0518	mg/L	0.589	103	(0%-20%)			
Sodium	2.00	19.3		21.0	mg/L	3.46	N/A	(0%-20%)			
Thallium	0.0500	U	ND	0.0486	mg/L	0.679	97.3	(0%-20%)			
QC1205486565 633126001 SDILT											
Aluminum		U	ND	U	ND	ug/L	N/A	(0%-20%)		08/17/23	13:24
Antimony		U	ND	U	ND	ug/L	N/A	(0%-20%)		08/18/23	12:43
Arsenic		U	ND	U	ND	ug/L	N/A	(0%-20%)		08/17/23	13:24
Barium			44.4		8.42	ug/L		(0%-20%)			
Beryllium		U	ND	U	ND	ug/L	N/A	(0%-20%)			
Boron			118		24.8	ug/L		(0%-20%)		08/18/23	13:01

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QC Summary

Workorder: 633126

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Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Metals Analysis - ICPMS											
Batch	2475579										
Cadmium	U	ND	U	ND	ug/L	N/A		(0%-20%)	PRB	08/17/23	13:24
Calcium		8020		1650	ug/L	2.53		(0%-20%)		08/17/23	13:46
Chromium	U	ND	U	ND	ug/L	N/A		(0%-20%)		08/17/23	13:24
Cobalt	J	0.889	U	ND	ug/L	N/A		(0%-20%)			
Iron		808		165	ug/L	1.85		(0%-20%)			
Lead	U	ND	U	ND	ug/L	N/A		(0%-20%)			
Lithium		12.1	U	ND	ug/L	N/A		(0%-20%)			
Magnesium		36000		7510	ug/L	4.38		(0%-20%)			
Manganese		351		71.9	ug/L	2.48		(0%-20%)		08/18/23	12:43
Molybdenum	U	ND	U	ND	ug/L	N/A		(0%-20%)		08/17/23	13:24
Potassium		5910		1150	ug/L	2.42		(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		19300		3960	ug/L	2.69		(0%-20%)			
Thallium	U	ND	U	ND	ug/L	N/A		(0%-20%)			

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QC Summary

Workorder: 633126

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Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Metals Analysis-Mercury											
Batch	2475854										
QC1205487211	632954001	DUP									
Mercury		U	ND	U	ND	mg/L	N/A		JP2	08/15/23	12:27
QC1205487204	LCS										
Mercury	0.00200				0.00199	mg/L	99.6	(80%-120%)		08/15/23	12:02
QC1205487203	MB										
Mercury			U		ND	mg/L				08/15/23	12:01
QC1205487212	632954001	MS									
Mercury	0.00200	U	ND		0.00200	mg/L	100	(75%-125%)		08/15/23	12:29
QC1205487213	632954001	SDILT									
Mercury		U	ND	U	ND	ug/L	N/A	(0%-10%)		08/15/23	12:30
Nutrient Analysis											
Batch	2475768										
QC1205487034	633126010	DUP									
Nitrogen, Nitrate/Nitrite			0.0715		0.0710	mg/L	0.702 ^	(+/-0.0200)	AXH3	08/14/23	08:00
QC1205487031	LCS										
Nitrogen, Nitrate/Nitrite	1.00				1.01	mg/L	101	(90%-110%)		08/14/23	07:39
QC1205487030	MB										
Nitrogen, Nitrate/Nitrite			U		ND	mg/L				08/14/23	07:38
QC1205487035	633126010	PS									
Nitrogen, Nitrate/Nitrite	1.00		0.0715		0.855	mg/L	78.4*	(90%-110%)		08/14/23	08:01
Solids Analysis											
Batch	2477178										
QC1205489455	633255002	DUP									
Total Dissolved Solids			136		137	mg/L	0.733	(0%-5%)	CH6	08/16/23	15:58

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QC Summary

Workorder: 633126

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Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Solids Analysis											
Batch	2477178										
QC1205489454	LCS										
Total Dissolved Solids	300			301	mg/L		100	(95%-105%)	CH6	08/16/23	15:58
QC1205489453	MB										
Total Dissolved Solids			U	ND	mg/L					08/16/23	15:58
Titration and Ion Analysis											
Batch	2476209										
QC1205487866	633099001 DUP										
Alkalinity, Total as CaCO3		52.6		52.7	mg/L	0.19		(0%-20%)	JW2	08/14/23	15:56
Bicarbonate alkalinity (CaCO3)		52.6		52.7	mg/L	0.19		(0%-20%)			
Carbonate alkalinity (CaCO3)	U	ND	U	ND	mg/L	N/A					
QC1205487868	633099016 DUP										
Alkalinity, Total as CaCO3		259		259	mg/L	0.154		(0%-20%)		08/14/23	16:35
Bicarbonate alkalinity (CaCO3)		259		259	mg/L	0.154		(0%-20%)			
Carbonate alkalinity (CaCO3)	U	ND	U	ND	mg/L	N/A					
QC1205487865	LCS										
Alkalinity, Total as CaCO3	50.0			50.6	mg/L		101	(90%-110%)		08/14/23	15:48
QC1205487867	633099001 MS										
Alkalinity, Total as CaCO3	50.0	52.6		104	mg/L		103	(80%-120%)		08/14/23	15:57
QC1205487869	633099016 MS										
Alkalinity, Total as CaCO3	50.0	259		311	mg/L		N/A	(80%-120%)		08/14/23	16:38

Notes:

The Qualifiers in this report are defined as follows:

U Analyte was analyzed for, but not detected above the MDL, MDA, MDC or LOD.

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QC Summary

Workorder: 633126

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Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
J											
X											
N											
H											
<											
>											
h											
R											
Z											
d											
^											
N/A											
ND											
E											
NJ											
E											
Q											
FB											
N1											
Y											
R											
B											
e											
J											

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 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.

* 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: August 21, 2023

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

Contact: Joju Abraham

Workorder: 632699

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Ion Chromatography											
Batch	2473965										
QC1205483950	632604002	DUP									
Chloride		1.97		1.96	mg/L	0.311		(0%-20%)	LXA2	08/10/23	03:33
Fluoride		0.229		0.229	mg/L	0.0437	^	(+/-0.100)			
Sulfate		2.17		2.16	mg/L	0.481		(0%-20%)			
QC1205483949	LCS										
Chloride	5.00			4.87	mg/L			97.5 (90%-110%)		08/09/23	16:34
Fluoride	2.50			2.62	mg/L			105 (90%-110%)			
Sulfate	10.0			9.91	mg/L			99.1 (90%-110%)			
QC1205483948	MB										
Chloride			U	ND	mg/L					08/09/23	16:04
Fluoride			U	ND	mg/L						
Sulfate			U	ND	mg/L						
QC1205483951	632604002	PS									
Chloride	5.00	1.97		7.21	mg/L			105 (90%-110%)		08/10/23	05:06
Fluoride	2.50	0.229		2.95	mg/L			109 (90%-110%)			
Sulfate	10.0	2.17		12.3	mg/L			102 (90%-110%)			

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QC Summary

Workorder: 632699

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Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Metals Analysis - ICPMS											
Batch	2474005										
QC1205484018	LCS										
Aluminum	2.00			1.92	mg/L		95.8	(80%-120%)	PRB	08/19/23	03:09
Antimony	0.0500			0.0466	mg/L		93.1	(80%-120%)			
Arsenic	0.0500			0.0482	mg/L		96.4	(80%-120%)			
Barium	0.0500			0.0542	mg/L		108	(80%-120%)			
Beryllium	0.0500			0.0493	mg/L		98.6	(80%-120%)			
Boron	0.100			0.0965	mg/L		96.5	(80%-120%)			
Cadmium	0.0500			0.0488	mg/L		97.6	(80%-120%)			
Calcium	2.00			2.08	mg/L		104	(80%-120%)			
Chromium	0.0500			0.0472	mg/L		94.4	(80%-120%)			
Cobalt	0.0500			0.0471	mg/L		94.3	(80%-120%)			
Iron	2.00			1.83	mg/L		91.7	(80%-120%)			
Lead	0.0500			0.0492	mg/L		98.4	(80%-120%)			
Lithium	0.0500			0.0464	mg/L		92.8	(80%-120%)			
Magnesium	2.00			1.94	mg/L		97	(80%-120%)			
Manganese	0.0500			0.0468	mg/L		93.6	(80%-120%)			

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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	2474005										
Molybdenum	0.0500			0.0495	mg/L		99	(80%-120%)	PRB	08/19/23	03:09
Potassium	2.00			2.00	mg/L		99.8	(80%-120%)			
Selenium	0.0500			0.0488	mg/L		97.6	(80%-120%)			
Silver	0.0500			0.0494	mg/L		98.8	(80%-120%)			
Sodium	2.00			1.93	mg/L		96.3	(80%-120%)			
Thallium	0.0500			0.0485	mg/L		96.9	(80%-120%)			
QC1205484017	MB										
Aluminum			U	ND	mg/L					08/19/23	03:05
Antimony			U	ND	mg/L						
Arsenic			U	ND	mg/L						
Barium			U	ND	mg/L						
Beryllium			U	ND	mg/L						
Boron			U	ND	mg/L						
Cadmium			U	ND	mg/L						
Calcium			U	ND	mg/L						
Chromium			U	ND	mg/L						

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Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Metals Analysis - ICPMS											
Batch	2474005										
Cobalt			U	ND	mg/L				PRB	08/19/23	03:05
Iron			U	ND	mg/L						
Lead			U	ND	mg/L						
Lithium			U	ND	mg/L						
Magnesium			U	ND	mg/L						
Manganese			U	ND	mg/L						
Molybdenum			U	ND	mg/L						
Potassium			U	ND	mg/L						
Selenium			U	ND	mg/L						
Silver			U	ND	mg/L						
Sodium			U	ND	mg/L						
Thallium			U	ND	mg/L						
QC1205484019 632699001 MS											
Aluminum	2.00	U	ND	1.90	mg/L		94.8	(75%-125%)		08/19/23	03:16
Antimony	0.0500	U	ND	0.0485	mg/L		97	(75%-125%)			
Arsenic	0.0500	U	ND	0.0483	mg/L		94.6	(75%-125%)			

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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	2474005										
Barium	0.0500	0.0337		0.0860	mg/L		105	(75%-125%)	PRB	08/19/23	03:16
Beryllium	0.0500	U	ND	0.0503	mg/L		101	(75%-125%)			
Boron	0.100	0.0199		0.115	mg/L		95.4	(75%-125%)			
Cadmium	0.0500	U	ND	0.0494	mg/L		98.7	(75%-125%)			
Calcium	2.00	8.51		10.4	mg/L		N/A	(75%-125%)			
Chromium	0.0500	U	ND	0.0491	mg/L		95.6	(75%-125%)			
Cobalt	0.0500	U	ND	0.0473	mg/L		94.5	(75%-125%)			
Iron	2.00	U	ND	1.84	mg/L		91.8	(75%-125%)			
Lead	0.0500	U	ND	0.0489	mg/L		97.9	(75%-125%)			
Lithium	0.0500	J	0.00382	0.0508	mg/L		93.9	(75%-125%)			
Magnesium	2.00	3.36		5.23	mg/L		93.4	(75%-125%)			
Manganese	0.0500	U	ND	0.0478	mg/L		95.6	(75%-125%)			
Molybdenum	0.0500	J	0.000421	0.0511	mg/L		101	(75%-125%)			
Potassium	2.00	2.08		4.03	mg/L		97.4	(75%-125%)			
Selenium	0.0500	U	ND	0.0495	mg/L		98.3	(75%-125%)			

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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	2474005										
Silver	0.0500	U	ND	0.0497	mg/L		99.3	(75%-125%)	PRB	08/19/23	03:16
Sodium	2.00		9.51	11.3	mg/L		N/A	(75%-125%)			
Thallium	0.0500	U	ND	0.0474	mg/L		94.7	(75%-125%)			
QC1205484020	632699001	MSD									
Aluminum	2.00	U	ND	1.88	mg/L	0.976	93.9	(0%-20%)		08/19/23	03:20
Antimony	0.0500	U	ND	0.0482	mg/L	0.707	96.3	(0%-20%)			
Arsenic	0.0500	U	ND	0.0490	mg/L	1.39	96	(0%-20%)			
Barium	0.0500		0.0337	0.0864	mg/L	0.392	105	(0%-20%)			
Beryllium	0.0500	U	ND	0.0510	mg/L	1.31	102	(0%-20%)			
Boron	0.100		0.0199	0.117	mg/L	1.5	97.2	(0%-20%)			
Cadmium	0.0500	U	ND	0.0481	mg/L	2.66	96.1	(0%-20%)			
Calcium	2.00		8.51	10.3	mg/L	0.681	N/A	(0%-20%)			
Chromium	0.0500	U	ND	0.0485	mg/L	1.1	94.6	(0%-20%)			
Cobalt	0.0500	U	ND	0.0479	mg/L	1.16	95.6	(0%-20%)			
Iron	2.00	U	ND	1.85	mg/L	0.502	92.3	(0%-20%)			
Lead	0.0500	U	ND	0.0486	mg/L	0.749	97.1	(0%-20%)			

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Parname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Metals Analysis - ICPMS											
Batch	2474005										
Lithium	0.0500	J	0.00382	0.0510	mg/L	0.45	94.4	(0%-20%)	PRB	08/19/23	03:20
Magnesium	2.00		3.36	5.17	mg/L	1.16	90.4	(0%-20%)			
Manganese	0.0500	U	ND	0.0475	mg/L	0.646	95	(0%-20%)			
Molybdenum	0.0500	J	0.000421	0.0512	mg/L	0.186	102	(0%-20%)			
Potassium	2.00		2.08	3.99	mg/L	0.917	95.6	(0%-20%)			
Selenium	0.0500	U	ND	0.0505	mg/L	1.95	100	(0%-20%)			
Silver	0.0500	U	ND	0.0495	mg/L	0.347	99	(0%-20%)			
Sodium	2.00		9.51	11.2	mg/L	0.99	N/A	(0%-20%)			
Thallium	0.0500	U	ND	0.0478	mg/L	0.879	95.5	(0%-20%)			
QC1205484021 632699001 SDILT											
Aluminum		U	ND	U	ND	ug/L	N/A	(0%-20%)		08/19/23	03:27
Antimony		U	ND	U	ND	ug/L	N/A	(0%-20%)			
Arsenic		U	ND	U	ND	ug/L	N/A	(0%-20%)			
Barium			33.7	6.29	ug/L	6.57		(0%-20%)			
Beryllium		U	ND	U	ND	ug/L	N/A	(0%-20%)			
Boron			19.9	U	ND	ug/L	N/A	(0%-20%)			

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Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Metals Analysis - ICPMS											
Batch	2474005										
Cadmium	U	ND	U	ND	ug/L	N/A		(0%-20%)	PRB	08/19/23	03:27
Calcium		8510		1720	ug/L	.997		(0%-20%)			
Chromium	U	ND	U	ND	ug/L	N/A		(0%-20%)			
Cobalt	U	ND	U	ND	ug/L	N/A		(0%-20%)			
Iron	U	ND	U	ND	ug/L	N/A		(0%-20%)			
Lead	U	ND	U	ND	ug/L	N/A		(0%-20%)			
Lithium	J	3.82	U	ND	ug/L	N/A		(0%-20%)			
Magnesium		3360		663	ug/L	1.22		(0%-20%)			
Manganese	U	ND	U	ND	ug/L	N/A		(0%-20%)			
Molybdenum	J	0.421	U	ND	ug/L	N/A		(0%-20%)			
Potassium		2080		395	ug/L	5.08		(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		9510		1890	ug/L	.846		(0%-20%)			
Thallium	U	ND	U	ND	ug/L	N/A		(0%-20%)			

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Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Metals Analysis-Mercury											
Batch 2474015											
QC1205484047	632582001	DUP									
Mercury		U	ND	U	ND	mg/L	N/A		JP2	08/11/23	09:58
QC1205484046	LCS										
Mercury	0.00200				0.00199	mg/L	99.6	(80%-120%)		08/11/23	09:52
QC1205484045	MB										
Mercury			U		ND	mg/L				08/11/23	09:50
QC1205484048	632582001	MS									
Mercury	0.00200	U	ND		0.00195	mg/L	97.3	(75%-125%)		08/11/23	10:00
QC1205484049	632582001	SDILT									
Mercury		U	ND	U	ND	ug/L	N/A	(0%-10%)		08/11/23	10:02
Nutrient Analysis											
Batch 2473982											
QC1205485196	632699001	DUP									
Nitrogen, Nitrate/Nitrite			1.83		1.79	mg/L	1.94	(0%-20%)	AXH3	08/11/23	11:36
QC1205483979	LCS										
Nitrogen, Nitrate/Nitrite	1.00				1.03	mg/L	103	(90%-110%)		08/11/23	11:23
QC1205483978	MB										
Nitrogen, Nitrate/Nitrite			U		ND	mg/L				08/11/23	11:22
QC1205485195	632699001	PS									
Nitrogen, Nitrate/Nitrite	1.00		0.365		1.34	mg/L	97.5	(90%-110%)		08/11/23	11:37
Solids Analysis											
Batch 2474115											
QC1205484191	632609002	DUP									
Total Dissolved Solids			266		263	mg/L	1.13	(0%-5%)	CH6	08/10/23	14:35

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Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Solids Analysis											
Batch	2474115										
QC1205484188	LCS										
Total Dissolved Solids	300			303	mg/L		101	(95%-105%)	CH6	08/10/23	14:35
QC1205484187	MB										
Total Dissolved Solids			U	ND	mg/L					08/10/23	14:35
Titration and Ion Analysis											
Batch	2474137										
QC1205484237	632699001 DUP										
Alkalinity, Total as CaCO3		37.0		36.8	mg/L	0.542		(0%-20%)	HH2	08/11/23	09:58
Bicarbonate alkalinity (CaCO3)		37.0		36.8	mg/L	0.542		(0%-20%)			
Carbonate alkalinity (CaCO3)	U		ND	U	ND	mg/L	N/A				
QC1205484236	LCS										
Alkalinity, Total as CaCO3	50.0			52.4	mg/L		105	(90%-110%)		08/11/23	09:54
QC1205484238	632699001 MS										
Alkalinity, Total as CaCO3	50.0	37.0		87.6	mg/L		101	(80%-120%)		08/11/23	10:00

Notes:

The Qualifiers in this report are defined as follows:

- U Analyte was analyzed for, but not detected above the MDL, MDA, MDC or LOD.
- J Value is estimated
- X Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
- N Metals--The Matrix spike sample recovery is not within specified control limits
- H Analytical holding time was exceeded
- < Result is less than value reported
- > Result is greater than value reported
- h Preparation or preservation holding time was exceeded
- R Sample results are rejected
- Z Paint Filter Test--Particulates passed through the filter, however no free liquids were observed.
- d 5-day BOD--The 2:1 depletion requirement was not met for this sample

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Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
^											
N/A											
ND											
E											
NJ											
E											
Q											
FB											
N1											
Y											
R											
B											
e											
J											

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 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.

* 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 #: 632699**

Metals

Product: Determination of Metals by ICP-MS

Analytical Method: SW846 3005A/6020B

Analytical Procedure: GL-MA-E-014 REV# 36

Analytical Batch: 2474005

Preparation Method: SW846 3005A

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

Preparation Batch: 2474004

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

<u>GEL Sample ID#</u>	<u>Client Sample Identification</u>
632699001	ARK-ARGWA-19
632699002	ARK-AP2-FD-01
632699003	ARK-ARGWC-22
632699004	ARK-ARAMW-7
632699005	ARK-AP2-FB-01
632699006	ARK-ARAMW-9
632699007	ARK-ARAMW-2
632699008	ARK-ARAMW-1
632699009	ARK-ARGWC-23
1205484017	Method Blank (MB)ICP-MS
1205484018	Laboratory Control Sample (LCS)
1205484021	632699001(ARK-ARGWA-19L) Serial Dilution (SD)
1205484019	632699001(ARK-ARGWA-19S) Matrix Spike (MS)
1205484020	632699001(ARK-ARGWA-19SD) 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 6020B met the advisory control limits with the exception of magnesium and 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 632699003 (ARK-ARGWC-22), 632699004 (ARK-ARAMW-7), 632699006 (ARK-ARAMW-9), 632699007 (ARK-ARAMW-2), 632699008 (ARK-ARAMW-1) and 632699009 (ARK-ARGWC-23) were diluted to ensure that the analyte concentrations were within the linear calibration range of the instrument.

Analyte	632699					
	003	004	006	007	008	009
Boron	20X	20X	1X	20X	20X	10X
Calcium	20X	20X	10X	20X	20X	10X
Magnesium	20X	20X	1X	1X	1X	1X
Manganese	20X	20X	1X	1X	1X	1X
Sodium	1X	1X	10X	1X	1X	1X

Product: Mercury Analysis Using the Perkin Elmer Automated Mercury Analyzer

Analytical Method: SW846 7470A

Analytical Procedure: GL-MA-E-010 REV# 39

Analytical Batch: 2474015

Preparation Method: SW846 7470A Prep

Preparation Procedure: GL-MA-E-010 REV# 39

Preparation Batch: 2474012

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

<u>GEL Sample ID#</u>	<u>Client Sample Identification</u>
632699001	ARK-ARGWA-19
632699002	ARK-AP2-FD-01
632699003	ARK-ARGWC-22
632699004	ARK-ARAMW-7
632699005	ARK-AP2-FB-01
632699006	ARK-ARAMW-9
632699007	ARK-ARAMW-2
632699008	ARK-ARAMW-1
632699009	ARK-ARGWC-23
1205484045	Method Blank (MB)CVAA
1205484046	Laboratory Control Sample (LCS)
1205484049	632582001(NonSDGL) Serial Dilution (SD)
1205484047	632582001(NonSDGD) Sample Duplicate (DUP)
1205484048	632582001(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# 32

Analytical Batch: 2473965

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

<u>GEL Sample ID#</u>	<u>Client Sample Identification</u>
632699001	ARK-ARGWA-19
632699002	ARK-AP2-FD-01
632699003	ARK-ARGWC-22
632699004	ARK-ARAMW-7
632699005	ARK-AP2-FB-01
632699006	ARK-ARAMW-9
632699007	ARK-ARAMW-2
632699008	ARK-ARAMW-1
632699009	ARK-ARGWC-23
1205483948	Method Blank (MB)
1205483949	Laboratory Control Sample (LCS)
1205483950	632604002(NonSDG) Sample Duplicate (DUP)
1205483951	632604002(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 632699003 (ARK-ARGWC-22), 632699004 (ARK-ARAMW-7), 632699006 (ARK-ARAMW-9), 632699007 (ARK-ARAMW-2), 632699008 (ARK-ARAMW-1) and 632699009 (ARK-ARGWC-23) were diluted because target analyte concentrations exceeded the calibration range. Sample 632699003 (ARK-ARGWC-22) was diluted to minimize matrix effects on instrument performance. Sample 632699003 (ARK-ARGWC-22) was diluted based on historical data. 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	632699					
	003	004	006	007	008	009
Chloride	10X	1X	50X	1X	1X	1X
Fluoride	2X	1X	1X	1X	1X	1X
Sulfate	100X	100X	50X	50X	50X	5X

Product: Nitrate/Nitrite Cad Redux Low Level

Analytical Method: EPA 353.2 Low Level

Analytical Procedure: GL-GC-E-128 REV# 11

Analytical Batch: 2473982

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

<u>GEL Sample ID#</u>	<u>Client Sample Identification</u>
632699001	ARK-ARGWA-19
632699002	ARK-AP2-FD-01
632699003	ARK-ARGWC-22
632699004	ARK-ARAMW-7
632699005	ARK-AP2-FB-01
632699006	ARK-ARAMW-9
632699007	ARK-ARAMW-2
632699008	ARK-ARAMW-1
632699009	ARK-ARGWC-23
1205483978	Method Blank (MB)
1205483979	Laboratory Control Sample (LCS)
1205485195	632699001(ARK-ARGWA-19) Post Spike (PS)
1205485196	632699001(ARK-ARGWA-19) Sample Duplicate (DUP)

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 1205485195 (ARK-ARGWA-19PS), 1205485196 (ARK-ARGWA-19DUP), 632699001 (ARK-ARGWA-19), 632699002 (ARK-AP2-FD-01) and 632699009 (ARK-ARGWC-23) 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	632699		
	001	002	009
Nitrogen, Nitrate/Nitrite	5X	5X	5X

Sample Re-analysis

Samples 632699008 (ARK-ARAMW-1) and 632699009 (ARK-ARGWC-23) were re-analyzed due to instrument failure. The results from the reanalysis are reported.

Product: Solids, Total Dissolved

Analytical Method: SM 2540C

Analytical Procedure: GL-GC-E-001 REV# 21

Analytical Batch: 2474115

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

<u>GEL Sample ID#</u>	<u>Client Sample Identification</u>
632699001	ARK-ARGWA-19
632699002	ARK-AP2-FD-01
632699003	ARK-ARGWC-22
632699004	ARK-ARAMW-7
632699005	ARK-AP2-FB-01
632699006	ARK-ARAMW-9
632699007	ARK-ARAMW-2
632699008	ARK-ARAMW-1
632699009	ARK-ARGWC-23
1205484187	Method Blank (MB)
1205484188	Laboratory Control Sample (LCS)
1205484191	632609002(NonSDG) Sample Duplicate (DUP)

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

A reduced aliquot was used due to matrix interference. 632699003 (ARK-ARGWC-22), 632699004 (ARK-ARAMW-7) and 632699006 (ARK-ARAMW-9).

Product: Alkalinity

Analytical Method: SM 2320B

Analytical Procedure: GL-GC-E-033 REV# 15

Analytical Batch: 2474137

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

<u>GEL Sample ID#</u>	<u>Client Sample Identification</u>
632699001	ARK-ARGWA-19
632699003	ARK-ARGWC-22
632699004	ARK-ARAMW-7
632699006	ARK-ARAMW-9
632699007	ARK-ARAMW-2
632699008	ARK-ARAMW-1
632699009	ARK-ARGWC-23
1205484236	Laboratory Control Sample (LCS)
1205484237	632699001(ARK-ARGWA-19) Sample Duplicate (DUP)
1205484238	632699001(ARK-ARGWA-19) 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 #: 633126**

Metals

Product: Determination of Metals by ICP-MS

Analytical Method: SW846 3005A/6020B

Analytical Procedure: GL-MA-E-014 REV# 36

Analytical Batch: 2475579

Preparation Method: SW846 3005A

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

Preparation Batch: 2475578

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

<u>GEL Sample ID#</u>	<u>Client Sample Identification</u>
633126001	ARK-ARGWC-21
633126002	ARK-AP2-EB-01
633126003	ARK-ARAMW-8
633126004	ARK-ARGWA-20
633126005	ARK-STNTW-22
1205486561	Method Blank (MB) ICP-MS
1205486562	Laboratory Control Sample (LCS)
1205486565	633126001(ARK-ARGWC-21L) Serial Dilution (SD)
1205486563	633126001(ARK-ARGWC-21S) Matrix Spike (MS)
1205486564	633126001(ARK-ARGWC-21SD) 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 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 633126001 (ARK-ARGWC-21),

633126003 (ARK-ARAMW-8) and 633126005 (ARK-STNTW-22) were diluted to ensure that the analyte concentrations were within the linear calibration range of the instrument.

Analyte	633126		
	001	003	005
Boron	10X	10X	100X
Calcium	10X	10X	10X
Manganese	1X	1X	100X

Product: Mercury Analysis Using the Perkin Elmer Automated Mercury Analyzer

Analytical Method: SW846 7470A

Analytical Procedure: GL-MA-E-010 REV# 39

Analytical Batch: 2475854

Preparation Method: SW846 7470A Prep

Preparation Procedure: GL-MA-E-010 REV# 39

Preparation Batch: 2475853

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

<u>GEL Sample ID#</u>	<u>Client Sample Identification</u>
633126001	ARK-ARGWC-21
633126002	ARK-AP2-EB-01
633126003	ARK-ARAMW-8
633126004	ARK-ARGWA-20
633126005	ARK-STNTW-22
1205487203	Method Blank (MB)CVAA
1205487204	Laboratory Control Sample (LCS)
1205487213	632954001(NonSDGL) Serial Dilution (SD)
1205487211	632954001(NonSDGD) Sample Duplicate (DUP)
1205487212	632954001(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# 32

Analytical Batch: 2475685

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

<u>GEL Sample ID#</u>	<u>Client Sample Identification</u>
633126001	ARK-ARGWC-21
633126002	ARK-AP2-EB-01
633126003	ARK-ARAMW-8
633126004	ARK-ARGWA-20
633126005	ARK-STNTW-22
1205486795	Method Blank (MB)
1205486796	Laboratory Control Sample (LCS)
1205486797	632744003(NonSDG) Sample Duplicate (DUP)
1205486798	632744003(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 1205486797 (Non SDG 632744003DUP), 1205486798 (Non SDG 632744003PS), 633126001 (ARK-ARGWC-21), 633126003 (ARK-ARAMW-8) and 633126005 (ARK-STNTW-22) 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	633126		
	001	003	005
Sulfate	25X	10X	100X

Product: Nitrate/Nitrite Cad Redux Low Level

Analytical Method: EPA 353.2 Low Level

Analytical Procedure: GL-GC-E-128 REV# 11

Analytical Batch: 2475768

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

<u>GEL Sample ID#</u>	<u>Client Sample Identification</u>
633126006	ARK-ARGWC-21
633126007	ARK-AP2-EB-01
633126008	ARK-ARAMW-8
633126009	ARK-ARGWA-20
633126010	ARK-STNTW-22
1205487030	Method Blank (MB)
1205487031	Laboratory Control Sample (LCS)
1205487034	633126010(ARK-STNTW-22) Sample Duplicate (DUP)
1205487035	633126010(ARK-STNTW-22) 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
Nitrogen, Nitrate/Nitrite	1205487035 (ARK-STNTW-22PS)	78.4* (90%-110%)

Product: Solids, Total Dissolved

Analytical Method: SM 2540C

Analytical Procedure: GL-GC-E-001 REV# 21

Analytical Batch: 2477178

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

<u>GEL Sample ID#</u>	<u>Client Sample Identification</u>
633126001	ARK-ARGWC-21
633126002	ARK-AP2-EB-01
633126003	ARK-ARAMW-8
633126004	ARK-ARGWA-20
1205489453	Method Blank (MB)
1205489454	Laboratory Control Sample (LCS)
1205489455	633255002(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# 15

Analytical Batch: 2476209

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

<u>GEL Sample ID#</u>	<u>Client Sample Identification</u>
633126001	ARK-ARGWC-21
633126003	ARK-ARAMW-8
633126004	ARK-ARGWA-20
633126005	ARK-STNTW-22
1205487865	Laboratory Control Sample (LCS)
1205487866	633099001(ARK-ARGWC-24) Sample Duplicate (DUP)
1205487867	633099001(ARK-ARGWC-24) Matrix Spike (MS)
1205487868	633099016(ARK-ARGWA-14) Sample Duplicate (DUP)
1205487869	633099016(ARK-ARGWA-14) 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.

Sample ID	*Date Collected (mm-dd-yy)	*Time Collected (Military) (hhmm)	QC Code (3)	Field Filtered (5)	Sample Matrix (6)	Should this sample be considered: Yes, please supply isotopic info.)	Radiative (if possible Hazards (7) Known or	Sample Analysis Requested (8) (Fill in the number of containers for each test)										Comments (task_code: ARK-CCR-ASSMT-2023S1)					
								Ag (App. I) (6020B)	Meals App. III (6020B)	Alkalinity (300.0 R2.1) TDS (SM Method 2540C)	Anions (Cl, F, Sulfate) (300.0 Rev. 2.1 1993)	Metals App. IV (6020B)	RAID 226-228 Cmbd	F2+ / Mn2+ (EPA Method 6020B) (Field Filtered)	Mercury (7470B)	Metals Al, K, Mg, Na, Fe, Mn (6020B)	NI		NI	NI	NI	Preservative Type (6)	
ARK-ARGWC-21	08-09-23	1035	N	Y	WG			9	X	X	X	X	X	X	X	X	X	X	X	X	X	X	See Nitrate/Nitrite COC for their times
ARK-AP2-EB-01	08-09-23	1110	FB	N	WQ			7	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
ARK-ARAMW-8	08-09-23	1115	N	Y	WG			9	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
ARK-ARGWA-20	08-10-23	0925	N	Y	WG			10	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
ARK-STINTW-22	08-10-23	1255	N	Y	WG			6	X	X	X	X	X	X	X	X	X	X	X	X	X	X	Add. anion collected at 0825 8/11/23

Chain of Custody Signatures

Relinquished By (Signed)	Print Name	Date	Received by (signed)	Print Name	Date
<i>John Myer</i>	John Myer	8/11/23	<i>Anthony Ward</i>	Anthony Ward	8/11/23
<i>Erin Trent</i>	Erin Trent	8/11/23	<i>Erin Trent</i>	Erin Trent	8/11/23

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=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**

Characteristics Hazards	Listed Waste	Other
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:

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

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.)

Originally Nitrate by N were originally collected in unpreserved bottles; Later preserved Nitrate/Nitrite bottles were sent and collected from wells on 8/10/2023

SAMPLE RECEIPT & REVIEW FORM

632702
632699

Client: <u>GPCC</u>		SDG/AR/COC/Work Order: <u>632-699, 632-702</u>			
Received By: <u>EG</u>		Date Received: <u>8/9/23 1245</u>			
Carrier and Tracking Number		Circle Applicable: FedEx Express FedEx Ground UPS Field Services Courier <u>Other</u>			
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): <u>6</u> <u>0</u> 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 ≤ deg. C)?*	<input checked="" type="checkbox"/>	<input 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>5</u>
4	Daily check performed and passed on IR temperature gun?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Temperature Device Serial #: <u>IR5-23</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: <u>nitrate containers preserved with sulfuric</u> If Preservation added, Lot#: <u>3858525-A</u>
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 AT Date 8/10/23 Page 1 of 1

Page: 1 of 1
 Project # 175569434
 GEL Quote #:
 COC Number (1): 3 Coolers
 PO Number:

GEL Laboratories LLC
 Chemistry | Radiochemistry | Radioassay | Specialty Analytics
Chain of Custody and Analytical Request
GEL Work Order Number: _____ **GEL Project Manager:** Erin Trent

GEL Laboratories, LLC
 2040 Savage Road
 Charleston, SC 29407
 Phone: (843) 556-8171
 Fax: (843) 766-1178

Client Name: Georgia Power Phone # (937-344-6533)

Project/Site Name: Plant Arkwright Ash Pond 2 Fax: _____

Address: 241 Ralph McGill Blvd SE, Atlanta, GA 30308

Collected By: John Myer, Dylan Quintal, Houston Lynn
 Send Results To: jabrabam@southernco.com EDD@stantec.com edgar.smith@stantec.com

Sample Analysis Requested (5) (Fill in the number of containers for each test)

Should this sample be considered:	Total number of containers	NI	NI			NI	NI	NI	NI	NI		NI	NI	← Preservative Type (6)
		Ag (App. I) (6020B)	Metals App. III (6020B)	Alkalinity (300.0 R2.1)	TDS (SM Method 2540C)	Anions (Cl, F, Sulfate) (300.0 Rev. 2.1 1993)	Metals App. IV (6020B)	RAD 226-228 Cmbd	Fe2+ / Mn2+ (EPA Method 6020B) (Field Filtered)	Nitrate as N (EPA Method 353.2)	Mercury (7470B)	Metals Al, K, Mg, Na, Fe, Mn (6020B)		
	9	X	X	X	X	X	X	X	X	X	X	X	X	
	7		X		X	X	X		X	X		X	X	
	9	X	X	X	X	X	X	X	X	X	X	X	X	
	9	X	X	X	X	X	X	X	X	X	X	X	X	
	7		X		X	X	X		X	X		X	X	
	9	X	X	X	X	X	X	X	X	X	X	X	X	
	9	X	X	X	X	X	X	X	X	X	X	X	X	
	9	X	X	X	X	X	X	X	X	X	X	X	X	
	9	X	X	X	X	X	X	X	X	X	X	X	X	

Comments
 (task code: ARK-CCR-ASSMT-2023S~~X~~)
 A.S. 8/15/23 2

Sample ID	Date Collected (mm-dd-yy)	Time Collected (Military) (hhmm)	QC Code (2)	Field Filtered (3)	Sample Matrix (4)	Radioreactive (if yes, please supply isotopic info.)	(7) Known or possible hazards
ARK-ARGWA-19	08-08-23	1015	N	Y	WG		
ARK-AP2-FD-01	08-08-23	NA	FD	N	WQ		
ARK-ARGWC-22	08-08-23	0955	N	Y	WG		
ARK-ARAMW-7	08-08-23	1150	N	Y	WG		
ARK-AP2-FB-01	08-08-23	1230	FB	N	WQ		
ARK-ARAMW-9	08-08-23	1235	N	Y	WG		
ARK-ARAMW-2	08-08-23	1505	N	Y	WG		
ARK-ARAMW-1	08-08-23	1600	N	Y	WG		
ARK-ARGWC-23	08-08-23	1655	N	Y	WG		

Chain of Custody Signatures

TAT Requested: Normal: _____ Rush: _____ Specify: _____ (Subject to Surcharge)

Relinquished By (Signed)	Print Name	Date	Received by (signed)	Print Name	Date
1	Zachary Myer	8/19/23	1	[Signature]	8/19/23 8:27
2			2		
3			3		

Fax Results: [] Yes [X] No
 Select Deliverable: [] C of A [] QC Summary [] Level 1 [X] Level 2 [] Level 3 [] Level 4
 Additional Remarks:
 For Lab Receiving Use Only: Custody Seal Intact? [] Yes [] No Cooler Temp: _____ °C

> For sample shipping and delivery details, see Sample Receipt & Review form (SRR) Sample Collection Time Zone: [X] Eastern [] Pacific [] Central [] Mountain [] Other.

- 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=Focal, 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, SB = Sodium Hydroxide, SA = Sulfuric Acid, AA = Ascorbic Acid, HX = Hexane, ST = Sodium Thiosulfate, If no preservative is added = leave field blank

KNOWN OR POSSIBLE HAZARDS	Characteristic Hazards	Listed Waste	Other
RCRA Metals As = Arsenic Ba = Barium Cd = Cadmium Cr = Chromium Pb = Lead	Hg = Mercury Se = Selenium Ag = Silver MR = Misc. RCRA metals	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:
	TSCA Regulated PCB = Polychlorinated biphenyls		

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.)

Page: 1 of 1
 Project # 175569434
 GEL Quote #:
 QC Number (1): 3 Coolers
 PO Number:

GEL Laboratories LLC
 Chemistry | Radiochemistry | Radiobioassay | Specialty Analytics
 Cooler 2 of 3
Chain of Custody and Analytical Request
 GEL Work Order Number:
 GEL Project Manager: Erin Trent

GEL Laboratories, LLC
 2040 Savage Road
 Charleston, SC 29407
 Phone: (843) 556-8171
 Fax: (843) 766-1178

Client Name: Georgia Power Phone # (937-344-6533)
 Project/Site Name: Plant Arkwright Ash Pond 2 Fax:
 Address: 241 Ralph McGill Blvd SE, Atlanta, GA 30308

Collected By: John Myer, Dylan Quintal, Houston Lynn
 Send Results To: jabraham@southernco.com EDD@stantec.com
 edgar.smith@stantec.com

Sample ID <i>* For composites - indicate start and stop date/time</i>	*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.)	(7) Known or possible Hazards	Total number of containers	Sample Analysis Requested (5) (Fill in the number of containers for each test)												Comments (task_code: ARK-CCR-ASSMT-2023S) 2 A.S. 8/15/23	
									Ag (App. I) (6020B)	Metals App. III (6020B)	Alkalinity (300.0 R2.1)	TDS (SM Method 2540C)	Anions (Cl, F, Sulfate) (300.0 Rev. 2.1 1993)	Metals App. IV (6020B)	RAD 226-228 Combd	Pb2+ / Mn2+ (EPA Method 6020B) (Field Filtered)	Nitrate as N (EPA Method 353.2)	Mercury (7470B)	Metals Al, K, Mg, Na, Fe, Mn (6020B)	Preservative Type (6)		
ARK-ARGWA-19	08-08-23	1015	N	Y	WG			9	X	X	X	X	X	X	X	X	X	X	X	X	X	
ARK-AP2-FD-01	08-08-23	NA	FD	N	WQ			7		X		X	X	X	X		X	X				
ARK-ARGWC-22	08-08-23	0955	N	Y	WG			9	X	X	X	X	X	X	X	X	X	X	X	X	X	
ARK-ARAMW-7	08-08-23	1150	N	Y	WG			9	X	X	X	X	X	X	X	X	X	X	X	X	X	
ARK-AP2-FB-01	08-08-23	1230	FB	N	WQ			7		X		X	X	X	X		X	X				
ARK-ARAMW-9	08-08-23	1235	N	Y	WG			9	X	X	X	X	X	X	X	X	X	X	X	X	X	
ARK-ARAMW-2	08-08-23	1505	N	Y	WG			9	X	X	X	X	X	X	X	X	X	X	X	X	X	
ARK-ARAMW-1	08-08-23	1600	N	Y	WG			9	X	X	X	X	X	X	X	X	X	X	X	X	X	
ARK-ARGWC-23	08-08-23	1655	N	Y	WG			9	X	X	X	X	X	X	X	X	X	X	X	X	X	

Chain of Custody Signatures TAT Requested: Normal: ___ Rush: ___ Specify: ___ (Subject to Surcharge)

Relinquished By (Signed)	Print Name	Date	Received by (signed)	Print Name	Date
<i>[Signature]</i>	Zach Lory	8/19/23	<i>[Signature]</i>	Erin Trent	8/19/23 8:28
2			2		
3			3		

Fax Results: [] Yes [X] No
 Select Deliverable: [] C of A [] QC Summary [] level 1 [X] 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: [X] 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, SB = Sodium Hydroxide, SA = Sulfuric Acid, AA = Ascorbic Acid, EX = Hexane, ST = Sodium Thiosulfate, If no preservative is added = leave field blank

7) KNOWN OR POSSIBLE HAZARDS	Characteristic Hazards	Listed Waste	Other	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.)
RCRA Metals As = Arsenic Hg = Mercury Ba = Barium Se = Selenium Cd = Cadmium Ag = Silver Cr = Chromium MR = Misc. RCRA metals Pb = Lead	FL = Flammable/Ignitable CO = Corrosive RE = Reactive TSCA Regulated PCB = Polychlorinated biphenyls	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:	

Page: _____ of _____
 Project # 175569434
 GEL Quote #:
 COC Number (1): 3 Coolers
 PO Number:

GEL Laboratories LLC
 Chemistry | Radiochemistry | Radiobioassay | Specialty Analytics
 Cooler 3 of 3
 Chain of Custody and Analytical Request
 GEL Work Order Number: _____ GEL Project Manager: Erin Trent

2040 Savage Road
 Charleston, SC 29407
 Phone: (843) 556-8171
 Fax: (843) 766-1178

Client Name: Georgia Power Phone # (937-344-6533) Sample Analysis Requested (5) (Fill in the number of containers for each test)

Project/Site Name: Plant Arkwright Ash Pond 2 Fax: _____ Should this sample be considered: _____

Address: 241 Ralph McGill Blvd SE, Atlanta, GA 30308
 Collected By: John Myer; Dylan Quintal, Houston Lynn Send Results To: jabraham@southernco.com EDD@stantec.com edgar.smith@stantec.com

Sample ID <i>* For composites - Indicate start and stop date/time</i>	*Date Collected (mm-dd-yy)	*Time Collected (Military (hh:mm))	QC Code (9)	Field Filtered (9)	Sample Matrix (6)	Radioactive (if yes, please supply isotopic info.)	(7) Known or possible hazards	Total number of containers	Ag (App. I) (6020B)	Metals App. III (6020B)	Alkalinity (300.0 R2.1)	TDS (SM Method 2540C)	Anions (Cl, F, Sulfate) (300.0 Rev. 2.1 1993)	Metals App. IV (6020B)	RAD 226-228 Comb	Fe2+ / Mn2+ (EPA Method 6020B) (Field Filtered)	Nitrate as N (EPA Method 353.2)	Mercury (7470B)	Metals Al, K, Mg, Na, Fe, Mn (6020B)	← Preservative Type (6)	Comments (task_code: ARK-CCR-ASSMT-2023S1)2 A.S. 8/15/23
									NI	NI	NI	NI	NI	NI	NI	NI	NI	NI			
ARK-ARGWA-19	08-08-23	1015	N	Y	WG			9	X	X	X	X	X	X	X	X	X	X	X		
ARK-AP2-FD-01	08-08-23	NA	FD	N	WQ			7		X	X	X	X	X	X		X	X			
ARK-ARGWC-22	08-08-23	0955	N	Y	WG			9	X	X	X	X	X	X	X	X	X	X	X		
ARK-ARAMW-7	08-08-23	1150	N	Y	WG			9	X	X	X	X	X	X	X	X	X	X	X		
ARK-AP2-FB-01	08-08-23	1230	FB	N	WQ			7		X	X	X	X	X	X		X	X			
ARK-ARAMW-9	08-08-23	1235	N	Y	WG			9	X	X	X	X	X	X	X	X	X	X	X		
ARK-ARAMW-2	08-08-23	1505	N	Y	WG			9	X	X	X	X	X	X	X	X	X	X	X		
ARK-ARAMW-1	08-08-23	1600	N	Y	WG			9	X	X	X	X	X	X	X	X	X	X	X		
ARK-ARGWC-23	08-08-23	1655	N	Y	WG			9	X	X	X	X	X	X	X	X	X	X	X		

Chain of Custody Signatures TAT Requested: Normal: ___ Rush: ___ Specify: ___ (Subject to Surcharge)

Relinquished By (Signed)	Print Name	Date	Received by (signed)	Print Name	Date	Fax Results: [] Yes [X] No
1 Zachary Levy	Zach Levy	8/19/23	[Signature]	[Signature]	8/19/23 8:20	Select Deliverable: [] C of A [] QC Summary [] Level 1 [X] Level 2 [] Level 3 [] Level 4
2						Additional Remarks:
3						For Lab Receiving Use Only: Custody Seal Intact? [] Yes [] No Cooler Temp: ___ °C

> For sample shipping and delivery details, see Sample Receipt & Review form (SRR.) Sample Collection Time Zone: [X] Eastern [] Pacific [] Central [] Mountain [] Other:

- 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=Fecal, 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 = 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):	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.)
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			

GEL Quote #: 11209439
 COC Number (1): 2 Coolers
 PO Number:
 Client Name: Georgia Power

GEL Laboratories LLC
 Chemistry | Radiochemistry | Radiobiology | Specialty Analytics
Chain of Custody and Analytical Request
 GEL Work Order Number:
 GEL Project Manager: Erin Trent

GEL Laboratories, LLC
 2040 Savage Road
 Charleston, SC 29407
 Phone: (843) 556-8171
 Fax: (843) 766-1178

COOLER
 1 OF 2

Project Site Name: Plant Arkwright Ash Pond 2		Sample Analysis Requested (5) (Fill in the number of containers for each test)										← Preservative Type (6)			
Address: 241 Ralph McGill Blvd SE, Atlanta, GA 30308		Should this sample be considered:	Total number of containers	NI	NI	NI		NI	NI	NI		NI	NI		Comments
Collected By: John Myer, Dylan Quintal, Dylan Ripley, Houston Lynn		Send Results To: jabraham@southernco.com EDD@stantec.com edgar.smith@stantec.com	Radioactive (if yes, please supply isotopic info)	Metal	Alkalinity	TDS	Anions	Metals	RAD	Fe2+ / Mn2+	Mercury	Metals	Na, I, g, Mn		
Sample ID	Date Collected	Time Collected	QC Code	Field Filtered	Sample Matrix										
ARK-ARGWC-21	08-09-23	1035	N	Y	WG	9	X	X	X	X	X	X	X	X	See Nitrate/Nitrite COC for their times
ARK-AP2-EB-01	08-09-23	1110	FB	N	WQ	7	X		X	X	X				
ARK-ARAMW-8	08-09-23	1115	N	Y	WG	9	X	X	X	X	X	X	X	X	
ARK-ARGWA-20	08-10-23	0925	N	Y	WG	10	X	X	X	X	X	X	X	X	
ARK-STNTW-22	08-10-23	1255	N	Y	WG	6	X	X	X	X					Add anion collected at 0825 8/11/23

Chain of Custody Signatures						TAT Requested: Normal: Rush: Specify: (Subject to Surcharge)			
Relinquished By (Signed)	Print Name	Date	Received by (signed)	Print Name	Date	Fax Results	Yes	No	
<i>[Signature]</i>	John Myer	8/11/23	<i>[Signature]</i>	Anthony Ward	8/11/23	Select Deliverable	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Level 1 <input checked="" type="checkbox"/> Level 2 <input type="checkbox"/> Level 3 <input type="checkbox"/> Level 4 <input type="checkbox"/>
						Additional Remarks:			
						For Lab Receiving Use Only: Custody Seal Intact? <input type="checkbox"/> Yes <input type="checkbox"/> No Cooler Temp: °C			

- > For sample shipping and delivery details, see Sample Receipt & Review form (SRR)
- Sample Collection Time Zone: Eastern Pacific Central Mountain Other
- 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=Fecal, 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 = Sodium Hydroxide, SA = Sulfuric Acid, AA = Ascorbic Acid, EX = Hexane, ST = Sodium Thiosulfate. If no preservative is added = leave field blank

KNOWN OR POSSIBLE HAZARDS	Characteristic Hazards	Listed Waste	Other
RCRA Metals As = Arsenic Hg = Mercury Ba = Barium Se = Selenium Cd = Cadmium Ag = Silver Cr = Chromium MR = Misc. RCRA metals Pb = Lead	FL = Flammable/ignitable CO = Corrosive RE = Reactive TSCA Regulated PCB = Polychlorinated biphenyls	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.)

Originally Nitrate by N were originally collected in unpreserved bottles; Later preserved Nitrate/Nitrite bottles were sent and collected from wells on 8/10/2023

GEL Quote # _____
 COC Number (1) 2 Coolers
 PO Number _____
 Client Name Georgia Power

GEL Laboratories LLC
 Chemistry | Radiochemistry | Radiobiology | Specialty Analytics
Chain of Custody and Analytical Request
 GEL Work Order Number: _____
 GEL Project Manager: Erin Trent
 Phone = (937-344-6533)
 Fax _____

GEL Laboratories, LLC
 2040 Savage Road
 Charleston, SC 29407
 Phone (843) 556-8171
 Fax (843) 766-1178
COOLER
1 OF 2

Project Site Name: Plant Arkwright Ash Pond 2
 Address: 241 Ralph McGill Blvd SE, Atlanta, GA 30308
 Collected By: John Myer, Dylan Quintal, Dylan Ripley, Houston Lynn
 Send Results To: jabraham@southwestern.com EDD@stantec.com edgar.smith@stantec.com

Sample ID <small>* For composites - indicate start and stop date/time</small>	Date Collected <small>(mm-dd-yy)</small>	Time Collected <small>(Military)</small> <small>(hh:mm)</small>	QC Code ²⁾	Field Filtered ³⁾	Sample Matrix ⁴⁾	Should this sample be considered: <small>(1) Radioactive (if yes, please supply isotopic info)</small> <small>(7) Known or possible hazards</small>	Total number of containers	Sample Analysis Requested ⁵⁾ (Fill in the number of containers for each test)											Preservative Type (6)	Comments <small>(task_code: ARK-CCR-ASSMT-2023S¹⁾)</small> <u>A.S. 8/15/23</u>		
								Ag (App I) (6020B)	Metals App III (6020B)	Alkalinity (300.0 (2,1))	TDS (SM Method 2540C)	Anions (Cl, F, Sulfate) (100.0 Rev 2.1.93)	Metals App IV (6020B)	KAP 226-228 Cmbal	Fe2 / Mn2 (ISPA Method (6020B) (field filtered))	Mercury (7470B)	Metals Al, K, Mg, Na, Fe, Mn (6020B)					
ARK-ARGWC-21	08-09-23	1035	N	Y	WG			9	X	X	X	X	X	X	X	X	X	X	X	X	X	See Nitrate/Nitrite COC for their times
ARK-AP2-EB-01	08-09-23	1110	FB	N	WQ			7	X		X	X	X	X	X							
ARK-ARAMW-8	08-09-23	1115	N	Y	WG			9	X	X	X	X	X	X	X	X	X	X	X	X	X	
ARK-ARGWA-20	08-10-23	0925	N	Y	WG			10	X	X	X	X	X	X	X	X	X	X	X	X	X	
ARK-STNTW-22	08-10-23	1255	N	Y	WG			6	X	X	X	X	X	X	X							Add anion collected at 0825 8/11/23 + only App. III metals <u>As, Co, Li, Mo</u> <u>A.S. 8/15/23</u>

Chain of Custody Signatures
 TAT Requested: Normal: _____ Rush: _____ Specify: _____ (Subject to Surchage)

Relinquished By (Signed)	Print Name	Date	Received by (signed)	Print Name	Date	Fax Results	Level 1	Level 2	Level 3	Level 4		
<u>[Signature]</u>	<u>Anthony Ward</u>	<u>8/11/23</u>	<u>[Signature]</u>	<u>Anthony Ward</u>	<u>8/11/23</u>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> C of A	<input type="checkbox"/> OC Summary	<input checked="" type="checkbox"/> Level 1	<input type="checkbox"/> Level 2	<input type="checkbox"/> Level 3	<input type="checkbox"/> Level 4
						Additional Remarks						
						For Lab Receiving Use Only: Custody Seal Intact? <input type="checkbox"/> Yes <input type="checkbox"/> No Cooler Temp: _____ °C						
For sample shipping and delivery details, see Sample Receipt & Review form (SRR)						Sample Collection Time Zone: <input checked="" type="checkbox"/> Eastern <input type="checkbox"/> Pacific <input type="checkbox"/> Central <input type="checkbox"/> Mountain <input type="checkbox"/> 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 = Geo, 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=Soilcore, SL=Sludge, SS=Solid Waste, O=Oil, F=Filter, P=Wipe, L=Lime, F=Fuel, 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, EDX = Hexose, ST = Sodium Thiosulfate. If no preservative is added = leave field blank

7) KNOWN OR POSSIBLE HAZARDS	Characteristic Hazards	Listed Waste	Other
RCRA Metals As = Arsenic Hg = Mercury Ba = Barium Se = Selenium Cd = Cadmium Ag = Silver Cr = Chromium MR = Misc. RCRA metals Pb = Lead	FL = Flammable/Ignitable CO = Corrosive RE = Reactive TSCA Regulated PCB = Polychlorinated biphenyls	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.)

 Originally Nitrate by N were originally collected in un-preserved bottles; Later preserved Nitrate/Nitrite bottles were sent and collected from wells on 8/10/2023

List of current GEL Certifications as of 24 August 2023

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	SC000122023-4
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

List of current GEL Certifications as of 21 August 2023

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	SC000122023-4
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 18, 2023

Kelley Sharpe
ARCADIS - Atlanta
2839 Paces Ferry Rd
STE 900
Atlanta, GA 30339

RE: Project: Plant Arkwright-CCR Ash Pond
Pace Project No.: 92682089

Dear Kelley Sharpe:

Enclosed are the analytical results for sample(s) received by the laboratory on August 10, 2023. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

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

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

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

Sincerely,

Maiya Parks
maiya.parks@pacelabs.com
(770)734-4200
Project Manager

Enclosures

cc: Joju Abraham, Georgia Power-CCR
Jordan Gamble, ARCADIS - Atlanta
Ben Hodges, Georgia Power-CCR
Warren Johnson, ARCADIS - Atlanta
Laura Midkiff, Georgia Power
Charles Steele, Arcadis - Atlanta
Tina Sullivan, ERM



REPORT OF LABORATORY ANALYSIS

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CERTIFICATIONS

Project: Plant Arkwright-CCR Ash Pond

Pace Project No.: 92682089

Pace Analytical Services Asheville

2225 Riverside Drive, Asheville, NC 28804

Florida/NELAP Certification #: E87648

North Carolina Drinking Water Certification #: 37712

North Carolina Wastewater Certification #: 40

South Carolina Laboratory ID: 99030

South Carolina Certification #: 99030001

Virginia/VELAP Certification #: 460222

Pace Analytical Services Peachtree Corners

110 Technology Pkwy, Peachtree Corners, GA 30092

Florida DOH Certification #: E87315

Georgia DW Inorganics Certification #: 812

North Carolina Certification #: 381

South Carolina Certification #: 98011001

Virginia Certification #: 460204

REPORT OF LABORATORY ANALYSIS

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SAMPLE SUMMARY

Project: Plant Arkwright-CCR Ash Pond
Pace Project No.: 92682089

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92682089001	ARK-BC-0.8a	Water	08/10/23 11:22	08/10/23 13:46
92682089002	ARK-BC-0.5.5	Water	08/10/23 10:44	08/10/23 13:46
92682089003	ARK-BC-0.5.6	Water	08/10/23 10:37	08/10/23 13:46
92682089004	ARK-BC-0.5.7	Water	08/10/23 10:51	08/10/23 13:46
92682089005	ARK-BC-BR	Water	08/10/23 09:59	08/10/23 13:46

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SAMPLE ANALYTE COUNT

Project: Plant Arkwright-CCR Ash Pond

Pace Project No.: 92682089

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92682089001	ARK-BC-0.8a	EPA 6010D	MS	5	PASI-GA
		EPA 6020B	CW1	3	PASI-GA
		SM 2540C-2015	DL1	1	PASI-GA
		SM 2320B-2011	SMS	2	PASI-A
		EPA 9056A	CDC	3	PASI-A
92682089002	ARK-BC-0.5.5	EPA 6010D	MS	5	PASI-GA
		EPA 6020B	CW1	3	PASI-GA
		SM 2540C-2015	DL1	1	PASI-GA
		SM 2320B-2011	SMS	2	PASI-A
		EPA 9056A	CDC	3	PASI-A
92682089003	ARK-BC-0.5.6	EPA 6010D	MS	5	PASI-GA
		EPA 6020B	CW1	3	PASI-GA
		SM 2540C-2015	DL1	1	PASI-GA
		SM 2320B-2011	SMS	2	PASI-A
		EPA 9056A	CDC	3	PASI-A
92682089004	ARK-BC-0.5.7	EPA 6010D	MS	5	PASI-GA
		EPA 6020B	CW1	3	PASI-GA
		SM 2540C-2015	DL1	1	PASI-GA
		SM 2320B-2011	SMS	2	PASI-A
		EPA 9056A	CDC	3	PASI-A
92682089005	ARK-BC-BR	EPA 6010D	MS	5	PASI-GA
		EPA 6020B	CW1	3	PASI-GA
		SM 2540C-2015	DL1	1	PASI-GA
		SM 2320B-2011	SMS	2	PASI-A
		EPA 9056A	CDC	3	PASI-A

PASI-A = Pace Analytical Services - Asheville

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

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ANALYTICAL RESULTS

Project: Plant Arkwright-CCR Ash Pond

Pace Project No.: 92682089

Sample: ARK-BC-0.8a	Lab ID: 92682089001	Collected: 08/10/23 11:22	Received: 08/10/23 13:46	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010D ATL ICP								
Analytical Method: EPA 6010D Preparation Method: EPA 3010A								
Pace Analytical Services - Peachtree Corners, GA								
Boron	ND	mg/L	0.040	1	08/11/23 12:25	08/12/23 00:15	7440-42-8	
Potassium	2.5	mg/L	0.50	1	08/11/23 12:25	08/12/23 00:15	7440-09-7	
Sodium	7.4	mg/L	1.0	1	08/11/23 12:25	08/12/23 00:15	7440-23-5	
Calcium	8.2	mg/L	1.0	1	08/11/23 12:25	08/12/23 00:15	7440-70-2	
Magnesium	3.7	mg/L	0.050	1	08/11/23 12:25	08/12/23 00:15	7439-95-4	
6020 MET ICPMS								
Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Pace Analytical Services - Peachtree Corners, GA								
Cobalt	ND	mg/L	0.0050	1	08/12/23 12:20	08/15/23 19:24	7440-48-4	
Lithium	ND	mg/L	0.030	1	08/12/23 12:20	08/15/23 19:24	7439-93-2	
Molybdenum	ND	mg/L	0.010	1	08/12/23 12:20	08/15/23 19:24	7439-98-7	
2540C Total Dissolved Solids								
Analytical Method: SM 2540C-2015								
Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	81.0	mg/L	25.0	1		08/16/23 10:54		
2320B Alkalinity								
Analytical Method: SM 2320B-2011								
Pace Analytical Services - Asheville								
Alkalinity, Bicarbonate (CaCO ₃)	44.3	mg/L	5.0	1		08/15/23 16:37		
Alkalinity, Total as CaCO ₃	44.3	mg/L	5.0	1		08/15/23 16:37		
9056 IC anions 28 Days								
Analytical Method: EPA 9056A								
Pace Analytical Services - Asheville								
Chloride	6.7	mg/L	1.0	1		08/11/23 14:23	16887-00-6	
Fluoride	ND	mg/L	0.10	1		08/11/23 14:23	16984-48-8	
Sulfate	2.6	mg/L	1.0	1		08/11/23 14:23	14808-79-8	

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ANALYTICAL RESULTS

Project: Plant Arkwright-CCR Ash Pond

Pace Project No.: 92682089

Sample: ARK-BC-0.5.5	Lab ID: 92682089002	Collected: 08/10/23 10:44	Received: 08/10/23 13:46	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010D ATL ICP								
Analytical Method: EPA 6010D Preparation Method: EPA 3010A								
Pace Analytical Services - Peachtree Corners, GA								
Boron	ND	mg/L	0.040	1	08/11/23 12:25	08/12/23 00:19	7440-42-8	
Potassium	2.4	mg/L	0.50	1	08/11/23 12:25	08/12/23 00:19	7440-09-7	
Sodium	7.5	mg/L	1.0	1	08/11/23 12:25	08/12/23 00:19	7440-23-5	
Calcium	8.6	mg/L	1.0	1	08/11/23 12:25	08/12/23 00:19	7440-70-2	
Magnesium	3.8	mg/L	0.050	1	08/11/23 12:25	08/12/23 00:19	7439-95-4	
6020 MET ICPMS								
Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Pace Analytical Services - Peachtree Corners, GA								
Cobalt	ND	mg/L	0.0050	1	08/12/23 12:20	08/15/23 19:27	7440-48-4	
Lithium	ND	mg/L	0.030	1	08/12/23 12:20	08/15/23 19:27	7439-93-2	
Molybdenum	ND	mg/L	0.010	1	08/12/23 12:20	08/15/23 19:27	7439-98-7	
2540C Total Dissolved Solids								
Analytical Method: SM 2540C-2015								
Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	87.0	mg/L	25.0	1		08/16/23 10:54		
2320B Alkalinity								
Analytical Method: SM 2320B-2011								
Pace Analytical Services - Asheville								
Alkalinity, Bicarbonate (CaCO ₃)	45.2	mg/L	5.0	1		08/15/23 16:43		
Alkalinity, Total as CaCO ₃	45.2	mg/L	5.0	1		08/15/23 16:43		
9056 IC anions 28 Days								
Analytical Method: EPA 9056A								
Pace Analytical Services - Asheville								
Chloride	7.9	mg/L	1.0	1		08/11/23 14:37	16887-00-6	
Fluoride	ND	mg/L	0.10	1		08/11/23 14:37	16984-48-8	
Sulfate	4.4	mg/L	1.0	1		08/11/23 14:37	14808-79-8	

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ANALYTICAL RESULTS

Project: Plant Arkwright-CCR Ash Pond

Pace Project No.: 92682089

Sample: ARK-BC-0.5.6	Lab ID: 92682089003	Collected: 08/10/23 10:37	Received: 08/10/23 13:46	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010D ATL ICP								
Analytical Method: EPA 6010D Preparation Method: EPA 3010A								
Pace Analytical Services - Peachtree Corners, GA								
Boron	ND	mg/L	0.040	1	08/11/23 12:25	08/12/23 00:24	7440-42-8	
Potassium	2.4	mg/L	0.50	1	08/11/23 12:25	08/12/23 00:24	7440-09-7	
Sodium	7.4	mg/L	1.0	1	08/11/23 12:25	08/12/23 00:24	7440-23-5	
Calcium	8.4	mg/L	1.0	1	08/11/23 12:25	08/12/23 00:24	7440-70-2	
Magnesium	3.8	mg/L	0.050	1	08/11/23 12:25	08/12/23 00:24	7439-95-4	
6020 MET ICPMS								
Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Pace Analytical Services - Peachtree Corners, GA								
Cobalt	ND	mg/L	0.0050	1	08/12/23 12:20	08/15/23 19:31	7440-48-4	
Lithium	ND	mg/L	0.030	1	08/12/23 12:20	08/15/23 19:31	7439-93-2	
Molybdenum	ND	mg/L	0.010	1	08/12/23 12:20	08/15/23 19:31	7439-98-7	
2540C Total Dissolved Solids								
Analytical Method: SM 2540C-2015								
Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	90.0	mg/L	25.0	1		08/16/23 10:54		
2320B Alkalinity								
Analytical Method: SM 2320B-2011								
Pace Analytical Services - Asheville								
Alkalinity, Bicarbonate (CaCO ₃)	45.9	mg/L	5.0	1		08/15/23 16:50		
Alkalinity, Total as CaCO ₃	45.9	mg/L	5.0	1		08/15/23 16:50		
9056 IC anions 28 Days								
Analytical Method: EPA 9056A								
Pace Analytical Services - Asheville								
Chloride	7.3	mg/L	1.0	1		08/11/23 14:51	16887-00-6	
Fluoride	ND	mg/L	0.10	1		08/11/23 14:51	16984-48-8	
Sulfate	4.4	mg/L	1.0	1		08/11/23 14:51	14808-79-8	

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ANALYTICAL RESULTS

Project: Plant Arkwright-CCR Ash Pond

Pace Project No.: 92682089

Sample: ARK-BC-0.5.7	Lab ID: 92682089004	Collected: 08/10/23 10:51	Received: 08/10/23 13:46	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010D ATL ICP								
Analytical Method: EPA 6010D Preparation Method: EPA 3010A								
Pace Analytical Services - Peachtree Corners, GA								
Boron	ND	mg/L	0.040	1	08/11/23 12:25	08/12/23 00:39	7440-42-8	
Potassium	2.5	mg/L	0.50	1	08/11/23 12:25	08/12/23 00:39	7440-09-7	
Sodium	7.6	mg/L	1.0	1	08/11/23 12:25	08/12/23 00:39	7440-23-5	
Calcium	8.5	mg/L	1.0	1	08/11/23 12:25	08/12/23 00:39	7440-70-2	
Magnesium	3.8	mg/L	0.050	1	08/11/23 12:25	08/12/23 00:39	7439-95-4	
6020 MET ICPMS								
Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Pace Analytical Services - Peachtree Corners, GA								
Cobalt	ND	mg/L	0.0050	1	08/12/23 12:20	08/15/23 19:35	7440-48-4	
Lithium	ND	mg/L	0.030	1	08/12/23 12:20	08/15/23 19:35	7439-93-2	
Molybdenum	ND	mg/L	0.010	1	08/12/23 12:20	08/15/23 19:35	7439-98-7	
2540C Total Dissolved Solids								
Analytical Method: SM 2540C-2015								
Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	86.0	mg/L	25.0	1		08/16/23 10:54		
2320B Alkalinity								
Analytical Method: SM 2320B-2011								
Pace Analytical Services - Asheville								
Alkalinity, Bicarbonate (CaCO ₃)	45.7	mg/L	5.0	1		08/15/23 16:56		
Alkalinity, Total as CaCO ₃	45.7	mg/L	5.0	1		08/15/23 16:56		
9056 IC anions 28 Days								
Analytical Method: EPA 9056A								
Pace Analytical Services - Asheville								
Chloride	7.2	mg/L	1.0	1		08/11/23 15:05	16887-00-6	
Fluoride	ND	mg/L	0.10	1		08/11/23 15:05	16984-48-8	
Sulfate	3.8	mg/L	1.0	1		08/11/23 15:05	14808-79-8	

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ANALYTICAL RESULTS

Project: Plant Arkwright-CCR Ash Pond

Pace Project No.: 92682089

Sample: ARK-BC-BR	Lab ID: 92682089005	Collected: 08/10/23 09:59	Received: 08/10/23 13:46	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010D ATL ICP								
Analytical Method: EPA 6010D Preparation Method: EPA 3010A								
Pace Analytical Services - Peachtree Corners, GA								
Boron	ND	mg/L	0.040	1	08/11/23 12:25	08/12/23 00:44	7440-42-8	
Potassium	2.6	mg/L	0.50	1	08/11/23 12:25	08/12/23 00:44	7440-09-7	
Sodium	7.9	mg/L	1.0	1	08/11/23 12:25	08/12/23 00:44	7440-23-5	
Calcium	8.8	mg/L	1.0	1	08/11/23 12:25	08/12/23 00:44	7440-70-2	
Magnesium	4.0	mg/L	0.050	1	08/11/23 12:25	08/12/23 00:44	7439-95-4	
6020 MET ICPMS								
Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Pace Analytical Services - Peachtree Corners, GA								
Cobalt	ND	mg/L	0.0050	1	08/12/23 12:20	08/15/23 19:38	7440-48-4	
Lithium	ND	mg/L	0.030	1	08/12/23 12:20	08/15/23 19:38	7439-93-2	
Molybdenum	ND	mg/L	0.010	1	08/12/23 12:20	08/15/23 19:38	7439-98-7	
2540C Total Dissolved Solids								
Analytical Method: SM 2540C-2015								
Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	87.0	mg/L	25.0	1		08/16/23 10:54		
2320B Alkalinity								
Analytical Method: SM 2320B-2011								
Pace Analytical Services - Asheville								
Alkalinity, Bicarbonate (CaCO ₃)	45.8	mg/L	5.0	1		08/15/23 17:02		
Alkalinity, Total as CaCO ₃	45.8	mg/L	5.0	1		08/15/23 17:02		
9056 IC anions 28 Days								
Analytical Method: EPA 9056A								
Pace Analytical Services - Asheville								
Chloride	7.7	mg/L	1.0	1		08/11/23 15:19	16887-00-6	
Fluoride	ND	mg/L	0.10	1		08/11/23 15:19	16984-48-8	
Sulfate	4.4	mg/L	1.0	1		08/11/23 15:19	14808-79-8	

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QUALITY CONTROL DATA

Project: Plant Arkwright-CCR Ash Pond

Pace Project No.: 92682089

QC Batch:	792976	Analysis Method:	EPA 6010D
QC Batch Method:	EPA 3010A	Analysis Description:	6010D ATL
		Laboratory:	Pace Analytical Services - Peachtree Corners, GA

Associated Lab Samples: 92682089001, 92682089002, 92682089003, 92682089004, 92682089005

METHOD BLANK: 4109304 Matrix: Water

Associated Lab Samples: 92682089001, 92682089002, 92682089003, 92682089004, 92682089005

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Boron	mg/L	ND	0.040	08/11/23 23:12	
Calcium	mg/L	ND	1.0	08/11/23 23:12	
Magnesium	mg/L	ND	0.050	08/11/23 23:12	
Potassium	mg/L	ND	0.50	08/11/23 23:12	
Sodium	mg/L	ND	1.0	08/11/23 23:12	

LABORATORY CONTROL SAMPLE: 4109305

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Boron	mg/L	1	0.99	99	80-120	
Calcium	mg/L	1	ND	100	80-120	
Magnesium	mg/L	1	1.0	101	80-120	
Potassium	mg/L	1	1.1	110	80-120	
Sodium	mg/L	1	1.0	102	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4109983 4109984

Parameter	Units	92682086002 Result	MS Spike Conc.	MSD Spike Conc.	4109983		4109984		% Rec Limits	RPD	Max RPD	Qual
					MS Result	MSD Result	MS % Rec	MSD % Rec				
Boron	mg/L	ND	1	1	1.0	1.1	100	103	75-125	3	20	
Calcium	mg/L	10.5	1	1	11.4	12.2	89	169	75-125	7	20 M1	
Magnesium	mg/L	6.5	1	1	7.4	8.0	89	145	75-125	7	20 M1	
Potassium	mg/L	3.0	1	1	3.9	4.2	96	127	75-125	8	20 M1	
Sodium	mg/L	6.0	1	1	7.0	7.4	99	142	75-125	6	20 M1	

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QUALITY CONTROL DATA

Project: Plant Arkwright-CCR Ash Pond

Pace Project No.: 92682089

QC Batch:	792962	Analysis Method:	EPA 6020B
QC Batch Method:	EPA 3005A	Analysis Description:	6020 MET
		Laboratory:	Pace Analytical Services - Peachtree Corners, GA

Associated Lab Samples: 92682089001, 92682089002, 92682089003, 92682089004, 92682089005

METHOD BLANK: 4109255 Matrix: Water
 Associated Lab Samples: 92682089001, 92682089002, 92682089003, 92682089004, 92682089005

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Cobalt	mg/L	ND	0.0050	08/15/23 18:35	
Lithium	mg/L	ND	0.030	08/15/23 18:35	
Molybdenum	mg/L	ND	0.010	08/15/23 18:35	

LABORATORY CONTROL SAMPLE: 4109256

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Cobalt	mg/L	0.1	0.097	97	80-120	
Lithium	mg/L	0.1	0.11	107	80-120	
Molybdenum	mg/L	0.1	0.10	100	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4109257 4109258

Parameter	Units	MS		MSD		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		92682086003	Result	Spike Conc.	Spike Conc.								
Cobalt	mg/L	0.013	0.1	0.1	0.11	0.11	98	99	75-125	1	20		
Lithium	mg/L	ND	0.1	0.1	0.080	0.080	79	80	75-125	1	20		
Molybdenum	mg/L	ND	0.1	0.1	0.10	0.10	102	102	75-125	0	20		

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QUALITY CONTROL DATA

Project: Plant Arkwright-CCR Ash Pond

Pace Project No.: 92682089

QC Batch:	793913	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: 92682089001, 92682089002, 92682089003, 92682089004, 92682089005

METHOD BLANK: 4113724 Matrix: Water
 Associated Lab Samples: 92682089001, 92682089002, 92682089003, 92682089004, 92682089005

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	25.0	08/16/23 10:52	

LABORATORY CONTROL SAMPLE: 4113725

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	384	96	80-120	

SAMPLE DUPLICATE: 4113726

Parameter	Units	92682086006 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	81.0	76.0	6	10	

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QUALITY CONTROL DATA

Project: Plant Arkwright-CCR Ash Pond

Pace Project No.: 92682089

QC Batch: 793557 Analysis Method: SM 2320B-2011
 QC Batch Method: SM 2320B-2011 Analysis Description: 2320B Alkalinity
 Laboratory: Pace Analytical Services - Asheville
 Associated Lab Samples: 92682089001, 92682089002, 92682089003, 92682089004, 92682089005

METHOD BLANK: 4112158 Matrix: Water
 Associated Lab Samples: 92682089001, 92682089002, 92682089003, 92682089004, 92682089005

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Alkalinity, Total as CaCO3	mg/L	ND	5.0	08/15/23 15:20	
Alkalinity,Bicarbonate (CaCO3)	mg/L	ND	5.0	08/15/23 15:20	

LABORATORY CONTROL SAMPLE: 4112159

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	50	52.2	104	80-120	

LABORATORY CONTROL SAMPLE: 4112160

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	50	49.6	99	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4112161 4112162

Parameter	Units	4112161		4112162		% Rec Limits	RPD	Max RPD	Qual
		MS Result	MSD Spike Conc.	MS Result	MSD Spike Conc.				
Alkalinity, Total as CaCO3	mg/L	154	50	212	50	116	3	25	M1

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4112163 4112164

Parameter	Units	4112163		4112164		% Rec Limits	RPD	Max RPD	Qual
		MS Result	MSD Spike Conc.	MS Result	MSD Spike Conc.				
Alkalinity, Total as CaCO3	mg/L	156	50	220	50	129	1	25	M1

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QUALITY CONTROL DATA

Project: Plant Arkwright-CCR Ash Pond

Pace Project No.: 92682089

QC Batch: 792926 Analysis Method: EPA 9056A
 QC Batch Method: EPA 9056A Analysis Description: 9056 IC anions 28 Days
 Laboratory: Pace Analytical Services - Asheville
 Associated Lab Samples: 92682089001, 92682089002, 92682089003, 92682089004, 92682089005

METHOD BLANK: 4109134 Matrix: Water
 Associated Lab Samples: 92682089001, 92682089002, 92682089003, 92682089004, 92682089005

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	08/11/23 11:35	
Fluoride	mg/L	ND	0.10	08/11/23 11:35	
Sulfate	mg/L	ND	1.0	08/11/23 11:35	

LABORATORY CONTROL SAMPLE: 4109135

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	48.1	96	90-110	
Fluoride	mg/L	2.5	2.5	100	90-110	
Sulfate	mg/L	50	48.2	96	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4109136 4109137

Parameter	Units	92682086001		MS		MSD		% Rec	% Rec	% Rec Limits	RPD	Max RPD	Qual
		Result	Conc.	Spike Conc.	Spike Conc.	Result	Result						
Chloride	mg/L	4.2	50	50	53.2	52.9	98	97	90-110	0	10		
Fluoride	mg/L	ND	2.5	2.5	2.4	2.4	95	95	90-110	0	10		
Sulfate	mg/L	ND	50	50	48.2	48.0	95	94	90-110	1	10		

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4109138 4109139

Parameter	Units	92682089005		MS		MSD		% Rec	% Rec	% Rec Limits	RPD	Max RPD	Qual
		Result	Conc.	Spike Conc.	Spike Conc.	Result	Result						
Chloride	mg/L	7.7	50	50	56.0	57.3	97	99	90-110	2	10		
Fluoride	mg/L	ND	2.5	2.5	2.4	2.5	94	96	90-110	2	10		
Sulfate	mg/L	4.4	50	50	51.0	53.9	93	99	90-110	5	10		

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

REPORT OF LABORATORY ANALYSIS

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QUALIFIERS

Project: Plant Arkwright-CCR Ash Pond

Pace Project No.: 92682089

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.: 92682089

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92682089001	ARK-BC-0.8a	EPA 3010A	792976	EPA 6010D	793131
92682089002	ARK-BC-0.5.5	EPA 3010A	792976	EPA 6010D	793131
92682089003	ARK-BC-0.5.6	EPA 3010A	792976	EPA 6010D	793131
92682089004	ARK-BC-0.5.7	EPA 3010A	792976	EPA 6010D	793131
92682089005	ARK-BC-BR	EPA 3010A	792976	EPA 6010D	793131
92682089001	ARK-BC-0.8a	EPA 3005A	792962	EPA 6020B	793277
92682089002	ARK-BC-0.5.5	EPA 3005A	792962	EPA 6020B	793277
92682089003	ARK-BC-0.5.6	EPA 3005A	792962	EPA 6020B	793277
92682089004	ARK-BC-0.5.7	EPA 3005A	792962	EPA 6020B	793277
92682089005	ARK-BC-BR	EPA 3005A	792962	EPA 6020B	793277
92682089001	ARK-BC-0.8a	SM 2540C-2015	793913		
92682089002	ARK-BC-0.5.5	SM 2540C-2015	793913		
92682089003	ARK-BC-0.5.6	SM 2540C-2015	793913		
92682089004	ARK-BC-0.5.7	SM 2540C-2015	793913		
92682089005	ARK-BC-BR	SM 2540C-2015	793913		
92682089001	ARK-BC-0.8a	SM 2320B-2011	793557		
92682089002	ARK-BC-0.5.5	SM 2320B-2011	793557		
92682089003	ARK-BC-0.5.6	SM 2320B-2011	793557		
92682089004	ARK-BC-0.5.7	SM 2320B-2011	793557		
92682089005	ARK-BC-BR	SM 2320B-2011	793557		
92682089001	ARK-BC-0.8a	EPA 9056A	792926		
92682089002	ARK-BC-0.5.5	EPA 9056A	792926		
92682089003	ARK-BC-0.5.6	EPA 9056A	792926		
92682089004	ARK-BC-0.5.7	EPA 9056A	792926		
92682089005	ARK-BC-BR	EPA 9056A	792926		

REPORT OF LABORATORY ANALYSIS

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DC#_Title: ENV-FRM-HUN1-0083 v02_Sample Condition Upon Receipt

Effective Date: 11/14/2022

Laboratory receiving samples:

Asheville Eden Greenwood Huntersville Raleigh Mechanicsville Atlanta Kernersville

Sample Condition Upon Receipt

Client Name: **ARCADIS**

Project #: **WO#: 92682089**
PM: MP Due Date: 08/17/23
CLIENT: GA-ArcadRt1

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

Custody Seal Present? Yes No Seals Intact? Yes No

Date/Initials Person Examining Contents: **8-10-23AY**

Packing Material: Bubble Wrap Bubble Bags None Other

Biological Tissue Frozen? Yes No N/A

Thermometer:

IR Gun ID: **214**

Type of Ice: Wet Blue None

Cooler Temp: **5.2** 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): **5.2**

USDA Regulated Soil (N/A, water sample)

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

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

	Comments/Discrepancy:
Chain of Custody Present? <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 checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	3.
Rush Turn Around Time Requested? <input checked="" type="checkbox"/> Yes <input 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 checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	8.
Sample Labels Match COC? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	9.
-Includes Date/Time/ID/Analysis Matrix: WG	
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 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: _____



Effective Date: 11/14/2022

*Check mark top half of box if pH and/or dechlorination is verified and within the acceptance range for preservation samples.

Exceptions: VOA, Coliform, TOC, Oil and Grease, DRO/8015 (water) DOC, LLHg

**Bottom half of box is to list number of bottles

***Check all unpreserved Nitrates for chlorine

Project #

WO#: 92682089

PM: HP

Due Date: 08/17/23

CLIENT: GA-ArcadAtl

Item#	BP4U-125 mL Plastic Unpreserved (N/A) (Cl-)	BP3U-250 mL Plastic Unpreserved (N/A)	BP2U-500 mL Plastic Unpreserved (N/A)	BP1U-1 liter Plastic Unpreserved (N/A)	BP4S-125 mL Plastic H2SO4 (pH < 2) (Cl-)	BP3N-250 mL plastic HNO3 (pH < 2)	BP4Z-125 mL Plastic ZN Acetate & NaOH (>9)	BP4B-125 mL Plastic NaOH (pH > 12) (Cl-)	WGFU-Wide-mouthed Glass jar Unpreserved	AG1U-1 liter Amber Unpreserved (N/A) (Cl-)	AG1H-1 liter Amber HCl (pH < 2)	AG3U-250 mL Amber Unpreserved (N/A) (Cl-)	AG1S-1 liter Amber H2SO4 (pH < 2)	AG3S-250 mL Amber H2SO4 (pH < 2)	DG94-40 mL Amber NH4Cl (N/A)(Cl-)	DG9H-40 mL VOA HCl (N/A)	VG9T-40 mL VOA Na2SO3 (N/A)	VG9U-40 mL VOA Unpreserved (N/A)	DG9V-40 mL VOA H3PO4 (N/A)	KP7U-50 mL Plastic Unpreserved (N/A)	V/GK (3 vials per kit)-VPH/Gas kit (N/A)	SP5T-125 mL Sterile Plastic (N/A - lab)	SP2T-250 mL Sterile Plastic (N/A - lab)	BP3R-250 mL Plastic (NH2)2SO4 (9.3-9.7)	AG0U-100 mL Amber Unpreserved (N/A) (Cl-)	VSGU-20 mL Scintillation vials (N/A)	DG9U-40 mL Amber Unpreserved vials (N/A)	
1			2																									
2			2																									
3			2																									
4			2																									
5			2																									
6																												
7																												
8																												
9																												
10																												
11																												
12																												

pH Adjustment Log for Preserved Samples

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

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

B.5 Data Quality Evaluation



DATA USABILITY SUMMARY

Steven Elliott (Stantec) reviewed two data packages from GEL Laboratories (GEL) for the analysis of water samples collected August 8 through August 10, 2023, at the Georgia Power Arkwright Plant AP2 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 – Total Metals by inductively coupled plasma - mass spectrometry (ICP/MS)
- SW-846 6020B – Dissolved Metals (Fe & Mn) by 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)
- EPA 353.2 – Nitrate/nitrite
- SM 2320B – Alkalinity, Total and Bicarbonate
- EPA Method 904/ SW846 9320 Modified – 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

Eleven (11) groundwater samples, one (1) field blank, one (1) equipment blank, and one (1) field duplicate sample 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 temperature ranges of 0.0 to 3.6°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 exception.

SDG 632699

- Aluminum was detected in the method blank (1205501935) at a concentration (0.021 mg/L) below the reporting limit (RL). No qualification was required for associated sample results reported as greater than 10 times the blank concentration. Associated samples reported with detected concentrations less than 10 times the blank concentration have been qualified as estimated.

Field Blanks. Field blanks were analyzed for the full suite of sample analyses and all analytes were not detected with the following exceptions:

SDG 632699

- Boron was detected in the field blank ARK-AP2-FB-01 (08/08/2023) at a concentration above the laboratory RL. No qualification was required for associated sample results reported as greater than 10 times the blank concentration. Associated samples reported with detected concentrations less than 10 times the blank concentration have been qualified as estimated.

SDG 633126

- Chloride was detected in the equipment blank ARK-AP2-EB-01 (08/09/2023) 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.

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.

Field Precision

One set of field duplicate samples were collected for this sampling event (see Table 3a 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.

Table 1 – Cross-Reference between Laboratory and Field Identifications

Field Identification	Laboratory Identification	SDG	Analyses	Sample Date
ARK-ARGWA-19	632699001	632699	6020B, 7470A, 300, 353.2, 2540C, 2320B	08/08/2023
ARK-AP2-FD-01	632699002	632699	6020B, 7470A, 300, 353.2, 2540C	08/08/2023
ARK-ARGWC-22	632699003	632699	6020B, 7470A, 300, 353.2, 2540C, 2320B	08/08/2023
ARK-ARAMW-7	632699004	632699	6020B, 7470A, 300, 353.2, 2540C, 2320B	08/08/2023
ARK-AP2-FB-01	632699005	632699	6020B, 7470A, 300, 353.2, 2540C	08/08/2023
ARK-ARAMW-9	632699006	632699	6020B (D), 7470A, 300, 353.2, 2540C, 2320B	08/08/2023
ARK-ARAMW-2	632699007	632699	6020B, 7470A, 300, 353.2, 2540C, 2320B	08/08/2023
ARK-ARAMW-1	632699008	632699	6020B, 7470A, 300, 353.2, 2540C, 2320B	08/08/2023
ARK-ARGWC-23	632699009	632699	6020B, 7470A, 300, 353.2, 2540C, 2320B	08/08/2023
ARK-ARGWA-19	632699010	632699	6020B (D)	08/08/2023
ARK-ARGWC-22	632699011	632699	6020B, 7470A	08/08/2023
ARK-ARAMW-7	632699012	632699	6020B (D)	08/08/2023
ARK-ARAMW-9	632699013	632699	6020B	08/08/2023
ARK-ARAMW-2	632699014	632699	6020B (D)	08/08/2023
ARK-ARAMW-1	632699015	632699	6020B (D)	08/08/2023
ARK-ARGWC-23	632699016	632699	6020B (D)	08/08/2023
ARK-ARGWC-21	633126001	633126	6020B (D), 7470A, 300, 2540C, 2320B	08/09/2023
ARK-AP2-EB-01	633126002	633126	6020B, 7470A, 300, 2540C	08/09/2023

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 Georgia Power – Arkwright (AP-2)
 Analytical Report Nos. 632699, 632702, 633126, 633128
 August 2023

Field Identification	Laboratory Identification	SDG	Analyses	Sample Date
ARK-ARAMW-8	633126003	633126	6020B, 7470A, 300, 2540C, 2320B	08/9/2023
ARK-ARGWA-20	633126004	633126	6020B (D), 7470A, 300, 2540C, 2320B	08/10/2023
ARK-STN-TW22	633126005	633126	6020B, 7470A, 300, 2320B	08/10/2023
ARK-ARGWC-21	633126006	633126	353.2	08/09/2023
ARK-AP2-EB-01	633126007	633126	353.2	08/09/2023
ARK-ARAMW-8	633126008	633126	353.2	08/9/2023
ARK-ARGWA-20	633126009	633126	353.2	08/10/2023
ARK-STN-TW22	633126010	633126	353.2	08/10/2023
ARK-ARGWC-21	633126011	633126	6020B, 7470A	08/09/2023
ARK-ARAMW-8	633126012	633126	6020B (D)	08/09/2023
ARK-ARGWA-20	633126013	633126	6020B, 7470A	08/10/2023
ARK-STN-TW22	633126014	633126	6020B (D)	08/10/2023
ARK-ARGWA-19	632702001	632702	903.1, 904	08/08/2023
ARK-AP2-FD-01	632702002	632702	903.1, 904	08/08/2023
ARK-ARGWC-22	632702003	632702	903.1, 904	08/08/2023
ARK-ARAMW-7	632702004	632702	903.1, 904	08/08/2023
ARK-AP2-FB-01	632702005	632702	903.1, 904	08/08/2023
ARK-ARAMW-9	632702006	632702	903.1, 904	08/08/2023
ARK-ARAMW-2	632702007	632702	903.1, 904	08/08/2023
ARK-ARAMW-1	632702008	632702	903.1, 904	08/08/2023
ARK-ARGWC-23	632702009	632702	903.1, 904	08/08/2023
ARK-ARGWC-21	633128001	633128	903.1, 904	08/09/2023
ARK-AP2-EB-01	633128002	633128	903.1, 904	08/09/2023
ARK-ARAMW-8	633128003	633128	903.1, 904	08/9/2023
ARK-ARGWA-20	633128004	633128	903.1, 904	08/10/2023

D – dissolved (Fe, Mn)

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 Georgia Power – Arkwright (AP-2)
 Analytical Report Nos. 632699, 632702, 633126, 633128
 August 2023

Table 2 – Qualified Analytical Data

Field Identification	Analyte	Qualification / Code	Reason for Qualification
ARK-ARAMW-9	Boron	J+ / BFH	Detected in FB
ARK-ARGWA-19	Boron	J+ / BFH	Detected in FB
ARK-AP2-FD-01	Boron	J+ / BFH	Detected in FB
ARK-ARGWC-21	Aluminum	J+ / BLH	Detected in MB
ARGWC-22	Aluminum	J+ / BLH	Detected in MB
ARAMW-9	Aluminum	J+ / BLH	Detected in MB

BFH – Blank Field High – detected in the field blank (FB)

BLH – Blank Lab High – detected in the lab method blank (MB)

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.

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 Georgia Power – Arkwright (AP-2)
 Analytical Report Nos. 632699, 632702, 633126, 633128
 August 2023

Table 3a – Field Precision

Field Identification	Analyte	Sample Result (mg/L)	Duplicate Result (mg/L)	RPD ^a	Qualified
ARK-ARGWA-19/ ARK-AP2-FD-01	Sulfate	8.29	8.34	0.6%	A
	Chloride	6.37	6.27	1.6%	A
	Boron	0.0199	0.0183	<5*RL, <2*RL	A*
	Calcium	8.51	8.36	1.8%	A
	Barium	0.0337	0.0334	<5*RL, <2*RL	A*
	Magnesium	3.36	NA	NC	-
	Potassium	2.08	NA	NC	-
	Sodium	9.51	NA	NC	-
	Lithium	0.00382	0.00368	<5*RL, <2*RL	A*
	Molybdenum	0.000421 J	0.000361	<5*RL, <2*RL	A*
	Nitrate/nitrite	1.83	1.89	0.4%	A
	TDS	62	67	3.2%	A
	Total Alkalinity	37	NA	NC	-
	Bicarbonate	37	NA	NC	-

^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

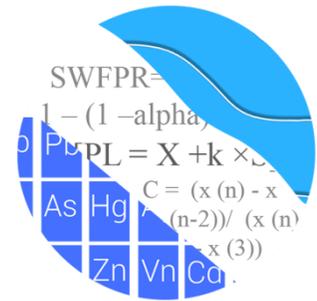
NC – not calculated

Appendix C

Statistical Analyses



GROUNDWATER STATS CONSULTING



February 28, 2024

Southern Company Services
Attn: Mr. Joju Abraham
241 Ralph McGill Blvd NE, Bin 10160
Atlanta, Georgia 30308-3374

Re: Plant Arkwright Ash Pond 2/Dry Ash Stockpile
August 2023 Semi-Annual Sample Event

Dear Mr. Abraham,

Groundwater Stats Consulting, formerly the statistical consulting division of Sanitas Technologies, is pleased to provide the August 2023 Semi-Annual Groundwater Monitoring Detection and Assessment statistical analysis of monitoring data for Georgia Power Company's Plant Arkwright Ash Pond 2/Dry Ash Stockpile. 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-19 and ARGWA-20
- **Downgradient wells:** ARGWC-21, ARGWC-22, and ARGWC-23
- **Assessment wells:** ARAMW-1, ARAMW-2, ARAMW-7, ARAMW-8, and ARAMW-9

Assessment wells ARAMW-1 and ARAMW-2 were installed in late 2019, and wells ARAMW-7 and ARAMW-8 were installed in late 2020. Assessment well ARAMW-9 was first sampled in January 2023. Assessment wells with less than 4 samples did not require

formal statistics; therefore, these well/constituent pairs were only plotted on time series graphs and box plots. Assessment wells with 4 or more samples were additionally evaluated with confidence intervals.

Data were sent electronically to Groundwater Stats Consulting, and the statistical analysis was reviewed by Andrew Collins, Project Manager for Groundwater Stats Consulting.

The CCR program consists of the following constituents:

- **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 I constituents were analyzed using interwell prediction limits and confidence intervals; data for Appendix III constituents were analyzed using interwell prediction limits; 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 all constituents follow this letter. For all constituents, a substitution of the most recent reporting limit is used for non-detect data.

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 previously provided 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 EPD Appendix I Constituents:

- Semi-Annual Sampling
- Interwell Prediction Limits with 1-of-2 resample plan (all parameters)
- # Constituents: 5 (cadmium was 100% non-detect in downgradient wells)
- # Downgradient wells: 3

CCR Appendix III Constituents:

- Semi-Annual Sampling
- Interwell Prediction Limits with 1-of-2 resample plan (all parameters)
- # Constituents: 7
- # Downgradient wells: 3

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, simple substitution of one-half the reporting limit is utilized in the statistical analysis. The reporting limit utilized for non-detects is the most recent practical quantification limit (PQL) as reported by the laboratory.
- When data contain between 15-50% non-detects, the Kaplan-Meier non-detect adjustment is applied to the background data for parametric limits. This technique adjusts the mean and standard deviation of the historical concentrations to account for concentrations below the reporting limit.
- Nonparametric prediction limits are used on data containing greater than 50% non-detects.

Natural systems continuously evolve due to physical changes made to the environment. Examples include capping a landfill, paving areas near a well, or lining a drainage channel to prevent erosion. Periodic updating of background statistical limits is necessary to accommodate these types of changes. In the interwell case, prediction limits are updated with upgradient well data during each event after careful screening for any new outliers. In some cases, the earlier portion of data may require deselection prior to construction of limits to provide sensitive limits that will rapidly detect changes in groundwater quality. Even though the data are excluded from the calculation, the values will continue to be reported and shown in tables and graphs.

Summary of Background Screening – Conducted in 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 wells ARGWA-19, ARGWA-20, and ARGWC-21 for Appendix I, Appendix III, and Appendix IV 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. Outliers were flagged in downgradient wells, though there are no intrawell statistical analyses in the current report. This improves the estimate of downgradient confidence intervals and provides for possible future application of intrawell statistics. As noted below, current values that could result in exceedances were not flagged.

When the most recent values are identified as outliers in upgradient wells, those values are typically not flagged in the database (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) may be flagged as outliers if they are much higher than current reporting limits.

Additionally, when any values are flagged in the database as outliers, they are plotted in a disconnected and lighter symbol on the time series graph. The accompanying data

pages display the flagged value in a lighter font as well. A substitution of the most recent reporting limit was applied when varying detection limits existed in data. A summary of flagged values is included in Figure C.

Seasonality

No obvious seasonal patterns were observed on the time series plots for any of the detected data; therefore, no deseasonalizing adjustments were made to the data. When seasonal patterns are observed, data may be deseasonalized so that the resulting limits will correctly account for the seasonality as a predictable pattern rather than random variation or a release.

Trend Test Evaluation

While trends may be identified by visual inspection, a quantification of the trend and its significance is needed. The Sen's Slope/Mann Kendall trend test was used to evaluate all data at wells ARGWA-19, ARGWA-20, and ARGWC-21 to identify statistically significant increasing or decreasing trends. In the absence of suspected contamination, significant trending data are typically not included as part of the background data used for construction of prediction limits. This step serves to eliminate the trend and, thus, reduce variation in background. When statistically significant decreasing trends are present, all available data are evaluated to determine whether earlier concentration levels are significantly different than current reported concentrations and will be deselected as necessary. When any records of data are truncated for the reasons above, a summary report will be provided to show the date ranges used in construction of the statistical limits.

The results of the trend analyses were included with the previous screenings and showed a few statistically significant trends, both increasing and decreasing. No adjustments to the background period were made because the overall changes were relatively small. Since intrawell tests are not used in this current analysis, the background levels are not affected by trends in downgradient wells.

Appendix III – Determination of Spatial Variation

The Analysis of Variance (ANOVA) was used to statistically evaluate differences in average concentrations among upgradient wells, which assists in identifying the most appropriate statistical approach. Interwell tests, which compare downgradient well data to statistical limits constructed from pooled upgradient well data, are appropriate when average concentrations are similar across upgradient wells. Intrawell tests, which compare

compliance data from a single well to screened historical data within the same well, are appropriate when upgradient wells exhibit spatial variation; when statistical limits constructed from upgradient wells are not representative of the current background data population; and when downgradient water quality is unimpacted compared to upgradient water quality for the same parameter.

The ANOVA identified significant differences among upgradient well data for several constituents. While data were further tested for intrawell eligibility during the screening, interwell methods will be used for all Appendix I and Appendix III constituents in accordance with Georgia EPD requirements.

Prediction Limit Analysis of Appendix I & III Parameters – August 2023

All Appendix I and III parameters are analyzed using interwell prediction limits. Upgradient well data were re-assessed for potential outliers during this analysis. No additional values were flagged and a summary of flagged outliers follows this report (Figure C).

Interwell Prediction Limits

Interwell prediction limits, combined with a 1-of-2 resample plan, were constructed using all historical upgradient well data through August 2023 for Appendix I and III constituents (Figures D & E, respectively). As mentioned above, downgradient wells containing 100% non-detects did not require statistical analyses. Interwell prediction limits pool upgradient well data to establish a background limit for an individual constituent. The August 2023 sample from each downgradient well is compared to the background limit to determine whether initial exceedances are present.

In the event of an initial exceedance of compliance well data, the 1-of-2 resample plan allows for collection of one additional sample to determine whether the initial exceedance is confirmed. When 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 and graphical results for the interwell prediction limits for Appendix I and III constituents limits follow this letter. No exceedances were identified for Appendix I well/constituent pairs. The following exceedances were identified for Appendix III well/constituent pairs:

- Boron: ARGWC-21, ARGWC-22, and ARGWC-23
- Calcium: ARGWC-21, ARGWC-22, and ARGWC-23
- Fluoride: ARGWC-21 and ARGWC-23
- pH: ARGWC-21 and ARGWC-23
- Sulfate: ARGWC-21, ARGWC-22, and ARGWC-23
- TDS ARGWC-21, ARGWC-22, and ARGWC-23

Trend Tests – Appendix III

When prediction limit exceedances are identified in downgradient wells, data are further evaluated using the Sen’s Slope/Mann Kendall trend test at the 99% confidence level to determine whether concentrations are statistically increasing, decreasing, or stable (Figure 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 variability in groundwater quality unrelated to practices at the site. Both a summary and graphical display of the trend test results follows this letter. Statistically significant trends were identified for the following well/constituent pairs:

Increasing:

- Boron: ARGWC-21
- Calcium: ARGWC-21
- Fluoride: ARGWC-23
- Sulfate: ARGWC-21
- TDS: ARGWC-21

Decreasing:

- Sulfate: ARGWA-19 (upgradient)

Confidence Interval Analysis of Appendix I & IV Parameters – August 2023

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 well/constituent pairs containing 100% non-detects do not require analysis. Data from upgradient wells for Appendix I and IV parameters are reassessed for outliers during each analysis. No additional values were flagged, and a summary of previously flagged outliers follows this report (Figure C).

Interwell Upper Tolerance Limits

Interwell tolerance limits were used to calculate site-specific background limits from all available pooled upgradient well data through August 2023 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, nonparametric 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 when a minimum of 4 samples was available using data since 2016 for each of the Appendix I and IV constituents in accordance with the state requirements in each downgradient well (Figure I). The Sanitas software was used to calculate the tolerance limits and the confidence intervals, either parametric or nonparametric, depending on the data distribution and percentage of non-detects. When data followed a normal or transformed-normal distribution, parametric confidence intervals were used for Appendix IV parameters. Nonparametric confidence intervals, which use the appropriate order

statistics, depending on the sample size, as interval limits, were constructed when data did not follow a normal or transformed-normal distribution or when there were greater than 50% non-detects. The lower confidence limit, which is constructed with 99% confidence for parametric confidence intervals, is compared to the GWPS prepared as described above. The achievable confidence level associated with nonparametric confidence intervals is dependent upon the number samples available.

Only when the entire confidence interval is above a GWPS is the well/constituent pair considered to exceed its respective standard. In the event of a confidence interval exceedance of the GWPS, a statistically significant level (SSL) exceedance is identified. A summary of the confidence intervals follows this letter and an exceedance was identified for the following well/constituent pairs:

- Cobalt: ARAMW-7
- Lithium: ARAMW-7

Trend Test Evaluation – Appendix IV

Assessment monitoring well/constituent pairs identified with confidence interval exceedances (which evaluate the average concentration of a group of measurements) are further evaluated using the Sen's Slope/Mann-Kendall trend test using 95% confidence (Figure J). Although the trend tests for Assessment monitoring pairs were previously evaluated using 99% confidence, the 95% confidence level more rapidly identifies statistically significant trends. Additionally, the 95% confidence is recommended in cases with limited sample sizes and, particularly, for new assessment wells. Upgradient wells are included in the trend analyses to identify whether similar patterns exist upgradient of the site for the same constituents. When trends are present in upgradient wells, it is an indication of variability in groundwater quality unrelated to practices at the site. No significant trends were identified.

Thank you for the opportunity to assist you in the statistical analysis of groundwater quality for Plant Arkwright Ash Pond 2/Dry Ash Stockpile. If you have any questions or comments, please feel free to contact us.

For Groundwater Stats Consulting,



Kristina Rayner
Senior Statistician



Andrew Collins
Project Manager

100% Non-Detects: Appendix I & IV Downgradient and Assessment

Analysis Run 10/13/2023 11:00 AM View: Confidence Intervals
Plant Arkwright Client: Southern Company Data: Arkwright No 2

Antimony (mg/L)

ARAMW-1, ARAMW-2, ARAMW-7, ARGWC-21, ARGWC-22, ARGWC-23

Arsenic (mg/L)

ARAMW-9

Beryllium (mg/L)

ARAMW-1, ARAMW-2, ARAMW-8, ARAMW-9, ARGWC-21

Cadmium (mg/L)

ARAMW-1, ARAMW-2, ARAMW-7, ARAMW-8, ARAMW-9, ARGWC-21, ARGWC-22, ARGWC-23

Chromium (mg/L)

ARAMW-1, ARAMW-2, ARAMW-7, ARAMW-8, ARAMW-9, ARGWC-23

Cobalt (mg/L)

ARAMW-9

Lead (mg/L)

ARAMW-1, ARAMW-2, ARAMW-8, ARAMW-9

Mercury (mg/L)

ARAMW-1, ARAMW-2, ARAMW-7, ARAMW-8, ARAMW-9, ARGWC-22, ARGWC-23

Molybdenum (mg/L)

ARGWC-21

Selenium (mg/L)

ARAMW-1, ARAMW-2, ARAMW-7, ARAMW-8, ARAMW-9, ARGWC-21, ARGWC-23

Silver (mg/L)

ARAMW-1, ARAMW-2, ARAMW-7, ARAMW-8, ARAMW-9, ARGWC-22, ARGWC-23

Thallium (mg/L)

ARAMW-1, ARAMW-2, ARAMW-7, ARAMW-8, ARAMW-9, ARGWC-21

Interwell Prediction Limits - Appendix I & IV - All Results (No Significant)

Plant Arkwright Client: Southern Company Data: Arkwright No 2 Printed 10/19/2023, 8:46 AM

<u>Constituent</u>	<u>Well</u>	<u>Upper Lim.</u>	<u>Lower Lim.</u>	<u>Date</u>	<u>Observ.</u>	<u>Sig.</u>	<u>Bg N</u>	<u>Bg Mean</u>	<u>Std. Dev.</u>	<u>%NDs</u>	<u>ND Adj.</u>	<u>Transform</u>	<u>Alpha</u>	<u>Method</u>
Arsenic (mg/L)	ARGWC-21	0.005	n/a	8/9/2023	0.005ND	No	68	n/a	n/a	86.76	n/a	n/a	0.0004166	NP Inter (NDs) 1 of 2
Arsenic (mg/L)	ARGWC-22	0.005	n/a	8/8/2023	0.005ND	No	68	n/a	n/a	86.76	n/a	n/a	0.0004166	NP Inter (NDs) 1 of 2
Arsenic (mg/L)	ARGWC-23	0.005	n/a	8/8/2023	0.005ND	No	68	n/a	n/a	86.76	n/a	n/a	0.0004166	NP Inter (NDs) 1 of 2
Barium (mg/L)	ARGWC-21	0.107	n/a	8/9/2023	0.0474	No	68	n/a	n/a	0	n/a	n/a	0.0004166	NP Inter (normality) 1 of 2
Barium (mg/L)	ARGWC-22	0.107	n/a	8/8/2023	0.0255	No	68	n/a	n/a	0	n/a	n/a	0.0004166	NP Inter (normality) 1 of 2
Barium (mg/L)	ARGWC-23	0.107	n/a	8/8/2023	0.0936	No	68	n/a	n/a	0	n/a	n/a	0.0004166	NP Inter (normality) 1 of 2
Lead (mg/L)	ARGWC-21	0.002	n/a	8/9/2023	0.002ND	No	68	n/a	n/a	86.76	n/a	n/a	0.0004166	NP Inter (NDs) 1 of 2
Lead (mg/L)	ARGWC-22	0.002	n/a	8/8/2023	0.002ND	No	68	n/a	n/a	86.76	n/a	n/a	0.0004166	NP Inter (NDs) 1 of 2
Lead (mg/L)	ARGWC-23	0.002	n/a	8/8/2023	0.002ND	No	68	n/a	n/a	86.76	n/a	n/a	0.0004166	NP Inter (NDs) 1 of 2
Selenium (mg/L)	ARGWC-22	0.005	n/a	8/8/2023	0.005ND	No	67	n/a	n/a	65.67	n/a	n/a	0.0004301	NP Inter (NDs) 1 of 2
Silver (mg/L)	ARGWC-21	0.001	n/a	8/9/2023	0.001ND	No	58	n/a	n/a	91.38	n/a	n/a	0.0005697	NP Inter (NDs) 1 of 2

Interwell Prediction Limits - Appendix III - Significant Results

Plant Arkwright Client: Southern Company Data: Arkwright No 2 Printed 10/13/2023, 11:32 AM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Boron (mg/L)	ARGWC-21	0.092	n/a	8/9/2023	1.12	Yes	38	n/a	n/a	28.95	n/a	n/a	0.001277	NP Inter (normality) 1 of 2
Boron (mg/L)	ARGWC-22	0.092	n/a	8/8/2023	3.06	Yes	38	n/a	n/a	28.95	n/a	n/a	0.001277	NP Inter (normality) 1 of 2
Boron (mg/L)	ARGWC-23	0.092	n/a	8/8/2023	0.379	Yes	38	n/a	n/a	28.95	n/a	n/a	0.001277	NP Inter (normality) 1 of 2
Calcium (mg/L)	ARGWC-21	13.99	n/a	8/9/2023	82.9	Yes	38	3.222	0.2948	0	None	sqrt(x)	0.002505	Param Inter 1 of 2
Calcium (mg/L)	ARGWC-22	13.99	n/a	8/8/2023	196	Yes	38	3.222	0.2948	0	None	sqrt(x)	0.002505	Param Inter 1 of 2
Calcium (mg/L)	ARGWC-23	13.99	n/a	8/8/2023	66.6	Yes	38	3.222	0.2948	0	None	sqrt(x)	0.002505	Param Inter 1 of 2
Fluoride (mg/L)	ARGWC-21	0.148	n/a	8/9/2023	0.203	Yes	42	n/a	n/a	45.24	n/a	n/a	0.001066	NP Inter (normality) 1 of 2
Fluoride (mg/L)	ARGWC-23	0.148	n/a	8/8/2023	0.283	Yes	42	n/a	n/a	45.24	n/a	n/a	0.001066	NP Inter (normality) 1 of 2
pH (SU)	ARGWC-21	6.085	5.388	8/9/2023	6.6	Yes	41	5.737	0.1994	0	None	No	0.001253	Param Inter 1 of 2
pH (SU)	ARGWC-23	6.085	5.388	8/8/2023	6.33	Yes	41	5.737	0.1994	0	None	No	0.001253	Param Inter 1 of 2
Sulfate (mg/L)	ARGWC-21	21	n/a	8/9/2023	214	Yes	63	n/a	n/a	0	n/a	n/a	0.0004845	NP Inter (normality) 1 of 2
Sulfate (mg/L)	ARGWC-22	21	n/a	8/8/2023	719	Yes	63	n/a	n/a	0	n/a	n/a	0.0004845	NP Inter (normality) 1 of 2
Sulfate (mg/L)	ARGWC-23	21	n/a	8/8/2023	69.8	Yes	63	n/a	n/a	0	n/a	n/a	0.0004845	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	ARGWC-21	143.5	n/a	8/9/2023	520	Yes	36	105.8	21.33	0	None	No	0.002505	Param Inter 1 of 2
Total Dissolved Solids (mg/L)	ARGWC-22	143.5	n/a	8/8/2023	1220	Yes	36	105.8	21.33	0	None	No	0.002505	Param Inter 1 of 2
Total Dissolved Solids (mg/L)	ARGWC-23	143.5	n/a	8/8/2023	294	Yes	36	105.8	21.33	0	None	No	0.002505	Param Inter 1 of 2

Interwell Prediction Limits - Appendix III - All Results

Plant Arkwright Client: Southern Company Data: Arkwright No 2 Printed 10/13/2023, 11:32 AM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Boron (mg/L)	ARGWC-21	0.092	n/a	8/9/2023	1.12	Yes	38	n/a	n/a	28.95	n/a	n/a	0.001277	NP Inter (normality) 1 of 2
Boron (mg/L)	ARGWC-22	0.092	n/a	8/8/2023	3.06	Yes	38	n/a	n/a	28.95	n/a	n/a	0.001277	NP Inter (normality) 1 of 2
Boron (mg/L)	ARGWC-23	0.092	n/a	8/8/2023	0.379	Yes	38	n/a	n/a	28.95	n/a	n/a	0.001277	NP Inter (normality) 1 of 2
Calcium (mg/L)	ARGWC-21	13.99	n/a	8/9/2023	82.9	Yes	38	3.222	0.2948	0	None	sqrt(x)	0.002505	Param Inter 1 of 2
Calcium (mg/L)	ARGWC-22	13.99	n/a	8/8/2023	196	Yes	38	3.222	0.2948	0	None	sqrt(x)	0.002505	Param Inter 1 of 2
Calcium (mg/L)	ARGWC-23	13.99	n/a	8/8/2023	66.6	Yes	38	3.222	0.2948	0	None	sqrt(x)	0.002505	Param Inter 1 of 2
Chloride (mg/L)	ARGWC-21	16.2	n/a	8/9/2023	3.35	No	64	n/a	n/a	0	n/a	n/a	0.0004709	NP Inter (normality) 1 of 2
Chloride (mg/L)	ARGWC-22	16.2	n/a	8/8/2023	6.79	No	64	n/a	n/a	0	n/a	n/a	0.0004709	NP Inter (normality) 1 of 2
Chloride (mg/L)	ARGWC-23	16.2	n/a	8/8/2023	3.6	No	64	n/a	n/a	0	n/a	n/a	0.0004709	NP Inter (normality) 1 of 2
Fluoride (mg/L)	ARGWC-21	0.148	n/a	8/9/2023	0.203	Yes	42	n/a	n/a	45.24	n/a	n/a	0.001066	NP Inter (normality) 1 of 2
Fluoride (mg/L)	ARGWC-22	0.148	n/a	8/8/2023	0.1ND	No	42	n/a	n/a	45.24	n/a	n/a	0.001066	NP Inter (normality) 1 of 2
Fluoride (mg/L)	ARGWC-23	0.148	n/a	8/8/2023	0.283	Yes	42	n/a	n/a	45.24	n/a	n/a	0.001066	NP Inter (normality) 1 of 2
pH (SU)	ARGWC-21	6.085	5.388	8/9/2023	6.6	Yes	41	5.737	0.1994	0	None	No	0.001253	Param Inter 1 of 2
pH (SU)	ARGWC-22	6.085	5.388	8/8/2023	5.61	No	41	5.737	0.1994	0	None	No	0.001253	Param Inter 1 of 2
pH (SU)	ARGWC-23	6.085	5.388	8/8/2023	6.33	Yes	41	5.737	0.1994	0	None	No	0.001253	Param Inter 1 of 2
Sulfate (mg/L)	ARGWC-21	21	n/a	8/9/2023	214	Yes	63	n/a	n/a	0	n/a	n/a	0.0004845	NP Inter (normality) 1 of 2
Sulfate (mg/L)	ARGWC-22	21	n/a	8/8/2023	719	Yes	63	n/a	n/a	0	n/a	n/a	0.0004845	NP Inter (normality) 1 of 2
Sulfate (mg/L)	ARGWC-23	21	n/a	8/8/2023	69.8	Yes	63	n/a	n/a	0	n/a	n/a	0.0004845	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	ARGWC-21	143.5	n/a	8/9/2023	520	Yes	36	105.8	21.33	0	None	No	0.002505	Param Inter 1 of 2
Total Dissolved Solids (mg/L)	ARGWC-22	143.5	n/a	8/8/2023	1220	Yes	36	105.8	21.33	0	None	No	0.002505	Param Inter 1 of 2
Total Dissolved Solids (mg/L)	ARGWC-23	143.5	n/a	8/8/2023	294	Yes	36	105.8	21.33	0	None	No	0.002505	Param Inter 1 of 2

Trend Tests - Prediction Limit Exceedances - Significant Results

Plant Arkwright Client: Southern Company Data: Arkwright No 2 Printed 10/13/2023, 11:49 AM

<u>Constituent</u>	<u>Well</u>	<u>Slope</u>	<u>Calc.</u>	<u>Critical</u>	<u>Sig.</u>	<u>N</u>	<u>%NDs</u>	<u>Normality</u>	<u>Xform</u>	<u>Alpha</u>	<u>Method</u>
Boron (mg/L)	ARGWC-21	0.0716	137	74	Yes	19	0	n/a	n/a	0.01	NP
Calcium (mg/L)	ARGWC-21	5.478	135	74	Yes	19	0	n/a	n/a	0.01	NP
Fluoride (mg/L)	ARGWC-23	0.1263	88	63	Yes	17	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	ARGWA-19 (bg)	-0.2188	-217	-161	Yes	32	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	ARGWC-21	8.273	378	161	Yes	32	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	ARGWC-21	31.32	121	68	Yes	18	0	n/a	n/a	0.01	NP

Trend Tests - Prediction Limit Exceedances - All Results

Plant Arkwright Client: Southern Company Data: Arkwright No 2 Printed 10/13/2023, 11:50 AM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Boron (mg/L)	ARGWA-19 (bg)	0	21	74	No	19	36.84	n/a	n/a	0.01	NP
Boron (mg/L)	ARGWA-20 (bg)	0.005321	65	74	No	19	21.05	n/a	n/a	0.01	NP
Boron (mg/L)	ARGWC-21	0.0716	137	74	Yes	19	0	n/a	n/a	0.01	NP
Boron (mg/L)	ARGWC-22	0	8	63	No	17	0	n/a	n/a	0.01	NP
Boron (mg/L)	ARGWC-23	0.01446	29	63	No	17	0	n/a	n/a	0.01	NP
Calcium (mg/L)	ARGWA-19 (bg)	-0.4773	-48	-74	No	19	0	n/a	n/a	0.01	NP
Calcium (mg/L)	ARGWA-20 (bg)	0.249	64	74	No	19	0	n/a	n/a	0.01	NP
Calcium (mg/L)	ARGWC-21	5.478	135	74	Yes	19	0	n/a	n/a	0.01	NP
Calcium (mg/L)	ARGWC-22	0	7	63	No	17	0	n/a	n/a	0.01	NP
Calcium (mg/L)	ARGWC-23	1.41	34	63	No	17	0	n/a	n/a	0.01	NP
Fluoride (mg/L)	ARGWA-19 (bg)	0	14	87	No	21	38.1	n/a	n/a	0.01	NP
Fluoride (mg/L)	ARGWA-20 (bg)	0	-9	-87	No	21	52.38	n/a	n/a	0.01	NP
Fluoride (mg/L)	ARGWC-21	0.007085	33	87	No	21	0	n/a	n/a	0.01	NP
Fluoride (mg/L)	ARGWC-23	0.1263	88	63	Yes	17	0	n/a	n/a	0.01	NP
pH (SU)	ARGWA-19 (bg)	0.002899	4	81	No	20	0	n/a	n/a	0.01	NP
pH (SU)	ARGWA-20 (bg)	0.002459	8	87	No	21	0	n/a	n/a	0.01	NP
pH (SU)	ARGWC-21	-0.03265	-66	-87	No	21	0	n/a	n/a	0.01	NP
pH (SU)	ARGWC-23	-0.01164	-9	-63	No	17	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	ARGWA-19 (bg)	-0.2188	-217	-161	Yes	32	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	ARGWA-20 (bg)	-0.01894	-47	-152	No	31	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	ARGWC-21	8.273	378	161	Yes	32	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	ARGWC-22	-0.5044	-7	-63	No	17	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	ARGWC-23	0.9535	14	63	No	17	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	ARGWA-19 (bg)	-5.194	-60	-68	No	18	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	ARGWA-20 (bg)	0	11	68	No	18	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	ARGWC-21	31.32	121	68	Yes	18	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	ARGWC-22	-17.34	-30	-58	No	16	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	ARGWC-23	0	-6	-58	No	16	0	n/a	n/a	0.01	NP

Upper Tolerance Limits

Plant Arkwright Client: Southern Company Data: Arkwright No 2 Printed 10/13/2023, 11:56 AM

<u>Constituent</u>	<u>Upper Lim.</u>	<u>Bg N</u>	<u>Bg Mean</u>	<u>Std. Dev.</u>	<u>%NDs</u>	<u>ND Adj.</u>	<u>Transform</u>	<u>Alpha</u>	<u>Method</u>
Antimony (mg/L)	0.003	30	n/a	n/a	100	n/a	n/a	0.2146	NP Inter(NDs)
Arsenic (mg/L)	0.005	68	n/a	n/a	86.76	n/a	n/a	0.03056	NP Inter(NDs)
Barium (mg/L)	0.107	68	n/a	n/a	0	n/a	n/a	0.03056	NP Inter(normality)
Beryllium (mg/L)	0.0005	34	n/a	n/a	91.18	n/a	n/a	0.1748	NP Inter(NDs)
Cadmium (mg/L)	0.001	66	n/a	n/a	98.48	n/a	n/a	0.03387	NP Inter(NDs)
Chromium (mg/L)	0.01	38	n/a	n/a	23.68	n/a	n/a	0.1424	NP Inter(normality)
Cobalt (mg/L)	0.001	40	n/a	n/a	65	n/a	n/a	0.1285	NP Inter(NDs)
Combined Radium 226 + 228 (pCi/L)	2.33	38	n/a	n/a	0	n/a	n/a	0.1424	NP Inter(normality)
Fluoride (mg/L)	0.148	42	n/a	n/a	45.24	n/a	n/a	0.116	NP Inter(normality)
Lead (mg/L)	0.002	68	n/a	n/a	86.76	n/a	n/a	0.03056	NP Inter(NDs)
Lithium (mg/L)	0.013	40	n/a	n/a	42.5	n/a	n/a	0.1285	NP Inter(normality)
Mercury (mg/L)	0.0002	30	n/a	n/a	93.33	n/a	n/a	0.2146	NP Inter(NDs)
Molybdenum (mg/L)	0.001	36	n/a	n/a	86.11	n/a	n/a	0.1578	NP Inter(NDs)
Selenium (mg/L)	0.005	67	n/a	n/a	65.67	n/a	n/a	0.03217	NP Inter(NDs)
Silver (mg/L)	0.001	58	n/a	n/a	91.38	n/a	n/a	0.05105	NP Inter(NDs)
Thallium (mg/L)	0.002	30	n/a	n/a	96.67	n/a	n/a	0.2146	NP Inter(NDs)

PLANT ARKWRIGHT AP #2 GWPS				
Constituent Name	MCL	CCR-Rule Specified	Background Limit	GWPS
Antimony, Total (mg/L)	0.006		0.003	0.006
Arsenic, Total (mg/L)	0.01		0.005	0.01
Barium, Total (mg/L)	2		0.11	2
Beryllium, Total (mg/L)	0.004		0.0005	0.004
Cadmium, Total (mg/L)	0.005		0.001	0.005
Chromium, Total (mg/L)	0.1		0.01	0.1
Cobalt, Total (mg/L)	n/a	0.006	0.001	0.006
Combined Radium, Total (pCi/L)	5		2.33	5
Fluoride, Total (mg/L)	4		0.15	4
Lead, Total (mg/L)	n/a	0.015	0.002	0.015
Lithium, Total (mg/L)	n/a	0.04	0.013	0.04
Mercury, Total (mg/L)	0.002		0.0002	0.002
Molybdenum, Total (mg/L)	n/a	0.1	0.001	0.1
Selenium, Total (mg/L)	0.05		0.005	0.05
Silver, Total (mg/L)	n/a		0.001	0.001
Thallium, Total (mg/L)	0.002		0.002	0.002

*MCL = Maximum Contaminant Level

*GWPS = Groundwater Protection Standard

*CCR = Coal Combustion Residuals

Confidence Intervals Summary Table - Significant Results

Plant Arkwright Client: Southern Company Data: Arkwright No 2 Printed 10/13/2023, 12:06 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig. N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Cobalt (mg/L)	ARAMW-7	0.07871	0.03458	0.006	Yes 7	0.05713	0.02447	0	None	x^3	0.01	Param.
Lithium (mg/L)	ARAMW-7	0.0655	0.05767	0.04	Yes 7	0.06159	0.003298	0	None	No	0.01	Param.

Confidence Intervals Summary Table - All Results

Plant Arkwright Client: Southern Company Data: Arkwright No 2 Printed 10/13/2023, 12:06 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig. N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Antimony (mg/L)	ARAMW-8	0.003	0.00134	0.006	No 5	0.002668	0.0007424	80	None	No	0.031	NP (NDs)
Arsenic (mg/L)	ARAMW-1	0.005	0.00233	0.01	No 8	0.004666	0.000944	87.5	None	No	0.004	NP (NDs)
Arsenic (mg/L)	ARAMW-2	0.0457	0.004386	0.01	No 8	0.02402	0.02717	0	None	x^(1/3)	0.01	Param.
Arsenic (mg/L)	ARAMW-7	0.005	0.00035	0.01	No 6	0.00316	0.002189	50	None	No	0.0155	NP (normality)
Arsenic (mg/L)	ARAMW-8	0.005	0.00031	0.01	No 6	0.002972	0.002305	50	None	No	0.0155	NP (normality)
Arsenic (mg/L)	ARGWC-21	0.005	0.00207	0.01	No 34	0.003494	0.001661	52.94	None	No	0.01	NP (NDs)
Arsenic (mg/L)	ARGWC-22	0.005	0.00066	0.01	No 16	0.003978	0.001869	75	None	No	0.01	NP (NDs)
Arsenic (mg/L)	ARGWC-23	0.005	0.00075	0.01	No 16	0.004154	0.00182	81.25	None	No	0.01	NP (NDs)
Barium (mg/L)	ARAMW-1	0.05308	0.04397	2	No 8	0.04853	0.004295	0	None	No	0.01	Param.
Barium (mg/L)	ARAMW-2	0.14	0.067	2	No 8	0.09181	0.02753	0	None	No	0.004	NP (normality)
Barium (mg/L)	ARAMW-7	0.03483	0.02184	2	No 6	0.02833	0.00473	0	None	No	0.01	Param.
Barium (mg/L)	ARAMW-8	0.1224	0.08756	2	No 6	0.105	0.0127	0	None	No	0.01	Param.
Barium (mg/L)	ARGWC-21	0.1	0.044	2	No 34	0.06834	0.03428	0	None	No	0.01	NP (normality)
Barium (mg/L)	ARGWC-22	0.04906	0.02955	2	No 16	0.04005	0.01602	0	None	sqrt(x)	0.01	Param.
Barium (mg/L)	ARGWC-23	0.1491	0.09733	2	No 16	0.1232	0.0398	0	None	No	0.01	Param.
Beryllium (mg/L)	ARAMW-7	0.0025	0.000236	0.004	No 6	0.001384	0.001223	50	None	No	0.0155	NP (normality)
Beryllium (mg/L)	ARGWC-22	0.0005	0.00023	0.004	No 15	0.0004307	0.000125	66.67	None	No	0.01	NP (NDs)
Beryllium (mg/L)	ARGWC-23	0.0005	0.00033	0.004	No 15	0.0004887	0.00004389	93.33	None	No	0.01	NP (NDs)
Chromium (mg/L)	ARGWC-21	0.01	0.0017	0.1	No 19	0.009563	0.001904	94.74	None	No	0.01	NP (NDs)
Chromium (mg/L)	ARGWC-22	0.01	0.0048	0.1	No 16	0.009675	0.0013	93.75	None	No	0.01	NP (NDs)
Cobalt (mg/L)	ARAMW-1	0.001	0.00035	0.006	No 9	0.0006842	0.0002748	0	None	No	0.002	NP (normality)
Cobalt (mg/L)	ARAMW-2	0.003072	0.002117	0.006	No 9	0.002594	0.0004943	0	None	No	0.01	Param.
Cobalt (mg/L)	ARAMW-7	0.07871	0.03458	0.006	Yes 7	0.05713	0.02447	0	None	x^3	0.01	Param.
Cobalt (mg/L)	ARAMW-8	0.005631	0.00256	0.006	No 7	0.004096	0.001293	0	None	No	0.01	Param.
Cobalt (mg/L)	ARGWC-21	0.0019	0.0007	0.006	No 20	0.001316	0.0005999	0	None	No	0.01	NP (normality)
Cobalt (mg/L)	ARGWC-22	0.008291	0.002588	0.006	No 17	0.006004	0.005185	0	None	sqrt(x)	0.01	Param.
Cobalt (mg/L)	ARGWC-23	0.002238	0.0008255	0.006	No 17	0.001652	0.001313	0	None	sqrt(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	ARAMW-1	2.894	0.3446	5	No 8	1.551	1.405	0	None	sqrt(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	ARAMW-2	4.208	2.169	5	No 8	3.189	0.962	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	ARAMW-7	5.264	4.116	5	No 6	4.69	0.418	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	ARAMW-8	2.764	0.007706	5	No 6	1.04	1.243	0	None	sqrt(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	ARGWC-21	1.143	0.5604	5	No 19	0.9819	0.7745	0	None	ln(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	ARGWC-22	1.094	0.3362	5	No 16	0.7813	0.7044	0	None	sqrt(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	ARGWC-23	0.706	0.1455	5	No 16	0.4897	0.5722	0	None	sqrt(x)	0.01	Param.
Fluoride (mg/L)	ARAMW-1	0.2271	0.1592	4	No 9	0.1931	0.03517	0	None	No	0.01	Param.
Fluoride (mg/L)	ARAMW-2	0.1357	0.07228	4	No 9	0.104	0.03286	11.11	None	No	0.01	Param.
Fluoride (mg/L)	ARAMW-7	0.11	0.032	4	No 7	0.07714	0.03245	42.86	None	No	0.008	NP (normality)
Fluoride (mg/L)	ARAMW-8	0.2658	0.1542	4	No 7	0.21	0.04695	0	None	No	0.01	Param.
Fluoride (mg/L)	ARGWC-21	0.1565	0.08641	4	No 21	0.137	0.1074	0	None	ln(x)	0.01	Param.
Fluoride (mg/L)	ARGWC-22	0.0979	0.04	4	No 17	0.07882	0.05991	17.65	None	No	0.01	NP (normality)
Fluoride (mg/L)	ARGWC-23	0.366	0.2099	4	No 17	0.2879	0.1246	0	None	No	0.01	Param.
Lead (mg/L)	ARAMW-7	0.002	0.00013	0.015	No 6	0.001688	0.0007634	83.33	None	No	0.0155	NP (NDs)
Lead (mg/L)	ARGWC-21	0.002	0.00026	0.015	No 34	0.001894	0.0004289	94.12	None	No	0.01	NP (NDs)
Lead (mg/L)	ARGWC-22	0.002	0.00022	0.015	No 16	0.001773	0.0006218	87.5	None	No	0.01	NP (NDs)
Lead (mg/L)	ARGWC-23	0.002	0.00026	0.015	No 16	0.001778	0.0006082	87.5	None	No	0.01	NP (NDs)
Lithium (mg/L)	ARAMW-1	0.009867	0.008372	0.04	No 10	0.009089	0.0009949	0	None	x^3	0.01	Param.
Lithium (mg/L)	ARAMW-2	0.036	0.019	0.04	No 10	0.02887	0.02073	0	None	No	0.011	NP (normality)
Lithium (mg/L)	ARAMW-7	0.0655	0.05767	0.04	Yes 7	0.06159	0.003298	0	None	No	0.01	Param.
Lithium (mg/L)	ARAMW-8	0.006719	0.005207	0.04	No 7	0.005986	0.0007869	0	None	x^4	0.01	Param.
Lithium (mg/L)	ARGWC-21	0.01215	0.009736	0.04	No 20	0.01095	0.002129	0	None	No	0.01	Param.
Lithium (mg/L)	ARGWC-22	0.02454	0.01523	0.04	No 17	0.01989	0.007428	0	None	No	0.01	Param.
Lithium (mg/L)	ARGWC-23	0.04604	0.02833	0.04	No 17	0.03719	0.01413	0	None	No	0.01	Param.
Mercury (mg/L)	ARGWC-21	0.0002	0.000073	0.002	No 15	0.0001915	0.00003279	93.33	None	No	0.01	NP (NDs)
Molybdenum (mg/L)	ARAMW-1	0.00807	0.004699	0.1	No 9	0.006384	0.001745	0	None	No	0.01	Param.
Molybdenum (mg/L)	ARAMW-2	0.015	0.000491	0.1	No 9	0.008722	0.007449	55.56	None	No	0.002	NP (NDs)

Confidence Intervals Summary Table - All Results

Plant Arkwright Client: Southern Company Data: Arkwright No 2 Printed 10/13/2023, 12:06 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig. N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Molybdenum (mg/L)	ARAMW-7	0.0012	0.000379	0.1	No 7	0.0009399	0.0002583	71.43	None	No	0.008	NP (NDs)
Molybdenum (mg/L)	ARAMW-8	0.2118	0.0568	0.1	No 7	0.1343	0.06523	0	None	No	0.01	Param.
Molybdenum (mg/L)	ARGWC-22	0.015	0.000514	0.1	No 16	0.008801	0.007268	56.25	None	No	0.01	NP (NDs)
Molybdenum (mg/L)	ARGWC-23	0.06318	0.0438	0.1	No 16	0.05137	0.01838	0	None	x^2	0.01	Param.
Selenium (mg/L)	ARGWC-22	0.005	0.002	0.05	No 16	0.004812	0.00075	93.75	None	No	0.01	NP (NDs)
Silver (mg/L)	ARGWC-21	0.001	0.001	0.001	No 29	0.0009803	0.0001058	93.1	None	No	0.01	NP (NDs)
Thallium (mg/L)	ARGWC-22	0.002	0.00034	0.002	No 13	0.001518	0.0007608	69.23	None	No	0.01	NP (NDs)
Thallium (mg/L)	ARGWC-23	0.002	0.00028	0.002	No 13	0.0016	0.0007601	76.92	None	No	0.01	NP (NDs)

Trend Tests - Confidence Interval Exceedances - All Results (No Significant)

Plant Arkwright Client: Southern Company Data: Arkwright No 2 Printed 10/13/2023, 12:09 PM

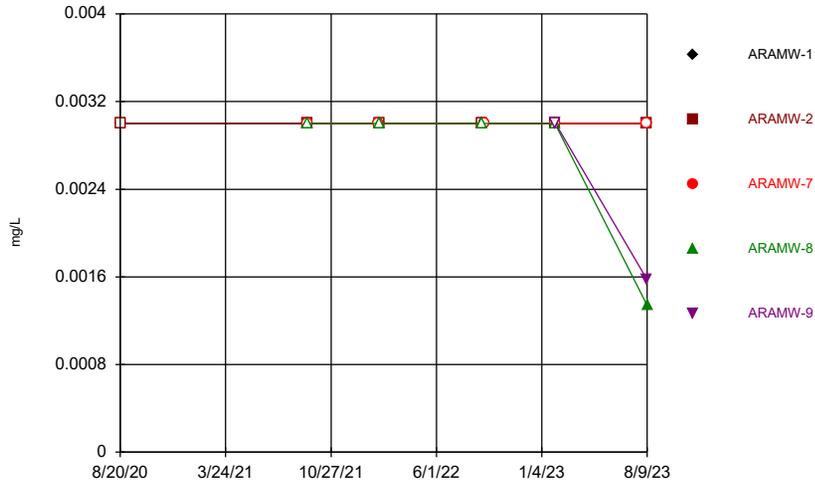
<u>Constituent</u>	<u>Well</u>	<u>Slope</u>	<u>Calc.</u>	<u>Critical</u>	<u>Sig.</u>	<u>N</u>	<u>%NDs</u>	<u>Normality</u>	<u>Xform</u>	<u>Alpha</u>	<u>Method</u>
Cobalt (mg/L)	ARAMW-7	0.005034	1	15	No	7	0	n/a	n/a	0.05	NP
Cobalt (mg/L)	ARGWA-19 (bg)	0	-3	-62	No	20	80	n/a	n/a	0.05	NP
Cobalt (mg/L)	ARGWA-20 (bg)	0	-42	-62	No	20	50	n/a	n/a	0.05	NP
Lithium (mg/L)	ARAMW-7	0	-1	-15	No	7	0	n/a	n/a	0.05	NP
Lithium (mg/L)	ARGWA-19 (bg)	-0.0002284	-56	-62	No	20	5	n/a	n/a	0.05	NP
Lithium (mg/L)	ARGWA-20 (bg)	0	-2	-62	No	20	80	n/a	n/a	0.05	NP

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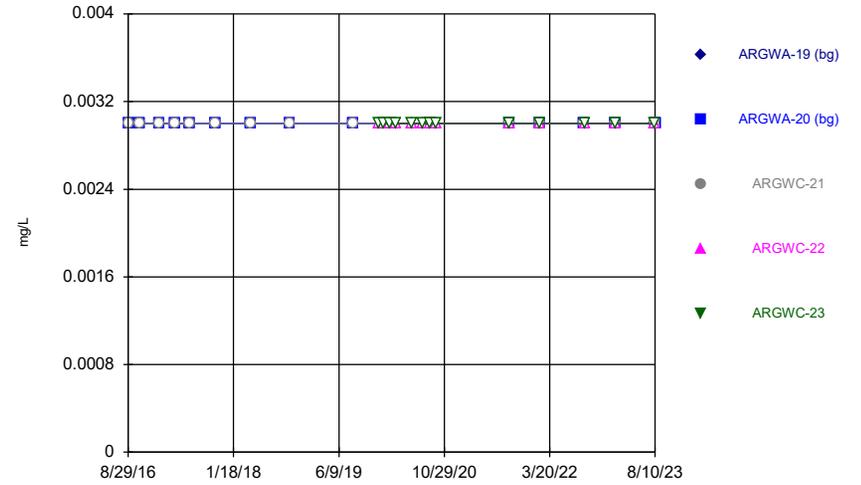
FIGURE A.

Time Series



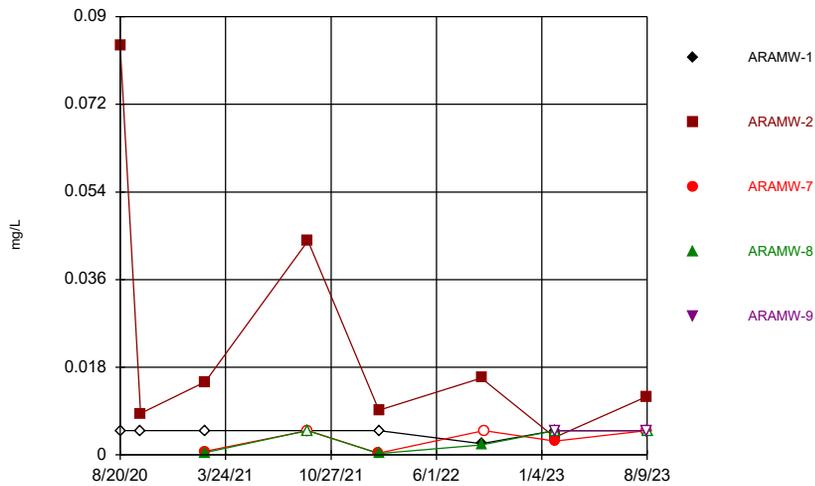
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Plant Arkwright Client: Southern Company Data: Arkwright No 2

Time Series



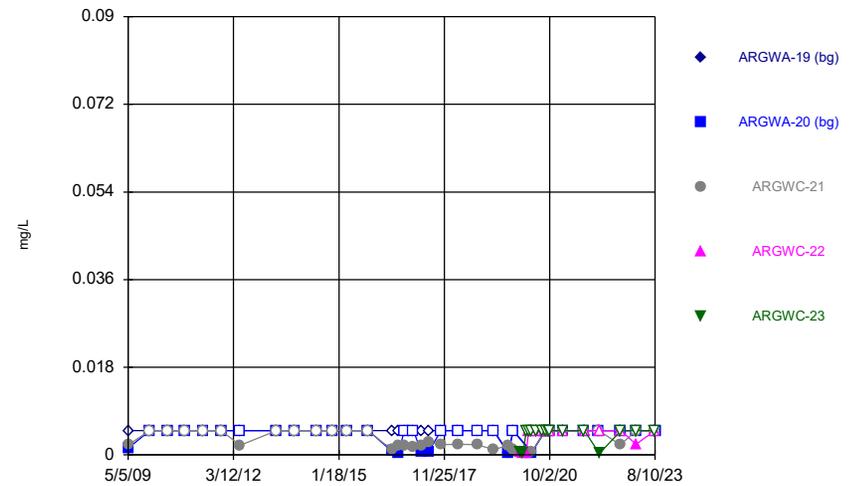
Constituent: Antimony Analysis Run 10/19/2023 8:39 AM View: Descriptive
Plant Arkwright Client: Southern Company Data: Arkwright No 2

Time Series



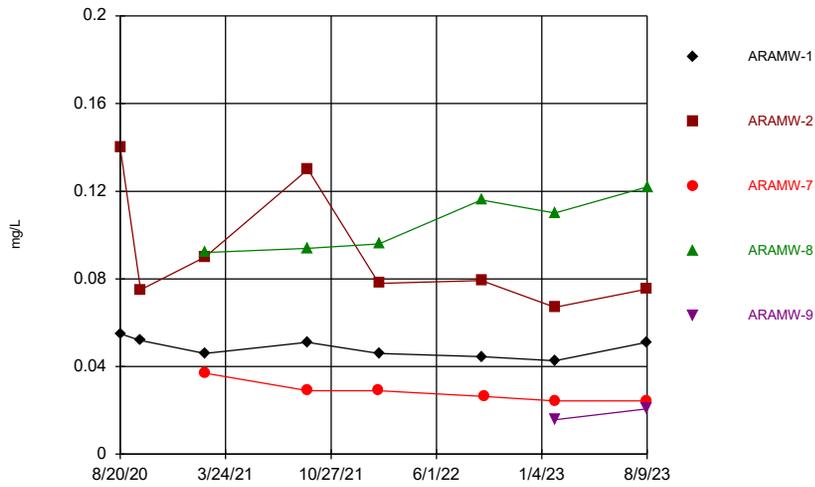
Constituent: Arsenic Analysis Run 10/19/2023 8:39 AM View: Descriptive
Plant Arkwright Client: Southern Company Data: Arkwright No 2

Time Series



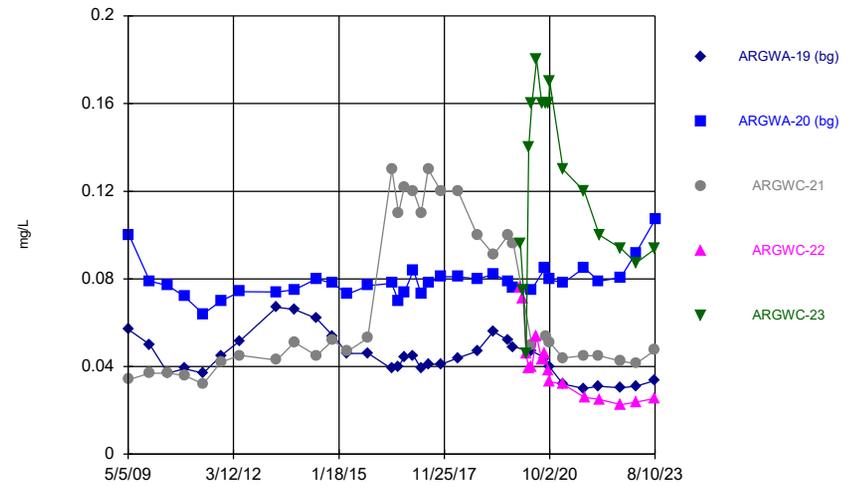
Constituent: Arsenic Analysis Run 10/19/2023 8:39 AM View: Descriptive
Plant Arkwright Client: Southern Company Data: Arkwright No 2

Time Series



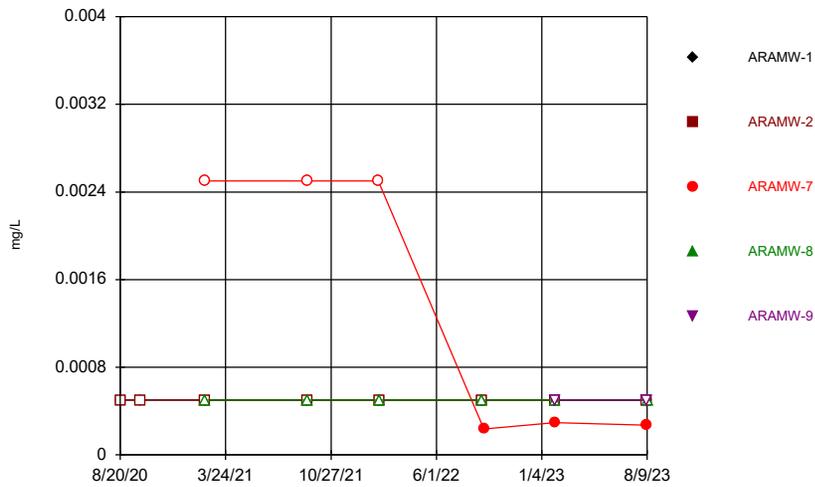
Constituent: Barium Analysis Run 10/19/2023 8:39 AM View: Descriptive
 Plant Arkwright Client: Southern Company Data: Arkwright No 2

Time Series



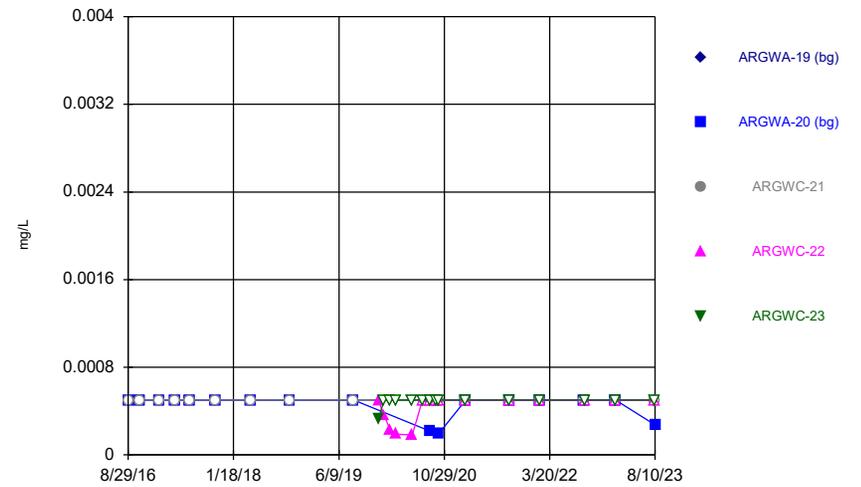
Constituent: Barium Analysis Run 10/19/2023 8:39 AM View: Descriptive
 Plant Arkwright Client: Southern Company Data: Arkwright No 2

Time Series



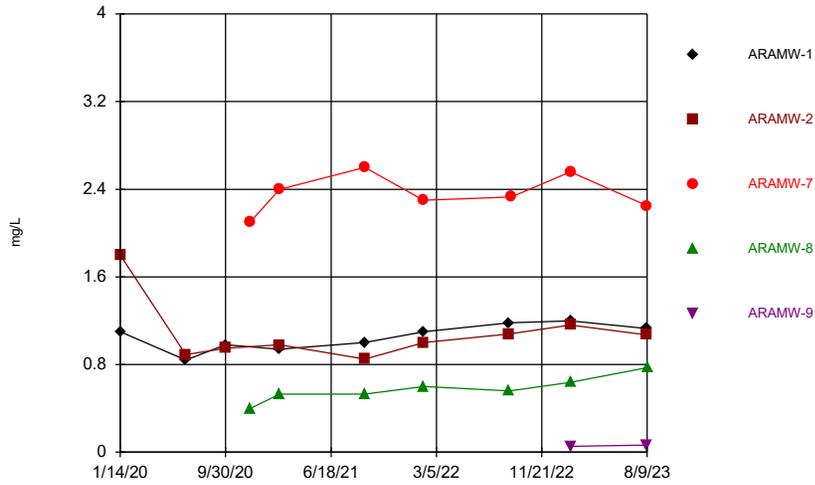
Constituent: Beryllium Analysis Run 10/19/2023 8:39 AM View: Descriptive
 Plant Arkwright Client: Southern Company Data: Arkwright No 2

Time Series



Constituent: Beryllium Analysis Run 10/19/2023 8:39 AM View: Descriptive
 Plant Arkwright Client: Southern Company Data: Arkwright No 2

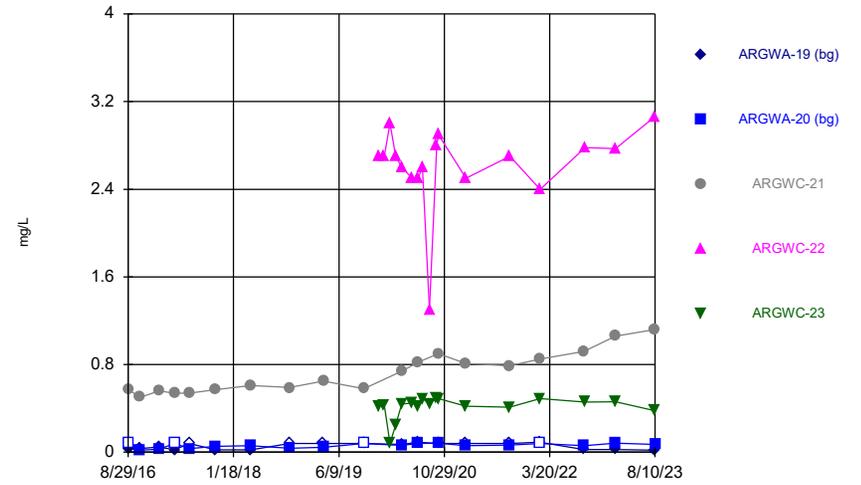
Time Series



Constituent: Boron Analysis Run 10/19/2023 8:39 AM View: Descriptive
 Plant Arkwright Client: Southern Company Data: Arkwright No 2

Hollow symbols indicate censored values.

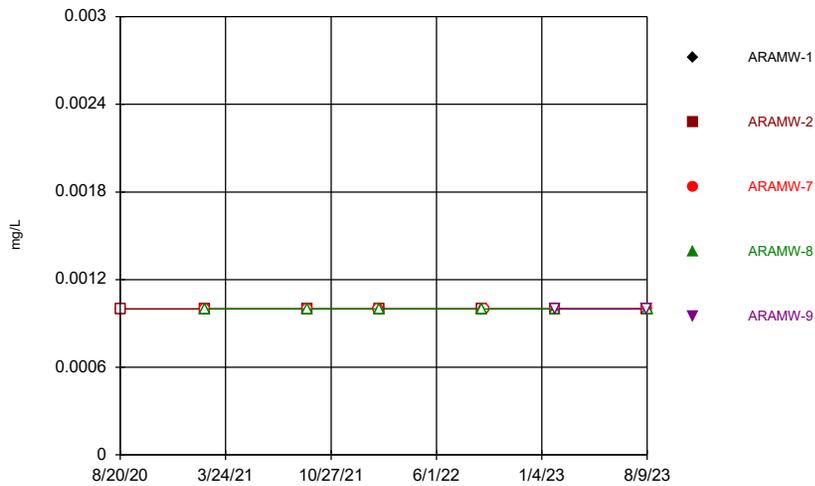
Time Series



Constituent: Boron Analysis Run 10/19/2023 8:39 AM View: Descriptive
 Plant Arkwright Client: Southern Company Data: Arkwright No 2

Hollow symbols indicate censored values.

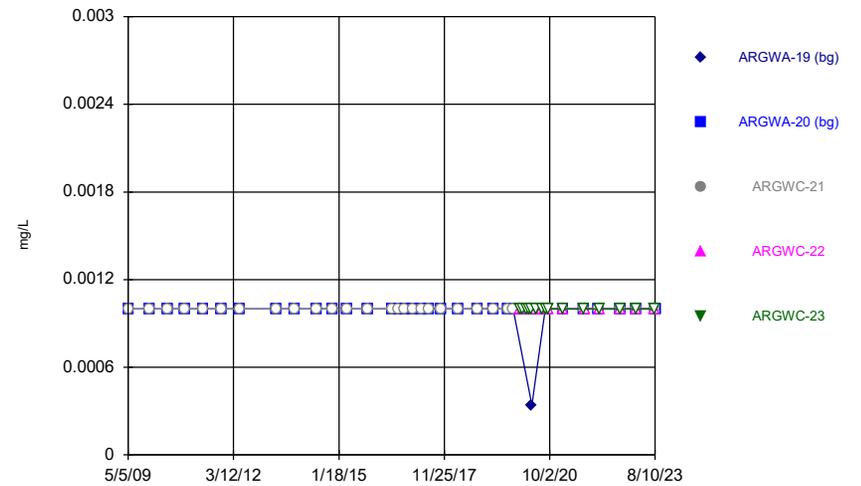
Time Series



Constituent: Cadmium Analysis Run 10/19/2023 8:39 AM View: Descriptive
 Plant Arkwright Client: Southern Company Data: Arkwright No 2

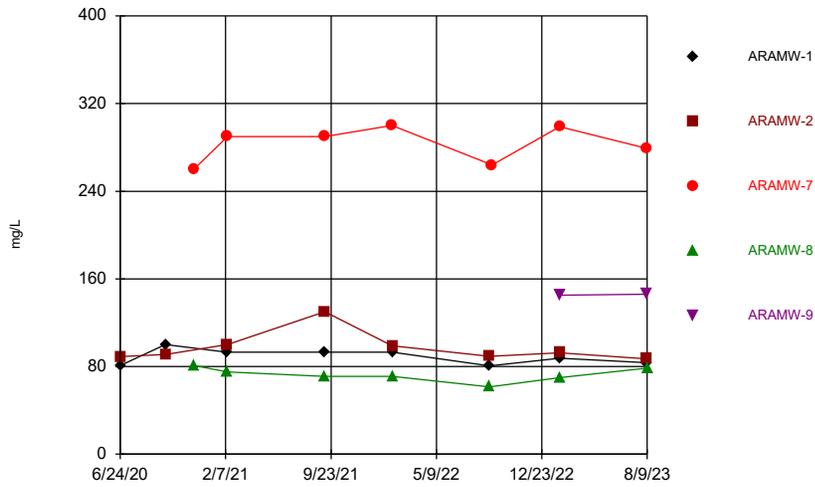
Hollow symbols indicate censored values.

Time Series



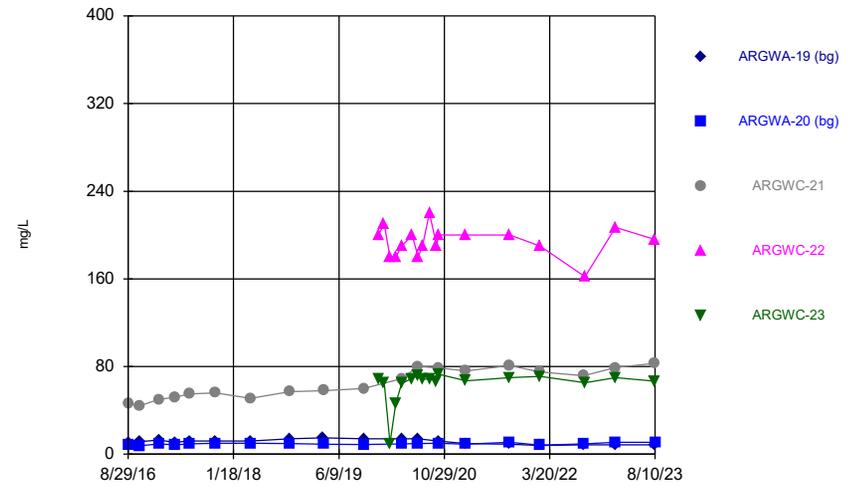
Constituent: Cadmium Analysis Run 10/19/2023 8:39 AM View: Descriptive
 Plant Arkwright Client: Southern Company Data: Arkwright No 2

Time Series



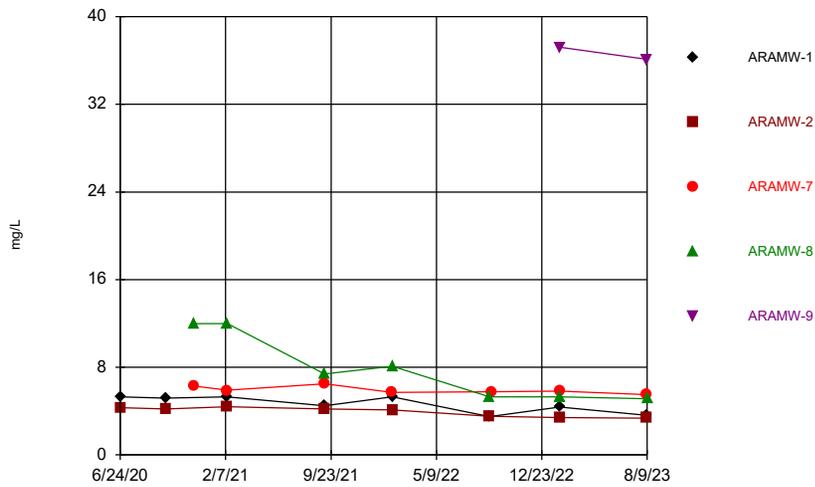
Constituent: Calcium Analysis Run 10/19/2023 8:39 AM View: Descriptive
 Plant Arkwright Client: Southern Company Data: Arkwright No 2

Time Series



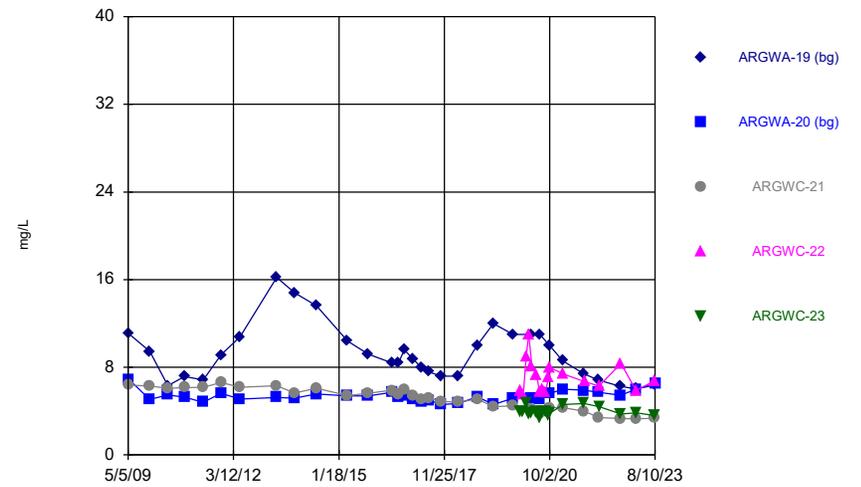
Constituent: Calcium Analysis Run 10/19/2023 8:39 AM View: Descriptive
 Plant Arkwright Client: Southern Company Data: Arkwright No 2

Time Series



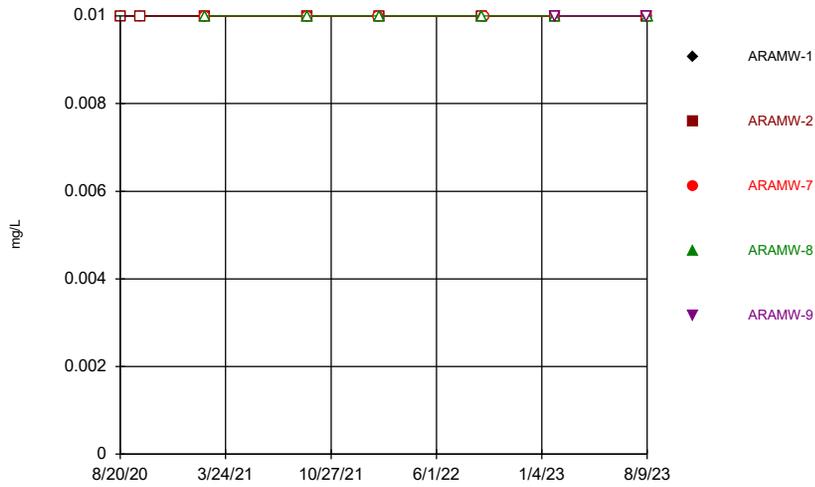
Constituent: Chloride Analysis Run 10/19/2023 8:39 AM View: Descriptive
 Plant Arkwright Client: Southern Company Data: Arkwright No 2

Time Series



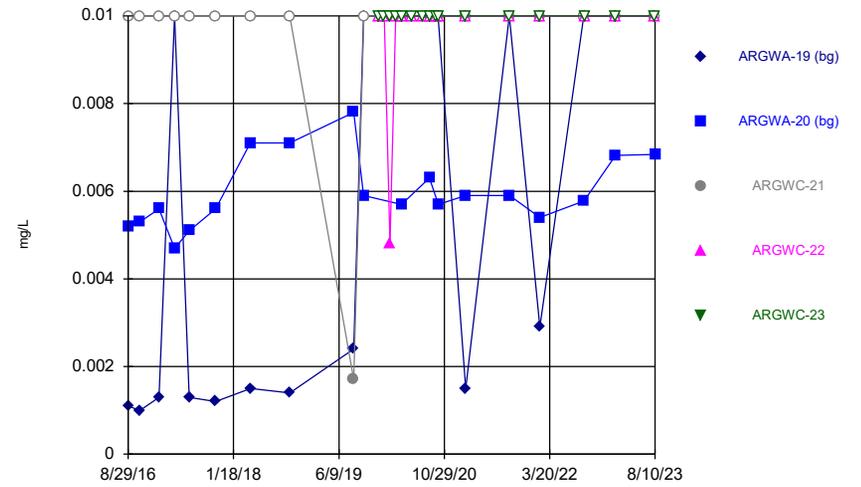
Constituent: Chloride Analysis Run 10/19/2023 8:39 AM View: Descriptive
 Plant Arkwright Client: Southern Company Data: Arkwright No 2

Time Series



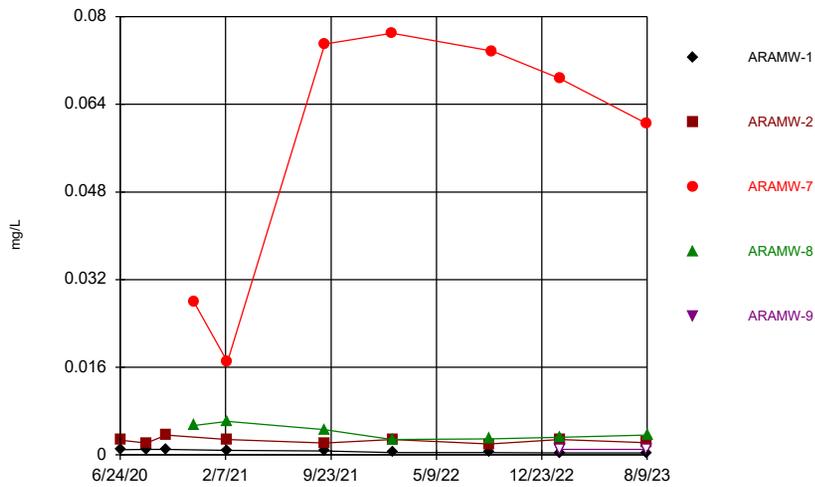
Constituent: Chromium Analysis Run 10/19/2023 8:39 AM View: Descriptive
Plant Arkwright Client: Southern Company Data: Arkwright No 2

Time Series



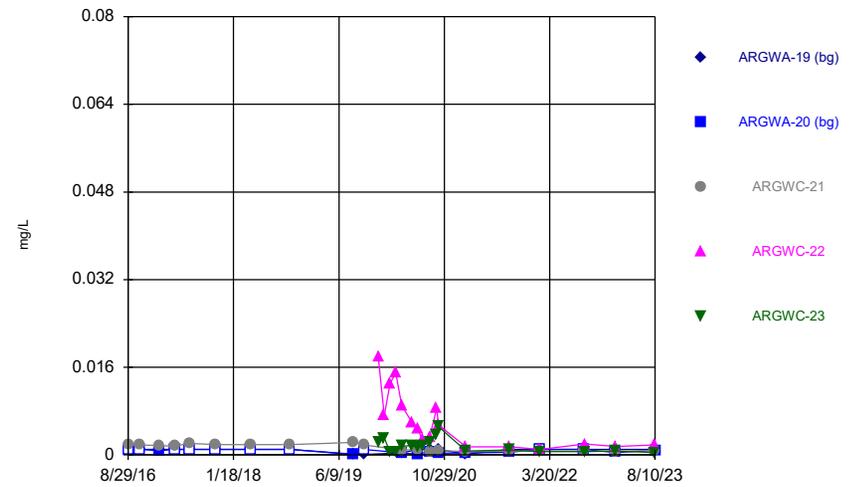
Constituent: Chromium Analysis Run 10/19/2023 8:39 AM View: Descriptive
Plant Arkwright Client: Southern Company Data: Arkwright No 2

Time Series



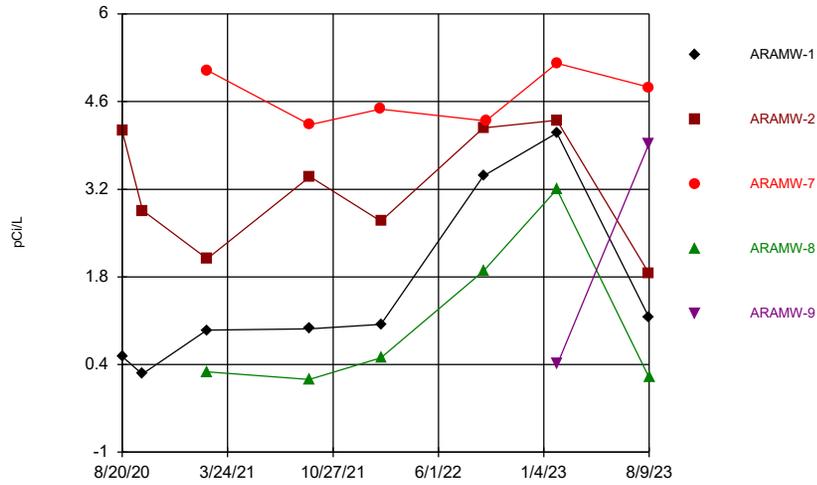
Constituent: Cobalt Analysis Run 10/19/2023 8:40 AM View: Descriptive
Plant Arkwright Client: Southern Company Data: Arkwright No 2

Time Series



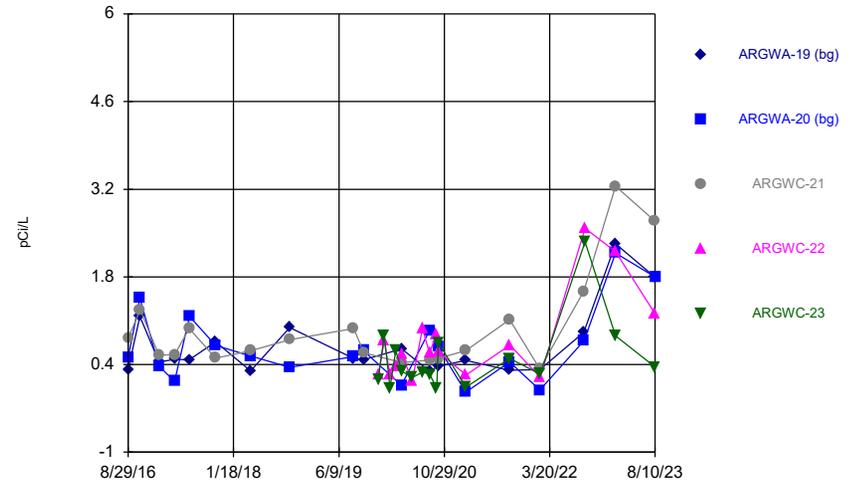
Constituent: Cobalt Analysis Run 10/19/2023 8:40 AM View: Descriptive
Plant Arkwright Client: Southern Company Data: Arkwright No 2

Time Series



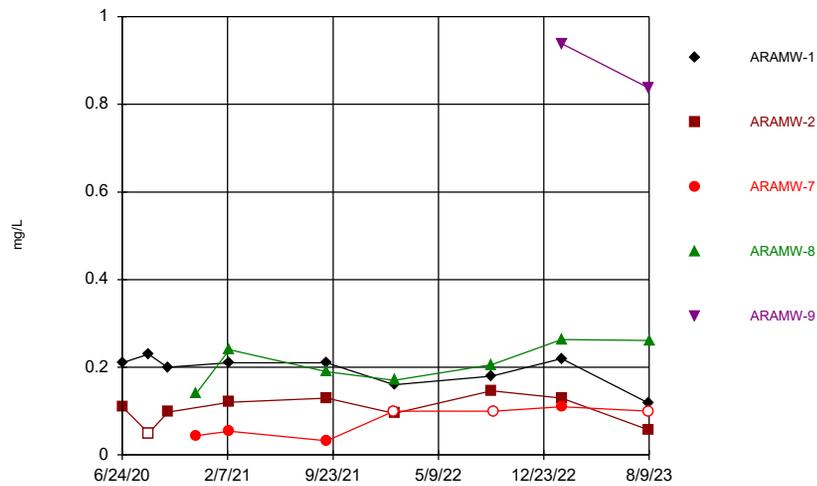
Constituent: Combined Radium 226 + 228 Analysis Run 10/19/2023 8:40 AM View: Descriptive
 Plant Arkwright Client: Southern Company Data: Arkwright No 2

Time Series



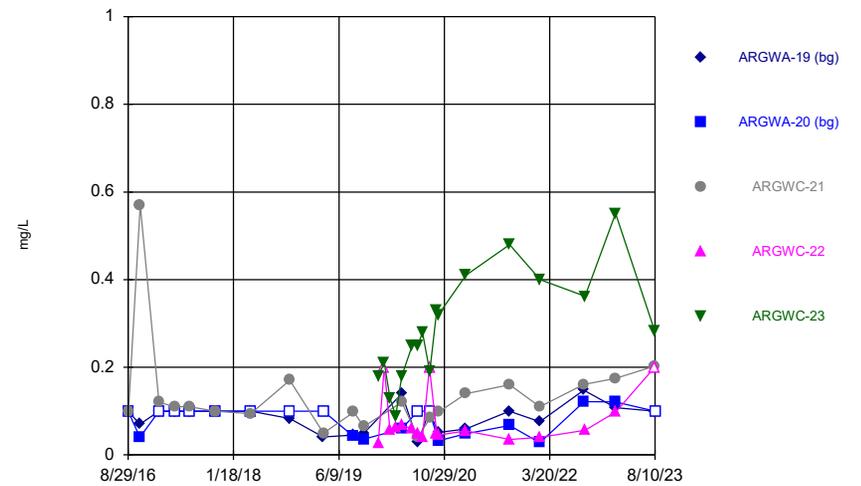
Constituent: Combined Radium 226 + 228 Analysis Run 10/19/2023 8:40 AM View: Descriptive
 Plant Arkwright Client: Southern Company Data: Arkwright No 2

Time Series



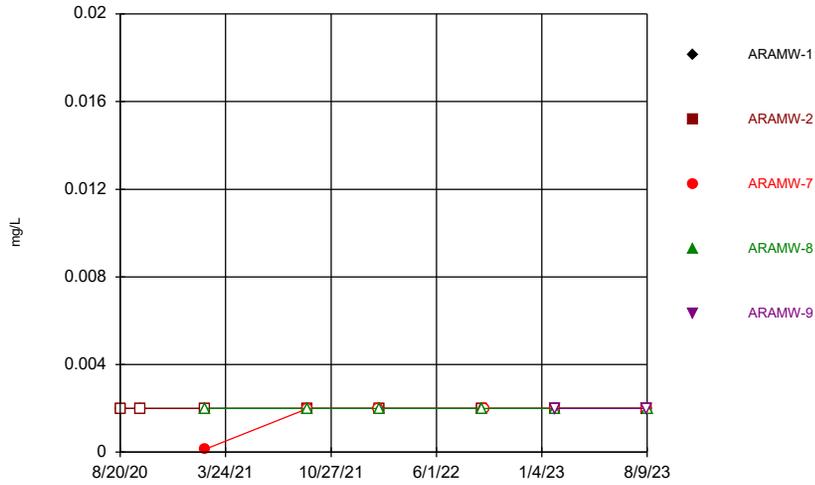
Constituent: Fluoride Analysis Run 10/19/2023 8:40 AM View: Descriptive
 Plant Arkwright Client: Southern Company Data: Arkwright No 2

Time Series



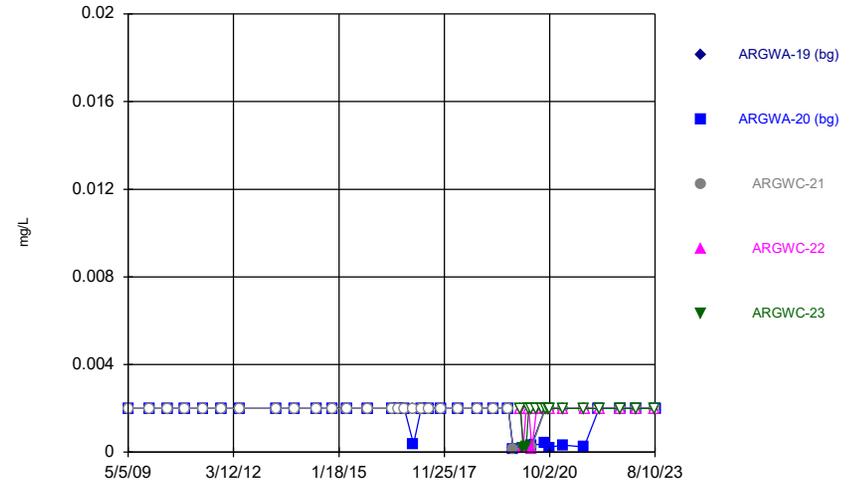
Constituent: Fluoride Analysis Run 10/19/2023 8:40 AM View: Descriptive
 Plant Arkwright Client: Southern Company Data: Arkwright No 2

Time Series



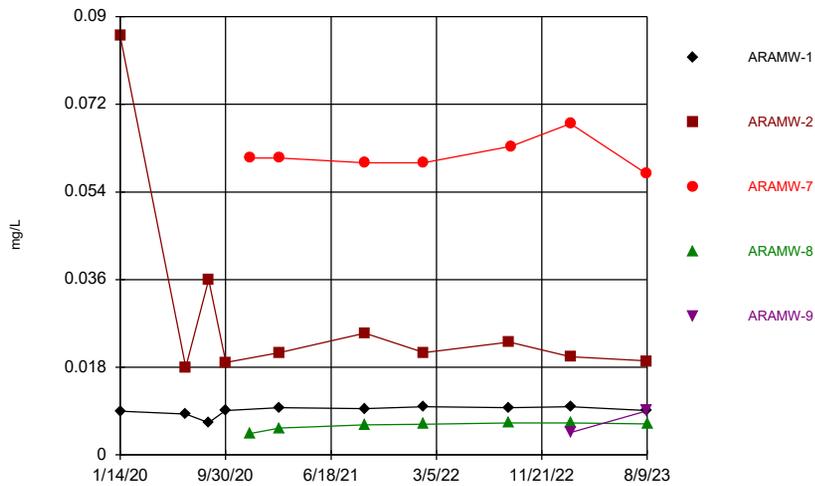
Constituent: Lead Analysis Run 10/19/2023 8:40 AM View: Descriptive
Plant Arkwright Client: Southern Company Data: Arkwright No 2

Time Series



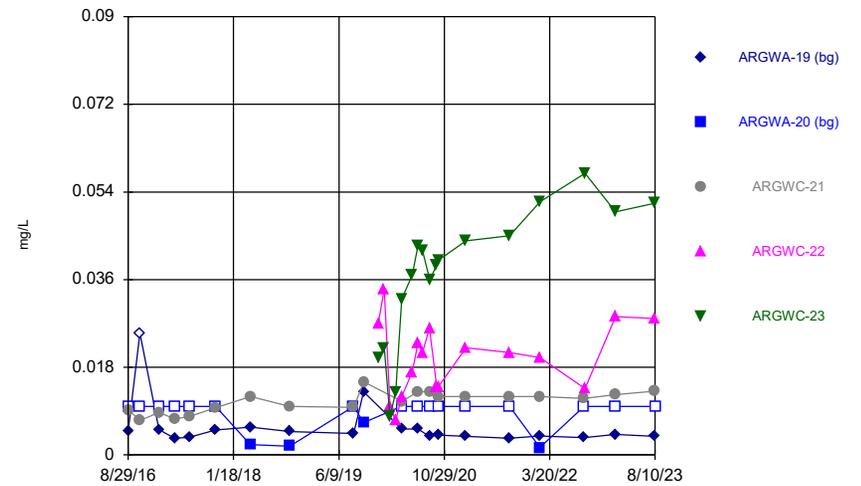
Constituent: Lead Analysis Run 10/19/2023 8:40 AM View: Descriptive
Plant Arkwright Client: Southern Company Data: Arkwright No 2

Time Series



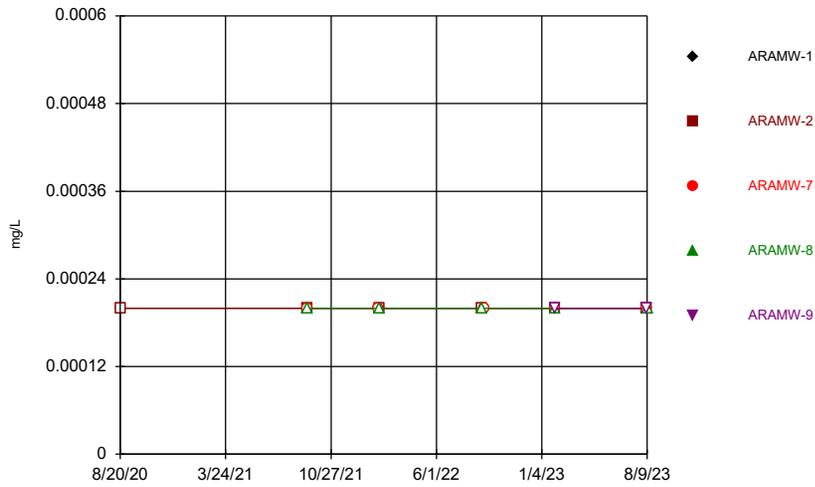
Constituent: Lithium Analysis Run 10/19/2023 8:40 AM View: Descriptive
Plant Arkwright Client: Southern Company Data: Arkwright No 2

Time Series



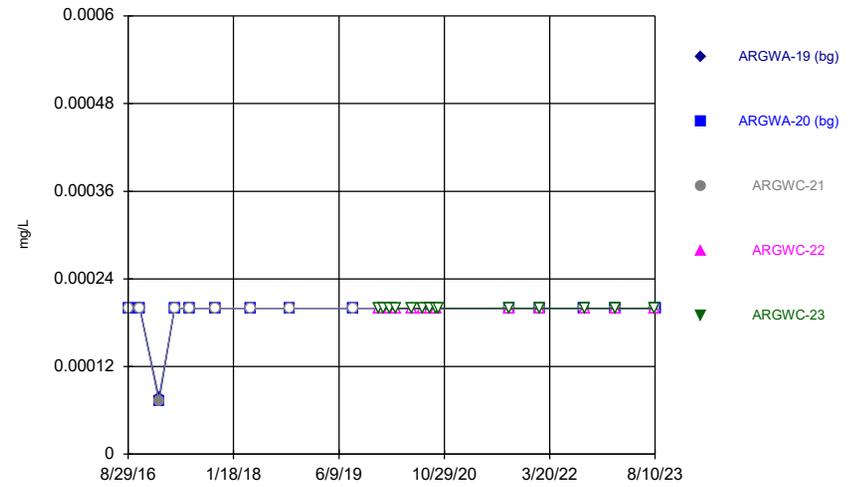
Constituent: Lithium Analysis Run 10/19/2023 8:40 AM View: Descriptive
Plant Arkwright Client: Southern Company Data: Arkwright No 2

Time Series



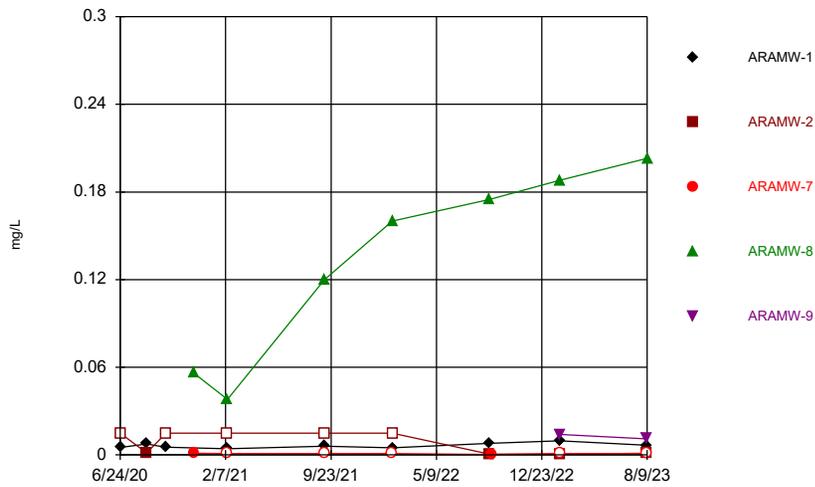
Constituent: Mercury Analysis Run 10/19/2023 8:40 AM View: Descriptive
Plant Arkwright Client: Southern Company Data: Arkwright No 2

Time Series



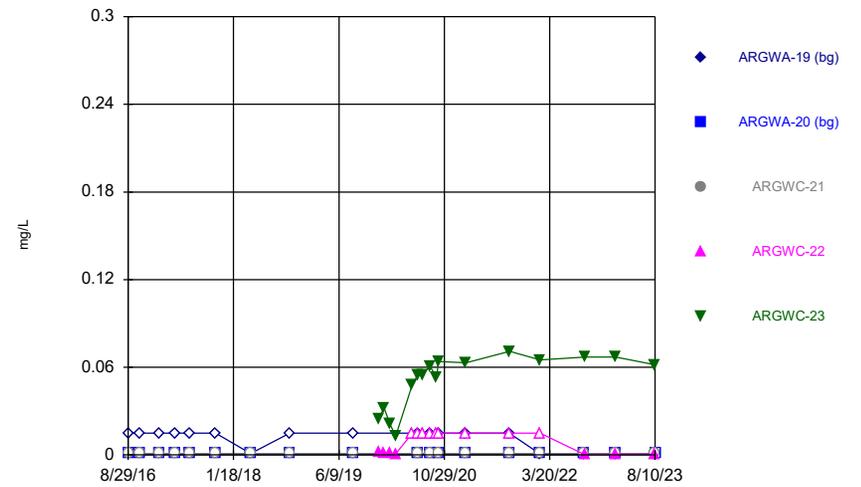
Constituent: Mercury Analysis Run 10/19/2023 8:40 AM View: Descriptive
Plant Arkwright Client: Southern Company Data: Arkwright No 2

Time Series



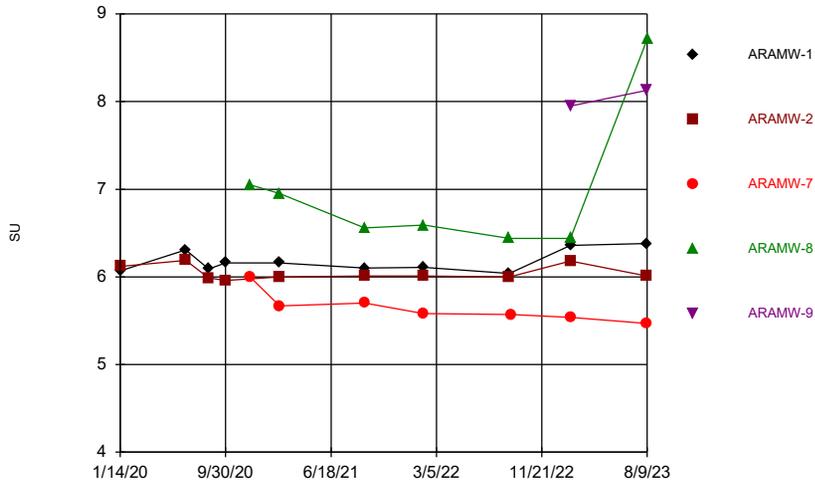
Constituent: Molybdenum Analysis Run 10/19/2023 8:40 AM View: Descriptive
Plant Arkwright Client: Southern Company Data: Arkwright No 2

Time Series



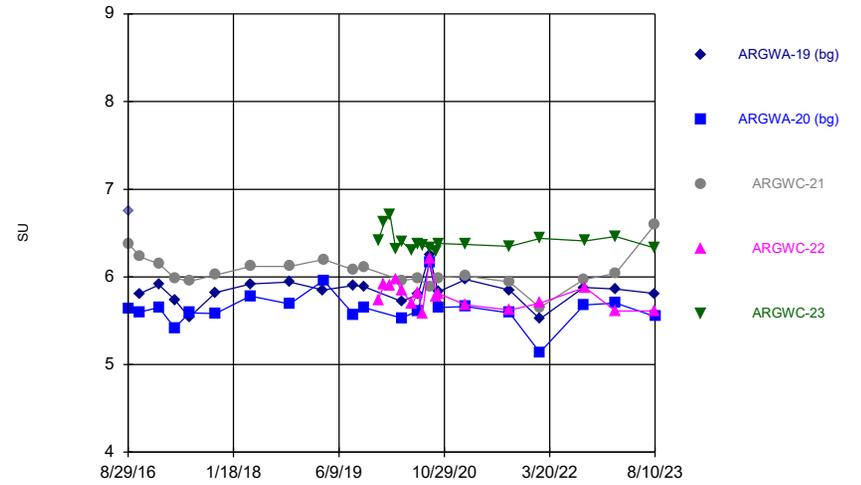
Constituent: Molybdenum Analysis Run 10/19/2023 8:40 AM View: Descriptive
Plant Arkwright Client: Southern Company Data: Arkwright No 2

Time Series



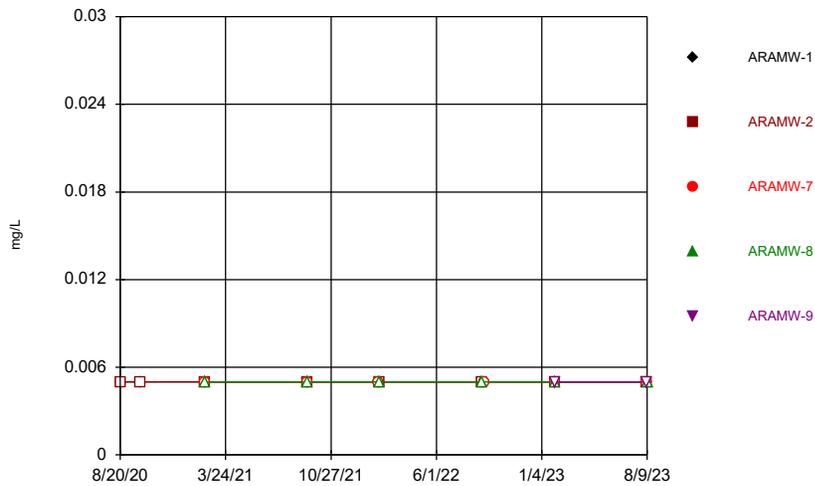
Constituent: pH Analysis Run 10/19/2023 8:40 AM View: Descriptive
 Plant Arkwright Client: Southern Company Data: Arkwright No 2

Time Series



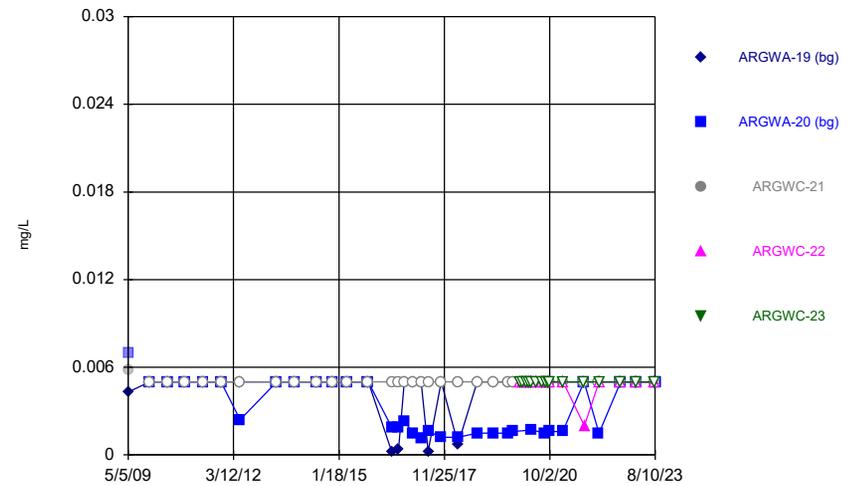
Constituent: pH Analysis Run 10/19/2023 8:40 AM View: Descriptive
 Plant Arkwright Client: Southern Company Data: Arkwright No 2

Time Series



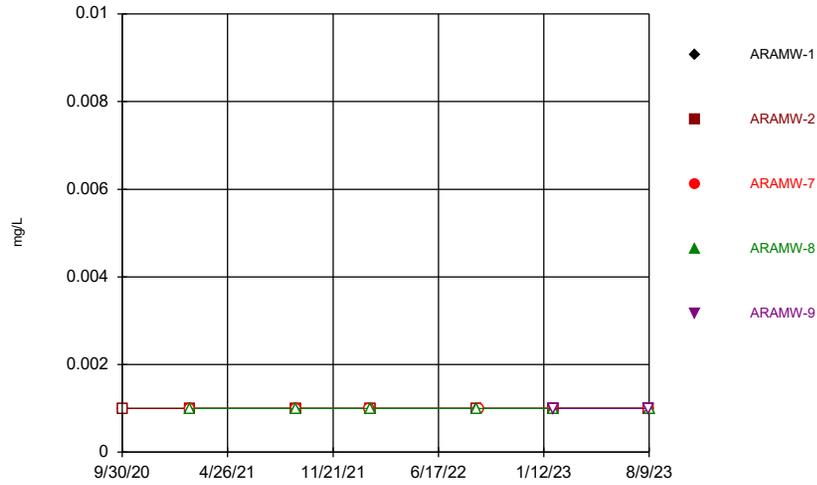
Constituent: Selenium Analysis Run 10/19/2023 8:40 AM View: Descriptive
 Plant Arkwright Client: Southern Company Data: Arkwright No 2

Time Series



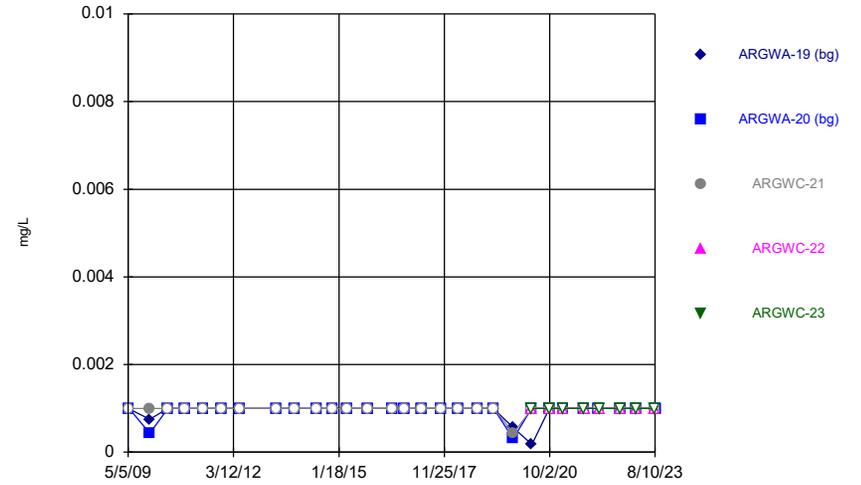
Constituent: Selenium Analysis Run 10/19/2023 8:40 AM View: Descriptive
 Plant Arkwright Client: Southern Company Data: Arkwright No 2

Time Series



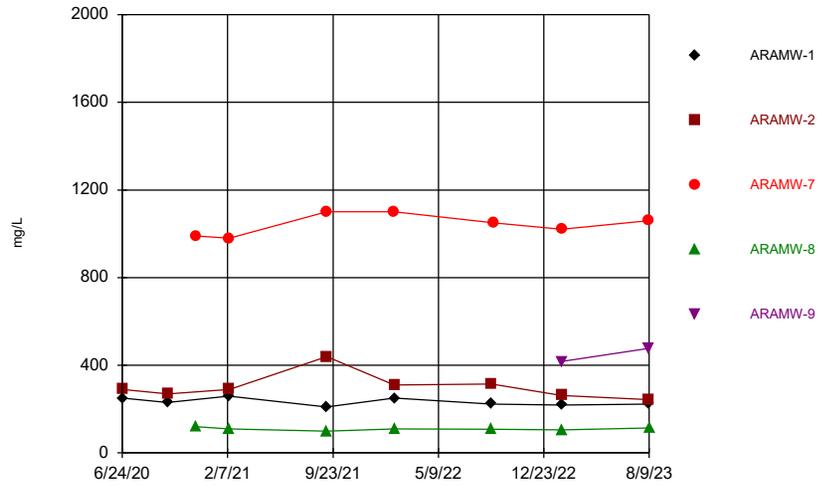
Constituent: Silver Analysis Run 10/19/2023 8:40 AM View: Descriptive
Plant Arkwright Client: Southern Company Data: Arkwright No 2

Time Series



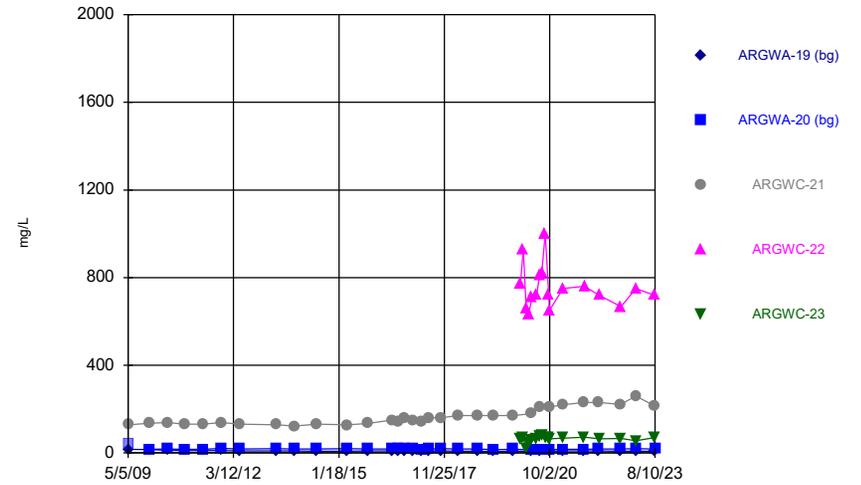
Constituent: Silver Analysis Run 10/19/2023 8:40 AM View: Descriptive
Plant Arkwright Client: Southern Company Data: Arkwright No 2

Time Series



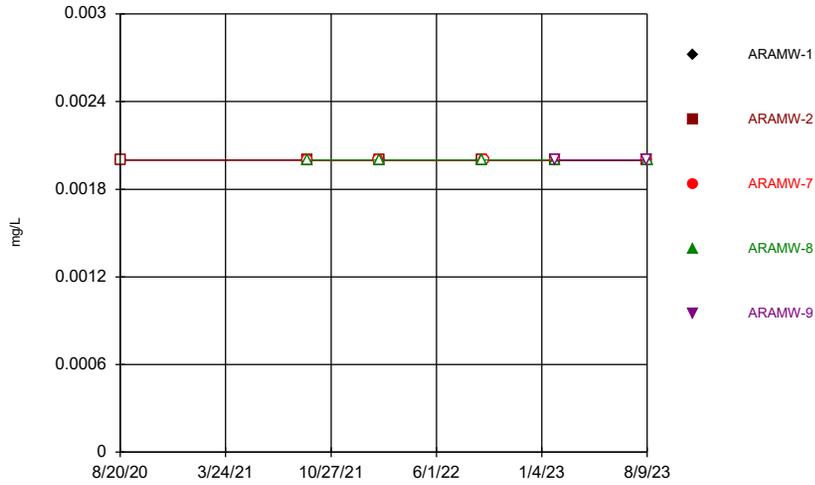
Constituent: Sulfate Analysis Run 10/19/2023 8:40 AM View: Descriptive
Plant Arkwright Client: Southern Company Data: Arkwright No 2

Time Series



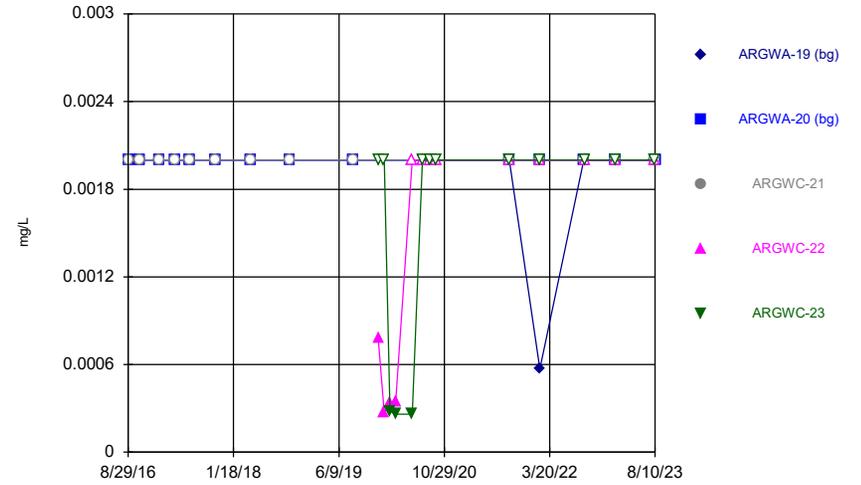
Constituent: Sulfate Analysis Run 10/19/2023 8:40 AM View: Descriptive
Plant Arkwright Client: Southern Company Data: Arkwright No 2

Time Series



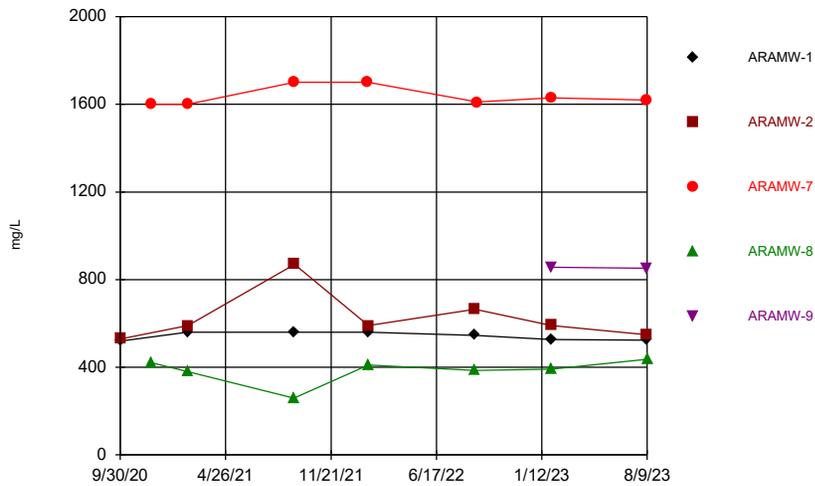
Constituent: Thallium Analysis Run 10/19/2023 8:40 AM View: Descriptive
Plant Arkwright Client: Southern Company Data: Arkwright No 2

Time Series



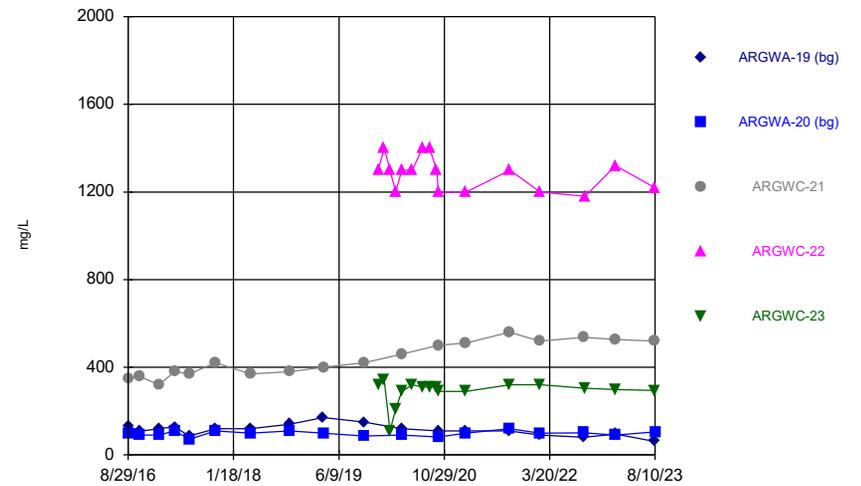
Constituent: Thallium Analysis Run 10/19/2023 8:40 AM View: Descriptive
Plant Arkwright Client: Southern Company Data: Arkwright No 2

Time Series



Constituent: Total Dissolved Solids Analysis Run 10/19/2023 8:40 AM View: Descriptive
Plant Arkwright Client: Southern Company Data: Arkwright No 2

Time Series



Constituent: Total Dissolved Solids Analysis Run 10/19/2023 8:40 AM View: Descriptive
Plant Arkwright Client: Southern Company Data: Arkwright No 2

Time Series

Constituent: Antimony (mg/L) Analysis Run 10/19/2023 8:41 AM View: Descriptive
Plant Arkwright Client: Southern Company Data: Arkwright No 2

	ARAMW-1	ARAMW-2	ARAMW-7	ARAMW-8	ARAMW-9
8/20/2020	<0.003	<0.003			
9/9/2021	<0.003			<0.003	
9/10/2021		<0.003	<0.003		
2/2/2022			<0.003		
2/3/2022	<0.003	<0.003		<0.003	
9/2/2022	<0.003	<0.003		<0.003	
9/7/2022			<0.003		
1/31/2023	<0.003	<0.003	<0.003	<0.003	
2/1/2023					<0.003
8/8/2023	<0.003	<0.003	<0.003		0.00158 (J)
8/9/2023				0.00134 (J)	

Time Series

Constituent: Antimony (mg/L) Analysis Run 10/19/2023 8:41 AM View: Descriptive

Plant Arkwright Client: Southern Company Data: Arkwright No 2

	ARGWA-19 (bg)	ARGWA-20 (bg)	ARGWC-21	ARGWC-22	ARGWC-23
8/29/2016	<0.003	<0.003			
8/30/2016			<0.003		
10/24/2016	<0.003	<0.003			
10/26/2016			<0.003		
1/25/2017	<0.003	<0.003	<0.003		
4/10/2017	<0.003	<0.003	<0.003		
6/19/2017	<0.003		<0.003		
6/20/2017		<0.003			
10/24/2017	<0.003	<0.003	<0.003		
4/9/2018		<0.003			
4/10/2018	<0.003		<0.003		
10/16/2018	<0.003	<0.003	<0.003		
8/20/2019	<0.003	<0.003	<0.003		
12/16/2019				<0.003	<0.003
1/14/2020				<0.003	<0.003
2/11/2020				<0.003	<0.003
3/9/2020				<0.003	<0.003
5/27/2020				<0.003	<0.003
7/15/2020				<0.003	<0.003
8/19/2020	<0.003	<0.003		<0.003	
8/20/2020					<0.003
8/21/2020			<0.003		
9/22/2020				<0.003	<0.003
9/7/2021	<0.003				
9/8/2021		<0.003	<0.003		
9/9/2021					<0.003
9/10/2021				<0.003	
2/1/2022	<0.003	<0.003	<0.003		
2/2/2022				<0.003	
2/3/2022					<0.003
9/1/2022	<0.003		<0.003		
9/2/2022		<0.003			
9/6/2022				<0.003	<0.003
1/31/2023	<0.003		<0.003	<0.003	<0.003
2/1/2023		<0.003			
8/8/2023	<0.003			<0.003	<0.003
8/9/2023			<0.003		
8/10/2023		<0.003			

Time Series

Constituent: Arsenic (mg/L) Analysis Run 10/19/2023 8:41 AM View: Descriptive
Plant Arkwright Client: Southern Company Data: Arkwright No 2

	ARAMW-1	ARAMW-2	ARAMW-7	ARAMW-8	ARAMW-9
8/20/2020	<0.005	0.084			
9/30/2020	<0.005				
10/1/2020		0.0085			
2/10/2021	<0.005				
2/11/2021		0.015	0.00075 (J)	0.00046 (J)	
9/9/2021	<0.005			<0.005	
9/10/2021		0.044	<0.005		
2/2/2022			0.00035 (J)		
2/3/2022	<0.005	0.0092		0.00031 (J)	
9/2/2022	0.00233 (J)	0.0158		0.00206 (J)	
9/7/2022			<0.005		
1/31/2023	<0.005	0.00363 (J)	0.00286 (J)	<0.005	
2/1/2023					<0.005
8/8/2023	<0.005	0.012	<0.005		<0.005
8/9/2023				<0.005	

Time Series

Constituent: Arsenic (mg/L) Analysis Run 10/19/2023 8:41 AM View: Descriptive
 Plant Arkwright Client: Southern Company Data: Arkwright No 2

	ARGWA-19 (bg)	ARGWA-20 (bg)	ARGWC-21	ARGWC-22	ARGWC-23
5/5/2009	<0.005				
5/14/2009			0.0022		
5/15/2009		0.0015			
12/5/2009	<0.005	<0.005	<0.005		
6/1/2010	<0.005	<0.005			
6/2/2010			<0.005		
11/11/2010	<0.005	<0.005	<0.005		
5/17/2011	<0.005	<0.005	<0.005		
11/8/2011	<0.005	<0.005	<0.005		
5/16/2012	<0.005	<0.005	0.002 (J)		
5/14/2013	<0.005	<0.005	<0.005		
11/5/2013	<0.005	<0.005	<0.005		
6/9/2014	<0.005	<0.005	<0.005		
11/18/2014		<0.005	<0.005		
11/19/2014	<0.005				
4/14/2015	<0.005	<0.005	<0.005		
10/29/2015			<0.005		
11/4/2015	<0.005	<0.005			
6/22/2016	<0.005	0.00084 (J)			
6/23/2016			0.0011 (J)		
8/29/2016	<0.005	0.00049 (J)			
8/30/2016			0.002		
10/24/2016	<0.005	<0.005			
10/26/2016			0.0019 (J)		
1/25/2017	<0.005	<0.005	0.0017		
4/10/2017	<0.005	0.00056 (J)	0.002		
6/19/2017	<0.005		0.0026		
6/20/2017		0.00068 (J)			
10/24/2017	<0.005	<0.005	0.0021		
4/9/2018		<0.005			
4/10/2018	<0.005		0.0022		
10/16/2018	<0.005	<0.005	0.0021		
3/26/2019	<0.005				
3/27/2019		<0.005	0.0011 (J)		
8/20/2019	0.00036 (J)	0.00047 (J)	0.002		
10/7/2019	<0.005	<0.005			
10/8/2019			0.0012 (J)		
12/16/2019				0.00066 (J)	0.00075 (J)
1/14/2020				0.00038 (J)	0.00042 (J)
2/11/2020				0.0004 (J)	<0.005
3/9/2020				<0.005	<0.005
4/6/2020		0.00042 (J)			
4/7/2020	0.0006 (J)		0.00054 (J)	<0.005	<0.005
5/27/2020				<0.005	<0.005
7/15/2020				<0.005	<0.005
8/19/2020	<0.005	<0.005		<0.005	
8/20/2020					<0.005
8/21/2020			<0.005		
9/22/2020				<0.005	<0.005
9/29/2020	<0.005				
9/30/2020		<0.005		<0.005	
10/1/2020			<0.005		<0.005

Time Series

Constituent: Arsenic (mg/L) Analysis Run 10/19/2023 8:41 AM View: Descriptive
Plant Arkwright Client: Southern Company Data: Arkwright No 2

	ARGWA-19 (bg)	ARGWA-20 (bg)	ARGWC-21	ARGWC-22	ARGWC-23
2/9/2021	<0.005	<0.005			
2/10/2021			<0.005	<0.005	<0.005
9/7/2021	<0.005				
9/8/2021		<0.005	<0.005		
9/9/2021					<0.005
9/10/2021				<0.005	
2/1/2022	<0.005	<0.005	<0.005		
2/2/2022				<0.005	
2/3/2022					0.0003 (J)
9/1/2022	<0.005		0.00207 (J)		
9/2/2022		<0.005			
9/6/2022				<0.005	<0.005
1/31/2023	<0.005		<0.005	0.00221 (J)	<0.005
2/1/2023		<0.005			
8/8/2023	<0.005			<0.005	<0.005
8/9/2023			<0.005		
8/10/2023		<0.005			

Time Series

Constituent: Barium (mg/L) Analysis Run 10/19/2023 8:41 AM View: Descriptive
Plant Arkwright Client: Southern Company Data: Arkwright No 2

	ARAMW-1	ARAMW-2	ARAMW-7	ARAMW-8	ARAMW-9
8/20/2020	0.055	0.14			
9/30/2020	0.052				
10/1/2020		0.075			
2/10/2021	0.046				
2/11/2021		0.09	0.037	0.092	
9/9/2021	0.051			0.094	
9/10/2021		0.13	0.029		
2/2/2022			0.029		
2/3/2022	0.046	0.078		0.096	
9/2/2022	0.0445	0.0792		0.116	
9/7/2022			0.0263		
1/31/2023	0.0427	0.067	0.0243	0.11	
2/1/2023					0.0158
8/8/2023	0.051	0.0753	0.0244		0.0207
8/9/2023				0.122	

Time Series

Constituent: Barium (mg/L) Analysis Run 10/19/2023 8:41 AM View: Descriptive
 Plant Arkwright Client: Southern Company Data: Arkwright No 2

	ARGWA-19 (bg)	ARGWA-20 (bg)	ARGWC-21	ARGWC-22	ARGWC-23
5/5/2009	0.057				
5/14/2009			0.034		
5/15/2009		0.1			
12/5/2009	0.05	0.079	0.037		
6/1/2010	0.037	0.077			
6/2/2010			0.037		
11/11/2010	0.039	0.072	0.036		
5/17/2011	0.037	0.064	0.032		
11/8/2011	0.045	0.07	0.042		
5/16/2012	0.0518	0.0741	0.0451		
5/14/2013	0.067	0.074	0.043		
11/5/2013	0.066	0.075	0.051		
6/9/2014	0.062	0.08	0.045		
11/18/2014		0.078	0.052		
11/19/2014	0.054				
4/14/2015	0.046	0.073	0.047		
10/29/2015			0.053		
11/4/2015	0.046	0.077			
6/22/2016	0.039	0.078			
6/23/2016			0.13		
8/29/2016	0.04	0.07			
8/30/2016			0.11		
10/24/2016	0.0444	0.0738			
10/26/2016			0.122		
1/25/2017	0.045	0.084	0.12		
4/10/2017	0.039	0.073	0.11		
6/19/2017	0.041		0.13		
6/20/2017		0.078			
10/24/2017	0.041	0.081	0.12		
4/9/2018		0.081			
4/10/2018	0.044		0.12		
10/16/2018	0.047	0.08	0.1		
3/26/2019	0.056				
3/27/2019		0.082	0.091		
8/20/2019	0.052	0.079	0.1		
10/7/2019	0.049	0.076			
10/8/2019			0.096		
12/16/2019				0.076	0.096
1/14/2020				0.071	0.075
2/11/2020				0.046	0.046
3/9/2020				0.039	0.14
4/6/2020		0.075			
4/7/2020	0.047		0.05	0.04	0.16
5/27/2020				0.054	0.18
7/15/2020				0.043	0.16
8/19/2020	0.044	0.085		0.046	
8/20/2020					0.16
8/21/2020			0.054		
9/22/2020				0.038	0.16
9/29/2020	0.04				
9/30/2020		0.08		0.033	
10/1/2020			0.051		0.17

Time Series

Constituent: Barium (mg/L) Analysis Run 10/19/2023 8:41 AM View: Descriptive
Plant Arkwright Client: Southern Company Data: Arkwright No 2

	ARGWA-19 (bg)	ARGWA-20 (bg)	ARGWC-21	ARGWC-22	ARGWC-23
2/9/2021	0.032	0.078			
2/10/2021			0.044	0.032	0.13
9/7/2021	0.03				
9/8/2021		0.085	0.045		
9/9/2021					0.12
9/10/2021				0.026	
2/1/2022	0.031	0.079	0.045		
2/2/2022				0.025	
2/3/2022					0.1
9/1/2022	0.0303		0.0425		
9/2/2022		0.0806			
9/6/2022				0.0226	0.0939
1/31/2023	0.031		0.0414	0.0237	0.0872
2/1/2023		0.0919			
8/8/2023	0.0337			0.0255	0.0936
8/9/2023			0.0474		
8/10/2023		0.107			

Time Series

Constituent: Beryllium (mg/L) Analysis Run 10/19/2023 8:41 AM View: Descriptive
Plant Arkwright Client: Southern Company Data: Arkwright No 2

	ARAMW-1	ARAMW-2	ARAMW-7	ARAMW-8	ARAMW-9
8/20/2020	<0.0005	<0.0005			
9/30/2020	<0.0005				
10/1/2020		<0.0005			
2/10/2021	<0.0005				
2/11/2021		<0.0005	<0.0025	<0.0005	
9/9/2021	<0.0005			<0.0005	
9/10/2021		<0.0005	<0.0025		
2/2/2022			<0.0025		
2/3/2022	<0.0005	<0.0005		<0.0005	
9/2/2022	<0.0005	<0.0005		<0.0005	
9/7/2022			0.000236 (J)		
1/31/2023	<0.0005	<0.0005	0.000296 (J)	<0.0005	
2/1/2023					<0.0005
8/8/2023	<0.0005	<0.0005	0.000272 (J)		<0.0005
8/9/2023				<0.0005	

Time Series

Constituent: Beryllium (mg/L) Analysis Run 10/19/2023 8:41 AM View: Descriptive
 Plant Arkwright Client: Southern Company Data: Arkwright No 2

	ARGWA-19 (bg)	ARGWA-20 (bg)	ARGWC-21	ARGWC-22	ARGWC-23
8/29/2016	<0.0005	<0.0005			
8/30/2016			<0.0005		
10/24/2016	<0.0005	<0.0005			
10/26/2016			<0.0005		
1/25/2017	<0.0005	<0.0005	<0.0005		
4/10/2017	<0.0005	<0.0005	<0.0005		
6/19/2017	<0.0005		<0.0005		
6/20/2017		<0.0005			
10/24/2017	<0.0005	<0.0005	<0.0005		
4/9/2018		<0.0005			
4/10/2018	<0.0005		<0.0005		
10/16/2018	<0.0005	<0.0005	<0.0005		
8/20/2019	<0.0005	<0.0005	<0.0005		
12/16/2019				0.0005 (J)	0.00033 (J)
1/14/2020				0.00036 (J)	<0.0005
2/11/2020				0.00023	<0.0005
3/9/2020				0.00019	<0.0005
5/27/2020				0.00018 (J)	<0.0005
7/15/2020				<0.0005	<0.0005
8/19/2020	<0.0005	0.00022 (J)		<0.0005	
8/20/2020					<0.0005
8/21/2020			<0.0005		
9/22/2020				<0.0005	<0.0005
9/29/2020	<0.0005				
9/30/2020		0.00019 (J)		<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
9/7/2021	<0.0005				
9/8/2021		<0.0005	<0.0005		
9/9/2021					<0.0005
9/10/2021				<0.0005	
2/1/2022	<0.0005	<0.0005	<0.0005		
2/2/2022				<0.0005	
2/3/2022					<0.0005
9/1/2022	<0.0005		<0.0005		
9/2/2022		<0.0005			
9/6/2022				<0.0005	<0.0005
1/31/2023	<0.0005		<0.0005	<0.0005	<0.0005
2/1/2023		<0.0005			
8/8/2023	<0.0005			<0.0005	<0.0005
8/9/2023			<0.0005		
8/10/2023		0.000275 (J)			

Time Series

Constituent: Boron (mg/L) Analysis Run 10/19/2023 8:41 AM View: Descriptive

Plant Arkwright Client: Southern Company Data: Arkwright No 2

	ARAMW-1	ARAMW-2	ARAMW-7	ARAMW-8	ARAMW-9
1/14/2020	1.1	1.8			
6/24/2020	0.84	0.89			
9/30/2020	0.98				
10/1/2020		0.95			
11/30/2020			2.1		
12/1/2020				0.4	
2/10/2021	0.94				
2/11/2021		0.98	2.4	0.53	
9/9/2021	1			0.53	
9/10/2021		0.85	2.6		
2/2/2022			2.3		
2/3/2022	1.1	1		0.6	
9/2/2022	1.18	1.08		0.558	
9/7/2022			2.33		
1/31/2023	1.2	1.16	2.56	0.637	
2/1/2023					0.055
8/8/2023	1.13	1.07	2.25		0.0666
8/9/2023				0.77	

Time Series

Constituent: Boron (mg/L) Analysis Run 10/19/2023 8:41 AM View: Descriptive

Plant Arkwright Client: Southern Company Data: Arkwright No 2

	ARGWA-19 (bg)	ARGWA-20 (bg)	ARGWC-21	ARGWC-22	ARGWC-23
8/29/2016	0.024 (J)	<0.08			
8/30/2016			0.57		
10/24/2016	0.0339 (J)	0.0194 (J)			
10/26/2016			0.502		
1/25/2017	0.048 (J)	0.026 (J)	0.56		
4/10/2017	0.022 (J)	<0.08	0.54		
6/19/2017	<0.08		0.54		
6/20/2017		0.032 (J)			
10/24/2017	0.021 (J)	0.054	0.57		
4/9/2018		0.06			
4/10/2018	0.022 (J)		0.61		
10/16/2018	<0.08	0.036 (J)	0.59		
3/26/2019	<0.08				
3/27/2019		0.046 (J)	0.65		
10/7/2019	<0.08	<0.08			
10/8/2019			0.58		
12/16/2019				2.7	0.42
1/14/2020				2.7	0.43
2/11/2020				3	0.079 (J)
3/9/2020				2.7	0.25
4/6/2020		0.063 (J)			
4/7/2020	0.072 (J)		0.74	2.6	0.44
5/27/2020				2.5	0.45
6/24/2020				2.5	
6/25/2020	0.091	0.081	0.82		0.42
7/15/2020				2.6	0.49
8/19/2020				1.3	
8/20/2020					0.44
9/22/2020				2.8	0.5
9/29/2020	<0.08				
9/30/2020		0.083		2.9	
10/1/2020			0.9		0.49
2/9/2021	<0.08	0.059 (J)			
2/10/2021			0.81	2.5	0.42
9/7/2021	<0.08				
9/8/2021		0.064 (J)	0.79		
9/9/2021					0.41
9/10/2021				2.7	
2/1/2022	0.092	<0.08	0.85		
2/2/2022				2.4	
2/3/2022					0.49
9/1/2022	0.0238		0.921		
9/2/2022		0.0597			
9/6/2022				2.78	0.458
1/31/2023	0.0234		1.06	2.77	0.459
2/1/2023		0.0816			
8/8/2023	0.0199			3.06	0.379
8/9/2023			1.12		
8/10/2023		0.0714			

Time Series

Constituent: Cadmium (mg/L) Analysis Run 10/19/2023 8:41 AM View: Descriptive
Plant Arkwright Client: Southern Company Data: Arkwright No 2

	ARAMW-1	ARAMW-2	ARAMW-7	ARAMW-8	ARAMW-9
8/20/2020	<0.001	<0.001			
2/10/2021	<0.001				
2/11/2021		<0.001	<0.001	<0.001	
9/9/2021	<0.001			<0.001	
9/10/2021		<0.001	<0.001		
2/2/2022			<0.001		
2/3/2022	<0.001	<0.001		<0.001	
9/2/2022	<0.001	<0.001		<0.001	
9/7/2022			<0.001		
1/31/2023	<0.001	<0.001	<0.001	<0.001	
2/1/2023					<0.001
8/8/2023	<0.001	<0.001	<0.001		<0.001
8/9/2023				<0.001	

Time Series

Constituent: Cadmium (mg/L) Analysis Run 10/19/2023 8:41 AM View: Descriptive

Plant Arkwright Client: Southern Company Data: Arkwright No 2

	ARGWA-19 (bg)	ARGWA-20 (bg)	ARGWC-21	ARGWC-22	ARGWC-23
5/5/2009	<0.001				
5/14/2009			<0.001		
5/15/2009		<0.001			
12/5/2009	<0.001	<0.001	<0.001		
6/1/2010	<0.001	<0.001			
6/2/2010			<0.001		
11/11/2010	<0.001	<0.001	<0.001		
5/17/2011	<0.001	<0.001	<0.001		
11/8/2011	<0.001	<0.001	<0.001		
5/16/2012	<0.001	<0.001	<0.001		
5/14/2013	<0.001	<0.001	<0.001		
11/5/2013	<0.001	<0.001	<0.001		
6/9/2014	<0.001	<0.001	<0.001		
11/18/2014		<0.001	<0.001		
11/19/2014	<0.001				
4/14/2015	<0.001	<0.001	<0.001		
10/29/2015			<0.001		
11/4/2015	<0.001	<0.001			
6/22/2016	<0.001	<0.001			
6/23/2016			<0.001		
8/29/2016	<0.001	<0.001			
8/30/2016			<0.001		
10/24/2016	<0.001	<0.001			
10/26/2016			<0.001		
1/25/2017	<0.001	<0.001	<0.001		
4/10/2017	<0.001	<0.001	<0.001		
6/19/2017	<0.001		<0.001		
6/20/2017		<0.001			
10/24/2017	<0.001	<0.001	<0.001		
4/9/2018		<0.001			
4/10/2018	<0.001		<0.001		
10/16/2018	<0.001	<0.001	<0.001		
3/26/2019	<0.001				
3/27/2019		<0.001	<0.001		
8/20/2019	<0.001	<0.001	<0.001		
10/7/2019	<0.001	<0.001			
10/8/2019			<0.001		
12/16/2019				<0.001	<0.001
1/14/2020				<0.001	<0.001
2/11/2020				<0.001	<0.001
3/9/2020				<0.001	<0.001
4/6/2020		<0.001			
4/7/2020	0.00034 (J)		<0.001	<0.001	<0.001
5/27/2020				<0.001	<0.001
7/15/2020				<0.001	<0.001
8/19/2020	<0.001	<0.001		<0.001	
8/20/2020					<0.001
8/21/2020			<0.001		
9/22/2020				<0.001	<0.001
2/9/2021	<0.001	<0.001			
2/10/2021			<0.001	<0.001	<0.001
9/7/2021	<0.001				

Time Series

Constituent: Cadmium (mg/L) Analysis Run 10/19/2023 8:41 AM View: Descriptive
Plant Arkwright Client: Southern Company Data: Arkwright No 2

	ARGWA-19 (bg)	ARGWA-20 (bg)	ARGWC-21	ARGWC-22	ARGWC-23
9/8/2021		<0.001	<0.001		
9/9/2021					<0.001
9/10/2021				<0.001	
2/1/2022	<0.001	<0.001	<0.001		
2/2/2022				<0.001	
2/3/2022					<0.001
9/1/2022	<0.001		<0.001		
9/2/2022		<0.001			
9/6/2022				<0.001	<0.001
1/31/2023	<0.001		<0.001	<0.001	<0.001
2/1/2023		<0.001			
8/8/2023	<0.001			<0.001	<0.001
8/9/2023			<0.001		
8/10/2023		<0.001			

Time Series

Constituent: Calcium (mg/L) Analysis Run 10/19/2023 8:41 AM View: Descriptive
Plant Arkwright Client: Southern Company Data: Arkwright No 2

	ARAMW-1	ARAMW-2	ARAMW-7	ARAMW-8	ARAMW-9
6/24/2020	81	89			
9/30/2020	100				
10/1/2020		91			
11/30/2020			260		
12/1/2020				81	
2/10/2021	93				
2/11/2021		100	290	75	
9/9/2021	93			71	
9/10/2021		130	290		
2/2/2022			300		
2/3/2022	93	99		71	
9/2/2022	80.5	89.2		61.4	
9/7/2022			264		
1/31/2023	87.7	92.5	299	69.8	
2/1/2023					145
8/8/2023	83.4	87.1	279		146
8/9/2023				78.6	

Time Series

Constituent: Calcium (mg/L) Analysis Run 10/19/2023 8:41 AM View: Descriptive
Plant Arkwright Client: Southern Company Data: Arkwright No 2

	ARGWA-19 (bg)	ARGWA-20 (bg)	ARGWC-21	ARGWC-22	ARGWC-23
8/29/2016	11	8.3			
8/30/2016			46		
10/24/2016	11.5	7.66			
10/26/2016			44.3		
1/25/2017	13	9.4	50		
4/10/2017	11	8.6	52		
6/19/2017	12		55		
6/20/2017		9.4			
10/24/2017	12	9.9	56		
4/9/2018		9.9			
4/10/2018	12		51		
10/16/2018	14	9.8	57		
3/26/2019	15				
3/27/2019		9.2	58		
10/7/2019	14	8.9			
10/8/2019			60		
12/16/2019				200	69
1/14/2020				210	65
2/11/2020				180	10
3/9/2020				180	46
4/6/2020		9.5			
4/7/2020	14		69	190	65
5/27/2020				200	69
6/24/2020				180	
6/25/2020	14	9.6	80		72
7/15/2020				190	68
8/19/2020				220	
8/20/2020					69
9/22/2020				190	66
9/29/2020	12				
9/30/2020		9.9		200	
10/1/2020			79		73
2/9/2021	9.7	9.2			
2/10/2021			76	200	67
9/7/2021	9.2				
9/8/2021		11	81		
9/9/2021					70
9/10/2021				200	
2/1/2022	8	8.3	75		
2/2/2022				190	
2/3/2022					71
9/1/2022	8.52		71.5		
9/2/2022		9.48			
9/6/2022				162	65.2
1/31/2023	8.5		79.1	207	69.9
2/1/2023		10.8			
8/8/2023	8.51			196	66.6
8/9/2023			82.9		
8/10/2023		11			

Time Series

Constituent: Chloride (mg/L) Analysis Run 10/19/2023 8:41 AM View: Descriptive
Plant Arkwright Client: Southern Company Data: Arkwright No 2

	ARAMW-1	ARAMW-2	ARAMW-7	ARAMW-8	ARAMW-9
6/24/2020	5.3	4.3			
9/30/2020	5.2				
10/1/2020		4.2			
11/30/2020			6.3		
12/1/2020				12	
2/10/2021	5.3				
2/11/2021		4.4	5.9	12	
9/9/2021	4.5			7.4	
9/10/2021		4.2	6.5		
2/2/2022			5.7		
2/3/2022	5.3	4.1		8.1	
9/2/2022	3.5	3.54		5.31	
9/7/2022			5.78		
1/31/2023	4.36	3.4	5.82	5.3	
2/1/2023					37.2
8/8/2023	3.61	3.35	5.5		36.1
8/9/2023				5.13	

Time Series

Constituent: Chloride (mg/L) Analysis Run 10/19/2023 8:41 AM View: Descriptive
Plant Arkwright Client: Southern Company Data: Arkwright No 2

	ARGWA-19 (bg)	ARGWA-20 (bg)	ARGWC-21	ARGWC-22	ARGWC-23
5/5/2009	11.1				
5/14/2009			6.38		
5/15/2009		6.86			
12/5/2009	9.46	5.06	6.28		
6/1/2010	6.32	5.47			
6/2/2010			6.1		
11/11/2010	7.16	5.26	6.1461		
5/17/2011	6.84	4.8	6.17		
11/8/2011	9.13	5.62	6.6		
5/16/2012	10.8	5.1	6.18		
5/14/2013	16.2	5.25	6.32		
11/5/2013	14.8	5.19	5.65		
6/9/2014	13.6	5.55	6.08		
4/14/2015	10.4	5.39	5.43		
10/29/2015			5.62		
11/4/2015	9.19	5.38			
6/22/2016	8.4	5.7			
6/23/2016			5.9		
8/29/2016	8.4	5.3			
8/30/2016			5.5		
10/24/2016	9.6	5.4			
10/26/2016			6		
1/25/2017	8.7	5.1	5.4		
4/10/2017	8	4.9	5.1		
6/19/2017	7.6		5.2		
6/20/2017		5			
10/24/2017	7.2	4.6	4.9		
4/9/2018		4.7			
4/10/2018	7.2		4.8		
10/16/2018	10	5.3	5.1		
3/26/2019	12				
3/27/2019		4.6	4.4		
10/7/2019	11	5.2			
10/8/2019			4.5		
12/16/2019				5.8	3.9
1/14/2020				5.5	4
2/11/2020				9	4.7
3/9/2020				11	3.7
4/6/2020		5.2			
4/7/2020	11		4.2	8.1	3.8
5/27/2020				7.3	4
6/24/2020				5.7	
6/25/2020	11	5.1	3.7		3.4
7/15/2020				6	3.9
8/19/2020				5.7	
8/20/2020					3.9
9/22/2020				7.1	3.6
9/29/2020	10				
9/30/2020		5.6		8	
10/1/2020			4.3		3.8
2/9/2021	8.6	6			
2/10/2021			4.3	7.4	4.6

Time Series

Constituent: Chloride (mg/L) Analysis Run 10/19/2023 8:41 AM View: Descriptive
Plant Arkwright Client: Southern Company Data: Arkwright No 2

	ARGWA-19 (bg)	ARGWA-20 (bg)	ARGWC-21	ARGWC-22	ARGWC-23
9/7/2021	7.4				
9/8/2021		5.9	4		
9/9/2021					4.7
9/10/2021				6.7	
2/1/2022	6.8	5.7	3.4		
2/2/2022				6.3	
2/3/2022					4.4
9/1/2022	6.27		3.34		
9/2/2022		5.44			
9/6/2022				8.34	3.73
1/31/2023	6.04		3.3	5.88	3.84
2/1/2023		6			
8/8/2023	6.37			6.79	3.6
8/9/2023			3.35		
8/10/2023		6.5			

Time Series

Constituent: Chromium (mg/L) Analysis Run 10/19/2023 8:41 AM View: Descriptive
Plant Arkwright Client: Southern Company Data: Arkwright No 2

	ARAMW-1	ARAMW-2	ARAMW-7	ARAMW-8	ARAMW-9
8/20/2020	<0.01	<0.01			
9/30/2020	<0.01				
10/1/2020		<0.01			
2/10/2021	<0.01				
2/11/2021		<0.01	<0.01	<0.01	
9/9/2021	<0.01			<0.01	
9/10/2021		<0.01	<0.01		
2/2/2022			<0.01		
2/3/2022	<0.01	<0.01		<0.01	
9/2/2022	<0.01	<0.01		<0.01	
9/7/2022			<0.01		
1/31/2023	<0.01	<0.01	<0.01	<0.01	
2/1/2023					<0.01
8/8/2023	<0.01	<0.01	<0.01		<0.01
8/9/2023				<0.01	

Time Series

Constituent: Chromium (mg/L) Analysis Run 10/19/2023 8:41 AM View: Descriptive

Plant Arkwright Client: Southern Company Data: Arkwright No 2

	ARGWA-19 (bg)	ARGWA-20 (bg)	ARGWC-21	ARGWC-22	ARGWC-23
8/29/2016	0.0011 (J)	0.0052			
8/30/2016			<0.01		
10/24/2016	0.001 (J)	0.0053 (J)			
10/26/2016			<0.01		
1/25/2017	0.0013 (J)	0.0056	<0.01		
4/10/2017	<0.01	0.0047	<0.01		
6/19/2017	0.0013 (J)		<0.01		
6/20/2017		0.0051			
10/24/2017	0.0012 (J)	0.0056	<0.01		
4/9/2018		0.0071			
4/10/2018	0.0015 (J)		<0.01		
10/16/2018	0.0014 (J)	0.0071	<0.01		
8/20/2019	0.0024	0.0078	0.0017 (J)		
10/7/2019	<0.01	0.0059			
10/8/2019			<0.01		
12/16/2019				<0.01	<0.01
1/14/2020				<0.01	<0.01
2/11/2020				0.0048	<0.01
3/9/2020				<0.01	<0.01
4/6/2020		0.0057			
4/7/2020	<0.01		<0.01	<0.01	<0.01
5/27/2020				<0.01	<0.01
7/15/2020				<0.01	<0.01
8/19/2020	<0.01	0.0063		<0.01	
8/20/2020					<0.01
8/21/2020			<0.01		
9/22/2020				<0.01	<0.01
9/29/2020	<0.01				
9/30/2020		0.0057		<0.01	
10/1/2020			<0.01		<0.01
2/9/2021	0.0015 (J)	0.0059			
2/10/2021			<0.01	<0.01	<0.01
9/7/2021	<0.01				
9/8/2021		0.0059	<0.01		
9/9/2021					<0.01
9/10/2021				<0.01	
2/1/2022	0.0029	0.0054	<0.01		
2/2/2022				<0.01	
2/3/2022					<0.01
9/1/2022	<0.01		<0.01		
9/2/2022		0.00578 (J)			
9/6/2022				<0.01	<0.01
1/31/2023	<0.01		<0.01	<0.01	<0.01
2/1/2023		0.00682 (J)			
8/8/2023	<0.01			<0.01	<0.01
8/9/2023			<0.01		
8/10/2023		0.00684 (J)			

Time Series

Constituent: Cobalt (mg/L) Analysis Run 10/19/2023 8:41 AM View: Descriptive
Plant Arkwright Client: Southern Company Data: Arkwright No 2

	ARAMW-1	ARAMW-2	ARAMW-7	ARAMW-8	ARAMW-9
6/24/2020	0.00097 (J)	0.0027			
8/20/2020	0.001 (J)	0.0022 (J)			
9/30/2020	0.001 (J)				
10/1/2020		0.0036			
11/30/2020			0.028		
12/1/2020				0.0054	
2/10/2021	0.00082 (J)				
2/11/2021		0.0028	0.017	0.0061	
9/9/2021	0.00072 (J)			0.0046	
9/10/2021		0.0022 (J)	0.075		
2/2/2022			0.077		
2/3/2022	0.00045 (J)	0.0028		0.0028	
9/2/2022	0.000449 (J)	0.002		0.00292	
9/7/2022			0.0737		
1/31/2023	0.000399 (J)	0.00282	0.0687	0.00321	
2/1/2023					<0.001
8/8/2023	0.00035 (J)	0.00223	0.0605		<0.001
8/9/2023				0.00364	

Time Series

Constituent: Cobalt (mg/L) Analysis Run 10/19/2023 8:41 AM View: Descriptive
 Plant Arkwright Client: Southern Company Data: Arkwright No 2

	ARGWA-19 (bg)	ARGWA-20 (bg)	ARGWC-21	ARGWC-22	ARGWC-23
8/29/2016	<0.001	<0.001			
8/30/2016			0.0018 (J)		
10/24/2016	<0.001	<0.001			
10/26/2016			0.0018 (J)		
1/25/2017	<0.001	0.00076 (J)	0.0017 (J)		
4/10/2017	<0.001	<0.001	0.0016 (J)		
6/19/2017	<0.001		0.0021 (J)		
6/20/2017		<0.001			
10/24/2017	<0.001	<0.001	0.0019 (J)		
4/9/2018		<0.001			
4/10/2018	<0.001		0.0019 (J)		
10/16/2018	<0.001	<0.001	0.0019 (J)		
8/20/2019	0.00011 (J)	0.00015 (J)	0.0023		
10/7/2019	0.00011 (J)	<0.001			
10/8/2019			0.0018		
12/16/2019				0.018	0.0023
1/14/2020				0.0072	0.0031
2/11/2020				0.013	0.00056
3/9/2020				0.015	0.00061 (J)
4/6/2020		0.00039 (J)			
4/7/2020	0.00038 (J)		0.00087	0.009	0.0016
5/27/2020				0.0059	0.0017 (J)
6/24/2020				0.0047	
6/25/2020	<0.001	0.00015 (J)	0.00097 (J)		0.0014 (J)
7/15/2020				0.0027	0.0017 (J)
8/19/2020	<0.001	0.00064 (J)		0.0032	
8/20/2020					0.0023 (J)
8/21/2020			0.00066 (J)		
9/22/2020				0.0085	0.0036
9/29/2020	<0.001				
9/30/2020		0.00031 (J)		0.0055	
10/1/2020			0.00082 (J)		0.0052
2/9/2021	0.00016 (J)	0.00038 (J)			
2/10/2021			0.00063 (J)	0.0015 (J)	0.00072 (J)
9/7/2021	<0.001				
9/8/2021		0.0005 (J)	0.0007 (J)		
9/9/2021					0.0009 (J)
9/10/2021				0.0015 (J)	
2/1/2022	<0.001	<0.001	0.0007 (J)		
2/2/2022				0.001 (J)	
2/3/2022					0.00063 (J)
9/1/2022	<0.001		0.00069 (J)		
9/2/2022		<0.001			
9/6/2022				0.00198	0.000588 (J)
1/31/2023	<0.001		0.000659 (J)	0.00154	0.000742 (J)
2/1/2023		0.000458 (J)			
8/8/2023	<0.001			0.00184	0.00044 (J)
8/9/2023			0.000813 (J)		
8/10/2023		0.000814 (J)			

Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 10/19/2023 8:41 AM View: Descriptive
Plant Arkwright Client: Southern Company Data: Arkwright No 2

	ARAMW-1	ARAMW-2	ARAMW-7	ARAMW-8	ARAMW-9
8/20/2020	0.527	4.13			
9/30/2020	0.249 (U)				
10/1/2020		2.86			
2/10/2021	0.949				
2/11/2021		2.09	5.1	0.285 (U)	
9/9/2021	0.972			0.16 (U)	
9/10/2021		3.4	4.23		
2/2/2022			4.48		
2/3/2022	1.04	2.69		0.51	
9/2/2022	3.41	4.18		1.89	
9/7/2022			4.29		
1/31/2023	4.1	4.3	5.21	3.2	
2/1/2023					0.413 (U)
8/8/2023	1.16 (U)	1.86	4.83		3.92
8/9/2023				0.193 (U)	

Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 10/19/2023 8:41 AM View: Descriptive

Plant Arkwright Client: Southern Company Data: Arkwright No 2

	ARGWA-19 (bg)	ARGWA-20 (bg)	ARGWC-21	ARGWC-22	ARGWC-23
8/29/2016	0.324 (U)	0.508 (U)			
8/30/2016			0.832		
10/24/2016	1.17 (U)	1.46			
10/26/2016			1.27		
1/25/2017	0.443 (U)	0.377 (U)	0.549		
4/10/2017	0.483	0.132 (U)	0.556		
6/19/2017	0.478		0.976		
6/20/2017		1.17			
10/24/2017	0.764	0.704	0.504		
4/9/2018		0.539			
4/10/2018	0.3 (U)		0.621		
10/16/2018	0.991	0.354 (U)	0.796		
8/20/2019	0.498	0.53	0.978		
10/7/2019	0.476 (U)	0.621 (U)			
10/8/2019			0.588		
12/16/2019				0.229 (U)	0.166 (U)
1/14/2020				0.783	0.869
2/11/2020				0.229 (U)	0.0291 (U)
3/9/2020				0.365	0.626
4/6/2020		0.072 (U)			
4/7/2020	0.651		0.433 (U)	0.567	0.296 (U)
5/27/2020				0.143 (U)	0.192 (U)
7/15/2020				0.97	0.279 (U)
8/19/2020	0.294 (U)	0.94		0.587 (U)	
8/20/2020					0.242 (U)
8/21/2020			0.472		
9/22/2020				0.884	0.0177 (U)
9/29/2020	0.372 (U)				
9/30/2020		0.679		0.602	
10/1/2020			0.496 (U)		0.749
2/9/2021	0.466 (U)	-0.0396 (U)			
2/10/2021			0.625	0.233 (U)	0.0408 (U)
9/7/2021	0.31 (U)				
9/8/2021		0.44 (U)	1.12		
9/9/2021					0.498
9/10/2021				0.713	
2/1/2022	0.319 (U)	-0.00713 (U)	0.331 (U)		
2/2/2022				0.195 (U)	
2/3/2022					0.248 (U)
9/1/2022	0.913		1.57		
9/2/2022		0.783			
9/6/2022				2.58	2.36
1/31/2023	2.33		3.25	2.2	0.859 (U)
2/1/2023		2.18			
8/8/2023	1.8			1.22 (U)	0.363 (U)
8/9/2023			2.69		
8/10/2023		1.8			

Time Series

Constituent: Fluoride (mg/L) Analysis Run 10/19/2023 8:41 AM View: Descriptive
Plant Arkwright Client: Southern Company Data: Arkwright No 2

	ARAMW-1	ARAMW-2	ARAMW-7	ARAMW-8	ARAMW-9
6/24/2020	0.21	0.11			
8/20/2020	0.23	<0.1			
9/30/2020	0.2				
10/1/2020		0.098 (J)			
11/30/2020			0.044 (J)		
12/1/2020				0.14	
2/10/2021	0.21				
2/11/2021		0.12	0.054 (J)	0.24	
9/9/2021	0.21			0.19	
9/10/2021		0.13	0.032 (J)		
2/2/2022			<0.1		
2/3/2022	0.16	0.095 (J)		0.17	
9/2/2022	0.18	0.146		0.206	
9/7/2022			<0.1		
1/31/2023	0.22 (J)	0.13 (J)	0.11 (J)	0.263 (J)	
2/1/2023					0.938
8/8/2023	0.118	0.0571 (J)	<0.1		0.837
8/9/2023				0.261	

Time Series

Constituent: Fluoride (mg/L) Analysis Run 10/19/2023 8:41 AM View: Descriptive
 Plant Arkwright Client: Southern Company Data: Arkwright No 2

	ARGWA-19 (bg)	ARGWA-20 (bg)	ARGWC-21	ARGWC-22	ARGWC-23
8/29/2016	<0.1	<0.1			
8/30/2016			0.099 (J)		
10/24/2016	0.07 (J)	0.04 (J)			
10/26/2016			0.57		
1/25/2017	<0.1	<0.1	0.12 (J)		
4/10/2017	<0.1	<0.1	0.11 (J)		
6/19/2017	<0.1		0.11 (J)		
6/20/2017		<0.1			
10/24/2017	<0.1	<0.1	0.1 (J)		
4/9/2018		<0.1			
4/10/2018	<0.1		0.094 (J)		
10/16/2018	0.083 (J)	<0.1	0.17 (J)		
3/26/2019	0.041 (J)				
3/27/2019		<0.1	0.05 (J)		
8/20/2019	0.045 (J)	0.042 (J)	0.098 (J)		
10/7/2019	0.049 (J)	0.036 (J)			
10/8/2019			0.065 (J)		
12/16/2019				0.026 (J)	0.18 (J)
1/14/2020				<0.2	0.21
2/11/2020				0.056	0.13
3/9/2020				0.064 (J)	0.089 (J)
4/6/2020		0.059 (J)			
4/7/2020	0.14		0.12	0.068 (J)	0.18
5/27/2020				0.06 (J)	0.25
6/24/2020				0.048 (J)	
6/25/2020	0.03 (J)	<0.1	0.041 (J)		0.25
7/15/2020				0.04 (J)	0.28
8/19/2020	<0.1	<0.1		<0.2	
8/20/2020					0.19
8/21/2020			0.084 (J)		
9/22/2020				0.049 (J)	0.33
9/29/2020	0.051 (J)				
9/30/2020		0.032 (J)		0.045 (J)	
10/1/2020			0.098 (J)		0.32
2/9/2021	0.059 (J)	0.048 (J)			
2/10/2021			0.14	0.055 (J)	0.41
9/7/2021	0.1				
9/8/2021		0.067 (J)	0.16		
9/9/2021					0.48
9/10/2021				0.035 (J)	
2/1/2022	0.076 (J)	0.028 (J)	0.11		
2/2/2022				0.04 (J)	
2/3/2022					0.4
9/1/2022	0.148		0.161		
9/2/2022		0.122			
9/6/2022				0.056 (J)	0.362
1/31/2023	0.108 (J)		0.175 (J)	0.0979 (J)	0.551 (J)
2/1/2023		0.121			
8/8/2023	<0.1			<0.2	0.283
8/9/2023			0.203		
8/10/2023		<0.1			

Time Series

Constituent: Lead (mg/L) Analysis Run 10/19/2023 8:41 AM View: Descriptive

Plant Arkwright Client: Southern Company Data: Arkwright No 2

	ARAMW-1	ARAMW-2	ARAMW-7	ARAMW-8	ARAMW-9
8/20/2020	<0.002	<0.002			
9/30/2020	<0.002				
10/1/2020		<0.002			
2/10/2021	<0.002				
2/11/2021		<0.002	0.00013 (J)	<0.002	
9/9/2021	<0.002			<0.002	
9/10/2021		<0.002	<0.002		
2/2/2022			<0.002		
2/3/2022	<0.002	<0.002		<0.002	
9/2/2022	<0.002	<0.002		<0.002	
9/7/2022			<0.002		
1/31/2023	<0.002	<0.002	<0.002	<0.002	
2/1/2023					<0.002
8/8/2023	<0.002	<0.002	<0.002		<0.002
8/9/2023				<0.002	

Time Series

Constituent: Lead (mg/L) Analysis Run 10/19/2023 8:41 AM View: Descriptive

Plant Arkwright Client: Southern Company Data: Arkwright No 2

	ARGWA-19 (bg)	ARGWA-20 (bg)	ARGWC-21	ARGWC-22	ARGWC-23
5/5/2009	<0.002				
5/14/2009			<0.002		
5/15/2009		<0.002			
12/5/2009	<0.002	<0.002	<0.002		
6/1/2010	<0.002	<0.002			
6/2/2010			<0.002		
11/11/2010	<0.002	<0.002	<0.002		
5/17/2011	<0.002	<0.002	<0.002		
11/8/2011	<0.002	<0.002	<0.002		
5/16/2012	<0.002	<0.002	<0.002		
5/14/2013	<0.002	<0.002	<0.002		
11/5/2013	<0.002	<0.002	<0.002		
6/9/2014	<0.002	<0.002	<0.002		
11/18/2014		<0.002	<0.002		
11/19/2014	<0.002				
4/14/2015	<0.002	<0.002	<0.002		
10/29/2015			<0.002		
11/4/2015	<0.002	<0.002			
6/22/2016	<0.002	<0.002			
6/23/2016			<0.002		
8/29/2016	<0.002	<0.002			
8/30/2016			<0.002		
10/24/2016	<0.002	<0.002			
10/26/2016			<0.002		
1/25/2017	<0.002	0.00037 (J)	<0.002		
4/10/2017	<0.002	<0.002	<0.002		
6/19/2017	<0.002		<0.002		
6/20/2017		<0.002			
10/24/2017	<0.002	<0.002	<0.002		
4/9/2018		<0.002			
4/10/2018	<0.002		<0.002		
10/16/2018	<0.002	<0.002	<0.002		
3/26/2019	<0.002				
3/27/2019		<0.002	<0.002		
8/20/2019	<0.002	<0.002	<0.002		
10/7/2019	0.00018 (J)	0.00014 (J)			
10/8/2019			0.00015 (J)		
12/16/2019				<0.002	<0.002
1/14/2020				0.00022 (J)	0.00018 (J)
2/11/2020				<0.002	0.00026 (J)
3/9/2020				<0.002	<0.002
4/6/2020		0.00033 (J)			
4/7/2020	0.00037 (J)		0.00026 (J)	0.00014 (J)	<0.002
5/27/2020				<0.002	<0.002
7/15/2020				<0.002	<0.002
8/19/2020	<0.002	0.00039 (J)		<0.002	
8/20/2020					<0.002
8/21/2020			<0.002		
9/22/2020				<0.002	<0.002
9/29/2020	<0.002				
9/30/2020		0.00022 (J)		<0.002	
10/1/2020			<0.002		<0.002

Time Series

Constituent: Lead (mg/L) Analysis Run 10/19/2023 8:41 AM View: Descriptive
Plant Arkwright Client: Southern Company Data: Arkwright No 2

	ARGWA-19 (bg)	ARGWA-20 (bg)	ARGWC-21	ARGWC-22	ARGWC-23
2/9/2021	<0.002	0.00033 (J)			
2/10/2021			<0.002	<0.002	<0.002
9/7/2021	<0.002				
9/8/2021		0.00024 (J)	<0.002		
9/9/2021					<0.002
9/10/2021				<0.002	
2/1/2022	<0.002	<0.002	<0.002		
2/2/2022				<0.002	
2/3/2022					<0.002
9/1/2022	<0.002		<0.002		
9/2/2022		<0.002			
9/6/2022				<0.002	<0.002
1/31/2023	<0.002		<0.002	<0.002	<0.002
2/1/2023		<0.002			
8/8/2023	<0.002			<0.002	<0.002
8/9/2023			<0.002		
8/10/2023		<0.002			

Time Series

Constituent: Lithium (mg/L) Analysis Run 10/19/2023 8:41 AM View: Descriptive
Plant Arkwright Client: Southern Company Data: Arkwright No 2

	ARAMW-1	ARAMW-2	ARAMW-7	ARAMW-8	ARAMW-9
1/14/2020	0.009	0.086			
6/24/2020	0.0084	0.018			
8/20/2020	0.0066	0.036			
9/30/2020	0.0091				
10/1/2020		0.019			
11/30/2020			0.061		
12/1/2020				0.0044 (J)	
2/10/2021	0.0097				
2/11/2021		0.021	0.061	0.0055	
9/9/2021	0.0095			0.0062	
9/10/2021		0.025	0.06		
2/2/2022			0.06		
2/3/2022	0.0099	0.021		0.0063	
9/2/2022	0.0097 (J)	0.0232		0.00654 (J)	
9/7/2022			0.0634		
1/31/2023	0.0099 (J)	0.0202	0.068	0.00659 (J)	
2/1/2023					0.00463 (J)
8/8/2023	0.00909 (J)	0.0193	0.0577		0.00907 (J)
8/9/2023				0.00637 (J)	

Time Series

Constituent: Lithium (mg/L) Analysis Run 10/19/2023 8:41 AM View: Descriptive
Plant Arkwright Client: Southern Company Data: Arkwright No 2

	ARGWA-19 (bg)	ARGWA-20 (bg)	ARGWC-21	ARGWC-22	ARGWC-23
8/29/2016	0.0048 (J)	<0.01			
8/30/2016			0.0092		
10/24/2016	<0.05	<0.01			
10/26/2016			0.0071 (J)		
1/25/2017	0.0052	<0.01	0.0087		
4/10/2017	0.0034 (J)	<0.01	0.0074		
6/19/2017	0.0036 (J)		0.0079		
6/20/2017		<0.01			
10/24/2017	0.0051	<0.01	0.0097		
4/9/2018		0.0021 (J)			
4/10/2018	0.0057		0.012		
10/16/2018	0.0048 (J)	0.0018 (J)	0.01		
8/20/2019	0.0044 (J)	<0.01	0.0098		
10/7/2019	0.013	0.0066			
10/8/2019			0.015		
12/16/2019				0.027	0.02
1/14/2020				0.034	0.022
2/11/2020				0.01	0.0078
3/9/2020				0.0071	0.013
4/6/2020		<0.01			
4/7/2020	0.0053		0.011	0.012	0.032
5/27/2020				0.017	0.037
6/24/2020				0.023	
6/25/2020	0.0053	<0.01	0.013		0.043
7/15/2020				0.021	0.042
8/19/2020	0.0038 (J)	<0.01		0.026	
8/20/2020					0.036
8/21/2020			0.013		
9/22/2020				0.014	0.039
9/29/2020	0.0041 (J)				
9/30/2020		<0.01		0.014	
10/1/2020			0.012		0.04
2/9/2021	0.0038 (J)	<0.01			
2/10/2021			0.012	0.022	0.044
9/7/2021	0.0034 (J)				
9/8/2021		<0.01	0.012		
9/9/2021					0.045
9/10/2021				0.021	
2/1/2022	0.0039 (J)	0.0015 (J)	0.012		
2/2/2022				0.02	
2/3/2022					0.052
9/1/2022	0.00359 (J)		0.0116		
9/2/2022		<0.01			
9/6/2022				0.0136	0.0578
1/31/2023	0.00424 (J)		0.0124	0.0284	0.0499
2/1/2023		<0.01			
8/8/2023	0.00382 (J)			0.028	0.0517
8/9/2023			0.0131		
8/10/2023		<0.01			

Time Series

Constituent: Mercury (mg/L) Analysis Run 10/19/2023 8:41 AM View: Descriptive
Plant Arkwright Client: Southern Company Data: Arkwright No 2

	ARAMW-1	ARAMW-2	ARAMW-7	ARAMW-8	ARAMW-9
8/20/2020	<0.0002	<0.0002			
9/9/2021	<0.0002			<0.0002	
9/10/2021		<0.0002	<0.0002		
2/2/2022			<0.0002		
2/3/2022	<0.0002	<0.0002		<0.0002	
9/2/2022	<0.0002	<0.0002		<0.0002	
9/7/2022			<0.0002		
1/31/2023	<0.0002	<0.0002	<0.0002	<0.0002	
2/1/2023					<0.0002
8/8/2023	<0.0002	<0.0002	<0.0002		<0.0002
8/9/2023				<0.0002	

Time Series

Constituent: Mercury (mg/L) Analysis Run 10/19/2023 8:41 AM View: Descriptive
Plant Arkwright Client: Southern Company Data: Arkwright No 2

	ARGWA-19 (bg)	ARGWA-20 (bg)	ARGWC-21	ARGWC-22	ARGWC-23
8/29/2016	<0.0002	<0.0002			
8/30/2016			<0.0002		
10/24/2016	<0.0002	<0.0002			
10/26/2016			<0.0002		
1/25/2017	7.7E-05 (J)	7.2E-05 (J)	7.3E-05 (J)		
4/10/2017	<0.0002	<0.0002	<0.0002		
6/19/2017	<0.0002		<0.0002		
6/20/2017		<0.0002			
10/24/2017	<0.0002	<0.0002	<0.0002		
4/9/2018		<0.0002			
4/10/2018	<0.0002		<0.0002		
10/16/2018	<0.0002	<0.0002	<0.0002		
8/20/2019	<0.0002	<0.0002	<0.0002		
12/16/2019				<0.0002	<0.0002
1/14/2020				<0.0002	<0.0002
2/11/2020				<0.0002	<0.0002
3/9/2020				<0.0002	<0.0002
5/27/2020				<0.0002	<0.0002
7/15/2020				<0.0002	<0.0002
8/19/2020	<0.0002	<0.0002		<0.0002	
8/20/2020					<0.0002
8/21/2020			<0.0002		
9/22/2020				<0.0002	<0.0002
10/1/2020					<0.0002
9/7/2021	<0.0002				
9/8/2021		<0.0002	<0.0002		
9/9/2021					<0.0002
9/10/2021				<0.0002	
2/1/2022	<0.0002	<0.0002	<0.0002		
2/2/2022				<0.0002	
2/3/2022					<0.0002
9/1/2022	<0.0002		<0.0002		
9/2/2022		<0.0002			
9/6/2022				<0.0002	<0.0002
1/31/2023	<0.0002		<0.0002	<0.0002	<0.0002
2/1/2023		<0.0002			
8/8/2023	<0.0002			<0.0002	<0.0002
8/9/2023			<0.0002		
8/10/2023		<0.0002			

Time Series

Constituent: Molybdenum (mg/L) Analysis Run 10/19/2023 8:41 AM View: Descriptive
Plant Arkwright Client: Southern Company Data: Arkwright No 2

	ARAMW-1	ARAMW-2	ARAMW-7	ARAMW-8	ARAMW-9
6/24/2020	0.0051 (J)	<0.015			
8/20/2020	0.0076 (J)	0.0013 (J)			
9/30/2020	0.0054 (J)				
10/1/2020		<0.015			
11/30/2020			0.0012 (J)		
12/1/2020				0.056	
2/10/2021	0.0043 (J)				
2/11/2021		<0.015	<0.001	0.038	
9/9/2021	0.0059 (J)			0.12	
9/10/2021		<0.015	<0.001		
2/2/2022			<0.001		
2/3/2022	0.0049 (J)	<0.015		0.16	
9/2/2022	0.00785	0.000603 (J)		0.175	
9/7/2022			0.000379 (J)		
1/31/2023	0.00974	0.000491 (J)	<0.001	0.188	
2/1/2023					0.014
8/8/2023	0.00667	0.0011	<0.001		0.0109
8/9/2023				0.203	

Time Series

Constituent: Molybdenum (mg/L) Analysis Run 10/19/2023 8:41 AM View: Descriptive
 Plant Arkwright Client: Southern Company Data: Arkwright No 2

	ARGWA-19 (bg)	ARGWA-20 (bg)	ARGWC-21	ARGWC-22	ARGWC-23
8/29/2016	<0.015	<0.001			
8/30/2016			<0.001		
10/24/2016	<0.015	<0.001			
10/26/2016			<0.001		
1/25/2017	<0.015	<0.001	<0.001		
4/10/2017	<0.015	<0.001	<0.001		
6/19/2017	<0.015		<0.001		
6/20/2017		<0.001			
10/24/2017	<0.015	<0.001	<0.001		
4/9/2018		<0.001			
4/10/2018	0.00096 (J)		<0.001		
10/16/2018	<0.015	<0.001	<0.001		
8/20/2019	<0.015	<0.001	<0.001		
12/16/2019				0.0018 (J)	0.025
1/14/2020				0.0012 (J)	0.032
2/11/2020				0.00093	0.021
3/9/2020				0.00067	0.013 (J)
5/27/2020				<0.015	0.048
6/24/2020				<0.015	
6/25/2020	<0.015	<0.001	<0.001		0.055
7/15/2020				<0.015	0.055
8/19/2020	<0.015	<0.001		<0.015	
8/20/2020					0.061
8/21/2020			<0.001		
9/22/2020				<0.015	0.053
9/29/2020	<0.015				
9/30/2020		<0.001		<0.015	
10/1/2020			<0.001		0.064
2/9/2021	<0.015	<0.001			
2/10/2021			<0.001	<0.015	0.063
9/7/2021	<0.015				
9/8/2021		<0.001	<0.001		
9/9/2021					0.071
9/10/2021				<0.015	
2/1/2022	0.00067 (J)	<0.001	<0.001		
2/2/2022				<0.015	
2/3/2022					0.065
9/1/2022	0.000501 (J)		<0.001		
9/2/2022		<0.001			
9/6/2022				0.000203 (J)	0.067
1/31/2023	0.000395 (J)		<0.001	0.000496 (J)	0.0671
2/1/2023		<0.001			
8/8/2023	0.000421 (J)			0.000514 (J)	0.0618
8/9/2023			<0.001		
8/10/2023		<0.001			

Time Series

Constituent: pH (SU) Analysis Run 10/19/2023 8:41 AM View: Descriptive

Plant Arkwright Client: Southern Company Data: Arkwright No 2

	ARAMW-1	ARAMW-2	ARAMW-7	ARAMW-8	ARAMW-9
1/14/2020	6.07	6.12			
6/24/2020	6.31	6.19			
8/20/2020	6.09	5.99			
9/30/2020	6.16				
10/1/2020		5.96			
11/30/2020			6		
12/1/2020				7.05	
2/10/2021	6.16				
2/11/2021		6	5.67	6.95	
9/9/2021	6.1			6.56	
9/10/2021		6.01	5.7		
2/2/2022			5.58		
2/3/2022	6.11	6.01		6.59	
9/2/2022	6.04	6		6.44	
9/7/2022			5.57		
1/31/2023	6.36	6.18	5.54	6.44	
2/1/2023					7.95
8/8/2023	6.38	6.01	5.47		8.13
8/9/2023				8.71	

Time Series

Constituent: pH (SU) Analysis Run 10/19/2023 8:41 AM View: Descriptive

Plant Arkwright Client: Southern Company Data: Arkwright No 2

	ARGWA-19 (bg)	ARGWA-20 (bg)	ARGWC-21	ARGWC-22	ARGWC-23
8/29/2016	6.75 (o)	5.64			
8/30/2016			6.38		
10/24/2016	5.81	5.6			
10/26/2016			6.23		
1/25/2017	5.91	5.65	6.15		
4/10/2017	5.74	5.42	5.99		
6/19/2017	5.54		5.95		
6/20/2017		5.59			
10/24/2017	5.82	5.58	6.02		
4/9/2018		5.78			
4/10/2018	5.92		6.12		
10/16/2018	5.94	5.69	6.12		
3/26/2019	5.85				
3/27/2019		5.96	6.2		
8/20/2019	5.9	5.57	6.08		
10/7/2019	5.89	5.65			
10/8/2019			6.11		
12/16/2019				5.74	6.41
1/14/2020				5.91	6.62
2/11/2020				5.9	6.71
3/9/2020				5.97	6.32
4/6/2020		5.53			
4/7/2020	5.72		5.96	5.84	6.4
5/27/2020				5.69	6.3
6/24/2020				5.82	
6/25/2020	5.8	5.61	5.98		6.37
7/15/2020				5.58	6.36
8/19/2020	6.25	6.16		6.21	
8/20/2020					6.33
8/21/2020			5.89		
9/22/2020				5.77	6.29
9/29/2020	5.83				
9/30/2020		5.65		5.81	
10/1/2020			5.99		6.38
2/9/2021	5.97	5.66			
2/10/2021			6.01	5.68	6.37
9/7/2021	5.85				
9/8/2021		5.59	5.94		
9/9/2021					6.35
9/10/2021				5.62	
2/1/2022	5.52	5.14	5.65		
2/2/2022				5.7	
2/3/2022					6.44
9/1/2022	5.88		5.97		
9/2/2022		5.68			
9/6/2022				5.88	6.41
1/31/2023	5.86		6.04	5.61	6.46
2/1/2023		5.7			
8/8/2023	5.81			5.61	6.33
8/9/2023			6.6		
8/10/2023		5.55			

Time Series

Constituent: Selenium (mg/L) Analysis Run 10/19/2023 8:41 AM View: Descriptive
Plant Arkwright Client: Southern Company Data: Arkwright No 2

	ARAMW-1	ARAMW-2	ARAMW-7	ARAMW-8	ARAMW-9
8/20/2020	<0.005	<0.005			
9/30/2020	<0.005				
10/1/2020		<0.005			
2/10/2021	<0.005				
2/11/2021		<0.005	<0.005	<0.005	
9/9/2021	<0.005			<0.005	
9/10/2021		<0.005	<0.005		
2/2/2022			<0.005		
2/3/2022	<0.005	<0.005		<0.005	
9/2/2022	<0.005	<0.005		<0.005	
9/7/2022			<0.005		
1/31/2023	<0.005	<0.005	<0.005	<0.005	
2/1/2023					<0.005
8/8/2023	<0.005	<0.005	<0.005		<0.005
8/9/2023				<0.005	

Time Series

Constituent: Selenium (mg/L) Analysis Run 10/19/2023 8:41 AM View: Descriptive
 Plant Arkwright Client: Southern Company Data: Arkwright No 2

	ARGWA-19 (bg)	ARGWA-20 (bg)	ARGWC-21	ARGWC-22	ARGWC-23
5/5/2009	0.0043				
5/14/2009			0.0058 (o)		
5/15/2009		0.007 (o)			
12/5/2009	<0.005	<0.005	<0.005		
6/1/2010	<0.005	<0.005			
6/2/2010			<0.005		
11/11/2010	<0.005	<0.005	<0.005		
5/17/2011	<0.005	<0.005	<0.005		
11/8/2011	<0.005	<0.005	<0.005		
5/16/2012	<0.005	0.0024 (J)	<0.005		
5/14/2013	<0.005	<0.005	<0.005		
11/5/2013	<0.005	<0.005	<0.005		
6/9/2014	<0.005	<0.005	<0.005		
11/18/2014		<0.005	<0.005		
11/19/2014	<0.005				
4/14/2015	<0.005	<0.005	<0.005		
10/29/2015			<0.005		
11/4/2015	<0.005	<0.005			
6/22/2016	0.00025 (J)	0.0019			
6/23/2016			<0.005		
8/29/2016	0.0004 (J)	0.0019			
8/30/2016			<0.005		
10/24/2016	<0.005	0.0023 (J)			
10/26/2016			<0.005		
1/25/2017	<0.005	0.0015	<0.005		
4/10/2017	<0.005	0.0011 (J)	<0.005		
6/19/2017	0.00025 (J)		<0.005		
6/20/2017		0.0016			
10/24/2017	<0.005	0.0012 (J)	<0.005		
4/9/2018		0.0012 (J)			
4/10/2018	0.00074 (J)		<0.005		
10/16/2018	<0.005	0.0015	<0.005		
3/26/2019	<0.005				
3/27/2019		0.0015	<0.005		
8/20/2019	<0.005	0.0015 (J)	<0.005		
10/7/2019	<0.005	0.0016 (J)			
10/8/2019			<0.005		
12/16/2019				<0.005	<0.005
1/14/2020				<0.005	<0.005
2/11/2020				<0.005	<0.005
3/9/2020				<0.005	<0.005
4/6/2020		0.0017 (J)			
4/7/2020	<0.005		<0.005	<0.005	<0.005
5/27/2020				<0.005	<0.005
7/15/2020				<0.005	<0.005
8/19/2020	<0.005	0.0015 (J)		<0.005	
8/20/2020					<0.005
8/21/2020			<0.005		
9/22/2020				<0.005	<0.005
9/29/2020	<0.005				
9/30/2020		0.0016 (J)		<0.005	
10/1/2020			<0.005		<0.005

Time Series

Constituent: Selenium (mg/L) Analysis Run 10/19/2023 8:41 AM View: Descriptive
Plant Arkwright Client: Southern Company Data: Arkwright No 2

	ARGWA-19 (bg)	ARGWA-20 (bg)	ARGWC-21	ARGWC-22	ARGWC-23
2/9/2021	<0.005	0.0016 (J)			
2/10/2021			<0.005	<0.005	<0.005
9/7/2021	<0.005				
9/8/2021		<0.005	<0.005		
9/9/2021					<0.005
9/10/2021				0.002 (J)	
2/1/2022	<0.005	0.0015 (J)	<0.005		
2/2/2022				<0.005	
2/3/2022					<0.005
9/1/2022	<0.005		<0.005		
9/2/2022		<0.005			
9/6/2022				<0.005	<0.005
1/31/2023	<0.005		<0.005	<0.005	<0.005
2/1/2023		<0.005			
8/8/2023	<0.005			<0.005	<0.005
8/9/2023			<0.005		
8/10/2023		<0.005			

Time Series

Constituent: Silver (mg/L) Analysis Run 10/19/2023 8:41 AM View: Descriptive
Plant Arkwright Client: Southern Company Data: Arkwright No 2

	ARAMW-1	ARAMW-2	ARAMW-7	ARAMW-8	ARAMW-9
9/30/2020	<0.001				
10/1/2020		<0.001			
2/10/2021	<0.001				
2/11/2021		<0.001	<0.001	<0.001	
9/9/2021	<0.001			<0.001	
9/10/2021		<0.001	<0.001		
2/2/2022			<0.001		
2/3/2022	<0.001	<0.001		<0.001	
9/2/2022	<0.001	<0.001		<0.001	
9/7/2022			<0.001		
1/31/2023	<0.001	<0.001	<0.001	<0.001	
2/1/2023					<0.001
8/8/2023	<0.001	<0.001	<0.001		<0.001
8/9/2023				<0.001	

Time Series

Constituent: Silver (mg/L) Analysis Run 10/19/2023 8:41 AM View: Descriptive

Plant Arkwright Client: Southern Company Data: Arkwright No 2

	ARGWA-19 (bg)	ARGWA-20 (bg)	ARGWC-21	ARGWC-22	ARGWC-23
5/5/2009	<0.001				
5/14/2009			<0.001		
5/15/2009		<0.001			
12/5/2009	0.00075	0.00043	0.001		
6/1/2010	<0.001	<0.001			
6/2/2010			<0.001		
11/11/2010	<0.001	<0.001	<0.001		
5/17/2011	<0.001	<0.001	<0.001		
11/8/2011	<0.001	<0.001	<0.001		
5/16/2012	<0.001	<0.001	<0.001		
5/14/2013	<0.001	<0.001	<0.001		
11/5/2013	<0.001	<0.001	<0.001		
6/9/2014	<0.001	<0.001	<0.001		
11/18/2014		<0.001	<0.001		
11/19/2014	<0.001				
4/14/2015	<0.001	<0.001	<0.001		
10/29/2015			<0.001		
11/4/2015	<0.001	<0.001			
6/22/2016	<0.001	<0.001			
6/23/2016			<0.001		
10/24/2016	<0.001	<0.001			
10/26/2016			<0.001		
4/10/2017	<0.001	<0.001	<0.001		
10/24/2017	<0.001	<0.001	<0.001		
4/9/2018		<0.001			
4/10/2018	<0.001		<0.001		
10/16/2018	<0.001	<0.001	<0.001		
3/26/2019	<0.001				
3/27/2019		<0.001	<0.001		
10/7/2019	0.00056 (J)	0.00031 (J)			
10/8/2019			0.00043 (J)		
4/6/2020		<0.001			
4/7/2020	0.00018 (J)		<0.001	<0.001	<0.001
9/29/2020	<0.001				
9/30/2020		<0.001		<0.001	
10/1/2020			<0.001		<0.001
2/9/2021	<0.001	<0.001			
2/10/2021			<0.001	<0.001	<0.001
9/7/2021	<0.001				
9/8/2021		<0.001	<0.001		
9/9/2021					<0.001
9/10/2021				<0.001	
2/1/2022	<0.001	<0.001	<0.001		
2/2/2022				<0.001	
2/3/2022					<0.001
9/1/2022	<0.001		<0.001		
9/2/2022		<0.001			
9/6/2022				<0.001	<0.001
1/31/2023	<0.001		<0.001	<0.001	<0.001
2/1/2023		<0.001			
8/8/2023	<0.001			<0.001	<0.001
8/9/2023			<0.001		

Time Series

Constituent: Silver (mg/L) Analysis Run 10/19/2023 8:41 AM View: Descriptive
Plant Arkwright Client: Southern Company Data: Arkwright No 2

	ARGWA-19 (bg)	ARGWA-20 (bg)	ARGWC-21	ARGWC-22	ARGWC-23
8/10/2023		<0.001			

Time Series

Constituent: Sulfate (mg/L) Analysis Run 10/19/2023 8:41 AM View: Descriptive
Plant Arkwright Client: Southern Company Data: Arkwright No 2

	ARAMW-1	ARAMW-2	ARAMW-7	ARAMW-8	ARAMW-9
6/24/2020	250	290			
9/30/2020	230				
10/1/2020		270			
11/30/2020			990		
12/1/2020				120	
2/10/2021	260				
2/11/2021		290	980	110	
9/9/2021	210			100	
9/10/2021		440	1100		
2/2/2022			1100		
2/3/2022	250	310		110	
9/2/2022	223	315		108	
9/7/2022			1050		
1/31/2023	218	262	1020	105	
2/1/2023					417
8/8/2023	223	243	1060		477
8/9/2023				114	

Time Series

Constituent: Sulfate (mg/L) Analysis Run 10/19/2023 8:41 AM View: Descriptive
Plant Arkwright Client: Southern Company Data: Arkwright No 2

	ARGWA-19 (bg)	ARGWA-20 (bg)	ARGWC-21	ARGWC-22	ARGWC-23
5/5/2009	15.9				
5/14/2009			129		
5/15/2009		41.3 (o)			
12/5/2009	15.1	16.2	136		
6/1/2010	12.7	18.2			
6/2/2010			138		
11/11/2010	11.5	16.5	131.49		
5/17/2011	11.2	16	132		
11/8/2011	11.3	21	138		
5/16/2012	9.38	17.7	132		
5/14/2013	8.74	19.5	129		
11/5/2013	9.12	18.3	122		
6/9/2014	8.61	18.6	131		
4/14/2015	8.45	18.8	128		
10/29/2015			134		
11/4/2015	9.01	17.4			
6/22/2016	9.3	18			
6/23/2016			150		
8/29/2016	8.7	18			
8/30/2016			140		
10/24/2016	9.3	18			
10/26/2016			160		
1/25/2017	8.8	19	150		
4/10/2017	7.8	16	140		
6/19/2017	8.6		160		
6/20/2017		18			
10/24/2017	9.1	19	160		
4/9/2018		18			
4/10/2018	7.9		170		
10/16/2018	8.2	18	170		
3/26/2019	6.1				
3/27/2019		15	170		
10/7/2019	7.4	17			
10/8/2019			170		
12/16/2019				770	66
1/14/2020				930	68
2/11/2020				660	18
3/9/2020				630	49
4/6/2020		15			
4/7/2020	8.4		180	710	58
5/27/2020				720	65
6/24/2020				810	
6/25/2020	9.8	16	210		77
7/15/2020				820	78
8/19/2020				1000	
8/20/2020					69
9/22/2020				720	68
9/29/2020	8.4				
9/30/2020		15		650	
10/1/2020			210		64
2/9/2021	10	16			
2/10/2021			220	750	67

Time Series

Constituent: Sulfate (mg/L) Analysis Run 10/19/2023 8:41 AM View: Descriptive
Plant Arkwright Client: Southern Company Data: Arkwright No 2

	ARGWA-19 (bg)	ARGWA-20 (bg)	ARGWC-21	ARGWC-22	ARGWC-23
9/7/2021	9.9				
9/8/2021		16	230		
9/9/2021					72
9/10/2021				760	
2/1/2022	10	18	230		
2/2/2022				720	
2/3/2022					64
9/1/2022	8.38		221		
9/2/2022		18.5			
9/6/2022				667	65.3
1/31/2023	7.55		260	751	55.5
2/1/2023		19.3			
8/8/2023	8.29			719	69.8
8/9/2023			214		
8/10/2023		18.5			

Time Series

Constituent: Thallium (mg/L) Analysis Run 10/19/2023 8:41 AM View: Descriptive
Plant Arkwright Client: Southern Company Data: Arkwright No 2

	ARAMW-1	ARAMW-2	ARAMW-7	ARAMW-8	ARAMW-9
8/20/2020	<0.002	<0.002			
9/9/2021	<0.002			<0.002	
9/10/2021		<0.002	<0.002		
2/2/2022			<0.002		
2/3/2022	<0.002	<0.002		<0.002	
9/2/2022	<0.002	<0.002		<0.002	
9/7/2022			<0.002		
1/31/2023	<0.002	<0.002	<0.002	<0.002	
2/1/2023					<0.002
8/8/2023	<0.002	<0.002	<0.002		<0.002
8/9/2023				<0.002	

Time Series

Constituent: Thallium (mg/L) Analysis Run 10/19/2023 8:41 AM View: Descriptive
 Plant Arkwright Client: Southern Company Data: Arkwright No 2

	ARGWA-19 (bg)	ARGWA-20 (bg)	ARGWC-21	ARGWC-22	ARGWC-23
8/29/2016	<0.002	<0.002			
8/30/2016			<0.002		
10/24/2016	<0.002	<0.002			
10/26/2016			<0.002		
1/25/2017	<0.002	<0.002	<0.002		
4/10/2017	<0.002	<0.002	<0.002		
6/19/2017	<0.002		<0.002		
6/20/2017		<0.002			
10/24/2017	<0.002	<0.002	<0.002		
4/9/2018		<0.002			
4/10/2018	<0.002		<0.002		
10/16/2018	<0.002	<0.002	<0.002		
8/20/2019	<0.002	<0.002	<0.002		
12/16/2019				0.00078 (J)	<0.002
1/14/2020				0.00027 (J)	<0.002
2/11/2020				0.00034	0.00028 (J)
3/9/2020				0.00035 (J)	0.00026 (J)
5/27/2020				<0.002	0.00026 (J)
7/15/2020				<0.002	<0.002
8/19/2020	<0.002	<0.002		<0.002	
8/20/2020					<0.002
8/21/2020			<0.002		
9/22/2020				<0.002	<0.002
9/7/2021	<0.002				
9/8/2021		<0.002	<0.002		
9/9/2021					<0.002
9/10/2021				<0.002	
2/1/2022	0.00057 (J)	<0.002	<0.002		
2/2/2022				<0.002	
2/3/2022					<0.002
9/1/2022	<0.002		<0.002		
9/2/2022		<0.002			
9/6/2022				<0.002	<0.002
1/31/2023	<0.002		<0.002	<0.002	<0.002
2/1/2023		<0.002			
8/8/2023	<0.002			<0.002	<0.002
8/9/2023			<0.002		
8/10/2023		<0.002			

Time Series

Constituent: T Total Dissolved Solids (mg/L) Analysis Run 10/19/2023 8:41 AM View: Descriptive
Plant Arkwright Client: Southern Company Data: Arkwright No 2

	ARAMW-1	ARAMW-2	ARAMW-7	ARAMW-8	ARAMW-9
9/30/2020	520				
10/1/2020		530			
11/30/2020			1600		
12/1/2020				420	
2/10/2021	560				
2/11/2021		590	1600	380	
9/9/2021	560			260	
9/10/2021		870	1700		
2/2/2022			1700		
2/3/2022	560	590		410	
9/2/2022	546	664		385	
9/7/2022			1610		
1/31/2023	527	591	1630	392	
2/1/2023					857
8/8/2023	524	548	1620		852
8/9/2023				436	

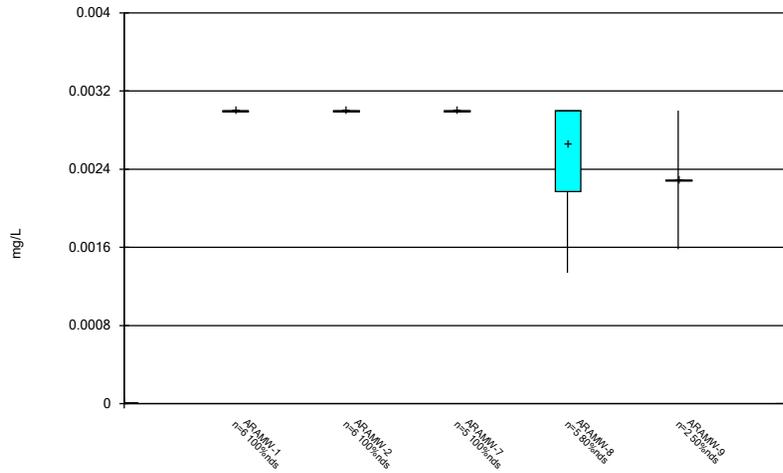
Time Series

Constituent: T Total Dissolved Solids (mg/L) Analysis Run 10/19/2023 8:41 AM View: Descriptive
Plant Arkwright Client: Southern Company Data: Arkwright No 2

	ARGWA-19 (bg)	ARGWA-20 (bg)	ARGWC-21	ARGWC-22	ARGWC-23
8/29/2016	130	100			
8/30/2016			350		
10/24/2016	108	91			
10/26/2016			357		
1/25/2017	120	90	320		
4/10/2017	128 (D)	110	380		
6/19/2017	86		370		
6/20/2017		72			
10/24/2017	120	110	420		
4/9/2018		100			
4/10/2018	120		370		
10/16/2018	140	110	380		
3/26/2019	170				
3/27/2019		100	400		
10/7/2019	150	87			
10/8/2019			420		
12/16/2019				1300	320
1/14/2020				1400	340
2/11/2020				1300	110
3/9/2020				1200	210
4/6/2020		90			
4/7/2020	120		460	1300	290
5/27/2020				1300	320
7/15/2020				1400	310
8/19/2020				1400	
8/20/2020					310
9/22/2020				1300	310
9/29/2020	110				
9/30/2020		82		1200	
10/1/2020			500		290
2/9/2021	110	100			
2/10/2021			510	1200	290
9/7/2021	110				
9/8/2021		120	560		
9/9/2021					320
9/10/2021				1300	
2/1/2022	91	100	520		
2/2/2022				1200	
2/3/2022					320
9/1/2022	81		537		
9/2/2022		101			
9/6/2022				1180	305
1/31/2023	95		526	1320	299
2/1/2023		90			
8/8/2023	62			1220	294
8/9/2023			520		
8/10/2023		105			

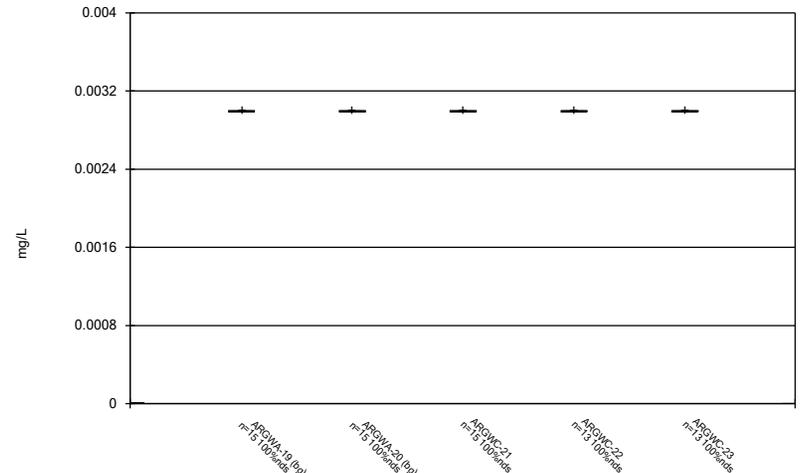
FIGURE B.

Box & Whiskers Plot



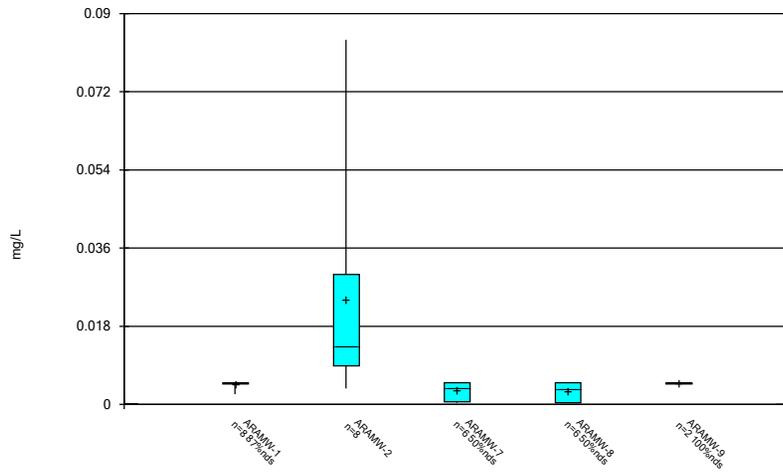
Constituent: Antimony Analysis Run 10/19/2023 8:42 AM View: Descriptive
Plant Arkwright Client: Southern Company Data: Arkwright No 2

Box & Whiskers Plot



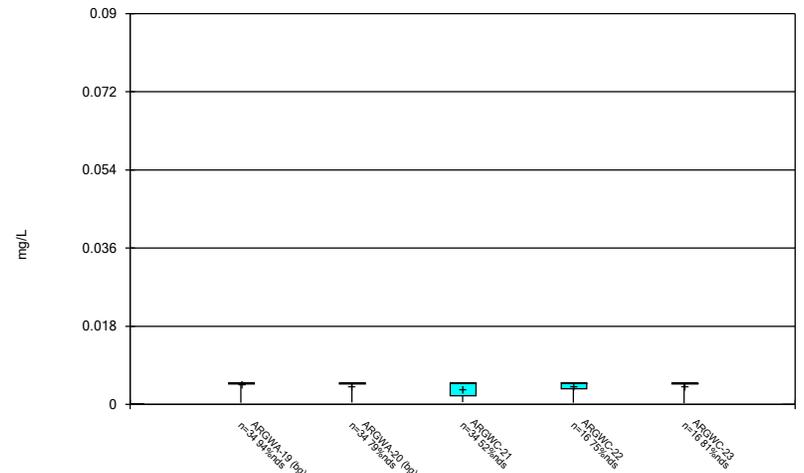
Constituent: Antimony Analysis Run 10/19/2023 8:42 AM View: Descriptive
Plant Arkwright Client: Southern Company Data: Arkwright No 2

Box & Whiskers Plot



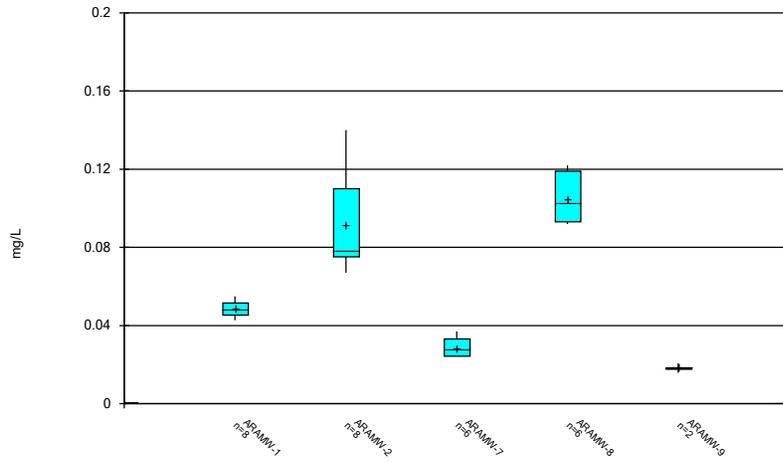
Constituent: Arsenic Analysis Run 10/19/2023 8:42 AM View: Descriptive
Plant Arkwright Client: Southern Company Data: Arkwright No 2

Box & Whiskers Plot



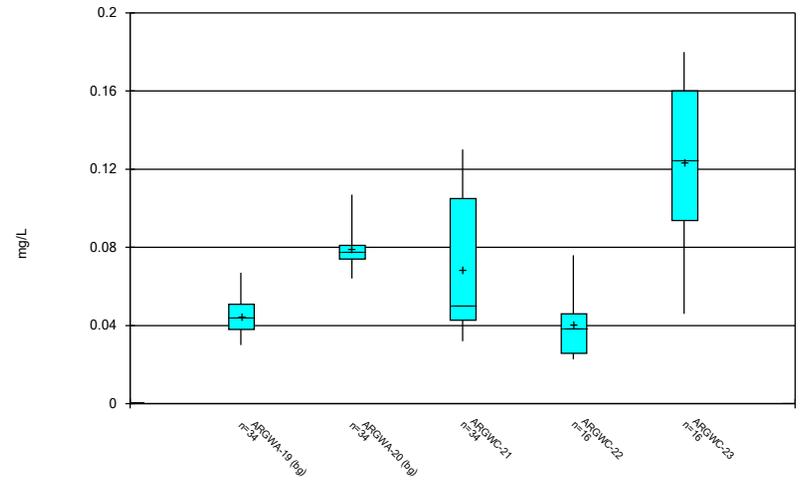
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Plant Arkwright Client: Southern Company Data: Arkwright No 2

Box & Whiskers Plot



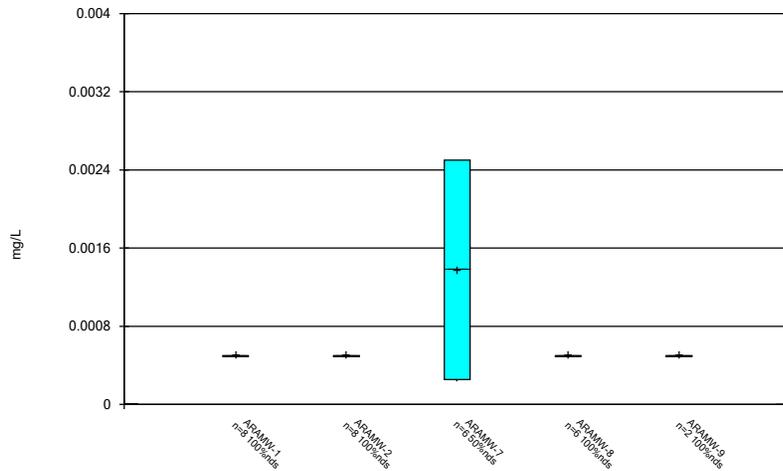
Constituent: Barium Analysis Run 10/19/2023 8:42 AM View: Descriptive
 Plant Arkwright Client: Southern Company Data: Arkwright No 2

Box & Whiskers Plot



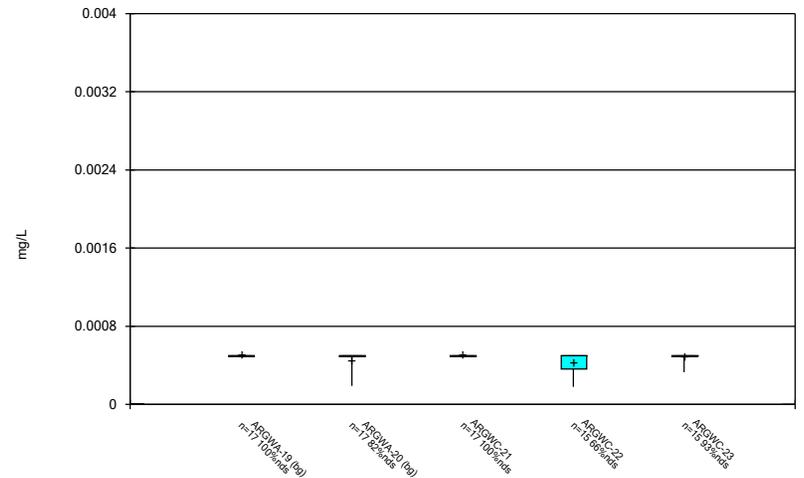
Constituent: Barium Analysis Run 10/19/2023 8:42 AM View: Descriptive
 Plant Arkwright Client: Southern Company Data: Arkwright No 2

Box & Whiskers Plot



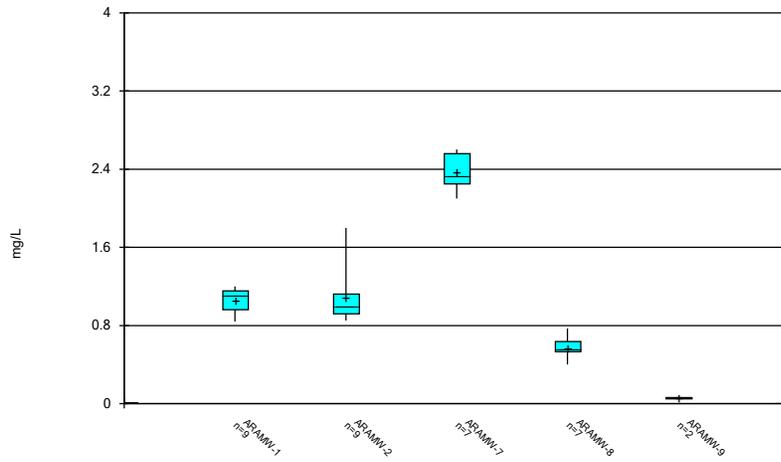
Constituent: Beryllium Analysis Run 10/19/2023 8:42 AM View: Descriptive
 Plant Arkwright Client: Southern Company Data: Arkwright No 2

Box & Whiskers Plot



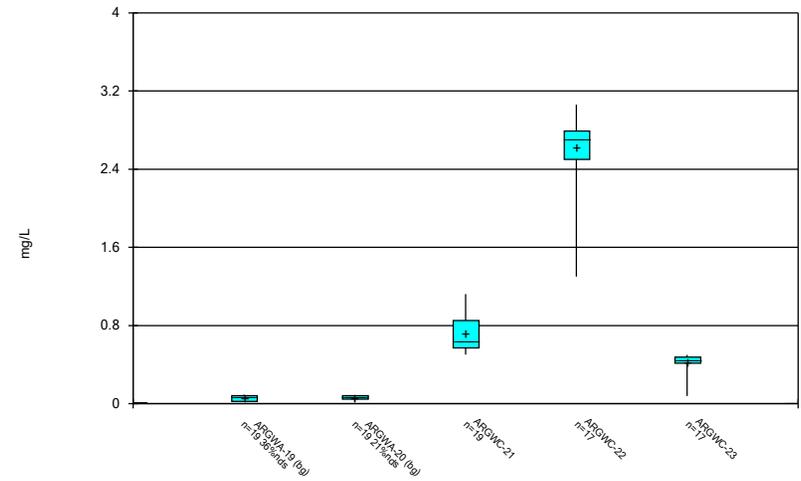
Constituent: Beryllium Analysis Run 10/19/2023 8:42 AM View: Descriptive
 Plant Arkwright Client: Southern Company Data: Arkwright No 2

Box & Whiskers Plot



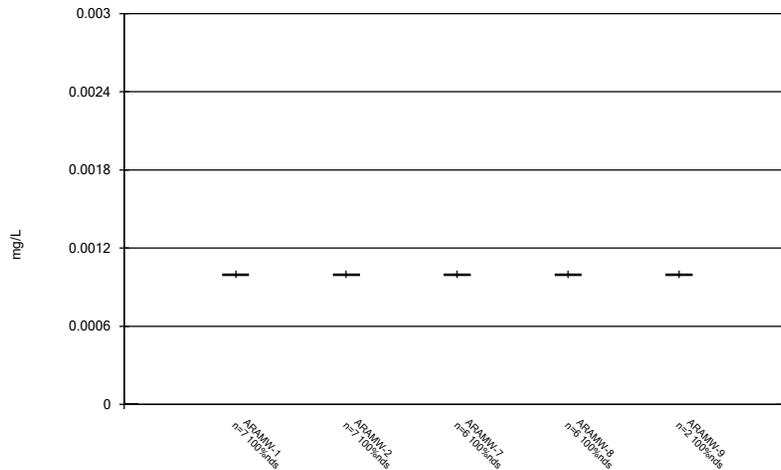
Constituent: Boron Analysis Run 10/19/2023 8:42 AM View: Descriptive
 Plant Arkwright Client: Southern Company Data: Arkwright No 2

Box & Whiskers Plot



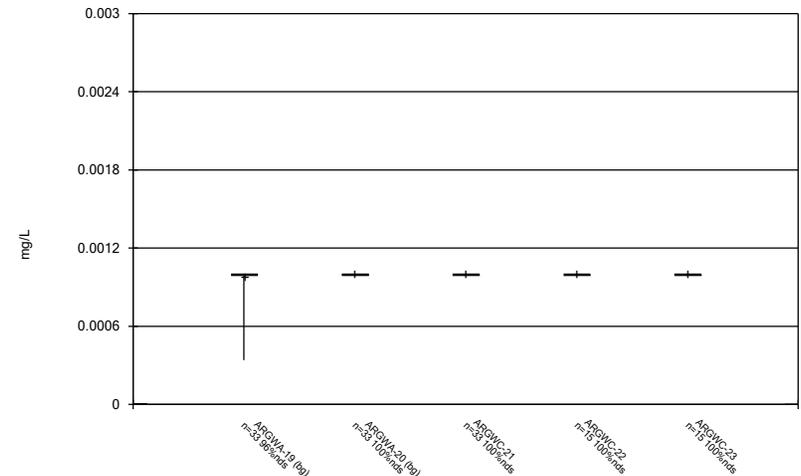
Constituent: Boron Analysis Run 10/19/2023 8:42 AM View: Descriptive
 Plant Arkwright Client: Southern Company Data: Arkwright No 2

Box & Whiskers Plot



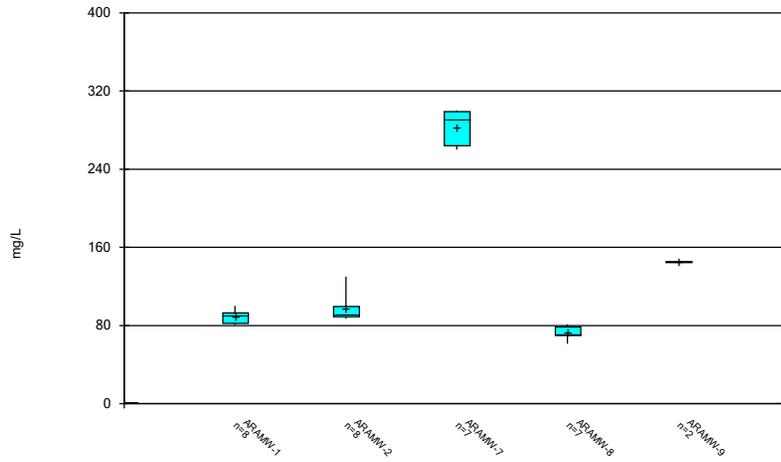
Constituent: Cadmium Analysis Run 10/19/2023 8:42 AM View: Descriptive
 Plant Arkwright Client: Southern Company Data: Arkwright No 2

Box & Whiskers Plot



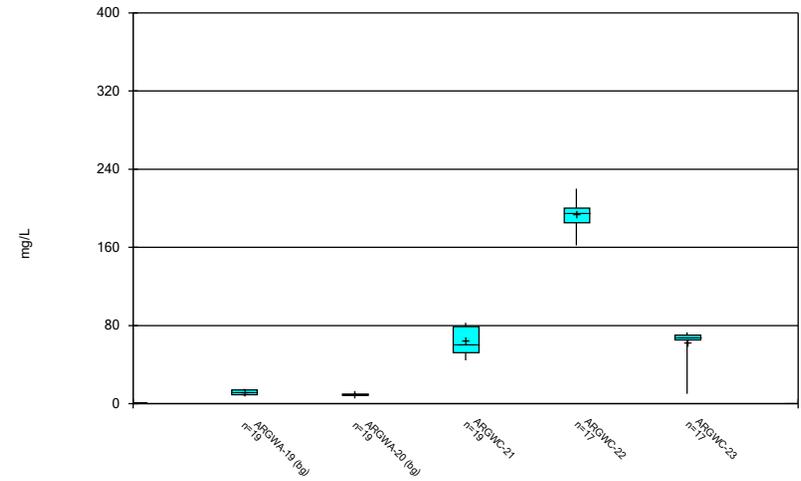
Constituent: Cadmium Analysis Run 10/19/2023 8:42 AM View: Descriptive
 Plant Arkwright Client: Southern Company Data: Arkwright No 2

Box & Whiskers Plot



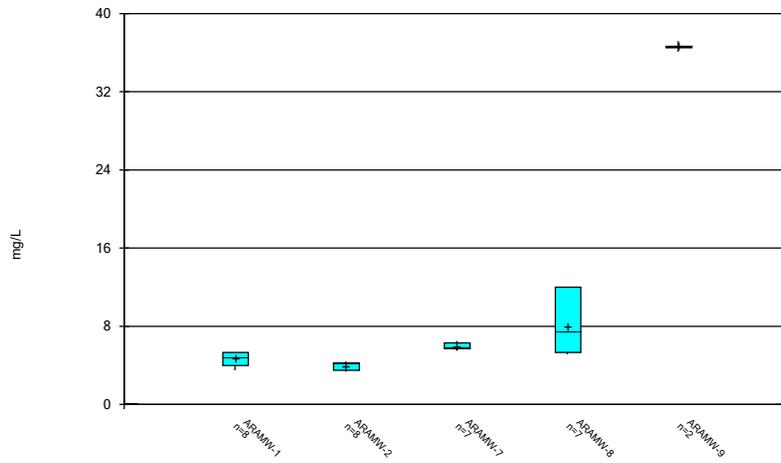
Constituent: Calcium Analysis Run 10/19/2023 8:42 AM View: Descriptive
Plant Arkwright Client: Southern Company Data: Arkwright No 2

Box & Whiskers Plot



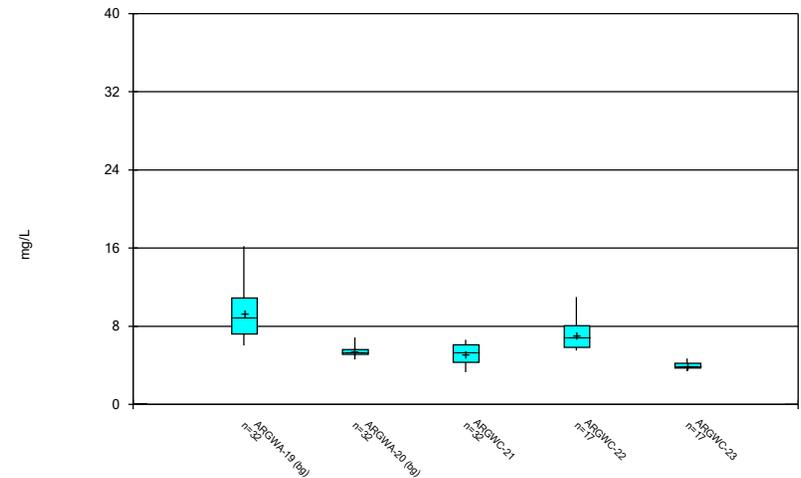
Constituent: Calcium Analysis Run 10/19/2023 8:42 AM View: Descriptive
Plant Arkwright Client: Southern Company Data: Arkwright No 2

Box & Whiskers Plot



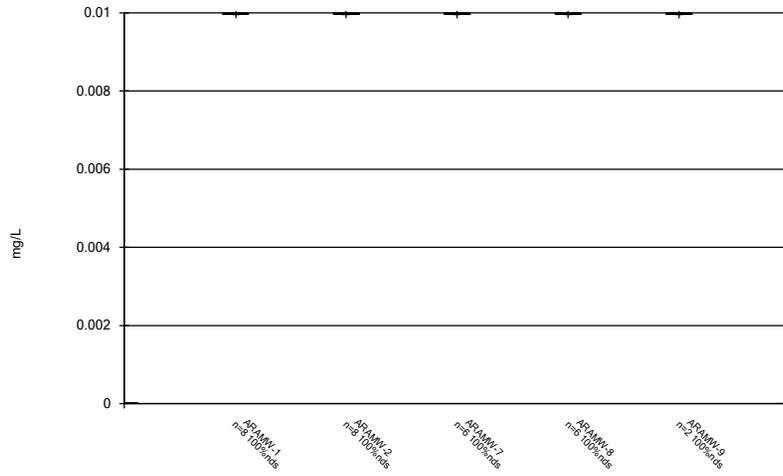
Constituent: Chloride Analysis Run 10/19/2023 8:42 AM View: Descriptive
Plant Arkwright Client: Southern Company Data: Arkwright No 2

Box & Whiskers Plot



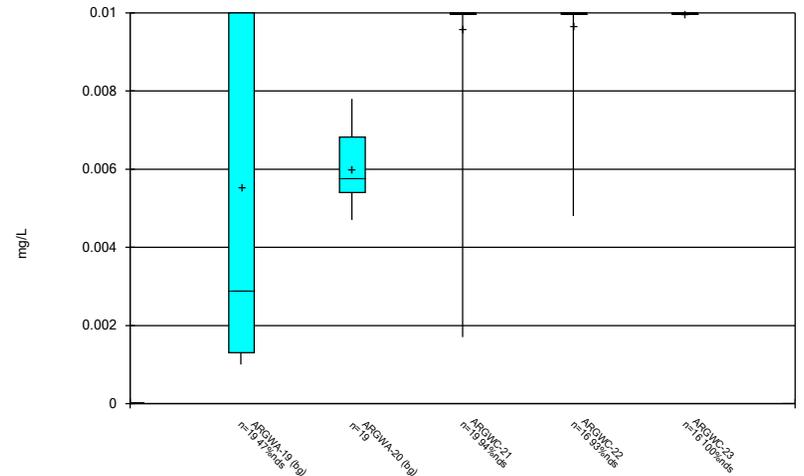
Constituent: Chloride Analysis Run 10/19/2023 8:42 AM View: Descriptive
Plant Arkwright Client: Southern Company Data: Arkwright No 2

Box & Whiskers Plot



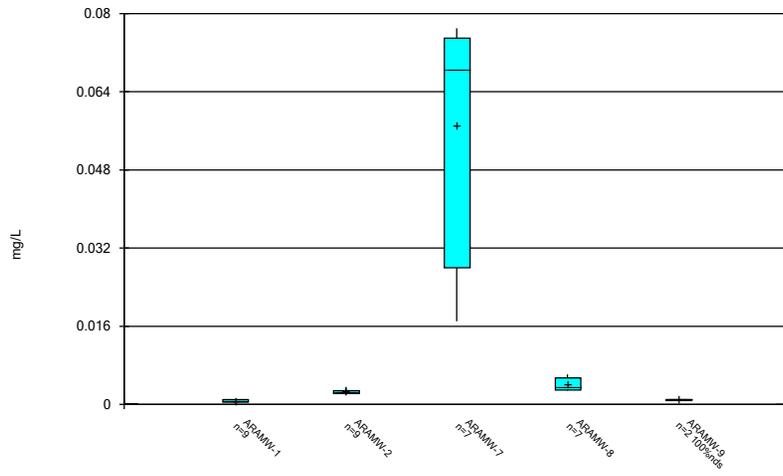
Constituent: Chromium Analysis Run 10/19/2023 8:42 AM View: Descriptive
 Plant Arkwright Client: Southern Company Data: Arkwright No 2

Box & Whiskers Plot



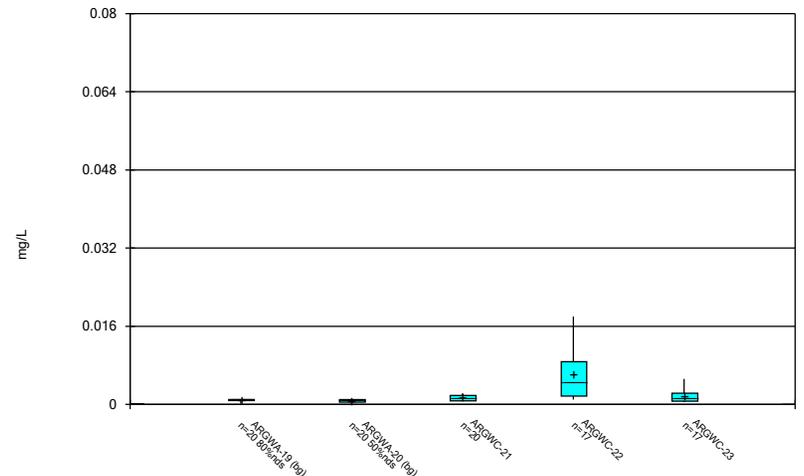
Constituent: Chromium Analysis Run 10/19/2023 8:42 AM View: Descriptive
 Plant Arkwright Client: Southern Company Data: Arkwright No 2

Box & Whiskers Plot



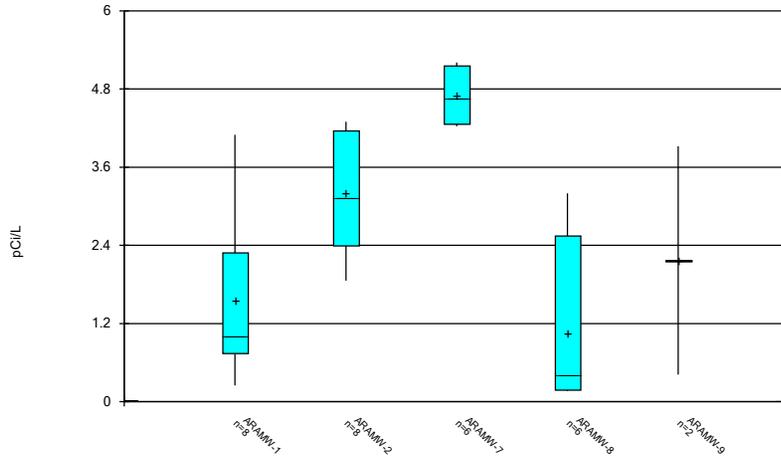
Constituent: Cobalt Analysis Run 10/19/2023 8:42 AM View: Descriptive
 Plant Arkwright Client: Southern Company Data: Arkwright No 2

Box & Whiskers Plot



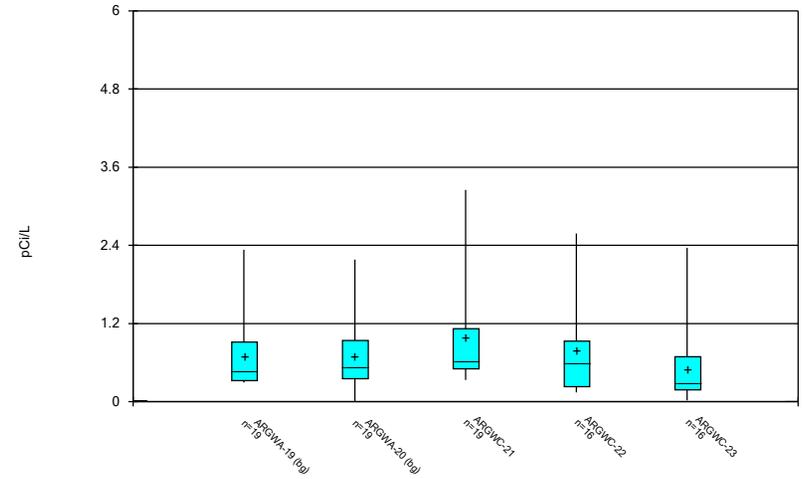
Constituent: Cobalt Analysis Run 10/19/2023 8:42 AM View: Descriptive
 Plant Arkwright Client: Southern Company Data: Arkwright No 2

Box & Whiskers Plot



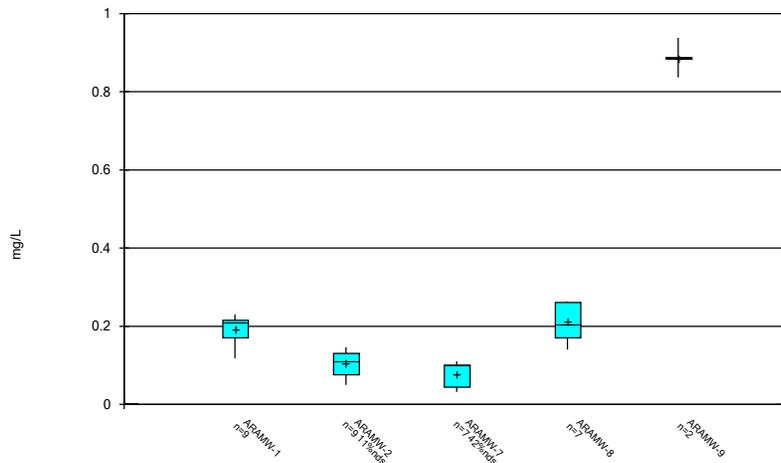
Constituent: Combined Radium 226 + 228 Analysis Run 10/19/2023 8:42 AM View: Descriptive
Plant Arkwright Client: Southern Company Data: Arkwright No 2

Box & Whiskers Plot



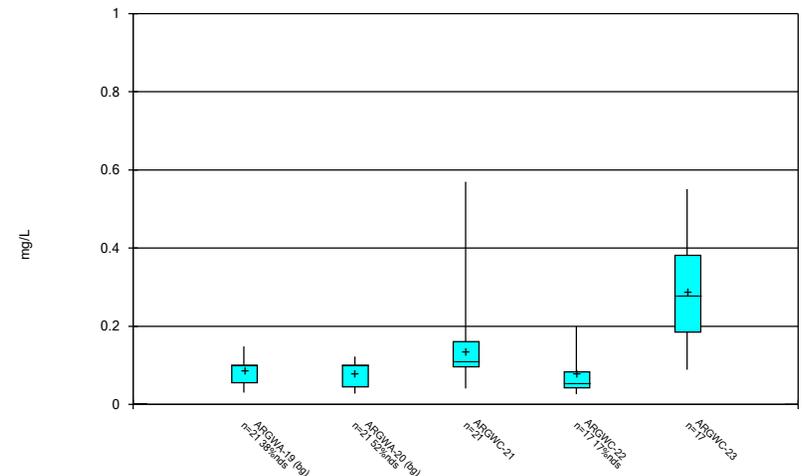
Constituent: Combined Radium 226 + 228 Analysis Run 10/19/2023 8:42 AM View: Descriptive
Plant Arkwright Client: Southern Company Data: Arkwright No 2

Box & Whiskers Plot



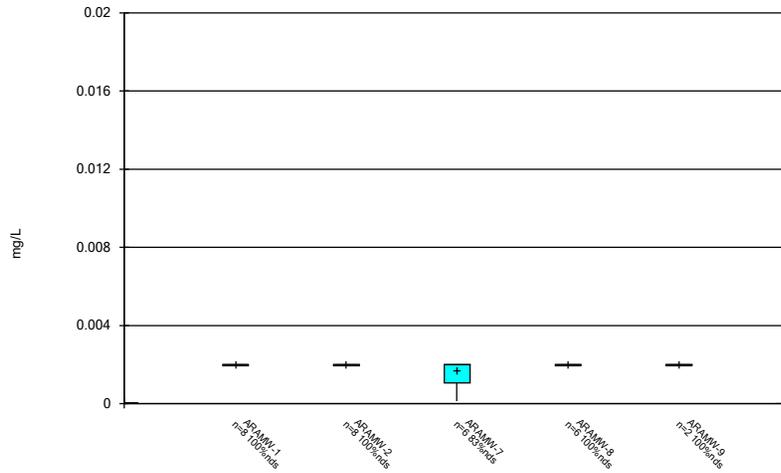
Constituent: Fluoride Analysis Run 10/19/2023 8:42 AM View: Descriptive
Plant Arkwright Client: Southern Company Data: Arkwright No 2

Box & Whiskers Plot



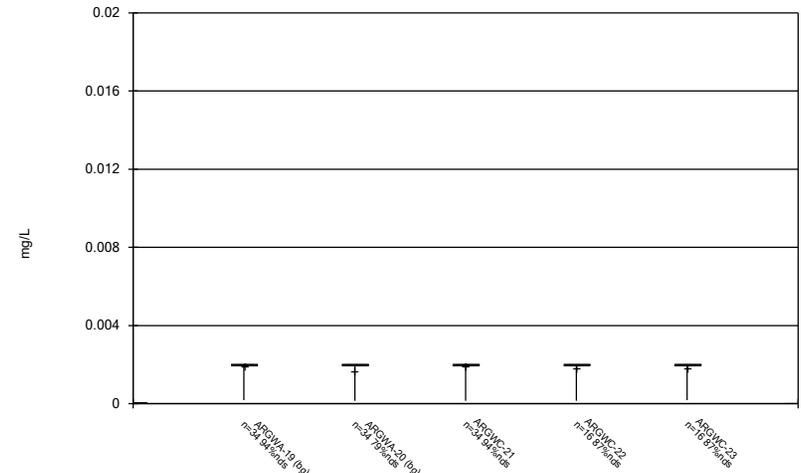
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Plant Arkwright Client: Southern Company Data: Arkwright No 2

Box & Whiskers Plot



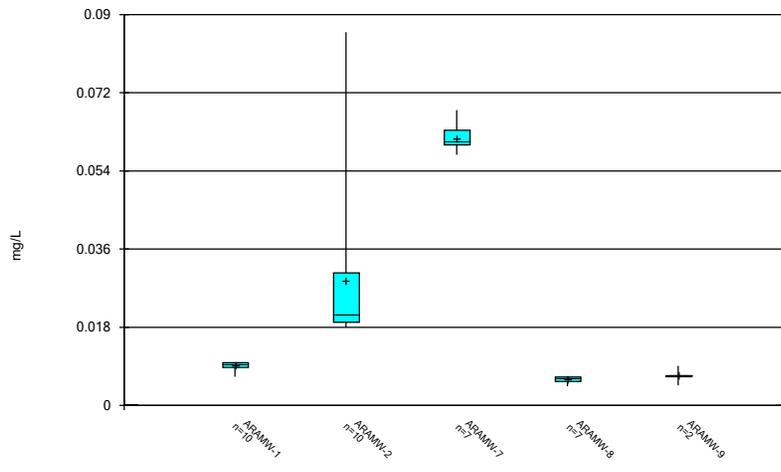
Constituent: Lead Analysis Run 10/19/2023 8:42 AM View: Descriptive
Plant Arkwright Client: Southern Company Data: Arkwright No 2

Box & Whiskers Plot



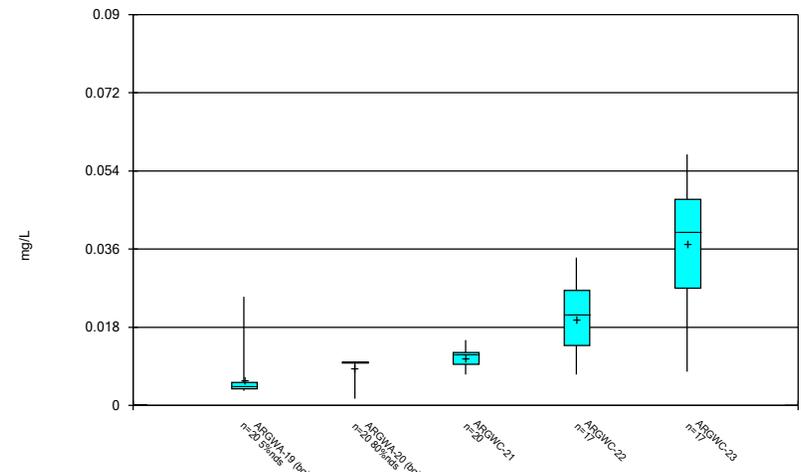
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Plant Arkwright Client: Southern Company Data: Arkwright No 2

Box & Whiskers Plot



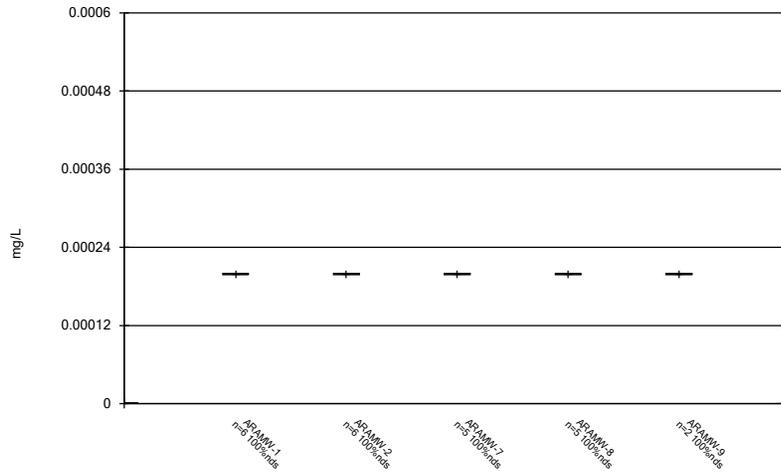
Constituent: Lithium Analysis Run 10/19/2023 8:42 AM View: Descriptive
Plant Arkwright Client: Southern Company Data: Arkwright No 2

Box & Whiskers Plot



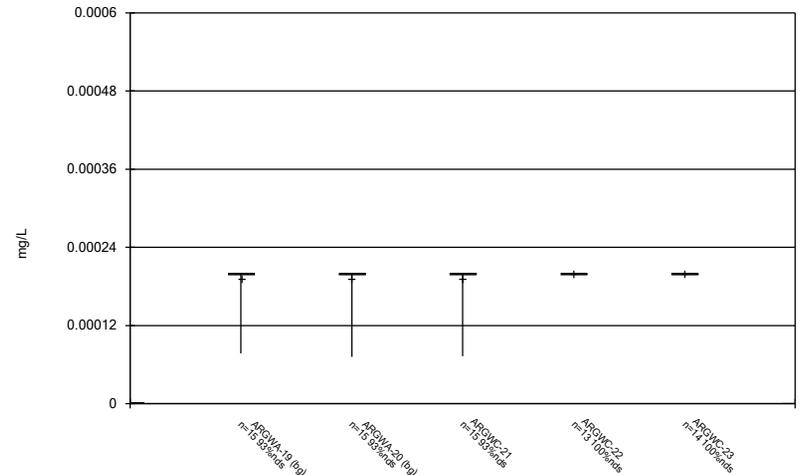
Constituent: Lithium Analysis Run 10/19/2023 8:42 AM View: Descriptive
Plant Arkwright Client: Southern Company Data: Arkwright No 2

Box & Whiskers Plot



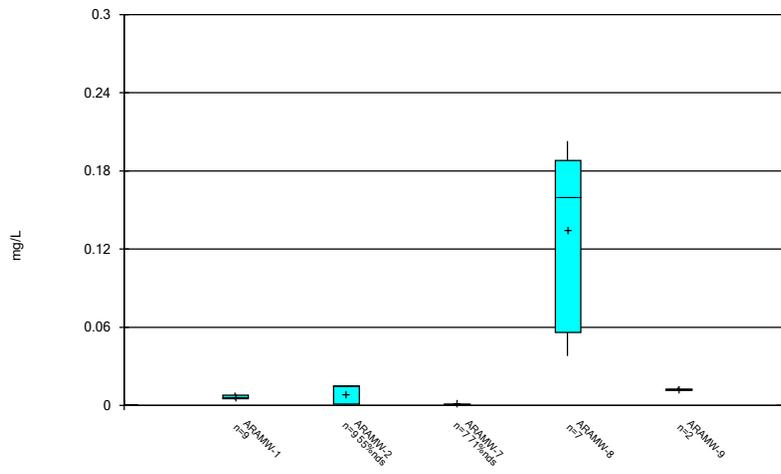
Constituent: Mercury Analysis Run 10/19/2023 8:42 AM View: Descriptive
 Plant Arkwright Client: Southern Company Data: Arkwright No 2

Box & Whiskers Plot



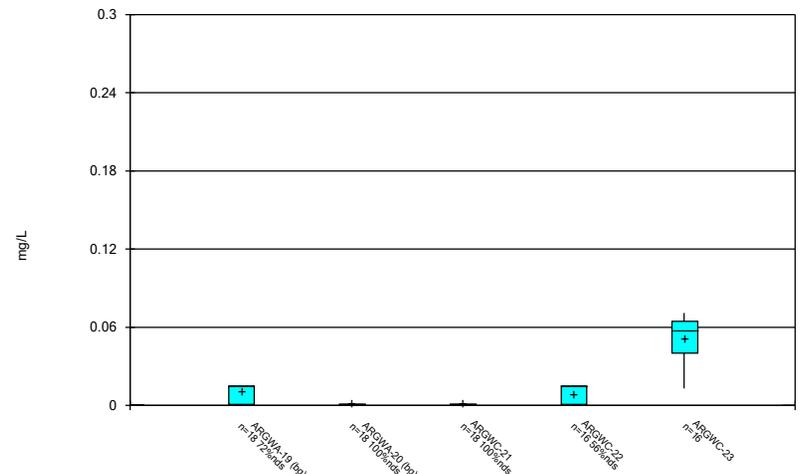
Constituent: Mercury Analysis Run 10/19/2023 8:42 AM View: Descriptive
 Plant Arkwright Client: Southern Company Data: Arkwright No 2

Box & Whiskers Plot



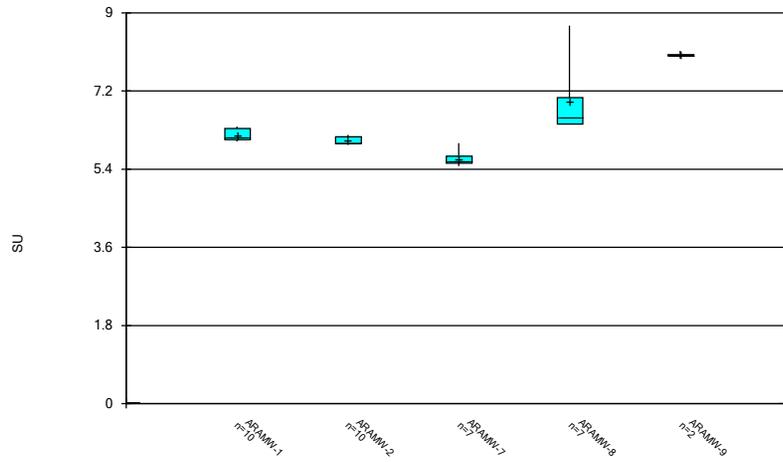
Constituent: Molybdenum Analysis Run 10/19/2023 8:42 AM View: Descriptive
 Plant Arkwright Client: Southern Company Data: Arkwright No 2

Box & Whiskers Plot



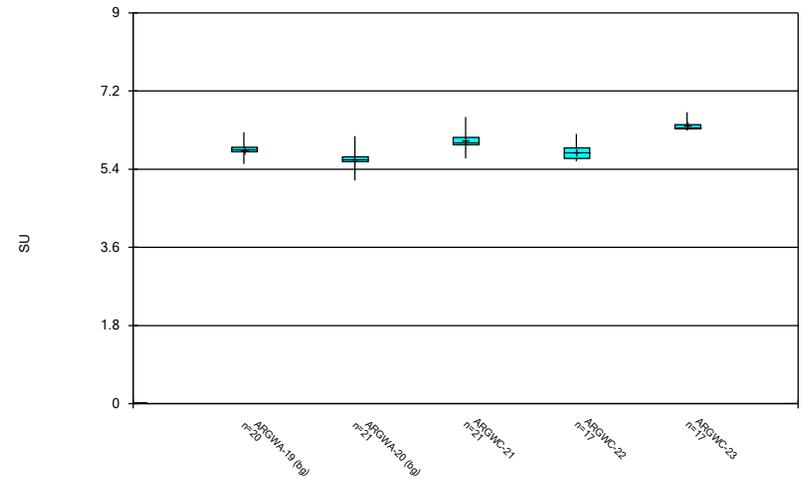
Constituent: Molybdenum Analysis Run 10/19/2023 8:42 AM View: Descriptive
 Plant Arkwright Client: Southern Company Data: Arkwright No 2

Box & Whiskers Plot



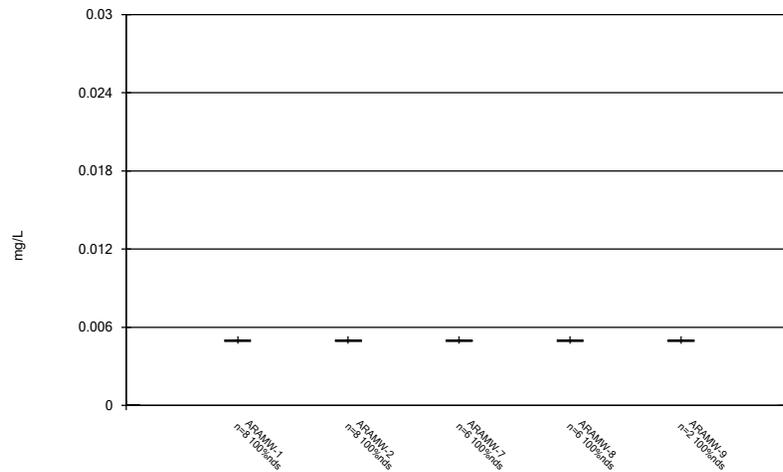
Constituent: pH Analysis Run 10/19/2023 8:42 AM View: Descriptive
 Plant Arkwright Client: Southern Company Data: Arkwright No 2

Box & Whiskers Plot



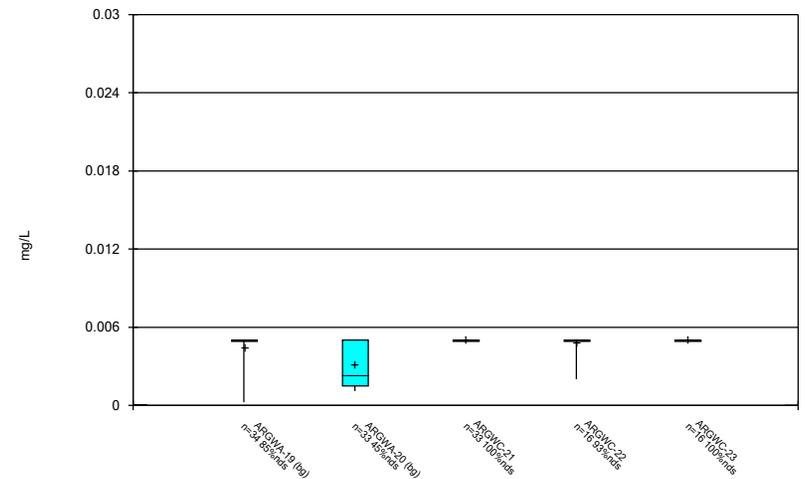
Constituent: pH Analysis Run 10/19/2023 8:42 AM View: Descriptive
 Plant Arkwright Client: Southern Company Data: Arkwright No 2

Box & Whiskers Plot



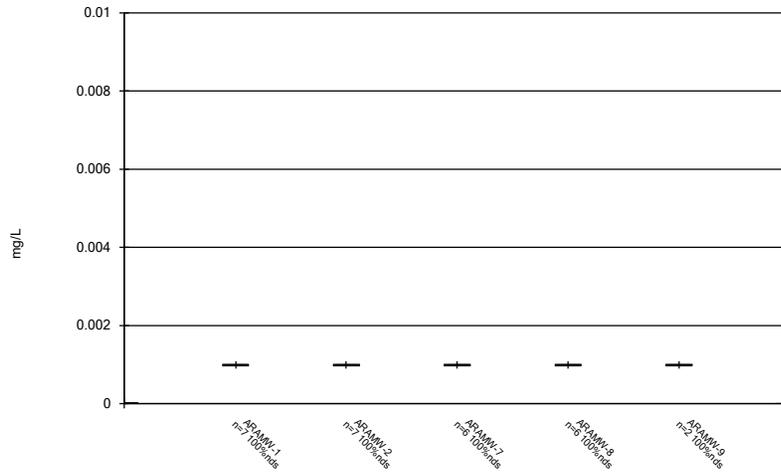
Constituent: Selenium Analysis Run 10/19/2023 8:42 AM View: Descriptive
 Plant Arkwright Client: Southern Company Data: Arkwright No 2

Box & Whiskers Plot



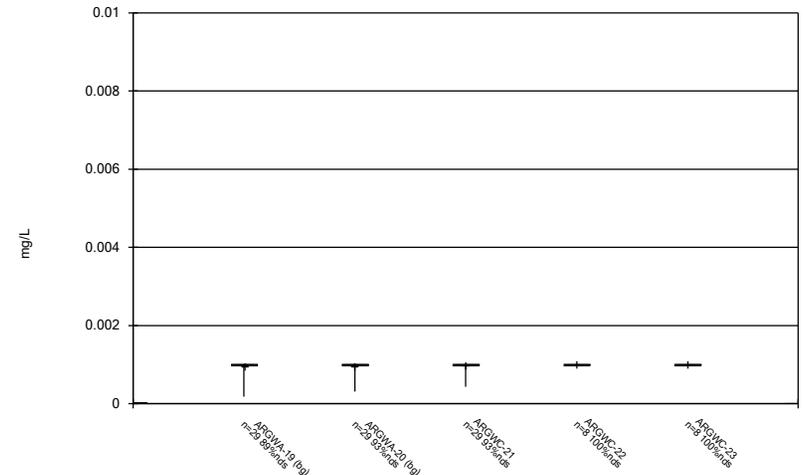
Constituent: Selenium Analysis Run 10/19/2023 8:42 AM View: Descriptive
 Plant Arkwright Client: Southern Company Data: Arkwright No 2

Box & Whiskers Plot



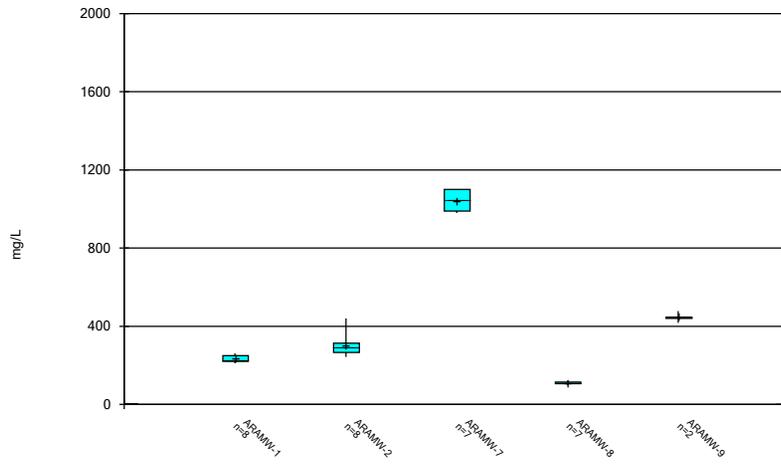
Constituent: Silver Analysis Run 10/19/2023 8:42 AM View: Descriptive
Plant Arkwright Client: Southern Company Data: Arkwright No 2

Box & Whiskers Plot



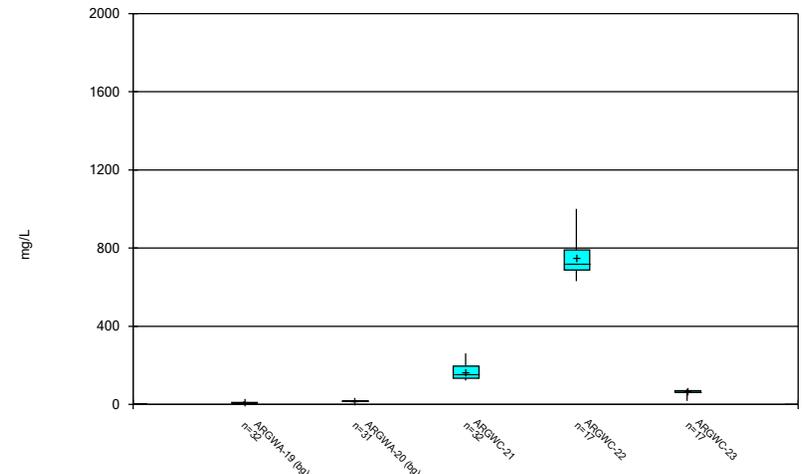
Constituent: Silver Analysis Run 10/19/2023 8:42 AM View: Descriptive
Plant Arkwright Client: Southern Company Data: Arkwright No 2

Box & Whiskers Plot



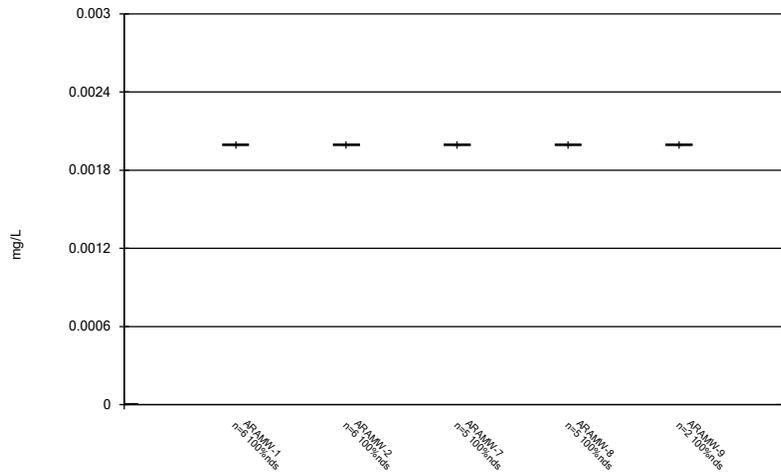
Constituent: Sulfate Analysis Run 10/19/2023 8:42 AM View: Descriptive
Plant Arkwright Client: Southern Company Data: Arkwright No 2

Box & Whiskers Plot



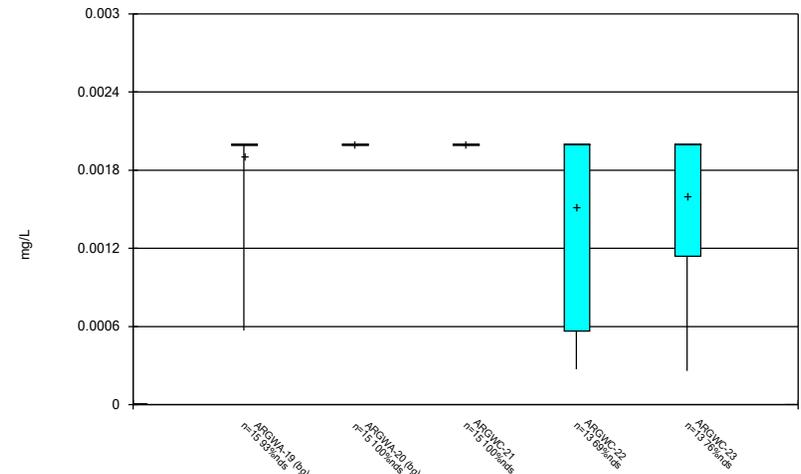
Constituent: Sulfate Analysis Run 10/19/2023 8:42 AM View: Descriptive
Plant Arkwright Client: Southern Company Data: Arkwright No 2

Box & Whiskers Plot



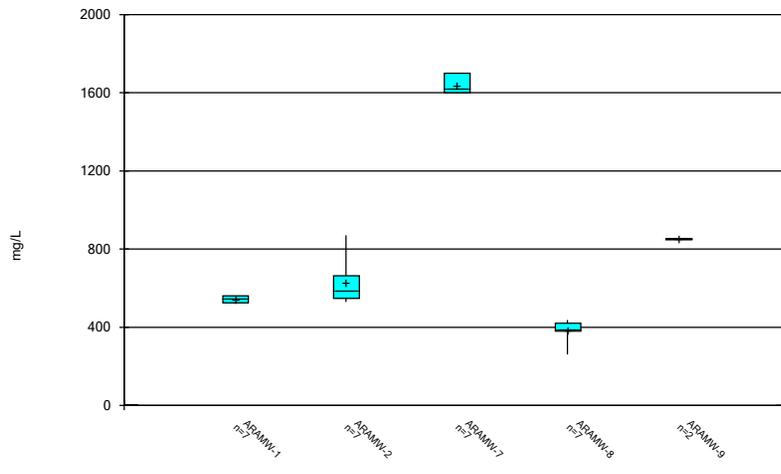
Constituent: Thallium Analysis Run 10/19/2023 8:42 AM View: Descriptive
 Plant Arkwright Client: Southern Company Data: Arkwright No 2

Box & Whiskers Plot



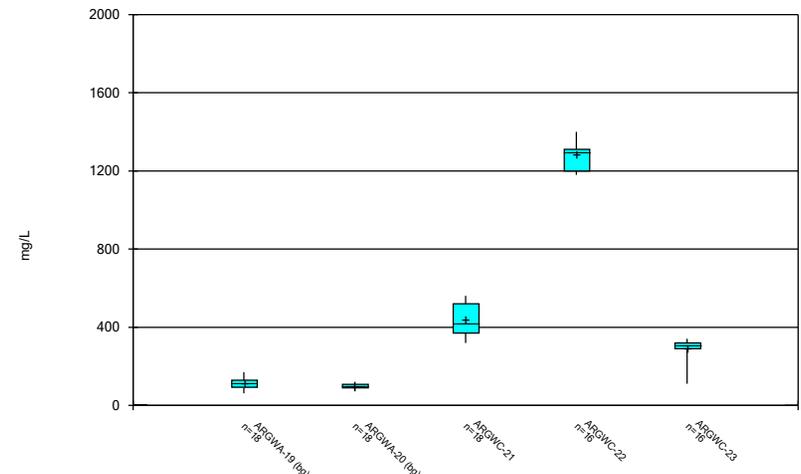
Constituent: Thallium Analysis Run 10/19/2023 8:42 AM View: Descriptive
 Plant Arkwright Client: Southern Company Data: Arkwright No 2

Box & Whiskers Plot



Constituent: Total Dissolved Solids Analysis Run 10/19/2023 8:42 AM View: Descriptive
 Plant Arkwright Client: Southern Company Data: Arkwright No 2

Box & Whiskers Plot



Constituent: Total Dissolved Solids Analysis Run 10/19/2023 8:42 AM View: Descriptive
 Plant Arkwright Client: Southern Company Data: Arkwright No 2

FIGURE C.

Outlier Summary

Plant Arkwright Client: Southern Company Data: Arkwright No 2 Printed 10/13/2023, 12:24 PM

ARGWA-19 pH (SU)
ARGWA-20 Selenium (mg/L)
ARGWC-21 Selenium (mg/L)
ARGWA-20 Sulfate (mg/L)

5/14/2009		0.0058 (o)	
5/15/2009	0.007 (o)		41.3 (o)
8/29/2016	6.75 (o)		

FIGURE D.

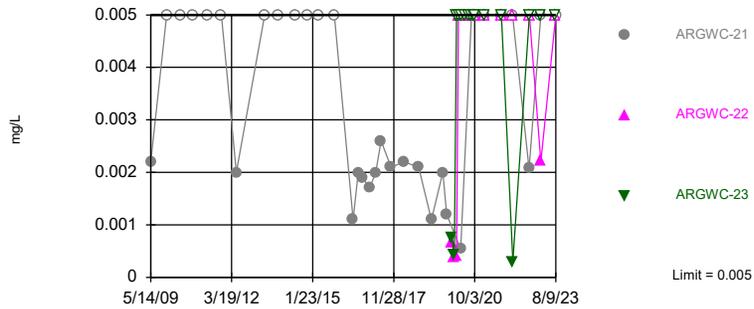
Interwell Prediction Limits - Appendix I & IV - All Results (No Significant)

Plant Arkwright Client: Southern Company Data: Arkwright No 2 Printed 10/19/2023, 8:46 AM

<u>Constituent</u>	<u>Well</u>	<u>Upper Lim.</u>	<u>Lower Lim.</u>	<u>Date</u>	<u>Observ.</u>	<u>Sig.</u>	<u>Bg N</u>	<u>Bg Mean</u>	<u>Std. Dev.</u>	<u>%NDs</u>	<u>ND Adj.</u>	<u>Transform</u>	<u>Alpha</u>	<u>Method</u>
Arsenic (mg/L)	ARGWC-21	0.005	n/a	8/9/2023	0.005ND	No	68	n/a	n/a	86.76	n/a	n/a	0.0004166	NP Inter (NDs) 1 of 2
Arsenic (mg/L)	ARGWC-22	0.005	n/a	8/8/2023	0.005ND	No	68	n/a	n/a	86.76	n/a	n/a	0.0004166	NP Inter (NDs) 1 of 2
Arsenic (mg/L)	ARGWC-23	0.005	n/a	8/8/2023	0.005ND	No	68	n/a	n/a	86.76	n/a	n/a	0.0004166	NP Inter (NDs) 1 of 2
Barium (mg/L)	ARGWC-21	0.107	n/a	8/9/2023	0.0474	No	68	n/a	n/a	0	n/a	n/a	0.0004166	NP Inter (normality) 1 of 2
Barium (mg/L)	ARGWC-22	0.107	n/a	8/8/2023	0.0255	No	68	n/a	n/a	0	n/a	n/a	0.0004166	NP Inter (normality) 1 of 2
Barium (mg/L)	ARGWC-23	0.107	n/a	8/8/2023	0.0936	No	68	n/a	n/a	0	n/a	n/a	0.0004166	NP Inter (normality) 1 of 2
Lead (mg/L)	ARGWC-21	0.002	n/a	8/9/2023	0.002ND	No	68	n/a	n/a	86.76	n/a	n/a	0.0004166	NP Inter (NDs) 1 of 2
Lead (mg/L)	ARGWC-22	0.002	n/a	8/8/2023	0.002ND	No	68	n/a	n/a	86.76	n/a	n/a	0.0004166	NP Inter (NDs) 1 of 2
Lead (mg/L)	ARGWC-23	0.002	n/a	8/8/2023	0.002ND	No	68	n/a	n/a	86.76	n/a	n/a	0.0004166	NP Inter (NDs) 1 of 2
Selenium (mg/L)	ARGWC-22	0.005	n/a	8/8/2023	0.005ND	No	67	n/a	n/a	65.67	n/a	n/a	0.0004301	NP Inter (NDs) 1 of 2
Silver (mg/L)	ARGWC-21	0.001	n/a	8/9/2023	0.001ND	No	58	n/a	n/a	91.38	n/a	n/a	0.0005697	NP Inter (NDs) 1 of 2

Within Limit

Prediction Limit
Interwell Non-parametric

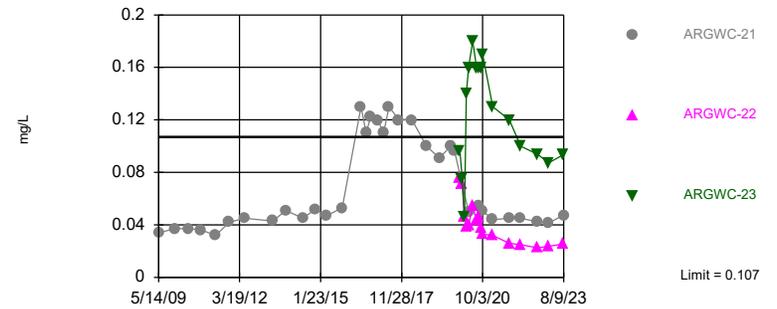


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 68 background values. 86.76% NDs. Annual per-constituent alpha = 0.002497. Individual comparison alpha = 0.0004166 (1 of 2). Comparing 3 points to limit.

Constituent: Arsenic Analysis Run 10/19/2023 8:45 AM View: PLs - App I
Plant Arkwright Client: Southern Company Data: Arkwright No 2

Within Limit

Prediction Limit
Interwell Non-parametric

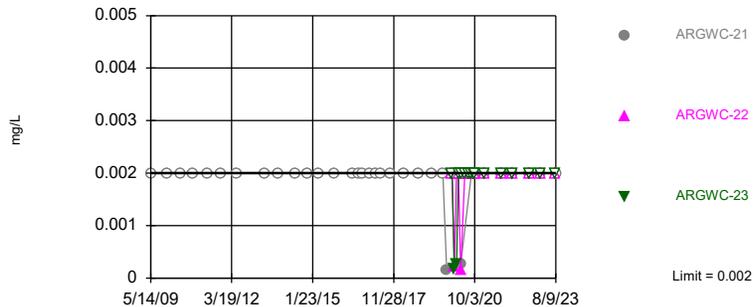


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Francia normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 68 background values. Annual per-constituent alpha = 0.002497. Individual comparison alpha = 0.0004166 (1 of 2). Comparing 3 points to limit.

Constituent: Barium Analysis Run 10/19/2023 8:45 AM View: PLs - App I
Plant Arkwright Client: Southern Company Data: Arkwright No 2

Within Limit

Prediction Limit
Interwell Non-parametric

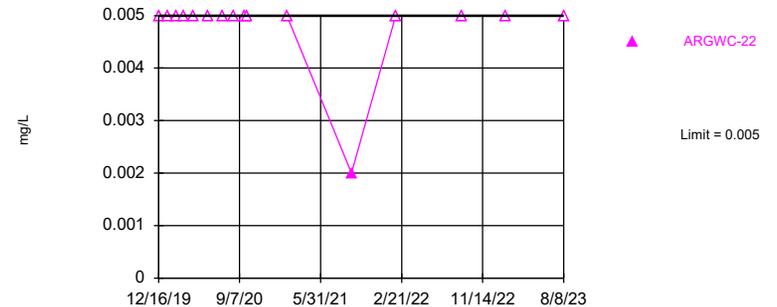


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 68 background values. 86.76% NDs. Annual per-constituent alpha = 0.002497. Individual comparison alpha = 0.0004166 (1 of 2). Comparing 3 points to limit.

Constituent: Lead Analysis Run 10/19/2023 8:45 AM View: PLs - App I
Plant Arkwright Client: Southern Company Data: Arkwright No 2

Within Limit

Prediction Limit
Interwell Non-parametric



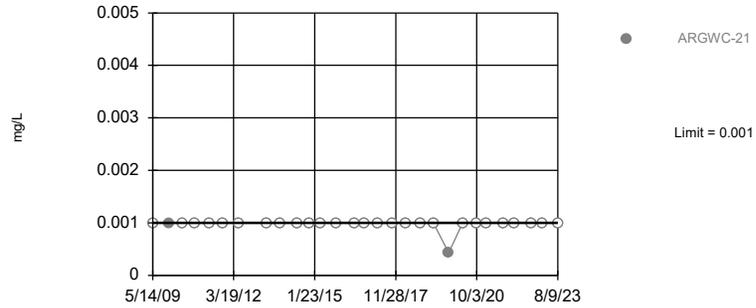
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 67 background values. 65.67% NDs. Annual per-constituent alpha = 0.002578. Individual comparison alpha = 0.0004301 (1 of 2). Assumes 2 future values.

Constituent: Selenium Analysis Run 10/19/2023 8:46 AM View: PLs - App I
Plant Arkwright Client: Southern Company Data: Arkwright No 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 58 background values. 91.38% NDs. Annual per-constituent alpha = 0.003413. Individual comparison alpha = 0.0005697 (1 of 2). Assumes 2 future values.

Constituent: Silver Analysis Run 10/19/2023 8:46 AM View: PLs - App I
Plant Arkwright Client: Southern Company Data: Arkwright No 2

Prediction Limit

Constituent: Arsenic (mg/L) Analysis Run 10/19/2023 8:46 AM View: PLs - App I
 Plant Arkwright Client: Southern Company Data: Arkwright No 2

	ARGWA-19 (bg)	ARGWC-21	ARGWA-20 (bg)	ARGWC-23	ARGWC-22
5/5/2009	<0.005				
5/14/2009		0.0022			
5/15/2009			0.0015		
12/5/2009	<0.005	<0.005	<0.005		
6/1/2010	<0.005		<0.005		
6/2/2010		<0.005			
11/11/2010	<0.005	<0.005	<0.005		
5/17/2011	<0.005	<0.005	<0.005		
11/8/2011	<0.005	<0.005	<0.005		
5/16/2012	<0.005	0.002 (J)	<0.005		
5/14/2013	<0.005	<0.005	<0.005		
11/5/2013	<0.005	<0.005	<0.005		
6/9/2014	<0.005	<0.005	<0.005		
11/18/2014		<0.005	<0.005		
11/19/2014	<0.005				
4/14/2015	<0.005	<0.005	<0.005		
10/29/2015		<0.005			
11/4/2015	<0.005		<0.005		
6/22/2016	<0.005		0.00084 (J)		
6/23/2016		0.0011 (J)			
8/29/2016	<0.005		0.00049 (J)		
8/30/2016		0.002			
10/24/2016	<0.005		<0.005		
10/26/2016		0.0019 (J)			
1/25/2017	<0.005	0.0017	<0.005		
4/10/2017	<0.005	0.002	0.00056 (J)		
6/19/2017	<0.005	0.0026			
6/20/2017			0.00068 (J)		
10/24/2017	<0.005	0.0021	<0.005		
4/9/2018			<0.005		
4/10/2018	<0.005	0.0022			
10/16/2018	<0.005	0.0021	<0.005		
3/26/2019	<0.005				
3/27/2019		0.0011 (J)	<0.005		
8/20/2019	0.00036 (J)	0.002	0.00047 (J)		
10/7/2019	<0.005		<0.005		
10/8/2019		0.0012 (J)			
12/16/2019				0.00075 (J)	0.00066 (J)
1/14/2020				0.00042 (J)	0.00038 (J)
2/11/2020				<0.005	0.0004 (J)
3/9/2020				<0.005	<0.005
4/6/2020			0.00042 (J)		
4/7/2020	0.0006 (J)	0.00054 (J)		<0.005	<0.005
5/27/2020				<0.005	<0.005
7/15/2020				<0.005	<0.005
8/19/2020	<0.005		<0.005		<0.005
8/20/2020				<0.005	
8/21/2020		<0.005			
9/22/2020				<0.005	<0.005
9/29/2020	<0.005				
9/30/2020			<0.005		<0.005
10/1/2020		<0.005		<0.005	

Prediction Limit

Constituent: Arsenic (mg/L) Analysis Run 10/19/2023 8:46 AM View: PLs - App I
Plant Arkwright Client: Southern Company Data: Arkwright No 2

	ARGWA-19 (bg)	ARGWC-21	ARGWA-20 (bg)	ARGWC-23	ARGWC-22
2/9/2021	<0.005		<0.005		
2/10/2021		<0.005		<0.005	<0.005
9/7/2021	<0.005				
9/8/2021		<0.005	<0.005		
9/9/2021				<0.005	
9/10/2021					<0.005
2/1/2022	<0.005	<0.005	<0.005		
2/2/2022					<0.005
2/3/2022				0.0003 (J)	
9/1/2022	<0.005	0.00207 (J)			
9/2/2022			<0.005		
9/6/2022				<0.005	<0.005
1/31/2023	<0.005	<0.005		<0.005	0.00221 (J)
2/1/2023			<0.005		
8/8/2023	<0.005			<0.005	<0.005
8/9/2023		<0.005			
8/10/2023			<0.005		

Prediction Limit

Constituent: Barium (mg/L) Analysis Run 10/19/2023 8:46 AM View: PLs - App I
 Plant Arkwright Client: Southern Company Data: Arkwright No 2

	ARGWA-19 (bg)	ARGWC-21	ARGWA-20 (bg)	ARGWC-23	ARGWC-22
5/5/2009	0.057				
5/14/2009		0.034			
5/15/2009			0.1		
12/5/2009	0.05	0.037	0.079		
6/1/2010	0.037		0.077		
6/2/2010		0.037			
11/11/2010	0.039	0.036	0.072		
5/17/2011	0.037	0.032	0.064		
11/8/2011	0.045	0.042	0.07		
5/16/2012	0.0518	0.0451	0.0741		
5/14/2013	0.067	0.043	0.074		
11/5/2013	0.066	0.051	0.075		
6/9/2014	0.062	0.045	0.08		
11/18/2014		0.052	0.078		
11/19/2014	0.054				
4/14/2015	0.046	0.047	0.073		
10/29/2015		0.053			
11/4/2015	0.046		0.077		
6/22/2016	0.039		0.078		
6/23/2016		0.13			
8/29/2016	0.04		0.07		
8/30/2016		0.11			
10/24/2016	0.0444		0.0738		
10/26/2016		0.122			
1/25/2017	0.045	0.12	0.084		
4/10/2017	0.039	0.11	0.073		
6/19/2017	0.041	0.13			
6/20/2017			0.078		
10/24/2017	0.041	0.12	0.081		
4/9/2018			0.081		
4/10/2018	0.044	0.12			
10/16/2018	0.047	0.1	0.08		
3/26/2019	0.056				
3/27/2019		0.091	0.082		
8/20/2019	0.052	0.1	0.079		
10/7/2019	0.049		0.076		
10/8/2019		0.096			
12/16/2019				0.096	0.076
1/14/2020				0.075	0.071
2/11/2020				0.046	0.046
3/9/2020				0.14	0.039
4/6/2020			0.075		
4/7/2020	0.047	0.05		0.16	0.04
5/27/2020				0.18	0.054
7/15/2020				0.16	0.043
8/19/2020	0.044		0.085		0.046
8/20/2020				0.16	
8/21/2020		0.054			
9/22/2020				0.16	0.038
9/29/2020	0.04				
9/30/2020			0.08		0.033
10/1/2020		0.051		0.17	

Prediction Limit

Constituent: Barium (mg/L) Analysis Run 10/19/2023 8:46 AM View: PLs - App I
Plant Arkwright Client: Southern Company Data: Arkwright No 2

	ARGWA-19 (bg)	ARGWC-21	ARGWA-20 (bg)	ARGWC-23	ARGWC-22
2/9/2021	0.032		0.078		
2/10/2021		0.044		0.13	0.032
9/7/2021	0.03				
9/8/2021		0.045	0.085		
9/9/2021				0.12	
9/10/2021					0.026
2/1/2022	0.031	0.045	0.079		
2/2/2022					0.025
2/3/2022				0.1	
9/1/2022	0.0303	0.0425			
9/2/2022			0.0806		
9/6/2022				0.0939	0.0226
1/31/2023	0.031	0.0414		0.0872	0.0237
2/1/2023			0.0919		
8/8/2023	0.0337			0.0936	0.0255
8/9/2023		0.0474			
8/10/2023			0.107		

Prediction Limit

Constituent: Lead (mg/L) Analysis Run 10/19/2023 8:46 AM View: PLS - App 1

Plant Arkwright Client: Southern Company Data: Arkwright No 2

	ARGWA-19 (bg)	ARGWC-21	ARGWA-20 (bg)	ARGWC-23	ARGWC-22
5/5/2009	<0.002				
5/14/2009		<0.002			
5/15/2009			<0.002		
12/5/2009	<0.002	<0.002	<0.002		
6/1/2010	<0.002		<0.002		
6/2/2010		<0.002			
11/11/2010	<0.002	<0.002	<0.002		
5/17/2011	<0.002	<0.002	<0.002		
11/8/2011	<0.002	<0.002	<0.002		
5/16/2012	<0.002	<0.002	<0.002		
5/14/2013	<0.002	<0.002	<0.002		
11/5/2013	<0.002	<0.002	<0.002		
6/9/2014	<0.002	<0.002	<0.002		
11/18/2014		<0.002	<0.002		
11/19/2014	<0.002				
4/14/2015	<0.002	<0.002	<0.002		
10/29/2015		<0.002			
11/4/2015	<0.002		<0.002		
6/22/2016	<0.002		<0.002		
6/23/2016		<0.002			
8/29/2016	<0.002		<0.002		
8/30/2016		<0.002			
10/24/2016	<0.002		<0.002		
10/26/2016		<0.002			
1/25/2017	<0.002	<0.002	0.00037 (J)		
4/10/2017	<0.002	<0.002	<0.002		
6/19/2017	<0.002	<0.002			
6/20/2017			<0.002		
10/24/2017	<0.002	<0.002	<0.002		
4/9/2018			<0.002		
4/10/2018	<0.002	<0.002			
10/16/2018	<0.002	<0.002	<0.002		
3/26/2019	<0.002				
3/27/2019		<0.002	<0.002		
8/20/2019	<0.002	<0.002	<0.002		
10/7/2019	0.00018 (J)		0.00014 (J)		
10/8/2019		0.00015 (J)			
12/16/2019			<0.002	<0.002	
1/14/2020			0.00018 (J)	0.00022 (J)	
2/11/2020			0.00026 (J)	<0.002	
3/9/2020			<0.002	<0.002	
4/6/2020			0.00033 (J)		
4/7/2020	0.00037 (J)	0.00026 (J)		<0.002	0.00014 (J)
5/27/2020				<0.002	<0.002
7/15/2020				<0.002	<0.002
8/19/2020	<0.002		0.00039 (J)		<0.002
8/20/2020				<0.002	
8/21/2020		<0.002			
9/22/2020				<0.002	<0.002
9/29/2020	<0.002				
9/30/2020			0.00022 (J)		<0.002
10/1/2020		<0.002		<0.002	

Prediction Limit

Constituent: Lead (mg/L) Analysis Run 10/19/2023 8:46 AM View: PLs - App 1
Plant Arkwright Client: Southern Company Data: Arkwright No 2

	ARGWA-19 (bg)	ARGWC-21	ARGWA-20 (bg)	ARGWC-23	ARGWC-22
2/9/2021	<0.002		0.00033 (J)		
2/10/2021		<0.002		<0.002	<0.002
9/7/2021	<0.002				
9/8/2021		<0.002	0.00024 (J)		
9/9/2021				<0.002	
9/10/2021					<0.002
2/1/2022	<0.002	<0.002	<0.002		
2/2/2022					<0.002
2/3/2022				<0.002	
9/1/2022	<0.002	<0.002			
9/2/2022			<0.002		
9/6/2022				<0.002	<0.002
1/31/2023	<0.002	<0.002		<0.002	<0.002
2/1/2023			<0.002		
8/8/2023	<0.002			<0.002	<0.002
8/9/2023		<0.002			
8/10/2023			<0.002		

Prediction Limit

Constituent: Selenium (mg/L) Analysis Run 10/19/2023 8:46 AM View: PLs - App 1
 Plant Arkwright Client: Southern Company Data: Arkwright No 2

	ARGWA-19 (bg)	ARGWA-20 (bg)	ARGWC-22
5/5/2009	0.0043		
5/15/2009		0.007 (o)	
12/5/2009	<0.005	<0.005	
6/1/2010	<0.005	<0.005	
11/11/2010	<0.005	<0.005	
5/17/2011	<0.005	<0.005	
11/8/2011	<0.005	<0.005	
5/16/2012	<0.005	0.0024 (J)	
5/14/2013	<0.005	<0.005	
11/5/2013	<0.005	<0.005	
6/9/2014	<0.005	<0.005	
11/18/2014		<0.005	
11/19/2014	<0.005		
4/14/2015	<0.005	<0.005	
11/4/2015	<0.005	<0.005	
6/22/2016	0.00025 (J)	0.0019	
8/29/2016	0.0004 (J)	0.0019	
10/24/2016	<0.005	0.0023 (J)	
1/25/2017	<0.005	0.0015	
4/10/2017	<0.005	0.0011 (J)	
6/19/2017	0.00025 (J)		
6/20/2017		0.0016	
10/24/2017	<0.005	0.0012 (J)	
4/9/2018		0.0012 (J)	
4/10/2018	0.00074 (J)		
10/16/2018	<0.005	0.0015	
3/26/2019	<0.005		
3/27/2019		0.0015	
8/20/2019	<0.005	0.0015 (J)	
10/7/2019	<0.005	0.0016 (J)	
12/16/2019			<0.005
1/14/2020			<0.005
2/11/2020			<0.005
3/9/2020			<0.005
4/6/2020		0.0017 (J)	
4/7/2020	<0.005		<0.005
5/27/2020			<0.005
7/15/2020			<0.005
8/19/2020	<0.005	0.0015 (J)	<0.005
9/22/2020			<0.005
9/29/2020	<0.005		
9/30/2020		0.0016 (J)	<0.005
2/9/2021	<0.005	0.0016 (J)	
2/10/2021			<0.005
9/7/2021	<0.005		
9/8/2021		<0.005	
9/10/2021			0.002 (J)
2/1/2022	<0.005	0.0015 (J)	
2/2/2022			<0.005
9/1/2022	<0.005		
9/2/2022		<0.005	
9/6/2022			<0.005

Prediction Limit

Constituent: Selenium (mg/L) Analysis Run 10/19/2023 8:46 AM View: PLS - App 1
Plant Arkwright Client: Southern Company Data: Arkwright No 2

	ARGWA-19 (bg)	ARGWA-20 (bg)	ARGWC-22
1/31/2023	<0.005		<0.005
2/1/2023		<0.005	
8/8/2023	<0.005		<0.005
8/10/2023		<0.005	

Prediction Limit

Constituent: Silver (mg/L) Analysis Run 10/19/2023 8:46 AM View: PLs - App I

Plant Arkwright Client: Southern Company Data: Arkwright No 2

	ARGWA-19 (bg)	ARGWC-21	ARGWA-20 (bg)
5/5/2009	<0.001		
5/14/2009		<0.001	
5/15/2009			<0.001
12/5/2009	0.00075	0.001	0.00043
6/1/2010	<0.001		<0.001
6/2/2010		<0.001	
11/11/2010	<0.001	<0.001	<0.001
5/17/2011	<0.001	<0.001	<0.001
11/8/2011	<0.001	<0.001	<0.001
5/16/2012	<0.001	<0.001	<0.001
5/14/2013	<0.001	<0.001	<0.001
11/5/2013	<0.001	<0.001	<0.001
6/9/2014	<0.001	<0.001	<0.001
11/18/2014		<0.001	<0.001
11/19/2014	<0.001		
4/14/2015	<0.001	<0.001	<0.001
10/29/2015		<0.001	
11/4/2015	<0.001		<0.001
6/22/2016	<0.001		<0.001
6/23/2016		<0.001	
10/24/2016	<0.001		<0.001
10/26/2016		<0.001	
4/10/2017	<0.001	<0.001	<0.001
10/24/2017	<0.001	<0.001	<0.001
4/9/2018			<0.001
4/10/2018	<0.001	<0.001	
10/16/2018	<0.001	<0.001	<0.001
3/26/2019	<0.001		
3/27/2019		<0.001	<0.001
10/7/2019	0.00056 (J)		0.00031 (J)
10/8/2019		0.00043 (J)	
4/6/2020			<0.001
4/7/2020	0.00018 (J)	<0.001	
9/29/2020	<0.001		
9/30/2020			<0.001
10/1/2020		<0.001	
2/9/2021	<0.001		<0.001
2/10/2021		<0.001	
9/7/2021	<0.001		
9/8/2021		<0.001	<0.001
2/1/2022	<0.001	<0.001	<0.001
9/1/2022	<0.001	<0.001	
9/2/2022			<0.001
1/31/2023	<0.001	<0.001	
2/1/2023			<0.001
8/8/2023	<0.001		
8/9/2023		<0.001	
8/10/2023			<0.001

FIGURE E.

Interwell Prediction Limits - Appendix III - Significant Results

Plant Arkwright Client: Southern Company Data: Arkwright No 2 Printed 10/13/2023, 11:32 AM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Boron (mg/L)	ARGWC-21	0.092	n/a	8/9/2023	1.12	Yes	38	n/a	n/a	28.95	n/a	n/a	0.001277	NP Inter (normality) 1 of 2
Boron (mg/L)	ARGWC-22	0.092	n/a	8/8/2023	3.06	Yes	38	n/a	n/a	28.95	n/a	n/a	0.001277	NP Inter (normality) 1 of 2
Boron (mg/L)	ARGWC-23	0.092	n/a	8/8/2023	0.379	Yes	38	n/a	n/a	28.95	n/a	n/a	0.001277	NP Inter (normality) 1 of 2
Calcium (mg/L)	ARGWC-21	13.99	n/a	8/9/2023	82.9	Yes	38	3.222	0.2948	0	None	sqrt(x)	0.002505	Param Inter 1 of 2
Calcium (mg/L)	ARGWC-22	13.99	n/a	8/8/2023	196	Yes	38	3.222	0.2948	0	None	sqrt(x)	0.002505	Param Inter 1 of 2
Calcium (mg/L)	ARGWC-23	13.99	n/a	8/8/2023	66.6	Yes	38	3.222	0.2948	0	None	sqrt(x)	0.002505	Param Inter 1 of 2
Fluoride (mg/L)	ARGWC-21	0.148	n/a	8/9/2023	0.203	Yes	42	n/a	n/a	45.24	n/a	n/a	0.001066	NP Inter (normality) 1 of 2
Fluoride (mg/L)	ARGWC-23	0.148	n/a	8/8/2023	0.283	Yes	42	n/a	n/a	45.24	n/a	n/a	0.001066	NP Inter (normality) 1 of 2
pH (SU)	ARGWC-21	6.085	5.388	8/9/2023	6.6	Yes	41	5.737	0.1994	0	None	No	0.001253	Param Inter 1 of 2
pH (SU)	ARGWC-23	6.085	5.388	8/8/2023	6.33	Yes	41	5.737	0.1994	0	None	No	0.001253	Param Inter 1 of 2
Sulfate (mg/L)	ARGWC-21	21	n/a	8/9/2023	214	Yes	63	n/a	n/a	0	n/a	n/a	0.0004845	NP Inter (normality) 1 of 2
Sulfate (mg/L)	ARGWC-22	21	n/a	8/8/2023	719	Yes	63	n/a	n/a	0	n/a	n/a	0.0004845	NP Inter (normality) 1 of 2
Sulfate (mg/L)	ARGWC-23	21	n/a	8/8/2023	69.8	Yes	63	n/a	n/a	0	n/a	n/a	0.0004845	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	ARGWC-21	143.5	n/a	8/9/2023	520	Yes	36	105.8	21.33	0	None	No	0.002505	Param Inter 1 of 2
Total Dissolved Solids (mg/L)	ARGWC-22	143.5	n/a	8/8/2023	1220	Yes	36	105.8	21.33	0	None	No	0.002505	Param Inter 1 of 2
Total Dissolved Solids (mg/L)	ARGWC-23	143.5	n/a	8/8/2023	294	Yes	36	105.8	21.33	0	None	No	0.002505	Param Inter 1 of 2

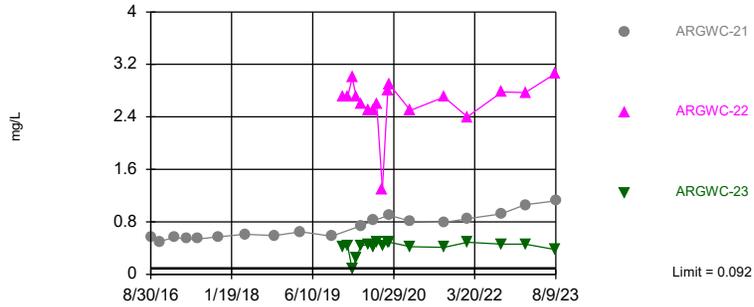
Interwell Prediction Limits - Appendix III - All Results

Plant Arkwright Client: Southern Company Data: Arkwright No 2 Printed 10/13/2023, 11:32 AM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Boron (mg/L)	ARGWC-21	0.092	n/a	8/9/2023	1.12	Yes	38	n/a	n/a	28.95	n/a	n/a	0.001277	NP Inter (normality) 1 of 2
Boron (mg/L)	ARGWC-22	0.092	n/a	8/8/2023	3.06	Yes	38	n/a	n/a	28.95	n/a	n/a	0.001277	NP Inter (normality) 1 of 2
Boron (mg/L)	ARGWC-23	0.092	n/a	8/8/2023	0.379	Yes	38	n/a	n/a	28.95	n/a	n/a	0.001277	NP Inter (normality) 1 of 2
Calcium (mg/L)	ARGWC-21	13.99	n/a	8/9/2023	82.9	Yes	38	3.222	0.2948	0	None	sqrt(x)	0.002505	Param Inter 1 of 2
Calcium (mg/L)	ARGWC-22	13.99	n/a	8/8/2023	196	Yes	38	3.222	0.2948	0	None	sqrt(x)	0.002505	Param Inter 1 of 2
Calcium (mg/L)	ARGWC-23	13.99	n/a	8/8/2023	66.6	Yes	38	3.222	0.2948	0	None	sqrt(x)	0.002505	Param Inter 1 of 2
Chloride (mg/L)	ARGWC-21	16.2	n/a	8/9/2023	3.35	No	64	n/a	n/a	0	n/a	n/a	0.0004709	NP Inter (normality) 1 of 2
Chloride (mg/L)	ARGWC-22	16.2	n/a	8/8/2023	6.79	No	64	n/a	n/a	0	n/a	n/a	0.0004709	NP Inter (normality) 1 of 2
Chloride (mg/L)	ARGWC-23	16.2	n/a	8/8/2023	3.6	No	64	n/a	n/a	0	n/a	n/a	0.0004709	NP Inter (normality) 1 of 2
Fluoride (mg/L)	ARGWC-21	0.148	n/a	8/9/2023	0.203	Yes	42	n/a	n/a	45.24	n/a	n/a	0.001066	NP Inter (normality) 1 of 2
Fluoride (mg/L)	ARGWC-22	0.148	n/a	8/8/2023	0.1ND	No	42	n/a	n/a	45.24	n/a	n/a	0.001066	NP Inter (normality) 1 of 2
Fluoride (mg/L)	ARGWC-23	0.148	n/a	8/8/2023	0.283	Yes	42	n/a	n/a	45.24	n/a	n/a	0.001066	NP Inter (normality) 1 of 2
pH (SU)	ARGWC-21	6.085	5.388	8/9/2023	6.6	Yes	41	5.737	0.1994	0	None	No	0.001253	Param Inter 1 of 2
pH (SU)	ARGWC-22	6.085	5.388	8/8/2023	5.61	No	41	5.737	0.1994	0	None	No	0.001253	Param Inter 1 of 2
pH (SU)	ARGWC-23	6.085	5.388	8/8/2023	6.33	Yes	41	5.737	0.1994	0	None	No	0.001253	Param Inter 1 of 2
Sulfate (mg/L)	ARGWC-21	21	n/a	8/9/2023	214	Yes	63	n/a	n/a	0	n/a	n/a	0.0004845	NP Inter (normality) 1 of 2
Sulfate (mg/L)	ARGWC-22	21	n/a	8/8/2023	719	Yes	63	n/a	n/a	0	n/a	n/a	0.0004845	NP Inter (normality) 1 of 2
Sulfate (mg/L)	ARGWC-23	21	n/a	8/8/2023	69.8	Yes	63	n/a	n/a	0	n/a	n/a	0.0004845	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	ARGWC-21	143.5	n/a	8/9/2023	520	Yes	36	105.8	21.33	0	None	No	0.002505	Param Inter 1 of 2
Total Dissolved Solids (mg/L)	ARGWC-22	143.5	n/a	8/8/2023	1220	Yes	36	105.8	21.33	0	None	No	0.002505	Param Inter 1 of 2
Total Dissolved Solids (mg/L)	ARGWC-23	143.5	n/a	8/8/2023	294	Yes	36	105.8	21.33	0	None	No	0.002505	Param Inter 1 of 2

Exceeds Limit: ARGWC-21, ARGWC-22, ARGWC-23

Prediction Limit
Interwell Non-parametric

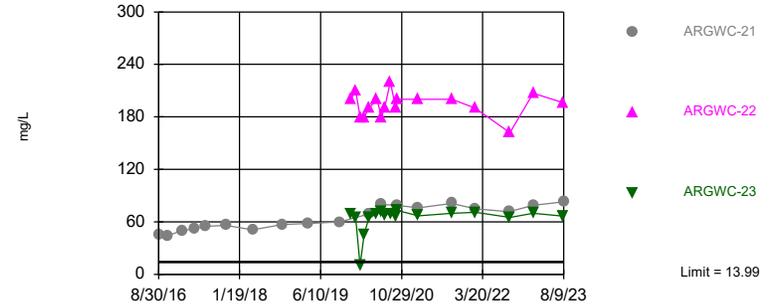


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 38 background values. 28.95% NDs. Annual per-constituent alpha = 0.00764. Individual comparison alpha = 0.001277 (1 of 2). Comparing 3 points to limit.

Constituent: Boron Analysis Run 10/13/2023 11:10 AM View: PL's App III
Plant Arkwright Client: Southern Company Data: Arkwright No 2

Exceeds Limit: ARGWC-21, ARGWC-22, ARGWC-23

Prediction Limit
Interwell Parametric

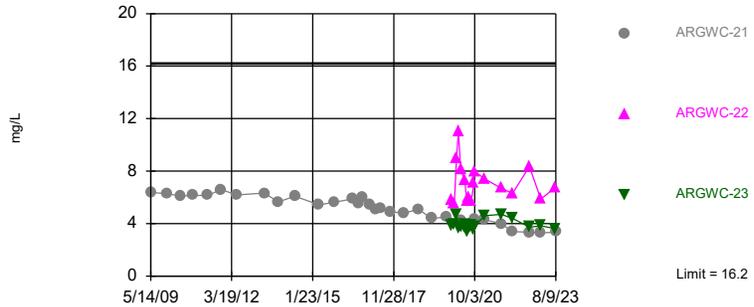


Background Data Summary (based on square root transformation): Mean=3.222, Std. Dev.=0.2948, n=38. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9262, critical = 0.916. Kappa = 1.758 (c=7, w=3, 1 of 2, event alpha = 0.05132). Report alpha = 0.007498. Individual comparison alpha = 0.002505. Comparing 3 points to limit.

Constituent: Calcium Analysis Run 10/13/2023 11:10 AM View: PL's App III
Plant Arkwright Client: Southern Company Data: Arkwright No 2

Within Limit

Prediction Limit
Interwell Non-parametric



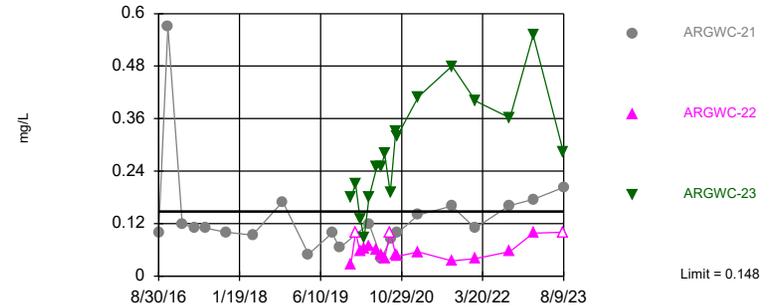
Non-parametric test used in lieu of parametric prediction limit because the Shapiro Francia normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 64 background values. Annual per-constituent alpha = 0.002822. Individual comparison alpha = 0.0004709 (1 of 2). Comparing 3 points to limit.

Constituent: Chloride Analysis Run 10/13/2023 11:10 AM View: PL's App III
Plant Arkwright Client: Southern Company Data: Arkwright No 2

Hollow symbols indicate censored values.

Exceeds Limit: ARGWC-21, ARGWC-23

Prediction Limit
Interwell Non-parametric

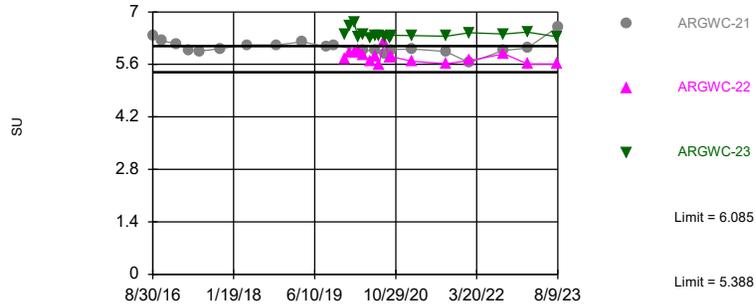


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 42 background values. 45.24% NDs. Annual per-constituent alpha = 0.006378. Individual comparison alpha = 0.001066 (1 of 2). Comparing 3 points to limit.

Constituent: Fluoride Analysis Run 10/13/2023 11:10 AM View: PL's App III
Plant Arkwright Client: Southern Company Data: Arkwright No 2

Exceeds Limits: ARGWC-21, ARGWC-23

Prediction Limit
Interwell Parametric

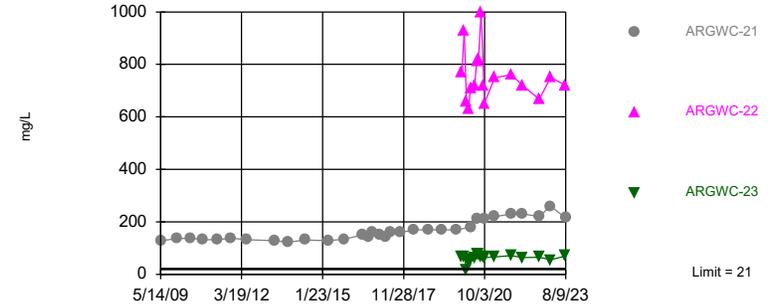


Background Data Summary: Mean=5.737, Std. Dev.=0.1994, n=41. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9719, critical = 0.92. Kappa = 1.747 (c=7, w=3, 1 of 2, event alpha = 0.05132). Report alpha = 0.007498. Individual comparison alpha = 0.001253. Comparing 3 points to limit.

Constituent: pH Analysis Run 10/13/2023 11:11 AM View: PL's App III
Plant Arkwright Client: Southern Company Data: Arkwright No 2

Exceeds Limit: ARGWC-21, ARGWC-22, ARGWC-23

Prediction Limit
Interwell Non-parametric

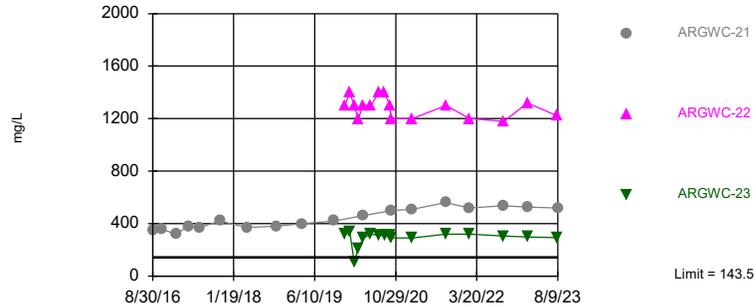


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Francia normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 63 background values. Annual per-constituent alpha = 0.002904. Individual comparison alpha = 0.0004845 (1 of 2). Comparing 3 points to limit.

Constituent: Sulfate Analysis Run 10/13/2023 11:11 AM View: PL's App III
Plant Arkwright Client: Southern Company Data: Arkwright No 2

Exceeds Limit: ARGWC-21, ARGWC-22, ARGWC-23

Prediction Limit
Interwell Parametric



Background Data Summary: Mean=105.8, Std. Dev.=21.33, n=36. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9602, critical = 0.912. Kappa = 1.766 (c=7, w=3, 1 of 2, event alpha = 0.05132). Report alpha = 0.007498. Individual comparison alpha = 0.002505. Comparing 3 points to limit.

Constituent: Total Dissolved Solids Analysis Run 10/13/2023 11:11 AM View: PL's App III
Plant Arkwright Client: Southern Company Data: Arkwright No 2

Prediction Limit

Constituent: Boron (mg/L) Analysis Run 10/13/2023 11:32 AM View: PL's App III
 Plant Arkwright Client: Southern Company Data: Arkwright No 2

	ARGWA-19 (bg)	ARGWA-20 (bg)	ARGWC-21	ARGWC-23	ARGWC-22
8/29/2016	0.024 (J)	<0.08			
8/30/2016			0.57		
10/24/2016	0.0339 (J)	0.0194 (J)			
10/26/2016			0.502		
1/25/2017	0.048 (J)	0.026 (J)	0.56		
4/10/2017	0.022 (J)	<0.08	0.54		
6/19/2017	<0.08		0.54		
6/20/2017		0.032 (J)			
10/24/2017	0.021 (J)	0.054	0.57		
4/9/2018		0.06			
4/10/2018	0.022 (J)		0.61		
10/16/2018	<0.08	0.036 (J)	0.59		
3/26/2019	<0.08				
3/27/2019		0.046 (J)	0.65		
10/7/2019	<0.08	<0.08			
10/8/2019			0.58		
12/16/2019				0.42	2.7
1/14/2020				0.43	2.7
2/11/2020				0.079 (J)	3
3/9/2020				0.25	2.7
4/6/2020		0.063 (J)			
4/7/2020	0.072 (J)		0.74	0.44	2.6
5/27/2020				0.45	2.5
6/24/2020					2.5
6/25/2020	0.091	0.081	0.82	0.42	
7/15/2020				0.49	2.6
8/19/2020					1.3
8/20/2020				0.44	
9/22/2020				0.5	2.8
9/29/2020	<0.08				
9/30/2020		0.083			2.9
10/1/2020			0.9	0.49	
2/9/2021	<0.08	0.059 (J)			
2/10/2021			0.81	0.42	2.5
9/7/2021	<0.08				
9/8/2021		0.064 (J)	0.79		
9/9/2021				0.41	
9/10/2021					2.7
2/1/2022	0.092	<0.08	0.85		
2/2/2022					2.4
2/3/2022				0.49	
9/1/2022	0.0238		0.921		
9/2/2022		0.0597			
9/6/2022				0.458	2.78
1/31/2023	0.0234		1.06	0.459	2.77
2/1/2023		0.0816			
8/8/2023	0.0199			0.379	3.06
8/9/2023			1.12		
8/10/2023		0.0714			

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 10/13/2023 11:32 AM View: PL's App III
 Plant Arkwright Client: Southern Company Data: Arkwright No 2

	ARGWA-19 (bg)	ARGWA-20 (bg)	ARGWC-21	ARGWC-23	ARGWC-22
8/29/2016	11	8.3			
8/30/2016			46		
10/24/2016	11.5	7.66			
10/26/2016			44.3		
1/25/2017	13	9.4	50		
4/10/2017	11	8.6	52		
6/19/2017	12		55		
6/20/2017		9.4			
10/24/2017	12	9.9	56		
4/9/2018		9.9			
4/10/2018	12		51		
10/16/2018	14	9.8	57		
3/26/2019	15				
3/27/2019		9.2	58		
10/7/2019	14	8.9			
10/8/2019			60		
12/16/2019				69	200
1/14/2020				65	210
2/11/2020				10	180
3/9/2020				46	180
4/6/2020		9.5			
4/7/2020	14		69	65	190
5/27/2020				69	200
6/24/2020					180
6/25/2020	14	9.6	80	72	
7/15/2020				68	190
8/19/2020					220
8/20/2020				69	
9/22/2020				66	190
9/29/2020	12				
9/30/2020		9.9			200
10/1/2020			79	73	
2/9/2021	9.7	9.2			
2/10/2021			76	67	200
9/7/2021	9.2				
9/8/2021		11	81		
9/9/2021				70	
9/10/2021					200
2/1/2022	8	8.3	75		
2/2/2022					190
2/3/2022				71	
9/1/2022	8.52		71.5		
9/2/2022		9.48			
9/6/2022				65.2	162
1/31/2023	8.5		79.1	69.9	207
2/1/2023		10.8			
8/8/2023	8.51			66.6	196
8/9/2023			82.9		
8/10/2023		11			

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 10/13/2023 11:32 AM View: PL's App III

Plant Arkwright Client: Southern Company Data: Arkwright No 2

	ARGWA-19 (bg)	ARGWC-21	ARGWA-20 (bg)	ARGWC-22	ARGWC-23
5/5/2009	11.1				
5/14/2009		6.38			
5/15/2009			6.86		
12/5/2009	9.46	6.28	5.06		
6/1/2010	6.32		5.47		
6/2/2010		6.1			
11/11/2010	7.16	6.1461	5.26		
5/17/2011	6.84	6.17	4.8		
11/8/2011	9.13	6.6	5.62		
5/16/2012	10.8	6.18	5.1		
5/14/2013	16.2	6.32	5.25		
11/5/2013	14.8	5.65	5.19		
6/9/2014	13.6	6.08	5.55		
4/14/2015	10.4	5.43	5.39		
10/29/2015		5.62			
11/4/2015	9.19		5.38		
6/22/2016	8.4		5.7		
6/23/2016		5.9			
8/29/2016	8.4		5.3		
8/30/2016		5.5			
10/24/2016	9.6		5.4		
10/26/2016		6			
1/25/2017	8.7	5.4	5.1		
4/10/2017	8	5.1	4.9		
6/19/2017	7.6	5.2			
6/20/2017			5		
10/24/2017	7.2	4.9	4.6		
4/9/2018			4.7		
4/10/2018	7.2	4.8			
10/16/2018	10	5.1	5.3		
3/26/2019	12				
3/27/2019		4.4	4.6		
10/7/2019	11		5.2		
10/8/2019		4.5			
12/16/2019				5.8	3.9
1/14/2020				5.5	4
2/11/2020				9	4.7
3/9/2020				11	3.7
4/6/2020			5.2		
4/7/2020	11	4.2		8.1	3.8
5/27/2020				7.3	4
6/24/2020				5.7	
6/25/2020	11	3.7	5.1		3.4
7/15/2020				6	3.9
8/19/2020				5.7	
8/20/2020					3.9
9/22/2020				7.1	3.6
9/29/2020	10				
9/30/2020			5.6	8	
10/1/2020		4.3			3.8
2/9/2021	8.6		6		
2/10/2021		4.3		7.4	4.6

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 10/13/2023 11:32 AM View: PL's App III
Plant Arkwright Client: Southern Company Data: Arkwright No 2

	ARGWA-19 (bg)	ARGWC-21	ARGWA-20 (bg)	ARGWC-22	ARGWC-23
9/7/2021	7.4				
9/8/2021		4	5.9		
9/9/2021					4.7
9/10/2021				6.7	
2/1/2022	6.8	3.4	5.7		
2/2/2022				6.3	
2/3/2022					4.4
9/1/2022	6.27	3.34			
9/2/2022			5.44		
9/6/2022				8.34	3.73
1/31/2023	6.04	3.3		5.88	3.84
2/1/2023			6		
8/8/2023	6.37			6.79	3.6
8/9/2023		3.35			
8/10/2023			6.5		

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 10/13/2023 11:32 AM View: PL's App III
 Plant Arkwright Client: Southern Company Data: Arkwright No 2

	ARGWA-19 (bg)	ARGWA-20 (bg)	ARGWC-21	ARGWC-23	ARGWC-22
8/29/2016	<0.1	<0.1			
8/30/2016			0.099 (J)		
10/24/2016	0.07 (J)	0.04 (J)			
10/26/2016			0.57		
1/25/2017	<0.1	<0.1	0.12 (J)		
4/10/2017	<0.1	<0.1	0.11 (J)		
6/19/2017	<0.1		0.11 (J)		
6/20/2017		<0.1			
10/24/2017	<0.1	<0.1	0.1 (J)		
4/9/2018		<0.1			
4/10/2018	<0.1		0.094 (J)		
10/16/2018	0.083 (J)	<0.1	0.17 (J)		
3/26/2019	0.041 (J)				
3/27/2019		<0.1	0.05 (J)		
8/20/2019	0.045 (J)	0.042 (J)	0.098 (J)		
10/7/2019	0.049 (J)	0.036 (J)			
10/8/2019			0.065 (J)		
12/16/2019				0.18 (J)	0.026 (J)
1/14/2020				0.21	<0.1
2/11/2020				0.13	0.056
3/9/2020				0.089 (J)	0.064 (J)
4/6/2020		0.059 (J)			
4/7/2020	0.14		0.12	0.18	0.068 (J)
5/27/2020				0.25	0.06 (J)
6/24/2020					0.048 (J)
6/25/2020	0.03 (J)	<0.1	0.041 (J)	0.25	
7/15/2020				0.28	0.04 (J)
8/19/2020	<0.1	<0.1			<0.1
8/20/2020				0.19	
8/21/2020			0.084 (J)		
9/22/2020				0.33	0.049 (J)
9/29/2020	0.051 (J)				
9/30/2020		0.032 (J)			0.045 (J)
10/1/2020			0.098 (J)	0.32	
2/9/2021	0.059 (J)	0.048 (J)			
2/10/2021			0.14	0.41	0.055 (J)
9/7/2021	0.1				
9/8/2021		0.067 (J)	0.16		
9/9/2021				0.48	
9/10/2021					0.035 (J)
2/1/2022	0.076 (J)	0.028 (J)	0.11		
2/2/2022					0.04 (J)
2/3/2022				0.4	
9/1/2022	0.148		0.161		
9/2/2022		0.122			
9/6/2022				0.362	0.056 (J)
1/31/2023	0.108 (J)		0.175 (J)	0.551 (J)	0.0979 (J)
2/1/2023		0.121			
8/8/2023	<0.1			0.283	<0.1
8/9/2023			0.203		
8/10/2023		<0.1			

Prediction Limit

Constituent: pH (SU) Analysis Run 10/13/2023 11:32 AM View: PL's App III
 Plant Arkwright Client: Southern Company Data: Arkwright No 2

	ARGWA-20 (bg)	ARGWC-21	ARGWA-19 (bg)	ARGWC-23	ARGWC-22
8/29/2016	5.64		6.75 (o)		
8/30/2016		6.38			
10/24/2016	5.6		5.81		
10/26/2016		6.23			
1/25/2017	5.65	6.15	5.91		
4/10/2017	5.42	5.99	5.74		
6/19/2017		5.95	5.54		
6/20/2017	5.59				
10/24/2017	5.58	6.02	5.82		
4/9/2018	5.78				
4/10/2018		6.12	5.92		
10/16/2018	5.69	6.12	5.94		
3/26/2019			5.85		
3/27/2019	5.96	6.2			
8/20/2019	5.57	6.08	5.9		
10/7/2019	5.65		5.89		
10/8/2019		6.11			
12/16/2019				6.41	5.74
1/14/2020				6.62	5.91
2/11/2020				6.71	5.9
3/9/2020				6.32	5.97
4/6/2020	5.53				
4/7/2020		5.96	5.72	6.4	5.84
5/27/2020				6.3	5.69
6/24/2020					5.82
6/25/2020	5.61	5.98	5.8	6.37	
7/15/2020				6.36	5.58
8/19/2020	6.16		6.25		6.21
8/20/2020				6.33	
8/21/2020		5.89			
9/22/2020				6.29	5.77
9/29/2020			5.83		
9/30/2020	5.65				5.81
10/1/2020		5.99		6.38	
2/9/2021	5.66		5.97		
2/10/2021		6.01		6.37	5.68
9/7/2021			5.85		
9/8/2021	5.59	5.94			
9/9/2021				6.35	
9/10/2021					5.62
2/1/2022	5.14	5.65	5.52		
2/2/2022					5.7
2/3/2022				6.44	
9/1/2022		5.97	5.88		
9/2/2022	5.68				
9/6/2022				6.41	5.88
1/31/2023		6.04	5.86	6.46	5.61
2/1/2023	5.7				
8/8/2023			5.81	6.33	5.61
8/9/2023		6.6			
8/10/2023	5.55				

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 10/13/2023 11:32 AM View: PL's App III
 Plant Arkwright Client: Southern Company Data: Arkwright No 2

	ARGWA-19 (bg)	ARGWC-21	ARGWA-20 (bg)	ARGWC-23	ARGWC-22
5/5/2009	15.9				
5/14/2009		129			
5/15/2009			41.3 (o)		
12/5/2009	15.1	136		16.2	
6/1/2010	12.7			18.2	
6/2/2010		138			
11/11/2010	11.5	131.49		16.5	
5/17/2011	11.2	132		16	
11/8/2011	11.3	138		21	
5/16/2012	9.38	132		17.7	
5/14/2013	8.74	129		19.5	
11/5/2013	9.12	122		18.3	
6/9/2014	8.61	131		18.6	
4/14/2015	8.45	128		18.8	
10/29/2015		134			
11/4/2015	9.01			17.4	
6/22/2016	9.3			18	
6/23/2016		150			
8/29/2016	8.7			18	
8/30/2016		140			
10/24/2016	9.3			18	
10/26/2016		160			
1/25/2017	8.8	150		19	
4/10/2017	7.8	140		16	
6/19/2017	8.6	160			
6/20/2017				18	
10/24/2017	9.1	160		19	
4/9/2018				18	
4/10/2018	7.9	170			
10/16/2018	8.2	170		18	
3/26/2019	6.1				
3/27/2019		170		15	
10/7/2019	7.4			17	
10/8/2019		170			
12/16/2019				66	770
1/14/2020				68	930
2/11/2020				18	660
3/9/2020				49	630
4/6/2020			15		
4/7/2020	8.4	180		58	710
5/27/2020				65	720
6/24/2020					810
6/25/2020	9.8	210	16	77	
7/15/2020				78	820
8/19/2020					1000
8/20/2020				69	
9/22/2020				68	720
9/29/2020	8.4				
9/30/2020			15		650
10/1/2020		210		64	
2/9/2021	10		16		
2/10/2021		220		67	750

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 10/13/2023 11:32 AM View: PL's App III
Plant Arkwright Client: Southern Company Data: Arkwright No 2

	ARGWA-19 (bg)	ARGWC-21	ARGWA-20 (bg)	ARGWC-23	ARGWC-22
9/7/2021	9.9				
9/8/2021		230	16		
9/9/2021				72	
9/10/2021					760
2/1/2022	10	230	18		
2/2/2022					720
2/3/2022				64	
9/1/2022	8.38	221			
9/2/2022			18.5		
9/6/2022				65.3	667
1/31/2023	7.55	260		55.5	751
2/1/2023			19.3		
8/8/2023	8.29			69.8	719
8/9/2023		214			
8/10/2023			18.5		

Prediction Limit

Constituent: Total Dissolved Solids (mg/L) Analysis Run 10/13/2023 11:32 AM View: PL's App III

Plant Arkwright Client: Southern Company Data: Arkwright No 2

	ARGWA-19 (bg)	ARGWA-20 (bg)	ARGWC-21	ARGWC-23	ARGWC-22
8/29/2016	130	100			
8/30/2016			350		
10/24/2016	108	91			
10/26/2016			357		
1/25/2017	120	90	320		
4/10/2017	128 (D)	110	380		
6/19/2017	86		370		
6/20/2017		72			
10/24/2017	120	110	420		
4/9/2018		100			
4/10/2018	120		370		
10/16/2018	140	110	380		
3/26/2019	170				
3/27/2019		100	400		
10/7/2019	150	87			
10/8/2019			420		
12/16/2019				320	1300
1/14/2020				340	1400
2/11/2020				110	1300
3/9/2020				210	1200
4/6/2020		90			
4/7/2020	120		460	290	1300
5/27/2020				320	1300
7/15/2020				310	1400
8/19/2020					1400
8/20/2020				310	
9/22/2020				310	1300
9/29/2020	110				
9/30/2020		82			1200
10/1/2020			500	290	
2/9/2021	110	100			
2/10/2021			510	290	1200
9/7/2021	110				
9/8/2021		120	560		
9/9/2021				320	
9/10/2021					1300
2/1/2022	91	100	520		
2/2/2022					1200
2/3/2022				320	
9/1/2022	81		537		
9/2/2022		101			
9/6/2022				305	1180
1/31/2023	95		526	299	1320
2/1/2023		90			
8/8/2023	62			294	1220
8/9/2023			520		
8/10/2023		105			

FIGURE F.

Trend Tests - Prediction Limit Exceedances - Significant Results

Plant Arkwright Client: Southern Company Data: Arkwright No 2 Printed 10/13/2023, 11:49 AM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Boron (mg/L)	ARGWC-21	0.0716	137	74	Yes	19	0	n/a	n/a	0.01	NP
Calcium (mg/L)	ARGWC-21	5.478	135	74	Yes	19	0	n/a	n/a	0.01	NP
Fluoride (mg/L)	ARGWC-23	0.1263	88	63	Yes	17	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	ARGWA-19 (bg)	-0.2188	-217	-161	Yes	32	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	ARGWC-21	8.273	378	161	Yes	32	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	ARGWC-21	31.32	121	68	Yes	18	0	n/a	n/a	0.01	NP

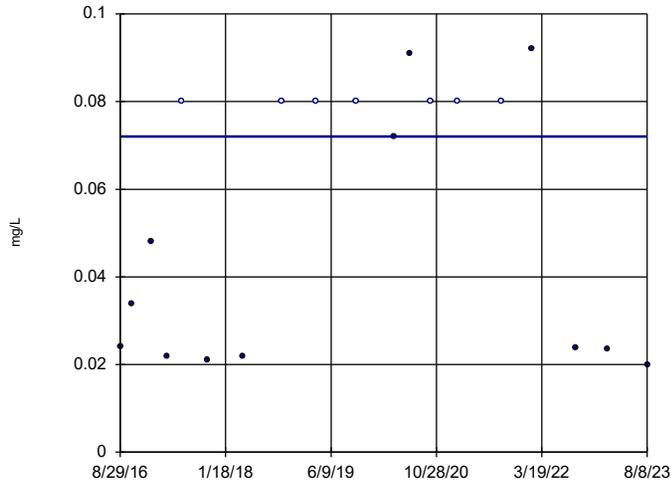
Trend Tests - Prediction Limit Exceedances - All Results

Plant Arkwright Client: Southern Company Data: Arkwright No 2 Printed 10/13/2023, 11:50 AM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Boron (mg/L)	ARGWA-19 (bg)	0	21	74	No	19	36.84	n/a	n/a	0.01	NP
Boron (mg/L)	ARGWA-20 (bg)	0.005321	65	74	No	19	21.05	n/a	n/a	0.01	NP
Boron (mg/L)	ARGWC-21	0.0716	137	74	Yes	19	0	n/a	n/a	0.01	NP
Boron (mg/L)	ARGWC-22	0	8	63	No	17	0	n/a	n/a	0.01	NP
Boron (mg/L)	ARGWC-23	0.01446	29	63	No	17	0	n/a	n/a	0.01	NP
Calcium (mg/L)	ARGWA-19 (bg)	-0.4773	-48	-74	No	19	0	n/a	n/a	0.01	NP
Calcium (mg/L)	ARGWA-20 (bg)	0.249	64	74	No	19	0	n/a	n/a	0.01	NP
Calcium (mg/L)	ARGWC-21	5.478	135	74	Yes	19	0	n/a	n/a	0.01	NP
Calcium (mg/L)	ARGWC-22	0	7	63	No	17	0	n/a	n/a	0.01	NP
Calcium (mg/L)	ARGWC-23	1.41	34	63	No	17	0	n/a	n/a	0.01	NP
Fluoride (mg/L)	ARGWA-19 (bg)	0	14	87	No	21	38.1	n/a	n/a	0.01	NP
Fluoride (mg/L)	ARGWA-20 (bg)	0	-9	-87	No	21	52.38	n/a	n/a	0.01	NP
Fluoride (mg/L)	ARGWC-21	0.007085	33	87	No	21	0	n/a	n/a	0.01	NP
Fluoride (mg/L)	ARGWC-23	0.1263	88	63	Yes	17	0	n/a	n/a	0.01	NP
pH (SU)	ARGWA-19 (bg)	0.002899	4	81	No	20	0	n/a	n/a	0.01	NP
pH (SU)	ARGWA-20 (bg)	0.002459	8	87	No	21	0	n/a	n/a	0.01	NP
pH (SU)	ARGWC-21	-0.03265	-66	-87	No	21	0	n/a	n/a	0.01	NP
pH (SU)	ARGWC-23	-0.01164	-9	-63	No	17	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	ARGWA-19 (bg)	-0.2188	-217	-161	Yes	32	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	ARGWA-20 (bg)	-0.01894	-47	-152	No	31	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	ARGWC-21	8.273	378	161	Yes	32	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	ARGWC-22	-0.5044	-7	-63	No	17	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	ARGWC-23	0.9535	14	63	No	17	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	ARGWA-19 (bg)	-5.194	-60	-68	No	18	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	ARGWA-20 (bg)	0	11	68	No	18	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	ARGWC-21	31.32	121	68	Yes	18	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	ARGWC-22	-17.34	-30	-58	No	16	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	ARGWC-23	0	-6	-58	No	16	0	n/a	n/a	0.01	NP

Sen's Slope Estimator

ARGWA-19 (bg)

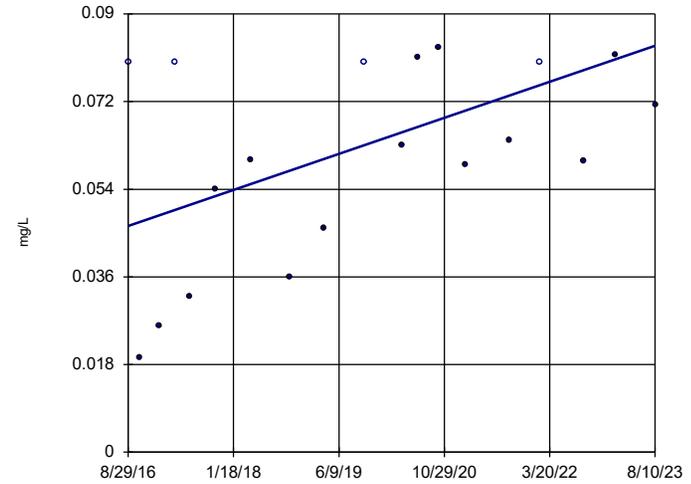


n = 19
Slope = 0
units per year.
Mann-Kendall
statistic = 21
critical = 74
Trend not sig-
nificant at 99%
confidence level
($\alpha = 0.005$ per
tail).

Constituent: Boron Analysis Run 10/13/2023 11:44 AM View: Trend Tests
Plant Arkwright Client: Southern Company Data: Arkwright No 2

Sen's Slope Estimator

ARGWA-20 (bg)

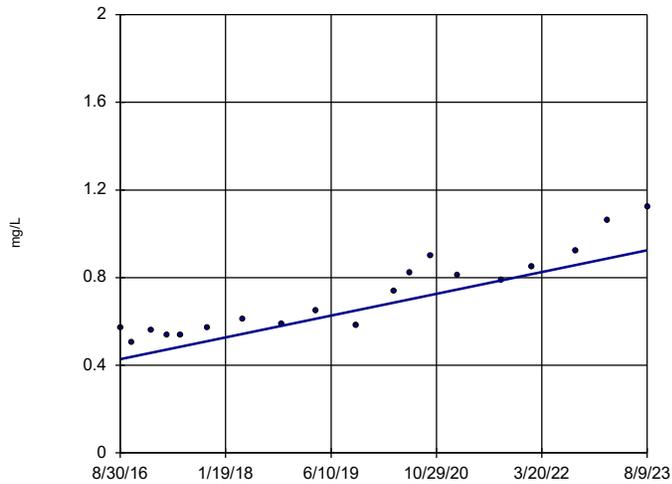


n = 19
Slope = 0.005321
units per year.
Mann-Kendall
statistic = 65
critical = 74
Trend not sig-
nificant at 99%
confidence level
($\alpha = 0.005$ per
tail).

Constituent: Boron Analysis Run 10/13/2023 11:44 AM View: Trend Tests
Plant Arkwright Client: Southern Company Data: Arkwright No 2

Sen's Slope Estimator

ARGWC-21

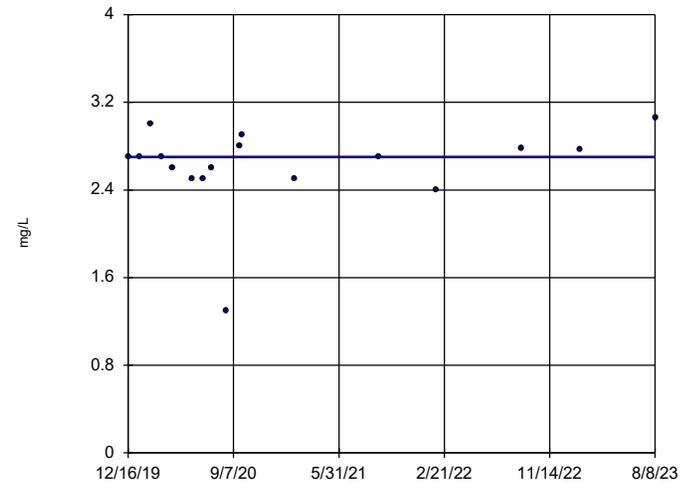


n = 19
Slope = 0.0716
units per year.
Mann-Kendall
statistic = 137
critical = 74
Increasing trend
significant at 99%
confidence level
($\alpha = 0.005$ per
tail).

Constituent: Boron Analysis Run 10/13/2023 11:44 AM View: Trend Tests
Plant Arkwright Client: Southern Company Data: Arkwright No 2

Sen's Slope Estimator

ARGWC-22

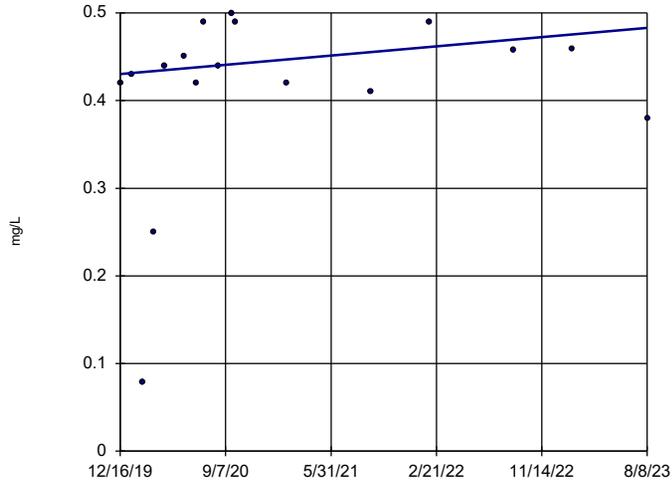


n = 17
Slope = 0
units per year.
Mann-Kendall
statistic = 8
critical = 63
Trend not sig-
nificant at 99%
confidence level
($\alpha = 0.005$ per
tail).

Constituent: Boron Analysis Run 10/13/2023 11:44 AM View: Trend Tests
Plant Arkwright Client: Southern Company Data: Arkwright No 2

Sen's Slope Estimator

ARGWC-23

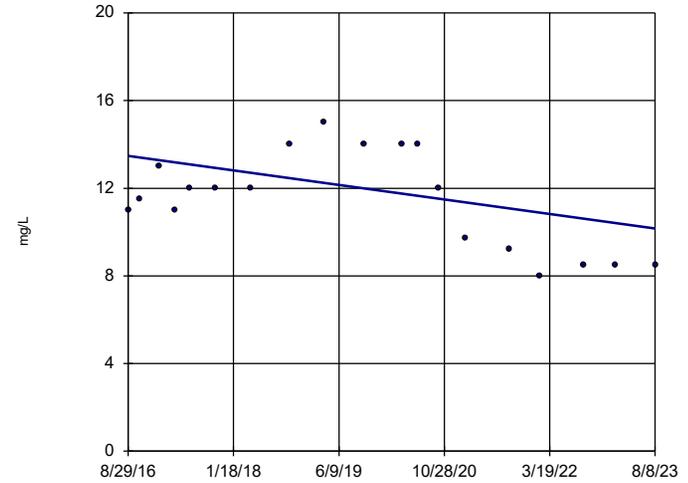


n = 17
 Slope = 0.01446
 units per year.
 Mann-Kendall
 statistic = 29
 critical = 63
 Trend not sig-
 nificant at 99%
 confidence level
 ($\alpha = 0.005$ per
 tail).

Constituent: Boron Analysis Run 10/13/2023 11:44 AM View: Trend Tests
 Plant Arkwright Client: Southern Company Data: Arkwright No 2

Sen's Slope Estimator

ARGWA-19 (bg)

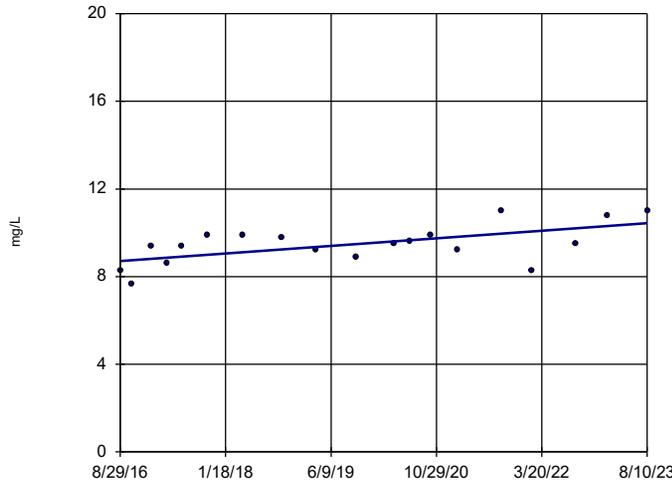


n = 19
 Slope = -0.4773
 units per year.
 Mann-Kendall
 statistic = -48
 critical = -74
 Trend not sig-
 nificant at 99%
 confidence level
 ($\alpha = 0.005$ per
 tail).

Constituent: Calcium Analysis Run 10/13/2023 11:44 AM View: Trend Tests
 Plant Arkwright Client: Southern Company Data: Arkwright No 2

Sen's Slope Estimator

ARGWA-20 (bg)

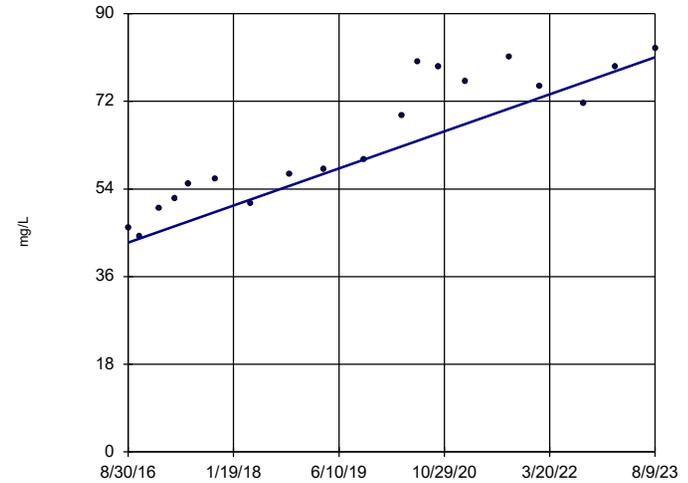


n = 19
 Slope = 0.249
 units per year.
 Mann-Kendall
 statistic = 64
 critical = 74
 Trend not sig-
 nificant at 99%
 confidence level
 ($\alpha = 0.005$ per
 tail).

Constituent: Calcium Analysis Run 10/13/2023 11:44 AM View: Trend Tests
 Plant Arkwright Client: Southern Company Data: Arkwright No 2

Sen's Slope Estimator

ARGWC-21

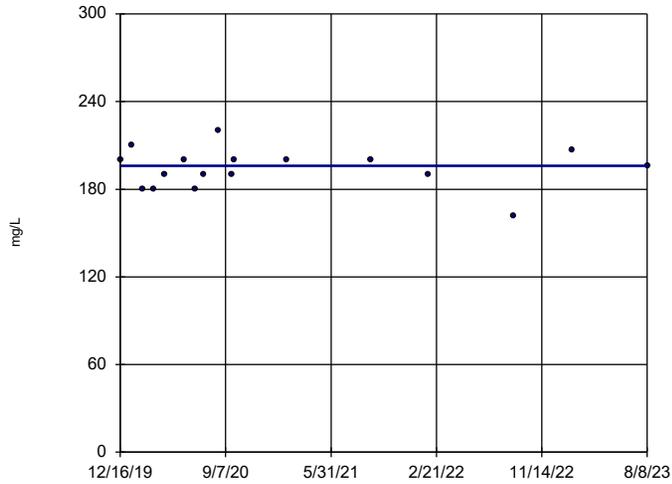


n = 19
 Slope = 5.478
 units per year.
 Mann-Kendall
 statistic = 135
 critical = 74
 Increasing trend
 significant at 99%
 confidence level
 ($\alpha = 0.005$ per
 tail).

Constituent: Calcium Analysis Run 10/13/2023 11:44 AM View: Trend Tests
 Plant Arkwright Client: Southern Company Data: Arkwright No 2

Sen's Slope Estimator

ARGWC-22

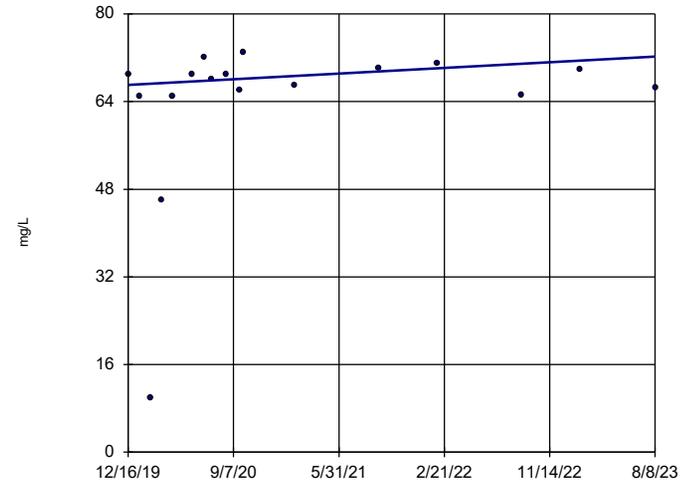


n = 17
 Slope = 0
 units per year.
 Mann-Kendall
 statistic = 7
 critical = 63
 Trend not sig-
 nificant at 99%
 confidence level
 ($\alpha = 0.005$ per
 tail).

Constituent: Calcium Analysis Run 10/13/2023 11:44 AM View: Trend Tests
 Plant Arkwright Client: Southern Company Data: Arkwright No 2

Sen's Slope Estimator

ARGWC-23

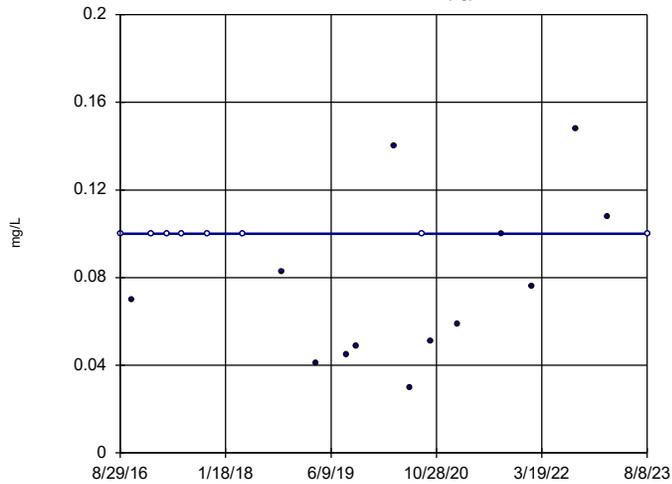


n = 17
 Slope = 1.41
 units per year.
 Mann-Kendall
 statistic = 34
 critical = 63
 Trend not sig-
 nificant at 99%
 confidence level
 ($\alpha = 0.005$ per
 tail).

Constituent: Calcium Analysis Run 10/13/2023 11:44 AM View: Trend Tests
 Plant Arkwright Client: Southern Company Data: Arkwright No 2

Sen's Slope Estimator

ARGWA-19 (bg)

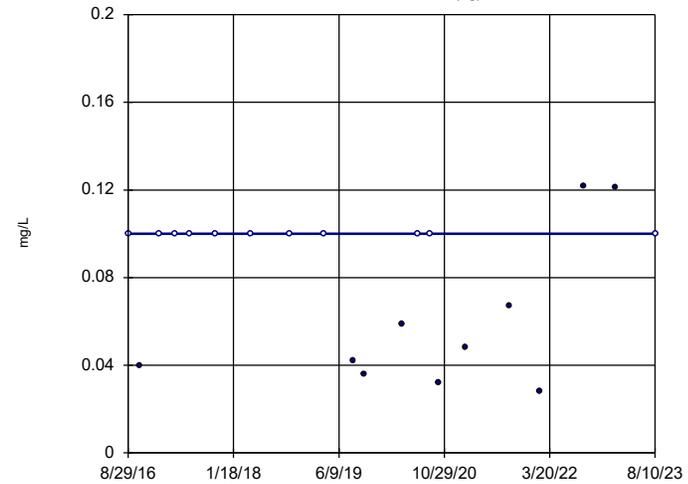


n = 21
 Slope = 0
 units per year.
 Mann-Kendall
 statistic = 14
 critical = 87
 Trend not sig-
 nificant at 99%
 confidence level
 ($\alpha = 0.005$ per
 tail).

Constituent: Fluoride Analysis Run 10/13/2023 11:44 AM View: Trend Tests
 Plant Arkwright Client: Southern Company Data: Arkwright No 2

Sen's Slope Estimator

ARGWA-20 (bg)

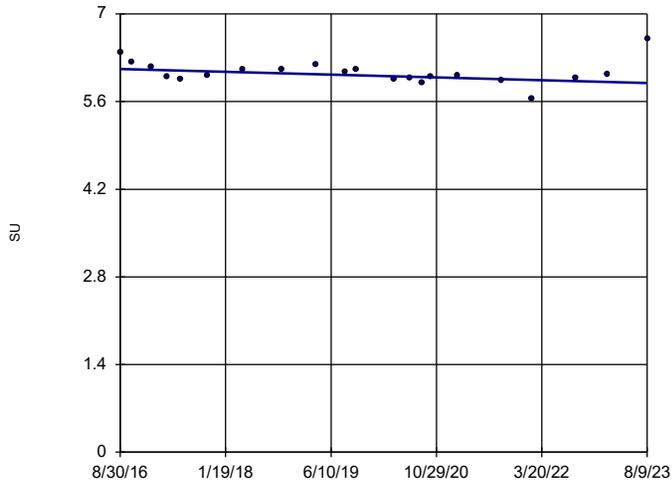


n = 21
 Slope = 0
 units per year.
 Mann-Kendall
 statistic = -9
 critical = -87
 Trend not sig-
 nificant at 99%
 confidence level
 ($\alpha = 0.005$ per
 tail).

Constituent: Fluoride Analysis Run 10/13/2023 11:44 AM View: Trend Tests
 Plant Arkwright Client: Southern Company Data: Arkwright No 2

Sen's Slope Estimator

ARGWC-21

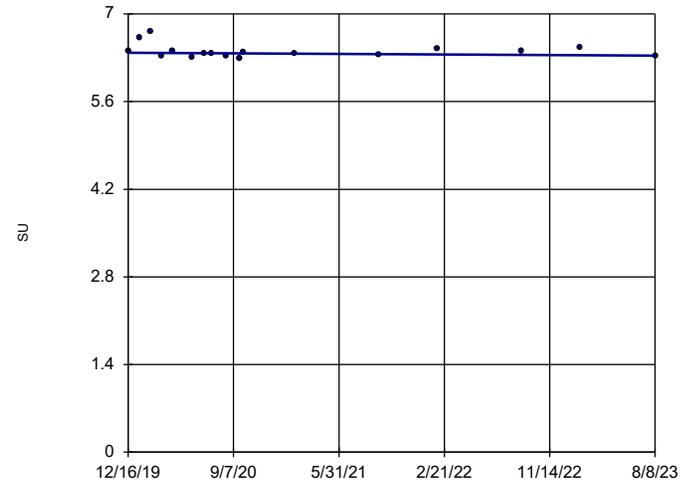


n = 21
 Slope = -0.03265
 units per year.
 Mann-Kendall
 statistic = -66
 critical = -87
 Trend not sig-
 nificant at 99%
 confidence level
 ($\alpha = 0.005$ per
 tail).

Constituent: pH Analysis Run 10/13/2023 11:44 AM View: Trend Tests
 Plant Arkwright Client: Southern Company Data: Arkwright No 2

Sen's Slope Estimator

ARGWC-23

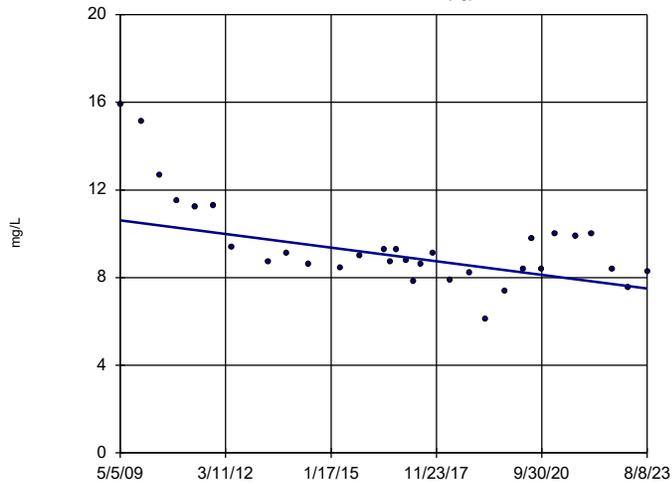


n = 17
 Slope = -0.01164
 units per year.
 Mann-Kendall
 statistic = -9
 critical = -63
 Trend not sig-
 nificant at 99%
 confidence level
 ($\alpha = 0.005$ per
 tail).

Constituent: pH Analysis Run 10/13/2023 11:44 AM View: Trend Tests
 Plant Arkwright Client: Southern Company Data: Arkwright No 2

Sen's Slope Estimator

ARGWA-19 (bg)

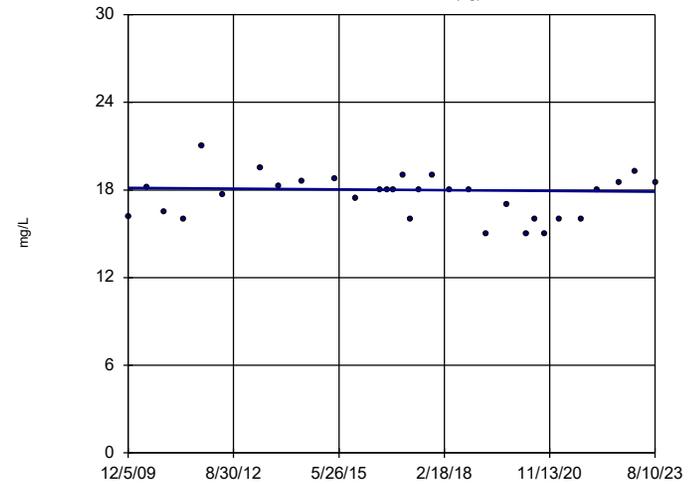


n = 32
 Slope = -0.2188
 units per year.
 Mann-Kendall
 statistic = -217
 critical = -161
 Decreasing trend
 significant at 99%
 confidence level
 ($\alpha = 0.005$ per
 tail).

Constituent: Sulfate Analysis Run 10/13/2023 11:44 AM View: Trend Tests
 Plant Arkwright Client: Southern Company Data: Arkwright No 2

Sen's Slope Estimator

ARGWA-20 (bg)

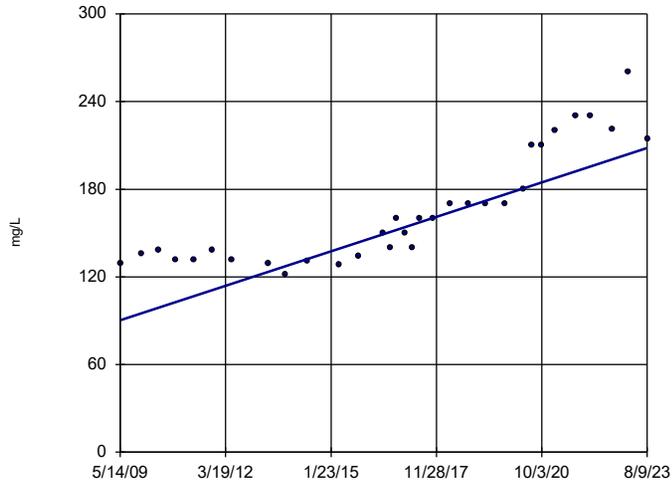


n = 31
 Slope = -0.01894
 units per year.
 Mann-Kendall
 statistic = -47
 critical = -152
 Trend not sig-
 nificant at 99%
 confidence level
 ($\alpha = 0.005$ per
 tail).

Constituent: Sulfate Analysis Run 10/13/2023 11:44 AM View: Trend Tests
 Plant Arkwright Client: Southern Company Data: Arkwright No 2

Sen's Slope Estimator

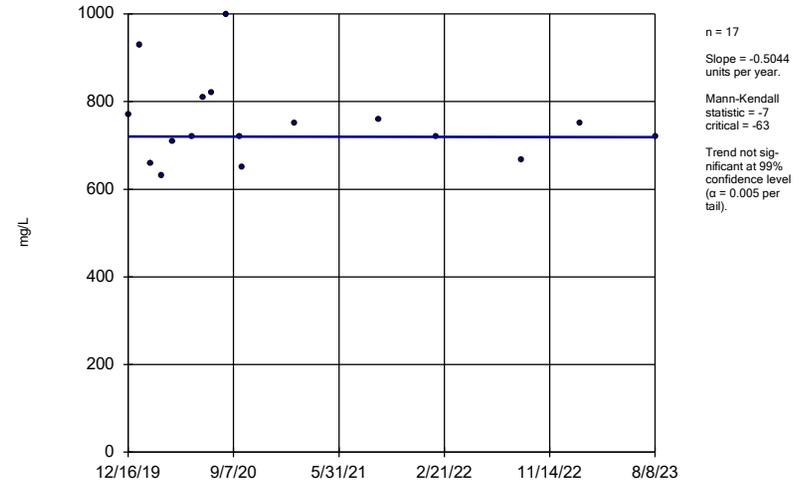
ARGWC-21



Constituent: Sulfate Analysis Run 10/13/2023 11:44 AM View: Trend Tests
Plant Arkwright Client: Southern Company Data: Arkwright No 2

Sen's Slope Estimator

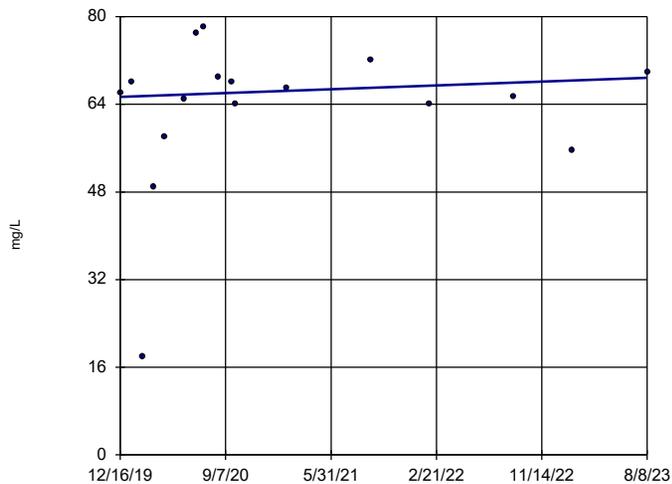
ARGWC-22



Constituent: Sulfate Analysis Run 10/13/2023 11:44 AM View: Trend Tests
Plant Arkwright Client: Southern Company Data: Arkwright No 2

Sen's Slope Estimator

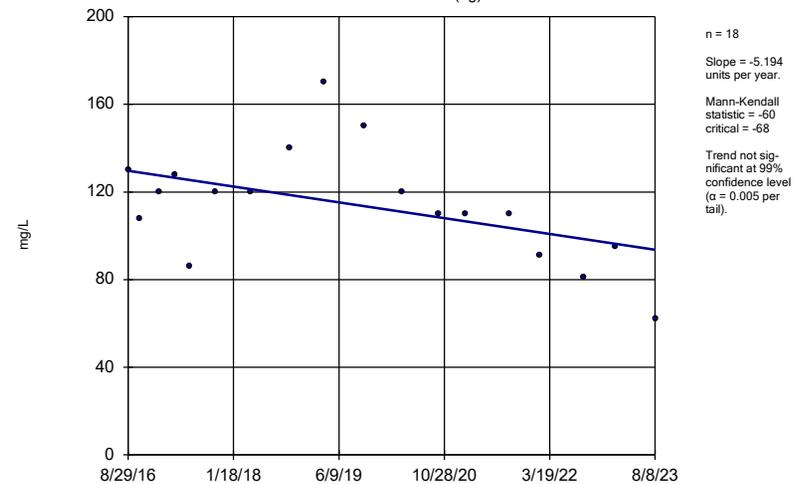
ARGWC-23



Constituent: Sulfate Analysis Run 10/13/2023 11:44 AM View: Trend Tests
Plant Arkwright Client: Southern Company Data: Arkwright No 2

Sen's Slope Estimator

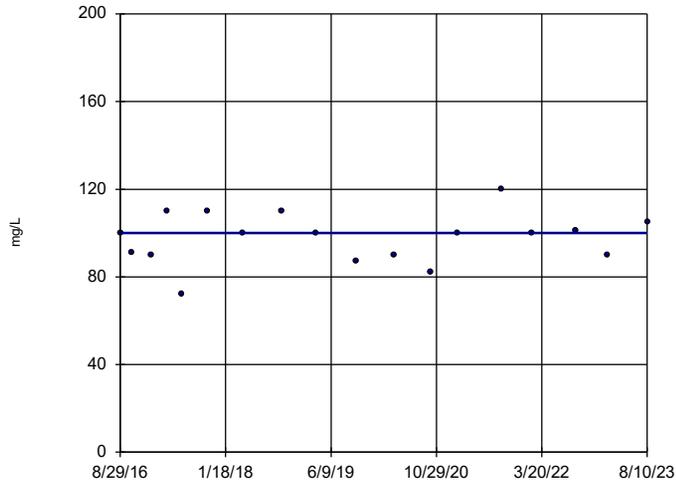
ARGWA-19 (bg)



Constituent: Total Dissolved Solids Analysis Run 10/13/2023 11:44 AM View: Trend Tests
Plant Arkwright Client: Southern Company Data: Arkwright No 2

Sen's Slope Estimator

ARGWA-20 (bg)

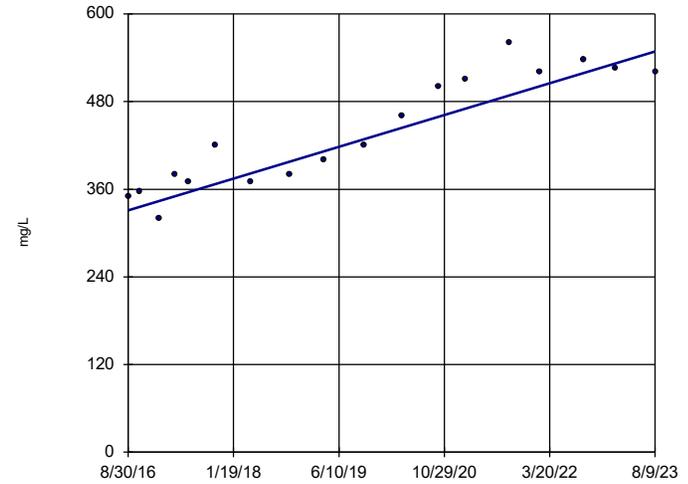


n = 18
 Slope = 0
 units per year.
 Mann-Kendall
 statistic = 11
 critical = 68
 Trend not sig-
 nificant at 99%
 confidence level
 ($\alpha = 0.005$ per
 tail).

Constituent: Total Dissolved Solids Analysis Run 10/13/2023 11:44 AM View: Trend Tests
 Plant Arkwright Client: Southern Company Data: Arkwright No 2

Sen's Slope Estimator

ARGWC-21

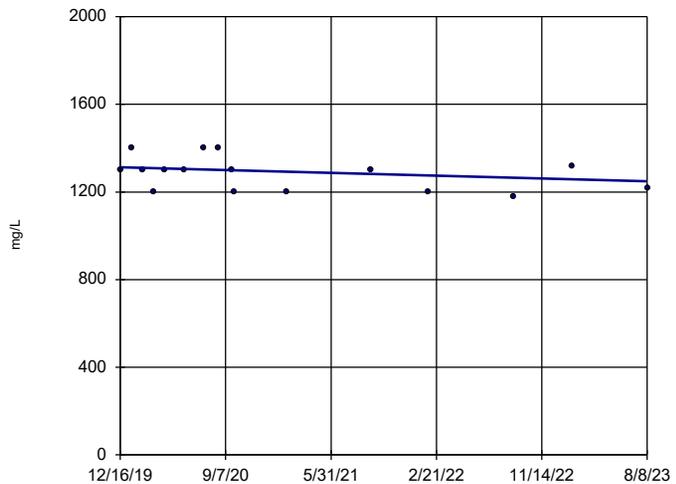


n = 18
 Slope = 31.32
 units per year.
 Mann-Kendall
 statistic = 121
 critical = 68
 Increasing trend
 significant at 99%
 confidence level
 ($\alpha = 0.005$ per
 tail).

Constituent: Total Dissolved Solids Analysis Run 10/13/2023 11:44 AM View: Trend Tests
 Plant Arkwright Client: Southern Company Data: Arkwright No 2

Sen's Slope Estimator

ARGWC-22

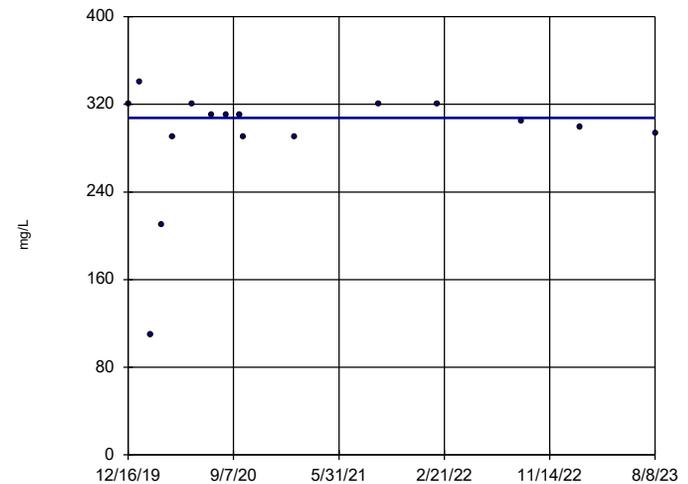


n = 16
 Slope = -17.34
 units per year.
 Mann-Kendall
 statistic = -30
 critical = -58
 Trend not sig-
 nificant at 99%
 confidence level
 ($\alpha = 0.005$ per
 tail).

Constituent: Total Dissolved Solids Analysis Run 10/13/2023 11:44 AM View: Trend Tests
 Plant Arkwright Client: Southern Company Data: Arkwright No 2

Sen's Slope Estimator

ARGWC-23



n = 16
 Slope = 0
 units per year.
 Mann-Kendall
 statistic = -6
 critical = -58
 Trend not sig-
 nificant at 99%
 confidence level
 ($\alpha = 0.005$ per
 tail).

Constituent: Total Dissolved Solids Analysis Run 10/13/2023 11:44 AM View: Trend Tests
 Plant Arkwright Client: Southern Company Data: Arkwright No 2

FIGURE G.

Upper Tolerance Limits

Plant Arkwright Client: Southern Company Data: Arkwright No 2 Printed 10/13/2023, 11:56 AM

<u>Constituent</u>	<u>Upper Lim.</u>	<u>Bg N</u>	<u>Bg Mean</u>	<u>Std. Dev.</u>	<u>%NDs</u>	<u>ND Adj.</u>	<u>Transform</u>	<u>Alpha</u>	<u>Method</u>
Antimony (mg/L)	0.003	30	n/a	n/a	100	n/a	n/a	0.2146	NP Inter(NDs)
Arsenic (mg/L)	0.005	68	n/a	n/a	86.76	n/a	n/a	0.03056	NP Inter(NDs)
Barium (mg/L)	0.107	68	n/a	n/a	0	n/a	n/a	0.03056	NP Inter(normality)
Beryllium (mg/L)	0.0005	34	n/a	n/a	91.18	n/a	n/a	0.1748	NP Inter(NDs)
Cadmium (mg/L)	0.001	66	n/a	n/a	98.48	n/a	n/a	0.03387	NP Inter(NDs)
Chromium (mg/L)	0.01	38	n/a	n/a	23.68	n/a	n/a	0.1424	NP Inter(normality)
Cobalt (mg/L)	0.001	40	n/a	n/a	65	n/a	n/a	0.1285	NP Inter(NDs)
Combined Radium 226 + 228 (pCi/L)	2.33	38	n/a	n/a	0	n/a	n/a	0.1424	NP Inter(normality)
Fluoride (mg/L)	0.148	42	n/a	n/a	45.24	n/a	n/a	0.116	NP Inter(normality)
Lead (mg/L)	0.002	68	n/a	n/a	86.76	n/a	n/a	0.03056	NP Inter(NDs)
Lithium (mg/L)	0.013	40	n/a	n/a	42.5	n/a	n/a	0.1285	NP Inter(normality)
Mercury (mg/L)	0.0002	30	n/a	n/a	93.33	n/a	n/a	0.2146	NP Inter(NDs)
Molybdenum (mg/L)	0.001	36	n/a	n/a	86.11	n/a	n/a	0.1578	NP Inter(NDs)
Selenium (mg/L)	0.005	67	n/a	n/a	65.67	n/a	n/a	0.03217	NP Inter(NDs)
Silver (mg/L)	0.001	58	n/a	n/a	91.38	n/a	n/a	0.05105	NP Inter(NDs)
Thallium (mg/L)	0.002	30	n/a	n/a	96.67	n/a	n/a	0.2146	NP Inter(NDs)

FIGURE H.

PLANT ARKWRIGHT AP #2 GWPS				
Constituent Name	MCL	CCR-Rule Specified	Background Limit	GWPS
Antimony, Total (mg/L)	0.006		0.003	0.006
Arsenic, Total (mg/L)	0.01		0.005	0.01
Barium, Total (mg/L)	2		0.11	2
Beryllium, Total (mg/L)	0.004		0.0005	0.004
Cadmium, Total (mg/L)	0.005		0.001	0.005
Chromium, Total (mg/L)	0.1		0.01	0.1
Cobalt, Total (mg/L)	n/a	0.006	0.001	0.006
Combined Radium, Total (pCi/L)	5		2.33	5
Fluoride, Total (mg/L)	4		0.15	4
Lead, Total (mg/L)	n/a	0.015	0.002	0.015
Lithium, Total (mg/L)	n/a	0.04	0.013	0.04
Mercury, Total (mg/L)	0.002		0.0002	0.002
Molybdenum, Total (mg/L)	n/a	0.1	0.001	0.1
Selenium, Total (mg/L)	0.05		0.005	0.05
Silver, Total (mg/L)	n/a		0.001	0.001
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 Summary Table - Significant Results

Plant Arkwright Client: Southern Company Data: Arkwright No 2 Printed 10/13/2023, 12:06 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig. N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Cobalt (mg/L)	ARAMW-7	0.07871	0.03458	0.006	Yes 7	0.05713	0.02447	0	None	x^3	0.01	Param.
Lithium (mg/L)	ARAMW-7	0.0655	0.05767	0.04	Yes 7	0.06159	0.003298	0	None	No	0.01	Param.

Confidence Intervals Summary Table - All Results

Plant Arkwright Client: Southern Company Data: Arkwright No 2 Printed 10/13/2023, 12:06 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig. N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Antimony (mg/L)	ARAMW-8	0.003	0.00134	0.006	No 5	0.002668	0.0007424	80	None	No	0.031	NP (NDs)
Arsenic (mg/L)	ARAMW-1	0.005	0.00233	0.01	No 8	0.004666	0.000944	87.5	None	No	0.004	NP (NDs)
Arsenic (mg/L)	ARAMW-2	0.0457	0.004386	0.01	No 8	0.02402	0.02717	0	None	x^(1/3)	0.01	Param.
Arsenic (mg/L)	ARAMW-7	0.005	0.00035	0.01	No 6	0.00316	0.002189	50	None	No	0.0155	NP (normality)
Arsenic (mg/L)	ARAMW-8	0.005	0.00031	0.01	No 6	0.002972	0.002305	50	None	No	0.0155	NP (normality)
Arsenic (mg/L)	ARGWC-21	0.005	0.00207	0.01	No 34	0.003494	0.001661	52.94	None	No	0.01	NP (NDs)
Arsenic (mg/L)	ARGWC-22	0.005	0.00066	0.01	No 16	0.003978	0.001869	75	None	No	0.01	NP (NDs)
Arsenic (mg/L)	ARGWC-23	0.005	0.00075	0.01	No 16	0.004154	0.00182	81.25	None	No	0.01	NP (NDs)
Barium (mg/L)	ARAMW-1	0.05308	0.04397	2	No 8	0.04853	0.004295	0	None	No	0.01	Param.
Barium (mg/L)	ARAMW-2	0.14	0.067	2	No 8	0.09181	0.02753	0	None	No	0.004	NP (normality)
Barium (mg/L)	ARAMW-7	0.03483	0.02184	2	No 6	0.02833	0.00473	0	None	No	0.01	Param.
Barium (mg/L)	ARAMW-8	0.1224	0.08756	2	No 6	0.105	0.0127	0	None	No	0.01	Param.
Barium (mg/L)	ARGWC-21	0.1	0.044	2	No 34	0.06834	0.03428	0	None	No	0.01	NP (normality)
Barium (mg/L)	ARGWC-22	0.04906	0.02955	2	No 16	0.04005	0.01602	0	None	sqrt(x)	0.01	Param.
Barium (mg/L)	ARGWC-23	0.1491	0.09733	2	No 16	0.1232	0.0398	0	None	No	0.01	Param.
Beryllium (mg/L)	ARAMW-7	0.0025	0.000236	0.004	No 6	0.001384	0.001223	50	None	No	0.0155	NP (normality)
Beryllium (mg/L)	ARGWC-22	0.0005	0.00023	0.004	No 15	0.0004307	0.000125	66.67	None	No	0.01	NP (NDs)
Beryllium (mg/L)	ARGWC-23	0.0005	0.00033	0.004	No 15	0.0004887	0.00004389	93.33	None	No	0.01	NP (NDs)
Chromium (mg/L)	ARGWC-21	0.01	0.0017	0.1	No 19	0.009563	0.001904	94.74	None	No	0.01	NP (NDs)
Chromium (mg/L)	ARGWC-22	0.01	0.0048	0.1	No 16	0.009675	0.0013	93.75	None	No	0.01	NP (NDs)
Cobalt (mg/L)	ARAMW-1	0.001	0.00035	0.006	No 9	0.0006842	0.0002748	0	None	No	0.002	NP (normality)
Cobalt (mg/L)	ARAMW-2	0.003072	0.002117	0.006	No 9	0.002594	0.0004943	0	None	No	0.01	Param.
Cobalt (mg/L)	ARAMW-7	0.07871	0.03458	0.006	Yes 7	0.05713	0.02447	0	None	x^3	0.01	Param.
Cobalt (mg/L)	ARAMW-8	0.005631	0.00256	0.006	No 7	0.004096	0.001293	0	None	No	0.01	Param.
Cobalt (mg/L)	ARGWC-21	0.0019	0.0007	0.006	No 20	0.001316	0.0005999	0	None	No	0.01	NP (normality)
Cobalt (mg/L)	ARGWC-22	0.008291	0.002588	0.006	No 17	0.006004	0.005185	0	None	sqrt(x)	0.01	Param.
Cobalt (mg/L)	ARGWC-23	0.002238	0.0008255	0.006	No 17	0.001652	0.001313	0	None	sqrt(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	ARAMW-1	2.894	0.3446	5	No 8	1.551	1.405	0	None	sqrt(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	ARAMW-2	4.208	2.169	5	No 8	3.189	0.962	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	ARAMW-7	5.264	4.116	5	No 6	4.69	0.418	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	ARAMW-8	2.764	0.007706	5	No 6	1.04	1.243	0	None	sqrt(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	ARGWC-21	1.143	0.5604	5	No 19	0.9819	0.7745	0	None	ln(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	ARGWC-22	1.094	0.3362	5	No 16	0.7813	0.7044	0	None	sqrt(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	ARGWC-23	0.706	0.1455	5	No 16	0.4897	0.5722	0	None	sqrt(x)	0.01	Param.
Fluoride (mg/L)	ARAMW-1	0.2271	0.1592	4	No 9	0.1931	0.03517	0	None	No	0.01	Param.
Fluoride (mg/L)	ARAMW-2	0.1357	0.07228	4	No 9	0.104	0.03286	11.11	None	No	0.01	Param.
Fluoride (mg/L)	ARAMW-7	0.11	0.032	4	No 7	0.07714	0.03245	42.86	None	No	0.008	NP (normality)
Fluoride (mg/L)	ARAMW-8	0.2658	0.1542	4	No 7	0.21	0.04695	0	None	No	0.01	Param.
Fluoride (mg/L)	ARGWC-21	0.1565	0.08641	4	No 21	0.137	0.1074	0	None	ln(x)	0.01	Param.
Fluoride (mg/L)	ARGWC-22	0.0979	0.04	4	No 17	0.07882	0.05991	17.65	None	No	0.01	NP (normality)
Fluoride (mg/L)	ARGWC-23	0.366	0.2099	4	No 17	0.2879	0.1246	0	None	No	0.01	Param.
Lead (mg/L)	ARAMW-7	0.002	0.00013	0.015	No 6	0.001688	0.0007634	83.33	None	No	0.0155	NP (NDs)
Lead (mg/L)	ARGWC-21	0.002	0.00026	0.015	No 34	0.001894	0.0004289	94.12	None	No	0.01	NP (NDs)
Lead (mg/L)	ARGWC-22	0.002	0.00022	0.015	No 16	0.001773	0.0006218	87.5	None	No	0.01	NP (NDs)
Lead (mg/L)	ARGWC-23	0.002	0.00026	0.015	No 16	0.001778	0.0006082	87.5	None	No	0.01	NP (NDs)
Lithium (mg/L)	ARAMW-1	0.009867	0.008372	0.04	No 10	0.009089	0.0009949	0	None	x^3	0.01	Param.
Lithium (mg/L)	ARAMW-2	0.036	0.019	0.04	No 10	0.02887	0.02073	0	None	No	0.011	NP (normality)
Lithium (mg/L)	ARAMW-7	0.0655	0.05767	0.04	Yes 7	0.06159	0.003298	0	None	No	0.01	Param.
Lithium (mg/L)	ARAMW-8	0.006719	0.005207	0.04	No 7	0.005986	0.0007869	0	None	x^4	0.01	Param.
Lithium (mg/L)	ARGWC-21	0.01215	0.009736	0.04	No 20	0.01095	0.002129	0	None	No	0.01	Param.
Lithium (mg/L)	ARGWC-22	0.02454	0.01523	0.04	No 17	0.01989	0.007428	0	None	No	0.01	Param.
Lithium (mg/L)	ARGWC-23	0.04604	0.02833	0.04	No 17	0.03719	0.01413	0	None	No	0.01	Param.
Mercury (mg/L)	ARGWC-21	0.0002	0.000073	0.002	No 15	0.0001915	0.00003279	93.33	None	No	0.01	NP (NDs)
Molybdenum (mg/L)	ARAMW-1	0.00807	0.004699	0.1	No 9	0.006384	0.001745	0	None	No	0.01	Param.
Molybdenum (mg/L)	ARAMW-2	0.015	0.000491	0.1	No 9	0.008722	0.007449	55.56	None	No	0.002	NP (NDs)

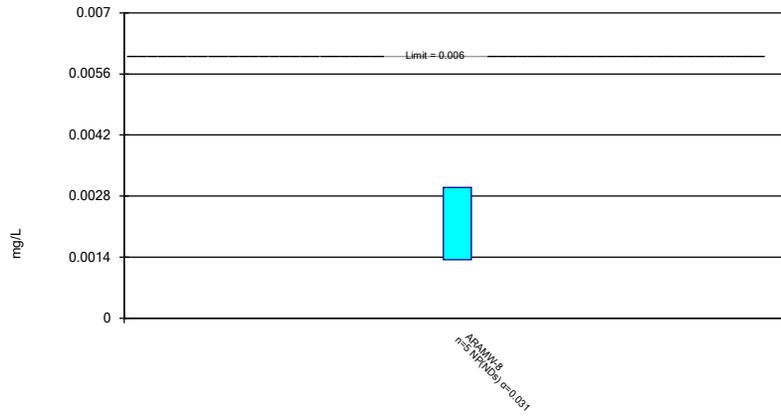
Confidence Intervals Summary Table - All Results

Plant Arkwright Client: Southern Company Data: Arkwright No 2 Printed 10/13/2023, 12:06 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig. N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Molybdenum (mg/L)	ARAMW-7	0.0012	0.000379	0.1	No 7	0.0009399	0.0002583	71.43	None	No	0.008	NP (NDs)
Molybdenum (mg/L)	ARAMW-8	0.2118	0.0568	0.1	No 7	0.1343	0.06523	0	None	No	0.01	Param.
Molybdenum (mg/L)	ARGWC-22	0.015	0.000514	0.1	No 16	0.008801	0.007268	56.25	None	No	0.01	NP (NDs)
Molybdenum (mg/L)	ARGWC-23	0.06318	0.0438	0.1	No 16	0.05137	0.01838	0	None	x^2	0.01	Param.
Selenium (mg/L)	ARGWC-22	0.005	0.002	0.05	No 16	0.004812	0.00075	93.75	None	No	0.01	NP (NDs)
Silver (mg/L)	ARGWC-21	0.001	0.001	0.001	No 29	0.0009803	0.0001058	93.1	None	No	0.01	NP (NDs)
Thallium (mg/L)	ARGWC-22	0.002	0.00034	0.002	No 13	0.001518	0.0007608	69.23	None	No	0.01	NP (NDs)
Thallium (mg/L)	ARGWC-23	0.002	0.00028	0.002	No 13	0.0016	0.0007601	76.92	None	No	0.01	NP (NDs)

Non-Parametric Confidence Interval

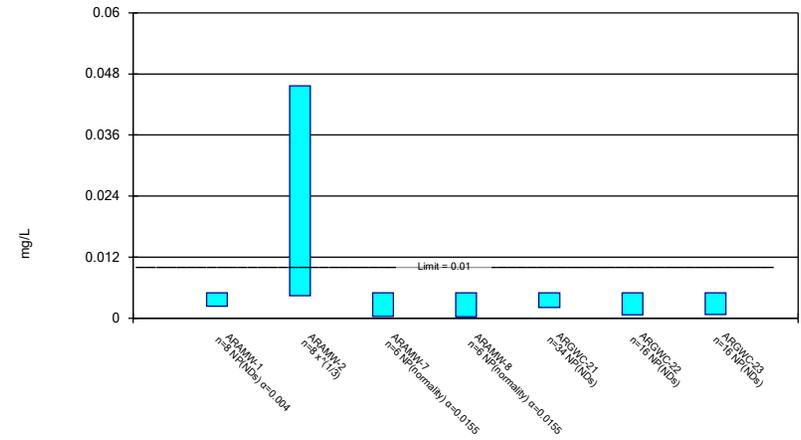
Compliance Limit is not exceeded.



Constituent: Antimony Analysis Run 10/13/2023 12:04 PM View: Confidence Intervals
Plant Arkwright Client: Southern Company Data: Arkwright No 2

Parametric and Non-Parametric (NP) Confidence Interval

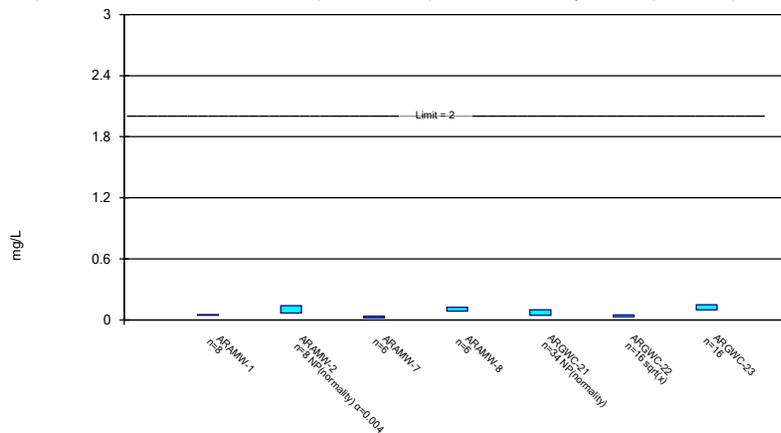
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Arsenic Analysis Run 10/13/2023 12:04 PM View: Confidence Intervals
Plant Arkwright Client: Southern Company Data: Arkwright No 2

Parametric and Non-Parametric (NP) Confidence Interval

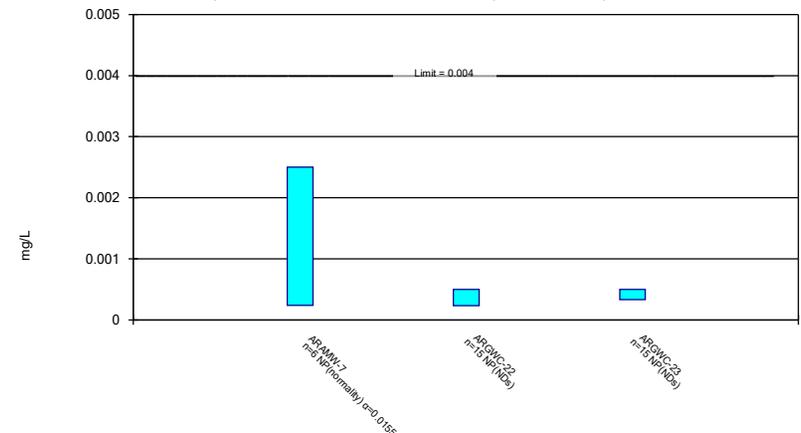
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Barium Analysis Run 10/13/2023 12:04 PM View: Confidence Intervals
Plant Arkwright Client: Southern Company Data: Arkwright No 2

Non-Parametric Confidence Interval

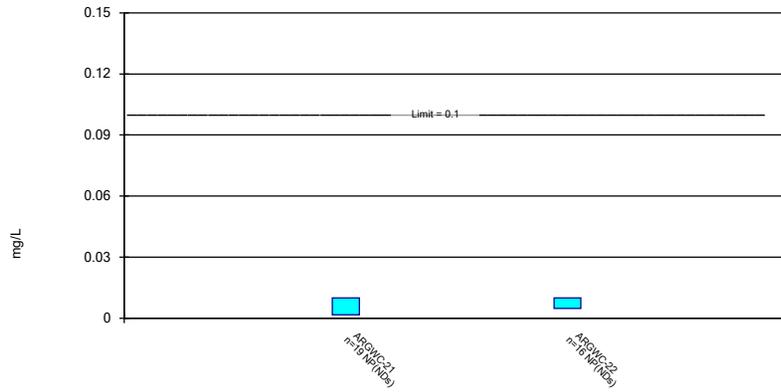
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted.



Constituent: Beryllium Analysis Run 10/13/2023 12:04 PM View: Confidence Intervals
Plant Arkwright Client: Southern Company Data: Arkwright No 2

Non-Parametric Confidence Interval

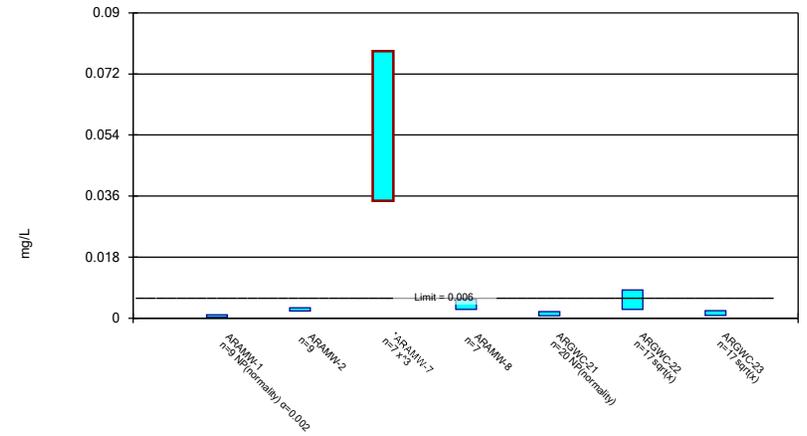
Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Chromium Analysis Run 10/13/2023 12:04 PM View: Confidence Intervals
Plant Arkwright Client: Southern Company Data: Arkwright No 2

Parametric and Non-Parametric (NP) Confidence Interval

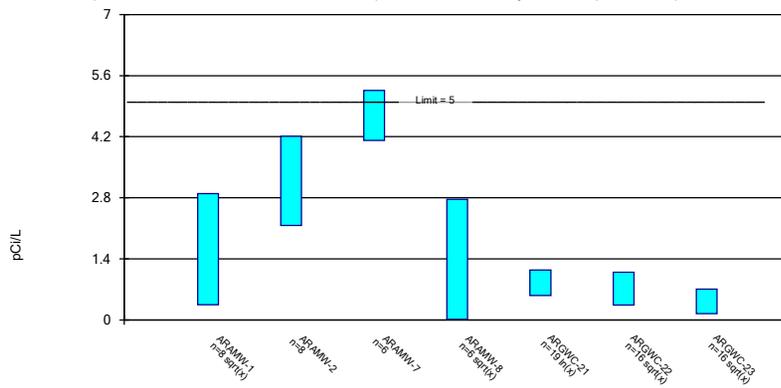
Compliance limit is exceeded.* Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Cobalt Analysis Run 10/13/2023 12:04 PM View: Confidence Intervals
Plant Arkwright Client: Southern Company Data: Arkwright No 2

Parametric Confidence Interval

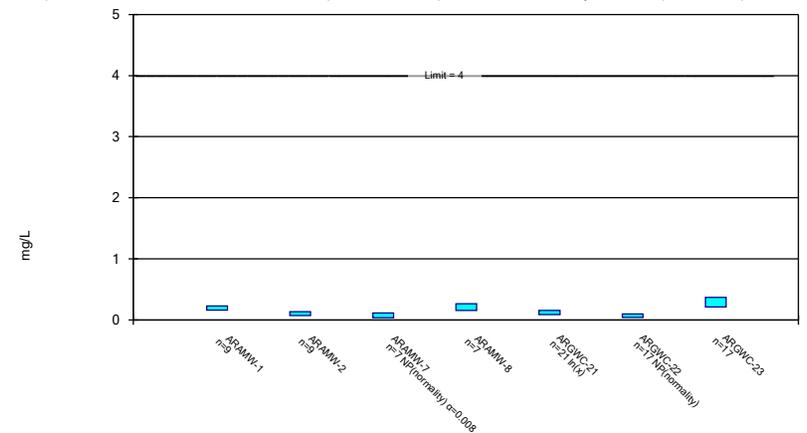
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Combined Radium 226 + 228 Analysis Run 10/13/2023 12:04 PM View: Confidence Intervals
Plant Arkwright Client: Southern Company Data: Arkwright No 2

Parametric and Non-Parametric (NP) Confidence Interval

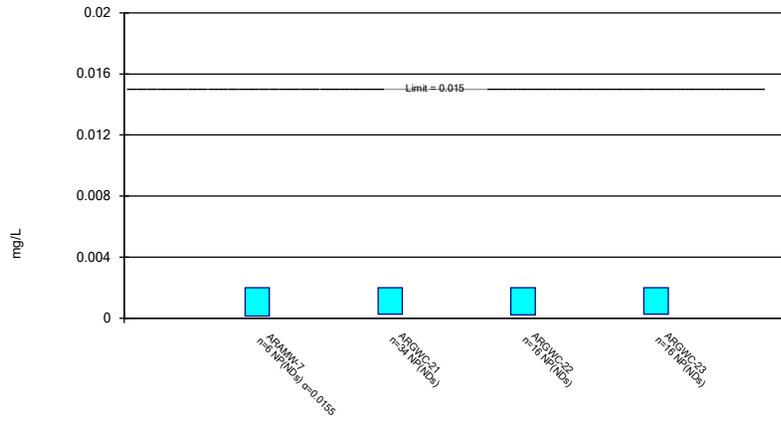
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Fluoride Analysis Run 10/13/2023 12:04 PM View: Confidence Intervals
Plant Arkwright Client: Southern Company Data: Arkwright No 2

Non-Parametric Confidence Interval

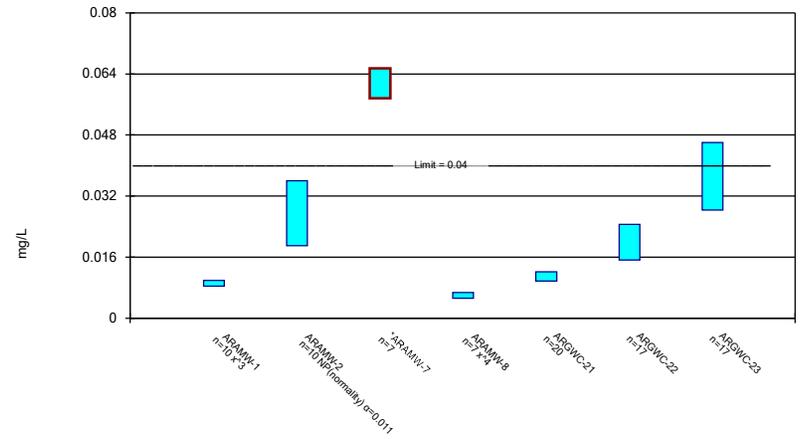
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted.



Constituent: Lead Analysis Run 10/13/2023 12:04 PM View: Confidence Intervals
 Plant Arkwright Client: Southern Company Data: Arkwright No 2

Parametric and Non-Parametric (NP) Confidence Interval

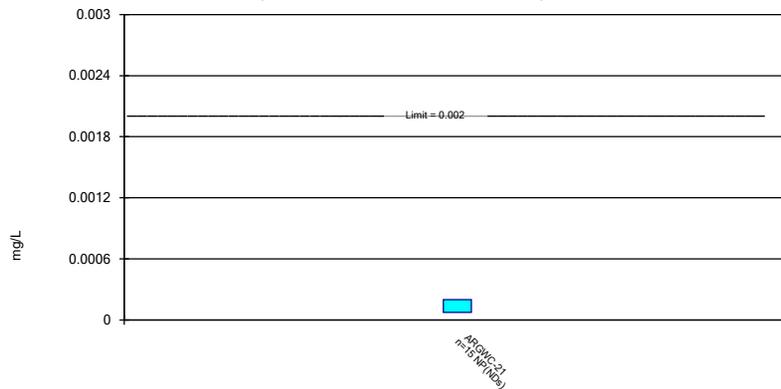
Compliance limit is exceeded.* Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Lithium Analysis Run 10/13/2023 12:04 PM View: Confidence Intervals
 Plant Arkwright Client: Southern Company Data: Arkwright No 2

Non-Parametric Confidence Interval

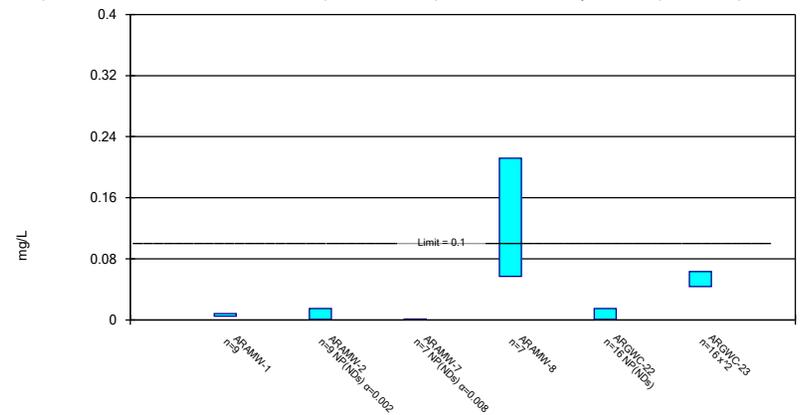
Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Mercury Analysis Run 10/13/2023 12:04 PM View: Confidence Intervals
 Plant Arkwright Client: Southern Company Data: Arkwright No 2

Parametric and Non-Parametric (NP) Confidence Interval

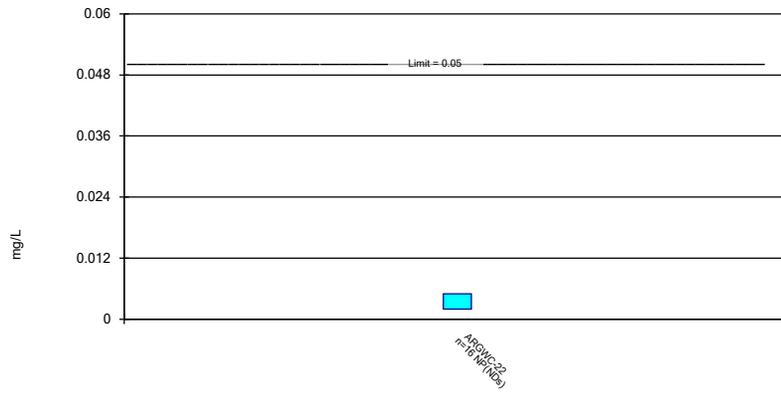
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Molybdenum Analysis Run 10/13/2023 12:04 PM View: Confidence Intervals
 Plant Arkwright Client: Southern Company Data: Arkwright No 2

Non-Parametric Confidence Interval

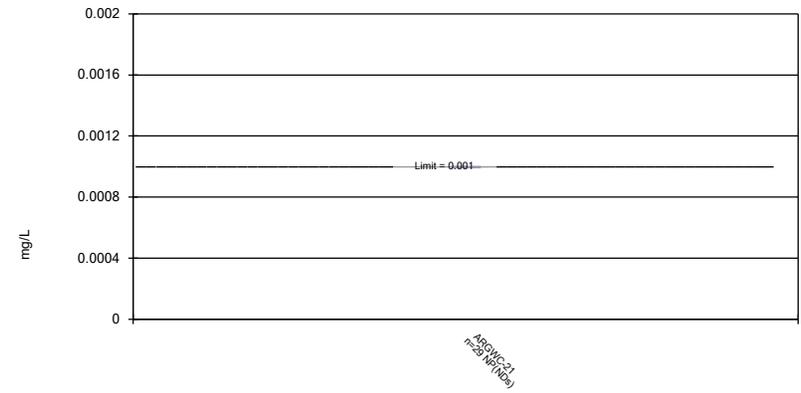
Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Selenium Analysis Run 10/13/2023 12:04 PM View: Confidence Intervals
Plant Arkwright Client: Southern Company Data: Arkwright No 2

Non-Parametric Confidence Interval

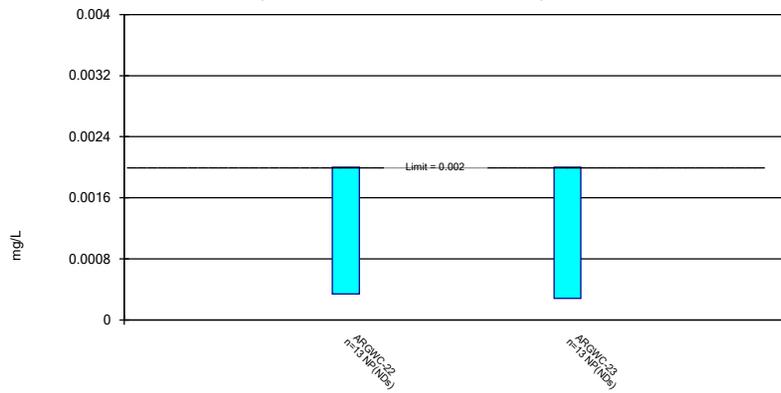
Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Silver Analysis Run 10/13/2023 12:04 PM View: Confidence Intervals
Plant Arkwright Client: Southern Company Data: Arkwright No 2

Non-Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Thallium Analysis Run 10/13/2023 12:04 PM View: Confidence Intervals
Plant Arkwright Client: Southern Company Data: Arkwright No 2

Confidence Interval

Constituent: Antimony (mg/L) Analysis Run 10/13/2023 12:06 PM View: Confidence Intervals
Plant Arkwright Client: Southern Company Data: Arkwright No 2

	ARAMW-8
9/9/2021	<0.003
2/3/2022	<0.003
9/2/2022	<0.003
1/31/2023	<0.003
8/9/2023	0.00134 (J)
Mean	0.002668
Std. Dev.	0.0007424
Upper Lim.	0.003
Lower Lim.	0.00134

Confidence Interval

Constituent: Arsenic (mg/L) Analysis Run 10/13/2023 12:06 PM View: Confidence Intervals
 Plant Arkwright Client: Southern Company Data: Arkwright No 2

	ARAMW-1	ARAMW-2	ARAMW-7	ARAMW-8	ARGWC-21	ARGWC-22	ARGWC-23
5/14/2009					0.0022		
12/5/2009					<0.005		
6/2/2010					<0.005		
11/11/2010					<0.005		
5/17/2011					<0.005		
11/8/2011					<0.005		
5/16/2012					0.002 (J)		
5/14/2013					<0.005		
11/5/2013					<0.005		
6/9/2014					<0.005		
11/18/2014					<0.005		
4/14/2015					<0.005		
10/29/2015					<0.005		
6/23/2016					0.0011 (J)		
8/30/2016					0.002		
10/26/2016					0.0019 (J)		
1/25/2017					0.0017		
4/10/2017					0.002		
6/19/2017					0.0026		
10/24/2017					0.0021		
4/10/2018					0.0022		
10/16/2018					0.0021		
3/27/2019					0.0011 (J)		
8/20/2019					0.002		
10/8/2019					0.0012 (J)		
12/16/2019						0.00066 (J)	0.00075 (J)
1/14/2020						0.00038 (J)	0.00042 (J)
2/11/2020						0.0004 (J)	<0.005
3/9/2020						<0.005	<0.005
4/7/2020					0.00054 (J)	<0.005	<0.005
5/27/2020						<0.005	<0.005
7/15/2020						<0.005	<0.005
8/19/2020						<0.005	
8/20/2020	<0.005	0.084					<0.005
8/21/2020					<0.005		
9/22/2020						<0.005	<0.005
9/30/2020	<0.005					<0.005	
10/1/2020		0.0085			<0.005		<0.005
2/10/2021	<0.005				<0.005	<0.005	<0.005
2/11/2021		0.015	0.00075 (J)	0.00046 (J)			
9/8/2021					<0.005		
9/9/2021	<0.005			<0.005			<0.005
9/10/2021		0.044	<0.005			<0.005	
2/1/2022					<0.005		
2/2/2022			0.00035 (J)			<0.005	
2/3/2022	<0.005	0.0092		0.00031 (J)			0.0003 (J)
9/1/2022					0.00207 (J)		
9/2/2022	0.00233 (J)	0.0158		0.00206 (J)			
9/6/2022						<0.005	<0.005
9/7/2022			<0.005				
1/31/2023	<0.005	0.00363 (J)	0.00286 (J)	<0.005	<0.005	0.00221 (J)	<0.005
8/8/2023	<0.005	0.012	<0.005			<0.005	<0.005

Confidence Interval

Constituent: Arsenic (mg/L) Analysis Run 10/13/2023 12:06 PM View: Confidence Intervals
Plant Arkwright Client: Southern Company Data: Arkwright No 2

	ARAMW-1	ARAMW-2	ARAMW-7	ARAMW-8	ARGWC-21	ARGWC-22	ARGWC-23
8/9/2023				<0.005	<0.005		
Mean	0.004666	0.02402	0.00316	0.002972	0.003494	0.003978	0.004154
Std. Dev.	0.000944	0.02717	0.002189	0.002305	0.001661	0.001869	0.00182
Upper Lim.	0.005	0.0457	0.005	0.005	0.005	0.005	0.005
Lower Lim.	0.00233	0.004386	0.00035	0.00031	0.00207	0.00066	0.00075

Confidence Interval

Constituent: Barium (mg/L) Analysis Run 10/13/2023 12:06 PM View: Confidence Intervals
 Plant Arkwright Client: Southern Company Data: Arkwright No 2

	ARAMW-1	ARAMW-2	ARAMW-7	ARAMW-8	ARGWC-21	ARGWC-22	ARGWC-23
5/14/2009					0.034		
12/5/2009					0.037		
6/2/2010					0.037		
11/11/2010					0.036		
5/17/2011					0.032		
11/8/2011					0.042		
5/16/2012					0.0451		
5/14/2013					0.043		
11/5/2013					0.051		
6/9/2014					0.045		
11/18/2014					0.052		
4/14/2015					0.047		
10/29/2015					0.053		
6/23/2016					0.13		
8/30/2016					0.11		
10/26/2016					0.122		
1/25/2017					0.12		
4/10/2017					0.11		
6/19/2017					0.13		
10/24/2017					0.12		
4/10/2018					0.12		
10/16/2018					0.1		
3/27/2019					0.091		
8/20/2019					0.1		
10/8/2019					0.096		
12/16/2019						0.076	0.096
1/14/2020						0.071	0.075
2/11/2020						0.046	0.046
3/9/2020						0.039	0.14
4/7/2020					0.05	0.04	0.16
5/27/2020						0.054	0.18
7/15/2020						0.043	0.16
8/19/2020						0.046	
8/20/2020	0.055	0.14					0.16
8/21/2020					0.054		
9/22/2020						0.038	0.16
9/30/2020	0.052					0.033	
10/1/2020		0.075			0.051		0.17
2/10/2021	0.046				0.044	0.032	0.13
2/11/2021		0.09	0.037	0.092			
9/8/2021					0.045		
9/9/2021	0.051			0.094			0.12
9/10/2021		0.13	0.029			0.026	
2/1/2022					0.045		
2/2/2022			0.029			0.025	
2/3/2022	0.046	0.078		0.096			0.1
9/1/2022					0.0425		
9/2/2022	0.0445	0.0792		0.116			
9/6/2022						0.0226	0.0939
9/7/2022			0.0263				
1/31/2023	0.0427	0.067	0.0243	0.11	0.0414	0.0237	0.0872
8/8/2023	0.051	0.0753	0.0244			0.0255	0.0936

Confidence Interval

Constituent: Barium (mg/L) Analysis Run 10/13/2023 12:06 PM View: Confidence Intervals
Plant Arkwright Client: Southern Company Data: Arkwright No 2

	ARAMW-1	ARAMW-2	ARAMW-7	ARAMW-8	ARGWC-21	ARGWC-22	ARGWC-23
8/9/2023				0.122	0.0474		
Mean	0.04853	0.09181	0.02833	0.105	0.06834	0.04005	0.1232
Std. Dev.	0.004295	0.02753	0.00473	0.0127	0.03428	0.01602	0.0398
Upper Lim.	0.05308	0.14	0.03483	0.1224	0.1	0.04906	0.1491
Lower Lim.	0.04397	0.067	0.02184	0.08756	0.044	0.02955	0.09733

Confidence Interval

Constituent: Beryllium (mg/L) Analysis Run 10/13/2023 12:06 PM View: Confidence Intervals
Plant Arkwright Client: Southern Company Data: Arkwright No 2

	ARAMW-7	ARGWC-22	ARGWC-23
12/16/2019		0.0005 (J)	0.00033 (J)
1/14/2020		0.00036 (J)	<0.0005
2/11/2020		0.00023	<0.0005
3/9/2020		0.00019	<0.0005
5/27/2020		0.00018 (J)	<0.0005
7/15/2020		<0.0005	<0.0005
8/19/2020		<0.0005	
8/20/2020			<0.0005
9/22/2020		<0.0005	<0.0005
9/30/2020		<0.0005	
10/1/2020			<0.0005
2/10/2021		<0.0005	<0.0005
2/11/2021	<0.0025		
9/9/2021			<0.0005
9/10/2021	<0.0025	<0.0005	
2/2/2022	<0.0025	<0.0005	
2/3/2022			<0.0005
9/6/2022		<0.0005	<0.0005
9/7/2022	0.000236 (J)		
1/31/2023	0.000296 (J)	<0.0005	<0.0005
8/8/2023	0.000272 (J)	<0.0005	<0.0005
Mean	0.001384	0.0004307	0.0004887
Std. Dev.	0.001223	0.000125	4.389E-05
Upper Lim.	0.0025	0.0005	0.0005
Lower Lim.	0.000236	0.00023	0.00033

Confidence Interval

Constituent: Chromium (mg/L) Analysis Run 10/13/2023 12:06 PM View: Confidence Intervals
Plant Arkwright Client: Southern Company Data: Arkwright No 2

	ARGWC-21	ARGWC-22
8/30/2016	<0.01	
10/26/2016	<0.01	
1/25/2017	<0.01	
4/10/2017	<0.01	
6/19/2017	<0.01	
10/24/2017	<0.01	
4/10/2018	<0.01	
10/16/2018	<0.01	
8/20/2019	0.0017 (J)	
10/8/2019	<0.01	
12/16/2019		<0.01
1/14/2020		<0.01
2/11/2020		0.0048
3/9/2020		<0.01
4/7/2020	<0.01	<0.01
5/27/2020		<0.01
7/15/2020		<0.01
8/19/2020		<0.01
8/21/2020	<0.01	
9/22/2020		<0.01
9/30/2020		<0.01
10/1/2020	<0.01	
2/10/2021	<0.01	<0.01
9/8/2021	<0.01	
9/10/2021		<0.01
2/1/2022	<0.01	
2/2/2022		<0.01
9/1/2022	<0.01	
9/6/2022		<0.01
1/31/2023	<0.01	<0.01
8/8/2023		<0.01
8/9/2023	<0.01	
Mean	0.009563	0.009675
Std. Dev.	0.001904	0.0013
Upper Lim.	0.01	0.01
Lower Lim.	0.0017	0.0048

Confidence Interval

Constituent: Cobalt (mg/L) Analysis Run 10/13/2023 12:06 PM View: Confidence Intervals
 Plant Arkwright Client: Southern Company Data: Arkwright No 2

	ARAMW-1	ARAMW-2	ARAMW-7	ARAMW-8	ARGWC-21	ARGWC-22	ARGWC-23
8/30/2016					0.0018 (J)		
10/26/2016					0.0018 (J)		
1/25/2017					0.0017 (J)		
4/10/2017					0.0016 (J)		
6/19/2017					0.0021 (J)		
10/24/2017					0.0019 (J)		
4/10/2018					0.0019 (J)		
10/16/2018					0.0019 (J)		
8/20/2019					0.0023		
10/8/2019					0.0018		
12/16/2019						0.018	0.0023
1/14/2020						0.0072	0.0031
2/11/2020						0.013	0.00056
3/9/2020						0.015	0.00061 (J)
4/7/2020					0.00087	0.009	0.0016
5/27/2020						0.0059	0.0017 (J)
6/24/2020	0.00097 (J)	0.0027				0.0047	
6/25/2020					0.00097 (J)		0.0014 (J)
7/15/2020						0.0027	0.0017 (J)
8/19/2020						0.0032	
8/20/2020	0.001 (J)	0.0022 (J)					0.0023 (J)
8/21/2020					0.00066 (J)		
9/22/2020						0.0085	0.0036
9/30/2020	0.001 (J)					0.0055	
10/1/2020		0.0036			0.00082 (J)		0.0052
11/30/2020			0.028				
12/1/2020				0.0054			
2/10/2021	0.00082 (J)				0.00063 (J)	0.0015 (J)	0.00072 (J)
2/11/2021		0.0028	0.017	0.0061			
9/8/2021					0.0007 (J)		
9/9/2021	0.00072 (J)			0.0046			0.0009 (J)
9/10/2021		0.0022 (J)	0.075			0.0015 (J)	
2/1/2022					0.0007 (J)		
2/2/2022			0.077			0.001 (J)	
2/3/2022	0.00045 (J)	0.0028		0.0028			0.00063 (J)
9/1/2022					0.00069 (J)		
9/2/2022	0.000449 (J)	0.002		0.00292			
9/6/2022						0.00198	0.000588 (J)
9/7/2022			0.0737				
1/31/2023	0.000399 (J)	0.00282	0.0687	0.00321	0.000659 (J)	0.00154	0.000742 (J)
8/8/2023	0.00035 (J)	0.00223	0.0605			0.00184	0.00044 (J)
8/9/2023				0.00364	0.000813 (J)		
Mean	0.0006842	0.002594	0.05713	0.004096	0.001316	0.006004	0.001652
Std. Dev.	0.0002748	0.0004943	0.02447	0.001293	0.0005999	0.005185	0.001313
Upper Lim.	0.001	0.003072	0.07871	0.005631	0.0019	0.008291	0.002238
Lower Lim.	0.00035	0.002117	0.03458	0.00256	0.0007	0.002588	0.0008255

Confidence Interval

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 10/13/2023 12:06 PM View: Confidence Intervals

Plant Arkwright Client: Southern Company Data: Arkwright No 2

	ARAMW-1	ARAMW-2	ARAMW-7	ARAMW-8	ARGWC-21	ARGWC-22	ARGWC-23
8/30/2016					0.832		
10/26/2016					1.27		
1/25/2017					0.549		
4/10/2017					0.556		
6/19/2017					0.976		
10/24/2017					0.504		
4/10/2018					0.621		
10/16/2018					0.796		
8/20/2019					0.978		
10/8/2019					0.588		
12/16/2019						0.229 (U)	0.166 (U)
1/14/2020						0.783	0.869
2/11/2020						0.229 (U)	0.0291 (U)
3/9/2020						0.365	0.626
4/7/2020					0.433 (U)	0.567	0.296 (U)
5/27/2020						0.143 (U)	0.192 (U)
7/15/2020						0.97	0.279 (U)
8/19/2020						0.587 (U)	
8/20/2020	0.527	4.13					0.242 (U)
8/21/2020					0.472		
9/22/2020						0.884	0.0177 (U)
9/30/2020	0.249 (U)					0.602	
10/1/2020		2.86			0.496 (U)		0.749
2/10/2021	0.949				0.625	0.233 (U)	0.0408 (U)
2/11/2021		2.09	5.1	0.285 (U)			
9/8/2021					1.12		
9/9/2021	0.972			0.16 (U)			0.498
9/10/2021		3.4	4.23			0.713	
2/1/2022					0.331 (U)		
2/2/2022			4.48			0.195 (U)	
2/3/2022	1.04	2.69		0.51			0.248 (U)
9/1/2022					1.57		
9/2/2022	3.41	4.18		1.89			
9/6/2022						2.58	2.36
9/7/2022			4.29				
1/31/2023	4.1	4.3	5.21	3.2	3.25	2.2	0.859 (U)
8/8/2023	1.16 (U)	1.86	4.83			1.22 (U)	0.363 (U)
8/9/2023				0.193 (U)	2.69		
Mean	1.551	3.189	4.69	1.04	0.9819	0.7813	0.4897
Std. Dev.	1.405	0.962	0.418	1.243	0.7745	0.7044	0.5722
Upper Lim.	2.894	4.208	5.264	2.764	1.143	1.094	0.706
Lower Lim.	0.3446	2.169	4.116	0.007706	0.5604	0.3362	0.1455

Confidence Interval

Constituent: Fluoride (mg/L) Analysis Run 10/13/2023 12:06 PM View: Confidence Intervals
 Plant Arkwright Client: Southern Company Data: Arkwright No 2

	ARAMW-1	ARAMW-2	ARAMW-7	ARAMW-8	ARGWC-21	ARGWC-22	ARGWC-23
8/30/2016					0.099 (J)		
10/26/2016					0.57		
1/25/2017					0.12 (J)		
4/10/2017					0.11 (J)		
6/19/2017					0.11 (J)		
10/24/2017					0.1 (J)		
4/10/2018					0.094 (J)		
10/16/2018					0.17 (J)		
3/27/2019					0.05 (J)		
8/20/2019					0.098 (J)		
10/8/2019					0.065 (J)		
12/16/2019						0.026 (J)	0.18 (J)
1/14/2020						<0.2	0.21
2/11/2020						0.056	0.13
3/9/2020						0.064 (J)	0.089 (J)
4/7/2020					0.12	0.068 (J)	0.18
5/27/2020						0.06 (J)	0.25
6/24/2020	0.21	0.11				0.048 (J)	
6/25/2020					0.041 (J)		0.25
7/15/2020						0.04 (J)	0.28
8/19/2020						<0.2	
8/20/2020	0.23	<0.1					0.19
8/21/2020					0.084 (J)		
9/22/2020						0.049 (J)	0.33
9/30/2020	0.2					0.045 (J)	
10/1/2020		0.098 (J)			0.098 (J)		0.32
11/30/2020			0.044 (J)				
12/1/2020				0.14			
2/10/2021	0.21				0.14	0.055 (J)	0.41
2/11/2021		0.12	0.054 (J)	0.24			
9/8/2021					0.16		
9/9/2021	0.21			0.19			0.48
9/10/2021		0.13	0.032 (J)			0.035 (J)	
2/1/2022					0.11		
2/2/2022			<0.1			0.04 (J)	
2/3/2022	0.16	0.095 (J)		0.17			0.4
9/1/2022					0.161		
9/2/2022	0.18	0.146		0.206			
9/6/2022						0.056 (J)	0.362
9/7/2022			<0.1				
1/31/2023	0.22 (J)	0.13 (J)	0.11 (J)	0.263 (J)	0.175 (J)	0.0979 (J)	0.551 (J)
8/8/2023	0.118	0.0571 (J)	<0.1			<0.2	0.283
8/9/2023				0.261	0.203		
Mean	0.1931	0.104	0.07714	0.21	0.137	0.07882	0.2879
Std. Dev.	0.03517	0.03286	0.03245	0.04695	0.1074	0.05991	0.1246
Upper Lim.	0.2271	0.1357	0.11	0.2658	0.1565	0.0979	0.366
Lower Lim.	0.1592	0.07228	0.032	0.1542	0.08641	0.04	0.2099

Confidence Interval

Constituent: Lead (mg/L) Analysis Run 10/13/2023 12:06 PM View: Confidence Intervals
 Plant Arkwright Client: Southern Company Data: Arkwright No 2

	ARAMW-7	ARGWC-21	ARGWC-22	ARGWC-23
5/14/2009		<0.002		
12/5/2009		<0.002		
6/2/2010		<0.002		
11/11/2010		<0.002		
5/17/2011		<0.002		
11/8/2011		<0.002		
5/16/2012		<0.002		
5/14/2013		<0.002		
11/5/2013		<0.002		
6/9/2014		<0.002		
11/18/2014		<0.002		
4/14/2015		<0.002		
10/29/2015		<0.002		
6/23/2016		<0.002		
8/30/2016		<0.002		
10/26/2016		<0.002		
1/25/2017		<0.002		
4/10/2017		<0.002		
6/19/2017		<0.002		
10/24/2017		<0.002		
4/10/2018		<0.002		
10/16/2018		<0.002		
3/27/2019		<0.002		
8/20/2019		<0.002		
10/8/2019		0.00015 (J)		
12/16/2019			<0.002	<0.002
1/14/2020			0.00022 (J)	0.00018 (J)
2/11/2020			<0.002	0.00026 (J)
3/9/2020			<0.002	<0.002
4/7/2020		0.00026 (J)	0.00014 (J)	<0.002
5/27/2020			<0.002	<0.002
7/15/2020			<0.002	<0.002
8/19/2020			<0.002	
8/20/2020				<0.002
8/21/2020		<0.002		
9/22/2020			<0.002	<0.002
9/30/2020			<0.002	
10/1/2020		<0.002		<0.002
2/10/2021		<0.002	<0.002	<0.002
2/11/2021	0.00013 (J)			
9/8/2021		<0.002		
9/9/2021				<0.002
9/10/2021	<0.002		<0.002	
2/1/2022		<0.002		
2/2/2022	<0.002		<0.002	
2/3/2022				<0.002
9/1/2022		<0.002		
9/6/2022			<0.002	<0.002
9/7/2022	<0.002			
1/31/2023	<0.002	<0.002	<0.002	<0.002
8/8/2023	<0.002		<0.002	<0.002
8/9/2023		<0.002		

Confidence Interval

Constituent: Lead (mg/L) Analysis Run 10/13/2023 12:06 PM View: Confidence Intervals
Plant Arkwright Client: Southern Company Data: Arkwright No 2

	ARAMW-7	ARGWC-21	ARGWC-22	ARGWC-23
Mean	0.001688	0.001894	0.001773	0.001778
Std. Dev.	0.0007634	0.0004289	0.0006218	0.0006082
Upper Lim.	0.002	0.002	0.002	0.002
Lower Lim.	0.00013	0.00026	0.00022	0.00026

Confidence Interval

Constituent: Lithium (mg/L) Analysis Run 10/13/2023 12:06 PM View: Confidence Intervals
 Plant Arkwright Client: Southern Company Data: Arkwright No 2

	ARAMW-1	ARAMW-2	ARAMW-7	ARAMW-8	ARGWC-21	ARGWC-22	ARGWC-23
8/30/2016					0.0092		
10/26/2016					0.0071 (J)		
1/25/2017					0.0087		
4/10/2017					0.0074		
6/19/2017					0.0079		
10/24/2017					0.0097		
4/10/2018					0.012		
10/16/2018					0.01		
8/20/2019					0.0098		
10/8/2019					0.015		
12/16/2019						0.027	0.02
1/14/2020	0.009	0.086				0.034	0.022
2/11/2020						0.01	0.0078
3/9/2020						0.0071	0.013
4/7/2020					0.011	0.012	0.032
5/27/2020						0.017	0.037
6/24/2020	0.0084	0.018				0.023	
6/25/2020					0.013		0.043
7/15/2020						0.021	0.042
8/19/2020						0.026	
8/20/2020	0.0066	0.036					0.036
8/21/2020					0.013		
9/22/2020						0.014	0.039
9/30/2020	0.0091					0.014	
10/1/2020		0.019			0.012		0.04
11/30/2020			0.061				
12/1/2020				0.0044 (J)			
2/10/2021	0.0097				0.012	0.022	0.044
2/11/2021		0.021	0.061	0.0055			
9/8/2021					0.012		
9/9/2021	0.0095			0.0062			0.045
9/10/2021		0.025	0.06			0.021	
2/1/2022					0.012		
2/2/2022			0.06			0.02	
2/3/2022	0.0099	0.021		0.0063			0.052
9/1/2022					0.0116		
9/2/2022	0.0097 (J)	0.0232		0.00654 (J)			
9/6/2022						0.0136	0.0578
9/7/2022			0.0634				
1/31/2023	0.0099 (J)	0.0202	0.068	0.00659 (J)	0.0124	0.0284	0.0499
8/8/2023	0.00909 (J)	0.0193	0.0577			0.028	0.0517
8/9/2023				0.00637 (J)	0.0131		
Mean	0.009089	0.02887	0.06159	0.005986	0.01095	0.01989	0.03719
Std. Dev.	0.0009949	0.02073	0.003298	0.0007869	0.002129	0.007428	0.01413
Upper Lim.	0.009867	0.036	0.0655	0.006719	0.01215	0.02454	0.04604
Lower Lim.	0.008372	0.019	0.05767	0.005207	0.009736	0.01523	0.02833

Confidence Interval

Constituent: Mercury (mg/L) Analysis Run 10/13/2023 12:06 PM View: Confidence Intervals
Plant Arkwright Client: Southern Company Data: Arkwright No 2

	ARGWC-21
8/30/2016	<0.0002
10/26/2016	<0.0002
1/25/2017	7.3E-05 (J)
4/10/2017	<0.0002
6/19/2017	<0.0002
10/24/2017	<0.0002
4/10/2018	<0.0002
10/16/2018	<0.0002
8/20/2019	<0.0002
8/21/2020	<0.0002
9/8/2021	<0.0002
2/1/2022	<0.0002
9/1/2022	<0.0002
1/31/2023	<0.0002
8/9/2023	<0.0002
Mean	0.0001915
Std. Dev.	3.279E-05
Upper Lim.	0.0002
Lower Lim.	7.3E-05

Confidence Interval

Constituent: Molybdenum (mg/L) Analysis Run 10/13/2023 12:06 PM View: Confidence Intervals

Plant Arkwright Client: Southern Company Data: Arkwright No 2

	ARAMW-1	ARAMW-2	ARAMW-7	ARAMW-8	ARGWC-22	ARGWC-23
12/16/2019					0.0018 (J)	0.025
1/14/2020					0.0012 (J)	0.032
2/11/2020					0.00093	0.021
3/9/2020					0.00067	0.013 (J)
5/27/2020					<0.015	0.048
6/24/2020	0.0051 (J)	<0.015			<0.015	
6/25/2020						0.055
7/15/2020					<0.015	0.055
8/19/2020					<0.015	
8/20/2020	0.0076 (J)	0.0013 (J)				0.061
9/22/2020					<0.015	0.053
9/30/2020	0.0054 (J)				<0.015	
10/1/2020		<0.015				0.064
11/30/2020			0.0012 (J)			
12/1/2020				0.056		
2/10/2021	0.0043 (J)				<0.015	0.063
2/11/2021		<0.015	<0.001	0.038		
9/9/2021	0.0059 (J)			0.12		0.071
9/10/2021		<0.015	<0.001		<0.015	
2/2/2022			<0.001		<0.015	
2/3/2022	0.0049 (J)	<0.015		0.16		0.065
9/2/2022	0.00785	0.000603 (J)		0.175		
9/6/2022					0.000203 (J)	0.067
9/7/2022			0.000379 (J)			
1/31/2023	0.00974	0.000491 (J)	<0.001	0.188	0.000496 (J)	0.0671
8/8/2023	0.00667	0.0011	<0.001		0.000514 (J)	0.0618
8/9/2023				0.203		
Mean	0.006384	0.008722	0.0009399	0.1343	0.008801	0.05137
Std. Dev.	0.001745	0.007449	0.0002583	0.06523	0.007268	0.01838
Upper Lim.	0.00807	0.015	0.0012	0.2118	0.015	0.06318
Lower Lim.	0.004699	0.000491	0.000379	0.0568	0.000514	0.0438

Confidence Interval

Constituent: Selenium (mg/L) Analysis Run 10/13/2023 12:06 PM View: Confidence Intervals
Plant Arkwright Client: Southern Company Data: Arkwright No 2

	ARGWC-22
12/16/2019	<0.005
1/14/2020	<0.005
2/11/2020	<0.005
3/9/2020	<0.005
4/7/2020	<0.005
5/27/2020	<0.005
7/15/2020	<0.005
8/19/2020	<0.005
9/22/2020	<0.005
9/30/2020	<0.005
2/10/2021	<0.005
9/10/2021	0.002 (J)
2/2/2022	<0.005
9/6/2022	<0.005
1/31/2023	<0.005
8/8/2023	<0.005
Mean	0.004812
Std. Dev.	0.00075
Upper Lim.	0.005
Lower Lim.	0.002

Confidence Interval

Constituent: Silver (mg/L) Analysis Run 10/13/2023 12:06 PM View: Confidence Intervals
Plant Arkwright Client: Southern Company Data: Arkwright No 2

	ARGWC-21
5/14/2009	<0.001
12/5/2009	0.001
6/2/2010	<0.001
11/11/2010	<0.001
5/17/2011	<0.001
11/8/2011	<0.001
5/16/2012	<0.001
5/14/2013	<0.001
11/5/2013	<0.001
6/9/2014	<0.001
11/18/2014	<0.001
4/14/2015	<0.001
10/29/2015	<0.001
6/23/2016	<0.001
10/26/2016	<0.001
4/10/2017	<0.001
10/24/2017	<0.001
4/10/2018	<0.001
10/16/2018	<0.001
3/27/2019	<0.001
10/8/2019	0.00043 (J)
4/7/2020	<0.001
10/1/2020	<0.001
2/10/2021	<0.001
9/8/2021	<0.001
2/1/2022	<0.001
9/1/2022	<0.001
1/31/2023	<0.001
8/9/2023	<0.001
Mean	0.0009803
Std. Dev.	0.0001058
Upper Lim.	0.001
Lower Lim.	0.001

Confidence Interval

Constituent: Thallium (mg/L) Analysis Run 10/13/2023 12:06 PM View: Confidence Intervals
Plant Arkwright Client: Southern Company Data: Arkwright No 2

	ARGWC-22	ARGWC-23
12/16/2019	0.00078 (J)	<0.002
1/14/2020	0.00027 (J)	<0.002
2/11/2020	0.00034	0.00028 (J)
3/9/2020	0.00035 (J)	0.00026 (J)
5/27/2020	<0.002	0.00026 (J)
7/15/2020	<0.002	<0.002
8/19/2020	<0.002	
8/20/2020		<0.002
9/22/2020	<0.002	<0.002
9/9/2021		<0.002
9/10/2021	<0.002	
2/2/2022	<0.002	
2/3/2022		<0.002
9/6/2022	<0.002	<0.002
1/31/2023	<0.002	<0.002
8/8/2023	<0.002	<0.002
Mean	0.001518	0.0016
Std. Dev.	0.0007608	0.0007601
Upper Lim.	0.002	0.002
Lower Lim.	0.00034	0.00028

FIGURE J.

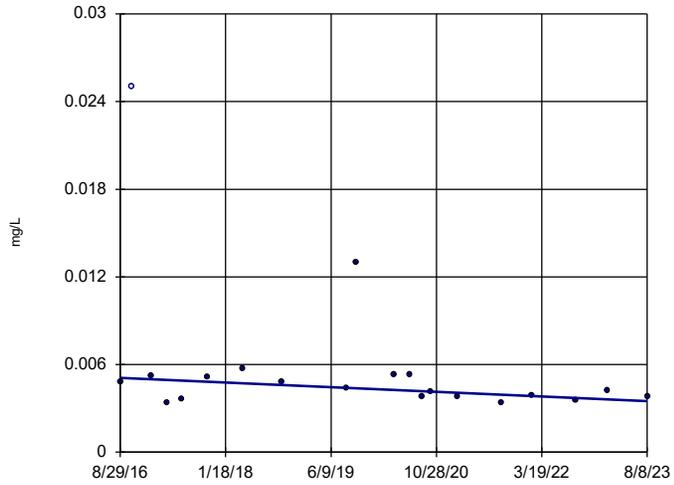
Trend Tests - Confidence Interval Exceedances - All Results (No Significant)

Plant Arkwright Client: Southern Company Data: Arkwright No 2 Printed 10/13/2023, 12:09 PM

<u>Constituent</u>	<u>Well</u>	<u>Slope</u>	<u>Calc.</u>	<u>Critical</u>	<u>Sig.</u>	<u>N</u>	<u>%NDs</u>	<u>Normality</u>	<u>Xform</u>	<u>Alpha</u>	<u>Method</u>
Cobalt (mg/L)	ARAMW-7	0.005034	1	15	No	7	0	n/a	n/a	0.05	NP
Cobalt (mg/L)	ARGWA-19 (bg)	0	-3	-62	No	20	80	n/a	n/a	0.05	NP
Cobalt (mg/L)	ARGWA-20 (bg)	0	-42	-62	No	20	50	n/a	n/a	0.05	NP
Lithium (mg/L)	ARAMW-7	0	-1	-15	No	7	0	n/a	n/a	0.05	NP
Lithium (mg/L)	ARGWA-19 (bg)	-0.0002284	-56	-62	No	20	5	n/a	n/a	0.05	NP
Lithium (mg/L)	ARGWA-20 (bg)	0	-2	-62	No	20	80	n/a	n/a	0.05	NP

Sen's Slope Estimator

ARGWA-19 (bg)

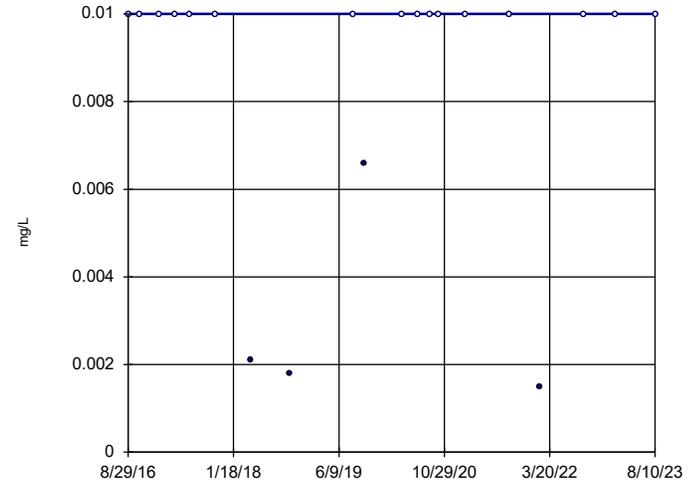


n = 20
Slope = -0.0002284
units per year.
Mann-Kendall
statistic = -56
critical = -62
Trend not sig-
nificant at 95%
confidence level
($\alpha = 0.025$ per
tail).

Constituent: Lithium Analysis Run 10/13/2023 12:07 PM View: Trend Tests - App IV
Plant Arkwright Client: Southern Company Data: Arkwright No 2

Sen's Slope Estimator

ARGWA-20 (bg)



n = 20
Slope = 0
units per year.
Mann-Kendall
statistic = -2
critical = -62
Trend not sig-
nificant at 95%
confidence level
($\alpha = 0.025$ per
tail).

Constituent: Lithium Analysis Run 10/13/2023 12:07 PM View: Trend Tests - App IV
Plant Arkwright Client: Southern Company Data: Arkwright No 2