

2024 ANNUAL GROUNDWATER MONITORING REPORT

Plant Arkwright Ash Pond 1 (AP-1) Landfill Macon, Georgia

July 31, 2024

Prepared for:



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

2024 Annual Groundwater Monitoring Report Plant Arkwright Ash Pond 1 Landfill

CERTIFICATION STATEMENT

This 2024 Annual Groundwater Monitoring Report, Plant Arkwright, Ash Pond 1 Landfill has been prepared in compliance with the Interim Groundwater Monitoring Plan submitted to the Georgia Environmental Protection Division on September 24, 2021. Plant Arkwright AP-1 Landfill closed according to Solid Waste Management Tracking Number 011-030D(LI) since July 30, 2010. This report has been prepared by a qualified groundwater scientist or engineer with Stantec Consulting Services, Inc. I hereby certify that I am a qualified groundwater scientist, in accordance with the Georgia Rules of Solid Waste Management 391-3-4-.01.

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

SEORGIA RESIDENCE DE PROFESSION

7/31/2024

Date

Katie Ross, P.G.

Senior Principal

<u>7/31/2024</u> Date

Table of Contents

EXECU ⁻	TIVE SUMMARY	II.
ACRON	YMS / ABBREVIATIONS	Ш
1.0 1.1 1.2 1.2.1 1.2.2 1.3	INTRODUCTION	. 1 . 2 . 2
2.0 2.1 2.2	GROUNDWATER MONITORING ACTIVITIES Well and Piezometer Maintenance Surface Water Sampling.	. 4
3.0 3.1 3.2 3.3 3.4 3.5 3.6	SAMPLE METHODOLOGY & ANALYSES Groundwater Elevation Measurements and Flow Direction Groundwater Gradient and Flow Velocity Groundwater Sampling Surface Water Sampling Laboratory Analyses Quality Assurance & Quality Control	. 5 . 6 . 6
4.0	GROUNDWATER AND SURFACE WATER RESULTS	.8
5.0	MONITORING PROGRAM STATUS	.9
6.0	CONCLUSIONS & FUTURE ACTIONS	10
7.0	REFERENCES	11
LIST OF Table 1 Table 2 Table 3 Table 4 Table 5 Table 6	Summary of Piezometer Construction Groundwater Sampling Event Summary Summary of Groundwater Elevations Groundwater Flow Velocity Calculations Analytical Data Summary – Groundwater, June 2023, October 2023, and January 2024 Analytical Data Summary – Surface Water, October 2023, and January 2024	
LIST OF Figure 1 Figure 2 Figure 3 Figure 4	FIGURES Site Location Map Piezometer and Surface Water Sample Locations Map Potentiometric Surface Contour Map, Ash Pond 1 Landfill – October 9, 2023 Potentiometric Surface Contour Map, Ash Pond 1 Landfill – January 22, 2024	
	APPENDICES A Well Inspections	

Appendix B Field Sampling Data and Analytical Data Reports

- Field Sampling Data B.1
- B.2 Calibration Data
- Groundwater & Surface Water Laboratory Analytical Reports B.3
- Data Quality Evaluation B.4



Executive Summary

This summary of the *2024 Annual Groundwater Monitoring Report* provides the status of the groundwater monitoring program from July 2023 through June 2024 at the Georgia Power Company (Georgia Power)

former Plant Arkwright Ash Pond 1 (AP-1) Landfill. This summary was prepared by Stantec Consulting Services Inc. (Stantec) on behalf of Georgia Power.

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 31-acre AP-1 Landfill is located south of the former plant area and is bordered by the Ocmulgee River, Beaverdam Creek, and a Norfolk Southern Railroad line. 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. The AP-1 Landfill received a closure certificate on July 30, 2010, under Solid Waste Permit Number 011-030D(LI). AP-1 Landfill is currently in post-closure care.

A coal combustion residuals (CCR) unit solid waste handling permit application, dated November 2018, was submitted to the Georgia Environmental Protection Division (GA EPD) pursuant to the requirements of Georgia Administrative Code Rule 391-3-4-.10. Per the 2018 permit submittal, Georgia Power has elected to remove CCR material from AP-1 Landfill and place it in a lined landfill. The Groundwater Monitoring Plan, Revision 1, is a minor modification



Plant Arkwright Ash Pond 1 Landfill

to Solid Waste Permit Number 011-030D(LI) and an interim plan, as requested by GA EPD on March 23, 2021, to be used until the new CCR unit solid waste handling permit is issued and a permanent groundwater monitoring system is established for AP-1 Landfill. Monitoring and reporting utilizing the existing interim groundwater monitoring network will be conducted on a semi-annual basis in accordance with the Groundwater Monitoring Plan until CCR removal activities require the interim piezometers to be abandoned. Groundwater monitoring at AP-1 Landfill has been initiated in order to meet GA EPD requirements. A minor modification was submitted to GA EPD on June 15, 2023, for the abandonment of AP1PZ-6 and removal of AP1PZ-6 from the groundwater monitoring system in support of initial construction. AP1PZ-6 was abandoned on June 21, 2023.

During the 2023-2024 annual reporting period, Stantec conducted two semi-annual groundwater sampling events in October 2023 and January 2024. Piezometer AP1PZ-6 was sampled in June 2023 prior to its abandonment. Samples were analyzed for the full suites of Appendix III and Appendix IV constituents listed in Title 40, Code of Federal Regulations, Part 257.

Georgia Power will continue semi-annual groundwater monitoring and reporting at the AP-1 Landfill. Reports will be provided to GA EPD semi-annually.



Acronyms / Abbreviations

40 CFR Title 40 Code of Federal Regulations

AP-1 Ash Pond 1

CCR Coal Combustion Residuals
District Washington Slope District

DO Dissolved Oxygen

GA EPD Georgia Environmental Protection Division

GEL Laboratories LLC
Georgia Power Georgia Power Company

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 1 Landfill Site

Stantec Stantec Consulting Services, Inc.

US EPA United States Environmental Protection Agency

1.0 Introduction

This 2024 Annual Groundwater Monitoring Report has been prepared to document groundwater monitoring activities conducted at the Georgia Power Company (Georgia Power) former Plant Arkwright Ash Pond-1 (AP-1) Landfill Site (Site).

Groundwater monitoring and reporting for Plant Arkwright AP-1 Landfill are performed in accordance with the Interim Groundwater Monitoring Plan, Revision 1 (Jacobs, 2021), submitted to Georgia Environmental Protection Division (GA EPD) on September 24, 2021. This interim plan is a minor modification to Solid Waste Permit Number 011-030D(LI), as requested by GA EPD on March 23, 2021. Per the 2018 Georgia Power Company (CCR) permit submittal, Georgia Power has elected to remove CCR material from AP-1 Landfill and place it in a lined landfill. Groundwater monitoring at the Site will be conducted in accordance with this Interim Groundwater Monitoring Plan until the new CCR unit solid waste handling permit is issued, and a permanent groundwater monitoring network is established for AP-1 Landfill. This 2024 annual report documents the activities completed between July 2023 and June 2024. Two groundwater monitoring events were conducted during this monitoring period in October 2023 and January 2024. Additionally, piezometer AP1PZ-6 was sampled in June 2023, prior to abandonment due to construction, and the results are included in this report.

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 31-acre AP-1 Landfill is located south of the former plant area and is bordered by the Ocmulgee River, Beaverdam Creek, and a Norfolk Southern Railroad line (Figure 2). When in operation, the coal-fired Plant Arkwright power plant consisted of four 40-megawatt units. In the years before retirement, the plant was used primarily to provide peaking power and operated approximately 40 to 60 days per year. Plant Arkwright was retired in 2002 and decommissioned in 2003.

AP-1 Landfill was constructed prior to 1958 and was closed with 2 feet of soil cover and vegetation in 1990. Regrading and stabilization of the riverbank and creek bank occurred in two phases in 2004 and 2007. Additionally, the slopes and top of AP-1 Landfill were regraded by relocating CCR and placing additional cover soil (Jacobs, 2018).

AP-1 Landfill received a closure certificate on July 30, 2010, under Solid Waste Permit Number 011-030D(LI) and is currently in post-closure care. Because the unit ceased receiving waste prior to October 19, 2015, the AP-1 Landfill is exempt from the 2015 requirements in Title 40 Code of Federal Regulations (40 CFR) Part 257 Subpart D – Standards for the Disposal of Coal Combustion Residuals in Landfills and Surface Impoundments, as specified in 40 CFR §257.50 (d) and (e). As such, a CCR unit solid waste handling permit application package for the AP-1 Landfill was submitted to GA EPD in November 2018 and is currently under review. To continue stabilization and streambank improvement of the AP-1 Landfill slope and to reduce the steepness of the slope along the south point of the AP-1 Landfill, the south point was excavated and regraded in late 2023 under GA EPD's approval of a minor modification. CCR materials were removed and transported to a CCR Stockpile within the Landfill footprint. The CCR Stockpile as well as the south point after CCR removal was subsequently graded and covered with



2024 Annual Groundwater Monitoring Report Plant Arkwright Ash Pond 1 Landfill 1.0 Introduction

suitable material in accordance with permit requirements. Activities were documented in the AP-1 South Point Slope Improvement CCR Removal and Cover Certification Report, which was submitted to GA EPD on April 26, 2024.

1.2 Regional Geology & Hydrogeologic Setting

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

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

Bedrock in the region is composed of moderate to high-grade metamorphic rocks, consisting of biotite-granite gneiss, schist, and amphibolite, and igneous rocks like granite. In the southernmost Piedmont, around the Site, bedrock is predominantly composed of biotite gneiss. Major geologic structures in the region include the Ocmulgee fault, located approximately 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 overburden thickness ranging from 22 to 62 feet, overlying a thin layer (5 to 10 feet) of partially weathered rock (PWR) above a more competent bedrock. The underlying bedrock consists of quartzofeldspathic gneiss, hornblende gneiss, and schist (Jacobs, 2021).

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



2024 Annual Groundwater Monitoring Report Plant Arkwright Ash Pond 1 Landfill 1.0 Introduction

unconfined conditions. The interim piezometers were installed to evaluate the uppermost occurrence of groundwater at the Site and form the groundwater monitoring system for AP-1 Landfill (Figure 2).

Slug testing data from the Site reflects a range of hydraulic conductivities from 10⁻⁶ to 10⁻³ centimeters per second in the water table (overburden) hydrostratigraphic unit (Jacobs, 2021). Groundwater level gauging data from the Site show stable water level trends, and the potentiometric surface maps depict groundwater flowing to the east, southeast, and northeast, in the direction of the Ocmulgee River and Beaverdam Creek (Figures 3 and 4).

1.3 Groundwater Monitoring System

Georgia Power installed a temporary groundwater monitoring system within the uppermost aquifer at the Site. Wells and piezometers were located to serve as upgradient or downgradient monitoring points based on the groundwater flow direction (Table 1). The well and piezometer locations are depicted in Figure 2. Due to access constraints and safety concerns, downgradient piezometers at AP-1 Landfill were installed through CCR and will be removed during the closure by removal of the unit. A permanent groundwater monitoring system will be established following closure as noted in the 2018 CCR permit application.



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 and piezometers in the monitoring network depicted in Figure 2. In accordance with 40 CFR § 257.93, Table 2 presents a summary of the groundwater sampling events completed for AP-1 Landfill during this monitoring period.

Piezometer AP1PZ-6 was abandoned in June of 2023 due to construction activities involving ash removal on the southern tip of the landfill, and groundwater sampling for the Fall of 2023 was completed for piezometer AP1PZ-6 on June 13, 2023, prior to the abandonment. The remaining AP-1 Landfill piezometers were sampled in October 2023 and January 2024.

2.1 Well and Piezometer Maintenance

Wells and piezometers 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)). Well inspection forms are included in Appendix A. In October 2023 and January 2024, the piezometers were inspected. There was no need for corrective actions for the wells at AP-1 Landfill during this reporting period.

2.2 Surface Water Sampling

Due to the close proximity of Beaverdam Creek and the Ocmulgee River in the downgradient direction, Georgia Power proactively collected surface water samples. Surface water samples were collected from four locations along the Ocmulgee River and two locations along Beaverdam Creek in October 2023 and January 2024, as depicted in Figure 2.

Surface water samples were analyzed for the full suites of 40 CFR Part 257 Appendix III and 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 October 2023 and January 2024 sampling events are provided in Appendix B. Georgia Power will continue collecting the surface water samples semi-annually during interim groundwater monitoring.



3.0 Sample Methodology & Analyses

The semi-annual groundwater sampling events completed in June 2023 (AP1PZ-6 only), October 2023, and January 2024 for AP-1 Landfill includes sampling for the constituents listed in 40 CFR Part 257 Appendix III and Appendix IV. Groundwater analytical data and chain-of-custody records are located in Appendix B. The following sections describe methods used to conduct groundwater monitoring activities at AP-1.

3.1 Groundwater Elevation Measurements and Flow Direction

Prior to each sampling event, the static groundwater levels were measured in each well and piezometer at AP-1 Landfill. The water level indicator was properly decontaminated between each measurement. Groundwater elevations are summarized in Table 3. The recorded groundwater levels were used to determine the groundwater elevations in each piezometer and develop potentiometric surface contour maps (Figures 3 and 4). Review of the figures indicates that the apparent groundwater flow direction in the uppermost aquifer is to the east, southeast, and northeast, in the direction of the Ocmulgee River and Beaverdam Creek. This groundwater flow pattern is generally consistent with historical groundwater flow patterns.

3.2 Groundwater Gradient and Flow Velocity

The groundwater flow velocity at AP-1 Landfill was calculated using a derivation of Darcy's Law. Specifically,

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

Where:

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

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

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

 $n_{\circ} =$ Effective porosity (unitless)

The general groundwater flow velocities were calculated for AP-1 Landfill based on hydraulic gradients, average hydraulic conductivity based on previous slug test data, and an estimated effective porosity of 0.20 for silty sand (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 October 9, 2023, and January 22, 2024, are presented in Table 4. The results for groundwater flow velocities ranged from 0.0040 to 0.0053 feet/day in the southern portion of the Site to 0.12 feet/day in the northeastern portion of the Site (1.5 to 1.9 and 43 to 45 feet/year, respectively) on October 9, 2023, and January 22, 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 June 2023 (AP1PZ-6 only), October 2023, and January 2024. Sampling procedures were conducted in accordance with U.S. Environmental Protection Agency (US EPA) Region 4 Laboratory Services and Applied Science Division Operating Procedures for Groundwater Sampling (LSASDPROC-301-R6, April 22, 2023). Wells and piezometers 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 consecutive readings measured at 5-minute intervals:

- pH ± 0.1 Standard Units
- Specific conductance ± 5 %
- \pm 10% for DO where DO > 0.5 milligrams per liter (mg/L). No criterion applies if DO < 0.5 mg/L
- Turbidity measurements less than 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. 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 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 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 40 CFR Part 257 Appendix III and Appendix IV constituents. Laboratory analyses of the groundwater were performed by GEL, which is accredited by the National



2024 Annual Groundwater Monitoring Report Plant Arkwright Ash Pond 1 Landfill 3.0 Sample Methodology & Analyses

Environmental Laboratory Accreditation Program (NELAP) and maintains the NELAP accreditation for the constituents analyzed for this project. Table 5 summarizes the groundwater analytical results for June 2023 (AP1PZ-6 only), October 2023, and January 2024, and the corresponding formal analytical reports are in Appendix B.

The October 2023 and January 2024 surface water samples were also analyzed for 40 CFR Part 257 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 June 2023 (AP1PZ-6 only), October 2023, and January 2024 groundwater 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.



4.0 Groundwater and Surface Water Results

The analytical data for the 40 CFR Part 257 Appendix III and IV constituents for the June 2023 (AP1PZ-6 only), October 2023, and January 2024 groundwater monitoring events and for the October 2023 and January 2024 surface water sampling events, are summarized in Table 5 and Table 6, respectively. The complete laboratory and field data sheets are included in Appendix B.



5.0 Monitoring Program Status

The AP-1 Landfill is currently in post-closure care. Groundwater monitoring has been initiated at the request of GA EPD. Georgia Power will continue routine groundwater monitoring and reporting at the Site. Reports will be submitted to the GA EPD semi-annually.



6.0 Conclusions & Future Actions

This 2024 Annual Groundwater Monitoring Report was prepared to fulfill the requirements of the Interim Groundwater Monitoring Plan (Jacobs, 2021). Due to construction activities at the Site, groundwater sampling for the Fall of 2023 was completed for piezometer AP1PZ-6 on June 13, 2023, for the AP-1 Landfill. The remaining AP-1 Landfill piezometers, monitoring wells, and surface water sampling locations were sampled in October 2023 and January 2024. The next semi-annual sampling event is scheduled for July 2024. The July 2024 semi-annual monitoring event will include sampling and analysis of the full suites of 40 CFR Part 257 Appendix III and IV constituents.



7.0 References

- Clark, W.Z., and Zisa, A.C., 1976, Physiographic Map of Georgia: 1:2,000,000, Georgia Department of Natural Resources, Geologic and Water Resources Division, Atlanta, Georgia.
- Driscoll, F.G. 1986. Ground Water and Wells, 2nd Edition, Johnson Filtration Systems, Inc., St. Paul. Minnesota, 1089p.
- Freeze, R.A. and Cherry, JA. 1979, Groundwater, Prentice-Hall, Englewood Cliffs, New Jersey, 604 pp.
- Jacobs, 2018. Limited Hydrogeological Assessment Report for Inactive CCR Landfill Georgia Power Company Former Plant Arkwright AP1 Landfill, Macon, Bibb County, Georgia., November 2018.
- Jacobs, 2021. Groundwater Monitoring Plan, Revision 1 Georgia Power Company Former Plant Arkwright AP1 Landfill, Permit No. 011-030D(LI), Bibb County, Georgia., September 2021.
- LeGrand, H. E. 1962. Geology and Ground-water Resources of the Macon Area, Georgia. The Geological Survey Bulletin No. 72.
- Southern Company Services, Inc., 2005. Plant Arkwright Ash Ponds 2 and 3 and Ash Monofill Site Acceptability Report, Revision 1.
- Stantec (2023a). "Minor Modification AP-1: Update Groundwater Monitoring Plan." Prepared for Southern Company Services, June 2023.
- Stantec (2023b). "Minor Modification AP-1: South Point Slope Improvement." Prepared for Southern Company Services, June 2023.
- Stantec (2024) "AP-1 South Point Slope Improvement CCR Removal and Cover Certification Report" Prepared for Southern Company Services, April 2024.
- US EPA, 1989. US EPA 530/SW-89-031 Interim Final RCRA Investigation (RFI) Guidance, Volume I and II.
- US EPA, 2002. Data Validation Standard Operating Procedures and Quality Assurance Manual., November 2002
- US EPA, 2023, Laboratory Services and Applied Science Division Operating Procedures for Surface Water Sampling LSASDPROC-201-R6, April 22, 2023.
- US EPA, 2023, Laboratory Services and Applied Science Division Operating Procedures for Groundwater Sampling LSASDPROC-301-R6, April 22, 2023.

(

TABLES

TABLE 1 SUMMARY OF PIEZOMETER CONSTRUCTION Georgia Power Company - Plant Arkwright AP-1 Landfill Macon, Georgia

Well	Installation Date	Northing ⁽¹⁾	Easting ⁽¹⁾	Top of Casing Elevation (feet NAVD88) ⁽²⁾	Ground Surface Elevation (feet NAVD88) ⁽²⁾	Top of Screen Elevation (feet NAVD88) ⁽³⁾	Bottom of Screen Elevation (feet NAVD88) ⁽³⁾	Screen Length (feet)	Groundwater Zone Screened	Hydraulic Location
AP1GWA-1	4/20/2018	1066048.91	2439462.98	345.44	342.28	318.6	308.6	10.0	Overburden/ Bedrock	Upgradient
AP1GWA-2	4/20/2018	1065095.10	2439623.37	341.42	338.55	320.9	310.9	10.0	Overburden/ Bedrock	Upgradient
AP1PZ-1	5/1/2021	1062799.79	2440164.34	338.97	335.92	261.9	251.9	10.0	Overburden/ Bedrock	Downgradient
AP1PZ-2	5/2/2021	1062573.21	2440300.14	339.58	336.64	287.5	277.5	10.0	Bedrock	Downgradient
AP1PZ-3	5/4/2021	1062286.28	2440387.36	338.57	335.50	281.7	271.7	10.0	Overburden/ Bedrock	Downgradient
AP1PZ-4	5/11/2021	1061989.86	2440520.65	338.36	334.98	281.4	271.4	10.0	Overburden	Downgradient
AP1PZ-5	5/13/2021	1061645.61	2440599.18	339.81	336.61	283.1	273.1	10.0	Overburden	Downgradient
AP1PZ-6*	5/13/2021	1061273.40	2440714.78	347.56	344.25	285.4	275.4	10.0	Overburden/PWR	Downgradient
AP1PZ-7	5/15/2021	1061483.62	2440573.47	340.91	337.56	273.7	263.7	10.0	Overburden	Downgradient
AP1PZ-8	5/16/2021	1061721.72	2440362.39	338.31	334.94	282.7	272.7	10.0	Overburden/PWR	Downgradient
AP1PZ-9	5/17/2021	1062083.33	2440187.59	337.62	334.14	291.4	281.4	10.0	Bedrock	Downgradient
AP1PZ-10	5/19/2021	1062334.74	2440116.05	338.38	335.07	292.4	282.4	10.0	Bedrock	Downgradient
AP1PZ-11	5/26/2021	1062615.94	2440044.48	338.98	335.78	276.2	266.2	10.0	Overburden	Downgradient

- 1. Horizontal locations were referenced to Georgia State Plane West, North American Datum of 1983 (NAD 83).
- 2. Elevations are feet referenced to North American Vertical Datum of 1988 (NAVD 88).
- 3. Screen elevations were calculated using total depth and length of bottom sump.
- 4. PWR indicates Partially Weathered Rock.
- 5. * = Abandoned. AP1PZ-6 was abandoned on June 20 21, 2023.

TABLE 2 GROUNDWATER SAMPLING EVENT SUMMARY Georgia Power Company - Plant Arkwright

AP-1 Landfill Macon, Georgia

Well ID	Hydraulic	Summary of Sampling Event						
Woll ID	Location	October 9-11, 2023	January 22-23, 2024					
Purpose of S	Sampling Event	Mor	nitoring					
Al	P-1 LANDFILL INTERIM N	IONITORING WELL NET	WORK					
AP1GWA-1	Upgradient	Х	Χ					
AP1GWA-2	Upgradient	Х	X					
AP1PZ-1	Downgradient	Х	Х					
AP1PZ-2	Downgradient	Х	Х					
AP1PZ-3	Downgradient	X	Х					
AP1PZ-4	Downgradient	Х	Х					
AP1PZ-5	Downgradient	Х	X					
AP1PZ-6*	Downgradient	X						
AP1PZ-7	Downgradient	X	Х					
AP1PZ-8	Downgradient	X	X					
AP1PZ-9	Downgradient	X	X					
AP1PZ-10	Downgradient	X X						
AP1PZ-11	Downgradient	X X						

X - Indicates well sampled during event

^{*} AP1PZ-6 was sampled on June 13, 2023 as part of the October 2023 event and abandoned on June 21, 2023.

TABLE 3 SUMMARY OF GROUNDWATER ELEVATIONS Georgia Power Company - Plant Arkwright AP-1 Landfill Macon, Georgia

Well ID	Top of Casing Elevation (feet NAVD88) ⁽¹⁾	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		10/	/9/2023	1/2	2/2024
AP1GWA-1	345.44	26.96	318.48	25.95	319.49
AP1GWA-2	341.42	19.67	321.75	18.19	323.23
AP1PZ-1	338.97	45.73	293.24	44.81	294.16
AP1PZ-2	339.58	43.04	296.54	43.01	296.57
AP1PZ-3	338.57	43.65	294.92	43.28	295.29
AP1PZ-4	338.36	48.02	290.34	46.52	291.84
AP1PZ-5	339.81	49.55	290.26	48.35	291.46
AP1PZ-7	340.91	50.93	289.98	50.08	290.83
AP1PZ-8	338.31	47.34	290.97	46.23	292.08
AP1PZ-9	337.62	42.14	295.48	42.12	295.50
AP1PZ-10	338.38	39.96	298.42	40.78	297.60
AP1PZ-11	338.98	41.23	297.75	40.42	298.56

- 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

AP-1 Landfill Macon, Georgia

Potentiometric Map Date	Location	in Wel (h ₁ ,	r Elevations I Pairs h ₂) et)	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)
October 9, 2023	AP1PZ-10 to AP1PZ-5	298.42	290.26	8.16	842	0.010	0.11	0.20	0.0053	1.9
October 9, 2023	AP1PZ-11 to AP1PZ-1	297.75	293.24	4.51	222	0.020	1.20	0.20	0.12	45
January 22, 2024	AP1PZ-10 to AP1PZ-5	297.60	291.46	6.14	842	0.007	0.11	0.20	0.0040	1.5
January 22, 2024	AP1PZ-11 to AP1PZ-1	298.56	294.16	4.40	222	0.020	1.20	0.20	0.12	43

- 1. The geometric mean of the in-situ hydraulic conductivity (K) slug test values for AP1PZ-10 and AP1PZ-5 used for AP1PZ-10 to AP1PZ-5 calculation; the slug test K value for AP1PZ-11 used for the AP1PZ-11 to AP1PZ-11 calculation.
- 2. Effective porosity of 20% was selected for the silty sands/sandy silts overburden based on a review of several sources, including Driscoll, 1986; US EPA, 1989; Freeze and Cherry, 1979.

TABLE 5 ANALYTICAL DATA SUMMARY - GROUNDWATER, JUNE 2023, OCTOBER 2023 AND JANUARY 2024

Georgia Power Company - Plant Arkwright

AP-1 Landfill

Macon, Georgia

							We	ell ID					
	Substance	AP1GWA-1	AP1GWA-1	AP1GWA-2	AP1GWA-2	AP1PZ-1	AP1PZ-1	AP1PZ-2	AP1PZ-2	AP1PZ-3	AP1PZ-3	AP1PZ-4	AP1PZ-4
		10/9/2023	1/22/2024	10/9/2023	1/22/2024	10/9/2023	1/22/2024	10/9/2023	1/22/2024	10/10/2023	1/23/2024	10/10/2023	1/23/2024
	Boron	0.108	0.108	0.0734	0.0266	0.355	0.364	0.470	0.408	1.71	1.57	4.02	3.75
=	Calcium	19.3	16.5	6.91	5.47	33.2	31.6	205	183	434	426	418	399
	Chloride	1.77	1.75	1.81	1.90	3.13	2.13	2.98	2.99	4.77	4.79	5.59	4.64
	Fluoride	0.426	0.339	0.225	0.120	0.279	0.139	0.262	0.123	< 0.165	0.139	0.565	0.235
APPENDIX	Sulfate	58.3	46.0	2.17	3.36	105	102	801	625	1290	1310	1370	1310
₹	TDS	139	139	52.0	56.0	211	235	1170	998	1830	1880	2030	2160
	pН	5.29	5.34	5.99	6.03	6.41	6.41	5.98	6.2	5.61	5.61	6.28	6.27
	Antimony	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100
	Arsenic	0.00219 J	< 0.00200	0.00255 J	< 0.00200	0.00222 J	< 0.00200	< 0.00200	< 0.00200	< 0.00200	< 0.00200	0.00302 J	0.00230 J
	Barium	0.0609	0.0551	0.0580	0.0382	0.0422	0.0359	0.0300	0.0242	0.0254	0.0226	0.0395	0.0326
	Beryllium	0.00187	0.00204	< 0.000200	< 0.000200	< 0.000200	< 0.000200	< 0.000200	< 0.000200	< 0.000200	< 0.000200	< 0.000200	< 0.000200
	Cadmium	0.000410 J	0.000354 J	< 0.000300	< 0.000300	< 0.000300	< 0.000300	0.000689 J	0.000374 J	0.00195	0.00200	< 0.000300	< 0.000300
⋛	Chromium	0.00462 J	0.00447 J	0.00340 J	0.00561 J	< 0.00300	< 0.00300	< 0.00300	< 0.00300	< 0.00300	< 0.00300	< 0.00300	< 0.00300
APPENDIX	Cobalt	0.00672	0.00650	0.0112	0.000388 J	0.000610 J	0.000480 J	0.169	0.110	0.0639	0.0600	0.000518 J	0.000674 J
Ř	Lead	< 0.000500	< 0.000500	< 0.000500	< 0.000500	< 0.000500	< 0.000500	< 0.000500	< 0.000500	< 0.000500	< 0.000500	< 0.000500	< 0.000500
AP	Lithium	0.00944 J	0.0101	< 0.00300	< 0.00300	0.00408 J	0.00421 J	0.0214	0.0189	0.0659	0.0677	0.00657 J	0.00686 J
	Mercury	< 0.0000670	< 0.0000670	< 0.0000670	< 0.0000670	< 0.0000670	< 0.0000670	< 0.0000670	< 0.0000670	< 0.0000670	< 0.0000670	< 0.0000670	0.0000830 J
	Molybdenum	< 0.000200	< 0.000200	< 0.000200	< 0.000200	0.000437 J	0.000400 J	< 0.000200	< 0.000200	0.000299 J	0.000296 J	0.00398	0.00366
	Radium	4.31	1.06 U	6.78	2.89	4.93	2.22	7.40	3.55	12.5	1.95	5.33	0.946 U
	Selenium	0.00299 J	0.00243 J	< 0.00150	< 0.00150	< 0.00150	< 0.00150	< 0.00150	< 0.00150	< 0.00150	< 0.00150	< 0.00150	< 0.00150
	Thallium	< 0.000600	< 0.000600	< 0.000600	< 0.000600	< 0.000600	< 0.000600	< 0.000600	< 0.000600	< 0.000600	< 0.000600	< 0.000600	< 0.000600

- 1. Results for constituents are reported in milligrams per liter (mg/L). pH values are reported in standard units (s.u.)
- 2. Radium results are reported in picocuries per liter (pCi/L).
- 3. < indicates the constituent was not detected above the analytical method detection limit (MDL) shown.
- 4. 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.
- 5. TDS indicates total dissolved solids.
- 6. 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.

TABLE 5

ANALYTICAL DATA SUMMARY - GROUNDWATER, JUNE 2023, OCTOBER 2023 AND JANUARY 2024

Georgia Power Company - Plant Arkwright

AP-1 Landfill

Macon, Georgia

								Well ID						
	Substance	AP1PZ-5	AP1PZ-5	AP1PZ-6	AP1PZ-7	AP1PZ-7	AP1PZ-8	AP1PZ-8	AP1PZ-9	AP1PZ-9	AP1PZ-10	AP1PZ-10	AP1PZ-11	AP1PZ-11
		10/10/2023	1/23/2024	6/13/2023	10/10/2023	1/23/2024	10/10/2023	1/23/2024	10/11/2023	1/23/2024	10/10/2023	1/23/2024	10/10/2023	1/23/2024
	Boron	7.16	7.05	6.95	2.76	2.74	2.88	2.83	0.707	0.701	0.357	0.342	0.143	0.161
≡	Calcium	589	598	460	383	383	311	320	72.3	69.4	90.4	88.9	27.6	25.1
	Chloride	7.01	7.74	7.77	6.29	5.09	2.72	2.96	8.68	4.92	10.9	9.71	1.20	1.15
	Fluoride	0.409 J	0.352	< 0.500	0.270 J	0.182 J	0.292	0.293	0.964	0.798	0.647	0.459	0.202	0.146
APPENDIX	Sulfate	1970	1960	2480	1370	1380	680	646	308	291	231	218	54.3	46.5
⋖	TDS	3080	2890	3340	1960	2050	1370	1340	527	517	499	507	198	187
	pН	6.05	6.1	5.33	6.27	6.25	6.6	6.59	5.17	4.68	6.3	6.38	6.67	6.79
	Antimony	< 0.00100	< 0.00100	< 0.00300	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100
	Arsenic	0.00493 J	0.00420 J	0.00324 J	0.00399 J	0.00207 J	0.00326 J	< 0.00200	0.00224 J	< 0.00200	0.00382 J	0.00300 J	0.00303 J	< 0.00200
	Barium	0.0362	0.0402	0.0228	0.0421	0.0333	0.0449	0.0404	0.0252	0.0224	0.0347	0.0275	0.0234	0.0192
	Beryllium	< 0.000200	< 0.000200	0.00172	< 0.000200	< 0.000200	< 0.000200	< 0.000200	0.000523	0.000794	< 0.000200	< 0.000200	< 0.000200	< 0.000200
	Cadmium	< 0.000300	< 0.000300	< 0.00100	< 0.000300	< 0.000300	0.00125	0.000323 J	0.00112	0.00125	< 0.000300	< 0.000300	< 0.000300	< 0.000300
⋛	Chromium	< 0.00300	< 0.00300	< 0.0100	< 0.00300	< 0.00300	< 0.00300	< 0.00300	< 0.00300	< 0.00300	< 0.00300	< 0.00300	< 0.00300	< 0.00300
APPENDIX	Cobalt	0.0631	0.0486	0.415	0.00123	0.00164	0.00118	0.00113	0.100	0.106	0.00140	0.000707 J	< 0.000300	< 0.000300
Ĕ	Lead	< 0.000500	< 0.000500	< 0.00200	< 0.000500	< 0.000500	< 0.000500	< 0.000500	< 0.000500	< 0.000500	< 0.000500	< 0.000500	< 0.000500	< 0.000500
AP	Lithium	0.343	0.317	0.00923 J	0.00302 J	0.00306 J	0.00315 J	0.00364 J	0.145	0.155	0.0189	0.0176	< 0.00300	< 0.00300
`	Mercury	< 0.0000670	< 0.0000670	< 0.000200	< 0.0000670	< 0.0000670	< 0.0000670	< 0.0000670	< 0.0000670	< 0.0000670	< 0.0000670	< 0.0000670	< 0.0000670	< 0.0000670
	Molybdenum	0.0437	0.0355	< 0.00100	0.00367	0.00192	0.729	0.683	0.000323 J	0.000302 J	0.00214	0.00216	0.000342 J	0.000629 J
	Radium	4.50	1.94	3.69	1.64 U	0.892 U	3.27	2.87	5.37	2.87	11.6	4.89	1.77 U	1.43
	Selenium	< 0.00150	< 0.00150	0.00251 J	< 0.00150	< 0.00150	< 0.00150	< 0.00150	< 0.00150	< 0.00150	< 0.00150	< 0.00150	< 0.00150	< 0.00150
	Thallium	< 0.000600	< 0.000600	< 0.00200	< 0.000600	< 0.000600	< 0.000600	< 0.000600	< 0.000600	< 0.000600	< 0.000600	< 0.000600	< 0.000600	< 0.000600

- 1. Results for constituents are reported in milligrams per liter (mg/L). pH values are reported in standard units (s.u.)
- 2. Radium results are reported in picocuries per liter (pCi/L).
- 3. < indicates the constituent was not detected above the analytical method detection limit (MDL) shown.
- 4. 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.
- 5. TDS indicates total dissolved solids.
- 6. 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.

TABLE 6

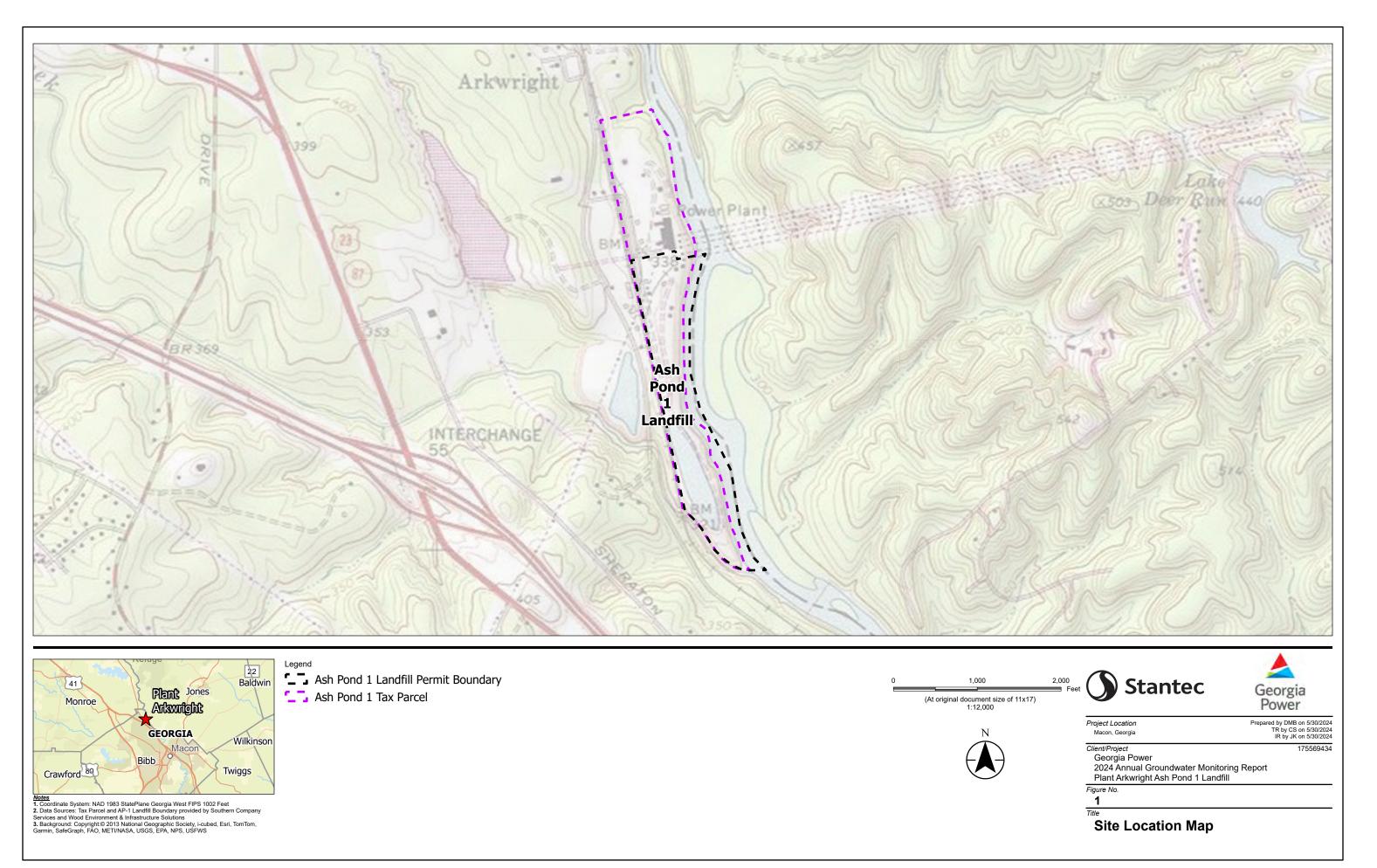
ANALYTICAL DATA SUMMARY - SURFACE WATER, OCTOBER 2023 and JANUARY 2024 Georgia Power Company - Plant Arkwright AP-1 Landfill

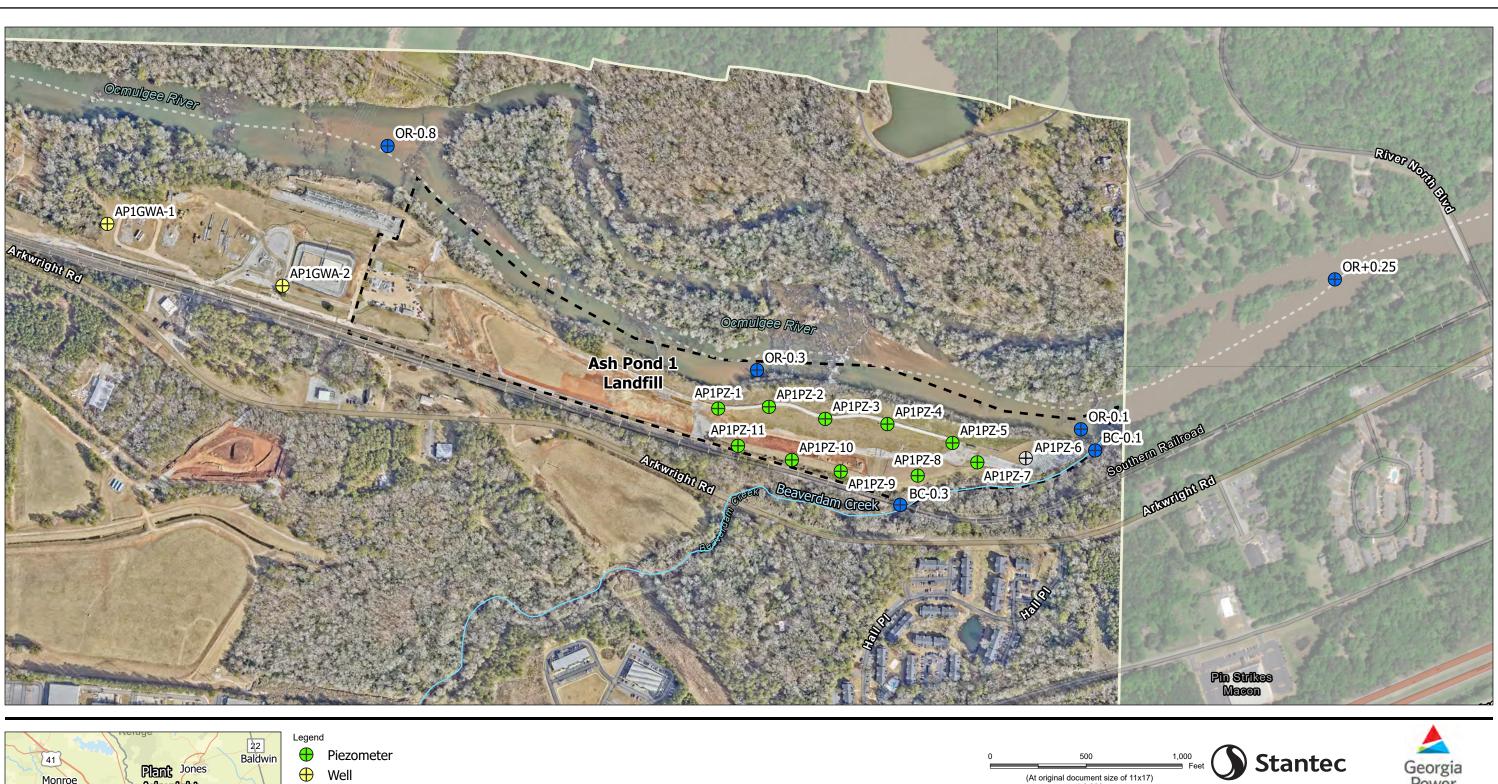
Macon, Georgia

						Sur	face Water S	Sample Loca	tion				
	Substance	OR	-0.8	OR	-0.3	OR	-0.1	OR+	0.25	ВС	-0.3	ВС	-0.1
		10/3/2023	1/23/2024	10/3/2023	1/23/2024	10/3/2023	1/23/2024	10/3/2023	1/23/2024	10/3/2023	1/23/2024	10/3/2023	1/23/2024
	Boron	<0.027	<0.027	<0.027	<0.027	<0.027	<0.027	<0.027	<0.027	<0.027	<0.027	0.045	<0.027
=	Calcium	7.4	4.7	7.2	4.5	7.4	4.8	7.2	4.8	12.9	8.5	15.0	8.6
×	Chloride	9.0	5.1	9.0	5.1	8.9	5.1	9.0	5.1	9.3	8.4	9.2	8.4
	Fluoride	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	0.16	<0.050	0.14	<0.050
APPENDIX III	Sulfate	6.4	4.4	6.3	4.5	6.4	4.5	6.5	4.5	11.6	7.7	14.7	8.1
¥	TDS	72.0	52.0	66.0	211	72.0	77.0	67.0	68.0	99.0	90.0	110	94.0
	pН	7.32	6.80	7.45	6.45	7.71	6.53	7.74	6.62	7.77	6.82	7.72	6.60
	Antimony	<0.0012	<0.00054	<0.0012	<0.00054	<0.0012	<0.00054	<0.0012	<0.00054	<0.0012	<0.00054	<0.0012	<0.00054
	Arsenic	<0.0037	<0.00084	<0.0037	<0.00084	<0.0037	<0.00084	<0.0037	<0.00084	<0.0037	<0.00084	<0.0037	<0.00084
	Barium	0.021	0.031	0.020	0.030	0.021	0.031	0.019	0.031	0.037	0.038	0.036	0.054
	Beryllium	<0.000054	<0.000094	<0.000054	<0.000094	<0.000054	<0.000094	<0.000054	<0.000094	<0.000054	<0.000094	<0.000054	<0.000094
	Cadmium	<0.00011	<0.00010	<0.00011	<0.00010	<0.00011	<0.00010	<0.00011	<0.00010	<0.00011	<0.00010	<0.00011	<0.00010
-	Chromium	<0.0011	<0.0019	<0.0011	<0.0019	<0.0011	<0.0019	<0.0011	<0.0019	<0.0011	<0.0019	<0.0011	<0.0019
	Cobalt	<0.00039	<0.00032	<0.00039	<0.00032	<0.00039	<0.00032	<0.00039	<0.00032	<0.00039	<0.00032	<0.00039	<0.00032
APPENDIX IV	Lead	<0.00012	<0.00016	<0.00012	<0.00016	<0.00012	<0.00016	<0.00012	<0.00016	<0.00012	<0.00016	<0.00012	<0.00016
l ₽	Lithium	<0.00073	<0.0016	<0.00073	<0.0016	<0.00073	<0.0016	<0.00073	<0.0016	<0.00073	<0.0016	<0.00073	<0.0016
`	Mercury	<0.00013	<0.00013	<0.00013	<0.00013	<0.00013	<0.00013	<0.00013	<0.00013	<0.00013	<0.00013	<0.00013	<0.00013
	Molybdenum	<0.00074	<0.00062	<0.00074	<0.00062	<0.00074	<0.00062	<0.00074	<0.00062	<0.00074	<0.00062	<0.00074	<0.00062
	Radium	0.106	0.712	0.160	0.991	0.549	1.57	0.187	0.273	0.302	0.423	0.297	1.52
	Selenium	<0.0014	<0.00096	<0.0014	<0.00096	<0.0014	<0.00096	<0.0014	<0.00096	<0.0014	<0.00096	<0.0014	<0.00096
	Thallium	<0.00018	<0.00038	<0.00018	<0.00038	<0.00018	<0.00038	<0.00018	<0.00038	<0.00018	<0.00038	<0.00018	<0.00038
A S	Total Alkalinity	32.7	17.9	32.4	20.2	33.1	20.0	33.1	20.2	60.9	39.1	61.8	39.7
N E	Bicarbonate Alkalinity	32.7	17.9	32.4	20.2	33.1	20.0	33.1	20.2	60.9	39.1	61.8	39.7
ΙĔΆ	Magnesium	2.0	1.7	2.0	1.6	2.0	1.7	2.0	1.7	5.5	4.3	6.4	4.3
ADDITIONAL ANALYTES	Potassium	3.6	2.9	3.5	2.7	3.3	2.9	3.4	2.9	2.7	2.1	2.8	2.2
_ ₹ ₹	Sodium	9.4	5.8	9.1	5.5	9.5	5.9	9.2	5.9	11.2	8.9	11.3	8.5

- 1. Results for constituents are reported in milligrams per liter (mg/L). pH values are reported in standard units (s.u.)
- 2. Radium results are reported in picocuries per liter (pCi/L).
- 3. < indicates the constituent was not detected above the analytical method detection limit (MDL)
- 4. TDS indicates total dissolved solids.

FIGURES







Notes
1. Coordinate System: NAD 1983 StatePlane Georgia West FIPS 1002 Feet
2. Data Sources: AP-1 Boundary, Surface Water Samples, Piezometers, and Beave
Creek locations provided by Southern Company Services and Wood Environment &

2. Data Sources: AP-1 Bourloary,
Creek locations provided by Southern Company Services and vvoos L.....
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,

SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS, US Census Bureau,

SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS, US Census Bureau,

SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS, US Census Bureau,

SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS, US Census Bureau,

SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS, US Census Bureau,

SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS, US Census Bureau,

SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS, US Census Bureau,

SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS, US Census Bureau,

SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS, US Census Bureau,

SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS, US Census Bureau,

SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS, US Census Bureau,

SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS, US Census Bureau,

SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS, US Census Bureau,

SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS, US Census Bureau,

SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS, US Census Bureau,

SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS, US Census Bureau,

SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS, US Census Bureau,

SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS, US Census Bureau,

SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS, US Census Bureau,

SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS, US Census Bureau,

SafeGraph, Ge

Abandoned Piezometer

Surface Water Sampling Location

Beaverdam Creek

Ash Pond 1 Landfill Permit Boundary

Limit of Client Imagery (dated 1/22/2024)

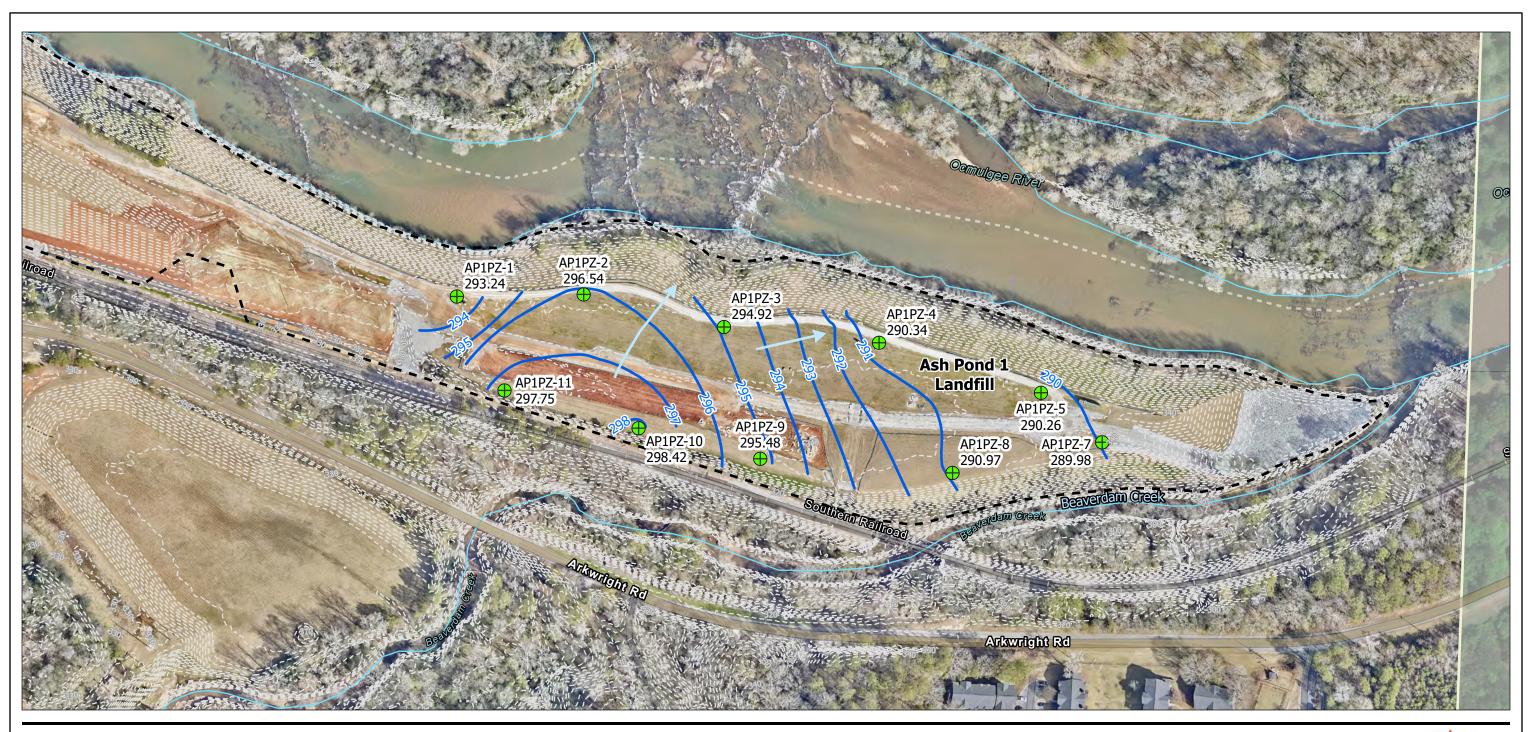




Prepared by DMB on 5/30/2024 TR by CS on 5/30/2024 IR by JK on 5/30/2024 Project Location

Client/Project Georgia Power 2024 Annual Groundwater Monitoring Report Plant Arkwright Ash Pond 1 Landfill

Piezometer and Surface Water Sample Locations Map





Notes

1. Coordinate System: NAD 1983 StatePlane Georgia West FIPS 1002 Feet
2. Data Sources: AP-1 Boundary, Piezometers, Topography, and Beaverdam Creek provided by Southern Company Services and Wood Environment & Infrastructure Solutions; Groundwater Contours, Flow Arrow, and Ocmulgee River provided by Stantes
3. Background: Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community, Esri, Tom Tom, Garmin, SafeGraph, FAO, METLINASA, USGS, EPA, NPS, USFWS, Esri Community Maps Contributors, © OpenStreetMap, Microsoft, Esri, Tom Tom, Garmin, SafeGraph, Geo Technologies, Inc, METLINASA, USGS, EPA, NPS, US Census Bureau, USCA, LICENAS, Classification of Control Control

Legend Piezometer Location Potentiometric Surface Contour (feet (ft) NAVD88) Interpreted Groundwater Flow Direction Beaverdam Creek/Ocmulgee River (Approximate) Topographic Contour 2024 (2 ft interval) Approximate Limits of Ash Pond 1 Landfill

Limit of Client Imagery (dated 1/22/2024) 293.24 Groundwater Elevation (ft NAVD88) AP1GWA-1 and AP1GWA-2 not included in contouring NAVD88 - North American Vertical Datum of 1988



Stantec (At original document size of 11x17)



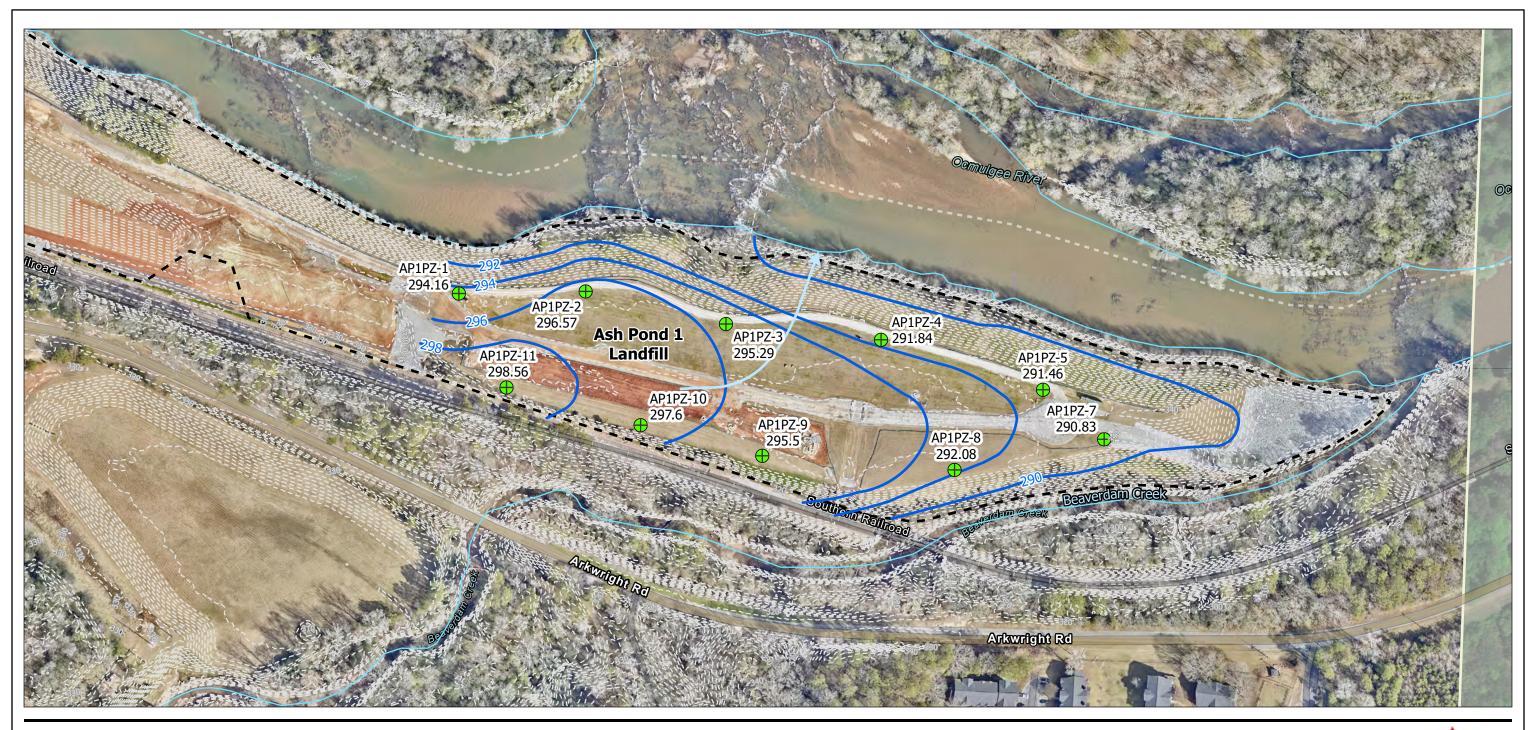
Project Location

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

Client/Project Georgia Power

2024 Annual Groundwater Monitoring Report Plant Arkwright Ash Pond 1 Landfill

Potentiometric Surface Contour Map Ash Pond 1 Landfill - October 9, 2023





Notes

1. Coordinate System: NAD 1983 StatePlane Georgia West FIPS 1002 Feet

2. Data Sources: AP-1 Boundary, Piezometers, Topography, and Beaverdam Creek provide by Southern Company Services and Wood Environment & Infrastructure Solutions; 2. Data Sources: AP-1 Boundary, Precuriors...
by Southern Company Services and Wood Environment & Infrastructure Solutions;
Groundwater Contours, Flow Arrow, and Ocmulgee River provided by Stantec
3. Background: Source: Esti, Maxar, Earthstar Geographics, and the GIS User Community,
Esri, TomTom, Garmin, SafeGraph, FAO, METI/NASA, USGS, EPA, NPS, USEVWS, Esri
Community Maps Contributors, © OpenStreetMap, Microsoft, Esri, TomTom, Garmin,
SafeGraph, FAO, GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS, US Census Bureau,

Legend Piezometer Location

Potentiometric Surface Contour (feet (ft) NAVD88)

Interpreted Groundwater Flow Direction

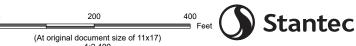
Beaverdam Creek/Ocmulgee River (Approximate)

Topographic Contour 2024 (2 ft interval)

Approximate Limits of Ash Pond 1 Landfill Limit of Client Imagery (dated 1/22/2024)

294.16 Groundwater Elevation (ft NAVD88) AP1GWA-1 and AP1GWA-2 not included in contouring NAVD88 - North American Vertical Datum of 1988







Project Location

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

Client/Project Georgia Power

2024 Annual Groundwater Monitoring Report Plant Arkwright Ash Pond 1 Landfill

Potentiometric Surface Contour Map Ash Pond 1 Landfill - January 22, 2024

APPENDIX A Well Inspections



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:	10/9/2023
Monitoring Well No.:	APIGWA-1
Priority Maintenance	Item Identified: N/A

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

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

N/A

Prepared By / Date: John Myer 10/9/2023
DL/SME Review By / Date: Dylan Ripley 10/17/2023



Plant Name:	Plant Arkwright
Plant Address:	5001 Arkwright Road, Macon, GA 31210
Project Number:	175569434
Goal/Task:	Hydrogeological investigation
Date:	10/9/2023
Monitoring Well No.:	AP1GWA-2
Priority Maintenance	Item Identified: Missing dedicated tubing.

	Description	Yes	No	NA	Comments
1	Location/Identification				
а	Is the well visible and accessible?	Х			
Э	Is the well properly identified with the correct well ID?	Х			
0	Is the well in a high traffic area and does the well require protection	Х			Well is located at the confluence
	from traffic?				of two high-traffic roads; truck co
b	Is the drainage around the well acceptable? (no standing water, nor is	X			
	well located in obvious drainage flow path)				
2	Protective Casing	1			
а	Is the protective casing free from apparent damage and able to be secured?	Х			
5	Is the casing free of degradation or deterioration?	Χ			
0	Does the casing have a functioning weep hole?	Х			
b	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?	Х			
Э	Is the well locked and is the lock in good condition?	Х			
_	I		1		
	Surface pad				
	Is the well pad in good condition (not cracked or broken)?	Х			
	Is the well pad sloped away from the protective casing?	Х			
	Is the well pad in complete contact with the protective casing?	Х			
d	Is the well pad in complete contact with the ground surface and	Х			
	stable?(Not undermined by erosion, animal burrows, and does not move when stepped on).				
Э	Is the pad surface clean (not covered with sediment or debris)?	Х	1		
=	is the pad sofface clear (not covered with seatment of debtis)?	^			
4	Internal casing	1			
a	Does the cap prevent entry of foreign material into the well?	Х			
0	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?	Х			
-	Is the well properly vented for equilibrium of air pressure?	Х	1		
	Is the survey point clearly marked on the inner casing?		Х		
	Is the depth of the well consistent with the original well log?	Х			
	Is the casing stable? (or does the PVC move easily when touched or	Х			
	can it be taken apart by hand due to lack of grout or use of slip				
	couplings in construction)				
5	Sampling (Groundwater Wells Only)	ı	ı		
	Does well recharge adequately when purged?	Х	1		
2	5 , , , ,		Χ		Dedicated length of tubing is
,	If dedicated sampling equipment installed, is it in good condition and specified in the approved groundwater plan for the facility?		(`		missing from gauging portal.
	Does the well require redevelopment (low-flow, turbid)?		Х	-	Well breathes at 400 mL/min.

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

Well is protected on two sides by concrete barriers. Defunct wasp nest inside outer casing and defunct ant hill on edge of well pad. Well pad and surrounding area are in need of mild landscaping maintenance.

Prepared By / Date: 10/12/2023 Dylan Quintal

DL/SME Review By / Date: Dylan Ripley 10/17/2023



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:	10/9/2023					
Monitoring Well No.:	AP1PZ-1					
Priority Maintenance	Item Identified: N/A					

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

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

N/A

Prepared By / Date: John Myer 10/9/2023

DL/SME Review By / Date: Dylan Ripley 10/17/2023



Project Name:	Southern Company Arkwright						
Plant Name:	Plant Arkwright						
Plant Address:	5001 Arkwright Road, Macon, GA 31210 175569434						
Project Number:							
Goal/Task:	Hydrogeological investigation						
Date:		10/12/2023					
Monitoring Well No.:	AP1PZ-2						
Priority Maintenance	Item Identified:	N/A					

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

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

Well is protected on two sides by concrete barriers. Ant hill located on or near well pad; presented no significant hazard.

10/12/2023 Prepared By / Date: Dylan Quintal DL/SME Review By / Date: Dylan Ripley 10/17/2023



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:	10/9/2023						
Monitoring Well No.:	AP1PZ-3						
Priority Maintenance	Item Identified: Grass cutting; Ant mound						

	Description	Yes	No	NA	Comments
1	Location/Identification				
а	Is the well visible and accessible?	Χ			
b	Is the well properly identified with the correct well ID?	Χ			
С	Is the well in a high traffic area and does the well require protection from traffic?		Х		
d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	Х			
2	Protective Casing				1
а	Is the protective casing free from apparent damage and able to be secured?	Х			
b	Is the casing free of degradation or deterioration?	Χ			
C	Does the casing have a functioning weep hole?	Х			
d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?	Х			
е	Is the well locked and is the lock in good condition?	Х			
	· · · · · · · · · · · · · · · · · · ·				-
3	Surface pad				
а	Is the well pad in good condition (not cracked or broken)?	Х			
b	Is the well pad sloped away from the protective casing?	Х			
С	Is the well pad in complete contact with the protective casing?	Х			
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).		Х		Ant mound found; Grass needs to be cut
е	Is the pad surface clean (not covered with sediment or debris)?	Χ			
					•
4	Internal casing				
а	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)?	Х			
С	Is the well properly vented for equilibrium of air pressure?	Х			
d	Is the survey point clearly marked on the inner casing?	Х			
е	Is the depth of the well consistent with the original well log?	Х			
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)	Х			
5	Sampling (Groundwater Wells Only)				
а	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?	Х			
С	Does the well require redevelopment (low-flow, turbid)?		X		
U	poes the well require redevelopment flow-flow, forbid/9				

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

N/A

Prepared By / Date: John Myer 10/9/2023

DL/SME Review By / Date: Dylan Ripley 10/17/2023



		MONITORING WELL INSPECTION	ON CHE	CKLIST	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			
	oodi, rasii.				
	Date:	10/12/2023			
	Monitoring Well No.:	AP1PZ-4			
	Priority Maintenance	Item Identified: N/A			
		·			
		B 1 II	I v		To .
1	Location/Identification	Description	Yes	No NA	Comments
<u> </u>	Is the well visible and		Χ		
5		dentified with the correct well ID?	Х		
2		affic area and does the well require protection	Х		Well is located on circuit road
	from traffic?				used exclusivey by pickup trucks
t		nd the well acceptable? (no standing water, nor is ous drainage flow path)	Х		
	T				1
2	Protective Casing		Х		
1	Is the protective casi secured?	ng free from apparent damage and able to be	X		
_		degradation or deterioration?	Х		+
:		e a functioning weep hole?	X		+
d		between casings clear of debris and water, or filled	Χ		
	with pea gravel/sand				
Э	Is the well locked an	d is the lock in good condition?	Х		
					1
3	Surface pad			<u> </u>	
2		od condition (not cracked or broken)? d away from the protective casing?	X		
-		mplete contact with the protective casing?	X		1
<u></u>		mplete contact with the ground surface and	X		
		ned by erosion, animal burrows, and does not			
	move when stepped	•			
9	is the pad surface ci	ean (not covered with sediment or debris)?	Х		
1	Internal casing		1		1
<u>.</u>		nt entry of foreign material into the well?	Х		
5		inks or bends, or any obstructions from foreign	Χ		
	objects (such as baile				
2	Is the well properly v	ented for equilibrium of air pressure?	Х		
t		early marked on the inner casing?	Χ		
9		ell consistent with the original well log?	X		
t		(or does the PVC move easily when touched or t by hand due to lack of grout or use of slip	Х		
	couplings in construc				
		•			1
5	Sampling (Groundwo				
1	Does well recharge of	adequately when purged?	Χ		
0		g equipment installed, is it in good condition and oved groundwater plan for the facility?	Х		
2	Does the well require	redevelopment (low-flow, turbid)?		Х	Well breathes at 100 mL/min.
			•		
or		ction details, including items requiring repair or mair			
	Well is pr	otected on two sides by concrete barriers. Small wa	tercraft	located on w	est side of well pad.

Prepared By / Date: 10/12/2023 Dylan Quintal

DL/SME Review By / Date: Dylan Ripley 10/17/2023



	MONITORINO WELL INSI ECITO	II CIIL	CKLIST						
Project Name:	Southern Company Arkwright								
Plant Name:	Plant Arkwright								
Plant Address:	5001 Arkwright Road, Macon, GA 31210								
Project Number:	175569434								
Goal/Task:	Plant Arkwright								
Date:	10/9/2023			_					
Monitoring Well No.:	AP1PZ-5								
Priority Maintenance	Item Identified: Grass Cutting								
	Description	Yes	No						
Location/Identificatio	n								
Is the well visible and	accessible?	Χ		ľ					
Is the well properly id	ontified with the correct well ID2			Г					

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

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

N/A

Prepared By / Date: John Myer 10/9/2023

DL/SME Review By / Date: Dylan Ripley 10/17/2023



Location/Identification					_
	Description		Yes	No	П
					•
Priority Maintenance	Item Identified:	N/A			-
Monitoring Well No.:	AP1PZ-7				-
Date:	10/9/2023				
Goal/Task:	Hydrogeological inve	estigation			_
Project Number:	175569434				_
Plant Address:	5001 Arkwright Road	Macon, GA 31210			
Plant Name:	Plant Arkwright				
Project Name:	Southern Company	Arkwright			

	Description	Yes	No	NA	Comments
1	Location/Identification				
а	Is the well visible and accessible?	Х			
b	Is the well properly identified with the correct well ID?	Х			
С	Is the well in a high traffic area and does the well require protection		Х		
	from traffic?				
d	Is the drainage around the well acceptable? (no standing water, nor is	X			
	well located in obvious drainage flow path)				
2	Protective Casing				
а	Is the protective casing free from apparent damage and able to be secured?	Х			
b	Is the casing free of degradation or deterioration?	Х			
С	Does the casing have a functioning weep hole?	Х			
d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?	Х			
е	Is the well locked and is the lock in good condition?	Х			
	<u> </u>		•		
3	Surface pad				
а	Is the well pad in good condition (not cracked or broken)?	Х			
b	Is the well pad sloped away from the protective casing?	Х			
С	Is the well pad in complete contact with the protective casing?	Х			
d	Is the well pad in complete contact with the ground surface and	Х			
	stable?(Not undermined by erosion, animal burrows, and does not				
	move when stepped on).				
е	Is the pad surface clean (not covered with sediment or debris)?	Χ			
	I				
	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)?	Х			
С	Is the well properly vented for equilibrium of air pressure?	Х			
	Is the survey point clearly marked on the inner casing?	Χ			
	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	Х			
	can it be taken apart by hand due to lack of grout or use of slip				
	couplings in construction)		l		L
-	Carantina (Carana da International Malla Carla)		1		T
	Sampling (Groundwater Wells Only) Does well recharge adequately when purged?	Х			
a b	Does well recticing adequately when purgeds	X	-		
D	If dedicated sampling equipment installed, is it in good condition and	^			
	specified in the approved groundwater plan for the facility?				
С	Does the well require redevelopment (low-flow, turbid)?		Х		
Ė	to a seek a sign of A seek a seek.				

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

N/A

Prepared By / Date: John Myer 10/9/2023

DL/SME Review By / Date: Dylan Ripley 10/17/2023



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:		10/12/2023						
Monitoring Well No.:	AP1PZ-8							
Priority Maintenance	Item Identified:	Access via wattles and landscaping.						

	Description	Yes	No	NA	Comments
1	Location/Identification				
а	Is the well visible and accessible?		Х		Well cannot be easily accessed
b	Is the well properly identified with the correct well ID?	Х			
U	Is the well in a high traffic area and does the well require protection from traffic?		Х		
d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	Х			
2	Protective Casing			l	T
a		Х			
u	Is the protective casing free from apparent damage and able to be secured?	^			
b	Is the casing free of degradation or deterioration?	X			
С	Does the casing have a functioning weep hole?	Х			
d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?	Х			
е	Is the well locked and is the lock in good condition?	Х			
					•
3	Surface pad				
а	Is the well pad in good condition (not cracked or broken)?	Х			
b	Is the well pad sloped away from the protective casing?	Х			
С	Is the well pad in complete contact with the protective casing?	Х			
d	Is the well pad in complete contact with the ground surface and	Х			
	stable?(Not undermined by erosion, animal burrows, and does not				
	move when stepped on).				
е	Is the pad surface clean (not covered with sediment or debris)?	X			
4	Internal casing				
а	Does the cap prevent entry of foreign material into the well?	Х			
b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?	Х			
С	Is the well properly vented for equilibrium of air pressure?	Х			
d	Is the survey point clearly marked on the inner casing?	Х			
е	Is the depth of the well consistent with the original well log?	Х			
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	Х			
	couplings in construction)				
5	Sampling (Groundwater Wells Only)				
а	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?	Х			
С	Does the well require redevelopment (low-flow, turbid)?		Х		Well breathes at 100 mL/min.

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

Well located behind wattles in less well-maintained area; requires landscaping maintenance.

Prepared By / Date: 10/12/2023 Dylan Quintal DL/SME Review By / Date: Dylan Ripley 10/17/2023



		MONITORING WELL INST ECTIO	IN CITE	CKLIS		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									
	Godi/Task.	Tryatogeological investigation									
	Date:	10/9/2023	10/9/2023								
	Monitoring Well No.:	AP1PZ-9									
	Priority Maintenance	Item Identified: Grass Cutting									
					•						
						In .					
	Location/Identification	Description	Yes	No	NA	Comments					
1	Is the well visible and		Х								
,		dentified with the correct well ID?	X								
:		affic area and does the well require protection		Х							
	from traffic?										
1		nd the well acceptable? (no standing water, nor is	Χ								
	well located in obvio	ous drainage flow path)									
,	Protective Casing					T					
1	_	ng free from apparent damage and able to be	X								
	secured?	ng nee nom apparem damage and able to be	^								
)	Is the casing free of a	degradation or deterioration?	Χ								
;	Does the casing have	e a functioning weep hole?	Χ								
1		between casings clear of debris and water, or filled	Χ								
	with pea gravel/sand										
•	is the well locked and	d is the lock in good condition?	Х								
	Surface pad										
1		od condition (not cracked or broken)?	Х								
)		d away from the protective casing?	Χ								
;	Is the well pad in cor	mplete contact with the protective casing?	Χ								
1		mplete contact with the ground surface and		Х		Grass needs to be cut					
	stable?(Not undermit move when stepped	ned by erosion, animal burrows, and does not									
,		ean (not covered with sediment or debris)?	Х								
	is mo pad sondes on	can (not concrete miniscannon or account).									
ļ	Internal casing										
1	Does the cap prever	nt entry of foreign material into the well?	Χ								
)	Is the casing free of k objects (such as baile	cinks or bends, or any obstructions from foreign	Х								
;		ented for equilibrium of air pressure?	Х								
1		early marked on the inner casing?	X								
,		ell consistent with the original well log?	Χ								
		(or does the PVC move easily when touched or	Χ								
		t by hand due to lack of grout or use of slip									
_	couplings in construc	JION		l		1					
;	Sampling (Groundwo	ster Wells Only)									
1		adequately when purged?	Х								
)		g equipment installed, is it in good condition and	Х								
		oved groundwater plan for the facility?									
		redevelopment (low-flow, turbid)?		X							
	Ipoes the well reduite	reactophiciii (iow-iiow, iorbia) t			_						
or	nments: Include inspe	ction details, including items requiring repair or main	tenanc	e.							
		N/A									

Prepared By / Date: John Myer 10/9/2023 DL/SME Review By / Date: Dylan Ripley 10/17/2023



		MONITORING WELL INSPECTION	ON CHE	CKLIS	ī	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			-	
		10/12/2022			_	
	Date:	10/12/2023			_	
	Monitoring Well No.:	AP1PZ-10			_	
	Priority Maintenance	Item Identified: Tilted bollard.			_	
		Description	Yes	No	NA	Comments
1	Location/Identification					
а	Is the well visible and			Χ		Well cannot be easily seen or
b		lentified with the correct well ID?	Х			
С	from traffic?	affic area and does the well require protection		Х		
d		nd the well acceptable? (no standing water, nor is bus drainage flow path)	Х			
2	Bratastiva Casina					1
2 a	Protective Casing	ng free from apparent damage and able to be	Х			
_	secured?	ng nee nom apparem damage and able to be	^`			
b	Is the casing free of a	degradation or deterioration?	Х			
С	Does the casing have	e a functioning weep hole?	Χ			
d	Is the annular space with pea gravel/sand	between casings clear of debris and water, or filled d?	Х			
е	Is the well locked an	d is the lock in good condition?	Χ			
3	Surface pad					
a		od condition (not cracked or broken)? d away from the protective casing?	X			
b c		mplete contact with the protective casing?	X			
d		mplete contact with the ground surface and	X			
-		ned by erosion, animal burrows, and does not				
	move when stepped	•				
е	Is the pad surface cl	ean (not covered with sediment or debris)?	Х			Ant hill located on edge of well
4	Internal casing			1	1	
а		nt entry of foreign material into the well?	Х			
b		tinks or bends, or any obstructions from foreign	Х			
	objects (such as baile					
С	Is the well properly v	ented for equilibrium of air pressure?	Х			
d	Is the survey point cle	early marked on the inner casing?	Χ			
е		ell consistent with the original well log?	Х			
f		(or does the PVC move easily when touched or	Х			
	can it be taken apar couplings in construc	t by hand due to lack of grout or use of slip				
	coopiii iga ii i coriaii oc	SIOT I		l .		1
5	Sampling (Groundwo	iter Wells Only)				
а		adequately when purged?	Χ			
b	If dedicated samplin	g equipment installed, is it in good condition and	Х			
	specified in the appr	oved groundwater plan for the facility?				
С	Does the well require	redevelopment (low-flow, turbid)?		Х	<u> </u>	Well breathes at 100 mL/min.
Cor	mments: Include inspe	ction details, including items requiring repair or main	ntenanc	e.		
	Southeast bollard doe	s not stand completely vertically. Active ant hill locc need of landscaping maint	ited on	edge c	of well p	
_	pared By / Date:	Dylan Quintal				10/12/2023
DL/	SME Review By / Date	: Dylan Ripley 10/17/2023				



Plant Name	Plant Arkwright				
Plant Address:	5001 Arkwright Road, Macon, GA 31210				
Project Number:	175569434				
Goal/Task:	Hydrogeological investigation				
Date:	10/12/2023				
Monitoring Well No.:	AP1PZ-11				
Priority Maintenance	Item Identified: Access via wattles and landscaping.				

	Description	Yes	No	NA	Comments
1	Location/Identification				
a	Is the well visible and accessible?		Χ		Well cannot be easily seen or
	Is the well properly identified with the correct well ID?	Х			
)	Is the well in a high traffic area and does the well require protection		Х		
	from traffic?				
b	Is the drainage around the well acceptable? (no standing water, nor is	Х			
	well located in obvious drainage flow path)				<u> </u>
2	Protective Casing				
	Is the protective casing free from apparent damage and able to be	Х			
-	secured?	,			
)	Is the casing free of degradation or deterioration?	Χ			
2	Does the casing have a functioning weep hole?	X			
b	Is the annular space between casings clear of debris and water, or filled	Χ			
	with pea gravel/sand?				
е	Is the well locked and is the lock in good condition?	Х			
	Surface pad				
	Is the well pad in good condition (not cracked or broken)?	X			
	Is the well pad sloped away from the protective casing?	Х			
	Is the well pad in complete contact with the protective casing?	Х			
b	Is the well pad in complete contact with the ground surface and	Х			
	stable?(Not undermined by erosion, animal burrows, and does not				
_	move when stepped on).		Х		A-4 - 11
Э	Is the pad surface clean (not covered with sediment or debris)?		Α		Ant hill located on edge of well
4	Internal casing		1		
a	Does the cap prevent entry of foreign material into the well?	Χ			
	Is the casing free of kinks or bends, or any obstructions from foreign	X			
	objects (such as bailers)?				
-	Is the well properly vented for equilibrium of air pressure?	Х			
	Is the survey point clearly marked on the inner casing?	X			-
_	Is the depth of the well consistent with the original well log?	X			
	Is the casing stable? (or does the PVC move easily when touched or	X			+
	can it be taken apart by hand due to lack of grout or use of slip	^			
	couplings in construction)				
_	,				•
5	Sampling (Groundwater Wells Only)				
а	Does well recharge adequately when purged?	Χ			
b	If dedicated sampling equipment installed, is it in good condition and	Χ			
	specified in the approved groundwater plan for the facility?				
	, , ,				
С	Does the well require redevelopment (low-flow, turbid)?		X	l	Well breathes at 200 mL/min.

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

Well located behind wattles in less well-maintained area; requires landscaping maintenance.

Prepared By / Date: Dylan Quintal 10/12/2023

DL/SME Review By / Date: Dylan Ripley 10/17/2023

		Location/Id	dentification				Protective Casing				Surface Pad			Internal Casing			
	Visible and accessible	with correct well ID	traffic area; does the well require protection from	standing water, not	Free from apparent		Functioning weep	Annular space clear of debris and water, or filled with pea gravel/sand		Good condition (not cracked/ broken)	Sloped away from the protective casing			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:	
Well ID:																	
AP-1																	
AP1GWA-		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	NA .	
AP1GWA-	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	NA NA	
AP1PZ-1		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	NA NA	
AP1PZ-2		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	NA	
AP1PZ-3		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	NA	
AP1PZ-4		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	NA	
AP1PZ-5		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	NA	
AP1PZ-7		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	NA	
AP1PZ-8		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	NA .	
AP1PZ-9		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	NA NA	
AP1PZ-10		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	NA NA	
AP1PZ-11	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	NA NA	

APPENDIX B Field Sampling Data and Analytical Data Reports

B.1 Field Sampling Data

Test Date / Time: 10/9/2023 1:11:56 PM

Project: Arkwright **Operator Name:** J. Myer

Location Name: AP1GWA-1 Latitude: 32.930019061764 Longitude: -83.7010088190436

Well Diameter: 2 in Casing Type: PVC Screen Length: 10 ft Top of Screen: 26.8 ft Total Depth: 37.5 ft

Initial Depth to Water: 29.96 ft

26.96

Pump Type: Dedicated Bladder

Pump

Tubing Type: HDPE

Pump Intake From TOC: 31.8 ft Estimated Total Volume Pumped:

7500 ml

Flow Cell Volume: 90 ml Final Flow Rate: 300 ml/min Final Draw Down: 2.81 ft

0.19

Instrument Used: Aqua TROLL 400

Serial Number: 850751

Test Notes:

Heron Instruments Dipper-T ID: WL006

MP50 SN: 26 ID: 103

Pressure: 25 psi

Weather Conditions:

Sunny 71 F

Low-Flow Readings:

Date Time	Elapsed Time	рН	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 10 %	+/- 10 %	+/- 10	+/- 0.3	
10/9/2023 1:11 PM	00:00	5.32 pH	22.31 °C	203.05 μS/cm	4.21 mg/L	2.44 NTU	188.7 mV	27.15 ft	300.00 ml/min
10/9/2023 1:16 PM	05:00	5.25 pH	20.71 °C	203.67 μS/cm	3.15 mg/L	2.52 NTU	161.0 mV	27.15 ft	300.00 ml/min
10/9/2023 1:21 PM	10:00	5.29 pH	20.66 °C	203.66 μS/cm	3.06 mg/L	2.04 NTU	180.8 mV	27.15 ft	300.00 ml/min
10/9/2023 1:26 PM	15:00	5.30 pH	20.62 °C	202.08 μS/cm	3.03 mg/L	2.10 NTU	145.2 mV	27.15 ft	300.00 ml/min
10/9/2023 1:31 PM	20:00	5.30 pH	20.62 °C	202.21 μS/cm	3.01 mg/L	2.30 NTU	138.7 mV	27.15 ft	300.00 ml/min
10/9/2023 1:36 PM	25:00	5.29 pH	20.66 °C	201.95 μS/cm	3.00 mg/L	3.10 NTU	135.2 mV	27.15 ft	300.00 ml/min

Sam	ple ID:	Description:
-----	---------	--------------

	1345
	6 bottles
	Metals
ARK-AP1GWA-1	Radium
	TDS
	Anions
	1405
	6 bottles
	Metals
ARK-AP1-FB-01	Radium
	TDS
	Anions
	DI water provided by AIR

Test Date / Time: 10/9/2023 1:40:42 PM

Project: Arkwright

Operator Name: Dylan Quintal

Location Name: Arkwright, AP-1,

AP1GWA-2

Latitude: 32.9273346601797 Longitude: -83.7005548551679

Well Diameter: 2 in Casing Type: PVC Screen Length: 10 ft Top of Screen: 20.5 ft Total Depth: 31.1 ft

Initial Depth to Water: 19.67 ft

Pump Type: Dedicated Bladder

Pump

Tubing Type: HDPE

Pump Intake From TOC: 25.3 ft Estimated Total Volume Pumped:

16000 ml

Flow Cell Volume: 90 ml

Final Flow Rate: 400 ml/min Final

Draw Down: 0 ft

Instrument Used: Aqua TROLL 400

Serial Number: 850762

Test Notes:

Heron Dipper-T SN: 11FF2205014ML

MP50 SN: 22 ID: 103

Pressure: 35 psi

Weather Conditions:

Sunny, 73F

Low-Flow Readings:

Date Time	Elapsed Time	рН	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 10 %	+/- 10 %	+/- 10	+/- 0.3	
10/9/2023 1:40 PM	00:00	6.01 pH	21.68 °C	87.35 μS/cm	3.50 mg/L	27.50 NTU	49.9 mV	19.67 ft	400.00 ml/min
10/9/2023 1:45 PM	05:00	6.00 pH	21.80 °C	91.00 µS/cm	3.22 mg/L	18.20 NTU	16.1 mV	19.67 ft	400.00 ml/min
10/9/2023 1:50 PM	10:00	6.00 pH	21.83 °C	93.36 µS/cm	3.01 mg/L	15.10 NTU	-2.5 mV	19.67 ft	400.00 ml/min
10/9/2023 1:55 PM	15:00	6.00 pH	21.87 °C	94.40 µS/cm	2.90 mg/L	11.30 NTU	-5.1 mV	19.67 ft	400.00 ml/min
10/9/2023 2:00 PM	20:00	5.95 pH	21.91 °C	94.79 µS/cm	2.86 mg/L	8.17 NTU	-16.2 mV	19.67 ft	400.00 ml/min
10/9/2023 2:05 PM	25:00	5.95 pH	21.84 °C	95.81 µS/cm	2.72 mg/L	7.42 NTU	-20.3 mV	19.67 ft	400.00 ml/min
10/9/2023 2:10 PM	30:00	5.98 pH	21.87 °C	96.42 µS/cm	2.59 mg/L	5.51 NTU	-26.6 mV	19.67 ft	400.00 ml/min
10/9/2023 2:15 PM	35:00	5.99 pH	21.93 °C	97.22 μS/cm	2.44 mg/L	3.99 NTU	-33.2 mV	19.67 ft	400.00 ml/min
10/9/2023 2:20 PM	40:00	5.99 pH	21.89 °C	97.80 μS/cm	2.36 mg/L	3.64 NTU	-37.9 mV	19.67 ft	400.00 ml/min

Samples

Sample ID:	Description:
	Sample time: 1430
ARK-AP1GWA-2	6 bottles: Metals, Anions, TDS, Radium
ARK-AP1-EB-01	6 bottles: Metals, Anions, TDS, Radium

Test Date / Time: 10/9/2023 3:31:25 PM

Project: Arkwright **Operator Name:** J. Myer

Location Name: AP1PZ-1 Latitude: 32.9210574183589 Longitude: -83.6987658217549

Well Diameter: 2 in Casing Type: PVC Screen Length: 10 ft Top of Screen: 77 ft Total Depth: 87.6 ft

Initial Depth to Water: 45.73 ft

Pump Type: Dedicated Bladder

Pump

Tubing Type: HDPE

Pump Intake From TOC: 82.6 ft Estimated Total Volume Pumped:

4000 ml

Flow Cell Volume: 90 ml Final Flow Rate: 100 ml/min Final Draw Down: 2.33 ft Instrument Used: Aqua TROLL 400

Serial Number: 850751

Test Notes:

Heron Instruments Dipper-T SN WL 006

MP50 SN: 26 ID: 105 Pressure: 45

Weather Conditions:

Sunny 76 F

Low-Flow Readings:

Date Time	Elapsed Time	рН	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 10 %	+/- 10 %	+/- 10	+/- 0.3	
10/9/2023 3:31 PM	00:00	6.75 pH	24.42 °C	329.45 μS/cm	1.76 mg/L	3.32 NTU	19.4 mV	46.49 ft	100.00 ml/min
10/9/2023 3:36 PM	05:00	6.50 pH	22.11 °C	337.93 μS/cm	1.12 mg/L	3.51 NTU	58.1 mV	46.98 ft	100.00 ml/min
10/9/2023 3:41 PM	10:00	6.44 pH	21.87 °C	337.04 μS/cm	1.14 mg/L	3.36 NTU	65.9 mV	47.34 ft	100.00 ml/min
10/9/2023 3:46 PM	15:00	6.43 pH	21.73 °C	336.97 μS/cm	0.99 mg/L	3.70 NTU	70.4 mV	47.71 ft	100.00 ml/min
10/9/2023 3:51 PM	20:00	6.42 pH	21.64 °C	339.90 μS/cm	0.83 mg/L	2.55 NTU	81.7 mV	47.73 ft	100.00 ml/min
10/9/2023 3:56 PM	25:00	6.42 pH	21.47 °C	339.04 μS/cm	0.73 mg/L	1.97 NTU	70.1 mV	47.83 ft	100.00 ml/min
10/9/2023 4:01 PM	30:00	6.41 pH	21.50 °C	338.33 µS/cm	0.68 mg/L	1.45 NTU	69.6 mV	47.94 ft	100.00 ml/min
10/9/2023 4:06 PM	35:00	6.41 pH	21.46 °C	337.40 μS/cm	0.64 mg/L	1.46 NTU	68.9 mV	48.01 ft	100.00 ml/min
10/9/2023 4:11 PM	40:00	6.41 pH	21.41 °C	337.44 µS/cm	0.64 mg/L	1.80 NTU	68.1 mV	48.06 ft	100.00 ml/min

Samples

Sample ID:	Description:
	1620 6 bottles collected
	Metals
ARK-AP1PZ-1	Radium
	Anions
	TDS

Test Date / Time: 10/9/2023 4:20:06 PM

Project: Arkwright

Operator Name: Dylan Quintal

Location Name: Arkwright, AP-1,

AP1PZ-2

Latitude: 32.920425025932 Longitude: -83.6982994526625

Well Diameter: 2 in Casing Type: PVC Screen Length: 10 ft Top of Screen: 52.1 ft Total Depth: 62.7 ft

Initial Depth to Water: 43.04 ft

Pump Type: Dedicated Bladder

Pump

Tubing Type: HDPE

Pump Intake From TOC: 56.6 ft Estimated Total Volume Pumped:

9000 ml

Flow Cell Volume: 90 ml Final Flow Rate: 300 ml/min Final Draw Down: 0 ft Instrument Used: Aqua TROLL 400

Serial Number: 850762

Test Notes:

Heron dipper-T SN: 11FF2205014ML

MP50 SN: 22 ID: 103

Pressure: 45 psi

Weather Conditions:

Sunny, 77F

Low-Flow Readings:

Date Time	Elapsed Time	рН	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 10 %	+/- 10 %	+/- 10	+/- 0.3	
10/9/2023 4:20 PM	00:00	6.12 pH	20.84 °C	1,154.8 μS/cm	0.48 mg/L	11.50 NTU	54.4 mV	43.04 ft	300.00 ml/min
10/9/2023 4:25 PM	05:00	6.08 pH	20.78 °C	1,216.5 μS/cm	0.44 mg/L	9.03 NTU	56.6 mV	43.04 ft	300.00 ml/min
10/9/2023 4:30 PM	10:00	6.05 pH	20.65 °C	1,268.1 μS/cm	0.36 mg/L	7.15 NTU	64.5 mV	43.04 ft	300.00 ml/min
10/9/2023 4:35 PM	15:00	6.02 pH	20.76 °C	1,317.6 μS/cm	0.24 mg/L	4.31 NTU	71.7 mV	43.04 ft	300.00 ml/min
10/9/2023 4:40 PM	20:00	6.01 pH	21.00 °C	1,326.9 μS/cm	0.18 mg/L	4.04 NTU	75.5 mV	43.04 ft	300.00 ml/min
10/9/2023 4:45 PM	25:00	5.99 pH	20.95 °C	1,343.6 μS/cm	0.18 mg/L	3.87 NTU	79.8 mV	43.04 ft	300.00 ml/min
10/9/2023 4:50 PM	30:00	5.98 pH	20.92 °C	1,369.4 μS/cm	0.17 mg/L	3.29 NTU	82.1 mV	43.04 ft	300.00 ml/min

Sample ID: Description:

ARK-AP1PZ-2	Sample time: 1700; 6 bottles: Metals, Anions, TDS, Radium
ARK-AP1-FD-01	6 bottles: Metals, Anions, TDS, Radium

Test Date / Time: 10/10/2023 8:49:00 AM

Project: Arkwright **Operator Name:** J. Myer

Location Name: AP1PZ-3 Latitude: 32.9196479679014 Longitude: -83.6980466544628

Well Diameter: 2 in Casing Type: PVC Screen Length: 10 ft Top of Screen: 56.9 ft Total Depth: 67.4 ft

Initial Depth to Water: 43.7 ft

Pump Type: Dedicated Bladder

Pump

Tubing Type: HDPE

Pump Intake From TOC: 61.4 ft Estimated Total Volume Pumped:

5250 ml

Flow Cell Volume: 90 ml Final Flow Rate: 150 ml/min Final Draw Down: 0.3 ft Instrument Used: Aqua TROLL 400

Serial Number: 850751

Test Notes:

Heron Instrument Dipper-T SN: WL-006

MP-50 SN: 26 ID: 103

Pressure: 35 PSI

Weather Conditions:

Cloudy 53 F

Low-Flow Readings:

Date Time	Elapsed Time	рН	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 10 %	+/- 10 %	+/- 10	+/- 0.3	
10/10/2023 8:49 AM	00:00	5.56 pH	18.11 °C	2,156.4 μS/cm	4.47 mg/L	1.36 NTU	198.0 mV	44.00 ft	150.00 ml/min
10/10/2023 8:54 AM	05:00	5.60 pH	19.14 °C	2,143.6 μS/cm	0.83 mg/L	0.80 NTU	175.2 mV	44.00 ft	150.00 ml/min
10/10/2023 8:59 AM	10:00	5.61 pH	19.11 °C	2,126.4 μS/cm	0.58 mg/L	0.59 NTU	192.3 mV	44.00 ft	150.00 ml/min
10/10/2023 9:04 AM	15:00	5.61 pH	19.15 °C	2,138.6 μS/cm	0.51 mg/L	0.74 NTU	164.2 mV	44.00 ft	150.00 ml/min
10/10/2023 9:09 AM	20:00	5.61 pH	19.23 °C	2,127.3 μS/cm	0.52 mg/L	0.51 NTU	178.5 mV	44.00 ft	150.00 ml/min
10/10/2023 9:14 AM	25:00	5.61 pH	19.23 °C	2,133.2 μS/cm	0.38 mg/L	0.94 NTU	152.0 mV	44.00 ft	150.00 ml/min
10/10/2023 9:19 AM	30:00	5.61 pH	19.24 °C	2,143.0 μS/cm	0.30 mg/L	0.69 NTU	147.2 mV	44.00 ft	150.00 ml/min
10/10/2023 9:24 AM	35:00	5.61 pH	19.33 °C	2,130.6 μS/cm	0.27 mg/L	0.34 NTU	142.6 mV	44.00 ft	150.00 ml/min

Sample ID:	Description:
------------	--------------

	0930 6 bottles collected
	Metals
ARK-AP1PZ-3	Radium
	Anions
	TDS

Test Date / Time: 10/10/2023 8:45:09 AM

Project: Arkwright

Operator Name: Dylan Quintal

Location Name: Arkwright, AP-1,

AP1PZ-4

Latitude: 32.9188151770192 Longitude: -83.6975826323032

Well Diameter: 2 in Casing Type: PVC Screen Length: 10 ft Top of Screen: 56.9 ft Total Depth: 67.4 ft

Initial Depth to Water: 48.03 ft

Pump Type: Dedicated Bladder

Pump

Tubing Type: HDPE

Pump Intake From TOC: 61.5 ft Estimated Total Volume Pumped:

2000 ml

Flow Cell Volume: 90 ml Final Flow Rate: 100 ml/min

Final Draw Down: 0 ft

Instrument Used: Aqua TROLL 400

Serial Number: 850762

Test Notes:

Heron dipper-T SN: 11FF2205014ML; MP50 SN: 22; ID: 101; Pressure: 35 psi

Weather Conditions:

Cloudy, 54F

Low-Flow Readings:

Date Time	Elapsed Time	рН	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 10 %	+/- 10 %	+/- 10	+/- 0.3	
10/10/2023	00:00	6.30 pH	18.19 °C	2,379.5	0.46 mg/L	6.10 NTU	.10 NTU -52.7 mV	48.03 ft	100.00 ml/min
8:45 AM	00.00	0.50 pri	10.19 C	μS/cm	0.40 mg/L	0.101010	-32.7 1110		
10/10/2023	05:00	5:00 6.29 pH	18.37 °C	2,371.3	0.45 mg/L	5.98 NTU	-69.0 mV	48.03 ft	100.00 ml/min
8:50 AM	03.00			μS/cm	0.45 mg/L	5.96 NTO			100.00 1111/111111
10/10/2023	10:00	6.29 pH	18.57 °C	2,362.8	0.45 mg/L	4.55 NTU	-52.0 mV	48.03 ft	100.00 ml/min
8:55 AM	10.00	0.29 pm	10.57	μS/cm	0.43 Hig/L	4.55 1110		40.03 10	100.00 1111/111111
10/10/2023	15:00	6.29 pH	18.46 °C	2,361.8	0.43 mg/L	4.15 NTU	-51.1 mV	48.03 ft	100.00 ml/min
9:00 AM	15.00	6.29 pm	10.40	μS/cm	0.43 Hig/L	4.131010	-51.11110	40.03 10	100.00 1111/111111
10/10/2023	20:00	20:00 6.28 pH	18.59 °C	2,357.5	0.43 mg/L	3.99 NTU	-66.8 mV	48.03 ft	100.00 ml/min
9:05 AM	20.00			μS/cm				40.03 10	100.00 1111/111111

Sample ID:	Description:
ARK-AP1PZ-4	Sample time: 0910; 6 bottles: Metals, Anions, TDS, Radium
ARK-AP1-FB-02	Sample time: 0930; 6 bottles: Metals, Anions, TDS, Radium

Test Date / Time: 10/10/2023 10:31:42 AM

Project: Arkwright **Operator Name:** J. Myer

Location Name: AP1PZ-5 Latitude: 32.9179289032926 Longitude: -83.6973509564996

Well Diameter: 2 in Casing Type: PVC Screen Length: 10 ft Top of Screen: 56.8 ft Total Depth: 67.2 ft

Initial Depth to Water: 49.55 ft

Pump Type: Dedicated Bladder

Pump

Tubing Type: HDPE

Pump Intake From TOC: 61.3 ft Estimated Total Volume Pumped:

4500 ml

Flow Cell Volume: 90 ml Final Flow Rate: 100 ml/min Final Draw Down: 1.12 ft Instrument Used: Aqua TROLL 400

Serial Number: 850751

Test Notes:

Heron Instruments Dipper-T SN: WL-006

MP-50 SN: 26 ID: 103

Pressure: 35 psi

Weather Conditions:

Sunny 64 F

Low-Flow Readings:

Date Time	Elapsed Time	рН	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 10 %	+/- 10 %	+/- 10	+/- 0.3	
10/10/2023 10:31 AM	00:00	6.03 pH	22.07 °C	2,926.0 μS/cm	2.18 mg/L	20.50 NTU	-11.3 mV	50.30 ft	100.00 ml/min
10/10/2023 10:36 AM	05:00	6.05 pH	20.32 °C	3,023.3 µS/cm	1.37 mg/L	14.90 NTU	-37.6 mV	50.48 ft	100.00 ml/min
10/10/2023 10:41 AM	10:00	6.06 pH	20.30 °C	3,028.5 µS/cm	1.20 mg/L	8.60 NTU	-42.2 mV	50.55 ft	100.00 ml/min
10/10/2023 10:46 AM	15:00	6.06 pH	20.35 °C	3,019.0 µS/cm	1.05 mg/L	6.59 NTU	-74.1 mV	50.60 ft	100.00 ml/min
10/10/2023 10:51 AM	20:00	6.06 pH	20.33 °C	3,022.2 µS/cm	0.85 mg/L	5.51 NTU	-49.9 mV	50.63 ft	100.00 ml/min
10/10/2023 10:56 AM	25:00	6.05 pH	20.38 °C	3,023.4 µS/cm	0.72 mg/L	3.26 NTU	-48.9 mV	50.66 ft	100.00 ml/min
10/10/2023 11:01 AM	30:00	6.06 pH	20.54 °C	3,025.1 μS/cm	0.66 mg/L	2.07 NTU	-50.6 mV	50.67 ft	100.00 ml/min
10/10/2023 11:06 AM	35:00	6.05 pH	20.57 °C	3,015.2 µS/cm	0.63 mg/L	1.71 NTU	-77.6 mV	50.67 ft	100.00 ml/min
10/10/2023 11:11 AM	40:00	6.05 pH	20.66 °C	3,027.6 µS/cm	0.60 mg/L	1.03 NTU	-48.8 mV	50.67 ft	100.00 ml/min
10/10/2023 11:16 AM	45:00	6.05 pH	20.77 °C	3,026.0 μS/cm	0.59 mg/L	0.88 NTU	-46.8 mV	50.67 ft	100.00 ml/min

Samples

Sample ID:	Description:
	1120 6 Samples taken
	Metals
ARK-AP1PZ-5	Radium
	Anions
	TDS
	1210 6 Samples taken
	Metals
ARK-AP1-EB-02	Radium
	TDS
	Anions

Test Date / Time: 6/13/2023 2:42:52 PM

Project: Arkwright

Operator Name: B. Pennell

Location Name: Arkwright, AP-1,

PZ-6

Latitude: 32.9169078058876 Longitude: -83.696961030364

Well Diameter: 2 in Casing Type: PVC Screen Length: 10 ft Top of Screen: 62.2 ft Total Depth: 72.2 ft

Initial Depth to Water: 57.13 ft

Pump Type: Dedicated Bladder

Pump

Tubing Type: LDPE

Tubing Inner Diameter: 0.17 in Pump Intake From TOC: 67.6 ft Estimated Total Volume Pumped:

9750 ml

Flow Cell Volume: 90 ml Final Flow Rate: 150 ml/min Final Draw Down: 0.43 ft Instrument Used: Aqua TROLL 400

Serial Number: 989630

Test Notes:

Sample time: 1552

Weather Conditions:

Light rain, 30 C

Low-Flow Readings:

Date Time	Elapsed Time	рН	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 10 %	+/- 10 %	+/- 10	+/- 0.33	
6/13/2023 2:42 PM	00:00	4.68 pH	20.23 °C	3,021.4 µS/cm	2.60 mg/L	4.86 NTU	164.5 mV	57.13 ft	150.00 ml/min
6/13/2023 2:47 PM	05:00	5.10 pH	19.95 °C	3,047.8 µS/cm	1.96 mg/L	6.22 NTU	89.1 mV	57.56 ft	150.00 ml/min
6/13/2023 2:52 PM	10:00	5.22 pH	19.86 °C	3,044.7 µS/cm	1.47 mg/L	3.59 NTU	76.2 mV	57.56 ft	150.00 ml/min
6/13/2023 2:57 PM	15:00	5.26 pH	19.86 °C	3,049.9 µS/cm	1.27 mg/L	2.36 NTU	53.4 mV	57.56 ft	150.00 ml/min
6/13/2023 3:02 PM	20:00	5.28 pH	19.86 °C	3,049.8 μS/cm	1.10 mg/L	2.04 NTU	45.6 mV	57.56 ft	150.00 ml/min
6/13/2023 3:07 PM	25:00	5.30 pH	19.86 °C	3,051.9 μS/cm	1.00 mg/L	1.41 NTU	40.7 mV	57.56 ft	150.00 ml/min
6/13/2023 3:12 PM	30:00	5.31 pH	19.89 °C	3,048.2 μS/cm	0.87 mg/L	0.97 NTU	37.2 mV	57.56 ft	150.00 ml/min
6/13/2023 3:17 PM	35:00	5.31 pH	19.91 °C	3,057.0 μS/cm	0.80 mg/L	0.82 NTU	34.7 mV	57.56 ft	150.00 ml/min
6/13/2023 3:22 PM	40:00	5.32 pH	19.91 °C	3,055.5 μS/cm	0.71 mg/L	0.62 NTU	32.6 mV	57.56 ft	150.00 ml/min
6/13/2023 3:27 PM	45:00	5.33 pH	19.90 °C	3,042.9 μS/cm	0.62 mg/L	0.68 NTU	31.1 mV	57.56 ft	150.00 ml/min
6/13/2023 3:32 PM	50:00	5.33 pH	19.86 °C	3,039.1 µS/cm	0.55 mg/L	0.47 NTU	29.7 mV	57.56 ft	150.00 ml/min
6/13/2023 3:37 PM	55:00	5.33 pH	19.81 °C	3,036.5 µS/cm	0.49 mg/L	0.39 NTU	28.8 mV	57.56 ft	150.00 ml/min

6/13/2023 3:42 PM	01:00:00	5.34 pH	19.81 °C	3,031.2 μS/cm	0.43 mg/L	0.39 NTU	27.6 mV	57.56 ft	150.00 ml/min
6/13/2023 3:47 PM	01:05:00	5.34 pH	19.83 °C	3,029.3 μS/cm	0.38 mg/L	0.34 NTU	26.6 mV	57.56 ft	150.00 ml/min

Samples

Sample ID:	Description:
ARK-AP1PZ-6-20230613	6 Polys collected at 1552

Test Date / Time: 10/10/2023 1:11:16 PM

Project: Arkwright **Operator Name:** J. Myer

Location Name: AP1PZ-7 Latitude: 32.9174028763597 Longitude: -83.6975306645036

Well Diameter: 2 in Casing Type: PVC Screen Length: 10 ft Top of Screen: 67.3 ft Total Depth: 77.8 ft

Initial Depth to Water: 51.1 ft

Pump Type: Dedicated Bladder

Pump

Tubing Type: HDPE

Pump Intake From TOC: 71.8 ft Estimated Total Volume Pumped:

3000 ml

Flow Cell Volume: 90 ml Final Flow Rate: 100 ml/min

Final Draw Down: 3 ft

Instrument Used: Aqua TROLL 400

Serial Number: 850751

Test Notes:

Heron Instruments Dipper-T SN: WL 006

MP50 SN: 26 ID: 103

Pressure: 40 PSI

Weather Conditions:

Sunny 76 F

Low-Flow Readings:

Date Time	Elapsed Time	рН	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 10 %	+/- 10 %	+/- 10	+/- 0.3	
10/10/2023	00:00	6.34 pH	25.56 °C	2,237.8	1.52 mg/L	8.00 NTU	-51.5 mV	52.05 ft	100.00 ml/min
1:11 PM	00.00	6.54 μπ	25.56 C	μS/cm	1.52 IIIg/L 6.00 N T O	8.00 NTO	-51.51117	32.03 It	
10/10/2023	05:00	6.24 pH	22.56 °C	2,332.4	0.81 mg/L	7.55 NTU	-41.5 mV	52.50 ft	100.00 ml/min
1:16 PM	03.00	0.24 pri	22.56 C	μS/cm	0.61 mg/L 7.50	7.55 1110	-41.51110	32.30 It	
10/10/2023	10:00	10:00 6.25 pH 21.96 °C	21.96 °C	2,343.3	0.67 mg/L	6.62 NTU	-33.3 mV	52.95 ft	100.00 ml/min
1:21 PM	10.00		21.50 0	μS/cm		0.02 1110	00.01111		100.00 1111/11111
10/10/2023	15:00	00 6.28 pH	22.18 °C	2,323.1	0.81 mg/L	5.26 NTU	-24.2 mV	53.35 ft	100.00 ml/min
1:26 PM	15.00	0.20 pr i	22.10	μS/cm	0.01 mg/L	3.20 1110	24.21117	55.55 It	100.00 111/111111
10/10/2023	20:00	6.28 pH	22.08 °C	2,327.5	0.93 mg/L	2.72 NTU	-22.2 mV	53.65 ft	100.00 ml/min
1:31 PM	20.00	0.20 pm	22.00 0	μS/cm	0.55 mg/L	2.72 1110	22.2 111 V	55.05 It	100.00 111/111111
10/10/2023	25:00	25:00 6.28 pH 22	22.18 °C	2,312.8	0.98 mg/L	2.21 NTU	-41.6 mV	53.85 ft	100.00 ml/min
1:36 PM	25.00		22.10 0	μS/cm	0.96 Hig/L	2.211110	-41.01110	33.63 10	100.00 111/111111
10/10/2023	30:00	6.27 pH	22.32 °C	2,300.6	0.98 mg/L	1.98 NTU	-23.8 mV	54.10 ft	100.00 ml/min
1:41 PM	00.00	0.27 pm	22.32 0	μS/cm	0.96 mg/L	1.90 NTO	-23.6 1110	54.10 π	100.00 111/111111

S	Sample ID:	Description:
---	------------	--------------

	1350 6 samples taken
	Metals
ARK-AP1PZ-7	Radium
	TDS
	Anions

Test Date / Time: 10/10/2023 10:40:18 AM

Project: Arkwright

Operator Name: Dylan Quintal

Location Name: Arkwright, AP-1,

AP1PZ-8

Latitude: 32.9180746929753 Longitude: -83.6980637535453

Well Diameter: 2 in Casing Type: PVC Screen Length: 10 ft Top of Screen: 55.6 ft Total Depth: 66.1 ft

Initial Depth to Water: 47.87 ft

Pump Type: Dedicated Bladder

Pump

Tubing Type: HDPE

Pump Intake From TOC: 59 ft Estimated Total Volume Pumped:

7500 ml

Flow Cell Volume: 90 ml Final Flow Rate: 100 ml/min Final Draw Down: 2.27 ft Instrument Used: Aqua TROLL 400

Serial Number: 850762

Test Notes:

Heron dipper-T SN: 11FF2205014ML; MP50 SN: 22; ID: 99; Pressure: 40 psi

Weather Conditions:

Partly cloudy, 66F

Low-Flow Readings:

Date Time	Elapsed Time	рН	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 10 %	+/- 10 %	+/- 10	+/- 0.3	
10/10/2023 10:40 AM	00:00	6.63 pH	20.37 °C	1,569.6 μS/cm	2.14 mg/L	2.02 NTU	-22.3 mV	50.14 ft	100.00 ml/min
10/10/2023 10:45 AM	05:00	6.60 pH	20.88 °C	1,631.7 μS/cm	1.45 mg/L	1.08 NTU	-31.5 mV	50.14 ft	100.00 ml/min
10/10/2023 10:50 AM	10:00	6.60 pH	20.80 °C	1,653.1 μS/cm	1.12 mg/L	0.64 NTU	-37.0 mV	50.14 ft	100.00 ml/min
10/10/2023 10:55 AM	15:00	6.60 pH	20.99 °C	1,659.2 μS/cm	0.99 mg/L	0.54 NTU	-39.0 mV	50.14 ft	100.00 ml/min
10/10/2023 11:00 AM	20:00	6.60 pH	21.53 °C	1,655.6 μS/cm	0.89 mg/L	0.50 NTU	-40.6 mV	50.14 ft	100.00 ml/min
10/10/2023 11:05 AM	25:00	6.60 pH	21.91 °C	1,651.5 μS/cm	0.82 mg/L	0.54 NTU	-41.4 mV	50.14 ft	100.00 ml/min
10/10/2023 11:10 AM	30:00	6.59 pH	21.84 °C	1,652.4 μS/cm	0.76 mg/L	0.48 NTU	-42.3 mV	50.14 ft	100.00 ml/min
10/10/2023 11:15 AM	35:00	6.59 pH	22.27 °C	1,653.1 μS/cm	0.72 mg/L	0.45 NTU	-42.7 mV	50.14 ft	100.00 ml/min
10/10/2023 11:20 AM	40:00	6.59 pH	22.60 °C	1,650.5 μS/cm	0.67 mg/L	0.46 NTU	-42.2 mV	50.14 ft	100.00 ml/min
10/10/2023 11:25 AM	45:00	6.59 pH	22.60 °C	1,652.6 μS/cm	0.63 mg/L	0.67 NTU	-42.1 mV	50.14 ft	100.00 ml/min
10/10/2023 11:30 AM	50:00	6.59 pH	22.68 °C	1,652.7 μS/cm	0.59 mg/L	0.34 NTU	-42.3 mV	50.14 ft	100.00 ml/min
10/10/2023 11:35 AM	55:00	6.59 pH	22.33 °C	1,651.2 μS/cm	0.57 mg/L	0.28 NTU	-42.1 mV	50.14 ft	100.00 ml/min

10/10/2023	01:00:00	6.60 pH	22.38 °C	1,648.9	0.52 mg/L	0.27 NTU	-42.6 mV	50.14 ft	100.00 ml/min
11:40 AM				μS/cm	0.52 mg/L	0.27 1010	-42.01110	50.1411	100.00 111/111111
10/10/2023	01:05:00	6.60 pH	22.07 °C	1,650.4	0.50 mg/L	0.26 NTU	-55.9 mV	50.14 ft	100.00 ml/min
11:45 AM		0.00 pm	22.07 0	μS/cm		0.201110	33.3 111		100.00 111/111111
10/10/2023	01:10:00	6.60 pH	22.16 °C	1,651.0	0.49 mg/L	0.25 NTU	-55.8 mV	50.14 ft	100.00 ml/min
11:50 AM	01.10.00	0.00 pri	22.10 C	μS/cm	0.43 mg/L	0.25 1410	33.0 111	30.1410	100.00 111/111111
10/10/2023	01:15:00	7.06 pH	24.69 °C	0.93 µS/cm	8.11 mg/L		13.1 mV	50.14 ft	100.00 ml/min
11:55 AM	01.10.00	7.00 pm	24.00 0	0.00 μ0/6/11	O.11 Hig/L		10.1111	00.1410	100.00 111/111111

Samples

Sample ID:	Description:
ARK-AP1PZ-8	Sample time: 1155; 6 bottles: Metals, Anions, TDS, Radium

Created using VuSitu from In-Situ, Inc.

Final reading at 11:55 AM was taken after flow through cell was detached and while sampling was occurring. Values are not applicable to stabilization criteria. Final stable parameters are recorded at 11:50 AM.

Test Date / Time: 10/10/2023 3:11:32 PM

Project: Arkwright **Operator Name:** J. Myer

Location Name: AP1PZ-9

Well Diameter: 2 in Casing Type: PVC Screen Length: 10 ft Top of Screen: 46.3 ft Total Depth: 57.4 ft

Initial Depth to Water: 42.15 ft

Pump Type: Dedicated Bladder

Pump

Tubing Type: HDPE

Pump Intake From TOC: 50.1 ft Estimated Total Volume Pumped:

3500 ml

Flow Cell Volume: 90 ml Final Flow Rate: 100 ml/min Final Draw Down: 4.85 ft Instrument Used: Aqua TROLL 400

Serial Number: 850751

Test Notes:

Heron Instruments Dipper-T SN: WL 006

MP50 SN: 26 ID: 103

Pressure: 35 PSI

Well purged dry. Well will allow to recharge and sample the following day

Weather Conditions:

Cloudy 81 F

Low-Flow Readings:

Date Time	Elapsed Time	рН	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 10 %	+/- 10 %	+/- 10	+/- 0.3	
10/10/2023 3:11 PM	00:00	5.22 pH	28.36 °C	589.11 μS/cm	2.15 mg/L	11.70 NTU	191.7 mV	43.33 ft	100.00 ml/min
10/10/2023 3:16 PM	05:00	4.61 pH	22.70 °C	636.28 μS/cm	1.88 mg/L	13.10 NTU	224.2 mV	43.89 ft	100.00 ml/min
10/10/2023 3:21 PM	10:00	4.39 pH	22.36 °C	646.67 µS/cm	2.16 mg/L	9.85 NTU	248.2 mV	44.45 ft	100.00 ml/min
10/10/2023 3:26 PM	15:00	4.32 pH	22.19 °C	649.23 μS/cm	2.37 mg/L	6.60 NTU	259.8 mV	44.90 ft	100.00 ml/min
10/10/2023 3:31 PM	20:00	4.30 pH	22.00 °C	650.97 μS/cm	2.36 mg/L	5.39 NTU	263.2 mV	45.40 ft	100.00 ml/min
10/10/2023 3:36 PM	25:00	4.32 pH	22.23 °C	646.95 µS/cm	2.27 mg/L	3.87 NTU	262.3 mV	45.90 ft	100.00 ml/min
10/10/2023 3:41 PM	30:00	4.36 pH	22.31 °C	645.89 μS/cm	2.25 mg/L	3.20 NTU	258.1 mV	46.30 ft	100.00 ml/min
10/10/2023 3:46 PM	35:00	4.40 pH	22.08 °C	645.34 μS/cm	2.44 mg/L	2.66 NTU	252.9 mV	47.00 ft	100.00 ml/min

Samples

Sample ID:	Description:
	Collected 10/11/23 due to well being purged dry
	6 bottles collected
A DIV A DADZ 0	Metals
ARK-AP1PZ-9	Anions
	TDS
	Radium

Created using VuSitu from In-Situ, Inc.

Well not sampled due to insufficient water

Test Date / Time: 10/11/2023 8:15:06 AM

Project: Arkwright

Operator Name: Dylan Quintal

Location Name: Arkwright, AP-1,

AP1PZ-9

Latitude: 32.9191016872371 Longitude: -83.6986887082457

Well Diameter: 2 in Casing Type: PVC Screen Length: 10 ft Top of Screen: 46.3 ft Total Depth: 57.4 ft

Initial Depth to Water: 42.26 ft

Pump Type: Dedicated Bladder

Pump

Tubing Type: HDPE

Pump Intake From TOC: 50.1 ft Estimated Total Volume Pumped:

0 ml

Flow Cell Volume: 90 ml Final Flow Rate: 100 ml/min

Final Draw Down: 0 ft

Instrument Used: Aqua TROLL 400

Serial Number: 850762

Test Notes:

Heron dipper-T SN: 11FF2205014ML; MP50 SN: 22; ID: 103; Pressure: 35 psi

Weather Conditions:

Cloudy, 60F

Low-Flow Readings:

Date Time	Elapsed Time	рН	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 10 %	+/- 10 %	+/- 10	+/- 0.3	
10/11/2023 8:15 AM	00:00	5.17 pH	18.68 °C	692.89 μS/cm	1.93 mg/L	3.97 NTU	170.3 mV	42.26 ft	100.00 ml/min

Samples

Sample ID:	Description:
ARK-AP1PZ-9	Sample time: 0820; 6 bottles: Metals, Anions, TDS, Radium

Test Date / Time: 10/10/2023 1:30:27 PM

Project: Arkwright

Operator Name: Dylan Quintal

Location Name: Arkwright, AP-1,

AP1PZ-10

Latitude: 32.9197326819116 Longitude: -83.6989545822144

Well Diameter: 2 cm Casing Type: PVC Screen Length: 10 ft Top of Screen: 46 ft Total Depth: 56.5 ft

Initial Depth to Water: 39.98 ft

Pump Type: Dedicated Bladder

Pump

Tubing Type: HDPE

Pump Intake From TOC: 50.5 ft Estimated Total Volume Pumped:

4500 ml

Flow Cell Volume: 90 ml Final Flow Rate: 100 ml/min Final Draw Down: 2.52 ft Instrument Used: Aqua TROLL 400

Serial Number: 850762

Test Notes:

Heron dipper-T SN: 11FF2205014ML; MP50 SN: 22; ID: 99; Pressure: 30 psi

Weather Conditions:

Sunny, 77F

Low-Flow Readings:

Date Time	Elapsed Time	рН	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 10 %	+/- 10 %	+/- 10	+/- 0.3	
10/10/2023 1:30 PM	00:00	6.24 pH	23.54 °C	671.01 μS/cm	1.72 mg/L	2.88 NTU	11.9 mV	42.50 ft	100.00 ml/min
10/10/2023 1:35 PM	05:00	6.38 pH	23.54 °C	739.85 µS/cm	1.46 mg/L	2.00 NTU	-48.0 mV	42.50 ft	100.00 ml/min
10/10/2023 1:40 PM	10:00	6.43 pH	23.59 °C	764.43 µS/cm	1.23 mg/L	1.71 NTU	-48.9 mV	42.50 ft	100.00 ml/min
10/10/2023 1:45 PM	15:00	6.42 pH	23.75 °C	763.75 µS/cm	1.08 mg/L	1.95 NTU	-47.9 mV	42.50 ft	100.00 ml/min
10/10/2023 1:50 PM	20:00	6.40 pH	23.83 °C	752.07 μS/cm	1.02 mg/L	2.37 NTU	-44.3 mV	42.50 ft	100.00 ml/min
10/10/2023 1:55 PM	25:00	6.40 pH	23.68 °C	751.40 μS/cm	0.93 mg/L	1.94 NTU	-42.6 mV	42.50 ft	100.00 ml/min
10/10/2023 2:00 PM	30:00	6.38 pH	23.24 °C	740.03 µS/cm	0.84 mg/L	2.62 NTU	-40.2 mV	42.50 ft	100.00 ml/min
10/10/2023 2:05 PM	35:00	6.35 pH	23.22 °C	719.32 µS/cm	0.79 mg/L	2.55 NTU	-35.7 mV	42.50 ft	100.00 ml/min
10/10/2023 2:10 PM	40:00	6.34 pH	22.62 °C	720.61 µS/cm	0.75 mg/L	3.03 NTU	-32.4 mV	42.50 ft	100.00 ml/min
10/10/2023 2:15 PM	45:00	6.30 pH	22.70 °C	700.48 μS/cm	0.77 mg/L	1.89 NTU	-27.0 mV	42.50 ft	100.00 ml/min

Sample ID:	Description:
ARK-AP1PZ-10	Sample time: 1420; 6 bottles: Metals, Anions, TDS, Radium

Test Date / Time: 10/10/2023 3:50:03 PM

Project: Arkwright

Operator Name: Dylan Quintal

Location Name: Arkwright, AP-1,

AP1PZ-11

Latitude: 32.9205162123018 Longitude: -83.6991527304053

Well Diameter: 2 in Casing Type: PVC Screen Length: 10 ft Top of Screen: 62.8 ft Total Depth: 73.3 ft

Initial Depth to Water: 41.22 ft

Pump Type: Dedicated Bladder

Pump

Tubing Type: HDPE

Pump Intake From TOC: 67.9 ft Estimated Total Volume Pumped:

4000 ml

Flow Cell Volume: 90 ml Final Flow Rate: 200 ml/min

Final Draw Down: 0 ft

Instrument Used: Aqua TROLL 400

Serial Number: 850762

Test Notes:

Heron dipper-T SN: 11FF2205014ML; MP50 SN: 22; ID: 104; Pressure: 40 psi

Weather Conditions:

Cloudy, 81F

Low-Flow Readings:

Date Time	Elapsed Time	рН	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 10 %	+/- 10 %	+/- 10	+/- 0.3	
10/10/2023 3:50 PM	00:00	6.67 pH	21.09 °C	297.14 μS/cm	3.55 mg/L	2.38 NTU	77.3 mV	41.22 ft	200.00 ml/min
10/10/2023 3:55 PM	05:00	6.67 pH	20.92 °C	298.01 μS/cm	3.00 mg/L	2.33 NTU	69.7 mV	41.22 ft	200.00 ml/min
10/10/2023 4:00 PM	10:00	6.67 pH	20.82 °C	297.33 μS/cm	2.77 mg/L	2.15 NTU	68.7 mV	41.22 ft	200.00 ml/min
10/10/2023 4:05 PM	15:00	6.67 pH	20.77 °C	295.74 μS/cm	2.67 mg/L	1.69 NTU	67.6 mV	41.22 ft	200.00 ml/min
10/10/2023 4:10 PM	20:00	6.67 pH	20.74 °C	294.40 μS/cm	2.64 mg/L	1.41 NTU	80.5 mV	41.22 ft	200.00 ml/min

Sample ID:	Description:						
ARK-AP1PZ-11	IPZ-11 Sample time: 1615; 6 bottles: Metals, Anions, TDS, Radium						
ARK-AP1-FD-02	Sample time: NA; 6 bottles: Metals, Anions, TDS, Radium						

Test Date / Time: 1/22/2024 2:01:36 PM

Project: Arkwright **Operator Name:** J. Myer

Location Name: AP1GWA-1 Latitude: 32.930019061764 Longitude: -83.7010088190436

Well Diameter: 2 in Casing Type: PVC Screen Length: 10 ft Top of Screen: 26.8 ft Total Depth: 37.5 ft

Initial Depth to Water: 25.9 ft

Pump Type: Dedicated Bladder

Tubing Type: LDPE

Pump Intake From TOC: 31.8 ft Estimated Total Volume Pumped:

9600 ml

Flow Cell Volume: 90 ml Final Flow Rate: 320 ml/min Final Draw Down: 0.25 ft Instrument Used: Aqua TROLL 400

Serial Number: 989630

Test Notes:

AquaTroll ID: 989630

Turbidimeter S/N: 22090D000345

MP-50 S/N: 35

ID: 103 PSI: 30

Weather Conditions:

Sunny 54 °F

Low-Flow Readings:

Date Time	Elapsed Time	рН	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 10 %	+/- 10 %	+/- 10	+/- 0.5	
1/22/2024 2:01 PM	00:00	5.28 pH	20.39 °C	179.06 μS/cm	3.62 mg/L	14.60 NTU	130.6 mV	26.15 ft	320.00 ml/min
1/22/2024 2:06 PM	05:00	5.30 pH	20.41 °C	176.01 μS/cm	2.36 mg/L	9.38 NTU	96.3 mV	26.15 ft	320.00 ml/min
1/22/2024 2:11 PM	10:00	5.31 pH	20.43 °C	175.76 μS/cm	2.27 mg/L	8.02 NTU	86.7 mV	26.15 ft	320.00 ml/min
1/22/2024 2:16 PM	15:00	5.30 pH	20.47 °C	175.89 μS/cm	2.25 mg/L	6.17 NTU	82.5 mV	26.15 ft	320.00 ml/min
1/22/2024 2:21 PM	20:00	5.32 pH	20.36 °C	176.05 μS/cm	2.24 mg/L	4.35 NTU	79.8 mV	26.15 ft	320.00 ml/min
1/22/2024 2:26 PM	25:00	5.33 pH	20.38 °C	175.49 μS/cm	2.23 mg/L	3.09 NTU	77.6 mV	26.15 ft	320.00 ml/min
1/22/2024 2:31 PM	30:00	5.34 pH	20.35 °C	175.12 μS/cm	2.23 mg/L	2.37 NTU	80.3 mV	26.15 ft	320.00 ml/min

Sample ID:	Description:
------------	--------------

	Sample Time: 14:35
ARK-AP1GWA-1	6 bottles: metals, radiologicals, TDS, anions
ARK-AP1-FD-01	6 bottles: metals, radiologicals, TDS, anions
	Sample Time: 15:00
ARK-AP1-FB-01	6 bottles: metals, radiologicals, TDS, anions
	DI water provided by AIR

Test Date / Time: 1/22/2024 2:03:37 PM

Project: Arkwright AP1GWA-2 **Operator Name:** Dylan Ripley

Location Name: AP1GWA-2 Latitude: 32.92731739864359 Longitude: -83.70052860236954

Well Diameter: 2 in Casing Type: PVC Screen Length: 10 ft Top of Screen: 20.5 ft Total Depth: 31.1 ft

Initial Depth to Water: 18.22 ft

Pump Type: Dedicated Bladder

Tubing Type: LDPE

Pump Intake From TOC: 25.3 ft Estimated Total Volume Pumped:

10760 ml

Flow Cell Volume: 90 ml Final Flow Rate: 300 ml/min

Final Draw Down: 0 ft

Instrument Used: Aqua TROLL 400

Serial Number: 965586

Test Notes:

MP-50 S/N: 07

ID: 99 PSI: 35

Turbidimeter S/N: 22090D000235 WLM S/N: T11FF2104058JH

Weather Conditions:

Partly Cloudy

10 °C

Low-Flow Readings:

Date Time	Elapsed Time	рН	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 10 %	+/- 10 %	+/- 10	+/- 0.5	
1/22/2024	00.00	0.05 -11	20.04.80	77.00 0/2	4.44/	4 00 NTU	400.4\/	40.00#	200.001/
2:03 PM	00:00	6.05 pH	20.04 °C	77.28 µS/cm	4.11 mg/L	4.33 NTU	136.1 mV	18.22 ft	300.00 ml/min
1/22/2024	05.00	0.05 -11	20.44.90	77.070/2	2.00/	O OC NEU	07.5\/	40.00#	200.001/:-
2:08 PM	05:00	6.05 pH	20.11 °C	77.27 µS/cm	3.98 mg/L	2.36 NTU	97.5 mV	18.22 ft	300.00 ml/min
1/22/2024	10.00	6.02 =1.1	20.42.90	76.00 uC/om	2.00 mg/l	C 44 NTU	422.2 m\/	40.00#	200 00 ml/min
2:13 PM	10:00	6.03 pH	20.12 °C	76.92 µS/cm	3.90 mg/L	6.44 NTU	133.3 mV	18.22 ft	300.00 ml/min
1/22/2024	15:00	6.02 =1.1	20.21 °C	77.72 µS/cm	2.04 mg/l	5.04 NTU	88.3 mV	18.22 ft	300.00 ml/min
2:18 PM	15.00	6.03 pH	20.21 C	77.72 μ3/011	3.84 mg/L	5.04 1010	00.3 1117	10.2211	300.00 111/111111
1/22/2024	20:00	6.04 pH	20.24 °C	78.24 µS/cm	3.79 mg/L	3.04 NTU	91.0 mV	18.22 ft	300.00 ml/min
2:23 PM	20.00	0.04 pm	20.24 0	70.24 μο/οπ	3.79 Hig/L	3.04 1110	91.01110	10.22 10	300.00 111/111111
1/22/2024	25:00	6.03 pH	20.17 °C	78.61 µS/cm	3.73 mg/L	3.17 NTU	90.3 mV	18.22 ft	300.00 ml/min
2:28 PM	23.00	0.03 pri	20.17	70.01 μο/οπ	3.73 Hig/L	3.17 N10	90.5 1117	10.22 10	300.00 111/111111
1/22/2024	25:52	6.03 pH	20.19 °C	80.53 µS/cm	3.73 mg/L	2.11 NTU	82.8 mV	18.22 ft	300.00 ml/min
2:29 PM	25.52	0.03 pri	20.19 0	00.55 μ5/6/11	3.73 Hig/L	2.111010	02.0 1117	10.22 10	300.00 111/111111
1/22/2024	30:52	6.04 pH	20.21 °C	79.34 µS/cm	3.71 mg/L	0.95 NTU	87.8 mV	18.22 ft	300.00 ml/min
2:34 PM	30.32	0.04 pri	20.21 0	7 3.5 4 μο/οπ	5.7 Tillg/L	0.00 1410	07.01110	10.22 10	300.00 111/111111
1/22/2024	35:52	6.03 pH	20.26 °C	79.86 µS/cm	3.65 mg/L	1.00 NTU	88.0 mV	18.22 ft	300.00 ml/min
2:39 PM	33.32	0.03 pri	20.20	7 3.00 μο/οπ	3.03 mg/L	1.00 1010	00.0 111	10.22 11	300.00 111/111111

Samples

Sample ID:	Description:
	14:45 6 bottles
	Metals
ARK-AP1GWA-2	Radiums
	TDS
	Anions

Test Date / Time: 1/22/2024 4:09:33 PM

Project: Arkwright **Operator Name:** J. Myer

Location Name: AP1PZ-1 Latitude: 32.9210574183589 Longitude: -83.6987658217549

Well Diameter: 2 in Casing Type: PVC Screen Length: 10 ft Top of Screen: 77 ft Total Depth: 87.6 ft

Initial Depth to Water: 44.8 ft

Pump Type: Dedicated Bladder

Pump

Tubing Type: LDPE

Pump Intake From TOC: 82.6 ft Estimated Total Volume Pumped:

2500 ml

Flow Cell Volume: 90 ml Final Flow Rate: 100 ml/min Final Draw Down: 2.85 ft Instrument Used: Aqua TROLL 400

Serial Number: 989630

Test Notes:

AquaTroll ID: 989630

Turbidimeter: 22690D000345

MP-50 S/N: 35 ID: 105 Pressure: 40

Weather Conditions:

Sunny 14 °C

Low-Flow Readings:

Date Time	Elapsed Time	pН	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 10 %	+/- 10 %	+/- 10	+/- 0.5	
1/22/2024 4:09 PM	00:00	7.01 pH	19.96 °C	326.75 μS/cm	4.38 mg/L	3.66 NTU	105.1 mV	45.35 ft	100.00 ml/min
1/22/2024 4:14 PM	05:00	6.47 pH	18.92 °C	327.92 μS/cm	1.19 mg/L	4.98 NTU	62.2 mV	46.05 ft	100.00 ml/min
1/22/2024 4:19 PM	10:00	6.42 pH	18.83 °C	328.60 μS/cm	1.10 mg/L	4.41 NTU	49.6 mV	46.65 ft	100.00 ml/min
1/22/2024 4:24 PM	15:00	6.41 pH	18.78 °C	328.59 μS/cm	1.00 mg/L	2.76 NTU	42.6 mV	47.05 ft	100.00 ml/min
1/22/2024 4:29 PM	20:00	6.41 pH	18.74 °C	328.84 μS/cm	0.93 mg/L	2.67 NTU	39.1 mV	47.40 ft	100.00 ml/min
1/22/2024 4:34 PM	25:00	6.41 pH	18.70 °C	328.78 μS/cm	0.85 mg/L	2.17 NTU	55.0 mV	47.65 ft	100.00 ml/min

Samples

Sample ID:	Description:
-	

ARK-AP1PZ-1 Sample Time: 16:40
6 bottles: metals, radiologicals, TDS, anions

Test Date / Time: 1/22/2024 4:06:49 PM

Project: Arkwright AP1PZ-2 **Operator Name:** Dylan Ripley

Location Name: AP1PZ-2 Latitude: 32.92042654370735

Longitude: -83.69832418021439

Well Diameter: 2 in Casing Type: PVC Screen Length: 10 ft Top of Screen: 52.1 ft Total Depth: 62.7 ft

Initial Depth to Water: 42.99 ft

Pump Type: Dedicated Bladder

Tubing Type: LDPE

Pump Intake From TOC: 56.6 ft Estimated Total Volume Pumped:

5375 ml

Flow Cell Volume: 90 ml Final Flow Rate: 215 ml/min Final Draw Down: 0.51 ft Instrument Used: Aqua TROLL 400

Serial Number: 965586

Test Notes:

MP-50 S/N: 07

ID: 99 PSI: 45

Turbidimeter S/N: 23060D000342 WLM S/N: T11FF2104058JH

Weather Conditions:

Partly cloudy

13 °C

Low-Flow Readings:

Date Time	Elapsed Time	рН	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 10 %	+/- 10 %	+/- 10	+/- 0.5	
1/22/2024 4:06 PM	00:00	6.24 pH	18.52 °C	974.62 μS/cm	0.43 mg/L	10.00 NTU	103.5 mV	43.45 ft	215.00 ml/min
1/22/2024 4:11 PM	05:00	6.24 pH	18.48 °C	1,040.6 μS/cm	0.32 mg/L	6.66 NTU	62.9 mV	43.47 ft	215.00 ml/min
1/22/2024 4:16 PM	10:00	6.24 pH	18.52 °C	1,061.7 μS/cm	0.27 mg/L	4.59 NTU	66.8 mV	43.48 ft	215.00 ml/min
1/22/2024 4:21 PM	15:00	6.22 pH	18.44 °C	1,085.9 μS/cm	0.25 mg/L	3.23 NTU	55.1 mV	43.50 ft	215.00 ml/min
1/22/2024 4:26 PM	20:00	6.21 pH	18.46 °C	1,108.7 μS/cm	0.24 mg/L	2.39 NTU	53.8 mV	43.50 ft	215.00 ml/min
1/22/2024 4:31 PM	25:00	6.20 pH	18.48 °C	1,127.2 µS/cm	0.23 mg/L	1.75 NTU	55.5 mV	43.50 ft	215.00 ml/min

Samples

Sample ID:	Description:
------------	--------------

ARK-AP1PZ-2	Sample time: 16:40 6 bottles: Metals Radium TDS Anions
ARK-AP1-EB-01	Sample time:17:15 6 bottles: Metals Radium TDS Anions

Test Date / Time: 1/23/2024 10:46:10 AM

Project: Arkwright

Operator Name: E. Scheiben

Location Name: AP1PZ-3

Latitude: 32.91960816463575 Longitude: -83.6980804498379

Well Diameter: 2 in Casing Type: PVC Screen Length: 10 ft Top of Screen: 56.9 ft Total Depth: 67.4 ft

Initial Depth to Water: 43.55 ft

Pump Type: Dedicated bladder

Tubing Type: LDPE

Tubing Inner Diameter: 0.17 in

Tubing Length: 65 ft

Pump Intake From TOC: 61.4 ft Estimated Total Volume Pumped:

7500 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:

MP-50 S/N: 06

ID: 50 PSI: 30

Turbidimeter S/N: 23100D000368 WLM S/N: removed. Rental ID 29051

Weather Conditions:

Overcast, 45 °F

Low-Flow Readings:

Date Time	Elapsed Time	рН	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow	
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 10 %	+/- 10 %	+/- 10	+/- 0.5		
1/23/2024	00:00	E E0 pU	18.98 °C	2,043.5	0.65 mg/l	0.66 NTU	103.4 mV	43.55 ft	150.00 ml/min	
10:46 AM	00.00	5.59 pH	10.96 C	μS/cm	0.65 mg/L	0.00 NTO	103.4 1117	43.55 11	150.00 111/111111	
1/23/2024	05:00	5.61 pH	18.52 °C	2,157.6	0.35 mg/L	0.42 NTU	189.6 mV	43.55 ft	150.00 ml/min	
10:51 AM	03.00	3.01 pm	10.52 C	μS/cm	0.55 Hig/L	0.42 1110	109.01117	45.55 10	130.00 111/111111	
1/23/2024	10:00	5.61 pH	18.44 °C	2,157.9	0.24 mg/L	0.24 NTU	148.6 mV	43.55 ft	150.00 ml/min	
10:56 AM	10.00	0.01 pm	10.44 C	μS/cm	0.24 mg/L	0.241410	140.01111	40.00 It	130.00 111/111111	
1/23/2024	15:00	15:00	5.62 pH	18.49 °C	2,155.8	0.23 mg/L	0.23 NTU	137.9 mV	43.55 ft	150.00 ml/min
11:01 AM	10.00	3.02 pri	0.02 pri		μS/cm	0.20 mg/2	0.201110	107.01117	10.00 11	
1/23/2024	20:00	5.62 pH	18.49 °C	2,142.0	0.23 mg/L	0.40 NTU	127.6 mV	43.55 ft	150.00 ml/min	
11:06 AM	20.00	0.02 pi i	10.10	μS/cm	0.20 mg/L	0.101110	127.01117	10.00 11	100.00 1111/111111	
1/23/2024	25:00	5.62 pH	18.61 °C	2,133.9	0.24 mg/L	0.18 NTU	123.2 mV	43.55 ft	150.00 ml/min	
11:11 AM	20.00	0.02 pi i	10.01	μS/cm	0.2 i iiig/ 2	0.101110	120.2 1117	10.00 11	100.00 1111/111111	
1/23/2024	30:00	5.62 pH	18.63 °C	2,134.4	0.25 mg/L	0.26 NTU	113.8 mV	43.55 ft	150.00 ml/min	
11:16 AM	00.00	0.02 pm	10.00	μS/cm	0.20 mg/L	0.201110	110.01111	40.00 K	100.00 1111/111111	
1/23/2024	35:00	5.62 pH	18.65 °C	2,156.9	0.26 mg/L	0.26 NTU	132.4 mV	43.55 ft	150.00 ml/min	
11:21 AM	33.00	0.02 pm	10.00	μS/cm	5.25 mg/L	0.201110	102.71117	10.50 10	100.00 111/11111	
1/23/2024	40:00	5.62 pH	18.70 °C	2,150.0	0.26 mg/L	0.18 NTU	108.4 mV	43.55 ft	150.00 ml/min	
11:26 AM	40.00	0.02 pm	13.70	μS/cm	3.23 mg/L	3.131410	100.41111	10.50 10	100.00 111/111111	

1/23/2024	45:00	5.61 pH	18.70 °C	2,146.9	0.26 mg/L	0.16 NTU	105.1 mV	43.55 ft	150.00 ml/min
11:31 AM	45.00	5.61 pn	16.70 C	μS/cm	0.26 mg/L	0.16 N10	105.11110	43.33 11	150.00 111/111111
1/23/2024	F0:00	F 61 all	18.70 °C	2,142.8	0.26 mg/l	0.16 NTU	440.0 ~\/	43.55 ft	150.00 ml/min
11:36 AM	50:00	5.61 pH	18.70 °C	μS/cm	0.26 mg/L	0.16 N10	118.8 mV	43.55 11	150.00 ml/min

Samples

Sample ID:	Description:
	6 bottles filled at 11:45
	(3) Ra-226/Ra-228
ARK-AP1PZ-3	(1) TDS
	(1) Anions
	(1) metals

Test Date / Time: 1/23/2024 12:27:43 PM

Project: Arkwright

Operator Name: E. Scheiben

Location Name: AP1PZ-4 Latitude: 32.9210630471097 Longitude: -83.698776550591

Well Diameter: 2 in Casing Type: PVC Screen Length: 10 ft Top of Screen: 56.9 ft Total Depth: 67.4 ft

Initial Depth to Water: 46.56 ft

Pump Type: Dedicated bladder

Tubing Type: LDPE

Tubing Inner Diameter: 0.17 in

Tubing Length: 65 ft

Pump Intake From TOC: 61.5 ft Estimated Total Volume Pumped:

4000 ml

Flow Cell Volume: 90 ml Final Flow Rate: 100 ml/min Final Draw Down: 1.43 ft Instrument Used: Aqua TROLL 400

Serial Number: 966105

Test Notes:

MP-50 S/N: 06

ID:47 PSI:30

Turbidimeter S/N: 23100D000368 WLM S/N: removed. Rental ID 29051

Weather Conditions:

Overcast, 45 °F

Low-Flow Readings:

Date Time	Elapsed Time	рН	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow		
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 10 %	+/- 10 %	+/- 10	+/- 0.5			
1/23/2024	00:00	6 25 pU	18.20 °C	2,351.1	4.85 mg/L	42.30 NTU	-75.8 mV	46.56 ft	100.00 ml/min		
12:27 PM	00.00	6.35 pH	16.20 C	μS/cm	4.65 Hig/L	42.30 NTO	-75.6 1110	40.50 11	100.00 111/111111		
1/23/2024	05:00	6.31 pH	18.43 °C	2,342.0	1.36 mg/L	5.79 NTU	-94.7 mV	47.58 ft	100.00 ml/min		
12:32 PM	03.00	0.31 pm	16.43 C	μS/cm	1.30 Hig/L	3.79 1110	-94.7 1110	47.56 11	100.00 111/111111		
1/23/2024	10:00	6.30 pH	18.56 °C	2,337.2	1.22 mg/L	4.83 NTU	-88.5 mV	47.68 ft	100.00 ml/min		
12:37 PM	10.00	0.30 pm	18.56 °C	μS/cm	1.22 Hig/L	4.03 1110	-00.5 111	47.0010	100.00 111/111111		
1/23/2024	15:00	15:00	15:00	6.30 pH	18.61 °C	2,336.9	0.96 mg/L	4.17 NTU	-85.9 mV	47.81 ft	100.00 ml/min
12:42 PM	13.00	0.30 pn	0.00 pri	10.01	μS/cm	0.50 mg/L	4.17 1110	00.0 111 V	47.0110	100.00 111/111111	
1/23/2024	20:00	6.29 pH	18.59 °C	2,335.1	0.66 mg/L	4.80 NTU	-88.3 mV	47.86 ft	100.00 ml/min		
12:47 PM	20.00	0.23 pm	10.55	μS/cm	0.00 mg/L	4.001410	-00.5 111	47.0010	100.00 111/111111		
1/23/2024	25:00	6.29 pH	18.63 °C	2,337.8	0.50 mg/L	3.80 NTU	-129.4 mV	47.92 ft	100.00 ml/min		
12:52 PM	20.00	0.20 pm	10.00	μS/cm	0.00 mg/L	0.001110	120.4111	47.02 10	100.00 1111/111111		
1/23/2024	30:00	6.28 pH	18.63 °C	2,334.3	0.42 mg/L	3.29 NTU	-86.6 mV	47.96 ft	100.00 ml/min		
12:57 PM	30.00 0.28 pm	0.20 pr i	10.05	μS/cm	0.42 mg/L	3.23 1110	-00.0 111	47.5010	100.00 111/111111		
1/23/2024	35:00	6.27 pH	18.66 °C	2,333.4	0.37 mg/L	2.51 NTU	-88.0 mV	47.98 ft	100.00 ml/min		
1:02 PM	33.00	0.27 pm	10.00 C	μS/cm	0.57 Hig/L	2.51 1110	33.3 111	47.90 It	100.00 111/111111		
1/23/2024	40:00	6.27 pH	18.63 °C	2,330.7	0.33 mg/L	1.80 NTU	-128.4 mV	47.99 ft	100.00 ml/min		
1:07 PM		0.27 pm	10.03	μS/cm	0.55 Hig/L	1.00 1410	120.4 1110	47.5510	100.00 1111/111111		

Samples

Sample ID:	Description:
	6 bottles filled at 13:10
	(3) Ra-226/Ra-228
ARK-AP1PZ-4	(1) TDS
	(1) Anions
	(1) metals

Test Date / Time: 1/23/2024 2:12:59 PM

Project: Arkwright

Operator Name: E. Scheiben

Location Name: AP1PZ-5 Latitude: 32.917865859031 Longitude: -83.6973610147834

Well Diameter: 2 in Casing Type: PVC Screen Length: 10 ft Top of Screen: 56.8 ft Total Depth: 67.3 ft

Initial Depth to Water: 48.79 ft

Pump Type: Dedicated bladder

Tubing Type: LDPE

Tubing Inner Diameter: 0.17 in

Tubing Length: 65 ft

Pump Intake From TOC: 61.3 ft Estimated Total Volume Pumped:

3500 ml

Flow Cell Volume: 90 ml Final Flow Rate: 100 ml/min Final Draw Down: 0.73 ft Instrument Used: Aqua TROLL 400

Serial Number: 966105

Test Notes:

MP-50 S/N: 06

ID:47 PSI:30

Turbidimeter S/N: 23100D000368 WLM S/N: removed. Rental ID 29051

Weather Conditions:

Overcast, 45 °F

Low-Flow Readings:

Date Time	Elapsed Time	рН	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 10 %	+/- 10 %	+/- 10	+/- 0.5	
1/23/2024 2:12 PM	00:00	6.10 pH	18.69 °C	3,018.8 μS/cm	5.18 mg/L	1.17 NTU	-37.3 mV	48.79 ft	100.00 ml/min
1/23/2024 2:17 PM	05:00	6.09 pH	18.43 °C	3,041.6 μS/cm	1.69 mg/L	1.22 NTU	-42.1 mV	49.29 ft	100.00 ml/min
1/23/2024 2:22 PM	10:00	6.09 pH	18.48 °C	3,041.9 μS/cm	1.43 mg/L	1.94 NTU	-45.9 mV	49.38 ft	100.00 ml/min
1/23/2024 2:27 PM	15:00	6.09 pH	18.49 °C	3,040.2 μS/cm	1.18 mg/L	0.93 NTU	-84.1 mV	49.39 ft	100.00 ml/min
1/23/2024 2:32 PM	20:00	6.09 pH	18.52 °C	3,039.8 μS/cm	0.89 mg/L	0.62 NTU	-63.8 mV	49.42 ft	100.00 ml/min
1/23/2024 2:37 PM	25:00	6.10 pH	18.50 °C	3,038.7 μS/cm	0.69 mg/L	0.48 NTU	-102.5 mV	49.46 ft	100.00 ml/min
1/23/2024 2:42 PM	30:00	6.10 pH	18.48 °C	3,036.3 µS/cm	0.64 mg/L	0.45 NTU	-106.2 mV	49.49 ft	100.00 ml/min
1/23/2024 2:47 PM	35:00	6.10 pH	18.47 °C	3,030.8 µS/cm	0.58 mg/L	0.39 NTU	-107.9 mV	49.52 ft	100.00 ml/min

Samples

Sample ID:	Description:
	6 bottles filled at 14:50
	(3) Ra-226/Ra-228
ARK-AP1PZ-5	(1) TDS
	(1) Anions
	(1) Metals

Test Date / Time: 1/23/2024 3:54:25 PM

Project: Arkwright

Operator Name: E. Scheiben

Location Name: AP1PZ-7

Latitude: 32.91790369787738 Longitude: -83.6973066453411

Well Diameter: 2 in Casing Type: PVC Screen Length: 10 ft Top of Screen: 67.3 ft Total Depth: 77.8 ft

Initial Depth to Water: 50.94 ft

Pump Type: Dedicated bladder

Tubing Type: LDPE

Tubing Inner Diameter: 0.17 in

Tubing Length: 76 ft

Pump Intake From TOC: 71.8 ft Estimated Total Volume Pumped:

3000 ml

Flow Cell Volume: 90 ml Final Flow Rate: 100 ml/min Final Draw Down: 2.39 ft Instrument Used: Aqua TROLL 400

Serial Number: 966105

Test Notes:

MP-50 S/N: 06

ID:45 PSI:35

Turbidimeter S/N: 23100D000368 WLM S/N: removed. Rental ID 29051

Weather Conditions:

Overcast, 46 °F

Low-Flow Readings:

Date Time	Elapsed Time	рН	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 10 %	+/- 10 %	+/- 10	+/- 0.5	
1/23/2024	00:00	6.27 pH	19.28 °C	2,311.2	2.91 mg/L	7.26 NTU	-60.6 mV	50.94 ft	100.00 ml/min
3:54 PM	00.00	0.27 pm	19.20 C	μS/cm	2.91 mg/L	7.20 NTO	-00.01117	30.94 II	100.00 1111/111111
1/23/2024	05:00	6.23 pH	18.20 °C	2,356.2	1.09 mg/L	7.38 NTU	-52.1 mV	51.80 ft	100.00 ml/min
3:59 PM	03.00	0.23 pri	10.20 C	μS/cm	1.09 Hig/L	7.50 1410	-32.11110	31.0010	100.00 1111/111111
1/23/2024	10:00	6.22 pH	18.04 °C	2,353.8	1.05 mg/L	7.48 NTU	-71.9 mV	52.34 ft	100.00 ml/min
4:04 PM	10.00	0.22 pm	10.04 0	μS/cm	1.00 mg/L	7.401110	7 1.5 111	02.04 K	100.00 1111/111111
1/23/2024	15:00	6.22 pH	18.03 °C	2,351.3	0.87 mg/L	5.14 NTU	-75.6 mV	52.87 ft	100.00 ml/min
4:09 PM	13.00	0.22 pm	10.05	μS/cm	0.07 Hig/L	3.141010	7 3.0 111 0	52.07 It	100.00 111/111111
1/23/2024	20:00	6.23 pH	17.99 °C	2,348.6	0.88 mg/L	4.92 NTU	-80.5 mV	52.91 ft	100.00 ml/min
4:14 PM	20.00	0.23 pm	17.55 0	μS/cm	0.00 mg/L	4.52 1110	-00.5 111	52.51 It	100.00 1111/111111
1/23/2024	25:00	6.25 pH	18.02 °C	2,342.5	0.90 mg/L	3.51 NTU	-86.1 mV	53.19 ft	100.00 ml/min
4:19 PM	20.00	0.20 pm	10.02 0	μS/cm	0.00 Hig/L	0.011110	55.1 IIIV	55.1510	100.00 1111/111111
1/23/2024	30:00	6.25 pH	18.03 °C	2,344.5	0.90 mg/L	2.88 NTU	-57.4 mV	53.33 ft	100.00 ml/min
4:24 PM	30.00	0.23 pri	10.03 0	μS/cm	0.50 Hig/L	2.00 1410	57.4 IIIV	55.55 It	100.00 111/111111

Samples

Sample ID:	Description:
	6 bottles filled at 16:25
	(3) Ra-226/Ra-228
ARK-AP1PZ-7	(1) TDS
	(1) Anions
	(1) metals
	6 bottles filled at 15:55
	(3) Ra-226/Ra-228
ARK-AP1-FB02	(1) TDS
	(1) Anions
	(1) metals
	6 bottles filled at 17:00
	(3) Ra-226/Ra-228
ARK-AP1-EB02	(1) TDS
	(1) Anions

Created using VuSitu from In-Situ, Inc.

(1) metals

Test Date / Time: 1/23/2024 10:53:48 AM

Project: Arkwright

Operator Name: Zach Levy

Location Name: AP1PZ-8

Latitude: 32.916992633965506 Longitude: -83.6994890825729

Well Diameter: 2 in Casing Type: PVC Screen Length: 10 ft Top of Screen: 55.6 ft Total Depth: 66.1 ft

Initial Depth to Water: 46.11 ft

Pump Type: Dedicated bladder

Tubing Type: LDPE

Pump Intake From TOC: 59 ft Estimated Total Volume Pumped:

4000 ml

Flow Cell Volume: 90 ml Final Flow Rate: 100 ml/min Final Draw Down: 4.39 ft Instrument Used: Aqua TROLL 400

Serial Number: 952637

Test Notes: MP-50 S/N: 02

ID: 103 PSI: 40

Turbidimeter S/N: 23100D000373

WLM S/N: 28839

Weather Conditions:

Cloudy

Low-Flow Readings:

				Specific	RDO			Depth to	
Date Time	Elapsed Time	рН	Temperature	Conductivity	Concentration	Turbidity	ORP	Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 10 %	+/- 10 %	+/- 10	+/- 0.5	
1/23/2024	00:00	6.58 pH	17.47 °C	1,643.3	1.44 mg/L	1.46 NTU	-6.2 mV	49.80 ft	100.00 ml/min
10:53 AM	00.00	0.36 pri	17.47 C	μS/cm	1.44 mg/L	1.40 1110	-0.2 1110	49.00 11	100.00 111/111111
1/23/2024	05:00	6.60 pH	17.85 °C	1,640.1	0.94 mg/L	0.64 NTU	-41.5 mV	49.95 ft	100.00 ml/min
10:58 AM	03.00	0.00 pi i	17.05 C	μS/cm	0.94 Hig/L	0.04 1110	-41.51117	49.95 11	100.00 111/111111
1/23/2024	10:00	6.59 pH	17.88 °C	1,646.1	0.78 mg/L	0.58 NTU	-31.0 mV	50.11 ft	100.00 ml/min
11:03 AM	10.00	0.59 pm	17.00 C	μS/cm	0.78 mg/L	0.38 1410	-31.01110	30.1111	100.00 111/111111
1/23/2024	15:00	6.59 pH	17.94 °C	1,646.1	0.60 mg/L	0.47 NTU	-34.3 mV	50.22 ft	100.00 ml/min
11:08 AM	13.00	0.59 pri	17.94 0	μS/cm	0.00 mg/L	0.47 1110	-54.5 111	30.22 It	100.00 111/111111
1/23/2024	20:00	6.59 pH	18.08 °C	1,653.2	0.53 mg/L	0.37 NTU	-56.4 mV	50.30 ft	100.00 ml/min
11:13 AM	20.00	0.00 pi i	10.00	μS/cm	0.55 Hig/L	0.57 1410	30.41117	30.30 10	100.00 111/111111
1/23/2024	25:00	6.60 pH	18.05 °C	1,653.0	0.43 mg/L	0.43 NTU	-59.2 mV	50.38 ft	100.00 ml/min
11:18 AM	23.00	0.00 pi i	10.05 C	μS/cm	0.43 Hig/L	0.43 1110	-59.2 1110	30.36 it	100.00 1111/111111
1/23/2024	30:00	6.59 pH	18.02 °C	1,656.1	0.38 mg/L	0.21 NTU	-39.0 mV	50.42 ft	100.00 ml/min
11:23 AM	30.00	0.59 pri	10.02 C	μS/cm	0.30 Hig/L	0.211010	-59.0 1110	30.42 It	100.00 111/111111
1/23/2024	35:00	6.59 pH	18.12 °C	1,655.5	0.35 mg/L	0.24 NTU	-39.4 mV	50.49 ft	100.00 ml/min
11:28 AM	33.00	0.53 pi i	10.12 0	μS/cm	0.55 Hig/L	0.24 1410	.55.4 1117	30.4311	100.00 111/111111
1/23/2024	40:00	6.59 pH	18.13 °C	1,656.3	0.33 mg/L	0.28 NTU	-38.5 mV	50.50 ft	100.00 ml/min
11:33 AM	40.00	0.53 pri	10.13	μS/cm	0.33 Hig/L	0.20 1010	-30.3 1117	30.30 It	100.00 1111/111111

Samples

Sample ID:	Description:				
ARK-AP1PZ-8	Sample time: 11:40				
6 bottles: metals, anions, TDS, radium					

Test Date / Time: 1/23/2024 12:44:59 PM

Project: Arkwright

Operator Name: Zach Levy

Location Name: AP1PZ-9

Latitude: 32.919084221218284 Longitude: -83.69870549726224

Well Diameter: 2 in Casing Type: PVC Screen Length: 10 ft Top of Screen: 46.3 ft Total Depth: 57.4 ft

Initial Depth to Water: 41.97 ft

Pump Type: Dedicated bladder

Tubing Type: LDPE

Pump Intake From TOC: 50.1 ft Estimated Total Volume Pumped:

4500 ml

Flow Cell Volume: 90 ml Final Flow Rate: 100 ml/min Final Draw Down: 4.73 ft Instrument Used: Aqua TROLL 400

Serial Number: 952637

Test Notes: MP-50 S/N: 02

ID: 103 PSI: 25

Turbidimeter S/N: 23100D000373

WLM S/N: 28839

Weather Conditions:

Cloudy

Low-Flow Readings:

Date Time	Elapsed Time	рН	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 10 %	+/- 10 %	+/- 10	+/- 0.5	
1/23/2024 12:44 PM	00:00	4.26 pH	18.66 °C	646.30 μS/cm	2.96 mg/L	3.93 NTU	259.7 mV	44.55 ft	100.00 ml/min
1/23/2024 12:49 PM	05:00	4.23 pH	18.03 °C	649.33 μS/cm	2.48 mg/L	2.62 NTU	277.4 mV	44.89 ft	100.00 ml/min
1/23/2024 12:54 PM	10:00	4.26 pH	17.99 °C	653.40 μS/cm	2.17 mg/L	1.31 NTU	254.9 mV	45.55 ft	100.00 ml/min
1/23/2024 12:59 PM	15:00	4.30 pH	17.95 °C	650.84 μS/cm	2.54 mg/L	1.33 NTU	248.5 mV	46.12 ft	100.00 ml/min
1/23/2024 1:04 PM	20:00	4.31 pH	17.42 °C	648.64 µS/cm	2.50 mg/L	0.98 NTU	244.2 mV	46.40 ft	100.00 ml/min
1/23/2024 1:09 PM	25:00	4.41 pH	17.29 °C	648.69 µS/cm	2.59 mg/L	1.12 NTU	233.2 mV	46.59 ft	100.00 ml/min
1/23/2024 1:14 PM	30:00	4.52 pH	17.39 °C	647.63 μS/cm	2.60 mg/L	1.37 NTU	220.6 mV	46.70 ft	100.00 ml/min
1/23/2024 1:19 PM	35:00	4.60 pH	17.18 °C	644.72 μS/cm	2.57 mg/L	1.16 NTU	211.5 mV	46.70 ft	100.00 ml/min
1/23/2024 1:24 PM	40:00	4.66 pH	16.91 °C	646.68 µS/cm	2.53 mg/L	1.11 NTU	204.6 mV	46.70 ft	100.00 ml/min
1/23/2024 1:29 PM	45:00	4.68 pH	17.05 °C	645.77 μS/cm	2.53 mg/L	1.22 NTU	201.8 mV	46.70 ft	100.00 ml/min

Samples

Sample ID:	Description:				
ARK-AP1PZ-9	Sample time: 13:35				
6 bottles: metals, anions, TDS, Radium					

Test Date / Time: 1/23/2024 3:36:40 PM

Project: Arkwright

Operator Name: Zach Levy

Location Name: AP1PZ-10

Latitude: 32.919759918035005 Longitude: -83.69891015820549

Well Diameter: 2 in Casing Type: PVC Screen Length: 10 ft Top of Screen: 46 ft Total Depth: 56.5 ft

Initial Depth to Water: 40.59 ft

Pump Type: Dedicated bladder

Tubing Type: LDPE

Pump Intake From TOC: 50.5 ft Estimated Total Volume Pumped:

3000 ml

Flow Cell Volume: 90 ml Final Flow Rate: 150 ml/min Final Draw Down: 4.13 ft Instrument Used: Aqua TROLL 400

Serial Number: 952637

Test Notes:

MP-50 S/N: 02

ID: 103 PSI: 30

Turbidimeter S/N: 23100D000373

WLM S/N: 28839

Weather Conditions:

Cloudy

Low-Flow Readings:

Date Time	Elapsed Time	рН	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 10 %	+/- 10 %	+/- 10	+/- 0.5	
1/23/2024 3:36 PM	00:00	6.19 pH	18.56 °C	651.39 μS/cm	1.97 mg/L	4.98 NTU	60.4 mV	43.05 ft	150.00 ml/min
1/23/2024 3:41 PM	05:00	6.31 pH	18.45 °C	690.31 μS/cm	1.51 mg/L	2.74 NTU	-36.2 mV	43.45 ft	150.00 ml/min
1/23/2024 3:46 PM	10:00	6.35 pH	18.52 °C	706.63 μS/cm	1.40 mg/L	2.09 NTU	-40.1 mV	43.96 ft	150.00 ml/min
1/23/2024 3:51 PM	15:00	6.37 pH	18.57 °C	705.68 μS/cm	1.37 mg/L	2.33 NTU	-39.4 mV	44.39 ft	150.00 ml/min
1/23/2024 3:56 PM	20:00	6.38 pH	18.52 °C	704.53 μS/cm	1.29 mg/L	1.60 NTU	-37.6 mV	44.72 ft	150.00 ml/min

Samples

Sample ID:	Description:
ARK-AP1PZ-10	Sample time: 16:00
ANN-AF IFZ-10	6 bottles: metals, anions, TDS, Radium

Test Date / Time: 1/23/2024 4:45:33 PM

Project: Arkwright

Operator Name: Zach Levy

Location Name: AP1PZ-11

Latitude: 32.92053163985994 Longitude: -83.69913831360982

Well Diameter: 2 in Casing Type: PVC Screen Length: 10 ft Top of Screen: 62.8 ft Total Depth: 73.3 ft

Initial Depth to Water: 40.22 ft

Pump Type: Dedicated bladder

Tubing Type: LDPE

Pump Intake From TOC: 67.9 ft Estimated Total Volume Pumped:

7500 ml

Flow Cell Volume: 90 ml Final Flow Rate: 300 ml/min Final Draw Down: 0.58 ft Instrument Used: Aqua TROLL 400

Serial Number: 952637

Test Notes:

MP50 SN: 02

ID: 104 PSI: 40

Turbidity meter SN: 23100D000373

WL meter SN: 28839

Weather Conditions:

Cloudy

Low-Flow Readings:

Date Time	Elapsed Time	рН	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 10 %	+/- 10 %	+/- 10	+/- 0.5	
1/23/2024 4:45 PM	00:00	6.91 pH	18.16 °C	285.42 μS/cm	2.40 mg/L	1.60 NTU	39.7 mV	40.78 ft	300.00 ml/min
1/23/2024 4:50 PM	05:00	6.86 pH	18.36 °C	281.32 μS/cm	1.72 mg/L	1.80 NTU	61.9 mV	40.80 ft	300.00 ml/min
1/23/2024 4:55 PM	10:00	6.83 pH	18.30 °C	279.00 μS/cm	1.84 mg/L	1.44 NTU	55.2 mV	40.80 ft	300.00 ml/min
1/23/2024 5:00 PM	15:00	6.81 pH	18.32 °C	276.77 μS/cm	2.00 mg/L	1.53 NTU	56.9 mV	40.80 ft	300.00 ml/min
1/23/2024 5:05 PM	20:00	6.80 pH	18.30 °C	275.06 μS/cm	2.13 mg/L	1.83 NTU	58.4 mV	40.80 ft	300.00 ml/min
1/23/2024 5:10 PM	25:00	6.79 pH	18.34 °C	273.71 μS/cm	2.22 mg/L	1.47 NTU	59.6 mV	40.80 ft	300.00 ml/min

Samples

Sample ID:

ARK-AP1PZ-11	Sample time: 17:15
ARR-AFTFZ-11	6 bottles: metals, anions, TDS, Radium
ADK AD4 ED 00	Sample time: N/A
ARK-AP1-FD-02	6 bottles: metals, anions, TDS, Radium

B.2 Calibration Data

Site Name:	<u>Arkwright</u>	Date:	10/9/23
Calibrated By:	John Myer	Field Conditions:	Clear 65 F

Instrument	Manufactuer/ Model	Serial Number
Water Quality Meter	AquaTroll	850751
Turbidity Meter	Hach 2100Q	23060D00290

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	10:34	Time Finish	10:55					
			Calibration Solution					
Parameter	Standard	Calibration Value	Temperature (°C)	Acceptance Criteria	Reference			
Specific Conductance (µS/cm)	4,490	4484	20.35	± 10% of standard	EPA 2023			
pH (SU)	4.00	4.02	20.59	± 0.1	GWMP			
pH (SU)	7.00	7.05	20.51	± 0.1	GWMP			
pH (SU)	10.00	10.05	20.75	± 0.1	GWMP			
D.O. (%)	N/A	100.09	20.11	± 10%	NA			
ORP (mV)	228.0	235	20.49	± 10	EPA 2023			

	Standard	Calibration Value	Acceptance Criteria	Reference
	20	19.7		
Turbidity (NTU)	100	98.9	± 10% of standard	EPA 2023
	800	798	± 10 % Of Standard	LFA 2023
	10	10.3		

		0 111 11	0 1 1				
Calibration Check							
Time Start 15:00 Time Finish 15:15							
			Calibration Solution				
Parameter	Standard	Calibration Value	Temperature (°C)	Acceptance Criteria	Reference		
Specific Conductance (µS/cm)	4,490	4342.7	25.6	± 10% of standard	EPA 2023		
pH (SU)	4.00	4.07	25.6	± 0.1	GWMP		
pH (SU)	7.00	7.08	24.1	± 0.1	GWMP		
pH (SU)	10.00	10.04	24.4	± 0.1	GWMP		

	Standard	Calibration Value	Acceptance Criteria	Reference
	20	20.3		
Turbidity (NTU)	100	103	± 10% of standard	EPA 2023
	800	795	1 10 % Of Standard	LI A 2023
	10	10.2		

Field Conditions: Clear 60F

Date: 2023-10-09_

Instrument	Manufactuer/ Model	Serial Number
Water Quality Meter	nSitu Aqua TROLL 400	850762
Turbidity Meter	Hach 2100Q	22090D000086

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	10:30	Time Finish	11:05					
			Calibration Solution					
Parameter	Standard	Calibration Value	Temperature (°C)	Acceptance Criteria	Reference			
Specific Conductance (µS/cm)	4,490	4484.9	20.49	± 10% of standard	EPA 2023			
pH (SU)	4.00	4.03	19.35	± 0.1	GWMP			
pH (SU)	7.00	7.05	19.67	± 0.1	GWMP			
pH (SU)	10.00	10.05	20.33	± 0.1	GWMP			
D.O. (%)	N/A	100.13	21.76	± 10%	NA			
ORP (mV)	228.0	228	20.4	± 10	EPA 2023			

	Standard	Calibration Value	Acceptance Criteria	Reference
	20	19.4		
Turbidity (NTU)	100	101	± 10% of standard	EPA 2023
	800	802	1 10 % Of Staffdard	LFA 2023
	10	10.1		

Calibration Check						
Time Start	15:15	Time Finish	15:35			
			Calibration Solution			
Parameter	Standard	Calibration Value	Temperature (°C)	Acceptance Criteria	Reference	
Specific Conductance (µS/cm)	4,490	4516.7	22.64	± 10% of standard	EPA 2023	
pH (SU)	4.00	4.07	22.72	± 0.1	GWMP	
pH (SU)	7.00	7.04	21.89	± 0.1	GWMP	
pH (SU)	10.00	9.95	22.06	± 0.1	GWMP	

	Standard	Calibration Value	Acceptance Criteria	Reference
	20	20.6		
Turbidity (NTU)	100	99.3	± 10% of standard	EPA 2023
	800	802	± 10 % of Standard	LI A 2020
	10	9.92		

Site Name: Plant Arkwrigh

Calibrated By: John Myer

Date: _____10/10/23

Field Conditions: Clear 51 F

Instrument	Manufactuer/ Model	Serial Number
Water Quality Meter	AquaTroll	850751
Turbidity Meter	Hach 2100Q	23060D00290

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	5:30	Time Finish	6:00				
			Calibration Solution				
Parameter	Standard	Calibration Value	Temperature (°C)	Acceptance Criteria	Reference		
Specific Conductance (µS/cm)	4,490	4403	19.89	± 10% of standard	EPA 2023		
pH (SU)	4.00	4.03	20.22	± 0.1	GWMP		
pH (SU)	7.00	7.06	20.25	± 0.1	GWMP		
pH (SU)	10.00	10.06	20.28	± 0.1	GWMP		
D.O. (%)	N/A	100.05	20.08	± 10%	NA		
ORP (mV)	228.0	235.5	20.08	± 10	EPA 2023		

	Standard	Calibration Value	Acceptance Criteria	Reference
	20	20.2		
Turbidity (NTU)	100	104	± 10% of standard	EPA 2023
	800	816	± 10 /0 OI Stalldald	LFA 2023
	10	10.1		

Calibration Check						
Time Start 12:35 Time Finish 12:50						
			Calibration Solution			
Parameter	Standard	Calibration Value	Temperature (°C)	Acceptance Criteria	Reference	
Specific Conductance (µS/cm)	4,490	4301	25.41	± 10% of standard	EPA 2023	
pH (SU)	4.00	4.06	25.41	± 0.1	GWMP	
pH (SU)	7.00	7.08	23.89	± 0.1	GWMP	
pH (SU)	10.00	10.05	22.59	± 0.1	GWMP	

	Standard	Calibration Value	Acceptance Criteria	Reference
	20	20.2		
Turbidity (NTU)	100	102	± 10% of standard	EPA 2023
	800	803	1 10 % Of Standard	LI A 2023
	10	10.1		

Field Conditions: Partly cloudy

Date: 2023-10-10_

Instrument	Manufactuer/ Model	Serial Number
Water Quality Meter	InSitu AquaTroll 400	850762
Turbidity Meter	Hach 2100Q	22090D000086

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	7:25	Time Finish	7:50				
			Calibration Solution				
Parameter	Standard	Calibration Value	Temperature (°C)	Acceptance Criteria	Reference		
Specific Conductance (µS/cm)	4,490	4470.4	11.85	± 10% of standard	EPA 2023		
pH (SU)	4.00	4.03	12.00	± 0.1	GWMP		
pH (SU)	7.00	7.09	12.24	± 0.1	GWMP		
pH (SU)	10.00	10.14	12.38	± 0.1	GWMP		
D.O. (%)	N/A	100.1	14.47	± 10%	NA		
ORP (mV)	228.0	246.7	11.82	± 10	EPA 2023		

	Standard	Calibration Value	Acceptance Criteria	Reference	
	20	20.3			
Turbidity (NTU)	100	101	± 10% of standard	EPA 2023	
	800	771	± 10 % Of Staffdard	EFA 2023	
	10	9.71			

Calibration Check						
Time Start 14:40 Time Finish 14:50						
	-		Calibration Solution			
Parameter	Standard	Calibration Value	Temperature (°C)	Acceptance Criteria	Reference	
Specific Conductance (µS/cm)	4,490	4285.4	25.72	± 10% of standard	EPA 2023	
pH (SU)	4.00	4.09	25.72	± 0.1	GWMP	
pH (SU)	7.00	7.09	24.75	± 0.1	GWMP	
pH (SU)	10.00	10.02	23.73	± 0.1	GWMP	

	Standard	Calibration Value	Acceptance Criteria	Reference
	20	20.7		
Turbidity (NTU)	100	103	± 10% of standard	EPA 2023
	800	797	1 10 % Of Standard	LI A 2023
	10	10.2		

Field Conditions:Cloudy, 59F

Date: 2023-10-11

Instrument	Manufactuer/ Model	Serial Number
Water Quality Meter	InSitu AquaTroll 400	850762
Turbidity Meter	Hach 2100Q	22090D000086

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	7:00	Time Finish	7:30					
			Calibration Solution					
Parameter	Standard	Calibration Value	Temperature (°C)	Acceptance Criteria	Reference			
Specific Conductance (µS/cm)	4,490	4477.8	18.09	± 10% of standard	EPA 2023			
pH (SU)	4.00	4.04	18.03	± 0.1	GWMP			
pH (SU)	7.00	7.07	18.05	± 0.1	GWMP			
pH (SU)	10.00	10.05	18.21	± 0.1	GWMP			
D.O. (%)	N/A	100.07	17.65	± 10%	NA			
ORP (mV)	228.0	227.9	17.93	± 10	EPA 2023			

	Standard	Calibration Value	Acceptance Criteria	Reference
	20	20.4		
Turbidity (NTU)	100	97.5	± 10% of standard	EPA 2023
	800	803	± 10 % Of Standard	LFA 2023
	10	9.76		

Calibration Check						
Time Start 8:50 Time Finish 9:00						
			Calibration Solution			
Parameter	Standard	Calibration Value	Temperature (°C)	Acceptance Criteria	Reference	
Specific Conductance (µS/cm)	4,490	4412.9	17.61	± 10% of standard	EPA 2023	
pH (SU)	4.00	4.04	17.63	± 0.1	GWMP	
pH (SU)	7.00	7.04	17.97	± 0.1	GWMP	
pH (SU)	10.00	10.03	18.00	± 0.1	GWMP	

	Standard	Calibration Value	Acceptance Criteria	Reference
	20	19.2		
Turbidity (NTU)	100	88.6	± 10% of standard	EPA 2023
	800	807	1 10 % Of Standard	LI A 2023
	10	9.81		

Site Name: Plant Arkwright
Calibrated By: E.Scheiben

Date: <u>01/23/2024</u>

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				
			Calibration Solution				
Parameter	Standard	Calibration Value	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
	20	20.2		
Turbidity (NTU)	100	101	± 10% of standard	EPA 2023
	800	790	1 10 % Of Standard	
	10	9.81		

Calibration Check							
Time Start	13:16						
	Calibration Solution						
Parameter	Standard	Calibration Value	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		
rurbidity (NTO)	100	101	± 10% of standard	EPA 2023
	800	798	± 10 % Of Standard	
	10	10.2		

Date: <u>1/24/24</u>

Site Name: Plant Arkwright

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					
			Calibration Solution					
Parameter	Standard	Calibration Value	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			
	100	99.6	± 10% of standard	EPA 2023	
	800	788	± 10 % of Standard	EPA 2023	
	10	9.81			

Calibration Check							
Time Start	me Start 15:20 Time Finish 15:35						
			Calibration Solution				
Parameter	Standard	Calibration Value	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		

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

Site Name:_____Plant Arkwright_

Field Conditions: ____Overcast, 65F_____

Date: ____1/25/2024___

Calibrated By: Emily Scheiben							
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			
	100	99.7	± 10% of standard	EPA 2023	
	800	799	± 10 % of Standard	EPA 2023	
	10	10			

Calibration Check							
Time Start		Time Finish					
		Calibration Solution					
Parameter	Standard	Calibration Value	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		
Turblatty (NTO)	100	96.5	± 10% of standard	EPA 2023
	800	784	± 10 /0 OI Standard	LFA 2023
	10	9.75		

Site Name: Plant Arkwright

 Manufactuer/ Model
 Serial Number

 Water Quality Meter
 AquaTroll 400
 989630

 Turbidity Meter
 Hack 2100Q
 22690D000345

Field Conditions:	Sunnv	

Date: _1/22/2024_

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				
			Calibration Solution				
Parameter	Standard	Calibration Value	Temperature (°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
	20	20.2		
Turbidity (NTU)	100	99	± 10% of standard	EPA 2023
	800	814	± 10 % of Standard	LFA 2023
	10	9.86		

Calibration Check							
Time Start	Time Start 15:15 Time Finish 15:30						
			Calibration Solution				
Parameter	Standard	Calibration Value	Temperature (°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		
rurbidity (NTO)	100	101	± 10% of standard	EPA 2023
	800	753	± 10% of Standard	EPA 2023
	10	9.69		

Site Name: <u>Arkwright</u>

 Calibrated By:
 John Myer

 Instrument
 Manufactuer/ Model
 Serial Number

 Water Quality Meter
 AquaTroll 400
 989619

 Turbidity Meter
 Hach 2100Q
 23060D000342

Field Conditions:	Overcast	

Date: ___<u>1/23/24</u>

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				
			Calibration Solution				
Parameter	Standard	Calibration Value	Temperature (°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
	20	20.2		
Turbidity (NTU)	100	101	± 10% of standard	EPA 2023
	800	791	± 10 % of Standard	LFA 2023
	10	9.96		

Calibration Check							
Time Start	Time Start 12:55 Time Finish 13:15						
Parameter	Standard	Calibration Value	Temperature (°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		
rurbidity (NTO)	100	96.8	± 10% of standard	EPA 2023
	800	778	± 10 % Of Standard	EPA 2023
	10	9.95		

Date: __1/24/2024_

Site Name: Arkwright

Calibrated By: John Myer Field Conditions: Showers

Calibrated by. John Wyer		
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	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			
	100	98.1	± 10% of standard	EPA 2023	
	800	806	± 10 % of Standard		
	10	10.3			

Calibration Check							
Time Start 15:00 Time Finish 15:15							
Calibration Solution							
Parameter	Standard	Calibration Value	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		
rurbidity (NTO)	100	103	± 10% of standard	EPA 2023
	800	775	± 10 % Of Standard	EPA 2023
	10	9.76		

Site Name:_ Arkwright

Calibrated By:_ John Myer Instrument
Water Quality Meter
Turbidity Meter Manufactuer/ Model Serial Number AquaTroll 400 989619

Hach 2100Q

Field Conditions:_ Overcast

Date:

1/25/2024

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			

23060D000342

Calibration							
Time Start							
			Calibration Solution				
Parameter	Standard	Calibration Value	Temperature (°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		
	100	102	± 10% of standard	EPA 2023
	800	801	± 10 % of Standard	
	10	10.2	7	

Calibration Check							
Time Start 14:25 Time Finish 14:35							
Parameter	Standard	Calibration Value	Temperature (°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			
rurbidity (NTO)	100	97.8	± 10% of standard	EPA 2023	
	800	780	± 10 % of standard	EPA 2023	
	10	9.66			

Site Name: Arkwright Date: 1-22-24

Field Conditions: Partly Cloudy 20-50 F

Calibrated By: Dylan Ripley

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			
			Calibration Solution			
Parameter	Standard	Calibration Value	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
	10	9.95		
Turbidity (NTU)	20	19.4	± 10% of standard	EPA 2023
	100	97.0	± 10 % of Standard	LFA 2023
	800	722		

Calibration Check							
Time Start 1530 Time Finish 1541							
			Calibration Solution				
Parameter	Standard	Calibration Value	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		
raibiaity (ivio)	20	20.1	± 10% of standard	EPA 2023
	100	99.1	± 10 /0 OI Standard	LI A 2023
	800	800		

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

Site Name: Arkwright Date: 1-23-24

Field Conditions: Partly Cloudy 44 - 62 F

Calibrated By: Dylan Ripley

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			
			Calibration Solution			
Parameter	Standard	Calibration Value	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
	10	9.98		
Turbidity (NTU)	20	19.7	± 10% of standard	EPA 2023
	100	97.4	± 10 % of Standard	LFA 2023
	800	805		ļ

Calibration Check						
Time Start	1525	Time Finish	1535			
			Calibration Solution			
Parameter	Standard	Calibration Value	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		
Turblaity (NTO)	20	19.9	± 10% of standard	EPA 2023
	100	101	± 10 % of Standard	LFA 2023
	800	783		

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

Field Conditions: Partly Cloudy 53 - 70 F

Calibrated By: Dylan Ripley

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			
			Calibration Solution			
Parameter	Standard	Calibration Value	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
	10	10.1		
Turbidity (NTU)	20	20.1	± 10% of standard	EPA 2023
	100	101	± 10 % of Standard	LFA 2023
	800	797	1	

Calibration Check							
Time Start	Time Start 1450 Time Finish 1458						
Calibration Solution							
Parameter	Standard	Calibration Value	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		
raibiaity (1410)	20	21.2	± 10% of standard	EPA 2023
	100	101	± 10 % of standard	LFA 2023
	800	773		

Note:

Field Conditions: Partly Cloudy 61 - 71 F

Calibrated By: Dylan Ripley

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			
			Calibration Solution			
Parameter	Standard	Calibration Value	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
	10	10.1		
Turbidity (NTU)	20	19.2	± 10% of standard	EPA 2023
	100	102	± 10 % of Standard	LFA 2023
	800	807		

Calibration Check							
Time Start	Time Start 1200 Time Finish 1211						
Calibration Solution							
Parameter	Standard	Calibration Value	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		
ruibidity (NTO)	20	20.1	± 10% of standard	EPA 2023
	100	98.7	± 10% of Standard	EPA 2023
	800	782		

Note:

Field Instrumentation Calibration Form

Site Name: ___Arkwright_____

Date: __1/23/2024_____
Field Conditions:___Cloudy/rainy_____

Calibrated By: Z. Levy		
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
	20	20.5		
Turbidity (NTU)	100	99.9	± 10% of standard	EPA 2023
	800	798	± 10 % of Standard	LFA 2023
	10	10.3		

Calibration Check						
Time Start: 1400		Time Finish: 1422				
			Calibration Solution			
Parameter	Standard	Calibration Value	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		•	

Orti (IIIV)	220	225.1	10.73	
	Standard	Calibration Value	Acceptance Criteria	Reference
Turbidity (NTU)	20	20.5		
Turblaity (NTO)	100	100	± 10% of standard	EPA 2023
	800	791	± 10 % of Standard	LFA 2023
	10	10.1		

Notes:

Field Instrumentation Calibration Form

Site Name:___Arkwright_____

Date: __1/24/2024______Field Conditions:__Cloudy/rainy_____

Calibrated By: Z. Levy		
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				
			Calibration Solution			
Parameter	Standard	Calibration Value	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
	20	20.1		
Turbidity (NTU)	100	101	± 10% of standard	EPA 2023
	800	806	± 10 % of Standard	LFA 2023
	10	10.2		

Calibration Check						
Time Start: 1300		Time Finish: 1315				
			Calibration Solution			
Parameter	Standard	Calibration Value	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			

Orti (IIIV)	220	220.0	10.70	
	Standard	Calibration Value	Acceptance Criteria	Reference
Turbidity (NTU)	20	20.7		
Turblaity (NTO)	100	101	± 10% of standard	EPA 2023
	800	795	± 10 % of Standard	LFA 2023
	10	10.2		

Notes:

Field Instrumentation Calibration Form

Site Name: ___Arkwright_____

Date: __1/25/2024_____

Field Conditions:___Cloudy/rainy___

AIR - ORP solution

Calibrated By: Z. Levy

ORP (mV)

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

228.0

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		

24002258

		Calibra	ation		
Time Start: 0730		Time Finish: 0750			
			Calibration Solution		
Parameter	Standard	Calibration Value	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

24-Jun

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

Calibration Check							
Time Start: 1140		Time Finish: 1152					
			Calibration Solution				
Parameter	Standard	Calibration Value	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		•		

Ord (IIIV)	220	220.2	20.14	
	Standard	Calibration Value	Acceptance Criteria	Reference
Turbidity (NTU)	20	20.5		
Turblatty (NTO)	100	98.9	± 10% of standard	EPA 2023
	800	791	± 10 % of Standard	LFA 2023
	10	10.2		

Notes:

B.3 Groundwater & Surface Water Laboratory Analytical Reports



a member of The GEL Group INC







PO Box 30712 Charleston, SC 29417 2040 Savage Road Charleston, SC 29407 P 843.556.8171 F 843.766.1178

gel.com

June 30, 2023

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

Re: Arkwright CCR Groundwater Compliance AP1 Work Order: 625986

Dear Joju Abraham:

GEL Laboratories, LLC (GEL) appreciates the opportunity to provide the enclosed analytical results for the sample(s) we received on June 14, 2023. This revised data report has been prepared and reviewed in accordance with GEL's standard operating procedures. Georgia Power EQuIS Database Manager requested for the correction of the sample IDs by removing the dates. These updates ensure the sample nomenclature is consistent on final PDF & EDD and successful upload to database.

The sample was 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.

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

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

Sincerely,

Anna Johnson for Erin Trent Project Manager

Purchase Order: GPC82177-0005

Enclosures



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

Certificate of Analysis Report for

GPCC001 Georgia Power Company Client SDG: 625986 GEL Work Order: 625986

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.

Page 2 of 19 SDG: 625986 Rev1

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

Certificate of Analysis

Report Date: June 30, 2023

GPCC00100

2444297

1250

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

Atlanta, Georgia 30308

Contact: Joju Abraham

Project: Arkwright CCR Groundwater ComplianceAP1

Client Sample ID: ARK-AP1PZ-6 Sample ID:

Matrix: WG

Collect Date: 13-JUN-23 15:52 Receive Date: 14-JUN-23 Collector: Client

Project: 625986001 Client ID: GPCC001

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analy	yst Date	Time	Batch	Method
Field Data												
Client collected Field	pH "As Receiv	ved"										
Field pH	•	5.33			SU			EOS1	06/13/23	1552	2443847	1
Ion Chromatography												
EPA 300.0 Anions Li	quid "As Recei	ived"										
Chloride	1	7.77	0.335	1.00	mg/L		5	JLD1	06/14/23	2231	2444191	2
Fluoride	U	ND	0.165	0.500	mg/L		5					
Sulfate		2480	26.6	80.0	mg/L		200	JLD1	06/15/23	1330	2444191	3
Mercury Analysis-CV	/AA											
7470 Cold Vapor Mer	rcury, Liquid ".	As Received"										
Mercury	U	ND	0.0000670	0.000200	mg/L	1.00	1	JP2	06/16/23	1039	2444300	4
Metals Analysis-ICP-	MS											
SW846 3005A/6020E	3 "As Received	."										
Boron		6.95	0.520	1.50	mg/L	1.00	100	PRB	06/17/23	2127	2443846	5
Calcium		460	8.00	20.0	mg/L	1.00	100					
Antimony	U	ND	0.00100	0.00300	mg/L	1.00	1	PRB	06/17/23	1936	2443846	6
Arsenic	J	0.00324	0.00200	0.00500	mg/L	1.00	1					
Barium		0.0228	0.000670	0.00400	mg/L	1.00	1					
Beryllium		0.00172	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		0.415	0.000300	0.00100	mg/L	1.00	1					
Lead	U	ND	0.000500	0.00200	mg/L	1.00	1					
Lithium	J	0.00923	0.00300	0.0100	mg/L	1.00	1					
Molybdenum	U	ND	0.000200	0.00100	mg/L	1.00	1					
Selenium	J	0.00251	0.00150	0.00500	mg/L	1.00	1					
Thallium	U	ND	0.000600	0.00200	mg/L	1.00	1					
Solids Analysis												
SM2540C Dissolved	Solids "As Rec	eived"										
Total Dissolved Solids		3340	23.8	100	mg/L			CH6	06/15/23	1400	2444265	7
The following Prep M	lethods were po	erformed:										
Method	Description	n		Analyst	Date	,	Гimе	e Pı	rep Batch			
SW846 3005A	ICP-MS 3005	5A PREP		JD2	06/15/23		0720	24	43845			

EK1

06/15/23

Page 3 of 19 SDG: 625986 Rev1

EPA 7470A Mercury Prep Liquid

SW846 7470A Prep

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

Certificate of Analysis

Report Date: June 30, 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 ComplianceAP1

Client Sample ID: ARK-AP1PZ-6 Project: GPCC00100 Sample ID: 625986001 Client ID: GPCC001

Parameter	Qualifier	Result	DL	RL	Units	PF	DF Analyst Date	Time Batch	Method
The following Analytic	vere performed:								
Method Description						Analys	t Comments		
1	SM 4500-H B/SW846 9040C, SM 2550B								
2	EPA 300.0								
3	EPA 300.0								
4	SW846 7470A	Λ							
5	SW846 3005A	A/6020B							
6	SW846 3005A	\dagger/6020B							
7	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

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

QC Summary

Report Date: June 30, 2023

Page 1 of 8

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

Atlanta, Georgia Joju Abraham

Contact: Joju Ab

Workorder: 625986

Parmname	NOM	Sample Qual	QC	Units	RPD%	REC%	Range Anlst	Date Time
Ion Chromatography Batch 2444191								
QC1205433470 625884001 DUP Chloride		2.67	2.70	mg/L	1.22		(0%-20%) JLD1	06/15/23 03:18
Fluoride	J	0.0909 J	0.0803	mg/L	12.4 ^		(+/-0.100)	
Sulfate		88.1	89.8	mg/L	1.91		(0%-20%)	06/15/23 07:01
QC1205433469 LCS Chloride	5.00		4.85	mg/L		97.1	(90%-110%)	06/15/23 02:46
Fluoride	2.50		2.49	mg/L		99.5	(90%-110%)	
Sulfate	10.0		9.93	mg/L		99.3	(90%-110%)	
QC1205433468 MB Chloride		U	ND	mg/L				06/15/23 02:15
Fluoride		U	ND	mg/L				
Sulfate		U	ND	mg/L				
QC1205433471 625884001 PS Chloride	5.00	2.67	7.39	mg/L		94.4	(90%-110%)	06/15/23 03:50
Fluoride	2.50 J	0.0909	2.38	mg/L		91.8	(90%-110%)	
Sulfate	10.0	8.81	18.9	mg/L		101	(90%-110%)	06/15/23 07:33

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

QC Summary

Workorder: 625986 Page 2 of 8 Sample Qual Parmname NOM QC Units RPD% REC% Range Anlst Date Time Metals Analysis - ICPMS 2443846 Batch QC1205432938 LCS 0.0478 0.0500 mg/L 95.7 (80%-120%) PRB 06/17/23 19:33 Antimony Arsenic 0.0500 0.0486 mg/L 97.1 (80% - 120%)0.0500 0.0496 99.3 Barium mg/L (80%-120%) Beryllium 0.0500 0.0581 mg/L 116 (80%-120%) 0.100 0.0984 98.4 06/17/23 21:23 Boron mg/L (80%-120%) Cadmium 0.0500 0.0495 mg/L 98.9 (80% - 120%)06/17/23 19:33 Calcium 2.00 2.00 mg/L 99.8 (80%-120%) 06/17/23 21:23 Chromium 0.0500 0.047806/17/23 19:33 mg/L 95.7 (80%-120%) Cobalt 0.0500 0.0492 mg/L98.4 (80%-120%) 0.0489 0.0500 mg/L 97.8 (80%-120%) Lead Lithium 0.0500 0.0533 107 mg/L (80%-120%) 0.0493 98.6 Molybdenum 0.0500 mg/L (80%-120%) Selenium 0.0500 0.0472 mg/L 94.4 (80% - 120%)Thallium 0.0500 0.0469 93.7 (80%-120%) mg/L QC1205432937 MB U ND 06/17/23 19:29 Antimony mg/L

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

QC Summary

		QC D	umma,	y					
Workorder: 625986									Page 3 of 8
Parmname	NOM	Sample Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Metals Analysis - ICPMS Batch 2443846									
Arsenic		U	ND	mg/L				PRB	06/17/23 19:29
riseme		C	ND	mg/L				TRD	00/17/23 17.27
ъ.			ND	σ					
Barium		U	ND	mg/L					
Beryllium		U	ND	mg/L					
Boron		U	ND	mg/L					06/17/23 21:20
Cadmium		U	ND	mg/L					06/17/23 19:29
				C					
Calcium		U	ND	mg/L					06/17/23 21:20
Culcium		_	112	mg/L					00/17/23 21:20
an :		**	1 ID	ar.					0.5/1.5/00.10.00
Chromium		U	ND	mg/L					06/17/23 19:29
Cobalt		U	ND	mg/L					
Lead		U	ND	mg/L					
Lithium		U	ND	mg/L					
				C					
Molybdenum		U	ND	mg/L					
Wory odenum		C	ND	mg/L					
				-					
Selenium		U	ND	mg/L					
Thallium		U	ND	mg/L					
QC1205432939 625986001 MS				-					
Antimony	0.0500 U	ND	0.0503	mg/L		100	(75%-125%)	06/17/23 19:40
Arsenic	0.0500 J	0.00324	0.0553	mg/L		104	(75%-125%)	

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

QC Summary

Workorder: 625986 Page 4 of 8 Sample Qual **Parmname** NOM QC Units RPD% REC% Range Anlst Date Time Metals Analysis - ICPMS 2443846 Batch Barium 0.0500 0.0228 0.0707 mg/L95.8 (75% - 125%)PRB 06/17/23 19:40 Beryllium 0.0500 0.00172 0.0628122 (75%-125%) mg/L Boron 0.100 6.95 7.09 mg/L N/A (75%-125%) 06/17/23 21:31 0.0500 U ND 0.0505 Cadmium mg/L 101 (75%-125%) 06/17/23 19:40 Calcium 2.00 460 483 mg/L N/A (75%-125%) 06/17/23 21:31 0.0500 U ND 0.0488 mg/L Chromium 97 06/17/23 19:40 (75%-125%)0.0500 Cobalt 0.415 0.466 mg/L N/A (75% - 125%)0.0500 U ND 0.0479 95.7 Lead (75% - 125%)mg/L 0.0500 0.00923 0.0675 Lithium J mg/L 116 (75%-125%) 0.0500 U ND 0.0543 108 Molybdenum mg/L(75% - 125%)Selenium 0.0500 J 0.00251 0.0607 116 (75%-125%) mg/L Thallium 0.0500 U ND 0.0471 94.1 mg/L (75% - 125%)QC1205432940 625986001 MSD 0.0500 U ND 0.0511 1.61 102 (0%-20%)06/17/23 19:43 Antimony mg/L0.00324 0.0559 0.0500 J 105 mg/L 0.988 (0%-20%)Arsenic Barium 0.0500 0.0228 0.0702 mg/L 0.749 94.7 (0% - 20%)

Page 8 of 19 SDG: 625986 Rev1

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

QC Summary

625986 Page 5 of 8 **Parmname** NOM Sample Qual QC Units RPD% REC% Range Anlst Date Time Metals Analysis - ICPMS 2443846 Batch Beryllium 0.0500 0.00172 0.0627 mg/L 0.132 122 (0%-20%)PRB 06/17/23 19:43 0.100 6.95 N/A(0%-20%)06/17/23 21:34 Boron 6.62 mg/L 6.82 Cadmium 0.0500 ND 0.0501 mg/L 0.774 100 (0%-20%)06/17/23 19:43 Calcium 2.00 460 455 mg/L 6.05 N/A(0%-20%)06/17/23 21:34 Chromium 0.0500 U ND 0.0485 mg/L 0.516 96.5 (0%-20%)06/17/23 19:43 0.0500 0.415 0.460 mg/L Cobalt 1.25 N/A(0%-20%)0.0500 U ND 0.0473 Lead mg/L 1.25 94.5 (0% - 20%)Lithium 0.0500 J 0.00923 0.0668 1.04 115 (0%-20%)mg/L 0.0500 U ND 0.0535 Molybdenum mg/L 1.46 107 (0%-20%)0.0500 J 0.00251 0.0596 Selenium mg/L1.75 114 (0%-20%)Thallium 0.0500 U ND 0.0461 2.07 92.2 (0%-20%)mg/L QC1205432941 625986001 SDILT U ND U ND 06/17/23 19:51 Antimony ug/L (0%-20%)N/A Arsenic J 3.24 ND N/A (0% - 20%)ug/L 22.8 4.32 Barium ug/L 5.44 (0%-20%)Beryllium 1.72 0.296 ug/L 13.9 (0% - 20%)

Page 9 of 19 SDG: 625986 Rev1

Workorder:

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

QC Summary

625986 Page 6 of 8 Parmname NOM Sample Qual QC Units RPD% REC% Range Anlst Date Time Metals Analysis - ICPMS 2443846 Batch Boron 69.5 10.7 ug/L 22.8 (0%-20%)PRB 06/17/23 21:38 U Cadmium ND U ND ug/L N/A (0%-20%)06/17/23 19:51 Calcium 4600 950 ug/L 3.2 (0%-20%)06/17/23 21:38 U ND U ND (0%-20%)Chromium ug/L N/A 06/17/23 19:51 Cobalt 415 84.0 ug/L 1.19 (0%-20%)U ND U ND (0%-20%)ug/L N/A Lead J 9.23 U ND Lithium ug/L N/A (0%-20%)U Molybdenum ND U ND N/A (0%-20%)ug/L J 2.51 U ND Selenium ug/L N/A (0%-20%)Thallium U ND U ND N/A (0%-20%)ug/L Metals Analysis-Mercury 2444300 Batch QC1205433645 625831006 DUP U ND U ND JP2 06/16/23 10:06 Mercury mg/L N/A LCS QC1205433644 0.00200 0.00210 105 (80%-120%) 06/16/23 09:48 Mercury mg/L QC1205433643 MB U Mercury ND 06/16/23 09:46 mg/L

Page 10 of 19 SDG: 625986 Rev1

Workorder:

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

QC Summary

Workorder: 625986 Page 7 of 8 Units **Parmname** NOM Sample Qual QC RPD% REC% Range Anlst Date Time Metals Analysis-Mercury Batch 2444300 QC1205433646 625831006 MS ND 0.00183 mg/L 89.3 0.00200 U (75% - 125%)JP2 06/16/23 10:08 QC1205433647 625831006 SDILT U ND Mercury ND U ug/L N/A (0%-10%)06/16/23 10:09 **Solids Analysis** Batch 2444265 QC1205433571 625877002 DUP U Total Dissolved Solids ND U ND mg/L N/A CH6 06/15/23 14:00 QC1205433567 LCS Total Dissolved Solids 300 302 mg/L 101 (95%-105%) 06/15/23 14:00 QC1205433566 ND U **Total Dissolved Solids** mg/L 06/15/23 14:00

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

Page 11 of 19 SDG: 625986 Rev1

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

QC Summary

625986 Page 8 of 8 **Parmname** NOM Sample Qual \mathbf{OC} Units RPD% REC% Range Anlst Date Time

- NJ Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
- Е 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
- N1See case narrative

Workorder:

- 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.
- В The target analyte was detected in the associated blank.
- 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 e 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.

Page 12 of 19 SDG: 625986 Rev1

Technical Case Narrative Georgia Power Company SDG #: 625986

Metals

Product: Determination of Metals by ICP-MS Analytical Method: SW846 3005A/6020B Analytical Procedure: GL-MA-E-014 REV# 35

Analytical Batch: 2443846

Preparation Method: SW846 3005A

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

Preparation Batch: 2443845

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

GEL Sample ID#	Client Sample Identification
625986001	ARK-AP1PZ-6
1205432937	Method Blank (MB)ICP-MS
1205432938	Laboratory Control Sample (LCS)
1205432941	625986001(ARK-AP1PZ-6L) Serial Dilution (SD)
1205432939	625986001(ARK-AP1PZ-6S) Matrix Spike (MS)
1205432940	625986001(ARK-AP1PZ-6SD) 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 were diluted to ensure that the analyte concentrations were within the linear calibration range of the instrument.

A l	625986
Analyte	001
Boron	100X
Calcium	100X

Page 13 of 19 SDG: 625986 Rev1

Product: Mercury Analysis Using the Perkin Elmer Automated Mercury Analyzer

Analytical Method: SW846 7470A

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

Analytical Batch: 2444300

Preparation Method: SW846 7470A Prep

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

Preparation Batch: 2444297

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

GEL Sample ID#	Client Sample Identification
625986001	ARK-AP1PZ-6
1205433643	Method Blank (MB)CVAA
1205433644	Laboratory Control Sample (LCS)
1205433647	625831006(NonSDGL) Serial Dilution (SD)
1205433645	625831006(NonSDGD) Sample Duplicate (DUP)
1205433646	625831006(NonSDGS) Matrix Spike (MS)

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

Data Summary:

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

General Chemistry

Product: Ion Chromatography Analytical Method: EPA 300.0

Analytical Procedure: GL-GC-E-086 REV# 31

Analytical Batch: 2444191

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

GEL Sample ID#	Client Sample Identification
625986001	ARK-AP1PZ-6
1205433468	Method Blank (MB)
1205433469	Laboratory Control Sample (LCS)
1205433470	625884001(NonSDG) Sample Duplicate (DUP)
1205433471	625884001(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.

Page 14 of 19 SDG: 625986 Rev1

Technical Information

Sample Dilutions

The following samples 1205433470 (Non SDG 625884001DUP), 1205433471 (Non SDG 625884001PS) and 625986001 (ARK-AP1PZ-6) were diluted because target analyte concentrations exceeded the calibration range. Sample 625986001 (ARK-AP1PZ-6) was diluted to minimize matrix effects on instrument performance. Sample 625986001 (ARK-AP1PZ-6) 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.

A 1	625986
Analyte	001
Chloride	5X
Fluoride	5X
Sulfate	200X

Product: Solids, Total Dissolved Analytical Method: SM 2540C

Analytical Procedure: GL-GC-E-001 REV# 20

Analytical Batch: 2444265

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

GEL Sample ID# Client Sample Identification

625986001 ARK-AP1PZ-6 1205433566 Method Blank (MB)

1205433567 Laboratory Control Sample (LCS)

1205433571 625877002(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

Sample filtration took > 10 minutes; therefore as prescribed in the method, a reduced aliquot was used. 625986001 (ARK-AP1PZ-6). A reduced aliquot was used due to limited volume. The client did not provide an entire 1 liter aliquot. 1205433571 (Non SDG 625877002DUP).

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 15 of 19 SDG: 625986 Rev1

Perct # 175569434	<u>ত</u>	Call Laboratories LLC 625986	ITIES LLO	Coord Charles	, the state of the	3	25986	186)40 Sav	2040 Savage Road	ad 90407		
OC Number (1):		Chain of Custody and Analytical Request	Analytical R	equest	a la	E	3			none: (8	Phone: (843) 556-8171	5-8171		
ØNumber:	GEL Work Order Number:	GEL Project Manager: Erin Trent	Aanager: Erin						Fa	ıx: (84	Fax: (843) 766-1178	178		
Hent Name: Georgia Power	Pho	Phone # (937-344-6533)		Sample A	nalysi	s Requ	Analysis Requested (5)		in the	numb	er of c	ontaine	(Fill in the number of containers for each test)	
Pegect/Site Name: Plant Arkwright Ash Pond 1	Fax:		Should this	1500	IN				IN	IN	IN		< Preservative Type (6)	(9) ad
Variess: 241 Ralph McGill Blvd SE, Atlanta, GA 30308	30308		sample be considered:				ро	86			'BJ	(00		
Sected By: Bryan Pennell	Send Results To: jabraham@southemco.com EDD@stantec.com brian.steele@stantec.com edgar.smith@stantec.com	nco.com EDD@stantec.com h@stantec.com	ylqq Ylqq	r of con		y (300	(Meth	61 1.2	(B0		I' K' M	200/ 11	Comments	60
Sample ID * For composites - indicate start and stop date/time	*Date Collected (mm-dd-yy)	*Time Collected (Military) (Adminary) Code (3) Filered (5) Matrix (4)	Radioactive yes, please suj isotopic info.) (7) Known or possible Haza	Total number	Ag (App. I	Alkalinit	R2. TDS (SM 2540	Anions (Cl, (300.0 Rev Metals A	709)	KAD 226-2	Metals A Na, Fe, M	141 10 1 1911	(Task_code: Akk-CCk- ASSMT-2023S1)	-C.K-
ARK-AP1PZ-6-20230613		Z	N OT	9	×		×	×	×	×			pH: 5.33	
									1	-	_			
			0											
			_											
		643-27												
						1								
											1	1		
Ch	Chain of Custody Signatures		L	TAT Requested:	sted:	Normal:	I: X	Rush:	h:	Spe	Specify:		(Subject to Surcharge)	arge)
Relinquished By (Signed) Print Name	Date Received by (signed)	Print Name Date	Fax F	Fax Results: [] Yes	Yes	N X	0						i	
THE EPHIN PENNEW	613-23 1 36/1	(Xo,14,23)(Selec	Select Deliverable: [] C of A [] QC Summary	le: [] (CofA	[] 0C	Summs	1 . 1	[] level 1		[X] Level 2	2 [] Level 3 [] Level 4	evel 4
	2 / "		Addii	Additional Remarks:	rks:									
	3		For	For Lab Receiving Use Only: Custody Seal Intact? [] Yes	ng Use	Only:	Custody	Seal I	ntact?	[] Ye	-] No C	Cooler Temp: Cooler Temp	
For sample shipping and delivery details, see Sample Receipt & Review form (SRR.)	ample Receipt & Review form (SR	IR.)	Sample Collection Time Zone: [X] Eastern	tion Time 2	cone:	[X]E	0000000	[] Pacific		[] Central	DOM: N	[] Mo	[] Mountain [] Other:	
.) Chain of Custody Number = Client Determined .) QC Codes: N = Normal Sample, TB = Trip Blank, FD = Field Duplicate, EB = Equipment Blank, MS = Matrix Spike Sample, MSD = Matrix Spike Duplicate Sample, G = Grab, C = Composite .) Field Filtered: For flouid matrices, indicate with a - Y - for yes the sample was field filtered or - N - for sample was not field filtered.	old Duplicate, EB = Equipment Blank, MS: wes the sample was field filtered or - N - for	= Matrix Spike Sample, MSD = Matrix Spi sample was not field filtered.	ikc Duplicate Samp	c, G = Grab, (C = Com	oosite								
.) Marix Codes: DW=Drinking Water, GW=Groundwater, SW=Surface Water, WW=Waste Water, WL=Wise Liquid, SO=Soil, SD=Sediment, SL=Sludge, SS=Soild Waste, O=Oil, F=Filter, P=Wipe, U=Urine, F=Fecal, N=Nasal	W=Surface Water, WW=Waste Water, W=N	Water, ML=Misc Liquid, SO=Soil, SD=Se	diment, SL=Sludge	, SS=Solid Wa	iste, 0=(ii, F=Fil	er, P=Wi _l	e, U=Ur	ine, F=F	ecal, N=	Nasal			
.) Sample Analysis Requested: Analytical method requested (i.e. 8260B, 6010B/7470A) and number of containers provided for each (i.e. 8260B - 3, 6010B/7470A - 1). 1. Preservative Type: HA = Hydrochloric Acid, NI = Nitric Acid, SH = Sodium Hydroxide, SA = Sulfuric Acid, AA = Ascorbic Acid, HX = Hexane, ST = Sodium Thiosulfate, If no preservative is added = leave field blank	i.e. 8260B , 6010B/7470A) and number of cc cid, SH = Sodium Hydroxide, SA = Sulfuric	ontainers provided for each (i.e. 8260B - 3 Acid, AA = Ascorbic Acid, HX = Hexane,	, 60108/7470A - 1) ST = Sodium Thio	sulfate, If no p	reservati	ve is adde	d = lcave	field blar	*					
KNOWN OR POSSIBLE HAZARDS	Characteristic Hazards	Listed Waste	Other								Plea	se prov	Please provide any additional details	uils .
CCRA Metals As = Arsenic Hg= Mercury Sa = Barium Se= Selenium	FL = Flammable/Ignitable CO = Corrosive RE = Reactive	LW= Listed Waste (F,K,P and U-listed wastes.) Waste code(s):	OI≒ (i.e.: misc. Descr	OI= Other / Unknown (i.e.: High/low pH, asbestos, beryllium, irritants, other misc. health hazards, etc.) Description:	cnown H, asbe urds, et	stos, be	ryllium	irritan	its, oth	er	belo conc of si	erns. (below regarding handling and/or disposal concerns. (i.e.: Origin of sample(s), type of site collected from, odd matrices, etc.)	disposal), type s, etc.)
nium Ag= Silver mium MR= Misc. RCRA metals	TSCA Regulated PCB = Polychlorinated									1.1				
b = Lead	biphenyls													

Sample ID Sample ID ARK APIPZ 6_20230613 ARK APIPZ 6_20230613
Date Received by (signed) 6-13-2.3 1 2 2 3 umple Receipt & Review form (SRR res the sample was field filtered or - N - for san V=Surface Water, WW=Waste Water, W=Wa

GEL	Laboratories LLC
-----	------------------

SAMPLE RECEIPT & REVIEW FORM SDG/AR/COC/Work Order: (025986 625 Client: OPCC Received By: SNS Date Received: Circle Applicable: FedEx Express FedEx Ground UPS Field Services Courier Other Carrier and Tracking Number 399598403522-10 3511-1°C *If Net Counts > 100cpm on samples not marked "radioactive", contact the Radiation Safety Group for further investigation. Xes ž Suspected Hazard Information UN#: Hazard Class Shipped: If UN2910, Is the Radioactive Shipment Survey Compliant? Yes___ No___ A)Shipped as a DOT Hazardous? COC notation or radioactive stickers on containers equal client designation. B) Did the client designate the samples are to be received as radioactive? Maximum Net Counts Observed* (Observed Counts - Area Background Counts): CPMV mR/Hr Classified as: Rad 1 Rad 2 Rad 3 C) Did the RSO classify the samples as radioactive? COC notation or hazard labels on containers equal client designation. D) Did the client designate samples are hazardous? If D or B is yes, select Hazards below. Foreign Soil RCRA Asbestos Beryllium PCB's Flammable E) Did the RSO identify possible hazards? Comments/Qualifiers (Required for Non-Conforming Items) Yes NA VA Sample Receipt Criteria Circle Applicable: Seals broken Damaged container Leaking container Other (describe) Shipping containers received intact and 1 sealed? Circle Applicable: Client contacted and provided COC COC created upon receipt Chain of custody documents included 2 with shipment? Preservation Method Wet Ice Ice Packs Dry ice None Other: TEMP: *all temperatures are recorded in Celsius Samples requiring cold preservation 3 within $(0 \le 6 \text{ deg. C})$?* Temperature Device Serial #: IR1-23 Daily check performed and passed on IR Secondary Temperature Device Serial # (If Applicable): 4 temperature gun? Circle Applicable: Scals broken Damaged container Leaking container Other (describe) 5 |Sample containers intact and scaled? Sample ID's and Containers Affected: Samples requiring chemical preservation If Preservation added, Lott: at proper pH? If Yes, are Encores or Soil Kits present for solids? Yes___No___NA__(If yes, take to VOA Freezer) _ NA__(If unknown, select No) Do liquid VOA vials contain acid preservation? Yes___ No__ Do any samples require Volatile Are liquid VOA vials free of headspace? Yes____ No_ 7 Analysis? Sample 1D's and containers affected: ID's and tests affected: Samples received within holding time? ID's and containers affected: Sample ID's on COC match ID's on bottles? Circle Applicable: No dates on containers No times on containers COC missing info Other (describe) Date & time on COC match date & time on bottles? Circle Applicable: No container count on COC Other (describe) Number of containers received match 11 number indicated on COC7 Are sample containers identifiable as 12 GEL provided by use of GEL labels? Circle Applicable: Not relinquished Other (describe) COC form is properly signed in relinquished/received sections? Comments (Use Continuation Form if needed): M(9 Date (2)15/23 Page 1 of)

GL-CHL-SR-001 Rev 7

PM (or PMA) review: Initials _____

List of current GEL Certifications as of 30 June 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



a member of The GEL Group INC



2040 Savage Road Charleston, SC 29407





P 843.556.8171 F 843.766.1178

gel.com

July 06, 2023

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

Re: Arkwright CCR Groundwater Compliance AP1 Work Order: 625987

Dear Joju Abraham:

GEL Laboratories, LLC (GEL) appreciates the opportunity to provide the enclosed analytical results for the sample(s) we received on June 14, 2023. This original data report has been prepared and reviewed in accordance with GEL's standard operating procedures.

The sample was 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.

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

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

Sincerely,

Erin Trent Project Manager

Purchase Order: GPC82177-0005

Enclosures



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

Certificate of Analysis Report for

GPCC001 Georgia Power Company Client SDG: 625989 GEL Work Order: 625989

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.

	Cuna Johnson	
Reviewed by		

Page 2 of 24 SDG: 625987

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

Certificate of Analysis Report for

GPCC001 Georgia Power Company Client SDG: 625987 GEL Work Order: 625987

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.

	Cuna Johnson	
Reviewed by		

Page 3 of 24 SDG: 625987

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: July 6, 2023

Contact: Joju Abraham

Project: Arkwright CCR Groundwater ComplianceAP1

GPCC00100 GPCC001 Client Sample ID: ARK-AP1PZ-3-20230616 Project: Client ID:

Sample ID: Matrix: 625989001 WG

Collect Date: 13-JUN-23 Receive Date: 14-JUN-23 Collector: Client

Parameter	Qualifier	Result U	ncertainty	MDC	TPU	RL	Units	PF	DF	Analyst	Date	Time	Batch	Mtd.
Rad Gas Flow Proport GFPC Ra228, Liquid		U												
Radium-228	U	0.0108	+/-0.698	1.37	+/-0.698	3.00	pCi/L			JE1	06/23/23	1509	2445900) 1
Radium-226+Radium	ı-228 Calcular	tion "See Pa	rent Product	s"										
Radium-226+228 Sum		1.53	+/-0.981	1.37	+/-1.04		pCi/L		1	LXB3	07/06/23	1001	2448609	2
Rad Radium-226 Lucas Cell, Ra226, L	iquid "As Rece	eived"												
Radium-226		1.52	+/-0.690	0.533	+/-0.771	1.00	pCi/L			LXP1	06/27/23	0810	2445887	3

The following Analytical Methods were performed Description

1 EPA 904.0/SW846 9320 Modified Calculation

EPA 903.1 Modified

Surrogate/Tracer Recovery	Test	Batch ID	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC Ra228, Liquid "As Received"	2445900	76.5	(15%-125%)

Notes:

Method

The MDC is a sample specific MDC.

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

Column headers are defined as follows:

DF: Dilution Factor Mtd.: Method DL: Detection Limit PF: Prep Factor **RL**: Reporting Limit Lc/LC: Critical Level

MDA: Minimum Detectable Activity TPU: Total Propagated Uncertainty

MDC: Minimum Detectable Concentration

Page 4 of 24 SDG: 625987

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: July 6, 2023

Contact: Joju Abraham

Project: Arkwright CCR Groundwater ComplianceAP1

ARK-AP1-EB-01-20230613 Client Sample ID: Project: GPCC00100 Sample ID: GPCC001 Client ID:

625989002 Matrix: WQ Collect Date: 13-JUN-23 Receive Date: 14-JUN-23 Collector: Client

Parameter	Qualifier	Result U	ncertainty	MDC	TPU	RL	Units	PF	DF Ana	lyst	Date Time	Batch	Mtd.
Rad Gas Flow Proportion GFPC Ra228, Liquid		0											
Radium-228	U	0.605	+/-1.44	2.53	+/-1.45	3.00	pCi/L		JE	. 06	/23/23 1509	2445900	1
Radium-226+Radium-	228 Calculat	tion "See Pa	rent Product	s"									
Radium-226+228 Sum	U	0.766	+/-1.48	2.53	+/-1.49		pCi/L		1 LXI	3 07	/06/23 1001	2448609	2
Rad Radium-226 Lucas Cell, Ra226, Liq	juid "As Rece	eived"											
Radium-226	U	0.160	+/-0.352	0.698	+/-0.354	1.00	pCi/L		LXI	1 06	/27/23 0810	2445887	3

The following Analytical Methods were performed **Description**

	<u> </u>
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"	2445900	78.6	(15%-125%)

Notes:

Method

The MDC is a sample specific MDC.

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

Column headers are defined as follows:

DF: Dilution Factor Mtd.: Method DL: Detection Limit PF: Prep Factor Lc/LC: Critical Level **RL**: Reporting Limit

MDA: Minimum Detectable Activity TPU: Total Propagated Uncertainty

MDC: Minimum Detectable Concentration

Page 5 of 24 SDG: 625987

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: July 6, 2023

Contact: Joju Abraham

Project: Arkwright CCR Groundwater ComplianceAP1

Client Sample ID: ARK-AP1-FB-01-20230613 Project: GPCC00100 Sample ID: Client ID: GPCC001

625989003 Matrix: WQ Collect Date: 13-JUN-23 Receive Date:

14-JUN-23 Collector: Client

Parameter	Qualifier	Result Un	certainty	MDC	TPU	RL	Units	PF	DF	Analys	t Date	Time	Batch	Mtd.
Rad Gas Flow Proporti GFPC Ra228, Liquid		0												
Radium-228	U	1.66	+/-1.26	2.00	+/-1.33	3.00	pCi/L			JE1	06/23/23	1509	2445900	1
Radium-226+Radium-	-228 Calculai	tion "See Par	rent Product	s"										
Radium-226+228 Sum		5.04	+/-1.65	2.00	+/-1.78		pCi/L		1	LXB3	07/06/23	1001	2448609	2
Rad Radium-226 Lucas Cell, Ra226, Lie	quid "As Rece	eived"												
Radium-226		3.39	+/-1.07	0.663	+/-1.19	1.00	pCi/L			LXP1	06/27/23	0848	2445887	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 2445900 76.4 (15% - 125%)

GFPC Ra228, Liquid "As Received"

Notes:

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

Column headers are defined as follows:

The MDC is a sample specific MDC.

DF: Dilution Factor Mtd.: Method DL: Detection Limit PF: Prep Factor Lc/LC: Critical Level **RL**: Reporting Limit

MDA: Minimum Detectable Activity TPU: Total Propagated Uncertainty

MDC: Minimum Detectable Concentration

Page 6 of 24 SDG: 625987

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

Certificate of Analysis

Company: Georgia Power Company, Southern

Client

Address: Company

241 Ralph McGill Blvd NE, Bin 10160

Atlanta, Georgia 30308 Report Date: July 6, 2023

Contact: Joju Abraham

Project: Arkwright CCR Groundwater ComplianceAP1

ARK-AP1-FD-01-20230613 Client Sample ID: Project: GPCC00100 Sample ID: GPCC001 Client ID:

625989004 Matrix: WG Collect Date: 13-JUN-23 Receive Date: 14-JUN-23

Collector:

Parameter	Qualifier Resu	ılt Uncertainty	MDC	TPU	RL	Units	PF	DF Analy	st Date Time	Batch	Mtd.
Rad Gas Flow Proportion GFPC Ra228, Liquid	0										
Radium-228	1.	90 +/-1.02	1.46	+/-1.13	3.00	pCi/L		JE1	06/23/23 1509	2445900	1
Radium-226+Radium-	228 Calculation "Se	ee Parent Produc	ts"								
Radium-226+228 Sum	2.	44 +/-1.10	1.46	+/-1.20		pCi/L		1 LXB3	07/06/23 1001	2448609	2
Rad Radium-226 Lucas Cell, Ra226, Liq	quid "As Received"										
Radium-226	0.5	+/-0.408	0.475	+/-0.419	1.00	pCi/L		LXP1	06/27/23 0848	2445887	3

The following Analytical Methods were performed **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"	2445900	80.4	(15%-125%)

Notes:

Method

The MDC is a sample specific MDC.

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

Column headers are defined as follows:

DF: Dilution Factor Mtd.: Method DL: Detection Limit PF: Prep Factor Lc/LC: Critical Level **RL**: Reporting Limit

MDA: Minimum Detectable Activity TPU: Total Propagated Uncertainty

MDC: Minimum Detectable Concentration

Page 7 of 24 SDG: 625987

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: July 6, 2023

Contact: Joju Abraham

Project: Arkwright CCR Groundwater ComplianceAP1

GPCC00100 GPCC001 Client Sample ID: ARK-AP1PZ-6-20230613 Project: Client ID:

Sample ID: Matrix: 625987001 WG

Collect Date: 13-JUN-23 Receive Date: 14-JUN-23 Collector: Client

Parameter	Qualifier	Result U1	ncertainty	MDC	TPU	RL	Units	PF	DF	Analyst	Date	Time	Batch	Mtd.
Rad Gas Flow Proport GFPC Ra228, Liquid		0												
Radium-228	U	1.68	+/-1.46	2.39	+/-1.53	3.00	pCi/L			JE1	06/23/23	1509	2445900	1
Radium-226+Radium	ı-228 Calculat	tion "See Pa	rent Product	ts"										
Radium-226+228 Sum		3.69	+/-1.65	2.39	+/-1.77		pCi/L		1	LXB3	07/06/23	1001	2448609	2
Rad Radium-226 Lucas Cell, Ra226, Li	iquid "As Rece	eived"												
Radium-226		2.01	+/-0.768	0.560	+/-0.901	1.00	pCi/L			LXP1	06/27/23	0810	2445887	3

The following Analytical Methods were performed Description

	*
1	EPA 904.0/SW846 9320 Modified
2	Calculation

EPA 903.1 Modified

Surrogate/Tracer Recovery	Test	Batch ID	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC Ra228, Liquid "As Received"	2445900	74.4	(15%-125%)

Notes:

Method

The MDC is a sample specific MDC.

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

Column headers are defined as follows:

DF: Dilution Factor Mtd.: Method DL: Detection Limit PF: Prep Factor **RL**: Reporting Limit Lc/LC: Critical Level

MDA: Minimum Detectable Activity TPU: Total Propagated Uncertainty

MDC: Minimum Detectable Concentration

Page 8 of 24 SDG: 625987

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

QC Summary

Client: Georgia Power Company, Southern Company

241 Ralph McGill Blvd NE, Bin 10160

Atlanta, Georgia

Contact: Joju Abraham

Workorder: 625987

Report Date:	July 6,	2023	
	Page	1 of	2

Parmname	NOM	Sample Qual		QC	Units	RPD%	REC%	Range A	Anlst	Date Time
Rad Gas Flow										
Batch 2445900 -										
QC1205436474 625716001 DUP										
Radium-228	U	0.410	U	1.25	pCi/L	0		N/A	JE1	06/23/2315:09
	Uncert:	+/-0.944		+/-1.03						
	TPU:	+/-0.950		+/-1.08						
QC1205436475 LCS										
Radium-228	80.4			88.8	pCi/L		111	(75%-125%)	JE1	06/23/2315:09
	Uncert:			+/-4.76						
	TPU:			+/-23.1						
QC1205436473 MB										
Radium-228			U	0.213	pCi/L				JE1	06/23/2315:09
	Uncert:			+/-0.991						
	TPU:			+/-0.992						
Rad Ra-226										
Batch 2445887										
QC1205436429 625648001 DUP										
Radium-226	U	0.580		1.33	pCi/L	78.8		(0% - 100%)	LXP1	06/27/2309:24
	Uncert:	+/-0.575		+/-0.739						
	TPU:	+/-0.582		+/-0.781						
QC1205436431 LCS										
Radium-226	26.4			26.5	pCi/L		100	(75%-125%)	LXP1	06/27/2309:24
	Uncert:			+/-2.78						
	TPU:			+/-5.69						
QC1205436428 MB										
Radium-226			U	0.326	pCi/L				LXP1	06/27/2309:24
	Uncert:			+/-0.394						
	TPU:			+/-0.400						
QC1205436430 625648001 MS										
Radium-226	127 U	0.580		117	pCi/L		92.1	(75%-125%)	LXP1	06/27/2309:24
	Uncert:	+/-0.575		+/-12.9						
	TPU:	+/-0.582		+/-27.6						

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

Page 9 of 24 SDG: 625987

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

QC Summary

Workorder: 625987 Page 2 of 2 **Parmname** NOM Sample Qual QC Units RPD% REC% Range Anlst Date Time UI Gamma Spectroscopy--Uncertain identification BDResults are either below the MDC or tracer recovery is low Preparation or preservation holding time was exceeded h 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. Analyte concentration is not detected above the detection limit ND M M if above MDC and less than LLD Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier NJ

- FA Failed analysis.UJ Gamma Spectroscopy--Uncertain identification
- 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.

Page 10 of 24 SDG: 625987

Radiochemistry Technical Case Narrative Georgia Power Company SDG #: 625987

Product: Radium-226+Radium-228 Calculation

Analytical Method: Calculation

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

Analytical Batch: 2448609

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

GEL Sample ID# Client Sample Identification
625987001 ARK-AP1PZ-6-20230613

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: 2445900

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

GEL Sample ID#Client Sample Identification625987001ARK-AP1PZ-6-202306131205436473Method Blank (MB)

1205436474 625716001(NonSDG) Sample Duplicate (DUP)

1205436475 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.

Preparation Information

Homogenous Matrix

Sample 1205436474 (Non SDG 625716001DUP) was non-homogenous matrix. particles and debris 1205436474 (Non SDG 625716001DUP).

Page 11 of 24 SDG: 625987

<u>Product:</u> Lucas Cell, Ra226, Liquid <u>Analytical Method:</u> EPA 903.1 Modified

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

Analytical Batch: 2445887

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

GEL Sample ID#	Client Sample Identification
625987001	ARK-AP1PZ-6-20230613
1205436428	Method Blank (MB)
1205436429	625648001(NonSDG) Sample Duplicate (DUP)
1205436430	625648001(NonSDG) Matrix Spike (MS)
1205436431	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, 1205436430 (Non SDG 625648001MS), 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 12 of 24 SDG: 625987

Radiochemistry Technical Case Narrative Georgia Power Company SDG #: 625989

Product: Radium-226+Radium-228 Calculation

Analytical Method: Calculation

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

Analytical Batch: 2448609

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

GEL Sample ID#	Client Sample Identification
625989001	ARK-AP1PZ-3-20230616
625989002	ARK-AP1-EB-01-20230613
625989003	ARK-AP1-FB-01-20230613
625989004	ARK-AP1-FD-01-20230613

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

<u>Analytical Method:</u> EPA 904.0/SW846 9320 Modified <u>Analytical Procedure:</u> GL-RAD-A-063 REV# 5

Analytical Batch: 2445900

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

GEL Sample ID#	Client Sample Identification
625989001	ARK-AP1PZ-3-20230616
625989002	ARK-AP1-EB-01-20230613
625989003	ARK-AP1-FB-01-20230613
625989004	ARK-AP1-FD-01-20230613
1205436473	Method Blank (MB)
1205436474	625716001(NonSDG) Sample Duplicate (DUP)
1205436475	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.

Page 13 of 24 SDG: 625987

Preparation Information

Homogenous Matrix

Sample 1205436474 (Non SDG 625716001DUP) was non-homogenous matrix. particles and debris 1205436474 (Non SDG 625716001DUP).

<u>Product:</u> Lucas Cell, Ra226, Liquid <u>Analytical Method:</u> EPA 903.1 Modified

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

Analytical Batch: 2445887

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

GEL Sample ID#	Client Sample Identification
625989001	ARK-AP1PZ-3-20230616
625989002	ARK-AP1-EB-01-20230613
625989003	ARK-AP1-FB-01-20230613
625989004	ARK-AP1-FD-01-20230613
1205436428	Method Blank (MB)
1205436429	625648001(NonSDG) Sample Duplicate (DUP)
1205436430	625648001(NonSDG) Matrix Spike (MS)
1205436431	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, 1205436430 (Non SDG 625648001MS), 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 14 of 24 SDG: 625987

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

Report Date: July 6, 2023

Page 1 of 2

100 (75%-125%) LXP1

92.1 (75%-125%) LXP1

LXP1

06/27/2309:24

06/27/2309:24

06/27/2309:24

QC Summary

Client: Georgia Power Company, Southern Company

241 Ralph McGill Blvd NE, Bin 10160

Atlanta, Georgia

Contact: Joju Abraham

Workorder: 625989

Parmname		NOM	Sample (Qual	QC	Units	RPD%	REC%	Range Anlst	Date Time
Rad Gas Flow										
Batch	2445900 -									
QC1205436474	625716001 DUP									
Radium-228		U	0.410	U	1.25	pCi/L	0		N/A JE	06/23/2315:09
		Uncert:	+/-0.944		+/-1.03					
		TPU:	+/-0.950		+/-1.08					
QC1205436475	LCS									
Radium-228		80.4			88.8	pCi/L		111	(75%-125%) JE1	06/23/2315:09
		Uncert:			+/-4.76					
		TPU:			+/-23.1					
QC1205436473	MB									
Radium-228				U	0.213	pCi/L			JE1	06/23/2315:09
		Uncert:			+/-0.991					
		TPU:			+/-0.992					
Rad Ra-226										
Batch	2445887 —									
QC1205436429	625648001 DUP									
Radium-226		U	0.580		1.33	pCi/L	78.8		(0% - 100%) LXF	06/27/2309:24
		Uncert:	+/-0.575		+/-0.739	•			,	

+/-0.781

26.5

+/-2.78

+/-5.69

+/-0.394

+/-0.400

+/-12.9

+/-27.6

0.326

117

U

pCi/L

pCi/L

pCi/L

+/-0.582

0.580

+/-0.575

+/-0.582

Notes:

QC1205436431

QC1205436428

Radium-226

Radium-226

Radium-226

LCS

MB

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

127

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

QC1205436430 625648001 MS

X Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier

TPU:

Uncert:

Uncert:

Uncert:

TPU:

TPU:

U

TPU:

26.4

- H Analytical holding time was exceeded
- < Result is less than value reported
- > Result is greater than value reported

Page 15 of 24 SDG: 625987

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

QC Summary

Workorder: 625989 Page 2 of 2 **Parmname** NOM Sample Qual QC Units RPD% REC% Range Anlst Date Time UI Gamma Spectroscopy--Uncertain identification BDResults are either below the MDC or tracer recovery is low Preparation or preservation holding time was exceeded h 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. Analyte concentration is not detected above the detection limit ND M M if above MDC and less than LLD

FA Failed analysis.

NJ

- UJ Gamma Spectroscopy--Uncertain identification
- One or more quality control criteria have not been met. Refer to the applicable narrative or DER.

Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier

- 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.

Page 16 of 24 SDG: 625987

म्म्ट्रिटा # 175569434 स्ट्रिट Quote #: COC Number (!)	5	Chain of Custody and Analytical Request		ay Special	y Analy	EE	125986 1025987	2000	0_	2040 Charle Phone	2040 Savage Road Charleston, SC 294 Phone: (843) 556-8	2040 Savage Road Charleston, SC 29407 Phone: (843) 556-8171	. 11		
O'Number:	GEL Work Order Number:	GEL Project Manager: Erin Trent	Manager: Erin	Trent						Fax: (843) 7(Fax: (843) 766-1178			
Hent Name: Georgia Power	Phor	Phone # (937-344-6533)		Sample Analysis Requested (5)	nalys	is Rec	uested	(5) (F	ill in t	he nu	nber c	f contai	(Fill in the number of containers for each test)	ch test)	20-10
Period Name: Plant Arkwright Ash Pond 1	Fax:			S	IN	IN			IN	IN	IN	IN	< P	< Preservative Type (6)	(95W)
Modess: 241 Ralph McGill Blvd SE, Atlanta, GA 30308	30308		sample be considered:	rənist			ро		Λ	pqı					3 100
ત્રી Gollected By: Bryan Pennell	Send Results To: jabraham@southemco.com EDDO@stantec.com brian.steele@stantec.com edgar.smith@stantec.com	o.com EDD@stantec.com @stantec.com	ylqq			00£) ų	Meth	Fl, Sulfa		228 Cm	121		1	Comments	See W
Sample ID * For composites - indicate start and stop date/time	*Date Collected Collected (Mi (Mi (mm-dd-yy) (h)	*Time Collected (Military) (Code (3) Filered (3) Matrix (4)	Radioactive yes, please sul isotopic info.) (7) Known or	Total number	I .qqA) gA	Metals App.	R2. TDS (SM 2540	Anions (Cl, (300.0 Rev	Metals / (602	KAD 226-2	Mercury	Metals A Ma, Fe, Mi	(Task, AS	(Task_code: AKK-UK- ASSMT-2023S1)	
ARK-AP1PZ-6-20230613	123	52 N N	N OT	9	×		×	×	×	×	×		pH: 5.33	13	
								Dig.					强烈		
				nt.											
													News and		
		2	0	. 350											
			~										7.70		
		6+3-27	1												1
						1							Tare III		T
															T
												1	1		
Ch	Chain of Custody Signatures		T	TAT Requested:	sted:	Normal:	ial:	a l	Rush:		Specify:		(Sub	(Subject to Surcharge)	
Relinquished By (Signed) Print Name	Date Received by (signed)	Print Name Date	Fax R	Fax Results: [] Yes	Yes	[X]No	N _o								
THE BRIAN PENNEW	6-18-23 1 34/1	(Xo.14.73)(Select Select	Select Deliverable: [] C of A [] QC Summary	le: []	C of A	2	C Sum	mary	[] level 1	vel 1	[X] Level 2		[] Level 3 [] Level 4	
	2 / 2		Addit	Additional Remarks:	ırks:									e	
	3		For I	For Lab Receiving Use Only: Custody Seal Intact? [] Yes	ing Us	e Only.	Custo	dy Sea	l Intac				Cooler Temp:	mp:	
 For sample shipping and delivery details, see Sample Receipt & Review form (SRR.) Chain of Custody Number = Client Determined 	ample Receipt & Review form (SRI	R.)	Sample Collection Time Zone: [X] Eastern [] Pacific	ion Time	Cone:	×	castern		acific	9000	[] Central		[] Mountain [] Other:	[] Other:	300
) 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	eld Duplicate, EB = Equipment Blank, MS =	Matrix Spike Sample, MSD = Matrix Spi	ike Duplicate Sampl	e, G = Grab,	C = Con	nposite									
.) Field Filtered: For liquid matrices, indicate with a - Y - for yes the sample was field filtered or - N - for sample was not field filtered. .) Marix 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=Wipc, U=Urine, F=Fecal, N=Nasal	yes the sample was field filtered or - N - for s. W=Surface Water, WW=Waste Water, W=W	ample was not field filtered. ater, ML=Misc Liquid, SO=Soil, SD=Se	diment, SL =Sludge,	SS=Solid W	aste, 0=	Oil, F=F	ilter, P=V	/ipe, U=	Urine, F	=Fecal,	N=Nasa				
.) Sample Analysis Requested: Analytical method requested (i.e. 8260B, 6010B/7470A) and number of containers provided for each (i.e. 8260B - 3, 6010B/7470A - 1). Preservative Type: HA = Hydrochloric Acid, NI = Nitric Acid, SI = Sodium Hydroxide, SA = Sulfuric Acid, AA = Ascorbic Acid, HX = Hexane, ST = Sodium Thiosulfate, If no preservative is added = leave field blank	i.e. 8260B, 6010B/7470A) and number of cor sid, SH = Sodium Hydroxide, SA = Sulfuric A	ntainers provided for each (i.e. 8260B - 3. cid, AA = Ascorbic Acid, HX = Hoxane,	, 6010B/7470A - 1). ST = Sodium Thios	ulfate, If no j	reserval	ive is ad	ded = lear	e field b	lank						
() KNOWN OR POSSIBLE HAZARDS	Characteristic Hazards	Listed Waste	Other						7.		7	lease pr	ovide any c	Please provide any additional details	1223
Hg= Mercury Se= Selenium	ole [LW= Listed Waste (F.K.P and U-listed wastes.) Waste code(s):	OT= (i.e.: I misc. Descr	OI= Other / Unknown (i.e.: High/low pH, asbestos, beryllium, irritants, other misc. health hazards, etc.) Description:	known H, asb ards, e	estos, l tc.)	berylliu	m, irrit	ants, o	ther	9 0 0	elow reg oncerns f site co	arding han (i.e.: Orig lected fron	below regarding handling and/or disposal concerns. (i.e.: Origin of sample(s). type of site collected from, odd matrices, etc.)	STATE OF THE PARTY
Cd = Cadmium Ag= Silver Cr = Chromium MR= Misc. RCRA metals 3t = 1 and	TSCA Regulated PCB = Polychlorinated														- S D S
n = Leau	oipnenyis														

		(Fill in the number of containers for each test)	< Preservative Type (6)		Comments	(Task_code: Akk-CCK-ASSMT-2023S1)	pH: 5.33						(Subject to Surcharge)		rel 2 [] Level 3 [] Level 4	-	Cooler Temp: °C	al [] Mountain [] Other: Please provide any additional details below regarding handling and/or disposal concerns. (i.e.: Origin of sample(s), type of site collected from, odd matrices, etc.)
2040 Savage Road Charleston, SC 29407 Phone: (843) 556-8171	Fax: (843) 766-1178	number of contai	IN IN IN	(g (g)	<u>I' K' W</u> (1410B	RAD 226-: Mercury Metals A Na, Fe, Mr	×						Specify:		[] level 1 [X] Level 2		[] Yes [] No	ccal, N=Nasal Please pr below reg concerns of site co
<u> </u>	Fa	(5)	IN	A (5)3	OC) Fi, Sulfa 2. 2.1 199 App. IV	A Shetals (SM) Anions (Cl., (300.0 Rev Metals A (6002)	x x x				1		X Rush:		[] QC Summary [dy Seal Intact?	. F=+
ocialty Analytics		le Analysis Requested	IN IN	(H0)	208) III 00E) y (1.	Ag (App. 1 Metals App. Alkalinit R2	x 9		1	1			TAT Requested: Normal:	N [X] No	ble: [] C of A	emarks:	ceiving Use Only: C	's Sample, G = Grab, C = Composite Sludge, SS=Solid Waste, O=Oil, F=Filter M - 1). OTher OT = Other / Unknown (i.e.: High/low pH, asbestos, bermise. health hazards, etc.) Description:
16SLLC rry I Radiobioassay I Spe nalytical Reques	GEL Project Manager: Erin Trent	Sample A	760	sample be considered:	pply	Radioactive yes, please su isotopic info.) (7) Known or possible Haza	OT	2	-	13.5	\frac{\frac}\fint{\frac{\fir}}}}}}}{\firac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\fir}}}}}}{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac}\frac{\frac{\fir}}}}{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\f		TATRe	Fax Results:	Select Delive	Additional Remarks:	For Lab Rec	Sample Collection Time Zone: [X] Eastern ke Duplicate Sample, G = Grab, C = Composite diment, SL=Sludge, SS=Solid Waste, O=Oil, F=Filter, P=V 6010B/7470A - 1). ST = Sodium Thiosulfate, If no preservative is added = leav [Other Other Onknown Other Other Unknown (i.e.: Hight/low pH, asbestos, berylliu misc. health hazards, etc.) Description:
Laboratories LLC get.com Chemistry Radiochemistry Chain of Custody and Analytical Request	GEL Project Ma	Phone # (937-344-6533)	X:			*Time Collected (Military) (Adminary) Code (2) Flield Sample (1) Matrix (9)	1552 N N GW N							d) Print Name Date	0 5240)			S = Matrix Spike Sample, MSD = Matrix Spike r sample was not field filtered. =Water, ML=Misc Liquid, SO=Soil, SD=Sedir containers provided for each (i.e. 8260B - 3, 60 c Acid, AA = Ascorbic Acid, HX = Hexane, SI Listed Waste L.W=Listed Waste (F.K.P and U-listed wastes.) Waste code(s):
9	GEL Work Order Number:	P	Fax:	A 30308	Send Results To: jabraham@southernco.com EDD@stantec.com brian.steele@stantec.com edgar.smith@stantec.com	*Date Collected (mm-dd-yy)	6/13/2023						Chain of Custody Signatures	Date Received by (signed)	6-18-23 1 Styl	2	3	ield Duplicate, EB = Equipment Blank, Mister yes the sample was field filtered or - N - fc Sw-Surface Water, WW=Waste Water, W (i.e. 8260B, 6010B/7470A) and number of Kid. SH = Sodium Hydroxide, SA = Sulfuri Characteristic Hazards FL = Flammable/Ignitable CO = Corrosive RE = Reactive TSCA Regulated PCB = Polychlorinated PCB = Polychlorinated
Project # 175569434 (BL Quote #:	P8Number:	Chent Name: Georgia Power	Project/Site Name: Plant Arkwright Ash Pond 1	Address: 241 Ralph McGill Blvd SE, Atlanta, GA 30308	Collected By: Bryan Pennell	Sample ID * For composites - indicate start and stop date/time	ARK-AP1PZ-6-20230613							Relinquished By (Signed) Print Name	1 Jibu BRYAN PENNEN	20	3	Sample shipping and delivery details, see Sample Receipt & Review form (SRR) Sample Collection Time Zone: [X] Eastern [] Pacific [] Central Chain of Custody Number = Circun Determined Chain of Custody Number = Circun Determined

SAMPLE RECEIPT & REVIEW FORM SDG/AR/COC/Work Order: (02598(0 625 Client: GPCC Received By: SNS Date Received: Circle Applicable; FedEx Express FedEx Ground UPS Field Services Courier Other Carrier and Tracking Number 399598403522-10 3511-10 *If Net Counts > 100cpm on samples not marked "radioactive", contact the Radiation Safety Group for further investigation. Yes ĝ Suspected Hazard Information UN#: Hazard Class Shipped: If UN2910, Is the Radioactive Shipment Survey Compliant? Yes___No___ A)Shipped as a DOT Hazardous? COC notation or radioactive stickers on containers equal client designation. B) Did the client designate the samples are to be received as radioactive? CPMy mR/Hr Maximum Net Counts Observed* (Observed Counts - Area Background Counts): Classified as: Rad 1 Rad 2 Rad 3 C) Did the RSO classify the samples as radicactive? COC notation or hazard labels on containers equal client designation. D) Did the client designate samples are hazardous? If D or B is yes, select Hazards below. Foreign Soil RCRA Asbestos Beryllium PCB's Flammable E) Did the RSO identify possible hazards? Comments/Qualifiers (Required for Non-Conforming Items) X 2 2 Sample Receipt Criteria Circle Applicable: Seals broken Damaged container Leaking container Other (describe) Shipping containers received intact and 1 sealed? Circle Applicable: Client contacted and provided COC COC created upon receipt Chain of custody documents included 2 with shipment? Preservation Method: Wet Ice Ice Packs Dry ice None Other: TEMP: *all temperatures are recorded in Celsius Samples requiring cold preservation 3 within $(0 \le 6 \text{ deg. C})$?* Temperature Device Serial #: <u>IR1-23</u> Daily check performed and passed on IR Secondary Temperature Device Serial # (If Applicable): temperature gun? Circle Applicable: Seals broken Damaged container Leaking container Other (describe) Sample containers intact and sealed? Sample ID's and Containers Affected: Samples requiring chemical preservation 6 If Preservation added, Lot#: at proper pH? If Yes, are Encores or Soil Kits present for solids? Yes No NA (If yes, take to VOA Freezer) NA__(If unknown, select No) Do liquid VOA vials contain acid preservation? Yes____ No__ Do any samples require Volatile Are liquid VOA vials free of headspace? Yes___ No___ NA_ 7 Analysis? Sample ID's and containers affected; ID's and tests affected: Samples received within holding time? ID's and containers affected: Sample ID's on COC match ID's on 9 bottles? Circle Applicable: No dates on containers No times on containers COC missing info Other (describe) Date & time on COC match date & time 10 on bottles? Circle Applicable: No container count on COC Other (describe) Number of containers received match number indicated on COC? Are sample containers identifiable as 12 GEL provided by use of GEL labels? Circle Applicable: Not relinquished Other (describe) COC form is properly signed in relinquished/received sections? Comments (Use Continuation Form if needed):

> M(9 Date (0)15/23 Page 1 of 1 PM (or PMA) review: Initials .____

Regject # 175569434	_	9	TI College	_	abc emistry)rat	Orie mistry I R	_aboratories LLC	Laboratories LLC Chemistry Radiochemistry Radiobioassay Specialty Analytics 6259 89	ialty Ana	alytics C	625988	800	700	<u>C</u> 5	40 Sava	2040 Savage Road Charleston, SC 29407	ad 29407			
COC Number '':	GEI. Work Order Number:	umhor.	Chain	0	ustod	y and	Analy	ustody and Analytical Reques	of Custody and Analytical Request						Ä.	one: (8	43) 55	Phone: (843) 556-8171			
(Hent Name: Georgia Power		P	Phone # (937-344-6533)	7-344-0	5533)	and and		al. El	Sample		vsis R	Analysis Requested (5)	(5) hed	(Fill	in the	c: (843	Fax: (843) 766-1178 he number of conta	1178	(Fill in the number of containers for each test)	(teet)	
Project/Site Name: Plant Arkwright Ash Pond 1		F	Fax:				Sh	Should this			IN				IN	IN	IN		A Pre	Second (4) Second (4) Second (4)	(i)
Address: 241 Ralph McGill Blvd SE, Atlanta, GA 30308	3A 30308						Sa	sample be	sanie	(B)				8			3, 1	(0		(a) Africa	100
Collected By: Bryan Pennell	Send Results To: jabraham@southernco.com EDD@stantec.com brian.steele@stantec.com edgar.smith@stantec.com	n@southe	rnco.com lith@stante	DD@sta	intec.com	_			la est) (205((1	()(2.1 199	(BC		' K' W	0700)		Comments	Section.
Sample ID * For composites - indicate start and stop date/time	*Date Collected ate/time (nmr-dd-yy)		*Time Collected (Military) (hhmm)	QC Code (2)	Field Filtered (3)	Sample Matrix (4)	Radioactive	isotopic info.) (7) Known or	possible Haza	I .qqA) gA	Metals App.	Alkalinity R2. TDS (SM	254C Anions (Cl, I	(300.0 Rev. A statsM	(602(Метситу (Metals Al Na, Fe, Mn	IIIAI to I tak I	(task_c ASS	(task_code: ARK-CCR- ASSMT-2023S1)	
ARK-AP1PZ-3-20230613	6/13	6/13/2023	1308	Z	Z	GW	z	OT	9		×	×	×	×	×	×			pH: 5.57		
ARK-API-EB-01-20230613	6/13	6/13/2023	1405	EB	Z	W	z	OT	9		×	×		×	×	×					
ARK-AP1-FB-01-20230613	6/13	6/13/2023	1420 FB	FB	Z	×	z	OT	9		×	×		×	×	×					
ARK-API-FD-01-20230613	6/13	6/13/2023		FD	N	MD	z	OT	9		×	×	×	×	×	×					
	The same of the sa																				T
				· >	1	A		. (1
					6-1	J'A															
					,	25				1											
														H							
																		1			
	Chain of Custody Signatures	tures						L	TAT Requested:	nested		Normal:	1	Rush:	×	Specify:	ify:		(Subje	(Subject to Surcharge)	
Ę l	Date	Received by (signed)		Print Name		Date		Fax F	Fax Results: [] Yes] Yes		ON [X]									
1 H GRTAN DENNEU	615-23 1 34	N	0	75	2	ğ	9	Selec	Select Deliverable: [] C of A	able: []C of	Α []	[] QC Summary	ımmar	- 1	[] level 1		[X] Level 2	2 [] Level 3	el 3 [] Level 4	
	2)						Addit	Additional Remarks	marks:											
	3							For I	For Lab Receiving Use Only: Custody Seal Intact?	iving L	se On	ly: Cu	stody S	eal In	act? [[] Yes	[]] No C	Cooler Temp:	<i>2</i> ,	
For sample shipping and delivery details, see Sample Receipt & Review form (SRR.)	Sample Receipt & Review	form (S	RR.)				Sample	e Colleci	Collection Time Zone: [X] Eastern	e Zone	x]:	Easter		[] Pacific	j ji] Central		[] Mountain		[] Other:	45.50
.) OC Codes: N = Normal Sample, TB = Trip Blank, FD = Field Duplicate, EB = Equipment Blank, MS = Matrix Spike Sample, MSD = Matrix Spike Duplicate Sample, G = Grab, C = Composite .) Field Filtered: For liquid matrices, indicate with a · Y · for yes the sample was field filtered or · N · for sample was not field filtered.	Field Duplicate, EB = Equipment or yes the sample was field filtered	Blank, MS	S = Matrix S r sample wa	oike Samp	Sample, MSD = field filtered.	Matrix S	pike Dupli	cate Sampl	e, G = Gra	ç, C = Ω	omposite										
.) Marrix Codes: DW=Drinking Water, GW=Groundwater, SW=Surface Water, WW=Waste Water, WL=Misc Liquid, SO=Soil, SD=Sediment, SL=Sludge, SS=Solid Waste, O=Oil, F=Filler, P=Wipe, U=Urine, F=Fecal, N=Nasal.) Sample Analysis Requested: Analytical method requested (i.e. 8260B, 6010B/7470A) and number of containers provided for each (i.e. 8260B - 3, 6010B/7470A - 1).	. SW=Surface Water, WW=Wasted (i.e. 8260B, 6010B/7470A) and	: Water, Wannumber of	=Water, ML	=Misc Lic ovided fo	luid, SO=S	Soil, SD =S	ediment, S	L=Sludge,	SS=Solid	Waste, C	=Oil, F	=Filter, P	=Wipe,	U=Urin	e, F=Fec	al, N=N	asal				
.) 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 KNOWN OR POSSIBLE HAZARDS Characteristic Hazards Listed Waste Other	Acid, SH = Sodium Hydroxide, SA = Characteristic Hazards	A = Sulfurio	Acid, AA = Ascort	Ascorbic	Acid, HX	= Hexane	, ST = So	Jium Thiosu	ulfate, If no	o preserv	ative is	added = 1	eave fiel	d blank			Pleas	o nrow	ido any adi	Please provide any additional details	(8)
	FL = Flammable/Ignitable CO = Corrosive RE = Reactive	ple	LW=Listed Waste (F.K.P and U-listee Waste code(s):	sted Wand U-li	LW= Listed Waste (F.K,P and U-listed wastes.) Waste code(s):	tes.)		OT= (i.e.: 1 misc. Descr	OT=-Other / Unknown (i.e.: High/low pH, asbestos, beryllium, irritants, other misc. health hazards, etc.) Description:	Jnknow pH, as zards,	n sbestos etc.)	, beryll	ium, ir	ritant	s, other		belov conce of site	e regar	ding handlie.: Origin	rease provine any auditional actions below regarding handling and/or disposal concerns. (i.e.: Origin of sample(s), type of site collected from, odd matrices, etc.)	
Cd = Cadmium Ag= Silver Tr = Chromium MR= Misc. RCRA metals Db = Lead	TSCA Regulated PCB = Polychlorinated hinhenyls															1.1					
	Utpuvuya																				200

Pagiect # 175569434		T T		hors	aboratorias -	01100							2040	Savage	2040 Savage Road			-
Ouote #:		gel.com	Cher	nistry Radi	ochemistry	Chemistry Radiochemistry Radiobioassay Specialty Analytics	ıy I Specia	ulty Analy	tics				Charle	ston,	Charleston, SC 29407	_		
COC Number (1):		Chain o	of CL	stody a	ind Anal	Custody and Analytical Request	quest	,					Phone	: (843)	Phone: (843) 556-8171	71		
P O' Number:	GEL Work Order Number:			GEL Pro	ject Mana	GEL Project Manager: Erin Trent	Trent						Fax: (343) 7	Fax: (843) 766-1178			
CHent Name: Georgia Power		Phone # (937-344-6533)	-344-65	33)		3	le	Analysis Requested (5)	sis Req	uested		III in t	he nu	nber	of contain	(Fill in the number of containers for each test)	ach test)	
Project/Site Name: Plant Arkwright Ash Pond 1		Fax:			S	Should this	-83%	IN	IN			IN	IN	IN	IN	\ \	< Preservative Type (6)	
Agiress: 241 Ralph McGill Blvd SE, Atlanta, GA 30308	30308					sample be	ainers	20000		ро	VV/45-33		pq					
Collected By: Bryan Pennell	Send Results To: jabraham@southernco.com EDD@brian.steele@stantec.com edgar.smith@stantec.com	hernco.com ED mith@stantec.c	D@stan	stantec.com	л)		ot cont	10000	.00£) y	Metho	Fl, Sulfa		228 Cm			,	Comments	
Sample ID * For composites - indicate start and stop date/time	*Date Collected time (mm-dd-yy)	*Time Collected (Military)	9	Field Si	Sample Matrix (4) Radioactive	yes, please sul isotopic info.) (7) Known or possible Haza	Total number	I .qqA) gA	Metals App.	.R2. TDS (SM D\$42	Anions (Cl, 300.0 Rev	Metals A	KAD 226-2	Mercury	Metals Al Na, Fe, Mr	(task	task_code: ARK-CCR- ASSMT-2023S1)	<u>.</u>
ARK-AP1PZ-3-20230613	6/13/2023	1308 N	Z		N	OT	9	×		×	×	×	×	×		pH: 5.	5.57	
ARK-AP1-EB-01-20230613	6/13/2023	1405 EB	B	M	Z	TO	9	×		×	×	×	X	×		机发音		
ARK-AP1-FB-01-20230613	6/13/2023	1420 FB	N B	*	z	OT	9	×		×	×			×				
ARK-AP1-FD-01-20230613	6/13/2023	E	FD N	MD .	Z 3	OT	9	×		×	×			×		200		
					1		1003											
			1		7	V										10 mg		
				U	3	1												
						~			+									
							1635						1					
															1			
5	Chain of Custody Signatures					TA	TAT Requested:	ested:	Normal:	al:	Rush:	j ji	X	Specify:		nS)	(Subject to Surcharge)	
Relinquished By (Signed) Print Name	Date Received by (signed)		Print Name	Date		Fax Re	Fax Results: [] Yes] Yes	[X]No	92								
1914 BRYAN GENNEW	(-13-23 1 3AM)	1 (2)	141	1 82	1000	Select	Select Deliverable: [] C of A	ble: []	CofA	[] QC Summary	Sum	nary] le] level 1	[X] Level 2		[] Level 3 [] Level 4	
2	2)				Additio	Additional Remarks	ıarks:										
3	3					For La	For Lab Receiving Use Only: Custody Seal Intact? [] Yes	ving Us	e Only:	Custoc	ly Seal	Intaci	.? []		[] No	Cooler Temp:	Э°:	
> For sample shipping and delivery details, see Sample Receipt & Review form (SRR.)	unple Receipt & Review form	(SRR.)			Sam	Sample Collection Time Zone: [X] Eastern	on Time	Zone:	[X]E	astern	[]P	[] Pacific		[] Central	Total I	[] Mountain	[] Other:	
 Chain of Custody Number = Client Determined QC Codes: N = Normal Sample, TB = Trip Blank, FD = Field Duplicate, EB = Equipment Blank, MS = Matrix Spike Sample, MSD = Matrix Spike Duplicate Sample, G = Grab, C = Composite Sample, FO inquid matrices, indicate with a - Y - for yes the sample was field filtered or - N - for sample was not field Filtered. 	id Duplicate, EB = Equipment Blank, es the sample was field filtered or - N	MS = Matrix Spil	ce Sample	MSD = Mai tered.	rrix Spike Du	plicate Sample	G = Grab	, C = Con	posite									
4-) Main'x Codes, DW=Drinking water, GW=Groundwater, SW=Surface water, WW=Waste, WB=Waster, U=Urine, F=Freeai, NB=Nastar, Codes, DM=Nativeal method requested (i.e. 8260B, 6010B/7470A) and number of containers provided for each (i.e. 8260B - 3, 6010B/7470A - 1). 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).	v=Surface water, ww=waste water, e. 8260B, 6010B/7470A) and number d. SH = Sodium Hydroxide, SA = Sulf	w=water, ML=r of containers pro- uric Acid, AA = /	vitse Liqui vided for e Ascorbic A	ach (i.e. 826 cid. HX = H	SD=Sedimen OB - 3, 60101 exane, ST = 5	out, SD-Sedimont, 3L-Sludge, SS-Solid Wasic, O=Oli, F=Filler, F=Wipe, U=Urin 8260B - 3, 6010B/7470A - 1). = Hexane, ST = Sodium Thiosulfate, If no preservative is added = leave field blank	SS=Solid v	vaste, U= preservat	OII, F=FI	iter, F=w ed = leave	ipe, U=t	Jrine, Fa	=Fecal,	N=Nasa	_			
7.) KNOWN OR POSSIBLE HAZARDS	Characteristic Hazards	Listed Waste	aste			Other								I	lease pro	ovide any	Please provide any additional details	36
RCRA Metals As = Arsenic Hg= Mercury Ba = Barium Se= Selenium Cd = Cadmium Ag= Silver Cr = Chromium MR= Misc. RCRA metals Pb = Lead	FL = Flammable/Ignitable CO = Corrosive RE = Reactive TSCA Regulated PCB = Polychlorinated biphenyls	LW= Listed W (F,K,P and U-l) Waste code(s):	ed Waste d U-listea fe(s):	LW= Listed Waste (F,K,P and U-listed wastes.) Waste code(s):		OT= Other / (i.e.: High/lo misc. health Description:	OT= Other / Unknown (i.e.: High/low pH, asbestos, beryllium, irritants, other misc. health hazards, etc.) Description:	nknown pH, asb zards, e	estos, b	eryllium	ı, irrite	unts, o	ther	a 2 0,	elow reg oncerns. f site coll	arding ha (i.e.: Ori, lected fron	below regarding handling and/or disposal concerns. (i.e.: Origin of sample(s), type of site collected from, odd matrices, etc.)	al
		*																

Laboratories LLC SAMPLE RECEIPT & REVIEW FORM SDG/AR/COC/Work Order: (025988 / 625 Client: GPCC Received By: SNS Date Received: Circle Applicable: FedEx Express FedEx Ground UPS Field Services Courier Other Carrier and Tracking Number *If Net Counts > 100cpm on samples not marked "radioactive", contact the Radiation Safety Group for further investigation. Yes ŝ Suspected Hazard Information UN#: Hazard Class Shipped: If UN2910, Is the Radioactive Shipment Survey Compliant? Yes___No___ A)Shipped as a DOT Hazardous? COC notation or radioactive stickers on containers equal client designation. B) Did the client designate the samples are to be received as radioactive? Maximum Net Counts Observed* (Observed Counts - Area Background Counts): CPM\ mR/Hr C) Did the RSO classify the samples as Classified as: Rad 1 Rad 2 Rad 3 radioactive? COC notation or hazard labels on containers equal client designation. D) Did the client designate samples are hazardous? If D or E is yes, select Hazards below. RCRA Asbestos Beryllium Foreign Soil PCB's Flammable E) Did the RSO identify possible hazards? Comments/Qualifiers (Required for Non-Conforming Items) Yes ž Sample Receipt Criteria Circle Applicable: Seals broken Damaged container Leaking container Other (describe) Shipping containers received intact and 1 Circle Applicable: Client contacted and provided COC COC created upon receipt Chain of custody documents included 2 with shipment? Preservation Method Wet lee Jee Packs Dry ice None Other: TEMP:_ Samples requiring cold preservation *all temperatures are recorded in Celsius within $(0 \le 6 \text{ deg. C})$?* Temperature Device Serial #: IR1-23 Daily check performed and passed on IR Secondary Temperature Device Serial # (If Applicable): temperature gun? Circle Applicable: Scals broken Damaged container Leaking container Other (describe) Sample containers intact and sealed? Sample ID's and Containers Affected: Samples requiring chemical preservation 6 If Preservation added, Lotif: at proper pH? If Yes, are Encores or Soil Kits present for solids 7 Yes No NA (If yes, take to VOA Freezer) Do liquid VOA vials contain acid preservation? Yes No NA (If unknown, select No) Do any samples require Volatile Are liquid VOA vials free of headspace? Yes___ No__ NA_ 7 Analysis? Sample ID's and containers affected: ID's and tests affected: Samples received within holding time? 8 ID's and containers affected: Sample ID's on COC match ID's on 9 Circle Applicable: No dates on containers No times on containers COC missing info Other (describe) Date & time on COC match date & time 10 on bottles? Circle Applicable: No container count on COC Other (describe) Number of containers received match 11 number indicated on COC? Are sample containers identifiable as 12 GEL provided by use of GEL labels? Circle Applicable: Not relinquished Other (describe) COC form is properly signed in relinquished/received sections? Comments (Use Continuation Form if needed):

PM (or PMA) review; Initials Mg Date 615 23 Page 1 of 1

List of current GEL Certifications as of 06 July 2023

State	Certification
Alabama	42200
Alaska	17-018
Alaska Drinking Water	SC00012
Arkansas	88-0651
CLIA	42D0904046
California	2940
Colorado	SC00012
Connecticut	PH-0169
DoD ELAP/ ISO17025 A2LA	2567.01
Florida NELAP	E87156
Foreign Soils Permit	P330-15-00283, P330-15-00253
Georgia	SC00012
Georgia SDWA	967
Hawaii	SC00012
Idaho	SC00012
Illinois NELAP	200029
Indiana	C-SC-01
Kansas NELAP	E-10332
Kentucky SDWA	90129
Kentucky Wastewater	90129
Louisiana Drinking Water	LA024
Louisiana NELAP	03046 (AI33904)
Maine	2019020
Maryland	270
Massachusetts	M-SC012
Massachusetts PFAS Approv	Letter
Michigan	9976
Mississippi	SC00012
Nebraska	NE-OS-26-13
Nevada	SC000122023-4
New Hampshire NELAP	2054
New Jersey NELAP	SC002
New Mexico	SC00012
New York NELAP	11501
North Carolina	233
North Carolina SDWA	45709
North Dakota	R-158
Oklahoma	2022-160
Pennsylvania NELAP	68-00485
Puerto Rico	SC00012
S. Carolina Radiochem	10120002
Sanitation Districts of L	9255651
South Carolina Chemistry	10120001
Tennessee	TN 02934
Texas NELAP	T104704235-22-20
Utah NELAP	SC000122022-37
Vermont	VT87156
Virginia NELAP	460202
Washington	C780

List of current GEL Certifications as of 06 July 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 SC00012
Illinois NELAP	200029
Indiana	C-SC-01
Kansas NELAP	E-10332
Kansas NELAT 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



a member of The GEL Group INC

October 23, 2023

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

Re: Arkwright CCR Groundwater Compliance AP1

Work Order: 640869

Dear Joju Abraham:

GEL Laboratories, LLC (GEL) appreciates the opportunity to provide the enclosed analytical results for the sample(s) we received on October 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
640869001	ARK-AP1GWA-1	Ground Water	09/10/23 13:45	11/10/23 15:28
640869002	ARK-AP1-FB-01	Ground Water	09/10/23 14:05	11/10/23 15:28
640869003	ARK-AP1GWA-2	Ground Water	09/10/23 14:30	11/10/23 15:28
640869004	ARK-AP1-EB-01	Ground Water	09/10/23 15:00	11/10/23 15:28
640869005	ARK-AP1PZ-1	Ground Water	09/10/23 16:20	11/10/23 15:28
640869006	ARK-AP1PZ-2	Ground Water	09/10/23 17:00	11/10/23 15:28
640869007	ARK-AP1-FD-01	Ground Water	09/10/23 00:00	11/10/23 15:28
640869008	ARK-AP1PZ-4	Ground Water	10/10/23 09:10	11/10/23 15:28
640869009	ARK-AP1-FB-02	Ground Water	10/10/23 09:30	11/10/23 15:28
640869010	ARK-AP1PZ-3	Ground Water	10/10/23 09:30	11/10/23 15:28
640869011	ARK-AP1PZ-8	Ground Water	10/10/23 11:55	11/10/23 15:28
640869012	ARK-AP1PZ-5	Ground Water	10/10/23 11:20	11/10/23 15:28
640869013	ARK-AP1-EB-02	Ground Water	10/10/23 12:10	11/10/23 15:28
640869014	ARK-AP1PZ-7	Ground Water	10/10/23 13:50	11/10/23 15:28
640869015	ARK-AP1PZ-10	Ground Water	10/10/23 14:20	11/10/23 15:28
640869016	ARK-AP1PZ-11	Ground Water	10/10/23 16:15	11/10/23 15:28



640869017	ARK-AP1-FD-02	Ground Water	10/10/23 00:00	11/10/23 15:28
640869018	ARK-AP1PZ-9	Ground Water	11/10/23 08:20	11/10/23 15:28

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	12-OCT-2023
SW846 7470A Pro	ep 12-OCT-2023

Analysis Methods and Analysis Dates

Method	Run Date ID
EPA 300.0	13-OCT-2023
EPA 300.0	14-OCT-2023
SM 2540C	12-OCT-2023
SM 2540C	13-OCT-2023
SW846 3005A/6020B	14-OCT-2023
SW846 3005A/6020B	15-OCT-2023
SW846 3005A/6020B	16-OCT-2023
SW846 7470A	13-OCT-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,

Amanda Turner for

Erin Trent

Project Manager

Purchase Order: GPC82177-0005

Enclosures

Page 3 of 60 SDG: 640869

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

Certificate of Analysis Report for

GPCC001 Georgia Power Company Client SDG: 640869 GEL Work Order: 640869

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 Metals--The Matrix spike sample recovery is not within specified control limits
- 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	manda	len		

Page 4 of 60 SDG: 640869

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

Certificate of Analysis

Report Date: October 23, 2023

GPCC00100

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

Atlanta, Georgia 30308

Contact: Joju Abraham

Project: Arkwright CCR Groundwater ComplianceAP1

Client Sample ID: ARK-AP1GWA-1

Sample ID: 640869001

Matrix: WG

Collect Date: 09-OCT-23 13:45
Receive Date: 11-OCT-23
Collector: Client

ICP-MS 3005A PREP

869001 Client ID: GPCC001

Project:

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analy	st Date	Time	Batch	Method
Ion Chromatography												
EPA 300.0 Anions Lic	quid "As Rece	ived"										
Chloride	•	1.77	0.335	1.00	mg/L		5	LXA2	10/13/23	0209	2507800	1
Sulfate		58.3	0.665	2.00	mg/L		5					
Fluoride		0.426	0.0330	0.100	mg/L		1	LXA2	10/13/23	2017	2507800	2
Mercury Analysis-CV	AA											
7470 Cold Vapor Mer	cury, Liquid ".	As Received"										
Mercury	U	ND	0.0000670	0.000200	mg/L	1.00	1	JP2	10/13/23	1200	2507487	3
Metals Analysis-ICP-I	MS											
SW846 3005A/6020B	"As Received	l"										
Antimony	U	ND	0.00100	0.00300	mg/L	1.00	1	PRB	10/14/23	1441	2507328	4
Barium		0.0609	0.000670	0.00400	mg/L	1.00	1					
Beryllium		0.00187	0.000200	0.000500	mg/L	1.00	1					
Cadmium	J	0.000410	0.000300	0.00100	mg/L	1.00	1					
Calcium		19.3	0.0800	0.200	mg/L	1.00	1					
Chromium	J	0.00462	0.00300	0.0100	mg/L	1.00	1					
Cobalt		0.00672	0.000300	0.00100	mg/L	1.00	1					
Lead	U	ND	0.000500	0.00200	mg/L	1.00	1					
Lithium	J	0.00944	0.00300	0.0100	mg/L	1.00	1					
Molybdenum	U	ND	0.000200	0.00100	mg/L	1.00	1					
Selenium	J	0.00299	0.00150	0.00500	mg/L	1.00	1					
Thallium	U	ND	0.000600	0.00200	mg/L	1.00	1					
Arsenic	J	0.00219	0.00200	0.00500	mg/L	1.00	1	PRB	10/15/23	1550	2507328	5
Boron		0.108	0.00520	0.0150	mg/L	1.00	1	PRB	10/16/23	1028	2507328	6
Solids Analysis												
SM2540C Dissolved S	Solids "As Rec	ceived"										
Total Dissolved Solids		139	2.38	10.0	mg/L			CH6	10/12/23	1323	2507350	7
The following Prep M	ethods were p	erformed:										
Method	Descriptio	n		Analyst	Date	-	Гim	e Pr	ep Batch			
SW846 7470A Prep		Mercury Prep Liquid		EK1	10/12/23	1	1120	250	07486			
GTT10.4.5.200.5.4	TCD 140 200	* . DD TD		ap	10/10/00			~	2000			

SD

10/12/23

1525

2507327

Page 5 of 60 SDG: 640869

SW846 3005A

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

Certificate of Analysis

Report Date: October 23, 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 ComplianceAP1

Client Sample ID: ARK-AP1GWA-1 Project: GPCC00100 Sample ID: 640869001 Client ID: GPCC001

Parameter	Qualifier Result	DL	RL	Units Pl	F DF Analyst Date Time Batch Method
The following Analytic	cal Methods were performed:				
Method	Description			Ana	lyst Comments
1	EPA 300.0				
2	EPA 300.0				
3	SW846 7470A				
4	SW846 3005A/6020B				
5	SW846 3005A/6020B				
6	SW846 3005A/6020B				
7	SM 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

Page 6 of 60 SDG: 640869

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

Certificate of Analysis

Project:

Client ID:

Report Date: October 23, 2023

GPCC00100

GPCC001

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

Atlanta, Georgia 30308

Contact: Joju Abraham

Project: Arkwright CCR Groundwater ComplianceAP1

Client Sample ID: ARK-AP1-FB-01

Sample ID: 640869002

Matrix: WQ

Collect Date: 09-OCT-23 14:05 Receive Date: 11-OCT-23

EPA 7470A Mercury Prep Liquid

Collector: Client

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analy	st Date	Time Batch	Method
Ion Chromatography											
EPA 300.0 Anions Liq	uid "As Recei	ved"									
Chloride	-	0.213	0.0670	0.200	mg/L		1	LXA2	10/13/23	0342 2507800	1
Fluoride	U	ND	0.0330	0.100	mg/L		1				
Sulfate	U	ND	0.133	0.400	mg/L		1				
Mercury Analysis-CV	AA										
7470 Cold Vapor Merc	cury, Liquid "A	As Received"									
Mercury	U	ND	0.0000670	0.000200	mg/L	1.00	1	JP2	10/13/23	1201 2507487	2
Metals Analysis-ICP-N	МS										
SW846 3005A/6020B		"									
Antimony	U	ND	0.00100	0.00300	mg/L	1.00	1	PRB	10/14/23	1506 2507328	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				
Boron	U	ND	0.00520	0.0150	mg/L	1.00	1	PRB	10/16/23	1041 2507328	4
Arsenic	J	0.00231	0.00200	0.00500	mg/L	1.00	1	PRB	10/15/23	1604 2507328	5
Solids Analysis											
SM2540C Dissolved S	solids "As Rec	eived"									
Total Dissolved Solids	U	ND	2.38	10.0	mg/L			CH6	10/12/23	1323 2507350	6
The following Prep Mo	ethods were pe	erformed:									
Method	Description	1		Analyst	Date	,	Гim	e Pr	ep Batch		
SW846 3005A	ICP-MS 3005	SA PREP		SD	10/12/23		1525	250	07327		

EK1

10/12/23

1120

2507486

Page 7 of 60 SDG: 640869

SW846 7470A Prep

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

Certificate of Analysis

Report Date: October 23, 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 ComplianceAP1

Client Sample ID: ARK-AP1-FB-01 Project: GPCC00100 Sample ID: 640869002 Client ID: GPCC001

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

Notes:

Column headers are defined as follows:

DF: Dilution Factor 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

Page 8 of 60 SDG: 640869

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

Certificate of Analysis

Report Date: October 23, 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 ComplianceAP1

Client Sample ID: ARK-AP1GWA-2

Sample ID: 640869003

Matrix: WG

Collect Date: 09-OCT-23 14:30 Receive Date: 11-OCT-23 Collector: Client

EPA 7470A Mercury Prep Liquid

ICP-MS 3005A PREP

Project: GPCC00100 Client ID: GPCC001

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analy	st Date	Time	Batch	Method
Ion Chromatography												
EPA 300.0 Anions Liqu	uid "As Recei	ved"										
Chloride		1.81	0.0670	0.200	mg/L		1	LXA2	10/13/23	0413	2507800	1
Fluoride		0.225	0.0330	0.100	mg/L		1					
Sulfate		2.17	0.133	0.400	mg/L		1					
Mercury Analysis-CVA	λA											
7470 Cold Vapor Merci	ury, Liquid "A	As Received"										
Mercury	U	ND	0.0000670	0.000200	mg/L	1.00	1	JP2	10/13/23	1203	2507487	2
Metals Analysis-ICP-M	IS											
SW846 3005A/6020B "	'As Received	"										
Boron		0.0734	0.00520	0.0150	mg/L	1.00	1	PRB	10/16/23	1043	2507328	3
Arsenic	J	0.00255	0.00200	0.00500	mg/L	1.00	1	PRB	10/15/23	1606	2507328	4
Antimony	U	ND	0.00100	0.00300	mg/L	1.00	1	PRB	10/14/23	1510	2507328	5
Barium		0.0580	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		6.91	0.0800	0.200	mg/L	1.00	1					
Chromium	J	0.00340	0.00300	0.0100	mg/L	1.00	1					
Cobalt		0.0112	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					
Solids Analysis												
SM2540C Dissolved So	olids "As Rec	eived"										
Total Dissolved Solids		52.0	2.38	10.0	mg/L			CH6	10/12/23	1323	2507350	6
The following Prep Me	thods were pe	erformed:										
Method	Description	1		Analyst	Date	-	Гim	e Pr	ep Batch			

EK1

SD

10/12/23

10/12/23

1120

1525

2507486

2507327

SW846 7470A Prep

SW846 3005A

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

Certificate of Analysis

Report Date: October 23, 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 ComplianceAP1

Client Sample ID: ARK-AP1GWA-2 Project: GPCC00100 Sample ID: 640869003 Client ID: GPCC001

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

Notes:

Column headers are defined as follows:

DF: Dilution Factor 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

Page 10 of 60 SDG: 640869

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

Certificate of Analysis

Project:

Client ID:

Report Date: October 23, 2023

GPCC00100

GPCC001

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

Atlanta, Georgia 30308

Contact: Joju Abraham

Project: Arkwright CCR Groundwater ComplianceAP1

Client Sample ID: ARK-AP1-EB-01 Sample ID: 640869004

Matrix: WQ

Collect Date: 09-OCT-23 15:00 Receive Date: 11-OCT-23

ICP-MS 3005A PREP

EPA 7470A Mercury Prep Liquid

Collector: Client

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analy	st Date	Time	Batch	Method
Ion Chromatography												
EPA 300.0 Anions Lie	quid "As Recei	ved"										
Chloride	•	0.364	0.0670	0.200	mg/L		1	LXA2	10/13/23	0546	2507800	1
Fluoride	U	ND	0.0330	0.100	mg/L		1					
Sulfate	U	ND	0.133	0.400	mg/L		1					
Mercury Analysis-CV	'AA											
7470 Cold Vapor Mer	cury, Liquid "A	As Received"										
Mercury	U	ND	0.0000670	0.000200	mg/L	1.00	1	JP2	10/13/23	1204	2507487	2
Metals Analysis-ICP-	MS				C							
SW846 3005A/6020B		"										
Arsenic	J	0.00243	0.00200	0.00500	mg/L	1.00	1	PRB	10/15/23	1608	2507328	3
Boron	U	ND	0.00520	0.0150	mg/L	1.00	1	PRB	10/16/23	1045	2507328	4
Antimony	U	ND	0.00100	0.00300	mg/L	1.00	1	PRB	10/14/23	1513	2507328	5
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					
Solids Analysis												
SM2540C Dissolved S	Solids "As Rec	eived"										
Total Dissolved Solids	U	ND	2.38	10.0	mg/L			CH6	10/12/23	1423	2507357	6
The following Prep M	lethods were pe	erformed:										
Method	Description	n		Analyst	Date	,	Tim	e Pr	ep Batch			

SD

EK1

10/12/23

10/12/23

1525

1120

2507327

2507486

Page 11 of 60 SDG: 640869

SW846 3005A

SW846 7470A Prep

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

Certificate of Analysis

Report Date: October 23, 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 ComplianceAP1

Client Sample ID: ARK-AP1-EB-01 Project: GPCC00100 Sample ID: 640869004 Client ID: GPCC001

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

Notes:

Column headers are defined as follows:

DF: Dilution Factor 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

Page 12 of 60 SDG: 640869

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

Certificate of Analysis

Report Date: October 23, 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 ComplianceAP1

Client Sample ID: ARK-AP1PZ-1 Sample ID: 640869005

Matrix: WG

Collect Date: 09-OCT-23 16:20 Receive Date: 11-OCT-23 Collector: Client

ICP-MS 3005A PREP

Project: GPCC00100 Client ID: GPCC001

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analy	st Date	Time	Batch	Method
Ion Chromatography												
EPA 300.0 Anions Liqu	id "As Recei	ived"										
Fluoride		0.279	0.0330	0.100	mg/L		1	LXA2	10/13/23	2149	2507800	1
Chloride		3.13	0.670	2.00	mg/L		10	LXA2	10/13/23	0718	2507800	2
Sulfate		105	1.33	4.00	mg/L		10					
Mercury Analysis-CVA	A											
7470 Cold Vapor Mercu	ary, Liquid ".	As Received"										
Mercury	U	ND	0.0000670	0.000200	mg/L	1.00	1	JP2	10/13/23	1206	2507487	3
Metals Analysis-ICP-M	S				Ü							
SW846 3005A/6020B ".		"										
Arsenic	J	0.00222	0.00200	0.00500	mg/L	1.00	1	PRB	10/15/23	1610	2507328	4
Antimony	U	ND	0.00100	0.00300	mg/L	1.00	1	PRB	10/14/23	1517	2507328	5
Barium		0.0422	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		33.2	0.0800	0.200	mg/L	1.00	1					
Chromium	U	ND	0.00300	0.0100	mg/L	1.00	1					
Cobalt	J	0.000610	0.000300	0.00100	mg/L	1.00	1					
Lead	U	ND	0.000500	0.00200	mg/L	1.00	1					
Lithium	J	0.00408	0.00300	0.0100	mg/L	1.00	1					
Molybdenum	J	0.000437	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					
Boron		0.355	0.0260	0.0750	mg/L	1.00	5	PRB	10/15/23	2114	2507328	6
Solids Analysis												
SM2540C Dissolved So	olids "As Rec	eived"										
Total Dissolved Solids		211	2.38	10.0	mg/L			CH6	10/12/23	1423	2507357	7
The following Prep Met	thods were p	erformed:										
Method	Description	n		Analyst	Date	-	Γim	e Pr	ep Batch			
SW846 7470A Prep	EPA 7470A I	Mercury Prep Liquid		EK1	10/12/23		1120	250	07486			

SD

10/12/23

1525

2507327

Page 13 of 60 SDG: 640869

SW846 3005A

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

Certificate of Analysis

Report Date: October 23, 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 ComplianceAP1

Client Sample ID: ARK-AP1PZ-1 Project: GPCC00100 Sample ID: 640869005 Client ID: GPCC001

Parameter	Qualifier	Result	DL	RL	Units	PF	DF Analyst Date	Time Batch	Method
The following Analytic	cal Methods w	vere performed:							
Method	Description					Analys	t Comments		
1	EPA 300.0								
2	EPA 300.0								
3	SW846 7470A	L							
4	SW846 3005A	/6020B							
5	SW846 3005A	/6020B							
6	SW846 3005A	/6020B							
7	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

Page 14 of 60 SDG: 640869

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

Certificate of Analysis

Report Date: October 23, 2023

GPCC00100

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

Atlanta, Georgia 30308

Contact: Joju Abraham

Project: Arkwright CCR Groundwater ComplianceAP1

Client Sample ID: ARK-AP1PZ-2 Sample ID:

Matrix: WG

Collect Date: 09-OCT-23 17:00 Receive Date: 11-OCT-23 Collector: Client

Project: 640869006 Client ID: GPCC001

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analy	st Date	Time Batch	Method
Ion Chromatography											
EPA 300.0 Anions Liqu	uid "As Recei	ved"									
Sulfate		801	6.65	20.0	mg/L		50	LXA2	10/13/23	0749 2507800	1
Chloride		2.98	0.134	0.400	mg/L		2	LXA2	10/13/23	2220 2507800	2
Fluoride		0.262	0.0660	0.200	mg/L		2				
Mercury Analysis-CVA	λA										
7470 Cold Vapor Merci	ury, Liquid "A	As Received"									
Mercury	U	ND	0.0000670	0.000200	mg/L	1.00	1	JP2	10/13/23	1208 2507487	3
Metals Analysis-ICP-M	IS										
SW846 3005A/6020B "	'As Received	"									
Antimony	U	ND	0.00100	0.00300	mg/L	1.00	1	PRB	10/14/23	1520 2507328	4
Barium		0.0300	0.000670	0.00400	mg/L	1.00	1				
Beryllium	U	ND	0.000200	0.000500	mg/L	1.00	1				
Cadmium	J	0.000689	0.000300	0.00100	mg/L	1.00	1				
Chromium	U	ND	0.00300	0.0100	mg/L	1.00	1				
Cobalt		0.169	0.000300	0.00100	mg/L	1.00	1				
Lead	U	ND	0.000500	0.00200	mg/L	1.00	1				
Lithium		0.0214	0.00300	0.0100	mg/L	1.00	1				
Molybdenum	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				
Boron		0.470	0.0260	0.0750	mg/L	1.00	5	PRB	10/15/23	2116 2507328	5
Calcium		205	0.400	1.00	mg/L	1.00	5				
Arsenic	U	ND	0.00200	0.00500	mg/L	1.00	1	PRB	10/15/23	1612 2507328	6
Solids Analysis											
SM2540C Dissolved So	olids "As Rec	eived"									
Total Dissolved Solids		1170	4.76	20.0	mg/L			CH6	10/12/23	1423 2507357	7
The following Prep Me	thods were pe	erformed:									
Method	Description	n		Analyst	Date	-	Гim	e Pr	ep Batch		

SW846 3005A ICP-MS 3005A PREP SD 10/12/23 1525 2507327 EPA 7470A Mercury Prep Liquid SW846 7470A Prep EK1 10/12/23 1120 2507486

Page 15 of 60 SDG: 640869

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

Certificate of Analysis

Report Date: October 23, 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 ComplianceAP1

Client Sample ID: ARK-AP1PZ-2 Project: GPCC00100 Sample ID: 640869006 Client ID: GPCC001

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

Page 16 of 60 SDG: 640869

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

Certificate of Analysis

Report Date: October 23, 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 ComplianceAP1

Client Sample ID: ARK-AP1-FD-01

Sample ID: 640869007

Matrix: WG

Collect Date: 09-OCT-23 00:00
Receive Date: 11-OCT-23
Collector: Client

EPA 7470A Mercury Prep Liquid

Project: GPCC00100 Client ID: GPCC001

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analy	st Date	Time	Batch	Method
Ion Chromatography												
EPA 300.0 Anions Liqu	uid "As Recei	ived"										
Sulfate		804	13.3	40.0	mg/L		100	LXA2	10/13/23	0820	2507800	1
Chloride		3.06	0.134	0.400	mg/L		2	LXA2	10/13/23	2251	2507800	2
Fluoride		0.283	0.0660	0.200	mg/L		2					
Mercury Analysis-CVA	λA											
7470 Cold Vapor Merc	ury, Liquid ".	As Received"										
Mercury	U	ND	0.0000670	0.000200	mg/L	1.00	1	JP2	10/13/23	1213	2507487	3
Metals Analysis-ICP-M	IS											
SW846 3005A/6020B '		"										
Antimony	U	ND	0.00100	0.00300	mg/L	1.00	1	PRB	10/14/23	1524	2507328	4
Barium		0.0313	0.000670	0.00400	mg/L	1.00	1					
Beryllium	U	ND	0.000200	0.000500	mg/L	1.00	1					
Cadmium	J	0.000635	0.000300	0.00100	mg/L	1.00	1					
Chromium	U	ND	0.00300	0.0100	mg/L	1.00	1					
Cobalt		0.192	0.000300	0.00100	mg/L	1.00	1					
Lead	U	ND	0.000500	0.00200	mg/L	1.00	1					
Lithium		0.0238	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					
Arsenic	U	ND	0.00200	0.00500	mg/L	1.00	1	PRB	10/15/23	1614	2507328	5
Boron		0.492	0.0260	0.0750	mg/L	1.00	5	PRB	10/15/23	2118	2507328	6
Calcium		218	0.400	1.00	mg/L	1.00	5					
Solids Analysis												
SM2540C Dissolved So	olids "As Rec	eived"										
Total Dissolved Solids		1210	4.76	20.0	mg/L			CH6	10/12/23	1423	2507357	7
The following Prep Me	thods were pe	erformed:										
Method	Description	n		Analyst	Date	,	Гimе	Pr	ep Batch			
SW846 3005A	ICP-MS 3005	5A PREP		SD	10/12/23		1525	250	07327			

EK1

10/12/23

1120

2507486

Page 17 of 60 SDG: 640869

SW846 7470A Prep

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

Certificate of Analysis

Report Date: October 23, 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 ComplianceAP1

Client Sample ID: ARK-AP1-FD-01 Project: GPCC00100 Sample ID: 640869007 Client ID: GPCC001

Parameter	Qualifier	Result	DL	RL	Units	PF	DF Analyst Date	Time Batch	Method
The following Analytic	cal Methods w	vere performed:							
Method	Description					Analys	t Comments		
1	EPA 300.0								
2	EPA 300.0								
3	SW846 7470A	L							
4	SW846 3005A	/6020B							
5	SW846 3005A	/6020B							
6	SW846 3005A	/6020B							
7	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

Page 18 of 60 SDG: 640869

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

Certificate of Analysis

Report Date: October 23, 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 ComplianceAP1

Client Sample ID: ARK-AP1PZ-4 Sample ID: 640869008

Matrix: WG

Collect Date: 10-OCT-23 09:10
Receive Date: 11-OCT-23
Collector: Client

Project: GPCC00100 Client ID: GPCC001

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analy	st Date	Time Batch	Method
Ion Chromatography											
EPA 300.0 Anions Lic	quid "As Recei	ived"									
Chloride	•	5.59	0.335	1.00	mg/L		5	LXA2	10/13/23	2321 2507800	1
Fluoride		0.565	0.165	0.500	mg/L		5				
Sulfate		1370	26.6	80.0	mg/L		200	LXA2	10/13/23	0851 2507800	2
Mercury Analysis-CV	AA										
7470 Cold Vapor Mer	cury, Liquid ".	As Received"									
Mercury	U	ND	0.0000670	0.000200	mg/L	1.00	1	JP2	10/13/23	1214 2507487	3
Metals Analysis-ICP-N	MS				C						
SW846 3005A/6020B	"As Received	<u>l</u> "									
Arsenic	J	0.00302	0.00200	0.00500	mg/L	1.00	1	PRB	10/15/23	1616 2507328	4
Antimony	U	ND	0.00100	0.00300	mg/L	1.00	1	PRB	10/14/23	1528 2507328	5
Barium		0.0395	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	0.000518	0.000300	0.00100	mg/L	1.00	1				
Lead	U	ND	0.000500	0.00200	mg/L	1.00	1				
Lithium	J	0.00657	0.00300	0.0100	mg/L	1.00	1				
Molybdenum		0.00398	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				
Boron		4.02	0.130	0.375	mg/L	1.00	25	PRB	10/15/23	2120 2507328	6
Calcium		418	2.00	5.00	mg/L	1.00	25				
Solids Analysis											
SM2540C Dissolved S	Solids "As Rec	ceived"									
Total Dissolved Solids		2030	23.8	100	mg/L			CH6	10/12/23	1423 2507357	7
The following Prep M	ethods were p	erformed:									
Method	Descriptio	n		Analyst	Date	,	Time	e Pr	ep Batch		

 Method
 Description
 Analyst
 Date
 Time
 Prep Batch

 SW846 3005A
 ICP-MS 3005A PREP
 SD
 10/12/23
 1525
 2507327

 SW846 7470A Prep
 EPA 7470A Mercury Prep Liquid
 EK1
 10/12/23
 1120
 2507486

Page 19 of 60 SDG: 640869

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

Certificate of Analysis

Report Date: October 23, 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 ComplianceAP1

Client Sample ID: ARK-AP1PZ-4 Project: GPCC00100 Sample ID: 640869008 Client ID: GPCC001

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

Page 20 of 60 SDG: 640869

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

Certificate of Analysis

Report Date: October 23, 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 ComplianceAP1

Client Sample ID: ARK-AP1-FB-02

Sample ID: 640869009

Matrix: WQ

Collect Date: 10-OCT-23 09:30
Receive Date: 11-OCT-23
Collector: Client

EPA 7470A Mercury Prep Liquid

ICP-MS 3005A PREP

Project: GPCC00100 Client ID: GPCC001

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analy	st Date	Time B	atch	Method
Ion Chromatography												
EPA 300.0 Anions Liq	uid "As Recei	ved"										
Chloride	U	ND	0.0670	0.200	mg/L		1	LXA2	10/13/23	0922 250	07800	1
Fluoride	U	ND	0.0330	0.100	mg/L		1					
Sulfate	U	ND	0.133	0.400	mg/L		1					
Mercury Analysis-CV	AA											
7470 Cold Vapor Merc	cury, Liquid "A	As Received"										
Mercury	U	ND	0.0000670	0.000200	mg/L	1.00	1	JP2	10/13/23	1216 250	07487	2
Metals Analysis-ICP-N	ИS											
SW846 3005A/6020B	"As Received	"										
Antimony	U	ND	0.00100	0.00300	mg/L	1.00	1	PRB	10/14/23	1531 250	07328	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					
Boron	U	ND	0.00520	0.0150	mg/L	1.00	1	PRB	10/16/23	1046 250	07328	4
Arsenic	J	0.00204	0.00200	0.00500	mg/L	1.00	1	PRB	10/15/23	1622 250	07328	5
Solids Analysis												
SM2540C Dissolved S	olids "As Rec	eived"										
Total Dissolved Solids	U	ND	2.38	10.0	mg/L			CH6	10/12/23	1423 250	07357	6
The following Prep Me	ethods were pe	erformed:										
Method	Description	n		Analyst	Date	,	Time	e Pr	ep Batch			

EK1

SD

10/12/23

10/12/23

1120

1525

2507486

2507327

Page 21 of 60 SDG: 640869

SW846 7470A Prep

SW846 3005A

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

Certificate of Analysis

Report Date: October 23, 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 ComplianceAP1

Client Sample ID: ARK-AP1-FB-02 Project: GPCC00100 Sample ID: 640869009 Client ID: GPCC001

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

Notes:

Column headers are defined as follows:

DF: Dilution Factor 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

Page 22 of 60 SDG: 640869

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

Certificate of Analysis

Report Date: October 23, 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 ComplianceAP1

Client Sample ID: ARK-AP1PZ-3 Sample ID: 640869010

Matrix: WG

Collect Date: 10-OCT-23 09:30 Receive Date: 11-OCT-23 Collector: Client

Project: GPCC00100 Client ID: GPCC001

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analy	st Date	Time Batch	Method
Ion Chromatography											
EPA 300.0 Anions Lic	quid "As Recei	ved"									
Sulfate	1	1290	13.3	40.0	mg/L		100	LXA2	10/13/23	0952 250780) 1
Chloride		4.77	0.335	1.00	mg/L		5	LXA2	10/14/23	0054 250780) 2
Fluoride	U	ND	0.165	0.500	mg/L		5				
Mercury Analysis-CV	AA										
7470 Cold Vapor Mer	cury, Liquid "A	As Received"									
Mercury	U	ND	0.0000670	0.000200	mg/L	1.00	1	JP2	10/13/23	1218 250748	7 3
Metals Analysis-ICP-I	MS										
SW846 3005A/6020B	"As Received	"									
Antimony	U	ND	0.00100	0.00300	mg/L	1.00	1	PRB	10/14/23	1535 250732	3 4
Barium		0.0254	0.000670	0.00400	mg/L	1.00	1				
Beryllium	U	ND	0.000200	0.000500	mg/L	1.00	1				
Cadmium		0.00195	0.000300	0.00100	mg/L	1.00	1				
Chromium	U	ND	0.00300	0.0100	mg/L	1.00	1				
Cobalt		0.0639	0.000300	0.00100	mg/L	1.00	1				
Lead	U	ND	0.000500	0.00200	mg/L	1.00	1				
Lithium		0.0659	0.00300	0.0100	mg/L	1.00	1				
Molybdenum	J	0.000299	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				
Arsenic	U	ND	0.00200	0.00500	mg/L	1.00	1	PRB	10/15/23	1625 250732	3 5
Boron		1.71	0.104	0.300	mg/L	1.00	20	PRB	10/15/23	2126 250732	6
Calcium		434	1.60	4.00	mg/L	1.00	20				
Solids Analysis											
SM2540C Dissolved S	Solids "As Rec	eived"									
Total Dissolved Solids		1830	23.8	100	mg/L			CH6	10/12/23	1423 250735	7 7
The following Prep M	ethods were pe	erformed:									
Method	Description	n		Analyst	Date	-	Гіте	e Pr	ep Batch		
SW846 7470A Prep	EPA 7470A N	Mercury Prep Liquid		EK1	10/12/23	1	1120	250	07486		
SW846 3005A	ICP-MS 3005	SA PREP		SD	10/12/23	1	1525	250	07327		

Page 23 of 60 SDG: 640869

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

Certificate of Analysis

Report Date: October 23, 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 ComplianceAP1

Client Sample ID: ARK-AP1PZ-3 Project: GPCC00100 Sample ID: 640869010 Client ID: GPCC001

Parameter	Qualifier	Result	DL	RL	Units	PF	DF Analyst Date	Time Batch	Method
The following Analytic	cal Methods w	vere performed:							
Method	Description					Analys	t Comments		
1	EPA 300.0								
2	EPA 300.0								
3	SW846 7470A	.							
4	SW846 3005A	/6020B							
5	SW846 3005A	/6020B							
6	SW846 3005A	/6020B							
7	SM 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

Page 24 of 60 SDG: 640869

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

Certificate of Analysis

Report Date: October 23, 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 ComplianceAP1

Client Sample ID: ARK-AP1PZ-8 Sample ID: 640869011

Matrix: WG

Collect Date: 10-OCT-23 11:55
Receive Date: 11-OCT-23
Collector: Client

ICP-MS 3005A PREP

Project: GPCC00100 Client ID: GPCC001

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analy	st Date	Time	Batch	Method
Ion Chromatography												
EPA 300.0 Anions Liq	uid "As Recei	ved"										
Sulfate	L	680	13.3	40.0	mg/L		100	LXA2	10/13/23	1023	2507800	1
Chloride		2.72	0.134	0.400	mg/L		2	LXA2	10/14/23	0125	2507800	2
Fluoride		0.292	0.0660	0.200	mg/L		2					
Mercury Analysis-CV	AA											
7470 Cold Vapor Merc	cury, Liquid "A	As Received"										
Mercury	U	ND	0.0000670	0.000200	mg/L	1.00	1	JP2	10/13/23	1219	2507487	3
Metals Analysis-ICP-N	ИS				C							
SW846 3005A/6020B		"										
Boron		2.88	0.104	0.300	mg/L	1.00	20	PRB	10/15/23	2127	2507328	4
Calcium		311	1.60	4.00	mg/L	1.00						
Antimony	U	ND	0.00100	0.00300	mg/L	1.00	1	PRB	10/14/23	1546	2507328	5
Barium		0.0449	0.000670	0.00400	mg/L	1.00	1					
Beryllium	U	ND	0.000200	0.000500	mg/L	1.00	1					
Cadmium		0.00125	0.000300	0.00100	mg/L	1.00	1					
Chromium	U	ND	0.00300	0.0100	mg/L	1.00	1					
Cobalt		0.00118	0.000300	0.00100	mg/L	1.00	1					
Lead	U	ND	0.000500	0.00200	mg/L	1.00	1					
Lithium	J	0.00315	0.00300	0.0100	mg/L	1.00	1					
Molybdenum		0.729	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					
Arsenic	J	0.00326	0.00200	0.00500	mg/L	1.00	1	PRB	10/15/23	1627	2507328	6
Solids Analysis												
SM2540C Dissolved S	olids "As Rec	eived"										
Total Dissolved Solids		1370	4.76	20.0	mg/L			CH6	10/12/23	1423	2507357	7
The following Prep Me	ethods were pe	erformed:										
Method	Description	n		Analyst	Date	-	Гimе	Pro	ep Batch			
SW846 7470A Prep	EPA 7470A N	Mercury Prep Liquid		EK1	10/12/23	1	1120	250	07486			
Cadmium Chromium Cobalt Lead Lithium Molybdenum Selenium Thallium Arsenic Solids Analysis SM2540C Dissolved S Total Dissolved Solids The following Prep Med Method	U U J volids "As Recethods were perpendicular to the control of th	0.00125 ND 0.00118 ND 0.00315 0.729 ND ND 0.00326 eived" 1370 erformed:	0.000300 0.00300 0.000300 0.000500 0.00300 0.000200 0.00150 0.000600 0.00200	0.00100 0.0100 0.00100 0.00200 0.0100 0.00100 0.00500 0.00200 0.00500	mg/L mg/L mg/L mg/L mg/L mg/L mg/L mg/L	1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00	1 1 1 1 1 1 1 1 1 1	CH6	10/12/23 ep Batch			

SD

10/12/23

1525

2507327

Page 25 of 60 SDG: 640869

SW846 3005A

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

Certificate of Analysis

Report Date: October 23, 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 ComplianceAP1

Client Sample ID: ARK-AP1PZ-8 Project: GPCC00100 Sample ID: 640869011 Client ID: GPCC001

Parameter	Qualifier	Result	DL	RL	Units	PF	DF Analyst Date	Time Batch	Method
The following Analytic	cal Methods w	vere performed:							
Method	Description					Analys	t Comments		
1	EPA 300.0								
2	EPA 300.0								
3	SW846 7470A	.							
4	SW846 3005A	/6020B							
5	SW846 3005A	/6020B							
6	SW846 3005A	/6020B							
7	SM 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

Page 26 of 60 SDG: 640869

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

Certificate of Analysis

Report Date: October 23, 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 ComplianceAP1

Client Sample ID: ARK-AP1PZ-5 Sample ID: 640869012

Matrix: WG

Collect Date: 10-OCT-23 11:20 Receive Date: 11-OCT-23 Collector: Client

EPA 7470A Mercury Prep Liquid

Project: GPCC00100 Client ID: GPCC001

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analy	st Date	Time	Batch	Method
Ion Chromatography												
EPA 300.0 Anions Lie	quid "As Recei	ived"										
Sulfate	1	1970	26.6	80.0	mg/L		200	LXA2	10/13/23	1054	2507800	1
Chloride		7.01	0.335	1.00	mg/L		5	LXA2	10/14/23	0156	2507800	2
Fluoride	J	0.409	0.165	0.500	mg/L		5					
Mercury Analysis-CV	AA											
7470 Cold Vapor Mer	cury, Liquid "	As Received"										
Mercury	U	ND	0.0000670	0.000200	mg/L	1.00	1	JP2	10/13/23	1221	2507487	3
Metals Analysis-ICP-	MS				Ü							
SW846 3005A/6020B		"										
Arsenic	J	0.00493	0.00200	0.00500	mg/L	1.00	1	PRB	10/15/23	1629	2507328	4
Boron		7.16	0.520	1.50	mg/L	1.00	100	PRB	10/15/23	2129	2507328	5
Calcium		589	8.00	20.0	mg/L	1.00	100					
Antimony	U	ND	0.00100	0.00300	mg/L	1.00	1	PRB	10/14/23	1549	2507328	6
Barium		0.0362	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		0.0631	0.000300	0.00100	mg/L	1.00	1					
Lead	U	ND	0.000500	0.00200	mg/L	1.00	1					
Lithium		0.343	0.00300	0.0100	mg/L	1.00	1					
Molybdenum		0.0437	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					
Solids Analysis												
SM2540C Dissolved S	Solids "As Rec	eived"										
Total Dissolved Solids		3080	23.8	100	mg/L			CH6	10/12/23	1423	2507357	7
The following Prep M	ethods were po	erformed:										
Method	Description	n		Analyst	Date	-	Гimе	Pr	ep Batch			
SW846 3005A	ICP-MS 3005	5A PREP		SD	10/12/23	1	1525	250	07327			

EK1

10/12/23

1120

2507486

Page 27 of 60 SDG: 640869

SW846 7470A Prep

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

Certificate of Analysis

Report Date: October 23, 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 ComplianceAP1

Client Sample ID: ARK-AP1PZ-5 Project: GPCC00100 Sample ID: 640869012 Client ID: GPCC001

Parameter	Qualifier	Result	DL	RL	Units	PF	DF Analyst Date	Time Batch	Method
The following Analytic	al Methods w	vere performed:							
Method	Description				1	Analys	st Comments		
1	EPA 300.0								
2	EPA 300.0								
3	SW846 7470A								
4	SW846 3005A	/6020B							
5	SW846 3005A	/6020B							
6	SW846 3005A	/6020B							
7	SM 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

Page 28 of 60 SDG: 640869

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

Certificate of Analysis

Project:

Client ID:

Report Date: October 23, 2023

GPCC00100

GPCC001

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

Atlanta, Georgia 30308

Contact: Joju Abraham

Project: Arkwright CCR Groundwater Compliance AP1

Client Sample ID: ARK-AP1-EB-02

Sample ID: 640869013

Matrix: WQ

Collect Date: 10-OCT-23 12:10
Receive Date: 11-OCT-23
Collector: Client

RL Parameter **Oualifier** DL Units PF DF Analyst Date Time Batch Method Result Ion Chromatography EPA 300.0 Anions Liquid "As Received" Chloride 0.206 0.0670 0.200 mg/L LXA2 10/13/23 1125 2507800 1 Fluoride 0.0330 U ND 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 ND 0.0000670 0.000200 mg/L 1.00 1 JP2 10/13/23 1223 2507487 2 Metals Analysis-ICP-MS SW846 3005A/6020B "As Received" ND 0.00100 0.00300 PRB 10/14/23 1553 2507328 Antimony U mg/L 1.00 1 3 Barium U ND 0.000670 0.00400 mg/L 1.00 1 Beryllium U ND 0.000200 0.000500mg/L 1.00 1 U 0.000300 0.00100 mg/L 1.00 Cadmium ND 1 1.00 Calcium 0.115 0.0800 0.200 mg/L1 J mg/L Chromium U 0.00300 0.0100 1.00 1 ND Cobalt U ND 0.000300 0.00100mg/L 1.00 1 U 0.00200 1.00 Lead ND 0.000500mg/L Lithium U ND 0.00300 0.0100 mg/L 1.00 1 Molybdenum J 0.000205 0.000200 0.00100 mg/L 1.00 1 U ND 0.00500 mg/L 1.00 Selenium 0.00150 1 U Thallium ND 0.00200 mg/L 1.00 0.000600 1 Boron U ND 0.00520 0.0150 mg/L 1.00 1 PRB 10/16/23 1048 2507328 4 0.00200 0.00500 PRB Arsenic ND mg/L 1.00 1 10/15/23 1631 2507328 5 Solids Analysis SM2540C Dissolved Solids "As Received" Total Dissolved Solids 2.38 10.0 CH6 10/12/23 1423 2507357 mg/L 6 The following Prep Methods were performed:

Method Description Date Prep Batch Analyst Time SW846 3005A ICP-MS 3005A PREP SD 10/12/23 1525 2507327 SW846 7470A Prep EPA 7470A Mercury Prep Liquid EK1 10/12/23 1120 2507486

Page 29 of 60 SDG: 640869

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

Certificate of Analysis

Report Date: October 23, 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 ComplianceAP1

Client Sample ID: ARK-AP1-EB-02 Project: GPCC00100 Sample ID: 640869013 Client ID: GPCC001

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

Notes:

Column headers are defined as follows:

DF: Dilution Factor 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

Page 30 of 60 SDG: 640869

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

Certificate of Analysis

Report Date: October 23, 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 ComplianceAP1

Client Sample ID: ARK-AP1PZ-7 Sample ID: 640869014

Matrix: WG

Collect Date: 10-OCT-23 13:50
Receive Date: 11-OCT-23
Collector: Client

Project: GPCC00100 Client ID: GPCC001

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analy	st Date	Time	Batch	Method
Ion Chromatography												
EPA 300.0 Anions Liq	uid "As Recei	ved"										
Sulfate		1370	13.3	40.0	mg/L		100	LXA2	10/13/23	1156	2507800	1
Chloride		6.29	0.335	1.00	mg/L		5	LXA2	10/14/23	0227	2507800	2
Fluoride	J	0.270	0.165	0.500	mg/L		5					
Mercury Analysis-CVA	AA											
7470 Cold Vapor Merc	ury, Liquid "A	As Received"										
Mercury	U	ND	0.0000670	0.000200	mg/L	1.00	1	JP2	10/13/23	1224	2507487	3
Metals Analysis-ICP-M	1S				C							
SW846 3005A/6020B		"										
Arsenic	J	0.00399	0.00200	0.00500	mg/L	1.00	1	PRB	10/15/23	1633	2507328	4
Boron		2.76	0.104	0.300	mg/L	1.00	20	PRB	10/15/23	2131	2507328	5
Calcium		383	1.60	4.00	mg/L	1.00	20					
Antimony	U	ND	0.00100	0.00300	mg/L	1.00	1	PRB	10/14/23	1556	2507328	6
Barium		0.0421	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		0.00123	0.000300	0.00100	mg/L	1.00	1					
Lead	U	ND	0.000500	0.00200	mg/L	1.00	1					
Lithium	J	0.00302	0.00300	0.0100	mg/L	1.00	1					
Molybdenum		0.00367	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					
Solids Analysis												
SM2540C Dissolved S	olids "As Rec	eived"										
Total Dissolved Solids		1960	23.8	100	mg/L			CH6	10/12/23	1423	2507357	7
The following Prep Me	ethods were pe	erformed:										
Method	Description	1		Analyst	Date	7	Гіте	Pr	ep Batch			
SW846 7470A Prep	EPA 7470A N	Mercury Prep Liquid		EK1	10/12/23	1	1120	250	07486			
SW846 3005A	ICP-MS 3005	SA PREP		SD	10/12/23	1	1525	250	07327			

Page 31 of 60 SDG: 640869

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

Certificate of Analysis

Report Date: October 23, 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 ComplianceAP1

Client Sample ID: ARK-AP1PZ-7 Project: GPCC00100 Sample ID: 640869014 Client ID: GPCC001

Parameter	Qualifier	Result	DL	RL	Units	PF	DF Analyst Date	Time Batch	Method
The following Analytic	cal Methods w	vere performed:							
Method	Description					Analys	t Comments		
1	EPA 300.0								
2	EPA 300.0								
3	SW846 7470A	.							
4	SW846 3005A	/6020B							
5	SW846 3005A	/6020B							
6	SW846 3005A	/6020B							
7	SM 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

Page 32 of 60 SDG: 640869

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

Certificate of Analysis

Report Date: October 23, 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 ComplianceAP1

Client Sample ID: ARK-AP1PZ-10 Sample ID: 640869015

Matrix: WG

Collect Date: 10-OCT-23 14:20 Receive Date: 11-OCT-23 Collector: Client

EPA 7470A Mercury Prep Liquid

Project: GPCC00100 Client ID: GPCC001

Ion Chromatography EPA 300.0 Anions Liquid "As Refluoride Chloride Sulfate	ceiv	ved" 0.647 10.9	0.0330									
Fluoride Chloride	ceiv	0.647	0.0330									
Fluoride Chloride		0.647	0.0330									
		10.9		0.100	mg/L		1	LXA2	10/14/23	0257	2507800	1
Sulfate			1.34	4.00	mg/L		20	LXA2	10/13/23	1329	2507800	2
Bullate		231	2.66	8.00	mg/L		20					
Mercury Analysis-CVAA												
7470 Cold Vapor Mercury, Liqui	1 "A	s Received"										
Mercury	J	ND	0.0000670	0.000200	mg/L	1.00	1	JP2	10/13/23	1226	2507487	3
Metals Analysis-ICP-MS					C							
SW846 3005A/6020B "As Recei	ed"											
Boron		0.357	0.0260	0.0750	mg/L	1.00	5	PRB	10/15/23	2133	2507328	4
Calcium		90.4	0.400	1.00	mg/L	1.00	5					
Antimony	J	ND	0.00100	0.00300	mg/L	1.00	1	PRB	10/14/23	1600	2507328	5
Barium		0.0347	0.000670	0.00400	mg/L	1.00	1					
Beryllium	J	ND	0.000200	0.000500	mg/L	1.00	1					
Cadmium	J	ND	0.000300	0.00100	mg/L	1.00	1					
Chromium	J	ND	0.00300	0.0100	mg/L	1.00	1					
Cobalt		0.00140	0.000300	0.00100	mg/L	1.00	1					
Lead	J	ND	0.000500	0.00200	mg/L	1.00	1					
Lithium		0.0189	0.00300	0.0100	mg/L	1.00	1					
Molybdenum		0.00214	0.000200	0.00100	mg/L	1.00	1					
Selenium	J	ND	0.00150	0.00500	mg/L	1.00	1					
Thallium	J	ND	0.000600	0.00200	mg/L	1.00	1					
Arsenic	J	0.00382	0.00200	0.00500	mg/L	1.00	1	PRB	10/15/23	1635	2507328	6
Solids Analysis												
SM2540C Dissolved Solids "As I	Rece	ived"										
Total Dissolved Solids		499	2.38	10.0	mg/L			CH6	10/13/23	1601	2508295	7
The following Prep Methods wer	e pei	rformed:										
Method Descrip	tion			Analyst	Date	7	Γime	Pre	ep Batch			
SW846 3005A ICP-MS	005 <i>A</i>	A PREP		SD	10/12/23	1	525	250	7327			

EK1

10/12/23

1120

2507486

Page 33 of 60 SDG: 640869

SW846 7470A Prep

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

Certificate of Analysis

Report Date: October 23, 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 ComplianceAP1

Client Sample ID: ARK-AP1PZ-10 Project: GPCC00100 Sample ID: 640869015 Client ID: GPCC001

Parameter	Qualifier	Result	DL	RL	Units	PF	DF Analyst Date	Time Batch	Method
The following Analytic	cal Methods w	vere performed:							
Method	Description					Analys	t Comments		
1	EPA 300.0								
2	EPA 300.0								
3	SW846 7470A	.							
4	SW846 3005A	/6020B							
5	SW846 3005A	/6020B							
6	SW846 3005A	/6020B							
7	SM 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

Page 34 of 60 SDG: 640869

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

Certificate of Analysis

Report Date: October 23, 2023

GPCC00100

GPCC001

Project:

Client ID:

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

Atlanta, Georgia 30308

Contact: Joju Abraham

Project: Arkwright CCR Groundwater ComplianceAP1

Client Sample ID: ARK-AP1PZ-11 Sample ID: 640869016

Matrix: WG

Collect Date: 10-OCT-23 16:15 Receive Date: 11-OCT-23

Collector: Client

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analy	st Date	Time	Batch	Method
Ion Chromatograp	ohy											
EPA 300.0 Anions	s Liquid "As Recei	ived"										
Chloride	•	1.20	0.0670	0.200	mg/L		1	LXA2	10/14/23	0328	2507800	1
Fluoride		0.202	0.0330	0.100	mg/L		1					
Sulfate		54.3	0.665	2.00	mg/L		5	LXA2	10/13/23	1359	2507800	2
Mercury Analysis-	-CVAA											
7470 Cold Vapor	Mercury, Liquid ".	As Received"										
Mercury	U	ND	0.0000670	0.000200	mg/L	1.00	1	JP2	10/13/23	1227	2507487	3
Metals Analysis-IO	CP-MS											
SW846 3005A/60	20B "As Received	l"										
Boron		0.143	0.00520	0.0150	mg/L	1.00	1	PRB	10/16/23	1050	2507328	4
Arsenic	J	0.00303	0.00200	0.00500	mg/L	1.00	1	PRB	10/15/23	1708	2507328	5
Antimony	U	ND	0.00100	0.00300	mg/L	1.00	1	PRB	10/14/23	1604	2507328	6
Barium		0.0234	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		27.6	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	J	0.000342	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					
Solids Analysis												
SM2540C Dissolv	ed Solids "As Rec	eived"										
Total Dissolved Solids		198	2.38	10.0	mg/L			CH6	10/13/23	1601	2508295	7
The following Pre	p Methods were po	erformed:										
Method	Description	n		Analyst	Date	-	Гim	e Pr	ep Batch			

 Method
 Description
 Analyst
 Date
 Time
 Prep Batch

 SW846 7470A Prep
 EPA 7470A Mercury Prep Liquid
 EK1
 10/12/23
 1120
 2507486

 SW846 3005A
 ICP-MS 3005A PREP
 SD
 10/12/23
 1525
 2507327

Page 35 of 60 SDG: 640869

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

Certificate of Analysis

Report Date: October 23, 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 ComplianceAP1

Client Sample ID: ARK-AP1PZ-11 Project: GPCC00100 Sample ID: 640869016 Client ID: GPCC001

Parameter	Qualifier	Result	DL	RL	Units	PF	DF Analyst Date	Time Batch	Method
The following Analytic	cal Methods w	vere performed:							
Method	Description					Analys	t Comments		
1	EPA 300.0								
2	EPA 300.0								
3	SW846 7470A	.							
4	SW846 3005A	/6020B							
5	SW846 3005A	/6020B							
6	SW846 3005A	/6020B							
7	SM 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

Page 36 of 60 SDG: 640869

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

Certificate of Analysis

Report Date: October 23, 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 ComplianceAP1

Client Sample ID: ARK-AP1-FD-02

Sample ID: 640869017

Matrix: WG

Collect Date: 10-OCT-23 00:00
Receive Date: 11-OCT-23
Collector: Client

ICP-MS 3005A PREP

EPA 7470A Mercury Prep Liquid

Project: GPCC00100 Client ID: GPCC001

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analy	st Date	Time	Batch	Method
Ion Chromatography												
EPA 300.0 Anions Liqu	iid "As Recei	ived"										
Sulfate		80.1	26.6	80.0	mg/L		200	LXA2	10/13/23	1430	2507800	1
Chloride		1.21	0.0670	0.200	mg/L		1	LXA2	10/14/23	0359	2507800	2
Fluoride		0.297	0.0330	0.100	mg/L		1					
Mercury Analysis-CVA	A											
7470 Cold Vapor Mercu	ary, Liquid "A	As Received"										
Mercury	U	ND	0.0000670	0.000200	mg/L	1.00	1	JP2	10/13/23	1233	2507487	3
Metals Analysis-ICP-M	S											
SW846 3005A/6020B "	As Received											
Arsenic	J	0.00319	0.00200	0.00500	mg/L	1.00	1	PRB	10/15/23	1710	2507328	4
Boron		0.146	0.00520	0.0150	mg/L	1.00	1	PRB	10/16/23	1052	2507328	5
Antimony	U	ND	0.00100	0.00300	mg/L	1.00	1	PRB	10/14/23	1607	2507328	6
Barium		0.0242	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		28.0	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	J	0.000326	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					
Solids Analysis												
SM2540C Dissolved So	olids "As Rec	eived"										
Total Dissolved Solids		197	2.38	10.0	mg/L			CH6	10/13/23	1601	2508295	7
The following Prep Met	thods were pe	erformed:										
Method	Description	n		Analyst	Date	,	Гimе	e Pr	ep Batch			

SD

EK1

10/12/23

10/12/23

1525

1120

2507327

2507486

Page 37 of 60 SDG: 640869

SW846 3005A

SW846 7470A Prep

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

Certificate of Analysis

Report Date: October 23, 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 ComplianceAP1

Client Sample ID: ARK-AP1-FD-02 Project: GPCC00100 Sample ID: 640869017 Client ID: GPCC001

Parameter	Qualifier Result	DL	RL	Units Pl	F DF Analyst Date Time Batch Method
The following Analytic	cal Methods were performed:				
Method	Description			Ana	lyst Comments
1	EPA 300.0				
2	EPA 300.0				
3	SW846 7470A				
4	SW846 3005A/6020B				
5	SW846 3005A/6020B				
6	SW846 3005A/6020B				
7	SM 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

Page 38 of 60 SDG: 640869

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

Certificate of Analysis

Report Date: October 23, 2023

GPCC00100

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

Atlanta, Georgia 30308

Contact: Joju Abraham

Project: Arkwright CCR Groundwater ComplianceAP1

Client Sample ID: ARK-AP1PZ-9 Sample ID: 640869018

Matrix: WG

Collect Date: 11-OCT-23 08:20 Receive Date: 11-OCT-23 Collector: Client

640869018 Client ID: GPCC001

Project:

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analy	st Date	Time	Batch	Method
Ion Chromatography												
EPA 300.0 Anions Liqu	uid "As Recei	ved"										
Fluoride		0.964	0.0330	0.100	mg/L		1	LXA2	10/14/23	0430	2507800	1
Chloride		8.68	2.68	8.00	mg/L		40	LXA2	10/13/23	1501	2507800	2
Sulfate		308	5.32	16.0	mg/L		40					
Mercury Analysis-CVA	AA											
7470 Cold Vapor Merc	ury, Liquid "	As Received"										
Mercury	U	ND	0.0000670	0.000200	mg/L	1.00	1	JP2	10/13/23	1234	2507487	3
Metals Analysis-ICP-N	1S											
SW846 3005A/6020B	"As Received	"										
Boron		0.707	0.0260	0.0750	mg/L	1.00	5	PRB	10/15/23	2135	2507328	4
Calcium		72.3	0.400	1.00	mg/L	1.00	5					
Antimony	U	ND	0.00100	0.00300	mg/L	1.00	1	PRB	10/14/23	1611	2507328	5
Barium		0.0252	0.000670	0.00400	mg/L	1.00	1					
Beryllium		0.000523	0.000200	0.000500	mg/L	1.00	1					
Cadmium		0.00112	0.000300	0.00100	mg/L	1.00	1					
Chromium	U	ND	0.00300	0.0100	mg/L		1					
Cobalt		0.100	0.000300	0.00100	mg/L	1.00	1					
Lead	U	ND	0.000500	0.00200	mg/L	1.00	1					
Lithium		0.145	0.00300	0.0100	mg/L	1.00	1					
Molybdenum	J	0.000323	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					
Arsenic	J	0.00224	0.00200	0.00500	mg/L	1.00	1	PRB	10/15/23	1641	2507328	6
Solids Analysis												
SM2540C Dissolved Se	olids "As Rec	eived"										
Total Dissolved Solids		527	2.38	10.0	mg/L			CH6	10/13/23	1601	2508295	7
The following Prep Me	ethods were pe	erformed:										
Method	Description			Analyst	Date	7	Γim	e Pro	ep Batch			
SW846 7470A Prep	EPA 7470A I	Mercury Prep Liquid		EK1	10/12/23	1	120	250	07486			
SW846 3005A	ICP-MS 3005	SA PREP		SD	10/12/23	1	1525	250	07327			

Page 39 of 60 SDG: 640869

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

Certificate of Analysis

Report Date: October 23, 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 ComplianceAP1

Client Sample ID: ARK-AP1PZ-9 Project: GPCC00100 Sample ID: 640869018 Client ID: GPCC001

Parameter	Qualifier	Result	DL	RL	Units	PF	DF Analyst Date	Time Batch	Method
The following Analytic	cal Methods w	vere performed:							
Method Description						Analys	t Comments		
1	EPA 300.0								
2	EPA 300.0								
3	SW846 7470A	.							
4	SW846 3005A	/6020B							
5	SW846 3005A	/6020B							
6	SW846 3005A								
7	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

Page 40 of 60 SDG: 640869

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

QC Summary

Report Date: October 23, 2023

Page 1 of 9

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

Atlanta, Georgia Joju Abraham

640869

Workorder:

Contact:

Parmname	NOM	Sample Qual	QC	Units	RPD%	REC%	Range Anlst	Date Time
Ion Chromatography								
Batch 2507800 ——————————————————————————————————								
Chloride		1.77	1.83	mg/L	2.97 ^		(+/-1.00) LXA2	10/13/23 02:40
Fluoride		0.426	0.479	mg/L	11.6 ^		(+/-0.100)	10/13/23 20:47
Sulfate		58.3	59.2	mg/L	1.5		(0%-20%)	10/13/23 02:40
QC1205545079 640869003 DUP Chloride		1.81	1.80	mg/L	0.636		(0%-20%)	10/13/23 04:44
Cinoriac		1.01	1.00	mg/L	0.030		(070-2070)	10/13/23 04.44
Fluoride		0.225	0.229	mg/L	1.94 ^		(+/-0.100)	
Taoride		0.223	0.22)	111.5/12	1.,, 1		(17 0.100)	
Sulfate		2.17	2.15	mg/L	0.767		(0%-20%)	
				8			(474 = 474)	
QC1205545077 LCS								
Chloride	5.00		4.58	mg/L		91.6	(90%-110%)	10/13/23 01:39
Fluoride	2.50		2.39	mg/L		95.6	(90%-110%)	
Sulfate	10.0		9.46	mg/L		94.6	(90%-110%)	
0.04007747074								
QC1205545076 MB Chloride		U	ND	mg/L				10/13/23 01:08
Fluoride		U	ND	mg/L				
Sulfate		U	ND	mg/L				
QC1205545080 640869001 PS	7 00	0.255	F 05	7.5		00.0	(000/_1100/)	10/12/20 00 11
Chloride	5.00	0.355	5.05	mg/L		93.8	(90%-110%)	10/13/23 03:11

Page 41 of 60 SDG: 640869

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

QC Summary

Workorder: 640869 Page 2 of 9 Parmname **NOM** Sample Qual QC Units RPD% REC% Range Anlst Date Time Ion Chromatography 2507800 Batch Fluoride 2.50 0.426 2.82 mg/L95.5 (90%-110%) LXA2 10/13/23 21:18 Sulfate 10.0 11.7 22.3 106 (90%-110%) 10/13/23 03:11 mg/L QC1205545081 640869003 PS Chloride 1.81 6.87 101 10/13/23 05:15 5.00 (90%-110%) mg/L Fluoride 2.50 0.225 2.68 mg/L 98.1 (90%-110%) Sulfate 10.0 2.17 12.1 99.2 mg/L (90%-110%) Metals Analysis - ICPMS 2507328 QC1205544129 LCS 0.0484 Antimony 0.0500 mg/L 96.8 (80%-120%) PRB 10/14/23 14:37 0.0500 0.0510 102 (80%-120%) 10/15/23 15:48 Arsenic mg/L 0.0560 Barium 0.0500 mg/L 112 (80%-120%) 10/14/23 14:37 Beryllium 0.0500 0.0518 mg/L 104 (80%-120%) Boron 0.100 0.104 104 (80%-120%) 10/16/23 10:26 mg/L Cadmium 0.0500 0.0507 mg/L 101 (80%-120%) 10/14/23 14:37 Calcium 2.00 2.08 mg/L 104 (80%-120%) Chromium 0.0500 0.0480 mg/L 96.1 (80%-120%) 0.0500 0.0479 Cobalt 95.8 mg/L (80%-120%)

Page 42 of 60 SDG: 640869

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

QC Summary

Workorder: 640869 Page 3 of 9 QC RPD% REC% Range Parmname NOM Sample Qual Units Anlst Date Time Metals Analysis - ICPMS Batch 2507328 Lead 0.0500 0.0485 mg/L97 (80%-120%) PRB 10/14/23 14:37 Lithium 0.0500 0.0496 mg/L 99.2 (80%-120%) Molybdenum 0.0500 0.0521 mg/L104 (80%-120%) 0.0500 0.0520 104 Selenium mg/L(80%-120%) Thallium 0.0500 0.0474 mg/L 94.9 (80%-120%) QC1205544128 MB U ND Antimony mg/L10/14/23 14:34 U Arsenic ND mg/L 10/15/23 15:46 ND U 10/14/23 14:34 Barium mg/L Beryllium U ND mg/LU Boron ND mg/L 10/16/23 10:24 Cadmium U ND mg/L10/14/23 14:34 U ND Calcium mg/L Chromium U ND mg/LU ND Cobalt mg/L Lead U ND mg/L

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

QC Summary

		<u> </u>	ge Summa	y				
Workorder: 640869								Page 4 of 9
Parmname M. J. A. J. J. J. GPMG	NOM	Sample	Qual QC	Units	RPD% REC%	6 Range	Anlst	Date Time
Metals Analysis - ICPMS Batch 2507328								
Lithium			U ND	mg/L			PRB	10/14/23 14:34
Molybdenum			U ND	mg/L				
•				C				
Selenium			U ND	mg/L				
, and the second				8				
Thallium			U ND	mg/L				
Thamum			c ND	mg/L				
QC1205544130 640869001 MS								
Antimony	0.0500 U	ND	0.0497	mg/L	99.4	(75%-125%)		10/14/23 14:44
Arsenic	0.0500 J	0.00219	0.0530	mg/L	102	(75%-125%)		10/15/23 15:52
Barium	0.0500	0.0609	0.115	mg/L	108	(75%-125%)		10/14/23 14:44
				C		,		
Beryllium	0.0500	0.00187	0.0544	mg/L	105	(75%-125%)		
Berymani	0.0300	0.00107	0.00	g 2	103	(7570 12570)		
Boron	0.100	0.108	0.216	mg/L	107	(75%-125%)		10/16/23 10:29
Doron	0.100	0.108	0.210	mg/L	107	(7370-12370)		10/10/23 10.29
	0.0500	0.000410	0.0516	7.	102	(750/ 1050/)		10/14/22 14 44
Cadmium	0.0500 J	0.000410	0.0516	mg/L	102	(75%-125%)		10/14/23 14:44
Calcium	2.00	19.3	21.0	mg/L	N/A	(75%-125%)		
Chromium	0.0500 J	0.00462	0.0539	mg/L	98.5	(75%-125%)		
Cobalt	0.0500	0.00672	0.0558	mg/L	98.2	(75%-125%)		
Lead	0.0500 U	ND	0.0494	mg/L	98.7	(75%-125%)		
Lithium	0.0500 J	0.00944	0.0604	mg/L	102	(75%-125%)		
				-				

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

QC Summary

Workorder: 640869 Page 5 of 9 **Parmname NOM** Sample Qual QC Units RPD% REC% Range Anlst Date Time Metals Analysis - ICPMS 2507328 Batch Molybdenum 0.0500 ND 0.0530 mg/L 106 (75% - 125%)PRB 10/14/23 14:44 Selenium 0.0500 J 0.00299 0.0538 102 (75%-125%) mg/L Thallium 0.0500 U ND 0.0479 mg/L 95.8 (75% - 125%)QC1205544131 640869001 MSD Antimony 0.0500 U ND 0.0508 mg/L 2.07 101 (0% - 20%)10/14/23 14:48 0.0500 0.00219 0.0528 0.334 101 10/15/23 15:54 J mg/L (0%-20%)Arsenic Barium 0.0500 0.0609 0.117 mg/L 1.29 111 (0%-20%)10/14/23 14:48 Beryllium 0.0500 0.00187 0.0556 mg/L 2.12 107 (0%-20%)0.108 0.214 Boron 0.100 mg/L 0.707 106 (0%-20%)10/16/23 10:31 mg/L Cadmium 0.0500 0.000410 0.0528 2.47 105 (0%-20%)10/14/23 14:48 2.00 19.3 21.1 N/A Calcium mg/L 0.633(0%-20%)0.00462 0.0543 99.3 Chromium 0.0500 mg/L 0.793 (0%-20%)0.0500 0.00672 0.0559 Cobalt mg/L (0%-20%)0.181 98.4 Lead 0.0500 U ND 0.0493 0.306 98.4 (0% - 20%)mg/L 0.00944 0.0606 0.0500 J 102 Lithium mg/L 0.261 (0%-20%)Molybdenum 0.0500 U ND 0.0544 mg/L 2.52 109 (0% - 20%)

Page 45 of 60 SDG: 640869

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

QC Summary

640869 Page 6 of 9 **Parmname NOM** Sample Qual QC Units RPD% REC% Range Anlst Date Time Metals Analysis - ICPMS 2507328 Batch mg/L 0.00558 Selenium 0.0500 0.00299 0.0538 102 (0%-20%)PRB 10/14/23 14:48 Thallium 0.0500 U ND 0.0480 mg/L 0.142 96 (0%-20%)QC1205544132 640869001 SDILT 10/14/23 14:55 U ND U ND Antimony ug/L N/A (0%-20%)Arsenic J 2.19 U ND ug/L N/A (0%-20%)10/15/23 15:58 60.9 12.1 10/14/23 14:55 Barium ug/L .317 (0%-20%)Beryllium 1.87 J 0.369 ug/L 1.18 (0%-20%)Boron 108 22.8 ug/L 5.38 (0%-20%)10/16/23 10:35 J 0.410 U ND Cadmium ug/L N/A (0%-20%)10/14/23 14:55 19300 4020 Calcium ug/L 4.06 (0%-20%)J Chromium 4.62 U ND (0%-20%)ug/L N/A 6.72 1.44 Cobalt ug/L 6.95 (0%-20%)U ND U ND Lead ug/L (0%-20%)N/A Lithium J 9.44 U ND N/A (0% - 20%)ug/L U ND U ND Molybdenum ug/L N/A (0%-20%)Selenium J 2.99 U ND ug/L N/A (0% - 20%)

Page 46 of 60 SDG: 640869

Workorder:

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

QC Summary

Parmname		NO	м	Sample	Onal	QC	Units	RPD%	REC%	Range A	Anlst	Page 7 of 9 Date Time
Metals Analysis - ICPMS		1101	<u>, , , , , , , , , , , , , , , , , , , </u>	Батріс	Quui	- QC	Cints	III D 70	1112070	runge 1	IIIst	Dute Time
Batch 2507328												
Thallium			U	ND	U	ND	ug/L	N/A		(0%-20%)	PRB	10/14/23 14:55
Metals Analysis-Mercury Batch 2507487												
QC1205544431 640813001 Mercury	DUP		U	ND	U	ND	mg/L	N/A			JP2	10/13/23 11:53
QC1205544430 LCS Mercury		0.00200				0.00198	mg/L		99.2	(80%-120%)		10/13/23 11:47
QC1205544429 MB Mercury					U	ND	mg/L					10/13/23 11:45
QC1205544432 640813001 Mercury	MS	0.00200	U	ND		0.00134	mg/L		67.1*	(75%-125%)		10/13/23 11:55
QC1205544434 640813001 Mercury	PS	2.00	U	ND		1.38	ug/L		68.8*	(80%-120%)		10/13/23 11:58
QC1205544433 640813001 Mercury	SDILT		U	ND	U	ND	ug/L	N/A		(0%-10%)		10/13/23 11:56
Solids Analysis Batch 2507350												
QC1205544191 640698013 Total Dissolved Solids	DUP		U	ND	U	ND	mg/L	N/A			СН6	10/12/23 13:23
QC1205544190 LCS Total Dissolved Solids		300				303	mg/L		101	(95%-105%)		10/12/23 13:23
QC1205544189 MB Total Dissolved Solids					U	ND	mg/L					10/12/23 13:23

Page 47 of 60 SDG: 640869

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

QC Summary

Workorder: 640869 Page 8 of 9 Units **Parmname** NOM Sample Qual QC RPD% REC% Range Anlst Date Time Solids Analysis 2507357 Batch QC1205544196 640683001 DUP 235 228 mg/L CH6 10/12/23 14:23 **Total Dissolved Solids** 3.02 (0%-5%)QC1205544195 LCS 300 **Total Dissolved Solids** 302 mg/L 101 (95%-105%) 10/12/23 14:23 QC1205544194 U ND 10/12/23 14:23 **Total Dissolved Solids** mg/L Batch 2508295 OC1205545882 641034002 DUP 395 Total Dissolved Solids 386 2.3 (0%-5%)CH6 10/13/23 16:01 mg/L QC1205545878 LCS **Total Dissolved Solids** 300 302 mg/L 101 (95%-105%) 10/13/23 16:01 QC1205545877 Total Dissolved Solids U ND mg/L 10/13/23 16:01

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.

Page 48 of 60 SDG: 640869

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

QC Summary

Workorder: 640869 Page 9 of 9 Pa

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

- ND Analyte concentration is not detected above the detection limit
- Е % 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
- Е 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.
- 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 R
- В The target analyte was detected in the associated blank.
- 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
- 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.

Page 49 of 60 SDG: 640869

Technical Case Narrative Georgia Power Company SDG #: 640869

Metals

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

Analytical Batch: 2507328

Preparation Method: SW846 3005A

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

Preparation Batch: 2507327

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

GEL Sample ID#	Client Sample Identification
640869001	ARK-APIGWA-1
640869002	ARK-AP1-FB-01
640869003	ARK-AP1GWA-2
640869004	ARK-AP1-EB-01
640869005	ARK-AP1PZ-1
640869006	ARK-AP1PZ-2
640869007	ARK-AP1-FD-01
640869008	ARK-AP1PZ-4
640869009	ARK-AP1-FB-02
640869010	ARK-AP1PZ-3
640869011	ARK-AP1PZ-8
640869012	ARK-AP1PZ-5
640869013	ARK-AP1-EB-02
640869014	ARK-AP1PZ-7
640869015	ARK-AP1PZ-10
640869016	ARK-AP1PZ-11
640869017	ARK-AP1-FD-02
640869018	ARK-AP1PZ-9
1205544128	Method Blank (MB)ICP-MS
1205544129	Laboratory Control Sample (LCS)
1205544132	640869001(ARK-AP1GWA-1L) Serial Dilution (SD)
1205544130	640869001(ARK-AP1GWA-1S) Matrix Spike (MS)
1205544131	640869001(ARK-AP1GWA-1SD) 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

Page 50 of 60 SDG: 640869

The CRDL standard recoveries for SW846 6020B met the advisory control limits with the exception of calcium. Client sample concentrations were greater than two times the CRDL; therefore the data were not adversely affected. 640869006 (ARK-AP1PZ-2), 640869007 (ARK-AP1-FD-01), 640869008 (ARK-AP1PZ-4), 640869010 (ARK-AP1PZ-3), 640869011 (ARK-AP1PZ-8), 640869012 (ARK-AP1PZ-5), 640869014 (ARK-AP1PZ-7), 640869015 (ARK-AP1PZ-10) and 640869018 (ARK-AP1PZ-9).

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 640869005 (ARK-AP1PZ-1), 640869006 (ARK-AP1PZ-2), 640869007 (ARK-AP1-FD-01), 640869008 (ARK-AP1-PZ-4), 640869010 (ARK-AP1-PZ-3), 640869011 (ARK-AP1-PZ-8), 640869012 (ARK-AP1-PZ-5), 640869014 (ARK-AP1-PZ-7), 640869015 (ARK-AP1-PZ-10) and 640869018 (ARK-AP1-PZ-9) were diluted to ensure that the analyte concentrations were within the linear calibration range of the instrument. The ICPMS solid samples in this SDG were diluted the standard two times.

A 1 t -					640	0869				
Analyte	005	006	007	008	010	011	012	014	015	018
Boron	5X	5X	5X	25X	20X	20X	100X	20X	5X	5X
Calcium	1X	5X	5X	25X	20X	20X	100X	20X	5X	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: 2507487

Preparation Method: SW846 7470A Prep

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

Preparation Batch: 2507486

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

GEL Sample ID#	Client Sample Identification
640869001	ARK-AP1GWA-1
640869002	ARK-AP1-FB-01
640869003	ARK-AP1GWA-2
640869004	ARK-AP1-EB-01
640869005	ARK-AP1PZ-1
640869006	ARK-AP1PZ-2
640869007	ARK-AP1-FD-01
640869008	ARK-AP1PZ-4
640869009	ARK-AP1-FB-02
640869010	ARK-AP1PZ-3
640869011	ARK-AP1PZ-8
640869012	ARK-AP1PZ-5
640869013	ARK-AP1-EB-02

640869014	ARK-AP1PZ-7
640869015	ARK-AP1PZ-10
640869016	ARK-AP1PZ-11
640869017	ARK-AP1-FD-02
640869018	ARK-AP1PZ-9
1205544429	Method Blank (MB)CVAA
1205544430	Laboratory Control Sample (LCS)
1205544433	640813001(NonSDGL) Serial Dilution (SD)
1205544431	640813001(NonSDGD) Sample Duplicate (DUP)
1205544432	640813001(NonSDGS) Matrix Spike (MS)
1205544434	640813001(NonSDGPS) 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/MSD) Recovery Statement

The percent recoveries (%R) obtained from the MS/MSD analyses are evaluated when the sample concentration is less than four times (4X) the spike concentration added. The MS/MSD (See Below) did not meet the recommended quality control acceptance criteria for percent recoveries for the following applicable analyte. The post spike also did not meet the required control limits; thus, confirming matrix interferences and/or sample non-homogeneity.

Sample	Analyte	Value
1205544432 (Non SDG 640813001MS)	Mercury	67.1* (75%-125%)

Post Spike (PS) Recovery Statement

The percent recoveries (%R) obtained from the PS analyses are evaluated when the sample concentration is less than four times (4X) the spike concentration added. The PS did not meet the recommended quality control acceptance criteria for percent recoveries for all applicable analytes and verifies the presence of matrix interferences.

Sample	Analyte	Value
1205544434 (Non SDG 640813001PS)	Mercury	68.8* (80%-120%)

General Chemistry

Product: Ion Chromatography Analytical Method: EPA 300.0

Analytical Procedure: GL-GC-E-086 REV# 33

Analytical Batch: 2507800

Page 52 of 60 SDG: 640869

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

GEL Sample ID#	Client Sample Identification
640869001	ARK-AP1GWA-1
640869002	ARK-AP1-FB-01
640869003	ARK-AP1GWA-2
640869004	ARK-AP1-EB-01
640869005	ARK-AP1PZ-1
640869006	ARK-AP1PZ-2
640869007	ARK-AP1-FD-01
640869008	ARK-AP1PZ-4
640869009	ARK-AP1-FB-02
640869010	ARK-AP1PZ-3
640869011	ARK-AP1PZ-8
640869012	ARK-AP1PZ-5
640869013	ARK-AP1-EB-02
640869014	ARK-AP1PZ-7
640869015	ARK-AP1PZ-10
640869016	ARK-AP1PZ-11
640869017	ARK-AP1-FD-02
640869018	ARK-AP1PZ-9
1205545076	Method Blank (MB)
1205545077	Laboratory Control Sample (LCS)
1205545078	640869001(ARK-AP1GWA-1) Sample Duplicate (DUP)
1205545079	640869003(ARK-AP1GWA-2) Sample Duplicate (DUP)
1205545080	640869001(ARK-AP1GWA-1) Post Spike (PS)
1205545081	640869003(ARK-AP1GWA-2) 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 1205545078 (ARK-AP1GWA-1DUP), 1205545080 (ARK-AP1GWA-1PS), 640869001 (ARK-AP1GWA-1), 640869005 (ARK-AP1PZ-1), 640869006 (ARK-AP1PZ-2), 640869007 (ARK-AP1-FD-01), 640869008 (ARK-AP1PZ-4), 640869010 (ARK-AP1PZ-3), 640869011 (ARK-AP1PZ-8), 640869012 (ARK-AP1PZ-5), 640869014 (ARK-AP1PZ-7), 640869015 (ARK-AP1PZ-10), 640869016 (ARK-AP1PZ-11), 640869017 (ARK-AP1-FD-02) and 640869018 (ARK-AP1PZ-9) were diluted because target analyte concentrations exceeded the calibration range. Samples 1205545078 (ARK-AP1GWA-1DUP), 1205545080 (ARK-AP1GWA-1PS), 640869001 (ARK-AP1GWA-1), 640869005 (ARK-AP1PZ-1), 640869006 (ARK-AP1PZ-2), 640869007 (ARK-AP1-FD-01), 640869008 (ARK-AP1PZ-4), 640869010 (ARK-AP1PZ-3), 640869011 (ARK-AP1PZ-8), 640869012 (ARK-AP1PZ-5), 640869014 (ARK-AP1PZ-7), 640869018 (ARK-AP1PZ-10), 640869016 (ARK-AP1PZ-11), 640869017 (ARK-AP1-FD-02) and 640869018 (ARK-AP1PZ-9) were 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.

A 1					64	0869				
Analyte	001	005	006	007	008	010	011	012	014	015

Chloride	5X	10X	2X	2X	5X	5X	2X	5X	5X	20X
Fluoride	1X	1X	2X	2X	5X	5X	2X	5X	5X	1X
Sulfate	5X	10X	50X	100X	200X	100X	100X	200X	100X	20X

A 1 + -		640869)
Analyte	016	017	018
Chloride	1X	1X	40X
Sulfate	5X	200X	40X

Miscellaneous Information

Manual Integrations

Sample 640869004 (ARK-AP1-EB-01) was manually integrated to correctly position the baseline as set in the calibration standards.

Product: Solids, Total Dissolved **Analytical Method:** SM 2540C

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

Analytical Batch: 2507350

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

GEL Sample ID# Client Sample Identification

640869001 ARK-AP1GWA-1 640869002 ARK-AP1-FB-01 640869003 ARK-AP1GWA-2 1205544189 Method Blank (MB)

1205544190 Laboratory Control Sample (LCS)

1205544191 640698013(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: 2507357

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

GEL Sample ID# Client Sample Identification

640869004 ARK-AP1-EB-01 640869005 ARK-AP1PZ-1

Page 54 of 60 SDG: 640869

ARK-AP1PZ-2
ARK-AP1-FD-01
ARK-AP1PZ-4
ARK-AP1-FB-02
ARK-AP1PZ-3
ARK-AP1PZ-8
ARK-AP1PZ-5
ARK-AP1-EB-02
ARK-AP1PZ-7
Method Blank (MB)
Laboratory Control Sample (LCS)
640683001(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 TDS meter was used to check the samples for interference prior to analysis. 640869006 (ARK-AP1PZ-2), 640869007 (ARK-AP1-FD-01), 640869008 (ARK-AP1PZ-4), 640869010 (ARK-AP1PZ-3), 640869011 (ARK-AP1PZ-8), 640869012 (ARK-AP1PZ-5) and 640869014 (ARK-AP1PZ-7).

Product: Solids, Total Dissolved Analytical Method: SM 2540C

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

Analytical Batch: 2508295

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

GEL Sample ID#	Client Sample Identification
640869015	ARK-AP1PZ-10
640869016	ARK-AP1PZ-11
640869017	ARK-AP1-FD-02
640869018	ARK-AP1PZ-9
1205545877	Method Blank (MB)
1205545878	Laboratory Control Sample (LCS)
1205545882	641034002(NonSDG) Sample Duplicate (DUP)

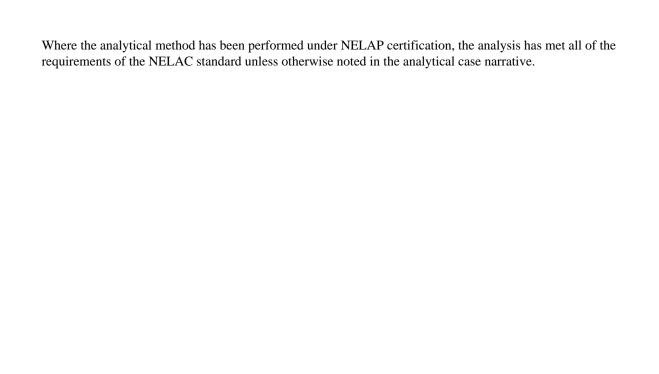
The samples in this SDG were analyzed on an "as received" basis.

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.

Certification Statement

Page 55 of 60 SDG: 640869



Page 56 of 60 SDG: 640869

Page: 1	of 2						-	-			0	,	2		GEL 1	aborato	GEL Laboratories, LLC		
GL Quote #:	5 Coolers			1 5		apol	910	DOFATORIES LLC	TC OT	70000	0	9	_		2040 §	2040 Savage Road	Road		
COC Number (1)				Chain	्र ज	ustody	and A	Custody and Analytical Request	Reque	pecialty A	nalytics	0/20/0	90	2	Charle	ston, SC	Charleston, SC 29407		
Ont Name:		GEL Wo.	GEL Work Order Number:	r:		GEL P	roject M	GEL Project Manager: Erin Trent	Frin Tren	щ					Fax: (8	Fax: (843) 766-1178	5-1178		
On Indine: Georgia Power	gia Power			Phone # (937-344-6533)	37-344-6	533)			Sam	Sample Analysis Requested (5)	lysis R	equeste		Fill in	he min	nher of	oontoinon.	(Fill in the number of contains for soil to the	T
Perct/Site Name:	Perject/Site Name: Plant Arkwright Ash Pond 1	11		Fax:				Should this	100	IN	IN			11	I		I collitatilier	s for each test)	
Address: 241 Ralpl	Argiress: 241 Ralph McGill Blvd SE, Atlanta, GA 30308	GA3					T	sample be			327		(6	_	N P	+		< Freservative Type (6)	(9)
Collected By: Joh	ın Myer; Dylan Quintal		Send Results To: jabraham@southernco.com EDD@stantec.com Cassidy.Sutherland@stantec.com	rthernco.com	EDD@sta	ntec.com) Alde	sp.i		- 03) Метро	l, Sulfat	VI .qq	dmD 8			Comments	=1
*For compc	Sample ID * For composites - indicate start and stop date/time	date/ti	*Date Collected (mm-dd-yy)	*Time Collected (Military) (hmm)	QC Code (2)	Field (3) N	Sample Matrix (4)	Radioactive yes, please sup isotopic info.)	(7) Known or possible Hazar	Fotal number Ag (App. I)	Metals App. II	Alkalinity R2.1 TDS (SM I	Anions (Cl, Fl (300.0 Rev. 2	Metals Ap (6020)	K∀D 556-22	Mercury (7	1a, Fe, Mn ((task_code: ARK-CCR-ASSMT-2023S1)	CCR-
-	ARK-AP1GWA-1		10-09-23	1345	z	z	MG			9	×	×	×	×	>	>	1		T
	ARK-AP1-FB-01		10-09-23	1405	FB	z	WQ			9	×	: >	: >						
	ARK-AP1GWA-2		10-09-23	1430	z	z	MG			9	: ×	< >	< >		< >	1			
	ARK-AP1-EB-01	100 March 100 Ma	10-09-23	1500	EB	Z	WQ			9	×	<u> </u>	: ×						
	ARK-AP1PZ-1		10-09-23	1620	z	z	MG			9	×	×	: ×		Т				I
	ARK-AP1PZ-2		10-09-23	1700	Z	z	WG				×	; ×	: >				+		T
	ARK-AP1-FD-01		10-09-23	NA	FD	z	ÓΜ				: ×	< >	< >		< >	1			
	ARK-AP1PZ-4		10-10-23	0160	Z	z	MG				: >	< >	< >			+			T
	ARK-AP1-FB-02		10-10-23	0830	FB	-	WO				(×	< >	< >			+			T
92	ARK-AP1PZ-3		10-10-23	0930	z		WG				< >	< >	< >				+		T
		Chain of Cust	Chain of Custody Signatures						TATR	mester		Normal.	V D	Duch:	X X				
0	gned) Print Name	Date	Received by (signed)		Print Name	Date	a	East	. December	7 1 3			1	SIII:	de	Specify:		(Subject to Surcharge)	ge)
1 MMM	John Myer	10(11/27	1 Georgenmenen	1 1	Brooker	JAMIN.	iam	2	Select Deliverable: [] C of A [] OC Summary	rable:	1C of A	No -	C Sumr		[] level 1		(level 7	1 1 2 proof 7	
2			2/1	No.		7	11/	(23) Ada	Additional Remarks:	emarks:							7 10,07	1	+
> For sample shippi	> For sample shipping and delivery details. see So		3				7 6	For	For Lab Receiving Use Only: Custody Seal Intact? [] Yes	eiving l	se Only	: Custo	dy Seal	Intact?	[] Ye] No Cool	Cooler Temp: 2-°C	
1.) Chain of Custody Number = Client Determined	iber = Client Determined						38	sumple Contection Time Zone: [X] Eastern	ection In	ne Zone	[x]	castern	[] Pacific	acific	[] Central	- 1	[] Mountain	ain [] Other:	
2.) QC Codes: N = Norma	2.) QC Codes: N = Normal Sample, TB = Trip Blank, FD = Field Duplicate, EB = Equipment Blank, MS = Matrix Spike Sampl	= Field Duplicate, EB	= Equipment Blank, N	IS = Matrix Spi	ke Sample,	MSD = Ma	trix Spike I	te, $MSD = Matrix$ Spike Duplicate Sample, $G = Grab$, $C = Composite$	ıple, G = Gr.	ab, C = Cc	mposite								
3.) Field Filtered: For liqu	3.) Field Filtered: For liquid matrices, indicate with a - Y - for yes the sample was field filtered or - N - for sample was not field	for yes the sample wa	ss field filtered or - N -	for sample was	not field fili	filtered.													
4.) Matrix Codes: DW =Dr	4.) Matrix Codes: DW=Drinking Water, GW=Groundwater, SW=Surface Water, WW=Waste Water, W=Water, ML=Misc Liquid, 80=Soil, SD=Sediment, SL=Sludge, SS=Solid Waste, O=Oil, F=Filter, P=Wipe, U=Urine, F=Fecal, N=Nasal	r, SW=Surface Water,	, WW=Waste Water, V	V=Water, ML=	Misc Liquic	, SO=Soil,	SD=Sedim	ent, SL=Sludg	ge, SS=Solid	l Waste, O	=0il, F =F	ilter, P=W	ipe, U=U	rine, F=	ecal, N=	Nasal			
5.) Sample Analysis Reque	5.) Sample Analysis Requested: Analytical method requested (i.e. 8260B, 6010B/7470A) and number of containers provided for	ed (i.e. 8260B , 6010B	8/7470A) and number o	f containers pro	vided for e	ıch (i.e. 826	0B -3, 601	each (i.e. 8260B - 3, 6010B/7470A - 1).	(1))) 6						
7.) KNOWN OR POSSIBLE HAZARDS	7.) KNOWN OR POSSIBLE HAZARDS	c Acid, SH = Sodium	Hydroxide, SA = Sulfu	ric Acid, AA = .	Ascorbic A	id, HX = H	exane, ST	Acid, HX = Hexane, ST = Sodium Thiosulfate, If no preservative is added = leave field blank	osulfate, If r	no preserva	ative is ad	led = leav	e field bla	nk					
RCRA Metals As = Arsenic Hg Ba = Barium Se	Hg= Mercury Se= Selenium	Cuaracteristic Hazards FL = Flammable/Ignitabl CO = Corrosive RE = Reactive	Cuaracteristic Hazards FL = Flammable/Ignitable CO = Corrosive RE = Reactive	Listed Waste LW=Listed Waste (F.K.P and U-listed wastes.) Waste code(s):	ted Waste d U-liste te(s):	d wastes.,		Other OT= ((i.e.: F misc. A	Other OT= Other / Unknown (i.e.: High/low pH, asbestos, beryllium, irritants, other misc. health hazards, etc.)	Unknow v pH, as. azards,	n bestos, l etc.)	erylliun	ı, irrita	nts, oth	er	Pleas belov conce	Please provide below regarding concerns. (i.e.: of site collected	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.)	posal
nium mium	Ag= Silver MR= Misc. RCRA metals	TSCA Regulated PCB = Polychlorinated	ated					Test	rescription.						1	7.5			
Pb = Lead		biphenyls	snyls												1				
						45													

640 870

\vdash	lient: GPCC			S	DG/AR/COC/Work Order:
R	eceived By: QG			$\neg \vdash$	Date Received: 0 / U / 2-3
	Carrier and Tracking Number				Circle Applicable: FedEx Express FedEx Ground UPS Field Services Courier Other
Sı	spected Hazard Information	Yes	No	*1	If Net Counts > 100cm on samples not mode at ""
		Ť	-	-	If Net Counts > 100cpm on samples not marked "radioactive", contact the Radiation Safety Group for further investigation. azard Class Shipped: UN#-
A)	Shipped as a DOT Hazardous?		1	10.79	If UN2910, Is the Radioactive Shipment Survey Compliant? Yes No
B) rec	Did the client designate the samples are to be eived as radioactive?		-	CC	OC potation or radioactive stickers on containers equal client designation.
C)	Did the RSO classify the samples as ioactive?		/	Mi	aximum Net Counts Observed* (Observed Counts - Area Background Counts): Classified as: Rad 1 Rad 2 Rad 3
D)	Did the client designate samples are hazardous	?	/	14500	C notation or hazard labels on containers equal client designation.
Ε)	Did the RSO identify possible hazards?		/	IfI	D or E is yes, select Hazards below. PCB's Flammable Foreign Soil RCRA Asbestos Beryllium Other:
	Sample Receipt Criteria	Yes	NA	/Z	Comments/Qualifiers (Required for Non-Conforming Items)
1	Shipping containers received intact and scaled?	/	7		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 $(0 \le 6 \text{ deg. C})$?*		/	/	Preservation Method: We Lee Ice Packs Dry ice None Other: *all temperatures are recorded in Celsius TEMP: 2
4	Daily check performed and passed on IR temperature gun?	1		/	Temperature Device Serial #: <u>IR1-23</u> Secondary Temperature Device Serial # (If Applicable):
5	Sample containers intact and sealed?	1		/	Circle Applicable: Seals broken Damaged container Leaking container Other (describe)
6	Samples requiring chemical preservation at proper pH?	1			Sample ID's and Containers Affected:
7	Do any samples require Volatile Analysis?	2000		/	If Ppeservation added, Lot#: If Yes, are Encores or Soil Kits present for solids? Yes No NA (If yes, take to VOA Freezer) Do liquid VOA vials contain acid preservation? Yes No NA (If unknown, select No) Are liquid VOA vials free of headspace? Yes No NA Sample ID's and containers affected:
3	Samples received within holding time?	/		/	ID's and tests affected:
,	Sample ID's on COC match ID's on bottles?	/		/	ID's and containers affected:
	Date & time on COC match date & time on bottles?		/		Circle Applicable: No dates on containers No times on containers COC missing info Other (describe)
	Number of containers received match number indicated on COC?	1		0	Circle Applicable: No container count on COC Other (describe)
	Are sample containers identifiable as GEL provided by use of GEL labels?				
1	COC form is properly signed in elinquished/received sections? ents (Use Continuation Form if needed):	/		0	Circle Applicable: Not relinquished Other (describe)
	Som includy.				

List of current GEL Certifications as of 23 October 2023

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 SC00012
Illinois NELAP	200029
Indiana	C-SC-01
Kansas NELAP	E-10332
Kansas NELAT Kentucky SDWA	KY90129
Kentucky Wastewater	KY90129 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	SC000122024-04
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	T104704235-23-21
Utah NELAP	SC000122022-37
Vermont	VT87156
Virginia NELAP	460202
Washington	C780

Page 60 of 60 SDG: 640869



a member of The GEL Group INC

October 23, 2023

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

Re: Arkwright CCR Groundwater Compliance AP1

Work Order: 640870

Dear Joju Abraham:

GEL Laboratories, LLC (GEL) appreciates the opportunity to provide the enclosed analytical results for the sample(s) we received on October 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
640870001	ARK-AP1GWA-1	Ground Water	09/10/23 13:45	11/10/23 15:28
640870002	ARK-AP1-FB-01	Ground Water	09/10/23 14:05	11/10/23 15:28
640870003	ARK-AP1GWA-2	Ground Water	09/10/23 14:30	11/10/23 15:28
640870004	ARK-AP1-EB-01	Ground Water	09/10/23 15:00	11/10/23 15:28
640870005	ARK-AP1PZ-1	Ground Water	09/10/23 16:20	11/10/23 15:28
640870006	ARK-AP1PZ-2	Ground Water	09/10/23 17:00	11/10/23 15:28
640870007	ARK-AP1-FD-01	Ground Water	09/10/23 00:00	11/10/23 15:28
640870008	ARK-AP1PZ-4	Ground Water	10/10/23 09:10	11/10/23 15:28
640870009	ARK-AP1-FB-02	Ground Water	10/10/23 09:30	11/10/23 15:28
640870010	ARK-AP1PZ-3	Ground Water	10/10/23 09:30	11/10/23 15:28
640870011	ARK-AP1PZ-8	Ground Water	10/10/23 11:55	11/10/23 15:28
640870012	ARK-AP1PZ-5	Ground Water	10/10/23 11:20	11/10/23 15:28
640870013	ARK-AP1-EB-02	Ground Water	10/10/23 12:10	11/10/23 15:28
640870014	ARK-AP1PZ-7	Ground Water	10/10/23 13:50	11/10/23 15:28
640870015	ARK-AP1PZ-10	Ground Water	10/10/23 14:20	11/10/23 15:28
640870016	ARK-AP1PZ-11	Ground Water	10/10/23 16:15	11/10/23 15:28



640870017	ARK-AP1-FD-02	Ground Water	10/10/23 00:00	11/10/23 15:28
640870018	ARK-AP1PZ-9	Ground Water	11/10/23 08:20	11/10/23 15:28

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	23-OCT-2023
EPA 903.1 Modified	23-OCT-2023
EPA 904 0/SW846 9320 Modified	16-OCT-2023

Page 2 of 31 SDG: 640870

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

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

Certificate of Analysis Report for

GPCC001 Georgia Power Company Client SDG: 640870 GEL Work Order: 640870

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.

	/ manda	len		
Reviewed by				

Page 4 of 31 SDG: 640870

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: October 23, 2023

Contact: Joju Abraham

Project: Arkwright CCR Groundwater ComplianceAP1

GPCC00100 GPCC001 Client Sample ID: ARK-AP1GWA-1 Project: Client ID:

Sample ID: Matrix: 640870001 WG

Collect Date: 09-OCT-23 Receive Date: 11-OCT-23 Collector: Client

Parameter	Qualifier	Result U	ncertainty	MDC	TPU	RL	Units	PF	DF	Analyst	Date '	Time	Batch	Mtd.
Rad Gas Flow Propor GFPC Ra228, Liqui		0												
Radium-228		2.41	+/-1.09	1.37	+/-1.25	3.00	pCi/L			JE1	10/16/23	0816	2507338	1
Radium-226+Radiu	m-228 Calcula	tion "See Pa	rent Produci	ts"										
Radium-226+228 Sum		4.31	+/-1.35	1.37	+/-1.51		pCi/L			NXL1	10/23/23	1409	2508821	2
Rad Radium-226 Lucas Cell, Ra226, 1	Liquid "As Reco	eived"												
Radium-226		1.90	+/-0.801	0.580	+/-0.848	1.00	pCi/L			LXP1	10/23/23	0818	2508813	3

The following Analytical Methods were performed Description

1 EPA 904.0/SW846 9320 Modified Calculation

EPA 903.1 Modified

Surrogate/Tracer Recovery	Test	Batch ID	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC Ra228, Liquid "As Received"	2507338	66.4	(15%-125%)

Notes:

Method

The MDC is a sample specific MDC.

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

Column headers are defined as follows:

DF: Dilution Factor Mtd.: Method DL: Detection Limit PF: Prep Factor **RL**: Reporting Limit Lc/LC: Critical Level

MDA: Minimum Detectable Activity TPU: Total Propagated Uncertainty

MDC: Minimum Detectable Concentration

Page 5 of 31 SDG: 640870

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: October 23, 2023

Contact: Joju Abraham

Project: Arkwright CCR Groundwater ComplianceAP1

Client Sample ID: ARK-AP1-FB-01 Project: GPCC00100 Sample ID: Client ID: GPCC001 640870002 Matrix: WQ

Collect Date: 09-OCT-23 Receive Date: 11-OCT-23 Collector: Client

Parameter	Qualifier	Result U	ncertainty	MDC	TPU	RL	Units	PF	DF Analys	t Date Time	Batch	Mtd.
Rad Gas Flow Proporti GFPC Ra228, Liquid		U										
Radium-228	U	1.12	+/-1.18	1.96	+/-1.21	3.00	pCi/L		JE1	10/16/23 0816	2507338	1
Radium-226+Radium	-228 Calcular	tion "See Pa	rent Produci	ts"								
Radium-226+228 Sum		2.23	+/-1.36	1.96	+/-1.40		pCi/L		NXL1	10/23/23 1409	2508821	2
Rad Radium-226 Lucas Cell, Ra226, Li	quid "As Rece	eived"										
Radium-226		1.11	+/-0.667	0.704	+/-0.688	1.00	pCi/L		LXP1	10/23/23 0818	2508813	3

The following Analytical Methods were performed Description

EPA 904.0/SW846 9320 Modified

Surrogate/Tracer	Recovery Test	Batch ID Recovery%	Acceptable Limits
3	EPA 903.1 Modified		
2	Calculation		

Barium-133 Tracer 2507338 69.1 (15% - 125%)GFPC Ra228, Liquid "As Received"

Notes:

Method

1

The MDC is a sample specific MDC.

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

Column headers are defined as follows:

DF: Dilution Factor Mtd.: Method DL: Detection Limit PF: Prep Factor Lc/LC: Critical Level **RL**: Reporting Limit

MDA: Minimum Detectable Activity TPU: Total Propagated Uncertainty

MDC: Minimum Detectable Concentration

Page 6 of 31 SDG: 640870

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: October 23, 2023

Contact: Joju Abraham

Project: Arkwright CCR Groundwater ComplianceAP1

Client Sample ID: ARK-AP1GWA-2 Project: GPCC00100 Sample ID: GPCC001 Client ID: 640870003

Matrix: WG

Collect Date: 09-OCT-23 Receive Date: 11-OCT-23 Collector: Client

Parameter	Qualifier	Result Un	certainty	MDC	TPU	RL	Units	PF	DF Analyst	Date Time	Batch 1	Mtd.
Rad Gas Flow Proportion GFPC Ra228, Liquid		0										
Radium-228	U	0.754	+/-1.07	1.84	+/-1.09	3.00	pCi/L		JE1	10/16/23 0816	2507338	1
Radium-226+Radium-	-228 Calculat	tion "See Par	ent Products	s"								
Radium-226+228 Sum		6.78	+/-1.83	1.84	+/-2.05		pCi/L		NXL1	10/23/23 1409	2508821	2
Rad Radium-226 Lucas Cell, Ra226, Lic	quid "As Rece	eived"										
Radium-226		6.03	+/-1.48	0.547	+/-1.73	1.00	pCi/L		LXP1	10/23/23 0818	2508813	3

The following Analytical Methods were performed **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"	2507338	72.4	(15%-125%)

Notes:

Method

The MDC is a sample specific MDC.

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

Column headers are defined as follows:

DF: Dilution Factor Mtd.: Method DL: Detection Limit PF: Prep Factor Lc/LC: Critical Level **RL**: Reporting Limit

MDA: Minimum Detectable Activity TPU: Total Propagated Uncertainty

MDC: Minimum Detectable Concentration

Page 7 of 31 SDG: 640870

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: October 23, 2023

Contact: Joju Abraham

Project: Arkwright CCR Groundwater ComplianceAP1

Client Sample ID: ARK-AP1-EB-01 Project: GPCC00100 GPCC001 Sample ID: Client ID: 640870004

Matrix: WQ

Collect Date: 09-OCT-23 Receive Date: 11-OCT-23 Collector: Client

Parameter	Qualifier	Result U	ncertainty	MDC	TPU	<u>RL</u>	Units	PF	DF Analys	t Date Time	Batch	Mtd.
Rad Gas Flow Proportion GFPC Ra228, Liquid		0										
Radium-228	U	1.24	+/-1.22	2.01	+/-1.26	3.00	pCi/L		JE1	10/16/23 0816	2507338	1
Radium-226+Radium-	228 Calculo	ation "See Pa	rent Product	s"								
Radium-226+228 Sum	U	1.38	+/-1.25	2.01	+/-1.29		pCi/L		NXL1	10/23/23 1409	2508821	2
Rad Radium-226 Lucas Cell, Ra226, Liq	quid "As Rec	ceived"										
Radium-226	U	0.130	+/-0.256	0.508	+/-0.257	1.00	pCi/L		LXP1	10/23/23 0852	2508813	3

The following Analytical Methods were performed 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"	2507338	69.4	(15%-125%)

Notes:

Method

The MDC is a sample specific MDC.

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

Column headers are defined as follows:

DF: Dilution Factor Mtd.: Method DL: Detection Limit PF: Prep Factor **RL**: Reporting Limit Lc/LC: Critical Level

MDA: Minimum Detectable Activity TPU: Total Propagated Uncertainty

MDC: Minimum Detectable Concentration

Page 8 of 31 SDG: 640870

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: October 23, 2023

Contact: Joju Abraham

Project: Arkwright CCR Groundwater ComplianceAP1

Client Sample ID: ARK-AP1PZ-1 Project: GPCC00100 Sample ID: GPCC001 Client ID: 640870005

Matrix: WG

Collect Date: 09-OCT-23 Receive Date: 11-OCT-23 Collector: Client

Parameter	Qualifier	Result U	ncertainty	MDC	TPU	RL	Units	PF	DF Analyst	Date Time	Batch	Mtd.
Rad Gas Flow Proporti GFPC Ra228, Liquid		0										
Radium-228		2.01	+/-1.04	1.42	+/-1.16	3.00	pCi/L		JE1	10/16/23 0816	2507338	1
Radium-226+Radium	-228 Calculat	tion "See Pa	rent Product	s"								
Radium-226+228 Sum		4.93	+/-1.43	1.42	+/-1.59		pCi/L		NXL1	10/23/23 1409	2508821	2
Rad Radium-226 Lucas Cell, Ra226, Li	quid "As Rece	eived"										
Radium-226		2.92	+/-0.983	0.494	+/-1.09	1.00	pCi/L		LXP1	10/23/23 0852	2508813	3

The following Analytical Methods were performed 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"	2507338	68.6	(15%-125%)

Notes:

Method

The MDC is a sample specific MDC.

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

Column headers are defined as follows:

DF: Dilution Factor Mtd.: Method DL: Detection Limit PF: Prep Factor Lc/LC: Critical Level **RL**: Reporting Limit

MDA: Minimum Detectable Activity TPU: Total Propagated Uncertainty

MDC: Minimum Detectable Concentration

Page 9 of 31 SDG: 640870

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: October 23, 2023

Contact: Joju Abraham

Project: Arkwright CCR Groundwater ComplianceAP1

Client Sample ID: ARK-AP1PZ-2 Project: GPCC00100 Sample ID: GPCC001 Client ID: 640870006

Matrix: WG

Collect Date: 09-OCT-23 Receive Date: 11-OCT-23 Collector: Client

Parameter	Qualifier	Result Un	certainty	MDC	TPU	RL	Units	PF	DF Analyst	Date Time	Batch 1	Mtd.
Rad Gas Flow Proportion GFPC Ra228, Liquid		0										
Radium-228	U	1.39	+/-1.07	1.65	+/-1.13	3.00	pCi/L		JE1	10/16/23 0816	2507338	1
Radium-226+Radium-												
Radium-226+228 Sum		7.40	+/-1.78	1.65	+/-2.05		pCi/L		NXL1	10/23/23 1409	2508821	2
Rad Radium-226 Lucas Cell, Ra226, Lic	quid "As Rece	rived"										
Radium-226		6.01	+/-1.43	0.676	+/-1.71	1.00	pCi/L		LXP1	10/23/23 0852	2508813	3

The following Analytical Methods were performed 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"	2507338	63.8	(15%-125%)

Notes:

Method

The MDC is a sample specific MDC.

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

Column headers are defined as follows:

DF: Dilution Factor Mtd.: Method DL: Detection Limit PF: Prep Factor Lc/LC: Critical Level **RL**: Reporting Limit

MDA: Minimum Detectable Activity TPU: Total Propagated Uncertainty

MDC: Minimum Detectable Concentration

Page 10 of 31 SDG: 640870

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: October 23, 2023

Contact: Joju Abraham

Project: Arkwright CCR Groundwater ComplianceAP1

Client Sample ID: ARK-AP1-FD-01 Project: GPCC00100 Sample ID: 640870007 Client ID: GPCC001

Matrix: WG

Collect Date: 09-OCT-23 Receive Date: 11-OCT-23 Collector: Client

Parameter	Qualifier	Result Un	certainty	MDC	TPU	RL	Units	PF	DF Analys	t Date Time	Batch	Mtd.
Rad Gas Flow Proport GFPC Ra228, Liquid		U										
Radium-228	U	1.66	+/-1.20	1.85	+/-1.28	3.00	pCi/L		JE1	10/16/23 0816	2507338	1
Radium-226+Radium	-228 Calcular	tion "See Par	ent Produci	ts"								
Radium-226+228 Sum		7.98	+/-2.05	1.85	+/-2.39		pCi/L		NXL1	10/23/23 1409	2508821	2
Rad Radium-226 Lucas Cell, Ra226, Li	iquid "As Rece	eived"										
Radium-226		6.33	+/-1.66	0.996	+/-2.02	1.00	pCi/L		LXP1	10/23/23 0852	2508813	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" 2507338 60.3 (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 FactorMtd.: MethodDL: Detection LimitPF: Prep FactorLc/LC: Critical LevelRL: Reporting Limit

MDA: Minimum Detectable Activity TPU: Total Propagated Uncertainty

MDC: Minimum Detectable Concentration

Page 11 of 31 SDG: 640870

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: October 23, 2023

Contact: Joju Abraham

Project: Arkwright CCR Groundwater ComplianceAP1

Client Sample ID: ARK-AP1PZ-4 Project: GPCC00100 Sample ID: GPCC001 Client ID: 640870008

Matrix: WG

Collect Date: 10-OCT-23 Receive Date: 11-OCT-23 Collector: Client

Parameter	Qualifier	Result Un	certainty	MDC	TPU	RL	Units	PF	DF Analys	t Date Time	Batch 1	Mtd.
Rad Gas Flow Proporti GFPC Ra228, Liquid		0										
Radium-228	U	2.16	+/-1.68	2.70	+/-1.77	3.00	pCi/L		JE1	10/16/23 0819	2507338	1
Radium-226+Radium-	-228 Calculai	tion "See Par	rent Product	<i>'s''</i>								
Radium-226+228 Sum		5.33	+/-1.96	2.70	+/-2.14		pCi/L		NXL1	10/23/23 1409	2508821	2
Rad Radium-226 Lucas Cell, Ra226, Lie	quid "As Rece	eived"										
Radium-226		3.16	+/-1.01	0.481	+/-1.21	1.00	pCi/L		LXP1	10/23/23 0852	2508813	3

The following Analytical Methods were performed 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"	2507338	62.9	(15%-125%)

Notes:

Method

The MDC is a sample specific MDC.

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

Column headers are defined as follows:

DF: Dilution Factor Mtd.: Method DL: Detection Limit PF: Prep Factor Lc/LC: Critical Level **RL**: Reporting Limit

MDA: Minimum Detectable Activity TPU: Total Propagated Uncertainty

MDC: Minimum Detectable Concentration

Page 12 of 31 SDG: 640870

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: October 23, 2023

Contact: Joju Abraham

Project: Arkwright CCR Groundwater ComplianceAP1

Client Sample ID: ARK-AP1-FB-02 Project: GPCC00100 Sample ID: GPCC001 Client ID: 640870009

Matrix: WQ

Collect Date: 10-OCT-23 Receive Date: 11-OCT-23 Collector: Client

Parameter	Qualifier	Result U	ncertainty	MDC	TPU	RL	Units	PF	DF Analys	Date Time	Batch	Mtd.
Rad Gas Flow Proporti GFPC Ra228, Liquid		U										
Radium-228		2.02	+/-1.05	1.43	+/-1.17	3.00	pCi/L		JE1	10/16/23 0821	2507338	1
Radium-226+Radium	-228 Calcula	tion "See Pa	rent Produci	ts"								
Radium-226+228 Sum		2.51	+/-1.13	1.43	+/-1.25		pCi/L		NXL1	10/23/23 1409	2508821	2
Rad Radium-226 Lucas Cell, Ra226, Li	quid "As Rec	eived"										
Radium-226	U	0.489	+/-0.437	0.573	+/-0.449	1.00	pCi/L		LXP1	10/23/23 0852	2508813	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"	2507338	68.6	(15%-125%)

Notes:

The MDC is a sample specific MDC.

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

Column headers are defined as follows:

DF: Dilution Factor Mtd.: Method DL: Detection Limit PF: Prep Factor Lc/LC: Critical Level **RL**: Reporting Limit

MDA: Minimum Detectable Activity TPU: Total Propagated Uncertainty

MDC: Minimum Detectable Concentration

Page 13 of 31 SDG: 640870

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: October 23, 2023

Contact: Joju Abraham

Project: Arkwright CCR Groundwater ComplianceAP1

Client Sample ID: ARK-AP1PZ-3 Project: GPCC00100 Sample ID: GPCC001 Client ID: 640870010

Matrix: WG

Collect Date: 10-OCT-23 Receive Date: 11-OCT-23 Collector: Client

Parameter	Qualifier	Result Un	certainty	MDC	TPU	RL	Units	PF	DF Analyst	Date Time	Batch 1	Mtd.
Rad Gas Flow Proporti GFPC Ra228, Liquid		0										
Radium-228		3.12	+/-1.40	1.86	+/-1.61	3.00	pCi/L		JE1	10/16/23 0821	2507338	1
Radium-226+Radium-	-228 Calculat	ion "See Par	rent Products	s"								
Radium-226+228 Sum		12.5	+/-2.28	1.86	+/-2.99		pCi/L		NXL1	10/23/23 1409	2508821	2
Rad Radium-226 Lucas Cell, Ra226, Lic	quid "As Rece	rived"										
Radium-226		9.36	+/-1.80	0.761	+/-2.52	1.00	pCi/L		LXP1	10/23/23 0852	2508813	3

The following Analytical Methods were performed **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"	2507338	57.7	(15%-125%)

Notes:

Method

The MDC is a sample specific MDC.

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

Column headers are defined as follows:

DF: Dilution Factor Mtd.: Method DL: Detection Limit PF: Prep Factor Lc/LC: Critical Level **RL**: Reporting Limit

MDA: Minimum Detectable Activity TPU: Total Propagated Uncertainty

MDC: Minimum Detectable Concentration

Page 14 of 31 SDG: 640870

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: October 23, 2023

Contact: Joju Abraham

Project: Arkwright CCR Groundwater ComplianceAP1

GPCC00100 GPCC001 Client Sample ID: ARK-AP1PZ-8 Project: Sample ID: Matrix: 640870011 Client ID:

WG

Collect Date: 10-OCT-23 Receive Date: 11-OCT-23 Collector: Client

Parameter	Qualifier	Result U	ncertainty	MDC	TPU	RL	Units	PF	DF Analyst	Date Time	Batch 1	Mtd.
Rad Gas Flow Proportion GFPC Ra228, Liquid		0										
Radium-228		1.84	+/-0.907	1.17	+/-1.02	3.00	pCi/L		JE1	10/16/23 0821	2507338	1
Radium-226+Radium-	228 Calculat	ion "See Pa	rent Product.	s"								
Radium-226+228 Sum		3.27	+/-1.13	1.17	+/-1.27		pCi/L		NXL1	10/23/23 1409	2508821	2
Rad Radium-226 Lucas Cell, Ra226, Lid	juid "As Rece	eived"										
Radium-226		1.44	+/-0.671	0.531	+/-0.748	1.00	pCi/L		LXP1	10/23/23 0852	2508813	3

The following Analytical Methods were performed Description

1 EPA 904.0/SW846 9320 Modified Calculation

EPA 903.1 Modified

Surrogate/Tracer Recovery	Test	Batch ID	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC Ra228, Liquid "As Received"	2507338	71.3	(15%-125%)

Notes:

Method

The MDC is a sample specific MDC.

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

Column headers are defined as follows:

DF: Dilution Factor Mtd.: Method DL: Detection Limit PF: Prep Factor **RL**: Reporting Limit Lc/LC: Critical Level

MDA: Minimum Detectable Activity TPU: Total Propagated Uncertainty

MDC: Minimum Detectable Concentration

Page 15 of 31 SDG: 640870

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: October 23, 2023

Contact: Joju Abraham

Project: Arkwright CCR Groundwater ComplianceAP1

ARK-AP1PZ-5 Client Sample ID: Project: GPCC00100 Sample ID: GPCC001 Client ID: 640870012

Matrix: WG

Collect Date: 10-OCT-23 Receive Date: 11-OCT-23 Collector: Client

Parameter	Qualifier	Result Un	certainty	MDC	TPU	RL	Units	PF	DF Analys	t Date Time	Batch 1	Mtd.
Rad Gas Flow Proporti GFPC Ra228, Liquid		0										
Radium-228	U	-0.394	+/-1.54	2.87	+/-1.54	3.00	pCi/L		JE1	10/16/23 0821	2507338	1
Radium-226+Radium	-228 Calculat	tion "See Par	rent Product.	s"								
Radium-226+228 Sum		4.50	+/-2.00	2.87	+/-2.27		pCi/L		NXL1	10/23/23 1409	2508821	2
Rad Radium-226 Lucas Cell, Ra226, Li	quid "As Rece	eived"										
Radium-226		4.50	+/-1.28	0.542	+/-1.66	1.00	pCi/L		LXP1	10/23/23 0927	2508813	3

The following Analytical Methods were performed **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"	2507338	59.1	(15%-125%)

Notes:

Method

The MDC is a sample specific MDC.

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

Column headers are defined as follows:

DF: Dilution Factor Mtd.: Method DL: Detection Limit PF: Prep Factor Lc/LC: Critical Level **RL**: Reporting Limit

MDA: Minimum Detectable Activity TPU: Total Propagated Uncertainty

MDC: Minimum Detectable Concentration

Page 16 of 31 SDG: 640870

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: October 23, 2023

Contact: Joju Abraham

Project: Arkwright CCR Groundwater ComplianceAP1

ARK-AP1-EB-02 Client Sample ID: Project: GPCC00100 Sample ID: GPCC001 Client ID: 640870013

Matrix: WQ

Collect Date: 10-OCT-23 Receive Date: 11-OCT-23 Collector: Client

Parameter	Qualifier	Result Ui	ncertainty	MDC	TPU	RL	Units	PF	DF Analys	Date Time	Batch 1	Mtd.
Rad Gas Flow Proportion GFPC Ra228, Liquid		0										
Radium-228	U	1.38	+/-1.34	2.21	+/-1.39	3.00	pCi/L		JE1	10/16/23 0821	2507338	1
Radium-226+Radium-	228 Calcula	ation "See Pa	rent Product	s"								
Radium-226+228 Sum	U	1.91	+/-1.44	2.21	+/-1.49		pCi/L		NXL1	10/23/23 1409	2508821	2
Rad Radium-226 Lucas Cell, Ra226, Liq	quid "As Rec	ceived"										
Radium-226	U	0.527	+/-0.523	0.761	+/-0.529	1.00	pCi/L		LXP1	10/23/23 0927	2508813	3

The following Analytical Methods were performed **Description**

	<u>-</u>
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"	2507338	66.8	(15%-125%)

Notes:

Method

The MDC is a sample specific MDC.

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

Column headers are defined as follows:

DF: Dilution Factor Mtd.: Method DL: Detection Limit PF: Prep Factor Lc/LC: Critical Level **RL**: Reporting Limit

MDA: Minimum Detectable Activity TPU: Total Propagated Uncertainty

MDC: Minimum Detectable Concentration

Page 17 of 31 SDG: 640870

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: October 23, 2023

Contact: Joju Abraham

Project: Arkwright CCR Groundwater ComplianceAP1

Client Sample ID: ARK-AP1PZ-7 Project: GPCC00100 Sample ID: 640870014 Client ID: GPCC001

Matrix: WG

Collect Date: 10-OCT-23 Receive Date: 11-OCT-23 Collector: Client

Parameter	Qualifier	Result U	ncertainty	MDC_	TPU	RL_	Units	PF	DF Analys	t Date Time	Batch	Mtd.
Rad Gas Flow Proportion		0										
Radium-228	U	0.986	+/-1.17	1.98	+/-1.20	3.00	pCi/L		JE1	10/16/23 0822	2507338	1
Radium-226+Radium-	228 Calculai	tion "See Pa	rent Product.	s"								
Radium-226+228 Sum	U	1.64	+/-1.29	1.98	+/-1.32		pCi/L		NXL1	10/23/23 1409	2508821	2
Rad Radium-226 Lucas Cell, Ra226, Liq	uid "As Rece	eived"										
Radium-226		0.652	+/-0.529	0.587	+/-0.545	1.00	pCi/L		LXP1	10/23/23 0927	2508813	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 Recove	ry% Acceptable Limits
Darium 122 Trager	CEDC Do229 Liquid "As Doggiyad"	2507338 6	(15%_125%)

Barium-133 Tracer GFPC Ra228, Liquid "As Received" 2507338 61.9 (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 FactorMtd.: MethodDL: Detection LimitPF: Prep FactorLc/LC: Critical LevelRL: Reporting Limit

MDA: Minimum Detectable Activity TPU: Total Propagated Uncertainty

MDC: Minimum Detectable Concentration

Page 18 of 31 SDG: 640870

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: October 23, 2023

Contact: Joju Abraham

Project: Arkwright CCR Groundwater ComplianceAP1

Client Sample ID: ARK-AP1PZ-10 Project: GPCC00100 Sample ID: GPCC001 Client ID: 640870015

Matrix: WG

Collect Date: 10-OCT-23 Receive Date: 11-OCT-23 Collector: Client

Parameter	Qualifier	Result Un	ncertainty	MDC	TPU	RL	Units	PF	DF Analyst	Date Time	Batch 1	Mtd.
Rad Gas Flow Proportion GFPC Ra228, Liquid		0										
Radium-228	U	1.06	+/-0.958	1.53	+/-0.995	3.00	pCi/L		JE1	10/16/23 0822	2507338	1
Radium-226+Radium-	228 Calculat	tion "See Pa	rent Product	s"								
Radium-226+228 Sum		11.6	+/-2.32	1.53	+/-2.85		pCi/L		NXL1	10/23/23 1409	2508821	2
Rad Radium-226 Lucas Cell, Ra226, Liq	quid "As Rece	eived"										
Radium-226		10.5	+/-2.11	1.15	+/-2.67	1.00	pCi/L		LXP1	10/23/23 0927	2508813	3

The following Analytical Methods were performed **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"	2507338	64.6	(15%-125%)

Notes:

Method

The MDC is a sample specific MDC.

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

Column headers are defined as follows:

DF: Dilution Factor Mtd.: Method DL: Detection Limit PF: Prep Factor Lc/LC: Critical Level **RL**: Reporting Limit

MDA: Minimum Detectable Activity TPU: Total Propagated Uncertainty

MDC: Minimum Detectable Concentration

Page 19 of 31 SDG: 640870

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: October 23, 2023

Contact: Joju Abraham

Project: Arkwright CCR Groundwater ComplianceAP1

Client Sample ID: ARK-AP1PZ-11 Project: GPCC00100 Sample ID: GPCC001 Client ID: 640870016

Matrix: WG

Collect Date: 10-OCT-23 Receive Date: 11-OCT-23 Collector: Client

Parameter	Qualifier	Result U	ncertainty	MDC	TPU	RL	Units	PF	DF Analys	t Date Time	Batch 1	Mtd.
Rad Gas Flow Proportion GFPC Ra228, Liquid		0										
Radium-228	U	0.798	+/-1.05	1.78	+/-1.07	3.00	pCi/L		JE1	10/16/23 0814	2507338	1
Radium-226+Radium-	228 Calcula	tion "See Pa	rent Product.	s"								
Radium-226+228 Sum	U	1.77	+/-1.23	1.78	+/-1.27		pCi/L		NXL1	10/23/23 1409	2508821	2
Rad Radium-226 Lucas Cell, Ra226, Lie	quid "As Rec	eived"										
Radium-226		0.977	+/-0.648	0.813	+/-0.685	1.00	pCi/L		LXP1	10/23/23 0927	2508813	3

The following Analytical Methods were performed **Description**

	<u>•</u>
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"	2507338	76.2	(15%-125%)

Notes:

Method

The MDC is a sample specific MDC.

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

Column headers are defined as follows:

DF: Dilution Factor Mtd.: Method DL: Detection Limit PF: Prep Factor Lc/LC: Critical Level **RL**: Reporting Limit

MDA: Minimum Detectable Activity TPU: Total Propagated Uncertainty

MDC: Minimum Detectable Concentration

Page 20 of 31 SDG: 640870

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: October 23, 2023

Contact: Joju Abraham

Project: Arkwright CCR Groundwater ComplianceAP1

Client Sample ID: ARK-AP1-FD-02 Project: GPCC00100 Sample ID: 640870017 Client ID: GPCC001

Matrix: WG

Collect Date: 10-OCT-23 Receive Date: 11-OCT-23 Collector: Client

Parameter	Qualifier	Result U	ncertainty	MDC	TPU	RL	Units	PF	DF Analyst	Date Time	Batch 1	Mtd.
Rad Gas Flow Proportion GFPC Ra228, Liquid		0										
Radium-228		1.92	+/-1.03	1.44	+/-1.15	3.00	pCi/L		JE1	10/16/23 0814	2507338	1
Radium-226+Radium-	228 Calculat	tion "See Pa	rent Product	s"								
Radium-226+228 Sum		3.72	+/-1.32	1.44	+/-1.48		pCi/L		NXL1	10/23/23 1409	2508821	2
Rad Radium-226 Lucas Cell, Ra226, Lia	quid "As Rece	eived"										
Radium-226		1.80	+/-0.818	0.633	+/-0.927	1.00	pCi/L		LXP1	10/23/23 0927	2508813	3

The following Analytical Methods were performed

Method	Description
1	EPA 904.0/SW846 9320 Modified
2	Calculation
2	EDA 002 1 M 1'C' 1

3 EPA 903.1 Modified

Surrogate/Tracer Recovery	Test	Batch ID	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC Ra228, Liquid "As Received"	2507338	64.7	(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 FactorMtd.: MethodDL: Detection LimitPF: Prep FactorLc/LC: Critical LevelRL: Reporting Limit

MDA: Minimum Detectable Activity TPU: Total Propagated Uncertainty

MDC: Minimum Detectable Concentration

Page 21 of 31 SDG: 640870

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: October 23, 2023

Contact: Joju Abraham

Project: Arkwright CCR Groundwater ComplianceAP1

Client Sample ID: ARK-AP1PZ-9 Project: GPCC00100 Sample ID: Client ID: GPCC001 640870018

Matrix: WG

Collect Date: 11-OCT-23 Receive Date: 11-OCT-23 Collector: Client

Parameter	Qualifier	Result Un	certainty	MDC	TPU	J RL	Units	PF	DF Analyst	Date Time	Batch	Mtd.
Rad Gas Flow Proportion GFPC Ra228, Liquid		0										
Radium-228	U	2.25	+/-1.57	2.47	+/-1.6	3.00	pCi/L		JE1	10/16/23 0815	2507338	1
Radium-226+Radium-	228 Calculat	ion "See Par	ent Product	s"								
Radium-226+228 Sum		5.37	+/-1.91	2.47	+/-2.1	2	pCi/L		NXL1	10/23/23 1409	2508821	2
Rad Radium-226 Lucas Cell, Ra226, Lie	quid "As Rece	rived"										
Radium-226		3.12	+/-1.09	0.740	+/-1.3	1.00	pCi/L		LXP1	10/23/23 0927	2508813	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 2507338 62.6 (15% - 125%)

GFPC Ra228, Liquid "As Received"

The MDC is a sample specific MDC.

Notes:

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

Column headers are defined as follows:

DF: Dilution Factor Mtd.: Method DL: Detection Limit PF: Prep Factor **RL**: Reporting Limit Lc/LC: Critical Level

MDA: Minimum Detectable Activity TPU: Total Propagated Uncertainty

MDC: Minimum Detectable Concentration

Page 22 of 31 SDG: 640870

Radiochemistry Technical Case Narrative Georgia Power Company SDG #: 640870

Product: Radium-226+Radium-228 Calculation

Analytical Method: Calculation

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

Analytical Batch: 2508821

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

GEL Sample ID#	Client Sample Identification
640870001	ARK-AP1GWA-1
640870002	ARK-AP1-FB-01
640870003	ARK-AP1GWA-2
640870004	ARK-AP1-EB-01
640870005	ARK-AP1PZ-1
640870006	ARK-AP1PZ-2
640870007	ARK-AP1-FD-01
640870008	ARK-AP1PZ-4
640870009	ARK-AP1-FB-02
640870010	ARK-AP1PZ-3
640870011	ARK-AP1PZ-8
640870012	ARK-AP1PZ-5
640870013	ARK-AP1-EB-02
640870014	ARK-AP1PZ-7
640870015	ARK-AP1PZ-10
640870016	ARK-AP1PZ-11
640870017	ARK-AP1-FD-02
640870018	ARK-AP1PZ-9

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: 2507338

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

GEL Sample ID# Client Sample Identification

640870001 ARK-AP1GWA-1

Page 23 of 31 SDG: 640870

640870002	ARK-AP1-FB-01
640870003	ARK-AP1GWA-2
640870004	ARK-AP1-EB-01
640870005	ARK-AP1PZ-1
640870006	ARK-AP1PZ-2
640870007	ARK-AP1-FD-01
640870008	ARK-AP1PZ-4
640870009	ARK-AP1-FB-02
640870010	ARK-AP1PZ-3
640870011	ARK-AP1PZ-8
640870012	ARK-AP1PZ-5
640870013	ARK-AP1-EB-02
640870014	ARK-AP1PZ-7
640870015	ARK-AP1PZ-10
640870016	ARK-AP1PZ-11
640870017	ARK-AP1-FD-02
640870018	ARK-AP1PZ-9
1205544152	Method Blank (MB)
1205544153	640870001(ARK-AP1GWA-1) Sample Duplicate (DUP)
1205544154	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

Sample 1205544152 (MB) was recounted due to a suspected blank false positive. The recount is reported.

<u>Product:</u> Lucas Cell, Ra226, Liquid <u>Analytical Method:</u> EPA 903.1 Modified

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

Analytical Batch: 2508813

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

GEL Sample ID#	Client Sample Identification
640870001	ARK-AP1GWA-1
640870002	ARK-AP1-FB-01
640870003	ARK-AP1GWA-2
640870004	ARK-AP1-EB-01
640870005	ARK-AP1PZ-1
640870006	ARK-AP1PZ-2
640870007	ARK-AP1-FD-01
640870008	ARK-AP1PZ-4
640870009	ARK-AP1-FB-02
640870010	ARK-AP1PZ-3

640870011	ARK-AP1PZ-8
640870012	ARK-AP1PZ-5
640870013	ARK-AP1-EB-02
640870014	ARK-AP1PZ-7
640870015	ARK-AP1PZ-10
640870016	ARK-AP1PZ-11
640870017	ARK-AP1-FD-02
640870018	ARK-AP1PZ-9
1205546778	Method Blank (MB)
1205546779	640870001(ARK-AP1GWA-1) Sample Duplicate (DUP)
1205546780	640870001(ARK-AP1GWA-1) Matrix Spike (MS)
1205546781	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, 1205546780 (ARK-AP1GWA-1MS), 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 25 of 31 SDG: 640870

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

QC Summary

Client: Georgia Power Company, Southern Company

241 Ralph McGill Blvd NE, Bin 10160

Atlanta, Georgia

Contact: Joju Abraham

Workorder: 640870

Parmname		NOM	Sample (Qual	QC	Units	RPD%	REC%	Range A	Anlst	Date Time
Rad Gas Flow											
Batch	2507338										
QC1205544153	640870001 DUP										
Radium-228			2.41	U	1.61	pCi/L	39.9		(0% - 100%)	JE1	10/16/2309:05
		Uncert:	+/-1.09		+/-1.09						
		TPU:	+/-1.25		+/-1.17						
QC1205544154	LCS										
Radium-228		76.7			67.0	pCi/L		87.3	(75%-125%)	JE1	10/16/2309:05
		Uncert:			+/-4.44						
		TPU:			+/-17.7						
QC1205544152	MB				2.04	C: /I				TE 1	10/16/2210 40
Radium-228		Uncert:		U	2.84 +/-1.87	pCi/L				JE1	10/16/2310:40
		TPU:			+/-1.87						
Rad Ra-226		IPU:			+/-2.00						
Batch	2508813										
QC1205546779	640870001 DUP		1.00		2.12	ъC:/I	11.5		(00/ 1000/)	I VD1	10/22/2210.02
Radium-226		Uncert:	1.90 +/-0.801		2.13 +/-0.886	pCi/L	11.5		(0% - 100%)	LAFI	10/23/2310:02
		TPU:	+/-0.848		+/-0.880						
QC1205546781	LCS	11 0.	17 0.040		17 0.557						
Radium-226	Les	27.1			23.8	pCi/L		88	(75%-125%)	LXP1	10/23/2310:02
114444411 220		Uncert:			+/-2.72	F			(1273 ===73)		
		TPU:			+/-6.04						
QC1205546778	MB										
Radium-226				U	0.468	pCi/L				LXP1	10/23/2309:27
		Uncert:			+/-0.519						
		TPU:			+/-0.526						
QC1205546780	640870001 MS										
Radium-226		135	1.90		148	pCi/L		109	(75%-125%)	LXP1	10/23/2310:02
		Uncert:	+/-0.801		+/-17.0						
		TPU:	+/-0.848		+/-27.6						

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.
- Value is estimated
- X Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
- Н Analytical holding time was exceeded
- Result is less than value reported
- Result is greater than value reported

Page 26 of 31 SDG: 640870

Report Date: October 23, 2023

Page 1 of 2

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

QC Summary

Workorder: 640870 Page 2 of 2 **Parmname** NOM Sample Qual QC Units RPD% REC% Range Anlst Date Time UI Gamma Spectroscopy--Uncertain identification BDResults are either below the MDC or tracer recovery is low Preparation or preservation holding time was exceeded h 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. Analyte concentration is not detected above the detection limit ND M M if above MDC and less than LLD Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier NJ FA Failed analysis. UJ Gamma Spectroscopy--Uncertain identification 0 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.

Page 27 of 31 SDG: 640870

Page of a 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1,
--

		The second name of the second na																		
Page: 2	of <u>2</u> 175569434					aho	rato	aboratories	C						GE 204	L Labo	GEL Laboratories, LLC 2040 Savage Road	TTC		
GELOQuote #:	5 Coolers			gel.	Ghain of C	emistry F	Radiochemi	hemistry I Radiochemistry I Radiobioassay I Specialty Analytics Ciretody and Analytical Reminest	oassay S	pecialty	Analytic	so.			Ch	arlesto	Charleston, SC 29407	107		
PO Number:		GEL WO	GEL Work Order Number:			GEL	Project N	GEL Project Manager: Erin Trent	rin Trei	11					Fax	one: (8-	Fnone: (843) 556-8171 Fax: (843) 766-1178	21/1		
Client Name: Georgia Power	gia Power			Phone # (937-344	37-344-6	-6533)			Sam	ple An	alysis	Sample Analysis Requested	sted (5)		n the 1	numbe	er of cont	(Fill in the number of containers for each test)	r each t	est)
Project/Site Name:	Project/Site Name: Plant Arkwright Ash Pond 1			Fax:				Should this		IN	IN			IN	IN	IN	IN	ļ ·	Prese	< Preservative Type (6)
Addı S: 241 Ralph	s: 241 Ralph McGill Blvd SE, Atlanta, GA 30308	3A 30308						sample be			-			3	po	\vdash	69			
Collected By: Joh	ın Myer; Dylan Quintal	Send Resulh Cassidy.Sut	Send Results To: jabraham@southernco.com EDD@stantec.com Cassidy.Sutherland@stantec.com	n thernco.com	EDD@sta	antec.com	_	Aldo Yldo	rds	To the second		(1	()	5.1 199			' K' W		ပိ	Comments
0870	082 0. Sample ID * For composites - indicate start and stop date/time	late/time	*Date Collected	*Time Collected (Military)	OC Code (3)	Field Filtered (3)	Sample (4)	Adioactive es, please sup sotopic info.)	7) Known or ossible Haza	otal number Ag (App. I)	Metals App. I	Alkalinity R2,	TDS (SM 2540 Anions (Cl, F	(300.0 Rev. A slass A	(6020 RAD 226-2	Mercury (Metals Al, Va, Fe, Mn	(task_AS	sk_coc ASSM	sk_code: ARK-CCR- ASSMT-2023S1)
	ARK-AP1PZ-8		10-10-23	1155	Z	z	9M	SI A	d	19	×		×	×	×	×	I			
	ARK-AP1PZ-5		10-10-23	1120	Z	z	MG			9	×				×	×				
	ARK-AP1-EB-02		10-10-23	1210	EB	z	WQ			9	×			×	×	×			ļ .	
	ARK-AP1PZ-7		10-10-23	1350	Z	Z	MG			9	×				×	×			-	
	ARK-APIPZ-10		10-10-23	1420	Z	Z	MG			9	×		×	×	×	×				
	ARK-AP1PZ-11		10-10-23	1615	Z	N	9M			9	×		×	×	×	×				
	ARK-AP1-FD-02		10-10-23	NA	FD	N	WQ			9	×		×	×	×	×				
5	ARK-AP1PZ-9		10-11-23	0820	Z	N	WG			9	×		×	×	×	×				
		ř.																		
		Chain of Cus	Chain of Custody Signatures	James de la companya del companya de la companya del companya de la companya de l					TATE	TAT Requested:		Normal:	X	Rush:		Specify:	ify:	S)	ubject	(Subject to Surcharge)
Relinquished By (Signed)		Date	Received by (signed)		Print Name		Date		Fax Results: [] Yes	: [] Y		[X]No								
1 Christin	J JOHN MXEN 1	2/1/2	195 Linder	Proposition of the state of the	1	Brandon		Er I Com Sel	Select Deliverable: [] C of A	verable] C		[] QC Summary	ummar		[] level 1	I [X] Level 2		[] Level 3	3 [] Level 4
2	~		20 Th	The state of the s			11/01	(2) Ad.	Additional Remarks.	Remar	£S:									
3			3				57	LS FO	For Lab Receiving Use Only: Custody Seal Intact? [] Yes	eceiving	g Use (Inly: Ci	ustody S	eal In	act? [] Yes	[] No	Cooler Temp:	Temp:	20 >
> For sample shipp	> For sample shipping and delivery details, see Sample Receipt & Review form (SRR.)	e Sample Recei	ipt & Review form	(SRR.)			-1	Sample Collection Time Zone: [X] Eastern	lection T	ime Zo	ne: []	X] East		[] Pacific	_] Central		[] Mountain		[] Other:
 Chain of Custody int. QC Codes: N = Norm 	1.) Chain of Custody Number = Chent Determined 2.) QC Codes: N = Normal Sample, TB = Trip Blank, FD = Field Duplicate, EB = Equipment Blank, MS = Marrix Spike Sample, MSD = Marrix Spike Duplicate Sample, G = Grab, C = Commostre	Field Duplicate, El	B = Equipment Blank.	MS = Matrix S	Spike Samp	e. MSD =	Matrix Spik	e Duplicate Sar	mole G = 0	Trab C	: Compos	site								
3.) Field Filtered: For lic	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.	for yes the sample w	was field filtered or - N	- for sample wa	as not field	filtered.	•	•												
4.) Matrix Codes: DW =I	4.) Matrix Codes: DW=Drinking Water, GW=Groundwater, SW=Surface Water, WW=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	; SW=Surface Wate	er, WW=Waste Water,	W=Water, M	C=Misc Liq	uid, SO=So	oil, SD=Sed.	iment, SL=Sluc	dge, SS=So	lid Wast	3, 0 =0il,	F=Filter,	P=Wipe,	U=Urin	, F=Fec.	al, N=N	asal			
5.) Sample Analysis Req	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).	ed (i.e. 8260B, 6010	0B/7470A) and number	of containers !	orovided for	each (i.e.	8260B - 3, c	5010B/7470A -	.1)											
7.) KNOWN OR PC	o.) Preservative Type: I.A. = hydrochropre Acid, M. = Nittic Acid, M. = Sodium Hydroxide, SA = Sodium Hydroxide, S	Acid, SH = Sodiur Characteri	d, SH = Sodium Hydroxide, SA = Sulf Characteristic Hazards	huric Acid, AA = Ascort Listed Waste	= Ascorbic	Acid, HX	= Hexane, S	ST = Sodium Thiosu	hiosulfate,	If no pres	ervative	is added =	leave fie	ld blank			Plancar	abinom	" addit	Planes menids am additional dainile
		FL = Flam	FL = Flammable/Ignitable	LW=L	LW= Listed Waste	ste		0	OT= Other / Unknown	/ Unkn	uwo						below re	egarding I	handlin	r reuse provide any daminonia actuins below regarding handling and/or disposal
<u>s</u>	Hg= Mercury	CO = Corrosive RE = Reactive	osive	(F,K,P) Waste	(F,K,P and U-listed wastes.) Waste code(s):	sted wast	(es.)	(i.e. mis	(i.e.: High/low pH, asbestos, beryllium, irritants, other misc. health hazards, etc.)	ow pH,	asbest	os, bery.	llium, in	ritants	, other		concern	S. (i.e.: O.	rigin of	concerns. (i.e.: Origin of sample(s), type of site collected from odd matrices, etc.)
	Se= Selenium							Des	Description:								9 3116	discrea y	out, out	amdirates, etc.)
Cr = Cadmium A Cr = Chromium M	Ag= Silver MR= Misc. RCRA metals	PCB = Polychlorinated	ulated				1	1.								1				
		lqiq	biphenyls													1				
				5																

640 870

Laboratories LLC SAMPLE RECEIPT & REVIEW FORM Client: 6 PC C SDG/AR/COC/Work Order: Received By: QG Date Received: 10123 Circle Applicable: FedEx Express FedEx Ground UPS Field Services Courier Other Carrier and Tracking Number Suspected Hazard Information *If Net Counts > 100cpm on samples not marked "radioactive", contact the Radiation Safety Group for further investigation. No Hazard Class Shipped: If UN2910, Is the Radioactive Shipment Survey Compliant? Yes____No_ A)Shipped as a DOT Hazardous? B) Did the client designate the samples are to be COC potation or radioactive stickers on containers equal client designation. received as radioactive? C) Did the RSO classify the samples as Maximum Net Counts Observed* (Observed Counts - Area Background Counts):

Classified as: Rad 1 Rad 2 Rad 3 CPM/mR/Hr radioactive? coc notation or hazard labels on containers equal client designation. D) Did the client designate samples are hazardous? If D or E is yes, select Hazards below. PCB's Flammable Fore E) Did the RSO identify possible hazards? Foreign Soil RCRA Asbestos Beryllium Sample Receipt Criteria NA NA Comments/Qualifiers (Required for Non-Conforming Items) Shipping containers received intact and Circle Applicable: Seals broken Damaged container Leaking container Other (describe) Chain of custody documents included Circle Applicable: Client contacted and provided COC COC created upon receipt with shipment? Preservation Method: Wellce Ice Packs Dry ice None Other: *all temperatures are recorded in Celsius Samples requiring cold preservation within $(0 \le 6 \text{ deg. C})$?* Daily check performed and passed on IR Temperature Device Serial #: IR1-23 temperature gun? Secondary Temperature Device Serial # (If Applicable): Circle Applicable: Seals broken Damaged container Leaking container Other (describe) Sample containers intact and sealed? Samples requiring chemical preservation Sample ID's and Containers Affected: at proper pH? If Preservation added, Lot#: Ly es, 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) Do any samples require Volatile Are liquid VOA vials free of headspace? Yes___ No_ Analysis? Sample ID's and containers affected: ID's and tests affected: Samples received within holding time? Sample ID's on COC match ID's on ID's and containers affected: bottles? Date & time on COC match date & time Circle Applicable: No dates on containers No times on containers COC missing info Other (describe) 10 on bottles? Number of containers received match Circle Applicable: No container count on COC Other (describe) 11 number indicated on COC? Are sample containers identifiable as GEL provided by use of GEL labels? COC form is properly signed in Circle Applicable: Not relinquished Other (describe) relinquished/received sections? Comments (Use Continuation Form if needed): PM (or PMA) review: Initials _

GL-CHL-SR-001 Rev 7

List of current GEL Certifications as of 23 October 2023

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		
	9976		
Michigan	9976 SC00012		
Mississippi Nebraska	NE-OS-26-13		
Nevada	SC000122024-04		
New Hampshire NELAP	2054		
New Jersey NELAP New Mexico	SC002		
	SC00012		
New York NELAP North Carolina	11501		
North Carolina SDWA	233		
	45709		
North Dakota	R-158 2022-160		
Oklahoma			
Pennsylvania NELAP	68-00485 SC00012		
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	SC000122022-37		
Vermont	VT87156		
Virginia NELAP	460202		
Washington	C780		





October 20, 2023

Kelley Sharpe ARCADIS - Atlanta 2839 Paces Ferry Rd STE 900 Atlanta, GA 30339

RE: Project: Plant Arkwright-CCR Ash Pond

Pace Project No.: 92691202

Dear Kelley Sharpe:

Enclosed are the analytical results for sample(s) received by the laboratory on October 03, 2023. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

Pace Analytical Services - Greensburg

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

Sincerely,

Maiya Parks

maiya.parks@pacelabs.com

Maiya Tacks

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, Georgia Power Noelia Muskus Ruiz, Georgia Power Charles Steele, Arcadis - Atlanta Tina Sullivan, ERM







CERTIFICATIONS

Project: Plant Arkwright-CCR Ash Pond

Pace Project No.: 92691202

Pace Analytical Services Pennsylvania

1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601

ANAB DOD-ELAP Rad Accreditation #: L2417 ANABISO/IEC 17025:2017 Rad Cert#: L24170

Alabama Certification #: 41590 Arizona Certification #: AZ0734

Arkansas Certification

California Certification #: 2950 Colorado Certification #: PA01547 Connecticut Certification #: PH-0694

EPA Region 4 DW Rad

Florida/TNI Certification #: E87683 Georgia Certification #: C040

Guam Certification Hawaii Certification Idaho Certification Illinois Certification Indiana Certification

Indiana Certification #: 391
Kansas Certification #: E-10358
Kentucky Certification #: KY90133
KY WW Permit #: KY0098221
KY WW Permit #: KY0000221

Louisiana DHH/TNI Certification #: LA010 Louisiana DEQ/TNI Certification #: 04086

Maine Certification #: 2023021 Maryland Certification #: 308

Massachusetts Certification #: M-PA1457 Michigan/PADEP Certification #: 9991 Missouri Certification #: 235

Montana Certification #: Cert0082 Nebraska Certification #: NE-OS-29-14 Nevada Certification #: PA014572023-03 New Hampshire/TNI Certification #: 297622 New Jersey/TNI Certification #: PA051

New Mexico Certification #: PA01457 New York/TNI Certification #: 10888 North Carolina Certification #: 42706 North Dakota Certification #: R-190 Ohio EPA Rad Approval: #41249

Oregon/TNI Certification #: PA200002-015 Pennsylvania/TNI Certification #: 65-00282 Puerto Rico Certification #: PA01457 Rhode Island Certification #: 65-00282

South Dakota Certification

Tennessee Certification #: TN02867

Texas/TNI Certification #: T104704188-22-18
Utah/TNI Certification #: PA014572223-14
USDA Soil Permit #: 525-23-67-77263
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 460198
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C

Wisconsin Approve List for Rad



SAMPLE SUMMARY

Project: Plant Arkwright-CCR Ash Pond

Pace Project No.: 92691202

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92691202001	ARK-BC-0.3	Water	10/03/23 12:45	10/03/23 15:46
92691202002	ARK-BC-0.1	Water	10/03/23 11:21	10/03/23 15:46
92691202003	ARK-OR-0.8	Water	10/03/23 09:35	10/03/23 15:46
92691202004	ARK-OR-0.1	Water	10/03/23 11:50	10/03/23 15:46
92691202005	ARK-OR-0.3	Water	10/03/23 10:12	10/03/23 15:46
92691202006	ARK-OR+0.25	Water	10/03/23 12:12	10/03/23 15:46



SAMPLE ANALYTE COUNT

Project: Plant Arkwright-CCR Ash Pond

Pace Project No.: 92691202

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92691202001	ARK-BC-0.3	EPA 903.1	MAR1	1	PASI-PA
		EPA 904.0	ZPC	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92691202002	ARK-BC-0.1	EPA 903.1	MAR1	1	PASI-PA
		EPA 904.0	ZPC	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92691202003	ARK-OR-0.8	EPA 903.1	MAR1	1	PASI-PA
		EPA 904.0	ZPC	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92691202004	ARK-OR-0.1	EPA 903.1	MAR1	1	PASI-PA
		EPA 904.0	ZPC	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92691202005	ARK-OR-0.3	EPA 903.1	MAR1	1	PASI-PA
		EPA 904.0	ZPC	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92691202006	ARK-OR+0.25	EPA 903.1	MAR1	1	PASI-PA
		EPA 904.0	ZPC	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA

PASI-PA = Pace Analytical Services - Greensburg



Project: Plant Arkwright-CCR Ash Pond

Pace Project No.: 92691202

Sample: ARK-BC-0.3 PWS:	Lab ID: 9269 ⁻ Site ID:	1202001 Collected: 10/03/23 12:45 Sample Type:	Received:	10/03/23 15:46	Matrix: Water	
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical	Services - Greensburg				
Radium-226	EPA 903.1	0.0706 ± 0.571 (1.12) C:NA T:90%	pCi/L	10/19/23 13:13	3 13982-63-3	
	Pace Analytical	Services - Greensburg				
Radium-228	EPA 904.0	0.231 ± 0.383 (0.834) C:80% T:79%	pCi/L	10/18/23 11:45	5 15262-20-1	
	Pace Analytical	Services - Greensburg				
Total Radium	Total Radium Calculation	0.302 ± 0.954 (1.95)	pCi/L	10/20/23 16:34	4 7440-14-4	



Project: Plant Arkwright-CCR Ash Pond

Pace Project No.: 92691202

Sample: ARK-BC-0.1 PWS:	Lab ID: 9269120 Site ID:	D2002 Collected: 10/03/23 11:21 Sample Type:	Received:	10/03/23 15:46	Matrix: Water	
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Se	rvices - Greensburg				
Radium-226	EPA 903.1	-0.134 ± 0.490 (1.06) C:NA T:92%	pCi/L	10/19/23 13:13	3 13982-63-3	
	Pace Analytical Se	rvices - Greensburg				
Radium-228	EPA 904.0	0.297 ± 0.399 (0.854) C:77% T:84%	pCi/L	10/18/23 11:45	15262-20-1	
	Pace Analytical Se	rvices - Greensburg				
Total Radium	Total Radium Calculation	0.297 ± 0.889 (1.91)	pCi/L	10/20/23 16:34	7440-14-4	



Project: Plant Arkwright-CCR Ash Pond

Pace Project No.: 92691202

Sample: ARK-OR-0.8 PWS:	Lab ID: 9269 Site ID:	1202003 Collected: 10/03/23 09:35 Sample Type:	Received:	10/03/23 15:46	Matrix: Water	
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical	Services - Greensburg				
Radium-226	EPA 903.1	-0.123 ± 0.295 (0.737) C:NA T:96%	pCi/L	10/19/23 13:1:	3 13982-63-3	
	Pace Analytical	Services - Greensburg				
Radium-228	EPA 904.0	0.106 ± 0.368 (0.829) C:77% T:76%	pCi/L	10/18/23 11:46	5 15262-20-1	
	Pace Analytical	Services - Greensburg				
Total Radium	Total Radium Calculation	0.106 ± 0.663 (1.57)	pCi/L	10/20/23 16:34	4 7440-14-4	



Project: Plant Arkwright-CCR Ash Pond

Pace Project No.: 92691202

Sample: ARK-OR-0.1 PWS:	Lab ID: 9269 Site ID:	1202004 Collected: 10/03/23 11:50 Sample Type:	Received:	10/03/23 15:46	Matrix: Water	
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical	Services - Greensburg				
Radium-226	EPA 903.1	0.000 ± 0.567 (1.15) C:NA T:90%	pCi/L	10/19/23 13:13	3 13982-63-3	
	Pace Analytical	Services - Greensburg				
Radium-228	EPA 904.0	0.549 ± 0.366 (0.700) C:79% T:83%	pCi/L	10/18/23 11:46	5 15262-20-1	
	Pace Analytical	Services - Greensburg				
Total Radium	Total Radium Calculation	0.549 ± 0.933 (1.85)	pCi/L	10/20/23 16:34	4 7440-14-4	



Project: Plant Arkwright-CCR Ash Pond

Pace Project No.: 92691202

Sample: ARK-OR-0.3 PWS:	Lab ID: 9269 Site ID:	1202005 Collected: 10/03/23 10:12 Sample Type:	Received:	10/03/23 15:46	Matrix: Water	
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical	Services - Greensburg				
Radium-226	EPA 903.1	0.000 ± 0.432 (0.913) C:NA T:92%	pCi/L	10/19/23 13:1:	3 13982-63-3	
	Pace Analytical	Services - Greensburg				
Radium-228	EPA 904.0	0.160 ± 0.333 (0.734) C:81% T:83%	pCi/L	10/18/23 11:46	5 15262-20-1	
	Pace Analytical	Services - Greensburg				
Total Radium	Total Radium Calculation	0.160 ± 0.765 (1.65)	pCi/L	10/20/23 16:34	4 7440-14-4	



Project: Plant Arkwright-CCR Ash Pond

Pace Project No.: 92691202

Sample: ARK-OR+0.25 PWS:	Lab ID: 9269120 2 Site ID:	2006 Collected: 10/03/23 12:12 Sample Type:	Received:	10/03/23 15:46	Matrix: Water	
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Serv	vices - Greensburg				
Radium-226	EPA 903.1	0.000 ± 0.464 (0.950) C:NA T:91%	pCi/L	10/19/23 13:1:	3 13982-63-3	
	Pace Analytical Serv	vices - Greensburg				
Radium-228	EPA 904.0	0.187 ± 0.344 (0.754) C:80% T:77%	pCi/L	10/18/23 11:46	5 15262-20-1	
	Pace Analytical Serv	vices - Greensburg				
Total Radium	Total Radium Calculation	0.187 ± 0.808 (1.70)	pCi/L	10/20/23 16:34	4 7440-14-4	



QUALITY CONTROL - RADIOCHEMISTRY

Project: Plant Arkwright-CCR Ash Pond

Pace Project No.: 92691202

QC Batch: 620910 Analysis Method: EPA 904.0

QC Batch Method: EPA 904.0 Analysis Description: 904.0 Radium 228

Laboratory: Pace Analytical Services - Greensburg

Associated Lab Samples: 92691202001, 92691202002, 92691202003, 92691202004, 92691202005, 92691202006

METHOD BLANK: 3026015 Matrix: Water

Associated Lab Samples: 92691202001, 92691202002, 92691202003, 92691202004, 92691202005, 92691202006

 Parameter
 Act ± Unc (MDC) Carr Trac
 Units
 Analyzed
 Qualifiers

 Radium-228
 0.112 ± 0.300 (0.672) C:79% T:87%
 pCi/L
 10/18/23 11:43

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



QUALITY CONTROL - RADIOCHEMISTRY

Project: Plant Arkwright-CCR Ash Pond

Pace Project No.: 92691202

QC Batch: 620909 Analysis Method: EPA 903.1

QC Batch Method: EPA 903.1 Analysis Description: 903.1 Radium-226

Laboratory: Pace Analytical Services - Greensburg

Associated Lab Samples: 92691202001, 92691202002, 92691202003, 92691202004, 92691202005, 92691202006

METHOD BLANK: 3026014 Matrix: Water

Associated Lab Samples: 92691202001, 92691202002, 92691202003, 92691202004, 92691202005, 92691202006

 Parameter
 Act ± Unc (MDC) Carr Trac
 Units
 Analyzed
 Qualifiers

 Radium-226
 0.504 ± 0.400 (0.520) C:NA T:93%
 pCi/L
 10/19/23 13:00

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



QUALIFIERS

Project: Plant Arkwright-CCR Ash Pond

Pace Project No.: 92691202

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

Acid preservation may not be appropriate for 2 Chloroethylvinyl ether.

A separate vial preserved to a pH of 4-5 is recommended in SW846 Chapter 4 for the analysis of Acrolein and Acrylonitrile by EPA Method 8260.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Reported results are not rounded until the final step prior to reporting. Therefore, calculated parameters that are typically reported as "Total" may vary slightly from the sum of the reported component parameters.

Act - Activity

Date: 10/20/2023 04:50 PM

Unc - Uncertainty: SDWA = 1.96 sigma count uncertainty, all other matrices = Expanded Uncertainty (95% confidence interval).

Gamma Spec = Expanded Uncertainty (95.4% Confidence Interval)

(MDC) - Minimum Detectable Concentration

Trac - Tracer Recovery (%)

Carr - Carrier Recovery (%)

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.



QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Plant Arkwright-CCR Ash Pond

Pace Project No.: 92691202

Date: 10/20/2023 04:50 PM

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92691202001	ARK-BC-0.3	EPA 903.1	620909		
92691202002	ARK-BC-0.1	EPA 903.1	620909		
92691202003	ARK-OR-0.8	EPA 903.1	620909		
92691202004	ARK-OR-0.1	EPA 903.1	620909		
92691202005	ARK-OR-0.3	EPA 903.1	620909		
92691202006	ARK-OR+0.25	EPA 903.1	620909		
92691202001	ARK-BC-0.3	EPA 904.0	620910		
92691202002	ARK-BC-0.1	EPA 904.0	620910		
92691202003	ARK-OR-0.8	EPA 904.0	620910		
92691202004	ARK-OR-0.1	EPA 904.0	620910		
92691202005	ARK-OR-0.3	EPA 904.0	620910		
92691202006	ARK-OR+0.25	EPA 904.0	620910		
92691202001	ARK-BC-0.3	Total Radium Calculation	623972		
92691202002	ARK-BC-0.1	Total Radium Calculation	623972		
92691202003	ARK-OR-0.8	Total Radium Calculation	623972		
92691202004	ARK-OR-0.1	Total Radium Calculation	623972		
92691202005	ARK-OR-0.3	Total Radium Calculation	623972		
92691202006	ARK-OR+0.25	Total Radium Calculation	623972		

CHAIN-OF-CUSTODY / Analytical Request Document
The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

	ARK-CCF	App. IV		12	4	6	9	8	7	Ф.	0)	4	6	N.	1	ITEM#			Requests	Phone:	-	Address:	Company:	Required :	
	ARK-CCR-ASSMT-202382 [00]	App. IV - Sb, Aa, Ba, Be, Cd, Cr, Co, Pb, Li, Mo, Se, T	ADDITIONAL COMMENTS		200			600 6	- ACC	ARK-OR+0.25	ARK-OR-0.3	ARK-OR-0.1	ARK-OR-0.8	ARK-8C-0.1	ARK-BC-0.3	(A-Z, 0-9 / ,-) Sample ids must be unique Tissue	SAMPLE ID Solffadd	MATRO Christo	Requested Due Date: 5 Day 41)384-6584	ulanta, GA 30339	П	ARCADIS - Atlanta	Required Client Information:	MAMA PETET SECTION
		T + Hg																	Project #:	Proje		Copy To:	Report To:	Required	
			B						100							or 2 20	\$ 2 P 7 §		*	Project Name:	Purchase Order#	1 1		Required Project Information:	í D
	١,	D)	RELIMOUSE						100	WGG	WGG	WGG	WG G	WG	wgg	MATRIX COD	_	c=COMP)	11		*	Ben Hodges, Joju Abraham	Kelley Sharpe, Warren Johnson	ŭ	
		1	F	-			-		-			i .			-	SAMPLE TYPE	G=GRAB	C=COMP)	Н		8	odges	Sharp	form	
			1					- 3		145/13	17/10	7/3	18/23	122	12	DATE	123		Ш	Plant Arkwright/CCR-Ash Pond Closure	GPCROATALOOG	욛	ě	iton:	
2			HOLLYTHERY FAL		-						_		2		1245	2	START	Ω	Ш	E C		Abrat Parat	Tren.		
SAMPLER NAME AND SIGNATURE PRINT Name of SAMPLER: SIGNATURE of SAMPLER:		Accels	à							17.12	1017	1120	0235	12	5	TIME		COLLECTED	П	? }	3	1	1		
PLER RAME AND SIGNATURE OF SAMPLER:		5			7.50											DATE		CTED	Ш	3		1	ß		
RE o			鑑			_			\vdash	-	\vdash	-	-	-	-		물 .		Ш		1	L	П		
Y SAN		24/2	BING													TIME			Ш	\$					
IPLEI PLEI		12	A	\vdash		-	\vdash	\vdash			\vdash	-	+	-	-	SAMPLE TEM	P AT COLLE	CTION	11	П			П		
2 2 2		1-	200							0	5	5	0	5	On .	# OF CONTA	NERS		1 🖥		2 8	Company Name:	Alle	hvo	£ .
		1246	E .							×	×	×	×	×	×	Unpreserved			Pace Profile #:	3	Pace Quote:	1	Atlention	Ce In	Section C
		6							_		×	×	×	×	×	H2SO4		٠,,	1 1	2	•	I S	П	100	,-
0		Lk,		⊢	_	-	_	-	_	×	<u>r</u>	<u>r</u>	₽	<u>r</u>	<u> </u>	HNO3 HCI	+	— es		151			П	mvoice information:	
7 \$ 1		1 8		\vdash	-	⊢	\vdash	\vdash	\vdash	\vdash	+-	+	╁	\vdash	\vdash	NaOH	-	Preservativ	15836	*	1	ı		ļ .	
水 片		16	8	H	-	1			t	\vdash	1	1	\vdash	t		Na2\$2O3		ives	П		1	1	П		
15			3													Methanol			П	Na par		1			
1		1 3	180											L		Other		torn served	П	S S	1				
124		C	NOCERTED BY FAFFELATION	_		_	_	_	_	ı×	1×	T×	1×	×	×	Analys Total/Bicarb		YAN		naiya parks@pacelabs.com					
		1	E	-	-	+	\vdash	╁	+	×	×	×	×	×	×	CI, F, SO4		+		8				ı	
TES I			Ž	H		+	1	1	\vdash	×	×	×	×	×	×	TDS			Į.	1					
DATE Signed:		1								×	×	×	×	×	×	App. III Meta			2	П					
	\sqcup	\perp			_		_	1	1	×	×	×	×	×	×	App. IV Meta Metals - Mg.		st)	1				'n		
		16.73	9	_	-	+	+-	+	+-	×	×	×	×	×	×	Radium 226	_	+	-	3			Σ		
		-	DATE	-	-	+	+-	+	╁	+	+	+-	+	+	+								5	2	
	-	_	_	1	1	+		+	1	T										<u>š</u> =	Ξ		Ŧ	F	
		1/2/	TIME												I			_					•	5	¬
			-		L		1	1	1	\perp	+	+	+		+	-	-	_	-	Ξ	Ξ		1	5	1
TEMP in C		1		_		1				_	_		_		1	Residual C	Notine (Y/N	1000		=	- 3	1	σ	5	
Received on	++-	++		-		Т	T	Т	Т	T	Т	Т	Т	Т	T	-	1000		The same of				C	# · 00000000000000000000000000000000000	
ice (Y/N)	11		иошамо жану																		1 70	ļ	4		
Custody	++	++	8																The same of				7	3.	
Sealed Cooler			ollio							1								4 8					7	1	
(Y/N) Samples	H	+	- 5															*							
Intact (Y/N)													1												
			100		1				-	-				_											

DC#_Title: ENV-FRM-HUN1	-0083 v02_Sample Co	ondition Upon Receipt	
Effective Date: 11/14/2022		THE PARTY OF THE P	B. S.
ry receiving samples:			
le Eden Greenwood Hu	untersville Raleigh	Mechanicsville /	Atlanta Kernersville
e Condition Client Name:		WO#: 92	2691202
Receipt	// L	roject #: PM: MP	Due Date: 10/25/23
Accidis →A	USPS Clie		rcadAtl
ercial Pace	Other:	OCILITY ON THE	
eal Present? Yes No Seals Int	act? Yes	Date/Initials Person	Examining Contents: 10-3-73 ICC
laterial: Bubble Wrap Bubble	e Bags None Ot		gical Tissue Frozen?
21R Gun 1D: 083	Type of Ice: Wet B	ue	April 1975 de de la composition della compositio
mp: Correction Factor: Add/Subtract (°C)	6.0	Temp should be above fr	eezing to 6°C
77			criteria. Samples on ice, cooling process
mp Corrected (°C):			the sends
nples originate in a quarantine zone within the Unmaps)? Yes No	ited States: CA, NY, or SC	including Hawaii and Puerto	
			ts/Discrepancy:
of Custody Present?	✓ Yes □No □N/A	1.	
les Arrived within Hold Time?	✓Yes □No □N/A	2.	
t Hold Time Analysis (<72 hr.)?	Yes No N/A	3.	1
Turn Around Time Requested?	□Yes □No □N/A	4.	
cient Volume?	Yes No N/A	5.	
ect Containers Used? ace Containers Used?	☐Yes ☐No ☐N/A ☐Yes ☐No ☐N/A	6.	The state of the s
ainers Intact?	☐Yes ☐No ☐N/A	7.	
olved analysis: Samples Field Filtered?	□Yes □No ☑N/A	8.	
ple Labels Match COC?	☐Yes ☐No ☐N/A	9.	As a religion of
ncludes Date/Time/ID/Analysis Matrix:	/		
	□Yes □No ØŅ/A	10.	
dspace in VOA Vials (>5-6mm)? Blank Present?	Yes No N/A	11.	4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Blank Custody Seals Present?	Yes No DATA		
S/SAMPLE DISCREPANCY		Fiel	d Data Required? Yes No
		Lot ID of split containers:	
TIFICATION/RESOLUTION			
	Date/Tir	ne:	The second of th
ontacted:			- 12 k
ct Manager SCURF Review:		Date:	<u> </u>
ct Manager SRF Review:		Date:	<u> </u>
			Page 1



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#:92691202

PM: MP

Due Date: 10/25/23

CLIENT: GA-ArcadAtl

Itemi	BP4U-125 mL Plastic Unpreserved (N/A) (CI-)	BP3U-250 mL Plastic Unpreserved (N/A)	BP2U-500 mL Plastic Unpreserved (N/A)	BP1U-1 liter Plastic Unpreserved (N/A)	BP4S-1 25 mL Plastic H2SO4 (pH < 2) (CI-)	BP3N-250 mL plastic HNO3 (pH < 2)	BP4Z-125 mL Plastic ZN Acetate & NaOH (>9)	BP4B-125 mL Plastic NaOH (pH > 12) (CI-)	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) (CI-)	AG15-1 liter Amber H2SO4 (pH < 2)	AG35-250 mL Amber H2SO4 (pH < 2)	DG94-40 mL Amber NH4C! (N/A)(CI-)	DG9H-40 mL VOA HCI (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)	BPIW	BP3R-250 mL Plastic (NH2)2SO4 (9.3-9.7)	AG0U-100 ml. Amber Unpreserved (N/A) (CI-)	VSGU-20 mL Scintillation vials (N/A)	DG9U-40 mL Amber Unpreserved vials (N/A)
1		7				V																		$ \angle $				1
2		7				V																		Z	\angle			
3		کر				X																		Z				
4		7				X																		15				
5		7				X																		Z				
6		7				X																		X				
7																												
8																												Ш
9																												
10																												
11																					_							
12																												

	261 - 1301 -	pH Ac	ljustment Log for Pres	erved 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.





November 07, 2023

Kelley Sharpe ARCADIS - Atlanta 2839 Paces Ferry Rd STE 900 Atlanta, GA 30339

RE: Project: Plant Arkwright-CCR Ash Pond-Revised Report

Pace Project No.: 92691209

Dear Kelley Sharpe:

Enclosed are the analytical results for sample(s) received by the laboratory on October 03, 2023. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services Asheville
- Pace Analytical Services Peachtree Corners, GA

Rev. 1 - This replaces the November 3, 2023 final report. Due to lab error, this report was revised to update the 6010 Metals list reported for sample 92691209-001 (ARK-BC-0.3). No other changes were made to this report.

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 Manage

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 Noelia Muskus Ruiz, Georgia Power Tina Sullivan, ERM



(770)734-4200



CERTIFICATIONS

Project: Plant Arkwright-CCR Ash Pond-Revised Report

Pace Project No.: 92691209

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

Pace Analytical Services Peachtree Corners

110 Technology Pkwy, Peachtree Corners, GA 30092 Florida DOH Certification #: E87315 Georgia DW Inorganics Certification #: 812

South Carolina Laboratory ID: 99030 South Carolina Certification #: 99030001

Virginia/VELAP Certification #: 460222

North Carolina Certification #: 381 South Carolina Certification #: 98011001

Virginia Certification #: 460204



SAMPLE SUMMARY

Project: Plant Arkwright-CCR Ash Pond-Revised Report

Pace Project No.: 92691209

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92691209001	ARK-BC-0.3	Water	10/03/23 12:45	10/03/23 15:46
92691209002	ARK-BC-0.1	Water	10/03/23 11:21	10/03/23 15:46
92691209003	ARK-OR-0.8	Water	10/03/23 09:55	10/03/23 15:46
92691209004	ARK-OR-0.1	Water	10/03/23 11:50	10/03/23 15:46
92691209005	ARK-OR-0.3	Water	10/03/23 10:12	10/03/23 15:46
92691209006	ARK-OR+0.25	Water	10/03/23 12:12	10/03/23 15:46



SAMPLE ANALYTE COUNT

Project: Plant Arkwright-CCR Ash Pond-Revised Report

Pace Project No.: 92691209

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92691209001	ARK-BC-0.3	EPA 6010D	DRB	5	PASI-GA
		EPA 6020B	CW1	12	PASI-GA
		EPA 7470A	VB	1	PASI-GA
		SM 2540C-2015	DL1	1	PASI-GA
		SM 2320B-2011	YEG	2	PASI-A
		EPA 9056A	CDC	3	PASI-A
92691209002	ARK-BC-0.1	EPA 6010D	DRB	5	PASI-GA
		EPA 6020B	CW1	12	PASI-GA
		EPA 7470A	VB	1	PASI-GA
		SM 2540C-2015	DL1	1	PASI-GA
		SM 2320B-2011	YEG	2	PASI-A
		EPA 9056A	CDC	3	PASI-A
2691209003	ARK-OR-0.8	EPA 6010D	DRB	5	PASI-GA
		EPA 6020B	CW1	12	PASI-GA
		EPA 7470A	VB	1	PASI-GA
		SM 2540C-2015	DL1	1	PASI-GA
		SM 2320B-2011	YEG	2	PASI-A
		EPA 9056A	CDC	3	PASI-A
2691209004	ARK-OR-0.1	EPA 6010D	DRB	5	PASI-GA
		EPA 6020B	CW1	12	PASI-GA
		EPA 7470A	VB	1	PASI-GA
		SM 2540C-2015	DL1	1	PASI-GA
		SM 2320B-2011	YEG	2	PASI-A
		EPA 9056A	CDC	3	PASI-A
2691209005	ARK-OR-0.3	EPA 6010D	DRB	5	PASI-GA
		EPA 6020B	CW1	12	PASI-GA
		EPA 7470A	VB	1	PASI-GA
		SM 2540C-2015	DL1	1	PASI-GA
		SM 2320B-2011	YEG	2	PASI-A
		EPA 9056A	CDC	3	PASI-A
2691209006	ARK-OR+0.25	EPA 6010D	DRB	5	PASI-GA
		EPA 6020B	CW1	12	PASI-GA
		EPA 7470A	VB	1	PASI-GA
		SM 2540C-2015	DL1	1	PASI-GA
		SM 2320B-2011	YEG	2	PASI-A
		EPA 9056A	CDC	3	PASI-A





SAMPLE ANALYTE COUNT

Project: Plant Arkwright-CCR Ash Pond-Revised Report

Pace Project No.: 92691209

Lab ID Sample ID Method Analysts Reported Laboratory

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



Project: Plant Arkwright-CCR Ash Pond-Revised Report

Pace Project No.: 92691209

Date: 11/07/2023 04:29 PM

Sample: ARK-BC-0.3	Lab ID: 9269	91209001	Collected: 10/03/2	23 12:45	Received: 10	0/03/23 15:46	Matrix: Water	
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qua
6010D ATL ICP	Analytical Meth	od: EPA 60	10D Preparation Me	ethod: El	PA 3010A			
	Pace Analytica	Services -	Peachtree Corners,	GA				
Boron	ND	mg/L	0.040	1	10/10/23 11:20	10/23/23 23:25	7440-42-8	
Potassium	2.7	mg/L	0.50	1	10/10/23 11:20	10/24/23 20:15	7440-09-7	
Sodium	11.2	mg/L	1.0	1	10/10/23 11:20	10/24/23 20:15	7440-23-5	M1
Calcium	12.9	mg/L	1.0	1	10/10/23 11:20	10/23/23 23:25	7440-70-2	L2,M0
Magnesium	5.5	mg/L	0.050	1	10/10/23 11:20	10/23/23 23:25	7439-95-4	M1
6020 MET ICPMS	Analytical Meth	od: EPA 60	20B Preparation Me	thod: Ef	PA 3005A			
	Pace Analytica	Services -	Peachtree Corners,	GA				
Antimony	ND	mg/L	0.0030	1	10/07/23 09:18	10/10/23 15:56	7440-36-0	
Arsenic	ND	mg/L	0.0050	1	10/07/23 09:18	10/10/23 15:56	7440-38-2	
Barium	0.037	mg/L	0.0050	1	10/07/23 09:18	10/10/23 15:56	7440-39-3	
Beryllium	ND	mg/L	0.00050	1	10/07/23 09:18	10/10/23 15:56	7440-41-7	
Cadmium	ND	mg/L	0.00050	1		10/10/23 15:56		
Chromium	ND	mg/L	0.0050	1	10/07/23 09:18	10/10/23 15:56	7440-47-3	
Cobalt	ND	mg/L	0.0050	1	10/07/23 09:18	10/10/23 15:56	7440-48-4	
Lead	ND	mg/L	0.0010	1		10/10/23 15:56		
Lithium	ND	mg/L	0.030	1		10/10/23 15:56		L1
Molybdenum	ND	mg/L	0.010	1		10/10/23 15:56		
Selenium 	ND	mg/L	0.0050	1		10/10/23 15:56		
Thallium	ND	mg/L	0.0010	1	10/07/23 09:18	10/10/23 15:56	5 7440-28-0	
7470 Mercury	Analytical Meth	od: EPA 74	70A Preparation Me	thod: EF	PA 7470A			
	Pace Analytica	Services -	Peachtree Corners,	GA				
Mercury	ND	mg/L	0.00020	1	10/12/23 12:00	10/12/23 16:52	7439-97-6	
2540C Total Dissolved Solids	Analytical Meth	od: SM 254	40C-2015					
	Pace Analytica	Services -	Peachtree Corners,	GA				
Total Dissolved Solids	99.0	mg/L	25.0	1		10/04/23 14:07	7	
2320B Alkalinity	Analytical Meth	od: SM 232	20B-2011					
,	Pace Analytica							
Alkalinity, Bicarbonate (CaCO3)	60.9	mg/L	5.0	1		10/09/23 17:07	7	
Alkalinity, Total as CaCO3	60.9	mg/L	5.0	1		10/09/23 17:07		
9056 IC anions 28 Days	Analytical Meth	od: EPA 90	956A					
	Pace Analytica							
Chloride	9.3	mg/L	1.0	1		10/04/23 02:05	16887-00-6	
Fluoride	0.16	mg/L	0.10	1		10/04/23 02:05		
	0	9, =	0.10			,,		



Project: Plant Arkwright-CCR Ash Pond-Revised Report

Pace Project No.: 92691209

Date: 11/07/2023 04:29 PM

Sample: ARK-BC-0.1	Lab ID: 926	91209002	Collected: 10/03/2	3 11:21	Received: 10)/03/23 15:46	Matrix: Water	
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qua
6010D ATL ICP	Analytical Meth	nod: EPA 60	010D Preparation Me	thod: El	PA 3010A			
	Pace Analytica	l Services -	Peachtree Corners,	GA				
Boron	0.045	mg/L	0.040	1	10/31/23 12:33	11/02/23 19:05	7440-42-8	
Potassium	2.8	mg/L	0.50	1	10/31/23 12:33	11/02/23 19:05	7440-09-7	
Sodium	11.3	mg/L	1.0	1	10/31/23 12:33	11/02/23 19:05	7440-23-5	M1
Calcium	15.0	mg/L	1.0	1	10/31/23 12:33	11/02/23 19:05	7440-70-2	M1
Magnesium	6.4	mg/L	0.050	1	10/31/23 12:33	11/02/23 19:05	7439-95-4	
6020 MET ICPMS	Analytical Meth	nod: EPA 60	020B Preparation Me	thod: El	PA 3005A			
	Pace Analytica	l Services -	Peachtree Corners,	GA				
Antimony	ND	mg/L	0.0030	1	10/07/23 09:18	10/10/23 16:00	7440-36-0	
Arsenic	ND	mg/L	0.0050	1	10/07/23 09:18	10/10/23 16:00	7440-38-2	
Barium	0.036	mg/L	0.0050	1	10/07/23 09:18	10/10/23 16:00	7440-39-3	
Beryllium	ND	mg/L	0.00050	1	10/07/23 09:18	10/10/23 16:00	7440-41-7	
Cadmium	ND	mg/L	0.00050	1	10/07/23 09:18	10/10/23 16:00	7440-43-9	
Chromium	ND	mg/L	0.0050	1	10/07/23 09:18	10/10/23 16:00	7440-47-3	
Cobalt	ND	mg/L	0.0050	1	10/07/23 09:18	10/10/23 16:00	7440-48-4	
_ead	ND	mg/L	0.0010	1	10/07/23 09:18	10/10/23 16:00	7439-92-1	
_ithium	ND	mg/L	0.030	1	10/07/23 09:18	10/10/23 16:00	7439-93-2	L1
Molybdenum	ND	mg/L	0.010	1	10/07/23 09:18	10/10/23 16:00	7439-98-7	
Selenium	ND	mg/L	0.0050	1	10/07/23 09:18	10/10/23 16:00	7782-49-2	
Thallium	ND	mg/L	0.0010	1	10/07/23 09:18	10/10/23 16:00	7440-28-0	
7470 Mercury	Analytical Meth	nod: EPA 74	170A Preparation Me	thod: Ef	PA 7470A			
•	Pace Analytica	l Services -	Peachtree Corners,	GA				
Mercury	ND	mg/L	0.00020	1	10/12/23 12:00	10/12/23 16:5	5 7439-97-6	
2540C Total Dissolved Solids	Analytical Meth	nod: SM 25	40C-2015					
	Pace Analytica	l Services -	Peachtree Corners,	GA				
Total Dissolved Solids	110	mg/L	25.0	1		10/04/23 14:07	7	
2320B Alkalinity	Analytical Meth	nod: SM 23	20B-2011					
•	Pace Analytica	l Services -	Asheville					
Alkalinity, Bicarbonate (CaCO3)	61.8	mg/L	5.0	1		10/09/23 17:28	3	
Alkalinity, Total as CaCO3	61.8	mg/L	5.0	1		10/09/23 17:28		
9056 IC anions 28 Days	Analytical Meth	nod: EPA 90	056A					
•	Pace Analytica	l Services -	Asheville					
Chloride	9.2	mg/L	1.0	1		10/04/23 02:20	16887-00-6	
Fluoride	0.14	mg/L	0.10	1		10/04/23 02:20	16984-48-8	
Sulfate	14.7	mg/L	1.0	1		10/04/23 02:20	1/808-70-8	



Project: Plant Arkwright-CCR Ash Pond-Revised Report

Pace Project No.: 92691209

Date: 11/07/2023 04:29 PM

Sample: ARK-OR-0.8	Lab ID: 926	91209003	Collected: 10/03/2	23 09:55	Received: 1	0/03/23 15:46	Matrix: Water	
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qua
6010D ATL ICP	Analytical Meth	nod: EPA 60	10D Preparation Me	ethod: EF	PA 3010A			
	Pace Analytica	l Services -	Peachtree Corners,	GA				
Boron	ND	mg/L	0.040	1	10/10/23 11:20	10/23/23 23:5	1 7440-42-8	
Calcium	7.4	mg/L	1.0	1	10/10/23 11:20	10/23/23 23:5	1 7440-70-2	L2
Magnesium	2.0	mg/L	0.050	1	10/10/23 11:20	10/23/23 23:5	1 7439-95-4	
Potassium	3.6	mg/L	0.50	1	10/10/23 11:20	10/24/23 20:3	6 7440-09-7	
Sodium	9.4	mg/L	1.0	1	10/10/23 11:20	10/24/23 20:3	6 7440-23-5	
6020 MET ICPMS	Analytical Meth	nod: EPA 60	20B Preparation Me	ethod: EF	PA 3005A			
	Pace Analytica	l Services -	Peachtree Corners,	GA				
Antimony	ND	mg/L	0.0030	1	10/07/23 09:18	3 10/10/23 16:1	4 7440-36-0	
Arsenic	ND	mg/L	0.0050	1	10/07/23 09:18	3 10/10/23 16:1	4 7440-38-2	
Barium	0.021	mg/L	0.0050	1	10/07/23 09:18	3 10/10/23 16:1	4 7440-39-3	
Beryllium	ND	mg/L	0.00050	1	10/07/23 09:18	3 10/10/23 16:1	4 7440-41-7	
Cadmium	ND	mg/L	0.00050	1	10/07/23 09:18	3 10/10/23 16:1	4 7440-43-9	
Chromium	ND	mg/L	0.0050	1	10/07/23 09:18	3 10/10/23 16:1	4 7440-47-3	
Cobalt	ND	mg/L	0.0050	1	10/07/23 09:18	3 10/10/23 16:1	4 7440-48-4	
₋ead	ND	mg/L	0.0010	1	10/07/23 09:18	3 10/10/23 16:1	4 7439-92-1	
_ithium	ND	mg/L	0.030	1	10/07/23 09:18	3 10/10/23 16:1	4 7439-93-2	L1
Molybdenum	ND	mg/L	0.010	1	10/07/23 09:18	3 10/10/23 16:1	4 7439-98-7	
Selenium	ND	mg/L	0.0050	1	10/07/23 09:18	3 10/10/23 16:1	4 7782-49-2	
Thallium	ND	mg/L	0.0010	1	10/07/23 09:18	3 10/10/23 16:1	4 7440-28-0	
7470 Mercury	Analytical Meth	nod: EPA 74	70A Preparation Me	thod: EF	PA 7470A			
	Pace Analytica	l Services -	Peachtree Corners,	GA				
Mercury	ND	mg/L	0.00020	1	10/12/23 12:00	10/12/23 16:5	7 7439-97-6	
2540C Total Dissolved Solids	Analytical Meth	nod: SM 254	40C-2015					
	•		Peachtree Corners,	GA				
Total Dissolved Solids	72.0	mg/L	25.0	1		10/04/23 14:0	7	
2320B Alkalinity	Analytical Meth	nod: SM 232	20B-2011					
,	Pace Analytica							
Alkalinity,Bicarbonate (CaCO3)	32.7	mg/L	5.0	1		10/09/23 17:4	8	
Alkalinity, Total as CaCO3	32.7	mg/L	5.0	1		10/09/23 17:4		
9056 IC anions 28 Days	Analytical Meth	nod: EPA 90	956A					
	Pace Analytica							
Chloride	9.0	mg/L	1.0	1		10/04/23 02:3	4 16887-00-6	
Fluoride	ND	mg/L	0.10	1			4 16984-48-8	



Project: Plant Arkwright-CCR Ash Pond-Revised Report

Pace Project No.: 92691209

Date: 11/07/2023 04:29 PM

Sample: ARK-OR-0.1	Lab ID: 926	91209004	Collected: 10/03/2	23 11:50	Received: 1	0/03/23 15:46	Matrix: Water	
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qua
6010D ATL ICP	Analytical Meth	nod: EPA 60	010D Preparation Me	ethod: El	PA 3010A			
	Pace Analytica	l Services -	Peachtree Corners,	GA				
Boron	ND	mg/L	0.040	1	10/10/23 11:20	10/23/23 23:5	6 7440-42-8	
Calcium	7.4	mg/L	1.0	1	10/10/23 11:20	10/23/23 23:5	6 7440-70-2	L2
Magnesium	2.0	mg/L	0.050	1	10/10/23 11:20	10/23/23 23:5	6 7439-95-4	
Potassium	3.3	mg/L	0.50	1	10/10/23 11:20	10/24/23 20:4	1 7440-09-7	
Sodium	9.5	mg/L	1.0	1	10/10/23 11:20	10/24/23 20:4	1 7440-23-5	
6020 MET ICPMS	Analytical Meth	nod: EPA 60	20B Preparation Me	ethod: El	PA 3005A			
	Pace Analytica	l Services -	Peachtree Corners,	GA				
Antimony	ND	mg/L	0.0030	1	10/07/23 09:18	3 10/10/23 16:1	8 7440-36-0	
Arsenic	ND	mg/L	0.0050	1	10/07/23 09:18	3 10/10/23 16:1	8 7440-38-2	
Barium	0.021	mg/L	0.0050	1	10/07/23 09:18	3 10/10/23 16:1	8 7440-39-3	
Beryllium	ND	mg/L	0.00050	1	10/07/23 09:18	3 10/10/23 16:1	8 7440-41-7	
Cadmium	ND	mg/L	0.00050	1	10/07/23 09:18	3 10/10/23 16:1	8 7440-43-9	
Chromium	ND	mg/L	0.0050	1	10/07/23 09:18	3 10/10/23 16:1	8 7440-47-3	
Cobalt	ND	mg/L	0.0050	1	10/07/23 09:18	3 10/10/23 16:1	8 7440-48-4	
Lead	ND	mg/L	0.0010	1	10/07/23 09:18	3 10/10/23 16:1	8 7439-92-1	
Lithium	ND	mg/L	0.030	1	10/07/23 09:18	3 10/10/23 16:1	8 7439-93-2	L1
Molybdenum	ND	mg/L	0.010	1	10/07/23 09:18	3 10/10/23 16:1	8 7439-98-7	
Selenium	ND	mg/L	0.0050	1	10/07/23 09:18	3 10/10/23 16:1	8 7782-49-2	
Thallium	ND	mg/L	0.0010	1	10/07/23 09:18	3 10/10/23 16:1	8 7440-28-0	
7470 Mercury	Analytical Meth	nod: EPA 74	70A Preparation Me	thod: EF	PA 7470A			
	Pace Analytica	l Services -	Peachtree Corners,	GA				
Mercury	ND	mg/L	0.00020	1	10/12/23 12:00	10/12/23 17:0	5 7439-97-6	
2540C Total Dissolved Solids	Analytical Meth	nod: SM 254	40C-2015					
	•		Peachtree Corners,	GA				
Total Dissolved Solids	72.0	mg/L	25.0	1		10/04/23 14:1	0	
2320B Alkalinity	Analytical Meth	nod: SM 232	20B-2011					
,	Pace Analytica							
Alkalinity,Bicarbonate (CaCO3)	33.1	mg/L	5.0	1		10/09/23 18:0	4	
Alkalinity, Total as CaCO3	33.1	mg/L	5.0	1		10/09/23 18:0		
9056 IC anions 28 Days	Analytical Meth	nod: EPA 90	056A					
	Pace Analytica							
Chloride	8.9	mg/L	1.0	1		10/04/23 02:4	9 16887-00-6	
Fluoride	ND	mg/L	0.10	1			9 16984-48-8	
	_	- ·						



Project: Plant Arkwright-CCR Ash Pond-Revised Report

Pace Project No.: 92691209

Date: 11/07/2023 04:29 PM

Sample: ARK-OR-0.3	Lab ID: 926	91209005	Collected: 10/03/2	3 10:12	Received: 10)/03/23 15:46	Matrix: Water	
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qua
6010D ATL ICP	Analytical Metl	nod: EPA 60	010D Preparation Me	thod: Ef	PA 3010A			
	Pace Analytica	l Services -	Peachtree Corners,	GA				
Potassium	3.5	mg/L	0.50	1	10/10/23 11:20	10/24/23 20:4	6 7440-09-7	
Sodium	9.1	mg/L	1.0	1	10/10/23 11:20	10/24/23 20:4	6 7440-23-5	
Boron	ND	mg/L	0.040	1	10/10/23 11:20	10/24/23 00:0	1 7440-42-8	
Calcium	7.2	mg/L	1.0	1	10/10/23 11:20	10/24/23 00:0	1 7440-70-2	L2
Magnesium	2.0	mg/L	0.050	1	10/10/23 11:20	10/24/23 00:0	1 7439-95-4	
020 MET ICPMS	Analytical Met	nod: EPA 60	020B Preparation Me	thod: EF	PA 3005A			
	Pace Analytica	l Services -	Peachtree Corners,	GA				
Antimony	ND	mg/L	0.0030	1	10/07/23 09:18	10/10/23 16:2	3 7440-36-0	
Arsenic	ND	mg/L	0.0050	1	10/07/23 09:18	10/10/23 16:2	3 7440-38-2	
Barium	0.020	mg/L	0.0050	1	10/07/23 09:18	10/10/23 16:2	3 7440-39-3	
Beryllium	ND	mg/L	0.00050	1	10/07/23 09:18	10/10/23 16:2	3 7440-41-7	
Cadmium	ND	mg/L	0.00050	1	10/07/23 09:18	10/10/23 16:2	3 7440-43-9	
Chromium	ND	mg/L	0.0050	1	10/07/23 09:18	10/10/23 16:2	3 7440-47-3	
Cobalt	ND	mg/L	0.0050	1	10/07/23 09:18	10/10/23 16:2	3 7440-48-4	
.ead	ND	mg/L	0.0010	1	10/07/23 09:18	10/10/23 16:2	3 7439-92-1	
ithium	ND	mg/L	0.030	1	10/07/23 09:18	10/10/23 16:2	3 7439-93-2	L1
Nolybdenum	ND	mg/L	0.010	1	10/07/23 09:18	10/10/23 16:2	3 7439-98-7	
Selenium	ND	mg/L	0.0050	1	10/07/23 09:18	10/10/23 16:2	3 7782-49-2	
Thallium Thallium	ND	mg/L	0.0010	1	10/07/23 09:18	10/10/23 16:2	3 7440-28-0	
7470 Mercury	Analytical Met	nod: EPA 74	170A Preparation Me	thod: EF	PA 7470A			
	Pace Analytica	l Services -	Peachtree Corners,	GA				
Mercury	ND	mg/L	0.00020	1	10/12/23 12:00	10/12/23 17:0	8 7439-97-6	
2540C Total Dissolved Solids	Analytical Met	nod: SM 25	40C-2015					
	Pace Analytica	l Services -	Peachtree Corners,	GA				
Total Dissolved Solids	66.0	mg/L	25.0	1		10/04/23 14:1	0	
2320B Alkalinity	Analytical Metl	nod: SM 23	20B-2011					
·	Pace Analytica	l Services -	Asheville					
Alkalinity, Bicarbonate (CaCO3)	32.4	mg/L	5.0	1		10/09/23 18:1	0	
Alkalinity, Total as CaCO3	32.4	mg/L	5.0	1		10/09/23 18:1	0	
0056 IC anions 28 Days	Analytical Met	nod: EPA 90	056A					
-	Pace Analytica	l Services -	Asheville					
Chloride	9.0	mg/L	1.0	1		10/04/23 03:0	3 16887-00-6	
Fluoride	ND	mg/L	0.10	1		10/04/23 03:0	3 16984-48-8	
Sulfate	6.3	mg/L	1.0	1		10/04/23 03:0	3 14808-79-8	



Project: Plant Arkwright-CCR Ash Pond-Revised Report

Pace Project No.: 92691209

Date: 11/07/2023 04:29 PM

Sample: ARK-OR+0.25	Lab ID: 926	91209006	Collected: 10/03/2	23 12:12	Received: 1	0/03/23 15:46	Matrix: Water	
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qua
6010D ATL ICP	Analytical Metl	nod: EPA 60	010D Preparation Me	ethod: El	PA 3010A			
	Pace Analytica	l Services -	Peachtree Corners,	GA				
Boron	ND	mg/L	0.040	1	10/10/23 11:20	10/24/23 00:0	6 7440-42-8	
Calcium	7.2	mg/L	1.0	1	10/10/23 11:20	10/24/23 00:0	6 7440-70-2	L2
Magnesium	2.0	mg/L	0.050	1	10/10/23 11:20	10/24/23 00:0	6 7439-95-4	
Potassium	3.4	mg/L	0.50	1	10/10/23 11:20	10/24/23 20:5	1 7440-09-7	
Sodium	9.2	mg/L	1.0	1	10/10/23 11:20	10/24/23 20:5	1 7440-23-5	
6020 MET ICPMS	Analytical Metl	nod: EPA 60	20B Preparation Me	ethod: Ef	PA 3005A			
	Pace Analytica	l Services -	Peachtree Corners,	GA				
Antimony	ND	mg/L	0.0030	1	10/07/23 09:18	3 10/10/23 16:2	7 7440-36-0	
Arsenic	ND	mg/L	0.0050	1	10/07/23 09:18	3 10/10/23 16:2	7 7440-38-2	
Barium	0.019	mg/L	0.0050	1	10/07/23 09:18	3 10/10/23 16:2	7 7440-39-3	
Beryllium	ND	mg/L	0.00050	1	10/07/23 09:18	3 10/10/23 16:2	7 7440-41-7	
Cadmium	ND	mg/L	0.00050	1	10/07/23 09:18	3 10/10/23 16:2	7 7440-43-9	
Chromium	ND	mg/L	0.0050	1	10/07/23 09:18	3 10/10/23 16:2	7 7440-47-3	
Cobalt	ND	mg/L	0.0050	1	10/07/23 09:18	3 10/10/23 16:2	7 7440-48-4	
Lead	ND	mg/L	0.0010	1	10/07/23 09:18	3 10/10/23 16:2	7 7439-92-1	
Lithium	ND	mg/L	0.030	1	10/07/23 09:18	3 10/10/23 16:2	7 7439-93-2	L1
Molybdenum	ND	mg/L	0.010	1	10/07/23 09:18	3 10/10/23 16:2	7 7439-98-7	
Selenium	ND	mg/L	0.0050	1	10/07/23 09:18	3 10/10/23 16:2	7 7782-49-2	
Thallium	ND	mg/L	0.0010	1	10/07/23 09:18	3 10/10/23 16:2	7 7440-28-0	
7470 Mercury	Analytical Met	nod: EPA 74	70A Preparation Me	thod: EF	PA 7470A			
	Pace Analytica	l Services -	Peachtree Corners,	GA				
Mercury	ND	mg/L	0.00020	1	10/12/23 12:00	10/12/23 17:1	0 7439-97-6	
2540C Total Dissolved Solids	Analytical Met	nod: SM 254	40C-2015					
	•		Peachtree Corners,	GA				
Total Dissolved Solids	67.0	mg/L	25.0	1		10/04/23 14:1	0	
2320B Alkalinity	Analytical Met	nod: SM 232	20B-2011					
· · · · · · · · · · · · · · · · · · ·	Pace Analytica							
Alkalinity, Bicarbonate (CaCO3)	33.1	mg/L	5.0	1		10/09/23 18:1	6	
Alkalinity, Total as CaCO3	33.1	mg/L	5.0	1		10/09/23 18:1		
9056 IC anions 28 Days	Analytical Metl	nod: EPA 90	056A					
	Pace Analytica							
Chloride	9.0	mg/L	1.0	1		10/04/23 03:4	7 16887-00-6	
Fluoride	ND	mg/L	0.10	1			7 16984-48-8	
riuolide								



Project: Plant Arkwright-CCR Ash Pond-Revised Report

Pace Project No.: 92691209

Date: 11/07/2023 04:29 PM

QC Batch: 805246 Analysis Method: EPA 6010D
QC Batch Method: EPA 3010A Analysis Description: 6010D ATL

Laboratory: Pace Analytical Services - Peachtree Corners, GA

Associated Lab Samples: 92691209001, 92691209003, 92691209004, 92691209005, 92691209006

METHOD BLANK: 4169858 Matrix: Water

Associated Lab Samples: 92691209001, 92691209003, 92691209004, 92691209005, 92691209006

		Blank	Reporting		
Parameter	Units	Result	Limit	Analyzed	Qualifiers
Boron	mg/L	ND	0.040	10/23/23 23:04	
Calcium	mg/L	ND	1.0	10/23/23 23:04	
Magnesium	mg/L	ND	0.050	10/23/23 23:04	
Potassium	mg/L	ND	0.50	10/24/23 19:55	
Sodium	mg/L	ND	1.0	10/24/23 19:55	

LABORATORY CONTROL SAMPLE:	4169859					
		Spike	LCS	LCS	% Rec	
Parameter	Units	Conc.	Result	% Rec	Limits	Qualifiers
Boron	mg/L	1	0.99	99	80-120	
Calcium	mg/L	1	.77J	77	80-120	L2
Magnesium	mg/L	1	0.94	94	80-120	
Potassium	mg/L	1	1.1	111	80-120	
Sodium	mg/L	1	1.1	112	80-120	

MATRIX SPIKE & MATRIX S	PIKE DUPLIC	CATE: 4169	860		4169861							
	9	2691209001	MS Spike	MSD Spike	MS	MSD	MS	MSD	% Rec		Max	
Parameter	Units	Result	Conc.	Conc.	Result	Result	% Rec	% Rec	Limits	RPD	RPD	Qual
Boron	mg/L	ND	1	1	1.1	1.1	105	104	75-125	1	20	
Calcium	mg/L	12.9	1	1	15.1	13.9	219	102	75-125	8	20	MO
Magnesium	mg/L	5.5	1	1	7.2	6.4	174	96	75-125	11	20	M1
Potassium	mg/L	2.7	1	1	3.7	3.9	106	122	75-125	4	20	
Sodium	mg/L	11.2	1	1	11.9	12.3	66	105	75-125	3	20	M1

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



Project: Plant Arkwright-CCR Ash Pond-Revised Report

Pace Project No.: 92691209

Date: 11/07/2023 04:29 PM

QC Batch: 809947 Analysis Method: EPA 6010D
QC Batch Method: EPA 3010A Analysis Description: 6010D ATL

Laboratory: Pace Analytical Services - Peachtree Corners, GA

Associated Lab Samples: 92691209002

METHOD BLANK: 4193423 Matrix: Water

Associated Lab Samples: 92691209002

		Blank	Reporting		
Parameter	Units	Result	Limit	Analyzed	Qualifiers
Boron	mg/L	ND	0.040	11/02/23 18:54	
Calcium	mg/L	ND	1.0	11/02/23 18:54	
Magnesium	mg/L	ND	0.050	11/02/23 18:54	
Potassium	mg/L	ND	0.50	11/02/23 18:54	
Sodium	mg/L	ND	1.0	11/02/23 18:54	

		Spike	LCS	LCS	% Rec	
Parameter	Units	Conc.	Result	% Rec	Limits	Qualifiers
Boron	mg/L		0.95	95	80-120	
alcium	mg/L	1	1.0	100	80-120	
lagnesium	mg/L	1	1.0	103	80-120	
otassium	mg/L	1	1.0	100	80-120	
odium	mg/L	1	.99J	99	80-120	

MATRIX SPIKE & MATRIX	SPIKE DUPL	ICATE: 4193	425		4193426	i						
		92691209002	MS Spike	MSD Spike	MS	MSD	MS	MSD	% Rec		Max	
Parameter	Units	Result	Conc.	Conc.	Result	Result	% Rec	% Rec	Limits	RPD	RPD	Qual
Boron	mg/L	0.045	1	1	1.1	1.0	102	100	75-125	2	20	
Calcium	mg/L	15.0	1	1	16.3	15.6	125	58	75-125	4	20	M1
Magnesium	mg/L	6.4	1	1	7.6	7.3	117	91	75-125	3	20	
Potassium	mg/L	2.8	1	1	3.8	3.8	103	102	75-125	0	20	
Sodium	mg/L	11.3	1	1	12.6	12.3	132	94	75-125	3	20	M1

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



Project: Plant Arkwright-CCR Ash Pond-Revised Report

Pace Project No.: 92691209

Date: 11/07/2023 04:29 PM

QC Batch: 804826 Analysis Method: EPA 6020B
QC Batch Method: EPA 3005A Analysis Description: 6020 MET

Laboratory: Pace Analytical Services - Peachtree Corners, GA

Associated Lab Samples: 92691209001, 92691209002, 92691209003, 92691209004, 92691209005, 92691209006

METHOD BLANK: 4168100 Matrix: Water

Associated Lab Samples: 92691209001, 92691209002, 92691209003, 92691209004, 92691209005, 92691209006

		Blank	Reporting		
Parameter	Units	Result	Limit	Analyzed	Qualifiers
Antimony	mg/L	ND	0.0030	10/10/23 15:19	
Arsenic	mg/L	ND	0.0050	10/10/23 15:19	
Barium	mg/L	ND	0.0050	10/10/23 15:19	
Beryllium	mg/L	ND	0.00050	10/10/23 15:19	
Cadmium	mg/L	ND	0.00050	10/10/23 15:19	
Chromium	mg/L	ND	0.0050	10/10/23 15:19	
Cobalt	mg/L	ND	0.0050	10/10/23 15:19	
Lead	mg/L	ND	0.0010	10/10/23 15:19	
Lithium	mg/L	ND	0.030	10/10/23 15:19	
Molybdenum	mg/L	ND	0.010	10/10/23 15:19	
Selenium	mg/L	ND	0.0050	10/10/23 15:19	
Thallium	mg/L	ND	0.0010	10/10/23 15:19	

LABORATORY CONTROL SAMPLE:	4168101					
		Spike	LCS	LCS	% Rec	
Parameter	Units	Conc.	Result	% Rec	Limits	Qualifiers
Antimony	mg/L	0.1	0.11	106	80-120	
Arsenic	mg/L	0.1	0.10	102	80-120	
Barium	mg/L	0.1	0.10	104	80-120	
Beryllium	mg/L	0.1	0.12	116	80-120	
Cadmium	mg/L	0.1	0.11	105	80-120	
Chromium	mg/L	0.1	0.11	106	80-120	
Cobalt	mg/L	0.1	0.11	106	80-120	
Lead	mg/L	0.1	0.11	105	80-120	
Lithium	mg/L	0.1	0.13	129	80-120 L1	
Molybdenum	mg/L	0.1	0.10	104	80-120	
Selenium	mg/L	0.1	0.10	102	80-120	
Thallium	mg/L	0.1	0.10	103	80-120	

MATRIX SPIKE & MATRIX SP	PIKE DUPLI	CATE: 4168	102		4168103							
	g	92687886008	MS Spike	MSD Spike	MS	MSD	MS	MSD	% Rec		Max	
Parameter	Units	Result	Conc.	Conc.	Result	Result	% Rec	% Rec	Limits	RPD	RPD	Qual
Antimony	mg/L	ND	0.1	0.1	0.11	0.10	108	104	75-125	4	20	
Arsenic	mg/L	ND	0.1	0.1	0.11	0.10	105	101	75-125	4	20	
Barium	mg/L	1090 ug/L	0.1	0.1	1.2	1.1	71	30	75-125	4	20	
Beryllium	mg/L	ND	0.1	0.1	0.10	0.097	102	97	75-125	5	20	

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



Project: Plant Arkwright-CCR Ash Pond-Revised Report

Pace Project No.: 92691209

Date: 11/07/2023 04:29 PM

			MS	MSD								
	9	92687886008	Spike	Spike	MS	MSD	MS	MSD	% Rec		Max	
Parameter	Units	Result	Conc.	Conc.	Result	Result	% Rec	% Rec	Limits	RPD	RPD	Qua
Cadmium	mg/L	ND ND	0.1	0.1	0.11	0.10	110	102	75-125	8	20	
Chromium	mg/L	ND	0.1	0.1	0.10	0.099	105	99	75-125	5	20	
Cobalt	mg/L	162 ug/L	0.1	0.1	0.27	0.26	107	95	75-125	5	20	
_ead	mg/L	ND	0.1	0.1	0.10	0.099	104	99	75-125	6	20	
_ithium	mg/L	ND	0.1	0.1	0.12	0.12	113	108	75-125	4	20	
Molybdenum	mg/L	ND	0.1	0.1	0.11	0.10	105	101	75-125	4	20	
Selenium	mg/L	ND	0.1	0.1	0.11	0.10	104	101	75-125	4	20	
Thallium	mg/L	2.2 ug/L	0.1	0.1	0.11	0.10	103	98	75-125	6	20	

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



Project: Plant Arkwright-CCR Ash Pond-Revised Report

Pace Project No.: 92691209

Date: 11/07/2023 04:29 PM

QC Batch: 805706 Analysis Method: EPA 7470A

QC Batch Method: EPA 7470A Analysis Description: 7470 Mercury

Laboratory: Pace Analytical Services - Peachtree Corners, GA

Associated Lab Samples: 92691209001, 92691209002, 92691209003, 92691209004, 92691209005, 92691209006

METHOD BLANK: 4172220 Matrix: Water

Associated Lab Samples: 92691209001, 92691209002, 92691209003, 92691209004, 92691209005, 92691209006

Blank Reporting

Parameter Units Result Limit Analyzed Qualifiers

Mercury mg/L ND 0.00020 10/12/23 16:01

LABORATORY CONTROL SAMPLE: 4172221

Spike LCS LCS % Rec Conc. Result % Rec Limits Qualifiers Parameter Units Mercury mg/L 0.0025 0.0021 85 80-120

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4172222 4172223

MS MSD

92689717009 Spike Spike MS MSD MS MSD % Rec Max Parameter Units Result **RPD** RPD Qual Result Conc. Conc. Result % Rec % Rec Limits 0.0025 Mercury mg/L ND 0.0025 0.0026 0.0023 99 87 75-125 12 20

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



Project: Plant Arkwright-CCR Ash Pond-Revised Report

Pace Project No.: 92691209

QC Batch: 804106 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: 92691209001, 92691209002, 92691209003, 92691209004, 92691209005, 92691209006

METHOD BLANK: 4164514 Matrix: Water

Associated Lab Samples: 92691209001, 92691209002, 92691209003, 92691209004, 92691209005, 92691209006

Blank Reporting

Parameter Units Result Limit Analyzed Qualifiers

Total Dissolved Solids mg/L ND 25.0 10/04/23 14:01

LABORATORY CONTROL SAMPLE: 4164515

Spike LCS LCS % Rec Conc. % Rec Limits Qualifiers Parameter Units Result mg/L **Total Dissolved Solids** 400 381 95 80-120

SAMPLE DUPLICATE: 4164516

92691004001 Dup Max Parameter Units Result Result **RPD RPD** Qualifiers 228 **Total Dissolved Solids** 9 mg/L 208 10

SAMPLE DUPLICATE: 4164517

Date: 11/07/2023 04:29 PM

92691209003 Dup Max Parameter RPD RPD Units Result Result Qualifiers Total Dissolved Solids 72.0 mg/L 76.0 5 10

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



Project: Plant Arkwright-CCR Ash Pond-Revised Report

Pace Project No.: 92691209

QC Batch: 804990 Analysis Method: SM 2320B-2011
QC Batch Method: SM 2320B-2011 Analysis Description: 2320B Alkalinity

Laboratory: Pace Analytical Services - Asheville

Associated Lab Samples: 92691209001, 92691209002, 92691209003, 92691209004, 92691209005, 92691209006

METHOD BLANK: 4168576 Matrix: Water

Associated Lab Samples: 92691209001, 92691209002, 92691209003, 92691209004, 92691209005, 92691209006

Blank Reporting Qualifiers Parameter Units Result Limit Analyzed Alkalinity, Total as CaCO3 ND 5.0 10/09/23 16:49 mg/L Alkalinity, Bicarbonate (CaCO3) mg/L ND 5.0 10/09/23 16:49

LABORATORY CONTROL SAMPLE: 4168577

Spike LCS LCS % Rec Parameter Units Conc. Result % Rec Limits Qualifiers Alkalinity, Total as CaCO3 52.5 105 80-120 mg/L 50

LABORATORY CONTROL SAMPLE: 4168578

Date: 11/07/2023 04:29 PM

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

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4168579 4168580

MS MSD 92691209001 MS MSD MS MSD Spike Spike % Rec Max RPD Parameter Units Result Conc. Conc. Result Result % Rec % Rec Limits RPD Qual 50 50 Alkalinity, Total as CaCO3 60.9 111 112 101 103 80-120 25 mg/L

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4168581 4168582

MSD MS 92691209002 Spike Spike MS MSD MS MSD % Rec Max Parameter Units Conc. Conc. Result Result % Rec % Rec **RPD** RPD Result Limits Qual Alkalinity, Total as CaCO3 mg/L 61.8 50 50 114 112 104 101 80-120 2 25

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



Project: Plant Arkwright-CCR Ash Pond-Revised Report

Pace Project No.: 92691209

LABORATORY CONTROL CAMPLE: 4162720

Date: 11/07/2023 04:29 PM

QC Batch: 803939 Analysis Method: EPA 9056A

QC Batch Method: EPA 9056A Analysis Description: 9056 IC anions 28 Days

Laboratory: Pace Analytical Services - Asheville

Associated Lab Samples: 92691209001, 92691209002, 92691209003, 92691209004, 92691209005, 92691209006

METHOD BLANK: 4163719 Matrix: Water

Associated Lab Samples: 92691209001, 92691209002, 92691209003, 92691209004, 92691209005, 92691209006

		Blank	Reporting		
Parameter	Units	Result	Limit	Analyzed	Qualifiers
Chloride	mg/L	ND ND	1.0	10/04/23 00:53	
Fluoride	mg/L	ND	0.10	10/04/23 00:53	
Sulfate	mg/L	ND	1.0	10/04/23 00:53	

LABORATORY CONTROL SAMPLE.	4103720					
		Spike	LCS	LCS	% Rec	
Parameter	Units	Conc.	Result	% Rec	Limits	Qualifiers
Chloride	mg/L	50	49.2	98	90-110	
Fluoride	mg/L	2.5	2.5	99	90-110	
Sulfate	mg/L	50	49.2	98	90-110	

MATRIX SPIKE & MATRIX SP	IKE DUPL	ICATE: 4163	721		4163722							
			MS	MSD								
		92690697022	Spike	Spike	MS	MSD	MS	MSD	% Rec		Max	
Parameter	Units	Result	Conc.	Conc.	Result	Result	% Rec	% Rec	Limits	RPD	RPD	Qual
Chloride	mg/L	2.8	50	50	51.3	50.9	97	96	90-110	1	10	
Fluoride	mg/L	ND	2.5	2.5	2.6	2.5	100	99	90-110	1	10	
Sulfate	mg/L	1.4	50	50	49.4	49.2	96	96	90-110	0	10	

MATRIX SPIKE & MATRIX SP	IKE DUPL	ICATE: 4163	723		4163724							
			MS	MSD								
		92691157017	Spike	Spike	MS	MSD	MS	MSD	% Rec		Max	
Parameter	Units	Result	Conc.	Conc.	Result	Result	% Rec	% Rec	Limits	RPD	RPD	Qual
Chloride	mg/L	11.1	50	50	58.5	58.6	95	95	90-110	0	10	
Fluoride	mg/L	ND	2.5	2.5	2.6	2.6	103	103	90-110	0	10	
Sulfate	mg/L	5.8	50	50	52.9	53.3	94	95	90-110	1	10	

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



QUALIFIERS

Project: Plant Arkwright-CCR Ash Pond-Revised Report

Pace Project No.: 92691209

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

Date: 11/07/2023 04:29 PM

- L1 Analyte recovery in the laboratory control sample (LCS) was above QC limits. Results for this analyte in associated samples may be biased high.
- L2 Analyte recovery in the laboratory control sample (LCS) was below QC limits. Results for this analyte in associated samples may be biased low.

M0 Matrix spike recovery and/or matrix spike duplicate recovery was outside laboratory control limits.

M1 Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.



QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Plant Arkwright-CCR Ash Pond-Revised Report

Pace Project No.: 92691209

Date: 11/07/2023 04:29 PM

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92691209001	ARK-BC-0.3	EPA 3010A	805246	EPA 6010D	805325
92691209002	ARK-BC-0.1	EPA 3010A	809947	EPA 6010D	810055
92691209003	ARK-OR-0.8	EPA 3010A	805246	EPA 6010D	805325
92691209004	ARK-OR-0.1	EPA 3010A	805246	EPA 6010D	805325
92691209005	ARK-OR-0.3	EPA 3010A	805246	EPA 6010D	805325
92691209006	ARK-OR+0.25	EPA 3010A	805246	EPA 6010D	805325
92691209001	ARK-BC-0.3	EPA 3005A	804826	EPA 6020B	804860
92691209002	ARK-BC-0.1	EPA 3005A	804826	EPA 6020B	804860
92691209003	ARK-OR-0.8	EPA 3005A	804826	EPA 6020B	804860
92691209004	ARK-OR-0.1	EPA 3005A	804826	EPA 6020B	804860
92691209005	ARK-OR-0.3	EPA 3005A	804826	EPA 6020B	804860
92691209006	ARK-OR+0.25	EPA 3005A	804826	EPA 6020B	804860
92691209001	ARK-BC-0.3	EPA 7470A	805706	EPA 7470A	805878
92691209002	ARK-BC-0.1	EPA 7470A	805706	EPA 7470A	805878
92691209003	ARK-OR-0.8	EPA 7470A	805706	EPA 7470A	805878
92691209004	ARK-OR-0.1	EPA 7470A	805706	EPA 7470A	805878
92691209005	ARK-OR-0.3	EPA 7470A	805706	EPA 7470A	805878
92691209006	ARK-OR+0.25	EPA 7470A	805706	EPA 7470A	805878
92691209001	ARK-BC-0.3	SM 2540C-2015	804106		
92691209002	ARK-BC-0.1	SM 2540C-2015	804106		
92691209003	ARK-OR-0.8	SM 2540C-2015	804106		
92691209004	ARK-OR-0.1	SM 2540C-2015	804106		
92691209005	ARK-OR-0.3	SM 2540C-2015	804106		
92691209006	ARK-OR+0.25	SM 2540C-2015	804106		
92691209001	ARK-BC-0.3	SM 2320B-2011	804990		
92691209002	ARK-BC-0.1	SM 2320B-2011	804990		
92691209003	ARK-OR-0.8	SM 2320B-2011	804990		
92691209004	ARK-OR-0.1	SM 2320B-2011	804990		
92691209005	ARK-OR-0.3	SM 2320B-2011	804990		
92691209006	ARK-OR+0.25	SM 2320B-2011	804990		
92691209001	ARK-BC-0.3	EPA 9056A	803939		
92691209002	ARK-BC-0.1	EPA 9056A	803939		
92691209003	ARK-OR-0.8	EPA 9056A	803939		
92691209004	ARK-OR-0.1	EPA 9056A	803939		
92691209005	ARK-OR-0.3	EPA 9056A	803939		
92691209006	ARK-OR+0.25	EPA 9056A	803939		

CHAIN-OF-CUSTODY / Analytical Request Document The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

		ARK-CCF		App. IV -		12	11	10	9	8	7	0	On .	4	۵	N	4	ITEM#		VAIR -	Request	Phone:	Attenta,	Address	Company	Required
		ARK-CCR-ASSMT-202382 (- Sb, As, Ba, Be, Cd, Cr, Co, Pb, Li, Mo, Se, Ti + Hq	ADDITIONAL COMMENTS							ARK-OR+0.25	ARK-OR-0.3	ARK-OR-0.1	ARK-OR-08	ARK-BC-0.1	ARK-BC-0.3	Sample ids must be unique These	SAMPLE ID Solfsold One Character per box.	MATRIX Drinkton	M	kelley sharpe@arcadis.com	Manta, GA 30339	Ш	ARCADIS - Atlanta	Required Client Information:
	F		_	Ŧ															₩ ₽₽₽₽₩		Project #:	Project Name:		Copy To:	Report To:	Required Project Information:
		{	1		RELINQU				b 3			WG	WG	¥	¥.	Ş.	¥	MATRIX COL	E (see valid co	des to left)	Ш	Order			1	Proj.
	1		\mathcal{H}		HOUR			 			t	G	G	ြ	wGG	wgg	wa a	SAMPLE TY							9	# Info
			*		4							14/5/13	14/23	7/13	%/ ₁₃	1/3/	95/13	DATE				98	П	Ben Hodges, Joju Abraham	Kelley Shame Warran Johnson	
1 6			ļ	V	MIN			_					1		22	/23	23	īī .	START			GPC82474-0003		Ş.	٤	≘
S 5		1 1	-	14	NOTIALITIES ! N							1712	1012	1150	0935	1121	1245	TIME	4	8				BLEK		
SAMPLER HAME AND SIGNATURE PRINT Name of SAMPLER: SIGNATURE of SAMPLER:	ı		Į	45/12	ROE		\vdash					12	-	۲	3	_	3			СОГГЕСТЕВ		2	П		3	
			Ý	₹ 														DATE		图			П	П	1	
9 9	Г	\Box	_	₹	100			-					\vdash	\vdash				<u> </u>				3	Ш	П	ı	
AMPL			t	1/3/22	DATE													TIME				8	П	П	ı	
9 9 2	L	11										5	5	5	/5	5	S		IP AT COLLECT	ON	Ш	1	Ļ	Ц	4	
R			Į,	ᆁ			\vdash	<u> </u>				×	×	×	5 X	×	×	# OF CONTA		_	Pace Profile #: 1583	Pace Quote:	Bea Ippy	Company Name:	Attention:	Section C Invoice information:
			1	질	TIME		\vdash				-		\vdash				\vdash	Unpreserve H2SO4	P	┨	l logil.		8	N Vere	9	2 S
	Н	1	T	Ť	922		\vdash					×	×	×	×	×	×	HNO3		┪╗			ı	9. 19.		Ž
W.	ı	11	- 6	Чl	麗													нсі		Tes es	15836		П	Н	ı	9
720		11		ZI	A													NaOH		Preservativ	8			П	ı	
た		11	ľ	Ľ	CCEF		<u> </u>				_	_	 	ļ	_	<u> </u>		Na2S2O3		_les			Н	H	1	
F	ı	1 1	ı	\mathbb{N}	CEPTED								⊢		┝			Methanol Other		╣.			П	П	1	
		1		$ \mathcal{I}_{g} $	NIA	100						_		<u> </u>		,	Н		os Test	Y/N	H		П	П	1	
4	ı		1	2000	NOUVILLAND AND							×	×	×	×	×	×	Total/Bicarb	Alkalinity		Ro		П		ı	
DATE SCHOOL	ı			ľ	NOE							×	×	×	×	x l	×	CI, F, SO4			2		П	П	ı	
	ı	1		١								×	×	×	×	×	×	TDS			1		П	П	ı	
•	ı	1 1		١	繼							×	×	×	×	×	×	App. III Meta App. IV Meta	ds (Client List)	-1	<u> </u>	N.			i	
	H	+-+	-	8	800		\vdash	-			-	×	×	×	×	×	×	Metais - Mg		-	<u> </u>		3	7	1	
			Ŋ	10-8-73	DATE							×	×	×	×	×	×	Radium 226	228		ý =		1	3	Ц	
	L			_																	<u> </u>	Ξ			Г	
		1 1	- [ゲル	=						ļ	<u> </u>	├		ļ					-			(2		
	L	1 1			TIME		┝						├	\vdash	\vdash		Н			+	\equiv		1	5	F	
1000	۲	╁┤	\dashv	+	1000		\vdash					\vdash			\vdash	\vdash	H	· · · ·		+		K	g			Page :
MP in C	1		[]]				31 15			0 C				·	Residual Cl	lorine (Y/N)	1			4		ŀ	•
eceived on		\prod	\Box	\neg	PAH																9289		·			
7N)				╝	MAMPLE C		ľ			i												6	ž		ſ	_
ustody aled			T		COMOT																	U	ō			ð
ooler /N)		\perp	\perp	╝	SNOWO									İ								110			ľ	•
amples act				1	THE REAL PROPERTY.																			0		_
/N)	1	1 [- 1	10/51							l	1			1							1		-11	

DC#_Title: ENV-FRM-HU	JN1-0083 v0	2_Saı	mple Co	ondi	ition Upon Receipt
Effective Date: 11/14/2022					
atory receiving samples: ville Eden Greenwood r ple Condition Client Name:					Mechanicsville Atlanta Kernersville Cet #: WO#: 92691209
er: Fed Ex UPS	USPS Other:		Clie	-	PM: MP Due Date: 10/11/23 CLIENT: GR-ArcadAt1
dy Seal Present? ☐Yes ☑No Sea	ls Intact?]Yes	□ ₩		Date/Initials Person Examining Contents: 10 3-73 T(C
Material: Bubble Wrap □8: Dometer: R Gun ID: 0 × 3	ubble Bags]None □v		her	Biological Tissue Frozen? ☐Yes ☐No ☐N/A ☐None
r Temp: 3,3 Correction Fact Add/Subtract (r Temp Corrected (°C): 3,3					Temp should be above freezing to 6°C Samples out of temp criteria. Samples on ice, cooling process has begun
Regulated Soil (N/A, water sample) samples originate in a quarantine zone within the ck maps)? Yes No	e United States: C	CA, NY, o	or SC	_	Did samples originate from a foreign source (internationally, including Hawaii and Puerto Rico)? Yes No
Asia of Contacto Brosses	7			-	Comments/Discrepancy:
hain of Custody Present?		□No	□N/A	1.	
mples Arrived within Hold Time?		□No	□N/A	2.	50.00
ort Hold Time Analysis (<72 hr.)? ush Turn Around Time Requested?	Yes Yes	ØN∘ DA∘	□n/a □n/a	4.	
fficient Volume?	✓¥es	□No	□N/A	5.	
errect Containers Used?		□No	□N/A	6.	
-Pace Containers Used?	ďYes	□No	□N/A	1_	
ntainers Intact?	⊒Yes	□No	□N/A	7.	
ssolved analysis: Samples Field Filtered?		□No	ĭ∃N/A	8.	
emple Labels Match COC?	☐fes	□No	□n/a	9.	and the state of t
-Includes Date/Time/ID/Analysis Matrix:				+	
eadspace in VOA Vials (>5-6mm)? p Blank Present?	☐Yes ☐Yes	□No □No	ØN/A ØN/A	10.	
1					
ip Blank Custody Seals Present? NTS/SAMPLE DISCREPANCY	Yes	□No	□w/A		Field Data Required?
1 y				Lot IC	D of split containers:
IDTIFICATION/RESOLUTION	<u> </u>				
n contacted:			Date/Tim	e: _	No. decided to the control of the co
pect Manager SCURF Review:					Date:
oject Manager SRF Review:					Date:

V ID- 6061/I

Page 1 of 2



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#:92691209

PM: MP

Due Date: 10/11/23

CLIENT: GA-ArcadAt1

tem#	BP4U-125 mL Plastic Unpreserved (N/A) (CI-)	BP3U-250 mL Plastic Unpreserved (N/A)	BP2U-500 mL Plastic Unpreserved (N/A)	BP1U-1 liter Plastic Unpreserved (N/A)	BP4S-1 25 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) (CI-)	AG1H-1 liter Amber HCl (pH < 2)	AG3U-250 mL Amber Unpreserved (N/A) (CI-)	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 HCI (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)	BrIN	BP3R- 250 mL Plastic (NH2)2SO4 (9.3-9.7)	AGOU-100 mL Amber Unpreserved (N/A) (CI-)	VSGU-20 mL Scintillation vials (N/A)	DG9U-40 mL Amber Unpreserved vials (N/A)
1		7				N																		$\not \sim$				
2		7				N																		K.				
3		7				X																		Z				
4		7				X							/		/									Z				
5		2				X																		Z				
6		7				X									/									Z,	\setminus			
7																												
8																												
9																												
10																												
11				,									\setminus															
12																												

							-							
	pH Adjustment Log for Preserved Samples													
Sample ID	Type of Preservative	pH upon receipt	Date preservation adjusted	Time preser adjuste		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.com



a member of The GEL Group INC

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

Re: Arkwright CCR Groundwater Compliance AP1

Work Order: 652703

February 07, 2024

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. 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
652703001	ARK-AP1GWA-1	Ground Water	22/01/24 14:35	24/01/24 13:35
652703002	ARK-AP1GWA-2	Ground Water	22/01/24 14:45	24/01/24 13:35
652703003	ARK-AP1PZ-1	Ground Water	22/01/24 16:40	24/01/24 13:35
652703004	ARK-AP1PZ-2	Ground Water	22/01/24 16:40	24/01/24 13:35
652703005	ARK-AP1-FB-01	Water	22/01/24 15:00	24/01/24 13:35
652703006	ARK-AP1-FD-01	Ground Water	22/01/24 12:00	24/01/24 13:35
652703007	ARK-AP1-EB-01	Water	22/01/24 17:15	24/01/24 13:35
652703008	ARK-AP1PZ-3	Ground Water	23/01/24 11:45	24/01/24 13:35
652703009	ARK-AP1PZ-4	Ground Water	23/01/24 13:10	24/01/24 13:35
652703010	ARK-AP1PZ-5	Ground Water	23/01/24 14:50	24/01/24 13:35
652703011	ARK-AP1PZ-7	Ground Water	23/01/24 16:25	24/01/24 13:35
652703012	ARK-AP1PZ-8	Ground Water	23/01/24 11:40	24/01/24 13:35
652703013	ARK-AP1PZ-9	Ground Water	23/01/24 13:35	24/01/24 13:35
652703014	ARK-AP1PZ-10	Ground Water	23/01/24 16:00	24/01/24 13:35
652703015	ARK-AP1PZ-11	Ground Water	23/01/24 17:15	24/01/24 13:35
652703016	ARK-AP1-EB-02	Water	23/01/24 17:00	24/01/24 13:35



652703017	ARK-AP1-FD-02	Ground Water	23/01/24 12:00	24/01/24 13:35
652703018	ARK-AP1-FB-02	Water	23/01/24 15:55	24/01/24 13:35

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 7470A Prep	26-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	28-JAN-2024
EPA 300.0	29-JAN-2024
SM 2540C	25-JAN-2024
SW846 3005A/6020B	02-FEB-2024
SW846 7470A	29-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,

Amanda Turner for

Erin Trent

Project Manager

Purchase Order: GPC82177-0005

Enclosures

Page 3 of 59 SDG: 652703

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

Certificate of Analysis Report for

GPCC001 Georgia Power Company Client SDG: 652703 GEL Work Order: 652703

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	Franda	len		

Page 4 of 59 SDG: 652703

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

Certificate of Analysis

Project:

Client ID:

Report Date: February 7, 2024

GPCC00100

GPCC001

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

Atlanta, Georgia 30308

Contact: Joju Abraham

Project: Arkwright CCR Groundwater ComplianceAP1

Client Sample ID: ARK-AP1GWA-1

Sample ID: 652703001

Matrix: WG

Collect Date: 22-JAN-24 14:35 Receive Date: 24-JAN-24 Collector: Client

RL Parameter **Oualifier** DL Units PF DF Analyst Date Time Batch Method Result Ion Chromatography EPA 300.0 Anions Liquid "As Received" Sulfate 46.0 0.665 2.00 mg/L 5 CWW 01/27/24 0638 2559114 1 0.200 CWW 01/26/24 Chloride 1.75 0.0670 mg/L 1 2033 2559114 2 Fluoride 0.339 0.0330 0.100 mg/L Mercury Analysis-CVAA 7470 Cold Vapor Mercury, Liquid "As Received" Mercury ND 0.0000670 0.000200 mg/L 1.00 1 JP2 01/29/24 1122 2558962 3 Metals Analysis-ICP-MS SW846 3005A/6020B "As Received" ND 0.00100 0.00300 02/02/24 0034 2558106 Antimony U mg/L 1.00 1 BAJ Arsenic U ND 0.00200 0.00500 mg/L 1.00 1 Barium 0.0551 0.0006700.00400 mg/L 1.00 1 0.000200 0.000500 mg/L 1.00 Beryllium 0.00204 1 1.00 0.00520 0.0150 mg/LBoron 0.108 1 mg/L Cadmium 0.000354 0.000300 0.00100 1.00 1 J mg/L Calcium 0.0800 0.200 1.00 16.5 1 0.00447 0.0100 1.00 Chromium 0.00300mg/L Cobalt 0.00650 0.000300 0.00100mg/L 1.00 U 0.00200 Lead ND 0.000500 mg/L 1.00 1 Lithium 0.0101 0.0100 1.00 0.00300 mg/L 1 U ND 0.000200 0.00100 mg/L1.00 Molybdenum 1 Selenium J 0.00243 0.00150 0.00500 mg/L 1.00 1 0.000600 0.00200 Thallium ND mg/L 1.00 1 Solids Analysis SM2540C Dissolved Solids "As Received" Total Dissolved Solids 2.38 10.0 ES2 01/25/24 1214 2558321 5 mg/L The following Prep Methods were performed:

Method Description Date Prep Batch Analyst Time SW846 3005A ICP-MS 3005A PREP JD2 01/25/24 0845 2558105 SW846 7470A Prep EPA 7470A Mercury Prep Liquid JM13 01/26/24 1145 2558961

Page 5 of 59 SDG: 652703

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 ComplianceAP1

Client Sample ID: ARK-AP1GWA-1 Project: GPCC00100 Sample ID: 652703001 Client ID: GPCC001

Parameter	Qualifier	Result	DL	RL	Units	PF	DF Analyst Date	Time Batch	Method
The following Analy	tical Methods v	were performed:							
Method	Description	1			1	Analy	st Comments		
1	EPA 300.0					-			
2	EPA 300.0								
3	SW846 7470A	A							
4	SW846 3005A	A/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

Page 6 of 59 SDG: 652703

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

Certificate of Analysis

Report Date: February 7, 2024

GPCC00100

Project:

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

Atlanta, Georgia 30308

Contact: Joju Abraham

Project: Arkwright CCR Groundwater ComplianceAP1

Client Sample ID: ARK-AP1GWA-2

Sample ID:

Matrix: WG

Collect Date: 22-JAN-24 14:45 Receive Date: 24-JAN-24 Collector: Client

652703002 Client ID: GPCC001

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analy	st Date	Time Batch	Method
Ion Chromatograph	ny										
EPA 300.0 Anions	Liquid "As Recei	ived"									
Chloride	•	1.90	0.0670	0.200	mg/L		1	CWW	01/26/24	2105 2559114	1
Fluoride		0.120	0.0330	0.100	mg/L		1				
Sulfate		3.36	0.133	0.400	mg/L		1				
Mercury Analysis-	CVAA										
7470 Cold Vapor N	Mercury, Liquid "A	As Received"									
Mercury	U	ND	0.0000670	0.000200	mg/L	1.00	1	JP2	01/29/24	1124 2558962	2
Metals Analysis-IC	CP-MS										
SW846 3005A/602	20B "As Received										
Antimony	U	ND	0.00100	0.00300	mg/L	1.00	1	BAJ	02/02/24	0048 2558106	3
Arsenic	U	ND	0.00200	0.00500	mg/L	1.00	1				
Barium		0.0382	0.000670	0.00400	mg/L	1.00	1				
Beryllium	U	ND	0.000200	0.000500	mg/L	1.00	1				
Boron		0.0266	0.00520	0.0150	mg/L	1.00	1				
Cadmium	U	ND	0.000300	0.00100	mg/L	1.00	1				
Calcium		5.47	0.0800	0.200	mg/L	1.00	1				
Chromium	J	0.00561	0.00300	0.0100	mg/L	1.00	1				
Cobalt	J	0.000388	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				
Solids Analysis											
SM2540C Dissolve	ed Solids "As Rec	eived"									
Total Dissolved Solids		56.0	2.38	10.0	mg/L			ES2	01/25/24	1214 2558321	4
The following Prep	Methods were pe	erformed:									
3.6.1.1					-						

Method Date Prep Batch Description Analyst Time 2558105 SW846 3005A ICP-MS 3005A PREP JD2 01/25/24 0845 SW846 7470A Prep EPA 7470A Mercury Prep Liquid JM13 01/26/24 1145 2558961

Page 7 of 59 SDG: 652703

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 ComplianceAP1

Client Sample ID: ARK-AP1GWA-2 Project: GPCC00100 Sample ID: 652703002 Client ID: GPCC001

Parameter	Qualifier Result	DL	RL	Units	PF	DF Analyst Date	Time Batch	Method
The following A	nalytical Methods were performed:							
Method	Description			A	Analys	st Comments		
1	EPA 300.0							
2	SW846 7470A							
3	SW846 3005A/6020B							
4	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

Page 8 of 59 SDG: 652703

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

Certificate of Analysis

Project:

Client ID:

Report Date: February 7, 2024

GPCC00100

GPCC001

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

Atlanta, Georgia 30308

Contact: Joju Abraham

Project: Arkwright CCR Groundwater ComplianceAP1

Client Sample ID: ARK-AP1PZ-1 Sample ID: 652703003

Matrix: WG

Collect Date: 22-JAN-24 16:40 Receive Date: 24-JAN-24 Collector: Client

RL Parameter **Oualifier** DL Units PF DF Analyst Date Time Batch Method Result Ion Chromatography EPA 300.0 Anions Liquid "As Received" Sulfate 102 1.33 4.00 mg/L CWW 01/27/24 1521 2559114 1 0.0670 0.200 CWW 01/26/24 2137 2559114 Chloride 2.13 mg/L 1 2 Fluoride 0.139 0.0330 0.100 mg/L Mercury Analysis-CVAA 7470 Cold Vapor Mercury, Liquid "As Received" Mercury ND 0.0000670 0.000200 mg/L 1.00 1 JP2 01/29/24 1126 2558962 3 Metals Analysis-ICP-MS SW846 3005A/6020B "As Received" ND 0.00100 0.00300 02/02/24 0057 2558106 Antimony U mg/L 1.00 1 BAJ Arsenic U ND 0.00200 0.00500 mg/L 1.00 1 Barium 0.0359 0.0006700.00400 mg/L1.00 1 U 0.000200 0.000500 1.00 Beryllium ND mg/L 1 Cadmium U ND 0.000300 0.00100 mg/L1.00 1 mg/L Calcium 0.0800 0.200 1.00 1 31.6 0.0100 Chromium U ND 0.00300 mg/L 1.00 1 Cobalt 0.0004800.00100 1.00 0.000300 mg/L Lead U ND 0.000500 0.00200mg/L1.00 1 Lithium J 0.00421 0.00300 0.0100 mg/L 1.00 1 Molybdenum 0.000400 0.0002000.00100 1.00 T mg/L 1 U ND 0.00150 0.00500 mg/L1.00 Selenium 1 Thallium U ND 0.000600 0.00200 mg/L 1.00 1 0.364 0.0260 0.0750 02/02/24 1117 2558106 Boron mg/L 1.00 5 BAJ Solids Analysis SM2540C Dissolved Solids "As Received" Total Dissolved Solids 2.38 10.0 ES2 01/25/24 1214 2558321 mg/L 6 The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
SW846 3005A	ICP-MS 3005A PREP	JD2	01/25/24	0845	2558105
SW846 7470A Prep	EPA 7470A Mercury Prep Liquid	JM13	01/26/24	1145	2558961

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 ComplianceAP1

Client Sample ID: ARK-AP1PZ-1 Project: GPCC00100 Sample ID: 652703003 Client ID: GPCC001

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

Notes:

Column headers are defined as follows:

DF: Dilution Factor 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

Page 10 of 59 SDG: 652703

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 ComplianceAP1

Client Sample ID: ARK-AP1PZ-2 Sample ID: 652703004

Matrix: WG

Collect Date: 22-JAN-24 16:40
Receive Date: 24-JAN-24
Collector: Client

Description

ICP-MS 3005A PREP

EPA 7470A Mercury Prep Liquid

-AP1PZ-2 Project: GPCC00100 03004 Client ID: GPCC001

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analy	st Date	Time	Batch	Method
Ion Chromatography												
EPA 300.0 Anions Liqui	d "As Recei	ived"										
Sulfate		625	13.3	40.0	mg/L		100	CWW	01/27/24	1624	2559114	1
Chloride		2.99	0.0670	0.200	mg/L		1	CWW	01/27/24	1553	2559114	2
Fluoride		0.123	0.0330	0.100	mg/L		1					
Mercury Analysis-CVA	A											
7470 Cold Vapor Mercur	ry, Liquid "A	As Received"										
Mercury	U	ND	0.0000670	0.000200	mg/L	1.00	1	JP2	01/29/24	1127	2558962	3
Metals Analysis-ICP-MS	S											
SW846 3005A/6020B "A	As Received											
Boron		0.408	0.0260	0.0750	mg/L	1.00	5	BAJ	02/02/24	1118	2558106	4
Calcium		183	0.400	1.00	mg/L	1.00	5					
Antimony	U	ND	0.00100	0.00300	mg/L	1.00	1	BAJ	02/02/24	0059	2558106	5
Arsenic	U	ND	0.00200	0.00500	mg/L	1.00	1					
Barium		0.0242	0.000670	0.00400	mg/L	1.00	1					
Beryllium	U	ND	0.000200	0.000500	mg/L	1.00	1					
Cadmium	J	0.000374	0.000300	0.00100	mg/L	1.00	1					
Chromium	U	ND	0.00300	0.0100	mg/L	1.00	1					
Cobalt		0.110	0.000300	0.00100	mg/L	1.00	1					
Lead	U	ND	0.000500	0.00200	mg/L	1.00	1					
Lithium		0.0189	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					
Solids Analysis												
SM2540C Dissolved Sol	ids "As Rec	eived"										
Total Dissolved Solids		998	4.76	20.0	mg/L			ES2	01/25/24	1214	2558321	6
The following Prep Meth	nods were pe	erformed:										

Analyst

JD2

JM13

Date

01/25/24

01/26/24

Prep Batch

2558105

2558961

Time

0845

1145

Page 11 of 59 SDG: 652703

Method

SW846 3005A

SW846 7470A Prep

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 ComplianceAP1

Client Sample ID: ARK-AP1PZ-2 Project: GPCC00100 Sample ID: 652703004 Client ID: GPCC001

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

Notes:

Column headers are defined as follows:

DF: Dilution Factor 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

Page 12 of 59 SDG: 652703

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

Certificate of Analysis

Project:

Client ID:

Report Date: February 7, 2024

GPCC00100

GPCC001

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

Atlanta, Georgia 30308

Contact: Joju Abraham

Project: Arkwright CCR Groundwater ComplianceAP1

Client Sample ID: ARK-AP1-FB-01

Sample ID: 652703005

Matrix: WQ

Collect Date: 22-JAN-24 15:00 Receive Date: 24-JAN-24 Collector: Client

U

U

ND

ND

RL Parameter **Oualifier** DL Units PF DF Analyst Date Time Batch Method Result Ion Chromatography EPA 300.0 Anions Liquid "As Received" Chloride ND 0.0670 0.200 mg/L CWW 01/26/24 2240 2559114 1 Fluoride ND 0.0330 0.100 U mg/L 1 Sulfate U ND 0.133 0.400 mg/L 1 Mercury Analysis-CVAA 7470 Cold Vapor Mercury, Liquid "As Received" Mercury ND 0.0000670 0.000200 mg/L 1.00 1 JP2 01/29/24 1129 2558962 2 Metals Analysis-ICP-MS SW846 3005A/6020B "As Received" ND 0.00520 0.0150 02/02/24 1133 2558106 3 Boron U mg/L 1.00 1 BAJ U ND 0.00100 0.00300 mg/L 1.00 1 BAJ 02/02/24 0102 2558106 4 Antimony Arsenic U ND 0.002000.00500mg/L 1.00 1 U 0.000670 0.00400 mg/L 1.00 Barium ND 1 Beryllium U ND 0.000200 0.000500 mg/L1.00 1 0.000300 mg/L Cadmium U ND 0.00100 1.00 1

0.200

0.0100

10.0

mg/L

mg/L

mg/L

1.00 1

1.00

ES2

01/25/24 1214 2558321

5

Cobalt U ND 0.000300 0.00100mg/L 1.00 U 0.00200 Lead ND 0.000500 mg/L 1.00 1 Lithium U ND 0.0100 1.00 0.00300 mg/L 1 U ND 0.000200 0.00100 1.00 Molybdenum mg/L 1 Selenium U ND 0.00150 0.00500 mg/L 1.00 1 ND 0.000600 0.00200 Thallium mg/L 1.00 Solids Analysis SM2540C Dissolved Solids "As Received"

The following Prep Methods were performed:

Calcium

Chromium

Total Dissolved Solids

Method	Description	Analyst	Date	Time	Prep Batch
SW846 3005A	ICP-MS 3005A PREP	JD2	01/25/24	0845	2558105
SW846 7470A Prep	EPA 7470A Mercury Prep Liquid	JM13	01/26/24	1145	2558961

2.38

0.0800

0.00300

Page 13 of 59 SDG: 652703

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 ComplianceAP1

Client Sample ID: ARK-AP1-FB-01 Project: GPCC00100 Sample ID: 652703005 Client ID: GPCC001

Parameter	Qualifier	Result	DL	RL	Units	PF	DF Analyst Date	Time Batch	Method
The following Analytic	cal Methods v	were performed:							
Method	Description	l				Analys	st Comments		
1	EPA 300.0								
2	SW846 7470A	A							
3	SW846 3005A	A/6020B							
4	SW846 3005A	A/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

Page 14 of 59 SDG: 652703

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

Certificate of Analysis

Project:

Client ID:

Report Date: February 7, 2024

GPCC00100

GPCC001

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

Atlanta, Georgia 30308

Contact: Joju Abraham

Project: Arkwright CCR Groundwater ComplianceAP1

Client Sample ID: ARK-AP1-FD-01

Sample ID: 652703006

Matrix: WG

Collect Date: 22-JAN-24 12:00
Receive Date: 24-JAN-24
Collector: Client

RL Parameter **Oualifier** DL Units PF DF Analyst Date Time Batch Method Result Ion Chromatography EPA 300.0 Anions Liquid "As Received" Sulfate 46.5 0.665 2.00 mg/L 5 CWW 01/27/24 1656 2559114 1 0.400 2 CWW 01/26/24 Chloride 1.86 0.134 mg/L 2312 2559114 2 Fluoride 0.366 0.0660 0.200 mg/L 2 Mercury Analysis-CVAA 7470 Cold Vapor Mercury, Liquid "As Received" 1130 2558962 Mercury U ND 0.0000670 0.000200 mg/L 1.00 1 JP2 01/29/24 3 Metals Analysis-ICP-MS SW846 3005A/6020B "As Received" 0.109 0.00520 0.0150 02/02/24 1134 2558106 Boron mg/L 1.00 1 BAJ U ND 0.00100 0.00300 mg/L 1.00 1 BAJ 02/02/24 0105 2558106 5 Antimony Arsenic U ND 0.002000.00500mg/L 1.00 1 0.000670 0.00400 1.00 Barium 0.0518mg/L 1 1.00 Beryllium 0.00191 0.000200 0.000500 mg/L1 mg/L Cadmium J 0.000310 0.000300 0.00100 1.00 1 mg/L Calcium 0.0800 0.200 1.00 16.3 1 0.00429 0.0100 1.00 Chromium 0.00300mg/L Cobalt 0.00615 0.000300 0.00100mg/L 1.00 U 0.00200 Lead ND 0.000500 mg/L 1.00 1 Lithium 0.00940 0.0100 1.00 T 0.00300 mg/L 1 U ND 0.000200 0.00100 mg/L1.00 Molybdenum 1 Selenium J 0.00220 0.00150 0.00500 mg/L 1.00 1 0.000600 0.00200 Thallium ND mg/L 1.00 1 Solids Analysis SM2540C Dissolved Solids "As Received" Total Dissolved Solids 2.38 10.0 ES2 01/25/24 1214 2558321 mg/L 6 The following Prep Methods were performed:

Method Description Date Prep Batch Analyst Time SW846 3005A ICP-MS 3005A PREP JD2 01/25/24 0845 2558105 SW846 7470A Prep EPA 7470A Mercury Prep Liquid JM13 01/26/24 1145 2558961

Page 15 of 59 SDG: 652703

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 ComplianceAP1

Client Sample ID: ARK-AP1-FD-01 Project: GPCC00100 Sample ID: 652703006 Client ID: GPCC001

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

Notes:

Column headers are defined as follows:

DF: Dilution Factor 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

Page 16 of 59 SDG: 652703

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

Certificate of Analysis

Report Date: February 7, 2024

GPCC00100

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

Atlanta, Georgia 30308

Contact: Joju Abraham

Project: Arkwright CCR Groundwater ComplianceAP1

Client Sample ID: ARK-AP1-EB-01

Client

Sample ID: Matrix: WQ

Collector:

Collect Date: 22-JAN-24 17:15 Receive Date: 24-JAN-24

Project: 652703007 Client ID: GPCC001

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analy	st Date	Time Batch	Method
Ion Chromatograph	y										
EPA 300.0 Anions l	Liquid "As Recei	ved"									
Chloride	J	0.190	0.0670	0.200	mg/L		1	CWW	01/26/24	2344 2559114	1
Fluoride	U	ND	0.0330	0.100	mg/L		1				
Sulfate	U	ND	0.133	0.400	mg/L		1				
Mercury Analysis-C	CVAA										
7470 Cold Vapor M	lercury, Liquid "A	As Received"									
Mercury	U	ND	0.0000670	0.000200	mg/L	1.00	1	JP2	01/29/24	1132 2558962	2
Metals Analysis-IC	P-MS										
SW846 3005A/6020	OB "As Received	"									
Antimony	U	ND	0.00100	0.00300	mg/L	1.00	1	BAJ	02/02/24	0108 2558106	3
Arsenic	U	ND	0.00200	0.00500	mg/L	1.00	1				
Barium	U	ND	0.000670	0.00400	mg/L	1.00	1				
Beryllium	U	ND	0.000200	0.000500	mg/L	1.00	1				
Cadmium	U	ND	0.000300	0.00100	mg/L	1.00	1				
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				
Boron	U	ND	0.00520	0.0150	mg/L	1.00	1	BAJ	02/02/24	1135 2558106	4
Solids Analysis											
SM2540C Dissolve	d Solids "As Rec	eived"									
Total Dissolved Solids	U	ND	2.38	10.0	mg/L			ES2	01/25/24	1214 2558321	5
The following Prep	Methods were pe	erformed:									
Method	Description	n		Analyst	Date	,	Гim	e Pr	ep Batch		

Description Analyst 1 ime SW846 7470A Prep EPA 7470A Mercury Prep Liquid JM13 01/26/24 1145 2558961 SW846 3005A ICP-MS 3005A PREP JD2 01/25/24 0845 2558105

Page 17 of 59 SDG: 652703

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 ComplianceAP1

Client Sample ID: ARK-AP1-EB-01 Project: GPCC00100 Sample ID: 652703007 Client ID: GPCC001

Parameter	Qualifier	Result	DL	RL	Units	PF	DF Analyst Date	Time Batch	Method
The following Analytic	cal Methods v	were performed:							
Method	Description	l				Analys	st Comments		
1	EPA 300.0								
2	SW846 7470A	A							
3	SW846 3005A	A/6020B							
4	SW846 3005A	A/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

Page 18 of 59 SDG: 652703

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

Certificate of Analysis

Report Date: February 7, 2024

GPCC00100

GPCC001

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

Atlanta, Georgia 30308

Contact: Joju Abraham

Project: Arkwright CCR Groundwater ComplianceAP1

Client Sample ID: ARK-AP1PZ-3 Sample ID: 652703008

Matrix: WG

Collect Date: 23-JAN-24 11:45 24-JAN-24

Receive Date: Collector: Client DI Units Qualifier Result DΙ DE DF Analyst Date Time Batch Method

Project:

Client ID:

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analy	st Date	Time Batch	Method
Ion Chromatography	7										
EPA 300.0 Anions L	iquid "As Recei	ived"									
Chloride	•	4.79	0.0670	0.200	mg/L		1	CWW	01/27/24	1728 2559114	1
Fluoride		0.139	0.0330	0.100	mg/L		1				
Sulfate		1310	26.6	80.0	mg/L		200	CWW	01/27/24	1800 2559114	2
Mercury Analysis-C	VAA										
7470 Cold Vapor Me	ercury, Liquid ".	As Received"									
Mercury	U	ND	0.0000670	0.000200	mg/L	1.00	1	JP2	01/29/24	1134 2558962	3
Metals Analysis-ICP	P-MS										
SW846 3005A/6020	B "As Received	."									
Boron		1.57	0.104	0.300	mg/L	1.00	20	BAJ	02/02/24	1119 2558106	4
Calcium		426	1.60	4.00	mg/L	1.00	20				
Antimony	U	ND	0.00100	0.00300	mg/L	1.00	1	BAJ	02/02/24	0111 2558106	5
Arsenic	U	ND	0.00200	0.00500	mg/L	1.00	1				
Barium		0.0226	0.000670	0.00400	mg/L	1.00	1				
Beryllium	U	ND	0.000200	0.000500	mg/L	1.00	1				
Cadmium		0.00200	0.000300	0.00100	mg/L	1.00	1				
Chromium	U	ND	0.00300	0.0100	mg/L	1.00	1				
Cobalt		0.0600	0.000300	0.00100	mg/L	1.00	1				
Lead	U	ND	0.000500	0.00200	mg/L	1.00	1				
Lithium		0.0677	0.00300	0.0100	mg/L	1.00	1				
Molybdenum	J	0.000296	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				
Solids Analysis											
SM2540C Dissolved	l Solids "As Rec	eived"									
Total Dissolved Solids		1880	23.8	100	mg/L			ES2	01/25/24	1214 2558321	6
The following Prep I	Methods were p	erformed:									

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	JD2	01/25/24	0845	2558105

Page 19 of 59 SDG: 652703

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 ComplianceAP1

Client Sample ID: ARK-AP1PZ-3 Project: GPCC00100 Sample ID: 652703008 Client ID: GPCC001

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

Notes:

Column headers are defined as follows:

DF: Dilution Factor 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

Page 20 of 59 SDG: 652703

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 ComplianceAP1

Client Sample ID: ARK-AP1PZ-4 Sample ID: 652703009

Matrix: WG

Collect Date: 23-JAN-24 13:10
Receive Date: 24-JAN-24
Collector: Client

Project: GPCC00100 Client ID: GPCC001

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analy	st Date	Time Batch	Method
Ion Chromatography											
EPA 300.0 Anions Lic	quid "As Recei	ived"									
Chloride	•	4.64	0.134	0.400	mg/L		2	CWW	01/27/24	1832 2559114	1
Fluoride		0.235	0.0660	0.200	mg/L		2				
Sulfate		1310	26.6	80.0	mg/L		200	CWW	01/27/24	1904 2559114	2
Mercury Analysis-CV	AA										
7470 Cold Vapor Mer	cury, Liquid ".	As Received"									
Mercury	J	0.0000830	0.0000670	0.000200	mg/L	1.00	1	JP2	01/29/24	1135 2558962	3
Metals Analysis-ICP-N	MS				Ü						
SW846 3005A/6020B	"As Received	<u>l</u> "									
Antimony	U	ND	0.00100	0.00300	mg/L	1.00	1	BAJ	02/02/24	0114 2558106	4
Arsenic	J	0.00230	0.00200	0.00500	mg/L	1.00	1				
Barium		0.0326	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	0.000674	0.000300	0.00100	mg/L	1.00	1				
Lead	U	ND	0.000500	0.00200	mg/L	1.00	1				
Lithium	J	0.00686	0.00300	0.0100	mg/L	1.00	1				
Molybdenum		0.00366	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				
Boron		3.75	0.260	0.750	mg/L	1.00	50	BAJ	02/02/24	1120 2558106	5
Calcium		399	4.00	10.0	mg/L	1.00	50				
Solids Analysis											
SM2540C Dissolved S	Solids "As Rec	ceived"									
Total Dissolved Solids		2160	23.8	100	mg/L			ES2	01/25/24	1214 2558321	6
The following Prep M	ethods were p	erformed:									
Method	Descriptio	n		Analyst	Date	,	Гim	e Pr	ep Batch		

 Method
 Description
 Analyst
 Date
 Time
 Prep Batch

 SW846 3005A
 ICP-MS 3005A PREP
 JD2
 01/25/24
 0845
 2558105

 SW846 7470A Prep
 EPA 7470A Mercury Prep Liquid
 JM13
 01/26/24
 1145
 2558961

Page 21 of 59 SDG: 652703

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 ComplianceAP1

Client Sample ID: ARK-AP1PZ-4 Project: GPCC00100 Sample ID: 652703009 Client ID: GPCC001

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

Notes:

Column headers are defined as follows:

DF: Dilution Factor 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

Page 22 of 59 SDG: 652703

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 ComplianceAP1

Client Sample ID: ARK-AP1PZ-5 Sample ID: 652703010

Matrix: WG

Collect Date: 23-JAN-24 14:50 Receive Date: 24-JAN-24 Collector: Client

ICP-MS 3005A PREP

EPA 7470A Mercury Prep Liquid

Project: GPCC00100 Client ID: GPCC001

Name	Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analy	st Date	Time Batch	Method
Sulface	Ion Chromatography											
Sulface	EPA 300.0 Anions Liq	uid "As Recei	ived"									
Fluoride				33.3	100	mg/L		250	CWW	01/27/24	2318 2559114	1
Mercury Analysis-CVAA 7470 Cold Vapor Mercury, Liquid "As Received" Mercury U ND 0.000200 mg/L 1.00 1 JP2 01/29/24 1137 2558962 3 Metals Analysis-ICP-MS SW846 3005A/6020B "As Received" Boron 7.05 0.520 1.50 mg/L 1.00 100 BAJ 02/02/24 1123 2558106 4 Calcium 598 8.00 20.0 mg/L 1.00 10 BAJ 02/02/24 1123 2558106 4 Calcium 598 8.00 20.0 mg/L 1.00 10 00 <td>Chloride</td> <td></td> <td>7.74</td> <td>0.134</td> <td>0.400</td> <td>mg/L</td> <td></td> <td>2</td> <td>CWW</td> <td>01/27/24</td> <td>2247 2559114</td> <td>2</td>	Chloride		7.74	0.134	0.400	mg/L		2	CWW	01/27/24	2247 2559114	2
Name	Fluoride		0.352	0.0660	0.200	mg/L		2				
Mercury U ND 0.0000670 0.000200 mg/L 1.00 1 JP2 01/29/24 1137 2558962 3 Metals Analysis-ICP-MS SW846 3005A/6020B "As Received" Boron 7.05 0.520 1.50 mg/L 1.00 100 BAJ 02/02/24 1123 2558106 4 Calcium 598 8.00 20.0 mg/L 1.00 10 BAJ 02/02/24 1123 2558106 4 Antimony U ND 0.00100 0.00300 mg/L 1.00 1 BAJ 02/02/24 0117 2558106 5 Arsenic J 0.00420 0.00200 0.00500 mg/L 1.00 1 BAJ 02/02/24 0117 2558106 5 Arsenic J 0.00420 0.00200 mg/L 1.00 1 2 2 258106 2 2 Beryllium U ND 0.00300	Mercury Analysis-CV	AA										
Metals Analysis-ICP-MS SW846 3005A/6020B "As Received" Boron 7.05 0.520 1.50 mg/L 1.00 100 BAJ 02/02/24 1123 2558106 4 Calcium 598 8.00 20.0 mg/L 1.00 10 BAJ 02/02/24 011 2558106 4 Antimony U ND 0.00100 0.00300 mg/L 1.00 1 BAJ 02/02/24 011 2558106 5 Arsenic J 0.00420 0.00200 0.00500 mg/L 1.00 1 25 4 2558106 5 Barium 0.0402 0.000607 0.00400 mg/L 1.00 1 2 4 2558106 5 Beryllium U ND 0.000200 0.000500 mg/L 1.00 1 2 4 4 4 4 4 4 4 4 4 4 4 4 4	7470 Cold Vapor Merc	cury, Liquid "A	As Received"									
Metals Analysis-ICP-MS SW846 3005A/6020B "As Received" Boron 7.05 0.520 1.50 mg/L 1.00 100 BAJ 02/02/24 1123 2558106 4 Calcium 598 8.00 20.0 mg/L 1.00 10 bAJ 02/02/24 0117 2558106 4 Antimony U ND 0.00100 0.00300 mg/L 1.00 1 BAJ 02/02/24 0117 2558106 5 Arsenic J 0.00420 0.000200 0.00500 mg/L 1.00 1 1 2558106 5 Barium 0.0402 0.000200 0.00500 mg/L 1.00 1 1 2558106 5 Beryllium U ND 0.000200 0.000500 mg/L 1.00 1 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2	Mercury	U	ND	0.0000670	0.000200	mg/L	1.00	1	JP2	01/29/24	1137 2558962	3
Boron 7.05 0.520 1.50 mg/L 1.00 100 BAJ 02/02/24 1123 2558106 4 Calcium 598 8.00 20.0 mg/L 1.00 100	Metals Analysis-ICP-N	ИS				C						
Calcium 598 8.00 20.0 mg/L 1.00 100 Antimony U ND 0.00100 0.00300 mg/L 1.00 1 BAJ 02/02/24 0117 2558106 5 Arsenic J 0.00420 0.000670 0.00400 mg/L 1.00 1 BAJ 02/02/24 0117 2558106 5 Barium 0.00402 0.000670 0.00400 mg/L 1.00 1 Lou 1 Lou 1 Lou	SW846 3005A/6020B	"As Received	."									
Calcium 598 8.00 20.0 mg/L 1.00 100 Antimony U ND 0.00100 0.00300 mg/L 1.00 1 BAJ 02/02/24 0117 2558106 5 Arsenic J 0.00420 0.000670 0.00400 mg/L 1.00 1 BAJ 02/02/24 0117 2558106 5 Barium 0.0402 0.000670 0.000500 mg/L 1.00 1 L <	Boron		7.05	0.520	1.50	mg/L	1.00	100	BAJ	02/02/24	1123 2558106	4
Antimony U ND 0.00100 0.00300 mg/L 1.00 1 BAJ 02/02/24 0117 2558106 5 Arsenic J 0.00420 0.00200 0.00500 mg/L 1.00 1 Barium 0.0402 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 0.0486 0.000300 0.00100 mg/L 1.00 1 Lead U ND 0.000500 0.00100 mg/L 1.00 1 Lead U ND 0.000500 0.00100 mg/L 1.00 1 Lithium 0.317 0.00300 0.0100 mg/L 1.00 1 Lithium 0.317 0.00300 0.0100 mg/L 1.00 1 Selenium U ND 0.00355 0.000200 0.00100 mg/L 1.00 1 Selenium U ND 0.00150 0.00500 mg/L 1.00 1 Selenium U ND 0.00150 0.00500 mg/L 1.00 1 Selenium U ND 0.00150 0.00500 mg/L 1.00 1 Selenium U ND 0.00600 0.00200 mg/L 1.00 1 Thallium U ND 0.00600 0.00200 mg/L 1.00 1 Thallium Prep Methods were performed:	Calcium		598	8.00	20.0		1.00	100				
Barium 0.0402 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 0.0486 0.000300 0.00100 mg/L 1.00 1 <td>Antimony</td> <td>U</td> <td>ND</td> <td>0.00100</td> <td>0.00300</td> <td></td> <td>1.00</td> <td>1</td> <td>BAJ</td> <td>02/02/24</td> <td>0117 2558106</td> <td>5</td>	Antimony	U	ND	0.00100	0.00300		1.00	1	BAJ	02/02/24	0117 2558106	5
Beryllium	Arsenic	J	0.00420	0.00200	0.00500	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 0.0486 0.000300 0.00100 mg/L 1.00 1 Lead U ND 0.000500 0.00200 mg/L 1.00 1 Lithium 0.317 0.00300 0.0100 mg/L 1.00 1 Molybdenum 0.0355 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 Solids Analysis SM2540C Dissolved Solids "As Received" Total Dissolved Solids 2890 23.8 100 mg/L ES2 01/25/24 1214 2558321 6 The following Prep Methods were performed:	Barium		0.0402	0.000670	0.00400	mg/L	1.00	1				
Chromium U ND 0.00300 0.0100 mg/L 1.00 1 Cobalt 0.0486 0.000300 0.00100 mg/L 1.00 1 Lead U ND 0.000500 0.00200 mg/L 1.00 1 Lithium 0.317 0.00300 0.0100 mg/L 1.00 1 Molybdenum 0.0355 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 SOlids Analysis SM2540C Dissolved Solids "As Received" Total Dissolved Solids 2890 23.8 100 mg/L ES2 01/25/24 1214 2558321 6 The following Prep Methods were performed:	Beryllium	U	ND	0.000200	0.000500	mg/L	1.00	1				
Cobalt 0.0486 0.000300 0.00100 mg/L 1.00 1 Lead U ND 0.000500 0.00200 mg/L 1.00 1 Lithium 0.317 0.00300 0.0100 mg/L 1.00 1 Molybdenum 0.0355 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 SOlids Analysis SM2540C Dissolved Solids "As Received" Total Dissolved Solids 2890 23.8 100 mg/L ES2 01/25/24 1214 2558321 6 The following Prep Methods were performed:	Cadmium	U	ND	0.000300	0.00100	mg/L	1.00	1				
Cobalt 0.0486 0.000300 0.00100 mg/L 1.00 1 Lead U ND 0.000500 0.00200 mg/L 1.00 1 Lithium 0.317 0.00300 0.0100 mg/L 1.00 1 Molybdenum 0.0355 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 SOlids Analysis SM2540C Dissolved Solids "As Received" Total Dissolved Solids 2890 23.8 100 mg/L ES2 01/25/24 1214 2558321 6 The following Prep Methods were performed:	Chromium	U	ND	0.00300	0.0100	mg/L	1.00	1				
Lithium 0.317 0.00300 0.0100 mg/L 1.00 1 Molybdenum 0.0355 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 Solids Analysis SM2540C Dissolved Solids "As Received" Total Dissolved Solids 2890 23.8 100 mg/L ES2 01/25/24 1214 2558321 6 The following Prep Methods were performed:	Cobalt		0.0486	0.000300	0.00100		1.00	1				
Molybdenum 0.0355 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 SM2540C Dissolved Solids "As Received" Total Dissolved Solids "As Received" Total Dissolved Solids 2890 23.8 100 mg/L ES2 01/25/24 1214 2558321 6 The following Prep Methods were performed:	Lead	U	ND	0.000500	0.00200	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 SM2540C Dissolved Solids "As Received" Total Dissolved Solids 2890 23.8 100 mg/L ES2 01/25/24 1214 2558321 6 The following Prep Methods were performed:	Lithium		0.317	0.00300	0.0100	mg/L	1.00	1				
Thallium U ND 0.000600 0.00200 mg/L 1.00 1 Solids Analysis SM2540C Dissolved Solids "As Received" Total Dissolved Solids 2890 23.8 100 mg/L ES2 01/25/24 1214 2558321 6 The following Prep Methods were performed:	Molybdenum		0.0355	0.000200	0.00100	mg/L	1.00	1				
Solids Analysis SM2540C Dissolved Solids "As Received" Total Dissolved Solids 2890 23.8 100 mg/L ES2 01/25/24 1214 2558321 6 The following Prep Methods were performed:	Selenium	U	ND	0.00150	0.00500	mg/L	1.00	1				
SM2540C Dissolved Solids "As Received" Total Dissolved Solids 2890 23.8 100 mg/L ES2 01/25/24 1214 2558321 6 The following Prep Methods were performed:	Thallium	U	ND	0.000600	0.00200	mg/L	1.00	1				
Total Dissolved Solids 2890 23.8 100 mg/L ES2 01/25/24 1214 2558321 6 The following Prep Methods were performed:	Solids Analysis											
The following Prep Methods were performed:	SM2540C Dissolved S	olids "As Rec	eived"									
	Total Dissolved Solids		2890	23.8	100	mg/L			ES2	01/25/24	1214 2558321	6
Method Description Analyst Date Time Prep Batch	The following Prep Me	ethods were pe	erformed:									
	Method	Description	n		Analyst	Date	,	Гimе	Pr	ep Batch		

JD2

JM13

01/25/24

01/26/24

0845

1145

2558105

2558961

Page 23 of 59 SDG: 652703

SW846 3005A

SW846 7470A Prep

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 ComplianceAP1

Client Sample ID: ARK-AP1PZ-5 Project: GPCC00100 Sample ID: 652703010 Client ID: GPCC001

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

Notes:

Column headers are defined as follows:

DF: Dilution Factor 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

Page 24 of 59 SDG: 652703

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 ComplianceAP1

Client Sample ID: ARK-AP1PZ-7 Sample ID: 652703011

Matrix: WG

Collect Date: 23-JAN-24 16:25 Receive Date: 24-JAN-24 Collector: Client

ICP-MS 3005A PREP

EPA 7470A Mercury Prep Liquid

Project: GPCC00100 Client ID: GPCC001

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analy	st Date	Time Batch	Method
Ion Chromatography	y										
EPA 300.0 Anions I	Liquid "As Recei	ived"									
Sulfate	1	1380	26.6	80.0	mg/L		200	CWW	01/28/24	0022 2559114	1
Chloride		5.09	0.134	0.400	mg/L		2	CWW	01/27/24	2350 2559114	2
Fluoride	J	0.182	0.0660	0.200	mg/L		2				
Mercury Analysis-C	CVAA										
7470 Cold Vapor M	ercury, Liquid "	As Received"									
Mercury	U	ND	0.0000670	0.000200	mg/L	1.00	1	JP2	01/29/24	1142 2558962	3
Metals Analysis-ICI	P-MS				C						
SW846 3005A/6020		."									
Antimony	U	ND	0.00100	0.00300	mg/L	1.00	1	BAJ	02/02/24	0125 2558106	4
Arsenic	J	0.00207	0.00200	0.00500	mg/L	1.00	1				
Barium		0.0333	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		0.00164	0.000300	0.00100	mg/L	1.00	1				
Lead	U	ND	0.000500	0.00200	mg/L	1.00	1				
Lithium	J	0.00306	0.00300	0.0100	mg/L	1.00	1				
Molybdenum		0.00192	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				
Boron		2.74	0.104	0.300	mg/L	1.00	20	BAJ	02/02/24	1124 2558106	5
Calcium		383	1.60	4.00	mg/L	1.00	20				
Solids Analysis											
SM2540C Dissolved	d Solids "As Rec	eived"									
Total Dissolved Solids		2050	23.8	100	mg/L			ES2	01/25/24	1214 2558321	6
The following Prep	Methods were po	erformed:									
Method	Description	n		Analyst	Date	,	Time	Pr	ep Batch		

JD2

JM13

01/25/24

01/26/24

0845

1145

2558105

2558961

Page 25 of 59 SDG: 652703

SW846 3005A

SW846 7470A Prep

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 ComplianceAP1

Client Sample ID: ARK-AP1PZ-7 Project: GPCC00100 Sample ID: 652703011 Client ID: GPCC001

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

Notes:

Column headers are defined as follows:

DF: Dilution Factor 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

Page 26 of 59 SDG: 652703

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

Certificate of Analysis

Project:

Client ID:

Report Date: February 7, 2024

GPCC00100

GPCC001

ES2

01/25/24 1214 2558321

6

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

Atlanta, Georgia 30308

Contact: Joju Abraham

Project: Arkwright CCR Groundwater ComplianceAP1

Client Sample ID: ARK-AP1PZ-8 Sample ID: 652703012

Matrix: WG

Collect Date: 23-JAN-24 11:40
Receive Date: 24-JAN-24
Collector: Client

RL Parameter **Oualifier** DL Units PF DF Analyst Date Time Batch Method Result Ion Chromatography EPA 300.0 Anions Liquid "As Received" Chloride 2.96 0.134 0.400 mg/L 2 CWW 01/27/24 0431 2559114 1 Fluoride 0.293 0.0660 0.200 mg/L Sulfate 646 13.3 40.0 mg/L 100 CWW 01/28/24 0054 2559114 Mercury Analysis-CVAA 7470 Cold Vapor Mercury, Liquid "As Received" Mercury ND 0.0000670 0.000200 mg/L 1.00 1 JP2 01/29/24 1143 2558962 3 Metals Analysis-ICP-MS SW846 3005A/6020B "As Received" 0.104 0.300 20 BAJ 02/02/24 1125 2558106 Boron 2.83 mg/L 1.00 Calcium 320 1.60 4.00 mg/L 1.00 20 0.00300 Antimony U ND 0.00100mg/L 1.00 1 BAJ 02/02/24 0128 2558106 5 U 0.00200 0.00500 mg/L 1.00 Arsenic ND 1 0.00400 Barium 0.0404 0.000670 mg/L1.00 1 mg/L Bervllium U 0.000200 0.000500 1.00 1 ND Cadmium 0.000323 0.000300 0.00100mg/L 1.00 J 1 U 0.00300 0.0100 1.00 Chromium ND mg/L Cobalt 0.00113 0.000300 0.00100mg/L1.00 U 0.00200 Lead ND 0.000500 mg/L 1.00 1 Lithium 0.00364 0.0100 1.00 J 0.00300 mg/L 1 0.683 0.000200 0.00100 mg/L1.00 Molybdenum 1 Selenium U ND 0.00150 0.00500 mg/L 1.00 1 U ND 0.000600 0.00200 Thallium mg/L 1.00

The following Prep Methods were performed:

SM2540C Dissolved Solids "As Received"

Solids Analysis

Total Dissolved Solids

Method	Description	Analyst	Date	Time	Prep Batch
SW846 3005A	ICP-MS 3005A PREP	JD2	01/25/24	0845	2558105
SW846 7470A Prep	EPA 7470A Mercury Prep Liquid	JM13	01/26/24	1145	2558961

20.0

mg/L

4.76

Page 27 of 59 SDG: 652703

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 ComplianceAP1

Client Sample ID: ARK-AP1PZ-8 Project: GPCC00100 Sample ID: 652703012 Client ID: GPCC001

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

Notes:

Column headers are defined as follows:

DF: Dilution Factor 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

Page 28 of 59 SDG: 652703

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

Certificate of Analysis

Report Date: February 7, 2024

GPCC00100

GPCC001

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

Atlanta, Georgia 30308

Contact: Joju Abraham

Project: Arkwright CCR Groundwater ComplianceAP1

Client Sample ID: ARK-AP1PZ-9 Sample ID: 652703013

Matrix: WG

Collect Date: 23-JAN-24 13:35 Receive Date: 24-JAN-24

Collector: Client

Project:

Client ID:

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analy	st Date	Time Batch	Method
Ion Chromatography	,										
EPA 300.0 Anions L	iquid "As Recei	ived"									
Sulfate	•	291	6.65	20.0	mg/L		50	CWW	01/28/24	0126 2559114	. 1
Chloride		4.92	0.0670	0.200	mg/L		1	CWW	01/27/24	0503 2559114	2
Fluoride		0.798	0.0330	0.100	mg/L		1				
Mercury Analysis-C	VAA										
7470 Cold Vapor Me	ercury, Liquid ".	As Received"									
Mercury	U	ND	0.0000670	0.000200	mg/L	1.00	1	JP2	01/29/24	1145 2558962	3
Metals Analysis-ICP	P-MS										
SW846 3005A/6020	B "As Received	."									
Antimony	U	ND	0.00100	0.00300	mg/L	1.00	1	BAJ	02/02/24	0131 2558106	4
Arsenic	U	ND	0.00200	0.00500	mg/L	1.00	1				
Barium		0.0224	0.000670	0.00400	mg/L	1.00	1				
Beryllium		0.000794	0.000200	0.000500	mg/L	1.00	1				
Cadmium		0.00125	0.000300	0.00100	mg/L	1.00	1				
Chromium	U	ND	0.00300	0.0100	mg/L	1.00	1				
Cobalt		0.106	0.000300	0.00100	mg/L	1.00	1				
Lead	U	ND	0.000500	0.00200	mg/L	1.00	1				
Lithium		0.155	0.00300	0.0100	mg/L	1.00	1				
Molybdenum	J	0.000302	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				
Boron		0.701	0.0520	0.150	mg/L	1.00	10	BAJ	02/02/24	1126 2558106	5 5
Calcium		69.4	0.800	2.00	mg/L	1.00	10				
Solids Analysis											
SM2540C Dissolved	Solids "As Rec	eived"									
Total Dissolved Solids		517	2.38	10.0	mg/L			ES2	01/25/24	1214 2558321	6
The following Prep I	Methods were po	erformed:									
Method	Description			Analyst	Data	,	Tim		on Ratch		

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	JD2	01/25/24	0845	2558105

Page 29 of 59 SDG: 652703

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 ComplianceAP1

Client Sample ID: ARK-AP1PZ-9 Project: GPCC00100 Sample ID: 652703013 Client ID: GPCC001

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

Notes:

Column headers are defined as follows:

DF: Dilution Factor 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

Page 30 of 59 SDG: 652703

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 ComplianceAP1

Client Sample ID: ARK-AP1PZ-10 Sample ID: 652703014

Matrix: WG

Collect Date: 23-JAN-24 16:00 Receive Date: 24-JAN-24 Collector: Client

ICP-MS 3005A PREP

Project: GPCC00100 Client ID: GPCC001

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analy	st Date	Time Batch	Method
Ion Chromatography											
EPA 300.0 Anions Liqu	id "As Recei	ved"									
Sulfate		218	3.33	10.0	mg/L		25	TXT1	01/29/24	1212 2559394	1
Chloride		9.71	0.0670	0.200	mg/L		1	TXT1	01/27/24	0023 2559394	2
Fluoride		0.459	0.0330	0.100	mg/L		1				
Mercury Analysis-CVA	A										
7470 Cold Vapor Mercu	ry, Liquid "A	As Received"									
Mercury	U	ND	0.0000670	0.000200	mg/L	1.00	1	JP2	01/29/24	1147 2558962	3
Metals Analysis-ICP-Ma	S										
SW846 3005A/6020B ".	As Received	"									
Antimony	U	ND	0.00100	0.00300	mg/L	1.00	1	BAJ	02/02/24	0134 2558106	4
Arsenic	J	0.00300	0.00200	0.00500	mg/L	1.00	1				
Barium		0.0275	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	0.000707	0.000300	0.00100	mg/L	1.00	1				
Lead	U	ND	0.000500	0.00200	mg/L	1.00	1				
Lithium		0.0176	0.00300	0.0100	mg/L	1.00	1				
Molybdenum		0.00216	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				
Boron		0.342	0.0260	0.0750	mg/L	1.00	5	BAJ	02/02/24	1127 2558106	5
Calcium		88.9	0.400	1.00	mg/L	1.00	5				
Solids Analysis											
SM2540C Dissolved So	lids "As Rec	eived"									
Total Dissolved Solids		507	2.38	10.0	mg/L			ES2	01/25/24	1214 2558321	6
The following Prep Met	hods were pe	erformed:									
Method	Description	n		Analyst	Date	-	Γime	Pr	ep Batch		_
SW846 7470A Prep	EPA 7470A	Mercury Prep Liquid		JM13	01/26/24		1145	25	58961		

JD2

01/25/24

0845

2558105

SW846 3005A

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 ComplianceAP1

Client Sample ID: ARK-AP1PZ-10 Project: GPCC00100 Sample ID: 652703014 Client ID: GPCC001

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

Notes:

Column headers are defined as follows:

DF: Dilution Factor 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

Page 32 of 59 SDG: 652703

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 ComplianceAP1

Client Sample ID: ARK-AP1PZ-11 Sample ID: 652703015

Matrix: WG

Collect Date: 23-JAN-24 17:15
Receive Date: 24-JAN-24
Collector: Client

EPA 7470A Mercury Prep Liquid

Project: GPCC00100 Client ID: GPCC001

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analy	st Date	Time Batch	Method
Ion Chromatography											
EPA 300.0 Anions Li	quid "As Recei	ived"									
Sulfate	1	46.5	0.665	2.00	mg/L		5	TXT1	01/29/24	1348 2559394	1
Chloride		1.15	0.0670	0.200	mg/L		1	TXT1	01/27/24	0159 2559394	2
Fluoride		0.146	0.0330	0.100	mg/L		1				
Mercury Analysis-CV	'AA										
7470 Cold Vapor Mei	cury, Liquid "	As Received"									
Mercury	U	ND	0.0000670	0.000200	mg/L	1.00	1	JP2	01/29/24	1148 2558962	3
Metals Analysis-ICP-	MS				J						
SW846 3005A/6020B		"									
Antimony	U	ND	0.00100	0.00300	mg/L	1.00	1	BAJ	02/02/24	0136 2558106	4
Arsenic	U	ND	0.00200	0.00500	mg/L	1.00	1				
Barium		0.0192	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		25.1	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	J	0.000629	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				
Boron		0.161	0.00520	0.0150	mg/L	1.00	1	BAJ	02/02/24	1136 2558106	5
Solids Analysis											
SM2540C Dissolved	Solids "As Rec	eived"									
Total Dissolved Solids		187	2.38	10.0	mg/L			ES2	01/25/24	1214 2558321	6
The following Prep M	lethods were p	erformed:									
Method	Description	n		Analyst	Date	-	Γim	e Pr	ep Batch		
SW846 3005A	ICP-MS 3005	5A PREP		JD2	01/25/24	(0845	25	58105		

JM13

01/26/24

1145

2558961

Page 33 of 59 SDG: 652703

SW846 7470A Prep

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 ComplianceAP1

Client Sample ID: ARK-AP1PZ-11 Project: GPCC00100 Sample ID: 652703015 Client ID: GPCC001

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

Notes:

Column headers are defined as follows:

DF: Dilution Factor 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

Page 34 of 59 SDG: 652703

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

Certificate of Analysis

Report Date: February 7, 2024

GPCC00100

Project:

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

Atlanta, Georgia 30308

Contact: Joju Abraham

Project: Arkwright CCR Groundwater ComplianceAP1

Client Sample ID: ARK-AP1-EB-02

Sample ID: 652703016

Matrix: WQ

Collect Date: 23-JAN-24 17:00 Receive Date: 24-JAN-24 Collector: Client

703016 Client ID: GPCC001

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	F Analyst Date		Time Batch		Method
Ion Chromatograph	ıy											
EPA 300.0 Anions	Liquid "As Recei	ived"										
Chloride	J	0.112	0.0670	0.200	mg/L		1	TXT1	01/27/24	0231 253	59394	1
Fluoride	U	ND	0.0330	0.100	mg/L		1					
Sulfate	U	ND	0.133	0.400	mg/L		1					
Mercury Analysis-C	CVAA											
7470 Cold Vapor M	fercury, Liquid "A	As Received"										
Mercury	U	ND	0.0000670	0.000200	mg/L	1.00	1	JP2	01/29/24	1150 25:	58962	2
Metals Analysis-IC	P-MS											
SW846 3005A/602	0B "As Received	."										
Boron	U	ND	0.00520	0.0150	mg/L	1.00	1	BAJ	02/02/24	1137 25	58106	3
Antimony	U	ND	0.00100	0.00300	mg/L	1.00	1	BAJ	02/02/24	0139 25	58106	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					
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					
Solids Analysis												
SM2540C Dissolve	d Solids "As Rec	eived"										
Total Dissolved Solids	U	ND	2.38	10.0	mg/L			ES2	01/25/24	1214 25	58321	5
The following Prep	Methods were pe	erformed:										
Method	Description	n		Analyst	Date	-	Гim	e Pr	ep Batch			

Method Description Analyst Time Prep Batch SW846 7470A Prep EPA 7470A Mercury Prep Liquid JM13 01/26/24 1145 2558961 SW846 3005A ICP-MS 3005A PREP JD2 01/25/24 0845 2558105

Page 35 of 59 SDG: 652703

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 ComplianceAP1

Client Sample ID: ARK-AP1-EB-02 Project: GPCC00100 Sample ID: 652703016 Client ID: GPCC001

Parameter	Qualifier	Result	DL	RL	Units	PF	DF Analyst Date	Time Batch	Method
The following Analytic	cal Methods v	were performed:							
Method	Description	l				Analys	st Comments		
1	EPA 300.0								
2	2 SW846 7470A								
3	3 SW846 3005A/6020B								
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

Page 36 of 59 SDG: 652703

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

Certificate of Analysis

Report Date: February 7, 2024

6

GPCC00100

GPCC001

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

Atlanta, Georgia 30308

Contact: Joju Abraham

Project: Arkwright CCR Groundwater ComplianceAP1

Client Sample ID: ARK-AP1-FD-02

Sample ID: 652703017

Matrix: WG

Collect Date: 23-JAN-24 12:00 Receive Date: 24-JAN-24 Collector: Client

RL Parameter **Oualifier** DL Units PF DF Analyst Date Time Batch Method Result Ion Chromatography EPA 300.0 Anions Liquid "As Received" 1.16 0.0670 0.200 mg/L 1 TXT1 01/27/24 0302 2559394 1 0.0330 0.142 0.100 mg/L 46.8 0.665 2.00 mg/L TXT1 01/29/24 1419 2559394 Mercury Analysis-CVAA 7470 Cold Vapor Mercury, Liquid "As Received" ND 0.0000670 0.000200 mg/L 1.00 1 JP2 01/29/24 1152 2558962 3 Metals Analysis-ICP-MS 0.158 0.00520 0.0150 02/02/24 1138 2558106 mg/L 1.00 1 BAJ

Project:

Client ID:

SW846 3005A/6020B "As Received" Boron U ND 0.00100 0.00300 mg/L 1.00 1 BAJ 02/02/24 0142 2558106 5 Antimony Arsenic U ND 0.002000.00500mg/L 1.00 1 0.000670 0.00400 1.00 Barium 0.0191 mg/L 1 Beryllium U ND 0.000200 0.000500 mg/L1.00 1 0.000300 mg/L Cadmium U ND 0.00100 1.00 1 Calcium 25.0 0.0800 0.200 mg/L 1.00 1 U 0.00300 0.0100 1.00 Chromium ND mg/L Cobalt U ND 0.000300 0.00100mg/L1.00 U 0.00200 Lead ND 0.000500 mg/L 1.00 1 Lithium U ND 0.0100 1.00 0.00300 mg/L 1 0.000757 0.000200 0.00100 mg/L1.00 Molybdenum J 1 Selenium U ND 0.00150 0.00500 mg/L 1.00 1 U ND 0.000600 0.00200 Thallium mg/L 1.00

SM2540C Dissolved Solids "As Received"

Solids Analysis

Chloride

Fluoride

Sulfate

Mercury

Total Dissolved Solids 2.38 10.0 ES2 01/25/24 1214 2558321 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	JD2	01/25/24	0845	2558105

Page 37 of 59 SDG: 652703

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 ComplianceAP1

Client Sample ID: ARK-AP1-FD-02 Project: GPCC00100 Sample ID: 652703017 Client ID: GPCC001

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

Notes:

Column headers are defined as follows:

DF: Dilution Factor 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

Page 38 of 59 SDG: 652703

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

Certificate of Analysis

Report Date: February 7, 2024

2

3

4

5

GPCC00100

GPCC001

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

Atlanta, Georgia 30308

Contact: Joju Abraham

Project: Arkwright CCR Groundwater ComplianceAP1

Client Sample ID: ARK-AP1-FB-02

Sample ID: 652703018

Matrix: WQ

Parameter

Chloride

Fluoride

Sulfate

Collect Date: 23-JAN-24 15:55 Receive Date: 24-JAN-24

Collector: Client RL **Oualifier** DL Units PF DF Analyst Date Time Batch Method Result Ion Chromatography EPA 300.0 Anions Liquid "As Received" 0.125 0.0670 0.200 mg/L TXT1 01/27/24 0334 2559394 1 0.0330 U ND 0.100 mg/L 1 U ND 0.133 0.400 mg/L Mercury Analysis-CVAA 7470 Cold Vapor Mercury, Liquid "As Received"

Project:

Client ID:

Mercury ND 0.0000670 0.000200 mg/L 1.00 1 JP2 01/29/24 1157 2558965 Metals Analysis-ICP-MS SW846 3005A/6020B "As Received"

ND 0.00520 0.0150 02/02/24 1139 2558106 Boron U mg/L 1.00 1 BAJ U ND 0.00100 0.00300 mg/L 1.00 1 BAJ 02/02/24 0145 2558106 Antimony Arsenic U ND 0.002000.00500mg/L 1.00 1

U 0.000670 0.00400 mg/L 1.00 Barium ND 1 1.00 Beryllium U ND 0.000200 0.000500 mg/L1 mg/L Cadmium U ND 0.000300 0.00100 1.00 1 0.200 Calcium U ND 0.0800 mg/L 1.00 1

U 0.00300 0.0100 1.00 Chromium ND mg/L Cobalt U ND 0.000300 0.00100mg/L 1.00 U 0.00200 Lead ND 0.000500 mg/L 1.00 1 Lithium U ND 0.0100 1.00 0.00300 mg/L 1 U ND 0.000200 0.00100 1.00 Molybdenum mg/L 1 mg/L 1.00 1

Selenium U ND 0.00150 0.00500 0.000600 0.00200 Thallium ND Solids Analysis

SM2540C Dissolved Solids "As Received" Total Dissolved Solids 2.38 10.0 ES2 01/25/24 1214 2558321 mg/L The following Prep Methods were performed:

mg/L

1.00 1

Method Description Date Prep Batch Analyst Time SW846 7470A Prep EPA 7470A Mercury Prep Liquid JM13 01/26/24 1145 2558964 SW846 3005A ICP-MS 3005A PREP JD2 01/25/24 0845 2558105

Page 39 of 59 SDG: 652703

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 ComplianceAP1

Client Sample ID: ARK-AP1-FB-02 Project: GPCC00100 Sample ID: 652703018 Client ID: GPCC001

Parameter	Qualifier	Result	DL	RL	Units	PF	DF Analyst Date	Time Batch	Method
The following Analytic	cal Methods v	were performed:							
Method	Description	l				Analys	st Comments		
1	EPA 300.0								
2	2 SW846 7470A								
3	3 SW846 3005A/6020B								
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

Page 40 of 59 SDG: 652703

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

QC Summary

Report Date: February 7, 2024

Page 1 of 9

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

Atlanta, Georgia

Contact: Joju Abraham

Workorder: 652703

Parmname	NOM	Sample Qual	QC	Units	RPD% 1	REC%	Range Anlst	Date Time
Ion Chromatography Batch 2559114								
QC1205632599 652703009 DUP Chloride		4.64	4.66	mg/L	0.374		(0%-20%) CWW	01/27/24 19:35
Fluoride		0.235	0.233	mg/L	0.684 ^		(+/-0.200)	
Sulfate		1310	1330	mg/L	1.32		(0%-20%)	01/27/24 20:07
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				
QC1205632600 652703009 PS Chloride	5.00	2.32	7.25	mg/L		98.5	(90%-110%)	01/27/24 21:43
Fluoride	2.50	0.117	2.59	mg/L		98.9	(90%-110%)	
Sulfate	10.0	6.57	16.4	mg/L		98.6	(90%-110%)	01/27/24 22:15

Page 41 of 59 SDG: 652703

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

QC Summary

Workorder: 652703 Page 2 of 9 Sample Qual Parmname **NOM** QC Units RPD% REC% Range Anlst Date Time Ion Chromatography 2559394 Batch QC1205633070 652703014 DUP 9.71 9.70 Chloride 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 01/29/24 12:44 218 mg/L 0.063 (0%-20%)QC1205633069 LCS 5.00 4.88 97.7 01/26/24 23:19 Chloride mg/L (90%-110%) Fluoride 2.50 2.44 mg/L 97.4 (90%-110%) Sulfate 10.0 9.77 97.7 (90%-110%) mg/L QC1205633068 MB 0.113 01/26/24 22:48 Chloride mg/LU Fluoride ND mg/L Sulfate U ND mg/L QC1205633071 652703014 PS Chloride 5.00 9.71 15.7 (90%-110%) 01/27/24 01:27 mg/L 2.50 0.459 2.90 97.5 Fluoride mg/L (90%-110%) Sulfate 10.0 8.73 19.2 105 (90%-110%) 01/29/24 13:16 mg/L **Metals Analysis - ICPMS** 2558106 QC1205630744 LCS 0.0500 BAJ 02/02/24 00:31 0.0500 Antimony mg/L 99.9 (80%-120%)

Page 42 of 59 SDG: 652703

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

QC Summary

Workorder: 652703

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

Parmname		NO	M Sample Qual	l QC	Units	RPD% REC%	6 Range	Anlst	Date Time
Metals Analysis Batch	2558106								
Arsenic		0.0500		0.0515	mg/L	103	(80%-120%)	BAJ	02/02/24 00:31
Barium		0.0500		0.0514	mg/L	103	(80%-120%)		
Beryllium		0.0500		0.0586	mg/L	117	(80%-120%)		
Boron		0.100		0.113	mg/L	113	(80%-120%)		
Cadmium		0.0500		0.0513	mg/L	103	(80%-120%)		
Calcium		2.00		2.09	mg/L	104	(80%-120%)		
Chromium		0.0500		0.0515	mg/L	103	(80%-120%)		
Cobalt		0.0500		0.0525	mg/L	105	(80%-120%)		
Lead		0.0500		0.0515	mg/L	103	(80%-120%)		
Lithium		0.0500		0.0550	mg/L	110	(80%-120%)		
Molybdenum		0.0500		0.0528	mg/L	106	(80%-120%)		
Selenium		0.0500		0.0511	mg/L	102	(80%-120%)		
Thallium		0.0500		0.0495	mg/L	99.1	(80%-120%)		
QC1205630 Antimony	743 M	IB	U	ND	mg/L				02/02/24 00:28
Arsenic			U	ND	mg/L				

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

QC Summary

Workorder: 652703 Page 4 of 9 NOM QC RPD% REC% Parmname Sample Qual Units Range Anlst Date Time Metals Analysis - ICPMS Batch 2558106 Barium U ND mg/L BAJ 02/02/24 00:28 U Beryllium ND mg/L U Boron ND mg/LU ND Cadmium mg/LCalcium U ND mg/L U ND Chromium mg/LU Cobalt ND mg/LU ND Lead mg/LU ND Lithium mg/L U ND Molybdenum mg/LU ND Selenium mg/L Thallium U ND mg/L QC1205630745 652703001 MS Antimony 0.0500 U ND 0.0495 mg/L98.9 (75%-125%) 02/02/24 00:37 0.0500 U ND 0.0526 104 (75%-125%) Arsenic mg/L Barium 0.0500 0.0551 0.106 mg/L102 (75% - 125%)

Page 44 of 59 SDG: 652703

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

QC Summary

Workorder: 652703 Page 5 of 9

Parmname	NOM	Sample Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Metals Analysis - ICPMS Potob 2559106									
Batch 2558106 Beryllium	0.0500	0.00204	0.0620	mg/L		120	(75%-125%)	BAJ	02/02/24 00:37
Boron	0.100	0.108	0.215	mg/L		107	(75%-125%)		
Cadmium	0.0500 J	0.000354	0.0517	mg/L		103	(75%-125%)		
Calcium	2.00	16.5	18.2	mg/L		N/A	(75%-125%)		
Chromium	0.0500 Ј	0.00447	0.0557	mg/L		102	(75%-125%)		
Cobalt	0.0500	0.00650	0.0597	mg/L		106	(75%-125%)		
Lead	0.0500 U	ND	0.0513	mg/L		102	(75%-125%)		
Lithium	0.0500	0.0101	0.0660	mg/L		112	(75%-125%)		
Molybdenum	0.0500 U	ND	0.0540	mg/L		108	(75%-125%)		
Selenium	0.0500 Ј	0.00243	0.0523	mg/L		99.7	(75%-125%)		
Thallium	0.0500 U	ND	0.0492	mg/L		98.3	(75%-125%)		
QC1205630746 652703001 MSD Antimony	0.0500 U	ND	0.0494	mg/L	0.192	98.7	(0%-20%)		02/02/24 00:39
Arsenic	0.0500 U	ND	0.0512	mg/L	2.72	101	(0%-20%)		
Barium	0.0500	0.0551	0.106	mg/L	0.18	102	(0%-20%)		
Beryllium	0.0500	0.00204	0.0619	mg/L	0.194	120	(0%-20%)		

Page 45 of 59 SDG: 652703

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

QC Summary

Workorder: 652703 Page 6 of 9 **Parmname NOM** Sample Qual QC Units RPD% REC% Range Anlst Date Time Metals Analysis - ICPMS 2558106 Batch Boron 0.100 0.108 0.219 mg/L1.98 111 (0%-20%)BAJ 02/02/24 00:39 Cadmium 0.0500 J 0.000354 0.0514 mg/L 0.537 102 (0%-20%)Calcium 2.00 16.5 18.3 mg/L 0.17 N/A (0%-20%)0.0567 104 (0%-20%)Chromium 0.0500 0.00447 mg/L 1.78 mg/L Cobalt 0.0500 0.00650 0.0601 0.583 107 (0%-20%)0.0500 U ND 0.0508 mg/L 101 (0%-20%)0.907 Lead 0.0500 0.0101 Lithium 0.0659 mg/L0.0334 112 (0%-20%)0.0500 U ND 0.0549 110 (0%-20%)Molybdenum mg/L 1.61 0.0500 0.00243 0.0525 100 Selenium J mg/L 0.395 (0%-20%)Thallium 0.0500 U ND 0.0489 97.9 mg/L0.463 (0%-20%)QC1205630747 652703001 SDILT U ND U ND 02/02/24 00:45 Antimony ug/L N/A (0%-20%)ND U ND U ug/L N/A (0%-20%)Arsenic Barium 55.1 10.8 1.96 (0%-20%)ug/L 2.04 J 0.395 Beryllium ug/L 2.95 (0%-20%)

108

22.5

ug/L

3.73

(0%-20%)

Page 46 of 59 SDG: 652703

Boron

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

QC Summary

Workorder: 652703 Page 7 of 9 **Parmname NOM** Sample Qual QC Units RPD% REC% Range Anlst Date Time Metals Analysis - ICPMS 2558106 Batch (0%-20%) Cadmium J 0.354 ND ug/L N/A BAJ 02/02/24 00:45 Calcium 16500 3470 ug/L 5.19 (0%-20%)ug/L Chromium J 4.47 U ND N/A (0%-20%)Cobalt 6.50 1.36 ug/L 4.8 (0%-20%)U Lead ND U ND ug/L N/A (0%-20%)10.1 U ND (0%-20%)Lithium ug/L N/A U U ND Molybdenum ND ug/L N/A (0%-20%)J Selenium 2.43 U ND N/A (0%-20%)ug/L U ND U ND Thallium ug/L N/A (0%-20%)Metals Analysis-Mercury 2558962 QC1205632403 652690004 DUP Mercury U ND U ND mg/LN/A JP2 01/29/24 11:09 QC1205632402 LCS Mercury 0.00200 0.00198 mg/L(80% - 120%)01/29/24 11:06 QC1205632401 MB U ND mg/L 01/29/24 11:04 Mercury QC1205632404 652690004 MS Mercury 0.00200 U ND 0.00158 mg/L 78.4 (75%-125%) 01/29/24 11:11

Page 47 of 59 SDG: 652703

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

QC Summary

652703 Page 8 of 9 **Parmname NOM** Sample Qual QC Units RPD% REC% Range Anlst Date Time Metals Analysis-Mercury Batch 2558962 QC1205632405 652690004 SDILT U ND U ND ug/L JP2 01/29/24 11:12 Mercury N/A (0%-10%)Batch 2558965 QC1205632413 652847001 DUP Mercury J 0.122 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 U ND 01/29/24 11:53 Mercury mg/L QC1205632414 652847001 MS 2.00 J 0.122 2.20 104 01/29/24 12:05 Mercury mg/L (75% - 125%)QC1205632415 652847001 SDILT J 0.122 U ND 01/29/24 12:06 Mercury ug/L N/A (0%-10%)**Solids Analysis** 2558321 QC1205631200 652703001 DUP Total Dissolved Solids 139 136 mg/L 2.18 (0%-5%)ES2 01/25/24 12:14 QC1205631201 652703014 DUP mg/L **Total Dissolved Solids** 507 504 0.593 (0%-5%)01/25/24 12:14 QC1205631199 LCS **Total Dissolved Solids** 300 290 mg/L 96.7 (95%-105%) 01/25/24 12:14 QC1205631198 MB U **Total Dissolved Solids** ND mg/L 01/25/24 12:14

Notes:

Workorder:

Page 48 of 59 SDG: 652703

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

QC Summary

652703 Page 9 of 9 **Parmname** NOM Sample Qual \mathbf{OC} Units RPD% REC% Range Anlst Date Time

The Qualifiers in this report are defined as follows:

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

Workorder:

- 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
- Η 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
- Ε % 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
- Ε 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.
- FΒ 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.
- The target analyte was detected in the associated blank. B
- 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.

Page 49 of 59 SDG: 652703

Technical Case Narrative Georgia Power Company SDG #: 652703

Metals

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

Analytical Batch: 2558106

Preparation Method: SW846 3005A

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

Preparation Batch: 2558105

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

GEL Sample ID#	Client Sample Identification
652703001	ARK-AP1GWA-1
652703002	ARK-AP1GWA-2
652703003	ARK-AP1PZ-1
652703004	ARK-AP1PZ-2
652703005	ARK-AP1-FB-01
652703006	ARK-AP1-FD-01
652703007	ARK-AP1-EB-01
652703008	ARK-AP1PZ-3
652703009	ARK-AP1PZ-4
652703010	ARK-AP1PZ-5
652703011	ARK-AP1PZ-7
652703012	ARK-AP1PZ-8
652703013	ARK-AP1PZ-9
652703014	ARK-AP1PZ-10
652703015	ARK-AP1PZ-11
652703016	ARK-AP1-EB-02
652703017	ARK-AP1-FD-02
652703018	ARK-AP1-FB-02
1205630743	Method Blank (MB)ICP-MS
1205630744	Laboratory Control Sample (LCS)
1205630747	652703001(ARK-AP1GWA-1L) Serial Dilution (SD)
1205630745	652703001(ARK-AP1GWA-1S) Matrix Spike (MS)
1205630746	652703001(ARK-AP1GWA-1SD) 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

Page 50 of 59 SDG: 652703

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 652703003 (ARK-AP1PZ-1), 652703004 (ARK-AP1PZ-2), 652703008 (ARK-AP1PZ-3), 652703009 (ARK-AP1PZ-4), 652703010 (ARK-AP1PZ-5), 652703011 (ARK-AP1PZ-7), 652703012 (ARK-AP1PZ-8), 652703013 (ARK-AP1PZ-9) and 652703014 (ARK-AP1PZ-10) were diluted to ensure that the analyte concentrations were within the linear calibration range of the instrument.

A 1 4 -					652703	3			
Analyte	003	004	008	009	010	011	012	013	014
Boron	5X	5X	20X	50X	100X	20X	20X	10X	5X
Calcium	1X	5X	20X	50X	100X	20X	20X	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: 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
652703001	ARK-AP1GWA-1
652703002	ARK-AP1GWA-2
652703003	ARK-AP1PZ-1
652703004	ARK-AP1PZ-2
652703005	ARK-AP1-FB-01
652703006	ARK-AP1-FD-01
652703007	ARK-AP1-EB-01
652703008	ARK-AP1PZ-3
652703009	ARK-AP1PZ-4
652703010	ARK-AP1PZ-5
652703011	ARK-AP1PZ-7
652703012	ARK-AP1PZ-8
652703013	ARK-AP1PZ-9
652703014	ARK-AP1PZ-10
652703015	ARK-AP1PZ-11
652703016	ARK-AP1-EB-02
652703017	ARK-AP1-FD-02
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)

Page 51 of 59 SDG: 652703

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: 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
652703018	ARK-AP1-FB-02
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: 2559114

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

GEL Sample ID# Client Sample Identification

Page 52 of 59 SDG: 652703

652703001	ARK-AP1GWA-1
652703002	ARK-AP1GWA-2
652703003	ARK-AP1PZ-1
652703004	ARK-AP1PZ-2
652703005	ARK-AP1-FB-01
652703006	ARK-AP1-FD-01
652703007	ARK-AP1-EB-01
652703008	ARK-AP1PZ-3
652703009	ARK-AP1PZ-4
652703010	ARK-AP1PZ-5
652703011	ARK-AP1PZ-7
652703012	ARK-AP1PZ-8
652703013	ARK-AP1PZ-9
1205632595	Method Blank (MB)
1205632596	Laboratory Control Sample (LCS)
1205632599	652703009(ARK-AP1PZ-4) Sample Duplicate (DUP)
1205632600	652703009(ARK-AP1PZ-4) Post Spike (PS)

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 1205632599 (ARK-AP1PZ-4DUP), 1205632600 (ARK-AP1PZ-4PS), 652703001 (ARK-AP1GWA-1), 652703003 (ARK-AP1PZ-1), 652703004 (ARK-AP1PZ-2), 652703006 (ARK-AP1-FD-01), 652703008 (ARK-AP1PZ-3), 652703009 (ARK-AP1PZ-4), 652703010 (ARK-AP1PZ-5), 652703011 (ARK-AP1PZ-7), 652703012 (ARK-AP1PZ-8) and 652703013 (ARK-AP1PZ-9) were diluted because target analyte concentrations exceeded the calibration range. Sample 652703011 (ARK-AP1PZ-7) was diluted to minimize matrix effects on instrument performance. Samples 1205632599 (ARK-AP1PZ-4DUP), 1205632600 (ARK-AP1PZ-4PS), 652703006 (ARK-AP1-FD-01), 652703009 (ARK-AP1PZ-4) and 652703012 (ARK-AP1PZ-8) were 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.

A 1 4					65	52703				
Analyte	001	003	004	006	008	009	010	011	012	013
Chloride	1X	1X	1X	2X	1X	2X	2X	2X	2X	1X
Fluoride	1X	1X	1X	2X	1X	2X	2X	2X	2X	1X
Sulfate	5X	10X	100X	5X	200X	200X	250X	200X	100X	50X

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

652703014	ARK-AP1PZ-10
652703015	ARK-AP1PZ-11
652703016	ARK-AP1-EB-02
652703017	ARK-AP1-FD-02
652703018	ARK-AP1-FB-02
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)

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), 652703014 (ARK-AP1PZ-10), 652703015 (ARK-AP1PZ-11) and 652703017 (ARK-AP1-FD-02) were diluted because target analyte concentrations exceeded the calibration range. Dilutions may be required for many reasons, including to minimize matrix interferences or to bring over range target analyte concentrations into the linear calibration range.

Amalasta	6	5270	3
Analyte	014	015	017
Sulfate	25X	5X	5X

Product: Solids, Total Dissolved **Analytical Method:** SM 2540C

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

Analytical Batch: 2558321

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

GEL Sample ID#	Client Sample Identification
652703001	ARK-AP1GWA-1
652703002	ARK-AP1GWA-2
652703003	ARK-AP1PZ-1
652703004	ARK-AP1PZ-2

652703005	ARK-AP1-FB-01
652703006	ARK-AP1-FD-01
652703007	ARK-AP1-EB-01
652703008	ARK-AP1PZ-3
652703009	ARK-AP1PZ-4
652703010	ARK-AP1PZ-5
652703011	ARK-AP1PZ-7
652703012	ARK-AP1PZ-8
652703013	ARK-AP1PZ-9
652703014	ARK-AP1PZ-10
652703015	ARK-AP1PZ-11
652703016	ARK-AP1-EB-02
652703017	ARK-AP1-FD-02
652703018	ARK-AP1-FB-02
1205631198	Method Blank (MB)
1205631199	Laboratory Control Sample (LCS)
1205631200	652703001(ARK-AP1GWA-1) Sample Duplicate (DUP)
1205631201	652703014(ARK-AP1PZ-10) Sample Duplicate (DUP)

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. 652703004 (ARK-AP1PZ-2), 652703008 (ARK-AP1PZ-3), 652703009 (ARK-AP1PZ-4), 652703010 (ARK-AP1PZ-5), 652703011 (ARK-AP1PZ-7) and 652703012 (ARK-AP1PZ-8). A TDS meter was used to check the samples for interference prior to analysis. 652703004 (ARK-AP1PZ-2), 652703008 (ARK-AP1PZ-3), 652703009 (ARK-AP1PZ-4), 652703010 (ARK-AP1PZ-5), 652703011 (ARK-AP1PZ-7) and 652703012 (ARK-AP1PZ-8).

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 55 of 59 SDG: 652703

			-									GE	Labora	GEL Lahoratories 1.1.C	
Page: 1 of 2					7	ahoratories	_	U	V	65770	5	204	2040 Savage Road	Road	
.# 6		os les] 5 	Chemistry R	adiochen	nistry Radic	Jiobioassay Spec	Special (alty Ans	malytics		Ch	rleston,	Charleston, SC 29407	
COC Number (1): 5 Sample Cooler(s)		Chain of	Custo	dy and	Anal	Custody and Analytical Request	dnest	9	52	20	2	Pho	ne: (843	Phone: (843) 556-8171	
82177-0005	GEL Work Order Number:			GEL P	roject	GEL Project Manager: Erin Trent	Erin T	rent				\neg	: (843) 7	Fax: (843) 766-1178	
Cont Name: Georgia Power		Phone # (93	7-344-6533)	533)			Sam	ple Ar	alysis	Sample Analysis Requested (3)	ested		I in the	number of conta	(Fill in the number of containers for each test)
Pegect/Site Name: Plant Arkwright Ash Pond 1	I	Fax: N/A			3	Should this	I this	S.I	IN		IN	IN	IN		< Preservative Type (6)
Ardress: 241 Ralph McGill Blvd SE, Atlanta, GA 30308	80					sample be considered:	ered:	enist	(B02		866		(8		
y, John Myer, Dylan	Send Results To: jabraham@southernco.com E. Cassidy.Sutherland@stantec.com	легисо.сош Е	DD@sta	DD@stantec.com		۲Iddr		er of cor			21 1.2 .vs		10747) y		Comments (task code: ARK-CCR-
Sample ID * For compositor, indicate start and stan date time	*Date Collected (mm-dd-vv)	*Time Collected (Military) (hhmm)	QC Code (2)	Field Filtered (3)	Sample Matrix (4)	Radioactive yes, please su isotopic info	(7) Known o	dmun latoT	Metals App	T ItsM M2) D) anoinA	(300.0 Re	Metals App	Mercur		ASSMT-2024S1)
ARK-APIGWA-1		14:35	z	z	MG			9	×	×	×	×	×		
ARK-APIGWA-2	1/22/2024	14:45	z	z	WG			9	×	×	×	×	×		
ARK-AP1PZ-1	1/22/2024	16:40	z	z	WG			9	×	×	×	×	×		
ARK-APIPZ-2	1/22/2024	16:40	z	z	MG			9	×	×	×	×	×		
ARK-API-FB-01	1/22/2024	15:00	FB	z	WQ			9	×	×	×	×	×		
ARK-API-FD-01	1/22/2024	NA	FD	z	WQ			9	×	×	×	×	×		
ARK-API-EB-01	1/22/2024	17:15	EB	z	WQ			9	×	×	×	×	×		
ARK-APIPZ-3	1/23/2024	11:45	z	z	WG			9	×	×	×	×	×		
ARK-APIPZ-4	1/23/2024	13:10	z	Z	MG			9	×	×	×	×	×		
ARK-APIPZ-5	1/23/2024	14:50	N	z	MG			9	×	×	×	×	×		
	Chain of Custody Signatures						TAT	TAT Requested:	sted:	Normal:	al: X		Rush:	Specify:	(Subject to Surcharge)
Relinquished By (Signed) Print Name Date	te Received by (signed)		Print Name	1	Date		Fax Results: [] Yes	sults: [] Yes		[X]No				
1) Company Company	4141 By	h	112	1/20	1500		Select Deliverable: [] C of A	Jeliver	able: []C of	-	QC St] QC Summary	[] level 1 [X]	Level 2 [] Level 3 [] Leve
3	2 / 20	ma	3	c/1	24/24	1335	Additional Remarks:	nal Re	marks.						1
11 (11)	3						For La	b Rece	iving	Jse On	b: Cu	stody S	For Lab Receiving Use Only: Custody Seal Intact? [] Yes [].	Cooler Te
> For sample shipping and delivery details, see Sample Receipt & Review form (SRR.)	ole Receipt & Review form	(SRR.)				Sample Collection Time Zone: [X] Eastern	Collectic	n Tim	e Zon	× .	Easter	- 1	[] 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	uplicate, $\mathbf{E}\mathbf{B}=\mathrm{Equipment}$ Blank,	MS = Matrix !	spike Sam	ple, MSD =	- Matrix S	pike Duplicat	te Sample,	G = Gra	b, C = (omposite					
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.	he sample was field filtered or - N \cdot	- for sample w	as not fiel	i filtered.					:					-Food N=Nace	
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=Soild Waste, O=Oul, F=Fulter, F=Wipe, U=Orther, F=Feder, r=recat, r=reca	urface Water, WW=Waste Water,	W=Water, M	L=Misc Li	quid, SO=9	Soil, SD=S	sediment, SL	=Sludge, S	PiloS=S	Waste,	J=Oil, F	=Filter,	=w ibe,	U=UIIIIe, I	r-recal, iv-ivasai	
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).	260B, 6010B/7470A) and number H = Sodium Hydroxide. SA = Sulf	of containers juric Acid, AA	provided f = Ascorb	or each (i.e c Acid, HX	. 8260B -	provided for each (i.e. \$260B - 3, 6010B7470A - 1). = Ascorbic Acid, HX = Hexane, ST = Sodium Thiosulfate, If no preservative is added = leave field blank	70.4 - 1). ım Thiosul	fate, If n	o preser	vative is	= added =	eave fie	d blank		
6.) Preservative Type: HA = Hydrochloric Acid, 31 7.) KNOWN OR POSSIBLE HAZARDS [Ch	Characteristic Hazards	Listed	Waste				Other Other / Habroun	1/ 101	- Julia	5				Please provide a	Please provide any additional details below regarding handling and/or disposal concerns.
FL RCRA Metals CC As = Arsenic Hg = Mercury RE	FL = Flammable/Ignitable CO = Corrosive RE = Reactive	LW = L (F, K, P) $Waste c$	LW= Listed waste (F,K,P and U-listed Waste code(s):	asted waste and U-listed wastes.) code(s):	stes.)		(i.e.: High/low pH, asbest misc. health hazards, etc.)	igh/low	v pH, c	sbestos , etc.)	i, beryl	lium, ii	ritants,	(i.e.: Origin of sample(s) from, odd matrices, etc.)	(i.e.: High/low pH, asbestos, beryllium, irritants, · (i.e.: Origin of sample(s), type of site collected misc. health hazards, etc.)
Se= Selenium	SCA Regulated					1	Description:	tton:					1		
Cr = Cadmium Ag = Since Cr = Chromium MR = Misc. RCRA metals PC Db = 1 and	PCB = Polychlorinated binhenvls					ſ							1 1		
I D - Leau															

			tainers for each test)	< Preservative Type (6)		Comments	(task_code: ARK-CCR- ASSMT-2024S1)									(Subject to Surcharge)		[X] Level 2 [] Level 3 [] Level		Vo Cooler Temp: ₹ °C	[] Mountain [] Other:						Other regarding handling and/or disposal concerns. OT=Other / Unknown regarding handling and/or disposal concerns. (i.e.: High/low pH, asbestos, beryllium, irritants, (i.e.: Origin of sample(s), type of site collected misc. health hazards, etc.)	
GEL Laboratories, LLC 2040 Savage Road	Charleston, SC 29407 Phone: (843) 556-8171	Fax: (843) 766-1178	(Fill in the number of containers for each test)	IN		(80747)	Метсигу (×	×	×	×	×	×	×	×	Specify:		[] level 1		For Lab Receiving Use Only: Custody Seal Intact? [] Yes [] No	[] Central			rine, F=Fecal, N=Nasal		ınk	Please provide any addirection of the search of the search of semple (s) from, odd matrices, etc.)	
GEL 2040	Phone	Fax: (IN	-		KAD 226-2	×	×	×	×	×	×	×	×	Rush:		[] QC Summary		ody Seal	[] Pacific			Vipe, U=U		ve field bla	m, irrita	
5	~		Sample Analysis Requested (5)	IN	E	561 1'7 '	(300.0 Rev	×	×	×	×	×	×	×	×	H:	No			r: Custo	Eastern			Filter, P=1		Ided = Iea	berylliu	
L0125	270 170		s Requ		-	04 2540C	TD (SM Methors, (Cl., 17)	×	×	×	×	×	×	×	×	Normal:	X	Select Deliverable: [] C of A		se Only	: [X]		omposite	⊨Oil, F =l		ative is ad	n bestos, etc.)	
659	C S 7		Analysi	IN	(B0	709) III	Metals App.	×	×	×	×	×	×	×	×	ested:	Yes	able: [marks:	eiving U	e Zone		1b, C = C	Waste, O		o preserv	Other OT = Other / Unknown (i.e.: High/low pH, asbest misc. health hazards, etc.)	
)	St spi	Trent	mple 4	s	- ainer	Ι	Total number	9	9	9	9	9	9	9	9	TAT Requested:	Fax Results:	Deliver	Additional Remarks	ab Rece	ion Tim		, G = G ₁₂	SS=Solid		ılfate, If n	Other / U ligh/low realth h	ption:
	Request (< 2.7.7	r: Erin	Sa	Should this	sample be considered:	spae	(7) Known or									TAT	Fax R	Select	Additi	For L	Collecti		te Sample	=Sludge,	704 - 1).	ım Thiosu	Other OT= (i.e.: h	Description:
	tical F	fanage		Shou	sam	(Iţ	Radioactive yes, please sup isotopic info.)														Sample Collection Time Zone: [X] Eastern		te Duplica	iment, SL	\$010B/74;	T = Sodi		
ratc	Analy	GEL Project Manager: Erin Trent					Sample Matrix (4)	ÐM	WG	DM	ÐM	WG	WQ	МQ	WQ		Date						fatrix Spil	il, SD=Sed	260B - 3,	Hexane,	s.)	
Laboratories LLC	Custody and Analytical Request	GEL P	(33)			tec.com	Field Filtered (3)	z	Z	z	Z	Z	z	Z	z		Ď	12021					MSD = N	d, SO=Soi	ach (i.e. 8.	cid, HX =	e ed waste	
	Custo		7-344-6533)			OD@stan	QC Code (2) F	z	z	z	Z	Z	EB	ED	FB		Print Name	5					ke Sample	Misc Liqui	vided for e	Ascorbic A	aste ed Wast d U-liste te(s):	
	Chain of		Phone # (937	Fax: N/A		егисо.сош ЕІ	*Time Collected (Military) (thmm)	16:25	11:40	13:35	16:00	17:15	17:00	NA	15:55		,	01/2	1		SRR.)		S = Matrix Spi	=Water, ML=	containers pro	c Acid, AA = A	Listed Waste LW= Listed Waste (F. K.P and U-listed wastes.) Waste code(s):	
	J	GEL Work Order Number:	Н	Ħ		Send Results To: jabraham@southernco.com EDD@stantec.com Cassidy.Sutherland@stantec.com	*Date Collected (mm-dd-yy)	1/23/2024	1/23/2024	1/23/2024	1/23/2024	1/23/2024	1/23/2024	1/23/2024	1/23/2024	dy Signatures	Received by (signed)	Ja De	2	3	& Review form (S		= Equipment Blank, M	WW=Waste Water, W	7470A) and number of	Hydroxide, SA = Sulfuri	tic Hazards able/Ignitable ive 'e	ated hlorinated
		GEL Work			iA 30308	Send Results ' Cassidy.Suthe	ate/time									Chain of Custody Signatures	Date	124/24	7	1	Sample Receipt		Field Duplicate, EB	SW=Surface Water,	1 (i.e. 8260B, 6010B/	Acid, SH = Sodium E	Characteristic Hazards FL = Flammable/Ignitable CO = Corrosive RE = Reactive	TSCA Regulated PCB = Polychlorinated
of 2	5 Sample Cooler(s)	C82177-0005	orgia Power	Project/Site Name: Plant Arkwright Ash Pond 1	ddress: 241 Ralph McGill Blvd SE, Atlanta, GA 30308	Collected By: Zach Levy, John Myer, Dylan Mipley, Emily Scheiben	Sample ID * For composites - indicate start and stop date time										(Signed) Print Name	A Stantec			> For sample shipping and delivery details, see Sample Receipt & Review form (SRR.)	1.) Chain of Custody Number = Client Determined	2.) QC Codes: N = Normal Sample, TB = Trip Blank, FD = Field Duplicate, EB = Equipment Blank, MS = Matrix Spike Sample, MSD = Matrix Spike Duplicate Sample, G = Grab, C = Composite	3.) Then Trickets. To requir matrices, indicate write a T-Toy yes use sample was field inference of TN-Toy sample was field inference. The field inference of TN-Toy sample was field inference of TN-Toy sample was field inference. The field inference of TN-Toy sample was field inference. The Figure of Toy of T	5.) Sample Analysis Requested: Analytical method requested (i.e. 82608, 601087/470A) and number of containers provided for each (i.e. 82608 - 3, 601087/470A - 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	Se= Selenium Ag= Silver MR= Misc. RCRA metals
Page: 2	GOC Number (1).	PO Number: GPC82177-0005	Glient Name: Georgia Power	Project/Site Nam	Address: 241 Ral	Collected By: Za Ripley, Emily Sc	2703	ARK-AP1PZ-7	ARK-AP1PZ-8	ARK-AP1PZ-9	ARK-AP1PZ-10	ARK-AP1PZ-11	ARK-AP1-EB-02	ARK-AP1-FD-02	ARK-AP1-FB-02		Relinquished By (Signed)	1 JM	. 12	3	> For sample shi	1.) Chain of Custody	2.) QC Codes: N=N	4.) Matrix Codes: DW	5.) Sample Analysis R.	6.) Preservative Type:	7.) KNOWN OR I RCRA Metals As = Arsenic	Ba = Barium $Cd = Cadmium$ $Cr = Chromium$ $Dr = Tand$

652694

652704 652703

GEL Laboratories LLC

Client: GPCC		SAMPLE RECEIPT & REVIEW FORM
Received By: QG		DG/AR/COC/Work Order:
Carrier and Tracking Number		Circle Applicable: FedEx Express FedEx Ground UPS Field Services Courier Other h (s.
Suspected Hazard Information	ç *	If New Counts > 100cpm on samples not marked "radioactive", contact the Radiation Safety Group for further investigation.
	<u> </u>	lazard Class Shipped: UN#:
A)Shipped as a DOT Hazardous?	1	If UN2910, Is the Radioactive Shipment Survey Compliant? Yes No
B) Did the client designate the samples are to be received as radioactive?		OC notation or radioactive stickers on containers equal client designation
C) Did the RSO classify the samples as radioactive?		faximum Net Counts Observed* (Observed Counts - Area Background Counts): CPM/hR/Hr Classified as: Rad 1 Rad 2 Rad 3
D) Did the client designate samples are hazardous?	/c	OC peranon or hazard labels on continers equal client designation. D or E is yes, select Hazards below.
E) Did the RSO identify possible hazards?		PCB's Flammable Foreign Soil RCRA Asbestos Beryllium Other:
	¥ Z	Comments/Qualifiers (Required for Non-Conforming Items)
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 ce Packs Dry ice None Other: *all temperatures represented in Celsius TEMP: 1
4 Daily check performed and passed on IR temperature gun?		Temperature Device Serial #: <u>IR1-23</u> Secondary Temperature Device Serial # (If Applicable):
5 Sample containers intact and sealed?	مر ۱۰۰	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, Lott:
7 Do any samples require Volatile Analysis?		If Yes, are Encores or Soil Kits present for solids? YesNoNA (If yes, take to VOA Freezer) Do liquid VOA vials contain acid preservation? YesNoNA (If unknown, select No) Are liquid VOA vials free of headspace? YesNoNA 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:
Date & time on COC match date & time on bottles?		Circle Applicable: No dates on containers No times on containers COC missing info Other (describe)
Number of containers received match number indicated on COC?	9	Circle Applicable: No container count on COC Other (describe)
Are sample containers identifiable as GEL provided by use of GEL labels?		
COC form is properly signed in relinquished/received sections?		Circle Applicable: Not relinquished Other (describe)
Comments (Use Continuation Form if needed):		
÷		
,		
		•
PM (or PMA) revie	Ie!	tials W7 Dute 1/25/24 Dura at

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	SC002 SC00012
New York NELAP	11501
North Carolina	233
North Carolina SDWA	45709
North Dakota	R-158
Oklahoma Ponnsylvonia NEL AD	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











a member of **The GEL Group** INC

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 AP1-R

Work Order: 652704

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. This original data report has been prepared and reviewed in accordance with GEL's standard operating procedures.

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

<u>Laboratory ID</u>	Client ID	Matrix	Date Collected	Date Recieved
652704001	ARK-AP1GWA-1	Ground Water	22/01/24 14:35	24/01/24 13:35
652704002	ARK-AP1GWA-2	Ground Water	22/01/24 14:45	24/01/24 13:35
652704003	ARK-AP1PZ-1	Ground Water	22/01/24 16:40	24/01/24 13:35
652704004	ARK-AP1PZ-2	Ground Water	22/01/24 16:40	24/01/24 13:35
652704005	ARK-AP1-FB-01	Water	22/01/24 15:00	24/01/24 13:35
652704006	ARK-AP1-FD-01	Ground Water	22/01/24 12:00	24/01/24 13:35
652704007	ARK-AP1-EB-01	Water	22/01/24 17:15	24/01/24 13:35
652704008	ARK-AP1PZ-3	Ground Water	23/01/24 11:45	24/01/24 13:35
652704009	ARK-AP1PZ-4	Ground Water	23/01/24 13:10	24/01/24 13:35
652704010	ARK-AP1PZ-5	Ground Water	23/01/24 14:50	24/01/24 13:35
652704011	ARK-AP1PZ-7	Ground Water	23/01/24 16:25	24/01/24 13:35
652704012	ARK-AP1PZ-8	Ground Water	23/01/24 11:40	24/01/24 13:35
652704013	ARK-AP1PZ-9	Ground Water	23/01/24 13:35	24/01/24 13:35
652704014	ARK-AP1PZ-10	Ground Water	23/01/24 16:00	24/01/24 13:35
652704015	ARK-AP1PZ-11	Ground Water	23/01/24 17:15	24/01/24 13:35
652704016	ARK-AP1-EB-02	Water	23/01/24 17:00	24/01/24 13:35



652704017	ARK-AP1-FD-02	Ground Water	23/01/24 12:00	24/01/24 13:35
652704018	ARK-AP1-FB-02	Water	23/01/24 15:55	24/01/24 13:35

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	06-FEB-2024
EPA 903.1 Modified	08-FEB-2024
EPA 904.0/SW846 9320 Modified	15-FEB-2024

Page 2 of 33 SDG: 652704

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

Page 3 of 33 SDG: 652704

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

Certificate of Analysis Report for

GPCC001 Georgia Power Company Client SDG: 652704 GEL Work Order: 652704

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	Franda	len		

Page 4 of 33 SDG: 652704

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 ComplianceAP1-R

Client Sample ID: ARK-AP1GWA-1 Project: GPCC00100 GPCC001 Client ID:

Sample ID: Matrix: 652704001 WG

Collect Date: 22-JAN-24 Receive Date: 24-JAN-24 Collector: Client

Parameter	Qualifier	Result U	ncertainty	MDC	TPU	RL	Units	PF	DF	Analys	t Date	Time	Batch	Mtd.
Rad Gas Flow Proportion GFPC Ra228, Liquid		0												
Radium-228	U	-0.0261	+/-1.04	1.94	+/-1.04	3.00	pCi/L			JE1	02/15/24	0839	2562861	1
Radium-226+Radium-	-228 Calculat	ion "See Pa	rent Product	s"										
Radium-226+228 Sum	U	1.06	+/-1.11	1.94	+/-1.14		pCi/L		1	NXL1	02/20/24	1250	2562864	2
Rad Radium-226 Lucas Cell, Ra226, Liquid "As Received"														
Radium-226		1.06	+/-0.407	0.290	+/-0.473	1.00	pCi/L			LXP1	02/08/24	1004	2559124	3

The following Analytical Methods were performed

Description 1 EPA 904.0/SW846 9320 Modified Calculation

EPA 903.1 Modified

Surrogate/Tracer Recovery	Test	Batch ID	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC Ra228, Liquid "As Received"	2562861	92.7	(15%-125%)

Notes:

Method

The MDC is a sample specific MDC.

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

Column headers are defined as follows:

DF: Dilution Factor Mtd.: Method DL: Detection Limit PF: Prep Factor **RL**: Reporting Limit Lc/LC: Critical Level

MDA: Minimum Detectable Activity TPU: Total Propagated Uncertainty

MDC: Minimum Detectable Concentration

Page 5 of 33 SDG: 652704

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 ComplianceAP1-R

Client Sample ID: ARK-AP1GWA-2 Project: GPCC00100 Sample ID: 652704002 Client ID: GPCC001

Matrix: WG
Collect Date: 22-JA

Collect Date: 22-JAN-24
Receive Date: 24-JAN-24
Collector: Client

Parameter	Qualifier	Result U	ncertainty	MDC	TPU	RL	Units	PF	DF Analys	t Date Time	Batch	Mtd.
Rad Gas Flow Proporti GFPC Ra228, Liquid		0										
Radium-228	U	1.05	+/-0.999	1.64	+/-1.03	3.00	pCi/L		JE1	02/15/24 0839	2562861	1
Radium-226+Radium	-228 Calculat	tion "See Pa	rent Produci	ts"								
Radium-226+228 Sum		2.89	+/-1.18	1.64	+/-1.25		pCi/L		1 NXL1	02/20/24 1250	2562864	2
Rad Radium-226 Lucas Cell, Ra226, Li	quid "As Rece	eived"										
Radium-226		1.84	+/-0.625	0.566	+/-0.708	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
2	EDA 002 1 Modified

3 EPA 903.1 Modified

Surrogate/Tracer Recovery	Test	Batch ID	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC Ra228, Liquid "As Received"	2562861	92.4	(15%-125%)

Notes:

The MDC is a sample specific MDC.

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

Column headers are defined as follows:

DF: Dilution Factor Mtd.: Method
DL: Detection Limit PF: Prep Factor
Lc/LC: Critical Level RL: Reporting Limit

MDA: Minimum Detectable Activity TPU: Total Propagated Uncertainty

MDC: Minimum Detectable Concentration

Page 6 of 33 SDG: 652704

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

Project:

Client ID:

GPCC00100

GPCC001

Contact: Joju Abraham

Project: Arkwright CCR Groundwater ComplianceAP1-R

Client Sample ID: ARK-AP1PZ-1 Sample ID: 652704003 Matrix: WG Collect Date: 22-JAN-24

Receive Date: 24-JAN-24 Collector: Client

Parameter	Qualifier	Result U	ncertainty	MDC	TPU	RL	Units	PF	DF	Analys	t Date	Time	Batch	Mtd.
Rad Gas Flow Proportion		U												
Radium-228	U	0.815	+/-0.871	1.45	+/-0.896	3.00	pCi/L			JE1	02/15/24	0839	2562861	1
Radium-226+Radium-	228 Calculat	tion "See Pa	rent Product	s"										
Radium-226+228 Sum		2.22	+/-1.02	1.45	+/-1.09		pCi/L		1	NXL1	02/20/24	1250	2562864	2
Rad Radium-226 Lucas Cell, Ra226, Liq	uid "As Rece	eived"												
Radium-226		1.41	+/-0.527	0.435	+/-0.627	1.00	pCi/L			LXP1	02/08/24	1004	2559124	3

The following Analytical Methods were performed **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"	2562861	95.1	(15%-125%)

Notes:

Method

The MDC is a sample specific MDC.

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

Column headers are defined as follows:

DF: Dilution Factor Mtd.: Method DL: Detection Limit PF: Prep Factor Lc/LC: Critical Level **RL**: Reporting Limit

MDA: Minimum Detectable Activity TPU: Total Propagated Uncertainty

MDC: Minimum Detectable Concentration

Page 7 of 33 SDG: 652704

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

Project:

Client ID:

GPCC00100

GPCC001

Contact: Joju Abraham

Project: Arkwright CCR Groundwater ComplianceAP1-R

Client Sample ID: ARK-AP1PZ-2 Sample ID: 652704004 Matrix: WG Collect Date: 22-JAN-24

Receive Date: 24-JAN-24 Collector: Client

Parameter	Qualifier	Result U	ncertainty	MDC_	TPU	RL	Units	PF	DF A	Analys	t Date	Time	Batch	Mtd.
Rad Gas Flow Proporti GFPC Ra228, Liquid		0												
Radium-228		2.10	+/-1.00	1.40	+/-1.14	3.00	pCi/L			JE1	02/15/24	0839	2562861	1
Radium-226+Radium	-228 Calculat	ion "See Pa	rent Product	s"										
Radium-226+228 Sum		3.55	+/-1.16	1.40	+/-1.31		pCi/L		1	NXL1	02/20/24	1250	2562864	2
Rad Radium-226 Lucas Cell, Ra226, Li	quid "As Rece	rived"												
Radium-226		1.46	+/-0.583	0.556	+/-0.641	1.00	pCi/L			LXP1	02/08/24	1004	2559124	3

The following Analytical Methods were performed **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"	2562861	89.2	(15%-125%)

Notes:

Method

The MDC is a sample specific MDC.

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

Column headers are defined as follows:

DF: Dilution Factor Mtd.: Method DL: Detection Limit PF: Prep Factor Lc/LC: Critical Level **RL**: Reporting Limit

MDA: Minimum Detectable Activity TPU: Total Propagated Uncertainty

MDC: Minimum Detectable Concentration

Page 8 of 33 SDG: 652704

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 ComplianceAP1-R

ARK-AP1-FB-01 Client Sample ID: Project: GPCC00100 Sample ID: GPCC001 Client ID: 652704005

Matrix: WQ

Collect Date: 22-JAN-24 Receive Date: 24-JAN-24 Collector: Client

Parameter	Qualifier	Result U	ncertainty	MDC	TPU	RL	Units	PF	DF	Analys	t Date	<u> Fime</u>	Batch 1	Mtd.
Rad Gas Flow Proportion GFPC Ra228, Liquid		0												
Radium-228		1.96	+/-0.861	1.13	+/-0.997	3.00	pCi/L			JE1	02/15/24	0839	2562861	1
Radium-226+Radium-	-228 Calculat	ion "See Pa	irent Product	s"										
Radium-226+228 Sum		2.84	+/-0.963	1.13	+/-1.11		pCi/L		1	NXL1	02/20/24	1250	2562864	2
Rad Radium-226 Lucas Cell, Ra226, Lic	quid "As Rece	rived"												
Radium-226		0.883	+/-0.430	0.375	+/-0.478	1.00	pCi/L			LXP1	02/08/24	1004	2559124	3

The following Analytical Methods were performed 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"	2562861	93.7	(15%-125%)

Notes:

Method

The MDC is a sample specific MDC.

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

Column headers are defined as follows:

DF: Dilution Factor Mtd.: Method DL: Detection Limit PF: Prep Factor Lc/LC: Critical Level **RL**: Reporting Limit

MDA: Minimum Detectable Activity TPU: Total Propagated Uncertainty

MDC: Minimum Detectable Concentration

Page 9 of 33 SDG: 652704

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

Project:

Client ID:

GPCC00100

GPCC001

Contact: Joju Abraham

Project: Arkwright CCR Groundwater ComplianceAP1-R

Client Sample ID: ARK-AP1-FD-01 Sample ID: 652704006 Matrix: WG

Matrix: WG Collect Date: 22-JAN-24

Receive Date: 24-JAN-24
Collector: Client

Parameter	Qualifier	Result U	ncertainty	MDC	TPU	RL	Units	PF	DF A	nalyst	Date T	ime	Batch	Mtd.
Rad Gas Flow Proports GFPC Ra228, Liquid		0												
Radium-228	U	0.921	+/-0.766	1.21	+/-0.801	3.00	pCi/L			JE1	02/15/24 08	839	2562861	1
Radium-226+Radium	-228 Calculat	ion "See Pa	rent Product	s"										
Radium-226+228 Sum		1.66	+/-0.851	1.21	+/-0.892		pCi/L		1 N	NXL1	02/20/24 12	250	2562864	2
Rad Radium-226 Lucas Cell, Ra226, Li	quid "As Rece	eived"												
Radium-226		0.738	+/-0.371	0.332	+/-0.392	1.00	pCi/L		I	LXP1	02/08/24 10	036	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"	2562861	86.3	(15%-125%)

Notes:

The MDC is a sample specific MDC.

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

Column headers are defined as follows:

DF: Dilution Factor Mtd.: Method
DL: Detection Limit PF: Prep Factor
Lc/LC: Critical Level RL: Reporting Limit

MDA: Minimum Detectable Activity TPU: Total Propagated Uncertainty

MDC: Minimum Detectable Concentration

Page 10 of 33 SDG: 652704

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 ComplianceAP1-R

ARK-AP1-EB-01 Client Sample ID: Project: GPCC00100 Sample ID: GPCC001 Client ID: 652704007

Matrix: WQ Collect Date: 22-JAN-24 Receive Date:

24-JAN-24 Collector: Client

Parameter	Qualifier	Result U	ncertainty	MDC_	TPU	RL	Units	PF	DF	Analys	t Date Ti	me]	Batch I	Mtd.
Rad Gas Flow Prop GFPC Ra228, Lie	portional Counting	0												
Radium-228	U	1.27	+/-0.970	1.53	+/-1.02	3.00	pCi/L			JE1	02/15/24 08	39 2	2562861	1
Radium-226+Rad	dium-228 Calculai	tion "See Pa	irent Product	s"										
Radium-226+228 Sun	n	1.61	+/-1.03	1.53	+/-1.09		pCi/L		1	NXL1	02/20/24 12	50 2	2562864	2
Rad Radium-226 Lucas Cell, Ra22	?6, Liquid "As Reco	eived"												
Radium-226	U	0.342	+/-0.356	0.574	+/-0.364	1.00	pCi/L			LXP1	02/08/24 10	36 2	2559124	3

The following Analytical Methods were performed **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"	2562861	87.4	(15%-125%)

Notes:

Method

The MDC is a sample specific MDC.

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

Column headers are defined as follows:

DF: Dilution Factor Mtd.: Method DL: Detection Limit PF: Prep Factor Lc/LC: Critical Level **RL**: Reporting Limit

MDA: Minimum Detectable Activity TPU: Total Propagated Uncertainty

MDC: Minimum Detectable Concentration

Page 11 of 33 SDG: 652704

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

Project:

Client ID:

GPCC00100

GPCC001

Contact: Joju Abraham

Project: Arkwright CCR Groundwater ComplianceAP1-R

Client Sample ID: ARK-AP1PZ-3
Sample ID: 652704008
Matrix: WG
Collect Date: 23-JAN-24

Receive Date: 24-JAN-24
Collector: Client

Parameter	Qualifier	Result U	ncertainty	MDC	TPU	RL	Units	PF	DF Ana	yst Dat	e Time	Batch 1	Mtd.
Rad Gas Flow Proportion GFPC Ra228, Liquid		0											
Radium-228	U	1.14	+/-0.868	1.36	+/-0.915	3.00	pCi/L		JE1	02/15/2	4 0839	2562861	1
Radium-226+Radium-	228 Calculat	ion "See Pa	rent Product	s"									
Radium-226+228 Sum		1.95	+/-0.975	1.36	+/-1.03		pCi/L		1 NXI	1 02/20/2	4 1250	2562864	2
Rad Radium-226 Lucas Cell, Ra226, Liq	quid "As Rece	eived"											
Radium-226		0.813	+/-0.445	0.487	+/-0.473	1.00	pCi/L		LXF	1 02/08/2	4 1036	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"	2562861	85.9	(15%-125%)

Notes:

The MDC is a sample specific MDC.

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

Column headers are defined as follows:

DF: Dilution Factor Mtd.: Method
DL: Detection Limit PF: Prep Factor
Lc/LC: Critical Level RL: Reporting Limit

MDA: Minimum Detectable Activity TPU: Total Propagated Uncertainty

MDC: Minimum Detectable Concentration

Page 12 of 33 SDG: 652704

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

Certificate of Analysis

Company: Georgia Power Company, Southern

Client

Address: Company

241 Ralph McGill Blvd NE, Bin 10160

Atlanta, Georgia 30308 Report Date: February 20, 2024

Project:

Client ID:

GPCC00100

GPCC001

Contact: Joju Abraham

Project: Arkwright CCR Groundwater ComplianceAP1-R

Client Sample ID: ARK-AP1PZ-4
Sample ID: 652704009
Matrix: WG

Collect Date: 23-JAN-24 Receive Date: 24-JAN-24

Collector:

Parameter	Qualifier	Result U	ncertainty	MDC	TPU	RL	Units	PF	<u>DF</u>	Analys	t Date	Time	Batch	Mtd.
Rad Gas Flow Proporti GFPC Ra228, Liquid		0												
Radium-228	U	-0.670	+/-0.897	1.81	+/-0.897	3.00	pCi/L			JE1	02/15/24	0839	2562861	1
Radium-226+Radium-	-228 Calcula	tion "See Pa	arent Products	s"										
Radium-226+228 Sum	U	0.946	+/-1.00	1.81	+/-1.02		pCi/L		1	NXL1	02/20/24	1250	2562864	2
Rad Radium-226 Lucas Cell, Ra226, Lie	quid "As Rec	eived"												
Radium-226		0.946	+/-0.451	0.529	+/-0.486	1.00	pCi/L			LXP1	02/08/24	1036	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"	2562861	88	(15%-125%)

Notes:

The MDC is a sample specific MDC.

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

Column headers are defined as follows:

DF: Dilution Factor Mtd.: Method
DL: Detection Limit PF: Prep Factor
Lc/LC: Critical Level RL: Reporting Limit

MDA: Minimum Detectable Activity TPU: Total Propagated Uncertainty

MDC: Minimum Detectable Concentration

Page 13 of 33 SDG: 652704

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 ComplianceAP1-R

Client Sample ID: ARK-AP1PZ-5 Project: GPCC00100 GPCC001 Sample ID: Client ID: 652704010 Matrix:

WG

Collect Date: 23-JAN-24 Receive Date: 24-JAN-24 Client Collector:

Parameter	Qualifier	Result U	ncertainty	MDC	TPU	RL	Units	PF	DF	Analys	t Date	Time	Batch 1	Mtd.
Rad Gas Flow Proporti GFPC Ra228, Liquid	,	0												
Radium-228		1.14	+/-0.749	1.13	+/-0.803	3.00	pCi/L			JE1	02/15/24	0839	2562861	1
Radium-226+Radium	-228 Calculati	on "See Pa	irent Products	,"										
Radium-226+228 Sum		1.94	+/-0.844	1.13	+/-0.909		pCi/L		1	NXL1	02/20/24	1250	2562864	2
Rad Radium-226 Lucas Cell, Ra226, Li	quid "As Recei	ived"												
Radium-226		0.798	+/-0.389	0.339	+/-0.425	1.00	pCi/L			LXP1	02/08/24	1036	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"	2562861	94.3	(15%-125%)

Notes:

The MDC is a sample specific MDC.

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

Column headers are defined as follows:

DF: Dilution Factor Mtd.: Method DL: Detection Limit PF: Prep Factor Lc/LC: Critical Level **RL**: Reporting Limit

MDA: Minimum Detectable Activity TPU: Total Propagated Uncertainty

MDC: Minimum Detectable Concentration

Page 14 of 33 SDG: 652704

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 ComplianceAP1-R

Client Sample ID: ARK-AP1PZ-7 Project: GPCC00100 Sample ID: Matrix: GPCC001 652704011 Client ID:

WG

Collect Date: 23-JAN-24 Receive Date: 24-JAN-24 Collector: Client

Parameter	Qualifier	Result U	ncertainty	MDC	TPU	RL	Units	PF	DF Analy	st Date Tim	e Batch	Mtd.
Rad Gas Flow Proport GFPC Ra228, Liquid		0										
Radium-228	U	-1.18	+/-0.776	1.73	+/-0.776	3.00	pCi/L		JE1	02/15/24 0840	2562861	1
Radium-226+Radium	ı-228 Calcular	tion "See Pa	arent Product	s"								
Radium-226+228 Sum	U	0.892	+/-0.868	1.73	+/-0.880		pCi/L		1 NXL1	02/20/24 1250	2562864	1 2
Rad Radium-226 Lucas Cell, Ra226, L	iquid "As Rece	eived"										
Radium-226		0.892	+/-0.389	0.310	+/-0.415	1.00	pCi/L		LXP1	02/08/24 1036	2559124	1 3

The following Analytical Methods were performed Description

1 EPA 904.0/SW846 9320 Modified Calculation

EPA 903.1 Modified

Surrogate/Tracer Recovery	Test	Batch ID	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC Ra228, Liquid "As Received"	2562861	84.2	(15%-125%)

Notes:

Method

The MDC is a sample specific MDC.

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

Column headers are defined as follows:

DF: Dilution Factor Mtd.: Method DL: Detection Limit PF: Prep Factor **RL**: Reporting Limit Lc/LC: Critical Level

MDA: Minimum Detectable Activity TPU: Total Propagated Uncertainty

MDC: Minimum Detectable Concentration

Page 15 of 33 SDG: 652704

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 ComplianceAP1-R

Client Sample ID: ARK-AP1PZ-8 Project: GPCC00100 Sample ID: GPCC001 Client ID: 652704012

Matrix: WG

Collect Date: 23-JAN-24 Receive Date: 24-JAN-24 Collector: Client

Parameter	Qualifier	Result U	ncertainty	MDC	TPU	RL	Units	PF	DF	Analys	t Date	Time	Batch 1	Mtd.
Rad Gas Flow Proporti GFPC Ra228, Liquid		0												
Radium-228		2.67	+/-1.29	1.93	+/-1.46	3.00	pCi/L			JE1	02/15/24	0841	2562861	1
Radium-226+Radium	-228 Calcul	ation "See Pa	rent Produc	ts"										
Radium-226+228 Sum		2.87	+/-1.35	1.93	+/-1.51		pCi/L		1	NXL1	02/20/24	1250	2562864	2
Rad Radium-226 Lucas Cell, Ra226, Li	quid "As Re	ceived"												
Radium-226	U	0.200	+/-0.393	0.721	+/-0.394	1.00	pCi/L			LXP1	02/08/24	1036	2559124	3

The following Analytical Methods were performed

Method	Description
1	EPA 904.0/SW846 9320 Modified
2	Calculation
2	EDA 002 1 M-4:6:-4

EPA 903.1 Modified

Surrogate/Tracer Recovery	Test	Batch ID	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC Ra228, Liquid "As Received"	2562861	94.3	(15%-125%)

Notes:

The MDC is a sample specific MDC.

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

Column headers are defined as follows:

DF: Dilution Factor Mtd.: Method DL: Detection Limit PF: Prep Factor Lc/LC: Critical Level **RL**: Reporting Limit

MDA: Minimum Detectable Activity TPU: Total Propagated Uncertainty

MDC: Minimum Detectable Concentration

Page 16 of 33 SDG: 652704

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 ComplianceAP1-R

Client Sample ID: ARK-AP1PZ-9 Project: GPCC00100 Sample ID: 652704013 Client ID: GPCC001

Matrix: WG

Collect Date: 23-JAN-24
Receive Date: 24-JAN-24
Collector: Client

Parameter	Qualifier	Result U	ncertainty	MDC	TPU	RL	Units	PF	DF	Analys	t Date	Time	Batch	Mtd.
Rad Gas Flow Proporti GFPC Ra228, Liquid		U												
Radium-228		2.60	+/-1.17	1.69	+/-1.35	3.00	pCi/L			JE1	02/15/24	0841	2562861	1
Radium-226+Radium	-228 Calcul	ation "See Pa	rent Produc	ts"										
Radium-226+228 Sum		2.87	+/-1.19	1.69	+/-1.37		pCi/L		1	NXL1	02/20/24	1250	2562864	2
Rad Radium-226 Lucas Cell, Ra226, Li	quid "As Re	ceived"												
Radium-226	U	0.261	+/-0.220	0.286	+/-0.228	1.00	pCi/L			LXP1	02/08/24	1036	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"	2562861	93.3	(15%-125%)

Notes:

The MDC is a sample specific MDC.

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

Column headers are defined as follows:

DF: Dilution Factor Mtd.: Method
DL: Detection Limit PF: Prep Factor
Lc/LC: Critical Level RL: Reporting Limit

MDA: Minimum Detectable Activity TPU: Total Propagated Uncertainty

MDC: Minimum Detectable Concentration

Page 17 of 33 SDG: 652704

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

GPCC00100

GPCC001

Contact: Joju Abraham

Project: Arkwright CCR Groundwater ComplianceAP1-R

Client Sample ID: ARK-AP1PZ-10 Project: Sample ID: Client ID: 652704014 Matrix: WG

Collect Date:

23-JAN-24 Receive Date: 24-JAN-24 Client Collector:

Parameter	Qualifier	Result U	ncertainty	MDC	TPU	RL	Units	PF	DF	Analys	t Date	Time	Batch 1	Mtd.
Rad Gas Flow Proportion GFPC Ra228, Liquid		0												
Radium-228		1.31	+/-0.730	1.01	+/-0.802	3.00	pCi/L			JE1	02/15/24	0841	2562861	1
Radium-226+Radium-	228 Calculat	tion "See Pa	rent Product	s"										
Radium-226+228 Sum		4.89	+/-1.18	1.01	+/-1.44		pCi/L		1	NXL1	02/20/24	1250	2562864	2
Rad Radium-226 Lucas Cell, Ra226, Lic	quid "As Rece	eived"												
Radium-226		3.59	+/-0.925	0.359	+/-1.20	1.00	pCi/L			LXP1	02/06/24	1039	2559126	3

The following Analytical Methods were performed 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"	2562861	93.7	(15%-125%)

Notes:

Method

The MDC is a sample specific MDC.

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

Column headers are defined as follows:

DF: Dilution Factor Mtd.: Method DL: Detection Limit PF: Prep Factor Lc/LC: Critical Level **RL**: Reporting Limit

MDA: Minimum Detectable Activity TPU: Total Propagated Uncertainty

MDC: Minimum Detectable Concentration

Page 18 of 33 SDG: 652704

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 ComplianceAP1-R

Client Sample ID: ARK-AP1PZ-11 Project: GPCC00100 Sample ID: 652704015 Client ID: GPCC001

Matrix: WG

Collect Date: 23-JAN-24 Receive Date: 24-JAN-24 Collector: Client

Parameter	Qualifier	Result U	ncertainty	MDC	TPU	RL	Units	PF	DF A	nalys	t Date	Гіте	Batch 1	Mtd.
Rad Gas Flow Proportion GFPC Ra228, Liquid		0												
Radium-228	U	1.07	+/-0.773	1.15	+/-0.820	3.00	pCi/L			JE1	02/15/24 ()842	2562861	1
Radium-226+Radium-														
Radium-226+228 Sum		1.43	+/-0.846	1.15	+/-0.891		pCi/L		1 N	XL1	02/20/24 1	1250	2562864	2
Rad Radium-226 Lucas Cell, Ra226, Lic														
Radium-226	U	0.357	+/-0.344	0.514	+/-0.349	1.00	pCi/L		I	XP1	02/06/24 1	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"	2562861	75.3	(15%-125%)

Notes:

The MDC is a sample specific MDC.

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

Column headers are defined as follows:

DF: Dilution Factor Mtd.: Method
DL: Detection Limit PF: Prep Factor
Lc/LC: Critical Level RL: Reporting Limit

MDA: Minimum Detectable Activity TPU: Total Propagated Uncertainty

MDC: Minimum Detectable Concentration

Page 19 of 33 SDG: 652704

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 ComplianceAP1-R

ARK-AP1-EB-02 Client Sample ID: Project: GPCC00100 Sample ID: GPCC001 Client ID: 652704016

Matrix: WQ

Collect Date: 23-JAN-24 Receive Date: 24-JAN-24 Collector: Client

Parameter	Qualifier	Result U	ncertainty	MDC	TPU	RL	Units	PF	DF A	nalys	t Date	<u> Fime</u>	Batch 1	Mtd.
Rad Gas Flow Proporti GFPC Ra228, Liquid		0												
Radium-228		1.19	+/-0.784	1.17	+/-0.842	3.00	pCi/L			JE1	02/15/24	0842	2562861	1
Radium-226+Radium-	-228 Calculo	ation "See Pa	rent Produci	s"										
Radium-226+228 Sum		1.51	+/-0.845	1.17	+/-0.900		pCi/L		1 N	VXL1	02/20/24	1250	2562864	2
Rad Radium-226 Lucas Cell, Ra226, Lic														
Radium-226	U	0.314	+/-0.314	0.442	+/-0.318	1.00	pCi/L		I	LXP1	02/06/24	1039	2559126	3

The following Analytical Methods were performed **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"	2562861	91.2	(15%-125%)

Notes:

Method

The MDC is a sample specific MDC.

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

Column headers are defined as follows:

DF: Dilution Factor Mtd.: Method DL: Detection Limit PF: Prep Factor Lc/LC: Critical Level **RL**: Reporting Limit

MDA: Minimum Detectable Activity TPU: Total Propagated Uncertainty

MDC: Minimum Detectable Concentration

Page 20 of 33 SDG: 652704

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 ComplianceAP1-R

Client Sample ID: ARK-AP1-FD-02 Project: GPCC00100 Sample ID: 652704017 Client ID: GPCC001

Matrix: WG

Collect Date: 23-JAN-24
Receive Date: 24-JAN-24
Collector: Client

Parameter	Qualifier	Result U	ncertainty	MDC	TPU	RL	Units	PF	DF	Analys	t Date	Time	Batch	Mtd.
Rad Gas Flow Proportion GFPC Ra228, Liquid		0												
Radium-228	U	-0.106	+/-0.724	1.40	+/-0.724	3.00	pCi/L			JE1	02/15/24	0842	2562861	1
Radium-226+Radium-														
Radium-226+228 Sum		2.22	+/-0.974	1.40	+/-1.08		pCi/L		1	NXL1	02/20/24	1250	2562864	2
Rad Radium-226 Lucas Cell, Ra226, Lie	quid "As Rece													
Radium-226		2.22	+/-0.651	0.339	+/-0.796	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"	2562861	90.9	(15%-125%)

Notes:

The MDC is a sample specific MDC.

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

Column headers are defined as follows:

DF: Dilution Factor Mtd.: Method
DL: Detection Limit PF: Prep Factor
Lc/LC: Critical Level RL: Reporting Limit

MDA: Minimum Detectable Activity TPU: Total Propagated Uncertainty

MDC: Minimum Detectable Concentration

Page 21 of 33 SDG: 652704

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 ComplianceAP1-R

Client Sample ID: ARK-AP1-FB-02 Project: GPCC00100 Sample ID: 652704018 Client ID: GPCC001

Matrix: WQ

Collect Date: 23-JAN-24
Receive Date: 24-JAN-24
Collector: Client

Parameter	Qualifier	Result U	ncertainty	MDC	TPU	RL	Units	PF	DF	Analys	t Date	Time	Batch	Mtd.
Rad Gas Flow Proporti GFPC Ra228, Liquid		0												
Radium-228		1.80	+/-1.11	1.70	+/-1.20	3.00	pCi/L			JE1	02/15/24	0842	2562861	1
Radium-226+Radium-	-228 Calcular	tion "See Pa	rent Produci	ts"										
Radium-226+228 Sum		2.63	+/-1.19	1.70	+/-1.29		pCi/L		1	NXL1	02/20/24	1250	2562864	2
Rad Radium-226 Lucas Cell, Ra226, Liquid "As Received"														
Radium-226		0.834	+/-0.444	0.427	+/-0.479	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"	2562861	87.3	(15%-125%)

Notes:

The MDC is a sample specific MDC.

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

Column headers are defined as follows:

DF: Dilution Factor Mtd.: Method
DL: Detection Limit PF: Prep Factor
Lc/LC: Critical Level RL: Reporting Limit

MDA: Minimum Detectable Activity TPU: Total Propagated Uncertainty

MDC: Minimum Detectable Concentration

Page 22 of 33 SDG: 652704

Radiochemistry Technical Case Narrative Georgia Power Company SDG #: 652704

Product: Radium-226+Radium-228 Calculation

Analytical Method: Calculation

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

Analytical Batch: 2562864

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

GEL Sample ID#	Client Sample Identification
652704001	ARK-AP1GWA-1
652704002	ARK-AP1GWA-2
652704003	ARK-AP1PZ-1
652704004	ARK-AP1PZ-2
652704005	ARK-AP1-FB-01
652704006	ARK-AP1-FD-01
652704007	ARK-AP1-EB-01
652704008	ARK-AP1PZ-3
652704009	ARK-AP1PZ-4
652704010	ARK-AP1PZ-5
652704011	ARK-AP1PZ-7
652704012	ARK-AP1PZ-8
652704013	ARK-AP1PZ-9
652704014	ARK-AP1PZ-10
652704015	ARK-AP1PZ-11
652704016	ARK-AP1-EB-02
652704017	ARK-AP1-FD-02
652704018	ARK-AP1-FB-02

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: 2562861

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

GEL Sample ID#	Client Sample Identification
652704001	ARK-AP1GWA-1
652704002	ARK-AP1GWA-2
652704003	ARK-AP1PZ-1

Page 23 of 33 SDG: 652704

652704004	ARK-AP1PZ-2
652704005	ARK-AP1-FB-01
652704006	ARK-AP1-FD-01
652704007	ARK-AP1-EB-01
652704008	ARK-AP1PZ-3
652704009	ARK-AP1PZ-4
652704010	ARK-AP1PZ-5
652704011	ARK-AP1PZ-7
652704012	ARK-AP1PZ-8
652704013	ARK-AP1PZ-9
652704014	ARK-AP1PZ-10
652704015	ARK-AP1PZ-11
652704016	ARK-AP1-EB-02
652704017	ARK-AP1-FD-02
652704018	ARK-AP1-FB-02
1205639369	Method Blank (MB)
1205639370	652704001(ARK-AP1GWA-1) Sample Duplicate (DUP)
1205639371	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
1205639369 (MB)	Radium-228	Result: 1.68 pCi/L > MDA: 1.42 pCi/L <= RDL: 3.00 pCi/L

<u>Product:</u> Lucas Cell, Ra226, Liquid <u>Analytical Method:</u> 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
652704001	ARK-AP1GWA-1
652704002	ARK-AP1GWA-2
652704003	ARK-AP1PZ-1
652704004	ARK-AP1PZ-2
652704005	ARK-AP1-FB-01
652704006	ARK-AP1-FD-01
652704007	ARK-AP1-EB-01

652704008	ARK-AP1PZ-3
652704009	ARK-AP1PZ-4
652704010	ARK-AP1PZ-5
652704011	ARK-AP1PZ-7
652704012	ARK-AP1PZ-8
652704013	ARK-AP1PZ-9
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.

<u>Product:</u> Lucas Cell, Ra226, Liquid <u>Analytical Method:</u> 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
652704014	ARK-AP1PZ-10
652704015	ARK-AP1PZ-11
652704016	ARK-AP1-EB-02
652704017	ARK-AP1-FD-02
652704018	ARK-AP1-FB-02
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

Page 25 of 33 SDG: 652704

The matrix spike, 1205632628 (Non SDG 652607001MS), 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 26 of 33 SDG: 652704

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

QC Summary

Client: Georgia Power Company, Southern Company

241 Ralph McGill Blvd NE, Bin 10160

Atlanta, Georgia

Contact: Joju Abraham

Workorder: 652704

Report Date: February 20, 2024
Page 1 of 3

Parmname	NOM	Sample (Qual	QC	Units	RPD%	REC%	Range Anlst	Date Time
Rad Gas Flow									
Batch 2562861 -									
QC1205639370 652704001 DUP									
Radium-228	U	-0.0261	U	-0.841	pCi/L	0		N/A JE1	02/15/2408:41
	Uncert:	+/-1.04		+/-1.19					
	TPU:	+/-1.04		+/-1.19					
QC1205639371 LCS									
Radium-228	73.4			74.5	pCi/L		102	(75%-125%) JE1	02/15/2408:41
	Uncert:			+/-3.93					
OC1205/20270 MD	TPU:			+/-19.4					
QC1205639369 MB Radium-228				1 60	pCi/L			JE1	02/15/2408:41
Radium-228	Uncert:			1.68 +/-0.969	pc1/L			JE1	U2/13/24U0.41
	TPU:			+/-0.909					
Rad Ra-226	110.			1/-1.00					
Batch 2559124 -									
QC1205632623 652694001 DUP									ļ
Radium-226		1.46		1.90	pCi/L	25.8		(0% - 100%) LXP1	02/08/2411:08
Radium 220	Uncert:	+/-0.552		+/-0.638	PCL	20.0		(0/0 100/0) 2:22 1	02,00,2111.00
	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	120	1.46		1.40	C: /I		100	(550/ 1050/) I WD1	02/00/2411 00
Radium-226	128	1.46		140	pCi/L		108	(75%-125%) LXP1	02/08/2411:08
	Uncert:	+/-0.552		+/-11.2					
Batch 2559126 -	TPU:	+/-0.595		+/-34.0					
QC1205632627 652607001 DUP		2.51		4.17	C: /I	17.1		(00/ 200/) LVD1	00/06/0410 56
Radium-226	I In cont.	3.51		4.17	pCi/L	17.1		(0%-20%) LXP1	02/06/2410:56
	Uncert: TPU:	+/-0.864 +/-1.19		+/-1.04 +/-1.23					
QC1205632629 LCS	ITU.	+/-1.19		⊤/-1.∠ <i>3</i>					
Radium-226	27.3			21.0	pCi/L		76.8	(75%-125%) LXP1	02/06/2410:56
Rudram 220	Uncert:			+/-2.02	P~~=		,	(10/0 120/0) 212	02,00,2.10.2
	TPU:			+/-3.69					
QC1205632626 MB									
Radium-226			U	0.344	pCi/L			LXP1	02/06/2410:56

Page 27 of 33 SDG: 652704

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

QC Summary

Workorder: 652704 Page 2 of 3 Sample Qual **Units Parmname NOM** QC RPD% REC% Range Anlst Date Time Rad Ra-226 2559126 Batch Uncert: +/-0.402 TPU: +/-0.405OC1205632628 652607001 MS Radium-226 137 3.51 119 pCi/L 84.1 (75%-125%) LXP1 02/06/2410:56 +/-0.864 +/-10.4Uncert: +/-1.19 +/-25.1 TPU:

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

Page 28 of 33 SDG: 652704

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

QC Summary

Workorder: 652704

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.

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.

Page 29 of 33 SDG: 652704

^{**} 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.

Page: 1 of 2					+		(•	((J	GEL 1	GEL Laboratories, LLC		
21.03.0434				200	2	\mathcal{L}		D	70	0770	_	2040	2040 Savage Road		
COC Number (1): 5 Sample Cooler(s)		ुन्। Chain of		Chemistry Badiochemist stody and Analyti	Radioche d Anal	Sa	Radiobioassay I Specially I Request ζ ζ	Specialt	Ly Analytics		h	Charle Phone	Charleston, SC 29407 Phone: (843) 556-8171		
PO Number: GPC82177-0005	GEL Work Order Number:	nber:		GEL	Project	GEL Project Manager: Erin Trent	Erin Tr					Fax: (8	Fax: (843) 766-1178		
Client Name: Georgia Power		Phone # (93		7-344-6533)			Samp	Sample Analysis Requested (5)	lysis F	sednes	ted (5)	(Fill i	(Fill in the number of containers for each test)	ainers for each test)	
Project/Site Name: Plant Arkwright Ash Pond 1	11	Fax: N/A			Š	Should this	this	s	IN		IN	IN	IN	< Preservative Type (6)	ype (6)
Address: 241 Ralph McGill Blvd SE, Atlanta,	, GA 30308					sample be	e be			(91		p			
Collected By: Zach Levy, John Myer, Dylan Ripley, Emily Scheiben	Send Results To: jabraham@southernco.com El Cassidy.Sutherland@stantec.com	asouthernco.con	ı EDD@s	OD@stantec.com	-		sp.res		SC	FI, Sulfa	e value - watercook	228 Cmb	(B0\/\psi\/)	Comments	(2)
Sample ID * For composites - indicate start and stop date time	*Date Collected o date/time (mm-dd-yy)	*Time ted Collected (Military)	QC Code (2)	Field Filtered (3)	Sample Matrix (4)	Radioactive yes, please su isotopic info.	onwonM (7) possible Haza	Total numbe	Metals App.	(SM Methoday) (S) Anions (Cl, 1909)	Metals App.	KAD 226-2	Мегсигу	(task_code: ARK-CCK- ASSMT-2024S1)	S1)
ARK-AP1GWA-1	1/22/2024	4 14:35	z	z	MG			9	X	×	×	×	×		
ARK-APIGWA-2	1/22/2024	4 14:45	Z	z	MG			9	X	×	×	×	×		
ARK-AP1PZ-1	1/22/2024	4 16:40	z	Z	MG			9	×	×	×	×	×		
ARK-APIPZ-2	1/22/2024	4 16:40	z	z	MG			6 3	×	×	×	×	×		
ARK-AP1-FB-01	1/22/2024	4 15:00	FB	z	WQ			X 9	×	×	×	×	X		
ARK-AP1-FD-01	1/22/2024	4 NA	Ð	z	WQ			X 9	X	×	×	×	×		
ARK-API-EB-01	1/22/2024	4 17:15	EB	z	WQ			X 9	X	×	×	×	×		
ARK-AP1PZ-3	1/23/2024	4 11:45	z	z	MG			X 9	×	×	×	×	×		
ARK-AP1PZ-4	1/23/2024	4 13:10	z	Z	MG			X 9	×	×	×	×	×		
ARK-AP1PZ-5	1/23/2024	14:50	z	Z	WG			X 9	×	×	×	×	X		
	Chain of Custody Signatures	res					TAT Re	Requested:		Normal:	X	Rush:	Specify:	(Subject to Surcharge)	charge)
Relinquished By (Signed) Print Name	Date Received by (signed)		Print Name		Date	I	Fax Results: [] Yes	ts: []	1	N[X]					
1 Offmer Stantee	124/24/18	na	May	18	1294		Select Deliverable: [iverable)[]:] C of A	[]00] QC Summary	[] level 1	X Level 2 [] Level 3	[] Level
2	2 00	moma	B	c//	24/24133	5	Additional Remarks:	l Remai	ks:					8.	
3	3					1	For Lab Receiving Use Only: Custody Seal Intact? [Receivin	g Use	Only:	Sustod	Seal I	itact? [] Yes [] No	o Cooler Temp:	7°C
> For sample shipping and delivery details, see Sample Receipt & Review form (SRR.)	ee Sample Receipt & Review f	orm (SRR.)				Sample Collection Time Zone: [X] Eastern	Mection	Time Z	ne: [X] Ea	stern	[] Pacific	[] Central	[] Mountain [] Other:	er:
1.) Chain of Custody Number = Client Determined 2.) Of Codes: N = Normal Samula TB = Trin Black FD = Field Dandisons DB = Emissions Dlack MC = Normal Samula Codes (N = Normal Samula TB = Trin Black FD = Field Dandisons DB = Emissions Dlack MC = Normal Samula TB = Trin Black FD = Field Dandisons DB = Emissions Dlack MC = Normal Samula Samula Samula TB = Trin Black FD = Field Dandisons DB = Emissions Dlack MC = Normal Samula Sa	= Field Dunlingte FD = Equipment D	MS - Mortin	o Clino	Men	Silve		-	,	C	2					
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	- for ves the sample was field filtered or	- N - for sample w	as not field	filtered.	de vinani	ne Dupincate	Sample, G	Ol ab,		Sile					
Matrix Codes: DW=Drinking Water, GW=Groundwater, SW=Surface Water, WW=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	er, SW=Surface Water, WW=Waste W	ater, W=Water, M	L=Misc Li	quid, SO=S	oil, SD=Se	diment, SL=S	ludge, SS=	olid Was	ie, 0 =0	l, F=Filte	r, P=Wip	e, U=Ur	ne, 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	sted (i.e. 8260B, 6010B/7470A) and nu	nber of containers	provided f	or each (i.e.	8260B - 3	-3, 6010B/7470A -1).	1 - 1)								
5.) Preservative Type: HA = Hydrochloric Acid, NI = Nitric Acid, SH = Sodium Hydroxide, SA = Sulfuric Acid, AA = Ascorbic Acid, HX = Hexane, ST = Sodium Thiosulfare, If no preservative is added = leave field blank or KNOWN OR POSSIBLE HAZARDS	ic Acid, SH = Sodium Hydroxide, SA =	Sulfuric Acid, AA = A	= Ascorbi	c Acid, HX	= Hexane,	ST = Sodium	m Thiosulfate	. If no pre	servativ	is added	l = leave	ield blar			
RCRA Metals As = Arsenic Hg= Mercury Ba = Barium Se= Selenium Cd = Cadmium Ag= Silver Cr = Chromium MR= Misc. RCRA metals Pb = Lead	FC = Flammable/Ignitable CO = Corrosive RE = Reactive TSCA Regulated PCB = Polychlorinated hinherwys] [Elster waste LW= Listed Waste (F.K.P and U-listee Waste code(s):	Elector waste (F.K.P and U-listed wastes.) Waste code(s):	tes.)		OTE Other / Unknown (i.e.: High/low pH, asbest misc. health hazards, etc., Description:	T / Unka Tow pH h hazar n:	lown , asbes ds, etc	tos, be	yllium,	irritar	rease provate any add regarding handling and s. (i.e.: Origin of sample(s, from, odd matrices, etc.)	rease provide any administration useful below Tegarding handling and/or disposal concerns. (i.e.: High/low pH, asbestos, beryllium, irritants, (i.e.: Origin of sample(s), type of site collected from, odd matrices, etc.) Description:	ected
	- C														

					1000													
2					(-!	, ,			152707	27	20		BEL L	GEL Laboratories, LLC	Ŋ		
175569434				.U		J . T .				,				2040 S	2040 Savage Road			
COC Number (1): 5 Sample Cooler(s)		Cha	Chain of C	ustod	Chemistry Rz fodv and	Analy	Custody and Analytical Requests	Redictions and Specialty Analytics Redicted Control Control	ay spe	cialty A	nalyfics J	٥,		harles hone.	Charleston, SC 29407 Phone: (843) 556 9171	7		-
82177	GEL Work Order Number:	mber:			SEL P	oject A	GEL Project Manager: Erin Trent	: Erin	Trent		1		T	ax: (8	Fax: (843) 766-1178			
Client Name: Georgia Power		Phone	Phone # (937-	7-344-6533)	33)			Sar	Sample Analysis Requested (5)	nalys	is Re	queste		Fill in	the number of	of conta	(Fill in the number of containers for each test)	
Project/Site Name: Plant Arkwright Ash Pond 1		Fax: N/A	Α,				Shoul	Should this	S	IN				IN	IN		< Preservative Type (6)	(9
ddress: 241 Ralph McGill Blvd SE, Atlanta, GA 30308	A 30308						samp	sample be considered:	, ainer	(BC	(3		(B)	p				
Collected By: Zach Levy, John Myer, Dylan Ripley, Emily Scheiben	Send Results To: jabraham@southernco.com El Cassidy.Sutherland@stantec.com	asouthernce ec.com	.com ED	DD@stantec.com	ec.com		H)	ırds	, ot cont	709) III)Z09) AI	dmD 82	(80747)		Comments	
Sample ID * For composites - indicate start and stop date/time	*Date Collected		_ ^	QC Code (2) Fi	Field (3)	Sample Matrix (4)	Radioactive yes, please sup isotopic info.)	(7) Known or possible Haza	Total number	Metals App.	TD (SM Metho	(300.0 Rev.)	Metals App.	KAD 226-2	, метсшу ((task_code: ARK-CCR- ASSMT-2024S1)	-
ARK-APIPZ-7		_		z	z	MG			. 9	×	×	×	×	×	×	1		
ARK-AP1PZ-8	1/23/2024		11:40	z	z	ВM			9	×	×	×	×	×	×			
ARK-AP1PZ-9	1/23/2024		13:35	z	z	MG			9	×	×	×	×	×	×			T
ARK-AP1PZ-10	1/23/2024	24 16:00	00	Z	z	MG			9	×	×	×	×	×	×			T
ARK-AP1PZ-11	1/23/2024		17:15	Z	z	MG			9	×	×	×	×	×	×			
ARK-AP1-EB-02	1/23/2024	24 17:00		EB	z	WQ			9	×	×	×	×	×	×			Γ
ARK-AP1-FD-02	1/23/2024	24 NA		ED	z	WQ			9	×	×	×	×	×	×			
ARK-AP1-FB-02	1/23/2024	24 15:55		FB	z	WQ			9	×	×	×	×	×	×			Τ
	Chain of Custody Signatures	nres	1	1				TAT	TAT Requested:	sted:	Normal:	nai:	×	Rush:	Specify:		(Subject to Surcharge)	ge)
Relinquished By (Signed) Print Name	Date Received	Received by (signed)	Print	Print Name	Date	te		Fax Results: [] Yes	sults:	l Ye	İ	[X]No						Γ
1 Manne Stantec	124/24	Sa	1/2	12/12	12021			Select Deliverable: [] C of A [] QC Summary	Deliver	able: [) C o	fA [100	nmuş	ry [] level 1	1	[X Level 2 [] Level 3 [] Leve	evel
Jan Jan Jan Jan Jan Jan Jan Jan Jan Jan	de		1					Additional Remarks.	nal Re	marks.								
3	3							For La	b Rece	iving	Use O	dy: C	ustody	Seal In	For Lab Receiving Use Only: Custody Seal Intact? [] Yes	[].No	o Cooler Temp: 7 °C	C
> For sample shipping and delivery details, see Sample Receipt & Review form (SRR.)	Sample Receipt & Review	form (SRR.				-1	Sample Collection Time Zone : [X] Eastern	Collectio	n Tim	e Zon	x] ::] East		[] Pacific	fic [] Central		[] Mountain [] Other:	
1.) Chain of Custody Number = Client Determined				-			:		((
(2.) Que codes: N = Normal Sample, 1B = 1 rpp Blank, F D = Freto Duplicate, EB = Equipment Blank, MS = Matrix Spike Sample, MSD = Matrix Spike Duplicate Sample, G = Grab, C = Composite 3.) Field Filtered: For hourd matrices, indicate with a - Y - for ves the sample was field filtered or - N - for sample was not field Filtered.	Fred Dupircate, E.B. = Equipment I	stank, MS = M	atrix Spike	s Sample, it field filt	MSD = M ered	аптх эртк	e Dupincate	s sample,	ق ا	۵, د =	isodwo	e.						
4.) Matrix Codes: DW =Drinking Water, GW =Groundwater, SW =Surface Water, WW =Waste Water, W =Waste, W =Miser, W ,	SW=Surface Water, WW=Waste	Water, W=Wat	er, ML=M	isc Liquic	SO=Soil	SD=Sed	iment, SL=	Sludge, S	S=Solid	Waste,	D=Oil, I	=Filter,	P=Wip	, U=Uri	ie, F=Fecal, N=N	asal		
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).	l (i.e. 8260B, 6010B/7470A) and n	umber of conta	iners provi	ded for ea	ch (i.e. 82	60B -3,	S010B/7470						í					
6.) Preservative Type: HA = Hydrochloric Acid, NI = Nitric Acid, SH = Sodium Hydroxide, SA = Sulfuric Acid, AA = Ascorbic Acid, HX	Acid, SH = Sodium Hydroxide, SA	= Sulfuric Acio	1, AA = As	corbic Ac	id, HX =	Hexane, S	= Hexane, \mathbf{ST} = Sodium Thiosulfate, If no preservative is added = leave field blank	n Thiosul	fate, If n	o preser	ative is	added =	leave fi	eld blan				
	Characteristic Hazards FL = Flammable/Ignitable CO = Corrosive RE = Reactive		Listed Waste LW= Listed Waste (F, K, P and U-listed wastes.) Waste code(s):	d Waste U-liste	d wastes			Other OT= Other / Unknown (i.e.: High/low pH, asbesti misc. health hazards, etc.) Description:	her / Ugh/low	Inknov pH, a	vn sbesto. etc.)	s, bery	llium,	irritan	Please provide any addi regarding handling and s. (i.e.: Origin of sample(s from, odd matrices, etc.)	vide an handlin n of san matrices	Other OT=Other / Unknown regarding handling and/or disposal concerns. (i.e.: High/low pH, asbestos, beryllium, irritants, (i.e.: Origin of sample(s), type of site collected from, odd matrices, etc.) Description:	g %
Cr = Caumun Ag= Savet Cr = Chromium MR= Misc. RCRA metals Pb = Lead	PCB = Polychlorinated biphenyls	1					I Is a							11			P.	П
														1				П

652694

652704 652703

GEL Laboratories LLC

CI	ent: GPCC			_	SAMPLE RECEIPT & REVIEW FORM
\vdash					G/AR/COC/Work Order:
Re	ceived By: QG			Da	te Received: 124/24 Circle Applicable:
	Carrier and Tracking Number				FedEx Express FedEx Ground UPS Field Services Courier Other
Sus	pected Hazard Information	Yes	ž	*[f	Net Counts > 100cpm on samples not marked "radioactive", contact the Radiation Safety Croup for further investigation.
	Pooren America Indiana	34	-	1	
<u>A)S</u>	hipped as a DOT Hazardous?		_		ard Class Shipped: UN#: If UN2910, Is the Radioactive Shipment Survey Compliant? YesNo
	Did the client designate the samples are to be ived as radioactive?		_		notation or radioactive stickers on containers equal client designation.
	oid the RSO classify the samples as pactive?		/	Max	timum Net Counts Observed* (Observed Counts - Area Background Counts): CPM / hR/Hr Classified as: Rad 1 Rad 2 Rad 3
D) :	Did the client designate samples are hazardous?	ļ	/	1,33	position or hazard labels on containers equal chent designation or B is yes, select Hazards below.
E) I	Pid the RSO identify possible hazards?		/	1	PCB's Flammable Foreign Soil RCRA Asbestos Beryllium Other:
	Sample Receipt Criteria	Yes	¥	ž	Comments/Qualifiers (Required for Non-Conforming Items)
1	Shipping containers received intact and sealed?	_	7 a		Circle Applicable: Seals broken Danuaged container Leaking container Other (describe)
2	Chain of custody documents included with shipment?	/	100		Circle Applicable: Client contacted and provided COC COC created upon receipt
3	Samples requiring cold preservation within $(0 \le 6 \text{ deg. C})$?*	/			Preservation Method: Wertee dee Packs Dry ice None Other: *all temperatures are presented in Celsius TEMP: 1 2
4	Daily check performed and passed on IR temperature gun?	~	A Sales		Temperature Device Serial #: <u> R1-23</u> Secondary Temperature Device Serial # (If Applicable):
5	Sample containers intact and sealed?	/	รักเ		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, Lotti:
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?		12 d))	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?			//	
	COC form is properly signed in relinquished/received sections?		•		Circle Applicable; Not relinquished Other (describe)
Com	ments (Use Continuation Form if needed):				
	,				
	•				
					(h) 5 - 4/25/7 h

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	SC002 SC00012
New York NELAP	11501
North Carolina	233
North Carolina SDWA	45709
North Dakota	R-158
Oklahoma Ponnsylvonia NEL AD	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





February 09, 2024

Kelley Sharpe ARCADIS - Atlanta 2839 Paces Ferry Rd STE 900 Atlanta, GA 30339

RE: Project: Plant Arkwright-CCR Ash Pond

Pace Project No.: 92709786

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 - Greensburg

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

Sincerely,

Maiya Parks

maiya.parks@pacelabs.com

Maiya Tacks

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 Jennifer Kolbe, Stantec Consulting Laura Midkiff, Southern Company Noelia Muskus Ruiz, Georgia Power Tina Sullivan, ERM







CERTIFICATIONS

Project: Plant Arkwright-CCR Ash Pond

Pace Project No.: 92709786

Pace Analytical Services Pennsylvania

1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601

ANAB DOD-ELAP Rad Accreditation #: L2417 ANABISO/IEC 17025:2017 Rad Cert#: L24170

Alabama Certification #: 41590 Arizona Certification #: AZ0734

Arkansas Certification

California Certification #: 2950 Colorado Certification #: PA01547 Connecticut Certification #: PH-0694

EPA Region 4 DW Rad

Florida/TNI Certification #: E87683 Georgia Certification #: C040

Guam Certification Hawaii Certification Idaho Certification Illinois Certification

Indiana Certification lowa Certification #: 391 Kansas Certification #: E-10358 Kentucky Certification #: KY90133 KY WW Permit #: KY0098221 KY WW Permit #: KY0000221

Louisiana DHH/TNI Certification #: LA010 Louisiana DEQ/TNI Certification #: 04086

Maine Certification #: 2023021 Maryland Certification #: 308

Massachusetts Certification #: M-PA1457 Michigan/PADEP Certification #: 9991 Montana Certification #: Cert0082 Nebraska Certification #: NE-OS-29-14 Nevada Certification #: PA014572023-03 New Hampshire/TNI Certification #: 297622 New Jersey/TNI Certification #: PA051

New Jersey/TNI Certification #: PA05 New Mexico Certification #: PA01457 New York/TNI Certification #: 10888 North Carolina Certification #: 42706 North Dakota Certification #: R-190 Ohio EPA Rad Approval: #41249

Missouri Certification #: 235

Oregon/TNI Certification #: PA200002-015 Pennsylvania/TNI Certification #: 65-00282 Puerto Rico Certification #: PA01457 Rhode Island Certification #: 65-00282

South Dakota Certification

Tennessee Certification #: TN02867

Texas/TNI Certification #: T104704188-22-18
Utah/TNI Certification #: PA014572223-14
USDA Soil Permit #: 525-23-67-77263
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 460198
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C

Wisconsin Approve List for Rad



SAMPLE SUMMARY

Project: Plant Arkwright-CCR Ash Pond

Pace Project No.: 92709786

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92709786001	ARK-BC-0.3	Water	01/23/24 13:48	01/24/24 11:06
92709786002	ARK-BC-0.1	Water	01/23/24 13:05	01/24/24 11:06
92709786003	ARK-OR-0.8	Water	01/23/24 10:34	01/24/24 11:06
92709786004	ARK-OR-0.1	Water	01/23/24 11:53	01/24/24 11:06
92709786005	ARK-OR-0.3	Water	01/23/24 11:14	01/24/24 11:06
92709786006	ARK-OR+0.25	Water	01/23/24 12:08	01/24/24 11:06



SAMPLE ANALYTE COUNT

Project: Plant Arkwright-CCR Ash Pond

Pace Project No.: 92709786

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92709786001	ARK-BC-0.3	EPA 903.1	LL1	1	PASI-PA
		EPA 904.0	JJS1	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92709786002	ARK-BC-0.1	EPA 903.1	LL1	1	PASI-PA
		EPA 904.0	JJS1	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92709786003	ARK-OR-0.8	EPA 903.1	LL1	1	PASI-PA
		EPA 904.0	JJS1	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92709786004	ARK-OR-0.1	EPA 903.1	LL1	1	PASI-PA
		EPA 904.0	JJS1	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92709786005	ARK-OR-0.3	EPA 903.1	LL1	1	PASI-PA
		EPA 904.0	JJS1	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92709786006	ARK-OR+0.25	EPA 903.1	LL1	1	PASI-PA
		EPA 904.0	JJS1	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA

PASI-PA = Pace Analytical Services - Greensburg



Project: Plant Arkwright-CCR Ash Pond

Pace Project No.: 92709786

Sample: ARK-BC-0.3 PWS:	Lab ID: 9270 Site ID:	9786001 Collected: 01/23/24 13:48 Sample Type:	Received:	01/24/24 11:06	Matrix: Water	
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical	Services - Greensburg				
Radium-226	EPA 903.1	0.000 ± 0.516 (1.02) C:NA T:85%	pCi/L	02/07/24 14:4	1 13982-63-3	
	Pace Analytical	Services - Greensburg				
Radium-228	EPA 904.0	0.423 ± 0.353 (0.700) C:93% T:69%	pCi/L	02/08/24 15:1	5 15262-20-1	
	Pace Analytical	Services - Greensburg				
Total Radium	Total Radium Calculation	0.423 ± 0.869 (1.72)	pCi/L	02/09/24 10:28	8 7440-14-4	



Project: Plant Arkwright-CCR Ash Pond

Pace Project No.: 92709786

Sample: ARK-BC-0.1 PWS:	Lab ID: 9270 Site ID:	9786002 Collected: 01/23/24 13:05 Sample Type:	Received:	01/24/24 11:06	Matrix: Water	
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical	Services - Greensburg				
Radium-226	EPA 903.1	0.941 ± 0.870 (1.36) C:NA T:88%	pCi/L	02/07/24 14:4	1 13982-63-3	
	Pace Analytical	Services - Greensburg				
Radium-228	EPA 904.0	0.581 ± 0.429 (0.851) C:92% T:80%	pCi/L	02/08/24 15:1	5 15262-20-1	
	Pace Analytical	Services - Greensburg				
Total Radium	Total Radium Calculation	1.52 ± 1.30 (2.21)	pCi/L	02/09/24 10:28	8 7440-14-4	



Project: Plant Arkwright-CCR Ash Pond

Pace Project No.: 92709786

Sample: ARK-OR-0.8 PWS:	Lab ID: 9270 Site ID:	9786003 Collected: 01/23/24 10:34 Sample Type:	Received:	01/24/24 11:06	Matrix: Water	
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical	Services - Greensburg				
Radium-226	EPA 903.1	0.139 ± 0.669 (1.26) C:NA T:88%	pCi/L	02/07/24 14:4	1 13982-63-3	
	Pace Analytical	Services - Greensburg				
Radium-228	EPA 904.0	0.573 ± 0.427 (0.839) C:88% T:76%	pCi/L	02/08/24 15:1	5 15262-20-1	
	Pace Analytical	Services - Greensburg				
Total Radium	Total Radium Calculation	0.712 ± 1.10 (2.10)	pCi/L	02/09/24 10:28	3 7440-14-4	



Project: Plant Arkwright-CCR Ash Pond

Pace Project No.: 92709786

Sample: ARK-OR-0.1 PWS:	Lab ID: 9270 Site ID:	9786004 Collected: 01/23/24 11:53 Sample Type:	Received:	01/24/24 11:06	Matrix: Water	
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical	Services - Greensburg				
Radium-226	EPA 903.1	-0.213 ± 0.502 (1.12) C:NA T:86%	pCi/L	02/07/24 14:4	1 13982-63-3	
	Pace Analytical	Services - Greensburg				
Radium-228	EPA 904.0	1.57 ± 0.528 (0.694) C:88% T:73%	pCi/L	02/08/24 15:1	5 15262-20-1	
	Pace Analytical	Services - Greensburg				
Total Radium	Total Radium Calculation	1.57 ± 1.03 (1.81)	pCi/L	02/09/24 10:28	8 7440-14-4	



Project: Plant Arkwright-CCR Ash Pond

Pace Project No.: 92709786

Sample: ARK-OR-0.3 PWS:	Lab ID: 9270 Site ID:	9786005 Collected: 01/23/24 11:14 Sample Type:	Received:	01/24/24 11:06	Matrix: Water	
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical	Services - Greensburg				
Radium-226	EPA 903.1	-0.358 ± 0.467 (1.13) C:NA T:84%	pCi/L	02/07/24 14:53	3 13982-63-3	
	Pace Analytical	Services - Greensburg				
Radium-228	EPA 904.0	0.991 ± 0.613 (1.17) C:80% T:68%	pCi/L	02/08/24 15:15	5 15262-20-1	
	Pace Analytical	Services - Greensburg				
Total Radium	Total Radium Calculation	0.991 ± 1.08 (2.30)	pCi/L	02/09/24 10:28	3 7440-14-4	



Project: Plant Arkwright-CCR Ash Pond

Pace Project No.: 92709786

Sample: ARK-OR+0.25 PWS:	Lab ID: 9270 Site ID:	9786006 Collected: 01/23/24 12:08 Sample Type:	Received:	01/24/24 11:06	Matrix: Water	
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical	Services - Greensburg				
Radium-226	EPA 903.1	-0.286 ± 0.486 (1.13) C:NA T:82%	pCi/L	02/07/24 14:53	3 13982-63-3	
	Pace Analytical	Services - Greensburg				
Radium-228	EPA 904.0	0.273 ± 0.410 (0.884) C:83% T:73%	pCi/L	02/08/24 15:1	5 15262-20-1	
	Pace Analytical	Services - Greensburg				
Total Radium	Total Radium Calculation	0.273 ± 0.896 (2.01)	pCi/L	02/09/24 10:28	3 7440-14-4	



QUALITY CONTROL - RADIOCHEMISTRY

Project: Plant Arkwright-CCR Ash Pond

Pace Project No.: 92709786

QC Batch: 644984 Analysis Method: EPA 903.1

QC Batch Method: EPA 903.1 Analysis Description: 903.1 Radium-226

Laboratory: Pace Analytical Services - Greensburg

Associated Lab Samples: 92709786001, 92709786002, 92709786003, 92709786004, 92709786005, 92709786006

METHOD BLANK: 3143117 Matrix: Water

Associated Lab Samples: 92709786001, 92709786002, 92709786003, 92709786004, 92709786005, 92709786006

 Parameter
 Act ± Unc (MDC) Carr Trac
 Units
 Analyzed
 Qualifiers

 Radium-226
 0.139 ± 0.213 (0.342) C:NA T:87%
 pCi/L
 02/07/24 14:41

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



QUALITY CONTROL - RADIOCHEMISTRY

Project: Plant Arkwright-CCR Ash Pond

Pace Project No.: 92709786

QC Batch: 644985 Analysis Method: EPA 904.0

QC Batch Method: EPA 904.0 Analysis Description: 904.0 Radium 228

Laboratory: Pace Analytical Services - Greensburg

Associated Lab Samples: 92709786001, 92709786002, 92709786003, 92709786004, 92709786005, 92709786006

METHOD BLANK: 3143118 Matrix: Water

Associated Lab Samples: 92709786001, 92709786002, 92709786003, 92709786004, 92709786005, 92709786006

 Parameter
 Act ± Unc (MDC) Carr Trac
 Units
 Analyzed
 Qualifiers

 Radium-228
 0.174 ± 0.361 (0.797) C:87% T:76%
 pCi/L
 02/08/24 11:59

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



QUALIFIERS

Project: Plant Arkwright-CCR Ash Pond

Pace Project No.: 92709786

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

Acid preservation may not be appropriate for 2 Chloroethylvinyl ether.

A separate vial preserved to a pH of 4-5 is recommended in SW846 Chapter 4 for the analysis of Acrolein and Acrylonitrile by EPA Method 8260.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Reported results are not rounded until the final step prior to reporting. Therefore, calculated parameters that are typically reported as "Total" may vary slightly from the sum of the reported component parameters.

Act - Activity

Date: 02/09/2024 10:40 AM

Unc - Uncertainty: SDWA = 1.96 sigma count uncertainty, all other matrices = Expanded Uncertainty (95% confidence interval).

Gamma Spec = Expanded Uncertainty (95.4% Confidence Interval)

(MDC) - Minimum Detectable Concentration

Trac - Tracer Recovery (%)

Carr - Carrier Recovery (%)

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.



QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Plant Arkwright-CCR Ash Pond

Pace Project No.: 92709786

Date: 02/09/2024 10:40 AM

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92709786001	ARK-BC-0.3	EPA 903.1	644984		
92709786002	ARK-BC-0.1	EPA 903.1	644984		
92709786003	ARK-OR-0.8	EPA 903.1	644984		
92709786004	ARK-OR-0.1	EPA 903.1	644984		
92709786005	ARK-OR-0.3	EPA 903.1	644984		
92709786006	ARK-OR+0.25	EPA 903.1	644984		
92709786001	ARK-BC-0.3	EPA 904.0	644985		
92709786002	ARK-BC-0.1	EPA 904.0	644985		
92709786003	ARK-OR-0.8	EPA 904.0	644985		
92709786004	ARK-OR-0.1	EPA 904.0	644985		
92709786005	ARK-OR-0.3	EPA 904.0	644985		
92709786006	ARK-OR+0.25	EPA 904.0	644985		
92709786001	ARK-BC-0.3	Total Radium Calculation	647695		
92709786002	ARK-BC-0.1	Total Radium Calculation	647695		
92709786003	ARK-OR-0.8	Total Radium Calculation	647695		
92709786004	ARK-OR-0.1	Total Radium Calculation	647695		
92709786005	ARK-OR-0.3	Total Radium Calculation	647695		
92709786006	ARK-OR+0.25	Total Radium Calculation	647695		

App. IV - Sb, As, Bs, Be, Cd, Cr, Co, Pb, Li, Mo, Se, Ti + Hg RK-CCR-ASSMT-2024S1 equired Cilent Information: company: ARCADIS - Altanta ITEM # Ilanta, GA 30339 12 quested Due Date: W0#:92709786 kelley.shape@arcadis.com ARK-OR-0.1 ARK-BC-0.3 MK-OR+0.25 ARK-OR-0.8 ARK-BC-0.1 2839 Paces Ferry Rd (770)384-6584 Sample ids must be unique One Character per box. **SAMPLE ID** (A.Z. 0-9/, -) ADDITIONAL CON MENTS E E MANTRIX Drinking Water Waste Water Product Soul/Sohld Oil Wilps Air Other Tissue Project Name: p Report To: Kelley Sharpe, Warren Johnson Copy To: Ben Hodges, Joju Abraham Required Project Information: Project #: 3 4 5 4 7 4 5 8 8 8 8 8 8 PIC-2 marga BELINOUSHED BY / APPLICATION WGG WGG WG G MATRIX CODE (see valid codes to left) Plant Arkwright/CCR-Ash Pond Closure SAMPLE TYPE (G=GRAB C=COMP) 2 123 348 11127 123 1153 元00元 123 1208 START 100 186 MATER HAMEAND SIGNATURE TIME COLLECTED SIGNATURE of SAMPLER: PRINT Name of SAMPLER: DATE S TIME 51/12 DATE SAMPLE TEMP AT COLLECTION Company Name: Address: Pace Profile #: Paca Quote: Pace Project Manager: Attention: invoice information: # OF CONTAINERS 8 252 Unpreserved H2SO4 HN03 Preservatives Swarson 15836 HCI NaOH Na2S2O3 maiya parks@pacelabs.com ACCESTED BY ASSETVATION Methanol Other YN Analyses Test Total/Bicarb Alkalinity DATE Signed: CI, F. SO4 TOS App. III Metals - B, Ca App. IV Metals (Client List) Metale - Mg, Na, K BANE Radium 226/228 Page : TEMP in C Residual Chlorine (Y/N) 2 Received on BANIFLE CONDITIONS Ice (Y/N)

Custod) Sealed

Cooler (Y/N) Samples ntaci (Y/N)

3

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

CHAIN-OF-CUSTODY / Analytical Request Document

Pace Analytical

Pace.	DC#_Title: ENV-FRM	-HUN1-0083 v0	3_San	nple Cond	dition Upon Receipt
ARALYTICAL SERVICES	Effective Date: 11/29/20)23			
Sample Conditi Upon Receipt Courier: Commercial Custody Seal Pres Packing Material: Thermometer:	Fed Ex Pace	UPS USPS Other:_	Yes	Client	Mechanicsville Atlanta Kernersville ect # WO#: 92709786 ect # Due Date: 02/14/24 PM: IIP CLIENT: GA-ArcadRt1 Date/Initials Person Examining Contents: //24/24 St. Biological Tissue Frozen? Yes No N/A
Cooler Temp: Cooler Temp Corn	rected (°C): Soil (N/A, water sample) riginate in a quarantine zone wir	tract (°C) <u>70.</u>)		□ None Temp should be above freezing to 6°C □ Samples out of temp criteria. Samples on ice, cooling process has begun Did samples originate from a foreign source (internationally, including Hawaii and Puerto Rico)? □ Yes □ No Comments/Discrepancy:
Chain of Cus	tody Present?	Yes	□No	□N/A	1.
	ived within Hold Time?	Yes	□No	□N/A	2.
	Time Analysis (<72 hr.)?	□Yes	□Kio	□N/A	3.
	round Time Requested?	□Yes	No	□N/A	4.
Sufficient Vo		⊠Yes	□No	□n/A	5.
	tainers Used?	Yes	□No	□N/A	6.
	ntainers Used?	Yes	□No	□N/A	
Containers I	ntact?	Yes	□No		7.
Dissolved ar	nalysis: Samples Field Filtered?	Yes	□No	E/N/A	8.
Sample Labe	els Match COC?	→ Yes	□No	□n/a	9.
-Includes	Date/Time/ID/Analysis Matri	x:	-		
Headspace i	in VOA Vials (>5-6mm)?	Yes	No_	DN/A	10.
Trip Blank P	Present?	Yes	□No	ZKV/A	11.
Trip Blank C	Custody Seals Present?	Yes	□No	ØN/A	Field Data Required? ☐Yes ☐No
COMMENTS/SAMF	PLE DISCREPANCY				, red sets in the set of the set
Rt				Lo	ot ID of split containers:
CLIENT NOTIFICATION	ON/RESOLUTION				

Page 16 of 17

Date: ______

Person contacted:

Project Manager SCURF Review:

Project Manager SRF Review:



DC#_Title: ENV-FRM-HUN1-0083 v03_Sample Condition Upon Receipt

Effective Date: 11/29/2023

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

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

Project #

WO#: 92709786

PM: 11F

Due Date: 02/14/24

CLIENT: GA-ArcadAti

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

***Check all unpreserved Nitrates for chlorine

Item#	BP4U-125 mL Plastic Unpreserved (N/A) (CI-)	BP3U-250 mL Plastic Unpreserved (N/A)	BP2U-500 mL Plastic Unpreserved (N/A)	BP1U-1 liter Plastic Unpreserved (N/A)	BP4S-1 25 mL Plastic H2SO4 (pH < 2) (CI-)	BP3N-250 mL plastic HNO3 (pH < 2)	BP4Z-125 mL Plastic ZN Acetate & NaOH (>9)	BP4B-125 mL Plastic NaOH (pH > 12) (CI-)	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) (CI-)	AG1S-1 liter Amber H25O4 (pH < 2)	AG3S-250 mL Amber H2SO4 (pH < 2)	DG94-40 mL Amber NH4Cl (N/A)(Cl-)	DG9H-40 mL VOA HC! (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 – łab)	SP2T-250 mL Sterile Plastic (N/A – lab)	3P/N	BP3R-250 mL Plastic (NH2)2SO4 (9.3-9.7)	AG0U-100 mL Amber Unpreserved (N/A) (CI-)	VSGU-20 mL Scintillation vials {N/A}	DG9U-40 mL Amber Unpreserved vials (N/A)
1			2			N																		Ŕ			\neg	
2		,	7		\setminus	$\overline{\mathbf{M}}$,								Z				
3			7			X																		X	7			
4		,	7			1			J		\bigvee					~								Z	1			
5			7		$\sqrt{\ }$	N							abla											V	1			\dashv
6			Σ		abla	V					J													R	1			\dashv
7					abla		\bigcup				1				\setminus									7	1			\dashv
8						V																		7	1		\dashv	\dashv
•											J													7				
10														7										7	1	\dashv		_
11							V				$ egthinspace{1.5em} olimits $		\bigvee											7	1			
12														Ì		~								7		\neg		\dashv

pH Adjustment Log for Preserved Samples											
Sample ID			Date preservation adjusted	Time preservation adjusted	Amount of Preservative added	Lot #					
											
				<u> </u>							

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. Dut of hold, incorrect preservative, out of temp, incorrect containers.





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.: 92709790

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





CERTIFICATIONS

Project: Plant Arkwright-CCR Ash Pond

Pace Project No.: 92709790

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



SAMPLE SUMMARY

Project: Plant Arkwright-CCR Ash Pond

Pace Project No.: 92709790

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92709790001	ARK-BC-0.3	Water	01/23/24 13:48	01/24/24 11:06
92709790002	ARK-BC-0.1	Water	01/23/24 13:05	01/24/24 11:06
92709790003	ARK-OR-0.8	Water	01/23/24 10:34	01/24/24 11:06
92709790004	ARK-OR-0.1	Water	01/23/24 11:53	01/24/24 11:06
92709790005	ARK-OR-0.3	Water	01/23/24 11:14	01/24/24 11:06
92709790006	ARK-OR+0.25	Water	01/23/24 12:08	01/24/24 11:06



SAMPLE ANALYTE COUNT

Project: Plant Arkwright-CCR Ash Pond

Pace Project No.: 92709790

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92709790001	ARK-BC-0.3	EPA 6010D	DRB	5	PASI-GA
		EPA 6020B	MT1	12	PASI-GA
		EPA 7470A	VB	1	PASI-GA
		SM 2540C-2015	DL1	1	PASI-GA
		SM 2320B-2011	SMS	2	PASI-A
		EPA 9056A	CDC	3	PASI-A
2709790002	ARK-BC-0.1	EPA 6010D	DRB	5	PASI-GA
		EPA 6020B	MT1	12	PASI-GA
		EPA 7470A	VB	1	PASI-GA
		SM 2540C-2015	DL1	1	PASI-GA
		SM 2320B-2011	SMS	2	PASI-A
		EPA 9056A	CDC	3	PASI-A
2709790003	ARK-OR-0.8	EPA 6010D	DRB	5	PASI-GA
		EPA 6020B	MT1	12	PASI-GA
		EPA 7470A	VB	1	PASI-GA
		SM 2540C-2015	DL1	1	PASI-GA
		SM 2320B-2011	SMS	2	PASI-A
		EPA 9056A	CDC	3	PASI-A
2709790004	ARK-OR-0.1	EPA 6010D	DRB	5	PASI-GA
		EPA 6020B	MT1	12	PASI-GA
		EPA 7470A	VB	1	PASI-GA
		SM 2540C-2015	DL1	1	PASI-GA
		SM 2320B-2011	SMS	2	PASI-A
		EPA 9056A	CDC	3	PASI-A
2709790005	ARK-OR-0.3	EPA 6010D	DRB	5	PASI-GA
		EPA 6020B	MT1	12	PASI-GA
		EPA 7470A	VB	1	PASI-GA
		SM 2540C-2015	DL1	1	PASI-GA
		SM 2320B-2011	SMS	2	PASI-A
		EPA 9056A	CDC	3	PASI-A
2709790006	ARK-OR+0.25	EPA 6010D	DRB	5	PASI-GA
		EPA 6020B	MT1	12	PASI-GA
		EPA 7470A	VB	1	PASI-GA
		SM 2540C-2015	DL1	1	PASI-GA
		SM 2320B-2011	SMS	2	PASI-A
		EPA 9056A	CDC	3	PASI-A





SAMPLE ANALYTE COUNT

Project: Plant Arkwright-CCR Ash Pond

Pace Project No.: 92709790

Lab ID Sample ID Method Analysts Reported Laboratory

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



Project: Plant Arkwright-CCR Ash Pond

Pace Project No.: 92709790

Date: 01/31/2024 10:52 AM

Sample: ARK-BC-0.3	Lab ID: 9270	09790001	Collected: 01/23/2	4 13:48	Received: 01	/24/24 11:06 I	Matrix: Water	
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qua
6010D ATL ICP	Analytical Meth	nod: EPA 60	10D Preparation Me	thod: E	PA 3010A			
	Pace Analytica	l Services -	Peachtree Corners,	GA				
Boron	ND	mg/L	0.040	1	01/25/24 13:04	01/26/24 20:32	7440-42-8	
Potassium	2.1	mg/L	0.50	1	01/25/24 13:04	01/26/24 20:32	7440-09-7	
Sodium	8.9	mg/L	1.0	1	01/25/24 13:04	01/26/24 20:32	7440-23-5	
Calcium	8.5	mg/L	1.0	1	01/25/24 13:04	01/26/24 20:32	7440-70-2	
Magnesium	4.3	mg/L	0.050	1	01/25/24 13:04	01/26/24 20:32	7439-95-4	
6020 MET ICPMS	Analytical Meth	nod: EPA 60	20B Preparation Me	thod: El	PA 3005A			
	Pace Analytica	l Services -	Peachtree Corners,	GA				
Antimony	ND	mg/L	0.0030	1	01/26/24 10:13	01/26/24 18:13	7440-36-0	
Arsenic	ND	mg/L	0.0050	1	01/26/24 10:13	01/26/24 18:13	7440-38-2	
Barium	0.038	mg/L	0.0050	1	01/26/24 10:13	01/26/24 18:13	7440-39-3	
Beryllium	ND	mg/L	0.00050	1	01/26/24 10:13	01/26/24 18:13	7440-41-7	
Cadmium	ND	mg/L	0.00050	1	01/26/24 10:13	01/26/24 18:13	7440-43-9	
Chromium	ND	mg/L	0.0050	1	01/26/24 10:13	01/26/24 18:13	7440-47-3	
Cobalt	ND	mg/L	0.0050	1	01/26/24 10:13	01/26/24 18:13	7440-48-4	
_ead	ND	mg/L	0.0010	1	01/26/24 10:13	01/26/24 18:13	7439-92-1	
_ithium	ND	mg/L	0.030	1	01/26/24 10:13	01/26/24 18:13	7439-93-2	
Molybdenum	ND	mg/L	0.010	1	01/26/24 10:13	01/26/24 18:13	7439-98-7	
Selenium	ND	mg/L	0.0050	1	01/26/24 10:13	01/26/24 18:13	7782-49-2	
Thallium	ND	mg/L	0.0010	1	01/26/24 10:13	01/26/24 18:13	7440-28-0	
7470 Mercury	Analytical Meth	nod: EPA 74	70A Preparation Me	thod: El	PA 7470A			
	Pace Analytica	l Services -	Peachtree Corners,	GA				
Mercury	ND	mg/L	0.00020	1	01/30/24 08:00	01/30/24 11:03	7439-97-6	
2540C Total Dissolved Solids	Analytical Meth	nod: SM 254	40C-2015					
			Peachtree Corners,	GA				
Total Dissolved Solids	90.0	mg/L	25.0	1		01/25/24 12:54		
2320B Alkalinity	Analytical Meth	nod: SM 23	20B-2011					
LOLOD ARGINITY	Pace Analytica							
Alkalinity,Bicarbonate (CaCO3)	39.1	mg/L	5.0	1		01/25/24 12:38		
Alkalinity, Total as CaCO3	39.1	mg/L	5.0	1		01/25/24 12:38		
	Analytical Meth	nod: EPA 90	956A					
9056 IC anions 28 Davs	•	l Services -						
9056 IC anions 28 Days	Pace Analytica							
9056 IC anions 28 Days Chloride	•		1.0	1		01/24/24 22:44	16887-00-6	
9056 IC anions 28 Days Chloride Fluoride	8.4 ND	mg/L mg/L	1.0 0.10	1 1		01/24/24 22:44 01/24/24 22:44		



Project: Plant Arkwright-CCR Ash Pond

Pace Project No.: 92709790

Date: 01/31/2024 10:52 AM

Sample: ARK-BC-0.1	Lab ID: 927	09790002	Collected: 01/23/2	24 13:05	Received: 0	1/24/24 11:06	Matrix: Water	
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qua
6010D ATL ICP	Analytical Meth	nod: EPA 60	010D Preparation Me	ethod: El	PA 3010A			
	Pace Analytica	l Services -	Peachtree Corners,	GA				
Boron	ND	mg/L	0.040	1	01/25/24 13:04	01/26/24 20:5	1 7440-42-8	
Potassium	2.2	mg/L	0.50	1	01/25/24 13:04	01/26/24 20:5	1 7440-09-7	
Sodium	8.5	mg/L	1.0	1	01/25/24 13:04	01/26/24 20:5	1 7440-23-5	
Calcium	8.6	mg/L	1.0	1	01/25/24 13:04	01/26/24 20:5	1 7440-70-2	
Magnesium	4.3	mg/L	0.050	1	01/25/24 13:04	01/26/24 20:5	1 7439-95-4	
6020 MET ICPMS	Analytical Meth	nod: EPA 60	20B Preparation Me	thod: Ef	PA 3005A			
	Pace Analytica	l Services -	Peachtree Corners,	GA				
Antimony	ND	mg/L	0.0030	1	01/26/24 10:13	01/26/24 18:10	6 7440-36-0	
Arsenic	ND	mg/L	0.0050	1	01/26/24 10:13	01/26/24 18:10	6 7440-38-2	
Barium	0.054	mg/L	0.0050	1	01/26/24 10:13	01/26/24 18:10	6 7440-39-3	
Beryllium	ND	mg/L	0.00050	1	01/26/24 10:13	01/26/24 18:10	6 7440-41-7	
Cadmium	ND	mg/L	0.00050	1	01/26/24 10:13	01/26/24 18:10	6 7440-43-9	
Chromium	ND	mg/L	0.0050	1	01/26/24 10:13	01/26/24 18:10	6 7440-47-3	
Cobalt	ND	mg/L	0.0050	1	01/26/24 10:13	01/26/24 18:10	6 7440-48-4	
Lead	ND	mg/L	0.0010	1	01/26/24 10:13	01/26/24 18:10	6 7439-92-1	
Lithium	ND	mg/L	0.030	1	01/26/24 10:13	01/26/24 18:10	6 7439-93-2	
Molybdenum	ND	mg/L	0.010	1	01/26/24 10:13	01/26/24 18:10	6 7439-98-7	
Selenium	ND	mg/L	0.0050	1	01/26/24 10:13	01/26/24 18:10	6 7782-49-2	
Thallium	ND	mg/L	0.0010	1	01/26/24 10:13	3 01/26/24 18:10	6 7440-28-0	
7470 Mercury	Analytical Meth	nod: EPA 74	70A Preparation Me	thod: EF	PA 7470A			
	Pace Analytica	l Services -	Peachtree Corners,	GA				
Mercury	ND	mg/L	0.00020	1	01/30/24 08:00	01/30/24 11:19	9 7439-97-6	
2540C Total Dissolved Solids	Analytical Meth	nod: SM 254	40C-2015					
	Pace Analytica	l Services -	Peachtree Corners,	GA				
Total Dissolved Solids	94.0	mg/L	25.0	1		01/25/24 12:5	5	
2320B Alkalinity	Analytical Meth	nod: SM 232	20B-2011					
•	Pace Analytica	l Services -	Asheville					
Alkalinity,Bicarbonate (CaCO3)	39.7	mg/L	5.0	1		01/25/24 12:4	5	
Alkalinity, Total as CaCO3	39.7	mg/L	5.0	1		01/25/24 12:4	5	
9056 IC anions 28 Days	Analytical Meth	nod: EPA 90	056A					
•	Pace Analytica	l Services -	Asheville					
Chloride	8.4	mg/L	1.0	1		01/24/24 23:29	9 16887-00-6	
Fluoride	ND	mg/L	0.10	1			9 16984-48-8	
						_		



Project: Plant Arkwright-CCR Ash Pond

Pace Project No.: 92709790

Date: 01/31/2024 10:52 AM

Sample: ARK-OR-0.8	Lab ID: 927	09790003	Collected: 01/23/2	24 10:34	Received: 01	1/24/24 11:06 I	Matrix: Water	
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qua
6010D ATL ICP	Analytical Met	hod: EPA 60	010D Preparation Me	ethod: El	PA 3010A			
	Pace Analytica	al Services -	Peachtree Corners,	GA				
Boron	ND	mg/L	0.040	1	01/25/24 13:04	01/26/24 20:56	7440-42-8	
Potassium	2.9	mg/L	0.50	1	01/25/24 13:04	01/26/24 20:56	7440-09-7	
Sodium	5.8	mg/L	1.0	1	01/25/24 13:04	01/26/24 20:56	7440-23-5	
Calcium	4.7	mg/L	1.0	1	01/25/24 13:04	01/26/24 20:56	7440-70-2	
Magnesium	1.7	mg/L	0.050	1	01/25/24 13:04	01/26/24 20:56	7439-95-4	
6020 MET ICPMS	Analytical Met	hod: EPA 60	20B Preparation Me	ethod: El	PA 3005A			
	Pace Analytica	al Services -	Peachtree Corners,	GA				
Antimony	ND	mg/L	0.0030	1	01/26/24 10:13	01/26/24 18:20	7440-36-0	
Arsenic	ND	mg/L	0.0050	1	01/26/24 10:13	01/26/24 18:20	7440-38-2	
Barium	0.031	mg/L	0.0050	1	01/26/24 10:13	01/26/24 18:20	7440-39-3	
Beryllium	ND	mg/L	0.00050	1	01/26/24 10:13	01/26/24 18:20	7440-41-7	
Cadmium	ND	mg/L	0.00050	1	01/26/24 10:13	01/26/24 18:20	7440-43-9	
Chromium	ND	mg/L	0.0050	1	01/26/24 10:13	01/26/24 18:20	7440-47-3	
Cobalt	ND	mg/L	0.0050	1	01/26/24 10:13	01/26/24 18:20	7440-48-4	
Lead	ND	mg/L	0.0010	1	01/26/24 10:13	01/26/24 18:20	7439-92-1	
Lithium	ND	mg/L	0.030	1	01/26/24 10:13	01/26/24 18:20	7439-93-2	
Molybdenum	ND	mg/L	0.010	1	01/26/24 10:13	01/26/24 18:20	7439-98-7	
Selenium	ND	mg/L	0.0050	1	01/26/24 10:13	01/26/24 18:20	7782-49-2	
Thallium	ND	mg/L	0.0010	1	01/26/24 10:13	01/26/24 18:20	7440-28-0	
7470 Mercury	Analytical Met	hod: EPA 74	70A Preparation Me	ethod: El	PA 7470A			
	Pace Analytica	al Services -	Peachtree Corners,	GA				
Mercury	ND	mg/L	0.00020	1	01/30/24 08:00	01/30/24 11:22	7439-97-6	
2540C Total Dissolved Solids	Analytical Met	hod: SM 254	40C-2015					
	Pace Analytica	al Services -	Peachtree Corners,	GA				
Total Dissolved Solids	52.0	mg/L	25.0	1		01/25/24 12:55	j	
2320B Alkalinity	Analytical Met	hod: SM 232	20B-2011					
	Pace Analytica							
Alkalinity, Bicarbonate (CaCO3)	17.9	mg/L	5.0	1		01/25/24 12:52	<u> </u>	
Alkalinity, Total as CaCO3	17.9	mg/L	5.0	1		01/25/24 12:52	!	
	Analytical Metl	hod: EPA 90	056A					
9056 IC anions 28 Davs								
9056 IC anions 28 Days	Pace Analytica	al Services -	Asheville					
9056 IC anions 28 Days Chloride	Pace Analytica		Asheville 1.0	1		01/24/24 23:44	16887-00-6	
•	•	al Services - mg/L mg/L		1 1		01/24/24 23:44 01/24/24 23:44		



Project: Plant Arkwright-CCR Ash Pond

Pace Project No.: 92709790

Date: 01/31/2024 10:52 AM

Sample: ARK-OR-0.1	Lab ID: 927	09790004	Collected: 01/23/2	24 11:53	Received: 0	1/24/24 11:06	Matrix: Water	
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qua
6010D ATL ICP	Analytical Meth	od: EPA 60	10D Preparation Me	ethod: El	PA 3010A			
	Pace Analytica	l Services -	Peachtree Corners,	GA				
Boron	ND	mg/L	0.040	1	01/25/24 13:04	01/26/24 21:0	1 7440-42-8	
Potassium	2.9	mg/L	0.50	1	01/25/24 13:04	01/26/24 21:0	1 7440-09-7	
Sodium	5.9	mg/L	1.0	1	01/25/24 13:04	01/26/24 21:0	1 7440-23-5	
Calcium	4.8	mg/L	1.0	1	01/25/24 13:04	01/26/24 21:0	1 7440-70-2	
Magnesium	1.7	mg/L	0.050	1	01/25/24 13:04	01/26/24 21:0	1 7439-95-4	
6020 MET ICPMS	Analytical Meth	od: EPA 60	20B Preparation Me	thod: Ef	PA 3005A			
	Pace Analytica	l Services -	Peachtree Corners,	GA				
Antimony	ND	mg/L	0.0030	1	01/26/24 10:13	01/26/24 18:3	5 7440-36-0	
Arsenic	ND	mg/L	0.0050	1	01/26/24 10:13	01/26/24 18:3	5 7440-38-2	
Barium	0.031	mg/L	0.0050	1		01/26/24 18:3		
Beryllium	ND	mg/L	0.00050	1	01/26/24 10:13	01/26/24 18:3	5 7440-41-7	
Cadmium	ND	mg/L	0.00050	1	01/26/24 10:13	01/26/24 18:3	5 7440-43-9	
Chromium	ND	mg/L	0.0050	1	01/26/24 10:13	01/26/24 18:3	5 7440-47-3	
Cobalt	ND	mg/L	0.0050	1	01/26/24 10:13	01/26/24 18:3	5 7440-48-4	
_ead	ND	mg/L	0.0010	1		01/26/24 18:3		
Lithium	ND	mg/L	0.030	1		01/26/24 18:3		
Molybdenum	ND	mg/L	0.010	1	01/26/24 10:13	01/26/24 18:3	5 7439-98-7	
Selenium	ND	mg/L	0.0050	1	01/26/24 10:13	01/26/24 18:3	5 7782-49-2	
Γhallium	ND	mg/L	0.0010	1	01/26/24 10:13	01/26/24 18:3	5 7440-28-0	
7470 Mercury	Analytical Meth	od: EPA 74	70A Preparation Me	thod: EF	PA 7470A			
	Pace Analytica	l Services -	Peachtree Corners,	GA				
Mercury	ND	mg/L	0.00020	1	01/30/24 08:00	01/30/24 11:24	7439-97-6	
2540C Total Dissolved Solids	Analytical Meth	od: SM 254	40C-2015					
	Pace Analytica	l Services -	Peachtree Corners,	GA				
Total Dissolved Solids	77.0	mg/L	25.0	1		01/25/24 12:5	5	
2320B Alkalinity	Analytical Meth	od: SM 232	20B-2011					
•	Pace Analytica							
Alkalinity, Bicarbonate (CaCO3)	20.0	mg/L	5.0	1		01/25/24 12:58	3	
Alkalinity, Total as CaCO3	20.0	mg/L	5.0	1		01/25/24 12:58		
9056 IC anions 28 Days	Analytical Meth	od: EPA 90	956A					
	Pace Analytica							
Chloride	5.1	mg/L	1.0	1		01/24/24 23:59	9 16887-00-6	
Fluoride	ND	mg/L	0.10	1		01/24/24 23:59		



Project: Plant Arkwright-CCR Ash Pond

Pace Project No.: 92709790

Date: 01/31/2024 10:52 AM

Sample: ARK-OR-0.3	Lab ID: 927	09790005	Collected: 01/23/2	24 11:14	Received: 0°	1/24/24 11:06	Matrix: Water	
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qua
6010D ATL ICP	Analytical Meth	nod: EPA 60	010D Preparation Me	ethod: El	PA 3010A			
	Pace Analytica	l Services -	Peachtree Corners,	GA				
Boron	ND	mg/L	0.040	1	01/25/24 13:04	01/26/24 21:0	5 7440-42-8	
Potassium	2.7	mg/L	0.50	1	01/25/24 13:04	01/26/24 21:0	5 7440-09-7	
Sodium	5.5	mg/L	1.0	1	01/25/24 13:04	01/26/24 21:0	5 7440-23-5	
Calcium	4.5	mg/L	1.0	1	01/25/24 13:04	01/26/24 21:0	5 7440-70-2	
Magnesium	1.6	mg/L	0.050	1	01/25/24 13:04	01/26/24 21:0	5 7439-95-4	
6020 MET ICPMS	Analytical Meth	nod: EPA 60	020B Preparation Me	thod: Ef	PA 3005A			
	Pace Analytica	l Services -	Peachtree Corners,	GA				
Antimony	ND	mg/L	0.0030	1	01/26/24 10:13	01/26/24 18:3	9 7440-36-0	
Arsenic	ND	mg/L	0.0050	1	01/26/24 10:13	01/26/24 18:3	9 7440-38-2	
Barium	0.030	mg/L	0.0050	1	01/26/24 10:13	01/26/24 18:3	9 7440-39-3	
Beryllium	ND	mg/L	0.00050	1	01/26/24 10:13	01/26/24 18:3	9 7440-41-7	
Cadmium	ND	mg/L	0.00050	1	01/26/24 10:13	01/26/24 18:3	9 7440-43-9	
Chromium	ND	mg/L	0.0050	1	01/26/24 10:13	01/26/24 18:3	9 7440-47-3	
Cobalt	ND	mg/L	0.0050	1	01/26/24 10:13	01/26/24 18:3	9 7440-48-4	
_ead	ND	mg/L	0.0010	1	01/26/24 10:13	01/26/24 18:3	9 7439-92-1	
_ithium	ND	mg/L	0.030	1	01/26/24 10:13	01/26/24 18:3	9 7439-93-2	
Molybdenum	ND	mg/L	0.010	1	01/26/24 10:13	01/26/24 18:3	9 7439-98-7	
Selenium	ND	mg/L	0.0050	1	01/26/24 10:13	01/26/24 18:3	9 7782-49-2	
Thallium	ND	mg/L	0.0010	1	01/26/24 10:13	01/26/24 18:3	9 7440-28-0	
7470 Mercury	Analytical Meth	nod: EPA 74	170A Preparation Me	thod: EF	PA 7470A			
	Pace Analytica	l Services -	Peachtree Corners,	GA				
Mercury	ND	mg/L	0.00020	1	01/30/24 08:00	01/30/24 11:2	7 7439-97-6	
2540C Total Dissolved Solids	Analytical Meth	nod: SM 254	40C-2015					
	Pace Analytica	l Services -	Peachtree Corners,	GA				
Total Dissolved Solids	211	mg/L	25.0	1		01/25/24 12:5	6	
2320B Alkalinity	Analytical Meth	nod: SM 232	20B-2011					
•	Pace Analytica	l Services -	Asheville					
Alkalinity,Bicarbonate (CaCO3)	20.2	mg/L	5.0	1		01/25/24 13:0	5	
Alkalinity, Total as CaCO3	20.2	mg/L	5.0	1		01/25/24 13:0	5	
9056 IC anions 28 Days	Analytical Meth	nod: EPA 90	056A					
	Pace Analytica							
Chloride	5.1	mg/L	1.0	1		01/25/24 00:1	3 16887-00-6	
Fluoride	ND	mg/L	0.10	1		01/25/24 00:1:		



Project: Plant Arkwright-CCR Ash Pond

Pace Project No.: 92709790

Date: 01/31/2024 10:52 AM

Sample: ARK-OR+0.25	Lab ID: 927	09790006	Collected: 01/23/2	24 12:08	Received: 0	1/24/24 11:06	Matrix: Water	
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qua
6010D ATL ICP	Analytical Meth	nod: EPA 60	010D Preparation Me	ethod: El	PA 3010A			
	Pace Analytica	l Services -	Peachtree Corners,	GA				
Boron	ND	mg/L	0.040	1	01/25/24 13:04	01/26/24 21:2	0 7440-42-8	
Potassium	2.9	mg/L	0.50	1	01/25/24 13:04	01/26/24 21:2	0 7440-09-7	
Sodium	5.9	mg/L	1.0	1	01/25/24 13:04	01/26/24 21:2	0 7440-23-5	
Calcium	4.8	mg/L	1.0	1	01/25/24 13:04	01/26/24 21:2	0 7440-70-2	
Magnesium	1.7	mg/L	0.050	1	01/25/24 13:04	01/26/24 21:2	0 7439-95-4	
6020 MET ICPMS	Analytical Meth	nod: EPA 60	20B Preparation Me	thod: Ef	PA 3005A			
	Pace Analytica	l Services -	Peachtree Corners,	GA				
Antimony	ND	mg/L	0.0030	1	01/26/24 10:13	01/26/24 18:5	0 7440-36-0	
Arsenic	ND	mg/L	0.0050	1	01/26/24 10:13	01/26/24 18:5	0 7440-38-2	
Barium	0.031	mg/L	0.0050	1	01/26/24 10:13	01/26/24 18:5	0 7440-39-3	
Beryllium	ND	mg/L	0.00050	1	01/26/24 10:13	01/26/24 18:5	0 7440-41-7	
Cadmium	ND	mg/L	0.00050	1	01/26/24 10:13	01/26/24 18:5	0 7440-43-9	
Chromium	ND	mg/L	0.0050	1	01/26/24 10:13	01/26/24 18:5	0 7440-47-3	
Cobalt	ND	mg/L	0.0050	1	01/26/24 10:13	01/26/24 18:5	0 7440-48-4	
Lead	ND	mg/L	0.0010	1	01/26/24 10:13	01/26/24 18:5	0 7439-92-1	
Lithium	ND	mg/L	0.030	1	01/26/24 10:13	01/26/24 18:5	0 7439-93-2	
Molybdenum	ND	mg/L	0.010	1	01/26/24 10:13	01/26/24 18:5	0 7439-98-7	
Selenium	ND	mg/L	0.0050	1	01/26/24 10:13	01/26/24 18:5	0 7782-49-2	
Thallium	ND	mg/L	0.0010	1	01/26/24 10:13	01/26/24 18:5	0 7440-28-0	
7470 Mercury	Analytical Meth	nod: EPA 74	70A Preparation Me	thod: EF	PA 7470A			
	Pace Analytica	l Services -	Peachtree Corners,	GA				
Mercury	ND	mg/L	0.00020	1	01/30/24 08:00	01/30/24 11:30	7439-97-6	
2540C Total Dissolved Solids	Analytical Meth	nod: SM 254	40C-2015					
	•		Peachtree Corners,	GA				
Total Dissolved Solids	68.0	mg/L	25.0	1		01/25/24 12:5	6	
2320B Alkalinity	Analytical Meth	nod: SM 232	20B-2011					
,	Pace Analytica							
Alkalinity,Bicarbonate (CaCO3)	20.2	mg/L	5.0	1		01/25/24 13:2	1	
Alkalinity, Total as CaCO3	20.2	mg/L	5.0	1		01/25/24 13:2		
9056 IC anions 28 Days	Analytical Meth	nod: EPA 90	056A					
	Pace Analytica							
Chloride	5.1	mg/L	1.0	1		01/25/24 00:2	8 16887-00-6	
Fluoride	ND	mg/L	0.10	1			8 16984-48-8	
i idolide								



Project: Plant Arkwright-CCR Ash Pond

Pace Project No.: 92709790

Date: 01/31/2024 10:52 AM

QC Batch: 827606 Analysis Method: EPA 6010D
QC Batch Method: EPA 3010A Analysis Description: 6010D ATL

Laboratory: Pace Analytical Services - Peachtree Corners, GA

Associated Lab Samples: 92709790001, 92709790002, 92709790003, 92709790004, 92709790005, 92709790006

METHOD BLANK: 4279128 Matrix: Water

Associated Lab Samples: 92709790001, 92709790002, 92709790003, 92709790004, 92709790005, 92709790006

		Blank	Reporting		
Parameter	Units	Result	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	Spike	LCS	LCS	% Rec	
Parameter	Units	Conc.	Result	% Rec	Limits	Qualifiers
Boron	mg/L		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 S	PIKE DUPLIC	CATE: 4279	130		4279131							
			MS	MSD								
	9	2709790001	Spike	Spike	MS	MSD	MS	MSD	% Rec		Max	
Parameter	Units	Result	Conc.	Conc.	Result	Result	% Rec	% Rec	Limits	RPD	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	

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



Project: Plant Arkwright-CCR Ash Pond

Pace Project No.: 92709790

Date: 01/31/2024 10:52 AM

QC Batch: 827976 Analysis Method: EPA 6020B
QC Batch Method: EPA 3005A Analysis Description: 6020 MET

Laboratory: Pace Analytical Services - Peachtree Corners, GA

Associated Lab Samples: 92709790001, 92709790002, 92709790003, 92709790004, 92709790005, 92709790006

METHOD BLANK: 4280989 Matrix: Water

Associated Lab Samples: 92709790001, 92709790002, 92709790003, 92709790004, 92709790005, 92709790006

		Blank	Reporting		
Parameter	Units	Result	Limit	Analyzed	Qualifiers
Antimony	mg/L	ND	0.0030	01/26/24 18:05	
Arsenic	mg/L	ND	0.0050	01/26/24 18:05	
Barium	mg/L	ND	0.0050	01/26/24 18:05	
Beryllium	mg/L	ND	0.00050	01/26/24 18:05	
Cadmium	mg/L	ND	0.00050	01/26/24 18:05	
Chromium	mg/L	ND	0.0050	01/26/24 18:05	
Cobalt	mg/L	ND	0.0050	01/26/24 18:05	
Lead	mg/L	ND	0.0010	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	
Selenium	mg/L	ND	0.0050	01/26/24 18:05	
Thallium	mg/L	ND	0.0010	01/26/24 18:05	

LABORATORY CONTROL SAMPLE:	4280990					
		Spike	LCS	LCS	% Rec	
Parameter	Units	Conc.	Result	% Rec	Limits	Qualifiers
Antimony	mg/L	0.1	0.10	101	80-120	
Arsenic	mg/L	0.1	0.098	98	80-120	
Barium	mg/L	0.1	0.098	98	80-120	
Beryllium	mg/L	0.1	0.097	97	80-120	
Cadmium	mg/L	0.1	0.095	95	80-120	
Chromium	mg/L	0.1	0.094	94	80-120	
Cobalt	mg/L	0.1	0.094	94	80-120	
Lead	mg/L	0.1	0.098	98	80-120	
Lithium	mg/L	0.1	0.10	101	80-120	
Molybdenum	mg/L	0.1	0.096	96	80-120	
Selenium	mg/L	0.1	0.10	100	80-120	
Thallium	mg/L	0.1	0.098	98	80-120	

MATRIX SPIKE & MATRIX SF	PIKE DUPLI	CATE: 4280	991		4280992							
	9	92709790003	MS Spike	MSD Spike	MS	MSD	MS	MSD	% Rec		Max	
Parameter	Units	Result	Conc.	Conc.	Result	Result	% Rec	% Rec	Limits	RPD	RPD	Qual
Antimony	mg/L	ND	0.1	0.1	0.095	0.096	95	96	75-125	1	20	
Arsenic	mg/L	ND	0.1	0.1	0.093	0.096	92	96	75-125	4	20	
Barium	mg/L	0.031	0.1	0.1	0.12	0.13	93	95	75-125	2	20	
Beryllium	mg/L	ND	0.1	0.1	0.093	0.093	93	93	75-125	0	20	

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



Project: Plant Arkwright-CCR Ash Pond

Pace Project No.: 92709790

Date: 01/31/2024 10:52 AM

MATRIX SPIKE & MATRIX	OF INCE DOT ET	CATE: 4280	MS	MSD	4280992							
	9	92709790003	Spike	Spike	MS	MSD	MS	MSD	% Rec		Max	
Parameter	Units	Result	Conc.	Conc.	Result	Result	% Rec	% Rec	Limits	RPD	RPD	Qual
Cadmium	mg/L	ND	0.1	0.1	0.094	0.095	94	95	75-125	1	20	
Chromium	mg/L	ND	0.1	0.1	0.093	0.095	91	94	75-125	3	20	
Cobalt	mg/L	ND	0.1	0.1	0.093	0.095	92	94	75-125	2	20	
Lead	mg/L	ND	0.1	0.1	0.093	0.096	92	95	75-125	3	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	
Selenium	mg/L	ND	0.1	0.1	0.091	0.098	91	97	75-125	7	20	
Thallium	mg/L	ND	0.1	0.1	0.092	0.094	92	94	75-125	2	20	

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



Project: Plant Arkwright-CCR Ash Pond

Pace Project No.: 92709790

Mercury

Mercury

Date: 01/31/2024 10:52 AM

QC Batch: 828685 Analysis Method: EPA 7470A

QC Batch Method: EPA 7470A Analysis Description: 7470 Mercury

Laboratory: Pace Analytical Services - Peachtree Corners, GA

Associated Lab Samples: 92709790001, 92709790002, 92709790003, 92709790004, 92709790005, 92709790006

METHOD BLANK: 4283589 Matrix: Water

Associated Lab Samples: 92709790001, 92709790002, 92709790003, 92709790004, 92709790005, 92709790006

Blank Reporting

 Parameter
 Units
 Result
 Limit
 Analyzed
 Qualifiers

 mg/L
 ND
 0.00020
 01/30/24 10:58

LABORATORY CONTROL SAMPLE: 4283590

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

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4283591

MSD MS 92709790001 Spike Spike MS MSD MS MSD % Rec Max Parameter Units Conc. **RPD** RPD Qual Result Conc. Result Result % Rec % Rec Limits 0.0025 Mercury mg/L ND 0.0025 0.0026 0.0027 105 107 75-125 2 20

4283592

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



Project: Plant Arkwright-CCR Ash Pond

Pace Project No.: 92709790

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: 92709790001, 92709790002, 92709790003, 92709790004, 92709790005, 92709790006

METHOD BLANK: 4279830 Matrix: Water

Associated Lab Samples: 92709790001, 92709790002, 92709790003, 92709790004, 92709790005, 92709790006

Blank Reporting

Parameter Units Result Limit Analyzed Qualifiers

Total Dissolved Solids mg/L ND 25.0 01/25/24 12:53

LABORATORY CONTROL SAMPLE: 4279831

ParameterUnitsSpike
Conc.LCS
ResultLCS
% Rec
% RecLimits
LimitsQualifiers

Total Dissolved Solids mg/L 400 367 92 80-120

SAMPLE DUPLICATE: 4279832

92709952001 Dup Max Parameter Units Result Result **RPD RPD** Qualifiers 26.0 **Total Dissolved Solids** 10 D6 mg/L 29.0 11

SAMPLE DUPLICATE: 4279833

Date: 01/31/2024 10:52 AM

92709793004 Dup Max RPD RPD Parameter Units Result Result Qualifiers Total Dissolved Solids 85.0 103 10 D6 mg/L 19

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



Project: Plant Arkwright-CCR Ash Pond

Pace Project No.: 92709790

QC Batch: 827797 Analysis Method: SM 2320B-2011
QC Batch Method: SM 2320B-2011 Analysis Description: 2320B Alkalinity

Laboratory: Pace Analytical Services - Asheville

Associated Lab Samples: 92709790001, 92709790002, 92709790003, 92709790004, 92709790005, 92709790006

METHOD BLANK: 4279859 Matrix: Water

Associated Lab Samples: 92709790001, 92709790002, 92709790003, 92709790004, 92709790005, 92709790006

Blank Reporting Qualifiers Parameter Units Result Limit Analyzed Alkalinity, Total as CaCO3 ND 5.0 01/25/24 12:03 mg/L Alkalinity, Bicarbonate (CaCO3) mg/L ND 5.0 01/25/24 12:03

LABORATORY CONTROL SAMPLE: 4279860

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

LABORATORY CONTROL SAMPLE: 4279861

Date: 01/31/2024 10:52 AM

LCS Spike LCS % Rec Conc. Limits Qualifiers Parameter Units Result % Rec 51.7 103 80-120 Alkalinity, Total as CaCO3 mg/L 50

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4279863 4279864 MS MSD 92709794006 MS MSD MS MSD Spike Spike % Rec Max RPD Parameter Units Result Conc. Conc. Result Result % Rec % Rec Limits RPD

Parameter Units Result Conc. Conc. Result Result % Rec % Rec Limits RPD 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 MSD MS 92709794004 Spike Spike MS MSD MS MSD % Rec Max Parameter Units Result Conc. Conc. Result Result % Rec % Rec **RPD** RPD Qual Limits Alkalinity, Total as CaCO3 mg/L 42.4 50 50 94.3 95.6 104 106 80-120 1 25

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



Project: Plant Arkwright-CCR Ash Pond

LABORATORY CONTROL CAMPLE: 4270220

Date: 01/31/2024 10:52 AM

Pace Project No.: 92709790

QC Batch: 827647 Analysis Method: EPA 9056A

QC Batch Method: EPA 9056A Analysis Description: 9056 IC anions 28 Days

Laboratory: Pace Analytical Services - Asheville

Associated Lab Samples: 92709790001, 92709790002, 92709790003, 92709790004, 92709790005, 92709790006

METHOD BLANK: 4279328 Matrix: Water

Associated Lab Samples: 92709790001, 92709790002, 92709790003, 92709790004, 92709790005, 92709790006

		Blank	Reporting		
Parameter	Units	Result	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					
		Spike	LCS	LCS	% Rec	
Parameter	Units	Conc.	Result	% 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 SP	IKE DUPL	ICATE: 4279	330		4279331							
			MS	MSD								
		92709790001	Spike	Spike	MS	MSD	MS	MSD	% Rec		Max	
Parameter	Units	Result	Conc.	Conc.	Result	Result	% Rec	% Rec	Limits	RPD	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 SP	IKE DUPL	ICATE: 4279	332		4279333							
			MS	MSD								
		92709793005	Spike	Spike	MS	MSD	MS	MSD	% Rec		Max	
Parameter	Units	Result	Conc.	Conc.	Result	Result	% Rec	% Rec	Limits	RPD	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	

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



QUALIFIERS

Project: Plant Arkwright-CCR Ash Pond

Pace Project No.: 92709790

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

Date: 01/31/2024 10:52 AM

D6 The precision between the sample and sample duplicate exceeded laboratory control limits.



QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Plant Arkwright-CCR Ash Pond

Pace Project No.: 92709790

Date: 01/31/2024 10:52 AM

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92709790001	ARK-BC-0.3	EPA 3010A	827606	EPA 6010D	827842
92709790002	ARK-BC-0.1	EPA 3010A	827606	EPA 6010D	827842
92709790003	ARK-OR-0.8	EPA 3010A	827606	EPA 6010D	827842
92709790004	ARK-OR-0.1	EPA 3010A	827606	EPA 6010D	827842
92709790005	ARK-OR-0.3	EPA 3010A	827606	EPA 6010D	827842
92709790006	ARK-OR+0.25	EPA 3010A	827606	EPA 6010D	827842
2709790001	ARK-BC-0.3	EPA 3005A	827976	EPA 6020B	828246
2709790002	ARK-BC-0.1	EPA 3005A	827976	EPA 6020B	828246
2709790003	ARK-OR-0.8	EPA 3005A	827976	EPA 6020B	828246
2709790004	ARK-OR-0.1	EPA 3005A	827976	EPA 6020B	828246
2709790005	ARK-OR-0.3	EPA 3005A	827976	EPA 6020B	828246
92709790006	ARK-OR+0.25	EPA 3005A	827976	EPA 6020B	828246
2709790001	ARK-BC-0.3	EPA 7470A	828685	EPA 7470A	828766
2709790002	ARK-BC-0.1	EPA 7470A	828685	EPA 7470A	828766
2709790003	ARK-OR-0.8	EPA 7470A	828685	EPA 7470A	828766
2709790004	ARK-OR-0.1	EPA 7470A	828685	EPA 7470A	828766
2709790005	ARK-OR-0.3	EPA 7470A	828685	EPA 7470A	828766
2709790006	ARK-OR+0.25	EPA 7470A	828685	EPA 7470A	828766
2709790001	ARK-BC-0.3	SM 2540C-2015	827796		
2709790002	ARK-BC-0.1	SM 2540C-2015	827796		
2709790003	ARK-OR-0.8	SM 2540C-2015	827796		
2709790004	ARK-OR-0.1	SM 2540C-2015	827796		
2709790005	ARK-OR-0.3	SM 2540C-2015	827796		
2709790006	ARK-OR+0.25	SM 2540C-2015	827796		
2709790001	ARK-BC-0.3	SM 2320B-2011	827797		
2709790002	ARK-BC-0.1	SM 2320B-2011	827797		
2709790003	ARK-OR-0.8	SM 2320B-2011	827797		
2709790004	ARK-OR-0.1	SM 2320B-2011	827797		
2709790005	ARK-OR-0.3	SM 2320B-2011	827797		
2709790006	ARK-OR+0.25	SM 2320B-2011	827797		
2709790001	ARK-BC-0.3	EPA 9056A	827647		
2709790002	ARK-BC-0.1	EPA 9056A	827647		
2709790003	ARK-OR-0.8	EPA 9056A	827647		
2709790004	ARK-OR-0.1	EPA 9056A	827647		
2709790005	ARK-OR-0.3	EPA 9056A	827647		
92709790006	ARK-OR+0.25	EPA 9056A	827647		

CHAIN-OF-CUSTODY / Analytical Request Document The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

92		Σ	ARK-CCI	T	App. N		12	11	10	6	60	7	0	5		ω	2	-	ITEM#		Reques	Phone:	Atlanta, Email:	Address	Company:	Required	
709780		MO#:92709790	ARK-CCR-ASSMT-2024S1		App. IV - Sb, As, Ba, Be, Cd, Cr, Co, Pb, Li, Mo, Se, Tl + Hg	ADDITIONAL COMMENTS							ARK-OR+0.25	ARK-OR-03	ARK-OR-0.1	ARK-OR-OB	ARK-BC-0.1	ARK-BC-0.3	SAMPLE ID One Character per box. (A-2, 0-9 / , -) Sample ids must be unique One Character per box. (A-2, 0-9 / , -) Sample ids must be unique One Character per box. O		Requested Due Date:	(770)384-6584 Fax:	Allanta, GA 30339 Email: kellov sharpadjarpadja.com	1	y: ARCADIS - Allanta	Required Client Information:	WWW.PACELASS.COM
			+	H		医						Manager Park							Water DWY Water WY WATER WW WT WATER AR AR AR AR T8		Project #	Project Name:	Purchase Order #:	Copy To:	Report To:	Required Project Information:	
					S	2	H					200	8	¥ G	8	8	¥ G	WG	MATRIX CODE (see valid codes	to left)	ı	3				Poje	
					12	NOU	┢	+	╁	╁		 	wGG	<u>ନ</u>	WGG	WGG	<u>ဂ</u>	<u>ର</u> ଜ	SAMPLE TYPE (G=GRAB C=C	_	Т	밁	*	동	lley S	표	
					ARC-S-WAY	SHED BY	ļ						1/23	1/23	1/23	1/23	1/23	1/23	DATE			Arkw	ap Ca	dges, lo	inarpe,	ormation	
	(- SE		1	100	RELINGUISHED BY / AFFILIATION	┢		H				31208	11/2	153	150	t			8 8		gh/CCF	GPC82474-0003	Ben Hodges, Joju Abraham	Kelley Sharpe, Warren Johnson	5	
	JGNATU	ER NA			1/2	MOLL	┝		-	-			∞		W	7	Dy.	<u>00</u>	DATE	COLLECTED		₹-Ash Po	ا	Į	thrison		;
	SIGNATURE of SAMPLER:	SAMPLER NAME AND SIGNATURE		+			\vdash	-	-	ļ	_						-	\vdash	<u>"</u>	"		Plant Arkwright/CCR-Ash Pond Closure					
		Seg			1/24/25	DATE			L					_					T N			8					
A	F .	휘칠	er ye.	_	100	100	<u> </u>	-	ļ	 	_	ļ	is .	55	5	5	I On	5	SAMPLE TEMP AT COLLECTION		F	H	- N	 -	Ļ	= 0	
1	In k	10000000	ŀ		100	TIME	⊢	\vdash	⊢	├		-	×	×	×	×	×	×	# OF CONTAINERS Unpreserved	\dashv	Pace Profile #:	Pace Project Manager	Address Pace Quote:	Company Name:	Attention:	nvoice information:	
1				١,	6	in		\vdash	\vdash	╁		╁	╁	\vdash	┢	-	-	├	H2SO4		ğ	क		캋	3		, ;
- 1	וו ראו	223080		+	4	100	\vdash	\vdash		┢			×	×	×	×	×	×		, I	*	X S		3	H	mat	Ġ
	Ma			1.	M/														HCI	Preservatives	15836	ğ			H	9	ġ
	1 8				'N		L	ļ		_		<u> </u>		_	_				NaOH		- 1				H		
	1 5	5.65		1	W,	OCEP	-	\vdash	├			-	-	┢	-	⊢	-	-	Na2S2O3 Methanol	8	П	naiya.			H		į
	arsolu				\	TEDE	⊢	╁	\vdash	\vdash	\vdash	⊢	\vdash	-		\vdash	\vdash	\vdash	Other			Parks	1	П	H		
	۱ /					YIN		100										- 10	Analyses Test	Y/N					$ \ $		į
				1		NOCEPTED BY ! AFFILIATION							×	×	×	×	×	×	Total/Bicarb Alkalinity			maiya.parks@pacelabs.com			H		9
	DATE Signed:			1		NOE	L	_	_	_	_	<u> </u>	×	×	×	×	×	×	CI, F, \$04	_	2	8			H		Š
	Sign	1		1			<u> </u>	-	├	-		├	×	×	×	×	×	×	TDS App. III Metals - B, Ca	\dashv	Ĭ	П					
	, i	1				7	\vdash	╁	\vdash	╁		 -	×	×	×	×	×	×	App. IV Metals (Client List)		<u>8</u>	П			П		
	0				N	瓣							×	×	×	×	×	×	Metals - Mg, Na, K		1	Н		ļ	Н		
	\mathcal{F}				K	DATE	L	$oxed{oxed}$					×	×	<u>×</u>	×	×	×	Radium 226/228		<u> </u>		-	L			1
	72		-	-	\downarrow	100	L	╀	⊢	├			-	ļ	 	-	├	.			2		100				1
		1			11/6	TIME	┝	┼	╁─╴	╁	\vdash	╁	┢	 	\vdash	-	├	╁		\dashv	3			ı			
		100					Н	+	 	\vdash		t	┢	 	 	\vdash	\vdash	 						ı	ſ	70	٦ إ
	TEMP in	٦			Τ	200																9	27		ŀ	Page :	Ι,
	I SIVIE II		\perp	\perp	\perp	Sep.		19,000				-		2300					Residual Chlorine (Y/N)			tate / Loca	Wieto			••	
	Receive Ice	d on				SAMP				ł]					æ	Local	ulatory Agency			_	
	(Y/N) Custody		\perp	+	\perp	BAMPLE CONDITIONS															1	rtion	ASU				
	Sealed Cooler					HOTT															1				-	Q	
	(Y/N)		_		+	8140																	100			-	
	Sample: Intact	•				1															200	機能	Ser Birth			<u> </u>	
1	(Y/N)	L					_	<u> </u>				<u> </u>	<u> </u>	L	<u></u>		<u> </u>	1	20-108 52 22 2	100 St. 100 St. 100 St. 100 St. 100 St. 100 St. 100 St. 100 St. 100 St. 100 St. 100 St. 100 St. 100 St. 100 St		靈	100	ı	Į		L
																										ı	Page

0	DC#_Title: ENV-FRM-HUN1-0083 v03_Sample Condition Upon Receipt
Pace	•
ANALYTICAL SERVICES	Effective Date: 11/29/2023

Laboratory receiving samples: Asheville	luntersville [Raleigh[☐ Mechanicsville☐ Atlanta☐ Kernersville☐
Sample Condition Client Name:			Project #: WO#: 92709790
Courier: Fed Ex UPS Commercial Pace	USPS Other:	Clien	PM: MP Due Date: 01/31/24 CLIENT: GA-ArcadAtl
Custody Seal Present?	Intact?	₫Yes □No	N/A Date/Initials Person Examining Contents: 1/24/14/5/
	ble Bags	None 🗌 Oti	ther Biological Tissue Frozen? Yes No N/A
Thermometer:		Wet □Ble	lue
Cooler Temp: Correction Factor Add/Subtract (°C): USDA Regulated Soil (\bigcap N/A, water sample)	10.1		Temp should be above freezing to 6°C Samples out of temp criteria. Samples on ice, cooling process has begun
Did samples originate in a quarantine zone within the	United States: CA	A, NY, or SC	Did samples originate from a foreign source (internationally,
(check maps)? Yes No			including Hawaii and Puerto Rico)? Yes No Comments/Discrepancy:
			1.
Chain of Custody Present?		No N/A	2.
Samples Arrived within Hold Time?		□No □N/A	
Short Hold Time Analysis (<72 hr.)?		⊒Ńo □N/A	3.
Rush Turn Around Time Requested?		⊿no □n/a	4.
Sufficient Volume?	⊉ ∜es [□No □N/A	5
Correct Containers Used? -Pace Containers Used?		□No □N/A □No □N/A	6.
Containers Intact?		□No □N/A	7.
Dissolved analysis: Samples Field Filtered?	□Yes	□No →□N/A	8,
Sample Labels Match COC?	2000	□No □N/A	9.
-Includes Date/Time/ID/Analysis Matrix:	n		
Headspace in VOA Vials (>5-6mm)?	Yes	□No □N/A	
Trip Blank Present?	Yes	□No □M/A	11.
Trip Blank Custody Seals Present?	☐Yes	□No ØN/A	
COMMENTS/SAMPLE DISCREPANCY			Field Data Required? ☐ Yes ☐ No
			Lot ID of split containers:
CLIENT NOTIFICATION/RESOLUTION			
Person contacted:		Date/Tim	me:
			Date:
	_		Dates
Project Manager SRF Review:			

Page 22 of 23



DC#_Title: ENV-FRM-HUN1-0083 v03_Sample Condition Upon Receipt

Effective Date: 11/29/2023

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

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

-

Project #

WO#: 92709790

PM: 11P

Due Date: 01/31/24

CLIENT: GA-ArcadAtl

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

***Check all unpreserved Nitrates for chlorine

Item#	BP4U-125 mL Plastic Unpreserved (N/A) (Cl-)	BP3U-250 mL Plastic Unpreserved (N/A)	BP2U-500 mL Plastic Unpreserved (N/A)	BP1U-1 liter Plastic Unpreserved (N/A)	BP45-125 mL Plastic H2SO4 (pH < 2) (CI-)	BP3N-250 mL plastic HNO3 (pH < 2)	BP42-125 mL Plastic ZN Acetate & NaOH (>9)	BP48-125 mL Plastic NaOH (pH > 12) (CI-)	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) (CI-)	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 HCI (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)	3PIN	BP3R-250 mL Plastic (NH2)25O4 (9.3-9.7)	AG0U-100 mL Amber Unpreserved (N/A) (CI-)	VSGU-20 mt. Scintillation vials (N/A)	DG9U-40 mL Amber Unpreserved vials (N/A)
1			2			\setminus						,												Ž				
2	\triangle		7			\times																		Z	\bigvee			
3			7			X																		X				
4			7			/								abla	abla									Z				\neg
5			て			7																		Z				\neg
6			Σ			X																		R			\dashv	\neg
7											\setminus		abla	J	\bigcup													\dashv
8		Ĩ												J	\bigcup			-						\bigvee				_
9					abla			\bigvee																1				\dashv
10								7					abla	J	7									1	$ egthinspace{1.5em} $		_	\dashv
11														7										7				-
12							\bigvee			-					J	-								7	7		_	\dashv

Sample ID Type of Preservative pH upon receipt Date preservation adjusted Time preservation adjusted adjusted added	pH Adjustment Log for Preserved Samples								
	Type of Preservative	pH upon receipt	Date preservation adjusted	· ·		Lot #			
						 ,			
-+		Type of Preservative			Type of Preservative pH upon receipt Date preservation adjusted Time preservation	Type of Preservative pH upon receipt Date preservation adjusted Time preservation Amount of Preservative			

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

B.4 Data Quality Evaluation

DATA USABILITY SUMMARY

Steven Elliott (Stantec) reviewed two data packages from GEL Laboratories (GEL) for the analysis of water samples collected August 9 through August 11, 2023, at the Georgia Power Arkwright Plant AP1 site. Samples were collected according to the Field Sampling Plan – Plant Arkwright (Amec Foster Wheeler, 2016).

Analyses requested included:

- SW-846 6020B Total Metals by inductively coupled plasma mass spectrometry (ICP/MS)
- SW-846 7470A Mercury by manual cold-vapor
- EPA 300 Rev 2.1 Chloride, fluoride, and sulfate by ion chromatography
- SM 2540C 2015 Total dissolved solids (TDS)
- 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, two (2) field blanks, two (2) equipment blank, and two (2) field duplicate samples were analyzed for one or more of the analyses listed above. Table 1 lists the field identifications cross-referenced to laboratory identifications. Table 2 is a summary of qualified data. Tables 3a through 3e summarize field duplicate results.

Analytical Results

The data packages contain a minimum of one quality control batch per analytical method analyzed. The quality control batch identifies the laboratory QC samples that correspond to the designated field samples. Not detected results are reported as less than the value of the method detection limit (MDL).

Preservation and Holding Times

The samples were evaluated for agreement with the chain-of-custody forms. The samples were received in the appropriate containers with the paperwork filled out properly. The laboratory sample condition upon receipt forms indicates all samples were received at temperature ranges of 0.0 to 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

• <u>Laboratory Method Blanks</u>. No contamination was detected in any of the laboratory method blanks.

<u>Field Blanks</u>. Field blanks were analyzed for the full suite of sample analyses and all analytes were not detected with the following exceptions:

SDG 640869

- Chloride was detected in the blanks ARK-AP1-FB-01,ARK-AP1-EB-01 (10/09/2023), and ARK-AP1-EB-02 (10/10/2023) 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.
- Arsenic was detected in the blank ARK-AP1-FB-01, ARK-AP1-EB-01 (10/09/2023), and ARK-AP1-FB-02 (10/10/2023) at a concentration below 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.
- Calcium and molybdenum were detected in the blank ARK-AP1-EB-02 (10/10/2023) at a concentration below 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 640870

- Radium 226 was detected in the blank ARK-AP1-FB-01 (10/09/2023) at a concentration above the laboratory Reporting Limit (RL). No qualification was required for associated sample results reported as greater than 10 times the blank concentration.
- Radium 228 was detected in the blank ARK-AP1-FB-02 (10/10/2023) 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 with the following exception.

SDG 640870

• The laboratory duplicate for radium 228 in sample ARK-AP1GWA-1 had a high RPD and has been qualified as estimated.

Field Precision

Two sets of field duplicate samples were collected for this sampling event (see Table 3a and 3b 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-AP1GWA-1	640869001	640869	6020B, 7470A, 300, 2540C	10/09/2023
ARK-AP1-FB-01	640869002	640869	6020B, 7470A, 300, 2540C	10/09/2023
ARK-AP1GWA-2	640869003	640869	6020B, 7470A, 300, 2540C	10/09/2023
ARK-AP1-EB-01	640869004	640869	6020B, 7470A, 300, 2540C	10/09/2023
ARK-AP1PZ-1	640869005	640869	6020B, 7470A, 300, 2540C	10/09/2023
ARK-AP1PZ-2	640869006	640869	6020B, 7470A, 300, 2540C	10/09/2023
ARK-AP1-FD-01	640869007	640869	6020B, 7470A, 300, 2540C	10/09/2023
ARK-AP1PZ-4	640869008	640869	6020B, 7470A, 300, 2540C	10/10/2023
ARK-AP1-FB-02	640869009	640869	6020B, 7470A, 300, 2540C	10/10/2023
ARK-AP1PZ-3	640869010	640869	6020B, 7470A, 300, 2540C	10/10/2023
ARK-AP1PZ-8	640869011	640869	6020B, 7470A, 300, 2540C	10/10/2023
ARK-AP1PZ-5	640869012	640869	6020B, 7470A, 300, 2540C	10/10/2023
ARK-AP1-EB-02	640869013	640869	6020B, 7470A, 300, 2540C	10/10/2023
ARK-AP1PZ-7	640869014	640869	6020B, 7470A, 300, 2540C	10/10/2023
ARK-AP1PZ-10	640869015	640869	6020B, 7470A, 300, 2540C	10/10/2023
ARK-AP1PZ-11	640869016	640869	6020B, 7470A, 300, 2540C	10/10/2023

Field Identification	Laboratory Identification	SDG	Analyses	Sample Date
ARK-AP1-FD-02	640869017	640869	6020B, 7470A, 300, 2540C	10/10/2023
ARK-AP1PZ-11	640869018	640869	6020B, 7470A, 300, 2540C	10/11/2023
ARK-AP1GWA-1	640870001	640870	903.1, 904	10/09/2023
ARK-AP1-FB-01	640870002	640870	903.1, 904	10/09/2023
ARK-AP1GWA-2	640870003	640870	903.1, 904	10/09/2023
ARK-AP1-EB-01	640870004	640870	903.1, 904	10/09/2023
ARK-AP1PZ-1	640870005	640870	903.1, 904	10/09/2023
ARK-AP1PZ-2	640870006	640870	903.1, 904	10/09/2023
ARK-AP1-FD-01	640870007	640870	903.1, 904	10/09/2023
ARK-AP1PZ-4	640870008	640870	903.1, 904	10/10/2023
ARK-AP1-FB-02	640870009	640870	903.1, 904	10/10/2023
ARK-AP1PZ-3	640870010	640870	903.1, 904	10/10/2023
ARK-AP1PZ-8	640870011	640870	903.1, 904	10/10/2023
ARK-AP1PZ-5	640870012	640870	903.1, 904	10/10/2023
ARK-AP1-EB-02	640870013	640870	903.1, 904	10/10/2023
ARK-AP1PZ-7	640870014	640870	903.1, 904	10/10/2023
ARK-AP1PZ-10	640870015	640870	903.1, 904	10/10/2023
ARK-AP1PZ-11	640870016	640870	903.1, 904	10/10/2023
ARK-AP1-FD-02	640870017	640870	903.1, 904	10/10/2023
ARK-AP1PZ-11	640870018	640870	903.1, 904	10/11/2023

Table 2 – Qualified Analytical Data

Field Identification	Analyte	Qualification / Code	Reason for Qualification
ARK-AP1GWA-2	Chloride	J+ / BFH	Detected in FB
ARK-AP1PZ-1	Chloride	J+ / BFH	Detected in FB
ARK-AP1PZ-2	Chloride	J+ / BFH	Detected in FB
ARK-AP1-FD-01	Chloride	J+ / BFH	Detected in FB
ARK-AP1GWA-1	Chloride	J+ / BFH	Detected in FB
ARK-AP1PZ-11	Chloride	J+ / BEH	Detected in EB
ARK-AP1-FD-02	Chloride	J+ / BEH	Detected in EB
ARK-AP1GWA-2	Arsenic	J+ / BEH	Detected in EB
ARK-AP1PZ-1	Arsenic	J+ / BEH	Detected in EB
ARK-AP1GWA-1	Arsenic	J+ / BEH	Detected in EB
ARK-AP1PZ-4	Arsenic	J+ / BEH	Detected in EB
ARK-AP1PZ-3	Arsenic	J+ / BEH	Detected in EB
ARK-AP1PZ-8	Arsenic	J+ / BEH	Detected in EB
ARK-AP1PZ-5	Arsenic	J+ / BEH	Detected in EB
ARK-AP1PZ-7	Arsenic	J+ / BEH	Detected in EB
ARK-AP1PZ-10	Arsenic	J+ / BEH	Detected in EB
ARK-AP1PZ-11	Arsenic	J+ / BEH	Detected in EB
ARK-AP1-FD-02	Arsenic	J+ / BEH	Detected in EB
ARK-AP1PZ-3	Molybdenum	J+ / BEH	Detected in EB
ARK-AP1PZ-11	Molybdenum	J+ / BEH	Detected in EB
ARK-AP1-FD-02	Molybdenum	J+ / BEH	Detected in EB
ARK-AP1GWA-1	Radium 226	J+ / BFH	Detected in FB
ARK-AP1GWA-2	Radium 226	J+ / BFH	Detected in FB
ARK-AP1PZ-1	Radium 226	J+ / BFH	Detected in FB
ARK-AP1PZ-2	Radium 226	J+ / BFH	Detected in FB
ARK-AP1-FD-01	Radium 226	J+ / BFH	Detected in FB

Table 2 – Qualified Analytical Data

Field Identification	Analyte	Qualification / Code	Reason for Qualification
ARK-AP1PZ-4	Radium 228	J+ / BFH	Detected in FB
ARK-AP1-FB-02	Radium 228	J+ / BFH	Detected in FB
ARK-AP1PZ-3	Radium 228	J+ / BFH	Detected in FB
ARK-AP1PZ-8	Radium 228	J+ / BFH	Detected in FB
ARK-AP1PZ-5	Radium 228	J+ / BFH	Detected in FB
ARK-AP1-EB-02	Radium 228	J+ / BFH	Detected in FB
ARK-AP1PZ-7	Radium 228	J+ / BFH	Detected in FB
ARK-AP1PZ-10	Radium 228	J+ / BFH	Detected in FB
ARK-AP1PZ-11	Radium 228	J+ / BFH	Detected in FB
ARK-AP1-FD-02	Radium 228	J+ / BFH	Detected in FB
ARK-AP1GWA-1	Radium 228	J/LD1	High LD RPD

 $\ensuremath{\mathsf{BFH}}-\ensuremath{\mathsf{Blank}}$ Field High – detected in the field blank (FB) above the RL

BLL – Blank Lab Low – detected in the lab method blank (MB) less than the RL

J+ – The analyte was detected in an associated blank; estimated data with a high bias.

Table 3a - Field Precision

Field		Sample Result	Duplicate		
Identification	Analyte	(mg/L)	Result (mg/L)	RPD ^a	Qualified
ARK-AP1PZ-2/	Sulfate	801	804	0.4%	А
ARK-AP1-FD-01	Chloride	2.98	3.06	2.6%	А
	Fluoride	0.262	0.283	7.7%	А
	Calcium	205	218	6.1%	А
	Barium	0.0300	0.0313	4.2%	А
	Cadmium	0.000689 J	0.000635 J	<5*RL, <2*RL	A*
	Cobalt	0.169	0.192	12.7%	А
	Lithium	0.0214	0.0238	<5*RL, <2*RL	A*
	Boron	0.470	0.492	4.6%	А
	TDS	1170	1210	3.4%	А

a RPD = ((SR - DR)*200)/(SR + DR)

Table 3b - Field Precision

Field		Sample Result	Duplicate		
Identification	Analyte	(mg/L)	Result (mg/L)	RPD ^a	Qualified
ARK-AP1PZ-11/	Sulfate	54.3	80.1	<5*RL, <2*RL	A*
ARK-AP1-FD-02	Chloride	1.20	1.21	0.8%	А
	Fluoride	0.202	0.297	<5*RL, <2*RL	A*
	Arsenic	0.00303 J	0.00319 J	<5*RL, <2*RL	A*
	Boron	0.143	0.146	2.1%	А
	Calcium	27.6	28.0	1.4%	A
	Barium	0.0234	0.0242	3.4%	A
	Molybdenum	0.000342 J	0.000326 J	<5*RL, <2*RL	A*
	TDS	198	197	0.5%	А

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.

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.

DATA USABILITY SUMMARY

Steven Elliott (Stantec) reviewed one data package from GEL Laboratories (GEL) for the analysis of water samples collected January 22 and 23, 2024, at the Georgia Power Arkwright Plant AP1 site. Samples were collected according to the Field Sampling Plan – Plant Arkwright (Amec Foster Wheeler, 2016).

Analyses requested included:

- SW-846 6020B Total Metals by inductively coupled plasma mass spectrometry (ICP/MS)
- SW-846 7470A Mercury by manual cold-vapor
- EPA 300 Rev 2.1 Chloride, fluoride, and sulfate by ion chromatography
- SM 2540C 2015 Total dissolved solids (TDS)
- 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, two (2) field blanks, two (2) equipment blank, and two (2) field duplicate samples were analyzed for one or more of the analyses listed above. Table 1 lists the field identifications cross-referenced to laboratory identifications. Table 2 is a summary of qualified data. Tables 3a through 3e summarize field duplicate results.

Analytical Results

The data packages contain a minimum of one quality control batch per analytical method analyzed. The quality control batch identifies the laboratory QC samples that correspond to the designated field samples. Not detected results are reported as less than the value of the method detection limit (MDL).

Preservation and Holding Times

The samples were evaluated for agreement with the chain-of-custody forms. The samples were received in the appropriate containers with the paperwork filled out properly. The laboratory sample condition upon receipt forms indicates all samples were received at a temperature of 7.0°C. Chloride, fluoride, and sulfate have been qualified as estimated due to the cooler temperature exceeding 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

<u>Laboratory Method Blanks</u>. No contamination was detected in any of the laboratory method blanks with the following exception:

SDG 652703

• Chloride was detected in the method blank (QC1205633068) in batch 2559394. All associated sample results were reported as either not detected or with results greater than 10 times the blank concentration and therefore no qualification was necessary.

<u>Field Blanks</u>. Field blanks were analyzed for the full suite of sample analyses and all analytes were not detected with the following exceptions:

SDG 652703

- Chloride was detected in the blanks ARK-AP1-EB-01 (01/22/2024), ARK-AP1-EB-02 (01/23/2024), and ARK-AP1-FB-02 (01/23/2024) at concentrations below the laboratory Reporting Limit (RL). No qualification was required for associated sample results reported as not detected or 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 with a high bias (J+).
- TDS was detected in the blank ARK-AP1-FB-02 (4.0J, at a concentration below the laboratory RL. All associated sample results were reported with results greater than 10 times the blank concentration and therefore no qualification was necessary.

SDG 652704

- Radium 226 was detected in the blank ARK-AP1-FB-01 (01/22/2024) and ARK-AP1-FB-02 (01/23/2024) at concentrations below the laboratory RL. No qualification was required for associated sample results reported as not detected or 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 with a high bias.
- Radium 228 was detected in the blank ARK-AP1-FB-01 (01/22/2024), ARK-AP1-EB-02 (01/23/2024) 1.19 and ARK-AP1-FB-02 (01/23/2024) 1.80 at a concentration below the laboratory RL. No qualification was required for associated sample results reported as not detected or 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 with a high bias.

Laboratory Control Samples

Laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) recoveries met the laboratory acceptance criteria for all analyses.

Matrix Spike/Matrix Spike Duplicates

Site-specific MS/MSD precision and accuracy results were within the laboratory acceptance criteria with the following exception:

SDG 652703

• The MS recovery of chloride in sample ARK-AP1PZ-10 exceeded the lab upper acceptance limit. Chloride in this sample has been qualified as estimated.

Laboratory Duplicates

Appropriate analytical duplicates were analyzed and RPDs were within the laboratory acceptance criteria.

Field Precision

Two sets of field duplicate samples were collected for this sampling event (see Table 3a and 3b 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 652704

Results for radium 226 in the field duplicate pair ARK-AP1PZ-11 / ARK-AP1-FD-02 had a
difference between sample and duplicate greater than two times the RL 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-AP1GWA-1	652703001	652703	6020B, 7470A, 300, 2540C	01/22/2024				
ARK-AP1GWA-2	652703002	652703	6020B, 7470A, 300, 2540C	01/22/2024				
ARK-AP1PZ-1	652703003	652703	6020B, 7470A, 300, 2540C	01/22/2024				
ARK-AP1PZ-2	652703004	652703	6020B, 7470A, 300, 2540C	01/22/2024				
ARK-AP1-FB-01	652703005	652703	6020B, 7470A, 300, 2540C	01/22/2024				
ARK-AP1-FD-01	652703006	652703	6020B, 7470A, 300, 2540C	01/22/2024				
ARK-AP1-ED-01	652703007	652703	6020B, 7470A, 300, 2540C	01/22/2024				
ARK-AP1PZ-3	652703008	652703	6020B, 7470A, 300, 2540C	01/23/2024				
ARK-AP1PZ-4	652703009	652703	6020B, 7470A, 300, 2540C	01/23/2024				
ARK-AP1PZ-5	652703010	652703	6020B, 7470A, 300, 2540C	01/23/2024				
ARK-AP1PZ-7	652703011	652703	6020B, 7470A, 300, 2540C	01/23/2024				
ARK-AP1PZ-8	652703012	652703	6020B, 7470A, 300, 2540C	01/23/2024				
ARK-AP1PZ-9	652703013	652703	6020B, 7470A, 300, 2540C	01/23/2024				
ARK-AP1PZ-10	652703014	652703	6020B, 7470A, 300, 2540C	01/23/2024				
ARK-AP1PZ-11	652703015	652703	6020B, 7470A, 300, 2540C	01/23/2024				
ARK-AP1-EB-02	652703016	652703	6020B, 7470A, 300, 2540C	01/23/2024				
ARK-AP1-FD-02	652703017	652703	6020B, 7470A, 300, 2540C	01/23/2024				
ARK-AP1-FB-02	652703018	652703	6020B, 7470A, 300, 2540C	01/23/2024				
ARK-AP1GWA-1	652704001	652704	903.1, 904	01/22/2024				
ARK-AP1GWA-2	652704002	652704	903.1, 904	01/22/2024				
ARK-AP1PZ-1	652704003	652704	903.1, 904	01/22/2024				
ARK-AP1PZ-2	652704004	652704	903.1, 904	01/22/2024				
ARK-AP1-FB-01	652704005	652704	903.1, 904	01/22/2024				
ARK-AP1-FD-01	652704006	652704	903.1, 904	01/22/2024				
ARK-AP1-ED-01	652704007	652704	903.1, 904	01/22/2024				
ARK-AP1PZ-3	652704008	652704	903.1, 904	01/23/2024				
ARK-AP1PZ-4	652704009	652704	903.1, 904	01/23/2024				

Field Identification	Laboratory Identification	SDG	Analyses	Sample Date
ARK-AP1PZ-5	652704010	652704	903.1, 904	01/23/2024
ARK-AP1PZ-7	652704011	652704	903.1, 904	01/23/2024
ARK-AP1PZ-8	652704012	652704	903.1, 904	01/23/2024
ARK-AP1PZ-9	652704013	652704	903.1, 904	01/23/2024
ARK-AP1PZ-10	652704014	652704	903.1, 904	01/23/2024
ARK-AP1PZ-11	652704015	652704	903.1, 904	01/23/2024
ARK-AP1-EB-02	652704016	652704	903.1, 904	01/23/2024
ARK-AP1-FD-02	652704017	652704	903.1, 904	01/23/2024
ARK-AP1-FB-02	652704018	652704	903.1, 904	01/23/2024

Table 2 – Qualified Analytical Data

Field Identification	Analyte	Qualification / Code	Reason for Qualification
All samples	Chloride	J/SP1	Exceeded cooler temperature
All samples	Fluoride	J/SP1	Exceeded cooler temperature
All samples	Sulfate	J/SP1	Exceeded cooler temperature
ARK-AP1GWA-1	Chloride	J+ / BFL	Detected in FB
ARK-AP1GWA-2	Chloride	J+ / BFL	Detected in FB
ARK-AP1PZ-11	Chloride	J+ / BFL	Detected in FB
ARK-AP1-FD-02	Chloride	J+ / BFL	Detected in FB
ARK-AP1PZ-10	Chloride	J / MS1	High MS %R
ARK-AP1GWA-1	Radium 226	J+ / BFL	Detected in FB
ARK-AP1GWA-2	Radium 226	J+ / BFL	Detected in FB
ARK-AP1PZ-1	Radium 226	J+ / BFL	Detected in FB
ARK-AP1PZ-2	Radium 226	J+ / BFL	Detected in FB

Table 2 – Qualified Analytical Data

Field Identification	Analyte	Qualification / Code	Reason for Qualification
ARK-AP1-FD-01	Radium 226	J+ / BFL	Detected in FB
ARK-AP1PZ-3	Radium 226	J+ / BFL	Detected in FB
ARK-AP1PZ-4	Radium 226	J+ / BFL	Detected in FB
ARK-AP1PZ-5	Radium 226	J+ / BFL	Detected in FB
ARK-AP1PZ-7	Radium 226	J+ / BFL	Detected in FB
ARK-AP1PZ-10	Radium 226	J+ / BFL	Detected in FB
ARK-AP1PZ-2	Radium 228	J+ / BFL	Detected in FB
ARK-AP1PZ-5	Radium 228	J+ / BFL	Detected in FB and EB
ARK-AP1PZ-8	Radium 228	J+ / BFL	Detected in FB and EB
ARK-AP1PZ-9	Radium 228	J+ / BFL	Detected in FB and EB
ARK-AP1PZ-10	Radium 228	J+ / BFL	Detected in FB and EB
ARK-AP1PZ-11	Radium 226	J / FD2	FD result<5xRL, difference >2xRL
ARK-AP1-FD-02	Radium 226	J / FD2	FD result<5xRL, difference >2xRL

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-AP1GWA-1/ ARK-AP1-FD-01	Sulfate	46.0	46.5	1.1%	A
	Chloride	1.75	1.86	<5*RL, <2*RL	A*
	Fluoride	0.339	0.366	<5*RL, <2*RL	A*
	Boron	0.108	0.109	0.9%	Α
	Barium	0.0551	0.0518	6.2%	Α
	Beryllium	0.00204	0.00191	<5*RL, <2*RL	A*
	Cadmium	0.000354 J	0.00031 J	<5*RL, <2*RL	A*
	Calcium	16.5	16.3	1.2%	А
	Chromium	0.00447 J	0.00429 J	<5*RL, <2*RL	A*
	Cobalt	0.0065	0.00615	5.5%	А
	Lithium	0.0101	0.0094 J	<5*RL, <2*RL	A*
	Selenium	0.00243 J	0.002 J	<5*RL, <2*RL	A*
	TDS	139	130	6.7%	А
	Radium 226	1.06	0.738	<5*RL, <2*RL	A*

 $^{^{}a}$ RPD = ((SR - DR)*200)/(SR + DR)

Table 3b - Field Precision

Field		Sample Result	Duplicate		
Identification	Analyte	(mg/L)	Result (mg/L)	RPD ^a	Qualified
ARK-AP1PZ-11/ ARK-AP1-FD-02	Sulfate	46.5	46.8	0.6%	Α
	Chloride	1.15	1.16	0.9%	Α
	Fluoride	0.146	0.142	<5*RL, <2*RL	A*
	Boron	0.161	0.158	1.9%	Α
	Barium	0.0192	0.0191	<5*RL, <2*RL	A*
	Calcium	25.1	25.0	0.4%	Α
	Molybdenum	0.000629 J	0.000757 J	<5*RL, <2*RL	A*
	TDS	187	198	5.7%	А
	Radium 226	0.357 U	2.22	<5*RL, >2*RL	J

 $^{^{}a}$ 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.

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.