Prepared for



Georgia Power Company 241 Ralph McGill Blvd NE Atlanta, Georgia 30308

ASSESSMENT OF CORRECTIVE MEASURES REPORT

PLANT BRANCH ASH POND E (AP-E)

Prepared by



engineers | scientists | innovators

1255 Roberts Boulevard, Suite 200 Kennesaw, Georgia 30144

Project Number GW8862

December 2022



ASSESSMENT OF CORRECTIVE MEASURES REPORT

Plant Branch Ash Pond E

CERTIFICATION STATEMENT

I, Lauren Fitzgerald, am a professional engineer and licensed in the State of Georgia. I hereby certify that this Assessment of Corrective Measures Report, Georgia Power Company – Plant Branch – Ash Pond E (AP-E) was prepared by, or under the direct supervision of, a Qualified Groundwater Scientist, in accordance with the Georgia Environmental Protection Division Rules of Solid Waste Management. According to 391-3-4-.01, a Qualified Groundwater Scientist is "a professional engineer or geologist registered to practice in Georgia who has received a baccalaureate or post-graduate degree in the natural sciences or engineering and has sufficient training and experience in groundwater hydrology and related fields that enable individuals to make sound professional judgments regarding groundwater monitoring, contaminant fate and transport, and corrective action." By affixing my professional seal and signature, I hereby acknowledge that this report has been prepared in conformance with the United States Environmental Protection Agency coal combustion residual rule [40 Code of Federal Regulations (CFR) 257 Subpart D] and the Georgia Environmental Protection Division Rules for Solid Waste Management 391-3-4-.10.



Lauren Fitzgerald, Ph.D., P.E. *Project Engineer*

F/ou

Whitney Law, P.E. Project Director



TABLE OF CONTENTS

1.0	INT	RODUC	CTION	1				
	1.1	Purpos	se	2				
	1.2	Site Lo	ocation and Description	2				
	1.3	Pond C	Closure	3				
2.0	COl		JAL SITE MODEL					
	2.1	Geolog	gy	4				
	2.2	Hydro	logy and Groundwater Flow	4				
3.0	NA		ND EXTENT DELINEATION					
	3.1	Groun	dwater Monitoring & Appendix IV Constituents	6				
		3.1.1	Groundwater Monitoring Program	6				
		3.1.2	SSLs for Appendix IV Constituents	6				
	3.2	Deline	eation of SSL Constituents	7				
4.0	GRO	JUNDW	VATER CORRECTIVE MEASURES	9				
	4.1	Object	tives of the Corrective Measures	9				
	4.2	Summ	ary of Corrective Measures	9				
		4.2.1	Geochemical Approaches (In-Situ Injection)	10				
		4.2.2	Hydraulic Containment (Pump and Treat)	11				
		4.2.3	Monitored Natural Attenuation					
		4.2.4	Permeable Reactive Barriers	13				
		4.2.5	Phytoremediation	14				
		4.2.6	Subsurface Vertical Barrier Walls	15				
5.0	REN	MEDY S	SELECTION PROCESS					
	5.1	Pond C	Closure and Site Management Strategy	17				
	5.2	Additional Data Gathering						
	5.3	Schedu	ule, Reporting, and Next Steps					
6.0	REF	FERENC	CES					



LIST OF TABLES

- Table 1Monitoring Well Network Summary
- Table 2Summary of Background Concentrations and Groundwater Protection
Standards
- Table 3Summary of Groundwater Analytical Data August 2022
- Table 4Evaluation of Remedial Technologies

LIST OF FIGURES

Figure 1	Site Location Map
Figure 2	Potentiometric Surface Contour Map – August 2022
Figure 3	AP-E Site Plan Monitoring Well Location Map
Figure 4	Iso-Concentration Map, Cobalt – August 2022
Figure 5	Iso-Concentration Map, Beryllium – August 2022
Figure 6	Cobalt and Beryllium Time Trends in BRGWC-33S and BRGWC-38S

LIST OF APPENDICES

Appendix A	Boring and Well Construction Logs
Appendix B	Laboratory Analytical Reports

Geosyntec[>]

LIST OF ACRONYMS

ACM	Assessment of Corrective Measures
ANS	Applied Natural Sciences
AP	ash pond
ASD	Alternate Source Demonstration
CCR	coal combustion residuals
CFR	Code of Federal Regulations
cm/sec	centimeters per second
ft	feet
ft bgs	feet below ground surface
ft/day	feet per day
ft/ft	feet per foot
GA EPD	GA Environmental Protection Division
Georgia Power	Georgia Power Company
Geosyntec	Geosyntec Consultants, Inc.
GWPS	Groundwater Protection Standard
HAR	Hydrogeologic Assessment Report
ISCO	in-situ chemical oxidation
ISCR	in-situ chemical reduction
ISS	in-situ solidification/stabilization
K_h	horizontal hydraulic conductivity
LDA	large diameter auger
MNA	monitored natural attenuation
O&M	operations and maintenance
P&T	pump and treat
PE	professional engineer
PRB	permeable reactive barriers
PWR	partially weathered rock
RCRA	Resource Conservation and Recovery Act
SSL	statistically significant level
TWR	transitionally weathered rock
US EPA	United States Environmental Protection Agency
ZVI	zero-valent iron

1.0 INTRODUCTION

In accordance with the United States Environmental Protection Agency (US EPA) Coal Combustion Residual Rule (federal CCR Rule) [40 Code of Federal Regulations (CFR) Part 257, Subpart D] and the Georgia Environmental Protection Division (GA EPD) Rules for Solid Waste Management 391-3-4-.10, Geosyntec Consultants, Inc. (Geosyntec) has prepared this *Assessment of Corrective Measures (ACM) Report* for Georgia Power Company (Georgia Power) Plant Branch (Site) Ash Pond E (AP-E). Pursuant to 40 CFR § 257.96 and Georgia Rule 391-3-4-.10(6)(a), this ACM Report evaluates potential corrective measures to address statistically significant levels (SSLs) of cobalt and beryllium identified at AP-E.

Plant Branch ceased producing electricity prior to October 19, 2015, and therefore pursuant to § 257.50(e), AP-E is not subject to the federal CCR Rule. However, the GA EPD Rules for Solid Waste Management 391-3-4-.10(6)(a) promulgates the groundwater monitoring and corrective action regulations stipulated in the federal CCR Rule § 257.90 through § 257.98. For ease of reference, the US EPA CCR rules are cited within this report.

The SSLs of cobalt and beryllium were identified following statistical analysis of analytical groundwater data from the October 2019 semiannual assessment monitoring event (Golder, 2020a). Georgia Power submitted an Alternate Source Demonstration (ASD) to GA EPD for the observed SSLs (Golder, 2020b) that was not accepted by GA EPD in April 2022. Within 90 days of receiving GA EPD's nonconcurrence letter, Georgia Power initiated ACM for AP-E on July 21, 2022. Four assessment groundwater monitoring wells, installed to assess the extent of cobalt and beryllium in groundwater downgradient of AP-E, show that cobalt and beryllium are horizontally and vertically delineated and contained within the property boundary. This ACM Report is the first step in identifying viable corrective measures to address SSLs in groundwater associated with AP-E. Based on the results of the ACM, further evaluation may be performed, site-specific studies completed, and a corrective action plan developed and implemented pursuant to § 257.97 and § 257.98.

Georgia Power is conducting a human health and ecological risk evaluation to evaluate constituents that exhibit SSLs in groundwater (i.e., cobalt, beryllium) at AP-E. The risk evaluation will use a conservative, health-protective approach that is consistent with US EPA risk assessment guidance, GA EPD regulations and guidance, and standard practice for risk assessment in the State of Georgia. As part of the risk evaluation, a well survey of potential groundwater wells within a three-mile radius of AP-E will be conducted and

will consist of reviewing federal, state, and county records and online sources in addition to conducting a windshield survey of the area. The risk evaluation will rely on groundwater data collected by Georgia Power from March 2020 to August 2022 in compliance with the federal and state CCR rules. The results of this risk evaluation will be presented in a *Risk Evaluation Report – Georgia Power Company – Plant Branch Ash Pond E* to be included as an appendix to the February 2023 *Semiannual Groundwater Monitoring and Corrective Action Report* (semiannual report).

1.1 <u>Purpose</u>

The purpose of this ACM is to begin the process of selecting corrective measure(s) for groundwater. This process is typically iterative and may be composed of multiple steps to analyze the effectiveness of corrective measures to address the potential migration of CCR constituents in groundwater at AP-E.

Once potential corrective measures are identified in this ACM, they are further evaluated using the criteria outlined in § 257.96 (c), which state that corrective measures assessment should include an analysis of the effectiveness of potential corrective measures that considers the following:

- Performance;
- Reliability;
- Ease of implementation;
- Potential impacts (including safety, cross-media, and exposure);
- The time required to begin and complete the remedy; and
- Any institutional requirements (e.g., permitting or environmental and public health requirements) that could affect implementation of the remedy.

These evaluation criteria are considered for each potential corrective measure. Further evaluation of the technologies will be required to select a corrective measure(s).

1.2 <u>Site Location and Description</u>

Plant Branch is located in Putnam County, Georgia, approximately 8 miles north of Milledgeville. The plant is primarily surrounded by agricultural, residential, and light

commercial land use. The property occupies approximately 3,200 acres and is bounded on the south and east by Lake Sinclair, which is an approximate 15,330-acre hydroelectric reservoir that was created in 1953 by the impoundment of the Oconee River (**Figure 1**). The physical address of the plant is 1100 Milledgeville Road, Milledgeville, Georgia 31061.

Plant Branch formerly operated as a coal-fired electric generating facility since the 1960s until being decommissioned in July 2015, at which point it ceased producing electricity. During its operation, five ash ponds were used for management of the CCR on the plant property. These ponds are identified as Ponds A, B, C, D, and E. Ash Pond A (AP-A), the first ash pond constructed at the Site, was taken out of service in the late 1960s and was closed in April 2016 by the removal and relocation of its stored CCR to AP-E. Ash Ponds B, C, D (AP-BCD) and AP-E are currently inactive.

Ash Pond E is surrounded by forested, rural land. The ash pond is approximately 348 acres in size and covers four converging valleys and side-channels. The ash pond was first used for CCR disposal in 1982 and stopped receiving CCR in 2015.

1.3 <u>Pond Closure</u>

Georgia Power retired Plant Branch in 2015 and will close AP-E through removal of the CCR material from the CCR unit. Removed CCR will be consolidated in a new, lined onsite CCR landfill. The closure of AP-E in the manner described above provides a source control measure that reduces the potential for migration of CCR constituents to groundwater. Corrective measures discussed in this ACM Report are being evaluated to address SSLs in groundwater at the compliance boundary of AP-E. The compliance boundary is the unit boundary where the detection well network is installed.

2.0 CONCEPTUAL SITE MODEL

The following section summarizes the geologic and hydrogeologic conditions at AP-E as described in the *Hydrogeologic Assessment Report Revision 01 – AP-E* (HAR Rev 01) submitted to GA EPD in April 2020 to provide information regarding the hydrogeologic conditions and the groundwater monitoring well network associated with AP-E (Geosyntec, 2020).

2.1 <u>Geology</u>

The Site is located within the Piedmont Physiographic Province of central Georgia, which is characterized by gently rolling hills and narrow valleys, with locally pronounced linear ridges. Generally, the property slopes gently east and south toward Beaverdam Creek and Lake Sinclair. The metamorphic and igneous rocks that underlie the area have been subjected to physical and chemical weathering which has created a landscape dissected by creeks and streams. Bedrock is typically overlain by a variably thick blanket of residual soils and saprolite. The overall depth of weathering in the Piedmont/Blue Ridge is generally about 20 to 60 feet; however, the depth of weathering along discontinuities and/or very mafic rock units may extend to depths greater than 100 feet. Because of such variations in rock types and structure, the depth of weathering can vary significantly over short horizontal distances. The bedrock underlying the saprolite is fine- to medium-grained, poorly jointed biotite-quartz-feldspar gneiss.

As discussed in the HAR Rev 01, micaceous, locally saprolitic soils, consisting primarily of clay, silty clay, silt, and sandy clay occur as a variably thick blanket of residuum overlying bedrock across most of the Site. The thickness of the residual soil encountered in AP-E borings is variable, ranging from a few feet to as much as 90 feet. Between the residual soil/saprolite zone and the underlying bedrock there is a zone of transitionally weathered rock (TWR) or partially weathered rock (PWR), as defined by standard penetration test data, where available. Material overlying the top of rock surface, including residual soil/saprolite and TWR/PWR, is collectively referred to as overburden.

2.2 Hydrology and Groundwater Flow

The uppermost aquifer at the Site is an unconfined regional groundwater aquifer that occurs primarily in the saprolite, PWR, and fractured bedrock. While the aquifer characteristics of each unit may vary, the groundwater is interpreted to be interconnected between these units, and they effectively act as one, unconfined aquifer. Generally, the water table surface at the Site is a subdued reflection of topography, with groundwater

generally flowing east, west, and south. Downward hydraulic gradients dominate in the topographically high areas, while upward gradients are observed in topographic lows. Recharge to the fractured bedrock aquifer system comes primarily from precipitation that is stored in the overburden and slowly infiltrates to the bedrock through areas of enhanced permeability. Interconnected fractures are the primary conduit for groundwater flow through bedrock since the rock lacks primary porosity.

Groundwater level data are recorded during each semiannual assessment monitoring event from the well and piezometer networks associated with Plant Branch, depicted on **Figure 2**. The data are used to generate potentiometric surface maps that depict the groundwater flow direction or calculate flow gradients. The potentiometric surface map representing the August 2022 groundwater level data is provided on **Figure 2**.

Groundwater gradient and flow velocity calculations using water level data collected in January 2022 were completed in the *2022 Annual Groundwater and Corrective Action Monitoring Report* (Geosyntec, 2022), which is summarized in the following text. Horizontal hydraulic conductivity (K_h) values used in flow calculations range from 2.7 to 5.5 feet per day (ft/day) and were based on slug test data presented in the HAR Rev 01 (Geosyntec, 2020). The highest observed K_h estimates from each well set were used, resulting in a conservatively high estimate of groundwater flow velocity. An estimated effective porosity of 0.20 was used to represent average conditions at AP-E which was derived based on the default values for effective porosity recommended by US EPA for a silty sand-type soil (US EPA, 1996). In the northern portion of the site, the horizontal hydraulic gradient between BRGWA-5S and BRGWC-33S was calculated to be 0.005 foot per foot (ft/ft) while in the southern portion of the site, the horizontal hydraulic gradient between PZ-4I and BRGWC-38S was calculated to be 0.009 ft/ft. Accounting for groundwater flow in the northern and southern portions of the Site, the representative horizontal groundwater hydraulic gradient for AP-E is 0.007 ft/ft.

Groundwater flow velocity in the vicinity of AP-E was approximately 0.17 ft/day. Additional details regarding the hydrogeologic conditions in vicinity of AP-E are provided in the HAR Rev 01 and the 2022 Annual Groundwater and Corrective Action Monitoring Report (Geosyntec, 2022). Updated groundwater flow velocity calculations based on the most recent sampling event conducted in August 2022 will be included in the 2023 semiannual report to be submitted in February 2023.

3.0 NATURE AND EXTENT DELINEATION

The following describes monitoring-related field and assessment activities performed to date in support of (i) delineating the nature and extent of SSLs in groundwater and (ii) evaluating potential corrective measures to address them.

3.1 Groundwater Monitoring & Appendix IV Constituents

3.1.1 Groundwater Monitoring Program

In accordance with § 257.91, a groundwater monitoring system was installed at AP-E that consists of a sufficient number of wells ("detection wells") installed at appropriate locations and depths to yield groundwater samples from the uppermost aquifer to represent the groundwater quality both upgradient of the units (i.e., background conditions) and passing the waste boundary of the units. The number, spacing, and depths of the detection groundwater monitoring wells were selected based on the characterization of site-specific hydrogeologic conditions. Based on the Site hydrogeology, the detection well monitoring system is designed to monitor groundwater flow in the overburden, the transition-zone, and the upper bedrock as a single interconnected aquifer system. Detection wells suffixed with an "S" are installed in overburden (saprolitic soil), an "I" indicates TWR/PWR and the upper fractured mantle of bedrock (transition zone), and "D" indicates a screened zone in the deeper bedrock. Well construction details for the AP-E detection well network are listed in **Table 1**. The locations of the detection wells are shown on **Figure 3**.

Groundwater is currently monitored in AP-E wells under the assessment monitoring program pursuant to § 257.95. Additional groundwater monitoring details are provided in the *2022 Annual Groundwater and Corrective Action Monitoring Report* (Geosyntec, 2022).

3.1.2 SSLs for Appendix IV Constituents

Groundwater monitoring data collected during the August 2022 assessment monitoring event are being statistically analyzed pursuant to § 257.93(f) and in general accordance with the US EPA document *Statistical Analysis of Groundwater Data at RCRA Facilities Unified Guidance* (Unified Guidance) (US EPA, 2009). Following federal and state rule requirements, groundwater protection standards (GWPS) are established for statistical comparisons of Appendix IV assessment monitoring parameters. For this ACM Report, Appendix IV GWPS from the statistical analysis completed for the February 2022 assessment monitoring event are provided in **Table 2**. Appendix IV parameters detected during the February 2022 event were statistically evaluated with the GWPS to assess if concentrations in detection monitoring wells statistically exceeded the GWPS. Details regarding the statistical analyses of the February 2022 sampling event are provided in the 2022 Annual Groundwater and Corrective Action Monitoring Report (Geosyntec, 2022). Statistical analysis of the August 2022 groundwater monitoring data will be included in the 2023 Semiannual Groundwater Monitoring and Corrective Action Report to be submitted to GA EPD in February 2023.

The statistical analyses of the February 2022 analytical data from AP-E identified SSLs of cobalt and beryllium in the following wells:

- Cobalt: BRGWC-33S and BRGWC-38S; and
- Beryllium: BRGWC-38S.

3.2 Delineation of SSL Constituents

Four additional groundwater monitoring wells were used to provide additional data to characterize flow conditions downgradient of AP-E and to horizontally and vertically delineate SSLs of cobalt and beryllium in groundwater at AP-E. Assessment wells PZ-13S and PZ-70I were utilized for horizontal delineation and assessment wells PZ-52D and PZ-53D were utilized for vertical delineation of detection wells BRGWC-33S and BRGWC-38S, respectively. Detailed boring and well construction logs for these four assessment wells are provided in **Appendix A**. The locations of these four assessment wells are shown on **Figure 3** and well construction details are also provided in **Table 1**.

Pursuant to § 257.96, groundwater in the vicinity of AP-E continues to be monitored during the ACM phase in accordance with the assessment monitoring program established for the CCR unit in 2019. Groundwater samples were collected from the detection wells and four assessment wells in August 2022 and analyzed for all Appendix IV parameters per § 257.95(b). The groundwater analytical results from this event are summarized in **Table 3**. Laboratory reports associated with the August 2022 results are provided in **Appendix B**.

The August 2022 assessment monitoring event was the first event to assess delineation of SSLs at AP-E. Due to limited data from the assessment wells, confidence intervals will be determined after an adequate number of independent events have been completed. However, the August 2022 analytical results reported for the horizontal assessment wells (PZ-13S and PZ-70I) suggest that SSLs of cobalt and beryllium are horizontally

Geosyntec[>]

delineated and contained within the property boundary; for these wells, the cobalt and beryllium concentrations are below their respective GWPS (0.006 mg/L; 0.004 mg/L, respectively). In addition, vertical assessment wells (PZ-52D and PZ-53D) suggest that SSLs of cobalt and beryllium are vertically delineated; for these wells, the cobalt and beryllium concentrations are below their respective GWPS. Iso-concentration maps illustrating delineation for the cobalt and beryllium concentrations in the vicinity of AP-E are provided on **Figures 4** and **5**, respectively.

4.0 GROUNDWATER CORRECTIVE MEASURES

4.1 **Objectives of the Corrective Measures**

In evaluating the effectiveness of potential corrective measures using the criteria listed in § 257.96(c), including performance, reliability, ease of implementation, potential impacts, time required, and institutional and public health requirements, the following criteria listed in § 257.97(b) must be met by the corrective measure when selected:

- Be protective of human health and the environment;
- Attain applicable groundwater protection standards as specified pursuant to § 257.95(h);
- Control the sources of releases to reduce or eliminate, to the maximum extent feasible, further releases of constituents in Appendix IV to this part to the environment;
- Remove from the environment as much of the contaminated material that was released from the CCR unit as is feasible, taking into account factors such as avoiding inappropriate disturbance of sensitive ecosystems; and
- Comply with standards for management of CCR as specified in § 257.98(d).

Corrective measures selected for evaluation herein for potential use at AP-E are anticipated to satisfy the above criteria to varying degrees of effectiveness.

4.2 <u>Summary of Corrective Measures</u>

The closure of AP-E via removal of CCR materials as described in Section 1.3 is a source control measure that reduces the potential for migration of CCR constituents to groundwater. Corrective measures discussed in this ACM are being evaluated to address SSLs in groundwater at and downgradient of the compliance boundary.

This section presents potential corrective measures capable of remediating the Appendix IV groundwater constituents (i.e., cobalt and beryllium) at AP-E. Each corrective measure is evaluated relative to criteria specified in § 257.96(c) and § 257.97(b). Table 4 provides a comparative screening of the corrective measures discussed in Section 4.

The following potential corrective measures are considered in this ACM:



- Geochemical Approaches (In-Situ Injection)
- Hydraulic Containment (Pump and Treat)
- In-Situ Solidification/Stabilization
- Monitored Natural Attenuation
- Permeable Reactive Barrier
- Phytoremediation
- Subsurface Vertical Barrier Walls

While in-situ solidification/stabilization (ISS) is generally considered a viable option for either small source areas or targeted zones within a larger footprint, this potential corrective measure is not a viable corrective measure at AP-E. The closure of AP-E as previously described will remove CCR materials from the pond and place them into a permitted onsite landfill. As such, the use of ISS for a fully excavated CCR pond is not an applicable corrective measure at AP-E and no detailed evaluation is provided in **Table 4**.

4.2.1 Geochemical Approaches (In-Situ Injection)

Beryllium and cobalt can be precipitated and/or immobilized under different combinations of pH and redox conditions. A variety of pH and/or redox-altering technologies are available which can incorporate biological processes, chemical oxidants and reductants, and/or mechanical processes such as air sparging. These processes can be used to decrease the mobility of beryllium and cobalt. For example, beryllium and cobalt can be sorbed to iron and manganese oxides or co-precipitated with sulfide minerals.

To understand the geochemical processes that would effectively immobilize beryllium and cobalt in groundwater, site-specific bench-scale and potentially field pilot-scale treatability studies are needed to identify an effective amendment to create the appropriate conditions for the precipitation and/or sorption of this constituent without mobilizing other naturally-occurring constituents. Once precipitated, these minerals are often stable even if geochemical conditions revert back to a different redox environment. However, if not properly designed and implemented, manipulating redox conditions without forming the desired compounds may increase the mobility of naturally-occurring constituents.

Air sparging can be used to provide oxygen to the subsurface in an attempt to precipitate out (or make more "sorptive") compounds that are generally more soluble and mobile under reducing conditions. This can also support the precipitation of iron and manganese oxides, which would provide additional sorption sites for constituents such as beryllium and cobalt.

Furthermore, in-situ chemical oxidation (ISCO) or in-situ chemical reduction (ISCR) can be used to chemically alter the redox or pH environment in the subsurface to affect the mobility and/or bioavailability of certain inorganic compounds.

The main limiting process in these in-situ remedial approaches is the delivery of the compounds within the area of interest. Mixing and contact with the target constituents are necessary and can be difficult in heterogeneous materials and fine-grained materials.

The attenuation of beryllium and cobalt is expected to occur under both aerobic (via sorption to manganese or iron oxides) and anaerobic conditions (via formation of sulfide minerals). Therefore, in-situ injections are considered a potentially viable corrective measure to address beryllium and cobalt in groundwater at AP-E, especially in smaller, more localized areas. This technology will be retained for further evaluation.

4.2.2 Hydraulic Containment (Pump and Treat)

Generally, hydraulic containment (or control) refers to the use of groundwater extraction to artificially induce a hydraulic gradient and capture or control the migration of impacted groundwater. One example, groundwater pump and treat (P&T), is often considered to be a viable remedial technology at many sites (US EPA, 1996). This approach uses extraction wells or trenches to capture groundwater, which may subsequently require above-ground treatment and permitted discharge to a receiving water feature or sewer system, reinjection into the aquifer, or reuse. Groundwater P&T is often relatively slow and costly as a means to restore groundwater quality over a long-term period, but can be effective as an interim measure, or combined with another measure, to provide hydraulic containment to limit constituent migration toward a potential receptor.

Groundwater extraction for hydraulic control can often effectively address the variety of inorganic constituents encountered at CCR sites, including beryllium and cobalt. Extraction technologies also have the ability to overcome the limitations of in situ injection-based technologies (i.e., mixing and contact with affected materials). Space constraints are mainly limited to the above-ground conveyance and treatment component of a P&T system since extraction wells can generally be fit into relatively tight spaces at the edge of waste or other points of compliance.

Extracted groundwater may need to be treated prior to discharge (depending on discharge permit requirements) but does have the potential to be used for irrigation (e.g., of a cover

system or other vegetated areas at the Site) or dust suppression purposes. It could also be used as moisture conditioning of dry ash that is being landfilled. Therefore, P&T is a potentially viable corrective measure for beryllium and cobalt in groundwater at AP-E and will be retained for further evaluation.

4.2.3 Monitored Natural Attenuation

The US EPA defines monitored natural attenuation (MNA) as the reliance on natural attenuation processes (within the context of a carefully controlled and monitored site cleanup approach) to achieve site-specific remediation objectives within a time frame that is reasonable compared to that offered by other more active methods. The natural attenuation processes that are at work in such a remediation approach include a variety of physical, chemical, or biological processes that, under favorable conditions, act without human intervention to reduce the mass, toxicity, mobility, volume, or concentration of contaminants in soil or groundwater. These in-situ processes include biodegradation; dispersion; dilution; sorption; volatilization; radioactive decay; and chemical or biological stabilization, transformation, or destruction of contaminants (US EPA, 2015).

Attenuation mechanisms for inorganic constituents, such as beryllium and cobalt, are either physical or chemical. Physical attenuation mechanisms such as dilution and dispersion may be appropriate as a polishing step (e.g., at the boundaries of impacted groundwater, when source control is complete, a separate active remedy is being used, and appropriate land use and groundwater controls are in place). Source control measures planned for AP-E include closure by removal of CCR materials from AP-E and placement into a new, permitted onsite landfill. Chemical attenuation mechanisms through sorption or oxidation reduction reactions discussed in more detail below may be viable as a standalone corrective measure.

As stated by US EPA (2015): "MNA may, under certain conditions (e.g., through sorption or oxidation-reduction reactions), effectively reduce the dissolved concentrations and/or toxic forms of inorganic contaminants in groundwater and soil. Both metals and nonmetals (including radionuclides) may be attenuated by sorption reactions such as precipitation, adsorption on the surfaces of soil minerals, absorption into the matrix of soil minerals, or partitioning into organic matter. Oxidation-reduction (redox) reactions can transform the valence states of some inorganic contaminants to less soluble and thus less mobile forms (e.g., hexavalent uranium to tetravalent uranium) and/or to less toxic forms (e.g., hexavalent chromium to trivalent chromium)." Beryllium and cobalt undergo sorption to iron and manganese oxides and, depending on specific redox conditions, may also form sparingly soluble sulfide minerals via abiotic or biotic processes. The US EPA uses four phases to establish whether MNA can be successfully implemented at a given site. The phases (or steps) include:

- Phase I: Demonstration that the groundwater plume is *not expanding*.
- Phase II: Determination that the *mechanism and rate* of the attenuation process are sufficient.
- Phase III: Determination that the *capacity* of the aquifer is sufficient to attenuate the mass of contaminant within the plume and the *stability* of the immobilized contaminant is sufficient to resist re-mobilization.
- Phase IV: Design of a *performance monitoring program* based on an understanding of the mechanism of the attenuation process, and establishment of contingency remedies tailored to site-specific characteristics.

Physical and chemical MNA mechanisms for beryllium and cobalt, including dilution, dispersion, sorption, and precipitation, can be operational without the potential for additional mass of beryllium or cobalt migrating to downgradient groundwater. Even under current conditions, attenuation processes for cobalt and beryllium are already occurring as evidenced by groundwater data from assessment wells, which indicates reduction in cobalt and beryllium concentrations to below GWPS at a short distance downgradient of the wells showing SSLs. Additionally, in the February 2022 statistical analysis, cobalt and beryllium show statistically significant decreasing concentrations over time in the SSL wells (**Figure 6**). Therefore, MNA is a potentially viable corrective measure for beryllium and cobalt in groundwater at AP-E and will be retained for further evaluation.

4.2.4 Permeable Reactive Barriers

Permeable reactive barriers (PRBs) can present a viable alternative for in-situ treatment of cobalt. The technology typically involves the installation of a subsurface wall constructed with reactive media such as zero-valent iron (ZVI), biologically active media (to induce oxidizing or reducing conditions), or clays, apatite, zeolites, and/or peat moss (to promote ionic exchange and/or sorption). PRBs have proven to be effective in passively treating several inorganic constituents found at CCR sites, including arsenic, selenium, and chromium (e.g., ITRC, 2011). The use of PRBs for cobalt has been tested (e.g., Ludwig et al., 2002), but additional site-specific testing is needed to confirm the applicability of this technology to cobalt removal from groundwater. Limited information is available on the effectiveness of PRBs on the removal of beryllium. Further research and testing are required to see if beryllium could be attenuated by a PRB.

PRBs can be installed in downgradient locations using conventional excavation methods or one-pass trenching methods. Excavated trenches get back-filled with reactive media to create a barrier that treats dissolved constituents as they passively flow through the PRB with the groundwater (e.g., ITRC, 2011). These systems can either be constructed as continuous "walls" or as "funnel-and-gate" systems where (impermeable) slurry walls create a "funnel" that directs groundwater to permeable "treatment gates" filled with reactive materials. Since the costs for reactive materials (e.g., ZVI or similar) are generally higher than bentonite-based slurry wall construction, these configurations with a smaller treatment area help to lower construction and maintenance costs.

The installation depths of a PRB unit are generally limited to about 90 ft below ground surface (ft bgs), which is suitable for AP-E where SSLs are observed less than 40 ft bgs. The installation of a PRB generally requires more space than extraction wells, but the system does not require above-ground treatment components and therefore, the overall treatment footprint is likely to be smaller compared to a P&T system.

While additional subsurface investigations, aquifer testing, reactive media testing, and compatibility testing of groundwater and a potential slurry wall component of a PRB will be needed to further evaluate the feasibility of installing a PRB at BRGWC-38S and BRGWC-33S, the technology is currently considered to be a potentially viable corrective measure to address beryllium and cobalt in groundwater at AP-E. Therefore, this technology will be retained for further evaluation.

4.2.5 Phytoremediation

Phytoremediation is the use of plants to degrade, immobilize, or contain constituents in soil, groundwater, surface water, and sediments. Over recent decades, phytoremediation has emerged as a viable alternative to more active and costly environmental cleanup technologies, especially for large areas with relatively low levels of constituents in shallow soils or groundwater. The effectiveness of groundwater remediation using traditional phytoremediation approaches may be limited by compacted soil conditions that impede root penetration, or target groundwater that is too deep for root access. Given that groundwater wells at AP-E that exhibited SSLs for beryllium and cobalt are screened between 16 and 38 ft bgs, traditional plantings for phytoremediation are not expected to be successful. However, more recently, an engineered approach to phytoremediation, the *TreeWell*[®] system (which is a proprietary system developed by Applied Natural Sciences

[ANS]), has been shown to overcome these constraints by utilizing a specialized lined planting unit constructed with optimum planting media designed to promote downward root growth, encourage constituent treatment, and focus groundwater extraction from a targeted depth interval (e.g., Gatliff et al., 2016).

By installing a cased "well" for tree planting using large diameter auger (LDA) technology, extraction of deeper groundwater zones (i.e., in excess of 50 ft bgs) can be achieved since the surface of the "well" is sealed and only groundwater from a targeted zone is allowed into the cased-off borehole. This type of system mirrors a traditional mechanical extraction system using the trees as pumps. The *TreeWell* system can be used for both hydraulic control of groundwater and for treatment of constituents via degradation (for organic constituents) or immobilization/containment mechanisms (for organic and inorganic constituents). With respect to the site-specific conditions, the system would be applied for hydraulic control, but beryllium and cobalt are expected to be either immobilized within the root zone or incidentally taken up into the tree biomass.

The advantage of the system includes no above-ground water management needs and limited long-term operations and maintenance (O&M) requirements following the establishment of the tree system. Such systems have been observed to meet design hydraulic control parameters typically by the end of the third growing season, when properly designed and spaced. The layout for a *TreeWell* remediation system is generally based on groundwater flow modeling assuming a design uptake rate of approximately 40 to 60 gallons per day per tree.

Based on the current understanding of groundwater flow velocities downgradient of AP-E (approximately 62 feet/year), a phytoremediation approach would appear to be viable. An engineered phytoremediation approach will be retained for further evaluation.

4.2.6 Subsurface Vertical Barrier Walls

Subsurface vertical barrier walls (sometimes referred to as slurry walls) have been used for seep control and groundwater cutoff at impoundments and waste disposal units for more than three decades. In general, barrier walls are designed to provide containment; localized treatment achieved through the sorption or chemical precipitation reactions from construction of the walls are incidental to the design objective.

This approach involves placing a barrier to groundwater flow in the subsurface, frequently around the source area (or the downgradient limits of the source area), to prevent future migration of dissolved constituents in groundwater from beneath the



source to downgradient areas. Barrier walls can also be used in downgradient applications to limit discharge to a surface water feature or to reduce aquifer recharge from an adjacent surface water feature when groundwater extraction wells are placed near a surface water feature. A variety of barrier materials can be used, including cement and/or bentonite slurries or various mixtures of soil with cement or bentonite, geomembrane composite materials, or driven materials such as steel or vinyl sheet pile.

The installation of these low-permeability walls is similar to the methods described for PRBs above. In general, the applicability of slurry walls is limited by the depth of installation, which is approximately 90 ft below ground surface. However, site-specific geologic and technology-specific considerations may limit this depth to shallower installations.

Groundwater pumping is generally required upgradient of the barrier wall to maintain an inward hydraulic gradient. The extracted groundwater would likely require treatment in an above-ground treatment system.

While additional subsurface investigations, aquifer testing, and wall compatibility testing with the groundwater chemistry will be needed to further evaluate the feasibility as well as the placement of a barrier wall at BRGWC-38S and BRGWC-33S, the technology is currently considered to be a potentially viable corrective measure to address beryllium and cobalt in groundwater at AP-E and will be retained for further evaluation. However, it is more likely to be a component of a potential PRB application rather than a standalone corrective measure.

5.0 **REMEDY SELECTION PROCESS**

The purpose of this ACM is to begin the process of selecting corrective measure(s) for groundwater based on further evaluation using the criteria outlined in § 257.96. The following sections present the pond closure and site management strategy, additional data gathering, schedule, reporting, and next steps.

5.1 Pond Closure and Site Management Strategy

Georgia Power plans to close AP-E via removal of the CCR materials from the unit for on-site disposal at a new, permitted landfill. During the pond closure, temporary changes in site conditions may occur. Additionally, the site conceptual model may need to be refined and/or updated from the current understanding as more data are collected. Georgia Power plans to proactively utilize adaptive site management to support the remedial strategy and address potential changes in site conditions as appropriate. Under an adaptive site management strategy, a remedial approach will be selected whereby: (1) a corrective measure will be installed or implemented to address current conditions; (2) the performance of the corrective measure will be monitored, evaluated, and reported semiannually; (3) the conceptual site model will be updated as more data are collected; and (4) adjustments and augmentations will be made to the corrective measure(s), as needed, to assure that performance criteria and site remedial goals are met.

5.2 Additional Data Gathering

Additional data, data analysis, and site-specific evaluation are necessary to refine the conceptual site model and to further evaluate the feasibility of each corrective measure presented herein such that an appropriate groundwater corrective measure may be selected. Some of the data needed to refine the conceptual site model may be collected concurrent with routine groundwater monitoring events under the assessment monitoring program, or during supplementary sampling, if required. However, additional data collection that includes aquifer testing, groundwater modeling, material compatibility testing, bench scale studies, and/or field pilot tests may require an estimated one to two additional years to complete. Once sufficient data are available to select a focused number of corrective measures or a combination of corrective measures that would provide an effective groundwater remedy, necessary steps will be taken to implement a remedy at the Site in accordance with § 257.98.



5.3 Schedule, Reporting, and Next Steps

It is anticipated that additional data collection will begin in 2023. Georgia Power will prepare semiannual progress reports to document Site groundwater conditions, results associated with additional data gathering identified in Section 5.2 and in **Table 4**, and the progress in selecting and designing the remedy in accordance with § 257.97(a) beginning in July 2023. These reports will be posted to Georgia Power's website.

A draft remedy selection report will be submitted to GA EPD for review and concurrence on the proposed remedy and, at least 30 days prior to the final selection of remedy or remedies, a public meeting to discuss the results of the corrective measures assessment will be held pursuant to § 257.96(e). The final remedy selection report will be developed as outlined in § 257.97(a). Once the remedy has been selected, the implementation of the remedy will be initiated in accordance with § 257.98.

6.0 **REFERENCES**

- Gatliff E., P.J. Linton, D.J. Riddle, and P.R. Thomas. 2016. Phytoremediation of Soil and Groundwater: Economic Benefits Over Traditional Methodologies. In: Bioremediation and Bioeconomy, p. 589-608; Elsevier, Amsterdam, Netherlands. M.N.V. Prasad, ed.
- Geosyntec Consultants, 2020. Hydrogeologic Assessment Report Plant Branch Ash Pond E (AP-E) Revision 01, April 2020.
- Geosyntec Consultants. 2022. 2022 Annual Groundwater Monitoring and Corrective Action Report - Plant Branch Ash Pond E (AP-E), July 2022.
- Golder, 2020a. 2019 Semi-Annual Groundwater Monitoring and Corrective Action Report Plant Branch Ash Pond E (AP-E), February 2020.
- Golder, 2020b. Alternate Source Demonstration Plant Branch Ash Pond E (AP-E), July 2020.
- ITRC (Interstate Technology & Regulatory Council). 2011. Permeable Reactive Barrier: Technology Update. PRB-5. Washington, D.C.: Interstate Technology & Regulatory Council, PRB: Technology Update Team. www.itrcweb.org.
- Ludwig R.D., R.G. McGregor, D.W. Blowes, S.G. Benner, and K. Mountjoy. 2002. A Permeable Reactive Barrier for Treatment of Heavy Metals. GROUND WATER 40(1): 59-66.
- U.S. Environmental Protection Agency. 1996. Soil Guidance Manual
- U.S. Environmental Protection Agency. 1996. Final Guidance: Presumptive Response Strategy and Ex-Situ Treatment Technologies for Contaminated Ground Water at CERCLA Sites, EPA 540/R-96/023, Office of Solid Waste and Emergency Response Directive 9283.1-12, October 1996.
- U.S. Environmental Protection Agency. 2009. *Statistical Analysis of Groundwater Monitoring Data at RCRA Facilities, Unified Guidance*. Office of Resource Conservation and Recovery Program Implementation and Information Division, March 2009.
- U.S. Environmental Protection Agency. 2015. Use of Monitored Natural Attenuation for Inorganic Contaminants in Groundwater at Superfund Sites, Office of Solid Waste and Emergency Response Directive 9283.1-36, August 2015.

TABLES

Table 1Monitoring Well Network SummaryPlant Branch AP-E, Putnam County, Georgia

Well ID	Hydraulic Location	Installation Date	Easting ⁽¹⁾	Northing ⁽¹⁾	Ground Surface Elevation ⁽²⁾ (ft)	Top of Casing Elevation ⁽²⁾ (ft)	Top of Screen Elevation ⁽²⁾ (ft)	Bottom of Screen Elevation ⁽²⁾ (ft)	Well Depth (ft BGS)	Screen Interval Length (ft)
AP-E Detection Moni	toring Well Network									
BRGWA-2S	Upgradient BCD & E	4/2/2014	2549952.59	1167139.69	440.4	443.20	406.2	396.2	44.6	10
BRGWA-2I	Upgradient BCD & E	3/14/2014	2549957.26	1167129.90	440.5	443.14	386.6	376.6	64.3	10
BRGWA-5S	Upgradient BCD & E	4/3/2014	2549415.60	1170177.42	440.8	443.86	411.2	401.2	40.0	10
BRGWA-5I	Upgradient BCD & E	4/3/2014	2549407.91	1170183.54	441.1	443.79	390.3	380.3	61.2	10
BRGWA-6S	Upgradient BCD & E	4/1/2014	2551540.90	1170732.82	455.8	458.96	416.5	406.5	49.7	10
BRGWC-17S	Downgradient E	3/13/2014	2554687.84	1166301.32	362.2	365.32	360.5	355.5	7.1	5
BRGWC-33S	Downgradient E	7/26/2016	2554064.97	1168057.09	414.2	416.68	398.2	388.2	26.4	10
BRGWC-34S	Downgradient E	7/25/2016	2554231.28	1167384.17	389.2	391.96	376.2	366.2	23.0	10
BRGWC-35S	Downgradient E	7/23/2016	2554476.13	1166646.02	363.7	366.31	346.7	336.7	27.4	10
BRGWC-36S	Downgradient E	7/26/2016	2554693.26	1165742.82	383.1	389.84	364.4	354.4	28.7	10
BRGWC-37S	Downgradient E	7/24/2016	2554979.63	1165093.07	444.4	447.05	390.8	380.8	63.6	10
BRGWC-38S	Downgradient E	7/22/2016	2555016.50	1164391.82	429.8	432.24	402.0	392.0	38.2	10
AP-E Assessment Mo	nitoring Well Network									
PZ-13S	Downgradient E	3/19/2014	2555276.64	1168011.19	406.5	409.97	382.2	372.2	34.7	10
PZ-70I	Downgradient E	8/16/2022	2555374.08	1164326.66	422.9	425.70	383.4	373.4	50.0	10
PZ-52D	Downgradient E	5/14/2020	2554051.53	1168053.71	414.3	417.03	364.8	354.8	59.5	10
PZ-53D	Downgradient E	5/17/2020	2554984.36	1164393.74	431.6	434.68	302.2	292.2	139.4	10

Notes:

-- = not applicable

ft = feet

ft BGS = feet below ground surface

(1) Coordinates in North American Datum (NAD) 1983, State Plane, Georgia-West, feet.

(2) Elevations referenced to the North American Vertical Datum of 1988 (NAVD88).

Table 2 Summary of Background Concentrations and Groundwater Protection Standards Plant Branch AP-E, Putnam County, Georgia

Analyte	Units	MCL	CCR-Rule Specified ⁽¹⁾	Background Limit ⁽²⁾ Feb. 2022	GWPS ⁽³⁾
Antimony	mg/L	0.006	N/A	0.003	0.006
Arsenic	mg/L	0.01	N/A	0.005	0.01
Barium	mg/L	2	N/A	0.063	2
Beryllium	mg/L	0.004	N/A	0.0005	0.004
Cadmium	mg/L	0.005	N/A	0.0005	0.005
Chromium	mg/L	0.1	N/A	0.016	0.1
Cobalt	mg/L	N/A	0.006	0.005	0.006
Fluoride	mg/L	4	N/A	0.19	4
Lead	mg/L	N/A	0.015	0.0013	0.015
Lithium	mg/L	N/A	0.04	0.089	0.089
Mercury	mg/L	0.002	N/A	0.00021	0.002
Molybdenum	mg/L	N/A	0.1	0.01	0.1
Selenium	mg/L	0.05	N/A	0.005	0.05
Thallium	mg/L	0.002	N/A	0.001	0.002
Combined Radium-226/228	pCi/L	5	N/A	1.55	5

Notes:

CCR = Coal Combustion Residuals

GWPS = Groundwater Protection Standard

MCL = Maximum Contaminant Level

mg/L = milligrams per liter

pCi/L = picocuries per liter

N/A = Not Applicable

Background limits and GWPS are applicable to the February 2022 semiannual event.

(1) On February 22, 2022, the Georgia Environmental Protection Division (GA EPD) adopted the federally promulgated GWPS for cobalt, lithium, lead, and molybdenum.

(2) The background limits were used when determining the GWPS under 40 CFR 257.95(h) and GA EPD Rule 391-3-4-.10(6)(a).

(3) Under 40 CFR 257.95(h)(1-3) the Federal GWPS is: (i) the maximum contaminant level (MCL) established under 141.62 and

141.66 of this title; (ii) where an MCL has not been established a rule-specific GWPS is used; or (iii) background concentrations for constituents were the background level is higher than the MCL or rule-specified GWPS.

Table 3 Summary of Groundwater Analytical Results - August 2022 Plant Branch AP-E, Putnam County, Georgia

	Well ID:	BRGWA-2S	BRGWA-2I	BRGWA-5S	BRGWA-5I	BRGWA-6S	BRGWC-17S	BRGWC-33S	BRGWC-34S	BRGWC-35S	BRGWC-36S	BRGWC-37S	BRGWC-38S	PZ-13S	PZ-52D	PZ-53D	PZ-70I
	Sample Date:	8/23/2022	8/23/2022	8/23/2022	8/23/2022	8/23/2022	8/24/2022	8/23/2022	8/24/2022	8/24/2022	8/24/2022	8/23/2022	8/23/2022	8/23/2022	9/1/2022	8/23/2022	9/1/2022
	Parameter ^(1,2,3)																
	Boron	0.00532 J	0.00592 J	0.00538 J	< 0.0052	< 0.0052	0.0273	0.975	2.45	2.23	1.1	< 0.0052	1.67	< 0.0052	0.0403	1.04	1.2
Ξ	Calcium	4.65	13.9	18.2	14.3	3.97	43.6	119	75	68.5	48.1	3.7	37.1	9.69	69	76.4	42.6
XI	Chloride	2.18	2.02	3.59	3.64	2.39	5	30.3	6.17	6.53	7.96	1.97	6.42	4.2	6.24	4.94	10.8
END	Fluoride	< 0.033	< 0.033	< 0.033	< 0.033	< 0.033	0.274	0.187	0.14	< 0.033	0.194	0.105	0.609	0.128	0.14	0.164	1.43
PPE	рН	5.95	6.67	6.36	6.24	6.51	6.62	4.67	5.75	6.05	5.59	5.82	3.97	5.46	7.33	7.18	6.13
AH	Sulfate	0.452	5.66	0.521	2.21	0.479	157	385	268	279	224	0.307 J	389	51	340	348	172
	TDS	45	117	101	107	52	370	614	452	507	418	40	568	130	754	543	321
	Antimony	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001		< 0.001	< 0.001
	Arsenic	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	0.00262 J	< 0.002	< 0.002	< 0.002	< 0.002	0.00337 J	< 0.002		< 0.002	< 0.002
	Barium	0.012	0.00954	0.0379	0.0241	0.014	0.0512	0.0409	0.0249	0.0339	0.0296	0.026	0.0141	0.0562		0.0547	0.0444
	Beryllium	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	0.00241	< 0.0002	0.00021 J	< 0.0002	< 0.0002	0.00854	0.000331 J		< 0.0002	< 0.0002
	Cadmium	< 0.0003	< 0.0003	< 0.0003	< 0.0003	< 0.0003	< 0.0003	0.000509 J	0.000517 J	< 0.0003	< 0.0003	< 0.0003	0.000459 J	< 0.0003		< 0.0003	< 0.0003
2	Chromium	0.00908 J	< 0.003	0.00435 J	0.00647 J	0.0143	0.0127	< 0.003	< 0.003	0.00752 J	0.00713 J	< 0.003	0.00398 J	0.0128		< 0.003	< 0.003
XI	Cobalt	0.000844 J	0.000767 J	< 0.0003	0.000553 J	< 0.0003	< 0.0003	0.0639	0.00438	< 0.0003	< 0.0003	< 0.0003	0.173	< 0.0003	0.0015	< 0.0003	0.0056
END	Fluoride	< 0.033	< 0.033	< 0.033	< 0.033	< 0.033	0.274	0.187	0.14	< 0.033	0.194	0.105	0.609	0.128	0.14	0.164	1.43
PPE	Lead	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005		< 0.0005	< 0.0005
V	Lithium	< 0.003	0.0262	< 0.003	< 0.003	0.00314 J	< 0.003	0.0109	< 0.003	< 0.003	< 0.003	< 0.003	0.0214	< 0.003		0.0171	0.00615 J
	Mercury	< 0.000067	< 0.000067	< 0.000067	< 0.000067	< 0.000067	< 0.000067	< 0.000067	< 0.000067	< 0.000067	< 0.000067	< 0.000067	0.000117 J	< 0.000067		< 0.000067	< 0.000067
	Molybdenum	< 0.0002	0.0024	< 0.0002	0.00151	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002		0.00265	0.00142
	Comb. Radium 226/228	0.531	1.7	0.735	2.3	0.203	0.152	1.94	1.86	3.1	1.38	2.37	3.12	1.83		3.04	1.57
	Selenium	< 0.0015	< 0.0015	< 0.0015	< 0.0015	< 0.0015	0.00208 J	0.0061	< 0.0015	< 0.0015	0.00246 J	< 0.0015	0.0296	0.00157 J		< 0.0015	0.00625
	Thallium	< 0.0006	< 0.0006	< 0.0006	< 0.0006	< 0.0006	< 0.0006	< 0.0006	< 0.0006	< 0.0006	< 0.0006	< 0.0006	< 0.0006	< 0.0006		< 0.0006	< 0.0006

Notes:

-- = Parameter was not analyzed

< = Indicates the parameter was not detected above the analytical method detection limit (MDL).

J = Indicates the parameter was estimated and detected between the MDL and the reporting limit (RL).

TDS = total dissolved solids

(1) Appendix III/IV parameter per 40 CFR 257 Subpart D. Parameters are reported in units of milligrams per liter (mg/L), except for pH reported as s.u. (standard units) and combined radium reported (1) Appendix Init's parameter per to CFR 257 Subpart D. Fatameters are reported in units of manifeding per net (mg 2), except for pri reported as stat (standard units) and combined radium as picocuries per liter (pCi/L).
(2) Metals were analyzed by EPA Method 6010D, 6020B, and 7470A, anions were analyzed by EPA Method 300.0, TDS was analyzed by SM2540-2011, and combined radium 226/228 by

EPA Methods 9315/9320.

(3) The pH value presented was recorded at the time of sample collection in the field.

Corrective Measure	Regulatory Citation for Criteria: Description	40 CFR 2 Performance	57.96(C)(1) Reliability	
Geochemical Approaches (In-Situ Injection)	Use of an injection well network, or other means of introducing reagents or air into the subsurface, to promote either anaerobic or aerobic attenuation of beryllium (Be) and cobalt (Co). However, the main attenuation mechanism for Be and Co is sorption, which is more dependent on pH than redox. Under anaerobic conditions, Be and Co would be attenuated within sparingly soluble sulfide minerals. Under aerobic conditions, soluble iron or manganese and oxygen (either via air sparging or through	The effective immobilization of Be and Co at neutral to alkaline pH can be effective at achieving groundwater protection standards (GWPS) within a reasonable time frame. This immobilization has been shown at other sites under	Reliability dependent on permeability of the subsurface and the amount and distribution of secondary iron or manganese (oxy-) hydroxides (for aerobic approach), or electron donors and soluble iron or manganese and sulfur that can be consistently distributed (for anaerobic approach). Reliable technology if injected	along the downgradient
Hydraulic Containment ("Pump and Treat")	Hydraulic containment refers to the use of groundwater extraction to induce a hydraulic gradient for hydraulic capture or control the migration of impacted groundwater. This approach uses extraction wells or trenches to capture groundwater, which may subsequently require above-ground treatment and permitted discharge to a receiving water feature, reinjection into the groundwater, or reuse (e.g., land application, CCR conditioning, etc.). It is applicable to a variable mix of inorganic constituents, including dissolved Be and Co.		Generally reliable for hydraulic containment, but uncertainty exists whether groundwater remediation goals can be achieved within a reasonable time frame without further understanding attenuation mechanisms.	Moderate. Proven appr wells/trenches is fairly potentially require an a precipitation approaches maintenance (O&M) re components (pumps, pi treatment system) and b
Monitored Natural Attenuation (MNA)	MNA relies on natural attenuation processes to achieve site-specific remediation objectives within a reasonable time frame relative to more active methods. Under certain conditions (e.g., through sorption, mineral precipitation or oxidation- reduction reactions), MNA effectively reduces the dissolved concentrations of inorganic constituents in groundwater. Attenuation mechanisms for inorganic constituents at CCR sites, including Be and Co at BRGWC-38S and Co at BRGWC- 33S, are either physical (e.g., dilution, dispersion, flushing, and related processes) or chemical (sorption or oxidation reduction reactions). Chemical attenuation processes include precipitation and sorption reactions such as adsorption on the surfaces of soil minerals, absorption into the matrix of soil minerals, or partitioning into organic matter. Further, oxidation-reduction (redox) reactions, via abiotic or biotic processes, can transform the valence states of some inorganic constituents to less soluble and thus less mobile forms. For Be and Co, the main attenuation processes include sorption to iron and manganese oxides and for Co, formation of sparingly soluble sulfide minerals.	Physical and chemical MNA mechanisms for Be and Co, including dilution, dispersion, sorption, and oxidation reduction reactions, can be effective at achieving groundwater protection standards (GWPS) within a reasonable time frame. Attenuation processes for Be and Co are already occurring at the site as evidenced by data from the assessment wells. Source control will improve the mass balance such that the buffer capacity of the aquifer is unlikely to be exhausted. The attenuation processes already at work for Be and Co at BRGWC- 38S and for Co at BRGWC-33S will further enhance the effectiveness of MNA.	Reliable as long as the aquifer conditions that result in Be and Co attenuation remain favorable (and/or are being enhanced) and sufficient attenuation capacity is present. MNA is reliable and can either be used as a stand-alone corrective measure for groundwater impacted by dissolved Be and Co, or in combination with a second technology.	Reasonably implements with respect to docume show that the existing a within a reasonable tim implement future grour
Permeable Reactive Barrier	Permeable reactive barrier (PRB) technology typically involves the installation of a permeable subsurface wall constructed with reactive media for the removal of constituents as groundwater passes through. Either zero valent iron (ZVI)-Carbon matrix or solid carbon (bio-barrier) are currently proposed for the removal of Co. The carbon could be composed of peat moss, mulch or another carbon source. The effectiveness of a PRB on the removal of Be is relatively unknown. Further research and testing is required to see if Be could be attenuated by a PRB. Exact placement of the PRB is contingent on finalization of the nature and extent characterization. PRBs can also be constructed as "funnel and gate" systems, where a barrier wall directs groundwater to a smaller "treatment gate" filled with reactive media.	PRBs have been shown to effectively address Co in groundwater if the right mix of reactive materials (e.g., ZVI and carbon) is selected for removal/immobilization of the constituent. The approach is expected to achieve GWPS for Co as impacted groundwater passes through the reactive barrier. Additional testing is required to select the appropriate sorptive media mix (e.g., to address Be).	require re-installation depending on the duration of the remedy. Additional data	Moderate to difficult. ' install a mix of reactive the most feasible const readily available. Once requirements are minin
Phytoremediation / <i>TreeWells</i>	Phytoremediation uses trees and other plants to degrade or immobilize constituents or achieve hydraulic control without the need for an above-ground water treatment system and infrastructure. Within the context of AP-E, this corrective measure would likely use an engineered (proprietary) TreeWell phytoremediation system along the point of compliance or downgradient edge of the impacted groundwater for hydraulic control. The system promotes root development to the targeted groundwater zone (depth), allowing for hydraulic control of impacted groundwater. In addition, immobilization of Be and Co within the root zone as well as incidental uptake of dissolved Be and Co with groundwater is expected to occur concurrent with hydraulic control.	system is effective for providing hydraulic containment of groundwater, and potential reduction of Be and Co concentrations through immobilization and/or uptake and sequestration in the tree biomass; however, the main purpose is to provide hydraulic control. Additional aquifer testing and/or groundwater flow modeling may be needed to confirm the suitability of this technology.	Engineered phytoremediation is a proven technology where hydrogeologic factors are taken into account (e.g., hydraulic conductivity, flow velocity, depth to impacted groundwater zone, etc.). This is considered an active remedial approach through the use of trees as the "pumps" driving the system. Careful design will be needed to select the proper species, which will include consideration of groundwater chemistry, plant uptake of constituents, and groundwater flow modeling to evaluate the required number and placement of TreeWell units.	Reasonably implement effective, and specific of wells" in a large diament impacted groundwater structures (i.e., power 1 growing seasons), is a external energy require associated with landsca
Subsurface Vertical Barrier Walls	This approach involves placing a barrier to groundwater flow in the subsurface, frequently around a source area, to prevent future migration of dissolved constituents in groundwater from beneath the source to downgradient areas. In general, barrier walls are designed to provide containment; localized treatment achieved through the sorption or chemical precipitation reactions from construction of the walls are incidental to the design objective. A barrier wall might be used in conjunction with a "funnel and gate" system for a PRB rather than a stand-alone technology. Barrier walls can also be used in downgradient applications; to limit discharge to a surface water feature or to reduce aquifer recharge from an adjacent surface water feature when groundwater extraction wells are placed near one. A variety of barrier materials can be used, including cement and/or bentonite slurries, geomembrane composite materials, or driven materials such as steel or vinyl sheet pile. Groundwater extraction from upgradient of the barrier is required to avoid groundwater mounding behind the barrier.	Barrier walls are a proven technology for seepage control and/or groundwater cutoff at impoundments. Slurry walls can be installed up to approximately 90 ft	Generally reliable as a barrier to groundwater flow; however, treatment of downgradient groundwater is typically not the primary objective.	Moderate to difficult. mixes; alternatively, sh excavation of trenches. installation. Installatio installed, above-ground required. O&M require components (pumps, pr treatment system) and b

Table 4Evaluation of Remedial TechnologiesPlant Branch AP-E, Putnam County, Georgia



40 CFR 257.96(C)(1)	40 CFR 257.96(C)(1)
Ease of Implementation	Potential Impacts
on of injection well network or other injection infrastructure Alternative installation approaches may be considered, such as ent edge of impacted groundwater, which would function plication. The potential for clogging of aquifer matrix and/or cructure is an implementation consideration. Chemical njections (i.e., radius of influence) needs to be evaluated.	Minimal impacts are expected if remedy works as designed, based on a thorough pre-design investigation, geochemical modeling, and bench/pilot study results. Redox-altering processes have the potential to mobilize naturally-occurring constituents as an unintended consequence if not properly studied and implemented.
pproach, and supplemental installation of extraction cly straightforward. The extracted groundwater may n above-ground treatment system. A variety of sorption and ches exist for ex-situ treatment of Be and Co. Operation and) requirements are expected to include upkeep of infrastructure , pipes, tanks, instrumentation and controls, above-ground nd handling of treatment residuals.	Moderate. The main potential impacts are related to the presence and operation of an on-site above-ground water treatment facility and related infrastructure to convey and treat extracted groundwater. Pumping activity may unintentionally alter the geochemistry within the hydraulic capture zone.
entable with respect to infrastructure, but moderate to complex mentation. Proven approach, but additional data are needed to ag attenuation capacity is sufficient to meet site objectives timeframe. A monitoring well network already exists to bundwater monitoring efforts.	
t. Trenching at depth (up to 40 feet) would be required to tive materials in the subsurface. Continuous trenching may be nstruction method. Installation methods and materials are nce installed, treatment will be passive and O&M nimal if replacement of the PRB is not necessary.	Minimal impacts are expected following the construction of the remedy. However, ZVI has the potential to create anaerobic conditions downgradient of the PRB wall that may mobilize redox-sensitive naturally-occurring constituents. These conditions need to be carefully monitored. Short-term impacts during the construction of the remedy can be mitigated through appropriate planning and health and safety measures.
entable to moderate. Engineered approach has been proven ic depth zones can be targeted. Trees are installed as "tree meter boring to get the roots deep enough to intercept ter flow paths. Area must be clear of above and below-ground er lines). The system, once established (approximately three a self-maintaining, sustainable remedial system that has no irements and little maintenance (i.e., efforts normally scaping).	Minimal impacts are expected. In fact, there are several positive impacts expected, including enhanced aesthetics, wildlife habitat, and limited energy consumption.
t. Trenching will be required to fill in the various slurry sheet pile installations can be accomplished without es. The application of barrier walls is limited by the depth of tion methods and materials are readily available. Once and infrastructure to pump and treat groundwater will be uirements are expected to include upkeep of infrastructure , pipes, tanks, instrumentation and controls, above-ground and handling of treatment residuals.	Minimal impacts are expected following the construction of the remedy. Short- term impacts during the construction of the remedy can be mitigated through appropriate planning and health and safety measures. Changes to groundwater flow patterns due to installation of the barrier wall are expected, which can affect other aspects of groundwater corrective action. Pumping activity may unintentionally alter the geochemistry within the hydraulic capture zone that may result in the mobilization of other constituents that may require treatment.

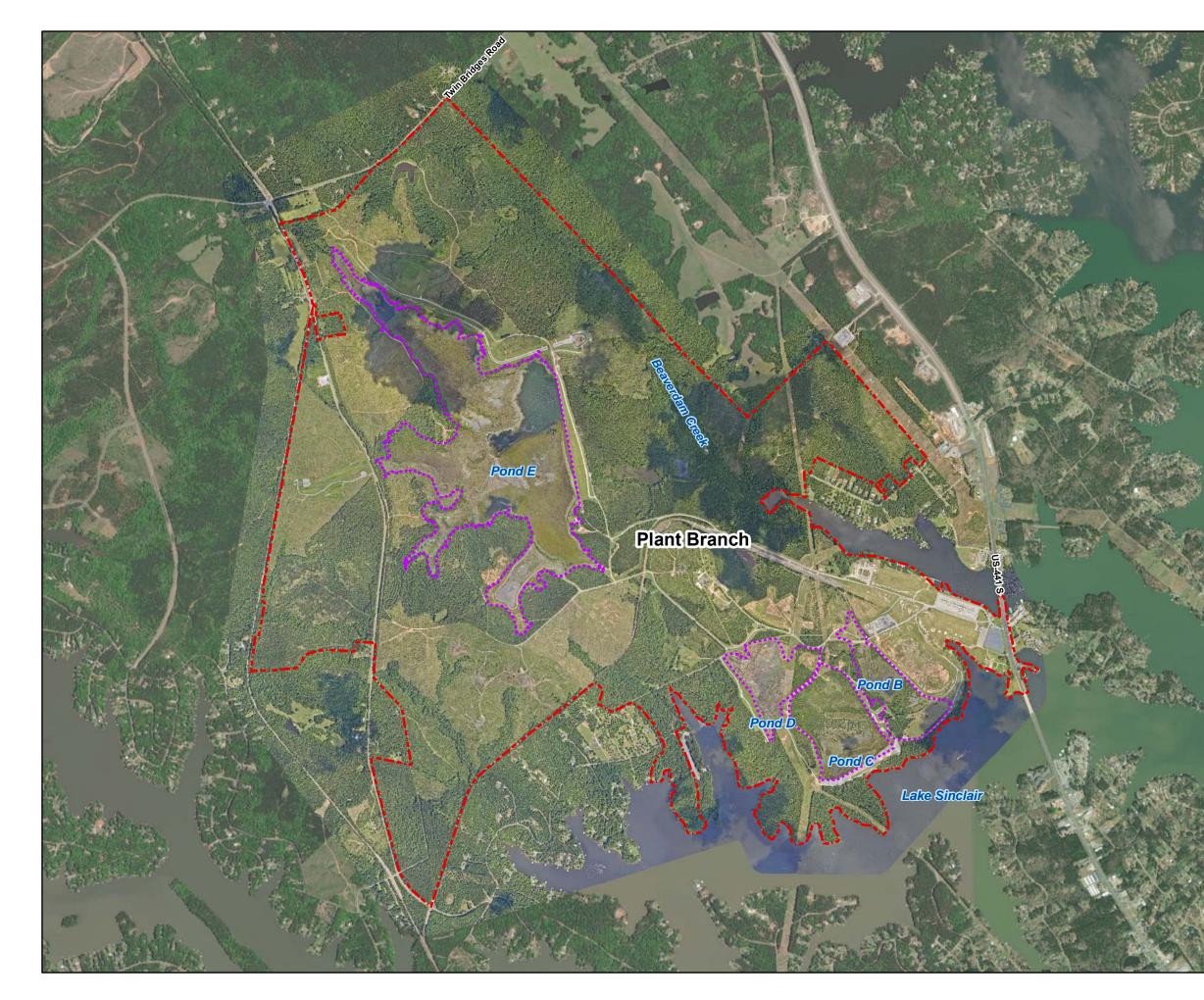
	40 CFR 2
Corrective Measure	Time Requirement
Geochemical Approaches (In-Situ Injection)	Installation of the injection network can a months). However, a thorough pre-desig and/or bench- and/or pilot-testing will be prior to design and construction of the co 24 months. Once installed, the time requ treatment area may be relatively quick be kinetics of each targeted constituent. Th injected materials throughout the treatment
Hydraulic Containment ("Pump and Treat")	Installation of extraction wells and/or tre quickly (1 to 2 months). However, addit installation, and permit approval may be months. The initiation of the approach v wastewater treatment infrastructure. Hyd relatively quickly after startup of the extr respect to the time to achieve GWPS wit understand attenuation mechanisms for H
Monitored Natural Attenuation (MNA)	The infrastructure to initiate MNA is alro mechanisms and capacity can be time-co MNA is expected to be successful within closure. Engineering measures will be in to the subsurface during closure activitie be used to verify that groundwater impac
Permeable Reactive Barrier	Installation of a PRB can be accomplished depending on the final location and confi testing would be required to obtain desig construction of the remedy, which may ta time to achieve GWPS downgradient of t quick.
Phytoremediation / <i>TreeWells</i>	The design phase will require some grou of the TreeWell units, which may take up and design may be required, which may t number of required units, the installation Hydraulic capture/control is expected ap system performance is expected to furthe
Subsurface Vertical Barrier Walls	Installation of a barrier wall can be accor months), depending on the final location additional aquifer and compatibility testi 24 months. Once installed, preventing n groundwater is anticipated to be relativel treat the downgradient area of impacted g a source area, it will likely have to be ma approaches.

Table 4Evaluation of Remedial TechnologiesPlant Branch AP-E, Putnam County, Georgia

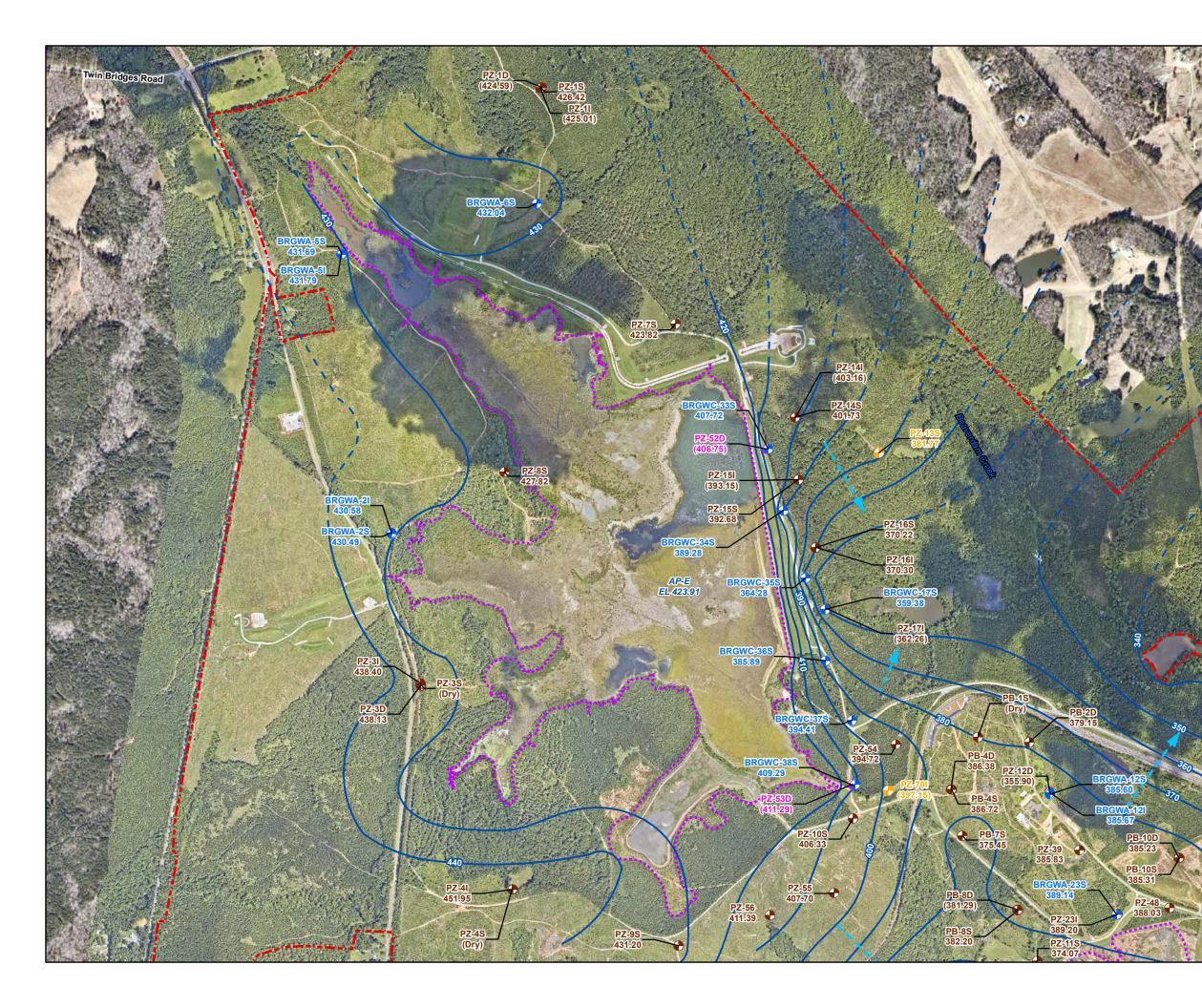
40 CFR 257.96(C)(2)	40 CFR 2	257.96(C)(3)	
Time Requirement to Begin/Complete	Institutional Requirements	Other Env or Public Health Requirements	Relative Costs
allation of the injection network can be accomplished relatively quickly (1 to 2 nths). However, a thorough pre-design investigation, geochemical modeling, /or bench- and/or pilot-testing will be required to obtain design parameters r to design and construction of the corrective measure, which may take up to nonths. Once installed, the time required to achieve GWPS within the tment area may be relatively quick but depends on the attenuation process etics of each targeted constituent. The time for complete distribution of the cred materials throughout the treatment area is also variable.	No institutional requirements are expected at this time.	None expected at this point. Based on downgradient sampling results, there currently are no complete exposure pathways for potential receptors downgradient of BRGWC-38S and BRGWC-33S. Potential for mobilization of redox-sensitive constituents exists during implementation of an anerobic attenuation approach. Following installation, the remedy is passive.	Medium (depending on expanse of injection network required and injectate volume required per derived design parameters)
allation of extraction wells and/or trenches can be accomplished relatively ekly (1 to 2 months). However, additional aquifer testing, system design and allation, and permit approval may be required, which may take up to 24 aths. The initiation of the approach would be contingent on the start-up of the tewater treatment infrastructure. Hydraulic containment can be achieved tively quickly after startup of the extraction system, but uncertainty exists with beet to the time to achieve GWPS without additional data collection to better erstand attenuation mechanisms for Be and Co.	Depending on the effluent management strategy, modifications to the existing NPDES permit may be required, or obtaining a new underground injection control (UIC) permit may be needed if groundwater reinjection is chosen.	Based on downgradient sampling results, there currently are no complete exposure pathways for potential receptors downgradient of BRGWC-38S and BRGWC- 33S. Above-ground treatment components may need to be present for an extended period of time, generating residuals requiring management and disposal.	Medium to high (depending on remedy duration, complexity of above-ground treatment system, and volume of water processed)
infrastructure to initiate MNA is already in place. Demonstrating attenuation hanisms and capacity can be time-consuming and can take up to 24 months. A is expected to be successful within a reasonable time frame following pond ure. Engineering measures will be implemented to minimize potential impacts he subsurface during closure activities and routine groundwater monitoring will used to verify that groundwater impacts remain stable or decrease over time.		Little to no physical disruption to remediation areas and no adverse construction- related impacts are expected on the surrounding community. Based on downgradient sampling results, there currently are no complete exposure pathways for potential receptors downgradient of BRGWC-38S and BRGWC-33S.	Low
allation of a PRB can be accomplished relatively quickly (6 to 12 months), ending on the final location and configuration. However, bench- and/or pilot- ing would be required to obtain design parameters prior to design and struction of the remedy, which may take up to 24 months. Once installed, the e to achieve GWPS downgradient of the PRB is anticipated to be relatively ek.	No institutional requirements are expected at this time.	None expected at this point. Based on downgradient sampling results, there currently are no complete exposure pathways for potential receptors downgradient of BRGWC-38S and BRGWC-33S. Following installation, the remedy is passive (but may require replacement). However, certain treatment media (such as ZVI) have the potential to mobilize naturally-occurring constituents downgradient of the PRB.	Medium to high (for installation) - minimal O&M requirements if replacement is not necessary
design phase will require some groundwater modeling for optimal placement ne TreeWell units, which may take up to 6 months. Additional aquifer testing design may be required, which may take up to 24 months. Depending on the obser of required units, the installation effort is expected to last several weeks. Iraulic capture/control is expected approximately three years after planting and em performance is expected to further improve over time.	No institutional requirements are expected at this time.	None expected at this point. Based on downgradient sampling results, there currently are no complete exposure pathways for potential receptors downgradient of BRGWC-38S and BRGWC-33S. Following installation, the remedy is passive and does not require external energy.	Medium (for installation) - minimal O&M requirements
allation of a barrier wall can be accomplished relatively quickly (6 to 12 atths), depending on the final location and configuration. However, design and itional aquifer and compatibility testing will be required, which may take up to nonths. Once installed, preventing migration of constituents dissolved in andwater is anticipated to be relatively quick. Since this approach does not t the downgradient area of impacted groundwater but prevents migration from urce area, it will likely have to be maintained long-term and coupled with other roaches.	No institutional requirements are expected at this time.	Based on downgradient sampling results, there currently are no complete exposure pathways for potential receptors downgradient of BRGWC-38S and BRGWC- 33S. Due to the need for groundwater extraction associated with barrier walls, above-ground treatment components may need to be present for an extended period of time, generating residuals requiring management and disposal.	Medium to high (depending on length and depth of wall, remedy duration and complexity of above-ground treatment system)



FIGURES









- Detection Monitoring Well
- Horizontal Assessment Monitoring Well
- Vertical Assessment Monitoring Well
- Piezometer
- Groundwater Elevation Iso-Contour
- Groundwater Elevation Iso-Contour (Inferred)
- Approximate Groundwater Flow Direction
- ---- Plant Branch Property Boundry
- Approximate Ash Pond Boundary

Notes:

Notes:
 Water level elevation recorded on August 22, 2022.
 Elevation provided in feet (ft) referenced to the North American Vertical Datum of 1988 (NAVD 88).
 Groundwater iso-contours based on linear interpolation and extrapolation from known groundwater elevation data, and temperarchic elevations.

and extrapolation from known groundwater elevation data, and topographic elevations.
4. Groundwater elevations in parentheses were not used to make the groundwater contours because these wells are screened at a different elevation in the formation/aquifer.
5. Coordinate System: NAD 1983 State Plane Georgia West_FIPS (U.S. Feet).
6. Property Boundary Provided by Southern Company Southern

Services.

7. Aerial: Nearmap Imagery, January 2022 and Georgia Power Company, August 2022.

0	1,000	2,000				
Scale in Feet						

POTENTIOMETRIC SURFACE CONTOUR MAP - AUGUST 2022

GEORGIA POWER COMPANY PLANT BRANCH PUTNAM COUNTY, GEORGIA

ALC: NOT	Prepared For: 🔶	(
AN - HINK	Prepared By:	(Geosyntec [▷] consultants	FIGURE 2
Carlo Carlo	KENNESAW, G	A	DECEMBER 2022	

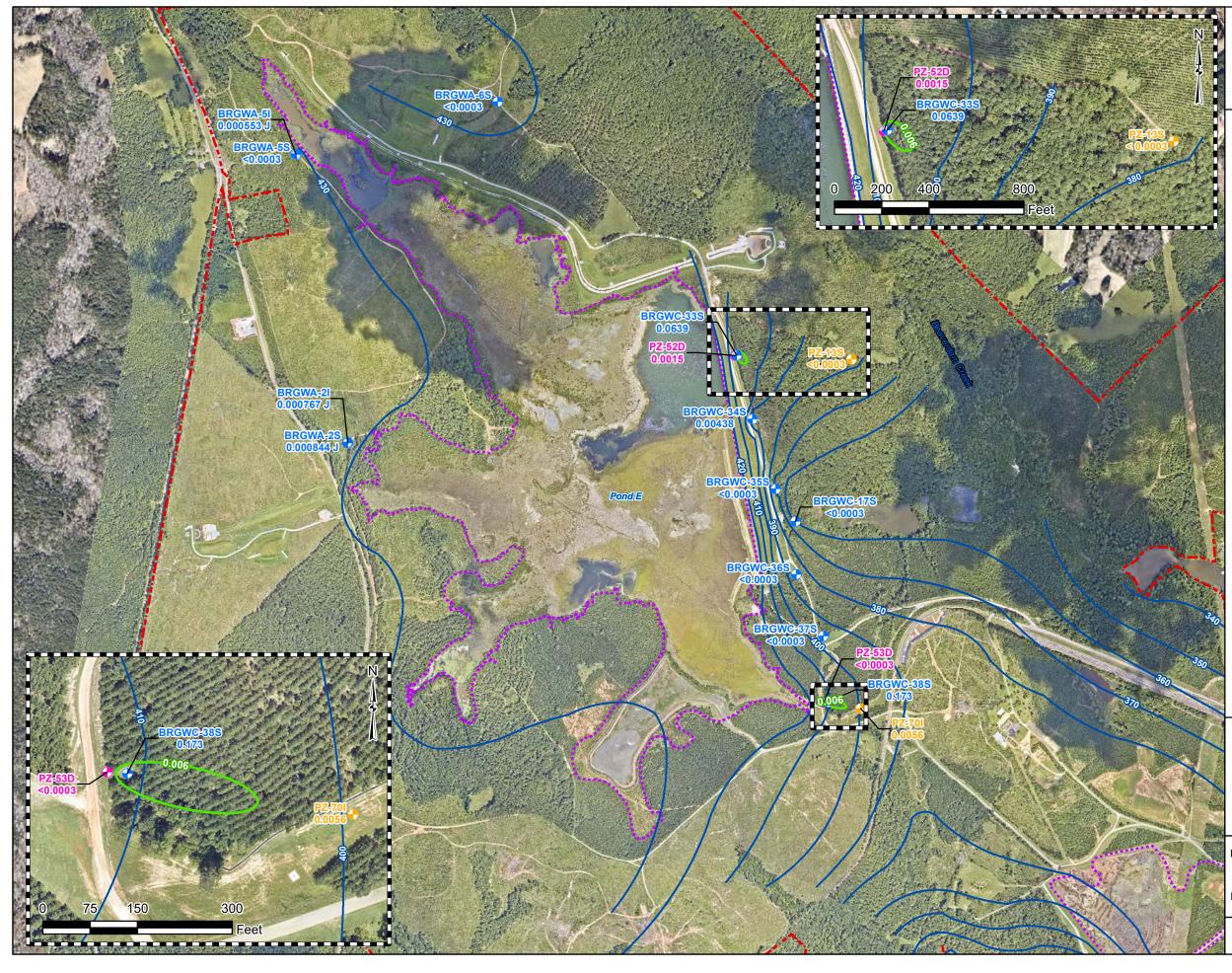




- Detection Monitoring Well
 Horizontal Assessment Monitoring Well
 Vertical Assessment Monitoring Well
 Plant Branch Property Boundry
 Approximate Ash Pond Boundary

Notes: 1. Property Boundary Provided by Southern Company Services. 2. Aerial: Nearmap Imagery, January 2022 and Georgia Power Company, February 2022.

0	1,000 Scale in Feet	2,000		
AP-E SITE PLAN MONITORING WELL LOCATION MAP				
GEORGIA POWER COMPANY PLANT BRANCH PUTNAM COUNTY, GEORGIA				
epared For: 🔺 (Georgia Pow	er		
repared By:	FIGURE			
ENNESAW, GA	DECEMBER 20)22		





- Detection Monitoring Well
- 0 Horizontal Assessment Monitoring Well
- Vertical Assessment Monitoring Well •
- Groundwater Elevation Iso-Contour (August 2022)
- Cobalt GWPS Iso-Concentration Contour (mg/L)
- ---- Plant Branch Property Boundry
- Contract Con

Notes:

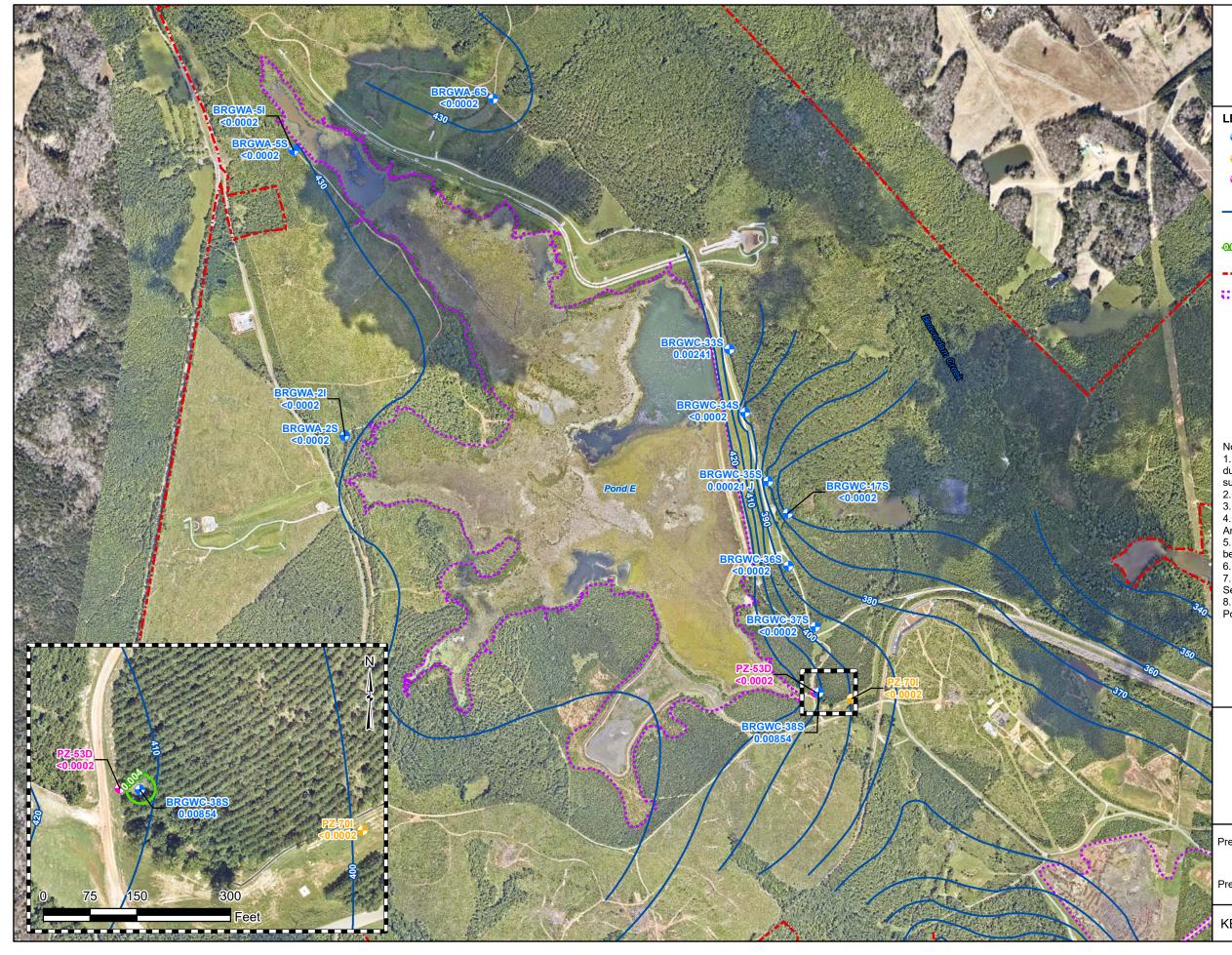
1. Concentration data from groundwater samples collected during the August 2022 semiannual monitoring event and subsequent September 2022 sampling event for PZ-52D and PZ-70I.

and P2-701.
2. Concentrations are reported in milligrams per liter (mg/L).
3. Water level elevation recorded on August 22, 2022.
4. Elevation provided in feet (ft) referenced to the North American Vertical Datum (NAVD) 88.
5. The Groundwater Protection Standard (GWPS) for cobalt is 0.006 mg/L.
6. J - Estimated value.
7. Property Boundary Provided by Southern Company

Services.

8. Aerial: Nearmap Imagery, January 2022 and Georgia Power Company, August 2022.

0		1,000	2,	000	
Scale in Feet					
ISO-CONCENTRATION MAP, COBALT - AUGUST 2022					
GEORGIA POWER COMPANY PLANT BRANCH PUTNAM COUNTY, GEORGIA					
Prepared For:	٨	Georgia F	Power		
Prepared By: Geosyntec Consultants		FIGURE 4			
KENNESAV	V, GA	DECEMBE	ER 2022		





- Detection Monitoring Well
- -Horizontal Assessment Monitoring Well
- Vertical Assessment Monitoring Well •
- Groundwater Elevation Iso-Contour (August 2022)
- Beryllium GWPS Iso-Concentration Contour (mg/L)
- ---- Plant Branch Property Boundry
- Approximate Ash Pond Boundary

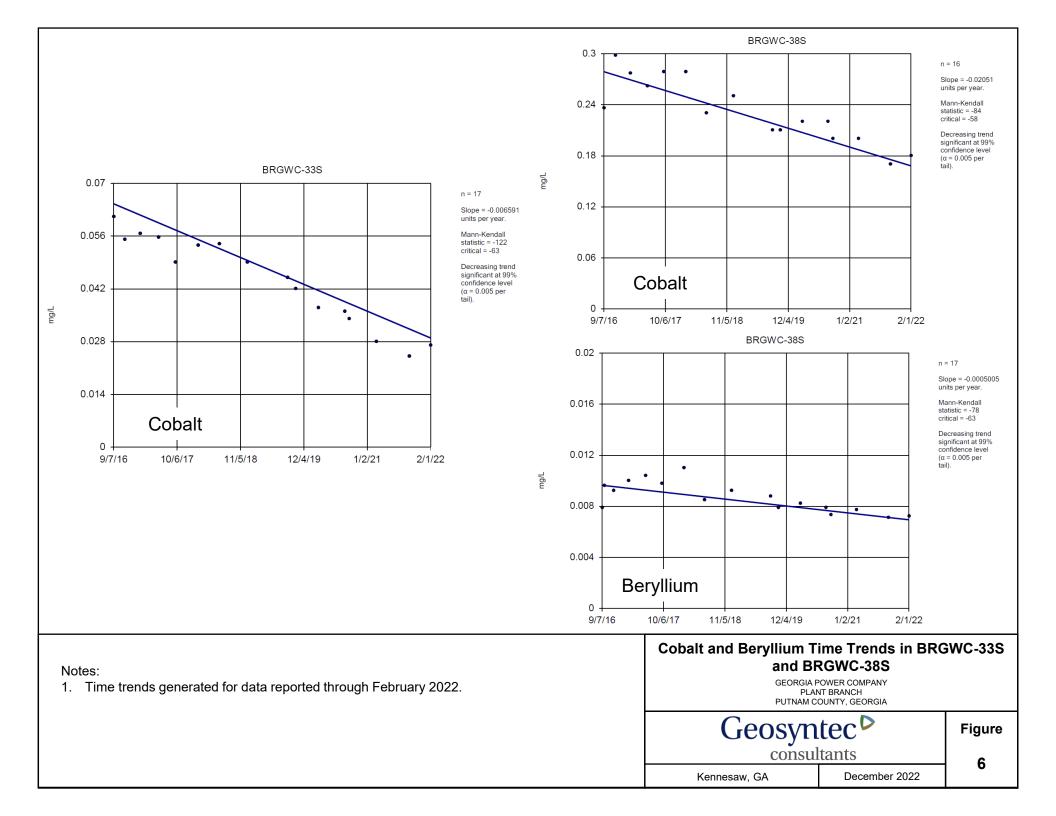
Notes:

Notes:
1. Concentration data from groundwater samples collected during the August 2022 semiannual monitoring event and subsequent September 2022 sampling event for PZ-70I.
2. Concentrations are reported in milligrams per liter (mg/L).
3. Water level elevation recorded on August 22, 2022.
4. Elevation provided in feet (ft) referenced to the North American Vertical Datum (NAVD) 88.
5. The Groundwater Protection Standard (GWPS) for beryllium is 0.004 mg/L.
6. J. - Estimated value

6. J - Estimated value.7. Property Boundary Provided by Southern Company Services.

8. Aerial: Nearmap Imagery, January 2022 and Georgia Power Company, August 2022.

0	1,000	2,000			
Scale in Feet					
ISO-CONCENTRATION MAP, BERYLLIUM - AUGUST 2022					
GEORGIA POWER COMPANY PLANT BRANCH PUTNAM COUNTY, GEORGIA					
Prepared For: 📥 Georgia Power					
Prepared By:	FIGURE				
KENNESAW, GA	DECEMBER 20	22			



APPENDIX A

Boring and Well Construction Logs

S	DUI			TEST BOR				BORING PZ-13 S PAGE 1 OF 1
SO EAI	UTHI RTH 3	COMPANY RN COMPANY SI CIENCE AND EN	ERVICES, INC. VIRONMENTAL ENGINEERING	PROJECT Plant	Branch		-	dy
			COMPLETED <u>3/19/2014</u> SUR					
			LOGGED BY W. Shaughnessy					BEARING
			_ GROUND WATER DEPTH: DURING		P		DELAYEI	D 19.9 ft. after 170 hrs.
DEPTH (ft)	GRAPHIC LOG		MATERIAL DESCRIPTION		Weak Moderate HCL Strong	GROUNDWATER OBSERVATIONS	Complet protectiv 4-foot so	WELL DATA tion: re aluminum cover with bollards; quare concrete pad
5		- CL: residuum sand, micas	ı dry, very stiff, silty CLAY, red with yell	ow-red mottles,	<u> </u>	00		
10			dry, medium stiff, clayey SILT, mediun w mottles, micas	n stiff, red-yellow				
15 20		brown with bla	dry, medium stiff, clayey SILT, yellow- ck mottles, micas wet, soft, clayey SILT, gray-brown and sand, micas				-	Annular Seal: bentonite pellets
25	-	- MH: saprolite black mottles,	wet, soft, clayey SILT, gray-brown and sand, micas	l red-brown with				Filter:
30	-	- MH: saprolite micas	wet, stiff, sandy SILT, brown, white an	id pale brown,				Standpipe: _2" OD PVC (SCH 40) Screen: 10 ft; pre-pack
35		- MH: saprolite micas	wet, very stiff, sandy SILT, brown, wh Bottom of borehole at 36.0 feet.	ite and pale brown,				—Sump:0.400000000000006 ft. ←Cave-in to 34.7 ft.
40								

RECORD OF BOREHOLE PZ-52D DRILL RIG: C 600 Track Mounted DATE STARTED: 5/14/20 DATE COMPLETED: 5/14/20 DATE COMPLETED: 5/14/20

SHEET 1 of 2 DEPTH W.L.: 46.5 ELEVATION W.L.: 367.8' DATE W.L.: 5/15/2020 TIME W.L.: 0735

	z	SOIL PROFILE					AMPL	ES		
(#)	ELEVATION (ft)	DESCRIPTION	nscs	GRAPHIC LOG	ELEV. DEPTH (ft)	SAMPLE NO.	ТҮРЕ	REC	PIEZOMETER DIAGRAM and NOTES	WELL CONSTRUCTION DETAILS
0	-	0.00 - 10.00 Air knife hole, water level ~ 5 feet bgs from SCS during hole clearing							AquaGuard Bentonite – Grout	WELL CASING Interval: 0' - 49.5' Material: Sch 40 PVC Diameter: 2" Joint Type: Threaded
5	- 410 									 WELL SCREEN Interval: 49.5' - 59.5' Material: 0.010'' Slotted Schedule 40 PVC Pre-Pack Screen Diameter: 2 Slot Size: 0.10 End Cap: 4"
	-									 FILTER PACK Interval: 47' - 59.5' Type: #1 Sand FILTER PACK SEAL
10 — -	405 	10.00 - 11.00 silty CLAY, red 2.5 YR 5/8, wet, slightly plastic, cohesive, soft. Residual soil	CL		404.3 10.00 403.3 11.00				Riser –	Interval: 43' - 47' Type: 3/8" Pel-Plug ANNULUS SEAL Interval: 0' - 43' Type: AquicQuard Benton
	- - - 400	11.00 - 17.00 sitty SAND, very fine to medium sand, 7.5 YR 4/6 strong brown, weathered biotite gneiss, SAPROLITE, subhorizontal foliation, micaceous, medium grained gneiss, moist to wet, cohesive, non-PLASTIC, firm. Poorly sorted medium grained sand (quartz and plagioclase) 0.1 ft thick lenses from 13 - 15.5 feet	SM			1	ROTO SONIC	<u>10.00</u> 7.00	Riser	Type: AquaGuard Benton Grout WELL COMPLETION Pad: 4' x 4' x 2" Protective Casing: Alumir
15	-	17.00 - 20.00			<u>397.3</u> 17.00		Ľ			DRILLING METHODS Soil Drill: Sonic Rock Drill: Sonic
-	- 	sitty SAND, very fine to medium sand, variegated white, brown, orange, very dark brown to black, SAPROLITE, weathered biotite gneiss, cohesive, stiff, non-plastic, mosit to wet. Quartz-plagioclase-biotite ferrous oxide oxidation throughout	SM		394.3					-
20	-	20.00 - 28.00 SILTY SAND, very fine to medium sand, variegated white, brown, orange, very dark brown to black, SAPROLITE, weakly foliated, weatehred biotite gneiss, cohesive, stiff, non-plastic, mosit to wet quatz-plagioclase-biotite oxidation staining throughout			20.00	2	ROTO SONIC	<u>10.00</u> 10.00		-
25 — _	- 390 -		SM							-
	-	28.00 - 28.50 Transitional weathered rock (TWR), biotite gneiss 28.50 - 37.00	TWR		386.3 385.8 28.50					-
30	- 385 - -	BIOTITE GNEISS, medium grained, phaneritic hornblende-quartz-plagioclase-biotite. Foliation orientation varies from subhorizontal to near vertical, weakly foliated from 31.5-32 feet, oxidation staining throughout, white and black foliations at 31 ft, 32.5 ft, and 33.5 ft	GNIESS			3	ROTO SONIC	<u>9.00</u> 10.00		-
35	- 380 - -						Ŕ			
	- - - 375	37.00 - 47.00 INTERLAYERED BIOTITE GNEISS AND TWR, poor recovery due to subsurface materials and drilling methodology, rock recovered is oxidized throughout and appears less coherent section above, fractured	GNIESS		377.3 37.00	4	ROTO SONIC	<u>2.50</u> 10.00		-
40 -		Log continued on next page								1
DRIL	LING	LE: 1 in = 5 ft COMPANY: Cascade Drilling Fref Kraus	(KED B۱				George, PG PG DATE:	s

RECORD OF BOREHOLE PZ-52D DRILL RIG: C 600 Track Mounted DATE STARTED: 5/14/20 DATE COMPLETED: 5/14/20 DATE COMPLETED: 5/14/20

SHEET 2 of 2 DEPTH W.L.: 46.5 ELEVATION W.L.: 367.8' DATE W.L.: 5/15/2020 TIME W.L.: 0735

	z	SOIL PROFILE					AMPLE	s			
DEPTH (ft)	ELEVATION (ft)	DESCRIPTION	USCS	GRAPHIC LOG	ELEV.	SAMPLE NO.	ТҮРЕ	REC	PIEZOMETE DIAGRAM and N	R OTES	WELL CONSTRUCTION DETAILS
40	-	37.00 - 47.00 INTERLAYERED BIOTITE GNEISS AND TWR, poor recovery due to subsurface materials and drilling methodology, rock recovered is oxidized throughout and appears less coherent section above, fractured (<i>Continued</i>)	GNIES		(ft)	4	ROTO SONIC	<u>2.50</u> 10.00			WELL CASING Interval: 0' - 49.5' Material: Sch 40 PVC Diameter: 2" Joint Type: Threaded WELL SCREEN Interval: 49.5' - 59.5'
45 -	- 370 - -				367.3		ROTO		Bentonite –	-	Material: 0.010" Slotted Schedule 40 PVC Pre-Pack Screen Diameter: 2 Slot Size: 0.10 End Cap: 4"
50 —	- 365 	47.00 - 59.50 BIOTITE GNEISS, medium grained, phaneritic hornblende-quartz-plagioclase-biotite, foliation orientation varies overall ~ 45 degrees from horizontal, weakly foliated, fractures/oxidation, minor oxidation at 50 ft, 51.5 ft, and 54.5 ft			47.00		C		#1 Sand –		FILTER PACK Interval: 47' - 59.5' Type: #1 Sand FILTER PACK SEAL Interval: 43' - 47' Type: 3/8" Pel-Plug ANNULUS SEAL
-	- - 360		GNIES			5	ROTO SONIC	10.00	0.010" Slotted –		Interval: 0' - 43' Type: AquaGuard Benton Grout WELL COMPLETION Pad: 4' x 4' x 2" Protective Casing: Alumin DRILLING METHODS
-	-					6	ROTO SONIC	<u>2.50</u> 2.50	Sioted – Screen		Soil Drill: Sonic Rock Drill: Sonic
60 —	— 355 -	Boring completed at 59.50 ft			354.8		ROTO	2.50		-	
65 -	- - - 350 - -									-	
70	- 345 										
- - 75 -	- 340 									-	
	- - - 335									-	
DRII	LLING	LE: 1 in = 5 ft COMPANY: Cascade Drilling Fref Kraus			KED B				George, PG PG DATE:		GOLDER

RECORD OF BOREHOLE PZ-53D DRILL RIG: C 600 Track Mounted DATE STARTED: 5/16/20 DATE COMPLETED: 5/17/20 DATE COMPLETED: 5/17/20

SHEET 1 of 4 DEPTH W.L.: 14.2' ELEVATION W.L.: 417.4' DATE W.L.: 5/19/2020 TIME W.L.: 745

	Z	SOIL PROFILE					AMPLI	ES			
DEPTH (ft)	ELEVATION (ft)	DESCRIPTION	nscs	GRAPHIC LOG	ELEV. DEPTH (ft)	SAMPLE NO.	ТҮРЕ	REC	PIEZOMET DIAGRAM and	ER NOTES	WELL CONSTRUCTION DETAILS
0 —	- 430	0.00 - 10.00 HYDROVAC HOLE, ML, SILT, red, plastic to slightly plastic, cohesive, firm to stiff, dry to moist									WELL CASING Interval: 0' - 129.4' Material: Sch 40 PVC Diameter: 2" Joint Type: Threaded
- 5 - -	 425										WELL SCREEN Interval: 129.4' - 139.4' Material: 0.010' Slotted Schedule 40 PVC Pre-Pack Screen Diameter: 2" Slot Size: 0.010'' End Cap: 3''
-	-										FILTER PACK Interval: 126.6' - 140' Type: #1 Sand FILTER PACK SEAL Interval: 121' - 126.6'
10 — - -	- 420	10.00 - 15.00 ML, clayey sandy SILT, fine sand, micaceous throughout, red, very weak foliation, trace relict foliation, non-plastic to slightly plastic, soft, dry to moist, primarily very weathered biotite gneiss SAPROLITE	ML		421.6 10.00				AquaGuard Bentonite – Grout		Type: 3/8" Pel-Plug ANNULUS SEAL Interval: 0' - 121' Type: AquaGuard Benton Grout
- - 15 -	-				416.6	1	ROTO SONIC	<u>10.00</u> 10.00	Riser –		WELL COMPLETION Pad: 4' x 4' x 2" Protective Casing: Alumir DRILLING METHODS
-	- 415 	15.00 - 19.00 SM, silty SAND, very fine to fine sand, weakly foliated, cohesive, soft, non-plastic, moist, primarily very weathered metagranite	SM		15.00		Ľ				Soil Drill: Sonic Rock Drill: Sonic
_ 20 — _ _	- - 410	19.00 - 29.00 ML, clayey sandy SILT, ine sand, micaceous throughout, red, very weak foliation, trace relict foliation, non-plastic to slightly plastic, soft, dry to moist, primarily metagranite SAPROLITE 18'-20', biotite gneiss 20'-23.5', metagranite 23.5'-29'			412.6 19.00						
- 25 — -	-		ML			2	ROTO SONIC	<u>10.00</u> 10.00			
	— 405 — —				402.6						
30 — - -	- 400	29.00 - 39.00 ML, clayey sandy SILT, fine sand, pale brown orange dark brown to black, subhorizontal foliation, moderately foliated, quartz-plagioclase-biotite, cohesive, soft to firm, wet, SM; 29'-30' and 34'-35'			29.00						
- 35 — -	-		ML			3	ROTO SONIC	<u>12.50</u> 10.00			
-	395 				392.6						-
40	-	Log continued on next page	SP		39.00	4					

RECORD OF BOREHOLE PZ-53D DRILL RIG: C 600 Track Mounted DATE STARTED: 5/16/20 DATE COMPLETED: 5/17/20 DATE COMPLETED: 5/17/20

SHEET 2 of 4 DEPTH W.L.: 14.2' ELEVATION W.L.: 367.8' DATE W.L.: 5/19/2020 TIME W.L.: 745

	z	SOIL PROFILE				S	AMPLI	ES		
UEPIH (ft)	ELEVATION (ft)	DESCRIPTION	nscs	GRAPHIC LOG	ELEV. DEPTH (ft)	SAMPLE NO.	түре	REC	PIEZOMETER DIAGRAM and NOTES	WELL CONSTRUCTION DETAILS
40	- 390	39.00 - 42.00 SP, SAND, poorly graded, sme silt, medium to coarse sand, reddish brown, subangular to angular, non-cohesive, non-plastic, loose, moist to wet.	SP		389.6					WELL CASING Interval: 0' - 129.4' Material: Sch 40 PVC Diameter: 2"
- 45 — - -	 385 	39.8'-42' SAPROLITE, biotitte gneiss with granite interlayers, moderately foliated, white to pale brown to yellowish brown to very dark brown, medium to coarse grained, little to some oxidation, moist, cohesive, non-plastic, very stiff (<i>Continued</i>) 42.00 - 49.00 CL/CH, sandy CLAY, dary grayish brown with interlayers of white, very stiff to hard, moist, plastic, weathered biotite gneiss	CL-CH		42.00	4	ROTO SONIC	<u>14.00</u> 10.00		Joint Type: Threaded WELL SCREEN Interval: 129.4' - 139.4' Material: 0.010" Slotted Schedule 40 PVC Pre-Pack Screen Diameter: 2" Slot Size: 0.010" End Cap: 3" FILTER PACK Interval: 126.6' - 140' Type: #1 Sand
- 50 — -	- - 380	49.00 - 53.00 SM, silty SAND, fine to medium sand, with clay, brown, weathered gneiss, quartz-plagioclase-biotite, weakly foliated, very stiff to hard, non-plastic, moist	SM		382.6 49.00					HITER PACK SEAL Interval: 121' - 126.6' Type: 3/8" Pel-Plug ANNULUS SEAL Interval: 0' - 121' Type: AquaGuard Bentoni Grout
- 55 -	- - - 375	53.00 - 63.00 SM, silty clayey SAND, fine to coarse sand, subangular to angular, brown, weathered gneiss quartz-plagioclase-biotite, medium grained, subhorizontal foliation, cohesive, stiff to very stiff, moist, non-plastic to plastic, SAPROLITE			378.6 53.00	5	ROTO SONIC	<u>10.50</u> 10.00		WELL COMPLETION Pad: 4' x 4' x 2" Protective Casing: Alumin DRILLING METHODS Soil Drill: Sonic Rock Drill: Sonic
- - 60 -	-		SM							
- - 65 —	— 370 — — —	63.00 - 65.00 CL, silty sandy CLAY, fine sand, brown to light olive brown, weathered gneiss, micaceous, moderately to weakly foliated, cohesive, plastic, moist to wet, w~PL, firm to very stiff 65.00 - 69.00 SM, silty SAND, very fine to medium sand, pale brown, slightly	CL		368.6 63.00 366.6 65.00	6	ROTO SONIC	<u>12.00</u> 10.00		
_	— 365 —	weathered to weathered gneiss biotite-quartz-plagioclase/feldspar	SM							
- 70 -	- - 360	69.00 - 70.00 SP-SM, Sand with Silt, very fine to medium sand, poorly graded, weathered biotite gneiss, weakly foliated to no foliation, dark grayish brown, wet, loose, non-plastic 70.00 - 73.50 ML, clayey sandy SILT, fine to medium sand, angular, brown to dark grayish brown, dry to moist, non-plastic	SP-SM		362.6 69.00 361.6 70.00	7	ROTO SONIC	<u>5.50</u> 4.50		
- 75 —	-	73.00 - 75.00 SP-SM, Sand with Silt, very fine to coarse sand, poorly graded, not foliated, weathered biotite gneiss 75.00 - 79.00	SP-SM		358.1 356.6 75.00		NIC			
-	- 355 -	SM, silty SAND, fine to coarse sand, TWR/SAPROLITE, interlayered SM and TWR, feldspathic biotite gneiss, coarse gravel throughout, firm to very hrd, dry	SM			8	ROTO SONIC	<u>6.50</u> 5.50		
- 80 -	-	Log continued on next page	ML		352.6 79.00	9		<u>9.50</u> 10.00		

RECORD OF BOREHOLE PZ-53D DRILL RIG: C 600 Track Mounted DATE STARTED: 5/16/20 DATE COMPLETED: 5/17/20 DATE COMPLETED: 5/17/20

SHEET 3 of 4 DEPTH W.L.: 14.2' ELEVATION W.L.: 367.8' DATE W.L.: 5/19/2020 TIME W.L.: 745

	z	SOIL PROFILE		1	1		AMPLI	ES	
DEPTH (ff)	ELEVATION (ft)	DESCRIPTION	nscs	GRAPHIC LOG	ELEV.	SAMPLE NO.	ТҮРЕ	REC	PIEZOMETER WELL DIAGRAM and NOTES CONSTRUCTION DETAILS
80	- 350 -	79.00 - 85.00 ML, sandy SILT, fine to medium sand, angular, brown, subhorizontal foliation, wet from drilling <i>(Continued)</i>	ML		(ft)	Š.	ONIC	0.50	 WELL CASING Interval: 0' - 129.4' Material: Sch 40 PVC Diameter: 2" Joint Type: Threaded WELL SCREEN Interval: 129.4' - 139.4' Material: 0.010" Slotted
85	- - 345 -	85.00 - 89.00 SM, silty SAND, fine to coarse sand, some gravel, weathered felspathic biotite gneiss, SAPROLITE/TWR	SM		346.6 85.00	9	ROTO SONIC	<u>9.50</u> 10.00	Schedule 40 PVC Pre-Pack Screen Diameter: 2" Stot Size: 0.010" End Cap: 3" FILTER PACK Interval: 126.6' - 140' Type: #1 Sand
90	- - 340	89.00 - 93.00 ML, clayey sandy SILT, very fine to medium sand, subanglar to angular, dark grayish brown to grayish brown, fain foliation	ML		342.6 89.00				 Filter Pack Seal Interval: 121' - 126.6' Type: 3/8" Pel-Plug ANNULUS SEAL Interval: 0' - 121' Type: AquaGuard Bento Grout
95 —	- - - 335 -	93.00 - 99.00 SM, silty SAND, very fine to coarse sand, pale brown, weakly foliated, weathered geniss, SAPROLITE	SM		338.6 93.00	10	ROTO SONIC	<u>8.00</u> 10.00	 WELL CASING Interval: 0' - 129.4' Materval: 0' - 129.4' Materval: 0' - 129.4' Material: Sch 40 PVC Diameter: 2" Joint Type: Threaded WELL SCREEN Interval: 129.4' - 139.4' Material: 0.010" Slotted Schedule 40 PVC Pre-Pack Screen Diameter: 2" Slot Size: 0.010" End Cap: 3" FILTER PACK Interval: 126.6' - 140' Type: #1 Sand FILTER PACK SEAL Interval: 121' - 126.6' Type: 3/8" Pel-Plug ANNULUS SEAL Interval: 0' - 121' Type: AquaGuard Bento Grout WELL COMPLETION Pad: 4' x 4' x 2" Protective Casing: Alurr DRILLING METHODS Soil Drill: Sonic Grout Herry Sonic
- - 100 - - - -	- - - - 330	99.00 - 102.50 ML, sandy SILT, and silty SAND, veryfine to medium sand, gravish brown to brown, not foliated, very weathered feldspathic geniss, non-plastic to slightly plastic, firm, wet, SAPROLITE	ML		332.6 99.00 329.1				
- - 105 -		102.50 - 105.00 SM, silty SAND, very fine to coarse sand, some gravel, subangular to angular, pale brown, weathered gneiss, relict foliation, moderate foliation, hard, non-plastic, dry 105.00 - 109.00 No recovery	SM		102.50 326.6 105.00	11	ROTO SONIC	<u>7.00</u> 10.00	
- - - 110	- 325 - - -	109.00 - 113.00 ML/SM, sandy SILT and silty SAND, very fine to medium sand, gravish brown to brown, no foliation wet, non-plastic to plastic,			<u>322.6</u> 109.00				
-	- 320 - -	113.00 - 115.00 SM, silty SAND, fine to coarse sand, weathered gneiss, weakly	ML		318.6 113.00	40	ROTO SONIC	<u>6.0</u> 0	
- 115 - -	- - 315 -	foliated, hard, SAPROLITE 115.00 - 119.00 No recovery	SM		316.6 115.00	12	ROTO (<u>6.00</u> 10.00	
- - 120		Log continued on next page	ML		312.6 119.00	13		<u>9.50</u> 10.00	

RECORD OF BOREHOLE PZ-53D DRILL RIG: C 600 Track Mounted DATE STARTED: 5/16/20 DATE COMPLETED: 5/17/20 DATE COMPLETED: 5/17/20

SHEET 4 of 4

DEPTH W.L.: 14.2' ELEVATION W.L.: 367.8' DATE W.L.: 5/19/2020 TIME W.L.: 745

	z	SOIL PROFILE					AMPLI	ES		
DEPTH (ff)	ELEVATION (ft)	DESCRIPTION	nscs	GRAPHIC LOG	ELEV. DEPTH (ft)	SAMPLE NO.	ТҮРЕ	REC	PIEZOMETER DIAGRAM and NOT	ES CONSTRUCTION DETAILS
120 — - -	- 310	119.00 - 122.50 ML/SM, sandy SILT and silty SAND, very fine to medium sand, some coarse sand, some weathered gneiss cobbles up to 1.5", dark grayish brown, no foliation, biotite gneiss cobbles are weakly foliated, cohesive, non-plastic to slightly plastic, soft to hard, wet (Continued)	ML		<u>309.1</u> 122.50	0,			Bentonite –	WELL CASING Interval: 0' - 129.4' Material: Sch 40 PVC Diameter: 2" Joint Type: Threaded
- - 125	-	122.50 - 127.00 SM, silty SAND, fine to coarse sand, weathered gneiss, weakly foliated, hard, SAPROLITE	SM		122.50	13	ROTO SONIC	<u>9.50</u> 10.00		 WELL CASING Interval: 0' - 129.4' Material: Sch 40 PVC Diameter: 2" Joint Type: Threaded WELL SCREEN Interval: 129.4' - 139.4' Material: 0.010" Slotted Schedule 40 PVC Pre-Pack Screen Diameter: 2" Slot Size: 0.010" End Cap: 3"
-	- 305	127.00 - 129.00 ML/SM, sandy SILT and silty SAND, very fine to medium sand, some coarse sand, some weathered gneiss cobbles up to 1.5", dark grayish brown, no foliation, biotite gneiss cobbles are weakly	ML		304.6 127.00	-			#1 Sand –	 Slot Size: 0.010" End Cap: 3" FILTER PACK Interval: 126.6' - 140' Type: #1 Sand
- 130 — -	_	foliated, cohesive, non-plastic to slightly plastic, soft to hard, wet 129.00 - 131.00 ML, clayey sandy SILT 131.00 - 138.00	ML		302.6 129.00 300.6 131.00	-				 FILTER PACK SEAL Interval: 121' - 126.6' Type: 3/8" Pel-Plug ANNULUS SEAL Interval: 0' - 121'
-	— 300 —	SM, silly SAND, fine and medium sand, gray to dark olive gray, interlayered weathered biotite gneiss and amphibolite, SAPROLITE			131.00		ROTO SONIC	<u>10.00</u>		Type: AquaGuard Bentor Grout WELL COMPLETION Pad: 4' x 4' x 2" Protective Casing: Alumin
135 —	- - - 295		SM			14	ROTO	10.00	0.010" Slotted – Screen	DRILLING METHODS Soil Drill: Sonic Rock Drill: Sonic
-	_	138.00 - 139.00 TWR, transitionally weathered rock, weathered biotite gneiss 139.00 - 144.00	TWR	PAA PAA	293.6 138.00 292.6 139.00	-				
140 — - -	_ 290 	BR, Biotite Gneiss, medium grained, quartz-hornblende-plagioclase, oxidation and fracture zone at 142'-143.5'	BR			15	ROTO SONIC	<u>5.00</u> 5.00		
- - 145	-	Boring completed at 144.00 ft			287.6					
_	285 									-
- 150 — -	-									-
-	— 280 — —									
155 — —	- 275 									
- 160 —	-									-
DRII	LLING	LE: 1 in = 5 ft COMPANY: Cascade Drilling Fred Kraus	(KED B				George, PG PG DATE:	GOLDER

	Ge	CO	onsu	ıltar	nts	>	Client:1100 Milledgeville Rd, Milledgeville, GAProject:Southern Company ServicesAddress:Plant BranchPage:	WELL LOG b. PZ-70 1 of 2	
Drillin Drillin Drillin Drillin Drillin	ng Start ng End ng Com ng Meth ng Equi er: jed By:	Date Ipany nod:	e: (y: (snt: 1	08/10 Caso Soni TSI- C. Fi	6/202 cade ic 4x	22 Drilli 6 in	Boring Depth (ft): 55 Well Depth (ft): Boring Diameter (in): 6 Well Diameter (i ng Sampling Method(s): Core Barrel Screen Slot (in): DTW During Drilling (ft): Riser Material: Ground Surface Elevation: 422.88 ft amsl Screen Material: Top of Casing Elevation: 425.70 ft amsl Seal Material(s): North, East (Y,X):1164326.66, 2555374.08 Filter Pack:	0.010 Sch 40 PVC Sch 40 PVC Slot	
DEPTH (ft)	ГІТНОГОСУ	WATER LEVEL	MELL	COMPLETION	Sample Type	Recovery (%)	SOIL/ROCK VISUAL DESCRIPTION	REMARKS	ELEVATION (ft AMSL)
					GR	10	(0') CLAY (CL); reddish-brown, dry, low plasticity, micaceous with trace sand and relict rock structure.		- - - - - - - - - - - - - - - - - - -
					СВ	90	(10') Same as above. (14') SANDY CLAY (CL); reddish-brown, dry, low plasticity, micaceous with relict rock structure.		- - - - - - - - - - - - - - - - - - -
					СВ	60	(20') SANDY CLAY (CL); reddish-brown, soft, low plasticity, micaceous.		- - - 400 - - - - - - - 395 -
30 - - 35					СВ	90	(30') Same as above. (33') CLAY (CL); reddish-brown, low plasticity, micaceous with some rock fragments and relict rock structure.		- - - 390 -
	NOT				leare ncret		hand auger from 0-10 feet bgs. Well (+2.82 feet stickup) completed with abo	oveground protective of	casing

Geosyntec consultants	Client: 1100 Milledgeville Rd, Milledgeville, GA Project: Southern Company Services Address: Plant Branch	Well No Page:	WELL LOG D. PZ-70 2 of 2				
Drilling Start Date:08/16/2022Drilling End Date:08/16/2022Drilling Company:Cascade DrillingDrilling Method:Sonic 4x6Drilling Equipment:TSI-150Driller:C. FranklinLogged By:D. Kegley	Boring Diameter (in):6WSampling Method(s):Core BarrelSoDTW During Drilling (ft):RiGround Surface Elevation:422.88 ft amslSoTop of Casing Elevation:425.70 ft amslSo	ell Depth (ft): ell Diameter (in creen Slot (in): ser Material: creen Material: eal Material(s): tter Pack:	0.010 Sch 40 PVC	ed			
DEPTH (ft) LITHOLOGY WATER LEVEL WELL COMPLETION Sample Type Recovery (%)	SOIL/ROCK VISUAL DESCRIPTION		REMARKS	ELEVATION (ft AMSL)			
	38') SILTY SAND (SM); reddish-brown, loose, trace clay.			- - - 385 -			
	 (40') SILTY SAND (SM); reddish-brown, loose, coarse sand with some gravel. (42') SANDY CLAY (CL); reddish-brown, moist, low to medium plasticity, relict rock structure. (44') SILTY SAND (SM); light brown, loose, trace gravel and trace clay. 						
55 CB 60	50') GNEISS; competent with multiple fractures near 53 feet, fra 4.5 feet, banded, iron oxide staining. 55') Boring terminated.	acture at		- - - - 370 -			
NOTES: Boring cleared with h set in concrete.	and auger from 0-10 feet bgs. Well (+2.82 feet stickup) com	oleted with abo	oveground protective ca	Ising			

APPENDIX B

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

September 08, 2022

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

Re: Branch CCR Groundwater Compliance Upgradient Work Order: 590838

Dear Joju Abraham:

GEL Laboratories, LLC (GEL) appreciates the opportunity to provide the enclosed analytical results for the sample(s) we received on August 24, 2022. This original data report has been prepared and reviewed in accordance with GEL's standard operating procedures.

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

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

Sincerely,

Vie & Trent

Erin Trent Project Manager

Purchase Order: GPC82177-0003 Enclosures



GEL LABORATORIES LLC

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

Certificate of Analysis Report for

GPCC001 Georgia Power Company

Client SDG: 590838 GEL Work Order: 590838

The Qualifiers in this report are defined as follows:

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

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

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

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

Vie & Treat

Reviewed by

Certificate of Analysis

Company : Address :	Georgia Power Company, Southern Company 241 Ralph McGill Blvd NE, Bin 10160		
Address .	241 Kalph Weohi Biva NE, Bin 10100		
	Atlanta, Georgia 30308		
Contact:	Joju Abraham		
Project:	Branch CCR Groundwater ComplianceUpgradient		
Client Sample ID:	BRGWA-2S	Project:	GPCC00101
Sample ID:	590838001	Client ID:	GPCC001
Matrix:	WG		
Collect Date:	23-AUG-22 10:55		
Receive Date:	24-AUG-22		
Collector:	Client		

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analy	st Date	Time Batch	Method
Field Data											
Client collected Fie	ld pH "As Receiv	/ed"									
Field pH	1	5.95			SU			EOS1	08/23/22	1055 2308296	1
Ion Chromatograph	Ŋ										
EPA 300.0 Anions	-	ved"									
Chloride		2.18	0.0670	0.200	mg/L		1	JLD1	08/25/22	1258 2308691	2
Fluoride	U	ND	0.0330	0.100	mg/L		1				
Sulfate		0.452	0.133	0.400	mg/L		1				
Mercury Analysis-C	CVAA										
7470 Cold Vapor M		As Received"									
Mercury	U	ND	0.0000670	0.000200	mg/L	1.00	1	JP2	08/26/22	1046 2308549	3
Metals Analysis-IC	P-MS				U						
SW846 3005A/602		"									
Arsenic	U U	ND	0.00200	0.00500	mg/L	1.00	1	BAJ	09/02/22	2334 2308385	4
Barium	0	0.0120	0.000670	0.00400	mg/L	1.00	1	D115	07/02/22	2001 2000000	
Chromium	J	0.00908	0.00300	0.0100	mg/L	1.00	1				
Cobalt	J	0.000844	0.000300	0.00100	mg/L	1.00	1				
Iron	J	0.0763	0.0330	0.100	mg/L	1.00	1				
Lead	U	ND	0.000500	0.00200	mg/L	1.00	1				
Lithium	U	ND	0.00300	0.0100	mg/L	1.00	1				
Potassium		0.439	0.0800	0.300	mg/L	1.00	1				
Selenium	U	ND	0.00150	0.00500	mg/L	1.00	1				
Sodium		3.36	0.0800	0.250	mg/L	1.00	1				
Thallium	U	ND	0.000600	0.00200	mg/L	1.00	1				
Antimony	U	ND	0.00100	0.00300	mg/L	1.00	1	BAJ	09/03/22	1430 2308385	5
Beryllium	U	ND	0.000200	0.000500	mg/L	1.00	1	BAJ	09/03/22	1043 2308385	6
Boron Cadmium	J U	0.00532 ND	0.00520 0.000300	0.0150 0.00100	mg/L	1.00 1.00	1				
Calcium	U	ND 4.65	0.000300	0.00100	mg/L mg/I	1.00	1				
Magnesium		4.86	0.0800	0.200	mg/L mg/L	1.00	1				
Manganese		0.0391	0.00100	0.00500	mg/L	1.00	1				
Molybdenum	U	ND	0.000200	0.00100	mg/L	1.00	1				
Solids Analysis	6	112	0.000200	0.00100	₆ , 12	1.00	•				
SM2540C Dissolve	d Solide "As Pas	aivad"									
	cu sonus As Rec		2.20	10.0	ma/T			CHA	09/25/22	1700 2208572	7
Total Dissolved Solids		45.0	2.38	10.0	mg/L			CH6	08/25/22	1700 2308573	7
Titration and Ion A	naiysis										

Certificate of Analysis

Report Date: September 8, 2022

Company : Address :	Georgia Power Company, Southern Company 241 Ralph McGill Blvd NE, Bin 10160		
Contact:	Atlanta, Georgia 30308 Joju Abraham		
Project:	Branch CCR Groundwater ComplianceUpgradient		
Client Sample ID:	BRGWA-2S	Project:	GPCC00101
Sample ID:	590838001	Client ID:	GPCC001

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst Date	Time	Batch	Method
Titration and Ion Analy	vsis										
SM 2320B Total Alkali	inity "As Rec	eived"									
Alkalinity, Total as CaCO3	•	32.6	1.45	4.00	mg/L			HH2 09/04/22	1338	2309339	8
Bicarbonate alkalinity (CaCC	03)	32.6	1.45	4.00	mg/L						
Carbonate alkalinity (CaCO3) U	ND	1.45	4.00	mg/L						
The following Prep Me	thods were pe	erformed:									
Method	Description	n		Analyst	Date		Time	Prep Batch			
SW846 3005A	ICP-MS 3005	5A PREP		PC1	08/26/22		0900	2308382			
SW846 7470A Prep	EPA 7470A N	Mercury Prep Liquid		RM4	08/25/22		1146	2308547			
The following Analytic	cal Methods w	vere performed:									
Method	Description	1			A	Analys	st Com	iments			
1	SM 4500-H B	/SW846 9040C, SM 2550B									
2	EPA 300.0										
3	SW846 7470A	Δ									
4	SW846 3005A	A/6020B									
5	SW846 3005A	A/6020B									
6	SW846 3005A	A/6020B									
7	SM 2540C										
8	SM 2320B										
Notes:											
Column headers are de	fined as follo	WS:									

DF: Dilution FactorLc/LC: Critical LevelDL: Detection LimitPF: Prep FactorMDA: Minimum Detectable ActivityRL: Reporting LimitMDC: Minimum Detectable ConcentrationSQL: Sample Quantitation Limit

Certificate of Analysis

Company : Address :	Georgia Power Company, Southern Company 241 Ralph McGill Blvd NE, Bin 10160		
Contact: Project:	Atlanta, Georgia 30308 Joju Abraham Branch CCR Groundwater ComplianceUpgradient		
Client Sample ID:	BRGWA-2I	Project:	GPCC00101
Sample ID:	590838002	Client ID:	GPCC001
Matrix:	WG		
Collect Date:	23-AUG-22 10:10		
Receive Date:	24-AUG-22		
Collector:	Client		

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analy	st Date	Time Batch	Method
Field Data											
Client collected Field p	H "As Receiv	/ed"									
Field pH		6.67			SU			EOS1	08/23/22	1010 230829	6 1
Ion Chromatography											
EPA 300.0 Anions Liqu	uid "As Recei	ved"									
Chloride		2.02	0.0670	0.200	mg/L		1	JLD1	08/25/22	1428 230869	1 2
Fluoride	U	ND	0.0330	0.100	mg/L		1				
Sulfate		5.66	0.133	0.400	mg/L		1				
Mercury Analysis-CVA	AA										
7470 Cold Vapor Merce		As Received"									
Mercury	U U	ND	0.0000670	0.000200	mg/L	1.00	1	JP2	08/26/22	1048 230854	9 3
Metals Analysis-ICP-M		112	0.0000070	0.000200	iiig 2	1100	-	012	00/20/22	1010 200001	, ,
SW846 3005A/6020B '		"									
Arsenic	U U	ND	0.00200	0.00500	m a /I	1.00	1	BAJ	09/02/22	2352 230838	5 4
Barium	U	ND 0.00954	0.00200	0.00300	mg/L mg/L	1.00	1	DAJ	09/02/22	2552 250858	5 4
Chromium	U	0.00934 ND	0.00300	0.00400	mg/L mg/L	1.00	1				
Cobalt	J	0.000767	0.000300	0.00100	mg/L mg/L	1.00	1				
Iron	3	0.183	0.0330	0.100	mg/L	1.00	1				
Lead	U	ND	0.000500	0.00200	mg/L	1.00	1				
Lithium		0.0262	0.00300	0.0100	mg/L	1.00	1				
Potassium		5.88	0.0800	0.300	mg/L	1.00	1				
Selenium	U	ND	0.00150	0.00500	mg/L	1.00	1				
Sodium		5.73	0.0800	0.250	mg/L	1.00	1				
Thallium	U	ND	0.000600	0.00200	mg/L	1.00	1				
Antimony	U	ND	0.00100	0.00300	mg/L	1.00	1	BAJ	09/03/22	1439 230838	
Beryllium	U	ND	0.000200	0.000500	mg/L	1.00	1	BAJ	09/03/22	1107 230838	5 6
Boron	J	0.00592	0.00520	0.0150	mg/L	1.00	1				
Cadmium	U	ND	0.000300	0.00100	mg/L	1.00	1				
Calcium		13.9	0.0800	0.200	mg/L	1.00	1				
Magnesium		8.82	0.0100	0.0300	mg/L	1.00	1				
Manganese Molybdenum		0.0134 0.00240	0.00100 0.000200	0.00500 0.00100	mg/L mg/L	1.00 1.00	1 1				
•		0.00240	0.000200	0.00100	iiig/L	1.00	1				
Solids Analysis	1.1	. 11									
SM2540C Dissolved So	olids "As Rec			10.0					00/07/07	1.500 000-0-	
Total Dissolved Solids		117	2.38	10.0	mg/L			CH6	08/26/22	1530 230902	97
Titration and Ion Analy	VS1S										

Certificate of Analysis

Report Date: September 8, 2022

Company :	Georgia Power Company, Southern Company		
Address :	241 Ralph McGill Blvd NE, Bin 10160		
	Atlanta, Georgia 30308		
Contact:	Joju Abraham		
Project:	Branch CCR Groundwater ComplianceUpgradient		
Client Sample ID:	BRGWA-2I	Project:	GPCC00101
Sample ID:	590838002	Client ID:	GPCC001

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst Date	Time Batch	Method
Titration and Ion Ana	alysis									
SM 2320B Total Alk	alinity "As Reco	eived"								
Alkalinity, Total as CaCO		62.4	1.45	4.00	mg/L			HH2 09/04/22	1342 2309339	8
Bicarbonate alkalinity (Ca		62.4	1.45	4.00	mg/L					
Carbonate alkalinity (CaC	O3) U	ND	1.45	4.00	mg/L					
The following Prep N	Aethods were pe	erformed:								
Method	Description	1		Analyst	Date		Time	Prep Batch		
SW846 3005A	ICP-MS 3005	A PREP		PC1	08/26/22		0900	2308382		
SW846 7470A Prep	EPA 7470A N	Mercury Prep Liquid		RM4	08/25/22		1146	2308547		
The following Analy	vtical Methods v	vere performed:								
Method	Description				A	Analys	st Con	nments		
1	SM 4500-H B	/SW846 9040C, SM 2550B								
2	EPA 300.0									
3	SW846 7470A	Δ								
4	SW846 3005A	A/6020B								
5	SW846 3005A	A/6020B								
6	SW846 3005A	A/6020B								
7	SM 2540C									
8	SM 2320B									
Notes:										
Column headers are	defined as follo	ws:								

DF: Dilution FactorLc/LC: Critical LevelDL: Detection LimitPF: Prep FactorMDA: Minimum Detectable ActivityRL: Reporting LimitMDC: Minimum Detectable ConcentrationSQL: Sample Quantitation Limit

Certificate of Analysis

Company :	Georgia Power Company, Southern Company		
Address :	241 Ralph McGill Blvd NE, Bin 10160		
	Atlanta, Georgia 30308		
Contact:	Joju Abraham		
Project:	Branch CCR Groundwater ComplianceUpgradient		
Client Sample ID:	BRGWA-5S	Project:	GPCC00101
Sample ID:	590838003	Client ID:	GPCC001
Matrix:	WG		
Collect Date:	23-AUG-22 10:00		
Receive Date:	24-AUG-22		
Collector:	Client		

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analy	st Date	Time Batch	Method
Field Data											
Client collected Fie	eld pH "As Receiv	/ed"									
Field pH	1	6.36			SU			EOS1	08/23/22	1000 2308296	1
Ion Chromatograph	hy										
EPA 300.0 Anions	•	ved"									
Chloride		3.59	0.0670	0.200	mg/L		1	JLD1	08/25/22	1457 2308691	2
Fluoride	U	ND	0.0330	0.100	mg/L		1				
Sulfate		0.521	0.133	0.400	mg/L		1				
Mercury Analysis-	CVAA										
7470 Cold Vapor M	Mercury, Liquid "/	As Received"									
Mercury	U	ND	0.0000670	0.000200	mg/L	1.00	1	JP2	08/26/22	1049 2308549	3
Metals Analysis-IC	CP-MS				U						
SW846 3005A/602		"									
Arsenic	U	ND	0.00200	0.00500	mg/L	1.00	1	BAJ	09/03/22	0003 2308385	4
Barium	0	0.0379	0.000670	0.00400	mg/L	1.00	1	DI	07/03/22	2500505	
Chromium	J	0.00435	0.00300	0.0100	mg/L	1.00	1				
Cobalt	U	ND	0.000300	0.00100	mg/L	1.00	1				
Iron		0.151	0.0330	0.100	mg/L	1.00	1				
Lead	U	ND	0.000500	0.00200	mg/L	1.00	1				
Lithium	U	ND	0.00300	0.0100	mg/L	1.00	1				
Potassium		0.635	0.0800	0.300	mg/L	1.00	1				
Selenium	U	ND	0.00150	0.00500	mg/L	1.00	1				
Sodium		4.03	0.0800	0.250	mg/L	1.00	1				
Thallium	U	ND	0.000600	0.00200	mg/L	1.00	1	D 4 T	00/02/22	1441 2200205	2
Antimony	U	ND ND	0.00100	0.00300	mg/L	1.00 1.00	1	BAJ	09/03/22	1441 2308385	5
Beryllium Boron	U J	0.00538	0.000200 0.00520	0.000500 0.0150	mg/L mg/L	1.00	1 1	BAJ	09/03/22	1110 2308385	6
Cadmium	J U	0.00538 ND	0.000320	0.0130	mg/L	1.00	1				
Calcium	0	18.2	0.0800	0.200	mg/L	1.00	1				
Magnesium		8.51	0.0100	0.0300	mg/L mg/L	1.00	1				
Manganese		0.0140	0.00100	0.00500	mg/L	1.00	1				
Molybdenum	U	ND	0.000200	0.00100	mg/L	1.00	1				
Solids Analysis					č						
SM2540C Dissolv	ed Solids "As Rec	eived"									
Total Dissolved Solids	cu sonus As Kee	101	2.38	10.0	mg/L			CH6	08/26/22	1530 2309029	7
Titration and Ion A	nalveie	101	2.56	10.0	ing/L			0110	00/20/22	1550 2507029	/
i in ano i and ion P	vilary 818										

Certificate of Analysis

Company : Address :	Georgia Power Company, Southern Company 241 Ralph McGill Blvd NE, Bin 10160		
Contact:	Atlanta, Georgia 30308 Joju Abraham		
	5		
Project:	Branch CCR Groundwater ComplianceUpgradient		
Client Sample ID:	BRGWA-5S	Project:	GPCC00101
Sample ID:	590838003	Client ID:	GPCC001

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst Date	Time Batch	Method
Titration and Ion Ana	lysis									
SM 2320B Total Alka	alinity "As Rec	eived"								
Alkalinity, Total as CaCO3	•	73.8	1.45	4.00	mg/L			HH2 09/04/22	1343 2309339	8
Bicarbonate alkalinity (Ca	CO3)	73.8	1.45	4.00	mg/L					
Carbonate alkalinity (CaCO	D3) U	ND	1.45	4.00	mg/L					
The following Prep N	lethods were po	erformed:								
Method	Description	n		Analyst	Date		Time	Prep Batch		
SW846 3005A	ICP-MS 3005	5A PREP		PC1	08/26/22		0900	2308382		
SW846 7470A Prep	EPA 7470A N	Mercury Prep Liquid		RM4	08/25/22		1146	2308547		
The following Analy	tical Methods v	were performed:								
Method	Description	l			A	Analys	st Con	nments		
1	SM 4500-H B	/SW846 9040C, SM 2550B								
2	EPA 300.0									
3	SW846 7470A	A								
4	SW846 3005A	A/6020B								
5	SW846 3005A	A/6020B								
6	SW846 3005A	A/6020B								
7	SM 2540C									
8	SM 2320B									
Notes:										
Column headers are o	defined as follo	<u>WS:</u> Lo/LC: Criti	17 1							

Lc/LC: Critical Level
PF: Prep Factor
RL: Reporting Limit
SQL: Sample Quantitation Limit

Certificate of Analysis

Company :	Georgia Power Company, Southern Company		
Address :	241 Ralph McGill Blvd NE, Bin 10160		
	Atlanta, Georgia 30308		
Contact:	Joju Abraham		
Project:	Branch CCR Groundwater ComplianceUpgradient		
Client Sample ID:	BRGWA-5I	Project:	GPCC00101
Sample ID:	590838004	Client ID:	GPCC001
Matrix:	WG		
Collect Date:	23-AUG-22 10:15		
Receive Date:	24-AUG-22		
Collector:	Client		

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analy	st Date	Time Batch	Method
Field Data											
Client collected Field pl	H "As Receiv	ved"									
Field pH		6.24			SU			EOS1	08/23/22	1015 2308296	1
Ion Chromatography											
EPA 300.0 Anions Liqu	uid "As Recei	ved"									
Chloride		3.64	0.0670	0.200	mg/L		1	JLD1	08/25/22	1527 2308691	2
Fluoride	U	ND	0.0330	0.100	mg/L mg/L		1	3 <u>L</u> D 1	00/20/22	1527 2500051	-
Sulfate	C	2.21	0.133	0.400	mg/L		1				
Mercury Analysis-CVA	A				8						
7470 Cold Vapor Merci		As Received"									
Mercury	ury, Eiquid 7 U	ND	0.0000670	0.000200	mg/L	1.00	1	JP2	08/26/22	1051 2308549	3
Metals Analysis-ICP-M		ND	0.0000070	0.000200	iiig/L	1.00	1	JI 2	00/20/22	1051 2500547	5
•											
SW846 3005A/6020B "			0.00200	0.00500	/τ	1.00	1	DAI	00/02/22	0006 0000005	
Arsenic	U	ND	0.00200	0.00500	mg/L	1.00	1	BAJ	09/03/22	0006 2308385	4
Barium		0.0241	0.000670	0.00400	mg/L	1.00	1				
Chromium	J	0.00647	0.00300	0.0100	mg/L	1.00	1				
Cobalt	J	0.000553	0.000300	0.00100	mg/L	1.00	1				
Iron	U	ND	0.0330	0.100	mg/L	1.00	1				
Lead	U	ND	0.000500	0.00200	mg/L	1.00	1				
Lithium	U	ND	0.00300	0.0100	mg/L	1.00	1				
Potassium		0.909	0.0800	0.300	mg/L	1.00	1				
Selenium	U	ND	0.00150	0.00500	mg/L	1.00	1				
Sodium		4.93	0.0800	0.250	mg/L	1.00	1				
Thallium	U	ND	0.000600	0.00200	mg/L	1.00	1	DAT	00/02/22	1446 0000005	~
Antimony	U	ND	0.00100	0.00300	mg/L	1.00	1	BAJ	09/03/22	1446 2308385	5
Beryllium	U	ND ND	0.000200	0.000500	mg/L	1.00	1	BAJ	09/03/22	1113 2308385	6
Boron	U		0.00520	0.0150	mg/L	1.00	1				
Cadmium	U	ND	0.000300	0.00100	mg/L	1.00	1				
Calcium		14.3	0.0800	0.200	mg/L	1.00	1				
Magnesium		10.4	0.0100	0.0300	mg/L	1.00	1				
Manganese Malah danam	U	ND	0.00100	0.00500	mg/L	1.00	1				
Molybdenum		0.00151	0.000200	0.00100	mg/L	1.00	1				
Solids Analysis											
SM2540C Dissolved Sc	olids "As Rec	eived"									
Total Dissolved Solids		107	2.38	10.0	mg/L			CH6	08/26/22	1530 2309029	7
Titration and Ion Analy	cic				-						

Certificate of Analysis

Company :	Georgia Power Company, Southern Company		
Address :	241 Ralph McGill Blvd NE, Bin 10160		
	Atlanta, Georgia 30308		
Contact:	Joju Abraham		
	5		
Project:	Branch CCR Groundwater ComplianceUpgradient		
Client Sample ID:	BRGWA-5I	Project:	GPCC00101
Sample ID:	590838004	Client ID:	GPCC001

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst Date	Time Batch	Method
Titration and Ion Ana	lysis									
SM 2320B Total Alka	alinity "As Rec	eived"								
Alkalinity, Total as CaCO3	•	72.8	1.45	4.00	mg/L			HH2 09/04/22	1344 2309339	8
Bicarbonate alkalinity (Ca	CO3)	72.8	1.45	4.00	mg/L					
Carbonate alkalinity (CaCo	D3) U	ND	1.45	4.00	mg/L					
The following Prep M	lethods were po	erformed:								
Method	Description	n		Analyst	Date		Time	Prep Batch		
SW846 3005A	ICP-MS 3005	5A PREP		PC1	08/26/22		0900	2308382		
SW846 7470A Prep	EPA 7470A N	Mercury Prep Liquid		RM4	08/25/22		1146	2308547		
The following Analy	tical Methods v	were performed:								
Method	Description	l			A	Analys	st Con	nments		
1	SM 4500-H B	/SW846 9040C, SM 2550B								
2	EPA 300.0									
3	SW846 7470A	A								
4	SW846 3005A	A/6020B								
5	SW846 3005A	A/6020B								
6	SW846 3005A	A/6020B								
7	SM 2540C									
8	SM 2320B									
Notes:										
Column headers are o	lefined as follo		17 1							

Lc/LC: Critical Level
PF: Prep Factor
RL: Reporting Limit
SQL: Sample Quantitation Limit

Certificate of Analysis

Company : Address :	Georgia Power Company, Southern Company 241 Ralph McGill Blvd NE, Bin 10160		
Contact: Project:	Atlanta, Georgia 30308 Joju Abraham Branch CCR Groundwater ComplianceUpgradient		
Client Sample ID:	BRGWA-6S	Project:	GPCC00101
Sample ID:	590838005	Client ID:	GPCC001
Matrix:	WG		
Collect Date:	23-AUG-22 09:50		
Receive Date:	24-AUG-22		
Collector:	Client		

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analy	vst Date	Time Batch	Method
Field Data											
Client collected Field pH	H "As Receiv	ved"									
Field pH		6.51			SU			EOS1	08/23/22	0950 2308296	1
Ion Chromatography											
EPA 300.0 Anions Liqui	id "As Recei	ved"									
Chloride		2.39	0.0670	0.200	mg/L		1	JLD1	08/25/22	1557 2308691	2
Fluoride	U	ND	0.0330	0.100	mg/L mg/L		1	JEDI	00/20/22	1557 2500091	2
Sulfate	e e	0.479	0.133	0.400	mg/L		1				
Mercury Analysis-CVA	А				8						
7470 Cold Vapor Mercu		As Received"									
Mercury	U U	ND	0.0000670	0.000200	mg/L	1.00	1	JP2	08/26/22	1053 2308549	3
Metals Analysis-ICP-MS		ND .	0.0000070	0.000200	ing/L	1.00	1	51 2	00/20/22	1055 2500549	5
SW846 3005A/6020B "											
			0.00200	0.00500	···· - /T	1.00	1	DAI	00/02/22	0010 2208285	4
Arsenic	U	ND		0.00500	mg/L	1.00 1.00	1	BAJ	09/03/22	0010 2308385	4
Barium		0.0140	0.000670	0.00400	mg/L		1				
Chromium Cobalt		0.0143	0.00300 0.000300	0.0100	mg/L	1.00 1.00	1 1				
Iron	U J	ND 0.0701	0.000300	0.00100 0.100	mg/L mg/L	1.00	1				
Lead	J U	0.0701 ND	0.000500	0.00200	mg/L mg/L	1.00	1				
Lithium	J	ND 0.00314	0.000500	0.00200	-	1.00	1				
Potassium	J	0.685	0.00300	0.0100	mg/L	1.00	1				
Selenium	U	0.085 ND	0.0800	0.300	mg/L	1.00	1				
Sodium	U	2.44	0.0800	0.00500	mg/L mg/L	1.00	1				
Thallium	U	2.44 ND	0.000600	0.230	mg/L mg/L	1.00	1				
Antimony	U	ND	0.000000	0.00200	mg/L mg/L	1.00	1	BAJ	09/03/22	1448 2308385	5
Beryllium	U	ND	0.000200	0.000500	mg/L mg/L	1.00	1	BAJ	09/03/22	1116 2308385	6
Boron	U	ND	0.00520	0.0150	mg/L mg/L	1.00	1	D7 15	07/03/22	1110 2500505	0
Cadmium	U	ND	0.000300	0.00100	mg/L mg/L	1.00	1				
Calcium	e	3.97	0.0800	0.200	mg/L mg/L	1.00	1				
Magnesium		4.06	0.0100	0.0300	mg/L	1.00	1				
Manganese	J	0.00329	0.00100	0.00500	mg/L mg/L	1.00	1				
Molybdenum	Ů	ND	0.000200	0.00100	mg/L mg/L	1.00	1				
Solids Analysis	-										
SM2540C Dissolved Sol	lide "As Roo	aived"									
Total Dissolved Solids	nus As Kec	52.0	2.38	10.0	ma/I			CHA	00/26/22	1520 2200020	7
		52.0	2.38	10.0	mg/L			CH6	08/26/22	1530 2309029	7
Titration and Ion Analys	515										

Certificate of Analysis

Report Date: September 8, 2022

Company : Address :	Georgia Power Company, Southern Company 241 Ralph McGill Blvd NE, Bin 10160		
	Atlanta, Georgia 30308		
Contact:	Joju Abraham		
Project:	Branch CCR Groundwater ComplianceUpgradient		
Client Sample ID:	BRGWA-6S	Project:	GPCC00101
Sample ID:	590838005	Client ID:	GPCC001

Parameter	Qualifier	Result	DL	RL	Units	PF	DF /	Analyst Date	Time Batch	Method
Titration and Ion Ana	lysis									
SM 2320B Total Alka	alinity "As Rec	eived"								
Alkalinity, Total as CaCO	•	58.2	1.45	4.00	mg/L]	HH2 09/04/22	1346 2309339	8
Bicarbonate alkalinity (Ca	CO3)	58.2	1.45	4.00	mg/L					
Carbonate alkalinity (CaCo	D3) U	ND	1.45	4.00	mg/L					
The following Prep N	Iethods were p	erformed:								
Method	Description	n		Analyst	Date		Time	Prep Batch		
SW846 3005A	ICP-MS 3005	5A PREP		PC1	08/26/22		0900	2308382		
SW846 7470A Prep	EPA 7470A 1	Mercury Prep Liquid		RM4	08/25/22		1146	2308547		
The following Analy	tical Methods v	were performed:								
Method	Description	l			A	Analys	t Com	ments		
1	SM 4500-H B	/SW846 9040C, SM 2550B								
2	EPA 300.0									
3	SW846 7470A	A								
4	SW846 3005A	A/6020B								
5	SW846 3005A	A/6020B								
6	SW846 3005A	A/6020B								
7	SM 2540C									
8	SM 2320B									
Notes:										
Column headers are o	defined as follo	<u>WS:</u> Lo/LC: Critic	.11.1							

DF: Dilution FactorLc/LC: Critical LevelDL: Detection LimitPF: Prep FactorMDA: Minimum Detectable ActivityRL: Reporting LimitMDC: Minimum Detectable ConcentrationSQL: Sample Quantitation Limit

GEL LABORATORIES LLC

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

QC Summary

Report Date: September 8, 2022

Page 1 of 11

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

Workorder:

590838

Contact:

Parmname NOM Sample Qual QC Units RPD% REC% Range Anlst Date Time Ion Chromatography 2308691 Batch QC1205175345 590838001 DUP Chloride 2.18 2.13 2.51 (0%-20%) JLD1 08/25/22 13:28 mg/L U ND U ND Fluoride mg/L N/A Sulfate 0.452 0.418 mg/L 7.86 ^ (+/-0.400) QC1205175347 590857001 DUP Chloride 30.3 08/26/22 03:54 30.4 0.158 ^ (+/-8.00)mg/L Fluoride 0.187 0.160 mg/L 15.7 ^ (+/-0.100)08/25/22 21:26 Sulfate 385 387 mg/L 0.559 (0% - 20%)08/26/22 03:54 QC1205175344 LCS Chloride 5.00 4.72 mg/L 94.3 (90%-110%) 08/25/22 12:28 2.50 2.30 (90%-110%)Fluoride mg/L 91.9 Sulfate 10.0 9.76 mg/L 97.6 (90%-110%) QC1205175343 MB U ND 08/25/22 11:59 Chloride mg/L U Fluoride ND mg/L U ND Sulfate mg/L QC1205175346 590838001 PS Chloride 5.00 2.18 7.68 110 (90%-110%) 08/25/22 13:58 mg/L

Wardandan 500020		<u><u>v</u>os</u>		<u></u>						
Workorder: 590838	NOM	Sample Oral	00	Units	RPD% F	REC%	Dongo	Anlst	Page 2 of	
Parmname Ion Chromatography	NOM	Sample Qual	QC	Units	KPD% F	KEC %	Range A	Anist	Date Tin	ne_
Batch 2308691										
Fluoride	2.50 U	ND	2.65	mg/L		106	(90%-110%)	JLD1	08/25/22 13	3:58
Sulfate	10.0	0.452	11.6	mg/L		111*	(90%-110%)			
QC1205175348 590857001 PS	5.00	0.750	574			00.7	(000/ 1100/)		08/26/22 0	1.24
Chloride	5.00	0.759	5.74	mg/L		99.7	(90%-110%)		08/26/22 04	1:24
Fluoride	2.50	0.187	2.68	m a/I		00.0	(000/ 1100/)		08/25/22 21	1.50
Fluoride	2.50	0.187	2.08	mg/L		99.9	(90%-110%)		08/25/22 21	1:50
Sulfate	10.0	9.63	20.5	mg/I		109	(90%-110%)		08/26/22 04	1.24
Sunate	10.0	9.05	20.3	mg/L		109	(90%-110%)		08/20/22 04	+.24
Metals Analysis - ICPMS										
Batch 2308385 —										
QC1205174766 LCS				_						
Antimony	0.0500		0.0497	mg/L		99.4	(80%-120%)	BAJ	09/03/22 14	1:29
	0.0500		0.0512	Л		100	(000/ 1000/)		00/02/22 22	2.20
Arsenic	0.0500		0.0512	mg/L		102	(80%-120%)		09/02/22 23	3:30
Barium	0.0500		0.0504	m a/I		101	(80%-120%)			
Darium	0.0300		0.0304	mg/L		101	(80%-120%)			
Beryllium	0.0500		0.0588	mg/L		118	(80%-120%)		09/03/22 10	0.40
Berymum	0.0500		0.0388	ilig/L		110	(80%-120%)		09/03/22 10	J.40
Boron	0.100		0.114	mg/L		114	(80%-120%)			
DOION	0.100		0.114	mg/L		114	(00/0-120/0)			
Cadmium	0.0500		0.0519	mg/L		104	(80%-120%)			
Caumum	0.0500		0.0517	ilig/L		104	(00/0-120/0)			
Calcium	2.00		2.18	mg/L		109	(80%-120%)			
Calcium	2.00		2.10	ing/E		10)	(00/0-120/0)			
Chromium	0.0500		0.0510	mg/L		102	(80%-120%)		09/02/22 23	3.30
Chroninghi	0.0200		0.0010	mg/L		102	(0070 12070)		07102122 Z	
Cobalt	0.0500		0.0497	mg/L		99.4	(80%-120%)			
Coban	0.0500		0.0477	mg/L)) . +	(00/0-12070)			

Workorder: 590838		<u>X</u> U D	<u>u</u>	<u> </u>				Dama 2 of 11
Parmname	NOM	Sample Qual	QC	Units	RPD%	REC%	Range Anlst	Page 3 of 11 Date Time
Metals Analysis - ICPMS Batch 2308385		Samhir Anar	<u>v</u> t		<u> </u>	<u>_ KEC /u</u>	Nalige Allise	Date Thire
Iron	2.00		2.10	mg/L		105	(80%-120%) BAJ	J 09/02/22 23:30
Lead	0.0500		0.0527	mg/L		105	(80%-120%)	
Lithium	0.0500		0.0518	mg/L		104	(80%-120%)	
Magnesium	2.00		2.17	mg/L		109	(80%-120%)	09/03/22 10:40
Manganese	0.0500		0.0512	mg/L		102	(80%-120%)	
Molybdenum	0.0500		0.0521	mg/L		104	(80%-120%)	
Potassium	2.00		1.99	mg/L		99.7	(80%-120%)	09/02/22 23:30
Selenium	0.0500		0.0494	mg/L		98.9	(80%-120%)	
Sodium	2.00		2.22	mg/L		111	(80%-120%)	
Thallium	0.0500		0.0460	mg/L		92.1	(80%-120%)	
QC1205174765 MB Antimony		U	ND	mg/L				09/03/22 14:27
Arsenic		U	ND	mg/L				09/02/22 23:27
Barium		U	ND	mg/L				
Beryllium		U	ND	mg/L				09/03/22 10:37
Boron		U	ND	mg/L				

Workorder: 590838		-			<u>.</u>					Page 4 of 11
Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Metals Analysis - ICPMS Batch 2308385		.								
Cadmium			U	ND	mg/L				BAJ	09/03/22 10:37
Calcium			U	ND	mg/L					
Chromium			U	ND	mg/L					09/02/22 23:27
Cobalt			U	ND	mg/L					
Iron			U	ND	mg/L					
Lead			U	ND	mg/L					
Lithium			U	ND	mg/L					
Magnesium			U	ND	mg/L					09/03/22 10:37
Manganese			U	ND	mg/L					
Molybdenum			U	ND	mg/L					
Potassium			U	ND	mg/L					09/02/22 23:27
Selenium			U	ND	mg/L					
Sodium			U	ND	mg/L					
Thallium			U	ND	mg/L					
QC1205174767 590838001 MS Antimony	0.0500 U	ND		0.0501	mg/L		99.4	(75%-125%	5)	09/03/22 14:32

Workordon 500929			$\underline{\mathbf{v}}$		<u></u>						
Workorder: 590838	NO		Converte Oreal		TI			Damas	A 14		5 of 11
Parmname Metals Analysis - ICPMS Batch 2308385	NOM	<u>vi</u>	Sample Qual	QC	Units	RPD%	REC%	Range	Anlst	Date 7	<u>l ime</u>
Arsenic	0.0500	U	ND	0.0500	mg/L		98	(75%-125%)	BAJ	09/02/22	23:37
Barium	0.0500		0.0120	0.0615	mg/L		99.1	(75%-125%)			
Beryllium	0.0500	U	ND	0.0613	mg/L		123	(75%-125%)		09/03/22	2 10:46
Boron	0.100	J	0.00532	0.120	mg/L		115	(75%-125%)			
Cadmium	0.0500	U	ND	0.0529	mg/L		106	(75%-125%)			
Calcium	2.00		4.65	7.04	mg/L		120	(75%-125%)			
Chromium	0.0500	J	0.00908	0.0603	mg/L		102	(75%-125%)		09/02/22	2 23:37
Cobalt	0.0500	J	0.000844	0.0514	mg/L		101	(75%-125%)			
Iron	2.00	J	0.0763	2.13	mg/L		103	(75%-125%)			
Lead	0.0500	U	ND	0.0508	mg/L		101	(75%-125%)			
Lithium	0.0500	U	ND	0.0545	mg/L		108	(75%-125%)			
Magnesium	2.00		4.86	7.40	mg/L		127*	(75%-125%)		09/03/22	2 10:46
Manganese	0.0500		0.0391	0.0930	mg/L		108	(75%-125%)			
Molybdenum	0.0500	U	ND	0.0538	mg/L		108	(75%-125%)			
Potassium	2.00		0.439	2.44	mg/L		100	(75%-125%)		09/02/22	2 23:37

Workorder: 590838			<u><u><u>v</u></u></u>		<u></u>						
			Gaussila Oas		T T • 4			David	A 14	Page 6	
Parmname Metals Analysis - ICPMS	NON	M	Sample Qua	l QC	Units	RPD%	REC%	Range	Anlst	Date T	me
Batch 2308385											
Selenium	0.0500	U	ND	0.0496	mg/L		99.2	(75%-125%)	BAJ	09/02/22	23:37
Sodium	2.00		3.36	5.52	mg/L		108	(75%-125%)			
Thallium	0.0500	U	ND	0.0463	mg/L		92.5	(75%-125%)			
QC1205174768 590838001 MSD Antimony	0.0500	U	ND	0.0492	mg/L	1.91	97.5	(0%-20%)		09/03/22	14:34
					č		-	· · · · · · · · · · · · · · · · · · ·			
Arsenic	0.0500	U	ND	0.0495	mg/L	1.13	96.9	(0%-20%)		09/02/22	23:41
					-						l
Barium	0.0500		0.0120	0.0611	mg/L	0.618	98.3	(0%-20%)			
Beryllium	0.0500	U	ND	0.0604	mg/L	1.57	121	(0%-20%)		09/03/22	10:49
Boron	0.100	J	0.00532	0.119	mg/L	1.12	114	(0%-20%)			
Cadmium	0.0500	U	ND	0.0516	mg/L	2.52	103	(0%-20%)			
Calcium	2.00		4.65	6.88	mg/L	2.39	111	(0%-20%)			
Chromium	0.0500	J	0.00908	0.0589	mg/L	2.28	99.7	(0%-20%)		09/02/22 2	23:41
•	2.0500	т	0.000014	0.0500	π	2.24	22.0	(201 2001)			
Cobalt	0.0500	J	0.000844	0.0503	mg/L	2.26	98.9	(0%-20%)			
T	2.00	т	0.0763	2.09	mg/I	1 70	101	(00/200/)			
Iron	2.00	J	0.0705	2.09	mg/L	1.79	101	(0%-20%)			
Lead	0.0500	IJ	ND	0.0506	mg/L	0.396	101	(0%-20%)			
Leau	0.0500	C		0.0500	Ing/ L	0.570	101	(0/0-20/0)			
Lithium	0.0500	U	ND	0.0534	mg/L	2.01	105	(0%-20%)			
Liunum	0.0500	e	ND	0.0554	iiig/L	2.01	105	(070-2070)			

		2		<u> y</u>				
Workorder: 590838								Page 7 of 11
Parmname	NOM	Sample	Qual QC	Units	RPD%	REC%	Range An	lst Date Time
Metals Analysis - ICPMS Batch 2308385								
Magnesium	2.00	4.86	7.28	mg/L	1.68	121	(0%-20%)	BAJ 09/03/22 10:49
Manganese	0.0500	0.0391	0.0926	mg/L	0.447	107	(0%-20%)	
Molybdenum	0.0500 U	ND	0.0536	mg/L	0.447	107	(0%-20%)	
Potassium	2.00	0.439	2.38	mg/L	2.49	97.1	(0%-20%)	09/02/22 23:41
Selenium	0.0500 U	ND	0.0478	mg/L	3.8	95.5	(0%-20%)	
Sodium	2.00	3.36	5.45	mg/L	1.34	105	(0%-20%)	
Thallium	0.0500 U	ND	0.0449	mg/L	2.98	89.8	(0%-20%)	
QC1205182314 590838001 PS Magnesium	2000	4860	7000	ug/L		107	(75%-125%)	09/03/22 10:52
QC1205174769 590838001 SDILT Antimony	U	ND	U ND	ug/L	N/A		(0%-20%)	09/03/22 14:37
Arsenic	U	ND	U ND	ug/L	N/A		(0%-20%)	09/02/22 23:48
Barium		12.0	ј 2.29	ug/L	4.59		(0%-20%)	
Beryllium	U	ND	U ND	ug/L	N/A		(0%-20%)	09/03/22 11:04
Boron	J	5.32	U ND	ug/L	N/A		(0%-20%)	
Cadmium	U	ND	U ND	ug/L	N/A		(0%-20%)	
Calcium		4650	892	ug/L	4.21		(0%-20%)	

GEL LABORATORIES LLC

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

		-		willing wi	<u>.</u>					
Workorder: 590838	NOM	<u> </u>	0	00	T L . •4			Dense		Page 8 of 11
<u>Parmname</u> Metals Analysis - ICPMS	NOM	Sample	Quai	QC	Units	RPD%	REC%	Range A	nlst	Date Time
Batch 2308385										
Chromium	J	9.08	U	ND	ug/L	N/A		(0%-20%)	BAJ	09/02/22 23:48
Cobalt	J	0.844	U	ND	ug/L	N/A		(0%-20%)		
	Ţ	54.0			σ	37/4		(0.0) 200()		
Iron	J	76.3	U	ND	ug/L	N/A		(0%-20%)		
Lead	U	ND	U	ND	ug/L	N/A		(0%-20%)		
Leau	C	ND	U	ND	ug/L	IN/A		(070-2070)		
Lithium	U	ND	U	ND	ug/L	N/A		(0%-20%)		
					ε			(,		
Magnesium		4860		866	ug/L	11		(0%-20%)		09/03/22 11:04
Manganese		39.1		7.50	ug/L	3.96		(0%-20%)		
Molybdenum	U	ND	U	ND	ug/L	N/A		(0%-20%)		
Potassium		439	J	85.4	ug/L	2.83		(0%-20%)		09/02/22 23:48
	ŢŢ				π	NT/A		(00) 200()		
Selenium	U	ND	U	ND	ug/L	N/A		(0%-20%)		
Sodium		3360		579	ug/L	13.8		(0%-20%)		
Sourin		2200		517	45/11	15.0		(070 2070)		
Thallium	U	ND	U	ND	ug/L	N/A		(0%-20%)		
					U					
Metals Analysis-Mercury Batch 2308549										
QC1205175103 590719007 DUP					_					
Mercury	U	ND	U	ND	mg/L	N/A			JP2	08/26/22 10:26
001205175102										
QC1205175102 LCS Mercury	0.00200			0.00212	mg/L		106	(80%-120%)		08/26/22 10:09

Workorder: 590838					-							Page 9 of 11
Parmname		NON	M	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Metals Analysis-Mercury Batch 2308549 QC1205175101 MB												
Mercury					U	ND	mg/L				JP2	08/26/22 10:07
QC1205175104 590719007 Mercury	MS	0.00200	U	ND		0.00152	mg/L		73.9*	(75%-125%)	I	08/26/22 10:28
QC1205175106 590719007 Mercury	PS	2.00	U	ND		1.51	ug/L		73.5*	(80%-120%)	1	08/26/22 10:31
QC1205175105 590719007 Mercury	SDILT		U	ND	U	ND	ug/L	N/A		(0%-10%)	١	08/26/22 10:30
Solids Analysis Batch 2308573												
QC1205175155 590720002 Total Dissolved Solids	DUP			161		159	mg/L	1.25		(0%-5%)	CH6	08/25/22 17:00
QC1205175152 LCS Total Dissolved Solids		300				301	mg/L		100	(95%-105%))	08/25/22 17:00
QC1205175151 MB Total Dissolved Solids					U	ND	mg/L					08/25/22 17:00
Batch 2309029												
QC1205176100 590857001 Total Dissolved Solids	DUP			614		616	mg/L	0.325		(0%-5%)	CH6	08/26/22 15:30
QC1205176099 LCS Total Dissolved Solids		300				300	mg/L		100	(95%-105%))	08/26/22 15:30
QC1205176098 MB Total Dissolved Solids					U	ND	mg/L					08/26/22 15:30

GEL LABORATORIES LLC

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

QC Summary

Workorder: 590838					_					Page 1	10 of 11
Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Titration and Ion AnalysisBatch2309339											
QC1205176799 590838001 DUP Alkalinity, Total as CaCO3		32.6		32.2	mg/L	1.23		(0%-20%)	HH2	09/04/2	2 13:40
Bicarbonate alkalinity (CaCO3)		32.6		32.2	mg/L	1.23		(0%-20%)	I		
Carbonate alkalinity (CaCO3)	U	ND	U	ND	mg/L	N/A					
QC1205176801 590857001 DUP Alkalinity, Total as CaCO3	J	3.40	J	3.60	mg/L	5.71 ^		(+/-4.00))	09/04/2	22 13:53
Bicarbonate alkalinity (CaCO3)	J	3.40	J	3.60	mg/L	5.71 ^		(+/-4.00))		
Carbonate alkalinity (CaCO3)	U	ND	U	ND	mg/L	N/A					
QC1205176798 LCS Alkalinity, Total as CaCO3	100			104	mg/L		104	(90%-110%)	I	09/04/2	22 13:37
QC1205176800 590838001 MS Alkalinity, Total as CaCO3	100	32.6		136	mg/L		104	(80%-120%)	I	09/04/2	22 13:42
QC1205176802 590857001 MS Alkalinity, Total as CaCO3	100 J	3.40		107	mg/L		104	(80%-120%)	I	09/04/2	22 13:54

Notes:

The Qualifiers in this report are defined as follows:

- < Result is less than value reported
- > Result is greater than value reported
- B The target analyte was detected in the associated blank.
- E %difference of sample and SD is >10%. Sample concentration must meet flagging criteria
- E General Chemistry--Concentration of the target analyte exceeds the instrument calibration range
- FB Mercury was found present at quantifiable concentrations in field blanks received with these samples. Data associated with the blank are deemed invalid for reporting to regulatory agencies
- H Analytical holding time was exceeded
- J See case narrative for an explanation

GEL LABORATORIES LLC

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

QC Summary

Workor Parmnar	Page 11 of						
J	Value is estimated						
y N	MetalsThe Matrix spike sample recovery is not within specified control limits						
	RPD or %Recovery limits do not apply.						
N1	See case narrative						
ND	Analyte concentration is not detected above the detection limit						
NJ	Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier						
Q	One or more quality control criteria have not been met. Refer to the applicable narrative or DER.						
R	Per section 9.3.4.1 of Method 1664 Revision B, due to matrix spike recovery issues, this result may not be reported or used for regulatory compliance purposes.						
R	Sample results are rejected						
U	Analyte was analyzed for, but not detected above the MDL, MDA, MDC or LOD.						
Х	Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier						
Y	Other specific qualifiers were required to properly define the results. Consult case narrative.						
Ζ	Paint Filter TestParticulates passed through the filter, however no free liquids were observed.						
^	RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL. Qualifier Not Applicable for Radiochemistry.						
d	5-day BODThe 2:1 depletion requirement was not met for this sample						
e	5-day BODTest replicates show more than 30% difference between high and low values. The data is qualified per the method and can be used for reporting purposes						
h	Preparation or preservation holding time was exceeded						
^ The Re five time evaluate	icates that spike recovery limits do not apply when sample concentration exceeds spike conc. by a factor of 4 or more or %RPD not applicable. elative Percent Difference (RPD) obtained from the sample duplicate (DUP) is evaluated against the acceptance criteria when the sample is greater than es (5X) the contract required detection limit (RL). In cases where the duplicate value is less than 5X the RL, a control limit of +/- the RL is used to the DUP result.						

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

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

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

Technical Case Narrative Georgia Power Company SDG #: 590838

<u>Metals</u>

Product: Determination of Metals by ICP-MS Analytical Method: SW846 3005A/6020B **Analytical Procedure:** GL-MA-E-014 REV# 35 **Analytical Batch:** 2308385

<u>Preparation Method:</u> SW846 3005A <u>Preparation Procedure:</u> GL-MA-E-006 REV# 14 <u>Preparation Batch:</u> 2308382

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

<u>GEL Sample ID#</u>	Client Sample Identification
590838001	BRGWA-2S
590838002	BRGWA-2I
590838003	BRGWA-5S
590838004	BRGWA-5I
590838005	BRGWA-6S
1205174765	Method Blank (MB)ICP-MS
1205174766	Laboratory Control Sample (LCS)
1205174769	590838001(BRGWA-2SL) Serial Dilution (SD)
1205174767	590838001(BRGWA-2SS) Matrix Spike (MS)
1205174768	590838001(BRGWA-2SSD) Matrix Spike Duplicate (MSD)
1205182314	590838001(BRGWA-2SPS) 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.

Calibration Information

ICSA/ICSAB Statement

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

Quality Control (QC) Information

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 recovery was within the required control limits. This verifies the absence of a matrix interference in

the post-spike digested sample. The recovery may be attributed to possible sample matrix interference and/or non-homogeneity.

Sample	Analyte	Value
1205174767 (BRGWA-2SMS)	Magnesium	127* (75%-125%)

<u>Product:</u> Mercury Analysis Using the Perkin Elmer Automated Mercury Analyzer <u>Analytical Method:</u> SW846 7470A <u>Analytical Procedure:</u> GL-MA-E-010 REV# 38 <u>Analytical Batch:</u> 2308549

Preparation Method: SW846 7470A Prep **Preparation Procedure:** GL-MA-E-010 REV# 38 **Preparation Batch:** 2308547

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

<u>GEL Sample ID#</u>	<u>Client Sample Identification</u>
590838001	BRGWA-2S
590838002	BRGWA-2I
590838003	BRGWA-5S
590838004	BRGWA-5I
590838005	BRGWA-6S
1205175101	Method Blank (MB)CVAA
1205175102	Laboratory Control Sample (LCS)
1205175105	590719007(NonSDGL) Serial Dilution (SD)
1205175103	590719007(NonSDGD) Sample Duplicate (DUP)
1205175104	590719007(NonSDGS) Matrix Spike (MS)
1205175106	590719007(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
1205175104 (Non SDG 590719007MS)	Mercury	73.9* (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
1205175106 (Non SDG 590719007PS)	Mercury	73.5* (80%-120%)

General Chemistry

<u>Product:</u> Ion Chromatography <u>Analytical Method:</u> EPA 300.0 <u>Analytical Procedure:</u> GL-GC-E-086 REV# 30 <u>Analytical Batch:</u> 2308691

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

<u>GEL Sample ID#</u>	Client Sample Identification
590838001	BRGWA-2S
590838002	BRGWA-2I
590838003	BRGWA-5S
590838004	BRGWA-5I
590838005	BRGWA-6S
1205175343	Method Blank (MB)
1205175344	Laboratory Control Sample (LCS)
1205175345	590838001(BRGWA-2S) Sample Duplicate (DUP)
1205175346	590838001(BRGWA-2S) Post Spike (PS)
1205175347	590857001(BRGWC-33S) Sample Duplicate (DUP)
1205175348	590857001(BRGWC-33S) Post Spike (PS)

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

Data Summary:

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

Quality Control (QC) Information

Matrix Spike (MS)/Post Spike (PS) Recovery Statement

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

Analyte	Sample	Value
Sulfate	1205175346 (BRGWA-2SPS)	111* (90%-110%)

Technical Information

Sample Dilutions

The following samples 1205175347 (BRGWC-33SDUP) and 1205175348 (BRGWC-33SPS) 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.

<u>Product:</u> Solids, Total Dissolved <u>Analytical Method:</u> SM 2540C <u>Analytical Procedure:</u> GL-GC-E-001 REV# 19 <u>Analytical Batch:</u> 2308573

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

<u>GEL Sample ID#</u>	Client Sample Identification
590838001	BRGWA-2S
1205175151	Method Blank (MB)
1205175152	Laboratory Control Sample (LCS)
1205175155	590720002(NonSDG) Sample Duplicate (DUP)

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

Data Summary:

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

Product: Solids, Total Dissolved Analytical Method: SM 2540C Analytical Procedure: GL-GC-E-001 REV# 19 Analytical Batch: 2309029

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

<u>GEL Sample ID#</u>	Client Sample Identification
590838002	BRGWA-2I
590838003	BRGWA-5S
590838004	BRGWA-5I
590838005	BRGWA-6S
1205176098	Method Blank (MB)
1205176099	Laboratory Control Sample (LCS)
1205176100	590857001(BRGWC-33S) Sample Duplicate (DUP)

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

Data Summary:

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

continuing calibration, instrument controls and process controls where applicable.

Product: Alkalinity Analytical Method: SM 2320B Analytical Procedure: GL-GC-E-033 REV# 14 Analytical Batch: 2309339

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

<u>GEL Sample ID#</u>	Client Sample Identification
590838001	BRGWA-2S
590838002	BRGWA-2I
590838003	BRGWA-5S
590838004	BRGWA-5I
590838005	BRGWA-6S
1205176798	Laboratory Control Sample (LCS)
1205176799	590838001(BRGWA-2S) Sample Duplicate (DUP)
1205176800	590838001(BRGWA-2S) Matrix Spike (MS)
1205176801	590857001(BRGWC-33S) Sample Duplicate (DUP)
1205176802	590857001(BRGWC-33S) Matrix Spike (MS)

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

Data Summary:

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

Certification Statement

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

							10000		2	210010				Γ
Page:of		Ш		aboratories	torie		C	1			GEL Lal 2040 Sa	GEL Laboratories, LLC 2040 Savage Road		
Project # GEL Quote #:		gel.com Chain	_ 0	chemistry I Radiochemistry I Radiobioassay I Speciality Analytics Custody and Analytical Request	chemistry l	vtical R	say I Spec	alty Analy	tics		Charlest Phone: (Charleston, SC 29407 Phone: (843) 556-8171		
	GEL Work Order Number:			GEL Project Manager: Erin Trent	ect Man	ager: Eri	in Trent			(5)	Fax: (84	Fax: (843) 766-1178		
Client Name: GA Power		Phone # 404	404-506-7116	16			Sample	Analys	sis Req	iested ^(c) (F)	Il in the numb	Sample Analysis Requested ⁽²⁾ (Fill in the number of containers for each test)	or each test)	
Project/Site Name: Plant Branch Ash Ponds		Fax #				Should this			IN	IN			< Preservative Type (6)	
Address: 241 Ralph McGill Blvd SE, Atlanta GA 30308					. 0	considered:		30t		877			Comments	
Collected By: $\int_{V} \int_{V} \int_$	Send Results To: SCS & Geosyntec Contacts	eosyntec Co	ntacts		л) '			-57 WS	als * 320B	2 28 922			Note: extra sample is	S
Sample ID	*Date Collected	*Time Collected (Military)	QC Code ⁽²⁾ F	Field St Filtered ⁽³⁾ Ma	Sample Matrix ⁽⁴⁾	yes, please su isotopic info.) (7) Known o	zsH əldizzoq dmun latoT	EPA 300, CI, F, So	Met	EPA 6020			required for sample specific QC	
Pro composites - indicate start and stop date time	08/23/22		U U	9W 1	(7)		7	7	7	>		fiel	field pH = 5.45	
RR GWA-2I	173/23/22	1010	0	m N	w6		4	7	2	>		fiel	field pH = 6.67	
8R 644 -55	68/23/22	10001	.0	N	~6		Ļ	>	7	7		fiel	field $pH = 6.36$	
BR. GWA- 5I	08/23/22	1015		N	2 On		4	>	>	>		fiel	field pH = 6.24	
BR 6WA-65	08/25/22	0950		N N	9		1	>	>	7		fiel	field pH = 6.51	
					3							fiel	field pH =	
												fiel	field pH =	
			11									fiel	field pH =	
												fiel	field pH =	
								- 11				fiel	field pH =	
Chain of	Chain of Custody Signatures						TAT Requested:	quested	: Nori	Normal: X R	Rush: Spo	Specify:	(Subject to Surcharge)	
Relinquished By (Signed) Date Time	Received by (signed)	ned)	Date	Time		Fax	Fax Results: [] Yes	[] Yes	[x] No	0				
Part alatic bruss	nol!	N	6	12	24/20	2 Sele	Select Deliverable: [] C of A	rable: [] C of A	[] QC Summary	mary [] level 1	[x] Level 2	[] Level 3 [·] Level	4
127 51	2 The	8	2412	00		624US Ada	Additional Remarks:	emarks:	V*	etals: B,Ca,Sh	As,Ba,Be,Cd,C	r,Co,Pb,Li,Mo,Se,Tl	* Metals: B,Ca,Sb,As,Ba,Be,Cd,Cr,Co,Pb,Li,Mo,Se,Tl,Fe,Mg,Mn,K,Na,Hg	
1000 - 2012 1000	3					For	Lab Rec	eiving U	se Only	Custody Sec	For Lab Receiving Use Only: Custody Seal Intact? [] Yes	es [] No Cool	Cooler Temp: °C	at the set
> For sample shipping and delivery details, see Sample Receipt & Review form (SRR.)	: Receipt & Review forn	ı (SRR.)			San	ple Colle	ction Tin	ne Zone	: [x] Ea	stern [] Pa	cific [] Cer	Sample Collection Time Zone: [x] Eastern [] Pacific [] Central [] Mountain [] Other:	n [] Uther:	
 Chain of Custody Number = Client Determined Chain of Custody Number = Client Determined C = Composite C = Composite C = Composite 	lionta DB = Equipment Rlank	MS = Matrix S	nike Samul	MSD = M	trix Spike D	uplicate San	ple, G = Gr	ab, C = Cc	omposite					
2.) QC Codes: N = Normal Sample, ID = 111p Data, FD = 1 course up to be reacted and the providence of the sample was field filtered or - N - for sample was not field filtered.	ample was field filtered or - N	- for sample was	not field fil	tered.	0									
 Field Fritefort. For fighting matrices, indicate with a state of coundwater. WS=Surface Water, WW=Water, WL=Leachate, SO=Soil, SE=Stediment, SL=Studge, WQ=Water Quality Control Matrix Montrix Codes, WD=Drinking Water WG=Groundwater. WS=Surface Water, WU=Leachate, SO=Soil, SE=Stediment, SL=Studge, WQ=Water Quality Control Matrix 	ace Water, WW=Waste Water	, WL=Leachate,	SO=Soil, S	SE=Sediment	SL=Sludge	WQ=Wate	r Quality Co	ontrol Matr	ix				2	
 Math. Codes. P.D. Charles, F.D. Charles, C.G. 2008, 6010B/7470A) and number of containers provided for each (i.e. 8260B - 3, 6010B/7470A - 1). 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). 	B, 6010B/7470A) and number	of containers pr	ovided for e	each (i.e. 826)B - 3, 6010	B/7470A - 1	Ċ							
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	= Sodium Hydroxide, SA = Su	Ifuric Acid, AA	= Ascorbic	Acid, HX = I	lexane, ST =	Sodium Thi	iosulfate, If	no preserv	ative is ad	led = leave field b	ank		altated In we titte	
7) KNOWN OR POSSIBLE HAZARDS Char	Characteristic Hazards	Listed Waste	Listed Waste	ste		Other OT=(Other OT= Other / Unknown	Unknov	5			Please provide below regardii	Please provide any additional details below regarding handling and/or	
S S	CO = Corrosive Dr - Danctive	(F,K,P	(F,K,P and U-lis	(F,K,P and U-listed wastes.)	<u>,</u>	(i.e. mis	(i.e.: High/low pH, asbest misc. health hazards. etc.)	w pH, a	sbestos, etc.)	(i.e.: High/low pH, asbestos, beryllium, irritants, other mise. health hazards. etc.)	itants, other	disposal conce sample(s), type	disposal concerns. (i.e.: Origin of sample(s), type of site collected from, odd	ppo
As = Arsenic $Hg = Mercury$ $Kt = Ba = Barium$ $Se = Selenium$	- Neaclive		. (c)ano			Des	Description:		Ň			matrices, etc.)		
m Ag= Silver um MR= Misc. RCRA metals	TSCA Regulated PCB = Polychlorinated													
	biphenyls													Deline -
													11400 C 100000 References 64 Capture Capture and 10 capture of the	

Page 29 of 31 SDG: 590838

GEL Laboratories LLC				SAMPLE RECEIPT & REVIEW FORM 590851, 59085	5,
Client: P.CC			SI	G/AR/COC/Work Order: 590838, 590840, 590845,	5908
Received By: Thyasia Tatum				ite Received: 6 24 27	590
Carrier and Tracking Number				Circle Applicable: FedEx Express FedEx Ground UPS Field Services Courier Other	590
Suspected Hazard Information	Yes	No	*I	Net Counts > 100cpm on samples not marked "radioactive", contact the Radiation Safety Group for further investigation.	
A)Shipped as a DOT Hazardous?		V	Ha	zard Class Shipped: UN#: If UN2910, Is the Radioactive Shipment Survey Compliant? Yes No	
) Did the client designate the samples are to be ecceived as radioactive?		/	С	C notation or radioactive stickers on containers equal client designation.	
2) Did the RSO classify the samples as adioactive?	1	1	M	ximum Net Counts Observed* (Observed Counts - Area Background Counts):CPM / mR/Hr Classified as: Rad 1 Rad 2 Rad 3	
D) Did the client designate samples are hazardous?		1	1	€ notation or hazard labels on containers equal client designation.	
E) Did the RSO identify possible hazards?		-	п	O or E is yes, select Hazards below. PCB's Flammable Foreign Soil RCRA Asbestos Beryllium Other:	
Sample Receipt Criteria	Yes	VN	°Z	Comments/Qualifiers (Required for Non-Conforming Items)	ĺ
1 Shipping containers received intact and scaled?	L			Circle Applicable: Seals broken Damaged container Leaking container Other (describe)	
2 Chain of custody documents included with shipment?	L	K		Circle Applicable: Client contacted and provided COC COC created upon receipt	
3 Samples requiring cold preservation within $(0 \le 6 \text{ deg. C})$?*	V	/		Preservation Method Wet Ice Ice Packs Dry ice None Other: *all temperatures are recorded in Celsius TEMP: 2C	
4 Daily check performed and passed on IR temperature gun?	V			Temperature Device Serial #: IR2-20 Secondary Temperature Device Serial # (If Applicable): Temperature Device Serial # (If Applicable):	
5 Sample containers intact and sealed?	/			Circle Applicable: Seals broken Damaged container Leaking container Other (describe)	
6 Samples requiring chemical preservation at proper pH?	V	1		Sample ID's and Containers Affected: If Prøservation added, Lot#:	
7 Do any samples require Volatile Analysis?			1	If res, 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?	V			ID's and tests affected:	
9 Sample ID's on COC match ID's on bottles?	V			ID's and containers affected:	
Date & time on COC match date & time on bottles?	V	6		Circle Applicable: No dates on containers No times on containers COC missing info Other (describe)	
Number of containers received match number indicated on COC?	V			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 PM	A) re	view	Ini	ials Date Page of]

State	Certification
Alabama	42200
Alaska	17-018
Alaska Drinking Water	SC00012
Arkansas	88-0651
CLIA	42D0904046
California	2940
Colorado	SC00012
Connecticut	PH-0169
DoD ELAP/ ISO17025 A2LA	2567.01
Florida NELAP	E87156
Foreign Soils Permit	P330-15-00283, P330-15-00253
Georgia	SC00012
Georgia SDWA	967
Hawaii	SC00012
Idaho	SC00012
Illinois NELAP	200029
Indiana	C-SC-01
Kansas NELAP	E-10332
Kentucky SDWA	90129
Kentucky Wastewater	90129
Louisiana Drinking Water	LA024
Louisiana NELAP	03046 (AI33904)
Maine	2019020
Maryland	270
Massachusetts	M-SC012
Massachusetts PFAS Approv	Letter
Michigan	9976
Mississippi	SC00012
Nebraska	NE-OS-26-13
Nevada	SC000122023-3
New Hampshire NELAP	2054
New Jersey NELAP	SC002
New Mexico	SC00012
New York NELAP	11501
North Carolina	233
North Carolina SDWA	45709
North Dakota	R-158
Oklahoma	2019–165
Pennsylvania NELAP	68-00485
Puerto Rico	SC00012
S. Carolina Radiochem	10120002
Sanitation Districts of L	9255651
South Carolina Chemistry	10120001
Tennessee	TN 02934
Texas NELAP	T104704235-22-20
Utah NELAP	SC000122021-36
Vermont	VT87156
Virginia NELAP	460202
Washington	C780
<i>Q</i> · ·	

List of current GEL Certifications as of 08 September 2022



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

September 20, 2022

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

Re: Branch CCR Groundwater Compliance Upgradient Work Order: 590840

Dear Joju Abraham:

GEL Laboratories, LLC (GEL) appreciates the opportunity to provide the enclosed analytical results for the sample(s) we received on August 24, 2022. This original data report has been prepared and reviewed in accordance with GEL's standard operating procedures.

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

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

Sincerely,

AMm

Adrian Melendrez for Erin Trent Project Manager

Purchase Order: GPC82177-0003 Enclosures



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

Certificate of Analysis Report for

GPCC001 Georgia Power Company

Client SDG: 590840 GEL Work Order: 590840

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

A. Mm

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

Certificate of Analysis

Company : Address :	Georgia Pow Company 241 Ralph M			0										
	Atlanta, Geor	rgia 30308						R	epor	t Date:	Septem	ber 20.	2022	
Contact:	Joju Abrahan	-							- r		~ - F	,		
Project:	Branch CCR		er Complianc	eUpgradient										
	Dianon con		er compnune	eepgraaten										_
Client Samp Sample ID: Matrix: Collect Date Receive Date Collector:	590840 WG 23-AU	0001 G-22					oject: ient ID:			0101 01				
Parameter	Qualifier	Result II	ncertainty	MDC	TPU	RL	Units	PF	DF	Analyst	- Date	Time	Batch	Mtd
Rad Gas Flow Pro GFPC Ra228, Li Radium-228	portional Counti iquid "As Received U		+/-1.08	1.96	+/-1.08	3.00	pCi/L			IXC9	09/16/2	2 1054	2309177	 ' 1
	dium-228 Calcula				+/-1.08	5.00	pei/L			JAC 9	09/10/2	2 1054	2309177	1
Radium-226+228 Sur		0.531	+/-1.10	3	+/-1.11		pCi/L			NXL1	09/20/2	2 0955	2309181	2
Rad Radium-226	26, Liquid "As Rec						F							-
Radium-226	U	0.250	+/-0.237	0.372	+/-0.242	1.00	pCi/L			LXP1	09/16/2	2 0859	2309179	3
The following Ana	lvtical Methods v	were perfor	med											
	Description	<u> </u>												
1	EPA 904.0/SW846	9320 Modifie	ed											
2	Calculation													
3	EPA 903.1 Modifie	d												
Surrogate/Tracer	Recoverv	Test						Batch	ID	Recovery	v% A	ccepta	ble Limi	its
Barium-133 Tra	-	GFPC Ra2	28, Liquid "A	s Received"				23091		77.4			125%)	
Notes: The MDC is a sa TPU and Coun	ample specific M ting Uncertainty is are defined as	ADC. are calcula	ated at the 9		ce level (1.96-sigma	ı).		20071	, ,				12570)	
DL: Detection I	Limit		PF: Pr	ep Factor										

DL: Detection Limit Lc/LC: Critical Level MDA: Minimum Detectable Activity MDC: Minimum Detectable Concentration Mtd.: Method PF: Prep Factor RL: Reporting Limit TPU: Total Propagated Uncertainty

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

Company : Address :	Georgia Powe Company 241 Ralph Mc			0								
	Atlanta, Georg	gia 30308						Rej	port Date:	September 20	0, 2022	I
Contact:	Joju Abraham	-						-		1	,	
Project:	Branch CCR	Groundwater	r Complianc	eUpgradient								
Client Sample I Sample ID: Matrix: Collect Date: Receive Date: Collector:	ID: BRGWA 5908400 WG 23-AUC 24-AUC Client	002 G-22				Pro Cli	oject: ient ID:	GPCO				
Parameter	Qualifier	Result Un	certainty	MDC	TPU	RL	Units	PF 1	DF Analyst	Date Tim	e Batch	Mtd.
Rad Gas Flow Propor		0										
<i>GFPC Ra228, Liqui</i> Radium-228	id "As Received" U	1.44	+/-1.61	2.70	+/-1.65	3.00	pCi/L		IXC9 (09/16/22 1054	4 2309177	1
Radium-226+Radiu					17-1.05	5.00	per/L		JAC	J7/10/22 1034	2307177	1
Radium-226+228 Sum	m-220 Cureman	1.70 1.70	+/-1.63	,	+/-1.67		pCi/L		NXL1 (09/20/22 0955	5 2309181	2
Rad Radium-226							L					
Lucas Cell, Ra226, I	Liquid "As Rece	eived"										
Radium-226	U	0.266	+/-0.278	0.452	+/-0.281	1.00	pCi/L		LXP1 (09/16/22 0859	€ 2309179	3
The following Analyt	ical Methods v	vere perforn	ned									
.	escription	F										
1 EP.	A 904.0/SW846 9	9320 Modified	i									
2 Cal	lculation											
3 EP.	A 903.1 Modified	1										
Surrogate/Tracer Re	ecovery 7	Гest						Batch II	D Recovery	y% Accept	table Limit	ts
Barium-133 Tracer		GFPC Ra22	28, Liquid "A	As Received"				2309177			%-125%)	
Notes: The MDC is a sam TPU and Counting	ple specific M	IDC.	-		nce level (1.96-sigma	ι).						
Column headers an DF: Dilution Facto DL: Detection Lin Lc/LC: Critical Le MDA: Minimum I MDC: Minimum I	or nit evel Detectable Act	tivity	PF: Pre RL: Re TPU: 7	Method ep Factor eporting Lin Total Propag	nit gated Uncertainty							

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

Company : Address :	Georgia Powe Company 241 Ralph Mc			0								
	Atlanta, Georg	gia 30308						Rep	oort Date: 5	September 20), 2022	
Contact:	Joju Abraham	1						-				
Project:	Branch CCR	Groundwate	r Compliance	eUpgradient								
Client Sample Sample ID: Matrix: Collect Date: Receive Date: Collector:	5908400 WG 23-AUC	003 G-22				Pro Cli	oject: ent ID:	GPCO				
Parameter	Qualifier	Result Ur	ncertainty	MDC	TPU	RL	Units	PF 1	DF Analyst	Date Tim	e Batch	Mtd.
Rad Gas Flow Propor		0										
GFPC Ra228, Liqui Radium-228	ud "As Received" U	-0.505	+/-1.08	2.12	+/-1.08	3.00	pCi/L		IXC9 (09/16/22 1054	1 2309177	1
Radium-226+Radiu					⊤/-1.00	5.00	рсил		JAC7 (J9/10/22 1057	2307177	1
Radium-226+228 Sum	m-220 Culcului	0.735	+/-1.11	¢	+/-1.12		pCi/L		NXL1 (09/20/22 0955	5 2309181	2
Rad Radium-226 Sum		0.725	1/		.,		Perz			J)/20/22 0/22	2007101	-
Lucas Cell, Ra226,	Liquid "As Rece	eived"										
Radium-226	1	0.735	+/-0.287	0.208	+/-0.324	1.00	pCi/L		LXP1 (09/16/22 0859	2309179	3
The following Analyt	tical Methods v	vere perfori	med									
.	escription	<u></u>										
1 EP	PA 904.0/SW846 9	€ € € € € € € € € € € € € € € € € € €	d									
2 Ca	alculation											
3 EP	PA 903.1 Modified	1										
Surrogate/Tracer Ro	ecovery 7	Fest						Batch II	D Recovery	% Accept	table Limit	ts
Barium-133 Tracer	r	GFPC Ra22	28, Liquid "A	s Received"				2309177	7 79.1	1 (15%	%-125%)	
Notes: The MDC is a sam TPU and Countin	nple specific M	IDC.	-		nce level (1.96-sigma	ı).						
Column headers a DF: Dilution Factor DL: Detection Lin Lc/LC: Critical Le MDA: Minimum MDC: Minimum	tor mit evel Detectable Act	tivity	PF: Pre RL: Re TPU: 7	Method ep Factor eporting Lin Total Propag	nit gated Uncertainty							

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

Company : Address :	Georgia Powe Company 241 Ralph Mc			0								
	Atlanta, Georg	gia 30308						Re	port Date: S	September	20, 2022	ļ
Contact:	Joju Abraham	1								-		
Project:	Branch CCR	Groundwate	r Compliance	eUpgradien [,]	.t							
Client Sample I Sample ID: Matrix: Collect Date: Receive Date: Collector:	5908400 WG 23-AUC 24-AUC Client	004 G-22 G-22				Cli	oject: ient ID:	GPC				
Parameter	Qualifier	Result Un	certainty	MDC	TPU	RL	Units	PF	DF Analyst	Date Ti	me Batch	Mtd.
Rad Gas Flow Propor												
GFPC Ra228, Liqui Radium-228	a "As Keceivea	2.04	+/-1.20	1.81	+/-1.30	3.00	pCi/L		IXC9 (09/16/22 10	054 2309177	1
Radium-226+Radiu	122-228 Calcula				1/-1.50	5.00	pent		JAC	J9/10/22 10	J4 2307177	1
Radium-226+228 Sum	m-220 Cultului	2.30	+/-1.22)	+/-1.32		pCi/L		NXL1 (09/20/22 09	2309181	2
Rad Radium-226			.,				r					-
Lucas Cell, Ra226, I	Liquid "As Rec	eived"										
Radium-226	U	0.260	+/-0.221	0.311	+/-0.224	1.00	pCi/L		LXP1 (09/16/22 09	934 2309179	3
The following Analyt	tical Methods v	vere perforr	ned									
	escription	L										
1 EP.	PA 904.0/SW846 9	9320 Modified	1									
2 Cal	alculation											
3 EP.	PA 903.1 Modified	1										
Surrogate/Tracer Re	ecovery	Гest						Batch I	D Recovery	% Acce	ptable Limi	its
Barium-133 Tracer	r	GFPC Ra22	28, Liquid "A	As Received				230917	7 80.8	3 (1	5%-125%)	
Notes: The MDC is a sam TPU and Countin	nple specific M	IDC.	-		ence level (1.96-sign	na).						
Column headers at DF: Dilution Facto DL: Detection Lin Lc/LC: Critical Le MDA: Minimum I MDC: Minimum I	tor mit evel Detectable Act	tivity	PF: Pre RL: Re TPU: 7	Method ep Factor eporting Li Total Propa	imit agated Uncertainty							

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

Company : Address :	Georgia Powe Company 241 Ralph Mc			0								
	Atlanta, Georg	gia 30308						Rep	oort Date: S	September	20, 2022	I
Contact:	Joju Abraham	1										
Project:	Branch CCR	Groundwate	er Compliance	eUpgradient								
Client Sample I Sample ID: Matrix: Collect Date: Receive Date: Collector:	ID: BRGWA 5908400 WG 23-AUC 24-AUC Client	005 G-22					oject: ient ID:		200101 2001			
Parameter	Qualifier	Result Ur	ncertainty	MDC	TPU	RL	Units	PF I	DF Analyst	Date Ti	ime Batch	Mtd.
Rad Gas Flow Propor												
<i>GFPC Ra228, Liqui</i> Radium-228	id "As Received" U	0.0663	+/-0.883	1.68	+/-0.883	3.00	pCi/L		IXC9 (09/16/22 1(054 2309177	/ 1
Radium-226+Radium	-				⊤/-0.005	5.00	pei/L		JAC2 V	J9/10/22 10	54 2507177	1
Radium-226+228 Sum	<i>m-220 Cuitmun</i>	0.203	+/-0.913	ý	+/-0.913		pCi/L		NXL1 (09/20/22 09	955 2309181	2
Rad Radium-226		0.200	17 0.910		17 0.912		POIL			J/20/22 02	2009101	-
Lucas Cell, Ra226, I	Liquid "As Rece	eived"										
Radium-226	U	0.137	+/-0.234	0.419	+/-0.235	1.00	pCi/L		LXP1 (09/16/22 09	934 2309179	3
The following Analyt	ical Methods v	vere perfor	med									
	scription	<u></u>										
1 EP.	A 904.0/SW846 9	→320 Modifie	d									
2 Cal	lculation											
3 EP.	A 903.1 Modified	1										
Surrogate/Tracer Re	covery 7	Fest						Batch II) Recovery	y% Acce	eptable Limi	its
Barium-133 Tracer		GFPC Ra2	28, Liquid "A	s Received"				2309177	7 75.9	9 (1	5%-125%)	
Notes: The MDC is a sam TPU and Counting	ple specific M	IDC.	-		ce level (1.96-sigma)).						
Column headers an DF: Dilution Factor DL: Detection Lin Lc/LC: Critical Le MDA: Minimum I MDC: Minimum I	or nit evel Detectable Act	tivity	PF: Pre RL: Re TPU: 7	Method ep Factor eporting Lim Total Propaga	it ated Uncertainty							

Radiochemistry Technical Case Narrative Georgia Power Company SDG #: 590840

Product: GFPC Ra228, Liquid Analytical Method: EPA 904.0/SW846 9320 Modified Analytical Procedure: GL-RAD-A-063 REV# 5 Analytical Batch: 2309177

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

<u>GEL Sample ID#</u>	Client Sample Identification
590840001	BRGWA-2S
590840002	BRGWA-2I
590840003	BRGWA-5S
590840004	BRGWA-5I
590840005	BRGWA-6S
1205176410	Method Blank (MB)
1205176411	590840001(BRGWA-2S) Sample Duplicate (DUP)
1205176412	Laboratory Control Sample (LCS)

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

Data Summary:

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

Product: Lucas Cell, Ra226, Liquid Analytical Method: EPA 903.1 Modified Analytical Procedure: GL-RAD-A-008 REV# 15 Analytical Batch: 2309179

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

<u>GEL Sample ID#</u>	Client Sample Identification
590840001	BRGWA-2S
590840002	BRGWA-2I
590840003	BRGWA-5S
590840004	BRGWA-5I
590840005	BRGWA-6S
1205176417	Method Blank (MB)
1205176418	590840001(BRGWA-2S) Sample Duplicate (DUP)
1205176419	590840001(BRGWA-2S) Matrix Spike (MS)
1205176420	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
1205176417 (MB)	Radium-226	Result: 0.319 pCi/L > MDA: 0.278 pCi/L <= RDL: 1.00 pCi/L

Miscellaneous Information

Additional Comments

The matrix spike, 1205176419 (BRGWA-2SMS), 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.

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

QC Summary

Client :	_	mpany, Southern Co Blvd NE, Bin 10160		<u>C Sı</u>	ummary	7]	Report Date: September 20, 2022 Page 1 of 2					
Contact: Workorder:	Atlanta, Georgia Joju Abraham 590840												
Parmname		NOM	Sample (Qual	QC	Units	RPD%	REC%	Range Anlst	Date Time			
Rad Gas Flow Batch	2309177 —												
QC1205176411	590840001 DUP												
Radium-228		U Uncert: TPU:	0.281 +/-1.08 +/-1.08	U	0.509 +/-0.796 +/-0.806	pCi/L	. 0		N/A JXC9	09/16/2210:54			
QC1205176412 Radium-228	LCS	44.1			39.6	pCi/L		89.9	(75%-125%) JXC9	09/16/2210:54			
Raululli-220		44.1 Uncert: TPU:			+/-3.28 +/-10.4	pent		07.7	(1370-14370) 32207	U7/10/2210.5-r			
QC1205176410	MB												
Radium-228		Uncert: TPU:		U	-0.160 +/-1.37 +/-1.37	pCi/L			JXC9	09/16/2210:54			
Rad Ra-226		-											
Batch	2309179												
-	590840001 DUP												
Radium-226		U Uncert: TPU:	0.250 +/-0.237 +/-0.242	U	0.114 +/-0.177 +/-0.178	pCi/L	0		N/A LXP1	09/16/2210:41			
QC1205176420	LCS												
Radium-226		26.6 Uncert: TPU:			20.1 +/-1.38 +/-4.51	pCi/L		75.8	(75%-125%) LXP1	09/16/2210:41			
QC1205176417	MB												
Radium-226		Uncert: TPU:			0.319 +/-0.220 +/-0.227	pCi/L			LXP1	09/16/2210:41			
QC1205176419	590840001 MS												
Radium-226		132 U Uncert: TPU:	0.250 +/-0.237 +/-0.242		103 +/-7.73 +/-17.8	pCi/L		78	(75%-125%) LXP1	09/16/2210:41			

Notes:

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

The Qualifiers in this report are defined as follows:

- ** Analyte is a Tracer compound
- < Result is less than value reported
- > Result is greater than value reported
- BD Results are either below the MDC or tracer recovery is low
- FA Failed analysis.
- H Analytical holding time was exceeded

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

QC Summary

				V U N M		2						
Workor	rder: 59	90840							Page 2	2 of 2		
Parmna	me		NOM	Sample Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
J	See case n	arrative for an e	explanation									
J	Value is es	stimated										
Κ	Analyte pr	esent. Reported	l value may be biased h	igh. Actual value is exp	ected to be	lower.						
L	Analyte pr	esent. Reported	l value may be biased le	ow. Actual value is expe	cted to be	higher.						
М	M if above	e MDC and less	than LLD									
М	REMP Res	sult > MDC/CL	and < RDL									
N/A	RPD or %	Recovery limits	s do not apply.									
N1	See case n	arrative										
ND	Analyte co	oncentration is r	not detected above the o	letection limit								
NJ	Consult Ca	ase Narrative, D	Data Summary package	, or Project Manager con	cerning thi	is qualifier	ſ					
Q	One or mo	ore quality contr	ol criteria have not bee	n met. Refer to the appli	cable narra	ative or DI	ER.					
R	Sample res	sults are rejected	d									
U	Analyte wa	as analyzed for,	, but not detected above	e the MDL, MDA, MDC	or LOD.							
UI	Gamma Sp	pectroscopyU	ncertain identification									
UJ	Gamma Sp	pectroscopyU	ncertain identification									
UL	Not consid	lered detected.	The associated number	is the reported concentra	ation, whic	h may be	inaccurate d	lue to a low	bias.			
Х	Consult Ca	ase Narrative, D	Data Summary package	, or Project Manager con	cerning thi	is qualifier	ſ					
Y	Other spec	ific qualifiers w	vere required to proper	y define the results. Cor	sult case n	arrative.						
^	RPD of sat	mple and duplic	cate evaluated using +/-	RL. Concentrations are	${<}5X$ the R	L. Qualif	ïer Not App	licable for I	Radiochemi	stry.		
h	Preparation	n or preservatio	n holding time was exc	ceeded								
** Indi	icates analy	te is a surrogate	e/tracer compound.	en sample concentration the sample duplicate (D			-					than
five tin	nes (5X) the		red detection limit (RL esult.). In cases where either t	he sample	or duplica						

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.

(1) (1) </th <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th>1</th> <th>-</th> <th></th> <th></th> <th></th> <th></th>										1	-				
(1) (act. Hork Animeter, and the second seco	tt # Duote #: Numher (I).		JED			ratol adiochemis	1 CS LL try I Radiobio	assay I Spe	cialty An	alytics			GEL Labora 2040 Savage Charleston,	ttories, LLC e Road SC 29407	
OLIVING Three a 44-506-716 Sample Analysis Requested Por Fill in the number of continuent o	(umber:	GEL Work Order Numb			CEL 1	roject M	anager: E	rin Tren					Fax: (843) 7) 556-8171 66-1178	
$\label{eq:constraints} \equal the function has brough a state of the function of the functio$	t Name: GA Power			04-506-	116	1925		Sampl	e Anal	ysis R	equest	(2)	the number of	of containers for e	ach test)
UN-ACT Start CA 10105 UN-ACT Start CA 10105 UN-ACT Start CA 10105 Under CA UN-ACT Start CA 10105 Under CA Sandple ID Under CA EXAMPLE ID Under CA	st/Site Name: Plant Branch Ash Ponds		Fax #				Should th	and the	64.00		IN	-		~- I	< Preservative Type (6)
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	ss: 241 Ralph McGill Blvd SE, Atlanta GA	× 30308					sample b			শ	-	0			
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	cted By: J. Bernderd	Send Results To: SCS &	Geosyntec C	Contacts				sp.r		20B	10109 ' 8	726 '51		Not	Comments e. extra sample is
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	Sample ID * For composites - indicate start and stop date		*Time Collected (Military) (hhmm)	QC Code ⁽²⁾	Field Filtered ⁽³⁾	P TARGE STREAM	res, please sup sotopic info.)	azaH əldizzoo		EZ WS	EPA 6020E	£6 9†8-MS		lor	required for sample specific QC
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	BREWA-25		1055	U	Z		1	, 1	7	7	2			field nU	
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	GwA	03/27/22	1010	0		w 6		. 14	7	>	1				1 3
$ \frac{\Omega_{0}(\omega_{1} + 5\underline{I})}{\beta \left[\mathcal{L}(\omega_{1} - 6\underline{J}) - 6\underline{J}(2\beta) \left[1^{12} - 6q^{2} \mathcal{L} - 1^{12} - 6q^{2} \mathcal{L} - 1^{12} - 6q^{2} \mathcal{L} - 1^{12} - 1^$	6w4 -5	68/23/22	10001	0.0		~C		- it	-	>	1				
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	6-4Mg	22/22/80	1015	e	S	~ ()		- 17	-	>	>			field pH	1 1
Vigned Time Chain of Custody Signatures Time Rushi:	6-4-6	08/25/22	0950	C		N6		1	>	>	>			field pH	
Chain of Custody Signatures Takin of Custody Signatures TAT Requester: Normal: Normal:<														field pH	Ш
Chain of Custody Signatures Tart Requested: Normal: A substrate Clain of Custody Signatures Clain Signatures														field pH	=
Chain of Custody Signatures Time TaT Requester: Normal: Aush: V(Signet) Date Time Erx Results: [] Yes [] No A J(J) ZZ BA'S [] Time Fax Results: [] Yes [] No A J(J) ZZ BA'S [] Time Fax Results: [] Yes [] No A B J(J) ZZ BA'S [] Time Fax Results: [] Yes Number B J(J) ZZ BA'S [] Time Fax Results: [] Yes Number Clean Determine [] Time Far Results: [] Yes [] No Number Clean Determine [] Time Far Results: [] Yes [] No Normal Sampte Time Far Results: [] Yes [] Yes [] Yes Nonnal Sampte Time Far Results: [] Yes [] Yes [] Yes Nonnal Sampte Time Sampte Results: [] Yes [] Yes [] Yes Nonnal Sampte Time Sampte Results: [] Yes [] Yes Nonnal Sampte Time Far Results: [] Yes [] Yes Nonnal Sampte Time Sampte Collection Time Zone: [] Yes [] Yes						-								field pH	11
Chain of Custody Signatures Tart Requestet: Normal: <u>x</u> Rush: <u>seedined by Gigned</u> Chain of Custody Signatures Chain with a processing to the colspan="2">Chain Signatures Select Deliverable: [] Ocf Al [] OC Summary [] [] Vetal Number = Client Determined Number = Client Determined Number = Client Determined Number = Client Determined Normal Sumple, CD = Faighteen Blank, RD = Sedium Theorem (] (a \$2008, 010877470A and annohe of conniners provided for each (] (a \$2008, NQ = Al Sodium Thotend (] a \$2008, NQ = Al Sodium Theorem (] (a \$2008, ND														field pH	н
Chain of Custody Signatures Tar Requested: Normal: X. Rush: Specification Specification Tar Requested: Normal: X. Rush: Specification Specification<											-			field pH	Ш
V (Signed) Date Time Received by (signed) Date Time Fax Results: [] Yes [X] No		ain of Custod	6					TAT Re	questec		rmal:		Specify:		(Subject to Surcharge)
M. R.P. M.R.H. S. R.G. (S.D.A., B.L., C.G. (C. r.C.) Description formation Non-contraction Non-contin Non-contra	Date 1 2/21/22	45	A	ate	Time		6	Results:	[] Yes	[X]	No				
3 3 For Lab Receiving Use Only: Custody Seal Intoc? [] Yes vilpping and delivery details, see Sample Receipt & Review form (SRR) Sample Collection Time Zone: [x] Eastern [] Pacific [] Central vNumber = Client Datemined Normal Sample, TB = Field Duplicate, EB = Equipment Blank, MS = Matrix Spike Duplicate Sample, G = Grah, C = Composite [] Pacific [] Central Normal Sample, TB = Trip Blank, FD = Field Duplicate, EB = Equipment Blank, MS = Matrix Spike Duplicate Sample, G = Grah, C = Composite [] Pacific [] Central Normal Sample, TB = Trip Blank, FD = Field Duplicate, EB = Equipment Blank, MS = Matrix Spike Duplicate Sample, G = Grah, C = Composite [] Pacific [] Central Normal Sample, TB = Trip Blank, FD = Field Duplicate, EB = Equipment Blank, MS = Matrix Spike Duplicate Sample, G = Grah, C = Composite [] Pacific [] Central DeDrinking Water, WG-Groundwater, WS-Surface Water, WL-Leachate, SO-Soil, SE-Sediment, SL=Sludge, WQ=Water Quality Control Matrix [] Pacific [] Central Requested: Analytical method requested (i.e. 82:08, 6010B/7470A) and mumber of containers provided for each (i.e. 82:08, WD PAT/20A = 1). [] Pacific [] Central Requested: Analytical method requested (i.e. 82:08, 6010B/7470A) and mumber of containers provided for each (i.e. 82:08, WQ=Water (i.e. 82:08, WQ=Water (i.e. 82:08, WQ=Water (i.e. 82:08, WQ=Water (i.e. 82:08, IE HAZARDS [] Characteristic Hazards [] Listed Waste R PoSSIBLE HAZARDS Characteristic Hazards [] Listed Waste [] Other	2200 - 127 S/34	4 2 1 to	8 8	1	2.01		SEUS	litional Re	marks:	5	Metals:	B,Ca,Sb,As,Ba	,Be,Cd,Cr,Co,F	b,Li,Mo,Se,Tl,Fe,M	g,Mn,K,Na,Hg
y Number = Client Determined Normal Sample, TB = Trip Blank, FD = Field Duplicate, EB = Equipment Blank, MS = Matrix Spike Sample, MSD = Matrix Spike Duplicate Sample, G = Grab, C = Composite or liquid matrices, indicate with a - Y - for yes the sample was not field filtered. TD=Drinking Water, WG=Groundwater, WS=Surface Water, WU=Leachate, SO=Soil, SE=Sediment, SL=Sludge, WQ=Water Quality Control Matrix Requested: Analytical method requested (i.e. 82608, 601087/470A) and number of containers provided for each (i.e. 8260B - 3, 601087/470A - 1). TD=Drinking Water, WE=Groundwater, WS=Surface Water, WU=Laechate, SO=Soil, SE=Sediment, SL=Sludge, WQ=Water Quality Control Matrix Requested: Analytical method requested (i.e. 82608, 601087/470A) and number of containers provided for each (i.e. 8260B - 3, 601087/470A - 1). TD=Drinking Water, WE = Roottic Acid, AA = Ascorbic Acid, AA = Ascorbic Acid, HX = Hexane, ST = Sodium Thiosulfate, if no preservative is added = leave field blank POSSIBLE HAZARDS Characteristic Hazards IListed Waster Other OT = Other / Unknown FL = Flammable/Ignitable TW = Listed Waster MR = Misc. RCRA metals PCB = Polychlorinated MR = Misc. RCRA metals PCB = Polychlorinated	mple shipping and delivery details, see Sa	3 (ample Receipt & Review form	n (SRR.)			Sa	mple Colle	Lab Reco	eiving U	<i>lse Oni</i> : [x] F	y: Cusi astern	ody Seal Intac	12 [] Yes [[] No Cooler Te	<i>np:</i> 0 <i>C</i> 1 Other:
or liquid matrices, indicate with a - V - for yes the sample was field filtered or - N - for sample was field filtered or - N - for sample was field filtered or - N - for sample was field filtered. (D=Drinking Water, WG=Groundwater, WS=Surface Water, WU=Water, WL=Leachate, SO=Soil, SE=Sediment, SL=Sludge, WQ=Water Quality Control Matrix Requested: Analytical method requested (i.e. 82.008, 6010B/7470A) and number of containers provided for each (i.e. 82.00B - 3, 6010B/7470A - 1). E. HA = Hydrochloric Acid, SH = Sodium Hydroxide, SA = Suffixie Acid, HX = Hexane, ST = Sodium Thiosuffate, If no preservative is added = leave field blank POSSIBLE HAZARDS Characteristic Hazards Listed Waste CO = Corrosive (F,K,P and U-listed Waste) CO = Corrosive (F,K,P and U-listed wastes,) Hg=Mercury See Selenium Ag= Silver Ag= S	of Custody Number = Client Determined des: N = Normal Samule TR = Trin Rlank ED = Fiol	old Dunlieste FR = Ecuierment Black	MC - M	S office	K- GOM			-	0			,	1		
(D=Drinking Water, WG=Groundwater, WS=Surface Water, WU=Uwater, WL=Leachate, SO=Soil, SE=Sediment, SL=Sludge, WQ=Water Quality Control Matrix Requested: Analytical method requested (i.e. 82608, 6010B7/470A) and number of containers provided for each (i.e. 8260B) = 3, 6010B7/470A = 1). e: HA = Hydrochloric Acid, NI = Nitric Acid, SH = Sodium Hydroxide, SA = Sulfaric Acid, AX = Ascorbic Acid, HX = Hexane, ST = Sodium Thiosulfate, If no preservative is added = leave field blank Requested: Analytical method requested (i.e. 8260B, 6010B7/470A) and number of containers provided for each (i.e. 8260B) = 3, 6010B7/470A = 1). e: HA = Hydrochloric Acid, NI = Nitric Acid, SH = Sodium Hydroxide, SA = Sulfaric Acid, AX = Ascorbic Acid, HX = Hexane, ST = Sodium Thiosulfate, If no preservative is added = leave field blank Records Characteristic Hazards Listed Waste Other Unknown Records CO = Corrosive IListed Waste Other Unknown Hg= Mercury RE = Reactive Waste code(s): Mastes.) (i.e. High/Iow PH, asbestos, beryllium, irritants, other Age Silver TSCA Regulated Maste code(s): Description: Description:	iltered: For liquid matrices, indicate with a - Y - for ye.	es the sample was field filtered or - N	- for sample was	pine samp not field fi	e, iMOU = N tered.	таптх эріке	Unplicate sam	pie, G = Gra	с = С	omposite					
e. HA = Hydrochloric Acid, NI = Nitric Acid, SH = Sodium Hydroxide, SA = Suffaric Acid, HX = Hexane, ST = Sodium Thiosultate, If no preservative is added = leave field blank. R POSSIBLE HAZARDS Characteristic Hazards Listed Waste Other Other R L = Flammable/Ignitable Lusted Waste Other Other Unknown Hg= Mercury RE = Reactive Waste code(s): 0T=Other / Unknown I.e.: High/low PH, asbestos, beryllium, irritants, other See Selenium TSCA Regulated Maste code(s): misc. health hazards, etc.) Description: Ag= Silver PCB = Polychorinated Description: Description: Description:	Codes: WD=Drinking Water, WG=Groundwater, WS 2 Analysis Requested: Analytical method requested (i.e.	S=Surface Water, WW=Waste Water e. 8260B, 6010B/7470A) and number	, WL=Leachate, of containers pri	SO=Soil, ovided for	SE=Sedimer each (i.e. 82	t, SL=Sludg 50B - 3, 601	e, WQ=Water 0B/7470A - 1)	· Quality Cor	itrol Matr	ix					
R POSSIBLE HAZARDS Characteristic Hazards Listed Waste Other FL = Flammable/Ignitable LW= Listed Waste OT= Other / Unknown FL = Flammable/Ignitable LW= Listed Waste OT= Other / Unknown FL = Flammable/Ignitable LW= Listed Waste OT= Other / Unknown FL = Flammable/Ignitable LW= Listed Waste OT= Other / Unknown FL = Flammable/Ignitable LW= Listed Waste OT= Other / Unknown FL = Flammable/Ignitable LW= Listed Waste OT= Other / Unknown FL = Flammable/Ignitable LW= Listed Waste OT= Other / Unknown FL = Reactive Waste code(s): misc. High/low PH, asbestos, beryllinm, irritants, other Age Stilver TSCA Regulated Description: Age Stilver PCB = Polycholorinated Description:	vative Type: HA = Hydrochloric Acid, NI = Nitric Acid	id, SH = Sodium Hydroxide, SA = Sul	furic Acid, AA =	- Ascorbic	Acid, HX =	Hexane, ST	= Sodium Thic	osulfate, If n	o preserva	ative is ac	lded = lea	ve field blank			
Hge CO = Corrosive (F,K,P and U-listed wastes.) (i.e.: High/low PH, asbestos, beryllium, irritants, other Hge Mercury RE = Reactive Waste code(s): misc. health hazards, etc.) See Selenium TSCA Regulated Description: MR= Misc. RCRA metals PCB = Polychlorinated Description:		Characteristic Hazards FL = Flammable/Ignitable	Listed V LW= L	Waste sted Wa	ste	Π	Oth	er = Other / U	Jnknow	E			P	lease provide any a	dditional details dling and/or
Ag= Silver TSCA Regulated MR= Misc. RCRA metals PCB = Polychlorinated	Hg= Mercury Se= Selenium	CO = Corrosive RE = Reactive	(F,K,P c Waste c	und U-lis ode(s):	ted waste	('s	(i.e.: misc Desc	High/low health h cription:	o pH, as azards,	ibestos, etc.)	berylli	ım, irritants, ı		sposal concerns. (mple(s), type of site atrices, etc.)	e.: Origin of collected from, od
	Ag= Silver MR= Misc. RCRA metals	TSCA Regulated PCB = Polychlorinated biphenyls													

Page 12 of 14 SDG: 590840

	GEL Laboratories LLC				SAMPLE RECEIPT & REVIEW FORM 590851, 590855, 590855
CI	ent: GP.CC			SD	G/AR/COC/Work Order: 590838, 590840, 590845, 59085
Re	ceived By: Thyasia Tatum				te Received: 6 24 23 59085
	Carrier and Tracking Number				FedEx Express FedEx Ground UPS Field Services Courier Other 59085
Su	pected Hazard Information	Yes	No	*lf	Net Counts > 100cpm on samples not marked "radioactive", contact the Radiation Safety Group for further investigation.
A)5	hipped as a DOT Hazardous?		V	Ha	zard Class Shipped: UN#: If UN2910, Is the Radioactive Shipment Survey Compliant? Yes No
	Did the client designate the samples are to be ived as radioactive?		/	со	C notation or radioactive stickers on containers equal client designation.
	Did the RSO classify the samples as pactive?		1	Ma	ximum Net Counts Observed* (Observed Counts - Area Background Counts): CPM / mR/Hr Classified as: Rad 1 Rad 2 Rad 3
D	Did the client designate samples are hazardous?		/	co	C notation or hazard labels on containers equal client designation.
	Did the RSO identify possible hazards?		1	If E	0 or E is yes, select Hazards below. PCB's Flammable Foreign Soil RCRA Asbestos Beryllium Other:
	Sample Receipt Criteria	Yes	NA	No	Comments/Qualifiers (Required for Non-Conforming Items)
1	Shipping containers received intact and sealed?	V			Circle Applicable: Seals broken Damaged container Leaking container Other (describe)
2	Chain of custody documents included with shipment?	L			Circle Applicable: Client contacted and provided COC COC created upon receipt
3	Samples requiring cold preservation within $(0 \le 6 \text{ deg. C})$?*	V	/		Preservation Method Wet Ice Ice Packs Dry ice None Other: *all temperatures are recorded in Celsius TEMP: 2C
4	Daily check performed and passed on IR temperature gun?	~			Temperature Device Serial #:IR2-20 Secondary Temperature Device Serial # (If Applicable):
5	Sample containers intact and sealed?	/			Circle Applicable: Seals broken Damaged container Leaking container Other (describe)
6	Samples requiring chemical preservation at proper pH?	_	/		Sample ID's and Containers Affected: If Preservation added, Lot#:
7	Do any samples require Volatile Analysis?	V		2	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?	V			TD's and tests affected:
9	Sample ID's on COC match ID's on bottles?	V	N		ID's and containers affected:
10	Date & time on COC match date & time on bottles?	V	1		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?	1		13	Circle Applicable: No container count on COC Other (describe)
12	Are sample containers identifiable as GEL provided by use of GEL labels?	/		1.	
13 Con	COC form is properly signed in relinquished/received sections? ments (Use Continuation Form if needed):	V			Circle Applicable: Not relinquished Other (describe)
Con	inents (Use Continuation Form if needed):				

PM (or PMA) review: Initials ____

_____ Date ____

Page _____ of ____

State	Certification						
Alabama	42200						
Alaska	17-018						
Alaska Drinking Water	SC00012						
Arkansas	88-0651						
CLIA	42D0904046						
California	2940						
Colorado	SC00012						
Connecticut	PH-0169						
DoD ELAP/ ISO17025 A2LA	2567.01						
Florida NELAP	E87156						
Foreign Soils Permit	P330-15-00283, P330-15-00253						
Georgia	SC00012						
Georgia SDWA	967						
Hawaii	SC00012						
Idaho	SC00012						
Illinois NELAP	200029						
Indiana	C-SC-01						
Kansas NELAP	E-10332						
Kentucky SDWA	90129						
Kentucky Wastewater	90129						
Louisiana Drinking Water	LA024						
Louisiana NELAP	03046 (AI33904)						
Maine	2019020						
Maryland	270						
Massachusetts	M-SC012						
Massachusetts PFAS Approv	Letter						
Michigan	9976						
Mississippi	SC00012						
Nebraska	NE-OS-26-13						
Nevada	SC000122023-3						
New Hampshire NELAP	2054						
New Jersey NELAP	SC002						
New Mexico	SC00012						
New York NELAP	11501						
North Carolina	233						
North Carolina SDWA	45709						
North Dakota	R-158						
Oklahoma	2022–137						
Pennsylvania NELAP	68–00485						
Puerto Rico	SC00012						
S. Carolina Radiochem	10120002						
Sanitation Districts of L	9255651						
South Carolina Chemistry	10120001						
Tennessee	TN 02934						
Texas NELAP	T104704235-22-20						
Utah NELAP	SC000122021-36						
Vermont	VT87156						
Virginia NELAP	460202						
Washington	C780						

List of current GEL Certifications as of 20 September 2022



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

October 03, 2022

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

Re: Branch CCR Groundwater Compliance AP - E and APE Work Orders: 591881,590857 and 591351

Dear Joju Abraham:

GEL Laboratories, LLC (GEL) appreciates the opportunity to provide the enclosed analytical results for the sample(s) we received on August 24, 2022, August 29, 2022 and September 02, 2022. This revised data report has been prepared and reviewed in accordance with GEL's standard operating procedures. The data package is being revised to include 6 missing metals.

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

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

Sincerely,

Vie & Frent

Erin Trent Project Manager

Purchase Order: GPC82177-0003 Enclosures



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

Certificate of Analysis Report for

GPCC001 Georgia Power Company

Client SDG: 591881 GEL Work Order: 591881

The Qualifiers in this report are defined as follows:

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

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

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

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

Vie & Trent

Reviewed by

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

Certificate of Analysis Report for

GPCC001 Georgia Power Company

Client SDG: 591351 GEL Work Order: 591351

The Qualifiers in this report are defined as follows:

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

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

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

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

Vie & Trent

Reviewed by

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

Certificate of Analysis Report for

GPCC001 Georgia Power Company

Client SDG: 590857 GEL Work Order: 590857

The Qualifiers in this report are defined as follows:

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

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

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

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

Vie & Trent

Reviewed by

Certificate of Analysis

Report Date: October 3, 2022

Company : Address :	Georgia Power Company, Southern Company 241 Ralph McGill Blvd NE, Bin 10160		
Contact: Project:	Atlanta, Georgia 30308 Joju Abraham Branch CCR Groundwater ComplianceAP - E and APE		
Client Sample ID:	PZ-70	Project:	GPCC00101
Sample ID:	591881001	Client ID:	GPCC001
Matrix:	WG		
Collect Date:	01-SEP-22 10:55		
Receive Date:	02-SEP-22		
Collector:	Client		

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analy	yst Date	Time	Batch	Method
Field Data												
Client collected Field pl	H "As Receiv	ved"										
Field pH		6.13			SU			EMK	09/01/22	1055	2313386	1
Ion Chromatography												
EPA 300.0 Anions Liqu	uid "As Recei	ved"										
Fluoride		1.43	0.0330	0.100	mg/L		1	JLD1	09/03/22	2210	2312366	2
Chloride		10.8	3.35	10.0	mg/L		50	JLD1	09/03/22		2312366	3
Sulfate		172	6.65	20.0	mg/L		50	0221	07707722	0102	2012000	5
Mercury Analysis-CVA	A				8							
7470 Cold Vapor Mercu		As Deceived"										
Mercury	ury, Liquid 7 U	ND	0.0000670	0.000200	m o/I	1.00	1	JP2	09/07/22	1121	2212722	4
•		ND	0.0000670	0.000200	mg/L	1.00	1	JP2	09/07/22	1121	2512755	4
Metals Analysis-ICP-M												
SW846 3005A/6020B "												
Antimony	U	ND	0.00100	0.00300	mg/L	1.00		PRB	09/14/22	0017	2312380	5
Arsenic	U	ND	0.00200	0.00500	mg/L	1.00						
Barium		0.0444	0.000670	0.00400	mg/L	1.00						
Beryllium	U	ND	0.000200	0.000500	mg/L	1.00						
Cadmium	U	ND	0.000300	0.00100	mg/L	1.00						
Calcium		42.6	0.0800	0.200	mg/L	1.00						
Chromium	U	ND	0.00300	0.0100	mg/L	1.00						
Cobalt		0.00560	0.000300	0.00100	mg/L	1.00						
Iron		1.48	0.0330	0.100	mg/L	1.00						
Lead	U	ND	0.000500	0.00200	mg/L	1.00						
Lithium	J	0.00615	0.00300	0.0100	mg/L	1.00						
Magnesium		15.5	0.0100	0.0300	mg/L	1.00						
Potassium		5.62	0.0800	0.300	mg/L	1.00						
Selenium		0.00625	0.00150	0.00500	mg/L	1.00 1.00						
Sodium Thallium	T	25.8 ND	0.0800	0.250	mg/L	1.00						
	U	ND 1.20	0.000600 0.0520	0.00200 0.150	mg/L	1.00		DDD	00/14/22	1720	2212200	6
Boron		1.20	0.0320	0.130	mg/L mg/I	1.00		PRB	09/14/22	1729	2312380	6
Manganese Molybdenum		0.00142	0.0100	0.0500	mg/L mg/L	1.00		PRB	09/13/22	2211	2312380	7
•		0.00142	0.000200	0.00100	iiig/L	1.00	1	ſKD	09/13/22	2211	2312380	/
Solids Analysis	1.1.11.4.15											
SM2540C Dissolved Sc	olids "As Rec											
Total Dissolved Solids		321	2.38	10.0	mg/L			CH6	09/08/22	1457	2313724	8
Titration and Ion Analy	sis											

Certificate of Analysis

Report Date: October 3, 2022

Company : Address :	Georgia Power Company, Southern Company 241 Ralph McGill Blvd NE, Bin 10160		
Contact: Project:	Atlanta, Georgia 30308 Joju Abraham Branch CCR Groundwater ComplianceAP - E and APE		
Client Sample ID: Sample ID:	PZ-70 591881001	Project: Client ID:	GPCC00101 GPCC001

Parameter	Qualifier	Result	DL	RL	Units	PF	DF .	Analyst Date	Time Batch	Method
Titration and Ion Ana	ılysis									
SM 2320B Total Alk	alinity "As Rec	eived"								
Alkalinity, Total as CaCO	•	37.8	1.45	4.00	mg/L]	HH2 09/08/22	1127 2312490	9
Bicarbonate alkalinity (Ca		37.8	1.45	4.00	mg/L					
Carbonate alkalinity (CaC	O3) U	ND	1.45	4.00	mg/L					
The following Prep N	Aethods were p	erformed:								
Method	Description	n		Analyst	Date		Time	Prep Batch		
SW846 3005A	ICP-MS 3005	5A PREP		PC1	09/06/22		0910	2312379		
SW846 7470A Prep	EPA 7470A 1	Mercury Prep Liquid		RM4	09/06/22		1255	2312730		
The following Analy	tical Methods v	were performed:								
Method	Description			I	Analys	t Com	ments			
1	SM 4500-H B	/SW846 9040C, SM 25	50B							
2	EPA 300.0									
3	EPA 300.0									
4	SW846 7470A	A								
5	SW846 3005A	A/6020B								
6	SW846 3005A	A/6020B								
7	SW846 3005A	A/6020B								
8	SM 2540C									
9	SM 2320B									
Notes:										
Column headers are	defined as follo	ws:								
DF: Dilution Factor			Critical Level							
DL: Detection Limit			p Factor							
MDA: Minimum Da			p i detoi norting Limit							

DE. Detection Ennit	11.11001 actor
MDA: Minimum Detectable Activity	RL: Reporting Li
MDC: Minimum Detectable Concentration	SQL: Sample Qu

PF: Prep Factor RL: Reporting Limit SQL: Sample Quantitation Limit

Certificate of Analysis

Report Date: October 3, 2022

Company : Address :	Georgia Power Company, Southern Company 241 Ralph McGill Blvd NE, Bin 10160		
Contact: Project:	Atlanta, Georgia 30308 Joju Abraham Branch CCR Groundwater ComplianceAP - E and APE		
Client Sample ID:	BRGWC-17S	Project:	GPCC00101
Sample ID:	591351001	Client ID:	GPCC001
Matrix:	WG		
Collect Date:	24-AUG-22 11:37		
Receive Date:	29-AUG-22		
Collector:	Client		

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analy	st Date	Time Batch	Method
Field Data											
Client collected Field pl	H "As Receiv	red"									
Field pH		6.62			SU			EOS1	08/24/22	1137 2310138	1
Ion Chromatography											
EPA 300.0 Anions Liqu	uid "As Recei	ved"									
Chloride		5.00	0.0670	0.200	mg/L		1	HXC1	08/30/22	1317 2310523	2
Fluoride		0.274	0.0330	0.100	mg/L		1	inter	00/00/22	1517 2510520	-
Sulfate		157	2.66	8.00	mg/L		20	HXC1	08/30/22	2115 2310523	3
Mercury Analysis-CVA	A				U						
7470 Cold Vapor Mercu		As Received"									
Mercury	U U	ND	0.0000670	0.000200	mg/L	1.00	1	JP2	08/31/22	1118 2310248	4
Metals Analysis-ICP-M		ND	0.0000070	0.000200	iiig/L	1.00	1	JI 2	00/31/22	1110 2310240	· -
•											
SW846 3005A/6020B "			0.00100	0.00200		1.00	1	D 4 4	00/07/22	1000 0010155	<u>ب</u>
Antimony	U	ND	0.00100	0.00300	mg/L	1.00	1	BAJ	09/07/22	1820 2310153	5
Arsenic Barium	U	ND	0.00200 0.000670	0.00500 0.00400	mg/L	1.00 1.00	1				
Boron		0.0512 0.0273	0.000870	0.00400	mg/L mg/L	1.00	1 1				
Cadmium	U	0.0273 ND	0.000320	0.00100	mg/L	1.00	1				
Calcium	U	43.6	0.0800	0.200	mg/L mg/L	1.00	1				
Chromium		0.0127	0.00300	0.0100	mg/L	1.00	1				
Cobalt	U	ND	0.000300	0.00100	mg/L	1.00	1				
Iron	Ū	ND	0.0330	0.100	mg/L	1.00	1				
Lead	U	ND	0.000500	0.00200	mg/L	1.00	1				
Lithium	U	ND	0.00300	0.0100	mg/L	1.00	1				
Magnesium		25.7	0.0100	0.0300	mg/L	1.00	1				
Manganese	U	ND	0.00100	0.00500	mg/L	1.00	1				
Molybdenum	U	ND	0.000200	0.00100	mg/L	1.00	1				
Potassium		1.29	0.0800	0.300	mg/L	1.00	1				
Sodium		24.6	0.0800	0.250	mg/L	1.00	1				
Thallium	U	ND	0.000600	0.00200	mg/L	1.00	1				
Beryllium	U	ND	0.000200	0.000500	mg/L	1.00	1	BAJ	09/07/22	0157 2310153	6
Selenium	J	0.00208	0.00150	0.00500	mg/L	1.00	1				
Solids Analysis											
SM2540C Dissolved So	olids "As Reco	eived"									
Total Dissolved Solids		370	2.38	10.0	mg/L			CH6	08/30/22	1449 2310249	7
Titration and Ion Analys	sis										

Certificate of Analysis

Report Date: October 3, 2022

Company : Address :	Georgia Power Company, Southern Company 241 Ralph McGill Blvd NE, Bin 10160		
Contact:	Atlanta, Georgia 30308 Joju Abraham		
Project:	Branch CCR Groundwater ComplianceAP - E and APE		
Client Sample ID:	BRGWC-17S	Project:	GPCC00101
Sample ID:	591351001	Client ID:	GPCC001

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst Date	Time Batch	Method
Titration and Ion Analy	sis									
SM 2320B Total Alkali	nity "As Reco	eived"								
Alkalinity, Total as CaCO3	-	74.0	1.45	4.00	mg/L			HH2 09/07/22	1323 2310459	8
Bicarbonate alkalinity (CaCC	3)	74.0	1.45	4.00	mg/L					
Carbonate alkalinity (CaCO3) U	ND	1.45	4.00	mg/L					
The following Prep Me	thods were pe	erformed:								
Method	Description	n		Analyst	Date		Time	Prep Batch		
SW846 3005A	ICP-MS 3005	5A PREP		PC1	08/30/22		0900	2310152		
SW846 7470A Prep	EPA 7470A N	Mercury Prep Liquid		RM4	08/30/22		1252	2310247		
The following Analytic	cal Methods v	vere performed:								
Method	Description	L			A	Analy	st Con	nments		
1	SM 4500-H B	/SW846 9040C, SM 2550B								
2	EPA 300.0									
3	EPA 300.0									
4	SW846 7470A	A Contraction of the second seco								
5	SW846 3005A	A/6020B								
6	SW846 3005A	A/6020B								
7	SM 2540C									
8	SM 2320B									
Notes:										
Column headers are de	fined as follo	ws:								
DF: Dilution Factor		Lc/LC: Critical	Level							

DF: Dilution FactorLc/LC: Critical LevelDL: Detection LimitPF: Prep FactorMDA: Minimum Detectable ActivityRL: Reporting LimitMDC: Minimum Detectable ConcentrationSQL: Sample Quantitation Limit

Certificate of Analysis

Report Date: October 3, 2022

Company :	Georgia Power Company, Southern Company		
Address :	241 Ralph McGill Blvd NE, Bin 10160		
	Atlanta, Georgia 30308		
Contact:	Joju Abraham		
Project:	Branch CCR Groundwater ComplianceAP - E and APE		
Client Sample ID:	BRGWC-35S	Project:	GPCC00101
Sample ID:	591351002	Client ID:	GPCC001
Matrix:	WG		
Collect Date:	24-AUG-22 13:58		
Receive Date:	29-AUG-22		
Collector:	Client		

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analy	st Date	Time Batch	Method
Field Data											
Client collected Field pl	H "As Receiv	ved"									
Field pH		6.05			SU			EOS1	08/24/22	1358 231013	3 1
Ion Chromatography											
EPA 300.0 Anions Liqu	uid "As Recei	ved"									
Chloride		6.53	0.0670	0.200	mg/L		1	HXC1	08/30/22	1347 231052	3 2
Fluoride	U	ND	0.0330	0.100	mg/L		1	inter	00/00/22	1517 251052.	, 2
Sulfate		279	2.66	8.00	mg/L		20	HXC1	08/30/22	2244 231052	3 3
Mercury Analysis-CVA	A				U						
7470 Cold Vapor Merci		As Received"									
Mercury	U U	ND	0.0000670	0.000200	mg/L	1.00	1	JP2	08/31/22	1120 231024	3 4
Metals Analysis-ICP-M		n.D	0.0000070	0.000200	IIIg/ L	1.00	1	51 2	00/31/22	1120 251024	, -
SW846 3005A/6020B "											
			0.00100	0.00300	ma/I	1.00	1	BAJ	09/07/22	1934 231015	3 5
Antimony Arsenic	U U	ND ND	0.00100	0.00500	mg/L	1.00	1	DAJ	09/07/22	1954 251015.	5 5
Barium	U	0.0339	0.00200	0.00300	mg/L mg/L	1.00					
Cadmium	U	0.0339 ND	0.000300	0.00100	mg/L	1.00					
Chromium	J	0.00752	0.00300	0.0100	mg/L	1.00	1				
Cobalt	Ŭ	ND	0.000300	0.00100	mg/L	1.00	1				
Iron		0.162	0.0330	0.100	mg/L	1.00	1				
Lead	U	ND	0.000500	0.00200	mg/L	1.00	1				
Lithium	U	ND	0.00300	0.0100	mg/L	1.00	1				
Magnesium		36.9	0.0100	0.0300	mg/L	1.00	1				
Manganese		0.0170	0.00100	0.00500	mg/L	1.00	1				
Molybdenum	U	ND	0.000200	0.00100	mg/L	1.00	1				
Potassium		4.24	0.0800	0.300	mg/L	1.00	1				
Sodium		19.8	0.0800	0.250	mg/L	1.00	1				
Thallium	U	ND	0.000600	0.00200	mg/L	1.00	1	DAI	00/07/00	0215 021015	
Beryllium	J	0.000210	0.000200	0.000500 0.00500	mg/L	1.00 1.00	1	BAJ	09/07/22	0215 2310153	3 6
Selenium Boron	U	ND 2.23	0.00150 0.104	0.00500	mg/L	1.00	1 20	BAJ	09/07/22	1841 2310153	3 7
Calcium		2.23 68.5	1.60	4.00	mg/L mg/L	1.00		DAJ	09/07/22	1041 251015.	» /
Solids Analysis		00.5	1.00	4.00	mg/L	1.00	20				
•	1.1										
SM2540C Dissolved So	olids "As Rec			10.0	-				00/00/07	1110 00100	
Total Dissolved Solids		507	2.38	10.0	mg/L			CH6	08/30/22	1449 2310249	9 8
Titration and Ion Analy	SIS										

Certificate of Analysis

Report Date: October 3, 2022

Company : Address :	Georgia Power Company, Southern Company 241 Ralph McGill Blvd NE, Bin 10160		
~	Atlanta, Georgia 30308		
Contact:	Joju Abraham		
Project:	Branch CCR Groundwater ComplianceAP - E and APE		
Client Sample ID:	BRGWC-35S	Project:	GPCC00101
Sample ID:	591351002	Client ID:	GPCC001

Parameter	Qualifier	Result		DL	RL	Units	PF	DF	Analyst Date	Time Batch	Method
Titration and Ion Ana	lysis										
SM 2320B Total Alka	alinity "As Rec	eived"									
Alkalinity, Total as CaCO3		50.6		1.45	4.00	mg/L			HH2 09/07/22	1332 2310459) 9
Bicarbonate alkalinity (Ca	203)	50.6		1.45	4.00	mg/L					
Carbonate alkalinity (CaCO	D3) U	ND		1.45	4.00	mg/L					
The following Prep N	fethods were p	erformed:									
Method	Descriptio	n		A	Analyst	Date		Time	Prep Batch		
SW846 3005A	ICP-MS 300	5A PREP		F	PC1	08/30/22		0900	2310152		
SW846 7470A Prep	EPA 7470A	Mercury Prep I	Liquid	F	RM4	08/30/22		1252	2310247		
The following Analy	tical Methods	were perform	ned:								
Method	Description	1				A	Analys	t Com	nments		
1	SM 4500-H E	B/SW846 9040	C, SM 2550B								
2	EPA 300.0										
3	EPA 300.0										
4	SW846 7470	A									
5	SW846 3005.	A/6020B									
6	SW846 3005.	A/6020B									
7	SW846 3005.	A/6020B									
8	SM 2540C										
9	SM 2320B										
Notes:											
Column headers are o	lefined as follo	ws.									
DF: Dilution Factor	actifica as tone		Lc/LC: Critica	1 Level							
DL: Detection Limit			PF: Prep Facto								
MDA: Minimum Det	tectable Activit		RL: Reporting								
		- y	COL C 1		.						

MDC: Minimum Detectable Concentration SQL: Sample Quantitation Limit

Certificate of Analysis

Report Date: October 3, 2022

Company :	Georgia Power Company, Southern Company		
Address :	241 Ralph McGill Blvd NE, Bin 10160		
	Atlanta, Georgia 30308		
Contact:	Joju Abraham		
Project:	Branch CCR Groundwater ComplianceAP - E and APE		
Client Sample ID:	BRGWC-36S	Project:	GPCC00101
Sample ID:	591351003	Client ID:	GPCC001
Matrix:	WG		
Collect Date:	24-AUG-22 09:52		
Receive Date:	29-AUG-22		
Collector:	Client		

Field Data Client collected Field pH Field pH Ion Chromatography EPA 300.0 Anions Liquic Chloride	l "As Recei	5.59 ved" 7.96 0.194	0.0670		SU			EOS1	08/24/22	0952	2310138	1
Field pH Ion Chromatography EPA 300.0 Anions Liquid	l "As Recei	5.59 ved" 7.96 0.194	0.0670		SU			EOS1	08/24/22	0952	2310138	1
Field pH Ion Chromatography EPA 300.0 Anions Liquid	l "As Recei	5.59 ved" 7.96 0.194	0.0670		SU			EOS1	08/24/22	0952	2310138	1
Ion Chromatography EPA 300.0 Anions Liquic		7.96 0.194	0.0670									
EPA 300.0 Anions Liquic		7.96 0.194	0.0670									
-		7.96 0.194	0.0670									
Children		0.194	0.007.0	0.200	mg/L		1	HXC1	08/30/22	1416	2310523	2
Fluoride			0.0330	0.100	mg/L		1		00/00/22	1.10	2010020	-
Sulfate		224	2.66	8.00	mg/L		20	HXC1	08/30/22	2314	2310523	3
Mercury Analysis-CVAA					U							
7470 Cold Vapor Mercur		As Received"										
Mercury	U, Elquid I U	ND	0.0000670	0.000200	mg/L	1.00	1	JP2	08/31/22	1121	2310248	4
Metals Analysis-ICP-MS	U	n b	0.0000070	0.000200	ing/ E	1.00	•	51 2	00/01/22	1121	2310210	
SW846 3005A/6020B "A	Deceived	"										
Antimony Antimony	U U	ND	0.00100	0.00300	mg/L	1.00	1	BAJ	09/07/22	1037	2310153	5
Arsenic	U	ND	0.00200	0.00500	mg/L mg/L	1.00	1	DAJ	09/01/22	1957	2310133	5
Barium	0	0.0296	0.00200	0.00500	mg/L mg/L	1.00	1					
Cadmium	U	0.0290 ND	0.000300	0.00100	mg/L mg/L	1.00	1					
Calcium	e	48.1	0.0800	0.200	mg/L	1.00	1					
Chromium	J	0.00713	0.00300	0.0100	mg/L	1.00	1					
Cobalt	U	ND	0.000300	0.00100	mg/L	1.00	1					
Iron	U	ND	0.0330	0.100	mg/L	1.00	1					
Lead	U	ND	0.000500	0.00200	mg/L	1.00	1					
Lithium	U	ND	0.00300	0.0100	mg/L	1.00	1					
Magnesium		20.5	0.0100	0.0300	mg/L	1.00	1					
Manganese	J	0.00295	0.00100	0.00500	mg/L	1.00	1					
Molybdenum	U	ND	0.000200	0.00100	mg/L	1.00	1					
Potassium		3.78	0.0800	0.300	mg/L	1.00	1					
Sodium		40.6	0.0800	0.250	mg/L	1.00	1					
Thallium	U	ND	0.000600	0.00200	mg/L	1.00	1					
Beryllium	U	ND	0.000200	0.000500	mg/L	1.00	1	BAJ	09/07/22	0219	2310153	6
Selenium	J	0.00246	0.00150	0.00500	mg/L	1.00	1	DAT	00/07/22	1044	0210152	7
Boron		1.10	0.104	0.300	mg/L	1.00	20	BAJ	09/07/22	1844	2310153	7
Solids Analysis												
SM2540C Dissolved Soli	ds "As Rec											
Total Dissolved Solids		418	2.38	10.0	mg/L			CH6	08/30/22	1449	2310249	8
Titration and Ion Analysis	5											

Certificate of Analysis

Report Date: October 3, 2022

Company : Address :	Georgia Power Company, Southern Company 241 Ralph McGill Blvd NE, Bin 10160		
Contact: Project:	Atlanta, Georgia 30308 Joju Abraham Branch CCR Groundwater ComplianceAP - E and APE		
Client Sample ID: Sample ID:	BRGWC-36S 591351003	Project: Client ID:	GPCC00101 GPCC001

Parameter	Qualifier	Result	DL	RL	Units	PF D	F Analyst Date	Time Batch	Method
Titration and Ion Analys	sis								
SM 2320B Total Alkalir	nity "As Reco	eived"							
Alkalinity, Total as CaCO3	2	20.6	1.45	4.00	mg/L		HH2 09/07/22	1334 2310459	9
Bicarbonate alkalinity (CaCO3	3)	20.6	1.45	4.00	mg/L				
Carbonate alkalinity (CaCO3)	U	ND	1.45	4.00	mg/L				
The following Prep Met	hods were pe	erformed:							
Method	Description	1		Analyst	Date	Tin	ne Prep Batch	l	
SW846 3005A	ICP-MS 3005	A PREP		PC1	08/30/22	090	0 2310152		
SW846 7470A Prep	EPA 7470A N	Mercury Prep Liquid		RM4	08/30/22	125	2 2310247		
The following Analytic	al Methods v	vere performed:							
Method	Description				A	Analyst C	omments		
1	SM 4500-H B	/SW846 9040C, SM 25	550B						
2	EPA 300.0								
3	EPA 300.0								
4	SW846 7470A	Δ							
5	SW846 3005A	A/6020B							
6	SW846 3005A	A/6020B							
7	SW846 3005A	A/6020B							
8	SM 2540C								
9	SM 2320B								
Notes:									
Column hoodom are def	inad as falls								
Column headers are def DF: Dilution Factor	med as 10110		: Critical Level						
DF: Dilution Factor DL: Detection Limit			ep Factor						
MDA · Minimum Detect	tabla Activity		ep racior						

MDA: Minimum Detectable ActivityRL: Reporting LimitMDC: Minimum Detectable ConcentrationSQL: Sample Quantitation Limit

Page 12 of 84 SDG: 591881 Rev1

Certificate of Analysis

Report Date: October 3, 2022

	Company : Address :		Power Company, h McGill Blvd N		npany				-				
	Contact:	Atlanta, (Joju Abra	Georgia 30308 aham										
	Project:	Branch C	CR Groundwate	r ComplianceA	P - E and	APE							
	Client Sample ID:	FD-04				Pro	oject:		GPCC	200101			
	Sample ID:	59135100)4			Cli	ent ID	:	GPCC	2001			
	Matrix:	WG											
	Collect Date:	24-AUG-	22 12:00										
	Receive Date:	29-AUG-	-22										
	Collector:	Client											
Parameter	Quali	fier Res	sult	DL	RL	Units	PF	DF	Analy	st Date	Time	Batch	Method
Ion Chroma	atography												
EPA 300.0	Anions Liquid "As]	Received"											
Chloride	-		7.95	0.0670	0.200	mg/L		1	HXC1	08/30/22	1446	2310523	1
Fluoride		(0.209	0.0330	0.100	mg/L		1	INCI	00/20/22	0244	0010500	2
Sulfate Mercury A	nalysis-CVAA		222	2.66	8.00	mg/L		20	HXC1	08/30/22	2344	2310523	2

j i i i i j	,			
7470 Cold	Vapor Mei	cury, Liq	uid "As l	Received"

7470 Cold Vapor Mercury, L	iquid "A	As Received"										
Mercury	Ū	ND	0.0000670	0.000200	mg/L	1.00	1	JP2	08/31/22	1123	2310248	3
Metals Analysis-ICP-MS												
SW846 3005A/6020B "As Re	eceived'											
Antimony	U	ND	0.00100	0.00300	mg/L	1.00	1	BAJ	09/07/22	1940	2310153	4
Arsenic	U	ND	0.00200	0.00500	mg/L	1.00	1					
Barium		0.0282	0.000670	0.00400	mg/L	1.00	1					
Cadmium	U	ND	0.000300	0.00100	mg/L	1.00	1					
Calcium		44.3	0.0800	0.200	mg/L	1.00	1					
Chromium	J	0.00668	0.00300	0.0100	mg/L	1.00	1					
Cobalt	U	ND	0.000300	0.00100	mg/L	1.00	1					
Iron	U	ND	0.0330	0.100	mg/L		1					
Lead	U	ND	0.000500	0.00200	mg/L	1.00	1					
Lithium	U	ND	0.00300	0.0100	mg/L	1.00	1					
Magnesium		18.8	0.0100	0.0300	mg/L	1.00	1					
Manganese	J	0.00286	0.00100	0.00500	mg/L	1.00	1					
Molybdenum	U	ND	0.000200	0.00100	mg/L	1.00	1					
Potassium		3.51	0.0800	0.300	mg/L	1.00	1					
Sodium		37.2	0.0800	0.250	mg/L	1.00	1					
Thallium	U	ND	0.000600	0.00200	mg/L	1.00	1					
Beryllium	U	ND	0.000200	0.000500	mg/L	1.00	1	BAJ	09/07/22	0229	2310153	5
Selenium	J	0.00227	0.00150	0.00500	mg/L	1.00	1					
Boron		1.07	0.104	0.300	mg/L	1.00	20	BAJ	09/07/22	1847	2310153	6
Solids Analysis												
SM2540C Dissolved Solids "	'As Rece	eived"										
Total Dissolved Solids		419	2.38	10.0	mg/L			CH6	08/30/22	1449	2310249	7
Titration and Ion Analysis												
SM 2320B Total Alkalinity "	As Rece	eived"										
Alkalinity, Total as CaCO3		20.4	1.45	4.00	mg/L			HH2	09/07/22	1336	2310459	8
Bicarbonate alkalinity (CaCO3)		20.4	1.45	4.00	mg/L							

Certificate of Analysis

Report Date: October 3, 2022 Georgia Power Company, Southern Company Company : Address : 241 Ralph McGill Blvd NE, Bin 10160 Atlanta, Georgia 30308 Contact: Joju Abraham Project: Branch CCR Groundwater ComplianceAP - E and APE Client Sample ID: FD-04 Project: GPCC00101 Sample ID: 591351004 Client ID: GPCC001

Parameter	Qualifier Resul	t Di	L RL	. Units	PF D	DF Analyst Da	te Time Batch	Method
Titration and Ion Ana	lysis							
SM 2320B Total Alka	linity "As Received"							
Carbonate alkalinity (CaCC	•	D 1.4	5 4	.00 mg/L				
The following Prep M	lethods were performed	1:						
Method	Description		Analys	t Date	Ti	me Prep Ba	tch	
SW846 3005A	ICP-MS 3005A PREP		PC1	08/30/22	090	00 2310152		
SW846 7470A Prep	EPA 7470A Mercury P	rep Liquid	RM4	08/30/22	125	52 2310247		
The following Analy	tical Methods were per	formed:						
Method	Description				Analyst C	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							
8	SM 2320B							
Notes:								
Column headers are of DF: Dilution Factor DL: Detection Limit MDA: Minimum Det		Lc/LC: Critical Leve PF: Prep Factor RL: Reporting Limit						

MDC: Minimum Detectable Concentration

SQL: Sample Quantitation Limit

Certificate of Analysis

Report Date: October 3, 2022

Company :	Georgia Power Company, Southern Company		
Address :	241 Ralph McGill Blvd NE, Bin 10160		
	Atlanta, Georgia 30308		
Contact:	Joju Abraham		
Project:	Branch CCR Groundwater ComplianceAP - E and APE		
Client Sample ID:	BRGWC-34S	Project:	GPCC00101
Sample ID:	591351005	Client ID:	GPCC001
Matrix:	WG		
Collect Date:	24-AUG-22 14:40		
Receive Date:	29-AUG-22		
Collector:	Client		

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analy	st Date	Time Bat	ch Method
Field Data											
Client collected Field pl	H "As Receiv	ved"									
Field pH		5.75			SU			EOS1	08/24/22	1440 2310	138 1
Ion Chromatography											
EPA 300.0 Anions Liqu	uid "As Recei	ved"									
Chloride		6.17	0.0670	0.200	mg/L		1	HXC1	08/30/22	1516 2310	523 2
Fluoride		0.140	0.0330	0.100	mg/L		1		00/00/22	1010 2010	
Sulfate		268	2.66	8.00	mg/L		20	HXC1	08/31/22	0114 2310	523 3
Mercury Analysis-CVA	A				C						
7470 Cold Vapor Mercu		As Received"									
Mercury	U U	ND	0.0000670	0.000200	mg/L	1.00	1	JP2	08/31/22	1125 2310	248 4
Metals Analysis-ICP-M		ND	0.0000070	0.000200	IIIg/ L	1.00	1	51 2	00/31/22	1125 2510	240 4
SW846 3005A/6020B "		"									
		ND	0.00100	0.00300	ma/I	1.00	1	BAJ	00/07/22	1943 2310	153 5
Antimony Arsenic	U U	ND ND	0.00100	0.00500	mg/L mg/L	1.00	1	DAJ	09/07/22	1945 2510	155 5
Barium	U	0.0249	0.00200	0.00300	mg/L	1.00	1				
Cadmium	J	0.000517	0.000300	0.00400	mg/L	1.00	1				
Chromium	J U	ND	0.00300	0.0100	mg/L	1.00	1				
Cobalt	C	0.00438	0.000300	0.00100	mg/L	1.00	1				
Iron	U	ND	0.0330	0.100	mg/L	1.00	1				
Lead	U	ND	0.000500	0.00200	mg/L	1.00	1				
Lithium	U	ND	0.00300	0.0100	mg/L	1.00	1				
Magnesium		18.6	0.0100	0.0300	mg/L	1.00	1				
Molybdenum	U	ND	0.000200	0.00100	mg/L	1.00	1				
Potassium		3.79	0.0800	0.300	mg/L	1.00	1				
Sodium		22.8	0.0800	0.250	mg/L	1.00	1				
Thallium	U	ND	0.000600	0.00200	mg/L	1.00	1				
Beryllium	U	ND	0.000200	0.000500	mg/L	1.00	1	BAJ	09/07/22	0233 2310	153 6
Selenium	U	ND	0.00150	0.00500	mg/L	1.00	1	DAI	00/07/02	1050 0010	
Boron		2.45 75.0	0.104	0.300 4.00	mg/L	1.00 1.00	20 20	BAJ	09/07/22	1850 2310	153 7
Calcium		75.0 2.97	1.60 0.0200	4.00 0.100	mg/L mg/I	1.00					
Manganese Solida Apolysis		2.97	0.0200	0.100	mg/L	1.00	20				
Solids Analysis											
SM2540C Dissolved So	olids "As Rec										
Total Dissolved Solids		452	2.38	10.0	mg/L			CH6	08/30/22	1449 2310	249 8
Titration and Ion Analys	sis										

Certificate of Analysis

Report Date: October 3, 2022

Company : Address :	Georgia Power Company, Southern Company 241 Ralph McGill Blvd NE, Bin 10160		
Contact: Project:	Atlanta, Georgia 30308 Joju Abraham Branch CCR Groundwater ComplianceAP - E and APE		
Client Sample ID: Sample ID:	BRGWC-34S 591351005	Project: Client ID:	GPCC00101 GPCC001

Parameter	Qualifier	Result	DL	RL	Units	PF DI	F Analyst Date	Time Batch	Method
Titration and Ion Ana	lysis								
SM 2320B Total Alka	alinity "As Reco	eived"							
Alkalinity, Total as CaCO3		28.6	1.45	4.00	mg/L		HH2 09/07/22	1339 2310459	9
Bicarbonate alkalinity (Ca	CO3)	28.6	1.45	4.00	mg/L				
Carbonate alkalinity (CaCO	D3) U	ND	1.45	4.00	mg/L				
The following Prep M	lethods were pe	erformed:							
Method	Description	1		Analyst	Date	Tim	e Prep Batch		
SW846 3005A	ICP-MS 3005	A PREP		PC1	08/30/22	0900	2310152		
SW846 7470A Prep	EPA 7470A N	Mercury Prep Liquid		RM4	08/30/22	1252	2 2310247		
The following Analy	tical Methods v	vere performed:							
Method	Description				A	Analyst Co	omments		
1	SM 4500-H B	/SW846 9040C, SM 25	50B			-			
2	EPA 300.0								
3	EPA 300.0								
4	SW846 7470A	L Contraction of the second seco							
5	SW846 3005A	/6020B							
6	SW846 3005A	/6020B							
7	SW846 3005A	/6020B							
8	SM 2540C								
9	SM 2320B								
Notes:									
Column headers are o	lefined as follo	ws.							
DF: Dilution Factor			Critical Level						
DL: Detection Limit			p Factor						
MDA · Minimum Det	ectable Activity		porting Limit						

MDA: Minimum Detectable ActivityRL: Reporting LimitMDC: Minimum Detectable ConcentrationSQL: Sample Quantitation Limit

Page 16 of 84 SDG: 591881 Rev1

Certificate of Analysis

	Company : Address :		orgia Power Compa Ralph McGill Blv						Ĩ			
	Contact: Project:	Joju	anta, Georgia 3030 1 Abraham nch CCR Groundw		AP - E and	APE						
	Client Sample ID:	EB-	08			Pro	oject:		GPCC	200101		
	Sample ID:	591	351006				ient ID	•	GPCC			
	Matrix:	WQ				-						
	Collect Date:	-	AUG-22 13:25									
	Receive Date: Collector:	Clie	AUG-22 ent									
Parameter	Quali	fier	Result	DL	RL	Units	PF	DF	Analy	vst Date	Time Batch	n Method
Ion Chroma	atography											
	Anions Liquid "As]	Recei	ved"									
Chloride		U	ND	0.0670	0.200	mg/L		1	HXC1	08/30/22	1546 231052	3 1
Fluoride		J	0.0366	0.0330	0.100	mg/L		1				
Sulfate		U	ND	0.133	0.400	mg/L		1				
Mercury A	nalysis-CVAA											
7470 Cold	Vapor Mercury, Liq	uid "A	As Received"									
Mercury	, up or more only, 2nd	U	ND	0.0000670	0.000200	mg/L	1.00	1	JP2	08/31/22	1126 231024	8 2
	alysis-ICP-MS					8						
	05A/6020B "As Rec	eived	"									
Antimony	0511/0020D 113 Ree	U	ND	0.00100	0.00300	mg/L	1.00	1	BAJ	09/07/22	1946 231015	3 3
Arsenic		U	ND	0.00200	0.00500	mg/L	1.00		DIN	07/01/22	1910 251015	5 5
Barium		Ū	ND	0.000670	0.00400	mg/L	1.00					
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					
Cobalt		U	ND	0.000300	0.00100	mg/L	1.00					
Iron		U	ND	0.0330	0.100	mg/L	1.00					
Lead		U	ND	0.000500	0.00200	mg/L	1.00					
Lithium Magnesium		U U	ND ND	0.00300 0.0100	0.0100 0.0300	mg/L mg/I	1.00 1.00					
Manganese		J	0.00124	0.00100	0.00500	mg/L mg/L	1.00					
Molybdenum		U	0.00124 ND	0.000200	0.00100	mg/L	1.00					
Potassium		U	ND	0.0800	0.300	mg/L	1.00					
Sodium		U	ND	0.0800	0.250	mg/L	1.00	1				
Thallium		U	ND	0.000600	0.00200	mg/L	1.00	1				
Beryllium		U	ND	0.000200	0.000500	mg/L	1.00	1	BAJ	09/07/22	0237 231015	3 4
Selenium		U	ND	0.00150	0.00500	mg/L	1.00					
Boron		U	ND	0.00520	0.0150	mg/L	1.00	1	BAJ	09/08/22	0646 231015	3 5
Solids Ana	lysis											
SM2540C	Dissolved Solids "As	s Rec	eived"									
Total Dissolve		U	ND	2.38	10.0	mg/L			CH6	08/30/22	1449 231024	9 6
Titration ar	nd Ion Analysis											
SM 2320B	Total Alkalinity "As	s Rece	eived"									
Alkalinity, To		J	2.40	1.45	4.00	mg/L			HH2	09/07/22	1342 231045	9 7
	lkalinity (CaCO3)	J	2.40	1.45	4.00	mg/L						

Certificate of Analysis

Report Date: October 3, 2022 Company : Georgia Power Company, Southern Company 241 Ralph McGill Blvd NE, Bin 10160 Address : Atlanta, Georgia 30308 Contact: Joju Abraham Project: Branch CCR Groundwater ComplianceAP - E and APE Client Sample ID: EB-08 Project: GPCC00101 Sample ID: 591351006 Client ID: GPCC001

Parameter	Qualifier Result		DL	RL	Units	PF	DF	Analyst Date	Time Batch	Method
Titration and Ion Analy	sis									
SM 2320B Total Alkali	nity "As Received"									
Carbonate alkalinity (CaCO3)) U ND	1	.45	4.00	mg/L					
The following Prep Met	thods were performed:									
Method	Description		А	nalyst	Date		Time	Prep Batch		
SW846 3005A	ICP-MS 3005A PREP		PC	C1	08/30/22		0900	2310152		
SW846 7470A Prep	EPA 7470A Mercury Pre	p Liquid	RI	M4	08/30/22		1252	2310247		
The following Analytic	al Methods were perfo	ormed:								
Method	Description				A	Analys	st Con	nments		
1	EPA 300.0									
2	SW846 7470A									
3	SW846 3005A/6020B									
4	SW846 3005A/6020B									
5	SW846 3005A/6020B									
6	SM 2540C									
7	SM 2320B									
Notes:										
Column headers are def DF: Dilution Factor DL: Detection Limit MDA: Minimum Detec MDC: Minimum Detec	table Activity	n Limit								

Certificate of Analysis

Company :	Georgia Power Company, Southern Company		
Address :	241 Ralph McGill Blvd NE, Bin 10160		
	Atlanta, Georgia 30308		
Contact:	Joju Abraham		
Project:	Branch CCR Groundwater ComplianceAP - E and APE		
Client Sample ID:	BRGWC-33S	Project:	GPCC00101
Sample ID:	590857001	Client ID:	GPCC001
Matrix:	WG		
Collect Date:	23-AUG-22 14:45		
Receive Date:	24-AUG-22		
Collector:	Client		

Field Data Client collected Field pH Field pH	"As Receiv	red"									
-	"As Receiv	ed"									
-		cu									
		4.67			SU			EOS1	08/23/22	1445 2308303	1
Ion Chromatography											
EPA 300.0 Anions Liquid	"As Recei	ved"									
Fluoride		0.187	0.0330	0.100	mg/L		1	JLD1	08/25/22	2056 2308691	2
Chloride		30.3	2.68	8.00	mg/L mg/L		40	JLD1	08/26/22	0325 2308691	
Sulfate		385	5.32	16.0	mg/L		40				
Mercury Analysis-CVAA					0						
7470 Cold Vapor Mercury		As Received"									
Mercury	y, Liquid <i>F</i> U	ND	0.0000670	0.000200	mg/L	1.00	1	JP2	08/26/22	1154 2308555	4
Metals Analysis-ICP-MS	0	ND	0.0000070	0.000200	mg/L	1.00	1	JI 2	00/20/22	1154 2506555	-
•	. D										
SW846 3005A/6020B "A			0.00200	0.00500	/T	1.00	1	DAI	00/02/22	0046 000000	
Arsenic	J	0.00262	0.00200	0.00500	mg/L	1.00	1	BAJ	09/03/22	0046 2308385	5
Barium		0.0409	0.000670	0.00400	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				
Iron	J	0.0381	0.0330	0.100 0.00200	mg/L	1.00 1.00	1 1				
Lead Lithium	U	ND	0.000500	0.00200	mg/L	1.00					
Potassium		0.0109	0.00300		mg/L		1				
		13.0	0.0800	0.300	mg/L	1.00 1.00	1				
Selenium Sodium		0.00610 24.0	0.00150 0.0800	0.00500 0.250	mg/L	1.00	1 1				
Thallium	U	ND	0.000600	0.230	mg/L	1.00	1				
Antimony	U	ND	0.000800	0.00200	mg/L mg/L	1.00	1	BAJ	09/03/22	1506 2308385	6
Beryllium	U	0.00241	0.00100	0.000500		1.00	1	BAJ	09/03/22	1236 2308385	
Cadmium	J	0.000241	0.000200	0.000300	mg/L mg/L	1.00	1	DAJ	09/03/22	1230 2308385	
Magnesium	J	14.7	0.000300	0.00100	mg/L mg/L	1.00	1				
Molybdenum	U	ND	0.000200	0.00100	mg/L mg/L	1.00	1				
Boron	U	0.975	0.104	0.300	mg/L mg/L	1.00	20	BAJ	09/03/22	1210 2308385	8
Calcium		119	1.60	4.00	mg/L mg/L	1.00	20	DAJ	07/03/22	1210 2300305	0
Manganese		2.75	0.0200	0.100	mg/L mg/L	1.00	20				
Solids Analysis		2.75	0.0200	0.100	ш <u>ь</u> , п	1.00	20				
•	Ja "A a D · ·	-: <i>4</i> "									
SM2540C Dissolved Solid	as "As Rece		2.20	10.0	æ			CIIC	00/06/00	1500 000000	c.
Total Dissolved Solids		614	2.38	10.0	mg/L			CH6	08/26/22	1530 2309029	9
Titration and Ion Analysis	3										

Certificate of Analysis

Company : Address :	Georgia Power Company, Southern Company 241 Ralph McGill Blvd NE, Bin 10160		
Contact:	Atlanta, Georgia 30308 Joju Abraham		
Project:	Branch CCR Groundwater ComplianceAP - E and APE		
Client Sample ID:	BRGWC-33S	Project:	GPCC00101
Sample ID:	590857001	Client ID:	GPCC001

Parameter	Qualifier R	esult	DL	RL	Units	PF D	OF Anal	yst Date	Time Batch	Method
Titration and Ion Analy	/sis									
SM 2320B Total Alkal	inity "As Receive	d"								
Alkalinity, Total as CaCO3	J	3.40	1.45	4.00	mg/L		HH2	09/04/22	1352 2309339	10
Bicarbonate alkalinity (CaCO		3.40	1.45	4.00	mg/L					
Carbonate alkalinity (CaCO3	3) U	ND	1.45	4.00	mg/L					
The following Prep Me	thods were perfor	rmed:								
Method	Description		A	Analyst	Date	Ti	me P	rep Batch		
SW846 3005A	ICP-MS 3005A PI	REP	Р	C1	08/26/22	090	00 2	308382		
SW846 7470A Prep	EPA 7470A Merce	ury Prep Liquid	R	CM4	08/25/22	114	47 2	308553		
The following Analytic	cal Methods were	performed:								
Method	Description				A	Analyst C	Commen	ts		
1	SM 4500-H B/SW8	846 9040C, SM 2550B								
2	EPA 300.0									
3	EPA 300.0									
4	SW846 7470A									
5	SW846 3005A/602	20B								
6	SW846 3005A/602	20B								
7	SW846 3005A/602	20B								
8	SW846 3005A/602	20B								
9	SM 2540C									
10	SM 2320B									
Notes:										
Column headers are de DF: Dilution Factor DL: Detection Limit MDA: Minimum Detec MDC: Minimum Detec	Lc/LC: Critic PF: Prep Fact RL: Reporting ion SQL: Sample	or g Limit	on Limit							

Certificate of Analysis

Company : Address :	Georgia Power Company, Southern Company 241 Ralph McGill Blvd NE, Bin 10160		
	Atlanta, Georgia 30308		
Contact:	Joju Abraham		
Project:	Branch CCR Groundwater ComplianceAP - E and APE		
Client Sample ID:	BRGWC-37S	Project:	GPCC00101
Sample ID:	590857002	Client ID:	GPCC001
Matrix:	WG		
Collect Date:	23-AUG-22 11:36		
Receive Date:	24-AUG-22		
Collector:	Client		

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analy	st Date	Time Batch	Method
Field Data											
Client collected Fi	ield pH "As Receiv	/ed"									
Field pH	1	5.82			SU			EOS1	08/23/22	1136 2308303	1
Ion Chromatograp	bhy										
EPA 300.0 Anions	s Liquid "As Recei	ved"									
Chloride	1	1.97	0.0670	0.200	mg/L		1	JLD1	08/25/22	2226 2308691	2
Fluoride		0.105	0.0330	0.100	mg/L		1				
Sulfate	J	0.307	0.133	0.400	mg/L		1				
Mercury Analysis	-CVAA										
7470 Cold Vapor	Mercury, Liquid "A	As Received"									
Mercury	U	ND	0.0000670	0.000200	mg/L	1.00	1	JP2	08/26/22	1155 2308555	3
Metals Analysis-I	CP-MS				C						
•	20B "As Received	"									
Arsenic	U	ND	0.00200	0.00500	mg/L	1.00	1	BAJ	09/03/22	0050 2308385	4
Barium	-	0.0260	0.000670	0.00400	mg/L	1.00	1				
Chromium	U	ND	0.00300	0.0100	mg/L	1.00	1				
Cobalt	U	ND	0.000300	0.00100	mg/L	1.00	1				
Iron	U	ND	0.0330	0.100	mg/L	1.00	1				
Lead	U	ND	0.000500	0.00200	mg/L	1.00	1				
Lithium	U	ND	0.00300	0.0100	mg/L	1.00	1				
Potassium		1.84	0.0800	0.300	mg/L	1.00	1				
Selenium	U	ND	0.00150	0.00500	mg/L	1.00	1				
Sodium		4.51	0.0800	0.250	mg/L	1.00	1				
Thallium	U	ND	0.000600	0.00200	mg/L	1.00	1				
Antimony	U	ND	0.00100	0.00300	mg/L	1.00	1	BAJ	09/03/22	1508 2308385	5
Beryllium	U	ND	0.000200	0.000500	mg/L	1.00	1	BAJ	09/03/22	1140 2308385	6
Boron	U	ND	0.00520	0.0150	mg/L	1.00	1				
Cadmium	U	ND	0.000300	0.00100	mg/L	1.00	1				
Calcium		3.70	0.0800	0.200	mg/L	1.00	1				
Magnesium		1.29	0.0100	0.0300	mg/L	1.00	1				
Manganese	U	ND	0.00100	0.00500	mg/L	1.00	1				
Molybdenum	U	ND	0.000200	0.00100	mg/L	1.00	1				
Solids Analysis											
SM2540C Dissolv	ved Solids "As Rec	eived"									
Total Dissolved Solids	5	40.0	2.38	10.0	mg/L			CH6	08/26/22	1530 2309029	7
Titration and Ion A	Analysis										

Certificate of Analysis

Report Date: October 3, 2022

Company : Address :	Georgia Power Company, Southern Company 241 Ralph McGill Blvd NE, Bin 10160		
Contact:	Atlanta, Georgia 30308 Joju Abraham		
Project:	Branch CCR Groundwater ComplianceAP - E and APE		
Client Sample ID:	BRGWC-37S	Project:	GPCC00101
Sample ID:	590857002	Client ID:	GPCC001

Parameter	Qualifier	Result	DL	RL	Units	PF	DF A	Analyst Date	Time Batch	Method
Titration and Ion Ana	lysis									
SM 2320B Total Alk	alinity "As Rec	eived"								
Alkalinity, Total as CaCO		21.2	1.45	4.00	mg/L		Н	HH2 09/04/22	1355 2309339	8
Bicarbonate alkalinity (Ca		21.2	1.45	4.00	mg/L					
Carbonate alkalinity (CaC	O3) U	ND	1.45	4.00	mg/L					
The following Prep N	Iethods were p	erformed:								
Method	Description	n		Analyst	Date	,	Time	Prep Batch		
SW846 3005A	ICP-MS 3005	5A PREP		PC1	08/26/22	(0900	2308382		
SW846 7470A Prep	EPA 7470A 1	Mercury Prep Liquid		RM4	08/25/22		1147	2308553		
The following Analy	tical Methods v	were performed:								
Method	Description	l			A	Analyst	t Comr	ments		
1	SM 4500-H B	/SW846 9040C, SM 2550B								
2	EPA 300.0									
3	SW846 7470A	A								
4	SW846 3005A	A/6020B								
5	SW846 3005A	A/6020B								
6	SW846 3005A	A/6020B								
7	SM 2540C									
8	SM 2320B									
Notes:										
Column headers are on DF: Dilution Factor	defined as follo	<u>ws:</u> Lc/LC: Criti	cal Laval							

DF: Dilution FactorLc/LC: Critical LevelDL: Detection LimitPF: Prep FactorMDA: Minimum Detectable ActivityRL: Reporting LimitMDC: Minimum Detectable ConcentrationSQL: Sample Quantitation Limit

Certificate of Analysis

Company :	Georgia Power Company, Southern Company		
Address :	241 Ralph McGill Blvd NE, Bin 10160		
	Atlanta, Georgia 30308		
Contact:	Joju Abraham		
Project:	Branch CCR Groundwater ComplianceAP - E and APE		
Client Sample ID:	BRGWC-38S	Project:	GPCC00101
Sample ID:	590857003	Client ID:	GPCC001
Matrix:	WG		
Collect Date:	23-AUG-22 16:00		
Receive Date:	24-AUG-22		
Collector:	Client		

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analy	st Date	Time	e Batch	Method
Field Data												
Client collected Field p	oH "As Receiv	/ed"										
Field pH		3.97			SU			EOS1	08/23/22	1600	2308303	1
Ion Chromatography												
EPA 300.0 Anions Liq	uid "As Recei	ved"										
Chloride		6.42	0.0670	0.200	mg/L		1	JLD1	08/25/22	2355	2308691	2
Fluoride		0.609	0.0330	0.100	mg/L		1	1221	00/20/22	2000	2000071	-
Sulfate		389	5.32	16.0	mg/L		40	JLD1	08/26/22	1120	2308691	3
Mercury Analysis-CVA	AA				C							
7470 Cold Vapor Merc		As Received"										
Mercury	J	0.000117	0.0000670	0.000200	mg/L	1.00	1	JP2	08/26/22	1157	2308555	4
Metals Analysis-ICP-N	-	0.000117	0.0000070	0.000200	ing/12	1.00	•	51 2	00/20/22	1107	2000000	
SW846 3005A/6020B		"										
Arsenic	As Received	0.00337	0.00200	0.00500	mg/L	1.00	1	BAJ	09/03/22	0053	2308385	5
Barium	J	0.0141	0.000200	0.00300	mg/L	1.00	1	DAJ	09/03/22	0055	2308383	5
Chromium	J	0.00398	0.00300	0.0100	mg/L mg/L	1.00	1					
Cobalt	5	0.173	0.000300	0.00100	mg/L	1.00	1					
Iron	U	ND	0.0330	0.100	mg/L	1.00	1					
Lead	U	ND	0.000500	0.00200	mg/L	1.00	1					
Lithium		0.0214	0.00300	0.0100	mg/L	1.00	1					
Potassium		5.75	0.0800	0.300	mg/L	1.00	1					
Selenium		0.0296	0.00150	0.00500	mg/L	1.00	1					
Sodium		44.1	0.0800	0.250	mg/L	1.00	1					
Thallium	U	ND	0.000600	0.00200	mg/L	1.00	1					
Antimony	U	ND	0.00100	0.00300	mg/L	1.00	1	BAJ	09/03/22		2308385	6
Beryllium	-	0.00854	0.000200	0.000500	mg/L	1.00	1	BAJ	09/03/22	1239	2308385	7
Cadmium	J	0.000459	0.000300	0.00100	mg/L	1.00	1					
Calcium		37.1 41.3	$0.0800 \\ 0.0100$	0.200 0.0300	mg/L	1.00 1.00	1 1					
Magnesium Molybdenum	U	41.3 ND	0.0100	0.0300	mg/L mg/L	1.00	1					
Boron	U	1.67	0.000200	0.00100	mg/L	1.00	20	BAJ	09/03/22	1213	2308385	8
Manganese		1.80	0.0200	0.300	mg/L	1.00		DAJ	09/03/22	1213	2308383	0
Solids Analysis		1.00	0.0200	0.100	1116/12	1.00	20					
•	alida "A - D	airrad"										
SM2540C Dissolved S	onds "As Rec		2.20	10.0	/7			CHC	00/06/02	1520	2200020	C
Total Dissolved Solids		568	2.38	10.0	mg/L			CH6	08/26/22	1530	2309029	9
Titration and Ion Analy	ys1s											

Certificate of Analysis

Company : Address :	Georgia Power Company, Southern Company 241 Ralph McGill Blvd NE, Bin 10160		
Contact:	Atlanta, Georgia 30308 Joju Abraham		
Project:	Branch CCR Groundwater ComplianceAP - E and APE		
Client Sample ID:	BRGWC-38S	Project:	GPCC00101
Sample ID:	590857003	Client ID:	GPCC001

Parameter	Qualifier	Result		DL	RL	Units	PF	DF	Analyst Date	Time Batch	Method
Titration and Ion Analy	sis										
SM 2320B Total Alkali	nity "As Receiv	ved"									
Alkalinity, Total as CaCO3	U	ND		1.45	4.00	mg/L			HH2 09/04/22	1356 2309339	10
Bicarbonate alkalinity (CaCC		ND		1.45	4.00	mg/L					
Carbonate alkalinity (CaCO3) U	ND		1.45	4.00	mg/L					
The following Prep Me	thods were perfe	ormed:									
Method	Description			I	Analyst	Date		Time	Prep Batch		
SW846 3005A	ICP-MS 3005A	PREP		F	PC1	08/26/22		0900	2308382		
SW846 7470A Prep	EPA 7470A Mer	rcury Prep Li	quid	F	RM4	08/25/22		1147	2308553		
The following Analytic	cal Methods wer	re perform	ed:								
Method	Description					A	Analys	t Con	nments		
1	SM 4500-H B/SV	W846 9040C,	SM 2550B								
2	EPA 300.0										
3	EPA 300.0										
4	SW846 7470A										
5	SW846 3005A/60	020B									
6	SW846 3005A/60	020B									
7	SW846 3005A/60	020B									
8	SW846 3005A/60	020B									
9	SM 2540C										
10	SM 2320B										
Notes:											
Column headers are de DF: Dilution Factor DL: Detection Limit MDA: Minimum Detec MDC: Minimum Detec	ctable Activity	– L P R	c/LC: Critical I F: Prep Factor L: Reporting L QL: Sample Qu	imit	on Limit						

Certificate of Analysis

Company :	Georgia Power Company, Southern Company		
Address :	241 Ralph McGill Blvd NE, Bin 10160		
	Atlanta, Georgia 30308		
Contact:	Joju Abraham		
Project:	Branch CCR Groundwater ComplianceAP - E and APE		
Client Sample ID:	PZ-53D	Project:	GPCC00101
Sample ID:	590857004	Client ID:	GPCC001
Matrix:	WG		
Collect Date:	23-AUG-22 13:55		
Receive Date:	24-AUG-22		
Collector:	Client		

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analy	st Date	Time	Batch	Method
Field Data												
Client collected Field pH	I "As Receiv	ved"										
Field pH		7.18			SU			EOS1	08/23/22	1355	2308303	1
Ion Chromatography												
EPA 300.0 Anions Liqui	id "As Recei	ved"										
Chloride		4.94	0.0670	0.200	mg/L		1	JLD1	08/26/22	0025	2308691	2
Fluoride		0.164	0.0330	0.100	mg/L		1	3 <u>L</u> D 1	00/20/22	0025	2500071	-
Sulfate		348	5.32	16.0	mg/L		40	JLD1	08/26/22	1150	2308691	3
Mercury Analysis-CVA	А				0							
7470 Cold Vapor Mercu		As Received"										
Mercury	U U	ND	0.0000670	0.000200	mg/L	1.00	1	JP2	08/26/22	1150	2308555	4
Metals Analysis-ICP-MS		ND	0.0000070	0.000200	iiig/L	1.00	1	JI 2	00/20/22	1157	2500555	-
•												
SW846 3005A/6020B "A			0.00000	0.00500		1.00	1	D 4 T	00/02/02	0057	2200205	-
Arsenic	U	ND	0.00200	0.00500	mg/L	1.00	1	BAJ	09/03/22	0057	2308385	5
Barium		0.0547	0.000670	0.00400	mg/L	1.00	1					
Chromium	U	ND	0.00300	0.0100	mg/L	1.00	1					
Cobalt	U	ND	0.000300	0.00100	mg/L	1.00	1					
Iron		0.294	0.0330	0.100	mg/L	1.00 1.00	1					
Lead Lithium	U	ND 0.0171	0.000500	0.00200 0.0100	mg/L	1.00	1 1					
			0.00300		mg/L							
Potassium		6.44 ND	0.0800 0.00150	0.300	mg/L	1.00 1.00	1 1					
Selenium Thallium	U U	ND ND	0.00150	0.00500 0.00200	mg/L	1.00	1					
Antimony	U	ND ND	0.000800	0.00200	mg/L mg/L	1.00	1	BAJ	09/03/22	1511	2308385	6
Beryllium	U	ND ND	0.00100	0.000500	mg/L	1.00	1	БАЈ BAJ	09/03/22		2308385	6 7
Cadmium	U	ND	0.000200	0.000300	mg/L	1.00	1	DAJ	09/03/22	1242	2308383	/
Magnesium	U	19.3	0.000300	0.00100	mg/L	1.00	1					
Manganese		0.641	0.00100	0.00500	mg/L	1.00	1					
Molybdenum		0.00265	0.000200	0.00100	mg/L	1.00	1					
Boron		1.04	0.000200	0.300	mg/L	1.00	20	BAJ	09/03/22	1216	2308385	8
Calcium		76.4	1.60	4.00	mg/L mg/L	1.00	20	DIII	07/03/22	1210	2300303	0
Sodium		52.0	1.60	5.00	mg/L	1.00						
Solids Analysis		52.0	1.00	2.00	₆ , 12	1.00	20					
•	lide "As Dec	-: d!!										
SM2540C Dissolved Sol	lias "As Rec			10.0					00 10 1 10 -	4.500		-
Total Dissolved Solids		543	2.38	10.0	mg/L			CH6	08/26/22	1530	2309029	9
Titration and Ion Analys	sis											

Certificate of Analysis

Company : Address :	Georgia Power Company, Southern Company 241 Ralph McGill Blvd NE, Bin 10160		
Contact:	Atlanta, Georgia 30308 Joju Abraham		
Project:	Branch CCR Groundwater ComplianceAP - E and APE		
Client Sample ID:	PZ-53D	Project:	GPCC00101
Sample ID:	590857004	Client ID:	GPCC001

Parameter	Qualifier Result		DL	RL	Units	PF	DF	Analyst Date	Time Batch	Method
Titration and Ion Anal	ysis									
SM 2320B Total Alka	linity "As Received"									
Alkalinity, Total as CaCO3	82.8	3	1.45	4.00	mg/L			HH2 09/04/22	1358 2309339	10
Bicarbonate alkalinity (CaC		3	1.45	4.00	mg/L					
Carbonate alkalinity (CaCO	3) U NE)	1.45	4.00	mg/L					
The following Prep Me	ethods were performed	:								
Method	Description			Analyst	Date		Time	Prep Batch		
SW846 3005A	ICP-MS 3005A PREP			PC1	08/26/22		0900	2308382		
SW846 7470A Prep	EPA 7470A Mercury Pro	ep Liquid		RM4	08/25/22		1147	2308553		
The following Analyti	cal Methods were perf	ormed:								
Method	Description				A	Analys	st Con	nments		
1	SM 4500-H B/SW846 90	40C, SM 2550B								
2	EPA 300.0									
3	EPA 300.0									
4	SW846 7470A									
5	SW846 3005A/6020B									
6	SW846 3005A/6020B									
7	SW846 3005A/6020B									
8	SW846 3005A/6020B									
9	SM 2540C									
10	SM 2320B									
Notes:										
Column headers are de DF: Dilution Factor DL: Detection Limit MDA: Minimum Dete MDC: Minimum Dete	ectable Activity	Lc/LC: Critical Le PF: Prep Factor RL: Reporting Lin SQL: Sample Qua	nit	ion Limit						

Certificate of Analysis

Company : Address :	Georgia Power Company, Southern Company 241 Ralph McGill Blvd NE, Bin 10160		
Contact: Project:	Atlanta, Georgia 30308 Joju Abraham Branch CCR Groundwater ComplianceAP - E and APE		
Client Sample ID:	PZ-13S	Project:	GPCC00101
Sample ID:	590857005	Client ID:	GPCC001
Matrix:	WG		
Collect Date:	23-AUG-22 13:15		
Receive Date:	24-AUG-22		
Collector:	Client		

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analy	vst Date	Time Batch	Method
Field Data											
Client collected Field pl	H "As Receiv	red"									
Field pH		5.46			SU			EOS1	08/23/22	1315 2308303	1
Ion Chromatography											
EPA 300.0 Anions Liqu	uid "As Recei	ved"									
Chloride		4.20	0.0670	0.200	mg/L		1	JLD1	08/26/22	0055 2308691	2
Fluoride		0.128	0.0330	0.100	mg/L mg/L		1	JEDI	00/20/22	00000 2000000	-
Sulfate		51.0	1.33	4.00	mg/L		10	JLD1	08/26/22	1220 2308691	3
Mercury Analysis-CVA	A				U						
7470 Cold Vapor Mercu		As Received"									
Mercury	U U	ND	0.0000670	0.000200	mg/L	1.00	1	JP2	08/26/22	1201 2308555	4
Metals Analysis-ICP-M		TLD .	0.0000070	0.000200	ing/12	1.00	•	51 2	00/20/22	1201 2500555	
SW846 3005A/6020B "											
Arsenic	U U	ND	0.00200	0.00500	mg/L	1.00	1	BAJ	09/03/22	0100 2308385	5
Barium	U	ND 0.0562	0.00200	0.00300	mg/L	1.00	1	DAJ	09/03/22	0100 2308383	5
Chromium		0.0128	0.00300	0.00400	mg/L	1.00	1				
Cobalt	U	0.0128 ND	0.000300	0.00100	mg/L mg/L	1.00	1				
Iron	U	ND	0.0330	0.100	mg/L mg/L	1.00	1				
Lead	Ŭ	ND	0.000500	0.00200	mg/L	1.00	1				
Lithium	U	ND	0.00300	0.0100	mg/L	1.00	1				
Potassium		3.59	0.0800	0.300	mg/L	1.00	1				
Selenium	J	0.00157	0.00150	0.00500	mg/L	1.00	1				
Sodium		12.5	0.0800	0.250	mg/L	1.00	1				
Thallium	U	ND	0.000600	0.00200	mg/L	1.00	1				
Antimony	U	ND	0.00100	0.00300	mg/L	1.00	1	BAJ	09/03/22	1513 2308385	6
Beryllium	J	0.000331	0.000200	0.000500	mg/L	1.00	1	BAJ	09/03/22	1144 2308385	7
Boron	U	ND	0.00520	0.0150	mg/L	1.00	1				
Cadmium	U	ND	0.000300	0.00100	mg/L	1.00	1				
Calcium		9.69	0.0800	0.200	mg/L	1.00	1				
Magnesium		5.94	0.0100	0.0300	mg/L	1.00	1				
Manganese	J	0.00137	0.00100	0.00500	mg/L	1.00	1				
Molybdenum	U	ND	0.000200	0.00100	mg/L	1.00	1				
Solids Analysis											
SM2540C Dissolved So	olids "As Rec										
Total Dissolved Solids		130	2.38	10.0	mg/L			CH6	08/26/22	1530 2309029	8
Titration and Ion Analys	sis										

Certificate of Analysis

Company : Address :	Georgia Power Company, Southern Company 241 Ralph McGill Blvd NE, Bin 10160		
Contact: Project:	Atlanta, Georgia 30308 Joju Abraham Branch CCR Groundwater ComplianceAP - E and APE		
 Client Sample ID: Sample ID:	PZ-13S 590857005	Project: Client ID:	GPCC00101 GPCC001

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst Date	Time Batch	Method
Titration and Ion Ana	alysis									
SM 2320B Total Alk	alinity "As Rec	eived"								
Alkalinity, Total as CaCO	3	21.4	1.45	4.00	mg/L			HH2 09/04/22	1359 2309339	9
Bicarbonate alkalinity (Ca	CO3)	21.4	1.45	4.00	mg/L					
Carbonate alkalinity (CaC	O3) U	ND	1.45	4.00	mg/L					
The following Prep N	Aethods were p	erformed:								
Method	Description	n		Analyst	Date]	Гime	Prep Batch		
SW846 3005A	ICP-MS 3005	5A PREP		PC1	08/26/22	C)900	2308382		
SW846 7470A Prep	EPA 7470A 1	Mercury Prep Liquid		RM4	08/25/22	1	1147	2308553		
The following Analy	tical Methods v	were performed:								
Method	Description	1			A	Analyst	Com	nments		
1	SM 4500-H B	/SW846 9040C, SM 2550F	3							
2	EPA 300.0									
3	EPA 300.0									
4	SW846 7470A	A								
5	SW846 3005A	A/6020B								
6	SW846 3005A	A/6020B								
7	SW846 3005A	A/6020B								
8	SM 2540C									
9	SM 2320B									
Notes:										
Column headers are	defined as follo	ws:								
DF: Dilution Factor		Lc/LC: Ci	ritical Level							
DL: Detection Limit		PF: Prep l	Factor							

DL. Detection Limit	PF: Prep Factor
MDA: Minimum Detectable Activity	RL: Reporting Limit
MDC: Minimum Detectable Concentration	SQL: Sample Quantitation Limit

Certificate of Analysis

									Ref	bort Date:	Octo	ber 5,	2022
	Company : Address :		rgia Power Compa Ralph McGill Blv										
	Contact: Project:	Joju	nta, Georgia 3030 Abraham nch CCR Groundw		eAP - E and	APE							
	Client Sample ID:						oject:		GPC	200101			
	-		857006				ient ID		GPC				
	Sample ID:					CI	lent ID	•	GPCC	2001			
	Matrix:	WQ											
	Collect Date:	23- <i>I</i>	AUG-22 12:45										
	Receive Date:	24-4	AUG-22										
	Collector:	Clie	ent										
Parameter	Quali	fier	Result	DL	RL	Units	PF	DF	Analy	yst Date	Time	Batch	Method
Ion Chroma	atography												
	Anions Liquid "As	Recei	ved"										
Chloride	1		0.329	0.0670	0.200	mg/L		1	JLD1	08/26/22	0125 2	2308691	1
Fluoride		U	ND	0.0330	0.100	mg/L		1					
Sulfate		U	ND	0.133	0.400	mg/L		1					
Mercury A	nalysis-CVAA												
7470 Cold	Vapor Mercury, Liq	uid "A	As Received"										
Mercury	, , , , , , , , , , , , , , , , , , ,	U	ND	0.0000670	0.000200	mg/L	1.00	1	JP2	08/26/22	1206 2	2308555	2
•	lysis-ICP-MS					e							
)5A/6020B "As Rec	eived											
Arsenic	511/0020D 115 1000	U	ND	0.00200	0.00500	mg/L	1.00	1	BAJ	09/03/22	0104 2	2308385	3
Barium		U	ND	0.000670	0.00400	mg/L	1.00		2110	07/00/22	010. 2		5
Chromium		U	ND	0.00300	0.0100	mg/L	1.00	1					
Cobalt		U	ND	0.000300	0.00100	mg/L	1.00	1					
Iron		J	0.0334	0.0330	0.100	mg/L	1.00	1					
Lead		U	ND	0.000500	0.00200	mg/L	1.00						
Lithium		U	ND	0.00300	0.0100	mg/L	1.00						
Potassium		U	ND	0.0800	0.300	mg/L	1.00						
Selenium Sodium		U U	ND ND	0.00150 0.0800	0.00500 0.250	mg/L mg/L	1.00 1.00						
Thallium		U	ND	0.000600	0.00200	mg/L	1.00						
Antimony		U	ND	0.00100	0.00300	mg/L	1.00	1	BAJ	09/03/22	1515 2	2308385	4
Beryllium		U	ND	0.000200	0.000500	mg/L	1.00	1	BAJ	09/03/22	1220 2	2308385	5
Boron		U	ND	0.00520	0.0150	mg/L	1.00	1					
Cadmium		U	ND	0.000300	0.00100	mg/L	1.00						
Calcium		U	ND	0.0800	0.200	mg/L	1.00						
Magnesium		U	ND	0.0100	0.0300	mg/L	1.00						
Manganese Molybdenum		U U	ND ND	0.00100	0.00500 0.00100	mg/L mg/I	1.00 1.00						
Solids Ana	lycic	U	ΝD	0.000200	0.00100	mg/L	1.00	1					
	•	D											
	Dissolved Solids "A			2.22	10.0				CUT	00/05/02	1610 2	200050	
Total Dissolve		U	ND	2.38	10.0	mg/L			CH6	08/26/22	1619 2	2309058	6
	nd Ion Analysis	_											
	Total Alkalinity "As	s Rece											
Alkalinity, To			33.2	1.45	4.00	mg/L			HH2	09/04/22	1400 2	2309339	7
Bicarbonate a	lkalinity (CaCO3)		33.2	1.45	4.00	mg/L							

Certificate of Analysis

Report Date: October 3, 2022 Company : Georgia Power Company, Southern Company 241 Ralph McGill Blvd NE, Bin 10160 Address : Atlanta, Georgia 30308 Contact: Joju Abraham Project: Branch CCR Groundwater ComplianceAP - E and APE Client Sample ID: FB-04 Project: GPCC00101 Sample ID: 590857006 Client ID: GPCC001

Parameter	Qualifier Result	Γ	DL	RL	Units	PF	DF	Analyst Date	Time Batch	Method
Titration and Ion Analy	sis									
SM 2320B Total Alkali	nity "As Received"									
Carbonate alkalinity (CaCO3)) U ND	1.	45	4.00	mg/L					
The following Prep Me	thods were performed:									
Method	Description		Α	nalyst	Date		Time	Prep Batch		
SW846 3005A	ICP-MS 3005A PREP		PC	C1	08/26/22		0900	2308382		
SW846 7470A Prep	EPA 7470A Mercury Prep	o Liquid	RI	M4	08/25/22		1147	2308553		
The following Analytic	cal Methods were perfo	rmed:								
Method	Description				A	Analys	st Con	nments		
1	EPA 300.0									
2	SW846 7470A									
3	SW846 3005A/6020B									
4	SW846 3005A/6020B									
5	SW846 3005A/6020B									
6	SM 2540C									
7	SM 2320B									
Notes:										
Column headers are de DF: Dilution Factor DL: Detection Limit MDA: Minimum Detec MDC: Minimum Detec	table Activity	Lc/LC: Critical Lev PF: Prep Factor RL: Reporting Limi SQL: Sample Quan	it	n Limit						

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

QC Summary

Report Date: October 3, 2022

Page 1 of 10

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

Workorder: 591881

Contact:

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range Anlst	Date Time
Ion Chromatography Batch 2312366 ———									
QC1205182663 591867001 DUP Chloride		19.9		19.9	mg/L	0.191		(0%-20%) JLI	01 09/06/22 12:07
Fluoride		0.367		0.242	mg/L	41.2*^		(+/-0.100)	09/03/22 19:41
Sulfate	U	ND	U	ND	mg/L	N/A			
QC1205182662 LCS Chloride	5.00			4.95	mg/L		99	(90%-110%)	09/03/22 16:42
Fluoride	2.50			2.40	mg/L		95.9	(90%-110%)	
Sulfate	10.0			10.2	mg/L		102	(90%-110%)	
QC1205182661 MB Chloride			U	ND	mg/L				09/03/22 16:12
Fluoride			U	ND	mg/L				
Sulfate			U	ND	mg/L				
QC1205182664 591867001 PS Chloride	5.00	3.99		10.4	mg/L		129*	(90%-110%)	09/06/22 12:37
Fluoride	2.50	0.367		3.83	mg/L		139*	(90%-110%)	09/03/22 20:11
Sulfate	10.0 U	ND		15.5	mg/L		155*	(90%-110%)	

QC Summary

		$\underline{\mathbf{v}}\underline{\mathbf{v}}\underline{\mathbf{s}}$	ummar	<u>ry</u>						
Workorder: 591881									Page	e 2 of 10
Parmname	NOM	Sample Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Metals Analysis - ICPMSBatch2312380										
QC1205182699 LCS Antimony	0.0500		0.0483	mg/L		96.6	(80%-120%)) PRB	09/14/2	22 00:14
Arsenic	0.0500		0.0477	mg/L		95.3	(80%-120%))		
Barium	0.0500		0.0501	mg/L		100	(80%-120%))		
Beryllium	0.0500		0.0506	mg/L		101	(80%-120%))		
Boron	0.100		0.112	mg/L		112	(80%-120%))	09/14/2	22 17:27
Cadmium	0.0500		0.0490	mg/L		98	(80%-120%))	09/14/2	22 00:14
Calcium	2.00		1.95	mg/L		97.7	(80%-120%))		
Chromium	0.0500		0.0489	mg/L		97.8	(80%-120%))		
Cobalt	0.0500		0.0480	mg/L		96	(80%-120%))		
Iron	2.00		1.99	mg/L		99.4	(80%-120%))		
Lead	0.0500		0.0494	mg/L		98.7	(80%-120%))		
Lithium	0.0500		0.0471	mg/L		94.1	(80%-120%))		
Magnesium	2.00		2.13	mg/L		106	(80%-120%))		
Manganese	0.0500		0.0496	mg/L		99.2	(80%-120%))	09/14/2	22 17:27
Molybdenum	0.0500		0.0489	mg/L		97.7	(80%-120%))	09/13/2	22 22:07

Workorder: 591881		<u>v</u> cb	4111111a1	<u>J</u>						
										3 of 10
Parmname	NOM	Sample Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Metals Analysis - ICPMSBatch2312380										
Potassium	2.00		1.97	mg/L		98.6	(80%-120%)	PRB	09/14/2	22 00:14
				U			. ,			
Selenium	0.0500		0.0487	mg/L		97.3	(80%-120%)			
Scientum	0.0500		0.0407	iiig/L		71.5	(00/0-120/0)			
Sodium	2.00		2.04	m a /I		102	(200/ 1200/)			
Sodium	2.00		2.04	mg/L		102	(80%-120%)			
Thallium	0.0500		0.0467	mg/L		93.5	(80%-120%)			
QC1205182698 MB Antimony		U	ND	mg/L					09/14/2	22 00:10
				6						
Arsenic		U	ND	mg/L						
<i>i</i> i senie		C	ND	ing/L						
		T	ND	/T						
Barium		U	ND	mg/L						
Beryllium		U	ND	mg/L						
Boron		U	ND	mg/L					09/14/2	22 17:25
Cadmium		U	ND	mg/L					09/14/2	22 00:10
Calcium		U	ND	mg/L						
Chromium		U	ND	mg/L						
Cobalt		U	ND	mg/L						
				U						
Iron		U	ND	mg/L						
non				iiig/L						
T 1		ŦŢ								
Lead		U	ND	mg/L						

Workorder: 591881		-			.				Page	e 4 of 10
Parmname	NOM	Sample	Qual	QC	Units	RPD% REC	C% Range	e Anlst		Time
Metals Analysis - ICPMSBatch2312380										
Lithium			U	ND	mg/L			PRB	09/14/2	/22 00:10
Magnesium			U	ND	mg/L					
Manganese			U	ND	mg/L				09/14/2	/22 17:25
Molybdenum			J	0.000271	mg/L				09/13/2	/22 22:04
Potassium			U	ND	mg/L				09/14/2	/22 00:10
Selenium			U	ND	mg/L					
Sodium			U	ND	mg/L					
Thallium			U	ND	mg/L					
QC1205182700 591881001 MS Antimony	0.0500 U	U ND		0.0509	mg/L	10	1 (75%-125%	%)	09/14/2	/22 00:21
Arsenic	0.0500 U	U ND		0.0496	mg/L	96.2	2 (75%-125%	%)		
Barium	0.0500	0.0444		0.0934	mg/L	97.9	9 (75%-125%	%)		
Beryllium	0.0500 U	U ND		0.0516	mg/L	103	3 (75%-125%	%)		
Boron	0.100	1.20		1.24	mg/L	N/#	A (75%-125%	%)	09/14/2	22 17:31
Cadmium	0.0500 U	U ND		0.0496	mg/L	99.2	2 (75%-125%	%)	09/14/2	/22 00:21
Calcium	2.00	42.6		43.0	mg/L	N/A	A (75%-125%	%)		

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

Workordon 501991									
Workorder: 591881									Page 5 of 10
Parmname Metals Analysis - ICPMS Batch 2312380	NON	м	Sample Qual	QC	Units	RPD%	REC%	6 Range Anlst	Date Time
Chromium	0.0500	U	ND	0.0498	mg/L		97.6	(75%-125%) PRI	B 09/14/22 00:21
Cobalt	0.0500		0.00560	0.0534	mg/L		95.6	(75%-125%)	
Iron	2.00		1.48	3.34	mg/L		93.1	(75%-125%)	
Lead	0.0500	U	ND	0.0492	mg/L		98	(75%-125%)	
Lithium	0.0500	J	0.00615	0.0535	mg/L		94.6	(75%-125%)	
Magnesium	2.00		15.5	16.8	mg/L		N/A	(75%-125%)	
Manganese	0.0500		1.06	1.10	mg/L		N/A	(75%-125%)	09/14/22 17:31
Molybdenum	0.0500		0.00142	0.0528	mg/L		103	(75%-125%)	09/13/22 22:14
Potassium	2.00		5.62	7.34	mg/L		86.3	(75%-125%)	09/14/22 00:21
Selenium	0.0500		0.00625	0.0546	mg/L		96.8	(75%-125%)	
Sodium	2.00		25.8	26.6	mg/L		N/A	(75%-125%)	
Thallium	0.0500	U	ND	0.0475	mg/L		94.8	(75%-125%)	
QC1205182701 591881001 MSD Antimony	0.0500	U	ND	0.0507	mg/L	0.395	101	(0%-20%)	09/14/22 00:24
Arsenic	0.0500	U	ND	0.0499	mg/L	0.49	96.7	(0%-20%)	
Barium	0.0500		0.0444	0.0937	mg/L	0.405	98.6	(0%-20%)	

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

Workorder: 591881								
								Page 6 of 10
Parmname Metals Analysis - ICPMS Batch 2312380	NOM	Sample Qual	QC	Units	RPD%	REC%	Range Anlst	Date Time
Beryllium	0.0500 U	ND	0.0501	mg/L	3.13	99.9	(0%-20%) PRB	6 09/14/22 00:24
Boron	0.100	1.20	1.27	mg/L	2.04	N/A	(0%-20%)	09/14/22 17:33
Cadmium	0.0500 U	ND	0.0490	mg/L	1.29	97.9	(0%-20%)	09/14/22 00:24
Calcium	2.00	42.6	42.9	mg/L	0.254	N/A	(0%-20%)	
Chromium	0.0500 U	ND	0.0494	mg/L	0.805	96.8	(0%-20%)	
Cobalt	0.0500	0.00560	0.0545	mg/L	2.08	97.8	(0%-20%)	
Iron	2.00	1.48	3.45	mg/L	3.27	98.6	(0%-20%)	
Lead	0.0500 U	ND	0.0495	mg/L	0.699	98.7	(0%-20%)	
Lithium	0.0500 J	0.00615	0.0534	mg/L	0.187	94.4	(0%-20%)	
Magnesium	2.00	15.5	16.6	mg/L	1.27	N/A	(0%-20%)	
Manganese	0.0500	1.06	1.08	mg/L	1.28	N/A	(0%-20%)	09/14/22 17:33
Molybdenum	0.0500	0.00142	0.0541	mg/L	2.51	105	(0%-20%)	09/13/22 22:18
Potassium	2.00	5.62	7.39	mg/L	0.567	88.4	(0%-20%)	09/14/22 00:24
Selenium	0.0500	0.00625	0.0553	mg/L	1.29	98.2	(0%-20%)	
Sodium	2.00	25.8	26.7	mg/L	0.195	N/A	(0%-20%)	

		<u>V</u> C D	Juiiiiai	<u>.y</u>				
Workorder: 591881								Page 7 of 10
Parmname	NOM	Sample Qual	QC	Units	RPD%	REC%	Range Anlst	Date Time
Metals Analysis - ICPMSBatch2312380								
Thallium	0.0500 U	ND	0.0475	mg/L	0.137	94.7	(0%-20%) PRB	09/14/22 00:24
QC1205182702 591881001 SDILT								
Antimony	U	ND U	ND	ug/L	N/A		(0%-20%)	09/14/22 00:32
Arsenic	U	ND U	ND	ug/L	N/A		(0%-20%)	
Barium		44.4	8.34	ug/L	6.1		(0%-20%)	
Beryllium	U	ND U	ND	ug/L	N/A		(0%-20%)	
Boron		120	26.6	ug/L	11.2		(0%-20%)	09/14/22 17:37
Cadmium	U	ND U	ND	ug/L	N/A		(0%-20%)	09/14/22 00:32
Calcium		42600	8140	ug/L	4.58		(0%-20%)	
Chromium	U	ND U	ND	ug/L	N/A		(0%-20%)	
Cobalt		5.60	1.10	ug/L	1.7		(0%-20%)	
Iron		1480	290	ug/L	1.92		(0%-20%)	
Lead	U	ND U	ND	ug/L	N/A		(0%-20%)	
Lithium	J	6.15 U	ND	ug/L	N/A		(0%-20%)	
Magnesium		15500	2970	ug/L	4.32		(0%-20%)	
Manganese		106	20.6	ug/L	3.13		(0%-20%)	09/14/22 17:37

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

					2	200	/ uninnu	<u>· y</u>						I
Workorder:	591881												Page	8 of 10
Parmname			NOM	Л	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Metals Analysis Batch	- ICPMS 2312380													
Molybdenum					1.42	J	0.372	ug/L	31.3		(0%-20%)	PRB	09/13/2	22 22:25
Potassium					5620		1060	ug/L	5.59		(0%-20%)		09/14/2	22 00:32
Selenium					6.25	U	ND	ug/L	N/A		(0%-20%)			
Sodium					25800		4990	ug/L	3.42		(0%-20%)			
Thallium				U	ND	U	ND	ug/L	N/A		(0%-20%)			
Metals Analysis- Batch	-Mercury 2312733													
QC12051835 Mercury	555 591729001	DUP		U	ND	U	ND	mg/L	N/A			JP2	09/07/2	22 10:51
QC12051835 Mercury	554 LCS		0.00200				0.00203	mg/L		102	(80%-120%)		09/07/2	22 10:42
QC12051835 Mercury	553 MB					U	ND	mg/L					09/07/2	22 10:40
QC12051835 Mercury	556 591729001	MS	0.00200	U	ND		0.00203	mg/L		102	(75%-125%)		09/07/2	22 10:52
QC12051835 Mercury	557 591729001	SDILT		U	ND	U	ND	ug/L	N/A		(0%-10%)		09/07/2	22 10:54
Solids Analysis Batch	2313724													
QC12051854 Total Dissolved	482 592010003 d Solids	DUP			158		155	mg/L	1.92		(0%-5%)	CH6	09/08/2	22 14:57

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

QC Summary

Workorder: 591881				_					Page 9 of 10
Parmname	NOM	Sample Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Solids Analysis Batch 2313724									
QC1205185480 LCS									
Total Dissolved Solids	300		301	mg/L		100	(95%-105%)	CH6	09/08/22 14:57
QC1205185479 MB Total Dissolved Solids		U	ND						00/09/22 14-57
Total Dissolved Solids		U	ND	mg/L					09/08/22 14:57
Titration and Ion AnalysisBatch2312490									
QC1205182984 591877005 DUP Alkalinity, Total as CaCO3		282	284	mg/L	0.707		(0%-20%)	нн2	09/08/22 11:20
Aikaninty, 10tar as CaCOS		202	204	ing/L	0.707		(070-2070)	11112	09/00/22 11.20
Bicarbonate alkalinity (CaCO3)		282	284	mg/L	0.707		(0%-20%)		
				-	27/1				
Carbonate alkalinity (CaCO3)	U	ND U	ND	mg/L	N/A				
QC1205182983 LCS				_					
Alkalinity, Total as CaCO3	100		104	mg/L		104	(90%-110%)		09/08/22 11:15
QC1205182985 591877005 MS									
Alkalinity, Total as CaCO3	100	282	383	mg/L		101	(80%-120%)		09/08/22 11:25

Notes:

The Qualifiers in this report are defined as follows:

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

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

QC Summary

			-			A /						
Worko	rder: 591881										Page	10 of 10
Parmna	me	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
N1	See case narrative											
ND	Analyte concentration is no	t detected above the	e detection lin	nit								
NJ	Consult Case Narrative, Da	ta Summary packag	ge, or Project	Manager o	concerning	this qualifi	er					
Q	One or more quality control	l criteria have not b	een met. Refe	r to the ap	plicable na	rrative or I	DER.					
R	Per section 9.3.4.1 of Meth purposes.	od 1664 Revision I	3, due to matr	ix spike re	ecovery iss	ues, this res	sult may not	be reported of	or used for	regulatory	complia	ance
R	Sample results are rejected											
U	Analyte was analyzed for, b	out not detected abo	ve the MDL,	MDA, MI	DC or LOD							
Х	Consult Case Narrative, Da	ta Summary packag	ge, or Project	Manager o	concerning	this qualifi	er					
Y	Other specific qualifiers we	re required to prope	erly define the	e results. C	Consult case	e narrative.						
Ζ	Paint Filter TestParticulat	es passed through th	ne filter, howe	ever no fre	e liquids w	ere observ	ed.					
^	RPD of sample and duplica	te evaluated using +	-/-RL. Conce	entrations	are <5X the	RL. Qual	ifier Not Ap	plicable for 1	Radiochem	istry.		
d	5-day BODThe 2:1 deplet	tion requirement wa	s not met for	this samp	le							
e	5-day BODTest replicates reporting purposes	s show more than 30)% difference	between	high and lo	w values. T	The data is qu	ualified per t	he method	and can be	e used fo	r
h	Preparation or preservation	holding time was e	xceeded									
^ The R five tim evaluate	dicates that spike recovery lin Relative Percent Difference (R les (5X) the contract required e the DUP result.	RPD) obtained from detection limit (RL	the sample do	uplicate (nere the du	DUP) is ev	aluated aga	inst the acce	ptance criter	ria when th	e sample is	s greater	than

* 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.

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

QC Summary

Report Date: October 3, 2022

Page 1 of 10

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

Workorder: 591351

Contact:

Parmname	NOM	Sample Qual	QC	Units	RPD%	REC%	Range Anlst	Date Time
Ion Chromatography Batch 2310523 —								
QC1205179260 591351001 DUP Chloride		5.00	4.97	mg/L	0.702		(0%-20%) HXC1	08/30/22 20:15
Fluoride		0.274	0.272	mg/L	0.88 ^		(+/-0.100)	
Sulfate		157	158	mg/L	0.766		(0%-20%)	08/30/22 21:44
QC1205179259 LCS Chloride	5.00		4.72	mg/L		94.4	(90%-110%)	08/30/22 19:45
Fluoride	2.50		2.51	mg/L		100	(90%-110%)	
Sulfate	10.0		9.64	mg/L		96.4	(90%-110%)	
QC1205179258 MB Chloride		U	ND	mg/L				08/30/22 19:15
Fluoride		U	ND	mg/L				
Sulfate		U	ND	mg/L				
QC1205179261 591351001 PS Chloride	5.00	5.00	10.4	mg/L		107	(90%-110%)	08/30/22 20:45
Fluoride	2.50	0.274	2.66	mg/L		95.4	(90%-110%)	
Sulfate	10.0	7.86	18.2	mg/L		103	(90%-110%)	08/30/22 22:14

		<u>QC Sui</u>	mmai	<u>.y</u>						I
Workorder: 591351										2 of 10
Parmname	NOM	Sample Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Metals Analysis - ICPMSBatch2310153										
QC1205178580 LCS Antimony	0.0500		0.0540	mg/L		108	(80%-120%)	BAJ	09/07/2	.2 18:17
Arsenic	0.0500		0.0568	mg/L		114	(80%-120%)			
Barium	0.0500		0.0523	mg/L		105	(80%-120%)			
Beryllium	0.0500		0.0563	mg/L		113	(80%-120%)		09/07/2	22 01:53
Boron	0.100		0.108	mg/L		108	(80%-120%)		09/07/2	2 18:17
Cadmium	0.0500		0.0568	mg/L		114	(80%-120%)			
Calcium	2.00		2.13	mg/L		106	(80%-120%)			
Chromium	0.0500		0.0512	mg/L		102	(80%-120%)			
Cobalt	0.0500		0.0513	mg/L		103	(80%-120%)			
Iron	2.00		2.04	mg/L		102	(80%-120%)			
Lead	0.0500		0.0528	mg/L		106	(80%-120%)			
Lithium	0.0500		0.0505	mg/L		101	(80%-120%)			
Magnesium	2.00		2.14	mg/L		107	(80%-120%)			
Manganese	0.0500		0.0508	mg/L		102	(80%-120%)			
Molybdenum	0.0500		0.0534	mg/L		107	(80%-120%)			

Workorder: 591351		<u>v</u> ent	#11111141	<u>.</u>					
		~							Page 3 of 10
Parmname Metals Analysis - ICPMS	NOM	Sample Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Batch 2310153									
Potassium	2.00		2.10	mg/L		105	(80%-120%)	BAJ	09/07/22 18:17
Selenium	0.0500		0.0499	mg/L		99.8	(80%-120%)		09/07/22 01:53
Sodium	2.00		2.08	mg/L		104	(80%-120%)		09/07/22 18:17
Thallium	0.0500		0.0505	mg/L		101	(80%-120%)		
QC1205178579 MB Antimony		U	ND	mg/L					09/07/22 18:14
Arsenic		U	ND	mg/L					
Barium		U	ND	mg/L					
Beryllium		U	ND	mg/L					09/07/22 01:50
Boron		U	ND	mg/L					09/07/22 18:14
Cadmium		U	ND	mg/L					
Calcium		U	ND	mg/L					
Chromium		U	ND	mg/L					
Cobalt		U	ND	mg/L					
Iron		U	ND	mg/L					
Lead		U	ND	mg/L					

Workorder: 591351		-	2		<u> </u>					Page	e 4 of 10
Parmname	NOM	A Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst		Time
Metals Analysis - ICPMSBatch2310153											
Lithium			U	ND	mg/L				BAJ	09/07/2	22 18:14
Magnesium			U	ND	mg/L						
Manganese			U	ND	mg/L						
Molybdenum			U	ND	mg/L						
Potassium			U	ND	mg/L						
Selenium			U	ND	mg/L					09/07/2	/22 01:50
Sodium			U	ND	mg/L					09/07/.	/22 18:14
Thallium			U	ND	mg/L						
QC1205178581 591351001 MS Antimony	0.0500	U ND		0.0519	mg/L		103	(75%-125%	,)	09/07 /.	/22 18:23
Arsenic	0.0500	U ND		0.0532	mg/L		104	(75%-125%)		
Barium	0.0500	0.0512		0.104	mg/L		106	(75%-125%)		
Beryllium	0.0500	U ND		0.0560	mg/L		112	(75%-125%)	09/07/2	/22 02:00
Boron	0.100	0.0273		0.134	mg/L		107	(75%-125%)	09/07/.	22 18:23
Cadmium	0.0500	U ND		0.0522	mg/L		104	(75%-125%)		
Calcium	2.00	43.6		47.5	mg/L		N/A	(75%-125%	,)		

Workondon 501251			<u><u> </u></u>		<u></u>				
Workorder: 591351									Page 5 of 10
Parmname Metals Analysis - ICPMS Batch 2310153	NON	<u>/</u>	Sample Qual	QC	Units	RPD%	REC%	Range Anlst	Date Time
Chromium	0.0500		0.0127	0.0655	mg/L		106	(75%-125%) BA	J 09/07/22 18:23
Cobalt	0.0500	U	ND	0.0502	mg/L		100	(75%-125%)	
Iron	2.00	U	ND	2.08	mg/L		103	(75%-125%)	
Lead	0.0500	U	ND	0.0511	mg/L		102	(75%-125%)	
Lithium	0.0500	U	ND	0.0528	mg/L		103	(75%-125%)	
Magnesium	2.00		25.7	28.9	mg/L		N/A	(75%-125%)	
Manganese	0.0500	U	ND	0.0507	mg/L		100	(75%-125%)	
Molybdenum	0.0500	U	ND	0.0559	mg/L		112	(75%-125%)	
Potassium	2.00		1.29	3.38	mg/L		105	(75%-125%)	
Selenium	0.0500	J	0.00208	0.0515	mg/L		98.9	(75%-125%)	09/07/22 02:00
Sodium	2.00		24.6	27.8	mg/L		N/A	(75%-125%)	09/07/22 18:23
Thallium	0.0500	U	ND	0.0502	mg/L		100	(75%-125%)	
QC1205178582 591351001 MSD Antimony	0.0500	U	ND	0.0533	mg/L	2.66	106	(0%-20%)	09/07/22 18:26
Arsenic	0.0500	U	ND	0.0555	mg/L	4.3	109	(0%-20%)	
Barium	0.0500		0.0512	0.105	mg/L	0.178	107	(0%-20%)	

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

Workorder: 591351		_						Page 6 of 10
Parmname	NOM	I Sample	Qual QC	Units	RPD%	REC%	Range Anlst	Date Time
Metals Analysis - ICPMS Batch 2310153								
Beryllium	0.0500	U ND	0.0546	mg/L	2.52	109	(0%-20%) BAJ	J 09/07/22 02:04
Boron	0.100	0.0273	0.134	mg/L	0.174	107	(0%-20%)	09/07/22 18:26
Cadmium	0.0500	U ND	0.0544	mg/L	4.28	109	(0%-20%)	
Calcium	2.00	43.6	45.7	mg/L	3.85	N/A	(0%-20%)	
Chromium	0.0500	0.0127	0.0636	mg/L	2.93	102	(0%-20%)	
Cobalt	0.0500	U ND	0.0494	mg/L	1.65	98.7	(0%-20%)	
Iron	2.00	U ND	2.06	mg/L	1.04	102	(0%-20%)	
Lead	0.0500	U ND	0.0512	mg/L	0.258	102	(0%-20%)	
Lithium	0.0500	U ND	0.0515	mg/L	2.49	101	(0%-20%)	
Magnesium	2.00	25.7	27.9	mg/L	3.37	N/A	(0%-20%)	
Manganese	0.0500	U ND	0.0506	mg/L	0.0711	100	(0%-20%)	
Molybdenum	0.0500	U ND	0.0558	mg/L	0.308	111	(0%-20%)	
Potassium	2.00	1.29	3.38	mg/L	0.0861	105	(0%-20%)	
Selenium	0.0500	J 0.00208	0.0521	mg/L	1.07	100	(0%-20%)	09/07/22 02:04
Sodium	2.00	24.6	27.1	mg/L	2.51	N/A	(0%-20%)	09/07/22 18:26

Washandan 504054		×		ummu	<u></u>				
Workorder: 591351									Page 7 of 10
<u>Parmname</u> Metals Analysis - ICPMS	NOM	Sample (<u>Jual</u>	QC	Units	RPD%	REC%	Range Anlst	Date Time
Batch 2310153									
Thallium	0.0500 U	ND		0.0503	mg/L	0.279	100	(0%-20%) BAJ	09/07/22 18:26
0.01005179592 501251001 8DH T									
QC1205178583 591351001 SDILT Antimony	U	ND	U	ND	ug/L	N/A		(0%-20%)	09/07/22 18:54
Arsenic	U	ND	U	ND	ug/L	N/A		(0%-20%)	
Barium		51.2		9.71	ug/L	5.13		(0%-20%)	
Beryllium	U	ND	U	ND	ug/L	N/A		(0%-20%)	09/07/22 02:11
Boron		27.3	J	5.37	ug/L	1.81		(0%-20%)	09/07/22 18:54
Cadmium	U	ND	U	ND	ug/L	N/A		(0%-20%)	
Calcium		43600		8480	ug/L	2.85		(0%-20%)	
Chromium		12.7	U	ND	ug/L	N/A		(0%-20%)	
					_				
Cobalt	U	ND	U	ND	ug/L	N/A		(0%-20%)	
-	T	ND		ND		NT / A		(00/ 200/)	
Iron	U	ND	U	ND	ug/L	N/A		(0%-20%)	
Lead	U	ND	U	ND	na/I	N/A		(0%-20%)	
Lead	U	ND	0	ND	ug/L	IN/A		(0%-20%)	
Lithium	U	ND	U	ND	ug/L	N/A		(0%-20%)	
Liulium	č		C		ug/ 12	11/21		(070-2070)	
Magnesium		25700		4930	ug/L	4.31		(0%-20%)	
Mughosium		20,00		1,200	~ <u>~</u> ~	1.01		(0,0 20,0)	
Manganese	U	ND	U	ND	ug/L	N/A		(0%-20%)	
Muligunese	-				-B -	1		(0,0 20,0)	

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

					2	200	Juiiiiiui	<u>· .</u>					
Workorder:	591351												Page 8 of 10
Parmname			NOM	Л	Sample	Qual	QC	Units	RPD%	REC%	6 Range	Anlst	Date Time
Metals Analysis Batch	- ICPMS 2310153												
Molybdenum				U	ND	U	ND	ug/L	N/A		(0%-20%)	BAJ	09/07/22 18:54
Potassium					1290	J	250	ug/L	2.87		(0%-20%)		
Selenium				J	2.08	U	ND	ug/L	N/A		(0%-20%)		09/07/22 02:11
Sodium					24600		4790	ug/L	2.6		(0%-20%)		09/07/22 18:54
Thallium				U	ND	U	ND	ug/L	N/A		(0%-20%)		
Metals Analysis- Batch	- Mercury 2310248												
QC12051787 Mercury	784 590142001	DUP		U	ND	U	ND	mg/L	N/A			JP2	08/31/22 10:55
QC12051787 Mercury	783 LCS		0.00200				0.00200	mg/L		99.9	(80%-120%)		08/31/22 10:52
QC12051787 Mercury	782 MB					U	ND	mg/L					08/31/22 10:47
QC12051787 Mercury	785 590142001	MS	0.00200	U	ND		0.00195	mg/L		96.6	(75%-125%)		08/31/22 10:57
QC12051787 Mercury	786 590142001	SDILT		U	ND	U	ND	ug/L	N/A		(0%-10%)		08/31/22 10:59
Solids Analysis Batch	2310249												
QC12051787 Total Dissolved	791 591355007 d Solids	DUP			1990		2040	mg/L	2.54		(0%-5%)	CH6	08/30/22 14:49

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

QC Summary

Workorder: 591351					_					Page 9	of 10
Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date T	ime
Solids AnalysisBatch2310249											
QC1205178789 LCS											
Total Dissolved Solids	300			302	mg/L		101	(95%-105%)	CH6	08/30/22	14:49
QC1205178788 MB											
Total Dissolved Solids			U	ND	mg/L					08/30/22	14:49
Titration and Ion Analysis Batch 2310459											
QC1205179132 591351001 DUP Alkalinity, Total as CaCO3		74.0		74.8	mg/L	1.08		(0%-20%)	HH2	09/07/22	13:27
Bicarbonate alkalinity (CaCO3)		74.0		74.8	mg/L	1.08		(0%-20%)	1		
Carbonate alkalinity (CaCO3)	U	ND	U	ND	mg/L	N/A					
QC1205179131 LCS Alkalinity, Total as CaCO3	100			103	mg/L		103	(90%-110%)	I	09/07/22	13:17
QC1205179133 591351001 MS Alkalinity, Total as CaCO3	100	74.0		175	mg/L		101	(80%-120%)	I	09/07/22	13:29

Notes:

The Qualifiers in this report are defined as follows:

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

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

QC Summary

	•		-									
Workor	rder: 591351										Page	10 of 10
Parmna	me	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
N1	See case narrative											
ND	Analyte concentration is not	t detected above the	detection lin	nit								
NJ	Consult Case Narrative, Dat	ta Summary packag	e, or Project	Manager	concerning t	his qualifi	er					
Q	One or more quality control	criteria have not be	en met. Refe	r to the aj	pplicable nai	rative or I	DER.					
R	Per section 9.3.4.1 of Meth purposes.	od 1664 Revision B	, due to matr	ix spike r	ecovery issu	es, this res	sult may not	be reported o	or used for	regulatory	complia	ince
R	Sample results are rejected											
U	Analyte was analyzed for, but not detected above the MDL, MDA, MDC or LOD.											
Х	Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier											
Y	Other specific qualifiers were required to properly define the results. Consult case narrative.											
Ζ	Paint Filter TestParticulates passed through the filter, however no free liquids were observed.											
^	RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL. Qualifier Not Applicable for Radiochemistry.											
d	5-day BODThe 2:1 deplet	ion requirement was	s not met for	this samp	ole							
e	5-day BODTest replicates reporting purposes	show more than 30	% difference	between	high and lov	v values. T	The data is qu	alified per tl	he method	and can be	used for	r
h	Preparation or preservation	holding time was ex	ceeded									
^ The R five tim	licates that spike recovery lim elative Percent Difference (R es (5X) the contract required e the DUP result.	PD) obtained from	the sample du). In cases wh	uplicate ((DUP) is eva	luated aga	inst the acce	ptance criter	ia when the	e sample is	s greater	than

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

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

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

QC Summary

Report Date: October 3, 2022

Page 1 of 11

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

Workorder: 590857

Contact:

Parmname	NOM	Sample Q	ual QC	Units	RPD%	REC%	Range A	Anlst	Date Time
Ion ChromatographyBatch2308691									
QC1205175345 590838001 DUP Chloride		2.18	2.13	mg/L	2.51		(0%-20%)	JLD1	08/25/22 13:28
Fluoride	U	ND	U ND	mg/L	N/A				
Sulfate		0.452	0.418	mg/L	7.86 ^		(+/-0.400)		
QC1205175347 590857001 DUP Chloride		30.3	30.4	mg/L	0.158 ^		(+/-8.00)		08/26/22 03:54
Fluoride		0.187	0.160	mg/L	15.7 ^		(+/-0.100)		08/25/22 21:26
Sulfate		385	387	mg/L	0.559		(0%-20%)		08/26/22 03:54
QC1205175344 LCS Chloride	5.00		4.72	mg/L		94.3	(90%-110%)		08/25/22 12:28
Fluoride	2.50		2.30	mg/L		91.9	(90%-110%)		
Sulfate	10.0		9.76	mg/L		97.6	(90%-110%)		
QC1205175343 MB Chloride			U ND	mg/L					08/25/22 11:59
Fluoride			U ND	mg/L					
Sulfate			U ND	mg/L					
QC1205175346 590838001 PS Chloride	5.00	2.18	7.68	mg/L		110	(90%-110%)		08/25/22 13:58

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

		<u> v</u> v v							
Workorder: 590857	NOM	Sample Oval	00	Units	RPD%	REC%	Dongo A	nlst	Page 2 of 11
Parmname Ion Chromatography	NOM	Sample Qual	QC	Units	KPD%	KEU %	Range A	nist	Date Time
Batch 2308691									
Fluoride	2.50 U	ND	2.65	mg/L		106	(90%-110%)	JLD1	08/25/22 13:58
Sulfate	10.0	0.452	11.6	mg/L		111*	(90%-110%)		
QC1205175348 590857001 PS	5.00	0.750	5 7 4	Л		00.7	(000/ 1100/)		00/26/22 04 24
Chloride	5.00	0.759	5.74	mg/L		99.7	(90%-110%)		08/26/22 04:24
Fluoride	2.50	0.187	2.68	m a /I		00.0	(000/ 1100/)		08/25/22 21.56
Fluoride	2.50	0.187	2.08	mg/L		99.9	(90%-110%)		08/25/22 21:56
Sulfate	10.0	9.63	20.5	mg/I		109	(90%-110%)		08/26/22 04:24
Sunate	10.0	9.05	20.5	mg/L		109	(90%-110%)		08/20/22 04.24
Metals Analysis - ICPMS									
Batch 2308385 —									
QC1205174766 LCS			o o (o -	-			(000) 10 00()		
Antimony	0.0500		0.0497	mg/L		99.4	(80%-120%)	BAJ	09/03/22 14:29
	0.0500		0.0512	Л		102	(000/ 1000/)		00/02/22 22 20
Arsenic	0.0500		0.0512	mg/L		102	(80%-120%)		09/02/22 23:30
Barium	0.0500		0.0504	ma/I		101	(80%-120%)		
Barluin	0.0300		0.0304	mg/L		101	(80%-120%)		
Beryllium	0.0500		0.0588	mg/L		118	(80%-120%)		09/03/22 10:40
Berymum	0.0300		0.0388	IIIg/L		110	(80%-120%)		09/03/22 10.40
Boron	0.100		0.114	mg/L		114	(80%-120%)		
Doron	0.100		0.114	iiig/L		114	(00/0-120/0)		
Cadmium	0.0500		0.0519	mg/L		104	(80%-120%)		
Cudinium	0.0200		0.0017	1116/12		101	(00/0 120/0)		
Calcium	2.00		2.18	mg/L		109	(80%-120%)		
Cultum	2.00			<u>6</u> , 2		10)	(00/0 120/0)		
Chromium	0.0500		0.0510	mg/L		102	(80%-120%)		09/02/22 23:30
	0.0200		0.0010	<u>6</u> , 12		102	(30/0 120/0)		<i>57,0<u>2</u>,<u>22</u>,20,30</i>
Cobalt	0.0500		0.0497	mg/L		99.4	(80%-120%)		
Cobait	0.0500		0.0477	mg/L		<u>,,,</u>	(00/0-12070)		

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

Workorder: 590857		$\underline{\mathbf{v}}$	ummu					D 2 6 11
Parmname	NOM	Sample Qual	QC	Units	RPD%	REC%	Range Anlst	Page 3 of 11 Date Time
Metals Analysis - ICPMS Batch 2308385	11014	Sampie Quai	ŲU		<u>NFD /0</u>	<u>NEC /0</u>	Källgt Allist	Date Thire
Iron	2.00		2.10	mg/L		105	(80%-120%) BAJ	J 09/02/22 23:30
Lead	0.0500		0.0527	mg/L		105	(80%-120%)	
Lithium	0.0500		0.0518	mg/L		104	(80%-120%)	
Magnesium	2.00		2.17	mg/L		109	(80%-120%)	09/03/22 10:40
Manganese	0.0500		0.0512	mg/L		102	(80%-120%)	
Molybdenum	0.0500		0.0521	mg/L		104	(80%-120%)	
Potassium	2.00		1.99	mg/L		99.7	(80%-120%)	09/02/22 23:30
Selenium	0.0500		0.0494	mg/L		98.9	(80%-120%)	
Sodium	2.00		2.22	mg/L		111	(80%-120%)	
Thallium	0.0500		0.0460	mg/L		92.1	(80%-120%)	
QC1205174765 MB Antimony		U	ND	mg/L				09/03/22 14:27
Arsenic		U	ND	mg/L				09/02/22 23:27
Barium		U	ND	mg/L				
Beryllium		U	ND	mg/L				09/03/22 10:37
Boron		U	ND	mg/L				

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

Workorder:	590857			-			<u>.</u>					Page	e 4 of 11
Parmname		NO	M	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst		Time
Metals Analysis - Batch 2	ICPMS 2308385												
Cadmium					U	ND	mg/L				BAJ	09/03/2	22 10:37
Calcium					U	ND	mg/L						
Chromium					U	ND	mg/L					09/02/2	22 23:27
Cobalt					U	ND	mg/L						
Iron					U	ND	mg/L						
Lead					U	ND	mg/L						
Lithium					U	ND	mg/L						
Magnesium					U	ND	mg/L					09/03/2	22 10:37
Manganese					U	ND	mg/L						
Molybdenum					U	ND	mg/L						
Potassium					U	ND	mg/L					09/02/2	22 23:27
Selenium					U	ND	mg/L						
Sodium					U	ND	mg/L						
Thallium					U	ND	mg/L						
QC120517476 Antimony	67 590838001	MS 0.0500	U	ND	J	0.0501	mg/L		99.4	(75%-125%))	09/03/.	22 14:32

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

		-	2000				
Workorder: 590857 Parmname	NOM	I Sample	Qual QC	Units	RPD% REC%	Range Anlst	Page 5 of 11 Date Time
Metals Analysis - ICPMS Batch 2308385	100	Bampic	Quai QC	Cints	KID/0 KEC/0	Kange Anise	
Arsenic	0.0500	U ND	0.0500	mg/L	98	(75%-125%) BA	AJ 09/02/22 23:37
Barium	0.0500	0.0120	0.0615	mg/L	99.1	(75%-125%)	
Beryllium	0.0500	U ND	0.0613	mg/L	123	(75%-125%)	09/03/22 10:46
Boron	0.100	J 0.00532	0.120	mg/L	115	(75%-125%)	
Cadmium	0.0500	U ND	0.0529	mg/L	106	(75%-125%)	
Calcium	2.00	4.65	7.04	mg/L	120	(75%-125%)	
Chromium	0.0500	J 0.00908	0.0603	mg/L	102	(75%-125%)	09/02/22 23:37
Cobalt	0.0500	J 0.000844	0.0514	mg/L	101	(75%-125%)	
Iron	2.00	J 0.0763	2.13	mg/L	103	(75%-125%)	
Lead	0.0500	U ND	0.0508	mg/L	101	(75%-125%)	
Lithium	0.0500	U ND	0.0545	mg/L	108	(75%-125%)	
Magnesium	2.00	4.86	7.40	mg/L	127*	(75%-125%)	09/03/22 10:46
Manganese	0.0500	0.0391	0.0930	mg/L	108	(75%-125%)	
Molybdenum	0.0500	U ND	0.0538	mg/L	108	(75%-125%)	
Potassium	2.00	0.439	2.44	mg/L	100	(75%-125%)	09/02/22 23:37

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

Workorder: 590857			$\underline{\mathbf{v}}$	Juiiiiiui	<u>.</u>					
										Page 6 of 11
Parmname	NON	M	Sample Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Metals Analysis - ICPMSBatch2308385										
Selenium	0.0500	U	ND	0.0496	mg/L		99.2	(75%-125%)	BAJ	09/02/22 23:37
Sodium	2.00		3.36	5.52	mg/L		108	(75%-125%)		
Thallium	0.0500	U	ND	0.0463	mg/L		92.5	(75%-125%)		
QC1205174768 590838001 MSD	0.0500	П	ND	0.0492	ma/I	1.01	07.5	(004, 2004)		00/02/22 14.24
Antimony	0.0500	U	ND	0.0492	mg/L	1.91	97.5	(0%-20%)		09/03/22 14:34
Arsenic	0.0500	т	ND	0.0495	ma/I	1.13	96.9	(0%-20%)		09/02/22 23:41
Arsenic	0.0500	U	ND	0.0495	mg/L	1.15	90.9	(0%-20%)		09/02/22 23.41
Barium	0.0500		0.0120	0.0611	ma/I	0.618	98.3	(0%-20%)		
Banum	0.0500		0.0120	0.0011	mg/L	0.010	90.3	(0%-20%)		
D11:	0.0500	IJ	ND	0.0604	ma/I	1 57	101	(004, 2004)		09/03/22 10:49
Beryllium	0.0300	U	ND	0.0004	mg/L	1.57	121	(0%-20%)		09/03/22 10:49
Boron	0.100	T	0.00532	0.119	mg/L	1.12	114	(0%-20%)		
DOIOII	0.100	J	0.00352	0.115	IIIg/L	1.12	114	(0%-20%)		
Cadmium	0.0500	IJ	ND	0.0516	ma/I	2.52	103	(0%-20%)		
Caulmum	0.0500	U	ND	0.0510	mg/L	2.32	105	(0%-20%)		
Calcium	2.00		4.65	6.88	mg/L	2.39	111	(0%-20%)		
Calcium	2.00		4.05	0.00	mg/L	2.37	111	(070-2070)		
Chromium	0.0500	T	0.00908	0.0589	mg/L	2.28	99.7	(0%-20%)		09/02/22 23:41
Chronnum	0.0500	J	0.00200	0.0007	ш _б / L	2.20)).ı	(0/0-20/0)		07/02/22 23.71
Cobalt	0.0500	I	0.000844	0.0503	mg/L	2.26	98.9	(0%-20%)		
Coban	0.0500	v	0.000077	0.0505	ш _б / L	2.20	70.7	(0/0-20/0)		
Iron	2.00	1	0.0763	2.09	mg/L	1.79	101	(0%-20%)		
lioli	2.00	v	0.0705	2.07	111 ₆ , L	1.//	101	(0/0-20/0)		
Lead	0.0500	IJ	ND	0.0506	mg/L	0.396	101	(0%-20%)		
Lead	0.0500	U	ND	0.0500	mg/L	0.570	101	(070-2070)		
Lithium	0.0500	П	ND	0.0534	mg/L	2.01	105	(0%-20%)		
Ennum	0.0500	0	ND	0.0334	mg/∟	2.01	105	(070-20%)		

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

		7		<u> </u>						
Workorder: 590857									Page 7 o	
Parmname	NOM	Sample	Qual QC	Units	RPD%	REC%	Range A	nlst	Date Ti	me
Metals Analysis - ICPMSBatch2308385										
Magnesium	2.00	4.86	7.28	mg/L	1.68	121	(0%-20%)	BAJ	09/03/22 1	0:49
Manganese	0.0500	0.0391	0.0926	mg/L	0.447	107	(0%-20%)			
Molybdenum	0.0500 U	ND	0.0536	mg/L	0.447	107	(0%-20%)			
Potassium	2.00	0.439	2.38	mg/L	2.49	97.1	(0%-20%)		09/02/22 2	:3:41
Selenium	0.0500 U	ND	0.0478	mg/L	3.8	95.5	(0%-20%)			
Sodium	2.00	3.36	5.45	mg/L	1.34	105	(0%-20%)			
Thallium	0.0500 U	ND	0.0449	mg/L	2.98	89.8	(0%-20%)			
QC1205182314 590838001 PS Magnesium	2000	4860	7000	ug/L		107	(75%-125%)		09/03/22 1	0:52
QC1205174769 590838001 SDILT Antimony	U	ND	U ND	ug/L	N/A		(0%-20%)		09/03/22 1	4:37
Arsenic	U	ND	U ND	ug/L	N/A		(0%-20%)		09/02/22 2	:3:48
Barium		12.0	J 2.29	ug/L	4.59		(0%-20%)			
Beryllium	U	ND	U ND	ug/L	N/A		(0%-20%)		09/03/22 1	1:04
Boron	J	5.32	U ND	ug/L	N/A		(0%-20%)			
Cadmium	U	ND	U ND	ug/L	N/A		(0%-20%)			
Calcium		4650	892	ug/L	4.21		(0%-20%)			

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

		-			<u>, </u>					
Workorder: 590857	NOM	G	0	00	T			Descent	1-4	Page 8 of 11
<u>Parmname</u> Metals Analysis - ICPMS	NOM	Sample	Quai	QC	Units	RPD%	REC%	Range A	nlst	Date Time
Batch 2308385										
Chromium	J	9.08	U	ND	ug/L	N/A		(0%-20%)	BAJ	09/02/22 23:48
Cobalt	1	0.844	U	ND	ug/L	N/A		(0%-20%)		
Iron	J	76.3	U	ND	ug/L	N/A		(0%-20%)		
Lead	U	ND	U	ND	ug/L	N/A		(0%-20%)		
Lithium	U	ND	U	ND	ug/L	N/A		(0%-20%)		
Magnesium		4860		866	ug/L	11		(0%-20%)		09/03/22 11:04
Manganese		39.1		7.50	ug/L	3.96		(0%-20%)		
Molybdenum	U	ND	U	ND	ug/L	N/A		(0%-20%)		
Potassium		439	J	85.4	ug/L	2.83		(0%-20%)		09/02/22 23:48
Selenium	U	ND	U	ND	ug/L	N/A		(0%-20%)		
Sodium		3360		579	ug/L	13.8		(0%-20%)		
Thallium	U	ND	U	ND	ug/L	N/A		(0%-20%)		
Metals Analysis-Mercury Batch 2308555										
QC1205175118 589727024 DUP Mercury	U	ND	U	ND	mg/L	N/A			JP2	08/26/22 11:15
QC1205175117 LCS Mercury	0.00200			0.00220	mg/L		110	(80%-120%)		08/26/22 11:07

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

Workorder: 590857							<u> </u>					
		NO:										Page 9 of 11
Parmname		NON	M	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Metals Analysis-MercuryBatch2308555												
QC1205175116 MB Mercury					U	ND	mg/L				JP2	08/26/22 11:05
QC1205175119 589727024 Mercury	MS	0.00200	U	ND		0.00222	mg/L		110	(75%-125%))	08/26/22 11:17
QC1205175120 589727024 Mercury	SDILT		U	ND	U	ND	ug/L	N/A		(0%-10%))	08/26/22 11:19
Solids Analysis Batch 2309029												
QC1205176100 590857001 Total Dissolved Solids	DUP			614		616	mg/L	0.325		(0%-5%)) CH6	08/26/22 15:30
QC1205176099 LCS Total Dissolved Solids		300				300	mg/L		100	(95%-105%))	08/26/22 15:30
QC1205176098 MB Total Dissolved Solids					U	ND	mg/L					08/26/22 15:30
Batch 2309058												
QC1205176171 590900002 Total Dissolved Solids	DUP			501		500	mg/L	0.2		(0%-5%)) CH6	08/26/22 16:19
QC1205176170 LCS Total Dissolved Solids		300				301	mg/L		100	(95%-105%))	08/26/22 16:19
QC1205176169 MB Total Dissolved Solids					U	ND	mg/L					08/26/22 16:19
Titration and Ion AnalysisBatch2309339												
QC1205176799 590838001 Alkalinity, Total as CaCO3	DUP			32.6		32.2	mg/L	1.23		(0%-20%)) HH2	09/04/22 13:40

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

QC Summary

Workorder: 590857					_					Page 10 of 11
Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Titration and Ion AnalysisBatch2309339										
Bicarbonate alkalinity (CaCO3)		32.6		32.2	mg/L	1.23		(0%-20%)	HH2	09/04/22 13:40
Carbonate alkalinity (CaCO3)	U	ND	U	ND	mg/L	N/A				
QC1205176801 590857001 DUP Alkalinity, Total as CaCO3	J	3.40	J	3.60	mg/L	5.71 ^		(+/-4.00)	1	09/04/22 13:53
Bicarbonate alkalinity (CaCO3)	J	3.40	J	3.60	mg/L	5.71 ^		(+/-4.00)	1	
Carbonate alkalinity (CaCO3)	U	ND	U	ND	mg/L	N/A				
QC1205176798 LCS Alkalinity, Total as CaCO3	100			104	mg/L		104	(90%-110%)		09/04/22 13:37
QC1205176800 590838001 MS Alkalinity, Total as CaCO3	100	32.6		136	mg/L		104	(80%-120%)		09/04/22 13:42
QC1205176802 590857001 MS Alkalinity, Total as CaCO3	100 J	3.40		107	mg/L		104	(80%-120%)		09/04/22 13:54

Notes:

The Qualifiers in this report are defined as follows:

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

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

QC Summary

Parmna	me			NOM	Sample	Onal	QC	Units	RPD%	REC%	Range	Anlst		11 of 11 Time
N1	See case 1	narrative		110111	Sumple	Quui	<u> </u>	<u> </u>		<u>ittle/t</u>	Itunge	111150	Dute	
ND			on is not de	etected above th	e detection lin	nit								
NJ				Summary packa			concerning	this qualifi	er					
Q				iteria have not l		-	-	-						
R R	purposes.			1664 Revision	B, due to matr	ix spike 1	ecovery issu	les, this res	sult may not	be reported o	or used for	regulatory	complia	ince
U	-		-	not detected ab	ove the MDL,	MDA, M	IDC or LOD							
Х	Consult C	Case Narrat	ive, Data S	Summary packa	ge, or Project	Manager	concerning	this qualifi	er					
Y	Other spe	cific qualit	fiers were r	required to prop	erly define the	results.	Consult case	narrative.						
Z	Paint Filte	er TestPa	rticulates p	bassed through	the filter, howe	ever no fi	ee liquids w	ere observ	ed.					
٨	RPD of sa	ample and	duplicate e	valuated using	+/-RL. Conce	ntrations	are <5X the	RL. Qual	ifier Not Ap	plicable for I	Radiochem	istry.		
d	5-day BO	DThe 2:	1 depletion	requirement w	as not met for	this samp	ole							
e	5-day BO reporting		plicates sho	ow more than 3	0% difference	between	high and lov	w values. T	The data is qu	ualified per tl	he method	and can be	e used for	r
h	Preparatio	on or prese	rvation hol	ding time was	exceeded									
^ The R five tim	Relative Per	cent Differ	rence (RPD	do not apply w) obtained from tection limit (R	n the sample d	uplicate	(DUP) is eva	aluated aga	inst the acce	ptance criter	ria when the	e sample is	s greater	than

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

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

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

Technical Case Narrative Georgia Power Company SDG #: 591881

Metals

Product: Determination of Metals by ICP-MS Analytical Method: SW846 3005A/6020B **Analytical Procedure:** GL-MA-E-014 REV# 35 **Analytical Batch:** 2312380

Preparation Method: SW846 3005A **Preparation Procedure:** GL-MA-E-006 REV# 14 **Preparation Batch:** 2312379

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

Client Sample Identification
PZ-70
Method Blank (MB)ICP-MS
Laboratory Control Sample (LCS)
591881001(PZ-70L) Serial Dilution (SD)
591881001(PZ-70S) Matrix Spike (MS)
591881001(PZ-70SD) Matrix Spike Duplicate (MSD)

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

Data Summary:

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

Calibration Information

ICSA/ICSAB Statement

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

Technical Information

Sample Dilutions

Dilutions may be required for many reasons, including to minimize matrix interferences or to bring over range target analyte concentrations into the linear calibration range. Sample 591881001 (PZ-70) was diluted to ensure that the analyte concentration was within the linear calibration range of the instrument.

A	591881
Analyte	001
Boron	10X
Manganese	10X

<u>Product:</u> Mercury Analysis Using the Perkin Elmer Automated Mercury Analyzer <u>Analytical Method:</u> SW846 7470A <u>Analytical Procedure:</u> GL-MA-E-010 REV# 38 <u>Analytical Batch:</u> 2312733

Preparation Method: SW846 7470A Prep **Preparation Procedure:** GL-MA-E-010 REV# 38 **Preparation Batch:** 2312730

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

<u>GEL Sample ID#</u>	Client Sample Identification
591881001	PZ-70
1205183553	Method Blank (MB)CVAA
1205183554	Laboratory Control Sample (LCS)
1205183557	591729001(NonSDGL) Serial Dilution (SD)
1205183555	591729001(NonSDGD) Sample Duplicate (DUP)
1205183556	591729001(NonSDGS) Matrix Spike (MS)

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

Data Summary:

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

General Chemistry

Product: Ion Chromatography Analytical Method: EPA 300.0 Analytical Procedure: GL-GC-E-086 REV# 30 Analytical Batch: 2312366

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

<u>GEL Sample ID#</u>	Client Sample Identification
591881001	PZ-70
1205182661	Method Blank (MB)
1205182662	Laboratory Control Sample (LCS)
1205182663	591867001(NonSDG) Sample Duplicate (DUP)
1205182664	591867001(NonSDG) Post Spike (PS)

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

Data Summary:

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

Quality Control (QC) Information

Matrix Spike (MS)/Post Spike (PS) Recovery Statement

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

Analyte	Sample	Value
Chloride	1205182664 (Non SDG 591867001PS)	129* (90%-110%)
Fluoride	1205182664 (Non SDG 591867001PS)	139* (90%-110%)
Sulfate	1205182664 (Non SDG 591867001PS)	155* (90%-110%)

Duplicate Relative Percent Difference (RPD) Statement

The Relative Percent Difference (RPD) between the sample and duplicate falls outside of the established acceptance limits because of the heterogeneous matrix of the sample:

Analyte	Sample	Value
Fluoride	1205182663 (Non SDG 591867001DUP)	abs(.242367)* (+/1 mg/L)

Technical Information

Sample Dilutions

The following samples 1205182663 (Non SDG 591867001DUP), 1205182664 (Non SDG 591867001PS) and 591881001 (PZ-70) 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.

A	591881
Analyte	001
Chloride	50X
Sulfate	50X

Sample Re-analysis Sample 591881001 (PZ-70) was re-analyzed to verify the result.

<u>Product:</u> Solids, Total Dissolved <u>Analytical Method:</u> SM 2540C <u>Analytical Procedure:</u> GL-GC-E-001 REV# 19 <u>Analytical Batch:</u> 2313724

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

<u>GEL Sample ID#</u>	Client Sample Identification
591881001	PZ-70
1205185479	Method Blank (MB)
1205185480	Laboratory Control Sample (LCS)

1205185482 592010003(NonSDG) Sample Duplicate (DUP)

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

Data Summary:

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

Product: Alkalinity Analytical Method: SM 2320B Analytical Procedure: GL-GC-E-033 REV# 14 Analytical Batch: 2312490

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

<u>GEL Sample ID#</u>	Client Sample Identification
591881001	PZ-70
1205182983	Laboratory Control Sample (LCS)
1205182984	591877005(NonSDG) Sample Duplicate (DUP)
1205182985	591877005(NonSDG) Matrix Spike (MS)

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

Data Summary:

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

<u>Certification Statement</u>

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

Technical Case Narrative Georgia Power Company SDG #: 591351

Metals

Product: Determination of Metals by ICP-MS Analytical Method: SW846 3005A/6020B **Analytical Procedure:** GL-MA-E-014 REV# 35 **Analytical Batch:** 2310153

Preparation Method: SW846 3005A **Preparation Procedure:** GL-MA-E-006 REV# 14 **Preparation Batch:** 2310152

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

<u>GEL Sample ID#</u>	Client Sample Identification
591351001	BRGWC-17S
591351002	BRGWC-35S
591351003	BRGWC-36S
591351004	FD-04
591351005	BRGWC-34S
591351006	EB-08
1205178579	Method Blank (MB)ICP-MS
1205178580	Laboratory Control Sample (LCS)
1205178583	591351001(BRGWC-17SL) Serial Dilution (SD)
1205178581	591351001(BRGWC-17SS) Matrix Spike (MS)
1205178582	591351001(BRGWC-17SSD) 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.

Analyte	591351			
	002	003	004	005
Boron	20X	20X	20X	20X
Calcium	20X	1X	1X	20X
Manganese	1X	1X	1X	20X

<u>Product:</u> Mercury Analysis Using the Perkin Elmer Automated Mercury Analyzer <u>Analytical Method:</u> SW846 7470A <u>Analytical Procedure:</u> GL-MA-E-010 REV# 38 <u>Analytical Batch:</u> 2310248

Preparation Method: SW846 7470A Prep **Preparation Procedure:** GL-MA-E-010 REV# 38 **Preparation Batch:** 2310247

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

GEL Sample ID#	Client Sample Identification
591351001	BRGWC-17S
591351002	BRGWC-35S
591351003	BRGWC-36S
591351004	FD-04
591351005	BRGWC-34S
591351006	EB-08
1205178782	Method Blank (MB)CVAA
1205178783	Laboratory Control Sample (LCS)
1205178786	590142001(NonSDGL) Serial Dilution (SD)
1205178784	590142001(NonSDGD) Sample Duplicate (DUP)
1205178785	590142001(NonSDGS) Matrix Spike (MS)

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

Data Summary:

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

General Chemistry

Product: Ion Chromatography Analytical Method: EPA 300.0 Analytical Procedure: GL-GC-E-086 REV# 30 Analytical Batch: 2310523

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

<u>GEL Sample ID#</u>	<u>Client Sample Identification</u>
591351001	BRGWC-17S

591351003 BRGWC-36S 591351004 FD-04 591351005 BRGWC-34S 591351006 EB-08 1205179258 Method Blank (MB) 1205179259 Laboratory Control Sample (LCS) 1205179260 591351001(BRGWC-17S) Sample Duplicate (DUP) 1205170261 501251001(BRGWC-17S) Part Spile (DS)	591351002	BRGWC-35S
591351005 BRGWC-34S 591351006 EB-08 1205179258 Method Blank (MB) 1205179259 Laboratory Control Sample (LCS) 1205179260 591351001(BRGWC-17S) Sample Duplicate (DUP)	591351003	BRGWC-36S
591351006 EB-08 1205179258 Method Blank (MB) 1205179259 Laboratory Control Sample (LCS) 1205179260 591351001(BRGWC-17S) Sample Duplicate (DUP)	591351004	FD-04
1205179258Method Blank (MB)1205179259Laboratory Control Sample (LCS)1205179260591351001(BRGWC-17S) Sample Duplicate (DUP)	591351005	BRGWC-34S
1205179259Laboratory Control Sample (LCS)1205179260591351001(BRGWC-17S) Sample Duplicate (DUP)	591351006	EB-08
1205179260 591351001(BRGWC-17S) Sample Duplicate (DUP)	1205179258	Method Blank (MB)
	1205179259	Laboratory Control Sample (LCS)
10051700(1 501251001(DDCWC 178) Dest Seiler (DS)	1205179260	591351001(BRGWC-17S) Sample Duplicate (DUP)
12051/9201 591551001(BRGwC-1/S) Post Spike (PS)	1205179261	591351001(BRGWC-17S) 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 1205179260 (BRGWC-17SDUP), 1205179261 (BRGWC-17SPS), 591351001 (BRGWC-17S), 591351002 (BRGWC-35S), 591351003 (BRGWC-36S), 591351004 (FD-04) and 591351005 (BRGWC-34S) 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.

A	591351				
Analyte	001	002	003	004	005
Sulfate	20X	20X	20X	20X	20X

Product: Solids, Total Dissolved Analytical Method: SM 2540C Analytical Procedure: GL-GC-E-001 REV# 19 Analytical Batch: 2310249

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

<u>GEL Sample ID#</u>	Client Sample Identification
591351001	BRGWC-17S
591351002	BRGWC-35S
591351003	BRGWC-36S
591351004	FD-04
591351005	BRGWC-34S
591351006	EB-08
1205178788	Method Blank (MB)
1205178789	Laboratory Control Sample (LCS)
1205178791	591355007(BRGWC-50) 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.

<u>Product:</u> Alkalinity <u>Analytical Method:</u> SM 2320B <u>Analytical Procedure:</u> GL-GC-E-033 REV# 14 <u>Analytical Batch:</u> 2310459

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

<u>GEL Sample ID#</u>	Client Sample Identification
591351001	BRGWC-17S
591351002	BRGWC-35S
591351003	BRGWC-36S
591351004	FD-04
591351005	BRGWC-34S
591351006	EB-08
1205179131	Laboratory Control Sample (LCS)
1205179132	591351001(BRGWC-17S) Sample Duplicate (DUP)
1205179133	591351001(BRGWC-17S) Matrix Spike (MS)

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

Data Summary:

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

Certification Statement

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

Technical Case Narrative Georgia Power Company SDG #: 590857

Metals

Product: Determination of Metals by ICP-MS Analytical Method: SW846 3005A/6020B **Analytical Procedure:** GL-MA-E-014 REV# 35 **Analytical Batch:** 2308385

Preparation Method: SW846 3005A **Preparation Procedure:** GL-MA-E-006 REV# 14 **Preparation Batch:** 2308382

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

<u>GEL Sample ID#</u>	Client Sample Identification
590857001	BRGWC-33S
590857002	BRGWC-37S
590857003	BRGWC-38S
590857004	PZ-53D
590857005	PZ-13S
590857006	FB-04
1205174765	Method Blank (MB)ICP-MS
1205174766	Laboratory Control Sample (LCS)
1205174769	590838001(BRGWA-2SL) Serial Dilution (SD)
1205174767	590838001(BRGWA-2SS) Matrix Spike (MS)
1205174768	590838001(BRGWA-2SSD) Matrix Spike Duplicate (MSD)
1205182314	590838001(BRGWA-2SPS) 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.

Calibration Information

ICSA/ICSAB Statement

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

Quality Control (QC) Information

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 recovery was within the required control limits. This verifies the absence of a matrix interference in the post-spike digested sample. The recovery may be attributed to possible sample matrix interference and/or non-homogeneity.

Sample	Analyte	Value
1205174767 (BRGWA-2SMS)	Magnesium	127* (75%-125%)

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 590857001 (BRGWC-33S), 590857003 (BRGWC-38S) and 590857004 (PZ-53D) were diluted to ensure that the analyte concentrations were within the linear calibration range of the instrument.

Analysta	590857			
Analyte	001	003	004	
Boron	20X	20X	20X	
Calcium	20X	1X	20X	
Manganese	20X	20X	1X	
Sodium	1X	1X	20X	

<u>Product:</u> Mercury Analysis Using the Perkin Elmer Automated Mercury Analyzer <u>Analytical Method:</u> SW846 7470A <u>Analytical Procedure:</u> GL-MA-E-010 REV# 38 <u>Analytical Batch:</u> 2308555

Preparation Method: SW846 7470A Prep **Preparation Procedure:** GL-MA-E-010 REV# 38 **Preparation Batch:** 2308553

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

<u>GEL Sample ID#</u>	Client Sample Identification
590857001	BRGWC-33S
590857002	BRGWC-37S
590857003	BRGWC-38S
590857004	PZ-53D
590857005	PZ-13S
590857006	FB-04
1205175116	Method Blank (MB)CVAA
1205175117	Laboratory Control Sample (LCS)
1205175120	589727024(NonSDGL) Serial Dilution (SD)
1205175118	589727024(NonSDGD) Sample Duplicate (DUP)
1205175119	589727024(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

<u>Product:</u> Ion Chromatography <u>Analytical Method:</u> EPA 300.0 <u>Analytical Procedure:</u> GL-GC-E-086 REV# 30 <u>Analytical Batch:</u> 2308691

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

GEL Sample ID#	Client Sample Identification
590857001	BRGWC-33S
590857002	BRGWC-37S
590857003	BRGWC-38S
590857004	PZ-53D
590857005	PZ-13S
590857006	FB-04
1205175343	Method Blank (MB)
1205175344	Laboratory Control Sample (LCS)
1205175345	590838001(BRGWA-2S) Sample Duplicate (DUP)
1205175346	590838001(BRGWA-2S) Post Spike (PS)
1205175347	590857001(BRGWC-33S) Sample Duplicate (DUP)
1205175348	590857001(BRGWC-33S) Post Spike (PS)

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

Data Summary:

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

Quality Control (QC) Information

Matrix Spike (MS)/Post Spike (PS) Recovery Statement

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

Analyte	Sample	Value
Sulfate	1205175346 (BRGWA-2SPS)	111* (90%-110%)

Technical Information

Sample Dilutions

The following samples 1205175347 (BRGWC-33SDUP), 1205175348 (BRGWC-33SPS), 590857001 (BRGWC-33S), 590857003 (BRGWC-38S), 590857004 (PZ-53D) and 590857005 (PZ-13S) were diluted

because target analyte concentrations exceeded the calibration range. Dilutions may be required for many reasons, including to minimize matrix interferences or to bring over range target analyte concentrations into the linear calibration range.

Analyte	590857			
Analyte	001	003	004	005
Chloride	40X	1X	1X	1X
Sulfate	40X	40X	40X	10X

Product: Solids, Total Dissolved Analytical Method: SM 2540C Analytical Procedure: GL-GC-E-001 REV# 19 Analytical Batch: 2309029

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

<u>GEL Sample ID#</u>	Client Sample Identification
590857001	BRGWC-33S
590857002	BRGWC-37S
590857003	BRGWC-38S
590857004	PZ-53D
590857005	PZ-13S
1205176098	Method Blank (MB)
1205176099	Laboratory Control Sample (LCS)
1205176100	590857001(BRGWC-33S) 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.

<u>Product:</u> Solids, Total Dissolved <u>Analytical Method:</u> SM 2540C <u>Analytical Procedure:</u> GL-GC-E-001 REV# 19 <u>Analytical Batch:</u> 2309058

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

<u>GEL Sample ID#</u>	<u>Client Sample Identification</u>
590857006	FB-04
1205176169	Method Blank (MB)
1205176170	Laboratory Control Sample (LCS)
1205176171	590900002(NonSDG) Sample Duplicate (DUP)

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

Data Summary:

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

Product: Alkalinity Analytical Method: SM 2320B Analytical Procedure: GL-GC-E-033 REV# 14 Analytical Batch: 2309339

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

<u>GEL Sample ID#</u>	<u>Client Sample Identification</u>
590857001	BRGWC-33S
590857002	BRGWC-37S
590857003	BRGWC-38S
590857004	PZ-53D
590857005	PZ-13S
590857006	FB-04
1205176798	Laboratory Control Sample (LCS)
1205176799	590838001(BRGWA-2S) Sample Duplicate (DUP)
1205176800	590838001(BRGWA-2S) Matrix Spike (MS)
1205176801	590857001(BRGWC-33S) Sample Duplicate (DUP)
1205176802	590857001(BRGWC-33S) Matrix Spike (MS)

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

Data Summary:

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

Certification Statement

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

$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	Field Sample Filtered ⁽³⁾ Matrix ⁽⁴⁾ N WG	Radioactive yes, please suppl isotopic info.) (7) Known or (7)	Cl, F, SO4, TDS	EPA 300, SM 2540C 33 Total & Bicarb Alk 55 SM 2320B 7540C 33 SM 2320B 7540C 33 SM 2320B 7540C 33 SM 2540C 35 SM 2550C 35 SM 2540C 35 SM 2540	Katim Zook, 6010D NI FPA 6020B, 6010D NI Katim Zook, 6010D NI	(3)	Fax: (843) 766-1178 he number of conta	71
Chain of Custod			TAT Requested:		Normal:	Rush:	Specify:	field pH = field pH =
Time Received by (signed) 091/0 1 091/0 2 1 1 2 1 3 3 4 2 6 3 7 5 7 5 8 3 9 5 9 5 9 5 9 5 10 2 11 7 12 7 13 3 14 5 14 10 15 5 15 5 16 10 17 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 19 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 <td< td=""><td>Date Time Fax Results: [] Yes [x] No String Select Deliverable: [] C of A [] QC Summe String Select Deliverable: [] C of A [] QC Summe String Additional Remarks: * Metals: B.Ca.Sb.As String Additional Remarks: * Metals: B.Ca.Sb.As String Additional Remarks: * Metals: B.Ca.Sb.As String For Lab Receiving Use Only: Custody Seal I For Lab Receiving Use Only: Custody Seal I For Lab Receiving Use Only: Custody Seal I rix Spike Sample, MSD = Matrix Spike Duplicate Sample, G = Grab, C = Composite [] Pacifi e was not field filtered. [] Sample, Q = Grab, C = Composite e hate, SO=Soil, SE=Sediment, SL=Sludge, WQ=Water Quality Control Matrix ars provided for each (i.e. M200B - 3, 6010B/7470A - 1). AA = Ascorbic Acid, HX = Hexane, ST = Sodium Thiosulfate, If no preservative is added = leave field blank</td><td>Pax Ri Pax Ri Pax Ri Addititi Addititi For Li Sample Collecti pike Duplicate Sample pike Unplicate Sample ol 00B/74704 ST = Sodium Thiosu</td><td>Fax Results: [] Yes Select Deliverable: [Additional Remarks: For Lab Receiving U ollection Time Zone Sample, G = Grab, C = CC Nater Quality Control Matr 4 - 1).</td><td>Yes [x] No :: [] C of A <i>ks:</i> * Me <i>g Use Only:</i> <i>one</i>: [x] East Matrix Matrix servative is addee</td><td>No Metals:] (<u>by: Crustr</u> Bastern e</td><td>Fax Results: [] Yes [x] No Z / O Select Deliverable: [] C of A [] QC Summary [] level 1 Additional Remarks: * Metals: B,Ca,Sb,As,Ba,Be,Cd,Cr,Co, Additional Remarks: * Metals: B,Ca,Sb,As,Ba,Be,Cd,Cr,Co, For Lab Receiving Use Only: Custody Seal Intact? [] Yes Sample Collection Time Zone: [x] Eastern [] Pacific [] Central ke Duplicate Sample, G = Grab, C = Composite dege, WQ=Water Quality Control Matrix 6010B77470A - 1). ST = Sodium Thiosulfate, If no preservative is added = leave field blank</td><td>[level 1 [x] Le</td><td>vel 2 lo,Se,TI Cool fountaii</td></td<>	Date Time Fax Results: [] Yes [x] No String Select Deliverable: [] C of A [] QC Summe String Select Deliverable: [] C of A [] QC Summe String Additional Remarks: * Metals: B.Ca.Sb.As String Additional Remarks: * Metals: B.Ca.Sb.As String Additional Remarks: * Metals: B.Ca.Sb.As String For Lab Receiving Use Only: Custody Seal I For Lab Receiving Use Only: Custody Seal I For Lab Receiving Use Only: Custody Seal I rix Spike Sample, MSD = Matrix Spike Duplicate Sample, G = Grab, C = Composite [] Pacifi e was not field filtered. [] Sample, Q = Grab, C = Composite e hate, SO=Soil, SE=Sediment, SL=Sludge, WQ=Water Quality Control Matrix ars provided for each (i.e. M200B - 3, 6010B/7470A - 1). AA = Ascorbic Acid, HX = Hexane, ST = Sodium Thiosulfate, If no preservative is added = leave field blank	Pax Ri Pax Ri Pax Ri Addititi Addititi For Li Sample Collecti pike Duplicate Sample pike Unplicate Sample ol 00B/74704 ST = Sodium Thiosu	Fax Results: [] Yes Select Deliverable: [Additional Remarks: For Lab Receiving U ollection Time Zone Sample, G = Grab, C = CC Nater Quality Control Matr 4 - 1).	Yes [x] No :: [] C of A <i>ks:</i> * Me <i>g Use Only:</i> <i>one</i> : [x] East Matrix Matrix servative is addee	No Metals:] (<u>by: Crustr</u> Bastern e	Fax Results: [] Yes [x] No Z / O Select Deliverable: [] C of A [] QC Summary [] level 1 Additional Remarks: * Metals: B,Ca,Sb,As,Ba,Be,Cd,Cr,Co, Additional Remarks: * Metals: B,Ca,Sb,As,Ba,Be,Cd,Cr,Co, For Lab Receiving Use Only: Custody Seal Intact? [] Yes Sample Collection Time Zone: [x] Eastern [] Pacific [] Central ke Duplicate Sample, G = Grab, C = Composite dege, WQ=Water Quality Control Matrix 6010B77470A - 1). ST = Sodium Thiosulfate, If no preservative is added = leave field blank	[level 1 [x] Le	vel 2 lo,Se,TI Cool fountaii
7.) KNOWN OR POSSIBLE HAZARDS Characteristic Hazards Listed Waste $RCRA$ Metals $FL = Flammable/Ignitable Lw= Listed Waste RCRA Metals FL = Flammable/Ignitable Lw= Listed Waste RS = Arsenic Hg= Mercury RE = Reactive Waste code(s): RS = Arsenic Hg= Mercury RE = Reactive Waste code(s): RS = Arsenic Hg= Mercury RE = Reactive Waste code(s): RE = Selenium Se= Selenium RE = Reactive Waste code(s): Cd = Cadmium Ag= Silver TSCA Regulated Pb = Lead Pb = Lead biphenyls biphenyls Pa $	Listed Waste LW= Listed Waste (F,K,P and U-listed wastes.) Waste code(s):	Other OT= Other / (i.e.: High/lo misc. health Description:	Other OT= Other / Unknown (i.e.: High/low pH, asbest misc. health hazards, etc.) Description:	nown J, asbesto: rds, etc.)	s, berylli	Other OT= Other / Unknown (i.e.: High/low pH, asbestos, beryllium, irritants, other misc. health hazards, etc.) Description:		Please provide any additional details below regarding handling and/or disposal concerns. (i.e.: Origin of sample(s), type of site collected from, odd matrices, etc.)

Page 75 of 84 SDG: 591881 Rev1

GEL Laboratories LLC				SAMPLE RECEIPT & REVIEW FORM
Client G D		-	one	
Received By: MVH			Dat	e Received: 09-02-2022
Carrier and Tracking Number				Circle Applicable: FedEx Express FedEx Ground UPS Field Services Courier Other
Suspected Hazard Information	Yes	No.	*lf N	Net Counts > 100cpm on samples not marked "radioactive", contact the Radiation Safety Group for further investigation.
A)Shipped as a DOT Hazardous?		X	Haza	rd Class Shipped: UN#: If UN2910, Is the Radioactive Shipment Survey Compliant? Yes No
B) Did the client designate the samples are to be received as radioactive?		Y	coc	notation or radioactive stickers on containers equal client designation.
C) Did the RSO classify the samples as radioactive?		X	Max	imum Net Counts Observed* (Observed Counts - Area Background Counts):CPM / mR/Hr Classified as: Rad 1 Rad 2 Rad 3
D) Did the client designate samples are hazardous?		Y		notation or hazard labels on containers equal client designation.
E) Did the RSO identify possible hazards?		Y		or E is yes, select Hazards below. PCB's Flammable Foreign Soil RCRA Asbestos Beryllium Other:
Sample Receipt Criteria	Yes	٧N	No	Comments/Qualifiers (Required for Non-Conforming Items)
1 Shipping containers received intact and scaled?	X			Circle Applicable: Seals broken Damaged container Leaking container Other (describe)
2 Chain of custody documents included with shipment?	X			Circle Applicable: Client contacted and provided COC COC created upon receipt
3 Samples requiring cold preservation within $(0 \le 6 \text{ deg. C})$?*			X	Preservation Method: Wet Ice Ice Packs Dry ice None Other: *all temperatures are recorded in Celsius TEMP:
4 Daily check performed and passed on IR temperature gun?	X			Temperature Device Serial #: <u>IR2-21</u> Secondary Temperature Device Serial # (If Applicable):
5 Sample containers intact and sealed?	K			Circle Applicable: Seals broken Damaged container Leaking container Other (describe)
6 Samples requiring chemical preservation at proper pH?	X			Sample ID's and Containers Affected: If Preservation added, Lot#:
7 Do any samples require Volatile Analysis?			X	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?	X			ID's and tests affected:
9 Sample ID's on COC match ID's on bottles?	1			ID's and containers affected:
10 Date & time on COC match date & time on bottles?	X			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?	K			Circle Applicable: No container count on COC Other (describe)
12 Are sample containers identifiable as	(8)		X	
12 GEL provided by use of GEL labels? 13 COC form is properly signed in relinquished/received sections?	X			Circle Applicable: Not relinquished Other (describe)
Comments (Use Continuation Form if needed):	1			
				als EMP Date 09/06/22 Page (of)
PM (or PMA) re	view	Initi	als Date Date Page of
				GL-CHL-SR-001 Rev 7

Project #			Chemistry	Orat(Laboratorias LLC	LC lioassav I Sc	pecialty Ana	lytics		2040 Savage Road Charleston, SC 29407	2040 Savage Road Charleston, SC 29407	59135 1
GEL Quote #: COC Number ⁽¹⁾ :			of Custo	dy and	Chain of Custody and Analytical Request	I Reque	est			Phone:	Phone: (843) 556-8171	591353
PO Number:	GEL Work Order Number:		GE	L Project	GEL Project Manager: Erin Trent	Erin Tre	int		. (5)		Fax: (843) 766-1178	() () () () () () () () () () () () () (
Client Name: GA Power		Phone # 404-5	404-506-7116		a sur france	Sam	ple Anal	ysis Req	nes		iber of contain	(Fill in the number of containers for each test)
Project/Site Name: Plant Branch Ash Ponds \pounds		Fax #			Should this		SJ	IN	IN			< Preservative Type (6)
Address: 241 Ralph McGill Blvd SE, Atlanta GA 30308	A 30308				sample be considered:	(arth	S		82			Comments
Collected By: Taylor Coble Anna Schniftker	f Send Results To: SCS & Geosyntec Contacts	eosyntec Conta	icts		۲bbly	spugs	04, TD	tals * 2320B	2 78 977			Note: extra sample is
Sample ID	*Date Collected	*Time Collected (Military) (hhmm) Cor	QC Field Code (3) Filtered (3)	d Sample d Matrix ⁽⁴⁾	setive kadioactive stopic info.	o nwonX (7) ssH sldizzoq	Eb¥ 300' Cl' E' Z Gutal numb	эM	EPA 602 Radium SW-846			required for sample specific QC
• For composites - matcate start and stop date time Ref (-175	20	4	Z	DM	C	157979	7 1	1	>			field pH = Lp. Lp. 2
92GWC - 355	08/24/22	1358 G	2	MG			7 1	1	1			field pH = Co. 05
RACINIC - 365	174	0952 6	Z	NG			7	>	1			field pH = 5.59
100	14/12	- 157 - 13	G N	NG	-		7 1	~ ~	1			field pH = NA
1 1 1	04/74/22	1440	G N	MG		1	2	> >	>			field pH = 5, 75
07	08/24/77	-	G N	0 M			ント	> >	>		1	field $pH = NA$
2)))		2	-									field pH =
												field pH =
												field pH =
												field pH =
	Chain of Custody Signatures					TAT	TAT Requested:	d: Normal:	nal: x	Rush: Sp	Specify:	(Subject to Surcharge)
Relinquished By (Signed) Date Ti	Time Received by (signed)	gned) Date	Time	ne		Fax Results: [] Yes	ts: [] Ye	s [x] No	0			
11 A 8129122	1515 AMARIA	a retur	829	22	515	Select Deliverable: []	iverable:]C of A	C df A [] QC Summary	Summary [] level 1	vel 1 [x] Level 2	12 [] Level 3 [] Level 4
	17		_	_		Additional Remarks:	l Remarks	V *	letals: B,C	a,Sb,As,Ba,Be,Cd,t	Cr,Co,Pb,Li,Mo,	* Metals: B,Ca,Sb,As,Ba,Be,Cd,Cr,Co,Pb,Li,Mo,Se,Tl,Fe,Mg,Mn,K,Na,Hg
	3					For Lab k	Receiving	Use Only	: Custody	For Lab Receiving Use Only: Custody Seal Intact? [] Yes	Yes [] No	Cooler Temp: °C
> For sample shipping and delivery details, see Sample Receipt & Review form (SRR.)	e Sample Receipt & Review forn	n (SRR.)	Same and a second	and the second second	Sample C	ollection	Time Zon	e: [x] E	stern [Sample Collection Time Zone: [x] Eastern [] Pacific [] Central	entral [] Mou	[] Mountain [] Other:
 Chain of Custody Number = Client Determined Chain of Custody Number = Client Determined 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 Duplicate, EB = Equipment Blank,	MS = Matrix Spike	Sample, MS	SD = Matrix S	ipike Duplicate	Sample, G =	: Grab, C = (Composite				
3.) Field Filtered: For liquid matrices, indicate with a - Y - for yes the sample was field filtered or - N - for sample was not field filtered	or yes the sample was field filtered or - N	- for sample was not	field filtered									
 Matrix Codes: WD=Drinking Water, WG=Groundwater, WS=Surface Water, WW=Water, WL=Leachate, SO=Soil, SE=Sediment, SL=Sludge, WQ=Water Quality Control Matrix S5.) Sample Analysis Requested: Analytical method requested (i.e. 82608, 6010B/7470A) and number of containers provided for each (i.e. 8260B - 3, 6010B/7470A - 1). 	, WS=Surface Water, WW=Waste Water d (i.e. 8260B, 6010B/7470A) and number	r, WL=Leachate, SO	=Soil, SE=S ed for each (ediment, SL= i.e. <i>8260B</i>	te, SO=Soil, SE=Sediment, SL=Sludge, WQ=Water (provided for each (i.e. <i>N260B</i> - 3, 6010B/7470A - 1).	Water Quality 4 - 1).	/ Control Ma	ttrix				
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	Acid, SH = Sodium Hydroxide, SA = Su	lfuric Acid, AA = As	corbic Acid,	HX = Hexan	e, ST = Sodiun	л Thiosulfate,	, If no preser	vative is ad	led = leave fi	eld blank		
7.) KNOWN OR POSSIBLE HAZARDS	Characteristic Hazards	Listed Waste	ste			Other OT= Other / I Inknown	r / I Inkno	um			Please pro	Please provide any additional details below regarding handling and/or
RCRA Metals As = Arsenic Hg= Mercury Ba = Barium Se= Selenium	FL = Flammable/ignitable CO = Corrosive RE = Reactive	LW= Listed waste (F,K,P and U-listed wastes.) Waste code(s):	l Vasic U-listed e(s):	wastes.)		(i.e.: High/low pH, asbes misc. health hazards, etc. Description:	Mow pH, th hazara m:	asbestos, s, etc.)	beryllium	Ot - Output output of the second s	disposal conc sample(s), typ matrices, etc.)	disposal concerns. (i.e.: Origin of sample(s), type of site collected from, matrices, etc.)
mium	TSCA Regulated PCB = Polychlorinated birhenvie											
PD = Lead	orbriendra							-	and the second se	The second se		

Page 77 of 84 SDG: 591881 Rev1

GEL Laboratories LLC	SAMPLE RECEIPT & REVIEW FØRM
Client:	SDG/AR/COC/Work Order: 59,135 59,333
Received By: Thyasia Tatum	Date Received: 0 29 20
Carrier and Tracking Number	Circle Applicable: FedEx Express FedEx Ground UPS Field Services Courier Other
Suspected Hazard Information $\overset{5}{\succ}$ $\overset{5}{\sim}$	*If Net Counts > 100cpm on samples not marked "radioactive", contact the Radiation Safety Group for further investigation.
A)Shipped as a DOT Hazardous?	Hazard Class Shipped: UN#: If UN2910, Is the Radioactive Shipment Survey Compliant? YesNo
B) Did the client designate the samples are to be received as radioactive?	COC notation or radioactive stickers on containers equal client designation.
C) Did the RSO classify the samples as radioactive?	Maximum Net Counts Observed* (Observed Counts - Area Background Counts):CPM / mR/Hr Classified as: Rad 1 Rad 2 Rad 3
D) Did the client designate samples are hazardous?	COC notation or hazard labels on containers equal client designation.
E) Did the RSO identify possible hazards?	If D or E is yes, select Hazards below. PCB's Flammable Foreign Soil RCRA Asbestos Beryllium Other:
Sample Receipt Criteria	
1 Shipping containers received intact and scaled?	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 Preservation Method, Wet Ice Ice Packs Dry ice None Other:
3 Samples requiring cold preservation within $(0 \le 6 \text{ deg. C})$?*	*all temperatures are recorded in Celsius TEMP:
4 Daily check performed and passed on IR temperature gun?	Temperature Device Serial #: IR2-20 Secondary Temperature Device Serial # (If Applicable):
5 Sample containers intact and sealed?	Circle Applicable: Seals broken Damaged container Leaking container Other (describe)
6 Samples requiring chemical preservation at proper pH?	Sample ID's and Containers Affected: If Preservation added, Lot#:
7 Do any samples require Volatile Analysis?	If Yes, are Encores or Soil Kits present for solids? Yes No NA(If yes, take to VOA Freezer) Do Jiquid VOA vials contain acid preservation? Yes No NA(If unknown, select No) Are liquid VOA vials free of headspace? Yes No NA Sample ID's and containers affected:
8 Samples received within holding time?	ID's and tests affected:
9 Sample ID's on COC match ID's on bottles?	ID's and containers affected:
10 Date & time on COC match date & time on bottles?	Circle Applicable: No dates on containers No times on containers COC missing info Other (describe)
11 Number of containers received match number indicated on COC?	Circle Applicable: No container count on COC Other (describe)
12 Are sample containers identifiable as GEL provided by use of GEL labels? COC form is properly signed in	Circle Applicable: Not relinquished Other (describe)
13 COC form is properly signed in relinquished/received sections? Comments (Use Continuation Form if needed):	Care Appleance. For lempassica Otter (aesence)
PM (or PMA) reviev	v: Initials Date B 21 22 Page of
PM (or PMA) review	GL-CHL-SR-001 Rev 7

of				-	-	-			59	590857	290	GEL Laboratories, LLC	TC
Project # GEL Quote #: COC Number ⁽¹⁾ :		<u>п</u> 5	el.com		Drato Radiochem	Chain of Custody and Analytical Request	LC bioassay I Sp al Reque	oecialty An SST	alytics		2040 Char Phor	2040 Savage Road Charleston, SC 29407 Phone: (843) 556-8171	77 171
GA Power	GEL Work Order Number:	nber: Phone #	G 404-506-7116	-7116	Project]	GEL Project Manager: Erin Trent	Erin Tre	1 Trent Sampa Analysis Requested ⁽⁵⁾	veie R.			Fax: (843) 766-1178	Fax: (843) 766-1178 Gill in the number of containers for each tast)
Project/Site Name: Plant Branch Ash Ponds		Fax #				Should this	Control of	202		IN IN			Contraction (6)
Address: 241 Ralph McGill Blvd SE, Atlanta GA 30308	A 30308					sample be considered:		UCCUARS		0	. 0		
Collected By: 14 / Dr Coble Anne Schmittee Send Results To: SCS & Geosyntec Contacts	Lec Send Results To: SCS	& Geosyntee	: Contac	s		pply (If	u.qz	SQT ,4C	320B	B, 6010I	756 '515		Comments Note: extra sample is
I Sample ID * For composites - indicate start and stop date/time	*Date Collected tertime (mm/dd/yy)	*Time ted Collected (Military)	d QC	Filtered ⁽³⁾	Sample Matrix ⁽⁴⁾	Radioactive yes, please suj isotopic info.)	10 nwonX (7) 222H əldizzoq 24mun layoT	Eb¥ 300' 2 Cl' E' 2C	Total & B SM 2 W2	Mets EPA 6020 Radium 2	6 9†8-MS		required for sample specific QC
BR.GWC-335	Ó	R		z	ЪМ			1 1	>	>			field pH = 4。67
BQGWC-375	06/23122			N	MG		r	7	7	1			field pH = 5, 32
BRGWC-385	08/23/22		5	2	NG			1	\mathbf{i}	1			field pH = 3, 97
P2-5315	06123122	1355	0	2	MG		1	1)	1			field pH = 7.18
PZ-135	0812312	2 1315	G	2	MG		1	7)	7			field pH = グ・H Le
FB-04	08/23/2	2 124	5	2	MQ			7)	7			field pH = NA
-				_									field pH =
		-											field pH =
						SCHI'E							field pH =
										-			field pH =
C	Chain of Custody Signatures	Ires					TATE	TAT Requested:		Normal:	x Rush:	Specify:	(Subject to Surcharge)
Relinquished By (Signed) Date Time	ne Received by (signed)	(signed)	Date	Time			Fax Results: [] Yes	:[]Ye	s [x] No	No			
12/ 8-24-22 , (OUT AND	Ja .		200	4183	5 (h21 C	Select Deliverable: [] C of A	verable:] C of	-] QC Summary []] level 1 [x] Level 2	vel 2 [] Level 3 [] Level 4
Com 8/24/20	2101 2 12	715-	81241	22	127	¥	Additional Remarks:	Remarks		Metals	B,Ca,Sb,As,Ba,Be,Co	1,Cr,Co,Pb,Li,M	* Metals: B,Ca,Sb,As,Ba,Be,Cd,Cr,Co,Pb,Li,Mo,Se,Tl,Fe,Mg,Mn,K,Na,Hg
	3	, and		and the second	and a strength	Cample Co	or Lab Re	ceiving	Use On	ly: Cus	For Lab Receiving Use Only: Custody Seal Intact? [] Yes] Yes [] No	For Lab Receiving Use Only: Custody Seal Intact? [] Yes [] No Cooler Temp: °C Sciented Collocition Time Zone [V] Eactern [] Double [] Double [] Double [] Other
 Chain of Custody Number = Client Determined 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 	<i>varipte Accept & Accept B</i>	ank, MS = Mat	ix Spike Sa	nple, MSD	= Matrix Spi	ke Duplicate S	Sample, G = 0	Grab, C = 0	Composite				
 Field Filtered: For liquid matrices, indicate with a - Y - for yes the sample was field filtered or - N - for sample was not field filtered. Matrix Codes: WD=Drinking Water, WG=Groundwater, WS=Surface Water, WW=Water Water, WL=Leachate, SO=Soil, SE=Sediment, SL=Sludge, WQ=Water Quality Control Matrix 	· yes the sample was field filtered or WS=Surface Water, WW=Waste W	- N - for sample ater, WL=Leach	was not field filtered. hate, SO=Soil, SE=So	d filtered. il, SE=Sedii	ment, SL=Slı	udge, WQ=W	ater Quality C	Control Ma	trix				
 Sample Analysis Requested: Analytical method requested (i.e. 82608, 60108/7470A) and number of containers provided for each (i.e. 8260B - 3, 60108/7470A - 1). Preservative Type: HA = Hydrochloric Acid, NI = Nitric Acid, SH = Sodium Hydroxide, SA = Sulfuric Acid, AA = Ascorbic Acid, HX = Hexane, ST = Sodium Thios 	(i.e. 8260B, 6010B/7470A) and nur toid, SH = Sodium Hydroxide, SA [±]	nber of container = Sulfuric Acid, /	s provided 1 AA = Ascor	or each (i.e. bic Acid, H2	8260B - 3, 0 X = Hexane, 3	irs provided för each (i.e. 82 <i>60B - 3, 6010B/7470A -</i> 1). AA = Ascorbic Acid, HX = Hexane, ST = Sodium Thiosulfate, If no preservative is added = leave field blank	- 1). Thiosulfate, I	f no preser	vative is a	dded = le	ve field blank		17
7) KNOWN OR POSSIBLE HAZARDS RCRA Metals As = Arsenic Hg= Mercury	Characteristic Hazards FL = Flammable/Ignitable CO = Corrosive RE = Reactive	e LW [±] (F,K	Listed Waste LW= Listed Waste (F,K,P and U-listed Waste code(s):	Listed Waste LW= Listed Waste (F,K,P and U-listed wastes.) Waste code(s):	stes.)		Other OT= Other / Unknown (i.e.: High/low pH, asbest misc. health hazards, etc.)	/ Unkno ow pH, c	wn 1sbestos 5, etc.)	, beryl	Other Other / Unknown OT= Other / Unknown (i.e.: High/low pH, asbestos, beryllium, irritants, other misc. health hazards, etc.)	Please p below re disposal sample(s	Please provide any additional details below regarding handling and/or disposal concerns. (i.e.: Origin of sample(s), type of site collected from, odd
ba = bartum se- scientum Cd = Cadmium Ag= Silver Cr = Chromium MR= Misc. RCRA metals bb = 1 ead	TSCA Regulated PCB = Polychlorinated binhenvls					-	Description.					mairices, etc.)	. etc.)
	VIPINUJU												

Page 79 of 84 SDG: 591881 Rev1

			<u> </u>	SAMPLE RECEIPT & REVIEW FORM 590851, 5908	33) 156106
Client: A P.U.			sr	OG/AR/COC/Work Order: 590838, 590840, 590845	59085 59085 59085
Received By: Thyasia Tatum			D	ate Received: 6 24 20	54085
Carrier and Tracking Number				Circle Applicuble: FedEx Express FedEx Ground UPS Field Services Courier Other	5908
Suspected Hazard Information	Yes	°N	*If	Net Counts > 100cpm on samples not marked "radioactive", contact the Radiation Safety Group for further investigation.	
A)Shipped as a DOT Hazardous?		V	Ha	zard Class Shipped: UN#: If UN2910, Is the Radioactive Shipment Survey Compliant? Yes No	
3) Did the client designate the samples are to be received as radioactive?		-	CC	C notation or radioactive stickers on containers equal client designation.	
C) Did the RSO classify the samples as adioactive?			Ma	ximum Net Counts Observed* (Observed Counts - Area Background Counts):CPM / mR/Hr Classified as: Rad 1 Rad 2 Rad 3	
D) Did the client designate samples are hazardous?		Ľ		C notation or hazard labels on containers equal client designation.	
3) Did the RSO identify possible hazards?		-	1 ^{If I}	D or E is yes, select Hazards below. PCB's Flammable Foreign Soil RCRA Asbestos Beryllium Other:	
Sample Receipt Criteria	Yes	NA	°Ż		
1 Shipping containers received intact and sealed?	V			Circle Applicable: Seals broken Damaged container Leaking container Other (describe)	
2 Chain of custody documents included with shipment?	V			Circle Applicable: Client contacted and provided COC COC created upon receipt	
3 Samples requiring cold preservation within $(0 \le 6 \text{ deg. C})$?*	V	Ľ		Preservation Method (Wet Ice) Ice Packs Dry ice None Other: *ail temperatures are recorded in Celsius TEMP: 2C	
4 Daily check performed and passed on IR temperature gun?	~	1 1 1		Temperature Device Serial #: <u>IR2-20</u> Secondary Temperature Device Serial # (If Applicable):	
5 Sample containers intact and sealed?	/			Circle Applicable: Seals broken Damaged container Leaking container Other (describe)	-
6 Samples requiring chemical preservation at proper pH?	\checkmark			Sample ID's and Containers Affected: If Preservation added, Lot#:	
7 Do any samples require Volatile Analysis?				If Yes, are Encores or Soil Kits present for solids? 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?	V			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?	V			Circle Applicable: No dates on containers No times on containers COC missing info Other (describe)	_
Number of containers received match number indicated on COC?				Circle Applicable: No container count on COC Other (describe)	-
Are sample containers identifiable as GEL provided by use of GEL labels?	\checkmark].		
COC form is properly signed in relinquished/received sections?	$\overline{\mathbf{v}}$			Circle Applicable: Not relinquished Other (describe)	_
comments (Use Continuation Form if needed):					
				als	

GL-CHL-SR-001 Rev 7

Erin Trent

From:	Erin Trent
Sent:	Tuesday, September 6, 2022 11:20 AM
То:	Betsy McDaniel; Abraham, Joju; Team Trent
Cc:	Chris Parker; Monte Jones; Charles Adams; Matt Malone; Ryan Walker; Lauren Coker
	(laucoker@southernco.com); Hodges, John Benjamin; Smilley, Michael Jay;
	lbmidkif@southernco.com; Hunter Auld
Subject:	RE: Branch Samples Received at 10 Degrees C

Betsy,

I apologize for the confusion. I just spoke with the group leader and the samples were at 5 degrees when received. The tech who called me about them being at 10 degrees was confused about which samples we were discussing. These samples were in temperature spec, so I will remove the qualifiers from the data. Again, I apologize for the confusion.

Thanks,

Erin Trent Project Manager



2040 Savage Road, Charleston, SC 29407 | PO Box 30712, Charleston, SC 29417 Office Direct: 843.769.7374 | Office Main: 843.556.8171 | Fax: 843.766.1178 E-Mail: <u>erin.trent@gel.com</u> | Website: <u>www.gel.com</u>

Analytical Testing



From: Betsy McDaniel <betsy.mcdaniel@atlcc.net>
Sent: Tuesday, September 6, 2022 9:36 AM
To: Abraham, Joju <JABRAHAM@SOUTHERNCO.COM>; Erin Trent <Erin.Trent@gel.com>; Team Trent
<Team.Trent@gel.com>
Cc: Chris Parker <chris.parker@atlcc.net>; Monte Jones <monte.jones@atlcc.net>; Charles Adams
<charles.adams@atlcc.net>; Matt Malone <matt.malone@atlcc.net>; Ryan Walker <ryan.walker@atlcc.net>; Lauren
Coker (laucoker@southernco.com) <laucoker@southernco.com>; Hodges, John Benjamin
<JOHHODGE@SOUTHERNCO.COM>; Smilley, Michael Jay <MJSMILLE@SOUTHERNCO.COM>; Ibmidkif@southernco.com;
Hunter Auld <hunter.auld@atlcc.net>
Subject: RE: Branch Samples Received at 10 Degrees C

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

Erin:

Please find attached the COCs our field technician (Hunter Auld) received upon delivering the Plant Branch samples last Friday. I can't read the signature of your lab representative, but the cooler temp is noted as 5 degrees C for both samples. Our technician delivered the samples on ice in his own cooler and mentioned at GEL Sample Receiving that he wanted the cooler back, so the samples were removed from the ACC technician's cooler at the lab. Our technician concurred that the ice had partially melted, but the samples were maintained on ice while they were in ACC custody.

Betsy McDaniel

Atlantic Coast Consulting, Inc. 1150 Northmeadow Pkwy, Suite 100, Roswell, Georgia 30076 Office: 770-594-5998 | Cell: 678-448-8459 | www.atlcc.net

"Our work helps produce a cleaner environment for all"

From: Abraham, Joju <<u>JABRAHAM@SOUTHERNCO.COM</u>>
Sent: Friday, September 2, 2022 6:19 PM
To: Erin Trent <<u>Erin.Trent@gel.com</u>>; Betsy McDaniel <<u>betsy.mcdaniel@atlcc.net</u>>; Chris Parker
<<u>chris.parker@atlcc.net</u>>; Monte Jones <<u>monte.jones@atlcc.net</u>>; Charles Adams <<u>charles.adams@atlcc.net</u>>; Matt
Malone <<u>matt.malone@atlcc.net</u>>; Ryan Walker <<u>ryan.walker@atlcc.net</u>>; Hartley, Lauren
<<u>LAUCOKER@SOUTHERNCO.COM</u>>; Hodges, Ben <<u>JOHHODGE@SOUTHERNCO.COM</u>>; Smilley, Michael Jay
<<u>MJSMILLE@SOUTHERNCO.COM</u>>; Midkiff, Laura B. <<u>lbmidkif@southernco.com</u>>
Cc: Team Trent <<u>Team.Trent@gel.com</u>>
Subject: RE: Branch Samples Received at 10 Degrees C

Erin,

Please qualify the samples with the noted temp and proceed with the requested analyses. We will follow up on this issue.

Joju

From: Erin Trent <<u>Erin.Trent@gel.com</u>>

Sent: Friday, September 02, 2022 5:18 PM To: Betsy McDaniel <<u>betsy.mcdaniel@atlcc.net</u>>; Chris Parker <<u>chris.parker@atlcc.net</u>>; Monte Jones <<u>monte.jones@atlcc.net</u>>; Charles Adams <<u>charles.adams@atlcc.net</u>>; Matt Malone <<u>matt.malone@atlcc.net</u>>; Ryan Walker <<u>ryan.walker@atlcc.net</u>>; Adria Reimer <<u>areimer@geosyntec.com</u>>; Anthony Szwast <<u>anthony.szwast@geosyntec.com</u>>; <u>cnelson@geosyntec.com</u>; Abraham, Joju <<u>JABRAHAM@SOUTHERNCO.COM</u>>; Jurinko, Kristen Nichole <<u>KNJURINK@SOUTHERNCO.COM</u>>; Hartley, Lauren <<u>LAUCOKER@SOUTHERNCO.COM</u>>; Singleton, Robert <<u>ROSINGLE@SOUTHERNCO.COM</u>>; Hodges, Ben <<u>JOHHODGE@SOUTHERNCO.COM</u>>; Smilley, Michael Jay <<u>MJSMILLE@SOUTHERNCO.COM</u>>; Muskus Ruiz, Noelia S. <<u>NSMUSKUS@SOUTHERNCO.COM</u>>; Midkiff, Laura B. <<u>Ibmidkif@southernco.com</u>> Cc: Team Trent <<u>Team.Trent@gel.com</u>> Subject: Branch Samples Received at 10 Degrees C

EXTERNAL MAIL: Caution Opening Links or Files

Good Afternoon,

The following samples were received at 10 degrees C. Please advise on how to proceed.

PZ-70 PZ-52D

These were in the same cooler together. The ice was partially melted.

Erin Trent Project Manager



2040 Savage Road, Charleston, SC 29407 | PO Box 30712, Charleston, SC 29417 Office Direct: 843.769.7374 | Office Main: 843.556.8171 | Fax: 843.766.1178 E-Mail: <u>erin.trent@gel.com</u> | Website: <u>www.gel.com [gel.com]</u>

Analytical Testing



CONFIDENTIALITY NOTICE: This e-mail and any files transmitted with it are the property of The GEL Group, Inc. and its affiliates. All rights, including without limitation copyright, are reserved. The proprietary information contained in this e-mail message, and any files transmitted with it, is intended for the use of the recipient(s) named above. If the reader of this e-mail is not the intended recipient, you are hereby notified that you have received this e-mail in error and that any review, distribution or copying of this e-mail or any files transmitted with it is strictly prohibited. If you have received this e-mail in error, please notify the sender immediately and delete the original message and any files transmitted. The unauthorized use of this e-mail or any files transmitted with it is prohibited and disclaimed by The GEL Group, Inc. and its affiliates..

State	Certification
Alabama	42200
Alaska	17-018
Alaska Drinking Water	SC00012
Arkansas	88-0651
CLIA	42D0904046
California	2940
Colorado	SC00012
Connecticut	PH-0169
DoD ELAP/ ISO17025 A2LA	2567.01
Florida NELAP	E87156
Foreign Soils Permit	P330-15-00283, P330-15-00253
Georgia	SC00012
Georgia SDWA	967
Hawaii	SC00012
Idaho	SC00012
Illinois NELAP	200029
Indiana	C-SC-01
Kansas NELAP	E-10332
Kentucky SDWA	90129
Kentucky Wastewater	90129
Louisiana Drinking Water	LA024
Louisiana NELAP	03046 (AI33904)
Maine	2019020
Maryland	270
Massachusetts	M-SC012
Massachusetts PFAS Approv	Letter
Michigan	9976
Mississippi	SC00012
Nebraska	NE-OS-26-13
Nevada	SC000122023-3
New Hampshire NELAP	2054
New Jersey NELAP	SC002
New Mexico	SC00012
New York NELAP	11501
North Carolina	233
North Carolina SDWA	45709
North Dakota	R-158
Oklahoma	2022-137
Pennsylvania NELAP	68-00485
Puerto Rico	SC00012
S. Carolina Radiochem	10120002
Sanitation Districts of L	9255651
South Carolina Chemistry	10120001
Tennessee	TN 02934
Texas NELAP	T104704235-22-20
Utah NELAP	SC000122021–36
Vermont	VT87156
Virginia NELAP	460202
Washington	C780

List of current GEL Certifications as of 03 October 2022



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

September 29, 2022

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

Re: Branch CCR Groundwater Compliance APE Work Orders: 591883,590859 and 591353

Dear Joju Abraham:

GEL Laboratories, LLC (GEL) appreciates the opportunity to provide the enclosed analytical results for the sample(s) we received on August 24, 2022, August 29, 2022 and September 02, 2022. This revised data report has been prepared and reviewed in accordance with GEL's standard operating procedures.

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

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

Sincerely,

Vie & Trent

Erin Trent Project Manager

Purchase Order: GPC82177-0003 Enclosures



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

Certificate of Analysis Report for

GPCC001 Georgia Power Company

Client SDG: 591883 GEL Work Order: 591883

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.

Vie & Trent

Reviewed by

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

Certificate of Analysis Report for

GPCC001 Georgia Power Company

Client SDG: 591353 GEL Work Order: 591353

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.

Vie & Trent

Reviewed by

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

Certificate of Analysis Report for

GPCC001 Georgia Power Company

Client SDG: 590859 GEL Work Order: 590859

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.

Vie & Trent

Reviewed by

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

Certificate of Analysis

Company : Address :	Company	ver Company AcGill Blvd I	y, Southern NE, Bin 1016	0										
	Atlanta, Geo	orgia 30308						R	epoi	rt Date:	Septemb	er 29.	2022	
Contact:	Joju Abraha	-							- r		~	,		
Project:	5		er Complianc	eAPE										
	Dialon CCI													_
Client Sample Sample ID: Matrix: Collect Date: Receive Date Collector:	59188 WG 01-SE	3001 P-22 P-22					oject: ient ID:			00101 001				
Parameter	Qualifier		ncertainty	MDC	TPU	RL	Units	PF	DF	F Analyst	t Date	Time	Batch	Mtd
1 E	uid "As Receive U lium-228 Calcula 6, Liquid "As Rec lytical Methods Description EPA 904.0/SW846	d" 0.802 ation "See Po 1.57 ceived" 0.771 were perfor	+/-1.19 +/-0.340	1.96 55″ 0.383	+/-1.16 +/-1.22 +/-0.361	3.00	pCi/L pCi/L pCi/L			NXL1	09/27/22 09/29/22 09/28/22	1056	2312610	2
2 0	Calculation													
3 E	EPA 903.1 Modifi	ed												
Surrogate/Tracer 1	Recovery	Test						Batch	ID	Recover	y% Ac	cepta	ble Limi	its
Barium-133 Trac	cer	GFPC Ra2	228, Liquid "A	As Received"				23126	14	88	3	(15%-	-125%)	
Notes: The MDC is a sa TPU and Count <u>Column headers</u> DF: Dilution Fac DL: Detection L	ing Uncertaint	MDC. y are calcul	ated at the 9 Mtd.:		e level (1.96-sigma	a).							-	

DL: Detection Limit Lc/LC: Critical Level MDA: Minimum Detectable Activity MDC: Minimum Detectable Concentration Mtd.: Method PF: Prep Factor RL: Reporting Limit TPU: Total Propagated Uncertainty

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

Certificate of Analysis

Company : Address :	Georgia Powe Company 241 Ralph Me			0										
	Atlanta, Geor	gia 30308						R	eport	t Date:	Septem	ber 23.	2022	
Contact:	Joju Abraham	•							-r		F	,		
Project:	Branch CCR		er Complianc	eAPE										
	Dialen CCR													_
Client Sample Sample ID: Matrix: Collect Date: Receive Date: Collector:	591353 WG 24-AU(001 G-22					oject: ient ID:			0101 01				
Parameter	Qualifier	Result I	ncertainty	MDC	TPU	RL	Units	PF	DF	Analyst	Date	Time	 Batch	Mtd
Rad Gas Flow Propo GFPC Ra228, Liqu	ortional Countinuid "As Received	ng												
Radium-228	U	-2.32	+/-1.31	2.83	+/-1.31	3.00	pCi/L			JXC9	09/20/22	2 1002	2310792	1
Radium-226+Radii	um-228 Calcula			<i>s</i> ″										
Radium-226+228 Sum		0.152	+/-1.33		+/-1.33		pCi/L			NXL1	09/23/22	2 0955	2310789	2
Rad Radium-226 Lucas Cell, Ra226,	Liquid "As Reco	eived"												
Radium-226	U	0.152	+/-0.211	0.365	+/-0.213	1.00	pCi/L			LXP1	09/15/22	2 0920	2310752	3
The following Analy	tical Methods v	vere perfor	med											
	escription	vere perior	liicu											
1 EI	PA 904.0/SW846 9	9320 Modifie												
	alculation													
3 EI	PA 903.1 Modified	i												
Surrogate/Tracer R	ecovery	Гest						Batch	ID 1	Recovery	y% A	ccepta	ble Limi	its
Barium-133 Trace	er	GFPC Ra2	28, Liquid "A	As Received"				23107		67.:		(15%-	125%)	
Notes:			•										-	
The MDC is a san			ated at the 9.	5% confidenc	e level (1.96-sigma	ı).								
Column headers a DF: Dilution Fact	tor	follows:		Method										
DL: Detection Li	mıt		PF: Pr	ep Factor										

DL: Detection Limit Lc/LC: Critical Level MDA: Minimum Detectable Activity MDC: Minimum Detectable Concentration Mtd.: Method PF: Prep Factor RL: Reporting Limit TPU: Total Propagated Uncertainty

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

Company : Address :	Georgia Powe Company 241 Ralph Mc			0								
	Atlanta, Georg	gia 30308						Re	eport Date: S	September 23	, 2022	
Contact:	Joju Abraham	1										
Project:	Branch CCR (Groundwate	r Compliance	eAPE								
Client Sample I Sample ID: Matrix: Collect Date: Receive Date: Collector:	5913530 WG 24-AUG 29-AUG Client	002 G-22 G-22					oject: ient ID:	GPC	CC00101 CC001			
Parameter	Qualifier	Result Un	certainty	MDC	TPU	RL	Units	PF	DF Analyst	Date Time	Batch M	Atd.
Rad Gas Flow Propor												
GFPC Ra228, Liquid Radium-228	d As Keceivea	2.43	+/-1.23	1.78	+/-1.37	3.00	pCi/L		IXC9 (09/20/22 1002	2310792	1
Radium-226+Radiur	m-228 Calcula				1/ 1.57	5.00	PCI/L		37107 0	<i>9/20/22</i> 1002	2310172	1
Radium-226+228 Sum	n-220 Caleman	3.10	+/-1.27	,	+/-1.41		pCi/L		NXL1 (09/23/22 0955	2310789	2
Rad Radium-226												
Lucas Cell, Ra226, 1	Liquid "As Rece	eived"										
Radium-226		0.669	+/-0.328	0.390	+/-0.342	1.00	pCi/L		LXP1 (09/15/22 0920	2310752	3
The following Analyti	ical Methods v	vere perforr	med									
	escription											
1 EP/	PA 904.0/SW846 9	320 Modified	1									
2 Cal	lculation											
3 EP/	A 903.1 Modified	1										
Surrogate/Tracer Re	ecovery 7	ſest						Batch J	ID Recovery	3% Accepts	able Limit	ts
Barium-133 Tracer	:	GFPC Ra22	28, Liquid "A	As Received	<i>ı</i> "			231079	92 79.5	5 (15%	-125%)	
Notes:			, ,							-	-	
The MDC is a sam	ple specific M	IDC.										
			ted at the 95	5% confid€	lence level (1.96-sigma	a).						
Column headers an		ollows:										
DF: Dilution Facto				Method								
DL: Detection Lin				ep Factor	::4							
Lc/LC: Critical Le MDA: Minimum I		tivity		eporting Li	amit bagated Uncertainty							
MDC: Minimum I				101/1110/2	agated Uncertainty							
112 01 11111111111111111111111111111111	<i><i><i>(</i>) <i>(</i>) <i>(</i>) <i>(</i>) <i>(</i>) <i>(</i>) <i>(</i>) <i>(</i></i></i>	loomanon										

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

Company : Address :	Georgia Powe Company 241 Ralph Mc)								
	Atlanta, Georg	gia 30308						Re	port Date: 5	September 23,	, 2022	I
Contact:	Joju Abraham	1							L			
Project:	Branch CCR (Groundwate	r Compliance	eAPE								
Client Sample Sample ID: Matrix: Collect Date: Receive Date: Collector:	5913530 WG 24-AUC 29-AUC Client	003 G-22 G-22					oject: ient ID:	ĞPĊ				
Parameter	Qualifier	Result Un	icertainty	MDC	TPU	RL	Units	PF	DF Analyst	Date Time	Batch M	Mtd.
Rad Gas Flow Propor												
<i>GFPC Ra228, Liqui</i> Radium-228	uid "As Received" U	<i>!"</i> 0.704	+/-1.05	1.81	+/-1.06	3.00	pCi/L		IXC9 (09/20/22 1002	2310792	1
Radium-226+Radiu					⊤/-1.00	3.00	pene		JAC7 (J9/20/22 1002	2310772	1
Radium-226+228 Sum	m-220 Culturar	1.38	+/-1.08		+/-1.10		pCi/L		NXL1 (09/23/22 0955	2310789	2
Rad Radium-226			.,		•••		r					-
Lucas Cell, Ra226, 1	Liquid "As Rece	eived"										
Radium-226	-	0.673	+/-0.263	0.191	+/-0.294	1.00	pCi/L		LXP1 (09/15/22 0920	2310752	3
The following Analyt	tical Methods v	vere perfort	med									
	escription	I										
1 EP.	PA 904.0/SW846 9	9320 Modified	±									
2 Cal	alculation											
3 EP.	PA 903.1 Modified	ł										
Surrogate/Tracer Re	ecovery 7	Гest						Batch I	D Recovery	y% Accepta	able Limit	ts
Barium-133 Tracer	r	GFPC Ra22	28, Liquid "A	s Received	d"			231079			-125%)	
Notes:			- , 1							[*]	,	
The MDC is a sam	uple specific N	IDC.										
			ted at the 95	5% confid	lence level (1.96-sigm	1a).						
Column headers a DF: Dilution Facto DL: Detection Lin Lc/LC: Critical Le MDA: Minimum I MDC: Minimum I	tor mit evel Detectable Act	ctivity	PF: Pre RL: Re TPU: T	Method ep Factor eporting L Total Prop								

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

Company : Address :	Georgia Powe Company 241 Ralph Mc			0								
	Atlanta, Georg	gia 30308						Re	port Date: 5	September 23	, 2022	l
Contact:	Joju Abraham	1										
Project:	Branch CCR (Groundwate	r Complianc [,]	eAPE								
Client Sample I Sample ID: Matrix: Collect Date: Receive Date: Collector:	ID: FD-04 5913530 WG 24-AUG 29-AUG Client	G-22					oject: ient ID:		C00101 C001			
Parameter	Qualifier	Result Ur	ncertainty	MDC	TPU	RL	Units	PF	DF Analyst	Date Time	e Batch	Mtd.
Rad Gas Flow Propor												
GFPC Ra228, Liqui Radium-228	ud "As Received" U	0.727	+/-0.977	1.67	+/-0.995	3.00	pCi/L		IXC9 (09/20/22 1002	2310702	1
Radium-226+Radiu	-				T/-0.775	5.00	pci/L		JAC7 (J9/20/22 1002	2310172	1
Radium-226+228 Sum	m-220 Cuicman	3.24	+/-1.11	j.	+/-1.23		pCi/L		NXL1 (09/23/22 0955	2310789	2
Rad Radium-226		0.2.	.,				P			// _		-
Lucas Cell, Ra226, 1	Liquid "As Rece	eived"										
Radium-226	1	2.52	+/-0.523	0.212	+/-0.717	1.00	pCi/L		LXP1 (09/15/22 0920	2310752	3
The following Analyt	tical Methods v	vere perfor	med									
	escription											
1 EP.	PA 904.0/SW846 9	J320 Modifie	d					-				
2 Cal	lculation											
3 EP.	PA 903.1 Modified	ł										
Surrogate/Tracer Re	ecovery 7	Гest						Batch I	D Recovery	y% Accepta	able Limi	its
Barium-133 Tracer	ſ	GFPC Ra2	28, Liquid "A	As Received"				2310792	2 82.6	5 (15%	5-125%)	
Notes: The MDC is a sam	ple specific M	1DC.	-		ence level (1.96-sigma)	ι).						
Column headers at DF: Dilution Facto DL: Detection Lin Lc/LC: Critical Le MDA: Minimum I MDC: Minimum I	or mit evel Detectable Act	tivity	PF: Pre RL: Re TPU: 7	Method Tep Factor eporting Lir Total Propa	mit agated Uncertainty							

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

Company : Address :	Georgia Powe Company 241 Ralph Mc			0								
	Atlanta, Georg	gia 30308						Re	port Date: S	September 23,	, 2022	
Contact:	Joju Abraham	1										
Project:	Branch CCR	Groundwate	r Complianc	eAPE								
Client Sample Sample ID: Matrix: Collect Date: Receive Date: Collector:	5913530 WG 24-AUC 29-AUC Client	005 G-22 G-22					oject: ient ID:	ĞPČ				
Parameter	Qualifier		ncertainty	MDC	TPU	RL	Units	PF	DF Analyst	Date Time	Batch I	Mtd.
Rad Gas Flow Propor												
GFPC Ra228, Liqui Radium-228	id "As Receivea"	<i>l"</i> 1.62	+/-0.934	1.34	+/-1.02	3.00	pCi/L		IXC9 (09/20/22 1002	2310792	1
Radium-226+Radiu	um 228 Calcula				+/-1.02	5.00	pci/L		JAC9 U	19/20/22 1002	2310/92	1
Radium-226+228 Sum	<i>m-220 Culcului</i>	1.86	+/-0.971	j.	+/-1.05		pCi/L		NXL1 (09/23/22 0955	2310789	2
Rad Radium-226		1.00			., 1.0-		PC#L			,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	2010.0.	-
Lucas Cell, Ra226,	Liquid "As Rec	eived"										
Radium-226	U	0.232	+/-0.267	0.444	+/-0.269	1.00	pCi/L		LXP1 (09/15/22 0920	2310752	3
The following Analyt	tical Methods y	vere perfor	med									
	escription	<u></u>										
1 EP	PA 904.0/SW846 9	9320 Modifier	d									
2 Cal	alculation											
3 EP	PA 903.1 Modified	t										
Surrogate/Tracer Re	ecovery	Test						Batch II	D Recovery	% Accepts	able Limit	ts
Barium-133 Tracer	r	GFPC Ra2	28, Liquid "A	s Received'				2310792			-125%)	
Notes:			- , 1							,	/	
The MDC is a sam	uple specific N	IDC.										
			ted at the 95	5% confide	ence level (1.96-sigm	a).						
Column headers a DF: Dilution Factor DL: Detection Lin Lc/LC: Critical Le MDA: Minimum 1 MDC: Minimum 1	tor mit evel Detectable Act	ctivity	PF: Pre RL: Re TPU: 7	Method ep Factor eporting Li Total Propa	imit agated Uncertainty							

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

Company : Address :	Georgia Powe Company 241 Ralph Mc)								
	Atlanta, Georg	gia 30308						Re	port Date: 5	September 23	3, 2022	
Contact:	Joju Abraham	1						-				
Project:	Branch CCR	Groundwate	r Compliance	eAPE								
Client Sample Sample ID: Matrix: Collect Date: Receive Date: Collector:	5913530 WQ 24-AUC	G-22				Pro Cli	oject: ient ID:	GPC				
Parameter	Qualifier		ncertainty	MDC	TPU	RL	Units	PF 1	DF Analyst	Date Tim	e Batch M	Mtd.
Rad Gas Flow Propo		0										
GFPC Ra228, Liqu Radium-228	ua "As Receivea" U	0.416	+/-0.862	1.54	+/-0.868	3.00	pCi/L		IXC9	09/20/22 1002	2310792	1
Radium-226+Radiu					17 0.000	5.00	PCI/L		57107	<i>))/20/22</i> 1002	2310772	1
Radium-226+228 Sum	In 220 Curcula	0.972	+/-0.900		+/-0.913		pCi/L		NXL1 (09/23/22 0955	5 2310789	2
Rad Radium-226							*					
Lucas Cell, Ra226,	Liquid "As Rece	eived"										
Radium-226		0.556	+/-0.258	0.298	+/-0.284	1.00	pCi/L		LXP1 (09/15/22 0920) 2310752	3
The following Analyt	tical Methods v	vere perfori	med									
	escription											
1 EP	PA 904.0/SW846 9	J320 Modified	Ŀ									
2 Ca	alculation											
3 EF	PA 903.1 Modified	1										
Surrogate/Tracer R	ecovery 7	Гest						Batch I	D Recovery	y% Accept	table Limit	ts
Barium-133 Trace	r	GFPC Ra22	28, Liquid "A	s Received"				2310792			%-125%)	
Notes: The MDC is a sam TPU and Countin	nple specific M	1DC.	-		nce level (1.96-sigma)).						
Column headers a DF: Dilution Fact DL: Detection Lin Lc/LC: Critical L MDA: Minimum MDC: Minimum	tor mit .evel Detectable Act	tivity	PF: Pre RL: Re TPU: T	Method ep Factor eporting Lin Total Propag	nit gated Uncertainty							

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

Certificate of Analysis

Company : Address :	Company	ver Company AcGill Blvd I	y, Southern NE, Bin 1016	0										
	Atlanta, Geo	orgia 30308						Re	epoi	rt Date:	Septem	ber 20,	2022	
Contact:	Joju Abraha	-							1		1	,		
Project:	Branch CCF	د Groundwat	er Complianc	eAP - E										
Client Samp Sample ID: Matrix: Collect Date Receive Date	590859 WG e: 23-AU e: 24-AU	JG-22 JG-22					oject: ient ID:			00101 001				_
Collector:	Client					T T 1 /	DE	DI					
Parameter	Qualifier		ncertainty	MDC	TPU	RL	Units	PF	Dr	F Analyst	t Date	2 Time	Batch	Mtd.
Rad Gas Flow Prog GFPC Ra228, Li														
Radium-228	<i>quia As Keceive</i> U	a 0.835	+/-1.09	1.85	+/-1.11	3.00	pCi/L			IXC9	09/16/2	2 1055	2309177	1
Radium-226+Rad	e				17 1.11	5.00	PCI/L			mey	09/10/2	2 1000	2307177	1
Radium-226+228 Sur		1.94	+/-1.16	.5	+/-1.19		pCi/L			NXL1	09/20/2	2 0955	2309181	2
Rad Radium-226	-						r							
Lucas Cell, Ra22	6, Liquid "As Re	ceived"												
Radium-226	-	1.10	+/-0.413	0.341	+/-0.446	1.00	pCi/L			LXP1	09/16/2	2 1006	2309179	3
The following Ana	lvtical Methods	were perfor	med											
	Description	I												
1	EPA 904.0/SW846	5 9320 Modifie	ed											
2	Calculation													
3	EPA 903.1 Modifie	ed												
Surrogate/Tracer	Recoverv	Test						Batch]	D	Recovery	v% A	ccepta	ble Limi	its
Barium-133 Tra	-	GFPC Ra2	228, Liquid "A	As Received"				230917		85.	•	•	125%)	
Notes: The MDC is a sa TPU and Coun <u>Column header</u> DF: Dilution Fa	ample specific l ting Uncertaint s are defined as actor	MDC. y are calcul	ated at the 9 Mtd.:	5% confiden Method	ce level (1.96-sigm	a).			-				,	
DL: Detection I	Limit		PF: Pi	ep Factor										

DL: Detection Limit Lc/LC: Critical Level MDA: Minimum Detectable Activity MDC: Minimum Detectable Concentration Mtd.: Method PF: Prep Factor RL: Reporting Limit TPU: Total Propagated Uncertainty

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

Company : Address :	Georgia Powe Company 241 Ralph Mc			0								
	Atlanta, Georg	gia 30308						Re	eport Date: S	September 2	.0, 2022	I
Contact:	Joju Abraham	1							•	1		
Project:	Branch CCR (Groundwate	r Compliance	eAP - E								
Client Sample Sample ID: Matrix: Collect Date: Receive Date: Collector:	5908590 WG 23-AUC	002 G-22 G-22					oject: ent ID:	ĞPĊ	CC00101 CC001			
Parameter	Qualifier	Result Un	icertainty	MDC	TPU	RL	Units	PF	DF Analyst	Date Tin	ne Batch	Mtd.
Rad Gas Flow Propo												
GFPC Ra228, Liqu Radium-228	ud "As Received" U	1.08	+/-1.44	2.45	+/-1.47	3.00	pCi/L		IXC9 (09/16/22 105	5 2309177	/ 1
Radium-226+Radii					T/-1. T /	5.00	рсиль		JAC / U	19/10/22 105	5 2507111	1
Radium-226+228 Sum	m-220 Cultular	2.37	+/-1.49	3	+/-1.53		pCi/L		NXL1 (09/20/22 095	5 2309181	2
Rad Radium-226			.,				P~		• • • • • •	·// = 0. = 0		-
Lucas Cell, Ra226,	Liquid "As Rece	eived"										
Radium-226	1	1.29	+/-0.385	0.219	+/-0.442	1.00	pCi/L		LXP1 (09/16/22 100	6 2309179	3
The following Analy	tical Methods v	vere perfort	med									
	escription											
1 EF	PA 904.0/SW846 9	320 Modified	i i									
2 Ca	alculation											
3 EF	PA 903.1 Modified	1										
Surrogate/Tracer R	ecovery 7	ſest						Batch I	D Recovery	% Accep	table Limi	its
Barium-133 Trace	r	GFPC Ra22	28, Liquid "A	As Received"				230917	77 80.1	(15)	%-125%)	
Notes:			· •								,	
The MDC is a sam												
TPU and Countir	ig Uncertainty	are calcula	ted at the 95	5% confidenc	e level (1.96-sigma)	.).						
Column headers a DF: Dilution Fact DL: Detection Lin Lc/LC: Critical L	tor mit	<u>`ollows:</u>	PF: Pro	Method ep Factor eporting Limi	it							

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

Company : Address :	Georgia Powe Company 241 Ralph Mc			0								
	Atlanta, Georg	gia 30308						Re	port Date: S	Septembe	r 20, 2022	ł
Contact:	Joju Abraham	-							L			ļ
Project:	Branch CCR (Groundwate	r Complianc	eAP - E								l
Client Sample Sample ID: Matrix: Collect Date: Receive Date: Collector:	5908590 WG 23-AUC 24-AUC Client	003 G-22 G-22				Cli	oject: lent ID:	GPC				
Parameter	Qualifier	Result Un	certainty	MDC	TPU	RL	Units	PF	DF Analyst	Date T	ime Batch	Mtd.
Rad Gas Flow Proport		0										
GFPC Ra228, Liqui Radium-228	a As Keceiveu	2.71	+/-1.32	1.92	+/-1.48	3.00	pCi/L		IXC9 (09/16/22 1	055 2309177	1
Radium-226+Radiu	m-228 Calcula				17 1.40	5.00	pene		JAC/ (<i>J7/10/22</i> 1	055 2507177	1
Radium-226+228 Sum	m-220 Cureman	3.12	+/-1.34	,	+/-1.50		pCi/L		NXL1 (09/20/22 0	955 2309181	2
Rad Radium-226							r -					
Lucas Cell, Ra226,	Liquid "As Rece	eived"										
Radium-226		0.407	+/-0.232	0.260	+/-0.247	1.00	pCi/L		LXP1 (09/16/22 1	006 2309179	3
The following Analyt	tical Methods v	vere perforr	ned									
	escription											
1 EP	PA 904.0/SW846 9	9320 Modified	1									
2 Ca	llculation											
3 EP	A 903.1 Modified	1										
Surrogate/Tracer R	ecovery 7	Гest						Batch I	D Recovery	% Acc	eptable Limi	ts
Barium-133 Tracer	r	GFPC Ra22	28, Liquid "A	As Received"				230917	7 82.2	2 (1	15%-125%)	
Notes:			· ·									
The MDC is a sam												
TPU and Countin	g Uncertainty	are calcula	ted at the 9.	5% confiden	ice level (1.96-sigma)).						
Column headers a DF: Dilution Fact DL: Detection Lir	or	collows:		Method ep Factor								

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

Company : Address :	Georgia Powe Company 241 Ralph Mc			D									
	Atlanta, Georg	gia 30308						Re	eport Date: S	Septembe	er 20, 2	.022	I
Contact:	Joju Abraham	1							-	-			I
Project:	Branch CCR (Groundwate	r Compliance	eAP - E									I
Client Sample I Sample ID: Matrix: Collect Date: Receive Date: Collector:	ID: PZ-53D 5908590 WG 23-AUG 24-AUG Client	004 G-22					oject: ient ID:		2C00101 2C001				
Parameter	Qualifier	Result Un	certainty	MDC	TPU	RL	Units	PF	DF Analyst	Date 7	Time I	Batch I	Mtd.
Rad Gas Flow Propor													I
<i>GFPC Ra228, Liqui</i> Radium-228	d "As Keceivea	2.35	+/-1.43	2.23	+/-1.55	3.00	pCi/L		IXC9	09/16/22	1055 2	200177	1
Radium-228 Radium-226+Radiu	228 Calcula				⊤/-1.JJ	5.00	pen e		JAC7 V	J9/10/22	1055 2	.309177	1
Radium-226+228 Sum	m-220 Cuicuian	3.04	+/-1.47	<i>i</i>	+/-1.59		pCi/L		NXL1	09/20/22 (0955 2	2309181	2
Rad Radium-226		5.01	., 1.1,		1/ 1.02		Point			<i>J/ 20/22</i>	0,00 -	507101	2
Lucas Cell, Ra226, I	Liquid "As Rece	eived"											
Radium-226		0.695	+/-0.330	0.372	+/-0.354	1.00	pCi/L		LXP1	09/16/22	1007 2	2309179	3
The following Analyt	cical Methods v	vere perforr	ned										
	escription	<u></u>											
1 EP.	PA 904.0/SW846 9	€ € € € € € € €	ī										
2 Cal	llculation												
3 EP.	A 903.1 Modified	1											
Surrogate/Tracer Re	ecovery 7	ſest						Batch I	D Recovery	y% Ac	ceptabl	le Limit	ts
Barium-133 Tracer	ε	GFPC Ra22	28, Liquid "A	s Received'	a			230917	77 83.7	7 ((15%-12	25%)	
Notes: The MDC is a sam TPU and Countin	ple specific M	IDC.	-		ence level (1.96-sigm	ıa).						·	
Column headers at DF: Dilution Facto DL: Detection Lin Lc/LC: Critical Le MDA: Minimum I MDC: Minimum I	or mit evel Detectable Act	tivity	PF: Pre RL: Re TPU: 7	Method ep Factor eporting Lin Total Propa	imit agated Uncertainty								

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

Company : Address :	Georgia Powe Company 241 Ralph Mc)									
	Atlanta, Georg	gia 30308						Re	port Date:	Septemb	oer 20, 2	2022	I
Contact:	Joju Abraham	1								Lan.			I
Project:	Branch CCR (Groundwate	r Compliance	еAP - Е									I
Client Sample I Sample ID: Matrix: Collect Date: Receive Date: Collector:	ID: PZ-13S 5908590 WG 23-AUG 24-AUG Client	005 G-22					oject: ient ID:	GPCO					
Parameter	Qualifier	Result Un	icertainty	MDC	TPU	RL	Units	PF 1	DF Analyst	Date	Time	Batch I	Mtd.
Rad Gas Flow Propor													l
<i>GFPC Ra228, Liqui</i> Radium-228	ud "As Received" U	0.879	+/-1.16	1.97	+/-1.18	3.00	pCi/L		IXC9	00/16/22	1055	2309177	1
Radium-226+Radiu	-				⊤/-1.10	5.00	pci/L		JAC	09/10/22	1055	2309177	1
Radium-226+228 Sum	m-220 Cuician	1.83	+/-1.20		+/-1.23		pCi/L		NXL1	09/20/22	0955	2309181	2
Rad Radium-226							r - ·			07.20	0,2.		-
Lucas Cell, Ra226, I	Liquid "As Rece	eived"											
Radium-226	-	0.956	+/-0.316	0.198	+/-0.371	1.00	pCi/L		LXP1	09/16/22	1007	2309179	3
The following Analyt	tical Methods v	vere perfort	med										
	escription	L											
1 EP.	PA 904.0/SW846 9	320 Modified	j.										
2 Cal	lculation												
3 EP.	PA 903.1 Modified	i											
Surrogate/Tracer Re	ecovery 7	Fest						Batch IJ	D Recovery	y% Ac	cceptar	ole Limi [†]	ts
Barium-133 Tracer	r	GFPC Ra22	28, Liquid "A	s Received	ł"			2309177	7 79.9	9	(15%-1	125%)	
Notes: The MDC is a sam TPU and Countin	ple specific M	ÍDC.	-		lence level (1.96-sigm	na).							
Column headers at DF: Dilution Facto DL: Detection Lin Lc/LC: Critical Le MDA: Minimum I MDC: Minimum I	or mit evel Detectable Act	tivity	PF: Pre RL: Re TPU: T	Method ep Factor eporting L Total Propa	imit bagated Uncertainty								

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

Company : Address :	Georgia Powe Company 241 Ralph Mc)								
	Atlanta, Georg	gia 30308						Re ⁻	port Date: S	September 2), 2022	
Contact:	Joju Abraham	.1										
Project:	Branch CCR (Groundwate	r Compliance	eAP - E								
Client Sample Sample ID: Matrix: Collect Date: Receive Date: Collector:	5908590 WQ 23-AUG	G-22					oject: ient ID:		C00101 C001			
Parameter	Qualifier	Result Un	certainty	MDC	TPU	RL	Units	PF 1	DF Analyst	Date Tim	e Batch	Mtd.
Rad Gas Flow Propo												
<i>GFPC Ra228, Liqu</i> Radium-228	ud "As Received" U	<i>l"</i> 1.64	+/-1.23	1.95	+/-1.30	3.00	pCi/L		IXC9	09/16/22 1056	< 2300177	7 1
Radium-226+Radiu	-				⊤/-1.30	5.00	pene		JAC7 (J9/10/22 1050	1 2309111	1
Radium-226+228 Sum	<i>m-220 Cucuun</i>	2.10 2.10	+/-1.26		+/-1.33		pCi/L		NXL1	09/20/22 0955	5 2309181	12
Rad Radium-226			.,				P-0			// = 0, = 1		-
Lucas Cell, Ra226,	Liquid "As Rece	eived"										
Radium-226	*	0.458	+/-0.287	0.362	+/-0.294	1.00	pCi/L		LXP1 (09/16/22 1041	2309179) 3
The following Analyt	tical Methods v	were perforr	ned									
	escription	<u></u>										
1 EF	PA 904.0/SW846 9	9320 Modified	1									
2 Ca	alculation											
3 EF	PA 903.1 Modified	Ł										
Surrogate/Tracer R	ecovery 7	Гest						Batch I'	D Recovery	y% Accep	table Lim	its
Barium-133 Trace	r	GFPC Ra22	28, Liquid "A	s Received"				2309177	7 77	(159	%-125%)	
Notes: The MDC is a sam			1							`		
			ted at the 95	5% confider	nce level (1.96-sigma)).						
Column headers a DF: Dilution Fact DL: Detection Lin Lc/LC: Critical Lo MDA: Minimum MDC: Minimum	tor mit evel Detectable Act	ctivity	PF: Pre RL: Re TPU: T	Method ep Factor eporting Lin Total Propag	mit gated Uncertainty							

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

QC Summary

Client :	Georgia Power Con 241 Ralph McGill F	npany, Southern Co Blvd NE, Bin 10160		<u>C St</u>	<u>ımmary</u>	<u>/</u>]	Report D	ate: September Page 1 of		!2
Contact: Workorder:	Atlanta, Georgia Joju Abraham 591883										
Parmname		NOM	Sample (Qual	QC	Units	RPD%	REC%	Range A	nlst	Date Time
Rad Gas Flow Batch	2312614										
QC1205183302	591883001 DUP										
Radium-228		U Uncert: TPU:	0.802 +/-1.15 +/-1.16	U	0.487 +/-1.24 +/-1.25	pCi/L	0		N/A	JE1	09/27/2209:23
QC1205183303	LCS	10.0			41.0	C' 1		05.0	(750) 1050()		20/25/22.00.22
Radium-228		43.9 Uncert: TPU:			41.8 +/-3.24 +/-10.9	pCi/L		95.3	(75%-125%)	JE1	09/27/2209:23
QC1205183301	MB										
Radium-228		Uncert: TPU:		U	0.716 +/-1.07 +/-1.09	pCi/L				JE1	09/27/2209:23
Rad Ra-226 Batch	2312595 —										
OC1205183271	591613003 DUP										
Radium-226		Uncert: TPU:	1.03 +/-0.384 +/-0.425		1.10 +/-0.385 +/-0.450	pCi/L	6.62		(0% - 100%)	LXP1	09/28/2210:14
QC1205183273	LCS										
Radium-226		26.6 Uncert: TPU:			21.3 +/-1.47 +/-3.62	pCi/L		80	(75%-125%)	LXP1	09/28/2210:14
QC1205183270	MB										
Radium-226		Uncert: TPU:		U	0.258 +/-0.245 +/-0.248	pCi/L				LXP1	09/28/2210:14
QC1205183272	591613003 MS										
Radium-226		135 Uncert: TPU:	1.03 +/-0.384 +/-0.425		106 +/-7.23 +/-18.3	pCi/L		77.4	(75%-125%)	LXP1	09/28/2210:14

Notes:

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

The Qualifiers in this report are defined as follows:

- ** Analyte is a Tracer compound
- < Result is less than value reported
- > Result is greater than value reported
- BD Results are either below the MDC or tracer recovery is low
- FA Failed analysis.
- H Analytical holding time was exceeded

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

QC Summary

				V U N M		2						
Workor	rder: 591	883							Page 2	2 of 2		
Parmna	me		NOM	Sample Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
J	See case nam	rative for an exp	olanation									
J	Value is estin	mated										
Κ	Analyte pres	ent. Reported va	alue may be biased h	igh. Actual value is exp	ected to be	lower.						
L	Analyte pres	ent. Reported va	alue may be biased l	ow. Actual value is expe	cted to be	higher.						
М	M if above N	IDC and less the	an LLD									
М	REMP Resul	t > MDC/CL and	nd < RDL									
N/A	RPD or %Re	covery limits do	o not apply.									
N1	See case nam	rative										
ND	Analyte conc	centration is not	detected above the d	letection limit								
NJ	Consult Case	e Narrative, Data	a Summary package	, or Project Manager con	cerning thi	is qualifier	ſ					
Q	One or more	quality control	criteria have not bee	n met. Refer to the appli	cable narra	ative or DI	ER.					
R	Sample resul	ts are rejected										
U	Analyte was	analyzed for, bu	at not detected above	e the MDL, MDA, MDC	or LOD.							
UI	Gamma Spec	ctroscopyUnce	ertain identification									
UJ	Gamma Spec	ctroscopyUnce	ertain identification									
UL	Not consider	ed detected. The	e associated number	is the reported concentra	ation, whic	h may be	inaccurate d	lue to a low	bias.			
Х	Consult Case	e Narrative, Data	a Summary package	, or Project Manager con	cerning thi	is qualifier	ſ					
Y	Other specifi	c qualifiers wer	e required to proper	y define the results. Cor	sult case n	arrative.						
^	RPD of samp	ple and duplicate	e evaluated using +/-	RL. Concentrations are	${<}5X$ the R	L. Qualif	ïer Not App	licable for I	Radiochemi	stry.		
h	Preparation of	or preservation h	holding time was exc	ceeded								
** Indi ^ The I	icates analyte Relative Perce	is a surrogate/transference (F	acer compound. RPD) obtained from	en sample concentration	OUP) is eva	luated aga	inst the acc	eptence crite	eria when th	ne sample	is greater	
		te the DUP resu	lt.). In cases where either t			te value is i	ess man 5A	uie KL, a c	onu of fim	n or +/- tr	ie

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.

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

QC Summary

Client :	Georgia Power Con 241 Ralph McGill B			<u>C Sı</u>	ummary	<u>/</u>]	Report D	ate: September Page 1 of		2
Contact: Workorder:	Atlanta, Georgia Joju Abraham 591353										
Parmname		NOM	Sample (Qual	QC	Units	RPD%	REC%	Range A	nlst	Date Time
Rad Gas Flow Batch	2310792										
QC1205179815	591353001 DUP										
Radium-228		U Uncert: TPU:	-2.32 +/-1.31 +/-1.31	U	0.746 +/-1.05 +/-1.07	pCi/L	0		N/A	JXC9	09/20/2210:02
QC1205179816	LCS				10.7	0.1		22 4	(2501 10501)	W.Go	20/20/2010 00
Radium-228		44.1 Uncert: TPU:			40.7 +/-3.20 +/-10.7	pCi/L		92.4	(75%-125%)	JXC9	09/20/2210:02
QC1205179814	MB										
Radium-228		Uncert: TPU:		U	0.428 +/-0.992 +/-0.998	pCi/L				JXC9	09/20/2210:02
Rad Ra-226 Batch	2310752										
QC1205179719	591353001 DUP										
Radium-226		U Uncert: TPU:	0.152 +/-0.211 +/-0.213		0.436 +/-0.289 +/-0.297	pCi/L	96.4		(0% - 100%)	LXP1	09/15/2210:25
QC1205179721	LCS	11 U.	1/-0.215		1/-0.271						
Radium-226		26.5 Uncert: TPU:			20.8 +/-1.40 +/-4.47	pCi/L		78.2	(75%-125%)	LXP1	09/15/2210:25
QC1205179718	MB				.,						
Radium-226		Uncert: TPU:		U	0.312 +/-0.270 +/-0.276	pCi/L				LXP1	09/15/2210:25
QC1205179720	591353001 MS										
Radium-226		132 U Uncert: TPU:	0.152 +/-0.211 +/-0.213		103 +/-7.31 +/-17.6	pCi/L		77.8	(75%-125%)	LXP1	09/15/2210:25

Notes:

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

The Qualifiers in this report are defined as follows:

- ** Analyte is a Tracer compound
- < Result is less than value reported
- > Result is greater than value reported
- BD Results are either below the MDC or tracer recovery is low
- FA Failed analysis.
- H Analytical holding time was exceeded

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

QC Summary

				2000		<u>_</u>						
Workor	der:	591353							Page 2	2 of 2		
Parmna	me		NOM	Sample Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
J	See cas	e narrative for a	an explanation									
J	Value i	s estimated										
Κ	Analyte	e present. Repor	rted value may be biased	high. Actual value is expo	ected to be	lower.						
L	Analyte	e present. Repor	rted value may be biased	low. Actual value is expe	cted to be	higher.						
М	M if ab	ove MDC and l	less than LLD									
М	REMP	Result > MDC/	CL and < RDL									
N/A	RPD or	%Recovery lin	nits do not apply.									
N1	See cas	e narrative										
ND	Analyte	e concentration	is not detected above the	detection limit								
NJ	Consul	t Case Narrative	e, Data Summary package	e, or Project Manager con	cerning thi	is qualifie	r					
Q	One or	more quality co	ontrol criteria have not be	en met. Refer to the appli	cable narra	ative or DI	ER.					
R	Sample	results are reje	cted									
U	Analyte	e was analyzed	for, but not detected abov	e the MDL, MDA, MDC	or LOD.							
UI	Gamma	a Spectroscopy-	Uncertain identification									
UJ	Gamma	a Spectroscopy-	Uncertain identification									
UL	Not con	nsidered detecte	ed. The associated number	is the reported concentration	ation, whic	h may be	inaccurate d	lue to a low	bias.			
Х	Consul	t Case Narrative	e, Data Summary package	e, or Project Manager con	cerning thi	is qualifie	r					
Y	Other s	pecific qualifier	rs were required to proper	ly define the results. Con	sult case n	arrative.						
٨	RPD of	f sample and du	plicate evaluated using +/	-RL. Concentrations are	$<\!\!5X$ the R	RL. Qualif	fier Not App	olicable for I	Radiochemi	istry.		
h	Prepara	tion or preserva	ation holding time was ex	ceeded								
** Indi ^ The F	cates an Relative	alyte is a surrog Percent Differe	ery limits do not apply wl gate/tracer compound. ence (RPD) obtained from	the sample duplicate (D	UP) is eva	luated aga	inst the acc	eptence crite	eria when th	ne sample	is greater	
		the contract red	quired detection limit (RI	L). In cases where either t	he sample	or duplica	te value is l	ess than 5X	the RL, a c	ontrol lim	it of +/- tl	he

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.

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

QC Summary

Client :	-	ompany, Southern Co ll Blvd NE, Bin 10160	ompany	<u>C Sı</u>	ummary	<u> </u>	1	Report D	ate: September 20, 202 Page 1 of 2	22
Contact: Workorder:	Atlanta, Georgia Joju Abraham 590859									
Parmname		NOM	Sample (Qual	QC	Units	RPD%	REC%	Range Anlst	Date Time
Rad Gas Flow Batch	2309177 —									
QC1205176411	590840001 DUP									
Radium-228		U Uncert: TPU:	0.281 +/-1.08 +/-1.08	U	0.509 +/-0.796 +/-0.806	pCi/L	0		N/A JXC9	09/16/2210:54
QC1205176412	LCS	44.1			20.6	-C:/I		80.0	(750) 1250() IVCO	00/16/2210-54
Radium-228		44.1 Uncert: TPU:			39.6 +/-3.28 +/-10.4	pCi/L		89.9	(75%-125%) JXC9	09/16/2210:54
QC1205176410	MB									
Radium-228		Uncert: TPU:		U	-0.160 +/-1.37 +/-1.37	pCi/L			JXC9	09/16/2210:54
Rad Ra-226										
Batch	2309179 —									
QC1205176418	590840001 DUP									
Radium-226		U Uncert: TPU:	0.250 +/-0.237 +/-0.242	U	0.114 +/-0.177 +/-0.178	pCi/L	0		N/A LXP1	09/16/2210:41
QC1205176420	LCS									
Radium-226		26.6 Uncert: TPU:			20.1 +/-1.38 +/-4.51	pCi/L		75.8	(75%-125%) LXP1	09/16/2210:41
QC1205176417	MB									
Radium-226		Uncert: TPU:			0.319 +/-0.220 +/-0.227	pCi/L			LXP1	09/16/2210:41
QC1205176419	590840001 MS									
Radium-226		132 U Uncert: TPU:	0.250 +/-0.237 +/-0.242		103 +/-7.73 +/-17.8	pCi/L		78	(75%-125%) LXP1	09/16/2210:41

Notes:

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

The Qualifiers in this report are defined as follows:

- ** Analyte is a Tracer compound
- Result is less than value reported <
- Result is greater than value reported >
- Results are either below the MDC or tracer recovery is low BD
- FA Failed analysis.
- Analytical holding time was exceeded Н

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

QC Summary

				<u><u> </u></u>		<u></u>						
Workor	rder:	590859							Page 2	2 of 2		
Parmna	me		NOM	Sample Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
J	See cas	e narrative	for an explanation									
J	Value i	s estimated										
Κ	Analyte	e present. R	eported value may be bias	ed high. Actual value is expe	ected to be	lower.						
L	Analyte	e present. R	eported value may be bias	ed low. Actual value is expe	cted to be	higher.						
М	M if ab	ove MDC a	and less than LLD									
М	REMP	Result > M	DC/CL and < RDL									
N/A	RPD of	« %Recover	y limits do not apply.									
N1	See cas	e narrative										
ND	Analyte	e concentra	tion is not detected above	the detection limit								
NJ	Consul	t Case Narr	ative, Data Summary pack	age, or Project Manager con	cerning thi	is qualifier	r					
Q	One or	more quali	ty control criteria have not	been met. Refer to the appli	cable narra	ative or DI	ER.					
R	Sample	e results are	rejected									
U	Analyte	e was analy	zed for, but not detected a	bove the MDL, MDA, MDC	or LOD.							
UI	Gamma	a Spectrosc	opyUncertain identificat	on								
UJ	Gamma	a Spectrosc	opyUncertain identificat	on								
UL	Not con	nsidered det	tected. The associated nun	ber is the reported concentration	ation, whic	h may be	inaccurate d	lue to a low	bias.			
Х	Consul	t Case Narr	ative, Data Summary pack	age, or Project Manager con	cerning thi	is qualifier	r					
Y	Other s	pecific qua	lifiers were required to pro	perly define the results. Con	sult case n	arrative.						
^	RPD of	f sample an	d duplicate evaluated usin	g +/-RL. Concentrations are	<5X the R	L. Qualif	ier Not App	olicable for I	Radiochemi	stry.		
h	Prepara	ation or pres	servation holding time was	exceeded								
** Indi ^ The I five tin	icates an Relative nes (5X)	alyte is a su Percent Dir the contract	urrogate/tracer compound. fference (RPD) obtained f	when sample concentration rom the sample duplicate (D (RL). In cases where either t	UP) is eva	luated aga	inst the acc	eptence crite	eria when th	ne sample	is greater	

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

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

Radiochemistry Technical Case Narrative Georgia Power Company SDG #: 591883

Product: GFPC Ra228, Liquid Analytical Method: EPA 904.0/SW846 9320 Modified Analytical Procedure: GL-RAD-A-063 REV# 5 Analytical Batch: 2312614

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

<u>GEL Sample ID#</u>	Client Sample Identification
591883001	PZ-70
1205183301	Method Blank (MB)
1205183302	591883001(PZ-70) Sample Duplicate (DUP)
1205183303	Laboratory Control Sample (LCS)

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

Data Summary:

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

<u>Product:</u> Lucas Cell, Ra226, Liquid <u>Analytical Method:</u> EPA 903.1 Modified <u>Analytical Procedure:</u> GL-RAD-A-008 REV# 15 <u>Analytical Batch:</u> 2312595

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

<u>GEL Sample ID#</u>	<u>Client Sample Identification</u>
591883001	PZ-70
1205183270	Method Blank (MB)
1205183271	591613003(NonSDG) Sample Duplicate (DUP)
1205183272	591613003(NonSDG) Matrix Spike (MS)
1205183273	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

CSU The blank (See Below) result is greater than 1.65 times the CSU but less than the MDC.

Sample	Analyte	Value
1205183270 (MB)	Radium-226	Blank result > 1.65 CSU

Miscellaneous Information

Additional Comments

The matrix spike, 1205183272 (Non SDG 591613003MS), aliquot was reduced to conserve sample volume.

<u>Certification Statement</u>

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

Radiochemistry Technical Case Narrative Georgia Power Company SDG #: 591353

Product: GFPC Ra228, Liquid Analytical Method: EPA 904.0/SW846 9320 Modified Analytical Procedure: GL-RAD-A-063 REV# 5 Analytical Batch: 2310792

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

<u>GEL Sample ID#</u>	Client Sample Identification
591353001	BRGWC-17S
591353002	BRGWC-35S
591353003	BRGWC-36S
591353004	FD-04
591353005	BRGWC-34S
591353006	EB-08
1205179814	Method Blank (MB)
1205179815	591353001(BRGWC-17S) Sample Duplicate (DUP)
1205179816	Laboratory Control Sample (LCS)

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

Data Summary:

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

Technical Information

Negative > 3 sigma TPU

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

Sample	Analyte	Value
591353001 (BRGWC-17S)	Radium-228	Negative Result > 3 sigma value

Product: Lucas Cell, Ra226, Liquid Analytical Method: EPA 903.1 Modified Analytical Procedure: GL-RAD-A-008 REV# 15 Analytical Batch: 2310752 The following samples were analyzed using the above methods and analytical procedure(s).

<u>GEL Sample ID#</u>	Client Sample Identification
591353001	BRGWC-17S
591353002	BRGWC-35S
591353003	BRGWC-36S
591353004	FD-04
591353005	BRGWC-34S
591353006	EB-08
1205179718	Method Blank (MB)
1205179719	591353001(BRGWC-17S) Sample Duplicate (DUP)
1205179720	591353001(BRGWC-17S) Matrix Spike (MS)
1205179721	Laboratory Control Sample (LCS)

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

Data Summary:

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

Technical Information

Recounts

Samples were degassed and recounted to verify sample results. The second counts are reported.

Miscellaneous Information

Additional Comments

The matrix spike, 1205179720 (BRGWC-17SMS), aliquot was reduced to conserve sample volume.

Certification Statement

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

Radiochemistry Technical Case Narrative Georgia Power Company SDG #: 590859

Product: GFPC Ra228, Liquid Analytical Method: EPA 904.0/SW846 9320 Modified Analytical Procedure: GL-RAD-A-063 REV# 5 Analytical Batch: 2309177

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

<u>GEL Sample ID#</u>	Client Sample Identification
590859001	BRGWC-33S
590859002	BRGWC-37S
590859003	BRGWC-38S
590859004	PZ-53D
590859005	PZ-13S
590859006	FB-04
1205176410	Method Blank (MB)
1205176411	590840001(BRGWA-2S) Sample Duplicate (DUP)
1205176412	Laboratory Control Sample (LCS)

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

Data Summary:

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

Product: Lucas Cell, Ra226, Liquid Analytical Method: EPA 903.1 Modified Analytical Procedure: GL-RAD-A-008 REV# 15 Analytical Batch: 2309179

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

<u>GEL Sample ID#</u>	Client Sample Identification
590859001	BRGWC-33S
590859002	BRGWC-37S
590859003	BRGWC-38S
590859004	PZ-53D
590859005	PZ-13S
590859006	FB-04
1205176417	Method Blank (MB)
1205176418	590840001(BRGWA-2S) Sample Duplicate (DUP)
1205176419	590840001(BRGWA-2S) Matrix Spike (MS)
1205176420	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
1205176417 (MB)	Radium-226	Result: 0.319 pCi/L > MDA: 0.278 pCi/L <= RDL: 1.00 pCi/L

Miscellaneous Information

Additional Comments

The matrix spike, 1205176419 (BRGWA-2SMS), aliquot was reduced to conserve sample volume.

Certification Statement

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

GEL Laboratories, LLC 2040 Savage Road Charleston, SC 29407	Fax: (843) 766-1178	(Fill in the number of containers for each test)	< Preservative Type (6)		Comments Note: extra sample is	required for sample specific QC	field pH = $(\mathcal{O}, i 3)$	field pH =	field pH =	₽ field pH =	Specify: (Subject to Surcharge)		[] level 1 [x] Level 2 [] Level 3 [] Level 4	20,Pb,Li,Mo,Se,Tl,Fe,Mg,Mn,K,Na,	[] Yes [] No Cooler Temp: <u>7</u> °C		Nimmer 1 1	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.)						
alty Analytics		e Analysis Requested ⁽⁵⁾	1000000000	tainer:)С к	26 & 22 B, 60101 115 * 520B 240 240 2540 247 2540 247 2240 247	(7) Known ou possible Hazz Total numbe EPA 500, Mete BSM 2 Mete BSM 2 Mete BSM 2 Mete BSM 2 Mete SW-846 9 SW-846 9	オノノノ										TAT Requested: Normal: x Rush:	Fax Results: [] Yes [x] No	Select Deliverable: [] C of A [] QC Summary [Additional Remarks: * Metals: B,Ca,Sb,As,Ba,Be,G	For Lab Receiving Use Only: Custody Seal Intact? [] Yes [] No Cooler Temp:	mple, G = Grab, C = Composite er Quality Control Matrix 1).	iiosulfate. If no preservative is added = leave field blank	Otuer OT= Other / Unknown (i.e.: High/low pH, asbestos, beryllium, irritants, other misc. health hazards, etc.) Description:
59/88/ GEL Laboratories LLC	GEL Work Order Number: GEL Project Manager: Erin Trent	hone # 404-506-71	Fax # Should this	sample be considered:	Send Results To: SCS & Geosyntec Contacts	*Date Collected *Time *Date Collected Collected Collected Collected Collected Collected (Military) QC Field Sample Sample (mm/dd/yy) (hhmm) Code (2) Fiftered (3) Matrix (4) Katiopte info).	1055 G N WG										Chain of Custody Signatures	Received by (signed) Date Time Fa	1 15 812122 910 Sel	2 / C/ C/ C/ 72 Ad		i D = Matrix Spi ediment, SL=Sli i.e. 8260B - 3,	(6) Preservative Type: HA = Hydrochloric Acid, NI = Nitric Acid, SH = Sodium Hydroxide, SA = Sulfuric Acid, HA = Ascorbic Acid, HX = Hexane, ST = Sodium Thiosulfate, If no preservative is added = leave field blank 7) KNOWN OR POSSIBLE HAZARDS	raizards Listed waste le/Ignitable LW= Listed Waste (F,K,P and U-listed wastes.) Waste code(s): ed orinated
Page: of 69 Project # 69 GGC Number ⁽¹⁾ , 59		Client Name: GA Power	Project/Site Name: Plant Branch Ash Ponds -	Address: 241 Ralph McGill Blvd SE, Atlanta GA 30308	Collected By: Hunter Aut of Send R	Sample ID * For composites - indicate start and stop date/time	0-2-24											Relinquished By (Signed) Date Time	300 alstre 0910	2	5 East counts attitude and Addingent Addition and Counts Day	 Crois starping and activery deatines, see Sumple Accept & Kevrew Joirn (SAAC) Chain of Custody Number = Client Determined Chain of Custody Number = Client Determined QC Codes: N = Normal Sample, TB = Trip Blank, FD = Field Duplicate, EB = Equipment Blank, MS = Matrix Spike Sample, MS QC Codes: N = Normal Sample, TB = Trip Blank, FD = Field Duplicate, EB = Equipment Blank, MS = Matrix Spike Sample, MS QC Codes: N = Normal Sample, TB = Trip Blank, FD = Field Duplicate, EB = Equipment Blank, MS = Matrix Spike Sample, MS Pield Filtered: For liquid matrices, indicate with a - Y - for yes the sample was field filtered or - N - for sample was not field filtered Matrix Codes: WD=Drinking Water, WG=Groundwater, WS=Surface Water, WW=Waste Water, WL=Leachate, SO=Soil, SE=Sc Matrix Codes: WD=Drinking Water, WG=Groundwater, MS=Surface Water, WW=Waste Water, WL=Leachate, SO=Soil, SE=Sc Matrix Codes: MD=Drinking Water, WG=Groundwater, MS=Surface Water, WW=Waste Water, WL=Leachate, SO=Soil, SE=Sc Matrix Codes: MD=Drinking Water, WG=Groundwater, MS=Surface Water, WW=Waste Water, WL=Leachate, SO=Soil, SE=Sc Matrix Codes: MD=Drinking Water, WG=Groundwater, MS=Surface Water, WW=Waste Water, WL=Leachate, SO=Soil, SE=Sc Matrix Codes: MD=Drinking Water, WG=Groundwater, MS=Surface Water, WW=Waste Water, WL=Leachate, SO=Soil, SE=Sc Matrix Codes: MD=Drinking Water, WG=Groundwater, MS=Surface Water, WW=Waste Water, WL=Leachate, SO=Soil, SE=Sc Matrix Codes: WD=Drinking Water, WG=Groundwater, MS=Surface Water, WW=Waste Water, WL=Leachate, SO=Soil, SE=Sc Matrix Codes: WD=Drinking Water, WG=Groundwater, MS=Surface Water, WW=Waste Water, WL=Leachate, SO=Soil, SE=Sc Matrix Codes: WD=Complex MD=Drinking Water, WG=MD, AdVAAAA, AdVAAAAAAAAAAAAAAAAAAAAAAAAAA	6.) Preservative Type: HA = Hydrochloric Acid, NI = Nitric Acid, SH = Soc 7.7 KNOWN OR POSSIBLE HAZARDS	l .

Page 30 of 36 SDG: 591883 Rev1

	GEL Laboratories LLC				SAMDLE DECEIDT & DEVIEW FORM
Clie	mBDC			CD	SAMPLE RECEIPT & REVIEW FORM G/AR/COC/Work Order: 59/88/59/883/59/887
-	CIE				Ad Co araa
Rec	eived By: MVH			Dat	te Received: Circle Applicable:
	Carrier and Tracking Number				FedEx Express FedEx Ground UPS Field Services Courier Other
Sus	pected Hazard Information	Yes	No	*If	Net Counts > 100cpm on samples not marked "radioactive", contact the Radiation Safety Group for further investigation.
A)S	nipped as a DOT Hazardous?		Y	Haz	ard Class Shipped: UN#: IF UN2910, Is the Radioactive Shipment Survey Compliant? Yes No
	id the client designate the samples are to be ved as radioactive?		Y	co	C notation or radioactive stickers on containers equal client designation.
	the RSO classify the samples as bactive?		X	Max	ximum Net Counts Observed* (Observed Counts - Area Background Counts):CPM / mR/Hr Classified as: Rad 1 Rad 2 Rad 3
D) [bid the client designate samples are hazardous?		Y	-	C notation or hazard labels on containers equal client designation. or E is yes, select Hazards below.
E) [id the RSO identify possible hazards?		Y		PCB's Flammable Foreign Soil RCRA Asbestos Beryllium Other:
F	Sample Receipt Criteria	Yes	NA.	°2	Comments/Qualifiers (Required for Non-Conforming Items)
1	Shipping containers received intact and sealed?	Ń	~	-	Circle Applicable: Seals broken Damaged container Leaking container Other (describe)
2	Chain of custody documents included with shipment?	X			Circle Applicable: Client contacted and provided COC COC created upon receipt
3	Samples requiring cold preservation within $(0 \le 6 \text{ deg. C})$?*			X	Preservation Method: Wet Ice Ice Packs Dry ice None Other: *all temperatures are recorded in Celsius TEMP:
4	Daily check performed and passed on IR temperature gun?	X			Temperature Device Serial #: IR2-21 Secondary Temperature Device Serial # (If Applicable):
5	Sample containers intact and sealed?	X			Circle Applicable: Seals broken Damaged container Leaking container Other (describe)
6	Samples requiring chemical preservation at proper pH?	X			Sample ID's and Containers Affected: If Preservation added, Lot#:
7	Do any samples require Volatile Analysis?	1		X	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?	X		,	ID's and tests affected:
9	Sample ID's on COC match ID's on bottles?	X			ID's and containers affected:
10	Date & time on COC match date & time on bottles?	X			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?	K			Circle Applicable: No container count on COC Other (describe)
12	Are sample containers identifiable as GEL provided by use of GEL labels?			X	
13	COC form is properly signed in relinquished/received sections?	X			Circle Applicable: Not relinquished Other (describe)
	ments (Use Continuation Form if needed): PM (or PM.	A) re	view	: Init	ials Date 0.9 /0.6 / 2.2 Page of

Project #		Bel.com	Chemis	DOLG try I Radio	Laboratory I Radiochemistry I Radiobioassay I Specialty Analytics	CLLC diobioassa	y I Specialt	y Analytics			2040 Savage Road Charleston, SC 29407		59135 1
COC Number ⁽¹⁾ .			of Cus	tody al	Chain of Custody and Analytical Request	ical Re	quest			-	Phone: (843) 556-8171		591353
PO Number:	GEL Work Order Number:		5	EL Proj	GEL Project Manager: Erin 1 rent	er: Erm	Inent	10-10-10-10-10-10-10-10-10-10-10-10-10-1			(T211 in the number of containers for each test)	11/0 Intoiners for	r andh taet)
Client Name: GA Power		Phone # 404-	404-506-7116			× ×	ample A	Sample Analysis Requested	Reques				I cauli tusty
Project/Site Name: Plant Branch Ash Ponds \pounds		Fax #			Sho	Should this	S.I.		IN	IN		V	< Preservative Type (6)
Address: 241 Ralph McGill Blvd SE, Atlanta GA 30308	A 30308				san cons	sample be considered:	63530						Comments
Collected By: Taylor Coldre Minna Schniftker	f Send Results To: SCS & Geosyntec Contacts	Geosyntec Cor	itacts		hply	L.	all light	2. 55 SOM	0B, 601 tals *			4	Note: extra sample is
Sample ID	*Date Collected	*Time Collected (Military)	QC Filt	Field Sa Filtered ⁽³⁾ Ma	Matrix (3) Radioactive Kadioactive Ves, please su	otopic info. (7) Known o SBH elastop	Total numbe	, Total & 1 Тоtal & 1		948-W2			required for sample specific QC
P. P. Composites - indicate start and stop and time R. C. I. T. S.	20	-	Z				٢	> >	>	/		field	field pH = (, (2
30	08/24 122	1358	N S		MG		5	11	1			field pH :	PH= 6.05
BACTUR - 365	08/24/22	0952	5	N	MG		٢	2	>	<		field pH	pH= 5.59
(C	74		5	NW	NG		٢	11	1	/		field pH :	pH = NA
	04174172	1440	6	MN	MG		٢	>	>			field pH	PH= 5,75
V	08/24177	-	GN	1	QM		٢	>	>			field pH	pH= NA
)))))												field pH	pH =
												field pH	= Hd
												field pH	pH =
					4							field	field pH =
	Chain of Custody Signatures	sa				T	TAT Requested:		Normal:	x Rush:	Specify:	0	(Subject to Surcharge)
Relinquished By (Signed) Date Ti	Time Received by (signed)	signed) Date		Time		Fax R	Fax Results: [] Yes		[x] No				
11 1 8129122	1515 AMARIA	Let 1	18 m	22 22	1515	Select	Delivera	ble:[]C	of A [Select Deliverable: [] C df A [] QC Summary	[] level 1 [x]	[x] Level 2 [[] Level 3 [] Level 4
	17		-	_		Additi	Additional Remarks:	arks:	* Metal	:: B,Ca,Sb,As,Ba	Be,Cd,Cr,Co,Pb,I	Li,Mo,Se,Tl,I	* Metals: B,Ca,Sb,As,Ba,Be,Cd,Cr,Co,Pb,Li,Mo,Se,Tl,Fe,Mg,Mn,K,Na,Hg
3	3				-	For L	ab Receiv	ving Use	Only: Ci	For Lab Receiving Use Only: Custody Seal Intact? [] Yes	1? [] Yes []	[] No Coole	Cooler Temp: °C
> For sample shipping and delivery details, see Sample Receipt & Review form (SRR.)	e Sample Receipt & Review fo	rm (SRR.)	A Construction of the other	and a state of the	Sampl	e Collecti	ion Time	Zone: [K] Eastern	Sample Collection Time Zone: [x] Eastern [] Pacific [] Central	[] Central [] Mountain	[] Mountain [] Uther:
 Chain of Custody Number = Client Determined Chain of Custody Number = Client Determined 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 Duplicate, EB = Equipment Blar	k, MS = Matrix Sp	ke Sample,	MSD = Ma	trix Spike Dupli	cate Sample	, G = Grab,	C = Compo	site				
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.	or yes the sample was field filtered or -	N - for sample was r	ot field filte	.ed.									
(4) Matrix Codes: WD=Drinking Water, WG=Groundwater, WS=Surface Water, WW=Waste Water, WL=Leachate, SO=Soil, SE=Studge, WQ=Water Quality Control Matrix (A) Matrix Codes: WD=Drinking Water, WG=Groundwater, WS=Surface Water, WW=Water Wu=Water Wu=Water Quality Control Matrix (A) Matrix Codes: WD=Drinking Water, WG=Groundwater, WS=Surface Water, WW=Water Wu=Water Quality Control Matrix	, WS=Surface Water, WW=Waste Wa	er, WL=Leachate, See of containers pro-	O=Soil, SE	=Sediment, th (i.e. 8260	te, SO=Soil, SE=Sediment, SL=Sludge, WQ=Water (provided for each (i.e. 8260B - 3, 6010B/7470A - 1).	Q=Water Q 470A - 1).	uality Contr	ol Matrix					
5.) Sample Analysis Requested. Analytical method requested (12) and 12 and	a (i.e. 2002, octobring Hydroxide SA =	Sulfuric Acid. AA =	Ascorbic Ac	id. HX = H	exane, ST = So	dium Thiosu	ilfate, If no	preservative	is added =	eave field blank			
 Preservative Type: HA = Hydrochloric Acid, NI = Nutro 7.) KNOWN OR POSSIBLE HAZARDS 	Characteristic Hazards	Listed V	aste			Other					Plea	ase provide	Please provide any additional details
RCRA Metals As = Arsenic Hg= Mercury Bo = Bosium Se= Selevium	FL = Flammable/Ignitable CO = Corrosive RE = Reactive	LW= Listed Waste (F,K,P and U-listed Waste code(s):	LW= Listed Waste (F,K,P and U-listed wastes.) Waste code(s):	e d wastes	(OT= ((<i>i.e.</i> : 1 misc Descr	OT= Other / Unknown (i.e.: High/low pH, asb misc. health hazards, e Description:	OT= Other / Unknown (i.e.: High/low pH, asbes mise. health hazards, etc. Description:	stos, berj	OT= Other / Unknown (i.e.: High/low pH, asbestps, beryllitum, irritants, other misc. health hazards, etc., Description:	14	below regarding disposal concer sample(s), type matrices, etc.)	below regarding handling and/or disposal concerns. (i.e.: Origin of sample(s), type of site collected from, odd matrices, etc.)
ЕĒ	TSCA Regulated PCB = Polychlorinated												
Pb = Lead	biphenyls									A CONTRACT OF LAND OF			

Page 32 of 36 SDG: 591883 Rev1

GEL Laboratories LLC	SAMPLE RECEIPT & REVIEW FØRM
Client:	SDG/AR/COC/Work Order: 59,135 59,333
Received By: Thyasia Tatum	Date Received: 5 29 30
Carrier and Tracking Number	Circle Applicable: FedEx Express FedEx Ground UPS Field Services Courier Other
Suspected Hazard Information $\overset{5}{\succ}$ $\overset{5}{\sim}$	*If Net Counts > 100cpm on samples not marked "radioactive", contact the Radiation Safety Group for further investigation.
A)Shipped as a DOT Hazardous?	Hazard Class Shipped: UN#: If UN2910, Is the Radioactive Shipment Survey Compliant? YesNo
B) Did the client designate the samples are to be received as radioactive?	COC notation or radioactive stickers on containers equal client designation.
C) Did the RSO classify the samples as radioactive?	Maximum Net Counts Observed* (Observed Counts - Area Background Counts):CPM / mR/Hr Classified as: Rad 1 Rad 2 Rad 3
D) Did the client designate samples are hazardous?	COC notation or hazard labels on containers equal client designation.
E) Did the RSO identify possible hazards?	If D or E is yes, select Hazards below. PCB's Flammable Foreign Soil RCRA Asbestos Beryllium Other:
Sample Receipt Criteria	
1 Shipping containers received intact and scaled?	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 Preservation Method/ Wet Ice Ace Packs Dry ice None Other:
3 Samples requiring cold preservation within $(0 \le 6 \text{ deg. C})$?*	*all temperatures are recorded in Celsius TEMP:
4 Daily check performed and passed on IR temperature gun?	Temperature Device Serial #: <u>IR2-20</u> Secondary Temperature Device Serial # (If Applicable):
5 Sample containers intact and sealed?	Circle Applicable: Seals broken Damaged container Leaking container Other (describe)
6 Samples requiring chemical preservation at proper pH?	Sample ID's and Containers Affected: If Preservation added, Lot#:
7 Do any samples require Volatile Analysis?	If Yes, are Encores or Soil Kits present for solids? Yes No NA(If yes, take to VOA Freezer) Do Jiquid VOA vials contain acid preservation? Yes No NA(If unknown, select No) Are liquid VOA vials free of headspace? Yes No NA Sample ID's and containers affected:
8 Samples received within holding time?	ID's and tests affected:
9 Sample ID's on COC match ID's on bottles?	ID's and containers affected:
10 Date & time on COC match date & time on bottles?	Circle Applicable: No dates on containers No times on containers COC missing info Other (describe)
11 Number of containers received match number indicated on COC?	Circle Applicable: No container count on COC Other (describe)
12 Are sample containers identifiable as GEL provided by use of GEL labels?	Circle Applicable: Not relinquished Other (describe)
13 COC form is properly signed in relinquished/received sections? Comments (Use Continuation Form if needed):	enere reprintante. For terinquisinea Other (aesentoe)
PM (or PMA) reviev	v: Initials Date B 21 22 Page of
	GL-CHL-SB-001 Rev 7

590857	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)	A Preservative Type (6)		Comments Note: extra sample is	required for sample specific QC	field pH = 4° 67	5	field pH = 3 , 97	field pH = γ_* / δ	field pH = $\mathcal{J} \cdot \mathcal{H} \mathcal{L}_{e}$	field pH = $\dot{N}\dot{A}$	field pH =	field pH =	field pH =	field pH =	Specify: (Subject to Surcharge)		[] level 1 [x] Level 2 [] Level 3 [] Level 4	* Metals: B,Ca,Sb,As,Ba,Be,Cd,Cr,Co,Pb,Li,Mo,Se,Tl,Fe,Mg,Mn,K,Na,Hg	ct? [] Yes [] No Cooler Temp:OC [] Control [] Mountain [] Other	L J vaountan	y	Please provide any additional details		
590857.59			Sample Analysis Requested ⁽⁵⁾ (Fill in	IN IN	58 DD	350B 13, 6010 15, 8, 23 15, 15, 15, 15, 15, 15, 15, 15, 15, 15,	z WS	///	· · · ·		///	>>>	111					Normal: x Rush:	[x] No	C of A [] QC Summary	* Metals: B,Ca,Sb,As,Ba	For Lab Receiving Use Only: Custody Seal Intact? [] Yes	[A] Dasketti [] Factuc posite		ve is added = leave field blank	OT= Other / Unknown (i.e.: High/low pH, asbestos, beryllium, irritants, other misc. health hazards, etc.) Description:	
ß	alty Ana	Erin Trent	Sample Analysi		itainer 5 0C	ards r of cor pd, TDS A 254 SM 254 SM 254	Total Ruown or Possible Haz Cl, F, S(Cl, F, S(Total numbe Total & E		77	x V V	1/1	、、て	レイト					TAT Requested:	Fax Results: [] Yes	Select Deliverable: [] (Additional Remarks:	or Lab Receiving Use	itection 1 the 2016	ater Quality Control Matrix - 1).	n Thiosulfate, If no preservativ Other	OT= Other / Unknown (i.e.: High/low pH, asbest misc. health hazards, etc.) Description:	
	Laboratories LLC chemistry I Radiochemistry I Radiobioassay I Specialty Analytics of Custody and Analytical Request	GEL Project Manager: Erin Trent		Should this	sample be considered:	yply	Filered Matrix (4) Matrix (4) Matrix (5) Mat	DM	-	N WG	N MG	N WG	NG MG						Time	5 (n21 C 8/12 C)	127 A	E Counta Co	ASD = Matrix Spike Duplicate S ed.	-Sediment, SL=Sludge, WQ=W 1 (i.e. 8260B - 3, 6010B/7470A	AA = Ascorbic Acid, HX = Hexane, ST = Sodium Thiosulfate, If no preservative is added = leave field blank red Waste Other	(wastes.)	
	SEL Lal		Phone # 404-506-7116	Fax #		Geosyntec Contacts	*Time Collected (Military) Code ⁽²⁾ Filte	Ð	G	1600 G- N	1355 G N	1315 G 1	1245 G N						Date	S	8/24/22		(<i>SKR.</i>) MS = Matrix Spike Sample, MS for sample was not field filtered.	WL=Leachate, SO=Soil, SE= f containers provided for each	Iric Acid, AA = Ascorbic Acid Listed Waste	LW= Listed Waste (F.K.P and U-listed wastes.) Waste code(s):	
		GEL Work Order Number:				Results To: SCS & Ge	*Date Collected (mm/dd/vv)	08/23/22	08/23/22	08/23/22	08123172	08/23/22	08/23/22	,				Chain of Custody Signatures	Received by (signed)	July .	12 127 B	3	tecetpt & Review form , tte, EB = Equipment Blank, A ple was field filtered or - N - f	: Water, WW=Waste Water, V 6010B/7470A) and number of	 H = Sodium Hydroxide, SA = Sulfu Characteristic Hazards 	FL = Flammable/Ignitable CO = Corrosive RE = Reactive TSCA Regulated	PCB = Polychlorinated
	Page:		Client Name: GA Power	Project/Site Name: Plant Branch Ash Ponds	Address: 241 Ralph McGill Blvd SE, Atlanta GA 30308	Collected By: Toylor Coble And Scinetice Send Results To: SCS &	I Sample ID * For composites - indicate start and stop date/time	BRGWC-335	BQGWC-375	BRGWC-38S	P2-5315	PZ-135	F.G-04					Chain of (Relinquished By (Signed) Date Time	1 Tally Poll 8-24-12 OUNT	2 yereg 10 12422 101		 > For sample shipping and delivery details, see Sample Receipt & Review form (SRR.) 1.) Chain of Custody Number = Client Determined 2.) QC Codes: N = Normal Sample, TB = Trip Blank, FD = Field Duplicate, EB = Equipment Blank, MS = Matrix Spike Sample, MSD = Matrix Spike Duplicate Sample, G = Grab, C = Composite 3.) Field Filtered: For liquid matrices, indicate with a - Y - for yes the sample was field filtered or - N - for sample was not field filtered. 	 Matrix Codes: WD=Drinking Water, WG=Groundwater, WS=Surface Water, WW=Water, WL=Leachate, SO=Soil, SE=Sediment, SL=Sludge, WQ=Water Quality Control Matrix S. Sample Analysis Requested: Analytical method requested (i.e. 82608, 60108/7470A) and number of containers provided for each (i.e. 8260B - 3, 60108/7470A - 1). 	Of the servative Type: HA = Hydrochloric Acid, NI = Nitric Acid, SH = Sodium Hydroxide, SA = Sulfuric Acid, Now OR POSSIBLE HAZARDS Characteristic Hazards Ist		MR= Misc. RCRA metals

Page 34 of 36 SDG: 591883 Rev1

			SI	SAMPLE RECEIPT & REVIEW FORM 590851, 5908	-2-108
eceived By: Thyasia Tatum				ate Received: 8 24 22	5908
Carrier and Tracking Number				Circle Applicable: FedEx Express FedEx Ground UPS Field Services Courier Other	5908 5908 5908
spected Hazard Information	Yes	°Ż	*[1	Net Counts > 100cpm on samples not marked "radioactive", contact the Radiation Safety Group for further investigation.	-
Shipped as a DOT Hazardous?		V	Ha	zard Class Shipped: UN#: If UN2910, Is the Radioactive Shipment Survey Compliant? YesNo	_
Did the client designate the samples are to be reived as radioactive?				C notation or radioactive stickers on containers equal client designation.	
Did the RSO classify the samples as lioactive?			Ma	ximum Net Counts Observed* (Observed Counts - Area Background Counts):CPM / mR/Hr Classified as: Rad 1 Rad 2 Rad 3	
Did the client designate samples are hazardous	?		12	C notation or hazard labels on containers equal client designation.	
Did the RSO identify possible hazards?		-		D or E is yes, select Hazards below. PCB's Flammable Foreign Soit RCRA Asbestos Beryllium Other:	
Sample Receipt Criteria	Yes	NA	²		····
Shipping containers received intact and sealed?	V			Circle Applicable: Seals broken Damaged container Leaking container Other (describe)	
Chain of custody documents included with shipment?	L			Circle Applicable: Client contacted and provided COC COC created upon receipt	
Samples requiring cold preservation within $(0 \le 6 \text{ deg. C})$?*	ν			Preservation Method (Vet Ice)Ice Packs Dry ice None Other: *all temperatures are recorded in Celsius TEMP: 2 C	
Daily check performed and passed on IR temperature gun?	V			Temperature Device Serial #: <u>IR2-20</u> Secondary Temperature Device Serial # (If Applicable):	
Sample containers intact and sealed?				Circle Applicable: Scals broken Damaged container Leaking container Other (describe)	-
Samples requiring chemical preservation at proper pH?				Sample ID's and Containers Affected: If Preservation added, Lot#:	
Do any samples require Volatile Aualysis?			•	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:	
Samples received within holding time?	V			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?	V			Circle Applicable: No dates on containers No times on containers COC missing info Other (describe)	-
on bottles:				Circle Applicable: No container count on COC Other (describe)	-
Number of containers received match	\checkmark				
Number of containers received match		: 	/.	Circle Applicable: Not relinquished Other (describe)	_

.....

State	Certification
Alabama	42200
Alaska	17-018
Alaska Drinking Water	SC00012
Arkansas	88-0651
CLIA	42D0904046
California	2940
Colorado	SC00012
Connecticut	PH-0169
DoD ELAP/ ISO17025 A2LA	2567.01
Florida NELAP	E87156
Foreign Soils Permit	P330-15-00283, P330-15-00253
Georgia	SC00012
Georgia SDWA	967
Hawaii	SC00012
Idaho	SC00012
Illinois NELAP	200029
Indiana	C-SC-01
Kansas NELAP	E-10332
Kentucky SDWA	90129
Kentucky Wastewater	90129
Louisiana Drinking Water	LA024
Louisiana NELAP	03046 (AI33904)
Maine	2019020
Maryland	270
Massachusetts	M-SC012
Massachusetts PFAS Approv	Letter
Michigan	9976
Mississippi	SC00012
Nebraska	NE-OS-26-13
Nevada	SC000122023-3
New Hampshire NELAP	2054
New Jersey NELAP	SC002
New Mexico	SC00012
New York NELAP	11501
North Carolina	233
North Carolina SDWA	45709
North Dakota	R-158
Oklahoma	2022–137
Pennsylvania NELAP	68–00485
Puerto Rico	SC00012
S. Carolina Radiochem	10120002
Sanitation Districts of L	9255651
South Carolina Chemistry	10120001
Tennessee	TN 02934
Texas NELAP	T104704235-22-20
Utah NELAP	SC000122021-36
Vermont	VT87156
Virginia NELAP	460202
Washington	C780

List of current GEL Certifications as of 29 September 2022



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

September 19, 2022

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

Re: Branch CCR Groundwater Compliance PZ-52D Work Order: 591887

Dear Joju Abraham:

GEL Laboratories, LLC (GEL) appreciates the opportunity to provide the enclosed analytical results for the sample(s) we received on September 02, 2022. This original data report has been prepared and reviewed in accordance with GEL's standard operating procedures.

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

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

Sincerely,

AMM

Adrian Melendrez for Erin Trent Project Manager

Purchase Order: GPC82177-0003 Enclosures



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

Certificate of Analysis Report for

GPCC001 Georgia Power Company

Client SDG: 591887 GEL Work Order: 591887

The Qualifiers in this report are defined as follows:

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

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

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

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

Reviewed by

A. M.

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

Certificate of Analysis

Report Date: September 19, 2022

Company : Address :	Georgia Power Company, Southern Company 241 Ralph McGill Blvd NE, Bin 10160		
Contact:	Atlanta, Georgia 30308 Joju Abraham		
Project:	Branch CCR Groundwater CompliancePZ-52D		
Client Sample ID:	PZ-52D	Project:	GPCC00101
Sample ID:	591887001	Client ID:	GPCC001
Matrix:	WG		
Collect Date:	01-SEP-22 12:32		
Receive Date:	02-SEP-22		
Collector:	Client		

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analy	st Date	Time	e Batch	Method
Field Data												
Client collected Field p	H "As Receiv	ved"										
Field pH		7.70			SU			EOS1	09/01/22	1232	2312053	1
Ion Chromatography												
EPA 300.0 Anions Liq	uid "As Rece	ived"										
Chloride		6.24	0.0670	0.200	mg/L		1	JLD1	09/03/22	2240	2312366	2
Fluoride		0.140	0.0330	0.100	mg/L		1					
Sulfate		340	6.65	20.0	mg/L		50	JLD1	09/06/22	1407	2312366	3
Metals Analysis-ICP-N	/IS											
SW846 3005A/6020B	- PZ-52D "As	s Received"										
Cobalt		0.00150	0.000300	0.00100	mg/L	1.00	1	PRB	09/14/22	0042	2312380	4
Boron		0.0403	0.00520	0.0150	mg/L	1.00	1	PRB	09/14/22	1740	2312380	5
Calcium		69.0	0.800	2.00	mg/L	1.00	10	PRB	09/14/22	1742	2312380	6
Solids Analysis												
SM2540C Dissolved S	olids "As Rec	ceived"										
Total Dissolved Solids		754	2.38	10.0	mg/L			CH6	09/08/22	1457	2313724	7
The following Prep Me	ethods were p	erformed:										
Method	Descriptio	n		Analyst	Date	-	Гim	e Pi	ep Batch			
SW846 3005A	ICP-MS 300:	5A PREP		PC1	09/06/22	(0910	23	12379			
The following Analyti	cal Methods	were performed:										
Method	Description	1	Analyst Comments									
1	SM 4500-H E	B/SW846 9040C, SM 2550B				2						
2	EPA 300.0											
3	EPA 300.0											
4	SW846 30054	A/6020B										
5	SW846 30054	A/6020B										
6	SW846 3005	A/6020B										
7	SM 2540C											

Notes:

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

Certificate of Analysis

Report Date: September 19, 2022

Company :	Georgia Power Company, Southern Company		
Address :	241 Ralph McGill Blvd NE, Bin 10160		
	Atlanta, Georgia 30308		
Contact:	Joju Abraham		
Project:	Branch CCR Groundwater CompliancePZ-52D		
Client Sample ID:	PZ-52D	Project:	GPCC00101
Sample ID:	591887001	Client ID:	GPCC001

Parameter	Qualifier	Result	DL	RL	Units	PF	DF Analyst Date	Time Batch Method
Column headers	are defined as follo	ws:						
DF: Dilution Fac			Lc/LC: Critical Level					
DL: Detection Li	mit		PF: Prep Factor					

PF: Prep Factor RL: Reporting Limit SQL: Sample Quantitation Limit

MDA: Minimum Detectable Activity

MDC: Minimum Detectable Concentration

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

QC Summary

Report Date: September 19, 2022

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

Page 1 of 4

Workorder: 591887

Contact:

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range Anlst	Date Time
Ion Chromatography Batch 2312366 ——									
QC1205182663 591867001 DUP Chloride		19.9		19.9	mg/L	0.191		(0%-20%) JLD1	09/06/22 12:07
Fluoride		0.367		0.242	mg/L	41.2*^		(+/-0.100)	09/03/22 19:41
Sulfate	U	ND	U	ND	mg/L	N/A			
QC1205182662 LCS Chloride	5.00			4.95	mg/L		99	(90%-110%)	09/03/22 16:42
Fluoride	2.50			2.40	mg/L		95.9	(90%-110%)	
Sulfate	10.0			10.2	mg/L		102	(90%-110%)	
QC1205182661 MB Chloride			U	ND	mg/L				09/03/22 16:12
Fluoride			U	ND	mg/L				
Sulfate			U	ND	mg/L				
QC1205182664 591867001 PS Chloride	5.00	3.99		10.4	mg/L		129*	(90%-110%)	09/06/22 12:37
Fluoride	2.50	0.367		3.83	mg/L		139*	(90%-110%)	09/03/22 20:11
Sulfate	10.0 U	ND		15.5	mg/L		155*	(90%-110%)	

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

QC Summary

Workorder: 59188	7			p.							Page	e 2 of 4
Parmname		NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst		Time
Metals Analysis - ICPMS Batch 2312380												
QC1205182699 LC Boron	CS	0.100			0.112	mg/L		112	(80%-120%)	PRB	09/14/2	.2 17:27
Calcium		2.00			1.95	mg/L		97.7	(80%-120%)		09/14/2	22 00:14
Cobalt		0.0500			0.0480	mg/L		96	(80%-120%)			
QC1205182698 M Boron	В			U	ND	mg/L					09/14/2	.2 17:25
Calcium				U	ND	mg/L					09/14/2	22 00:10
Cobalt				U	ND	mg/L						
QC1205182700 5918 Boron	81001 MS	0.100	1.20		1.24	mg/L		N/A	(75%-125%)		09/14/2	.2 17:31
Calcium		2.00	42.6		43.0	mg/L		N/A	(75%-125%)		09/14/2	2 00:21
Cobalt		0.0500	0.00560		0.0534	mg/L		95.6	(75%-125%)			
QC1205182701 5918 Boron	81001 MSD	0.100	1.20		1.27	mg/L	2.04	N/A	(0%-20%)		09/14/2	2 17:33
Calcium		2.00	42.6		42.9	mg/L	0.254	N/A	(0%-20%)		09/14/2	2 00:24
Cobalt		0.0500	0.00560		0.0545	mg/L	2.08	97.8	(0%-20%)			
QC1205182702 5918 Boron	81001 SDILT		120		26.6	ug/L	11.2		(0%-20%)		09/14/2	22 17:37
Calcium			42600		8140	ug/L	4.58		(0%-20%)		09/14/2	22 00:32

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

QC Summary

Workorder: 591887									Page 3 of 4
Parmname	NOM	Sample Qual	QC	Units	RPD%	REC%	Range A	Anlst	Date Time
Metals Analysis - ICPMS Batch 2312380									
Cobalt		5.60	1.10	ug/L	1.7		(0%-20%)	PRB	09/14/22 00:32
Solids Analysis Batch 2313724 QC1205185482 592010003 DUP									
Total Dissolved Solids		158	155	mg/L	1.92		(0%-5%)	CH6	09/08/22 14:57
QC1205185480 LCS Total Dissolved Solids	300		301	mg/L		100	(95%-105%)		09/08/22 14:57
QC1205185479 MB Total Dissolved Solids		U	ND	mg/L					09/08/22 14:57

Notes:

The Qualifiers in this report are defined as follows:

- < Result is less than value reported
- > Result is greater than value reported
- B The target analyte was detected in the associated blank.
- E %difference of sample and SD is >10%. Sample concentration must meet flagging criteria
- E General Chemistry--Concentration of the target analyte exceeds the instrument calibration range
- FB Mercury was found present at quantifiable concentrations in field blanks received with these samples. Data associated with the blank are deemed invalid for reporting to regulatory agencies
- H Analytical holding time was exceeded
- J See case narrative for an explanation
- J Value is estimated
- N Metals--The Matrix spike sample recovery is not within specified control limits
- N/A RPD or %Recovery limits do not apply.
- N1 See case narrative
- ND Analyte concentration is not detected above the detection limit
- NJ Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
- Q One or more quality control criteria have not been met. Refer to the applicable narrative or DER.
- R Per section 9.3.4.1 of Method 1664 Revision B, due to matrix spike recovery issues, this result may not be reported or used for regulatory compliance purposes.
- R Sample results are rejected

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

QC Summary

Worko	rder: 591887		-								Pag	ge 4 of 4
Parmna	ame	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
U	Analyte was analyzed for, be	ut not detected abov	ve the MDL,	MDA, MI	DC or LOD.							
Х	Consult Case Narrative, Dat	a Summary package	e, or Project	Manager (concerning th	nis qualifi	er					
Y	Other specific qualifiers were required to properly define the results. Consult case narrative.											
Ζ	Paint Filter TestParticulates passed through the filter, however no free liquids were observed.											
^	RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL. Qualifier Not Applicable for Radiochemistry.											
d	5-day BODThe 2:1 depleti	on requirement was	s not met for	this samp	le							
e	5-day BODTest replicates show more than 30% difference between high and low values. The data is qualified per the method and can be used for reporting purposes											
h	Preparation or preservation l	holding time was ex	ceeded									
^ The F	dicates that spike recovery lim Relative Percent Difference (R nes (5X) the contract required	PD) obtained from	the sample di	uplicate (1	DUP) is eva	uated aga	inst the acce	ptance criter	ia when the	e sample is	s greater	than

evaluate the DUP result. * Indicates that a Quality Control parameter was not within specifications.

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

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

Technical Case Narrative Georgia Power Company SDG #: 591887

Metals

Product: Determination of Metals by ICP-MS Analytical Method: SW846 3005A/6020B **Analytical Procedure:** GL-MA-E-014 REV# 35 **Analytical Batch:** 2312380

Preparation Method: SW846 3005A **Preparation Procedure:** GL-MA-E-006 REV# 14 **Preparation Batch:** 2312379

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

GEL Sample ID#	Client Sample Identification
591887001	PZ-52D
1205182698	Method Blank (MB)ICP-MS
1205182699	Laboratory Control Sample (LCS)
1205182702	591881001(PZ-70L) Serial Dilution (SD)
1205182700	591881001(PZ-70S) Matrix Spike (MS)
1205182701	591881001(PZ-70SD) Matrix Spike Duplicate (MSD)

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

Data Summary:

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

Calibration Information

ICSA/ICSAB Statement

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

Technical Information

Sample Dilutions

Dilutions may be required for many reasons, including to minimize matrix interferences or to bring over range target analyte concentrations into the linear calibration range. Sample 591887001 (PZ-52D) was diluted to ensure that the analyte concentration was within the linear calibration range of the instrument.

A	591887
Analyte	001
Calcium	10X

General Chemistry

Product: Ion Chromatography <u>Analytical Method:</u> EPA 300.0 <u>Analytical Procedure:</u> GL-GC-E-086 REV# 30 <u>Analytical Batch:</u> 2312366

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

<u>GEL Sample ID#</u>	Client Sample Identification
591887001	PZ-52D
1205182661	Method Blank (MB)
1205182662	Laboratory Control Sample (LCS)
1205182663	591867001(NonSDG) Sample Duplicate (DUP)
1205182664	591867001(NonSDG) Post Spike (PS)

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

Data Summary:

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

Quality Control (QC) Information

Matrix Spike (MS)/Post Spike (PS) Recovery Statement

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

Analyte	Sample	Value
Chloride	1205182664 (Non SDG 591867001PS)	129* (90%-110%)
Fluoride	1205182664 (Non SDG 591867001PS)	139* (90%-110%)
Sulfate	1205182664 (Non SDG 591867001PS)	155* (90%-110%)

Duplicate Relative Percent Difference (RPD) Statement

The Relative Percent Difference (RPD) between the sample and duplicate falls outside of the established acceptance limits because of the heterogeneous matrix of the sample:

Analyte	Sample	Value
Fluoride	1205182663 (Non SDG 591867001DUP)	abs(.242367)* (+/1 mg/L)

Technical Information

Sample Dilutions

The following samples 1205182663 (Non SDG 591867001DUP), 1205182664 (Non SDG 591867001PS) and 591887001 (PZ-52D) 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.

Anolyte	591887
Analyte	001
Sulfate	50X

<u>Product:</u> Solids, Total Dissolved <u>Analytical Method:</u> SM 2540C <u>Analytical Procedure:</u> GL-GC-E-001 REV# 19 <u>Analytical Batch:</u> 2313724

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

<u>GEL Sample ID#</u>	Client Sample Identification
591887001	PZ-52D
1205185479	Method Blank (MB)
1205185480	Laboratory Control Sample (LCS)
1205185482	592010003(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

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

GEL Laboratories, LLC 2040 Savase Road	Charleston, SC 29407	Phone: (843) 766-1178	(Fill in the number of containers for each test)	C Preservative Type (6)		Comments Note: extra sample is	required for sample specific QC	field pH = 7.70					Kush:Specify:(Subject to Surcharge)		nmary	al hitact? [] Yes [] No Cooler Temp: 5 °C	[] Central					Please provide any additional details below regarding handling and/or disposal concerns. (i.e.: Origin of sample(s), type of site collected from, odd 	
	Cremisty Rediochemisty Rediobleasesy Specialty Analytics of CriettoAtv and Analytical Permact	ouy and Analytical Neducet. GEL Project Manager: Erin Trent	lysis Requested (5)	Should this a NI NI NI	20	11 Classical and a construction of constructio	yes, please su isotopic info.) (7) Known or Possible Haza CI, F, SC EPA 300, ' Mere EPA 6 Mere EPA 6 EPA 6 FPA 6	3 / /					quested: Normal: X		Actect Deliverable: C OI A Q C Summary Additional Remarks: * Metals: B.Ca.Co	Use C	Sample Collection Time Zone: [x] Eastern [] Pacific	= Marix Spike Sample, MSD = Marix Spike Duplicate Sample, G = Grab, C = Composite	udue. WO=Water Ouality Control Matrix	(1 - <i>Y02+1/2</i> 80709	c, ST = Sodium Thiosulfate, If no preservative is added = lea	Other OT= Other / Unknown (i.e.: High/low pH, asbestos, beryllium, irritants, other misc. health hazards, etc.) Description:	
GEL aboratories i c	59/857 Chain of Circlody and Analytical Bacilised	GEL Work Order Number: GEL Project M	hone # 404-506-7116	Fax #		Send Results To: SCS & Geosyntec Contacts	*Date Collected *Time *Time *Time *Time *Time *Matrix	1232 G N WG					Chain of Custody Signatures	012	111 T 9-1-17	31001 1 600			was field filtered or - N - for sample was not field filtered. ater. WW=Water. WL=Leachate. SO=Soil. SE=Sediment. SL=Slu	0B/7470A) and number of containers provided for each (i.e. 8260B - 3, 6	um Hydroxide, SA = Sulfuric Acid, AA = Ascorbic Acid, HX = Hexane,	Characteristic Hazards Listed Waste FL = Flammable/Ignitable LW= Listed Waste CO = Corrosive (F,K,P and U-listed wastes.) RE = Reactive Waste code(s): TSCA Regulated	olychlorinated
Page:	ite #: 		e: GA Power	Project/Site Name: Plant Branch Ash Pond - PZ-52D	Address: 241 Ralph McGill Blvd SE, Atlanta GA 30308	Collected By: Humber Aud Collected By: Humber Aud							Polinouishad Bu (Sinnad) Data Tima	0 10 100	11/10 11/11		> For sample shipping and delivery details, see Sample Receipt & Review form (SRR.)	 Chain of Custody Number = Client Determined QC Codes: N = Normal Sample, TB = Trip Blank, FD = Field Duplicate, EB = Equipment Blank, MS 	 Field Filtered: For liquid matrices, indicate with a - Y - for yes the sample was field filtered or - N - for sample was not field filtered. Matrix Codes. WD=Drinkine Water. WG=Groundwater. WS=Surface Water. WW=Water. WL=Leachate. SO=Soil. SE=Soidment. SL=Sudgee. WO=Water Ouality Control Matrix 	5.) Sample Analysis Requested: Analytical method requested (i.e. 82608, 6010B/470A) and number of containers provided for each (i.e. 8260B - 3, 60/08 7470A - 1)	= Nitric A	t POSSIBLE HAZARDS Hg= Mercury Sc= Selenium Ag= Silver	MR= Misc. RCRA metals

Page 12 of 14 SDG: 591887

	GEL Laboratories LLC				SAMPLE RECEIPT & REVIEW FORM
Cli	ent SDC			sp	G/AR/COC/Work Order: 591881/591883/591887
De	ceived By:MVH				te Received: 09-07-7-022
Ke	Carrier and Tracking Number			Da	Circle Applicable: FedEx Express FedEx Ground UPS Field Services Courier Other
Sus	pected Hazard Information	Yes	No	*If	Net Counts > 100cpm on samples not marked "radioactive", contact the Radiation Safety Group for further investigation.
A)S	A)Shipped as a DOT Hazardous?			Haz	ard Class Shipped: UN#: If UN2910, Is the Radioactive Shipment Survey Compliant? Yes No
	Did the client designate the samples are to be ived as radioactive?		Y	co	C notation or radioactive stickers on containers equal client designation.
	Did the RSO classify the samples as oactive?		X	May	timum Net Counts Observed* (Observed Counts - Area Background Counts): CPM / mR/Hr Classified as: Rad 1 Rad 2 Rad 3
D) I	Did the client designate samples are hazardous?		Y	1.1	C notation or hazard labels on containers equal client designation.
E) I	Did the RSO identify possible hazards?		Y		or E is yes, select Hazards below. PCB's Flammable Foreign Soil RCRA Asbestos Beryllium Other:
	Sample Receipt Criteria	Yes	AN.	°2	Comments/Qualifiers (Required for Non-Conforming Items)
1	Shipping containers received intact and sealed?	Ń	2	2	Circle Applicable: Seals broken Damaged container Leaking container Other (describe)
2	Chain of custody documents included with shipment?	X			Circle Applicable: Client contacted and provided COC COC created upon receipt
3	Samples requiring cold preservation within $(0 \le 6 \text{ deg. C})$?*			X	Preservation Method: Wet Ice Dacks Dry ice None Other: *all temperatures are recorded in Celsius TEMP:
4	Daily check performed and passed on IR temperature gun?	X			Temperature Device Serial #: <u>IR2-21</u> Secondary Temperature Device Serial # (If Applicable):
5	Sample containers intact and sealed?	X			Circle Applicable: Seals broken Damaged container Leaking container Other (describe)
6	Samples requiring chemical preservation at proper pH?	X			Sample ID's and Containers Affected: If Preservation added, Lot#:
7	Do any samples require Volatile Analysis?	1		X	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?	X		,	ID's and tests affected:
9	Sample ID's on COC match ID's on bottles?	X			ID's and containers affected:
10	Date & time on COC match date & time on bottles?	X.			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?	K			Circle Applicable: No container count on COC Other (describe)
12	Are sample containers identifiable as GEL provided by use of GEL labels?			X	
13	COC form is properly signed in relinquished/received sections?	X			Circle Applicable: Not relinquished Other (describe)
Con	nments (Use Continuation Form if needed):	A) rej	/iew	Initi	alsDate09/06/22_Pageof

State Alabama Alaska Alaska Drinking Water Arkansas CLIA California Colorado	Certification 42200 17-018 SC00012 88-0651 42D0904046 2940 SC00012
Alaska Drinking Water Arkansas CLIA California Colorado	SC00012 88-0651 42D0904046 2940 SC00012
Arkansas CLIA California Colorado	SC00012 88-0651 42D0904046 2940 SC00012
Arkansas CLIA California Colorado	42D0904046 2940 SC00012
California Colorado	2940 SC00012
Colorado	SC00012
Colorado	
	DIL 01/0
Connecticut	PH-0169
DoD ELAP/ ISO17025 A2LA	2567.01
Florida NELAP	E87156
Foreign Soils Permit P330	D-15-00283, P330-15-00253
Georgia	SC00012
Georgia SDWA	967
Hawaii	SC00012
Idaho	SC00012
Illinois NELAP	200029
Indiana	C-SC-01
Kansas NELAP	E-10332
Kentucky SDWA	90129
Kentucky Wastewater	90129
Louisiana Drinking Water	LA024
Louisiana NELAP	03046 (AI33904)
Maine	2019020
Maryland	270
Massachusetts	M-SC012
Massachusetts PFAS Approv	Letter
Michigan	9976
Mississippi	SC00012
Nebraska	NE-OS-26-13
Nevada	SC000122023-3
New Hampshire NELAP	2054
New Jersey NELAP	SC002
New Mexico	SC00012
New York NELAP	11501
North Carolina	233
North Carolina SDWA	45709
North Dakota	R-158
Oklahoma	2022-137
Pennsylvania NELAP	68–00485
Puerto Rico	SC00012
S. Carolina Radiochem	10120002
Sanitation Districts of L	9255651
South Carolina Chemistry	10120001
Tennessee	TN 02934
Texas NELAP	T104704235-22-20
Utah NELAP	SC000122021-36
Vermont	VT87156
Virginia NELAP	460202
Washington	C780

List of current GEL Certifications as of 19 September 2022