2024 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT

Plant Arkwright
Ash Pond 2 Dry Ash Stockpile
Macon, Georgia

July 31, 2024

Prepared for:

Georgia Power

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

CERTIFICATION STATEMENT

This *2024 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 L. Kolbe

GEORGIA REGISTERED No. PE034643 PROFESSIONAL ENGINEER JENNIFER L. KOLBE

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

7/31/2024
Date

Katie Ross

KATIE T. ROSS GEORGIA REGISTERED PROFESSIONAL GEOLOGIST No. 1776

Katie Ross, P.G.
Senior Principal

7/31/2024
Date

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Executive Summary

This summary of the *2024 Annual Groundwater Monitoring and Corrective Action Report* provides the status of the groundwater monitoring and corrective action program from July 2023 through June 2024 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 6 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.



Plant Arkwright Ash Pond 2 Dry Ash Stockpile

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 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 2024 annual reporting period, AP-2 DAS remained in assessment monitoring as corrective measures were evaluated. A Draft Remedy Selection Report, which summarizes the evaluation and proposed selection of a corrective measure, or measures, was submitted under separate cover to GA EPD on February 28, 2024, in lieu of the Semi-annual Remedy Selection and Design Progress Report.

During the 2024 annual reporting period, Stantec conducted two groundwater sampling events in August 2023 and January 2024. Samples were analyzed for the full suites of Appendix III[1] and Appendix IV[2] constituents listed in Title 40, Code of Federal Regulations Part 257 (CCR Rule) and the GA EPD Appendix I constituent silver. Per the CCR Rule, groundwater results for the August 2023 and January 2024 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 SSLs were identified in well, ARAMW-7 and an SSL of lithium was identified in ARGWC-23, 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
Appendix III Constituents	**January 2024**
Boron	ARGWC-21, ARGWC-22, ARGWC-23
Calcium	ARGWC-21, ARGWC-22, ARGWC-23
Fluoride	ARGWC-21, ARGWC-23
pH	ARGWC-23
Sulfate	ARGWC-21, ARGWC-22, ARGWC-23
TDS	ARGWC-21, ARGWC-22, ARGWC-23
Appendix IV Constituents	**January 2024**
Cobalt	ARAMW-7
Lithium	ARAMW-7, ARGWC-23

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 June 2024, 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.

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

Acronyms / Abbreviations

40 CFR	Title 40 Code of Federal Regulations
ACM	Assessment of Corrective Measures
AP-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
NAVD88	North American Vertical Datum of 1988
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
Unified Guidance	Statistical Analysis of Groundwater Data at RCRA Facilities, Unified Guidance, March 2009
UPL	Upper Prediction Limit
US EPA	United States Environmental Protection Agency
UTL	Upper Tolerance Limit

1.0 Introduction

In accordance with the Georgia Environmental Protection Division (GA EPD) Rules of Solid Waste Management 391-3-4-.10(6)(a)-(c) and 391-3-4-.14, this *2024 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 annual report documents the activities completed between July 2023 and June 2024. Two semi-annual assessment monitoring events were conducted during this reporting period in August 2023 and January 2024.

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 events, cobalt and lithium show SSLs at well ARAMW-7 and lithium is an SSL at ARGWC-23 at AP-2 DAS. A Draft Remedy Section Report was submitted to GA EPD on February 28, 2024, proposing in-situ injections with monitored natural attenuation as a remedy to address the cobalt and lithium SSLs at ARAMW-7.

Well ARAMW-7 is screened between shallow well ARGWC-22 and deep well ARAMW-9. Both ARGWC-22 and ARAMW-9 do not show an SSL for cobalt or lithium establishing vertical delineation of the SSLs at ARAMW-7.

Vertical delineation for lithium in ARGWC-23 is completed by the adjacent deep well ARAMW-8, which does not show an SSL for lithium.

The cobalt and lithium SSLs at AP-2 DAS are horizontally delineated by downgradient surface water samples with both constituents being below analytical laboratory method detection limits, which are well below the Groundwater Protection Standard (GWPS).

1.1 Site Description and Background

Plant Arkwright is located in Bibb County, Georgia, approximately 6 miles northwest of the city of Macon (Figure 1). The physical address of the plant is 5241 Arkwright Road, Macon, Georgia 31210. The 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.

Plant Arkwright AP-2 DAS was used as a storage area for CCR beginning in the 1950s and was estimated to have been closed in-place in the late 1970s to early 1980s. Georgia Power officially closed AP-2 DAS in 2010 with GA EPD's approval and in accordance with the solid waste landfill regulations specified by GA EPD Rule 391-3-4, in effect at the time of its closure. A Closure Certificate was issued by GA EPD for AP-2 DAS on June 30, 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 2015 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.

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

1.2.1 Site Geology

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

1.2.2 Site Hydrogeology

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

The water table unit is hydraulically connected to the underlying bedrock through fractures in the partially weathered and fractured bedrock (Southern Company Services, 2005) and is considered to be under unconfined conditions. The monitoring well network for AP-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 (0.0028 to 2.835 feet per day) 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 (Figures 3 and 4).

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 groundwater 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 July 2023 and June 2024. Samples were collected from each of the wells in the groundwater monitoring system 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 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 and January 2024, the monitoring wells were inspected. Monitoring well ARGWC-23 was noted as requiring a new lock. No additional 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, located along the northern bank of Beaver Dam Creek, were redeveloped due to 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. Assessment monitoring wells ARGWC-23, ARAMW-7, and ARAMW-8 were again redeveloped between January 17 and 18, 2024 as a conservative measure due to high water levels at the Site. 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 2024 annual reporting period, semi-annual assessment monitoring events at AP-2 DAS were conducted from August 8 to 10, 2023 and January 23 to 24, 2024. 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 and January 2024 monitoring events are included in Appendix B.

2.3 Surface Water Sampling and Additional Groundwater 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, and January 23, 2024, from locations along Beaverdam Creek near AP-2 DAS, as shown in Figure 2.

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. The laboratory reports associated with the August 2023 and January 2024 sampling events are provided in Appendix B.



During the August 2023 and January 2024 semi-annual sampling events, groundwater samples were analyzed for dissolved iron and manganese in addition to the parameters described in Section 2.2. Dissolved iron and manganese concentrations provide information regarding the oxidation-reduction conditions, which is a key factor influencing the behavior of cobalt in the subsurface. Results are included in the laboratory analytical reports in Appendix B.

3.0 Sample Methodology & Analyses

The semi-annual groundwater sampling events completed in August 2023 and January 2024 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 potentiometric surface elevation contour maps (Figures 3 and 4). Review of the figures 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 = Groundwater flow velocity $\left(\frac{feet}{day}\right)$

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

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

n_e = 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, and January 22, 2024, groundwater elevations are presented in Table 4. The results for groundwater flow velocity through the central portion of AP-2 DAS was 0.10 feet/day (37 feet/year) in August 2023 and 0.090 feet/day (33 feet/year) in January 2024. Groundwater flow velocity through the eastern portion was 0.087 feet/day (32 feet/year) in August 2023 and 0.078 feet/day (29 feet/year) in January 2024. The observed groundwater flow velocities calculated for these monitoring events are 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 and January 2024. Sampling procedures were conducted in accordance with US EPA Region 4 *Laboratory Services and Applied Science Division Operating Procedures for Groundwater Sampling* (LSASDPROC-301-R6, April 22, 2023). 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 consecutive readings measured at five-minute intervals:

- pH ± 0.1 Standard Units
- Specific conductance ± 5 %
- ± 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 five 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 - August 2023) during the sampling events covered by this report. A dissolved metals sample was collected from this well during the January 2024 monitoring event 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 Surface Water Sampling

Surface water samples were collected in August 2023 and January 2024. Sampling was performed in accordance with US EPA Region 4 Laboratory Services and Applied Science Division Operating Procedures for Surface Water Sampling (LSASDPROC-201-R6, April 22, 2023).

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.

3.5 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 parameters[3] to assist with ongoing remedy evaluation. Laboratory analyses of the groundwater were performed by GEL, which is accredited by the National Environmental Laboratory Accreditation Program (NELAP) and maintains the NELAP accreditation for the constituents analyzed for this project. Table 5 summarizes the groundwater analytical results, and the corresponding formal analytical reports are in Appendix B.

The August 2023 and January 2024 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.

3.6 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 events 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 and January 2024 groundwater assessment monitoring and surface water sampling events as reported by the laboratories. When values are followed by a ”J” flag, this indicates that the value is an estimated analyte concentration detected between the method detection limit and the laboratory reporting limit. The estimated value is positively identified but is below the lowest level that can be reliably achieved within specified limits of precision and accuracy under routine laboratory operating conditions. Radium values followed by a “U” flag indicate that the constituent was not detected above the analytical minimum detectable concentration. The data are considered usable for meeting project objectives and the results are considered valid.

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

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 events. 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 200*9, 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 a 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 and January 2024 monitoring events were compared to the UPLs to evaluate whether SSIs exist. No resampling was conducted for the 2024 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 constituent 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 is provided in the GSC 2023 and 2024 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 GWPSs 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 established 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 constituent and GA EPD Appendix I constituent (silver) and the GWPS established under GA EPD Rules.

To complete the statistical evaluation, confidence intervals were constructed for each downgradient well/constituent pair and compared to the GWPS. In assessment monitoring, an SSL 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 and January 2024 sampling events, 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 events. 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 and January 2024 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
- January 2024:
  - Lithium: ARAMW-7, ARGWC-23
  - Cobalt: ARAMW-7

When GWPSs were exceeded, data were further evaluated for trend. Trend testing utilizing the Sen's Slope/Mann Kendall method at the 95% confidence level was used to determine whether concentrations were statistically increasing, decreasing, or stable. Upgradient well data were included in the trend analyses for all parameters found to exceed their GWPSs in downgradient wells to identify whether similar patterns exist upgradient of the site. Statistically significant trends were identified for the following:

Statistically significant trends were identified for the following:

- August 2023
  - None
- January 2024:
  - Increasing
    - Lithium: ARGWC-23

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 and the lithium SSL identified in ARGWC-23 are horizontally and vertically delineated to levels below GWPS. Vertical delineation is completed by sampling adjacent monitoring wells. The SSLs at ARAMW-7 are vertically delineated by deep well ARAMW-9. The SSL at ARGWC-23 is vertically delineated by deep well ARAMW-8. Due to the presence of Beaverdam Creek in the downgradient direction of ARAMW-7 and ARGWC-23 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 in ARAMW-7 and the lithium SSL in ARGWC-23 are limited to areas less than approximately 100 feet wide, as shown on the isoconcentrations maps for cobalt and lithium, presented as Figures 5 through 8.

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.

6.1 Assessment of Corrective Measures

A Draft Remedy Selection Report (Stantec, 2024) was submitted to GA EPD on February 28, 2024. This report includes:

- The current groundwater conceptual site model applicable to evaluating groundwater corrective measures proposed in the ACM Report (Wood, 2020b).
- An evaluation of each corrective measure retained for further consideration following the completed investigations.
- An evaluation of corrective measure options using the comparative criteria such as long- and short-term effectiveness and protectiveness, source control effectiveness, and ease of implementation. The Draft Remedy Selection Report presents geochemical approaches (in-situ injections) coupled with monitored natural attenuation as the proposed groundwater remedy for AP-2.

In the interim of GA EPD's review of the Draft Remedy Selection Report, Georgia Power continues to make progress towards selection of a remedy through updating routine sampling data and lab treatability testing in preparation for future pilot testing at the Site. The Draft Remedy Selection Report proposed in-situ injections with monitored natural attenuation as a remedy, and a Pilot Test Workplan is being prepared to further evaluate and optimize the injection plan. In addition, a treatability studies have been completed to determine injectate materials and to identify proper dosage information.

7.0 Conclusions & Future Actions

This *2024 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 and an SSL of lithium in well ARGWC-23, 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 sampling of adjacent monitoring wells. The SSLs at ARAMW-7 are vertically delineated by deep well ARAMW-9. The SSL at ARGWC-23 is vertically delineated by deep well ARAMW-8. Thus, horizontal and vertical delineations of the cobalt and lithium SSLs in well ARAMW-7 and ARGWC-23 are 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, was submitted to GA EPD under separate cover on February 28, 2024. The Draft Remedy Selection Report proposed in-situ injections with monitored natural attenuation as a remedy, and a Pilot Test Workplan is being prepared to further evaluate and optimize the injection plan.

The next semi-annual sampling event is planned for July 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.

8.0 References

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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]	Easting [1]	Top of Casing Elevation (feet NAVD88)[2][3]	Ground Surface Elevation (feet NAVD88)[2][3]	Top of Screen Elevation (feet NAVD88)[4]	Screen Bottom Elevation (feet NAVD88)[4]	Screen Length (feet)	Total Well Depth on Construction Log (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 Events		Status of Monitoring Well
		August 8 - 10, 2023	January 23 - 24, 2024	
ASH POND 2 DRY ASH STOCKPILE MONITORING WELL NETWORK				
ARGWA-19	Upgradient	X	X	Assessment Monitoring
ARGWA-20	Upgradient	X	X	Assessment Monitoring
ARGWC-21	Downgradient	X	X	Assessment Monitoring
ARGWC-22	Downgradient	X	X	Assessment Monitoring
ARGWC-23	Downgradient	X	X	Assessment Monitoring
ARAMW-1	Delineation Piezometer	X	X	Assessment Monitoring
ARAMW-2	Delineation Piezometer	X	X	Assessment Monitoring
ARAMW-7	Delineation Piezometer	X	X	Assessment Monitoring
ARAMW-8	Delineation Piezometer	X	X	Assessment Monitoring
ARAMW-9	Delineation Piezometer	X	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]	Depth to Water (feet below TOC)[2]	Groundwater Elevation (feet NAVD88)[1]
Measurement Date		**8/7/2023**		**1/22/2024**	
ARGWA-19	343.30	27.77	315.53	29.55	313.75
ARGWA-20	331.28	15.03	316.25	16.85	314.43
ARGWC-21	309.15	14.37	294.78	14.00	295.15
ARGWC-22	309.95	14.15	295.80	13.58	296.37
ARGWC-23	307.70	12.19	295.51	11.79	295.91
ARAMW-1	308.51	13.58	294.93	13.21	295.30
ARAMW-2	308.27	13.71	294.56	13.42	294.85
ARAMW-7	309.81	13.20	296.61	12.69	297.12
ARAMW-8	307.36	11.84	295.52	11.43	295.93
ARAMW-9	309.28	15.50	293.78	7.61	301.67

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	0.20	0.10	37
	ARGWA-19 to ARAMW-1	315.53	294.93	20.60	907	0.023	0.77	0.20	0.087	32
January 22, 2024	ARGWA-20 TO ARGWC-21	314.43	295.15	19.28	792	0.024	0.74	0.20	0.090	33
	ARGWA-19 to ARAMW-1	313.75	295.30	18.45	907	0.020	0.77	0.20	0.078	29

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 DAS 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 DAS groundwater monitoring system

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

	Substance	Well ID						
		ARGWA-19		ARGWA-20			ARGWC-21	
		8/8/2023	1/23/2024	8/10/2023	1/23/2024	1/23/2024-Diss	8/9/2023	1/24/2024
APPENDIX III	Boron	0.0199	0.0214	0.0714	0.0685	0.0739	1.12	1.13
	Calcium	8.51	9.34	11.0	11.4	11.2	82.9	82.6
	Chloride	6.37	5.63	6.50	6.68	NA	3.35	3.35
	Fluoride	< 0.0330	0.121	< 0.0330	0.113	NA	0.203	0.173
	Sulfate	8.29	6.98	18.5	17.1	NA	214	219
	TDS	62.0	82.0	105	92.0	NA	520	541
	pH	5.81	5.93	5.55	5.77	NA	6.6	6.03
APPENDIX IV	Antimony	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100
	Arsenic	< 0.00200	< 0.00200	< 0.00200	< 0.00200	< 0.00200	< 0.00200	< 0.00200
	Barium	0.0337	0.0348	0.107	0.0978	0.0933	0.0474	0.0427
	Beryllium	< 0.000200	< 0.000200	0.000275 J	< 0.000200	< 0.000200	< 0.000200	< 0.000200
	Cadmium	< 0.000300	< 0.000300	< 0.000300	< 0.000300	< 0.000300	< 0.000300	< 0.000300
	Chromium	< 0.00300	< 0.00300	0.00684 J	0.00682 J	0.00663 J	< 0.00300	< 0.00300
	Cobalt	< 0.000300	< 0.000300	0.000814 J	< 0.000300	< 0.000300	0.000813 J	0.00106
	Lead	< 0.000500	< 0.000500	< 0.000500	< 0.000500	< 0.000500	< 0.000500	< 0.000500
	Lithium	0.00382 J	0.00440 J	< 0.00300	< 0.00300	< 0.00300	0.0131	0.0131
	Mercury	< 0.0000670	< 0.0000670	< 0.0000670	< 0.0000670	< 0.0000670	< 0.0000670	< 0.0000670
	Molybdenum	0.000421 J	0.000480 J	< 0.000200	< 0.000200	< 0.000200	< 0.000200	< 0.000200
	Radium	1.80	1.73	1.80	2.50	NA	2.69	5.34
	Selenium	< 0.00150	< 0.00150	< 0.00150	< 0.00150	NA	< 0.00150	< 0.00150
	Thallium	< 0.000600	< 0.000600	< 0.000600	< 0.000600	< 0.000600	< 0.000600	< 0.000600
*	Silver	< 0.000300	< 0.000300	< 0.000300	< 0.000300	< 0.000300	< 0.000300	< 0.000300
ADDITIONAL PARAMETERS	Total Alkalinity	37.0	38.1	43.8	43.8	NA	162	162
	Bicarbonate Alkalinity	37.0	38.1	43.8	43.8	NA	162	162
	Carbonate Alkalinity	< 0.725	< 0.725	< 0.725	< 0.725	NA	< 0.725	< 0.725
	Aluminum	< 0.0193	< 0.0193	1.52	0.286	0.0480 J	0.0254 J	0.307
	Iron	< 0.0330	< 0.0330	1.90	0.400	0.0665 J	0.719	1.13
	Manganese	< 0.00100	< 0.00100	0.0285	0.00820	< 0.00100	0.348	0.355
	Magnesium	3.36	4.06	6.28	6.17	6.22	41.8	38.8
	Potassium	2.08	2.17	1.86	1.62	1.51	6.43	6.16
	Sodium	9.51	11.1	11.5	11.8	12.0	21.0	19.8

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) shown.
3. J indicates the result is an estimated concentration. “J” qualifiers are applied by the laboratory when the concentration reported in above the method detection limit but below the laboratory reporting limit. 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 5
ANALYTICAL DATA SUMMARY - GROUNDWATER
Georgia Power Company - Plant Arkwright
Ash Pond 2 Dry Ash Stockpile
Macon, Georgia

	Substance	Well ID					
		ARGWC-22		ARGWC-23		ARAMW-1	
		8/8/2023	1/23/2024	8/8/2023	1/24/2024	8/8/2023	1/24/2024
APPENDIX III	Boron	3.06	4.52	0.379	0.456	1.13	1.37
	Calcium	196	183	66.6	75.6	83.4	86.9
	Chloride	6.79	7.31	3.60	3.74	3.61	3.43
	Fluoride	< 0.0660	0.134	0.283	0.391	0.118	0.199
	Sulfate	719	567	69.8	78.4	223	219
	TDS	1220	1110	294	342	524	530
	pH	5.61	5.88	6.33	6.43	6.38	6.12
APPENDIX IV	Antimony	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100
	Arsenic	< 0.00200	< 0.00200	< 0.00200	< 0.00200	< 0.00200	< 0.00200
	Barium	0.0255	0.0227	0.0936	0.0922	0.0510	0.0430
	Beryllium	< 0.000200	< 0.000200	< 0.000200	< 0.000200	< 0.000200	< 0.000200
	Cadmium	< 0.000300	< 0.000300	< 0.000300	< 0.000300	< 0.000300	< 0.000300
	Chromium	< 0.00300	< 0.00300	< 0.00300	< 0.00300	< 0.00300	< 0.00300
	Cobalt	0.00184	0.00408	0.000440 J	< 0.000300	0.000350 J	0.000331 J
	Lead	< 0.000500	< 0.000500	< 0.000500	< 0.000500	< 0.000500	< 0.000500
	Lithium	0.0280	0.0125	0.0517	0.0547	0.00909 J	0.0106
	Mercury	< 0.0000670	0.000372	< 0.0000670	< 0.0000670	< 0.0000670	< 0.0000670
	Molybdenum	0.000514 J	0.000250 J	0.0618	0.0651	0.00667	0.00937
	Radium	1.22 U	2.10	0.363 U	2.73	1.16 U	9.30
	Selenium	< 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
*	Silver	< 0.000300	< 0.000300	< 0.000300	< 0.000300	< 0.000300	< 0.000300
ADDITIONAL PARAMETERS[4]	Total Alkalinity	117	168	175	181	184	182
	Bicarbonate Alkalinity	117	168	175	181	184	182
	Carbonate Alkalinity	< 0.725	< 0.725	< 0.725	< 0.725	< 0.725	< 0.725
	Aluminum	0.0513	0.155	< 0.0193	< 0.0193	0.0342 J	0.0276 J
	Iron	2.73	13.3	0.0491 J	< 0.0330	0.239	0.162
	Manganese	12.4	25.2	0.278	0.0280	0.145	0.147
	Magnesium	85.0	80.9	10.5	13.3	35.7	40.6
	Potassium	5.10	3.62	1.68	1.93	5.37	5.86
	Sodium	29.2	24.9	13.3	15.7	19.3	21.0

Notes:

1. Results for constituents are reported in milligrams per liter (mg/L). Radium results are reported in picocuries per liter (pCi/L).
2. < indicates the constituent was not detected above the analytical method detection limit (MDL) shown.
3. J indicates the result is an estimated concentration. “J” qualifiers are applied by the laboratory when the concentration reported in above the metho laboratory reporting limit. 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 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 5
ANALYTICAL DATA SUMMARY - GROUNDWATER
Georgia Power Company - Plant Arkwright
Ash Pond 2 Dry Ash Stockpile
Macon, Georgia

	Substance	Well ID								
		ARAMW-2		ARAMW-7		ARAMW-8		ARAMW-9		ARK-STN-TW22
		8/8/2023	1/24/2024	8/8/2023	1/23/2024	8/9/2023	1/24/2024	8/8/2023	1/23/2024	8/10/2023
APPENDIX III	Boron	1.07	1.16	2.25	4.12	0.770	0.666	0.0666	0.0549	5.65
	Calcium	87.1	83.7	279	357	78.6	75.8	146	167	374
	Chloride	3.35	3.31	5.50	5.11	5.13	4.96	36.1	32.9	4.92
	Fluoride	0.0571 J	0.171	< 0.0330	0.126	0.261	0.222	0.837	0.971	0.123
	Sulfate	243	214	1060	1000	114	106	477	415	1040
	TDS	548	529	1620	1670	436	419	852	750	NA
	pH	6.01	6.1	5.47	5.57	8.71	6.47	8.13	7.92	6.35
APPENDIX IV	Antimony	< 0.00100	< 0.00100	< 0.00100	< 0.00100	0.00134 J	< 0.00100	0.00158 J	0.00107 J	NA
	Arsenic	0.0120	0.00470 J	< 0.00200	0.00219 J	< 0.00200	< 0.00200	< 0.00200	< 0.00200	0.172
	Barium	0.0753	0.0562	0.0244	0.0277	0.122	0.103	0.0207	0.0128	NA
	Beryllium	< 0.000200	< 0.000200	0.000272 J	0.000378 J	< 0.000200	< 0.000200	< 0.000200	< 0.000200	NA
	Cadmium	< 0.000300	< 0.000300	< 0.000300	< 0.000300	< 0.000300	< 0.000300	< 0.000300	< 0.000300	NA
	Chromium	< 0.00300	< 0.00300	< 0.00300	< 0.00300	< 0.00300	< 0.00300	< 0.00300	< 0.00300	NA
	Cobalt	0.00223	0.00249	0.0605	0.0597	0.00364	0.00203	< 0.000300	< 0.000300	0.0238
	Lead	< 0.000500	< 0.000500	< 0.000500	< 0.000500	< 0.000500	< 0.000500	< 0.000500	< 0.000500	NA
	Lithium	0.0193	0.0172	0.0577	0.0779	0.00637 J	0.00669 J	0.00907 J	0.00862 J	0.247
	Mercury	< 0.0000670	< 0.0000670	< 0.0000670	< 0.0000670	< 0.0000670	< 0.0000670	< 0.0000670	< 0.0000670	< 0.0000670
	Molybdenum	0.00110	0.00101	< 0.000200	< 0.000200	0.203	0.196	0.0109	0.00683	0.00367
	Radium	1.86	10.3	4.83	4.65	0.193 U	2.87	3.92	2.96	NA
	Selenium	< 0.00150	< 0.00150	< 0.00150	< 0.00150	< 0.00150	< 0.00150	< 0.00150	< 0.00150	NA
	Thallium	< 0.000600	< 0.000600	< 0.000600	< 0.000600	< 0.000600	< 0.000600	< 0.000600	< 0.000600	NA
*	Silver	< 0.000300	< 0.000300	< 0.000300	< 0.000300	< 0.000300	< 0.000300	< 0.000300	< 0.000300	NA
ADDITIONAL PARAMETERS	Total Alkalinity	180	166	55.3	56.5	245	234	91.1	93.5	170
	Bicarbonate Alkalinity	180	166	55.3	56.5	245	234	91.1	93.5	170
	Carbonate Alkalinity	< 0.725	< 0.725	< 0.725	< 0.725	< 0.725	< 0.725	< 0.725	< 0.725	< 0.725
	Aluminum	0.0505	< 0.0193	0.0265 J	0.213	< 0.0193	0.0458 J	0.0354 J	0.0460 J	0.591
	Iron	6.78	2.87	4.04	5.58	0.515	1.39	0.580	0.499	38.2
	Manganese	0.943	0.641	14.3	16.3	0.279	0.272	0.172	0.166	11.5
	Magnesium	35.7	36.6	73.8	94.4	32.1	32.2	10.5	10.4	33.5
	Potassium	7.58	6.83	8.74	9.96	7.34	6.95	7.85	6.54	48.6
	Sodium	18.8	19.8	26.1	33.2	18.1	17.7	107	88.3	19.8

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) shown.
3. J indicates the result is an estimated concentration. “J” qualifiers are applied by the laboratory when the concentration reported in above the method detection limit but below the laboratory reporting limit. 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	1/23/2024	8/10/2023	1/23/2024	8/10/2023	1/23/2024	8/10/2023	1/23/2024	8/10/2023	1/23/2024
APPENDIX III	Boron	<0.027	<0.027	<0.027	<0.027	<0.027	<0.027	<0.027	<0.027	<0.027	<0.027
	Calcium	8.2	7.5	8.5	7.9	8.4	7.8	8.6	8.0	8.8	8.0
	Chloride	6.7	8.7	7.2	8.4	7.3	8.4	7.9	8.4	7.7	8.3
	Fluoride	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
	Sulfate	2.6	5.2	3.8	6.3	4.4	7.5	4.4	7.5	4.4	7.6
	TDS	81.0	87.0	86.0	85.0	90.0	95.0	87.0	126	87.0	96.0
	pH	NA	6.19	NA	6.71	NA	6.83	NA	6.76	NA	6.82
APP IV*	Cobalt	<0.00039	<0.00032	<0.00039	<0.00032	<0.00039	<0.00032	<0.00039	<0.00032	<0.00039	<0.00032
	Lithium	<0.00073	<0.0016	<0.00073	<0.0016	<0.00073	<0.0016	<0.00073	<0.0016	<0.00073	<0.0016
	Molybdenum	<0.00074	<0.00062	<0.00074	<0.00062	<0.00074	<0.00062	<0.00074	<0.00062	<0.00074	<0.00062
ADDITIONAL ANALYTES	Total Alkalinity	44.3	38.0	45.7	38.0	45.9	37.8	45.2	37.8	45.8	38.4
	Bicarbonate Alkalinity	44.3	38.0	45.7	38.0	45.9	37.8	45.2	37.8	45.8	38.4
	Magnesium	3.7	3.9	3.8	4.1	3.8	4.0	3.8	4.1	4.0	4.1
	Potassium	2.5	2.0	2.5	2.1	2.4	2.0	2.4	2.0	2.6	2
	Sodium	7.4	8.4	7.6	8.6	7.4	8.2	7.5	8.4	7.9	8.4

Notes:

1. Results for constituents are reported in milligrams per liter (mg/L). pH values are reported in standard units (s.u.).
2. < indicates the constituent was not detected above the analytical method detection limit (MDL).
3. TDS indicates total dissolved solids.
4. * - Targeted Appendix IV parameters
5. NA indicates the location was not analyzed for the constituent.

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**	**Site Specific Background Limit[2] January 2024**	**State GWPS January 2024**
Antimony	mg/L	0.006		0.003	0.006	0.003	0.006
Arsenic	mg/L	0.01		0.005	0.01	0.005	0.01
Barium	mg/L	2		0.11	2	0.11	2
Beryllium	mg/L	0.004		0.0005	0.004	0.0005	0.004
Cadmium	mg/L	0.005		0.001	0.005	0.001	0.005
Chromium	mg/L	0.1		0.01	0.1	0.01	0.1
Cobalt	mg/L	n/a	0.006	0.001	0.006	0.001	0.006
Combined Radium	pCi/L	5		2.33	5	2.5	5
Fluoride	mg/L	4		0.15	4	0.15	4
Lead	mg/L	n/a	0.015	0.002	0.015	0.002	0.015
Lithium	mg/L	n/a	0.04	0.013	0.04	0.013	0.04
Mercury	mg/L	0.002		0.0002	0.002	0.0002	0.002
Molybdenum	mg/L	n/a	0.1	0.001	0.1	0.001	0.1
Selenium	mg/L	0.05		0.005	0.05	0.005	0.05
Silver	mg/L	n/a		0.001	0.001	0.001	0.001
Thallium	mg/L	0.002		0.002	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

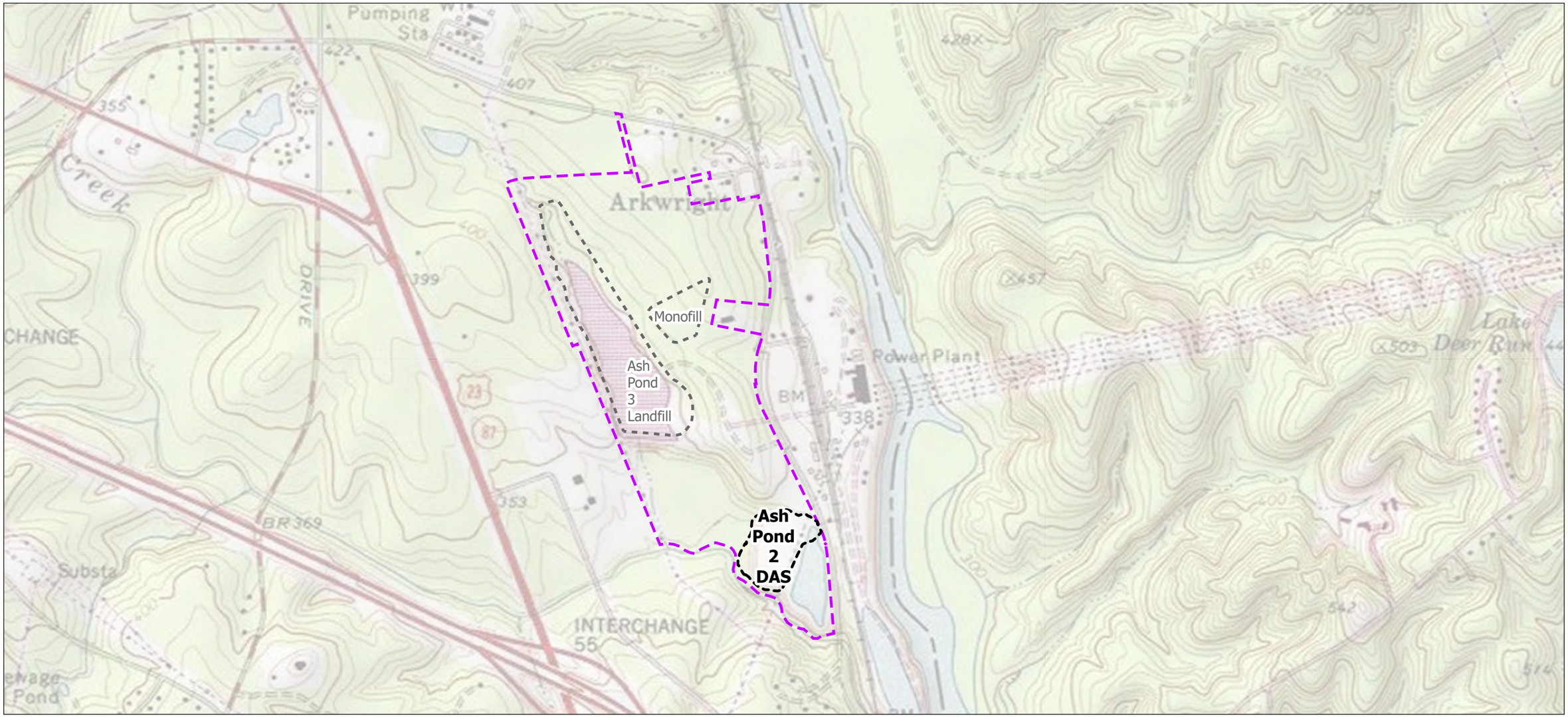
US EPA = United Stated Environmental Protection Agency

CFR = Code of Federal Regulations

[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





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, TomTom, Garmin, SafeGraph, FAO, METI/NASA, USGS, EPA, NPS, USFWS

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

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Georgia Power

Project Location
Macon, Georgia

Prepared by DMB on 5/30/2024
TR by CS on 5/30/2024
IR by JK on 5/30/2024

Client/Project 175569434
Georgia Power
2024 Annual Groundwater Monitoring and Corrective Action Report - Plant Arkwright Ash Pond 2 Dry Ash Stockpile

Figure No.
1

Title
Site Location Map

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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 1/22/2024)

0 200 400 Feet

(At original document size of 11x17)
1:2,400

N

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Georgia Power

Project Location
Macon, Georgia

Prepared by DMB on 5/30/2024
TR by CS on 5/30/2024
IR by JK on 5/30/2024

Client/Project 175569434
Georgia Power
2024 Annual Groundwater Monitoring and Corrective Action Report - Plant Arkwright Ash Pond 2 Dry Ash Stockpile

Figure No.
2

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

Notes
1. Coordinate System: NAD 1983 StatePlane Georgia West FIPS 1002 Feet
2. Data Sources: Ash Pond Boundaries, Surface Water Samples, Monitoring Wells, Piezometers, Property Boundary, and Beaverdam Creek locations provided by Southern Company Services and Wood Environment & Infrastructure Solutions
3. Background: Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community, Esri, TomTom, Garmin, SafeGraph, FAO, METI/NASA, USGS, EPA, NPS, USFWS, Esri Community Maps Contributors, © OpenStreetMap, Microsoft, Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS, US Census Bureau, USDA. USFWSPlant imagery provided by client and is dated 1/22/2024.

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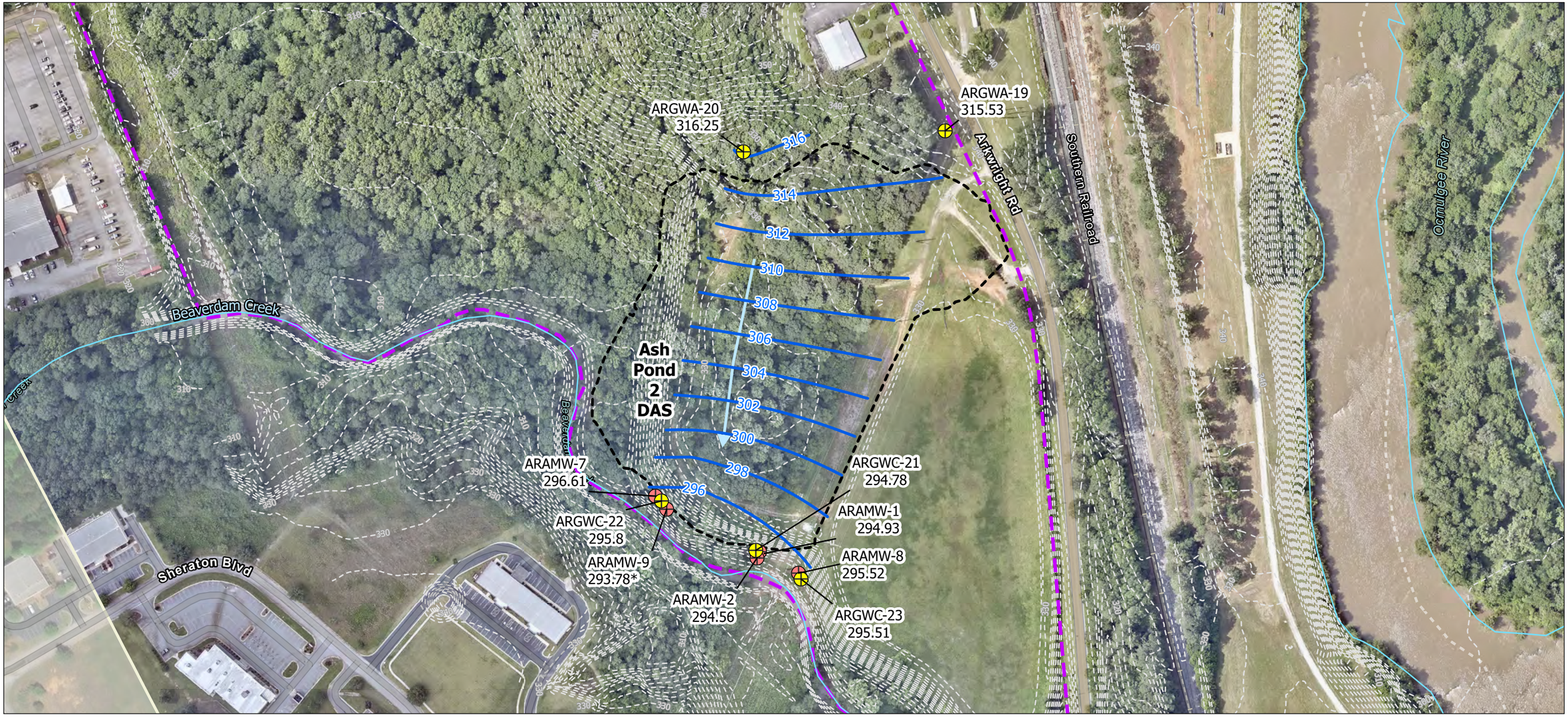



Notes

1. Coordinate System: NAD 1983 StatePlane Georgia West FIPS 1002 Feet
2. Data Sources: Ash Pond Boundaries, Monitoring Wells, Property Boundary, Topography, and Beaverdam Creek provided by Southern Company Services and Wood Environment & Infrastructure Solutions; Contours, Flow Arrow, and Ocmulgee River provided by Stantec
3. Background: Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community, Esri, TomTom, Garmin, SafeGraph, FAO, METI/NASA, USGS, EPA, NPS, USFWS, Esri Community Maps Contributors, © OpenStreetMap, Microsoft, Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS, US Census Bureau, USDA, USFWS. Plant imagery provided by client and is dated 7/13/2023.

Legend

- Detection Monitoring Well
- Assessment Monitoring Well
- Potentiometric Surface Contour (feet (ft) NAVD88))
- Interpreted Groundwater Flow Direction
- Beaverdam Creek/Ocmulgee River (Approximate)
- Topographic Contour 2018 (2 ft interval)
- 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.
NAVD88 - North American Vertical Datum of 1988

KATIE T. ROSS
GEORGIA REGISTERED PROFESSIONAL GEOLOGIST
No. 1776

0 200 400 Feet
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1:2,400

N

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Georgia Power

Project Location
Macon, Georgia

Prepared by DMB on 5/30/2024
TR by CS on 5/30/2024
IR by JK on 5/30/2024

Client/Project 175569434
Georgia Power
2024 Annual Groundwater Monitoring and Corrective Action Report - Plant Arkwright Ash Pond 2 Dry Ash Stockpile

Figure No.
3

Title
Potentiometric Surface Contour Map
Ash Pond 2 DAS – August 7, 2023

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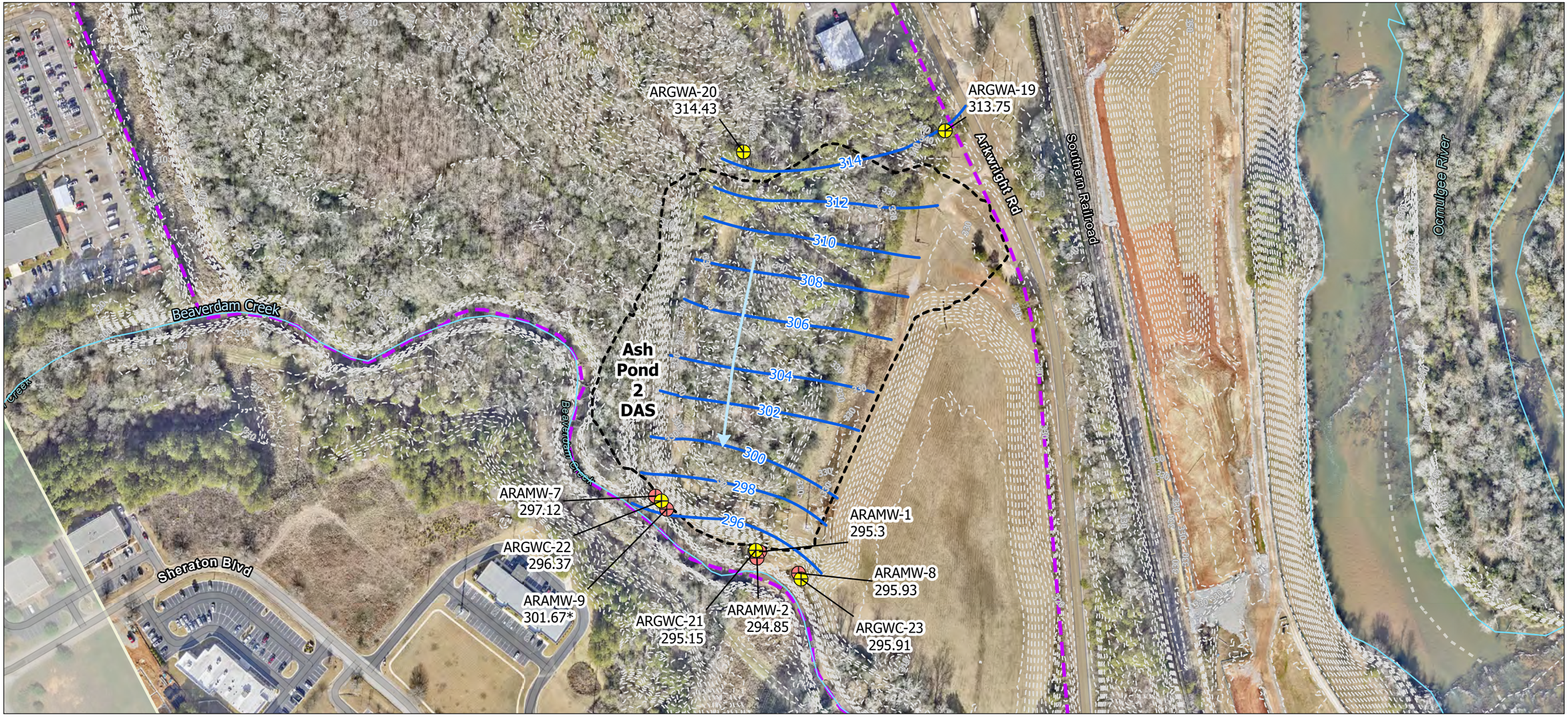



Notes

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2. Data Sources: Ash Pond Boundaries, Monitoring Wells, Property Boundary, Topography, and Beaverdam Creek provided by Southern Company Services and Wood Environment & Infrastructure Solutions; Contours, Flow Arrow, and Ocmulgee River provided by Stantec
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Legend

- Detection Monitoring Well
- Assessment Monitoring Well
- Potentiometric Surface Contour (feet (ft) NAVD88)
- Interpreted Groundwater Flow Direction
- Beaverdam Creek/Ocmulgee River (Approximate)
- Topographic Contour 2024 (2 ft interval)
- Approximate Property Boundary
- Ash Pond 2 Dry Ash Stockpile (DAS) (approximate location)
- Limit of Client Imagery (dated 1/22/2024)

295.91 Groundwater Elevation (ft NAVD88)
An "*" indicates groundwater elevation for ARAMW-9 was not used in contouring.
NAVD88 - North American Vertical Datum of 1988

KATIE T. ROSS
GEORGIA REGISTERED PROFESSIONAL GEOLOGIST
No. 1776

0 200 400 Feet
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N

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Georgia Power

Project Location
Macon, Georgia

Prepared by DMB on 5/30/2024
TR by CS on 5/30/2024
IR by JK on 5/30/2024

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Georgia Power
2024 Annual Groundwater Monitoring and Corrective Action Report - Plant Arkwright Ash Pond 2 Dry Ash Stockpile

Figure No.
4

Title
Potentiometric Surface Contour Map
Ash Pond 2 DAS – January 22, 2024

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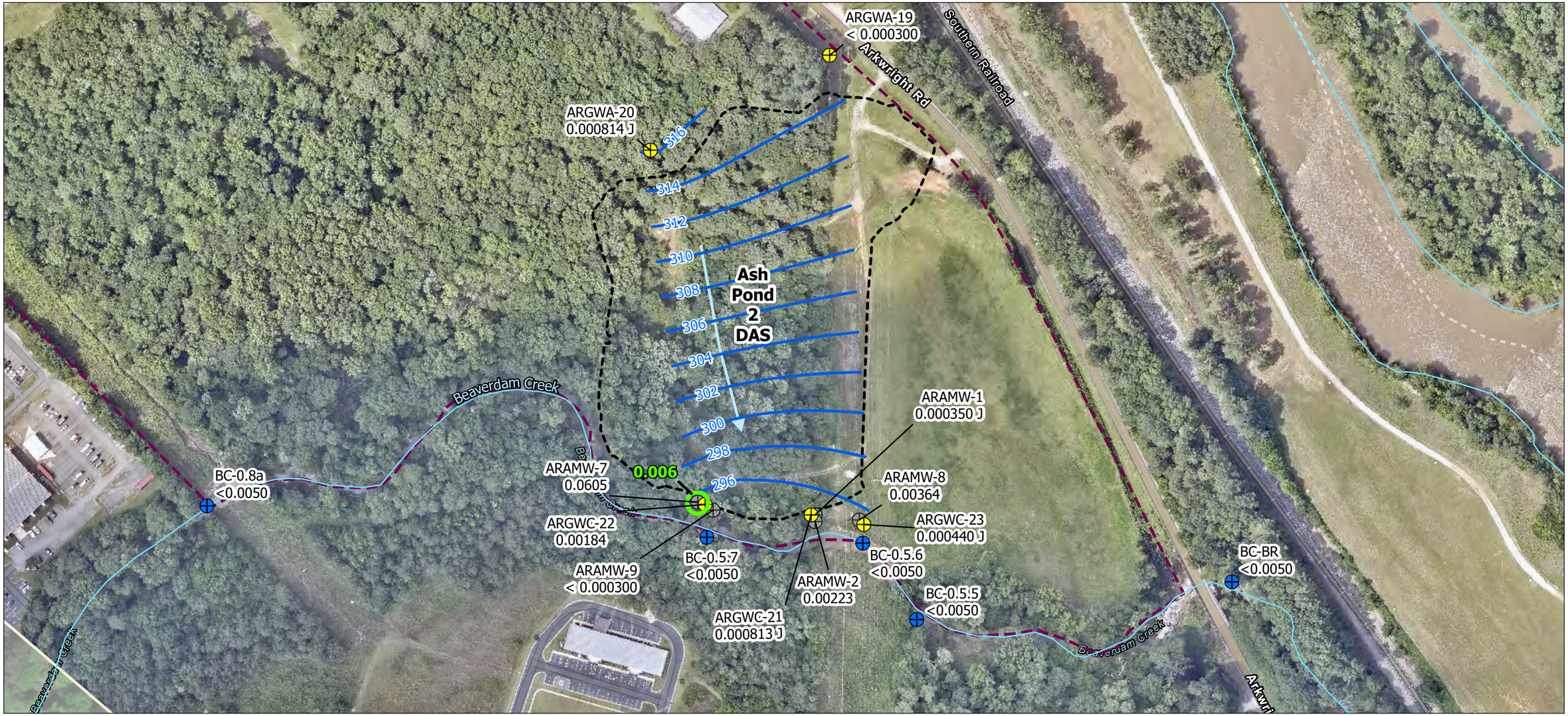



Notes
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Legend
- Detection Monitoring Well
- Assessment Monitoring Well
- Surface Water Sampling Location
- Cobalt Concentration Contour Aug 2023 (mg/L)
- Potentiometric Surface Contour Aug 2023 (ft NAVD88)
- Interpreted Groundwater Flow Direction
- 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)

0.0605 Cobalt Concentration milligrams per Liter (mg/L)

Isoconcentration Notes:
Cobalt concentration data from groundwater and surface water samples collected during the August 2023 monitoring event.

J indicates the constituent was detected between the analytical method detection limit and the laboratory reporting limit. The value followed by J is qualified by the laboratory as estimated.

GWPS - Groundwater Protection Standard

Analyte	Units	GWPS
Cobalt	mg/L	0.006

0 200 400 Feet
(At original document size of 11x17)
1:2,400

N

Stantec

Georgia Power

Project Location
Macon, Georgia

Prepared by DMB on 1/11/2024
TR by CS on 1/11/2024
IR by JK on 1/11/2024

Client/Project 175569434
Georgia Power
2024 Annual Groundwater Monitoring and Corrective Action Report - Plant Arkwright Ash Pond 2 Dry Ash Stockpile

Figure No.
5

Title
Isoconcentration Map for Cobalt AP-2 DAS – August 2023

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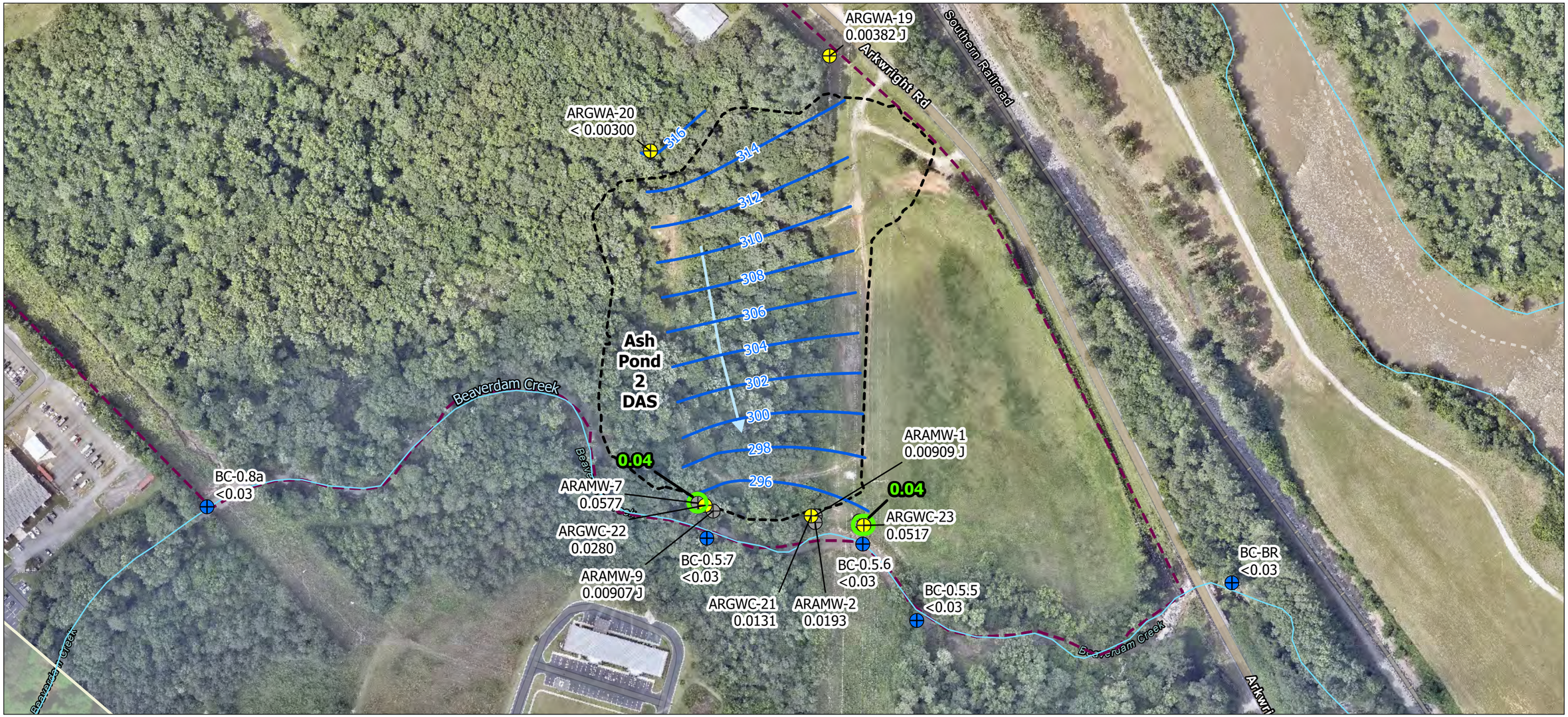



Notes
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Legend
- Detection Monitoring Well
- Assessment Monitoring Well
- Surface Water Sampling Location
- Lithium Concentration Contour Aug 2023 (mg/L)
- Potentiometric Surface Contour Aug 2023 (ft NAVD88)
- Interpreted Groundwater Flow Direction
- 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)
- 0.00907 (J) Lithium Concentration milligrams per Liter (mg/L)

Isoconcentration Notes:
Lithium concentration data from groundwater and surface water samples collected during the August 2023 monitoring event.

J indicates the constituent was detected between the analytical method detection limit and the laboratory reporting limit. The value followed by J is qualified by the laboratory as estimated.

GWPS - Groundwater Protection Standard

Analyte	Units	GWPS
Lithium	mg/L	0.04

0 200 400 Feet
(At original document size of 11x17)
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N

Stantec

Georgia Power

Project Location
Macon, Georgia

Prepared by DMB on 1/11/2024
TR by CS on 1/11/2024
IR by JK on 1/11/2024

Client/Project 175569434
Georgia Power
2024 Annual Groundwater Monitoring and Corrective Action Report - Plant Arkwright Ash Pond 2 Dry Ash Stockpile

Figure No.
6

Title
Isoconcentration Map for Lithium AP-2 DAS – August 2023

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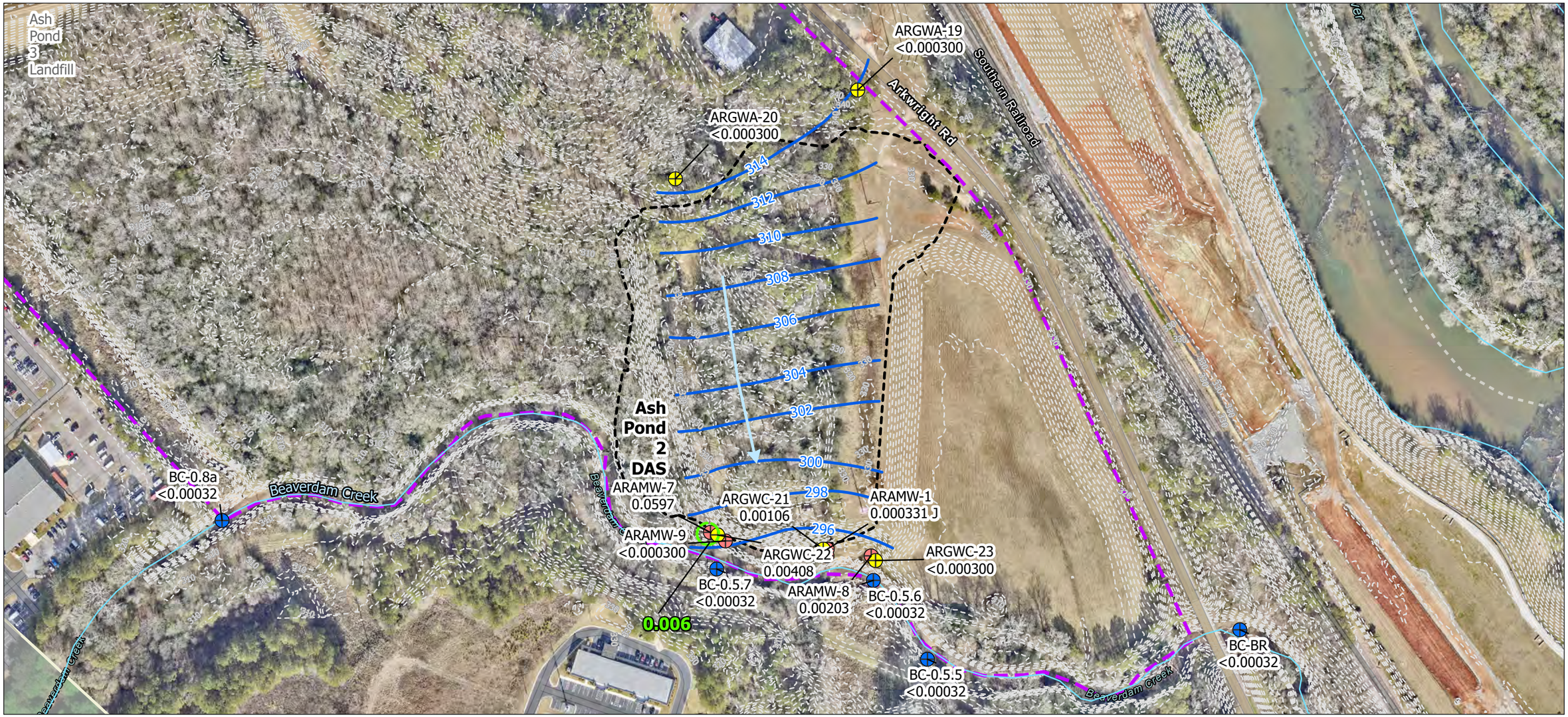




Notes

1. Coordinate System: NAD 1983 StatePlane Georgia West FIPS 1002 Feet
2. Data Sources: Ash Pond Boundaries, Monitoring Wells, Property Boundary, Topography, and Beaverdam Creek provided by Southern Company Services and Wood Environment & Infrastructure Solutions; Contours, Flow Arrow, and Ocmulgee River provided by Stantec
3. Background: Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community, Esri, TomTom, Garmin, SafeGraph, FAO, METI/NASA, USGS, EPA, NPS, USFWS, Esri Community Maps Contributors, © OpenStreetMap, Microsoft, Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS, US Census Bureau, USDA, USFWS. Plant imagery provided by client and is dated 1/22/2024.

Legend

- Detection Monitoring Well
- Assessment Monitoring Well
- Surface Water Sampling Location
- Interpreted Groundwater Flow Direction
- Potentiometric Surface Contour (feet (ft) NAVD88)
- Inferred Potentiometric Surface Contour (ft NAVD88)
- Cobalt Concentration Contour Jan 2024 (mg/l)
- Beaverdam Creek/Ocmulgee River (Approximate)
- Approximate Property Boundary
- Ash Pond 2 Dry Ash Stockpile (DAS) (approximate location)
- Ash Pond 3 and Ash Monofill

0.0597 (J) Cobalt Concentration milligrams per Liter (mg/L)

Isoconcentration Notes:

Cobalt concentration data from groundwater and surface water samples collected during the January 2024 monitoring event.

J indicates the constituent was detected between the analytical method detection limit and the laboratory reporting limit. The value followed by J is qualified by the laboratory as estimated.

GWPS- Groundwater Protection Standard

Analyte	Units	GWPS
Cobalt	mg/l	0.006

0 200 400 Feet

(At original document size of 11x17)
1:2,400

N

Stantec

Georgia Power

Project Location
Macon, Georgia

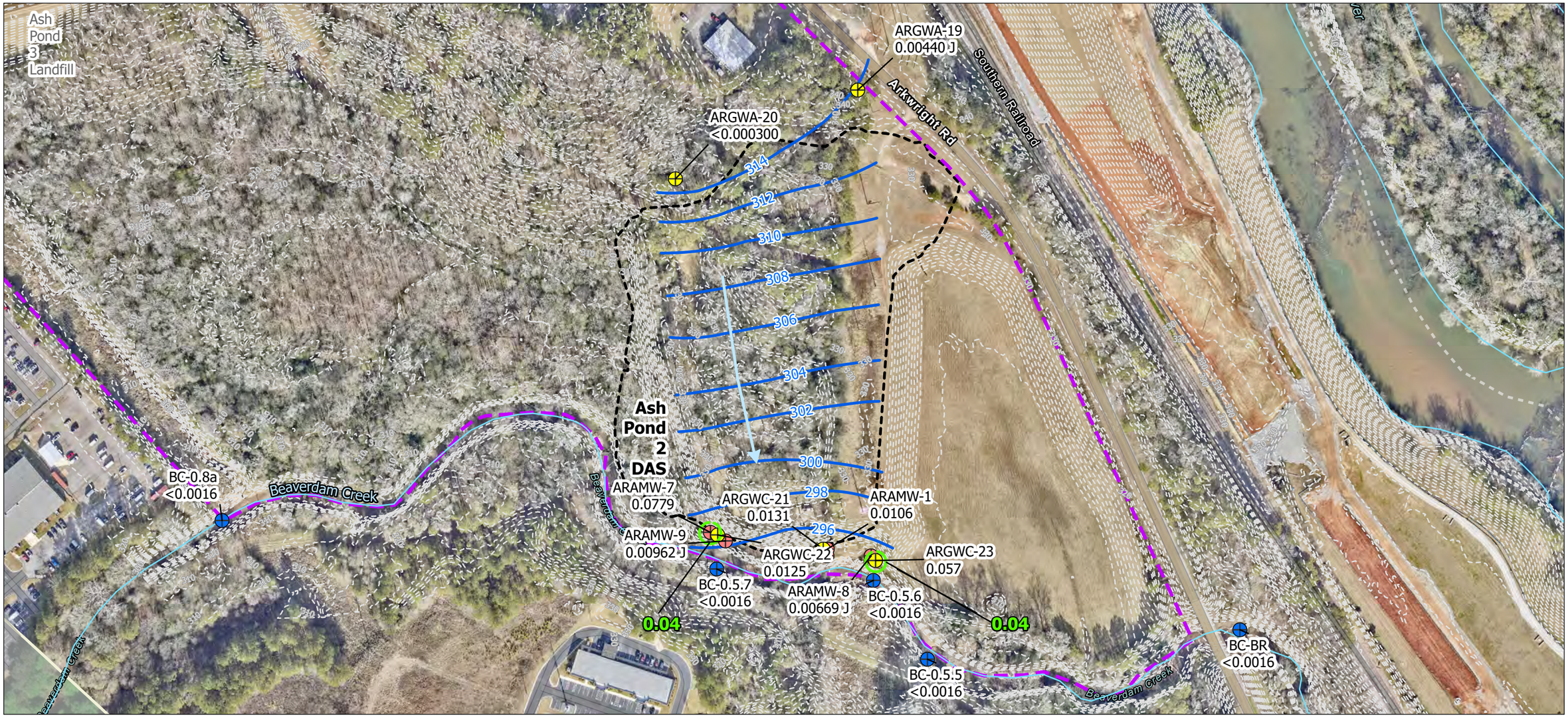
Prepared by DMB on 6/26/2024
TR by CS on 6/26/2024
IR by JK on 6/26/2024

Client/Project 175569434
Georgia Power
2024 Annual Groundwater Monitoring and Corrective Action Report - Plant Arkwright Ash Pond 2 Dry Ash Stockpile

Figure No.
7

Title
Isoconcentration Map for Cobalt AP-2 DAS - January 2024

Disclaimer: This document has been prepared based on information provided by others as cited in the Notes section. Stantec has not verified the accuracy and/or completeness of this information and shall not be responsible for any errors or omissions which may be incorporated herein as a result. Stantec assumes no responsibility for data supplied in electronic format, and the recipient accepts full responsibility for verifying the accuracy and completeness of the data.





Notes

1. Coordinate System: NAD 1983 StatePlane Georgia West FIPS 1002 Feet
2. Data Sources: Ash Pond Boundaries, Monitoring Wells, Property Boundary, Topography, and Beaverdam Creek provided by Southern Company Services and Wood Environment & Infrastructure Solutions; Contours, Flow Arrow, and Ocmulgee River provided by Stantec
3. Background: Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community, Esri, TomTom, Garmin, SafeGraph, FAO, METI/NASA, USGS, EPA, NPS, USFWS, Esri Community Maps Contributors, © OpenStreetMap, Microsoft, Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS, US Census Bureau, USDA, USFWS. Plant imagery provided by client and is dated 1/22/2024.

Legend

- Detection Monitoring Well
- Assessment Monitoring Well
- Surface Water Sampling Location
- Interpreted Groundwater Flow Direction
- Potentiometric Surface Contour (feet (ft) NAVD88)
- Inferred Potentiometric Surface Contour (ft NAVD88)
- Lithium Concentration Contour Jan 2024
- Beaverdam Creek/Ocmulgee River (Approximate)
- Approximate Property Boundary
- Ash Pond 2 Dry Ash Stockpile (DAS) (approximate location)
- Ash Pond 3 and Ash Monofill

0.00962 (J) Lithium Concentration milligrams per Liter

Isoconcentration Notes:

Lithium concentration data from groundwater and surface water samples collected during the January 2024 monitoring event.

J indicates the constituent was detected between the analytical method detection limit and the laboratory reporting limit. The value followed by J is qualified by the laboratory as estimated.

GWPS- Groundwater Protection Standard

Analyte	Units	GWPS
Lithium	mg/l	0.04

0 200 400 Feet

(At original document size of 11x17)
1:2,400

N

Stantec

Georgia Power

Project Location
Macon, Georgia

Prepared by DMB on 6/26/2024
TR by CS on 6/26/2024
IR by JK on 6/26/2024

Client/Project 175569434
Georgia Power
2024 Annual Groundwater Monitoring and Corrective Action Report - Plant Arkwright Ash Pond 2 Dry Ash Stockpile

Figure No.
8

Title
Isoconcentration Map for Lithium AP-2 DAS - January 2024

Disclaimer: This document has been prepared based on information provided by others as cited in the Notes section. Stantec has not verified the accuracy and/or completeness of this information and shall not be responsible for any errors or omissions which may be incorporated herein as a result. Stantec assumes no responsibility for data supplied in electronic format, and the recipient accepts full responsibility for verifying the accuracy and completeness of the data.

Appendix A
Well Inspections

MONITORING WELL INSPECTION CHECKLIST

Stantec

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

Stantec

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

Stantec

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: Houston Lynn 8/11/2023

DL/SME Review By / Date: Calli Provenza 8/14/2023

MONITORING WELL INSPECTION CHECKLIST

Stantec

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

Stantec

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

Stantec

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

Stantec

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

Stantec

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

Stantec

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

Stantec

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

Plant Arkwright Ash Pond 2 Well Inspection Form
January 22, 2024

	Location/Identification				Protective Casing					Surface Pad			Internal Casing			
Well ID:	Visible and accessible	Properly identified with correct well ID	Located in high traffic area; does the well require protection from traffic	Acceptable drainage around well (no standing water, not located in obvious drainage flow path)	Free from apparent damage and able to be secured	No degradation or deterioration	Functioning weep hole	Annular space clear of debris and water, or filled with pea gravel/sand	Locked and is the lock in good condition	Good condition (not cracked/ broken)	Sloped away from the protective casing	In complete contact with the ground surface and stable	Cap prevents entry of foreign material into the well	Free of kinks/bends, or any obstructions from foreign objects (such as bailers)	Properly vented for equilibration of air pressure	Corrective actions as needed, by date:
AP-2																
ARGWA-19	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	NA
ARGWA-20	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	NA
ARGWC-21	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	NA
ARGWC-22	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	NA
ARGWC-23	Yes	Yes	No	located in drainage flow path	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Needs new lock; lock replaced on 1/25
ARAMW-1	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	NA
ARAMW-2	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	NA
ARAMW-7	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	NA
ARAMW-8	Yes	Yes	No	located in drainage flow path	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	NA
ARAMW-9	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	NA

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**

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:

Created using VuSitu from In-Situ, Inc.

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, ARGWA-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**

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:

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**

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:

Created using VuSitu from In-Situ, Inc.

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**

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:

Created using VuSitu from In-Situ, Inc.

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**

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:

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**

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:

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**

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:

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**

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:

Created using VuSitu from In-Situ, Inc.

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**

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:

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**

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:

Created using VuSitu from In-Situ, Inc.

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**

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:

Created using VuSitu from In-Situ, Inc.

Low-Flow Test Report:

Test Date / Time: 1/17/2024 2:28:27 PM
Project: Arkwright AP-2
Operator Name: T. Stephens

Location Name: ARGWC-23 **Latitude: 32.92134543883886** **Longitude: -83.70190283291386** **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 18 ft** **Total Depth: 28.05 ft** **Initial Depth to Water: 11.33 ft**	**Pump Type: Non dedicated Bladder Pump** **Tubing Type: LDPE** **Pump Intake From TOC: 23 ft** **Estimated Total Volume Pumped: 25795 ml** **Flow Cell Volume: 90 ml** **Final Flow Rate: 125 ml/min** **Final Draw Down: 1.97 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 952637**

Test Notes:
Redevelopment by over-pumping. Surged at bottom of screen. Went to top of screen back down then left at middle of screen before lowering purge rate.

Weather Conditions:
Sunny 41 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	+/- 0.5	
1/17/2024 2:28 PM	00:00	6.47 pH	18.64 °C	530.36 µS/cm	6.19 mg/L	168.00 NTU	51.8 mV	11.33 ft	500.00 ml/min
1/17/2024 2:38 PM	10:00	6.47 pH	20.23 °C	516.17 µS/cm	3.59 mg/L	20.20 NTU	15.7 mV	11.33 ft	400.00 ml/min
1/17/2024 2:48 PM	20:00	6.50 pH	20.66 °C	482.61 µS/cm	7.42 mg/L	73.70 NTU	31.2 mV	12.30 ft	300.00 ml/min
1/17/2024 2:58 PM	30:00	6.61 pH	19.09 °C	486.91 µS/cm	9.58 mg/L	14.90 NTU	60.3 mV	12.10 ft	300.00 ml/min
1/17/2024 3:04 PM	35:34	6.43 pH	17.54 °C	490.03 µS/cm	1.35 mg/L	8.30 NTU	107.0 mV	13.30 ft	300.00 ml/min
1/17/2024 3:09 PM	40:34	6.41 pH	17.14 °C	492.42 µS/cm	1.22 mg/L	5.38 NTU	79.2 mV	13.30 ft	300.00 ml/min
1/17/2024 3:14 PM	45:34	6.41 pH	17.06 °C	492.92 µS/cm	1.32 mg/L	4.62 NTU	76.4 mV	13.30 ft	300.00 ml/min
1/17/2024 3:19 PM	50:34	6.40 pH	17.15 °C	493.62 µS/cm	1.28 mg/L	4.16 NTU	75.4 mV	13.30 ft	300.00 ml/min
1/17/2024 3:24 PM	55:34	6.40 pH	17.36 °C	492.32 µS/cm	1.34 mg/L	4.75 NTU	73.9 mV	13.30 ft	300.00 ml/min
1/17/2024 3:29 PM	01:00:59	6.41 pH	17.29 °C	489.64 µS/cm	1.44 mg/L	4.51 NTU	59.8 mV	13.30 ft	300.00 ml/min
1/17/2024 3:34 PM	01:05:59	6.41 pH	17.49 °C	491.55 µS/cm	1.46 mg/L	4.68 NTU	71.2 mV	13.30 ft	300.00 ml/min
1/17/2024 3:39 PM	01:10:59	6.41 pH	17.23 °C	492.41 µS/cm	1.55 mg/L	4.56 NTU	90.6 mV	13.30 ft	300.00 ml/min
1/17/2024 3:44 PM	01:15:59	6.41 pH	16.69 °C	490.74 µS/cm	1.55 mg/L	4.57 NTU	70.2 mV	13.30 ft	300.00 ml/min

Samples

Sample ID:	Description:

Low-Flow Test Report:

Test Date / Time: 1/17/2024 3:01:40 PM
Project: Arkwright AP-2
Operator Name: J. Myer

Location Name: ARAMW-8 **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: 10.11 ft**	**Pump Type: Non Dedicated Bladder Pump** **Tubing Type: LDPE** **Pump Intake From TOC: 44.5 ft** **Estimated Total Volume Pumped: 22480 ml** **Flow Cell Volume: 90 ml** **Final Flow Rate: 100 ml/min** **Final Draw Down: 16.84 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 989619**

Test Notes:
Redevelopment by over-pumping. Lowered pump to bottom and slightly surged. Brought to the top of screen and then slowly lowered. Finished in the middle of the screen and lowered purge rate.

At 1:00:00. Battery died and had to exchange for new battery without interruption of development.

Weather Conditions:
Sunny 45 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	+/- 0.5	
1/17/2024 3:01 PM	00:00	6.83 pH	15.83 °C	676.89 µS/cm	10.62 mg/L	112.00 NTU	13.1 mV	19.10 ft	500.00 ml/min
1/17/2024 3:11 PM	10:00	6.71 pH	16.50 °C	666.37 µS/cm	6.33 mg/L	37.20 NTU	11.4 mV	25.70 ft	400.00 ml/min
1/17/2024 3:21 PM	20:00	6.79 pH	16.69 °C	0.00 µS/cm	7.58 mg/L	24.60 NTU	37.5 mV	27.55 ft	300.00 ml/min
1/17/2024 3:31 PM	29:56	6.75 pH	16.75 °C	638.73 µS/cm	6.72 mg/L	17.40 NTU	23.2 mV	27.25 ft	100.00 ml/min
1/17/2024 3:36 PM	34:56	6.59 pH	16.90 °C	658.43 µS/cm	2.12 mg/L	58.20 NTU	17.5 mV	27.25 ft	100.00 ml/min
1/17/2024 3:41 PM	39:56	6.62 pH	17.46 °C	649.42 µS/cm	2.16 mg/L	51.10 NTU	17.4 mV	27.15 ft	100.00 ml/min
1/17/2024 3:46 PM	44:56	6.61 pH	16.72 °C	654.99 µS/cm	1.95 mg/L	41.00 NTU	16.6 mV	27.00 ft	100.00 ml/min
1/17/2024 3:51 PM	49:56	6.64 pH	16.37 °C	659.89 µS/cm	1.93 mg/L	37.70 NTU	16.4 mV	26.85 ft	100.00 ml/min
1/17/2024 3:56 PM	54:56	6.64 pH	16.23 °C	665.38 µS/cm	1.98 mg/L	29.20 NTU	14.9 mV	26.50 ft	100.00 ml/min
1/17/2024 4:01 PM	59:56	6.65 pH	16.05 °C	660.53 µS/cm	2.01 mg/L	27.30 NTU	15.2 mV	26.40 ft	100.00 ml/min
1/17/2024 4:06 PM	01:04:56	6.61 pH	15.99 °C	664.98 µS/cm	1.53 mg/L	19.00 NTU	12.4 mV	26.25 ft	100.00 ml/min
1/17/2024 4:11 PM	01:09:56	6.59 pH	16.41 °C	669.76 µS/cm	1.17 mg/L	16.30 NTU	10.2 mV	26.35 ft	100.00 ml/min

1/17/2024 4:16 PM	01:14:56	6.58 pH	16.46 °C	665.53 µS/cm	0.96 mg/L	10.90 NTU	8.9 mV	26.40 ft	100.00 ml/min
1/17/2024 4:21 PM	01:19:56	6.57 pH	16.37 °C	667.17 µS/cm	0.85 mg/L	10.00 NTU	8.5 mV	26.40 ft	100.00 ml/min
1/17/2024 4:26 PM	01:24:56	6.57 pH	16.28 °C	668.80 µS/cm	0.74 mg/L	9.75 NTU	8.6 mV	26.45 ft	100.00 ml/min
1/17/2024 4:31 PM	01:29:56	6.56 pH	16.10 °C	664.11 µS/cm	0.67 mg/L	9.51 NTU	7.6 mV	26.50 ft	100.00 ml/min
1/17/2024 4:36 PM	01:34:56	6.56 pH	16.05 °C	664.87 µS/cm	0.58 mg/L	8.32 NTU	7.0 mV	26.55 ft	100.00 ml/min
1/17/2024 4:41 PM	01:39:56	6.56 pH	15.97 °C	667.42 µS/cm	0.53 mg/L	7.88 NTU	6.7 mV	26.60 ft	100.00 ml/min
1/17/2024 4:46 PM	01:44:56	6.56 pH	15.86 °C	669.75 µS/cm	0.44 mg/L	7.10 NTU	6.4 mV	26.65 ft	100.00 ml/min
1/17/2024 4:51 PM	01:49:56	6.56 pH	15.87 °C	671.10 µS/cm	0.40 mg/L	6.83 NTU	4.9 mV	26.70 ft	100.00 ml/min
1/17/2024 4:56 PM	01:54:56	6.56 pH	15.86 °C	669.26 µS/cm	0.35 mg/L	6.29 NTU	4.0 mV	26.75 ft	100.00 ml/min
1/17/2024 5:01 PM	01:59:56	6.56 pH	15.83 °C	675.63 µS/cm	0.28 mg/L	5.16 NTU	2.6 mV	26.80 ft	100.00 ml/min
1/17/2024 5:06 PM	02:04:56	6.57 pH	15.85 °C	677.12 µS/cm	0.25 mg/L	4.30 NTU	0.9 mV	26.85 ft	100.00 ml/min
1/17/2024 5:11 PM	02:09:56	6.57 pH	15.74 °C	680.24 µS/cm	0.22 mg/L	4.14 NTU	-0.3 mV	26.90 ft	100.00 ml/min
1/17/2024 5:16 PM	02:14:56	6.57 pH	15.83 °C	682.60 µS/cm	0.19 mg/L	3.19 NTU	-1.5 mV	26.95 ft	100.00 ml/min

Samples

Sample ID:	Description:

Low-Flow Test Report:

Test Date / Time: 1/18/2024 10:07:59 AM
Project: Arkwright AP-2
Operator Name: J. Myer

Location Name: ARAMW-7 **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 40.75 ft** **Total Depth: 50.75 ft** **Initial Depth to Water: 12.62 ft**	**Pump Type: Non Dedicated Bladder Pump** **Tubing Type: LDPE** **Pump Intake From TOC: 45 ft** **Estimated Total Volume Pumped: 24453.334 ml** **Flow Cell Volume: 90 ml** **Final Flow Rate: 300 ml/min** **Final Draw Down: 0.78 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 952637**

Test Notes:
Redevelopment by over-pumping. Started pump at bottom. Slightly surged initially. Brought pump to the top of screen then lowered to the bottom of screen before setting pump in the middle of the screen and lowering the purge rate.

Weather Conditions:
Sunny 32 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	+/- 0.5	
1/18/2024 10:07 AM	00:00	6.53 pH	13.31 °C	2,022.5 µS/cm	10.16 mg/L	1,000.00 NTU	109.5 mV	13.40 ft	500.00 ml/min
1/18/2024 10:17 AM	10:00	5.58 pH	15.32 °C	1,943.2 µS/cm	3.12 mg/L	7.34 NTU	35.3 mV	13.60 ft	500.00 ml/min
1/18/2024 10:27 AM	20:00	5.55 pH	16.38 °C	1,859.6 µS/cm	3.24 mg/L	11.00 NTU	-9.9 mV	13.70 ft	400.00 ml/min
1/18/2024 10:37 AM	29:53	5.49 pH	16.24 °C	1,909.8 µS/cm	0.29 mg/L	8.55 NTU	11.0 mV	13.40 ft	300.00 ml/min
1/18/2024 10:42 AM	34:53	5.50 pH	16.60 °C	1,890.2 µS/cm	0.82 mg/L	9.31 NTU	-3.2 mV	13.40 ft	300.00 ml/min
1/18/2024 10:47 AM	39:53	5.50 pH	16.65 °C	1,895.8 µS/cm	0.55 mg/L	8.21 NTU	-10.6 mV	13.40 ft	300.00 ml/min
1/18/2024 10:52 AM	44:53	5.51 pH	16.62 °C	1,910.6 µS/cm	0.61 mg/L	6.92 NTU	-11.6 mV	13.40 ft	300.00 ml/min
1/18/2024 10:57 AM	49:53	5.51 pH	16.83 °C	1,910.2 µS/cm	1.07 mg/L	4.80 NTU	-5.3 mV	13.40 ft	300.00 ml/min
1/18/2024 11:02 AM	54:53	5.51 pH	16.93 °C	1,944.3 µS/cm	0.61 mg/L	3.72 NTU	-10.5 mV	13.40 ft	300.00 ml/min
1/18/2024 11:07 AM	59:53	5.51 pH	17.05 °C	1,910.5 µS/cm	0.67 mg/L	3.70 NTU	-11.3 mV	13.40 ft	300.00 ml/min
1/18/2024 11:12 AM	01:04:53	5.51 pH	17.15 °C	1,912.8 µS/cm	0.61 mg/L	3.50 NTU	-11.6 mV	13.40 ft	300.00 ml/min

Samples

Sample ID:	Description:

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**

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**

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**

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

Created using VuSitu from In-Situ, Inc.

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**

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**

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**

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

Created using VuSitu from In-Situ, Inc.

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**

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

Created using VuSitu from In-Situ, Inc.

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**

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**

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

Created using VuSitu from In-Situ, Inc.

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**

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**

Test Notes:
Hydrogen Sulfide Test Result: NA. Purging stopped without sampling due to high turbidity. This low-flow test report represents
part 1/? 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:

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**

Test Notes:
Hydrogen Sulfide Test Result: NA. No samples collected due to high turbidity. This low-flow test report represents part 2/? for ARGWA-19.

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**

Test Notes:
Hydrogen sulfide test result: NA. No samples taken due to high turbidity. This low-flow test report represents part 3/? 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:

Created using VuSitu from In-Situ, Inc.

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**

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

Created using VuSitu from In-Situ, Inc.

Low-Flow Test Report:

Test Date / Time: 1/24/2024 11:13:37 AM
Project: Arkwright
Operator Name: Zach Levy

Location Name: ARAMW-1 **Latitude: 32.92141534391139** **Longitude: -83.70228873573588** **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 37.4 ft** **Total Depth: 47.4 ft** **Initial Depth to Water: 13.32 ft**	**Pump Type: Peristaltic** **Tubing Type: LDPE** **Pump Intake From TOC: 42.4 ft** **Estimated Total Volume Pumped: 9000 ml** **Flow Cell Volume: 90 ml** **Final Flow Rate: 300 ml/min** **Final Draw Down: 0.31 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 952637**

Test Notes:
Hydrogen sulfide: 0.0 mg/L
Pump speed: 52.7
Turbiditmeter S/N: 23100D000373
WLM S/N: 28839

Weather Conditions:
Rainy

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 10 %	+/- 10 %	+/- 10	+/- 0.5	
1/24/2024 11:13 AM	00:00	6.21 pH	18.01 °C	796.96 µS/cm	0.20 mg/L	1.44 NTU	11.7 mV	13.58 ft	300.00 ml/min
1/24/2024 11:18 AM	05:00	6.19 pH	18.54 °C	791.04 µS/cm	0.13 mg/L	2.39 NTU	-4.4 mV	13.60 ft	300.00 ml/min
1/24/2024 11:23 AM	10:00	6.18 pH	18.66 °C	786.47 µS/cm	0.11 mg/L	2.05 NTU	3.6 mV	13.61 ft	300.00 ml/min
1/24/2024 11:28 AM	15:00	6.16 pH	18.68 °C	786.56 µS/cm	0.09 mg/L	0.69 NTU	8.0 mV	13.63 ft	300.00 ml/min
1/24/2024 11:33 AM	20:00	6.13 pH	18.70 °C	783.47 µS/cm	0.08 mg/L	0.38 NTU	10.0 mV	13.63 ft	300.00 ml/min
1/24/2024 11:38 AM	25:00	6.13 pH	18.74 °C	781.44 µS/cm	0.08 mg/L	0.42 NTU	11.7 mV	13.63 ft	300.00 ml/min
1/24/2024 11:43 AM	30:00	6.12 pH	18.73 °C	782.76 µS/cm	0.07 mg/L	0.39 NTU	14.1 mV	13.63 ft	300.00 ml/min

Samples

Sample ID:	Description:

ARK-ARAMW-1	Sample time: 11:50 9 bottles: radium, TDS, metals, anions, Fe2+/Mn2+, alkalinity, nitrate/nitrite
ARK-AP2-FB-03	Sample time: 11:45 7 bottles: radium, TDS, metals, anions, nitrate/nitrite

Created using VuSitu from In-Situ, Inc.

Low-Flow Test Report:

Test Date / Time: 1/24/2024 9:45:14 AM
Project: Arkwright
Operator Name: E. Scheiben

Location Name: ARAMW-2 **Latitude: 32.92019880146678** **Longitude: -83.70373101689026** **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: 13.62 ft**	**Pump Type: Peristaltic** **Tubing Type: LDPE** **Tubing Inner Diameter: 0.17 in** **Tubing Length: 25 ft** **Pump Intake From TOC: 20.2 ft** **Estimated Total Volume Pumped: 8250 ml** **Flow Cell Volume: 90 ml** **Final Flow Rate: 150 ml/min** **Final Draw Down: 0 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 966105**

Test Notes:
Turbidity S/N: 23100D000368
WLM S/N: removed. Rental ID 29051
Sulfide=0.0mg/L

Weather Conditions:
Light rain

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 10 %	+/- 10 %	+/- 10	+/- 0.5	
1/24/2024 9:45 AM	00:00	6.08 pH	16.51 °C	778.52 µS/cm	1.27 mg/L	0.00 NTU	128.9 mV	13.62 ft	150.00 ml/min
1/24/2024 9:50 AM	05:00	6.08 pH	17.80 °C	728.08 µS/cm	0.28 mg/L	33.50 NTU	82.5 mV	13.62 ft	150.00 ml/min
1/24/2024 9:55 AM	10:00	6.08 pH	18.00 °C	725.32 µS/cm	0.20 mg/L	17.40 NTU	92.6 mV	13.62 ft	150.00 ml/min
1/24/2024 10:00 AM	15:00	6.09 pH	18.12 °C	723.14 µS/cm	0.17 mg/L	16.90 NTU	90.5 mV	13.62 ft	150.00 ml/min
1/24/2024 10:05 AM	20:00	6.09 pH	18.21 °C	724.63 µS/cm	0.16 mg/L	14.70 NTU	85.5 mV	13.62 ft	150.00 ml/min
1/24/2024 10:10 AM	25:00	6.09 pH	18.23 °C	723.39 µS/cm	0.14 mg/L	12.90 NTU	63.7 mV	13.62 ft	150.00 ml/min
1/24/2024 10:15 AM	30:00	6.09 pH	18.22 °C	724.63 µS/cm	0.13 mg/L	10.30 NTU	78.6 mV	13.62 ft	150.00 ml/min
1/24/2024 10:20 AM	35:00	6.09 pH	18.22 °C	725.28 µS/cm	0.13 mg/L	9.14 NTU	79.1 mV	13.62 ft	150.00 ml/min
1/24/2024 10:25 AM	40:00	6.10 pH	18.24 °C	726.83 µS/cm	0.12 mg/L	7.73 NTU	77.1 mV	13.62 ft	150.00 ml/min
1/24/2024 10:30 AM	45:00	6.10 pH	18.21 °C	727.62 µS/cm	0.12 mg/L	4.90 NTU	74.9 mV	13.62 ft	150.00 ml/min
1/24/2024 10:35 AM	50:00	6.10 pH	18.30 °C	725.93 µS/cm	0.13 mg/L	4.19 NTU	62.1 mV	13.62 ft	150.00 ml/min
1/24/2024 10:40 AM	55:00	6.10 pH	18.30 °C	727.11 µS/cm	0.12 mg/L	4.22 NTU	78.2 mV	13.62 ft	150.00 ml/min

Samples

Sample ID:	Description:
ARK-ARAMW-2	9 bottles filled at 10:45 (3) Ra-226/Ra-228 (1) Metals (1)Fe2+/Mn2+ [filtered] (1) anions (1) Nitrate/Nitrite (1) TDS (1) Alkalinity
ARK-AP2-EB-03	7 bottles filled at 11:55 (3) Ra-226/Ra-228 . (1) Metals (1) anions (1) Nitrate/Nitrite (1) TDS

Created using VuSitu from In-Situ, Inc.

Low-Flow Test Report:

Test Date / Time: 1/23/2024 4:13:33 PM
Project: Arkwright
Operator Name: J. Myer

Location Name: ARAMW-7 **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 40.4 ft** **Total Depth: 50.7 ft** **Initial Depth to Water: 12.81 ft**	**Pump Type: Peristaltic** **Tubing Type: LDPE** **Pump Intake From TOC: 45.4 ft** **Estimated Total Volume Pumped: 4500 ml** **Flow Cell Volume: 90 ml** **Final Flow Rate: 150 ml/min** **Final Draw Down: 0.37 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 989630**

Test Notes:
AquaTroll #: 989630
Turbidimeter S/N: 22690D00345
WLM S/N: 11FF2205011ML
Alexis Peristaltic Pump: 24051
Pump Speed: 30.5 Hydrogen
Sulfide: 0.0 mg/L

Weather Conditions:
Overcast 16 °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	+/- 0.5	
1/23/2024 4:13 PM	00:00	5.89 pH	17.60 °C	1,856.0 µS/cm	2.49 mg/L	1.38 NTU	26.0 mV	13.15 ft	150.00 ml/min
1/23/2024 4:18 PM	05:00	5.56 pH	17.63 °C	1,842.7 µS/cm	0.32 mg/L	2.10 NTU	10.1 mV	13.15 ft	150.00 ml/min
1/23/2024 4:23 PM	10:00	5.57 pH	17.63 °C	1,840.0 µS/cm	0.25 mg/L	2.01 NTU	4.6 mV	13.18 ft	150.00 ml/min
1/23/2024 4:28 PM	15:00	5.56 pH	17.66 °C	1,840.9 µS/cm	0.21 mg/L	2.45 NTU	-0.7 mV	13.18 ft	150.00 ml/min
1/23/2024 4:33 PM	20:00	5.57 pH	17.67 °C	1,839.2 µS/cm	0.18 mg/L	1.54 NTU	-5.4 mV	13.18 ft	150.00 ml/min
1/23/2024 4:38 PM	25:00	5.56 pH	17.65 °C	1,838.9 µS/cm	0.16 mg/L	2.71 NTU	-8.3 mV	13.18 ft	150.00 ml/min
1/23/2024 4:43 PM	30:00	5.57 pH	17.63 °C	1,851.3 µS/cm	0.14 mg/L	2.16 NTU	-14.8 mV	13.18 ft	150.00 ml/min

Samples

Sample ID:	Description:

ARK-ARAMW-7	Sample Time: 16:50 9 Bottles Metals Radiologicals TDS Anions Alkalinity Nitrate/Nitrite Fe2+/Mn2+

Created using VuSitu from In-Situ, Inc.

Low-Flow Test Report:

Test Date / Time: 1/24/2024 12:34:55 PM
Project: Arkwright
Operator Name: Dylan Ripley

Location Name: ARAMW-8 **Latitude: 32.92132913888911** **Longitude: -83.70190566615437** **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 39.5 ft** **Total Depth: 49.8 ft** **Initial Depth to Water: 11.28 ft**	**Pump Type: Peristaltic** **Tubing Type: Poly** **Pump Intake From TOC: 44.5 ft** **Estimated Total Volume Pumped: 4000 ml** **Flow Cell Volume: 90 ml** **Final Flow Rate: 100 ml/min** **Final Draw Down: 5.21 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 965586**

Test Notes:
Peristaltic S/N: 738642
Speed : 15.3
Turbidimeter S/N: 23060D000342
WLM S/N: T11FF2104058JH
Sulfide = 0.0 mg/L

Weather Conditions:
Drizzle
18 °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	+/- 0.5	
1/24/2024 12:34 PM	00:00	6.48 pH	17.96 °C	678.17 µS/cm	0.73 mg/L	5.27 NTU	10.2 mV	13.13 ft	100.00 ml/min
1/24/2024 12:39 PM	05:00	6.47 pH	18.09 °C	677.11 µS/cm	0.66 mg/L	6.96 NTU	10.1 mV	13.68 ft	100.00 ml/min
1/24/2024 12:44 PM	10:00	6.48 pH	18.09 °C	676.19 µS/cm	0.98 mg/L	7.03 NTU	13.3 mV	14.10 ft	100.00 ml/min
1/24/2024 12:49 PM	15:00	6.47 pH	18.12 °C	677.64 µS/cm	0.93 mg/L	7.57 NTU	12.4 mV	14.57 ft	100.00 ml/min
1/24/2024 12:54 PM	20:00	6.48 pH	18.19 °C	677.09 µS/cm	0.94 mg/L	5.81 NTU	12.9 mV	15.04 ft	100.00 ml/min
1/24/2024 12:59 PM	25:00	6.48 pH	18.25 °C	676.24 µS/cm	0.93 mg/L	6.03 NTU	14.1 mV	15.38 ft	100.00 ml/min
1/24/2024 1:04 PM	30:00	6.48 pH	18.20 °C	675.48 µS/cm	0.95 mg/L	4.72 NTU	15.7 mV	15.76 ft	100.00 ml/min
1/24/2024 1:09 PM	35:00	6.48 pH	18.21 °C	675.86 µS/cm	0.95 mg/L	4.76 NTU	16.8 mV	16.14 ft	100.00 ml/min
1/24/2024 1:14 PM	40:00	6.47 pH	18.29 °C	675.81 µS/cm	0.94 mg/L	4.68 NTU	17.8 mV	16.49 ft	100.00 ml/min

Samples

Sample ID:	Description:
ARAMW-8	13:25 9 Bottles Radium TDS Anions Metals Nitrate/Nitrite Alkalinity Fe2+/Mn2+

Low-Flow Test Report:

Test Date / Time: 1/23/2024 1:53:22 PM
Project: Arkwright
Operator Name: J. Myer

Location Name: ARAMW-9 **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 95.4 ft** **Total Depth: 105.9 ft** **Initial Depth to Water: 6.3 ft**	**Pump Type: Non-Dedicated Bladder** **Tubing Type: LDPE** **Pump Intake From TOC: 100.4 ft** **Estimated Total Volume Pumped: 3000 ml** **Flow Cell Volume: 90 ml** **Final Flow Rate: 100 ml/min** **Final Draw Down: 8.1 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 989630**

Test Notes:
AquaTroll #: 989630
Turbidimeter S/N: 22690D00345
WLM S/N: 11FF2205011ML
MP-50 S/N: 35
ID: 97
PSI: 45
Hydrogen Sulfide: 0.3 mg/L

Weather Conditions:
Overcast 15 °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	+/- 0.5	
1/23/2024 1:53 PM	00:00	7.78 pH	16.95 °C	1,111.4 µS/cm	1.36 mg/L	2.47 NTU	-112.0 mV	8.10 ft	100.00 ml/min
1/23/2024 1:58 PM	05:00	7.84 pH	16.94 °C	1,122.5 µS/cm	0.63 mg/L	1.45 NTU	-119.1 mV	9.15 ft	100.00 ml/min
1/23/2024 2:03 PM	10:00	7.89 pH	16.92 °C	1,122.4 µS/cm	0.42 mg/L	1.25 NTU	-123.8 mV	10.20 ft	100.00 ml/min
1/23/2024 2:08 PM	15:00	7.90 pH	16.94 °C	1,122.0 µS/cm	0.37 mg/L	1.26 NTU	-121.0 mV	11.45 ft	100.00 ml/min
1/23/2024 2:13 PM	20:00	7.91 pH	17.09 °C	1,120.8 µS/cm	0.36 mg/L	1.10 NTU	-125.5 mV	12.40 ft	100.00 ml/min
1/23/2024 2:18 PM	25:00	7.92 pH	17.14 °C	1,118.1 µS/cm	0.35 mg/L	1.72 NTU	-126.0 mV	13.45 ft	100.00 ml/min
1/23/2024 2:23 PM	30:00	7.92 pH	17.24 °C	1,116.7 µS/cm	0.36 mg/L	1.69 NTU	-125.8 mV	14.40 ft	100.00 ml/min

Samples

Sample ID:	Description:
ARK-ARAMW-9	Sample Time: 14:30 Metals Radiologicals TDS Anions Alkalinity Nitrate/Nitrite Fe2+/Mn2+

Created using VuSitu from In-Situ, Inc.

Low-Flow Test Report:

Test Date / Time: 1/23/2024 11:01:20 AM
Project: Arkwright
Operator Name: J. Myer

Location Name: ARGWA-19 **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 43.1 ft** **Total Depth: 53.4 ft** **Initial Depth to Water: 29.65 ft**	**Pump Type: Dedicated Bladder** **Tubing Type: LDPE** **Pump Intake From TOC: 47.7 ft** **Estimated Total Volume Pumped: 8000 ml** **Flow Cell Volume: 90 ml** **Final Flow Rate: 400 ml/min** **Final Draw Down: 0.05 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 989630**

Test Notes:
AquaTroll #: 989630
Turbidimeter S/N: 22690D00345
WLM S/N: 11FF2205011ML
MP-50 S/N: 35
ID: 103
PSI: 30
Hydrogen Sulfide: 0.0 mg/L

Weather Conditions:
Overcast 11 °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	+/- 0.5	
1/23/2024 11:01 AM	00:00	5.98 pH	16.87 °C	132.94 µS/cm	4.32 mg/L	1.28 NTU	116.6 mV	29.70 ft	400.00 ml/min
1/23/2024 11:06 AM	05:00	5.93 pH	18.78 °C	128.68 µS/cm	3.18 mg/L	0.90 NTU	75.9 mV	29.70 ft	400.00 ml/min
1/23/2024 11:11 AM	10:00	5.93 pH	18.81 °C	128.76 µS/cm	3.17 mg/L	0.76 NTU	106.0 mV	29.70 ft	400.00 ml/min
1/23/2024 11:16 AM	15:00	5.93 pH	18.85 °C	128.39 µS/cm	3.18 mg/L	0.46 NTU	107.5 mV	29.70 ft	400.00 ml/min
1/23/2024 11:21 AM	20:00	5.93 pH	18.90 °C	127.79 µS/cm	3.18 mg/L	0.61 NTU	70.9 mV	29.70 ft	400.00 ml/min

Samples

Sample ID:	Description:

ARK-ARGWA-19	Sample Time: 11:25 9 Bottles Metals Radiologicals Alkalinity Nitrate/Nitrite Anions TDS Fe2+/Mn2+
ARK-AP2-FD-03	7 bottles Metals Radiologicals TDS Anions Nitrate/Nitrite

Created using VuSitu from In-Situ, Inc.

Low-Flow Test Report:

Test Date / Time: 1/23/2024 11:18:38 AM
Project: Arkwright
Operator Name: Dylan Ripley

Location Name: ARGWA-20 **Latitude: 32.92458767914931** **Longitude: -83.70153536268832** **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 28.1 ft** **Total Depth: 38.4 ft** **Initial Depth to Water: 16.97 ft**	**Pump Type: Dedicated Bladder** **Tubing Type: LDPE** **Pump Intake From TOC: 32.6 ft** **Estimated Total Volume Pumped: 29250 ml** **Flow Cell Volume: 90 ml** **Final Flow Rate: 150 ml/min** **Final Draw Down: 0.08 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 965586**

Test Notes:
MP-50 S/N: 07
ID: 95
PSI: 35
Turbidimeter S/N: 23060D000342
WLM S/N: T11FF2104058JH
HS = 0.0 mg/L

Weather Conditions:
Overcast
11 °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	+/- 0.5	
1/23/2024 11:18 AM	00:00	5.72 pH	16.99 °C	156.21 µS/cm	5.33 mg/L	66.40 NTU	136.0 mV	17.18 ft	150.00 ml/min
1/23/2024 11:23 AM	05:00	5.72 pH	17.00 °C	153.07 µS/cm	5.35 mg/L	31.40 NTU	95.1 mV	17.18 ft	150.00 ml/min
1/23/2024 11:28 AM	10:00	5.72 pH	17.00 °C	153.92 µS/cm	5.35 mg/L	22.20 NTU	91.4 mV	17.05 ft	150.00 ml/min
1/23/2024 11:33 AM	15:00	5.72 pH	17.00 °C	154.74 µS/cm	5.38 mg/L	26.40 NTU	87.2 mV	17.05 ft	150.00 ml/min
1/23/2024 11:38 AM	20:00	5.72 pH	17.02 °C	153.76 µS/cm	5.36 mg/L	22.50 NTU	89.8 mV	17.05 ft	150.00 ml/min
1/23/2024 11:43 AM	25:00	5.73 pH	17.05 °C	154.42 µS/cm	5.35 mg/L	27.00 NTU	89.0 mV	17.05 ft	150.00 ml/min
1/23/2024 11:48 AM	30:00	5.73 pH	17.09 °C	153.53 µS/cm	5.36 mg/L	20.40 NTU	88.9 mV	17.05 ft	150.00 ml/min
1/23/2024 11:53 AM	35:00	5.73 pH	17.05 °C	153.19 µS/cm	5.36 mg/L	21.80 NTU	89.0 mV	17.05 ft	150.00 ml/min
1/23/2024 11:58 AM	40:00	5.73 pH	17.08 °C	153.76 µS/cm	5.34 mg/L	21.80 NTU	89.3 mV	17.05 ft	150.00 ml/min

1/23/2024 12:03 PM	45:00	5.73 pH	17.11 °C	153.78 µS/cm	5.35 mg/L	19.60 NTU	88.5 mV	17.05 ft	150.00 ml/min
1/23/2024 12:08 PM	50:00	5.75 pH	17.11 °C	153.91 µS/cm	5.42 mg/L	15.60 NTU	87.9 mV	17.05 ft	150.00 ml/min
1/23/2024 12:13 PM	55:00	5.74 pH	17.13 °C	153.84 µS/cm	5.34 mg/L	15.20 NTU	88.3 mV	17.05 ft	150.00 ml/min
1/23/2024 12:18 PM	01:00:00	5.75 pH	17.14 °C	154.27 µS/cm	5.42 mg/L	15.90 NTU	87.1 mV	17.05 ft	150.00 ml/min
1/23/2024 12:23 PM	01:05:00	5.74 pH	17.15 °C	154.49 µS/cm	5.40 mg/L	13.90 NTU	87.7 mV	17.05 ft	150.00 ml/min
1/23/2024 12:28 PM	01:10:00	5.73 pH	17.18 °C	154.28 µS/cm	5.40 mg/L	13.50 NTU	87.7 mV	17.05 ft	150.00 ml/min
1/23/2024 12:33 PM	01:15:00	5.75 pH	17.18 °C	154.29 µS/cm	5.33 mg/L	13.30 NTU	87.1 mV	17.05 ft	150.00 ml/min
1/23/2024 12:38 PM	01:20:00	5.76 pH	17.20 °C	154.24 µS/cm	5.37 mg/L	12.20 NTU	87.1 mV	17.05 ft	150.00 ml/min
1/23/2024 12:43 PM	01:25:00	5.75 pH	17.22 °C	154.87 µS/cm	5.36 mg/L	12.60 NTU	87.1 mV	17.05 ft	150.00 ml/min
1/23/2024 12:48 PM	01:30:00	5.75 pH	17.26 °C	155.12 µS/cm	5.37 mg/L	10.20 NTU	86.7 mV	17.05 ft	150.00 ml/min
1/23/2024 12:53 PM	01:35:00	5.75 pH	17.22 °C	155.80 µS/cm	5.39 mg/L	11.60 NTU	86.6 mV	17.05 ft	150.00 ml/min
1/23/2024 12:58 PM	01:40:00	5.75 pH	17.27 °C	154.90 µS/cm	5.32 mg/L	9.42 NTU	87.4 mV	17.05 ft	150.00 ml/min
1/23/2024 1:03 PM	01:45:00	5.77 pH	17.27 °C	155.07 µS/cm	5.44 mg/L	9.68 NTU	86.6 mV	17.05 ft	150.00 ml/min
1/23/2024 1:08 PM	01:50:00	5.76 pH	17.29 °C	155.04 µS/cm	5.37 mg/L	7.87 NTU	86.4 mV	17.05 ft	150.00 ml/min
1/23/2024 1:13 PM	01:55:00	5.76 pH	17.31 °C	154.88 µS/cm	5.38 mg/L	7.27 NTU	82.5 mV	17.05 ft	150.00 ml/min
1/23/2024 1:18 PM	02:00:00	5.76 pH	17.29 °C	155.61 µS/cm	5.36 mg/L	8.11 NTU	86.1 mV	17.05 ft	150.00 ml/min
1/23/2024 1:23 PM	02:05:00	5.77 pH	17.27 °C	154.08 µS/cm	5.39 mg/L	8.27 NTU	125.0 mV	17.05 ft	150.00 ml/min
1/23/2024 1:28 PM	02:10:00	5.76 pH	17.27 °C	155.41 µS/cm	5.36 mg/L	9.06 NTU	88.0 mV	17.05 ft	150.00 ml/min
1/23/2024 1:33 PM	02:15:00	5.77 pH	17.27 °C	155.09 µS/cm	5.43 mg/L	8.08 NTU	86.3 mV	17.05 ft	150.00 ml/min
1/23/2024 1:38 PM	02:20:00	5.78 pH	17.25 °C	155.51 µS/cm	5.39 mg/L	7.95 NTU	85.8 mV	17.05 ft	150.00 ml/min
1/23/2024 1:43 PM	02:25:00	5.76 pH	17.25 °C	155.45 µS/cm	5.41 mg/L	7.49 NTU	86.8 mV	17.05 ft	150.00 ml/min
1/23/2024 1:48 PM	02:30:00	5.77 pH	17.25 °C	155.70 µS/cm	5.38 mg/L	7.06 NTU	85.8 mV	17.05 ft	150.00 ml/min
1/23/2024 1:53 PM	02:35:00	5.77 pH	17.27 °C	156.30 µS/cm	5.43 mg/L	8.07 NTU	81.3 mV	17.05 ft	150.00 ml/min
1/23/2024 1:58 PM	02:40:00	5.78 pH	17.27 °C	156.19 µS/cm	5.42 mg/L	6.48 NTU	84.5 mV	17.05 ft	150.00 ml/min
1/23/2024 2:03 PM	02:45:00	5.76 pH	17.24 °C	156.85 µS/cm	5.44 mg/L	6.65 NTU	85.8 mV	17.05 ft	150.00 ml/min
1/23/2024 2:08 PM	02:50:00	5.77 pH	17.23 °C	156.00 µS/cm	5.43 mg/L	6.84 NTU	85.3 mV	17.05 ft	150.00 ml/min
1/23/2024 2:13 PM	02:55:00	5.77 pH	17.23 °C	156.01 µS/cm	5.45 mg/L	6.59 NTU	84.6 mV	17.05 ft	150.00 ml/min
1/23/2024 2:18 PM	03:00:00	5.78 pH	17.23 °C	156.30 µS/cm	5.43 mg/L	7.17 NTU	85.1 mV	17.05 ft	150.00 ml/min
1/23/2024 2:23 PM	03:05:00	5.78 pH	17.27 °C	157.02 µS/cm	5.41 mg/L	6.49 NTU	84.9 mV	17.05 ft	150.00 ml/min

1/23/2024 2:28 PM	03:10:00	5.77 pH	17.30 °C	157.88 µS/cm	5.44 mg/L	7.77 NTU	80.9 mV	17.05 ft	150.00 ml/min
1/23/2024 2:33 PM	03:15:00	5.77 pH	17.31 °C	156.95 µS/cm	5.41 mg/L	6.78 NTU	83.9 mV	17.05 ft	150.00 ml/min

Samples

Sample ID:	Description:
ARK-ARGWA-20	14:40 9 bottles Radium TDS Metals Anions Nitrate/Nitrite Alkalinity Dissolved Metals

Low-Flow Test Report:

Test Date / Time: 1/24/2024 9:35:35 AM
Project: Arkwright
Operator Name: Zach Levy

Location Name: ARGWC-21 **Latitude: 32.92147321860512** **Longitude: -83.70219399937375** **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 17.4 ft** **Total Depth: 27.8 ft** **Initial Depth to Water: 14.03 ft**	**Pump Type: Dedicated bladder** **Tubing Type: LDPE** **Pump Intake From TOC: 21.7 ft** **Estimated Total Volume Pumped: 3000 ml** **Flow Cell Volume: 90 ml** **Final Flow Rate: 150 ml/min** **Final Draw Down: 0.48 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 952637**

Test Notes:
MP-50 S/N: 02
ID: 103
PSI: 10
Turbidity meter SN: 23100D000373
WLM S/N: 28830
Hydrogen sulfide: 0.0 mg/L

Weather Conditions:
Rainy

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 10 %	+/- 10 %	+/- 10	+/- 0.5	
1/24/2024 9:35 AM	00:00	6.03 pH	17.09 °C	766.02 µS/cm	0.60 mg/L	6.52 NTU	89.8 mV	14.64 ft	150.00 ml/min
1/24/2024 9:40 AM	05:00	6.03 pH	17.50 °C	762.06 µS/cm	0.45 mg/L	6.31 NTU	92.0 mV	14.51 ft	150.00 ml/min
1/24/2024 9:45 AM	10:00	6.03 pH	17.54 °C	759.59 µS/cm	0.37 mg/L	4.83 NTU	70.6 mV	14.49 ft	150.00 ml/min
1/24/2024 9:50 AM	15:00	6.03 pH	17.63 °C	755.72 µS/cm	0.35 mg/L	4.93 NTU	67.0 mV	14.51 ft	150.00 ml/min
1/24/2024 9:55 AM	20:00	6.03 pH	17.66 °C	757.53 µS/cm	0.30 mg/L	4.94 NTU	64.9 mV	14.51 ft	150.00 ml/min

Samples

Sample ID:	Description:
ARK-ARGWC-21	Sample time: 10:00 9 bottles: radium, TDS, metals, Fe2+/Mn2+, alkalinity, nitrate/nitrite, anions

Low-Flow Test Report:

Test Date / Time: 1/23/2024 4:27:00 PM
Project: Arkwright
Operator Name: Dylan Ripley

Location Name: ARGWC-22 **Latitude: 32.92458767914931** **Longitude: -83.70153536268832** **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: 13.77 ft**	**Pump Type: Peristaltic** **Tubing Type: Poly** **Pump Intake From TOC: 22.7 ft** **Estimated Total Volume Pumped: 4800 ml** **Flow Cell Volume: 90 ml** **Final Flow Rate: 160 ml/min** **Final Draw Down: 0.23 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 965586**

Test Notes:
Peristaltic S/N: 738642
Pump Speed: 25.2
Turbidimeter S/N: 23060D000342
WLM S/N: T11FF2104058JH
Sulfide = 0.0mg/L

Weather Conditions:
Overcast
16 °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	+/- 0.5	
1/23/2024 4:27 PM	00:00	5.91 pH	17.60 °C	1,325.3 µS/cm	0.32 mg/L	2.58 NTU	19.8 mV	14.00 ft	160.00 ml/min
1/23/2024 4:32 PM	05:00	5.88 pH	17.68 °C	1,357.0 µS/cm	0.26 mg/L	5.43 NTU	34.0 mV	14.00 ft	160.00 ml/min
1/23/2024 4:37 PM	10:00	5.87 pH	17.67 °C	1,364.5 µS/cm	0.26 mg/L	5.04 NTU	27.3 mV	14.00 ft	160.00 ml/min
1/23/2024 4:42 PM	15:00	5.89 pH	17.69 °C	1,363.5 µS/cm	0.24 mg/L	3.84 NTU	38.2 mV	14.00 ft	160.00 ml/min
1/23/2024 4:47 PM	20:00	5.89 pH	17.72 °C	1,362.9 µS/cm	0.22 mg/L	2.71 NTU	27.3 mV	14.00 ft	160.00 ml/min
1/23/2024 4:52 PM	25:00	5.87 pH	17.72 °C	1,359.2 µS/cm	0.21 mg/L	4.71 NTU	26.6 mV	14.00 ft	160.00 ml/min
1/23/2024 4:57 PM	30:00	5.88 pH	17.72 °C	1,359.0 µS/cm	0.21 mg/L	2.90 NTU	26.4 mV	14.00 ft	160.00 ml/min

Samples

Sample ID:	Description:

ARK-ARGWC-22	17:10 9 bottles Radium TDS Anions Metals Fe2+/Mn2+ Nitrate/Nitrite Alkalinity

Created using VuSitu from In-Situ, Inc.

Low-Flow Test Report:

Test Date / Time: 1/24/2024 9:56:51 AM
Project: Arkwright
Operator Name: Dylan Ripley

Location Name: ARGWC-23 **Latitude: 32.9212540707377** **Longitude: -83.70182143234746** **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 18.4 ft** **Total Depth: 28.4 ft** **Initial Depth to Water: 11.94 ft**	**Pump Type: Peristaltic** **Tubing Type: Poly** **Pump Intake From TOC: 23.4 ft** **Estimated Total Volume Pumped: 3000 ml** **Flow Cell Volume: 90 ml** **Final Flow Rate: 100 ml/min** **Final Draw Down: 0.79 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 965586**

Test Notes:
Peristaltic S/N: 738642
Speed: 14.2
Turbidimeter S/N: 23060D000342
WLM S/N: T11FF2104058JH
HS = 0.0 mg/L

Weather Conditions:
Drizzle
14 °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	+/- 0.5	
1/24/2024 9:56 AM	00:00	6.42 pH	17.09 °C	525.08 µS/cm	1.23 mg/L	3.00 NTU	109.7 mV	12.55 ft	100.00 ml/min
1/24/2024 10:01 AM	05:00	6.43 pH	17.40 °C	529.42 µS/cm	1.01 mg/L	2.74 NTU	73.4 mV	12.67 ft	100.00 ml/min
1/24/2024 10:06 AM	10:00	6.44 pH	17.54 °C	531.80 µS/cm	1.05 mg/L	1.29 NTU	89.5 mV	12.70 ft	100.00 ml/min
1/24/2024 10:11 AM	15:00	6.43 pH	17.58 °C	531.63 µS/cm	0.95 mg/L	1.30 NTU	87.6 mV	12.70 ft	100.00 ml/min
1/24/2024 10:16 AM	20:00	6.43 pH	17.63 °C	531.56 µS/cm	1.05 mg/L	1.60 NTU	84.8 mV	12.74 ft	100.00 ml/min
1/24/2024 10:21 AM	25:00	6.44 pH	17.63 °C	531.60 µS/cm	1.12 mg/L	0.86 NTU	59.5 mV	12.74 ft	100.00 ml/min
1/24/2024 10:26 AM	30:00	6.43 pH	17.63 °C	532.59 µS/cm	1.13 mg/L	0.86 NTU	56.1 mV	12.73 ft	100.00 ml/min

Samples

Sample ID:	Description:

ARK-ARGWC-23	10:45 9 bottles Radium TDS Anions Metals Alkalinity Nitrate/Nitrite Fe2+/Mn2+

Created using VuSitu from In-Situ, Inc.

B.3 Calibration Data

EQUIPMENT CALIBRATION FORM

Project Name: Arkwright Groundwater Sampling
Plant Name: Plant Arkwright **Date:** 8/9/2023
Plant Address: 5001 Arkwright Road, Macon, GA 31210
Project Number: 175569434 **Page** 1 **of** 1
Goal/Task: Groundwater Sampling

Morning (AM) Calibration			**Calibrated By:**	Dylan Quintal	
Weather:	Clear, 70F				
Time (24hr) Start:	7:20	*Acceptance Criteria*	**Time (24hr) Finish:**	8:00	
Temperature (°C):			**Barometric Pressure (mbar):**		
NIST Thermometer:	23.5	*+/- 4°C*	*Local Weather Station:*	1015.2	
Aqua TROLL 400:	22.3		*Aqua TROLL 400:*	1004.3	
Turbidity (NTUs):	*20 NTU Standard*	*100 NTU Standard*	*800 NTU Standard*	*10 NTU Verification*	*Acceptance Criteria*
	20.1	100	809	10.2	*+/- 3 %*
	Calibration Value	**Post Calibration**	*Acceptance Criteria*	**Cal Sol Temp (ºC)**	**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	*Acceptance Criteria*	**Time (24hr) Finish:**	12:15	
Temperature (°C):			**Barometric Pressure (mbar):**		
NIST Thermometer:	24.7	*+/- 4°C*	*Local Weather Station:*	1015.2	
	24.7		*Aqua TROLL 400:*	1005.3	
Turbidity (NTUs):	*20 NTU Standard*	*100 NTU Standard*	*800 NTU Standard*	*10 NTU Verification*	*Acceptance Criteria*
	20.1	102	800	9.96	*+/- 3 %*
	Calibration Value	**Verification**	*Acceptance Criteria*	**Cal Sol Temp (ºC)**	**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 **Date:** 8/7/2023
Plant Address: 5001 Arkwright Road, Macon, GA 31210
Project Number: 175569434 **Page** 1 **of** 1
Goal/Task: Groundwater Sampling

Morning (AM) Calibration			**Calibrated By:**	Houston Lynn	
Weather:	Mostly Sunny 94 F				
Time (24hr) Start:	14:00	*Acceptance Criteria*	**Time (24hr) Finish:**	15:00	
Temperature (°C):			**Barometric Pressure (mbar):**		
NIST Thermometer:	33.2	*+/- 4°C*	*Local Weather Station:*	1014.2	
Aqua TROLL 400:	33.1		*Aqua TROLL 400:*	1002.9	
Turbidity (NTUs):	*20 NTU Standard*	*100 NTU Standard*	*800 NTU Standard*	*10 NTU Verification*	*Acceptance Criteria*
	19.9	97	781	10.2	*+/- 3 %*
	Calibration Value	**Post Calibration**	*Acceptance Criteria*	**Cal Sol Temp (ºC)**	**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	*Acceptance Criteria*	**Time (24hr) Finish:**	18:45	
Temperature (°C):			**Barometric Pressure (mbar):**		
NIST Thermometer:	35.3	*+/- 4°C*	*Local Weather Station:*	1001.4	
	35.6		*Aqua TROLL 400:*	1001.0	
Turbidity (NTUs):	*20 NTU Standard*	*100 NTU Standard*	*800 NTU Standard*	*10 NTU Verification*	*Acceptance Criteria*
	20.1	98.7	788	10.1	*+/- 3 %*
	Calibration Value	**Verification**	*Acceptance Criteria*	**Cal Sol Temp (ºC)**	**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:* Calli Provenza

EQUIPMENT CALIBRATION FORM

Project Name: Arkwright Groundwater Sampling
Plant Name: Plant Arkwright **Date:** 8/7/2023
Plant Address: 5001 Arkwright Road, Macon, GA 31210
Project Number: 175569434 **Page** 1 **of** 1
Goal/Task: Groundwater Sampling

Morning (AM) Calibration			**Calibrated By:**	Dylan Quintal	
Weather:	Sunny, 95F				
Time (24hr) Start:	14:00	*Acceptance Criteria*	**Time (24hr) Finish:**	14:45	
Temperature (°C):			**Barometric Pressure (mbar):**		
NIST Thermometer:	31.5	*+/- 4°C*	*Local Weather Station:*	1014.2	
Aqua TROLL 400:	31.8		*Aqua TROLL 400:*	1003.7	
Turbidity (NTUs):	*20 NTU Standard*	*100 NTU Standard*	*800 NTU Standard*	*10 NTU Verification*	*Acceptance Criteria*
	19.9	98.6	796	9.90	*+/- 3 %*
	Calibration Value	**Post Calibration**	*Acceptance Criteria*	**Cal Sol Temp (ºC)**	**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	*Acceptance Criteria*	**Time (24hr) Finish:**	18:50	
Temperature (°C):			**Barometric Pressure (mbar):**		
NIST Thermometer:	36.1	*+/- 4°C*	*Local Weather Station:*	1012.5	
Aqua TROLL 400:	35.5		*Aqua TROLL 400:*	1001.4	
Turbidity (NTUs):	*20 NTU Standard*	*100 NTU Standard*	*800 NTU Standard*	*10 NTU Verification*	*Acceptance Criteria*
	19.8	99	819	9.95	*+/- 3 %*
	Calibration Value	**Verification**	*Acceptance Criteria*	**Cal Sol Temp (ºC)**	**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	**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:	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:* Calli Provenza

EQUIPMENT CALIBRATION FORM

Project Name: Arkwright Groundwater Sampling
Plant Name: Plant Arkwright **Date:** 8/7/2023
Plant Address: 5001 Arkwright Road, Macon, GA 31210
Project Number: 175569434 **Page** 1 **of** 1
Goal/Task: Groundwater Sampling

Morning (AM) Calibration			**Calibrated By:**	Dylan Ripley	
Weather:	Sunny Partly Cloudy				
Time (24hr) Start:	13:50	*Acceptance Criteria*	**Time (24hr) Finish:**	14:40	
Temperature (°C):			**Barometric Pressure (mbar):**		
NIST Thermometer:	30.1	*+/- 4°C*	*Local Weather Station:*	1014.6	
Aqua TROLL 400:	33.0		*Aqua TROLL 400:*	1003.0	
Turbidity (NTUs):	*20 NTU Standard*	*100 NTU Standard*	*800 NTU Standard*	*10 NTU Verification*	*Acceptance Criteria*
	20.0	99.7	793	9.83	*+/- 3 %*
	Calibration Value	**Post Calibration**	*Acceptance Criteria*	**Cal Sol Temp (ºC)**	**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	*Acceptance Criteria*	**Time (24hr) Finish:**	18:42	
Temperature (°C):			**Barometric Pressure (mbar):**		
NIST Thermometer:	31.1	*+/- 4°C*	*Local Weather Station:*	1012.9	
Aqua TROLL 400:	30.8		*Aqua TROLL 400:*	1000.8	
Turbidity (NTUs):	*20 NTU Standard*	*100 NTU Standard*	*800 NTU Standard*	*10 NTU Verification*	*Acceptance Criteria*
	19.9	101	805	9.96	*+/- 3 %*
	Calibration Value	**Verification**	*Acceptance Criteria*	**Cal Sol Temp (ºC)**	**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	**Instruments 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:* Dylan Ripley

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

EQUIPMENT CALIBRATION FORM

Project Name: Arkwright Groundwater Sampling
Plant Name: Plant Arkwright **Date:** 8/7/2023
Plant Address: 5001 Arkwright Road, Macon, GA 31210
Project Number: 175569434 **Page** 1 **of** 1
Goal/Task: Groundwater Sampling

Morning (AM) Calibration			**Calibrated By:**	Zach Levy	
Weather:	Partly Cloudy 98 F				
Time (24hr) Start:	13:46	*Acceptance Criteria*	**Time (24hr) Finish:**	14:38	
Temperature (°C):			**Barometric Pressure (mBar):**		
NIST Thermometer:	29.0	*+/- 4°C*	*Local Weather Station:*	1014.560	
Aqua TROLL 400:	28.9		*Aqua TROLL 400:*	1001.8	
Turbidity (NTUs):	*20 NTU Standard*	*100 NTU Standard*	*800 NTU Standard*	*10 NTU Verification*	*Acceptance Criteria*
	20.0	99.3	784	10.2	*+/- 3 %*
	Calibration Value	**Post Calibration**	*Acceptance Criteria*	**Cal Sol Temp (ºC)**	**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	*Acceptance Criteria*	**Time (24hr) Finish:**	18:45	
Temperature (°C):			**Barometric Pressure (mbar):**		
NIST Thermometer:	33.0	*+/- 4°C*	*Local Weather Station:*	1001.4	
	34.5		*Aqua TROLL 400:*	999.7	
Turbidity (NTUs):	*20 NTU Standard*	*100 NTU Standard*	*800 NTU Standard*	*10 NTU Verification*	*Acceptance Criteria*
	20.5	101	817	10.2	*+/- 3 %*
	Calibration Value	**Verification**	*Acceptance Criteria*	**Cal Sol Temp (ºC)**	**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	**Instruments 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:* Calli Provenza

EQUIPMENT CALIBRATION FORM

Project Name: Arkwright Groundwater Sampling
Plant Name: Plant Arkwright **Date:** 8/8/2023
Plant Address: 5001 Arkwright Road, Macon, GA 31210
Project Number: 175569434 **Page** 1 **of** 1
Goal/Task: Groundwater Sampling

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 (ºC)**	**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 (ºC)**	**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:* Calli Provenza

EQUIPMENT CALIBRATION FORM

Project Name: Arkwright Groundwater Sampling
Plant Name: Plant Arkwright **Date:** 8/8/2023
Plant Address: 5001 Arkwright Road, Macon, GA 31210
Project Number: 175569434 **Page** 1 **of** 1
Goal/Task: Groundwater Sampling

Morning (AM) Calibration			**Calibrated By:**	Zach Levy	
Weather:			Clear		
Time (24hr) Start:	7:35	*Acceptance Criteria*	**Time (24hr) Finish:**	8:05	
Temperature (°C):			**Barometric Pressure (mbar):**		
NIST Thermometer:	22.4	*+/- 4°C*	*Local Weather Station:*	1015.6	
Aqua TROLL 400:	23.2		*Aqua TROLL 400:*	1004.1	
Turbidity (NTUs):	*20 NTU Standard*	*100 NTU Standard*	*800 NTU Standard*	*10 NTU Verification*	*Acceptance Criteria*
	20.1	100	807	10.2	*+/- 3 %*
	Calibration Value	**Post Calibration**	*Acceptance Criteria*	**Cal Sol Temp (ºC)**	**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	*Acceptance Criteria*	**Time (24hr) Finish:**	14:20	
Temperature (°C):			**Barometric Pressure (mbar):**		
NIST Thermometer:	34.2	*+/- 4°C*	*Local Weather Station:*	1003.4	
	35.5		*Aqua TROLL 400:*	1005.7	
Turbidity (NTUs):	*20 NTU Standard*	*100 NTU Standard*	*800 NTU Standard*	*10 NTU Verification*	*Acceptance Criteria*
	20.2	100	787	10.1	*+/- 3 %*
	Calibration Value	**Verification**	*Acceptance Criteria*	**Cal Sol Temp (ºC)**	**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	**Instruments 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:* Calli Provenza

EQUIPMENT CALIBRATION FORM

Project Name: Arkwright Groundwater Sampling
Plant Name: Plant Arkwright **Date:** 8/7/2023
Plant Address: 5001 Arkwright Road, Macon, GA 31210
Project Number: 175569434 **Page** 1 **of** 1
Goal/Task: Groundwater Sampling

Morning (AM) Calibration			**Calibrated By:**	Houston Lynn	
Weather:	Mostly Sunny 75 F				
Time (24hr) Start:	7:00	*Acceptance Criteria*	**Time (24hr) Finish:**	7:36	
Temperature (°C):			**Barometric Pressure (mbar):**		
NIST Thermometer:	25.9	*+/- 4°C*	*Local Weather Station:*	1015.8	
Aqua TROLL 400:	25.7		*Aqua TROLL 400:*	1003.0	
Turbidity (NTUs):	*20 NTU Standard*	*100 NTU Standard*	*800 NTU Standard*	*10 NTU Verification*	*Acceptance Criteria*
	19.7	102	794	10.1	*+/- 3 %*
	Calibration Value	**Post Calibration**	*Acceptance Criteria*	**Cal Sol Temp (ºC)**	**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	*Acceptance Criteria*	**Time (24hr) Finish:**	13:32	
Temperature (°C):			**Barometric Pressure (mbar):**		
NIST Thermometer:	32.6	*+/- 4°C*	*Local Weather Station:*	1004.8	
	32.3		*Aqua TROLL 400:*	1005.3	
Turbidity (NTUs):	*20 NTU Standard*	*100 NTU Standard*	*800 NTU Standard*	*10 NTU Verification*	*Acceptance Criteria*
	19.6	97.6	789	10.2	*+/- 3 %*
	Calibration Value	**Verification**	*Acceptance Criteria*	**Cal Sol Temp (ºC)**	**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:**
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:	None			

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

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

EQUIPMENT CALIBRATION FORM

Project Name: Arkwright Groundwater Sampling
Plant Name: Plant Arkwright **Date:** 8/9/2023
Plant Address: 5001 Arkwright Road, Macon, GA 31210
Project Number: 175569434 **Page** 1 **of** 1
Goal/Task: Groundwater Sampling

Morning (AM) Calibration			**Calibrated By:**	Dylan Quintal	
Weather:	Clear, 70F				
Time (24hr) Start:	7:20	*Acceptance Criteria*	**Time (24hr) Finish:**	8:00	
Temperature (°C):			**Barometric Pressure (mbar):**		
NIST Thermometer:	23.5	*+/- 4°C*	*Local Weather Station:*	1015.2	
Aqua TROLL 400:	22.3		*Aqua TROLL 400:*	1004.3	
Turbidity (NTUs):	*20 NTU Standard*	*100 NTU Standard*	*800 NTU Standard*	*10 NTU Verification*	*Acceptance Criteria*
	20.1	100	809	10.2	*+/- 3 %*
	Calibration Value	**Post Calibration**	*Acceptance Criteria*	**Cal Sol Temp (ºC)**	**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	*Acceptance Criteria*	**Time (24hr) Finish:**	12:15	
Temperature (°C):			**Barometric Pressure (mbar):**		
NIST Thermometer:	24.7	*+/- 4°C*	*Local Weather Station:*	1015.2	
	24.7		*Aqua TROLL 400:*	1005.3	
Turbidity (NTUs):	*20 NTU Standard*	*100 NTU Standard*	*800 NTU Standard*	*10 NTU Verification*	*Acceptance Criteria*
	20.1	102	800	9.96	*+/- 3 %*
	Calibration Value	**Verification**	*Acceptance Criteria*	**Cal Sol Temp (ºC)**	**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:* 8/10/2023 *Signature:* Calli Provenza

EQUIPMENT CALIBRATION FORM

Project Name: Arkwright Groundwater Sampling
Plant Name: Plant Arkwright **Date:** 8/9/2023
Plant Address: 5001 Arkwright Road, Macon, GA 31210
Project Number: 175569434 **Page** 1 **of** 1
Goal/Task: Groundwater Sampling

Morning (AM) Calibration			**Calibrated By:**	Zach Levy	
Weather:			Clear		
Time (24hr) Start:	7:20	*Acceptance Criteria*	**Time (24hr) Finish:**	7:55	
Temperature (°C):			**Barometric Pressure (mbar):**		
NIST Thermometer:	23.6	*+/- 4°C*	*Local Weather Station:*	1015.6	
Aqua TROLL 400:	22.5		*Aqua TROLL 400:*	1004.2	
Turbidity (NTUs):	*20 NTU Standard*	*100 NTU Standard*	*800 NTU Standard*	*10 NTU Verification*	*Acceptance Criteria*
	20.0	99.9	793	10.2	*+/- 3 %*
	Calibration Value	**Post Calibration**	*Acceptance Criteria*	**Cal Sol Temp (ºC)**	**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	*Acceptance Criteria*	**Time (24hr) Finish:**	16:15	
Temperature (°C):			**Barometric Pressure (mbar):**		
NIST Thermometer:	34.7	*+/- 4°C*	*Local Weather Station:*	1001.6	
	34.2		*Aqua TROLL 400:*	1001.7	
Turbidity (NTUs):	*20 NTU Standard*	*100 NTU Standard*	*800 NTU Standard*	*10 NTU Verification*	*Acceptance Criteria*
	20.0	103	803	10.2	*+/- 3 %*
	Calibration Value	**Verification**	*Acceptance Criteria*	**Cal Sol Temp (ºC)**	**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	**Instruments 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: John Myer *Date:* 8/9/2023 *Signature:* John Myer Zachary Levy

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

EQUIPMENT CALIBRATION FORM

Project Name: Arkwright Groundwater Sampling
Plant Name: Plant Arkwright **Date:** 8/10/2023
Plant Address: 5001 Arkwright Road, Macon, GA 31210
Project Number: 175569434 **Page** 1 **of** 1
Goal/Task: Groundwater Sampling

Morning (AM) Calibration			**Calibrated By:**	Dylan Quintal	
Weather:	Partly cloudy, 75F				
Time (24hr) Start:	7:00	*Acceptance Criteria*	**Time (24hr) Finish:**	7:40	
Temperature (°C):			**Barometric Pressure (mbar):**		
NIST Thermometer:	26.1	*+/- 4°C*	*Local Weather Station:*	1011.5	
Aqua TROLL 400:	25.6		*Aqua TROLL 400:*	1000.9	
Turbidity (NTUs):	*20 NTU Standard*	*100 NTU Standard*	*800 NTU Standard*	*10 NTU Verification*	*Acceptance Criteria*
	20.5	97.9	785	10.2	*+/- 3 %*
	Calibration Value	**Post Calibration**	*Acceptance Criteria*	**Cal Sol Temp (ºC)**	**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	*Acceptance Criteria*	**Time (24hr) Finish:**	14:20	
Temperature (°C):			**Barometric Pressure (mbar):**		
NIST Thermometer:	30.1	*+/- 4°C*	*Local Weather Station:*	1012.2	
	30.6		*Aqua TROLL 400:*	999.9	
Turbidity (NTUs):	*20 NTU Standard*	*100 NTU Standard*	*800 NTU Standard*	*10 NTU Verification*	*Acceptance Criteria*
	20.3	101	789	9.89	*+/- 3 %*
	Calibration Value	**Verification**	*Acceptance Criteria*	**Cal Sol Temp (ºC)**	**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:* Dylan Quintal

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

EQUIPMENT CALIBRATION FORM

Project Name: Arkwright Groundwater Sampling
Plant Name: Plant Arkwright **Date:** 8/10/2023
Plant Address: 5001 Arkwright Road, Macon, GA 31210
Project Number: 175569434 **Page** 1 **of** 1
Goal/Task: Groundwater Sampling

Morning (AM) Calibration			**Calibrated By:** John Myer		
Weather:	Overcast 74 F				
Time (24hr) Start:	6:40	*Acceptance Criteria*	**Time (24hr) Finish:**	7:10	
Temperature (°C):			**Barometric Pressure (mbar):**		
NIST Thermometer:	29.1	*+/- 4°C*	*Local Weather Station:*	1001.5	
Aqua TROLL 400:	28.4		*Aqua TROLL 400:*	999.7	
Turbidity (NTUs):	*20 NTU Standard*	*100 NTU Standard*	*800 NTU Standard*	*10 NTU Verification*	*Acceptance Criteria*
	20.0	98.6	801	10.1	*+/- 3 %*
	Calibration Value	**Post Calibration**	*Acceptance Criteria*	**Cal Sol Temp (ºC)**	**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	*Acceptance Criteria*	**Time (24hr) Finish:**	13:45	
Temperature (°C):			**Barometric Pressure (mbar):**		
NIST Thermometer:	34.1	*+/- 4°C*	*Local Weather Station:*	1000.6	
	34.4		*Aqua TROLL 400:*	1000.9	
Turbidity (NTUs):	*20 NTU Standard*	*100 NTU Standard*	*800 NTU Standard*	*10 NTU Verification*	*Acceptance Criteria*
	20.0	101	790	10.3	*+/- 3 %*
	Calibration Value	**Verification**	*Acceptance Criteria*	**Cal Sol Temp (ºC)**	**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			
	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: John Myer *Date:* 8/10/2023 *Signature:* John Myer

Review By: Calli Provenza *Date:* 8/15/2023 *Signature:* Calli Provenza

EQUIPMENT CALIBRATION FORM

Project Name: Arkwright Groundwater Sampling
Plant Name: Plant Arkwright **Date:** 8/10/2023
Plant Address: 5001 Arkwright Road, Macon, GA 31210
Project Number: 175569434 **Page** 1 **of** 1
Goal/Task: Groundwater Sampling

Morning (AM) Calibration			**Calibrated By:**	Dylan Ripley	
Weather:			sunny partly cloudy		
Time (24hr) Start:	7:08	*Acceptance Criteria*	**Time (24hr) Finish:**	8:13	
Temperature (°C):			**Barometric Pressure (mbar):**		
NIST Thermometer:	26.0	*+/- 4°C*	*Local Weather Station:*	1011.9	
Aqua TROLL 400:	25.8		*Aqua TROLL 400:*	998.8	
Turbidity (NTUs):	*20 NTU Standard*	*100 NTU Standard*	*800 NTU Standard*	*10 NTU Verification*	*Acceptance Criteria*
	20.1	100	799	9.77	*+/- 3 %*
	Calibration Value	**Post Calibration**	*Acceptance Criteria*	**Cal Sol Temp (ºC)**	**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:	!4:45	*Acceptance Criteria*	**Time (24hr) Finish:**	`1502	
Temperature (°C):			**Barometric Pressure (mbar):**		
NIST Thermometer:	24.5	*+/- 4°C*	*Local Weather Station:*	1011.5	
Aqua TROLL 400:	26.4		*Aqua TROLL 400:*	998.3	
Turbidity (NTUs):	*20 NTU Standard*	*100 NTU Standard*	*800 NTU Standard*	*10 NTU Verification*	*Acceptance Criteria*
	20.0	99.8	791	9.77	*+/- 3 %*
	Calibration Value	**Verification**	*Acceptance Criteria*	**Cal Sol Temp (ºC)**	**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	**Instruments 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:* Dylan Ripley

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

EQUIPMENT CALIBRATION FORM

Project Name: Arkwright Groundwater Sampling
Plant Name: Plant Arkwright **Date:** 8/8/2023
Plant Address: 5001 Arkwright Road, Macon, GA 31210
Project Number: 175569434 **Page** 1 **of** 1
Goal/Task: Groundwater Sampling

Morning (AM) Calibration			**Calibrated By:**	Dylan Quintal	
Weather:	Sunny, 75F				
Time (24hr) Start:	7:15	*Acceptance Criteria*	**Time (24hr) Finish:**	7:50	
Temperature (°C):			**Barometric Pressure (mbar):**		
NIST Thermometer:	23.8	*+/- 4°C*	*Local Weather Station:*	1015.6	
Aqua TROLL 400:	23.7		*Aqua TROLL 400:*	1004.1	
Turbidity (NTUs):	*20 NTU Standard*	*100 NTU Standard*	*800 NTU Standard*	*10 NTU Verification*	*Acceptance Criteria*
	19.9	100	793	9.83	*+/- 3 %*
	Calibration Value	**Post Calibration**	*Acceptance Criteria*	**Cal Sol Temp (ºC)**	**Notes:**
Specific Conductance 4,490 (µS/cm)	4490	4489.9	*+/- 1 %*	25.0	NA
pH 7 (SU)	7.00	6.99	*+/- .1 (SU)*	25.0	NA
pH 4 (SU)	4.00	3.95	*+/- .1 (SU)*	24.7	NA
pH 10 (SU)	10.00	9.99	*+/- .1 (SU)*	25.2	NA
D.O. (%)	*N/A*	100.0	*95-105 %*	23.8	NA
ORP (mV)	228.0	228.6	*+/- 10 mV*	24.9	NA

Afternoon (PM) Calibration Verification			**Verification By:**	Dylan Quintal	
Weather:	Partly cloudy, 87F				
Time (24hr) Start:	12:00	*Acceptance Criteria*	**Time (24hr) Finish:**	12:20	
Temperature (°C):			**Barometric Pressure (mbar):**		
NIST Thermometer:	34.2	*+/- 4°C*	*Local Weather Station:*	1015.9	
Aqua TROLL 400:	35.3		*Aqua TROLL 400:*	1005.2	
Turbidity (NTUs):	*20 NTU Standard*	*100 NTU Standard*	*800 NTU Standard*	*10 NTU Verification*	*Acceptance Criteria*
	20.1	99.3	790	10.3	*+/- 3 %*
	Calibration Value	**Verification**	*Acceptance Criteria*	**Cal Sol Temp (ºC)**	**Notes:**
Specific Conductance 4490 (µS/cm)	4490	4485	*+/- 1 %*	33.9	NA
pH 7 (SU)	7.00	6.95	*+/- .1 (SU)*	33.1	NA
pH 4 (SU)	4.00	3.99	*+/- .1 (SU)*	33.9	NA
pH 10 (SU)	10.00	9.94	*+/- .1 (SU)*	32.1	NA
D.O. (%)	*N/A*	100.0	*95-105 %*	43.1	NA
ORP (mV)	228.0	218.0	*+/- 10 mV*	31.6	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	221620193	Expiration Date: 6/28/2024
Explanations:	Midday verification conducted in lieu of end-of-day verification.			

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

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

EQUIPMENT CALIBRATION FORM

Project Name: Arkwright Groundwater Sampling
Plant Name: Plant Arkwright **Date:** 8/9/2023
Plant Address: 5001 Arkwright Road, Macon, GA 31210
Project Number: 175569434 **Page** 1 **of** 1
Goal/Task: Groundwater Sampling

Morning (AM) Calibration			**Calibrated By:**	Dylan Ripley	
Weather:	Sunny and clear				
Time (24hr) Start:	6:55	*Acceptance Criteria*	**Time (24hr) Finish:**	7:46	
Temperature (°C):			**Barometric Pressure (mbar):**		
NIST Thermometer:	25.5	*+/- 4°C*	*Local Weather Station:*	1015.2	
Aqua TROLL 400:	23.3		*Aqua TROLL 400:*	1003.0	
Turbidity (NTUs):	*20 NTU Standard*	*100 NTU Standard*	*800 NTU Standard*	*10 NTU Verification*	*Acceptance Criteria*
	20.1	102	805	9.81	*+/- 3 %*
	Calibration Value	**Post Calibration**	*Acceptance Criteria*	**Cal Sol Temp (ºC)**	**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	*Acceptance Criteria*	**Time (24hr) Finish:**	14:45	
Temperature (°C):			**Barometric Pressure (mbar):**		
NIST Thermometer:	28.9	*+/- 4°C*	*Local Weather Station:*	1014.6	
Aqua TROLL 400:	28.7		*Aqua TROLL 400:*	1002.1	
Turbidity (NTUs):	*20 NTU Standard*	*100 NTU Standard*	*800 NTU Standard*	*10 NTU Verification*	*Acceptance Criteria*
	19.4	98.8	802	10.1	*+/- 3 %*
	Calibration Value	**Verification**	*Acceptance Criteria*	**Cal Sol Temp (ºC)**	**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	**Instruments 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:* Dylan Ripley

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

Field Instrumentation Calibration Form

Site Name: Plant Arkwright
Calibrated By: E.Scheiben

Date: 01/23/2024

Field Conditions: Overcast, 44◦F

Instrument	Manufactuer/ Model	Serial Number
Water Quality Meter	InSitu/AquaTroll400	966105
Turbidity Meter	Hach/2100Q	23100D000368

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

Calibration					
Time Start	**0815**	**Time Finish**	**0900**		
Parameter	**Standard**	**Calibration Value**	**Calibration Solution Temperature (°C)**	**Acceptance Criteria**	**Reference**
Specific Conductance (µS/cm)	4,490	4,485.70	18.92	± 10% of standard	EPA 2023
pH (SU)	4.00	4.01	16.78	± 0.1	GWMP
pH (SU)	7.00	7.03	16.17	± 0.1	GWMP
pH (SU)	10.00	10.02	17.05	± 0.1	GWMP
D.O. (%)	N/A	97.1	16.65	± 10%	NA
ORP (mV)	228.0	227.9	16.53	± 10	EPA 2023

	Standard	Calibration Value	Acceptance Criteria	Reference
Turbidity (NTU)	20	20.2	± 10% of standard	EPA 2023
	100	101		
	800	790		
	10	9.81		

Calibration Check					
Time Start	**13:16**	**Time Finish**	**13:30**		
Parameter	**Standard**	**Calibration Value**	**Calibration Solution Temperature (°C)**	**Acceptance Criteria**	**Reference**
Specific Conductance (µS/cm)	4,490	4,260.10	17.01	± 10% of standard	EPA 2023
pH (SU)	4.00	4.05	17.01	± 0.1	GWMP
pH (SU)	7.00	7.06	15.89	± 0.1	GWMP
pH (SU)	10.00	10.04	16.11	± 0.1	GWMP

	Standard	Calibration Value	Acceptance Criteria	Reference
Turbidity (NTU)	20	20.2	± 10% of standard	EPA 2023
	100	101		
	800	798		
	10	10.2		

Notes:

Field Instrumentation Calibration Form

Site Name: Plant Arkwright Date: 1/24/24

Calibrated By: Emily Scheiben Field Conditions: light rain,55◦F

Instrument	Manufactuer/ Model	Serial Number
Water Quality Meter	InSitu/AquaTroll 400	966105
Turbidity Meter	Hach/2100Q	23100D000368

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

Calibration					
Time Start	**07:45**	**Time Finish**	**08:15**		
Parameter	**Standard**	**Calibration Value**	**Calibration Solution Temperature (°C)**	**Acceptance Criteria**	**Reference**
Specific Conductance (µS/cm)	4,490	4,491.50	15.66	± 10% of standard	EPA 2023
pH (SU)	4.00	4.01	15.69	± 0.1	GWMP
pH (SU)	7.00	7.04	15.73	± 0.1	GWMP
pH (SU)	10.00	10.02	15.83	± 0.1	GWMP
D.O. (%)	N/A	101.43	15.87	± 10%	NA
ORP (mV)	228.0	227.7	15.79	± 10	EPA 2023

	Standard	Calibration Value	Acceptance Criteria	Reference
Turbidity (NTU)	20	20.2	± 10% of standard	EPA 2023
	100	99.6		
	800	788		
	10	9.81		

Calibration Check					
Time Start	**15:20**	**Time Finish**	**15:35**		
Parameter	**Standard**	**Calibration Value**	**Calibration Solution Temperature (°C)**	**Acceptance Criteria**	**Reference**
Specific Conductance (µS/cm)	4,490	4,334.70	19.61	± 10% of standard	EPA 2023
pH (SU)	4.00	4.08	19.61	± 0.1	GWMP
pH (SU)	7.00	7.08	18.99	± 0.1	GWMP
pH (SU)	10.00	9.98	18.72	± 0.1	GWMP

	Standard	Calibration Value	Acceptance Criteria	Reference
Turbidity (NTU)	20	20.8	± 10% of standard	EPA 2023
	100	106		
	800	798		
	10	11.3		

Notes:

Field Instrumentation Calibration Form

Site Name:_____Plant Arkwright_ Date: ____1/25/2024_____

Calibrated By:___Emily Scheiben___ Field Conditions:____Overcast, 65F_____

Instrument	Manufactuer/ Model	Serial Number
Water Quality Meter	InSitu/AquaTroll400	966105
Turbidity Meter	Hach/2100Q	23100D000368

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

Calibration					
Time Start		**Time Finish**			
Parameter	**Standard**	**Calibration Value**	**Calibration Solution Temperature (°C)**	**Acceptance Criteria**	**Reference**
Specific Conductance (µS/cm)	4,490	4,482.30	16.15	± 10% of standard	EPA 2023
pH (SU)	4.00	4.03	16.38	± 0.1	GWMP
pH (SU)	7.00	7.04	16.74	± 0.1	GWMP
pH (SU)	10.00	10.02	16.83	± 0.1	GWMP
D.O. (%)	N/A	102.27	17.29	± 10%	NA
ORP (mV)	228.0	228.0	17.00	± 10	EPA 2023

	Standard	Calibration Value	Acceptance Criteria	Reference
Turbidity (NTU)	20	19.9	± 10% of standard	EPA 2023
	100	99.7		
	800	799		
	10	10		

Calibration Check					
Time Start		**Time Finish**			
Parameter	**Standard**	**Calibration Value**	**Calibration Solution Temperature (°C)**	**Acceptance Criteria**	**Reference**
Specific Conductance (µS/cm)	4,490	4,233.30	22.63	± 10% of standard	EPA 2023
pH (SU)	4.00	4.08	22.63	± 0.1	GWMP
pH (SU)	7.00	7.07	22.91	± 0.1	GWMP
pH (SU)	10.00	9.98	22.77	± 0.1	GWMP

	Standard	Calibration Value	Acceptance Criteria	Reference
Turbidity (NTU)	20	20	± 10% of standard	EPA 2023
	100	96.5		
	800	784		
	10	9.75		

Notes:

Field Instrumentation Calibration Form

Site Name: Plant Arkwright

Date: 1/22/2024

Calibrated By: John Myer

Field Conditions: Sunny

Instrument	Manufactuer/ Model	Serial Number
Water Quality Meter	AquaTroll 400	989630
Turbidity Meter	Hack 2100Q	22690D000345

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

Calibration					
Time Start	**12:15**	**Time Finish**	**13:00**		
Parameter	**Standard**	**Calibration Value**	**Calibration Solution Temperature (^{o}C)**	**Acceptance Criteria**	**Reference**
Specific Conductance (µS/cm)	4,490	4496.9	5.51	± 10% of standard	EPA 2023
pH (SU)	4.00	4.09	7,98	± 0.1	GWMP
pH (SU)	7.00	7.07	7.74	± 0.1	GWMP
pH (SU)	10.00	10.09	7.54	± 0.1	GWMP
D.O. (%)	N/A	100.36	8.86	± 10%	NA
ORP (mV)	228.0	227.3	7.58	± 10	EPA 2023

	Standard	Calibration Value	Acceptance Criteria	Reference
Turbidity (NTU)	20	20.2	± 10% of standard	EPA 2023
	100	99		
	800	814		
	10	9.86		

Calibration Check					
Time Start	**15:15**	**Time Finish**	**15:30**		
Parameter	**Standard**	**Calibration Value**	**Calibration Solution Temperature (^{o}C)**	**Acceptance Criteria**	**Reference**
Specific Conductance (µS/cm)	4,490	4053.2	16.92	± 10% of standard	EPA 2023
pH (SU)	4.00	4.1	17.13	± 0.1	GWMP
pH (SU)	7.00	7.05	15.3	± 0.1	GWMP
pH (SU)	10.00	10.1	13.8	± 0.1	GWMP

	Standard	Calibration Value	Acceptance Criteria	Reference
Turbidity (NTU)	20	20.2	± 10% of standard	EPA 2023
	100	101		
	800	753		
	10	9.69		

Notes:

Field Instrumentation Calibration Form

Site Name: Arkwright Date: 1/23/24

Calibrated By: John Myer Field Conditions: Overcast

Instrument	Manufactuer/ Model	Serial Number
Water Quality Meter	AquaTroll 400	989619
Turbidity Meter	Hach 2100Q	23060D000342

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

Calibration					
Time Start	**8:45**	**Time Finish**	**9:35**		
Parameter	**Standard**	**Calibration Value**	**Calibration Solution Temperature (^{o}C)**	**Acceptance Criteria**	**Reference**
Specific Conductance (µS/cm)	4,490	4466.8	13.63	± 10% of standard	EPA 2023
pH (SU)	4.00	4.08	11.68	± 0.1	GWMP
pH (SU)	7.00	7.05	10.49	± 0.1	GWMP
pH (SU)	10.00	10.01	10.19	± 0.1	GWMP
D.O. (%)	N/A	100.09	10.92	± 10%	NA
ORP (mV)	228.0	227.5	9.66	± 10	EPA 2023

	Standard	Calibration Value	Acceptance Criteria	Reference
Turbidity (NTU)	20	20.2	± 10% of standard	EPA 2023
	100	101		
	800	791		
	10	9.96		

Calibration Check					
Time Start	**12:55**	**Time Finish**	**13:15**		
Parameter	**Standard**	**Calibration Value**	**Calibration Solution Temperature (^{o}C)**	**Acceptance Criteria**	**Reference**
Specific Conductance (µS/cm)	4,490	4169.4	14.31	± 10% of standard	EPA 2023
pH (SU)	4.00	4.1	14.31	± 0.1	GWMP
pH (SU)	7.00	7.09	13.79	± 0.1	GWMP
pH (SU)	10.00	9.98	13.57	± 0.1	GWMP

	Standard	Calibration Value	Acceptance Criteria	Reference
Turbidity (NTU)	20	19.5	± 10% of standard	EPA 2023
	100	96.8		
	800	778		
	10	9.95		

Notes:

Field Instrumentation Calibration Form

Site Name: Arkwright Date: 1/24/2024

Calibrated By: John Myer Field Conditions: Showers

Instrument	Manufactuer/ Model	Serial Number
Water Quality Meter	AquaTroll 400	989619
Turbidity Meter	Hach 2100Q	23060D000342

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

Calibration					
Time Start	**9:30**	**Time Finish**	**10:00**		
Parameter	**Standard**	**Calibration Value**	**Calibration Solution Temperature (°C)**	**Acceptance Criteria**	**Reference**
Specific Conductance (µS/cm)	4,490	4463.9	11.37	± 10% of standard	EPA 2023
pH (SU)	4.00	4.04	13.24	± 0.1	GWMP
pH (SU)	7.00	7.03	13.3	± 0.1	GWMP
pH (SU)	10.00	10.01	13.04	± 0.1	GWMP
D.O. (%)	N/A	100	13.58	± 10%	NA
ORP (mV)	228.0	227.7	13.4	± 10	EPA 2023

	Standard	Calibration Value	Acceptance Criteria	Reference
Turbidity (NTU)	20	20	± 10% of standard	EPA 2023
	100	98.1		
	800	806		
	10	10.3		

Calibration Check					
Time Start	**15:00**	**Time Finish**	**15:15**		
Parameter	**Standard**	**Calibration Value**	**Calibration Solution Temperature (°C)**	**Acceptance Criteria**	**Reference**
Specific Conductance (µS/cm)	4,490	4197.3	18.74	± 10% of standard	EPA 2023
pH (SU)	4.00	4.09	18.54	± 0.1	GWMP
pH (SU)	7.00	7.08	17.87	± 0.1	GWMP
pH (SU)	10.00	9.97	17.67	± 0.1	GWMP

	Standard	Calibration Value	Acceptance Criteria	Reference
Turbidity (NTU)	20	19.2	± 10% of standard	EPA 2023
	100	103		
	800	775		
	10	9.76		

Notes:

Field Instrumentation Calibration Form

Site Name: Arkwright

Date: 1/25/2024

Calibrated By: John Myer

Field Conditions: Overcast

Instrument	Manufactuer/ Model	Serial Number
Water Quality Meter	AquaTroll 400	989619
Turbidity Meter	Hach 2100Q	23060D000342

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

Calibration					
Time Start	**8:45**	**Time Finish**	**9:15**		
Parameter	**Standard**	**Calibration Value**	**Calibration Solution Temperature (^{o}C)**	**Acceptance Criteria**	**Reference**
Specific Conductance (µS/cm)	4,490	4487.2	18.34	± 10% of standard	EPA 2023
pH (SU)	4.00	4.01	19.06	± 0.1	GWMP
pH (SU)	7.00	7.04	18.97	± 0.1	GWMP
pH (SU)	10.00	10	18.79	± 0.1	GWMP
D.O. (%)	N/A	100.02	19.56	± 10%	NA
ORP (mV)	228.0	227.7	19.14	± 10	EPA 2023

	Standard	Calibration Value	Acceptance Criteria	Reference
Turbidity (NTU)	20	19.9	± 10% of standard	EPA 2023
	100	102		
	800	801		
	10	10.2		

Calibration Check					
Time Start	**14:25**	**Time Finish**	**14:35**		
Parameter	**Standard**	**Calibration Value**	**Calibration Solution Temperature (^{o}C)**	**Acceptance Criteria**	**Reference**
Specific Conductance (µS/cm)	4,490	4431.8	23.95	± 10% of standard	EPA 2023
pH (SU)	4.00	4.06	23.95	± 0.1	GWMP
pH (SU)	7.00	7.04	23.5	± 0.1	GWMP
pH (SU)	10.00	9.96	23.13	± 0.1	GWMP

	Standard	Calibration Value	Acceptance Criteria	Reference
Turbidity (NTU)	20	20.2	± 10% of standard	EPA 2023
	100	97.8		
	800	780		
	10	9.66		

Notes:

Field Instrumentation Calibration Form

Site Name: Arkwright

Date: 1-22-24

Calibrated By: Dylan Ripley

Field Conditions: Partly Cloudy 20-50 F

Instrument	Manufactuer/ Model	Serial Number
Water Quality Meter	Aqua Troll 400	965586
Turbidity Meter	HACH 2100Q	22090D000235

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

Calibration					
Time Start	**1130**	**Time Finish**	**1229**		
Parameter	**Standard**	**Calibration Value**	**Calibration Solution Temperature (°C)**	**Acceptance Criteria**	**Reference**
Specific Conductance (µS/cm)	4,490	4490.9	9.55	± 10% of standard	EPA 2023
pH (SU)	4.00	3.98	9.75	± 0.1	GWMP
pH (SU)	7.00	7.14	9.13	± 0.1	GWMP
pH (SU)	10.00	10.15	9.23	± 0.1	GWMP
D.O. (%)	N/A	99.78	8.32	± 10%	NA
ORP (mV)	228.0	227.7	9.79	± 10	EPA 2023

	Standard	Calibration Value	Acceptance Criteria	Reference
Turbidity (NTU)	10	9.95	± 10% of standard	EPA 2023
	20	19.4		
	100	97.0		
	800	722		

Calibration Check					
Time Start	**1530**	**Time Finish**	**1541**		
Parameter	**Standard**	**Calibration Value**	**Calibration Solution Temperature (°C)**	**Acceptance Criteria**	**Reference**
Specific Conductance (µS/cm)	4,490	4288.3	15.70	± 10% of standard	EPA 2023
pH (SU)	4.00	4.19	15.70	± 0.1	GWMP
pH (SU)	7.00	7.09	15.56	± 0.1	GWMP
pH (SU)	10.00	10.08	15.26	± 0.1	GWMP

	Standard	Calibration Value	Acceptance Criteria	Reference
Turbidity (NTU)	10	10.3	± 10% of standard	EPA 2023
	20	20.1		
	100	99.1		
	800	800		

Notes: Original turbiditimeter's lamp failed, had to use spare.

Field Instrumentation Calibration Form

Site Name: Arkwright

Date: 1-23-24

Calibrated By: Dylan Ripley

Field Conditions: Partly Cloudy 44 - 62 F

Instrument	Manufactuer/ Model	Serial Number
Water Quality Meter	Aqua Troll 400	965586
Turbidity Meter	HACH 2100Q	22060D000342

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

Calibration					
Time Start	**0820**	**Time Finish**	**0930**		
Parameter	**Standard**	**Calibration Value**	**Calibration Solution Temperature (°C)**	**Acceptance Criteria**	**Reference**
Specific Conductance (µS/cm)	4,490	4477.2	10.87	± 10% of standard	EPA 2023
pH (SU)	4.00	4.04	11.01	± 0.1	GWMP
pH (SU)	7.00	7.13	11.05	± 0.1	GWMP
pH (SU)	10.00	10.17	11.14	± 0.1	GWMP
D.O. (%)	N/A	99.99	9.51	± 10%	NA
ORP (mV)	228.0	227.7	10.68	± 10	EPA 2023

	Standard	Calibration Value	Acceptance Criteria	Reference
Turbidity (NTU)	10	9.98	± 10% of standard	EPA 2023
	20	19.7		
	100	97.4		
	800	805		

Calibration Check					
Time Start	**1525**	**Time Finish**	**1535**		
Parameter	**Standard**	**Calibration Value**	**Calibration Solution Temperature (°C)**	**Acceptance Criteria**	**Reference**
Specific Conductance (µS/cm)	4,490	4374.4	14.12	± 10% of standard	EPA 2023
pH (SU)	4.00	4.03	14.12	± 0.1	GWMP
pH (SU)	7.00	7.13	4.03	± 0.1	GWMP
pH (SU)	10.00	10.17	13.81	± 0.1	GWMP

	Standard	Calibration Value	Acceptance Criteria	Reference
Turbidity (NTU)	10	10.1	± 10% of standard	EPA 2023
	20	19.9		
	100	101		
	800	783		

Notes: Original turbiditimeter's lamp failed, had to use spare.

Field Instrumentation Calibration Form

Site Name: Arkwright

Date: 1-24-24

Calibrated By: Dylan Ripley

Field Conditions: Partly Cloudy 53 - 70 F

Instrument	Manufactuer/ Model	Serial Number
Water Quality Meter	Aqua Troll 400	965586
Turbidity Meter	HACH 2100Q	22060D000342

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

Calibration					
Time Start	**0745**	**Time Finish**	**0814**		
Parameter	**Standard**	**Calibration Value**	**Calibration Solution Temperature (°C)**	**Acceptance Criteria**	**Reference**
Specific Conductance (µS/cm)	4,490	4486.3	14.24	± 10% of standard	EPA 2023
pH (SU)	4.00	4.04	14.24	± 0.1	GWMP
pH (SU)	7.00	7.08	14.08	± 0.1	GWMP
pH (SU)	10.00	10.12	14.12	± 0.1	GWMP
D.O. (%)	N/A	100.09	13.53	± 10%	NA
ORP (mV)	228.0	228	14.03	± 10	EPA 2023

	Standard	Calibration Value	Acceptance Criteria	Reference
Turbidity (NTU)	10	10.1	± 10% of standard	EPA 2023
	20	20.1		
	100	101		
	800	797		

Calibration Check					
Time Start	**1450**	**Time Finish**	**1458**		
Parameter	**Standard**	**Calibration Value**	**Calibration Solution Temperature (°C)**	**Acceptance Criteria**	**Reference**
Specific Conductance (µS/cm)	4,490	4381	14.12	± 10% of standard	EPA 2023
pH (SU)	4.00	4.04	14.12	± 0.1	GWMP
pH (SU)	7.00	7.01	4.03	± 0.1	GWMP
pH (SU)	10.00	10.02	13.81	± 0.1	GWMP

	Standard	Calibration Value	Acceptance Criteria	Reference
Turbidity (NTU)	10	10.3	± 10% of standard	EPA 2023
	20	21.2		
	100	101		
	800	773		

Note:

Field Instrumentation Calibration Form

Site Name: Arkwright

Date: 1-25-24

Calibrated By: Dylan Ripley

Field Conditions: Partly Cloudy 61 - 71 F

Instrument	Manufactuer/ Model	Serial Number
Water Quality Meter	Aqua Troll 400	965586
Turbidity Meter	HACH 2100Q	22060D000342

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

Calibration					
Time Start	**0740**	**Time Finish**	**0821**		
Parameter	**Standard**	**Calibration Value**	**Calibration Solution Temperature (°C)**	**Acceptance Criteria**	**Reference**
Specific Conductance (µS/cm)	4,490	4492.1	18.16	± 10% of standard	EPA 2023
pH (SU)	4.00	4.02	18.16	± 0.1	GWMP
pH (SU)	7.00	7.03	18.29	± 0.1	GWMP
pH (SU)	10.00	10.05	18.31	± 0.1	GWMP
D.O. (%)	N/A	99.96	18.64	± 10%	NA
ORP (mV)	228.0	227.8	18.51	± 10	EPA 2023

	Standard	Calibration Value	Acceptance Criteria	Reference
Turbidity (NTU)	10	10.1	± 10% of standard	EPA 2023
	20	19.2		
	100	102		
	800	807		

Calibration Check					
Time Start	**1200**	**Time Finish**	**1211**		
Parameter	**Standard**	**Calibration Value**	**Calibration Solution Temperature (°C)**	**Acceptance Criteria**	**Reference**
Specific Conductance (µS/cm)	4,490	4479.3	21.57	± 10% of standard	EPA 2023
pH (SU)	4.00	4.03	21.57	± 0.1	GWMP
pH (SU)	7.00	6.97	21.11	± 0.1	GWMP
pH (SU)	10.00	9.93	20.1	± 0.1	GWMP

	Standard	Calibration Value	Acceptance Criteria	Reference
Turbidity (NTU)	10	10.2	± 10% of standard	EPA 2023
	20	20.1		
	100	98.7		
	800	782		

Note:

Field Instrumentation Calibration Form

Site Name:___Arkwright_____ Date: __1/23/2024_____

Calibrated By:___Z. Levy_____ Field Conditions:___Cloudy/rainy_____

Instrument	Manufactuer/ Model	Serial Number
Water Quality Meter	In-Situ	952637
Turbidity Meter	Hach	23100D000373

Calibration Standard Information				
Parameter	**Standard**	**Lot #**	**Date of Expiration**	**Brand**
Specific Conductance (µS/cm)	4,490	24000044	May-24	AIR - Autocal solution
pH (SU)	4.00	24000044	May-24	AIR - Autocal solution
pH (SU)	7.00	22290139	24-Apr	AIR - pH 7 solution
pH (SU)	10.00	22110130	24-Apr	AIR - pH 10 solution
D.O. (%)	N/A	N/A	N/A	N/A
ORP (mV)	228.0	24002258	24-Jun	AIR - ORP solution

Calibration					
Time Start: 0830		**Time Finish: 0850**			
Parameter	**Standard**	**Calibration Value**	**Calibration Solution Temperature (°C)**	**Acceptance Criteria**	**Reference**
Specific Conductance (µS/cm)	4,490	4490	16.16	± 10% of standard	EPA 2023
pH (SU)	4.00	4	16.59	± 0.1	GWMP
pH (SU)	7.00	7	16.06	± 0.1	GWMP
pH (SU)	10.00	10	15.98	± 0.1	GWMP
D.O. (%)	N/A	100	13.05	± 10%	NA
ORP (mV)	228.0	228	15.67	± 10	EPA 2023

	Standard	**Calibration Value**	**Acceptance Criteria**	**Reference**
Turbidity (NTU)	20	20.5	± 10% of standard	EPA 2023
	100	99.9		
	800	798		
	10	10.3		

Calibration Check					
Time Start: 1400		**Time Finish: 1422**			
Parameter	**Standard**	**Calibration Value**	**Calibration Solution Temperature (°C)**	**Acceptance Criteria**	**Reference**
Specific Conductance (µS/cm)	4,490	4318.6	16.08	± 10% of standard	EPA 2023
pH (SU)	4.00	4.06	16.08	± 0.1	GWMP
pH (SU)	7.00	7.07	16.56	± 0.1	GWMP
pH (SU)	10.00	10.12	16.7	± 0.1	GWMP
ORP (mV)	228	229.7	16.79		

	Standard	**Calibration Value**	**Acceptance Criteria**	**Reference**
Turbidity (NTU)	20	20.5	± 10% of standard	EPA 2023
	100	100		
	800	791		
	10	10.1		

Notes:

Field Instrumentation Calibration Form

Site Name:___Arkwright_____ Date: __1/24/2024_____

Calibrated By:___Z. Levy_____ Field Conditions:___Cloudy/rainy_____

Instrument	Manufactuer/ Model	Serial Number
Water Quality Meter	In-Situ	952637
Turbidity Meter	Hach	23100D000373

Calibration Standard Information				
Parameter	**Standard**	**Lot #**	**Date of Expiration**	**Brand**
Specific Conductance (µS/cm)	4,490	24000044	May-24	AIR - Autocal solution
pH (SU)	4.00	24000044	May-24	AIR - Autocal solution
pH (SU)	7.00	22290139	24-Apr	AIR - pH 7 solution
pH (SU)	10.00	22110130	24-Apr	AIR - pH 10 solution
D.O. (%)	N/A	N/A	N/A	N/A
ORP (mV)	228.0	24002258	24-Jun	AIR - ORP solution

Calibration					
Time Start: 0740		**Time Finish: 0755**			
Parameter	**Standard**	**Calibration Value**	**Calibration Solution Temperature (°C)**	**Acceptance Criteria**	**Reference**
Specific Conductance (µS/cm)	4,490	4490	14.85	± 10% of standard	EPA 2023
pH (SU)	4.00	4	15.26	± 0.1	GWMP
pH (SU)	7.00	7	15.2	± 0.1	GWMP
pH (SU)	10.00	10	15.19	± 0.1	GWMP
D.O. (%)	N/A	100	14.76	± 10%	NA
ORP (mV)	228.0	228	15.21	± 10	EPA 2023

	Standard	**Calibration Value**	**Acceptance Criteria**	**Reference**
Turbidity (NTU)	20	20.1	± 10% of standard	EPA 2023
	100	101		
	800	806		
	10	10.2		

Calibration Check					
Time Start: 1300		**Time Finish: 1315**			
Parameter	**Standard**	**Calibration Value**	**Calibration Solution Temperature (°C)**	**Acceptance Criteria**	**Reference**
Specific Conductance (µS/cm)	4,490	4388.9	18.55	± 10% of standard	EPA 2023
pH (SU)	4.00	4.04	18.55	± 0.1	GWMP
pH (SU)	7.00	7.07	18.69	± 0.1	GWMP
pH (SU)	10.00	10.08	18.75	± 0.1	GWMP
ORP (mV)	228	225.6	18.78		

	Standard	**Calibration Value**	**Acceptance Criteria**	**Reference**
Turbidity (NTU)	20	20.7	± 10% of standard	EPA 2023
	100	101		
	800	795		
	10	10.2		

Notes:

Field Instrumentation Calibration Form

Site Name:___Arkwright_____ Date: __1/25/2024_____

Calibrated By:___Z. Levy_____ Field Conditions:___Cloudy/rainy_____

Instrument	Manufactuer/ Model	Serial Number
Water Quality Meter	In-Situ	952637
Turbidity Meter	Hach	23100D000373

Calibration Standard Information				
Parameter	**Standard**	**Lot #**	**Date of Expiration**	**Brand**
Specific Conductance (µS/cm)	4,490	24000044	May-24	AIR - Autocal solution
pH (SU)	4.00	24000044	May-24	AIR - Autocal solution
pH (SU)	7.00	22290139	24-Apr	AIR - pH 7 solution
pH (SU)	10.00	22110130	24-Apr	AIR - pH 10 solution
D.O. (%)	N/A	N/A	N/A	N/A
ORP (mV)	228.0	24002258	24-Jun	AIR - ORP solution

Calibration					
Time Start: 0730		**Time Finish: 0750**			
Parameter	**Standard**	**Calibration Value**	**Calibration Solution Temperature (°C)**	**Acceptance Criteria**	**Reference**
Specific Conductance (µS/cm)	4,490	4490	18.45	± 10% of standard	EPA 2023
pH (SU)	4.00	4	18.69	± 0.1	GWMP
pH (SU)	7.00	7	18.56	± 0.1	GWMP
pH (SU)	10.00	10	18.71	± 0.1	GWMP
D.O. (%)	N/A	100	18.66	± 10%	NA
ORP (mV)	228.0	228	18.73	± 10	EPA 2023

	Standard	**Calibration Value**	**Acceptance Criteria**	**Reference**
Turbidity (NTU)	20	19.9	± 10% of standard	EPA 2023
	100	99.8		
	800	789		
	10	10.8		

Calibration Check					
Time Start: 1140		**Time Finish: 1152**			
Parameter	**Standard**	**Calibration Value**	**Calibration Solution Temperature (°C)**	**Acceptance Criteria**	**Reference**
Specific Conductance (µS/cm)	4,490	4473.1	23.16	± 10% of standard	EPA 2023
pH (SU)	4.00	4.06	23.16	± 0.1	GWMP
pH (SU)	7.00	7.06	23.41	± 0.1	GWMP
pH (SU)	10.00	10.04	23.56	± 0.1	GWMP
ORP (mV)	228	225.2	23.74		

	Standard	**Calibration Value**	**Acceptance Criteria**	**Reference**
Turbidity (NTU)	20	20.5	± 10% of standard	EPA 2023
	100	98.9		
	800	791		
	10	10.2		

Notes:

B.4 Groundwater and Surface Water Laboratory Analytical Reports

GEL Laboratories LLC
a member of The GEL Group INC

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):

Laboratory ID	Client ID	Matrix	Date Collected	Date Recieved
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

Method	Run Date ID
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

Method	Run Date ID
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,

Erin S. Trent

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 Erin B. Trent

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 Erin B. Trent

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
Sample ID: 632699001
Matrix: WG
Collect Date: 08-AUG-23 10:15
Receive Date: 09-AUG-23
Collector: Client

Project: GPCC00100
Client ID: GPCC001

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	0.0000670	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: 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
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-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	0.0000670	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-AP2-FD-01	Project:	GPCC00100
Sample ID:	632699002	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

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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
Sample ID: 632699003
Matrix: WG
Collect Date: 08-AUG-23 09:55
Receive Date: 09-AUG-23
Collector: Client

Project: GPCC00100
Client ID: GPCC001

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-ARGWC-22	Project:	GPCC00100
Sample ID:	632699003	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	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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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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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

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
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-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	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

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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: 632699006
Matrix: WG
Collect Date: 08-AUG-23 12:35
Receive Date: 09-AUG-23
Collector: Client

Project: GPCC00100
Client ID: GPCC001

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-9	Project:	GPCC00100
Sample ID:	632699006	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	EPA 353.2 Low Level	
8	SM 2540C	
9	SM 2320B	

Notes:

Column headers are defined as follows:

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

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Certificate of Analysis

Report Date: September 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
Sample ID: 632699007
Matrix: WG
Collect Date: 08-AUG-23 15:05
Receive Date: 09-AUG-23
Collector: Client

Project: GPCC00100
Client ID: GPCC001

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	AXS5	08/31/23	1207	2484083	3
Mercury	U	ND	0.0000670	0.000200	mg/L	1.00	1	JP2	08/11/23	1038	2474015	4
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	5
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	6
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	7
Solids Analysis												

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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
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-1
Sample ID: 632699008
Matrix: WG
Collect Date: 08-AUG-23 16:00
Receive Date: 09-AUG-23
Collector: Client

Project: GPCC00100
Client ID: GPCC001

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
Solids Analysis												
SM2540C Dissolved Solids "As Received"												

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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
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-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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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

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
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-19	Project:	GPCC00100
Sample ID:	632699010	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
Metals Analysis-ICP-MS												
SW846 3005A/6020B Dissolved Fe & Mn "As Received"												
Iron	U	ND	0.0330	0.100	mg/L	1.00	1	PRB	08/31/23	1328	2484159	1
Manganese	J	0.00100	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	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-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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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:	632699011	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	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-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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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:	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	Project:	GPCC00100
Sample ID:	632699013	Client ID:	GPCC001

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method

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-2	Project:	GPCC00100
Sample ID:	632699014	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
Metals Analysis-ICP-MS												
SW846 3005A/6020B Dissolved Fe & Mn "As Received"												
Iron		7.20	0.0330	0.100	mg/L	1.00	1	PRB	08/31/23	1401	2484159	1
Manganese		1.08	0.0100	0.0500	mg/L	1.00	10	PRB	08/31/23	1405	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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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	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-ARGWC-23	Project:	GPCC00100
Sample ID:	632699016	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
Metals Analysis-ICP-MS												
SW846 3005A/6020B Dissolved Fe & Mn "As Received"												
Iron	U	ND	0.0330	0.100	mg/L	1.00	1	PRB	08/31/23	1412	2484159	1
Manganese		0.273	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	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-21
Sample ID: 633126001
Matrix: WG
Collect Date: 09-AUG-23 10:35
Receive Date: 11-AUG-23
Collector: Client

Project: GPCC00100
Client ID: GPCC001

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	Project:	GPCC00100
Sample ID:	633126001	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	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-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	Project:	GPCC00100
Sample ID:	633126002	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	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-8
Sample ID: 633126003
Matrix: WG
Collect Date: 09-AUG-23 11:15
Receive Date: 11-AUG-23
Collector: Client

Project: GPCC00100
Client ID: GPCC001

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 CaCO3		245	0.725	2.00	mg/L			JW2	08/14/23	1702	2476209	10
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
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	Project:	GPCC00100
Sample ID:	633126004	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	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-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	Project:	GPCC00100
Sample ID:	633126005	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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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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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:	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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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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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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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
Matrix: WG
Collect Date: 09-AUG-23 10:35
Receive Date: 11-AUG-23
Collector: Client

Project: GPCC00100
Client ID: GPCC001

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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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

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	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
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	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	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-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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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

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method

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-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

QC Summary

Report Date: September 6, 2023

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%)		

QC Summary

Workorder: **632699**

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%)		

QC Summary

Workorder: **632699**

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					

QC Summary

Workorder: **632699**

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%)		

QC Summary

Workorder: **632699**

Parmname	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%)		

QC Summary

Workorder: **632699**

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%)		

QC Summary

Workorder: **632699**

Parmname	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%)		

QC Summary

Workorder: **632699**

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%)		

QC Summary

Workorder: **632699**

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%)		

QC Summary

Workorder: **632699**

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					

QC Summary

Workorder: **632699**

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

QC Summary

Workorder: **632699**

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%)		

QC Summary

Workorder: **632699**

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%)		

QC Summary

Workorder: **632699**

Parmname	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

QC Summary

Workorder: **632699**

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%)		

QC Summary

Workorder: **632699**

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

QC Summary

Workorder: **632699**

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	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

QC Summary

Workorder: **632699**

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
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

QC Summary

Workorder: **632699**

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

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.

QC Summary

Report Date: September 6, 2023

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

QC Summary

Workorder: **633126**

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

QC Summary

Workorder: **633126**

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					

QC Summary

Workorder: **633126**

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

QC Summary

Workorder: **633126**

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%)		

QC Summary

Workorder: **633126**

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%)		

QC Summary

Workorder: **633126**

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	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

QC Summary

Workorder: **633126**

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%)		

QC Summary

Workorder: **633126**

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%)		

QC Summary

Workorder: **633126**

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					

QC Summary

Workorder: **633126**

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

QC Summary

Workorder: **633126**

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%)		

QC Summary

Workorder: **633126**

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%)		

QC Summary

Workorder: **633126**

Parmname	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

QC Summary

Workorder: **633126**

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%)		

QC Summary

Workorder: **633126**

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

QC Summary

Workorder: **633126**

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

QC Summary

Workorder: **633126**

Parmname	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.

QC Summary

Workorder: **633126**

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).

GEL Sample ID#	Client Sample Identification
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).

GEL Sample ID#	Client Sample Identification
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).

GEL Sample ID#	Client Sample Identification
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).

GEL Sample ID#	Client Sample Identification
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).

GEL Sample ID#	Client Sample Identification
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).

GEL Sample ID#	Client Sample Identification
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).

GEL Sample ID#	Client Sample Identification
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).

GEL Sample ID#	Client Sample Identification
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).

GEL Sample ID#	Client Sample Identification
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).

GEL Sample ID#	Client Sample Identification
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).

GEL Sample ID#	Client Sample Identification
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).

GEL Sample ID#	Client Sample Identification
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).

GEL Sample ID#	Client Sample Identification
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).

GEL Sample ID#	Client Sample Identification
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.

Page: 1 of 1
Project # 175569434
GEL Quote #:
COC Number [1]: 3 Coolers
PO Number:

Cooler 3 of 3

GEL Laboratories LLC
gel.com
Chemistry | Radiochemistry | Radiobioassay | Specialty Analytics

Chain of Custody and Analytical Request

6032699
6032702

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

Sample ID * For composites - indicate start and stop date/time	*Date Collected (mm-dd-yy)	*Time Collected (Military) (hhmm)	QC Code [2]	Field Filtered [3]	Sample Matrix [4]	Should this sample be considered: Radioactive (If yes, please supply isotopic info.)	Should this sample be considered: (7) Known or possible Hazards	Total number of containers	NI Ag (App. I) (6020B)	NI Metals App. III (6020B)	Alkalinity (300.0 R2.1)	TDS (SM Method 2540C)	Anions (Cl, Fl, Sulfate) (300.0 Rev. 2.1 1993)	NI Metals App. IV (6020B)	NI RAD 226-228 Cmbd	NI Fe2+ / Mn2+ (EPA Method 6020B) (Field Filtered)	Nitrate as N (EPA Method 353.2)	NI Mercury (7470B)	NI Metals Al, K, Mg, Na, Fe, Mn (6020B)		<-- Preservative Type (6)	Comments (task_code: ARK-CCR-ASSMT-2023S1)
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	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

	Relinquished By (Signed)	Print Name	Date	Received by (signed)	Print Name	Date
1	Zachary Terry	Zach Levy	8/9/23			8/9/23 8:28
2				Erin Trent		8/9/23 1245
3						

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

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

Sample Collection Time Zone : [X] 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, **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
FL = Flammable/Ignitable
CO = Corrosive
RE = Reactive

TSCA Regulated
PCB = Polychlorinated biphenyls

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.)*

Page 07 of 130 SDG: 632699 Rev1

632702
632699

GEL Laboratories LLC

SAMPLE RECEIPT & REVIEW FORM

Client: GPCC	SDG/AR/COC/Work Order: 632-699, 632-702
Received By: EG	Date Received: 8/9/23 1245
Carrier and Tracking Number	Circle Applicable: FedEx Express FedEx Ground UPS Field Services Courier (Other)

Suspected Hazard Information	Yes	No	*If Net Counts > 100cpm on samples not marked "radioactive", contact the Radiation Safety Group for further investigation.
A)Shipped as a DOT Hazardous?		✓	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): 60 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?	✓			Circle Applicable: Seals broken Damaged container Leaking container Other (describe)
2	Chain of custody documents included with shipment?	✓			Circle Applicable: Client contacted and provided COC COC created upon receipt
3	Samples requiring cold preservation within (0 ≤ 6 deg. C)?*	✓			Preservation Method: (Wet Ice) Ice Packs Dry ice None Other: *all temperatures are recorded in Celsius TEMP: 5
4	Daily check performed and passed on IR temperature gun?	✓			Temperature Device Serial #: IR5-23 Secondary Temperature Device Serial # (If Applicable):
5	Sample containers intact and sealed?	✓			Circle Applicable: Seals broken Damaged container Leaking container Other (describe)
6	Samples requiring chemical preservation at proper pH?			✓	Sample ID's and Containers Affected: nitrate containers preserved with sulfuric If Preservation added, Lot#: 3858525-A
7	Do any samples require Volatile Analysis?			✓	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?	✓			ID's and tests affected:
9	Sample ID's on COC match ID's on bottles?	✓			ID's and containers affected:
10	Date & time on COC match date & time on bottles?	✓			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?	✓			Circle Applicable: No container count on COC Other (describe)
12	Are sample containers identifiable as GEL provided by use of GEL labels?	✓			
13	COC form is properly signed in relinquished/received sections?	✓			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

GL-CHL-SR-001 Rev 7

Page: 1 of 2
Project # 175569434
GEL Quote #:
COC Number [1]: 2 Coolers
PO Number:

Cooler 1 of 2

GEL Laboratories LLC
gel.com
Chemistry | Radiochemistry | Radiobioassay | Specialty Analytics

633126
633128

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

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, Dylan Ripley, Houston Lynn

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

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

Sample ID * For composites - indicate start and stop date/time	*Date Collected (mm-dd-yy)	*Time Collected (Military) (hhmm)	QC Code [2]	Field Filtered [3]	Sample Matrix [4]	Should this sample be considered: Radioactive (If yes, please supply isotopic info.)	Should this sample be considered: (7) Known or possible Hazards	Total number of containers	NI Ag (App. I) (6020B)	NI Metals App. III (6020B)	NI Alkalinity (300.0 R2.1)	TDS (SM Method 2540C)	Anions (Cl, Fl, Sulfate) (300.0 Rev. 2.1 1993	NI Metals App. IV (6020B)	NI RAD 226-228 Cmbd	NI Fe2+ / Mn2+ (EPA Method 6020B) (Field Filtered)		NI Mercury (7470B)	NI Metals Al, K, Mg, Na, Fe, Mn (6020B)		<-- Preservative Type (6) Comments (task_code: ARK-CCR-ASSMT-2023S1)
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
ARK-AP2-EB-01	08-09-23	1110	FB	N	WQ			7		X		X	X	X	X			X			for their times
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
1	John Myer	John Myer	8/11/23		Anthony Ward	8/11/23
2						8/11/23 1400
3				3		

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*

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

Sample Collection Time Zone: [X] 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, **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
FL = Flammable/Ignitable
CO = Corrosive
RE = Reactive

TSCA Regulated
PCB = Polychlorinated biphenyls

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.)

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

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Page: 1 of 2
Project # 175569434
GEL Quote #:
COC Number [1]: 2 Coolers
PO Number:

633126
633128
Cooler 1 of 2

GEL Laboratories LLC
gel.com
Chemistry | Radiochemistry | Radiobioassay | 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
2 of 2

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, Dylan Ripley, Houston Lynn
Send Results To: jabraham@southernco.com EDD@stantec.com edgar.smith@stantec.com

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

Sample ID (* For composites - indicate start and stop date/time)	*Date Collected (mm-dd-yy)	*Time Collected (Military) (hhmm)	QC Code [2]	Field Filtered [3]	Sample Matrix [4]	Should this sample be considered: Radioactive (If yes, please supply isotopic info.)	Should this sample be considered: (7) Known or possible Hazards	Total number of containers	NI Ag (App. I) (6020B)	NI Metals App. III (6020B)	NI Alkalinity (300.0 R2.1)	TDS (SM Method 2540C)	Anions (Cl, Fl, Sulfate) (300.0 Rev. 2.1 1993)	NI Metals App. IV (6020B)	NI RAD 226-228 Cmbd	NI Fe2+ / Mn2+ (EPA Method 6020B) (Field Filtered)		NI Mercury (7470B)	NI Metals Al, K, Mg, Na, Fe, Mn (6020B)		<-- Preservative Type (6)
																					Comments (task_code: ARK-CCR-ASSMT-2023S1)
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
ARK-AP2-EB-01	08-09-23	1110	FB	N	WQ			7		X		X	X	X	X			X			for their times
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
1	John Myer	John Myer	8/11/23		Anthony Wood	8/11/23
2						8/11/23 1400
3				3		

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

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

Sample Collection Time Zone: [X] Eastern [ ] Pacific [ ] Central [ ] Mountain [ ] Other:

1.) Chain of Custody Number = Client Determined

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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**).

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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:

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(i.e.: Origin of sample(s), type of site collected from, odd matrices, etc.)

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

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Page: 2 of 2
Project # 175569434
GEL Quote #:
COC Number [1]: 2 Coolers
PO Number:

GEL Laboratories LLC
gel.com
Chemistry | Radiochemistry | Radiobioassay | 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

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

Project/Site Name: Plant Arkwright Ash Pond 2 **Nitrate/Nitrite COC** Fax:

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

Sample ID (* For composites - indicate start and stop date/time)	*Date Collected (mm-dd-yy)	*Time Collected (Military) (hhmm)	QC Code [2]	Field Filtered [3]	Sample Matrix [4]	Should this sample be considered: Radioactive (If yes, please supply isotopic info.)	Should this sample be considered: (7) Known or possible Hazards	Total number of containers	SA	Nitrate/Nitrite (EPA Method 353.2)	<-- Preservative Type (6)	Comments (task_code: ARK-CCR-ASSMT-2023S1)
ARK-ARGWC-21	08-10-23	1947	N	N	WG			1		X		
ARK-AP2-EB-01	08-10-23	1925	FB	N	WQ			1		X		
ARK-ARAMW-8	08-10-23	1936	N	N	WG			1		X		
ARK-ARGWA-20	08-10-23	1953	N	N	WG			1		X		
ARK-STNTW-22	08-10-23	1935	N	N	WG			1		X		

Chain of Custody Signatures

	Relinquished By (Signed)	Print Name	Date	Received by (signed)	Print Name	Date
1	John Myer	John Myer	8/11/23	Anthony Ward		8/11/23
2				Anthony Johnson		8/11/23 1400
3						

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*

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

Sample Collection Time Zone: [X] Eastern [ ] Pacific [ ] Central [ ] Mountain [ ] Other:

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Description:

Please provide any additional details below regarding handling and/or disposal concerns.
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Page: 2 of 2
Project # 175569434
GEL Quote #:
COC Number [1]: 2 Coolers
PO Number:

GEL Laboratories LLC
gel.com
Chemistry | Radiochemistry | Radiobioassay | 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 2 OF 2

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

Project/Site Name: Plant Arkwright Ash Pond 2 **Nitrate/Nitrite COC** Fax:

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

Sample ID * For composites - indicate start and stop date/time	*Date Collected (mm-dd-yy)	*Time Collected (Military) (hhmm)	QC Code [2]	Field Filtered [3]	Sample Matrix [4]	Should this sample be considered: Radioactive (If yes, please supply isotopic info.)	Should this sample be considered: (7) Known or possible Hazards	Total number of containers	SA	Nitrate/Nitrite (EPA Method 353.2)	<-- Preservative Type (6)	Comments (task_code: ARK-CCR-ASSMT-2023S1)
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Chain of Custody Signatures

	Relinquished By (Signed)	Print Name	Date	Received by (signed)	Print Name	Date
1	[signature]	John Myer	8/11/23	[signature]	Anthony Ward	8/11/23
2				[signature]		8/11/23 1355
3						1400

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

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

Sample Collection Time Zone: [X] Eastern [ ] Pacific [ ] Central [ ] Mountain [ ] Other:

PS 8/15/23

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(F,K,P and U-listed wastes.)
Waste code(s):

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

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GEL Laboratories LLC

SAMPLE RECEIPT & REVIEW FORM

Client: GPCC	SDG/AR/COC/Work Order: 633099, 633107, 633126, 633128
Received By: Anna Johnson	Date Received: 8/11/23
Carrier and Tracking Number	Circle Applicable: FedEx Express FedEx Ground UPS Field Services (Courier) Other

cooler 1 - 0.6°C
Cooler 2 - 1.9°C
cooler 3 - 2.6°C
cooler 4 - 0.1°C

Suspected Hazard Information	Yes	No	*If Net Counts > 100cpm on samples not marked "radioactive", contact the Radiation Safety Group for further investigation.
A) Shipped as a DOT Hazardous?		/	Hazard Class Shipped: UN#: If UN2910, Is the Radioactive Shipment Survey Compliant? Yes___ No___
B) Did the client designate the samples are to be received as radioactive?		/	COC notation or radioactive stickers on containers equal client designation.
C) Did the RSO classify the samples as radioactive?		/	Maximum Net Counts Observed* (Observed Counts - Area Background Counts): _____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?	/			Circle Applicable: Seals broken Damaged container Leaking container Other (describe)
2	Chain of custody documents included with shipment?	/			Circle Applicable: Client contacted and provided COC COC created upon receipt
3	Samples requiring cold preservation within (0 ≤ 6 deg. C)?*	/			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?	✓			Temperature Device Serial #: IR2-21 Secondary Temperature Device Serial # (If Applicable):
5	Sample containers intact and sealed?	/			Circle Applicable: Seals broken Damaged container Leaking container Other (describe)
6	Samples requiring chemical preservation at proper pH?	/			Sample ID's and Containers Affected: If Preservation added, Lot#:
7	Do any samples require Volatile Analysis?			/	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?	/			ID's and tests affected:
9	Sample ID's on COC match ID's on bottles?	/			ID's and containers affected:
10	Date & time on COC match date & time on bottles?	/			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?	/			Circle Applicable: No container count on COC Other (describe) ~~*missing 2 containers for ARK-ARCW0-1A~~ AD 8/15/23
12	Are sample containers identifiable as GEL provided by use of GEL labels?	/			
13	COC form is properly signed in relinquished/received sections?	/			Circle Applicable: Not relinquished Other (describe)

Comments (Use Continuation Form if needed):

Cooler 5 - 3.1°C
Cooler 6 - 3.6°C
cooler 7 - 2.5°C
cooler 8 - 3.4°C
cooler 9 - 1.9°C
cooler 10 - 0.9°C

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

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

Cooler 1 of 3

GEL Laboratories LLC
gel.com
Chemistry | Radiochemistry | Radiobioassay | Specialty Analytics
Chain of Custody and Analytical Request

GEL Work Order Number:

GEL Project Manager: Erin Trent

GEL Laboratories, LLC
2040 Savage Road
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Phone: (843) 556-8171
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Client Name: Georgia Power
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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 Analysis Requested (5) (Fill in the number of containers for each test)

Sample ID (* For composites - indicate start and stop date/time)	*Date Collected (mm-dd-yy)	*Time Collected (Military) (hhmm)	QC Code (2)	Field Filtered (3)	Sample Matrix (4)	Should this sample be considered: Radioactive (If yes, please supply isotopic info.)	Should this sample be considered: (7) Known or possible Hazards	Total number of containers	Ag (App. I) (6020B) NI	Metals App. III (6020B) NI	Alkalinity (300.0 R2.1)	TDS (SM Method 2540C)	Anions (Cl, Fl, Sulfate) (300.0 Rev. 2.1 1993)	Metals App. IV (6020B) NI	RAD 226-228 Cmbd NI	Fe2+/Mn2+ (EPA Method 6020B) (Field Filtered) NI	Nitrate as N (EPA Method 353.2)	Mercury (7470B) NI	Metals Al, K, Mg, Na, Fe, Mn (6020B) NI		<-- 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		
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	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		

Comments (task_code: ARK-CCR-ASSMT-2023SX) 2
A.S. 8/15/23

Chain of Custody Signatures

	Relinquished By (Signed)	Print Name	Date	Received by (signed)	Print Name	Date
1	Zachary Levy	Zachary Levy	8/9/23			8/9/23 8:27
2						
3						

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

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

Sample Collection Time Zone: [X] Eastern [ ] Pacific [ ] Central [ ] Mountain [ ] Other:

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Cr = Chromium
Pb = Lead
Hg= Mercury
Se= Selenium
Ag= Silver
MR= Misc. RCRA metals

Characteristic Hazards
FL = Flammable/Ignitable
CO = Corrosive
RE = Reactive

TSCA Regulated
PCB = Polychlorinated biphenyls

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 disposa concerns. (i.e.: Origin of sample(s), type of site collected from, odd matrices, etc.)

Page: 1 of 1

Project # 175569434

GEL Quote #:

COC Number (1): 3 Coolers

PO Number:

Cooler 2 of 3

GEL Laboratories LLC

gel.com

Chemistry | Radiochemistry | Radiobioassay | 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: jabraham@southernco.com EDD@stantec.com edgar.smith@stantec.com

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

Sample ID (* For composites - indicate start and stop date/time)	*Date Collected (mm-dd-yy)	*Time Collected (Military) (hhmm)	QC Code (2)	Field Filtered (3)	Sample Matrix (4)	Should this sample be considered: Radioactive (If yes, please supply isotopic info.)	Should this sample be considered: (7) Known or possible Hazards	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, Fl, 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)		
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		[redacted]	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		[redacted]	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			
ARK-ARAMW-9	08-08-23	1235	N	Y	WG		[redacted]	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		[redacted]	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		
							[redacted]														

Comments
(task_code: ARK-CCR-ASSMT-2023S1)2
A.S. 8/15/23

Chain of Custody Signatures

Relinquished By (Signed)	Print Name	Date	Received by (signed)	Print Name	Date
1 Zachary Levy	Zach Levy	8/9/23	1		8/9/23 8:28
2			2		
3			3		

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

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

Sample Collection Time Zone: [X] 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, 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
FL = Flammable/Ignitable
CO = Corrosive
RE = Reactive

TSCA Regulated
PCB = Polychlorinated biphenyls

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.)

Page 1 of 1 SDG 52699 Rev1

Page: 1 of 1

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

Cooler 3 of 3

GEL Laboratories LLC
gel.com
Chemistry | Radiochemistry | Radiobioassay | Specialty Analytics

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)

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

Sample ID (* For composites - indicate start and stop date/time)	*Date Collected (mm-dd-yy)	*Time Collected (Military) (hhmm)	QC Code (2)	Field Filtered (3)	Sample Matrix (4)	Should this sample be considered: Radioactive (If yes, please supply isotopic info.)	Should this sample be considered: (7) Known or possible Hazards	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, Fl, 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)		
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	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		

Comments (task_code: ARK-CCR-ASSMT-2023S1)2
A.S. 8/15/23

Chain of Custody Signatures

	Relinquished By (Signed)	Print Name	Date	Received by (signed)	Print Name	Date
1	Zachary Levy	Zach Levy	8/19/23			8/19/23 8:25
2						
3						

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

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

Sample Collection Time Zone: [X] 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, HX = Hexane, ST = Sodium Thiosulfate, If no preservative is added = leave field blank

7.) KNOWN OR POSSIBLE HAZARDS

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

Characteristic Hazards
FL = Flammable/Ignitable
CO = Corrosive
RE = Reactive

TSCA Regulated
PCB = Polychlorinated biphenyls

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.)

GEL Quote #: 753609459

COC Number (1): 2 Coolers — Cooler 1 of 2

PO Number:

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, Dylan Ripley, Houston Lynn — Send Results To: jabraham@southernco.com EDD@stantec.com edgar.smith@stantec.com

GEL Laboratories LLC
Chemistry | Radiochemistry | Radiobioassay | 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

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

Sample ID (* For composites - indicate start and stop date/time)	*Date Collected (mm-dd-yy)	*Time Collected (Military) (hhmm)	QC Code (2)	Field Filtered (3)	Sample Matrix (4)	Should this sample be considered: Radioactive (If yes, please supply isotopic info.)	Should this sample be considered: (7) Known or possible Hazards	Total number of containers	NI Ag (App III) (6020B)	NI Metals App III (6020B)	NI Alkalinity (300.0 R2.1)	TDS (SM Method 2540C)	Anions (Cl, Fl, Sulfate) (300.0 Rev 2.1 1993)	NI Metals App IV (6020B)	NI RAD 226-228 Cmbd	NI Fe2+ / Mn2+ (HPA Method 6020B) (Field Filtered)	Mercury (7470B)	NI 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	See Nitrate/Nitrite COC
ARK-AP2-EB-01	08-09-23	1110	FB	N	WQ			7		X		X	X	X	X		X		for their times
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

Comments (task_code: ARK-CCR-ASSMT-2023S1) 2 A.S. 8/15/23

Chain of Custody Signatures

	Relinquished By (Signed)	Print Name	Date	Received by (signed)	Print Name	Date
1	[signature]	John Myer	8/11/23	[signature]	Anthony Ward	8/11/23
2						
3						

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

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

Sample Collection Time Zone: [X] 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, HX = Hexane, ST = Sodium Thiosulfate, If no preservative is added = leave field blank

7) KNOWN OR POSSIBLE HAZARDS

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

Characteristic Hazards
FL = Flammable/Ignitable
CO = Corrosive
RE = Reactive

TSCA Regulated
PCB = Polychlorinated biphenyls

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.)

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: 2 of 2
Project # 175569434
GEL Quote #:
COC Number (1): 2 Coolers
PO Number:

GEL Laboratories LLC
gel.com | Chemistry | Radiochemistry | Radiobioassay | Specialty Analytics

Chain of Custody and Analytical Request

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

Cooler 4 of 2

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

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

Project/Site Name: Plant Arkwright Ash Pond 2 Nitrate/Nitrite COC Fax

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

Sample ID * For composites - indicate start and stop date/time	*Date Collected (mm-dd-yy)	*Time Collected (Military) (hhmm)	QC Code (2)	Field Filtered (3)	Sample Matrix (4)	Should this sample be considered: Radioactive (If yes, please supply isotopic info.)	(7) Known or possible Hazards	Total number of containers	SA Nitrate/Nitrite (EPA Method 353.2)	<-- Preservative Type (6)	Comments (task_code: ARK-CCR-ASSMT-2023S1)
ARK-ARGWC-21	08-10-23	1947	N	N	WG			1	X		A.S. 8/15/23 2
ARK-AP2-EB-01	08-10-23	1925	FB	N	WQ			1	X		
ARK-ARAMW-8	08-10-23	1936	N	N	WG			1	X		
ARK-ARGWA-20	08-10-23	1953	N	N	WG			1	X		
ARK-STNTW-22	08-10-23	1935	N	N	WG			1	X		

Chain of Custody Signatures

	Relinquished By (Signed)	Print Name	Date	Received by (signed)	Print Name	Date
1		John Myer	8/11/23		Anthony Ward	8/11/23
2						
3						

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

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

Sample Collection Time Zone: [X] 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, 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
FL = Flammable/Ignitable
CO = Corrosive
RE = Reactive

TSCA Regulated
PCB = Polychlorinated biphenyls

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.)*

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 = 1732094.34

COC Number (1): 2 Coolers — Cooler 1 of 2

PO Number

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, Dylan Ripley, Houston Lynn — Send Results To: jabraham@southernco.com EDD@stantec.com edgar.smith@stantec.com

GEL Laboratories LLC

Chemistry | Radiochemistry | Radiobioassay | 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

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

Sample ID (* For composites - indicate start and stop date/time)	*Date Collected (mm-dd-yy)	*Time Collected (Military) (hhmm)	QC Code (2)	Field Filtered (3)	Sample Matrix (4)	Should this sample be considered: Radioactive (If yes, please supply isotopic info.)	Should this sample be considered: (?) Known or possible Hazards	Total number of containers	Ag (App. II) (6020B)	Metals App. III (6020B)	Alkalinity (300.0 or SM 2320B)	TDS (SM Method 2540C)	Anions (Cl, Fl, Sulfate) (300.0 Rev 2.1 1993)	Metals App. IV (6020B)	RAD 226-228 Combd	Fe2+ / Mn2+ (USEPA Method 6020B) (Field 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		See Nitrate/Nitrite COC
ARK-AP2-EB-01	08-09-23	1110	FB	N	WQ			7		X		X	X	X	X			X			for their times
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 + only App. III metals As, Co, Li, Mo
									A.S. 8/15/23												A.S. 8/15/23

Chain of Custody Signatures

	Relinquished By (Signed)	Print Name	Date	Received by (signed)	Print Name	Date
1	[signature]	Tonr Myer	8/11/23	[signature]	Anthony Ward	8/11/23
2						
3						

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

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 [ ] 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, EDX = Hexade, ST = Sodium Thiosulfate. If no preservative is added = leave field blank

7) KNOWN OR POSSIBLE HAZARDS

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

Characteristic Hazards
FL = Flammable/Ignitable; CO = Corrosive; RE = Reactive

TSCA Regulated
PCB = Polychlorinated biphenyls

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.)

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 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

GEL Laboratories LLC
a member of The GEL Group INC

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):

Laboratory ID	Client ID	Matrix	Date Collected	Date Recieved
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

Method	Run Date ID
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,

Erin S. Trent

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 Erin B. Trent

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 Erin B. Trent

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-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														
GFPC Ra228, Liquid "As Received"														
Radium-228	U	0.700	+/-0.734	1.21	+/-0.755	3.00	pCi/L			JE1	08/29/23	1024	2474962	1
Radium-226+Radium-228 Calculation "See Parent Products"														
Radium-226+228 Sum		1.80	+/-0.894	1.21	+/-0.931		pCi/L			NXL1	09/08/23	1226	2475371	2
Rad Radium-226														
Lucas Cell, Ra226, Liquid "As Received"														
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
DL: Detection Limit
Lc/LC: Critical Level
MDA: Minimum Detectable Activity
MDC: Minimum Detectable Concentration
Mtd.: Method
PF: Prep Factor
RL: Reporting Limit
TPU: Total Propagated Uncertainty

GEL LABORATORIES LLC
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-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														
GFPC Ra228, Liquid "As Received"														
Radium-228	U	-1.78	+/-1.01	2.19	+/-1.01	3.00	pCi/L			JE1	08/29/23	1024	2474962	1
Radium-226+Radium-228 Calculation "See Parent Products"														
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														
Lucas Cell, Ra226, Liquid "As Received"														
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
DL: Detection Limit
Lc/LC: Critical Level
MDA: Minimum Detectable Activity
MDC: Minimum Detectable Concentration
Mtd.: Method
PF: Prep Factor
RL: Reporting Limit
TPU: Total Propagated Uncertainty

GEL LABORATORIES LLC
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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
Sample ID: 632702003
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														
GFPC Ra228, Liquid "As Received"														
Radium-228	U	1.13	+/-1.04	1.69	+/-1.08	3.00	pCi/L			JE1	08/29/23	1024	2474962	1
Radium-226+Radium-228 Calculation "See Parent Products"														
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														
Lucas Cell, Ra226, Liquid "As Received"														
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
DL: Detection Limit
Lc/LC: Critical Level
MDA: Minimum Detectable Activity
MDC: Minimum Detectable Concentration
Mtd.: Method
PF: Prep Factor
RL: Reporting Limit
TPU: Total Propagated Uncertainty

GEL LABORATORIES LLC
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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-ARAMW-7
Sample ID: 632702004
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														
GFPC Ra228, Liquid "As Received"														
Radium-228		4.31	+/-1.46	1.85	+/-1.82	3.00	pCi/L			JE1	08/29/23	1024	2474962	1
Radium-226+Radium-228 Calculation "See Parent Products"														
Radium-226+228 Sum		4.83	+/-1.50	1.85	+/-1.86		pCi/L			NXL1	09/08/23	1226	2475371	2
Rad Radium-226														
Lucas Cell, Ra226, Liquid "As Received"														
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
DL: Detection Limit
Lc/LC: Critical Level
MDA: Minimum Detectable Activity
MDC: Minimum Detectable Concentration
Mtd.: Method
PF: Prep Factor
RL: Reporting Limit
TPU: Total Propagated Uncertainty

GEL LABORATORIES LLC
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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-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														
GFPC Ra228, Liquid "As Received"														
Radium-228	U	1.02	+/-0.927	1.50	+/-0.963	3.00	pCi/L			JE1	08/29/23	1024	2474962	1
Radium-226+Radium-228 Calculation "See Parent Products"														
Radium-226+228 Sum		1.76	+/-0.991	1.50	+/-1.04		pCi/L			NXL1	09/08/23	1226	2475371	2
Rad Radium-226														
Lucas Cell, Ra226, Liquid "As Received"														
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
DL: Detection Limit
Lc/LC: Critical Level
MDA: Minimum Detectable Activity
MDC: Minimum Detectable Concentration
Mtd.: Method
PF: Prep Factor
RL: Reporting Limit
TPU: Total Propagated Uncertainty

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Certificate of Analysis

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

Atlanta, Georgia 30308 Report Date: September 8, 2023

Contact: Joju Abraham

Project: Arkwright CCR Groundwater ComplianceAP2-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														
GFPC Ra228, Liquid "As Received"														
Radium-228		3.39	+/-1.15	1.38	+/-1.43	3.00	pCi/L			JE1	08/29/23	1024	2474962	1
Radium-226+Radium-228 Calculation "See Parent Products"														
Radium-226+228 Sum		3.92	+/-1.21	1.38	+/-1.49		pCi/L			NXL1	09/08/23	1226	2475371	2
Rad Radium-226														
Lucas Cell, Ra226, Liquid "As Received"														
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
DL: Detection Limit
Lc/LC: Critical Level
MDA: Minimum Detectable Activity
MDC: Minimum Detectable Concentration
Mtd.: Method
PF: Prep Factor
RL: Reporting Limit
TPU: Total Propagated Uncertainty

GEL LABORATORIES LLC
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-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														
GFPC Ra228, Liquid "As Received"														
Radium-228	U	1.11	+/-0.957	1.55	+/-0.998	3.00	pCi/L			JE1	08/29/23	1024	2474962	1
Radium-226+Radium-228 Calculation "See Parent Products"														
Radium-226+228 Sum		1.86	+/-1.08	1.55	+/-1.13		pCi/L			NXL1	09/08/23	1226	2475371	2
Rad Radium-226														
Lucas Cell, Ra226, Liquid "As Received"														
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
DL: Detection Limit
Lc/LC: Critical Level
MDA: Minimum Detectable Activity
MDC: Minimum Detectable Concentration
Mtd.: Method
PF: Prep Factor
RL: Reporting Limit
TPU: Total Propagated Uncertainty

GEL LABORATORIES LLC
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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-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														
GFPC Ra228, Liquid "As Received"														
Radium-228	U	0.725	+/-1.06	1.82	+/-1.08	3.00	pCi/L			JE1	08/29/23	1021	2474962	1
Radium-226+Radium-228 Calculation "See Parent Products"														
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														
Lucas Cell, Ra226, Liquid "As Received"														
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
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-23
Sample ID: 632702009
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														
GFPC Ra228, Liquid "As Received"														
Radium-228	U	-0.0472	+/-0.745	1.44	+/-0.745	3.00	pCi/L			JE1	08/29/23	1021	2474962	1
Radium-226+Radium-228 Calculation "See Parent Products"														
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														
Lucas Cell, Ra226, Liquid "As Received"														
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
DL: Detection Limit
Lc/LC: Critical Level
MDA: Minimum Detectable Activity
MDC: Minimum Detectable Concentration
Mtd.: Method
PF: Prep Factor
RL: Reporting Limit
TPU: Total Propagated Uncertainty

GEL LABORATORIES LLC
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 6, 2023

Contact: Joju Abraham

Project: Arkwright CCR Groundwater ComplianceAP2-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														
GFPC Ra228, Liquid "As Received"														
Radium-228		2.34	+/-1.09	1.47	+/-1.24	3.00	pCi/L			JE1	08/23/23	0928	2477579	1
Radium-226+Radium-228 Calculation "See Parent Products"														
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														
Lucas Cell, Ra226, Liquid "As Received"														
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
DL: Detection Limit
Lc/LC: Critical Level
MDA: Minimum Detectable Activity
MDC: Minimum Detectable Concentration
Mtd.: Method
PF: Prep Factor
RL: Reporting Limit
TPU: Total Propagated Uncertainty

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Certificate of Analysis

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

Atlanta, Georgia 30308 Report Date: September 6, 2023

Contact: Joju Abraham

Project: Arkwright CCR Groundwater ComplianceAP2-R

Client Sample ID: ARK-AP2-EB-01
Sample ID: 633128002
Matrix: WQ
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														
GFPC Ra228, Liquid "As Received"														
Radium-228	U	0.774	+/-0.989	1.68	+/-1.01	3.00	pCi/L			JE1	08/23/23	0928	2477579	1
Radium-226+Radium-228 Calculation "See Parent Products"														
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														
Lucas Cell, Ra226, Liquid "As Received"														
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
DL: Detection Limit
Lc/LC: Critical Level
MDA: Minimum Detectable Activity
MDC: Minimum Detectable Concentration
Mtd.: Method
PF: Prep Factor
RL: Reporting Limit
TPU: Total Propagated Uncertainty

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Certificate of Analysis

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

Atlanta, Georgia 30308 Report Date: September 6, 2023

Contact: Joju Abraham

Project: Arkwright CCR Groundwater ComplianceAP2-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														
GFPC Ra228, Liquid "As Received"														
Radium-228	U	0.193	+/-0.595	1.11	+/-0.597	3.00	pCi/L			JE1	08/23/23	0928	2477579	1
Radium-226+Radium-228 Calculation "See Parent Products"														
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														
Lucas Cell, Ra226, Liquid "As Received"														
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
DL: Detection Limit
Lc/LC: Critical Level
MDA: Minimum Detectable Activity
MDC: Minimum Detectable Concentration
Mtd.: Method
PF: Prep Factor
RL: Reporting Limit
TPU: Total Propagated Uncertainty

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Certificate of Analysis

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

Atlanta, Georgia 30308 Report Date: 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														
GFPC Ra228, Liquid "As Received"														
Radium-228	U	1.12	+/-0.916	1.46	+/-0.961	3.00	pCi/L			JE1	08/23/23	0928	2477579	1
Radium-226+Radium-228 Calculation "See Parent Products"														
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														
Lucas Cell, Ra226, Liquid "As Received"														
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
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

QC Summary

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

Atlanta, Georgia

Contact: **Joju Abraham**

Workorder: **632702**

Report Date: September 8, 2023

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	08/29/2310:23
	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	08/29/2310:21
	Uncert:			+/-4.13						
	TPU:			+/-19.3						
QC1205485680 MB										
Radium-228			U	1.14	pCi/L				JE1	08/29/2310:23
	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	09/08/2311:07
	Uncert:	+/-0.365		+/-0.662						
	TPU:	+/-0.375		+/-0.732						
QC1205485671 LCS										
Radium-226	26.2			25.2	pCi/L		96	(75%-125%)	LXP1	09/08/2311:07
	Uncert:			+/-1.98						
	TPU:			+/-5.66						
QC1205485668 MB										
Radium-226			U	0.302	pCi/L				LXP1	09/08/2311:07
	Uncert:			+/-0.349						
	TPU:			+/-0.355						
QC1205485670 632629005 MS										
Radium-226	133	0.529		150	pCi/L		112	(75%-125%)	LXP1	09/08/2311:07
	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

QC Summary

Workorder: **632702**

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 acceptence 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.

QC Summary

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

Atlanta, Georgia

Contact: **Joju Abraham**

Workorder: **633128**

Report Date: September 6, 2023

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

QC Summary

Workorder: **633128**

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 acceptence 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.

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).

GEL Sample ID#	Client Sample Identification
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).

GEL Sample ID#	Client Sample Identification
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).

GEL Sample ID#	Client Sample Identification
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).

GEL Sample ID#	Client Sample Identification
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).

GEL Sample ID#	Client Sample Identification
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).

GEL Sample ID#	Client Sample Identification
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.

Page: 1 of 1
Project # 175569434
GEL Quote #:
COC Number [1]: 3 Coolers
PO Number:

Cooler 3 of 3

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Chain of Custody and Analytical Request

6032699
6032702

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

Sample ID * For composites - indicate start and stop date/time	*Date Collected (mm-dd-yy)	*Time Collected (Military) (hhmm)	QC Code [2]	Field Filtered [3]	Sample Matrix [4]	Should this sample be considered: Radioactive (If yes, please supply isotopic info.)	Should this sample be considered: (7) Known or possible Hazards	Total number of containers	NI Ag (App. I) (6020B)	NI Metals App. III (6020B)	Alkalinity (300.0 R2.1)	TDS (SM Method 2540C)	Anions (Cl, Fl, Sulfate) (300.0 Rev. 2.1 1993)	NI Metals App. IV (6020B)	NI RAD 226-228 Cmbd	NI Fe2+ / Mn2+ (EPA Method 6020B) (Field Filtered)	Nitrate as N (EPA Method 353.2)	NI Mercury (7470B)	NI Metals Al, K, Mg, Na, Fe, Mn (6020B)		<-- Preservative Type (6)	Comments (task_code: ARK-CCR-ASSMT-2023S1)
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	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

	Relinquished By (Signed)	Print Name	Date	Received by (signed)	Print Name	Date
1	Zachary Levy	Zach Levy	8/9/23			8/9/23 8:28
2				Edgar Abraham		8/9/23 1245
3						

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

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 [ ] 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, **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
FL = Flammable/Ignitable
CO = Corrosive
RE = Reactive

TSCA Regulated
PCB = Polychlorinated biphenyls

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.)*

Page 28 of 40 SDG: 632702

632702
632699

GEL Laboratories LLC

SAMPLE RECEIPT & REVIEW FORM

Client: GPCC	SDG/AR/COC/Work Order: 632-699, 632-702
Received By: EG	Date Received: 8/9/23 1245
Carrier and Tracking Number	Circle Applicable: FedEx Express FedEx Ground UPS Field Services Courier (Other)

Suspected Hazard Information	Yes	No	*If Net Counts > 100cpm on samples not marked "radioactive", contact the Radiation Safety Group for further investigation.
A) Shipped as a DOT Hazardous?		✓	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): 60 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?	✓			Circle Applicable: Seals broken Damaged container Leaking container Other (describe)
2	Chain of custody documents included with shipment?	✓			Circle Applicable: Client contacted and provided COC COC created upon receipt
3	Samples requiring cold preservation within (0 ≤ 6 deg. C)?*	✓			Preservation Method: (Wet Ice) Ice Packs Dry ice None Other: *all temperatures are recorded in Celsius TEMP: 5
4	Daily check performed and passed on IR temperature gun?	✓			Temperature Device Serial #: IR5-23 Secondary Temperature Device Serial # (If Applicable):
5	Sample containers intact and sealed?	✓			Circle Applicable: Seals broken Damaged container Leaking container Other (describe)
6	Samples requiring chemical preservation at proper pH?			✓	Sample ID's and Containers Affected: nitrate containers preserved with sulfuric If Preservation added, Lot#: 3858525-A
7	Do any samples require Volatile Analysis?			✓	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?	✓			ID's and tests affected:
9	Sample ID's on COC match ID's on bottles?	✓			ID's and containers affected:
10	Date & time on COC match date & time on bottles?	✓			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?	✓			Circle Applicable: No container count on COC Other (describe)
12	Are sample containers identifiable as GEL provided by use of GEL labels?	✓			
13	COC form is properly signed in relinquished/received sections?	✓			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

GL-CHL-SR-001 Rev 7

Page: 1 of 2
Project # 175569434
GEL Quote #:
COC Number (1): 2 Coolers
PO Number:

Cooler 1 of 2

GEL Laboratories LLC
gel.com
Chemistry | Radiochemistry | Radiobioassay | Specialty Analytics

Chain of Custody and Analytical Request

433126
433128

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

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, Dylan Riley, Houston Lynn

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

Page 30 of 40 SDG 93702

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

Sample ID * For composites - indicate start and stop date/time	*Date Collected (mm-dd-yy)	*Time Collected (Military) (hhmm)	QC Code (2)	Field Filtered (3)	Sample Matrix (4)	Should this sample be considered: Radioactive (If yes, please supply isotopic info.)	Should this sample be considered: (7) Known or possible Hazards	Total number of containers	NI Ag (App. I) (6020B)	NI Metals App. III (6020B)	NI Alkalinity (300.0 R2.1)	TDS (SM Method 2540C)	Anions (Cl, Fl, Sulfate) (300.0 Rev. 2.1 1993)	NI Metals App. IV (6020B)	NI RAD 226-228 Cmbd	NI Fe2+ / Mn2+ (EPA Method 6020B) (Field Filtered)		NI Mercury (7470B)	NI Metals Al, K, Mg, Na, Fe, Mn (6020B)		<-- Preservative Type (6) / Comments (task_code: ARK-CCR-ASSMT-2023S1)
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
ARK-AP2-EB-01	08-09-23	1110	FB	N	WQ			7		X		X	X	X	X			X			for their times
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
1	John Myer	John Myer	8/11/23		Anthony Ward	8/11/23
2						8/11/23 1400
3				3		

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

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

Sample Collection Time Zone: [X] 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

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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**).

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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
FL = Flammable/Ignitable
CO = Corrosive
RE = Reactive

TSCA Regulated
PCB = Polychlorinated biphenyls

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.)

Orignially 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 2

Project # 175569434

GEL Quote #:

COC Number [1]: 2 Coolers

PO Number:

633126

633128

Cooler 1 of 2

GEL Laboratories LLC

gel.com | Chemistry | Radiochemistry | Radiobioassay | 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 2 of 2

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, Dylan Riley, Houston Lynn

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

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

Sample ID * For composites - indicate start and stop date/time	*Date Collected (mm-dd-yy)	*Time Collected (Military) (hhmm)	QC Code [2]	Field Filtered [3]	Sample Matrix [4]	Should this sample be considered: Radioactive (If yes, please supply isotopic info.)	Should this sample be considered: (7) Known or possible Hazards	Total number of containers	NI Ag (App. I) (6020B)	NI Metals App. III (6020B)	NI Alkalinity (300.0 R2.1)	TDS (SM Method 2540C)	Anions (Cl, Fl, Sulfate) (300.0 Rev. 2.1 1993)	NI Metals App. IV (6020B)	NI RAD 226-228 Cmbd	NI Fe2+ / Mn2+ (EPA Method 6020B) (Field Filtered)		NI Mercury (7470B)	NI Metals Al, K, Mg, Na, Fe, Mn (6020B)		<-- Preservative Type (6)
																					Comments (task_code: ARK-CCR-ASSMT-2023S1)
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
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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
1	[signature]	John Myer	8/11/23	[signature]	Anthony Wasol	8/11/23
2				[signature]		8/11/23 1400
3						

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

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

Sample Collection Time Zone: [X] Eastern [ ] Pacific [ ] Central [ ] Mountain [ ] Other:

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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.)

Orignially 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 30 of 40 SDG: 633702

Page: 2 of 2
Project # 175569434
GEL Quote #:
COC Number [1]: 2 Coolers
PO Number:

GEL Laboratories LLC
gel.com | Chemistry | Radiochemistry | Radiobioassay | 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

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

Project/Site Name: Plant Arkwright Ash Pond 2 **Nitrate/Nitrite COC** Fax:

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

Collected By: John Myer, Dylan Quintal, Dylan Riley, Houston Lynn

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

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

Sample ID (* For composites - indicate start and stop date/time)	*Date Collected (mm-dd-yy)	*Time Collected (Military) (hhmm)	QC Code [2]	Field Filtered [3]	Sample Matrix [4]	Should this sample be considered: Radioactive (If yes, please supply isotopic info.)	Should this sample be considered: (7) Known or possible Hazards	Total number of containers	SA	Nitrate/Nitrite (EPA Method 353.2)	<-- Preservative Type (6)	Comments (task_code: ARK-CCR-ASSMT-2023S1)
ARK-ARGWC-21	08-10-23	1947	N	N	WG			1		X		
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ARK-ARAMW-8	08-10-23	1936	N	N	WG			1		X		
ARK-ARGWA-20	08-10-23	1953	N	N	WG			1		X		
ARK-STNTW-22	08-10-23	1935	N	N	WG			1		X		

Chain of Custody Signatures

	Relinquished By (Signed)	Print Name	Date	Received by (signed)	Print Name	Date
1	John Myer	John Myer	8/11/23	Anthony Ward	Anthony Ward	8/11/23
2				Anna Johnson		8/11/23 1400
3						

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

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

Sample Collection Time Zone: [X] Eastern [ ] Pacific [ ] Central [ ] Mountain [ ] Other:

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Page: 2 of 2
Project # 175569434
GEL Quote #:
COC Number [1]: 2 Coolers
PO Number:

GEL Laboratories LLC
gel.com
Chemistry | Radiochemistry | Radiobioassay | 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 2 OF 2

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

Project/Site Name: Plant Arkwright Ash Pond 2 **Nitrate/Nitrite COC** Fax:

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

Collected By: John Myer, Dylan Quintal, Dylan Reiley, Houston Lynn

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

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

Sample ID (* For composites - indicate start and stop date/time)	*Date Collected (mm-dd-yy)	*Time Collected (Military) (hhmm)	QC Code [2]	Field Filtered [3]	Sample Matrix [4]	Should this sample be considered: Radioactive (If yes, please supply isotopic info.)	Should this sample be considered: (7) Known or possible Hazards	Total number of containers	SA	Nitrate/Nitrite (EPA Method 353.2)	<-- Preservative Type (6)	Comments (task_code: ARK-CCR-ASSMT-2023S1)
ARK-ARGWC-21	08-10-23	1947	N	N	WG			1		X		
ARK-AP2-EB-01	08-10-23	1925	FB	N	WQ			1		X		
ARK-ARAMW-8	08-10-23	1936	N	N	WG			1		X		
ARK-ARGWA-20	08-10-23	1953	N	N	WG			1		X		
ARK-STNTW-22	08-10-23	1935	N	N	WG			1		X		

Chain of Custody Signatures

	Relinquished By (Signed)	Print Name	Date	Received by (signed)	Print Name	Date
1	John Myer	John Myer	8/11/23	Anthony Ward	Anthony Ward	8/11/23
2						8/11/23 1355 1400
3						

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*

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

Sample Collection Time Zone: [X] Eastern [ ] Pacific [ ] Central [ ] Mountain [ ] Other:

PT 8/15/23

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

7.) **KNOWN OR POSSIBLE HAZARDS**

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

Characteristic Hazards
FL = Flammable/Ignitable
CO = Corrosive
RE = Reactive

TSCA Regulated
PCB = Polychlorinated biphenyls

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.)

Orignially 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 33 of 40 SDG 692702

GEL Laboratories LLC

SAMPLE RECEIPT & REVIEW FORM

Client: GPCC	SDG/AR/COC/Work Order: 633099, 633107, 633126, 633128
Received By: Anna Johnson	Date Received: 8/11/23
Carrier and Tracking Number	Circle Applicable: FedEx Express FedEx Ground UPS Field Services Courier Other cooler 1 - 0.6°C cooler 2 - 1.9°C cooler 3 - 2.6°C cooler 4 - 0.0°C

Suspected Hazard Information	Yes	No	*If Net Counts > 100cpm on samples not marked "radioactive", contact the Radiation Safety Group for further investigation.
A) Shipped as a DOT Hazardous?		/	Hazard Class Shipped: UN#: If UN2910, Is the Radioactive Shipment Survey Compliant? Yes___ No___
B) Did the client designate the samples are to be received as radioactive?		/	COC notation or radioactive stickers on containers equal client designation.
C) Did the RSO classify the samples as radioactive?		/	Maximum Net Counts Observed* (Observed Counts - Area Background Counts): _____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?	/			Circle Applicable: Seals broken Damaged container Leaking container Other (describe)
2	Chain of custody documents included with shipment?	/			Circle Applicable: Client contacted and provided COC COC created upon receipt
3	Samples requiring cold preservation within (0 ≤ 6 deg. C)?*	/			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?	✓			Temperature Device Serial #: IR2-21 Secondary Temperature Device Serial # (If Applicable):
5	Sample containers intact and sealed?	/			Circle Applicable: Seals broken Damaged container Leaking container Other (describe)
6	Samples requiring chemical preservation at proper pH?	/			Sample ID's and Containers Affected: If Preservation added, Lot#:
7	Do any samples require Volatile Analysis?			/	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?	/			ID's and tests affected:
9	Sample ID's on COC match ID's on bottles?	/			ID's and containers affected:
10	Date & time on COC match date & time on bottles?	/			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?	/			Circle Applicable: No container count on COC Other (describe) ~~*missing 2 containers for ARK-ARGWQ-1A~~ AD 8/15/23
12	Are sample containers identifiable as GEL provided by use of GEL labels?	/			
13	COC form is properly signed in relinquished/received sections?	/			Circle Applicable: Not relinquished Other (describe)

Comments (Use Continuation Form if needed):

cooler 5 - 3.1°C
cooler 6 - 3.6°C
cooler 7 - 2.5°C
cooler 8 - 3.4°C
cooler 9 - 1.9°C
cooler 10 - 0.9°C

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

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

Cooler 1 of 3

GEL Laboratories LLC
gel.com
Chemistry | Radiochemistry | Radiobioassay | 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: jabraham@southernco.com EDD@stantec.com edgar.smith@stantec.com

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

Sample ID (* For composites - indicate start and stop date/time)	*Date Collected (mm-dd-yy)	*Time Collected (Military) (hhmm)	QC Code (2)	Field Filtered (3)	Sample Matrix (4)	Should this sample be considered: Radioactive (If yes, please supply isotopic info.)	Should this sample be considered: (7) Known or possible Hazards	Total number of containers	Ag (App. I) (6020B) NI	Metals App. III (6020B) NI	Alkalinity (300.0 R2.1)	TDS (SM Method 2540C)	Anions (Cl, Fl, Sulfate) (300.0 Rev. 2.1 1993)	Metals App. IV (6020B) NI	RAD 226-228 Cmbd NI	Fe2+/Mn2+ (EPA Method 6020B) (Field Filtered) NI	Nitrate as N (EPA Method 353.2)	Mercury (7470B) NI	Metals Al, K, Mg, Na, Fe, Mn (6020B) NI		<-- 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		
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	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		

Comments (task_code: ARK-CCR-ASSMT-2023SX) 2
A.S. 8/15/23

Chain of Custody Signatures

	Relinquished By (Signed)	Print Name	Date	Received by (signed)	Print Name	Date
1	Zachary Levy	Zachary Levy	8/9/23			8/4/23 8:27
2						
3						

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

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

Sample Collection Time Zone: [X] 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

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6.) Preservative Type: HA = Hydrochloric Acid, NI = Nitric Acid, SH = Sodium Hydroxide, SA = Sulfuric Acid, AA = Ascorbic Acid, HX = Hexane, ST = Sodium Thiosulfate, If no preservative is added = leave field blank

7.) KNOWN OR POSSIBLE HAZARDS

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

Characteristic Hazards
FL = Flammable/Ignitable
CO = Corrosive
RE = Reactive

TSCA Regulated
PCB = Polychlorinated biphenyls

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 disposa concerns. (i.e.: Origin of sample(s), type of site collected from, odd matrices, etc.)

Page 33 of 40 SDG: 632702

Page: 1 of 1

Project # 175569434

GEL Quote #:

COC Number [1]: 3 Coolers

PO Number:

Cooler 2 of 3

GEL Laboratories LLC

gel.com

Chemistry | Radiochemistry | Radiobioassay | Specialty Analytics

Chain of Custody and Analytical Request

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

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

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

Sample ID (* For composites - indicate start and stop date/time)	*Date Collected (mm-dd-yy)	*Time Collected (Military) (hhmm)	QC Code [2]	Field Filtered [3]	Sample Matrix [4]	Should this sample be considered: Radioactive (If yes, please supply isotopic info.)	Should this sample be considered: (7) Known or possible Hazards	Total number of containers	Ag (App. I) (6020B) NI	Metals App. III (6020B) NI	Alkalinity (300.0 R2.1)	TDS (SM Method 2540C)	Anions (Cl, Fl, Sulfate) (300.0 Rev. 2.1 1993)	Metals App. IV (6020B) NI	RAD 226-228 Cmbd NI	Fe2+ / Mn2+ (EPA Method 6020B) (Field Filtered) NI	Nitrate as N (EPA Method 353.2)	Mercury (7470B) NI	Metals Al, K, Mg, Na, Fe, Mn (6020B) NI		<-- 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		
ARK-AP2-FD-01	08-08-23	NA	FD	N	WQ		[redacted]	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		[redacted]	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			
ARK-ARAMW-9	08-08-23	1235	N	Y	WG		[redacted]	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		[redacted]	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		
							[redacted]														

Comments (task_code: ARK-CCR-ASSMT-2023S1)2

A.S. 8/15/23

Chain of Custody Signatures

	Relinquished By (Signed)	Print Name	Date	Received by (signed)	Print Name	Date
1	Zachary Levy	Zach Levy	8/9/23	1	[redacted]	8/9/23 8:28
2				2		
3				3		

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

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

Sample Collection Time Zone: [X] 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

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5.) Sample Analysis Requested: Analytical method requested (i.e. 8260B, 6010B/7470A) and number of containers provided for each (i.e. *8260B - 3, 6010B/7470A - 1*).

6.) Preservative Type: HA = Hydrochloric Acid, NI = Nitric Acid, SH = Sodium Hydroxide, SA = Sulfuric Acid, AA = Ascorbic Acid, HX = Hexane, ST = Sodium Thiosulfate, If no preservative is added = leave field blank

7.) KNOWN OR POSSIBLE HAZARDS

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

Characteristic Hazards
FL = Flammable/Ignitable
CO = Corrosive
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TSCA Regulated
PCB = Polychlorinated biphenyls

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.)

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Page: 1 of 1

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

Cooler 3 of 3

GEL Laboratories LLC
gel.com
Chemistry | Radiochemistry | Radiobioassay | Specialty Analytics

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)

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

Sample ID (* For composites - indicate start and stop date/time)	*Date Collected (mm-dd-yy)	*Time Collected (Military) (hhmm)	QC Code (2)	Field Filtered (3)	Sample Matrix (4)	Should this sample be considered: Radioactive (If yes, please supply isotopic info.)	Should this sample be considered: (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, Fl, 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)		
								NI	NI	NI				NI	NI	NI		NI	NI		<-- 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		
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Comments (task_code: ARK-CCR-ASSMT-2023S1)2
A.S. 8/15/23

Chain of Custody Signatures

	Relinquished By (Signed)	Print Name	Date	Received by (signed)	Print Name	Date
1	Zachary Levy	Zach Levy	8/19/23			8/19/23 8:25
2						
3						

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

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

Sample Collection Time Zone: [X] 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

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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).

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MR= Misc. RCRA metals

Characteristic Hazards
FL = Flammable/Ignitable
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TSCA Regulated
PCB = Polychlorinated biphenyls

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.)

GEL Quote #: 753609459
COC Number (1): 2 Coolers — Cooler 1 of 2
PO Number:

GEL Laboratories LLC
Chemistry | Radiochemistry | Radiobioassay | 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

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, Dylan Ripley, Houston Lynn
Send Results To: jabraham@southernco.com EDD@stantec.com edgar.smith@stantec.com

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

Sample ID (* For composites - indicate start and stop date/time)	*Date Collected (mm-dd-yy)	*Time Collected (Military) (hhmm)	QC Code (2)	Field Filtered (3)	Sample Matrix (4)	Should this sample be considered: Radioactive (If yes, please supply isotopic info.)	Should this sample be considered: (7) Known or possible Hazards	Total number of containers	NI Ag (App III) (6020B)	NI Metals App III (6020B)	NI Alkalinity (300.0 R2.1)	TDS (SM Method 2540C)	Anions (Cl, Fl, Sulfate) (300.0 Rev 2.1 1993)	NI Metals App IV (6020B)	NI RAD 226-228 Cmbd	Fe2+ / Mn2+ (HPA Method 6020B) (Field Filtered)		NI Mercury (7470B)	NI Metals Al, K, Mg, Na, Fe, Mn (6020B)		<- Preservative Type (6)
																					Comments (task_code: ARK-CCR-ASSMT-2023S1) A.S. 8/15/23
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
ARK-AP2-EB-01	08-09-23	1110	FB	N	WQ			7		X		X	X	X	X			X			for their times
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
1	[signature]	John Myer	8/11/23	[signature]	Anthony Ward	8/11/23
2						
3						

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

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 [ ] 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, HX = Hexane, ST = Sodium Thiosulfate, If no preservative is added = leave field blank

7) KNOWN OR POSSIBLE HAZARDS

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

Characteristic Hazards
FL = Flammable/Ignitable
CO = Corrosive
RE = Reactive

TSCA Regulated
PCB = Polychlorinated biphenyls

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.)

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: 2 of 2
Project # 175569434
GEL Quote #:
COC Number (1): 2 Coolers
PO Number:

GEL Laboratories LLC
gel.com | Chemistry | Radiochemistry | Radiobioassay | Specialty Analytics

Chain of Custody and Analytical Request

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

Cooler 4 of 2

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

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

Project/Site Name: Plant Arkwright Ash Pond 2 Nitrate/Nitrite COC Fax

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

Sample ID * For composites - indicate start and stop date/time	*Date Collected (mm-dd-yy)	*Time Collected (Military) (hhmm)	QC Code (2)	Field Filtered (3)	Sample Matrix (4)	Should this sample be considered: Radioactive (If yes, please supply isotopic info.)	Should this sample be considered: (7) Known or possible Hazards	Total number of containers	SA	Nitrate/Nitrite (EPA Method 353.2)	<-- Preservative Type (6)
ARK-ARGWC-21	08-10-23	1947	N	N	WG			1		X	
ARK-AP2-EB-01	08-10-23	1925	FB	N	WQ			1		X	
ARK-ARAMW-8	08-10-23	1936	N	N	WG			1		X	
ARK-ARGWA-20	08-10-23	1953	N	N	WG			1		X	
ARK-STNTW-22	08-10-23	1935	N	N	WG			1		X	

Comments (task_code: ARK-CCR-ASSMT-2023S1)
A.S. 8/15/23 2

Chain of Custody Signatures

	Relinquished By (Signed)	Print Name	Date	Received by (signed)	Print Name	Date
1	[signature]	John Myer	8/11/23	[signature]	Anthony Ward	8/11/23
2						
3						

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

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

Sample Collection Time Zone: [X] 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, 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
FL = Flammable/Ignitable
CO = Corrosive
RE = Reactive

TSCA Regulated
PCB = Polychlorinated biphenyls

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.)*

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

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

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

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(770)734-4200

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

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

REPORT OF LABORATORY ANALYSIS

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Peachtree Corners, GA 30092
(770)734-4200

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 (CaCO3)	**44.3**	mg/L	5.0	1		08/15/23 16:37		
Alkalinity, Total as CaCO3	**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	

REPORT OF LABORATORY ANALYSIS

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

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 (CaCO3)	**45.2**	mg/L	5.0	1		08/15/23 16:43		
Alkalinity, Total as CaCO3	**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	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: Plant 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 (CaCO3)	**45.9**	mg/L	5.0	1		08/15/23 16:50		
Alkalinity, Total as CaCO3	**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	

REPORT OF LABORATORY ANALYSIS

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

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 (CaCO3)	**45.7**	mg/L	5.0	1		08/15/23 16:56		
Alkalinity, Total as CaCO3	**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	

REPORT OF LABORATORY ANALYSIS

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Peachtree Corners, GA 30092
(770)734-4200

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 (CaCO3)	**45.8**	mg/L	5.0	1		08/15/23 17:02		
Alkalinity, Total as CaCO3	**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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(770)734-4200

QUALITY CONTROL DATA

Project: Plant Arkwright-CCR Ash Pond
Pace Project No.: 92682089

QC Batch: 792976
QC Batch Method: EPA 3010A
Analysis Method: EPA 6010D
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.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
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
QC Batch Method: EPA 3005A
Analysis Method: EPA 6020B
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	92682086003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
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
QC Batch Method: SM 2540C-2015
Analysis Method: SM 2540C-2015
Analysis Description: 2540C Total Dissolved Solids
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 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
QC Batch Method: SM 2320B-2011
Analysis 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	92682122003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Alkalinity, Total as CaCO3	mg/L	154	50	50	212	220	116	131	80-120	3	25	M1

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4112163 4112164

Parameter	Units	92682122004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Alkalinity, Total as CaCO3	mg/L	156	50	50	220	223	129	133	80-120	1	25	M1

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QUALITY CONTROL DATA

Project: Plant Arkwright-CCR Ash Pond
Pace Project No.: 92682089

QC Batch: 792926
QC Batch Method: EPA 9056A
Analysis 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 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	4.2	50	50	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 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	7.7	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	

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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.

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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		

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CHAIN-OF-CUSTODY / Analytical Request Document

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

Page : 1 Of 1

WO# : 92682089

92682089

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:	
Company:	ARCADIS - Atlanta	Report To:	Kelley Sharpe, Warren Johnson	Attention:	
Address:	2839 Paces Ferry Rd	Copy To:	Ben Hodges, Joju Abraham	Company Name:	
Atlanta, GA 30339				Address:	
Email:	kelley.sharpe@arcadis.com	Purchase Order #:	GPC82474-0003	Pace Quote:	
Phone:	(770)384-6584 Fax:	Project Name:	Plant Arkwright/CCR-Ash Pond Closure	Pace Project Manager:	maiya.parks@pacelabs.com
Requested Due Date:	5 Day TAT	Project #:		Pace Profile #:	15836

ITEM #	SAMPLE ID One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique MATRIX CODE: Drinking Water DW, Water WT, Waste Water WW, Product P, Soil/Solid SL, Oil OL, Wipe WP, Air AR, Other OT, Tissue TS	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Analysis Test Y/N	Total/Bicarb Alkalinity	Cl, F, SO4	TDS	App. III Metals - B, Ca	App. IV Metals (Client List)	Metals - Mg, Na, K	Residual Chlorine (Y/N)
1	ARK-BC-0.8a	WG	G	8/10/23	1122				3	X		X						X	X	X	X	X	X	
2	ARK-BC-0.5.5	WG	G	8/10/23	1044				3	X		X						X	X	X	X	X	X	
3	ARK-BC-0 5.6	WG	G	8/10/23	1037				3	X		X						X	X	X	X	X	X	
4	ARK-BC-0.5 7	WG	G	8/10/23	1057				3	X		X						X	X	X	X	X	X	
5	ARK-BC-BR	WG	G	8/10/23	0959				3	X		X						X	X	X	X	X	X	
6																									
7																									
8																									
9																									
10																									
11																									
12																									

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
App. IV - As, Co, Li, Mo	[signature] / Arcadis	8/10/23	1346	[signature]	8-10	1346	
ARK-CCR-ASSMT-202382 0810							

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: [signature]

SIGNATURE of SAMPLER: [signature] DATE Signed: 8-10-23

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

DC#_Title: ENV-FRM-HUN1-0083 v02_Sample Condition Upon Receipt

Effective Date: 11/14/2022

Laboratory receiving samples:

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

Sample Condition Upon Receipt

Client Name: ARCADIS Project #:

WO#: 92682089
PM: MP Due Date: 08/17/23
CLIENT: GA-ArcadAtl

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

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

Date/Initials Person Examining Contents: 8-10-23 AG

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: Add/Subtract (°C) 0.0

Cooler Temp Corrected (°C): 5.2

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

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

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

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

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

COMMENTS/SAMPLE DISCREPANCY

Field Data Required? ☐ Yes ☐ No

Lot ID of split containers:

CLIENT NOTIFICATION/RESOLUTION

Person contacted: Date/Time:

Project Manager SCURF Review: **Date:**

Project Manager SRF Review: **Date:**

Pace ANALYTICAL SERVICES

DC#_Title: ENV-FRM-HUN1-0083 v02_Sample Condition Upon Receipt

Effective Date: 11/14/2022

***Check mark top half of box if pH and/or dechlorination is verified and within the acceptance range for preservation samples.**

Exceptions: VOA, Coliform, TOC, Oil and Grease, DRO/8015 (water) DOC, LLHg

****Bottom half of box is to list number of bottles**

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

Project # **WO#: 92682089**

PM: MP Due Date: 08/17/23

CLIENT: GA-AreadAtl

Item#	BP4U-125 mL Plastic Unpreserved (N/A) (Cl-)	BP3U-250 mL Plastic Unpreserved (N/A)	BP2U-500 mL Plastic Unpreserved (N/A)	BP1U-1 liter Plastic Unpreserved (N/A)	BP4S-125 mL Plastic H2SO4 (pH < 2) (Cl-)	BP3N-250 mL plastic HNO3 (pH < 2)	BP4Z-125 mL Plastic ZN Acetate & NaOH (>9)	BP4B-125 mL Plastic NaOH (pH > 12) (Cl-)	WGFU-Wide-mouthed Glass jar Unpreserved	AG1U-1 liter Amber Unpreserved (N/A) (Cl-)	AG1H-1 liter Amber HCl (pH < 2)	AG3U-250 mL Amber Unpreserved (N/A) (Cl-)	AG1S-1 liter Amber H2SO4 (pH < 2)	AG3S-250 mL Amber H2SO4 (pH < 2)	DG94-40 mL Amber NH4Cl (N/A)(Cl-)	DG9H-40 mL VOA HCl (N/A)	VG9T-40 mL VOA Na2S2O3 (N/A)	VG9U-40 mL VOA Unpreserved (N/A)	DG9V-40 mL VOA H3PO4 (N/A)	KP7U-50 mL Plastic Unpreserved (N/A)	V/GK (3 vials per kit)-VPH/Gas kit (N/A)	SP5T-125 mL Sterile Plastic (N/A – lab)	SP2T-250 mL Sterile Plastic (N/A – lab)		BP3R-250 mL Plastic (NH2)2SO4 (9.3-9.7)	AG0U-100 mL Amber Unpreserved (N/A) (Cl-)	VSGU-20 mL Scintillation vials (N/A)	DG9U-40 mL Amber Unpreserved vials (N/A)
1			2			1																							
2			2			1																							
3			2			1																							
4			2			1																							
5			2			1																							
6																													
7																													
8																													
9																													
10																													
11																													
12																													

pH Adjustment Log for Preserved Samples

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

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

GEL Laboratories LLC
a member of The GEL Group INC

2040 Savage Road | Charleston, SC 29407
843.556.8171
gel.com

February 07, 2024

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: 652690 and 652874

Dear Joju Abraham:

GEL Laboratories, LLC (GEL) appreciates the opportunity to provide the enclosed analytical results for the sample(s) we received on January 24, 2024 and January 25, 2024. 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):

Laboratory ID	Client ID	Matrix	Date Collected	Date Recieved
652690001	ARK-ARGWA-19	Ground Water	23/01/24 11:25	24/01/24 13:35
652690002	ARK-ARAMW-9	Ground Water	23/01/24 14:30	24/01/24 13:35
652690003	ARK-ARGWA-20	Ground Water	23/01/24 14:40	24/01/24 13:35
652690004	ARK-ARAMW-7	Ground Water	23/01/24 16:50	24/01/24 13:35
652690005	ARK-ARGWC-22	Ground Water	23/01/24 17:10	24/01/24 13:35
652690006	ARK-AP2-FD-03	Ground Water	23/01/24 12:00	24/01/24 13:35
652690007	ARK-ARGWA-19	Ground Water	23/01/24 11:25	24/01/24 13:35
652690008	ARK-ARAMW-9	Ground Water	23/01/24 14:30	24/01/24 13:35
652690009	ARK-ARGWA-20	Ground Water	23/01/24 14:40	24/01/24 13:35
652690010	ARK-ARAMW-7	Ground Water	23/01/24 16:50	24/01/24 13:35
652690011	ARK-ARGWC-22	Ground Water	23/01/24 17:10	24/01/24 13:35
652874001	ARK-ARGWC-21	Ground Water	24/01/24 10:00	25/01/24 14:40
652874002	ARK-ARGWC-23	Ground Water	24/01/24 10:45	25/01/24 14:40
652874003	ARK-ARAMW-1	Ground Water	24/01/24 11:50	25/01/24 14:40
652874004	ARK-ARAMW-2	Ground Water	24/01/24 10:45	25/01/24 14:40
652874005	ARK-ARAMW-8	Ground Water	24/01/24 13:25	25/01/24 14:40



652874006	ARK-AP2-EB-03	Ground Water	24/01/24 11:55	25/01/24 14:40
652874007	ARK-AP2-FB-03	Ground Water	24/01/24 11:45	25/01/24 14:40
652874008	ARK-ARGWC-21	Ground Water	24/01/24 10:00	25/01/24 14:40
652874009	ARK-ARGWC-23	Ground Water	24/01/24 10:45	25/01/24 14:40
652874010	ARK-ARAMW-1	Ground Water	24/01/24 11:50	25/01/24 14:40
652874011	ARK-ARAMW-2	Ground Water	24/01/24 10:45	25/01/24 14:40
652874012	ARK-ARAMW-8	Ground Water	24/01/24 13:25	25/01/24 14:40

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

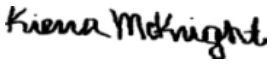
Method	Run Date ID
SW846 3005A	25-JAN-2024
SW846 3005A	26-JAN-2024
SW846 7470A Prep	26-JAN-2024
SW846 7470A Prep	29-JAN-2024

Analysis Methods and Analysis Dates

Method	Run Date ID
EPA 300.0	26-JAN-2024
EPA 300.0	27-JAN-2024
EPA 300.0	29-JAN-2024
EPA 300.0	30-JAN-2024
EPA 353.2 Low Level	26-JAN-2024
SM 2320B	25-JAN-2024
SM 2320B	29-JAN-2024
SM 2540C	25-JAN-2024
SM 2540C	31-JAN-2024
SW846 3005A/6020B	02-FEB-2024
SW846 3005A/6020B	05-FEB-2024
SW846 3005A/6020B	06-FEB-2024
SW846 3005A/6020B	07-FEB-2024
SW846 7470A	29-JAN-2024
SW846 7470A	30-JAN-2024

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,



Kierra McKnight 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: 652690 GEL Work Order: 652690

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 Kiena McKnight

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: 652874 GEL Work Order: 652874

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 Kiena McKnight

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

Certificate of Analysis

Report Date: February 7, 2024

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
Sample ID: 652690001
Matrix: WG
Collect Date: 23-JAN-24 11:25
Receive Date: 24-JAN-24
Collector: Client

Project: GPCC00100
Client ID: GPCC001

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Ion Chromatography												
EPA 300.0 Anions Liquid "As Received"												
Chloride		5.63	0.0670	0.200	mg/L		1	CWW	01/26/24	1515	2559114	1
Fluoride		0.121	0.0330	0.100	mg/L		1					
Sulfate		6.98	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	01/29/24	1044	2558958	2
Metals Analysis-ICP-MS												
SW846 3005A/6020B "As Received"												
Aluminum	U	ND	0.0193	0.0500	mg/L	1.00	1	BAJ	02/05/24	2155	2558202	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		0.0348	0.000670	0.00400	mg/L	1.00	1					
Cadmium	U	ND	0.000300	0.00100	mg/L	1.00	1					
Calcium		9.34	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	0.00440	0.00300	0.0100	mg/L	1.00	1					
Magnesium		4.06	0.0100	0.0300	mg/L	1.00	1					
Molybdenum	J	0.000480	0.000200	0.00100	mg/L	1.00	1					
Selenium	U	ND	0.00150	0.00500	mg/L	1.00	1					
Silver	U	ND	0.000300	0.00100	mg/L	1.00	1					
Sodium		11.1	0.0800	0.250	mg/L	1.00	1					
Thallium	U	ND	0.000600	0.00200	mg/L	1.00	1					
Potassium		2.17	0.0800	0.300	mg/L	1.00	1	BAJ	02/02/24	1446	2558202	4
Beryllium	U	ND	0.000200	0.000500	mg/L	1.00	1	PRB	02/06/24	1518	2558202	5
Boron		0.0214	0.00520	0.0150	mg/L	1.00	1					
Manganese	U	ND	0.00100	0.00500	mg/L	1.00	1					
Nutrient Analysis												
EPA 353.2 Nitrogen, Nitrate/Nitrite "As Received"												
Nitrogen, Nitrate/Nitrite		1.90	0.0350	0.100	mg/L		5	AXH3	01/26/24	0731	2557599	6
Solids Analysis												
SM2540C Dissolved Solids "As Received"												

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Certificate of Analysis

Report Date: February 7, 2024

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: 652690001 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		82.0	2.38	10.0	mg/L			ES2	01/25/24	1135	2558323	7
Titration and Ion Analysis												
SM 2320B Total Alkalinity "As Received"												
Alkalinity, Total as CaCO3		38.1	0.725	2.00	mg/L			JW2	01/25/24	1223	2558602	8
Bicarbonate alkalinity (CaCO3)		38.1	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	SD	01/25/24	1455	2558201
SW846 7470A Prep	EPA 7470A Mercury Prep Liquid	JM13	01/26/24	1145	2558957

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 300.0	
2	SW846 7470A	
3	SW846 3005A/6020B	
4	SW846 3005A/6020B	
5	SW846 3005A/6020B	
6	EPA 353.2 Low Level	
7	SM 2540C	
8	SM 2320B	

Notes:

Column headers are defined as follows:

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

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

Certificate of Analysis

Report Date: February 7, 2024

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: 652690002
Matrix: WG
Collect Date: 23-JAN-24 14:30
Receive Date: 24-JAN-24
Collector: Client

Project: GPCC00100
Client ID: GPCC001

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Ion Chromatography												
EPA 300.0 Anions Liquid "As Received"												
Fluoride		0.971	0.0330	0.100	mg/L		1	CWW	01/26/24	1650	2559114	1
Chloride		32.9	2.68	8.00	mg/L		40	CWW	01/27/24	0535	2559114	2
Sulfate		415	5.32	16.0	mg/L		40					
Mercury Analysis-CVAA												
7470 Cold Vapor Mercury, Liquid "As Received"												
Mercury	U	ND	0.0000670	0.000200	mg/L	1.00	1	JP2	01/29/24	1046	2558958	3
Metals Analysis-ICP-MS												
SW846 3005A/6020B "As Received"												
Potassium		6.54	0.0800	0.300	mg/L	1.00	1	BAJ	02/02/24	1500	2558202	4
Calcium		167	0.800	2.00	mg/L	1.00	10	PRB	02/07/24	1114	2558202	5
Sodium		88.3	0.800	2.50	mg/L	1.00	10					
Aluminum	J	0.0460	0.0193	0.0500	mg/L	1.00	1	BAJ	02/05/24	2210	2558202	6
Antimony	J	0.00107	0.00100	0.00300	mg/L	1.00	1					
Arsenic	U	ND	0.00200	0.00500	mg/L	1.00	1					
Barium		0.0128	0.000670	0.00400	mg/L	1.00	1					
Cadmium	U	ND	0.000300	0.00100	mg/L	1.00	1					
Chromium	U	ND	0.00300	0.0100	mg/L	1.00	1					
Cobalt	U	ND	0.000300	0.00100	mg/L	1.00	1					
Iron		0.499	0.0330	0.100	mg/L	1.00	1					
Lead	U	ND	0.000500	0.00200	mg/L	1.00	1					
Lithium	J	0.00862	0.00300	0.0100	mg/L	1.00	1					
Magnesium		10.4	0.0100	0.0300	mg/L	1.00	1					
Molybdenum		0.00683	0.000200	0.00100	mg/L	1.00	1					
Selenium	U	ND	0.00150	0.00500	mg/L	1.00	1					
Silver	U	ND	0.000300	0.00100	mg/L	1.00	1					
Thallium	U	ND	0.000600	0.00200	mg/L	1.00	1					
Beryllium	U	ND	0.000200	0.000500	mg/L	1.00	1	PRB	02/06/24	1528	2558202	7
Boron		0.0549	0.00520	0.0150	mg/L	1.00	1					
Manganese		0.166	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	01/26/24	0732	2557599	8
Solids Analysis												
SM2540C Dissolved Solids "As Received"												

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Certificate of Analysis

Report Date: February 7, 2024

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: 652690002 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		750	4.76	20.0	mg/L			ES2	01/25/24	1135	2558323	9
Titration and Ion Analysis												
SM 2320B Total Alkalinity "As Received"												
Alkalinity, Total as CaCO3		93.5	0.725	2.00	mg/L			JW2	01/25/24	1224	2558602	10
Bicarbonate alkalinity (CaCO3)		93.5	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	JM13	01/26/24	1145	2558957
SW846 3005A	ICP-MS 3005A PREP	SD	01/25/24	1455	2558201

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	EPA 353.2 Low Level	
9	SM 2540C	
10	SM 2320B	

Notes:

Column headers are defined as follows:

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

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

Certificate of Analysis

Report Date: February 7, 2024

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: 652690003
Matrix: WG
Collect Date: 23-JAN-24 14:40
Receive Date: 24-JAN-24
Collector: Client

Project: GPCC00100
Client ID: GPCC001

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Ion Chromatography												
EPA 300.0 Anions Liquid "As Received"												
Chloride		6.68	0.0670	0.200	mg/L		1	CWW	01/26/24	1722	2559114	1
Fluoride		0.113	0.0330	0.100	mg/L		1					
Sulfate		17.1	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	01/29/24	1047	2558958	2
Metals Analysis-ICP-MS												
SW846 3005A/6020B "As Received"												
Beryllium	U	ND	0.000200	0.000500	mg/L	1.00	1	PRB	02/06/24	1530	2558202	3
Boron		0.0685	0.00520	0.0150	mg/L	1.00	1					
Manganese		0.00820	0.00100	0.00500	mg/L	1.00	1					
Potassium		1.62	0.0800	0.300	mg/L	1.00	1	BAJ	02/02/24	1503	2558202	4
Aluminum		0.286	0.0193	0.0500	mg/L	1.00	1	BAJ	02/05/24	2213	2558202	5
Antimony	U	ND	0.00100	0.00300	mg/L	1.00	1					
Arsenic	U	ND	0.00200	0.00500	mg/L	1.00	1					
Barium		0.0978	0.000670	0.00400	mg/L	1.00	1					
Cadmium	U	ND	0.000300	0.00100	mg/L	1.00	1					
Calcium		11.4	0.0800	0.200	mg/L	1.00	1					
Chromium	J	0.00682	0.00300	0.0100	mg/L	1.00	1					
Cobalt	U	ND	0.000300	0.00100	mg/L	1.00	1					
Iron		0.400	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		6.17	0.0100	0.0300	mg/L	1.00	1					
Molybdenum	U	ND	0.000200	0.00100	mg/L	1.00	1					
Selenium	U	ND	0.00150	0.00500	mg/L	1.00	1					
Silver	U	ND	0.000300	0.00100	mg/L	1.00	1					
Sodium		11.8	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		0.839	0.00700	0.0200	mg/L		1	AXH3	01/26/24	0733	2557599	6
Solids Analysis												
SM2540C Dissolved Solids "As Received"												

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Certificate of Analysis

Report Date: February 7, 2024

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: 652690003 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		92.0	2.38	10.0	mg/L			ES2	01/25/24	1135	2558323	7
Titration and Ion Analysis												
SM 2320B Total Alkalinity "As Received"												
Alkalinity, Total as CaCO3		43.8	0.725	2.00	mg/L			JW2	01/25/24	1227	2558602	8
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	JM13	01/26/24	1145	2558957
SW846 3005A	ICP-MS 3005A PREP	SD	01/25/24	1455	2558201

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 300.0	
2	SW846 7470A	
3	SW846 3005A/6020B	
4	SW846 3005A/6020B	
5	SW846 3005A/6020B	
6	EPA 353.2 Low Level	
7	SM 2540C	
8	SM 2320B	

Notes:

Column headers are defined as follows:

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

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Certificate of Analysis

Report Date: February 7, 2024

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
Sample ID: 652690004
Matrix: WG
Collect Date: 23-JAN-24 16:50
Receive Date: 24-JAN-24
Collector: Client

Project: GPCC00100
Client ID: GPCC001

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Ion Chromatography												
EPA 300.0 Anions Liquid "As Received"												
Sulfate		1000	13.3	40.0	mg/L		100	CWW	01/27/24	0606	2559114	1
Chloride		5.11	0.0670	0.200	mg/L		1	CWW	01/26/24	1754	2559114	2
Fluoride		0.126	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	01/29/24	1108	2558962	3
Metals Analysis-ICP-MS												
SW846 3005A/6020B "As Received"												
Beryllium	J	0.000378	0.000200	0.000500	mg/L	1.00	1	PRB	02/06/24	1641	2558202	4
Boron		4.12	0.260	0.750	mg/L	1.00	50	PRB	02/06/24	1643	2558202	5
Manganese		16.3	0.0500	0.250	mg/L	1.00	50					
Aluminum		0.213	0.0193	0.0500	mg/L	1.00	1	BAJ	02/05/24	2221	2558202	6
Antimony	U	ND	0.00100	0.00300	mg/L	1.00	1					
Arsenic	J	0.00219	0.00200	0.00500	mg/L	1.00	1					
Barium		0.0277	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		0.0597	0.000300	0.00100	mg/L	1.00	1					
Iron		5.58	0.0330	0.100	mg/L	1.00	1					
Lead	U	ND	0.000500	0.00200	mg/L	1.00	1					
Lithium		0.0779	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					
Silver	U	ND	0.000300	0.00100	mg/L	1.00	1					
Sodium		33.2	0.0800	0.250	mg/L	1.00	1					
Thallium	U	ND	0.000600	0.00200	mg/L	1.00	1					
Calcium		357	4.00	10.0	mg/L	1.00	50	PRB	02/07/24	1115	2558202	7
Magnesium		94.4	0.500	1.50	mg/L	1.00	50					
Potassium		9.96	0.0800	0.300	mg/L	1.00	1	BAJ	02/02/24	1512	2558202	8
Nutrient Analysis												
EPA 353.2 Nitrogen, Nitrate/Nitrite "As Received"												
Nitrogen, Nitrate/Nitrite	U	ND	0.00700	0.0200	mg/L		1	AXH3	01/26/24	0735	2557599	9
Solids Analysis												
SM2540C Dissolved Solids "As Received"												

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Certificate of Analysis

Report Date: February 7, 2024

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: 652690004 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		1670	4.76	20.0	mg/L			ES2	01/25/24	1135	2558323	10
Titration and Ion Analysis												
SM 2320B Total Alkalinity "As Received"												
Alkalinity, Total as CaCO3		56.5	0.725	2.00	mg/L			JW2	01/25/24	1228	2558602	11
Bicarbonate alkalinity (CaCO3)		56.5	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	SD	01/25/24	1455	2558201
SW846 7470A Prep	EPA 7470A Mercury Prep Liquid	JM13	01/26/24	1145	2558961

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	SW846 3005A/6020B	
9	EPA 353.2 Low Level	
10	SM 2540C	
11	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: February 7, 2024

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: 652690005
Matrix: WG
Collect Date: 23-JAN-24 17:10
Receive Date: 24-JAN-24
Collector: Client

Project: GPCC00100
Client ID: GPCC001

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Ion Chromatography												
EPA 300.0 Anions Liquid "As Received"												
Chloride		7.31	0.0670	0.200	mg/L		1	CWW	01/27/24	0710	2559114	1
Fluoride		0.134	0.0330	0.100	mg/L		1					
Sulfate		567	13.3	40.0	mg/L		100	CWW	01/27/24	0742	2559114	2
Mercury Analysis-CVAA												
7470 Cold Vapor Mercury, Liquid "As Received"												
Mercury		0.000372	0.0000670	0.000200	mg/L	1.00	1	JP2	01/29/24	1116	2558962	3
Metals Analysis-ICP-MS												
SW846 3005A/6020B "As Received"												
Aluminum		0.155	0.0193	0.0500	mg/L	1.00	1	BAJ	02/05/24	2224	2558202	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		0.0227	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		0.00408	0.000300	0.00100	mg/L	1.00	1					
Iron		13.3	0.0330	0.100	mg/L	1.00	1					
Lead	U	ND	0.000500	0.00200	mg/L	1.00	1					
Lithium		0.0125	0.00300	0.0100	mg/L	1.00	1					
Molybdenum	J	0.000250	0.000200	0.00100	mg/L	1.00	1					
Selenium	U	ND	0.00150	0.00500	mg/L	1.00	1					
Silver	U	ND	0.000300	0.00100	mg/L	1.00	1					
Sodium		24.9	0.0800	0.250	mg/L	1.00	1					
Thallium	U	ND	0.000600	0.00200	mg/L	1.00	1					
Potassium		3.62	0.0800	0.300	mg/L	1.00	1	BAJ	02/02/24	1515	2558202	5
Beryllium	U	ND	0.000200	0.000500	mg/L	1.00	1	PRB	02/06/24	1645	2558202	6
Calcium		183	4.00	10.0	mg/L	1.00	50	PRB	02/07/24	1116	2558202	7
Magnesium		80.9	0.500	1.50	mg/L	1.00	50					
Boron		4.52	0.260	0.750	mg/L	1.00	50	PRB	02/06/24	1647	2558202	8
Manganese		25.2	0.0500	0.250	mg/L	1.00	50					
Nutrient Analysis												
EPA 353.2 Nitrogen, Nitrate/Nitrite "As Received"												
Nitrogen, Nitrate/Nitrite	U	ND	0.00700	0.0200	mg/L		1	AXH3	01/26/24	0741	2557599	9
Solids Analysis												
SM2540C Dissolved Solids "As Received"												

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Certificate of Analysis

Report Date: February 7, 2024

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: 652690005 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		1110	4.76	20.0	mg/L			ES2	01/25/24	1135	2558323	10
Titration and Ion Analysis												
SM 2320B Total Alkalinity "As Received"												
Alkalinity, Total as CaCO3		168	0.725	2.00	mg/L			JW2	01/25/24	1230	2558602	11
Bicarbonate alkalinity (CaCO3)		168	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	JM13	01/26/24	1145	2558961
SW846 3005A	ICP-MS 3005A PREP	SD	01/25/24	1455	2558201

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	SW846 3005A/6020B	
9	EPA 353.2 Low Level	
10	SM 2540C	
11	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: February 7, 2024

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-03	Project:	GPCC00100
Sample ID:	652690006	Client ID:	GPCC001
Matrix:	WG		
Collect Date:	23-JAN-24 12:00		
Receive Date:	24-JAN-24		
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		5.62	0.0670	0.200	mg/L		1	CWW	01/26/24	1858	2559114	1
Fluoride		0.125	0.0330	0.100	mg/L		1					
Sulfate		7.04	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	01/29/24	1117	2558962	2
Metals Analysis-ICP-MS												
SW846 3005A/6020B "As Received"												
Beryllium	U	ND	0.000200	0.000500	mg/L	1.00	1	PRB	02/06/24	1649	2558202	3
Boron		0.0322	0.00520	0.0150	mg/L	1.00	1					
Antimony	U	ND	0.00100	0.00300	mg/L	1.00	1	BAJ	02/05/24	2227	2558202	4
Arsenic	U	ND	0.00200	0.00500	mg/L	1.00	1					
Barium		0.0341	0.000670	0.00400	mg/L	1.00	1					
Cadmium	U	ND	0.000300	0.00100	mg/L	1.00	1					
Calcium		9.33	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	J	0.000549	0.000500	0.00200	mg/L	1.00	1					
Lithium	J	0.00415	0.00300	0.0100	mg/L	1.00	1					
Molybdenum	J	0.000444	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		1.88	0.0700	0.200	mg/L		10	AXH3	01/26/24	0742	2557599	5
Solids Analysis												
SM2540C Dissolved Solids "As Received"												
Total Dissolved Solids	J	9.00	2.38	10.0	mg/L			ES2	01/25/24	1135	2558323	6

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
SW846 3005A	ICP-MS 3005A PREP	SD	01/25/24	1455	2558201
SW846 7470A Prep	EPA 7470A Mercury Prep Liquid	JM13	01/26/24	1145	2558961

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Certificate of Analysis

Report Date: February 7, 2024

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-03	Project:	GPCC00100
Sample ID:	652690006	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	EPA 353.2 Low Level	
6	SM 2540C	

Notes:

Column headers are defined as follows:

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

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Certificate of Analysis

Report Date: February 7, 2024

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:	652690007	Client ID:	GPCC001
Matrix:	WG		
Collect Date:	23-JAN-24 11:25		
Receive Date:	24-JAN-24		
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	U	ND	0.00100	0.00500	mg/L	1.00	1	PRB	02/07/24	0954	2558202	1
Iron	U	ND	0.0330	0.100	mg/L	1.00	1	BAJ	02/05/24	2230	2558202	2

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
SW846 3005A	ICP-MS 3005A PREP	SD	01/25/24	1455	2558201

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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Certificate of Analysis

Report Date: February 7, 2024

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:	652690008	Client ID:	GPCC001
Matrix:	WG		
Collect Date:	23-JAN-24 14:30		
Receive Date:	24-JAN-24		
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		0.351	0.0330	0.100	mg/L	1.00	1	BAJ	02/05/24	2233	2558202	1
Manganese		0.173	0.00100	0.00500	mg/L	1.00	1	PRB	02/07/24	0956	2558202	2

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
SW846 3005A	ICP-MS 3005A PREP	SD	01/25/24	1455	2558201

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

Certificate of Analysis

Report Date: February 7, 2024

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: 652690009
Matrix: WG
Collect Date: 23-JAN-24 14:40
Receive Date: 24-JAN-24
Collector: Client

Project: GPCC00100
Client ID: GPCC001

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Mercury Analysis-CVAA												
7470 Cold Vapor Dissolved Mercury, Liquid "As Received"												
Mercury	U	ND	0.0000670	0.000200	mg/L	1.00	1	JP2	01/30/24	1210	2559709	1
Metals Analysis-ICP-MS												
SW846 3005A/6020B Dissolved Fe & Mn "As Received"												
Potassium		1.51	0.0800	0.300	mg/L	1.00	1	BAJ	02/02/24	1526	2558202	2
Aluminum	J	0.0480	0.0193	0.0500	mg/L	1.00	1	BAJ	02/05/24	2236	2558202	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		0.0933	0.000670	0.00400	mg/L	1.00	1					
Cadmium	U	ND	0.000300	0.00100	mg/L	1.00	1					
Calcium		11.2	0.0800	0.200	mg/L	1.00	1					
Chromium	J	0.00663	0.00300	0.0100	mg/L	1.00	1					
Cobalt	U	ND	0.000300	0.00100	mg/L	1.00	1					
Iron	J	0.0665	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		6.22	0.0100	0.0300	mg/L	1.00	1					
Molybdenum	U	ND	0.000200	0.00100	mg/L	1.00	1					
Selenium	U	ND	0.00150	0.00500	mg/L	1.00	1					
Silver	U	ND	0.000300	0.00100	mg/L	1.00	1					
Sodium		12.0	0.0800	0.250	mg/L	1.00	1					
Thallium	U	ND	0.000600	0.00200	mg/L	1.00	1					
Manganese	U	ND	0.00100	0.00500	mg/L	1.00	1	PRB	02/07/24	0958	2558202	4
Beryllium	U	ND	0.000200	0.000500	mg/L	1.00	1	PRB	02/06/24	1659	2558202	5
Boron		0.0739	0.00520	0.0150	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	JM13	01/29/24	1200	2559703
SW846 3005A	ICP-MS 3005A PREP	SD	01/25/24	1455	2558201

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Certificate of Analysis

Report Date: February 7, 2024

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:	652690009	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	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: February 7, 2024

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:	652690010	Client ID:	GPCC001
Matrix:	WG		
Collect Date:	23-JAN-24 16:50		
Receive Date:	24-JAN-24		
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		4.65	0.0330	0.100	mg/L	1.00	1	BAJ	02/05/24	2238	2558202	1
Manganese		16.3	0.100	0.500	mg/L	1.00	100	PRB	02/07/24	1000	2558202	2

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
SW846 3005A	ICP-MS 3005A PREP	SD	01/25/24	1455	2558201

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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Certificate of Analysis

Report Date: February 7, 2024

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:	652690011	Client ID:	GPCC001
Matrix:	WG		
Collect Date:	23-JAN-24 17:10		
Receive Date:	24-JAN-24		
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		12.9	0.0330	0.100	mg/L	1.00	1	BAJ	02/05/24	2241	2558202	1
Manganese		26.1	0.100	0.500	mg/L	1.00	100	PRB	02/07/24	1002	2558202	2

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
SW846 3005A	ICP-MS 3005A PREP	SD	01/25/24	1455	2558201

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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Certificate of Analysis

Report Date: February 8, 2024

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: 652874001
Matrix: WG
Collect Date: 24-JAN-24 10:00
Receive Date: 25-JAN-24
Collector: Client

Project: GPCC00100
Client ID: GPCC001

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	TXT1	01/27/24	0510	2559394	1
Fluoride		0.173	0.0330	0.100	mg/L		1					
Sulfate		219	3.33	10.0	mg/L		25	TXT1	01/29/24	1451	2559394	2
Mercury Analysis-CVAA												
7470 Cold Vapor Mercury, Liquid "As Received"												
Mercury	U	ND	0.0000670	0.000200	mg/L	1.00	1	JP2	01/29/24	1210	2558965	3
Metals Analysis-ICP-MS												
SW846 3005A/6020B "As Received"												
Boron		1.13	0.0520	0.150	mg/L	1.00	10	BAJ	02/02/24	1152	2558920	4
Calcium		82.6	0.800	2.00	mg/L	1.00	10					
Aluminum		0.307	0.0193	0.0500	mg/L	1.00	1	BAJ	02/02/24	0159	2558920	5
Antimony	U	ND	0.00100	0.00300	mg/L	1.00	1					
Arsenic	U	ND	0.00200	0.00500	mg/L	1.00	1					
Barium		0.0427	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		0.00106	0.000300	0.00100	mg/L	1.00	1					
Iron		1.13	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		38.8	0.0100	0.0300	mg/L	1.00	1					
Manganese		0.355	0.00100	0.00500	mg/L	1.00	1					
Molybdenum	U	ND	0.000200	0.00100	mg/L	1.00	1					
Potassium		6.16	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		19.8	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	01/26/24	0823	2558935	6
Solids Analysis												
SM2540C Dissolved Solids "As Received"												

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Report Date: February 8, 2024

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: 652874001 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		541	2.38	10.0	mg/L			KLP1	01/31/24	1110	2561128	7
Titration and Ion Analysis												
SM 2320B Total Alkalinity "As Received"												
Alkalinity, Total as CaCO3		162	0.725	2.00	mg/L			JW2	01/29/24	1410	2560083	8
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 3005A	ICP-MS 3005A PREP	AB5	01/26/24	1530	2558919
SW846 7470A Prep	EPA 7470A Mercury Prep Liquid	JM13	01/26/24	1145	2558964

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
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: February 8, 2024

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:	652874002	Client ID:	GPCC001
Matrix:	WG		
Collect Date:	24-JAN-24 10:45		
Receive Date:	25-JAN-24		
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		78.4	1.33	4.00	mg/L		10	TXT1	01/29/24	1523	2559394	1
Chloride		3.74	0.0670	0.200	mg/L		1	TXT1	01/27/24	0542	2559394	2
Fluoride		0.391	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	01/29/24	1211	2558965	3
Metals Analysis-ICP-MS												
SW846 3005A/6020B "As Received"												
Aluminum	U	ND	0.0193	0.0500	mg/L	1.00	1	BAJ	02/02/24	0213	2558920	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		0.0922	0.000670	0.00400	mg/L	1.00	1					
Beryllium	U	ND	0.000200	0.000500	mg/L	1.00	1					
Cadmium	U	ND	0.000300	0.00100	mg/L	1.00	1					
Chromium	U	ND	0.00300	0.0100	mg/L	1.00	1					
Cobalt	U	ND	0.000300	0.00100	mg/L	1.00	1					
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		0.0547	0.00300	0.0100	mg/L	1.00	1					
Magnesium		13.3	0.0100	0.0300	mg/L	1.00	1					
Manganese		0.0280	0.00100	0.00500	mg/L	1.00	1					
Molybdenum		0.0651	0.000200	0.00100	mg/L	1.00	1					
Potassium		1.93	0.0800	0.300	mg/L	1.00	1					
Selenium	U	ND	0.00150	0.00500	mg/L	1.00	1					
Silver	U	ND	0.000300	0.00100	mg/L	1.00	1					
Sodium		15.7	0.0800	0.250	mg/L	1.00	1					
Thallium	U	ND	0.000600	0.00200	mg/L	1.00	1					
Boron		0.456	0.0260	0.0750	mg/L	1.00	5	BAJ	02/02/24	1159	2558920	5
Calcium		75.6	0.400	1.00	mg/L	1.00	5					
Nutrient Analysis												
EPA 353.2 Nitrogen, Nitrate/Nitrite "As Received"												
Nitrogen, Nitrate/Nitrite		0.853	0.00700	0.0200	mg/L		1	AXH3	01/26/24	0821	2558935	6
Solids Analysis												
SM2540C Dissolved Solids "As Received"												

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Report Date: February 8, 2024

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: 652874002 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		342	2.38	10.0	mg/L			KLP1	01/31/24	1110	2561128	7
Titration and Ion Analysis												
SM 2320B Total Alkalinity "As Received"												
Alkalinity, Total as CaCO3		181	0.725	2.00	mg/L			JW2	01/29/24	1412	2560083	8
Bicarbonate alkalinity (CaCO3)		181	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	JM13	01/26/24	1145	2558964
SW846 3005A	ICP-MS 3005A PREP	AB5	01/26/24	1530	2558919

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
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: February 8, 2024

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
Sample ID: 652874003
Matrix: WG
Collect Date: 24-JAN-24 11:50
Receive Date: 25-JAN-24
Collector: Client

Project: GPCC00100
Client ID: GPCC001

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Ion Chromatography												
EPA 300.0 Anions Liquid "As Received"												
Chloride		3.43	0.0670	0.200	mg/L		1	TXT1	01/27/24	0614	2559394	1
Fluoride		0.199	0.0330	0.100	mg/L		1					
Sulfate		219	3.33	10.0	mg/L		25	TXT1	01/29/24	1555	2559394	2
Mercury Analysis-CVAA												
7470 Cold Vapor Mercury, Liquid "As Received"												
Mercury	U	ND	0.0000670	0.000200	mg/L	1.00	1	JP2	01/29/24	1213	2558965	3
Metals Analysis-ICP-MS												
SW846 3005A/6020B "As Received"												
Boron		1.37	0.0520	0.150	mg/L	1.00	10	BAJ	02/02/24	1200	2558920	4
Calcium		86.9	0.800	2.00	mg/L	1.00	10					
Aluminum	J	0.0276	0.0193	0.0500	mg/L	1.00	1	BAJ	02/02/24	0216	2558920	5
Antimony	U	ND	0.00100	0.00300	mg/L	1.00	1					
Arsenic	U	ND	0.00200	0.00500	mg/L	1.00	1					
Barium		0.0430	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	0.000331	0.000300	0.00100	mg/L	1.00	1					
Iron		0.162	0.0330	0.100	mg/L	1.00	1					
Lead	U	ND	0.000500	0.00200	mg/L	1.00	1					
Lithium		0.0106	0.00300	0.0100	mg/L	1.00	1					
Magnesium		40.6	0.0100	0.0300	mg/L	1.00	1					
Manganese		0.147	0.00100	0.00500	mg/L	1.00	1					
Molybdenum		0.00937	0.000200	0.00100	mg/L	1.00	1					
Potassium		5.86	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		21.0	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	01/26/24	0822	2558935	6
Solids Analysis												
SM2540C Dissolved Solids "As Received"												

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Report Date: February 8, 2024

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: 652874003 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		530	2.38	10.0	mg/L			KLP1	01/31/24	1110	2561128	7
Titration and Ion Analysis												
SM 2320B Total Alkalinity "As Received"												
Alkalinity, Total as CaCO3		182	0.725	2.00	mg/L			JW2	01/29/24	1413	2560083	8
Bicarbonate alkalinity (CaCO3)		182	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	AB5	01/26/24	1530	2558919
SW846 7470A Prep	EPA 7470A Mercury Prep Liquid	JM13	01/26/24	1145	2558964

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
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: February 8, 2024

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
Sample ID: 652874004
Matrix: WG
Collect Date: 24-JAN-24 10:45
Receive Date: 25-JAN-24
Collector: Client

Project: GPCC00100
Client ID: GPCC001

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	TXT1	01/29/24	1627	2559394	1
Chloride		3.31	0.0670	0.200	mg/L		1	TXT1	01/27/24	0645	2559394	2
Fluoride		0.171	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	01/29/24	1215	2558965	3
Metals Analysis-ICP-MS												
SW846 3005A/6020B "As Received"												
Boron		1.16	0.0520	0.150	mg/L	1.00	10	BAJ	02/02/24	1201	2558920	4
Calcium		83.7	0.800	2.00	mg/L	1.00	10					
Aluminum	U	ND	0.0193	0.0500	mg/L	1.00	1	BAJ	02/02/24	0225	2558920	5
Antimony	U	ND	0.00100	0.00300	mg/L	1.00	1					
Arsenic	J	0.00470	0.00200	0.00500	mg/L	1.00	1					
Barium		0.0562	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		0.00249	0.000300	0.00100	mg/L	1.00	1					
Iron		2.87	0.0330	0.100	mg/L	1.00	1					
Lead	U	ND	0.000500	0.00200	mg/L	1.00	1					
Lithium		0.0172	0.00300	0.0100	mg/L	1.00	1					
Magnesium		36.6	0.0100	0.0300	mg/L	1.00	1					
Manganese		0.641	0.00100	0.00500	mg/L	1.00	1					
Molybdenum		0.00101	0.000200	0.00100	mg/L	1.00	1					
Potassium		6.83	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		19.8	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	01/26/24	0824	2558935	6
Solids Analysis												
SM2540C Dissolved Solids "As Received"												

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Certificate of Analysis

Report Date: February 8, 2024

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: 652874004 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		529	2.38	10.0	mg/L			KLP1	01/31/24	1110	2561128	7
Titration and Ion Analysis												
SM 2320B Total Alkalinity "As Received"												
Alkalinity, Total as CaCO3		166	0.725	2.00	mg/L			JW2	01/29/24	1415	2560083	8
Bicarbonate alkalinity (CaCO3)		166	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	AB5	01/26/24	1530	2558919
SW846 7470A Prep	EPA 7470A Mercury Prep Liquid	JM13	01/26/24	1145	2558964

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
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: February 8, 2024

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
Sample ID: 652874005
Matrix: WG
Collect Date: 24-JAN-24 13:25
Receive Date: 25-JAN-24
Collector: Client

Project: GPCC00100
Client ID: GPCC001

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Ion Chromatography												
EPA 300.0 Anions Liquid "As Received"												
Sulfate		106	1.33	4.00	mg/L		10	TXT1	01/30/24	1257	2560129	1
Chloride		4.96	0.0670	0.200	mg/L		1	TXT1	01/29/24	1906	2560129	2
Fluoride		0.222	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	01/29/24	1216	2558965	3
Metals Analysis-ICP-MS												
SW846 3005A/6020B "As Received"												
Boron		0.666	0.0260	0.0750	mg/L	1.00	5	BAJ	02/02/24	1202	2558920	4
Calcium		75.8	0.400	1.00	mg/L	1.00	5					
Aluminum	J	0.0458	0.0193	0.0500	mg/L	1.00	1	BAJ	02/02/24	0228	2558920	5
Antimony	U	ND	0.00100	0.00300	mg/L	1.00	1					
Arsenic	U	ND	0.00200	0.00500	mg/L	1.00	1					
Barium		0.103	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		0.00203	0.000300	0.00100	mg/L	1.00	1					
Iron		1.39	0.0330	0.100	mg/L	1.00	1					
Lead	U	ND	0.000500	0.00200	mg/L	1.00	1					
Lithium	J	0.00669	0.00300	0.0100	mg/L	1.00	1					
Magnesium		32.2	0.0100	0.0300	mg/L	1.00	1					
Manganese		0.272	0.00100	0.00500	mg/L	1.00	1					
Molybdenum		0.196	0.000200	0.00100	mg/L	1.00	1					
Potassium		6.95	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		17.7	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	01/26/24	0830	2558935	6
Solids Analysis												
SM2540C Dissolved Solids "As Received"												

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Report Date: February 8, 2024

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: 652874005 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		419	2.38	10.0	mg/L			KLP1	01/31/24	1110	2561128	7
Titration and Ion Analysis												
SM 2320B Total Alkalinity "As Received"												
Alkalinity, Total as CaCO3		234	0.725	2.00	mg/L			JW2	01/29/24	1417	2560083	8
Bicarbonate alkalinity (CaCO3)		234	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	JM13	01/26/24	1145	2558964
SW846 3005A	ICP-MS 3005A PREP	AB5	01/26/24	1530	2558919

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
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: February 8, 2024

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-03	Project:	GPCC00100
Sample ID:	652874006	Client ID:	GPCC001
Matrix:	WQ		
Collect Date:	24-JAN-24 11:55		
Receive Date:	25-JAN-24		
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	0.112	0.0670	0.200	mg/L		1	TXT1	01/29/24	2042	2560129	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	01/29/24	1221	2558965	2
Metals Analysis-ICP-MS												
SW846 3005A/6020B "As Received"												
Boron	U	ND	0.00520	0.0150	mg/L	1.00	1	BAJ	02/02/24	1203	2558920	3
Calcium	U	ND	0.0800	0.200	mg/L	1.00	1					
Antimony	U	ND	0.00100	0.00300	mg/L	1.00	1	BAJ	02/02/24	0231	2558920	4
Arsenic	U	ND	0.00200	0.00500	mg/L	1.00	1					
Barium	U	ND	0.000670	0.00400	mg/L	1.00	1					
Beryllium	U	ND	0.000200	0.000500	mg/L	1.00	1					
Cadmium	U	ND	0.000300	0.00100	mg/L	1.00	1					
Chromium	U	ND	0.00300	0.0100	mg/L	1.00	1					
Cobalt	U	ND	0.000300	0.00100	mg/L	1.00	1					
Lead	U	ND	0.000500	0.00200	mg/L	1.00	1					
Lithium	U	ND	0.00300	0.0100	mg/L	1.00	1					
Molybdenum	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	01/26/24	0840	2558935	5
Solids Analysis												
SM2540C Dissolved Solids "As Received"												
Total Dissolved Solids	U	ND	2.38	10.0	mg/L			KLP1	01/31/24	1110	2561128	6

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
SW846 7470A Prep	EPA 7470A Mercury Prep Liquid	JM13	01/26/24	1145	2558964
SW846 3005A	ICP-MS 3005A PREP	AB5	01/26/24	1530	2558919

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Certificate of Analysis

Report Date: February 8, 2024

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-03	Project:	GPCC00100
Sample ID:	652874006	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	EPA 353.2 Low Level	
6	SM 2540C	

Notes:

Column headers are defined as follows:

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

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Certificate of Analysis

Report Date: February 8, 2024

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-03	Project:	GPCC00100
Sample ID:	652874007	Client ID:	GPCC001
Matrix:	WQ		
Collect Date:	24-JAN-24 11:45		
Receive Date:	25-JAN-24		
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	0.128	0.0670	0.200	mg/L		1	TXT1	01/29/24	2114	2560129	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	01/29/24	1223	2558965	2
Metals Analysis-ICP-MS												
SW846 3005A/6020B "As Received"												
Boron	U	ND	0.00520	0.0150	mg/L	1.00	1	BAJ	02/02/24	1204	2558920	3
Calcium	U	ND	0.0800	0.200	mg/L	1.00	1					
Antimony	U	ND	0.00100	0.00300	mg/L	1.00	1	BAJ	02/02/24	0234	2558920	4
Arsenic	U	ND	0.00200	0.00500	mg/L	1.00	1					
Barium	U	ND	0.000670	0.00400	mg/L	1.00	1					
Beryllium	U	ND	0.000200	0.000500	mg/L	1.00	1					
Cadmium	U	ND	0.000300	0.00100	mg/L	1.00	1					
Chromium	U	ND	0.00300	0.0100	mg/L	1.00	1					
Cobalt	U	ND	0.000300	0.00100	mg/L	1.00	1					
Lead	U	ND	0.000500	0.00200	mg/L	1.00	1					
Lithium	U	ND	0.00300	0.0100	mg/L	1.00	1					
Molybdenum	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	01/26/24	0833	2558935	5
Solids Analysis												
SM2540C Dissolved Solids "As Received"												
Total Dissolved Solids	U	ND	2.38	10.0	mg/L			KLP1	01/31/24	1040	2561127	6

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
SW846 7470A Prep	EPA 7470A Mercury Prep Liquid	JM13	01/26/24	1145	2558964
SW846 3005A	ICP-MS 3005A PREP	AB5	01/26/24	1530	2558919

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Certificate of Analysis

Report Date: February 8, 2024

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-03	Project:	GPCC00100
Sample ID:	652874007	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	EPA 353.2 Low Level	
6	SM 2540C	

Notes:

Column headers are defined as follows:

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

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Certificate of Analysis

Report Date: February 8, 2024

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:	652874008	Client ID:	GPCC001
Matrix:	WG		
Collect Date:	24-JAN-24 10:00		
Receive Date:	25-JAN-24		
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		0.594	0.0330	0.100	mg/L	1.00	1	BAJ	02/02/24	0236	2558920	1
Manganese		0.354	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	AB5	01/26/24	1530	2558919

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	SW846 3005A/6020B	

Notes:

Column headers are defined as follows:

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

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Certificate of Analysis

Report Date: February 8, 2024

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:	652874009	Client ID:	GPCC001
Matrix:	WG		
Collect Date:	24-JAN-24 10:45		
Receive Date:	25-JAN-24		
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	U	ND	0.0330	0.100	mg/L	1.00	1	BAJ	02/02/24	0239	2558920	1
Manganese		0.0243	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	AB5	01/26/24	1530	2558919

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	SW846 3005A/6020B	

Notes:

Column headers are defined as follows:

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

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Certificate of Analysis

Report Date: February 8, 2024

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:	652874010	Client ID:	GPCC001
Matrix:	WG		
Collect Date:	24-JAN-24 11:50		
Receive Date:	25-JAN-24		
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		0.145	0.0330	0.100	mg/L	1.00	1	BAJ	02/02/24	0242	2558920	1
Manganese		0.139	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	AB5	01/26/24	1530	2558919

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	SW846 3005A/6020B	

Notes:

Column headers are defined as follows:

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

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Certificate of Analysis

Report Date: February 8, 2024

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:	652874011	Client ID:	GPCC001
Matrix:	WG		
Collect Date:	24-JAN-24 10:45		
Receive Date:	25-JAN-24		
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		2.77	0.0330	0.100	mg/L	1.00	1	BAJ	02/02/24	0245	2558920	1
Manganese		0.630	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	AB5	01/26/24	1530	2558919

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	SW846 3005A/6020B	

Notes:

Column headers are defined as follows:

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

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

Certificate of Analysis

Report Date: February 8, 2024

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:	652874012	Client ID:	GPCC001
Matrix:	WG		
Collect Date:	24-JAN-24 13:25		
Receive Date:	25-JAN-24		
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		0.920	0.0330	0.100	mg/L	1.00	1	BAJ	02/02/24	0248	2558920	1
Manganese		0.261	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	AB5	01/26/24	1530	2558919

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	SW846 3005A/6020B	

Notes:

Column headers are defined as follows:

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

QC Summary

Report Date: February 8, 2024

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

Contact: **Joju Abraham**

Workorder: **652874**

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Ion Chromatography										
Batch 2559394										
QC1205633070 652703014 DUP										
Chloride		9.71		9.70	mg/L	0.113		(0%-20%)	TXT1	01/27/24 00:55
Fluoride		0.459		0.460	mg/L	0.109 ^		(+/-0.100)		
Sulfate		218		218	mg/L	0.063		(0%-20%)		01/29/24 12:44
QC1205633069 LCS										
Chloride	5.00			4.88	mg/L		97.7	(90%-110%)		01/26/24 23:19
Fluoride	2.50			2.44	mg/L		97.4	(90%-110%)		
Sulfate	10.0			9.77	mg/L		97.7	(90%-110%)		
QC1205633068 MB										
Chloride			J	0.113	mg/L					01/26/24 22:48
Fluoride			U	ND	mg/L					
Sulfate			U	ND	mg/L					
QC1205633071 652703014 PS										
Chloride	5.00	9.71		15.7	mg/L		119*	(90%-110%)		01/27/24 01:27
Fluoride	2.50	0.459		2.90	mg/L		97.5	(90%-110%)		
Sulfate	10.0	8.73		19.2	mg/L		105	(90%-110%)		01/29/24 13:16

QC Summary

Workorder: **652874**

Parmname	NOM		Sample	Qual	QC	Units	RPD%		REC%	Range	Anlst	Date Time
Ion Chromatography												
Batch 2560129												
QC1205634484 652874005 DUP												
Chloride			4.96		4.97	mg/L	0.25			(0%-20%)	TXT1	01/29/24 19:38
Fluoride			0.222		0.231	mg/L	3.98	^		(+/-0.100)		
Sulfate			106		106	mg/L	0.000943			(0%-20%)		01/30/24 13:29
QC1205634486 653067010 DUP												
Chloride			5.09		5.09	mg/L	0.00982			(0%-20%)		01/30/24 08:23
Fluoride		J	0.0377	J	0.0383	mg/L	1.58	^		(+/-0.100)		
Sulfate			10.9		10.9	mg/L	0.0816			(0%-20%)		
QC1205634483 LCS												
Chloride	5.00				4.85	mg/L			97	(90%-110%)		01/29/24 18:34
Fluoride	2.50				2.40	mg/L			96.2	(90%-110%)		
Sulfate	10.0				9.70	mg/L			97	(90%-110%)		
QC1205634482 MB												
Chloride				J	0.113	mg/L						01/29/24 18:02
Fluoride				U	ND	mg/L						
Sulfate				U	ND	mg/L						
QC1205634485 652874005 PS												
Chloride	5.00		4.96		10.4	mg/L			108	(90%-110%)		01/29/24 20:10
Fluoride	2.50		0.222		2.59	mg/L			94.7	(90%-110%)		

QC Summary

Workorder: **652874**

Parmname	NOM		Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Ion Chromatography											
Batch 2560129											
Sulfate	10.0		10.6		21.1	mg/L		105	(90%-110%)	TXT1	01/30/24 14:01
QC1205634487 653067010 PS											
Chloride	5.00		5.09		10.7	mg/L		112*	(90%-110%)		01/30/24 08:55
Fluoride	2.50	J	0.0377		2.48	mg/L		97.6	(90%-110%)		
Sulfate	10.0		10.9		21.3	mg/L		104	(90%-110%)		
Metals Analysis - ICPMS											
Batch 2558920											
QC1205632307 LCS											
Aluminum	2.00				2.05	mg/L		103	(80%-120%)	BAJ	02/02/24 01:56
Antimony	0.0500				0.0493	mg/L		98.5	(80%-120%)		
Arsenic	0.0500				0.0501	mg/L		100	(80%-120%)		
Barium	0.0500				0.0508	mg/L		102	(80%-120%)		
Beryllium	0.0500				0.0564	mg/L		113	(80%-120%)		
Boron	0.100				0.113	mg/L		113	(80%-120%)		02/02/24 11:51
Cadmium	0.0500				0.0505	mg/L		101	(80%-120%)		02/02/24 01:56
Calcium	2.00				2.09	mg/L		104	(80%-120%)		02/02/24 11:51
Chromium	0.0500				0.0504	mg/L		101	(80%-120%)		02/02/24 01:56
Cobalt	0.0500				0.0511	mg/L		102	(80%-120%)		

QC Summary

Workorder: **652874**

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Metals Analysis - ICPMS										
Batch 2558920										
Iron	2.00			2.00	mg/L		99.8	(80%-120%)	BAJ	02/02/24 01:56
Lead	0.0500			0.0514	mg/L		103	(80%-120%)		
Lithium	0.0500			0.0524	mg/L		105	(80%-120%)		
Magnesium	2.00			2.07	mg/L		104	(80%-120%)		
Manganese	0.0500			0.0505	mg/L		101	(80%-120%)		
Molybdenum	0.0500			0.0514	mg/L		103	(80%-120%)		
Potassium	2.00			2.07	mg/L		104	(80%-120%)		
Selenium	0.0500			0.0510	mg/L		102	(80%-120%)		
Silver	0.0500			0.0514	mg/L		103	(80%-120%)		
Sodium	2.00			2.08	mg/L		104	(80%-120%)		
Thallium	0.0500			0.0491	mg/L		98.3	(80%-120%)		
QC1205632306 MB										
Aluminum			U	ND	mg/L					02/02/24 01:54
Antimony			U	ND	mg/L					
Arsenic			U	ND	mg/L					
Barium			U	ND	mg/L					

QC Summary

Workorder: **652874**

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Metals Analysis - ICPMS										
Batch 2558920										
Beryllium			U	ND	mg/L				BAJ	02/02/24 01:54
Boron			U	ND	mg/L					02/02/24 11:50
Cadmium			U	ND	mg/L					02/02/24 01:54
Calcium			U	ND	mg/L					02/02/24 11:50
Chromium			U	ND	mg/L					02/02/24 01:54
Cobalt			U	ND	mg/L					
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					

QC Summary

Workorder: **652874**

Parmname	NOM		Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Metals Analysis - ICPMS												
Batch 2558920												
Sodium				U	ND	mg/L				BAJ	02/02/24	01:54
Thallium				U	ND	mg/L						
QC1205632308 652874001 MS												
Aluminum	2.00		0.307		2.39	mg/L		104	(75%-125%)		02/02/24	02:02
Antimony	0.0500	U	ND		0.0492	mg/L		98.3	(75%-125%)			
Arsenic	0.0500	U	ND		0.0522	mg/L		103	(75%-125%)			
Barium	0.0500		0.0427		0.0879	mg/L		90.4	(75%-125%)			
Beryllium	0.0500	U	ND		0.0561	mg/L		112	(75%-125%)			
Boron	0.100		1.13		1.23	mg/L		N/A	(75%-125%)		02/02/24	11:53
Cadmium	0.0500	U	ND		0.0495	mg/L		99	(75%-125%)		02/02/24	02:02
Calcium	2.00		82.6		82.5	mg/L		N/A	(75%-125%)		02/02/24	11:53
Chromium	0.0500	U	ND		0.0491	mg/L		96.8	(75%-125%)		02/02/24	02:02
Cobalt	0.0500		0.00106		0.0507	mg/L		99.4	(75%-125%)			
Iron	2.00		1.13		3.06	mg/L		96.3	(75%-125%)			
Lead	0.0500	U	ND		0.0468	mg/L		93.4	(75%-125%)			
Lithium	0.0500		0.0131		0.0668	mg/L		107	(75%-125%)			

QC Summary

Workorder: **652874**

Parmname	NOM		Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Metals Analysis - ICPMS												
Batch 2558920												
Magnesium	2.00		38.8		39.7	mg/L		N/A	(75%-125%)	BAJ	02/02/24	02:02
Manganese	0.0500		0.355		0.398	mg/L		N/A	(75%-125%)			
Molybdenum	0.0500	U	ND		0.0528	mg/L		105	(75%-125%)			
Potassium	2.00		6.16		8.02	mg/L		93.3	(75%-125%)			
Selenium	0.0500	U	ND		0.0513	mg/L		103	(75%-125%)			
Silver	0.0500	U	ND		0.0482	mg/L		96.4	(75%-125%)			
Sodium	2.00		19.8		21.5	mg/L		N/A	(75%-125%)			
Thallium	0.0500	U	ND		0.0459	mg/L		91.8	(75%-125%)			
QC1205632309 652874001 MSD												
Aluminum	2.00		0.307		2.39	mg/L	0.0926	104	(0%-20%)		02/02/24	02:05
Antimony	0.0500	U	ND		0.0504	mg/L	2.48	101	(0%-20%)			
Arsenic	0.0500	U	ND		0.0529	mg/L	1.32	104	(0%-20%)			
Barium	0.0500		0.0427		0.0910	mg/L	3.47	96.6	(0%-20%)			
Beryllium	0.0500	U	ND		0.0572	mg/L	1.8	114	(0%-20%)			
Boron	0.100		1.13		1.26	mg/L	3.13	N/A	(0%-20%)		02/02/24	11:54
Cadmium	0.0500	U	ND		0.0502	mg/L	1.42	100	(0%-20%)		02/02/24	02:05

QC Summary

Workorder: **652874**

Parmname	NOM		Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Metals Analysis - ICPMS											
Batch 2558920											
Calcium	2.00		82.6		84.7	mg/L	2.65	N/A	(0%-20%)	BAJ	02/02/24 11:54
Chromium	0.0500	U	ND		0.0501	mg/L	2.1	98.9	(0%-20%)		02/02/24 02:05
Cobalt	0.0500		0.00106		0.0511	mg/L	0.729	100	(0%-20%)		
Iron	2.00		1.13		3.09	mg/L	0.778	97.5	(0%-20%)		
Lead	0.0500	U	ND		0.0478	mg/L	1.97	95.3	(0%-20%)		
Lithium	0.0500		0.0131		0.0674	mg/L	0.867	109	(0%-20%)		
Magnesium	2.00		38.8		40.0	mg/L	0.783	N/A	(0%-20%)		
Manganese	0.0500		0.355		0.403	mg/L	1.17	N/A	(0%-20%)		
Molybdenum	0.0500	U	ND		0.0537	mg/L	1.66	107	(0%-20%)		
Potassium	2.00		6.16		8.15	mg/L	1.52	99.5	(0%-20%)		
Selenium	0.0500	U	ND		0.0531	mg/L	3.42	106	(0%-20%)		
Silver	0.0500	U	ND		0.0490	mg/L	1.69	98	(0%-20%)		
Sodium	2.00		19.8		21.9	mg/L	1.91	N/A	(0%-20%)		
Thallium	0.0500	U	ND		0.0466	mg/L	1.35	93.1	(0%-20%)		
QC1205632310 652874001 SDILT											
Aluminum			307		61.3	ug/L	.388		(0%-20%)		02/02/24 02:11

QC Summary

Workorder: **652874**

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Metals Analysis - ICPMS										
Batch 2558920										
Antimony	U	ND	U	ND	ug/L	N/A		(0%-20%)	BAJ	02/02/24 02:11
Arsenic	U	ND	U	ND	ug/L	N/A		(0%-20%)		
Barium		42.7		8.76	ug/L	2.55		(0%-20%)		
Beryllium	U	ND	U	ND	ug/L	N/A		(0%-20%)		
Boron		113		24.7	ug/L	9.21		(0%-20%)		02/02/24 11:55
Cadmium	U	ND	U	ND	ug/L	N/A		(0%-20%)		02/02/24 02:11
Calcium		8260		1730	ug/L	4.75		(0%-20%)		02/02/24 11:55
Chromium	U	ND	U	ND	ug/L	N/A		(0%-20%)		02/02/24 02:11
Cobalt		1.06	U	ND	ug/L	N/A		(0%-20%)		
Iron		1130		230	ug/L	1.26		(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		38800		7910	ug/L	1.96		(0%-20%)		
Manganese		355		73.7	ug/L	3.79		(0%-20%)		
Molybdenum	U	ND	U	ND	ug/L	N/A		(0%-20%)		

QC Summary

Workorder: **652874**

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Metals Analysis - ICPMS										
Batch 2558920										
Potassium		6160		1210	ug/L	1.38		(0%-20%)	BAJ	02/02/24 02:11
Selenium	U	ND	U	ND	ug/L	N/A		(0%-20%)		
Silver	U	ND	U	ND	ug/L	N/A		(0%-20%)		
Sodium		19800		3970	ug/L	.186		(0%-20%)		
Thallium	U	ND	U	ND	ug/L	N/A		(0%-20%)		
Metals Analysis-Mercury										
Batch 2558965										
QC1205632413 652847001 DUP										
Mercury	J	0.122	J	0.129	mg/L	5.58 ^		(+/-0.200)	JP2	01/29/24 12:03
QC1205632412 LCS										
Mercury 0.00200				0.00200	mg/L		100	(80%-120%)		01/29/24 11:55
QC1205632411 MB										
Mercury			U	ND	mg/L					01/29/24 11:53
QC1205632414 652847001 MS										
Mercury 2.00	J	0.122		2.20	mg/L		104	(75%-125%)		01/29/24 12:05
QC1205632415 652847001 SDILT										
Mercury	J	0.122	U	ND	ug/L	N/A		(0%-10%)		01/29/24 12:06
Nutrient Analysis										
Batch 2558935										
QC1205632351 652874001 DUP										
Nitrogen, Nitrate/Nitrite	U	ND	U	ND	mg/L	N/A			AXH3	01/26/24 08:18

QC Summary

Workorder: **652874**

Parmname	NOM		Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Nutrient Analysis											
Batch 2558935											
QC1205632353 652879003 DUP											
Nitrogen, Nitrate/Nitrite			0.318		0.318	mg/L	0		(0%-20%)	AXH3	01/26/24 08:37
QC1205632350 LCS											
Nitrogen, Nitrate/Nitrite	1.00				1.05	mg/L		105	(90%-110%)		01/26/24 08:16
QC1205632349 MB											
Nitrogen, Nitrate/Nitrite				U	ND	mg/L					01/26/24 08:15
QC1205632352 652874001 PS											
Nitrogen, Nitrate/Nitrite	1.00	U	ND		1.02	mg/L		102	(90%-110%)		01/26/24 08:20
QC1205632354 652879003 PS											
Nitrogen, Nitrate/Nitrite	1.00		0.318		1.32	mg/L		100	(90%-110%)		01/26/24 08:39
Solids Analysis											
Batch 2561127											
QC1205636344 652726001 DUP											
Total Dissolved Solids			264		262	mg/L	0.76		(0%-5%)	KLP1	01/31/24 10:40
QC1205636343 LCS											
Total Dissolved Solids	300				299	mg/L		99.7	(95%-105%)		01/31/24 10:40
QC1205636342 MB											
Total Dissolved Solids				U	ND	mg/L					01/31/24 10:40
Batch 2561128											
QC1205636357 652743002 DUP											
Total Dissolved Solids			371		369	mg/L	0.541		(0%-5%)	KLP1	01/31/24 11:10
QC1205636356 LCS											
Total Dissolved Solids	300				294	mg/L		98	(95%-105%)		01/31/24 11:10

QC Summary

Workorder: **652874**

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Solids Analysis										
Batch 2561128										
QC1205636355 MB										
Total Dissolved Solids			U	ND	mg/L				KLP1	01/31/24 11:10
Titration and Ion Analysis										
Batch 2560083										
QC1205634435 LCS										
Alkalinity, Total as CaCO3	50.0			52.0	mg/L		104	(90%-110%)	JW2	01/29/24 14:05
QC1205634440 LCS										
Alkalinity, Total as CaCO3	15.0			14.9	mg/L		99.3	(90%-110%)		01/29/24 14:08
QC1205634454 LCSD										
Alkalinity, Total as CaCO3	50.0			51.8	mg/L	0.385	104	(0%-20%)		01/29/24 14:06
QC1205634455 LCSD										
Alkalinity, Total as CaCO3	15.0			14.9	mg/L	0	99.3	(0%-20%)		01/29/24 14:09

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

QC Summary

Workorder: **652874**

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

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
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.

QC Summary

Report Date: February 7, 2024

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

Contact: **Joju Abraham**

Workorder: **652690**

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Ion Chromatography											
Batch 2559114											
QC1205632597 652690001 DUP											
Chloride		5.63		5.63	mg/L	0.0284		(0%-20%)	CWW	01/26/24	15:46
Fluoride		0.121		0.120	mg/L	0.748 ^		(+/-0.100)			
Sulfate		6.98		6.97	mg/L	0.237		(0%-20%)			
QC1205632596 LCS											
Chloride	5.00			4.53	mg/L		90.7	(90%-110%)		01/26/24	14:43
Fluoride	2.50			2.43	mg/L		97.1	(90%-110%)			
Sulfate	10.0			9.29	mg/L		92.9	(90%-110%)			
QC1205632595 MB											
Chloride			U	ND	mg/L					01/26/24	14:11
Fluoride			U	ND	mg/L						
Sulfate			U	ND	mg/L						
QC1205632598 652690001 PS											
Chloride	5.00	5.63		11.0	mg/L		107	(90%-110%)		01/26/24	16:18
Fluoride	2.50	0.121		2.55	mg/L		97.2	(90%-110%)			
Sulfate	10.0	6.98		16.9	mg/L		99.1	(90%-110%)			

QC Summary

Workorder: **652690**

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Metals Analysis - ICPMS										
Batch 2558202										
QC1205630857 LCS										
Aluminum	2.00			2.20	mg/L		110	(80%-120%)	BAJ	02/05/24 21:53
Antimony	0.0500			0.0528	mg/L		106	(80%-120%)		
Arsenic	0.0500			0.0533	mg/L		107	(80%-120%)		
Barium	0.0500			0.0542	mg/L		108	(80%-120%)		
Beryllium	0.0500			0.0540	mg/L		108	(80%-120%)	PRB	02/06/24 15:16
Boron	0.100			0.106	mg/L		106	(80%-120%)		
Cadmium	0.0500			0.0542	mg/L		108	(80%-120%)	BAJ	02/05/24 21:53
Calcium	2.00			2.17	mg/L		108	(80%-120%)		
Chromium	0.0500			0.0537	mg/L		107	(80%-120%)		
Cobalt	0.0500			0.0541	mg/L		108	(80%-120%)		
Iron	2.00			2.12	mg/L		106	(80%-120%)		
Lead	0.0500			0.0543	mg/L		109	(80%-120%)		
Lithium	0.0500			0.0577	mg/L		115	(80%-120%)		
Magnesium	2.00			2.33	mg/L		116	(80%-120%)		
Manganese	0.0500			0.0542	mg/L		108	(80%-120%)	PRB	02/06/24 15:16

QC Summary

Workorder: **652690**

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Metals Analysis - ICPMS										
Batch 2558202										
Molybdenum	0.0500			0.0547	mg/L		109	(80%-120%)	BAJ	02/05/24 21:53
Potassium	2.00			2.18	mg/L		109	(80%-120%)		02/02/24 14:43
Selenium	0.0500			0.0525	mg/L		105	(80%-120%)		02/05/24 21:53
Silver	0.0500			0.0559	mg/L		112	(80%-120%)		
Sodium	2.00			2.35	mg/L		117	(80%-120%)		
Thallium	0.0500			0.0521	mg/L		104	(80%-120%)		
QC1205630856 MB										
Aluminum			U	ND	mg/L					02/05/24 21:50
Antimony			U	ND	mg/L					
Arsenic			U	ND	mg/L					
Barium			U	ND	mg/L					
Beryllium			U	ND	mg/L				PRB	02/06/24 15:14
Boron			U	ND	mg/L					
Cadmium			U	ND	mg/L				BAJ	02/05/24 21:50
Calcium			U	ND	mg/L					
Chromium			U	ND	mg/L					

QC Summary

Workorder: **652690**

Parmname	NOM		Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Metals Analysis - ICPMS											
Batch 2558202											
Cobalt				U	ND	mg/L				BAJ	02/05/24 21:50
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				PRB	02/06/24 15:14
Molybdenum				U	ND	mg/L				BAJ	02/05/24 21:50
Potassium				U	ND	mg/L					02/02/24 14:41
Selenium				U	ND	mg/L					02/05/24 21:50
Silver				U	ND	mg/L					
Sodium				U	ND	mg/L					
Thallium				U	ND	mg/L					
QC1205630858 652690001 MS											
Aluminum	2.00	U	ND		2.20	mg/L		110	(75%-125%)		02/05/24 21:58
Antimony	0.0500	U	ND		0.0516	mg/L		103	(75%-125%)		
Arsenic	0.0500	U	ND		0.0525	mg/L		104	(75%-125%)		

QC Summary

Workorder: **652690**

Parmname	NOM		Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Metals Analysis - ICPMS											
Batch 2558202											
Barium	0.0500		0.0348		0.0891	mg/L		109	(75%-125%)	BAJ	02/05/24 21:58
Beryllium	0.0500	U	ND		0.0532	mg/L		106	(75%-125%)	PRB	02/06/24 15:20
Boron	0.100		0.0214		0.125	mg/L		103	(75%-125%)		
Cadmium	0.0500	U	ND		0.0529	mg/L		106	(75%-125%)	BAJ	02/05/24 21:58
Calcium	2.00		9.34		11.1	mg/L		N/A	(75%-125%)		
Chromium	0.0500	U	ND		0.0555	mg/L		108	(75%-125%)		
Cobalt	0.0500	U	ND		0.0538	mg/L		107	(75%-125%)		
Iron	2.00	U	ND		2.14	mg/L		106	(75%-125%)		
Lead	0.0500	U	ND		0.0523	mg/L		104	(75%-125%)		
Lithium	0.0500	J	0.00440		0.0625	mg/L		116	(75%-125%)		
Magnesium	2.00		4.06		6.14	mg/L		104	(75%-125%)		
Manganese	0.0500	U	ND		0.0528	mg/L		104	(75%-125%)	PRB	02/06/24 15:20
Molybdenum	0.0500	J	0.000480		0.0567	mg/L		112	(75%-125%)	BAJ	02/05/24 21:58
Potassium	2.00		2.17		4.20	mg/L		102	(75%-125%)		02/02/24 14:49
Selenium	0.0500	U	ND		0.0511	mg/L		101	(75%-125%)		02/05/24 21:58

QC Summary

Workorder: **652690**

Parmname	NOM		Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Metals Analysis - ICPMS											
Batch 2558202											
Silver	0.0500	U	ND		0.0558	mg/L		112	(75%-125%)	BAJ	02/05/24 21:58
Sodium	2.00		11.1		13.3	mg/L		N/A	(75%-125%)		
Thallium	0.0500	U	ND		0.0505	mg/L		101	(75%-125%)		
QC1205630859 652690001 MSD											
Aluminum	2.00	U	ND		2.35	mg/L	6.63	117	(0%-20%)		02/05/24 22:01
Antimony	0.0500	U	ND		0.0531	mg/L	2.75	106	(0%-20%)		
Arsenic	0.0500	U	ND		0.0540	mg/L	2.77	107	(0%-20%)		
Barium	0.0500		0.0348		0.0912	mg/L	2.39	113	(0%-20%)		
Beryllium	0.0500	U	ND		0.0550	mg/L	3.3	110	(0%-20%)	PRB	02/06/24 15:22
Boron	0.100		0.0214		0.130	mg/L	4.41	109	(0%-20%)		
Cadmium	0.0500	U	ND		0.0544	mg/L	2.91	109	(0%-20%)	BAJ	02/05/24 22:01
Calcium	2.00		9.34		11.5	mg/L	3.44	N/A	(0%-20%)		
Chromium	0.0500	U	ND		0.0574	mg/L	3.27	112	(0%-20%)		
Cobalt	0.0500	U	ND		0.0566	mg/L	5.06	113	(0%-20%)		
Iron	2.00	U	ND		2.26	mg/L	5.51	112	(0%-20%)		
Lead	0.0500	U	ND		0.0536	mg/L	2.56	107	(0%-20%)		

QC Summary

Workorder: **652690**

Parmname	NOM		Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Metals Analysis - ICPMS											
Batch 2558202											
Lithium	0.0500	J	0.00440		0.0659	mg/L	5.24	123	(0%-20%)	BAJ	02/05/24 22:01
Magnesium	2.00		4.06		6.41	mg/L	4.2	118	(0%-20%)		
Manganese	0.0500	U	ND		0.0554	mg/L	4.81	109	(0%-20%)	PRB	02/06/24 15:22
Molybdenum	0.0500	J	0.000480		0.0585	mg/L	3.15	116	(0%-20%)	BAJ	02/05/24 22:01
Potassium	2.00		2.17		4.46	mg/L	6.12	115	(0%-20%)		02/02/24 14:52
Selenium	0.0500	U	ND		0.0531	mg/L	3.85	105	(0%-20%)		02/05/24 22:01
Silver	0.0500	U	ND		0.0572	mg/L	2.48	114	(0%-20%)		
Sodium	2.00		11.1		13.7	mg/L	3.07	N/A	(0%-20%)		
Thallium	0.0500	U	ND		0.0516	mg/L	2.15	103	(0%-20%)		
QC1205630860 652690001 SDILT											
Aluminum		U	ND	U	ND	ug/L	N/A		(0%-20%)		02/05/24 22:07
Antimony		U	ND	U	ND	ug/L	N/A		(0%-20%)		
Arsenic		U	ND	U	ND	ug/L	N/A		(0%-20%)		
Barium			34.8		8.00	ug/L	14.9		(0%-20%)		
Beryllium		U	ND	U	ND	ug/L	N/A		(0%-20%)	PRB	02/06/24 15:26
Boron			21.4	J	5.92	ug/L	38.3		(0%-20%)		

QC Summary

Workorder: **652690**

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Metals Analysis - ICPMS										
Batch 2558202										
Cadmium	U	ND	U	ND	ug/L	N/A		(0%-20%)	BAJ	02/05/24 22:07
Calcium		9340		2160	ug/L	15.6		(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	4.40	U	ND	ug/L	N/A		(0%-20%)		
Magnesium		4060		941	ug/L	15.9		(0%-20%)		
Manganese	U	ND	U	ND	ug/L	N/A		(0%-20%)	PRB	02/06/24 15:26
Molybdenum	J	0.480	U	ND	ug/L	N/A		(0%-20%)	BAJ	02/05/24 22:07
Potassium		2170		433	ug/L	.00545		(0%-20%)		02/02/24 14:55
Selenium	U	ND	U	ND	ug/L	N/A		(0%-20%)		02/05/24 22:07
Silver	U	ND	U	ND	ug/L	N/A		(0%-20%)		
Sodium		11100		2540	ug/L	14.2		(0%-20%)		
Thallium	U	ND	U	ND	ug/L	N/A		(0%-20%)		

QC Summary

Workorder: **652690**

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Metals Analysis-Mercury										
Batch 2558958										
QC1205632391 652592001 DUP										
Mercury		U ND	U	ND	mg/L	N/A			JP2	01/29/24 10:04
QC1205632390 LCS										
Mercury	0.00200			0.00201	mg/L		100	(80%-120%)		01/29/24 10:01
QC1205632389 MB										
Mercury			U	ND	mg/L					01/29/24 09:56
QC1205632392 652592001 MS										
Mercury	0.00200	U ND		0.00190	mg/L		95.1	(75%-125%)		01/29/24 10:05
QC1205632393 652592001 SDILT										
Mercury		U ND	U	ND	ug/L	N/A		(0%-10%)		01/29/24 10:07
Batch 2558962										
QC1205632403 652690004 DUP										
Mercury		U ND	U	ND	mg/L	N/A			JP2	01/29/24 11:09
QC1205632402 LCS										
Mercury	0.00200			0.00198	mg/L		99	(80%-120%)		01/29/24 11:06
QC1205632401 MB										
Mercury			U	ND	mg/L					01/29/24 11:04
QC1205632404 652690004 MS										
Mercury	0.00200	U ND		0.00158	mg/L		78.4	(75%-125%)		01/29/24 11:11
QC1205632405 652690004 SDILT										
Mercury		U ND	U	ND	ug/L	N/A		(0%-10%)		01/29/24 11:12
Batch 2559709										
QC1205633704 652690009 DUP										
Mercury		U ND	U	ND	mg/L	N/A			JP2	01/30/24 12:15

QC Summary

Workorder: 652690

Parmname	NOM		Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Metals Analysis-Mercury											
Batch 2559709											
QC1205633702 LCS											
Mercury	0.00200				0.00199	mg/L		99.3	(80%-120%)	JP2	01/30/24 12:07
QC1205633701 MB											
Mercury				U	ND	mg/L					01/30/24 12:05
QC1205633705 652690009 MS											
Mercury	0.00200	U	ND		0.00196	mg/L		97.9	(75%-125%)		01/30/24 12:17
QC1205633706 652690009 SDILT											
Mercury		U	ND	U	ND	ug/L	N/A		(0%-10%)		01/30/24 12:19
Nutrient Analysis											
Batch 2557599											
QC1205630061 652457001 DUP											
Nitrogen, Nitrate/Nitrite			0.687		0.678	mg/L	1.32		(0%-20%)	AXH3	01/26/24 07:09
QC1205630060 LCS											
Nitrogen, Nitrate/Nitrite	1.00				1.06	mg/L		106	(90%-110%)		01/26/24 07:01
QC1205630059 MB											
Nitrogen, Nitrate/Nitrite				U	ND	mg/L					01/26/24 07:00
QC1205630062 652457001 PS											
Nitrogen, Nitrate/Nitrite	1.00		0.687		1.62	mg/L		93.3	(90%-110%)		01/26/24 07:10
Solids Analysis											
Batch 2558323											
QC1205631207 LCS											
Total Dissolved Solids	300				297	mg/L		99	(95%-105%)	ES2	01/25/24 11:35
QC1205631206 MB											
Total Dissolved Solids				U	ND	mg/L					01/25/24 11:35

QC Summary

Workorder: **652690**

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Titration and Ion Analysis											
Batch 2558602											
QC1205631785 LCS											
Alkalinity, Total as CaCO3	50.0			51.4	mg/L		103	(90%-110%)	JW2	01/25/24	12:19
QC1205631787 LCSD											
Alkalinity, Total as CaCO3	50.0			51.3	mg/L	0.195	103	(0%-20%)		01/25/24	12:20

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
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

QC Summary

Workorder: **652690**

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

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.

Metals

Product: **Determination of Metals by ICP-MS**
Analytical Method: SW846 3005A/6020B
Analytical Procedure: GL-MA-E-014 REV# 36
Analytical Batch: 2558202

Preparation Method: SW846 3005A
Preparation Procedure: GL-MA-E-006 REV# 14
Preparation Batch: 2558201

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

GEL Sample ID#	Client Sample Identification
652690001	ARK-ARGWA-19
652690002	ARK-ARAMW-9
652690003	ARK-ARGWA-20
652690004	ARK-ARAMW-7
652690005	ARK-ARGWC-22
652690006	ARK-AP2-FD-03
652690007	ARK-ARGWA-19
652690008	ARK-ARAMW-9
652690009	ARK-ARGWA-20
652690010	ARK-ARAMW-7
652690011	ARK-ARGWC-22
1205630856	Method Blank (MB)**ICP-MS**
1205630857	Laboratory Control Sample (LCS)
1205630860	652690001(ARK-ARGWA-19L) Serial Dilution (SD)
1205630858	652690001(ARK-ARGWA-19S) Matrix Spike (MS)
1205630859	652690001(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

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 652690002 (ARK-ARAMW-9), 652690004

(ARK-ARAMW-7), 652690005 (ARK-ARGWC-22), 652690010 (ARK-ARAMW-7) and 652690011 (ARK-ARGWC-22) were diluted to ensure that the analyte concentrations were within the linear calibration range of the instrument.

Analyte	652690				
	002	**004**	**005**	**010**	**011**
Boron	1X	50X	50X		
Calcium	10X	50X	50X		
Magnesium	1X	50X	50X		
Manganese	1X	50X	50X	100X	100X
Sodium	10X	1X	1X		

Product: **Mercury Analysis Using the Perkin Elmer Automated Mercury Analyzer**
Analytical Method: SW846 7470A
Analytical Procedure: GL-MA-E-010 REV# 40
Analytical Batch: 2558958

Preparation Method: SW846 7470A Prep
Preparation Procedure: GL-MA-E-010 REV# 40
Preparation Batch: 2558957

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

GEL Sample ID#	Client Sample Identification
652690001	ARK-ARGWA-19
652690002	ARK-ARAMW-9
652690003	ARK-ARGWA-20
1205632389	Method Blank (MB)**CVAA**
1205632390	Laboratory Control Sample (LCS)
1205632393	652592001(NonSDGL) Serial Dilution (SD)
1205632391	652592001(NonSDGD) Sample Duplicate (DUP)
1205632392	652592001(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: 2558962

Preparation Method: SW846 7470A Prep
Preparation Procedure: GL-MA-E-010 REV# 40

Preparation Batch: 2558961

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

GEL Sample ID#	Client Sample Identification
652690004	ARK-ARAMW-7
652690005	ARK-ARGWC-22
652690006	ARK-AP2-FD-03
1205632401	Method Blank (MB)**CVAA**
1205632402	Laboratory Control Sample (LCS)
1205632405	652690004(ARK-ARAMW-7L) Serial Dilution (SD)
1205632403	652690004(ARK-ARAMW-7D) Sample Duplicate (DUP)
1205632404	652690004(ARK-ARAMW-7S) 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: 2559709

Preparation Method: SW846 7470A Prep
Preparation Procedure: GL-MA-E-010 REV# 40
Preparation Batch: 2559703

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

GEL Sample ID#	Client Sample Identification
652690009	ARK-ARGWA-20
1205633701	Method Blank (MB)**CVAA**
1205633702	Laboratory Control Sample (LCS)
1205633706	652690009(ARK-ARGWA-20L) Serial Dilution (SD)
1205633704	652690009(ARK-ARGWA-20D) Sample Duplicate (DUP)
1205633705	652690009(ARK-ARGWA-20S) 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# 34
Analytical Batch: 2559114

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

GEL Sample ID#	Client Sample Identification
652690001	ARK-ARGWA-19
652690002	ARK-ARAMW-9
652690003	ARK-ARGWA-20
652690004	ARK-ARAMW-7
652690005	ARK-ARGWC-22
652690006	ARK-AP2-FD-03
1205632595	Method Blank (MB)
1205632596	Laboratory Control Sample (LCS)
1205632597	652690001(ARK-ARGWA-19) Sample Duplicate (DUP)
1205632598	652690001(ARK-ARGWA-19) Post Spike (PS)

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

Data Summary:

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

Technical Information

Sample Dilutions
The following samples 652690002 (ARK-ARAMW-9), 652690004 (ARK-ARAMW-7) and 652690005 (ARK-ARGWC-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	652690		
	002	004	005
Chloride	40X	1X	1X
Sulfate	40X	100X	100X

Product: **Nitrate/Nitrite Cad Redux Low Level**
Analytical Method: EPA 353.2 Low Level
Analytical Procedure: GL-GC-E-128 REV# 15
Analytical Batch: 2557599

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

GEL Sample ID#	Client Sample Identification
652690001	ARK-ARGWA-19
652690002	ARK-ARAMW-9
652690003	ARK-ARGWA-20
652690004	ARK-ARAMW-7
652690005	ARK-ARGWC-22
652690006	ARK-AP2-FD-03

1205630059	Method Blank (MB)
1205630060	Laboratory Control Sample (LCS)
1205630061	652457001(NonSDG) Sample Duplicate (DUP)
1205630062	652457001(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 652690001 (ARK-ARGWA-19) and 652690006 (ARK-AP2-FD-03) 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	652690	
	001	006
Nitrogen, Nitrate/Nitrite	5X	10X

Product: **Solids, Total Dissolved**
Analytical Method: SM 2540C
Analytical Procedure: GL-GC-E-001 REV# 21
Analytical Batch: 2558323

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

GEL Sample ID#	Client Sample Identification
652690001	ARK-ARGWA-19
652690002	ARK-ARAMW-9
652690003	ARK-ARGWA-20
652690004	ARK-ARAMW-7
652690005	ARK-ARGWC-22
652690006	ARK-AP2-FD-03
1205631206	Method Blank (MB)
1205631207	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
A reduced aliquot was used due to matrix interference. 652690002 (ARK-ARAMW-9), 652690004 (ARK-ARAMW-7) and 652690005 (ARK-ARGWC-22). A TDS meter was used to check the samples for

interference prior to analysis. 652690002 (ARK-ARAMW-9), 652690004 (ARK-ARAMW-7) and 652690005 (ARK-ARGWC-22).

Product: **Alkalinity**
Analytical Method: SM 2320B
Analytical Procedure: GL-GC-E-033 REV# 16
Analytical Batch: 2558602

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

GEL Sample ID#	Client Sample Identification
652690001	ARK-ARGWA-19
652690002	ARK-ARAMW-9
652690003	ARK-ARGWA-20
652690004	ARK-ARAMW-7
652690005	ARK-ARGWC-22
1205631785	Laboratory Control Sample (LCS)
1205631787	Laboratory Control Sample Duplicate (LCSD)

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

Laboratory Control Sample Duplicate (LCSD)
An LCSD was used in place of matrix QC due to limited 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.

Technical Case Narrative
Georgia Power Company
SDG #: 652874

Metals

Product: **Determination of Metals by ICP-MS**
Analytical Method: SW846 3005A/6020B
Analytical Procedure: GL-MA-E-014 REV# 36
Analytical Batch: 2558920

Preparation Method: SW846 3005A
Preparation Procedure: GL-MA-E-006 REV# 14
Preparation Batch: 2558919

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

GEL Sample ID#	Client Sample Identification
652874001	ARK-ARGWC-21
652874002	ARK-ARGWC-23
652874003	ARK-ARAMW-1
652874004	ARK-ARAMW-2
652874005	ARK-ARAMW-8
652874006	ARK-AP2-EB-03
652874007	ARK-AP2-FB-03
652874008	ARK-ARGWC-21
652874009	ARK-ARGWC-23
652874010	ARK-ARAMW-1
652874011	ARK-ARAMW-2
652874012	ARK-ARAMW-8
1205632306	Method Blank (MB)**ICP-MS**
1205632307	Laboratory Control Sample (LCS)
1205632310	652874001(ARK-ARGWC-21L) Serial Dilution (SD)
1205632308	652874001(ARK-ARGWC-21S) Matrix Spike (MS)
1205632309	652874001(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 652874001 (ARK-ARGWC-21), 652874002 (ARK-ARGWC-23), 652874003 (ARK-ARAMW-1), 652874004 (ARK-ARAMW-2) and 652874005 (ARK-ARAMW-8) were diluted to ensure that the analyte concentrations were within the linear calibration range of the instrument.

Analyte	652874				
	001	**002**	**003**	**004**	**005**
Boron	10X	5X	10X	10X	5X
Calcium	10X	5X	10X	10X	5X

Product: **Mercury Analysis Using the Perkin Elmer Automated Mercury Analyzer**
Analytical Method: SW846 7470A
Analytical Procedure: GL-MA-E-010 REV# 40
Analytical Batch: 2558965

Preparation Method: SW846 7470A Prep
Preparation Procedure: GL-MA-E-010 REV# 40
Preparation Batch: 2558964

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

GEL Sample ID#	Client Sample Identification
652874001	ARK-ARGWC-21
652874002	ARK-ARGWC-23
652874003	ARK-ARAMW-1
652874004	ARK-ARAMW-2
652874005	ARK-ARAMW-8
652874006	ARK-AP2-EB-03
652874007	ARK-AP2-FB-03
1205632411	Method Blank (MB)**CVAA**
1205632412	Laboratory Control Sample (LCS)
1205632415	652847001(NonSDGL) Serial Dilution (SD)
1205632413	652847001(NonSDGD) Sample Duplicate (DUP)
1205632414	652847001(NonSDGS) Matrix Spike (MS)

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

Data Summary:

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

Technical Information

Preparation Information
The samples and associated matrix QC 1205632413 (Non SDG 652847001DUP), 1205632414 (Non SDG 652847001MS) and 1205632415 (Non SDG 652847001SDILT) were prepared at a dilution for CVAA analysis because larger volumes of the matrix consume excessive amounts of potassium permanganate.

General Chemistry

Product: **Ion Chromatography**
Analytical Method: EPA 300.0
Analytical Procedure: GL-GC-E-086 REV# 34
Analytical Batch: 2559394

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

GEL Sample ID#	Client Sample Identification
652874001	ARK-ARGWC-21
652874002	ARK-ARGWC-23
652874003	ARK-ARAMW-1
652874004	ARK-ARAMW-2
1205633068	Method Blank (MB)
1205633069	Laboratory Control Sample (LCS)
1205633070	652703014(ARK-AP1PZ-10) Sample Duplicate (DUP)
1205633071	652703014(ARK-AP1PZ-10) Post Spike (PS)

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

Data Summary:

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

Quality Control (QC) Information

Matrix Spike (MS)/Post Spike (PS) Recovery Statement
The percent recoveries (%R) obtained from the spike analyses are evaluated when the sample concentration is less than four times (4X) the spike concentration added. The matrix spike recovered outside of the established acceptance limits due to matrix interference and/or non-homogeneity.

Analyte	Sample	Value
Chloride	1205633071 (ARK-AP1PZ-10PS)	119* (90%-110%)

Technical Information

Sample Dilutions
The following samples 1205633070 (ARK-AP1PZ-10DUP), 1205633071 (ARK-AP1PZ-10PS), 652874001 (ARK-ARGWC-21), 652874002 (ARK-ARGWC-23), 652874003 (ARK-ARAMW-1) and 652874004 (ARK-ARAMW-2) 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	652874			
	001	002	003	004
Sulfate	25X	10X	25X	25X

Product: **Ion Chromatography**
Analytical Method: EPA 300.0

Analytical Procedure: GL-GC-E-086 REV# 34
Analytical Batch: 2560129

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

GEL Sample ID#	Client Sample Identification
652874005	ARK-ARAMW-8
652874006	ARK-AP2-EB-03
652874007	ARK-AP2-FB-03
1205634482	Method Blank (MB)
1205634483	Laboratory Control Sample (LCS)
1205634484	652874005(ARK-ARAMW-8) Sample Duplicate (DUP)
1205634485	652874005(ARK-ARAMW-8) Post Spike (PS)
1205634486	653067010(NonSDG) Sample Duplicate (DUP)
1205634487	653067010(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.

Quality Control (QC) Information

Matrix Spike (MS)/Post Spike (PS) Recovery Statement
The percent recoveries (%R) obtained from the spike analyses are evaluated when the sample concentration is less than four times (4X) the spike concentration added. The matrix spike recovered outside of the established acceptance limits due to matrix interference and/or non-homogeneity.

Analyte	Sample	Value
Chloride	1205634487 (Non SDG 653067010PS)	112* (90%-110%)

Technical Information

Sample Dilutions
The following samples 1205634484 (ARK-ARAMW-8DUP), 1205634485 (ARK-ARAMW-8PS) and 652874005 (ARK-ARAMW-8) 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	652874 005
Sulfate	10X

Product: **Nitrate/Nitrite Cad Redux Low Level**
Analytical Method: EPA 353.2 Low Level
Analytical Procedure: GL-GC-E-128 REV# 15
Analytical Batch: 2558935

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

GEL Sample ID#	Client Sample Identification
652874001	ARK-ARGWC-21
652874002	ARK-ARGWC-23
652874003	ARK-ARAMW-1
652874004	ARK-ARAMW-2
652874005	ARK-ARAMW-8
652874006	ARK-AP2-EB-03
652874007	ARK-AP2-FB-03
1205632349	Method Blank (MB)
1205632350	Laboratory Control Sample (LCS)
1205632351	652874001(ARK-ARGWC-21) Sample Duplicate (DUP)
1205632352	652874001(ARK-ARGWC-21) Post Spike (PS)
1205632353	652879003(ARK-ARGWA-24) Sample Duplicate (DUP)
1205632354	652879003(ARK-ARGWA-24) 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 Re-analysis
Samples 652874001 (ARK-ARGWC-21) and 652874006 (ARK-AP2-EB-03) 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: 2561127

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

GEL Sample ID#	Client Sample Identification
652874007	ARK-AP2-FB-03
1205636342	Method Blank (MB)
1205636343	Laboratory Control Sample (LCS)
1205636344	652726001(NonSDG) Sample Duplicate (DUP)

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

Data Summary:

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

Product: **Solids, Total Dissolved**

Analytical Method: SM 2540C
Analytical Procedure: GL-GC-E-001 REV# 21
Analytical Batch: 2561128

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

GEL Sample ID#	Client Sample Identification
652874001	ARK-ARGWC-21
652874002	ARK-ARGWC-23
652874003	ARK-ARAMW-1
652874004	ARK-ARAMW-2
652874005	ARK-ARAMW-8
652874006	ARK-AP2-EB-03
1205636355	Method Blank (MB)
1205636356	Laboratory Control Sample (LCS)
1205636357	652743002(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# 16
Analytical Batch: 2560083

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

GEL Sample ID#	Client Sample Identification
652874001	ARK-ARGWC-21
652874002	ARK-ARGWC-23
652874003	ARK-ARAMW-1
652874004	ARK-ARAMW-2
652874005	ARK-ARAMW-8
1205634435	Laboratory Control Sample (LCS)
1205634440	Laboratory Control Sample (LCS)
1205634454	Laboratory Control Sample Duplicate (LCSD)
1205634455	Laboratory Control Sample Duplicate (LCSD)

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

Laboratory Control Sample Duplicate (LCSD)
An LCSD was used in place of matrix QC due to limited 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.

Page: 1 of 1
Project # 175569434
GEL Quote #:
COC Number (1): 2 Sample Cooler(s)
PO Number: GPC82177-0005

GEL Laboratories LLC
Chemistry | Radiochemistry | Radiobioassay | Specialty Analytics
Rev1
652690
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

1/24/24

Client Name: Georgia Power — Phone # (937-344-6533)
Project/Site Name: Plant Arkwright Ash Pond 2 — Fax: N/A
Address: 241 Ralph McGill Blvd SE, Atlanta, GA 30308
Collected By: John Myer, Dylan Ripley — Send Results To: jabraham@southernco.com EDD@stantec.com Cassidy.Sutherland@stantec.com

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

Sample ID (* For composites - indicate start and stop date/time)	*Date Collected (mm-dd-yy)	*Time Collected (Military) (hhmm)	QC Code (2)	Field Filtered (3)	Sample Matrix (4)	Should this sample be considered: Radioactive (If yes, please supply isotopic info.)	Should this sample be considered: (7) Known or possible Hazards	Total number of containers	Ag (App. I) (6020B) NI	Metals App. III (6020B) NI	Alkalinity (300.0 R2.1)	TDS (SM Method 2540C)	Anions (Cl, Fl, Sulfate) (300.0 Rev: 2.1 1993	Metals App. IV (6020B) NI	RAD 226-228 Cmbd NI	Mercury (7470B) NI	Metals Al, K, Mg, Na, Fe, Mn (6020B) NI	Fe2+/ Mn2+ (6020B) Field Filtered NI	Nitrate/ Nitrite (EPA Method 353.2) SA	<-- Preservative Type (6)	Comments (task_code: ARK-CCR-ASSMT-2024S1)
ARK-ARAMW-7	1/23/2024	16:50	N	N	WG			8	X	X	X	X	X	X	X	X	X		X		
ARK-ARAMW-9	1/23/2024	14:30	N	N	WG			8	X	X	X	X	X	X	X	X	X		X		
ARK-ARGWA-19	1/23/2024	11:25	N	N	WG			8	X	X	X	X	X	X	X	X	X		X		
ARK-ARGWA-20	1/23/2024	14:40	N	N	WG			8	X	X	X	X	X	X	X	X	X		X		
ARK-ARGWC-22	1/23/2024	17:10	N	N	WG			8	X	X	X	X	X	X	X	X	X		X		
ARK-AP2-FD-03	1/23/2024	NA	FD	N	WQ			7		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	Stantec	1/24/2024	1		
2			2		
3			3		

TAT Requested: Normal: X 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

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

Sample Collection Time Zone : [X] 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, **HX** = Hexane, **ST** = Sodium Thiosulfate, If no preservative is added = leave field blank

Revised on 1/25/2024

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
FL = Flammable/Ignitable
CO = Corrosive
RE = Reactive

TSCA Regulated
PCB = Polychlorinated biphenyls

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.)

Page: 1 of 1
Project # 175569434
GEL Quote #:
COC Number (1): 2 Sample Cooler(s)
PO Number: GPC82177-0005

GEL Laboratories LLC
Chemistry | Radiochemistry | Radiobioassay | Specialty Analytics

Chain of Custody and Analytical Request

Rev 1

652690

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

1/26/24

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

Project/Site Name: Plant Arkwright Ash Pond 2 — Fax: N/A

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

Collected By: John Myer, Dylan Ripley — Send Results To: jabraham@southernco.com EDD@stantec.com Cassidy.Sutherland@stantec.com

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

Sample ID (* For composites - indicate start and stop date/time)	*Date Collected (mm-dd-yy)	*Time Collected (Military) (hhmm)	QC Code (2)	Field Filtered (3)	Sample Matrix (4)	Should this sample be considered: Radioactive (If yes, please supply isotopic info.)	Should this sample be considered: (7) Known or possible Hazards	Total number of containers	NI Ag (App. I) (6020B)_DISS	NI Metals App. III (6020B)_DISS	Alkalinity (300.0 R2.1)	TDS (SM Method 2540C)	Anions (Cl, Fl, Sulfate) (300.0 Rev. 2.1 1993	NI Metals App. IV (6020B)_DISS	RAD 226-228 Cmbd	NI Mercury (7470B)_DISS	NI Metals Al, K, Mg, Na, Fe, Mn (6020B) DISS	NI Fe2+/ Mn2+ (6020B)_DISS	SA Nitrate/ Nitrite (EPA Method 353.2)	<-- Preservative Type (6) Comments (task_code: ARK-CCR-ASSMT-2024S1)
ARK-ARAMW-7	1/23/2024	16:50	N	Y	WG			1										X		
ARK-ARAMW-9	1/23/2024	14:30	N	Y	WG			1										X		
ARK-ARGWA-19	1/23/2024	11:25	N	Y	WG			1										X		
ARK-ARGWA-20	1/23/2024	14:40	N	Y	WG			1	X	X				X		X	X	X		Analyze filtered sample for all metals
ARK-ARGWC-22	1/23/2024	17:10	N	Y	WG			1										X		

Chain of Custody Signatures

	Relinquished By (Signed)	Print Name	Date	Received by (signed)	Print Name	Date
1	John Myer	Stantec	1/24/2024	1		
2				2		
3				3		

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

TAT Requested: Normal: X 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 [ ] 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, **HX** = Hexane, **ST** = Sodium Thiosulfate, If no preservative is added = leave field blank

Revised on 1/25/2024

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
FL = Flammable/Ignitable
CO = Corrosive
RE = Reactive

TSCA Regulated
PCB = Polychlorinated biphenyls

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.)

Page: 1 of 1
Project # 175569434
GEL Quote #:
COC Number [1]: 2 Sample Cooler(s)
PO Number: GPC82177-0005

Laboratories LLC
Chemistry | Radiochemistry | Radiobioassay | Specialty Analytics

Chain of Custody and Analytical Request

652690 WJ 652614

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

652690

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

Client Name: Georgia Power — Phone # (937-344-6533)
Project/Site Name: Plant Arkwright Ash Pond 2 — Fax: N/A
Address: 241 Ralph McGill Blvd SE, Atlanta, GA 30308
Collected By: John Myer, Dylan Ripley — Send Results To: jabraham@southernco.com EDD@stantec.com Cassidy.Sutherland@stantec.com

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

Sample ID (* For composites - indicate start and stop date/time)	*Date Collected (mm-dd-yy)	*Time Collected (Military) (hhmm)	QC Code [2]	Field Filtered [3]	Sample Matrix [4]	Should this sample be considered: Radioactive (If yes, please supply isotopic info.)	Should this sample be considered: (7) Known or possible Hazards	Total number of containers	NI Ag (App. I) (6020B)	NI Metals App. III (6020B)	Alkalinity (300.0 R2.1)	TDS (SM Method 2540C)	Anions (Cl, Fl, Sulfate) (300.0 Rev. 2.1 1993)	NI Metals App. IV (6020B)	NI RAD 226-228 Cmbd	NI Mercury (7470B)	NI Metals Al, K, Mg, Na, Fe, Mn (6020B)	NI Fe2+/ Mn2+ (6020B) Field Filtered	SA Nitrate/ Nitrite (EPA Method 353.2)	<-- Preservative Type (6)
ARK-ARGWA-19	1/23/2024	11:25	N	Y	WG			9	X	X	X	X	X	X	X	X	X	X	X	
ARK-ARAMW-9	1/23/2024	14:30	N	Y	WG			9	X	X	X	X	X	X	X	X	X	X	X	
ARK-ARGWA-20	1/23/2024	14:40	N	Y	WG			9	X	X	X	X	X	X	X	X	X	X	X	Analyze Filtered sample for Appx. IV Metals
ARK-ARAMW-7	1/23/2024	16:50	N	Y	WG			9	X	X	X	X	X	X	X	X	X	X	X	
ARK-ARGWC-22	1/23/2024	17:10	N	Y	WG			9	X	X	X	X	X	X	X	X	X	X	X	
ARK-AP2-FD-03	1/23/2024	NA	FD	N	WQ			7		X		X	X	X	X	X			X	

Comments (task_code: ARK-CCR-ASSMT-2024S1)

Chain of Custody Signatures

	Relinquished By (Signed)	Print Name	Date	Received by (signed)	Print Name	Date
1		Stantec	1/24/24			1/24/2024
2						1/24/24 1335
3						

TAT Requested: Normal: X 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:*** 7 °C

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

Sample Collection Time Zone : [X] Eastern [ ] Pacific [ ] Central [ ] Mountain [ ] Other:

1.) Chain of Custody Number = Client Determined

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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

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Page 83 of 91 SDG: 652690

Page: 1 of 1
Project # 175569434
GEL Quote #:
COC Number [1]: 2 Sample Cooler(s)
PO Number: GPC82177-0005

GEL Laboratories LLC
Chemistry | Radiochemistry | Radiobioassay | 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: N/A
Address: 241 Ralph McGill Blvd SE, Atlanta, GA 30308
Collected By: John Myer, Dylan Ripley — Send Results To: jabraham@southernco.com EDD@stantec.com Cassidy.Sutherland@stantec.com

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Sample ID (* For composites - indicate start and stop date/time)	*Date Collected (mm-dd-yy)	*Time Collected (Military) (hhmm)	QC Code [2]	Field Filtered [3]	Sample Matrix [4]	Should this sample be considered: Radioactive (If yes, please supply isotopic info.)	Should this sample be considered: (7) Known or possible Hazards	Total number of containers	NI Ag (App. I) (6020B)	NI Metals App. III (6020B)	Alkalinity (300.0 R2.1)	TDS (SM Method 2540C)	Anions (Cl, Fl, Sulfate) (300.0 Rev. 2.1 1993)	NI Metals App. IV (6020B)	NI RAD 226-228 Cmbd	NI Mercury (7470B)	NI Metals Al, K, Mg, Na, Fe, Mn (6020B)	NI Fe2+/Mn2+ (6020B) Field Filtered	SA Nitrate/ Nitrite (EPA Method 353.2)	<-- Preservative Type (6)	Comments (task_code: ARK-CCR-ASSMT-2024S1)
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ARK-AP2-FD-03	1/23/2024	NA	FD	N	WQ			7		X		X	X	X	X	X			X		

Chain of Custody Signatures

	Relinquished By (Signed)	Print Name	Date	Received by (signed)	Print Name	Date
1		Stantec	1/24/24			1/24/2024
2						1/24/24 1335
3				3		

TAT Requested: Normal: X 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

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

Sample Collection Time Zone : [X] Eastern [ ] Pacific [ ] Central [ ] Mountain [ ] Other:

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(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.)

652694 652704 652703 WS

GEL Laboratories LLC

SAMPLE RECEIPT & REVIEW FORM

Client: GPCC	**SDG/AR/COC/Work Order:**
Received By: QG	**Date Received:** 1/24/24
Carrier and Tracking Number	Circle Applicable: FedEx Express FedEx Ground UPS Field Services Courier (Other)
	n/a

Suspected Hazard Information	Yes	No	
			*If Net Counts > 100cpm on samples not marked "radioactive", contact the Radiation Safety Group for further investigation.
A)Shipped as a DOT Hazardous?		✓	Hazard Class Shipped: UN#: If UN2910, Is the Radioactive Shipment Survey Compliant? Yes___ No___
B) Did the client designate the samples are to be received as radioactive?		✓	COC notation or radioactive stickers on containers equal client designation.
C) Did the RSO classify the samples as radioactive?		✓	Maximum Net Counts Observed* (Observed Counts - Area Background Counts): 0 (CPM / mR/Hr) **Classified as: Rad 1 Rad 2 Rad 3**
D) Did the client designate samples are hazardous?		✓	COC notation or hazard labels on containers equal client designation.
E) Did the RSO identify possible hazards?		✓	If D or E is yes, select Hazards below. PCB's Flammable Foreign Soil RCRA Asbestos Beryllium Other:

	Sample Receipt Criteria	Yes	NA	No	**Comments/Qualifiers (Required for Non-Conforming Items)**
1	Shipping containers received intact and sealed?	✓			Circle Applicable: Seals broken Damaged container Leaking container Other (describe)
2	Chain of custody documents included with shipment?	✓			Circle Applicable: Client contacted and provided COC COC created upon receipt
3	Samples requiring cold preservation within (0 ≤ 6 deg. C)?*	✓			Preservation Method: (Wet Ice) Ice Packs Dry ice None Other: *all temperatures are recorded in Celsius TEMP: 7.2
4	Daily check performed and passed on IR temperature gun?	✓			**Temperature Device Serial #:** IR1-23 Secondary Temperature Device Serial # (If Applicable):
5	Sample containers intact and sealed?	✓			Circle Applicable: Seals broken Damaged container Leaking container Other (describe)
6	Samples requiring chemical preservation at proper pH?			✓	Sample ID's and Containers Affected: If Preservation added, Lot#:
7	Do any samples require Volatile Analysis?			✓	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?	✓			ID's and tests affected:
9	Sample ID's on COC match ID's on bottles?	✓			ID's and containers affected:
10	Date & time on COC match date & time on bottles?	✓			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?			✓	Circle Applicable: No container count on COC Other (describe)
12	Are sample containers identifiable as GEL provided by use of GEL labels?			✓	
13	COC form is properly signed in relinquished/received sections?			✓	Circle Applicable: Not relinquished Other (describe)

Comments (Use Continuation Form if needed):

PM (or PMA) review: Initials WS Date 1/25/24 Page 1 of 1

Page: 1 of 1
Project # 175569434
GEL Quote #:
COC Number (1): 2 Sample Cooler(s)
PO Number: GPC82177-0005

GEL Laboratories LLC Rev1
Chemistry | Radiochemistry | Radiobioassay | Specialty Analytics
652874
Chain of Custody and Analytical Request

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

1/26/24

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

Client Name: Georgia Power Phone # (937-344-6533)
Project/Site Name: Plant Arkwright Ash Pond 2 Fax: N/A
Address: 241 Ralph McGill Blvd SE, Atlanta, GA 30308
Collected By: Zach Levy, Dylan Ripley, Emily Scheiben Send Results To: jabraham@southernco.com EDD@stantec.com Cassidy.Sutherland@stantec.com

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

Sample ID * For composites - indicate start and stop date/time	*Date Collected (mm-dd-yy)	*Time Collected (Military) (hhmm)	QC Code (2)	Field Filtered (3)	Sample Matrix (4)	Should this sample be considered: Radioactive (If yes, please supply isotopic info.)	Should this sample be considered: (7) Known or possible Hazards	Total number of containers	NI Ag (App. I) (6020B)_DISS	NI Metals App. III (6020B)_DISS	Alkalinity (300.0 R2.1)	TDS (SM Method 2540C)	Anions (Cl, Fl, Sulfate) (300.0 Rev. 2.1 1993	NI Metals App. IV (6020B)_DISS	NI RAD 226-228 Cmbd	NI Mercury (7470B)_DISS	NI Metals Al, K, Mg, Na, Fe, Mn (6020B)_DISS	NI Fe2+/ Mn2+ (6020B)_DISS	SA Nitrate/ Nitrite (EPA Method 353.2)	<-- Preservative Type (6) Comments (task_code: ARK-CCR-ASSMT-2024S1)
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ARK-ARAMW-8	1/24/2024	13:25	N	Y	WG			1										X		
ARK-ARGWC-21	1/24/2024	10:00	N	Y	WG			1										X		
ARK-ARGWC-23	1/24/2024	10:45	N	Y	WG			1										X		

Chain of Custody Signatures

Relinquished By (Signed)	Print Name	Date	Received by (signed)	Print Name	Date
1 John Myer	Stantec	1/25/2024	1		
2			2		
3			3		

TAT Requested: **Normal:** X **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*

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Revised on 1/25/2024

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GEL Laboratories LLC — Rev 1
gel.com | Chemistry | Radiochemistry | Radiobioassay | Specialty Analytics

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Charleston, SC 29407
Phone: (843) 556-8171
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1/26/24

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Project/Site Name: Plant Arkwright Ash Pond 2 — Fax: N/A
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Collected By: Zach Levy, Dylan Ripley, Emily Scheiben
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Relinquished By (Signed)	Print Name	Date	Received by (signed)	Print Name	Date
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2			2		
3			3		

TAT Requested: Normal: X 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:

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Revised on 1/25/2024

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Project # 175569434

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QC Number [1]: 2 Sample Cooler(s)

PO Number: GPC82177-0005

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

Project/Site Name: Plant Arkwright Ash Pond _2_ Fax: N/A

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

Collected By: Zach Levy, Dylan Ripley, Emily Scheiben

Send Results To: jabraham@southernco.com EDD@stantec.com Cassidy.Sutherland@stantec.com

GEL Laboratories LLC 652877

Chemistry | Radiochemistry | Radiobioassay | Specialty Analytics

Chain of Custody and Analytical Request 652874

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

Page 88 of 91 SDG: 652690

Sample ID * For composites - indicate start and stop date/time	*Date Collected (mm-dd-yy)	*Time Collected (Military) (hhmm)	QC Code [2]	Field Filtered [3]	Sample Matrix [4]	Should this sample be considered: Radioactive (If yes, please supply isotopic info.)	Should this sample be considered: (7) Known or possible Hazards	Total number of containers	NI Ag (App. I) (6020B)	NI Metals App. III (6020B)	Alkalinity (300.0 R2.1)	TDS (SM Method 2540C)	Anions (Cl, Fl, Sulfate) (300.0 Rev. 2.1 1993)	Metals App. IV (6020B)	RAD 226-228 Cmbd	Mercury (7470B)	NI Metals Al, K, Mg, Na, Fe, Mn (6020B)	NI Fe2+/Mn2+ (6020B) Field Filtered	SA Nitrate/ Nitrite (EPA Method 353.2)	<-- Preservative Type (6)
ARK-ARGWC-21	1/24/2024	10:00	N	Y	WG			9	X	X	X	X	X	X	X	X	X	X	X	
ARK-ARGWC-23	1/24/2024	10:45	N	Y	WG			9	X	X	X	X	X	X	X	X	X	X	X	
ARK-ARAMW-1	1/24/2024	11:50	N	Y	WG			9	X	X	X	X	X	X	X	X	X	X	X	
ARK-ARAMW-2	1/24/2024	10:45	N	Y	WG			9	X	X	X	X	X	X	X	X	X	X	X	
ARK-ARAMW-8	1/24/2024	13:25	N	Y	WG			9	X	X	X	X	X	X	X	X	X	X	X	
ARK-AP2-EB-03	1/24/2024	11:55	EB	N	WQ			7		X		X	X	X	X	X			X	
ARK-AP2-FB-03	1/24/2024	11:45	FB	N	WQ			7		X		X	X	X	X	X			X	

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

Comments (task_code: ARK-CCR-ASSMT-2024S1)

Chain of Custody Signatures

	Relinquished By (Signed)	Print Name	Date	Received by (signed)	Print Name	Date
1		Stantec	1/25/24			1/25/2024
2			1/25/2024			1/25/24 1440
3						

TAT Requested: **Normal:** X **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:*** 2 °C

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

Sample Collection Time Zone : [X] 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, **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
FL = Flammable/Ignitable
CO = Corrosive
RE = Reactive

TSCA Regulated
PCB = Polychlorinated biphenyls

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.)

Page: 1 of 1
Project # 175569434
GEL Quote #:
COC Number (1): 2 Sample Cooler(s)
PO Number: GPC82177-0005

GEL Laboratories LLC
Chemistry | Radiochemistry | Radiobioassay | Specialty Analytics

652877
652874

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: N/A

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

Collected By: Zach Levy, Dylan Ripley, Emily Scheiben

Send Results To: jabraham@southernco.com EDD@stantec.com Cassidy.Sutherland@stantec.com

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

Sample ID (* For composites - indicate start and stop date/time)	*Date Collected (mm-dd-yy)	*Time Collected (Military) (hhmm)	QC Code (2)	Field Filtered (3)	Sample Matrix (4)	Should this sample be considered: Radioactive (If yes, please supply isotopic info.)	Should this sample be considered: (7) Known or possible Hazards	Total number of containers	NI Ag (App. I) (6020B)	NI Metals App. III (6020B)	Alkalinity (300.0 R2.1)	TDS (SM Method 2540C)	Anions (Cl, Fl, Sulfate) (300.0 Rev. 2.1 1993)	NI Metals App. IV (6020B)	NI RAD 226-228 Cmbd	NI Mercury (7470B)	NI Metals Al, K, Mg, Na, Fe, Mn (6020B)	NI Fe2+/ Mn2+ (6020B) Field Filtered	SA Nitrate/ Nitrite (EPA Method 353.2)	<-- Preservative Type (6)	Comments (task_code: ARK-CCR-ASSMT-2024S1)
ARK-ARGWC-21	1/24/2024	10:00	N	Y	WG			9	X	X	X	X	X	X	X	X	X	X	X		
ARK-ARGWC-23	1/24/2024	10:45	N	Y	WG			9	X	X	X	X	X	X	X	X	X	X	X		
ARK-ARAMW-1	1/24/2024	11:50	N	Y	WG			9	X	X	X	X	X	X	X	X	X	X	X		
ARK-ARAMW-2	1/24/2024	10:45	N	Y	WG			9	X	X	X	X	X	X	X	X	X	X	X		
ARK-ARAMW-8	1/24/2024	13:25	N	Y	WG			9	X	X	X	X	X	X	X	X	X	X	X		
ARK-AP2-EB-03	1/24/2024	11:55	EB	N	WQ			7		X		X	X	X	X	X			X		
ARK-AP2-FB-03	1/24/2024	11:45	FB	N	WQ			7		X		X	X	X	X	X			X		

Chain of Custody Signatures

	Relinquished By (Signed)	Print Name	Date	Received by (signed)	Print Name	Date
1		Stantec	1/25/24			1/25/2024
2			1/25/2024			1/25/24 1440
3						

TAT Requested: Normal: X 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:*** 2 °C

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

Sample Collection Time Zone : [X] 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, **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
FL = Flammable/Ignitable
CO = Corrosive
RE = Reactive

TSCA Regulated
PCB = Polychlorinated biphenyls

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.)

Page 69 of 691 SDG: 69690

GEL Laboratories LLC

652877 / ~~652881~~ WJ 1/30/23

SAMPLE RECEIPT & REVIEW FORM

652881

Client: GPCC	**SDG/AR/COC/Work Order:**
Received By: QG	**Date Received:** 1/25/24
Carrier and Tracking Number	Circle Applicable: FedEx Express FedEx Ground UPS Field Services Courier Other

n/a

Suspected Hazard Information	Yes	No	
			*If Net Counts > 100cpm on samples not marked "radioactive", contact the Radiation Safety Group for further investigation.
A)Shipped as a DOT Hazardous?			Hazard Class Shipped: UN#: If UN2910, Is the Radioactive Shipment Survey Compliant? Yes___ No___
B) Did the client designate the samples are to be received as radioactive?			COC notation or radioactive stickers on containers equal client designation.
C) Did the RSO classify the samples as radioactive?			Maximum Net Counts Observed* (Observed Counts - Area Background Counts): 0 CPM / mR/Hr **Classified as: Rad 1 Rad 2 Rad 3**
D) Did the client designate samples are hazardous?			COC notation or hazard labels on containers equal client designation.
E) Did the RSO identify possible hazards?			If D or E is yes, select Hazards below. PCB's Flammable Foreign Soil RCRA Asbestos Beryllium Other:

	Sample Receipt Criteria	Yes	NA	No	**Comments/Qualifiers (Required for Non-Conforming Items)**
1	Shipping containers received intact and sealed?				Circle Applicable: Seals broken Damaged container Leaking container Other (describe)
2	Chain of custody documents included with shipment?				Circle Applicable: Client contacted and provided COC COC created upon receipt
3	Samples requiring cold preservation within (0 ≤ 6 deg. C)?*				Preservation Method: Wet Ice Ice Packs Dry ice None Other: *all temperatures are recorded in Celsius **TEMP:** 2 c
4	Daily check performed and passed on IR temperature gun?	✔			**Temperature Device Serial #:** IR1-23 Secondary Temperature Device Serial # (If Applicable):
5	Sample containers intact and sealed?				Circle Applicable: Seals broken Damaged container Leaking container Other (describe)
6	Samples requiring chemical preservation at proper pH?				Sample ID's and Containers Affected: If Preservation added, Lot#:
7	Do any samples require Volatile Analysis?				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?				ID's and tests affected:
9	Sample ID's on COC match ID's on bottles?				ID's and containers affected:
10	Date & time on COC match date & time on bottles?				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?				Circle Applicable: No container count on COC Other (describe)
12	Are sample containers identifiable as GEL provided by use of GEL labels?				
13	COC form is properly signed in relinquished/received sections?				Circle Applicable: Not relinquished Other (describe)

Comments (Use Continuation Form if needed):

PM (or PMA) review: Initials WJ Date 1/26/24 Page 1 of 1

List of current GEL Certifications as of 07 February 2024

State	Certification
Alabama	42200
Alaska	17-018
Alaska Drinking Water	SC00012
Arkansas	88-00651
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	KY90129
Kentucky Wastewater	KY90129
Louisiana Drinking Water	LA024
Louisiana NELAP	03046 (AI33904)
Maine	2023019
Maryland	270
Massachusetts	M-SC012
Massachusetts PFAS Approv	Letter
Michigan	9976
Mississippi	SC00012
Nebraska	NE-OS-26-13
Nevada	SC000122024-05
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	2023-152
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	T104704235-23-21
Utah NELAP	SC000122023-38
Vermont	VT87156
Virginia NELAP	460202
Washington	C780

GEL Laboratories LLC
a member of The GEL Group INC

2040 Savage Road | Charleston, SC 29407
843.556.8171
gel.com

February 20, 2024

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: 652877 and 652694

Dear Joju Abraham:

GEL Laboratories, LLC (GEL) appreciates the opportunity to provide the enclosed analytical results for the sample(s) we received on January 24, 2024 and January 25, 2024. 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):

Laboratory ID	Client ID	Matrix	Date Collected	Date Recieved
652694001	ARK-ARGWA-19	Ground Water	23/01/24 11:25	24/01/24 13:35
652694002	ARK-ARAMW-9	Ground Water	23/01/24 14:30	24/01/24 13:35
652694003	ARK-ARGWA-20	Ground Water	23/01/24 14:40	24/01/24 13:35
652694004	ARK-ARAMW-7	Ground Water	23/01/24 16:50	24/01/24 13:35
652694005	ARK-ARGWC-22	Ground Water	23/01/24 17:10	24/01/24 13:35
652694006	ARK-AP2-FD-03	Ground Water	23/01/24 12:00	24/01/24 13:35
652877001	ARK-ARGWC-21	Ground Water	24/01/24 10:00	25/01/24 14:40
652877002	ARK-ARGWC-23	Ground Water	24/01/24 10:45	25/01/24 14:40
652877003	ARK-ARAMW-1	Ground Water	24/01/24 11:50	25/01/24 14:40
652877004	ARK-ARAMW-2	Ground Water	24/01/24 10:45	25/01/24 14:40
652877005	ARK-ARAMW-8	Ground Water	24/01/24 13:25	25/01/24 14:40
652877006	ARK-AP2-EB-03	Ground Water	24/01/24 11:55	25/01/24 14:40
652877007	ARK-AP2-FB-03	Ground Water	24/01/24 11:45	25/01/24 14:40

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

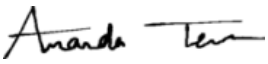
Not Applicable

Analysis Methods and Analysis Dates

Method	Run Date ID
Calculation	20-FEB-2024
EPA 903.1 Modified	01-FEB-2024
EPA 903.1 Modified	06-FEB-2024
EPA 903.1 Modified	08-FEB-2024
EPA 904.0/SW846 9320 Modified	15-FEB-2024
EPA 904.0/SW846 9320 Modified	20-FEB-2024

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,



Amanda Turner 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: 652694 GEL Work Order: 652694

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 Amanda Tenn

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: 652877 GEL Work Order: 652877

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 Amanda Tenn

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: February 20, 2024

Contact: Joju Abraham

Project: Arkwright CCR Groundwater ComplianceAP2-R

Client Sample ID: ARK-ARGWC-21
Sample ID: 652877001
Matrix: WG
Collect Date: 24-JAN-24
Receive Date: 25-JAN-24
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														
GFPC Ra228, Liquid "As Received"														
Radium-228	U	1.05	+/-1.02	1.67	+/-1.05	3.00	pCi/L			JE1	02/20/24	0832	2563659	1
Radium-226+Radium-228 Calculation "See Parent Products"														
Radium-226+228 Sum		5.34	+/-1.36	1.67	+/-1.55		pCi/L		1	NXL1	02/20/24	1249	2563660	2
Rad Radium-226														
Lucas Cell, Ra226, Liquid "As Received"														
Radium-226		4.29	+/-0.908	0.290	+/-1.14	1.00	pCi/L			LXP1	02/06/24	1039	2559126	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"	2563659	82.5	(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
DL: Detection Limit
Lc/LC: Critical Level
MDA: Minimum Detectable Activity
MDC: Minimum Detectable Concentration
Mtd.: Method
PF: Prep Factor
RL: Reporting Limit
TPU: Total Propagated Uncertainty

GEL LABORATORIES LLC
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: February 20, 2024

Contact: Joju Abraham

Project: Arkwright CCR Groundwater ComplianceAP2-R

Client Sample ID: ARK-ARGWC-23 Project: GPCC00100
Sample ID: 652877002 Client ID: GPCC001
Matrix: WG
Collect Date: 24-JAN-24
Receive Date: 25-JAN-24
Collector: Client

Parameter	Qualifier	Result	Uncertainty	MDC	TPU	RL	Units	PF	DF	Analyst	Date	Time	Batch	Mtd.
Rad Gas Flow Proportional Counting														
GFPC Ra228, Liquid "As Received"														
Radium-228		1.19	+/-0.758	1.11	+/-0.816	3.00	pCi/L			JE1	02/20/24	0832	2563659	1
Radium-226+Radium-228 Calculation "See Parent Products"														
Radium-226+228 Sum		2.73	+/-1.00	1.11	+/-1.08		pCi/L		1	NXL1	02/20/24	1249	2563660	2
Rad Radium-226														
Lucas Cell, Ra226, Liquid "As Received"														
Radium-226		1.54	+/-0.655	0.614	+/-0.709	1.00	pCi/L			LXP1	02/06/24	1039	2559126	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"	2563659	82.7	(15%-125%)

Notes:

The MDC is a sample specific MDC.
TPU and Counting Uncertainty are calculated at the 95% confidence level (1.96-sigma).

Column headers are defined as follows:

DF: Dilution Factor
DL: Detection Limit
Lc/LC: Critical Level
MDA: Minimum Detectable Activity
MDC: Minimum Detectable Concentration
Mtd.: Method
PF: Prep Factor
RL: Reporting Limit
TPU: Total Propagated Uncertainty

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: February 20, 2024

Contact: Joju Abraham

Project: Arkwright CCR Groundwater ComplianceAP2-R

Client Sample ID: ARK-ARAMW-1 Project: GPCC00100
Sample ID: 652877003 Client ID: GPCC001
Matrix: WG
Collect Date: 24-JAN-24
Receive Date: 25-JAN-24
Collector: Client

Parameter	Qualifier	Result	Uncertainty	MDC	TPU	RL	Units	PF	DF	Analyst	Date	Time	Batch	Mtd.
Rad Gas Flow Proportional Counting														
GFPC Ra228, Liquid "As Received"														
Radium-228		2.44	+/-1.16	1.62	+/-1.31	3.00	pCi/L			JE1	02/20/24	0832	2563659	1
Radium-226+Radium-228 Calculation "See Parent Products"														
Radium-226+228 Sum		9.30	+/-1.75	1.62	+/-2.19		pCi/L		1	NXL1	02/20/24	1249	2563660	2
Rad Radium-226														
Lucas Cell, Ra226, Liquid "As Received"														
Radium-226		6.85	+/-1.31	0.506	+/-1.76	1.00	pCi/L			LXP1	02/06/24	1039	2559126	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"	2563659	74.2	(15%-125%)

Notes:

The MDC is a sample specific MDC.
TPU and Counting Uncertainty are calculated at the 95% confidence level (1.96-sigma).

Column headers are defined as follows:

DF: Dilution Factor
DL: Detection Limit
Lc/LC: Critical Level
MDA: Minimum Detectable Activity
MDC: Minimum Detectable Concentration
Mtd.: Method
PF: Prep Factor
RL: Reporting Limit
TPU: Total Propagated Uncertainty

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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: February 20, 2024

Contact: Joju Abraham

Project: Arkwright CCR Groundwater ComplianceAP2-R

Client Sample ID: ARK-ARAMW-2 Project: GPCC00100
Sample ID: 652877004 Client ID: GPCC001
Matrix: WG
Collect Date: 24-JAN-24
Receive Date: 25-JAN-24
Collector: Client

Parameter	Qualifier	Result	Uncertainty	MDC	TPU	RL	Units	PF	DF	Analyst	Date	Time	Batch	Mtd.
Rad Gas Flow Proportional Counting														
GFPC Ra228, Liquid "As Received"														
Radium-228		2.75	+/-1.25	1.80	+/-1.43	3.00	pCi/L			JE1	02/20/24	0832	2563659	1
Radium-226+Radium-228 Calculation "See Parent Products"														
Radium-226+228 Sum		10.3	+/-1.76	1.80	+/-2.28		pCi/L		1	NXL1	02/20/24	1249	2563660	2
Rad Radium-226														
Lucas Cell, Ra226, Liquid "As Received"														
Radium-226		7.57	+/-1.23	0.364	+/-1.78	1.00	pCi/L			LXP1	02/06/24	1056	2559126	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"	2563659	83.1	(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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Address : Company
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Atlanta, Georgia 30308 Report Date: February 20, 2024

Contact: Joju Abraham

Project: Arkwright CCR Groundwater ComplianceAP2-R

Client Sample ID: ARK-ARAMW-8 Project: GPCC00100
Sample ID: 652877005 Client ID: GPCC001
Matrix: WG
Collect Date: 24-JAN-24
Receive Date: 25-JAN-24
Collector: Client

Parameter	Qualifier	Result	Uncertainty	MDC	TPU	RL	Units	PF	DF	Analyst	Date	Time	Batch	Mtd.
Rad Gas Flow Proportional Counting														
GFPC Ra228, Liquid "As Received"														
Radium-228		2.42	+/-1.01	1.30	+/-1.18	3.00	pCi/L			JE1	02/20/24	0832	2563659	1
Radium-226+Radium-228 Calculation "See Parent Products"														
Radium-226+228 Sum		2.87	+/-1.07	1.30	+/-1.24		pCi/L		1	NXL1	02/20/24	1249	2563660	2
Rad Radium-226														
Lucas Cell, Ra226, Liquid "As Received"														
Radium-226	U	0.444	+/-0.370	0.567	+/-0.383	1.00	pCi/L			LXP1	02/01/24	0957	2559525	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"	2563659	79.3	(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
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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Company : Georgia Power Company, Southern
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Atlanta, Georgia 30308 Report Date: February 20, 2024

Contact: Joju Abraham

Project: Arkwright CCR Groundwater ComplianceAP2-R

Client Sample ID: ARK-AP2-EB-03 Project: GPCC00100
Sample ID: 652877006 Client ID: GPCC001
Matrix: WQ
Collect Date: 24-JAN-24
Receive Date: 25-JAN-24
Collector: Client

Parameter	Qualifier	Result	Uncertainty	MDC	TPU	RL	Units	PF	DF	Analyst	Date	Time	Batch	Mtd.
Rad Gas Flow Proportional Counting														
GFPC Ra228, Liquid "As Received"														
Radium-228	U	0.834	+/-0.820	1.34	+/-0.847	3.00	pCi/L			JE1	02/20/24	0832	2563659	1
Radium-226+Radium-228 Calculation "See Parent Products"														
Radium-226+228 Sum	U	1.17	+/-0.877	1.34	+/-0.904		pCi/L		1	NXL1	02/20/24	1249	2563660	2
Rad Radium-226														
Lucas Cell, Ra226, Liquid "As Received"														
Radium-226	U	0.336	+/-0.310	0.428	+/-0.314	1.00	pCi/L			LXP1	02/01/24	0957	2559525	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"	2563659	77.6	(15%-125%)

Notes:

The MDC is a sample specific MDC.
TPU and Counting Uncertainty are calculated at the 95% confidence level (1.96-sigma).

Column headers are defined as follows:

DF: Dilution Factor
DL: Detection Limit
Lc/LC: Critical Level
MDA: Minimum Detectable Activity
MDC: Minimum Detectable Concentration
Mtd.: Method
PF: Prep Factor
RL: Reporting Limit
TPU: Total Propagated Uncertainty

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Atlanta, Georgia 30308 Report Date: February 20, 2024

Contact: Joju Abraham

Project: Arkwright CCR Groundwater ComplianceAP2-R

Client Sample ID: ARK-AP2-FB-03 Project: GPCC00100
Sample ID: 652877007 Client ID: GPCC001
Matrix: WQ
Collect Date: 24-JAN-24
Receive Date: 25-JAN-24
Collector: Client

Parameter	Qualifier	Result	Uncertainty	MDC	TPU	RL	Units	PF	DF	Analyst	Date	Time	Batch	Mtd.
Rad Gas Flow Proportional Counting														
GFPC Ra228, Liquid "As Received"														
Radium-228		2.28	+/-1.25	1.87	+/-1.38	3.00	pCi/L			JE1	02/20/24	0832	2563659	1
Radium-226+Radium-228 Calculation "See Parent Products"														
Radium-226+228 Sum		2.78	+/-1.33	1.87	+/-1.45		pCi/L		1	NXL1	02/20/24	1249	2563660	2
Rad Radium-226														
Lucas Cell, Ra226, Liquid "As Received"														
Radium-226	U	0.497	+/-0.443	0.692	+/-0.459	1.00	pCi/L			LXP1	02/01/24	0957	2559525	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"	2563659	82.2	(15%-125%)

Notes:

The MDC is a sample specific MDC.
TPU and Counting Uncertainty are calculated at the 95% confidence level (1.96-sigma).

Column headers are defined as follows:

DF: Dilution Factor
DL: Detection Limit
Lc/LC: Critical Level
MDA: Minimum Detectable Activity
MDC: Minimum Detectable Concentration
Mtd.: Method
PF: Prep Factor
RL: Reporting Limit
TPU: Total Propagated Uncertainty

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Atlanta, Georgia 30308 Report Date: February 20, 2024

Contact: Joju Abraham

Project: Arkwright CCR Groundwater ComplianceAP2-R

Client Sample ID: ARK-ARGWA-19
Sample ID: 652694001
Matrix: WG
Collect Date: 23-JAN-24
Receive Date: 24-JAN-24
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														
GFPC Ra228, Liquid "As Received"														
Radium-228	U	0.267	+/-0.630	1.17	+/-0.634	3.00	pCi/L			JE1	02/15/24	1251	2562867	1
Radium-226+Radium-228 Calculation "See Parent Products"														
Radium-226+228 Sum		1.73	+/-0.838	1.17	+/-0.869		pCi/L		1	NXL1	02/20/24	1249	2563660	2
Rad Radium-226														
Lucas Cell, Ra226, Liquid "As Received"														
Radium-226		1.46	+/-0.552	0.505	+/-0.595	1.00	pCi/L			LXP1	02/08/24	0932	2559124	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"	2562867	85	(15%-125%)

Notes:

The MDC is a sample specific MDC.
TPU and Counting Uncertainty are calculated at the 95% confidence level (1.96-sigma).

Column headers are defined as follows:

DF: Dilution Factor
DL: Detection Limit
Lc/LC: Critical Level
MDA: Minimum Detectable Activity
MDC: Minimum Detectable Concentration
Mtd.: Method
PF: Prep Factor
RL: Reporting Limit
TPU: Total Propagated Uncertainty

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Atlanta, Georgia 30308 Report Date: February 20, 2024

Contact: Joju Abraham

Project: Arkwright CCR Groundwater ComplianceAP2-R

Client Sample ID: ARK-ARAMW-9 Project: GPCC00100
Sample ID: 652694002 Client ID: GPCC001
Matrix: WG
Collect Date: 23-JAN-24
Receive Date: 24-JAN-24
Collector: Client

Parameter	Qualifier	Result	Uncertainty	MDC	TPU	RL	Units	PF	DF	Analyst	Date	Time	Batch	Mtd.
Rad Gas Flow Proportional Counting														
GFPC Ra228, Liquid "As Received"														
Radium-228		2.35	+/-1.46	2.30	+/-1.58	3.00	pCi/L			JE1	02/15/24	1120	2562867	1
Radium-226+Radium-228 Calculation "See Parent Products"														
Radium-226+228 Sum		2.96	+/-1.51	2.30	+/-1.62		pCi/L		1	NXL1	02/20/24	1249	2563660	2
Rad Radium-226														
Lucas Cell, Ra226, Liquid "As Received"														
Radium-226		0.612	+/-0.357	0.360	+/-0.369	1.00	pCi/L			LXP1	02/08/24	0932	2559124	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"	2562867	80.9	(15%-125%)

Notes:

The MDC is a sample specific MDC.
TPU and Counting Uncertainty are calculated at the 95% confidence level (1.96-sigma).

Column headers are defined as follows:

DF: Dilution Factor
DL: Detection Limit
Lc/LC: Critical Level
MDA: Minimum Detectable Activity
MDC: Minimum Detectable Concentration
Mtd.: Method
PF: Prep Factor
RL: Reporting Limit
TPU: Total Propagated Uncertainty

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Atlanta, Georgia 30308 Report Date: February 20, 2024

Contact: Joju Abraham

Project: Arkwright CCR Groundwater ComplianceAP2-R

Client Sample ID: ARK-ARGWA-20 Project: GPCC00100
Sample ID: 652694003 Client ID: GPCC001
Matrix: WG
Collect Date: 23-JAN-24
Receive Date: 24-JAN-24
Collector: Client

Parameter	Qualifier	Result	Uncertainty	MDC	TPU	RL	Units	PF	DF	Analyst	Date	Time	Batch	Mtd.
Rad Gas Flow Proportional Counting														
GFPC Ra228, Liquid "As Received"														
Radium-228	U	0.627	+/-0.724	1.21	+/-0.742	3.00	pCi/L			JE1	02/15/24	1120	2562867	1
Radium-226+Radium-228 Calculation "See Parent Products"														
Radium-226+228 Sum		2.50	+/-0.970	1.21	+/-1.04		pCi/L		1	NXL1	02/20/24	1249	2563660	2
Rad Radium-226														
Lucas Cell, Ra226, Liquid "As Received"														
Radium-226		1.88	+/-0.646	0.592	+/-0.735	1.00	pCi/L			LXP1	02/08/24	0932	2559124	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"	2562867	84.1	(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
241 Ralph McGill Blvd NE, Bin 10160

Atlanta, Georgia 30308 Report Date: February 20, 2024

Contact: Joju Abraham

Project: Arkwright CCR Groundwater ComplianceAP2-R

Client Sample ID: ARK-ARAMW-7 Project: GPCC00100
Sample ID: 652694004 Client ID: GPCC001
Matrix: WG
Collect Date: 23-JAN-24
Receive Date: 24-JAN-24
Collector: Client

Parameter	Qualifier	Result	Uncertainty	MDC	TPU	RL	Units	PF	DF	Analyst	Date	Time	Batch	Mtd.
Rad Gas Flow Proportional Counting														
GFPC Ra228, Liquid "As Received"														
Radium-228		3.27	+/-1.14	1.34	+/-1.41	3.00	pCi/L			JE1	02/15/24	1120	2562867	1
Radium-226+Radium-228 Calculation "See Parent Products"														
Radium-226+228 Sum		4.65	+/-1.25	1.34	+/-1.54		pCi/L		1	NXL1	02/20/24	1249	2563660	2
Rad Radium-226														
Lucas Cell, Ra226, Liquid "As Received"														
Radium-226		1.37	+/-0.517	0.363	+/-0.612	1.00	pCi/L			LXP1	02/08/24	1004	2559124	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"	2562867	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
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: February 20, 2024

Contact: Joju Abraham

Project: Arkwright CCR Groundwater ComplianceAP2-R

Client Sample ID: ARK-ARGWC-22 Project: GPCC00100
Sample ID: 652694005 Client ID: GPCC001
Matrix: WG
Collect Date: 23-JAN-24
Receive Date: 24-JAN-24
Collector: Client

Parameter	Qualifier	Result	Uncertainty	MDC	TPU	RL	Units	PF	DF	Analyst	Date	Time	Batch	Mtd.
Rad Gas Flow Proportional Counting														
GFPC Ra228, Liquid "As Received"														
Radium-228	U	0.747	+/-0.807	1.34	+/-0.830	3.00	pCi/L			JE1	02/15/24	1120	2562867	1
Radium-226+Radium-228 Calculation "See Parent Products"														
Radium-226+228 Sum		2.10	+/-1.01	1.34	+/-1.05		pCi/L		1	NXL1	02/20/24	1249	2563660	2
Rad Radium-226														
Lucas Cell, Ra226, Liquid "As Received"														
Radium-226		1.35	+/-0.612	0.698	+/-0.643	1.00	pCi/L			LXP1	02/08/24	1004	2559124	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"	2562867	80	(15%-125%)

Notes:

The MDC is a sample specific MDC.
TPU and Counting Uncertainty are calculated at the 95% confidence level (1.96-sigma).

Column headers are defined as follows:

DF: Dilution Factor
DL: Detection Limit
Lc/LC: Critical Level
MDA: Minimum Detectable Activity
MDC: Minimum Detectable Concentration
Mtd.: Method
PF: Prep Factor
RL: Reporting Limit
TPU: Total Propagated Uncertainty

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Certificate of Analysis

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

Atlanta, Georgia 30308 Report Date: February 20, 2024

Contact: Joju Abraham

Project: Arkwright CCR Groundwater ComplianceAP2-R

Client Sample ID: ARK-AP2-FD-03 Project: GPCC00100
Sample ID: 652694006 Client ID: GPCC001
Matrix: WG
Collect Date: 23-JAN-24
Receive Date: 24-JAN-24
Collector: Client

Parameter	Qualifier	Result	Uncertainty	MDC	TPU	RL	Units	PF	DF	Analyst	Date	Time	Batch	Mtd.
Rad Gas Flow Proportional Counting														
GFPC Ra228, Liquid "As Received"														
Radium-228	U	0.280	+/-0.822	1.49	+/-0.825	3.00	pCi/L			JE1	02/15/24	1120	2562867	1
Radium-226+Radium-228 Calculation "See Parent Products"														
Radium-226+228 Sum		1.61	+/-1.05	1.49	+/-1.08		pCi/L		1	NXL1	02/20/24	1249	2563660	2
Rad Radium-226														
Lucas Cell, Ra226, Liquid "As Received"														
Radium-226		1.33	+/-0.651	0.829	+/-0.695	1.00	pCi/L			LXP1	02/08/24	1004	2559124	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"	2562867	85.7	(15%-125%)

Notes:

The MDC is a sample specific MDC.
TPU and Counting Uncertainty are calculated at the 95% confidence level (1.96-sigma).

Column headers are defined as follows:

DF: Dilution Factor
DL: Detection Limit
Lc/LC: Critical Level
MDA: Minimum Detectable Activity
MDC: Minimum Detectable Concentration
Mtd.: Method
PF: Prep Factor
RL: Reporting Limit
TPU: Total Propagated Uncertainty

QC Summary

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

Atlanta, Georgia

Contact: **Joju Abraham**

Workorder: **652877**

Report Date: February 20, 2024

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Rad Gas Flow										
Batch 2563659										
QC1205640974 652607001 DUP										
Radium-228	U	1.13	U	-0.191	pCi/L	0		N/A	JE1	02/20/2408:32
	Uncert:	+/-1.18		+/-1.08						
	TPU:	+/-1.22		+/-1.08						
QC1205640975 LCS										
Radium-228	72.5			73.8	pCi/L		102	(75%-125%)	JE1	02/20/2408:32
	Uncert:			+/-4.27						
	TPU:			+/-19.6						
QC1205640973 MB										
Radium-228				1.84	pCi/L				JE1	02/20/2408:32
	Uncert:			+/-1.10						
	TPU:			+/-1.20						
Rad Ra-226										
Batch 2559126										
QC1205632627 652607001 DUP										
Radium-226		3.51		4.17	pCi/L	17.1		(0%-20%)	LXP1	02/06/2410:56
	Uncert:	+/-0.864		+/-1.04						
	TPU:	+/-1.19		+/-1.23						
QC1205632629 LCS										
Radium-226	27.3			21.0	pCi/L		76.8	(75%-125%)	LXP1	02/06/2410:56
	Uncert:			+/-2.02						
	TPU:			+/-3.69						
QC1205632626 MB										
Radium-226			U	0.344	pCi/L				LXP1	02/06/2410:56
	Uncert:			+/-0.402						
	TPU:			+/-0.405						
QC1205632628 652607001 MS										
Radium-226	137	3.51		119	pCi/L		84.1	(75%-125%)	LXP1	02/06/2410:56
	Uncert:	+/-0.864		+/-10.4						
	TPU:	+/-1.19		+/-25.1						
Batch 2559525										
QC1205633265 652329001 DUP										
Radium-226		0.555		0.605	pCi/L	8.58		(0% - 100%)	LXP1	02/01/2410:28
	Uncert:	+/-0.357		+/-0.379						
	TPU:	+/-0.371		+/-0.397						
QC1205633267 LCS										
Radium-226	53.8			66.8	pCi/L		124	(75%-125%)	LXP1	02/01/2410:28
	Uncert:			+/-3.71						
	TPU:			+/-11.1						
QC1205633264 MB										
Radium-226			U	0.0407	pCi/L				LXP1	02/01/2410:28

QC Summary

Workorder: **652877**

Parmname		NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Rad Ra-226											
Batch	2559525										
		Uncert:			+/-0.239						
		TPU:			+/-0.239						
QC1205633266	652329001 MS										
Radium-226		125	0.555		99.7	pCi/L		79.7	(75%-125%)	LXP1	02/01/2410:28
		Uncert:	+/-0.357		+/-9.19						
		TPU:	+/-0.371		+/-20.6						

Notes:

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

The Qualifiers in this report are defined as follows:

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
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

QC Summary

Workorder: **652877**

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

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 acceptence 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.

QC Summary

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

Atlanta, Georgia

Contact: **Joju Abraham**

Workorder: **652694**

Report Date: February 20, 2024

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Rad Gas Flow										
Batch 2562867										
QC1205639376 652694001 DUP										
Radium-228	U	0.267	U	1.21	pCi/L	0		N/A	JE1	02/15/2412:51
	Uncert:	+/-0.630		+/-0.944						
	TPU:	+/-0.634		+/-0.994						
QC1205639377 LCS										
Radium-228	74.2			66.0	pCi/L		88.9	(75%-125%)	JE1	02/15/2411:19
	Uncert:			+/-3.83						
	TPU:			+/-17.3						
QC1205639375 MB										
Radium-228			U	-0.317	pCi/L				JE1	02/15/2411:19
	Uncert:			+/-0.692						
	TPU:			+/-0.692						
Rad Ra-226										
Batch 2559124										
QC1205632623 652694001 DUP										
Radium-226		1.46		1.90	pCi/L	25.8		(0% - 100%)	LXP1	02/08/2411:08
	Uncert:	+/-0.552		+/-0.638						
	TPU:	+/-0.595		+/-0.713						
QC1205632625 LCS										
Radium-226	26.3			19.9	pCi/L		75.6	(75%-125%)	LXP1	02/08/2411:08
	Uncert:			+/-1.74						
	TPU:			+/-4.53						
QC1205632622 MB										
Radium-226			U	0.315	pCi/L				LXP1	02/08/2411:08
	Uncert:			+/-0.405						
	TPU:			+/-0.409						
QC1205632624 652694001 MS										
Radium-226	128	1.46		140	pCi/L		108	(75%-125%)	LXP1	02/08/2411:08
	Uncert:	+/-0.552		+/-11.2						
	TPU:	+/-0.595		+/-34.0						

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

QC Summary

Workorder: **652694**

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 acceptence 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 #: 652877

Product: **Radium-226+Radium-228 Calculation**
Analytical Method: Calculation
Analytical Procedure: GL-RAD-D-003 REV# 45
Analytical Batch: 2563660

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

GEL Sample ID#	Client Sample Identification
652877001	ARK-ARGWC-21
652877002	ARK-ARGWC-23
652877003	ARK-ARAMW-1
652877004	ARK-ARAMW-2
652877005	ARK-ARAMW-8
652877006	ARK-AP2-EB-03
652877007	ARK-AP2-FB-03

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: 2563659

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

GEL Sample ID#	Client Sample Identification
652877001	ARK-ARGWC-21
652877002	ARK-ARGWC-23
652877003	ARK-ARAMW-1
652877004	ARK-ARAMW-2
652877005	ARK-ARAMW-8
652877006	ARK-AP2-EB-03
652877007	ARK-AP2-FB-03
1205640973	Method Blank (MB)
1205640974	652607001(NonSDG) Sample Duplicate (DUP)
1205640975	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
1205640973 (MB)	Radium-228	Result: 1.84 pCi/L > MDA: 1.68 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: 2559126

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

GEL Sample ID#	Client Sample Identification
652877001	ARK-ARGWC-21
652877002	ARK-ARGWC-23
652877003	ARK-ARAMW-1
652877004	ARK-ARAMW-2
1205632626	Method Blank (MB)
1205632627	652607001(NonSDG) Sample Duplicate (DUP)
1205632628	652607001(NonSDG) Matrix Spike (MS)
1205632629	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, 1205632628 (Non SDG 652607001MS), aliquot was reduced to conserve sample volume.

Product: **Lucas Cell, Ra226, Liquid**
Analytical Method: EPA 903.1 Modified

Analytical Procedure: GL-RAD-A-008 REV# 15
Analytical Batch: 2559525

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

GEL Sample ID#	Client Sample Identification
652877005	ARK-ARAMW-8
652877006	ARK-AP2-EB-03
652877007	ARK-AP2-FB-03
1205633264	Method Blank (MB)
1205633265	652329001(NonSDG) Sample Duplicate (DUP)
1205633266	652329001(NonSDG) Matrix Spike (MS)
1205633267	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, 1205633266 (Non SDG 652329001MS), aliquot was reduced to conserve sample volume.

Certification Statement

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

Radiochemistry
Technical Case Narrative
Georgia Power Company
SDG #: 652694

Product: **Radium-226+Radium-228 Calculation**
Analytical Method: Calculation
Analytical Procedure: GL-RAD-D-003 REV# 45
Analytical Batch: 2563660

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

GEL Sample ID#	Client Sample Identification
652694001	ARK-ARGWA-19
652694002	ARK-ARAMW-9
652694003	ARK-ARGWA-20
652694004	ARK-ARAMW-7
652694005	ARK-ARGWC-22
652694006	ARK-AP2-FD-03

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: 2562867

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

GEL Sample ID#	Client Sample Identification
652694001	ARK-ARGWA-19
652694002	ARK-ARAMW-9
652694003	ARK-ARGWA-20
652694004	ARK-ARAMW-7
652694005	ARK-ARGWC-22
652694006	ARK-AP2-FD-03
1205639375	Method Blank (MB)
1205639376	652694001(ARK-ARGWA-19) Sample Duplicate (DUP)
1205639377	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

Recounts
Samples 1205639376 (ARK-ARGWA-19DUP) and 652694001 (ARK-ARGWA-19) were recounted due to high relative percent difference/relative error ratio. The recounts are reported.

Product: **Lucas Cell, Ra226, Liquid**
Analytical Method: EPA 903.1 Modified
Analytical Procedure: GL-RAD-A-008 REV# 15
Analytical Batch: 2559124

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

GEL Sample ID#	Client Sample Identification
652694001	ARK-ARGWA-19
652694002	ARK-ARAMW-9
652694003	ARK-ARGWA-20
652694004	ARK-ARAMW-7
652694005	ARK-ARGWC-22
652694006	ARK-AP2-FD-03
1205632622	Method Blank (MB)
1205632623	652694001(ARK-ARGWA-19) Sample Duplicate (DUP)
1205632624	652694001(ARK-ARGWA-19) Matrix Spike (MS)
1205632625	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, 1205632624 (ARK-ARGWA-19MS), 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.

Page: 1 of 1
Project # 175569434
GEL Quote #:
COC Number [1]: 2 Sample Cooler(s)
PO Number: GPC82177-0005

GEL Laboratories LLC 652877
Chemistry | Radiochemistry | Radiobioassay | Specialty Analytics

Chain of Custody and Analytical Request 652874

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: N/A
Address: 241 Ralph McGill Blvd SE, Atlanta, GA 30308
Collected By: Zach Levy, Dylan Ripley, Emily Scheiben
Send Results To: jabraham@southernco.com EDD@stantec.com Cassidy.Sutherland@stantec.com

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

Sample ID * For composites - indicate start and stop date/time	*Date Collected (mm-dd-yy)	*Time Collected (Military) (hhmm)	QC Code [2]	Field Filtered [3]	Sample Matrix [4]	Should this sample be considered: Radioactive (If yes, please supply isotopic info.)	Should this sample be considered: (7) Known or possible Hazards	Total number of containers	NI Ag (App. I) (6020B)	NI Metals App. III (6020B)	Alkalinity (300.0 R2.1)	TDS (SM Method 2540C)	Anions (Cl, Fl, Sulfate) (300.0 Rev. 2.1 1993	NI Metals App IV (6020B)	NI RAD 226-228 Cmbd	NI Mercury (7470B)	NI Metals Al, K, Mg, Na, Fe, Mn (6020B)	NI Fe2+/Mn2+ (6020B) Field Filtered	SA Nitrate/ Nitrite (EPA Method 353.2)	<-- Preservative Type (6)
ARK-ARGWC-21	1/24/2024	10:00	N	Y	WG			9	X	X	X	X	X	X	X	X	X	X	X	
ARK-ARGWC-23	1/24/2024	10:45	N	Y	WG			9	X	X	X	X	X	X	X	X	X	X	X	
ARK-ARAMW-1	1/24/2024	11:50	N	Y	WG			9	X	X	X	X	X	X	X	X	X	X	X	
ARK-ARAMW-2	1/24/2024	10:45	N	Y	WG			9	X	X	X	X	X	X	X	X	X	X	X	
ARK-ARAMW-8	1/24/2024	13:25	N	Y	WG			9	X	X	X	X	X	X	X	X	X	X	X	
ARK-AP2-EB-03	1/24/2024	11:55	EB	N	WQ			7		X		X	X	X	X	X			X	
ARK-AP2-FB-03	1/24/2024	11:45	FB	N	WQ			7		X		X	X	X	X	X			X	

Chain of Custody Signatures

	Relinquished By (Signed)	Print Name	Date	Received by (signed)	Print Name	Date
1		Stantec	1/25/24			1/25/2024
2			1/25/2024			1/25/24 1440
3						

TAT Requested: Normal: X 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:*** 2 °C

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

Sample Collection Time Zone : [X] 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, **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
FL = Flammable/Ignitable
CO = Corrosive
RE = Reactive

TSCA Regulated
PCB = Polychlorinated biphenyls

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.)

Page 29 of 37 SDG 652877

Page: 1 of 1

Project # 175569434

GEL Quote #:

COC Number (1): 2 Sample Cooler(s)

PO Number: GPC82177-0005

652877

652874

Chain of Custody and Analytical Request

GEL Laboratories LLC
Chemistry | Radiochemistry | Radiobioassay | Specialty Analytics

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: N/A

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

Collected By: Zach Levy, Dylan Ripley, Emily Scheiben

Send Results To: jabraham@southernco.com EDD@stantec.com
Cassidy.Sutherland@stantec.com

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

Sample ID * For composites - indicate start and stop date/time	*Date Collected (mm-dd-yy)	*Time Collected (Military) (hhmm)	QC Code (2)	Field Filtered (3)	Sample Matrix (4)	Should this sample be considered: Radioactive (If yes, please supply isotopic info.)	Should this sample be considered: (7) Known or possible Hazards	Total number of containers	NI Ag (App. I) (6020B)	NI Metals App. III (6020B)	Alkalinity (300.0 R2.1)	TDS (SM Method 2540C)	Anions (Cl, Fl, Sulfate) (300.0 Rev. 2.1 1993	NI Metals App. IV (6020B)	NI RAD 226-228 Cmbd	NI Mercury (7470B)	NI Metals Al, K, Mg, Na, Fe, Mn (6020B)	NI Fe2+/ Mn2+ (6020B) Field Filtered	SA Nitrate/ Nitrite (EPA Method 353.2)	<-- Preservative Type (6)	Comments (task_code: ARK-CCR-ASSMT-2024S1)
ARK-ARGWC-21	1/24/2024	10:00	N	Y	WG			9	X	X	X	X	X	X	X	X	X	X	X		
ARK-ARGWC-23	1/24/2024	10:45	N	Y	WG			9	X	X	X	X	X	X	X	X	X	X	X		
ARK-ARAMW-1	1/24/2024	11:50	N	Y	WG			9	X	X	X	X	X	X	X	X	X	X	X		
ARK-ARAMW-2	1/24/2024	10:45	N	Y	WG			9	X	X	X	X	X	X	X	X	X	X	X		
ARK-ARAMW-8	1/24/2024	13:25	N	Y	WG			9	X	X	X	X	X	X	X	X	X	X	X		
ARK-AP2-EB-03	1/24/2024	11:55	EB	N	WQ			7		X		X	X	X	X	X			X		
ARK-AP2-FB-03	1/24/2024	11:45	FB	N	WQ			7		X		X	X	X	X	X			X		

Chain of Custody Signatures

	Relinquished By (Signed)	Print Name	Date	Received by (signed)	Print Name	Date
1		Stantec	1/25/24			1/25/2024
2			1/25/2024			1/25/24 1440
3						

TAT Requested: Normal: X 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:*** 2 °C

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

Sample Collection Time Zone : [X] 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, **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
FL = Flammable/Ignitable
CO = Corrosive
RE = Reactive

TSCA Regulated
PCB = Polychlorinated biphenyls

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.)

Page 30 of 31 SDG: 652877

GEL Laboratories LLC

652877 / ~~652881~~ WJ 1/30/23

SAMPLE RECEIPT & REVIEW FORM

652881

Client: GPCC	**SDG/AR/COC/Work Order:**
Received By: QG	**Date Received:** 1/25/24
Carrier and Tracking Number	Circle Applicable: FedEx Express FedEx Ground UPS Field Services Courier Other

n/a

Suspected Hazard Information	Yes	No	*If Net Counts > 100cpm on samples not marked "radioactive", contact the Radiation Safety Group for further investigation.
A)Shipped as a DOT Hazardous?		✓	Hazard Class Shipped: UN#: If UN2910, Is the Radioactive Shipment Survey Compliant? Yes___ No___
B) Did the client designate the samples are to be received as radioactive?		✓	COC notation or radioactive stickers on containers equal client designation.
C) Did the RSO classify the samples as radioactive?		✓	Maximum Net Counts Observed* (Observed Counts - Area Background Counts): 0 CPM / mR/Hr **Classified as: Rad 1 Rad 2 Rad 3**
D) Did the client designate samples are hazardous?		✓	COC notation or hazard labels on containers equal client designation.
E) Did the RSO identify possible hazards?		✓	If D or E is yes, select Hazards below. PCB's Flammable Foreign Soil RCRA Asbestos Beryllium Other:

	Sample Receipt Criteria	Yes	NA	No	**Comments/Qualifiers (Required for Non-Conforming Items)**
1	Shipping containers received intact and sealed?	✓			Circle Applicable: Seals broken Damaged container Leaking container Other (describe)
2	Chain of custody documents included with shipment?	✓			Circle Applicable: Client contacted and provided COC COC created upon receipt
3	Samples requiring cold preservation within (0 ≤ 6 deg. C)?*	✓			Preservation Method: Wet Ice Ice Packs Dry ice None Other: *all temperatures are recorded in Celsius **TEMP:** 2 °c
4	Daily check performed and passed on IR temperature gun?	✓			**Temperature Device Serial #:** IR1-23 Secondary Temperature Device Serial # (If Applicable):
5	Sample containers intact and sealed?	✓			Circle Applicable: Seals broken Damaged container Leaking container Other (describe)
6	Samples requiring chemical preservation at proper pH?		✓		Sample ID's and Containers Affected: If Preservation added, Lot#:
7	Do any samples require Volatile Analysis?			✓	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?	✓			ID's and tests affected:
9	Sample ID's on COC match ID's on bottles?	✓			ID's and containers affected:
10	Date & time on COC match date & time on bottles?	✓			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?			✓	Circle Applicable: No container count on COC Other (describe)
12	Are sample containers identifiable as GEL provided by use of GEL labels?			✓	
13	COC form is properly signed in relinquished/received sections?			✓	Circle Applicable: Not relinquished Other (describe)

Comments (Use Continuation Form if needed):

PM (or PMA) review: Initials WJ Date 1/26/24 Page 1 of 1

Page: 1 of 1
Project # 175569434
GEL Quote #:
COC Number (1): 2 Sample Cooler(s)
PO Number: GPC82177-0005

GEL Laboratories LLC
Chemistry | Radiochemistry | Radiobioassay | Specialty Analytics
Rev1
Chain of Custody and Analytical Request

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

1/24/24

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

Client Name: Georgia Power — Phone # (937-344-6533)
Project/Site Name: Plant Arkwright Ash Pond 2 — Fax: N/A
Address: 241 Ralph McGill Blvd SE, Atlanta, GA 30308
Collected By: John Myer, Dylan Ripley — Send Results To: jabraham@southernco.com EDD@stantec.com Cassidy.Sutherland@stantec.com

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

Sample ID ** For composites - indicate start and stop date/time*	*Date Collected (mm-dd-yy)	*Time Collected (Military) (hhmm)	QC Code (2)	Field Filtered (3)	Sample Matrix (4)	Should this sample be considered: Radioactive (If yes, please supply isotopic info.)	Should this sample be considered: (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, Fl, Sulfate) (300.0 Rev. 2.1 1993	Metals App. IV (6020B)	RAD 226-228 Cmbd	Mercury (7470B)	Metals Al, K, Mg, Na, Fe, Mn (6020B)	Fe2+/ Mn2+ (6020B) Field Filtered	Nitrate/ Nitrite (EPA Method 353.2)	<-- Preservative Type (6)	Comments (task_code: ARK-CCR-ASSMT-2024S1)
									NI	NI				NI	NI	NI	NI	NI	SA		
ARK-ARAMW-7	1/23/2024	16:50	N	N	WG			8	X	X	X	X	X	X	X	X	X		X		
ARK-ARAMW-9	1/23/2024	14:30	N	N	WG			8	X	X	X	X	X	X	X	X	X		X		
ARK-ARGWA-19	1/23/2024	11:25	N	N	WG			8	X	X	X	X	X	X	X	X	X		X		
ARK-ARGWA-20	1/23/2024	14:40	N	N	WG			8	X	X	X	X	X	X	X	X	X		X		
ARK-ARGWC-22	1/23/2024	17:10	N	N	WG			8	X	X	X	X	X	X	X	X	X		X		
ARK-AP2-FD-03	1/23/2024	NA	FD	N	WQ			7		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	Stantec	1/24/2024	1		
2			2		
3			3		

TAT Requested: **Normal:** X **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*

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

Sample Collection Time Zone: [X] 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, **HX** = Hexane, **ST** = Sodium Thiosulfate, If no preservative is added = leave field blank

Revised on 1/25/2024

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
FL = Flammable/Ignitable
CO = Corrosive
RE = Reactive

TSCA Regulated
PCB = Polychlorinated biphenyls

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.)*

Page: 1 of 1
Project # 175569434
GEL Quote #:
COC Number (1): 2 Sample Cooler(s)
PO Number: GPC82177-0005

GEL Laboratories LLC — Rev 1
Chemistry | Radiochemistry | Radiobioassay | 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

1/24/24

Client Name: Georgia Power — Phone # (937-344-6533)
Project/Site Name: Plant Arkwright Ash Pond 2 — Fax: N/A
Address: 241 Ralph McGill Blvd SE, Atlanta, GA 30308
Collected By: John Myer, Dylan Ripley — Send Results To: jabraham@southernco.com EDD@stantec.com Cassidy.Sutherland@stantec.com

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

Sample ID (* For composites - indicate start and stop date/time)	*Date Collected (mm-dd-yy)	*Time Collected (Military) (hhmm)	QC Code (2)	Field Filtered (3)	Sample Matrix (4)	Should this sample be considered: Radioactive (If yes, please supply isotopic info.)	Should this sample be considered: (7) Known or possible Hazards	Total number of containers	NI Ag (App. I) (6020B)_DISS	NI Metals App. III (6020B)_DISS	Alkalinity (300.0 R2.1)	TDS (SM Method 2540C)	Anions (Cl, Fl, Sulfate) (300.0 Rev. 2.1 1993	NI Metals App. IV (6020B)_DISS	NI RAD 226-228 Cmbd	NI Mercury (7470B)_DISS	NI Metals Al, K, Mg, Na, Fe, Mn (6020B)_DISS	NI Fe2+/Mn2+ (6020B)_DISS	SA Nitrate/ Nitrite (EPA Method 353.2)	<-- Preservative Type (6) Comments (task_code: ARK-CCR-ASSMT-2024S1)
ARK-ARAMW-7	1/23/2024	16:50	N	Y	WG			1										X		
ARK-ARAMW-9	1/23/2024	14:30	N	Y	WG			1										X		
ARK-ARGWA-19	1/23/2024	11:25	N	Y	WG			1										X		
ARK-ARGWA-20	1/23/2024	14:40	N	Y	WG			1	X	X				X		X	X	X		Analyze filtered sample for all metals
ARK-ARGWC-22	1/23/2024	17:10	N	Y	WG			1										X		

Chain of Custody Signatures

	Relinquished By (Signed)	Print Name	Date	Received by (signed)	Print Name	Date
1	John Myer	Stantec	1/24/2024	1		
2				2		
3				3		

TAT Requested: Normal: X 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*

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

Sample Collection Time Zone : [X] 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, **HX** = Hexane, **ST** = Sodium Thiosulfate, If no preservative is added = leave field blank

Revised on 1/25/2024

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
FL = Flammable/Ignitable
CO = Corrosive
RE = Reactive

TSCA Regulated
PCB = Polychlorinated biphenyls

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.)*

Page: 1 of 1
Project # 175569434
GEL Quote #:
COC Number [1]: 2 Sample Cooler(s)
PO Number: GPC82177-0005

GEL Laboratories LLC
Chemistry | Radiochemistry | Radiobioassay | Specialty Analytics

Chain of Custody and Analytical Request

652690 WJ
652694

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

652690

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

Client Name: Georgia Power — Phone # (937-344-6533)
Project/Site Name: Plant Arkwright Ash Pond 2 — Fax: N/A
Address: 241 Ralph McGill Blvd SE, Atlanta, GA 30308
Collected By: John Myer, Dylan Ripley — Send Results To: jabraham@southernco.com EDD@stantec.com Cassidy.Sutherland@stantec.com

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

Sample ID (* For composites - indicate start and stop date/time)	*Date Collected (mm-dd-yy)	*Time Collected (Military) (hhmm)	QC Code [2]	Field Filtered [3]	Sample Matrix [4]	Should this sample be considered: Radioactive (If yes, please supply isotopic info.)	Should this sample be considered: (7) Known or possible Hazards	Total number of containers	NI Ag (App. I) (6020B)	NI Metals App. III (6020B)	Alkalinity (300.0 R2.1)	TDS (SM Method 2540C)	Anions (Cl, Fl, Sulfate) (300.0 Rev. 2.1 1993)	NI Metals App. IV (6020B)	NI RAD 226-228 Cmbd	NI Mercury (7470B)	NI Metals Al, K, Mg, Na, Fe, Mn (6020B)	NI Fe2+/ Mn2+ (6020B) Field Filtered	SA Nitrate/ Nitrite (EPA Method 353.2)	<-- Preservative Type (6) / Comments (task_code: ARK-CCR-ASSMT-2024S1)
ARK-ARGWA-19	1/23/2024	11:25	N	Y	WG			9	X	X	X	X	X	X	X	X	X	X	X	
ARK-ARAMW-9	1/23/2024	14:30	N	Y	WG			9	X	X	X	X	X	X	X	X	X	X	X	
ARK-ARGWA-20	1/23/2024	14:40	N	Y	WG			9	X	X	X	X	X	X	X	X	X	X	X	Analyze Filtered sample for App. IV Metals
ARK-ARAMW-7	1/23/2024	16:50	N	Y	WG			9	X	X	X	X	X	X	X	X	X	X	X	
ARK-ARGWC-22	1/23/2024	17:10	N	Y	WG			9	X	X	X	X	X	X	X	X	X	X	X	
ARK-AP2-FD-03	1/23/2024	NA	FD	N	WQ			7		X		X	X	X	X	X			X	

Chain of Custody Signatures

	Relinquished By (Signed)	Print Name	Date	Received by (signed)	Print Name	Date
1		Stantec	1/24/24	1		1/24/2024
2				2	Chramahon	1/24/24 1335
3				3		

TAT Requested: Normal: X 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:*** 7 °C

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

Sample Collection Time Zone : [X] 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, **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
FL = Flammable/Ignitable
CO = Corrosive
RE = Reactive

TSCA Regulated
PCB = Polychlorinated biphenyls

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.)

Page: 1 of 1
Project # 175569434
GEL Quote #:
COC Number [1]: 2 Sample Cooler(s)
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GEL Laboratories LLC
Chemistry | Radiochemistry | Radiobioassay | 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: N/A
Address: 241 Ralph McGill Blvd SE, Atlanta, GA 30308
Collected By: John Myer, Dylan Ripley Send Results To: jabraham@southernco.com EDD@stantec.com
Cassidy.Sutherland@stantec.com

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

Sample ID * For composites - indicate start and stop date/time	*Date Collected (mm-dd-yy)	*Time Collected (Military) (hhmm)	QC Code [2]	Field Filtered [3]	Sample Matrix [4]	Should this sample be considered: Radioactive (If yes, please supply isotopic info.)	Should this sample be considered: (7) Known or possible Hazards	Total number of containers	NI Ag (App. I) (6020B)	NI Metals App. III (6020B)	Alkalinity (300.0 R2.1)	TDS (SM Method 2540C)	Anions (Cl, Fl, Sulfate) (300.0 Rev. 2.1 1993	NI Metals App. IV (6020B)	NI RAD 226-228 Cmbd	NI Mercury (7470B)	NI Metals Al, K, Mg, Na, Fe, Mn (6020B)	NI Fe2+/ Mn2+ (6020B) Field Filtered	SA Nitrate/ Nitrite (EPA Method 353.2)	<-- Preservative Type (6) Comments (task_code: ARK-CCR-ASSMT-2024S1)
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ARK-ARGWA-20	1/23/2024	14:40	N	Y	WG			9	X	X	X	X	X	X	X	X	X	X	X	Analyze Filtered sample for App. IV Metals
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ARK-ARGWC-22	1/23/2024	17:10	N	Y	WG			9	X	X	X	X	X	X	X	X	X	X	X	
ARK-AP2-FD-03	1/23/2024	NA	FD	N	WQ			7		X		X	X	X	X	X			X	

Chain of Custody Signatures

	Relinquished By (Signed)	Print Name	Date	Received by (signed)	Print Name	Date
1		Stantec	1/24/24			1/24/2024
2						1/24/24 1335
3				3		

TAT Requested: Normal: X 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

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

Sample Collection Time Zone : [X] 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

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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**

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RE = Reactive

TSCA Regulated
PCB = Polychlorinated biphenyls

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.)

Page 55 of 57 SDG: 552877

652694 652704 652703 WJ

GEL Laboratories LLC

SAMPLE RECEIPT & REVIEW FORM

Client: GPCC	**SDG/AR/COC/Work Order:**
Received By: QG	**Date Received:** 1/24/24
Carrier and Tracking Number	Circle Applicable: FedEx Express FedEx Ground UPS Field Services Courier Other
	N/a

Suspected Hazard Information	Yes	No	
			*If Net Counts > 100cpm on samples not marked "radioactive", contact the Radiation Safety Group for further investigation.
A)Shipped as a DOT Hazardous?			Hazard Class Shipped: UN#: If UN2910, Is the Radioactive Shipment Survey Compliant? Yes___ No___
B) Did the client designate the samples are to be received as radioactive?			COC notation or radioactive stickers on containers equal client designation.
C) Did the RSO classify the samples as radioactive?			Maximum Net Counts Observed* (Observed Counts - Area Background Counts): 0 CPM / mR/Hr **Classified as: Rad 1 Rad 2 Rad 3**
D) Did the client designate samples are hazardous?			COC notation or hazard labels on containers equal client designation.
E) Did the RSO identify possible hazards?			If D or E is yes, select Hazards below. PCB's Flammable Foreign Soil RCRA Asbestos Beryllium Other:

	Sample Receipt Criteria	Yes	NA	No	**Comments/Qualifiers (Required for Non-Conforming Items)**
1	Shipping containers received intact and sealed?				Circle Applicable: Seals broken Damaged container Leaking container Other (describe)
2	Chain of custody documents included with shipment?				Circle Applicable: Client contacted and provided COC COC created upon receipt
3	Samples requiring cold preservation within (0 ≤ 6 deg. C)?*				Preservation Method: Wet Ice Ice Packs Dry ice None Other: *all temperatures are recorded in Celsius TEMP: 7 c
4	Daily check performed and passed on IR temperature gun?	✓			**Temperature Device Serial #:** IR1-23 Secondary Temperature Device Serial # (If Applicable):
5	Sample containers intact and sealed?				Circle Applicable: Seals broken Damaged container Leaking container Other (describe)
6	Samples requiring chemical preservation at proper pH?				Sample ID's and Containers Affected: If Preservation added, Lot#:
7	Do any samples require Volatile Analysis?				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?				ID's and tests affected:
9	Sample ID's on COC match ID's on bottles?				ID's and containers affected:
10	Date & time on COC match date & time on bottles?				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?				Circle Applicable: No container count on COC Other (describe)
12	Are sample containers identifiable as GEL provided by use of GEL labels?				
13	COC form is properly signed in relinquished/received sections?				Circle Applicable: Not relinquished Other (describe)

Comments (Use Continuation Form if needed):

PM (or PMA) review: Initials WJ Date 1/25/24 Page ____ of ____

List of current GEL Certifications as of 20 February 2024

State	Certification
Alabama	42200
Alaska	17-018
Alaska Drinking Water	SC00012
Arkansas	88-00651
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	KY90129
Kentucky Wastewater	KY90129
Louisiana Drinking Water	LA024
Louisiana NELAP	03046 (AI33904)
Maine	2023019
Maryland	270
Massachusetts	M-SC012
Massachusetts PFAS Approv	Letter
Michigan	9976
Mississippi	SC00012
Nebraska	NE-OS-26-13
Nevada	SC000122024-05
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	2023-152
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	T104704235-23-21
Utah NELAP	SC000122023-38
Vermont	VT87156
Virginia NELAP	460202
Washington	C780

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

January 31, 2024

Kelley Sharpe
ARCADIS - Atlanta
2839 Paces Ferry Rd
STE 900
Atlanta, GA 30339

RE: Project: Plant Arkwright-CCR Ash Pond
Pace Project No.: 92709793

Dear Kelley Sharpe:

Enclosed are the analytical results for sample(s) received by the laboratory on January 24, 2024. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

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

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

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

Sincerely,

Maiya Parks
maiya.parks@pacelabs.com
770-734-4205
Project Manager

Enclosures

cc: Joju Abraham, Georgia Power-CCR
Jordan Gamble, ARCADIS - Atlanta
Ben Hodges, Georgia Power-CCR
Warren Johnson, ARCADIS - Atlanta
Laura Midkiff, Southern Company
Noelia Muskus Ruiz, Georgia Power
Tina Sullivan, ERM

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CERTIFICATIONS

Project: Plant Arkwright-CCR Ash Pond
Pace Project No.: 92709793

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.: 92709793

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92709793001	**ARK-BC-0.8a**	Water	01/23/24 16:04	01/24/24 11:06
92709793002	**ARK-BC-0.5.5**	Water	01/23/24 15:04	01/24/24 11:06
92709793003	**ARK-BC-0.5.6**	Water	01/23/24 15:21	01/24/24 11:06
92709793004	**ARK-BC-0.5.7**	Water	01/23/24 15:28	01/24/24 11:06
92709793005	**ARK-BC-BR**	Water	01/23/24 14:39	01/24/24 11:06

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SAMPLE ANALYTE COUNT

Project: Plant Arkwright-CCR Ash Pond
Pace Project No.: 92709793

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92709793001	**ARK-BC-0.8a**	EPA 6010D	DRB	5	PASI-GA
		EPA 6020B	MT1	3	PASI-GA
		SM 2540C-2015	DL1	1	PASI-GA
		SM 2320B-2011	SMS	2	PASI-A
		EPA 9056A	CDC	3	PASI-A
92709793002	**ARK-BC-0.5.5**	EPA 6010D	DRB	5	PASI-GA
		EPA 6020B	MT1	3	PASI-GA
		SM 2540C-2015	DL1	1	PASI-GA
		SM 2320B-2011	SMS	2	PASI-A
		EPA 9056A	CDC	3	PASI-A
92709793003	**ARK-BC-0.5.6**	EPA 6010D	DRB	5	PASI-GA
		EPA 6020B	MT1	3	PASI-GA
		SM 2540C-2015	DL1	1	PASI-GA
		SM 2320B-2011	SMS	2	PASI-A
		EPA 9056A	CDC	3	PASI-A
92709793004	**ARK-BC-0.5.7**	EPA 6010D	DRB	5	PASI-GA
		EPA 6020B	MT1	3	PASI-GA
		SM 2540C-2015	DL1	1	PASI-GA
		SM 2320B-2011	SMS	2	PASI-A
		EPA 9056A	CDC	3	PASI-A
92709793005	**ARK-BC-BR**	EPA 6010D	DRB	5	PASI-GA
		EPA 6020B	MT1	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.: 92709793

Sample: ARK-BC-0.8a **Lab ID: 92709793001** Collected: 01/23/24 16:04 Received: 01/24/24 11:06 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	01/25/24 13:04	01/26/24 21:25	7440-42-8	
Potassium	**2.0**	mg/L	0.50	1	01/25/24 13:04	01/26/24 21:25	7440-09-7	
Sodium	**8.4**	mg/L	1.0	1	01/25/24 13:04	01/26/24 21:25	7440-23-5	
Calcium	**7.5**	mg/L	1.0	1	01/25/24 13:04	01/26/24 21:25	7440-70-2	
Magnesium	**3.9**	mg/L	0.050	1	01/25/24 13:04	01/26/24 21:25	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	01/26/24 10:13	01/26/24 18:54	7440-48-4	
Lithium	ND	mg/L	0.030	1	01/26/24 10:13	01/26/24 18:54	7439-93-2	
Molybdenum	ND	mg/L	0.010	1	01/26/24 10:13	01/26/24 18:54	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		01/25/24 12:57		
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville							
Alkalinity,Bicarbonate (CaCO3)	**38.0**	mg/L	5.0	1		01/25/24 13:28		
Alkalinity, Total as CaCO3	**38.0**	mg/L	5.0	1		01/25/24 13:28		
9056 IC anions 28 Days	Analytical Method: EPA 9056A Pace Analytical Services - Asheville							
Chloride	**8.7**	mg/L	1.0	1		01/25/24 01:13	16887-00-6	
Fluoride	ND	mg/L	0.10	1		01/25/24 01:13	16984-48-8	
Sulfate	**5.2**	mg/L	1.0	1		01/25/24 01:13	14808-79-8	

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(770)734-4200

ANALYTICAL RESULTS

Project: Plant Arkwright-CCR Ash Pond
Pace Project No.: 92709793

Sample: ARK-BC-0.5.5 **Lab ID: 92709793002** Collected: 01/23/24 15:04 Received: 01/24/24 11:06 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	01/25/24 13:04	01/26/24 21:30	7440-42-8	
Potassium	**2.0**	mg/L	0.50	1	01/25/24 13:04	01/26/24 21:30	7440-09-7	
Sodium	**8.4**	mg/L	1.0	1	01/25/24 13:04	01/26/24 21:30	7440-23-5	
Calcium	**8.0**	mg/L	1.0	1	01/25/24 13:04	01/26/24 21:30	7440-70-2	
Magnesium	**4.1**	mg/L	0.050	1	01/25/24 13:04	01/26/24 21:30	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	01/26/24 10:13	01/26/24 18:58	7440-48-4	
Lithium	ND	mg/L	0.030	1	01/26/24 10:13	01/26/24 18:58	7439-93-2	
Molybdenum	ND	mg/L	0.010	1	01/26/24 10:13	01/26/24 18:58	7439-98-7	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA							
Total Dissolved Solids	**126**	mg/L	25.0	1		01/25/24 12:57		
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville							
Alkalinity,Bicarbonate (CaCO3)	**37.8**	mg/L	5.0	1		01/25/24 13:34		
Alkalinity, Total as CaCO3	**37.8**	mg/L	5.0	1		01/25/24 13:34		
9056 IC anions 28 Days	Analytical Method: EPA 9056A Pace Analytical Services - Asheville							
Chloride	**8.4**	mg/L	1.0	1		01/25/24 01:28	16887-00-6	
Fluoride	ND	mg/L	0.10	1		01/25/24 01:28	16984-48-8	
Sulfate	**7.5**	mg/L	1.0	1		01/25/24 01:28	14808-79-8	

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(770)734-4200

ANALYTICAL RESULTS

Project: Plant Arkwright-CCR Ash Pond
Pace Project No.: 92709793

Sample: ARK-BC-0.5.6 **Lab ID: 92709793003** Collected: 01/23/24 15:21 Received: 01/24/24 11:06 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	01/25/24 13:04	01/26/24 21:35	7440-42-8	
Potassium	**2.0**	mg/L	0.50	1	01/25/24 13:04	01/26/24 21:35	7440-09-7	
Sodium	**8.2**	mg/L	1.0	1	01/25/24 13:04	01/26/24 21:35	7440-23-5	
Calcium	**7.8**	mg/L	1.0	1	01/25/24 13:04	01/26/24 21:35	7440-70-2	
Magnesium	**4.0**	mg/L	0.050	1	01/25/24 13:04	01/26/24 21:35	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	01/26/24 10:13	01/26/24 19:01	7440-48-4	
Lithium	ND	mg/L	0.030	1	01/26/24 10:13	01/26/24 19:01	7439-93-2	
Molybdenum	ND	mg/L	0.010	1	01/26/24 10:13	01/26/24 19:01	7439-98-7	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA							
Total Dissolved Solids	**95.0**	mg/L	25.0	1		01/25/24 12:57		
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville							
Alkalinity,Bicarbonate (CaCO3)	**37.8**	mg/L	5.0	1		01/25/24 13:41		
Alkalinity, Total as CaCO3	**37.8**	mg/L	5.0	1		01/25/24 13:41		
9056 IC anions 28 Days	Analytical Method: EPA 9056A Pace Analytical Services - Asheville							
Chloride	**8.4**	mg/L	1.0	1		01/25/24 01:43	16887-00-6	
Fluoride	ND	mg/L	0.10	1		01/25/24 01:43	16984-48-8	
Sulfate	**7.5**	mg/L	1.0	1		01/25/24 01:43	14808-79-8	

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(770)734-4200

ANALYTICAL RESULTS

Project: Plant Arkwright-CCR Ash Pond
Pace Project No.: 92709793

Sample: ARK-BC-0.5.7 **Lab ID: 92709793004** Collected: 01/23/24 15:28 Received: 01/24/24 11:06 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	01/25/24 13:04	01/26/24 21:40	7440-42-8	
Potassium	**2.1**	mg/L	0.50	1	01/25/24 13:04	01/26/24 21:40	7440-09-7	
Sodium	**8.6**	mg/L	1.0	1	01/25/24 13:04	01/26/24 21:40	7440-23-5	
Calcium	**7.9**	mg/L	1.0	1	01/25/24 13:04	01/26/24 21:40	7440-70-2	
Magnesium	**4.1**	mg/L	0.050	1	01/25/24 13:04	01/26/24 21:40	7439-95-4	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA							
Cobalt	ND	mg/L	0.0050	1	01/26/24 10:13	01/26/24 19:05	7440-48-4	
Lithium	ND	mg/L	0.030	1	01/26/24 10:13	01/26/24 19:05	7439-93-2	
Molybdenum	ND	mg/L	0.010	1	01/26/24 10:13	01/26/24 19:05	7439-98-7	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA							
Total Dissolved Solids	**85.0**	mg/L	25.0	1		01/25/24 12:57		D6
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville							
Alkalinity,Bicarbonate (CaCO3)	**38.0**	mg/L	5.0	1		01/25/24 13:47		
Alkalinity, Total as CaCO3	**38.0**	mg/L	5.0	1		01/25/24 13:47		
9056 IC anions 28 Days	Analytical Method: EPA 9056A Pace Analytical Services - Asheville							
Chloride	**8.4**	mg/L	1.0	1		01/25/24 01:58	16887-00-6	
Fluoride	ND	mg/L	0.10	1		01/25/24 01:58	16984-48-8	
Sulfate	**6.3**	mg/L	1.0	1		01/25/24 01:58	14808-79-8	

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ANALYTICAL RESULTS

Project: Plant Arkwright-CCR Ash Pond
Pace Project No.: 92709793

Sample: ARK-BC-BR **Lab ID: 92709793005** Collected: 01/23/24 14:39 Received: 01/24/24 11:06 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	01/25/24 13:04	01/26/24 21:44	7440-42-8	
Potassium	**2.0**	mg/L	0.50	1	01/25/24 13:04	01/26/24 21:44	7440-09-7	
Sodium	**8.4**	mg/L	1.0	1	01/25/24 13:04	01/26/24 21:44	7440-23-5	
Calcium	**8.0**	mg/L	1.0	1	01/25/24 13:04	01/26/24 21:44	7440-70-2	
Magnesium	**4.1**	mg/L	0.050	1	01/25/24 13:04	01/26/24 21:44	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	01/26/24 10:13	01/26/24 19:09	7440-48-4	
Lithium	ND	mg/L	0.030	1	01/26/24 10:13	01/26/24 19:09	7439-93-2	
Molybdenum	ND	mg/L	0.010	1	01/26/24 10:13	01/26/24 19:09	7439-98-7	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA							
Total Dissolved Solids	**96.0**	mg/L	25.0	1		01/25/24 12:58		
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville							
Alkalinity,Bicarbonate (CaCO3)	**38.4**	mg/L	5.0	1		01/25/24 13:54		
Alkalinity, Total as CaCO3	**38.4**	mg/L	5.0	1		01/25/24 13:54		
9056 IC anions 28 Days	Analytical Method: EPA 9056A Pace Analytical Services - Asheville							
Chloride	**8.3**	mg/L	1.0	1		01/25/24 02:13	16887-00-6	
Fluoride	ND	mg/L	0.10	1		01/25/24 02:13	16984-48-8	
Sulfate	**7.6**	mg/L	1.0	1		01/25/24 02:13	14808-79-8	

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QUALITY CONTROL DATA

Project: Plant Arkwright-CCR Ash Pond
Pace Project No.: 92709793

QC Batch: 827606
QC Batch Method: EPA 3010A
Analysis Method: EPA 6010D
Analysis Description: 6010D ATL
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92709793001, 92709793002, 92709793003, 92709793004, 92709793005

METHOD BLANK: 4279128 Matrix: Water
Associated Lab Samples: 92709793001, 92709793002, 92709793003, 92709793004, 92709793005

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Boron	mg/L	ND	0.040	01/26/24 20:22	
Calcium	mg/L	ND	1.0	01/26/24 20:22	
Magnesium	mg/L	ND	0.050	01/26/24 20:22	
Potassium	mg/L	ND	0.50	01/26/24 20:22	
Sodium	mg/L	ND	1.0	01/26/24 20:22	

LABORATORY CONTROL SAMPLE: 4279129

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Boron	mg/L	1	0.98	98	80-120	
Calcium	mg/L	1	.99J	99	80-120	
Magnesium	mg/L	1	1.0	102	80-120	
Potassium	mg/L	1	1.1	108	80-120	
Sodium	mg/L	1	1.0	104	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4279130 4279131

Parameter	Units	92709790001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Boron	mg/L	ND	1	1	1.0	1.0	102	101	75-125	1	20	
Calcium	mg/L	8.5	1	1	9.1	9.0	63	52	75-125	1	20	
Magnesium	mg/L	4.3	1	1	5.2	5.1	83	77	75-125	1	20	
Potassium	mg/L	2.1	1	1	3.0	3.1	95	96	75-125	1	20	
Sodium	mg/L	8.9	1	1	9.5	9.4	62	49	75-125	1	20	

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REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: Plant Arkwright-CCR Ash Pond
Pace Project No.: 92709793

QC Batch: 827976
QC Batch Method: EPA 3005A
Analysis Method: EPA 6020B
Analysis Description: 6020 MET
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92709793001, 92709793002, 92709793003, 92709793004, 92709793005

METHOD BLANK: 4280989 Matrix: Water
Associated Lab Samples: 92709793001, 92709793002, 92709793003, 92709793004, 92709793005

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Cobalt	mg/L	ND	0.0050	01/26/24 18:05	
Lithium	mg/L	ND	0.030	01/26/24 18:05	
Molybdenum	mg/L	ND	0.010	01/26/24 18:05	

LABORATORY CONTROL SAMPLE: 4280990

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Cobalt	mg/L	0.1	0.094	94	80-120	
Lithium	mg/L	0.1	0.10	101	80-120	
Molybdenum	mg/L	0.1	0.096	96	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4280991 4280992

Parameter	Units	92709790003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Cobalt	mg/L	ND	0.1	0.1	0.093	0.095	92	94	75-125	2	20	
Lithium	mg/L	ND	0.1	0.1	0.098	0.097	97	96	75-125	0	20	
Molybdenum	mg/L	ND	0.1	0.1	0.091	0.094	90	94	75-125	4	20	

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QUALITY CONTROL DATA

Project: Plant Arkwright-CCR Ash Pond
Pace Project No.: 92709793

QC Batch: 827796 | 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: 92709793001, 92709793002, 92709793003, 92709793004, 92709793005

METHOD BLANK: 4279830 Matrix: Water
Associated Lab Samples: 92709793001, 92709793002, 92709793003, 92709793004, 92709793005

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	25.0	01/25/24 12:53	

LABORATORY CONTROL SAMPLE: 4279831

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	367	92	80-120	

SAMPLE DUPLICATE: 4279832

Parameter	Units	92709952001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	26.0	29.0	11	10	D6

SAMPLE DUPLICATE: 4279833

Parameter	Units	92709793004 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	85.0	103	19	10	D6

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QUALITY CONTROL DATA

Project: Plant Arkwright-CCR Ash Pond
Pace Project No.: 92709793

QC Batch: 827797
QC Batch Method: SM 2320B-2011
Analysis Method: SM 2320B-2011
Analysis Description: 2320B Alkalinity
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92709793001, 92709793002, 92709793003, 92709793004, 92709793005

METHOD BLANK: 4279859 Matrix: Water
Associated Lab Samples: 92709793001, 92709793002, 92709793003, 92709793004, 92709793005

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Alkalinity, Total as CaCO3	mg/L	ND	5.0	01/25/24 12:03	
Alkalinity,Bicarbonate (CaCO3)	mg/L	ND	5.0	01/25/24 12:03	

LABORATORY CONTROL SAMPLE: 4279860

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

LABORATORY CONTROL SAMPLE: 4279861

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	50	51.7	103	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4279863 4279864

Parameter	Units	92709794006 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Alkalinity, Total as CaCO3	mg/L	38.4	50	50	87.1	89.3	97	102	80-120	2	25	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4279885 4279886

Parameter	Units	92709794004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Alkalinity, Total as CaCO3	mg/L	42.4	50	50	94.3	95.6	104	106	80-120	1	25	

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QUALITY CONTROL DATA

Project: Plant Arkwright-CCR Ash Pond
Pace Project No.: 92709793

QC Batch: 827647
QC Batch Method: EPA 9056A
Analysis Method: EPA 9056A
Analysis Description: 9056 IC anions 28 Days
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92709793001, 92709793002, 92709793003, 92709793004, 92709793005

METHOD BLANK: 4279328 Matrix: Water
Associated Lab Samples: 92709793001, 92709793002, 92709793003, 92709793004, 92709793005

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	01/24/24 21:23	
Fluoride	mg/L	ND	0.10	01/24/24 21:23	
Sulfate	mg/L	ND	1.0	01/24/24 21:23	

LABORATORY CONTROL SAMPLE: 4279329

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	50.3	101	90-110	
Fluoride	mg/L	2.5	2.4	95	90-110	
Sulfate	mg/L	50	50.4	101	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4279330 4279331

Parameter	Units	92709790001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	8.4	50	50	58.7	60.0	101	103	90-110	2	10	
Fluoride	mg/L	ND	2.5	2.5	2.6	2.7	101	105	90-110	4	10	
Sulfate	mg/L	7.7	50	50	58.3	59.6	101	104	90-110	2	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4279332 4279333

Parameter	Units	92709793005 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	8.3	50	50	58.6	60.2	101	104	90-110	3	10	
Fluoride	mg/L	ND	2.5	2.5	2.6	2.7	104	108	90-110	4	10	
Sulfate	mg/L	7.6	50	50	58.0	59.7	101	104	90-110	3	10	

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Peachtree Corners, GA 30092
(770)734-4200

QUALIFIERS

Project: Plant Arkwright-CCR Ash Pond
Pace Project No.: 92709793

DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

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

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

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

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

Acid preservation may not be appropriate for 2 Chloroethylvinyl ether.

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

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

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

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

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

D6 The precision between the sample and sample duplicate exceeded laboratory control limits.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Plant Arkwright-CCR Ash Pond
Pace Project No.: 92709793

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92709793001	**ARK-BC-0.8a**	EPA 3010A	827606	EPA 6010D	827842
92709793002	**ARK-BC-0.5.5**	EPA 3010A	827606	EPA 6010D	827842
92709793003	**ARK-BC-0.5.6**	EPA 3010A	827606	EPA 6010D	827842
92709793004	**ARK-BC-0.5.7**	EPA 3010A	827606	EPA 6010D	827842
92709793005	**ARK-BC-BR**	EPA 3010A	827606	EPA 6010D	827842
92709793001	**ARK-BC-0.8a**	EPA 3005A	827976	EPA 6020B	828246
92709793002	**ARK-BC-0.5.5**	EPA 3005A	827976	EPA 6020B	828246
92709793003	**ARK-BC-0.5.6**	EPA 3005A	827976	EPA 6020B	828246
92709793004	**ARK-BC-0.5.7**	EPA 3005A	827976	EPA 6020B	828246
92709793005	**ARK-BC-BR**	EPA 3005A	827976	EPA 6020B	828246
92709793001	**ARK-BC-0.8a**	SM 2540C-2015	827796		
92709793002	**ARK-BC-0.5.5**	SM 2540C-2015	827796		
92709793003	**ARK-BC-0.5.6**	SM 2540C-2015	827796		
92709793004	**ARK-BC-0.5.7**	SM 2540C-2015	827796		
92709793005	**ARK-BC-BR**	SM 2540C-2015	827796		
92709793001	**ARK-BC-0.8a**	SM 2320B-2011	827797		
92709793002	**ARK-BC-0.5.5**	SM 2320B-2011	827797		
92709793003	**ARK-BC-0.5.6**	SM 2320B-2011	827797		
92709793004	**ARK-BC-0.5.7**	SM 2320B-2011	827797		
92709793005	**ARK-BC-BR**	SM 2320B-2011	827797		
92709793001	**ARK-BC-0.8a**	EPA 9056A	827647		
92709793002	**ARK-BC-0.5.5**	EPA 9056A	827647		
92709793003	**ARK-BC-0.5.6**	EPA 9056A	827647		
92709793004	**ARK-BC-0.5.7**	EPA 9056A	827647		
92709793005	**ARK-BC-BR**	EPA 9056A	827647		

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CHAIN-OF-CUSTODY / Analytical Request Do

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

WO# : 92709793

92709793

Section A	Section B	Section C
Required Client Information:	Required Project Information:	Invoice Information:
Company: ARCADIS - Atlanta	Report To: Kelley Sharpe, Warren Johnson	Attention:
Address: 2639 Paces Ferry Rd	Copy To: Ben Hodges, Joju Abraham	Company Name:
Atlanta, GA 30339		Address:
Email: kelley.sharpe@arcadis.com	Purchase Order #: GPC82474-0003	Pace Quote:
Phone: (770)384-6584 Fax:	Project Name: Plant Arkwright/CCR-Ash Pond Closure	Pace Project Manager: maiya.parks@pacelabs.com
Requested Due Date:	Project #:	Pace Profile #: 15836

Regulatory Agency	State / Location
	GA

ITEM #	SAMPLE ID (One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique)	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Analyses Test Y/N	Total/Bicarb Alkalinity	Cl, F, SO4	TDS	App. III Metals - B, Ca	App. IV Metals (Client List)	Metals - Mg, Na, K	Residual Chlorine (Y/N)
1	ARK-BC-0.8a	WG	G	1/23	1604				3	X		X							X	X	X	X	X	X	
2	ARK-BC-0.5.5	WG	G	1/23	1504				3	X		X							X	X	X	X	X	X	
3	ARK-BC-0.5.6	WG	G	1/23	1521				3	X		X							X	X	X	X	X	X	
4	ARK-BC-0.5.7	WG	G	1/23	1528				3	X		X							X	X	X	X	X	X	
5	ARK-BC-BR	WG	G	1/23	1439				3	X		X							X	X	X	X	X	X	
6																									
7																									
8																									
9																									
10																									
11																									
12																									

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

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
App. IV - Co, Li, Mo	Jake Swanson/ARC	1/24/23	1100		1/24	1106	
ARK-CCR-ASSMT-202451							

SAMPLER NAME AND SIGNATURE			TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
PRINT Name of SAMPLER:	Jake Swanson					
SIGNATURE of SAMPLER:		DATE Signed: 1/24/24				

Laboratory receiving samples:

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

Sample Condition Upon Receipt

Client Name: Arcadis

Project #: WO#: 92709793

PM: MP Due Date: 01/31/24

CLIENT: GA-ArcadAtl

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

Custody Seal Present? ☑ Yes ☐ No **Seals Intact?** ☑ Yes ☐ No ☐ N/A

Date/Initials Person Examining Contents: 1/24/24 SM

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

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

Thermometer:

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

Cooler Temp: 4.5 **Correction Factor:** Add/Subtract (°C) +0.1

Cooler Temp Corrected (°C): 5.0

Temp should be above freezing to 6°C

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

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

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

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

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

COMMENTS/SAMPLE DISCREPANCY

Field Data Required? ☐ Yes ☐ No

Lot ID of split containers:

CLIENT NOTIFICATION/RESOLUTION

Person contacted: _____ Date/Time: _____

Project Manager SCURF Review: _____ **Date:** _____

Project Manager SRF Review: _____ **Date:** _____

*Check mark top half of box if pH and/or dechlorination is verified and within the acceptance range for preservation samples.

Exceptions: VOA, Coliform, TOC, Oil and Grease, DRO/8015 (water) DOC, LLHg

**Bottom half of box is to list number of bottles

***Check all unpreserved Nitrates for chlorine

Project # WO#:92709793

PM: MP Due Date: 01/31/24

CLIENT: GA-ArcadAtl

Item#	BP4U-125 mL Plastic Unpreserved (N/A) (Cl-)	BP3U-250 mL Plastic Unpreserved (N/A)	BP2U-500 mL Plastic Unpreserved (N/A)	BP1U-1 liter Plastic Unpreserved (N/A)	BP4S-125 mL Plastic H2SO4 (pH < 2) (Cl-)	BP3N-250 mL plastic HNO3 (pH < 2)	BP4Z-125 mL Plastic ZN Acetate & NaOH (>9)	BP4B-125 mL Plastic NaOH (pH > 12) (Cl-)	WGFU-Wide-mouthed Glass jar Unpreserved	AG1U-1 liter Amber Unpreserved (N/A) (Cl-)	AG1H-1 liter Amber HCl (pH < 2)	AG3U-250 mL Amber Unpreserved (N/A) (Cl-)	AG1S-1 liter Amber H2SO4 (pH < 2)	AG3S-250 mL Amber H2SO4 (pH < 2)	DG94-40 mL Amber NH4Cl (N/A)(Cl-)	DG9H-40 mL VOA HCl (N/A)	VG9T-40 mL VOA Na2S2O3 (N/A)	VG9U-40 mL VOA Unpreserved (N/A)	DG9V-40 mL VOA H3PO4 (N/A)	KP7U-50 mL Plastic Unpreserved (N/A)	V/GK (3 vials per kit)-VPH/Gas kit (N/A)	SP5T-125 mL Sterile Plastic (N/A – lab)	SP2T-250 mL Sterile Plastic (N/A – lab)		BP3R-250 mL Plastic (NH2)2SO4 (9.3-9.7)	AG0U-100 mL Amber Unpreserved (N/A) (Cl-)	VSGU-20 mL Scintillation vials (N/A)	DG9U-40 mL Amber Unpreserved vials (N/A)
1			2			1																							
2			2			1																							
3			2			1																							
4			2			1																							
5			2			1																							
6																													
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

Stantec
Georgia Power – Arkwright (AP-2)
Analytical Report Nos. 632699, 632702, 633126, 633128
August 2023

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

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)

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.

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

DATA USABILITY SUMMARY

Steven Elliott (Stantec) reviewed one data package from GEL Laboratories (GEL) for the analysis of water samples collected January 23 and 24, 2024, at the Georgia Power Arkwright Plant AP2 site. Samples were collected according to the Field Sampling Plan – Plant Arkwright (Amec Foster Wheeler, 2016).

Analyses requested included:

- SW-846 6020B – Metals, total and dissolved, by inductively coupled plasma - mass spectrometry (ICP/MS)
- SW-846 7470A – Mercury by manual cold-vapor
- EPA 300 Rev 2.1 – Chloride, fluoride, and sulfate by ion chromatography
- SM 2540C - 2015 – Total dissolved solids (TDS)
- EPA 353.2 – Nitrate/nitrite as nitrogen
- SM 2320B – Alkalinity, total, bicarbonate, carbonate
- 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

Ten (10) 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 a temperature of 2.0°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 652874

- Chloride was detected in the method blank (QC1205633068) in batch 2559394. All associated sample results were reported with results greater than 10 times the blank concentration and therefore no qualification was necessary.
- Chloride was detected in the method blank (QC1205634482) in batch 2560129. All associated sample results were reported with results greater than 10 times the blank concentration and therefore no qualification was necessary.

Field Blanks. Field blanks were analyzed for the full suite of sample analyses and all analytes were not detected with the following exceptions:

SDG 652874

- Chloride was detected in the blanks ARK-AP2-EB-03 (01/24/2024), 0.112J and ARK-AP2-FB-03 (01/24/2024) at concentrations below the laboratory Reporting Limit (RL). All associated sample results were reported with results greater than 10 times the blank concentration and therefore no qualification was necessary.

SDG 652877

- Radium 228 was detected in the blank ARK-AP2-FB-03 (01/24/2024) at a concentration below the laboratory RL. No qualification was required for associated sample results reported as not detected. Associated samples reported with detected concentrations less than 10 times the blank concentration have been qualified as estimated with a high bias (J+).

Laboratory Control Samples

Laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) recoveries met the laboratory acceptance criteria for all analyses.

Matrix Spike/Matrix Spike Duplicates

Site-specific MS/MSD precision and accuracy results were within the laboratory acceptance criteria.

Laboratory Duplicates

Appropriate analytical duplicates were analyzed and RPDs were within the laboratory acceptance criteria.

Field Precision

One set of field duplicate samples was 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 with the following exception:

SDG 652690

- Results for TDS in the field duplicate pair ARK-ARGWA-19 / ARK-AP2-FD-03 had a high FD RPD

and have been qualified as estimated.

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	652690001	652690	6020B, 7470A, 300, 2540C, 353.2, 2320B	01/23/2024
ARK-ARAMW-9	652690002	652690	6020B, 7470A, 300, 2540C, 353.2, 2320B	01/23/2024
ARK-ARGWA-20	652690003	652690	6020B, 7470A, 300, 2540C, 353.2, 2320B	01/23/2024
ARK-ARAMW-7	652690004	652690	6020B, 7470A, 300, 2540C, 353.2, 2320B	01/23/2024
ARK-ARGWC-22	652690005	652690	6020B, 7470A, 300, 2540C, 353.2, 2320B	01/23/2024
ARK-AP2-FD-03	652690006	652690	6020B, 7470A, 300, 2540C	01/23/2024
ARK-ARGWA-19	652690007	652690	6020B (D) (Mg, Fe)	01/23/2024
ARK-ARAMW-9	652690008	652690	6020B (D) (Mg, Fe)	01/23/2024
ARK-ARGWA-20	652690009	652690	6020B (D), 7470A (D)	01/23/2024
ARK-ARAMW-7	652690010	652690	6020B (D) (Mg, Fe)	01/23/2024
ARK-ARGWC-22	652690011	652690	6020B (D) (Mg, Fe)	01/23/2024
ARK-ARGWC-21	652874001	652874	6020B, 7470A, 300, 2540C, 353.2, 2320B	01/24/2024
ARK-ARGWC-23	652874002	652874	6020B, 7470A, 300, 2540C, 353.2, 2320B	01/24/2024
ARK-ARAMW-1	652874003	652874	6020B, 7470A, 300, 2540C, 353.2, 2320B	01/24/2024
ARK-ARAMW-2	652874004	652874	6020B, 7470A, 300, 2540C, 353.2, 2320B	01/24/2024
ARK-ARAMW-8	652874005	652874	6020B, 7470A, 300, 2540C, 353.2, 2320B	01/24/2024

Field Identification	Laboratory Identification	SDG	Analyses	Sample Date
ARK-AP2-EB-03	652874006	652874	6020B, 7470A, 300, 2540C	01/24/2024
ARK-AP2-FB-03	652874007	652874	6020B, 7470A, 300, 2540C	01/24/2024
ARK-ARGWC-21	652874008	652874	6020B (D) (Mg, Fe)	01/24/2024
ARK-ARGWC-23	652874009	652874	6020B (D) (Mg, Fe)	01/24/2024
ARK-ARAMW-1	652874010	652874	6020B (D) (Mg, Fe)	01/24/2024
ARK-ARAMW-2	652874011	652874	6020B (D) (Mg, Fe)	01/24/2024
ARK-ARAMW-8	652874012	652874	6020B (D) (Mg, Fe)	01/24/2024
ARK-ARGWA-19	652694001	652694	903.1, 904	01/23/2024
ARK-ARAMW-9	652694002	652694	903.1, 904	01/23/2024
ARK-ARGWA-20	652694003	652694	903.1, 904	01/23/2024
ARK-ARAMW-7	652694004	652694	903.1, 904	01/23/2024
ARK-ARGWC-22	652694005	652694	903.1, 904	01/23/2024
ARK-AP2-FD-03	652694006	652694	903.1, 904	01/23/2024
ARK-ARGWC-21	652877001	652877	903.1, 904	01/24/2024
ARK-ARGWC-23	652877002	652877	903.1, 904	01/24/2024
ARK-ARAMW-1	652877003	652877	903.1, 904	01/24/2024
ARK-ARAMW-2	652877004	652877	903.1, 904	01/24/2024
ARK-ARAMW-8	652877005	652877	903.1, 904	01/24/2024
ARK-AP2-EB-03	652877006	652877	903.1, 904	01/24/2024
ARK-AP2-FB-03	652877007	652877	903.1, 904	01/24/2024

Table 2 – Qualified Analytical Data

Field Identification	Analyte	Qualification / Code	Reason for Qualification
ARK-ARAMW-1	Radium 228	J+ / BFL	Detected in FB
ARK-ARAMW-2	Radium 228	J+ / BFL	Detected in FB
ARK-ARAMW-8	Radium 228	J+ / BFL	Detected in FB
ARK-ARGWC-23	Radium 228	J+ / BFL	Detected in FB
ARK-ARGWA-19	TDS	J / FD1	High FD RPD
ARK-AP2-FD-03	TDS	J / FD1	High FD RPD

BFL – Blank Field High – detected in the field blank (FB) below the RL
FD2 - Field duplicate absolute difference does not meet quality control criteria
J – estimated result
J+ – The analyte was detected in an associated blank; estimated data with a high bias
MS1 - Matrix spike %R does not meet quality control criteria
SP1 - Sample preservation does not meet quality control criteria (temperature)

Table 3a – Field Precision

Field Identification	Analyte	Sample Result (mg/L)	Duplicate Result (mg/L)	RPD[a]	Qualified
ARK-ARGWA-19/ ARK-AP2-FD-03	Chloride	5.63	5.62	0.3%	A
	Fluoride	0.121	0.125	<5*RL, <2*RL	A*
	Sulfate	6.98	7.04	0.9%	A
	Boron	0.0214	0.0322	<5*RL, <2*RL	A*
	Barium	0.0348	0.0341	2.0%	A
	Calcium	9.34	9.33	0.1%	A
	Lead	0.002 U	0.000549 J	<5*RL, <2*RL	A*
	Lithium	0.0044 J	0.00415 J	<5*RL, <2*RL	A*
	Magnesium	4.06	NA	NC	None
	Molybdenum	0.00048 J	0.00044 J	<5*RL, <2*RL	A*
	Sodium	11.1	NA	NC	None
	Potassium	2.17	NA	NC	None
	Nitrate/nitrite	1.90	1.88	1.1%	A
	TDS	82.0	9.0	160%	J
	Total Alkalinity	38.1	NA	NC	None
	Bicarbonate	38.1	NA	NC	None
	Radium 226	1.46	1.33	9.3%	A

[a] RPD = ((SR - DR)*200)/(SR + DR)
A - Acceptable Data.
A* - Acceptable data where results were less than 5X the RDL and the difference between sample and duplicate was less than 2X the RDL.
J – Estimated detected.
NA – not analyzed
NC – not calculated

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 recommend 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

Sanitas™ v.10.0.06 Software licensed to Groundwater Stats Consulting. UG

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

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Arsenic (mg/L)	ARGWC-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

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

Upper Tolerance Limits

Plant Arkwright Client: Southern Company Data: Arkwright No 2 Printed 10/13/2023, 11:56 AM

Constituent	Upper Lim.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
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

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
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.

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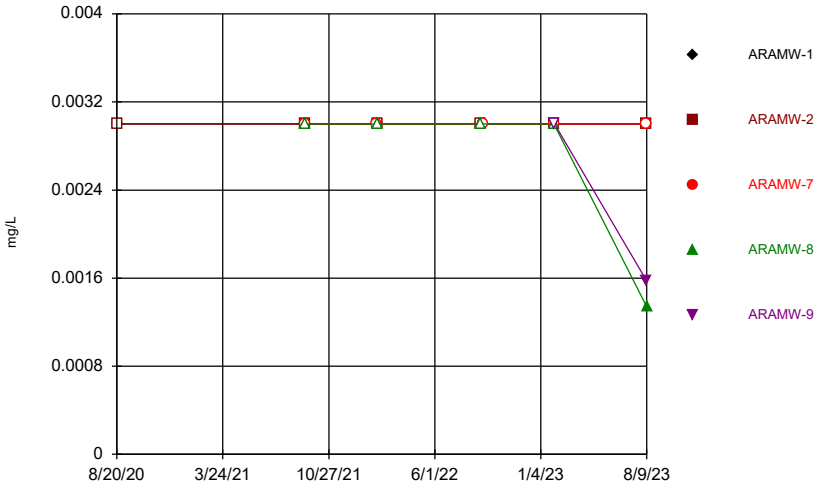
Hollow symbols indicate censored values.

Time Series



Constituent: Antimony Analysis Run 10/19/2023 8:39 AM View: Descriptive
Plant Arkwright Client: Southern Company Data: Arkwright No 2

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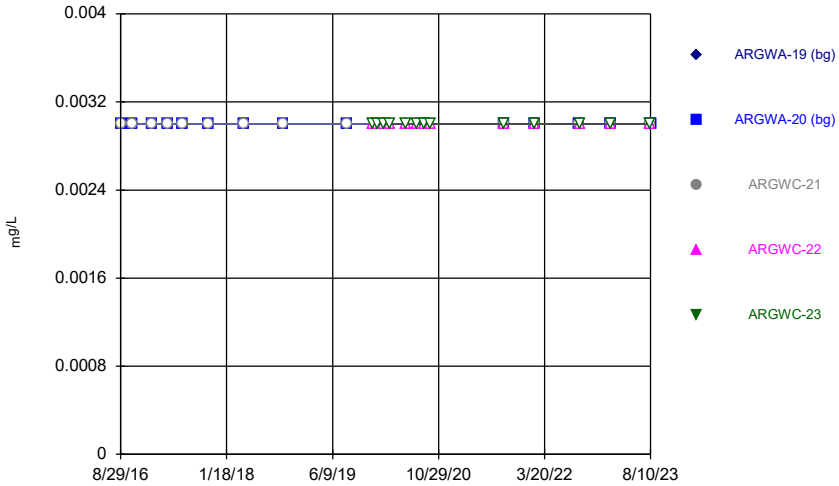
Hollow symbols indicate censored values.

Time Series



Constituent: Antimony Analysis Run 10/19/2023 8:39 AM View: Descriptive
Plant Arkwright Client: Southern Company Data: Arkwright No 2

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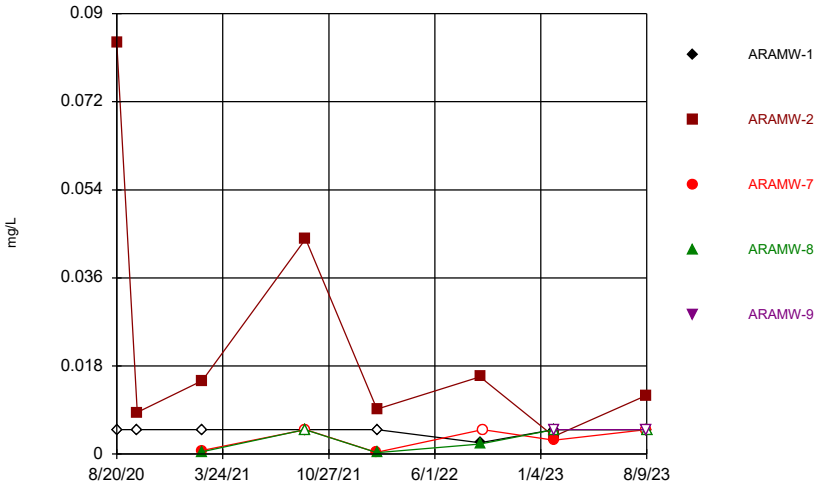
Time Series



Constituent: Arsenic Analysis Run 10/19/2023 8:39 AM View: Descriptive
Plant Arkwright Client: Southern Company Data: Arkwright No 2

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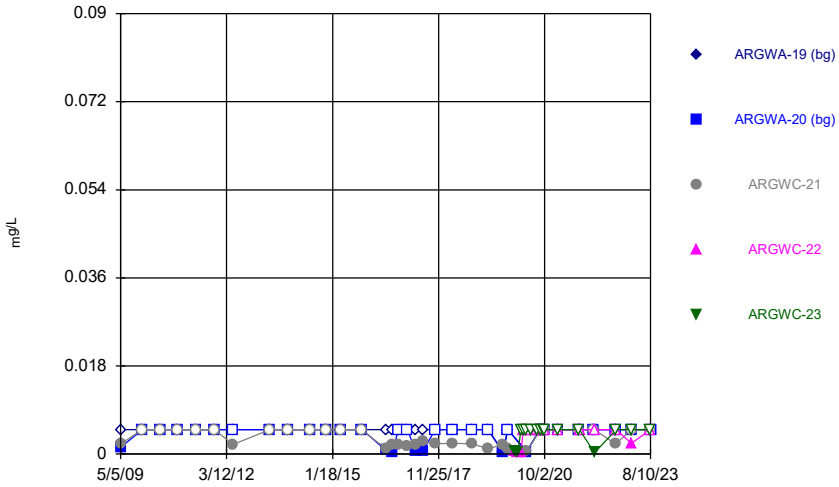
Hollow symbols indicate censored values.

Time Series



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Plant Arkwright Client: Southern Company Data: Arkwright No 2

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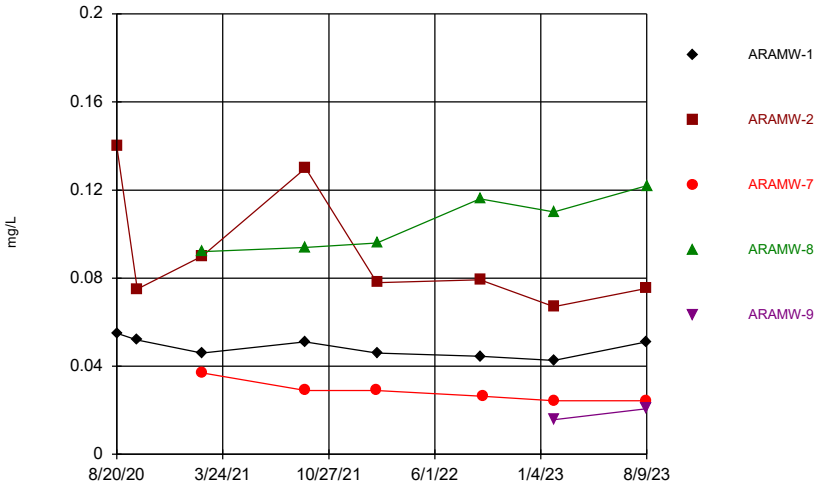
Time Series



Constituent: Barium Analysis Run 10/19/2023 8:39 AM View: Descriptive
Plant Arkwright Client: Southern Company Data: Arkwright No 2

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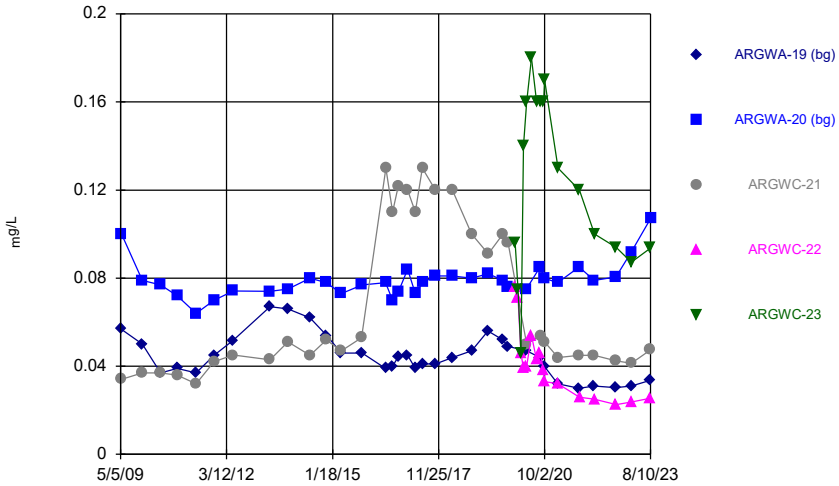
Time Series



Constituent: Barium Analysis Run 10/19/2023 8:39 AM View: Descriptive
Plant Arkwright Client: Southern Company Data: Arkwright No 2

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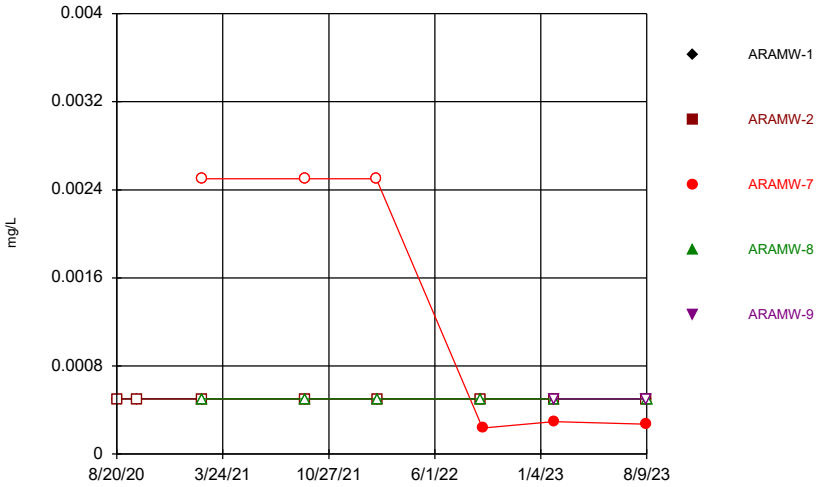
Hollow symbols indicate censored values.

Time Series



Constituent: Beryllium Analysis Run 10/19/2023 8:39 AM View: Descriptive
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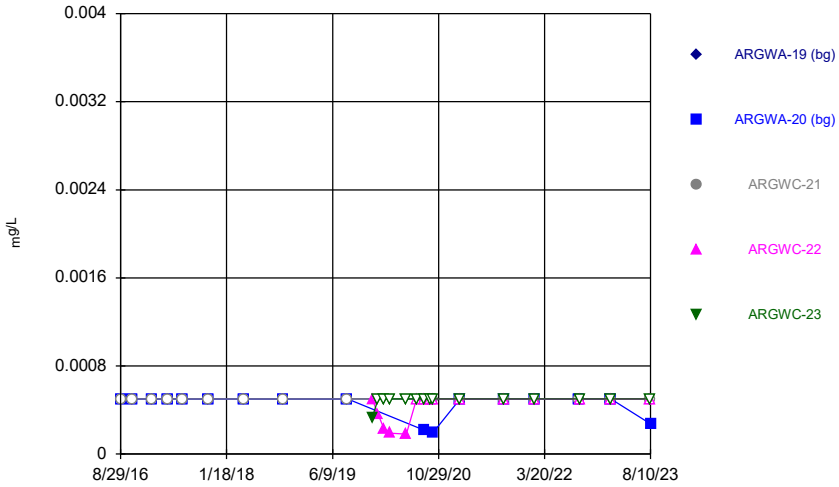
Hollow symbols indicate censored values.

Time Series



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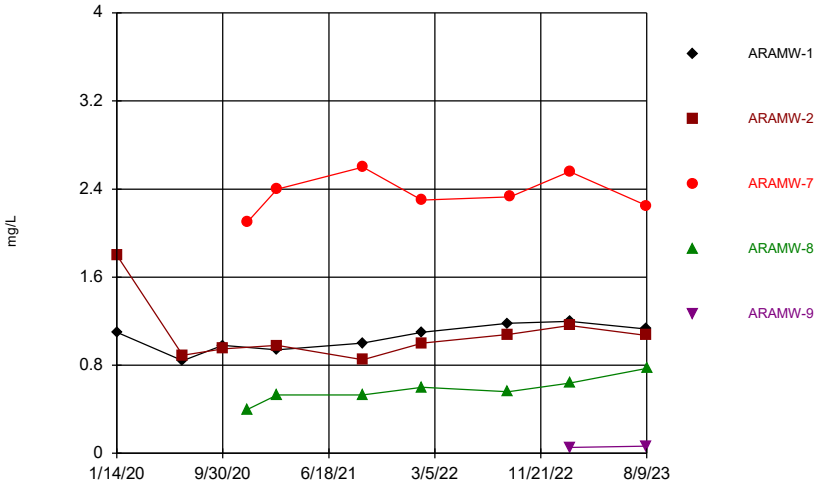
Time Series



Constituent: Boron Analysis Run 10/19/2023 8:39 AM View: Descriptive
Plant Arkwright Client: Southern Company Data: Arkwright No 2

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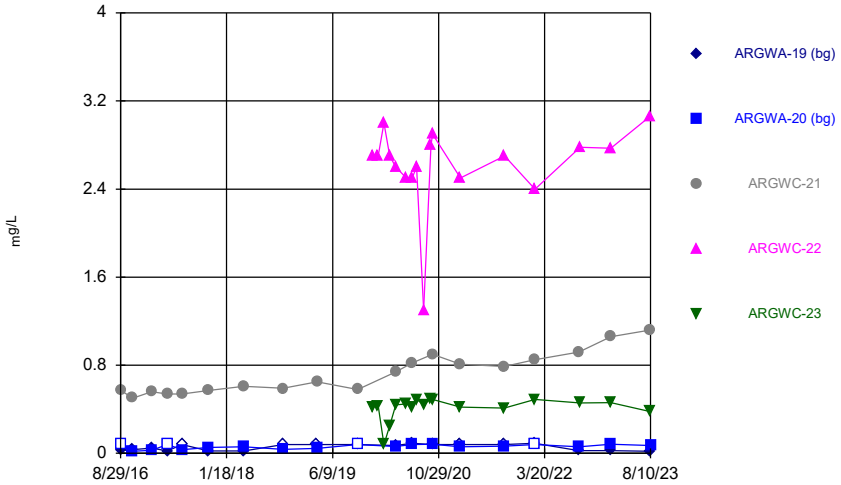

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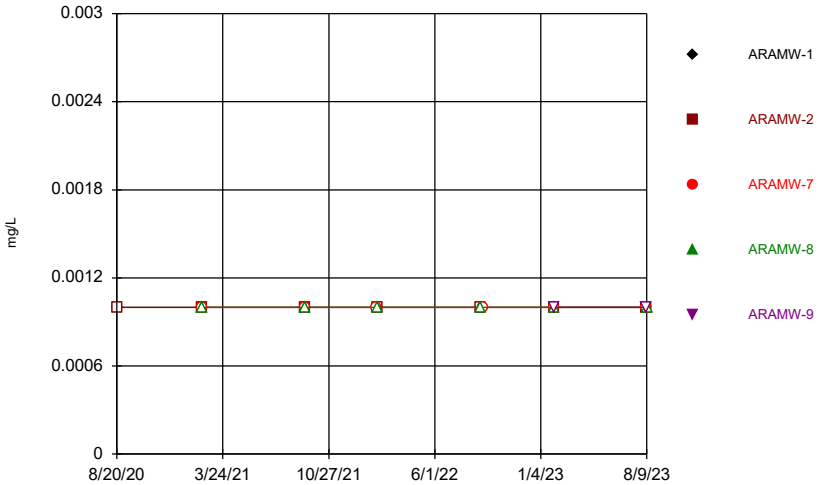
Hollow symbols indicate censored values.

Time Series



Constituent: Cadmium Analysis Run 10/19/2023 8:39 AM View: Descriptive
Plant Arkwright Client: Southern Company Data: Arkwright No 2

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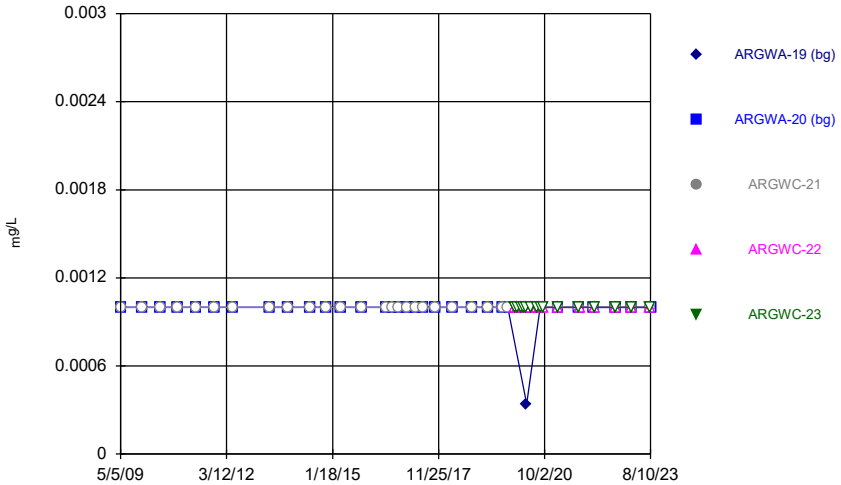
Hollow symbols indicate censored values.

Time Series



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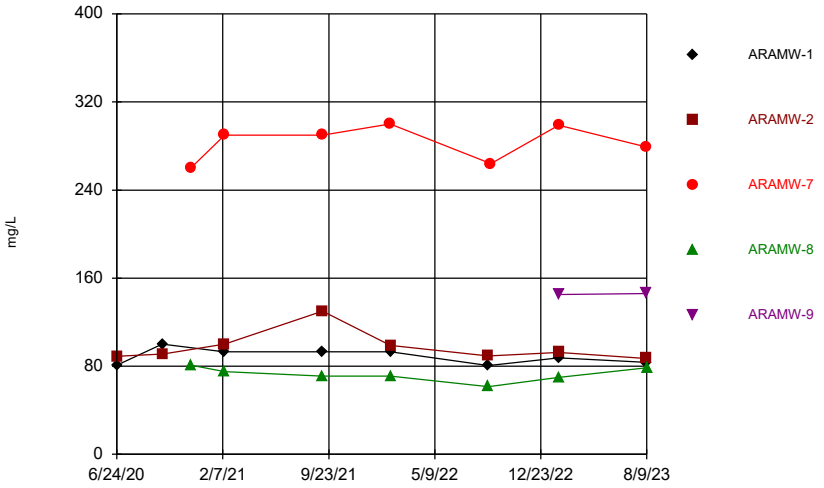
Time Series



Constituent: Calcium Analysis Run 10/19/2023 8:39 AM View: Descriptive
Plant Arkwright Client: Southern Company Data: Arkwright No 2

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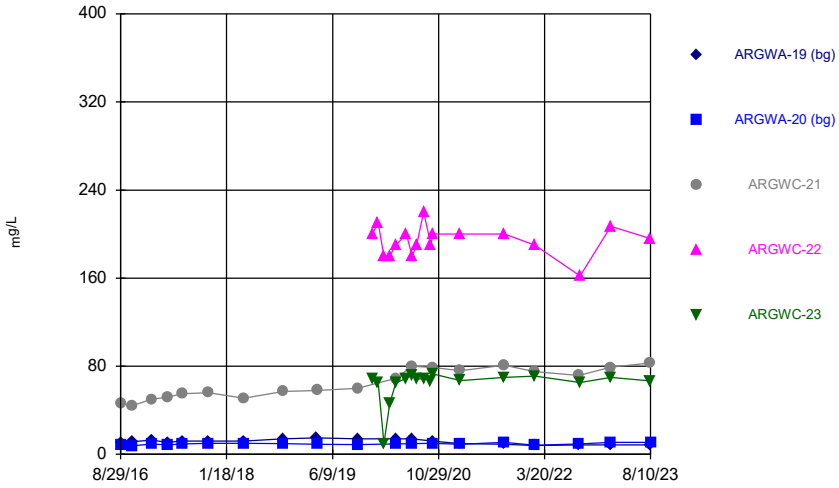
Time Series



Constituent: Calcium Analysis Run 10/19/2023 8:39 AM View: Descriptive
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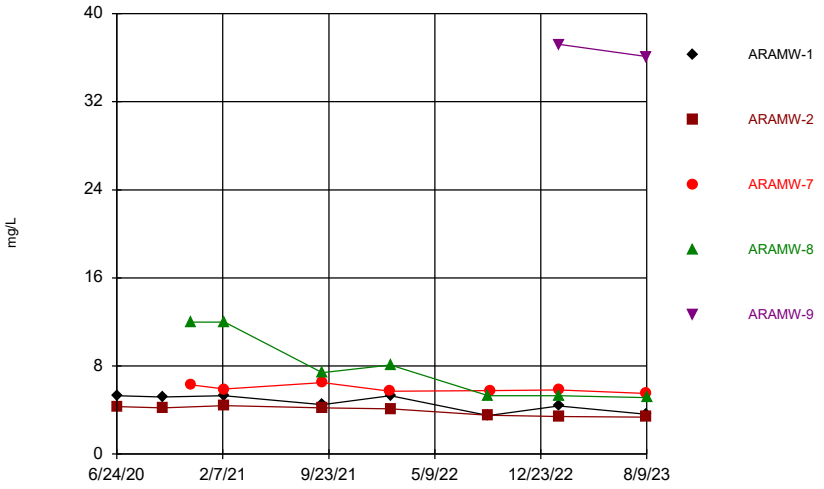
Time Series



Constituent: Chloride Analysis Run 10/19/2023 8:39 AM View: Descriptive
Plant Arkwright Client: Southern Company Data: Arkwright No 2

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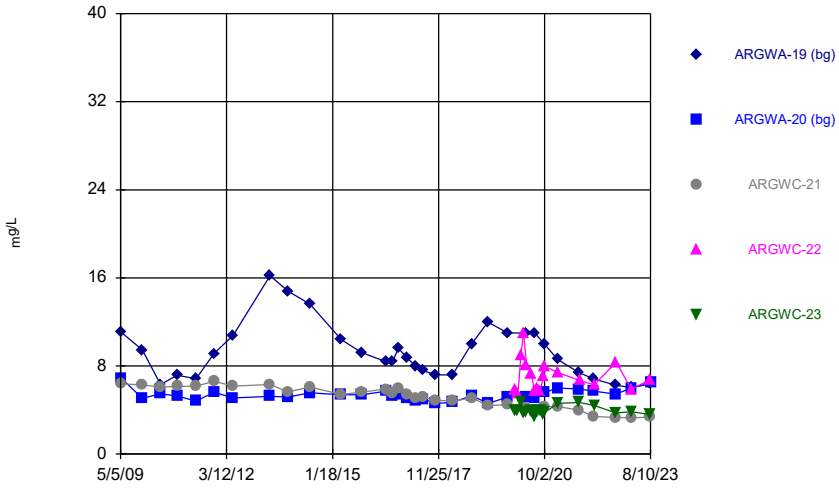
Time Series



Constituent: Chloride Analysis Run 10/19/2023 8:39 AM View: Descriptive
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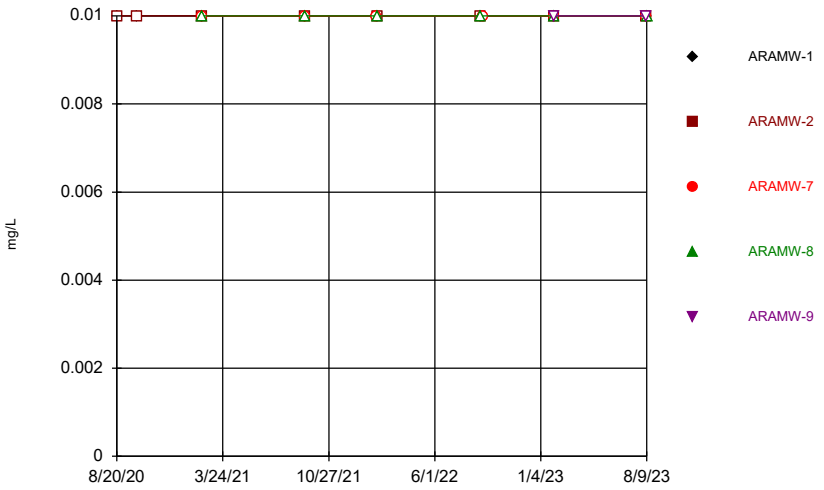
Hollow symbols indicate censored values.

Time Series



Constituent: Chromium Analysis Run 10/19/2023 8:39 AM View: Descriptive
Plant Arkwright Client: Southern Company Data: Arkwright No 2

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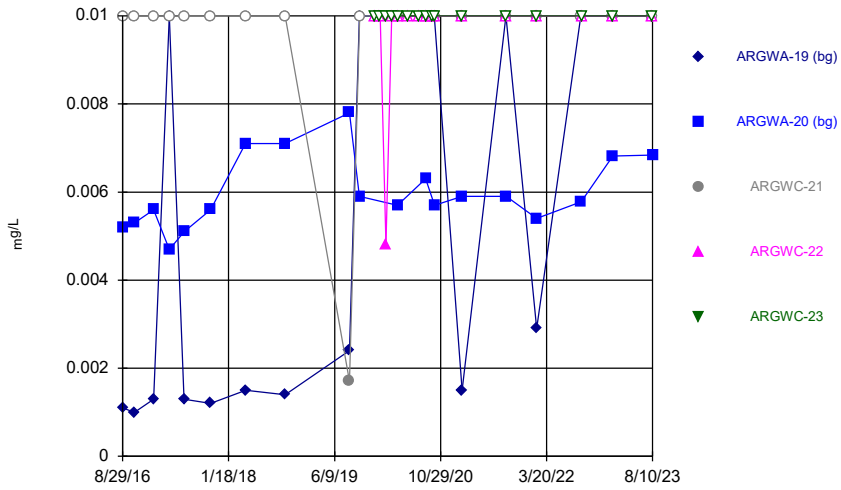
Hollow symbols indicate censored values.

Time Series



Constituent: Chromium Analysis Run 10/19/2023 8:39 AM View: Descriptive
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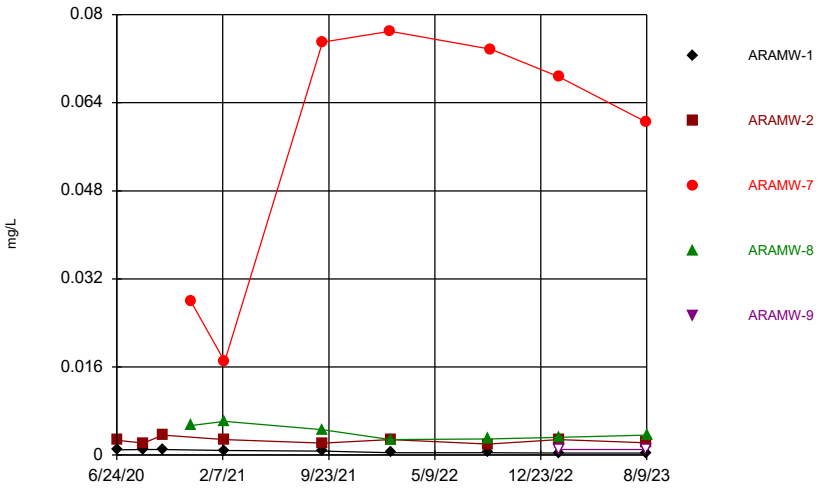
Time Series



Constituent: Cobalt Analysis Run 10/19/2023 8:40 AM View: Descriptive
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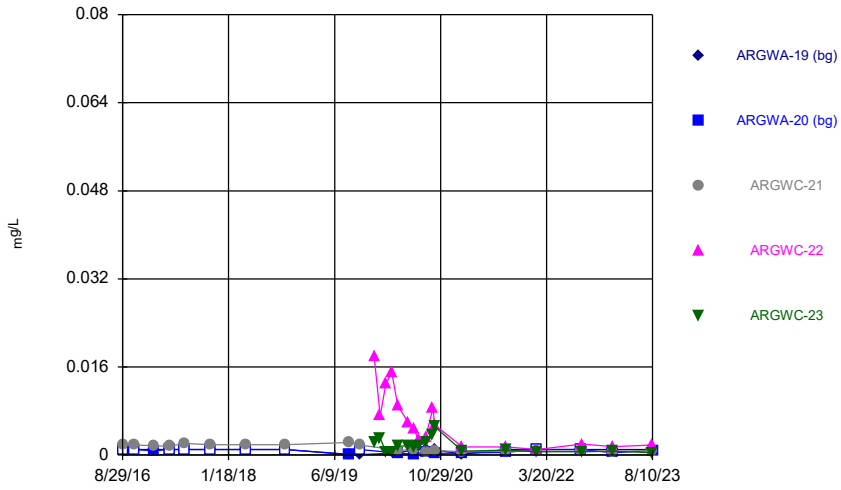
Hollow symbols indicate censored values.

Time Series



Constituent: Cobalt Analysis Run 10/19/2023 8:40 AM View: Descriptive
Plant Arkwright Client: Southern Company Data: Arkwright No 2

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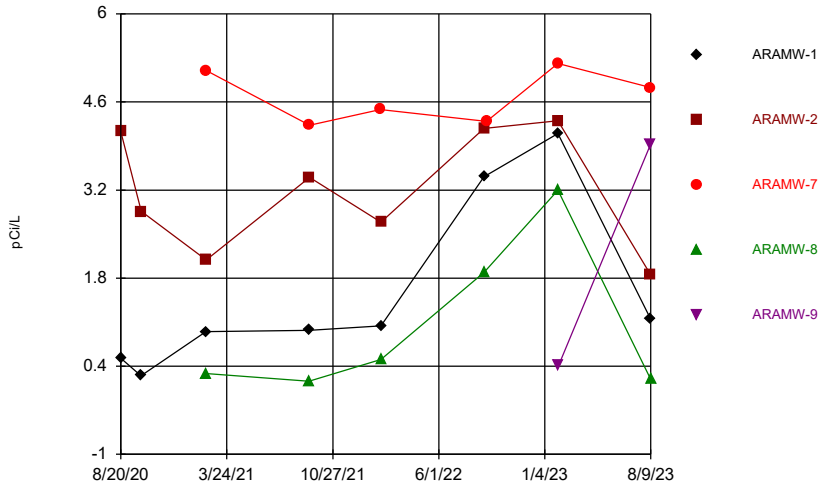
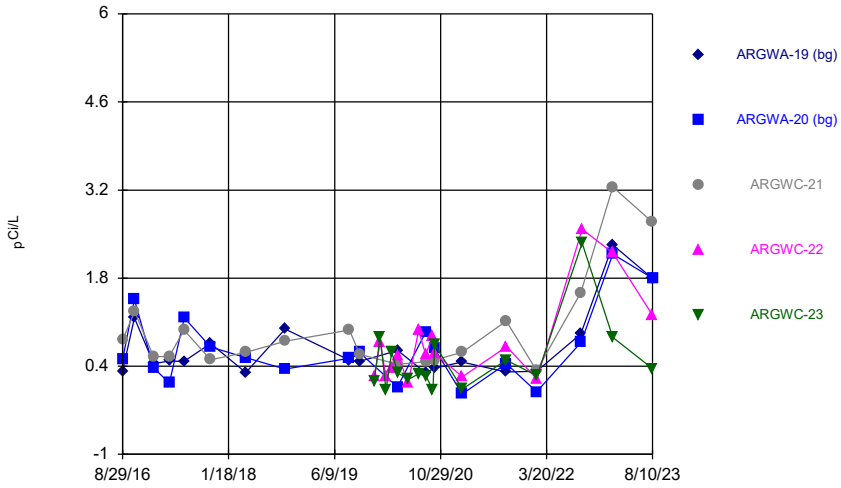
Time Series



Constituent: Combined Radium 226 + 228 Analysis Run 10/19/2023 8:40 AM View: Descriptive
Plant Arkwright Client: Southern Company Data: Arkwright No 2

Sanitas™ v.10.0.06 Software licensed to Groundwater Stats Consulting. UG

Time Series



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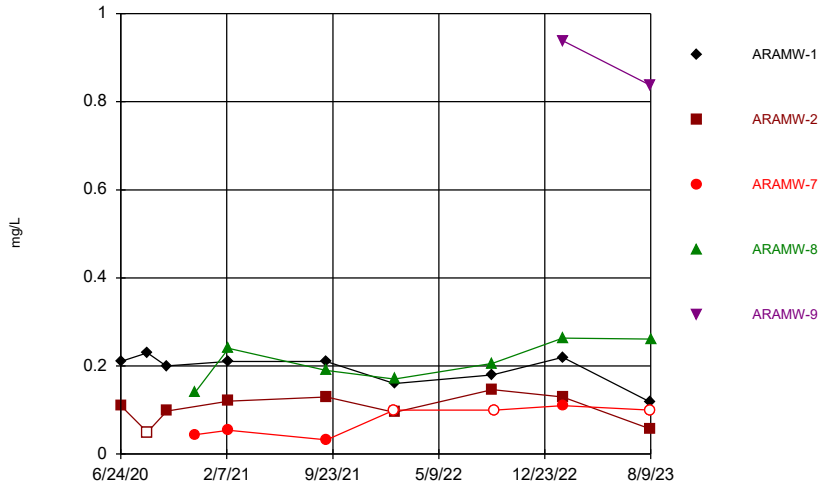
Time Series



Constituent: Fluoride Analysis Run 10/19/2023 8:40 AM View: Descriptive
Plant Arkwright Client: Southern Company Data: Arkwright No 2

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Hollow symbols indicate censored values.

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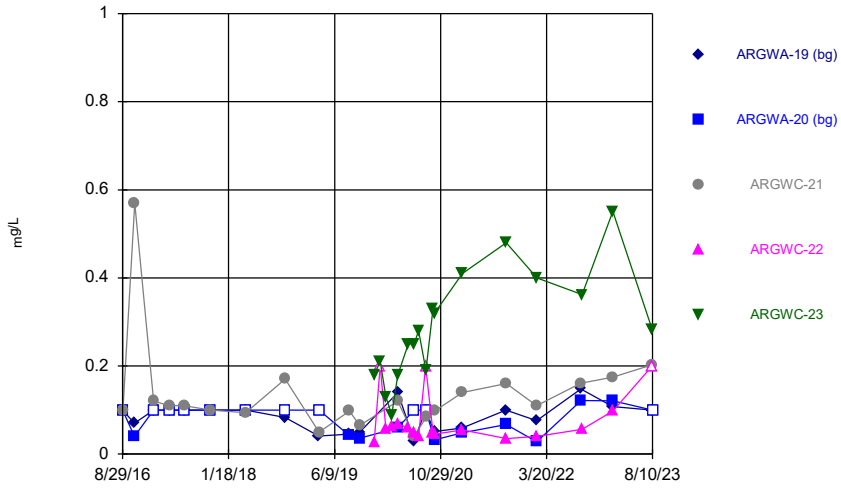

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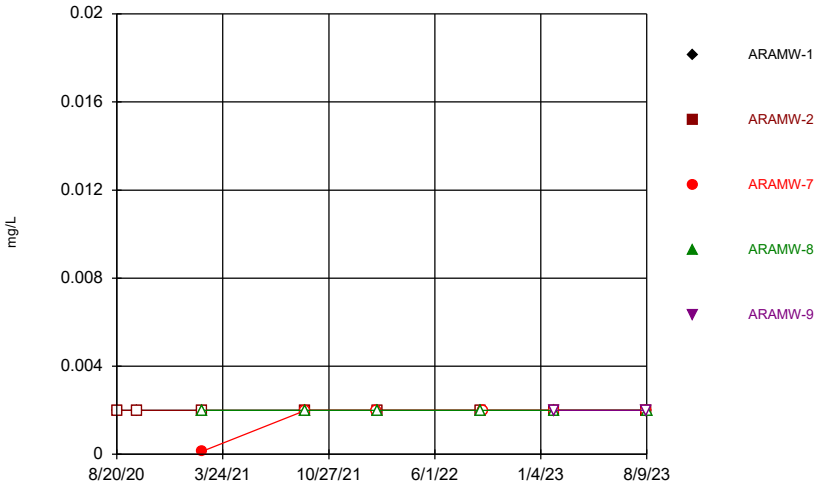

Constituent: Lead Analysis Run 10/19/2023 8:40 AM View: Descriptive
Plant Arkwright Client: Southern Company Data: Arkwright No 2

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Hollow symbols indicate censored values.

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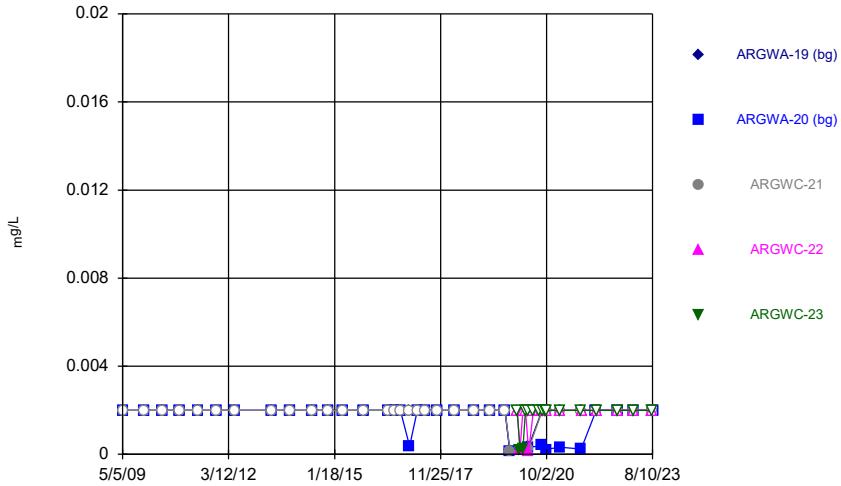

Constituent: Lead Analysis Run 10/19/2023 8:40 AM View: Descriptive
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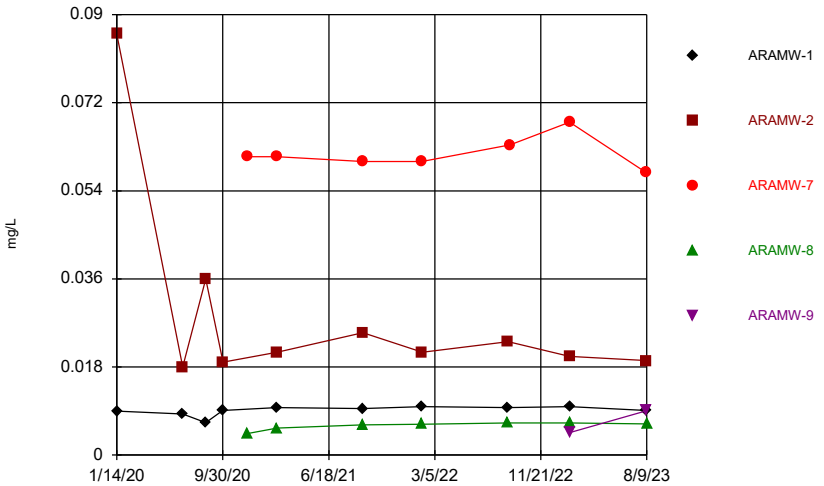
Time Series



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Plant Arkwright Client: Southern Company Data: Arkwright No 2

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Hollow symbols indicate censored values.

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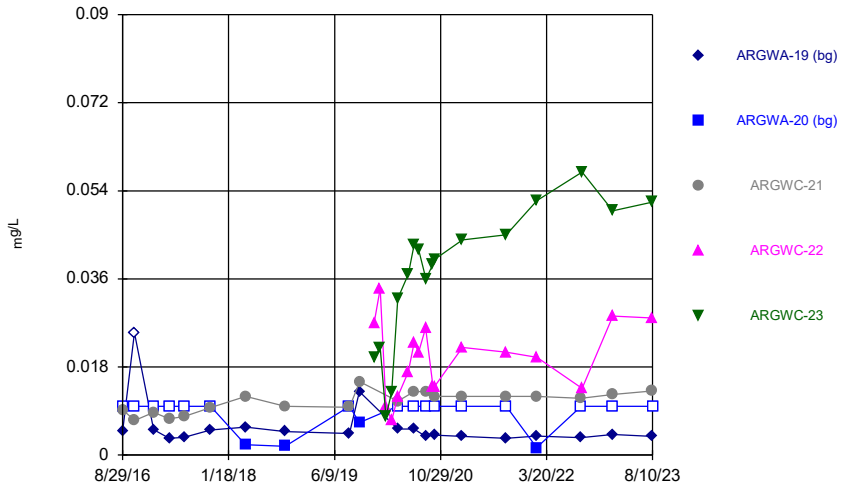

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Plant Arkwright Client: Southern Company Data: Arkwright No 2

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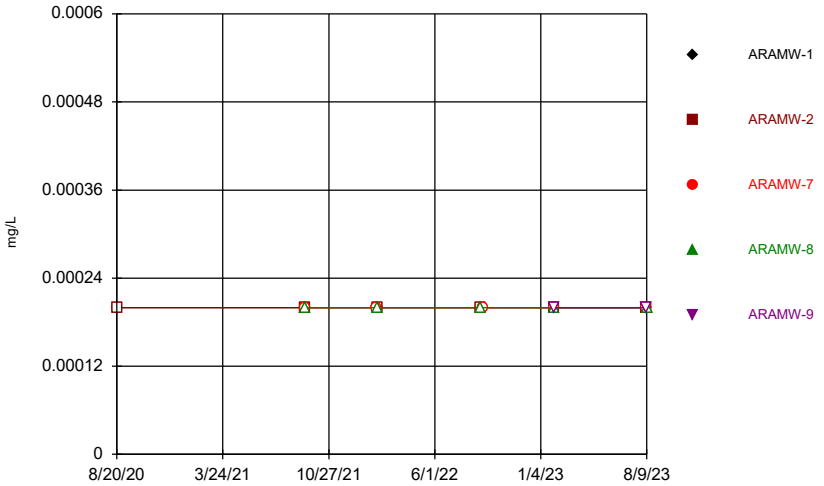

Constituent: Mercury Analysis Run 10/19/2023 8:40 AM View: Descriptive
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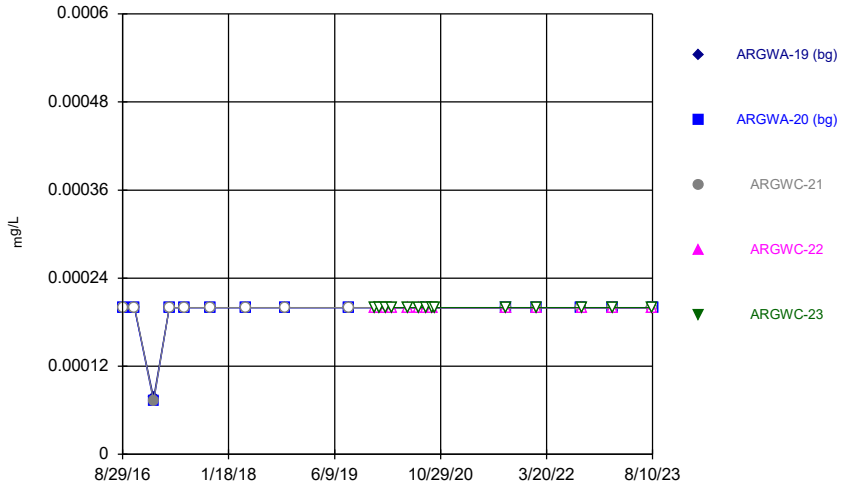

Constituent: Mercury Analysis Run 10/19/2023 8:40 AM View: Descriptive
Plant Arkwright Client: Southern Company Data: Arkwright No 2

Sanitas™ v.10.0.06 Software licensed to Groundwater Stats Consulting. UG
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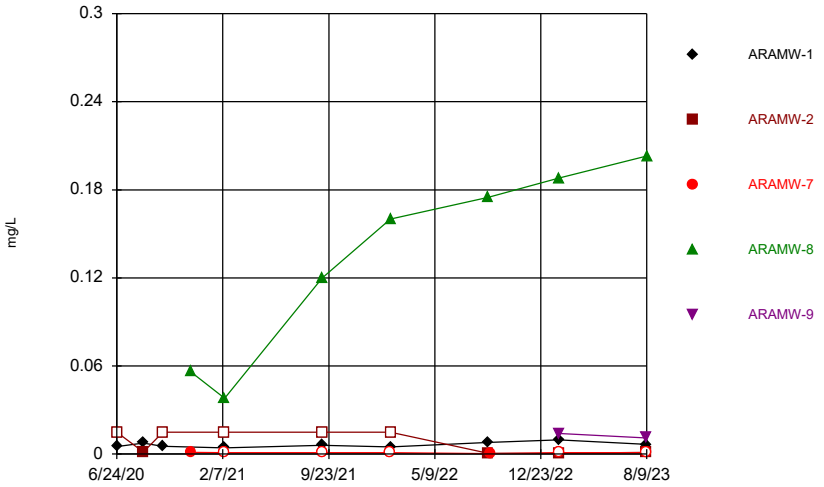

Constituent: Molybdenum Analysis Run 10/19/2023 8:40 AM View: Descriptive
Plant Arkwright Client: Southern Company Data: Arkwright No 2

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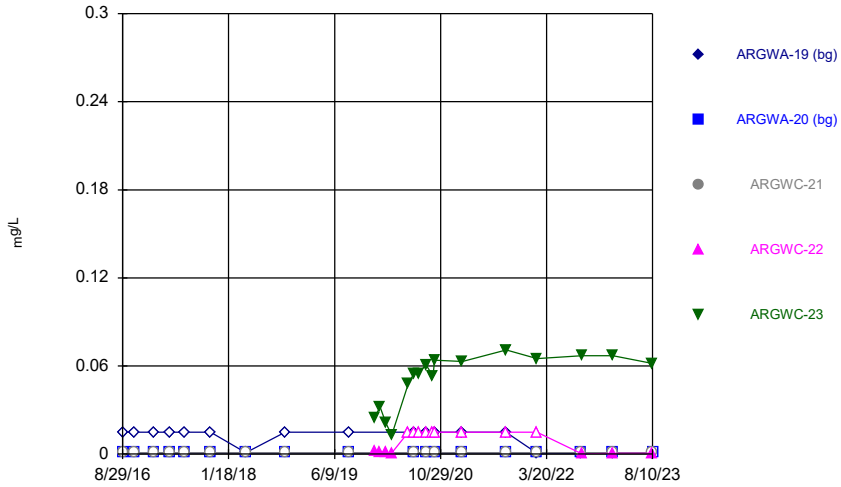
Hollow symbols indicate censored values.

Time Series



Constituent: Molybdenum Analysis Run 10/19/2023 8:40 AM View: Descriptive
Plant Arkwright Client: Southern Company Data: Arkwright No 2

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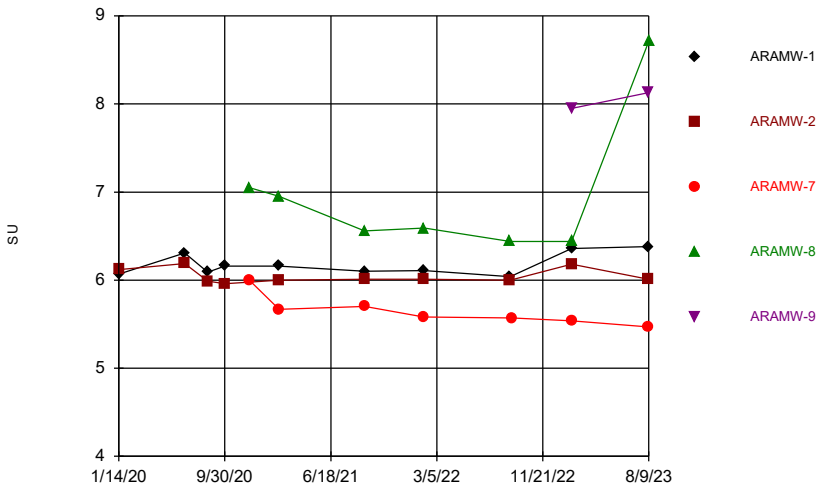
Time Series



Constituent: pH Analysis Run 10/19/2023 8:40 AM View: Descriptive
Plant Arkwright Client: Southern Company Data: Arkwright No 2

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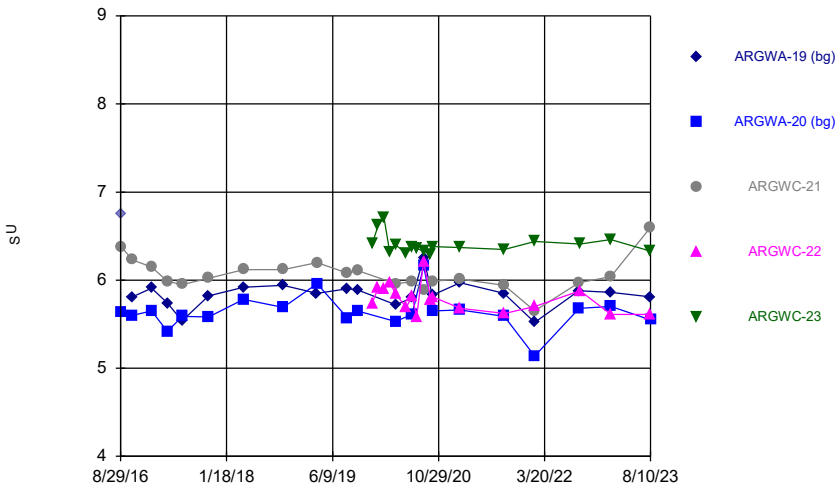
Time Series



Constituent: pH Analysis Run 10/19/2023 8:40 AM View: Descriptive
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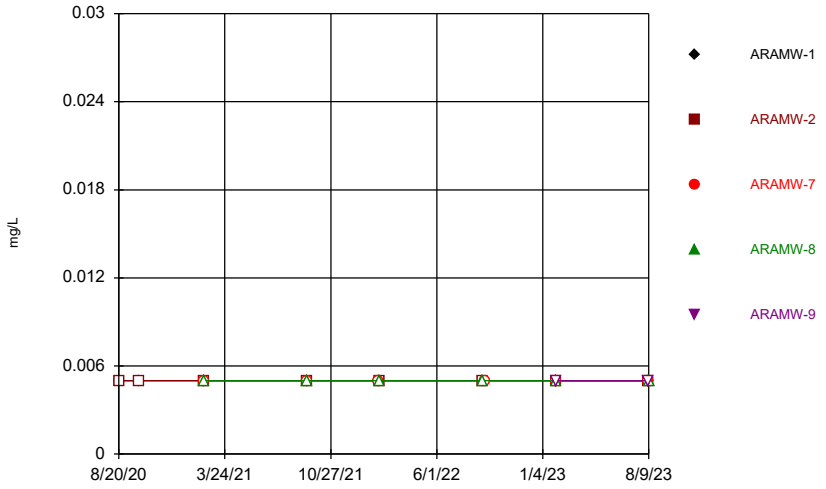

Constituent: Selenium Analysis Run 10/19/2023 8:40 AM View: Descriptive
Plant Arkwright Client: Southern Company Data: Arkwright No 2

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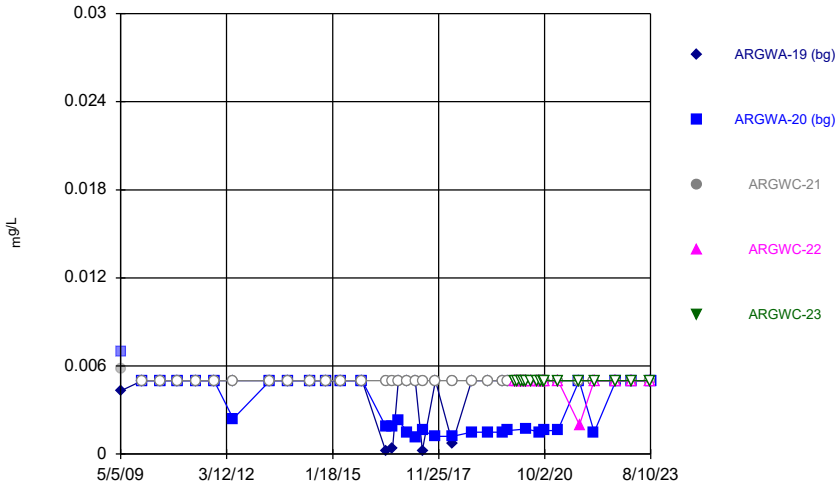
Hollow symbols indicate censored values.

Time Series



Constituent: Selenium Analysis Run 10/19/2023 8:40 AM View: Descriptive
Plant Arkwright Client: Southern Company Data: Arkwright No 2

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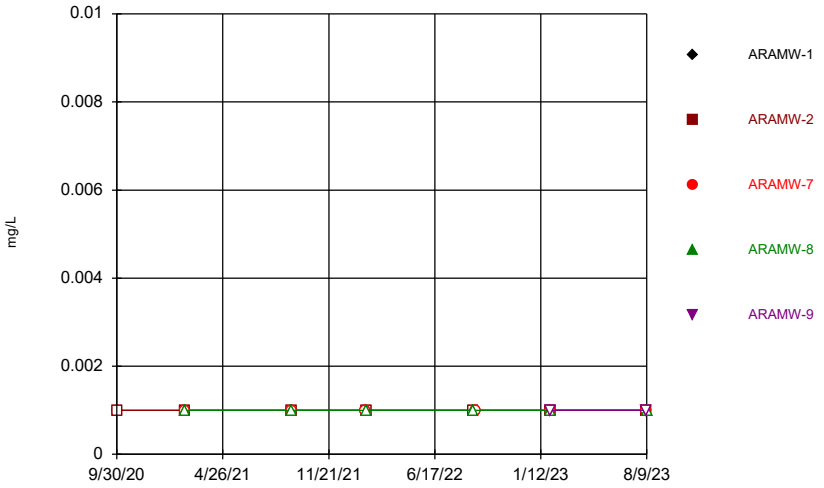
Hollow symbols indicate censored values.

Time Series



Constituent: Silver Analysis Run 10/19/2023 8:40 AM View: Descriptive
Plant Arkwright Client: Southern Company Data: Arkwright No 2

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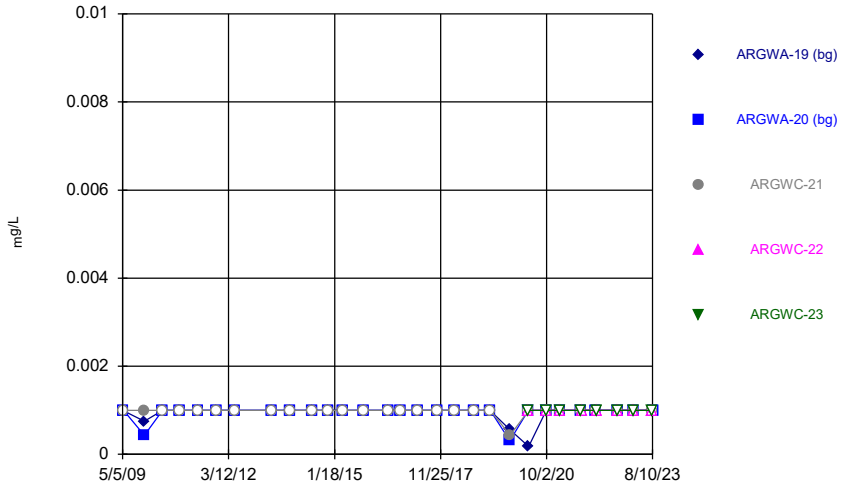
Hollow symbols indicate censored values.

Time Series



Constituent: Silver Analysis Run 10/19/2023 8:40 AM View: Descriptive
Plant Arkwright Client: Southern Company Data: Arkwright No 2

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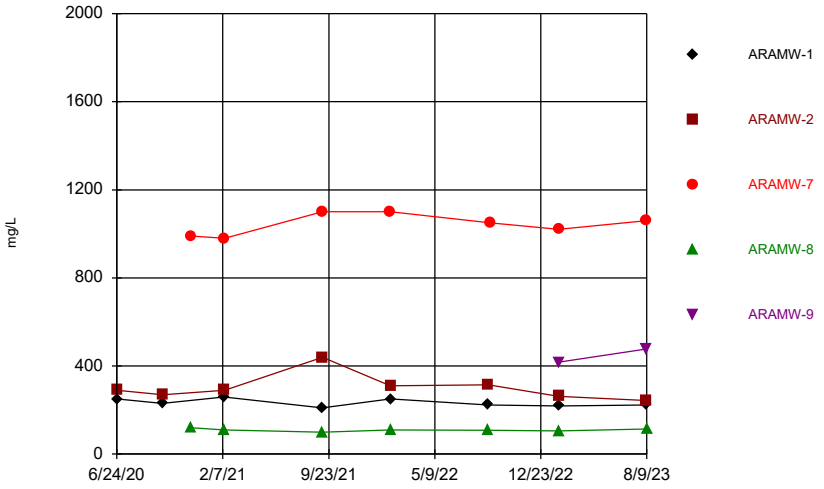
Time Series



Constituent: Sulfate Analysis Run 10/19/2023 8:40 AM View: Descriptive
Plant Arkwright Client: Southern Company Data: Arkwright No 2

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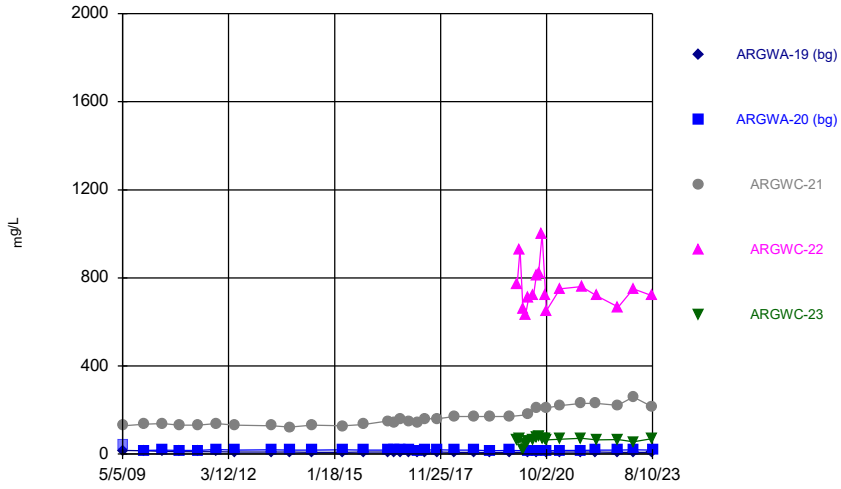
Time Series



Constituent: Sulfate Analysis Run 10/19/2023 8:40 AM View: Descriptive
Plant Arkwright Client: Southern Company Data: Arkwright No 2

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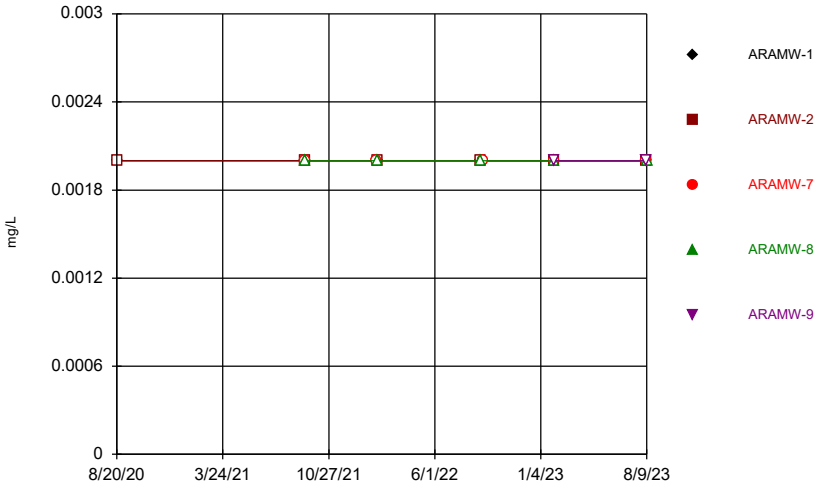
Hollow symbols indicate censored values.

Time Series



Constituent: Thallium Analysis Run 10/19/2023 8:40 AM View: Descriptive
Plant Arkwright Client: Southern Company Data: Arkwright No 2

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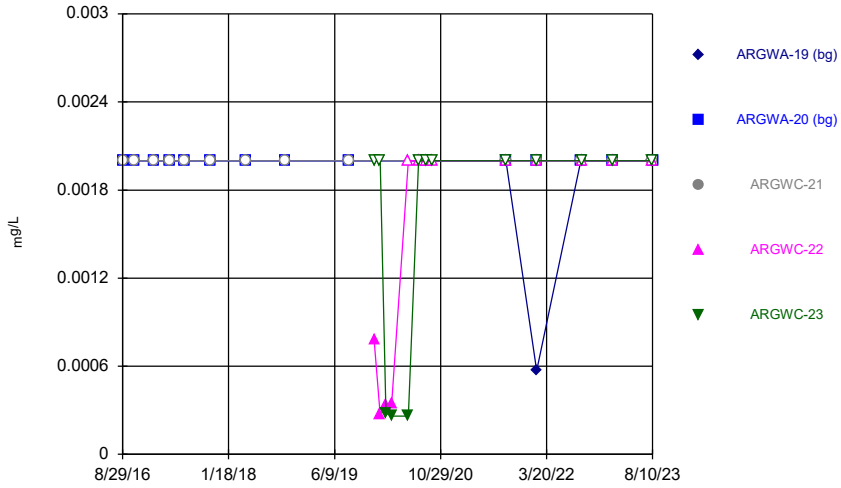
Time Series



Constituent: Thallium Analysis Run 10/19/2023 8:40 AM View: Descriptive
Plant Arkwright Client: Southern Company Data: Arkwright No 2

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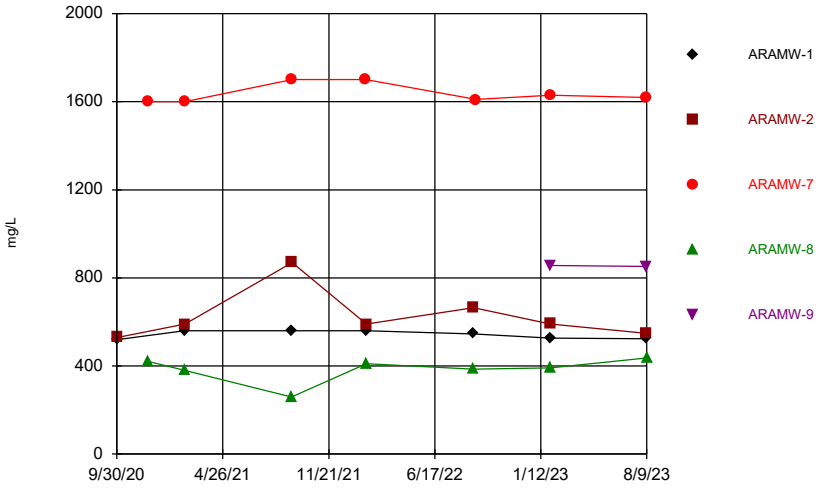
Time Series



Constituent: Total Dissolved Solids Analysis Run 10/19/2023 8:40 AM View: Descriptive
Plant Arkwright Client: Southern Company Data: Arkwright No 2

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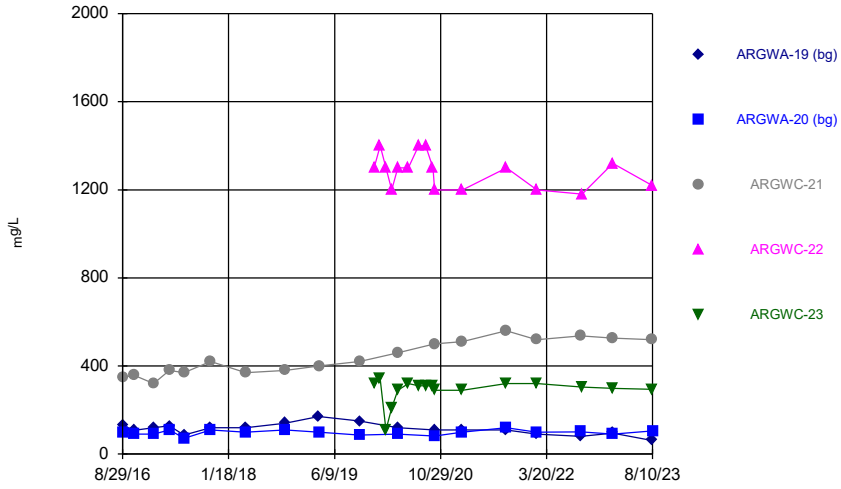
Time Series



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)	

ND substitution: RL or RL/2 if <15% NDs.

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			

ND substitution: RL or RL/2 if <15% NDs.

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	

ND substitution: RL or RL/2 if <15% NDs.

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

ND substitution: RL or RL/2 if <15% NDs.

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			

ND substitution: RL or RL/2 if <15% NDs.

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	

ND substitution: RL or RL/2 if <15% NDs.

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)			

ND substitution: RL or RL/2 if <15% NDs.

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			

ND substitution: RL or RL/2 if <15% NDs.

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	

ND substitution: RL or RL/2 if <15% NDs.

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				

ND substitution: RL or RL/2 if <15% NDs.

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	

ND substitution: RL or RL/2 if <15% NDs.

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)			

ND substitution: RL or RL/2 if <15% NDs.

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	

ND substitution: RL or RL/2 if <15% NDs.

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)			

ND substitution: RL or RL/2 if <15% NDs.

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	

ND substitution: RL or RL/2 if <15% NDs.

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			

ND substitution: RL or RL/2 if <15% NDs.

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	

ND substitution: RL or RL/2 if <15% NDs.

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

ND substitution: RL or RL/2 if <15% NDs.

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			

ND substitution: RL or RL/2 if <15% NDs.

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			

ND substitution: RL or RL/2 if <15% NDs.

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	

ND substitution: RL or RL/2 if <15% NDs.

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			

ND substitution: RL or RL/2 if <15% NDs.

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	

ND substitution: RL or RL/2 if <15% NDs.

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			

ND substitution: RL or RL/2 if <15% NDs.

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	

ND substitution: RL or RL/2 if <15% NDs.

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

ND substitution: RL or RL/2 if <15% NDs.

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			

ND substitution: RL or RL/2 if <15% NDs.

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	

ND substitution: RL or RL/2 if <15% NDs.

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		

ND substitution: RL or RL/2 if <15% NDs.

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			

ND substitution: RL or RL/2 if <15% NDs.

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	

ND substitution: RL or RL/2 if <15% NDs.

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			

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: 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: 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.

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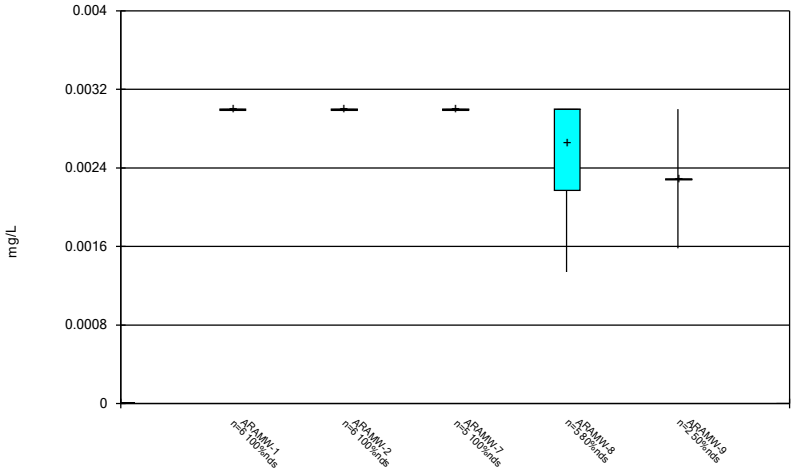
Box & Whiskers Plot



Constituent: Antimony Analysis Run 10/19/2023 8:42 AM View: Descriptive
Plant Arkwright Client: Southern Company Data: Arkwright No 2

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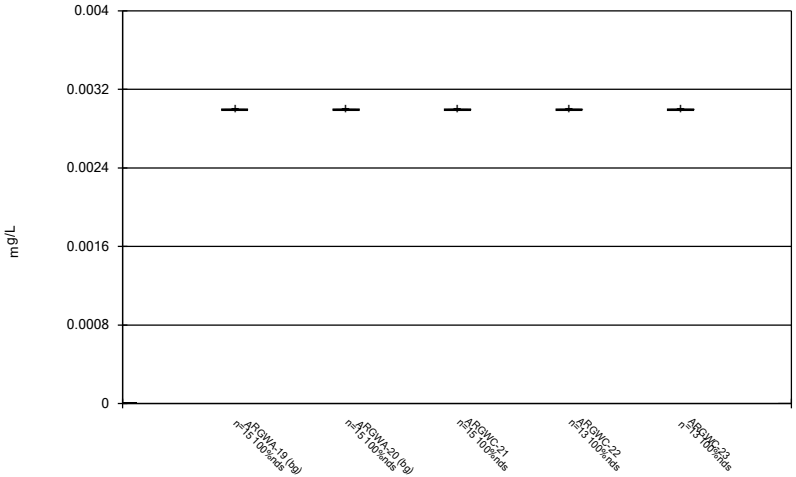
Box & Whiskers Plot



Constituent: Antimony Analysis Run 10/19/2023 8:42 AM View: Descriptive
Plant Arkwright Client: Southern Company Data: Arkwright No 2

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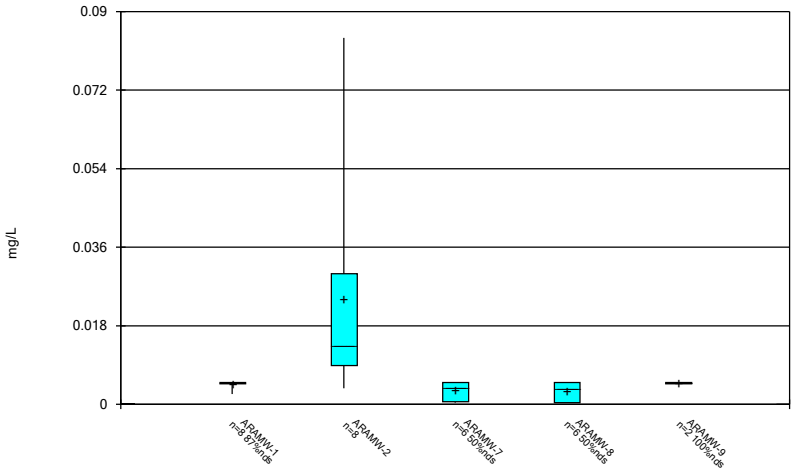
Box & Whiskers Plot



Constituent: Arsenic Analysis Run 10/19/2023 8:42 AM View: Descriptive
Plant Arkwright Client: Southern Company Data: Arkwright No 2

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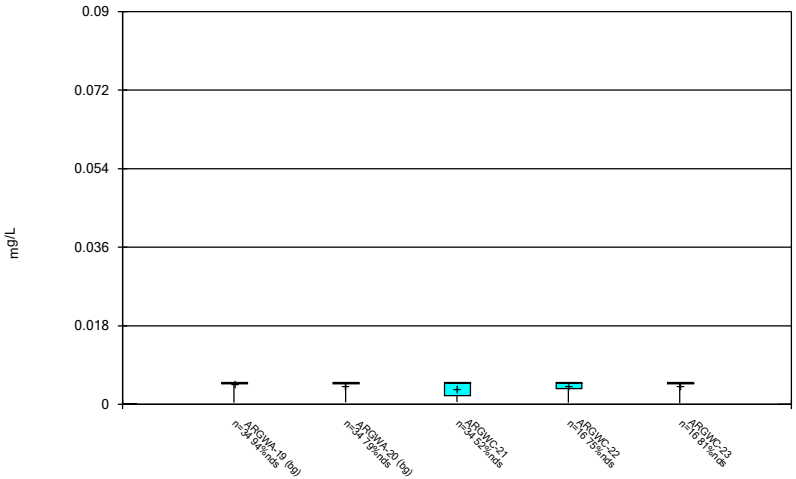
Box & Whiskers Plot



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Plant Arkwright Client: Southern Company Data: Arkwright No 2

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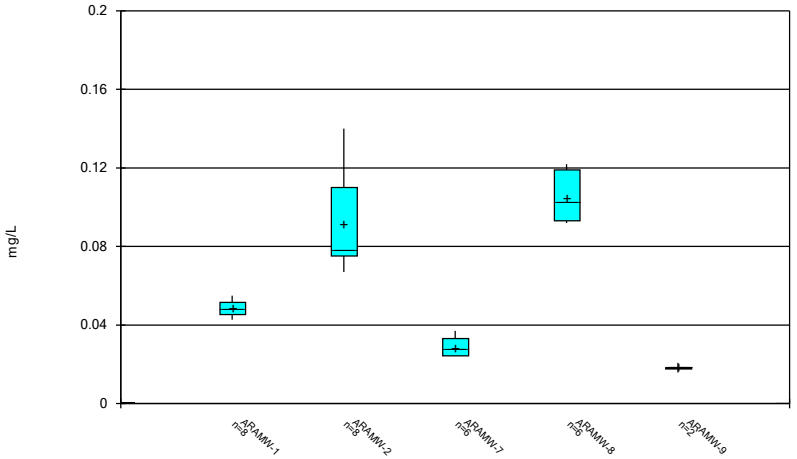
Box & Whiskers Plot



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Plant Arkwright Client: Southern Company Data: Arkwright No 2

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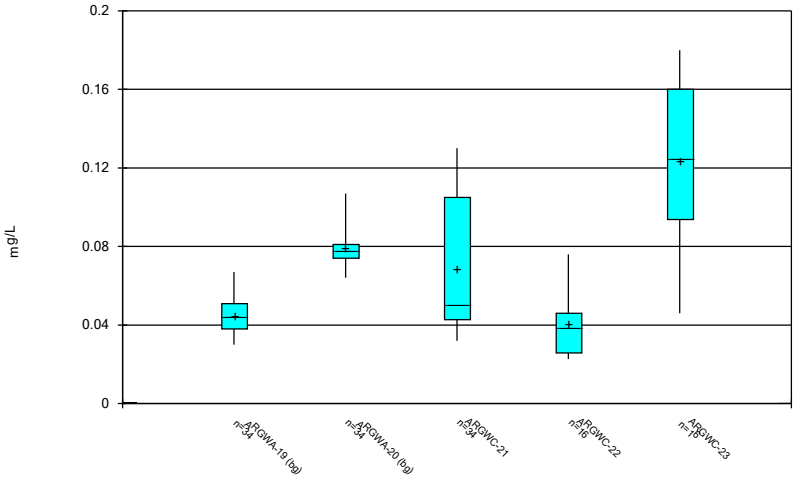
Box & Whiskers Plot



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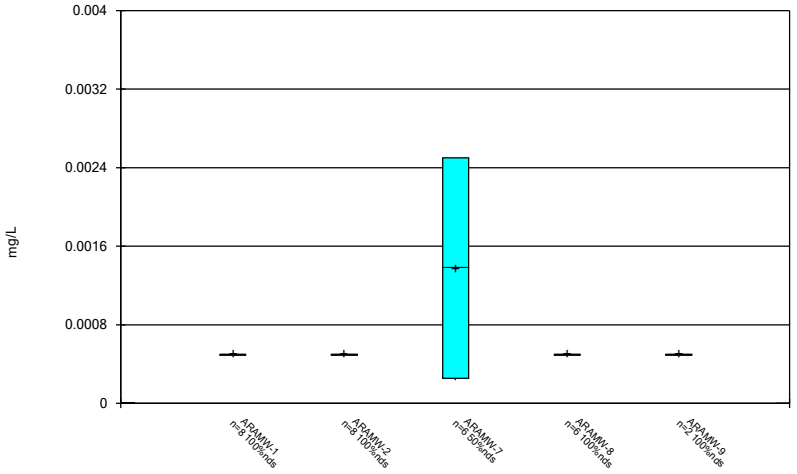
Box & Whiskers Plot



Constituent: Beryllium Analysis Run 10/19/2023 8:42 AM View: Descriptive
Plant Arkwright Client: Southern Company Data: Arkwright No 2

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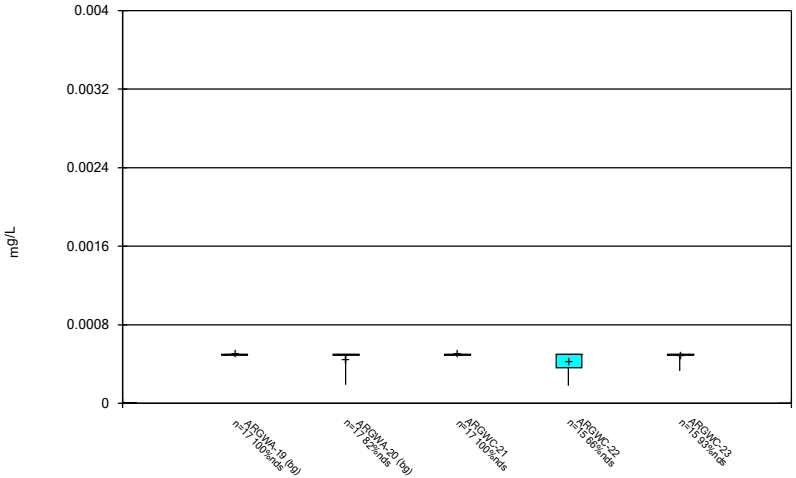
Box & Whiskers Plot



Constituent: Beryllium Analysis Run 10/19/2023 8:42 AM View: Descriptive
Plant Arkwright Client: Southern Company Data: Arkwright No 2

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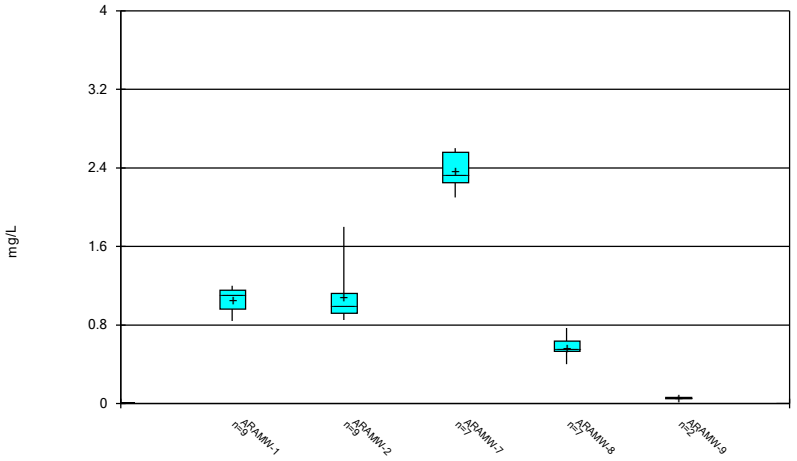
Box & Whiskers Plot



Constituent: Boron Analysis Run 10/19/2023 8:42 AM View: Descriptive
Plant Arkwright Client: Southern Company Data: Arkwright No 2

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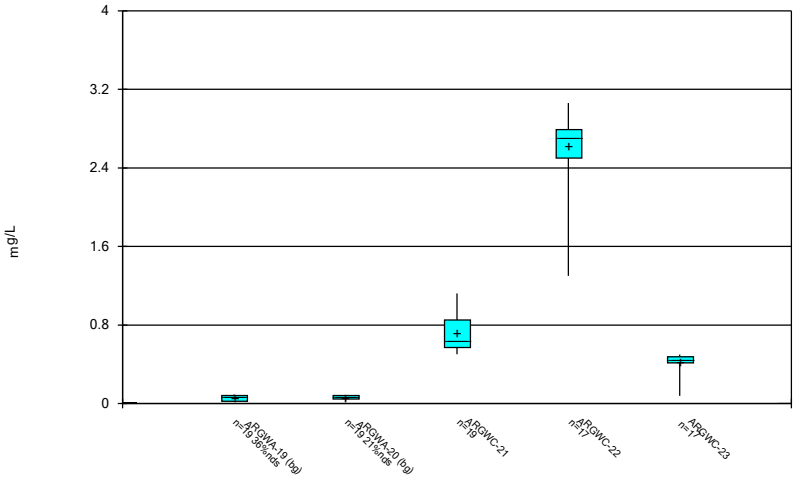
Box & Whiskers Plot



Constituent: Boron Analysis Run 10/19/2023 8:42 AM View: Descriptive
Plant Arkwright Client: Southern Company Data: Arkwright No 2

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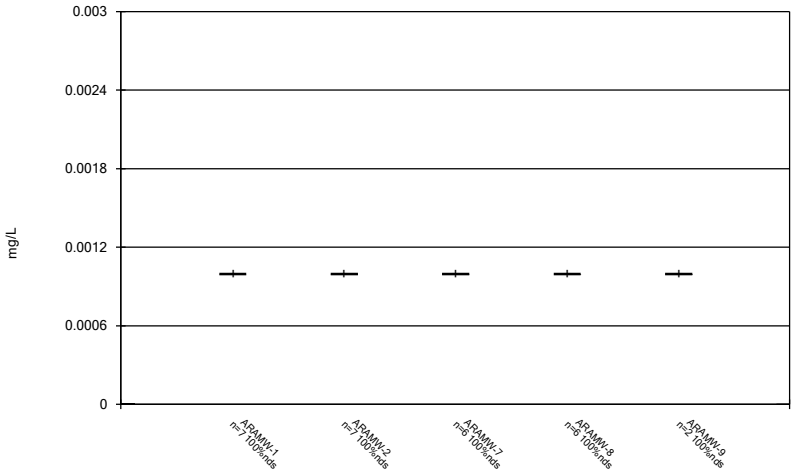
Box & Whiskers Plot



Constituent: Cadmium Analysis Run 10/19/2023 8:42 AM View: Descriptive
Plant Arkwright Client: Southern Company Data: Arkwright No 2

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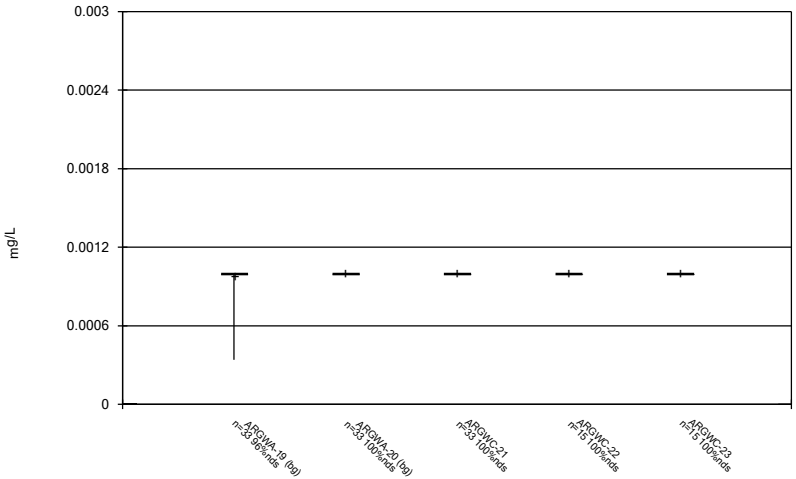
Box & Whiskers Plot



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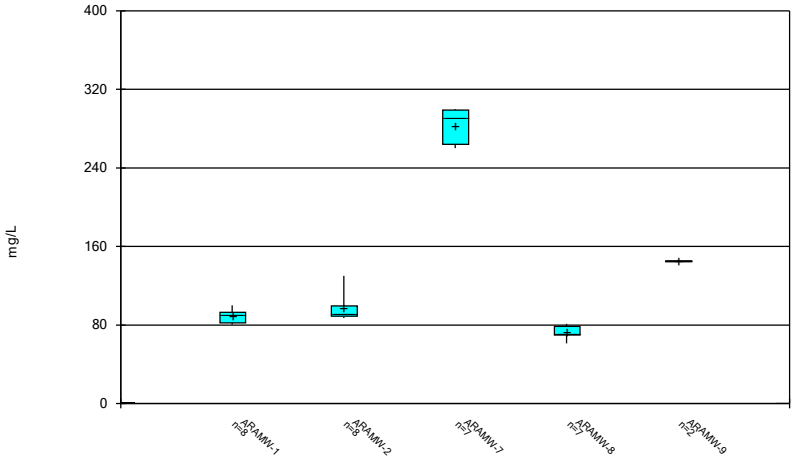
Box & Whiskers Plot



Constituent: Calcium Analysis Run 10/19/2023 8:42 AM View: Descriptive
Plant Arkwright Client: Southern Company Data: Arkwright No 2

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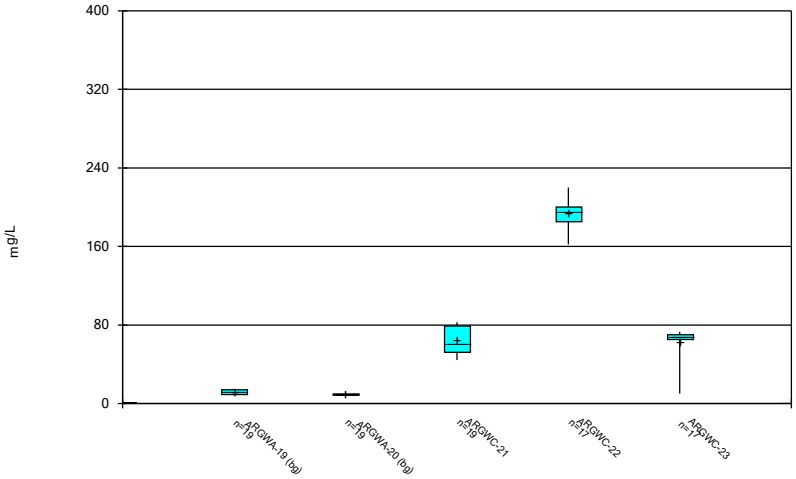
Box & Whiskers Plot



Constituent: Calcium Analysis Run 10/19/2023 8:42 AM View: Descriptive
Plant Arkwright Client: Southern Company Data: Arkwright No 2

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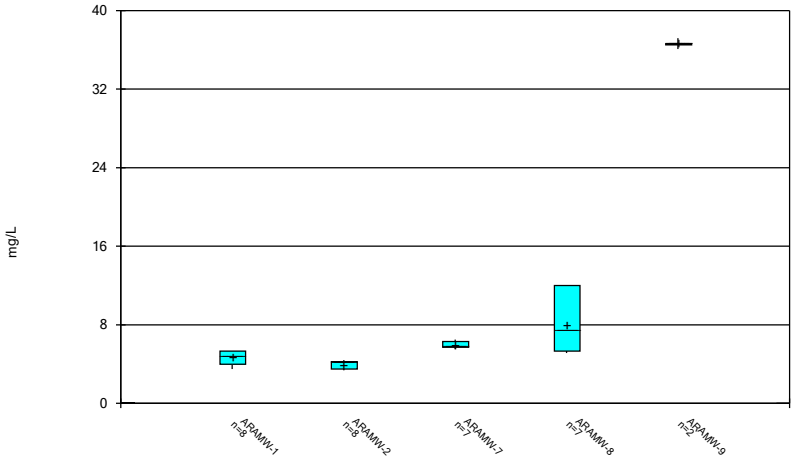
Box & Whiskers Plot



Constituent: Chloride Analysis Run 10/19/2023 8:42 AM View: Descriptive
Plant Arkwright Client: Southern Company Data: Arkwright No 2

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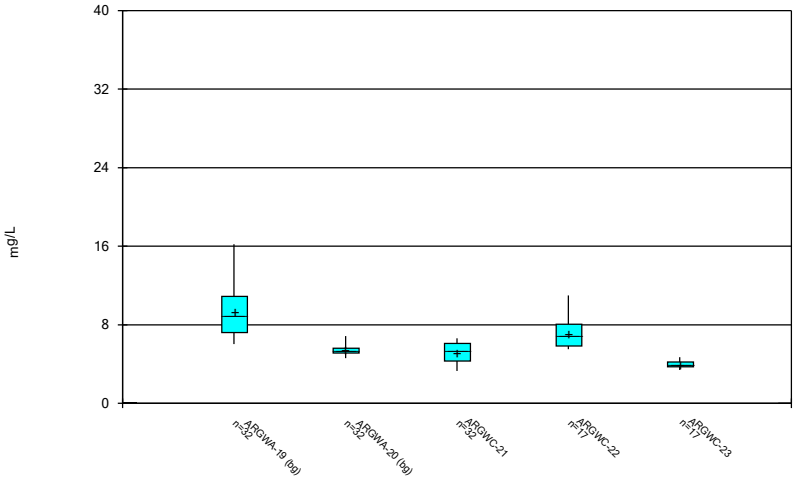
Box & Whiskers Plot



Constituent: Chloride Analysis Run 10/19/2023 8:42 AM View: Descriptive
Plant Arkwright Client: Southern Company Data: Arkwright No 2

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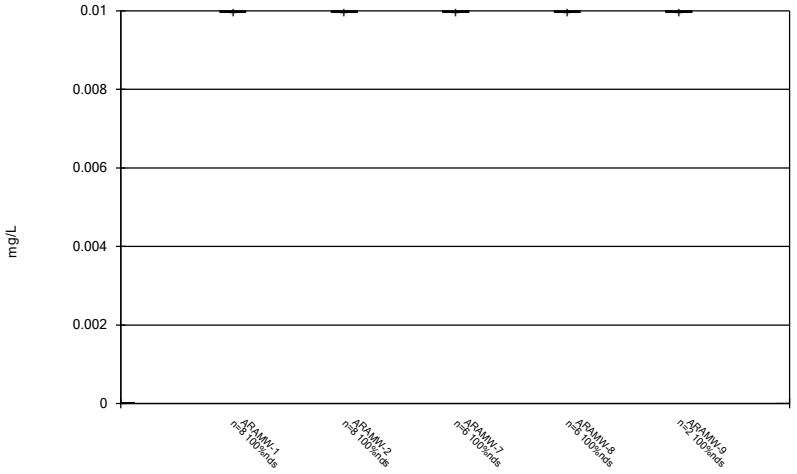
Box & Whiskers Plot



Constituent: Chromium Analysis Run 10/19/2023 8:42 AM View: Descriptive
Plant Arkwright Client: Southern Company Data: Arkwright No 2

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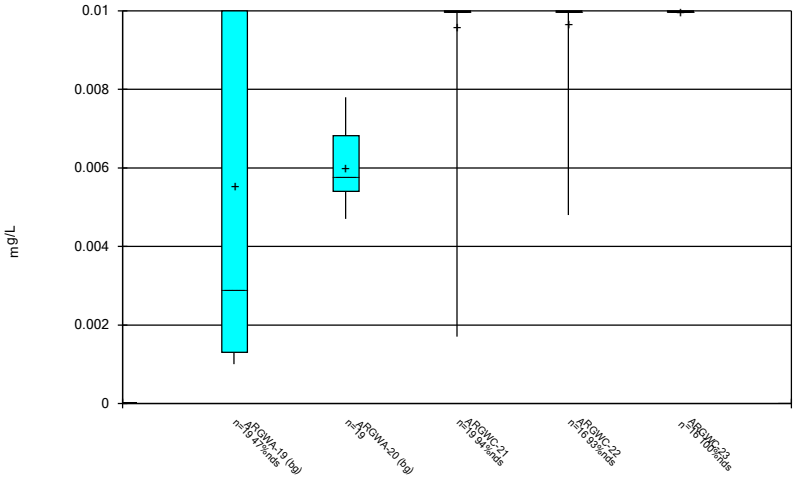
Box & Whiskers Plot



Constituent: Chromium Analysis Run 10/19/2023 8:42 AM View: Descriptive
Plant Arkwright Client: Southern Company Data: Arkwright No 2

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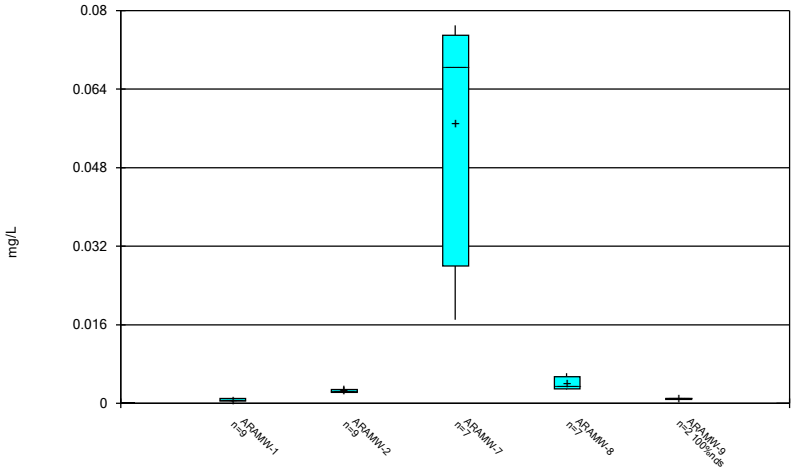
Box & Whiskers Plot



Constituent: Cobalt Analysis Run 10/19/2023 8:42 AM View: Descriptive
Plant Arkwright Client: Southern Company Data: Arkwright No 2

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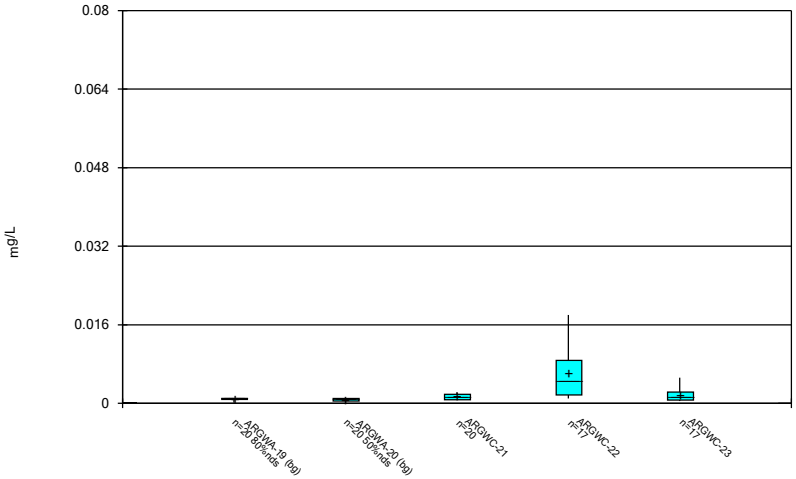
Box & Whiskers Plot



Constituent: Cobalt Analysis Run 10/19/2023 8:42 AM View: Descriptive
Plant Arkwright Client: Southern Company Data: Arkwright No 2

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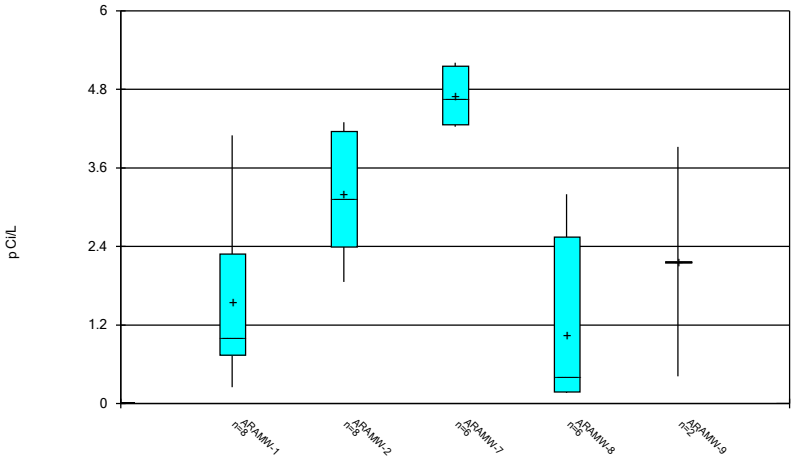
Box & Whiskers Plot



Constituent: Combined Radium 226 + 228 Analysis Run 10/19/2023 8:42 AM View: Descriptive
Plant Arkwright Client: Southern Company Data: Arkwright No 2

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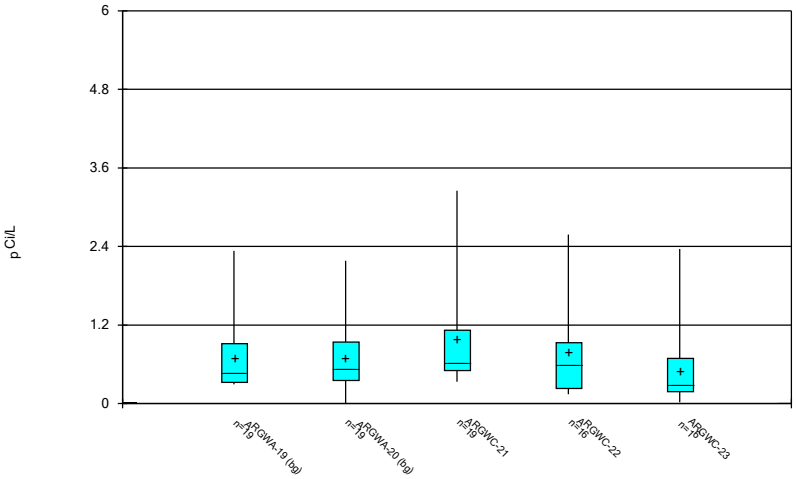
Box & Whiskers Plot



Constituent: Combined Radium 226 + 228 Analysis Run 10/19/2023 8:42 AM View: Descriptive
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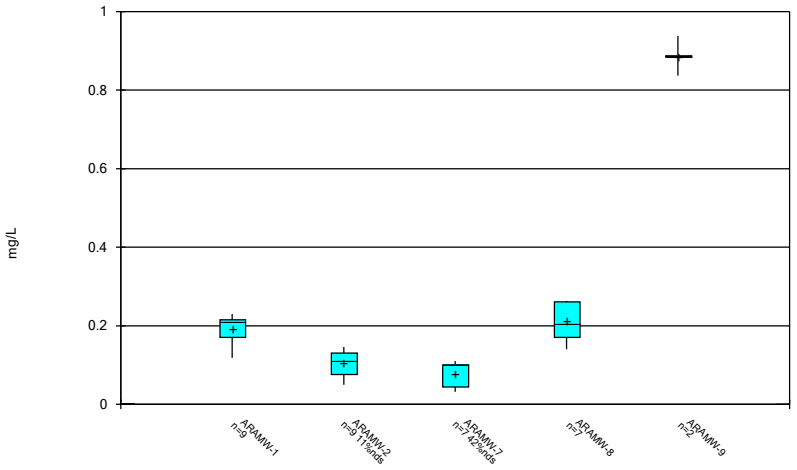
Box & Whiskers Plot



Constituent: Fluoride Analysis Run 10/19/2023 8:42 AM View: Descriptive
Plant Arkwright Client: Southern Company Data: Arkwright No 2

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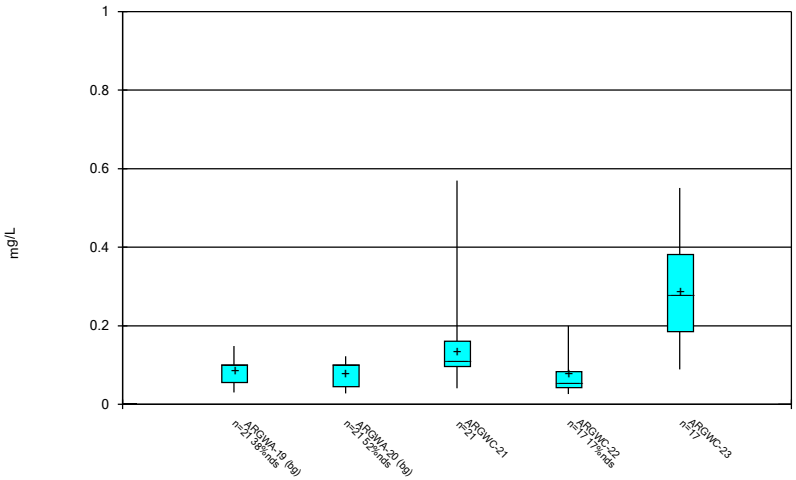
Box & Whiskers Plot



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Plant Arkwright Client: Southern Company Data: Arkwright No 2

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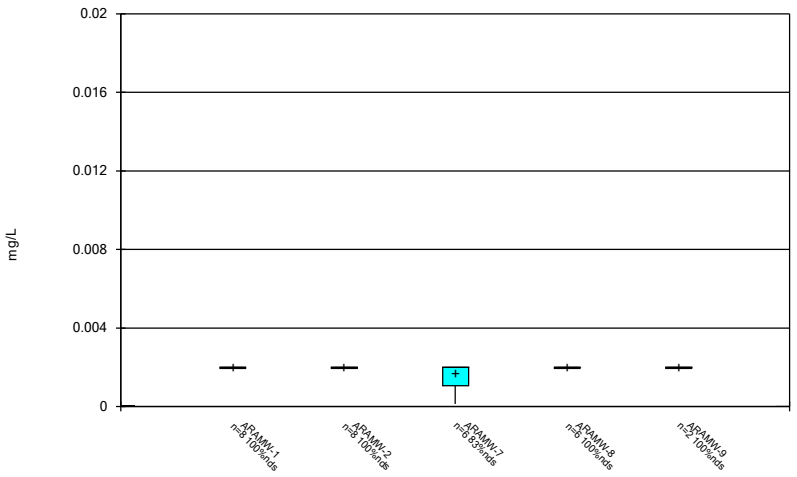
Box & Whiskers Plot



Constituent: Lead Analysis Run 10/19/2023 8:42 AM View: Descriptive
Plant Arkwright Client: Southern Company Data: Arkwright No 2

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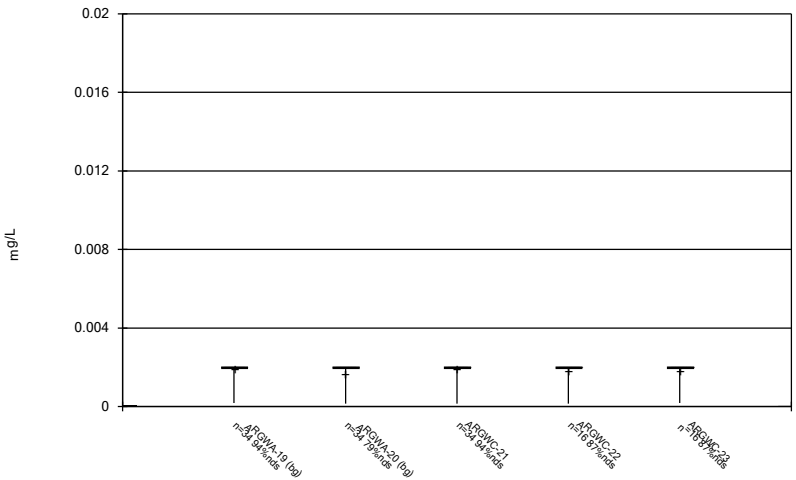
Box & Whiskers Plot



Constituent: Lead Analysis Run 10/19/2023 8:42 AM View: Descriptive
Plant Arkwright Client: Southern Company Data: Arkwright No 2

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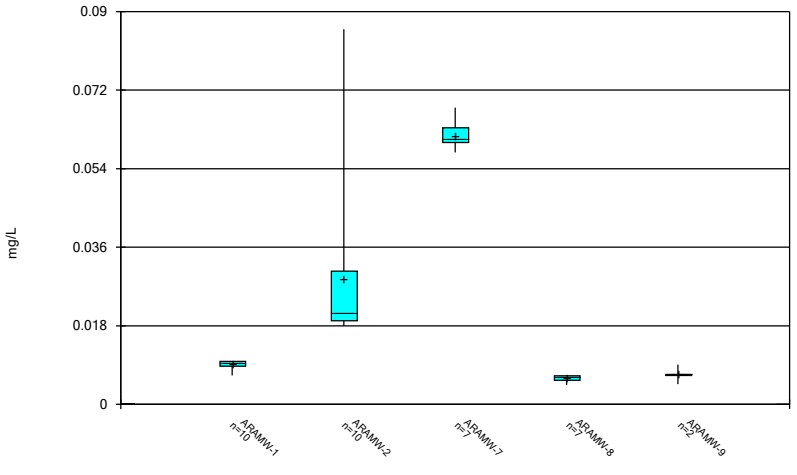
Box & Whiskers Plot



Constituent: Lithium Analysis Run 10/19/2023 8:42 AM View: Descriptive
Plant Arkwright Client: Southern Company Data: Arkwright No 2

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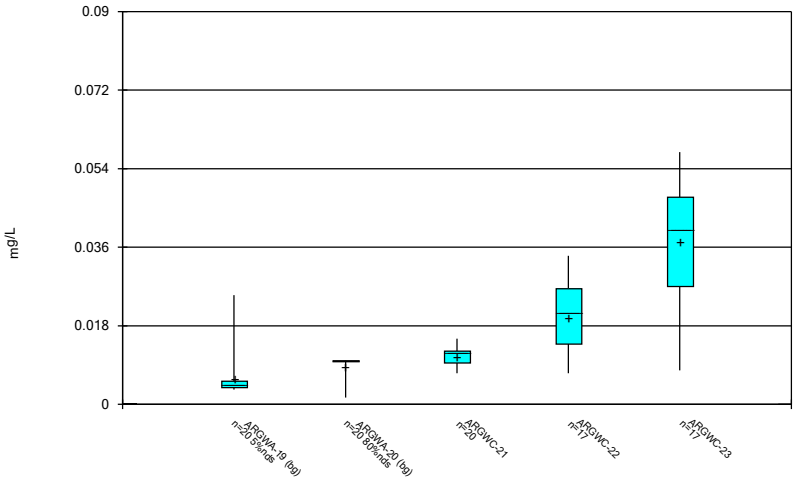
Box & Whiskers Plot



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Plant Arkwright Client: Southern Company Data: Arkwright No 2

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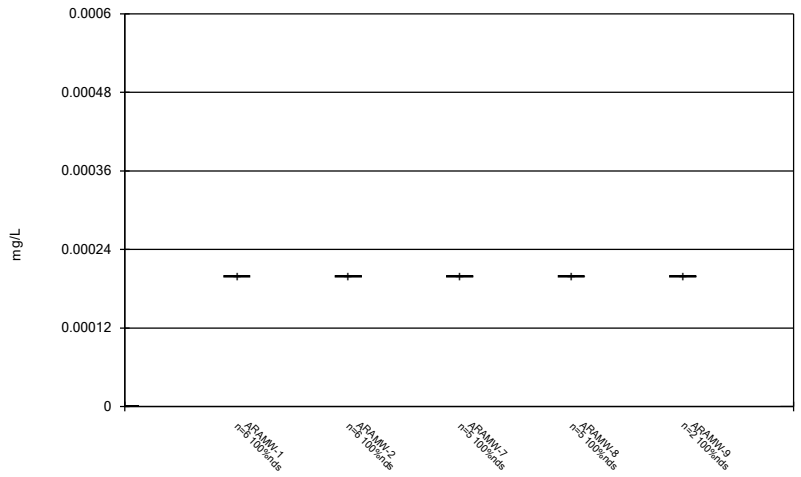
Box & Whiskers Plot



Constituent: Mercury Analysis Run 10/19/2023 8:42 AM View: Descriptive
Plant Arkwright Client: Southern Company Data: Arkwright No 2

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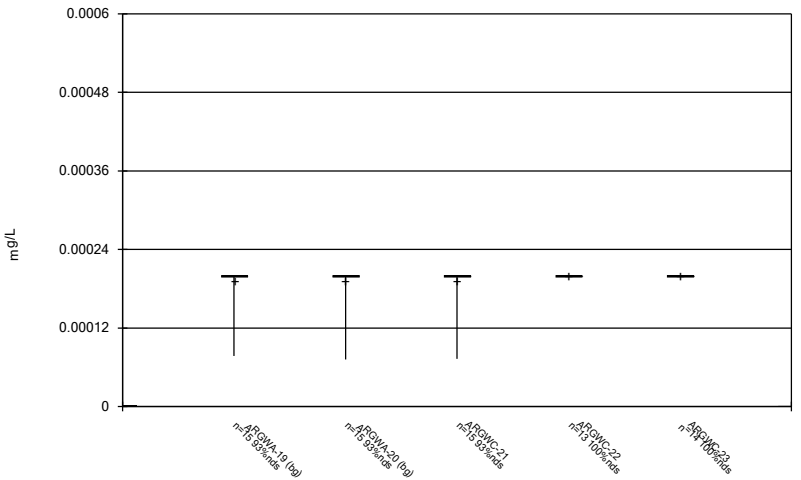
Box & Whiskers Plot



Constituent: Mercury Analysis Run 10/19/2023 8:42 AM View: Descriptive
Plant Arkwright Client: Southern Company Data: Arkwright No 2

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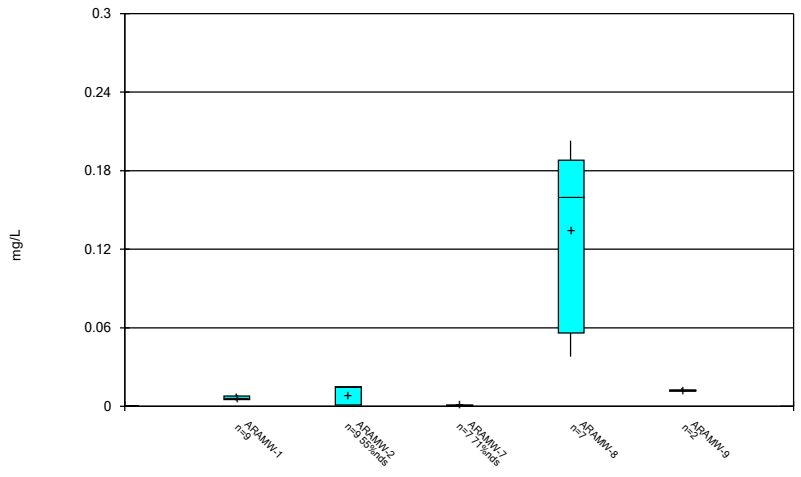
Box & Whiskers Plot



Constituent: Molybdenum Analysis Run 10/19/2023 8:42 AM View: Descriptive
Plant Arkwright Client: Southern Company Data: Arkwright No 2

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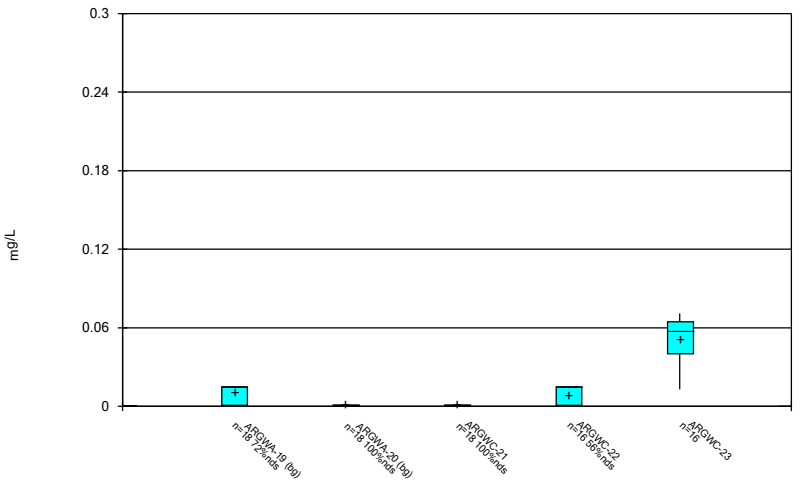
Box & Whiskers Plot



Constituent: Molybdenum Analysis Run 10/19/2023 8:42 AM View: Descriptive
Plant Arkwright Client: Southern Company Data: Arkwright No 2

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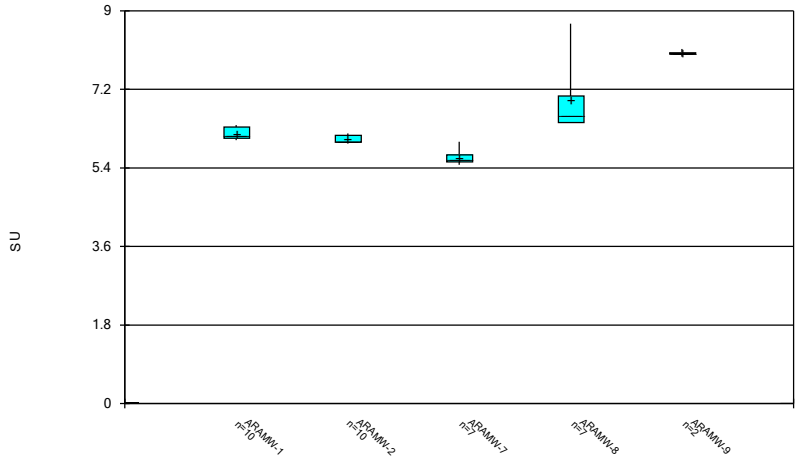
Box & Whiskers Plot



Constituent: pH Analysis Run 10/19/2023 8:42 AM View: Descriptive
Plant Arkwright Client: Southern Company Data: Arkwright No 2

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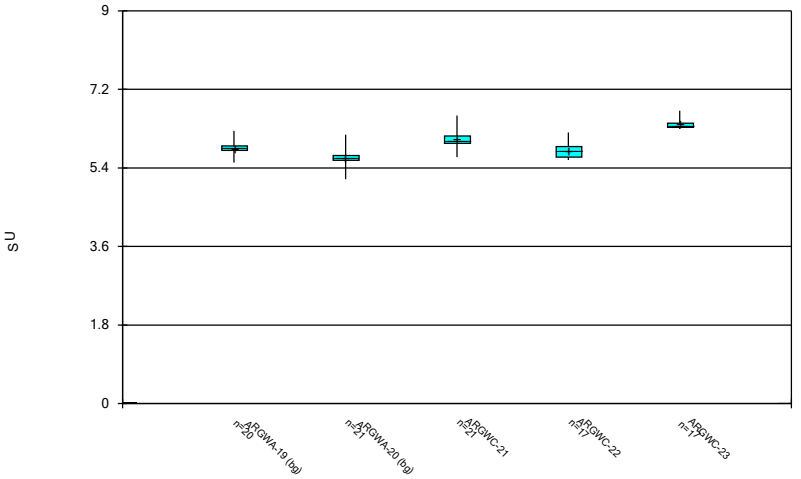
Box & Whiskers Plot



Constituent: pH Analysis Run 10/19/2023 8:42 AM View: Descriptive
Plant Arkwright Client: Southern Company Data: Arkwright No 2

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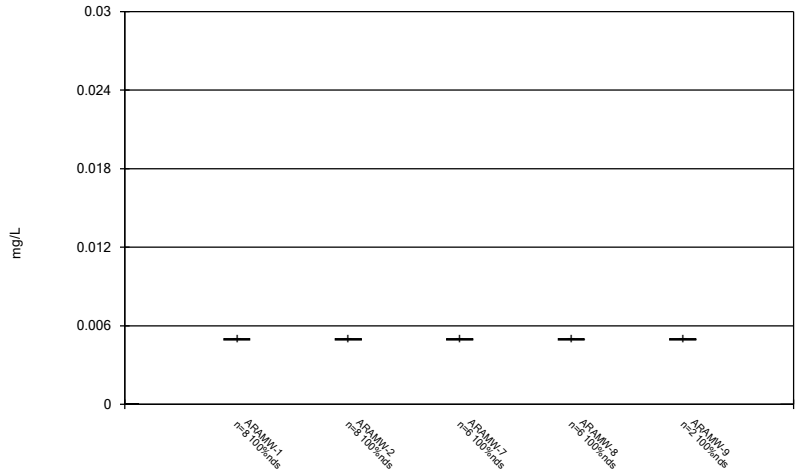
Box & Whiskers Plot



Constituent: Selenium Analysis Run 10/19/2023 8:42 AM View: Descriptive
Plant Arkwright Client: Southern Company Data: Arkwright No 2

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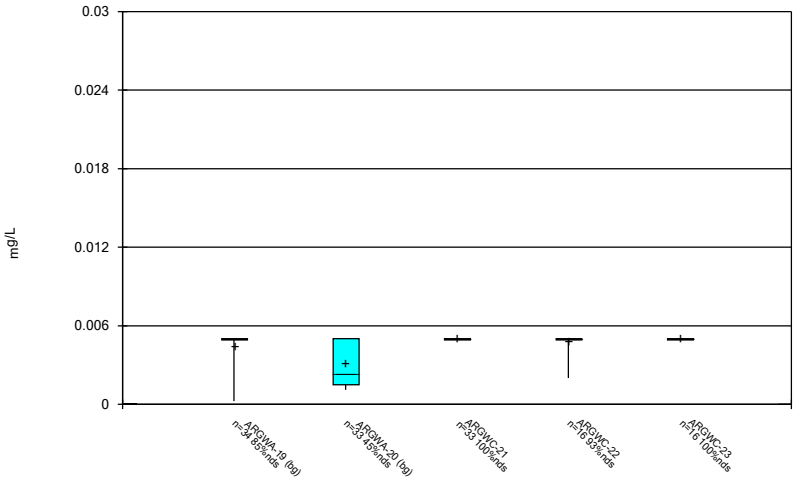
Box & Whiskers Plot



Constituent: Selenium Analysis Run 10/19/2023 8:42 AM View: Descriptive
Plant Arkwright Client: Southern Company Data: Arkwright No 2

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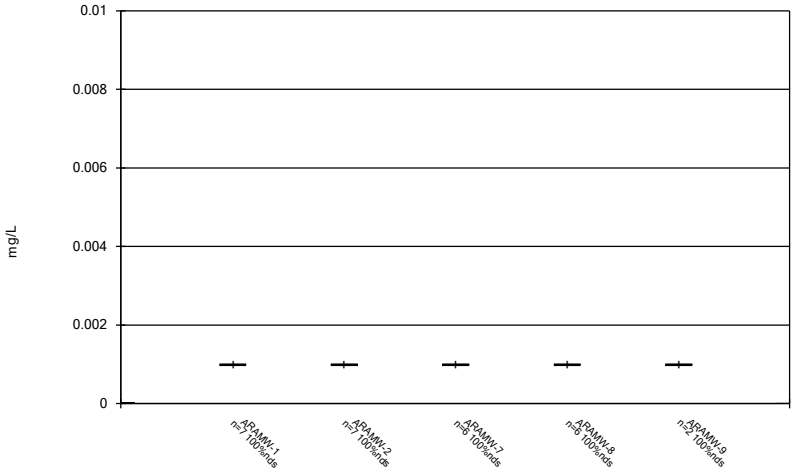
Box & Whiskers Plot



Constituent: Silver Analysis Run 10/19/2023 8:42 AM View: Descriptive
Plant Arkwright Client: Southern Company Data: Arkwright No 2

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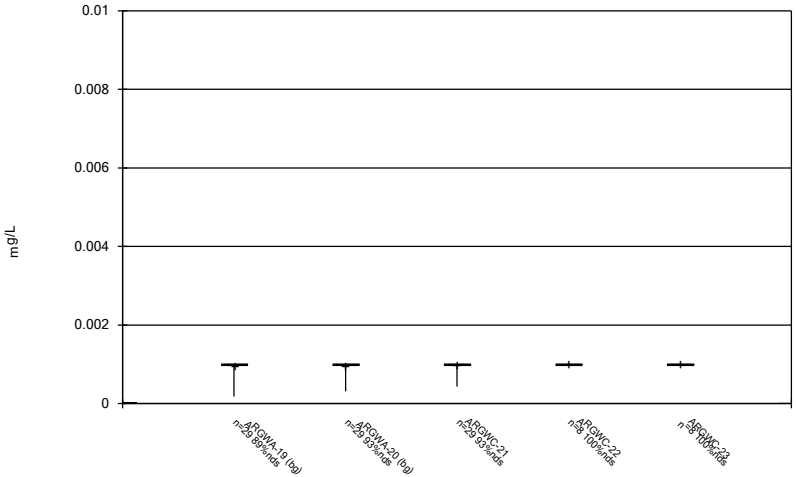
Box & Whiskers Plot



Constituent: Silver Analysis Run 10/19/2023 8:42 AM View: Descriptive
Plant Arkwright Client: Southern Company Data: Arkwright No 2

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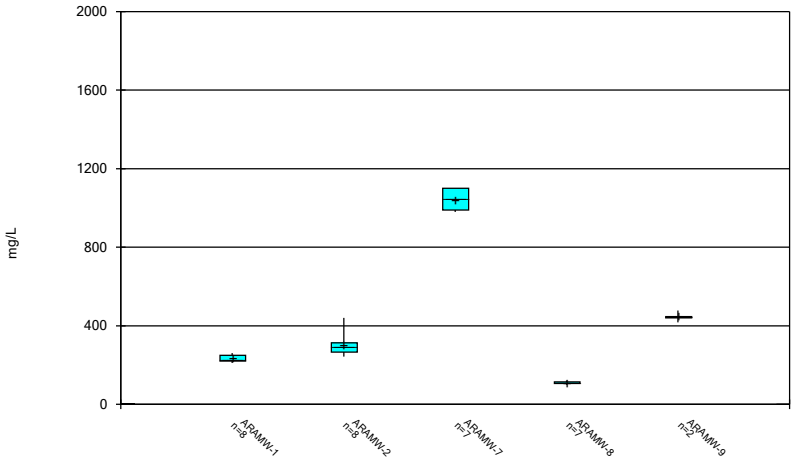
Box & Whiskers Plot



Constituent: Sulfate Analysis Run 10/19/2023 8:42 AM View: Descriptive
Plant Arkwright Client: Southern Company Data: Arkwright No 2

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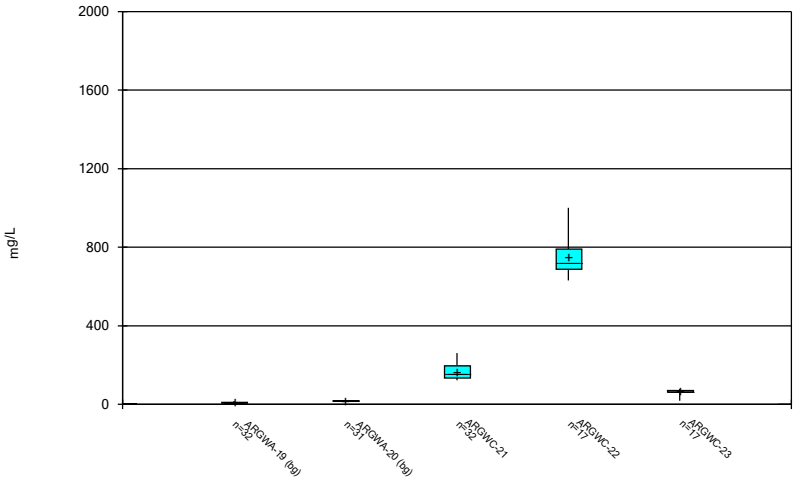
Box & Whiskers Plot



Constituent: Sulfate Analysis Run 10/19/2023 8:42 AM View: Descriptive
Plant Arkwright Client: Southern Company Data: Arkwright No 2

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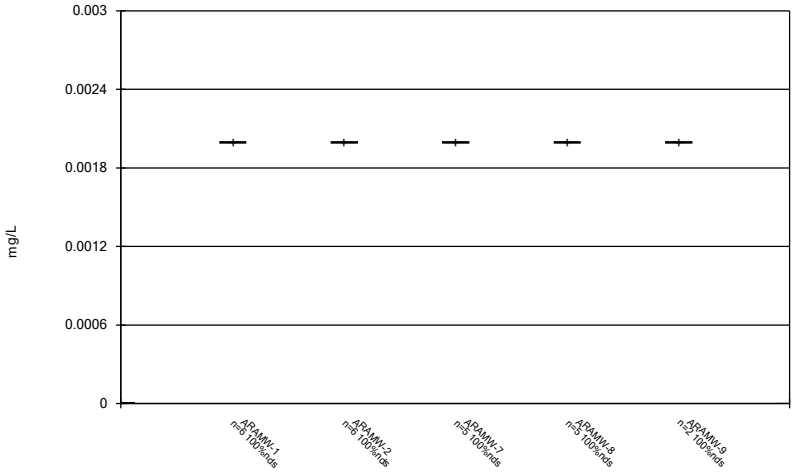
Box & Whiskers Plot



Constituent: Thallium Analysis Run 10/19/2023 8:42 AM View: Descriptive
Plant Arkwright Client: Southern Company Data: Arkwright No 2

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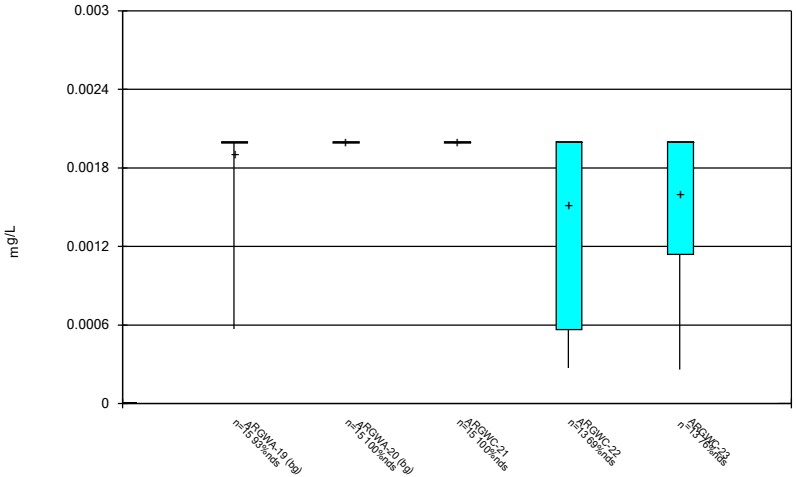
Box & Whiskers Plot



Constituent: Thallium Analysis Run 10/19/2023 8:42 AM View: Descriptive
Plant Arkwright Client: Southern Company Data: Arkwright No 2

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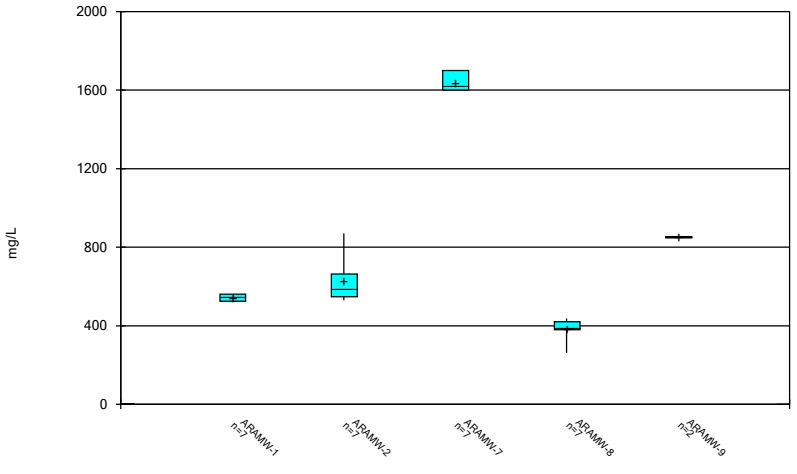
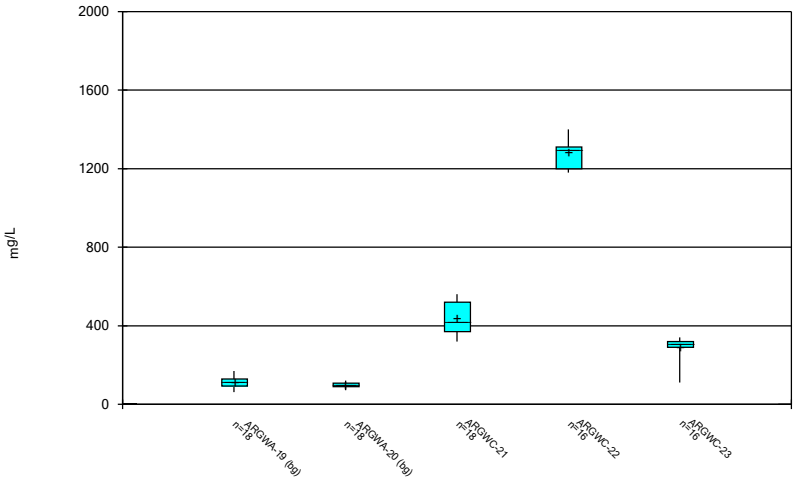
Box & Whiskers Plot



Constituent: Total Dissolved Solids Analysis Run 10/19/2023 8:42 AM View: Descriptive
Plant Arkwright Client: Southern Company Data: Arkwright No 2

Sanitas™ v.10.0.06 Software licensed to Groundwater Stats Consulting. UG

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

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Arsenic (mg/L)	ARGWC-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

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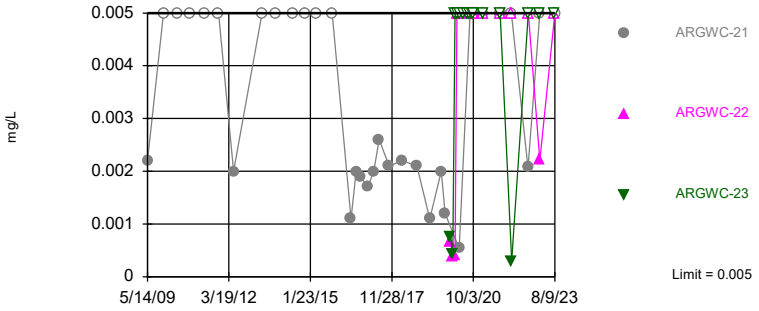
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because 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

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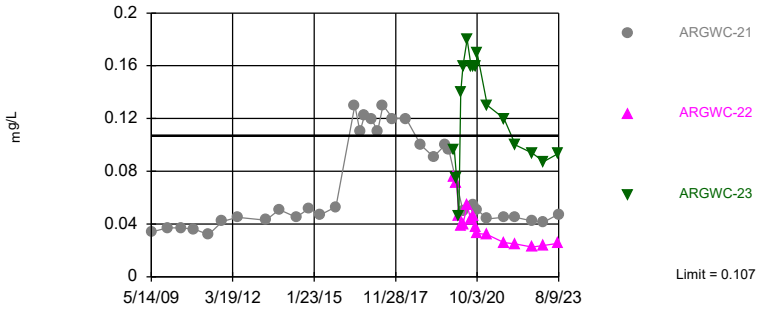
Within Limit

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.

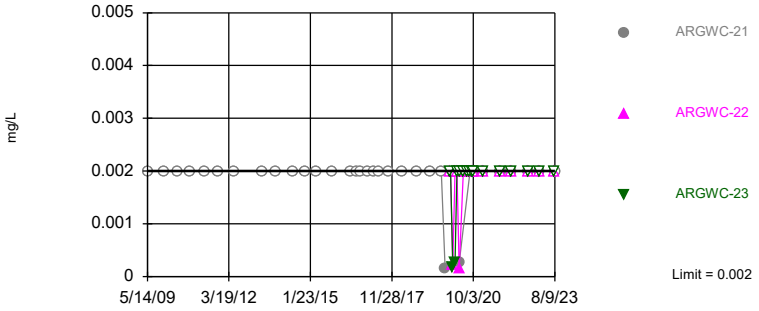
Constituent: Barium Analysis Run 10/19/2023 8:45 AM View: PLs - App I
Plant Arkwright Client: Southern Company Data: Arkwright No 2

Sanitas™ v.10.0.06 Software licensed to Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 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.

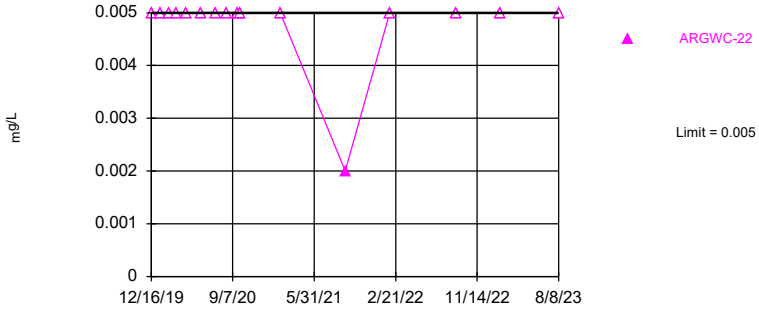
Constituent: Lead Analysis Run 10/19/2023 8:45 AM View: PLs - App I
Plant Arkwright Client: Southern Company Data: Arkwright No 2

Sanitas™ v.10.0.06 Software licensed to Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 67 background values. 65.67% NDs. Annual per-constituent alpha = 0.002578. Individual comparison alpha = 0.0004301 (1 of 2). Assumes 2 future values.

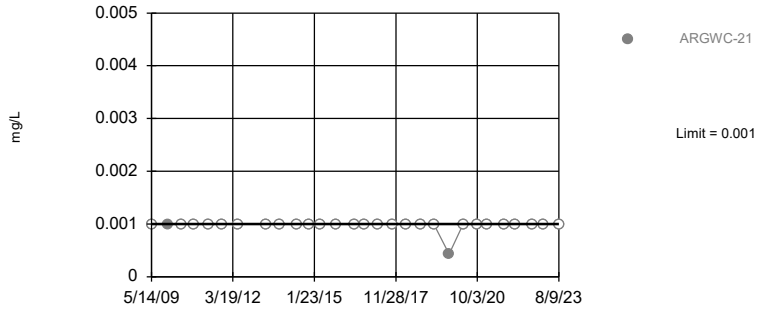
Constituent: Selenium Analysis Run 10/19/2023 8:46 AM View: PLs - App I
Plant Arkwright Client: Southern Company Data: Arkwright No 2

Sanitas™ v.10.0.06 Software licensed to Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 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	

ND substitution: RL or RL/2 if <15% NDs.

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		

ND substitution: RL or RL/2 if <15% NDs.

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 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	<0.002				
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	

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Lead (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	<0.002		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		

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Selenium (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)	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

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Selenium (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)	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	

ND substitution: RL or RL/2 if <15% NDs.

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

ND substitution: RL or RL/2 if <15% NDs.

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**

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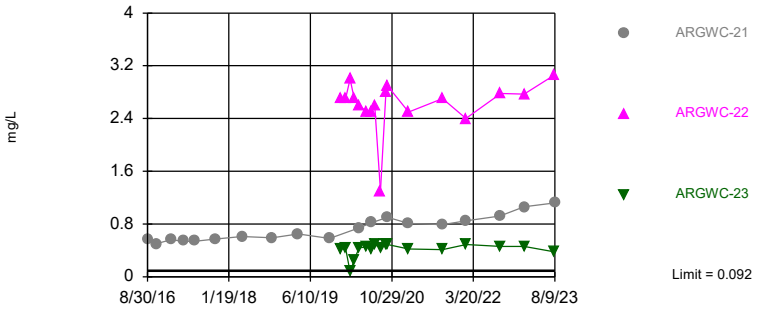
Exceeds Limit: ARGWC-21, ARGWC-22, ARGWC-23

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

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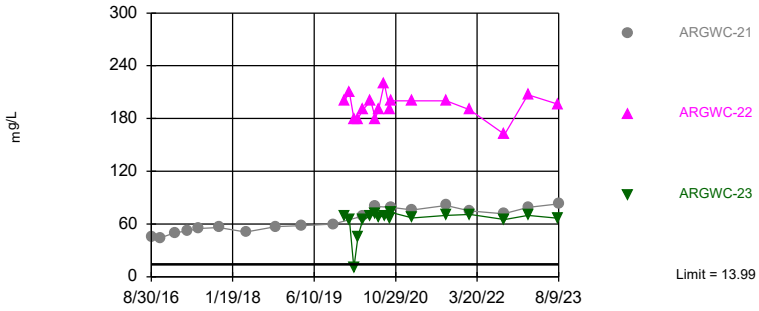
Exceeds Limit: ARGWC-21, ARGWC-22, ARGWC-23

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

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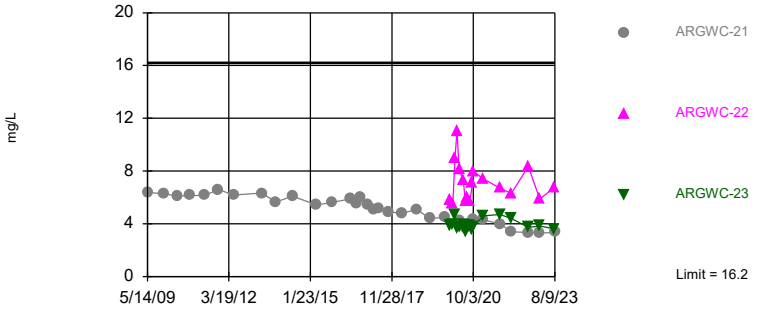
Within Limit

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

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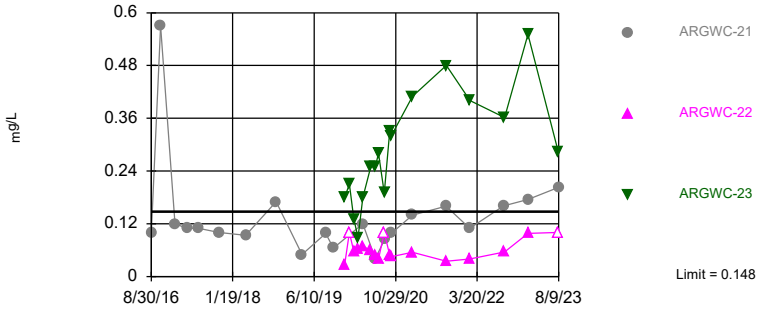
Hollow symbols indicate censored values.

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

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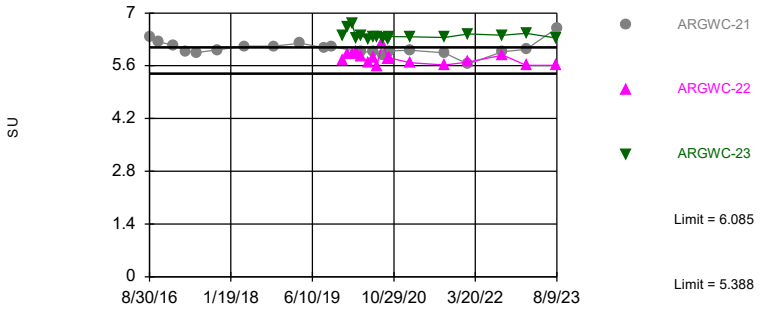
Exceeds Limits: ARGWC-21, ARGWC-23

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

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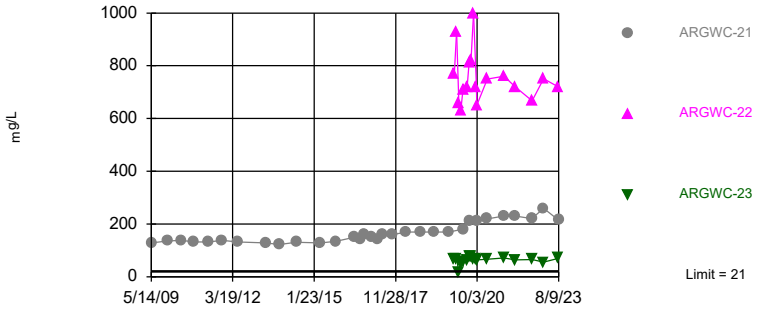
Exceeds Limit: ARGWC-21, ARGWC-22, ARGWC-23

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

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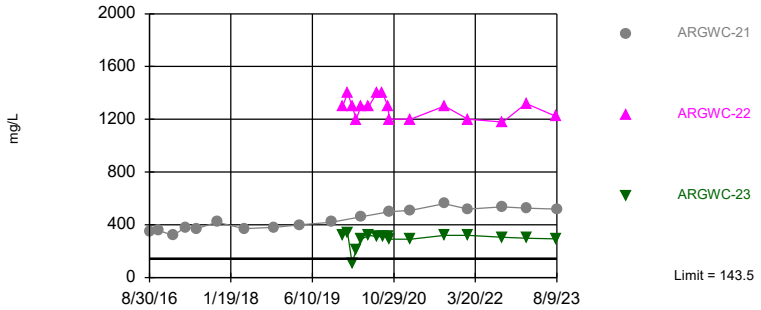
Exceeds Limit: ARGWC-21, ARGWC-22, ARGWC-23

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			

ND substitution: RL or RL/2 if <15% NDs.

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			

ND substitution: RL or RL/2 if <15% NDs.

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

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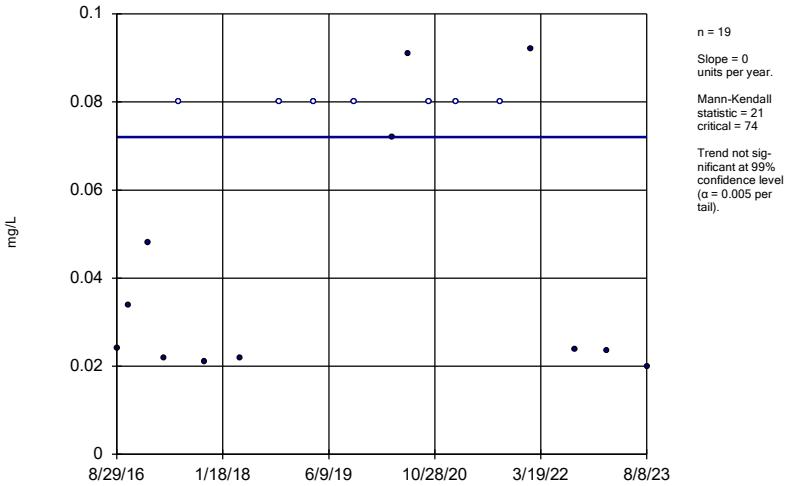
Hollow symbols indicate censored values.

Sen's Slope Estimator

ARGWA-19 (bg)



n = 19

Slope = 0 units per year.

Mann-Kendall statistic = 21 critical = 74

Trend not significant at 99% confidence level (α = 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

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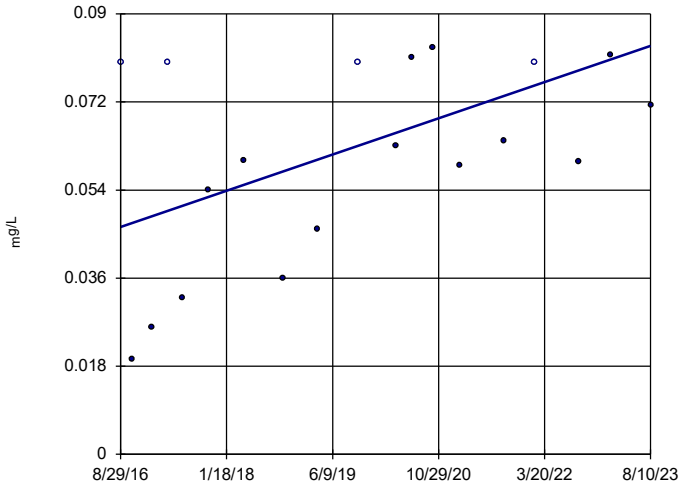
Hollow symbols indicate censored values.

Sen's Slope Estimator

ARGWA-20 (bg)



n = 19

Slope = 0.005321 units per year.

Mann-Kendall statistic = 65 critical = 74

Trend not significant at 99% confidence level (α = 0.005 per tail).

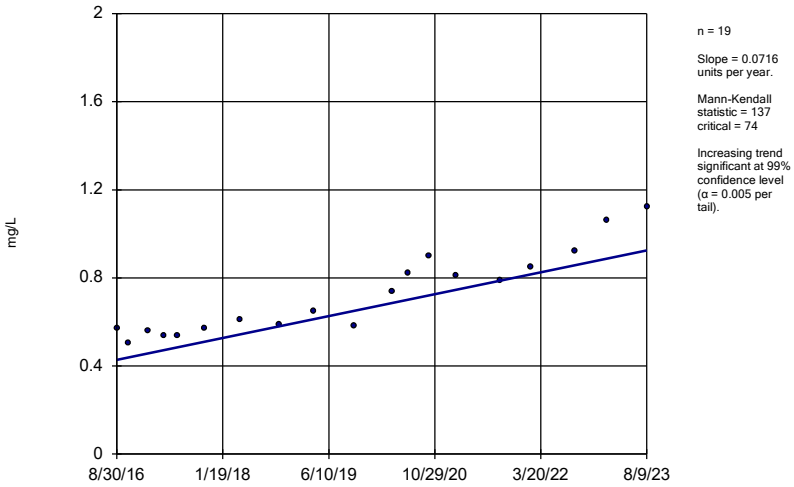
Constituent: Boron Analysis Run 10/13/2023 11:44 AM View: Trend Tests

Plant Arkwright Client: Southern Company Data: Arkwright No 2

Sanitas™ v.10.0.06 Software licensed to Groundwater Stats Consulting. UG

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 (α = 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

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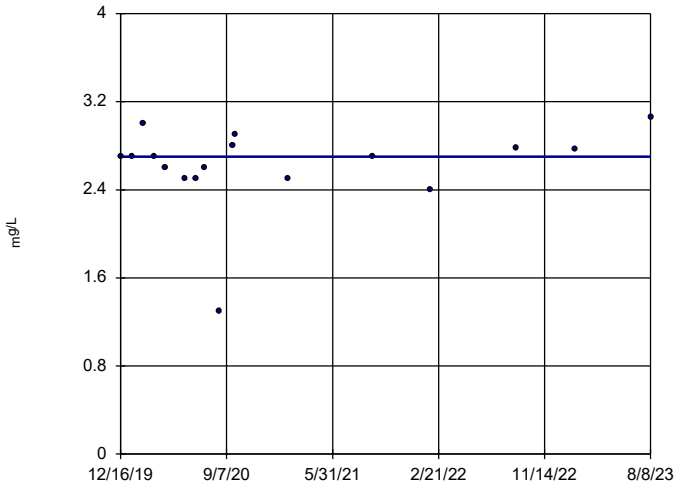
Sen's Slope Estimator

ARGWC-22



n = 17

Slope = 0 units per year.

Mann-Kendall statistic = 8 critical = 63

Trend not significant at 99% confidence level (α = 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

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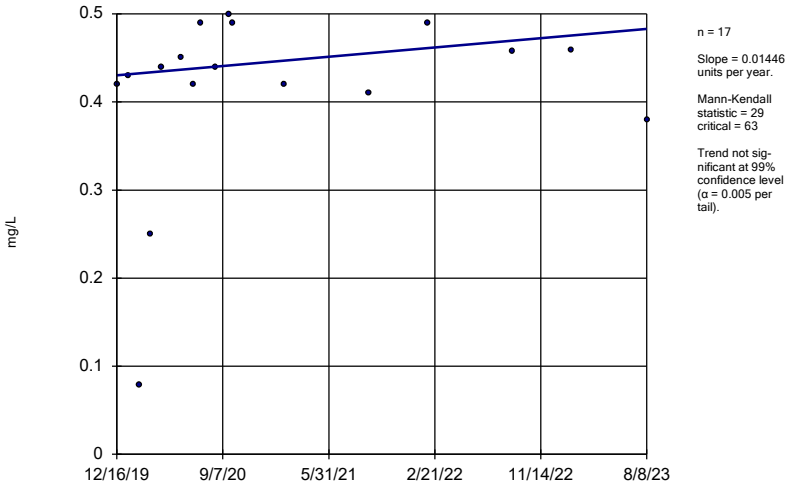
Sen's Slope Estimator

ARGWC-23



n = 17

Slope = 0.01446 units per year.

Mann-Kendall statistic = 29 critical = 63

Trend not significant at 99% confidence level (α = 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

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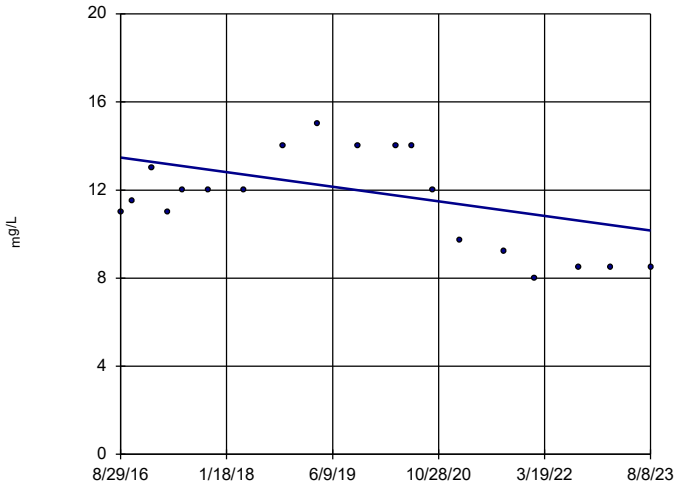
Sen's Slope Estimator

ARGWA-19 (bg)



n = 19

Slope = -0.4773 units per year.

Mann-Kendall statistic = -48 critical = -74

Trend not significant at 99% confidence level (α = 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

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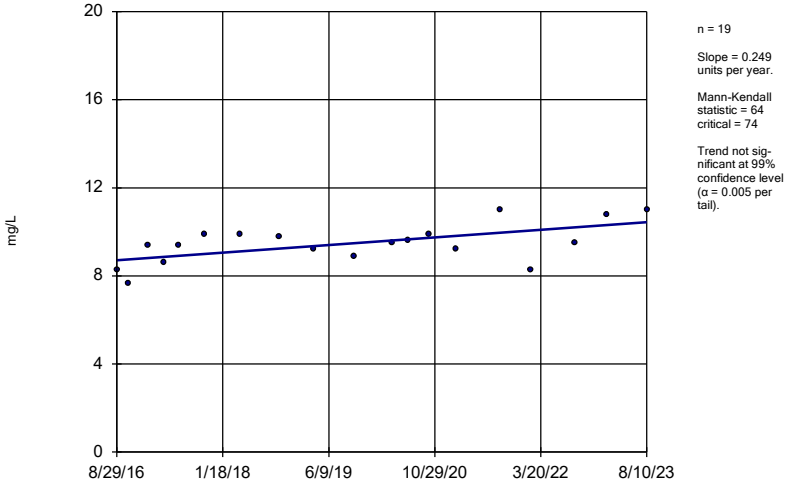
Sen's Slope Estimator

ARGWA-20 (bg)



n = 19

Slope = 0.249 units per year.

Mann-Kendall statistic = 64 critical = 74

Trend not significant at 99% confidence level (α = 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

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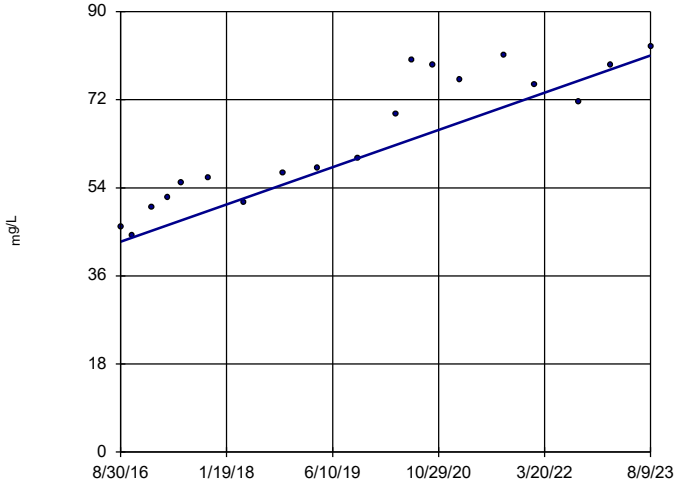
Sen's Slope Estimator

ARGWC-21



n = 19

Slope = 5.478 units per year.

Mann-Kendall statistic = 135 critical = 74

Increasing trend significant at 99% confidence level (α = 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

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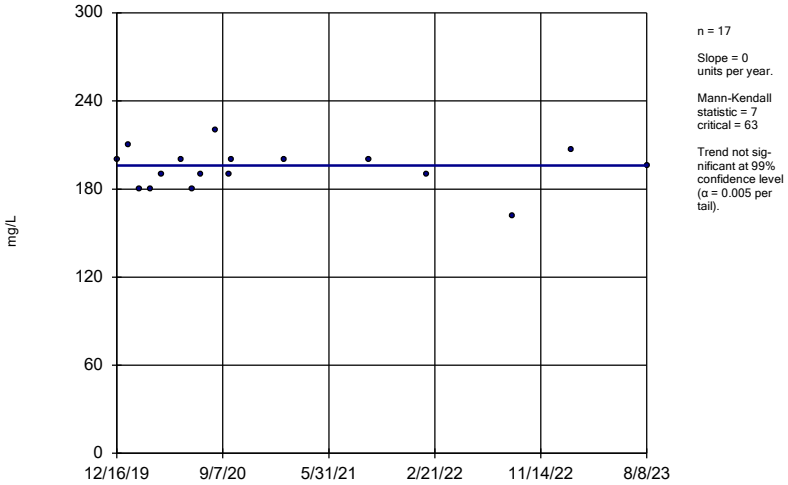
Sen's Slope Estimator

ARGWC-22



n = 17

Slope = 0 units per year.

Mann-Kendall statistic = 7
critical = 63

Trend not significant at 99% confidence level (α = 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

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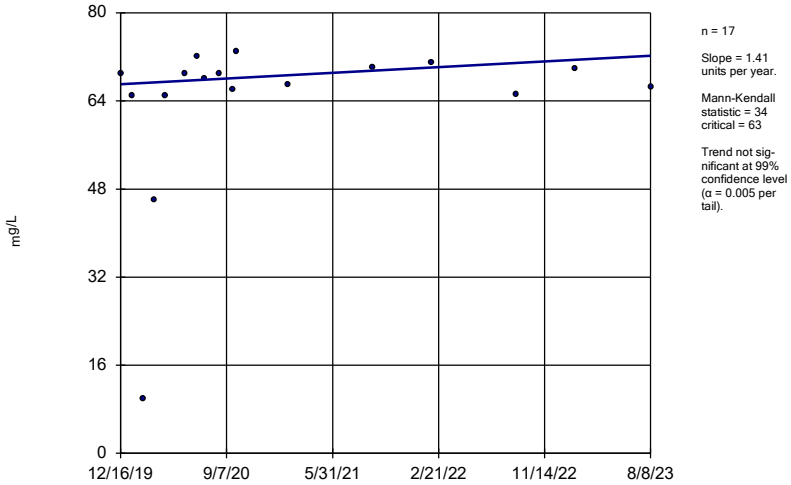
Sen's Slope Estimator

ARGWC-23



n = 17

Slope = 1.41 units per year.

Mann-Kendall statistic = 34
critical = 63

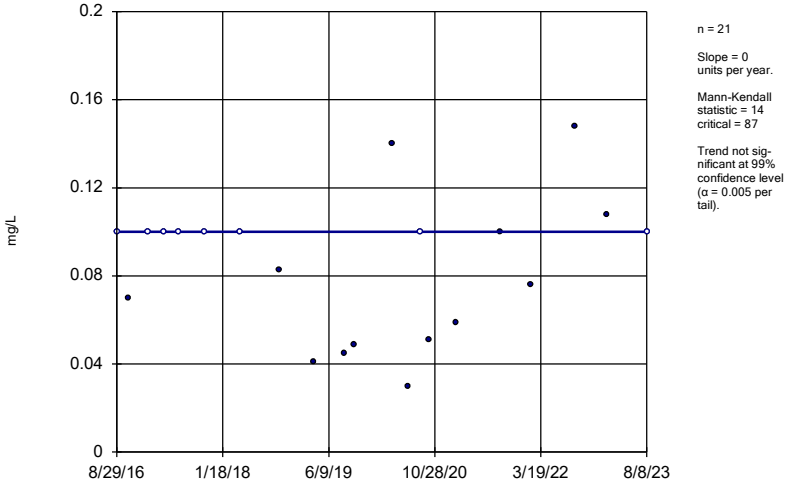
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 10/13/2023 11:44 AM View: Trend Tests
Plant Arkwright Client: Southern Company Data: Arkwright No 2

Sanitas™ v.10.0.06 Software licensed to Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

ARGWA-19 (bg)



n = 21

Slope = 0 units per year.

Mann-Kendall statistic = 14
critical = 87

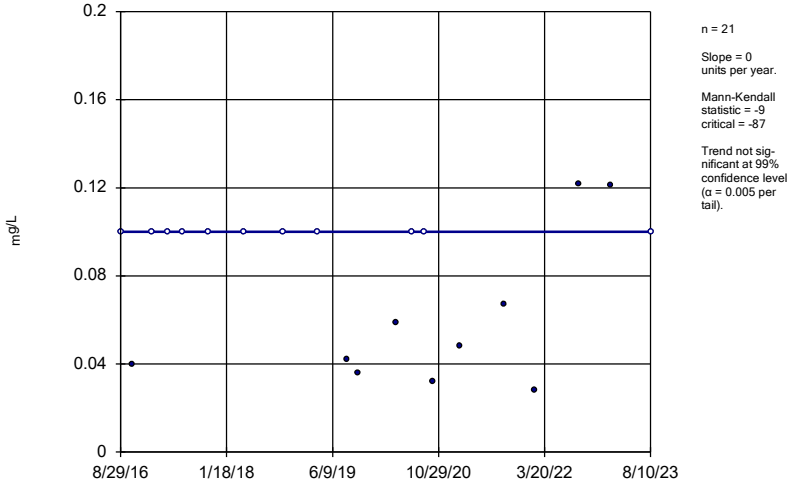
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Fluoride Analysis Run 10/13/2023 11:44 AM View: Trend Tests
Plant Arkwright Client: Southern Company Data: Arkwright No 2

Sanitas™ v.10.0.06 Software licensed to Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

ARGWA-20 (bg)



n = 21

Slope = 0 units per year.

Mann-Kendall statistic = -9
critical = -87

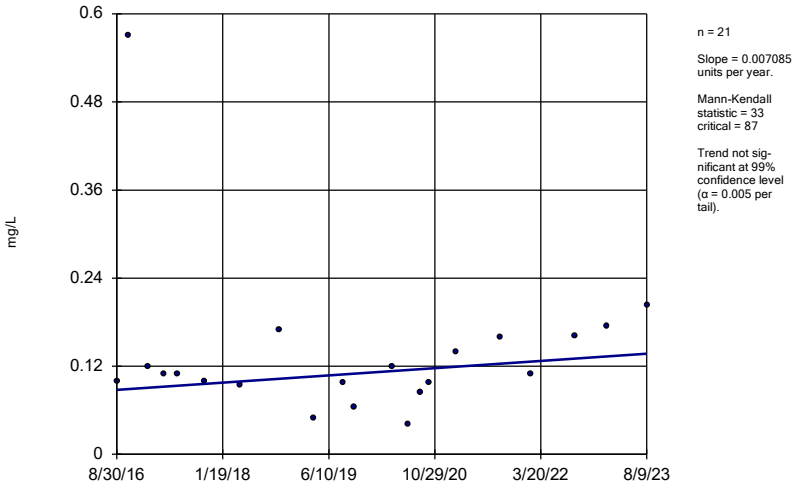
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Fluoride Analysis Run 10/13/2023 11:44 AM View: Trend Tests
Plant Arkwright Client: Southern Company Data: Arkwright No 2

Sanitas™ v.10.0.06 Software licensed to Groundwater Stats Consulting. UG

Sen's Slope Estimator

ARGWC-21



n = 21

Slope = 0.007085 units per year.

Mann-Kendall statistic = 33
critical = 87

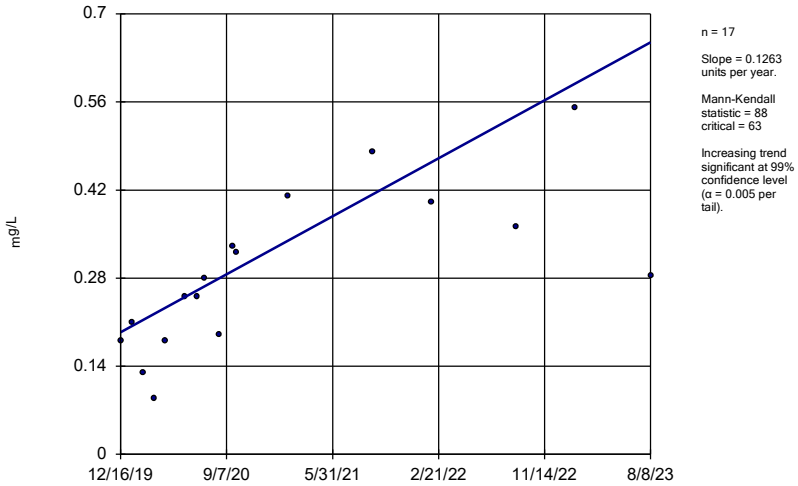
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Fluoride Analysis Run 10/13/2023 11:44 AM View: Trend Tests
Plant Arkwright Client: Southern Company Data: Arkwright No 2

Sanitas™ v.10.0.06 Software licensed to Groundwater Stats Consulting. UG

Sen's Slope Estimator

ARGWC-23



n = 17

Slope = 0.1263 units per year.

Mann-Kendall statistic = 88
critical = 63

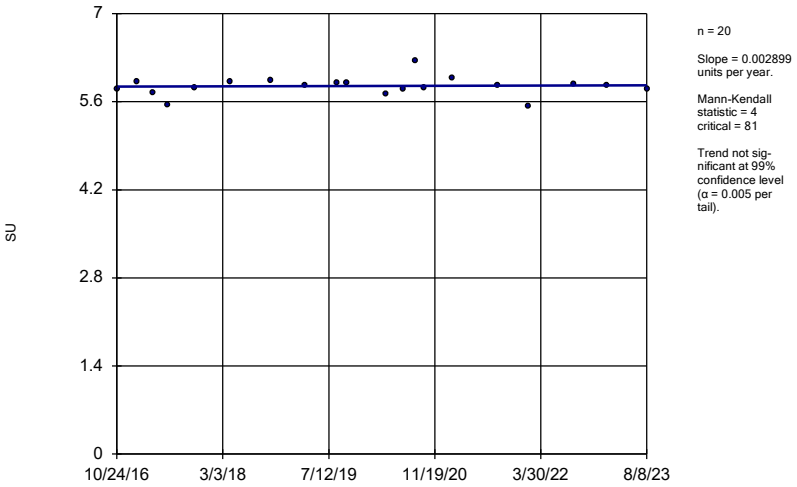
Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Fluoride Analysis Run 10/13/2023 11:44 AM View: Trend Tests
Plant Arkwright Client: Southern Company Data: Arkwright No 2

Sanitas™ v.10.0.06 Software licensed to Groundwater Stats Consulting. UG

Sen's Slope Estimator

ARGWA-19 (bg)



n = 20

Slope = 0.002899 units per year.

Mann-Kendall statistic = 4
critical = 81

Trend not significant at 99% confidence level (α = 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

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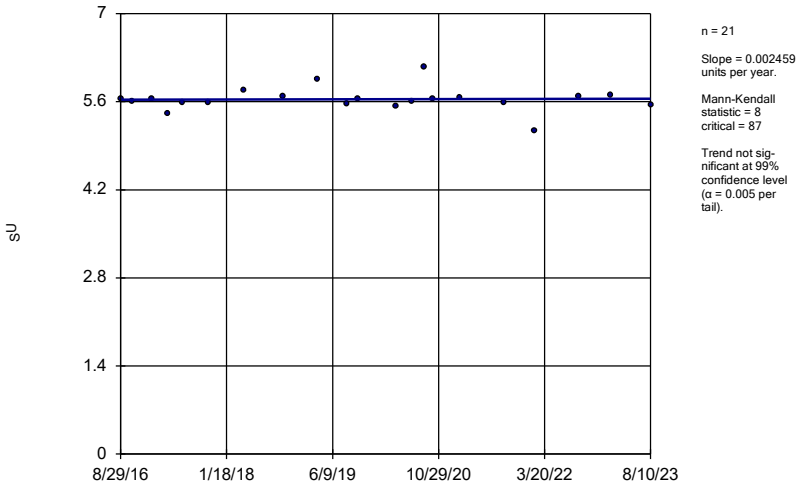
Sen's Slope Estimator

ARGWA-20 (bg)



n = 21

Slope = 0.002459 units per year.

Mann-Kendall statistic = 8
critical = 87

Trend not significant at 99% confidence level (α = 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

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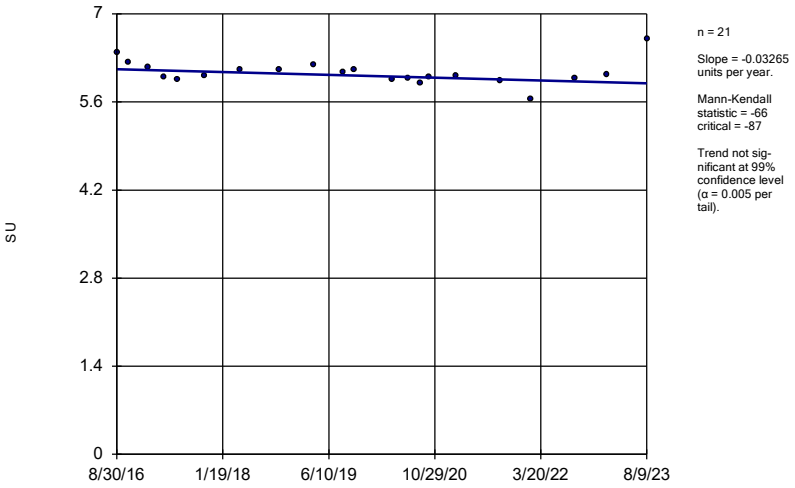
Sen's Slope Estimator

ARGWC-21



n = 21

Slope = -0.03265 units per year.

Mann-Kendall statistic = -66
critical = -87

Trend not significant at 99% confidence level (α = 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

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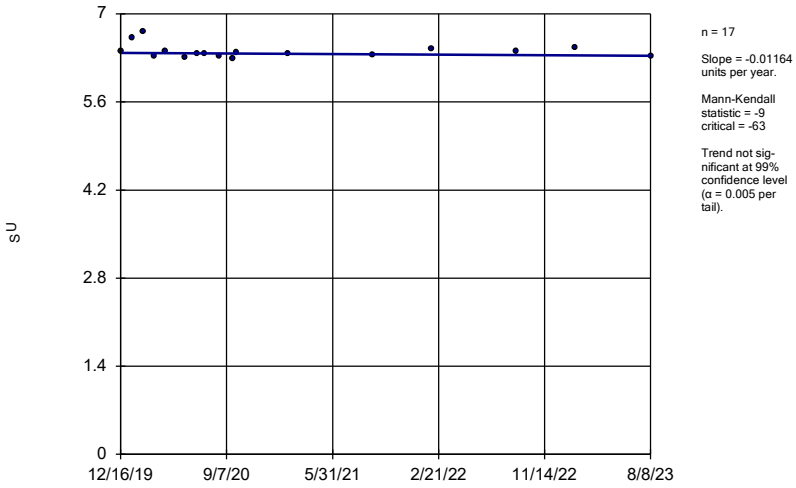
Sen's Slope Estimator

ARGWC-23



n = 17

Slope = -0.01164 units per year.

Mann-Kendall statistic = -9
critical = -63

Trend not significant at 99% confidence level (α = 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

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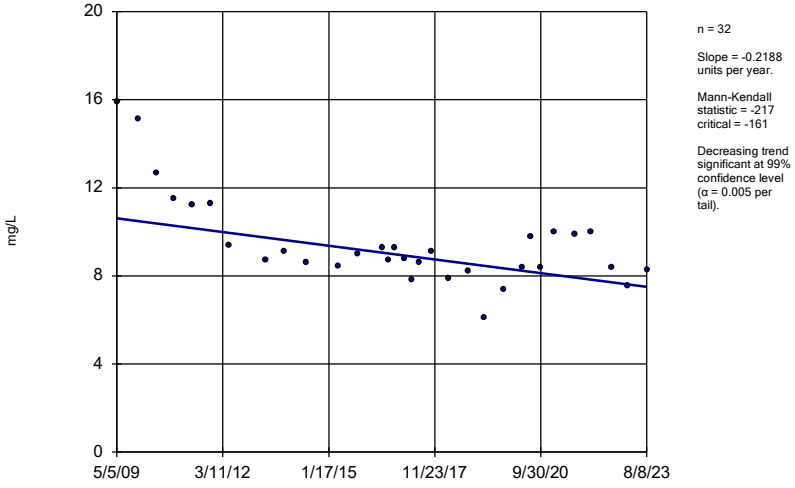
Sen's Slope Estimator

ARGWA-19 (bg)



n = 32

Slope = -0.2188 units per year.

Mann-Kendall statistic = -217
critical = -161

Decreasing trend significant at 99% confidence level (α = 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

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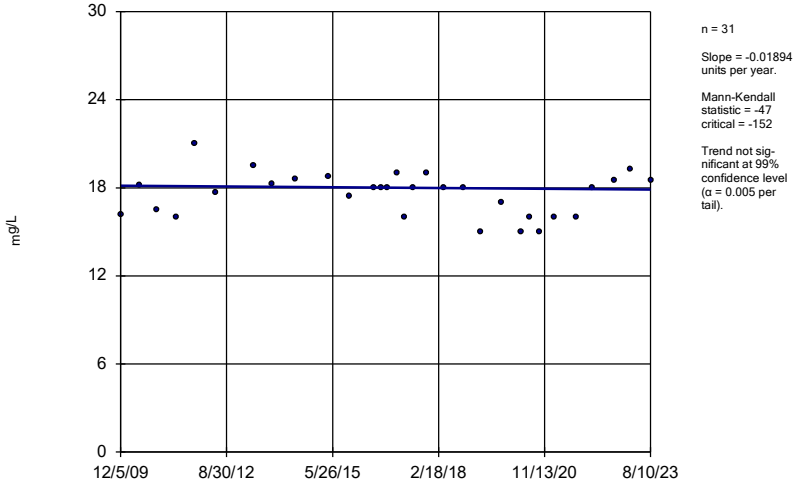
Sen's Slope Estimator

ARGWA-20 (bg)



n = 31

Slope = -0.01894 units per year.

Mann-Kendall statistic = -47
critical = -152

Trend not significant at 99% confidence level (α = 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

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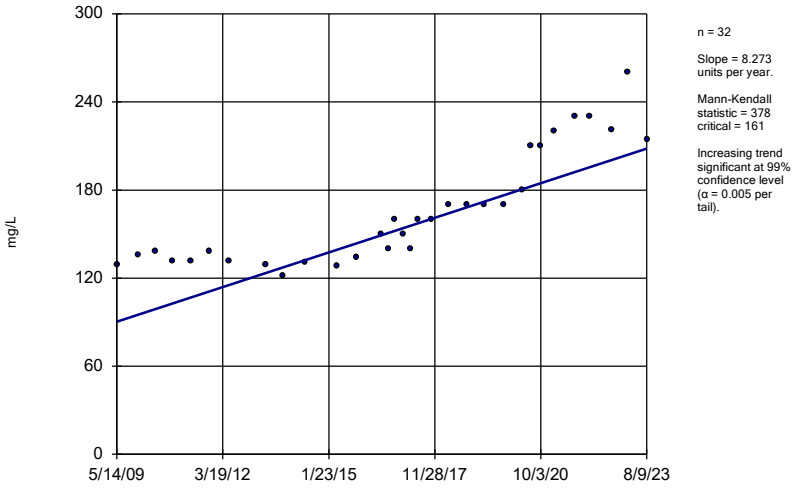
Sen's Slope Estimator

ARGWC-21



n = 32

Slope = 8.273 units per year.

Mann-Kendall statistic = 378 critical = 161

Increasing trend significant at 99% confidence level (α = 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

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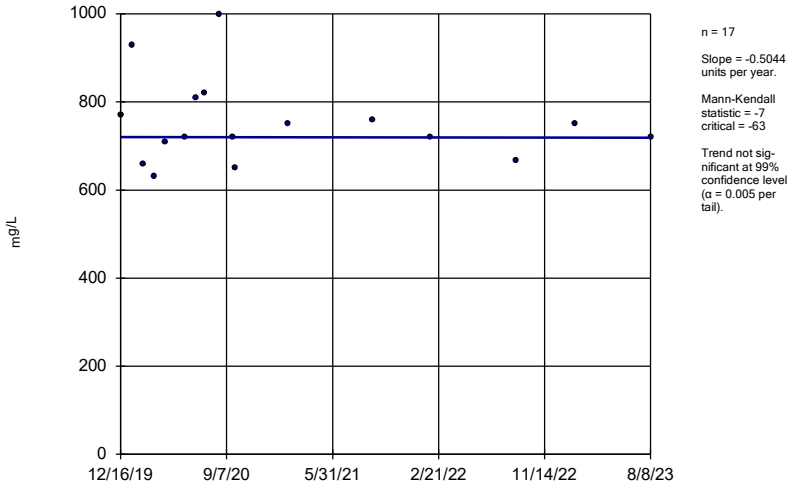
Sen's Slope Estimator

ARGWC-22



n = 17

Slope = -0.5044 units per year.

Mann-Kendall statistic = -7 critical = -63

Trend not significant at 99% confidence level (α = 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

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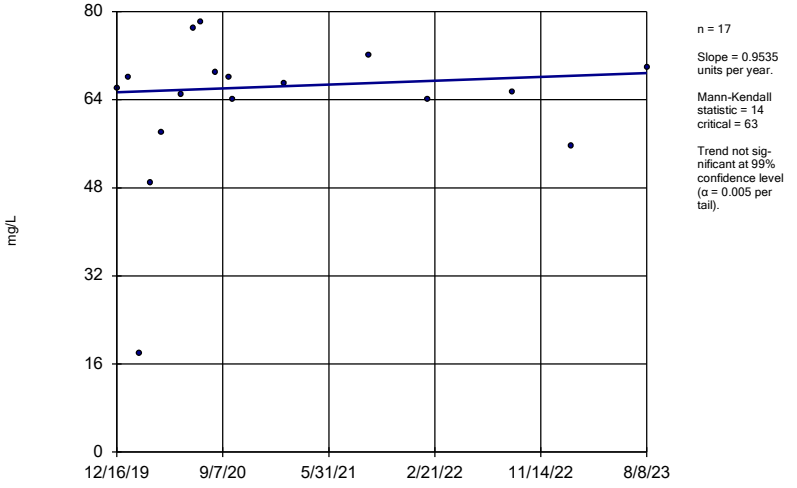
Sen's Slope Estimator

ARGWC-23



n = 17

Slope = 0.9535 units per year.

Mann-Kendall statistic = 14 critical = 63

Trend not significant at 99% confidence level (α = 0.005 per tail).

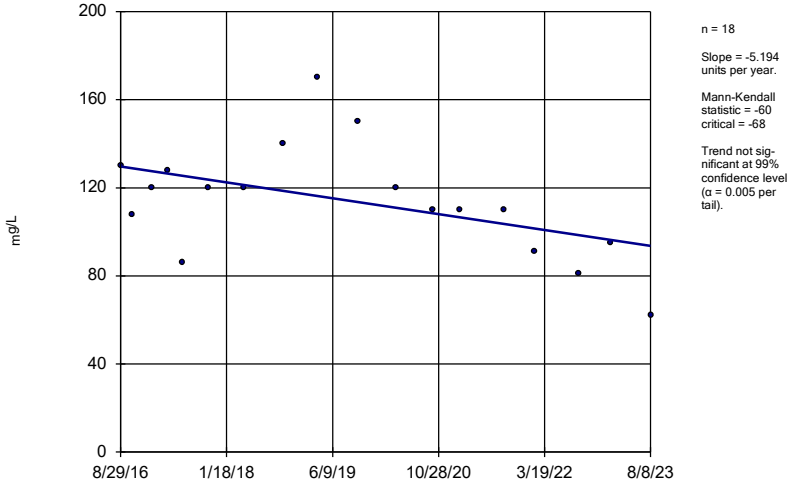
Constituent: Sulfate Analysis Run 10/13/2023 11:44 AM View: Trend Tests

Plant Arkwright Client: Southern Company Data: Arkwright No 2

Sanitas™ v.10.0.06 Software licensed to Groundwater Stats Consulting. UG

Sen's Slope Estimator

ARGWA-19 (bg)



n = 18

Slope = -5.194 units per year.

Mann-Kendall statistic = -60 critical = -68

Trend not significant at 99% confidence level (α = 0.005 per tail).

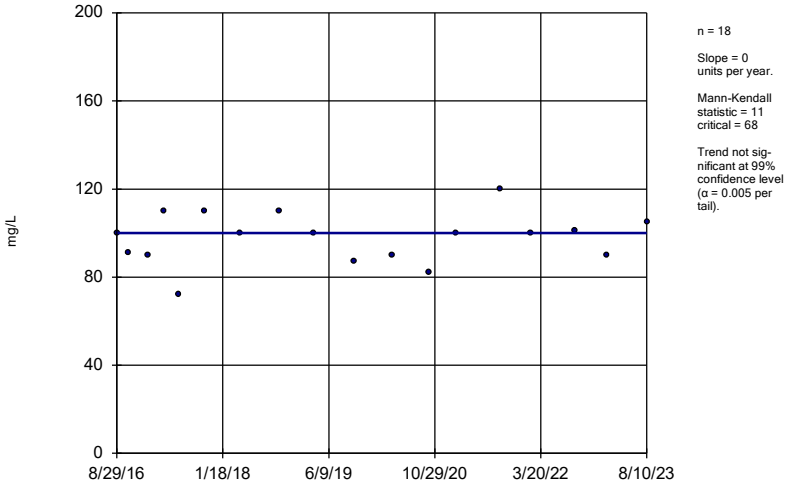
Constituent: Total Dissolved Solids Analysis Run 10/13/2023 11:44 AM View: Trend Tests

Plant Arkwright Client: Southern Company Data: Arkwright No 2

Sanitas™ v.10.0.06 Software licensed to Groundwater Stats Consulting. UG

Sen's Slope Estimator

ARGWA-20 (bg)



n = 18

Slope = 0 units per year.

Mann-Kendall statistic = 11 critical = 68

Trend not significant at 99% confidence level (α = 0.005 per tail).

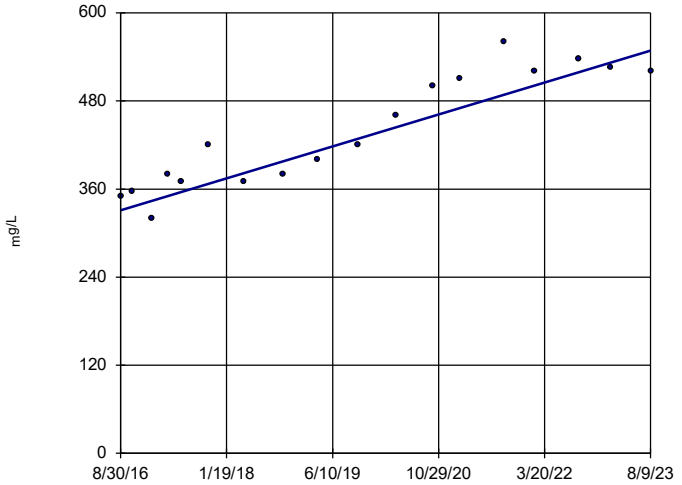
Constituent: Total Dissolved Solids Analysis Run 10/13/2023 11:44 AM View: Trend Tests

Plant Arkwright Client: Southern Company Data: Arkwright No 2

Sanitas™ v.10.0.06 Software licensed to Groundwater Stats Consulting. UG

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 (α = 0.005 per tail).

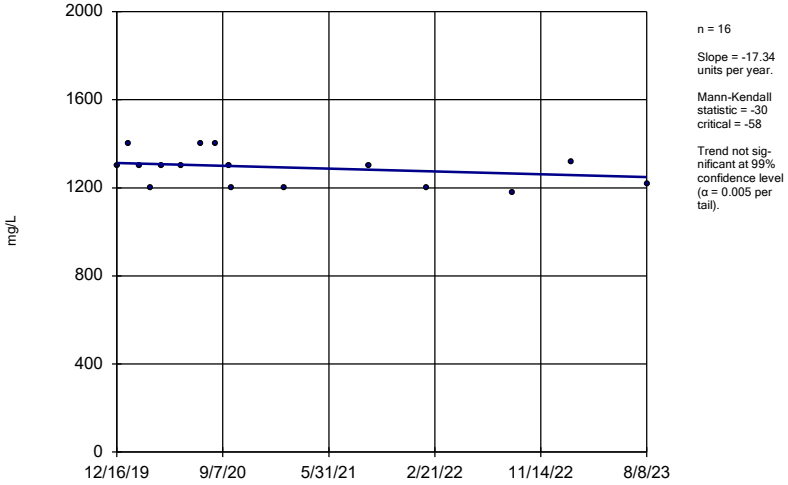
Constituent: Total Dissolved Solids Analysis Run 10/13/2023 11:44 AM View: Trend Tests

Plant Arkwright Client: Southern Company Data: Arkwright No 2

Sanitas™ v.10.0.06 Software licensed to Groundwater Stats Consulting. UG

Sen's Slope Estimator

ARGWC-22



n = 16

Slope = -17.34 units per year.

Mann-Kendall statistic = -30 critical = -58

Trend not significant at 99% confidence level (α = 0.005 per tail).

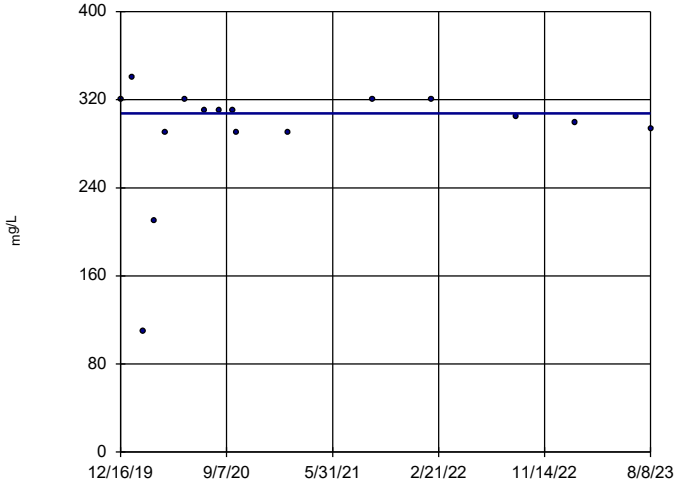
Constituent: Total Dissolved Solids Analysis Run 10/13/2023 11:44 AM View: Trend Tests

Plant Arkwright Client: Southern Company Data: Arkwright No 2

Sanitas™ v.10.0.06 Software licensed to Groundwater Stats Consulting. UG

Sen's Slope Estimator

ARGWC-23



n = 16

Slope = 0 units per year.

Mann-Kendall statistic = -6 critical = -58

Trend not significant at 99% confidence level (α = 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

Constituent	Upper Lim.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
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)

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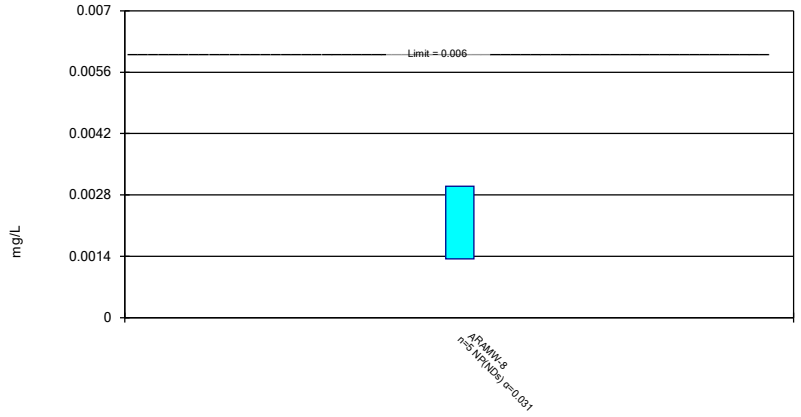
Non-Parametric Confidence Interval

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

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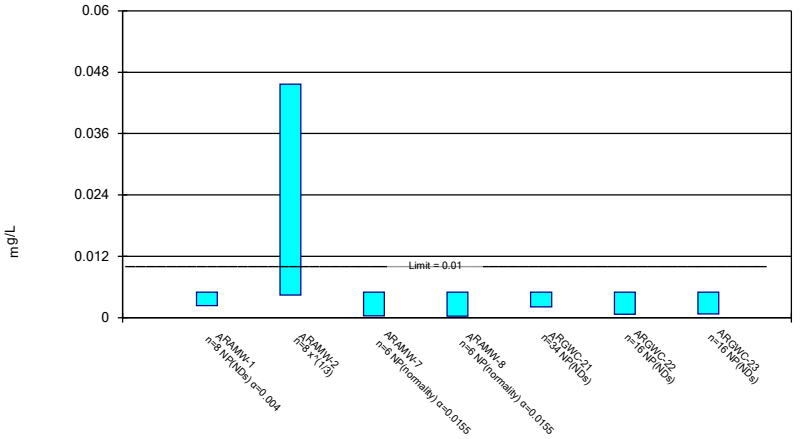
Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Arsenic Analysis Run 10/13/2023 12:04 PM View: Confidence Intervals
Plant Arkwright Client: Southern Company Data: Arkwright No 2

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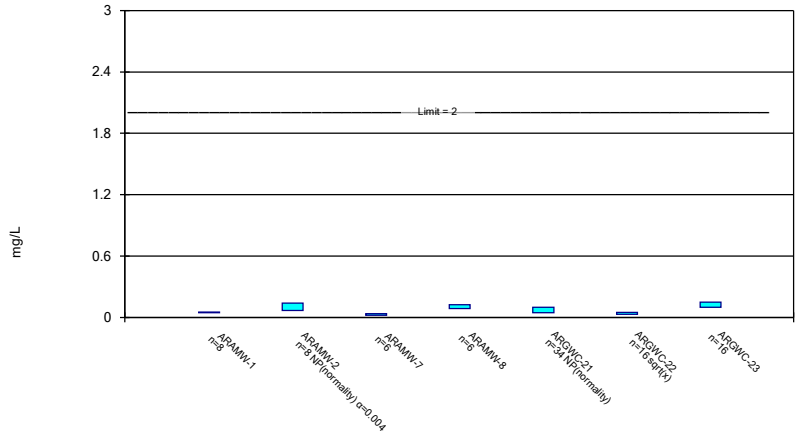
Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Barium Analysis Run 10/13/2023 12:04 PM View: Confidence Intervals
Plant Arkwright Client: Southern Company Data: Arkwright No 2

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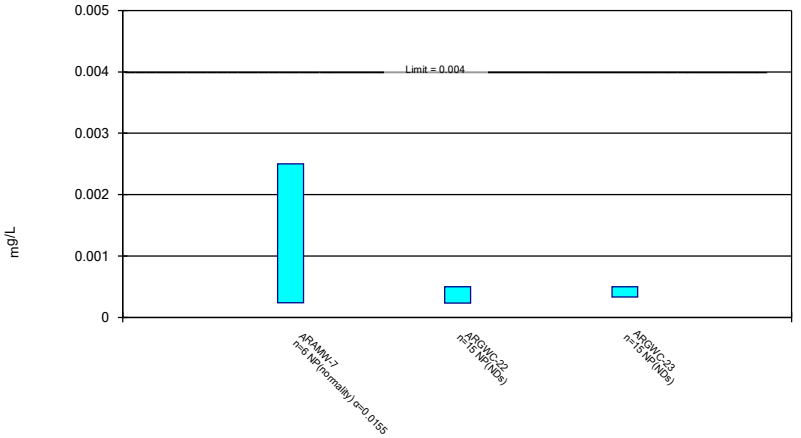
Non-Parametric Confidence Interval

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

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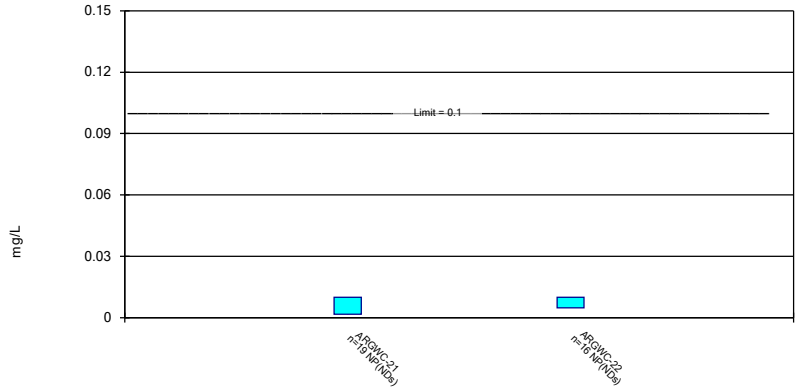
Non-Parametric Confidence Interval

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

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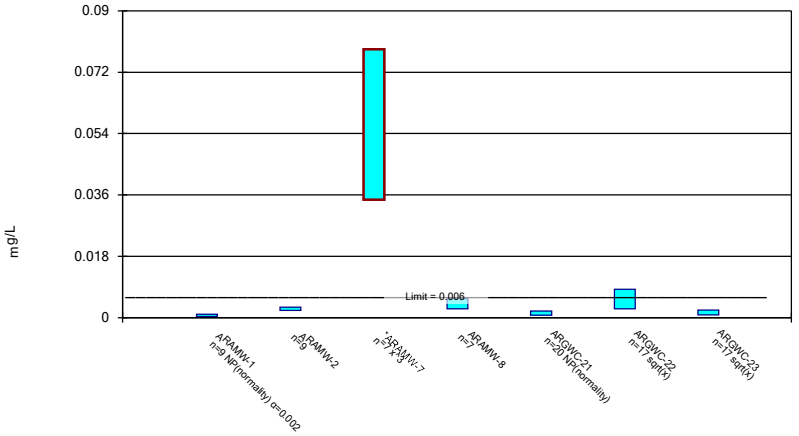
Parametric and Non-Parametric (NP) Confidence Interval

Compliance limit is exceeded.* Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Cobalt Analysis Run 10/13/2023 12:04 PM View: Confidence Intervals
Plant Arkwright Client: Southern Company Data: Arkwright No 2

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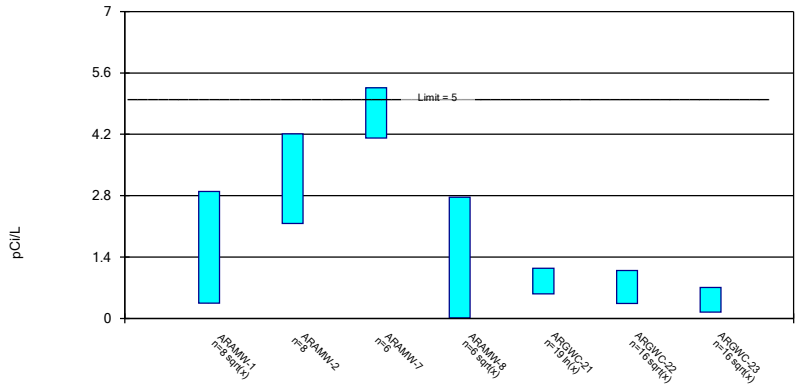
Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Combined Radium 226 + 228 Analysis Run 10/13/2023 12:04 PM View: Confidence Intervals
Plant Arkwright Client: Southern Company Data: Arkwright No 2

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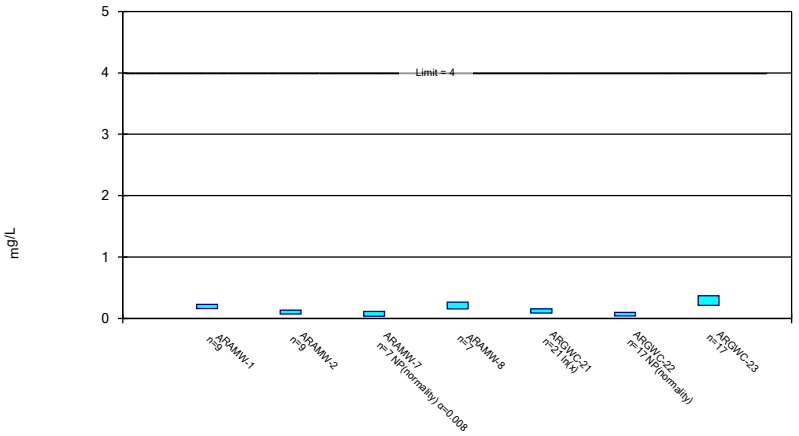
Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Fluoride Analysis Run 10/13/2023 12:04 PM View: Confidence Intervals
Plant Arkwright Client: Southern Company Data: Arkwright No 2

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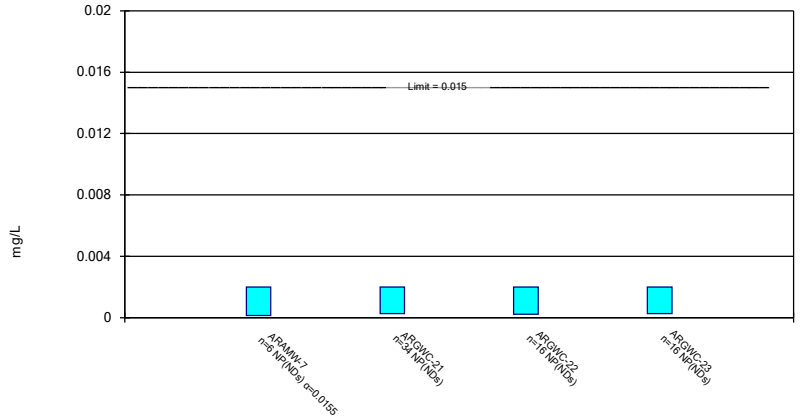
Non-Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted.



Constituent: Lead Analysis Run 10/13/2023 12:04 PM View: Confidence Intervals
Plant Arkwright Client: Southern Company Data: Arkwright No 2

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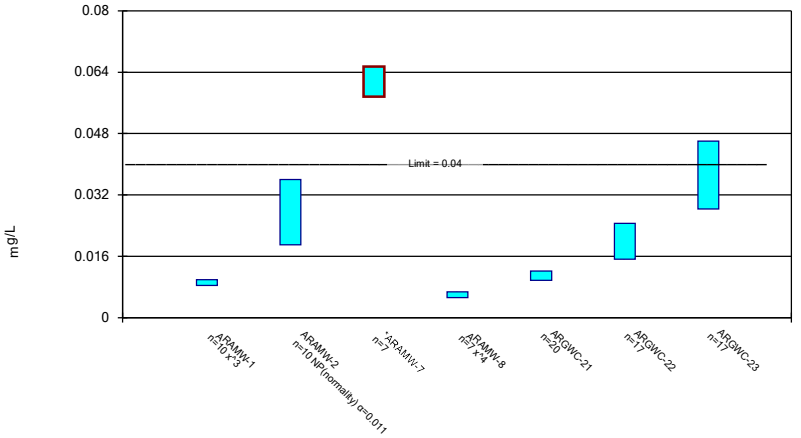
Parametric and Non-Parametric (NP) Confidence Interval

Compliance limit is exceeded.* Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Lithium Analysis Run 10/13/2023 12:04 PM View: Confidence Intervals
Plant Arkwright Client: Southern Company Data: Arkwright No 2

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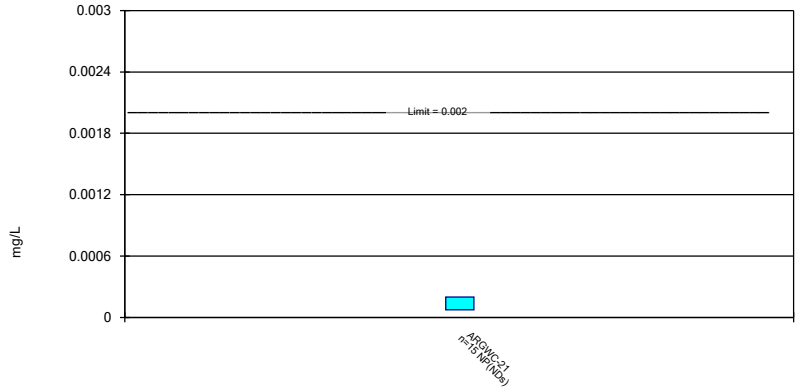
Non-Parametric Confidence Interval

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

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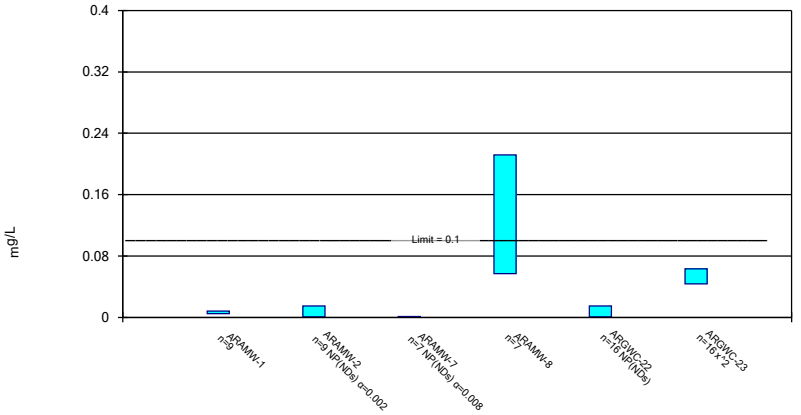
Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Molybdenum Analysis Run 10/13/2023 12:04 PM View: Confidence Intervals
Plant Arkwright Client: Southern Company Data: Arkwright No 2

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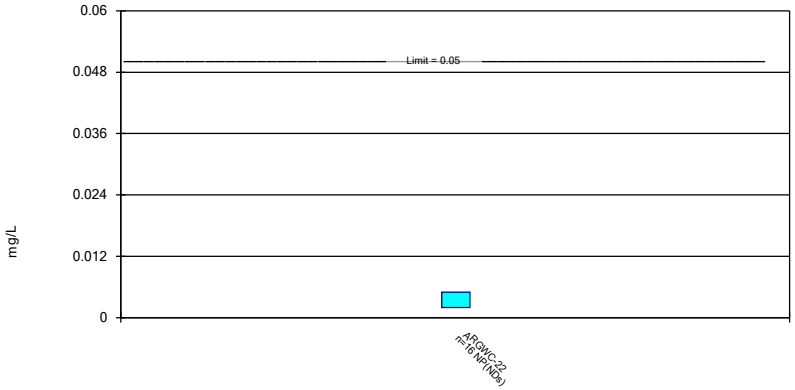
Non-Parametric Confidence Interval

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

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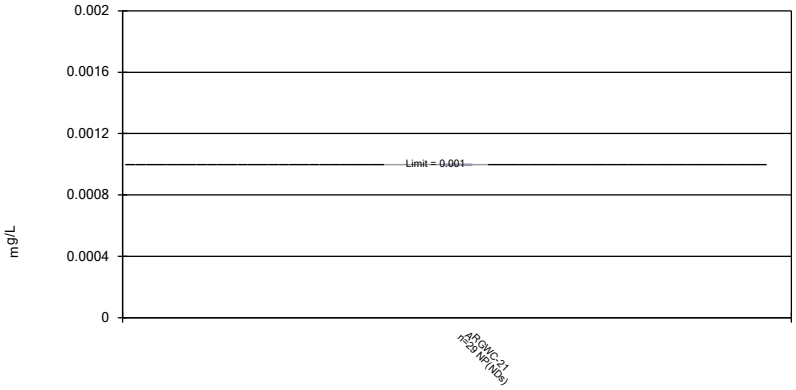
Non-Parametric Confidence Interval

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

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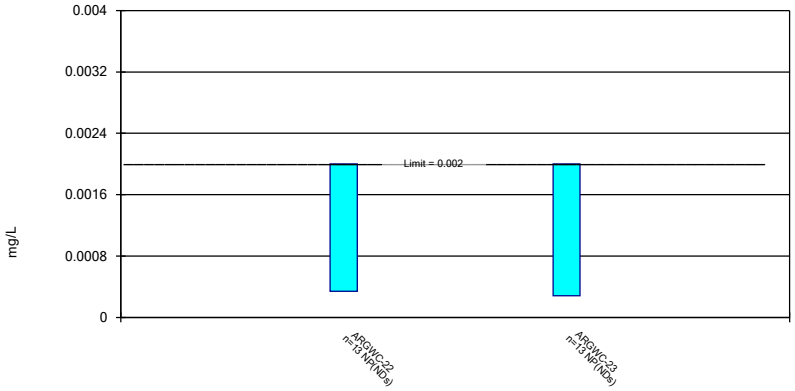
Non-Parametric Confidence Interval

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

ND substitution: RL or RL/2 if <15% NDs.

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

ND substitution: RL or RL/2 if <15% NDs.

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

ND substitution: RL or RL/2 if <15% NDs.

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

ND substitution: RL or RL/2 if <15% NDs.

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

ND substitution: RL or RL/2 if <15% NDs.

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

ND substitution: RL or RL/2 if <15% NDs.

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		

ND substitution: RL or RL/2 if <15% NDs.

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

ND substitution: RL or RL/2 if <15% NDs.

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

ND substitution: RL or RL/2 if <15% NDs.

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

ND substitution: RL or RL/2 if <15% NDs.

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

ND substitution: RL or RL/2 if <15% NDs.

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

ND substitution: RL or RL/2 if <15% NDs.

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

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
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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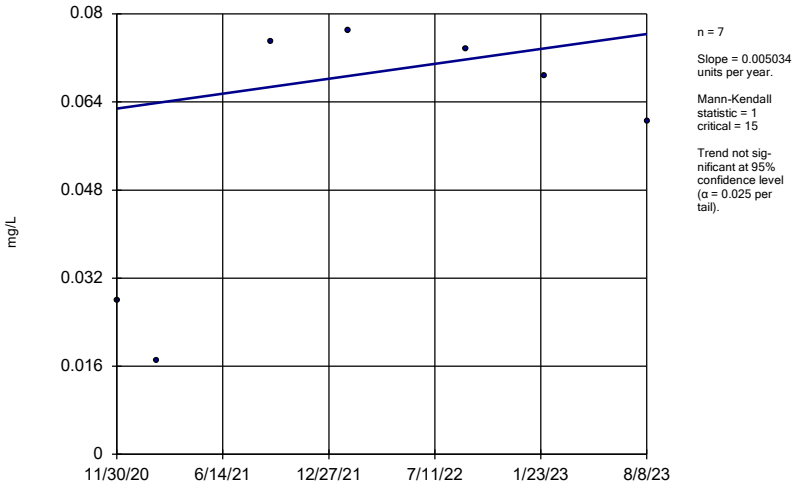
Sen's Slope Estimator

ARAMW-7



n = 7

Slope = 0.005034 units per year.

Mann-Kendall statistic = 1 critical = 15

Trend not significant at 95% confidence level (α = 0.025 per tail).

Constituent: Cobalt Analysis Run 10/13/2023 12:07 PM View: Trend Tests - App IV

Plant Arkwright Client: Southern Company Data: Arkwright No 2

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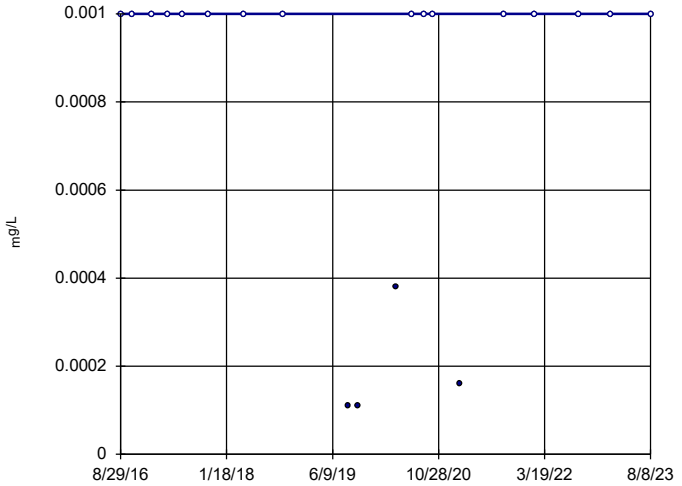
Hollow symbols indicate censored values.

Sen's Slope Estimator

ARGWA-19 (bg)



n = 20

Slope = 0 units per year.

Mann-Kendall statistic = -3 critical = -62

Trend not significant at 95% confidence level (α = 0.025 per tail).

Constituent: Cobalt Analysis Run 10/13/2023 12:07 PM View: Trend Tests - App IV

Plant Arkwright Client: Southern Company Data: Arkwright No 2

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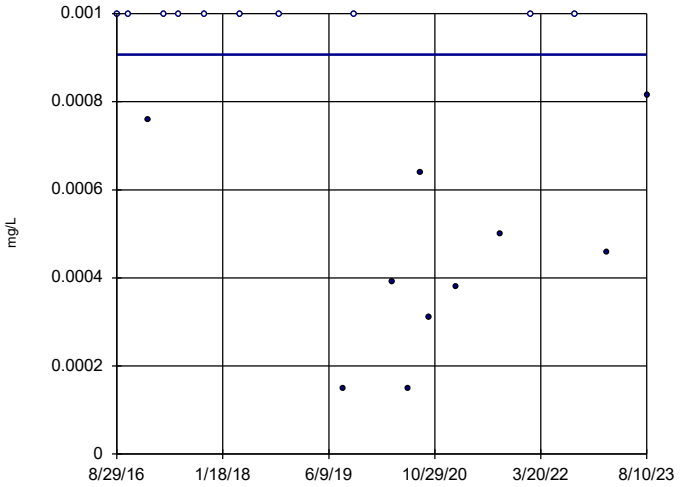
Hollow symbols indicate censored values.

Sen's Slope Estimator

ARGWA-20 (bg)



n = 20

Slope = 0 units per year.

Mann-Kendall statistic = -42 critical = -62

Trend not significant at 95% confidence level (α = 0.025 per tail).

Constituent: Cobalt Analysis Run 10/13/2023 12:07 PM View: Trend Tests - App IV

Plant Arkwright Client: Southern Company Data: Arkwright No 2

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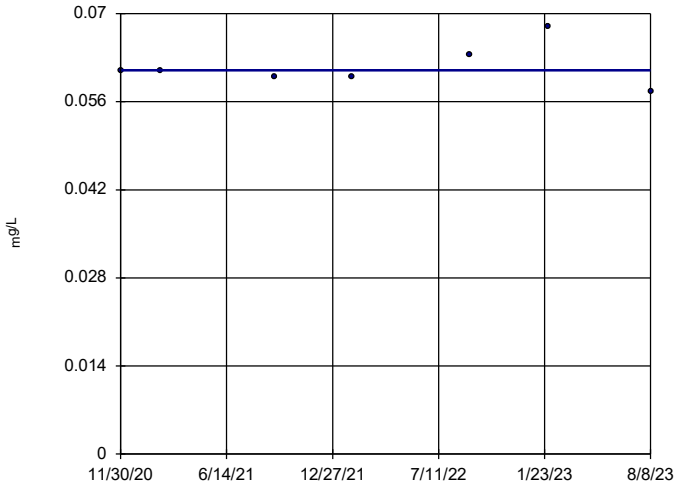
Sen's Slope Estimator

ARAMW-7



n = 7

Slope = 0 units per year.

Mann-Kendall statistic = -1 critical = -15

Trend not significant at 95% confidence level (α = 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

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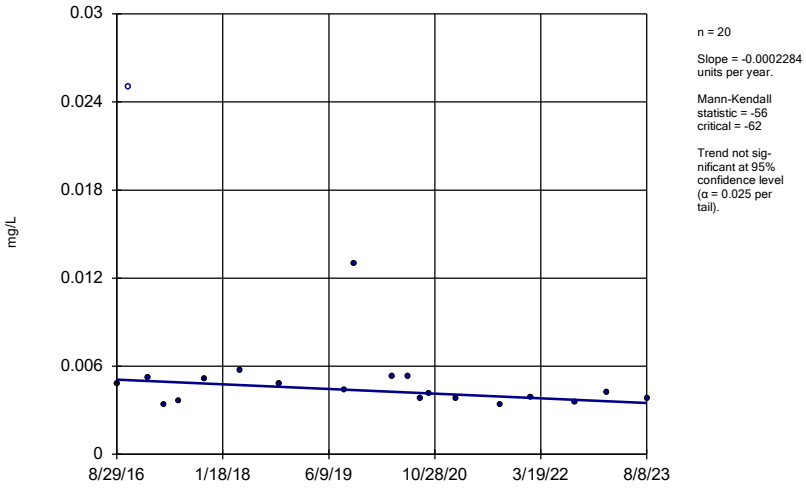
Hollow symbols indicate censored values.

Sen's Slope Estimator

ARGWA-19 (bg)



n = 20

Slope = -0.0002284 units per year.

Mann-Kendall statistic = -56
critical = -62

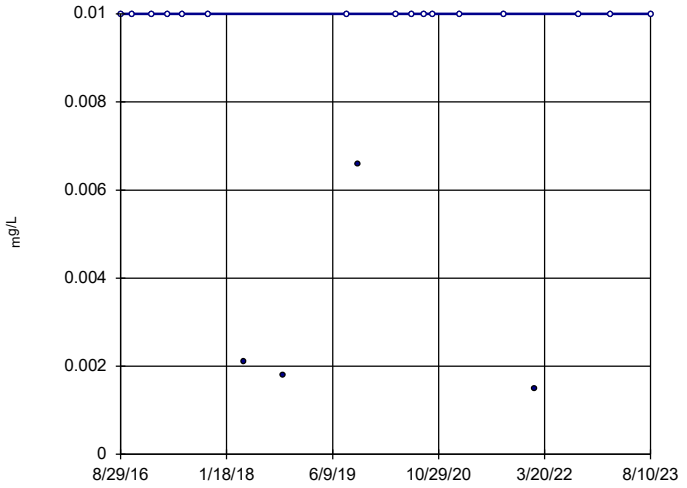
Trend not significant at 95% confidence level (α = 0.025 per tail).

Constituent: Lithium Analysis Run 10/13/2023 12:07 PM View: Trend Tests - App IV
Plant Arkwright Client: Southern Company Data: Arkwright No 2

Sanitas™ v.10.0.06 Software licensed to Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

ARGWA-20 (bg)



n = 20

Slope = 0 units per year.

Mann-Kendall statistic = -2
critical = -62

Trend not significant at 95% confidence level (α = 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

GROUNDWATER STATS CONSULTING

July 31,2024

Southern Company Services
Attn: Mr. Joju Abraham
241 Ralph McGill Blvd NE, Bin 10160
Atlanta, Georgia 30308-3374

Re: Plant Arkwright Ash Pond 2/Dry Ash Stockpile
January 2024 Semi-Annual Sample Event

Dear Mr. Abraham,

Groundwater Stats Consulting, formerly the statistical consulting division of Sanitas Technologies, is pleased to provide the January 2024 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 2019; wells ARAMW-7 and ARAMW-8 were installed in 2020; and well ARAMW-9 was installed in 2022 and first sampled in January 2023. Assessment wells with less than 4 samples do not require formal statistics but data are plotted on time series graphs and box plots. Assessment wells with

4 or more samples are additionally evaluated with confidence intervals for Appendix I and IV constituents.

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 EPD Appendix I:** arsenic, barium, cadmium, lead, selenium, and silver
- **CCR Appendix III:** boron, calcium, chloride, fluoride, pH, sulfate, and total dissolved solids (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 2009 for Appendix I constituents at downgradient wells and since 2016 for Appendix I and IV constituents at downgradient and assessment wells 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 recommend 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 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 – January 2024

All Appendix I and III parameters are analyzed using interwell prediction limits. Upgradient well data were reassessed 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 January 2024 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 January 2024 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 (upper limit): 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: ARGWA-20 (upgradient) and ARGWC-21
- Fluoride: ARGWC-23
- Sulfate: ARGWC-21
- TDS: ARGWC-21

Decreasing:
- Sulfate: ARGWA-19 (upgradient)

Confidence Interval Analysis of Appendix I & IV Parameters – January 2024

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 January 2024 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 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. Note that due to an increasing trend for lithium at downgradient well ARGWC-23, only the most recent 8 observations were used to construct a confidence interval (USEPA Unified Guidance, 2009, Chapter 7). A summary of the confidence intervals follows this letter. Confidence interval exceedances were identified for the following well/constituent pairs:

- Cobalt: ARAMW-7
- Lithium: ARAMW-7 and ARGWC-23

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 level 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. The following statistically significant trend was identified:

Increasing

- Lithium: ARGWC-23

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

Sanitas™ v.10.0.16 Software licensed to . UG

100% Non-Detects: Appendix I

Analysis Run 3/8/2024 7:52 AM View: Appendix I
Plant Arkwright Data: Arkwright No 2

Cadmium (mg/L)
ARGWC-21, ARGWC-22, ARGWC-23

Selenium (mg/L)
ARGWC-21, ARGWC-23

Silver (mg/L)
ARGWC-22, ARGWC-23

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100% Non-Detects: Appendix I & IV Downgradient and Assessment

Analysis Run 7/10/2024 3:02 PM 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

Beryllium (mg/L)
ARAMW-1, ARAMW-2, ARAMW-8, ARGWC-21

Cadmium (mg/L)
ARAMW-1, ARAMW-2, ARAMW-7, ARAMW-8, ARGWC-21, ARGWC-22, ARGWC-23

Chromium (mg/L)
ARAMW-1, ARAMW-2, ARAMW-7, ARAMW-8, ARGWC-23

Lead (mg/L)
ARAMW-1, ARAMW-2, ARAMW-8

Mercury (mg/L)
ARAMW-1, ARAMW-2, ARAMW-7, ARAMW-8, ARGWC-23

Molybdenum (mg/L)
ARGWC-21

Selenium (mg/L)
ARAMW-1, ARAMW-2, ARAMW-7, ARAMW-8, ARGWC-21, ARGWC-23

Silver (mg/L)
ARAMW-1, ARAMW-2, ARAMW-7, ARAMW-8, ARGWC-22, ARGWC-23

Thallium (mg/L)
ARAMW-1, ARAMW-2, ARAMW-7, ARAMW-8, ARGWC-21

Appendix I Interwell Prediction Limits - All Results (No Significant)

Plant Arkwright Client: Southern Company Data: Arkwright No 2 Printed 3/5/2024, 12:50 PM

Constituent	Well	Upper Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Arsenic (mg/L)	ARGWC-21	0.005	1/24/2024	0.005ND	No	70	n/a	n/a	87.14	n/a	n/a	0.0003894	NP Inter (NDs) 1 of 2
Arsenic (mg/L)	ARGWC-22	0.005	1/23/2024	0.005ND	No	70	n/a	n/a	87.14	n/a	n/a	0.0003894	NP Inter (NDs) 1 of 2
Arsenic (mg/L)	ARGWC-23	0.005	1/24/2024	0.005ND	No	70	n/a	n/a	87.14	n/a	n/a	0.0003894	NP Inter (NDs) 1 of 2
Barium (mg/L)	ARGWC-21	0.107	1/24/2024	0.0427	No	70	n/a	n/a	0	n/a	n/a	0.0003894	NP Inter (normality) 1 of 2
Barium (mg/L)	ARGWC-22	0.107	1/23/2024	0.0227	No	70	n/a	n/a	0	n/a	n/a	0.0003894	NP Inter (normality) 1 of 2
Barium (mg/L)	ARGWC-23	0.107	1/24/2024	0.0922	No	70	n/a	n/a	0	n/a	n/a	0.0003894	NP Inter (normality) 1 of 2
Lead (mg/L)	ARGWC-21	0.002	1/24/2024	0.002ND	No	70	n/a	n/a	87.14	n/a	n/a	0.0003894	NP Inter (NDs) 1 of 2
Lead (mg/L)	ARGWC-22	0.002	1/23/2024	0.002ND	No	70	n/a	n/a	87.14	n/a	n/a	0.0003894	NP Inter (NDs) 1 of 2
Lead (mg/L)	ARGWC-23	0.002	1/24/2024	0.002ND	No	70	n/a	n/a	87.14	n/a	n/a	0.0003894	NP Inter (NDs) 1 of 2
Selenium (mg/L)	ARGWC-22	0.005	1/23/2024	0.005ND	No	69	n/a	n/a	66.67	n/a	n/a	0.000403	NP Inter (NDs) 1 of 2
Silver (mg/L)	ARGWC-21	0.001	1/24/2024	0.001ND	No	60	n/a	n/a	91.67	n/a	n/a	0.0005253	NP Inter (NDs) 1 of 2

Appendix III Interwell Prediction Limits - Significant Results

Plant Arkwright Client: Southern Company Data: Arkwright No 2 Printed 3/5/2024, 12:59 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Boron (mg/L)	**ARGWC-21**	**0.092**	**n/a**	**1/24/2024**	**1.13**	**Yes**	**40**	**n/a**	**n/a**	**27.5**	**n/a**	**n/a**	**0.001146**	**NP Inter (normality) 1 of 2**
Boron (mg/L)	**ARGWC-22**	**0.092**	**n/a**	**1/23/2024**	**4.52**	**Yes**	**40**	**n/a**	**n/a**	**27.5**	**n/a**	**n/a**	**0.001146**	**NP Inter (normality) 1 of 2**
Boron (mg/L)	**ARGWC-23**	**0.092**	**n/a**	**1/24/2024**	**0.456**	**Yes**	**40**	**n/a**	**n/a**	**27.5**	**n/a**	**n/a**	**0.001146**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	**ARGWC-21**	**13.9**	**n/a**	**1/24/2024**	**82.6**	**Yes**	**40**	**3.222**	**0.2894**	**0**	**None**	**sqrt(x)**	**0.002505**	**Param Inter 1 of 2**
Calcium (mg/L)	**ARGWC-22**	**13.9**	**n/a**	**1/23/2024**	**183**	**Yes**	**40**	**3.222**	**0.2894**	**0**	**None**	**sqrt(x)**	**0.002505**	**Param Inter 1 of 2**
Calcium (mg/L)	**ARGWC-23**	**13.9**	**n/a**	**1/24/2024**	**75.6**	**Yes**	**40**	**3.222**	**0.2894**	**0**	**None**	**sqrt(x)**	**0.002505**	**Param Inter 1 of 2**
Fluoride (mg/L)	**ARGWC-21**	**0.148**	**n/a**	**1/24/2024**	**0.173**	**Yes**	**44**	**n/a**	**n/a**	**43.18**	**n/a**	**n/a**	**0.0009861**	**NP Inter (normality) 1 of 2**
Fluoride (mg/L)	**ARGWC-23**	**0.148**	**n/a**	**1/24/2024**	**0.391**	**Yes**	**44**	**n/a**	**n/a**	**43.18**	**n/a**	**n/a**	**0.0009861**	**NP Inter (normality) 1 of 2**
pH (SU)	**ARGWC-23**	**6.085**	**5.399**	**1/24/2024**	**6.43**	**Yes**	**43**	**5.742**	**0.1969**	**0**	**None**	**No**	**0.001253**	**Param Inter 1 of 2**
Sulfate (mg/L)	**ARGWC-21**	**21**	**n/a**	**1/24/2024**	**219**	**Yes**	**65**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0004573**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	**ARGWC-22**	**21**	**n/a**	**1/23/2024**	**567**	**Yes**	**65**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0004573**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	**ARGWC-23**	**21**	**n/a**	**1/24/2024**	**78.4**	**Yes**	**65**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0004573**	**NP Inter (normality) 1 of 2**
Total Dissolved Solids (mg/L)	**ARGWC-21**	**142.1**	**n/a**	**1/24/2024**	**541**	**Yes**	**38**	**104.8**	**21.21**	**0**	**None**	**No**	**0.002505**	**Param Inter 1 of 2**
Total Dissolved Solids (mg/L)	**ARGWC-22**	**142.1**	**n/a**	**1/23/2024**	**1110**	**Yes**	**38**	**104.8**	**21.21**	**0**	**None**	**No**	**0.002505**	**Param Inter 1 of 2**
Total Dissolved Solids (mg/L)	**ARGWC-23**	**142.1**	**n/a**	**1/24/2024**	**342**	**Yes**	**38**	**104.8**	**21.21**	**0**	**None**	**No**	**0.002505**	**Param Inter 1 of 2**

Appendix III Interwell Prediction Limits - All Results

Plant Arkwright Client: Southern Company Data: Arkwright No 2 Printed 3/5/2024, 12:59 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Boron (mg/L)	**ARGWC-21**	**0.092**	**n/a**	**1/24/2024**	**1.13**	**Yes**	**40**	**n/a**	**n/a**	**27.5**	**n/a**	**n/a**	**0.001146**	**NP Inter (normality) 1 of 2**
Boron (mg/L)	**ARGWC-22**	**0.092**	**n/a**	**1/23/2024**	**4.52**	**Yes**	**40**	**n/a**	**n/a**	**27.5**	**n/a**	**n/a**	**0.001146**	**NP Inter (normality) 1 of 2**
Boron (mg/L)	**ARGWC-23**	**0.092**	**n/a**	**1/24/2024**	**0.456**	**Yes**	**40**	**n/a**	**n/a**	**27.5**	**n/a**	**n/a**	**0.001146**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	**ARGWC-21**	**13.9**	**n/a**	**1/24/2024**	**82.6**	**Yes**	**40**	**3.222**	**0.2894**	**0**	**None**	**sqrt(x)**	**0.002505**	**Param Inter 1 of 2**
Calcium (mg/L)	**ARGWC-22**	**13.9**	**n/a**	**1/23/2024**	**183**	**Yes**	**40**	**3.222**	**0.2894**	**0**	**None**	**sqrt(x)**	**0.002505**	**Param Inter 1 of 2**
Calcium (mg/L)	**ARGWC-23**	**13.9**	**n/a**	**1/24/2024**	**75.6**	**Yes**	**40**	**3.222**	**0.2894**	**0**	**None**	**sqrt(x)**	**0.002505**	**Param Inter 1 of 2**
Chloride (mg/L)	ARGWC-21	16.2	n/a	1/24/2024	3.35	No	66	n/a	n/a	0	n/a	n/a	0.0004437	NP Inter (normality) 1 of 2
Chloride (mg/L)	ARGWC-22	16.2	n/a	1/23/2024	7.31	No	66	n/a	n/a	0	n/a	n/a	0.0004437	NP Inter (normality) 1 of 2
Chloride (mg/L)	ARGWC-23	16.2	n/a	1/24/2024	3.74	No	66	n/a	n/a	0	n/a	n/a	0.0004437	NP Inter (normality) 1 of 2
Fluoride (mg/L)	**ARGWC-21**	**0.148**	**n/a**	**1/24/2024**	**0.173**	**Yes**	**44**	**n/a**	**n/a**	**43.18**	**n/a**	**n/a**	**0.0009861**	**NP Inter (normality) 1 of 2**
Fluoride (mg/L)	ARGWC-22	0.148	n/a	1/23/2024	0.134	No	44	n/a	n/a	43.18	n/a	n/a	0.0009861	NP Inter (normality) 1 of 2
Fluoride (mg/L)	**ARGWC-23**	**0.148**	**n/a**	**1/24/2024**	**0.391**	**Yes**	**44**	**n/a**	**n/a**	**43.18**	**n/a**	**n/a**	**0.0009861**	**NP Inter (normality) 1 of 2**
pH (SU)	ARGWC-21	6.085	5.399	1/24/2024	6.03	No	43	5.742	0.1969	0	None	No	0.001253	Param Inter 1 of 2
pH (SU)	ARGWC-22	6.085	5.399	1/23/2024	5.88	No	43	5.742	0.1969	0	None	No	0.001253	Param Inter 1 of 2
pH (SU)	**ARGWC-23**	**6.085**	**5.399**	**1/24/2024**	**6.43**	**Yes**	**43**	**5.742**	**0.1969**	**0**	**None**	**No**	**0.001253**	**Param Inter 1 of 2**
Sulfate (mg/L)	**ARGWC-21**	**21**	**n/a**	**1/24/2024**	**219**	**Yes**	**65**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0004573**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	**ARGWC-22**	**21**	**n/a**	**1/23/2024**	**567**	**Yes**	**65**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0004573**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	**ARGWC-23**	**21**	**n/a**	**1/24/2024**	**78.4**	**Yes**	**65**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0004573**	**NP Inter (normality) 1 of 2**
Total Dissolved Solids (mg/L)	**ARGWC-21**	**142.1**	**n/a**	**1/24/2024**	**541**	**Yes**	**38**	**104.8**	**21.21**	**0**	**None**	**No**	**0.002505**	**Param Inter 1 of 2**
Total Dissolved Solids (mg/L)	**ARGWC-22**	**142.1**	**n/a**	**1/23/2024**	**1110**	**Yes**	**38**	**104.8**	**21.21**	**0**	**None**	**No**	**0.002505**	**Param Inter 1 of 2**
Total Dissolved Solids (mg/L)	**ARGWC-23**	**142.1**	**n/a**	**1/24/2024**	**342**	**Yes**	**38**	**104.8**	**21.21**	**0**	**None**	**No**	**0.002505**	**Param Inter 1 of 2**

Appendix III Trend Tests - Significant Results

Plant Arkwright Client: Southern Company Data: Arkwright No 2 Printed 3/5/2024, 1:04 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Boron (mg/L)	**ARGWC-21**	**0.07478**	**156**	**81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**ARGWA-20 (bg)**	**0.3016**	**83**	**81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**ARGWC-21**	**5.27**	**152**	**81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Fluoride (mg/L)	**ARGWC-23**	**0.1094**	**97**	**68**	**Yes**	**18**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**ARGWA-19 (bg)**	**-0.2359**	**-247**	**-167**	**Yes**	**33**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**ARGWC-21**	**8.305**	**400**	**167**	**Yes**	**33**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Total Dissolved Solids (mg/L)	**ARGWC-21**	**30.51**	**137**	**74**	**Yes**	**19**	**0**	**n/a**	**n/a**	**0.01**	**NP**

Appendix III Trend Tests - All Results

Plant Arkwright Client: Southern Company Data: Arkwright No 2 Printed 3/5/2024, 1:04 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Boron (mg/L)	ARGWA-19 (bg)	0	6	81	No	20	35	n/a	n/a	0.01	NP
Boron (mg/L)	ARGWA-20 (bg)	0.00457	68	81	No	20	20	n/a	n/a	0.01	NP
Boron (mg/L)	**ARGWC-21**	**0.07478**	**156**	**81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	ARGWC-22	0.0503	25	68	No	18	0	n/a	n/a	0.01	NP
Boron (mg/L)	ARGWC-23	0.01005	34	68	No	18	0	n/a	n/a	0.01	NP
Calcium (mg/L)	ARGWA-19 (bg)	-0.4594	-57	-81	No	20	0	n/a	n/a	0.01	NP
Calcium (mg/L)	**ARGWA-20 (bg)**	**0.3016**	**83**	**81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**ARGWC-21**	**5.27**	**152**	**81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	ARGWC-22	0	-2	-68	No	18	0	n/a	n/a	0.01	NP
Calcium (mg/L)	ARGWC-23	1.734	51	68	No	18	0	n/a	n/a	0.01	NP
Fluoride (mg/L)	ARGWA-19 (bg)	0	31	92	No	22	36.36	n/a	n/a	0.01	NP
Fluoride (mg/L)	ARGWA-20 (bg)	0	8	92	No	22	50	n/a	n/a	0.01	NP
Fluoride (mg/L)	ARGWC-21	0.008588	48	92	No	22	0	n/a	n/a	0.01	NP
Fluoride (mg/L)	**ARGWC-23**	**0.1094**	**97**	**68**	**Yes**	**18**	**0**	**n/a**	**n/a**	**0.01**	**NP**
pH (SU)	ARGWA-19 (bg)	0.007364	18	87	No	21	0	n/a	n/a	0.01	NP
pH (SU)	ARGWA-20 (bg)	0.00663	23	92	No	22	0	n/a	n/a	0.01	NP
pH (SU)	ARGWC-23	0	0	68	No	18	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	**ARGWA-19 (bg)**	**-0.2359**	**-247**	**-167**	**Yes**	**33**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	ARGWA-20 (bg)	-0.02777	-56	-161	No	32	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	**ARGWC-21**	**8.305**	**400**	**167**	**Yes**	**33**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	ARGWC-22	-17.3	-24	-68	No	18	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	ARGWC-23	2.242	31	68	No	18	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	ARGWA-19 (bg)	-5.775	-74	-74	No	19	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	ARGWA-20 (bg)	0	7	74	No	19	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	**ARGWC-21**	**30.51**	**137**	**74**	**Yes**	**19**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Total Dissolved Solids (mg/L)	ARGWC-22	-29.16	-46	-63	No	17	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	ARGWC-23	0	10	63	No	17	0	n/a	n/a	0.01	NP

Upper Tolerance Limits

Plant Arkwright Client: Southern Company Data: Arkwright No 2 Printed 3/5/2024, 1:20 PM

Constituent	Upper Lim.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Antimony (mg/L)	0.003	32	n/a	n/a	100	n/a	n/a	0.1937	NP Inter(NDs)
Arsenic (mg/L)	0.005	70	n/a	n/a	87.14	n/a	n/a	0.02758	NP Inter(NDs)
Barium (mg/L)	0.107	70	n/a	n/a	0	n/a	n/a	0.02758	NP Inter(normality)
Beryllium (mg/L)	0.0005	36	n/a	n/a	91.67	n/a	n/a	0.1578	NP Inter(NDs)
Cadmium (mg/L)	0.001	68	n/a	n/a	98.53	n/a	n/a	0.03056	NP Inter(NDs)
Chromium (mg/L)	0.01	40	n/a	n/a	25	n/a	n/a	0.1285	NP Inter(normality)
Cobalt (mg/L)	0.001	42	n/a	n/a	66.67	n/a	n/a	0.116	NP Inter(NDs)
Combined Radium 226 + 228 (pCi/L)	2.5	40	n/a	n/a	0	n/a	n/a	0.1285	NP Inter(normality)
Fluoride (mg/L)	0.148	44	n/a	n/a	43.18	n/a	n/a	0.1047	NP Inter(normality)
Lead (mg/L)	0.002	70	n/a	n/a	87.14	n/a	n/a	0.02758	NP Inter(NDs)
Lithium (mg/L)	0.013	42	n/a	n/a	42.86	n/a	n/a	0.116	NP Inter(normality)
Mercury (mg/L)	0.0002	32	n/a	n/a	93.75	n/a	n/a	0.1937	NP Inter(NDs)
Molybdenum (mg/L)	0.001	38	n/a	n/a	84.21	n/a	n/a	0.1424	NP Inter(NDs)
Selenium (mg/L)	0.005	69	n/a	n/a	66.67	n/a	n/a	0.02904	NP Inter(NDs)
Silver (mg/L)	0.001	60	n/a	n/a	91.67	n/a	n/a	0.04607	NP Inter(NDs)
Thallium (mg/L)	0.002	32	n/a	n/a	96.88	n/a	n/a	0.1937	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		2.5	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 7/10/2024, 3:09 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Cobalt (mg/L)	**ARAMW-7**	**0.07776**	**0.03813**	**0.006**	**Yes**	**8**	**0.05745**	**0.02267**	**0**	**None**	**x^2**	**0.01**	**Param.**
Lithium (mg/L)	**ARAMW-7**	**0.0779**	**0.0577**	**0.04**	**Yes**	**8**	**0.06363**	**0.006526**	**0**	**None**	**No**	**0.004**	**NP (normality)**
Lithium (mg/L)	**ARGWC-23**	**0.05569**	**0.04308**	**0.04**	**Yes**	**8**	**0.04939**	**0.00595**	**0**	**None**	**No**	**0.01**	**Param.**

Confidence Intervals Summary Table - All Results

Plant Arkwright Client: Southern Company Data: Arkwright No 2 Printed 7/10/2024, 3:09 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	6	0.002723	0.0006777	83.33	None	No	0.0155	NP (NDs)
Arsenic (mg/L)	ARAMW-1	0.005	0.00233	0.01	No	9	0.004703	0.00089	88.89	None	No	0.002	NP (NDs)
Arsenic (mg/L)	ARAMW-2	0.03865	0.004284	0.01	No	9	0.02187	0.02622	0	None	x^(1/3)	0.01	Param.
Arsenic (mg/L)	ARAMW-7	0.002531	0.0001492	0.01	No	7	0.003021	0.002031	42.86	Kaplan-Meier	No	0.01	Param.
Arsenic (mg/L)	ARAMW-8	0.005	0.00031	0.01	No	7	0.003261	0.00224	57.14	Kaplan-Meier	No	0.008	NP (NDs)
Arsenic (mg/L)	ARGWC-21	0.005	0.0019	0.01	No	22	0.002937	0.001656	36.36	None	No	0.01	NP (normality)
Arsenic (mg/L)	ARGWC-22	0.005	0.00221	0.01	No	17	0.004038	0.001827	76.47	None	No	0.01	NP (NDs)
Arsenic (mg/L)	ARGWC-23	0.005	0.00075	0.01	No	17	0.004204	0.001774	82.35	None	No	0.01	NP (NDs)
Barium (mg/L)	ARAMW-1	0.05218	0.04364	2	No	9	0.04791	0.00442	0	None	No	0.01	Param.
Barium (mg/L)	ARAMW-2	0.1137	0.0622	2	No	9	0.08786	0.02835	0	None	sqrt(x)	0.01	Param.
Barium (mg/L)	ARAMW-7	0.03327	0.02338	2	No	7	0.02824	0.004325	0	None	sqrt(x)	0.01	Param.
Barium (mg/L)	ARAMW-8	0.1185	0.09092	2	No	7	0.1047	0.01161	0	None	No	0.01	Param.
Barium (mg/L)	ARGWC-21	0.12	0.045	2	No	22	0.08236	0.03514	0	None	No	0.01	NP (normality)
Barium (mg/L)	ARGWC-22	0.04758	0.02884	2	No	17	0.03903	0.01608	0	None	sqrt(x)	0.01	Param.
Barium (mg/L)	ARGWC-23	0.146	0.0968	2	No	17	0.1214	0.03927	0	None	No	0.01	Param.
Beryllium (mg/L)	ARAMW-7	0.0025	0.000236	0.004	No	7	0.00124	0.001179	42.86	None	No	0.008	NP (normality)
Beryllium (mg/L)	ARGWC-22	0.0005	0.00023	0.004	No	16	0.000435	0.000122	68.75	None	No	0.01	NP (NDs)
Beryllium (mg/L)	ARGWC-23	0.0005	0.00033	0.004	No	16	0.0004894	0.0000425	93.75	None	No	0.01	NP (NDs)
Chromium (mg/L)	ARGWC-21	0.01	0.0017	0.1	No	20	0.009585	0.001856	95	None	No	0.01	NP (NDs)
Chromium (mg/L)	ARGWC-22	0.01	0.0048	0.1	No	17	0.009694	0.001261	94.12	None	No	0.01	NP (NDs)
Cobalt (mg/L)	ARAMW-1	0.0008945	0.0003968	0.006	No	10	0.0006489	0.0002821	0	None	sqrt(x)	0.01	Param.
Cobalt (mg/L)	ARAMW-2	0.003001	0.002167	0.006	No	10	0.002584	0.0004672	0	None	No	0.01	Param.
Cobalt (mg/L)	**ARAMW-7**	**0.07776**	**0.03813**	**0.006**	**Yes**	**8**	**0.05745**	**0.02267**	**0**	**None**	**x^2**	**0.01**	**Param.**
Cobalt (mg/L)	ARAMW-8	0.005324	0.002351	0.006	No	8	0.003838	0.001402	0	None	No	0.01	Param.
Cobalt (mg/L)	ARGWC-21	0.0019	0.0007	0.006	No	21	0.001303	0.0005874	0	None	No	0.01	NP (normality)
Cobalt (mg/L)	ARGWC-22	0.007996	0.002675	0.006	No	18	0.005897	0.005051	0	None	sqrt(x)	0.01	Param.
Cobalt (mg/L)	ARGWC-23	0.002049	0.0007833	0.006	No	18	0.001588	0.001302	5.556	None	x^(1/3)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	ARAMW-1	4.342	0.4093	5	No	9	2.412	2.898	0	None	x^(1/3)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	ARAMW-2	5.692	2.145	5	No	9	3.979	2.535	0	None	ln(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	ARAMW-7	5.138	4.231	5	No	7	4.684	0.3819	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	ARAMW-8	2.939	0.07292	5	No	7	1.301	1.329	0	None	sqrt(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	ARGWC-21	1.331	0.5818	5	No	20	1.2	1.232	0	None	ln(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	ARGWC-22	1.184	0.3751	5	No	17	0.8588	0.7533	0	None	sqrt(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	ARGWC-23	0.8802	0.1649	5	No	17	0.6214	0.776	0	None	sqrt(x)	0.01	Param.
Fluoride (mg/L)	ARAMW-1	0.2233	0.1641	4	No	10	0.1937	0.03321	0	None	No	0.01	Param.
Fluoride (mg/L)	ARAMW-2	0.1442	0.07722	4	No	10	0.1107	0.03753	10	None	No	0.01	Param.
Fluoride (mg/L)	ARAMW-7	0.0975	0.0265	4	No	8	0.08325	0.03466	37.5	Kaplan-Meier	No	0.01	Param.
Fluoride (mg/L)	ARAMW-8	0.2578	0.1652	4	No	8	0.2115	0.04367	0	None	No	0.01	Param.
Fluoride (mg/L)	ARGWC-21	0.1576	0.08899	4	No	22	0.1387	0.1051	0	None	ln(x)	0.01	Param.
Fluoride (mg/L)	ARGWC-22	0.134	0.04	4	No	18	0.08188	0.05956	16.67	None	No	0.01	NP (normality)
Fluoride (mg/L)	ARGWC-23	0.3682	0.2191	4	No	18	0.2937	0.1233	0	None	No	0.01	Param.
Lead (mg/L)	ARAMW-7	0.002	0.00013	0.015	No	7	0.001733	0.0007068	85.71	None	No	0.008	NP (NDs)
Lead (mg/L)	ARGWC-21	0.002	0.00026	0.015	No	22	0.001837	0.0005284	90.91	None	No	0.01	NP (NDs)
Lead (mg/L)	ARGWC-22	0.002	0.00022	0.015	No	17	0.001786	0.0006046	88.24	None	No	0.01	NP (NDs)
Lead (mg/L)	ARGWC-23	0.002	0.00026	0.015	No	17	0.001791	0.0005913	88.24	None	No	0.01	NP (NDs)
Lithium (mg/L)	ARAMW-1	0.0101	0.008353	0.04	No	11	0.009226	0.001048	0	None	No	0.01	Param.
Lithium (mg/L)	ARAMW-2	0.036	0.018	0.04	No	11	0.02781	0.01998	0	None	No	0.006	NP (normality)
Lithium (mg/L)	**ARAMW-7**	**0.0779**	**0.0577**	**0.04**	**Yes**	**8**	**0.06363**	**0.006526**	**0**	**None**	**No**	**0.004**	**NP (normality)**
Lithium (mg/L)	ARAMW-8	0.006728	0.005443	0.04	No	8	0.006074	0.0007699	0	None	x^4	0.01	Param.
Lithium (mg/L)	ARGWC-21	0.01222	0.009874	0.04	No	21	0.01105	0.002128	0	None	No	0.01	Param.
Lithium (mg/L)	ARGWC-22	0.02396	0.01499	0.04	No	18	0.01948	0.007413	0	None	No	0.01	Param.
Lithium (mg/L)	**ARGWC-23**	**0.05569**	**0.04308**	**0.04**	**Yes**	**8**	**0.04939**	**0.00595**	**0**	**None**	**No**	**0.01**	**Param.**
Mercury (mg/L)	ARGWC-21	0.0002	0.000073	0.002	No	16	0.0001921	0.00003175	93.75	None	No	0.01	NP (NDs)
Mercury (mg/L)	ARGWC-22	0.000372	0.0002	0.002	No	14	0.0002123	0.00004597	92.86	None	No	0.01	NP (NDs)

Confidence Intervals Summary Table - All Results

Plant Arkwright Client: Southern Company Data: Arkwright No 2 Printed 7/10/2024, 3:09 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Molybdenum (mg/L)	ARAMW-1	0.008376	0.00499	0.1	No	10	0.006683	0.001897	0	None	No	0.01	Param.
Molybdenum (mg/L)	ARAMW-2	0.015	0.000603	0.1	No	10	0.00795	0.007434	50	None	No	0.011	NP (normality)
Molybdenum (mg/L)	ARAMW-7	0.0012	0.000379	0.1	No	8	0.0009474	0.0002401	75	None	No	0.004	NP (NDs)
Molybdenum (mg/L)	ARAMW-8	0.2101	0.07394	0.1	No	8	0.142	0.06421	0	None	No	0.01	Param.
Molybdenum (mg/L)	ARGWC-22	0.015	0.000514	0.1	No	17	0.008298	0.007336	52.94	None	No	0.01	NP (NDs)
Molybdenum (mg/L)	ARGWC-23	0.06355	0.04828	0.1	No	17	0.05218	0.0181	0	None	x^3	0.01	Param.
Selenium (mg/L)	ARGWC-22	0.005	0.002	0.05	No	17	0.004824	0.0007276	94.12	None	No	0.01	NP (NDs)
Silver (mg/L)	ARGWC-21	0.001	0.00043	0.001	No	17	0.0009665	0.0001382	94.12	None	No	0.01	NP (NDs)
Thallium (mg/L)	ARGWC-22	0.002	0.00035	0.002	No	14	0.001553	0.0007422	71.43	None	No	0.01	NP (NDs)
Thallium (mg/L)	ARGWC-23	0.002	0.00028	0.002	No	14	0.001629	0.0007381	78.57	None	No	0.01	NP (NDs)

Appendix IV Trend Tests - Significant Results

Plant Arkwright Client: Southern Company Data: Arkwright No 2 Printed 3/5/2024, 4:13 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Lithium (mg/L)	**ARGWC-23**	**0.009556**	**119**	**53**	**Yes**	**18**	**0**	**n/a**	**n/a**	**0.05**	**NP**

Appendix IV Trend Tests - All Results

Plant Arkwright Client: Southern Company Data: Arkwright No 2 Printed 3/5/2024, 4:13 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Cobalt (mg/L)	ARAMW-7	-0.001524	-2	-17	No	8	0	n/a	n/a	0.05	NP
Cobalt (mg/L)	ARGWA-19 (bg)	0	1	66	No	21	80.95	n/a	n/a	0.05	NP
Cobalt (mg/L)	ARGWA-20 (bg)	0	-32	-66	No	21	52.38	n/a	n/a	0.05	NP
Lithium (mg/L)	ARAMW-7	0.002377	6	17	No	8	0	n/a	n/a	0.05	NP
Lithium (mg/L)	ARGWA-19 (bg)	-0.0002024	-55	-66	No	21	4.762	n/a	n/a	0.05	NP
Lithium (mg/L)	ARGWA-20 (bg)	0	2	66	No	21	80.95	n/a	n/a	0.05	NP
Lithium (mg/L)	**ARGWC-23**	**0.009556**	**119**	**53**	**Yes**	**18**	**0**	**n/a**	**n/a**	**0.05**	**NP**

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FIGURE A.

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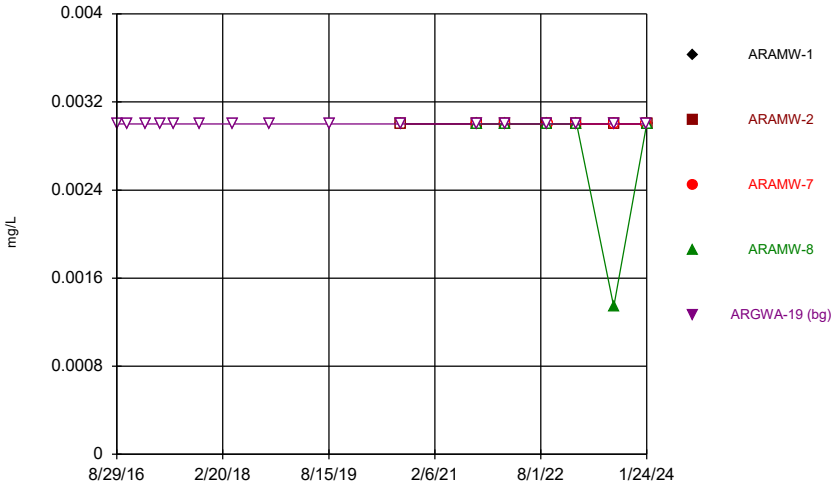
Hollow symbols indicate censored values.

Time Series



Constituent: Antimony Analysis Run 3/5/2024 1:08 PM View: Descriptive
Plant Arkwright Client: Southern Company Data: Arkwright No 2

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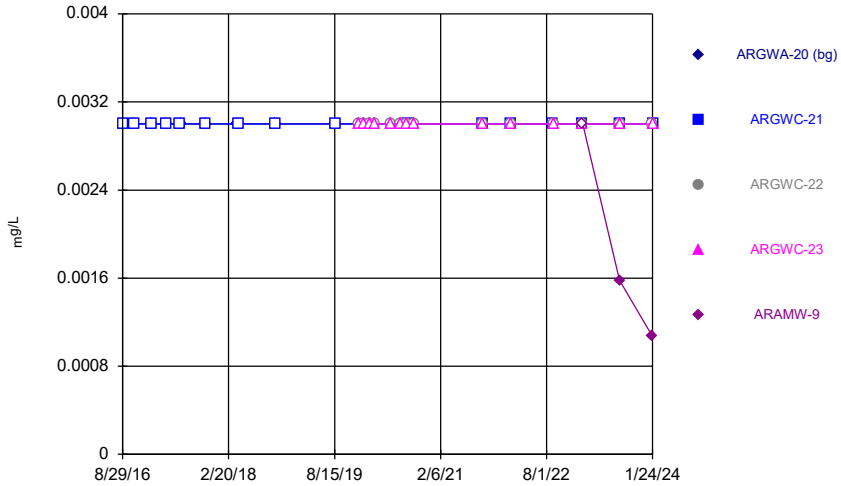
Hollow symbols indicate censored values.

Time Series



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Plant Arkwright Client: Southern Company Data: Arkwright No 2

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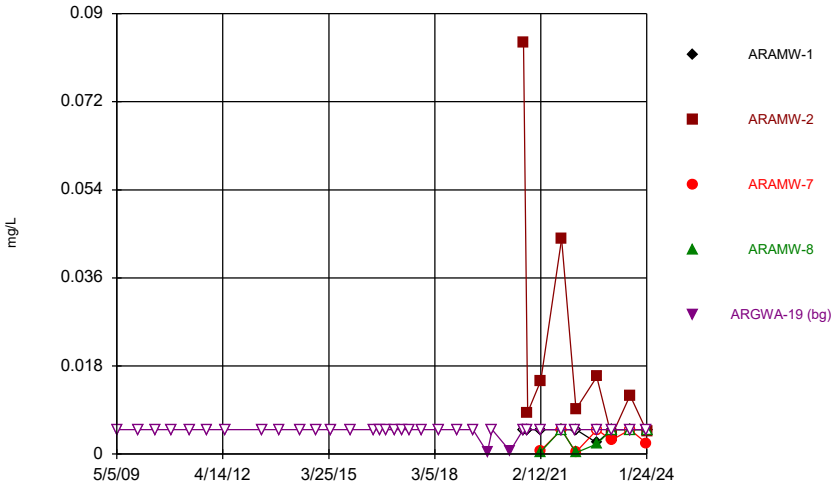
Hollow symbols indicate censored values.

Time Series



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Plant Arkwright Client: Southern Company Data: Arkwright No 2

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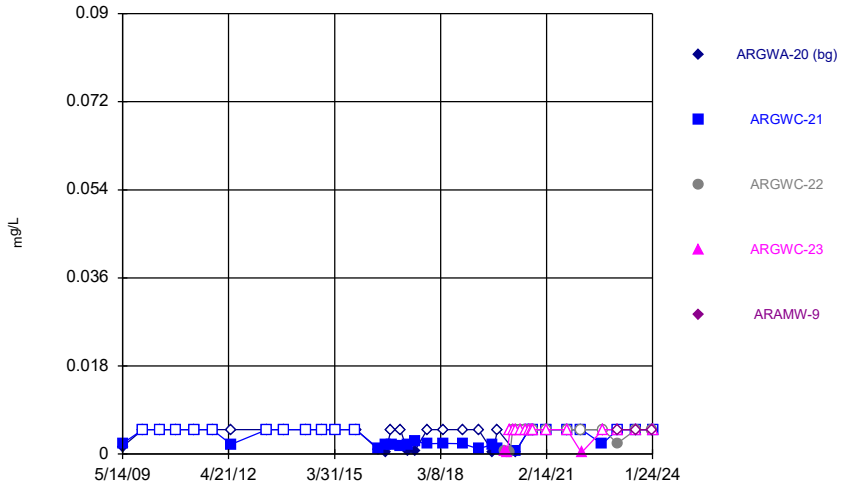
Hollow symbols indicate censored values.

Time Series



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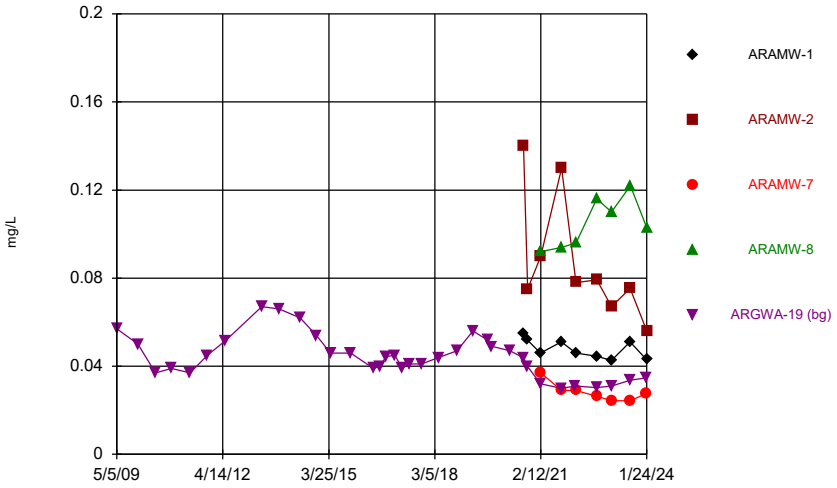
Time Series



Constituent: Barium Analysis Run 3/5/2024 1:08 PM View: Descriptive
Plant Arkwright Client: Southern Company Data: Arkwright No 2

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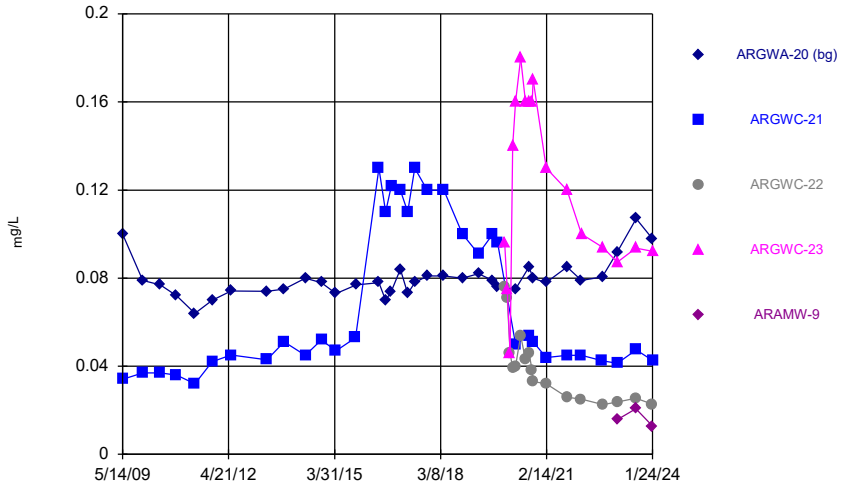
Time Series



Constituent: Barium Analysis Run 3/5/2024 1:08 PM View: Descriptive
Plant Arkwright Client: Southern Company Data: Arkwright No 2

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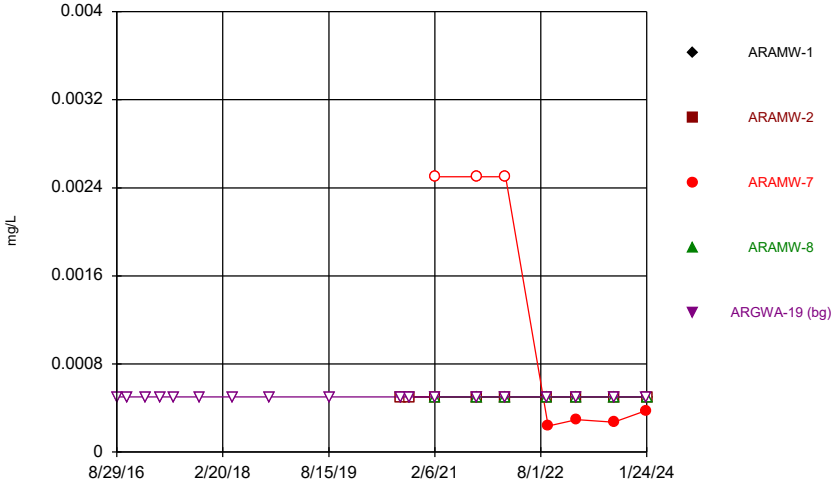
Hollow symbols indicate censored values.

Time Series



Constituent: Beryllium Analysis Run 3/5/2024 1:09 PM View: Descriptive
Plant Arkwright Client: Southern Company Data: Arkwright No 2

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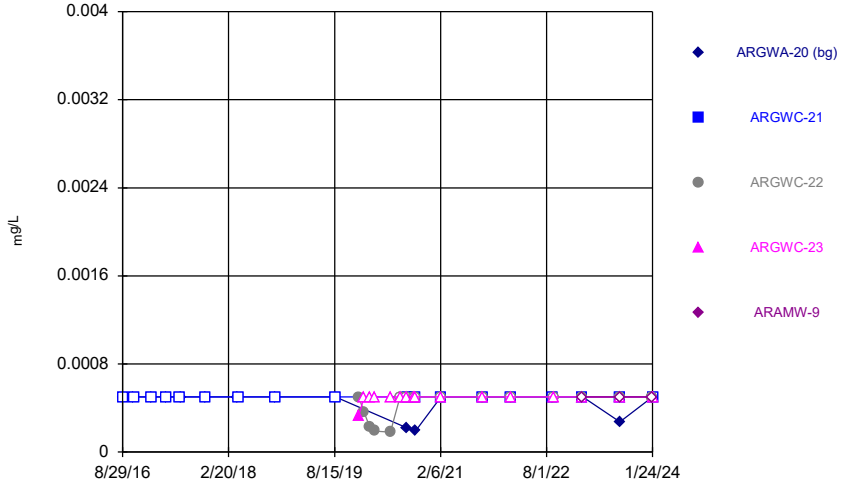
Time Series



Constituent: Beryllium Analysis Run 3/5/2024 1:09 PM View: Descriptive
Plant Arkwright Client: Southern Company Data: Arkwright No 2

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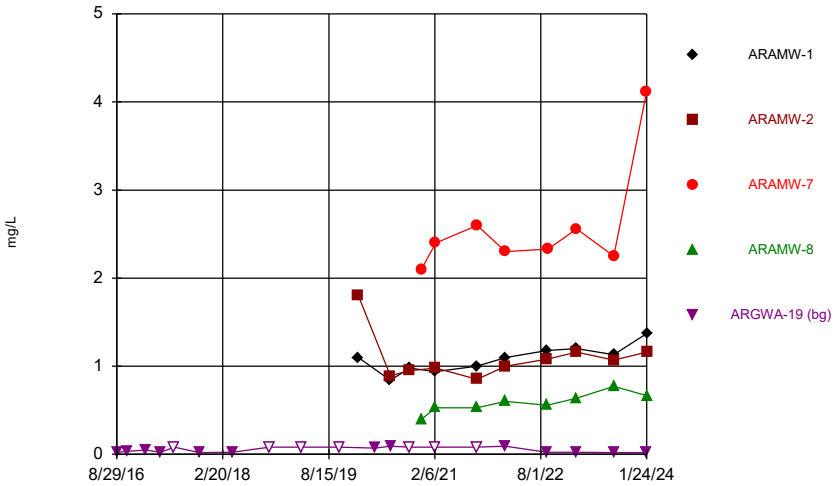
Hollow symbols indicate censored values.

Time Series



Constituent: Boron Analysis Run 3/5/2024 1:09 PM View: Descriptive
Plant Arkwright Client: Southern Company Data: Arkwright No 2

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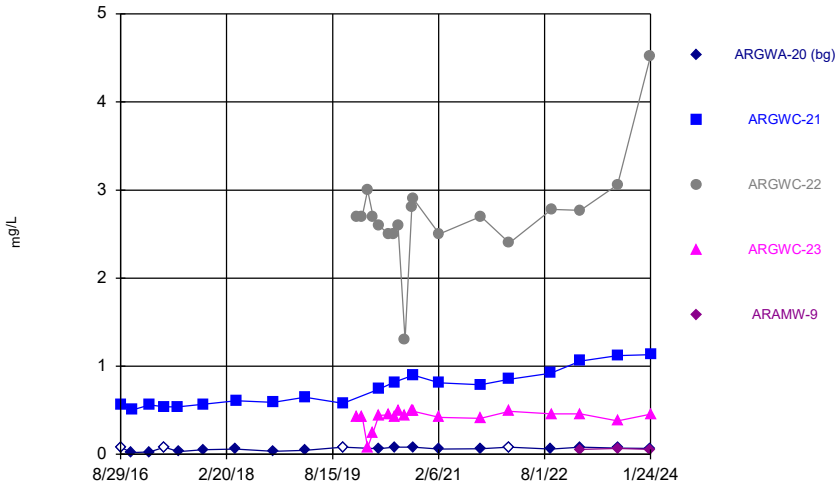
Hollow symbols indicate censored values.

Time Series



Constituent: Boron Analysis Run 3/5/2024 1:09 PM View: Descriptive
Plant Arkwright Client: Southern Company Data: Arkwright No 2

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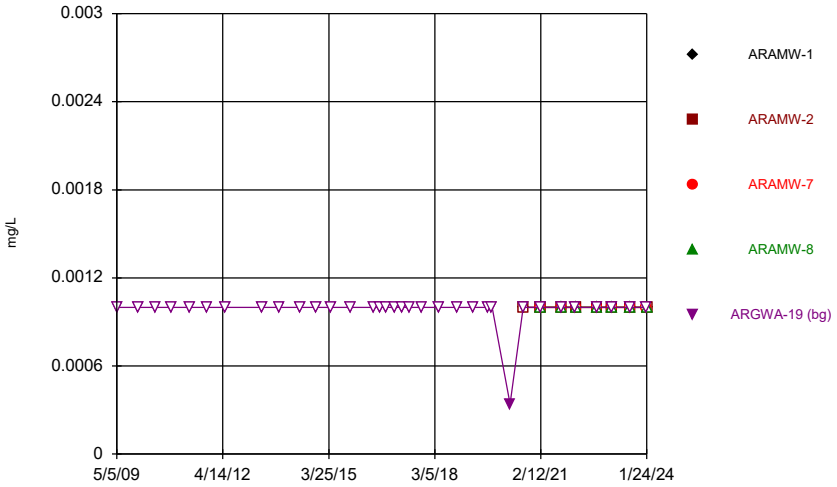
Hollow symbols indicate censored values.

Time Series



Constituent: Cadmium Analysis Run 3/5/2024 1:09 PM View: Descriptive
Plant Arkwright Client: Southern Company Data: Arkwright No 2

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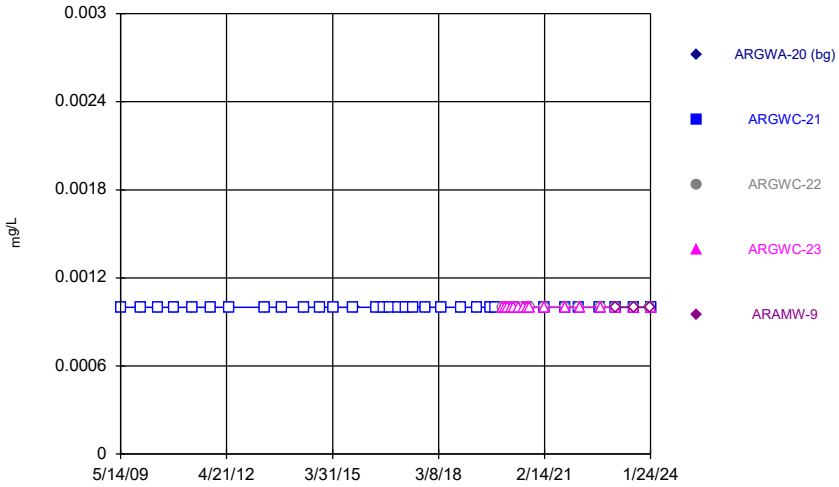
Hollow symbols indicate censored values.

Time Series



Constituent: Cadmium Analysis Run 3/5/2024 1:09 PM View: Descriptive
Plant Arkwright Client: Southern Company Data: Arkwright No 2

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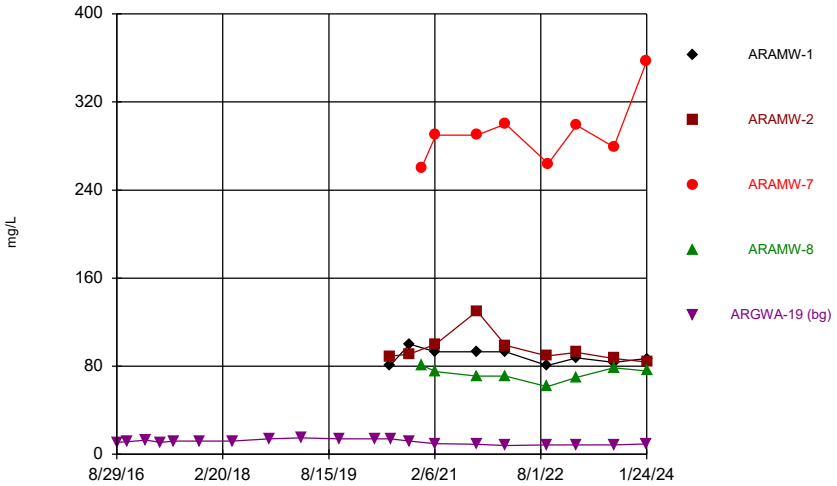
Time Series



Constituent: Calcium Analysis Run 3/5/2024 1:09 PM View: Descriptive
Plant Arkwright Client: Southern Company Data: Arkwright No 2

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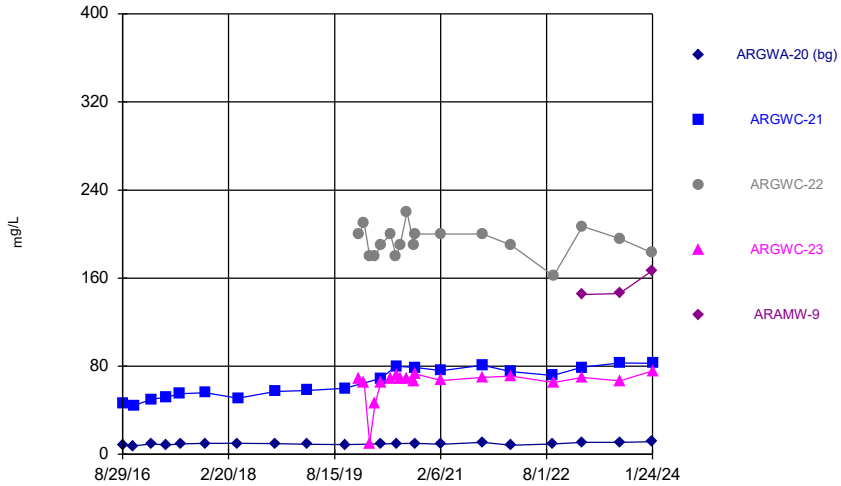
Time Series



Constituent: Calcium Analysis Run 3/5/2024 1:09 PM View: Descriptive
Plant Arkwright Client: Southern Company Data: Arkwright No 2

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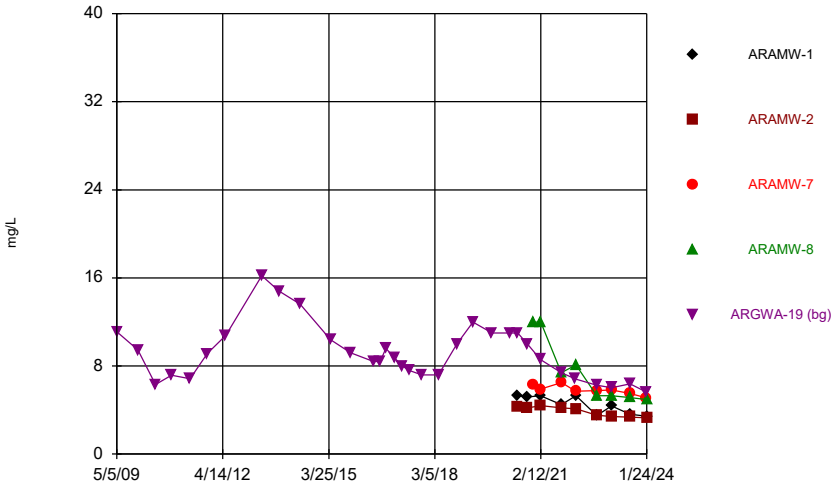
Time Series



Constituent: Chloride Analysis Run 3/5/2024 1:09 PM View: Descriptive
Plant Arkwright Client: Southern Company Data: Arkwright No 2

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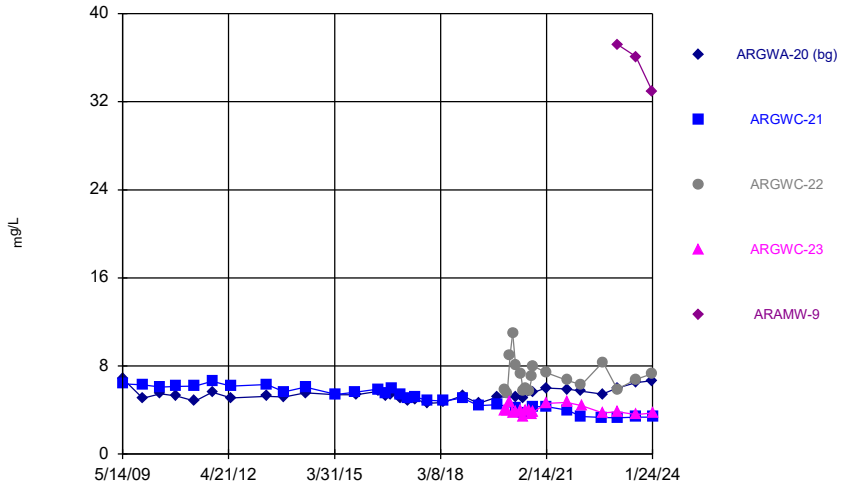
Time Series



Constituent: Chloride Analysis Run 3/5/2024 1:09 PM View: Descriptive
Plant Arkwright Client: Southern Company Data: Arkwright No 2

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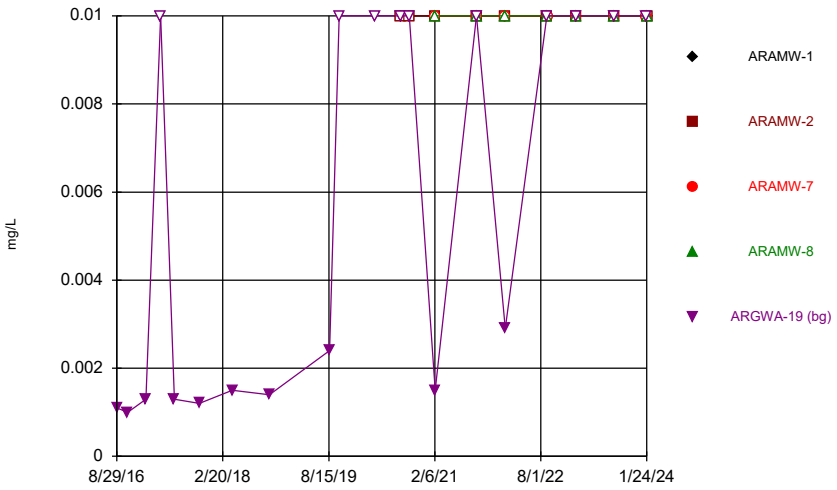
Hollow symbols indicate censored values.

Time Series



Constituent: Chromium Analysis Run 3/5/2024 1:09 PM View: Descriptive
Plant Arkwright Client: Southern Company Data: Arkwright No 2

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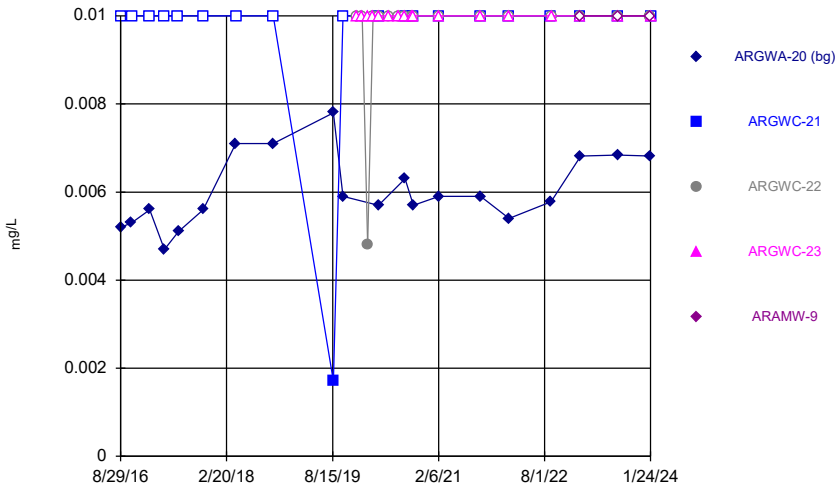
Hollow symbols indicate censored values.

Time Series



Constituent: Chromium Analysis Run 3/5/2024 1:09 PM View: Descriptive
Plant Arkwright Client: Southern Company Data: Arkwright No 2

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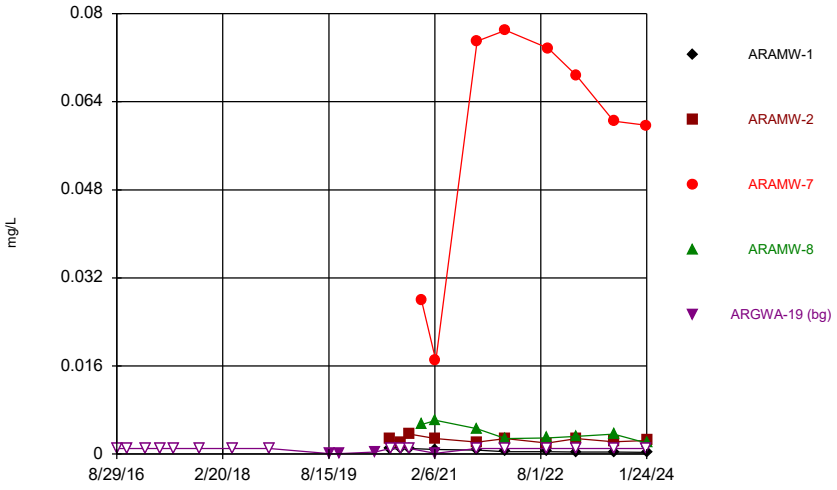
Time Series



Constituent: Cobalt Analysis Run 3/5/2024 1:09 PM View: Descriptive
Plant Arkwright Client: Southern Company Data: Arkwright No 2

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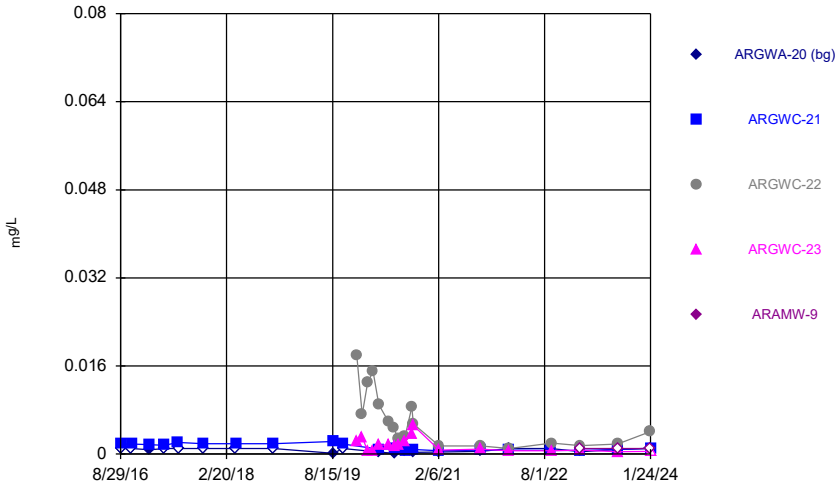
Hollow symbols indicate censored values.

Time Series



Constituent: Cobalt Analysis Run 3/5/2024 1:09 PM View: Descriptive
Plant Arkwright Client: Southern Company Data: Arkwright No 2

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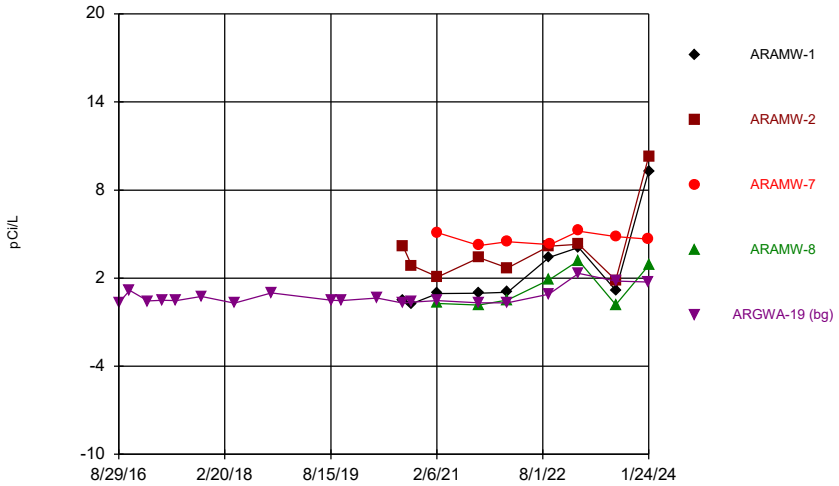
Time Series



Constituent: Combined Radium 226 + 228 Analysis Run 3/5/2024 1:09 PM View: Descriptive
Plant Arkwright Client: Southern Company Data: Arkwright No 2

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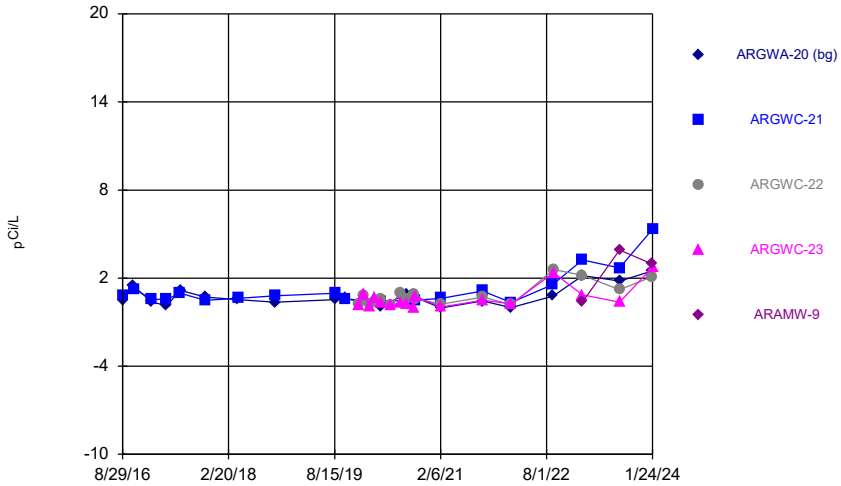
Time Series



Constituent: Combined Radium 226 + 228 Analysis Run 3/5/2024 1:09 PM View: Descriptive
Plant Arkwright Client: Southern Company Data: Arkwright No 2

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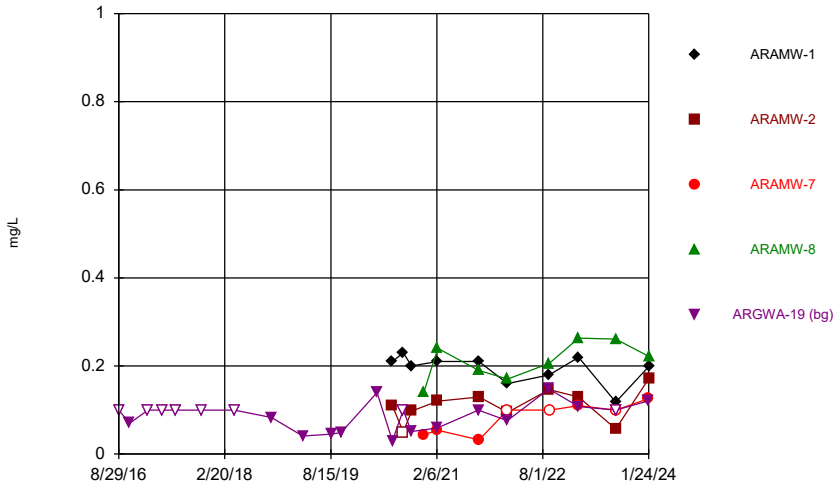
Time Series



Constituent: Fluoride Analysis Run 3/5/2024 1:09 PM View: Descriptive
Plant Arkwright Client: Southern Company Data: Arkwright No 2

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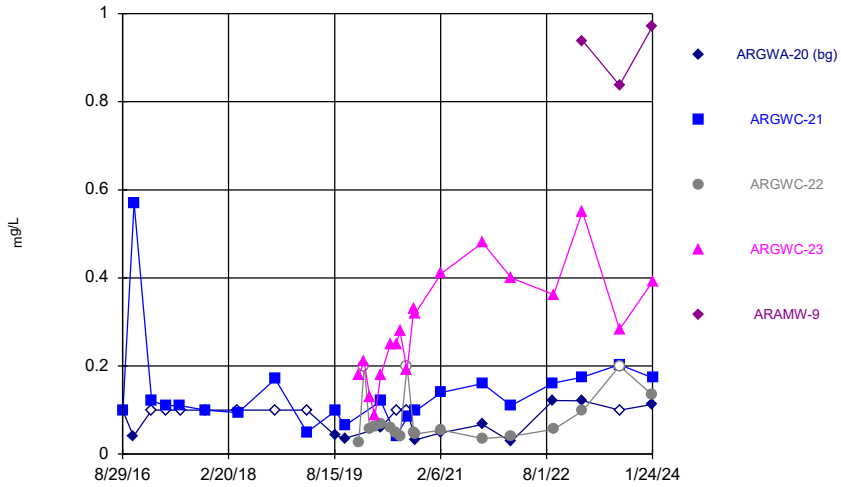

Constituent: Fluoride Analysis Run 3/5/2024 1:09 PM View: Descriptive
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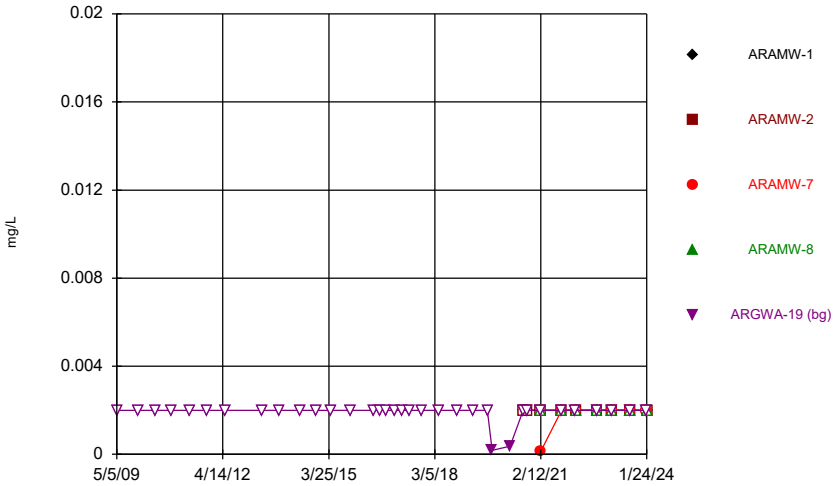

Constituent: Lead Analysis Run 3/5/2024 1:09 PM View: Descriptive
Plant Arkwright Client: Southern Company Data: Arkwright No 2

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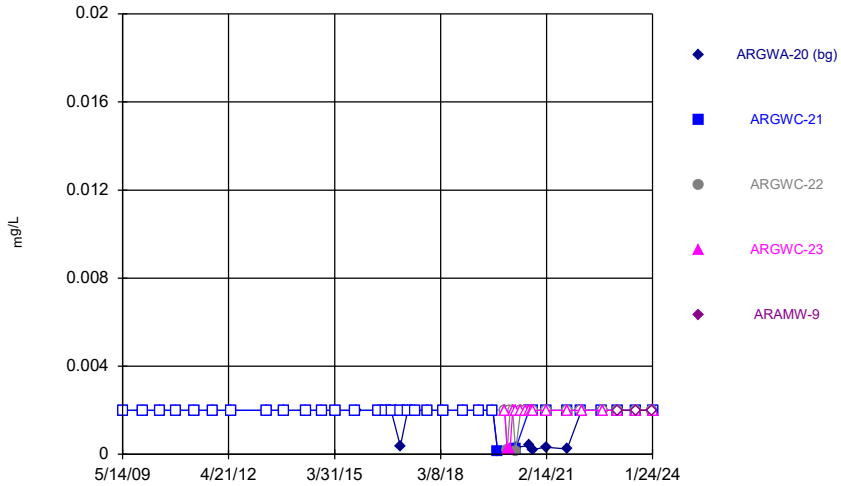
Hollow symbols indicate censored values.

Time Series



Constituent: Lead Analysis Run 3/5/2024 1:09 PM View: Descriptive
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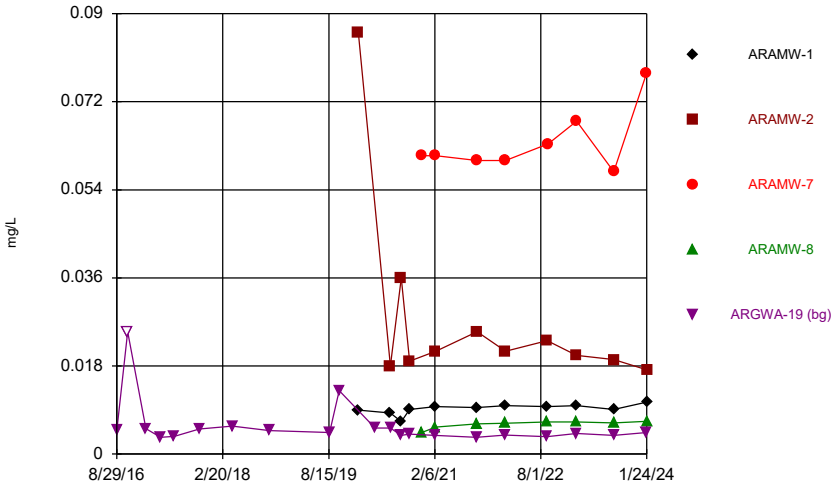
Hollow symbols indicate censored values.

Time Series



Constituent: Lithium Analysis Run 3/5/2024 1:09 PM View: Descriptive
Plant Arkwright Client: Southern Company Data: Arkwright No 2

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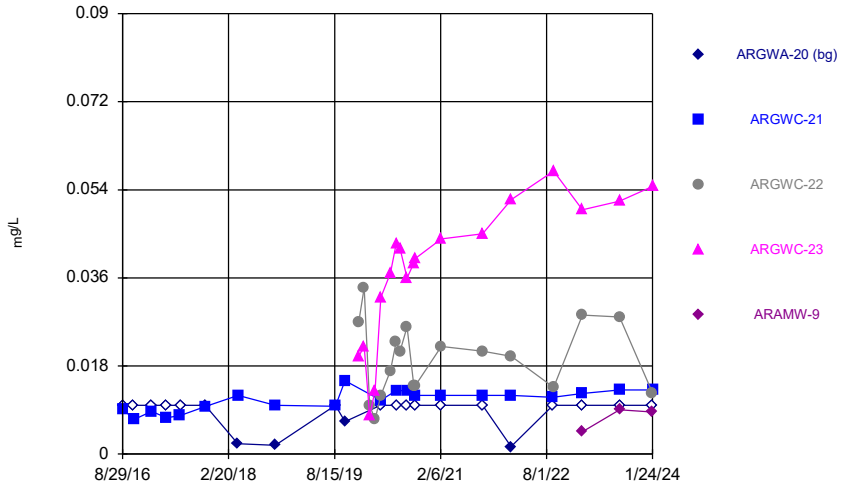
Time Series



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Plant Arkwright Client: Southern Company Data: Arkwright No 2

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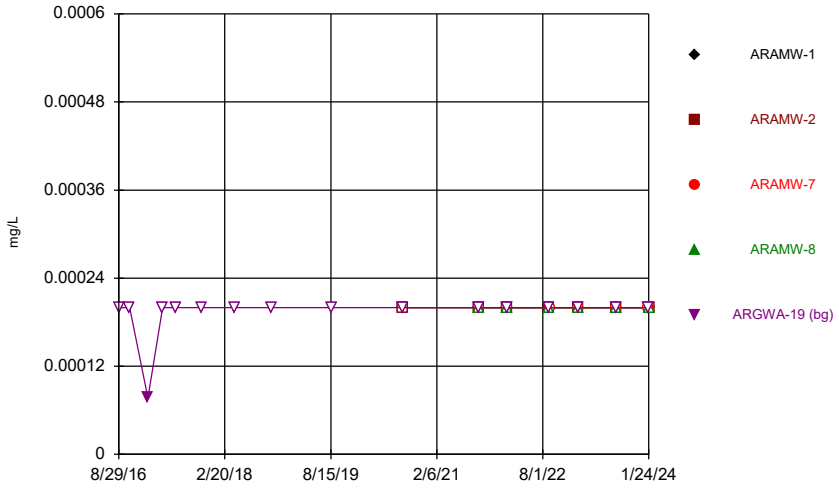
Hollow symbols indicate censored values.

Time Series



Constituent: Mercury Analysis Run 3/5/2024 1:09 PM View: Descriptive
Plant Arkwright Client: Southern Company Data: Arkwright No 2

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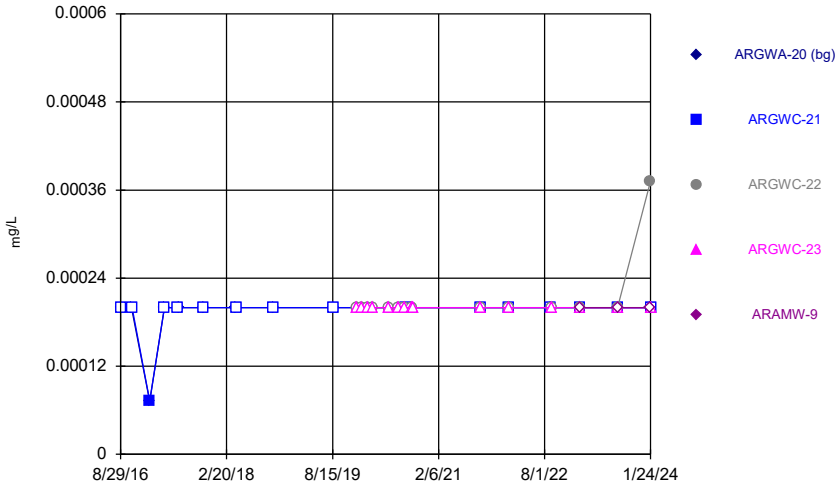
Hollow symbols indicate censored values.

Time Series



Constituent: Mercury Analysis Run 3/5/2024 1:09 PM View: Descriptive
Plant Arkwright Client: Southern Company Data: Arkwright No 2

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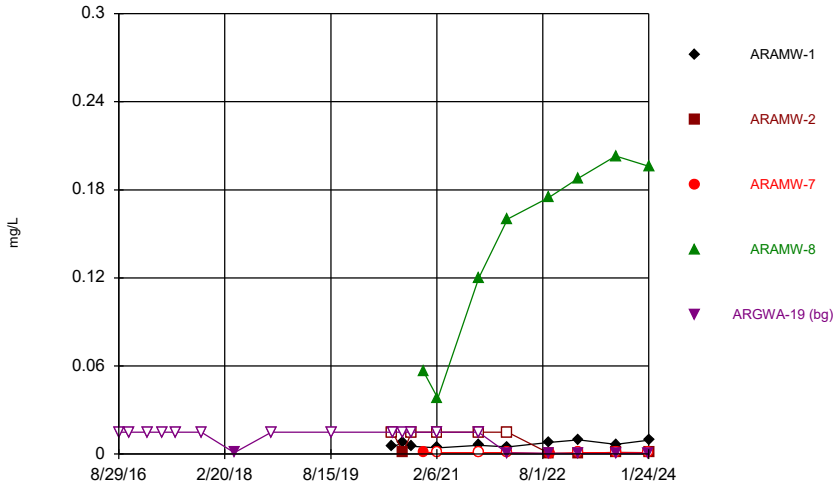
Hollow symbols indicate censored values.

Time Series



Constituent: Molybdenum Analysis Run 3/5/2024 1:09 PM View: Descriptive
Plant Arkwright Client: Southern Company Data: Arkwright No 2

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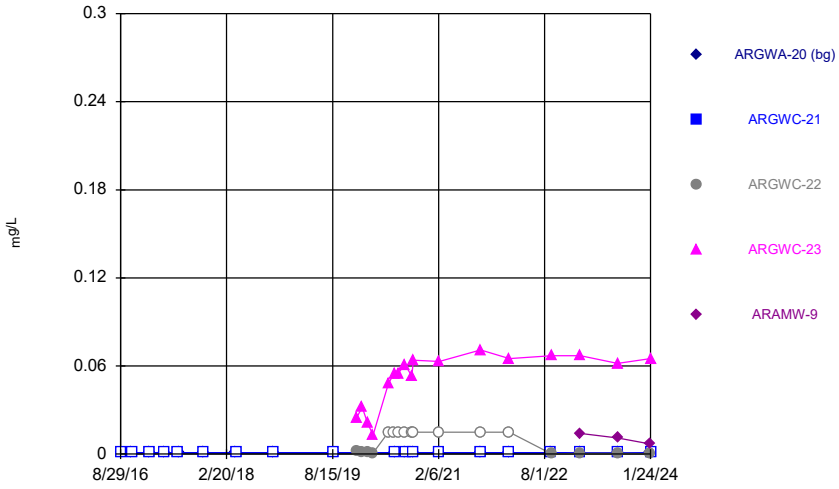
Hollow symbols indicate censored values.

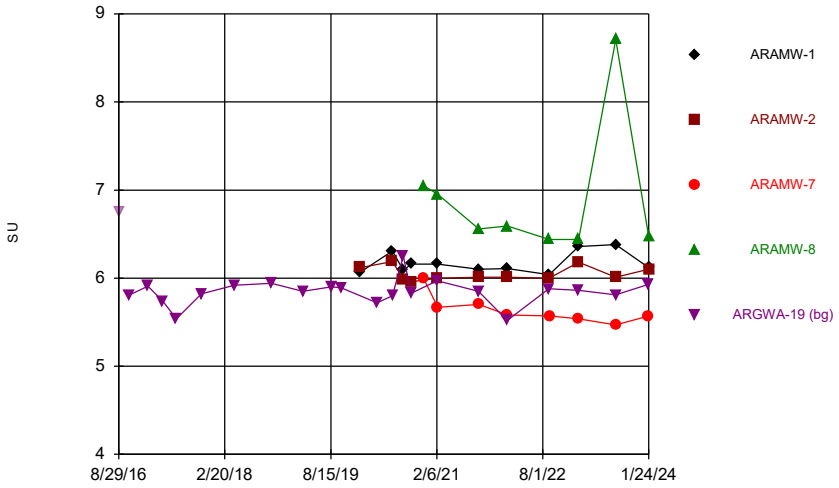
Time Series



Constituent: Molybdenum Analysis Run 3/5/2024 1:09 PM View: Descriptive
Plant Arkwright Client: Southern Company Data: Arkwright No 2

Sanitas™ v.10.0.15d Software licensed to Groundwater Stats Consulting. UG

Time Series



Constituent: pH Analysis Run 3/5/2024 1:09 PM View: Descriptive
Plant Arkwright Client: Southern Company Data: Arkwright No 2

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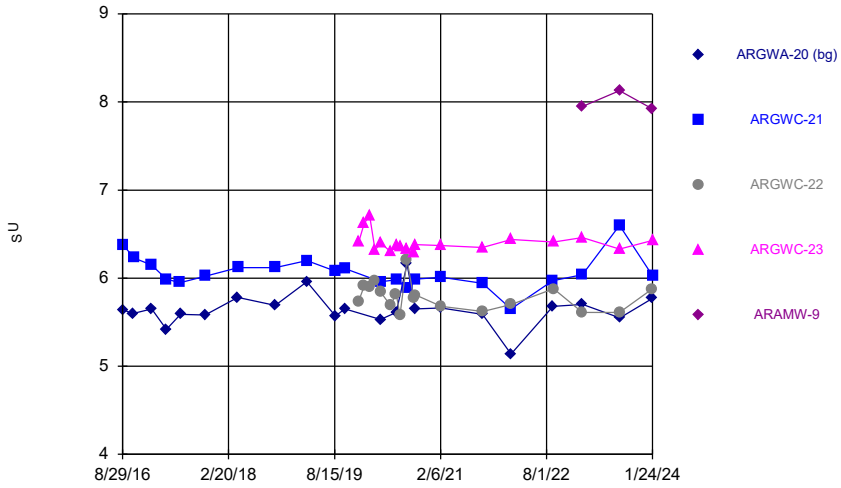
Time Series



Constituent: pH Analysis Run 3/5/2024 1:09 PM View: Descriptive
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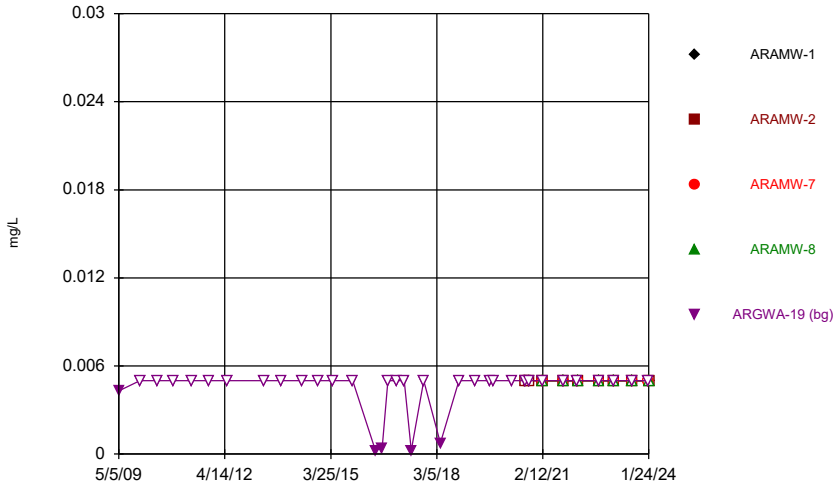
Hollow symbols indicate censored values.

Time Series



Constituent: Selenium Analysis Run 3/5/2024 1:09 PM View: Descriptive
Plant Arkwright Client: Southern Company Data: Arkwright No 2

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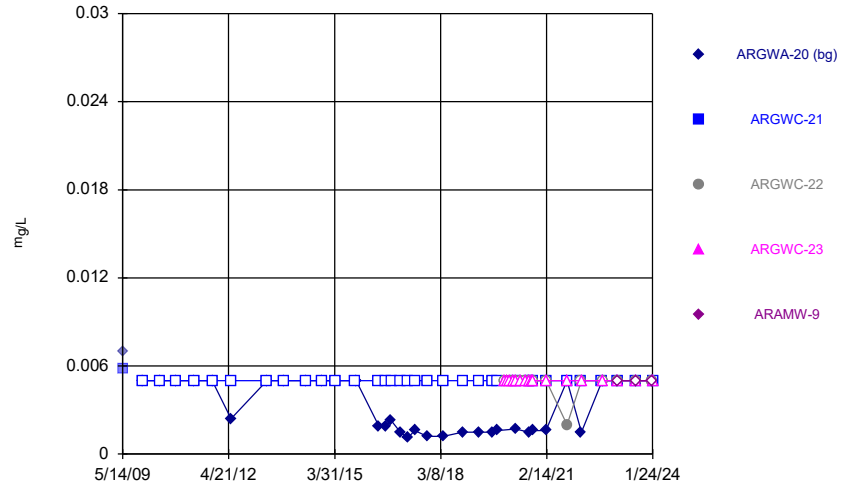
Hollow symbols indicate censored values.

Time Series



Constituent: Selenium Analysis Run 3/5/2024 1:09 PM View: Descriptive
Plant Arkwright Client: Southern Company Data: Arkwright No 2

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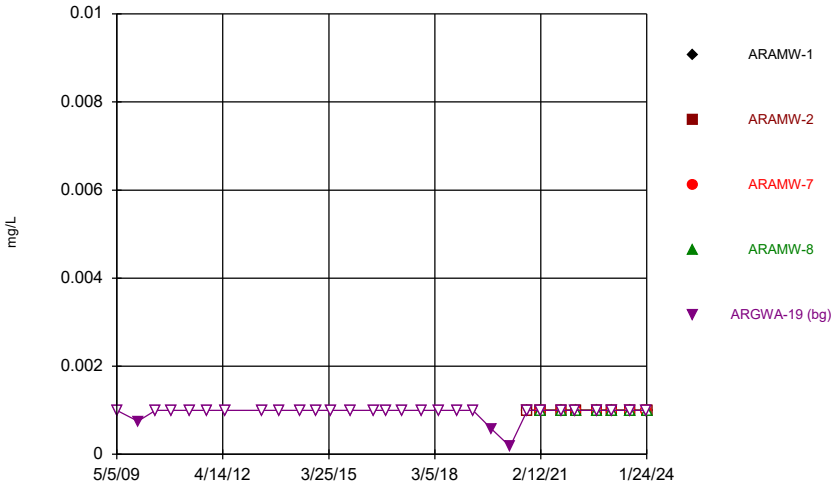
Hollow symbols indicate censored values.

Time Series



Constituent: Silver Analysis Run 3/5/2024 1:09 PM View: Descriptive
Plant Arkwright Client: Southern Company Data: Arkwright No 2

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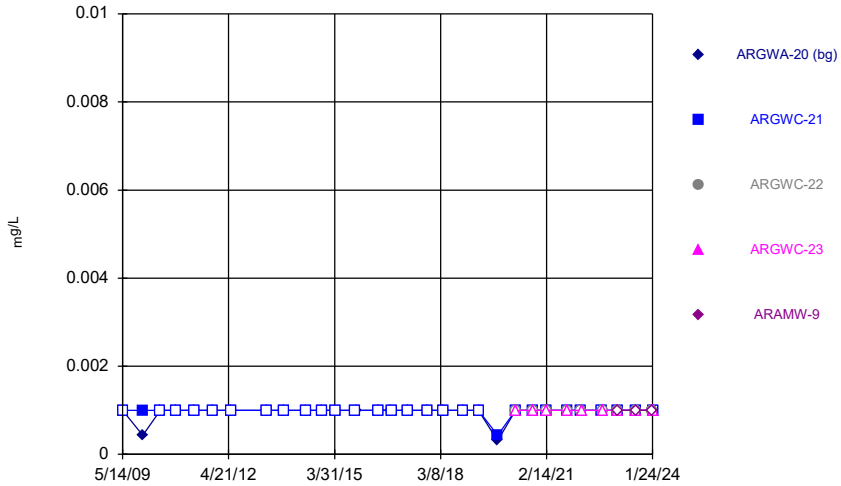
Hollow symbols indicate censored values.

Time Series



Constituent: Silver Analysis Run 3/5/2024 1:09 PM View: Descriptive
Plant Arkwright Client: Southern Company Data: Arkwright No 2

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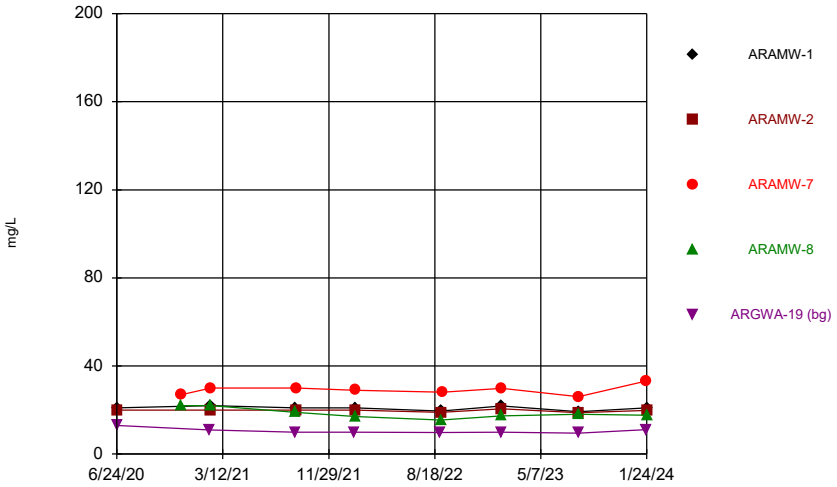
Time Series



Constituent: Sodium Analysis Run 3/5/2024 1:09 PM View: Descriptive
Plant Arkwright Client: Southern Company Data: Arkwright No 2

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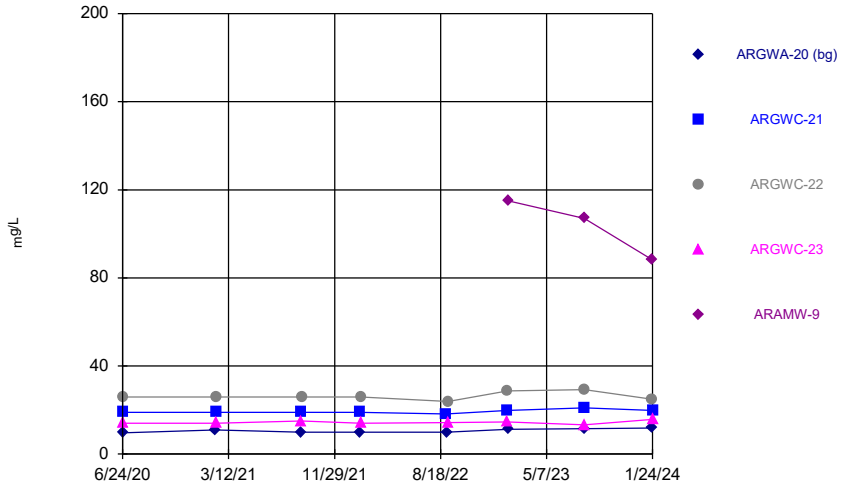
Time Series



Constituent: Sodium Analysis Run 3/5/2024 1:09 PM View: Descriptive
Plant Arkwright Client: Southern Company Data: Arkwright No 2

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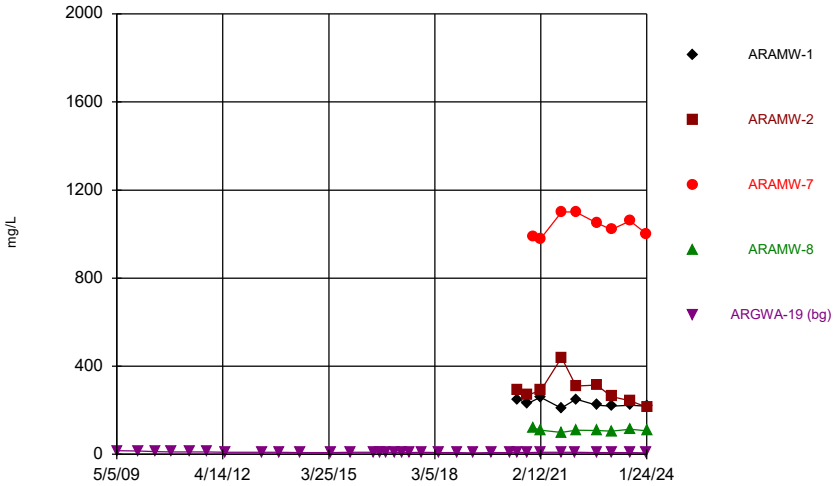
Time Series



Constituent: Sulfate Analysis Run 3/5/2024 1:10 PM View: Descriptive
Plant Arkwright Client: Southern Company Data: Arkwright No 2

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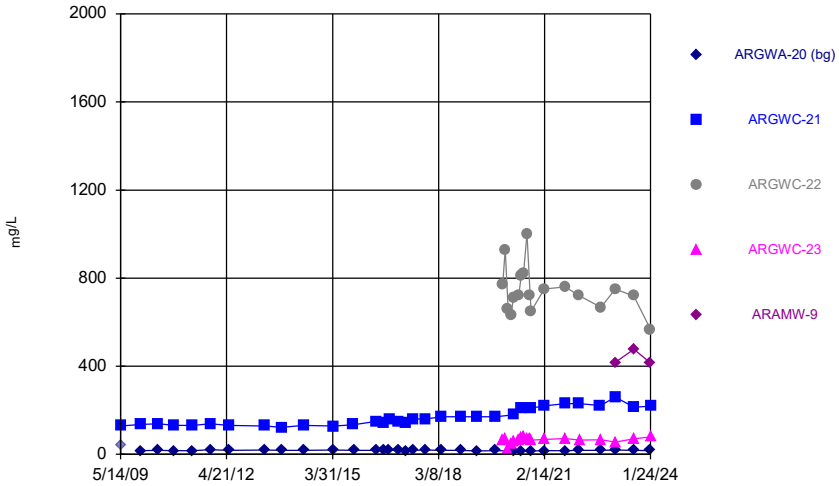
Time Series



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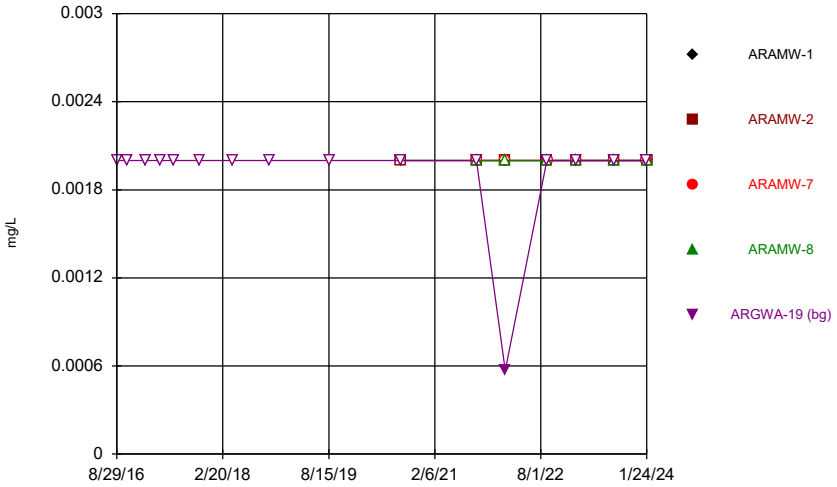
Hollow symbols indicate censored values.

Time Series



Constituent: Thallium Analysis Run 3/5/2024 1:10 PM View: Descriptive
Plant Arkwright Client: Southern Company Data: Arkwright No 2

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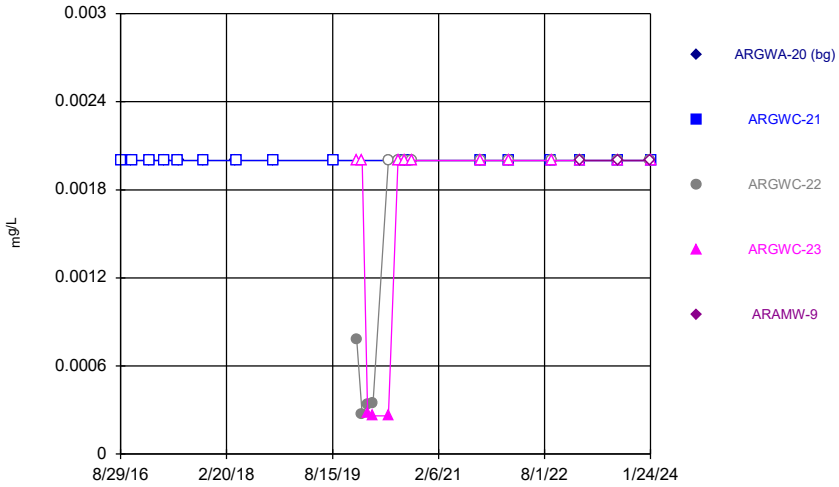
Hollow symbols indicate censored values.

Time Series



Constituent: Thallium Analysis Run 3/5/2024 1:10 PM View: Descriptive
Plant Arkwright Client: Southern Company Data: Arkwright No 2

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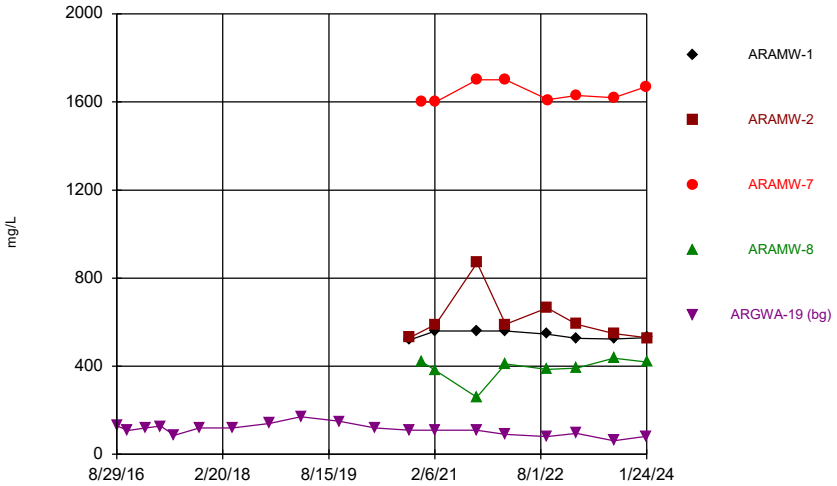
Time Series



Constituent: Total Dissolved Solids Analysis Run 3/5/2024 1:10 PM View: Descriptive
Plant Arkwright Client: Southern Company Data: Arkwright No 2

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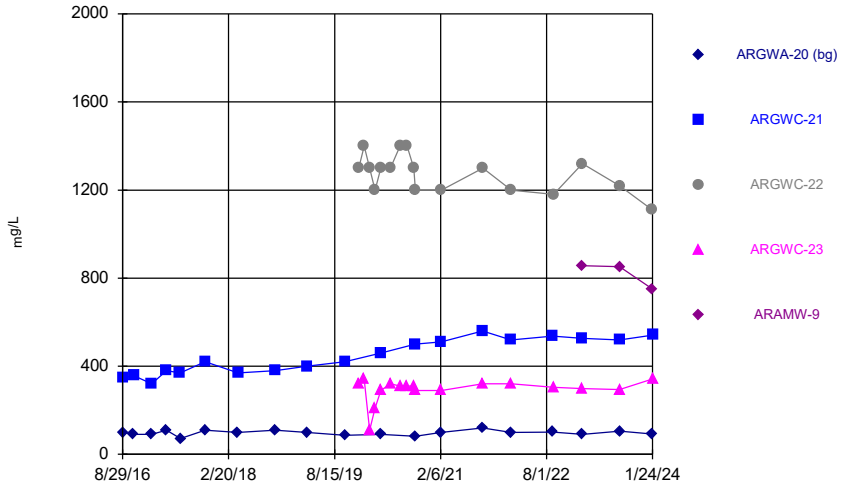
Time Series



Constituent: Total Dissolved Solids Analysis Run 3/5/2024 1:10 PM View: Descriptive
Plant Arkwright Client: Southern Company Data: Arkwright No 2

Time Series

Constituent: Antimony (mg/L) Analysis Run 3/5/2024 1:10 PM View: Descriptive

Plant Arkwright Client: Southern Company Data: Arkwright No 2

	ARAMW-1	ARAMW-2	ARAMW-7	ARAMW-8	ARGWA-19 (bg)
8/29/2016					<0.003
10/24/2016					<0.003
1/25/2017					<0.003
4/10/2017					<0.003
6/19/2017					<0.003
10/24/2017					<0.003
4/10/2018					<0.003
10/16/2018					<0.003
8/20/2019					<0.003
8/19/2020					<0.003
8/20/2020	<0.003	<0.003			
9/7/2021					<0.003
9/9/2021	<0.003			<0.003	
9/10/2021		<0.003	<0.003		
2/1/2022					<0.003
2/2/2022			<0.003		
2/3/2022	<0.003	<0.003		<0.003	
9/1/2022					<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	<0.003
8/8/2023	<0.003	<0.003	<0.003		<0.003
8/9/2023				0.00134 (J)	
1/23/2024			<0.003		<0.003
1/24/2024	<0.003	<0.003		<0.003	

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Antimony (mg/L) Analysis Run 3/5/2024 1:10 PM View: Descriptive

Plant Arkwright Client: Southern Company Data: Arkwright No 2

	ARGWA-20 (bg)	ARGWC-21	ARGWC-22	ARGWC-23	ARAMW-9
8/29/2016	<0.003				
8/30/2016		<0.003			
10/24/2016	<0.003				
10/26/2016		<0.003			
1/25/2017	<0.003	<0.003			
4/10/2017	<0.003	<0.003			
6/19/2017		<0.003			
6/20/2017	<0.003				
10/24/2017	<0.003	<0.003			
4/9/2018	<0.003				
4/10/2018		<0.003			
10/16/2018	<0.003	<0.003			
8/20/2019	<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		
8/20/2020				<0.003	
8/21/2020		<0.003			
9/22/2020			<0.003	<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			
2/2/2022			<0.003		
2/3/2022				<0.003	
9/1/2022		<0.003			
9/2/2022	<0.003				
9/6/2022			<0.003	<0.003	
1/31/2023		<0.003	<0.003	<0.003	
2/1/2023	<0.003				<0.003
8/8/2023			<0.003	<0.003	0.00158 (J)
8/9/2023		<0.003			
8/10/2023	<0.003				
1/23/2024	<0.003		<0.003		0.00107 (J)
1/24/2024		<0.003		<0.003	

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Arsenic (mg/L) Analysis Run 3/5/2024 1:10 PM View: Descriptive

Plant Arkwright Client: Southern Company Data: Arkwright No 2

	ARAMW-1	ARAMW-2	ARAMW-7	ARAMW-8	ARGWA-19 (bg)
5/5/2009					<0.005
12/5/2009					<0.005
6/1/2010					<0.005
11/11/2010					<0.005
5/17/2011					<0.005
11/8/2011					<0.005
5/16/2012					<0.005
5/14/2013					<0.005
11/5/2013					<0.005
6/9/2014					<0.005
11/19/2014					<0.005
4/14/2015					<0.005
11/4/2015					<0.005
6/22/2016					<0.005
8/29/2016					<0.005
10/24/2016					<0.005
1/25/2017					<0.005
4/10/2017					<0.005
6/19/2017					<0.005
10/24/2017					<0.005
4/10/2018					<0.005
10/16/2018					<0.005
3/26/2019					<0.005
8/20/2019					0.00036 (J)
10/7/2019					<0.005
4/7/2020					0.0006 (J)
8/19/2020					<0.005
8/20/2020	<0.005	0.084			
9/29/2020					<0.005
9/30/2020	<0.005				
10/1/2020		0.0085			
2/9/2021					<0.005
2/10/2021	<0.005				
2/11/2021		0.015	0.00075 (J)	0.00046 (J)	
9/7/2021					<0.005
9/9/2021	<0.005			<0.005	
9/10/2021		0.044	<0.005		
2/1/2022					<0.005
2/2/2022			0.00035 (J)		
2/3/2022	<0.005	0.0092		0.00031 (J)	
9/1/2022					<0.005
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	<0.005
8/8/2023	<0.005	0.012	<0.005		<0.005
8/9/2023				<0.005	
1/23/2024			0.00219 (J)		<0.005
1/24/2024	<0.005	0.0047 (J)		<0.005	

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Arsenic (mg/L) Analysis Run 3/5/2024 1:10 PM View: Descriptive

Plant Arkwright Client: Southern Company Data: Arkwright No 2

	ARGWA-20 (bg)	ARGWC-21	ARGWC-22	ARGWC-23	ARAMW-9
5/14/2009		0.0022			
5/15/2009	0.0015				
12/5/2009	<0.005	<0.005			
6/1/2010	<0.005				
6/2/2010		<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	0.002 (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	<0.005			
4/14/2015	<0.005	<0.005			
10/29/2015		<0.005			
11/4/2015	<0.005				
6/22/2016	0.00084 (J)				
6/23/2016		0.0011 (J)			
8/29/2016	0.00049 (J)				
8/30/2016		0.002			
10/24/2016	<0.005				
10/26/2016		0.0019 (J)			
1/25/2017	<0.005	0.0017			
4/10/2017	0.00056 (J)	0.002			
6/19/2017		0.0026			
6/20/2017	0.00068 (J)				
10/24/2017	<0.005	0.0021			
4/9/2018	<0.005				
4/10/2018		0.0022			
10/16/2018	<0.005	0.0021			
3/27/2019	<0.005	0.0011 (J)			
8/20/2019	0.00047 (J)	0.002			
10/7/2019	<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		0.00054 (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		
8/20/2020				<0.005	
8/21/2020		<0.005			
9/22/2020			<0.005	<0.005	
9/30/2020	<0.005		<0.005		
10/1/2020		<0.005		<0.005	
2/9/2021	<0.005				
2/10/2021		<0.005	<0.005	<0.005	
9/8/2021	<0.005	<0.005			
9/9/2021				<0.005	

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Arsenic (mg/L) Analysis Run 3/5/2024 1:10 PM View: Descriptive

Plant Arkwright Client: Southern Company Data: Arkwright No 2

	ARGWA-20 (bg)	ARGWC-21	ARGWC-22	ARGWC-23	ARAMW-9
9/10/2021			<0.005		
2/1/2022	<0.005	<0.005			
2/2/2022			<0.005		
2/3/2022				0.0003 (J)	
9/1/2022		0.00207 (J)			
9/2/2022	<0.005				
9/6/2022			<0.005	<0.005	
1/31/2023		<0.005	0.00221 (J)	<0.005	
2/1/2023	<0.005				<0.005
8/8/2023			<0.005	<0.005	<0.005
8/9/2023		<0.005			
8/10/2023	<0.005				
1/23/2024	<0.005		<0.005		<0.005
1/24/2024		<0.005		<0.005	

Time Series

Constituent: Barium (mg/L) Analysis Run 3/5/2024 1:10 PM View: Descriptive

Plant Arkwright Client: Southern Company Data: Arkwright No 2

	ARAMW-1	ARAMW-2	ARAMW-7	ARAMW-8	ARGWA-19 (bg)
5/5/2009					0.057
12/5/2009					0.05
6/1/2010					0.037
11/11/2010					0.039
5/17/2011					0.037
11/8/2011					0.045
5/16/2012					0.0518
5/14/2013					0.067
11/5/2013					0.066
6/9/2014					0.062
11/19/2014					0.054
4/14/2015					0.046
11/4/2015					0.046
6/22/2016					0.039
8/29/2016					0.04
10/24/2016					0.0444
1/25/2017					0.045
4/10/2017					0.039
6/19/2017					0.041
10/24/2017					0.041
4/10/2018					0.044
10/16/2018					0.047
3/26/2019					0.056
8/20/2019					0.052
10/7/2019					0.049
4/7/2020					0.047
8/19/2020					0.044
8/20/2020	0.055	0.14			
9/29/2020					0.04
9/30/2020	0.052				
10/1/2020		0.075			
2/9/2021					0.032
2/10/2021	0.046				
2/11/2021		0.09	0.037	0.092	
9/7/2021					0.03
9/9/2021	0.051			0.094	
9/10/2021		0.13	0.029		
2/1/2022					0.031
2/2/2022			0.029		
2/3/2022	0.046	0.078		0.096	
9/1/2022					0.0303
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	0.031
8/8/2023	0.051	0.0753	0.0244		0.0337
8/9/2023				0.122	
1/23/2024			0.0277		0.0348
1/24/2024	0.043	0.0562		0.103	

Time Series

Constituent: Barium (mg/L) Analysis Run 3/5/2024 1:10 PM View: Descriptive

Plant Arkwright Client: Southern Company Data: Arkwright No 2

	ARGWA-20 (bg)	ARGWC-21	ARGWC-22	ARGWC-23	ARAMW-9
5/14/2009		0.034			
5/15/2009	0.1				
12/5/2009	0.079	0.037			
6/1/2010	0.077				
6/2/2010		0.037			
11/11/2010	0.072	0.036			
5/17/2011	0.064	0.032			
11/8/2011	0.07	0.042			
5/16/2012	0.0741	0.0451			
5/14/2013	0.074	0.043			
11/5/2013	0.075	0.051			
6/9/2014	0.08	0.045			
11/18/2014	0.078	0.052			
4/14/2015	0.073	0.047			
10/29/2015		0.053			
11/4/2015	0.077				
6/22/2016	0.078				
6/23/2016		0.13			
8/29/2016	0.07				
8/30/2016		0.11			
10/24/2016	0.0738				
10/26/2016		0.122			
1/25/2017	0.084	0.12			
4/10/2017	0.073	0.11			
6/19/2017		0.13			
6/20/2017	0.078				
10/24/2017	0.081	0.12			
4/9/2018	0.081				
4/10/2018		0.12			
10/16/2018	0.08	0.1			
3/27/2019	0.082	0.091			
8/20/2019	0.079	0.1			
10/7/2019	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		0.05	0.04	0.16	
5/27/2020			0.054	0.18	
7/15/2020			0.043	0.16	
8/19/2020	0.085		0.046		
8/20/2020				0.16	
8/21/2020		0.054			
9/22/2020			0.038	0.16	
9/30/2020	0.08		0.033		
10/1/2020		0.051		0.17	
2/9/2021	0.078				
2/10/2021		0.044	0.032	0.13	
9/8/2021	0.085	0.045			
9/9/2021				0.12	

Time Series

Constituent: Barium (mg/L) Analysis Run 3/5/2024 1:10 PM View: Descriptive

Plant Arkwright Client: Southern Company Data: Arkwright No 2

	ARGWA-20 (bg)	ARGWC-21	ARGWC-22	ARGWC-23	ARAMW-9
9/10/2021			0.026		
2/1/2022	0.079	0.045			
2/2/2022			0.025		
2/3/2022				0.1	
9/1/2022		0.0425			
9/2/2022	0.0806				
9/6/2022			0.0226	0.0939	
1/31/2023		0.0414	0.0237	0.0872	
2/1/2023	0.0919				0.0158
8/8/2023			0.0255	0.0936	0.0207
8/9/2023		0.0474			
8/10/2023	0.107				
1/23/2024	0.0978		0.0227		0.0128
1/24/2024		0.0427		0.0922	

Time Series

Constituent: Beryllium (mg/L) Analysis Run 3/5/2024 1:10 PM View: Descriptive

Plant Arkwright Client: Southern Company Data: Arkwright No 2

	ARAMW-1	ARAMW-2	ARAMW-7	ARAMW-8	ARGWA-19 (bg)
8/29/2016					<0.0005
10/24/2016					<0.0005
1/25/2017					<0.0005
4/10/2017					<0.0005
6/19/2017					<0.0005
10/24/2017					<0.0005
4/10/2018					<0.0005
10/16/2018					<0.0005
8/20/2019					<0.0005
8/19/2020					<0.0005
8/20/2020	<0.0005	<0.0005			
9/29/2020					<0.0005
9/30/2020	<0.0005				
10/1/2020		<0.0005			
2/9/2021					<0.0005
2/10/2021	<0.0005				
2/11/2021		<0.0005	<0.0025	<0.0005	
9/7/2021					<0.0005
9/9/2021	<0.0005			<0.0005	
9/10/2021		<0.0005	<0.0025		
2/1/2022					<0.0005
2/2/2022			<0.0025		
2/3/2022	<0.0005	<0.0005		<0.0005	
9/1/2022					<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	<0.0005
8/8/2023	<0.0005	<0.0005	0.000272 (J)		<0.0005
8/9/2023				<0.0005	
1/23/2024			0.000378 (J)		<0.0005
1/24/2024	<0.0005	<0.0005		<0.0005	

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Beryllium (mg/L) Analysis Run 3/5/2024 1:10 PM View: Descriptive

Plant Arkwright Client: Southern Company Data: Arkwright No 2

	ARGWA-20 (bg)	ARGWC-21	ARGWC-22	ARGWC-23	ARAMW-9
8/29/2016	<0.0005				
8/30/2016		<0.0005			
10/24/2016	<0.0005				
10/26/2016		<0.0005			
1/25/2017	<0.0005	<0.0005			
4/10/2017	<0.0005	<0.0005			
6/19/2017		<0.0005			
6/20/2017	<0.0005				
10/24/2017	<0.0005	<0.0005			
4/9/2018	<0.0005				
4/10/2018		<0.0005			
10/16/2018	<0.0005	<0.0005			
8/20/2019	<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	0.00022 (J)		<0.0005		
8/20/2020				<0.0005	
8/21/2020		<0.0005			
9/22/2020			<0.0005	<0.0005	
9/30/2020	0.00019 (J)		<0.0005		
10/1/2020		<0.0005		<0.0005	
2/9/2021	<0.0005				
2/10/2021		<0.0005	<0.0005	<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			
2/2/2022			<0.0005		
2/3/2022				<0.0005	
9/1/2022		<0.0005			
9/2/2022	<0.0005				
9/6/2022			<0.0005	<0.0005	
1/31/2023		<0.0005	<0.0005	<0.0005	
2/1/2023	<0.0005				<0.0005
8/8/2023			<0.0005	<0.0005	<0.0005
8/9/2023		<0.0005			
8/10/2023	0.000275 (J)				
1/23/2024	<0.0005		<0.0005		<0.0005
1/24/2024		<0.0005		<0.0005	

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Boron (mg/L) Analysis Run 3/5/2024 1:10 PM View: Descriptive

Plant Arkwright Client: Southern Company Data: Arkwright No 2

	ARAMW-1	ARAMW-2	ARAMW-7	ARAMW-8	ARGWA-19 (bg)
8/29/2016					0.024 (J)
10/24/2016					0.0339 (J)
1/25/2017					0.048 (J)
4/10/2017					0.022 (J)
6/19/2017					<0.08
10/24/2017					0.021 (J)
4/10/2018					0.022 (J)
10/16/2018					<0.08
3/26/2019					<0.08
10/7/2019					<0.08
1/14/2020	1.1	1.8			
4/7/2020					0.072 (J)
6/24/2020	0.84	0.89			
6/25/2020					0.091
9/29/2020					<0.08
9/30/2020	0.98				
10/1/2020		0.95			
11/30/2020			2.1		
12/1/2020				0.4	
2/9/2021					<0.08
2/10/2021	0.94				
2/11/2021		0.98	2.4	0.53	
9/7/2021					<0.08
9/9/2021	1			0.53	
9/10/2021		0.85	2.6		
2/1/2022					0.092
2/2/2022			2.3		
2/3/2022	1.1	1		0.6	
9/1/2022					0.0238
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	0.0234
8/8/2023	1.13	1.07	2.25		0.0199
8/9/2023				0.77	
1/23/2024			4.12		0.0214
1/24/2024	1.37	1.16		0.666	

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Boron (mg/L) Analysis Run 3/5/2024 1:10 PM View: Descriptive

Plant Arkwright Client: Southern Company Data: Arkwright No 2

	ARGWA-20 (bg)	ARGWC-21	ARGWC-22	ARGWC-23	ARAMW-9
8/29/2016	<0.08				
8/30/2016		0.57			
10/24/2016	0.0194 (J)				
10/26/2016		0.502			
1/25/2017	0.026 (J)	0.56			
4/10/2017	<0.08	0.54			
6/19/2017		0.54			
6/20/2017	0.032 (J)				
10/24/2017	0.054	0.57			
4/9/2018	0.06				
4/10/2018		0.61			
10/16/2018	0.036 (J)	0.59			
3/27/2019	0.046 (J)	0.65			
10/7/2019	<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		0.74	2.6	0.44	
5/27/2020			2.5	0.45	
6/24/2020			2.5		
6/25/2020	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	
9/30/2020	0.083		2.9		
10/1/2020		0.9		0.49	
2/9/2021	0.059 (J)				
2/10/2021		0.81	2.5	0.42	
9/8/2021	0.064 (J)	0.79			
9/9/2021				0.41	
9/10/2021			2.7		
2/1/2022	<0.08	0.85			
2/2/2022			2.4		
2/3/2022				0.49	
9/1/2022		0.921			
9/2/2022	0.0597				
9/6/2022			2.78	0.458	
1/31/2023		1.06	2.77	0.459	
2/1/2023	0.0816				0.055
8/8/2023			3.06	0.379	0.0666
8/9/2023		1.12			
8/10/2023	0.0714				
1/23/2024	0.0685		4.52		0.0549
1/24/2024		1.13		0.456	

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Cadmium (mg/L) Analysis Run 3/5/2024 1:10 PM View: Descriptive

Plant Arkwright Client: Southern Company Data: Arkwright No 2

	ARAMW-1	ARAMW-2	ARAMW-7	ARAMW-8	ARGWA-19 (bg)
5/5/2009					<0.001
12/5/2009					<0.001
6/1/2010					<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
11/19/2014					<0.001
4/14/2015					<0.001
11/4/2015					<0.001
6/22/2016					<0.001
8/29/2016					<0.001
10/24/2016					<0.001
1/25/2017					<0.001
4/10/2017					<0.001
6/19/2017					<0.001
10/24/2017					<0.001
4/10/2018					<0.001
10/16/2018					<0.001
3/26/2019					<0.001
8/20/2019					<0.001
10/7/2019					<0.001
4/7/2020					0.00034 (J)
8/19/2020					<0.001
8/20/2020	<0.001	<0.001			
2/9/2021					<0.001
2/10/2021	<0.001				
2/11/2021		<0.001	<0.001	<0.001	
9/7/2021					<0.001
9/9/2021	<0.001			<0.001	
9/10/2021		<0.001	<0.001		
2/1/2022					<0.001
2/2/2022			<0.001		
2/3/2022	<0.001	<0.001		<0.001	
9/1/2022					<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	<0.001
8/8/2023	<0.001	<0.001	<0.001		<0.001
8/9/2023				<0.001	
1/23/2024			<0.001		<0.001
1/24/2024	<0.001	<0.001		<0.001	

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Cadmium (mg/L) Analysis Run 3/5/2024 1:10 PM View: Descriptive

Plant Arkwright Client: Southern Company Data: Arkwright No 2

	ARGWA-20 (bg)	ARGWC-21	ARGWC-22	ARGWC-23	ARAMW-9
5/14/2009		<0.001			
5/15/2009	<0.001				
12/5/2009	<0.001	<0.001			
6/1/2010	<0.001				
6/2/2010		<0.001			
11/11/2010	<0.001	<0.001			
5/17/2011	<0.001	<0.001			
11/8/2011	<0.001	<0.001			
5/16/2012	<0.001	<0.001			
5/14/2013	<0.001	<0.001			
11/5/2013	<0.001	<0.001			
6/9/2014	<0.001	<0.001			
11/18/2014	<0.001	<0.001			
4/14/2015	<0.001	<0.001			
10/29/2015		<0.001			
11/4/2015	<0.001				
6/22/2016	<0.001				
6/23/2016		<0.001			
8/29/2016	<0.001				
8/30/2016		<0.001			
10/24/2016	<0.001				
10/26/2016		<0.001			
1/25/2017	<0.001	<0.001			
4/10/2017	<0.001	<0.001			
6/19/2017		<0.001			
6/20/2017	<0.001				
10/24/2017	<0.001	<0.001			
4/9/2018	<0.001				
4/10/2018		<0.001			
10/16/2018	<0.001	<0.001			
3/27/2019	<0.001	<0.001			
8/20/2019	<0.001	<0.001			
10/7/2019	<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		<0.001	<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		
8/20/2020				<0.001	
8/21/2020		<0.001			
9/22/2020			<0.001	<0.001	
2/9/2021	<0.001				
2/10/2021		<0.001	<0.001	<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			

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Cadmium (mg/L) Analysis Run 3/5/2024 1:10 PM View: Descriptive

Plant Arkwright Client: Southern Company Data: Arkwright No 2

	ARGWA-20 (bg)	ARGWC-21	ARGWC-22	ARGWC-23	ARAMW-9
2/2/2022			<0.001		
2/3/2022				<0.001	
9/1/2022		<0.001			
9/2/2022	<0.001				
9/6/2022			<0.001	<0.001	
1/31/2023		<0.001	<0.001	<0.001	
2/1/2023	<0.001				<0.001
8/8/2023			<0.001	<0.001	<0.001
8/9/2023		<0.001			
8/10/2023	<0.001				
1/23/2024	<0.001		<0.001		<0.001
1/24/2024		<0.001		<0.001	

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Calcium (mg/L) Analysis Run 3/5/2024 1:10 PM View: Descriptive

Plant Arkwright Client: Southern Company Data: Arkwright No 2

	ARAMW-1	ARAMW-2	ARAMW-7	ARAMW-8	ARGWA-19 (bg)
8/29/2016					11
10/24/2016					11.5
1/25/2017					13
4/10/2017					11
6/19/2017					12
10/24/2017					12
4/10/2018					12
10/16/2018					14
3/26/2019					15
10/7/2019					14
4/7/2020					14
6/24/2020	81	89			
6/25/2020					14
9/29/2020					12
9/30/2020	100				
10/1/2020		91			
11/30/2020			260		
12/1/2020				81	
2/9/2021					9.7
2/10/2021	93				
2/11/2021		100	290	75	
9/7/2021					9.2
9/9/2021	93			71	
9/10/2021		130	290		
2/1/2022					8
2/2/2022			300		
2/3/2022	93	99		71	
9/1/2022					8.52
9/2/2022	80.5	89.2		61.4	
9/7/2022			264		
1/31/2023	87.7	92.5	299	69.8	8.5
8/8/2023	83.4	87.1	279		8.51
8/9/2023				78.6	
1/23/2024			357		9.34
1/24/2024	86.9	83.7		75.8	

Time Series

Constituent: Calcium (mg/L) Analysis Run 3/5/2024 1:10 PM View: Descriptive

Plant Arkwright Client: Southern Company Data: Arkwright No 2

	ARGWA-20 (bg)	ARGWC-21	ARGWC-22	ARGWC-23	ARAMW-9
8/29/2016	8.3				
8/30/2016		46			
10/24/2016	7.66				
10/26/2016		44.3			
1/25/2017	9.4	50			
4/10/2017	8.6	52			
6/19/2017		55			
6/20/2017	9.4				
10/24/2017	9.9	56			
4/9/2018	9.9				
4/10/2018		51			
10/16/2018	9.8	57			
3/27/2019	9.2	58			
10/7/2019	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		69	190	65	
5/27/2020			200	69	
6/24/2020			180		
6/25/2020	9.6	80		72	
7/15/2020			190	68	
8/19/2020			220		
8/20/2020				69	
9/22/2020			190	66	
9/30/2020	9.9		200		
10/1/2020		79		73	
2/9/2021	9.2				
2/10/2021		76	200	67	
9/8/2021	11	81			
9/9/2021				70	
9/10/2021			200		
2/1/2022	8.3	75			
2/2/2022			190		
2/3/2022				71	
9/1/2022		71.5			
9/2/2022	9.48				
9/6/2022			162	65.2	
1/31/2023		79.1	207	69.9	
2/1/2023	10.8				145
8/8/2023			196	66.6	146
8/9/2023		82.9			
8/10/2023	11				
1/23/2024	11.4		183		167
1/24/2024		82.6		75.6	

Time Series

Constituent: Chloride (mg/L) Analysis Run 3/5/2024 1:10 PM View: Descriptive

Plant Arkwright Client: Southern Company Data: Arkwright No 2

	ARAMW-1	ARAMW-2	ARAMW-7	ARAMW-8	ARGWA-19 (bg)
5/5/2009					11.1
12/5/2009					9.46
6/1/2010					6.32
11/11/2010					7.16
5/17/2011					6.84
11/8/2011					9.13
5/16/2012					10.8
5/14/2013					16.2
11/5/2013					14.8
6/9/2014					13.6
4/14/2015					10.4
11/4/2015					9.19
6/22/2016					8.4
8/29/2016					8.4
10/24/2016					9.6
1/25/2017					8.7
4/10/2017					8
6/19/2017					7.6
10/24/2017					7.2
4/10/2018					7.2
10/16/2018					10
3/26/2019					12
10/7/2019					11
4/7/2020					11
6/24/2020	5.3	4.3			
6/25/2020					11
9/29/2020					10
9/30/2020	5.2				
10/1/2020		4.2			
11/30/2020			6.3		
12/1/2020				12	
2/9/2021					8.6
2/10/2021	5.3				
2/11/2021		4.4	5.9	12	
9/7/2021					7.4
9/9/2021	4.5			7.4	
9/10/2021		4.2	6.5		
2/1/2022					6.8
2/2/2022			5.7		
2/3/2022	5.3	4.1		8.1	
9/1/2022					6.27
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	6.04
8/8/2023	3.61	3.35	5.5		6.37
8/9/2023				5.13	
1/23/2024			5.11		5.63
1/24/2024	3.43	3.31		4.96	

Time Series

Constituent: Chloride (mg/L) Analysis Run 3/5/2024 1:10 PM View: Descriptive

Plant Arkwright Client: Southern Company Data: Arkwright No 2

	ARGWA-20 (bg)	ARGWC-21	ARGWC-22	ARGWC-23	ARAMW-9
5/14/2009		6.38			
5/15/2009	6.86				
12/5/2009	5.06	6.28			
6/1/2010	5.47				
6/2/2010		6.1			
11/11/2010	5.26	6.1461			
5/17/2011	4.8	6.17			
11/8/2011	5.62	6.6			
5/16/2012	5.1	6.18			
5/14/2013	5.25	6.32			
11/5/2013	5.19	5.65			
6/9/2014	5.55	6.08			
4/14/2015	5.39	5.43			
10/29/2015		5.62			
11/4/2015	5.38				
6/22/2016	5.7				
6/23/2016		5.9			
8/29/2016	5.3				
8/30/2016		5.5			
10/24/2016	5.4				
10/26/2016		6			
1/25/2017	5.1	5.4			
4/10/2017	4.9	5.1			
6/19/2017		5.2			
6/20/2017	5				
10/24/2017	4.6	4.9			
4/9/2018	4.7				
4/10/2018		4.8			
10/16/2018	5.3	5.1			
3/27/2019	4.6	4.4			
10/7/2019	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		4.2	8.1	3.8	
5/27/2020			7.3	4	
6/24/2020			5.7		
6/25/2020	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	
9/30/2020	5.6		8		
10/1/2020		4.3		3.8	
2/9/2021	6				
2/10/2021		4.3	7.4	4.6	
9/8/2021	5.9	4			
9/9/2021				4.7	
9/10/2021			6.7		

Time Series

Constituent: Chloride (mg/L) Analysis Run 3/5/2024 1:10 PM View: Descriptive

Plant Arkwright Client: Southern Company Data: Arkwright No 2

	ARGWA-20 (bg)	ARGWC-21	ARGWC-22	ARGWC-23	ARAMW-9
2/1/2022	5.7	3.4			
2/2/2022			6.3		
2/3/2022				4.4	
9/1/2022		3.34			
9/2/2022	5.44				
9/6/2022			8.34	3.73	
1/31/2023		3.3	5.88	3.84	
2/1/2023	6				37.2
8/8/2023			6.79	3.6	36.1
8/9/2023		3.35			
8/10/2023	6.5				
1/23/2024	6.68		7.31		32.9
1/24/2024		3.35		3.74	

Time Series

Constituent: Chromium (mg/L) Analysis Run 3/5/2024 1:10 PM View: Descriptive

Plant Arkwright Client: Southern Company Data: Arkwright No 2

	ARAMW-1	ARAMW-2	ARAMW-7	ARAMW-8	ARGWA-19 (bg)
8/29/2016					0.0011 (J)
10/24/2016					0.001 (J)
1/25/2017					0.0013 (J)
4/10/2017					<0.01
6/19/2017					0.0013 (J)
10/24/2017					0.0012 (J)
4/10/2018					0.0015 (J)
10/16/2018					0.0014 (J)
8/20/2019					0.0024
10/7/2019					<0.01
4/7/2020					<0.01
8/19/2020					<0.01
8/20/2020	<0.01	<0.01			
9/29/2020					<0.01
9/30/2020	<0.01				
10/1/2020		<0.01			
2/9/2021					0.0015 (J)
2/10/2021	<0.01				
2/11/2021		<0.01	<0.01	<0.01	
9/7/2021					<0.01
9/9/2021	<0.01			<0.01	
9/10/2021		<0.01	<0.01		
2/1/2022					0.0029
2/2/2022			<0.01		
2/3/2022	<0.01	<0.01		<0.01	
9/1/2022					<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	<0.01
8/8/2023	<0.01	<0.01	<0.01		<0.01
8/9/2023				<0.01	
1/23/2024			<0.01		<0.01
1/24/2024	<0.01	<0.01		<0.01	

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Chromium (mg/L) Analysis Run 3/5/2024 1:10 PM View: Descriptive

Plant Arkwright Client: Southern Company Data: Arkwright No 2

	ARGWA-20 (bg)	ARGWC-21	ARGWC-22	ARGWC-23	ARAMW-9
8/29/2016	0.0052				
8/30/2016		<0.01			
10/24/2016	0.0053 (J)				
10/26/2016		<0.01			
1/25/2017	0.0056	<0.01			
4/10/2017	0.0047	<0.01			
6/19/2017		<0.01			
6/20/2017	0.0051				
10/24/2017	0.0056	<0.01			
4/9/2018	0.0071				
4/10/2018		<0.01			
10/16/2018	0.0071	<0.01			
8/20/2019	0.0078	0.0017 (J)			
10/7/2019	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	
5/27/2020			<0.01	<0.01	
7/15/2020			<0.01	<0.01	
8/19/2020	0.0063		<0.01		
8/20/2020				<0.01	
8/21/2020		<0.01			
9/22/2020			<0.01	<0.01	
9/30/2020	0.0057		<0.01		
10/1/2020		<0.01		<0.01	
2/9/2021	0.0059				
2/10/2021		<0.01	<0.01	<0.01	
9/8/2021	0.0059	<0.01			
9/9/2021				<0.01	
9/10/2021			<0.01		
2/1/2022	0.0054	<0.01			
2/2/2022			<0.01		
2/3/2022				<0.01	
9/1/2022		<0.01			
9/2/2022	0.00578 (J)				
9/6/2022			<0.01	<0.01	
1/31/2023		<0.01	<0.01	<0.01	
2/1/2023	0.00682 (J)				<0.01
8/8/2023			<0.01	<0.01	<0.01
8/9/2023		<0.01			
8/10/2023	0.00684 (J)				
1/23/2024	0.00682 (J)		<0.01		<0.01
1/24/2024		<0.01		<0.01	

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Cobalt (mg/L) Analysis Run 3/5/2024 1:10 PM View: Descriptive

Plant Arkwright Client: Southern Company Data: Arkwright No 2

	ARAMW-1	ARAMW-2	ARAMW-7	ARAMW-8	ARGWA-19 (bg)
8/29/2016					<0.001
10/24/2016					<0.001
1/25/2017					<0.001
4/10/2017					<0.001
6/19/2017					<0.001
10/24/2017					<0.001
4/10/2018					<0.001
10/16/2018					<0.001
8/20/2019					0.00011 (J)
10/7/2019					0.00011 (J)
4/7/2020					0.00038 (J)
6/24/2020	0.00097 (J)	0.0027			
6/25/2020					<0.001
8/19/2020					<0.001
8/20/2020	0.001 (J)	0.0022 (J)			
9/29/2020					<0.001
9/30/2020	0.001 (J)				
10/1/2020		0.0036			
11/30/2020			0.028		
12/1/2020				0.0054	
2/9/2021					0.00016 (J)
2/10/2021	0.00082 (J)				
2/11/2021		0.0028	0.017	0.0061	
9/7/2021					<0.001
9/9/2021	0.00072 (J)			0.0046	
9/10/2021		0.0022 (J)	0.075		
2/1/2022					<0.001
2/2/2022			0.077		
2/3/2022	0.00045 (J)	0.0028		0.0028	
9/1/2022					<0.001
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	<0.001
8/8/2023	0.00035 (J)	0.00223	0.0605		<0.001
8/9/2023				0.00364	
1/23/2024			0.0597		<0.001
1/24/2024	0.000331 (J)	0.00249		0.00203	

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Cobalt (mg/L) Analysis Run 3/5/2024 1:10 PM View: Descriptive

Plant Arkwright Client: Southern Company Data: Arkwright No 2

	ARGWA-20 (bg)	ARGWC-21	ARGWC-22	ARGWC-23	ARAMW-9
8/29/2016	<0.001				
8/30/2016		0.0018 (J)			
10/24/2016	<0.001				
10/26/2016		0.0018 (J)			
1/25/2017	0.00076 (J)	0.0017 (J)			
4/10/2017	<0.001	0.0016 (J)			
6/19/2017		0.0021 (J)			
6/20/2017	<0.001				
10/24/2017	<0.001	0.0019 (J)			
4/9/2018	<0.001				
4/10/2018		0.0019 (J)			
10/16/2018	<0.001	0.0019 (J)			
8/20/2019	0.00015 (J)	0.0023			
10/7/2019	<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		0.00087	0.009	0.0016	
5/27/2020			0.0059	0.0017 (J)	
6/24/2020			0.0047		
6/25/2020	0.00015 (J)	0.00097 (J)		0.0014 (J)	
7/15/2020			0.0027	0.0017 (J)	
8/19/2020	0.00064 (J)		0.0032		
8/20/2020				0.0023 (J)	
8/21/2020		0.00066 (J)			
9/22/2020			0.0085	0.0036	
9/30/2020	0.00031 (J)		0.0055		
10/1/2020		0.00082 (J)		0.0052	
2/9/2021	0.00038 (J)				
2/10/2021		0.00063 (J)	0.0015 (J)	0.00072 (J)	
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	0.0007 (J)			
2/2/2022			0.001 (J)		
2/3/2022				0.00063 (J)	
9/1/2022		0.00069 (J)			
9/2/2022	<0.001				
9/6/2022			0.00198	0.000588 (J)	
1/31/2023		0.000659 (J)	0.00154	0.000742 (J)	
2/1/2023	0.000458 (J)				<0.001
8/8/2023			0.00184	0.00044 (J)	<0.001
8/9/2023		0.000813 (J)			
8/10/2023	0.000814 (J)				
1/23/2024	<0.001		0.00408		<0.001
1/24/2024		0.00106		<0.001	

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 3/5/2024 1:10 PM View: Descriptive

Plant Arkwright Client: Southern Company Data: Arkwright No 2

	ARAMW-1	ARAMW-2	ARAMW-7	ARAMW-8	ARGWA-19 (bg)
8/29/2016					0.324 (U)
10/24/2016					1.17 (U)
1/25/2017					0.443 (U)
4/10/2017					0.483
6/19/2017					0.478
10/24/2017					0.764
4/10/2018					0.3 (U)
10/16/2018					0.991
8/20/2019					0.498
10/7/2019					0.476 (U)
4/7/2020					0.651
8/19/2020					0.294 (U)
8/20/2020	0.527	4.13			
9/29/2020					0.372 (U)
9/30/2020	0.249 (U)				
10/1/2020		2.86			
2/9/2021					0.466 (U)
2/10/2021	0.949				
2/11/2021		2.09	5.1	0.285 (U)	
9/7/2021					0.31 (U)
9/9/2021	0.972			0.16 (U)	
9/10/2021		3.4	4.23		
2/1/2022					0.319 (U)
2/2/2022			4.48		
2/3/2022	1.04	2.69		0.51	
9/1/2022					0.913
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	2.33
8/8/2023	1.16 (U)	1.86	4.83		1.8
8/9/2023				0.193 (U)	
1/23/2024			4.65		1.73
1/24/2024	9.3	10.3		2.87	

Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 3/5/2024 1:10 PM View: Descriptive

Plant Arkwright Client: Southern Company Data: Arkwright No 2

	ARGWA-20 (bg)	ARGWC-21	ARGWC-22	ARGWC-23	ARAMW-9
8/29/2016	0.508 (U)				
8/30/2016		0.832			
10/24/2016	1.46				
10/26/2016		1.27			
1/25/2017	0.377 (U)	0.549			
4/10/2017	0.132 (U)	0.556			
6/19/2017		0.976			
6/20/2017	1.17				
10/24/2017	0.704	0.504			
4/9/2018	0.539				
4/10/2018		0.621			
10/16/2018	0.354 (U)	0.796			
8/20/2019	0.53	0.978			
10/7/2019	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		0.433 (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	0.94		0.587 (U)		
8/20/2020				0.242 (U)	
8/21/2020		0.472			
9/22/2020			0.884	0.0177 (U)	
9/30/2020	0.679		0.602		
10/1/2020		0.496 (U)		0.749	
2/9/2021	-0.0396 (U)				
2/10/2021		0.625	0.233 (U)	0.0408 (U)	
9/8/2021	0.44 (U)	1.12			
9/9/2021				0.498	
9/10/2021			0.713		
2/1/2022	-0.00713 (U)	0.331 (U)			
2/2/2022			0.195 (U)		
2/3/2022				0.248 (U)	
9/1/2022		1.57			
9/2/2022	0.783				
9/6/2022			2.58	2.36	
1/31/2023		3.25	2.2	0.859 (U)	
2/1/2023	2.18				0.413 (U)
8/8/2023			1.22 (U)	0.363 (U)	3.92
8/9/2023		2.69			
8/10/2023	1.8				
1/23/2024	2.5		2.1		2.96
1/24/2024		5.34		2.73	

Time Series

Constituent: Fluoride (mg/L) Analysis Run 3/5/2024 1:10 PM View: Descriptive

Plant Arkwright Client: Southern Company Data: Arkwright No 2

	ARAMW-1	ARAMW-2	ARAMW-7	ARAMW-8	ARGWA-19 (bg)
8/29/2016					<0.1
10/24/2016					0.07 (J)
1/25/2017					<0.1
4/10/2017					<0.1
6/19/2017					<0.1
10/24/2017					<0.1
4/10/2018					<0.1
10/16/2018					0.083 (J)
3/26/2019					0.041 (J)
8/20/2019					0.045 (J)
10/7/2019					0.049 (J)
4/7/2020					0.14
6/24/2020	0.21	0.11			
6/25/2020					0.03 (J)
8/19/2020					<0.1
8/20/2020	0.23	<0.1			
9/29/2020					0.051 (J)
9/30/2020	0.2				
10/1/2020		0.098 (J)			
11/30/2020			0.044 (J)		
12/1/2020				0.14	
2/9/2021					0.059 (J)
2/10/2021	0.21				
2/11/2021		0.12	0.054 (J)	0.24	
9/7/2021					0.1
9/9/2021	0.21			0.19	
9/10/2021		0.13	0.032 (J)		
2/1/2022					0.076 (J)
2/2/2022			<0.1		
2/3/2022	0.16	0.095 (J)		0.17	
9/1/2022					0.148
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)	0.108 (J)
8/8/2023	0.118	0.0571 (J)	<0.1		<0.1
8/9/2023				0.261	
1/23/2024			0.126		0.121
1/24/2024	0.199	0.171		0.222	

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Fluoride (mg/L) Analysis Run 3/5/2024 1:10 PM View: Descriptive

Plant Arkwright Client: Southern Company Data: Arkwright No 2

	ARGWA-20 (bg)	ARGWC-21	ARGWC-22	ARGWC-23	ARAMW-9
8/29/2016	<0.1				
8/30/2016		0.099 (J)			
10/24/2016	0.04 (J)				
10/26/2016		0.57			
1/25/2017	<0.1	0.12 (J)			
4/10/2017	<0.1	0.11 (J)			
6/19/2017		0.11 (J)			
6/20/2017	<0.1				
10/24/2017	<0.1	0.1 (J)			
4/9/2018	<0.1				
4/10/2018		0.094 (J)			
10/16/2018	<0.1	0.17 (J)			
3/27/2019	<0.1	0.05 (J)			
8/20/2019	0.042 (J)	0.098 (J)			
10/7/2019	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		0.12	0.068 (J)	0.18	
5/27/2020			0.06 (J)	0.25	
6/24/2020			0.048 (J)		
6/25/2020	<0.1	0.041 (J)		0.25	
7/15/2020			0.04 (J)	0.28	
8/19/2020	<0.1		<0.2		
8/20/2020				0.19	
8/21/2020		0.084 (J)			
9/22/2020			0.049 (J)	0.33	
9/30/2020	0.032 (J)		0.045 (J)		
10/1/2020		0.098 (J)		0.32	
2/9/2021	0.048 (J)				
2/10/2021		0.14	0.055 (J)	0.41	
9/8/2021	0.067 (J)	0.16			
9/9/2021				0.48	
9/10/2021			0.035 (J)		
2/1/2022	0.028 (J)	0.11			
2/2/2022			0.04 (J)		
2/3/2022				0.4	
9/1/2022		0.161			
9/2/2022	0.122				
9/6/2022			0.056 (J)	0.362	
1/31/2023		0.175 (J)	0.0979 (J)	0.551 (J)	
2/1/2023	0.121				0.938
8/8/2023			<0.2	0.283	0.837
8/9/2023		0.203			
8/10/2023	<0.1				
1/23/2024	0.113		0.134		0.971
1/24/2024		0.173		0.391	

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Lead (mg/L) Analysis Run 3/5/2024 1:10 PM View: Descriptive

Plant Arkwright Client: Southern Company Data: Arkwright No 2

	ARAMW-1	ARAMW-2	ARAMW-7	ARAMW-8	ARGWA-19 (bg)
5/5/2009					<0.002
12/5/2009					<0.002
6/1/2010					<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
11/19/2014					<0.002
4/14/2015					<0.002
11/4/2015					<0.002
6/22/2016					<0.002
8/29/2016					<0.002
10/24/2016					<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
3/26/2019					<0.002
8/20/2019					<0.002
10/7/2019					0.00018 (J)
4/7/2020					0.00037 (J)
8/19/2020					<0.002
8/20/2020	<0.002	<0.002			
9/29/2020					<0.002
9/30/2020	<0.002				
10/1/2020		<0.002			
2/9/2021					<0.002
2/10/2021	<0.002				
2/11/2021		<0.002	0.00013 (J)	<0.002	
9/7/2021					<0.002
9/9/2021	<0.002			<0.002	
9/10/2021		<0.002	<0.002		
2/1/2022					<0.002
2/2/2022			<0.002		
2/3/2022	<0.002	<0.002		<0.002	
9/1/2022					<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	<0.002
8/8/2023	<0.002	<0.002	<0.002		<0.002
8/9/2023				<0.002	
1/23/2024			<0.002		<0.002
1/24/2024	<0.002	<0.002		<0.002	

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Lead (mg/L) Analysis Run 3/5/2024 1:10 PM View: Descriptive

Plant Arkwright Client: Southern Company Data: Arkwright No 2

	ARGWA-20 (bg)	ARGWC-21	ARGWC-22	ARGWC-23	ARAMW-9
5/14/2009		<0.002			
5/15/2009	<0.002				
12/5/2009	<0.002	<0.002			
6/1/2010	<0.002				
6/2/2010		<0.002			
11/11/2010	<0.002	<0.002			
5/17/2011	<0.002	<0.002			
11/8/2011	<0.002	<0.002			
5/16/2012	<0.002	<0.002			
5/14/2013	<0.002	<0.002			
11/5/2013	<0.002	<0.002			
6/9/2014	<0.002	<0.002			
11/18/2014	<0.002	<0.002			
4/14/2015	<0.002	<0.002			
10/29/2015		<0.002			
11/4/2015	<0.002				
6/22/2016	<0.002				
6/23/2016		<0.002			
8/29/2016	<0.002				
8/30/2016		<0.002			
10/24/2016	<0.002				
10/26/2016		<0.002			
1/25/2017	0.00037 (J)	<0.002			
4/10/2017	<0.002	<0.002			
6/19/2017		<0.002			
6/20/2017	<0.002				
10/24/2017	<0.002	<0.002			
4/9/2018	<0.002				
4/10/2018		<0.002			
10/16/2018	<0.002	<0.002			
3/27/2019	<0.002	<0.002			
8/20/2019	<0.002	<0.002			
10/7/2019	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		0.00026 (J)	0.00014 (J)	<0.002	
5/27/2020			<0.002	<0.002	
7/15/2020			<0.002	<0.002	
8/19/2020	0.00039 (J)		<0.002		
8/20/2020				<0.002	
8/21/2020		<0.002			
9/22/2020			<0.002	<0.002	
9/30/2020	0.00022 (J)		<0.002		
10/1/2020		<0.002		<0.002	
2/9/2021	0.00033 (J)				
2/10/2021		<0.002	<0.002	<0.002	
9/8/2021	0.00024 (J)	<0.002			
9/9/2021				<0.002	

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Lead (mg/L) Analysis Run 3/5/2024 1:10 PM View: Descriptive

Plant Arkwright Client: Southern Company Data: Arkwright No 2

	ARGWA-20 (bg)	ARGWC-21	ARGWC-22	ARGWC-23	ARAMW-9
9/10/2021			<0.002		
2/1/2022	<0.002	<0.002			
2/2/2022			<0.002		
2/3/2022				<0.002	
9/1/2022		<0.002			
9/2/2022	<0.002				
9/6/2022			<0.002	<0.002	
1/31/2023		<0.002	<0.002	<0.002	
2/1/2023	<0.002				<0.002
8/8/2023			<0.002	<0.002	<0.002
8/9/2023		<0.002			
8/10/2023	<0.002				
1/23/2024	<0.002		<0.002		<0.002
1/24/2024		<0.002		<0.002	

Time Series

Constituent: Lithium (mg/L) Analysis Run 3/5/2024 1:10 PM View: Descriptive

Plant Arkwright Client: Southern Company Data: Arkwright No 2

	ARAMW-1	ARAMW-2	ARAMW-7	ARAMW-8	ARGWA-19 (bg)
8/29/2016					0.0048 (J)
10/24/2016					<0.05
1/25/2017					0.0052
4/10/2017					0.0034 (J)
6/19/2017					0.0036 (J)
10/24/2017					0.0051
4/10/2018					0.0057
10/16/2018					0.0048 (J)
8/20/2019					0.0044 (J)
10/7/2019					0.013
1/14/2020	0.009	0.086			
4/7/2020					0.0053
6/24/2020	0.0084	0.018			
6/25/2020					0.0053
8/19/2020					0.0038 (J)
8/20/2020	0.0066	0.036			
9/29/2020					0.0041 (J)
9/30/2020	0.0091				
10/1/2020		0.019			
11/30/2020			0.061		
12/1/2020				0.0044 (J)	
2/9/2021					0.0038 (J)
2/10/2021	0.0097				
2/11/2021		0.021	0.061	0.0055	
9/7/2021					0.0034 (J)
9/9/2021	0.0095			0.0062	
9/10/2021		0.025	0.06		
2/1/2022					0.0039 (J)
2/2/2022			0.06		
2/3/2022	0.0099	0.021		0.0063	
9/1/2022					0.00359 (J)
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)	0.00424 (J)
8/8/2023	0.00909 (J)	0.0193	0.0577		0.00382 (J)
8/9/2023				0.00637 (J)	
1/23/2024			0.0779		0.0044 (J)
1/24/2024	0.0106	0.0172		0.00669 (J)	

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Lithium (mg/L) Analysis Run 3/5/2024 1:10 PM View: Descriptive

Plant Arkwright Client: Southern Company Data: Arkwright No 2

	ARGWA-20 (bg)	ARGWC-21	ARGWC-22	ARGWC-23	ARAMW-9
8/29/2016	<0.01				
8/30/2016		0.0092			
10/24/2016	<0.01				
10/26/2016		0.0071 (J)			
1/25/2017	<0.01	0.0087			
4/10/2017	<0.01	0.0074			
6/19/2017		0.0079			
6/20/2017	<0.01				
10/24/2017	<0.01	0.0097			
4/9/2018	0.0021 (J)				
4/10/2018		0.012			
10/16/2018	0.0018 (J)	0.01			
8/20/2019	<0.01	0.0098			
10/7/2019	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		0.011	0.012	0.032	
5/27/2020			0.017	0.037	
6/24/2020			0.023		
6/25/2020	<0.01	0.013		0.043	
7/15/2020			0.021	0.042	
8/19/2020	<0.01		0.026		
8/20/2020				0.036	
8/21/2020		0.013			
9/22/2020			0.014	0.039	
9/30/2020	<0.01		0.014		
10/1/2020		0.012		0.04	
2/9/2021	<0.01				
2/10/2021		0.012	0.022	0.044	
9/8/2021	<0.01	0.012			
9/9/2021				0.045	
9/10/2021			0.021		
2/1/2022	0.0015 (J)	0.012			
2/2/2022			0.02		
2/3/2022				0.052	
9/1/2022		0.0116			
9/2/2022	<0.01				
9/6/2022			0.0136	0.0578	
1/31/2023		0.0124	0.0284	0.0499	
2/1/2023	<0.01				0.00463 (J)
8/8/2023			0.028	0.0517	0.00907 (J)
8/9/2023		0.0131			
8/10/2023	<0.01				
1/23/2024	<0.01		0.0125		0.00862 (J)
1/24/2024		0.0131		0.0547	

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Mercury (mg/L) Analysis Run 3/5/2024 1:10 PM View: Descriptive

Plant Arkwright Client: Southern Company Data: Arkwright No 2

	ARAMW-1	ARAMW-2	ARAMW-7	ARAMW-8	ARGWA-19 (bg)
8/29/2016					<0.0002
10/24/2016					<0.0002
1/25/2017					7.7E-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
8/19/2020					<0.0002
8/20/2020	<0.0002	<0.0002			
9/7/2021					<0.0002
9/9/2021	<0.0002			<0.0002	
9/10/2021		<0.0002	<0.0002		
2/1/2022					<0.0002
2/2/2022			<0.0002		
2/3/2022	<0.0002	<0.0002		<0.0002	
9/1/2022					<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	<0.0002
8/8/2023	<0.0002	<0.0002	<0.0002		<0.0002
8/9/2023				<0.0002	
1/23/2024			<0.0002		<0.0002
1/24/2024	<0.0002	<0.0002		<0.0002	

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Mercury (mg/L) Analysis Run 3/5/2024 1:10 PM View: Descriptive

Plant Arkwright Client: Southern Company Data: Arkwright No 2

	ARGWA-20 (bg)	ARGWC-21	ARGWC-22	ARGWC-23	ARAMW-9
8/29/2016	<0.0002				
8/30/2016		<0.0002			
10/24/2016	<0.0002				
10/26/2016		<0.0002			
1/25/2017	7.2E-05 (J)	7.3E-05 (J)			
4/10/2017	<0.0002	<0.0002			
6/19/2017		<0.0002			
6/20/2017	<0.0002				
10/24/2017	<0.0002	<0.0002			
4/9/2018	<0.0002				
4/10/2018		<0.0002			
10/16/2018	<0.0002	<0.0002			
8/20/2019	<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		
8/20/2020				<0.0002	
8/21/2020		<0.0002			
9/22/2020			<0.0002	<0.0002	
10/1/2020				<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			
2/2/2022			<0.0002		
2/3/2022				<0.0002	
9/1/2022		<0.0002			
9/2/2022	<0.0002				
9/6/2022			<0.0002	<0.0002	
1/31/2023		<0.0002	<0.0002	<0.0002	
2/1/2023	<0.0002				<0.0002
8/8/2023			<0.0002	<0.0002	<0.0002
8/9/2023		<0.0002			
8/10/2023	<0.0002				
1/23/2024	<0.0002		0.000372		<0.0002
1/24/2024		<0.0002		<0.0002	

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Molybdenum (mg/L) Analysis Run 3/5/2024 1:10 PM View: Descriptive

Plant Arkwright Client: Southern Company Data: Arkwright No 2

	ARAMW-1	ARAMW-2	ARAMW-7	ARAMW-8	ARGWA-19 (bg)
8/29/2016					<0.015
10/24/2016					<0.015
1/25/2017					<0.015
4/10/2017					<0.015
6/19/2017					<0.015
10/24/2017					<0.015
4/10/2018					0.00096 (J)
10/16/2018					<0.015
8/20/2019					<0.015
6/24/2020	0.0051 (J)	<0.015			
6/25/2020					<0.015
8/19/2020					<0.015
8/20/2020	0.0076 (J)	0.0013 (J)			
9/29/2020					<0.015
9/30/2020	0.0054 (J)				
10/1/2020		<0.015			
11/30/2020			0.0012 (J)		
12/1/2020				0.056	
2/9/2021					<0.015
2/10/2021	0.0043 (J)				
2/11/2021		<0.015	<0.001	0.038	
9/7/2021					<0.015
9/9/2021	0.0059 (J)			0.12	
9/10/2021		<0.015	<0.001		
2/1/2022					0.00067 (J)
2/2/2022			<0.001		
2/3/2022	0.0049 (J)	<0.015		0.16	
9/1/2022					0.000501 (J)
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	0.000395 (J)
8/8/2023	0.00667	0.0011	<0.001		0.000421 (J)
8/9/2023				0.203	
1/23/2024			<0.001		0.00048 (J)
1/24/2024	0.00937	0.00101		0.196	

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Molybdenum (mg/L) Analysis Run 3/5/2024 1:10 PM View: Descriptive

Plant Arkwright Client: Southern Company Data: Arkwright No 2

	ARGWA-20 (bg)	ARGWC-21	ARGWC-22	ARGWC-23	ARAMW-9
8/29/2016	<0.001				
8/30/2016		<0.001			
10/24/2016	<0.001				
10/26/2016		<0.001			
1/25/2017	<0.001	<0.001			
4/10/2017	<0.001	<0.001			
6/19/2017		<0.001			
6/20/2017	<0.001				
10/24/2017	<0.001	<0.001			
4/9/2018	<0.001				
4/10/2018		<0.001			
10/16/2018	<0.001	<0.001			
8/20/2019	<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	<0.001	<0.001		0.055	
7/15/2020			<0.015	0.055	
8/19/2020	<0.001		<0.015		
8/20/2020				0.061	
8/21/2020		<0.001			
9/22/2020			<0.015	0.053	
9/30/2020	<0.001		<0.015		
10/1/2020		<0.001		0.064	
2/9/2021	<0.001				
2/10/2021		<0.001	<0.015	0.063	
9/8/2021	<0.001	<0.001			
9/9/2021				0.071	
9/10/2021			<0.015		
2/1/2022	<0.001	<0.001			
2/2/2022			<0.015		
2/3/2022				0.065	
9/1/2022		<0.001			
9/2/2022	<0.001				
9/6/2022			0.000203 (J)	0.067	
1/31/2023		<0.001	0.000496 (J)	0.0671	
2/1/2023	<0.001				0.014
8/8/2023			0.000514 (J)	0.0618	0.0109
8/9/2023		<0.001			
8/10/2023	<0.001				
1/23/2024	<0.001		0.00025 (J)		0.00683
1/24/2024		<0.001		0.0651	

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: pH (SU) Analysis Run 3/5/2024 1:10 PM View: Descriptive

Plant Arkwright Client: Southern Company Data: Arkwright No 2

	ARAMW-1	ARAMW-2	ARAMW-7	ARAMW-8	ARGWA-19 (bg)
8/29/2016					6.75 (o)
10/24/2016					5.81
1/25/2017					5.91
4/10/2017					5.74
6/19/2017					5.54
10/24/2017					5.82
4/10/2018					5.92
10/16/2018					5.94
3/26/2019					5.85
8/20/2019					5.9
10/7/2019					5.89
1/14/2020	6.07	6.12			
4/7/2020					5.72
6/24/2020	6.31	6.19			
6/25/2020					5.8
8/19/2020					6.25
8/20/2020	6.09	5.99			
9/29/2020					5.83
9/30/2020	6.16				
10/1/2020		5.96			
11/30/2020			6		
12/1/2020				7.05	
2/9/2021					5.97
2/10/2021	6.16				
2/11/2021		6	5.67	6.95	
9/7/2021					5.85
9/9/2021	6.1			6.56	
9/10/2021		6.01	5.7		
2/1/2022					5.52
2/2/2022			5.58		
2/3/2022	6.11	6.01		6.59	
9/1/2022					5.88
9/2/2022	6.04	6		6.44	
9/7/2022			5.57		
1/31/2023	6.36	6.18	5.54	6.44	5.86
8/8/2023	6.38	6.01	5.47		5.81
8/9/2023				8.71	
1/23/2024			5.57		5.93
1/24/2024	6.12	6.1		6.47	

Time Series

Constituent: pH (SU) Analysis Run 3/5/2024 1:10 PM View: Descriptive

Plant Arkwright Client: Southern Company Data: Arkwright No 2

	ARGWA-20 (bg)	ARGWC-21	ARGWC-22	ARGWC-23	ARAMW-9
8/29/2016	5.64				
8/30/2016		6.38			
10/24/2016	5.6				
10/26/2016		6.23			
1/25/2017	5.65	6.15			
4/10/2017	5.42	5.99			
6/19/2017		5.95			
6/20/2017	5.59				
10/24/2017	5.58	6.02			
4/9/2018	5.78				
4/10/2018		6.12			
10/16/2018	5.69	6.12			
3/27/2019	5.96	6.2			
8/20/2019	5.57	6.08			
10/7/2019	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		5.96	5.84	6.4	
5/27/2020			5.69	6.3	
6/24/2020			5.82		
6/25/2020	5.61	5.98		6.37	
7/15/2020			5.58	6.36	
8/19/2020	6.16		6.21		
8/20/2020				6.33	
8/21/2020		5.89			
9/22/2020			5.77	6.29	
9/30/2020	5.65		5.81		
10/1/2020		5.99		6.38	
2/9/2021	5.66				
2/10/2021		6.01	5.68	6.37	
9/8/2021	5.59	5.94			
9/9/2021				6.35	
9/10/2021			5.62		
2/1/2022	5.14	5.65			
2/2/2022			5.7		
2/3/2022				6.44	
9/1/2022		5.97			
9/2/2022	5.68				
9/6/2022			5.88	6.41	
1/31/2023		6.04	5.61	6.46	
2/1/2023	5.7				7.95
8/8/2023			5.61	6.33	8.13
8/9/2023		6.6			
8/10/2023	5.55				
1/23/2024	5.77		5.88		7.92
1/24/2024		6.03		6.43	

Time Series

Constituent: Selenium (mg/L) Analysis Run 3/5/2024 1:10 PM View: Descriptive

Plant Arkwright Client: Southern Company Data: Arkwright No 2

	ARAMW-1	ARAMW-2	ARAMW-7	ARAMW-8	ARGWA-19 (bg)
5/5/2009					0.0043
12/5/2009					<0.005
6/1/2010					<0.005
11/11/2010					<0.005
5/17/2011					<0.005
11/8/2011					<0.005
5/16/2012					<0.005
5/14/2013					<0.005
11/5/2013					<0.005
6/9/2014					<0.005
11/19/2014					<0.005
4/14/2015					<0.005
11/4/2015					<0.005
6/22/2016					0.00025 (J)
8/29/2016					0.0004 (J)
10/24/2016					<0.005
1/25/2017					<0.005
4/10/2017					<0.005
6/19/2017					0.00025 (J)
10/24/2017					<0.005
4/10/2018					0.00074 (J)
10/16/2018					<0.005
3/26/2019					<0.005
8/20/2019					<0.005
10/7/2019					<0.005
4/7/2020					<0.005
8/19/2020					<0.005
8/20/2020	<0.005	<0.005			
9/29/2020					<0.005
9/30/2020	<0.005				
10/1/2020		<0.005			
2/9/2021					<0.005
2/10/2021	<0.005				
2/11/2021		<0.005	<0.005	<0.005	
9/7/2021					<0.005
9/9/2021	<0.005			<0.005	
9/10/2021		<0.005	<0.005		
2/1/2022					<0.005
2/2/2022			<0.005		
2/3/2022	<0.005	<0.005		<0.005	
9/1/2022					<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	<0.005
8/8/2023	<0.005	<0.005	<0.005		<0.005
8/9/2023				<0.005	
1/23/2024			<0.005		<0.005
1/24/2024	<0.005	<0.005		<0.005	

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Selenium (mg/L) Analysis Run 3/5/2024 1:10 PM View: Descriptive

Plant Arkwright Client: Southern Company Data: Arkwright No 2

	ARGWA-20 (bg)	ARGWC-21	ARGWC-22	ARGWC-23	ARAMW-9
5/14/2009		0.0058 (o)			
5/15/2009	0.007 (o)				
12/5/2009	<0.005	<0.005			
6/1/2010	<0.005				
6/2/2010		<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	0.0024 (J)	<0.005			
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	<0.005			
4/14/2015	<0.005	<0.005			
10/29/2015		<0.005			
11/4/2015	<0.005				
6/22/2016	0.0019				
6/23/2016		<0.005			
8/29/2016	0.0019				
8/30/2016		<0.005			
10/24/2016	0.0023 (J)				
10/26/2016		<0.005			
1/25/2017	0.0015	<0.005			
4/10/2017	0.0011 (J)	<0.005			
6/19/2017		<0.005			
6/20/2017	0.0016				
10/24/2017	0.0012 (J)	<0.005			
4/9/2018	0.0012 (J)				
4/10/2018		<0.005			
10/16/2018	0.0015	<0.005			
3/27/2019	0.0015	<0.005			
8/20/2019	0.0015 (J)	<0.005			
10/7/2019	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	
5/27/2020			<0.005	<0.005	
7/15/2020			<0.005	<0.005	
8/19/2020	0.0015 (J)		<0.005		
8/20/2020				<0.005	
8/21/2020		<0.005			
9/22/2020			<0.005	<0.005	
9/30/2020	0.0016 (J)		<0.005		
10/1/2020		<0.005		<0.005	
2/9/2021	0.0016 (J)				
2/10/2021		<0.005	<0.005	<0.005	
9/8/2021	<0.005	<0.005			
9/9/2021				<0.005	

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Selenium (mg/L) Analysis Run 3/5/2024 1:10 PM View: Descriptive

Plant Arkwright Client: Southern Company Data: Arkwright No 2

	ARGWA-20 (bg)	ARGWC-21	ARGWC-22	ARGWC-23	ARAMW-9
9/10/2021			0.002 (J)		
2/1/2022	0.0015 (J)	<0.005			
2/2/2022			<0.005		
2/3/2022				<0.005	
9/1/2022		<0.005			
9/2/2022	<0.005				
9/6/2022			<0.005	<0.005	
1/31/2023		<0.005	<0.005	<0.005	
2/1/2023	<0.005				<0.005
8/8/2023			<0.005	<0.005	<0.005
8/9/2023		<0.005			
8/10/2023	<0.005				
1/23/2024	<0.005		<0.005		<0.005
1/24/2024		<0.005		<0.005	

Time Series

Constituent: Silver (mg/L) Analysis Run 3/5/2024 1:10 PM View: Descriptive

Plant Arkwright Client: Southern Company Data: Arkwright No 2

	ARAMW-1	ARAMW-2	ARAMW-7	ARAMW-8	ARGWA-19 (bg)
5/5/2009					<0.001
12/5/2009					0.00075
6/1/2010					<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
11/19/2014					<0.001
4/14/2015					<0.001
11/4/2015					<0.001
6/22/2016					<0.001
10/24/2016					<0.001
4/10/2017					<0.001
10/24/2017					<0.001
4/10/2018					<0.001
10/16/2018					<0.001
3/26/2019					<0.001
10/7/2019					0.00056 (J)
4/7/2020					0.00018 (J)
9/29/2020					<0.001
9/30/2020	<0.001				
10/1/2020		<0.001			
2/9/2021					<0.001
2/10/2021	<0.001				
2/11/2021		<0.001	<0.001	<0.001	
9/7/2021					<0.001
9/9/2021	<0.001			<0.001	
9/10/2021		<0.001	<0.001		
2/1/2022					<0.001
2/2/2022			<0.001		
2/3/2022	<0.001	<0.001		<0.001	
9/1/2022					<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	<0.001
8/8/2023	<0.001	<0.001	<0.001		<0.001
8/9/2023				<0.001	
1/23/2024			<0.001		<0.001
1/24/2024	<0.001	<0.001		<0.001	

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Silver (mg/L) Analysis Run 3/5/2024 1:10 PM View: Descriptive

Plant Arkwright Client: Southern Company Data: Arkwright No 2

	ARGWA-20 (bg)	ARGWC-21	ARGWC-22	ARGWC-23	ARAMW-9
5/14/2009		<0.001			
5/15/2009	<0.001				
12/5/2009	0.00043	0.001			
6/1/2010	<0.001				
6/2/2010		<0.001			
11/11/2010	<0.001	<0.001			
5/17/2011	<0.001	<0.001			
11/8/2011	<0.001	<0.001			
5/16/2012	<0.001	<0.001			
5/14/2013	<0.001	<0.001			
11/5/2013	<0.001	<0.001			
6/9/2014	<0.001	<0.001			
11/18/2014	<0.001	<0.001			
4/14/2015	<0.001	<0.001			
10/29/2015		<0.001			
11/4/2015	<0.001				
6/22/2016	<0.001				
6/23/2016		<0.001			
10/24/2016	<0.001				
10/26/2016		<0.001			
4/10/2017	<0.001	<0.001			
10/24/2017	<0.001	<0.001			
4/9/2018	<0.001				
4/10/2018		<0.001			
10/16/2018	<0.001	<0.001			
3/27/2019	<0.001	<0.001			
10/7/2019	0.00031 (J)				
10/8/2019		0.00043 (J)			
4/6/2020	<0.001				
4/7/2020		<0.001	<0.001	<0.001	
9/30/2020	<0.001		<0.001		
10/1/2020		<0.001		<0.001	
2/9/2021	<0.001				
2/10/2021		<0.001	<0.001	<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			
2/2/2022			<0.001		
2/3/2022				<0.001	
9/1/2022		<0.001			
9/2/2022	<0.001				
9/6/2022			<0.001	<0.001	
1/31/2023		<0.001	<0.001	<0.001	
2/1/2023	<0.001				<0.001
8/8/2023			<0.001	<0.001	<0.001
8/9/2023		<0.001			
8/10/2023	<0.001				
1/23/2024	<0.001		<0.001		<0.001
1/24/2024		<0.001		<0.001	

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Sodium (mg/L) Analysis Run 3/5/2024 1:10 PM View: Descriptive
Plant Arkwright Client: Southern Company Data: Arkwright No 2

	ARAMW-1	ARAMW-2	ARAMW-7	ARAMW-8	ARGWA-19 (bg)
6/24/2020	21	20			
6/25/2020					13
11/30/2020			27		
12/1/2020				22	
2/9/2021					11
2/10/2021	22				
2/11/2021		20	30	22	
9/7/2021					10
9/9/2021	21			19	
9/10/2021		20	30		
2/1/2022					10
2/2/2022			29		
2/3/2022	21	20		17	
9/1/2022					9.76
9/2/2022	19.5	18.9		15.5	
9/7/2022			28.1		
1/31/2023	21.9	20.5	29.8	17.4	10
8/8/2023	19.3	18.8	26.1		9.51
8/9/2023				18.1	
1/23/2024			33.2		11.1
1/24/2024	21	19.8		17.7	

Time Series

Constituent: Sodium (mg/L) Analysis Run 3/5/2024 1:10 PM View: Descriptive

Plant Arkwright Client: Southern Company Data: Arkwright No 2

	ARGWA-20 (bg)	ARGWC-21	ARGWC-22	ARGWC-23	ARAMW-9
6/24/2020			26		
6/25/2020	9.7	19		14	
2/9/2021	11				
2/10/2021		19	26	14	
9/8/2021	10	19			
9/9/2021				15	
9/10/2021			26		
2/1/2022	10	19			
2/2/2022			26		
2/3/2022				14	
9/1/2022		18.2			
9/2/2022	10				
9/6/2022			23.9	14.3	
1/31/2023		19.8	28.7	14.6	
2/1/2023	11.3				115
8/8/2023			29.2	13.3	107
8/9/2023		21			
8/10/2023	11.5				
1/23/2024	11.8		24.9		88.3
1/24/2024		19.8		15.7	

Time Series

Constituent: Sulfate (mg/L) Analysis Run 3/5/2024 1:10 PM View: Descriptive

Plant Arkwright Client: Southern Company Data: Arkwright No 2

	ARAMW-1	ARAMW-2	ARAMW-7	ARAMW-8	ARGWA-19 (bg)
5/5/2009					15.9
12/5/2009					15.1
6/1/2010					12.7
11/11/2010					11.5
5/17/2011					11.2
11/8/2011					11.3
5/16/2012					9.38
5/14/2013					8.74
11/5/2013					9.12
6/9/2014					8.61
4/14/2015					8.45
11/4/2015					9.01
6/22/2016					9.3
8/29/2016					8.7
10/24/2016					9.3
1/25/2017					8.8
4/10/2017					7.8
6/19/2017					8.6
10/24/2017					9.1
4/10/2018					7.9
10/16/2018					8.2
3/26/2019					6.1
10/7/2019					7.4
4/7/2020					8.4
6/24/2020	250	290			
6/25/2020					9.8
9/29/2020					8.4
9/30/2020	230				
10/1/2020		270			
11/30/2020			990		
12/1/2020				120	
2/9/2021					10
2/10/2021	260				
2/11/2021		290	980	110	
9/7/2021					9.9
9/9/2021	210			100	
9/10/2021		440	1100		
2/1/2022					10
2/2/2022			1100		
2/3/2022	250	310		110	
9/1/2022					8.38
9/2/2022	223	315		108	
9/7/2022			1050		
1/31/2023	218	262	1020	105	7.55
8/8/2023	223	243	1060		8.29
8/9/2023				114	
1/23/2024			1000		6.98
1/24/2024	219	214		106	

Time Series

Constituent: Sulfate (mg/L) Analysis Run 3/5/2024 1:10 PM View: Descriptive

Plant Arkwright Client: Southern Company Data: Arkwright No 2

	ARGWA-20 (bg)	ARGWC-21	ARGWC-22	ARGWC-23	ARAMW-9
5/14/2009		129			
5/15/2009	41.3 (o)				
12/5/2009	16.2	136			
6/1/2010	18.2				
6/2/2010		138			
11/11/2010	16.5	131.49			
5/17/2011	16	132			
11/8/2011	21	138			
5/16/2012	17.7	132			
5/14/2013	19.5	129			
11/5/2013	18.3	122			
6/9/2014	18.6	131			
4/14/2015	18.8	128			
10/29/2015		134			
11/4/2015	17.4				
6/22/2016	18				
6/23/2016		150			
8/29/2016	18				
8/30/2016		140			
10/24/2016	18				
10/26/2016		160			
1/25/2017	19	150			
4/10/2017	16	140			
6/19/2017		160			
6/20/2017	18				
10/24/2017	19	160			
4/9/2018	18				
4/10/2018		170			
10/16/2018	18	170			
3/27/2019	15	170			
10/7/2019	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		180	710	58	
5/27/2020			720	65	
6/24/2020			810		
6/25/2020	16	210		77	
7/15/2020			820	78	
8/19/2020			1000		
8/20/2020				69	
9/22/2020			720	68	
9/30/2020	15		650		
10/1/2020		210		64	
2/9/2021	16				
2/10/2021		220	750	67	
9/8/2021	16	230			
9/9/2021				72	
9/10/2021			760		

Time Series

Constituent: Sulfate (mg/L) Analysis Run 3/5/2024 1:10 PM View: Descriptive

Plant Arkwright Client: Southern Company Data: Arkwright No 2

	ARGWA-20 (bg)	ARGWC-21	ARGWC-22	ARGWC-23	ARAMW-9
2/1/2022	18	230			
2/2/2022			720		
2/3/2022				64	
9/1/2022		221			
9/2/2022	18.5				
9/6/2022			667	65.3	
1/31/2023		260	751	55.5	
2/1/2023	19.3				417
8/8/2023			719	69.8	477
8/9/2023		214			
8/10/2023	18.5				
1/23/2024	17.1		567		415
1/24/2024		219		78.4	

Time Series

Constituent: Thallium (mg/L) Analysis Run 3/5/2024 1:10 PM View: Descriptive

Plant Arkwright Client: Southern Company Data: Arkwright No 2

	ARAMW-1	ARAMW-2	ARAMW-7	ARAMW-8	ARGWA-19 (bg)
8/29/2016					<0.002
10/24/2016					<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
8/20/2019					<0.002
8/19/2020					<0.002
8/20/2020	<0.002	<0.002			
9/7/2021					<0.002
9/9/2021	<0.002			<0.002	
9/10/2021		<0.002	<0.002		
2/1/2022					0.00057 (J)
2/2/2022			<0.002		
2/3/2022	<0.002	<0.002		<0.002	
9/1/2022					<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	<0.002
8/8/2023	<0.002	<0.002	<0.002		<0.002
8/9/2023				<0.002	
1/23/2024			<0.002		<0.002
1/24/2024	<0.002	<0.002		<0.002	

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Thallium (mg/L) Analysis Run 3/5/2024 1:10 PM View: Descriptive

Plant Arkwright Client: Southern Company Data: Arkwright No 2

	ARGWA-20 (bg)	ARGWC-21	ARGWC-22	ARGWC-23	ARAMW-9
8/29/2016	<0.002				
8/30/2016		<0.002			
10/24/2016	<0.002				
10/26/2016		<0.002			
1/25/2017	<0.002	<0.002			
4/10/2017	<0.002	<0.002			
6/19/2017		<0.002			
6/20/2017	<0.002				
10/24/2017	<0.002	<0.002			
4/9/2018	<0.002				
4/10/2018		<0.002			
10/16/2018	<0.002	<0.002			
8/20/2019	<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		
8/20/2020				<0.002	
8/21/2020		<0.002			
9/22/2020			<0.002	<0.002	
9/8/2021	<0.002	<0.002			
9/9/2021				<0.002	
9/10/2021			<0.002		
2/1/2022	<0.002	<0.002			
2/2/2022			<0.002		
2/3/2022				<0.002	
9/1/2022		<0.002			
9/2/2022	<0.002				
9/6/2022			<0.002	<0.002	
1/31/2023		<0.002	<0.002	<0.002	
2/1/2023	<0.002				<0.002
8/8/2023			<0.002	<0.002	<0.002
8/9/2023		<0.002			
8/10/2023	<0.002				
1/23/2024	<0.002		<0.002		<0.002
1/24/2024		<0.002		<0.002	

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Total Dissolved Solids (mg/L) Analysis Run 3/5/2024 1:10 PM View: Descriptive

Plant Arkwright Client: Southern Company Data: Arkwright No 2

	ARAMW-1	ARAMW-2	ARAMW-7	ARAMW-8	ARGWA-19 (bg)
8/29/2016					130
10/24/2016					108
1/25/2017					120
4/10/2017					128 (D)
6/19/2017					86
10/24/2017					120
4/10/2018					120
10/16/2018					140
3/26/2019					170
10/7/2019					150
4/7/2020					120
9/29/2020					110
9/30/2020	520				
10/1/2020		530			
11/30/2020			1600		
12/1/2020				420	
2/9/2021					110
2/10/2021	560				
2/11/2021		590	1600	380	
9/7/2021					110
9/9/2021	560			260	
9/10/2021		870	1700		
2/1/2022					91
2/2/2022			1700		
2/3/2022	560	590		410	
9/1/2022					81
9/2/2022	546	664		385	
9/7/2022			1610		
1/31/2023	527	591	1630	392	95
8/8/2023	524	548	1620		62
8/9/2023				436	
1/23/2024			1670		82
1/24/2024	530	529		419	

Time Series

Constituent: Total Dissolved Solids (mg/L) Analysis Run 3/5/2024 1:10 PM View: Descriptive

Plant Arkwright Client: Southern Company Data: Arkwright No 2

	ARGWA-20 (bg)	ARGWC-21	ARGWC-22	ARGWC-23	ARAMW-9
8/29/2016	100				
8/30/2016		350			
10/24/2016	91				
10/26/2016		357			
1/25/2017	90	320			
4/10/2017	110	380			
6/19/2017		370			
6/20/2017	72				
10/24/2017	110	420			
4/9/2018	100				
4/10/2018		370			
10/16/2018	110	380			
3/27/2019	100	400			
10/7/2019	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		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	
9/30/2020	82		1200		
10/1/2020		500		290	
2/9/2021	100				
2/10/2021		510	1200	290	
9/8/2021	120	560			
9/9/2021				320	
9/10/2021			1300		
2/1/2022	100	520			
2/2/2022			1200		
2/3/2022				320	
9/1/2022		537			
9/2/2022	101				
9/6/2022			1180	305	
1/31/2023		526	1320	299	
2/1/2023	90				857
8/8/2023			1220	294	852
8/9/2023		520			
8/10/2023	105				
1/23/2024	92		1110		750
1/24/2024		541		342	

FIGURE B.

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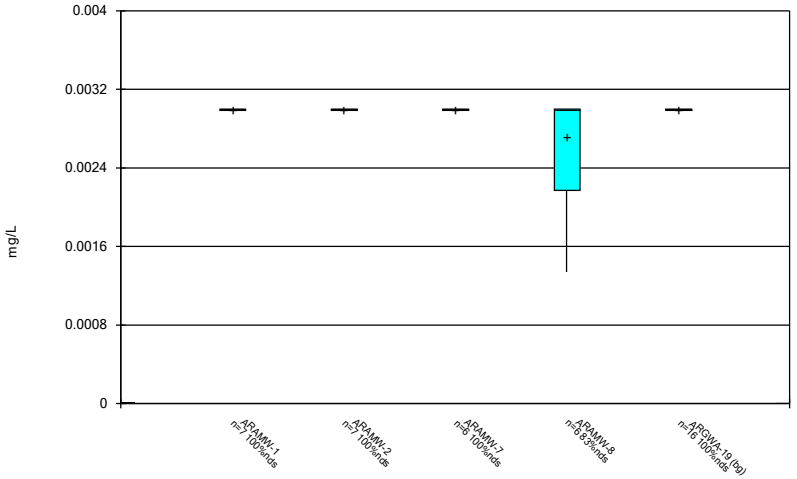
Box & Whiskers Plot



Constituent: Antimony Analysis Run 3/5/2024 1:12 PM View: Descriptive
Plant Arkwright Client: Southern Company Data: Arkwright No 2

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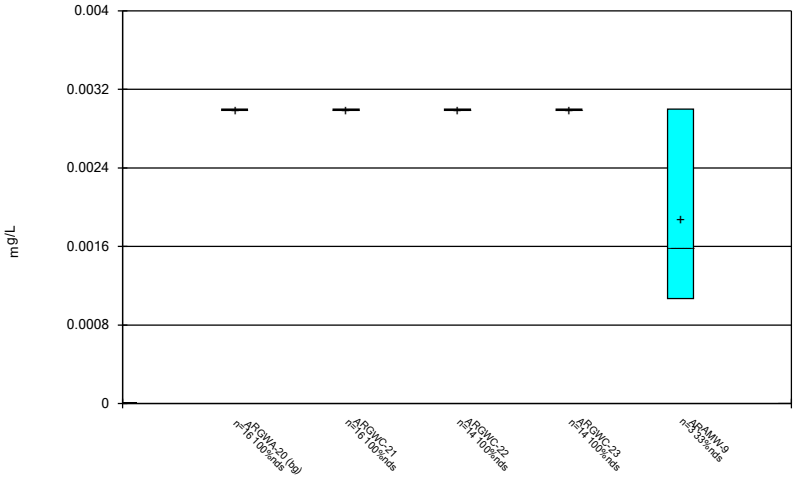
Box & Whiskers Plot



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Plant Arkwright Client: Southern Company Data: Arkwright No 2

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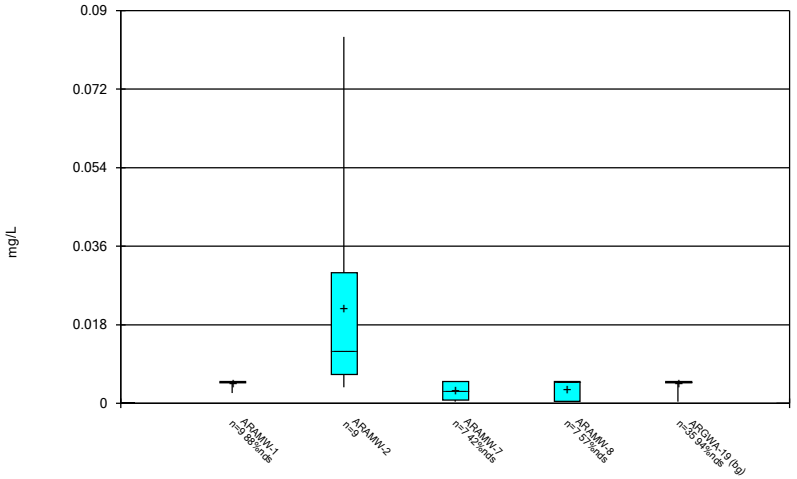
Box & Whiskers Plot



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Plant Arkwright Client: Southern Company Data: Arkwright No 2

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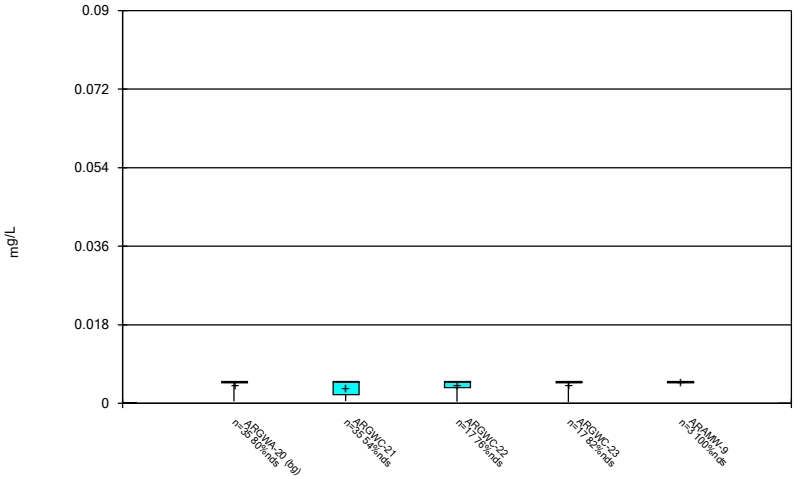
Box & Whiskers Plot



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Plant Arkwright Client: Southern Company Data: Arkwright No 2

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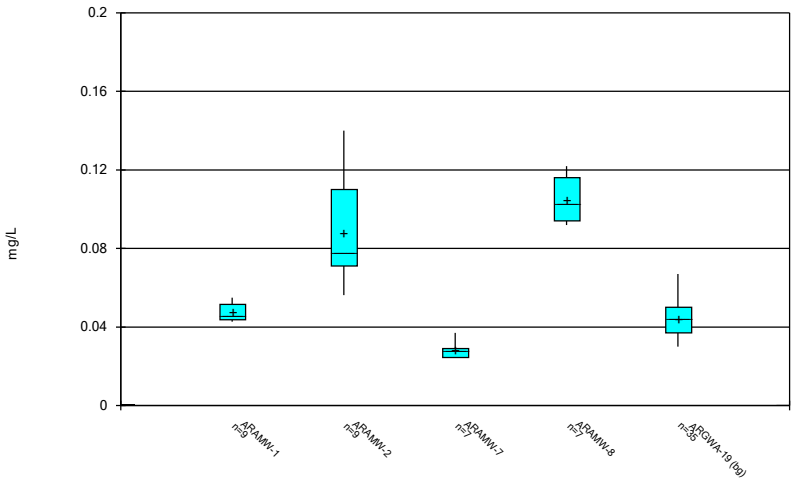
Box & Whiskers Plot



Constituent: Barium Analysis Run 3/5/2024 1:12 PM View: Descriptive
Plant Arkwright Client: Southern Company Data: Arkwright No 2

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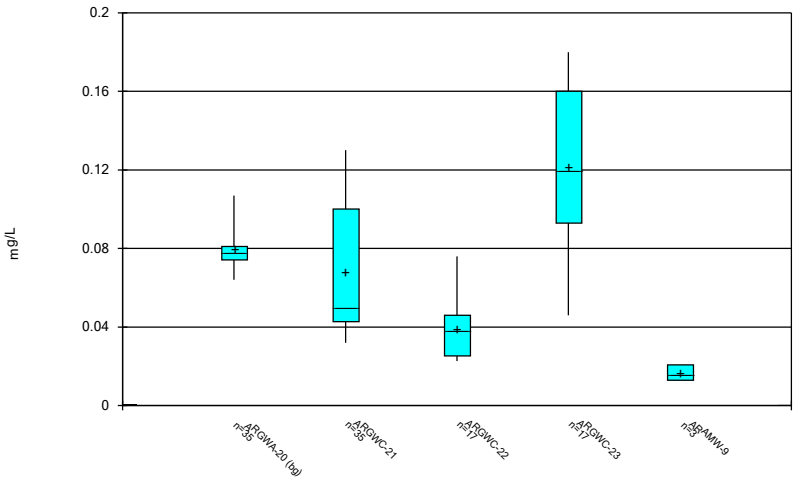
Box & Whiskers Plot



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Plant Arkwright Client: Southern Company Data: Arkwright No 2

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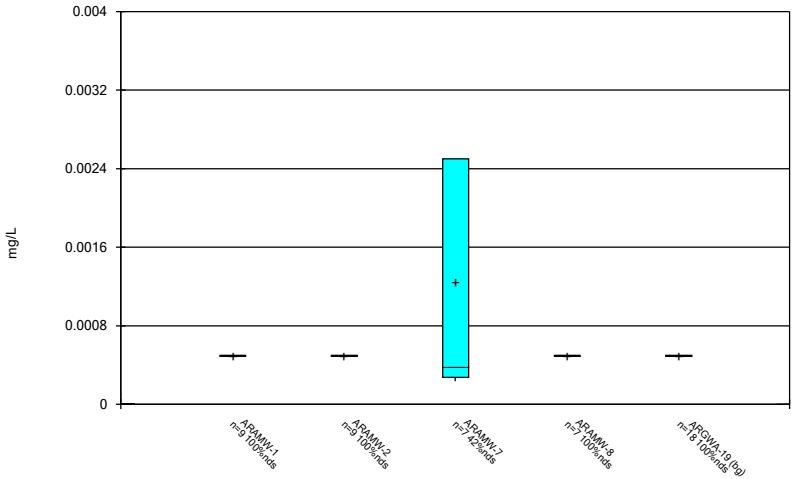
Box & Whiskers Plot



Constituent: Beryllium Analysis Run 3/5/2024 1:12 PM View: Descriptive
Plant Arkwright Client: Southern Company Data: Arkwright No 2

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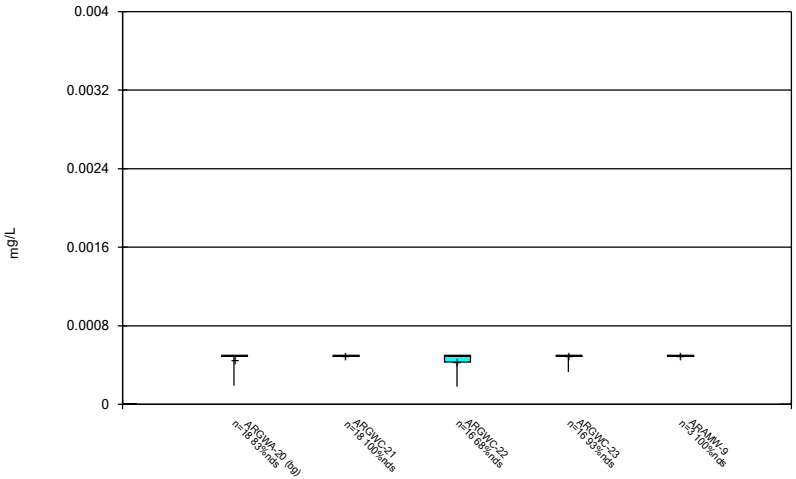
Box & Whiskers Plot



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Plant Arkwright Client: Southern Company Data: Arkwright No 2

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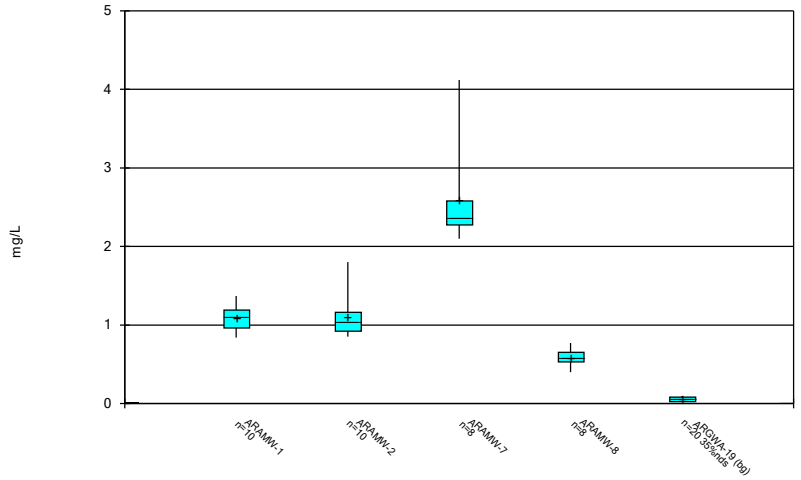
Box & Whiskers Plot



Constituent: Boron Analysis Run 3/5/2024 1:12 PM View: Descriptive
Plant Arkwright Client: Southern Company Data: Arkwright No 2

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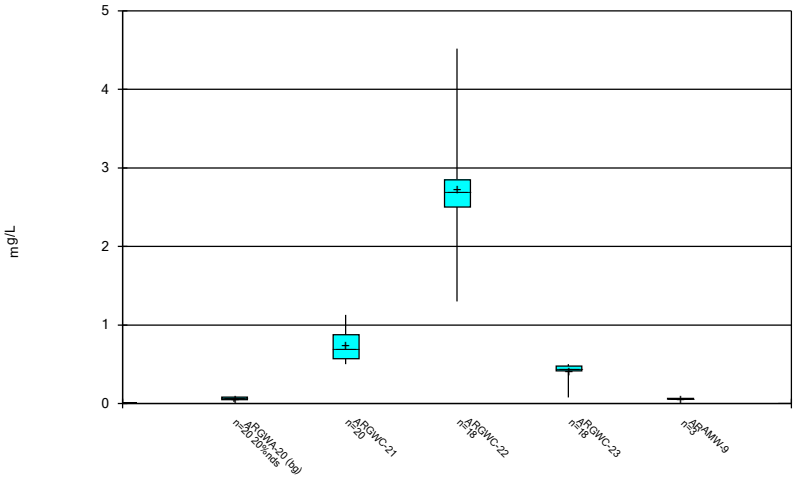
Box & Whiskers Plot



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Plant Arkwright Client: Southern Company Data: Arkwright No 2

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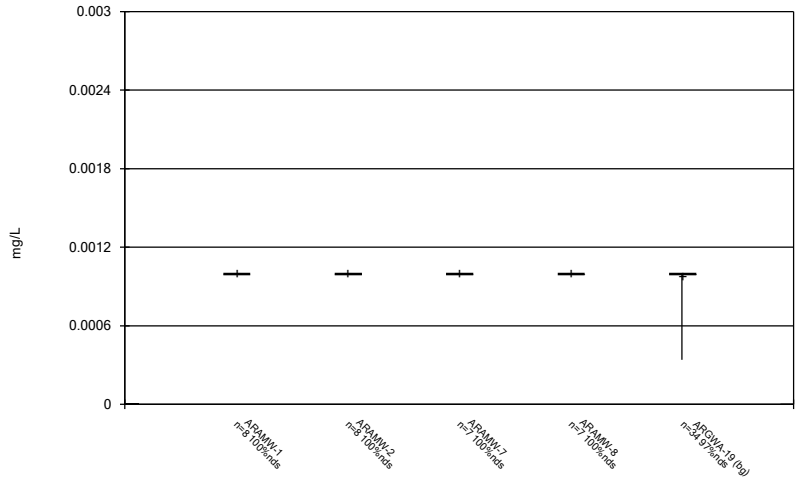
Box & Whiskers Plot



Constituent: Cadmium Analysis Run 3/5/2024 1:12 PM View: Descriptive
Plant Arkwright Client: Southern Company Data: Arkwright No 2

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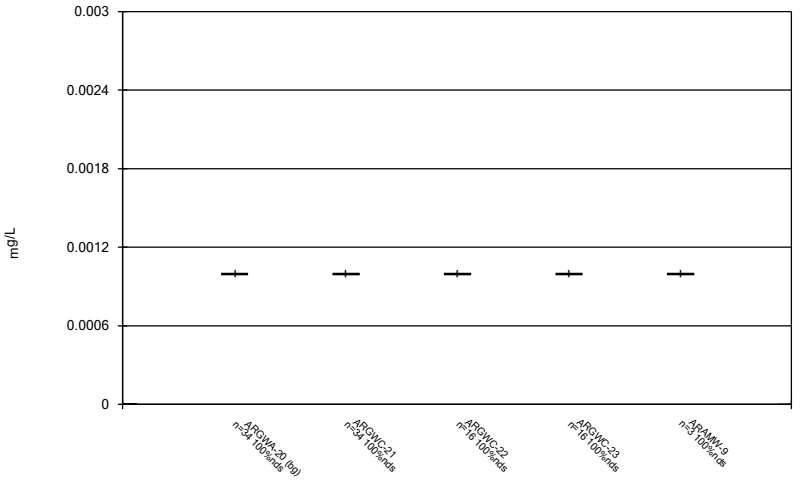
Box & Whiskers Plot



Constituent: Cadmium Analysis Run 3/5/2024 1:12 PM View: Descriptive
Plant Arkwright Client: Southern Company Data: Arkwright No 2

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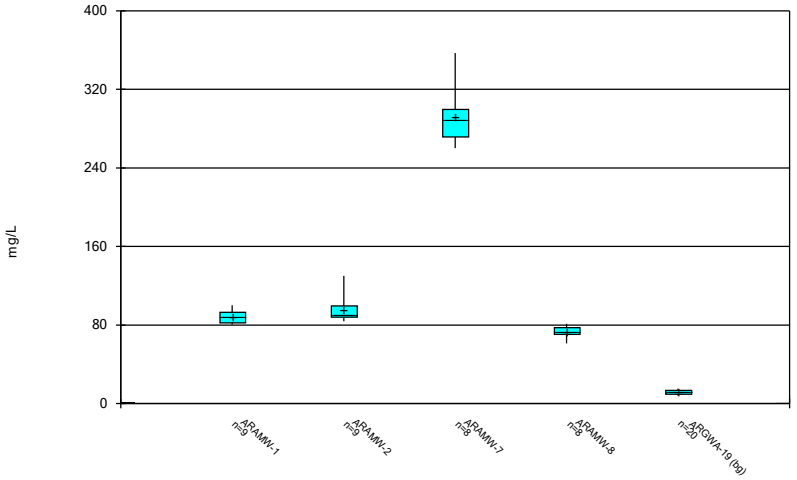
Box & Whiskers Plot



Constituent: Calcium Analysis Run 3/5/2024 1:12 PM View: Descriptive
Plant Arkwright Client: Southern Company Data: Arkwright No 2

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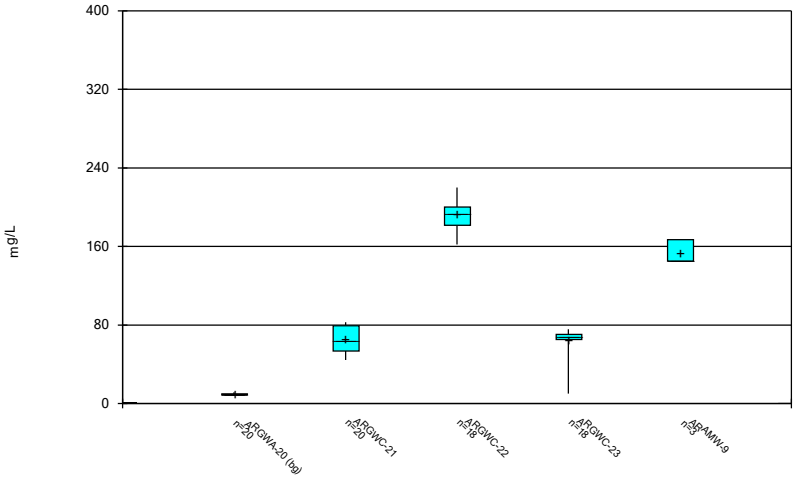
Box & Whiskers Plot



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Plant Arkwright Client: Southern Company Data: Arkwright No 2

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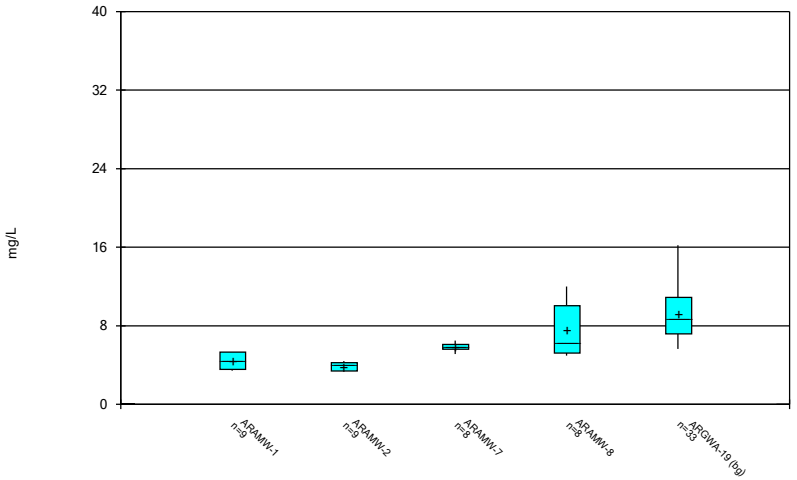
Box & Whiskers Plot



Constituent: Chloride Analysis Run 3/5/2024 1:12 PM View: Descriptive
Plant Arkwright Client: Southern Company Data: Arkwright No 2

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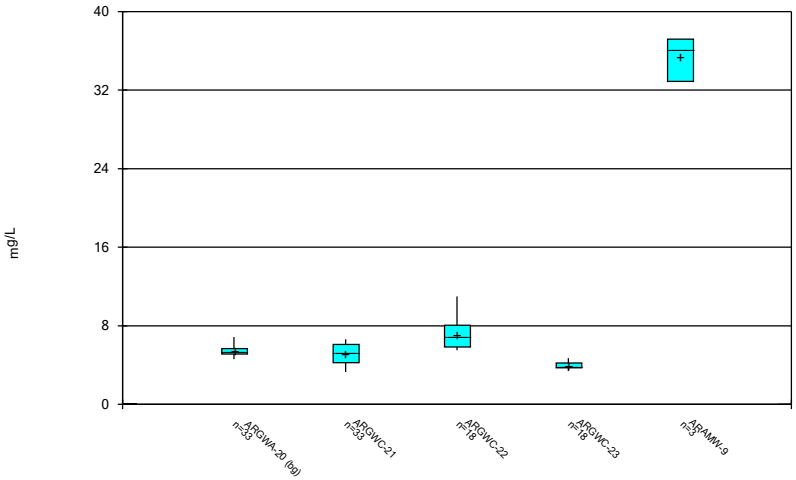
Box & Whiskers Plot



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Plant Arkwright Client: Southern Company Data: Arkwright No 2

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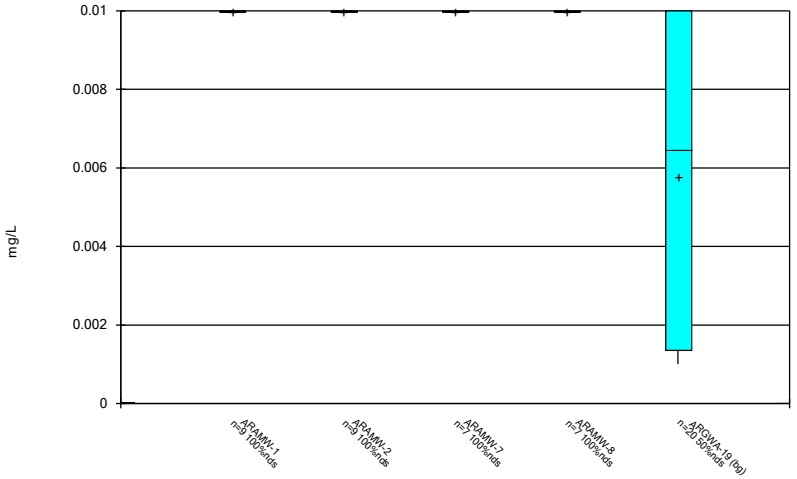
Box & Whiskers Plot



Constituent: Chromium Analysis Run 3/5/2024 1:12 PM View: Descriptive
Plant Arkwright Client: Southern Company Data: Arkwright No 2

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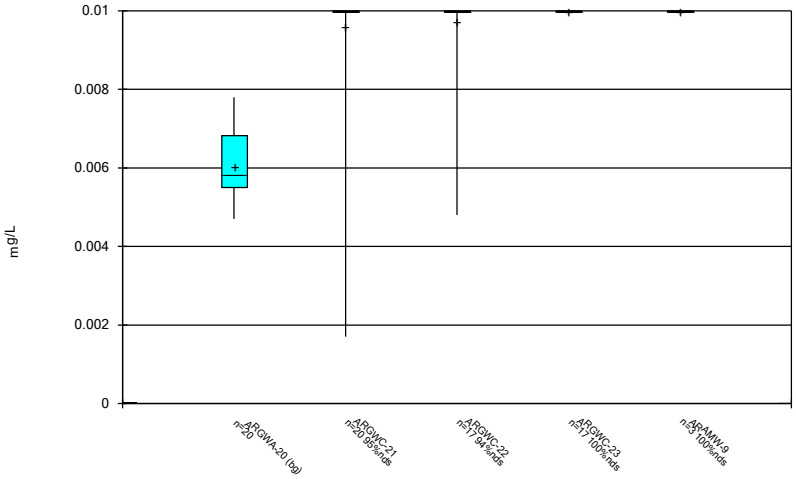
Box & Whiskers Plot



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Plant Arkwright Client: Southern Company Data: Arkwright No 2

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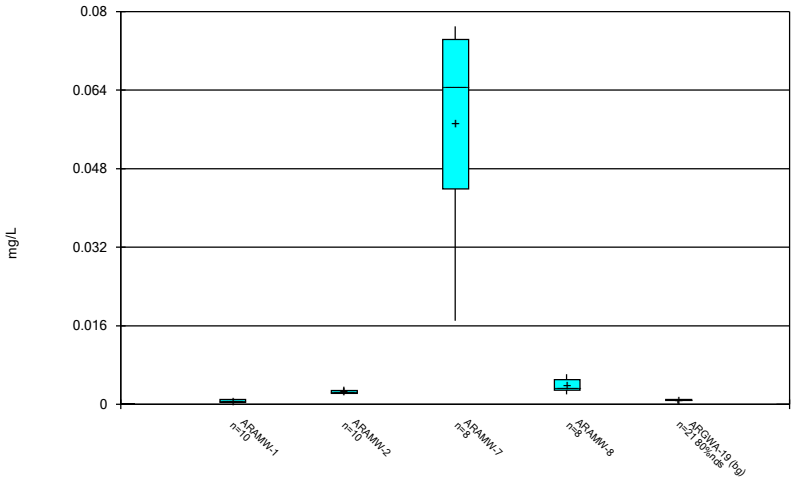
Box & Whiskers Plot



Constituent: Cobalt Analysis Run 3/5/2024 1:12 PM View: Descriptive
Plant Arkwright Client: Southern Company Data: Arkwright No 2

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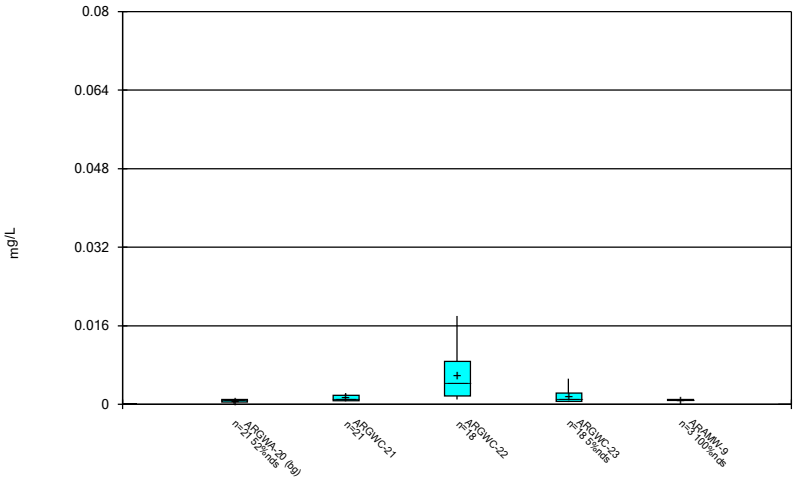
Box & Whiskers Plot



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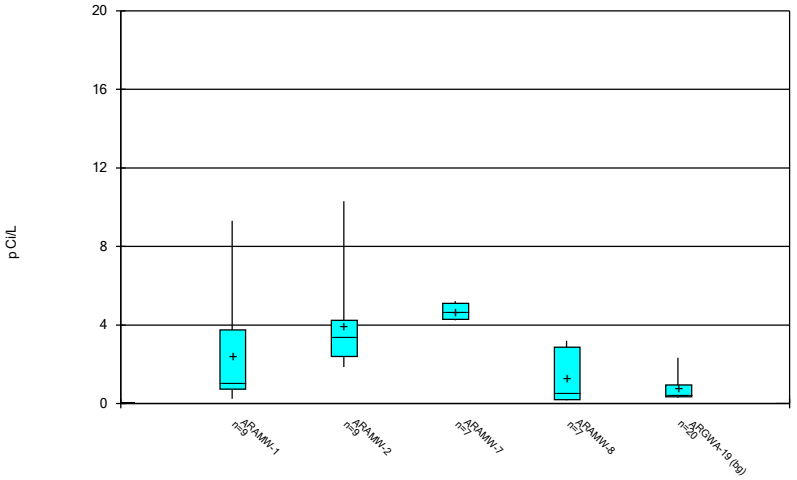
Box & Whiskers Plot



Constituent: Combined Radium 226 + 228 Analysis Run 3/5/2024 1:12 PM View: Descriptive
Plant Arkwright Client: Southern Company Data: Arkwright No 2

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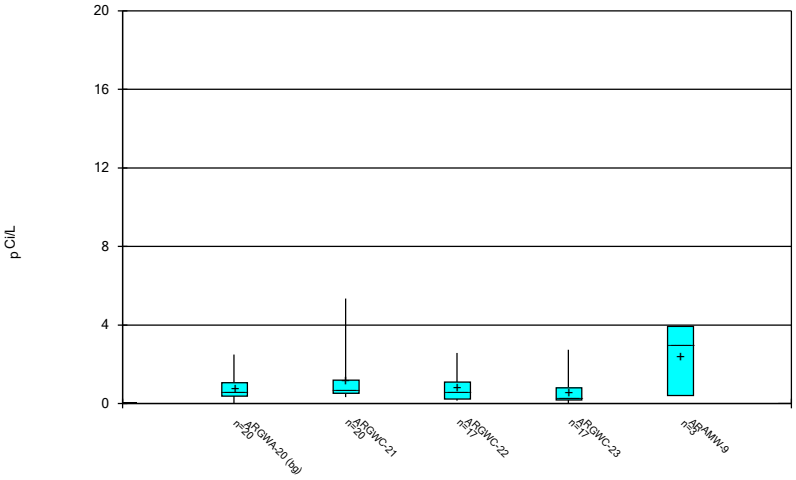
Box & Whiskers Plot



Constituent: Combined Radium 226 + 228 Analysis Run 3/5/2024 1:12 PM View: Descriptive
Plant Arkwright Client: Southern Company Data: Arkwright No 2

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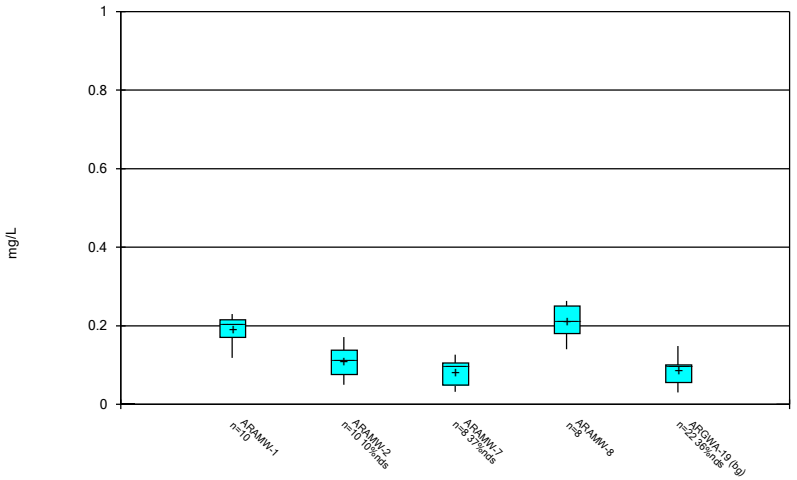
Box & Whiskers Plot



Constituent: Fluoride Analysis Run 3/5/2024 1:12 PM View: Descriptive
Plant Arkwright Client: Southern Company Data: Arkwright No 2

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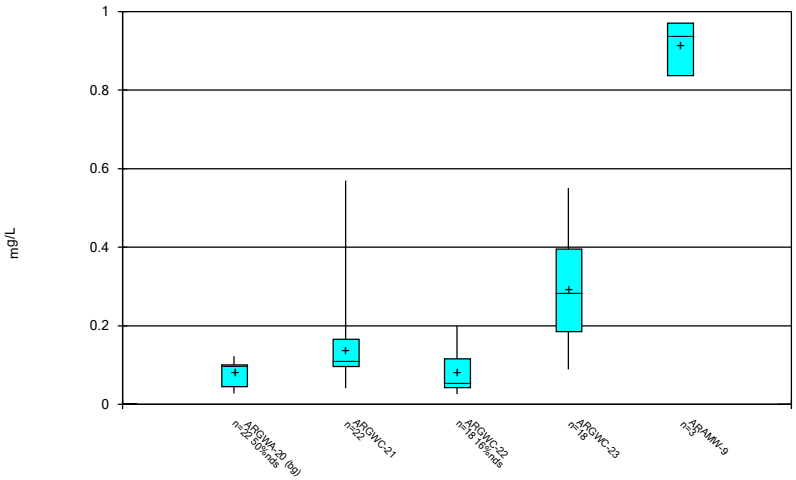
Box & Whiskers Plot



Constituent: Fluoride Analysis Run 3/5/2024 1:12 PM View: Descriptive
Plant Arkwright Client: Southern Company Data: Arkwright No 2

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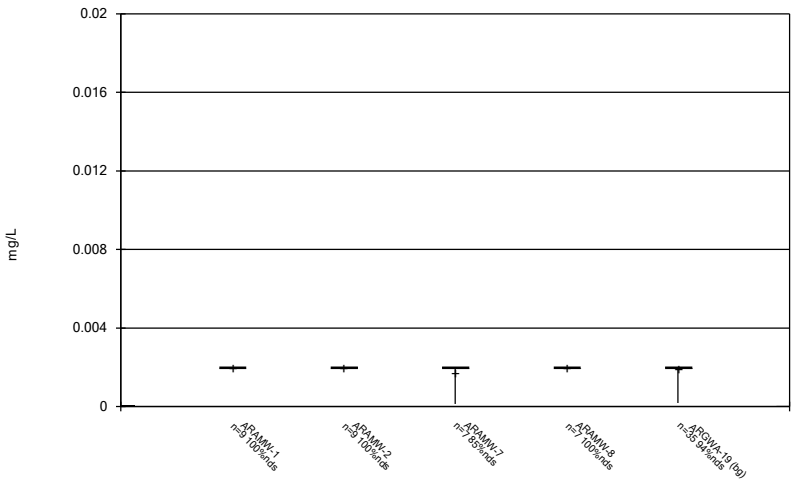

Constituent: Lead Analysis Run 3/5/2024 1:12 PM View: Descriptive
Plant Arkwright Client: Southern Company Data: Arkwright No 2

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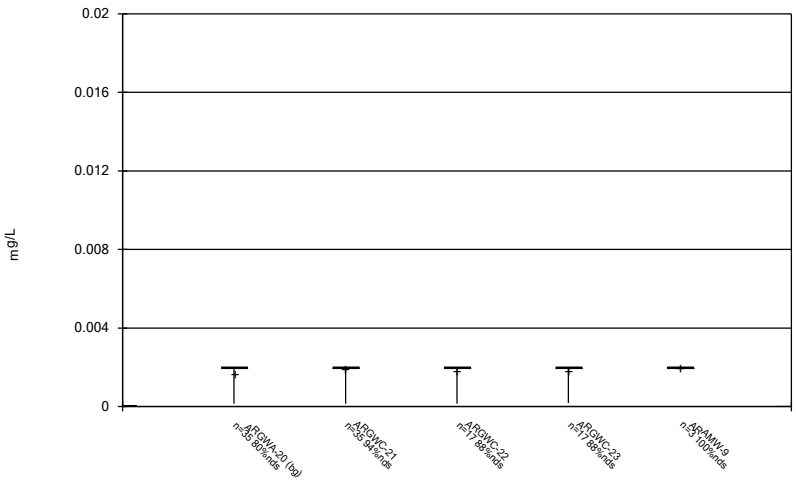
Box & Whiskers Plot



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Plant Arkwright Client: Southern Company Data: Arkwright No 2

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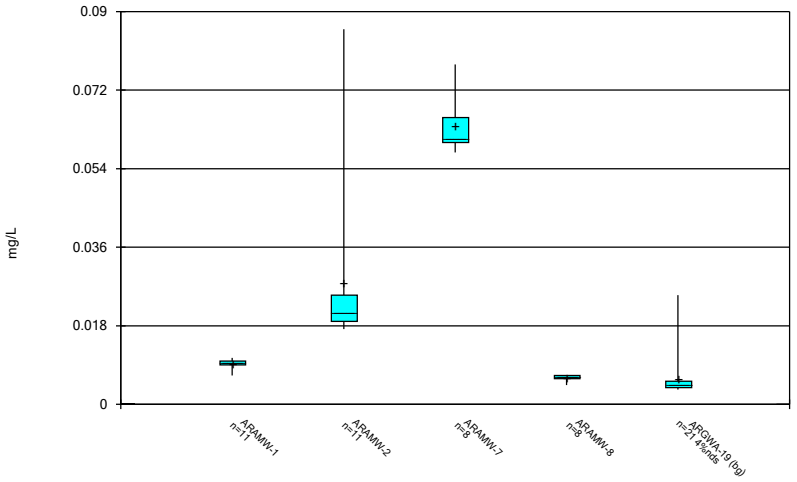

Constituent: Lithium Analysis Run 3/5/2024 1:12 PM View: Descriptive
Plant Arkwright Client: Southern Company Data: Arkwright No 2

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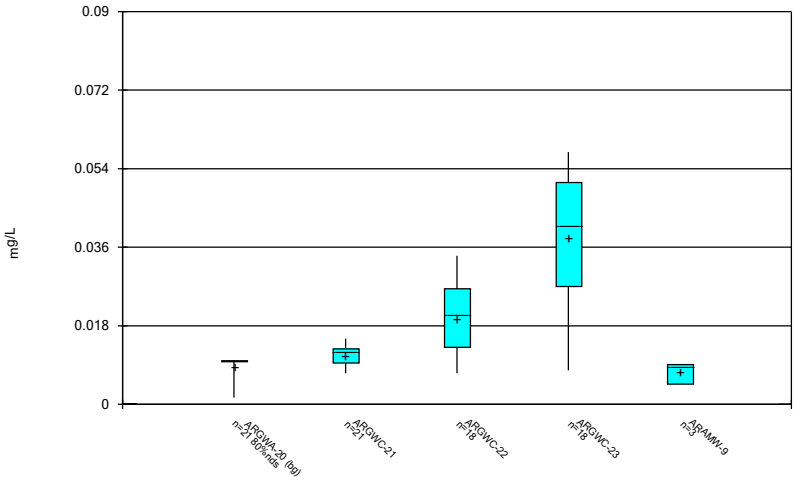
Box & Whiskers Plot



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Plant Arkwright Client: Southern Company Data: Arkwright No 2

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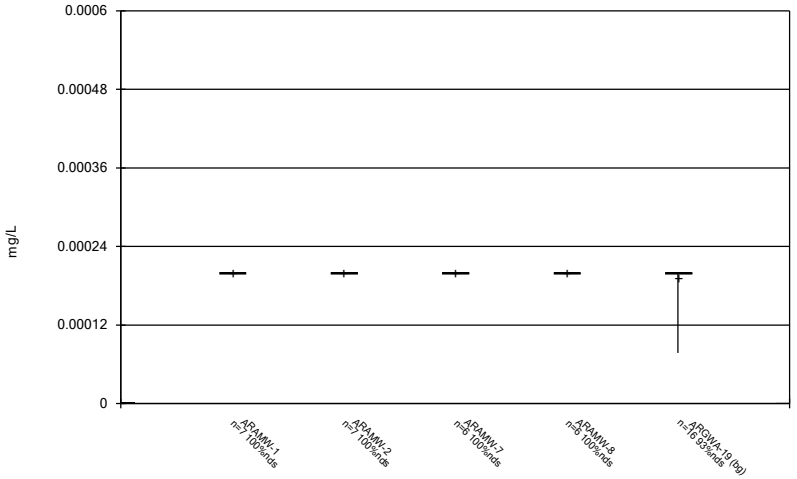

Constituent: Mercury Analysis Run 3/5/2024 1:12 PM View: Descriptive
Plant Arkwright Client: Southern Company Data: Arkwright No 2

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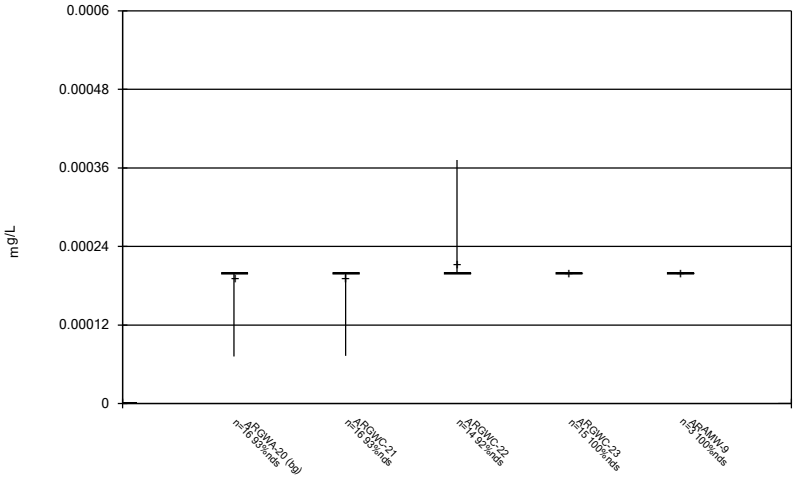
Box & Whiskers Plot



Constituent: Mercury Analysis Run 3/5/2024 1:12 PM View: Descriptive
Plant Arkwright Client: Southern Company Data: Arkwright No 2

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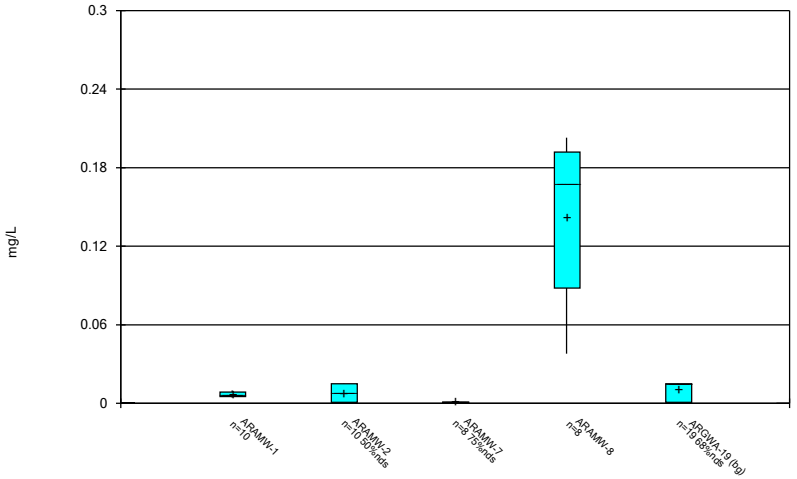
Box & Whiskers Plot



Constituent: Molybdenum Analysis Run 3/5/2024 1:12 PM View: Descriptive
Plant Arkwright Client: Southern Company Data: Arkwright No 2

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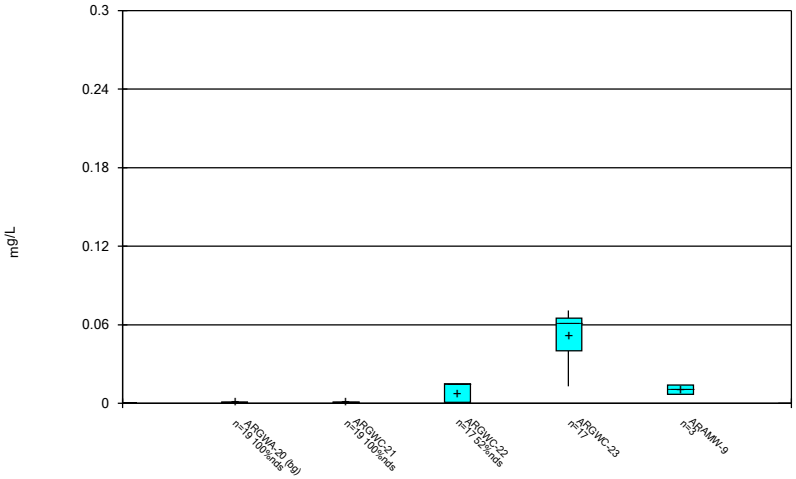
Box & Whiskers Plot



Constituent: Molybdenum Analysis Run 3/5/2024 1:12 PM View: Descriptive
Plant Arkwright Client: Southern Company Data: Arkwright No 2

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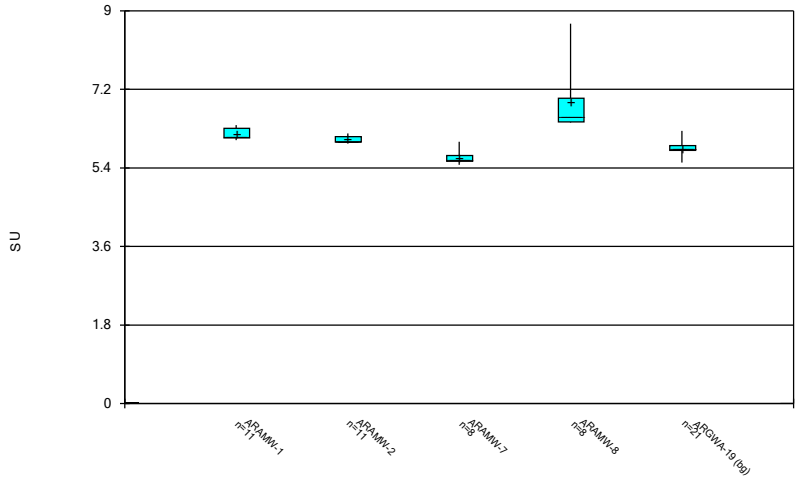
Box & Whiskers Plot



Constituent: pH Analysis Run 3/5/2024 1:12 PM View: Descriptive
Plant Arkwright Client: Southern Company Data: Arkwright No 2

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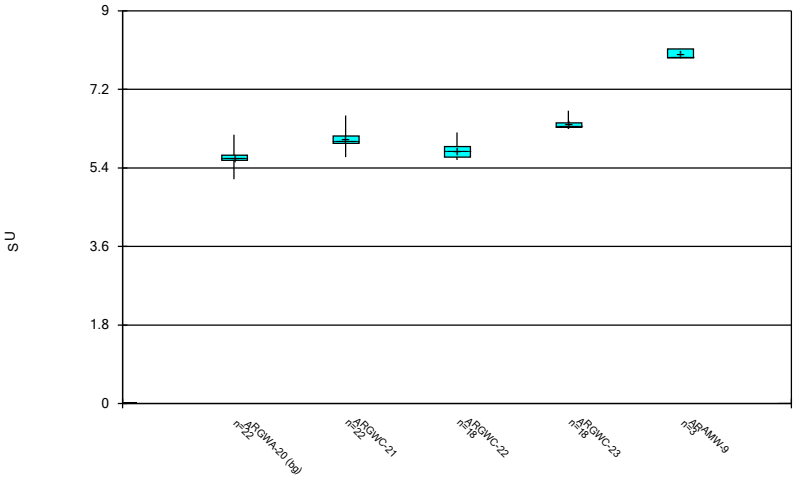
Box & Whiskers Plot



Constituent: pH Analysis Run 3/5/2024 1:12 PM View: Descriptive
Plant Arkwright Client: Southern Company Data: Arkwright No 2

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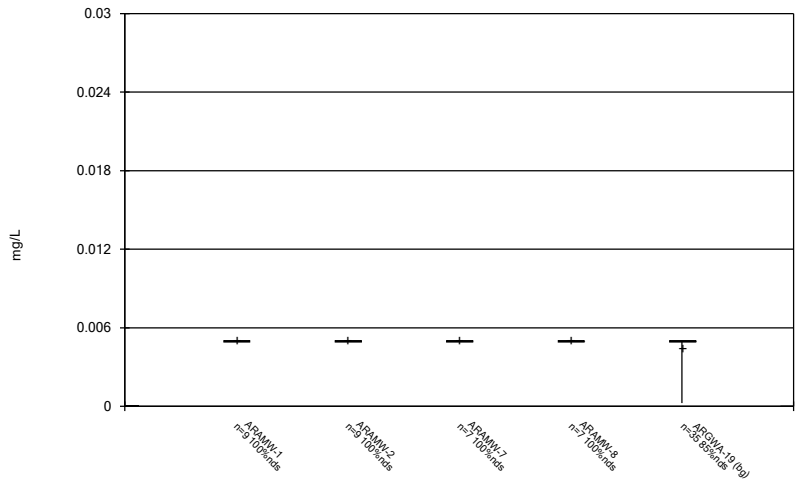
Box & Whiskers Plot



Constituent: Selenium Analysis Run 3/5/2024 1:12 PM View: Descriptive
Plant Arkwright Client: Southern Company Data: Arkwright No 2

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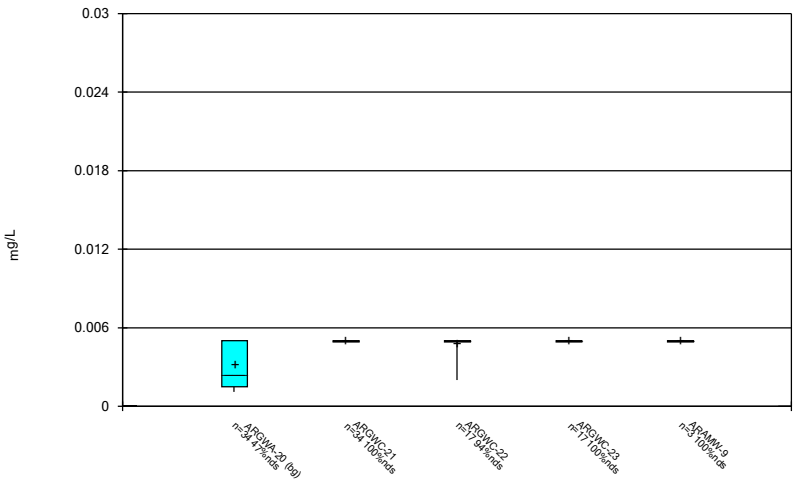
Box & Whiskers Plot



Constituent: Selenium Analysis Run 3/5/2024 1:12 PM View: Descriptive
Plant Arkwright Client: Southern Company Data: Arkwright No 2

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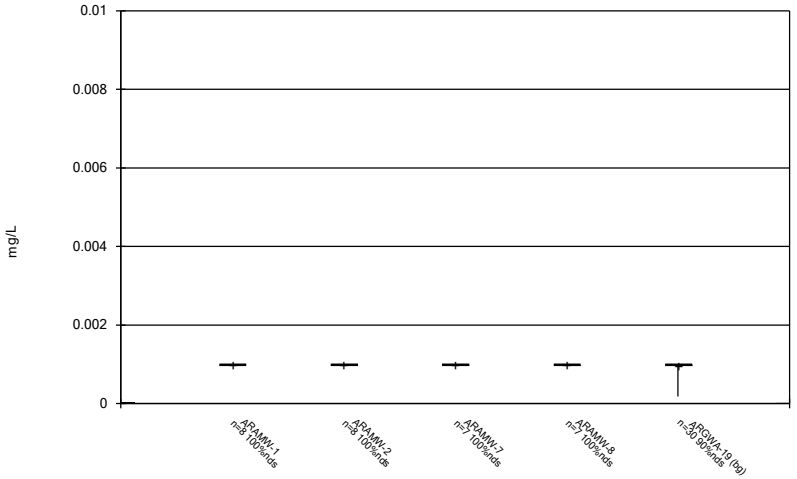
Box & Whiskers Plot



Constituent: Silver Analysis Run 3/5/2024 1:12 PM View: Descriptive
Plant Arkwright Client: Southern Company Data: Arkwright No 2

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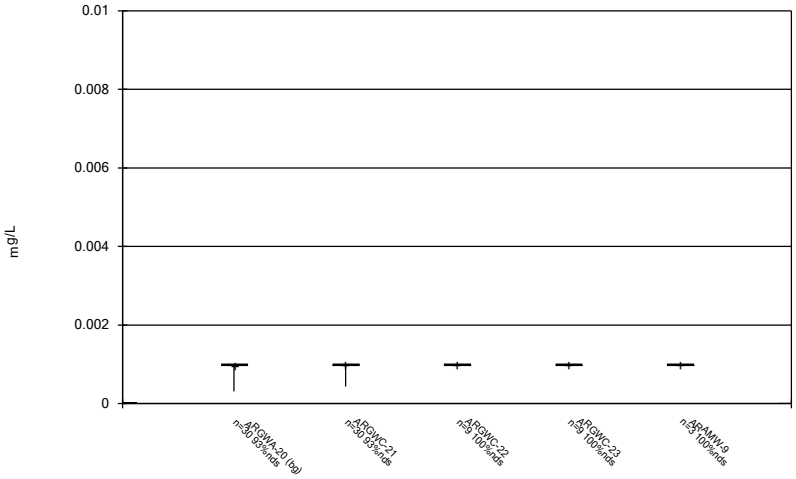
Box & Whiskers Plot



Constituent: Silver Analysis Run 3/5/2024 1:12 PM View: Descriptive
Plant Arkwright Client: Southern Company Data: Arkwright No 2

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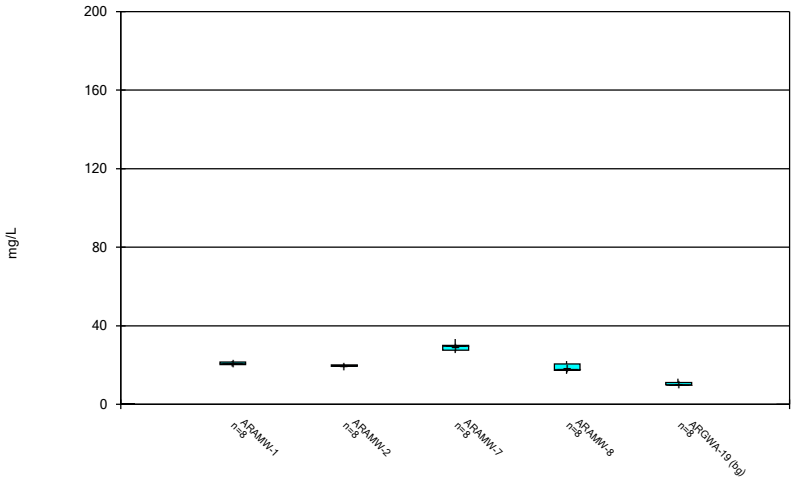
Box & Whiskers Plot



Constituent: Sodium Analysis Run 3/5/2024 1:12 PM View: Descriptive
Plant Arkwright Client: Southern Company Data: Arkwright No 2

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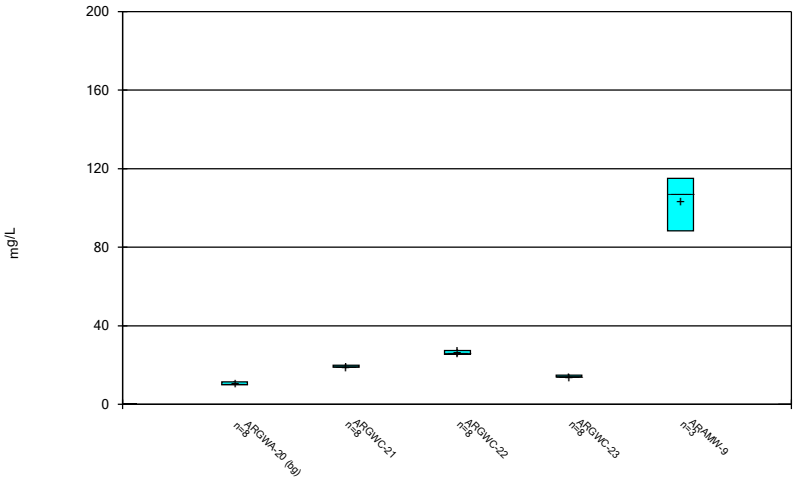
Box & Whiskers Plot



Constituent: Sodium Analysis Run 3/5/2024 1:13 PM View: Descriptive
Plant Arkwright Client: Southern Company Data: Arkwright No 2

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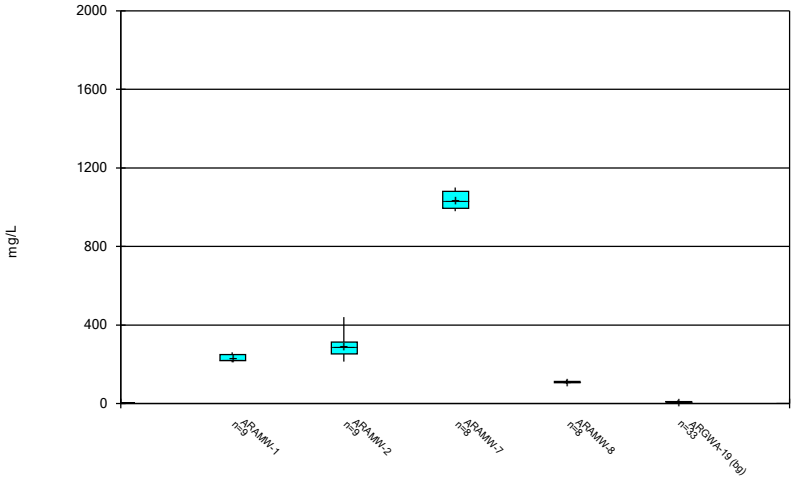
Box & Whiskers Plot



Constituent: Sulfate Analysis Run 3/5/2024 1:13 PM View: Descriptive
Plant Arkwright Client: Southern Company Data: Arkwright No 2

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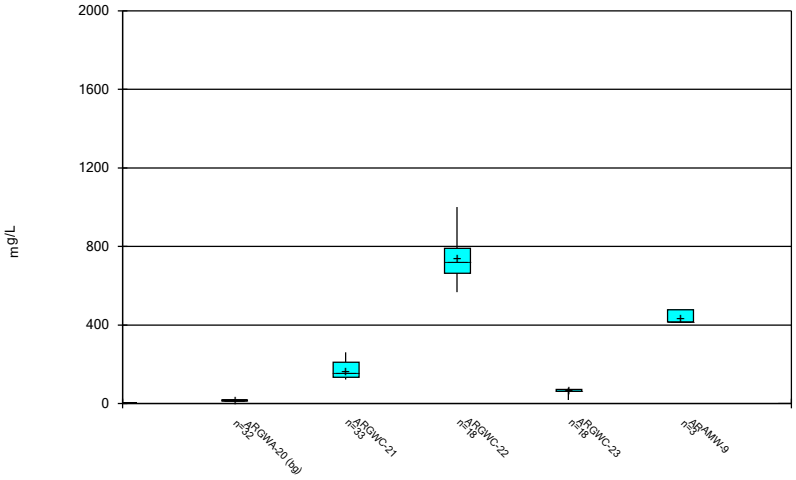
Box & Whiskers Plot



Constituent: Sulfate Analysis Run 3/5/2024 1:13 PM View: Descriptive
Plant Arkwright Client: Southern Company Data: Arkwright No 2

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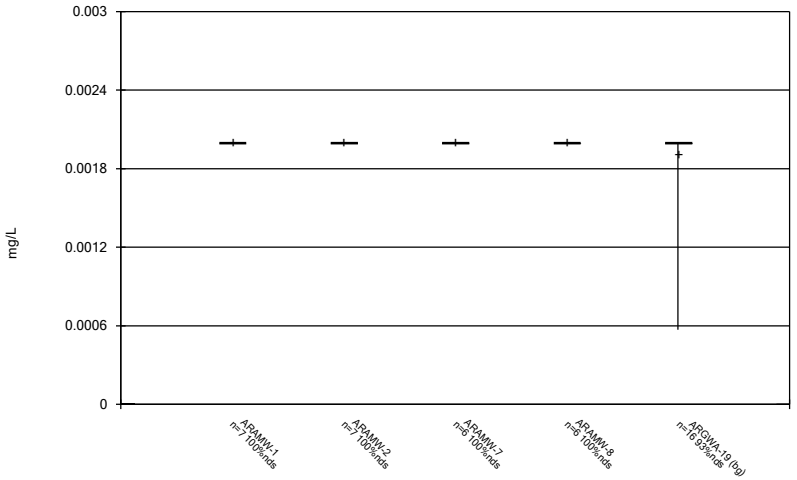
Box & Whiskers Plot



Constituent: Thallium Analysis Run 3/5/2024 1:13 PM View: Descriptive
Plant Arkwright Client: Southern Company Data: Arkwright No 2

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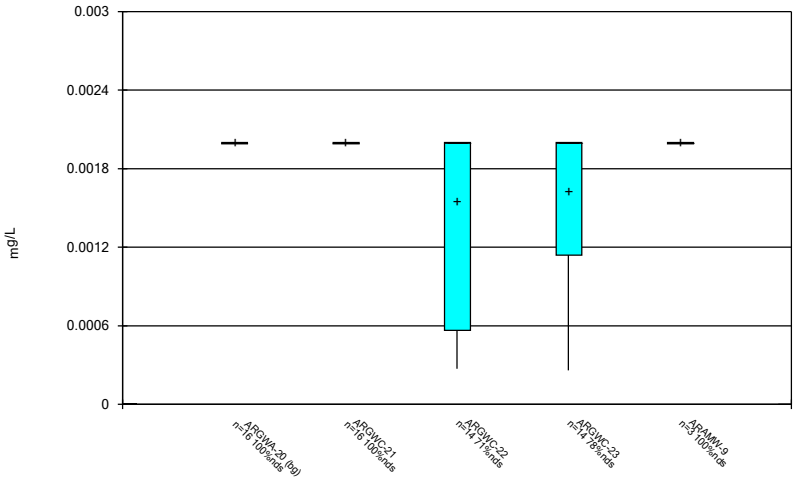
Box & Whiskers Plot



Constituent: Thallium Analysis Run 3/5/2024 1:13 PM View: Descriptive
Plant Arkwright Client: Southern Company Data: Arkwright No 2

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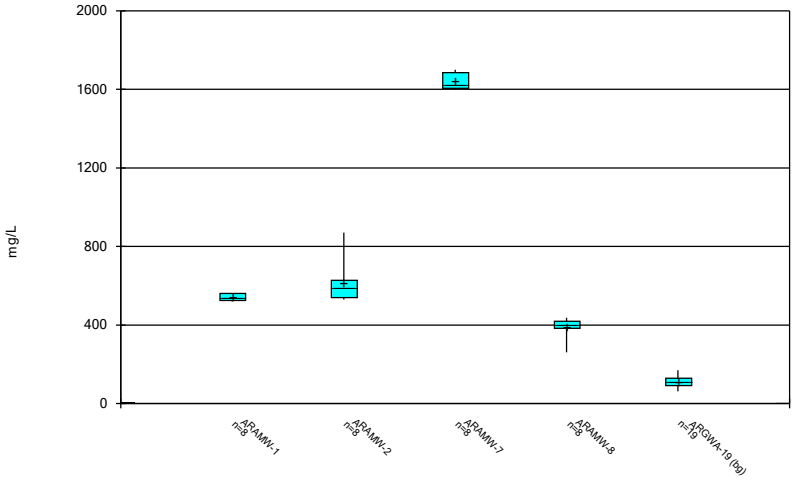
Box & Whiskers Plot



Constituent: Total Dissolved Solids Analysis Run 3/5/2024 1:13 PM View: Descriptive
Plant Arkwright Client: Southern Company Data: Arkwright No 2

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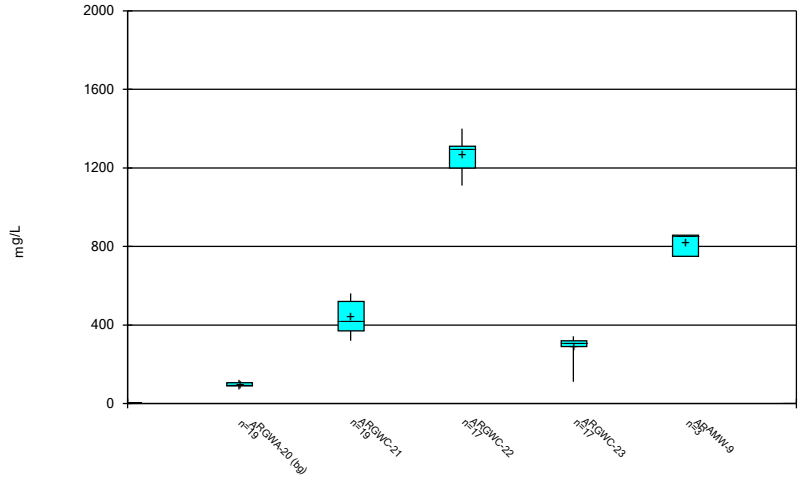
Box & Whiskers Plot



Constituent: Total Dissolved Solids Analysis Run 3/5/2024 1:13 PM 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 3/5/2024, 1:15 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.

Appendix I Interwell Prediction Limits - All Results (No Significant)

Plant Arkwright Client: Southern Company Data: Arkwright No 2 Printed 3/5/2024, 12:50 PM

Constituent	Well	Upper Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Arsenic (mg/L)	ARGWC-21	0.005	1/24/2024	0.005ND	No	70	n/a	n/a	87.14	n/a	n/a	0.0003894	NP Inter (NDs) 1 of 2
Arsenic (mg/L)	ARGWC-22	0.005	1/23/2024	0.005ND	No	70	n/a	n/a	87.14	n/a	n/a	0.0003894	NP Inter (NDs) 1 of 2
Arsenic (mg/L)	ARGWC-23	0.005	1/24/2024	0.005ND	No	70	n/a	n/a	87.14	n/a	n/a	0.0003894	NP Inter (NDs) 1 of 2
Barium (mg/L)	ARGWC-21	0.107	1/24/2024	0.0427	No	70	n/a	n/a	0	n/a	n/a	0.0003894	NP Inter (normality) 1 of 2
Barium (mg/L)	ARGWC-22	0.107	1/23/2024	0.0227	No	70	n/a	n/a	0	n/a	n/a	0.0003894	NP Inter (normality) 1 of 2
Barium (mg/L)	ARGWC-23	0.107	1/24/2024	0.0922	No	70	n/a	n/a	0	n/a	n/a	0.0003894	NP Inter (normality) 1 of 2
Lead (mg/L)	ARGWC-21	0.002	1/24/2024	0.002ND	No	70	n/a	n/a	87.14	n/a	n/a	0.0003894	NP Inter (NDs) 1 of 2
Lead (mg/L)	ARGWC-22	0.002	1/23/2024	0.002ND	No	70	n/a	n/a	87.14	n/a	n/a	0.0003894	NP Inter (NDs) 1 of 2
Lead (mg/L)	ARGWC-23	0.002	1/24/2024	0.002ND	No	70	n/a	n/a	87.14	n/a	n/a	0.0003894	NP Inter (NDs) 1 of 2
Selenium (mg/L)	ARGWC-22	0.005	1/23/2024	0.005ND	No	69	n/a	n/a	66.67	n/a	n/a	0.000403	NP Inter (NDs) 1 of 2
Silver (mg/L)	ARGWC-21	0.001	1/24/2024	0.001ND	No	60	n/a	n/a	91.67	n/a	n/a	0.0005253	NP Inter (NDs) 1 of 2

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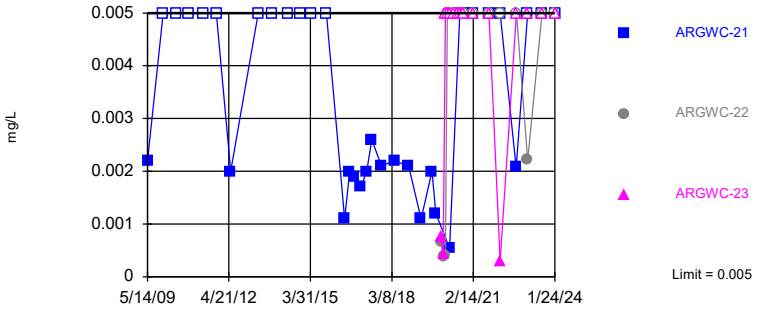
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 70 background values. 87.14% NDs. Annual per-constituent alpha = 0.002334. Individual comparison alpha = 0.0003894 (1 of 2). Comparing 3 points to limit.

Constituent: Arsenic Analysis Run 3/5/2024 12:49 PM View: PLs Appendix I

Plant Arkwright Client: Southern Company Data: Arkwright No 2

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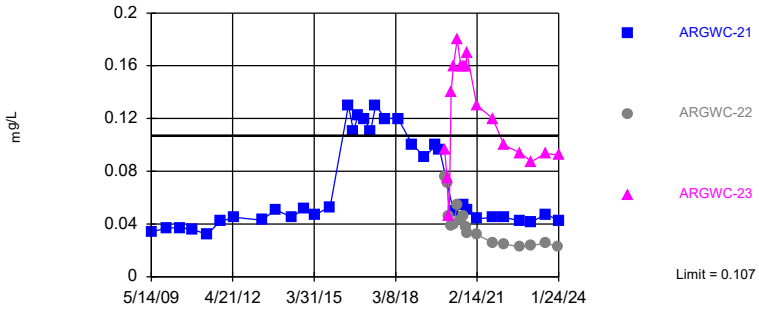
Within Limit

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 70 background values. Annual per-constituent alpha = 0.002334. Individual comparison alpha = 0.0003894 (1 of 2). Comparing 3 points to limit.

Constituent: Barium Analysis Run 3/5/2024 12:49 PM View: PLs Appendix I

Plant Arkwright Client: Southern Company Data: Arkwright No 2

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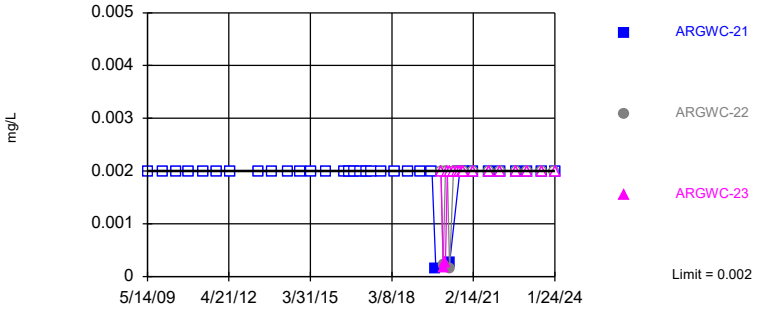
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 70 background values. 87.14% NDs. Annual per-constituent alpha = 0.002334. Individual comparison alpha = 0.0003894 (1 of 2). Comparing 3 points to limit.

Constituent: Lead Analysis Run 3/5/2024 12:49 PM View: PLs Appendix I

Plant Arkwright Client: Southern Company Data: Arkwright No 2

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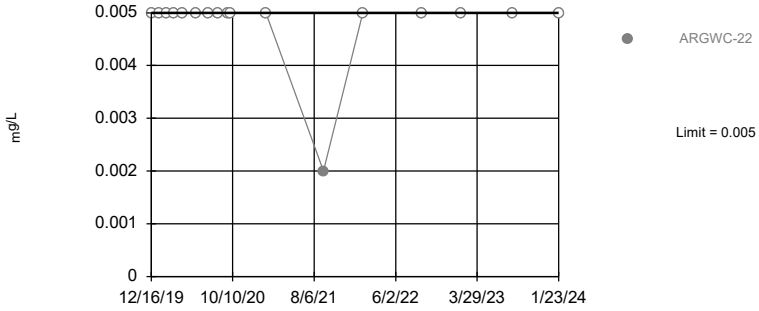
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 69 background values. 66.67% NDs. Annual per-constituent alpha = 0.002415. Individual comparison alpha = 0.000403 (1 of 2). Assumes 2 future values.

Constituent: Selenium Analysis Run 3/5/2024 12:49 PM View: PLs Appendix I

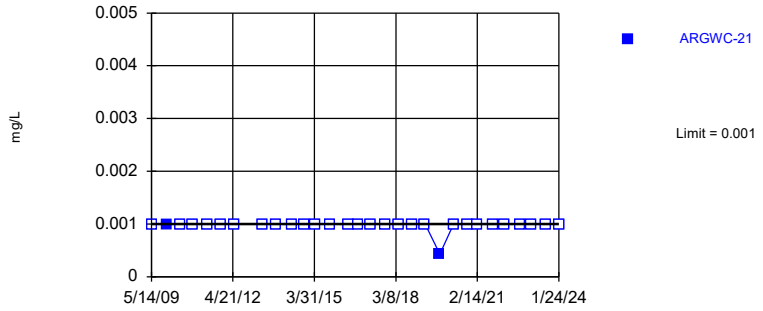
Plant Arkwright Client: Southern Company Data: Arkwright No 2

Sanitas™ v.10.0.15d Software licensed to Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 60 background values. 91.67% NDs. Annual per-constituent alpha = 0.003148. Individual comparison alpha = 0.0005253 (1 of 2). Assumes 2 future values.

Constituent: Silver Analysis Run 3/5/2024 12:49 PM View: PLs Appendix I

Plant Arkwright Client: Southern Company Data: Arkwright No 2

Prediction Limit

Constituent: Arsenic (mg/L) Analysis Run 3/5/2024 12:50 PM View: PLs Appendix I

Plant Arkwright Client: Southern Company Data: Arkwright No 2

	ARGWA-19 (bg)	ARGWC-21	ARGWA-20 (bg)	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	0.002 (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				0.00066 (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

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Arsenic (mg/L) Analysis Run 3/5/2024 12:50 PM View: PLs Appendix I

Plant Arkwright Client: Southern Company Data: Arkwright No 2

	ARGWA-19 (bg)	ARGWC-21	ARGWA-20 (bg)	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		
1/23/2024	<0.005		<0.005	<0.005	
1/24/2024		<0.005			<0.005

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Barium (mg/L) Analysis Run 3/5/2024 12:50 PM View: PLs Appendix I

Plant Arkwright Client: Southern Company Data: Arkwright No 2

	ARGWA-19 (bg)	ARGWC-21	ARGWA-20 (bg)	ARGWC-22	ARGWC-23
5/5/2009	0.057				
5/14/2009		0.034			
5/15/2009			0.1		
12/5/2009	0.05	0.037	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				0.076	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

Prediction Limit

Constituent: Barium (mg/L) Analysis Run 3/5/2024 12:50 PM View: PLs Appendix I

Plant Arkwright Client: Southern Company Data: Arkwright No 2

	ARGWA-19 (bg)	ARGWC-21	ARGWA-20 (bg)	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		0.045	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				0.0226	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		
1/23/2024	0.0348		0.0978	0.0227	
1/24/2024		0.0427			0.0922

Prediction Limit

Constituent: Lead (mg/L) Analysis Run 3/5/2024 12:50 PM View: PLs Appendix I

Plant Arkwright Client: Southern Company Data: Arkwright No 2

	ARGWA-19 (bg)	ARGWC-21	ARGWA-20 (bg)	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	<0.002	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				0.00022 (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

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Lead (mg/L) Analysis Run 3/5/2024 12:50 PM View: PLs Appendix I

Plant Arkwright Client: Southern Company Data: Arkwright No 2

	ARGWA-19 (bg)	ARGWC-21	ARGWA-20 (bg)	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		<0.002	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		
1/23/2024	<0.002		<0.002	<0.002	
1/24/2024		<0.002			<0.002

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Selenium (mg/L) Analysis Run 3/5/2024 12:50 PM View: PLs Appendix I

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

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Selenium (mg/L) Analysis Run 3/5/2024 12:50 PM View: PLs Appendix I

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	
1/23/2024	<0.005	<0.005	<0.005

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Silver (mg/L) Analysis Run 3/5/2024 12:50 PM View: PLs Appendix 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
1/23/2024	<0.001		<0.001
1/24/2024		<0.001	

ND substitution: RL or RL/2 if <15% NDs.

FIGURE E.

Appendix III Interwell Prediction Limits - Significant Results

Plant Arkwright Client: Southern Company Data: Arkwright No 2 Printed 3/5/2024, 12:59 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Boron (mg/L)	**ARGWC-21**	**0.092**	**n/a**	**1/24/2024**	**1.13**	**Yes**	**40**	**n/a**	**n/a**	**27.5**	**n/a**	**n/a**	**0.001146**	**NP Inter (normality) 1 of 2**
Boron (mg/L)	**ARGWC-22**	**0.092**	**n/a**	**1/23/2024**	**4.52**	**Yes**	**40**	**n/a**	**n/a**	**27.5**	**n/a**	**n/a**	**0.001146**	**NP Inter (normality) 1 of 2**
Boron (mg/L)	**ARGWC-23**	**0.092**	**n/a**	**1/24/2024**	**0.456**	**Yes**	**40**	**n/a**	**n/a**	**27.5**	**n/a**	**n/a**	**0.001146**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	**ARGWC-21**	**13.9**	**n/a**	**1/24/2024**	**82.6**	**Yes**	**40**	**3.222**	**0.2894**	**0**	**None**	**sqrt(x)**	**0.002505**	**Param Inter 1 of 2**
Calcium (mg/L)	**ARGWC-22**	**13.9**	**n/a**	**1/23/2024**	**183**	**Yes**	**40**	**3.222**	**0.2894**	**0**	**None**	**sqrt(x)**	**0.002505**	**Param Inter 1 of 2**
Calcium (mg/L)	**ARGWC-23**	**13.9**	**n/a**	**1/24/2024**	**75.6**	**Yes**	**40**	**3.222**	**0.2894**	**0**	**None**	**sqrt(x)**	**0.002505**	**Param Inter 1 of 2**
Fluoride (mg/L)	**ARGWC-21**	**0.148**	**n/a**	**1/24/2024**	**0.173**	**Yes**	**44**	**n/a**	**n/a**	**43.18**	**n/a**	**n/a**	**0.0009861**	**NP Inter (normality) 1 of 2**
Fluoride (mg/L)	**ARGWC-23**	**0.148**	**n/a**	**1/24/2024**	**0.391**	**Yes**	**44**	**n/a**	**n/a**	**43.18**	**n/a**	**n/a**	**0.0009861**	**NP Inter (normality) 1 of 2**
pH (SU)	**ARGWC-23**	**6.085**	**5.399**	**1/24/2024**	**6.43**	**Yes**	**43**	**5.742**	**0.1969**	**0**	**None**	**No**	**0.001253**	**Param Inter 1 of 2**
Sulfate (mg/L)	**ARGWC-21**	**21**	**n/a**	**1/24/2024**	**219**	**Yes**	**65**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0004573**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	**ARGWC-22**	**21**	**n/a**	**1/23/2024**	**567**	**Yes**	**65**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0004573**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	**ARGWC-23**	**21**	**n/a**	**1/24/2024**	**78.4**	**Yes**	**65**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0004573**	**NP Inter (normality) 1 of 2**
Total Dissolved Solids (mg/L)	**ARGWC-21**	**142.1**	**n/a**	**1/24/2024**	**541**	**Yes**	**38**	**104.8**	**21.21**	**0**	**None**	**No**	**0.002505**	**Param Inter 1 of 2**
Total Dissolved Solids (mg/L)	**ARGWC-22**	**142.1**	**n/a**	**1/23/2024**	**1110**	**Yes**	**38**	**104.8**	**21.21**	**0**	**None**	**No**	**0.002505**	**Param Inter 1 of 2**
Total Dissolved Solids (mg/L)	**ARGWC-23**	**142.1**	**n/a**	**1/24/2024**	**342**	**Yes**	**38**	**104.8**	**21.21**	**0**	**None**	**No**	**0.002505**	**Param Inter 1 of 2**

Appendix III Interwell Prediction Limits - All Results

Plant Arkwright Client: Southern Company Data: Arkwright No 2 Printed 3/5/2024, 12:59 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Boron (mg/L)	**ARGWC-21**	**0.092**	**n/a**	**1/24/2024**	**1.13**	**Yes**	**40**	**n/a**	**n/a**	**27.5**	**n/a**	**n/a**	**0.001146**	**NP Inter (normality) 1 of 2**
Boron (mg/L)	**ARGWC-22**	**0.092**	**n/a**	**1/23/2024**	**4.52**	**Yes**	**40**	**n/a**	**n/a**	**27.5**	**n/a**	**n/a**	**0.001146**	**NP Inter (normality) 1 of 2**
Boron (mg/L)	**ARGWC-23**	**0.092**	**n/a**	**1/24/2024**	**0.456**	**Yes**	**40**	**n/a**	**n/a**	**27.5**	**n/a**	**n/a**	**0.001146**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	**ARGWC-21**	**13.9**	**n/a**	**1/24/2024**	**82.6**	**Yes**	**40**	**3.222**	**0.2894**	**0**	**None**	**sqrt(x)**	**0.002505**	**Param Inter 1 of 2**
Calcium (mg/L)	**ARGWC-22**	**13.9**	**n/a**	**1/23/2024**	**183**	**Yes**	**40**	**3.222**	**0.2894**	**0**	**None**	**sqrt(x)**	**0.002505**	**Param Inter 1 of 2**
Calcium (mg/L)	**ARGWC-23**	**13.9**	**n/a**	**1/24/2024**	**75.6**	**Yes**	**40**	**3.222**	**0.2894**	**0**	**None**	**sqrt(x)**	**0.002505**	**Param Inter 1 of 2**
Chloride (mg/L)	ARGWC-21	16.2	n/a	1/24/2024	3.35	No	66	n/a	n/a	0	n/a	n/a	0.0004437	NP Inter (normality) 1 of 2
Chloride (mg/L)	ARGWC-22	16.2	n/a	1/23/2024	7.31	No	66	n/a	n/a	0	n/a	n/a	0.0004437	NP Inter (normality) 1 of 2
Chloride (mg/L)	ARGWC-23	16.2	n/a	1/24/2024	3.74	No	66	n/a	n/a	0	n/a	n/a	0.0004437	NP Inter (normality) 1 of 2
Fluoride (mg/L)	**ARGWC-21**	**0.148**	**n/a**	**1/24/2024**	**0.173**	**Yes**	**44**	**n/a**	**n/a**	**43.18**	**n/a**	**n/a**	**0.0009861**	**NP Inter (normality) 1 of 2**
Fluoride (mg/L)	ARGWC-22	0.148	n/a	1/23/2024	0.134	No	44	n/a	n/a	43.18	n/a	n/a	0.0009861	NP Inter (normality) 1 of 2
Fluoride (mg/L)	**ARGWC-23**	**0.148**	**n/a**	**1/24/2024**	**0.391**	**Yes**	**44**	**n/a**	**n/a**	**43.18**	**n/a**	**n/a**	**0.0009861**	**NP Inter (normality) 1 of 2**
pH (SU)	ARGWC-21	6.085	5.399	1/24/2024	6.03	No	43	5.742	0.1969	0	None	No	0.001253	Param Inter 1 of 2
pH (SU)	ARGWC-22	6.085	5.399	1/23/2024	5.88	No	43	5.742	0.1969	0	None	No	0.001253	Param Inter 1 of 2
pH (SU)	**ARGWC-23**	**6.085**	**5.399**	**1/24/2024**	**6.43**	**Yes**	**43**	**5.742**	**0.1969**	**0**	**None**	**No**	**0.001253**	**Param Inter 1 of 2**
Sulfate (mg/L)	**ARGWC-21**	**21**	**n/a**	**1/24/2024**	**219**	**Yes**	**65**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0004573**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	**ARGWC-22**	**21**	**n/a**	**1/23/2024**	**567**	**Yes**	**65**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0004573**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	**ARGWC-23**	**21**	**n/a**	**1/24/2024**	**78.4**	**Yes**	**65**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0004573**	**NP Inter (normality) 1 of 2**
Total Dissolved Solids (mg/L)	**ARGWC-21**	**142.1**	**n/a**	**1/24/2024**	**541**	**Yes**	**38**	**104.8**	**21.21**	**0**	**None**	**No**	**0.002505**	**Param Inter 1 of 2**
Total Dissolved Solids (mg/L)	**ARGWC-22**	**142.1**	**n/a**	**1/23/2024**	**1110**	**Yes**	**38**	**104.8**	**21.21**	**0**	**None**	**No**	**0.002505**	**Param Inter 1 of 2**
Total Dissolved Solids (mg/L)	**ARGWC-23**	**142.1**	**n/a**	**1/24/2024**	**342**	**Yes**	**38**	**104.8**	**21.21**	**0**	**None**	**No**	**0.002505**	**Param Inter 1 of 2**

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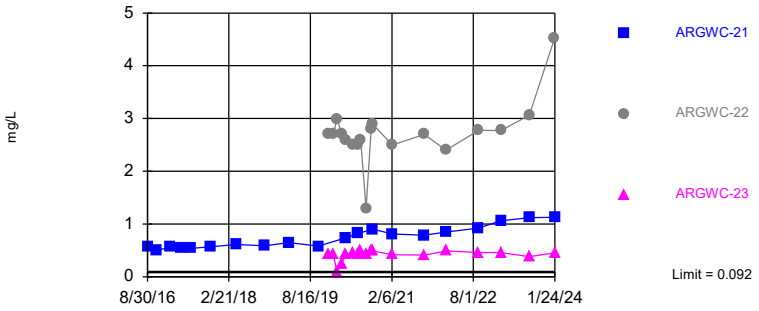
Exceeds Limit: ARGWC-21, ARGWC-22, ARGWC-23

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 40 background values. 27.5% NDs. Annual per-constituent alpha = 0.006854. Individual comparison alpha = 0.001146 (1 of 2). Comparing 3 points to limit.

Constituent: Boron Analysis Run 3/5/2024 12:58 PM View: Pls Appendix III

Plant Arkwright Client: Southern Company Data: Arkwright No 2

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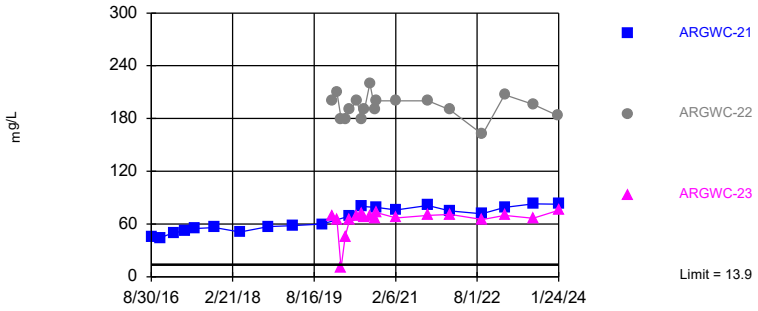
Exceeds Limit: ARGWC-21, ARGWC-22, ARGWC-23

Prediction Limit

Interwell Parametric



Background Data Summary (based on square root transformation): Mean=3.222, Std. Dev.=0.2894, n=40. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9287, critical = 0.919. Kappa = 1.75 (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 3/5/2024 12:58 PM View: Pls Appendix III

Plant Arkwright Client: Southern Company Data: Arkwright No 2

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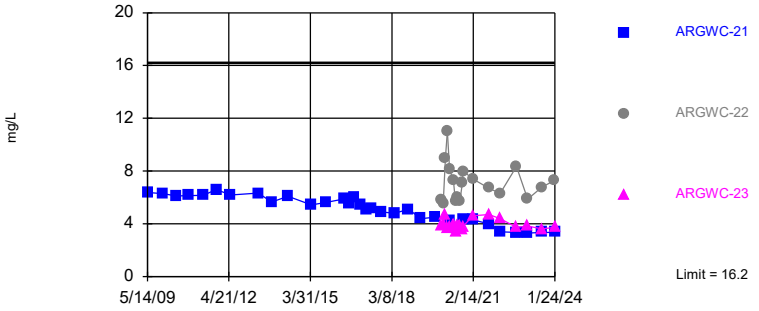
Within Limit

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 66 background values. Annual per-constituent alpha = 0.002659. Individual comparison alpha = 0.0004437 (1 of 2). Comparing 3 points to limit.

Constituent: Chloride Analysis Run 3/5/2024 12:58 PM View: Pls Appendix III

Plant Arkwright Client: Southern Company Data: Arkwright No 2

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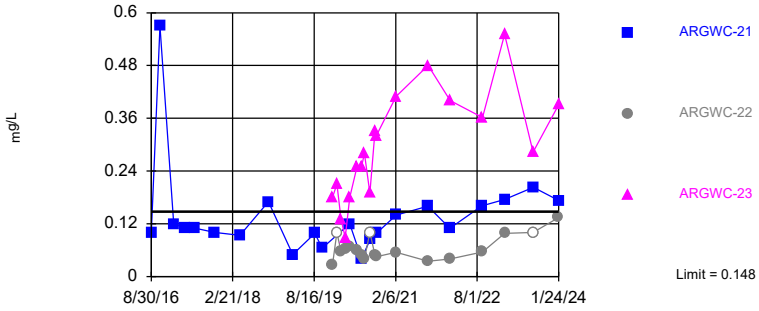
Hollow symbols indicate censored values.

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 44 background values. 43.18% NDs. Annual per-constituent alpha = 0.005902. Individual comparison alpha = 0.0009861 (1 of 2). Comparing 3 points to limit.

Constituent: Fluoride Analysis Run 3/5/2024 12:58 PM View: Pls Appendix III

Plant Arkwright Client: Southern Company Data: Arkwright No 2

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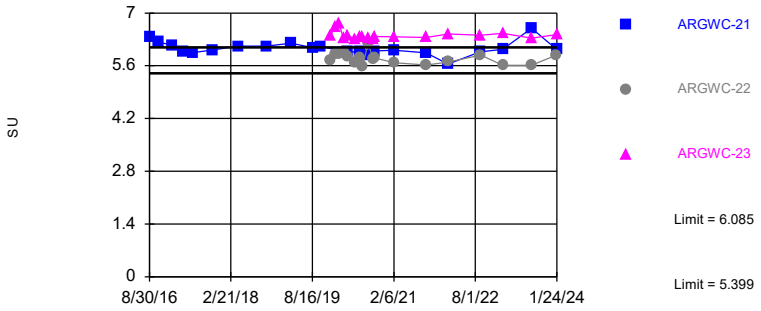
Exceeds Limits: ARGWC-23

Prediction Limit

Interwell Parametric



Background Data Summary: Mean=5.742, Std. Dev.=0.1969, n=43. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9732, critical = 0.923. Kappa = 1.742 (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 3/5/2024 12:58 PM View: Pls Appendix III

Plant Arkwright Client: Southern Company Data: Arkwright No 2

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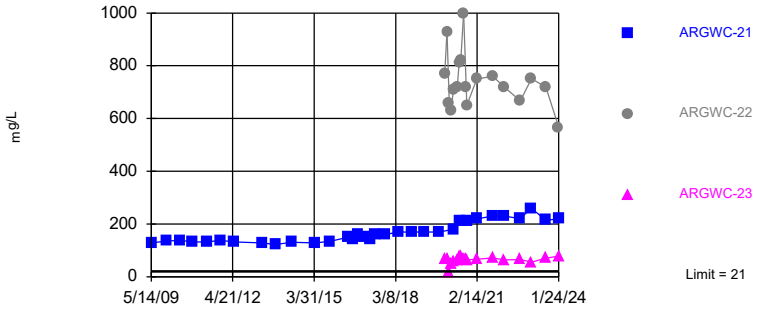
Exceeds Limit: ARGWC-21, ARGWC-22, ARGWC-23

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 65 background values. Annual per-constituent alpha = 0.002741. Individual comparison alpha = 0.0004573 (1 of 2). Comparing 3 points to limit.

Constituent: Sulfate Analysis Run 3/5/2024 12:58 PM View: Pls Appendix III

Plant Arkwright Client: Southern Company Data: Arkwright No 2

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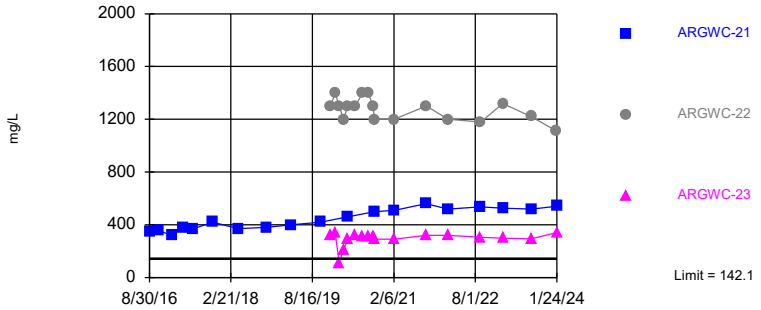
Exceeds Limit: ARGWC-21, ARGWC-22, ARGWC-23

Prediction Limit

Interwell Parametric



Background Data Summary: Mean=104.8, Std. Dev.=21.21, n=38. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9569, 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: Total Dissolved Solids Analysis Run 3/5/2024 12:58 PM View: Pls Appendix III

Plant Arkwright Client: Southern Company Data: Arkwright No 2

Prediction Limit

Constituent: Boron (mg/L) Analysis Run 3/5/2024 12:59 PM View: Pls Appendix III

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			
1/23/2024	0.0214	0.0685		4.52	
1/24/2024			1.13		0.456

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 3/5/2024 12:59 PM View: Pls Appendix III

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			
1/23/2024	9.34	11.4		183	
1/24/2024			82.6		75.6

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 3/5/2024 12:59 PM View: Pls Appendix 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 3/5/2024 12:59 PM View: Pls Appendix 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		
1/23/2024	5.63		6.68	7.31	
1/24/2024		3.35			3.74

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 3/5/2024 12:59 PM View: Pls Appendix III

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				<0.1	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		<0.1	
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			<0.1	0.283
8/9/2023			0.203		
8/10/2023		<0.1			
1/23/2024	0.121	0.113		0.134	

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 3/5/2024 12:59 PM View: Pls Appendix III

Plant Arkwright Client: Southern Company Data: Arkwright No 2

	ARGWA-19 (bg)	ARGWA-20 (bg)	ARGWC-21	ARGWC-22	ARGWC-23
1/24/2024			0.173		0.391

Prediction Limit

Constituent: pH (SU) Analysis Run 3/5/2024 12:59 PM View: Pls Appendix III

Plant Arkwright Client: Southern Company Data: Arkwright No 2

	ARGWA-20 (bg)	ARGWC-21	ARGWA-19 (bg)	ARGWC-22	ARGWC-23
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				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		5.96	5.72	5.84	6.4
5/27/2020				5.69	6.3
6/24/2020				5.82	
6/25/2020	5.61	5.98	5.8		6.37
7/15/2020				5.58	6.36
8/19/2020	6.16		6.25	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	5.66		5.97		
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	5.14	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				5.88	6.41
1/31/2023		6.04	5.86	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				
1/23/2024	5.77		5.93	5.88	

Prediction Limit

Constituent: pH (SU) Analysis Run 3/5/2024 12:59 PM View: Pls Appendix III

Plant Arkwright Client: Southern Company Data: Arkwright No 2

	ARGWA-20 (bg)	ARGWC-21	ARGWA-19 (bg)	ARGWC-22	ARGWC-23
1/24/2024		6.03			6.43

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 3/5/2024 12:59 PM View: Pls Appendix 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 3/5/2024 12:59 PM View: Pls Appendix 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		
1/23/2024	6.98		17.1		567
1/24/2024		219		78.4	

Prediction Limit

Constituent: Total Dissolved Solids (mg/L) Analysis Run 3/5/2024 12:59 PM View: Pls Appendix 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			
1/23/2024	82	92			1110
1/24/2024			541	342	

FIGURE F.

Appendix III Trend Tests - Significant Results

Plant Arkwright Client: Southern Company Data: Arkwright No 2 Printed 3/5/2024, 1:04 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Boron (mg/L)	**ARGWC-21**	**0.07478**	**156**	**81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**ARGWA-20 (bg)**	**0.3016**	**83**	**81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**ARGWC-21**	**5.27**	**152**	**81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Fluoride (mg/L)	**ARGWC-23**	**0.1094**	**97**	**68**	**Yes**	**18**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**ARGWA-19 (bg)**	**-0.2359**	**-247**	**-167**	**Yes**	**33**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**ARGWC-21**	**8.305**	**400**	**167**	**Yes**	**33**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Total Dissolved Solids (mg/L)	**ARGWC-21**	**30.51**	**137**	**74**	**Yes**	**19**	**0**	**n/a**	**n/a**	**0.01**	**NP**

Appendix III Trend Tests - All Results

Plant Arkwright Client: Southern Company Data: Arkwright No 2 Printed 3/5/2024, 1:04 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Boron (mg/L)	ARGWA-19 (bg)	0	6	81	No	20	35	n/a	n/a	0.01	NP
Boron (mg/L)	ARGWA-20 (bg)	0.00457	68	81	No	20	20	n/a	n/a	0.01	NP
Boron (mg/L)	**ARGWC-21**	**0.07478**	**156**	**81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	ARGWC-22	0.0503	25	68	No	18	0	n/a	n/a	0.01	NP
Boron (mg/L)	ARGWC-23	0.01005	34	68	No	18	0	n/a	n/a	0.01	NP
Calcium (mg/L)	ARGWA-19 (bg)	-0.4594	-57	-81	No	20	0	n/a	n/a	0.01	NP
Calcium (mg/L)	**ARGWA-20 (bg)**	**0.3016**	**83**	**81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**ARGWC-21**	**5.27**	**152**	**81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	ARGWC-22	0	-2	-68	No	18	0	n/a	n/a	0.01	NP
Calcium (mg/L)	ARGWC-23	1.734	51	68	No	18	0	n/a	n/a	0.01	NP
Fluoride (mg/L)	ARGWA-19 (bg)	0	31	92	No	22	36.36	n/a	n/a	0.01	NP
Fluoride (mg/L)	ARGWA-20 (bg)	0	8	92	No	22	50	n/a	n/a	0.01	NP
Fluoride (mg/L)	ARGWC-21	0.008588	48	92	No	22	0	n/a	n/a	0.01	NP
Fluoride (mg/L)	**ARGWC-23**	**0.1094**	**97**	**68**	**Yes**	**18**	**0**	**n/a**	**n/a**	**0.01**	**NP**
pH (SU)	ARGWA-19 (bg)	0.007364	18	87	No	21	0	n/a	n/a	0.01	NP
pH (SU)	ARGWA-20 (bg)	0.00663	23	92	No	22	0	n/a	n/a	0.01	NP
pH (SU)	ARGWC-23	0	0	68	No	18	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	**ARGWA-19 (bg)**	**-0.2359**	**-247**	**-167**	**Yes**	**33**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	ARGWA-20 (bg)	-0.02777	-56	-161	No	32	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	**ARGWC-21**	**8.305**	**400**	**167**	**Yes**	**33**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	ARGWC-22	-17.3	-24	-68	No	18	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	ARGWC-23	2.242	31	68	No	18	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	ARGWA-19 (bg)	-5.775	-74	-74	No	19	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	ARGWA-20 (bg)	0	7	74	No	19	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	**ARGWC-21**	**30.51**	**137**	**74**	**Yes**	**19**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Total Dissolved Solids (mg/L)	ARGWC-22	-29.16	-46	-63	No	17	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	ARGWC-23	0	10	63	No	17	0	n/a	n/a	0.01	NP

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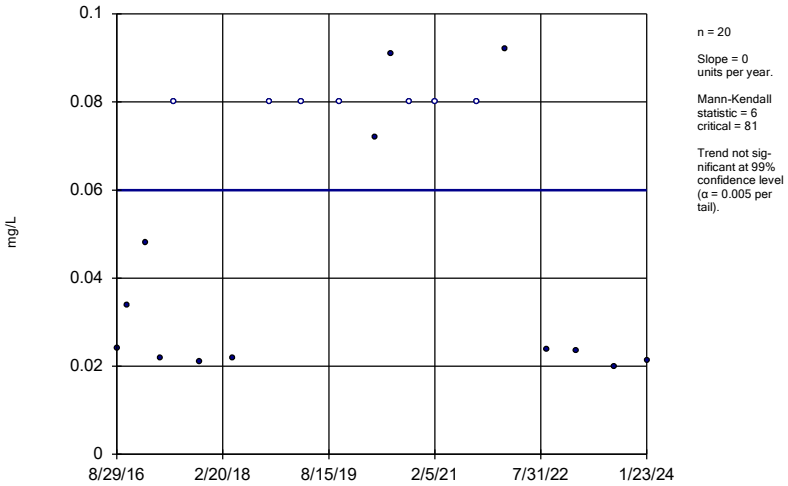
Hollow symbols indicate censored values.

Sen's Slope Estimator

ARGWA-19 (bg)



n = 20

Slope = 0 units per year.

Mann-Kendall statistic = 6
critical = 81

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 3/5/2024 1:02 PM View: Trend Tests
Plant Arkwright Client: Southern Company Data: Arkwright No 2

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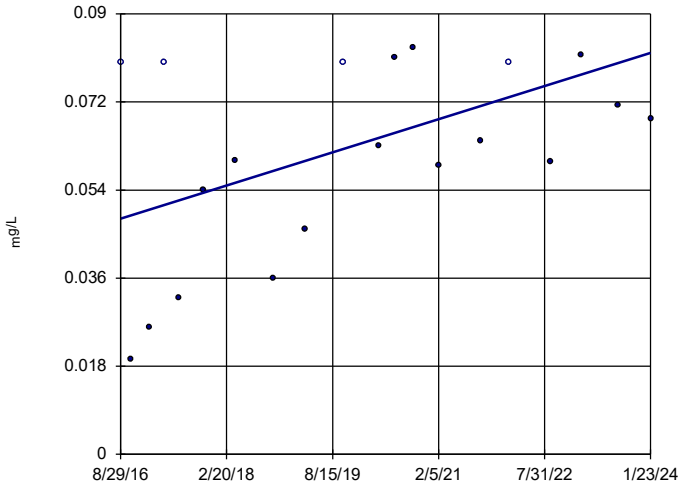
Hollow symbols indicate censored values.

Sen's Slope Estimator

ARGWA-20 (bg)



n = 20

Slope = 0.00457 units per year.

Mann-Kendall statistic = 68
critical = 81

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 3/5/2024 1:02 PM View: Trend Tests
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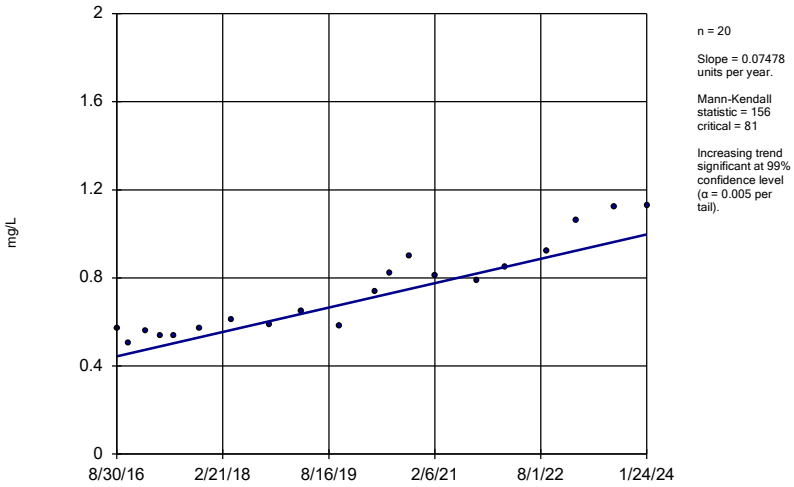
Sen's Slope Estimator

ARGWC-21



n = 20

Slope = 0.07478 units per year.

Mann-Kendall statistic = 156
critical = 81

Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 3/5/2024 1:02 PM View: Trend Tests
Plant Arkwright Client: Southern Company Data: Arkwright No 2

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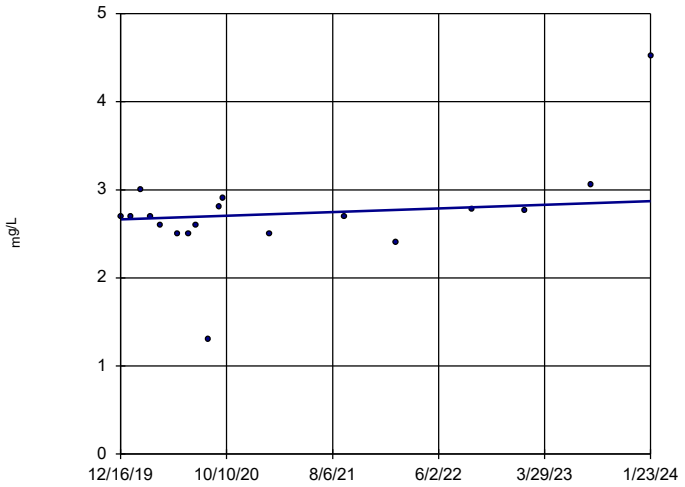
Sen's Slope Estimator

ARGWC-22



n = 18

Slope = 0.0503 units per year.

Mann-Kendall statistic = 25
critical = 68

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 3/5/2024 1:02 PM View: Trend Tests
Plant Arkwright Client: Southern Company Data: Arkwright No 2

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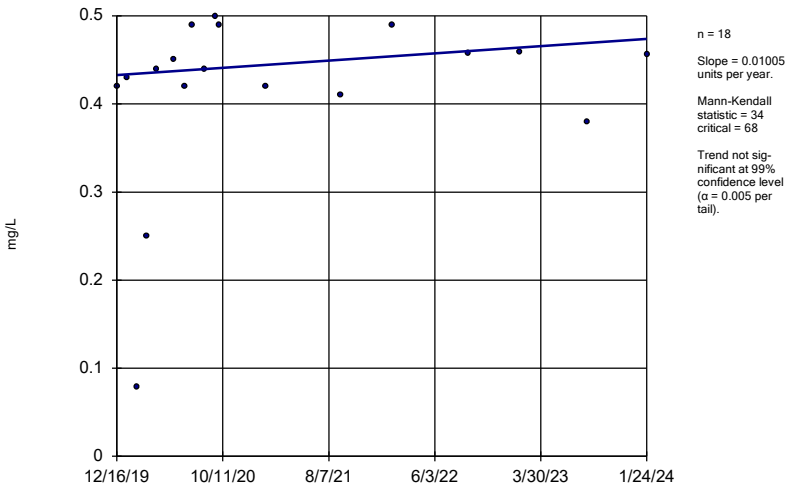
Sen's Slope Estimator

ARGWC-23



n = 18

Slope = 0.01005 units per year.

Mann-Kendall statistic = 34
critical = 68

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 3/5/2024 1:02 PM View: Trend Tests
Plant Arkwright Client: Southern Company Data: Arkwright No 2

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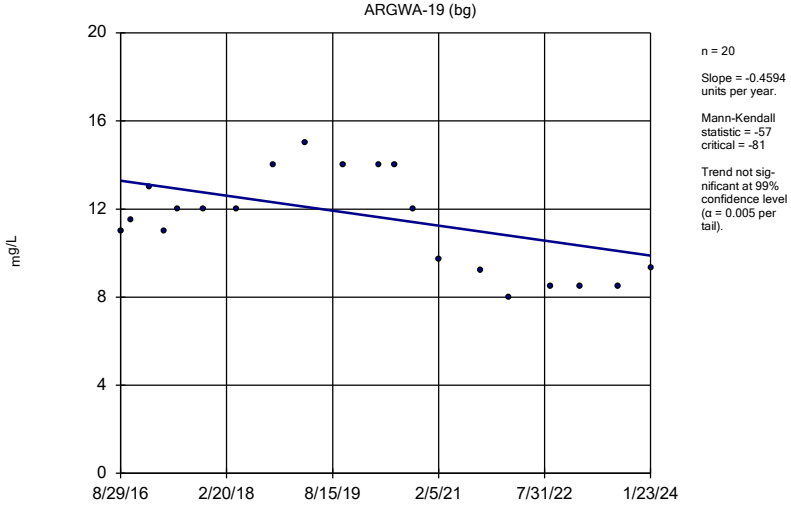
Sen's Slope Estimator

ARGWA-19 (bg)



n = 20

Slope = -0.4594 units per year.

Mann-Kendall statistic = -57
critical = -81

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 3/5/2024 1:02 PM View: Trend Tests
Plant Arkwright Client: Southern Company Data: Arkwright No 2

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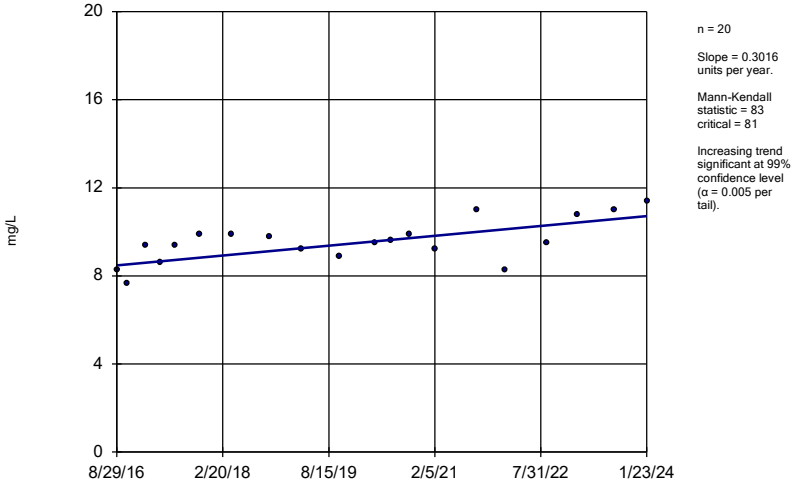
Sen's Slope Estimator

ARGWA-20 (bg)



n = 20

Slope = 0.3016 units per year.

Mann-Kendall statistic = 83
critical = 81

Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 3/5/2024 1:02 PM View: Trend Tests
Plant Arkwright Client: Southern Company Data: Arkwright No 2

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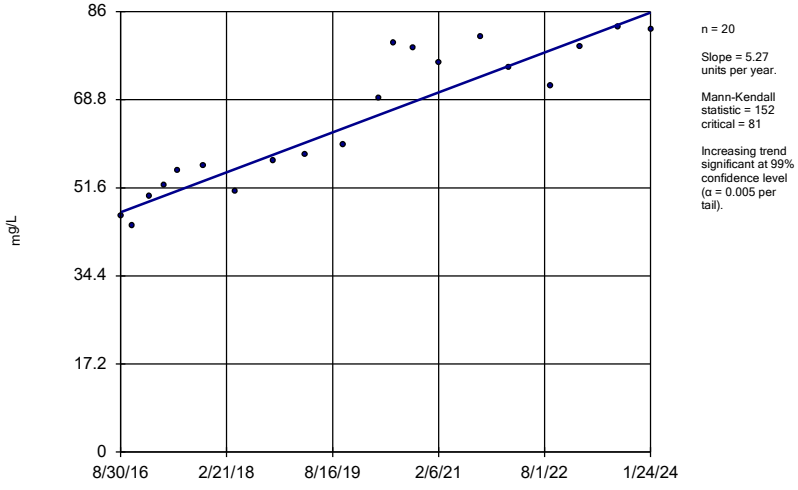
Sen's Slope Estimator

ARGWC-21



n = 20

Slope = 5.27 units per year.

Mann-Kendall statistic = 152
critical = 81

Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 3/5/2024 1:02 PM View: Trend Tests
Plant Arkwright Client: Southern Company Data: Arkwright No 2

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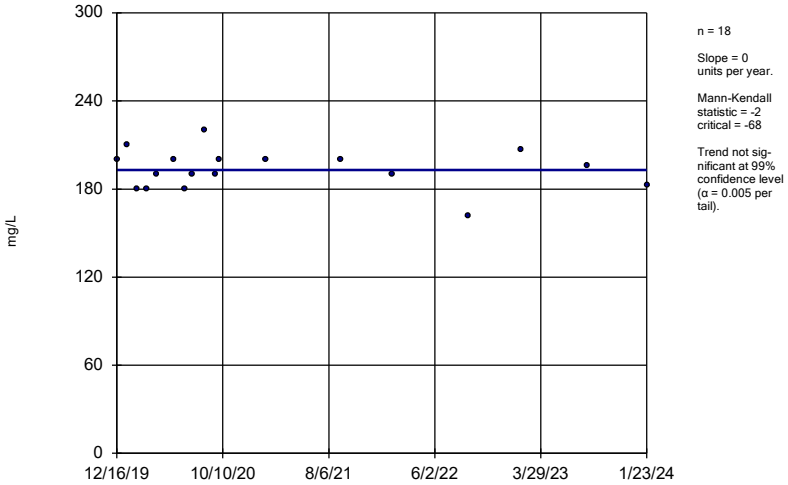
Sen's Slope Estimator

ARGWC-22



n = 18

Slope = 0 units per year.

Mann-Kendall statistic = -2
critical = -68

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 3/5/2024 1:02 PM View: Trend Tests
Plant Arkwright Client: Southern Company Data: Arkwright No 2

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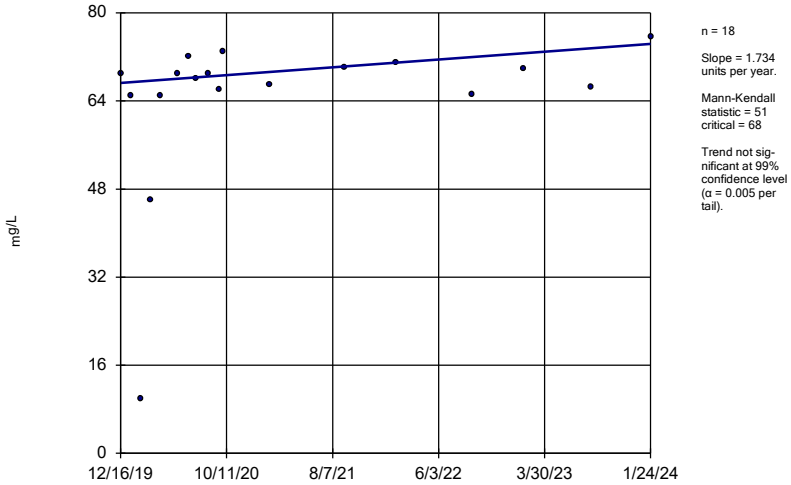
Sen's Slope Estimator

ARGWC-23



n = 18

Slope = 1.734 units per year.

Mann-Kendall statistic = 51
critical = 68

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 3/5/2024 1:02 PM View: Trend Tests
Plant Arkwright Client: Southern Company Data: Arkwright No 2

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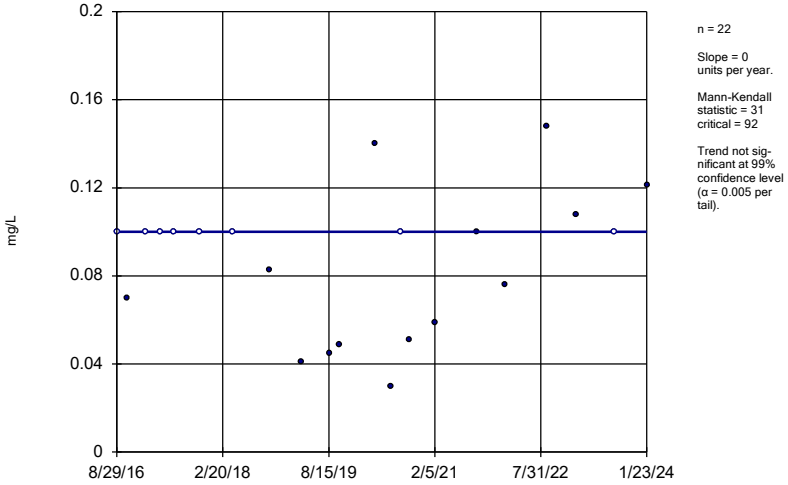
Hollow symbols indicate censored values.

Sen's Slope Estimator

ARGWA-19 (bg)



n = 22

Slope = 0 units per year.

Mann-Kendall statistic = 31
critical = 92

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Fluoride Analysis Run 3/5/2024 1:02 PM View: Trend Tests
Plant Arkwright Client: Southern Company Data: Arkwright No 2

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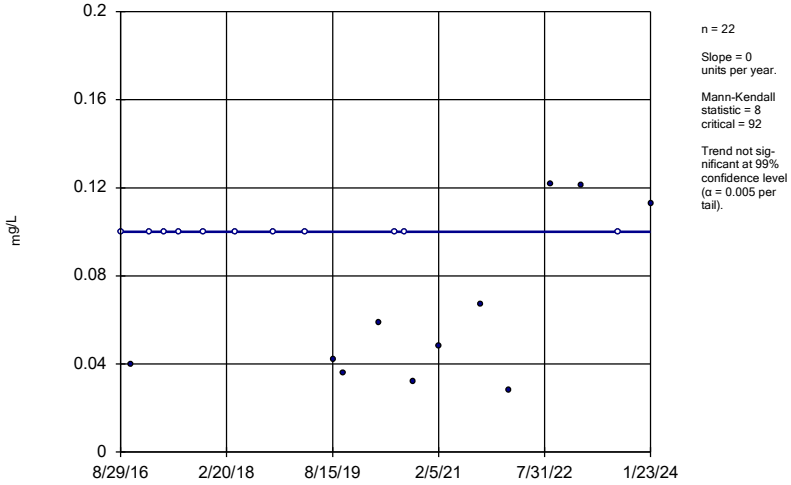
Hollow symbols indicate censored values.

Sen's Slope Estimator

ARGWA-20 (bg)



n = 22

Slope = 0 units per year.

Mann-Kendall statistic = 8
critical = 92

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Fluoride Analysis Run 3/5/2024 1:02 PM View: Trend Tests
Plant Arkwright Client: Southern Company Data: Arkwright No 2

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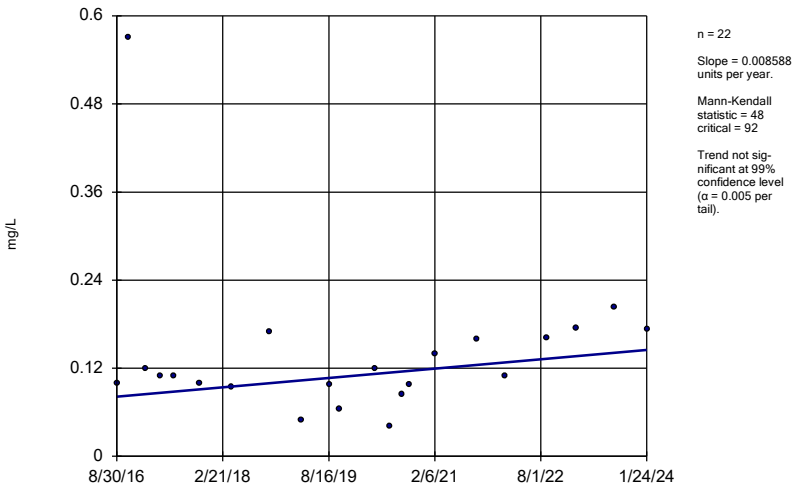
Sen's Slope Estimator

ARGWC-21



n = 22

Slope = 0.008588 units per year.

Mann-Kendall statistic = 48
critical = 92

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Fluoride Analysis Run 3/5/2024 1:02 PM View: Trend Tests
Plant Arkwright Client: Southern Company Data: Arkwright No 2

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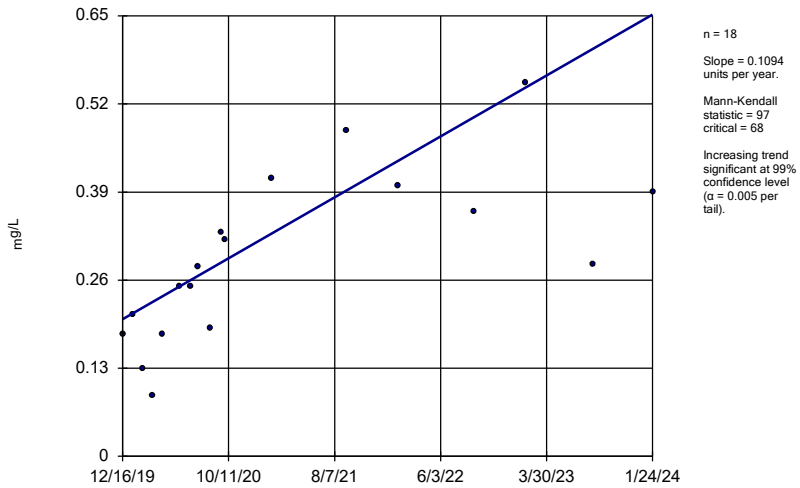
Sen's Slope Estimator

ARGWC-23



n = 18

Slope = 0.1094 units per year.

Mann-Kendall statistic = 97
critical = 68

Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Fluoride Analysis Run 3/5/2024 1:02 PM View: Trend Tests
Plant Arkwright Client: Southern Company Data: Arkwright No 2

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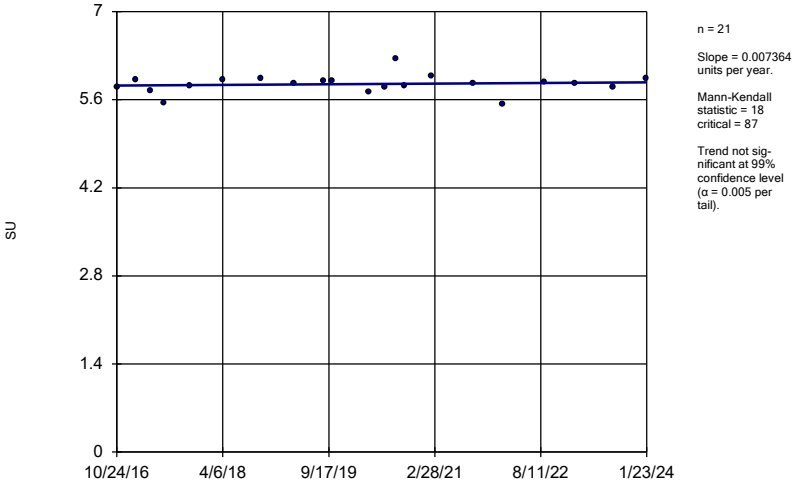
Sen's Slope Estimator

ARGWA-19 (bg)



n = 21

Slope = 0.007364 units per year.

Mann-Kendall statistic = 18
critical = 87

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: pH Analysis Run 3/5/2024 1:02 PM View: Trend Tests
Plant Arkwright Client: Southern Company Data: Arkwright No 2

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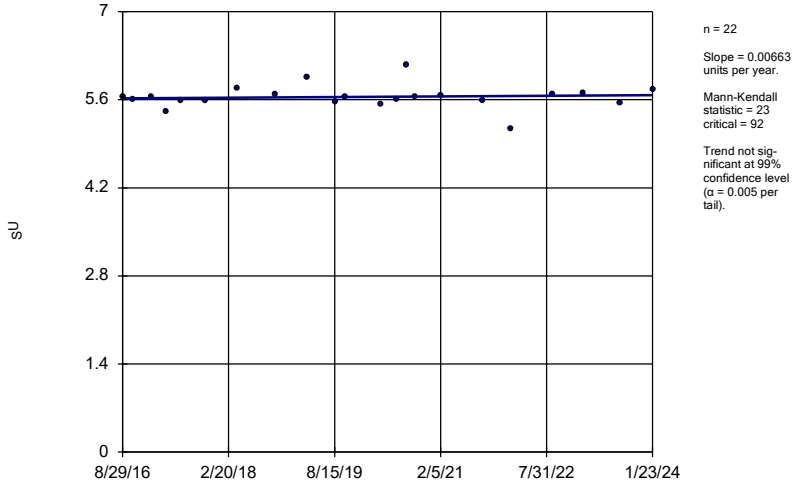
Sen's Slope Estimator

ARGWA-20 (bg)



n = 22

Slope = 0.00663 units per year.

Mann-Kendall statistic = 23
critical = 92

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: pH Analysis Run 3/5/2024 1:02 PM View: Trend Tests
Plant Arkwright Client: Southern Company Data: Arkwright No 2

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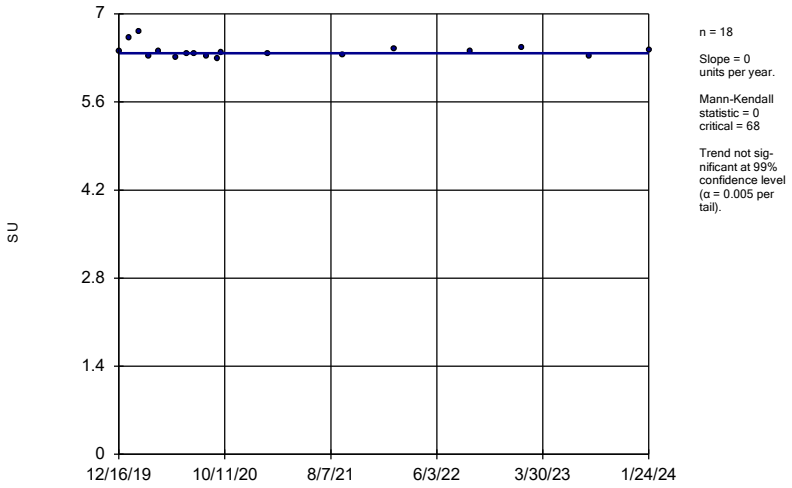
Sen's Slope Estimator

ARGWC-23



n = 18

Slope = 0 units per year.

Mann-Kendall statistic = 0 critical = 68

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: pH Analysis Run 3/5/2024 1:02 PM View: Trend Tests

Plant Arkwright Client: Southern Company Data: Arkwright No 2

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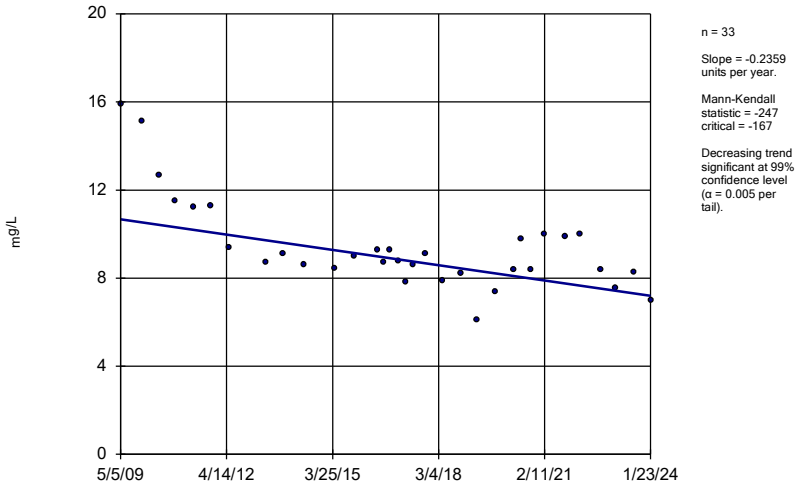
Sen's Slope Estimator

ARGWA-19 (bg)



n = 33

Slope = -0.2359 units per year.

Mann-Kendall statistic = -247 critical = -167

Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 3/5/2024 1:02 PM View: Trend Tests

Plant Arkwright Client: Southern Company Data: Arkwright No 2

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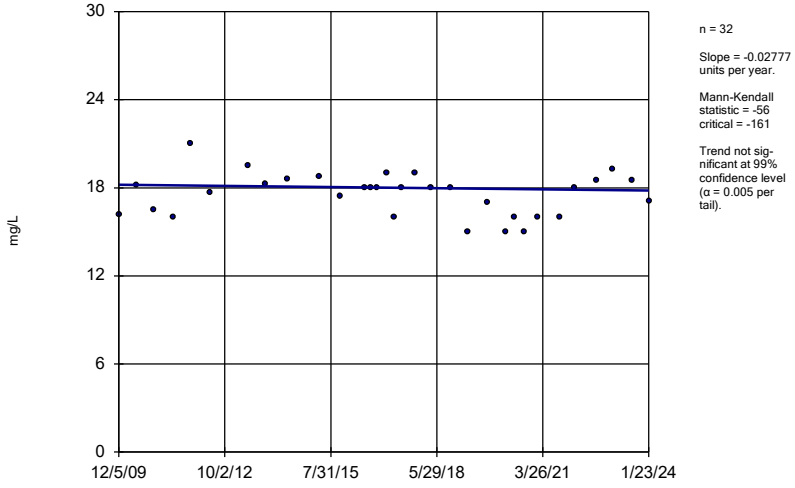
Sen's Slope Estimator

ARGWA-20 (bg)



n = 32

Slope = -0.02777 units per year.

Mann-Kendall statistic = -56 critical = -161

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 3/5/2024 1:02 PM View: Trend Tests

Plant Arkwright Client: Southern Company Data: Arkwright No 2

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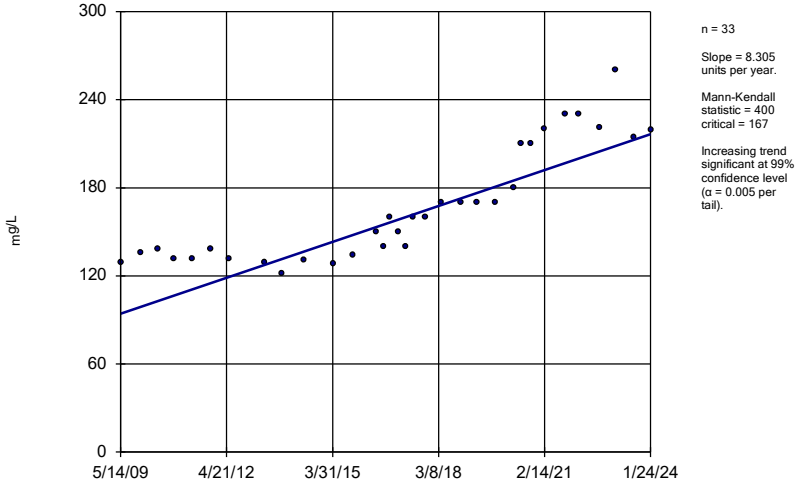
Sen's Slope Estimator

ARGWC-21



n = 33

Slope = 8.305 units per year.

Mann-Kendall statistic = 400 critical = 167

Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 3/5/2024 1:02 PM View: Trend Tests

Plant Arkwright Client: Southern Company Data: Arkwright No 2

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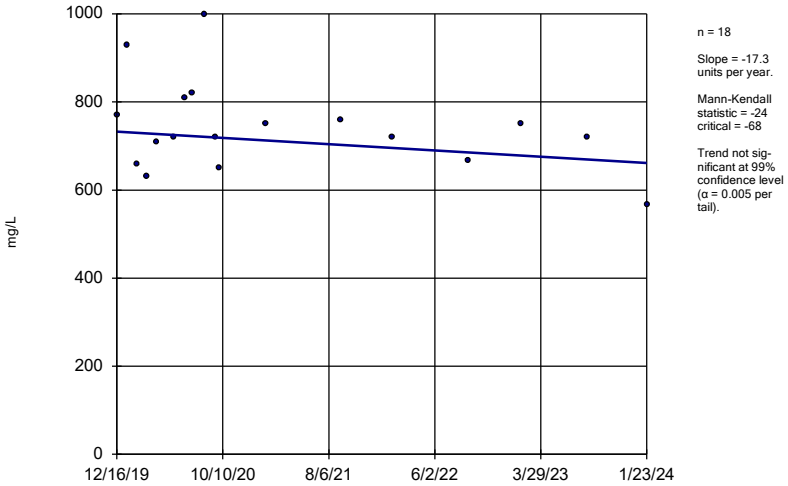
Sen's Slope Estimator

ARGWC-22



n = 18

Slope = -17.3 units per year.

Mann-Kendall statistic = -24 critical = -68

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 3/5/2024 1:02 PM View: Trend Tests

Plant Arkwright Client: Southern Company Data: Arkwright No 2

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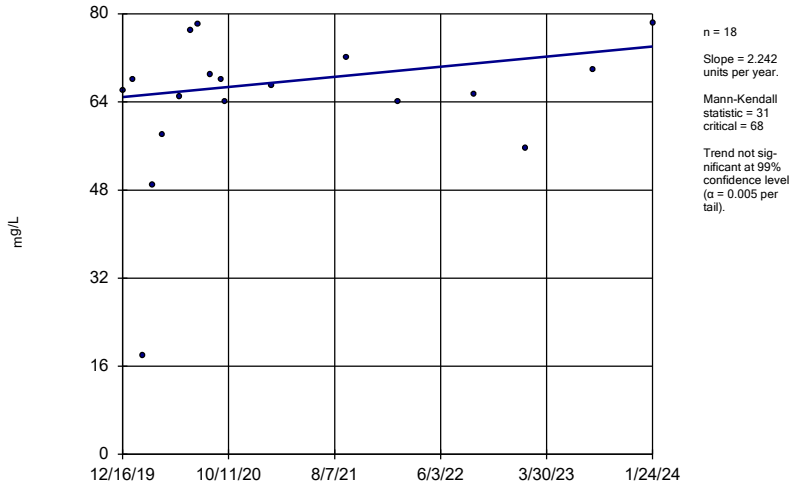
Sen's Slope Estimator

ARGWC-23



n = 18

Slope = 2.242 units per year.

Mann-Kendall statistic = 31 critical = 68

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 3/5/2024 1:02 PM View: Trend Tests

Plant Arkwright Client: Southern Company Data: Arkwright No 2

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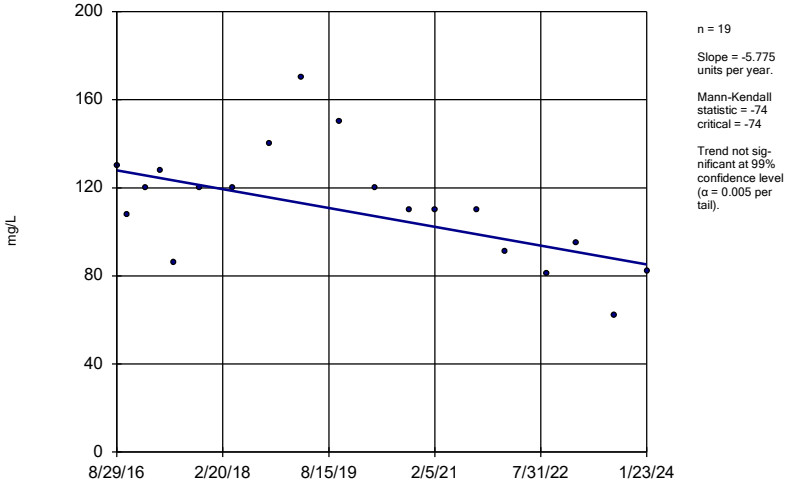
Sen's Slope Estimator

ARGWA-19 (bg)



n = 19

Slope = -5.775 units per year.

Mann-Kendall statistic = -74 critical = -74

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Total Dissolved Solids Analysis Run 3/5/2024 1:02 PM View: Trend Tests

Plant Arkwright Client: Southern Company Data: Arkwright No 2

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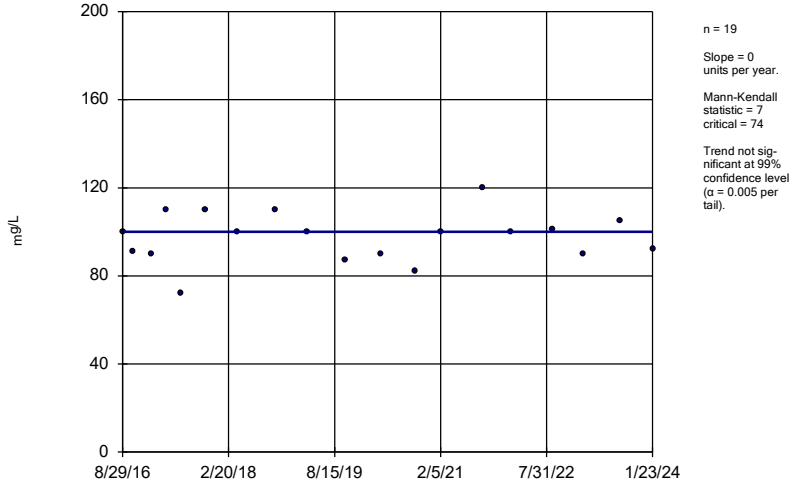
Sen's Slope Estimator

ARGWA-20 (bg)



n = 19

Slope = 0 units per year.

Mann-Kendall statistic = 7 critical = 74

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Total Dissolved Solids Analysis Run 3/5/2024 1:02 PM View: Trend Tests

Plant Arkwright Client: Southern Company Data: Arkwright No 2

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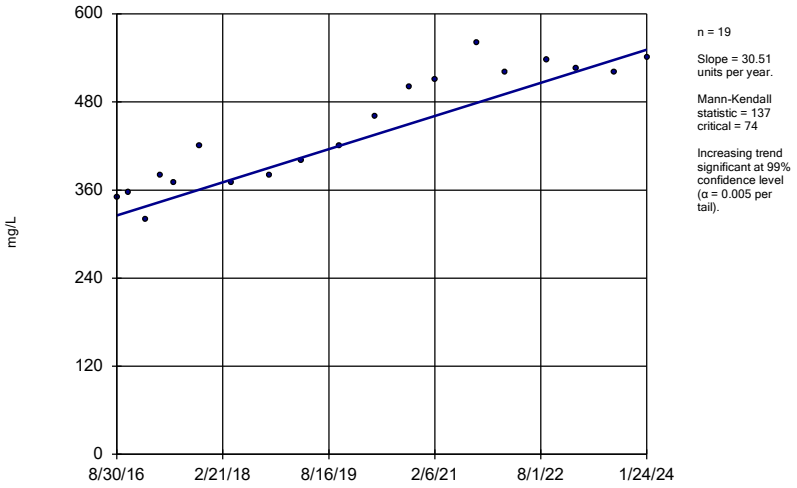
Sen's Slope Estimator

ARGWC-21



n = 19

Slope = 30.51 units per year.

Mann-Kendall statistic = 137 critical = 74

Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Total Dissolved Solids Analysis Run 3/5/2024 1:02 PM View: Trend Tests

Plant Arkwright Client: Southern Company Data: Arkwright No 2

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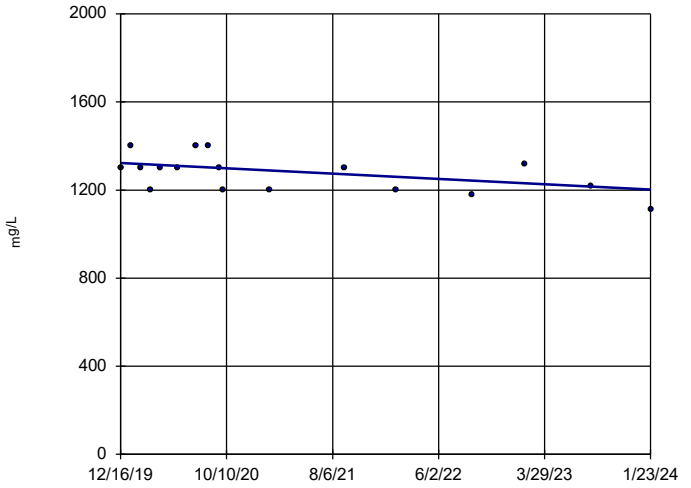
Sen's Slope Estimator

ARGWC-22



n = 17

Slope = -29.16 units per year.

Mann-Kendall statistic = -46 critical = -63

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Total Dissolved Solids Analysis Run 3/5/2024 1:02 PM View: Trend Tests

Plant Arkwright Client: Southern Company Data: Arkwright No 2

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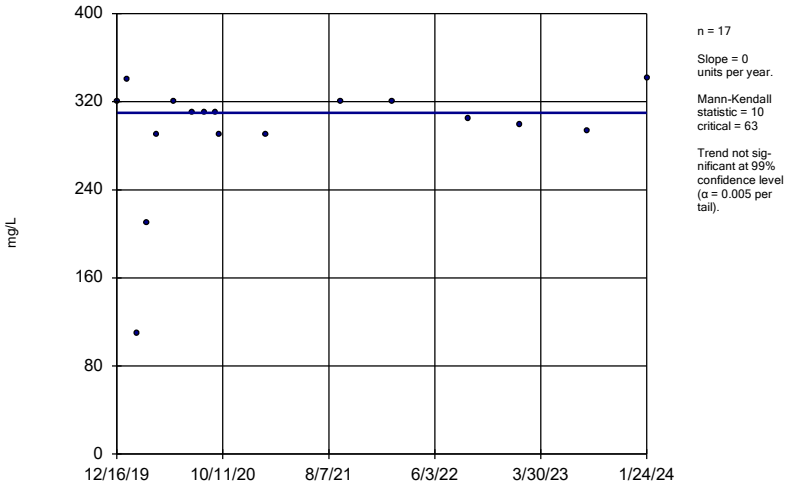
Sen's Slope Estimator

ARGWC-23



n = 17

Slope = 0 units per year.

Mann-Kendall statistic = 10 critical = 63

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Total Dissolved Solids Analysis Run 3/5/2024 1:02 PM 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 3/5/2024, 1:20 PM

Constituent	Upper Lim.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Antimony (mg/L)	0.003	32	n/a	n/a	100	n/a	n/a	0.1937	NP Inter(NDs)
Arsenic (mg/L)	0.005	70	n/a	n/a	87.14	n/a	n/a	0.02758	NP Inter(NDs)
Barium (mg/L)	0.107	70	n/a	n/a	0	n/a	n/a	0.02758	NP Inter(normality)
Beryllium (mg/L)	0.0005	36	n/a	n/a	91.67	n/a	n/a	0.1578	NP Inter(NDs)
Cadmium (mg/L)	0.001	68	n/a	n/a	98.53	n/a	n/a	0.03056	NP Inter(NDs)
Chromium (mg/L)	0.01	40	n/a	n/a	25	n/a	n/a	0.1285	NP Inter(normality)
Cobalt (mg/L)	0.001	42	n/a	n/a	66.67	n/a	n/a	0.116	NP Inter(NDs)
Combined Radium 226 + 228 (pCi/L)	2.5	40	n/a	n/a	0	n/a	n/a	0.1285	NP Inter(normality)
Fluoride (mg/L)	0.148	44	n/a	n/a	43.18	n/a	n/a	0.1047	NP Inter(normality)
Lead (mg/L)	0.002	70	n/a	n/a	87.14	n/a	n/a	0.02758	NP Inter(NDs)
Lithium (mg/L)	0.013	42	n/a	n/a	42.86	n/a	n/a	0.116	NP Inter(normality)
Mercury (mg/L)	0.0002	32	n/a	n/a	93.75	n/a	n/a	0.1937	NP Inter(NDs)
Molybdenum (mg/L)	0.001	38	n/a	n/a	84.21	n/a	n/a	0.1424	NP Inter(NDs)
Selenium (mg/L)	0.005	69	n/a	n/a	66.67	n/a	n/a	0.02904	NP Inter(NDs)
Silver (mg/L)	0.001	60	n/a	n/a	91.67	n/a	n/a	0.04607	NP Inter(NDs)
Thallium (mg/L)	0.002	32	n/a	n/a	96.88	n/a	n/a	0.1937	NP Inter(NDs)

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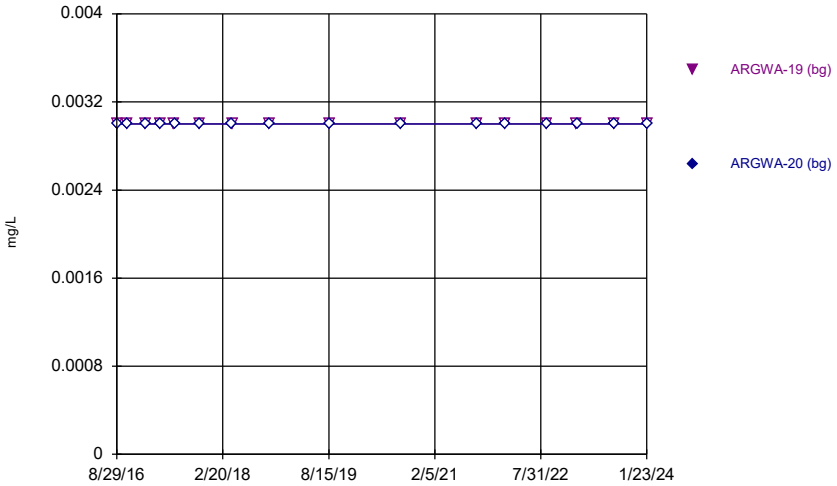
Hollow symbols indicate censored values.

Time Series



Constituent: Antimony Analysis Run 3/5/2024 1:20 PM View: Appendix IV - UTLs
Plant Arkwright Client: Southern Company Data: Arkwright No 2

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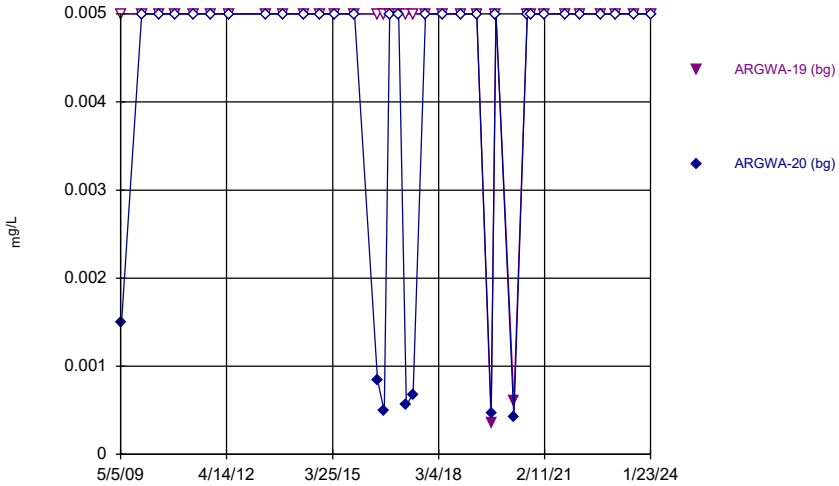
Hollow symbols indicate censored values.

Time Series



Constituent: Arsenic Analysis Run 3/5/2024 1:20 PM View: Appendix IV - UTLs
Plant Arkwright Client: Southern Company Data: Arkwright No 2

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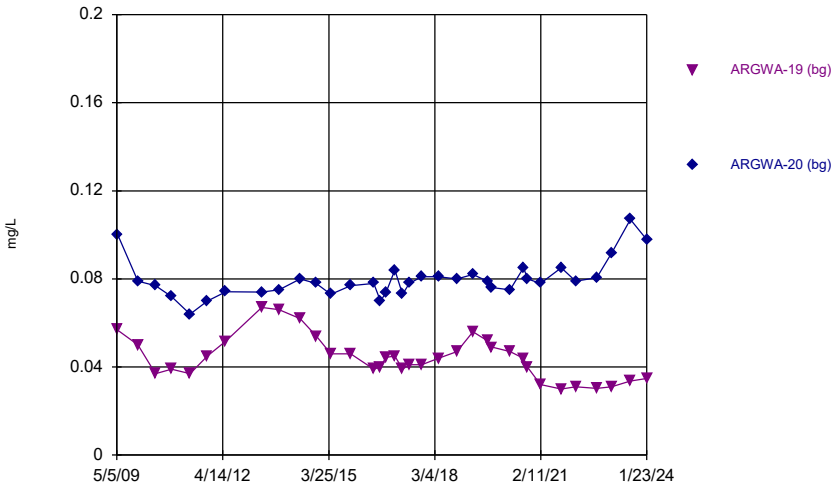
Time Series



Constituent: Barium Analysis Run 3/5/2024 1:20 PM View: Appendix IV - UTLs
Plant Arkwright Client: Southern Company Data: Arkwright No 2

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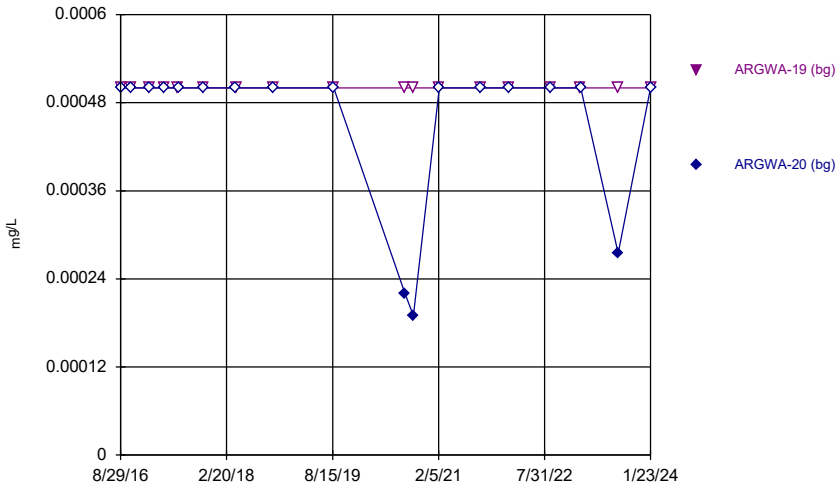
Hollow symbols indicate censored values.

Time Series



Constituent: Beryllium Analysis Run 3/5/2024 1:20 PM View: Appendix IV - UTLs
Plant Arkwright Client: Southern Company Data: Arkwright No 2

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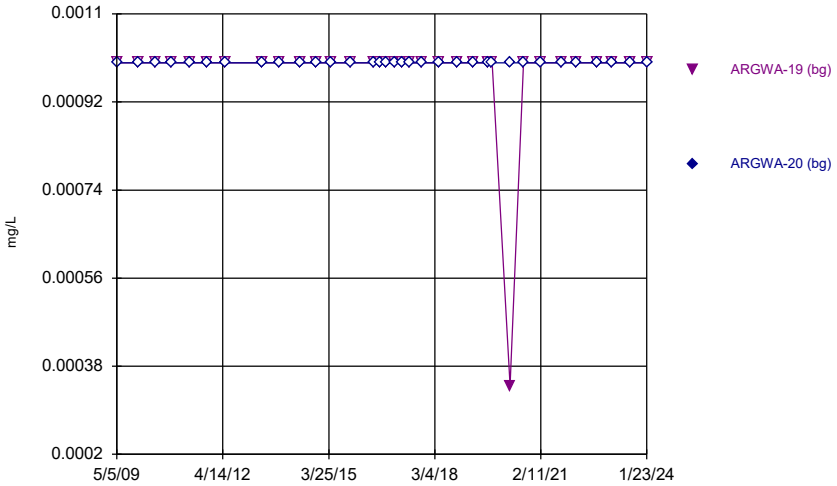
Hollow symbols indicate censored values.

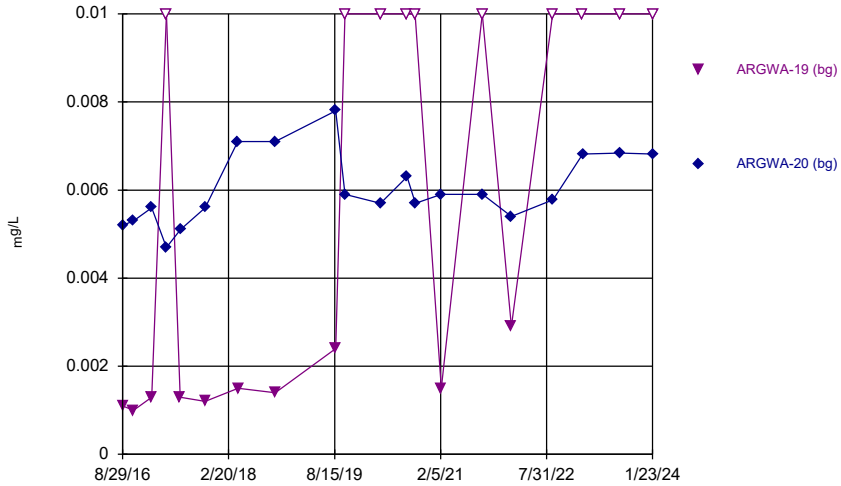
Time Series



Constituent: Cadmium Analysis Run 3/5/2024 1:20 PM View: Appendix IV - UTLs
Plant Arkwright Client: Southern Company Data: Arkwright No 2

Sanitas™ v.10.0.15d Software licensed to Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

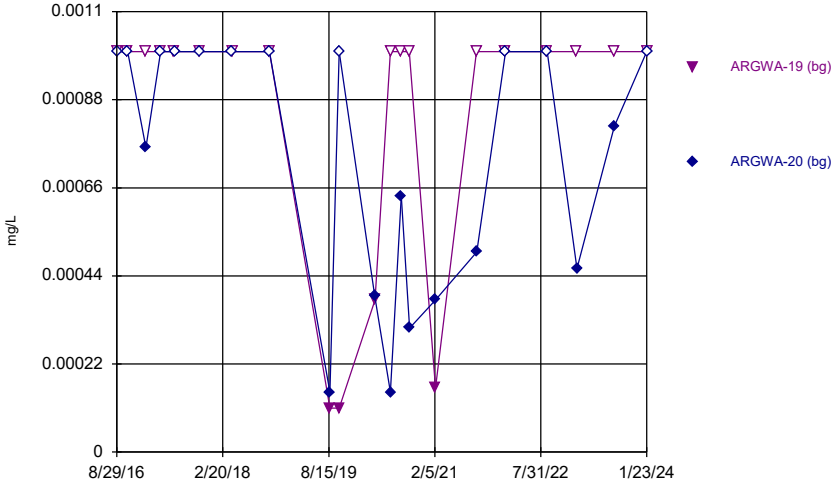
Time Series



Constituent: Chromium Analysis Run 3/5/2024 1:20 PM View: Appendix IV - UTLs
Plant Arkwright Client: Southern Company Data: Arkwright No 2

Sanitas™ v.10.0.15d Software licensed to Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

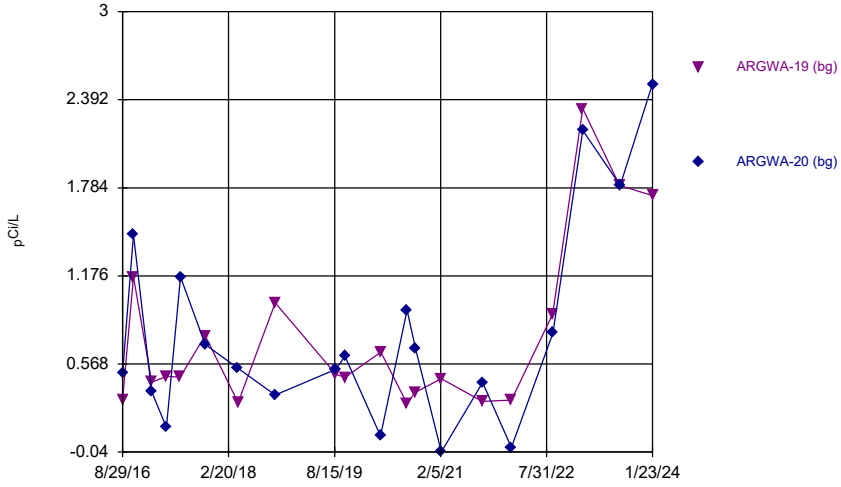
Time Series



Constituent: Cobalt Analysis Run 3/5/2024 1:20 PM View: Appendix IV - UTLs
Plant Arkwright Client: Southern Company Data: Arkwright No 2

Sanitas™ v.10.0.15d Software licensed to Groundwater Stats Consulting. UG

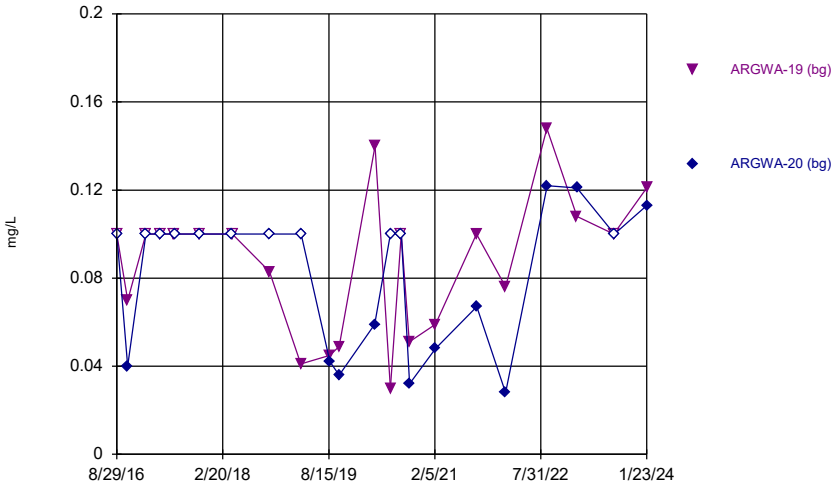
Time Series



Constituent: Combined Radium 226 + 228 Analysis Run 3/5/2024 1:20 PM View: Appendix IV - UTLs
Plant Arkwright Client: Southern Company Data: Arkwright No 2

Sanitas™ v.10.0.15d Software licensed to Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

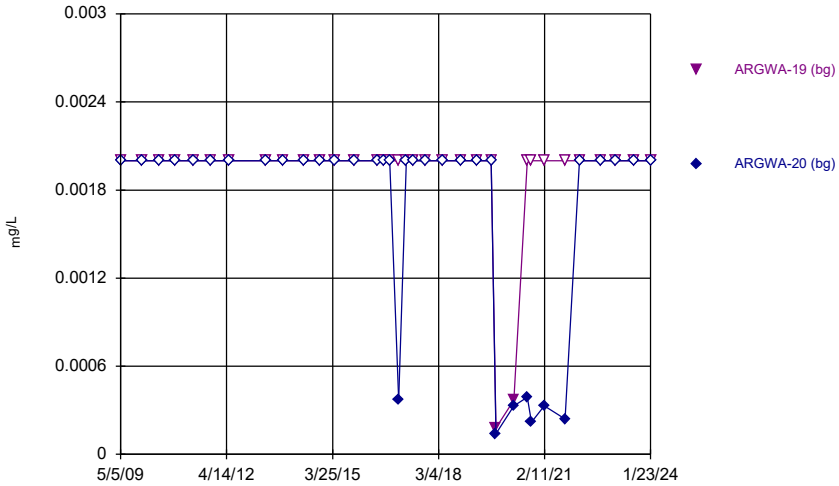
Time Series



Constituent: Fluoride Analysis Run 3/5/2024 1:20 PM View: Appendix IV - UTLs
Plant Arkwright Client: Southern Company Data: Arkwright No 2

Sanitas™ v.10.0.15d Software licensed to Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

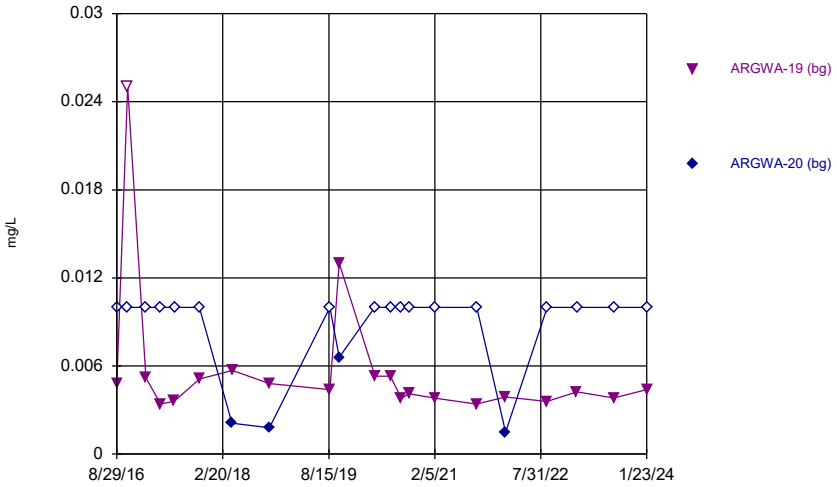
Time Series



Constituent: Lead Analysis Run 3/5/2024 1:20 PM View: Appendix IV - UTLs
Plant Arkwright Client: Southern Company Data: Arkwright No 2

Sanitas™ v.10.0.15d Software licensed to Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Time Series



Constituent: Lithium Analysis Run 3/5/2024 1:20 PM View: Appendix IV - UTLs
Plant Arkwright Client: Southern Company Data: Arkwright No 2

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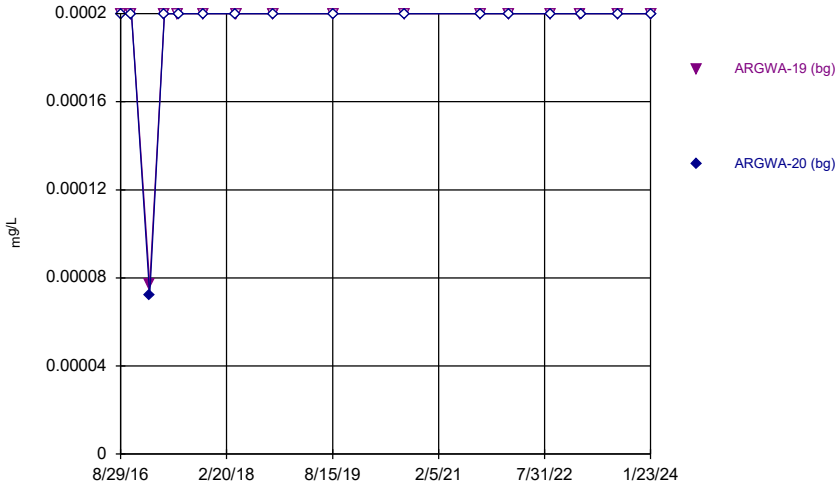
Hollow symbols indicate censored values.

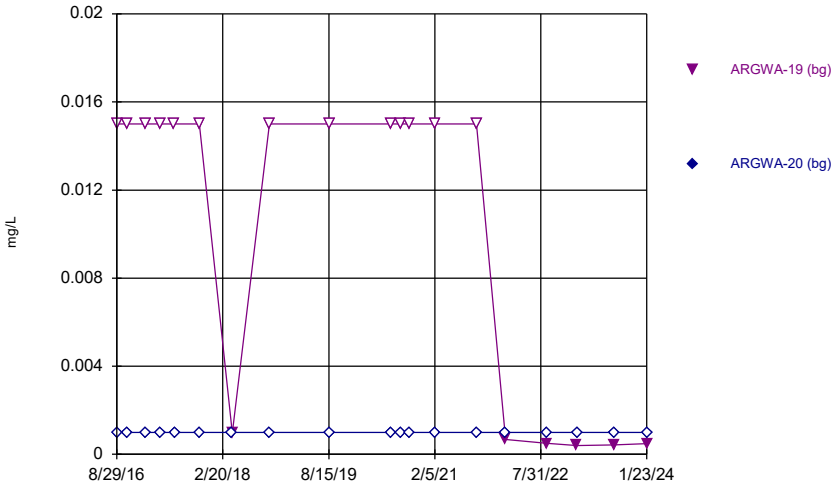
Time Series



Constituent: Mercury Analysis Run 3/5/2024 1:20 PM View: Appendix IV - UTLs
Plant Arkwright Client: Southern Company Data: Arkwright No 2

Sanitas™ v.10.0.15d Software licensed to Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

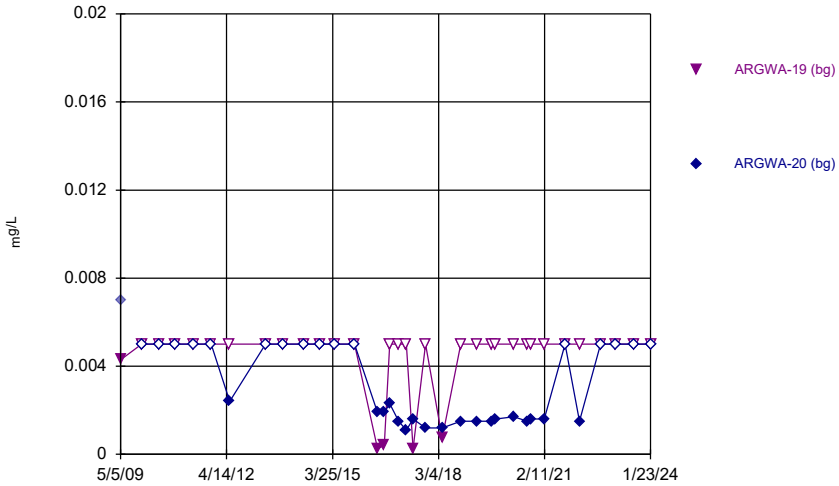
Time Series



Constituent: Molybdenum Analysis Run 3/5/2024 1:20 PM View: Appendix IV - UTLs
Plant Arkwright Client: Southern Company Data: Arkwright No 2

Sanitas™ v.10.0.15d Software licensed to Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

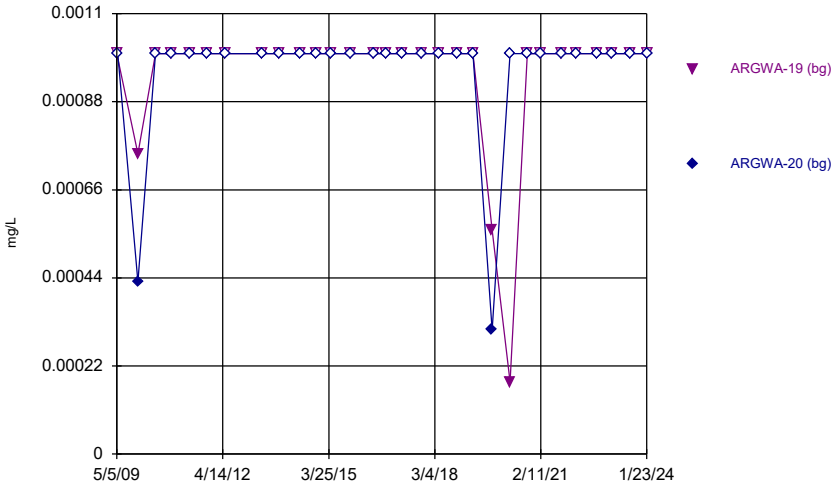
Time Series



Constituent: Selenium Analysis Run 3/5/2024 1:20 PM View: Appendix IV - UTLs
Plant Arkwright Client: Southern Company Data: Arkwright No 2

Sanitas™ v.10.0.15d Software licensed to Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

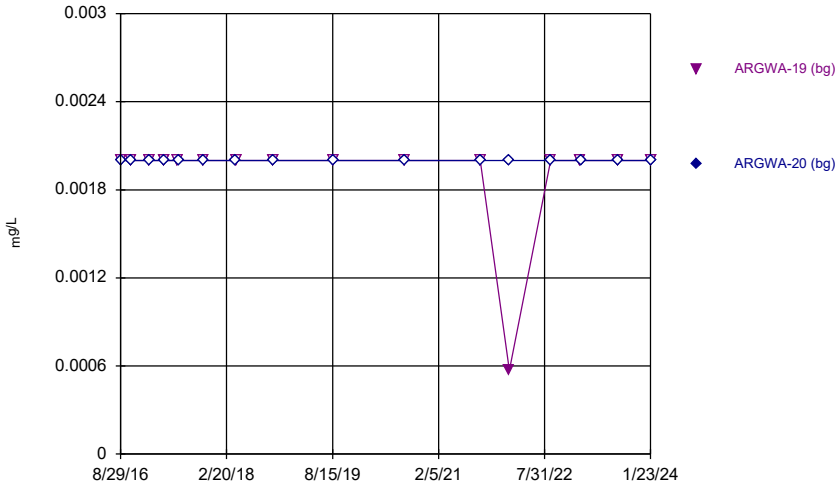
Time Series



Constituent: Silver Analysis Run 3/5/2024 1:20 PM View: Appendix IV - UTLs
Plant Arkwright Client: Southern Company Data: Arkwright No 2

Sanitas™ v.10.0.15d Software licensed to Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Time Series

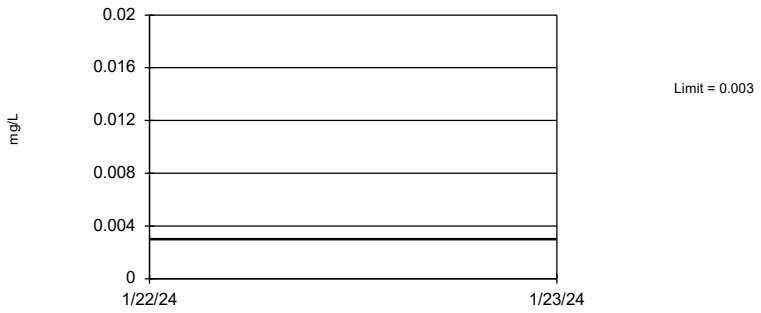


Constituent: Thallium Analysis Run 3/5/2024 1:20 PM View: Appendix IV - UTLs
Plant Arkwright Client: Southern Company Data: Arkwright No 2

Sanitas™ v.10.0.15d Software licensed to Groundwater Stats Consulting. UG

Tolerance Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 50%. All background values were censored; limit is most recent reporting limit. 86.52% coverage at alpha=0.01; 91.21% coverage at alpha=0.05; 97.85% coverage at alpha=0.5. Report alpha = 0.1937.

Constituent: Antimony Analysis Run 3/5/2024 1:17 PM View: Appendix IV - UTLs
Plant Arkwright Client: Southern Company Data: Arkwright No 2

Sanitas™ v.10.0.15d Software licensed to Groundwater Stats Consulting. UG

Tolerance Limit

Interwell Non-parametric



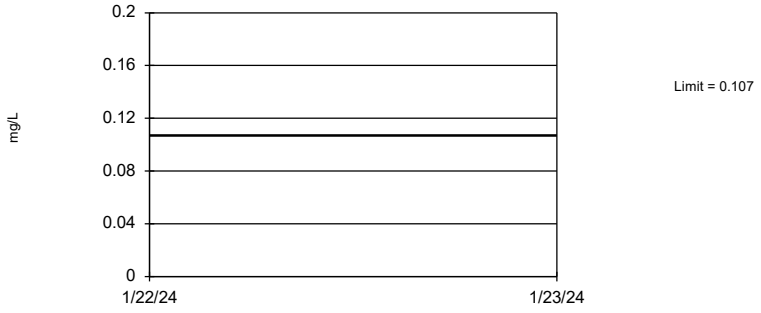
Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 50%. Limit is highest of 70 background values. 87.14% NDs. 93.55% coverage at alpha=0.01; 95.9% coverage at alpha=0.05; 99.02% coverage at alpha=0.5. Report alpha = 0.02758.

Constituent: Arsenic Analysis Run 3/5/2024 1:17 PM View: Appendix IV - UTLs
Plant Arkwright Client: Southern Company Data: Arkwright No 2

Sanitas™ v.10.0.15d Software licensed to Groundwater Stats Consulting. UG

Tolerance Limit

Interwell Non-parametric



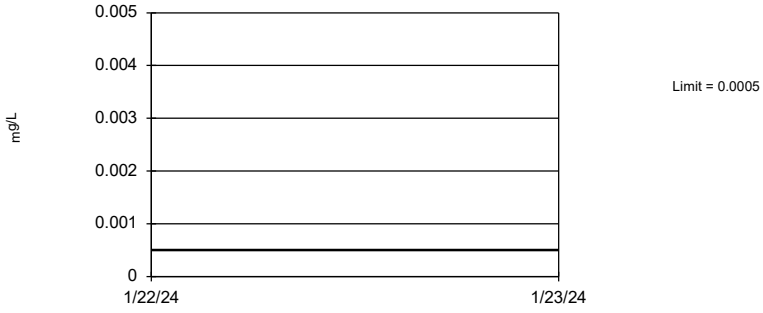
Non-parametric test used in lieu of parametric tolerance limit because the Shapiro Francia normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 70 background values. 93.55% coverage at alpha=0.01; 95.9% coverage at alpha=0.05; 99.02% coverage at alpha=0.5. Report alpha = 0.02758.

Constituent: Barium Analysis Run 3/5/2024 1:17 PM View: Appendix IV - UTLs
Plant Arkwright Client: Southern Company Data: Arkwright No 2

Sanitas™ v.10.0.15d Software licensed to Groundwater Stats Consulting. UG

Tolerance Limit

Interwell Non-parametric



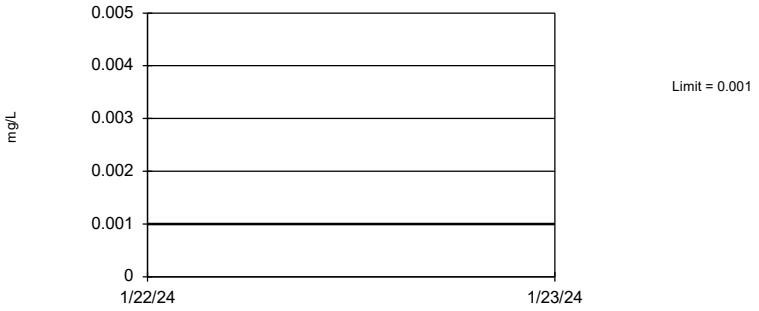
Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 50%. Limit is highest of 36 background values. 91.67% NDs. 88.09% coverage at alpha=0.01; 91.99% coverage at alpha=0.05; 98.24% coverage at alpha=0.5. Report alpha = 0.1578.

Constituent: Beryllium Analysis Run 3/5/2024 1:17 PM View: Appendix IV - UTLs
Plant Arkwright Client: Southern Company Data: Arkwright No 2

Sanitas™ v.10.0.15d Software licensed to Groundwater Stats Consulting. UG

Tolerance Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 50%. Limit is highest of 68 background values. 98.53% NDs. 93.55% coverage at alpha=0.01; 95.51% coverage at alpha=0.05; 99.02% coverage at alpha=0.5. Report alpha = 0.03056.

Constituent: Cadmium Analysis Run 3/5/2024 1:17 PM View: Appendix IV - UTLs
Plant Arkwright Client: Southern Company Data: Arkwright No 2

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Tolerance Limit

Interwell Non-parametric



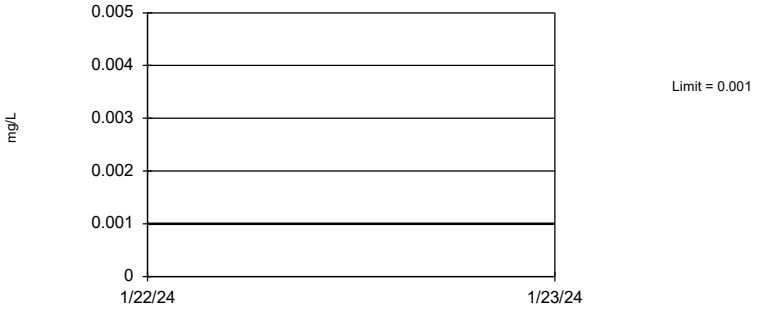
Non-parametric test used in lieu of parametric tolerance limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 40 background values. 25% NDs. 89.26% coverage at alpha=0.01; 92.77% coverage at alpha=0.05; 98.24% coverage at alpha=0.5. Report alpha = 0.1285.

Constituent: Chromium Analysis Run 3/5/2024 1:17 PM View: Appendix IV - UTLs
Plant Arkwright Client: Southern Company Data: Arkwright No 2

Sanitas™ v.10.0.15d Software licensed to Groundwater Stats Consulting. UG

Tolerance Limit

Interwell Non-parametric



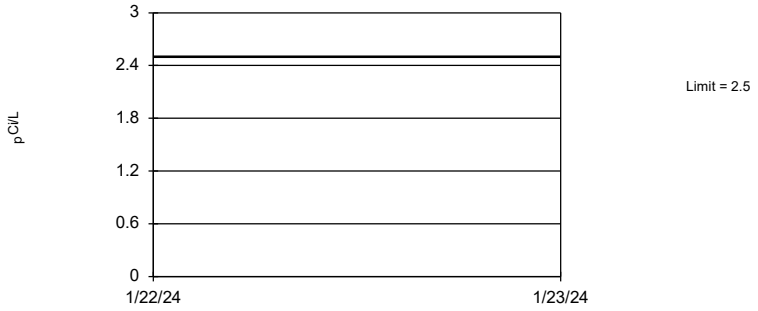
Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 50%. Limit is highest of 42 background values. 66.67% NDs. 89.65% coverage at alpha=0.01; 93.16% coverage at alpha=0.05; 98.24% coverage at alpha=0.5. Report alpha = 0.116.

Constituent: Cobalt Analysis Run 3/5/2024 1:17 PM View: Appendix IV - UTLs
Plant Arkwright Client: Southern Company Data: Arkwright No 2

Sanitas™ v.10.0.15d Software licensed to Groundwater Stats Consulting. UG

Tolerance Limit

Interwell Non-parametric



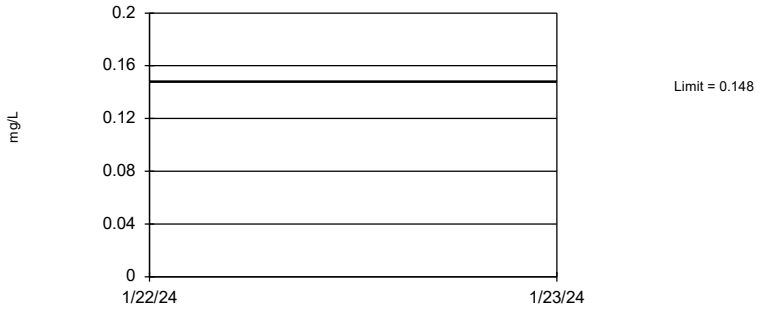
Non-parametric test used in lieu of parametric tolerance limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 40 background values. 89.26% coverage at alpha=0.01; 92.77% coverage at alpha=0.05; 98.24% coverage at alpha=0.5. Report alpha = 0.1285.

Constituent: Combined Radium 226 + 228 Analysis Run 3/5/2024 1:17 PM View: Appendix IV - UTLs
Plant Arkwright Client: Southern Company Data: Arkwright No 2

Sanitas™ v.10.0.15d Software licensed to Groundwater Stats Consulting. UG

Tolerance Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric tolerance limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 44 background values. 43.18% NDs. 90.04% coverage at alpha=0.01; 93.55% coverage at alpha=0.05; 98.24% coverage at alpha=0.5. Report alpha = 0.1047.

Constituent: Fluoride Analysis Run 3/5/2024 1:18 PM View: Appendix IV - UTLs
Plant Arkwright Client: Southern Company Data: Arkwright No 2

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Tolerance Limit

Interwell Non-parametric



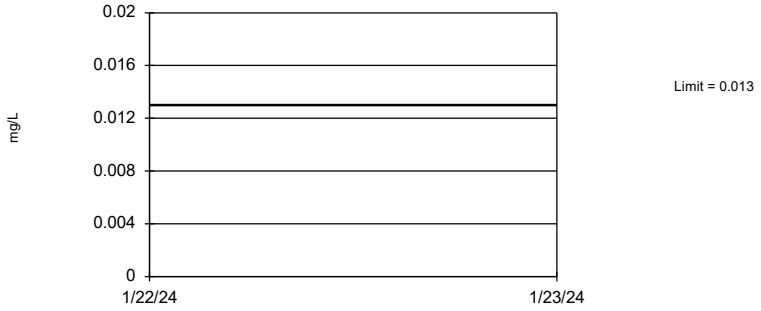
Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 50%. Limit is highest of 70 background values. 87.14% NDs. 93.55% coverage at alpha=0.01; 95.9% coverage at alpha=0.05; 99.02% coverage at alpha=0.5. Report alpha = 0.02758.

Constituent: Lead Analysis Run 3/5/2024 1:18 PM View: Appendix IV - UTLs
Plant Arkwright Client: Southern Company Data: Arkwright No 2

Sanitas™ v.10.0.15d Software licensed to Groundwater Stats Consulting. UG

Tolerance Limit

Interwell Non-parametric



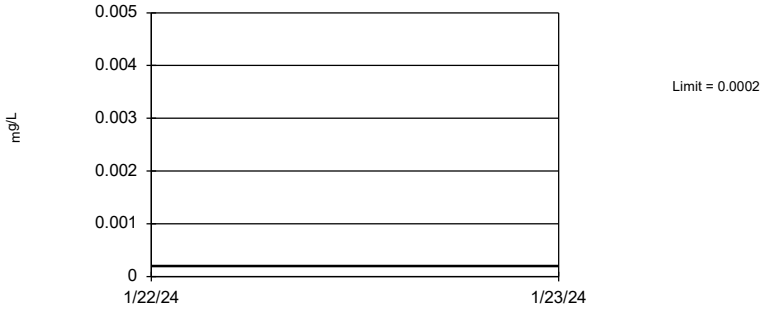
Non-parametric test used in lieu of parametric tolerance limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 42 background values. 42.86% NDs. 89.65% coverage at alpha=0.01; 93.16% coverage at alpha=0.05; 98.24% coverage at alpha=0.5. Report alpha = 0.116.

Constituent: Lithium Analysis Run 3/5/2024 1:18 PM View: Appendix IV - UTLs
Plant Arkwright Client: Southern Company Data: Arkwright No 2

Sanitas™ v.10.0.15d Software licensed to Groundwater Stats Consulting. UG

Tolerance Limit

Interwell Non-parametric



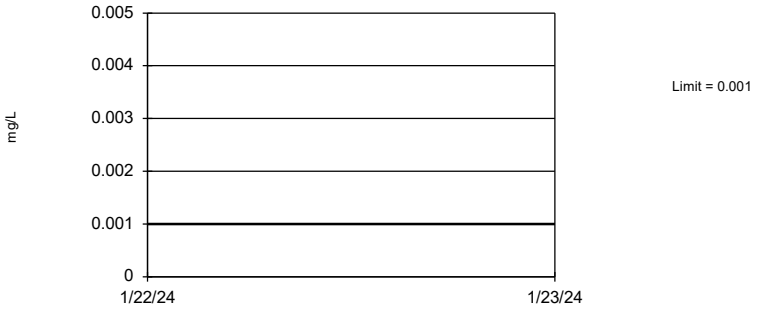
Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 50%. Limit is highest of 32 background values. 93.75% NDs. 86.52% coverage at alpha=0.01; 91.21% coverage at alpha=0.05; 97.85% coverage at alpha=0.5. Report alpha = 0.1937.

Constituent: Mercury Analysis Run 3/5/2024 1:18 PM View: Appendix IV - UTLs
Plant Arkwright Client: Southern Company Data: Arkwright No 2

Sanitas™ v.10.0.15d Software licensed to Groundwater Stats Consulting. UG

Tolerance Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 50%. Limit is highest of 38 background values. 84.21% NDs. 88.48% coverage at alpha=0.01; 92.38% coverage at alpha=0.05; 98.24% coverage at alpha=0.5. Report alpha = 0.1424.

Constituent: Molybdenum Analysis Run 3/5/2024 1:18 PM View: Appendix IV - UTLs
Plant Arkwright Client: Southern Company Data: Arkwright No 2

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Tolerance Limit

Interwell Non-parametric



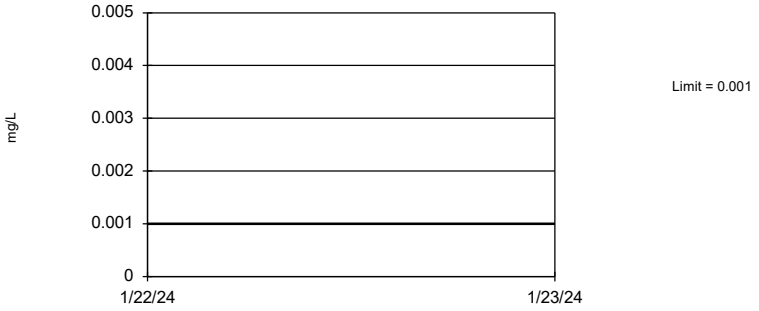
Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 50%. Limit is highest of 69 background values. 66.67% NDs. 93.55% coverage at alpha=0.01; 95.9% coverage at alpha=0.05; 99.02% coverage at alpha=0.5. Report alpha = 0.02904.

Constituent: Selenium Analysis Run 3/5/2024 1:18 PM View: Appendix IV - UTLs
Plant Arkwright Client: Southern Company Data: Arkwright No 2

Sanitas™ v.10.0.15d Software licensed to Groundwater Stats Consulting. UG

Tolerance Limit

Interwell Non-parametric



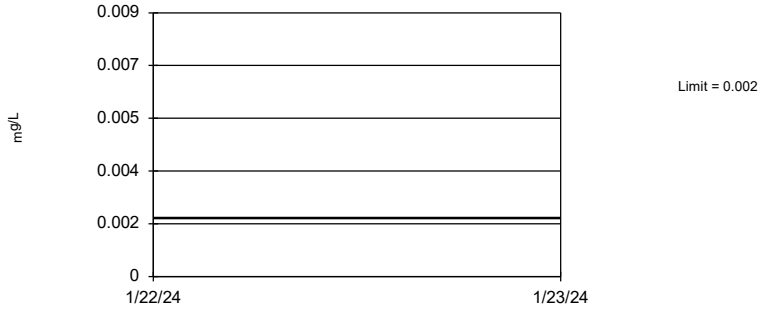
Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 50%. Limit is highest of 60 background values. 91.67% NDs. 92.77% coverage at alpha=0.01; 95.12% coverage at alpha=0.05; 99.02% coverage at alpha=0.5. Report alpha = 0.04607.

Constituent: Silver Analysis Run 3/5/2024 1:18 PM View: Appendix IV - UTLs
Plant Arkwright Client: Southern Company Data: Arkwright No 2

Sanitas™ v.10.0.15d Software licensed to Groundwater Stats Consulting. UG

Tolerance Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 50%. Limit is highest of 32 background values. 96.88% NDs. 86.52% coverage at alpha=0.01; 91.21% coverage at alpha=0.05; 97.85% coverage at alpha=0.5. Report alpha = 0.1937.

Constituent: Thallium Analysis Run 3/5/2024 1:18 PM View: Appendix IV - UTLs
Plant Arkwright Client: Southern Company Data: Arkwright No 2

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		2.5	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 7/10/2024, 3:09 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Cobalt (mg/L)	**ARAMW-7**	**0.07776**	**0.03813**	**0.006**	**Yes**	**8**	**0.05745**	**0.02267**	**0**	**None**	**x^2**	**0.01**	**Param.**
Lithium (mg/L)	**ARAMW-7**	**0.0779**	**0.0577**	**0.04**	**Yes**	**8**	**0.06363**	**0.006526**	**0**	**None**	**No**	**0.004**	**NP (normality)**
Lithium (mg/L)	**ARGWC-23**	**0.05569**	**0.04308**	**0.04**	**Yes**	**8**	**0.04939**	**0.00595**	**0**	**None**	**No**	**0.01**	**Param.**

Confidence Intervals Summary Table - All Results

Plant Arkwright Client: Southern Company Data: Arkwright No 2 Printed 7/10/2024, 3:09 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	6	0.002723	0.0006777	83.33	None	No	0.0155	NP (NDs)
Arsenic (mg/L)	ARAMW-1	0.005	0.00233	0.01	No	9	0.004703	0.00089	88.89	None	No	0.002	NP (NDs)
Arsenic (mg/L)	ARAMW-2	0.03865	0.004284	0.01	No	9	0.02187	0.02622	0	None	x^(1/3)	0.01	Param.
Arsenic (mg/L)	ARAMW-7	0.002531	0.0001492	0.01	No	7	0.003021	0.002031	42.86	Kaplan-Meier	No	0.01	Param.
Arsenic (mg/L)	ARAMW-8	0.005	0.00031	0.01	No	7	0.003261	0.00224	57.14	Kaplan-Meier	No	0.008	NP (NDs)
Arsenic (mg/L)	ARGWC-21	0.005	0.0019	0.01	No	22	0.002937	0.001656	36.36	None	No	0.01	NP (normality)
Arsenic (mg/L)	ARGWC-22	0.005	0.00221	0.01	No	17	0.004038	0.001827	76.47	None	No	0.01	NP (NDs)
Arsenic (mg/L)	ARGWC-23	0.005	0.00075	0.01	No	17	0.004204	0.001774	82.35	None	No	0.01	NP (NDs)
Barium (mg/L)	ARAMW-1	0.05218	0.04364	2	No	9	0.04791	0.00442	0	None	No	0.01	Param.
Barium (mg/L)	ARAMW-2	0.1137	0.0622	2	No	9	0.08786	0.02835	0	None	sqrt(x)	0.01	Param.
Barium (mg/L)	ARAMW-7	0.03327	0.02338	2	No	7	0.02824	0.004325	0	None	sqrt(x)	0.01	Param.
Barium (mg/L)	ARAMW-8	0.1185	0.09092	2	No	7	0.1047	0.01161	0	None	No	0.01	Param.
Barium (mg/L)	ARGWC-21	0.12	0.045	2	No	22	0.08236	0.03514	0	None	No	0.01	NP (normality)
Barium (mg/L)	ARGWC-22	0.04758	0.02884	2	No	17	0.03903	0.01608	0	None	sqrt(x)	0.01	Param.
Barium (mg/L)	ARGWC-23	0.146	0.0968	2	No	17	0.1214	0.03927	0	None	No	0.01	Param.
Beryllium (mg/L)	ARAMW-7	0.0025	0.000236	0.004	No	7	0.00124	0.001179	42.86	None	No	0.008	NP (normality)
Beryllium (mg/L)	ARGWC-22	0.0005	0.00023	0.004	No	16	0.000435	0.000122	68.75	None	No	0.01	NP (NDs)
Beryllium (mg/L)	ARGWC-23	0.0005	0.00033	0.004	No	16	0.0004894	0.0000425	93.75	None	No	0.01	NP (NDs)
Chromium (mg/L)	ARGWC-21	0.01	0.0017	0.1	No	20	0.009585	0.001856	95	None	No	0.01	NP (NDs)
Chromium (mg/L)	ARGWC-22	0.01	0.0048	0.1	No	17	0.009694	0.001261	94.12	None	No	0.01	NP (NDs)
Cobalt (mg/L)	ARAMW-1	0.0008945	0.0003968	0.006	No	10	0.0006489	0.0002821	0	None	sqrt(x)	0.01	Param.
Cobalt (mg/L)	ARAMW-2	0.003001	0.002167	0.006	No	10	0.002584	0.0004672	0	None	No	0.01	Param.
Cobalt (mg/L)	**ARAMW-7**	**0.07776**	**0.03813**	**0.006**	**Yes**	**8**	**0.05745**	**0.02267**	**0**	**None**	**x^2**	**0.01**	**Param.**
Cobalt (mg/L)	ARAMW-8	0.005324	0.002351	0.006	No	8	0.003838	0.001402	0	None	No	0.01	Param.
Cobalt (mg/L)	ARGWC-21	0.0019	0.0007	0.006	No	21	0.001303	0.0005874	0	None	No	0.01	NP (normality)
Cobalt (mg/L)	ARGWC-22	0.007996	0.002675	0.006	No	18	0.005897	0.005051	0	None	sqrt(x)	0.01	Param.
Cobalt (mg/L)	ARGWC-23	0.002049	0.0007833	0.006	No	18	0.001588	0.001302	5.556	None	x^(1/3)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	ARAMW-1	4.342	0.4093	5	No	9	2.412	2.898	0	None	x^(1/3)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	ARAMW-2	5.692	2.145	5	No	9	3.979	2.535	0	None	ln(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	ARAMW-7	5.138	4.231	5	No	7	4.684	0.3819	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	ARAMW-8	2.939	0.07292	5	No	7	1.301	1.329	0	None	sqrt(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	ARGWC-21	1.331	0.5818	5	No	20	1.2	1.232	0	None	ln(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	ARGWC-22	1.184	0.3751	5	No	17	0.8588	0.7533	0	None	sqrt(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	ARGWC-23	0.8802	0.1649	5	No	17	0.6214	0.776	0	None	sqrt(x)	0.01	Param.
Fluoride (mg/L)	ARAMW-1	0.2233	0.1641	4	No	10	0.1937	0.03321	0	None	No	0.01	Param.
Fluoride (mg/L)	ARAMW-2	0.1442	0.07722	4	No	10	0.1107	0.03753	10	None	No	0.01	Param.
Fluoride (mg/L)	ARAMW-7	0.0975	0.0265	4	No	8	0.08325	0.03466	37.5	Kaplan-Meier	No	0.01	Param.
Fluoride (mg/L)	ARAMW-8	0.2578	0.1652	4	No	8	0.2115	0.04367	0	None	No	0.01	Param.
Fluoride (mg/L)	ARGWC-21	0.1576	0.08899	4	No	22	0.1387	0.1051	0	None	ln(x)	0.01	Param.
Fluoride (mg/L)	ARGWC-22	0.134	0.04	4	No	18	0.08188	0.05956	16.67	None	No	0.01	NP (normality)
Fluoride (mg/L)	ARGWC-23	0.3682	0.2191	4	No	18	0.2937	0.1233	0	None	No	0.01	Param.
Lead (mg/L)	ARAMW-7	0.002	0.00013	0.015	No	7	0.001733	0.0007068	85.71	None	No	0.008	NP (NDs)
Lead (mg/L)	ARGWC-21	0.002	0.00026	0.015	No	22	0.001837	0.0005284	90.91	None	No	0.01	NP (NDs)
Lead (mg/L)	ARGWC-22	0.002	0.00022	0.015	No	17	0.001786	0.0006046	88.24	None	No	0.01	NP (NDs)
Lead (mg/L)	ARGWC-23	0.002	0.00026	0.015	No	17	0.001791	0.0005913	88.24	None	No	0.01	NP (NDs)
Lithium (mg/L)	ARAMW-1	0.0101	0.008353	0.04	No	11	0.009226	0.001048	0	None	No	0.01	Param.
Lithium (mg/L)	ARAMW-2	0.036	0.018	0.04	No	11	0.02781	0.01998	0	None	No	0.006	NP (normality)
Lithium (mg/L)	**ARAMW-7**	**0.0779**	**0.0577**	**0.04**	**Yes**	**8**	**0.06363**	**0.006526**	**0**	**None**	**No**	**0.004**	**NP (normality)**
Lithium (mg/L)	ARAMW-8	0.006728	0.005443	0.04	No	8	0.006074	0.0007699	0	None	x^4	0.01	Param.
Lithium (mg/L)	ARGWC-21	0.01222	0.009874	0.04	No	21	0.01105	0.002128	0	None	No	0.01	Param.
Lithium (mg/L)	ARGWC-22	0.02396	0.01499	0.04	No	18	0.01948	0.007413	0	None	No	0.01	Param.
Lithium (mg/L)	**ARGWC-23**	**0.05569**	**0.04308**	**0.04**	**Yes**	**8**	**0.04939**	**0.00595**	**0**	**None**	**No**	**0.01**	**Param.**
Mercury (mg/L)	ARGWC-21	0.0002	0.000073	0.002	No	16	0.0001921	0.00003175	93.75	None	No	0.01	NP (NDs)
Mercury (mg/L)	ARGWC-22	0.000372	0.0002	0.002	No	14	0.0002123	0.00004597	92.86	None	No	0.01	NP (NDs)

Confidence Intervals Summary Table - All Results

Plant Arkwright Client: Southern Company Data: Arkwright No 2 Printed 7/10/2024, 3:09 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Molybdenum (mg/L)	ARAMW-1	0.008376	0.00499	0.1	No	10	0.006683	0.001897	0	None	No	0.01	Param.
Molybdenum (mg/L)	ARAMW-2	0.015	0.000603	0.1	No	10	0.00795	0.007434	50	None	No	0.011	NP (normality)
Molybdenum (mg/L)	ARAMW-7	0.0012	0.000379	0.1	No	8	0.0009474	0.0002401	75	None	No	0.004	NP (NDs)
Molybdenum (mg/L)	ARAMW-8	0.2101	0.07394	0.1	No	8	0.142	0.06421	0	None	No	0.01	Param.
Molybdenum (mg/L)	ARGWC-22	0.015	0.000514	0.1	No	17	0.008298	0.007336	52.94	None	No	0.01	NP (NDs)
Molybdenum (mg/L)	ARGWC-23	0.06355	0.04828	0.1	No	17	0.05218	0.0181	0	None	x^3	0.01	Param.
Selenium (mg/L)	ARGWC-22	0.005	0.002	0.05	No	17	0.004824	0.0007276	94.12	None	No	0.01	NP (NDs)
Silver (mg/L)	ARGWC-21	0.001	0.00043	0.001	No	17	0.0009665	0.0001382	94.12	None	No	0.01	NP (NDs)
Thallium (mg/L)	ARGWC-22	0.002	0.00035	0.002	No	14	0.001553	0.0007422	71.43	None	No	0.01	NP (NDs)
Thallium (mg/L)	ARGWC-23	0.002	0.00028	0.002	No	14	0.001629	0.0007381	78.57	None	No	0.01	NP (NDs)

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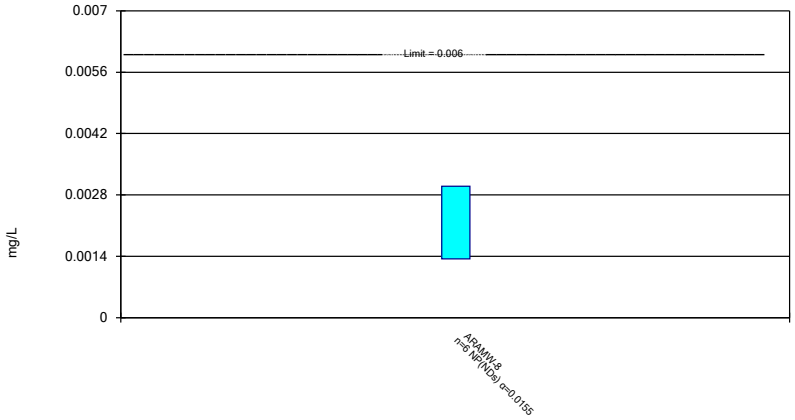
Non-Parametric Confidence Interval

Compliance Limit is not exceeded.



Constituent: Antimony Analysis Run 7/10/2024 3:04 PM View: Confidence Intervals
Plant Arkwright Client: Southern Company Data: Arkwright No 2

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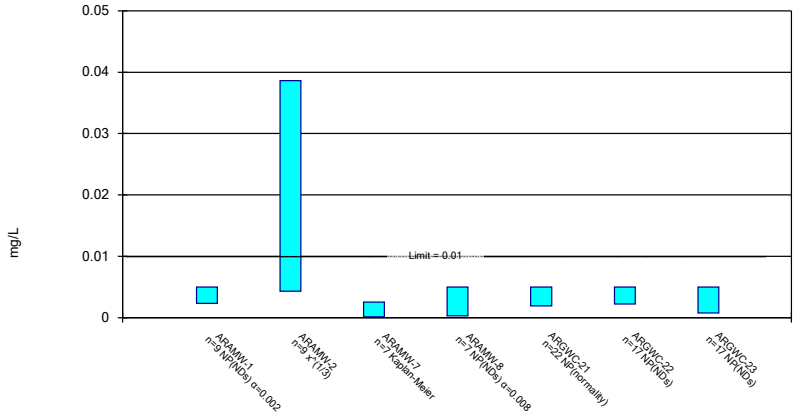
Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Arsenic Analysis Run 7/10/2024 3:04 PM View: Confidence Intervals
Plant Arkwright Client: Southern Company Data: Arkwright No 2

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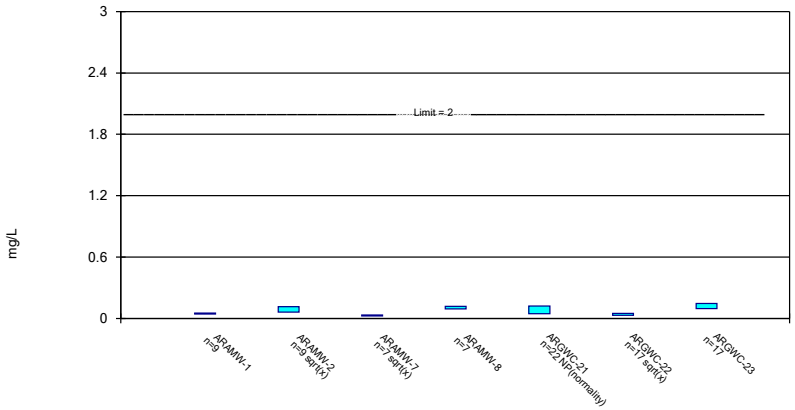
Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Barium Analysis Run 7/10/2024 3:04 PM View: Confidence Intervals
Plant Arkwright Client: Southern Company Data: Arkwright No 2

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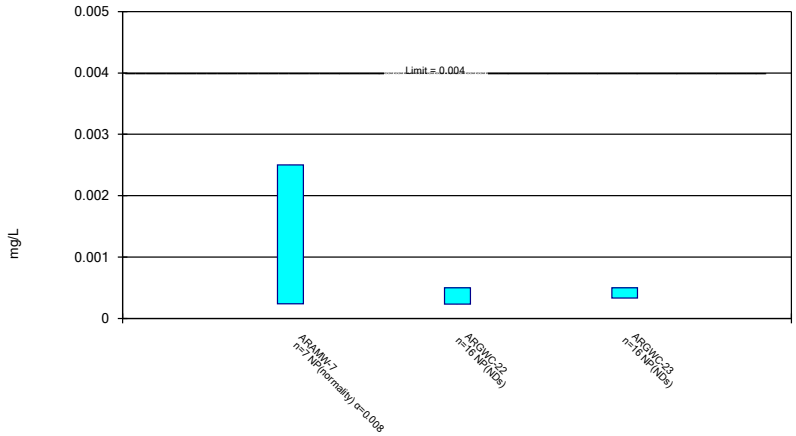
Non-Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted.



Constituent: Beryllium Analysis Run 7/10/2024 3:04 PM View: Confidence Intervals
Plant Arkwright Client: Southern Company Data: Arkwright No 2

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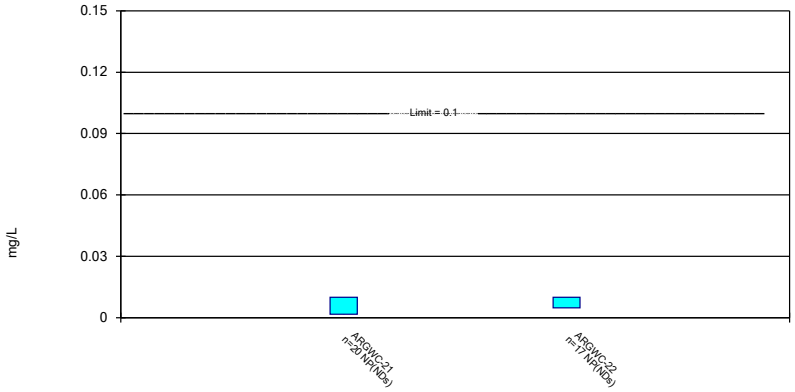
Non-Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Chromium Analysis Run 7/10/2024 3:04 PM View: Confidence Intervals
Plant Arkwright Client: Southern Company Data: Arkwright No 2

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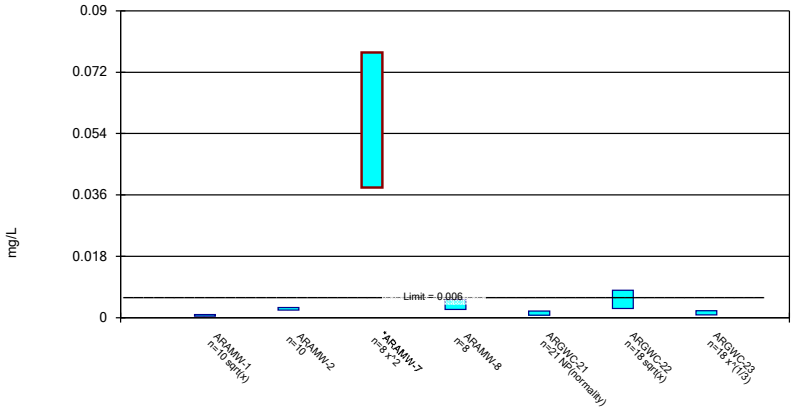
Parametric and Non-Parametric (NP) Confidence Interval

Compliance limit is exceeded.* Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Cobalt Analysis Run 7/10/2024 3:04 PM View: Confidence Intervals
Plant Arkwright Client: Southern Company Data: Arkwright No 2

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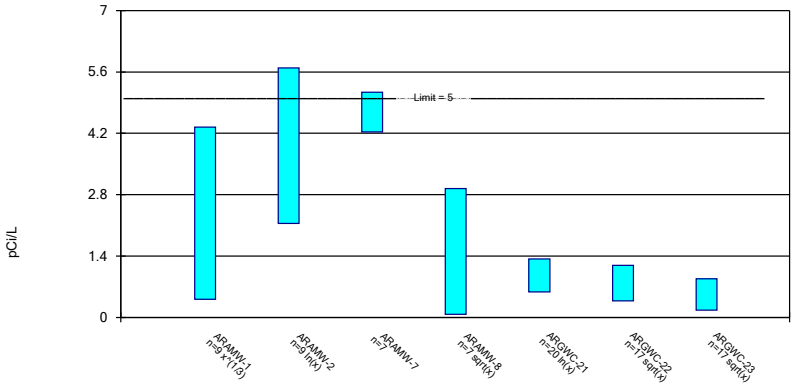
Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Combined Radium 226 + 228 Analysis Run 7/10/2024 3:04 PM View: Confidence Intervals
Plant Arkwright Client: Southern Company Data: Arkwright No 2

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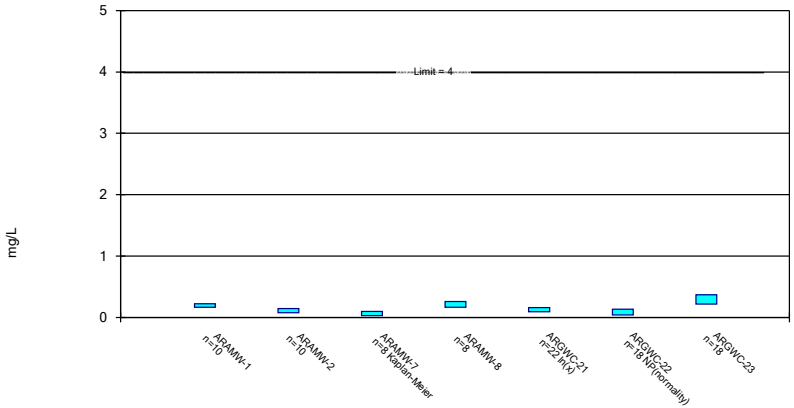
Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Fluoride Analysis Run 7/10/2024 3:04 PM View: Confidence Intervals
Plant Arkwright Client: Southern Company Data: Arkwright No 2

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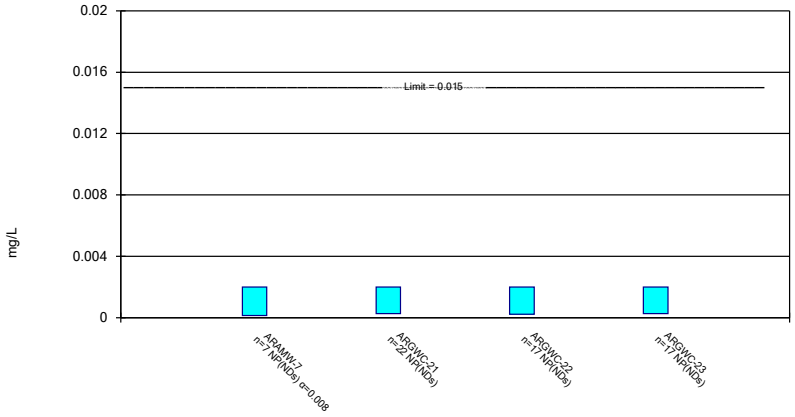
Non-Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted.



Constituent: Lead Analysis Run 7/10/2024 3:04 PM View: Confidence Intervals
Plant Arkwright Client: Southern Company Data: Arkwright No 2

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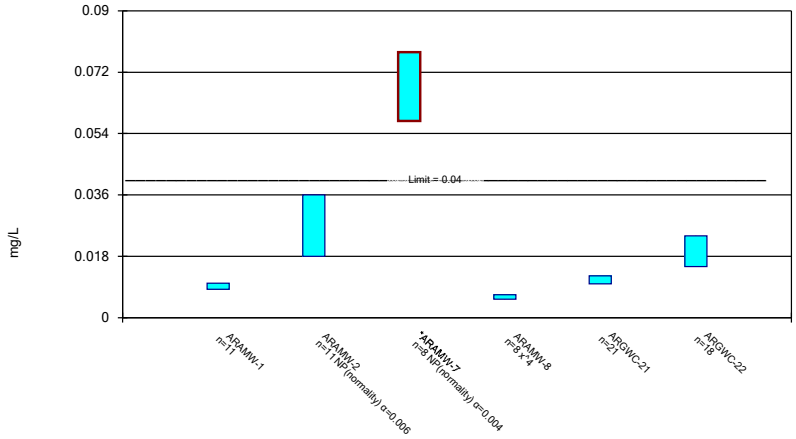
Parametric and Non-Parametric (NP) Confidence Interval

Compliance limit is exceeded.* Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Lithium Analysis Run 7/10/2024 3:04 PM View: Confidence Intervals
Plant Arkwright Client: Southern Company Data: Arkwright No 2

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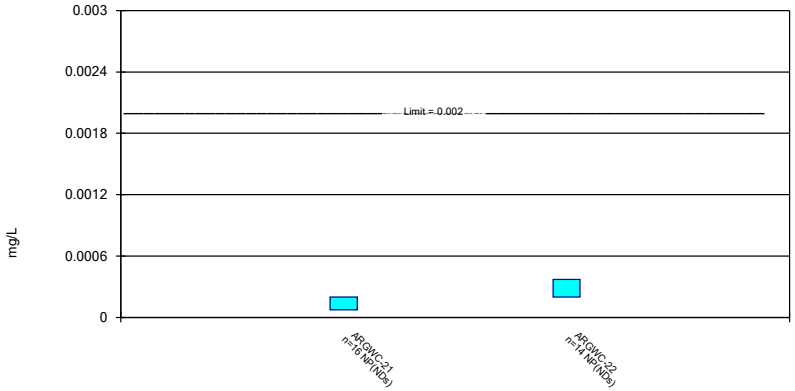
Non-Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Mercury Analysis Run 7/10/2024 3:04 PM View: Confidence Intervals
Plant Arkwright Client: Southern Company Data: Arkwright No 2

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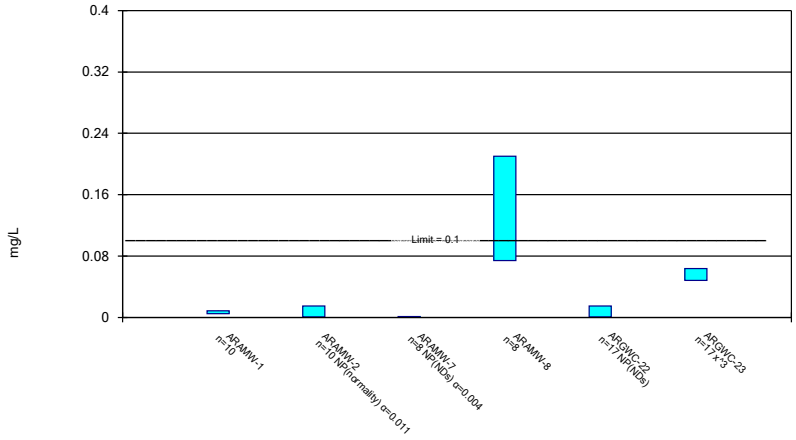
Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Molybdenum Analysis Run 7/10/2024 3:04 PM View: Confidence Intervals
Plant Arkwright Client: Southern Company Data: Arkwright No 2

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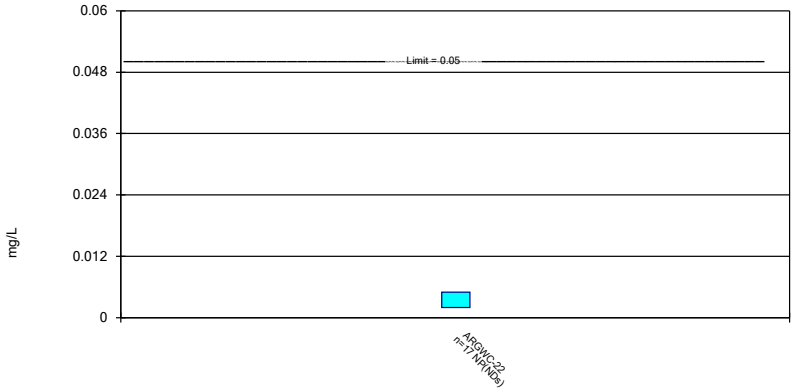
Non-Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Selenium Analysis Run 7/10/2024 3:04 PM View: Confidence Intervals
Plant Arkwright Client: Southern Company Data: Arkwright No 2

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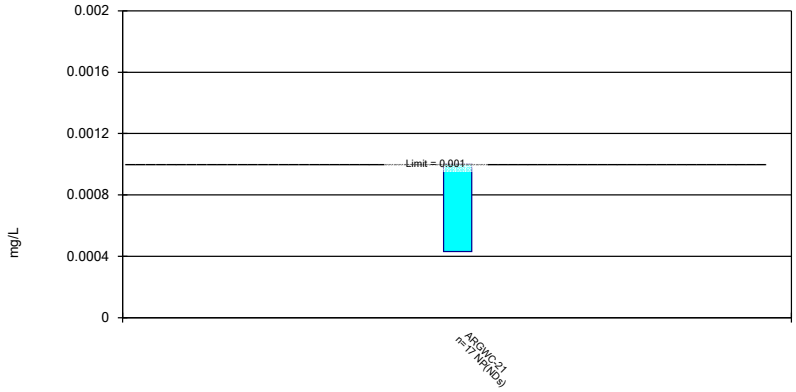
Non-Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Silver Analysis Run 7/10/2024 3:04 PM View: Confidence Intervals
Plant Arkwright Client: Southern Company Data: Arkwright No 2

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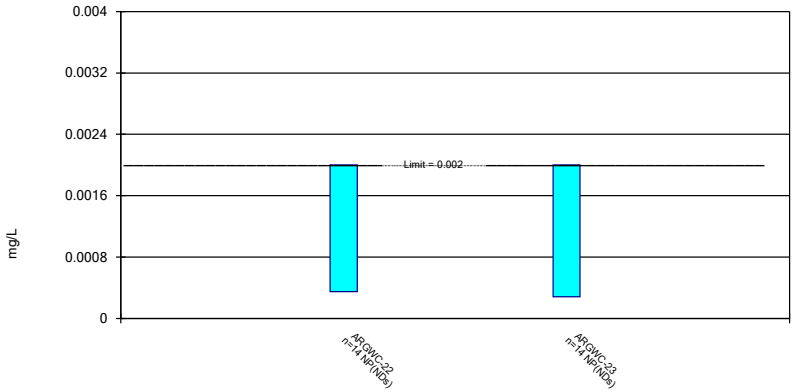
Non-Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Thallium Analysis Run 7/10/2024 3:04 PM View: Confidence Intervals
Plant Arkwright Client: Southern Company Data: Arkwright No 2

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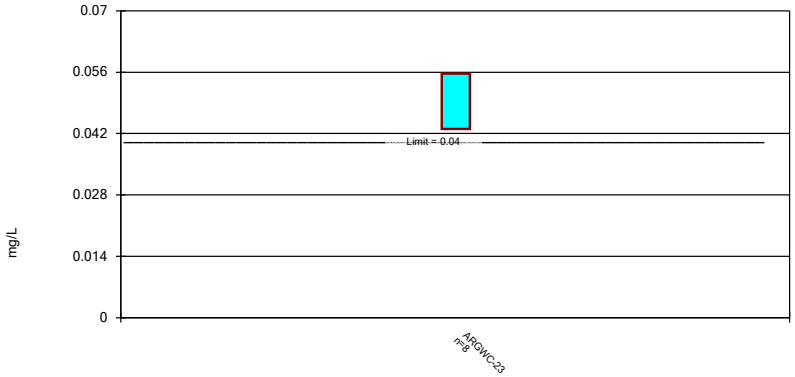
Parametric Confidence Interval

Compliance limit is exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Lithium Analysis Run 7/10/2024 3:05 PM View: Confidence Intervals
Plant Arkwright Client: Southern Company Data: Arkwright No 2

Confidence Interval

Constituent: Antimony (mg/L) Analysis Run 7/10/2024 3:09 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)
1/24/2024	<0.003
Mean	0.002723
Std. Dev.	0.0006777
Upper Lim.	0.003
Lower Lim.	0.00134

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Arsenic (mg/L) Analysis Run 7/10/2024 3:09 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
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
8/9/2023				<0.005	<0.005		
1/23/2024			0.00219 (J)			<0.005	
1/24/2024	<0.005	0.0047 (J)		<0.005	<0.005		<0.005
Mean	0.004703	0.02187	0.003021	0.003261	0.002937	0.004038	0.004204
Std. Dev.	0.00089	0.02622	0.002031	0.00224	0.001656	0.001827	0.001774
Upper Lim.	0.005	0.03865	0.002531	0.005	0.005	0.005	0.005
Lower Lim.	0.00233	0.004284	0.0001492	0.00031	0.0019	0.00221	0.00075

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Barium (mg/L) Analysis Run 7/10/2024 3:09 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
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
8/9/2023				0.122	0.0474		
1/23/2024			0.0277			0.0227	
1/24/2024	0.043	0.0562		0.103	0.0427		0.0922
Mean	0.04791	0.08786	0.02824	0.1047	0.08236	0.03903	0.1214
Std. Dev.	0.00442	0.02835	0.004325	0.01161	0.03514	0.01608	0.03927
Upper Lim.	0.05218	0.1137	0.03327	0.1185	0.12	0.04758	0.146
Lower Lim.	0.04364	0.0622	0.02338	0.09092	0.045	0.02884	0.0968

Confidence Interval

Constituent: Beryllium (mg/L) Analysis Run 7/10/2024 3:09 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
1/23/2024	0.000378 (J)	<0.0005	
1/24/2024			<0.0005
Mean	0.00124	0.000435	0.0004894
Std. Dev.	0.001179	0.000122	4.25E-05
Upper Lim.	0.0025	0.0005	0.0005
Lower Lim.	0.000236	0.00023	0.00033

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Chromium (mg/L) Analysis Run 7/10/2024 3:09 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	
1/23/2024		<0.01
1/24/2024	<0.01	
Mean	0.009585	0.009694
Std. Dev.	0.001856	0.001261
Upper Lim.	0.01	0.01
Lower Lim.	0.0017	0.0048

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Cobalt (mg/L) Analysis Run 7/10/2024 3:09 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)		
1/23/2024			0.0597			0.00408	
1/24/2024	0.000331 (J)	0.00249		0.00203	0.00106		<0.001
Mean	0.0006489	0.002584	0.05745	0.003838	0.001303	0.005897	0.001588
Std. Dev.	0.0002821	0.0004672	0.02267	0.001402	0.0005874	0.005051	0.001302
Upper Lim.	0.0008945	0.003001	0.07776	0.005324	0.0019	0.007996	0.002049
Lower Lim.	0.0003968	0.002167	0.03813	0.002351	0.0007	0.002675	0.0007833

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 7/10/2024 3:09 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		
1/23/2024			4.65			2.1	
1/24/2024	9.3	10.3		2.87	5.34		2.73
Mean	2.412	3.979	4.684	1.301	1.2	0.8588	0.6214
Std. Dev.	2.898	2.535	0.3819	1.329	1.232	0.7533	0.776
Upper Lim.	4.342	5.692	5.138	2.939	1.331	1.184	0.8802
Lower Lim.	0.4093	2.145	4.231	0.07292	0.5818	0.3751	0.1649

Confidence Interval

Constituent: Fluoride (mg/L) Analysis Run 7/10/2024 3:09 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		
1/23/2024			0.126			0.134	
1/24/2024	0.199	0.171		0.222	0.173		0.391
Mean	0.1937	0.1107	0.08325	0.2115	0.1387	0.08188	0.2937
Std. Dev.	0.03321	0.03753	0.03466	0.04367	0.1051	0.05956	0.1233
Upper Lim.	0.2233	0.1442	0.0975	0.2578	0.1576	0.134	0.3682
Lower Lim.	0.1641	0.07722	0.0265	0.1652	0.08899	0.04	0.2191

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Lead (mg/L) Analysis Run 7/10/2024 3:09 PM View: Confidence Intervals

Plant Arkwright Client: Southern Company Data: Arkwright No 2

	ARAMW-7	ARGWC-21	ARGWC-22	ARGWC-23
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		
1/23/2024	<0.002		<0.002	
1/24/2024		<0.002		<0.002
Mean	0.001733	0.001837	0.001786	0.001791
Std. Dev.	0.0007068	0.0005284	0.0006046	0.0005913
Upper Lim.	0.002	0.002	0.002	0.002
Lower Lim.	0.00013	0.00026	0.00022	0.00026

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Lithium (mg/L) Analysis Run 7/10/2024 3:09 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
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
1/14/2020	0.009	0.086				0.034
2/11/2020						0.01
3/9/2020						0.0071
4/7/2020					0.011	0.012
5/27/2020						0.017
6/24/2020	0.0084	0.018				0.023
6/25/2020					0.013	
7/15/2020						0.021
8/19/2020						0.026
8/20/2020	0.0066	0.036				
8/21/2020					0.013	
9/22/2020						0.014
9/30/2020	0.0091					0.014
10/1/2020		0.019			0.012	
11/30/2020			0.061			
12/1/2020				0.0044 (J)		
2/10/2021	0.0097				0.012	0.022
2/11/2021		0.021	0.061	0.0055		
9/8/2021					0.012	
9/9/2021	0.0095			0.0062		
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		
9/1/2022					0.0116	
9/2/2022	0.0097 (J)	0.0232		0.00654 (J)		
9/6/2022						0.0136
9/7/2022			0.0634			
1/31/2023	0.0099 (J)	0.0202	0.068	0.00659 (J)	0.0124	0.0284
8/8/2023	0.00909 (J)	0.0193	0.0577			0.028
8/9/2023				0.00637 (J)	0.0131	
1/23/2024			0.0779			0.0125
1/24/2024	0.0106	0.0172		0.00669 (J)	0.0131	
Mean	0.009226	0.02781	0.06363	0.006074	0.01105	0.01948
Std. Dev.	0.001048	0.01998	0.006526	0.0007699	0.002128	0.007413
Upper Lim.	0.0101	0.036	0.0779	0.006728	0.01222	0.02396
Lower Lim.	0.008353	0.018	0.0577	0.005443	0.009874	0.01499

Confidence Interval

Constituent: Mercury (mg/L) Analysis Run 7/10/2024 3:09 PM View: Confidence Intervals

Plant Arkwright Client: Southern Company Data: Arkwright No 2

	ARGWC-21	ARGWC-22
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	
12/16/2019		<0.0002
1/14/2020		<0.0002
2/11/2020		<0.0002
3/9/2020		<0.0002
5/27/2020		<0.0002
7/15/2020		<0.0002
8/19/2020		<0.0002
8/21/2020	<0.0002	
9/22/2020		<0.0002
9/8/2021	<0.0002	
9/10/2021		<0.0002
2/1/2022	<0.0002	
2/2/2022		<0.0002
9/1/2022	<0.0002	
9/6/2022		<0.0002
1/31/2023	<0.0002	<0.0002
8/8/2023		<0.0002
8/9/2023	<0.0002	
1/23/2024		0.000372
1/24/2024	<0.0002	
Mean	0.0001921	0.0002123
Std. Dev.	3.175E-05	4.597E-05
Upper Lim.	0.0002	0.000372
Lower Lim.	7.3E-05	0.0002

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Molybdenum (mg/L) Analysis Run 7/10/2024 3:09 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		
1/23/2024			<0.001		0.00025 (J)	
1/24/2024	0.00937	0.00101		0.196		0.0651
Mean	0.006683	0.00795	0.0009474	0.142	0.008298	0.05218
Std. Dev.	0.001897	0.007434	0.0002401	0.06421	0.007336	0.0181
Upper Lim.	0.008376	0.015	0.0012	0.2101	0.015	0.06355
Lower Lim.	0.00499	0.000603	0.000379	0.07394	0.000514	0.04828

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Selenium (mg/L) Analysis Run 7/10/2024 3:09 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
1/23/2024	<0.005
Mean	0.004824
Std. Dev.	0.0007276
Upper Lim.	0.005
Lower Lim.	0.002

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Silver (mg/L) Analysis Run 7/10/2024 3:09 PM View: Confidence Intervals

Plant Arkwright Client: Southern Company Data: Arkwright No 2

	ARGWC-21
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
1/24/2024	<0.001
Mean	0.0009665
Std. Dev.	0.0001382
Upper Lim.	0.001
Lower Lim.	0.00043

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Thallium (mg/L) Analysis Run 7/10/2024 3:09 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
1/23/2024	<0.002	
1/24/2024		<0.002
Mean	0.001553	0.001629
Std. Dev.	0.0007422	0.0007381
Upper Lim.	0.002	0.002
Lower Lim.	0.00035	0.00028

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Lithium (mg/L) Analysis Run 7/10/2024 3:09 PM View: Confidence Intervals

Plant Arkwright Client: Southern Company Data: Arkwright No 2

	ARGWC-23
10/1/2020	0.04
2/10/2021	0.044
9/9/2021	0.045
2/3/2022	0.052
9/6/2022	0.0578
1/31/2023	0.0499
8/8/2023	0.0517
1/24/2024	0.0547
Mean	0.04939
Std. Dev.	0.00595
Upper Lim.	0.05569
Lower Lim.	0.04308

FIGURE J.

Appendix IV Trend Tests - Significant Results

Plant Arkwright Client: Southern Company Data: Arkwright No 2 Printed 3/5/2024, 4:13 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Lithium (mg/L)	**ARGWC-23**	**0.009556**	**119**	**53**	**Yes**	**18**	**0**	**n/a**	**n/a**	**0.05**	**NP**

Appendix IV Trend Tests - All Results

Plant Arkwright Client: Southern Company Data: Arkwright No 2 Printed 3/5/2024, 4:13 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Cobalt (mg/L)	ARAMW-7	-0.001524	-2	-17	No	8	0	n/a	n/a	0.05	NP
Cobalt (mg/L)	ARGWA-19 (bg)	0	1	66	No	21	80.95	n/a	n/a	0.05	NP
Cobalt (mg/L)	ARGWA-20 (bg)	0	-32	-66	No	21	52.38	n/a	n/a	0.05	NP
Lithium (mg/L)	ARAMW-7	0.002377	6	17	No	8	0	n/a	n/a	0.05	NP
Lithium (mg/L)	ARGWA-19 (bg)	-0.0002024	-55	-66	No	21	4.762	n/a	n/a	0.05	NP
Lithium (mg/L)	ARGWA-20 (bg)	0	2	66	No	21	80.95	n/a	n/a	0.05	NP
Lithium (mg/L)	**ARGWC-23**	**0.009556**	**119**	**53**	**Yes**	**18**	**0**	**n/a**	**n/a**	**0.05**	**NP**

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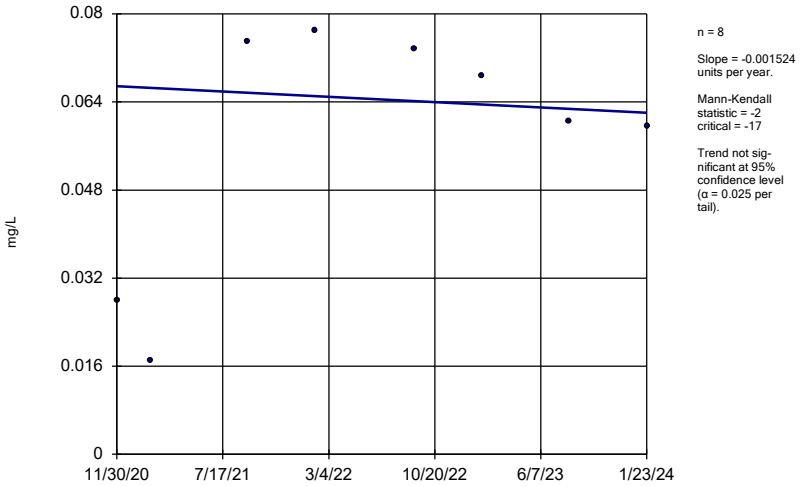
Sen's Slope Estimator

ARAMW-7



n = 8

Slope = -0.001524 units per year.

Mann-Kendall statistic = -2
critical = -17

Trend not significant at 95% confidence level (α = 0.025 per tail).

Constituent: Cobalt Analysis Run 3/5/2024 4:12 PM View: Trend Test - Confidence Interval Exceedances
Plant Arkwright Client: Southern Company Data: Arkwright No 2

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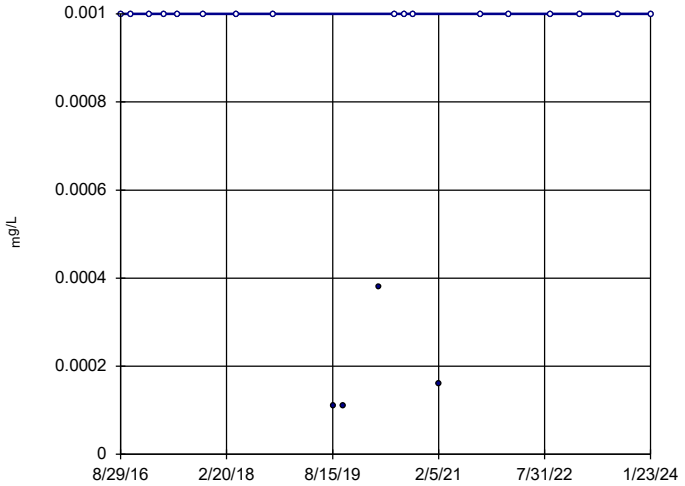
Hollow symbols indicate censored values.

Sen's Slope Estimator

ARGWA-19 (bg)



n = 21

Slope = 0 units per year.

Mann-Kendall statistic = 1
critical = 66

Trend not significant at 95% confidence level (α = 0.025 per tail).

Constituent: Cobalt Analysis Run 3/5/2024 4:12 PM View: Trend Test - Confidence Interval Exceedances
Plant Arkwright Client: Southern Company Data: Arkwright No 2

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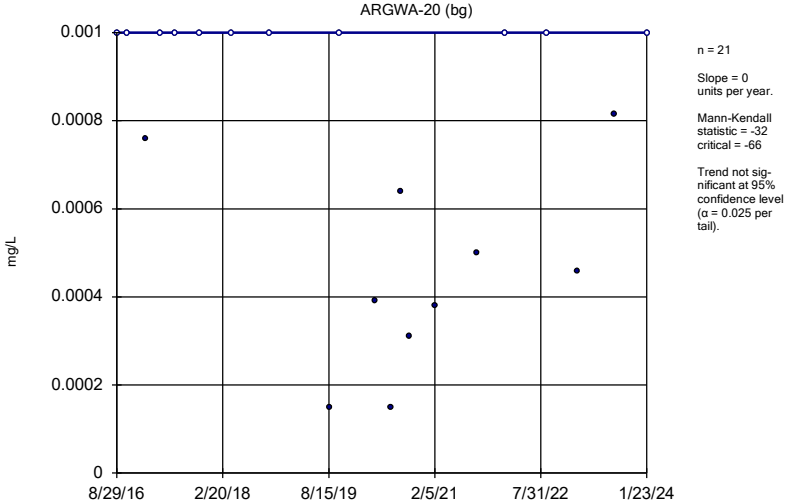
Hollow symbols indicate censored values.

Sen's Slope Estimator

ARGWA-20 (bg)



n = 21

Slope = 0 units per year.

Mann-Kendall statistic = -32
critical = -66

Trend not significant at 95% confidence level (α = 0.025 per tail).

Constituent: Cobalt Analysis Run 3/5/2024 4:12 PM View: Trend Test - Confidence Interval Exceedances
Plant Arkwright Client: Southern Company Data: Arkwright No 2

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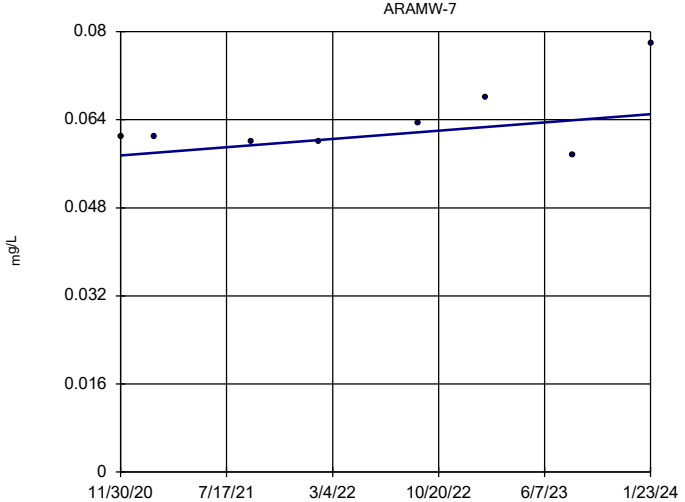
Sen's Slope Estimator

ARAMW-7



n = 8

Slope = 0.002377 units per year.

Mann-Kendall statistic = 6
critical = 17

Trend not significant at 95% confidence level (α = 0.025 per tail).

Constituent: Lithium Analysis Run 3/5/2024 4:12 PM View: Trend Test - Confidence Interval Exceedances
Plant Arkwright Client: Southern Company Data: Arkwright No 2